CONTAMINATED SOIL REMOVAL REPORT

CEDAR HILLS REGIONAL LANDFILL SOUTH SOLID WASTE AREA

Prepared for

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TABLE OF CONTENTS

1 INTRODUCTION 1
1.1 Background 1
1.2 Purpose and Overview 2
1.3 Document Organization 2
2 SUMMARY OF WORK PERFORMED 4
2.1 Scope of Work 4
2.2 Field Activities 4
3 SUMMARY OF ANALYTICAL RESULTS 6
3.1 Screening Levels 6
3.2 Volatile Organic Compounds 6
3.3 Toxicity Characteristic Leaching Procedure 7
3.4 Quality Assurance Samples 7
4 DATA REVIEW, VERIFICATION, AND VALIDATION 8
4.1 Field Quality Control Sample Collection 8
4.2 Data Quality Review and Validation 8
5 SUMMARY OF FOLLOW-UP ACTIONS 9
5.1 Contaminated Soil Removal Summary and Proposed Plan 9
6 REFERENCES 18

List of Tables

Table 1 Sample Collection Data Summary
Table 2 South Solid Waste Area Groundwater Elevation Data
Table 3 Soil Analytical Results

List of Figures

Figure 1 Site Vicinity Map
Figure 2 Site Location Plan
Figure 3 Hazardous Contaminated Soil Removal Plan
Figure 4 Non-hazardous Contaminated Soil Removal Plan

Figure 5 Confirmation Sampling Locations
Figure 6 Contaminated Soil Removal Area Liner Extension Plan
Figure 7 Contaminated Soil Removal Area Liner Extension Cross Section

List of Appendices

Tables
Figures
Appendix A Disposal Documentation
Appendix B Analytical Reports
Appendix C Data Validation Report
Appendix D GCL and CDN Product Data Sheets
Appendix E Field Directives

LIST OF ACRONYMS AND ABBREVIATIONS

µg/kg	microgram per kilogram
ARI	Analytical Resources, Inc.
bgs	below ground surface
BPA	Bonneville Power Administration
CHRL	Cedar Hills Regional Landfill
COC	chain-of-custody
Ecology	Washington State Department of Ecology
GRO	gasoline-range organics
KCSWD	King County Solid Waste Division
MTCA	Model Toxics Control Act
NAD	North American Datum
NGVD	National Geodetic Vertical Datum
NWTPH-Gx	Northwest Total Petroleum Hydrocarbons – Gasoline Range Organics
PCE	tetrachloroethene
PID	photoionization detector
profile	Hazardous Waste Profile Certification
Public Health	King County Public Health
QA	quality assurance
QC	quality control
Report	Contaminated Soil Investigation Report
RL	reporting limit
SAP	Sampling and Analysis Plan
SSWA	South Solid Waste Area
SVOC	semivolatile organic compound
TCAL	Total Constituent Analysis Limit
TCE	trichloroethylene
TCLP	toxicity characteristic leaching procedure
USEPA	U.S. Environmental Protection Agency
VOC	volatile organic compound

1 INTRODUCTION

This Contaminated Soil Removal Report (Report) has been prepared by Anchor QEA, LLC, on behalf of the King County Solid Waste Division (KCSWD), to document removal of contaminated soils during the Cedar Hills Regional Landfill (CHRL) SW Stormwater and CSW Ponds construction project. This Report summarizes the removal and disposal activities, presents the confirmation sampling results, and describes actions taken to address remaining contaminated soil. The sampling work performed in support of this Report was conducted in accordance with the *Draft Sampling and Analysis Plan* (SAP; Anchor QEA 2016).

1.1 Background

The CHRL has operated since 1965 as a municipal solid waste (MSW) landfill and is owned and operated by KCSWD. The landfill is located in unincorporated King County, north of the City of Maple Valley, and occupies a 940-acre parcel, 406 acres of which are allocated for waste disposal. The CHRL site is located 20 miles southeast of Seattle, at 16645 228th Avenue SE in Maple Valley, Washington. A vicinity map is presented in Figure 1. The project site plan is presented in Figure 2.

The South Solid Waste Area (SSWA) is located along the south side of the CHRL property, within the Bonneville Power Administration (BPA) easement. The SSWA contained a historical unlined MSW landfill cell that operated from the mid-1960s to mid-1980s. The SSWA was closed and capped in 1988 with a geomembrane and vegetative cover system.

The SSWA Excavation project, which was completed in December 2015, involved the removal and relocation of approximately 750,000 cubic yards of MSW (refuse) and soils from the SSWA. Confirmation sampling conducted during removal of the refuse revealed an area in the northern portion of the SSWA containing surface soil concentrations of trichloroethylene (TCE) and gasoline-range organics (GRO) exceeding Model Toxics Control Act (MTCA) Method A – Industrial screening levels. A limited investigation was conducted during the 2015 construction season in response to the confirmation sampling results and a more thorough investigation was conducted after completion of construction in March 2016.

Soil analytical results from the March investigation were compared to MTCA Method A industrial cleanup levels, when applicable. While concentrations of SVOCs and metals did not exceed screening levels, VOC concentrations had. A total of 108 samples were analyzed for VOCs. Concentrations of TCE, Tetrachloroethene (PCE), Vinyl Choloride, *Cis*-1,2-Dichloroethene, Bromomethane (methyl bromide), and BTEX exceeded Method A screening levels.

With the data collected during these sampling and investigation efforts, Anchor QEA developed a plan for removal of the contaminated soil. Figures 3 and 4 depict the hazardous and non-hazardous soil removal plans. Complete results from the March 2016 sampling effort are available in the *Contaminated Soil Investigation Report* (Anchor QEA; 2016).

In June 2016, the SW Stormwater and CSW Ponds Project began, and the contaminated soil identified through the 2015 and 2016 investigations was removed in conjunction with excavation activities for the new stormwater pond.

1.2 Purpose and Overview

The purpose of this Report is to summarize removal and disposal activities, present confirmation sampling results, and describe actions taken to address the contaminated soil that was left in place in the former SSWA.

This Report was prepared consistent with the Washington State Department of Ecology's (Ecology's) MTCA cleanup regulations (Ecology 2007), the U.S. Environmental Protection Agency's (USEPA's) protocols for sampling and analysis (Ecology 2011; USEPA 1993), and *Test Methods for the Evaluation of Solid Waste: Physical/Chemical Methods, 3rd Edition* (USEPA 1986).

1.3 Document Organization

This Report is organized into the following sections:

- **Section 2 – Summary of Work Performed**: Describes the removal, disposal and confirmation sampling activities.

- **Section 3 – Summary of Analytical Results**: Summarizes the confirmation sampling analytical results.
- **Section 4 – Data Review, Verification, and Validation**: Summarizes the confirmation sampling data quality review.
- **Section 5 – Summary of Follow-up Actions**: Describes actions taken to address remaining impacted soils.
- **Section 6 – References**: Provides references identified in the Report.

2 SUMMARY OF WORK PERFORMED

The Contaminated Soil Removal was conducted by Goodfellow Brothers, Inc. (GBI) as part of the CHRL SW Stormwater and CSW Ponds Project on June 27 to 29 and July 5, 2016. Confirmation samples were collected on June 29 and July 5. A detailed summary of the work performed is presented in the following subsections.

2.1 Scope of Work

Activities associated with the Contaminated Soil Removal included the following:

- Monitoring Contractor excavation and off-site disposal of 1,324 tons of hazardous contaminated soils
- Monitoring Contractor excavation and on-site disposal of 9,980 cy of non-hazardous contaminated soils
- Collecting confirmation samples at 27 locations
- Reviewing and validating the data
- Preparing this summary report, which includes a summary of the action taken to address remaining contamination

A description of the field activities is provided in the following subsection.

2.2 Field Activities

GBI began removing the contaminated soil on June 27, 2016 in accordance with Project Drawing AC-11 and revised soil removal figures provided on June 17, 2016 in Field Directive 01 (FD-01), provided in Appendix E. The hazardous soil was excavated into articulated trucks by a Cat 374F excavator and dumped at a polyethylene-lined stockpile located southeast of the existing siltation pond. The hazardous soil was completely removed from the contaminated soil area within a few hours and was immediately followed by excavation of the larger non-hazardous soil area. GBI completed excavation of the contaminated soil on June 29, 2016. The hazardous soil stockpile was covered with plastic until it was loaded into trucks and hauled to Waste Management's Subtitle C Landfill on October 5, 2016. Certificates of disposal and carbon copy manifests for the hazardous soil are included in Appendix A. Non-hazardous soil was hauled to the Area 7 active face for use as daily cover.

As expected, based on elevations provided in Table 2, groundwater was not encountered during the contaminated soil excavation activities.

Once design grades were achieved, 27 confirmation grab samples (0 to 4 inches) were collected from the excavation bottom at the locations identified in Figure 5 (i.e. M-02 through R-04). Sample locations coordinates are provided in Table 1, along with a summary of the laboratory analyses performed. All samples were collected, processed and transported to the laboratory, Analytical Results, Inc. (ARI), in accordance with the SAP.

Draft analytical results from the first round of confirmation sampling were provided by ARI on July 1, 2016. Exceedances of the MTCA Method B Soil Protective of Groundwater Vadose at 25 °C screening levels were identified at locations O-03, O-04, P-02, P-03, Q-02 and Q-03. Anchor QEA issued FD-02 (Appendix E) on July 5, 2016, directing GBI to complete additional soil removal under oversight of the construction manager. Upon completion of overexcavation activities, Anchor QEA collected additional confirmation samples at locations O-03A, O-04A, and P-03A. Results of the second round of sampling identified soil exceeding the MTCA Method B screening level for vinyl chloride at all three locations. Complete analytical results for both rounds of sampling are discussed in detail in Section 3.

Based on the analytical results from the two rounds of confirmation sampling, Anchor QEA determined that additional overexcavation was unlikely to remove all soil exceeding the MTCA Method B screening level for vinyl chloride. To prevent delays to the SW Stormwater and CSW Ponds Project schedule, Anchor QEA allowed GBI to backfill the contaminated soil excavation area to continue with construction of the stormwater pond.

3 SUMMARY OF ANALYTICAL RESULTS

The following sections summarize the analytical results of the Contaminated Soils Removal confirmation sampling as presented in Table 3. Figure 5 shows the confirmation sampling locations. All samples collected were analyzed by ARI. As specified in the SAP, soils were analyzed for VOCs by USEPA Method 8260C (collected by USEPA Method 5035). Copies of the investigation laboratory analytical reports for the soil samples are provided in Appendix B.

3.1 Screening Levels

The soil analytical results were compared to the MTCA Method B Soil Protective of Groundwater Vadose at 25 °C cleanup levels. During the previous investigations, soil analytical results were compared to the MTCA Method A – Industrial cleanup levels and the MTCA Method B cleanup levels only when MTCA Method A levels were not available. Anchor QEA maintains that the use of MTCA Method B cleanup levels is conservative in this application based on the depth of groundwater (see Table 2). Table 3 summarizes the analytical results for VOCs, GRO, and total solids, and highlights results that exceed the screening levels.

3.2 Volatile Organic Compounds

A total of 30 samples from the 2016 Contaminated Soils Removal were analyzed for VOCs, GRO, and total solids. Concentration exceedances were identified at six stations. The following VOCs were detected at concentrations exceeding the screening levels, as presented in Table 3:

- TCE
- Vinyl chloride
- *Cis*-1,2-Dichloroethene
- Bromomethane (methyl bromide)

Figures 6 shows the locations of each exceedance. GRO was not detected at any sample location.

3.3 Toxicity Characteristic Leaching Procedure

Analytical results for VOCs were compared to the Total Constituent Analysis Limits (TCALs). No TCLP analyses were required.

3.4 Quality Assurance Samples

The QA field duplicates were generally of similar magnitude and showed relatively low homogenization variability. VOCs were not detected above reporting limits (RLs) in the field blank QA samples. Further data quality assessment is presented in Section 4.

4 DATA REVIEW, VERIFICATION, AND VALIDATION

Soil sampling and analysis was performed in accordance with the SAP and conformed to USEPA guidance regarding sampling, QA/quality control (QC), data validation, and COC procedures. The following subsections provide further detail on data quality.

4.1 Field Quality Control Sample Collection

Field QC samples were collected at the frequency required in the SAP, including two trip blanks, and two duplicate samples. Field duplicates were collected for the following sample locations:

- M-03
- P-02

Duplicates are identified by adding 50 to the boring identification number (i.e., M-53 is the duplicate sample for M-03). Analytical results for duplicate samples are provided in Table 3, as well as in the validation reports included in Appendix C.

4.2 Data Quality Review and Validation

Laboratory data were generated by ARI and validated by Anchor QEA using USEPA Stage 2A validation guidelines (USEPA 2009). The validations are summarized in a validation report which was reviewed and approved by Anchor QEA's QA Manager and included as Appendix C.

The data validation verified the analytical accuracy and precision of the chemical analyses performed during this sampling effort and no data were rejected. The data may have been qualified as estimated for a particular analysis based on method or technical criterion. Data qualified with a "J" indicates that the associated numerical value is the approximate concentration of the analyte. Data qualified with a "U" indicates the approximate RL above which the analyte was not detected.

All soil data were determined to be useable as reported from the laboratory or as qualified in this Report to support the characterization of the nature and extent of contaminated soils.

5 SUMMARY OF FOLLOW-UP ACTIONS

This section summarizes the confirmation sampling results and the actions taken to address the remaining contaminated soil.

5.1 Contaminated Soil Removal and Follow-up Action Summary

Excavation activities performed during the SW Stormwater and CSW Ponds Project successfully removed the TCE- and GRO-contaminated soil that prompted the SSWA Contaminated Soil Investigation. However, after two rounds of excavation, vinyl chloride was still present at levels exceeding the MTCA Method B screening level in a localized pocket within the contaminated soil area.

As discussed in the Contaminated Soil Investigation Report (Anchor QEA; 2016), the targeted Method B soil cleanup levels are low, and it was anticipated that these levels may not be achieved following contaminated soil removal had VOC contamination migrated deeper than removal limits. Anchor QEA suggested that the Method B screening levels be re-evaluated under the circumstance that contamination remained following excavation. It was determined that the site screening levels would not be re-evaluated, and so alternative measures were proposed to contain the remaining contamination.

Since additional overexcavation of the contaminated soil area would have impacted the construction schedule and was unlikely to remove all soil exceeding the MTCA Method B screening levels, the use of engineering controls was proposed as an alternative to address the remaining impacted soil. The proposed alternative involved installation of geocomposite clay liner (GCL) and composite drainage net (CDN) over the majority of the former contaminated soil removal extents area to cap the remaining contamination, as shown in Figures 6 and 7. Placement of GCL would prevent water from coming into contact with the soil that exceeds the MTCA Method B screening levels for vinyl chloride and installation of CDN over the liner would provide drainage and prevents saturation of soil on top of the liner.

Detailing the extension of the liner system, Field Directive 10 (FD-10), included in Appendix E, was issued and executed on October 6, 2016. The GCL and CDN materials were installed

over the contaminated soil area on October 7, 2016, and were followed by placement of embankment and topsoil over the system on October 8, 2016, consistent with the design of the stormwater pond. The product data sheets for the GCL and CDN materials used are included in Appendix D.

6 REFERENCES

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USEPA, 2009. *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use*. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. USEPA 540-R-08-005. January 2009.

TABLES

Table 1
Sample Collection Data Summary

Station ID	Sample Collection Date	Location (NAD27 WAN)[a]		Elevation (NVGD29)	Sample ID	Analyses
		X Coordinate	Y Coordinate			
M-02	6/29/2016	1699109.5	168657.3	519.8	CHRL-M-02-160629	VOCs, GRO, TS
M-03	6/29/2016	1699139.5	168657.3	519.8	CHRL-M-03-160629	VOCs, GRO, TS
M-04	6/29/2016	1699169.5	168657.3	519.8	CHRL-M-04-160629	VOCs, GRO, TS
M-05	6/29/2016	1699199.5	168657.3	524.8	CHRL-M-05-160629	VOCs, GRO, TS
N-01	6/29/2016	1699079.5	168635.2	515.7	CHRL-N-01-160629	VOCs, GRO, TS
N-02	6/29/2016	1699109.5	168635.2	508.7	CHRL-N-02-160629	VOCs, GRO, TS
N-03	6/29/2016	1699139.5	168635.2	508.7	CHRL-N-03-160629	VOCs, GRO, TS
N-04	6/29/2016	1699169.5	168635.2	508.8	CHRL-N-04-160629	VOCs, GRO, TS
N-05	6/29/2016	1699199.5	168635.2	516.7	CHRL-N-05-160629	VOCs, GRO, TS
O-01	6/29/2016	1699079.5	168605.2	511.1	CHRL-O-01-160629	VOCs, GRO, TS
O-02	6/29/2016	1699103.2	168604.8	499.2	CHRL-O-02-160629	VOCs, GRO, TS
O-03	6/29/2016	1699139.5	168605.2	496.0	CHRL-O-03-160629	VOCs, GRO, TS
O-04	6/29/2016	1699169.5	168605.2	497.3	CHRL-O-04-160629	VOCs, GRO, TS
O-05	6/29/2016	1699199.5	168605.2	512.3	CHRL-O-05-160629	VOCs, GRO, TS
P-01	6/29/2016	1699079.5	168575.2	511.1	CHRL-P-01-160629	VOCs, GRO, TS
P-02	6/29/2016	1699109.5	168575.2	496.1	CHRL-P-02-160629	VOCs, GRO, TS
P-03	6/29/2016	1699139.5	168575.2	496.0	CHRL-P-03-160629	VOCs, GRO, TS
P-04	6/29/2016	1699169.5	168575.2	497.4	CHRL-P-04-160629	VOCs, GRO, TS
P-05	6/29/2016	1699199.5	168575.2	512.4	CHRL-P-05-160629	VOCs, GRO, TS
Q-01	6/29/2016	1699086.4	168545.2	509.5	CHRL-Q-01-160629	VOCs, GRO, TS
Q-02	6/29/2016	1699109.5	168545.2	500.8	CHRL-Q-02-160629	VOCs, GRO, TS
Q-03	6/29/2016	1699139.5	168545.2	496.0	CHRL-Q-03-160629	VOCs, GRO, TS
Q-04	6/29/2016	1699169.5	168545.2	497.3	CHRL-Q-04-160629	VOCs, GRO, TS
Q-05	6/29/2016	1699199.5	168545.2	512.3	CHRL-Q-05-160629	VOCs, GRO, TS
R-2	6/29/2016	1699109.5	168523.3	508.6	CHRL-R-02-160629	VOCs, GRO, TS
R-3	6/29/2016	1699139.5	168515.2	501.0	CHRL-R-03-160629	VOCs, GRO, TS
R-4	6/29/2016	1699169.5	168515.2	507.2	CHRL-R-04-160629	VOCs, GRO, TS
O-03A	7/5/2016	1699143.3	168575.9	481.0	CHRL-O-03A-160705	VOCs, GRO, TS
O-04A	7/5/2016	1699139.9	168604.7	492.7	CHRL-O-04A-160705	VOCs, GRO, TS
P-03A	7/5/2016	1699167.2	168603.8	493.7	CHRL-P-03A-160705	VOCs, GRO, TS

Notes:

a. Coordinates are in NAD27 Washington State Plane North, U.S. Feet.

NAD27 = North American Datum of 1927

NVGD29 = National Geodetic Vertical Datum of 1929

VOC = volatile organic compound

GRO = Gasoline range organics

TS = Total solids

Table 2
South Solid Waste Area Groundwater Elevation Data

Well Number	Aquifer	Date	Reference Elevation (feet)	Measured Depth to Water (feet)	Ground Water Elevation (feet)
MW-96	Perched	4/1/2015	547.74	99.13	448.61
MW-97	Perched	4/1/2015	564.54	112.89	451.65
MW-70	Regional	4/1/2015	530.57	204.48	326.09
MW-77	Regional	4/1/2015	552.67	226.09	326.58
MW-78	Regional	4/1/2015	537.35	211.86	325.49

Source: Second Quarter 2015 Cedar Hills Landfill Monitoring Report (King County 2015)

Table 3
Soil Analytical Results

		Task	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016
		Location ID	M-02_201606	M-03_201606	M-03_201606	M-04_201606	M-05_201606	N-01_201606	N-02_201606	N-03_201606
		Sample ID	CHRL-M-02-160629	CHRL-M-03-160629	CHRL-M-53-160629	CHRL-M-04-160629	CHRL-M-05-160629	CHRL-N-01-160629	CHRL-N-02-160629	CHRL-N-03-160629
		Sample Date	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016
		Depth	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in
		Sample Type	N	N	FD	N	N	N	N	N
		Matrix	SO	SO	SO	SO	SO	SO	SO	SO
		X[1]	1699109.50	1699139.50	1699139.50	1699169.50	1699199.50	1699079.50	1699109.50	1699139.50
		Y[1]	168657.32	168657.32	168657.32	168657.32	168657.32	168635.18	168635.18	168635.18
	Analytical Method	MTCA Method B Soil Protect GW V25C								
Conventional Parameters (pct)										
Total solids	SM2540B		**91.99**	**89.22**	**89.88**	**91.22**	**91.92**	**92.4**	**91.18**	**91.34**
Volatile Organic Compounds (µg/kg)										
1,2-Dichloroethene, cis-	USEPA 8260C	80	**1.57**	**4.81**	**3.88**	**2.68**	**1.2**	0.96 U	**0.68 J**	**44.6**
Benzene	USEPA 8260C	28.2	**0.45 J**	1.19 U	**0.38 J**	1.57 U	1.17 U	0.96 U	1.25 U	**0.61 J**
Bromomethane (Methyl bromide)	USEPA 8260C	51.8	1 U	1.19 U	1.08 U	1.57 U	1.17 U	0.96 U	1.25 U	1.17 U
Ethylbenzene	USEPA 8260C	6050	**0.33 J**	**1.58**	**1.68**	1.57 U	**0.29 J**	**0.92 J**	**0.71 J**	**2.51**
m,p-Xylene	USEPA 8260C		**0.73 J**	**3.67**	**3.73**	**0.74 J**	**0.71 J**	**2.16**	**1.61**	**7.45**
o-Xylene	USEPA 8260C	14700	**1.02**	**1.49**	**1.59**	**0.45 J**	**0.5 J**	**0.61 J**	**0.84 J**	**3.31**
Tetrachloroethene (PCE)	USEPA 8260C	53	1 U	1.19 U	1.08 U	1.57 U	1.17 U	0.96 U	1.25 U	1.17 U
Toluene	USEPA 8260C	4650	**0.87 J**	**2.2**	**2.29**	**0.63 J**	**0.46 J**	**1.38**	**2.92**	**36.4**
Trichloroethene (TCE)	USEPA 8260C	26.4	1 U	**2.51**	**2.04**	1.57 U	**0.62 J**	0.96 U	1.25 U	**3.66**
Vinyl chloride	USEPA 8260C	1.83	1 U	1.19 U	1.08 U	1.57 U	1.17 U	0.96 U	1.25 U	1.17 U
Total Petroleum Hydrocarbons (mg/kg)										
Gasoline range hydrocarbons	NWTPH-Gx		5.91 U	6.15 U	6.17 U	6.27 U	6.74 U	5.76 U	7.51 U	5.06 U

Notes:

Detected concentration is greater than MTCA Method B Soil Protect GW V25C screening level

Bold = Detected result

J = Estimated value

U = Compound analyzed, but not detected above detection limit

1. Coordinates are in NAD27 Washington State Plane North, U.S. Feet.

FD = Field Duplicate

N = Normal Enviornmental Sample

SO = Soil

Table 3
Soil Analytical Results

		Task	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016
		Location ID	N-04_201606	N-05_201606	O-01_201606	O-02_201606	O-03_201606	O-04_201606	O-05_201606	P-01_201606
		Sample ID	CHRL-N-04-160629	CHRL-N-05-160629	CHRL-O-01-160629	CHRL-O-02-160629	CHRL-O-03-160629	CHRL-O-04-160629	CHRL-O-05-160629	CHRL-P-01-160629
		Sample Date	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016
		Depth	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in
		Sample Type	N	N	N	N	N	N	N	N
		Matrix	SO	SO	SO	SO	SO	SO	SO	SO
		X	1699169.50	1699199.50	1699079.50	1699103.23	1699139.50	1699169.50	1699199.50	1699079.50
		Y	168635.18	168635.18	168605.18	168604.82	168605.18	168605.18	168605.18	168575.18
	Analytical Method	MTCA Method B Soil Protect GW V25C								
Conventional Parameters (pct)										
Total solids	SM2540B		**93.48**	**91.43**	**90.55**	**92.71**	**94.01**	**91.76**	**91.5**	**93.15**
Volatile Organics (µg/kg)										
1,2-Dichloroethene, cis-	USEPA 8260C	80	**39.2**	**22.1**	1.3 U	**3.14**	**187**	**125**	**17.5**	1.04 U
Benzene	USEPA 8260C	28.2	0.84 U	1.01 U	1.3 U	**0.33 J**	**1.31**	**0.49 J**	1.04 U	1.04 U
Bromomethane (Methyl bromide)	USEPA 8260C	51.8	0.84 U	1.01 U	1.3 U	0.97 U	0.94 U	1.08 U	1.04 U	**0.33 J**
Ethylbenzene	USEPA 8260C	6050	**0.45 J**	1.01 U	**0.97 J**	**0.51 J**	0.94 U	1.08 U	1.04 U	**2.12**
m,p-Xylene	USEPA 8260C		**1.43**	1.01 U	**2.54**	**1.23**	0.94 U	**0.52 J**	1.04 U	**6.21**
o-Xylene	USEPA 8260C	14700	**0.46 J**	**0.26 J**	**0.68 J**	**0.76 J**	0.94 U	1.08 U	**0.89 J**	**1.19**
Tetrachloroethene (PCE)	USEPA 8260C	53	0.84 U	1.01 U	1.3 U	0.97 U	0.94 U	1.08 U	1.04 U	1.04 U
Toluene	USEPA 8260C	4650	**11**	**0.29 J**	**2.02**	**5.99**	**6.2**	**7.4**	**0.56 J**	**3.67**
Trichloroethene (TCE)	USEPA 8260C	26.4	**19.4**	**16.8**	1.3 U	**0.58 J**	**10.8**	**125**	**0.74 J**	1.04 U
Vinyl chloride	USEPA 8260C	1.83	0.84 U	1.01 U	1.3 U	**0.7 J**	**6.53**	1.08 U	1.04 U	1.04 U
Total Petroleum Hydrocarbons (mg/kg)										
Gasoline range hydrocarbons	NWTPH-Gx		5.14 U	5.25 U	5.6 U	5.77 U	5.33 U	5.3 U	5.27 U	5.92 U

Notes:

Detected concentration is greater than MTCA Method B Soil Protect GW V25C screening level

Bold = Detected result

J = Estimated value

U = Compound analyzed, but not detected above detection limit

1. Coordinates are in NAD27 Washington State Plane North, U.S. Feet.

FD = Field Duplicate

N = Normal Enviornmental Sample

SO = Soil

Table 3
Soil Analytical Results

		Task	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016
		Location ID	P-02_201606	P-02_201606	P-03_201606	P-04_201606	P-05_201606	Q-01_201606	Q-02_201606	Q-03_201606
		Sample ID	CHRL-P-02-160629	CHRL-P-52-160629	CHRL-P-03-160629	CHRL-P-04-160629	CHRL-P-05-160629	CHRL-Q-01-160629	CHRL-Q-02-160629	CHRL-Q-03-160629
		Sample Date	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016
		Depth	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in
		Sample Type	N	FD	N	N	N	N	N	N
		Matrix	SO	SO	SO	SO	SO	SO	SO	SO
		X	1699109.50	1699109.50	1699139.50	1699169.50	1699199.50	1699086.38	1699109.50	1699139.50
		Y	168575.18	168575.18	168575.18	168575.18	168575.18	168545.18	168545.18	168545.18
	Analytical Method	MTCA Method B Soil Protect GW V25C								
Conventional Parameters (pct)										
Total solids	SM2540B		**92.91**	**92.75**	**91.2**	**94.03**	**91.24**	**90.75**	**90.03**	**93.23**
Volatile Organics (µg/kg)										
1,2-Dichloroethene, cis-	USEPA 8260C	80	**83.2**	**173**	**2100**	**64.8**	0.96 U	**0.67 J**	**422**	**276**
Benzene	USEPA 8260C	28.2	**0.6 J**	**1.3**	56.2 U	**0.7 J**	**0.43 J**	0.99 U	**0.55 J**	**0.57 J**
Bromomethane (Methyl bromide)	USEPA 8260C	51.8	**0.26 J**	1.03 U	**66.1**	**0.24 J**	0.96 U	**0.26 J**	0.94 U	1.05 U
Ethylbenzene	USEPA 8260C	6050	**5.53**	**8.69**	**43.2 J**	0.96 U	0.96 U	**1.85**	**10**	**22.2**
m,p-Xylene	USEPA 8260C		**22.1**	**33.9**	**193**	0.96 U	**0.8 J**	**6.4**	**46.2**	**98.4**
o-Xylene	USEPA 8260C	14700	**9.31**	**14.4**	**77.4**	0.96 U	**0.96 J**	**2.04**	**17.9**	**39.7**
Tetrachloroethene (PCE)	USEPA 8260C	53	0.98 U	1.03 U	56.2 U	0.96 U	0.96 U	0.99 U	0.94 U	1.05 U
Toluene	USEPA 8260C	4650	**137**	**150**	**1930**	**4.27**	**0.97**	**10.2**	**420**	**759**
Trichloroethene (TCE)	USEPA 8260C	26.4	**28.8**	**52.1**	**3040**	**15.5**	0.96 U	0.99 U	**1.13**	**2.17**
Vinyl chloride	USEPA 8260C	1.83	0.98 U	**9.24**	56.2 U	0.96 U	0.96 U	0.99 U	0.94 U	1.05 U
Total Petroleum Hydrocarbons (mg/kg)										
Gasoline range hydrocarbons	NWTPH-Gx		5.15 U	5.3 U	**14.3**	5.76 U	4.94 U	6.19 U	5.26 U	**6.88**

Notes:

Detected concentration is greater than MTCA Method B Soil Protect GW V25C screening level

Bold = Detected result

J = Estimated value

U = Compound analyzed, but not detected above detection limit

1. Coordinates are in NAD27 Washington State Plane North, U.S. Feet.

FD = Field Duplicate

N = Normal Enviornmental Sample

SO = Soil

Table 3
Soil Analytical Results

		Task	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016	CedarHillsLF2016
		Location ID	Q-04_201606	Q-05_201606	R-2_201606	R-3_201606	R-4_201606
		Sample ID	CHRL-Q-04-160629	CHRL-Q-05-160629	CHRL-R-02-160629	CHRL-R-03-160629	CHRL-R-04-160629
		Sample Date	6/29/2016	6/29/2016	6/29/2016	6/29/2016	6/29/2016
		Depth	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in	0 - 4 in
		Sample Type	N	N	N	N	N
		Matrix	SO	SO	SO	SO	SO
		X	1699169.50	1699199.50	1699109.50	1699139.50	1699169.50
		Y	168545.18	168545.18	168523.28	168515.18	168515.18
	Analytical Method	MTCA Method B Soil Protect GW V25C					
Conventional Parameters (pct)							
Total solids	SM2540B		**92.14**	**92.63**	**91.92**	**94.04**	**90**
Volatile Organics (µg/kg)							
1,2-Dichloroethene, cis-	USEPA 8260C	80	**0.7 J**	1.05 U	**18.8**	**3.54**	1.01 U
Benzene	USEPA 8260C	28.2	1.04 U	1.05 U	0.84 U	1.06 U	1.01 U
Bromomethane (Methyl bromide)	USEPA 8260C	51.8	1.04 U	1.05 U	0.84 U	1.06 U	1.01 U
Ethylbenzene	USEPA 8260C	6050	**1.92**	**0.43 J**	**3.04**	**3.42**	**1.3**
m,p-Xylene	USEPA 8260C		**6.79**	**1.57**	**10.6**	**15.8**	**5.07**
o-Xylene	USEPA 8260C	14700	**2.02**	**0.44 J**	**2.84**	**5.02**	**0.56 J**
Tetrachloroethene (PCE)	USEPA 8260C	53	1.04 U	1.05 U	0.84 U	1.06 U	1.01 U
Toluene	USEPA 8260C	4650	**5.61**	**0.46 J**	**6.85**	**45.2**	**1.26**
Trichloroethene (TCE)	USEPA 8260C	26.4	1.04 U	1.05 U	**0.85**	1.06 U	1.01 U
Vinyl chloride	USEPA 8260C	1.83	1.04 U	1.05 U	0.84 U	1.06 U	1.01 U
Total Petroleum Hydrocarbons (mg/kg)							
Gasoline range hydrocarbons	NWTPH-Gx		5.34 U	5.49 U	5.82 U	5.42 U	5.97 U

Notes:

Detected concentration is greater than MTCA Method B Soil Protect GW V25C screening level

Bold = Detected result

J = Estimated value

U = Compound analyzed, but not detected above detection limit

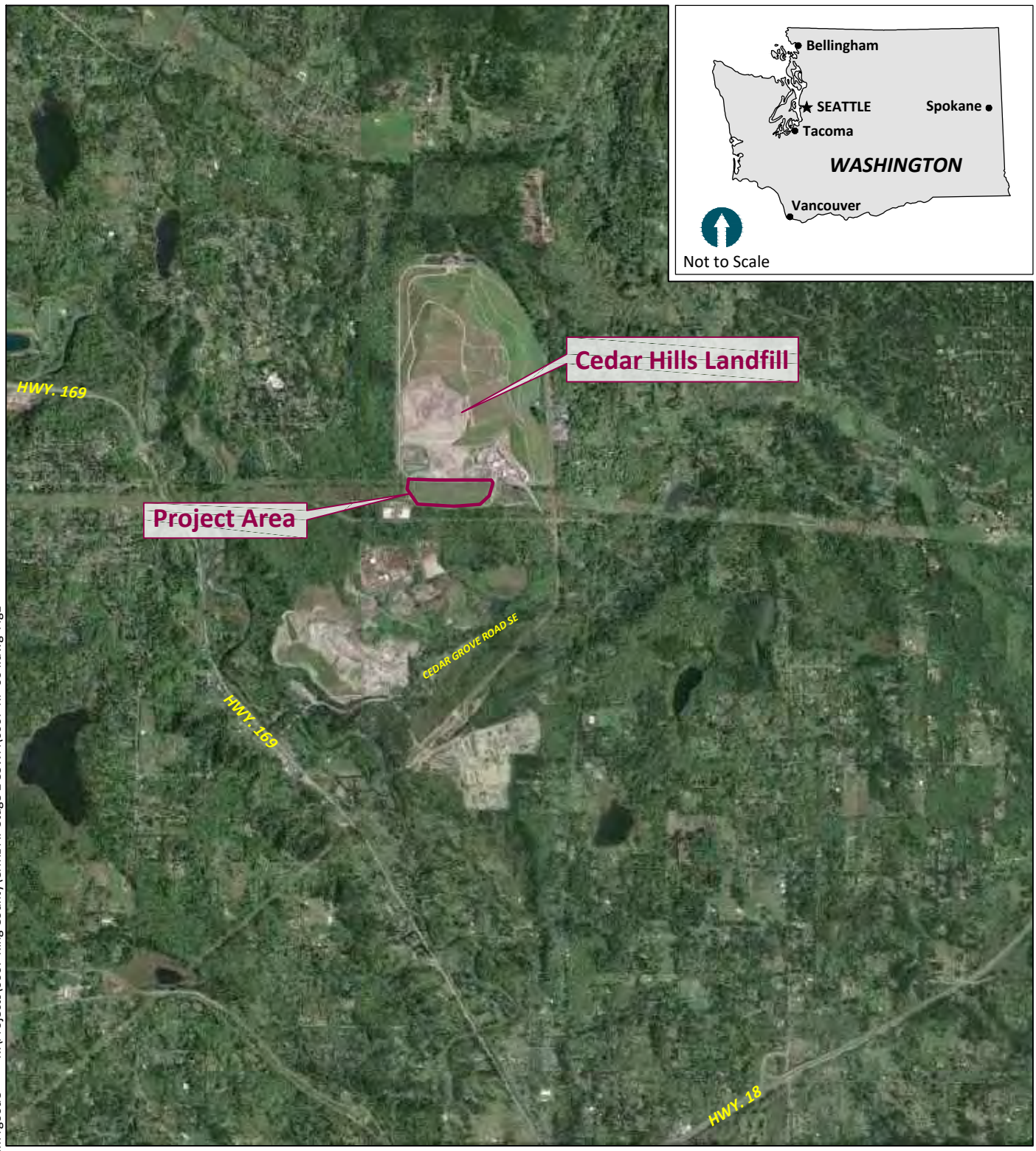
1. Coordinates are in NAD27 Washington State Plane North, U.S. Feet.

FD = Field Duplicate

N = Normal Enviornmental Sample

SO = Soil

FIGURES



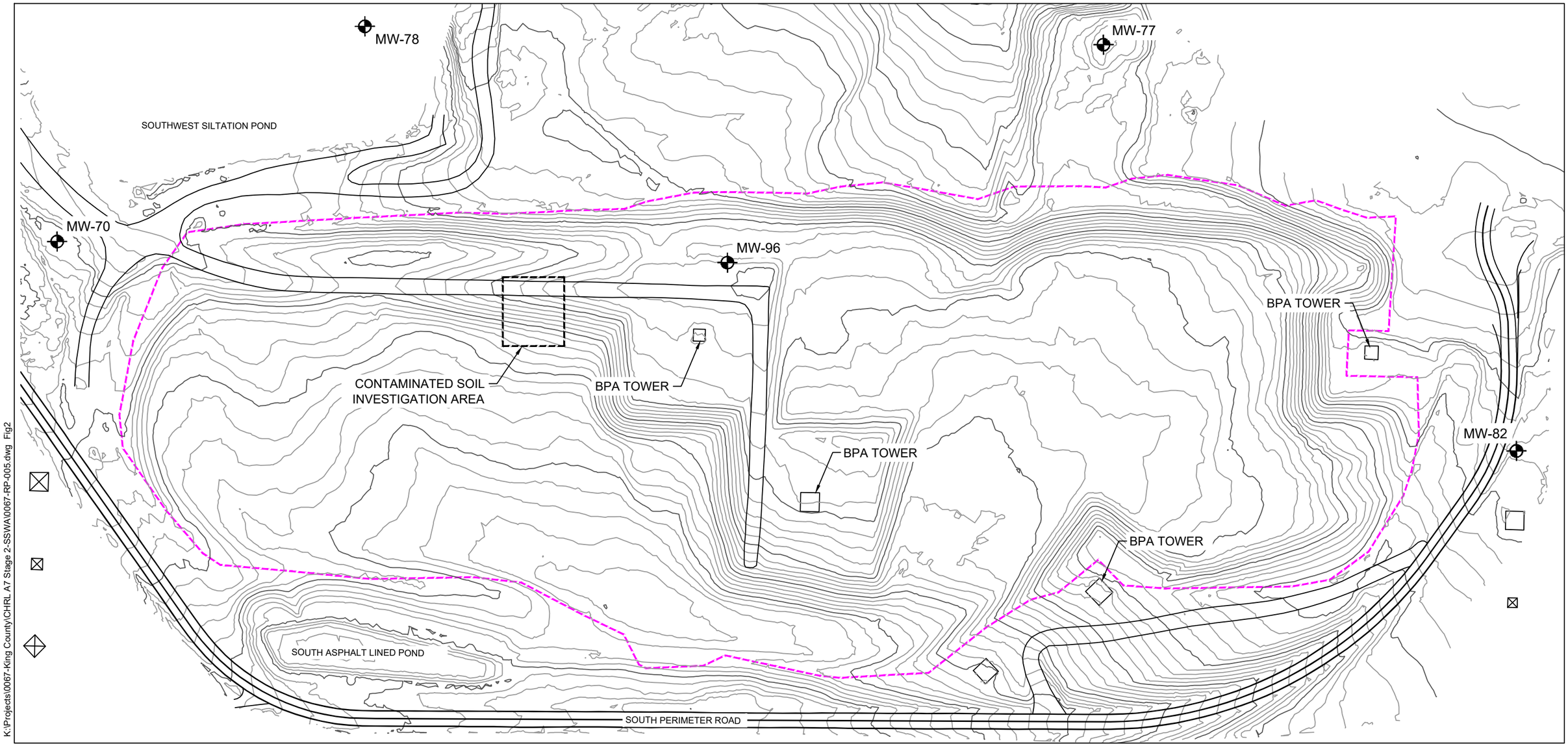
Apr 22, 2016 11:39am rgoode K:\Projects\0067-King County\CHRL A7 Stage 2-SSWA\0067-RP-004.dwg Fig1

AERIAL SOURCE: Google Earth Pro, 2015.

0 3500
Scale in Feet

ANCHOR QEA

Figure 1
Site Vicinity Map
Contaminated Soil Removal Report
CHRL SW Stormwater and CSW Ponds and LFG Pipeline



K:\Projects\0067-King County\CHRL A7 Stage 2-SSWA\0067-RP-005.dwg Fig2
Apr 22, 2016 11:39am rgoode

SOURCE: Drawing prepared from electronic AutoCad file provided by Lin & Associates Inc., dated February 22, 2015.
HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

NOTES:

LEGEND:

5 — Existing Contours (2015, 1 ft Intervals)

2015 SSWA Excavation Limits

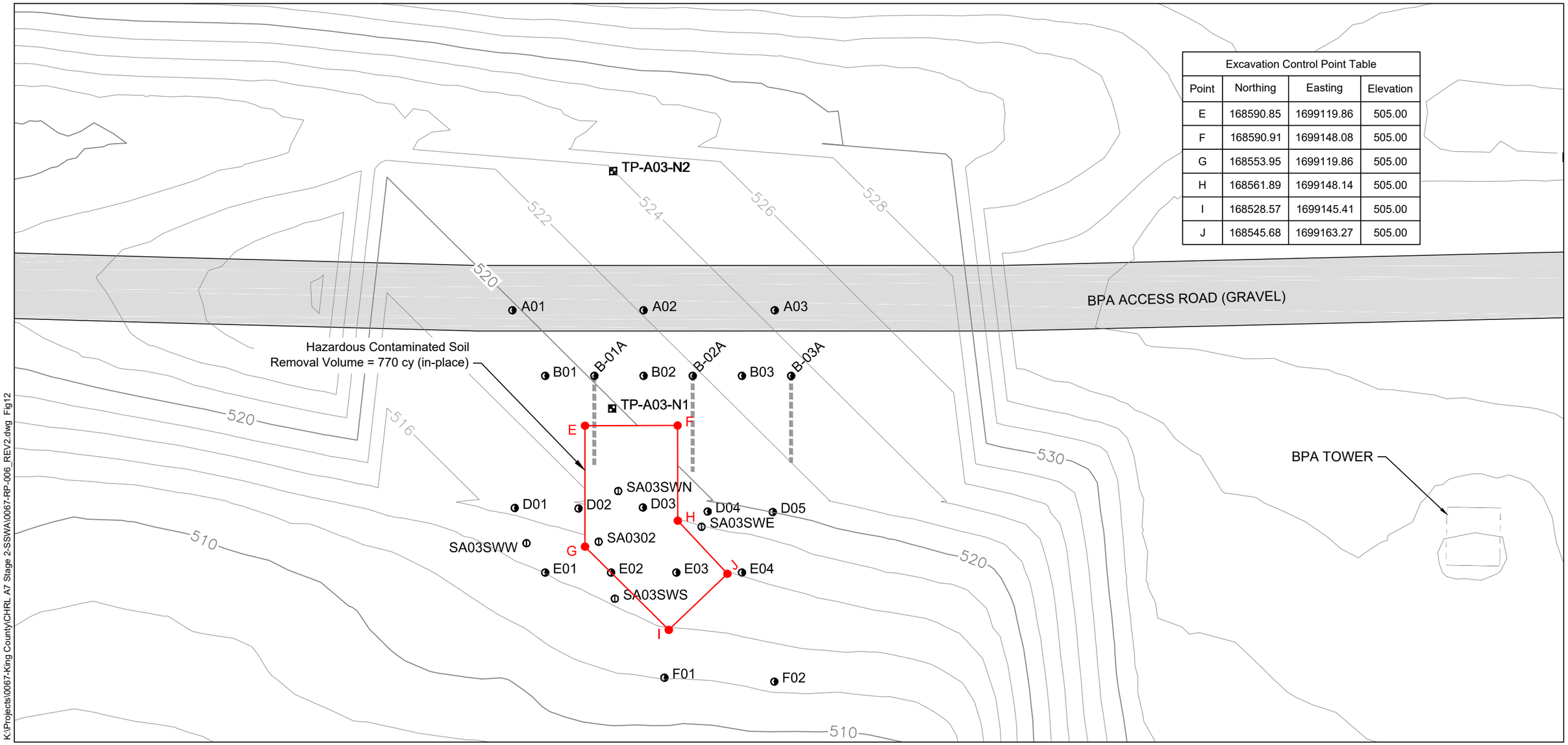
MW-96 — Monitoring well location and ID

0 150
Scale in Feet

ANCHOR QEA

Figure 2
Site Location Plan
Contaminated Soil Removal Report
CHRL SW Stormwater and CSW Ponds and LFG Pipeline

Excavation Control Point Table			
Point	Northing	Easting	Elevation
E	168590.85	1699119.86	505.00
F	168590.91	1699148.08	505.00
G	168553.95	1699119.86	505.00
H	168561.89	1699148.14	505.00
I	168528.57	1699145.41	505.00
J	168545.68	1699163.27	505.00



K:\Projects\0067-King County\CHRL A7 Stage 2-SSWA\0067-RP-006_REV2.dwg Fig12

Jun 13, 2016 9:29am rgoode

SOURCE: Drawing prepared from electronic topographic survey provided by Lin and Associates, Inc., dated December 8, 2015.
HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

NOTES: Soil concentrations shown indicate laboratory analytical results from SSWA confirmation sampling conducted by Anchor QEA between 8-6-2015 and 3-10-2016.

LEGEND:

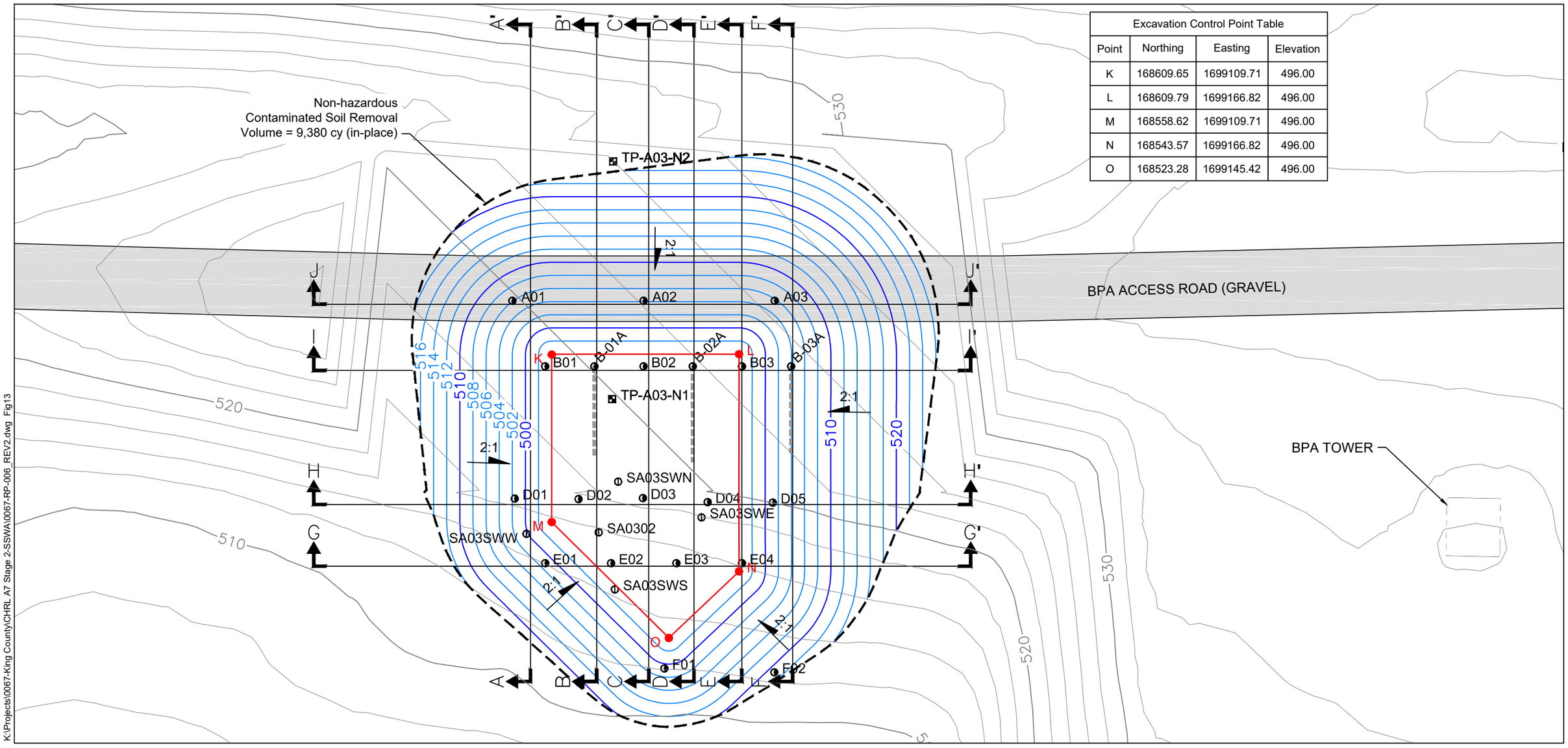
- **E01** — 2016 Boring Location and ID
- SA0300 — 2015 Surface Sample Location and ID
- TP-A03-N1 — 2015 Test Pit Location and ID
- Boring drilled at 41° from horizontal
- 5 — Existing Contours (2 ft Intervals)
- 5 — Proposed Contours (2 ft Intervals)
- Proposed Hazardous contaminated soil excavation limits
- A — Excavation control point

0 30
Scale in Feet

ANCHOR QEA

Figure 3
Hazardous Contaminated Soil Removal Plan Contaminated Soil
Contaminated Soil Removal Reportt
CHRL SW Stormwater and CSW Ponds and LFG Pipeline

Excavation Control Point Table			
Point	Northing	Easting	Elevation
K	168609.65	1699109.71	496.00
L	168609.79	1699166.82	496.00
M	168558.62	1699109.71	496.00
N	168543.57	1699166.82	496.00
O	168523.28	1699145.42	496.00



K:\Projects\0067-King County\CHRL A7 Stage 2-SSWA\0067-RP-006_REV2.dwg Fig13

Jun 13, 2016 9:30am rgoode

SOURCE: Drawing prepared from electronic topographic survey provided by Lin and Associates, Inc., dated December 8, 2015.
HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

NOTES: Soil concentrations shown indicate laboratory analytical results from SSWA confirmation sampling conducted by Anchor QEA between 8-6-2015 and 3-10-2016.

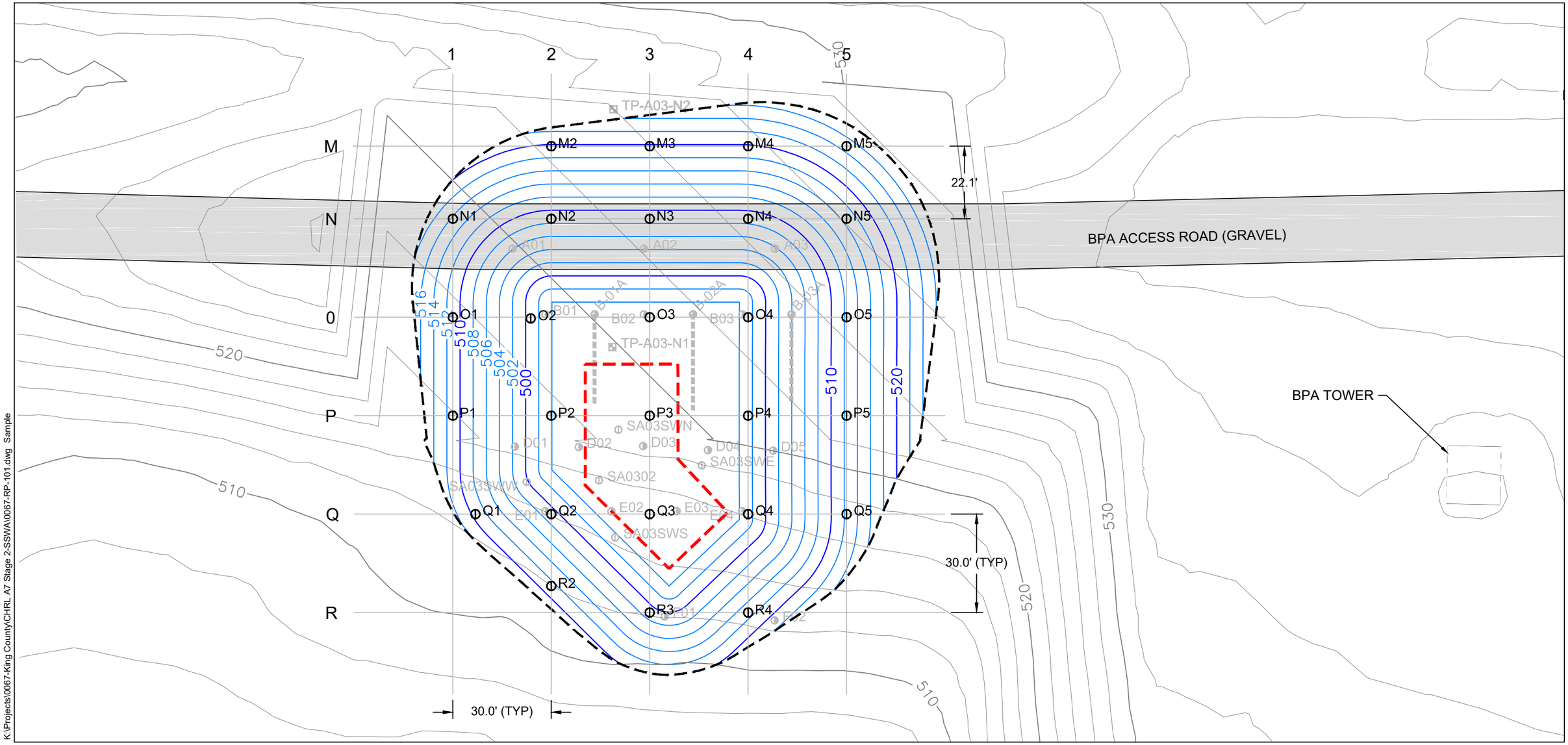
LEGEND:

- E01 — 2016 Boring Location and ID
- SA0300 — 2015 Surface Sample Location and ID
- TP-A03-N1 — 2015 Test Pit Location and ID
- Boring drilled at 41° from horizontal
- Existing Contours (2 ft Intervals)
- Proposed Contours (2 ft Intervals)
- A — Cross Section Location and Designation
- Proposed Non-hazardous contaminated soil excavation bottom
- Proposed Non-hazardous contaminated soil excavation limits
- A — Excavation control point

0 30
Scale in Feet

ANCHOR QEA

Figure 4
Non-Hazardous Contaminated Soil Removal Plan Contaminated
Contaminated Soil Removal Report
CHRL SW Stormwater and CSW Ponds and LFG Pipeline



K:\Projects\0067-King County\CHRL A7 Stage 2-SSWA\0067-RP-101.dwg Sample
Jun 29, 2016 9:30am rgoode

SOURCE: Drawing prepared from electronic topographic survey provided by Lin and Associates, Inc., dated December 8, 2015.
HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

NOTES: Soil concentrations shown indicate laboratory analytical results from SSWA confirmation sampling conducted by Anchor QEA between 8-6-2015 and 3-10-2016.

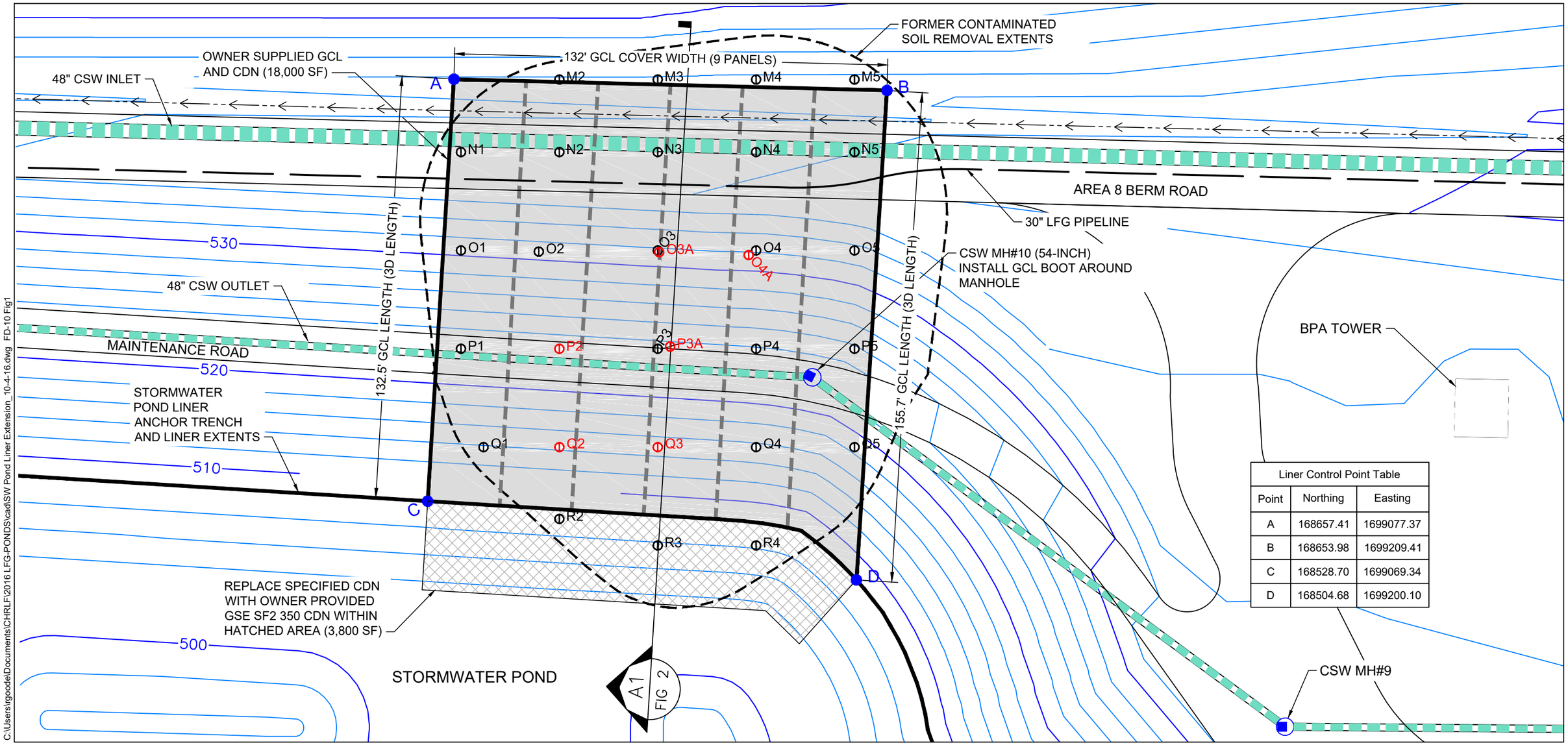
LEGEND:

- E01 — 2016 boring location and ID
- SA03SWS — 2015 surface sample location and ID
- TP-A03-N1 — 2015 test pit location and ID
- Boring drilled at 41° from horizontal
- 5 — Existing contours (2-foot intervals)
- 5 — Proposed contours (2-foot intervals)
- N3 — Proposed soil confirmation sample location and ID
- Proposed hazardous contaminated soil excavation limits
- Proposed non-hazardous contaminated soil excavation limits

0 30
Scale in Feet

ANCHOR QEA

Figure 5
Confirmation Sample Location Plan
Contaminated Soil Removal Report
CHRL SW Stormwater and CSW Ponds and LFG Pipeline



Liner Control Point Table		
Point	Northing	Easting
A	168657.41	1699077.37
B	168653.98	1699209.41
C	168528.70	1699069.34
D	168504.68	1699200.10

C:\Users\rgoode\Documents\CHRLF\2016 LFG-PONDS\cad\SW Pond Liner Extension_10-4-16.dwg FD-10 Fig1

Oct 04, 2016 7:32am rgoode

HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

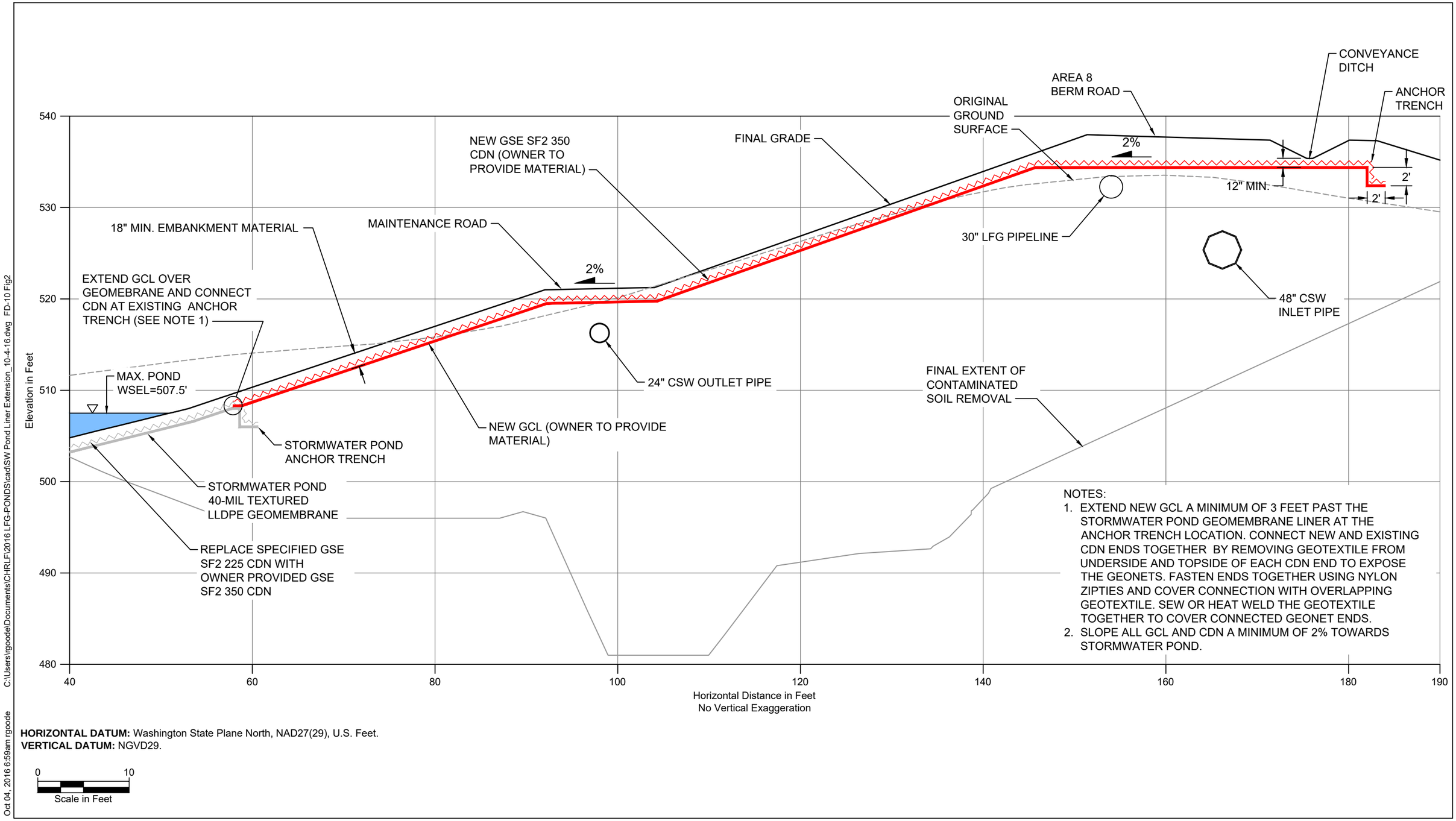
LEGEND:

- 5 — Final Contours (2 ft Intervals)
- Former contaminated soil excavation limits
- Drainage ditch
- Φ P1 — Soil confirmation sample location and ID below MTCA Method B Protective of Groundwater cleanup level
- Φ O3A — Soil confirmation sample location and ID exceeding MTCA Method B Protective of Groundwater cleanup level
- A — Liner control point and ID

0 30
Scale in Feet

ANCHOR QEA

Figure 6
Contaminated Soil Removal Area Liner Extension Plan
Contaminated Soil Removal Report
CHRL SW Stormwater and CSW Ponds and LFG Pipeline



HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

0 10
Scale in Feet

C:\Users\rgoode\Documents\CHRLF\2016 LFG-PONDS\cad\SW Pond Liner Extension_10-4-16.dwg FD-10 Fig2
Oct 04, 2016 6:59am rgoode

ANCHOR QEA

Figure 7
Contaminated Soil Removal Area Liner Extension Cross Section
Contaminated Soil Removal Report
CHRL SW Stormwater and CSW Ponds and LFG Pipeline

APPENDIX A
DISPOSAL DOCUMENTATION

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204835JJK	
CWM TRACKING ID:	449252-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/05/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/05/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/17/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204836JJK	
CWM TRACKING ID:	449255-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/05/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/05/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/17/2016**

B

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204837JJK	
CWM TRACKING ID:	449253-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/05/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/05/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/17/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204838JJK	
CWM TRACKING ID:	449254-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/05/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/05/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/17/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT
17629 Cedar Springs Lane
Arlington, OR 97812

KING GOUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF RECEIPT

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE
MANIFEST #:	016204839JJK
CWM TRACKING ID:	449260-01
PROFILE #:	OR332161
LINE ITEM:	9b.1
QUANTITY:	1 DT
RECEIVED DATE:	10/05/16
DISPOSAL PROCESS(ES):	LANDFILL
FINAL DISPOSAL LOCATION:	LANDFILL 14
DISPOSAL DATE:	10/05/16

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

Gina Weiser

CWMNW RECORDS DEPARTMENT
Date: **10/17/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204840JJK	
CWM TRACKING ID:	449263-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/05/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/05/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/17/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204841JJK	
CWM TRACKING ID:	449264-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/05/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/05/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/17/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204842JJK	
CWM TRACKING ID:	449258-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/05/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/05/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/17/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204843JJK	
CWM TRACKING ID:	449256-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/05/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/05/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/17/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204844JJK	
CWM TRACKING ID:	449259-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/05/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/05/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/17/2016**

9

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204845JJK	
CWM TRACKING ID:	449262-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/05/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/05/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/17/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204846JJK	
CWM TRACKING ID:	449261-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/05/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/05/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/17/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING GOUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204847JJK	
CWM TRACKING ID:	449293-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/06/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/06/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING GOUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204848JJK	
CWM TRACKING ID:	449294-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/06/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/06/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING GOUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204849JJK	
CWM TRACKING ID:	449290-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/06/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/06/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING GOUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204850JJK	
CWM TRACKING ID:	449292-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/06/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/06/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING GOUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204851JJK	
CWM TRACKING ID:	449291-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/06/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/06/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT
17629 Cedar Springs Lane
Arlington, OR 97812

KING GOUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF RECEIPT

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE
MANIFEST #:	016204852JJK
CWM TRACKING ID:	449295-01
PROFILE #:	OR332161
LINE ITEM:	9b.1
QUANTITY:	1 DT
RECEIVED DATE:	10/06/16
DISPOSAL PROCESS(ES):	LANDFILL
FINAL DISPOSAL LOCATION:	LANDFILL 14
DISPOSAL DATE:	10/06/16

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

Tina M Weiser

CWMNW RECORDS DEPARTMENT
Date: **10/17/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING GOUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204853JJK	
CWM TRACKING ID:	449298-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/06/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/06/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING GOUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204854JJK	
CWM TRACKING ID:	449297-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/06/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/06/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING GOUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204855JJK	
CWM TRACKING ID:	449299-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/06/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/06/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING GOUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204856JJK	
CWM TRACKING ID:	449301-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/06/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/06/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING GOUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204857JJK	
CWM TRACKING ID:	449300-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/06/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/06/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD04?848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204858JJK	
CWM TRACKING ID:	449332-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/07/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/07/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

9

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204859JJK	
CWM TRACKING ID:	449337-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/07/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/07/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204860JJK	
CWM TRACKING ID:	449333-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/07/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/07/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

B

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD041848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204861JJK	
CWM TRACKING ID:	449334-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/07/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/07/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047648122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204862JJK	
CWM TRACKING ID:	449338-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/07/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/07/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

8

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204863JJK	
CWM TRACKING ID:	449336-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/07/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/07/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047348122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204864JJK	
CWM TRACKING ID:	449335-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/07/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/07/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204865JJK	
CWM TRACKING ID:	449340-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/07/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/07/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204866JJK	
CWM TRACKING ID:	449341-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/07/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/07/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

9

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204867JJK	
CWM TRACKING ID:	449339-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/07/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/07/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204868JJK	
CWM TRACKING ID:	449343-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/07/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/07/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/24/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204869JJK	
CWM TRACKING ID:	449370-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/10/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/10/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/24/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204870JJK	
CWM TRACKING ID:	449369-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/10/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/10/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/24/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204871JJK	
CWM TRACKING ID:	449367-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/10/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/10/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/24/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING COUNTY SOLID WASTE	
MANIFEST #:	016204872JJK	
CWM TRACKING ID:	449366-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/10/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/10/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/24/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204873JJK	
CWM TRACKING ID:	449371-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/10/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/10/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

WASTE MANAGEMENT

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST
17629 Cedar Springs Lane
Arlington, OR 97812

KING COUNTY SOLID WASTE
WAD047848122
16645 228TH AVE SE
MAPLE VALLEY, WA 98038

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material:

GENERATOR:	KING GOUNTY SOLID WASTE	
MANIFEST #:	016204874JJK	
CWM TRACKING ID:	449424-01	
PROFILE #:	OR332161	
LINE ITEM:	9b.1	
QUANTITY:	1 DT	
RECEIVED DATE:	10/11/16	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	10/11/16	

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste material was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

CWMNW RECORDS DEPARTMENT
Date: **10/18/2016**

R52

449252

CWM

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 016204835 JJK

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	32.0	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS

64400 P
32.2 T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN
Signature: J. STEIN for King County
Month 10 Day 5 Year 16

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Mark Ehrlw
Signature: [signature]
Month 10 Day 5 Year 16
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132
2.
3.
4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Tina Weiser
Signature: [signature]
Month 10 Day 5 Year 16

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

R5E 449255 2 CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122
2. Page 1 of: 1
3. Emergency Response Phone: (800) 424-9300
4. Manifest Tracking Number: 016204836 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509) 662-7111

Generator's Site Address (if different than mailing address)

8:06 AM

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541) 454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	3326	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
26 T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEILI
Signature: J. Steili For King Co.
Month: 10 Day: 5 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Justin Bown
Signature:
Month: 10 Day: 5 Year: 16
Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Quantity Changed per Driver. D. 10/5/16
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Dathi Brandt
Signature:
Month: 10 Day: 05 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

R57

449253

CWM

16 OCT 25 8:06AM

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800)424-9300	016204837 JJK

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT — U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	31	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN — Signature: J. Stein for King Co — Month 10 Day 5 Year 16

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Shane Hersler — Signature: [signature] — Month 10 Day 5 Year 16
Transporter 2 Printed/Typed Name — Signature — Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Patti Brandt — Signature: [signature] — Month 10 Day 05 Year 16

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

23 449254 CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800) 424-9300	016204838 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509) 662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT — U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541) 454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	32	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
595601P
29.78 T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: John Steili — Signature: J. Steili for King Co. — Month 10 Day 5 Year 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: John Stewart — Signature: John Stewart — Month 10 Day 5 Year 16

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Tina Weiser — Signature: Tina Weiser — Month 10 Day 5 Year 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

2016 OCT 25 8:06 AM

22 449266

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800)424-9300	016204839 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
R TRANSPORT
U.S. EPA ID Number
WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number
ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	32T	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
32.13 T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: John Stein
Signature: J. Stein for King Co.
Month: 10 Day: 5 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Rick Boots
Signature:
Month: Day: Year:

Transporter 2 Printed/Typed Name:
Signature:
Month: 10 Day: 5 Year: 16

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Patti Brandt
Signature: Patti Brandt
Month: 10 Day: 05 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

R31

449263

CWM

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Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800) 424-9300	016204840 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038

Generator's Site Address (if different than mailing address)

Generator's Phone: (509) 662-7111

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
U.S. EPA ID Number: ORD089452353

Facility's Phone: (541) 454-2643

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	35T	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
35.71T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: John Stein
Signature: J. Stein for King Co
Month: 10 Day: 5 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: D Strickler
Signature:
Month: 10 Day: 4 Year: 16

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Ranawest
Signature:
Month: 10 Day: 5 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

R62 449064

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	WAD047848122	1	(800)424-9300	016204841 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT — U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	61,660	T	D040
	2.			30 Ton		
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
30.91T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: John Stein — Signature: J. Stein for King Co. — Month 10 Day 5 Year 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Ken Sides — Signature — Month 10 Day 5 Year 16

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Patti Brainard — Signature — Month 10 Day 05 Year 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

6

449258

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122
2. Page 1 of: 1
3. Emergency Response Phone: (800) 424-9300
4. Manifest Tracking Number: 016204842 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509) 662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541) 454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	10 TON 38.RD	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
34T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN
Signature: J. Stein for King Co.
Month: 10 Day: 5 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Richard Dwitz
Signature:
Month: 10 Day: 5 Year: 16

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Quantity changed per driver. Dw 10/5/16
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Dana West
Signature:
Month: 10 Day: 5 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

16 OCT 25 8:00 AM

13 449256 CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WA D 0 4 7 8 4 8 1 2 2
2. Page 1 of: 1
3. Emergency Response Phone: (800) 424-9300
4. Manifest Tracking Number: 016204843 JJK

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509) 662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WA H 0 0 0 0 2 8 3 3 8

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541) 454-2643
U.S. EPA ID Number: ORD 0 8 9 4 5 2 3 5 3

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	33	T	D040
	2.			36 K.T.		
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS 36.T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN
Signature: J. Stein for King Co.
Month: 10 Day: 5 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kyle Schrader
Signature:
Month: 10 Day: 5 Year: 16

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Changed per driver. p13 10/05/16
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Patti Brandt
Signature: Patti Brandt
Month: 10 Day: 05 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

5 449259 CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122
2. Page 1 of: 1
3. Emergency Response Phone: (800) 424-9300
4. Manifest Tracking Number: 016204844 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509) 662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541) 454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	35	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
PROFILE OR832181- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS 36. T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN
Signature: J. Stein for King Co.
Month: 10 Day: 5 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Mike Poe
Signature:
Month: 10 Day: 5 Year: 16

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Patti Brandt
Signature: Patti J Brandt
Month: 10 Day: 05 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

12 449262 CWMI

16 OCT 25 8:03AM

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 016204845 JJK

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	32	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS

32.14T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN
Signature: J Stein for King Co.
Month 10 Day 5 Year 16

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: TROY Comerise
Signature: TRC
Month 10 Day 5 Year 16
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132
2.
3.
4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Dana West
Signature: [signature]
Month 10 Day 5 Year 16

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

K9

44A 2C1

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800) 424-9300	016204846 JJK

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509) 662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT — U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541) 454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	34 T.S. ~~32~~	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS

34 T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN — Signature: J. STEIN for King Co. — Month 10 Day 5 Year 16

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: TROY D. SCHMITT — Signature: [signature] — Month 10 Day 5 Year 16
Transporter 2 Printed/Typed Name — Signature — Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Quantity Changed per driver. Dec 16/5/16 Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Dana West — Signature: [signature] — Month 10 Day 5 Year 16

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449293

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800)424-9300	016204847 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)862-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
R TRANSPORT
U.S. EPA ID Number
WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
U.S. EPA ID Number
ORD089452353
Facility's Phone: (541)454-2643

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	2 34 JB	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
34.T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: John Stein
Signature: J. Stein for King Co.
Month: 10 Day: 6 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Justin Bond
Signature:
Month: 10 Day: 6 Year: 16
Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Patti Brandt
Signature: Patti Brandt
Month: 10 Day: 06 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449294

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800) 424-9300	016204848 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038

Generator's Site Address (if different than mailing address)

Generator's Phone: (509) 662-7111

6. Transporter 1 Company Name
R TRANSPORT

U.S. EPA ID Number
WAH000028338

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709

U.S. EPA ID Number
ORD089452353

Facility's Phone: (541) 454-2643

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	34 SM	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS

34.T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN
Signature: J. Stein for King Co.
Month: 10 Day: 6 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Shane Hensley
Signature:
Month: 10 Day: 16 Year: 16

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Patti Brandt
Signature:
Month: 10 Day: 06 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449290

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800)424-9300	016204849 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
R TRANSPORT

U.S. EPA ID Number
WAH000028338

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643

U.S. EPA ID Number
ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	30,	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS

63440 P
31.72 T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN
Signature: J. Stein for King Co.
Month: 10 Day: 6 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Mark Ehl
Signature: Mark Ehl
Month: 10 Day: 6 Year: 16

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Tina Weisser
Signature: Tina Weisser
Month: 10 Day: 6 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449292 SW 10/6/16 ~~449329~~

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	WAD047848122	1	(800)424-9300	016204850 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT — U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	32	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS

64320 P
32.16

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN — Signature: J. Stein for King Co. — Month: 10 Day: 6 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: John Seward — Signature: [signature] — Month: 10 Day: 6 Year: 16

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month — Day — Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Tina Weiser — Signature: [signature] — Month: 10 Day: 6 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449291

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	WAD047848122	1	(800)424-9300	016204851 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT — U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	34	T	D040
	2.			30 LBS.		
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS 30. T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN — Signature: J. Stein f. King Co. — Month: 10 Day: 6 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kyle Schrader — Signature: [signature] — Month: 10 Day: 6 Year: 16

Transporter 2 Printed/Typed Name — Signature — Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Patti Brandt — Signature: [signature] — Month: 10 Day: 06 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449295

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	WAD047848122	1	(800) 424-9300	016204852 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038

Generator's Site Address (if different than mailing address)

Generator's Phone: (509) 662-7111

6. Transporter 1 Company Name: R TRANSPORT — U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709

U.S. EPA ID Number: ORD089452353

Facility's Phone: (541) 454-2643

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	00	DT	37 35	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS 37.T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jim Stein — Signature: J. Stein for King Co. — Month 10 Day 6 Year 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Anthony Pearl — Signature — Month 10 Day 6 Year 16

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Patti Brandt — Signature — Month 10 Day 06 Year 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449298

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800)424-9300	016204853 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
R TRANSPORT
U.S. EPA ID Number
WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number
ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	33	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS

68520 P
34.26T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Joan Stein
Signature: J. Stein for King Co.
Month: 10 Day: 6 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Richard D. Witz
Signature:
Month: 10 Day: 6 Year: 16

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Patti Brandt
Signature:
Month: 10 Day: 06 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449297

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 016204854 JJK

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	35	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS 34.47T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: John Stein
Signature: J. Stein for King Co.
Month 10 Day 6 Year 16

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Mike Poe
Signature:
Month 10 Day 6 Year 16
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Patti Brandt
Signature: Patti Brandt
Month 10 Day 26 Year 16

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449299

CWM

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800)424-9300	016204855 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
R TRANSPORT
U.S. EPA ID Number
WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number
ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	32	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
34. T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN
Signature: J. STEIN for King Co.
Month: 10 Day: 6 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: TROY D. SCHMITT
Signature:
Month: 10 Day: 6 Year: 16

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Patti Brandt
Signature: Patti Brandt
Month: 10 Day: 06 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

449301

CWML 16 OCT 25 8:00 AM

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122
2. Page 1 of: 1
3. Emergency Response Phone: (800) 424-9300
4. Manifest Tracking Number: 016204856 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509) 662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541) 454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	00	DT	34.5	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
34.98T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN
Signature: J. Stein for King Co.
Month: 10 Day: 6 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: TROY Lomenise
Signature: TROY
Month: 10 Day: 6 Year: 16

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
weight change per drive. P.B.
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Patti Brandt
Signature: Patti Brandt
Month: 10 Day: 06 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449300

CWM

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122

2. Page 1 of: 1

3. Emergency Response Phone: (800)424-9300

4. Manifest Tracking Number: 016204857 JJK

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	32	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
32.93T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JULIE STEIN
Signature: J. Stein for King Co.
Month: 10 Day: 6 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Jack Baptista
Signature:
Month: 10 Day: 6 Year: 16
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Patti Brandt
Signature: Patti Brandt
Month: 10 Day: 06 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449332

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122

2. Page 1 of: 1

3. Emergency Response Phone: (800) 424-9300

4. Manifest Tracking Number: 016204858 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038

Generator's Site Address (if different than mailing address)

Generator's Phone: (509) 662-7111

6. Transporter 1 Company Name: R TRANSPORT

U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709

U.S. EPA ID Number: ORD089452353

Facility's Phone: (541) 454-2643

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	00	DT	32	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS

32.68T
65360P

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN

Signature: J. Stein for King Co.

Month: 10 Day: 7 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Shane Hensel

Signature

Month: 10 Day: 7 Year: 16

Transporter 2 Printed/Typed Name

Signature

Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)

Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Tina Weiser

Signature

Month: 10 Day: 7 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449337

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122
2. Page 1 of: 1
3. Emergency Response Phone: (800) 424-9300
4. Manifest Tracking Number: 016204859 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509) 662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541) 454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE),	001	DT	32	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
T. PROFILE OR332161- TCE CONTAMINATED SOIL, ERG # 171; RQ= 100 LBS 32.63T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEILI
Signature: J. Steili for King Co.
Month: 10 Day: 7 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: JUSTIN BONN
Signature:
Month: 10 Day: 7 Year: 16

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Patti Brandt
Signature:
Month: 10 Day: 07 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449333

CWMI

16 NOV 8 11:43AM

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 016204860 JJK

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	32.	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS

65640P
32.82 T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN
Signature: J. STEIN for King Co.
Month 10 Day 7 Year 16

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Mark Ehrl
Signature: [signature]
Month 10 Day 7 Year 16

Transporter 2 Printed/Typed Name
Signature
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132
2.
3.
4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Tina Weiser
Signature: [signature]
Month 10 Day 7 Year 16

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449334

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800)424-9300	016204861 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
R TRANSPORT
U.S. EPA ID Number
WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number
ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	32	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
66440 P
33.22 T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN
Signature: J. Stein for King Co.
Month: 10 Day: 7 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JOHN STEWART
Signature:
Month: 10 Day: 7 Year: 16

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Tina Weiser
Signature: Tina Weiser
Month: 10 Day: 7 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449338

CWMI

16 NOV 08 11:44AM

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 016204862 JJK

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509) 662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	32	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS

32.65 T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN
Signature: J. Stein for King Co.
Month 10 Day 7 Year 16

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Rick Bootstr
Signature:
Month 10 Day 7 Year 16
Transporter 2 Printed/Typed Name
Signature
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132
2.
3.
4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Patti Brandt
Signature: Patti Brandt
Month 10 Day 07 Year 16

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

4493336

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800)424-9300	016204863 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
R TRANSPORT
U.S. EPA ID Number
WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number
ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	00	QT	36	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
34.49T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN
Signature: J. Stein for King Co.
Month: 10 Day: 7 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Anthony Pearl
Signature:
Month: 10 Day: 7 Year: 16
Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Changed by Driver. PB
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Darli Brandt
Signature:
Month: 10 Day: 07 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

16 NOV 8 11:44AM

449335

CWMI

16 NOV 8 11:44AM

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800)424-9300	016204864 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038

Generator's Site Address (if different than mailing address)

Generator's Phone: (509)662-7111

6. Transporter 1 Company Name: R TRANSPORT — U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709

U.S. EPA ID Number: ORD089452353

Facility's Phone: (541)454-2643

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	00	DT	33	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS

34.49 T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN — Signature: J. Stein for King Co. — Month: 10 Day: 7 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kyle Schrade — Signature — Month: 10 Day: 7 Year: 16

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Patti Brandt — Signature — Month: 10 Day: 07 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

1 449340

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800) 424-9300	016204865 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509) 662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
R TRANSPORT
U.S. EPA ID Number
WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541) 454-2643
U.S. EPA ID Number
ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ, NA3077, HAZARDOUS WASTE, SOLID, N.O.S., 9, III (TRICHLOROETHENE)	001	DT	34 32RP	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
31.86T
63720 P

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN
Signature: J. Stein for King Co.
Month: 10 Day: 7 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Richard Drewitz
Signature:
Month: 10 Day: 7 Year: 16

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☑ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Quantity changed by driver JW 10/7/16
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Dallis Braidt
Signature: Dallis Braidt
Month: 10 Day: 07 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

18 NOV 8 11 44 AM

449341

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800)424-9300	016204866 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038

Generator's Site Address (if different than mailing address)

Generator's Phone: (509) 662-7111

6. Transporter 1 Company Name
R TRANSPORT

U.S. EPA ID Number
WAH000028338

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709

U.S. EPA ID Number
ORD089452353

Facility's Phone: (541) 454-2643

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ, NA3077, HAZARDOUS WASTE SOLID, N.O.S., 9, III (TRICHLOROETHENE)	00	DT	35	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS 34.88 T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN | Signature: J. Stein for King Co. | Month: 10 | Day: 7 | Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Mike Poe | Signature | Month: 10 | Day: 7 | Year: 16

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) | U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Patti Brandt | Signature: Patti Brandt | Month: 10 | Day: 07 | Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

CWM 16 NOV 8 11:44AM

449339

CWML 16NOV 8 11:44AM

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122
2. Page 1 of: 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 016204867 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)862-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	00	DT	32	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
33.98

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEIN
Signature: J. Stein for King Co.
Month: 10 Day: 7 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: TROY D. SCHMITT
Signature:
Month: 10 Day: 7 Year: 16

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Patti Brandt
Signature: Patti Brandt
Month: 10 Day: 07 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

4493413

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800) 424-9300	016204868 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038

Generator's Site Address (if different than mailing address)

Generator's Phone: (509) 662-7111

6. Transporter 1 Company Name
R TRANSPORT

U.S. EPA ID Number
WAH000028338

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709

U.S. EPA ID Number
ORD089452353

Facility's Phone: (541) 454-2643

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	33	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS 33.87T.

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Dolli Stein | Signature: J. Stein for King Co. | Month: 10 | Day: 7 | Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: TROY Gemoise | Signature: TROY | Month: 10 | Day: 7 | Year: 16

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Patti Brandt | Signature: Patti Brandt | Month: 10 | Day: 07 | Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

NOV 8 2016

449370

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800)424-9300	016204869 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	32	T	D040
	2.					
	3.					
	4.					

BMS 10.19.16

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
32.72T.
~~32.T~~
65440 P.

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOLLI STEIN
Signature: J. Stein for Kim & Co.
Month: 10 Day: 7 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Dustin Gallagher
Signature:
Month: 10 Day: 7 Year: 16

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Dana West
Signature:
Month: 10 Day: 10 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

4493609

CWMI

16 NOV 8 11:43 AM

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800)424-9300	016204870 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038

Generator's Site Address (if different than mailing address)

Generator's Phone: (509)662-7111

6. Transporter 1 Company Name
R TRANSPORT

U.S. EPA ID Number
WAH000028338

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709

U.S. EPA ID Number
ORD089452353

Facility's Phone: (541)454-2643

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	00	DT	#32	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL, ERG # 171, RQ= 100 LBS

32.26T

64520P

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JOHN STEINI — Signature: J. Steini for King Co. — Month: 10 Day: 7 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Ken Sider — Signature: — Month: 10 Day: 7 Year: 16

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month — Day — Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Patti Brandt — Signature: Patti Brandt — Month: 10 Day: 10 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

4493671

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD047848122	1	(800)424-9300	016204871 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
R TRANSPORT
U.S. EPA ID Number
WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number
ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE),	001	DT	32	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
32.38 T.
64760 P.

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: RICHARD GOODE F.R KING COUNTY
Signature:
Month: 10 Day: 10 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Mark Ehaler
Signature:
Month: 10 Day: 15 Year: 16
Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Patti Brandt
Signature:
Month: 10 Day: 10 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

449366

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122
2. Page 1 of: 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 016204872 JJK

GENERATOR

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	00	DT	32	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS
32.74 T.
65420 P.

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: RICHARD GOODE for KING COUNTY
Signature:
Month: 10 Day: 10 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: DAN STEWART
Signature:
Month: 10 Day: 10 Year: 16
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Dan West
Signature:
Month: 10 Day: 10 Year: 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

16 NOV 8 11:47AM

449371

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 016204873 JJK

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	32	T	D040
	2.			32.		
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS

31.94 T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: RICHARD GOODE for KING COUNTY
Signature: [signature]
Month 10 Day 10 Year 16

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Richard Baptista
Signature: [signature]
Month 10 Day 10 Year 16
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Quantity changed per driver. [illegible]
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Patti Brandt
Signature: Patti Brandt
Month 10 Day 10 Year 16

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

H49424

CWMI

16 OCT 25 7:57AM

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD047848122
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 016204874 JJK

5. Generator's Name and Mailing Address
KING COUNTY SOLID WASTE
16645 228TH AVENUE SE
MAPLE VALLEY WA 98038
Generator's Phone: (509)662-7111

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: R TRANSPORT
U.S. EPA ID Number: WAH000028338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S.,9,III (TRICHLOROETHENE)	001	DT	32	T	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. PROFILE OR332161- TCE CONTAMINATED SOIL; ERG # 171; RQ= 100 LBS

30.28T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: RICHARD E CODE for King County
Signature: [signature]
Month 10 Day 11 Year 16

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Shane Hersley
Signature: [signature]
Month 10 Day 11 Year 16
Transporter 2 Printed/Typed Name
Signature
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132
2.
3.
4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Dana West
Signature: [signature]
Month 10 Day 11 Year 16

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

APPENDIX B
ANALYTICAL REPORTS

Analytical Resources, Incorporated
Analytical Chemists and Consultants

08 July 2016

Cindy Fields
Anchor QEA, LLC
720 Olive Way, Suite 1900
Seattle, WA 98101

RE: CHRL SSWA

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)	Associated SDG ID(s)
16F0096	N/A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the reqirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, Inc.

Cheronne Oreiro, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ACCREDITED IN ACCORDANCE WITH nelac
Cert# 100006

PJLA Testing
Accreditation # 66169

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 16F0096	Turn-around Requested: 2-Day	Page: 1 of 3	
ARI Client Company: Anchor QEA	Phone: (206)326-8170	Date: 6/29/16	Ice Present?
Client Contact: Cindy Fields		No. of Coolers:	Cooler Temps:
Client Project Name: CHRL SSWA			
Client Project #: 150067-01.01	Samplers: EM, AL, RG, AK		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: Total Solids	TPH-Gx	VOCs						Notes/Comments
CHRL-M-02-160629	06/29/16	11:00	SO	5	x	x	x						
CHRL-M-03-160629	06/29/16	11:00	SO	5									
CHRL-M-53-160629	06/29/16	11:00	SO	5									
CHRL-M-04-160629	06/29/16	1115	SO	5									
CHRL-M-05-160629	06/29/16	1115	SO	5									
CHRL-O-01-160629	06/29/16	1215	SO	5									
CHRL-O-02-160629	06/29/16	1205	SO	5									
CHRL-O-03-160629	06/29/16	1155	SO	5									
CHRL-O-04-160629	06/29/16	1145	SO	5									
CHRL-O-05-160629	06/29/16	1135	SO	5									

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: Evan Maliszyk	Printed Name: Justin Meyer	Printed Name:	Printed Name:
	Company: Anchor QEA	Company: ARI	Company:	Company:
	Date & Time: 6/29/16 1445	Date & Time: 6-29-16 1445	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 16F0096	Turn-around Requested: 2-Day	Page: 2 of 3	
ARI Client Company: Anchor QEA	Phone: 206-326-8170	Date: 6/29/16	Ice Present?
Client Contact: Cindy Fields		No. of Coolers:	Cooler Temps:
Client Project Name: CHRL-SSWA			
Client Project #: 150067-01.01	Samplers: EM, AK, RG, AC		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: Total Solids	TPH-Gx	VOCs						Notes/Comments
CHRL-N-01-160629	6/29/16	1125	SO	5	X	X	X						
CHRL-N-02-160629		1135	SO	5									
CHRL-N-03-160629		1145	SO	5									
CHRL-N-04-160629		1155	SO	5									
CHRL-N-05-160629		1120	SO	5									
CHRL-Q-01-160629		1305	SO	5									
CHRL-Q-02-160629		1255	SO	5									
CHRL-Q-03-160629		1245	SO	5									
CHRL-Q-04-160629		1235	SO	5									
CHRL-Q-05-160629		1225	SO	5									

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: Evan Malczyk	Printed Name: Justin Meyer	Printed Name:	Printed Name:
	Company: Anchor QEA	Company: ARI	Company:	Company:
	Date & Time: 6/29/16 1445	Date & Time: 6-29-16 1445	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 16F0096	Turn-around Requested:	Page: 3 of 3	
ARI Client Company: Anchor QEA	Phone: 206 3268170	Date: 6/29/16	Ice Present?
Client Contact: Cindy Fields		No. of Coolers:	Cooler Temps:
Client Project Name: CHRL-SSWA			
Client Project #: 150067-0101	Samplers: EM, AK, RG, AC		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: Total Solids	TPH-Gx	VOCs						Notes/Comments
CHRL-P-01-160629	6/29/16	1300	SO	5	x	x	x						
CHRL-P-02-160629		1310											
CHRL-P-S2-160629		1315											
CHRL-P-03-160629		1325											
CHRL-P-04-160629		1225											
CHRL-P-05-160629		1220											
CHRL-R-02-160629		1345											
CHRL-R-03-160629		1350											
CHRL-R-04-160629		1330											
~~Fr~~ CHRL-TB-160629	6/29/16	1400	WQ	4		x	x						trip blanks 2/cooler

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: Dan Madrzyk	Printed Name: Justin Meyer	Printed Name:	Printed Name:
	Company: Anchor QEA	Company: ARI	Company:	Company:
	Date & Time: 6/29/16 1445	Date & Time: 6-29-16 1445	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Anchor

Project Name: CHRL SSWA

COC No(s): _____ NA

Delivered by: Fed-Ex UPS Courier ~~Hand Delivered~~ Other: _____

Assigned ARI Job No: 16F0096

Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO
Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)	5.5 4.6	
Time: _____		

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: D209276

Cooler Accepted by: JM Date: 6-29-16 Time: 1445

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		(YES)	NO
What kind of packing material was used? ... Bubble Wrap (Wet Ice) Gel Packs Baggies Foam Block Paper Other: _____			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		(YES)	NO
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	NA	YES	(NO)
Were all VOC vials free of air bubbles?	NA	YES	(NO)
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	NA	6-27-16	

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: TR Date: 6 29-16 Time: 1545

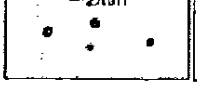
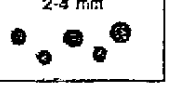
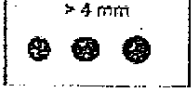
*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

1 of 4 VOA vials for Trip Blanks have "lg" bubbles.

By: Date:

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm
		

Small → "sm" (< 2 mm)

Peabubbles → "pb" (2 to < 4 mm)

Large → "lg" (4 to < 6 mm)

Headspace → "hs" (> 6 mm)

Anchor QEA, LLC	Project: CHRL SSWA	
720 Olive Way, Suite 1900	Project Number: 150067-01.01	**Reported:**
Seattle WA, 98101	Project Manager: Cindy Fields	08-Jul-2016 16:03

Case Narrative

Sample Receipt

Twenty-nine soil samples and a trip blank were received on June 29, 2016 under work order 16F0096. The cooler temperatures measured by IR thermometer following ARI SOP were 4.6 and 5.5ºC. For further details regarding sample receipt, please refer to the Cooler Receipt Form.

Volatiles by SW8260C

The samples were analyzed outside method recommended holding times.

Initial calibrations were within method requirements.

The initial calibration verification (ICV) on 6/29/19 at 14:20 fell outside the 20% control limit low for Bromomethane. All detected results associated with this ICV have been flagged with a “Q” qualifier. No further corrective action was taken.

The ICV on 6/30/16 at 12:05 ell outside the 20% control limit low for Bromomethane. All detected results associated with this ICV have been flagged with a “Q” qualifier. No further corrective action was taken.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blanks were clean at the reporting limits.

The LCS and LCSD percent recoveries of Bromomethane on 6/30/16 at 13:09 fell outside the control limits low. The LCS percent recovery of Bromomethane on 6/29/16 at 15:15 fell outside the control limits low. All other percent recoveries were within control limits. No corrective action was taken.

NWTPH-Gx

The samples were analyzed within method recommended holding times.

Initial calibrations, initial calibration verifications, and continuing calibration verifications were within method requirements. Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blanks were clean at the reporting limits. The LCS and LCSD percent recoveries were within control limits.

Anchor QEA, LLC	Project: CHRL SSWA	
720 Olive Way, Suite 1900	Project Number: 150067-01.01	**Reported:**
Seattle, WA 98101	Project Manager: Cindy Fields	07/08/2016 16:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CHRL-M-02-160629	16F0096-01	Solid	06/29/16 11:00	06/29/16 14:45
CHRL-M-03-160629	16F0096-02	Solid	06/29/16 11:00	06/29/16 14:45
CHRL-M-04-160629	16F0096-04	Solid	06/29/16 11:15	06/29/16 14:45
CHRL-M-05-160629	16F0096-05	Solid	06/29/16 11:15	06/29/16 14:45
CHRL-M-53-160629	16F0096-03	Solid	06/29/16 11:00	06/29/16 14:45
CHRL-N-01-160629	16F0096-11	Solid	06/29/16 11:25	06/29/16 14:45
CHRL-N-02-160629	16F0096-12	Solid	06/29/16 11:35	06/29/16 14:45
CHRL-N-03-160629	16F0096-13	Solid	06/29/16 11:45	06/29/16 14:45
CHRL-N-04-160629	16F0096-14	Solid	06/29/16 11:55	06/29/16 14:45
CHRL-N-05-160629	16F0096-15	Solid	06/29/16 11:20	06/29/16 14:45
CHRL-O-01-160629	16F0096-06	Solid	06/29/16 12:15	06/29/16 14:45
CHRL-O-02-160629	16F0096-07	Solid	06/29/16 12:05	06/29/16 14:45
CHRL-O-03-160629	16F0096-08	Solid	06/29/16 11:55	06/29/16 14:45
CHRL-O-04-160629	16F0096-09	Solid	06/29/16 11:45	06/29/16 14:45
CHRL-O-05-160629	16F0096-10	Solid	06/29/16 11:35	06/29/16 14:45
CHRL-P-01-160629	16F0096-21	Solid	06/29/16 13:00	06/29/16 14:45
CHRL-P-02-160629	16F0096-22	Solid	06/29/16 13:10	06/29/16 14:45
CHRL-P-03-160629	16F0096-24	Solid	06/29/16 13:25	06/29/16 14:45
CHRL-P-04-160629	16F0096-25	Solid	06/29/16 12:25	06/29/16 14:45
CHRL-P-05-160629	16F0096-26	Solid	06/29/16 12:20	06/29/16 14:45
CHRL-P-52-160629	16F0096-23	Solid	06/29/16 13:15	06/29/16 14:45
CHRL-Q-01-160629	16F0096-16	Solid	06/29/16 13:05	06/29/16 14:45
CHRL-Q-02-160629	16F0096-17	Solid	06/29/16 12:55	06/29/16 14:45
CHRL-Q-03-160629	16F0096-18	Solid	06/29/16 12:45	06/29/16 14:45
CHRL-Q-04-160629	16F0096-19	Solid	06/29/16 12:35	06/29/16 14:45
CHRL-Q-05-160629	16F0096-20	Solid	06/29/16 12:25	06/29/16 14:45
CHRL-R-02-160629	16F0096-27	Solid	06/29/16 13:45	06/29/16 14:45
CHRL-R-03-160629	16F0096-28	Solid	06/29/16 13:50	06/29/16 14:45
CHRL-R-04-160629	16F0096-29	Solid	06/29/16 13:30	06/29/16 14:45
CHRL-TB-160629	16F0096-30	Water	06/29/16 00:00	06/29/16 14:45

Analytical Resources, Incorporated

QUALIFIERS AND NOTES

Qualifier	Definition
U	This analyte is not detected above the applicable reporting or detection limit.
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20% RSD, <20% drift or minimum RRF)
J	Estimated concentration value detected below the reporting limit.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL)
*	Flagged value is not within established control limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

CHRL-M-02-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-01	File ID:	06291606.D
Sampled:	06/29/16 11:00	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 17:09
Solids:	91.99	Preparation:	No Prep - Volatiles	Initial/Final:	5.42 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.00	U	0.24	1.00
74-83-9	Bromomethane	1	1.00	U	0.19	1.00
156-59-2	cis-1,2-Dichloroethene	1	1.57		0.24	1.00
71-43-2	Benzene	1	0.45	J	0.30	1.00
79-01-6	Trichloroethene	1	1.00	U	0.21	1.00
108-88-3	Toluene	1	0.87	J	0.15	1.00
127-18-4	Tetrachloroethene	1	1.00	U	0.26	1.00
100-41-4	Ethylbenzene	1	0.33	J	0.20	1.00
179601-23-1	m,p-Xylene	1	0.73	J	0.39	1.00
95-47-6	o-Xylene	1	1.02		0.22	1.00

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	53.7	107	80 - 149	
1,2-Dichlorobenzene-d4	50.000	51.0	102	80 - 120	
Toluene-d8	50.000	49.3	98.7	77 - 120	
4-Bromofluorobenzene	50.000	46.0	92.0	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291606.D

Date : 29-JUN-2016 17:09

Client ID:

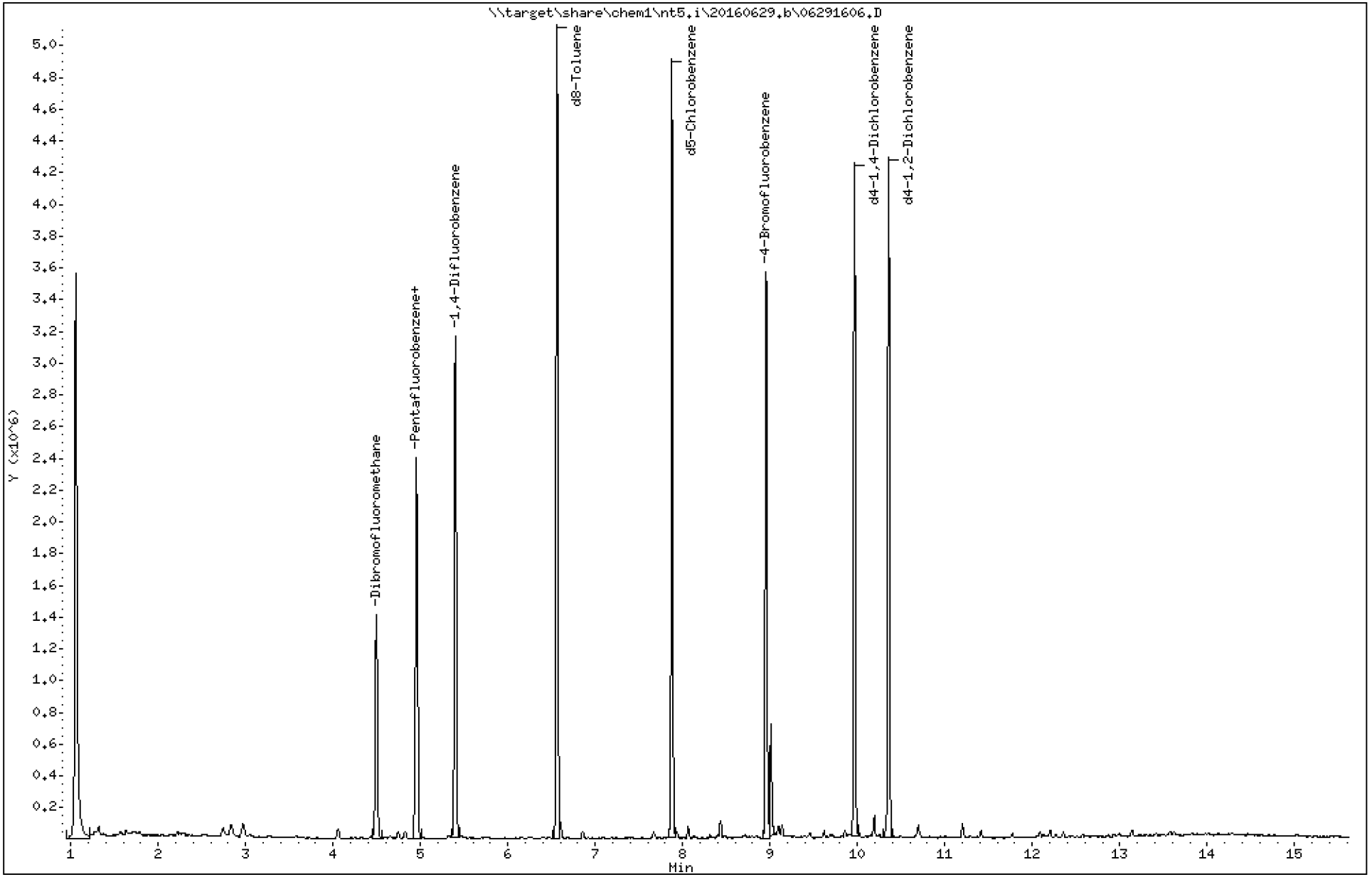
Instrument: nt5.i

Sample Info: 16F0096-01

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



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Date : 29-JUN-2016 17:09

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-01

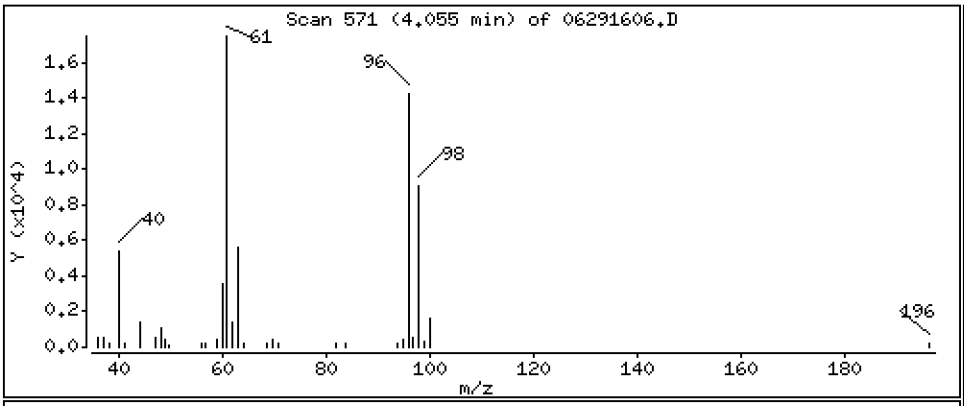
Operator: PB

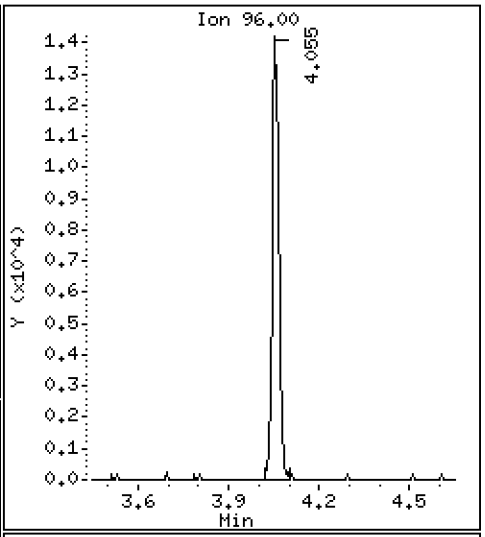
Column phase: RTXVMS

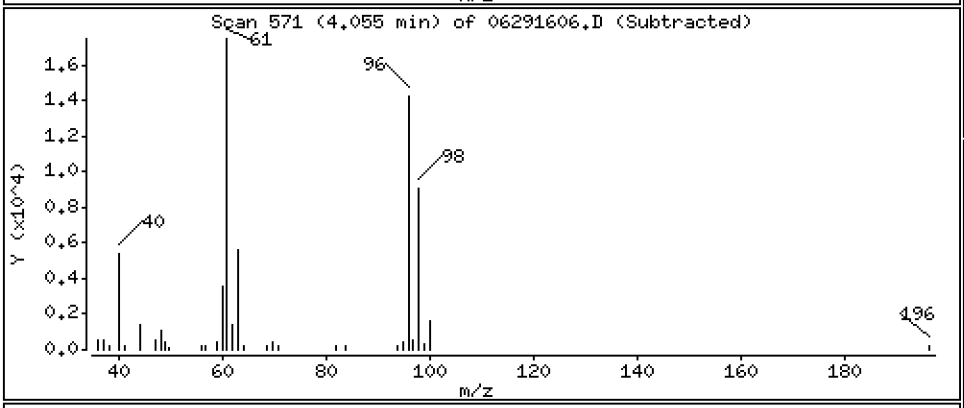
Column diameter: 0.18

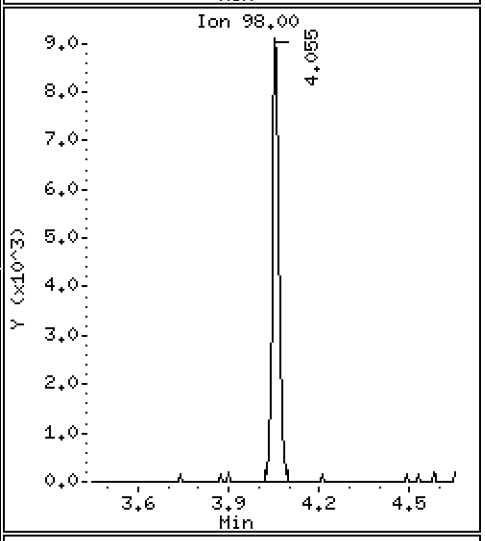
20 Cis-1,2-Dichloroethene

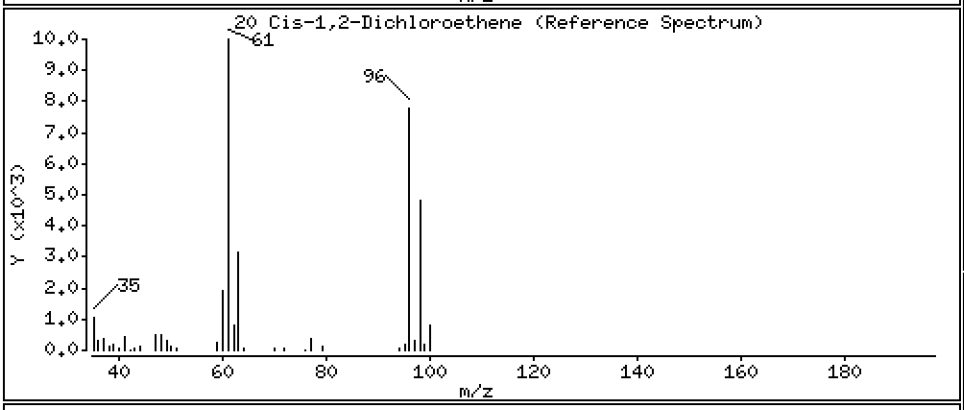
Concentration: 1.566 ug/Kg

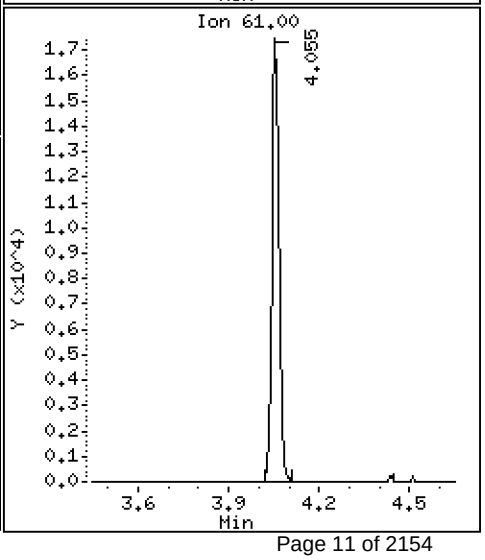


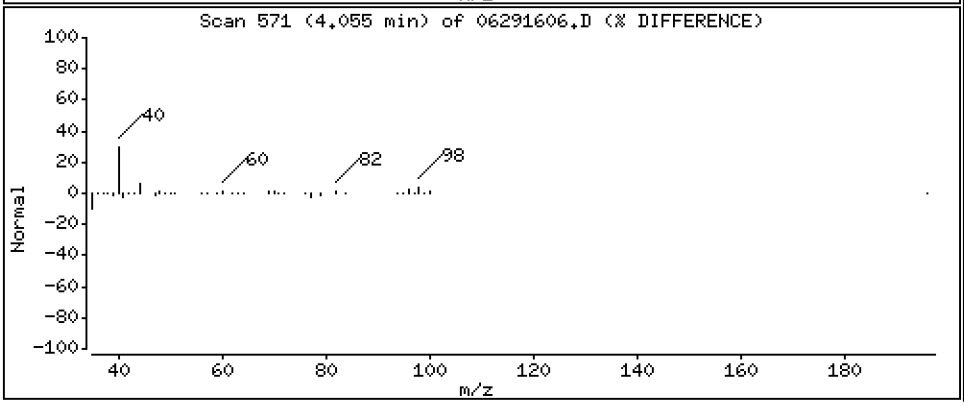












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Date : 29-JUN-2016 17:09

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-01

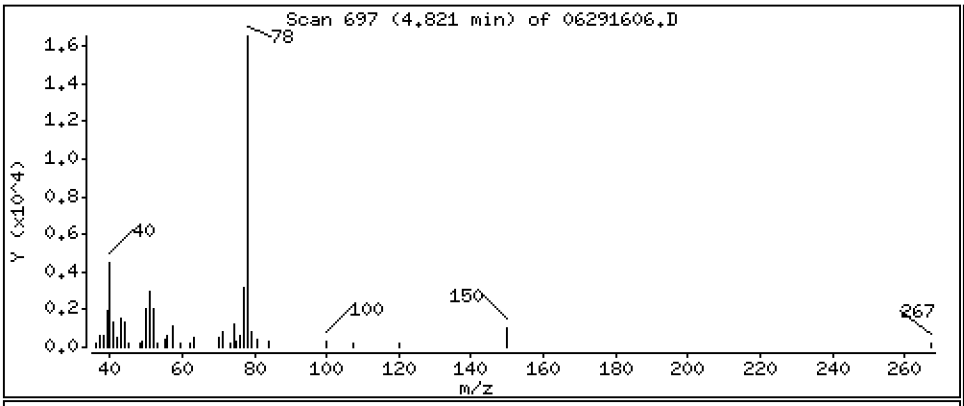
Operator: PB

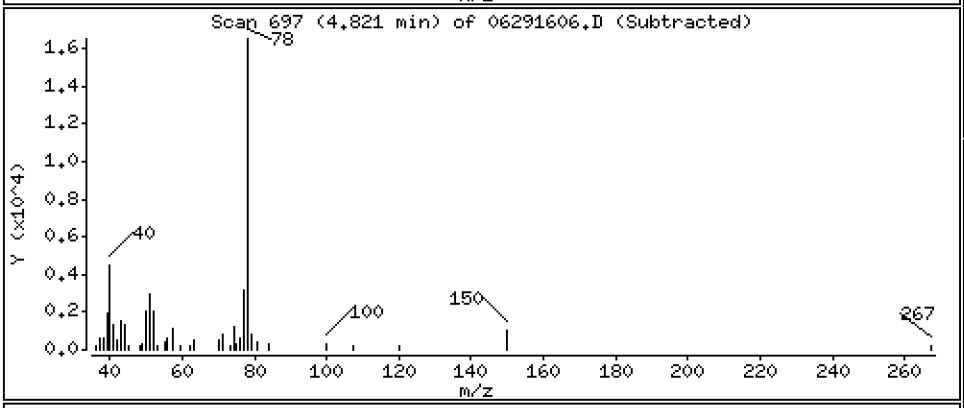
Column phase: RTXVMS

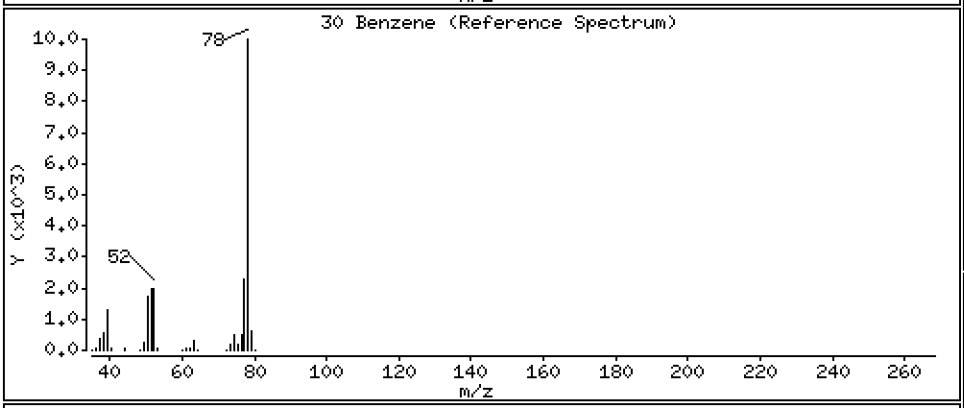
Column diameter: 0.18

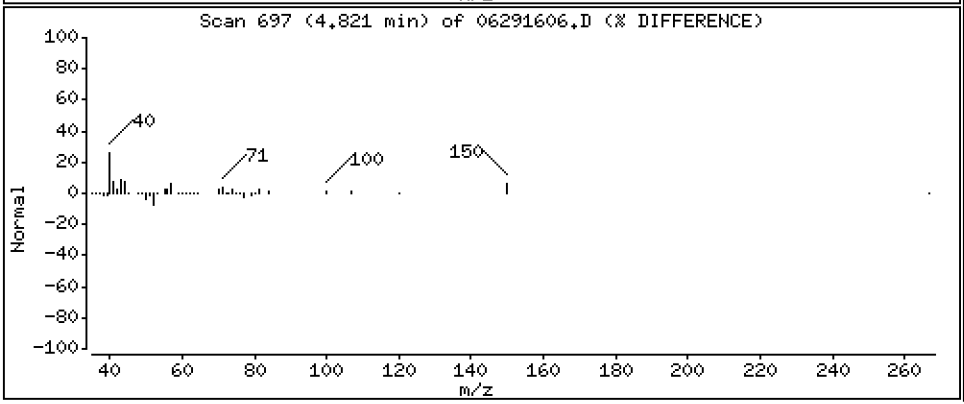
30 Benzene

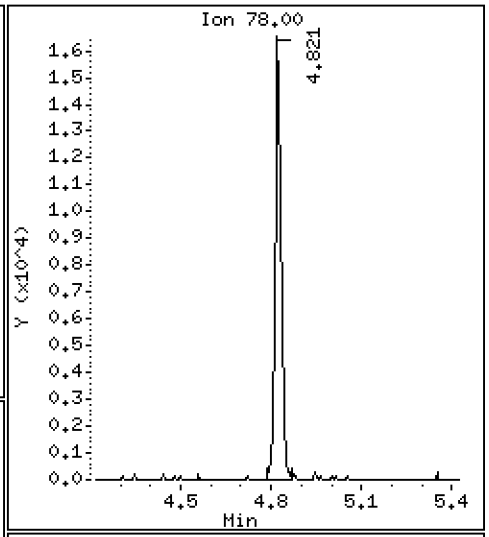
Concentration: 0.4533 ug/Kg

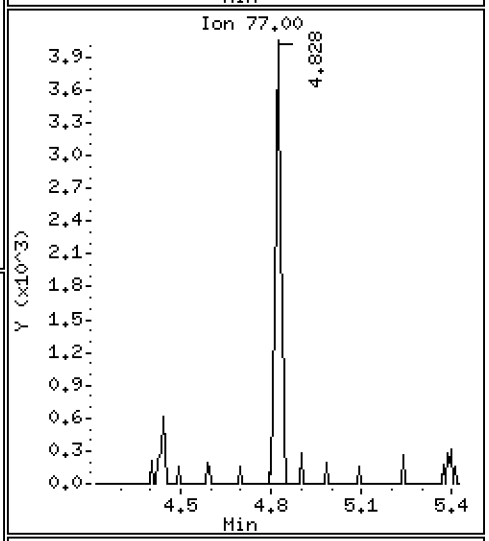


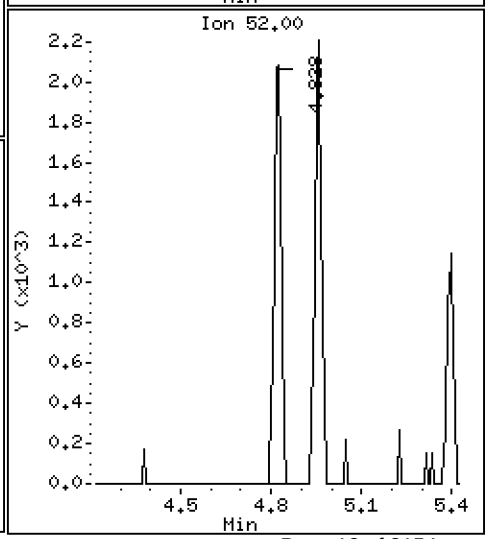












Data File: \\target\share\chem1\nt5.i\20160629.b\06291606.D

Date : 29-JUN-2016 17:09

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-01

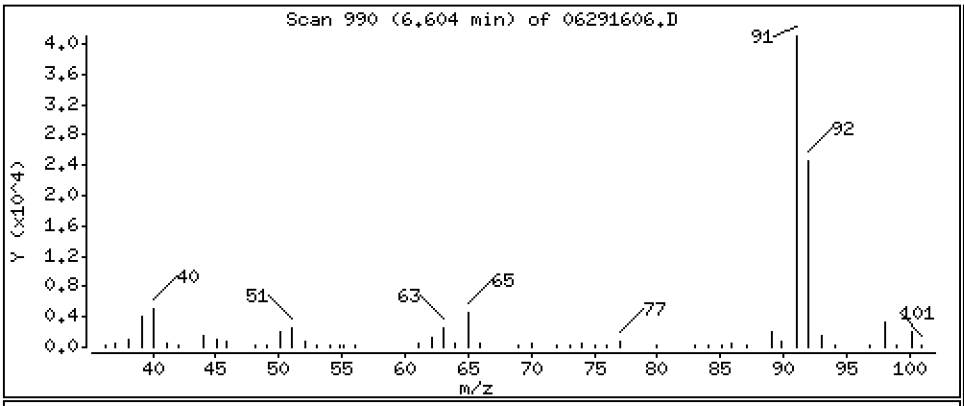
Operator: PB

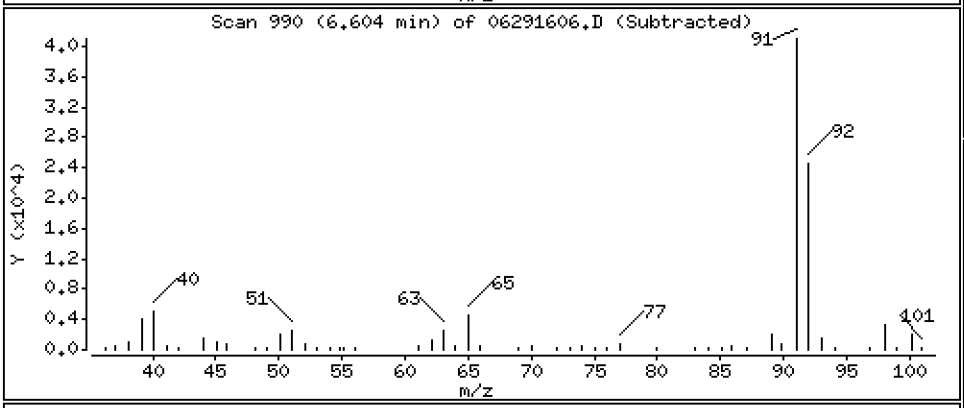
Column phase: RTXVMS

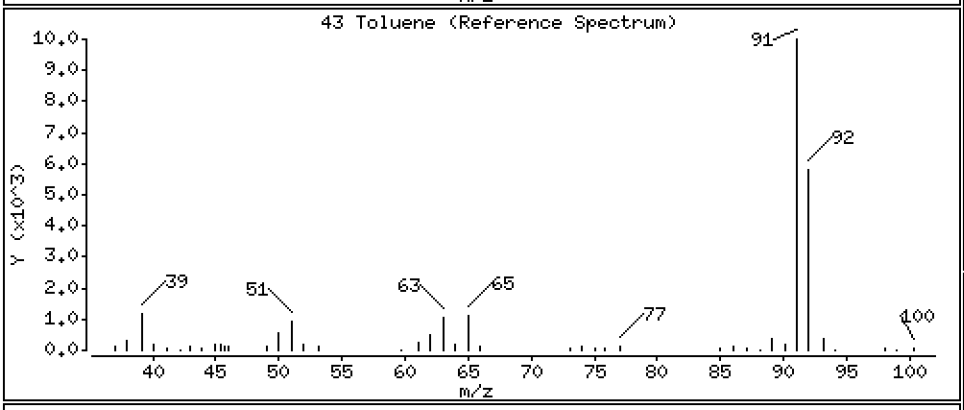
Column diameter: 0.18

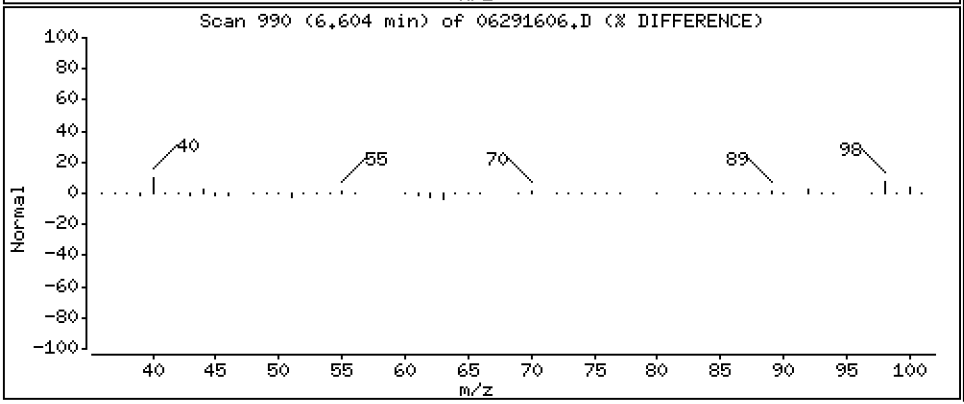
43 Toluene

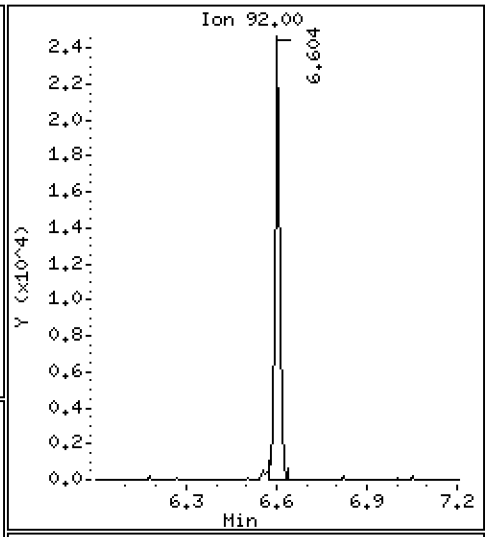
Concentration: 0.8716 ug/Kg

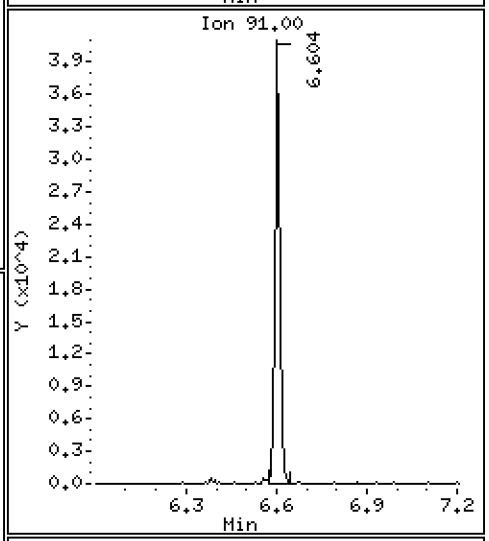


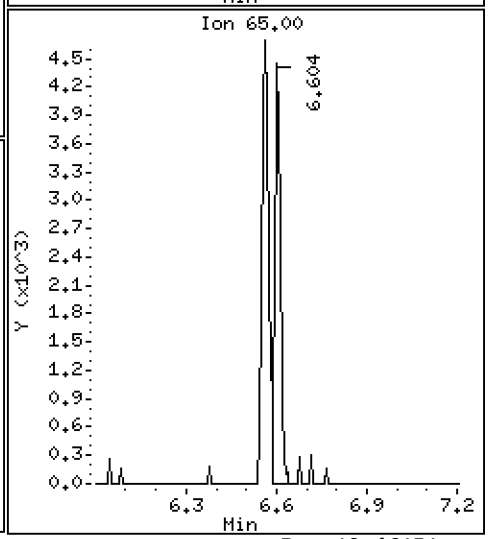












Data File: \\target\share\chem1\nt5.i\20160629.b\06291606.D

Date : 29-JUN-2016 17:09

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-01

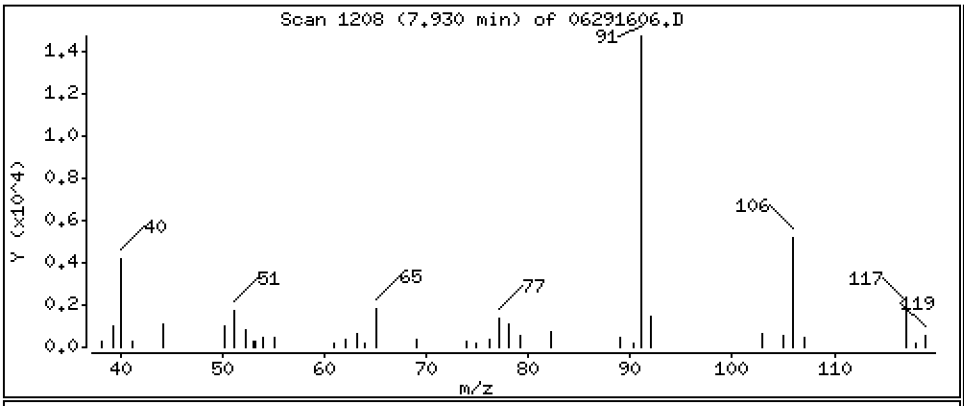
Operator: PB

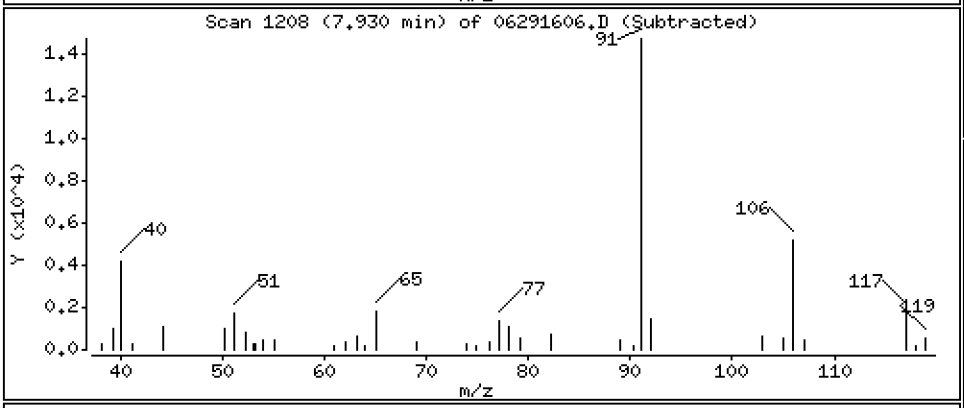
Column phase: RTXVMS

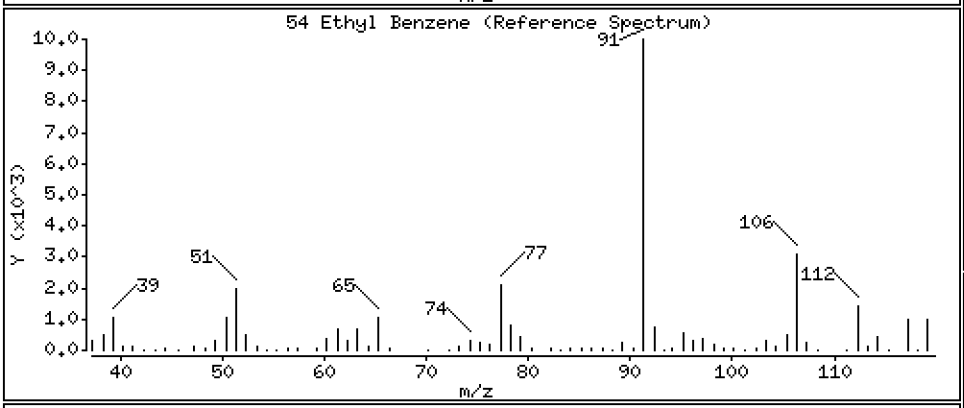
Column diameter: 0.18

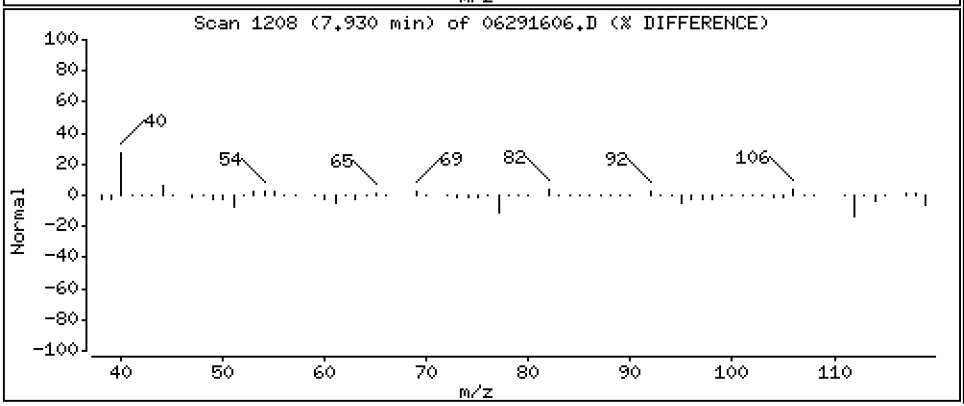
54 Ethyl Benzene

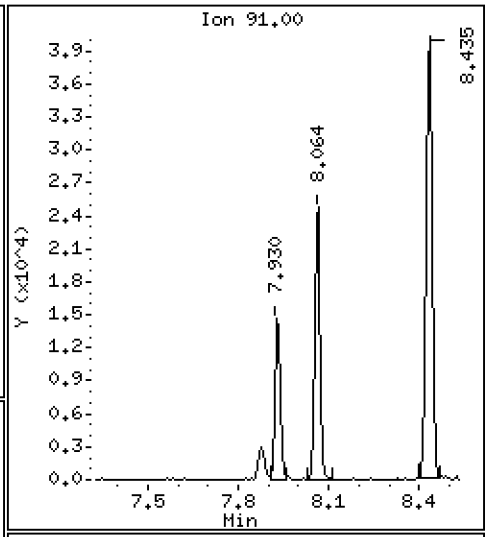
Concentration: 0.3323 ug/Kg

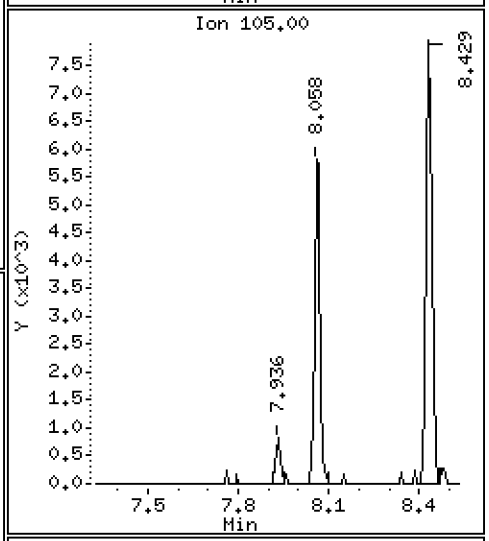


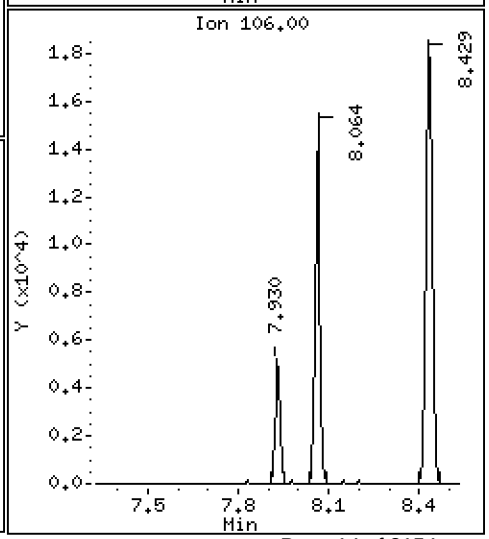












Data File: \\target\share\chem1\nt5.i\20160629.b\06291606.D

Date : 29-JUN-2016 17:09

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-01

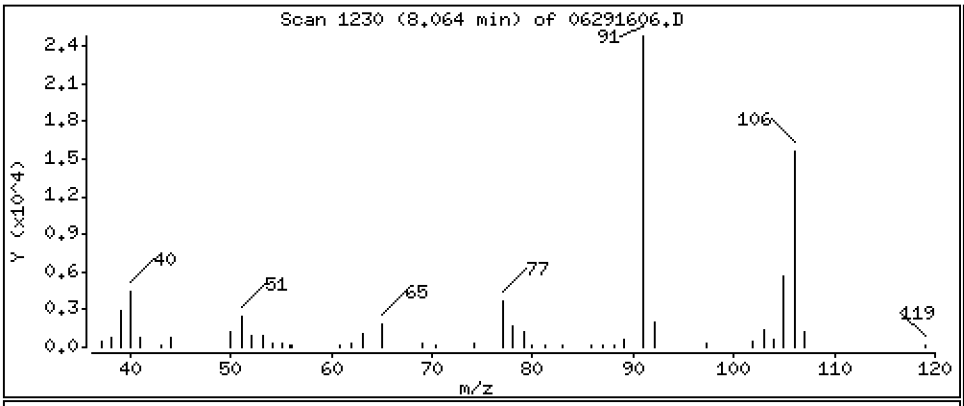
Operator: PB

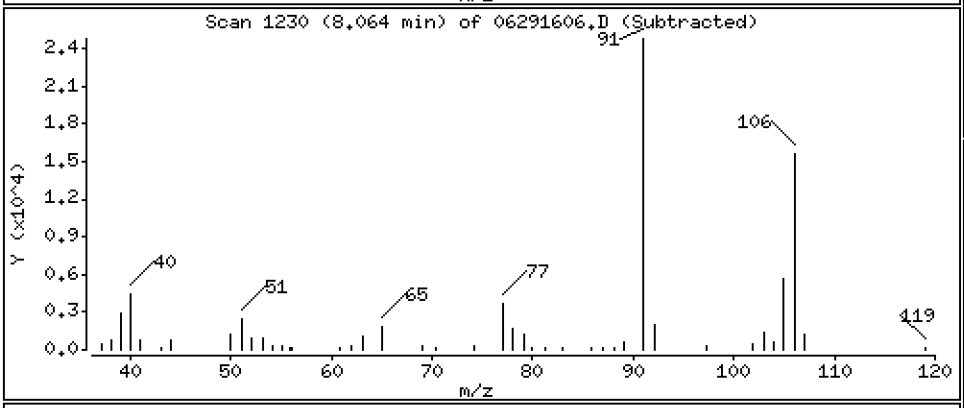
Column phase: RTXVMS

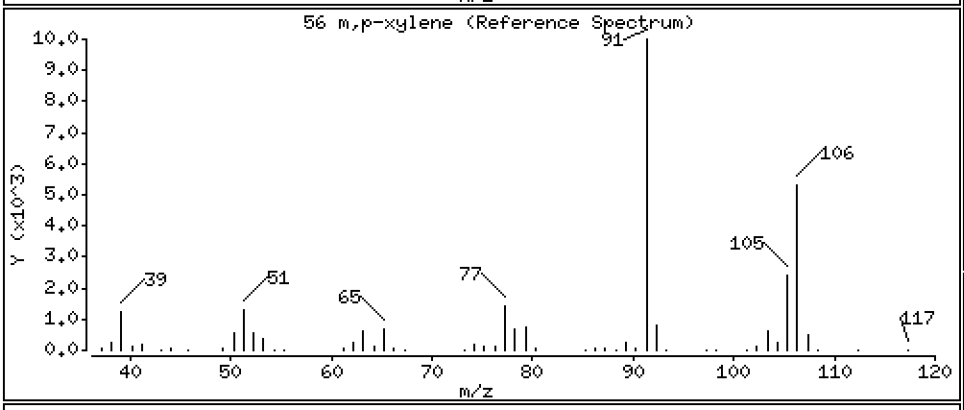
Column diameter: 0.18

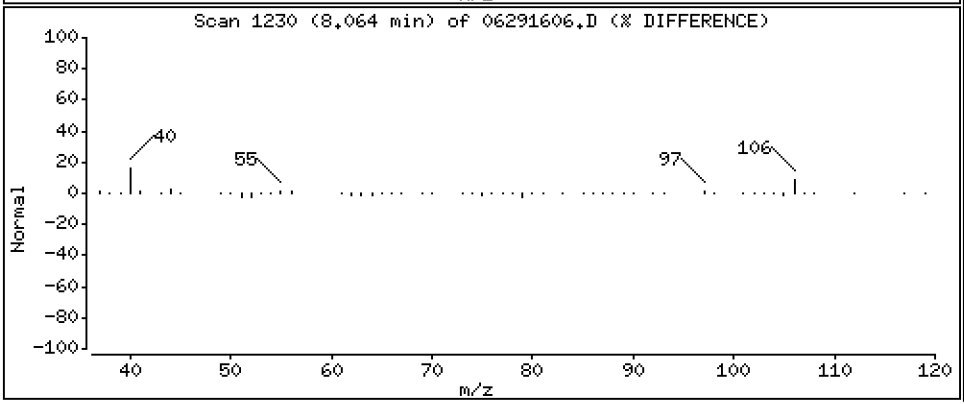
56 m,p-xylene

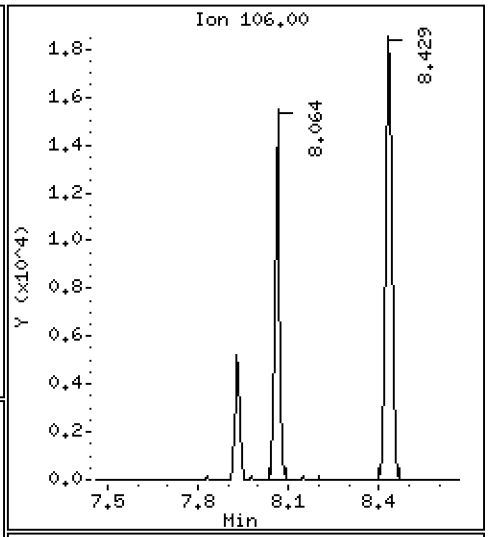
Concentration: 0.7246 ug/Kg

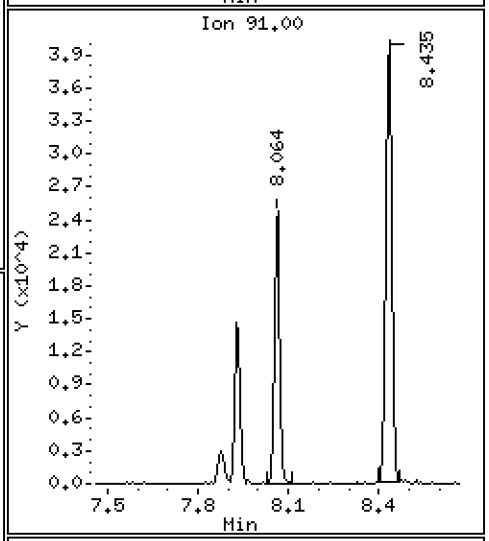


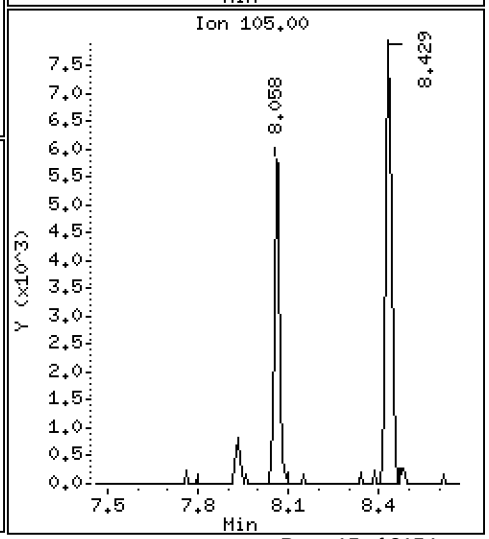












Data File: \\target\share\chem1\nt5.i\20160629.b\06291606.D

Date : 29-JUN-2016 17:09

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-01

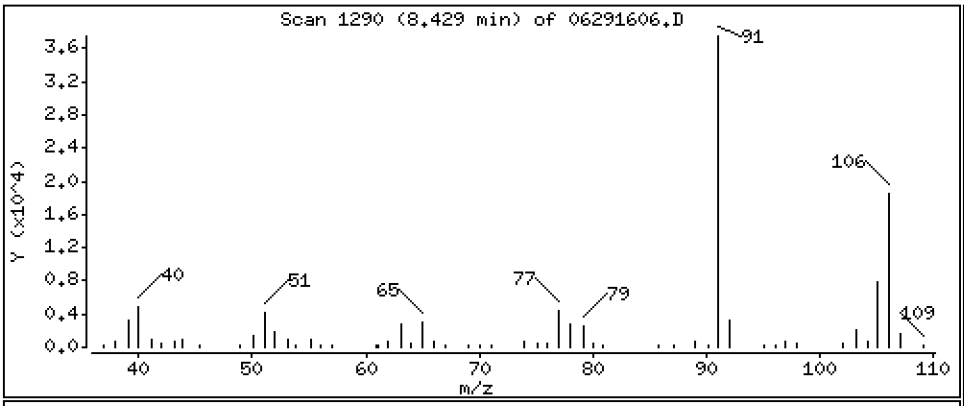
Operator: PB

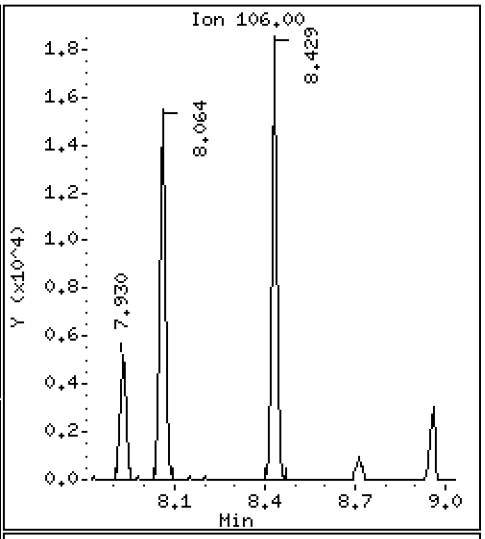
Column phase: RTXVMS

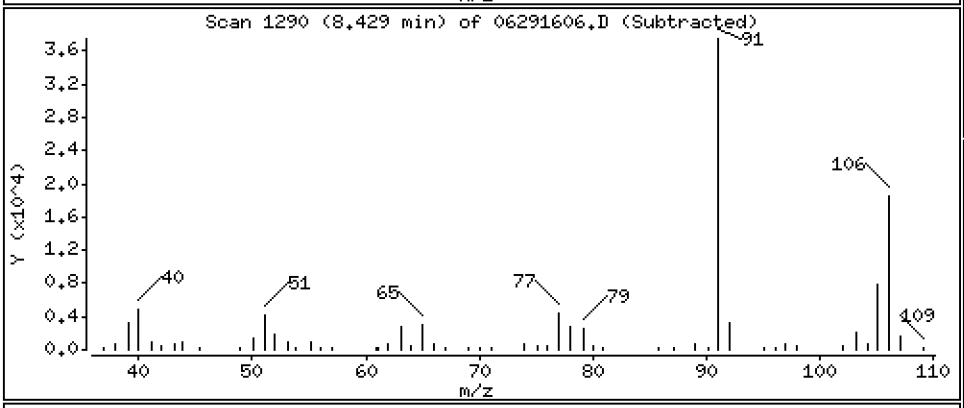
Column diameter: 0.18

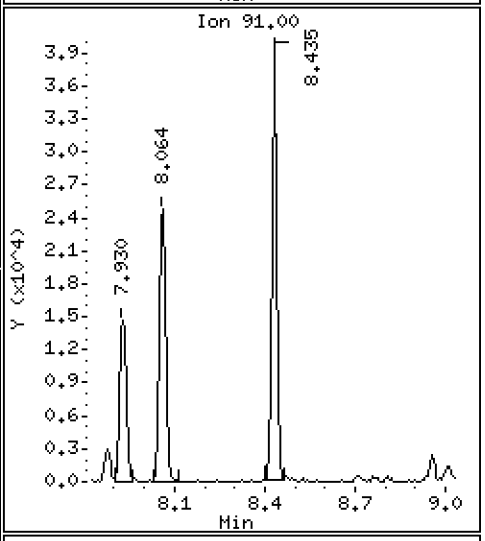
57 o-Xylene

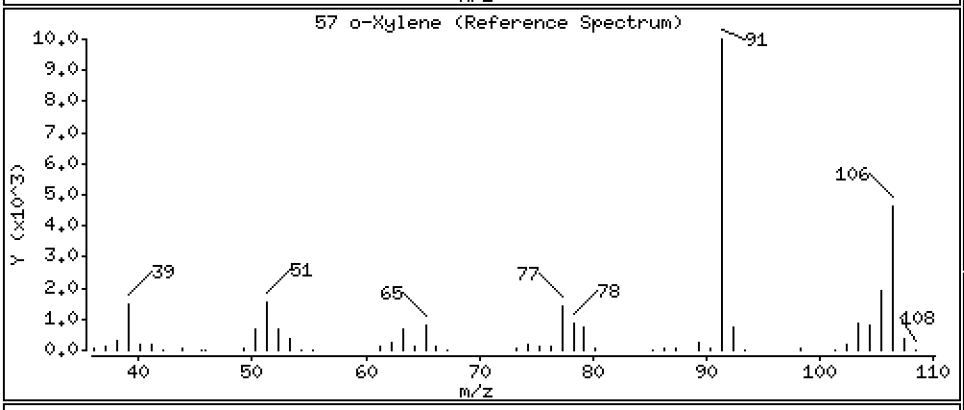
Concentration: 1.017 ug/Kg

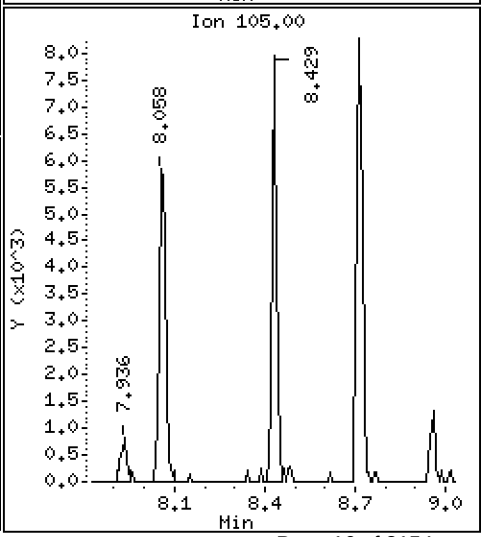


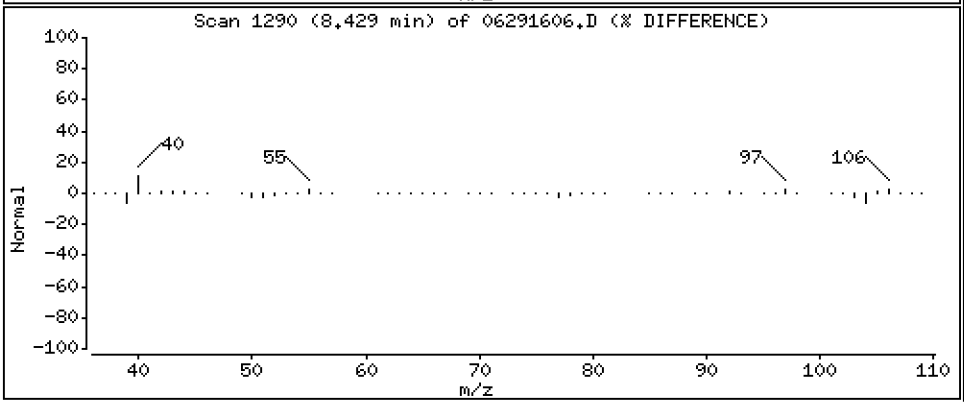












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291606.D
Lab Smp Id: 16F0096-01
Inj Date : 29-JUN-2016 17:09
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-01
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.054	4.048	(0.818)	23997	1.56627	1.566
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.492	4.486	(0.907)	778332	53.8352	53.835
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	4.821	4.821	(0.893)	26234	0.45335	0.4533
*	31 Pentafluorobenzene	168	4.955	4.949	(1.000)	606592	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.000)	775647	53.6670	53.667
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2142710	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.561	6.561	(1.215)	2708091	49.3259	49.326
	43 Toluene	92	6.603	6.603	(1.223)	32447	0.87157	0.8716
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.875	7.875	(1.000)	2182634	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.930	7.930	(1.007)	22134	0.33226	0.3323
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.063	8.063	(1.024)	18739	0.72458	0.7246
	57 o-Xylene	106	8.429	8.428	(1.070)	25991	1.01746	1.017
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.952	8.952	(1.137)	1080246	46.0216	46.022
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	941146	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	966545	51.0010	51.001
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291606.D
Lab Smp Id: 16F0096-01
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	606592	1.10
35 1,4-Difluorobenze	2041239	1020620	4082478	2142710	4.97
52 d5-Chlorobenzene	2118314	1059157	4236628	2182634	3.04
76 d4-1,4-Dichlorobe	1055047	527524	2110094	941146	-10.80

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.13
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.12
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-01
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	53.835	107.67	70-130
$ 32 d4-1,2-Dichloroeth	50.000	53.667	107.33	80-149
$ 42 d8-Toluene	50.000	49.326	98.65	77-120
$ 62 4-Bromofluorobenze	50.000	46.022	92.04	80-120
$ 79 d4-1,2-Dichloroben	50.000	51.001	102.00	80-120

REVIEW SUMMARY FOR FILE - 06291606.D

Lab ID: 16F0096-01
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 17:09

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

ARI Labs, Inc.

8260C
Data file : \\target\share\chem1\nt5.i\20160629.b\06291606.D
Lab Smp Id: 16F0096-01
Inj Date : 29-JUN-2016 17:09
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-01

Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.054	4.048	(0.818)	23997	1.56627	1.566
22	2,2-Dichloropropane	77	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
	23	Bromochloromethane	128	Compound Not Detected.					
	24	Chloroform	83	Compound Not Detected.					
	25	Carbon Tetrachloride	117	Compound Not Detected.					
$	27	Dibromofluoromethane	111	4.492	4.486	(0.907)	778332	53.8352	53.835
	26	1,1,1-Trichloroethane	97	Compound Not Detected.					
	28	1,1-Dichloropropene	75	Compound Not Detected.					
	29	2-Butanone	72	Compound Not Detected.					
	30	Benzene	78	4.821	4.821	(0.893)	26234	0.45335	0.4533
*	31	Pentafluorobenzene	168	4.955	4.949	(1.000)	606592	50.0000	
$	32	d4-1,2-Dichloroethane	65	4.955	4.949	(1.000)	775647	53.6670	53.667
	33	1,2-Dichloroethane	62	Compound Not Detected.					
	34	Trichloroethene	95	Compound Not Detected.					
*	35	1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2142710	50.0000	
	37	Dibromomethane	93	Compound Not Detected.					
	38	1,2-Dichloropropane	63	Compound Not Detected.					
	39	Bromodichloromethane	83	Compound Not Detected.					
	172	2-Pentanone	86	Compound Not Detected.					
	40	2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41	Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42	d8-Toluene	98	6.561	6.561	(1.215)	2708091	49.3259	49.326
	43	Toluene	92	6.603	6.603	(1.223)	32447	0.87157	0.8716
	44	Tetrachloroethene	166	Compound Not Detected.					
	45	4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46	Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47	1,1,2-Trichloroethane	97	Compound Not Detected.					
	48	Chlorodibromomethane	129	Compound Not Detected.					
	49	1,3-Dichloropropane	76	Compound Not Detected.					
	50	1,2-Dibromoethane	107	Compound Not Detected.					
	51	2-Hexanone	43	Compound Not Detected.					
*	52	d5-Chlorobenzene	117	7.875	7.875	(1.000)	2182634	50.0000	
	53	Chlorobenzene	112	Compound Not Detected.					
	54	Ethyl Benzene	91	7.930	7.930	(1.007)	22134	0.33226	0.3323
	55	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56	m,p-xylene	106	8.063	8.063	(1.024)	18739	0.72458	0.7246
	57	o-Xylene	106	8.429	8.428	(1.070)	25991	1.01746	1.017
	58	Styrene	104	Compound Not Detected.					
	59	Bromoform	173	Compound Not Detected.					
	60	Isopropyl Benzene	105	Compound Not Detected.					
$	62	4-Bromofluorobenzene	95	8.952	8.952	(1.137)	1080246	46.0216	46.022
	63	Bromobenzene	156	Compound Not Detected.					
	64	N-Propyl Benzene	91	Compound Not Detected.					
	65	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66	2-Chloro Toluene	91	Compound Not Detected.					
	67	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68	1,2,3-Trichloropropane	110	Compound Not Detected.					
	69	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70	4-Chloro Toluene	91	Compound Not Detected.					
	71	T-Butyl Benzene	119	Compound Not Detected.					
	72	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73	S-Butyl Benzene	105	Compound Not Detected.					
	74	4-Isopropyl Toluene	119	Compound Not Detected.					
	75	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76	d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	941146	50.0000	
	77	1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	Compound Not Detected.					
$	79 d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	966545	51.0010	51.001
	80 1,2-Dichlorobenzene	146	Compound Not Detected.					
	81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
	82 Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
	83 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	84 Naphthalene	128	Compound Not Detected.					
	85 1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291606.D
Lab Smp Id: 16F0096-01
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	606592	1.10
35 1,4-Difluorobenze	2041239	1020620	4082478	2142710	4.97
52 d5-Chlorobenzene	2118314	1059157	4236628	2182634	3.04
76 d4-1,4-Dichlorobe	1055047	527524	2110094	941146	-10.80

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.13
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.12
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-01
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	53.835	107.67	70-130
$ 32 d4-1,2-Dichloroeth	50.000	53.667	107.33	80-149
$ 42 d8-Toluene	50.000	49.326	98.65	77-120
$ 62 4-Bromofluorobenze	50.000	46.022	92.04	80-120
$ 79 d4-1,2-Dichloroben	50.000	51.001	102.00	80-120

REVIEW SUMMARY FOR FILE - 06291606.D

Lab ID: 16F0096-01
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 17:09

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-M-03-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-02	File ID:	06291607.D
Sampled:	06/29/16 11:00	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 17:32
Solids:	89.22	Preparation:	No Prep - Volatiles	Initial/Final:	4.7 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.19	U	0.28	1.19
74-83-9	Bromomethane	1	1.19	U	0.22	1.19
156-59-2	cis-1,2-Dichloroethene	1	4.81		0.29	1.19
71-43-2	Benzene	1	1.19	U	0.35	1.19
79-01-6	Trichloroethene	1	2.51		0.25	1.19
108-88-3	Toluene	1	2.20		0.18	1.19
127-18-4	Tetrachloroethene	1	1.19	U	0.31	1.19
100-41-4	Ethylbenzene	1	1.58		0.24	1.19
179601-23-1	m,p-Xylene	1	3.67		0.47	1.19
95-47-6	o-Xylene	1	1.49		0.27	1.19

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	52.6	105	80 - 149	
1,2-Dichlorobenzene-d4	50.000	49.8	99.7	80 - 120	
Toluene-d8	50.000	49.4	98.9	77 - 120	
4-Bromofluorobenzene	50.000	47.9	95.7	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291607.D

Date : 29-JUN-2016 17:32

Client ID:

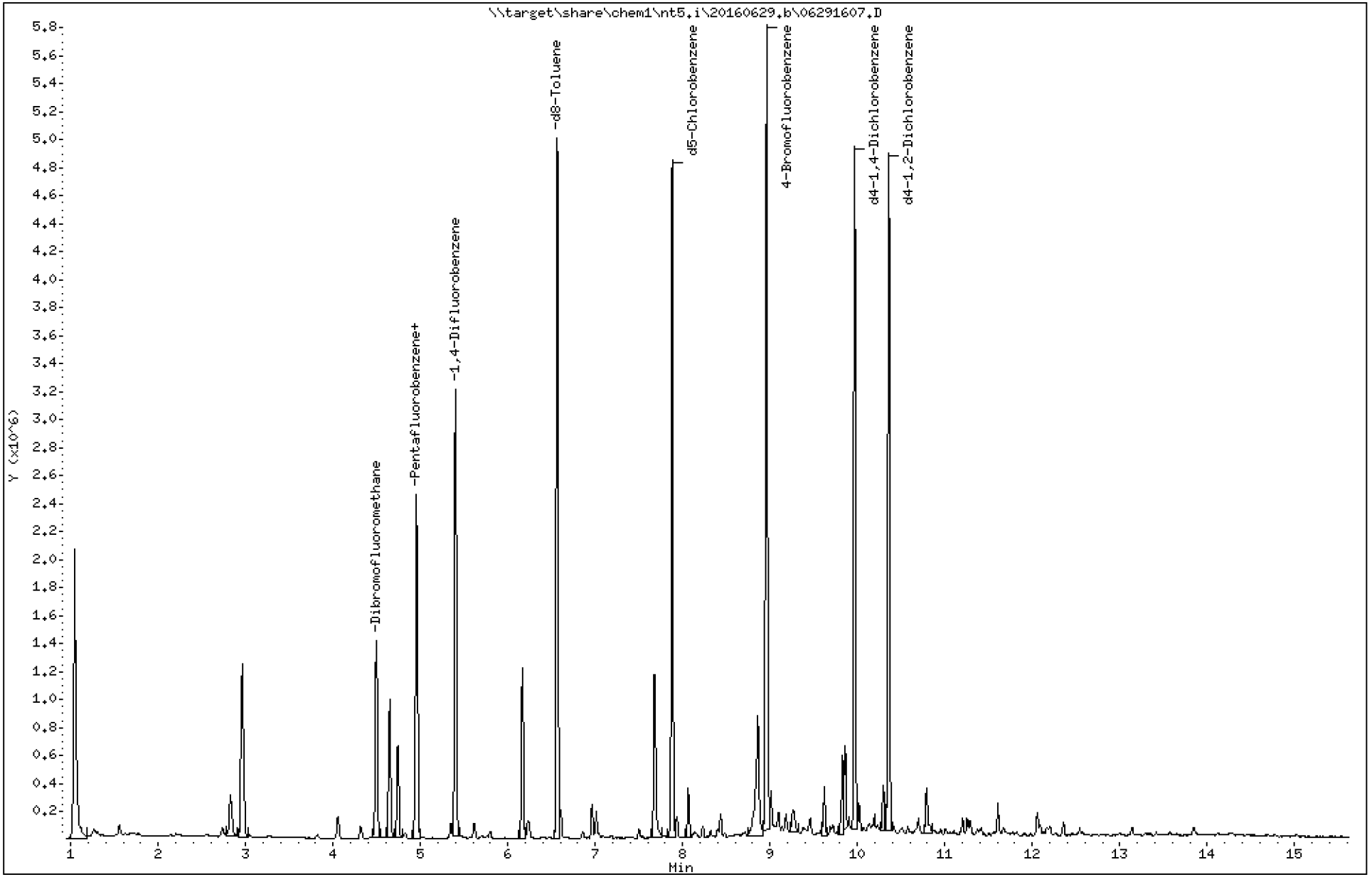
Sample Info: 16F0096-02

Instrument: nt5.i

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160629.b\06291607.D

Date : 29-JUN-2016 17:32

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-02

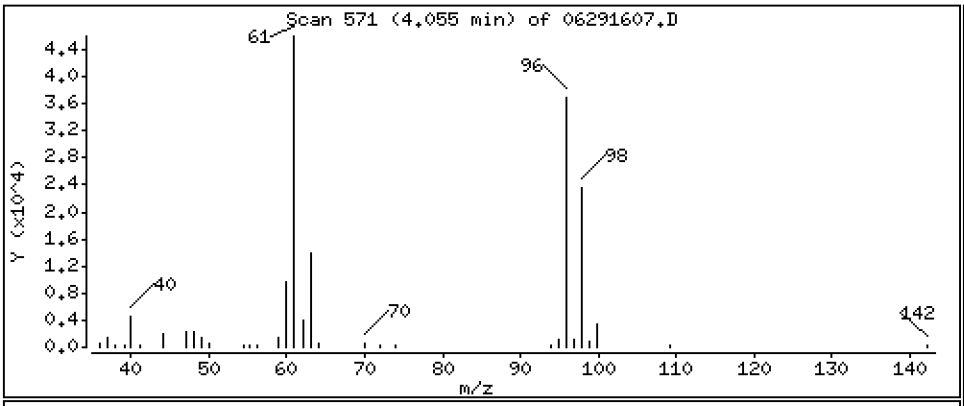
Operator: PB

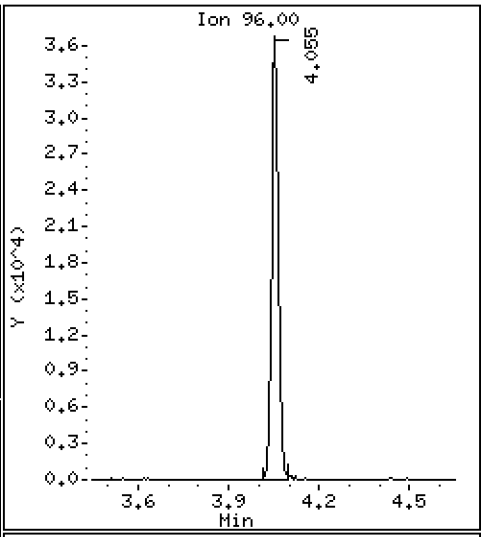
Column phase: RTXVMS

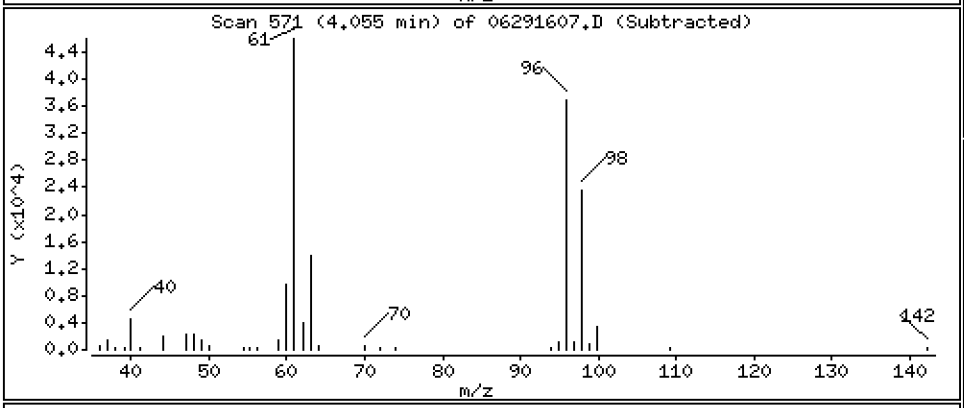
Column diameter: 0.18

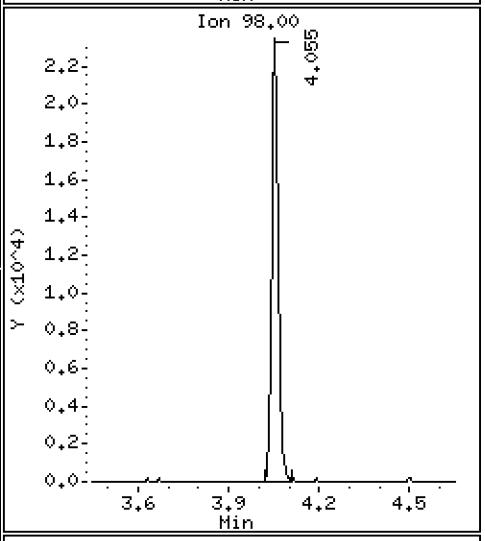
20 Cis-1,2-Dichloroethene

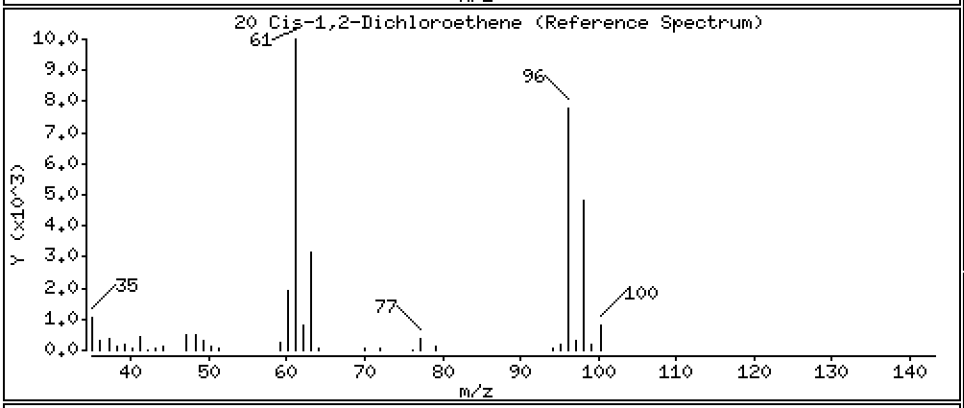
Concentration: 4.034 ug/Kg

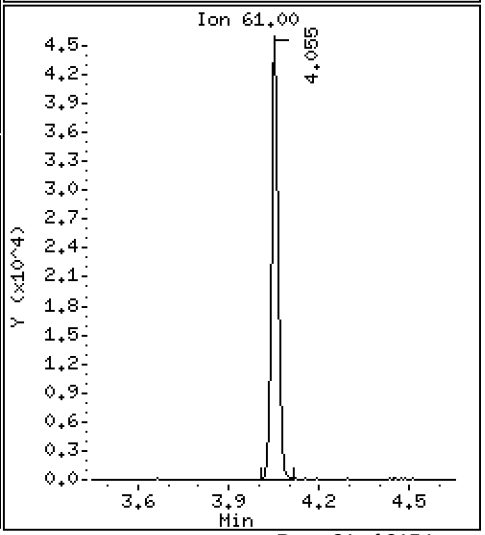


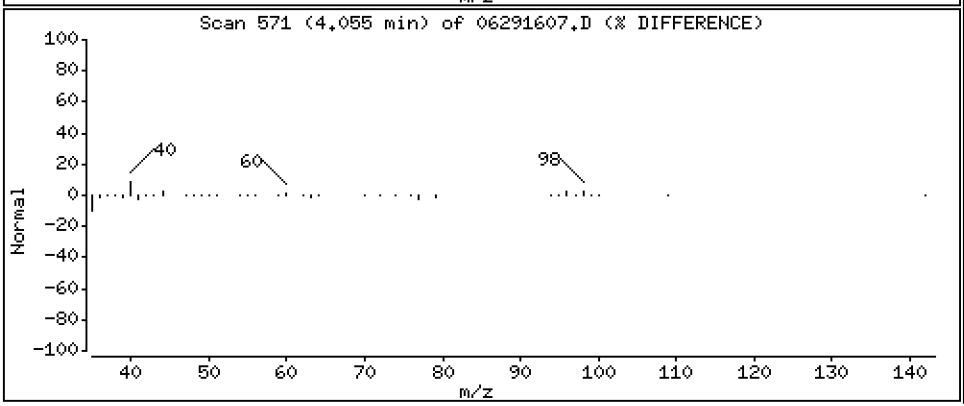












Data File: \\target\share\chem1\nt5.i\20160629.b\06291607.D

Date : 29-JUN-2016 17:32

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-02

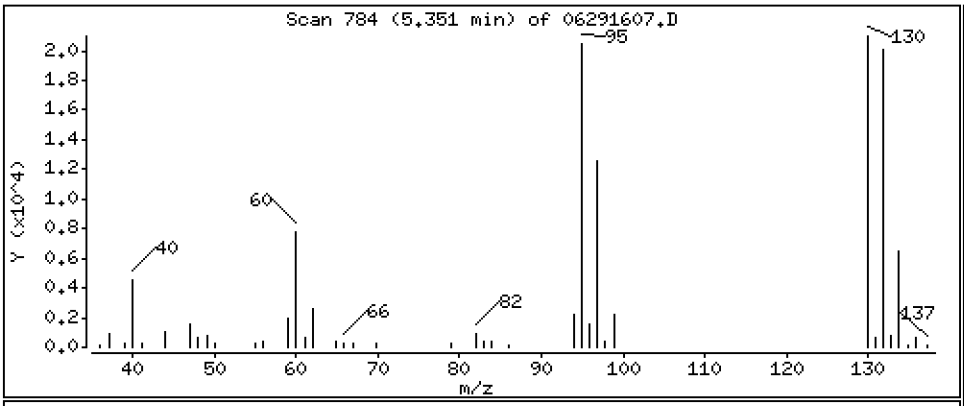
Operator: PB

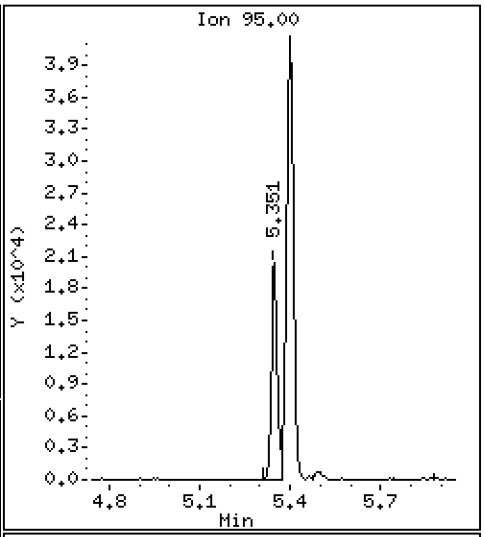
Column phase: RTXVMS

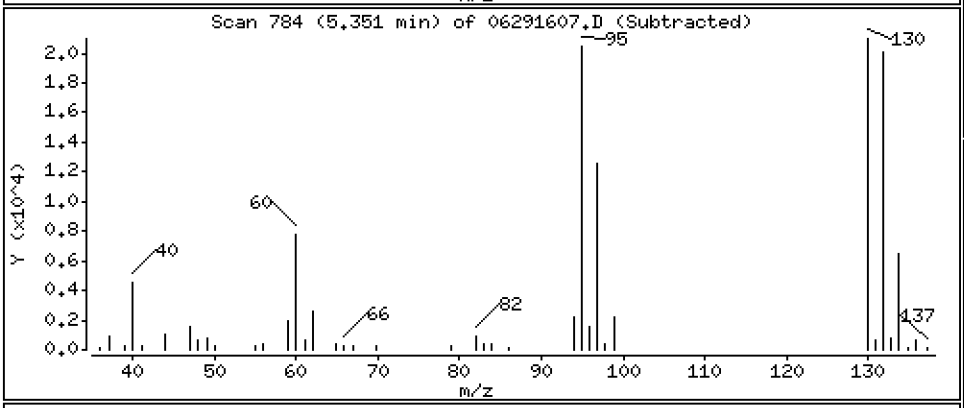
Column diameter: 0.18

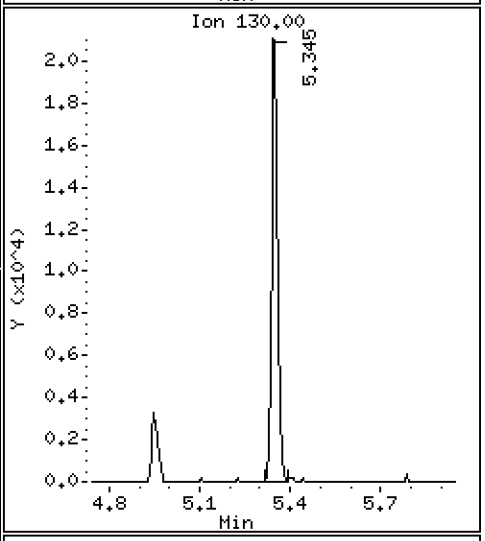
34 Trichloroethene

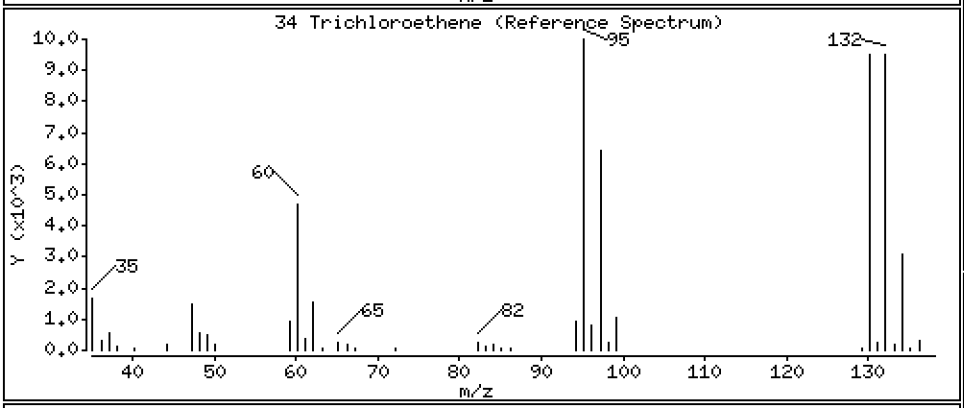
Concentration: 2.104 ug/Kg

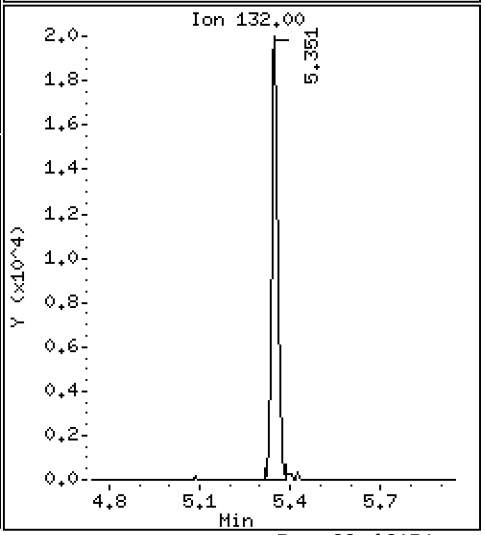


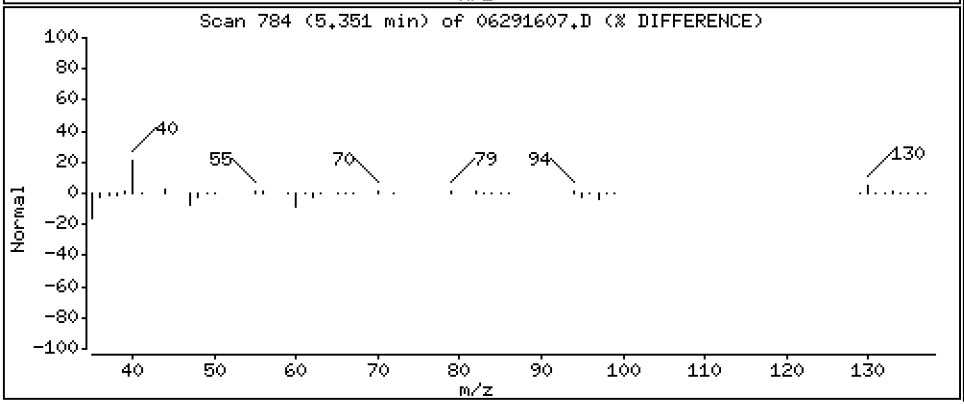












Data File: \\target\share\chem1\nt5.i\20160629.b\06291607.D

Date : 29-JUN-2016 17:32

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-02

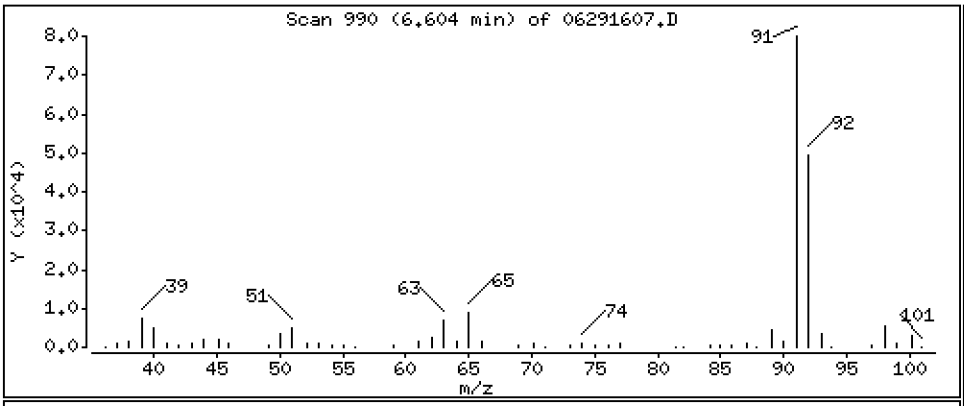
Operator: PB

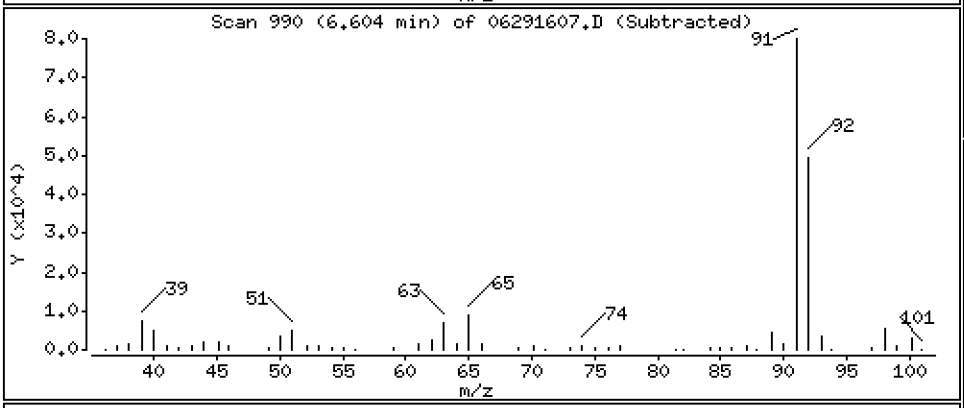
Column phase: RTXVMS

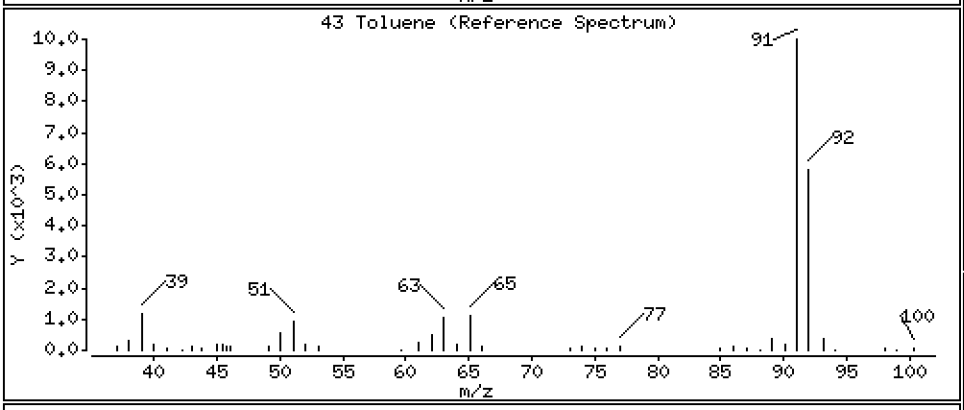
Column diameter: 0.18

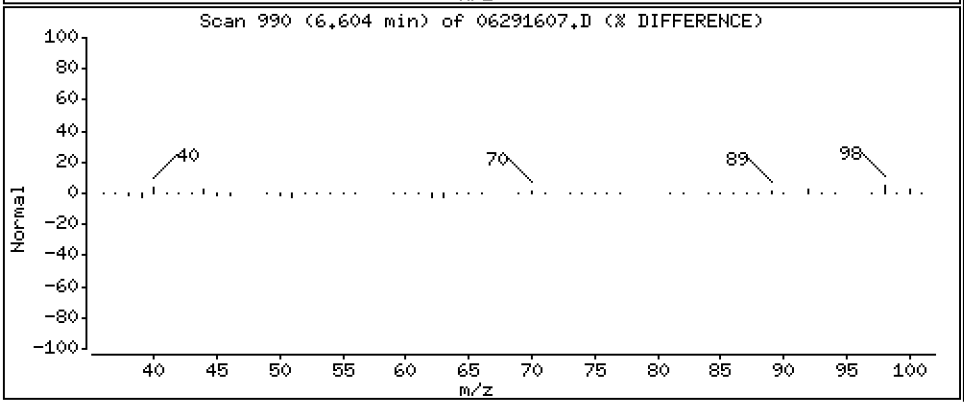
43 Toluene

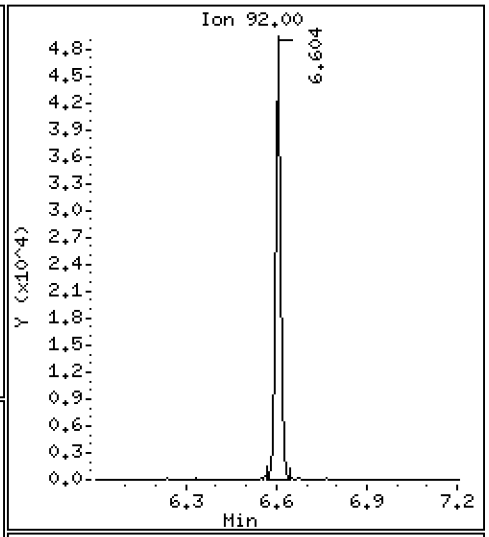
Concentration: 1.846 ug/Kg

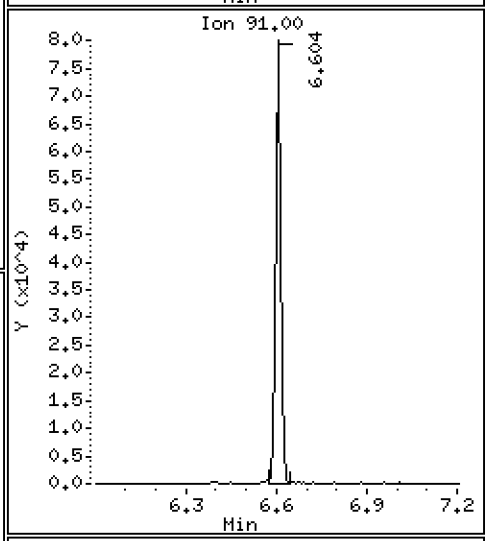


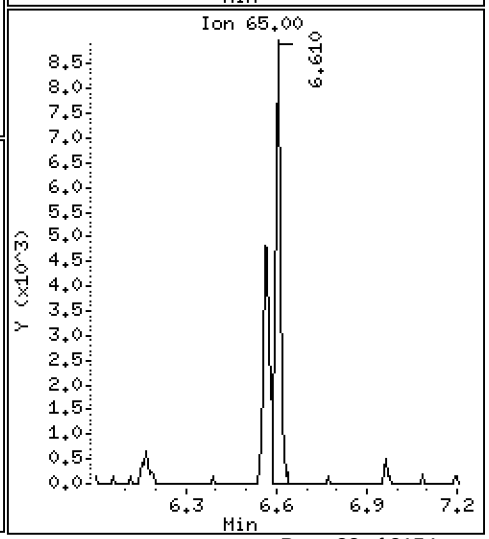












Data File: \\target\share\chem1\nt5.i\20160629.b\06291607.D

Date : 29-JUN-2016 17:32

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-02

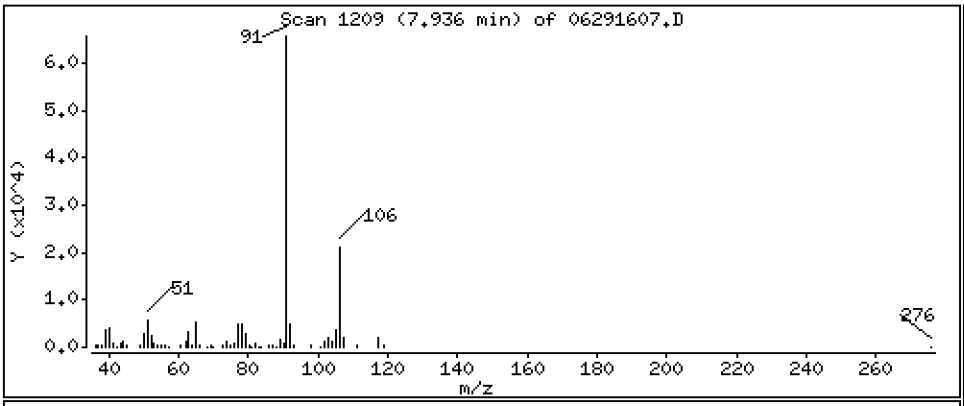
Operator: PB

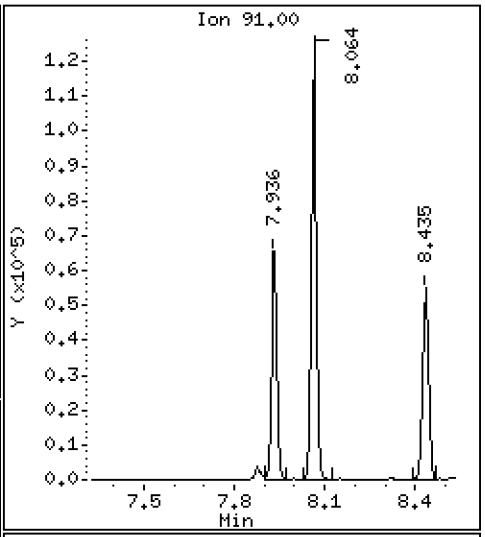
Column phase: RTXVMS

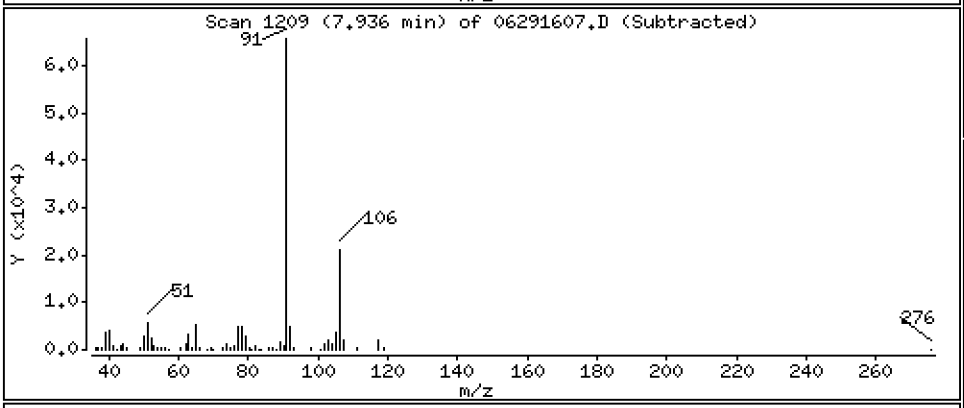
Column diameter: 0.18

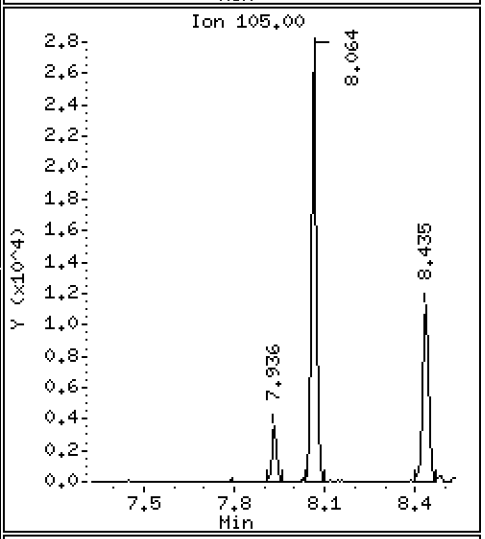
54 Ethyl Benzene

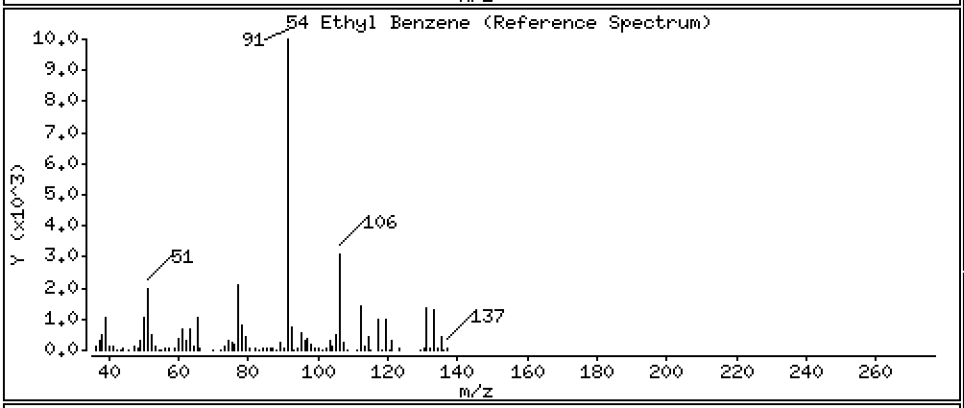
Concentration: 1.327 ug/Kg

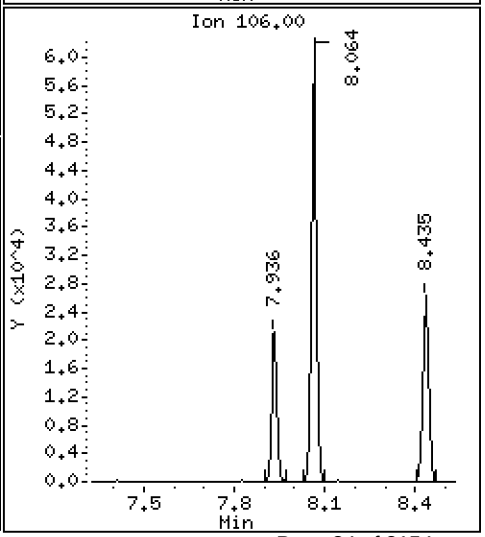


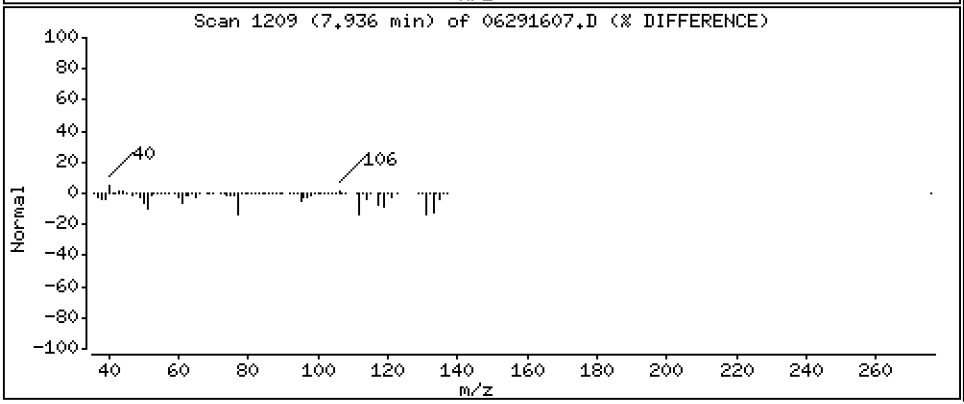












Data File: \\target\share\chem1\nt5.i\20160629.b\06291607.D

Date : 29-JUN-2016 17:32

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-02

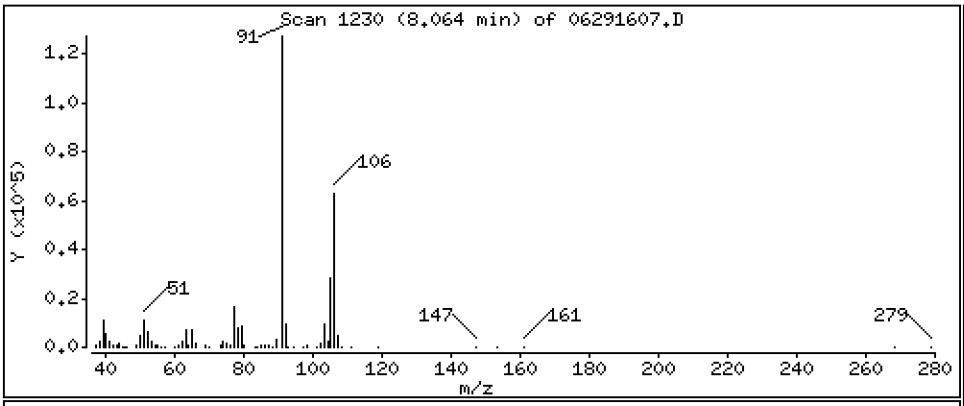
Operator: PB

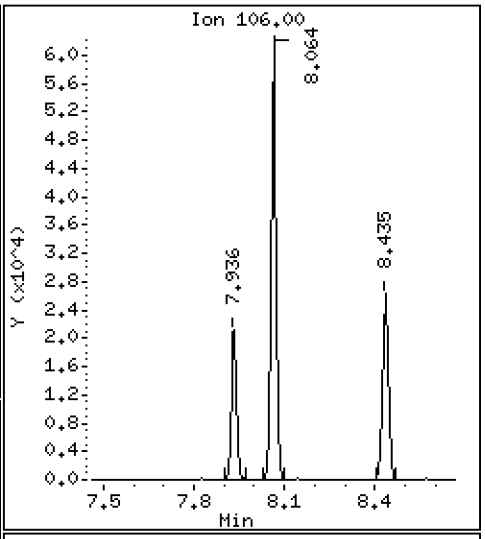
Column phase: RTXVMS

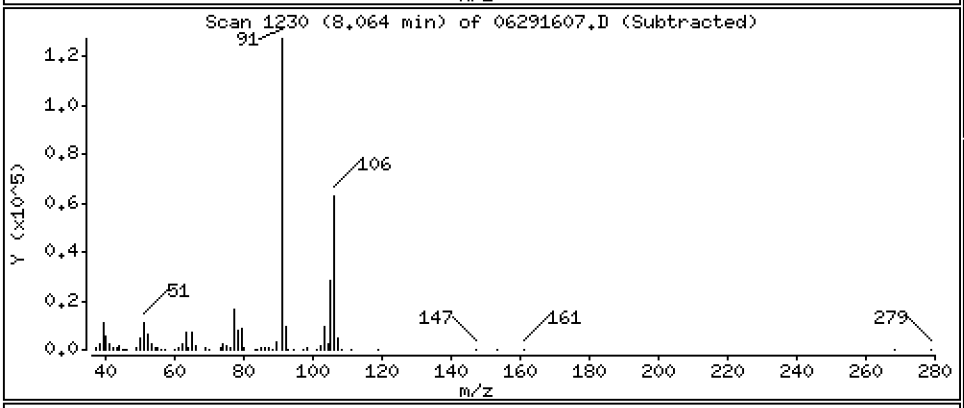
Column diameter: 0.18

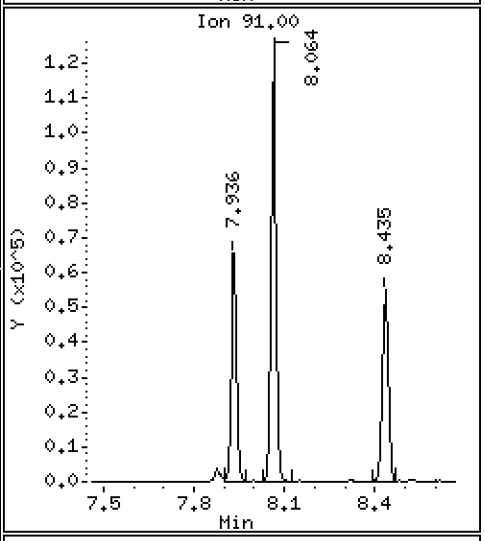
56 m,p-xylene

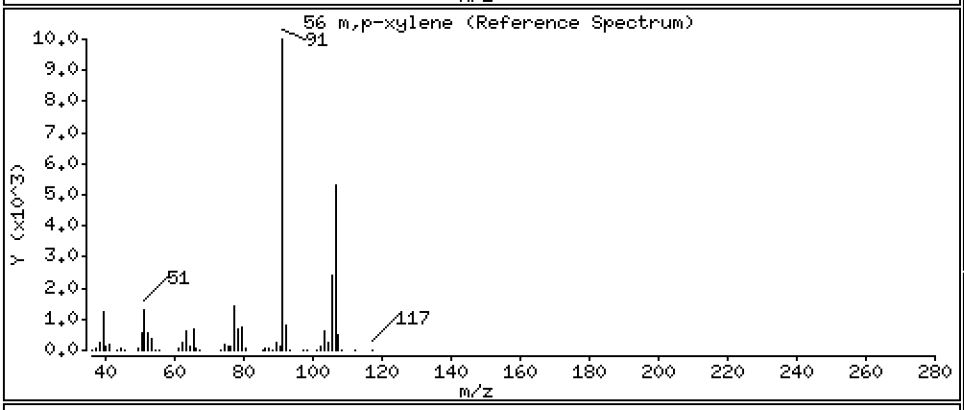
Concentration: 3.074 ug/Kg

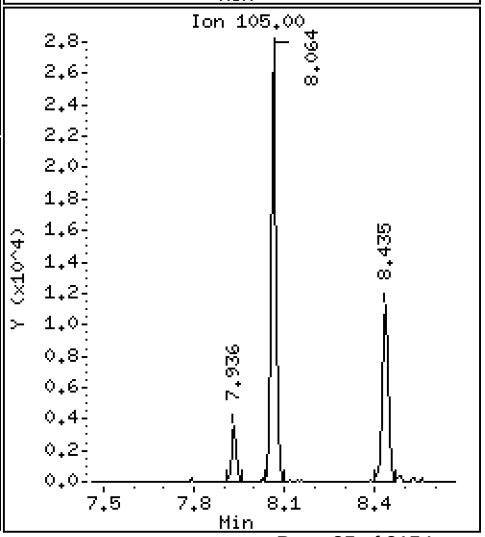


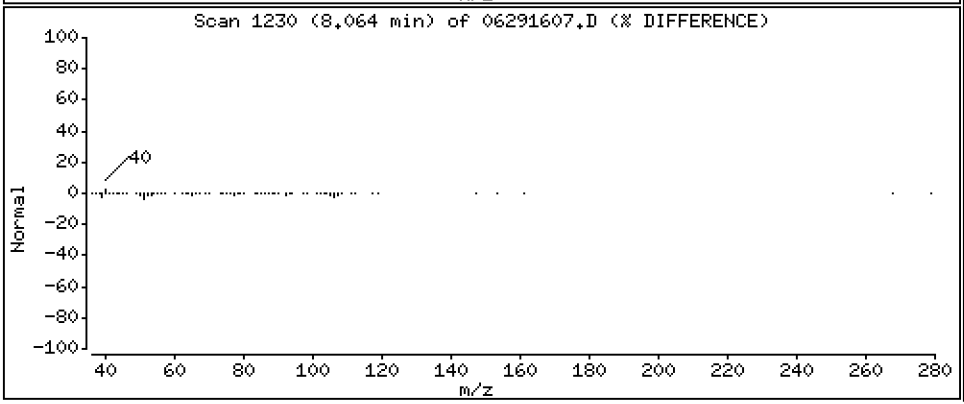












Data File: \\target\share\chem1\nt5.i\20160629.b\06291607.D

Date : 29-JUN-2016 17:32

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-02

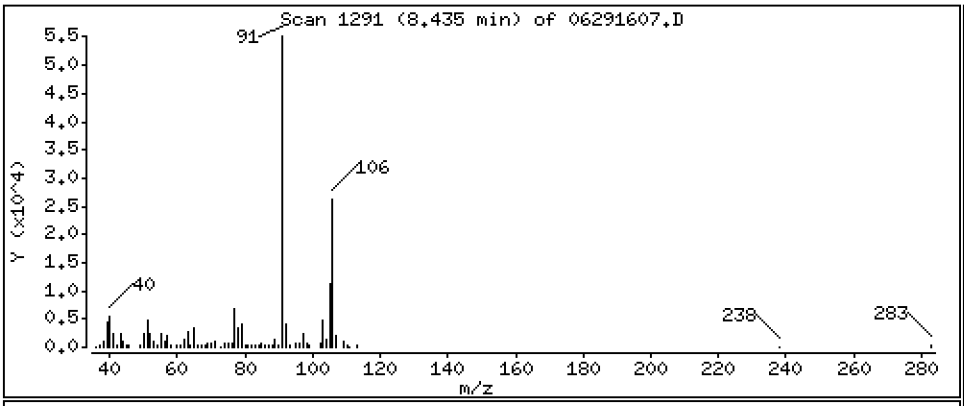
Operator: PB

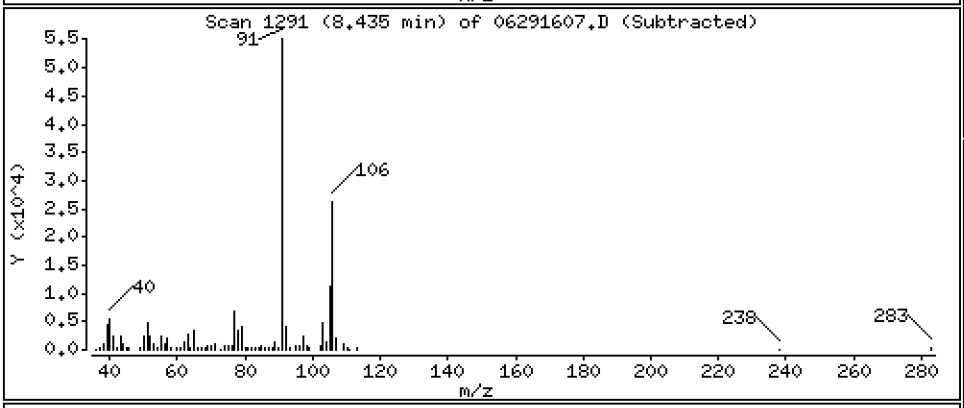
Column phase: RTXVMS

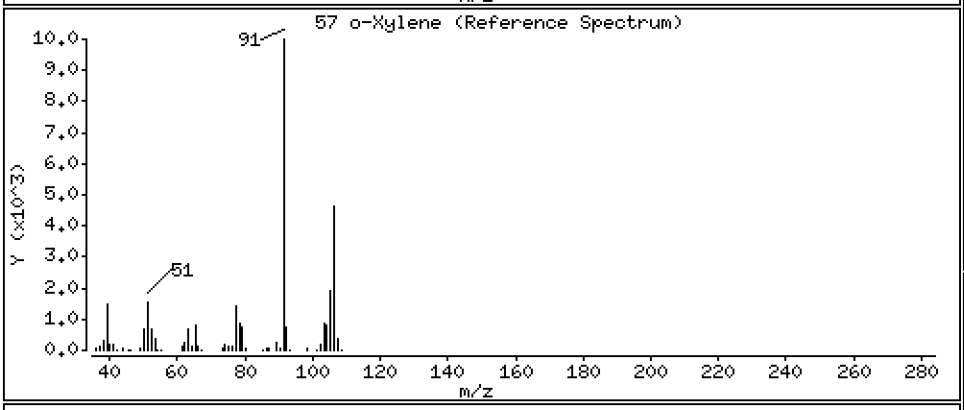
Column diameter: 0.18

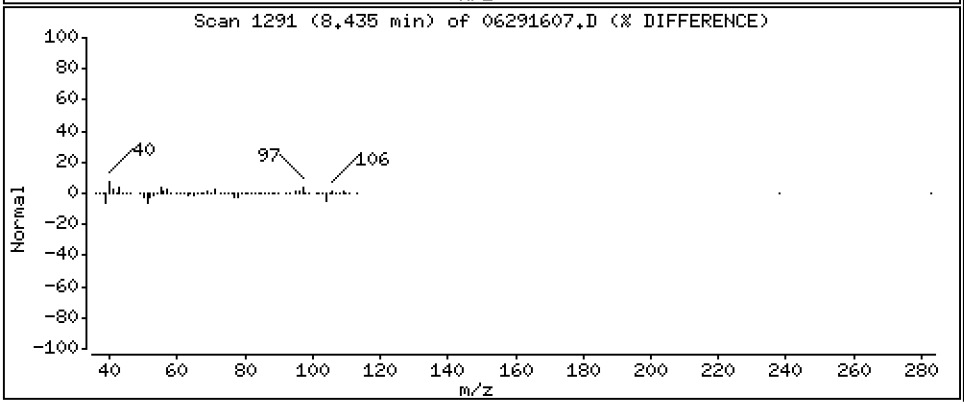
57 o-Xylene

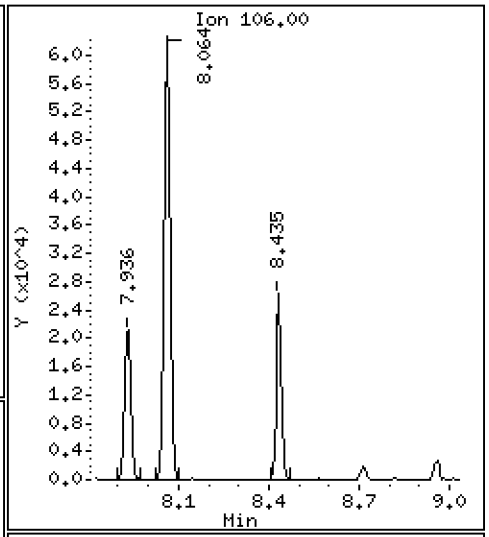
Concentration: 1.248 ug/Kg

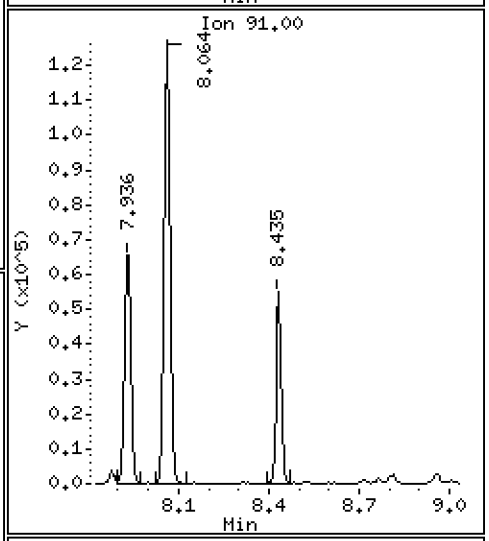


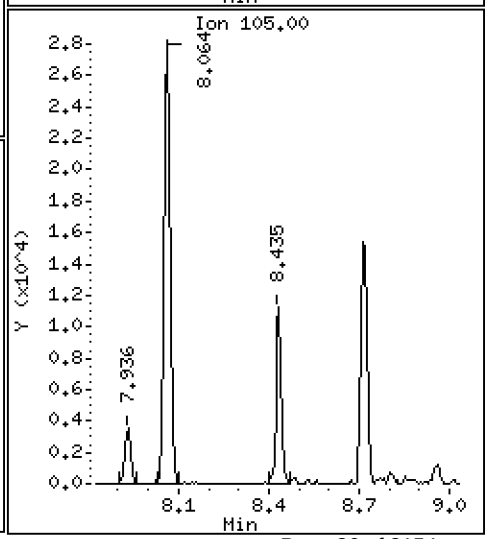












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291607.D
Lab Smp Id: 16F0096-02
Inj Date : 29-JUN-2016 17:32
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-02
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.054	4.048	(0.818)	63544	4.03385	4.034
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.492	4.486	(0.907)	789206	53.0916	53.092
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.955	4.949	(1.000)	623681	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.000)	782208	52.6381	52.638
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.350	5.344	(0.991)	32214	2.10367	2.104
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2188143	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.561	6.561	(1.215)	2771835	49.4387	49.439
	43 Toluene	92	6.603	6.603	(1.223)	70189	1.84622	1.846
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2302693	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.936	7.930	(1.007)	93261	1.32698	1.327
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.064	8.063	(1.023)	83873	3.07404	3.074
	57 o-Xylene	106	8.435	8.428	(1.070)	33643	1.24835	1.248
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1185405	47.8686	47.869
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1069438	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1073230	49.8369	49.837
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291607.D
Lab Smp Id: 16F0096-02
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	623681	3.95
35 1,4-Difluorobenze	2041239	1020620	4082478	2188143	7.20
52 d5-Chlorobenzene	2118314	1059157	4236628	2302693	8.70
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1069438	1.36

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.13
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.12
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-02
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	53.092	106.18	70-130
$ 32 d4-1,2-Dichloroeth	50.000	52.638	105.28	80-149
$ 42 d8-Toluene	50.000	49.439	98.88	77-120
$ 62 4-Bromofluorobenze	50.000	47.869	95.74	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.837	99.67	80-120

REVIEW SUMMARY FOR FILE - 06291607.D

Lab ID: 16F0096-02
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 17:32

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-M-53-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-03	File ID:	06291608.D
Sampled:	06/29/16 11:00	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 17:54
Solids:	89.88	Preparation:	No Prep - Volatiles	Initial/Final:	5.15 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.08	U	0.25	1.08
74-83-9	Bromomethane	1	1.08	U	0.20	1.08
156-59-2	cis-1,2-Dichloroethene	1	3.88		0.26	1.08
71-43-2	Benzene	1	0.38	J	0.32	1.08
79-01-6	Trichloroethene	1	2.04		0.23	1.08
108-88-3	Toluene	1	2.29		0.16	1.08
127-18-4	Tetrachloroethene	1	1.08	U	0.28	1.08
100-41-4	Ethylbenzene	1	1.68		0.22	1.08
179601-23-1	m,p-Xylene	1	3.73		0.42	1.08
95-47-6	o-Xylene	1	1.59		0.24	1.08

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	52.9	106	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.4	101	80 - 120	
Toluene-d8	50.000	49.3	98.5	77 - 120	
4-Bromofluorobenzene	50.000	47.8	95.5	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291608.D

Date : 29-JUN-2016 17:54

Client ID:

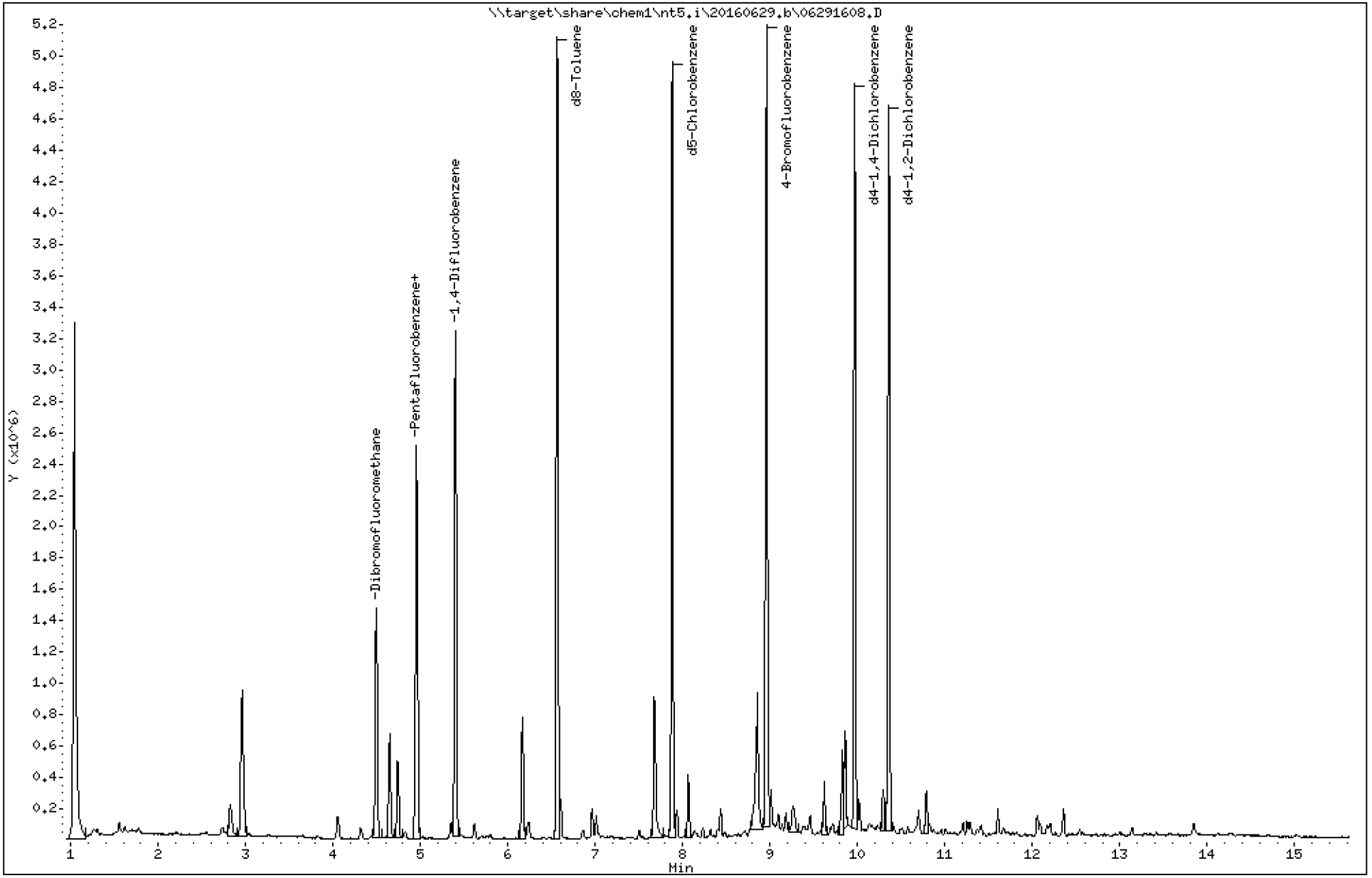
Instrument: nt5.i

Sample Info: 16F0096-03

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



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Date : 29-JUN-2016 17:54

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-03

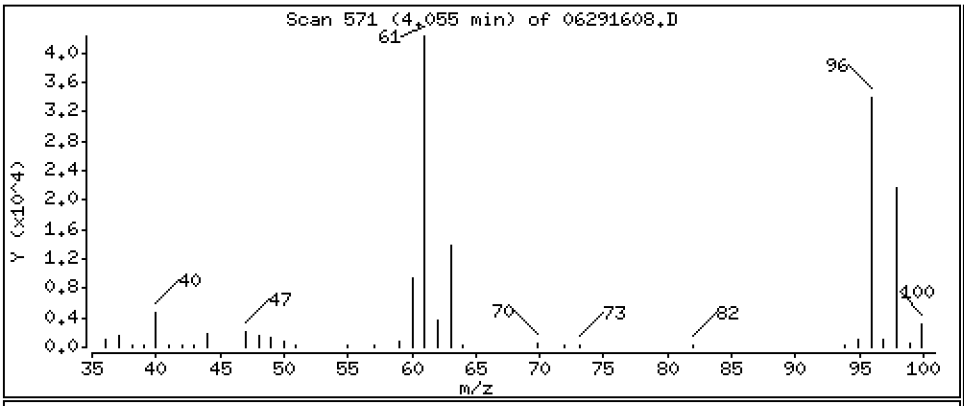
Operator: PB

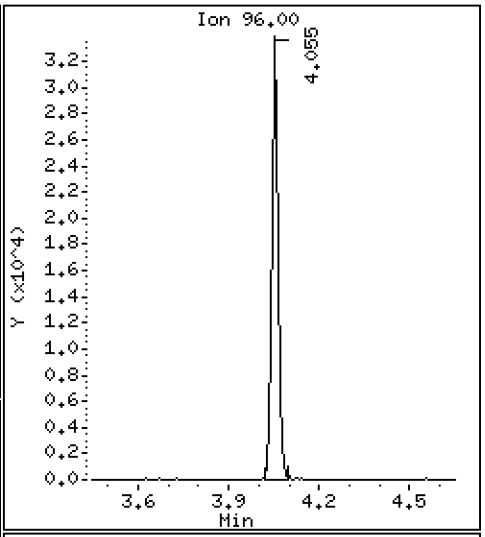
Column phase: RTXVMS

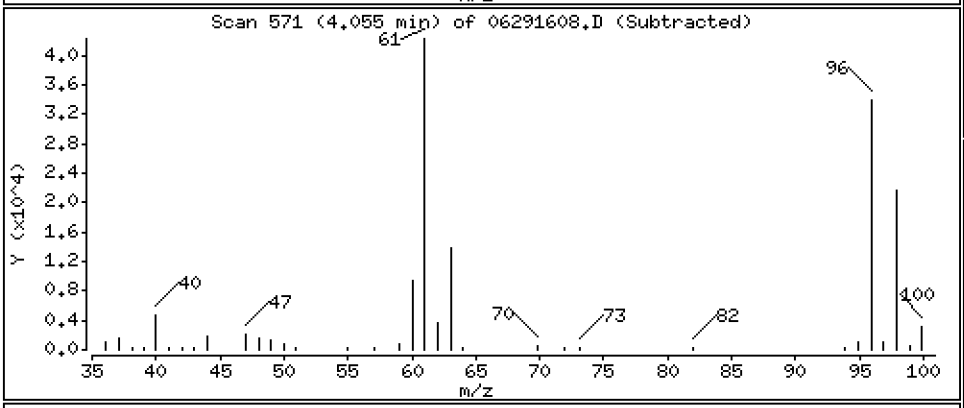
Column diameter: 0.18

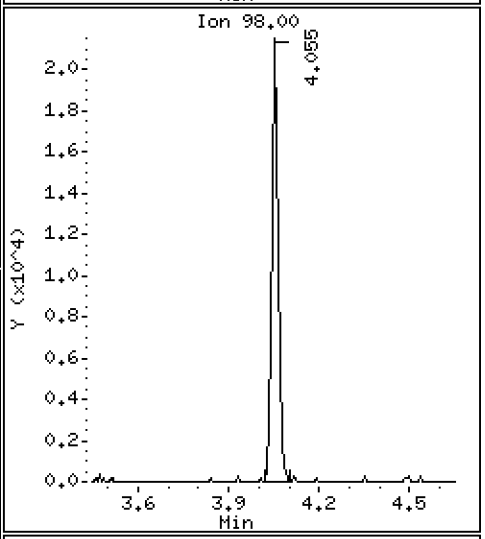
20 Cis-1,2-Dichloroethene

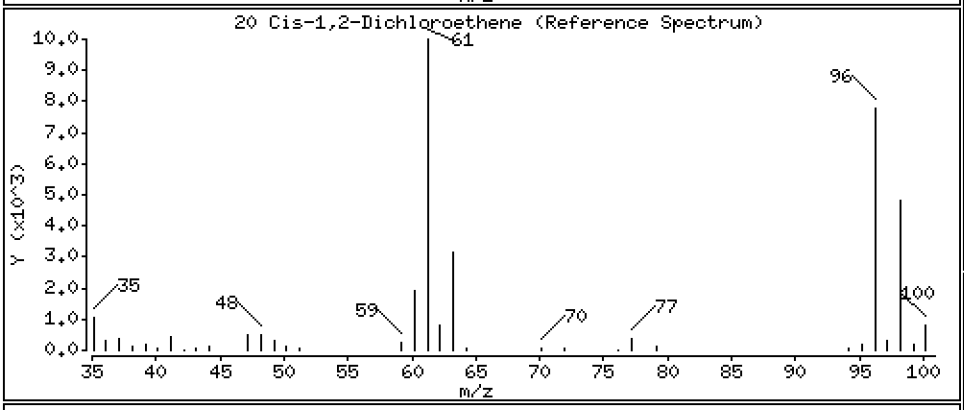
Concentration: 3.593 ug/Kg

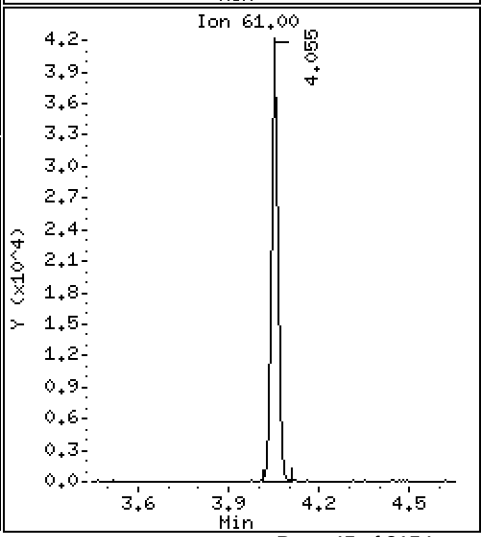


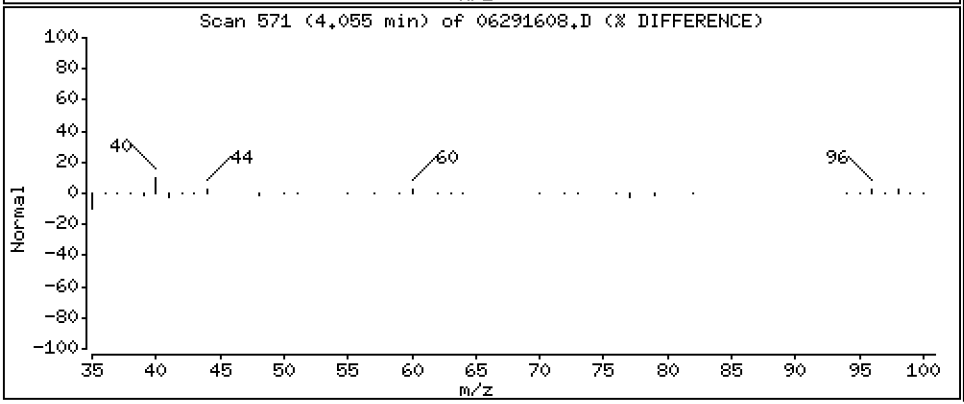












Data File: \\target\share\chem1\nt5.i\20160629.b\06291608.D

Date : 29-JUN-2016 17:54

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-03

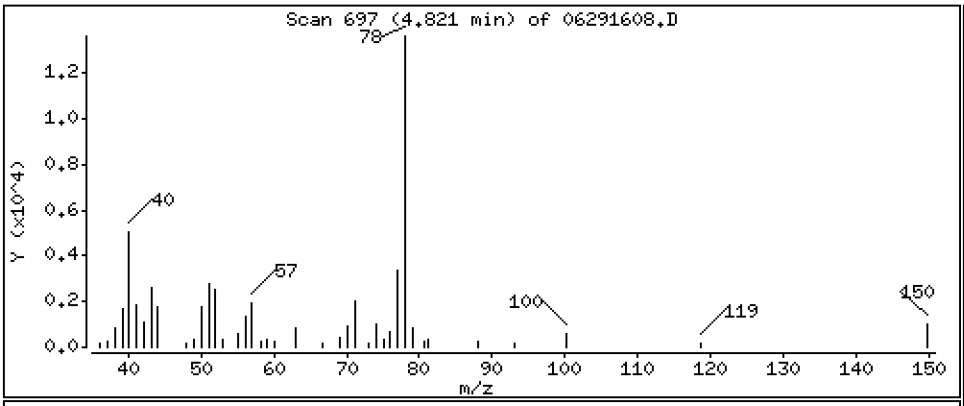
Operator: PB

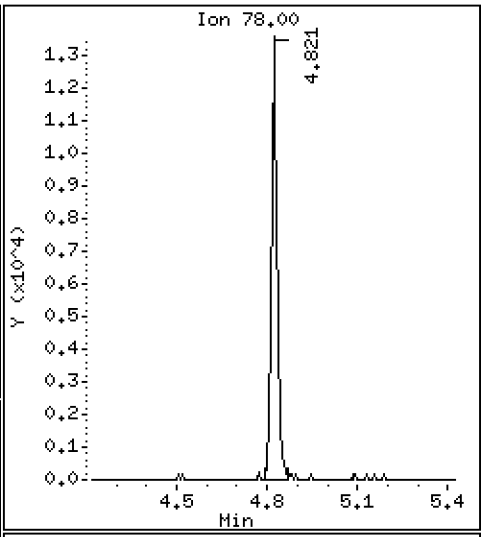
Column phase: RTXVMS

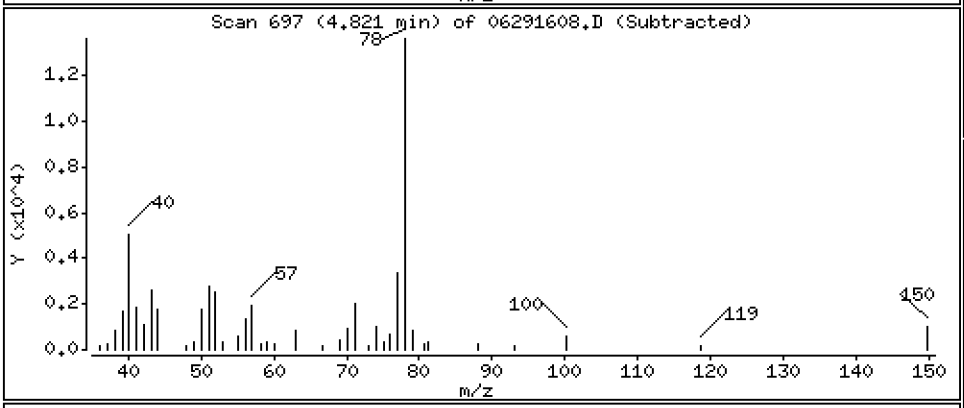
Column diameter: 0.18

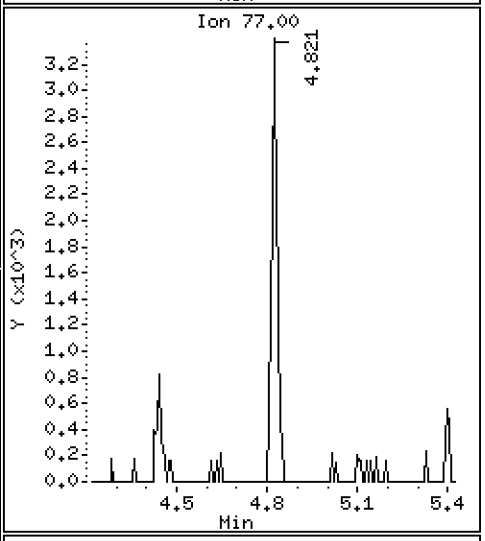
30 Benzene

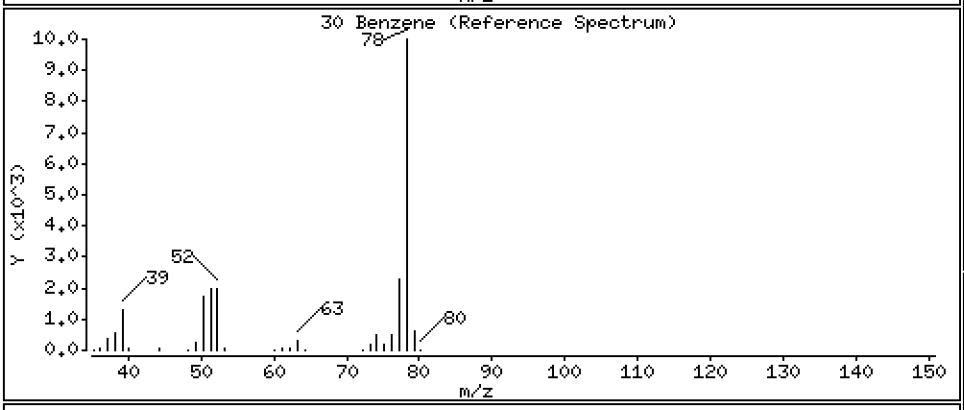
Concentration: 0.3533 ug/Kg

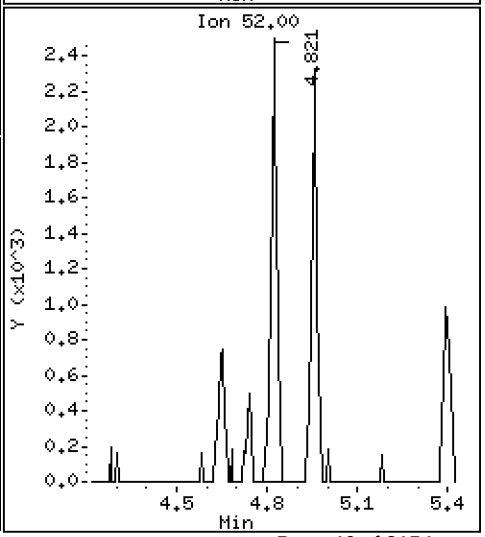


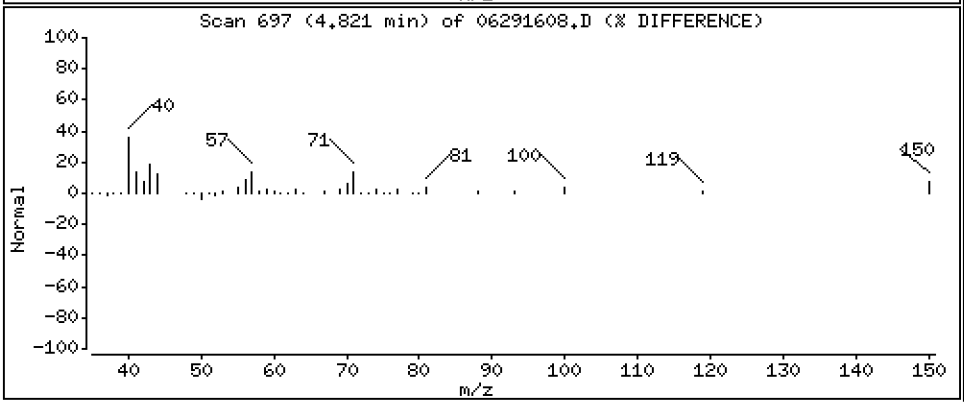












Data File: \\target\share\chem1\nt5.i\20160629.b\06291608.D

Date : 29-JUN-2016 17:54

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-03

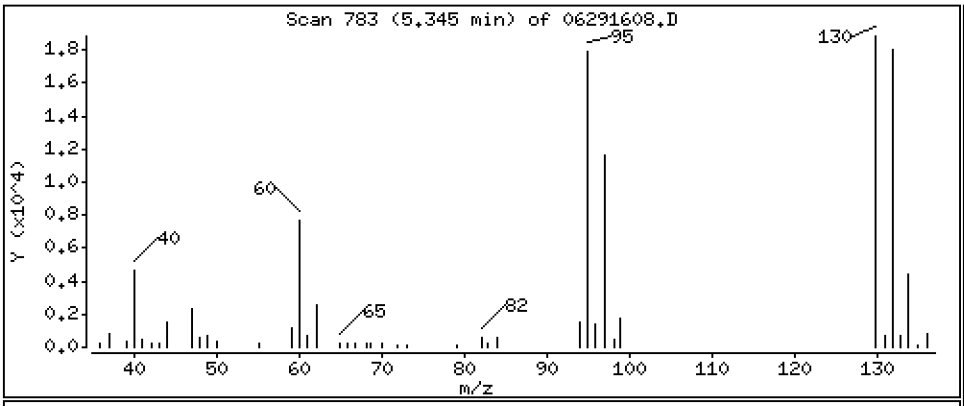
Operator: PB

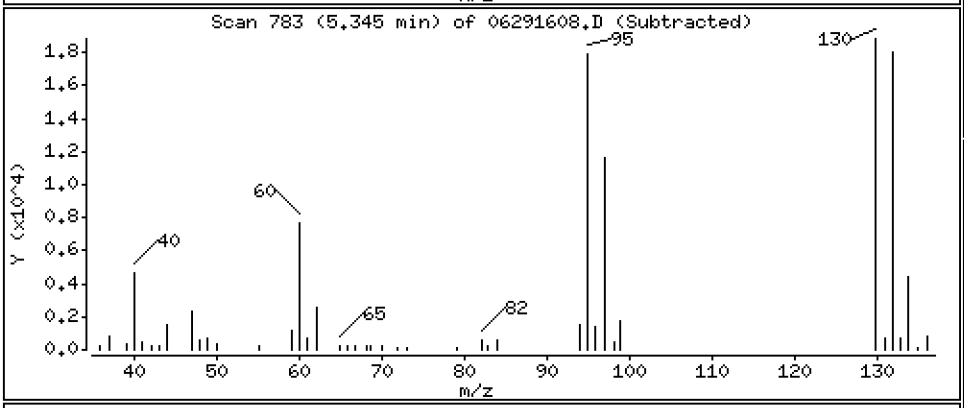
Column phase: RTXVMS

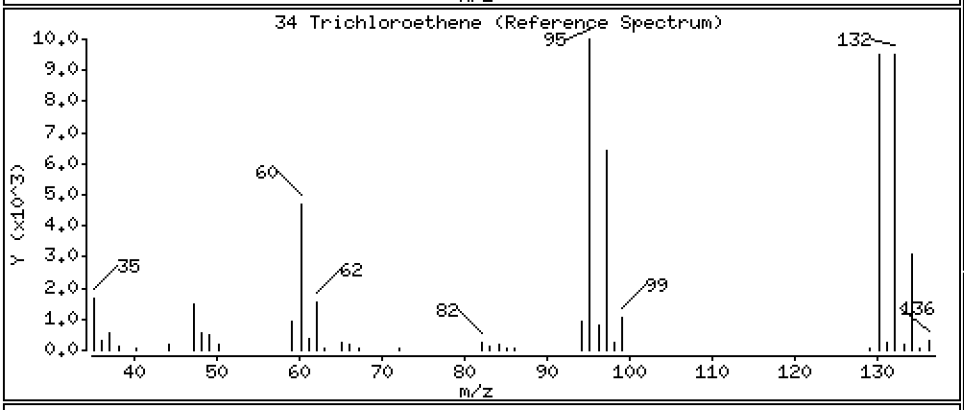
Column diameter: 0.18

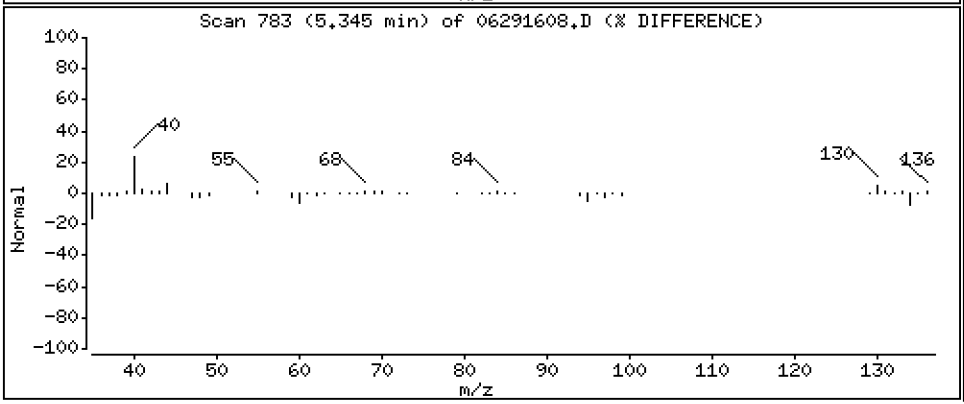
34 Trichloroethene

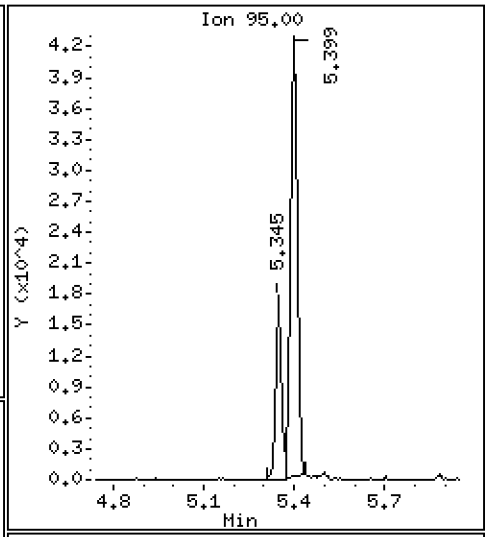
Concentration: 1.886 ug/Kg

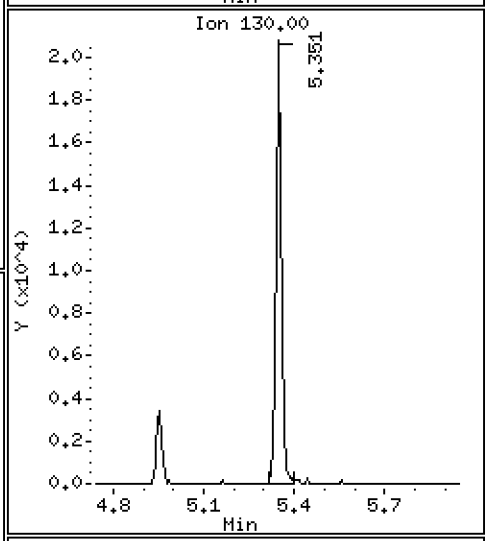


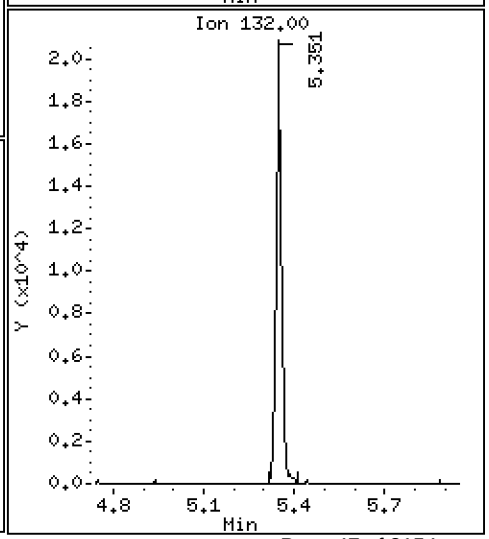












Data File: \\target\share\chem1\nt5.i\20160629.b\06291608.D

Date : 29-JUN-2016 17:54

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-03

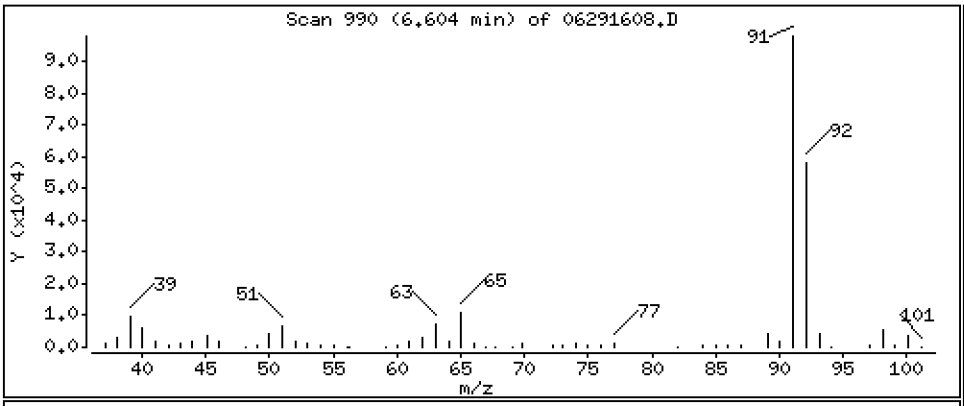
Operator: PB

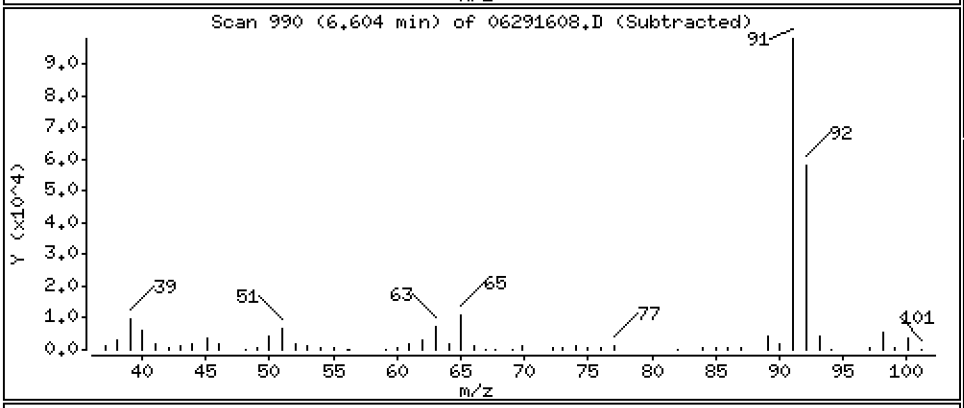
Column phase: RTXVMS

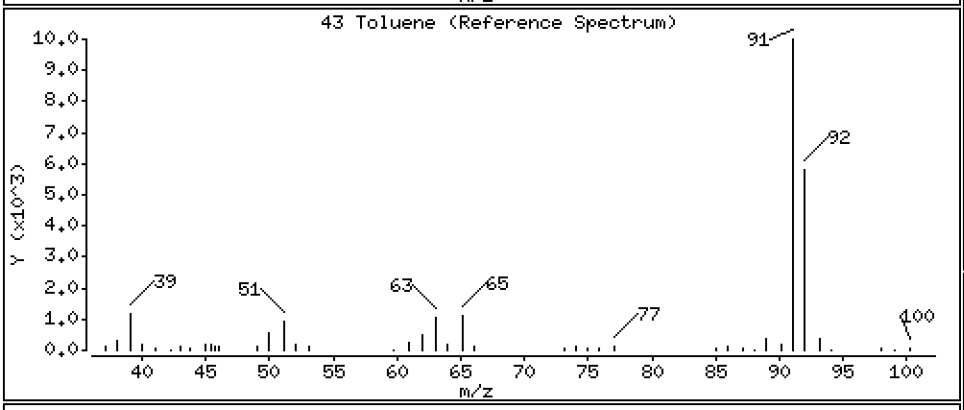
Column diameter: 0.18

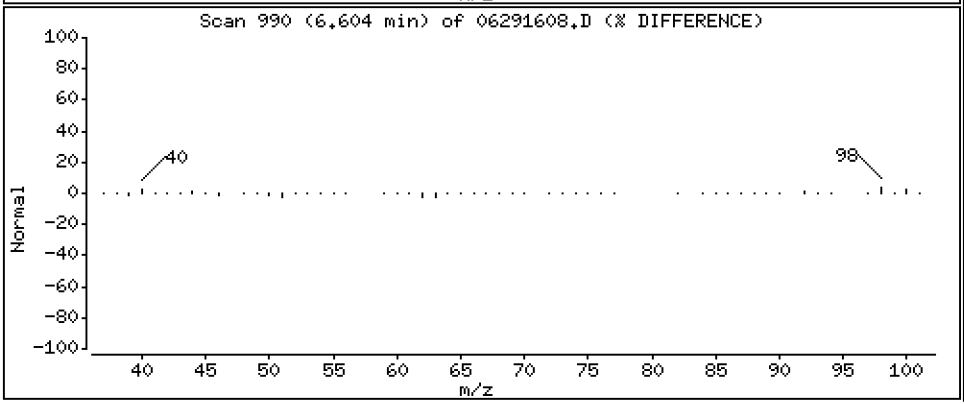
43 Toluene

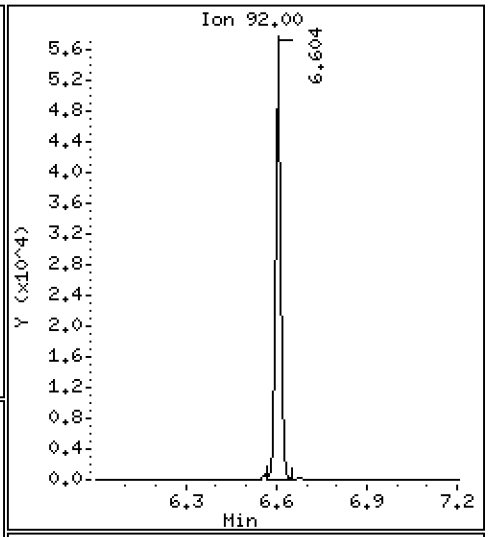
Concentration: 2.124 ug/Kg

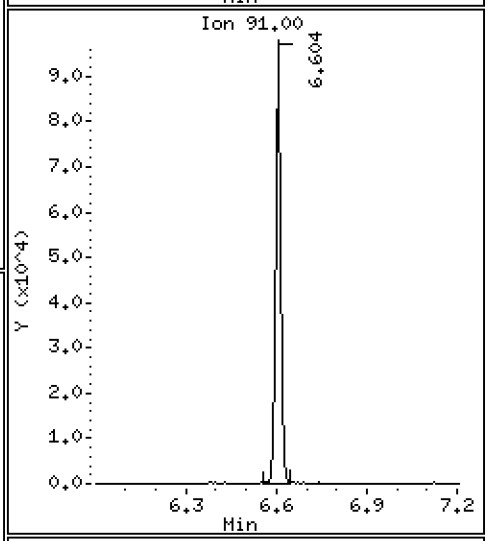


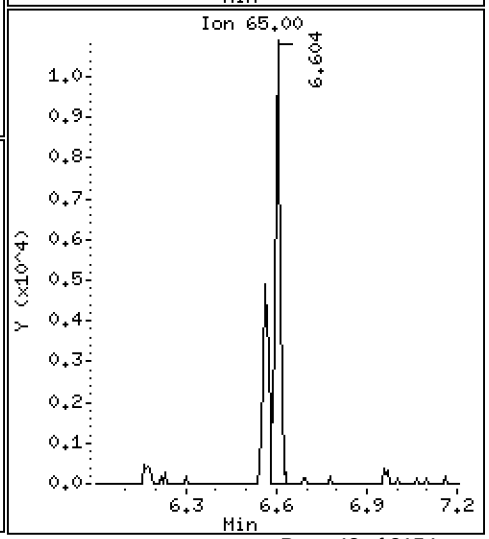












Data File: \\target\share\chem1\nt5.i\20160629.b\06291608.D

Date : 29-JUN-2016 17:54

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-03

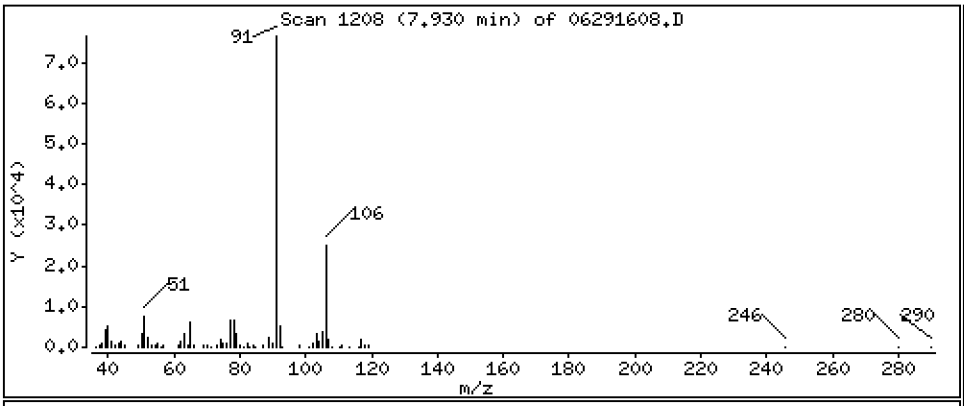
Operator: PB

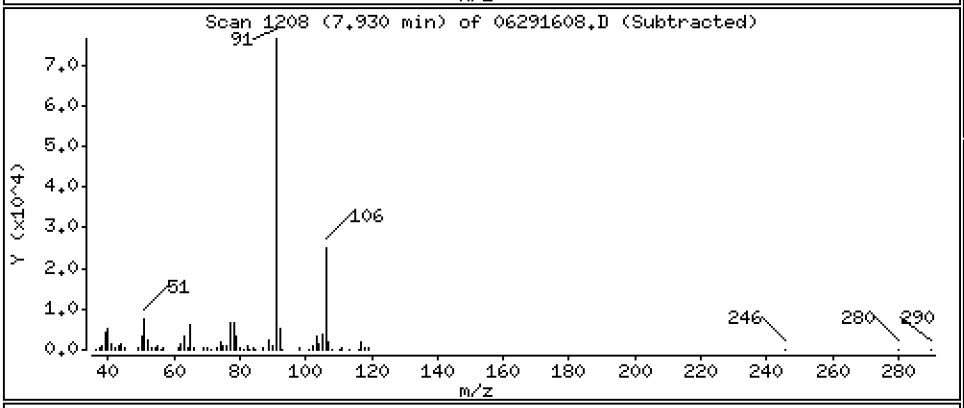
Column phase: RTXVMS

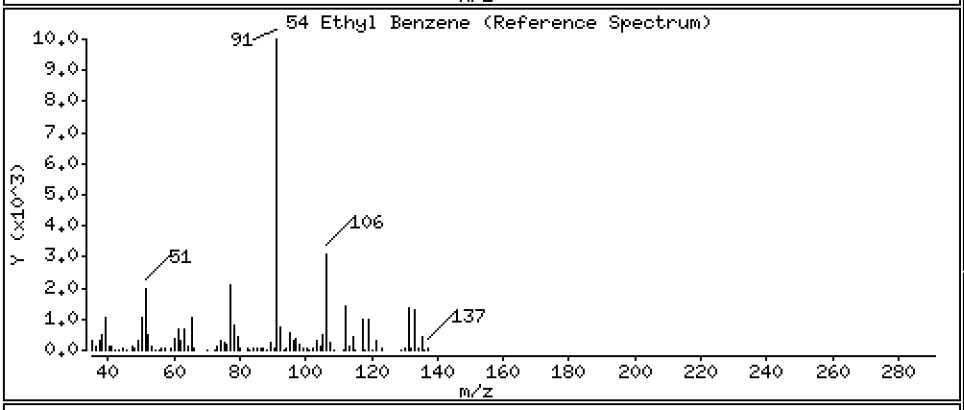
Column diameter: 0.18

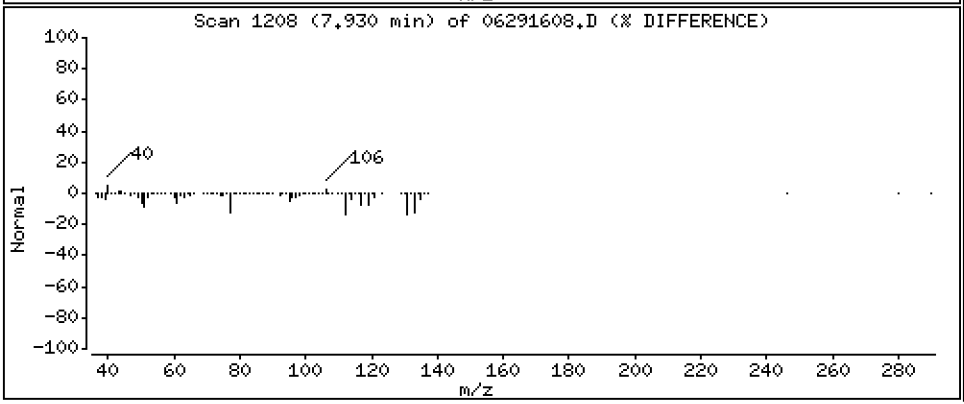
54 Ethyl Benzene

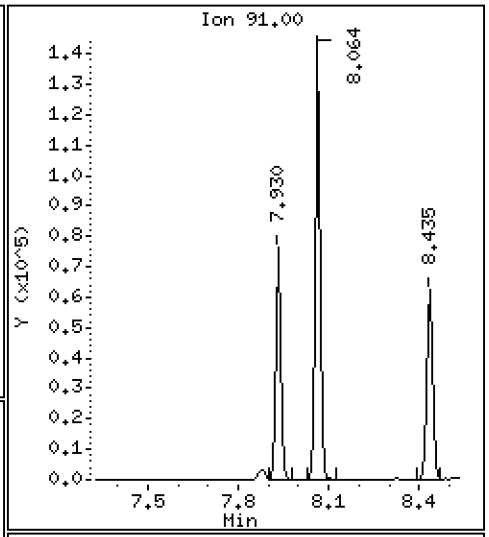
Concentration: 1.559 ug/Kg

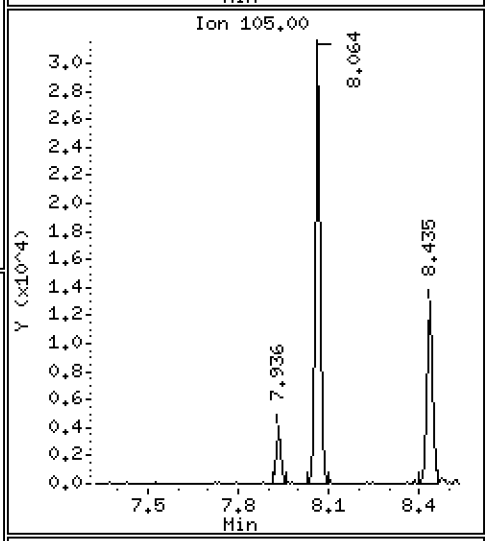


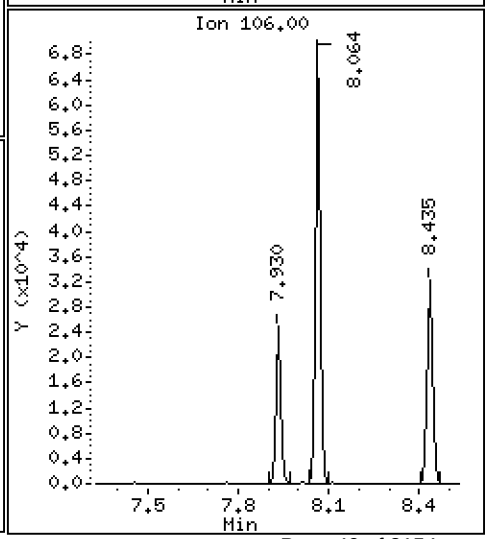












Data File: \\target\share\chem1\nt5.i\20160629.b\06291608.D

Date : 29-JUN-2016 17:54

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-03

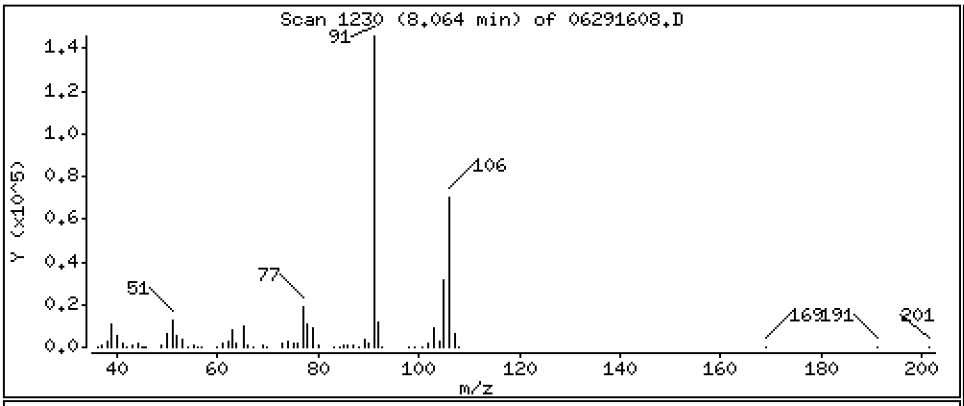
Operator: PB

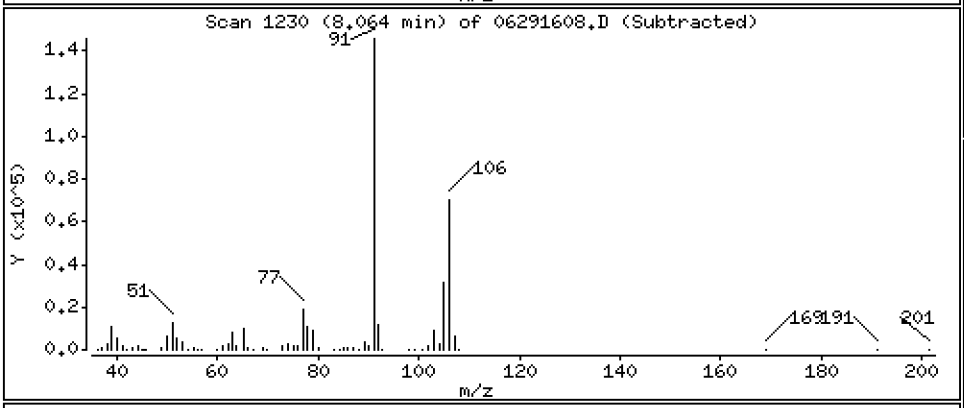
Column phase: RTXVMS

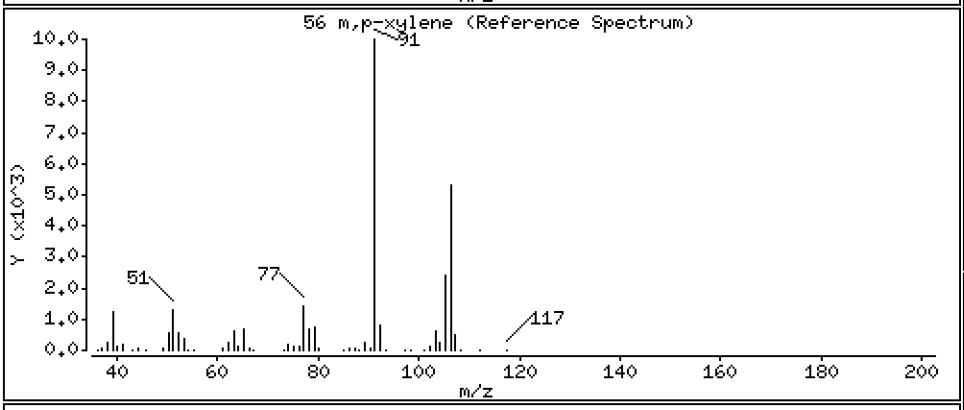
Column diameter: 0.18

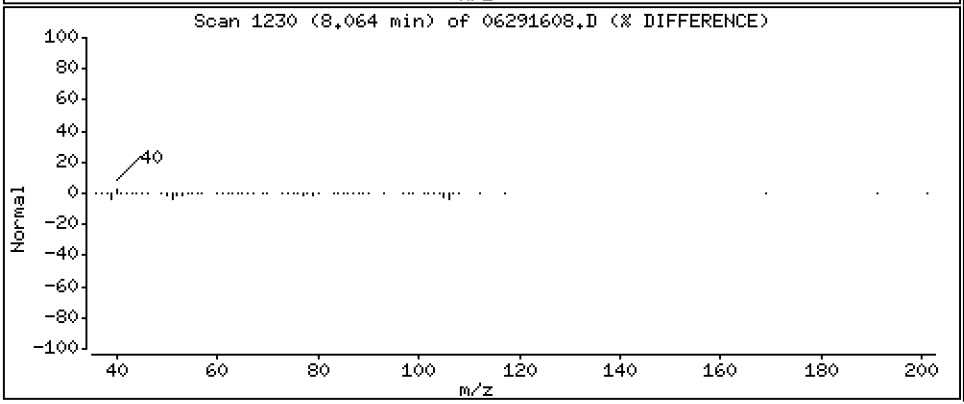
56 m,p-xylene

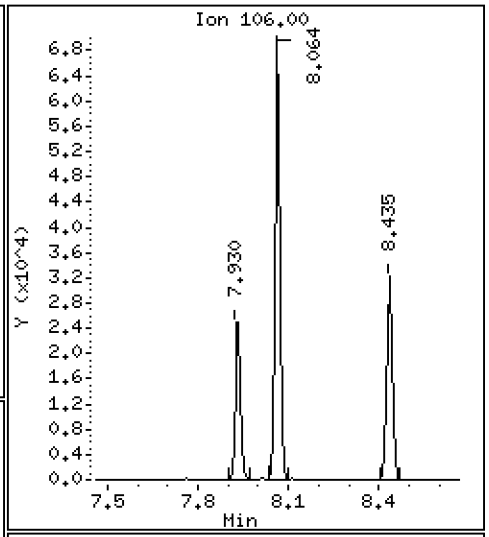
Concentration: 3.450 ug/Kg

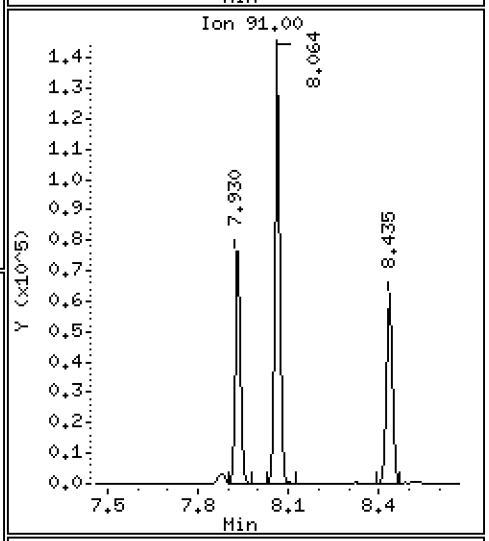


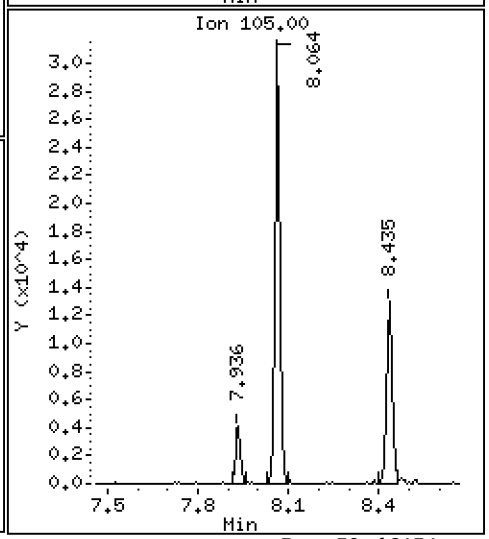












Data File: \\target\share\chem1\nt5.i\20160629.b\06291608.D

Date : 29-JUN-2016 17:54

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-03

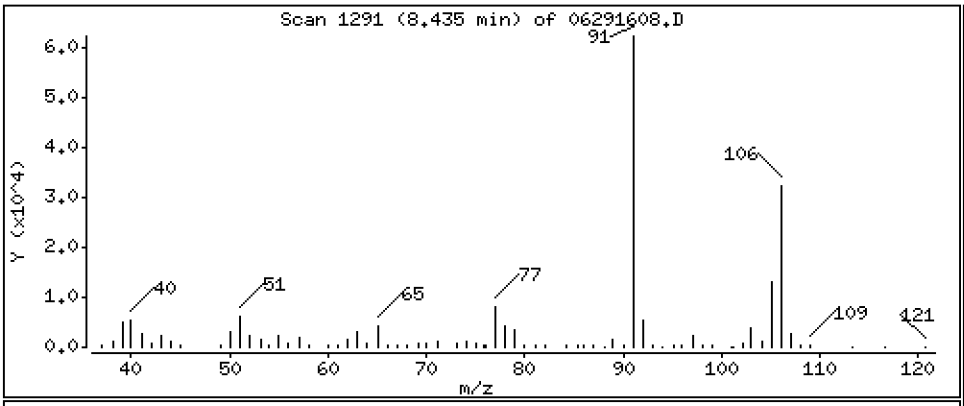
Operator: PB

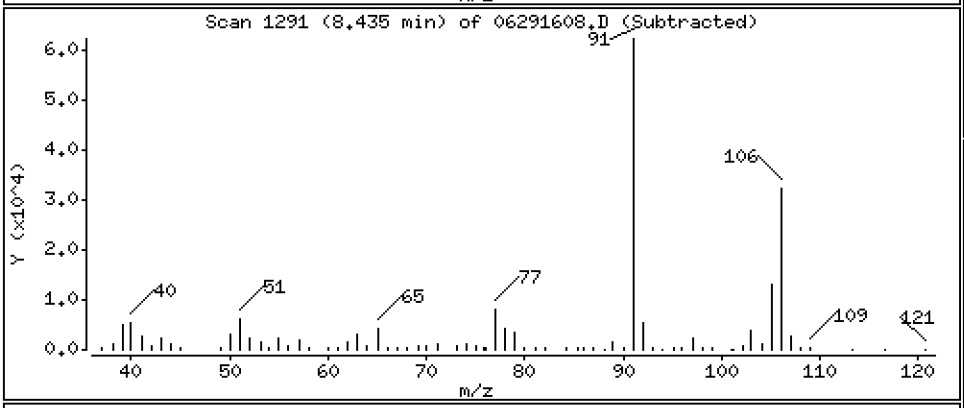
Column phase: RTXVMS

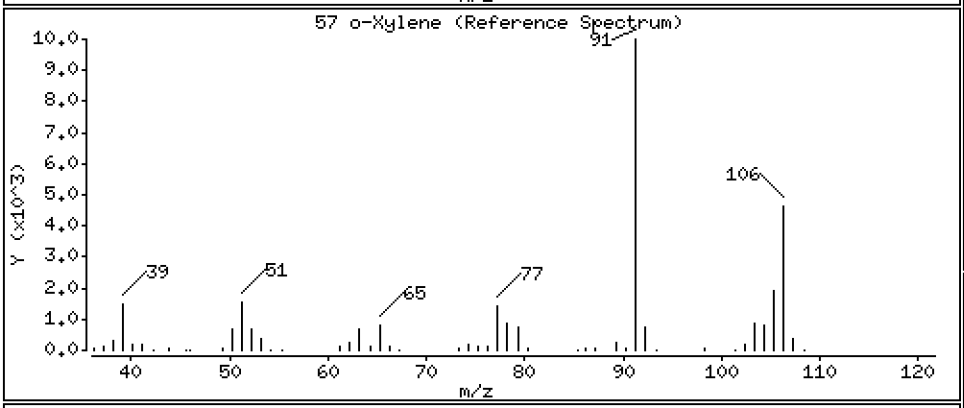
Column diameter: 0.18

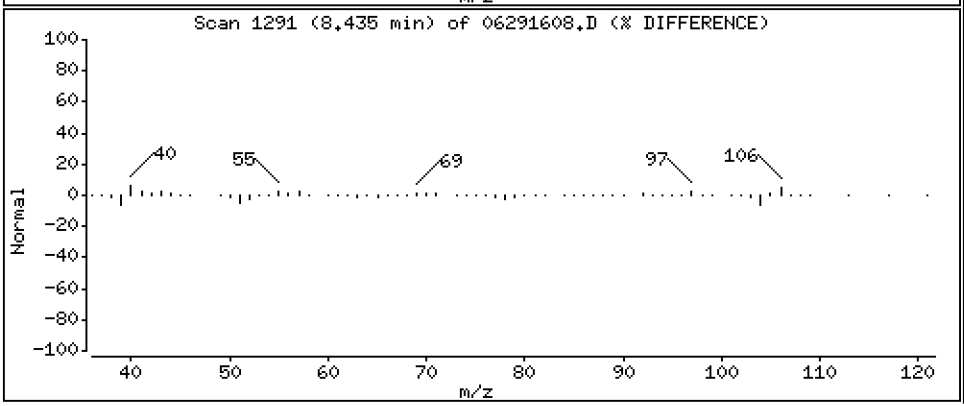
57 o-Xylene

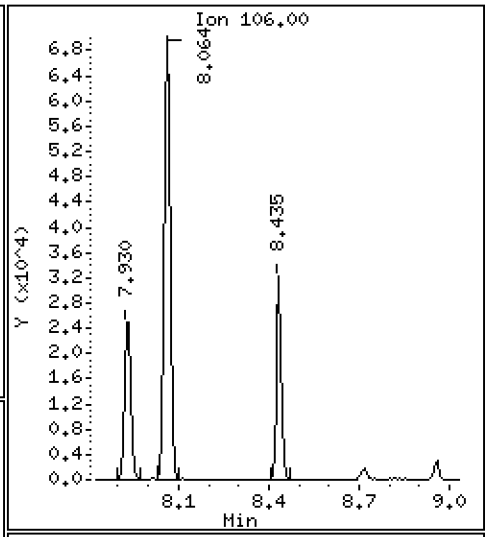
Concentration: 1.472 ug/Kg

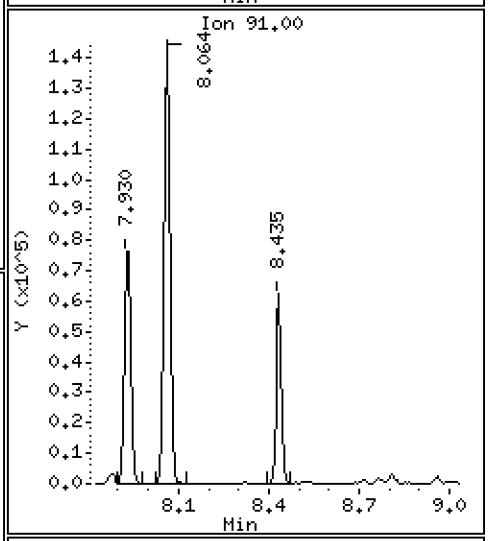


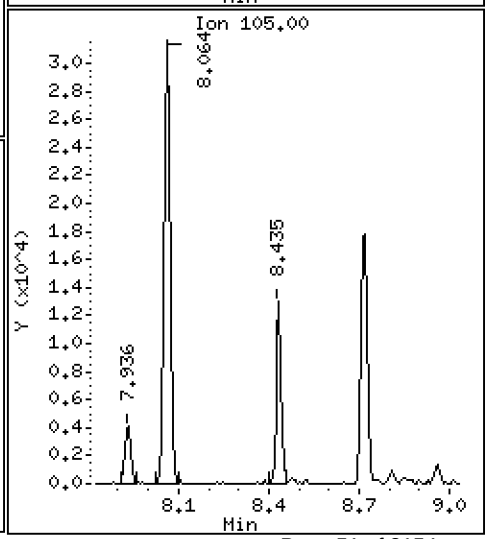












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291608.D
Lab Smp Id: 16F0096-03
Inj Date : 29-JUN-2016 17:54
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-03
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	Compound Not Detected.					
3 Vinyl Chloride	62	Compound Not Detected.					
4 Bromomethane	94	Compound Not Detected.					
5 Chloroethane	64	Compound Not Detected.					
6 Trichlorofluoromethane	101	Compound Not Detected.					
7 1,1-Dichloroethene	96	Compound Not Detected.					
8 Carbon Disulfide	76	Compound Not Detected.					
9 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10 Iodomethane	142	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Acrolein	56	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acetone	43	Compound Not Detected.					
15 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16 Methyl tert butyl ether	73	Compound Not Detected.					
17 1,1-Dichloroethane	63	Compound Not Detected.					
18 Acrylonitrile	53	Compound Not Detected.					
19 Vinyl Acetate	43	Compound Not Detected.					
20 Cis-1,2-Dichloroethene	96	4.054	4.048	(0.818)	57607	3.59301	3.593
22 2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.492	4.486	(0.907)	802372	53.0334	53.033
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	4.821	4.821	(0.893)	20993	0.35334	0.3533
*	31 Pentafluorobenzene	168	4.955	4.949	(1.000)	634782	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.000)	800725	52.9418	52.942
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.344	5.344	(0.990)	29040	1.88620	1.886
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2199968	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.561	6.561	(1.215)	2777084	49.2661	49.266
	43 Toluene	92	6.603	6.603	(1.223)	81175	2.12371	2.124
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2301366	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.930	7.930	(1.006)	109486	1.55874	1.559
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.064	8.063	(1.023)	94073	3.44987	3.450
	57 o-Xylene	106	8.435	8.428	(1.070)	39657	1.47235	1.472
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1182371	47.7736	47.774
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1024654	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1040097	50.4092	50.409
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291608.D
Lab Smp Id: 16F0096-03
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	634782	5.80
35 1,4-Difluorobenze	2041239	1020620	4082478	2199968	7.78
52 d5-Chlorobenzene	2118314	1059157	4236628	2301366	8.64
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1024654	-2.88

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.13
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.12
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-03
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	53.033	106.07	70-130
$ 32 d4-1,2-Dichloroeth	50.000	52.942	105.88	80-149
$ 42 d8-Toluene	50.000	49.266	98.53	77-120
$ 62 4-Bromofluorobenze	50.000	47.774	95.55	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.409	100.82	80-120

REVIEW SUMMARY FOR FILE - 06291608.D

Lab ID: 16F0096-03
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 17:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-M-04-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-04	File ID:	06291609.D
Sampled:	06/29/16 11:15	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 18:17
Solids:	91.22	Preparation:	No Prep - Volatiles	Initial/Final:	3.5 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.57	U	0.37	1.57
74-83-9	Bromomethane	1	1.57	U	0.29	1.57
156-59-2	cis-1,2-Dichloroethene	1	2.68		0.38	1.57
71-43-2	Benzene	1	1.57	U	0.46	1.57
79-01-6	Trichloroethene	1	1.57	U	0.33	1.57
108-88-3	Toluene	1	0.63	J	0.24	1.57
127-18-4	Tetrachloroethene	1	1.57	U	0.40	1.57
100-41-4	Ethylbenzene	1	1.57	U	0.32	1.57
179601-23-1	m,p-Xylene	1	0.74	J	0.61	1.57
95-47-6	o-Xylene	1	0.45	J	0.35	1.57

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	51.6	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.2	100	80 - 120	
Toluene-d8	50.000	49.4	98.8	77 - 120	
4-Bromofluorobenzene	50.000	50.2	100	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291609.D

Date : 29-JUN-2016 18:17

Client ID:

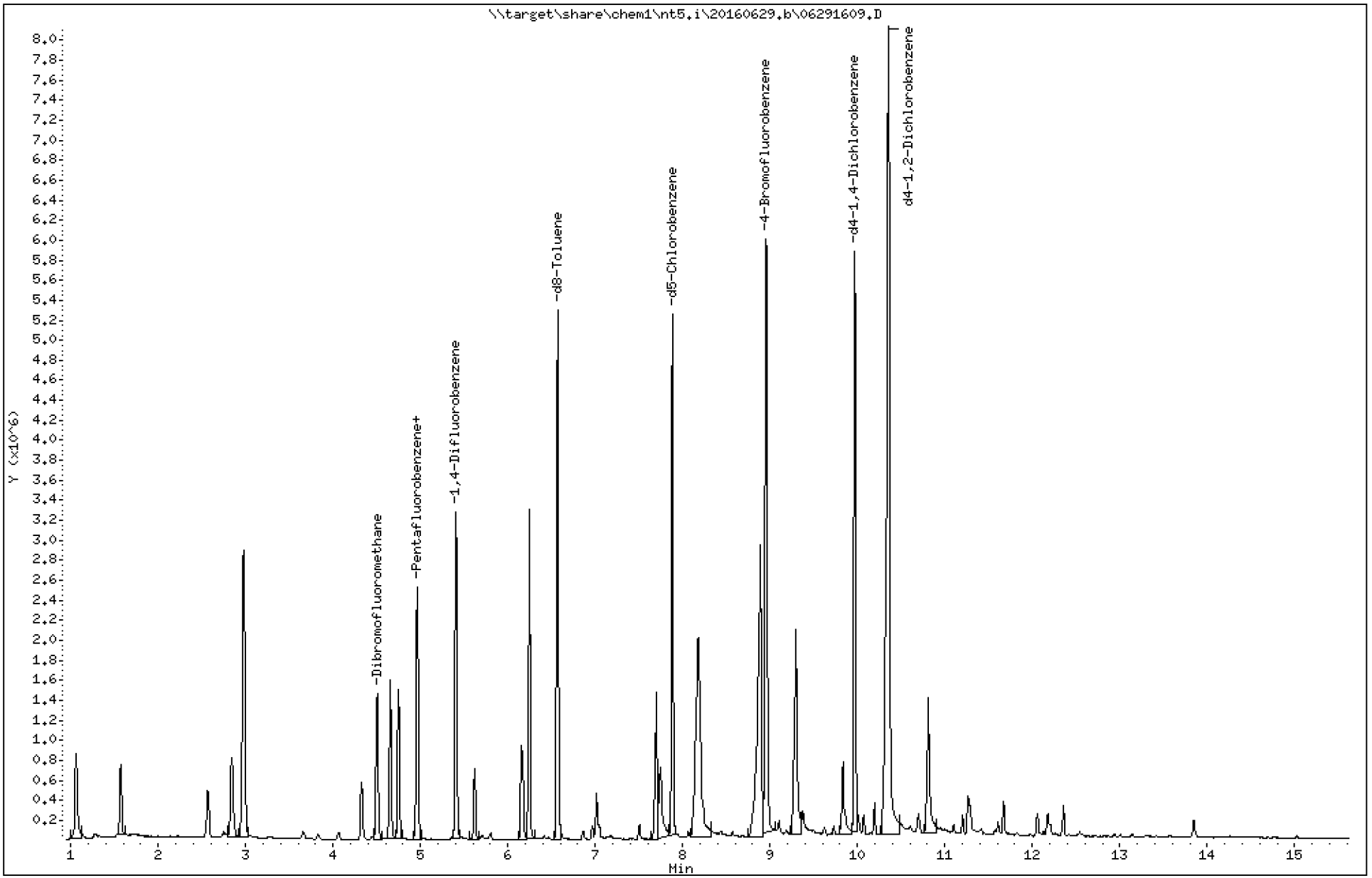
Instrument: nt5.i

Sample Info: 16F0096-04

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160629.b\06291609.D

Date : 29-JUN-2016 18:17

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-04

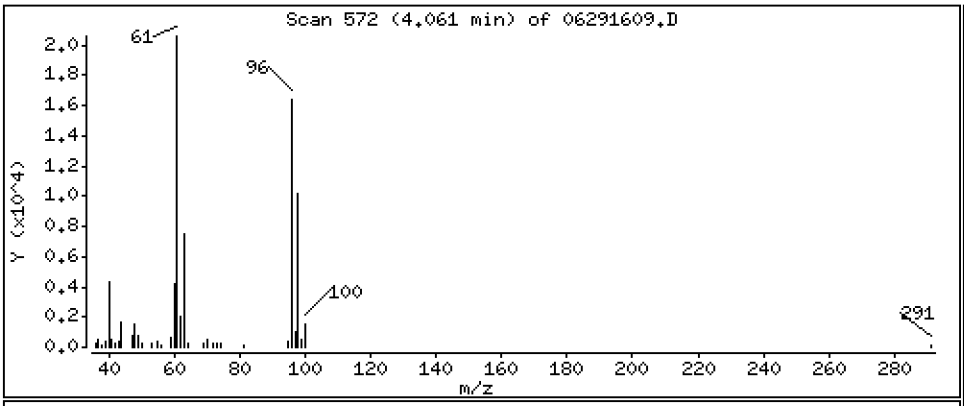
Operator: PB

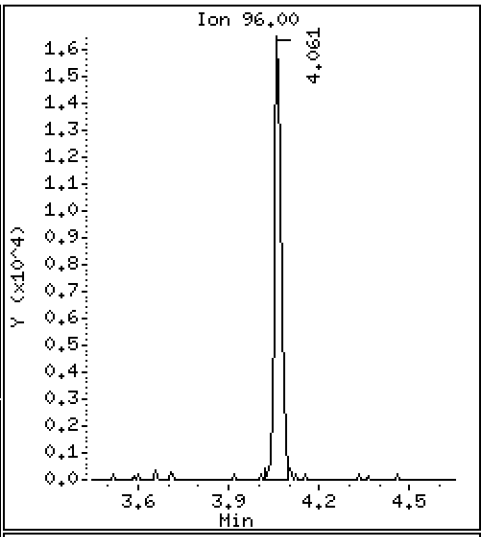
Column phase: RTXVMS

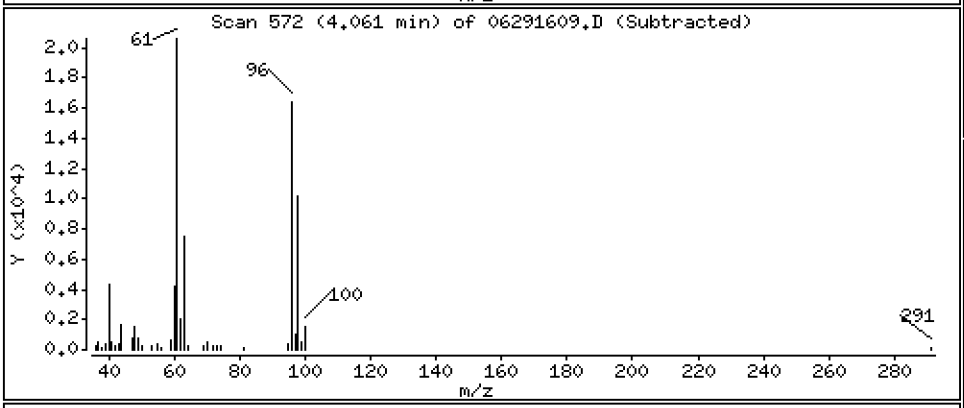
Column diameter: 0.18

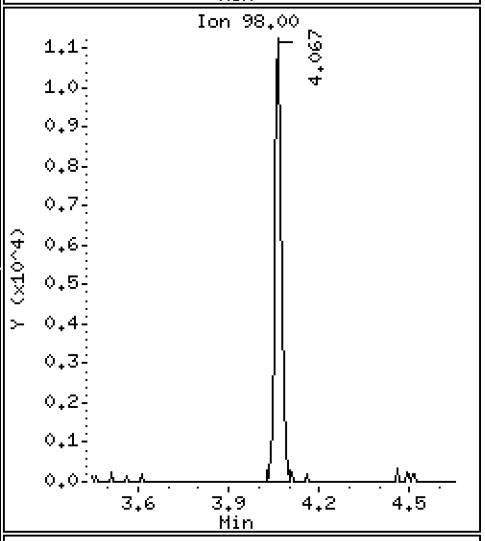
20 Cis-1,2-Dichloroethene

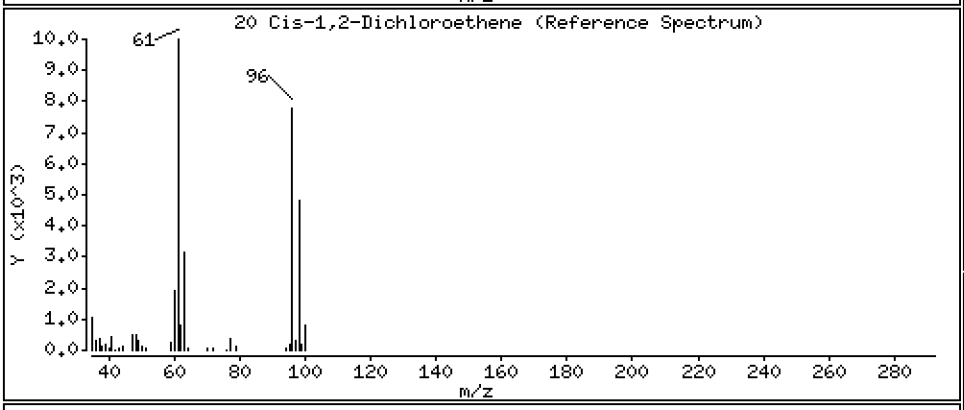
Concentration: 1.714 ug/Kg

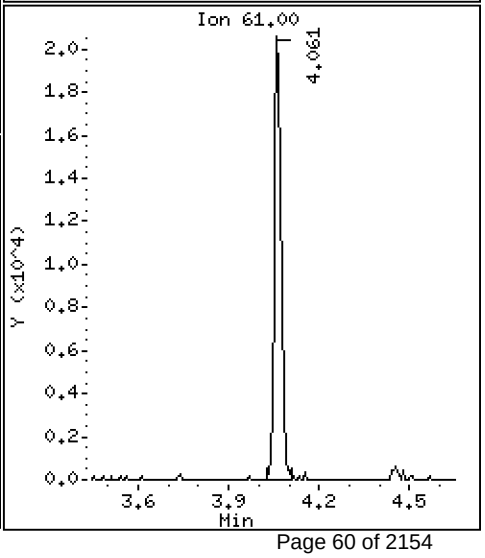


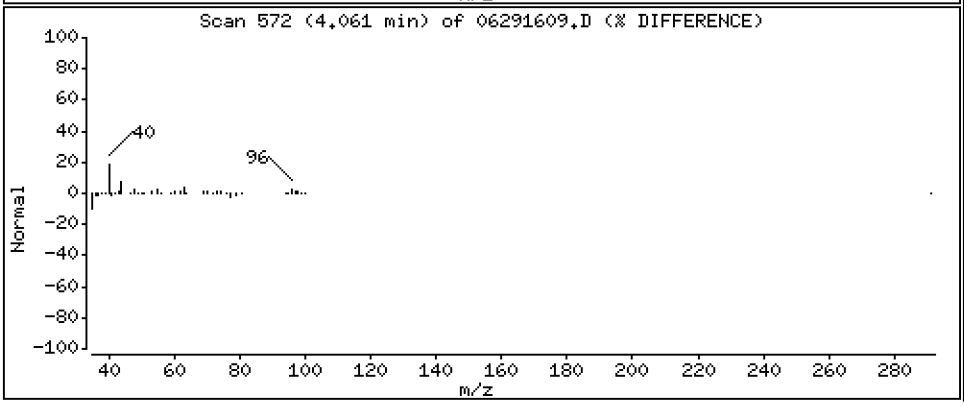












Data File: \\target\share\chem1\nt5.i\20160629.b\06291609.D

Date : 29-JUN-2016 18:17

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-04

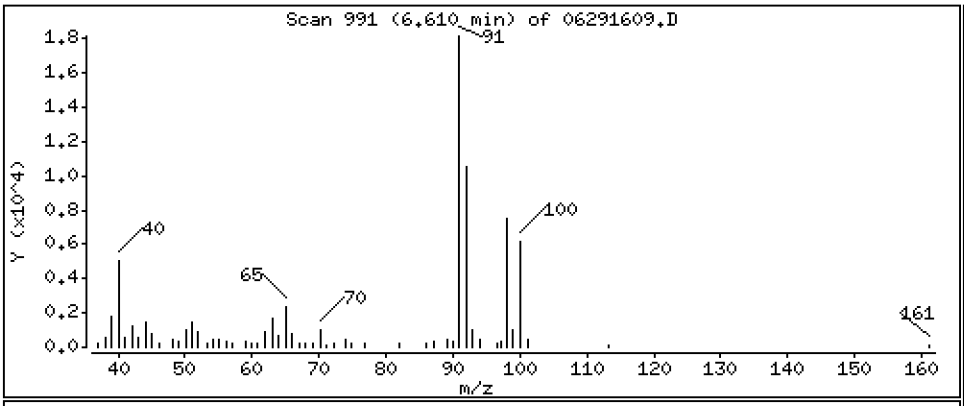
Operator: PB

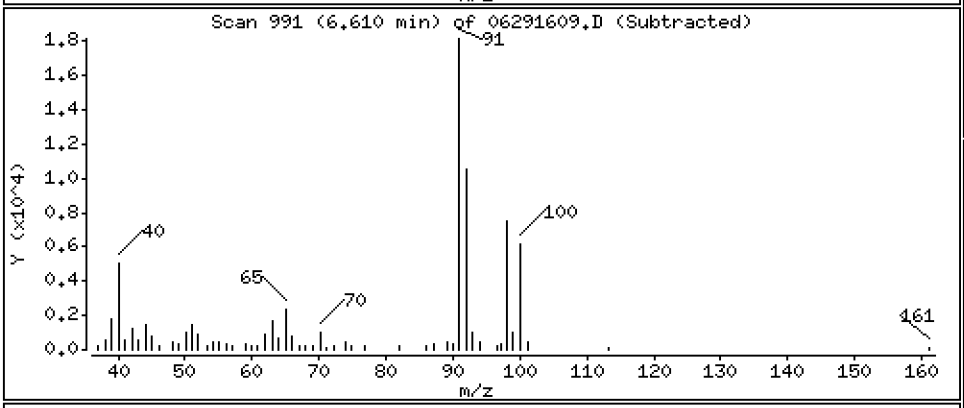
Column phase: RTXVMS

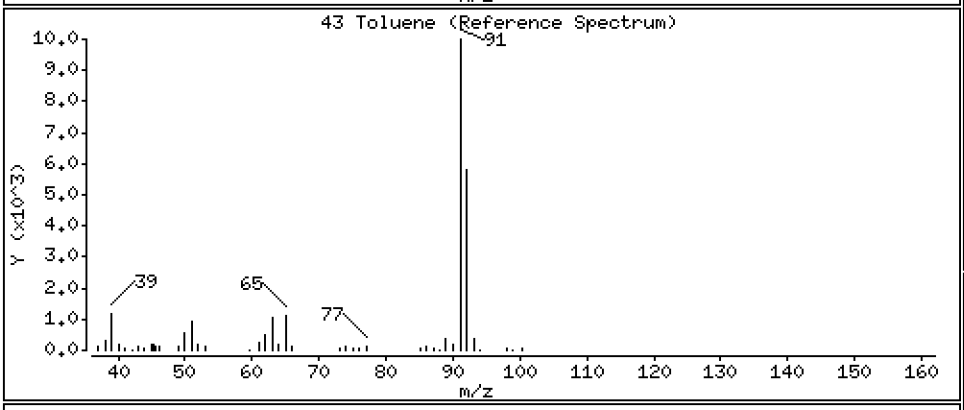
Column diameter: 0.18

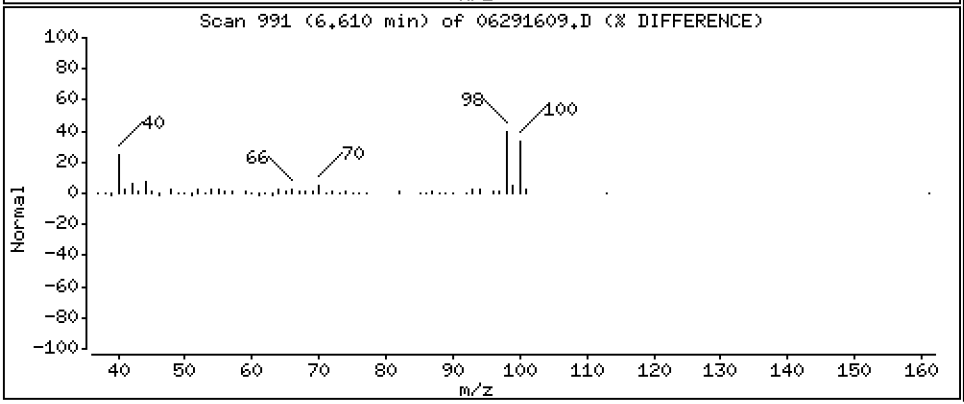
43 Toluene

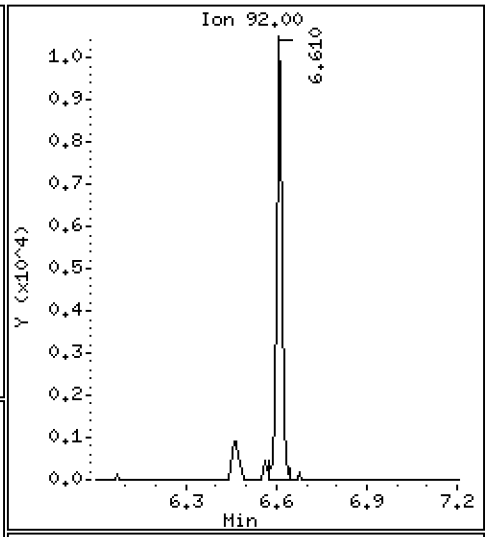
Concentration: 0.3997 ug/Kg

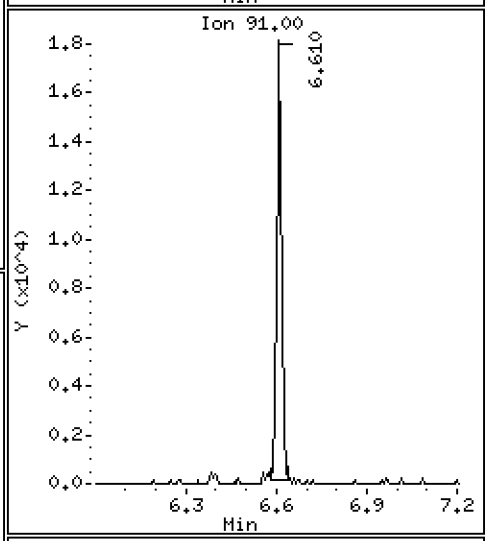


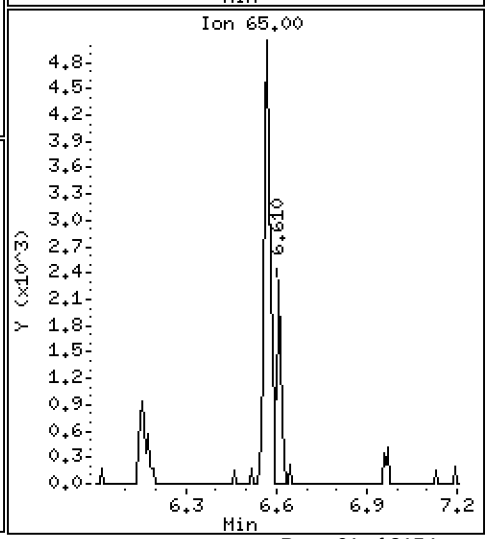












Data File: \\target\share\chem1\nt5.i\20160629.b\06291609.D

Date : 29-JUN-2016 18:17

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-04

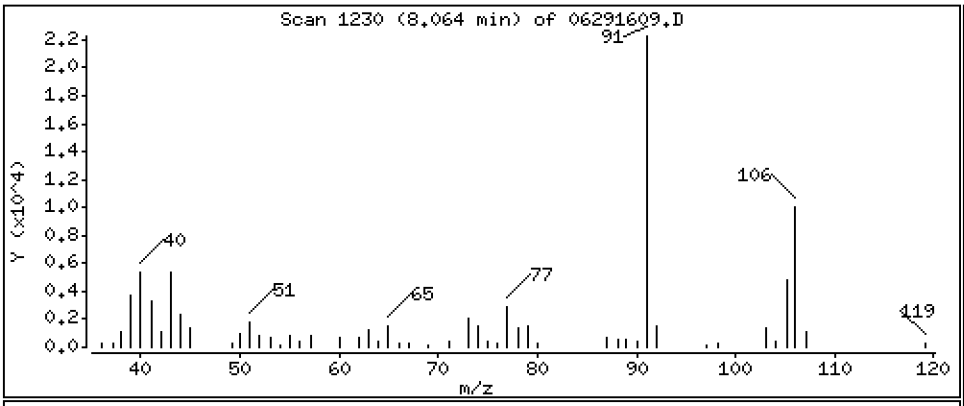
Operator: PB

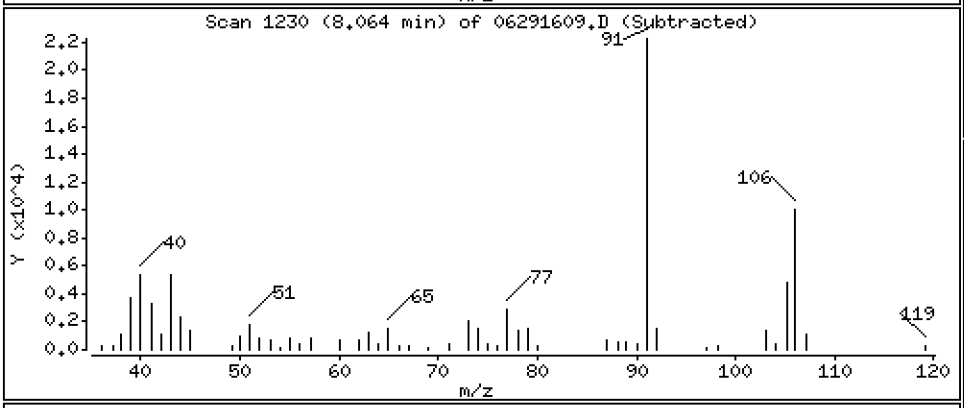
Column phase: RTXVMS

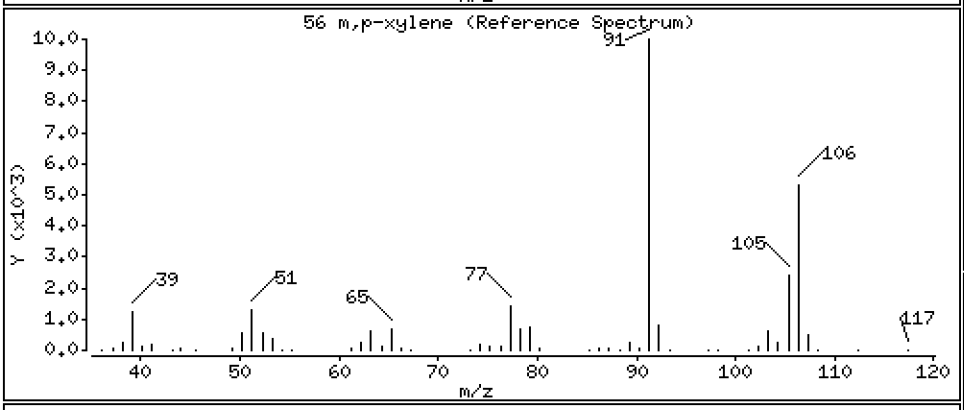
Column diameter: 0.18

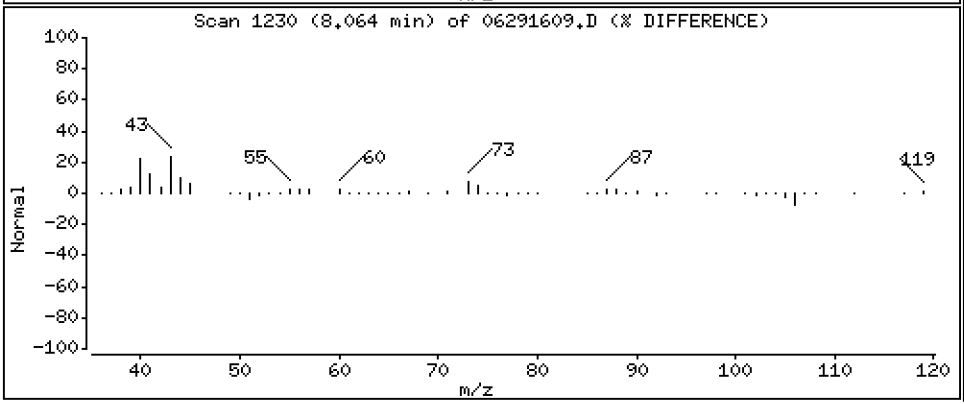
56 m,p-xylene

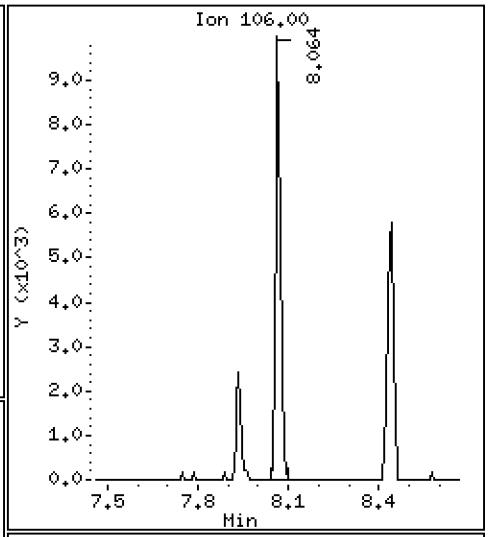
Concentration: 0.4726 ug/Kg

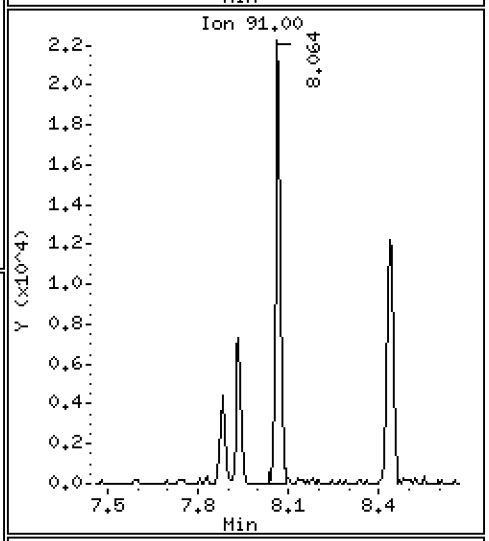


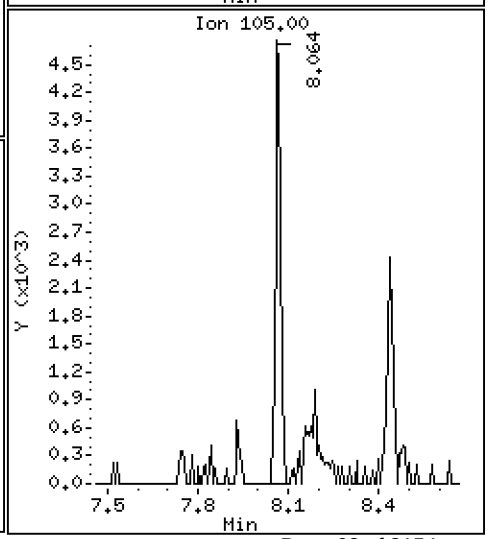












Data File: \\target\share\chem1\nt5.i\20160629.b\06291609.D

Date : 29-JUN-2016 18:17

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-04

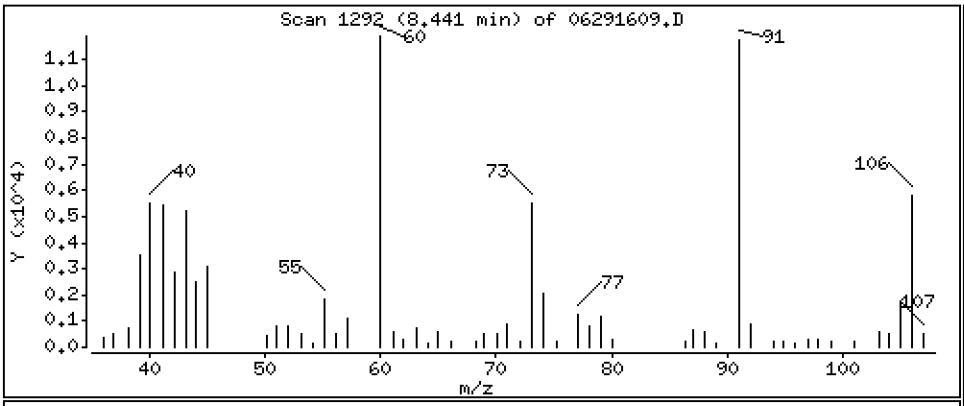
Operator: PB

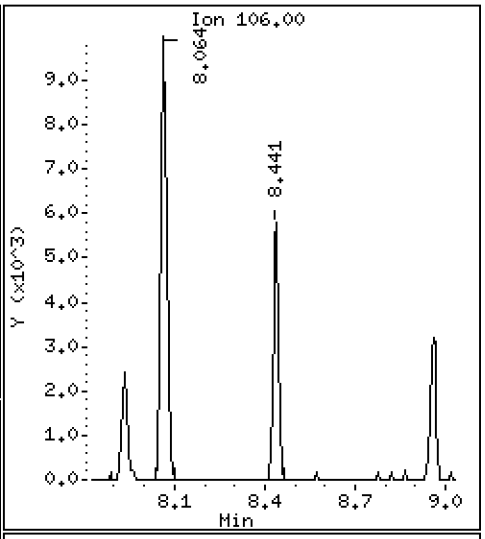
Column phase: RTXVMS

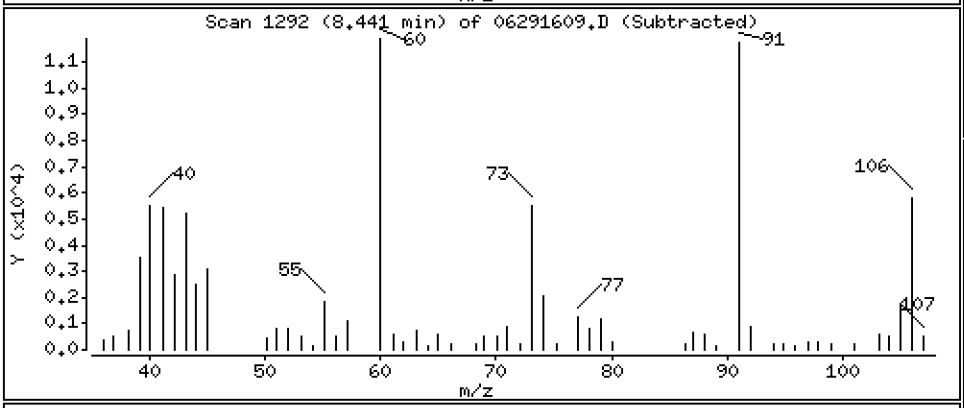
Column diameter: 0.18

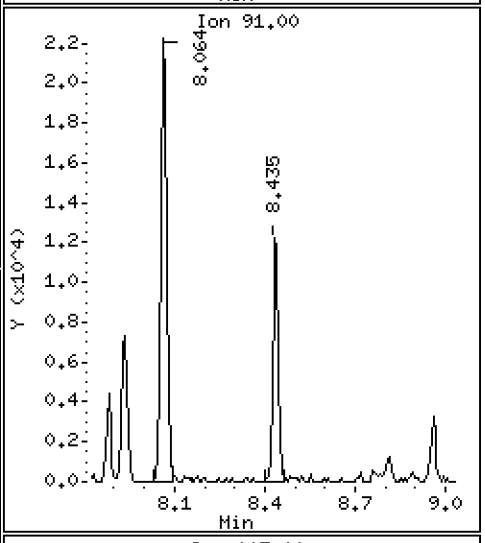
57 o-Xylene

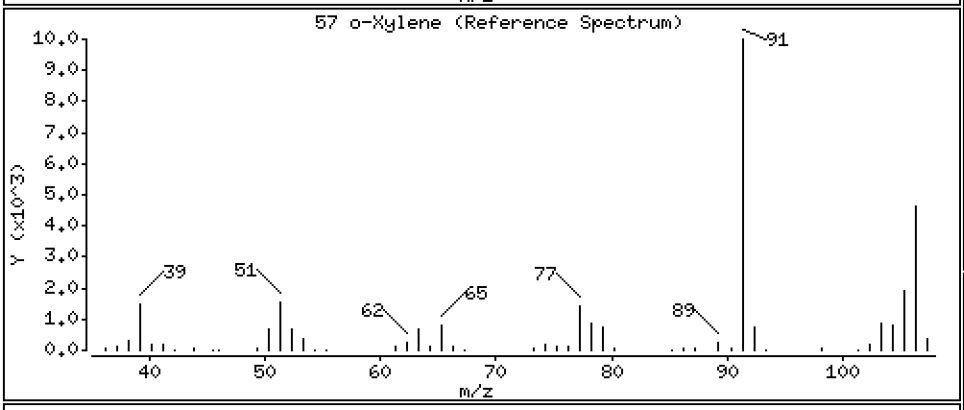
Concentration: 0.2888 ug/Kg

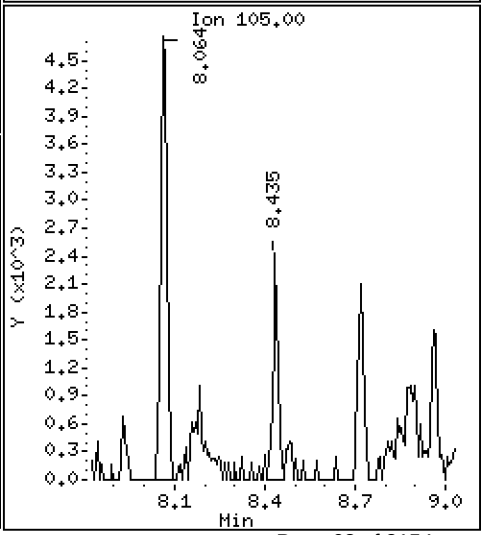


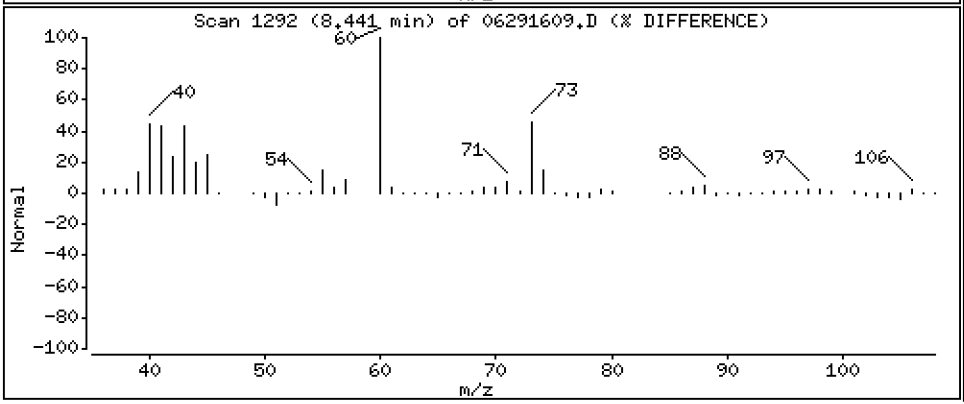












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291609.D
Lab Smp Id: 16F0096-04
Inj Date : 29-JUN-2016 18:17
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-04
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.061	4.048	(0.819)	27696	1.71373	1.714
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.505	4.486	(0.908)	803849	52.7099	52.710
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.961	4.949	(1.000)	639854	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.000)	787303	51.6418	51.642
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2230987	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.561	(1.215)	2823587	49.3946	49.395
	43 Toluene	92	6.610	6.603	(1.223)	15493	0.39969	0.3997
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2389933	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.064	8.063	(1.023)	13382	0.47256	0.4726
	57 o-Xylene	106	8.441	8.428	(1.071)	8077	0.28876	0.2888
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1289585	50.1746	50.175
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1253499	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1266830	50.1889	50.189
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291609.D
Lab Smp Id: 16F0096-04
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	639854	6.65
35 1,4-Difluorobenze	2041239	1020620	4082478	2230987	9.30
52 d5-Chlorobenzene	2118314	1059157	4236628	2389933	12.82
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1253499	18.81

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 13:10

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-04
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	52.710	105.42	70-130
$ 32 d4-1,2-Dichloroeth	50.000	51.642	103.28	80-149
$ 42 d8-Toluene	50.000	49.395	98.79	77-120
$ 62 4-Bromofluorobenze	50.000	50.175	100.35	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.189	100.38	80-120

REVIEW SUMMARY FOR FILE - 06291609.D

Lab ID: 16F0096-04
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 18:17

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-M-05-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-05	File ID:	06291610.D
Sampled:	06/29/16 11:15	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 18:39
Solids:	91.92	Preparation:	No Prep - Volatiles	Initial/Final:	4.66 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.17	U	0.27	1.17
74-83-9	Bromomethane	1	1.17	U	0.22	1.17
156-59-2	cis-1,2-Dichloroethene	1	1.20		0.28	1.17
71-43-2	Benzene	1	1.17	U	0.35	1.17
79-01-6	Trichloroethene	1	0.62	J	0.25	1.17
108-88-3	Toluene	1	0.46	J	0.18	1.17
127-18-4	Tetrachloroethene	1	1.17	U	0.30	1.17
100-41-4	Ethylbenzene	1	0.29	J	0.24	1.17
179601-23-1	m,p-Xylene	1	0.71	J	0.46	1.17
95-47-6	o-Xylene	1	0.50	J	0.26	1.17

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	52.2	104	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.6	101	80 - 120	
Toluene-d8	50.000	49.2	98.4	77 - 120	
4-Bromofluorobenzene	50.000	49.0	98.1	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291610.D

Date : 29-JUN-2016 18:39

Client ID:

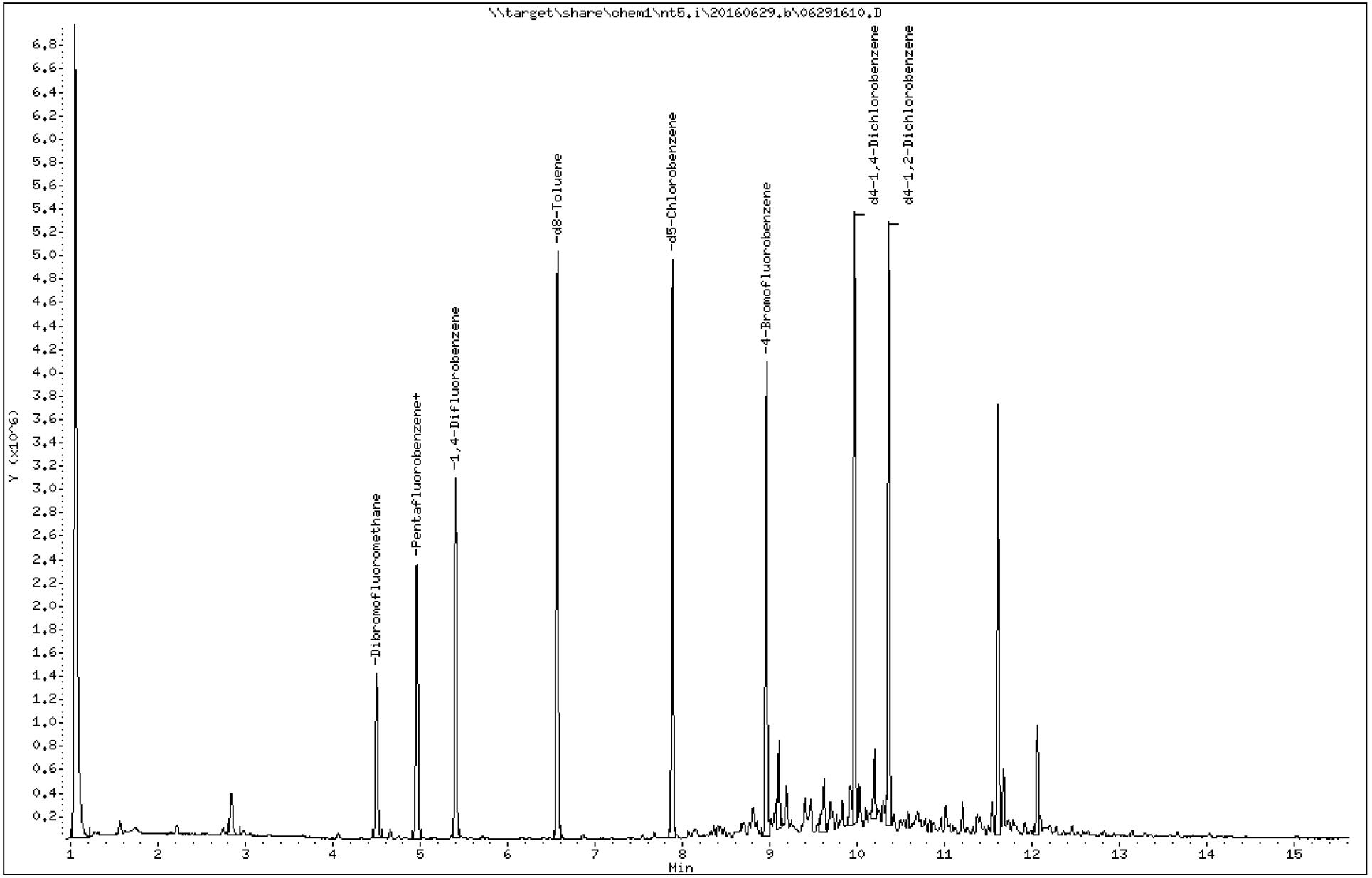
Instrument: nt5.i

Sample Info: 16F0096-05

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160629.b\06291610.D

Date : 29-JUN-2016 18:39

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-05

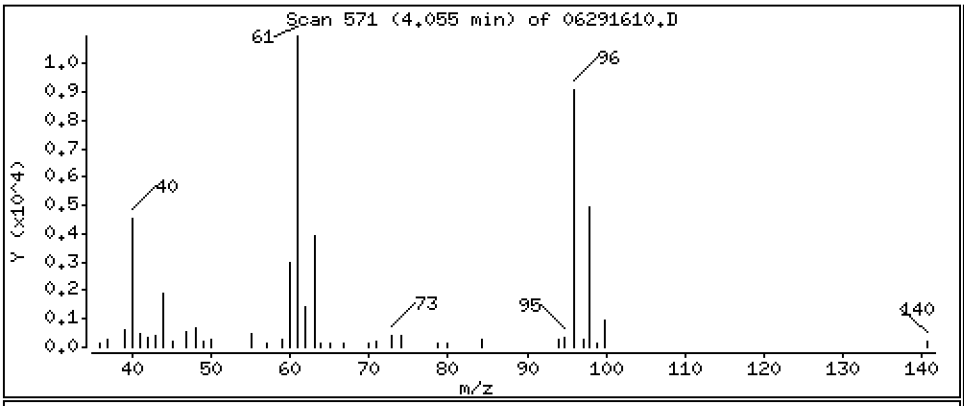
Operator: PB

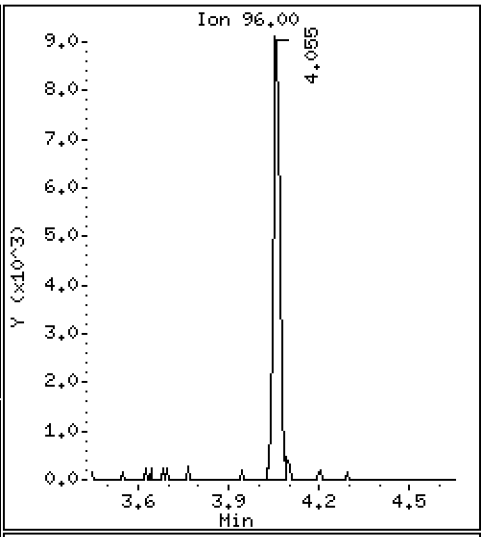
Column phase: RTXVMS

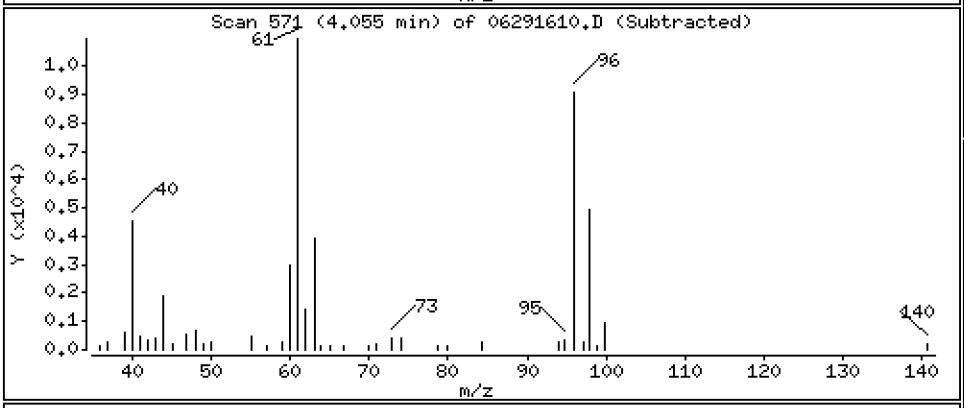
Column diameter: 0.18

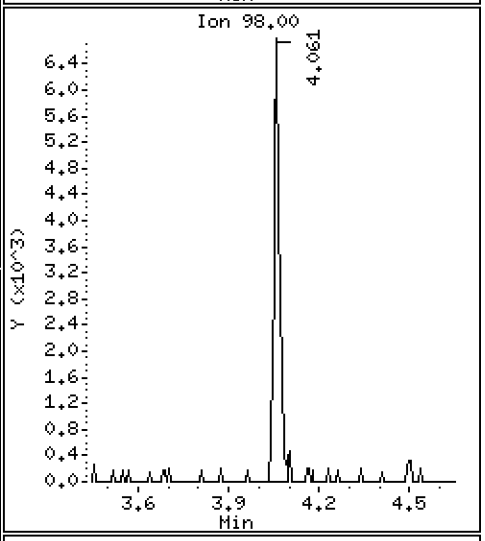
20 Cis-1,2-Dichloroethene

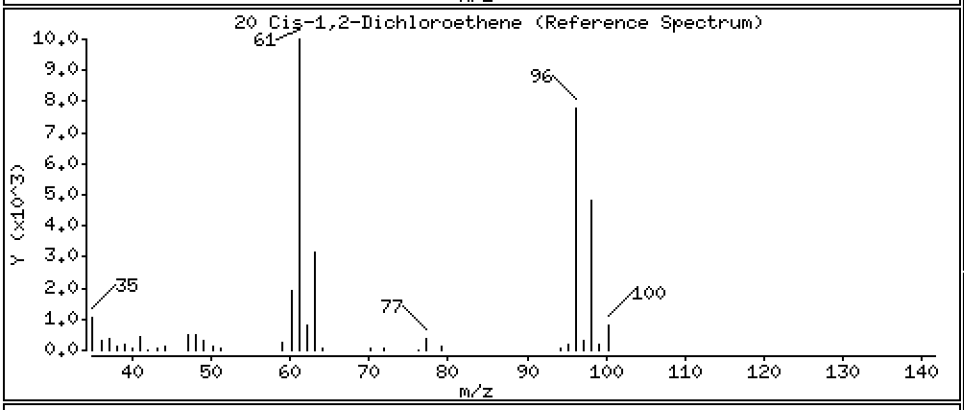
Concentration: 1.025 ug/Kg

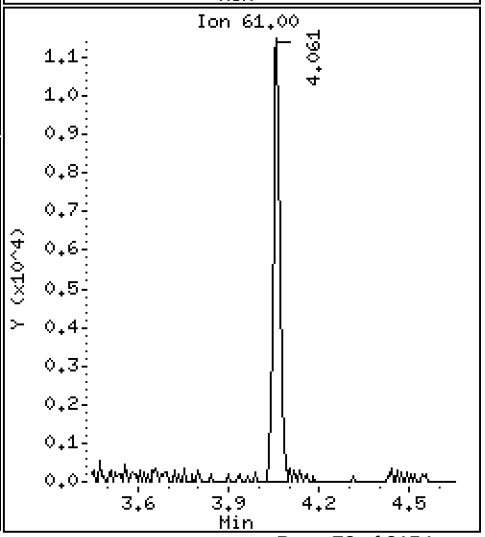


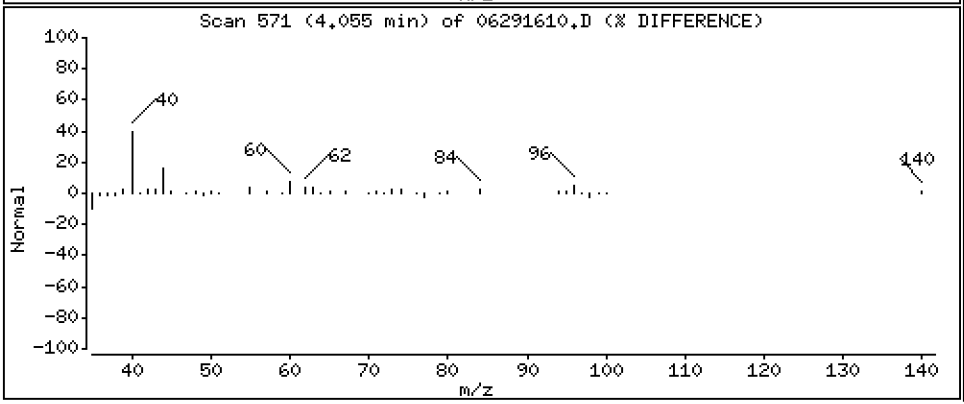












Data File: \\target\share\chem1\nt5.i\20160629.b\06291610.D

Date : 29-JUN-2016 18:39

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-05

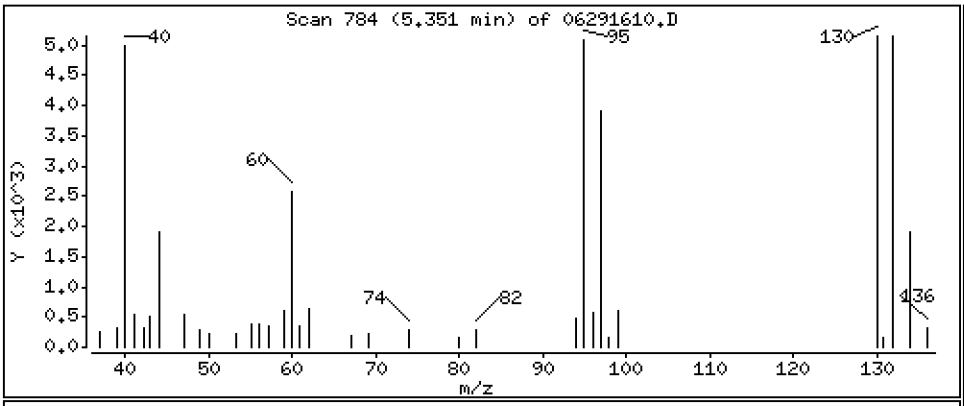
Operator: PB

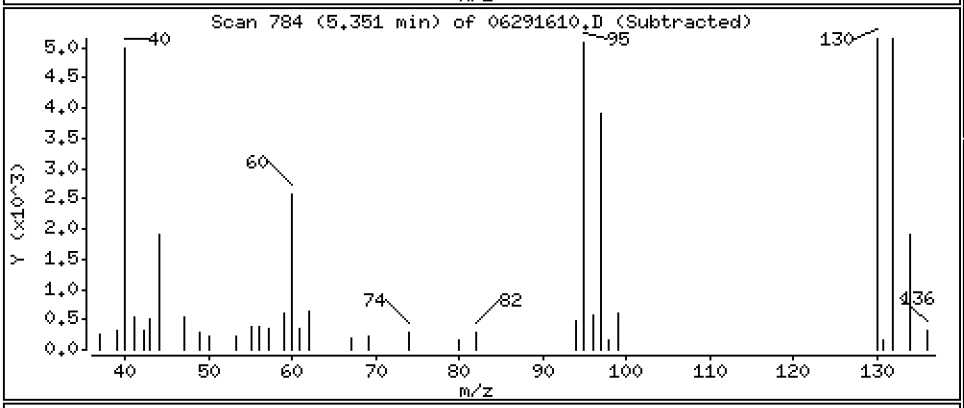
Column phase: RTXVMS

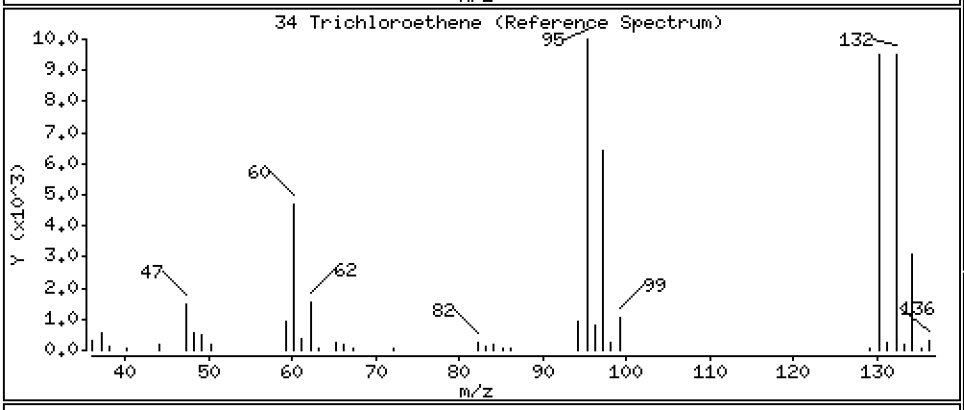
Column diameter: 0.18

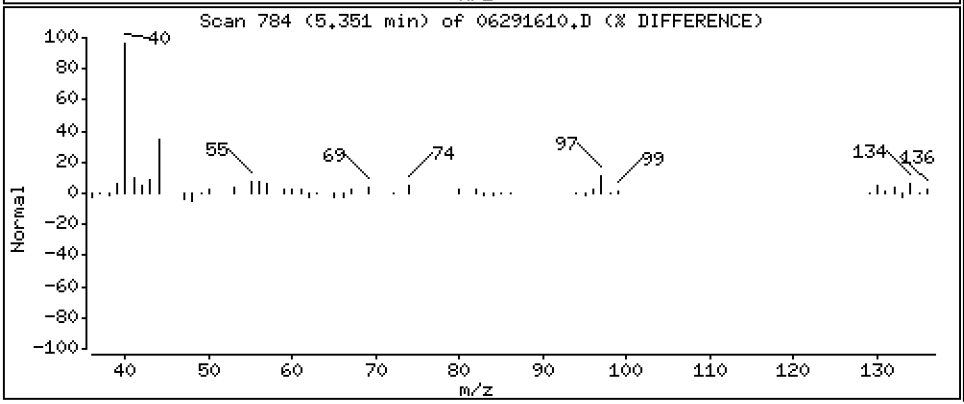
34 Trichloroethene

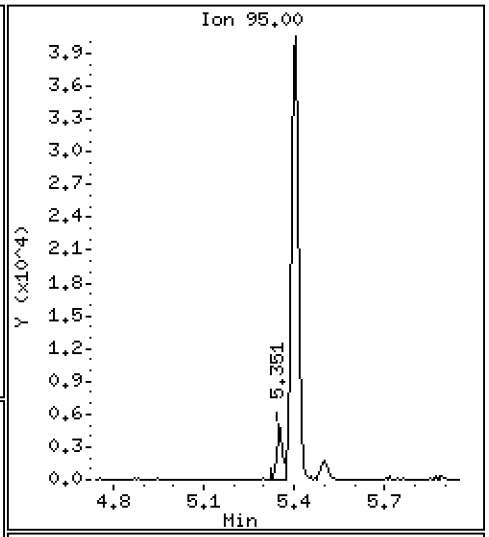
Concentration: 0.5302 ug/Kg

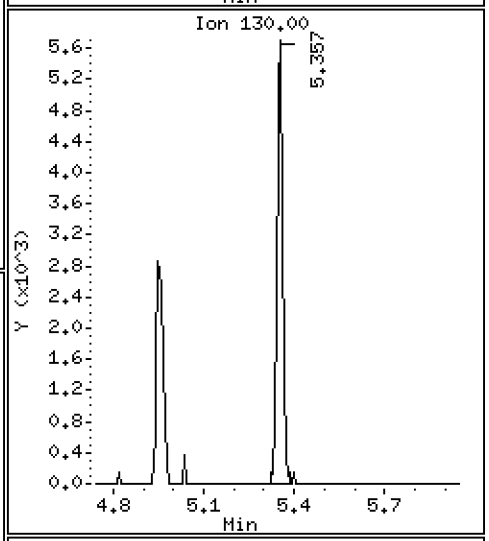


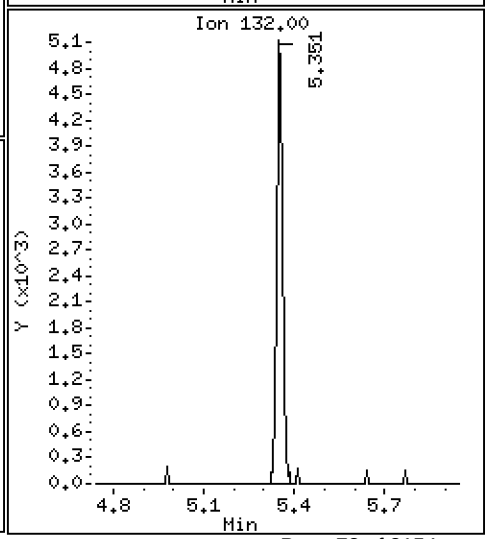












Data File: \\target\share\chem1\nt5.i\20160629.b\06291610.D

Date : 29-JUN-2016 18:39

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-05

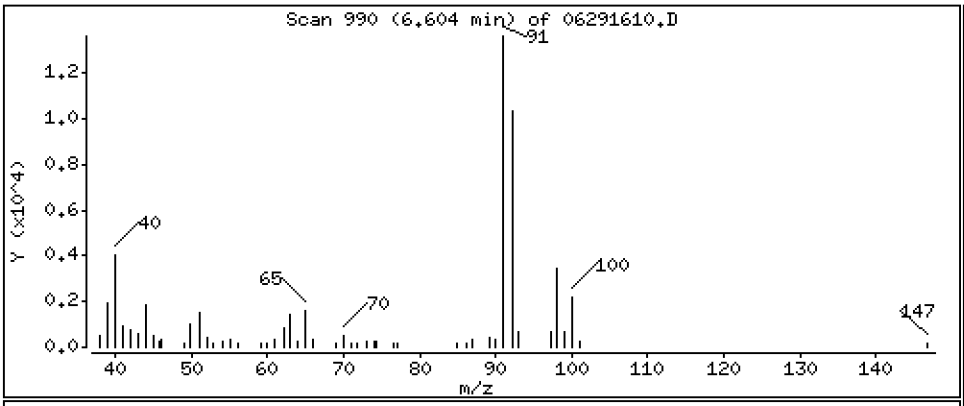
Operator: PB

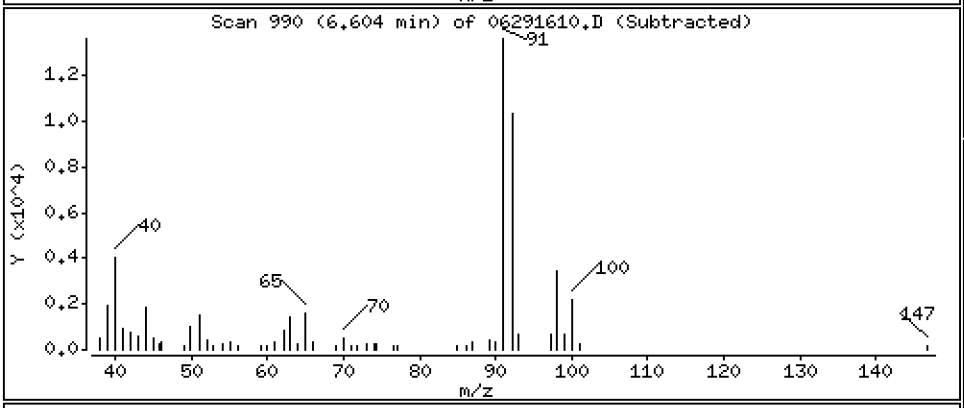
Column phase: RTXVMS

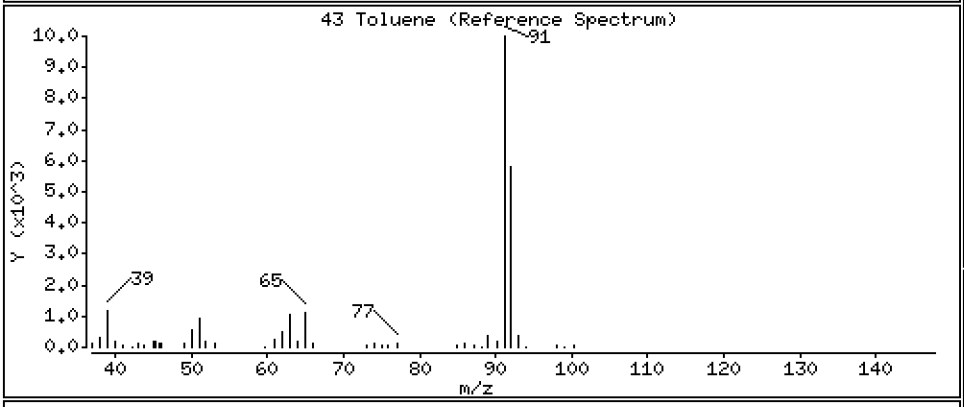
Column diameter: 0.18

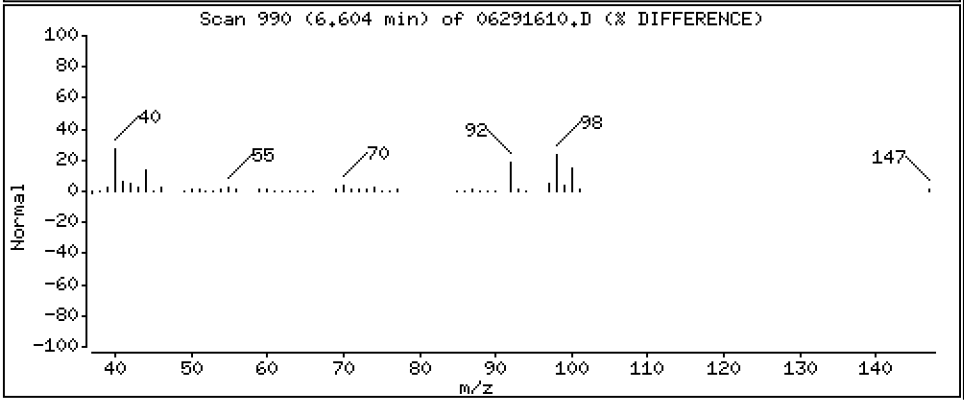
43 Toluene

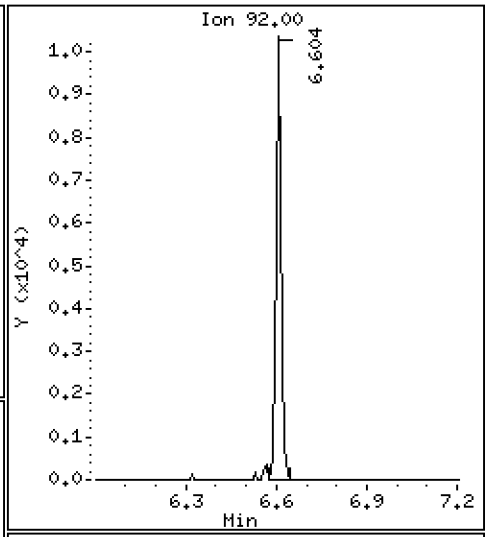
Concentration: 0.3960 ug/Kg

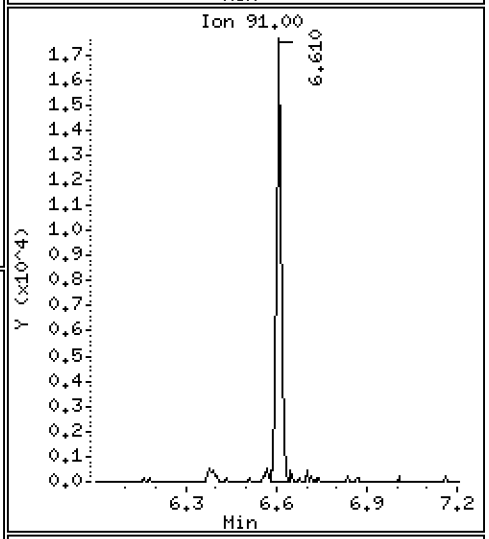


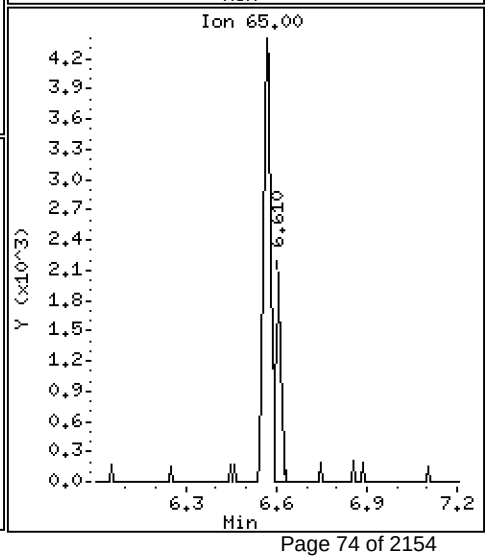












Data File: \\target\share\chem1\nt5.i\20160629.b\06291610.D

Date : 29-JUN-2016 18:39

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-05

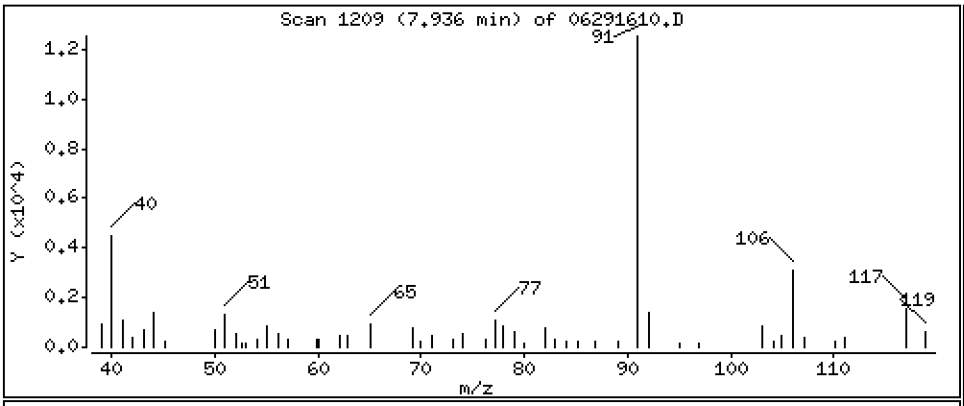
Operator: PB

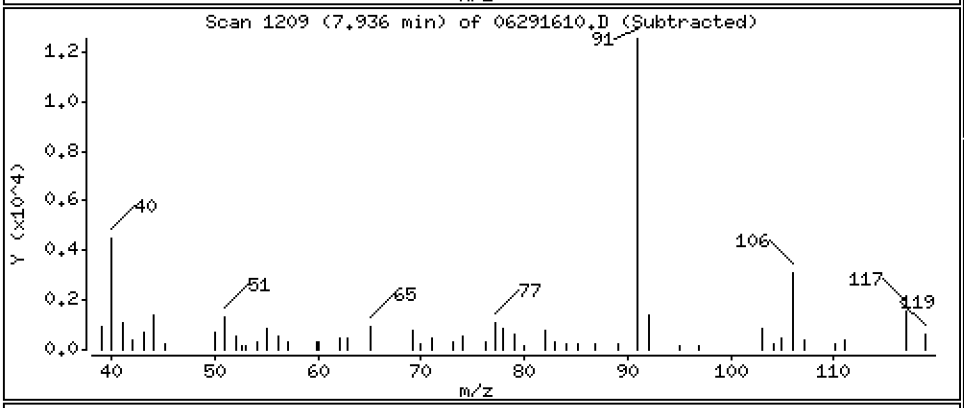
Column phase: RTXVMS

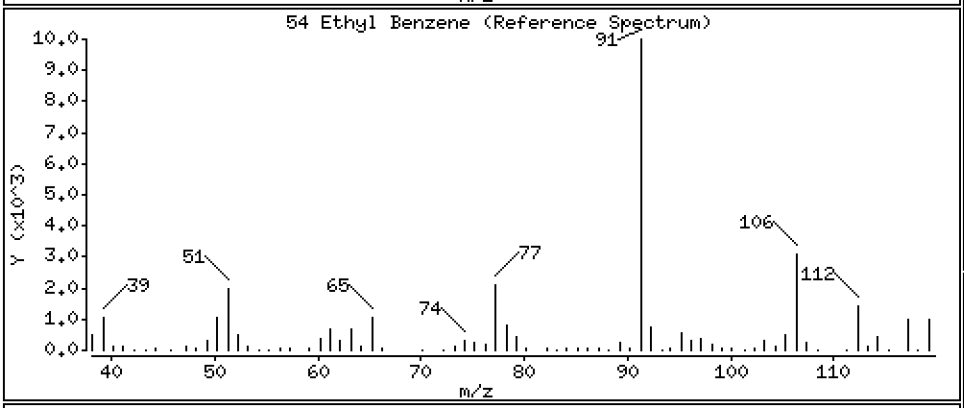
Column diameter: 0.18

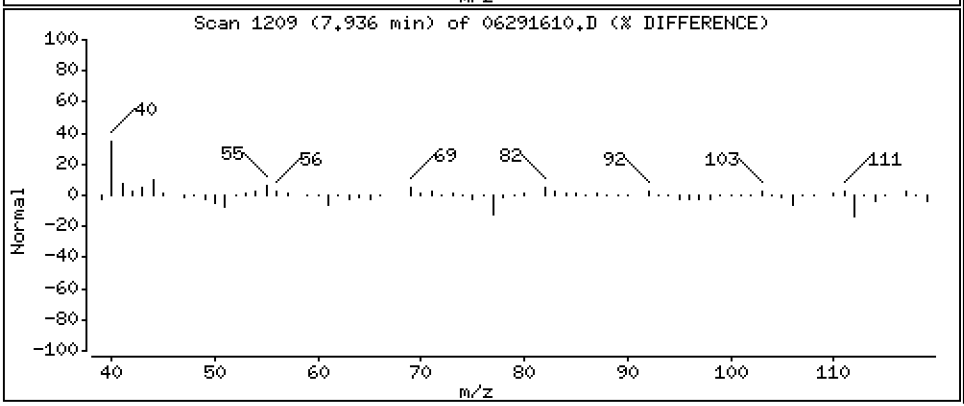
54 Ethyl Benzene

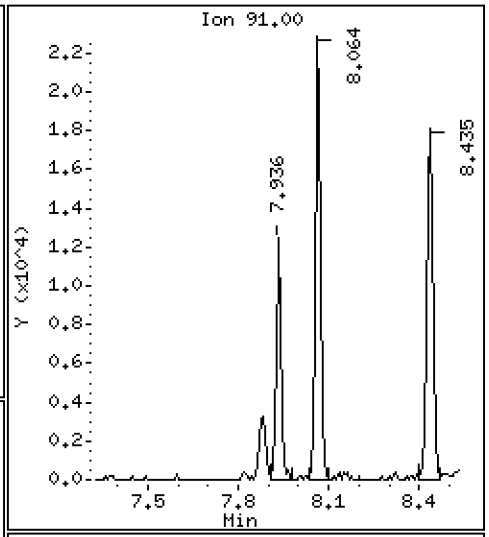
Concentration: 0.2474 ug/Kg

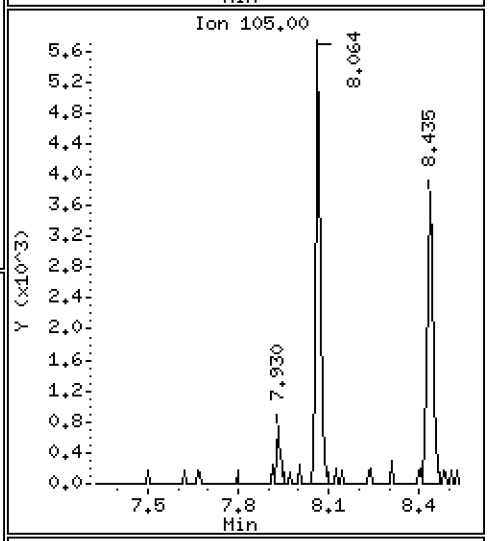


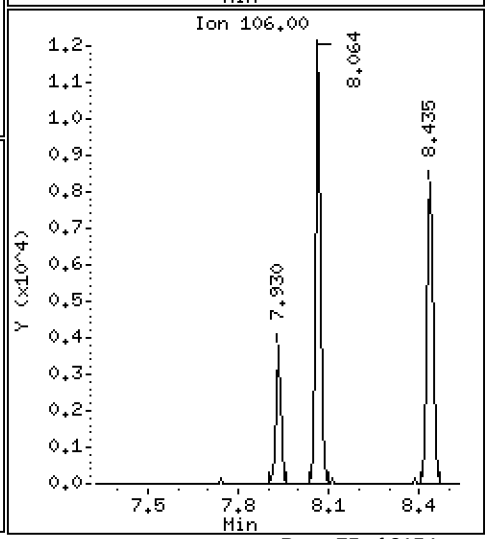












Data File: \\target\share\chem1\nt5.i\20160629.b\06291610.D

Date : 29-JUN-2016 18:39

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-05

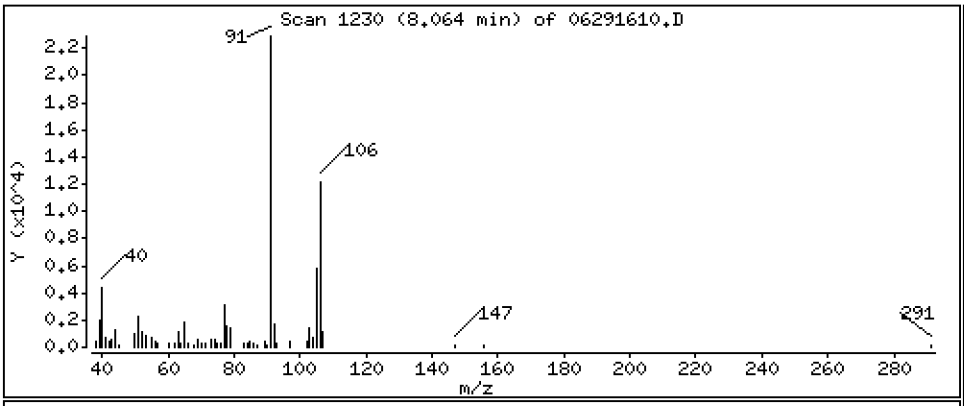
Operator: PB

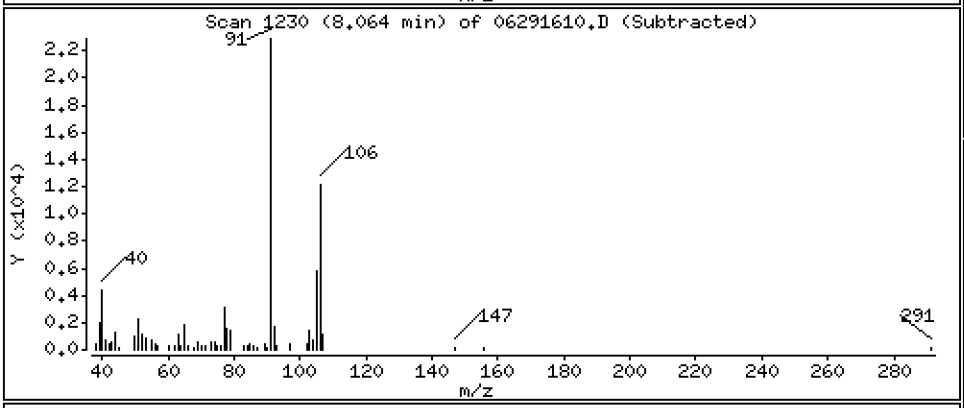
Column phase: RTXVMS

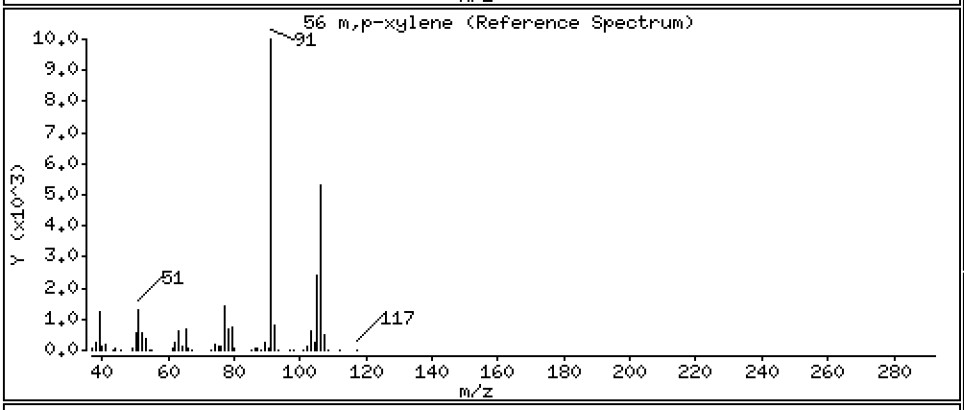
Column diameter: 0.18

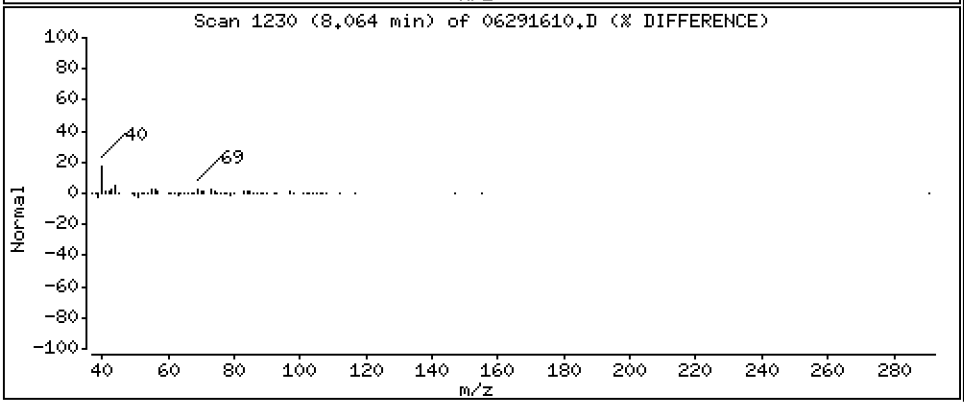
56 m,p-xylene

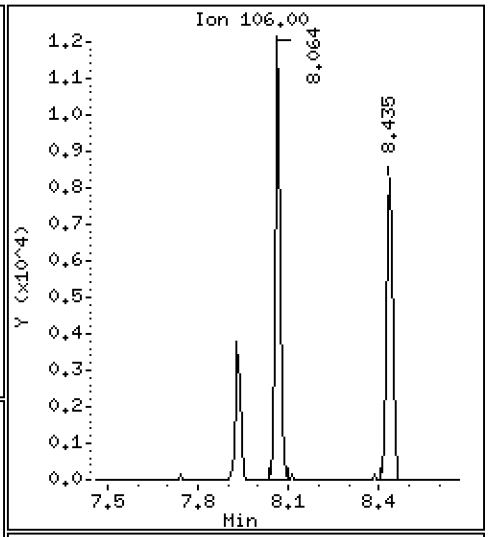
Concentration: 0.6088 ug/Kg

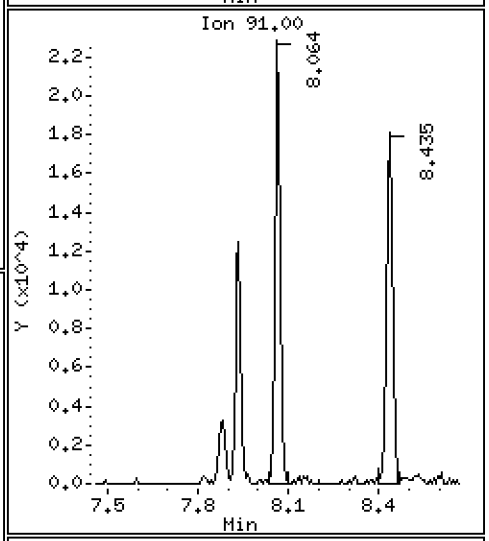


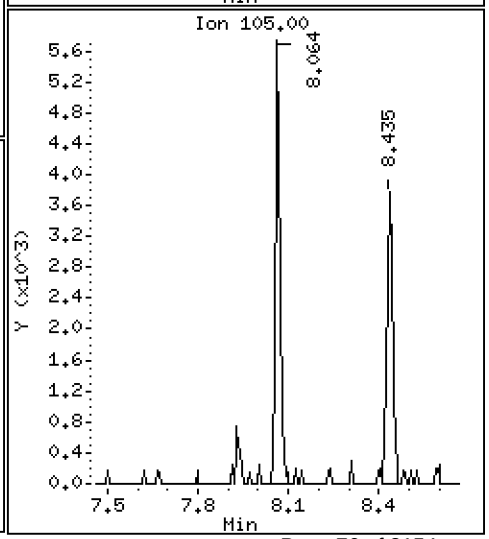












Data File: \\target\share\chem1\nt5.i\20160629.b\06291610.D

Date : 29-JUN-2016 18:39

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-05

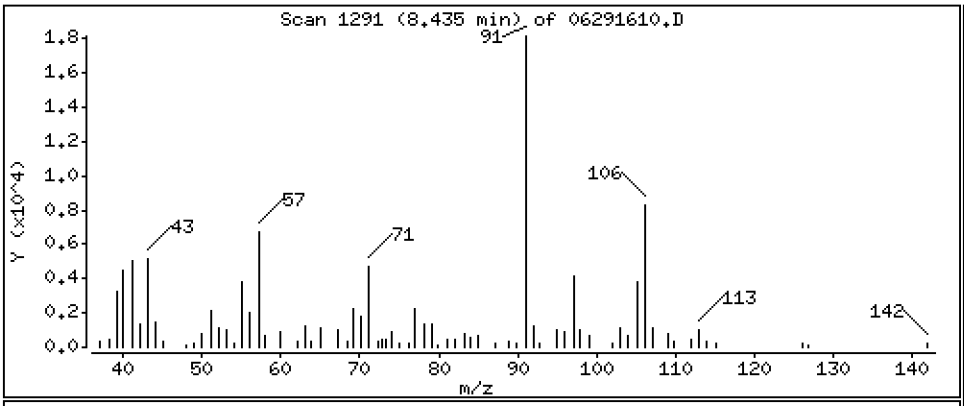
Operator: PB

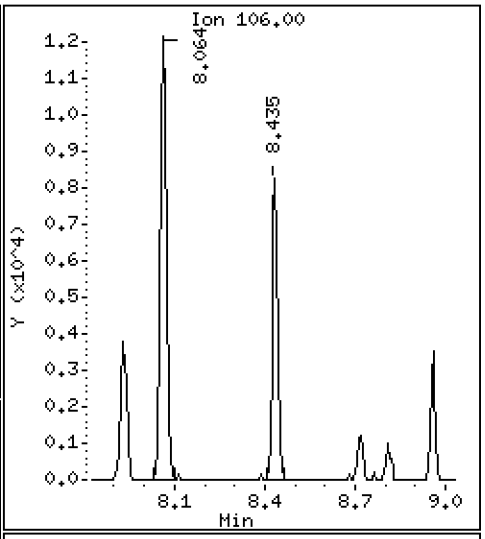
Column phase: RTXVMS

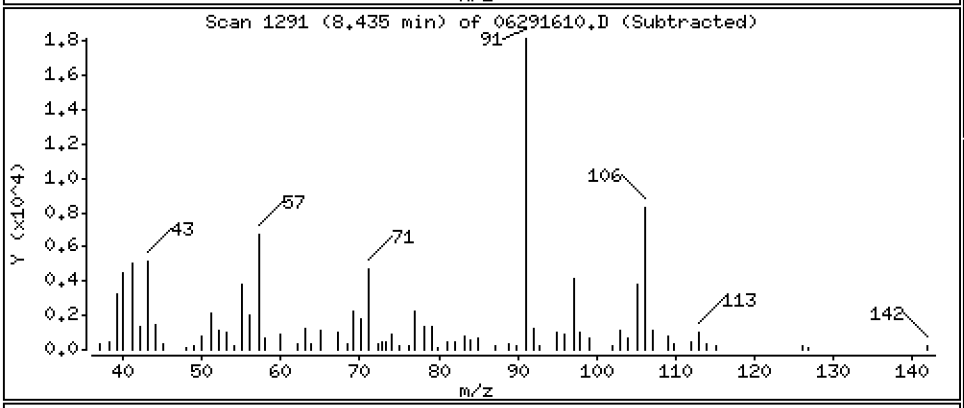
Column diameter: 0.18

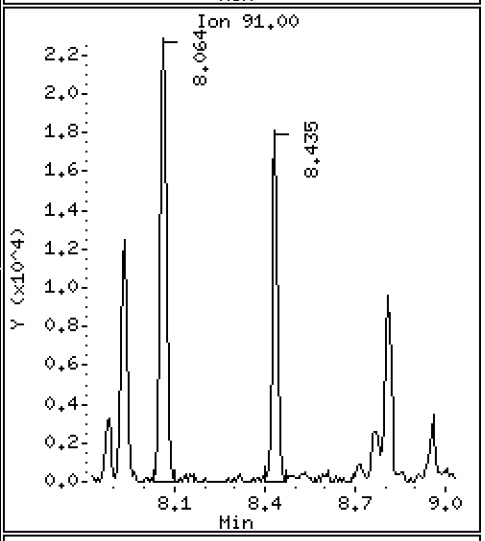
57 o-Xylene

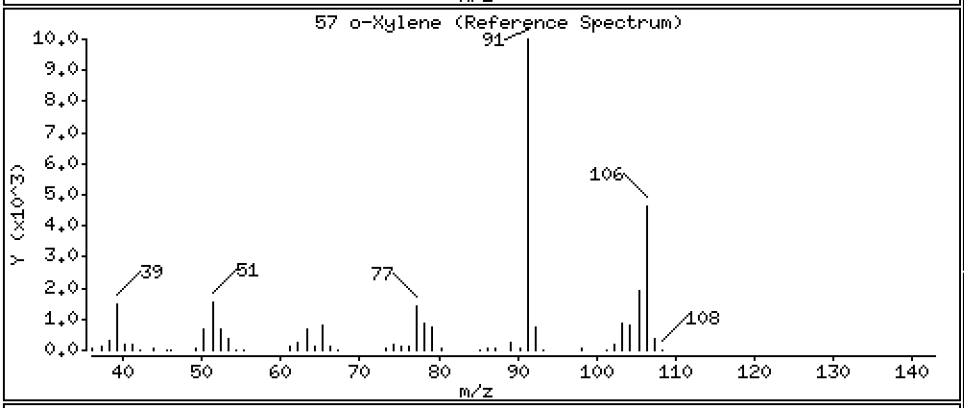
Concentration: 0.4297 ug/Kg

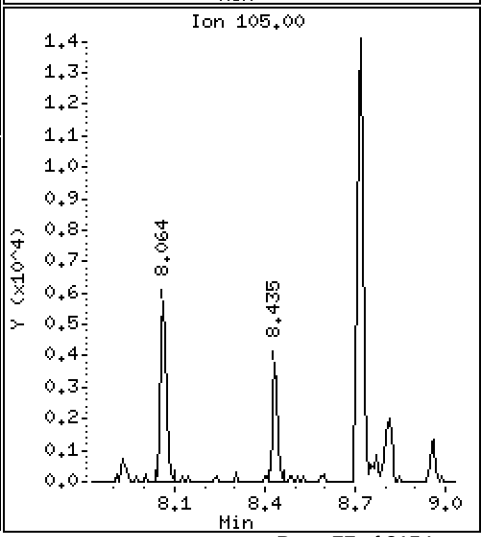


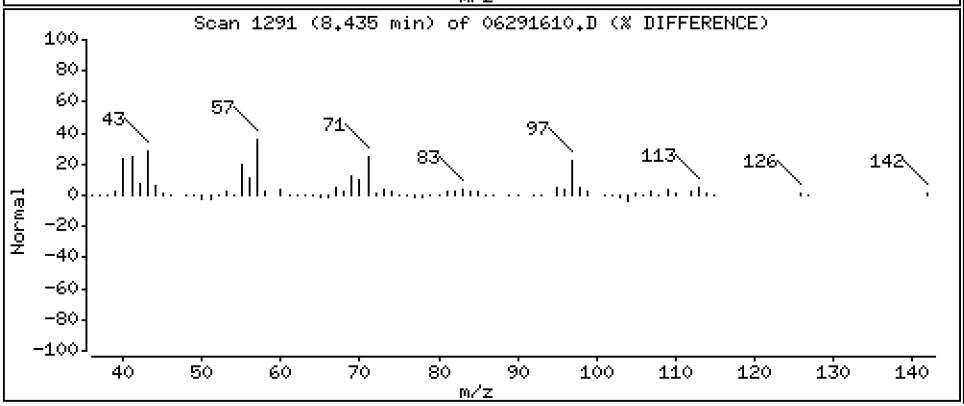












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291610.D
Lab Smp Id: 16F0096-05
Inj Date : 29-JUN-2016 18:39
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-05
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.054	4.048	(0.818)	16134	1.02545	1.025
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.499	4.486	(0.908)	771540	51.9663	51.966
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.955	4.949	(1.000)	622924	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.001)	774070	52.1537	52.154
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.350	5.344	(0.990)	8025	0.53021	0.5302
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2162743	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.561	(1.215)	2726528	49.2017	49.202
	43 Toluene	92	6.604	6.603	(1.222)	14880	0.39599	0.3960
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2299978	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.936	7.930	(1.007)	17368	0.24742	0.2474
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.064	8.063	(1.023)	16592	0.60883	0.6088
	57 o-Xylene	106	8.435	8.428	(1.070)	11567	0.42971	0.4297
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1212909	49.0370	49.037
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1136184	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	Compound Not Detected.					
$	79 d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1158696	50.6447	50.645
	80 1,2-Dichlorobenzene	146	Compound Not Detected.					
	81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
	82 Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
	83 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	84 Naphthalene	128	Compound Not Detected.					
	85 1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291610.D
Lab Smp Id: 16F0096-05
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	622924	3.83
35 1,4-Difluorobenze	2041239	1020620	4082478	2162743	5.95
52 d5-Chlorobenzene	2118314	1059157	4236628	2299978	8.58
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1136184	7.69

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.13
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-05
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	51.966	103.93	70-130
$ 32 d4-1,2-Dichloroeth	50.000	52.154	104.31	80-149
$ 42 d8-Toluene	50.000	49.202	98.40	77-120
$ 62 4-Bromofluorobenze	50.000	49.037	98.07	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.645	101.29	80-120

REVIEW SUMMARY FOR FILE - 06291610.D

Lab ID: 16F0096-05
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 18:39

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-O-01-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-06	File ID:	06291611.D
Sampled:	06/29/16 12:15	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 19:02
Solids:	90.55	Preparation:	No Prep - Volatiles	Initial/Final:	4.26 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.30	U	0.30	1.30
74-83-9	Bromomethane	1	1.30	U	0.24	1.30
156-59-2	cis-1,2-Dichloroethene	1	1.30	U	0.31	1.30
71-43-2	Benzene	1	1.30	U	0.38	1.30
79-01-6	Trichloroethene	1	1.30	U	0.27	1.30
108-88-3	Toluene	1	2.02		0.20	1.30
127-18-4	Tetrachloroethene	1	1.30	U	0.33	1.30
100-41-4	Ethylbenzene	1	0.97	J	0.26	1.30
179601-23-1	m,p-Xylene	1	2.54		0.51	1.30
95-47-6	o-Xylene	1	0.68	J	0.29	1.30

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	51.1	102	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.6	101	80 - 120	
Toluene-d8	50.000	49.2	98.4	77 - 120	
4-Bromofluorobenzene	50.000	49.4	98.8	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291611.D

Date : 29-JUN-2016 19:02

Client ID:

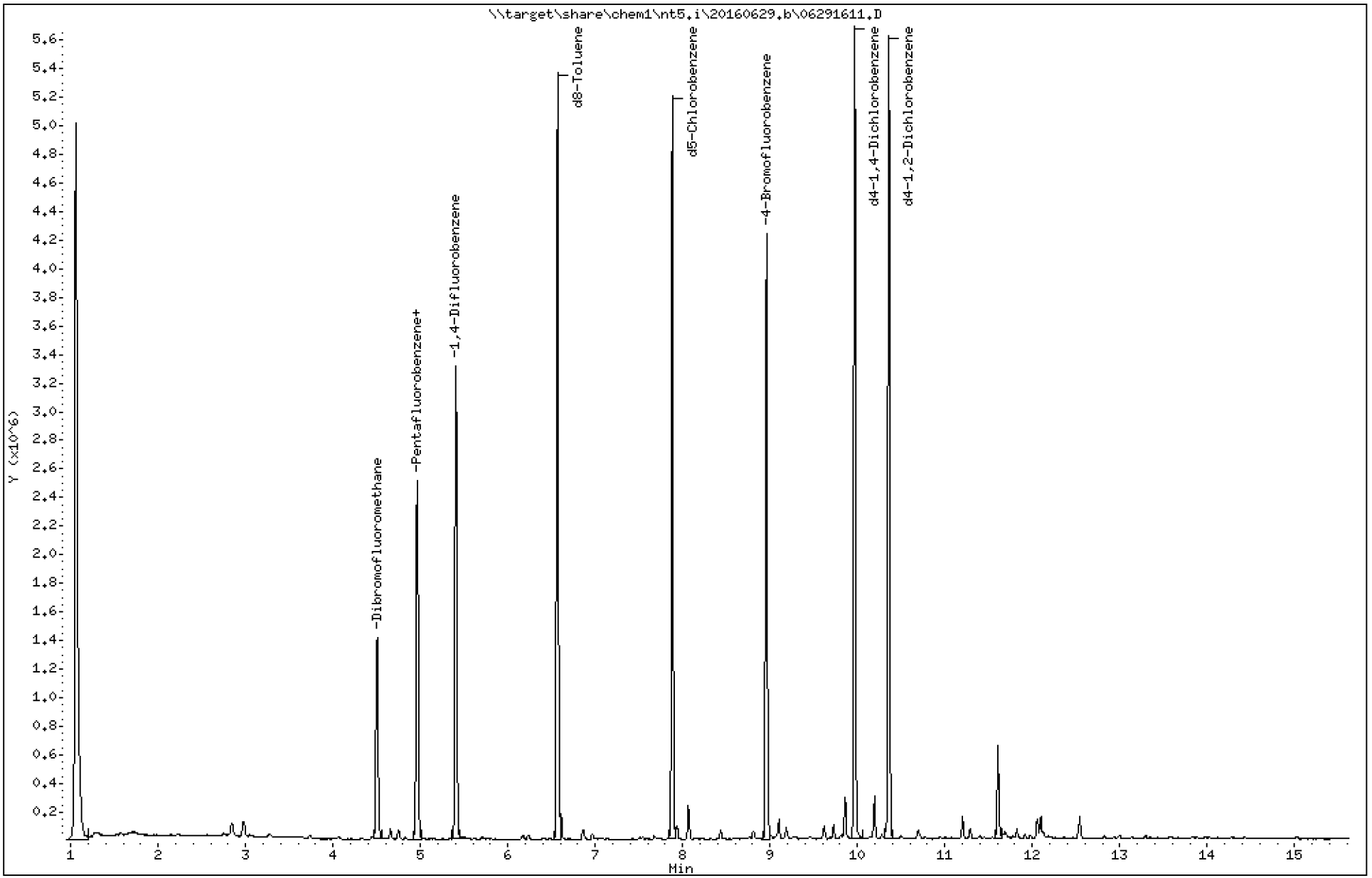
Sample Info: 16F0096-06

Instrument: nt5.i

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



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Date : 29-JUN-2016 19:02

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-06

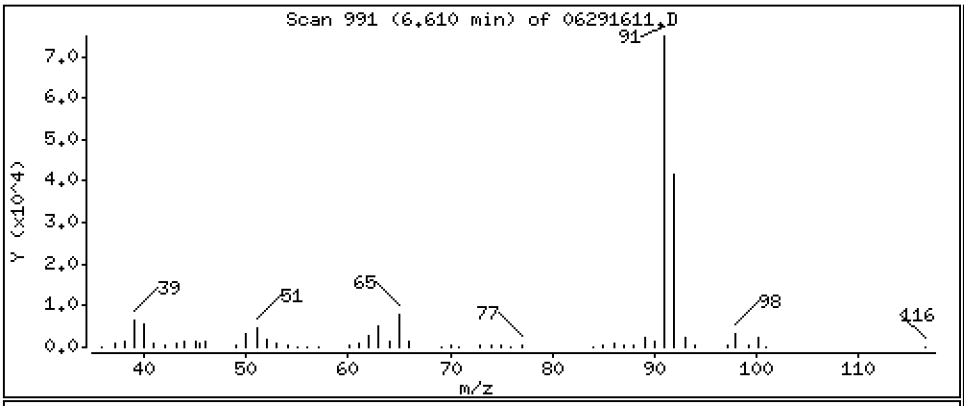
Operator: PB

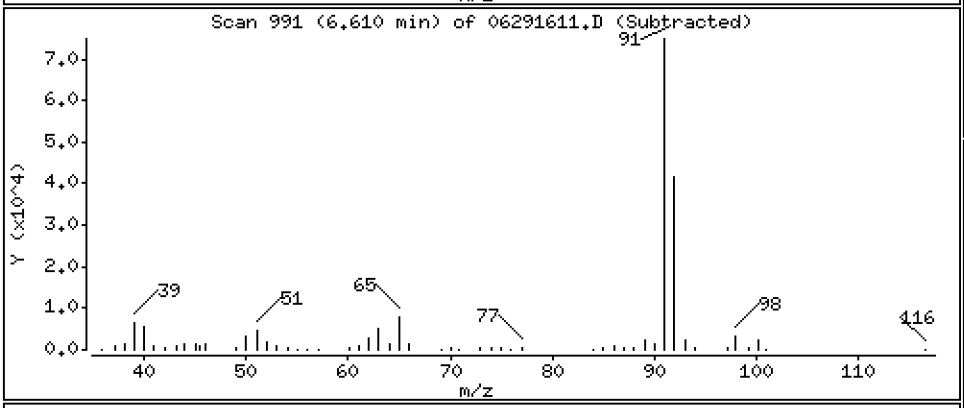
Column phase: RTXVMS

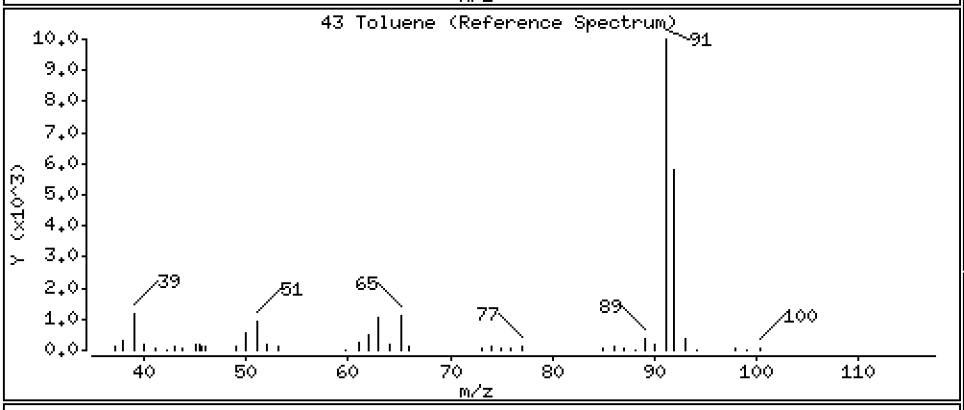
Column diameter: 0.18

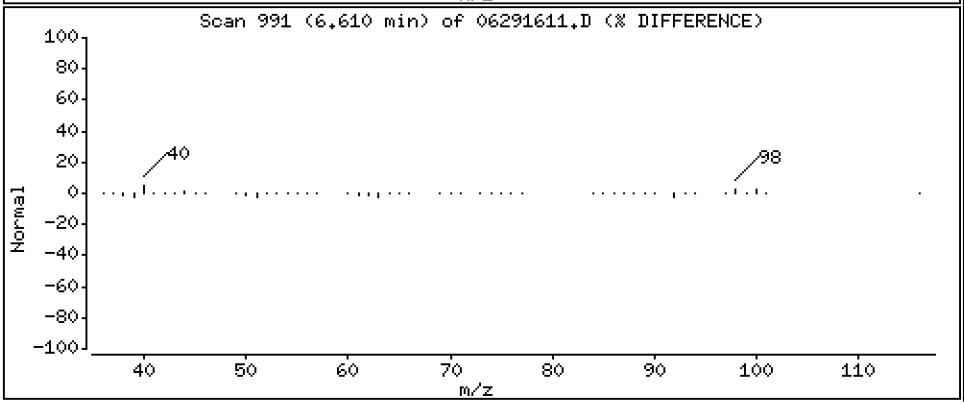
43 Toluene

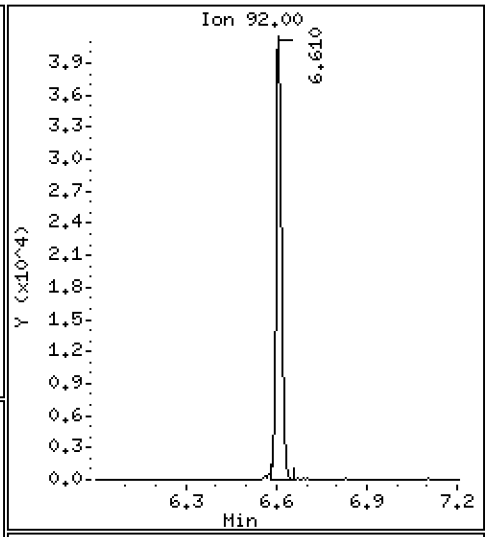
Concentration: 1.556 ug/Kg

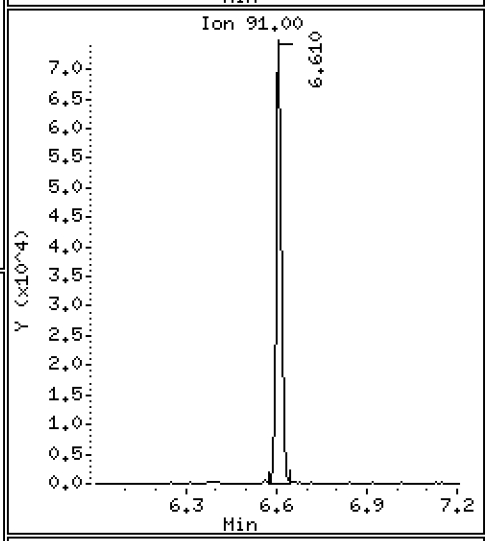


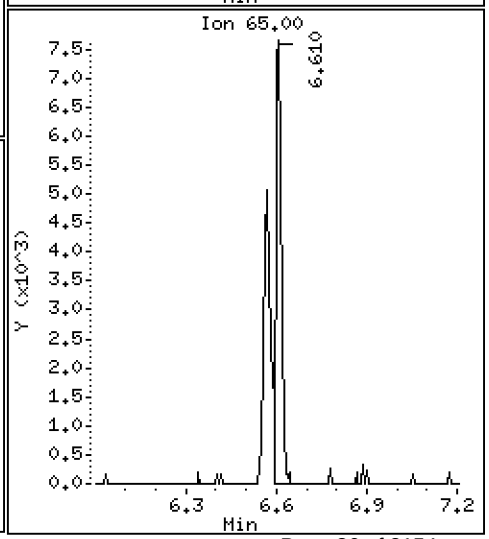












Data File: \\target\share\chem1\nt5.i\20160629.b\06291611.D

Date : 29-JUN-2016 19:02

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-06

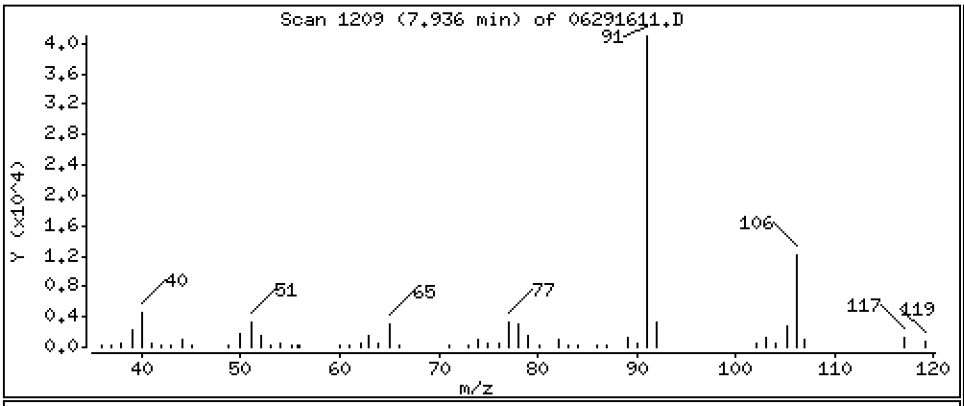
Operator: PB

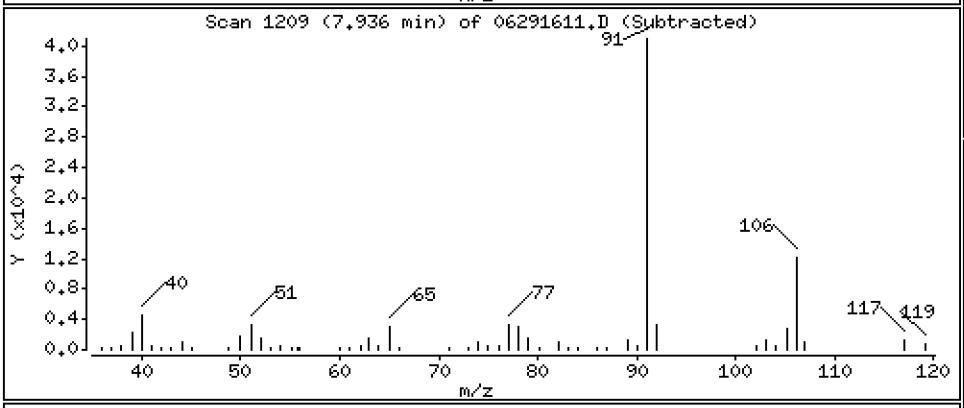
Column phase: RTXVMS

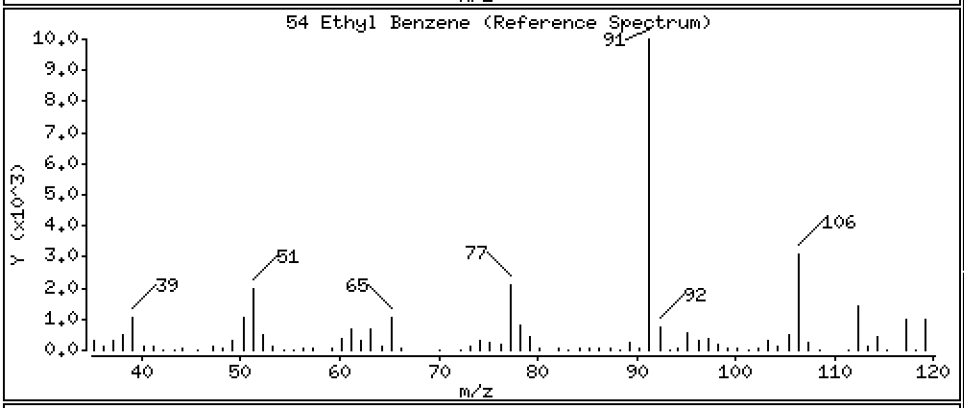
Column diameter: 0.18

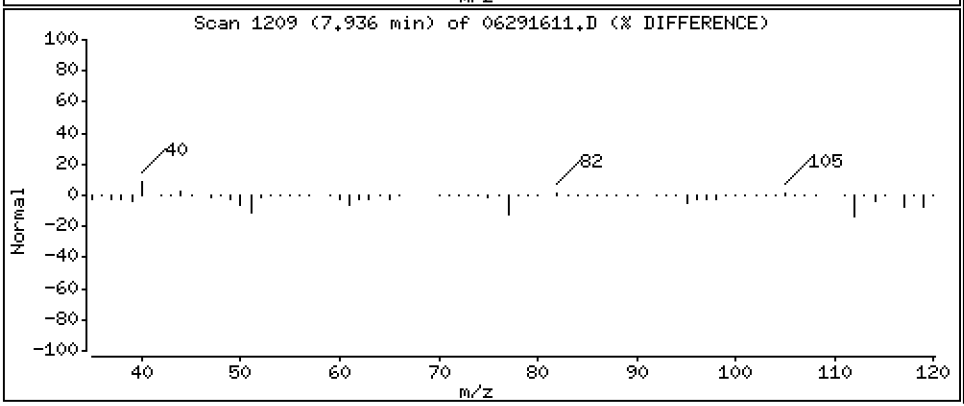
54 Ethyl Benzene

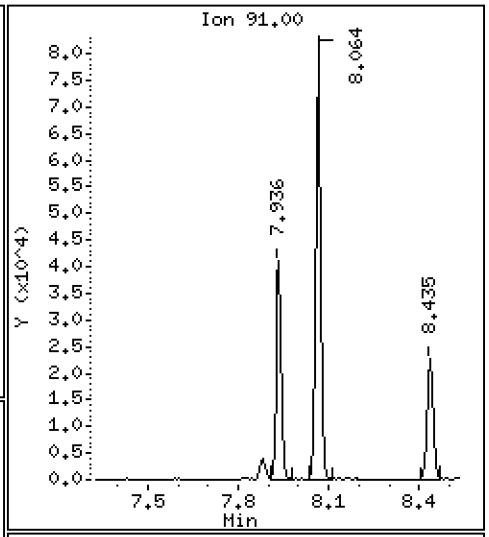
Concentration: 0.7456 ug/Kg

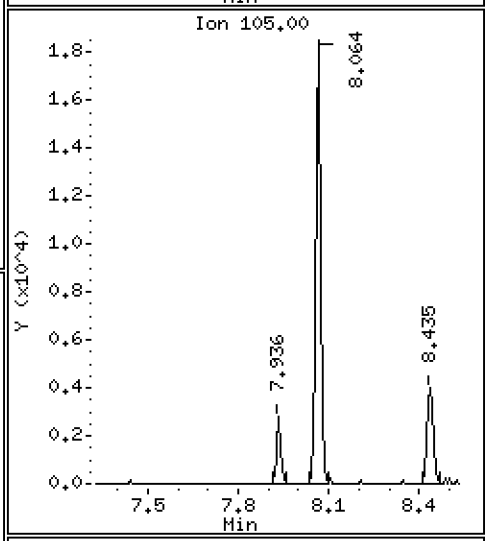


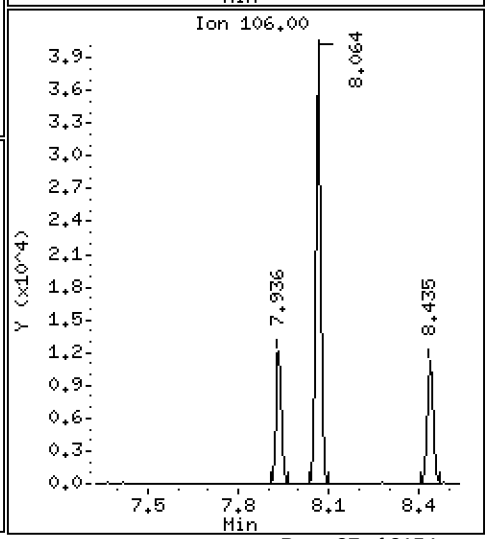












Data File: \\target\share\chem1\nt5.i\20160629.b\06291611.D

Date : 29-JUN-2016 19:02

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-06

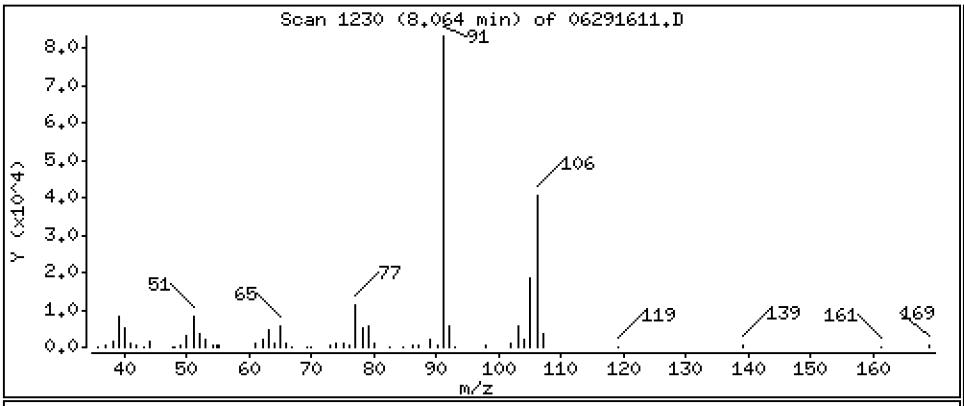
Operator: PB

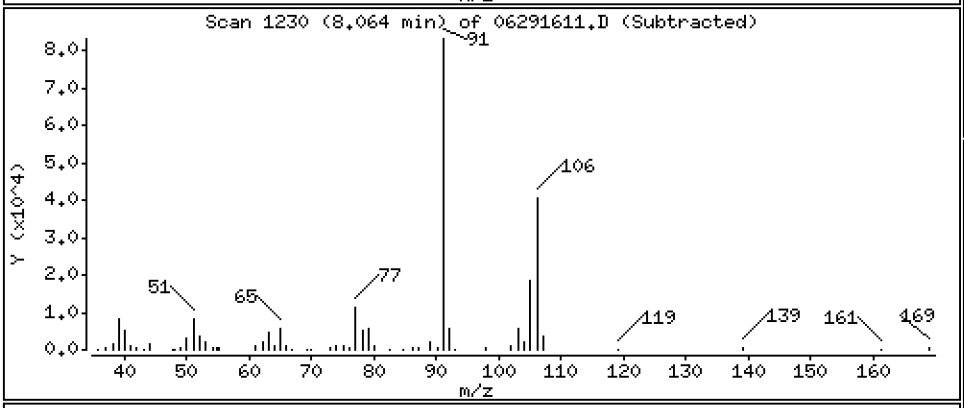
Column phase: RTXVMS

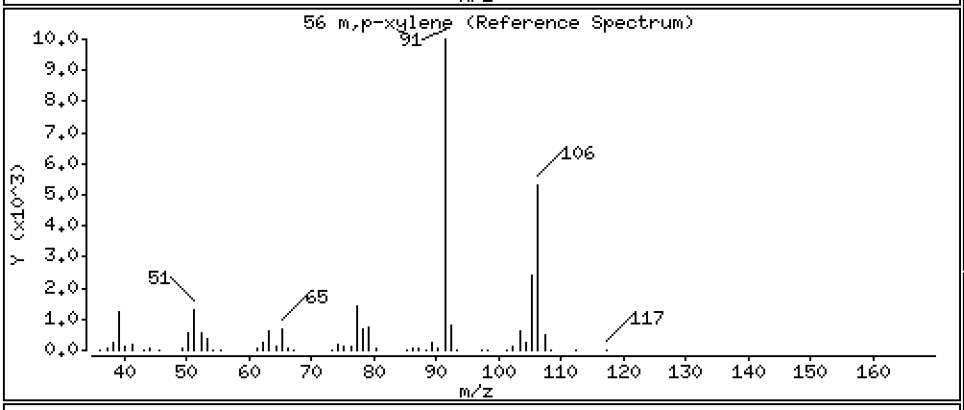
Column diameter: 0.18

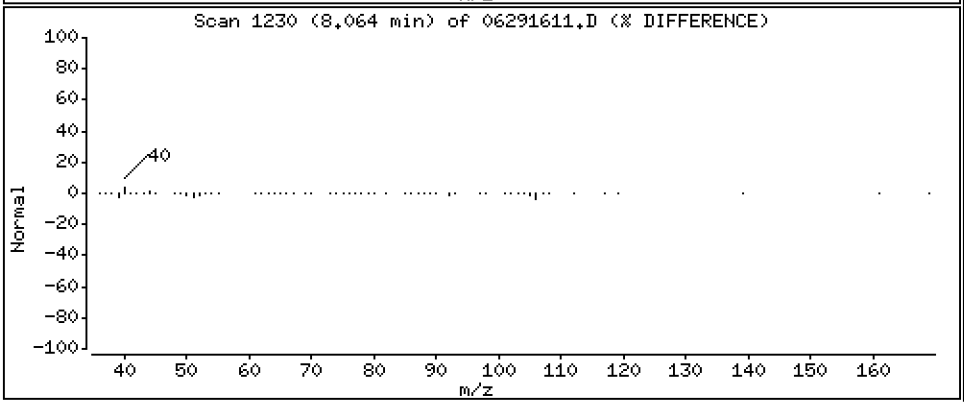
56 m,p-xylene

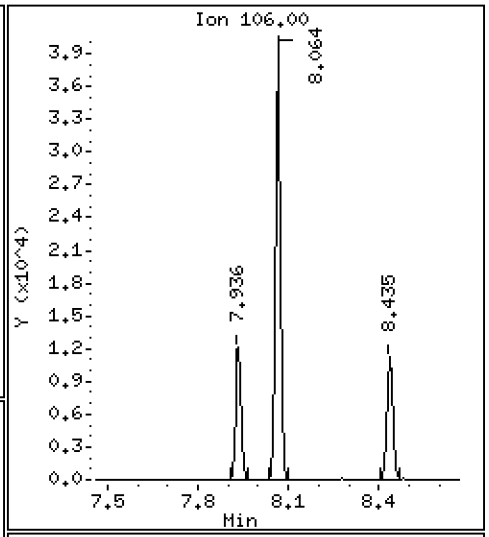
Concentration: 1.957 ug/Kg

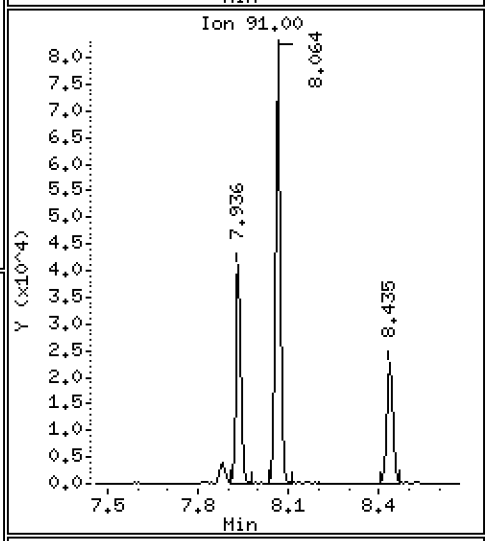


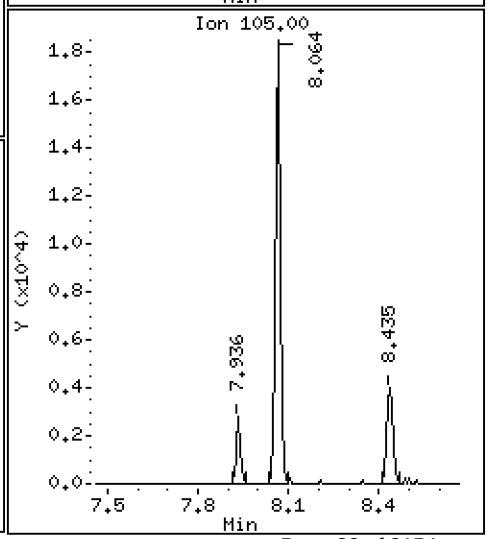












Data File: \\target\share\chem1\nt5.i\20160629.b\06291611.D

Date : 29-JUN-2016 19:02

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-06

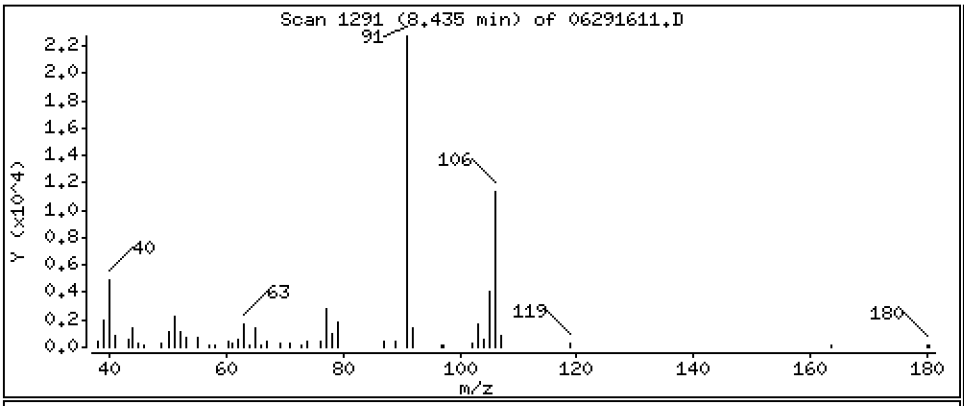
Operator: PB

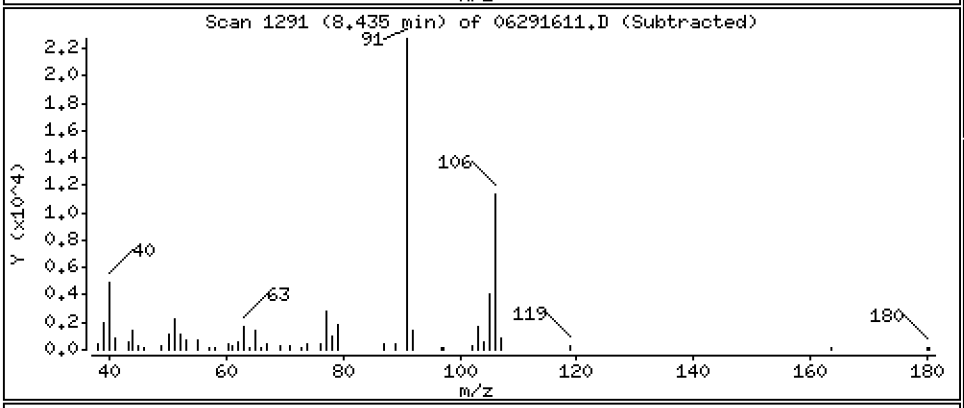
Column phase: RTXVMS

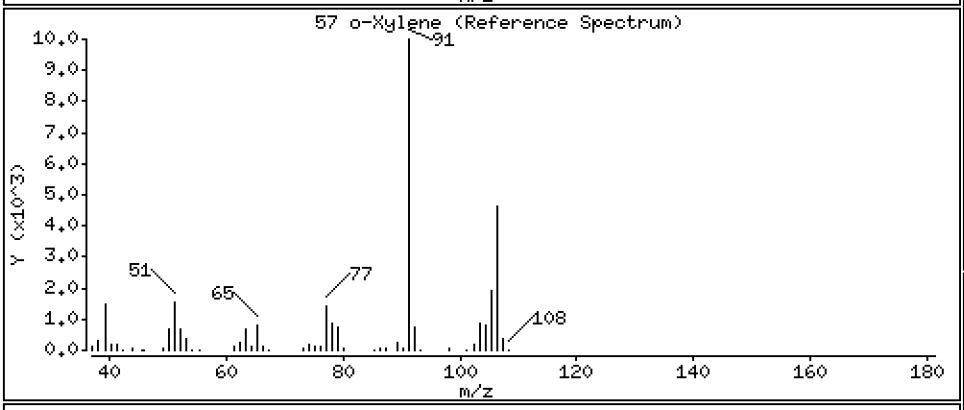
Column diameter: 0.18

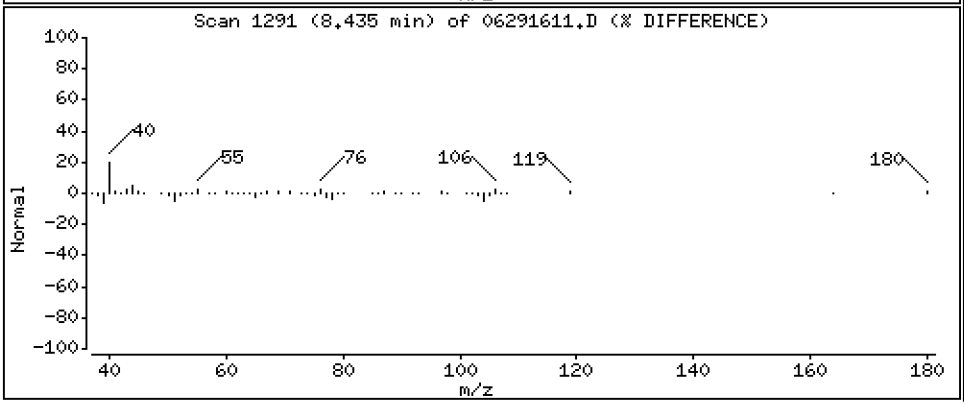
57 o-Xylene

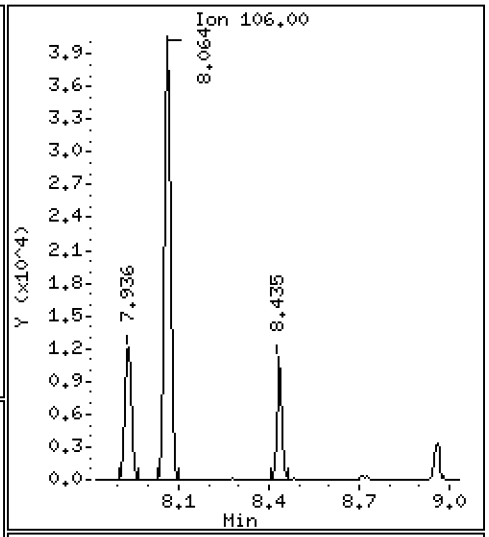
Concentration: 0.5280 ug/Kg

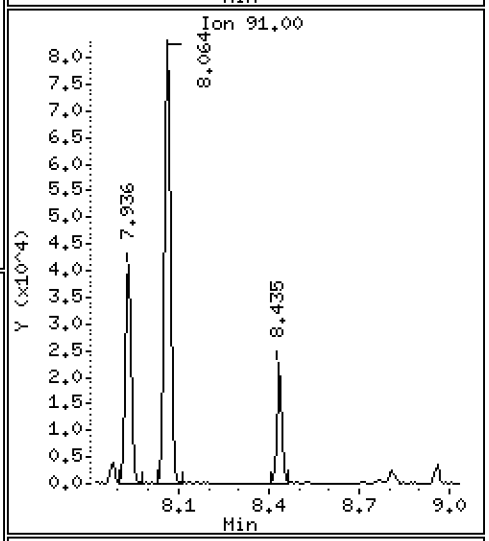


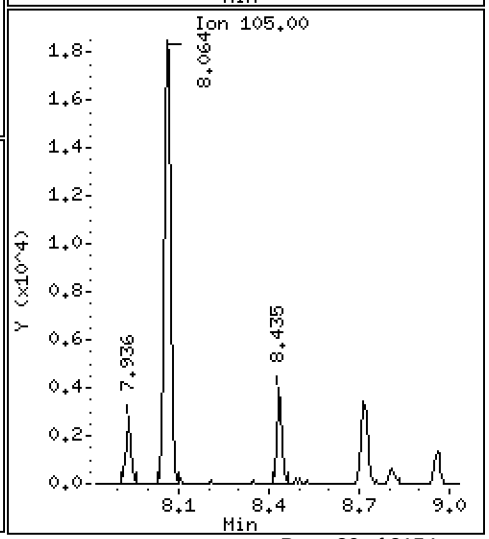












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291611.D
Lab Smp Id: 16F0096-06
Inj Date : 29-JUN-2016 19:02
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-06
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	Compound Not Detected.					
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.505	4.486	(0.908)	788189	51.0857	51.086
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.961	4.949	(1.000)	647335	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.000)	788111	51.0974	51.097
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2229911	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.561	(1.215)	2811555	49.2078	49.208
	43 Toluene	92	6.610	6.603	(1.223)	60281	1.55590	1.556
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2381750	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.936	7.930	(1.007)	54201	0.74561	0.7456
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.064	8.063	(1.023)	55217	1.95659	1.957
	57 o-Xylene	106	8.435	8.428	(1.070)	14718	0.52799	0.5280
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1265656	49.4128	49.413
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1222376	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1246504	50.6410	50.641
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291611.D
Lab Smp Id: 16F0096-06
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	647335	7.90
35 1,4-Difluorobenze	2041239	1020620	4082478	2229911	9.24
52 d5-Chlorobenzene	2118314	1059157	4236628	2381750	12.44
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1222376	15.86

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-06
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	51.086	102.17	70-130
$ 32 d4-1,2-Dichloroeth	50.000	51.097	102.19	80-149
$ 42 d8-Toluene	50.000	49.208	98.42	77-120
$ 62 4-Bromofluorobenze	50.000	49.413	98.83	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.641	101.28	80-120

REVIEW SUMMARY FOR FILE - 06291611.D

Lab ID: 16F0096-06
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 19:02

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-O-02-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-07	File ID:	06291612.D
Sampled:	06/29/16 12:05	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 19:25
Solids:	92.71	Preparation:	No Prep - Volatiles	Initial/Final:	5.58 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	0.70	J	0.23	0.97
74-83-9	Bromomethane	1	0.97	U	0.18	0.97
156-59-2	cis-1,2-Dichloroethene	1	3.14		0.23	0.97
71-43-2	Benzene	1	0.33	J	0.29	0.97
79-01-6	Trichloroethene	1	0.58	J	0.20	0.97
108-88-3	Toluene	1	5.99		0.15	0.97
127-18-4	Tetrachloroethene	1	0.97	U	0.25	0.97
100-41-4	Ethylbenzene	1	0.51	J	0.20	0.97
179601-23-1	m,p-Xylene	1	1.23		0.38	0.97
95-47-6	o-Xylene	1	0.76	J	0.22	0.97

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	51.5	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.5	101	80 - 120	
Toluene-d8	50.000	49.5	98.9	77 - 120	
4-Bromofluorobenzene	50.000	49.9	99.8	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291612.D

Page 1

Date : 29-JUN-2016 19:25

Client ID:

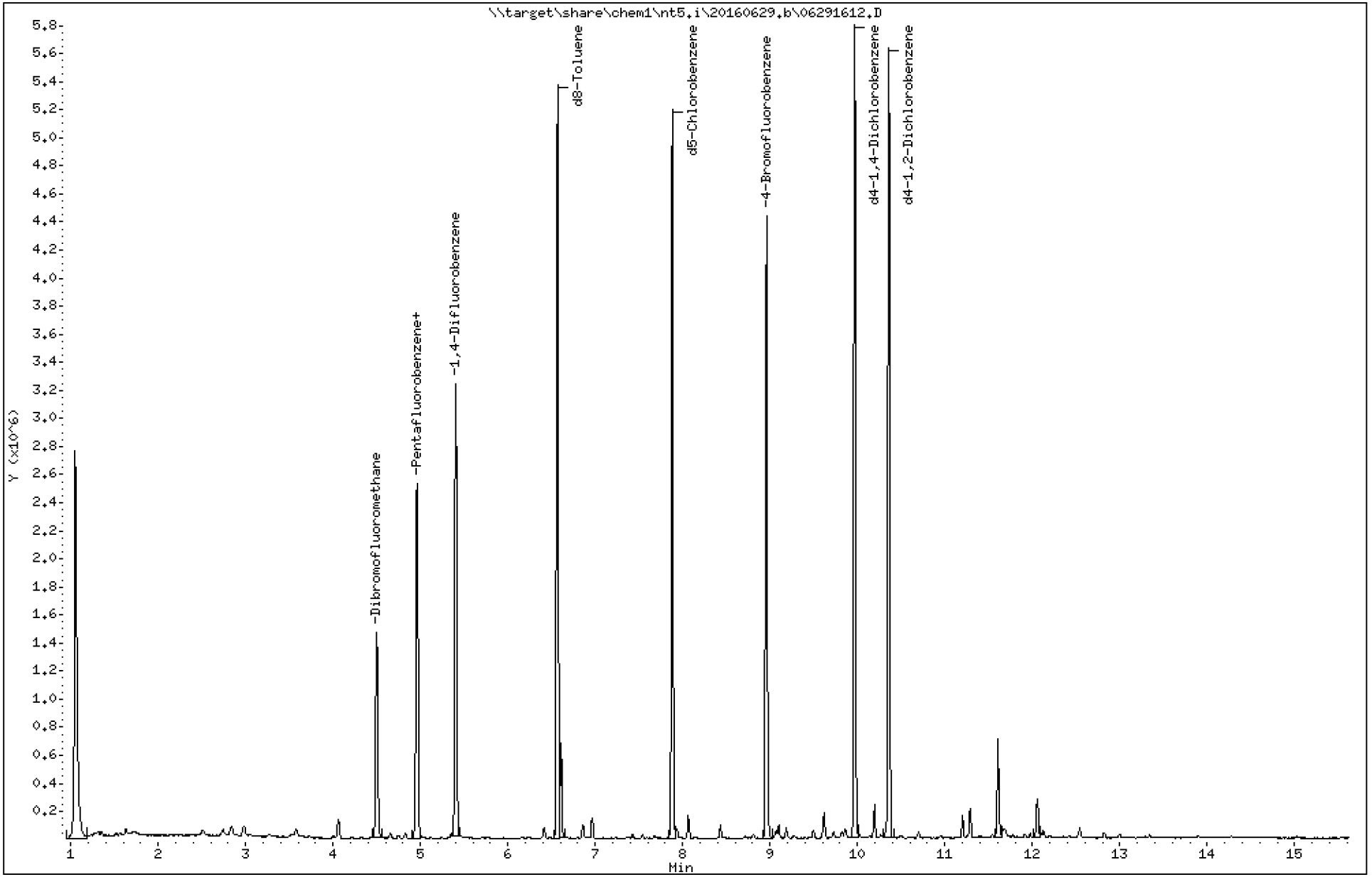
Instrument: nt5.i

Sample Info: 16F0096-07

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



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Date : 29-JUN-2016 19:25

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-07

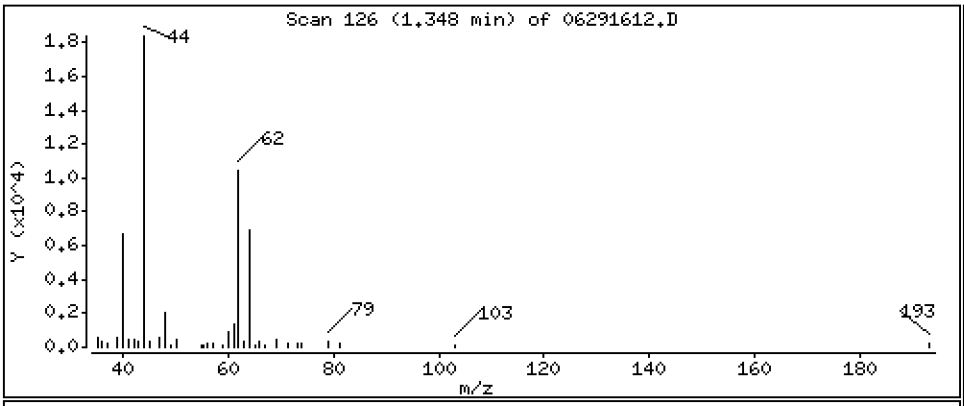
Operator: PB

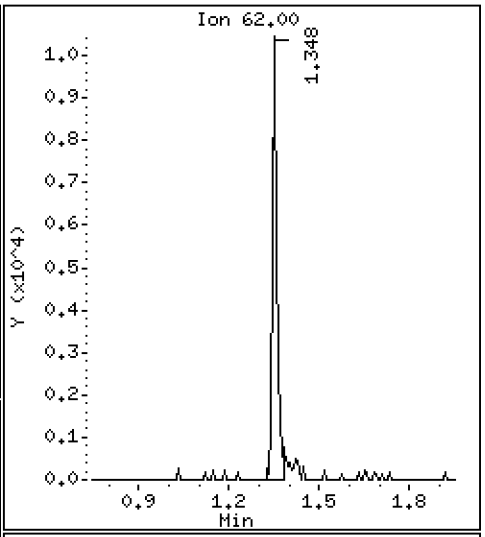
Column phase: RTXVMS

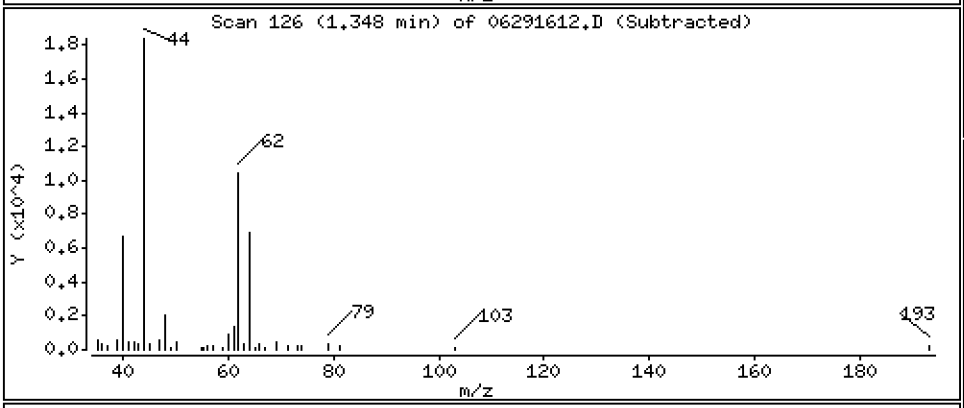
Column diameter: 0.18

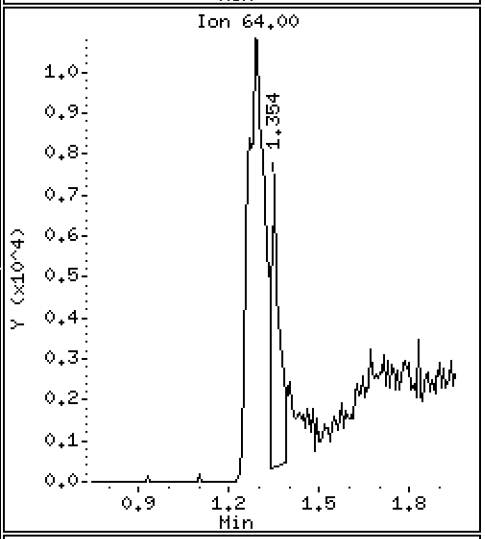
3 Vinyl Chloride

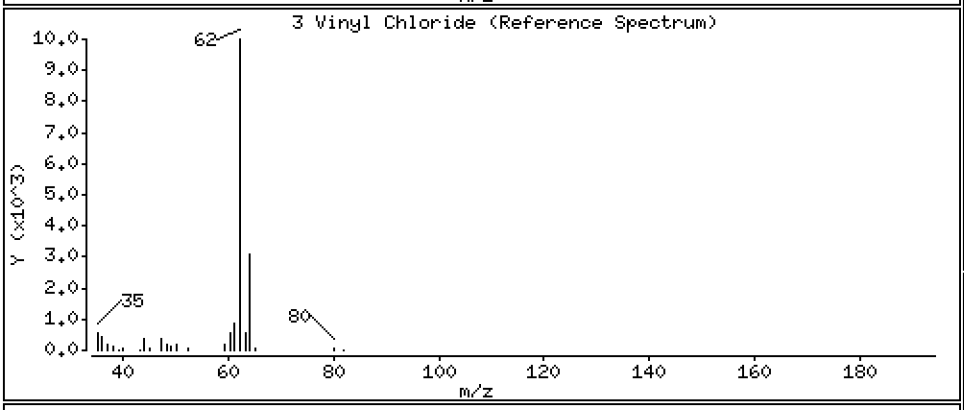
Concentration: 0.7287 ug/Kg

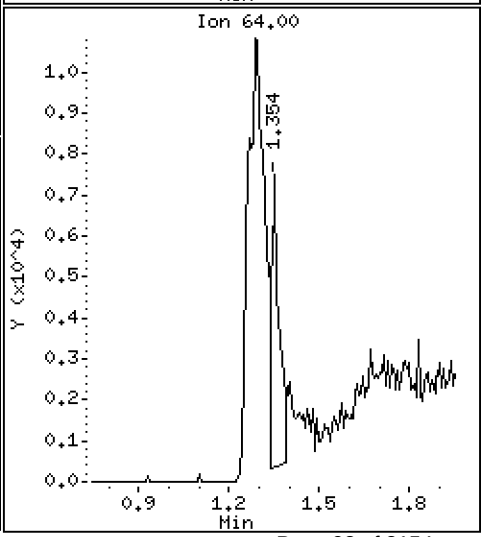


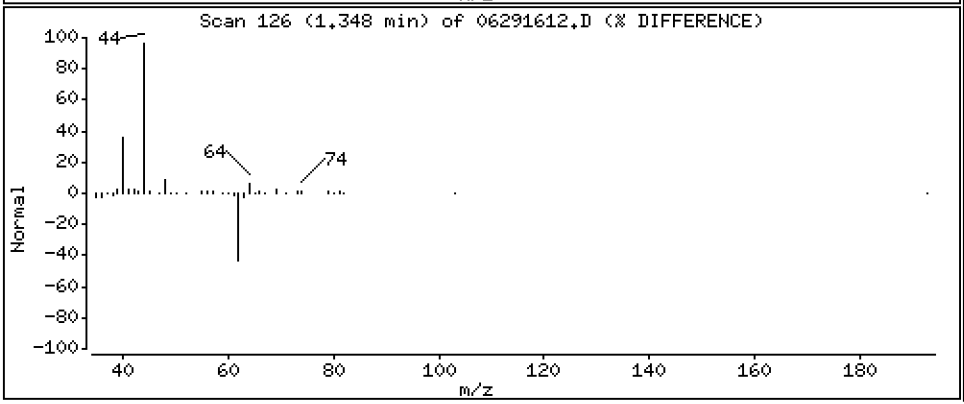












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Date : 29-JUN-2016 19:25

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-07

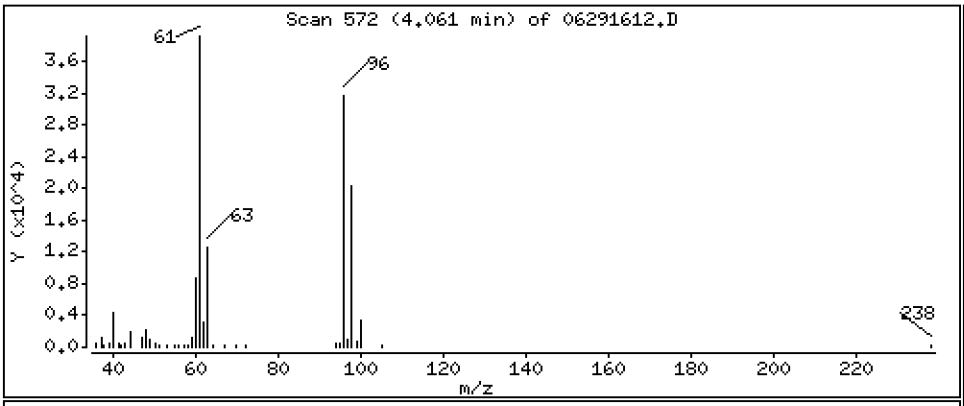
Operator: PB

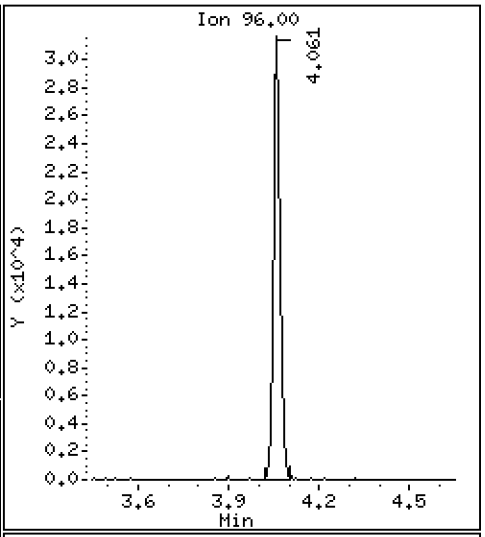
Column phase: RTXVMS

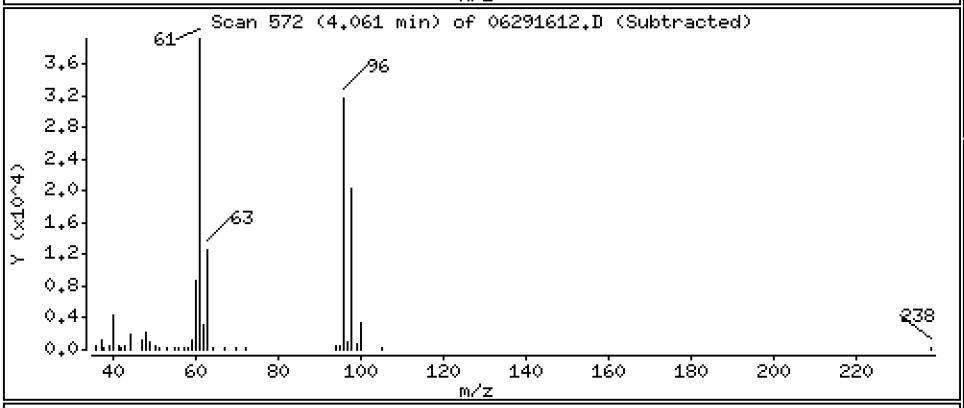
Column diameter: 0.18

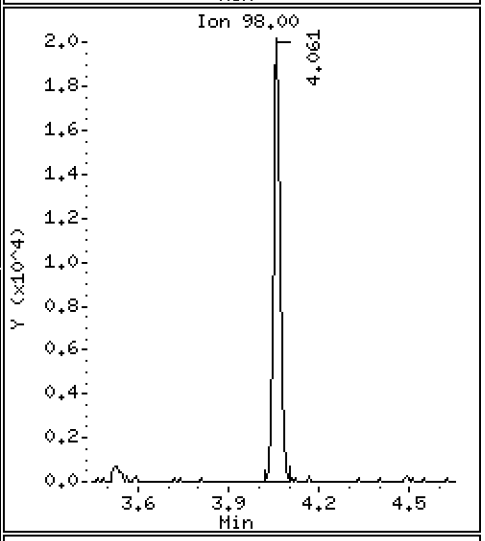
20 Cis-1,2-Dichloroethene

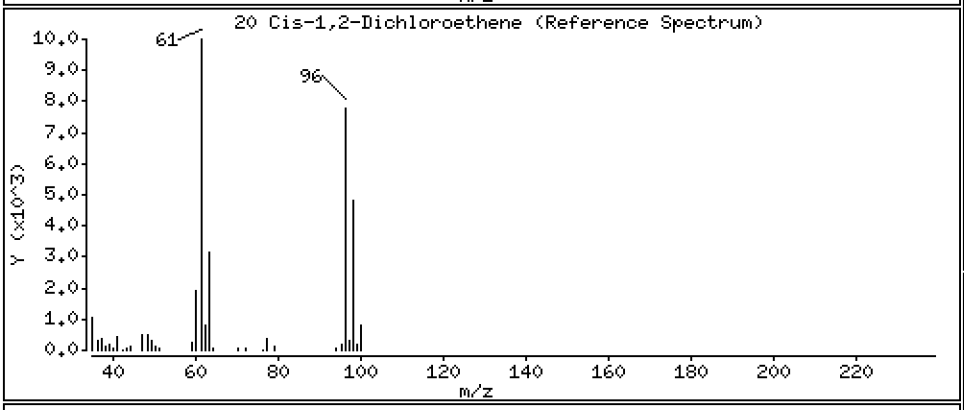
Concentration: 3.249 ug/Kg

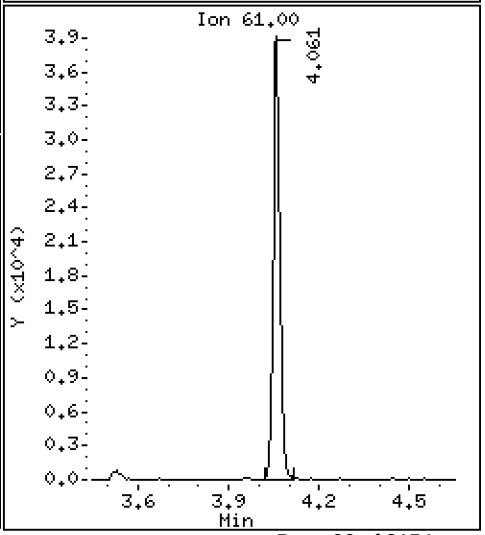


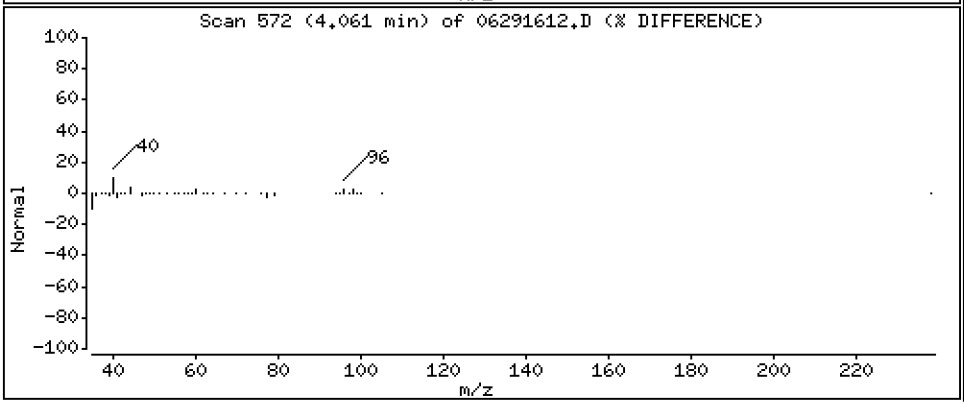












Data File: \\target\share\chem1\nt5.i\20160629.b\06291612.D

Date : 29-JUN-2016 19:25

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-07

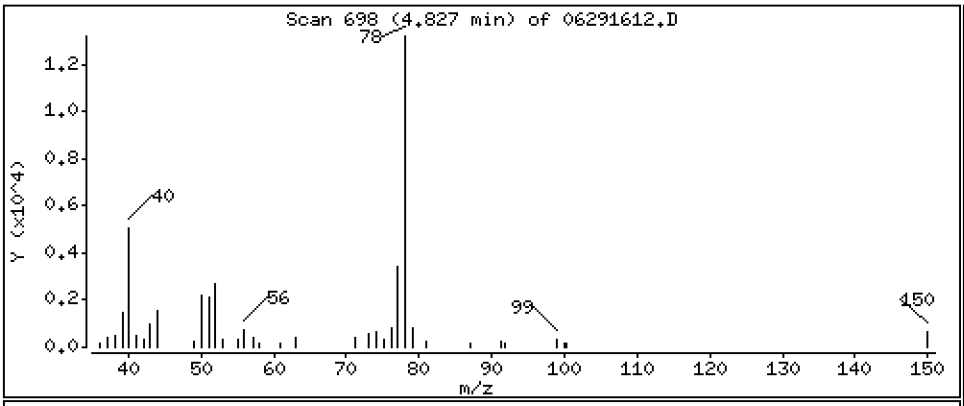
Operator: PB

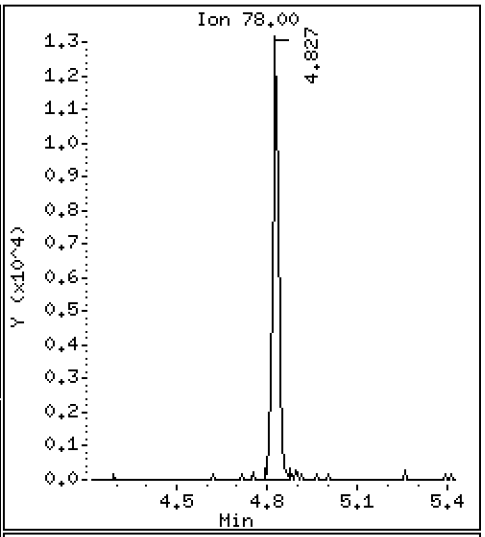
Column phase: RTXVMS

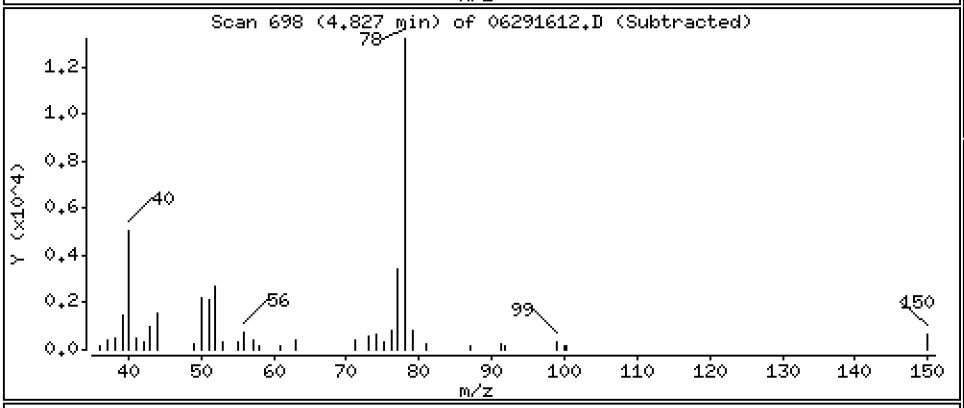
Column diameter: 0.18

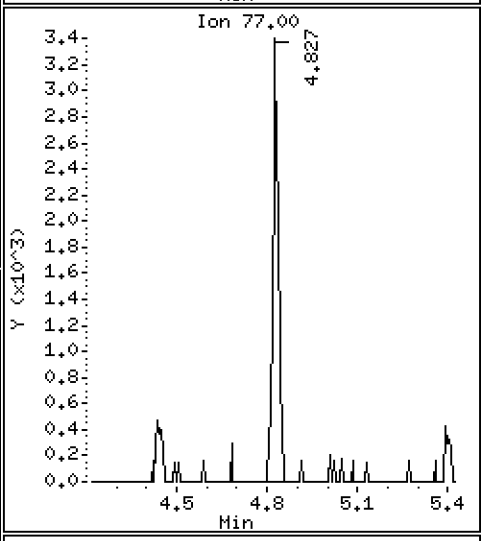
30 Benzene

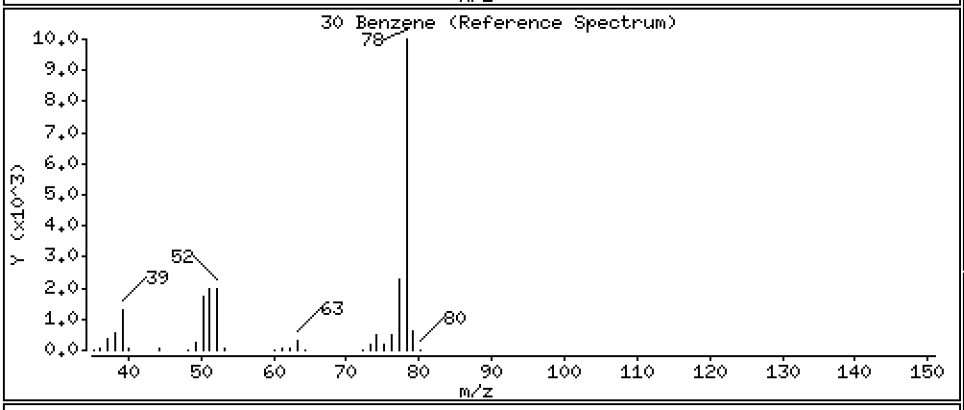
Concentration: 0.3431 ug/Kg

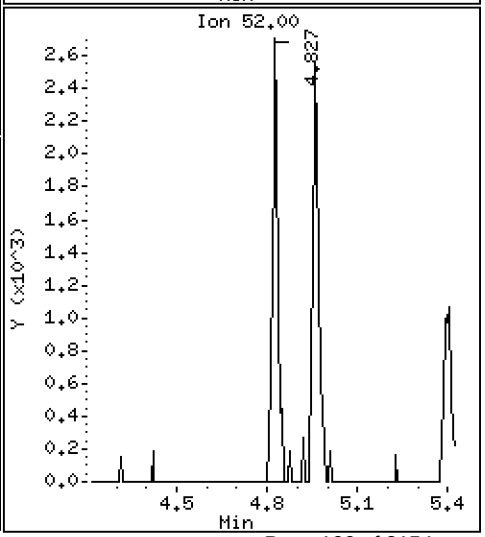


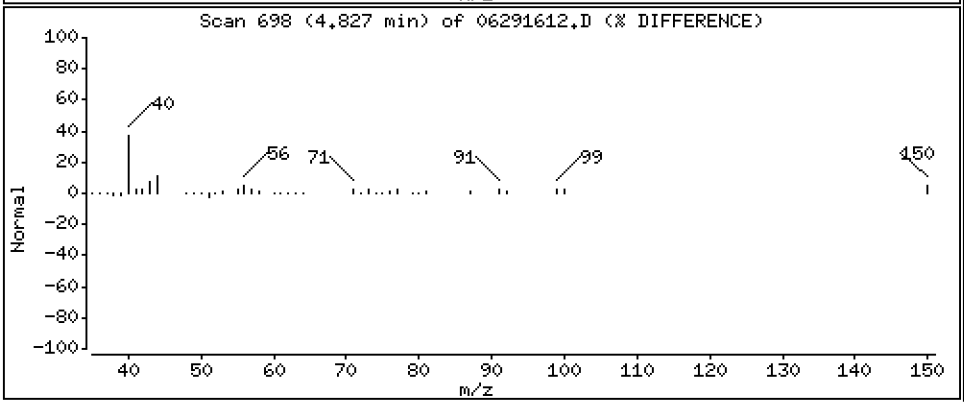












Data File: \\target\share\chem1\nt5.i\20160629.b\06291612.D

Date : 29-JUN-2016 19:25

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-07

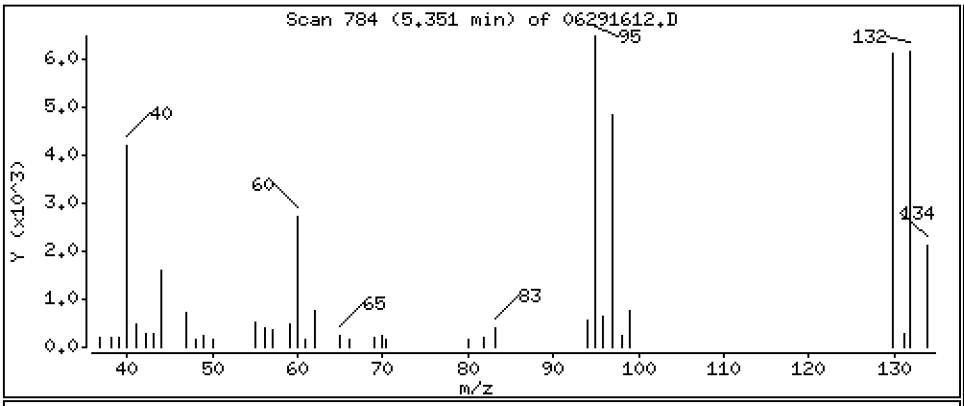
Operator: PB

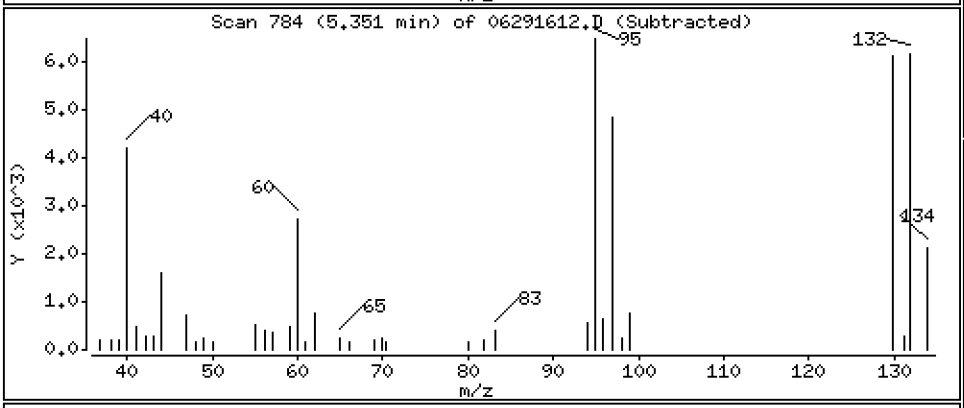
Column phase: RTXVMS

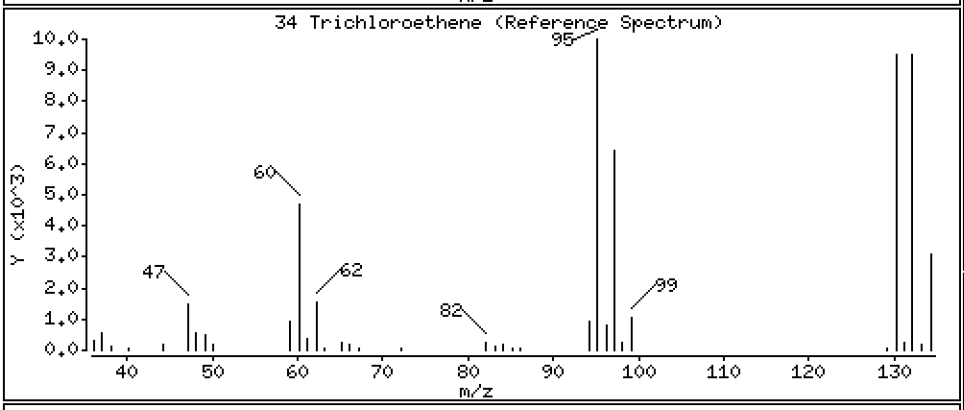
Column diameter: 0.18

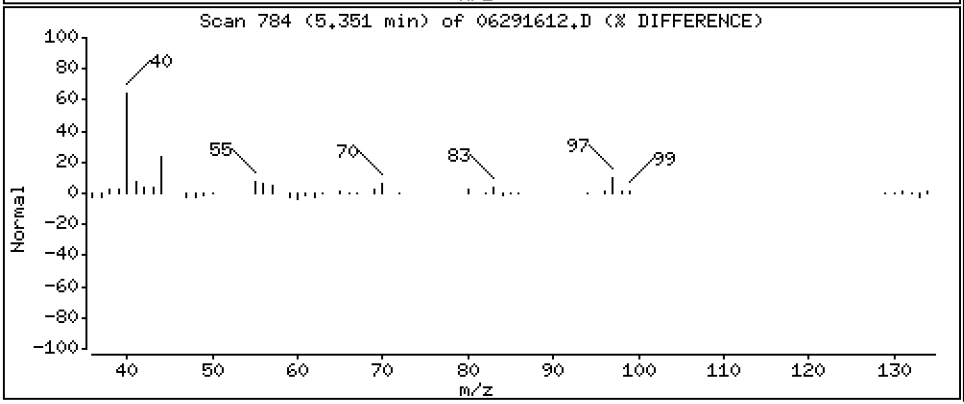
34 Trichloroethene

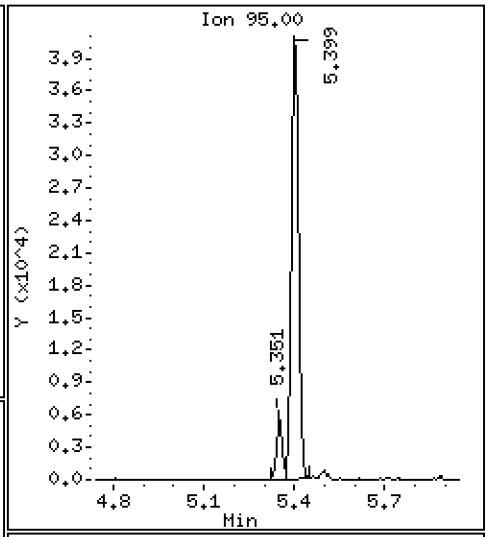
Concentration: 0.5987 ug/Kg

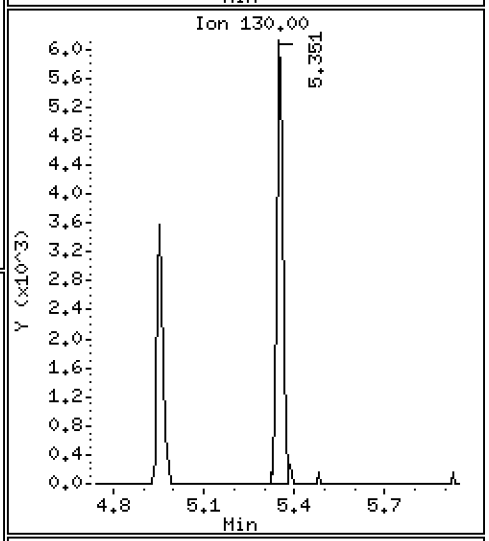


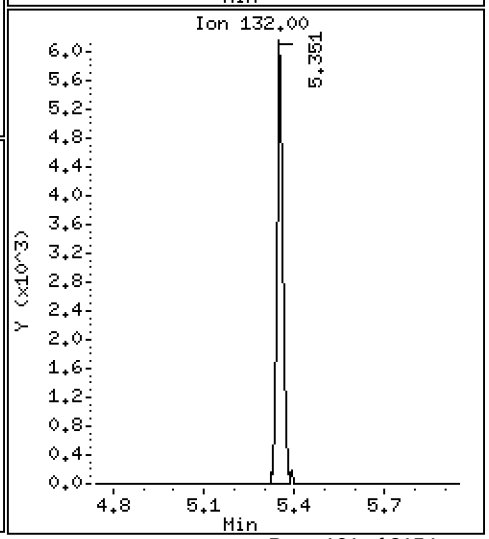












Data File: \\target\share\chem1\nt5.i\20160629.b\06291612.D

Date : 29-JUN-2016 19:25

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-07

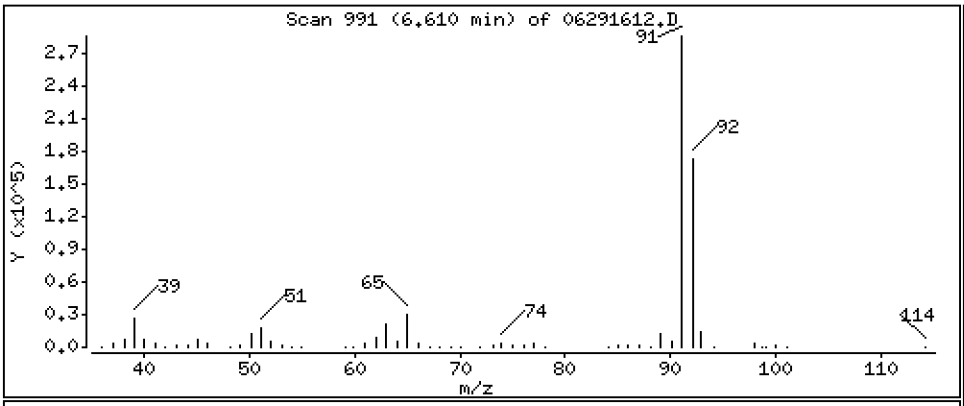
Operator: PB

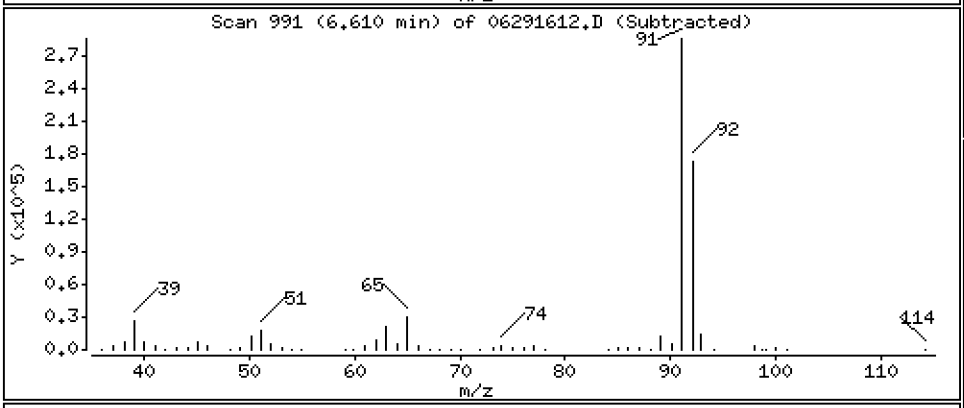
Column phase: RTXVMS

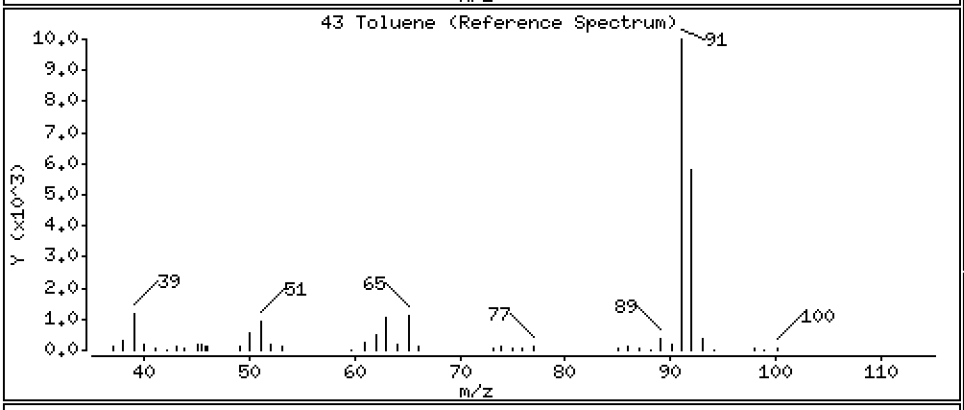
Column diameter: 0.18

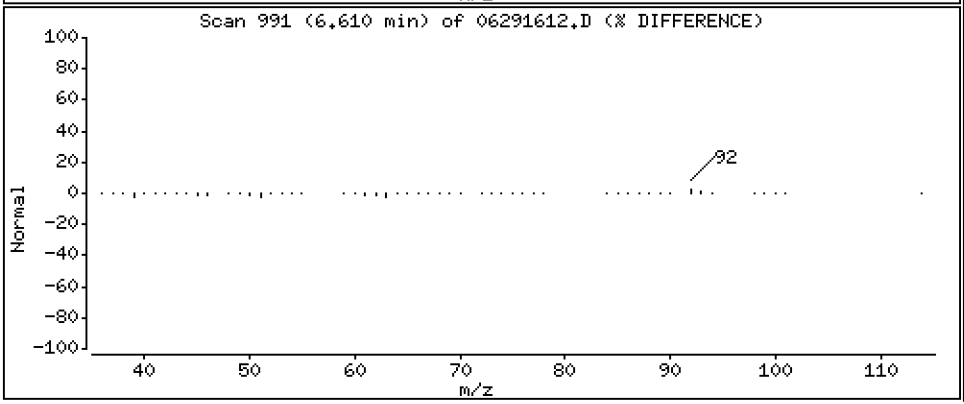
43 Toluene

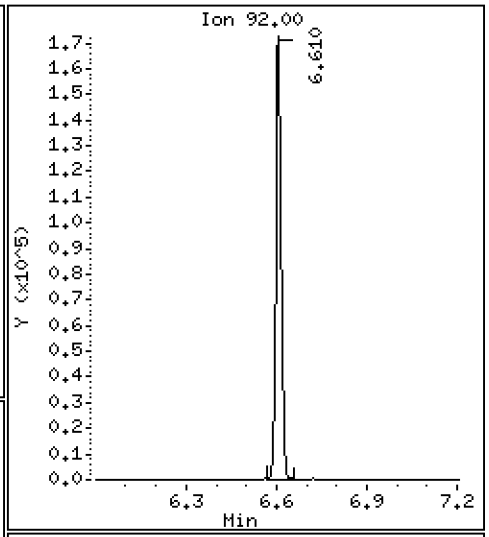
Concentration: 6.193 ug/Kg

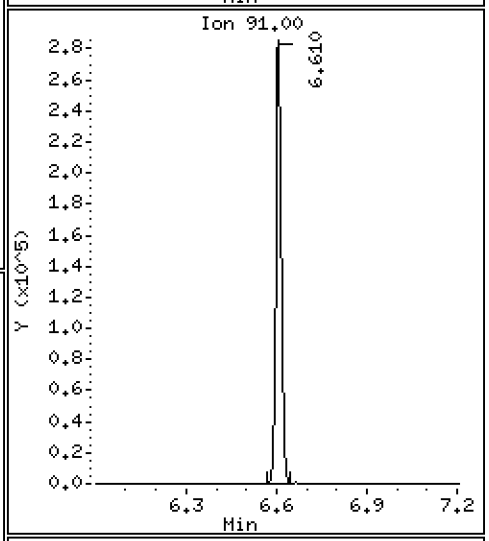


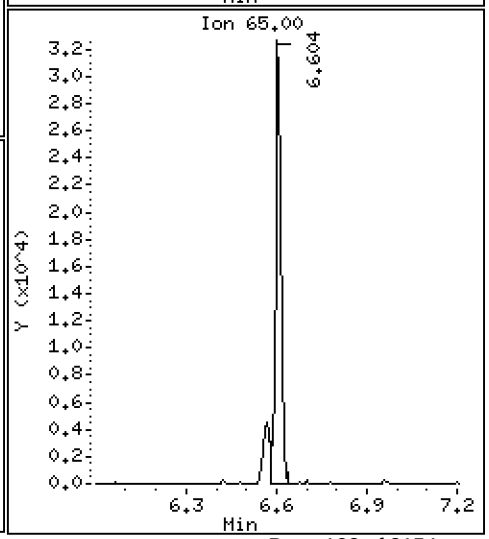












Data File: \\target\share\chem1\nt5.i\20160629.b\06291612.D

Date : 29-JUN-2016 19:25

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-07

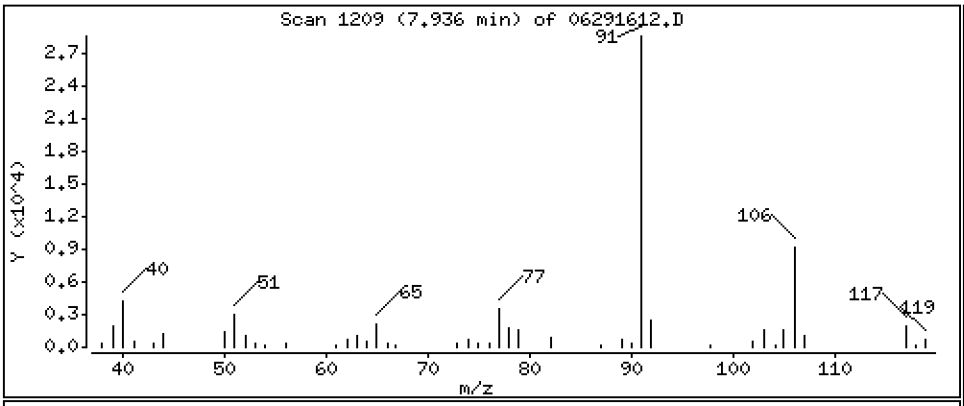
Operator: PB

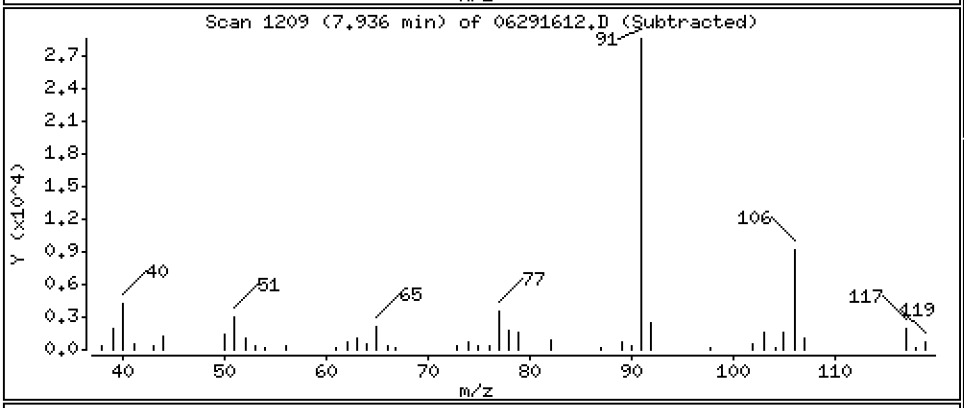
Column phase: RTXVMS

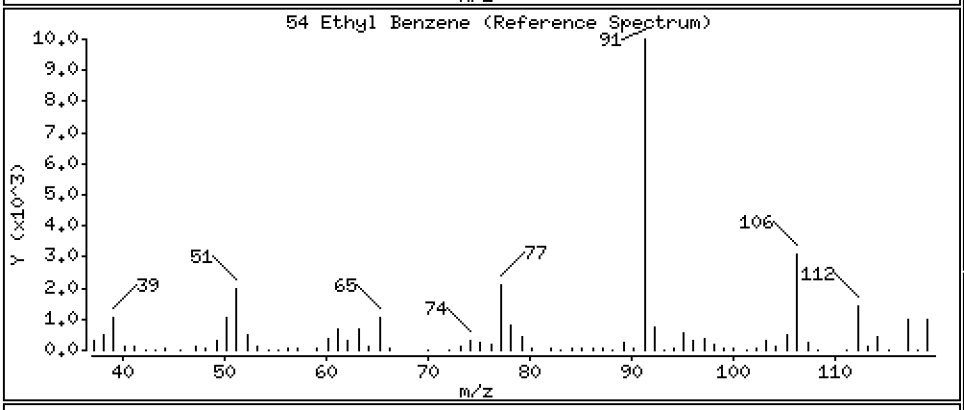
Column diameter: 0.18

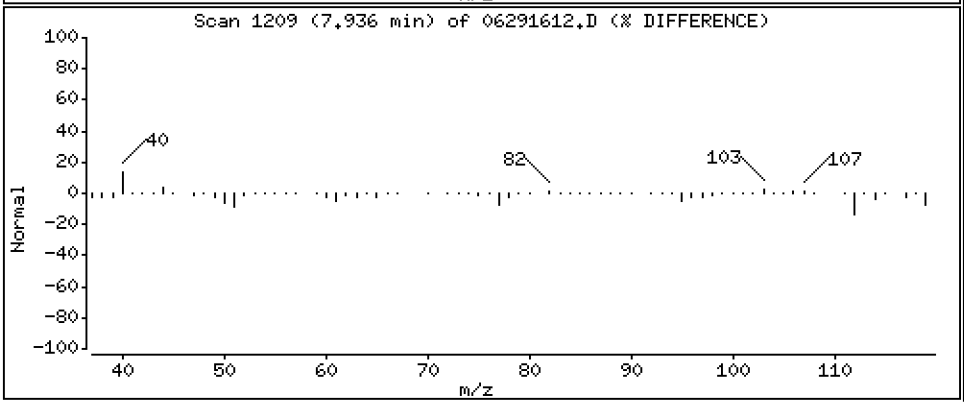
54 Ethyl Benzene

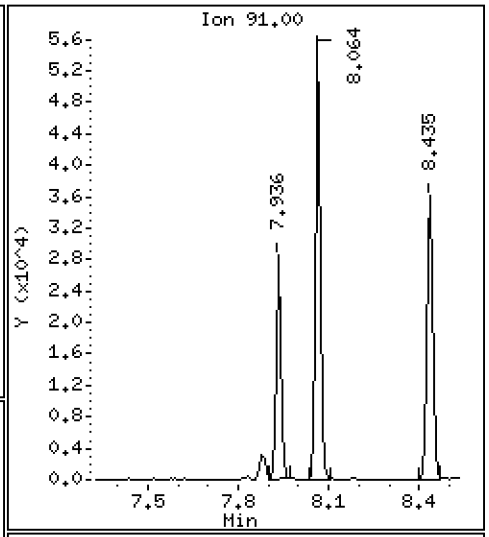
Concentration: 0.5239 ug/Kg

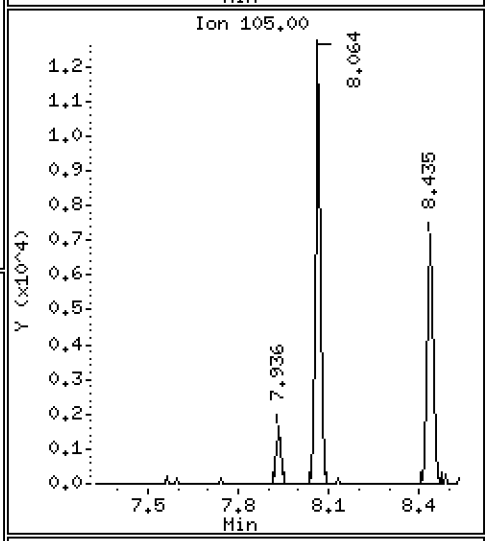


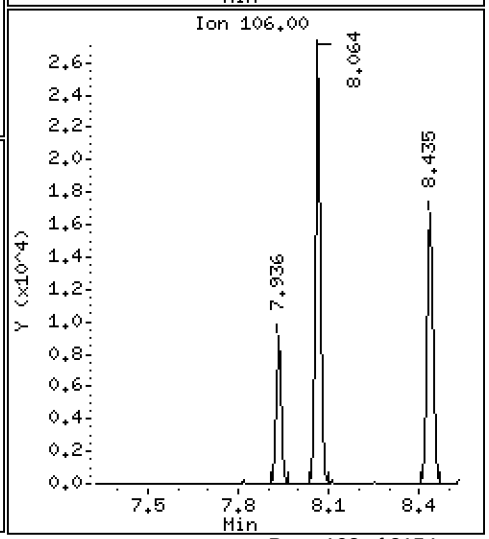












Data File: \\target\share\chem1\nt5.i\20160629.b\06291612.D

Date : 29-JUN-2016 19:25

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-07

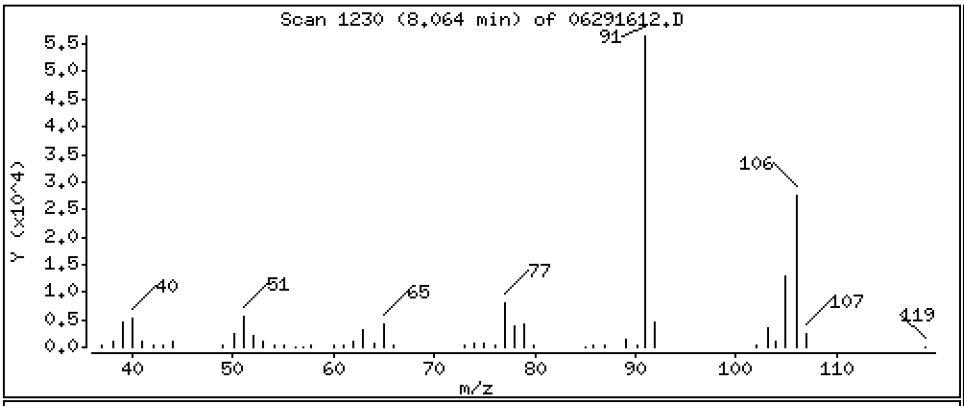
Operator: PB

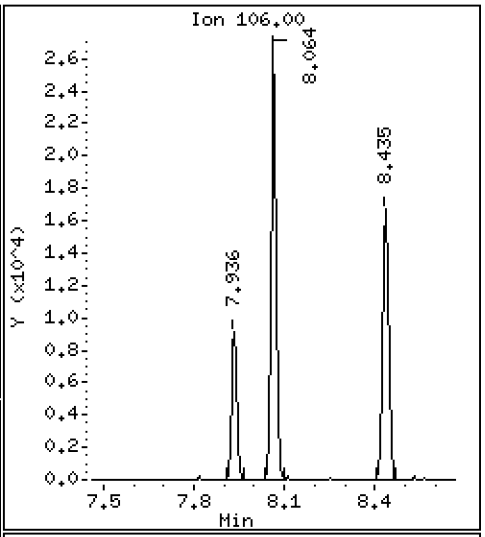
Column phase: RTXVMS

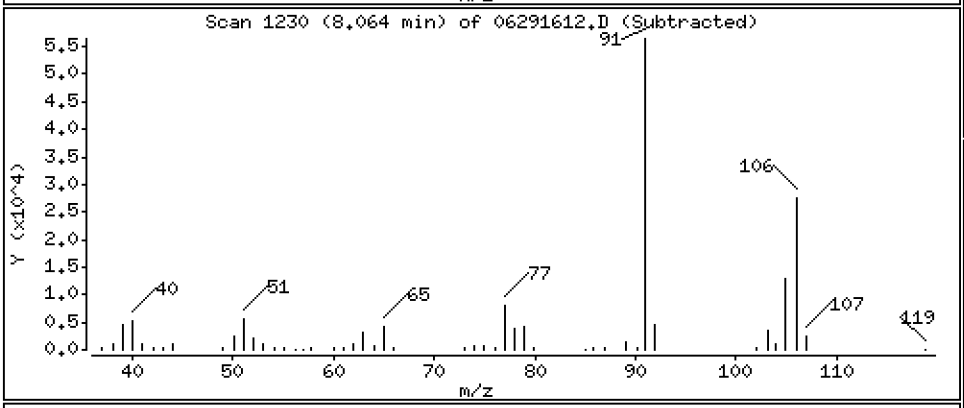
Column diameter: 0.18

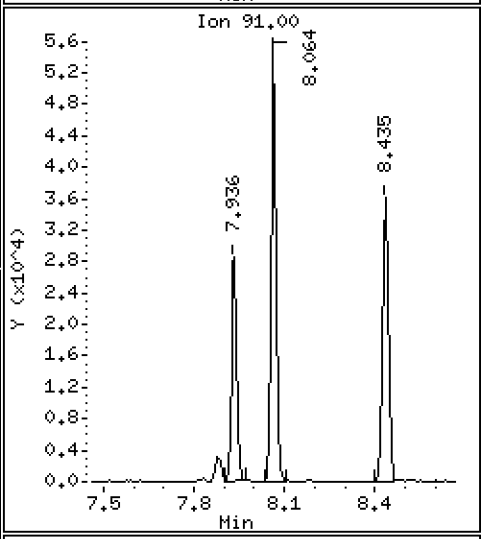
56 m,p-xylene

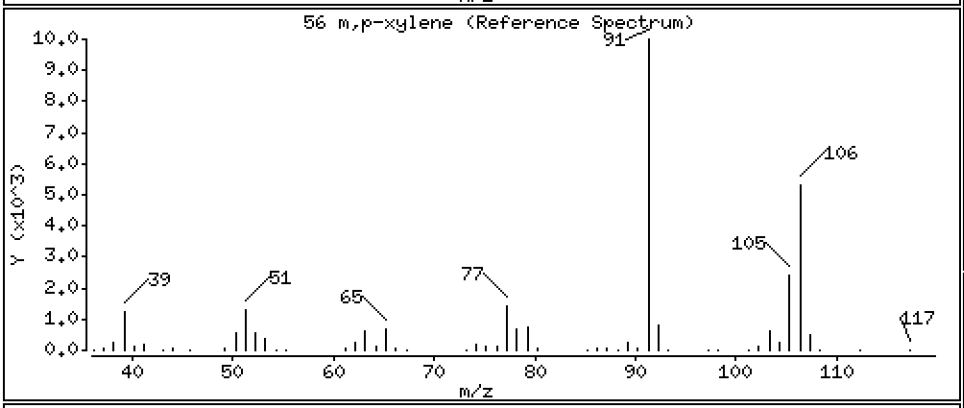
Concentration: 1.274 ug/Kg

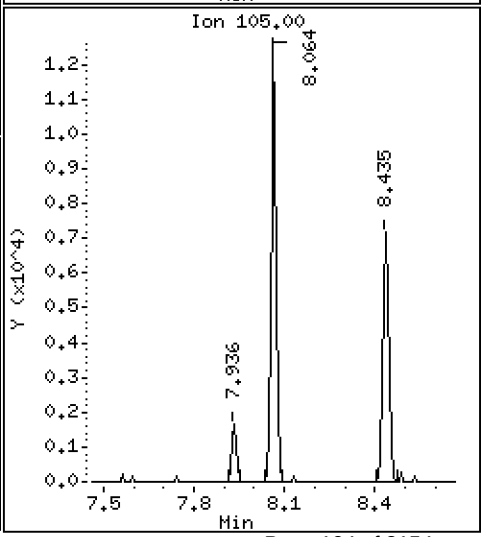


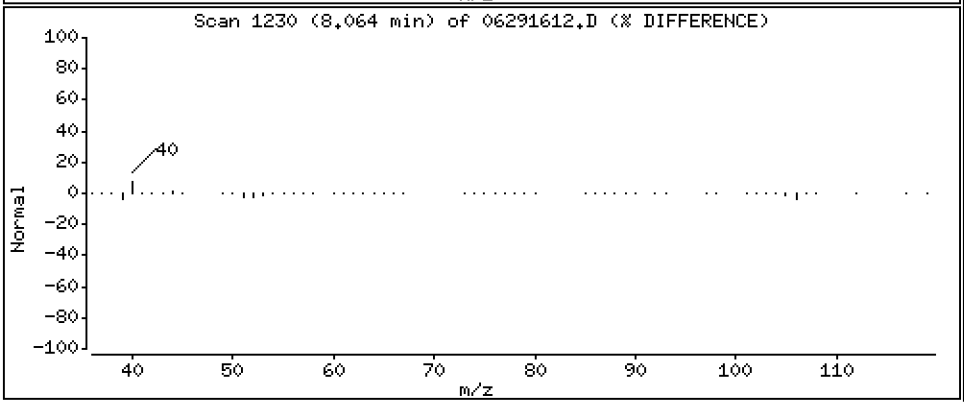












Data File: \\target\share\chem1\nt5.i\20160629.b\06291612.D

Date : 29-JUN-2016 19:25

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-07

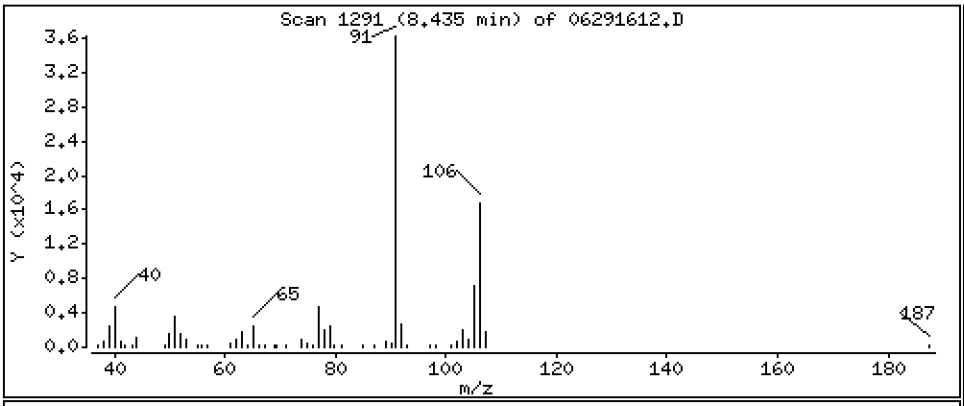
Operator: PB

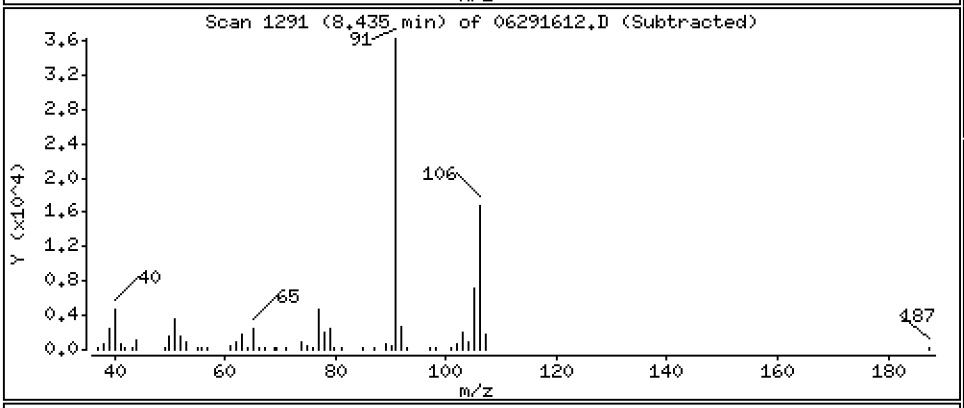
Column phase: RTXVMS

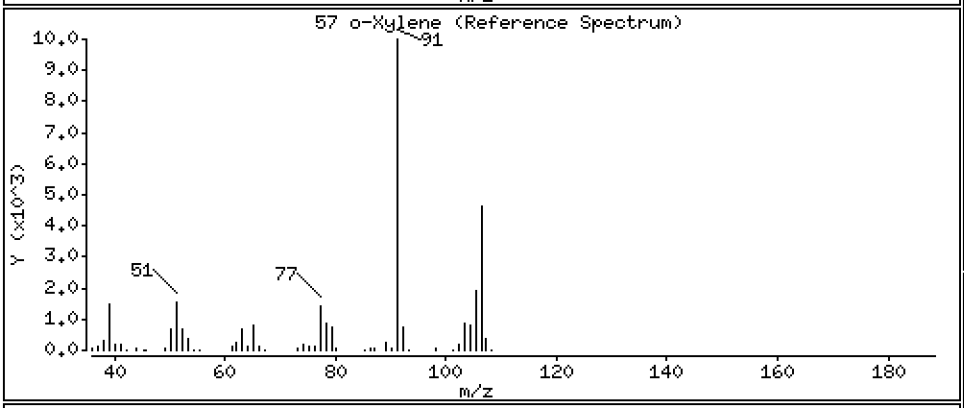
Column diameter: 0.18

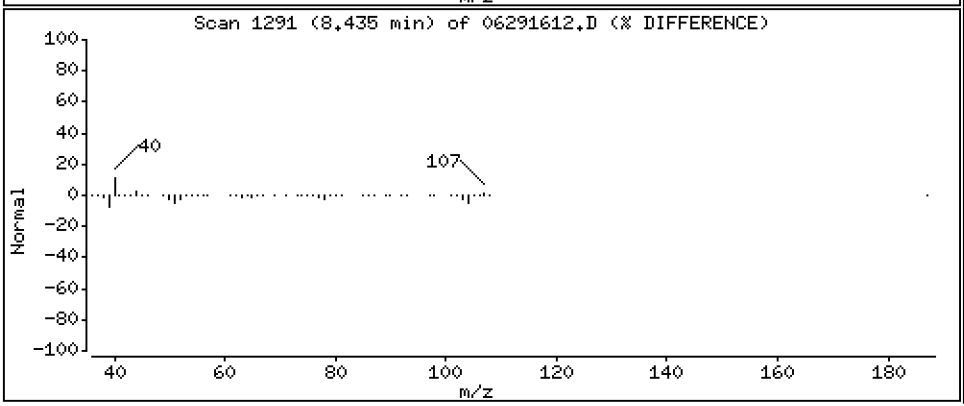
57 o-Xylene

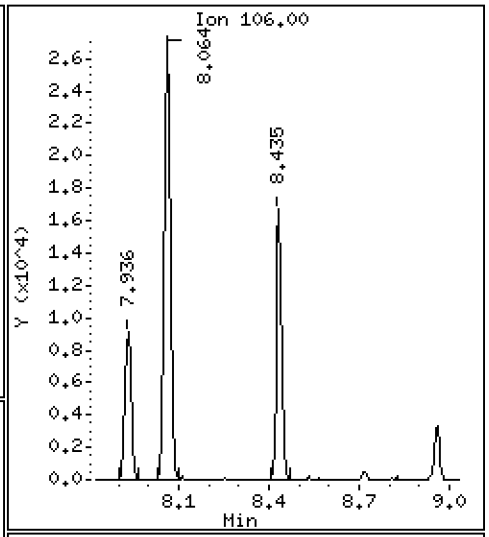
Concentration: 0.7878 ug/Kg

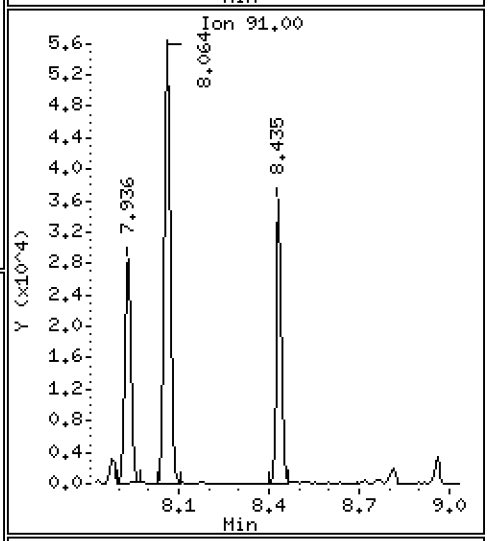


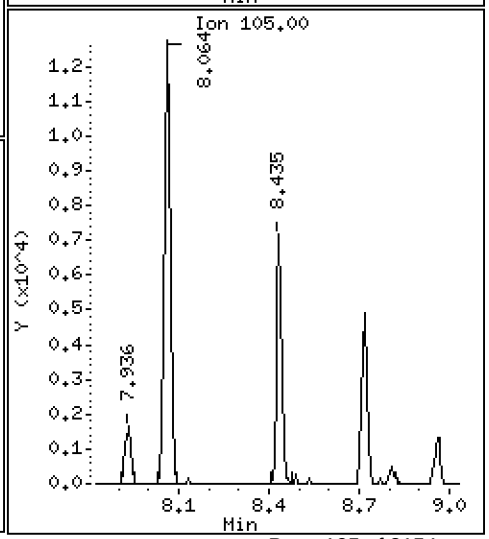












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291612.D
Lab Smp Id: 16F0096-07
Inj Date : 29-JUN-2016 19:25
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-07
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	1.347	1.347	(0.272)	13944	0.72873	0.7287
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.060	4.048	(0.820)	54183	3.24905	3.249
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.498	4.486	(0.908)	804472	51.1205	51.120
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	4.827	4.821	(0.893)	21002	0.34310	0.3431
*	31 Pentafluorobenzene	168	4.955	4.949	(1.000)	660259	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.001)	810095	51.4946	51.495
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.350	5.344	(0.990)	9496	0.59866	0.5987
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2266562	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.561	(1.215)	2872381	49.4595	49.459
	43 Toluene	92	6.609	6.603	(1.223)	243896	6.19336	6.193
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2447782	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.936	7.930	(1.007)	39138	0.52387	0.5239
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.063	8.063	(1.023)	36936	1.27350	1.274
	57 o-Xylene	106	8.434	8.428	(1.070)	22568	0.78777	0.7878
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1313824	49.9096	49.910
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1268189	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1288412	50.4527	50.453
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291612.D
Lab Smp Id: 16F0096-07
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	660259	10.05
35 1,4-Difluorobenze	2041239	1020620	4082478	2266562	11.04
52 d5-Chlorobenzene	2118314	1059157	4236628	2447782	15.55
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1268189	20.20

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.12
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-07
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	51.120	102.24	70-130
$ 32 d4-1,2-Dichloroeth	50.000	51.495	102.99	80-149
$ 42 d8-Toluene	50.000	49.459	98.92	77-120
$ 62 4-Bromofluorobenze	50.000	49.910	99.82	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.453	100.91	80-120

REVIEW SUMMARY FOR FILE - 06291612.D

Lab ID: 16F0096-07
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 19:25

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-O-03-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-08	File ID:	06291613.D
Sampled:	06/29/16 11:55	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 19:47
Solids:	94.01	Preparation:	No Prep - Volatiles	Initial/Final:	5.68 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	6.53		0.22	0.94
74-83-9	Bromomethane	1	0.94	U	0.18	0.94
156-59-2	cis-1,2-Dichloroethene	1	187		0.22	0.94
71-43-2	Benzene	1	1.31		0.28	0.94
79-01-6	Trichloroethene	1	10.8		0.20	0.94
108-88-3	Toluene	1	6.20		0.14	0.94
127-18-4	Tetrachloroethene	1	0.94	U	0.24	0.94
100-41-4	Ethylbenzene	1	0.94	U	0.19	0.94
179601-23-1	m,p-Xylene	1	0.94	U	0.37	0.94
95-47-6	o-Xylene	1	0.94	U	0.21	0.94

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	52.7	105	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.9	102	80 - 120	
Toluene-d8	50.000	49.0	98.0	77 - 120	
4-Bromofluorobenzene	50.000	49.0	98.0	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291613.D

Date : 29-JUN-2016 19:47

Client ID:

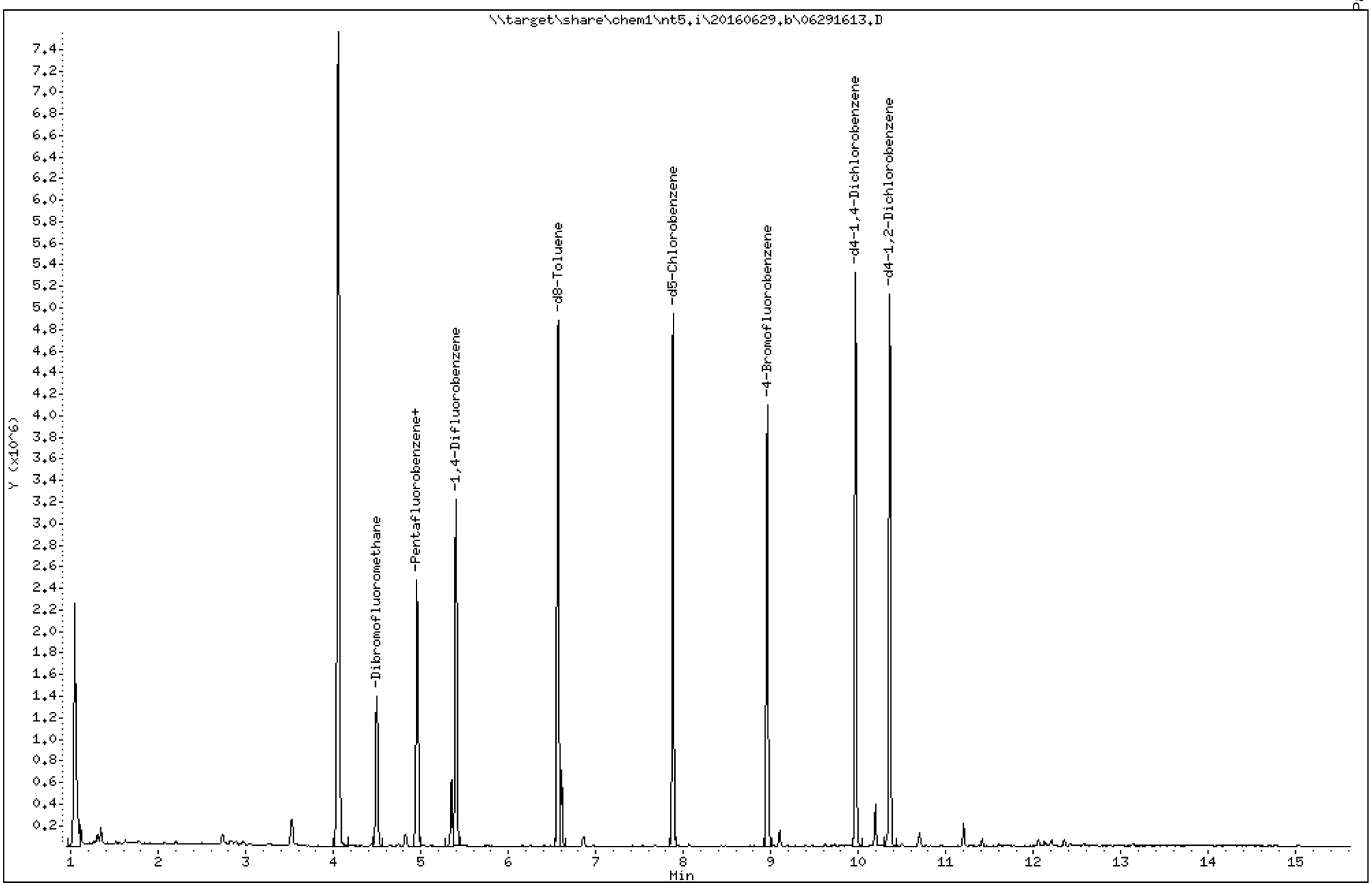
Instrument: nt5.i

Sample Info: 16F0096-08

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160629.b\06291613.D

Date : 29-JUN-2016 19:47

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-08

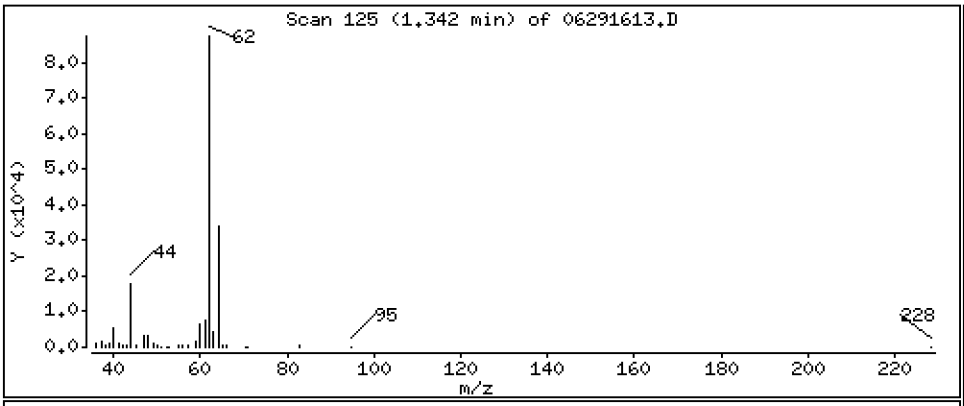
Operator: PB

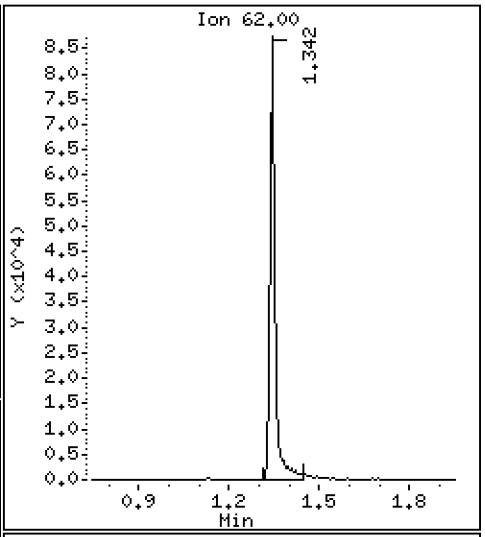
Column phase: RTXVMS

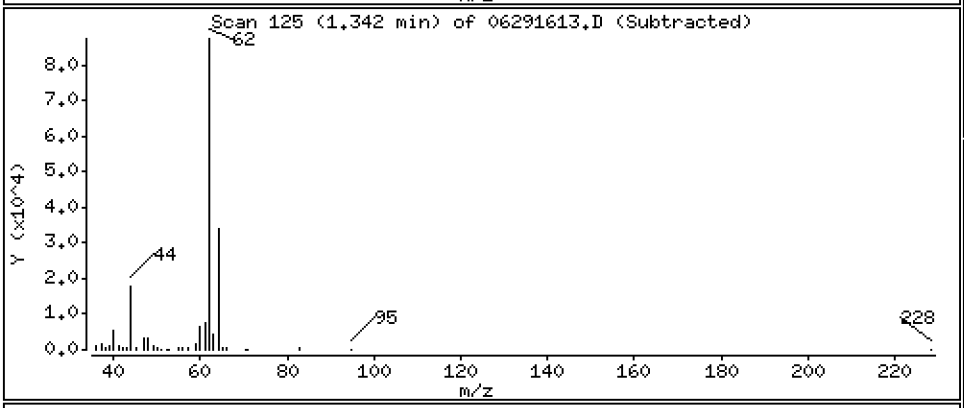
Column diameter: 0.18

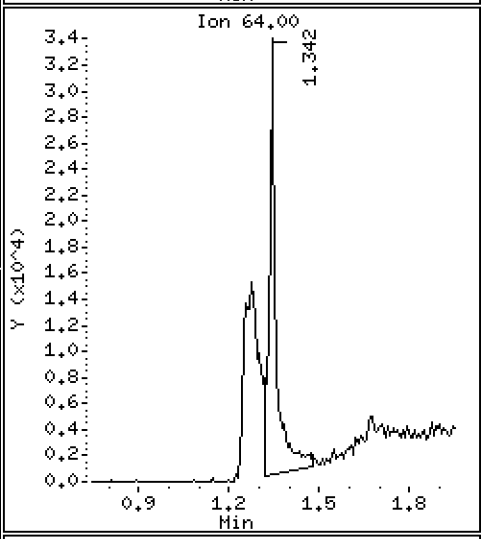
3 Vinyl Chloride

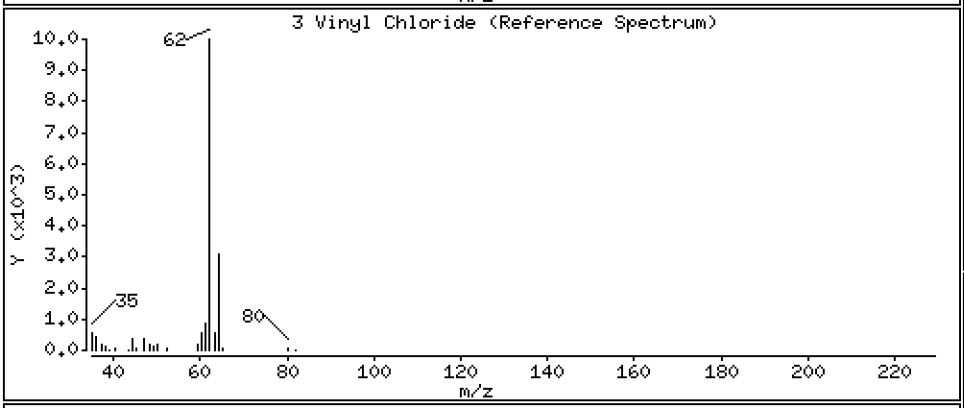
Concentration: 6.972 ug/Kg

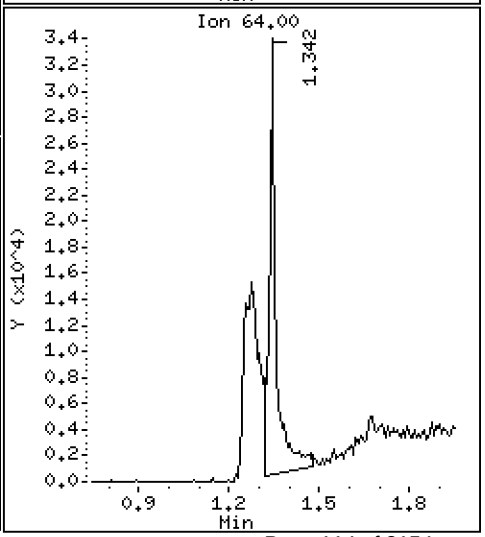


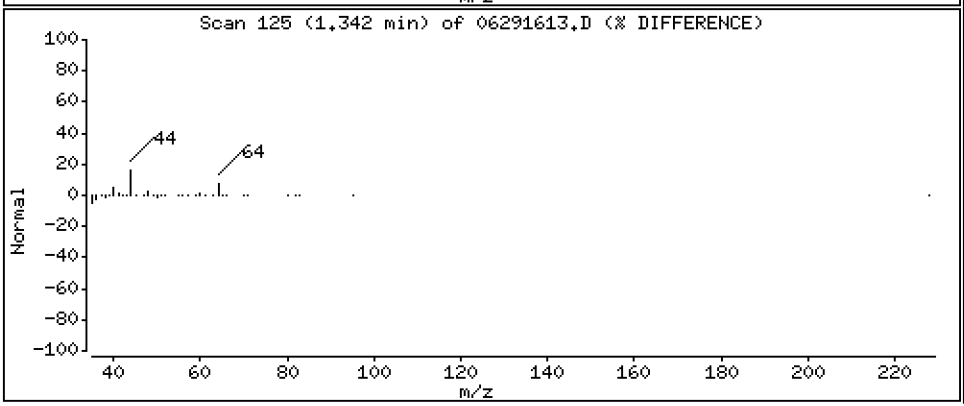












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Date : 29-JUN-2016 19:47

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-08

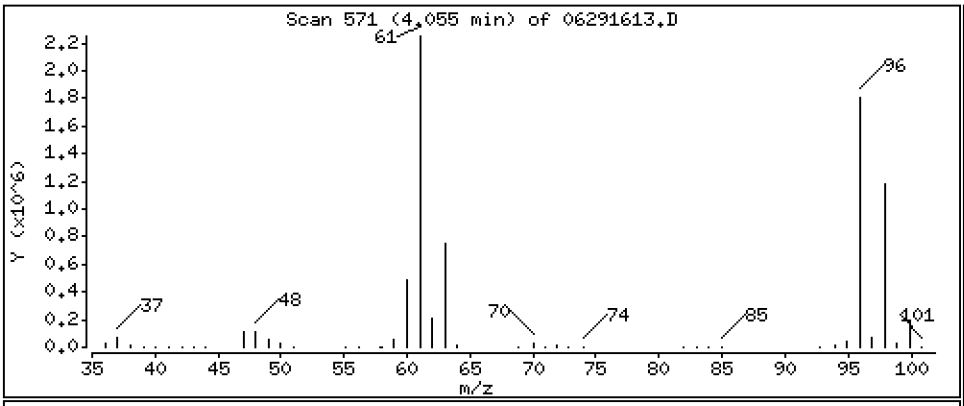
Operator: PB

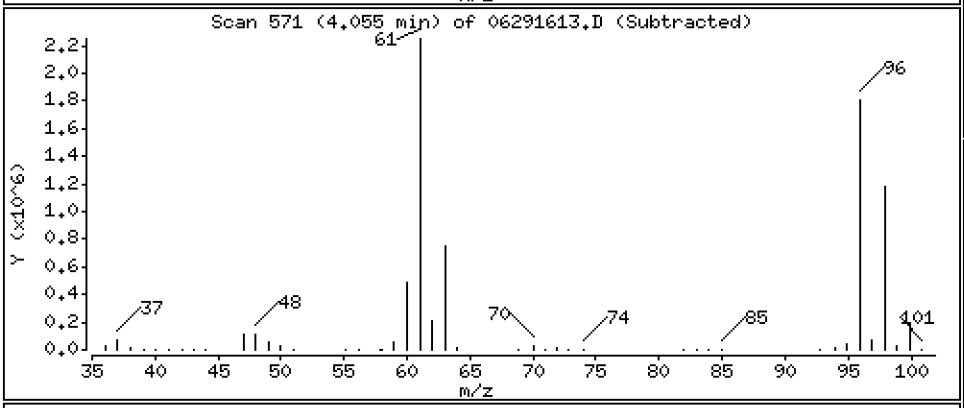
Column phase: RTXVMS

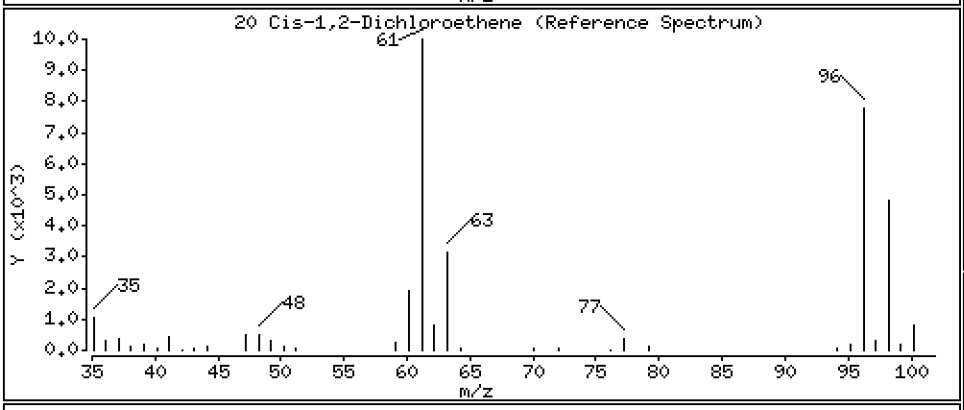
Column diameter: 0.18

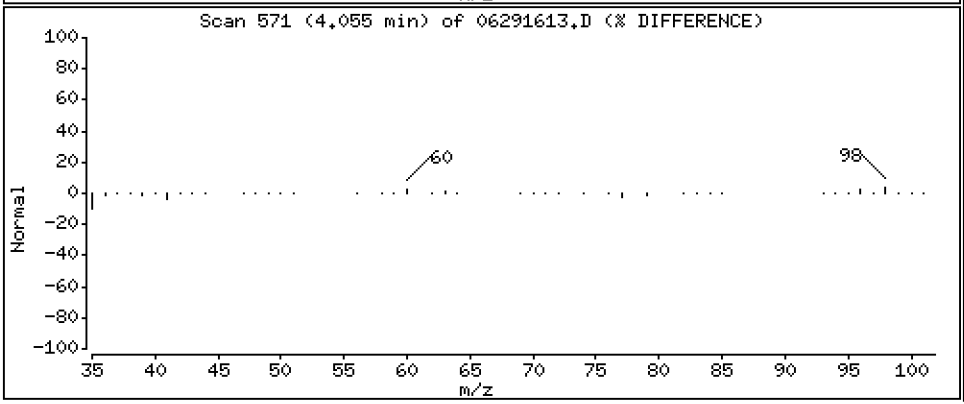
20 Cis-1,2-Dichloroethene

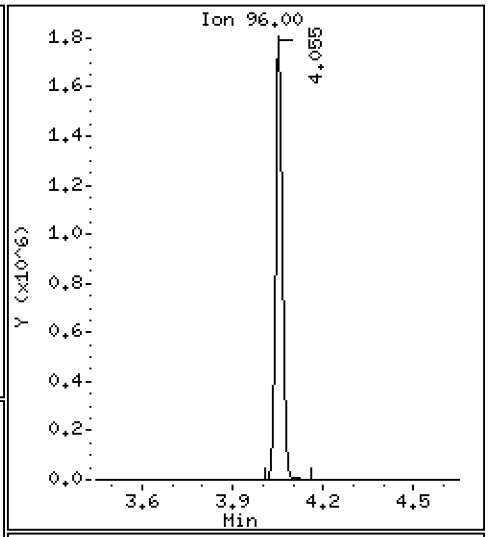
Concentration: 199.41 ug/Kg

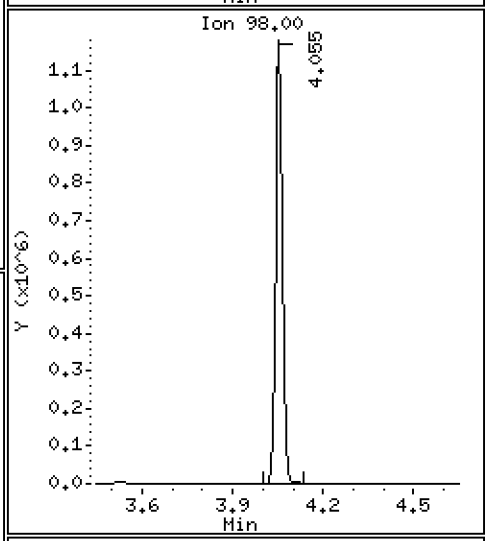


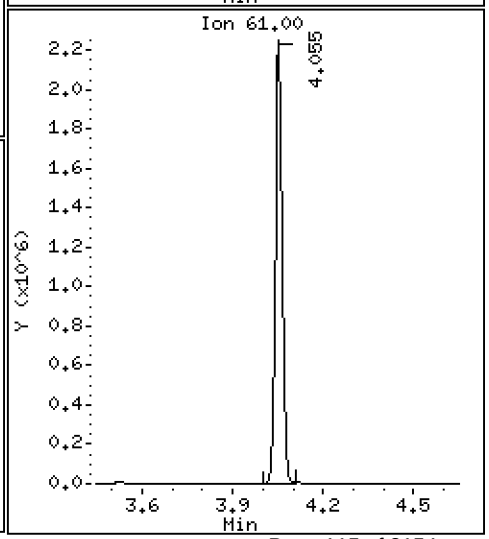












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Date : 29-JUN-2016 19:47

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-08

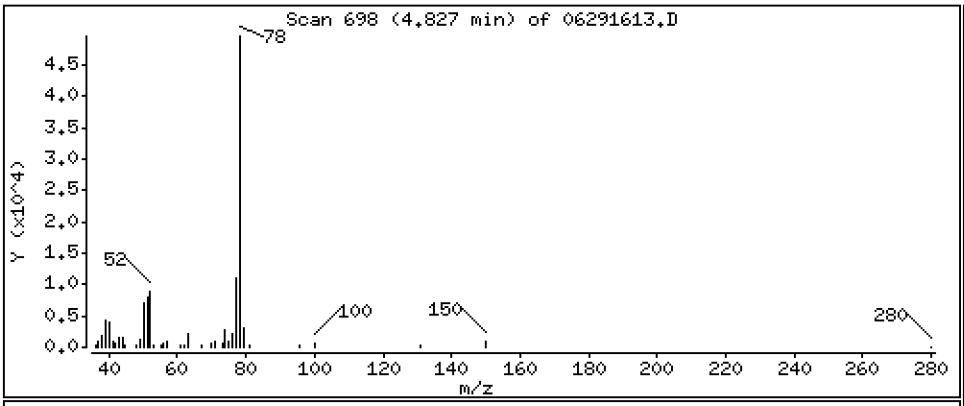
Operator: PB

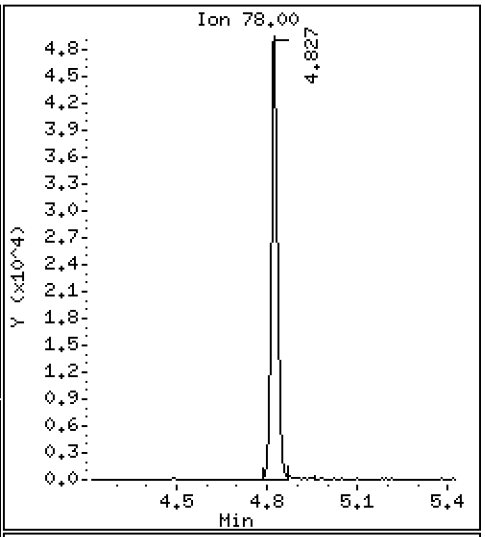
Column phase: RTXVMS

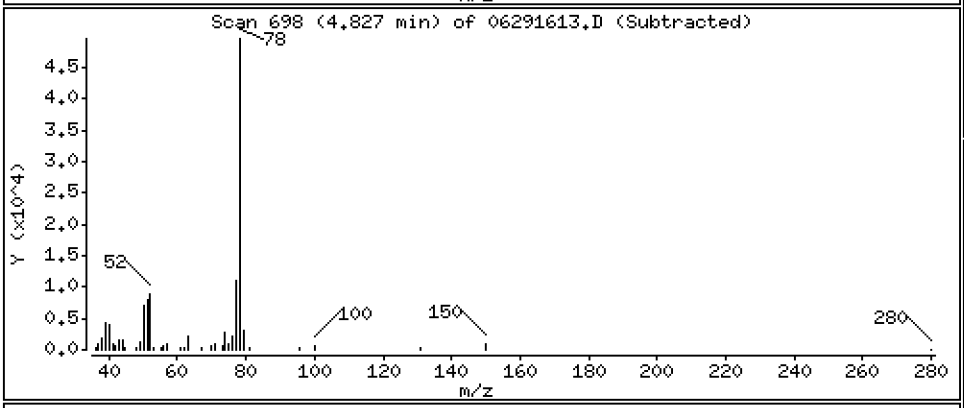
Column diameter: 0.18

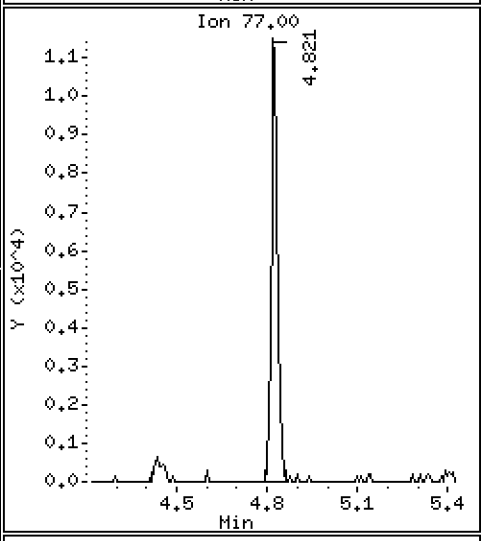
30 Benzene

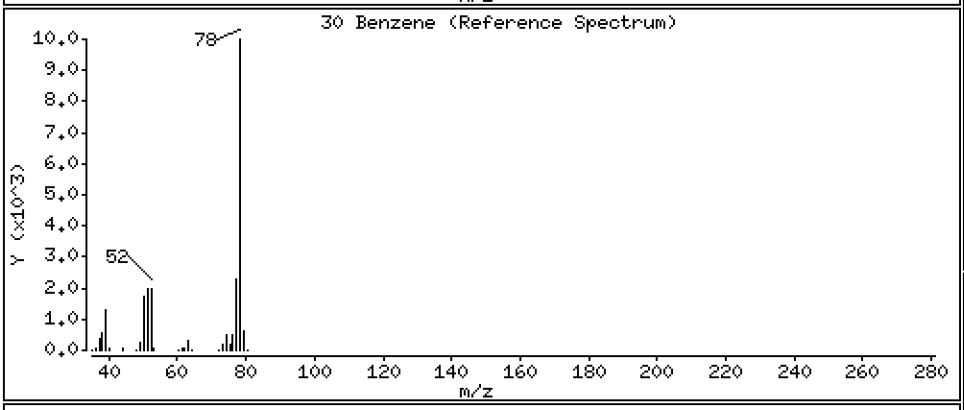
Concentration: 1.397 ug/Kg

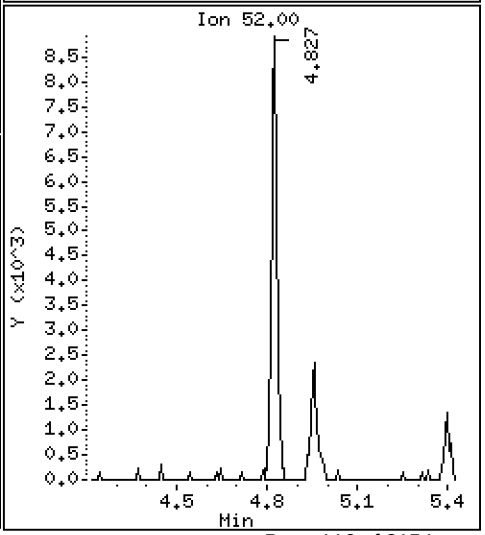


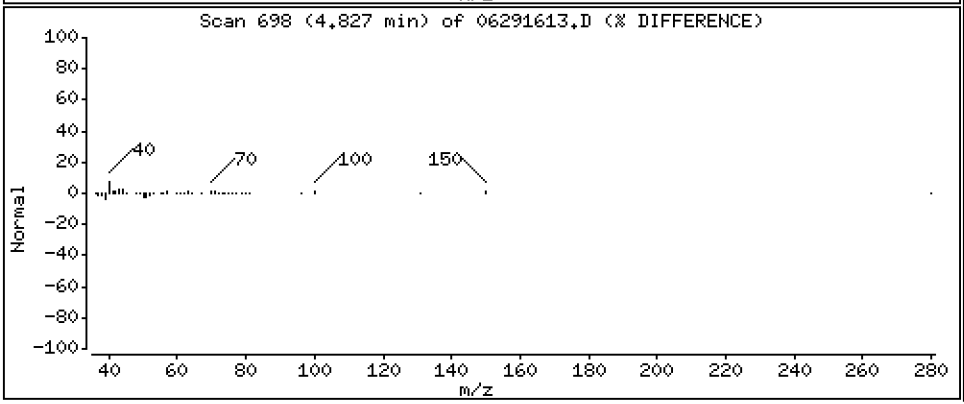












Data File: \\target\share\chem1\nt5.i\20160629.b\06291613.D

Date : 29-JUN-2016 19:47

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-08

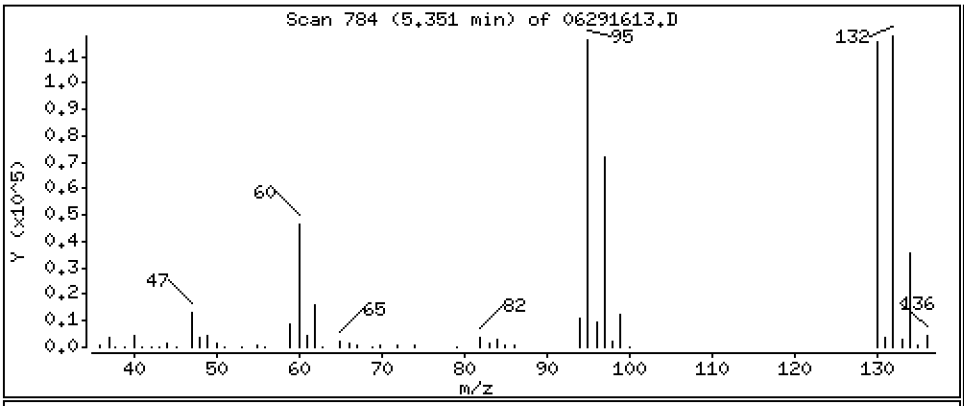
Operator: PB

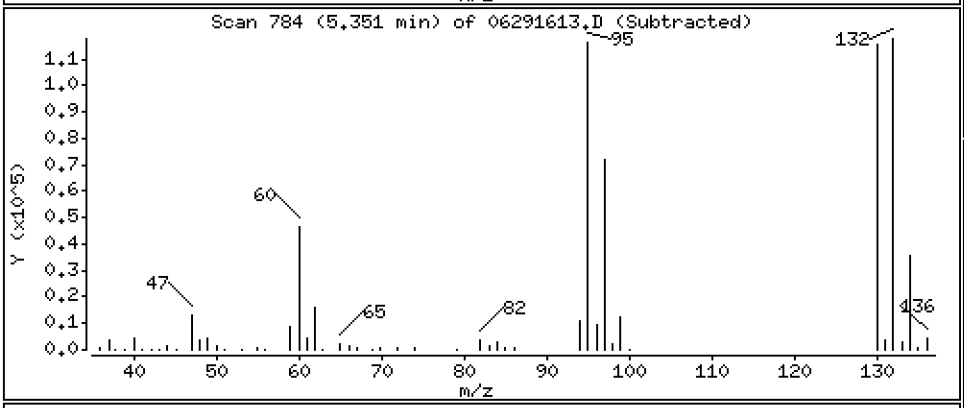
Column phase: RTXVMS

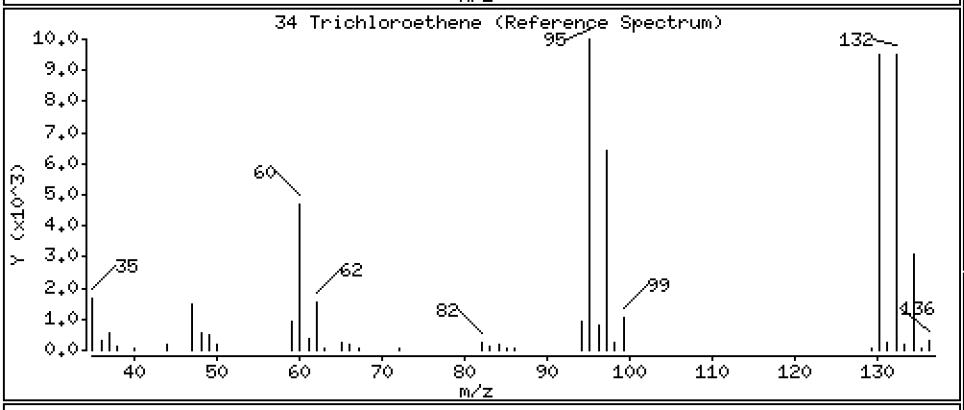
Column diameter: 0.18

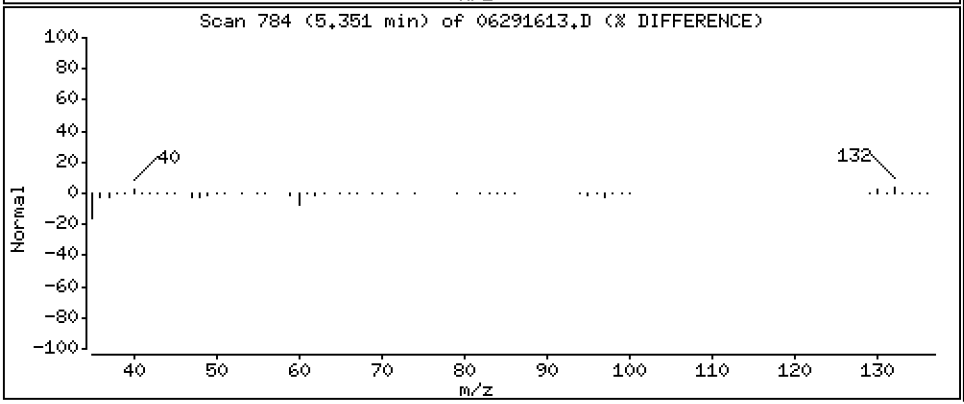
34 Trichloroethene

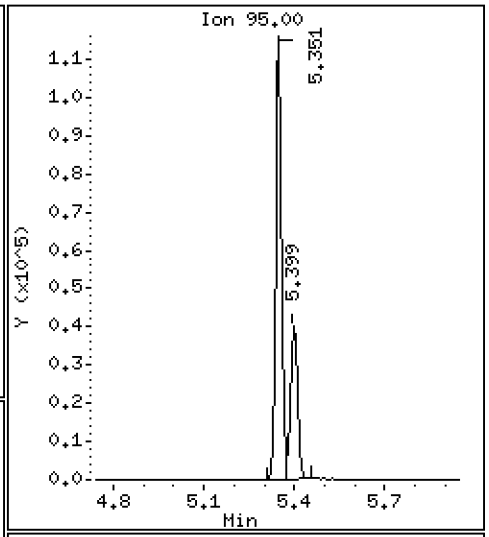
Concentration: 11.510 ug/Kg

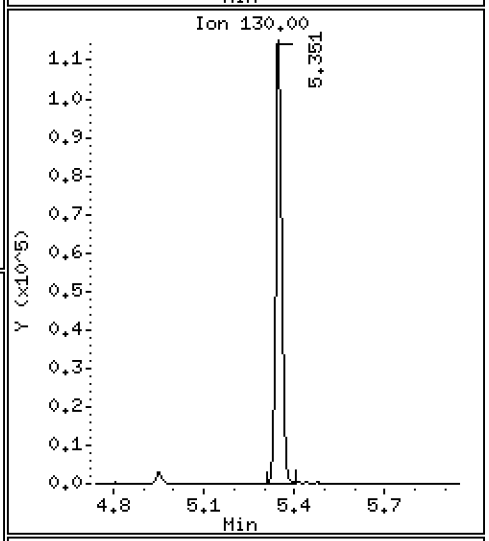


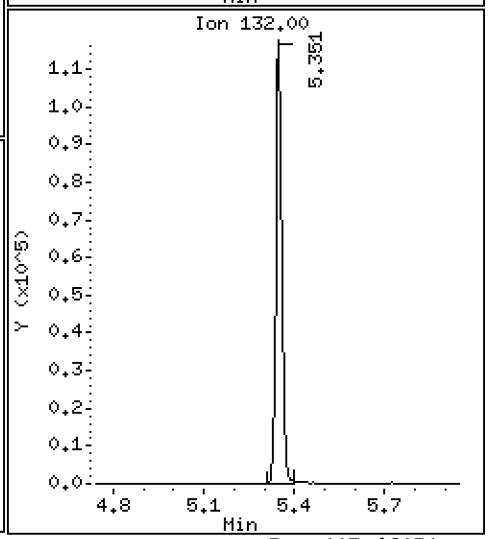












Data File: \\target\share\chem1\nt5.i\20160629.b\06291613.D

Date : 29-JUN-2016 19:47

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-08

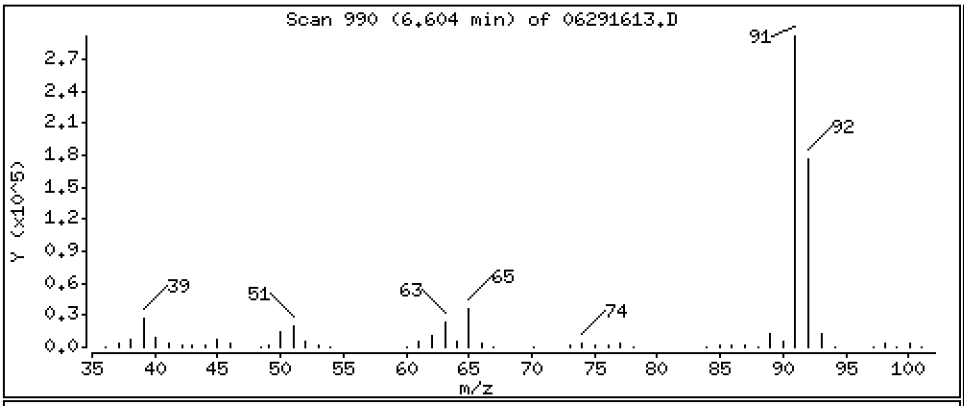
Operator: PB

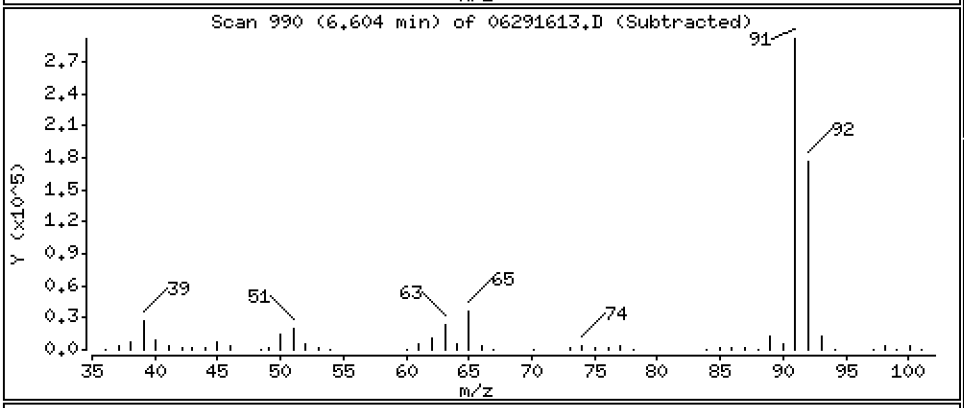
Column phase: RTXVMS

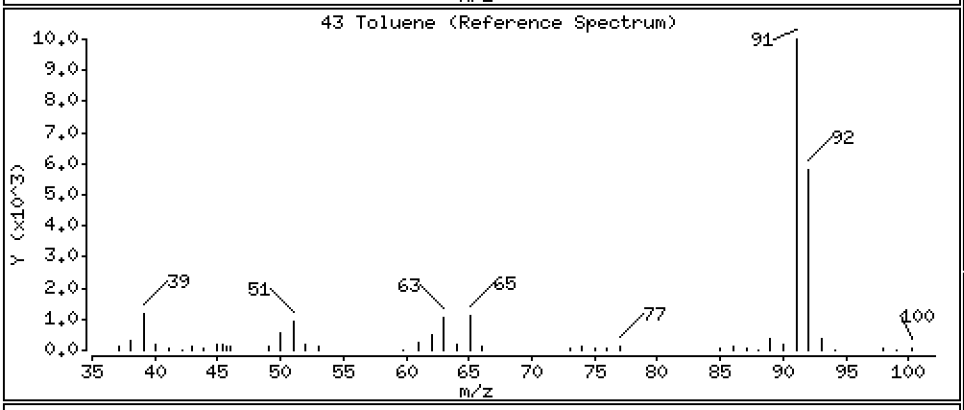
Column diameter: 0.18

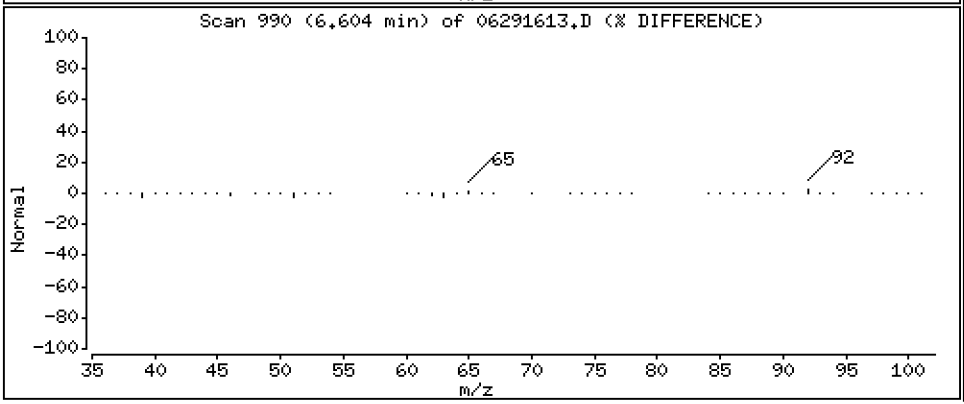
43 Toluene

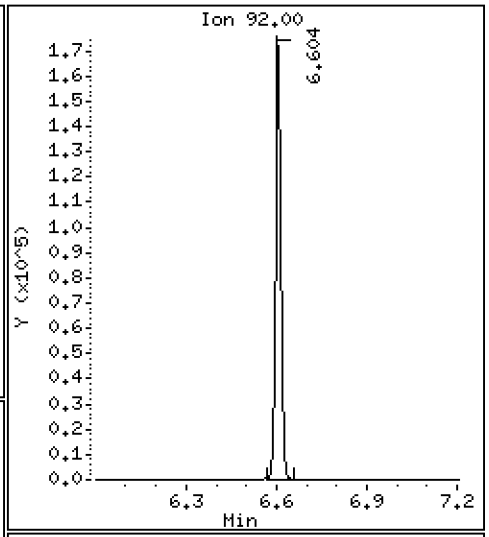
Concentration: 6.620 ug/Kg

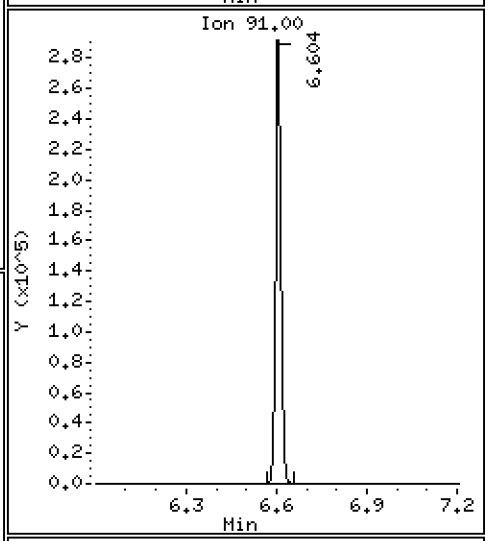


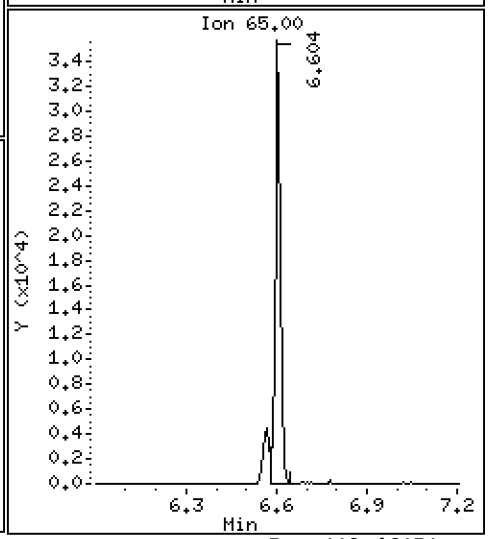












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291613.D
Lab Smp Id: 16F0096-08
Inj Date : 29-JUN-2016 19:47
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-08
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	1.341	1.347	(0.271)	126579	6.97153	6.972
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.054	4.048	(0.818)	3155469	199.409	199.41
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.492	4.486	(0.907)	774596	51.8737	51.874
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	4.827	4.821	(0.894)	81883	1.39731	1.397
*	31 Pentafluorobenzene	168	4.955	4.949	(1.000)	626507	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.000)	786510	52.6888	52.689
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.350	5.344	(0.991)	174789	11.5104	11.510
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2169856	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.561	(1.216)	2724899	49.0111	49.011
	43 Toluene	92	6.603	6.603	(1.223)	249562	6.61968	6.620
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2306101	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1215374	49.0062	49.006
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1145801	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1173844	50.8762	50.876
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291613.D
Lab Smp Id: 16F0096-08
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	626507	4.42
35 1,4-Difluorobenze	2041239	1020620	4082478	2169856	6.30
52 d5-Chlorobenzene	2118314	1059157	4236628	2306101	8.86
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1145801	8.60

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.13
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.11
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-08
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	51.874	103.75	70-130
$ 32 d4-1,2-Dichloroeth	50.000	52.689	105.38	80-149
$ 42 d8-Toluene	50.000	49.011	98.02	77-120
$ 62 4-Bromofluorobenze	50.000	49.006	98.01	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.876	101.75	80-120

REVIEW SUMMARY FOR FILE - 06291613.D

Lab ID: 16F0096-08
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 19:47

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-O-04-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-09	File ID:	06291614.D
Sampled:	06/29/16 11:45	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 20:10
Solids:	91.76	Preparation:	No Prep - Volatiles	Initial/Final:	5.06 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.08	U	0.25	1.08
74-83-9	Bromomethane	1	1.08	U	0.20	1.08
156-59-2	cis-1,2-Dichloroethene	1	125		0.26	1.08
71-43-2	Benzene	1	0.49	J	0.32	1.08
79-01-6	Trichloroethene	1	125		0.23	1.08
108-88-3	Toluene	1	7.40		0.16	1.08
127-18-4	Tetrachloroethene	1	1.08	U	0.28	1.08
100-41-4	Ethylbenzene	1	1.08	U	0.22	1.08
179601-23-1	m,p-Xylene	1	0.52	J	0.42	1.08
95-47-6	o-Xylene	1	1.08	U	0.24	1.08

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	51.7	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	51.1	102	80 - 120	
Toluene-d8	50.000	49.3	98.7	77 - 120	
4-Bromofluorobenzene	50.000	49.5	99.1	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291614.D

Date : 29-JUN-2016 20:10

Client ID:

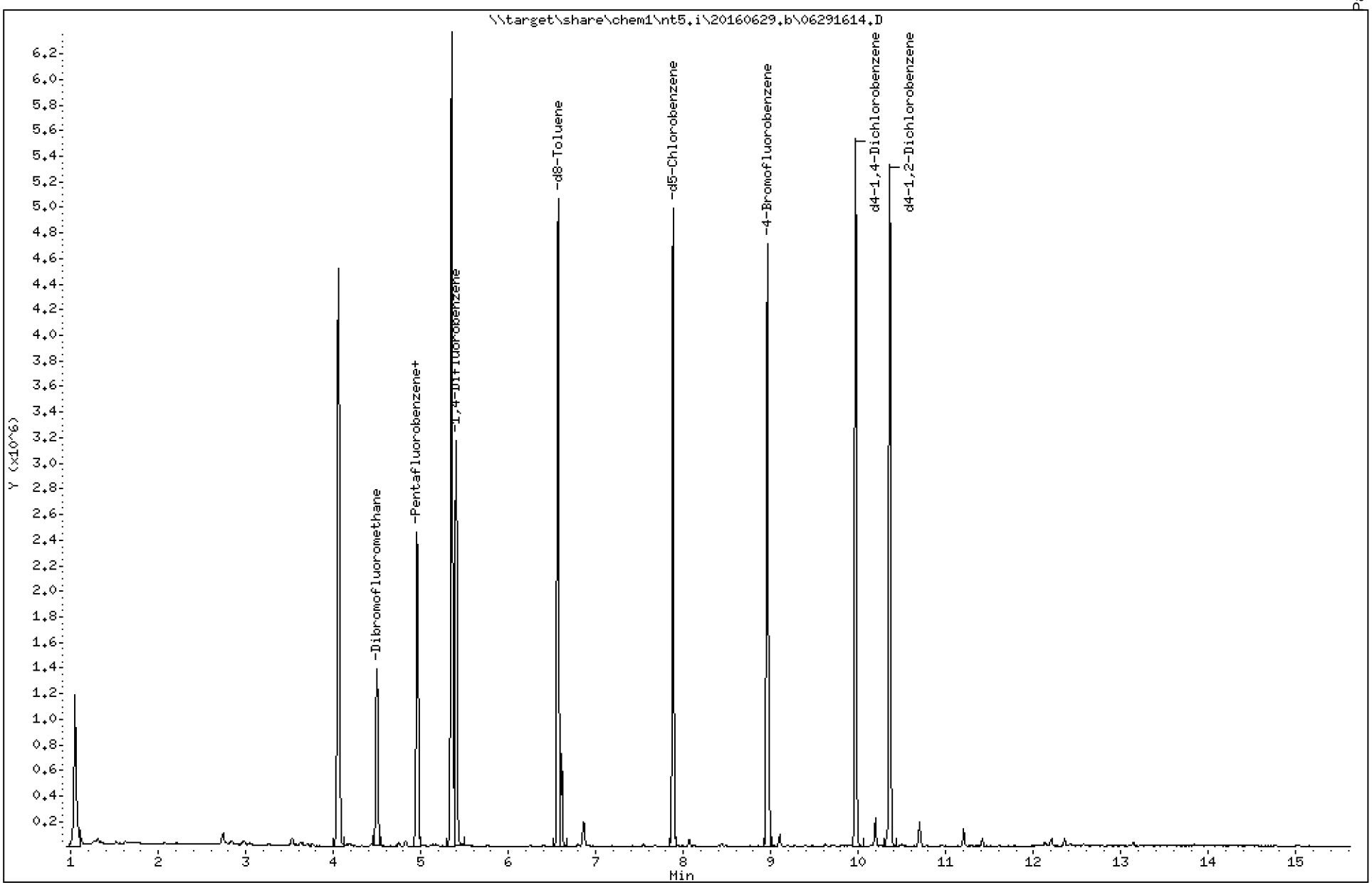
Sample Info: 16F0096-09

Column phase: RTXVMS

Instrument: nt5.i

Operator: PB

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160629.b\06291614.D

Date : 29-JUN-2016 20:10

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-09

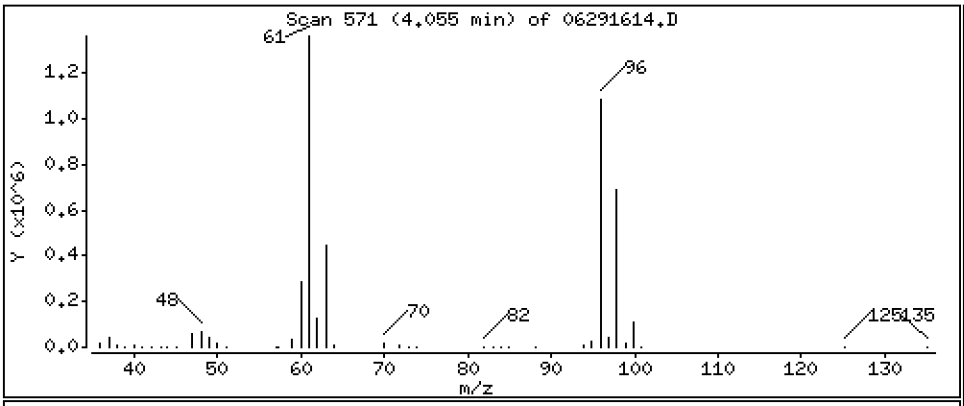
Operator: PB

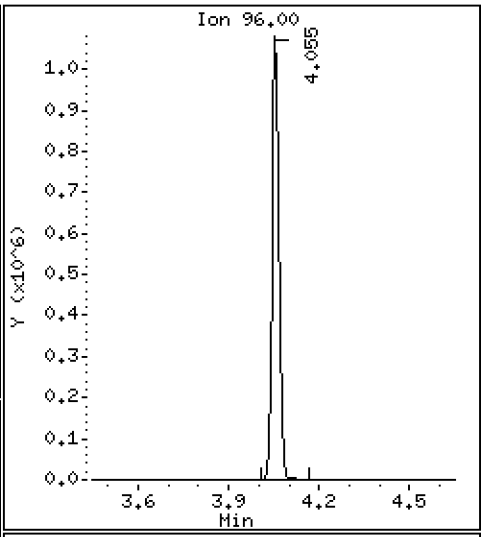
Column phase: RTXVMS

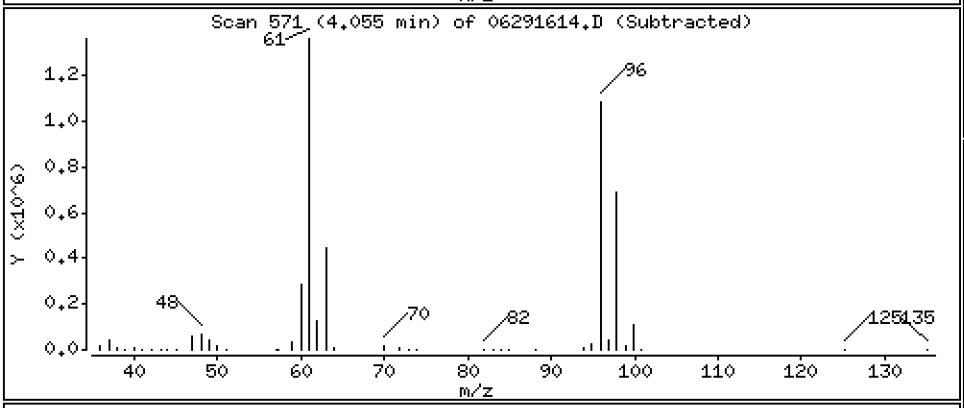
Column diameter: 0.18

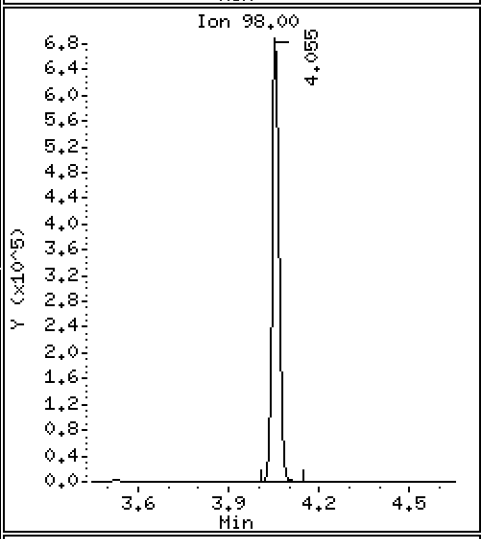
20 Cis-1,2-Dichloroethene

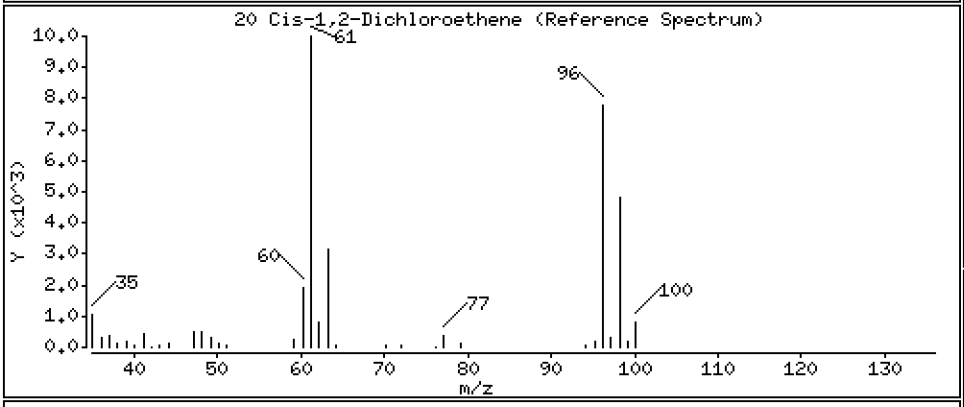
Concentration: 116.31 ug/Kg

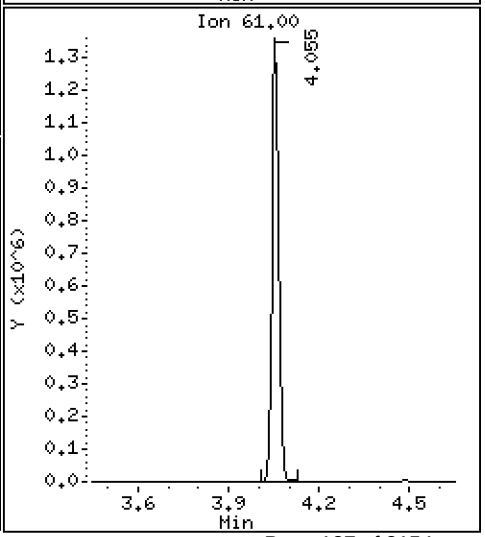


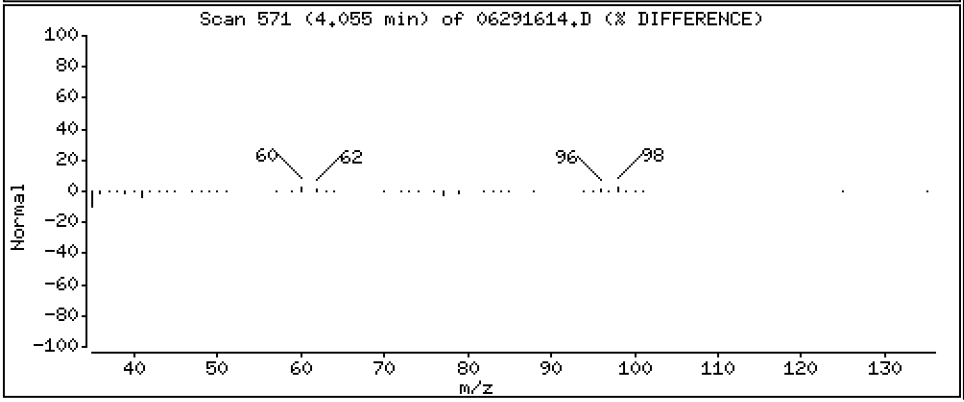












Data File: \\target\share\chem1\nt5.i\20160629.b\06291614.D

Date : 29-JUN-2016 20:10

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-09

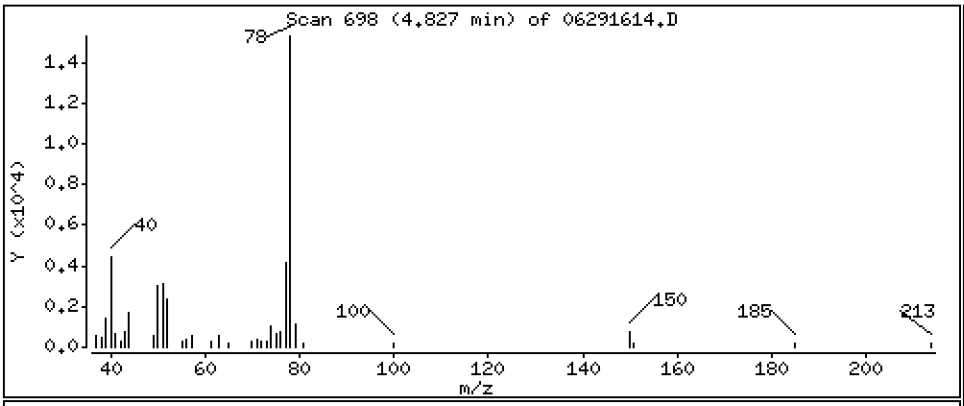
Operator: PB

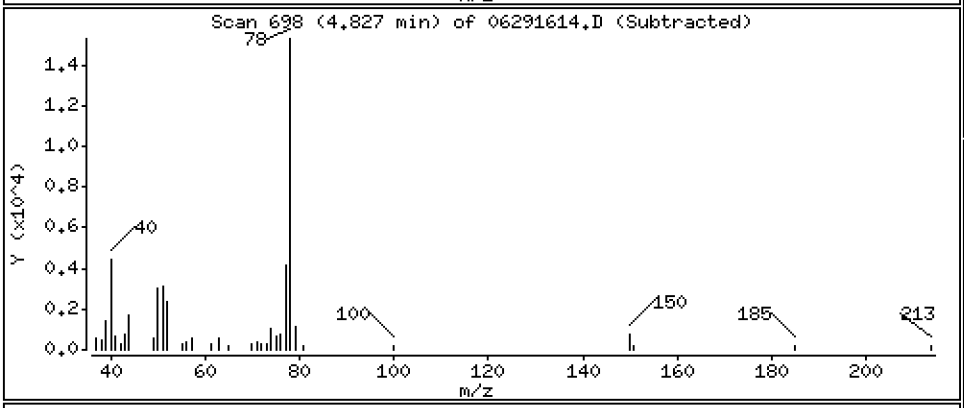
Column phase: RTXVMS

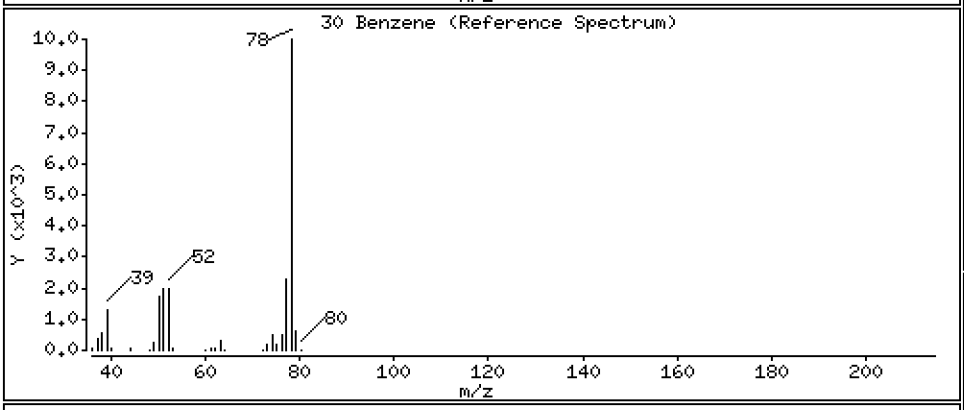
Column diameter: 0.18

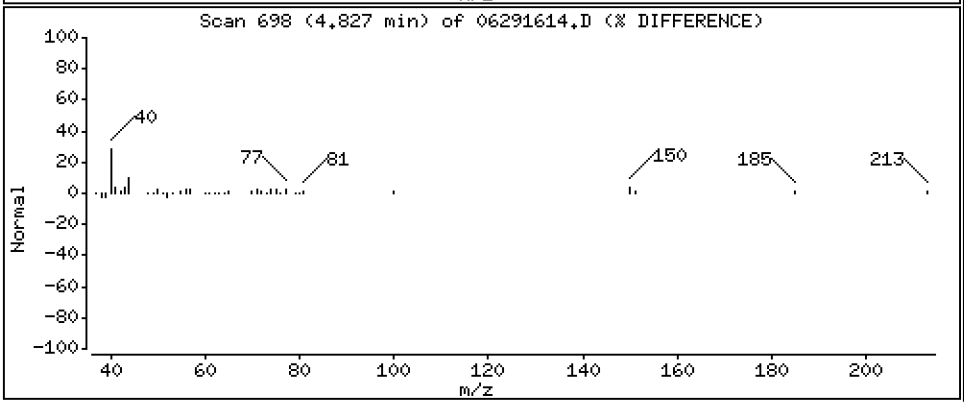
30 Benzene

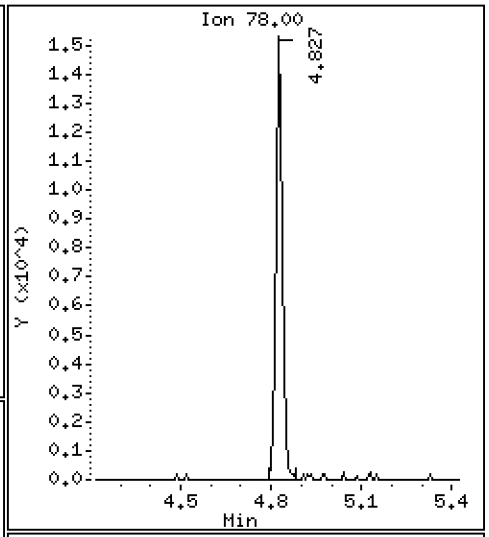
Concentration: 0.4584 ug/Kg

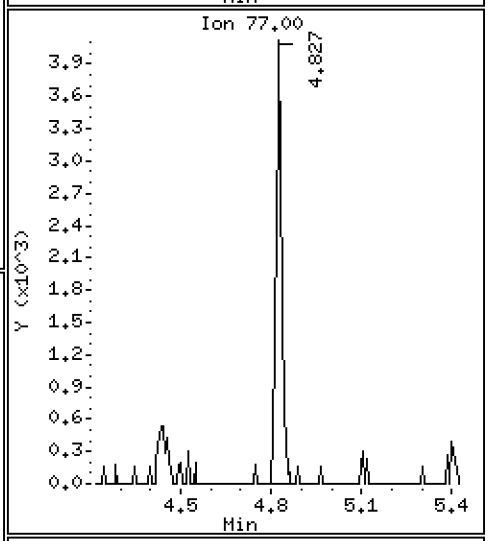


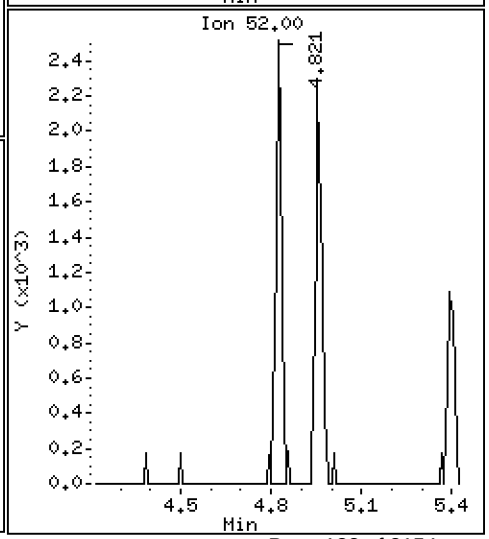












Data File: \\target\share\chem1\nt5.i\20160629.b\06291614.D

Date : 29-JUN-2016 20:10

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-09

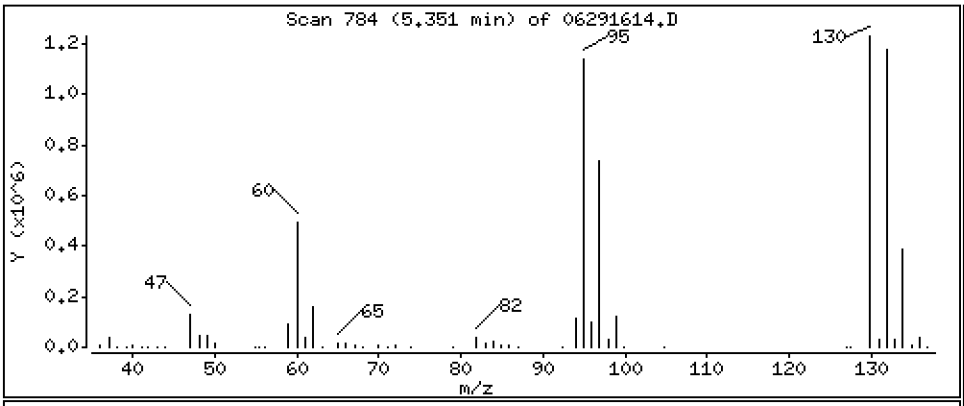
Operator: PB

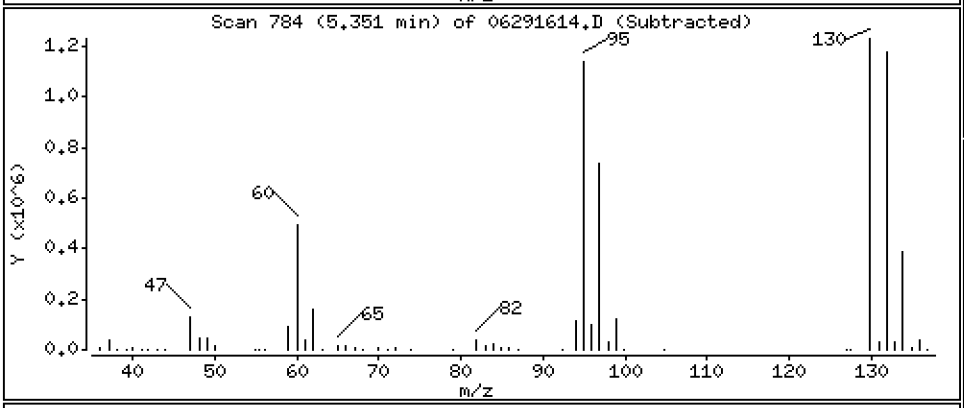
Column phase: RTXVMS

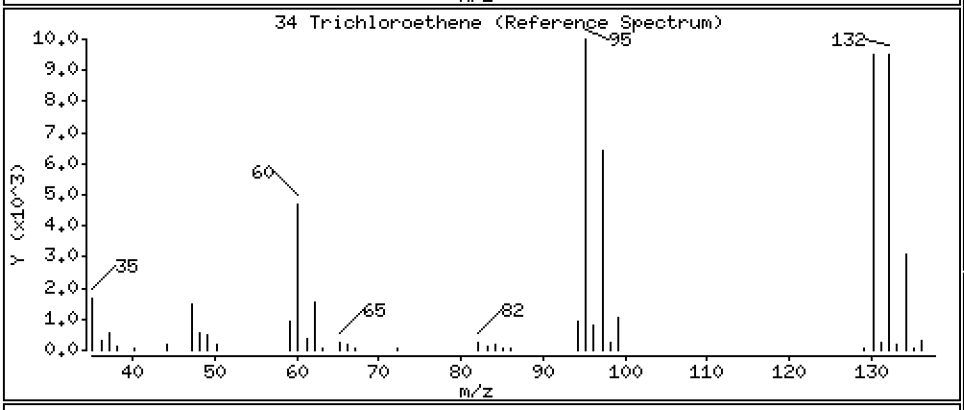
Column diameter: 0.18

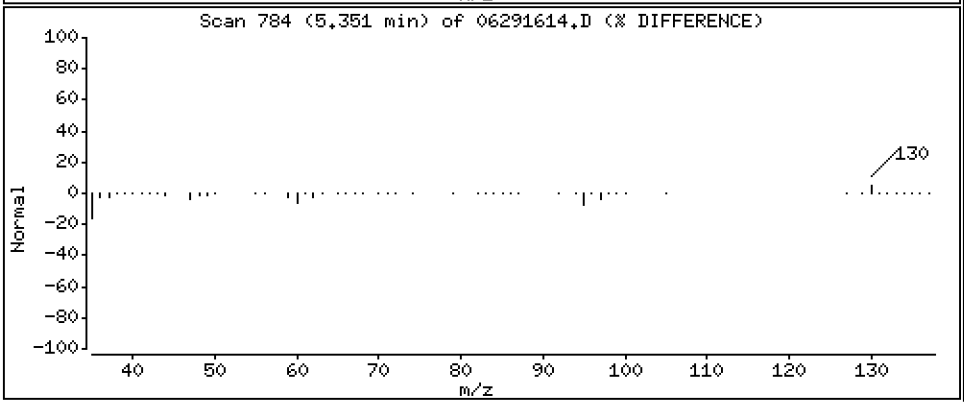
34 Trichloroethene

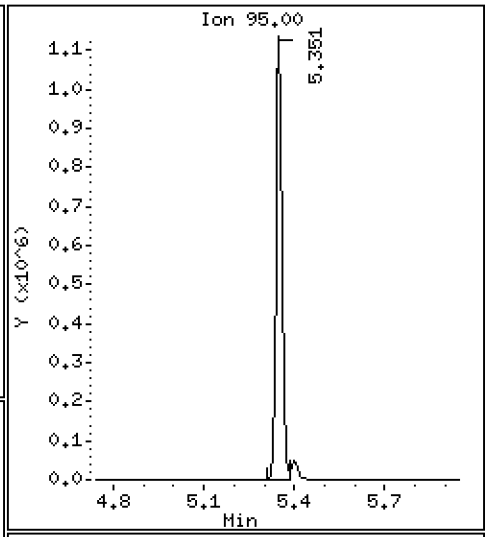
Concentration: 115.79 ug/Kg

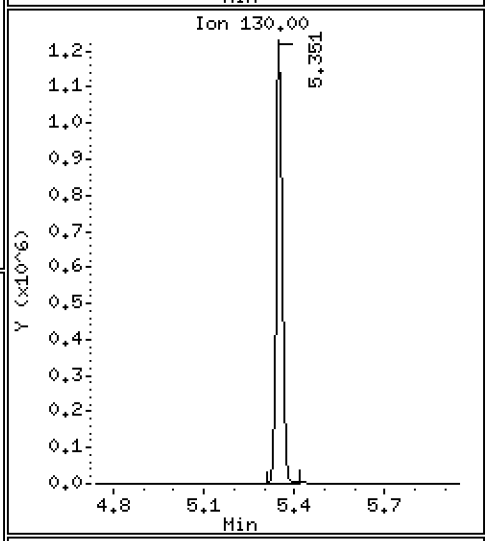


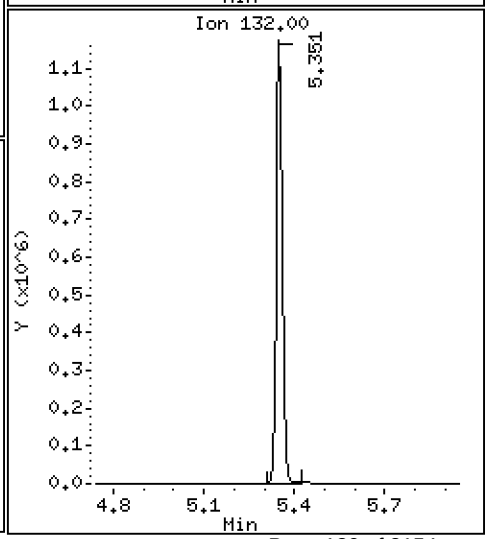












Data File: \\target\share\chem1\nt5.i\20160629.b\06291614.D

Date : 29-JUN-2016 20:10

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-09

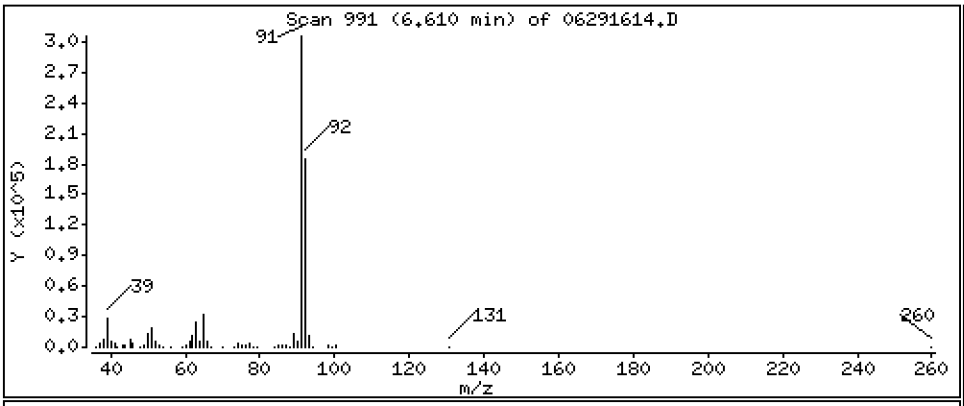
Operator: PB

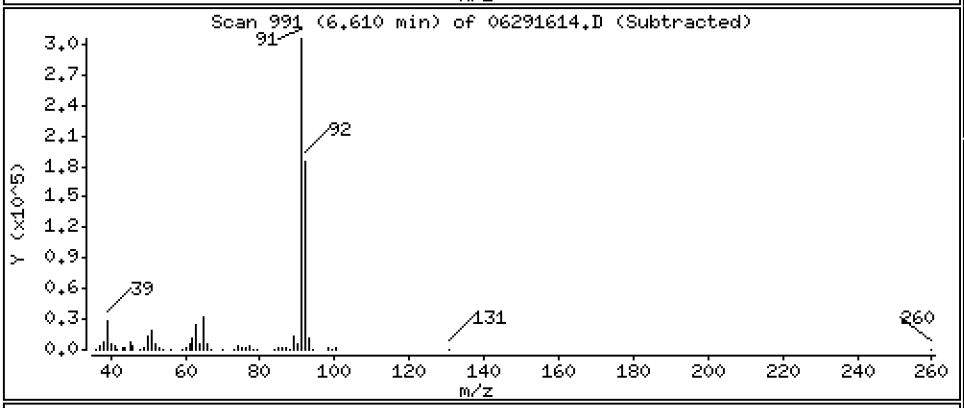
Column phase: RTXVMS

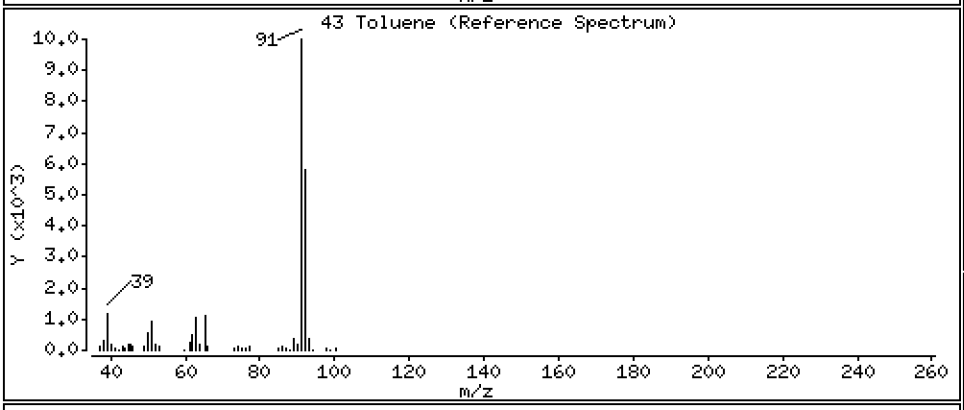
Column diameter: 0.18

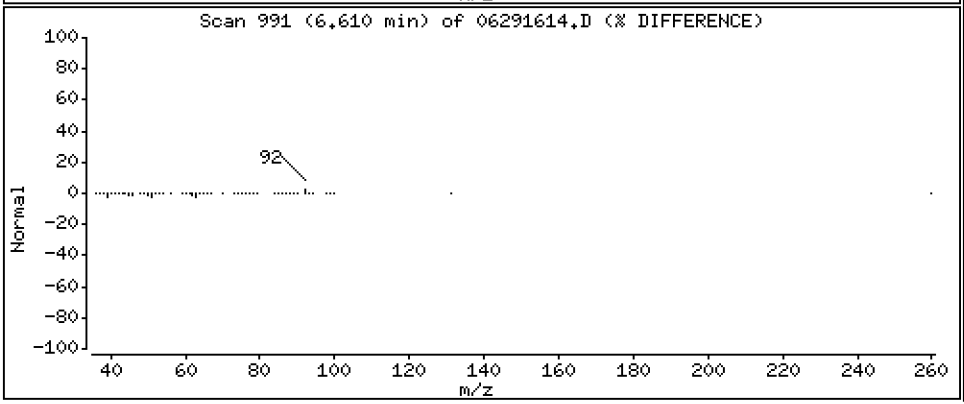
43 Toluene

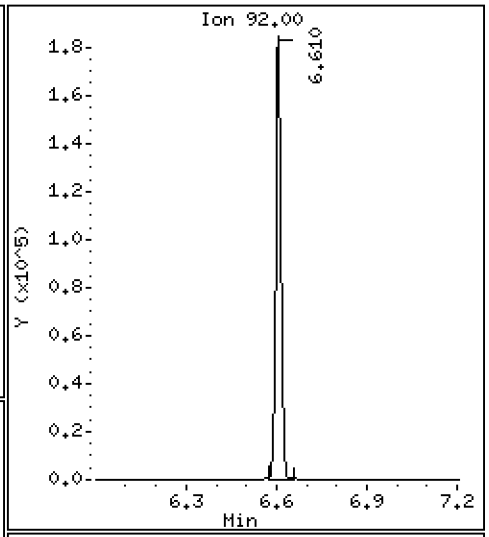
Concentration: 6.876 ug/Kg

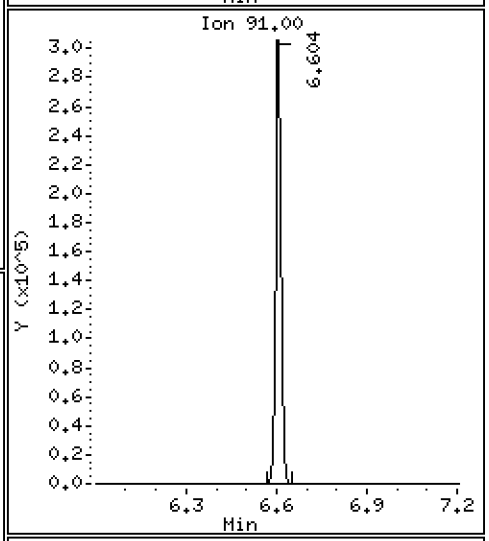


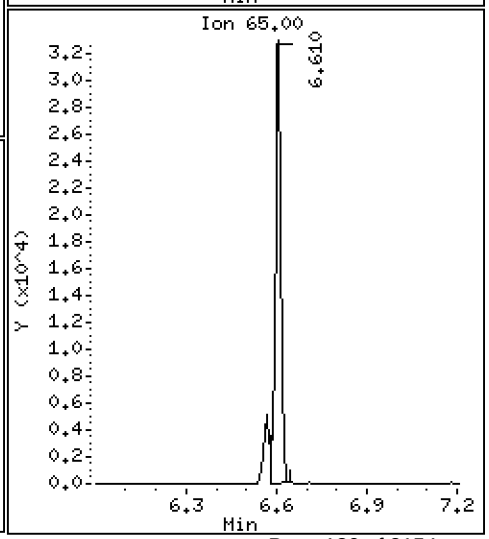












Data File: \\target\share\chem1\nt5.i\20160629.b\06291614.D

Date : 29-JUN-2016 20:10

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-09

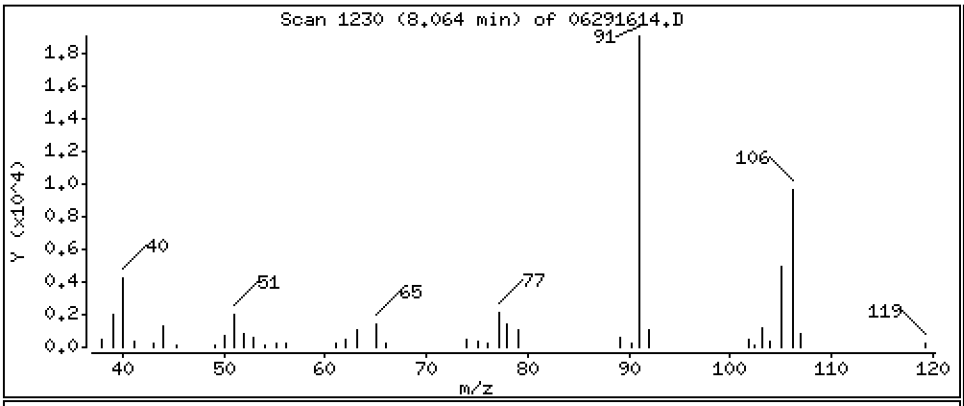
Operator: PB

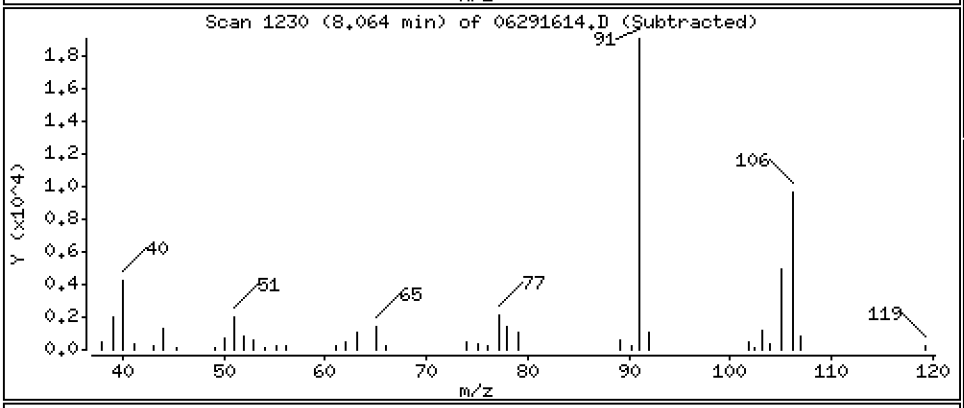
Column phase: RTXVMS

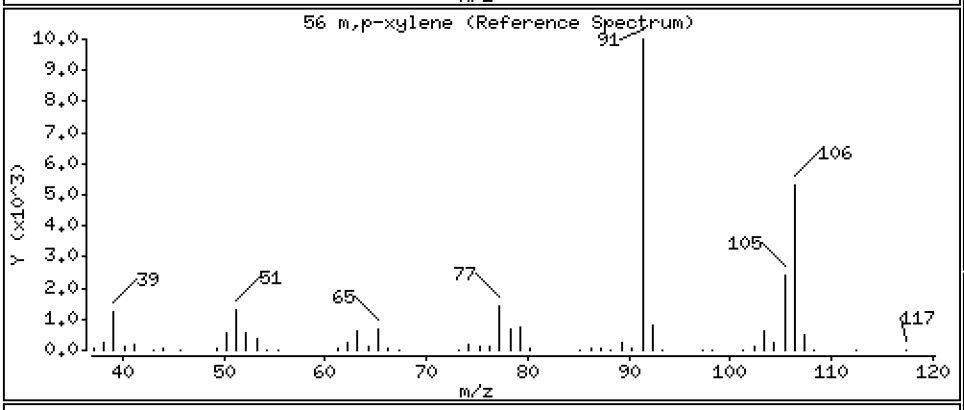
Column diameter: 0.18

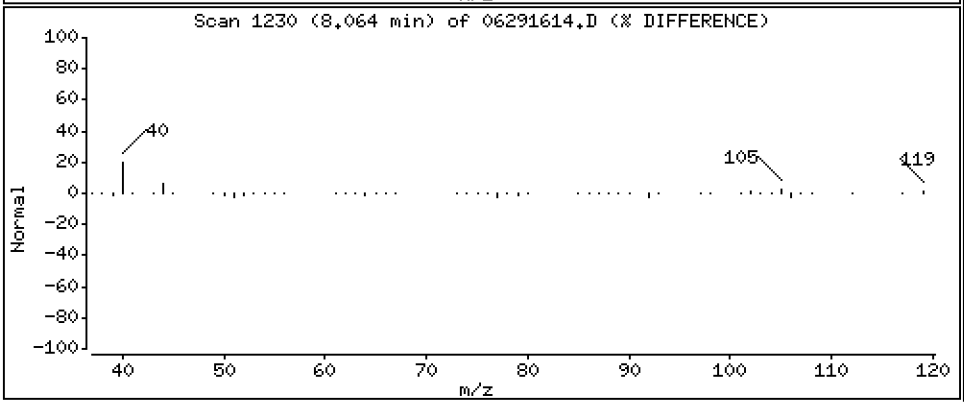
56 m,p-xylene

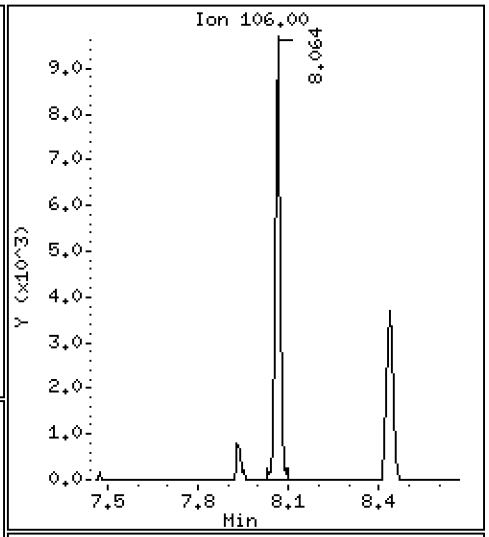
Concentration: 0.4813 ug/Kg

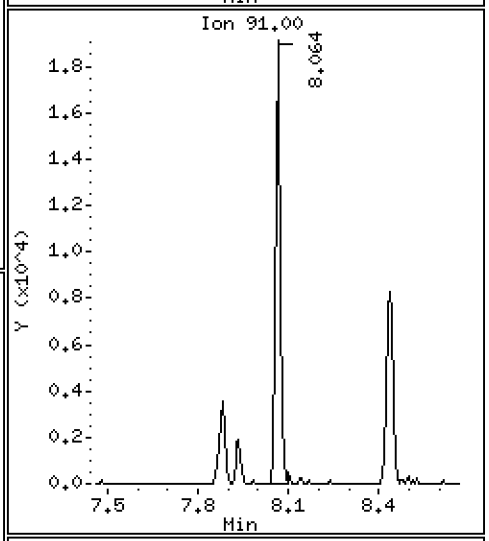


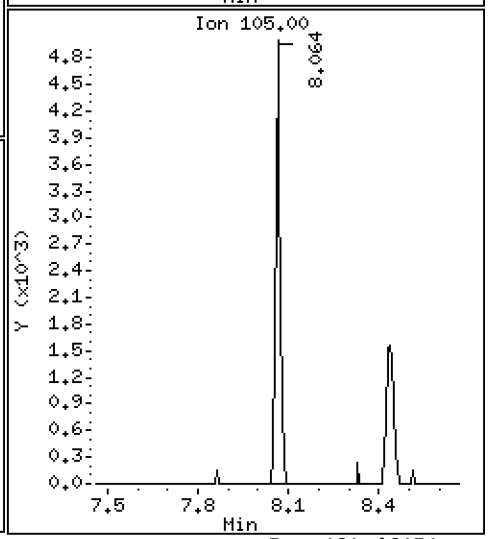












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291614.D
Lab Smp Id: 16F0096-09
Inj Date : 29-JUN-2016 20:10
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-09
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.054	4.048	(0.818)	1870558	116.314	116.31
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.498	4.486	(0.908)	771933	50.8665	50.867
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	4.827	4.821	(0.894)	26943	0.45840	0.4584
*	31 Pentafluorobenzene	168	4.955	4.949	(1.000)	636716	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.001)	784083	51.6840	51.684
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.350	5.344	(0.991)	1763566	115.790	115.79
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2176356	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.561	(1.216)	2751448	49.3408	49.341
	43 Toluene	92	6.609	6.603	(1.224)	259993	6.87576	6.876
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2329189	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.063	8.063	(1.023)	13283	0.48130	0.4813
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1240945	49.5413	49.541
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1182555	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1217641	51.1342	51.134
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291614.D
Lab Smp Id: 16F0096-09
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	636716	6.13
35 1,4-Difluorobenze	2041239	1020620	4082478	2176356	6.62
52 d5-Chlorobenzene	2118314	1059157	4236628	2329189	9.95
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1182555	12.09

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.12
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.11
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-09
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	50.867	101.73	70-130
$ 32 d4-1,2-Dichloroeth	50.000	51.684	103.37	80-149
$ 42 d8-Toluene	50.000	49.341	98.68	77-120
$ 62 4-Bromofluorobenze	50.000	49.541	99.08	80-120
$ 79 d4-1,2-Dichloroben	50.000	51.134	102.27	80-120

REVIEW SUMMARY FOR FILE - 06291614.D

Lab ID: 16F0096-09
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 20:10

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-O-05-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-10	File ID:	06291615.D
Sampled:	06/29/16 11:35	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 20:32
Solids:	91.50	Preparation:	No Prep - Volatiles	Initial/Final:	5.23 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.04	U	0.25	1.04
74-83-9	Bromomethane	1	1.04	U	0.20	1.04
156-59-2	cis-1,2-Dichloroethene	1	17.5		0.25	1.04
71-43-2	Benzene	1	1.04	U	0.31	1.04
79-01-6	Trichloroethene	1	0.74	J	0.22	1.04
108-88-3	Toluene	1	0.56	J	0.16	1.04
127-18-4	Tetrachloroethene	1	1.04	U	0.27	1.04
100-41-4	Ethylbenzene	1	1.04	U	0.21	1.04
179601-23-1	m,p-Xylene	1	1.04	U	0.41	1.04
95-47-6	o-Xylene	1	0.89	J	0.23	1.04

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	52.3	105	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.9	102	80 - 120	
Toluene-d8	50.000	49.5	99.0	77 - 120	
4-Bromofluorobenzene	50.000	49.8	99.6	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291615.D

Date : 29-JUN-2016 20:32

Client ID:

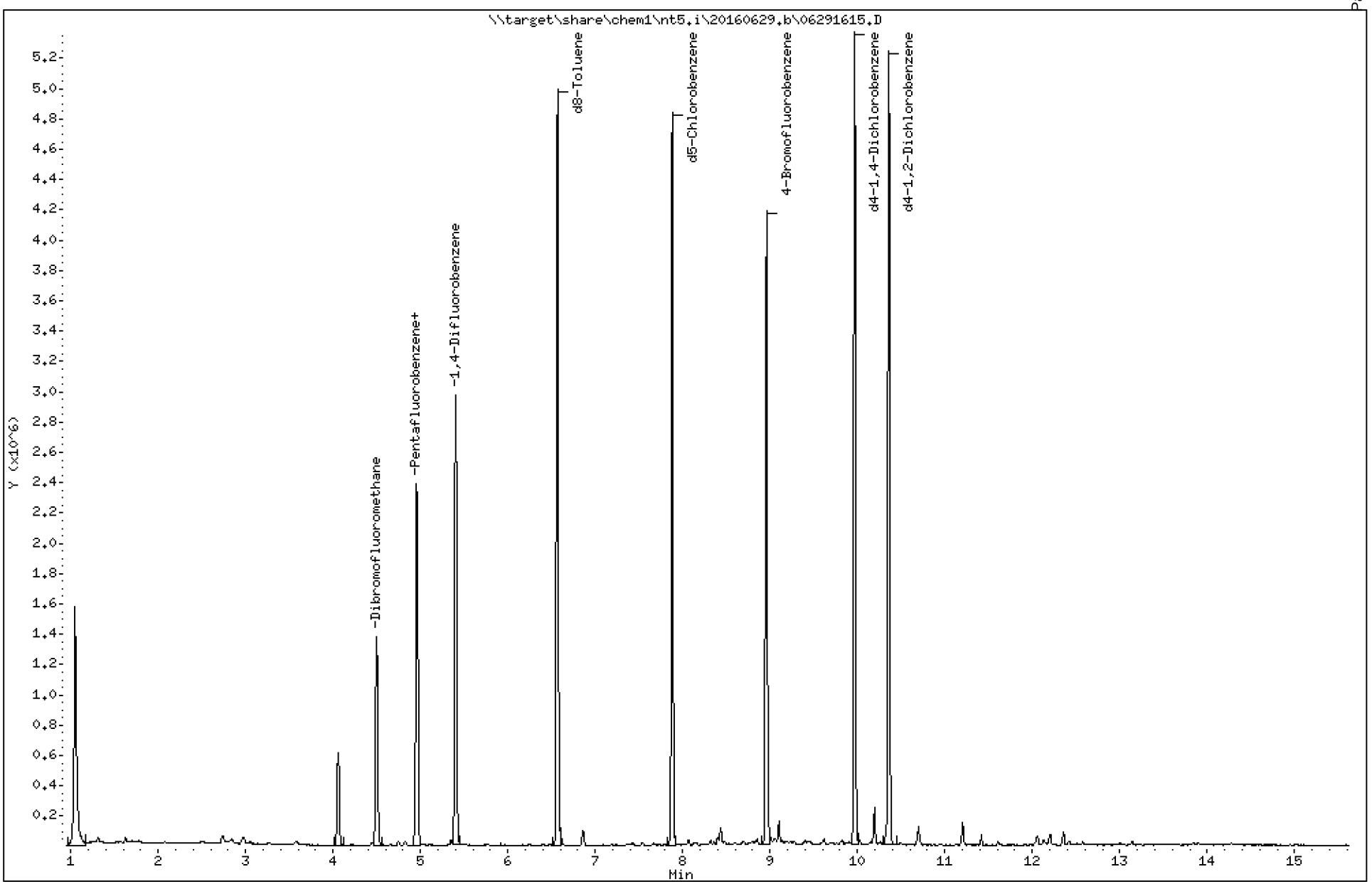
Instrument: nt5.i

Sample Info: 16F0096-10

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160629.b\06291615.D

Date : 29-JUN-2016 20:32

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-10

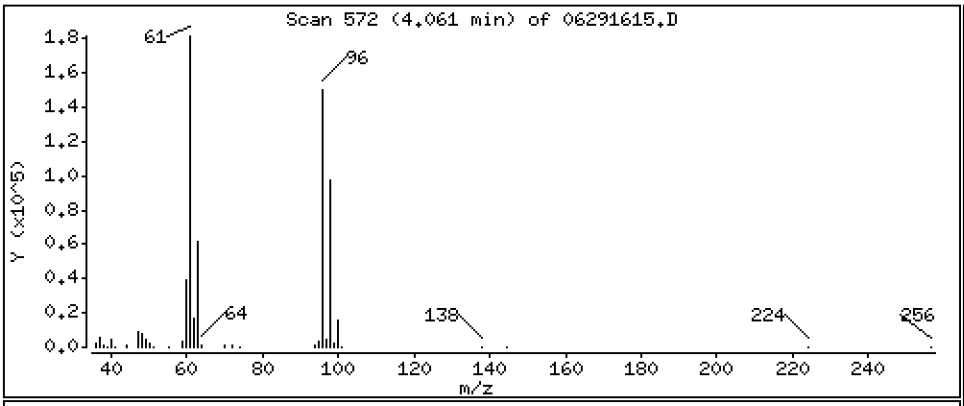
Operator: PB

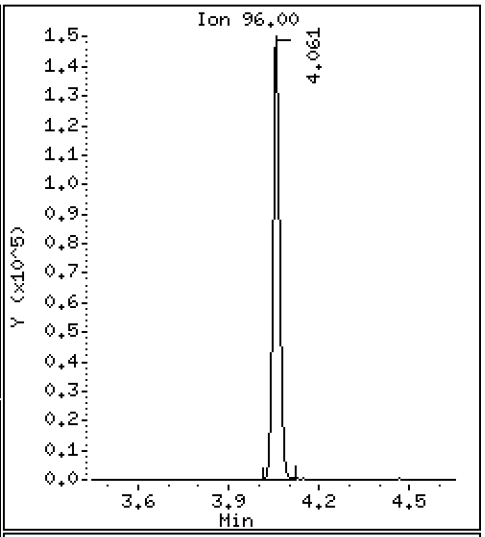
Column phase: RTXVMS

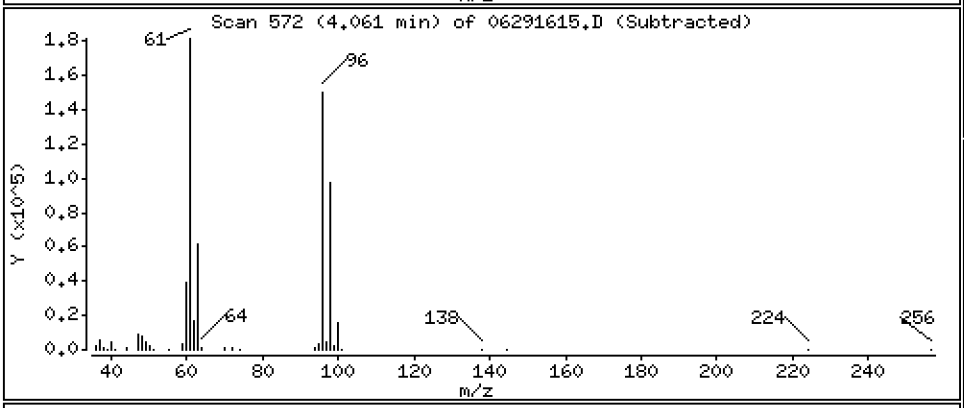
Column diameter: 0.18

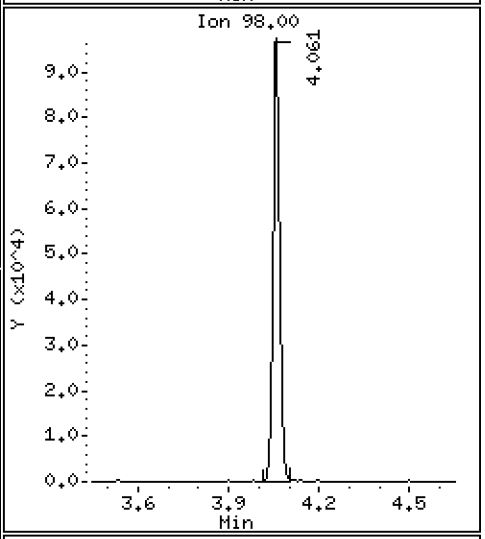
20 Cis-1,2-Dichloroethene

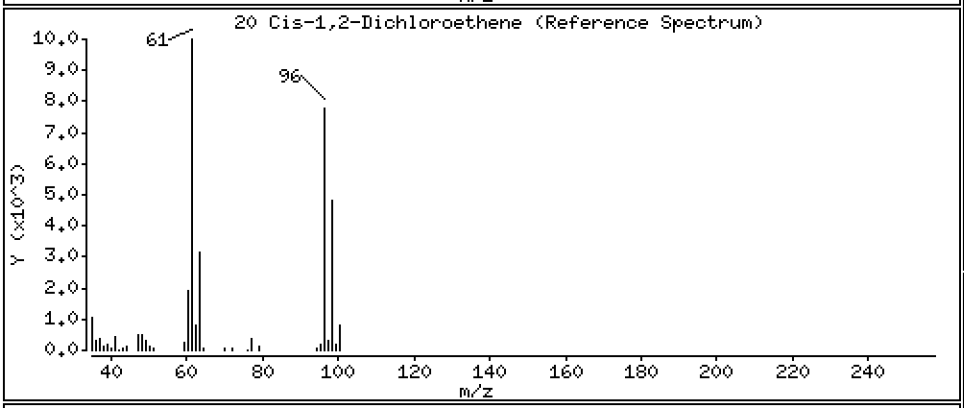
Concentration: 16.719 ug/Kg

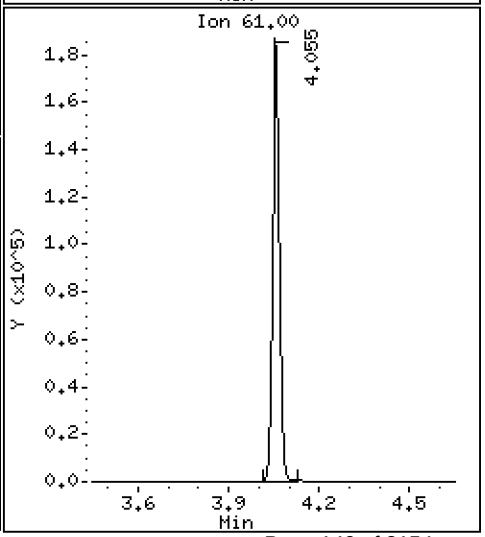


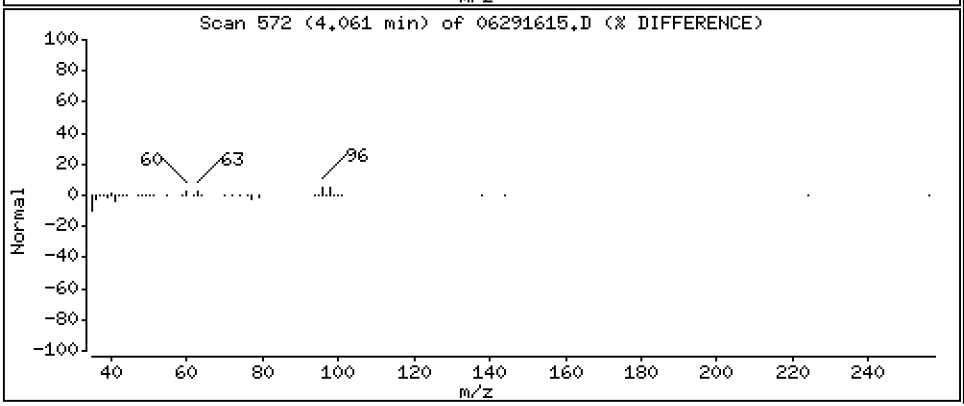












Data File: \\target\share\chem1\nt5.i\20160629.b\06291615.D

Date : 29-JUN-2016 20:32

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-10

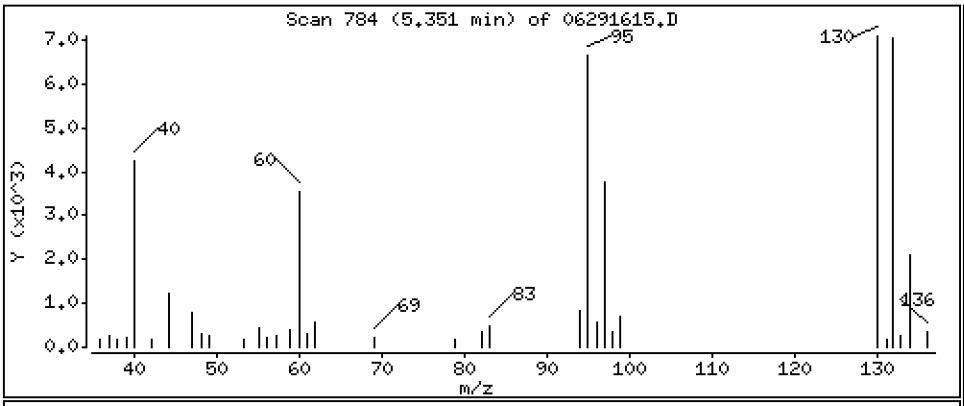
Operator: PB

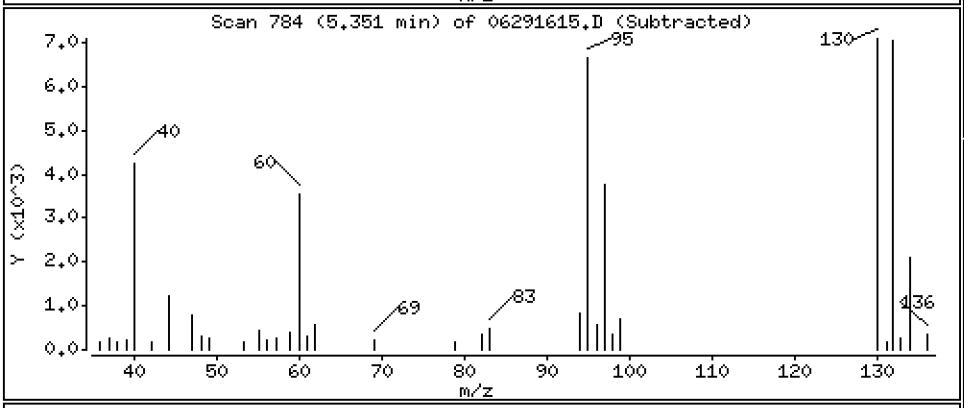
Column phase: RTXVMS

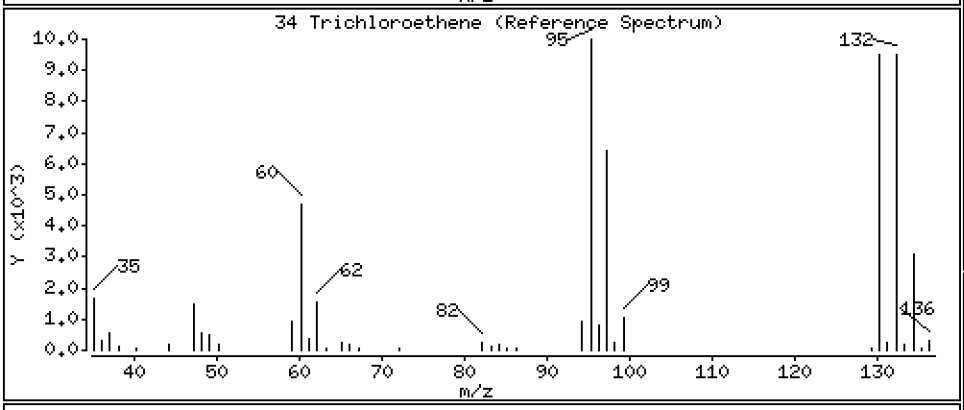
Column diameter: 0.18

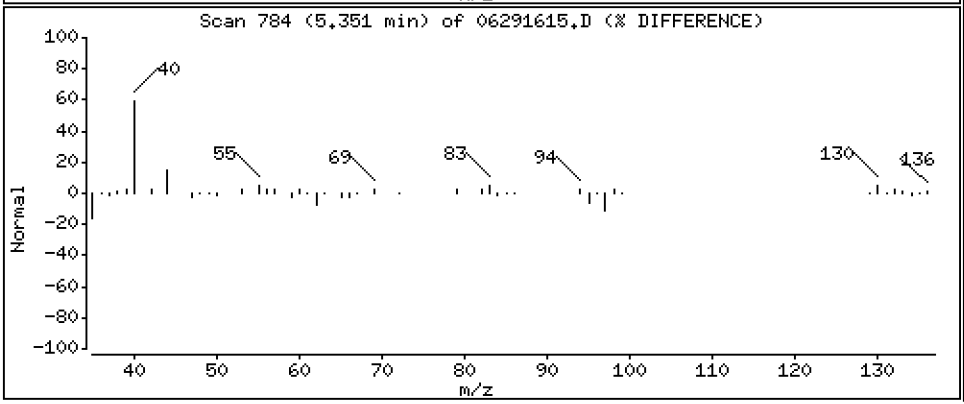
34 Trichloroethene

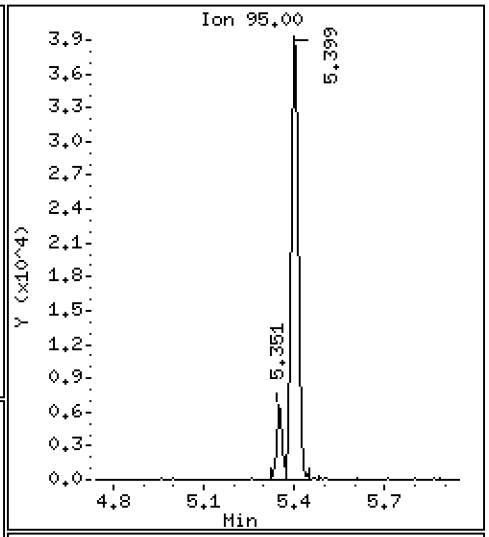
Concentration: 0.7043 ug/Kg

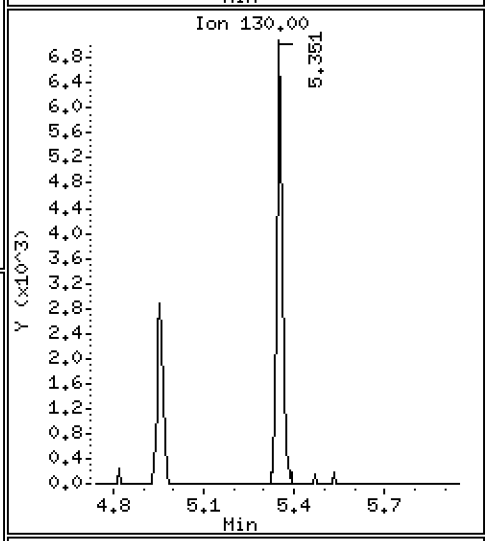


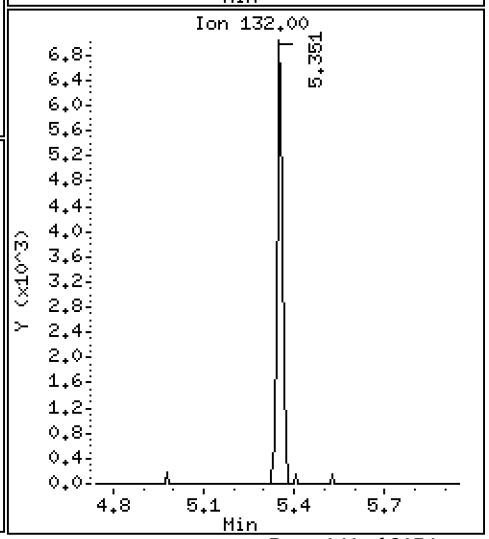












Data File: \\target\share\chem1\nt5.i\20160629.b\06291615.D

Date : 29-JUN-2016 20:32

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-10

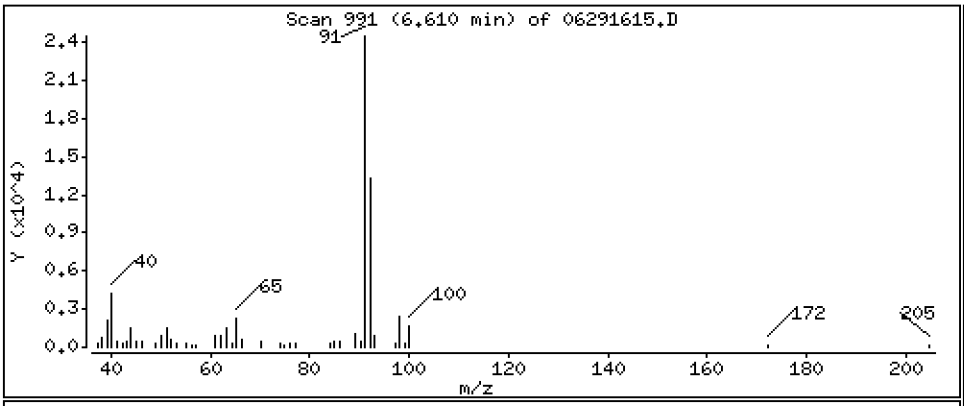
Operator: PB

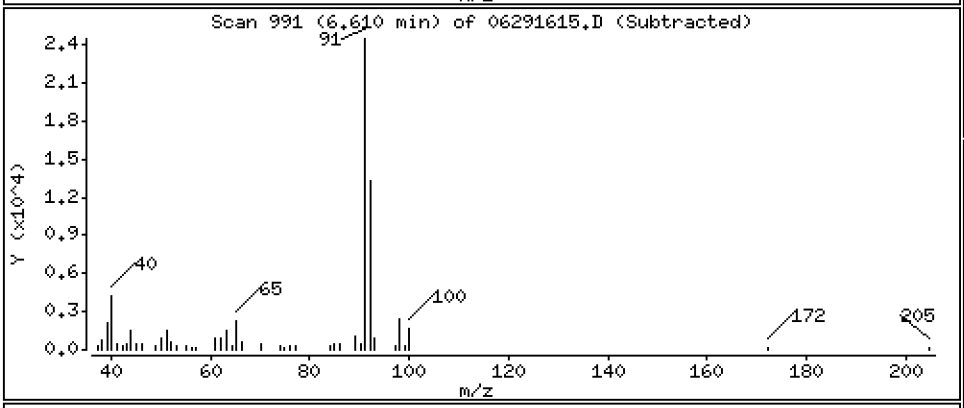
Column phase: RTXVMS

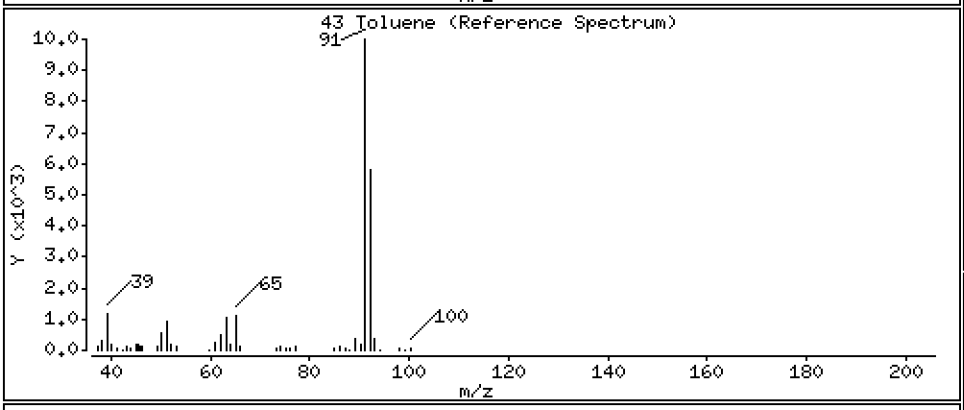
Column diameter: 0.18

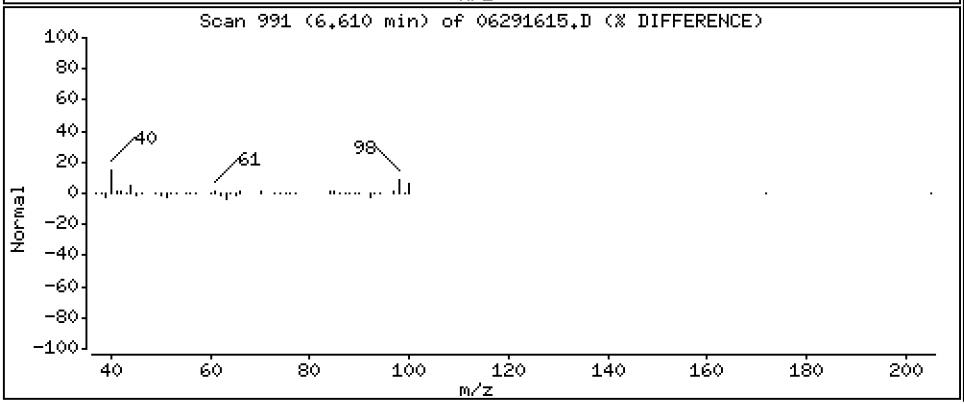
43 Toluene

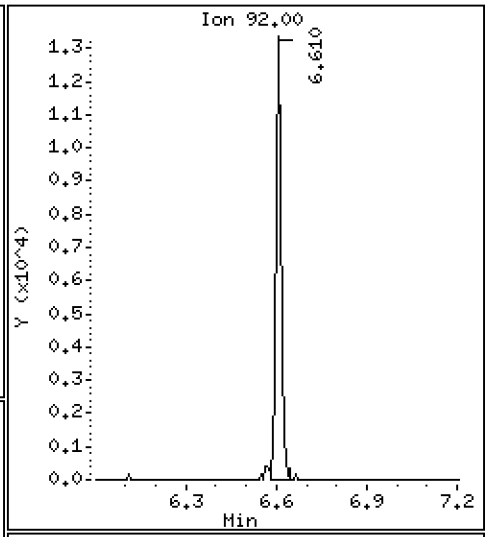
Concentration: 0.5385 ug/Kg

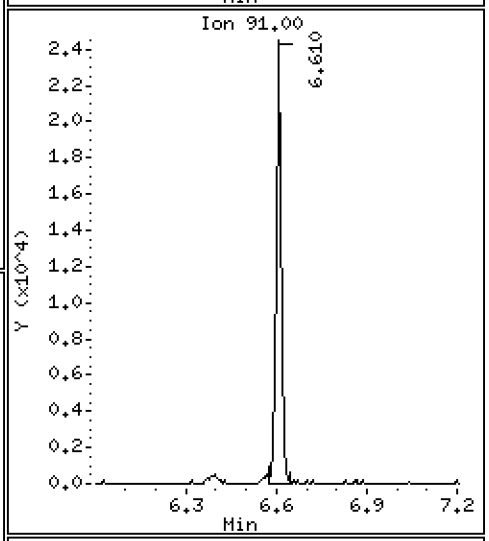


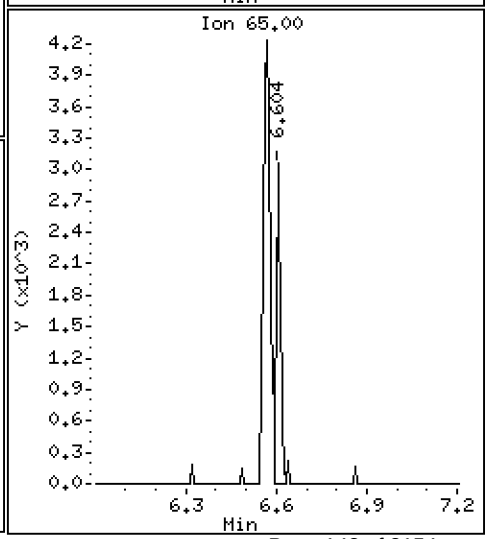












Data File: \\target\share\chem1\nt5.i\20160629.b\06291615.D

Date : 29-JUN-2016 20:32

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-10

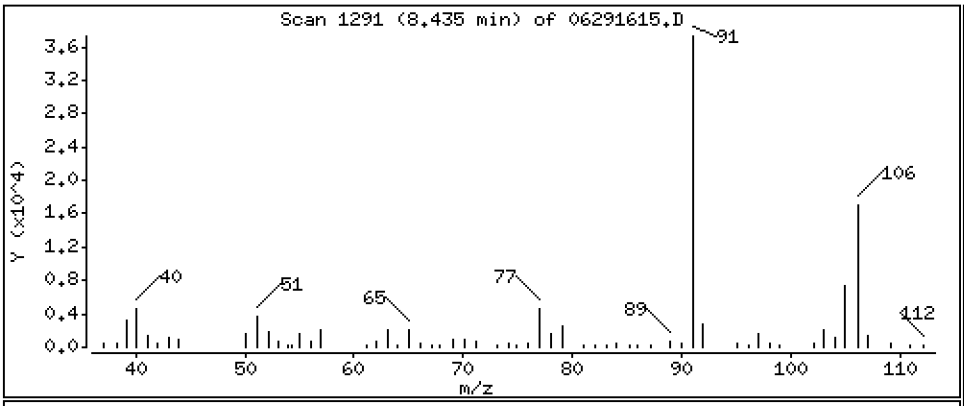
Operator: PB

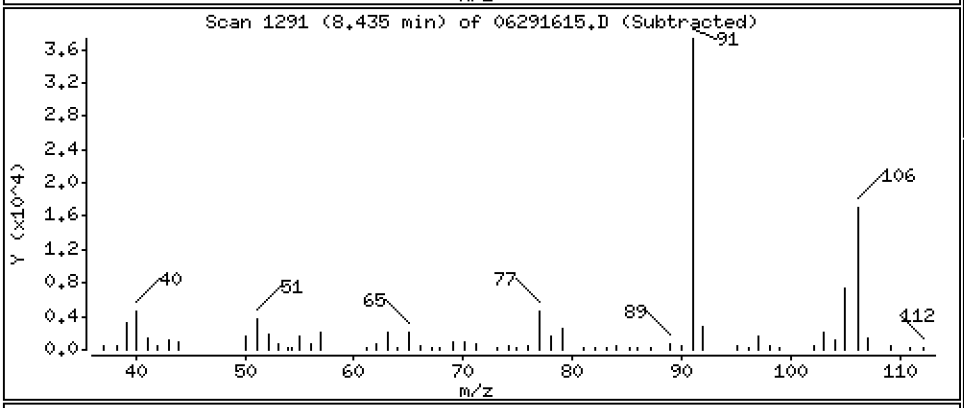
Column phase: RTXVMS

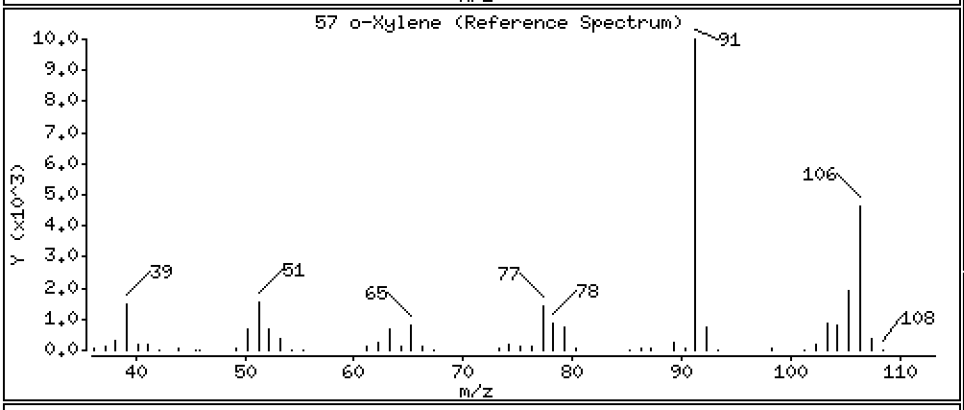
Column diameter: 0.18

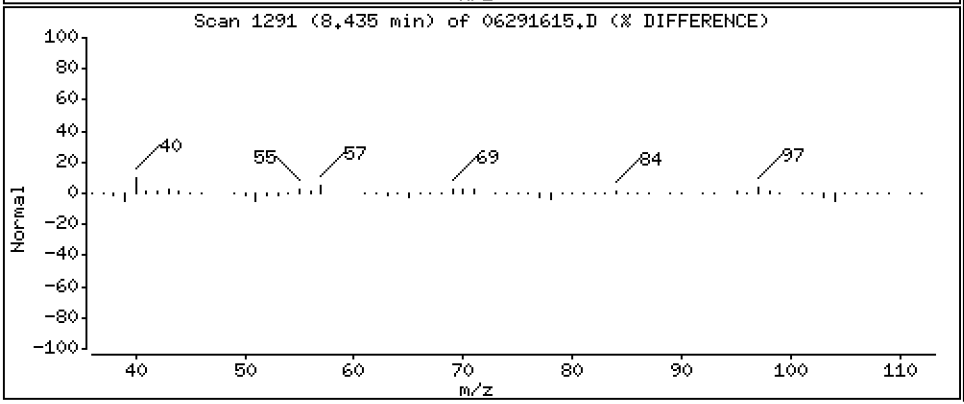
57 o-Xylene

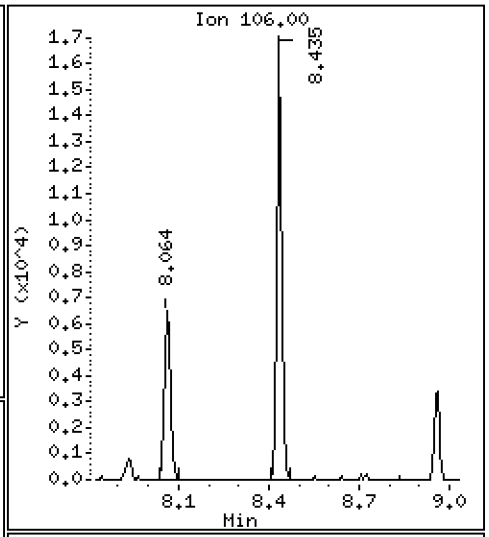
Concentration: 0.8479 ug/Kg

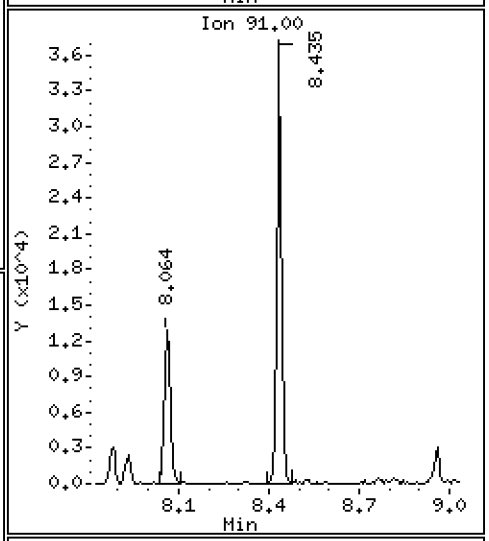


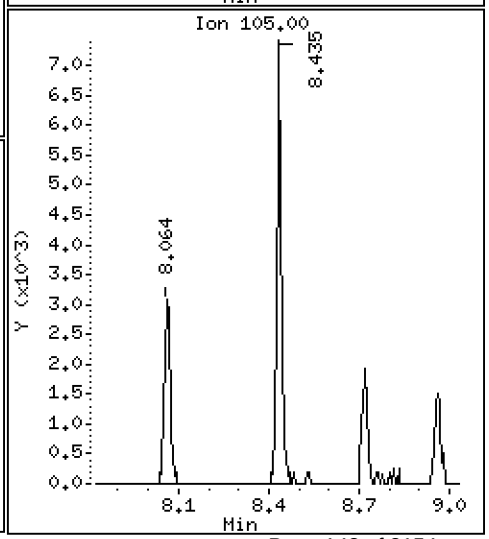












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291615.D
Lab Smp Id: 16F0096-10
Inj Date : 29-JUN-2016 20:32
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-10
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.061	4.048	(0.820)	263120	16.7194	16.719
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.499	4.486	(0.908)	759014	51.1101	51.110
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.955	4.949	(1.000)	623077	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.001)	776906	52.3319	52.332
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.350	5.344	(0.990)	10487	0.70431	0.7043
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2127619	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.561	(1.215)	2699568	49.5194	49.519
	43 Toluene	92	6.610	6.603	(1.223)	19908	0.53855	0.5385
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2292021	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	8.435	8.428	(1.070)	22745	0.84790	0.8479
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1227829	49.8126	49.813
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1180880	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1210410	50.9026	50.903
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291615.D
Lab Smp Id: 16F0096-10
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	623077	3.85
35 1,4-Difluorobenze	2041239	1020620	4082478	2127619	4.23
52 d5-Chlorobenzene	2118314	1059157	4236628	2292021	8.20
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1180880	11.93

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.13
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-10
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	51.110	102.22	70-130
$ 32 d4-1,2-Dichloroeth	50.000	52.332	104.66	80-149
$ 42 d8-Toluene	50.000	49.519	99.04	77-120
$ 62 4-Bromofluorobenze	50.000	49.813	99.63	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.903	101.81	80-120

REVIEW SUMMARY FOR FILE - 06291615.D

Lab ID: 16F0096-10
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 20:32

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-N-01-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-11	File ID:	06291616.D
Sampled:	06/29/16 11:25	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 20:55
Solids:	92.40	Preparation:	No Prep - Volatiles	Initial/Final:	5.65 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	0.96	U	0.23	0.96
74-83-9	Bromomethane	1	0.96	U	0.18	0.96
156-59-2	cis-1,2-Dichloroethene	1	0.96	U	0.23	0.96
71-43-2	Benzene	1	0.96	U	0.28	0.96
79-01-6	Trichloroethene	1	0.96	U	0.20	0.96
108-88-3	Toluene	1	1.38		0.14	0.96
127-18-4	Tetrachloroethene	1	0.96	U	0.25	0.96
100-41-4	Ethylbenzene	1	0.92	J	0.19	0.96
179601-23-1	m,p-Xylene	1	2.16		0.38	0.96
95-47-6	o-Xylene	1	0.61	J	0.21	0.96

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	51.9	104	80 - 149	
1,2-Dichlorobenzene-d4	50.000	51.2	102	80 - 120	
Toluene-d8	50.000	49.3	98.5	77 - 120	
4-Bromofluorobenzene	50.000	49.4	98.8	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291616.D

Date : 29-JUN-2016 20:55

Client ID:

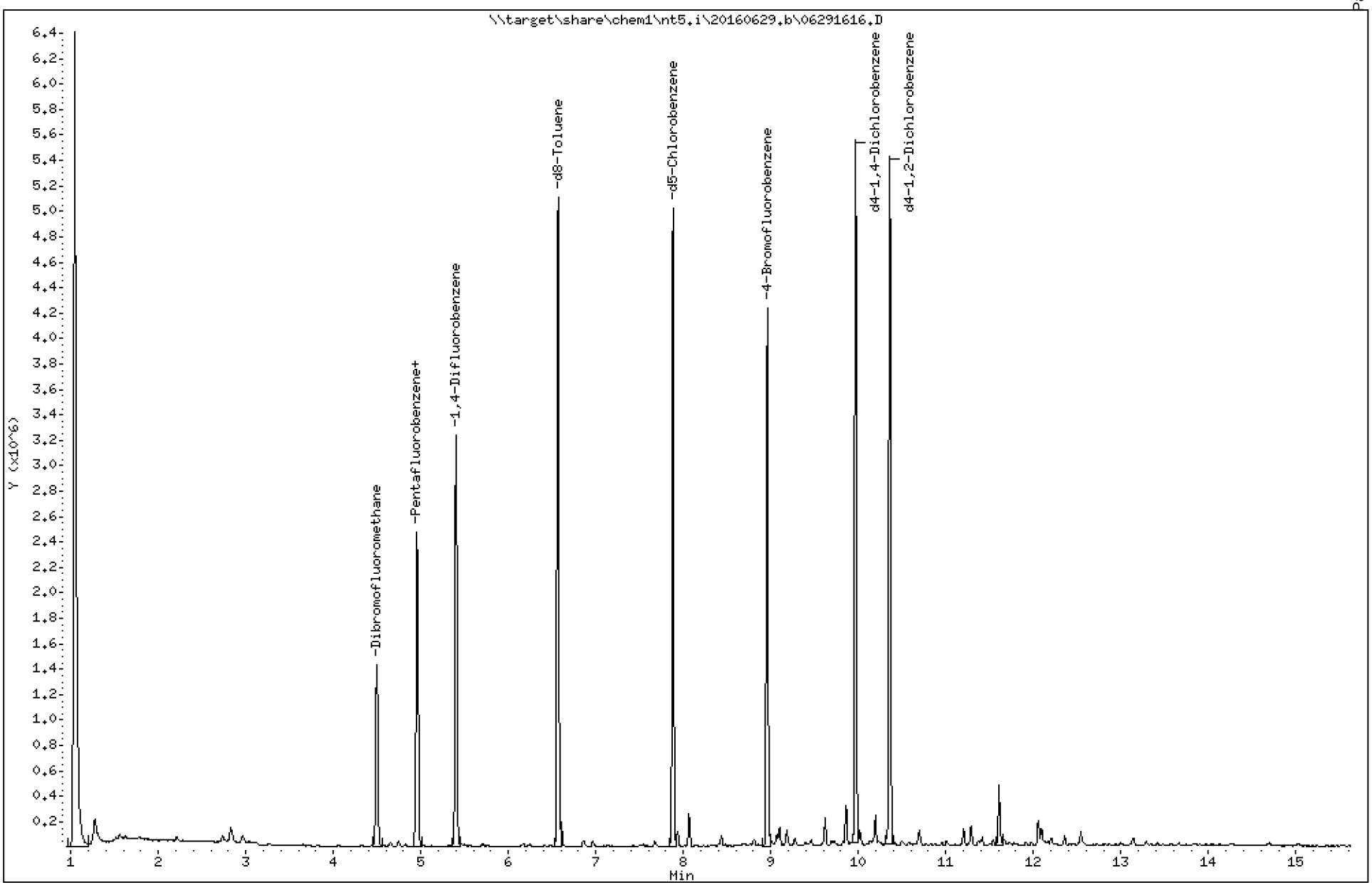
Sample Info: 16F0096-11

Column phase: RTXVMS

Instrument: nt5.i

Operator: PB

Column diameter: 0.18



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Date : 29-JUN-2016 20:55

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-11

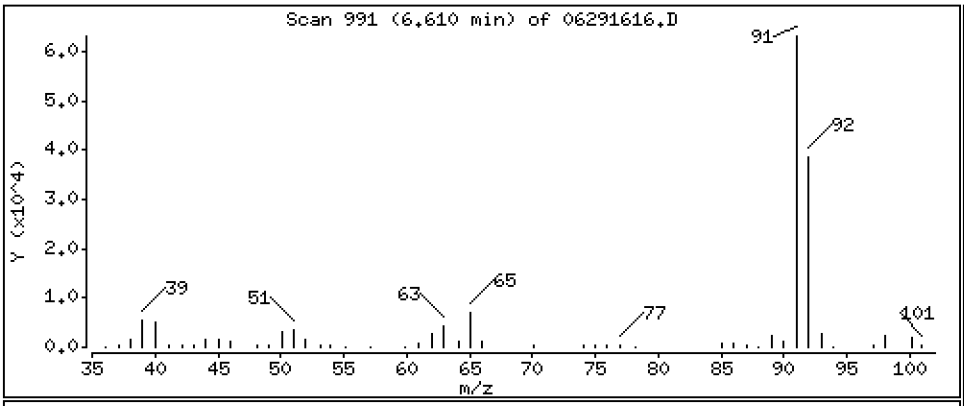
Operator: PB

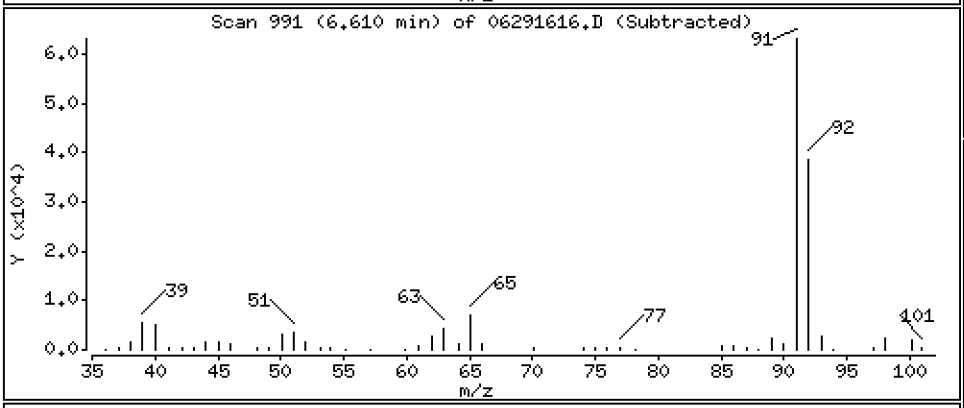
Column phase: RTXVMS

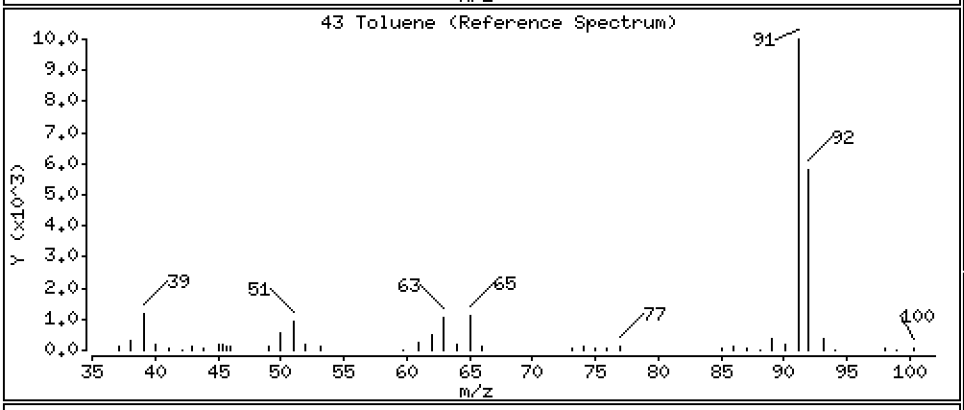
Column diameter: 0.18

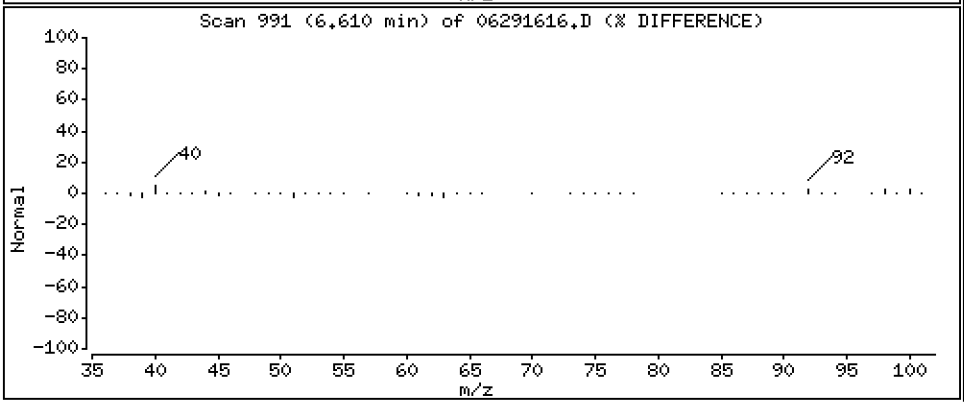
43 Toluene

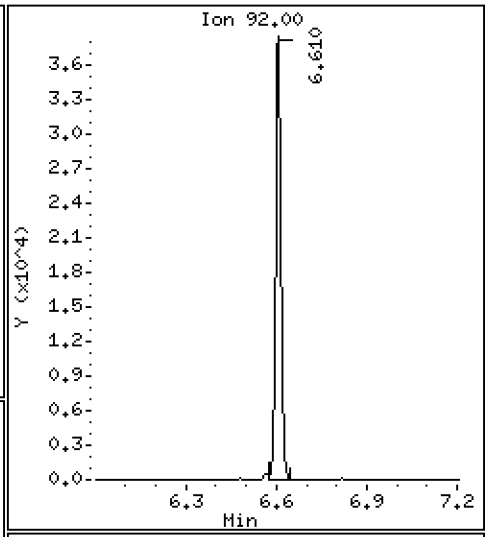
Concentration: 1.440 ug/Kg

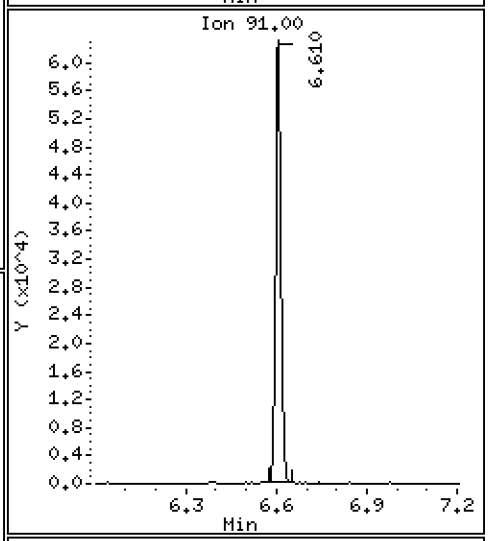


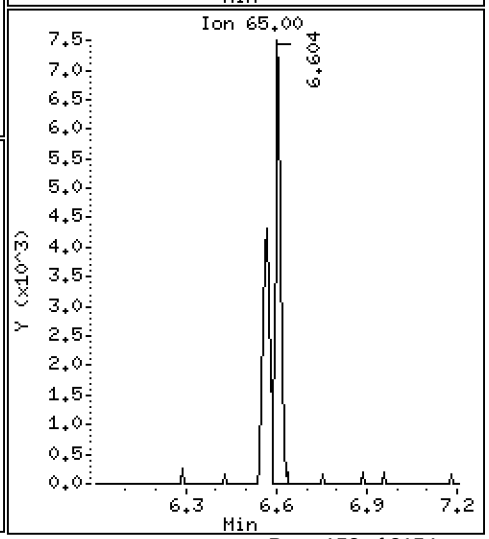












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Date : 29-JUN-2016 20:55

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-11

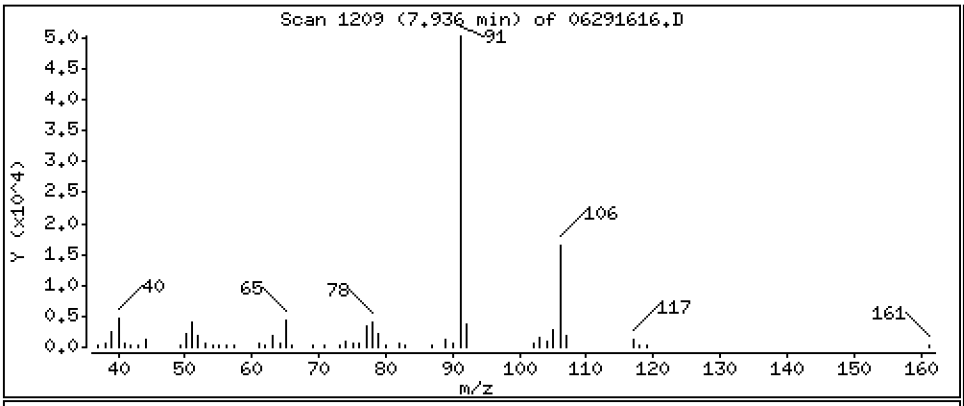
Operator: PB

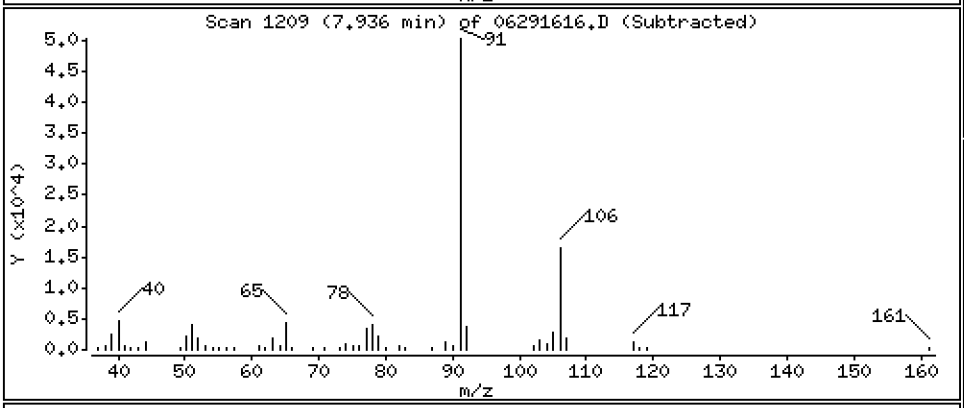
Column phase: RTXVMS

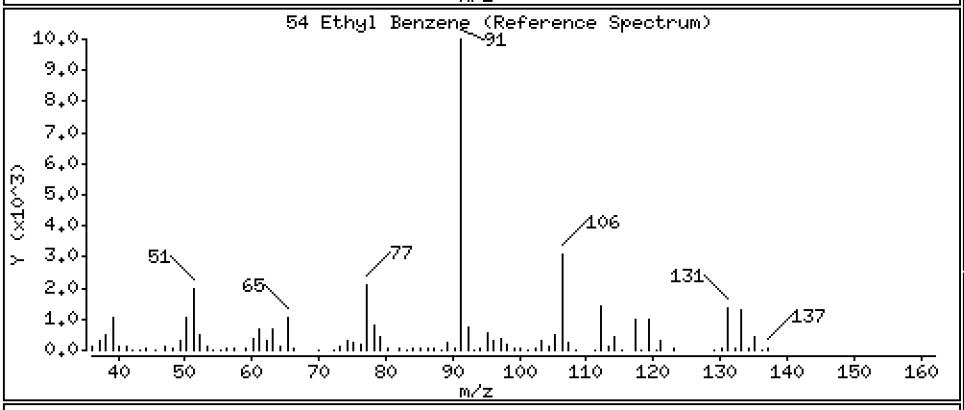
Column diameter: 0.18

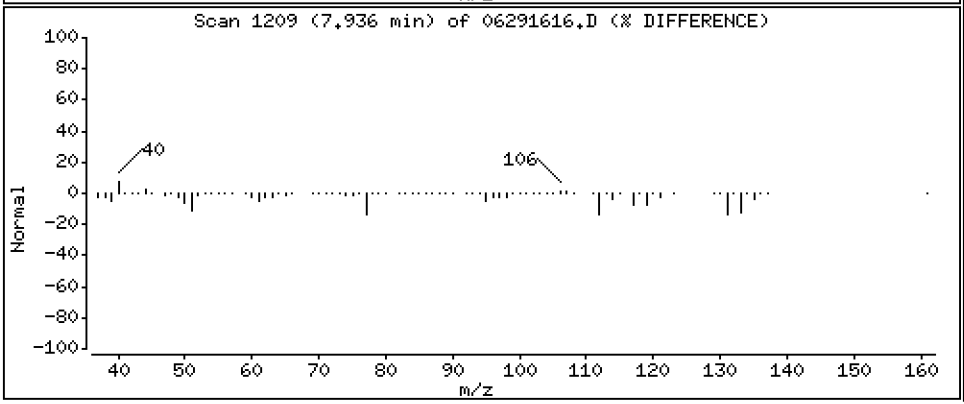
54 Ethyl Benzene

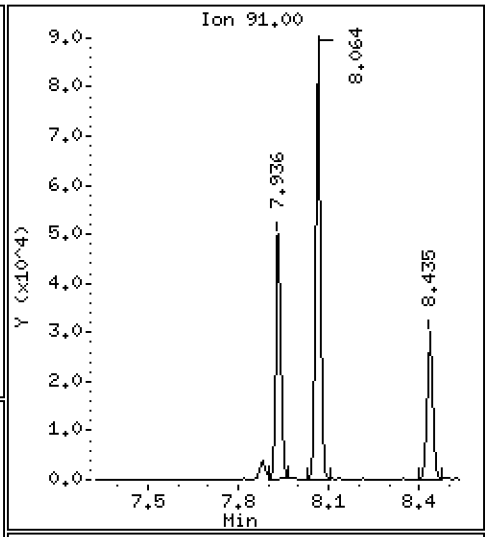
Concentration: 0.9652 ug/Kg

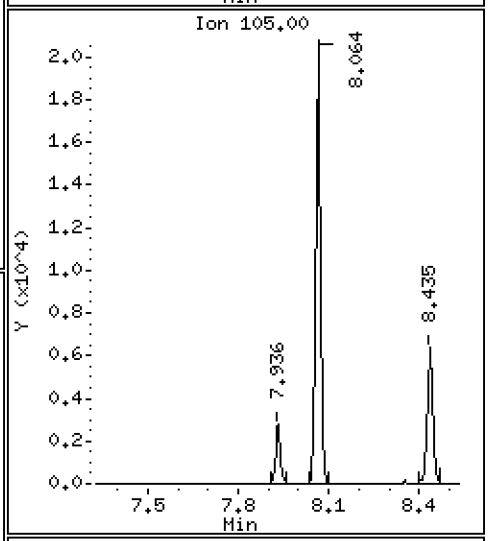


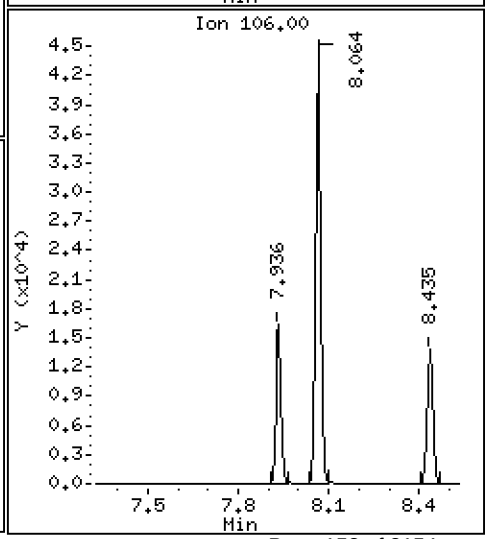












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Date : 29-JUN-2016 20:55

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-11

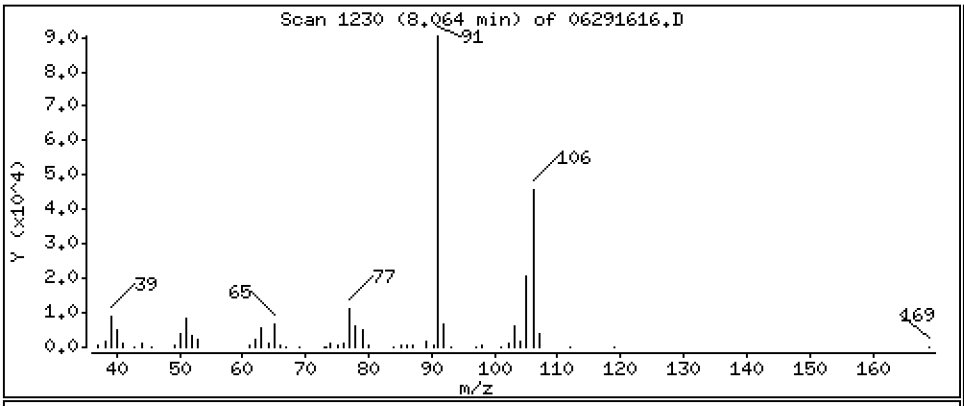
Operator: PB

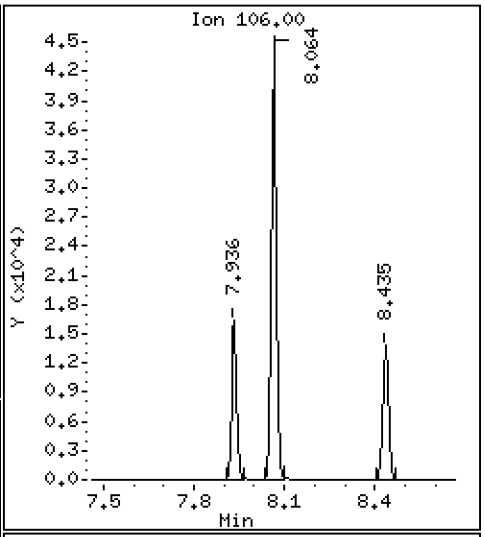
Column phase: RTXVMS

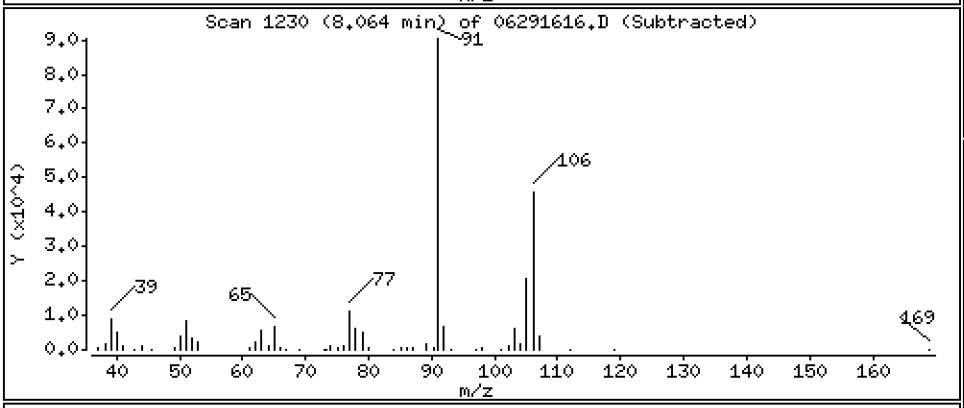
Column diameter: 0.18

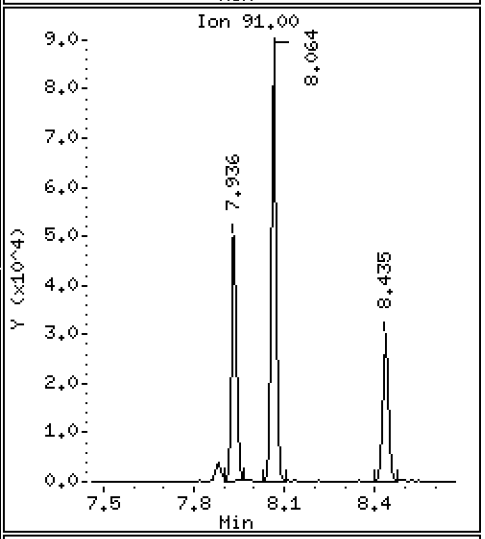
56 m,p-xylene

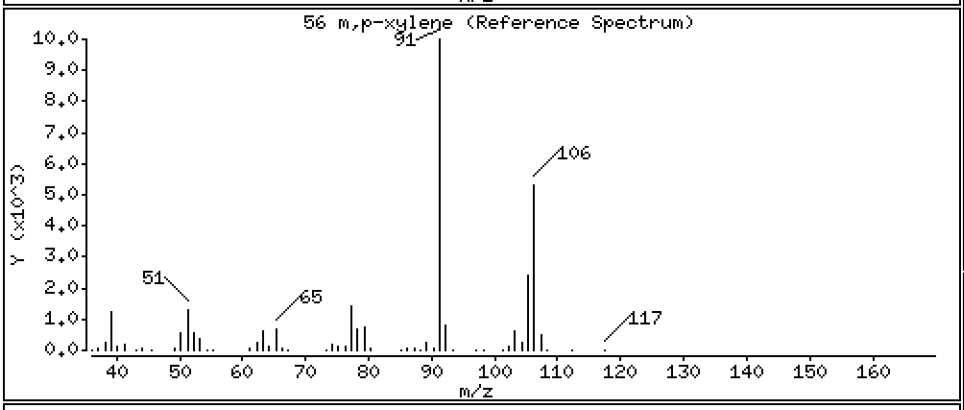
Concentration: 2.258 ug/Kg

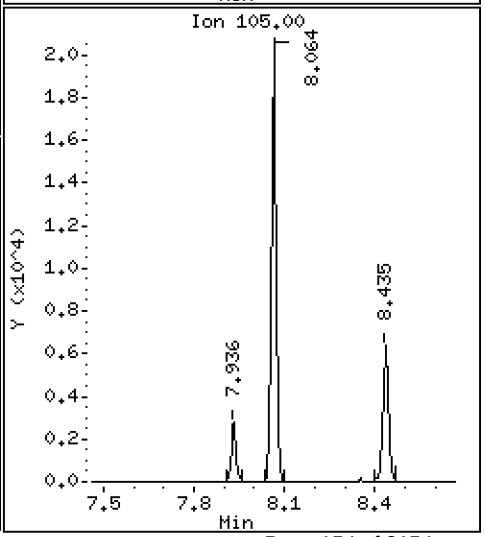


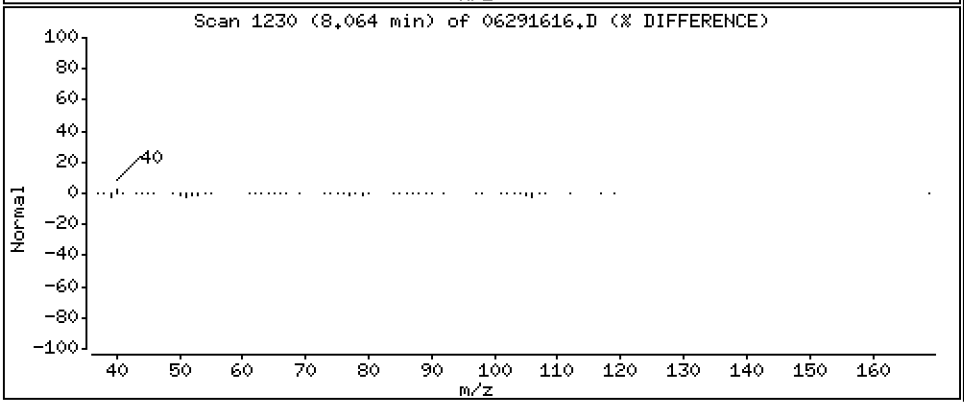












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Date : 29-JUN-2016 20:55

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-11

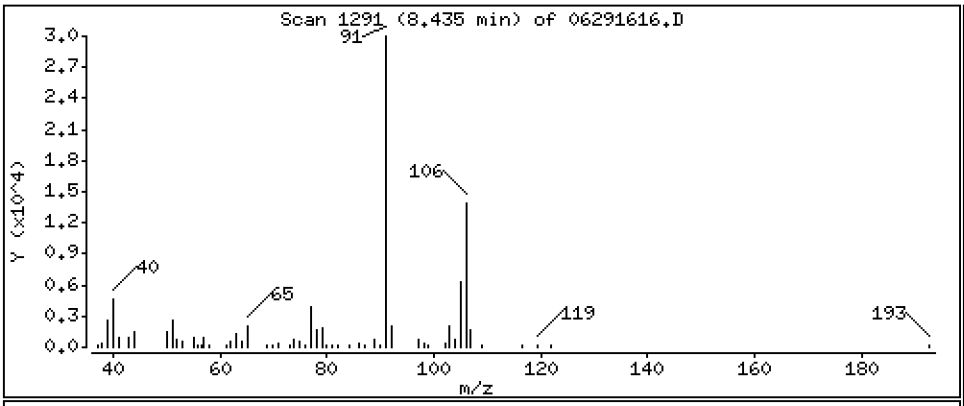
Operator: PB

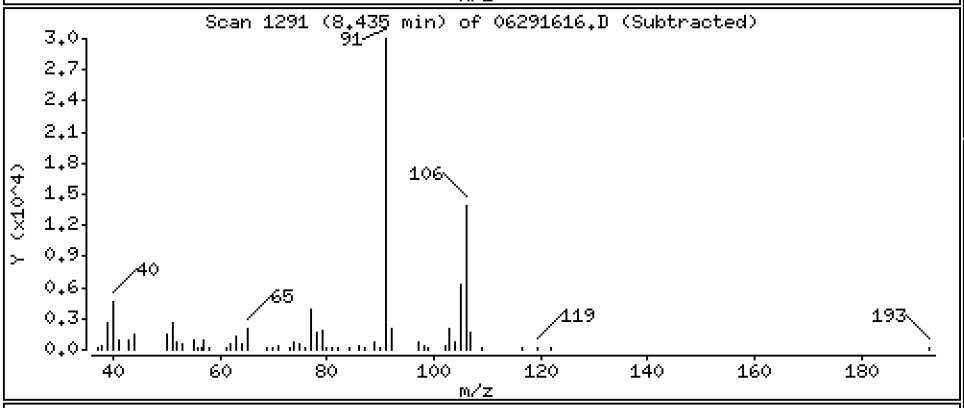
Column phase: RTXVMS

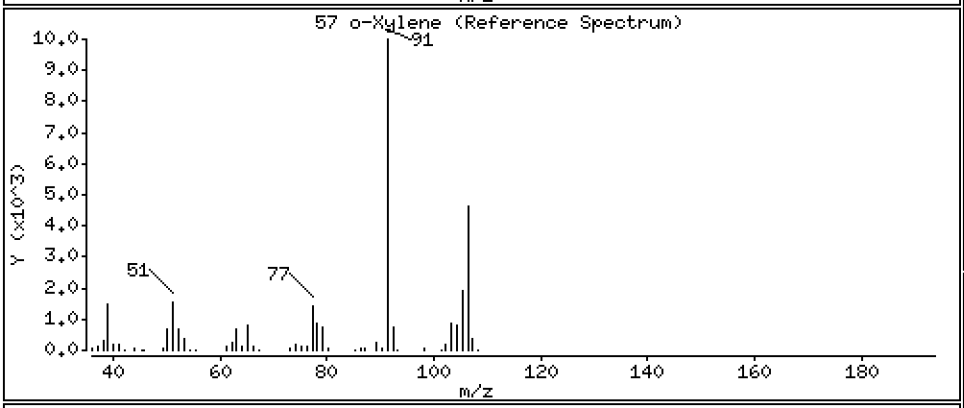
Column diameter: 0.18

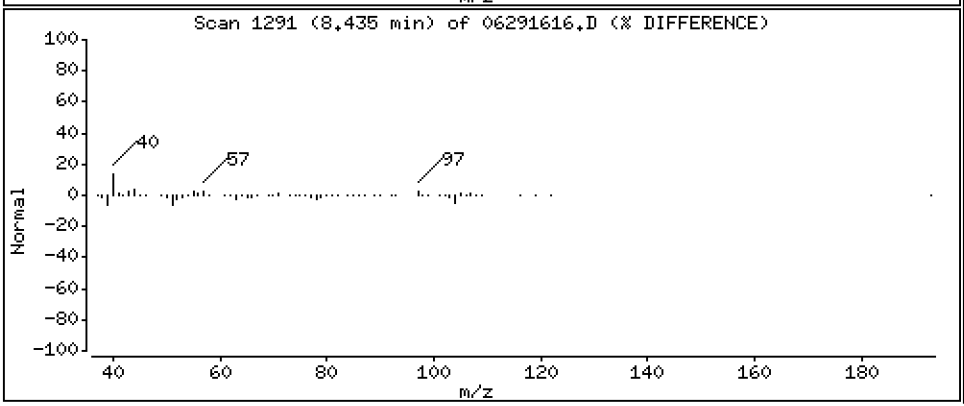
57 o-Xylene

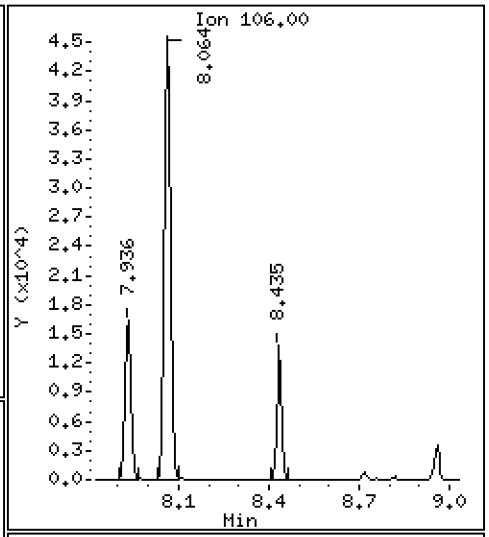
Concentration: 0.6362 ug/Kg

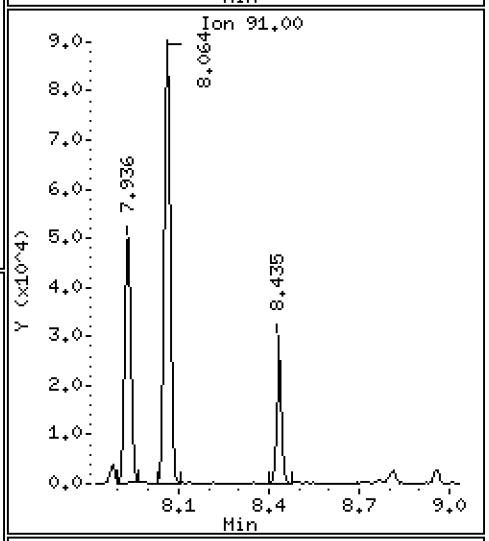


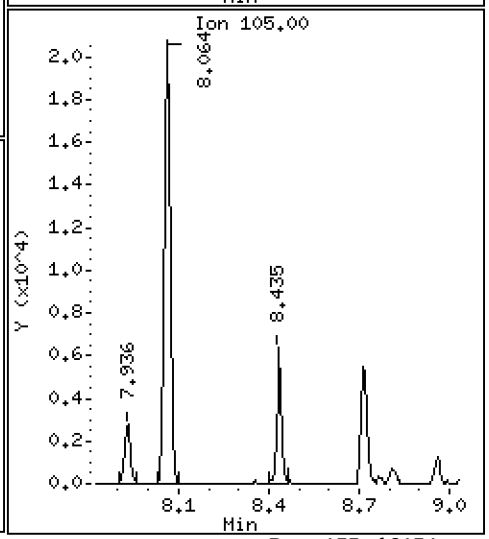












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291616.D
Lab Smp Id: 16F0096-11
Inj Date : 29-JUN-2016 20:55
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-11
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	Compound Not Detected.					
3 Vinyl Chloride	62	Compound Not Detected.					
4 Bromomethane	94	Compound Not Detected.					
5 Chloroethane	64	Compound Not Detected.					
6 Trichlorofluoromethane	101	Compound Not Detected.					
7 1,1-Dichloroethene	96	Compound Not Detected.					
8 Carbon Disulfide	76	Compound Not Detected.					
9 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10 Iodomethane	142	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Acrolein	56	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acetone	43	Compound Not Detected.					
15 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16 Methyl tert butyl ether	73	Compound Not Detected.					
17 1,1-Dichloroethane	63	Compound Not Detected.					
18 Acrylonitrile	53	Compound Not Detected.					
19 Vinyl Acetate	43	Compound Not Detected.					
20 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
22 2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.493	4.486	(0.907)	799694	52.3420	52.342
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.955	4.949	(1.000)	641020	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.000)	792216	51.8695	51.870
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2214275	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.561	(1.216)	2794772	49.2595	49.260
	43 Toluene	92	6.610	6.603	(1.224)	55418	1.44048	1.440
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2356023	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.936	7.930	(1.007)	69403	0.96516	0.9652
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.064	8.063	(1.023)	63036	2.25804	2.258
	57 o-Xylene	106	8.435	8.428	(1.070)	17544	0.63625	0.6362
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1251508	49.3939	49.394
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1205255	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	Compound Not Detected.					
$	79 d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1241581	51.1575	51.158
	80 1,2-Dichlorobenzene	146	Compound Not Detected.					
	81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
	82 Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
	83 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	84 Naphthalene	128	Compound Not Detected.					
	85 1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291616.D
Lab Smp Id: 16F0096-11
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	641020	6.84
35 1,4-Difluorobenze	2041239	1020620	4082478	2214275	8.48
52 d5-Chlorobenzene	2118314	1059157	4236628	2356023	11.22
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1205255	14.24

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.13
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.12
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 13:10

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-11
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	52.342	104.68	70-130
$ 32 d4-1,2-Dichloroeth	50.000	51.870	103.74	80-149
$ 42 d8-Toluene	50.000	49.260	98.52	77-120
$ 62 4-Bromofluorobenze	50.000	49.394	98.79	80-120
$ 79 d4-1,2-Dichloroben	50.000	51.158	102.32	80-120

REVIEW SUMMARY FOR FILE - 06291616.D

Lab ID: 16F0096-11
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 20:55

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-N-02-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-12	File ID:	06291617.D
Sampled:	06/29/16 11:35	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 21:17
Solids:	91.18	Preparation:	No Prep - Volatiles	Initial/Final:	4.4 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.25	U	0.29	1.25
74-83-9	Bromomethane	1	1.25	U	0.23	1.25
156-59-2	cis-1,2-Dichloroethene	1	0.68	J	0.30	1.25
71-43-2	Benzene	1	1.25	U	0.37	1.25
79-01-6	Trichloroethene	1	1.25	U	0.26	1.25
108-88-3	Toluene	1	2.92		0.19	1.25
127-18-4	Tetrachloroethene	1	1.25	U	0.32	1.25
100-41-4	Ethylbenzene	1	0.71	J	0.25	1.25
179601-23-1	m,p-Xylene	1	1.61		0.49	1.25
95-47-6	o-Xylene	1	0.84	J	0.28	1.25

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	51.1	102	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.9	102	80 - 120	
Toluene-d8	50.000	49.3	98.6	77 - 120	
4-Bromofluorobenzene	50.000	49.4	98.7	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291617.D

Date : 29-JUN-2016 21:17

Client ID:

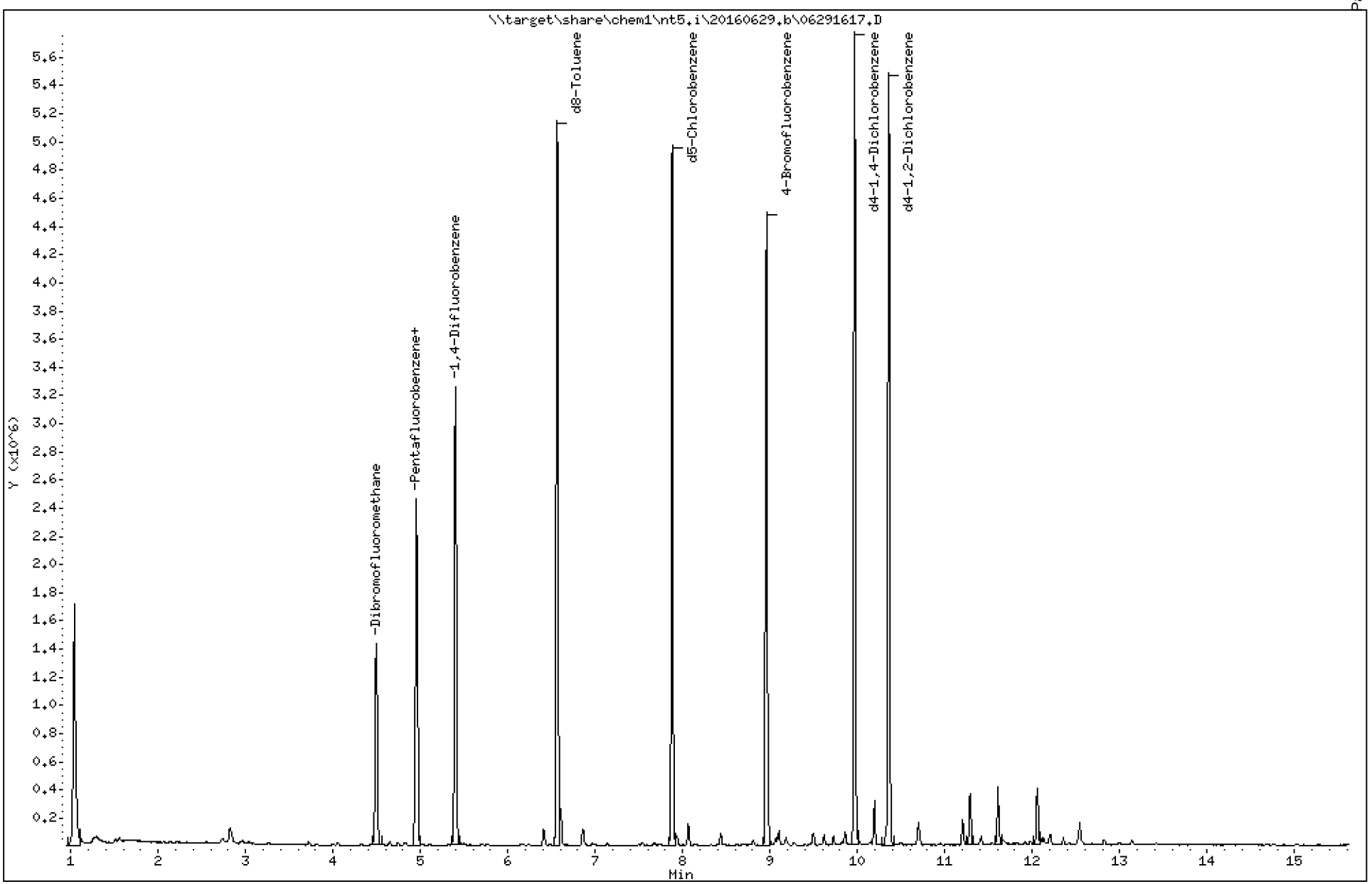
Instrument: nt5.i

Sample Info: 16F0096-12

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160629.b\06291617.D

Date : 29-JUN-2016 21:17

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-12

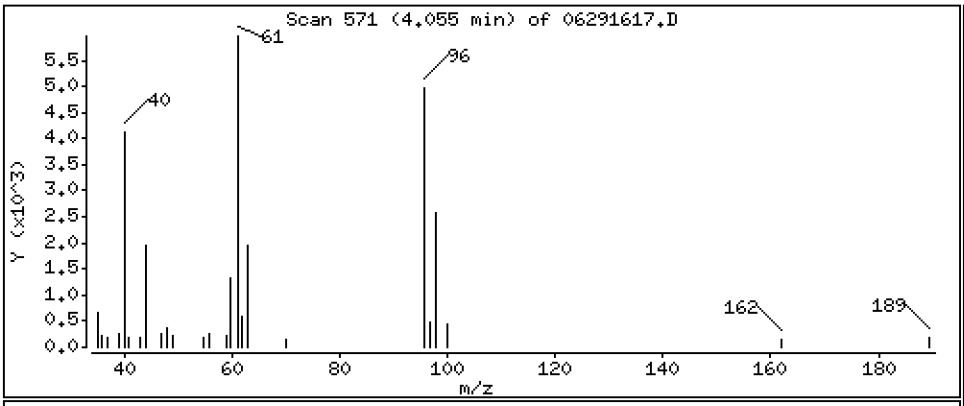
Operator: PB

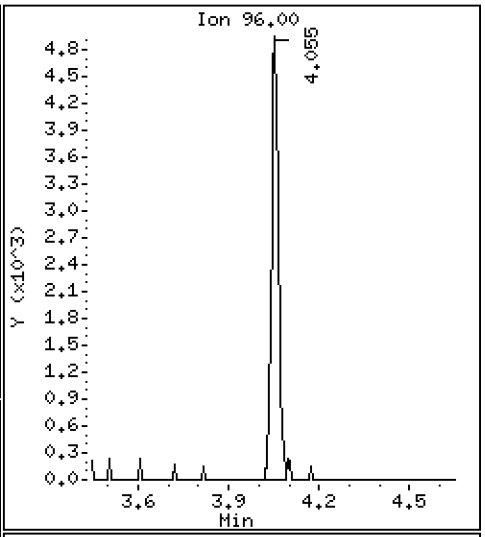
Column phase: RTXVMS

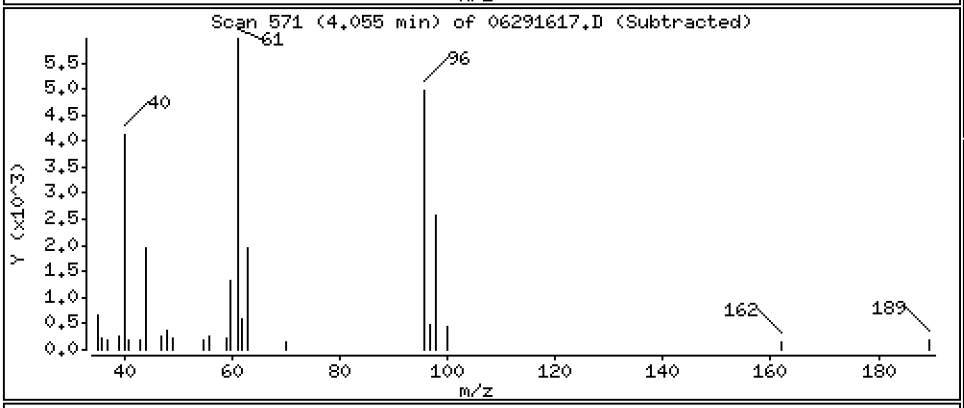
Column diameter: 0.18

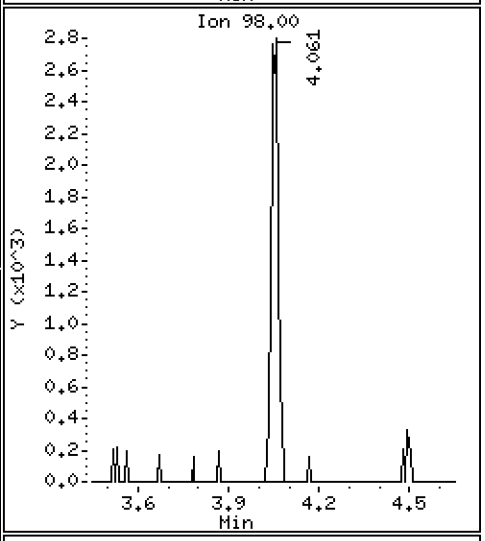
20 Cis-1,2-Dichloroethene

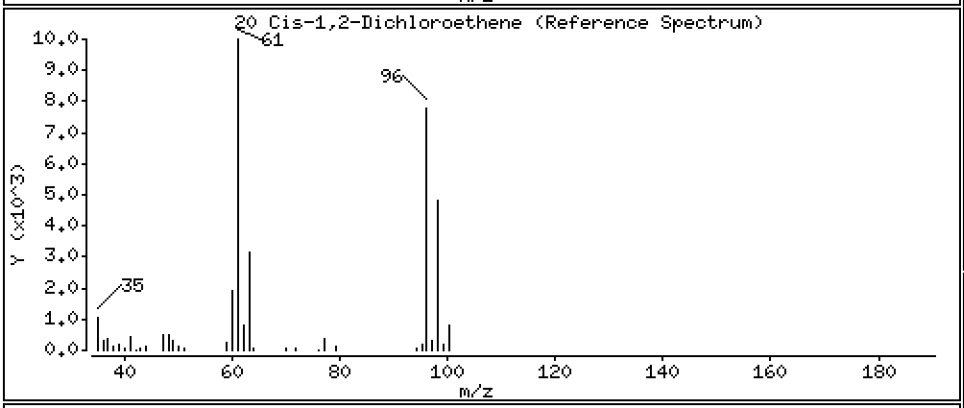
Concentration: 0.5488 ug/Kg

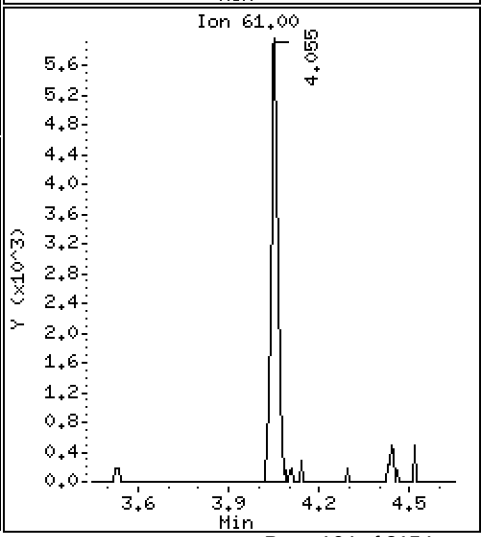


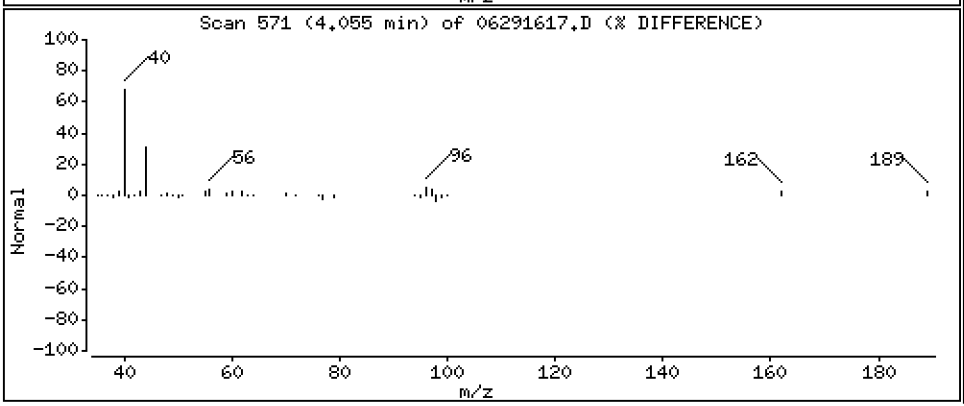












Data File: \\target\share\chem1\nt5.i\20160629.b\06291617.D

Date : 29-JUN-2016 21:17

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-12

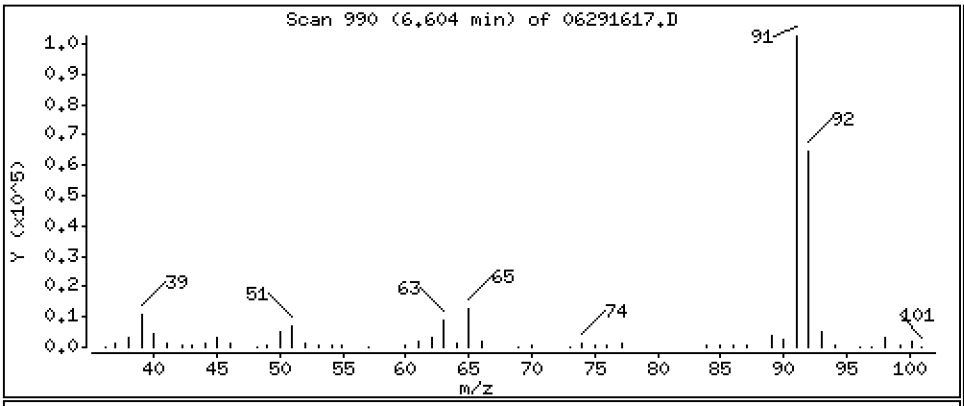
Operator: PB

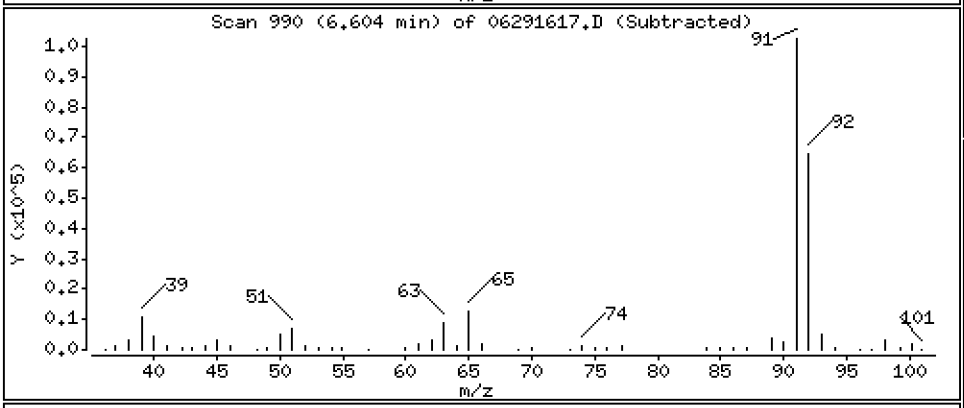
Column phase: RTXVMS

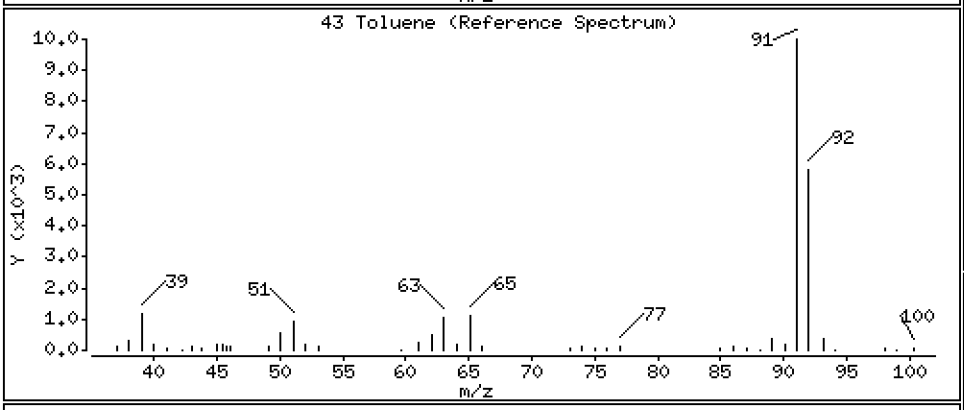
Column diameter: 0.18

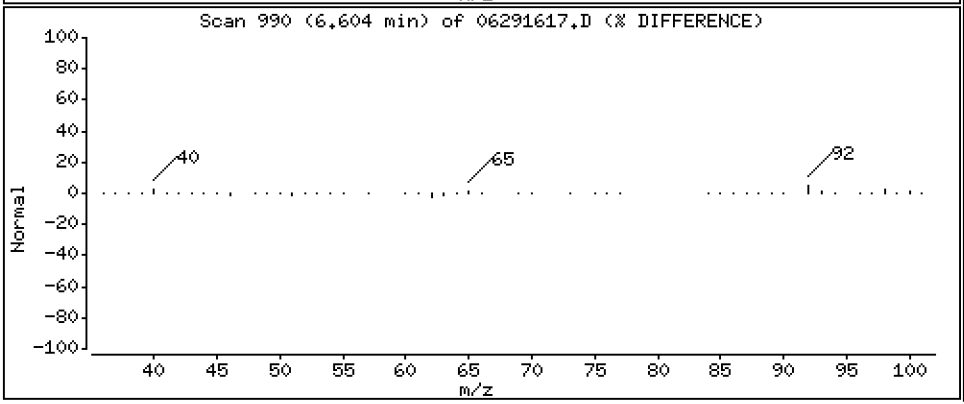
43 Toluene

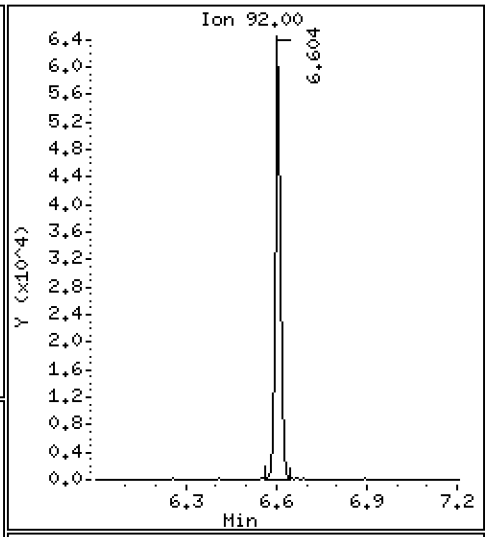
Concentration: 2.340 ug/Kg

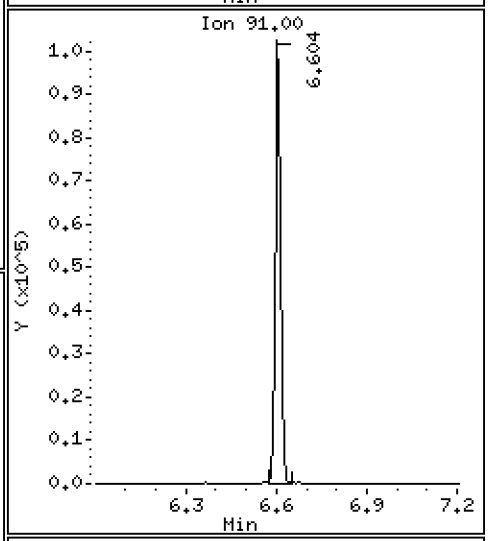


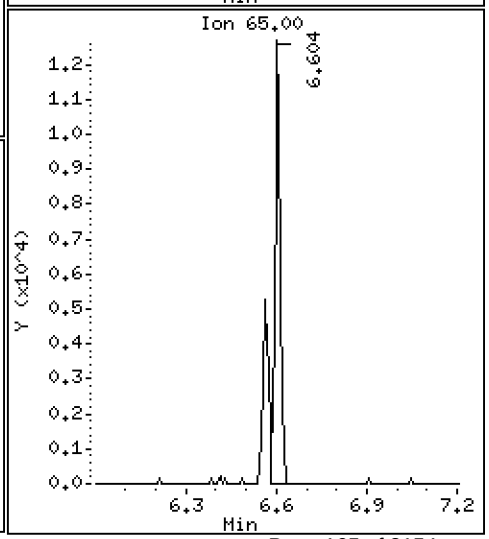












Data File: \\target\share\chem1\nt5.i\20160629.b\06291617.D

Date : 29-JUN-2016 21:17

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-12

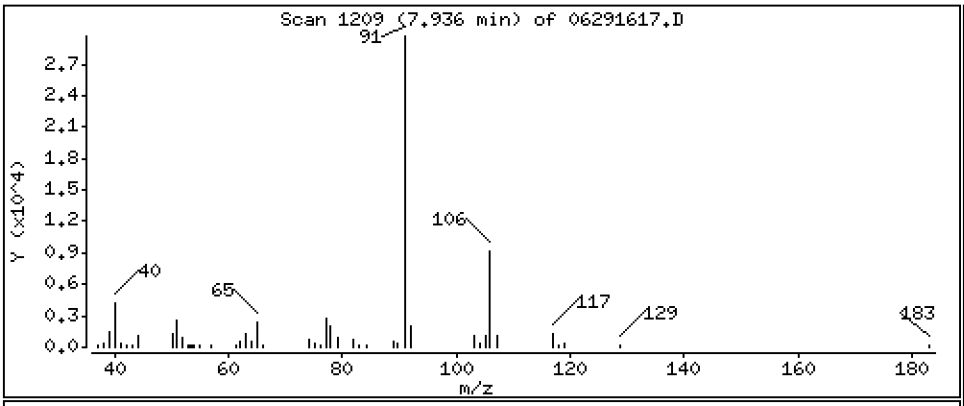
Operator: PB

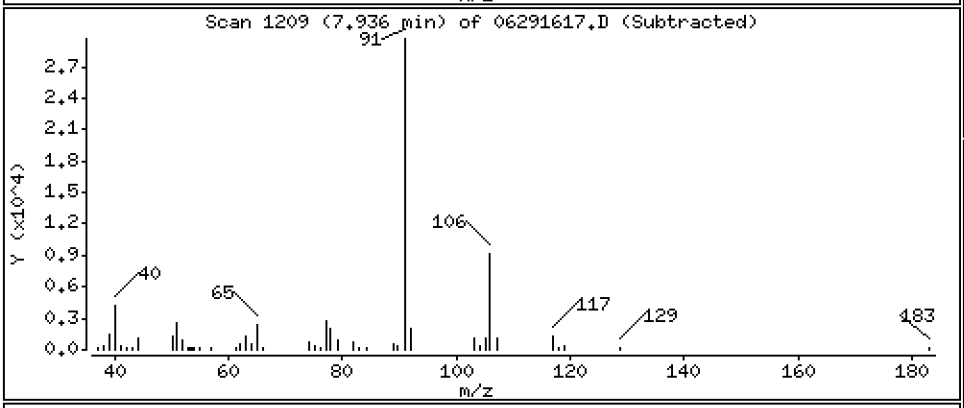
Column phase: RTXVMS

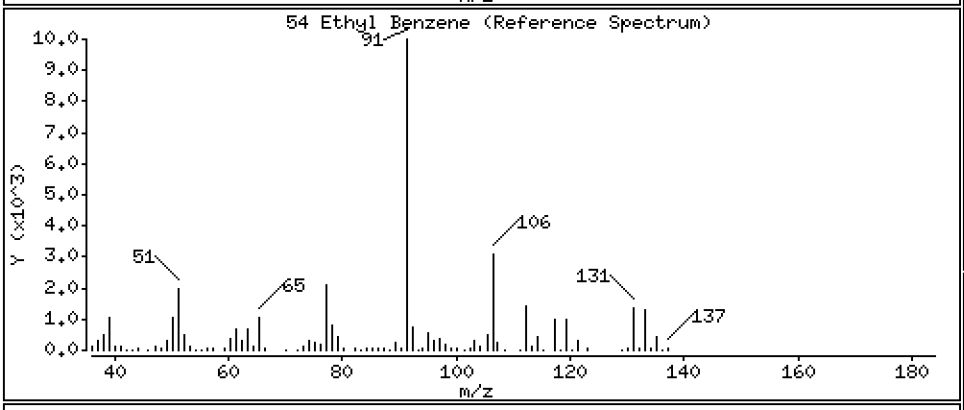
Column diameter: 0.18

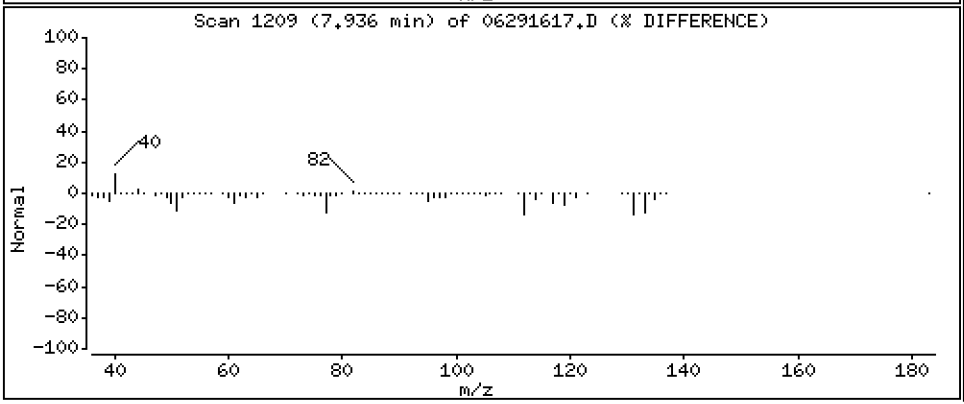
54 Ethyl Benzene

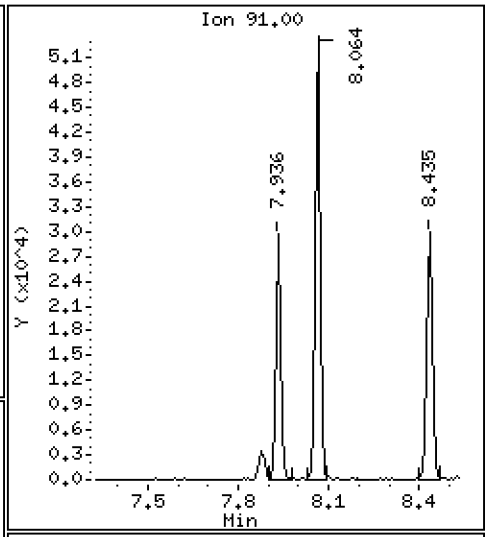
Concentration: 0.5731 ug/Kg

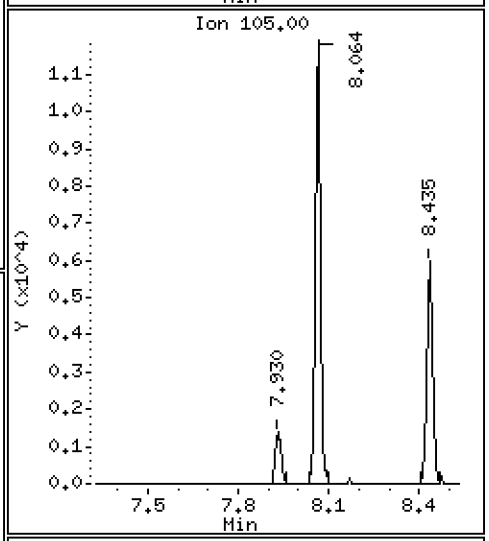


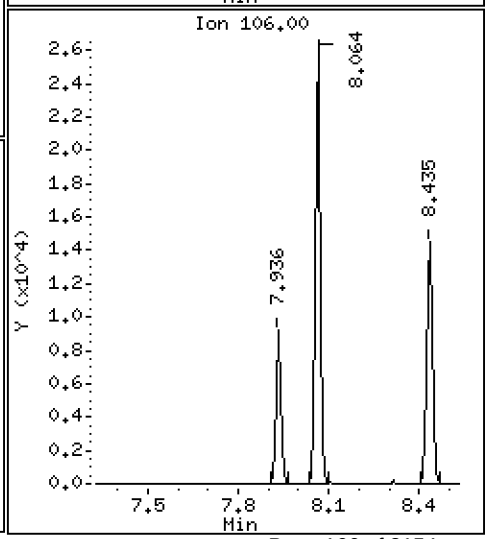












Data File: \\target\share\chem1\nt5.i\20160629.b\06291617.D

Date : 29-JUN-2016 21:17

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-12

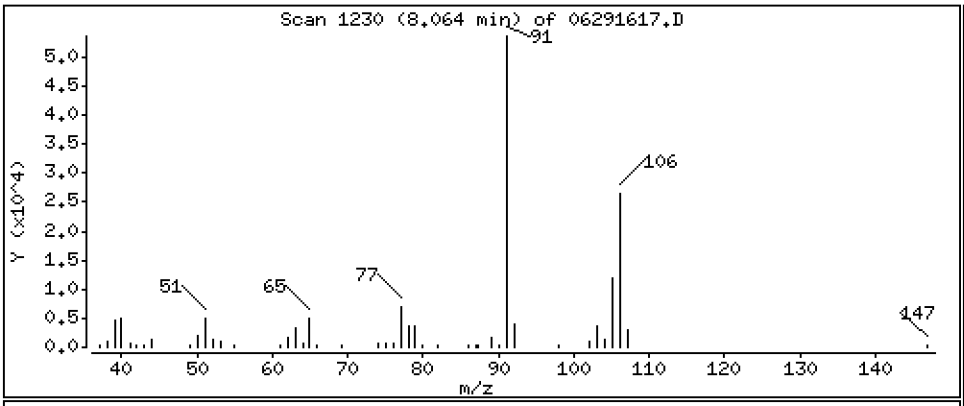
Operator: PB

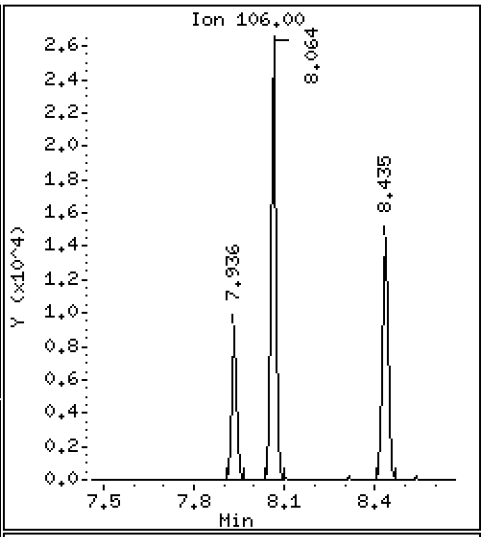
Column phase: RTXVMS

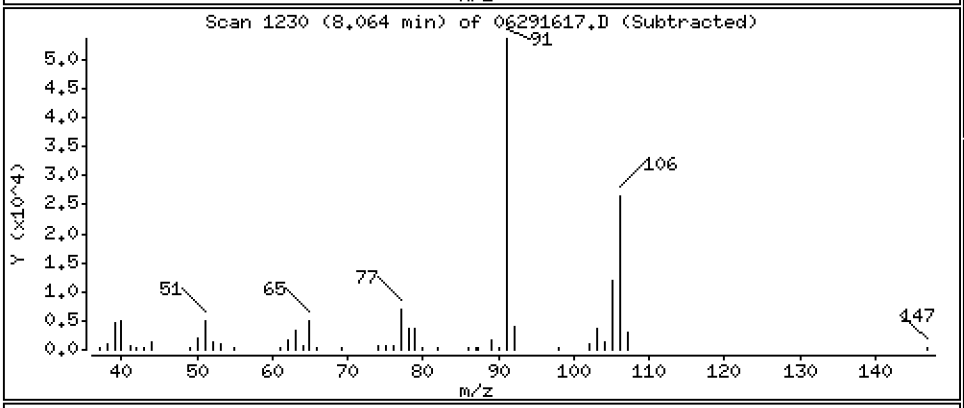
Column diameter: 0.18

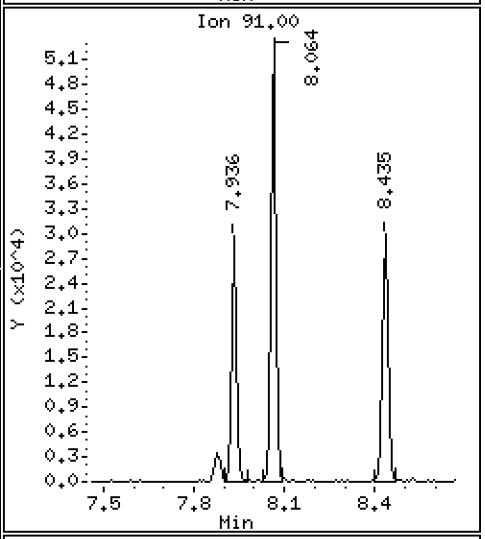
56 m,p-xylene

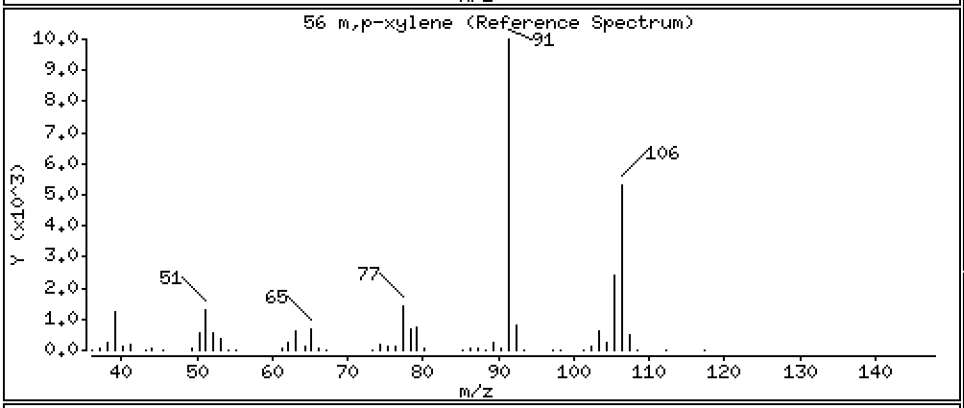
Concentration: 1.292 ug/Kg

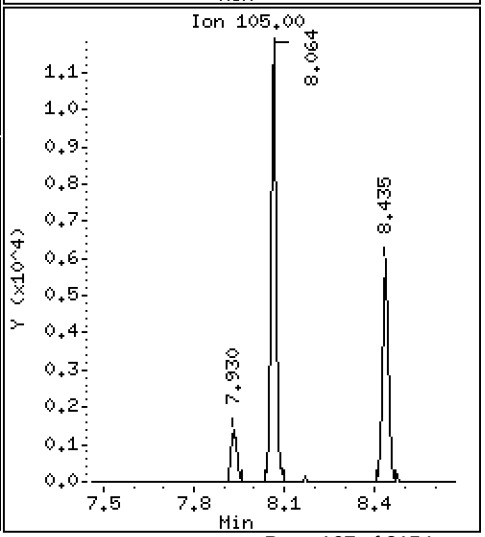


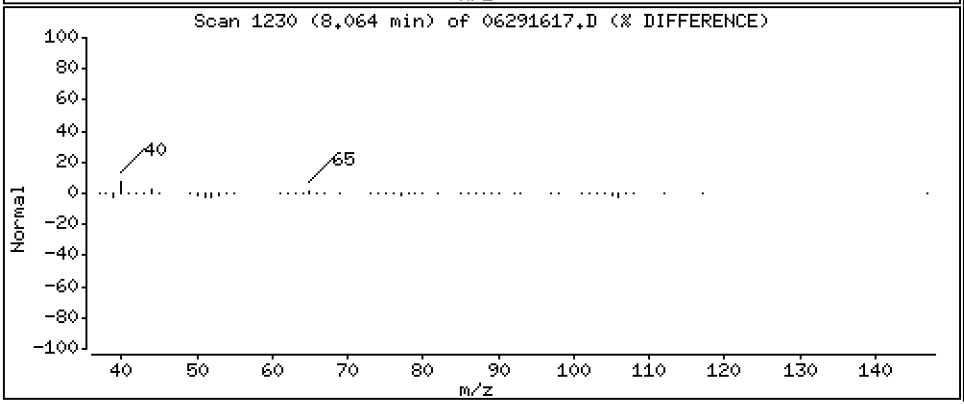












Data File: \\target\share\chem1\nt5.i\20160629.b\06291617.D

Date : 29-JUN-2016 21:17

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-12

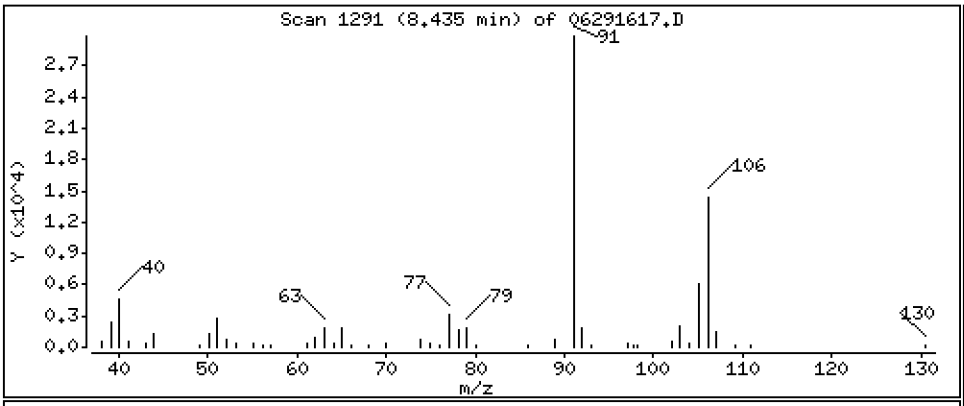
Operator: PB

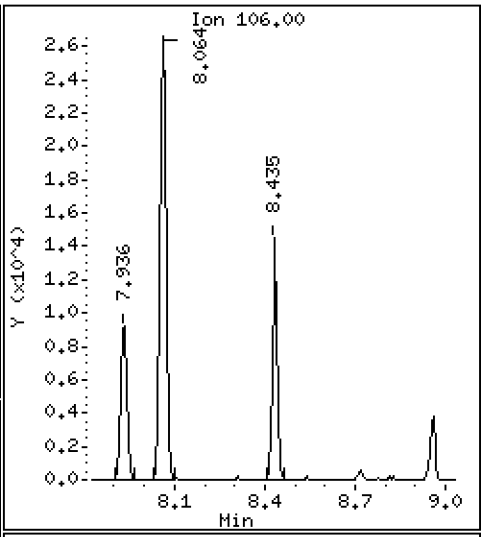
Column phase: RTXVMS

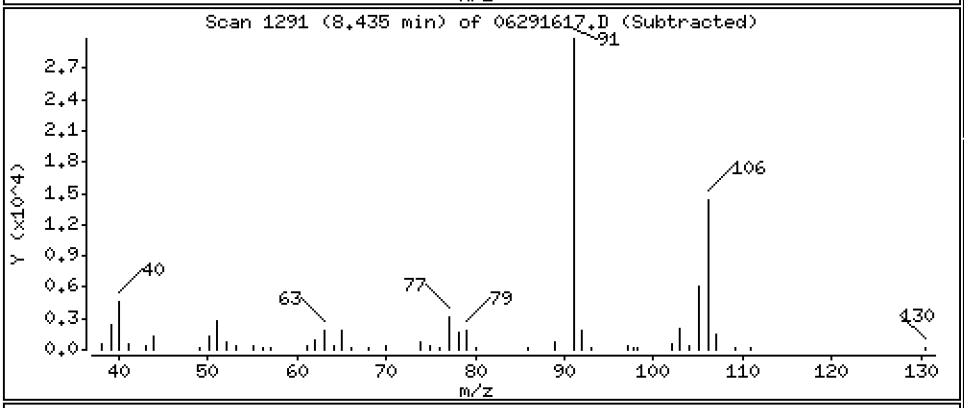
Column diameter: 0.18

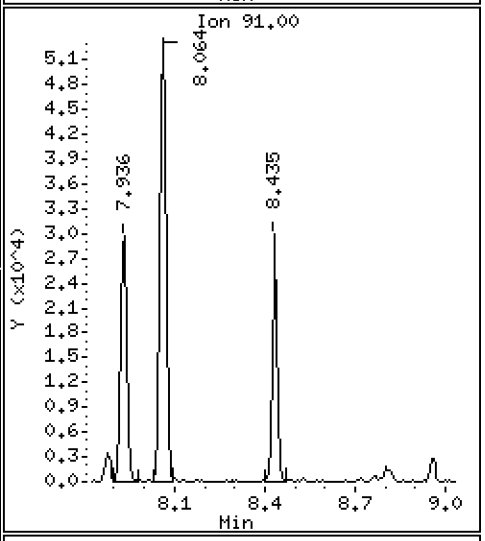
57 o-Xylene

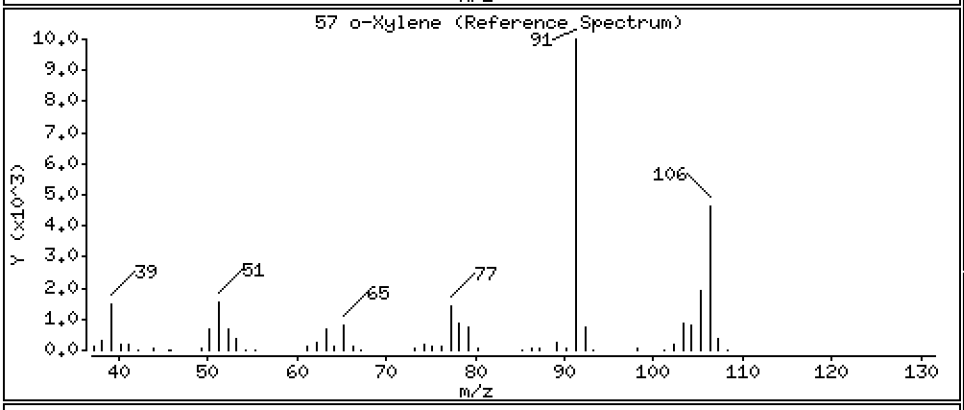
Concentration: 0.6700 ug/Kg

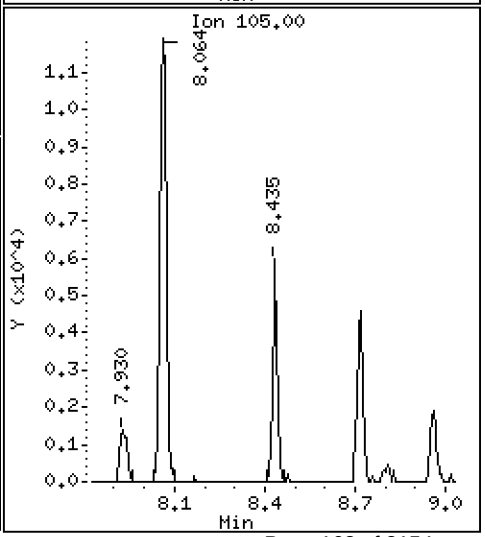


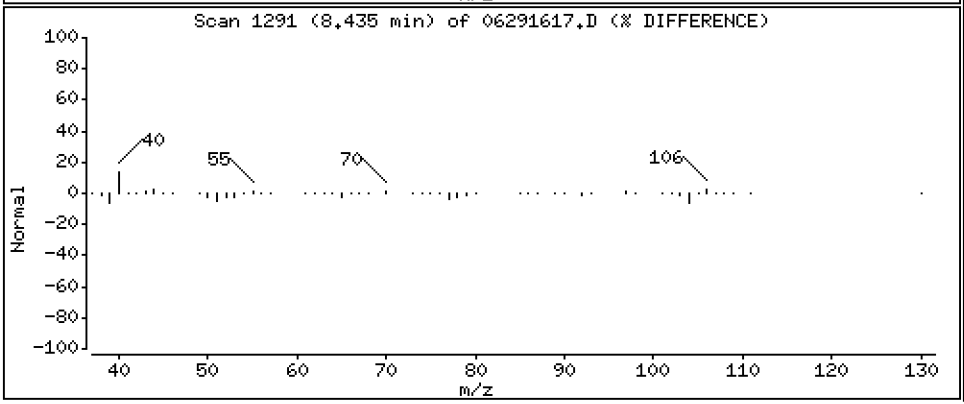












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291617.D
Lab Smp Id: 16F0096-12
Inj Date : 29-JUN-2016 21:17
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-12
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.055	4.048	(0.818)	8980	0.54879	0.5488
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.493	4.486	(0.907)	802279	51.9571	51.957
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.955	4.949	(1.000)	647857	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.000)	788956	51.1109	51.111
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2216803	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.561	6.561	(1.215)	2799781	49.2915	49.292
	43 Toluene	92	6.604	6.603	(1.223)	90144	2.34045	2.340
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2384186	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.936	7.930	(1.007)	41701	0.57307	0.5731
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.064	8.063	(1.023)	36510	1.29239	1.292
	57 o-Xylene	106	8.435	8.428	(1.070)	18696	0.67002	0.6700
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1265660	49.3624	49.362
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1231154	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1261127	50.8698	50.870
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291617.D
Lab Smp Id: 16F0096-12
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	647857	7.98
35 1,4-Difluorobenze	2041239	1020620	4082478	2216803	8.60
52 d5-Chlorobenzene	2118314	1059157	4236628	2384186	12.55
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1231154	16.69

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.13
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.12
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-12
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	51.957	103.91	70-130
$ 32 d4-1,2-Dichloroeth	50.000	51.111	102.22	80-149
$ 42 d8-Toluene	50.000	49.292	98.58	77-120
$ 62 4-Bromofluorobenze	50.000	49.362	98.72	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.870	101.74	80-120

REVIEW SUMMARY FOR FILE - 06291617.D

Lab ID: 16F0096-12
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 21:17

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-N-03-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-13	File ID:	06291618.D
Sampled:	06/29/16 11:45	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 21:40
Solids:	91.34	Preparation:	No Prep - Volatiles	Initial/Final:	4.68 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.17	U	0.27	1.17
74-83-9	Bromomethane	1	1.17	U	0.22	1.17
156-59-2	cis-1,2-Dichloroethene	1	44.6		0.28	1.17
71-43-2	Benzene	1	0.61	J	0.35	1.17
79-01-6	Trichloroethene	1	3.66		0.25	1.17
108-88-3	Toluene	1	36.4		0.18	1.17
127-18-4	Tetrachloroethene	1	1.17	U	0.30	1.17
100-41-4	Ethylbenzene	1	2.51		0.24	1.17
179601-23-1	m,p-Xylene	1	7.45		0.46	1.17
95-47-6	o-Xylene	1	3.31		0.26	1.17

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	51.4	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	49.9	99.8	80 - 120	
Toluene-d8	50.000	49.1	98.2	77 - 120	
4-Bromofluorobenzene	50.000	48.0	96.0	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291618.D

Date : 29-JUN-2016 21:40

Client ID:

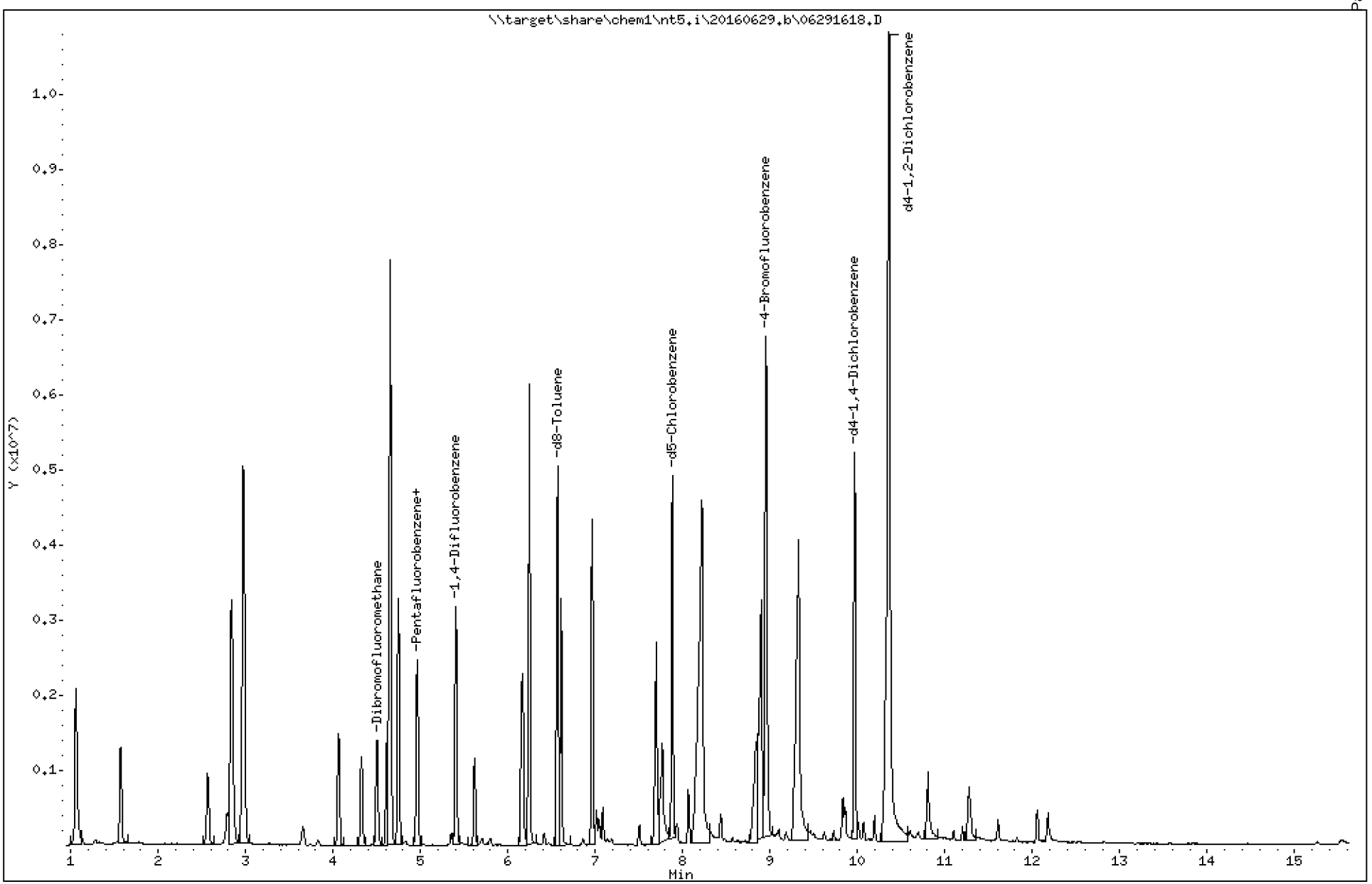
Instrument: nt5.i

Sample Info: 16F0096-13

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160629.b\06291618.D

Date : 29-JUN-2016 21:40

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-13

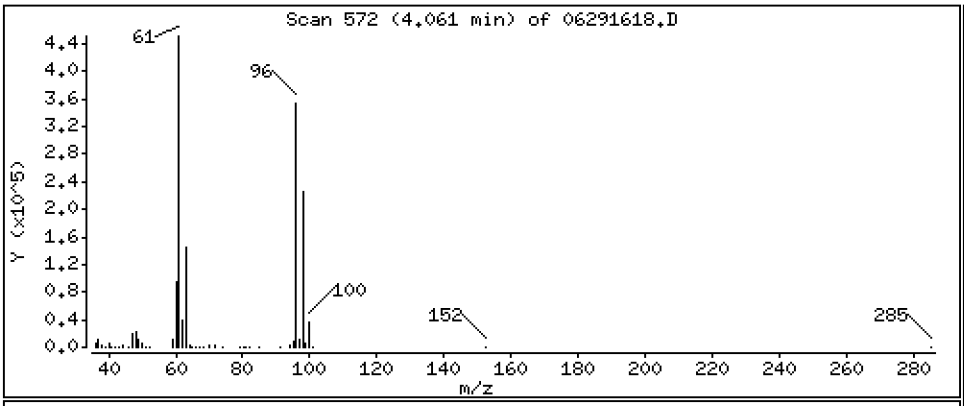
Operator: PB

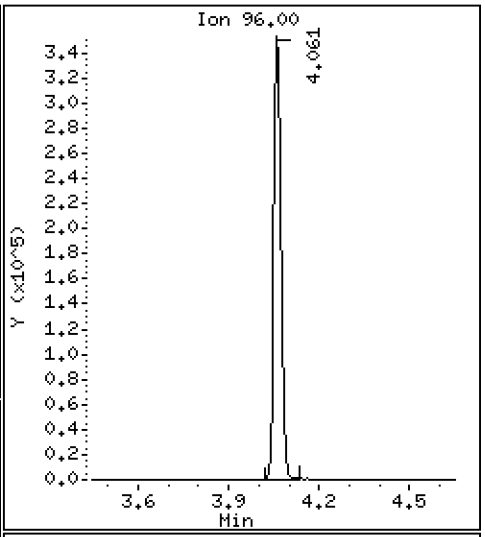
Column phase: RTXVMS

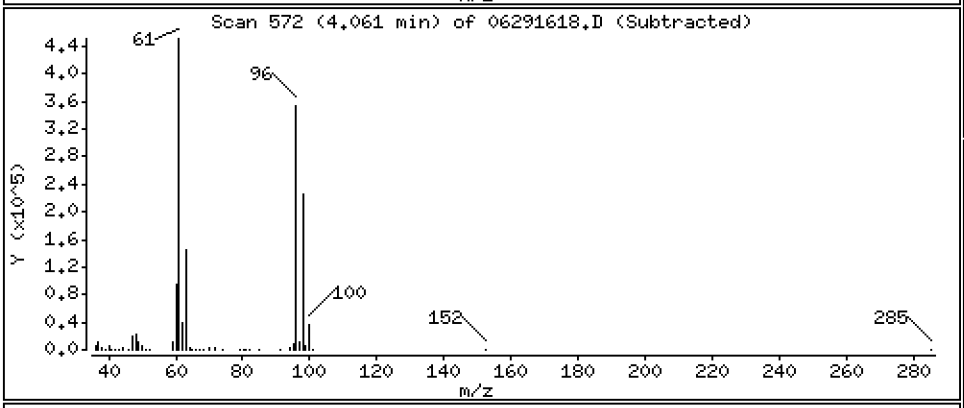
Column diameter: 0.18

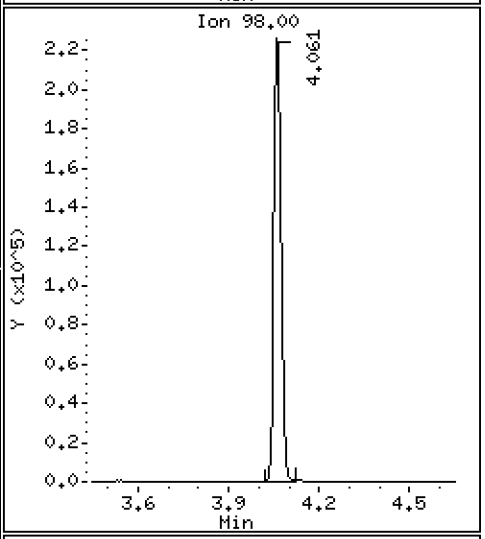
20 Cis-1,2-Dichloroethene

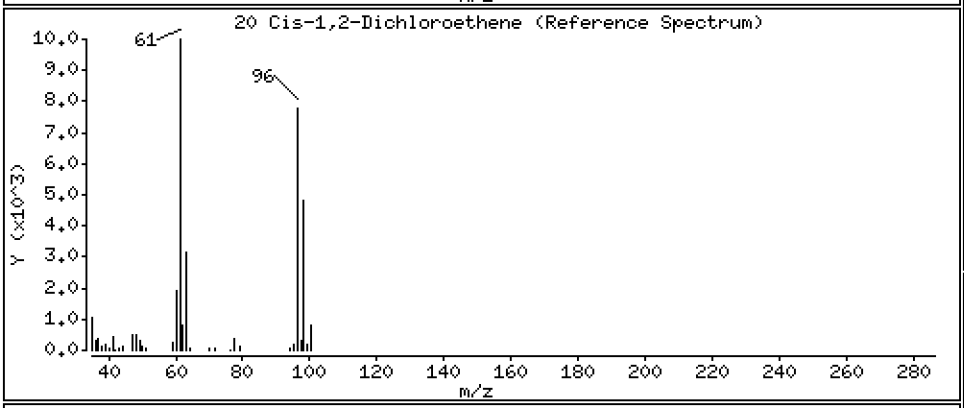
Concentration: 38.106 ug/Kg

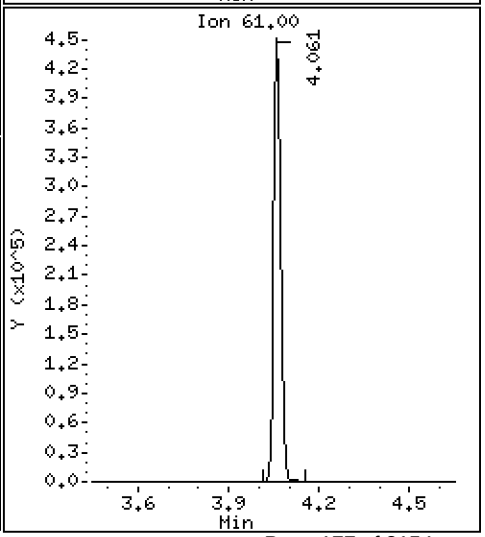


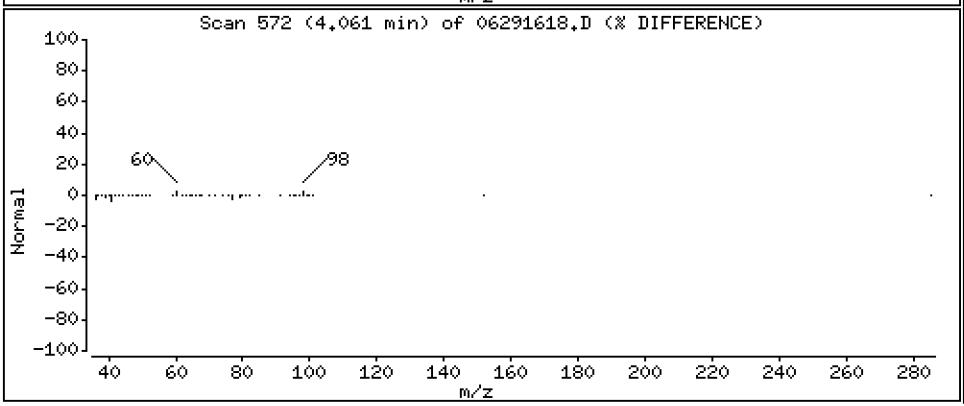












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Date : 29-JUN-2016 21:40

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-13

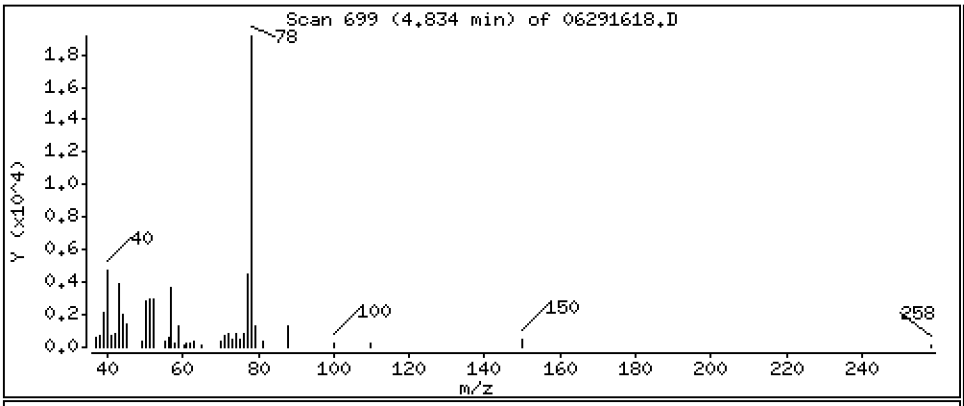
Operator: PB

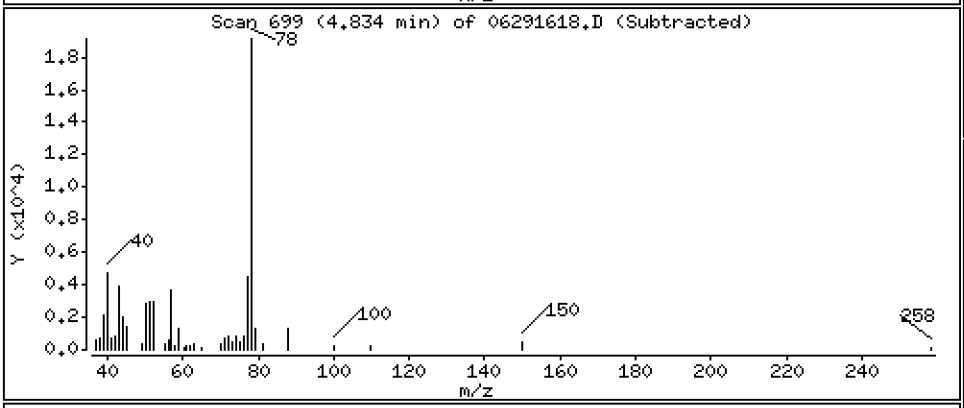
Column phase: RTXVMS

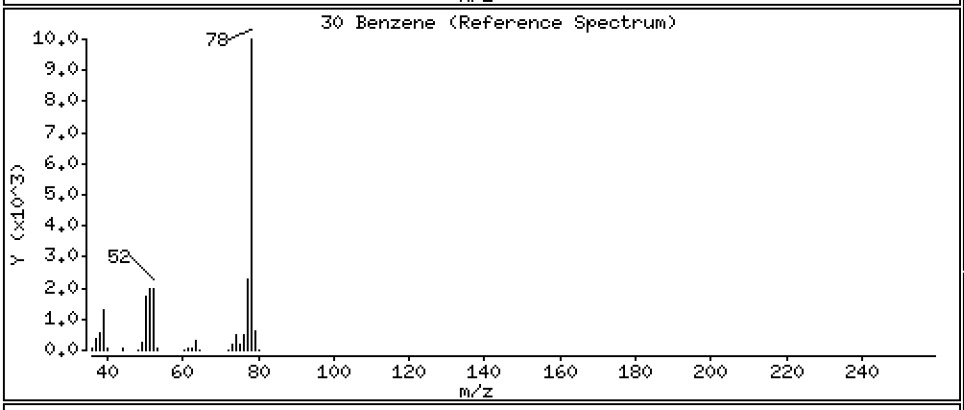
Column diameter: 0.18

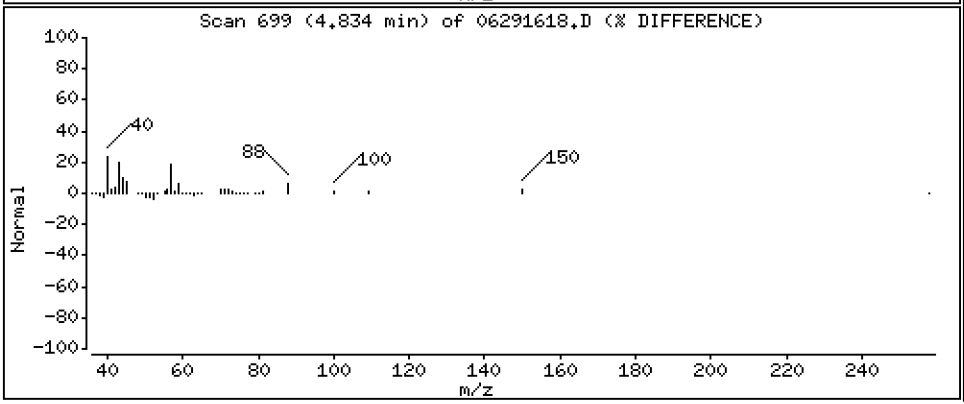
30 Benzene

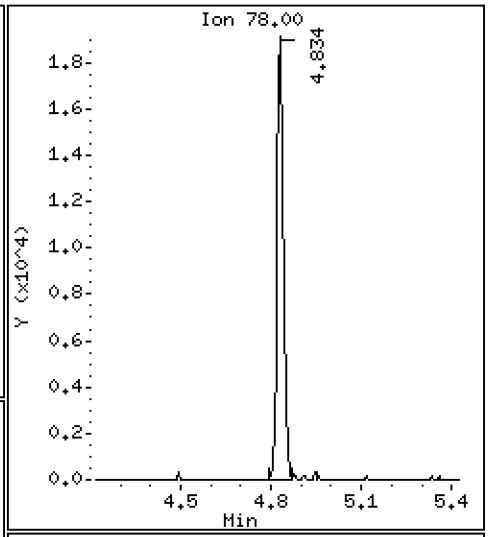
Concentration: 0.5202 ug/Kg

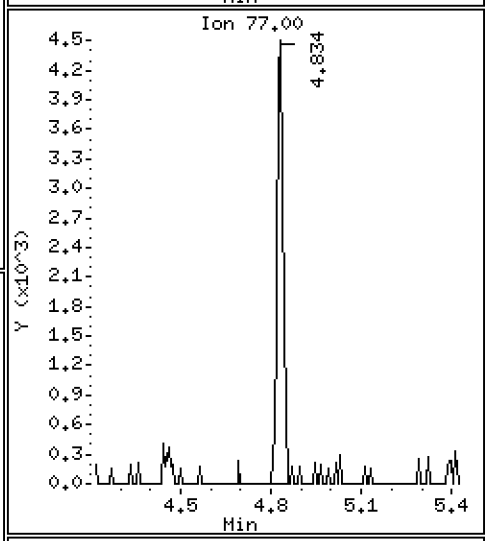


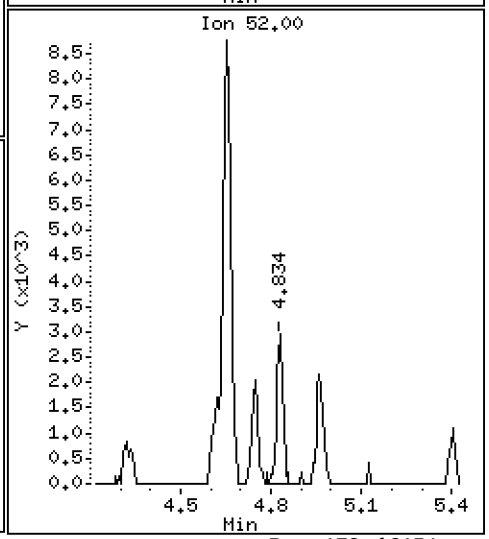












Data File: \\target\share\chem1\nt5.i\20160629.b\06291618.D

Date : 29-JUN-2016 21:40

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-13

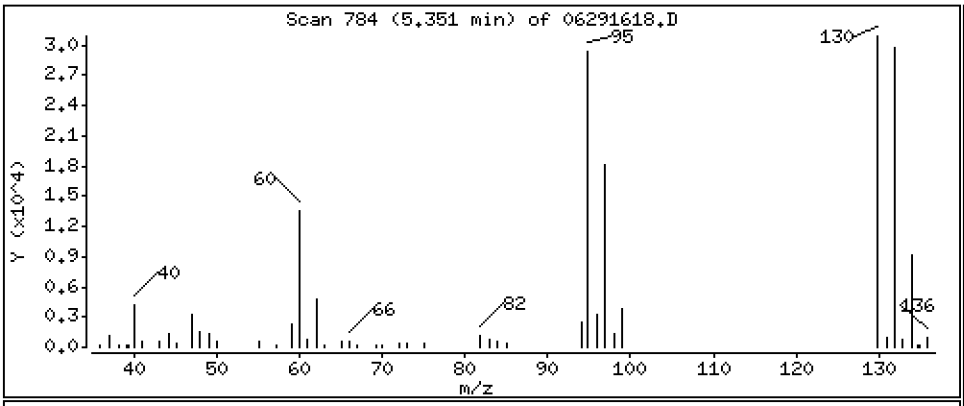
Operator: PB

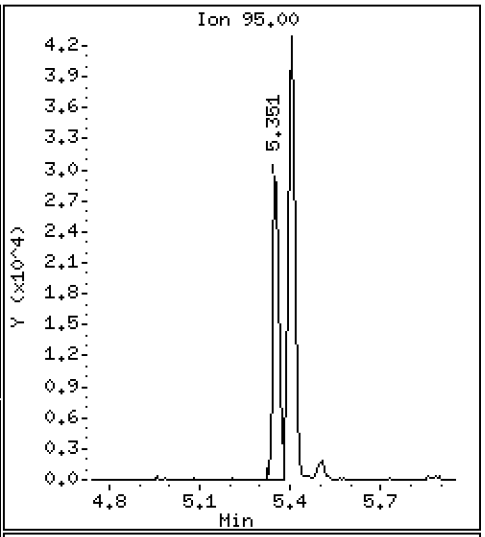
Column phase: RTXVMS

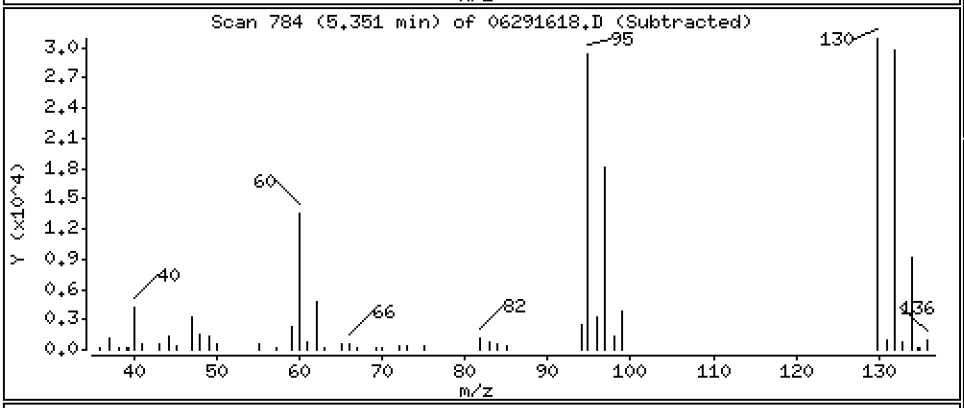
Column diameter: 0.18

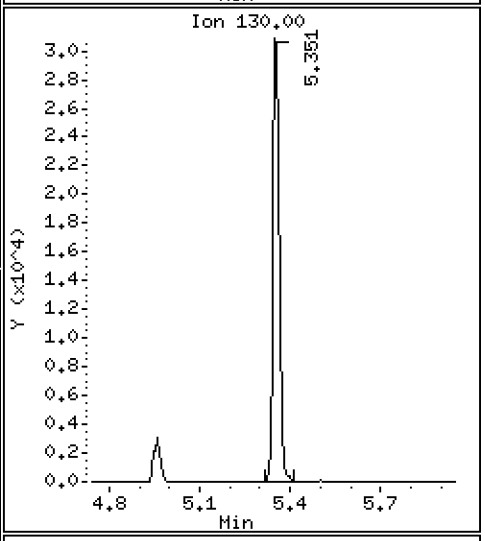
34 Trichloroethene

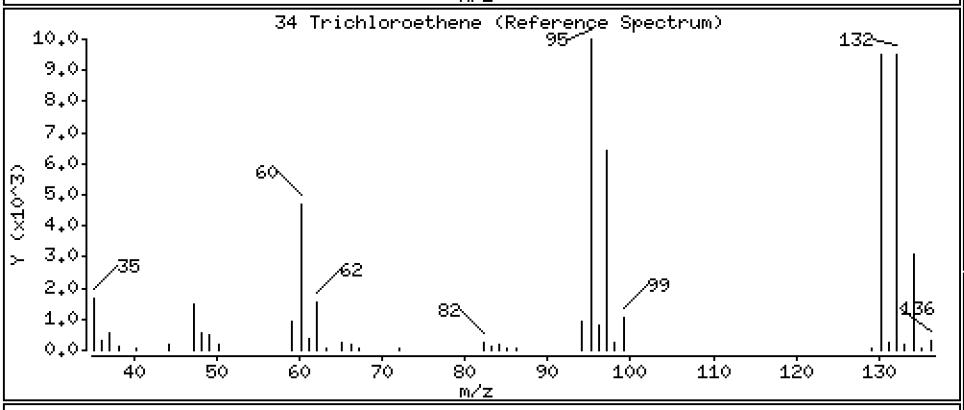
Concentration: 3.127 ug/Kg

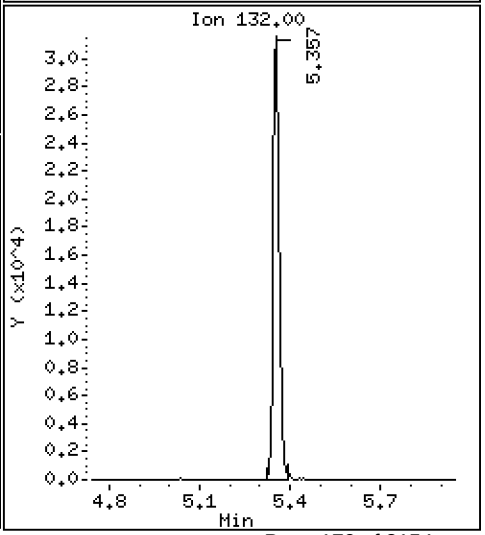


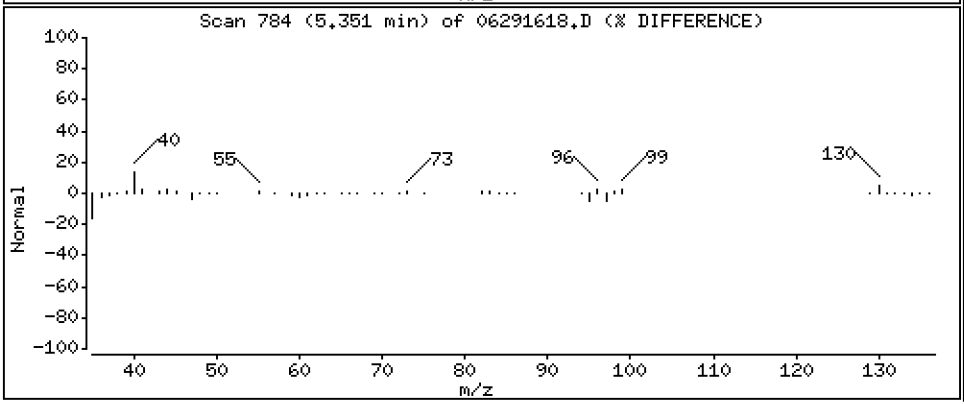












Data File: \\target\share\chem1\nt5.i\20160629.b\06291618.D

Date : 29-JUN-2016 21:40

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-13

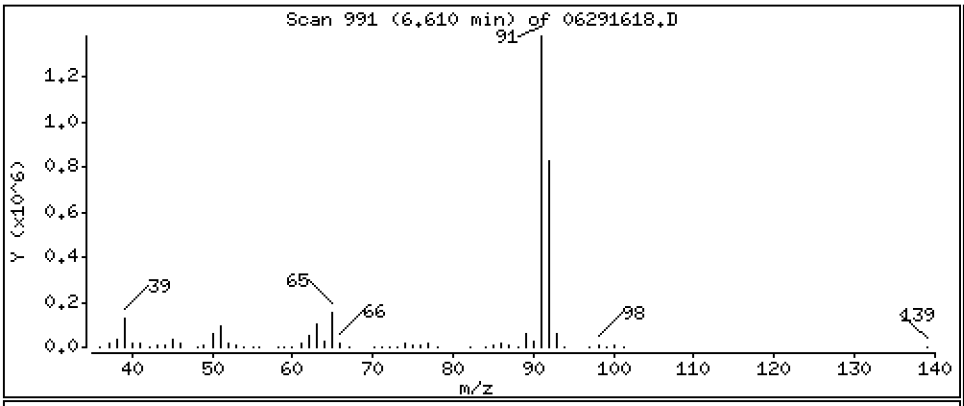
Operator: PB

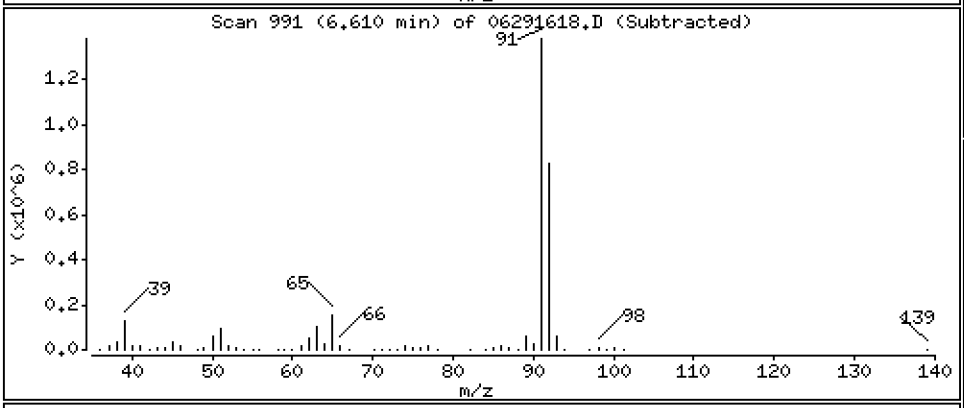
Column phase: RTXVMS

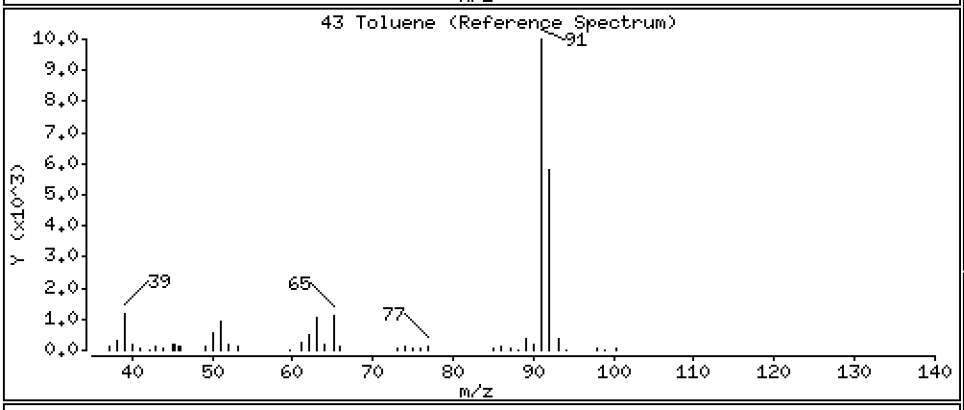
Column diameter: 0.18

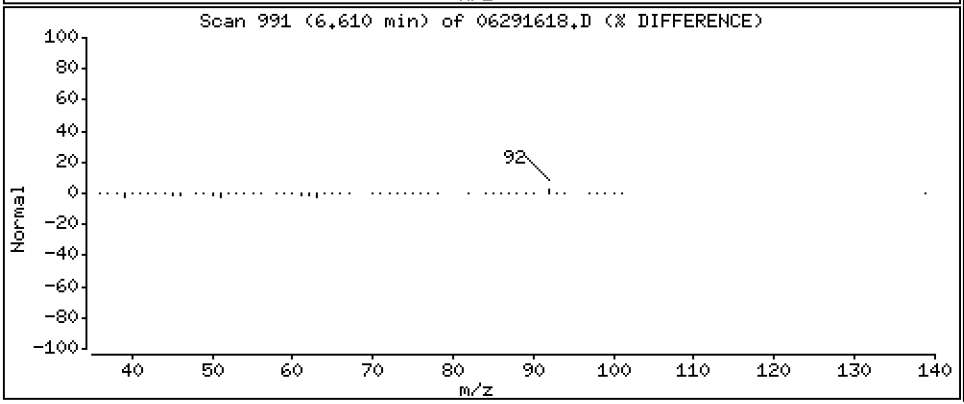
43 Toluene

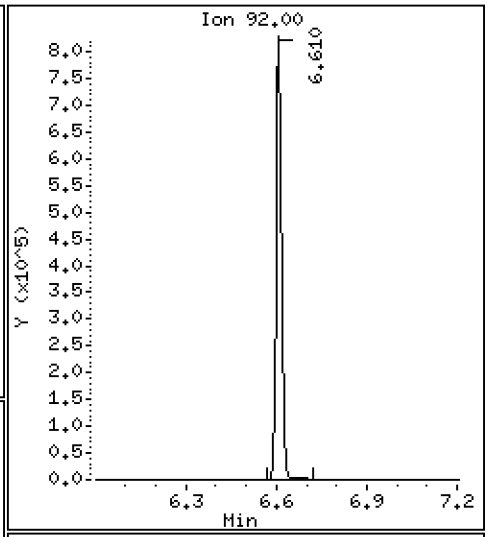
Concentration: 31.102 ug/Kg

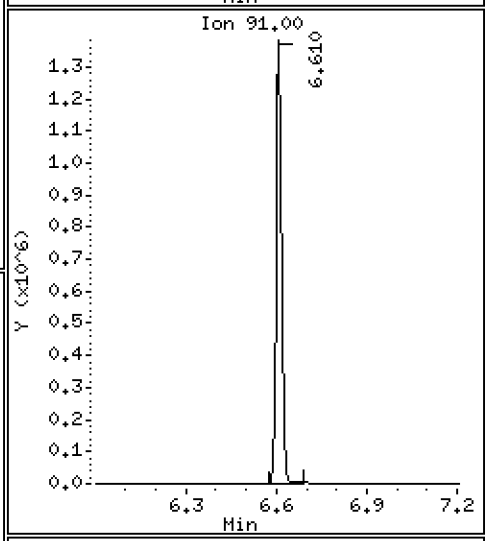


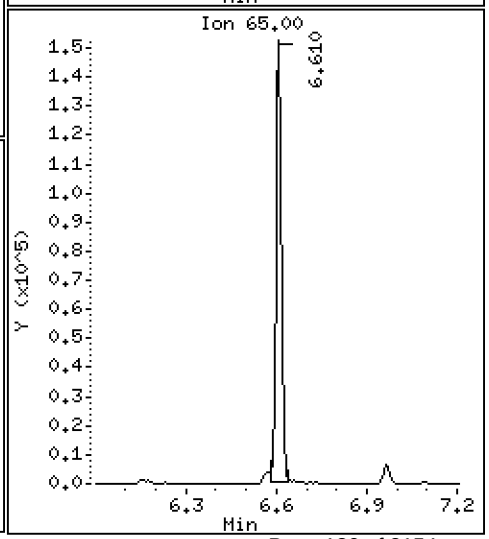












Data File: \\target\share\chem1\nt5.i\20160629.b\06291618.D

Date : 29-JUN-2016 21:40

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-13

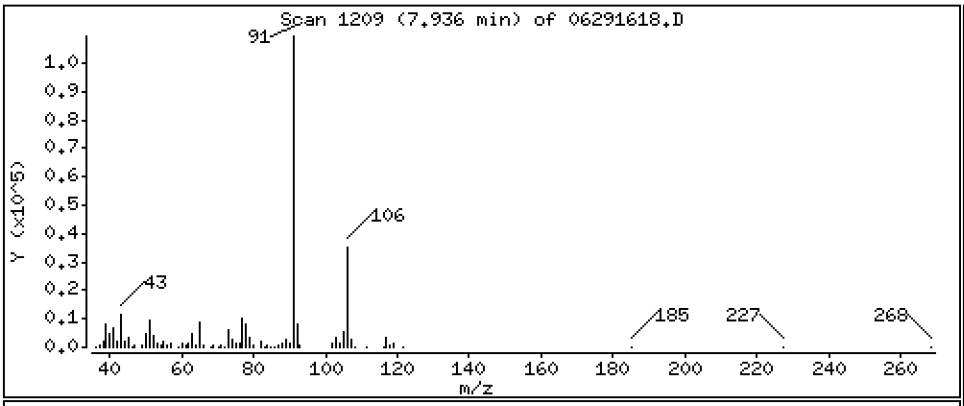
Operator: PB

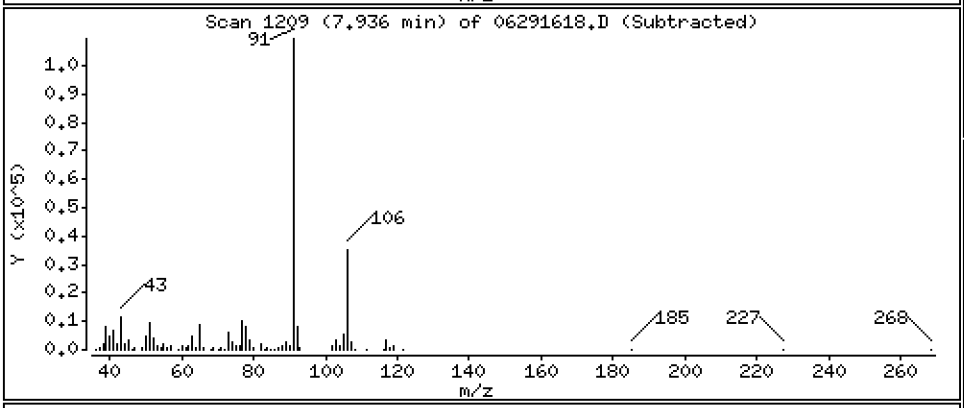
Column phase: RTXVMS

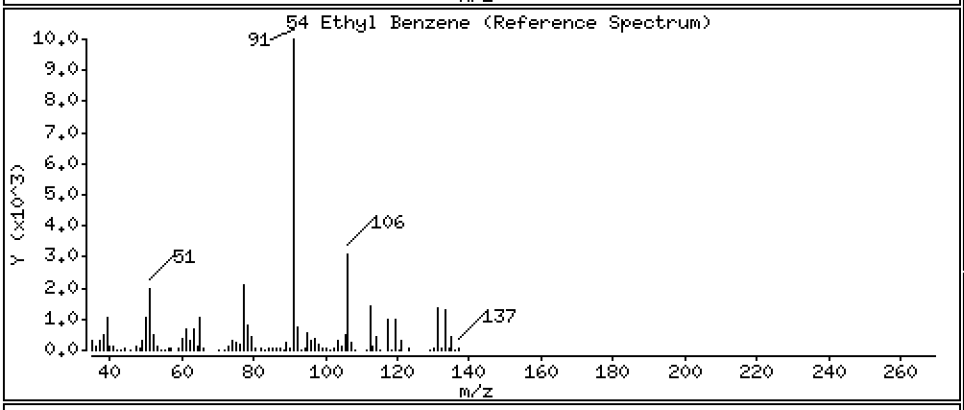
Column diameter: 0.18

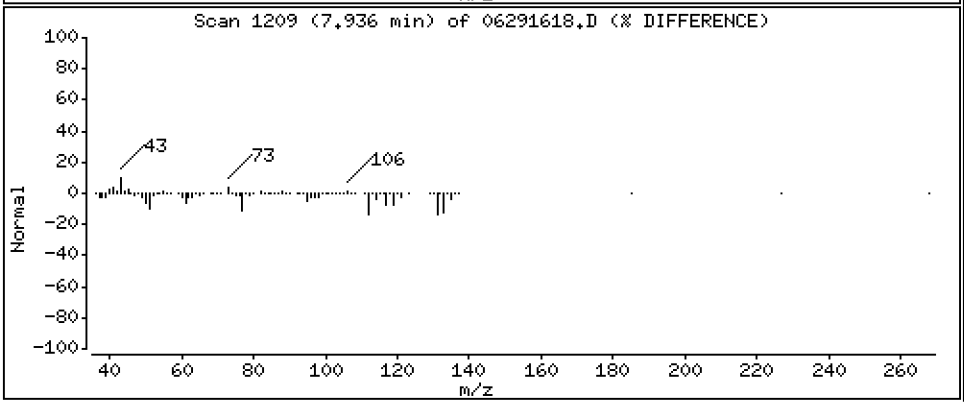
54 Ethyl Benzene

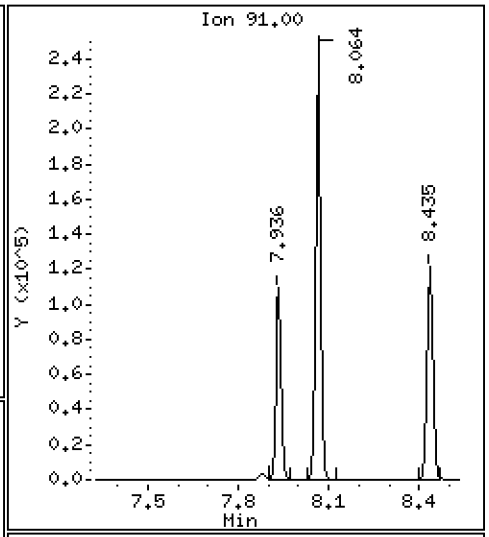
Concentration: 2.149 ug/Kg

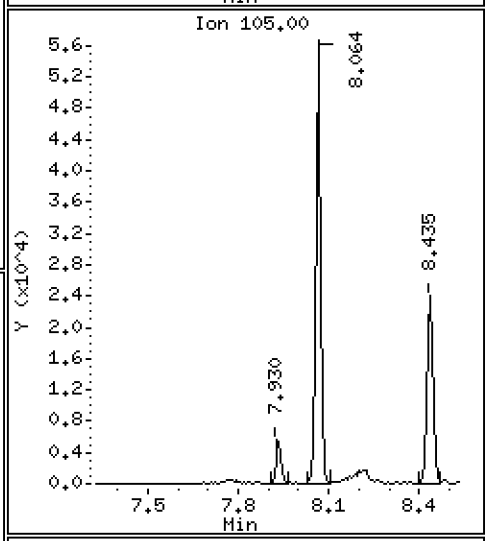


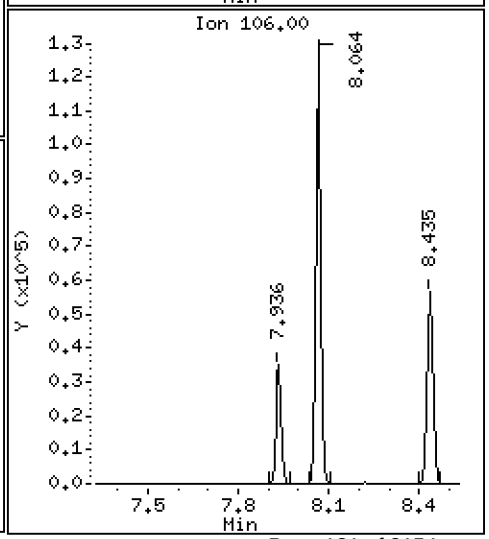












Data File: \\target\share\chem1\nt5.i\20160629.b\06291618.D

Date : 29-JUN-2016 21:40

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-13

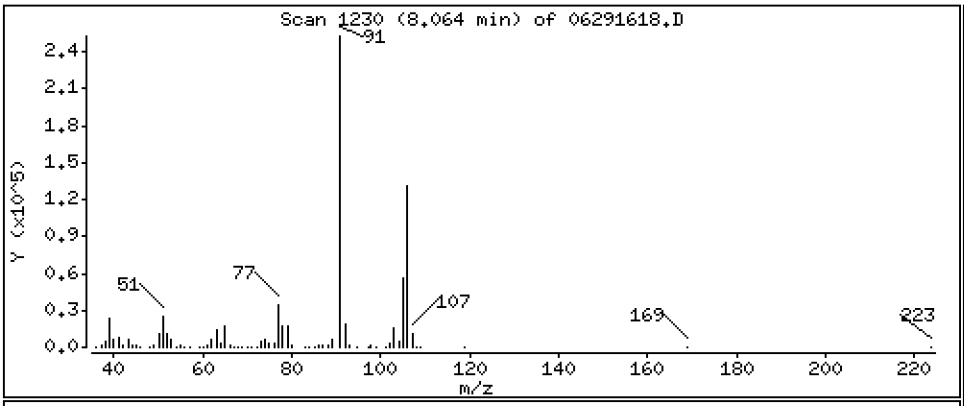
Operator: PB

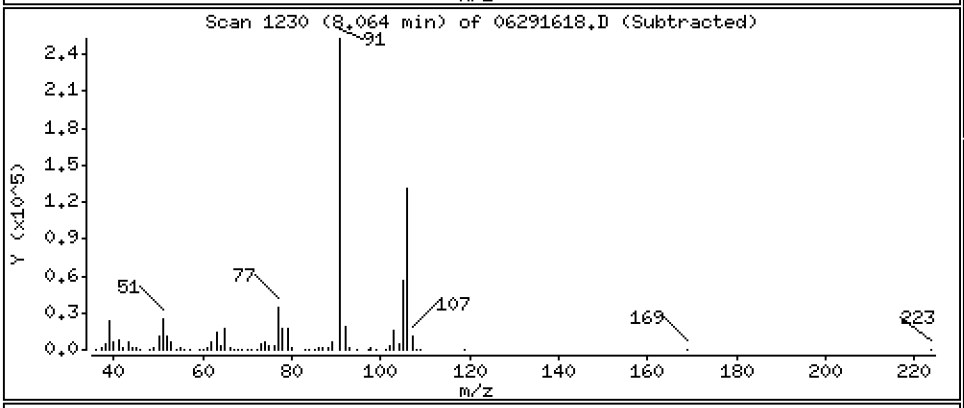
Column phase: RTXVMS

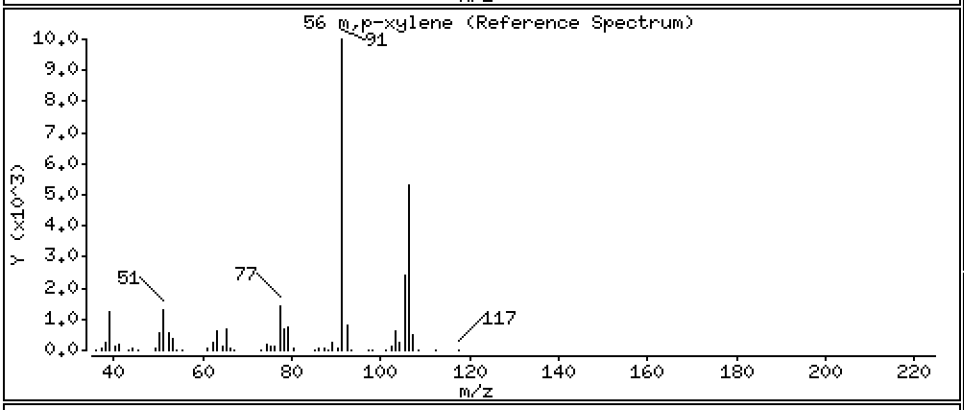
Column diameter: 0.18

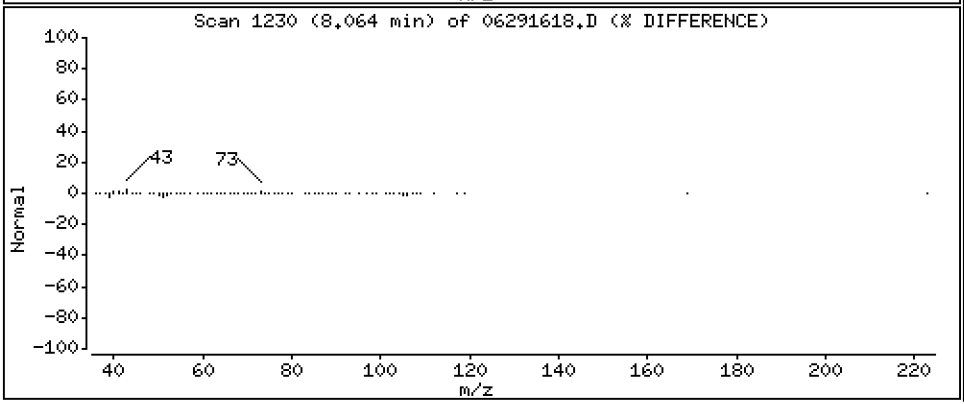
56 m,p-xylene

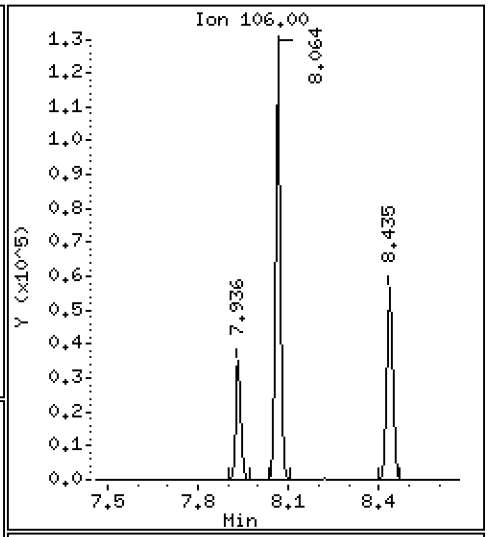
Concentration: 6.366 ug/Kg

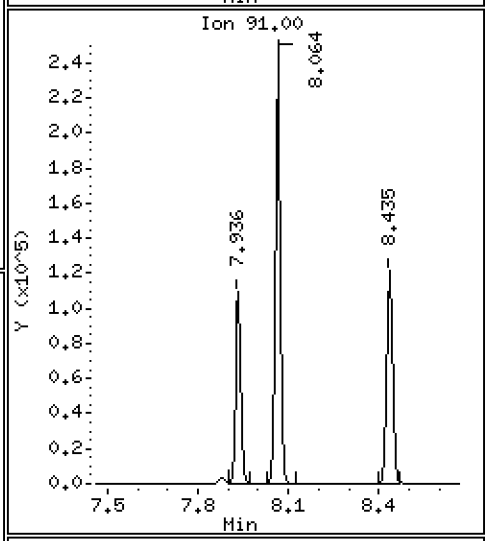


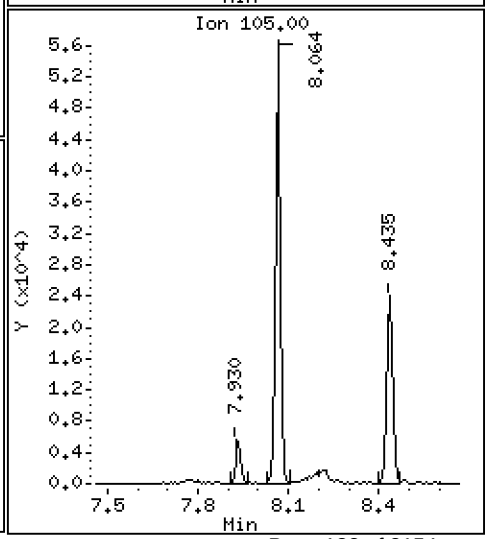












Data File: \\target\share\chem1\nt5.i\20160629.b\06291618.D

Date : 29-JUN-2016 21:40

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-13

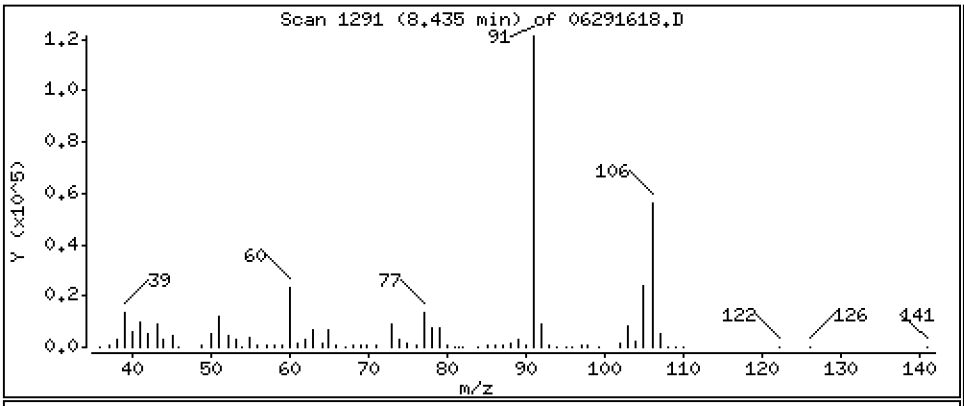
Operator: PB

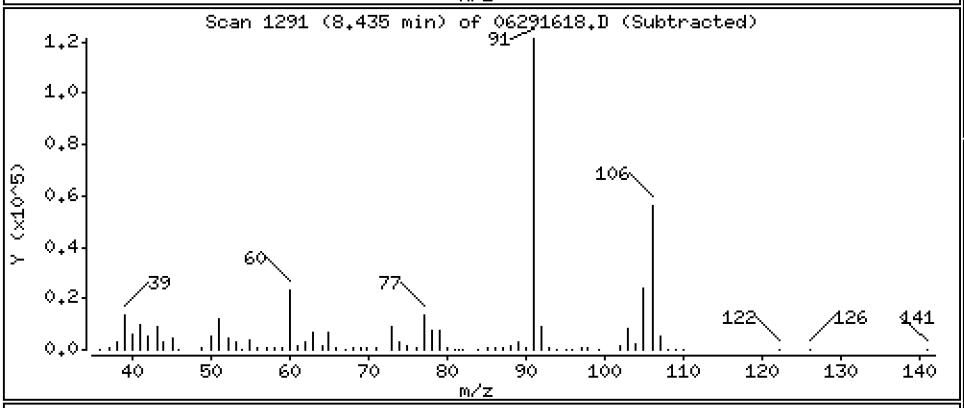
Column phase: RTXVMS

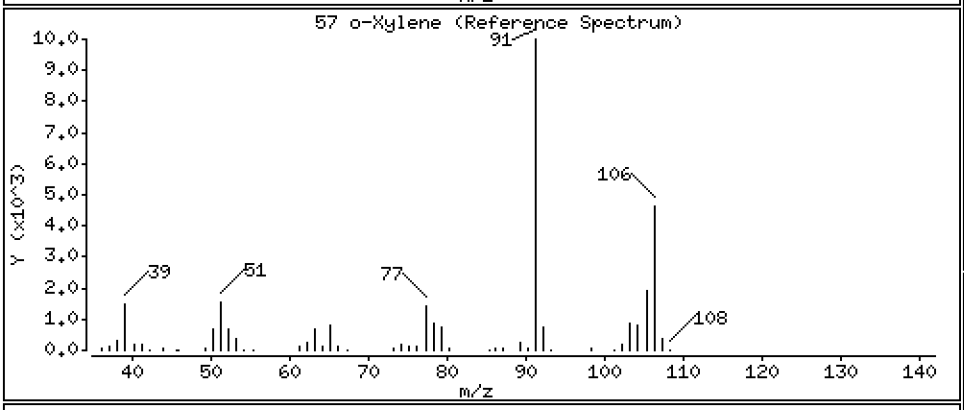
Column diameter: 0.18

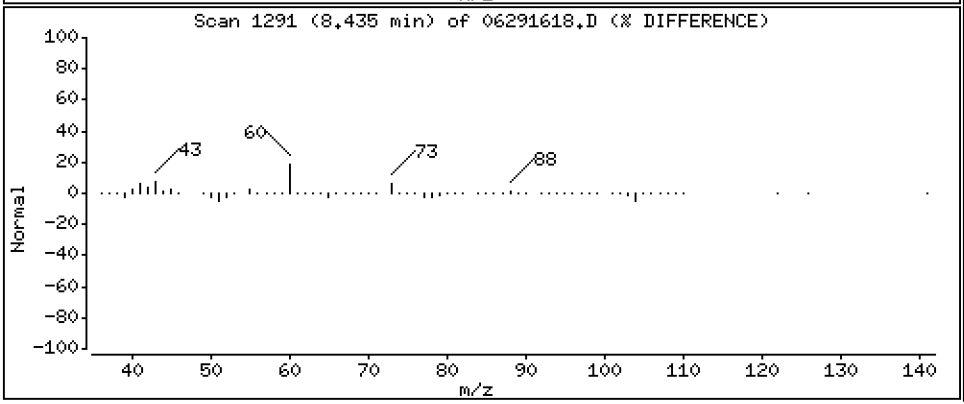
57 o-Xylene

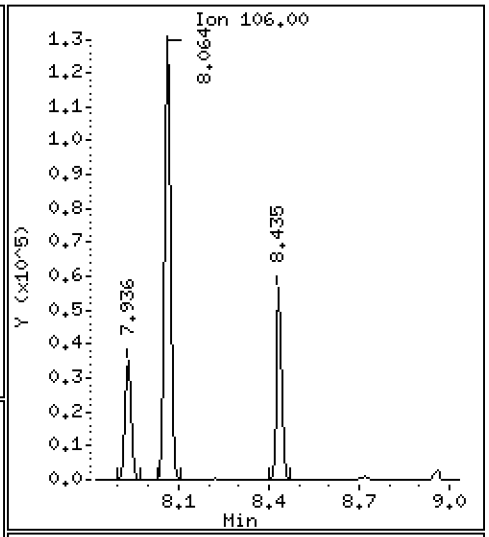
Concentration: 2.830 ug/Kg

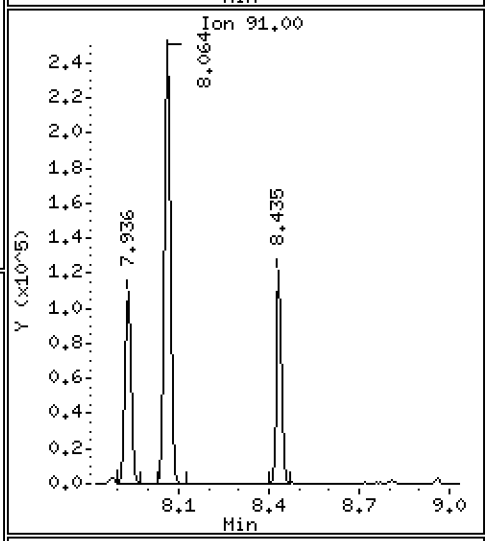


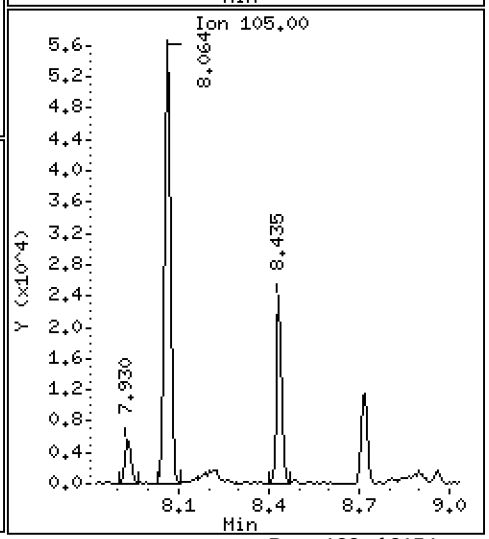












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291618.D
Lab Smp Id: 16F0096-13
Inj Date : 29-JUN-2016 21:40
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-13
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.061	4.048	(0.819)	612418	38.1058	38.106
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.499	4.486	(0.907)	792651	52.2656	52.266
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	4.833	4.821	(0.894)	30238	0.52023	0.5202
*	31 Pentafluorobenzene	168	4.961	4.949	(1.000)	636303	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.000)	779374	51.4070	51.407
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.350	5.344	(0.990)	47095	3.12677	3.127
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2152226	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.561	(1.215)	2708124	49.1084	49.108
	43 Toluene	92	6.610	6.603	(1.223)	1163020	31.1020	31.102
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2280334	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.936	7.930	(1.007)	149597	2.14944	2.149
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.064	8.063	(1.023)	172014	6.36632	6.366
	57 o-Xylene	106	8.435	8.428	(1.070)	75523	2.82981	2.830
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1177414	48.0121	48.012
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1101330	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1106614	49.8990	49.899
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291618.D
Lab Smp Id: 16F0096-13
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	636303	6.06
35 1,4-Difluorobenze	2041239	1020620	4082478	2152226	5.44
52 d5-Chlorobenzene	2118314	1059157	4236628	2280334	7.65
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1101330	4.39

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 13:10

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-13
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	52.266	104.53	70-130
$ 32 d4-1,2-Dichloroeth	50.000	51.407	102.81	80-149
$ 42 d8-Toluene	50.000	49.108	98.22	77-120
$ 62 4-Bromofluorobenze	50.000	48.012	96.02	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.899	99.80	80-120

REVIEW SUMMARY FOR FILE - 06291618.D

Lab ID: 16F0096-13
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 21:40

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-N-04-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-14	File ID:	06291619.D
Sampled:	06/29/16 11:55	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 22:03
Solids:	93.48	Preparation:	No Prep - Volatiles	Initial/Final:	6.35 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	0.84	U	0.20	0.84
74-83-9	Bromomethane	1	0.84	U	0.16	0.84
156-59-2	cis-1,2-Dichloroethene	1	39.2		0.20	0.84
71-43-2	Benzene	1	0.84	U	0.25	0.84
79-01-6	Trichloroethene	1	19.4		0.18	0.84
108-88-3	Toluene	1	11.0		0.13	0.84
127-18-4	Tetrachloroethene	1	0.84	U	0.22	0.84
100-41-4	Ethylbenzene	1	0.45	J	0.17	0.84
179601-23-1	m,p-Xylene	1	1.43		0.33	0.84
95-47-6	o-Xylene	1	0.46	J	0.19	0.84

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	51.4	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.6	101	80 - 120	
Toluene-d8	50.000	49.1	98.1	77 - 120	
4-Bromofluorobenzene	50.000	50.2	100	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291619.D

Date : 29-JUN-2016 22:03

Client ID:

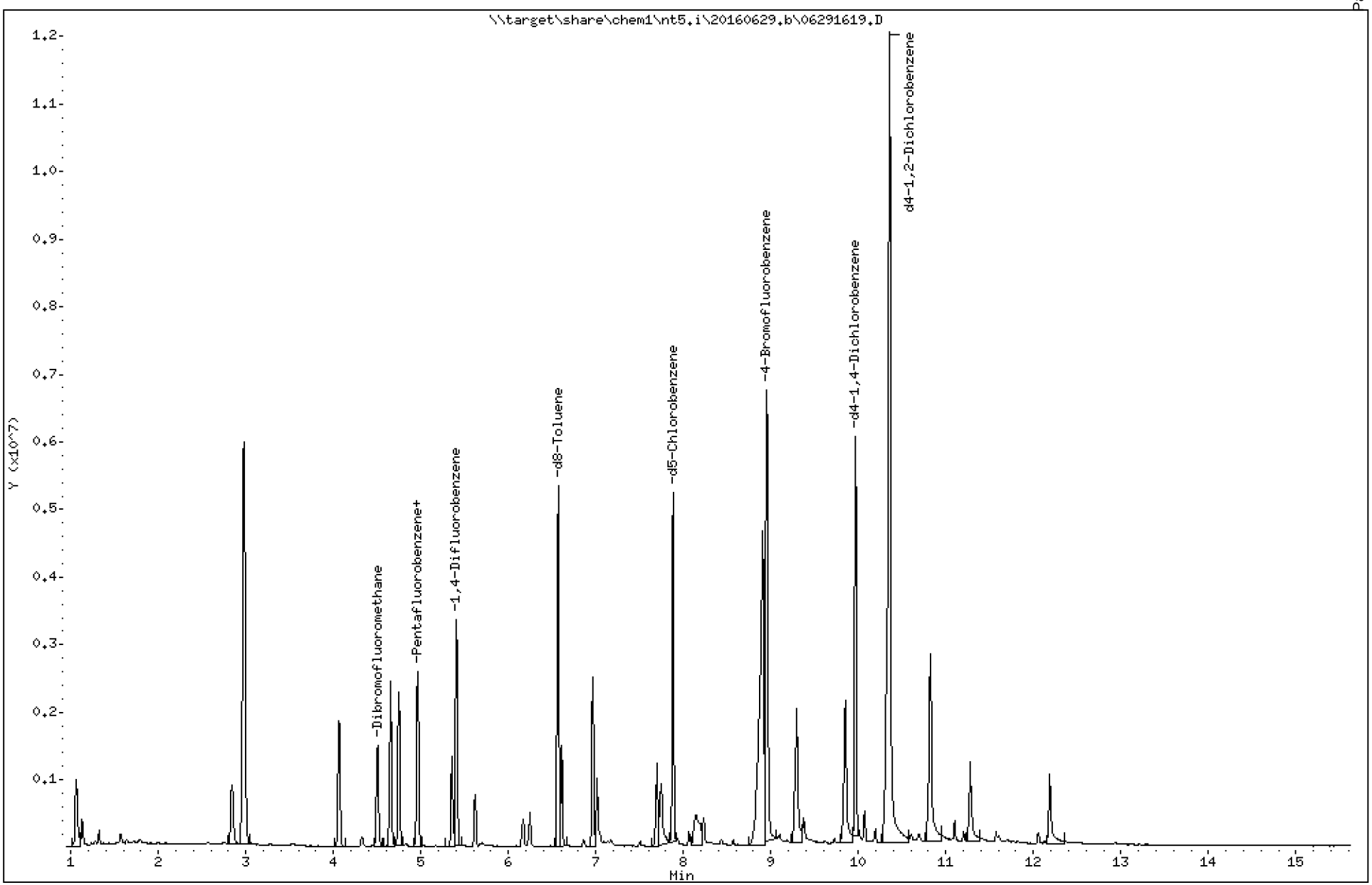
Instrument: nt5.i

Sample Info: 16F0096-14

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



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Date : 29-JUN-2016 22:03

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-14

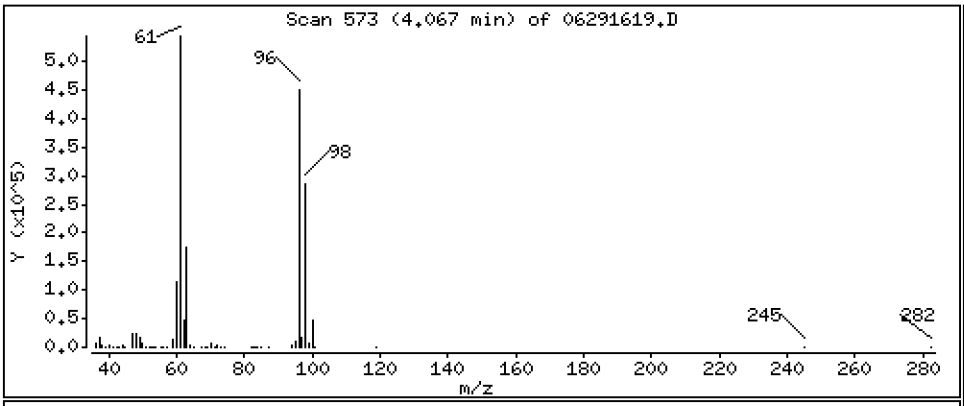
Operator: PB

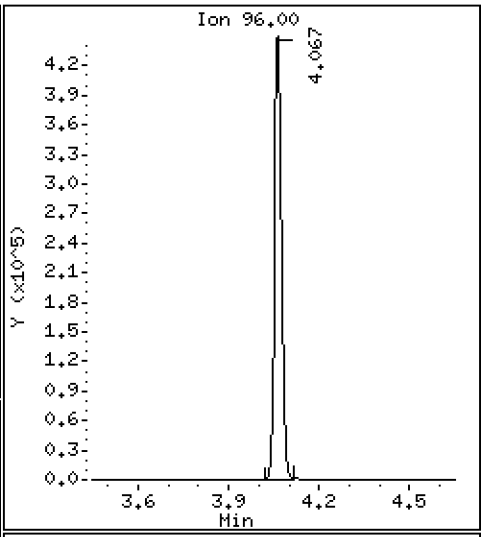
Column phase: RTXVMS

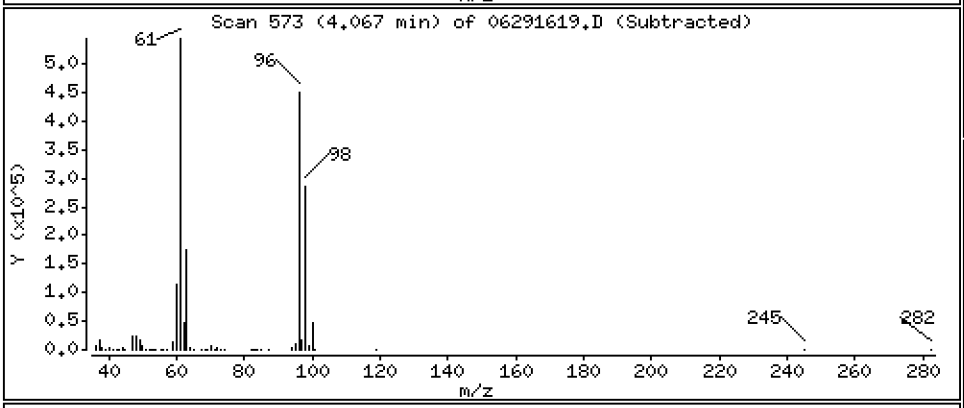
Column diameter: 0.18

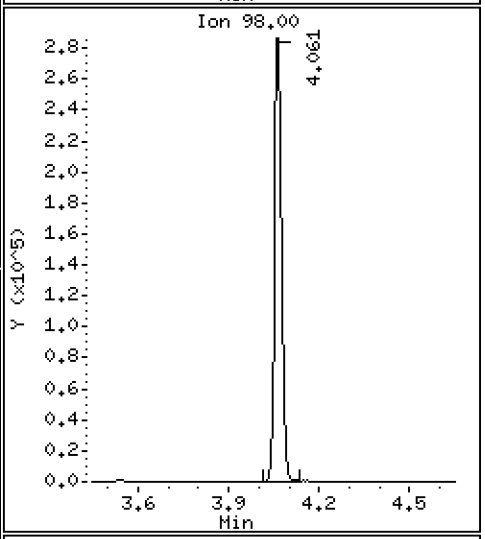
20 Cis-1,2-Dichloroethene

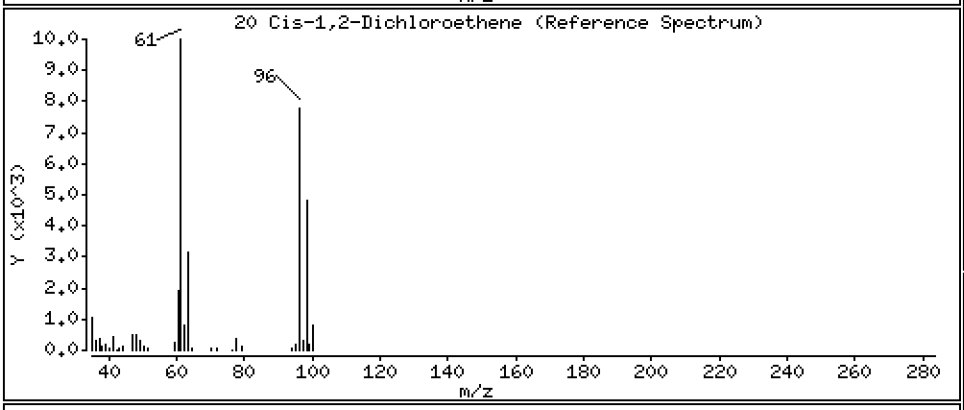
Concentration: 46.525 ug/Kg

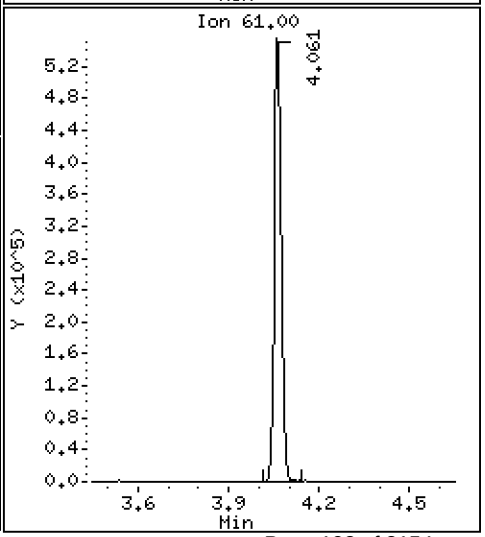


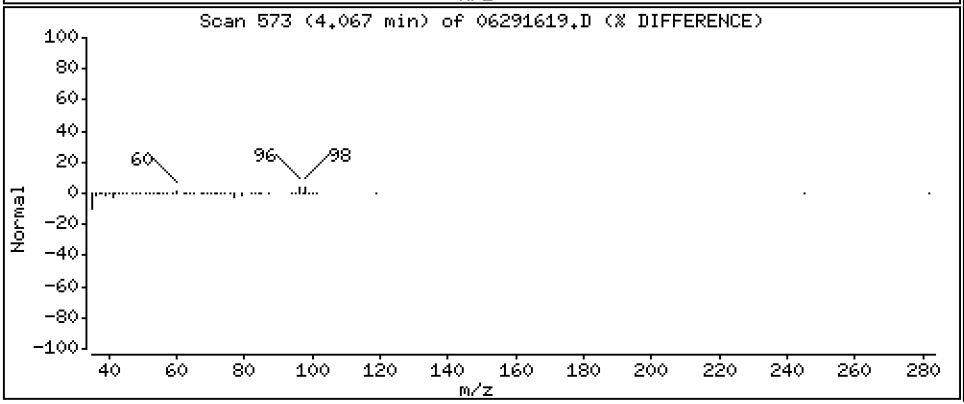












Data File: \\target\share\chem1\nt5.i\20160629.b\06291619.D

Date : 29-JUN-2016 22:03

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-14

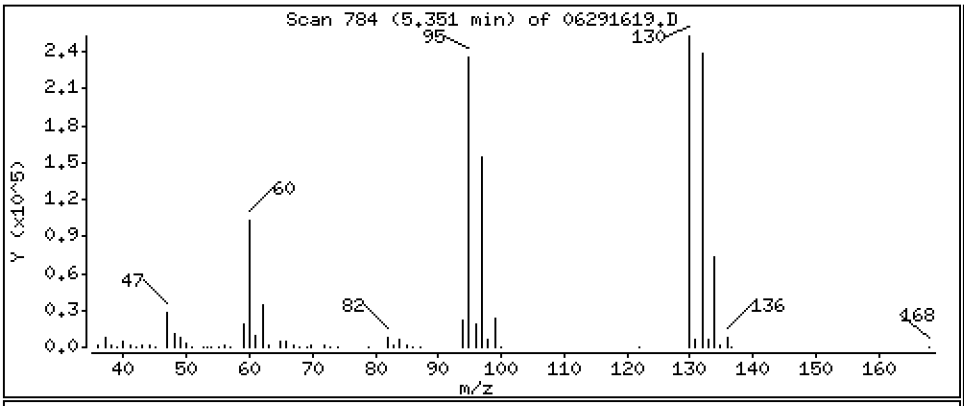
Operator: PB

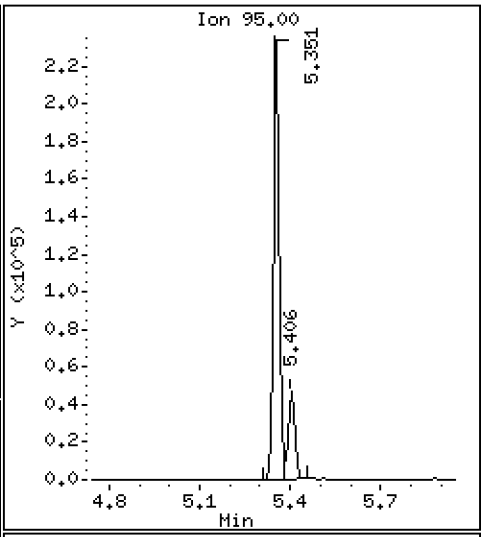
Column phase: RTXVMS

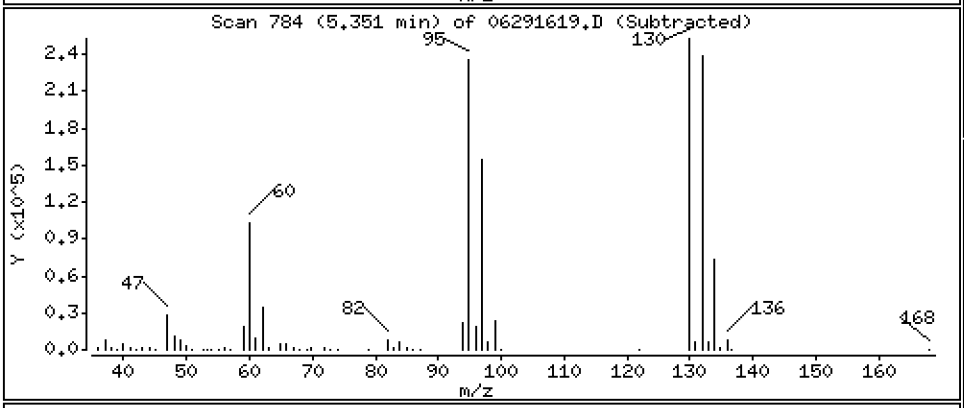
Column diameter: 0.18

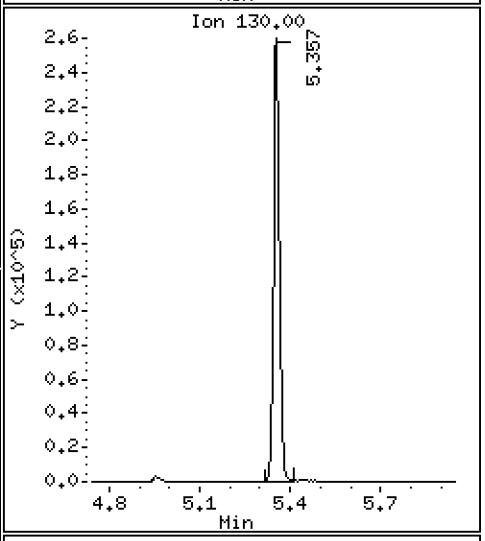
34 Trichloroethene

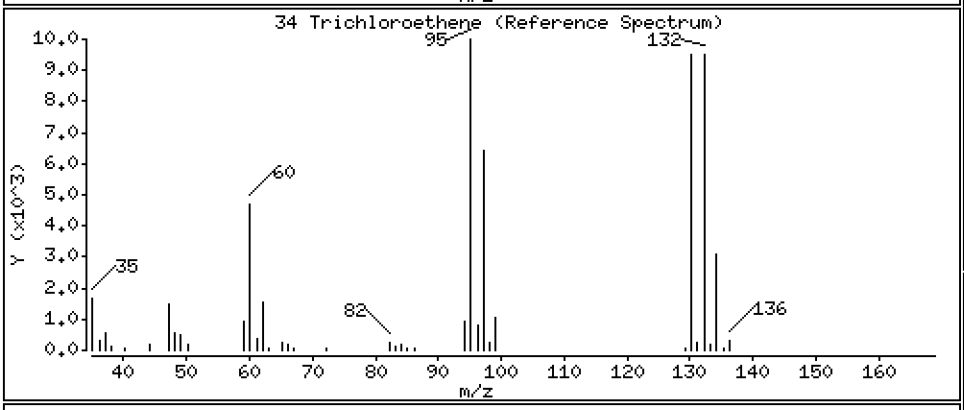
Concentration: 23.018 ug/Kg

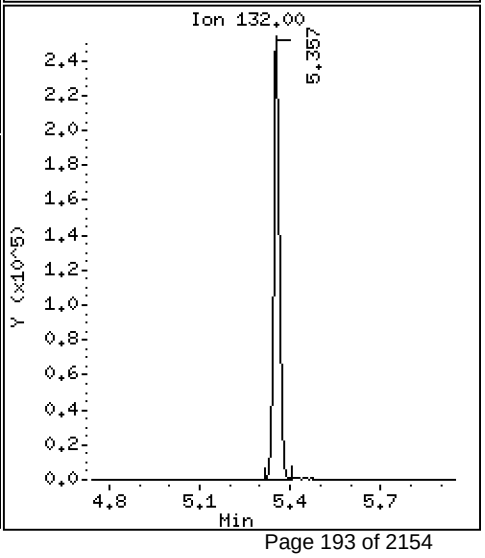


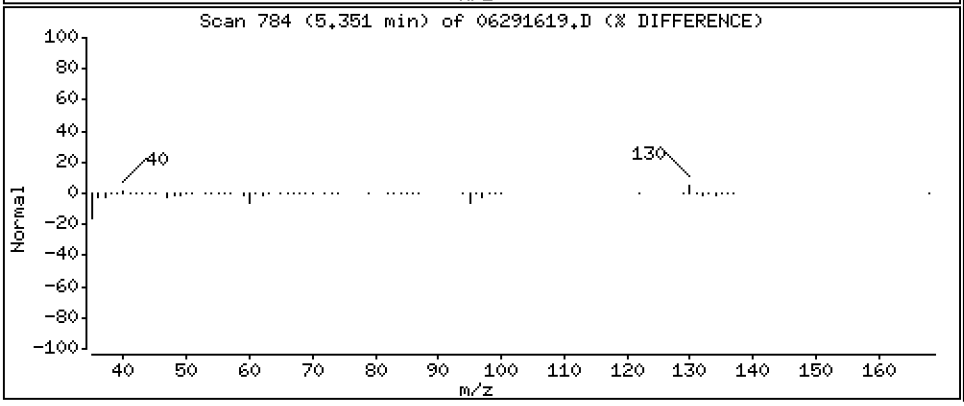












Data File: \\target\share\chem1\nt5.i\20160629.b\06291619.D

Date : 29-JUN-2016 22:03

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-14

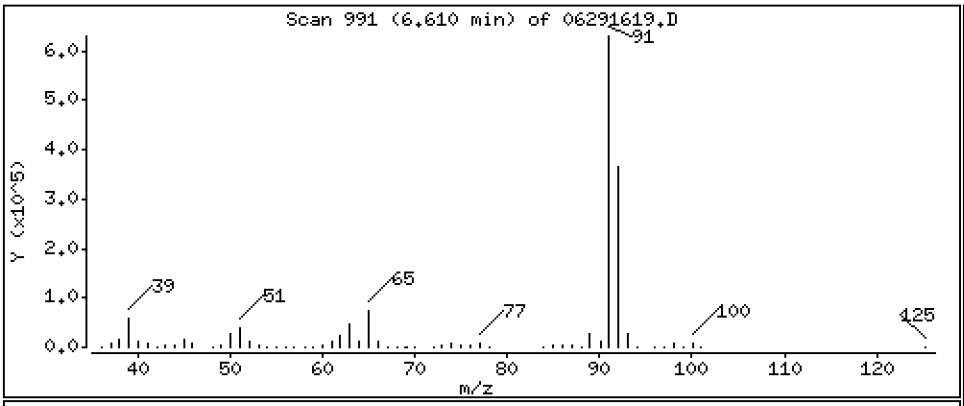
Operator: PB

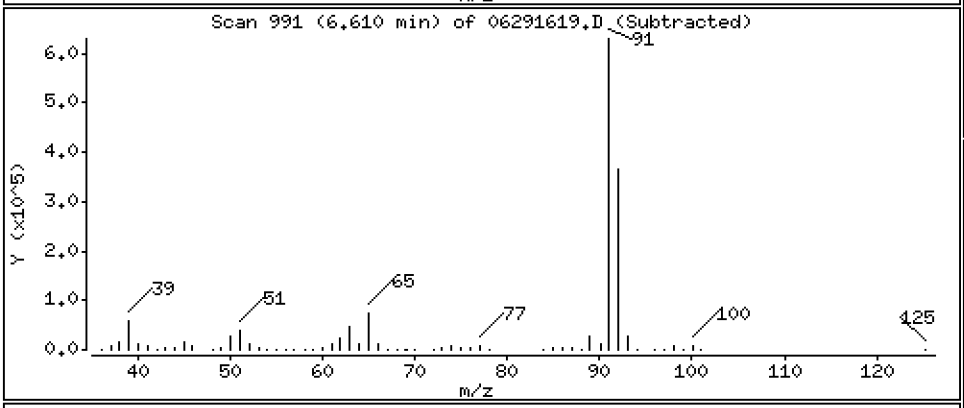
Column phase: RTXVMS

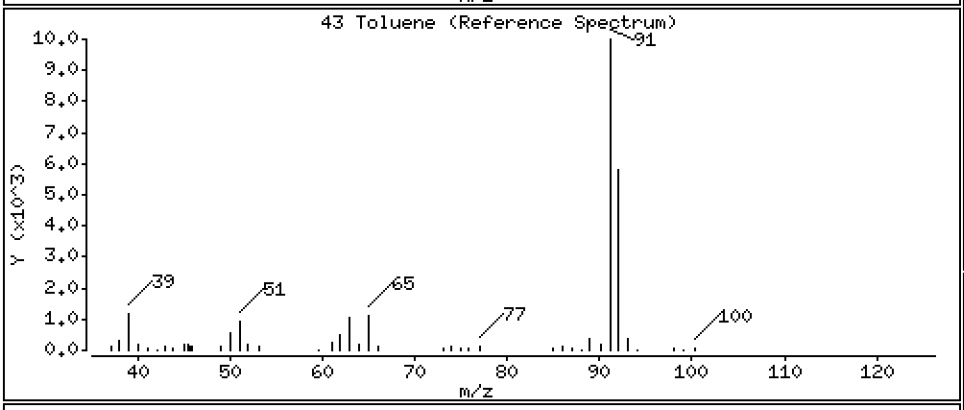
Column diameter: 0.18

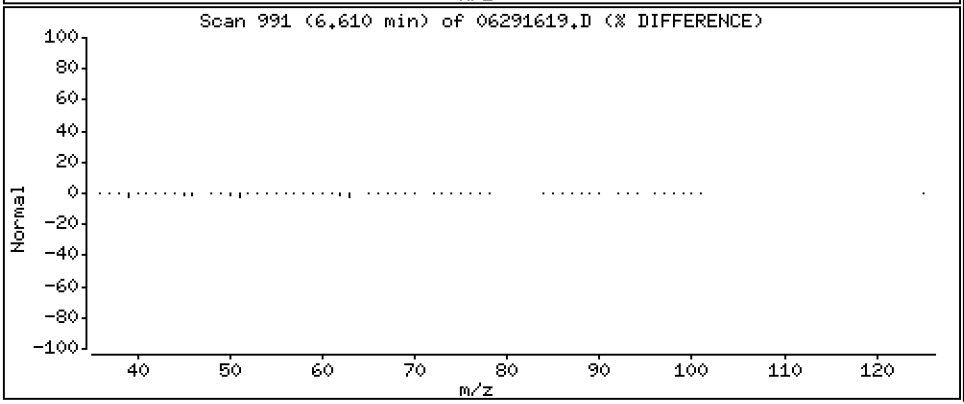
43 Toluene

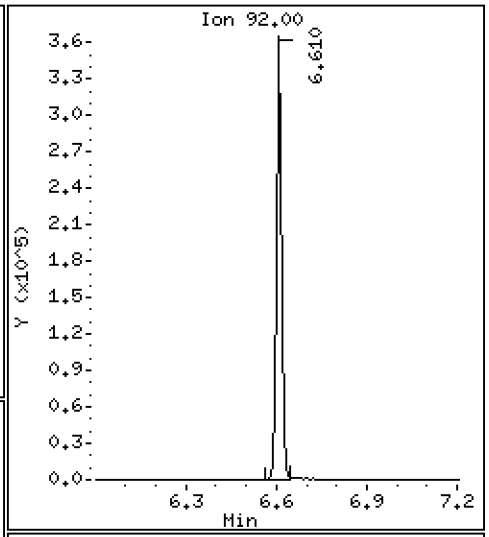
Concentration: 13.001 ug/Kg

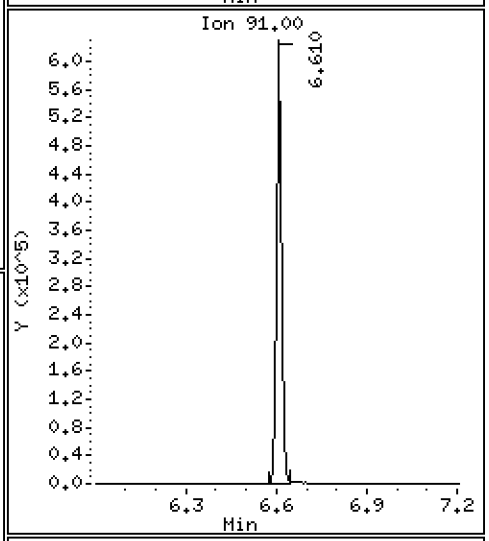


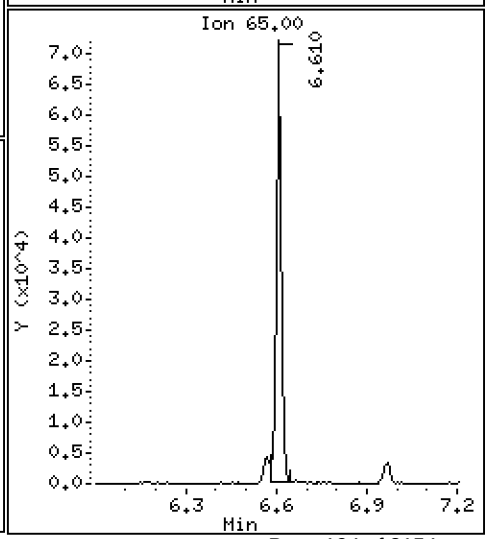












Data File: \\target\share\chem1\nt5.i\20160629.b\06291619.D

Date : 29-JUN-2016 22:03

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-14

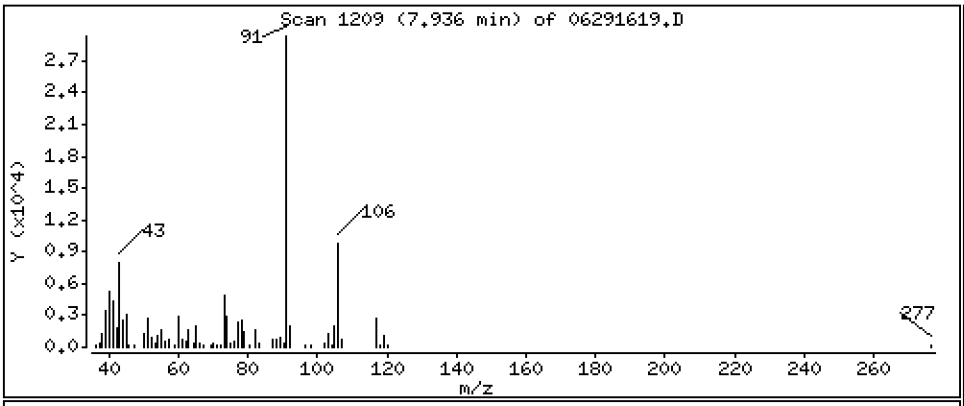
Operator: PB

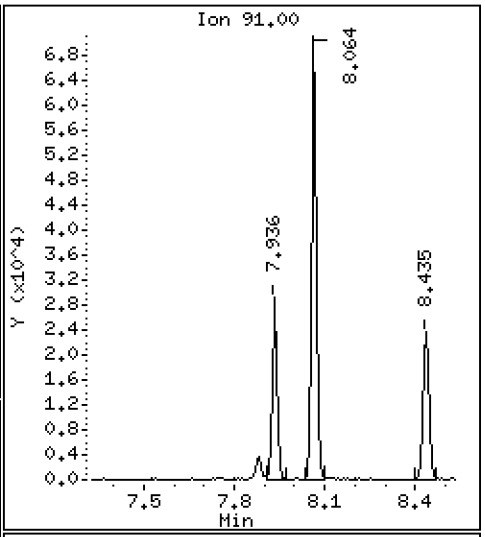
Column phase: RTXVMS

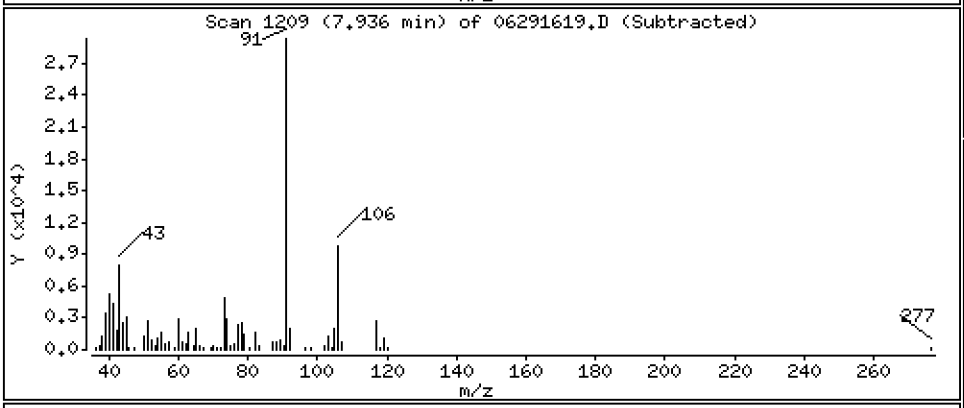
Column diameter: 0.18

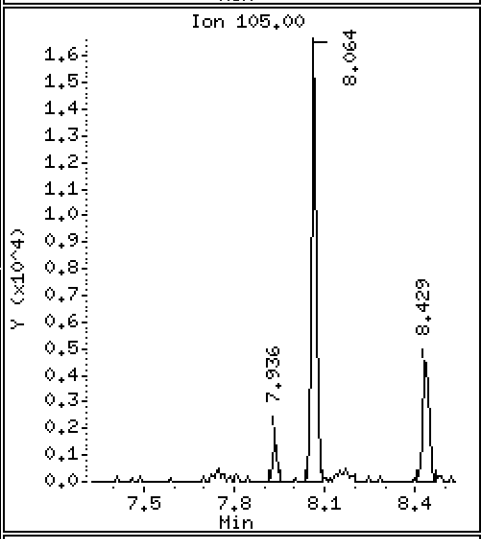
54 Ethyl Benzene

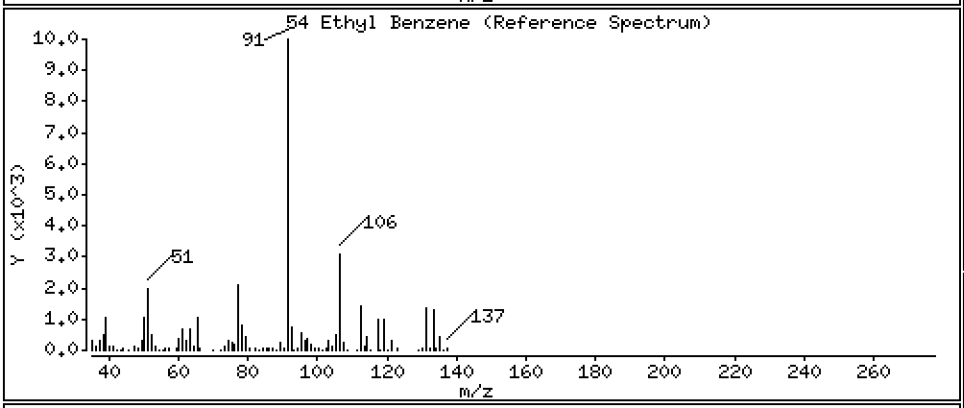
Concentration: 0.5353 ug/Kg

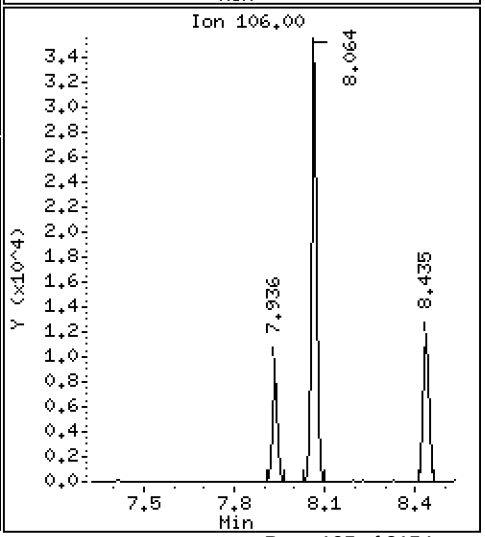


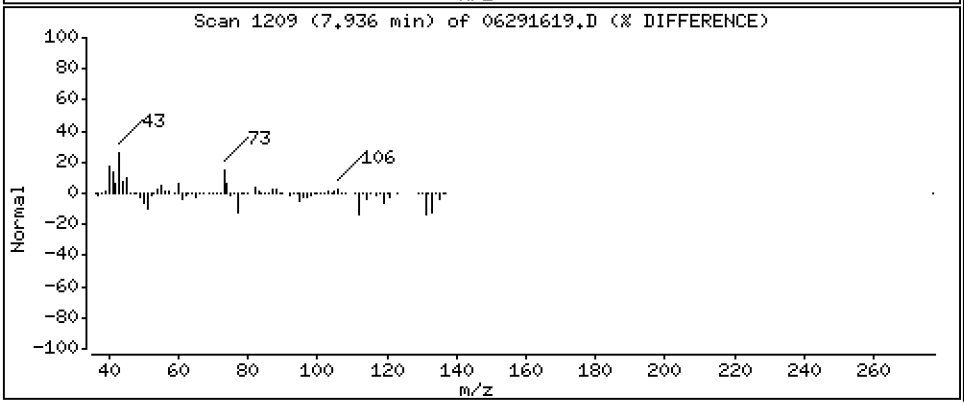












Data File: \\target\share\chem1\nt5.i\20160629.b\06291619.D

Date : 29-JUN-2016 22:03

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-14

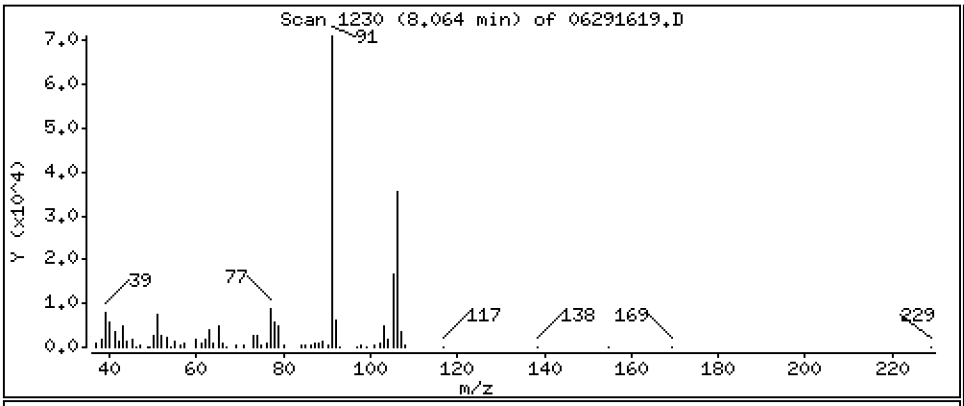
Operator: PB

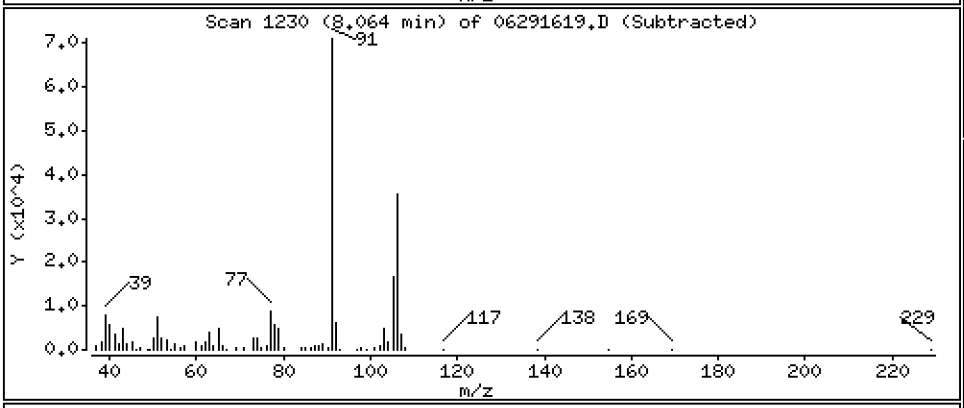
Column phase: RTXVMS

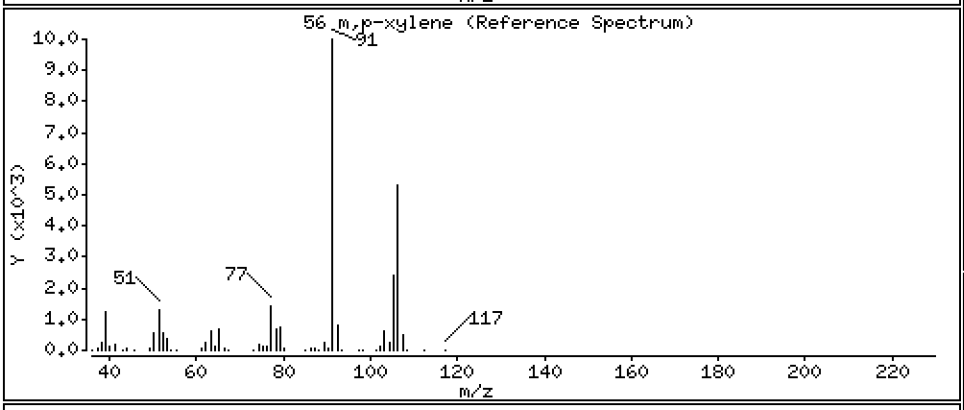
Column diameter: 0.18

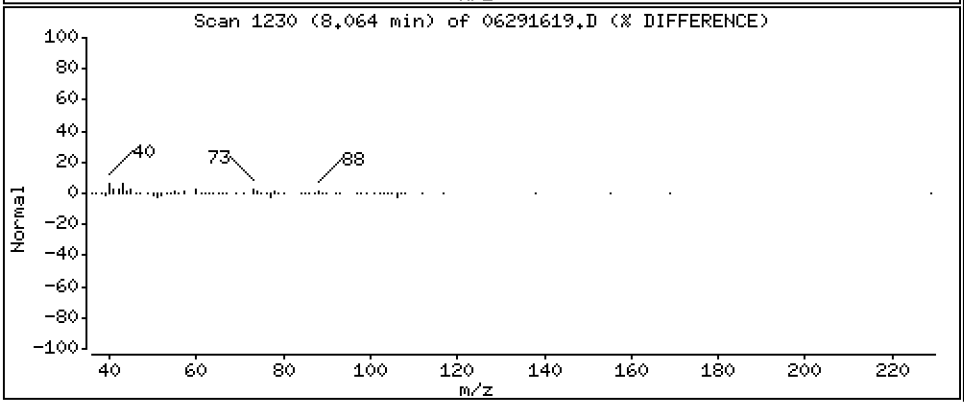
56 m,p-xylene

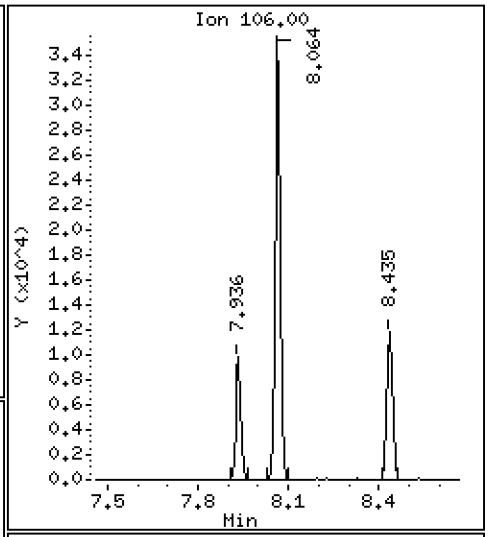
Concentration: 1.694 ug/Kg

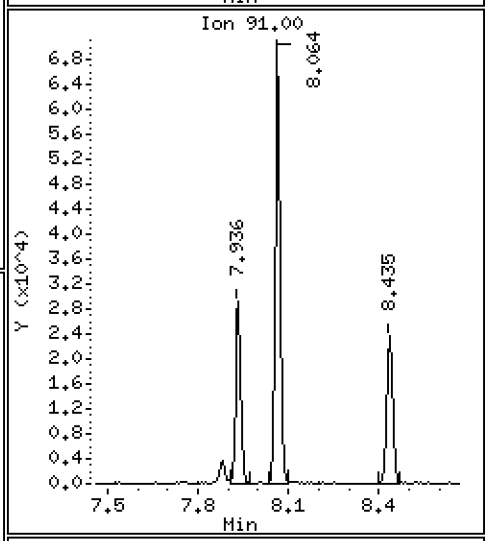


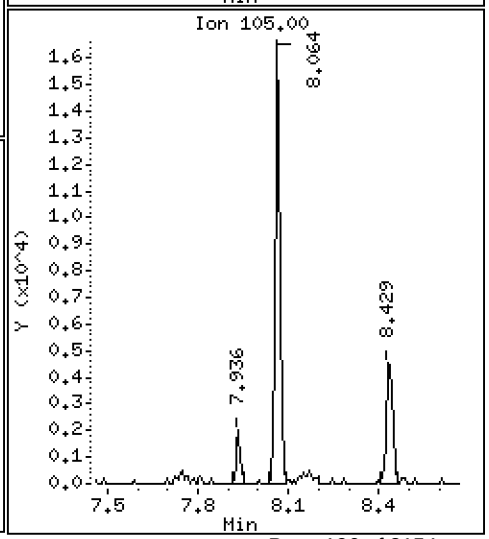












Data File: \\target\share\chem1\nt5.i\20160629.b\06291619.D

Date : 29-JUN-2016 22:03

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-14

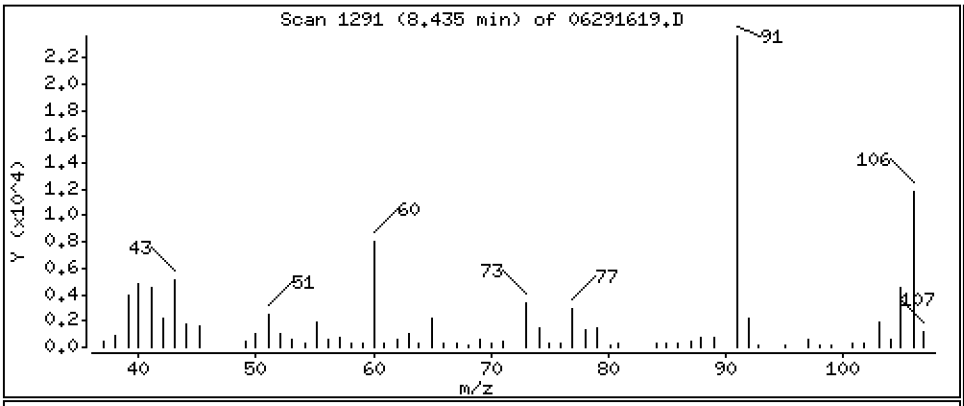
Operator: PB

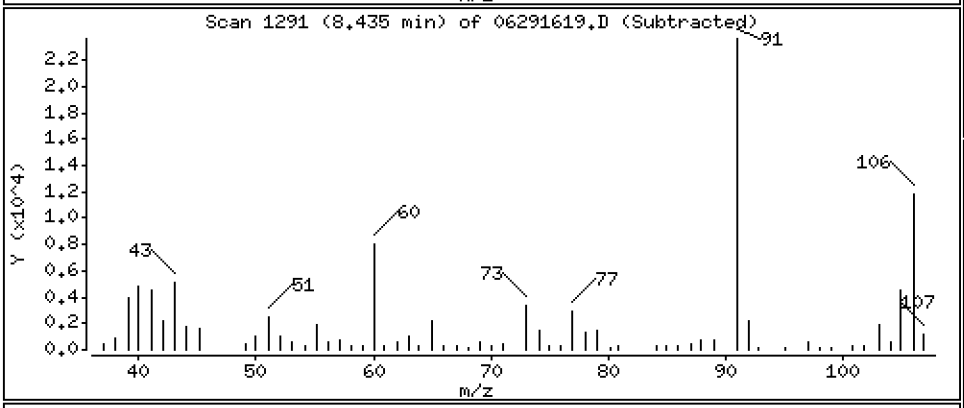
Column phase: RTXVMS

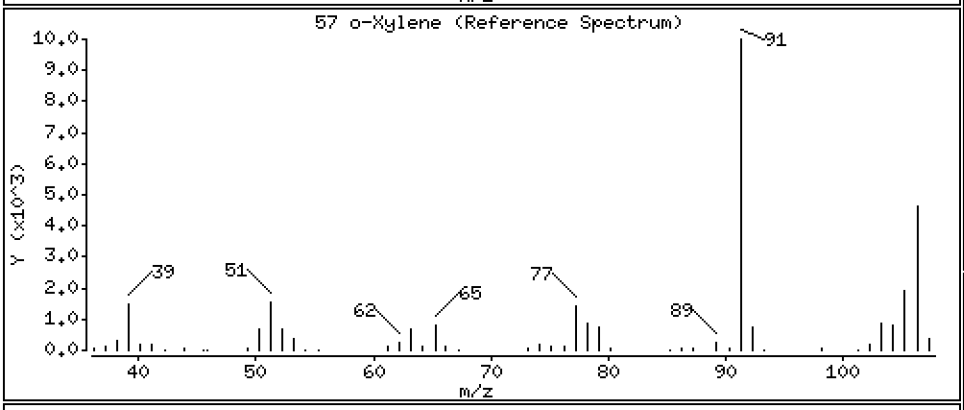
Column diameter: 0.18

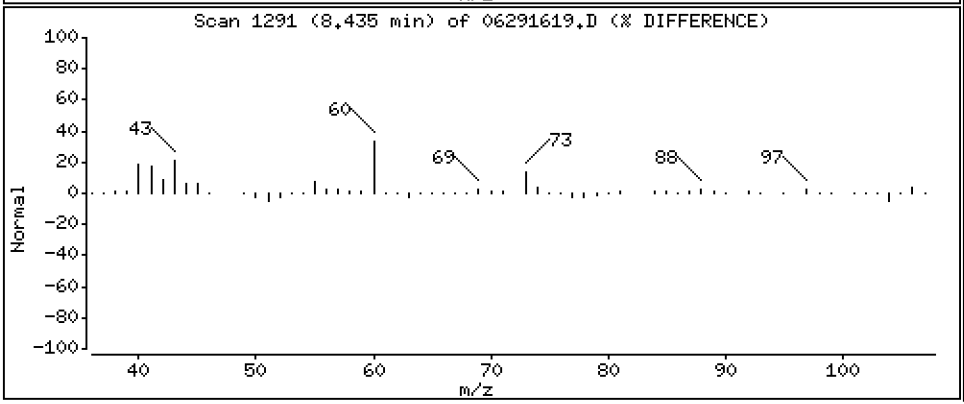
57 o-Xylene

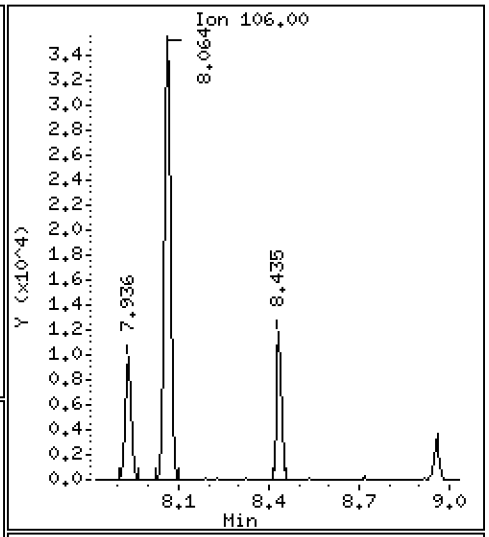
Concentration: 0.5451 ug/Kg

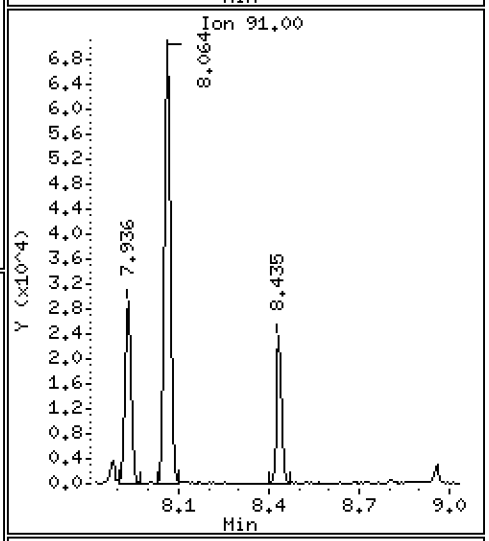


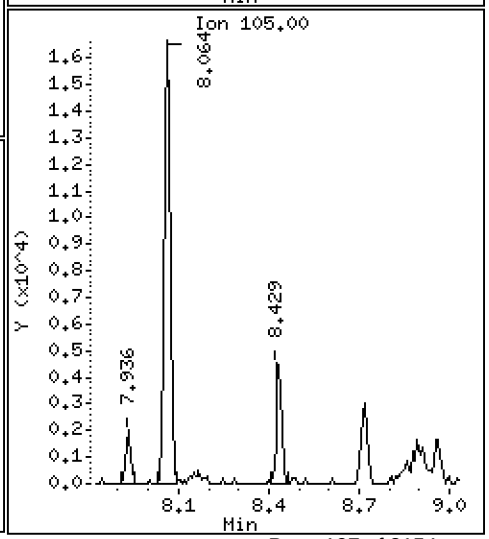












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291619.D
Lab Smp Id: 16F0096-14
Inj Date : 29-JUN-2016 22:03
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-14
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.067	4.048	(0.820)	784636	46.5249	46.525
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.505	4.486	(0.908)	823118	51.7214	51.721
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.961	4.949	(1.000)	667713	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.000)	817643	51.3942	51.394
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.350	5.344	(0.990)	366838	23.0180	23.018
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2277273	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.561	(1.215)	2863133	49.0684	49.068
	43 Toluene	92	6.610	6.603	(1.223)	514406	13.0011	13.001
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2434527	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.936	7.930	(1.007)	39772	0.53526	0.5353
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.064	8.063	(1.023)	48864	1.69394	1.694
	57 o-Xylene	106	8.435	8.428	(1.070)	15531	0.54508	0.5451
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1314766	50.2173	50.217
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1267395	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1290834	50.5792	50.579
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291619.D
Lab Smp Id: 16F0096-14
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	667713	11.29
35 1,4-Difluorobenze	2041239	1020620	4082478	2277273	11.56
52 d5-Chlorobenzene	2118314	1059157	4236628	2434527	14.93
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1267395	20.13

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-14
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	51.721	103.44	70-130
$ 32 d4-1,2-Dichloroeth	50.000	51.394	102.79	80-149
$ 42 d8-Toluene	50.000	49.068	98.14	77-120
$ 62 4-Bromofluorobenze	50.000	50.217	100.43	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.579	101.16	80-120

REVIEW SUMMARY FOR FILE - 06291619.D

Lab ID: 16F0096-14
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 22:03

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-N-05-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-15	File ID:	06291620.D
Sampled:	06/29/16 11:20	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 22:25
Solids:	91.43	Preparation:	No Prep - Volatiles	Initial/Final:	5.44 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.01	U	0.24	1.01
74-83-9	Bromomethane	1	1.01	U	0.19	1.01
156-59-2	cis-1,2-Dichloroethene	1	22.1		0.24	1.01
71-43-2	Benzene	1	1.01	U	0.30	1.01
79-01-6	Trichloroethene	1	16.8		0.21	1.01
108-88-3	Toluene	1	0.29	J	0.15	1.01
127-18-4	Tetrachloroethene	1	1.01	U	0.26	1.01
100-41-4	Ethylbenzene	1	1.01	U	0.20	1.01
179601-23-1	m,p-Xylene	1	1.01	U	0.39	1.01
95-47-6	o-Xylene	1	0.26	J	0.23	1.01

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	52.0	104	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.8	102	80 - 120	
Toluene-d8	50.000	48.7	97.3	77 - 120	
4-Bromofluorobenzene	50.000	48.9	97.9	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291620.D

Date : 29-JUN-2016 22:25

Client ID:

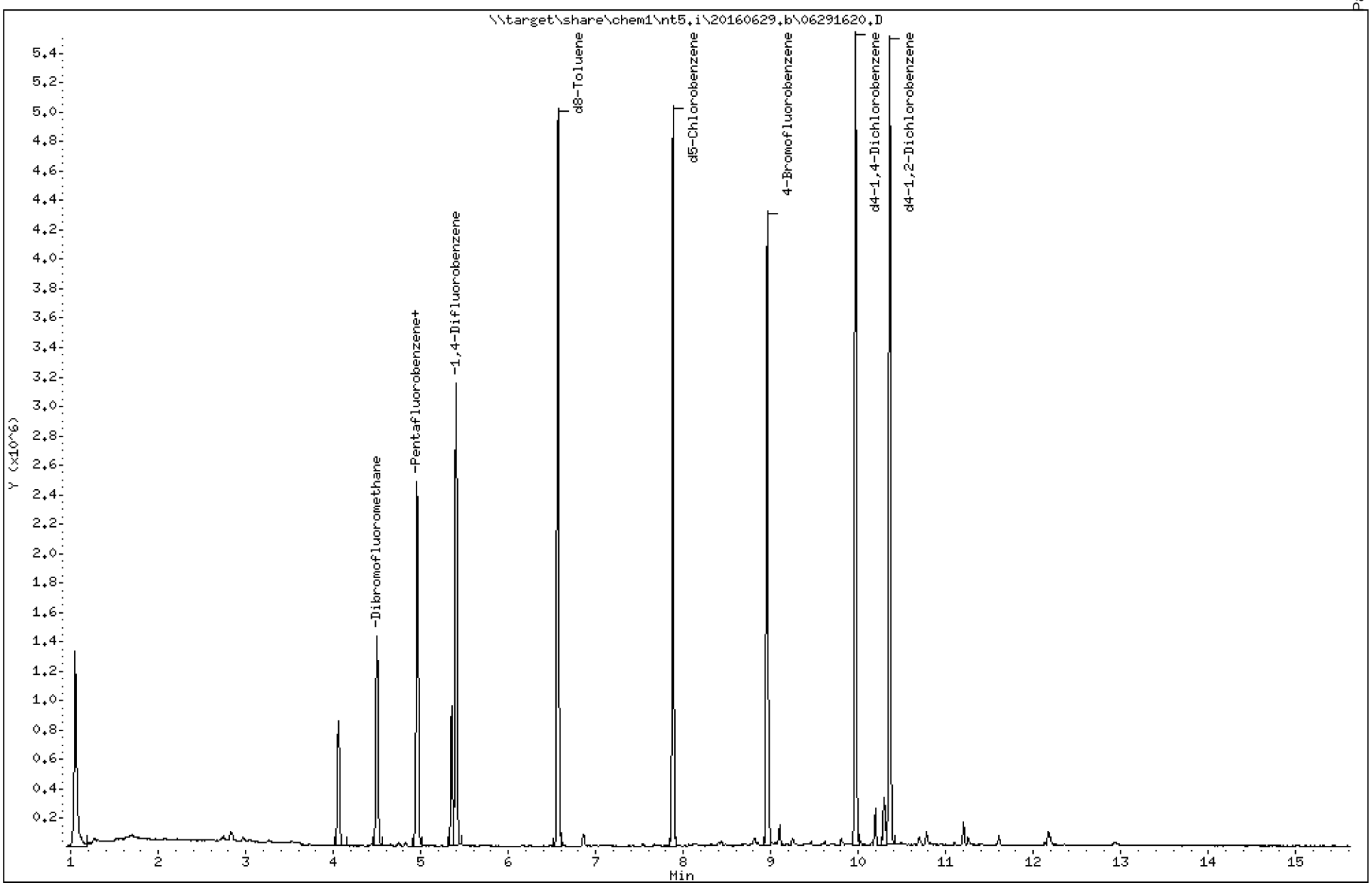
Sample Info: 16F0096-15

Column phase: RTXVMS

Instrument: nt5.i

Operator: PB

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160629.b\06291620.D

Date : 29-JUN-2016 22:25

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-15

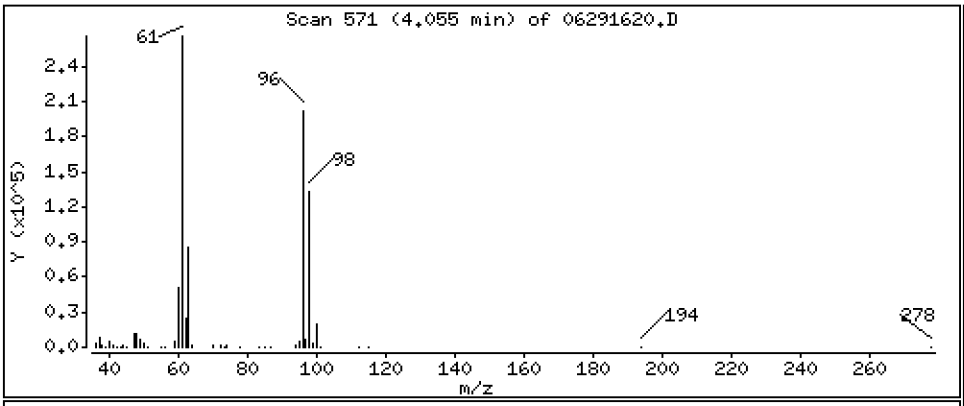
Operator: PB

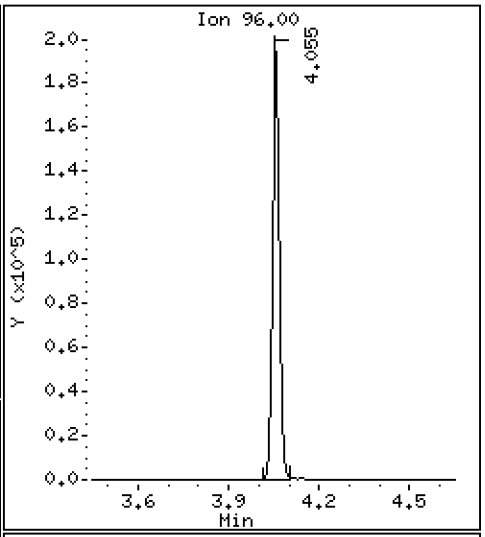
Column phase: RTXVMS

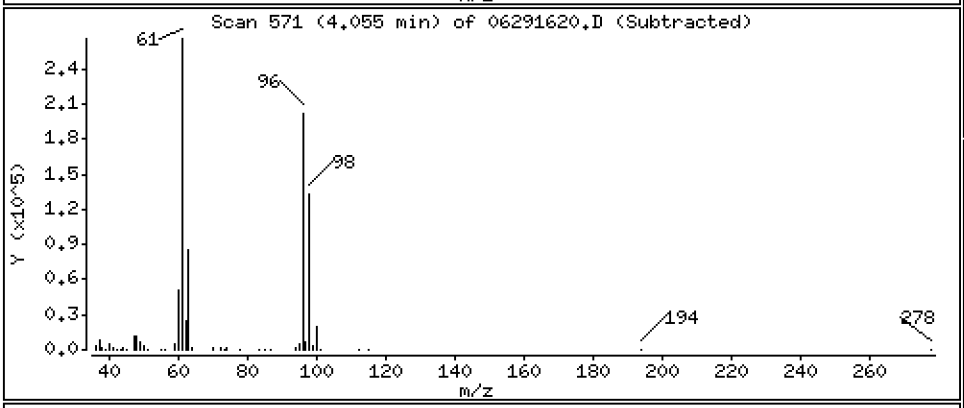
Column diameter: 0.18

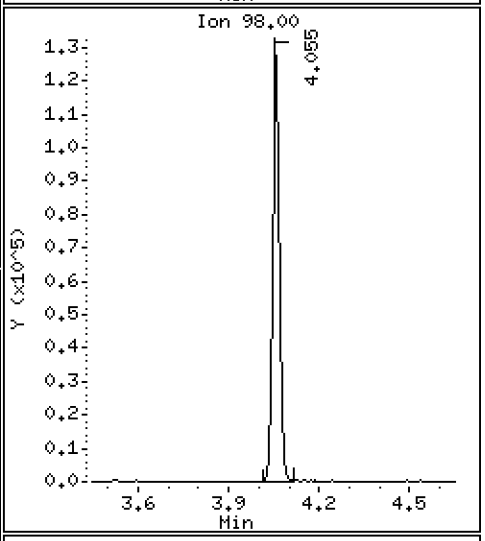
20 Cis-1,2-Dichloroethene

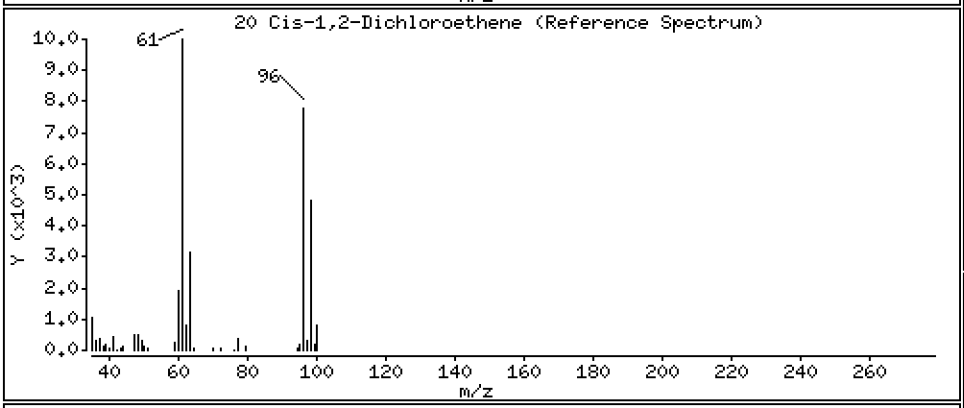
Concentration: 21.995 ug/Kg

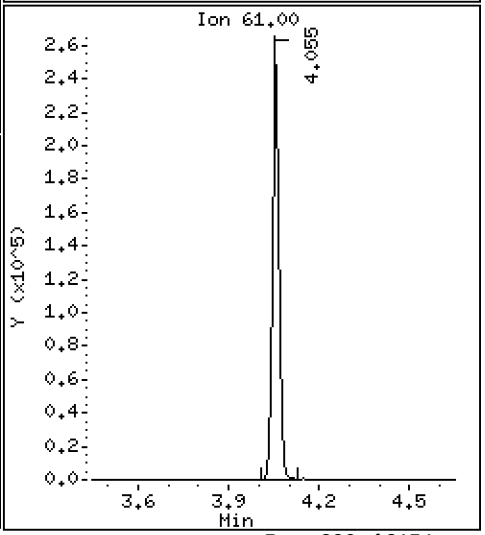


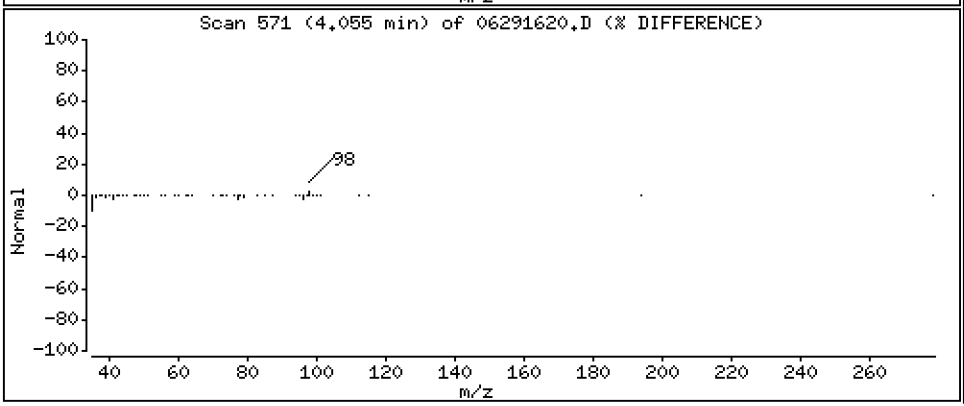












Data File: \\target\share\chem1\nt5.i\20160629.b\06291620.D

Date : 29-JUN-2016 22:25

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-15

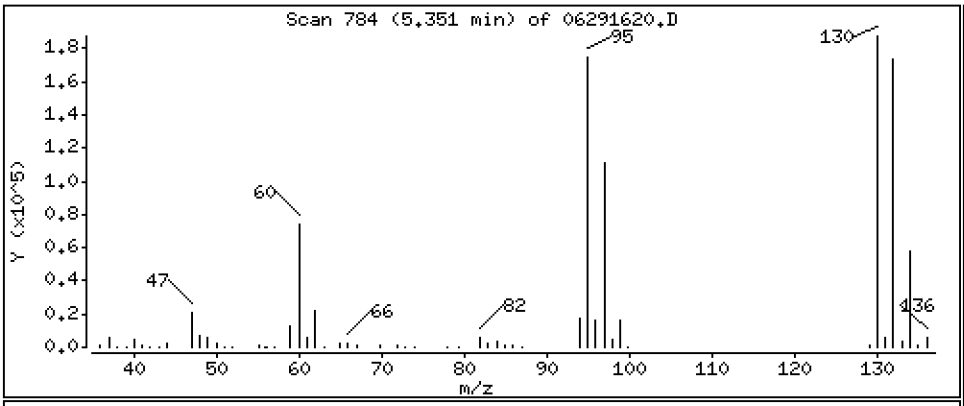
Operator: PB

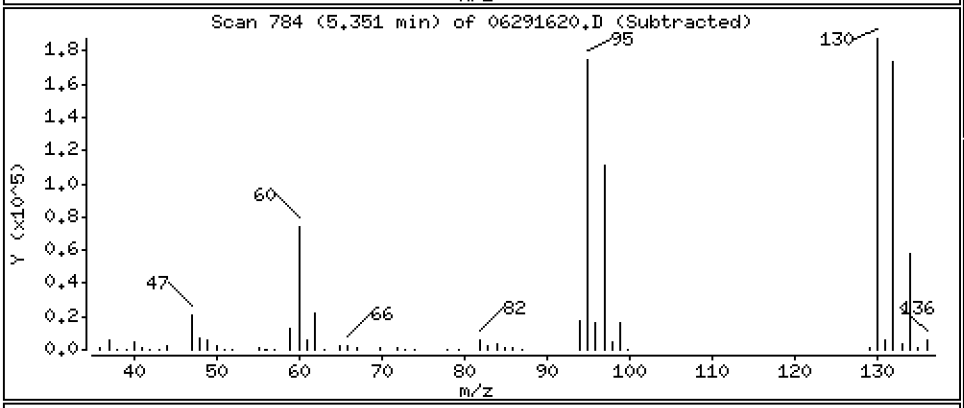
Column phase: RTXVMS

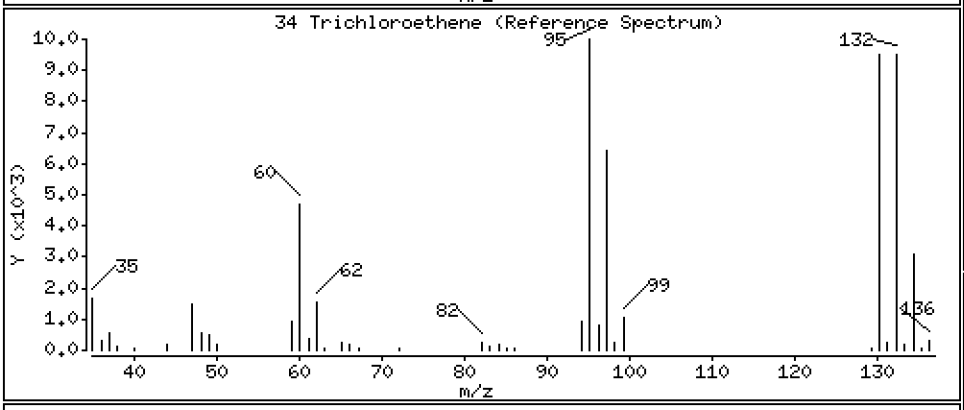
Column diameter: 0.18

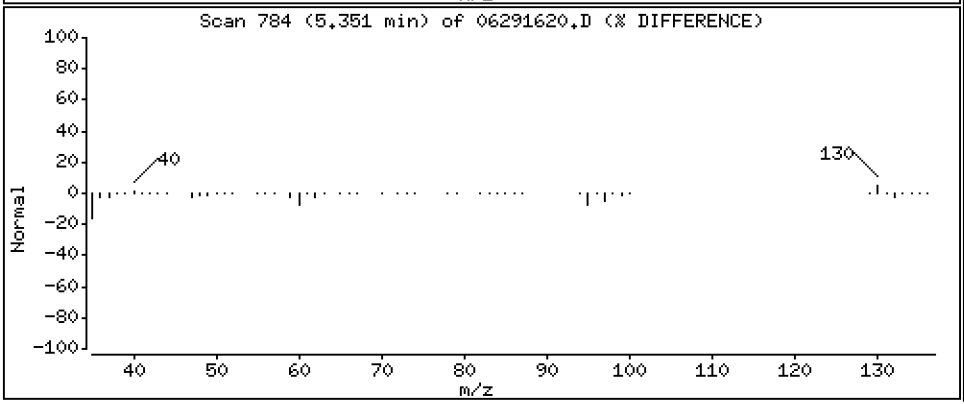
34 Trichloroethene

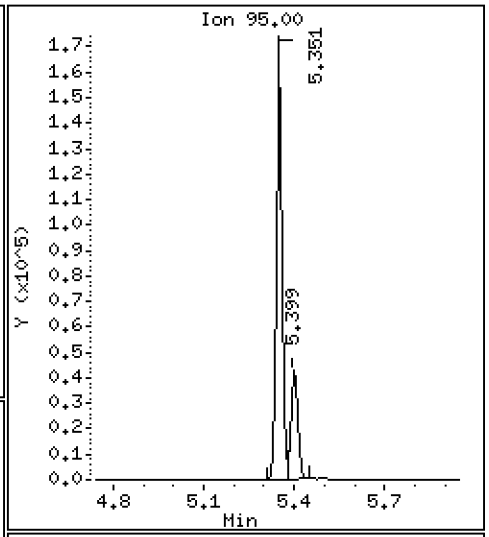
Concentration: 16.747 ug/Kg

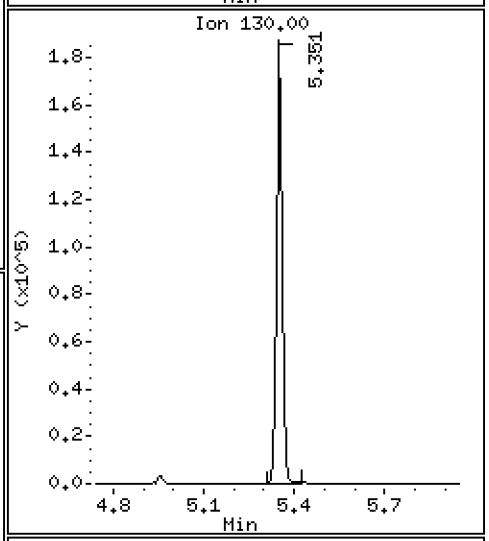


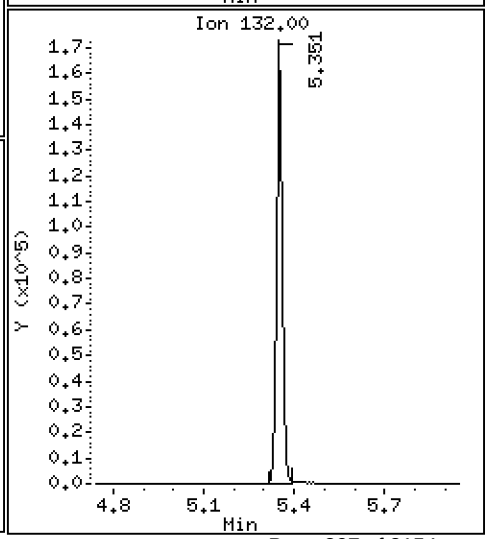












Data File: \\target\share\chem1\nt5.i\20160629.b\06291620.D

Date : 29-JUN-2016 22:25

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-15

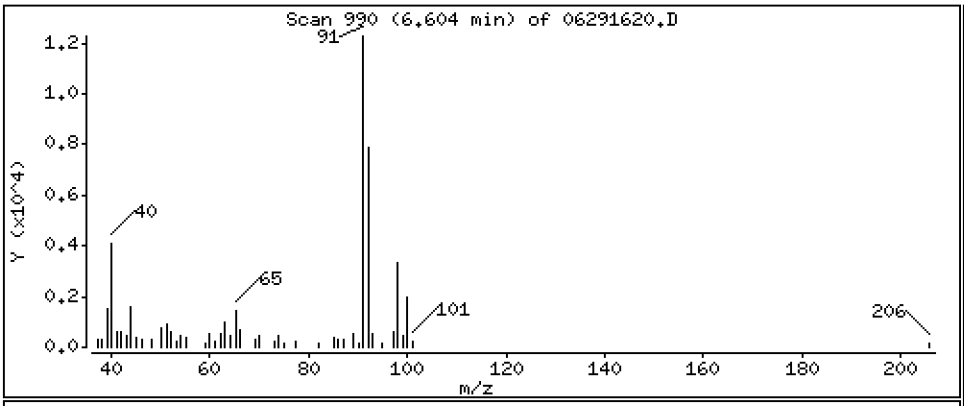
Operator: PB

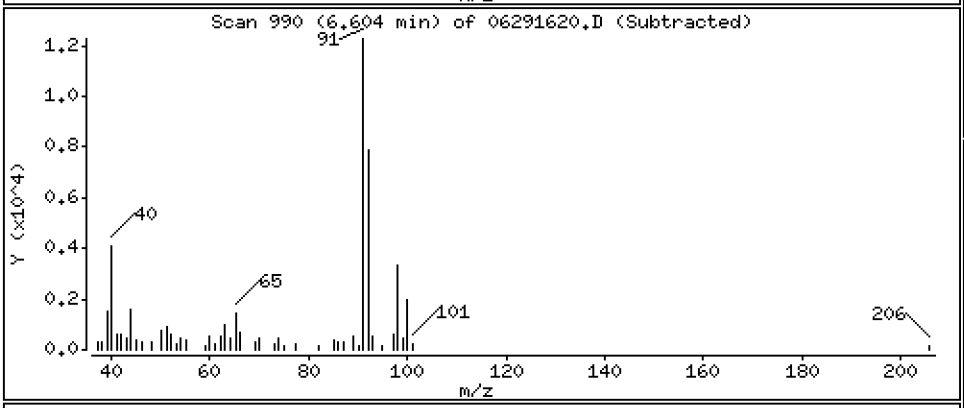
Column phase: RTXVMS

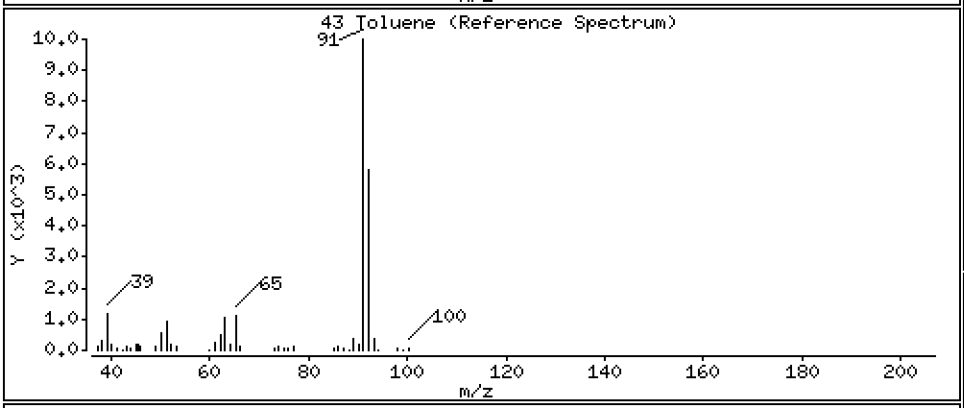
Column diameter: 0.18

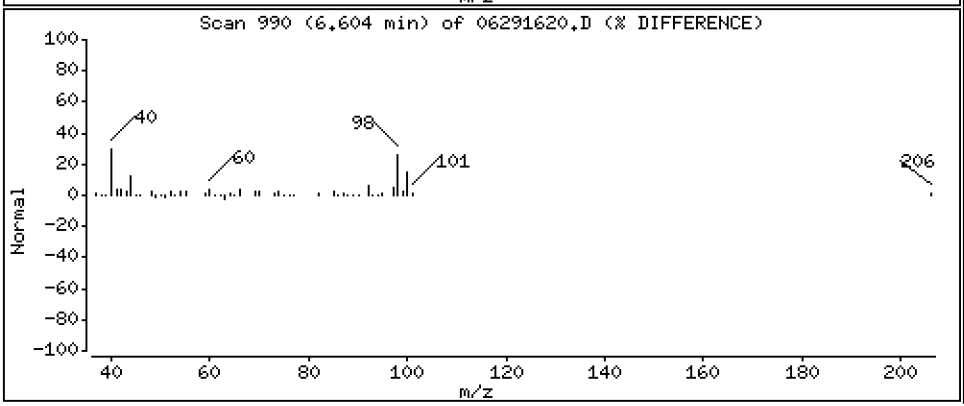
43 Toluene

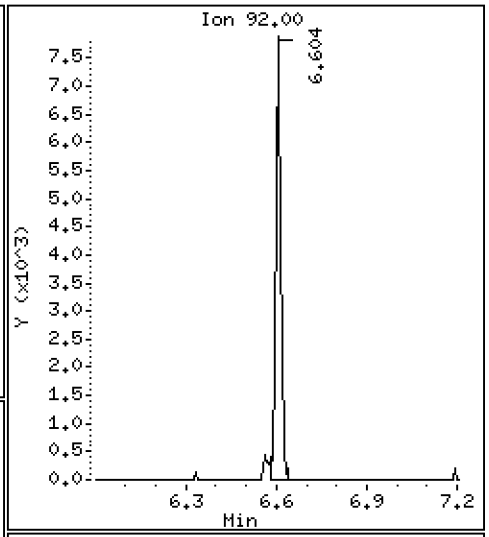
Concentration: 0.2919 ug/Kg

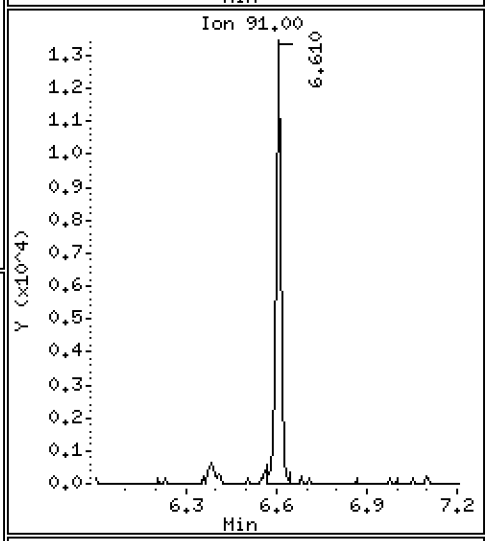


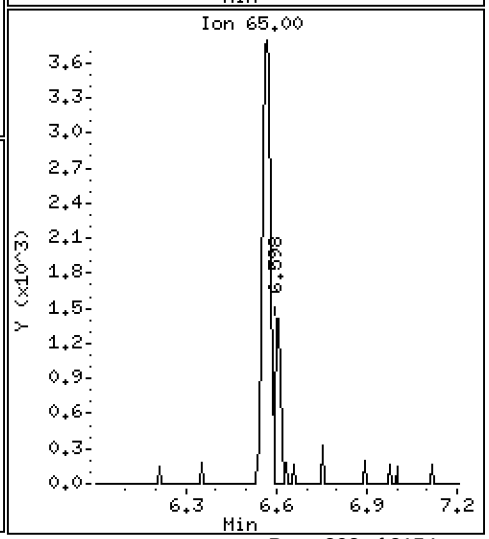












Data File: \\target\share\chem1\nt5.i\20160629.b\06291620.D

Date : 29-JUN-2016 22:25

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-15

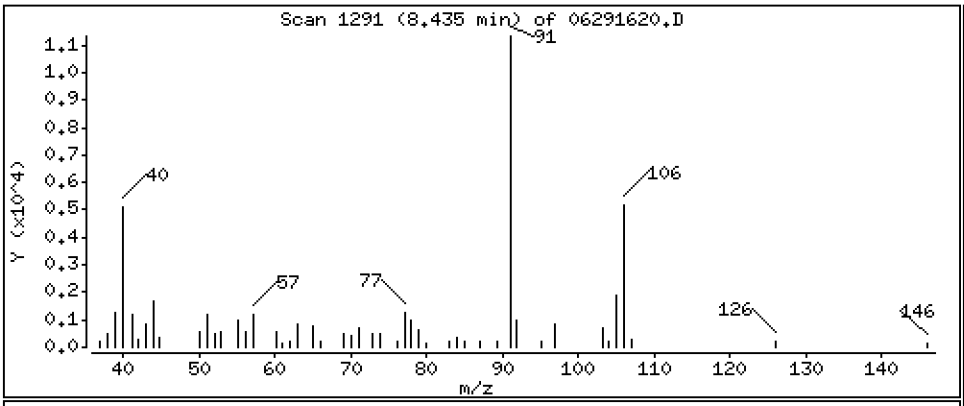
Operator: PB

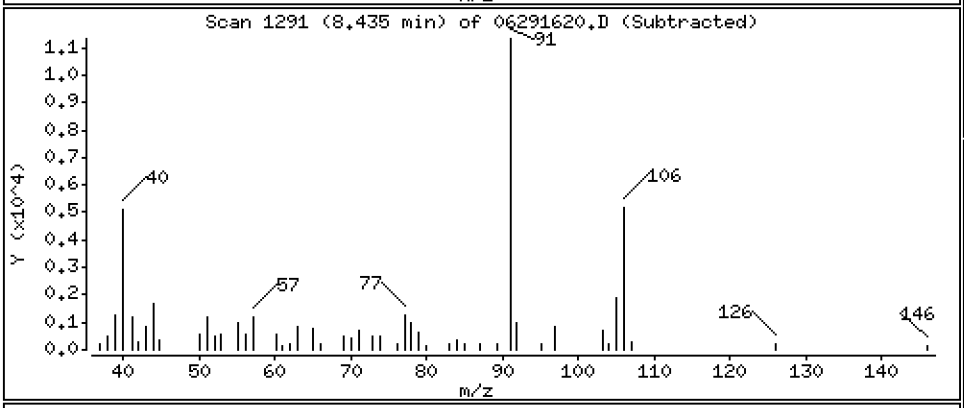
Column phase: RTXVMS

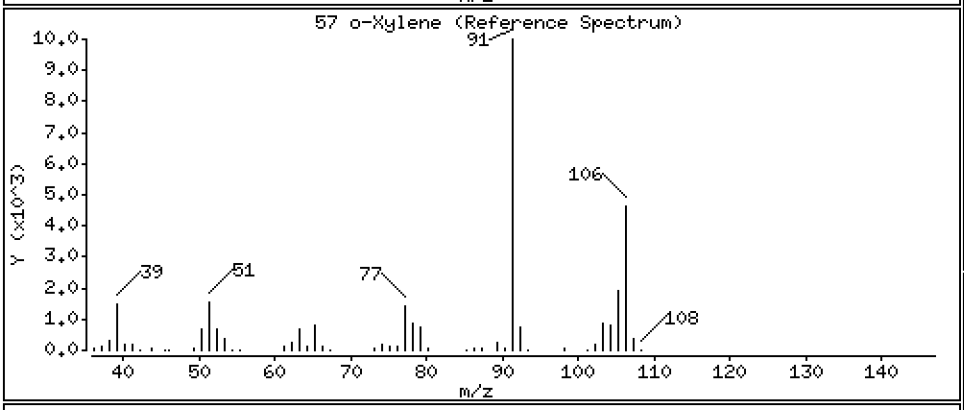
Column diameter: 0.18

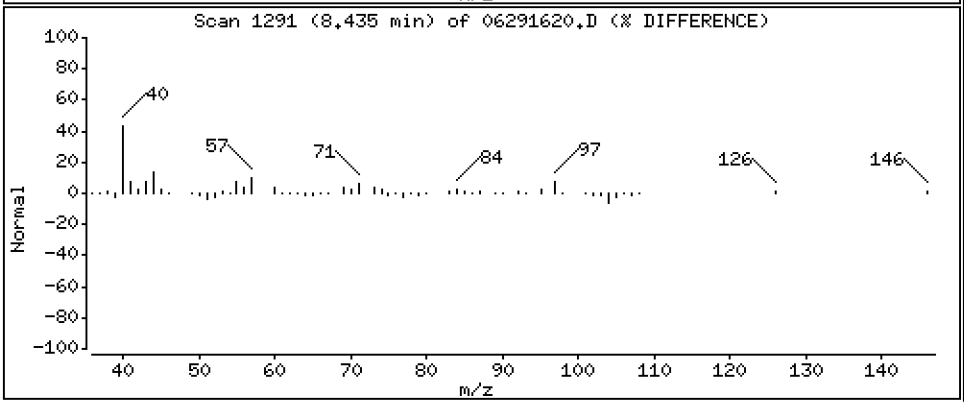
57 o-Xylene

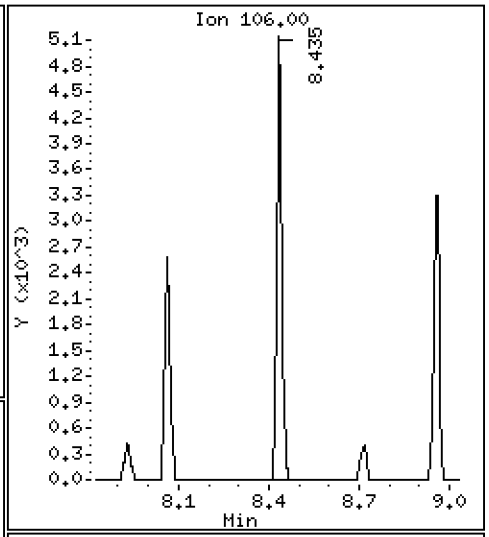
Concentration: 0.2584 ug/Kg

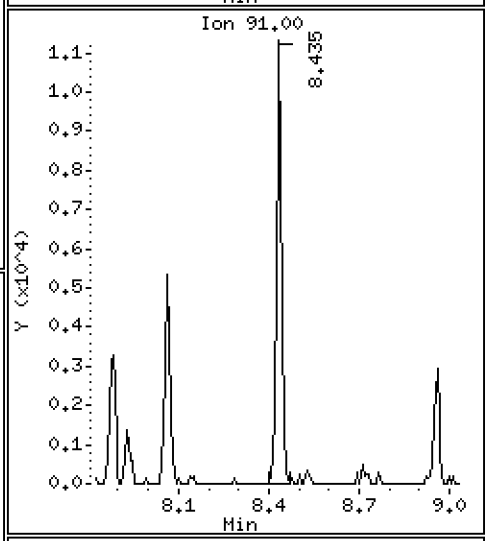


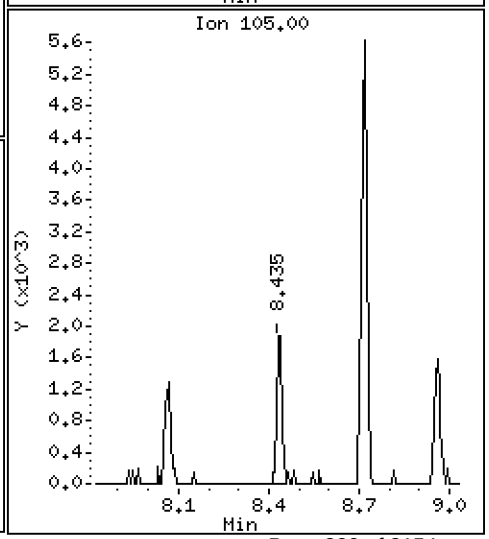












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291620.D
Lab Smp Id: 16F0096-15
Inj Date : 29-JUN-2016 22:25
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-15
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.054	4.048	(0.818)	353427	21.9951	21.995
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.499	4.486	(0.908)	785656	51.8143	51.814
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.955	4.949	(1.000)	636181	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.001)	788232	52.0012	52.001
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.350	5.344	(0.991)	257335	16.7471	16.747
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2195672	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.561	(1.216)	2738163	48.6706	48.671
	43 Toluene	92	6.603	6.603	(1.223)	11135	0.29189	0.2919
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2346476	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	8.435	8.428	(1.070)	7097	0.25843	0.2584
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1234992	48.9404	48.940
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1208347	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	Compound Not Detected.					
$	79 d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1236157	50.8037	50.804
	80 1,2-Dichlorobenzene	146	Compound Not Detected.					
	81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
	82 Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
	83 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	84 Naphthalene	128	Compound Not Detected.					
	85 1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291620.D
Lab Smp Id: 16F0096-15
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	636181	6.04
35 1,4-Difluorobenze	2041239	1020620	4082478	2195672	7.57
52 d5-Chlorobenzene	2118314	1059157	4236628	2346476	10.77
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1208347	14.53

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.13
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.12
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 13:11

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-15
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	51.814	103.63	70-130
$ 32 d4-1,2-Dichloroeth	50.000	52.001	104.00	80-149
$ 42 d8-Toluene	50.000	48.671	97.34	77-120
$ 62 4-Bromofluorobenze	50.000	48.940	97.88	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.804	101.61	80-120

REVIEW SUMMARY FOR FILE - 06291620.D

Lab ID: 16F0096-15
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 22:25

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-Q-01-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-16	File ID:	06291621.D
Sampled:	06/29/16 13:05	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 22:48
Solids:	90.75	Preparation:	No Prep - Volatiles	Initial/Final:	5.54 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	0.99	U	0.23	0.99
74-83-9	Bromomethane	1	0.26	Q, J	0.19	0.99
156-59-2	cis-1,2-Dichloroethene	1	0.67	J	0.24	0.99
71-43-2	Benzene	1	0.99	U	0.29	0.99
79-01-6	Trichloroethene	1	0.99	U	0.21	0.99
108-88-3	Toluene	1	10.2		0.15	0.99
127-18-4	Tetrachloroethene	1	0.99	U	0.26	0.99
100-41-4	Ethylbenzene	1	1.85		0.20	0.99
179601-23-1	m,p-Xylene	1	6.40		0.39	0.99
95-47-6	o-Xylene	1	2.04		0.22	0.99

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	51.7	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.6	101	80 - 120	
Toluene-d8	50.000	48.9	97.9	77 - 120	
4-Bromofluorobenzene	50.000	49.3	98.6	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291621.D

Date : 29-JUN-2016 22:48

Client ID:

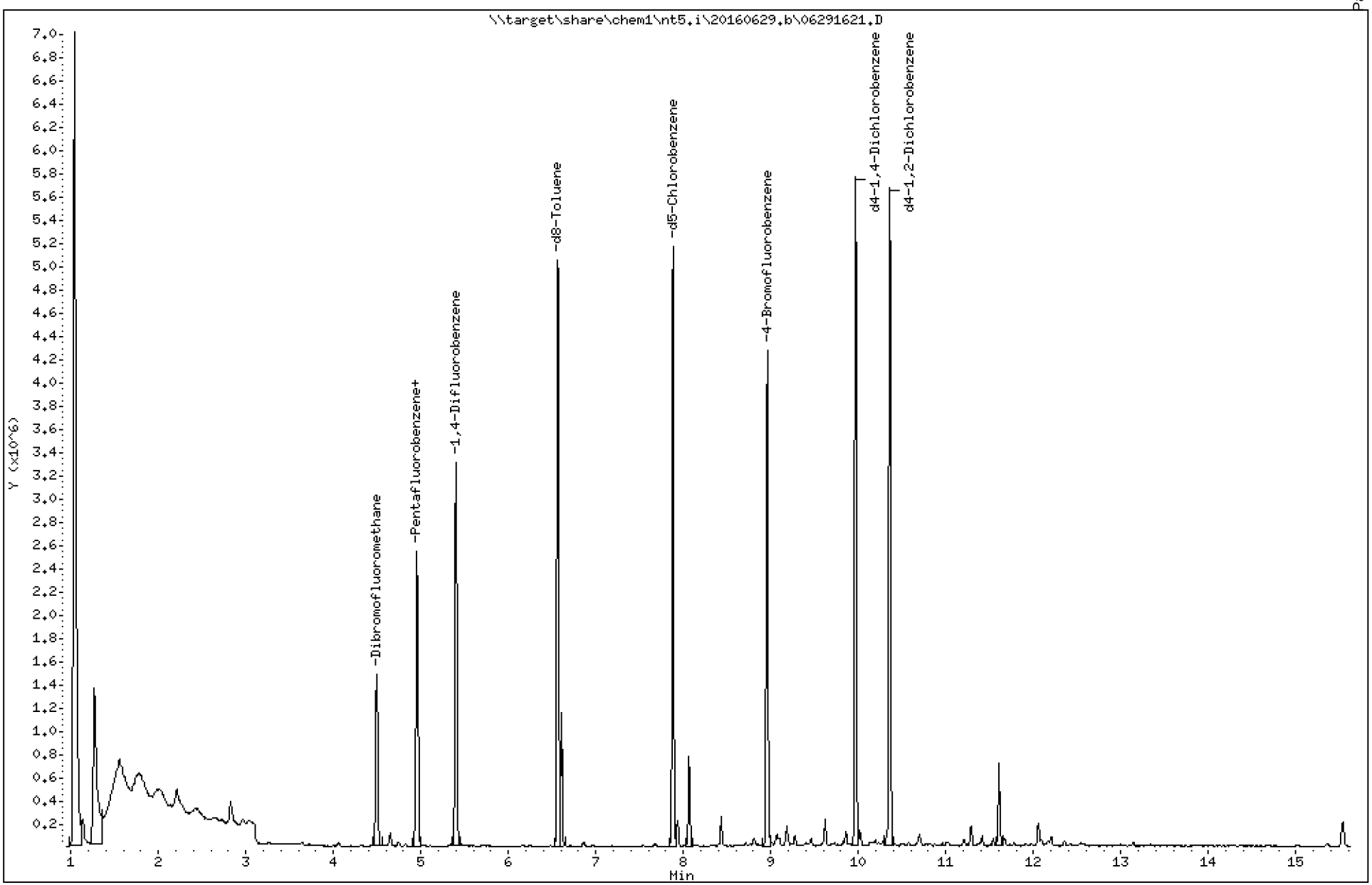
Sample Info: 16F0096-16

Column phase: RTXVMS

Instrument: nt5.i

Operator: PB

Column diameter: 0.18



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Date : 29-JUN-2016 22:48

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-16

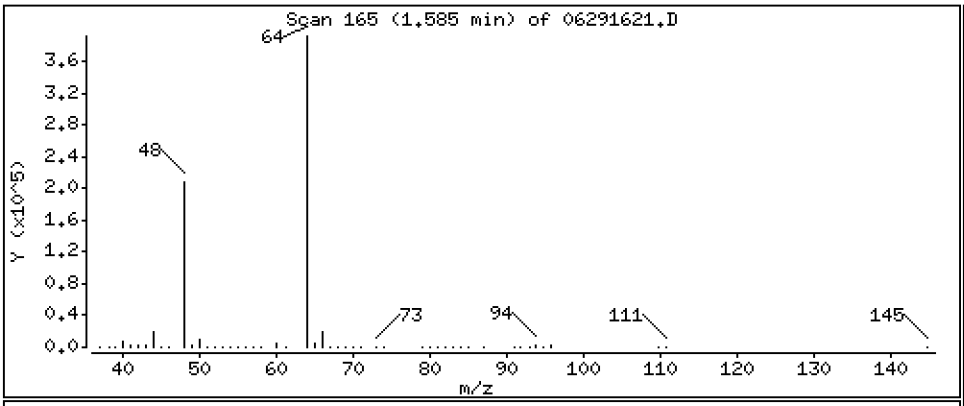
Operator: PB

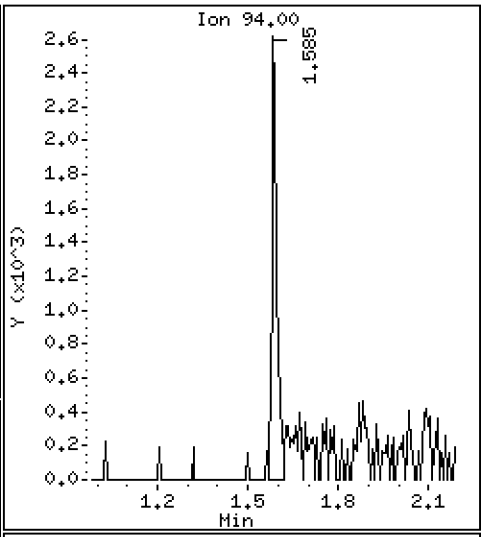
Column phase: RTXVMS

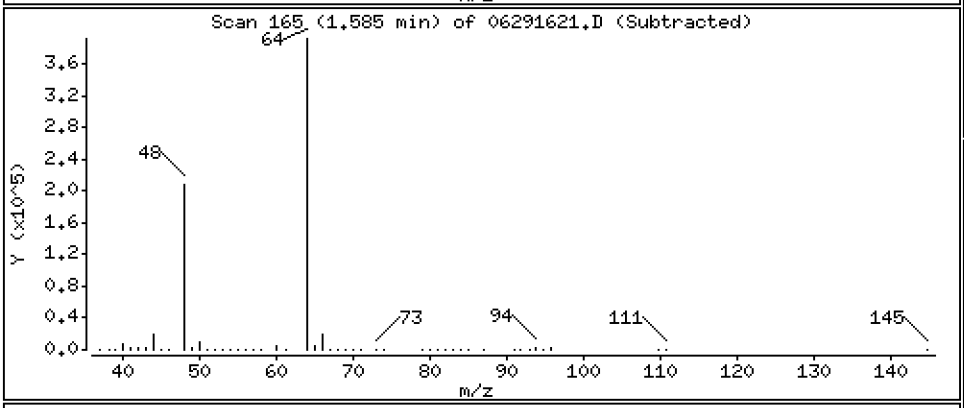
Column diameter: 0.18

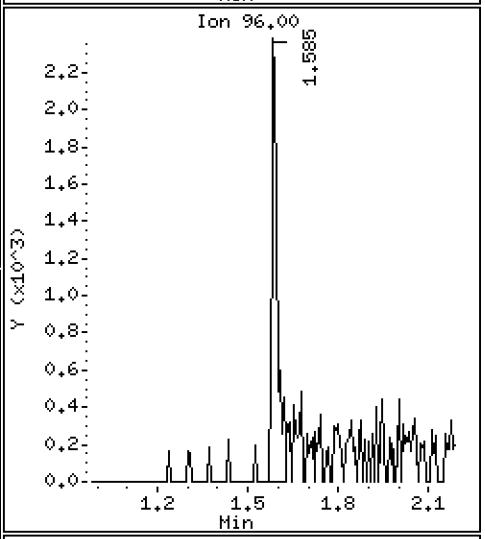
4 Bromomethane

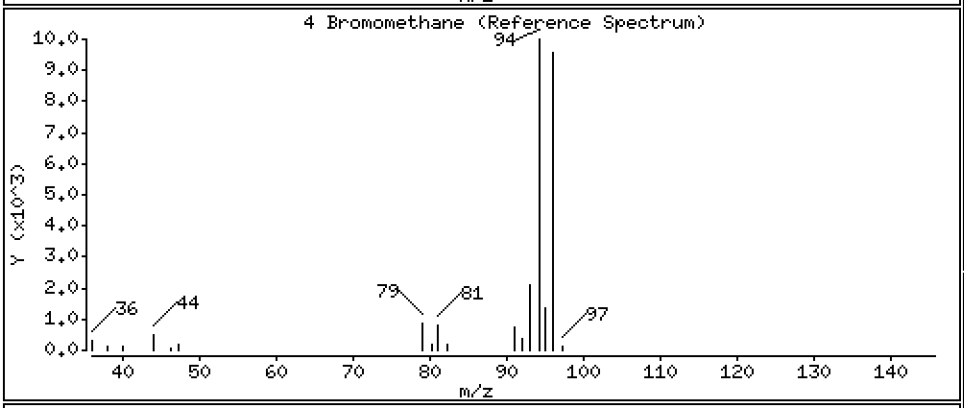
Concentration: 0.2601 ug/Kg

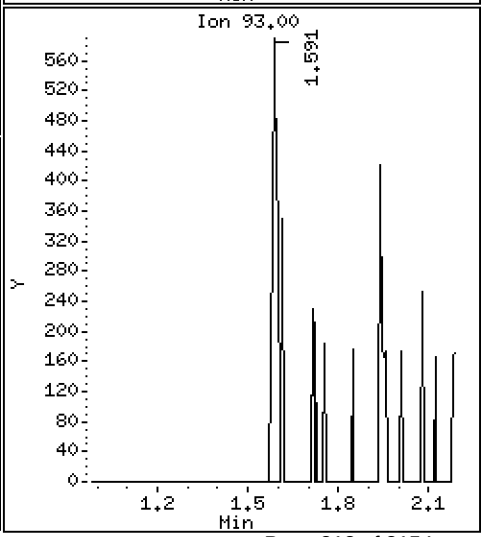


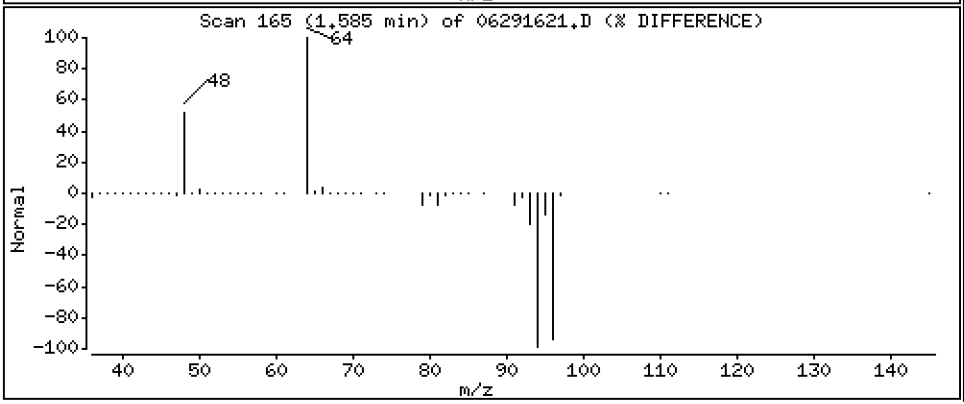












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Date : 29-JUN-2016 22:48

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-16

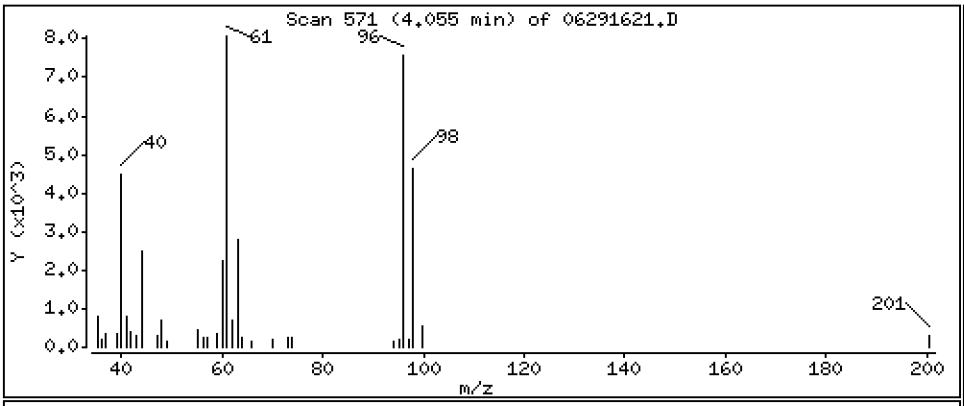
Operator: PB

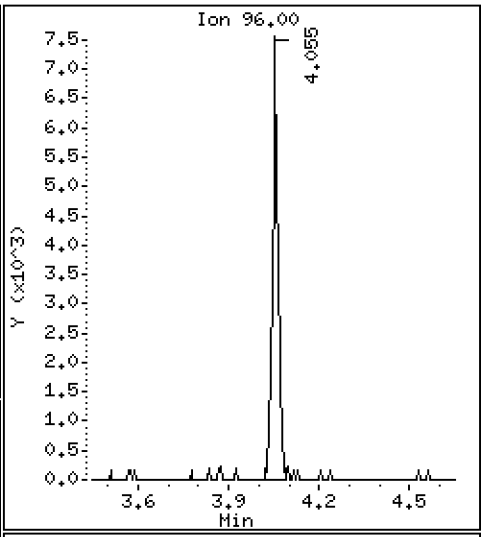
Column phase: RTXVMS

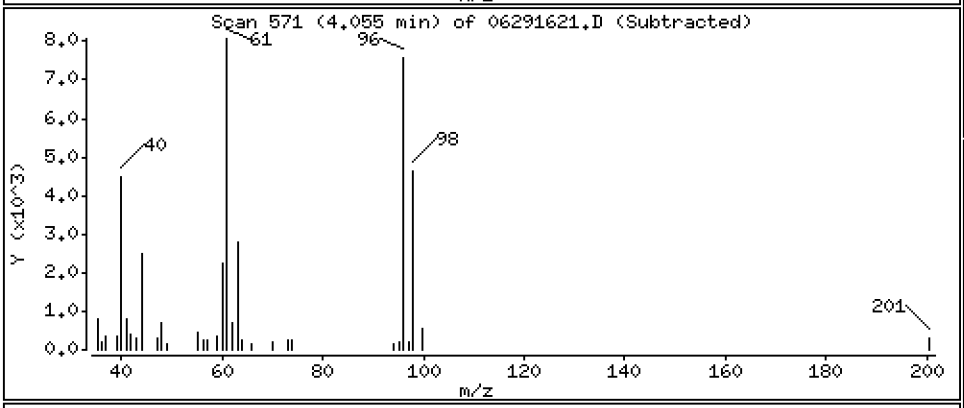
Column diameter: 0.18

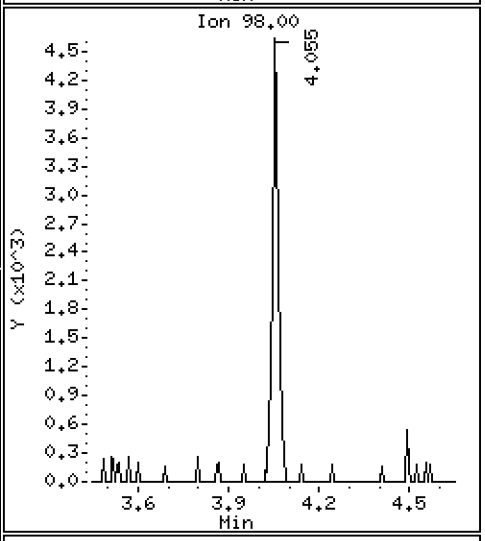
20 Cis-1,2-Dichloroethene

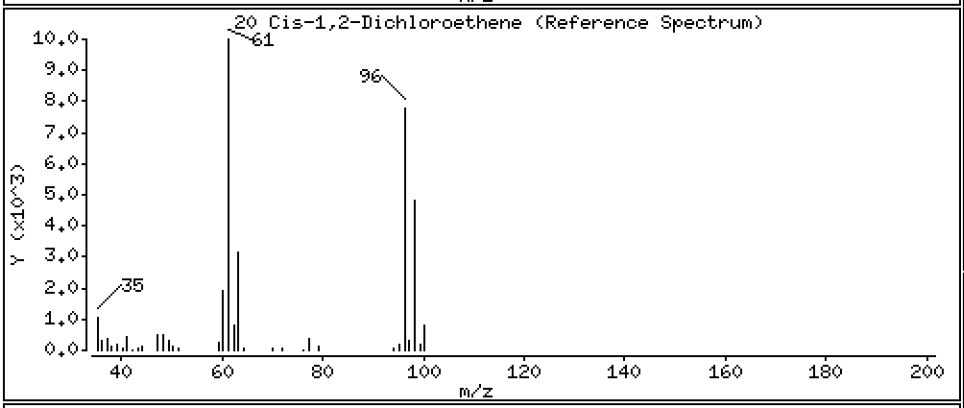
Concentration: 0.6746 ug/Kg

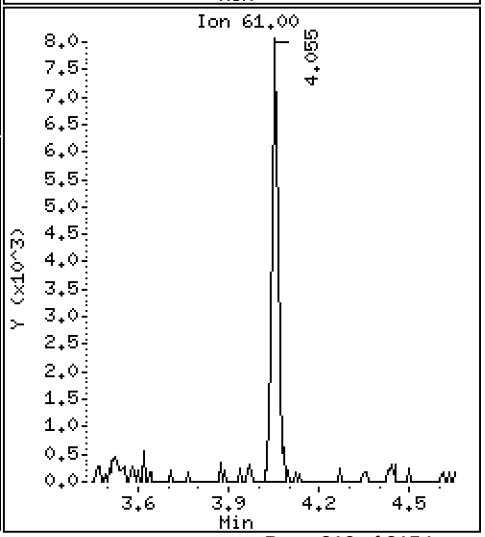


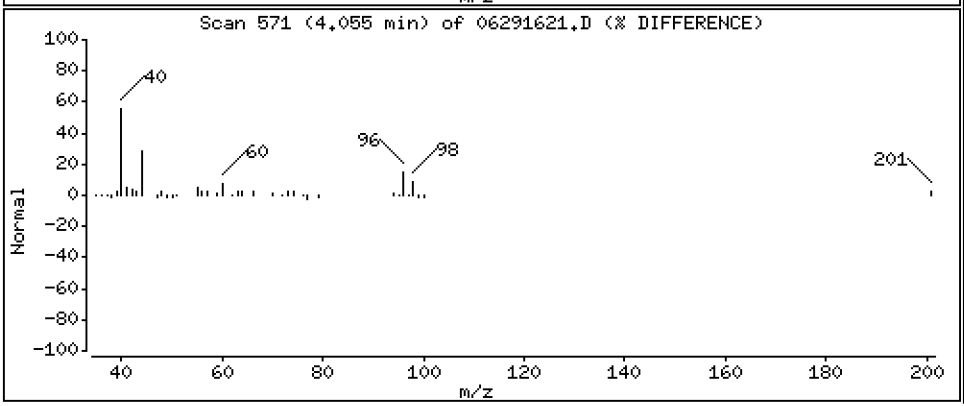












Data File: \\target\share\chem1\nt5.i\20160629.b\06291621.D

Date : 29-JUN-2016 22:48

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-16

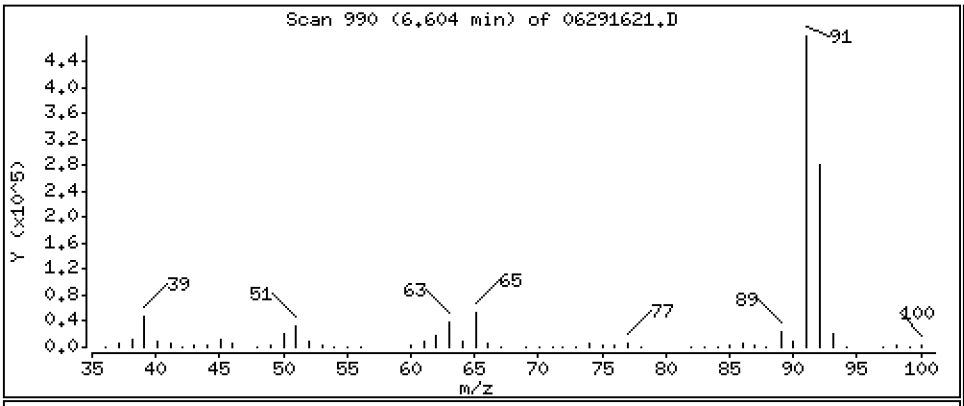
Operator: PB

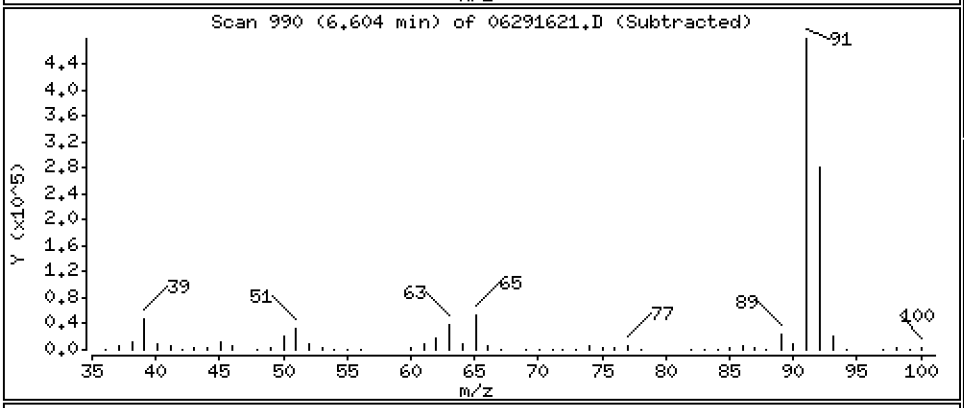
Column phase: RTXVMS

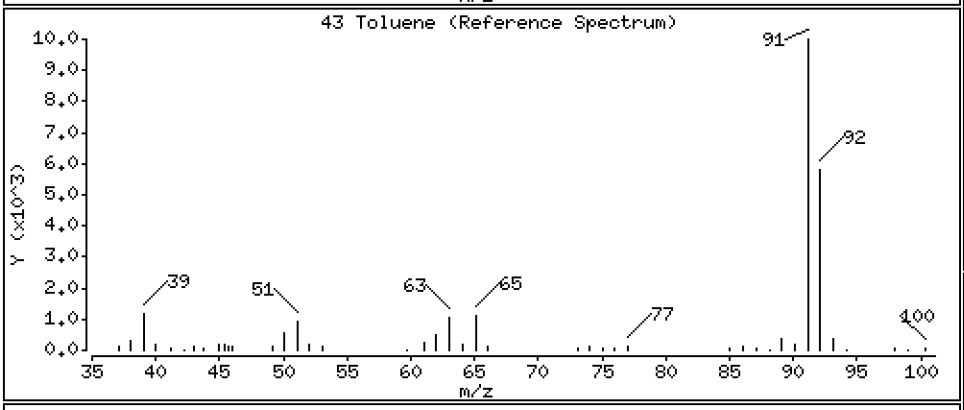
Column diameter: 0.18

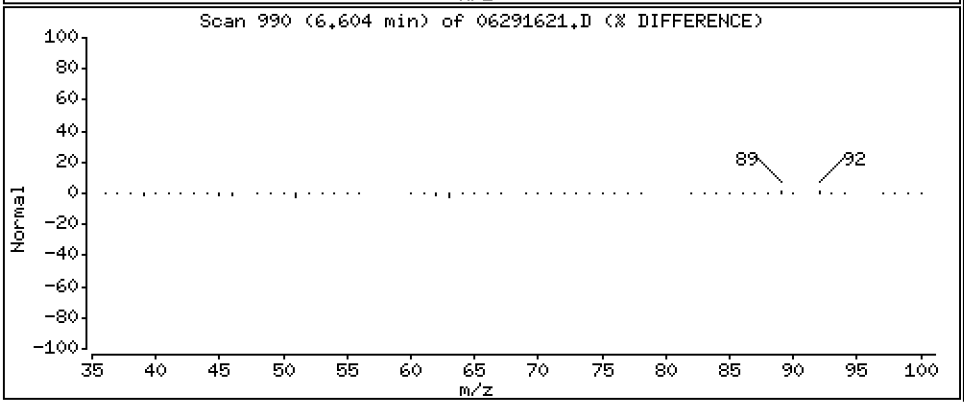
43 Toluene

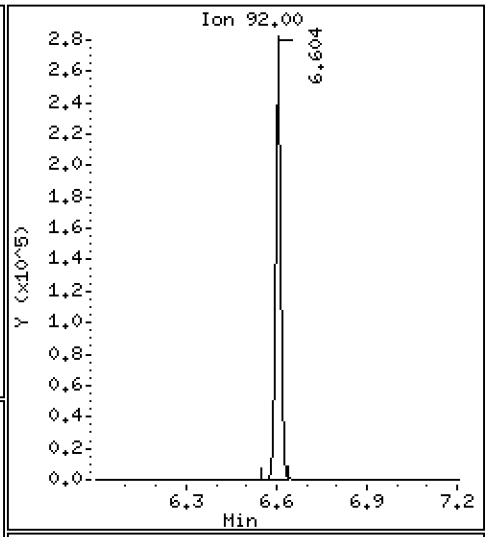
Concentration: 10.217 ug/Kg

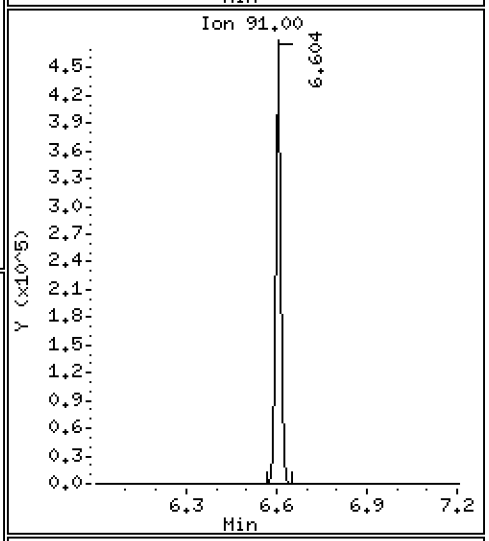


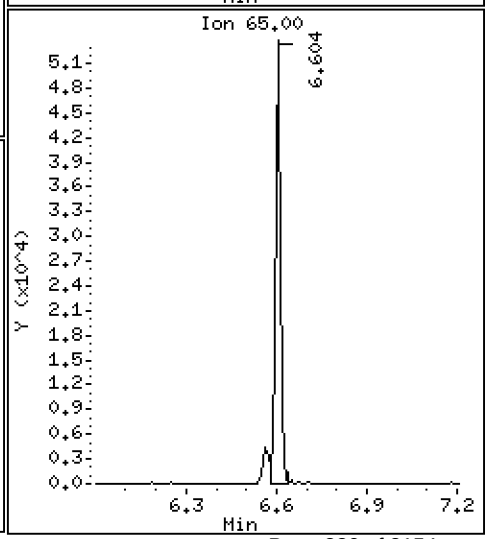












Data File: \\target\share\chem1\nt5.i\20160629.b\06291621.D

Date : 29-JUN-2016 22:48

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-16

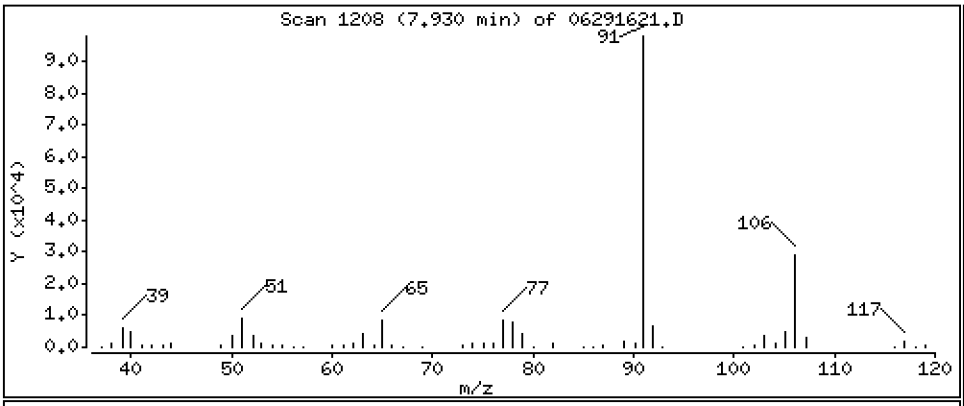
Operator: PB

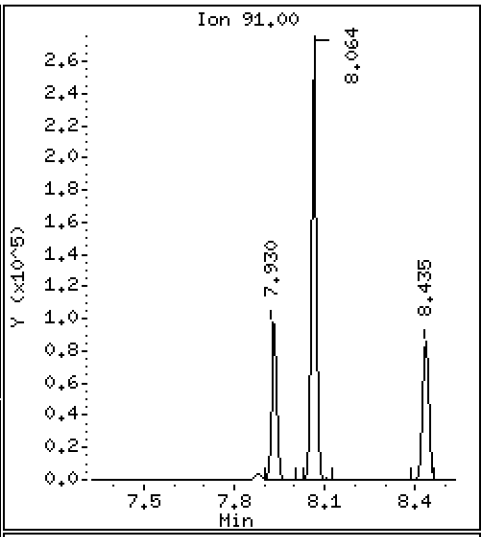
Column phase: RTXVMS

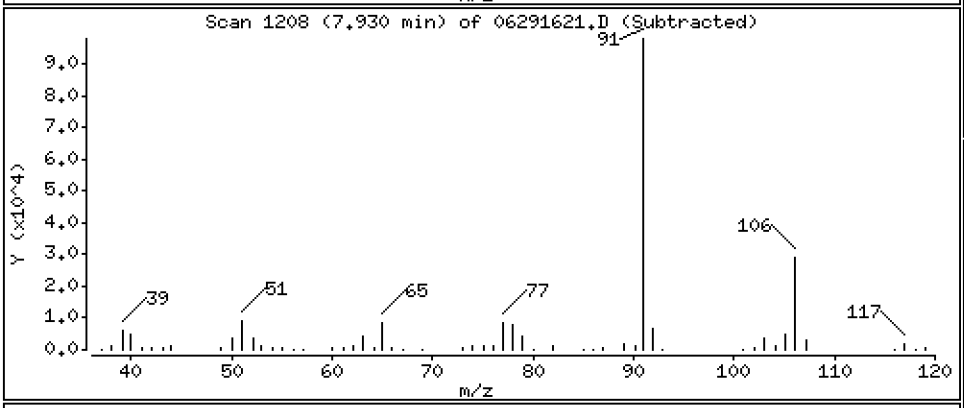
Column diameter: 0.18

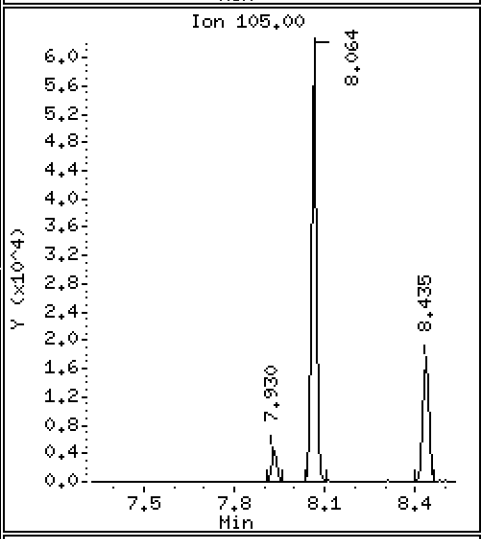
54 Ethyl Benzene

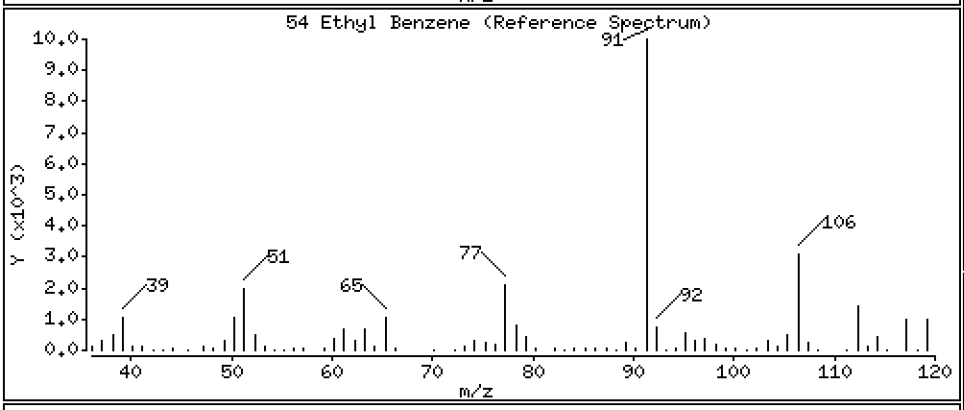
Concentration: 1.861 ug/Kg

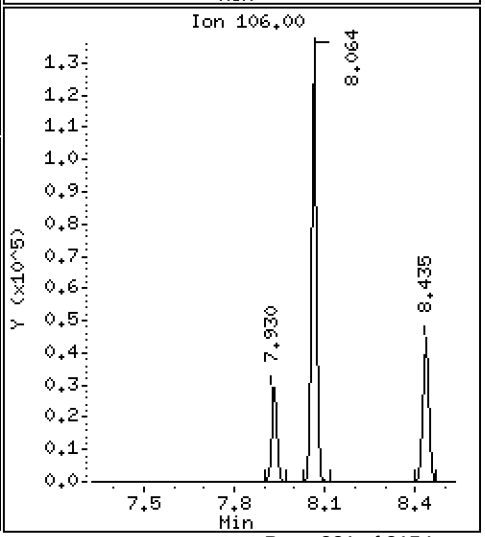


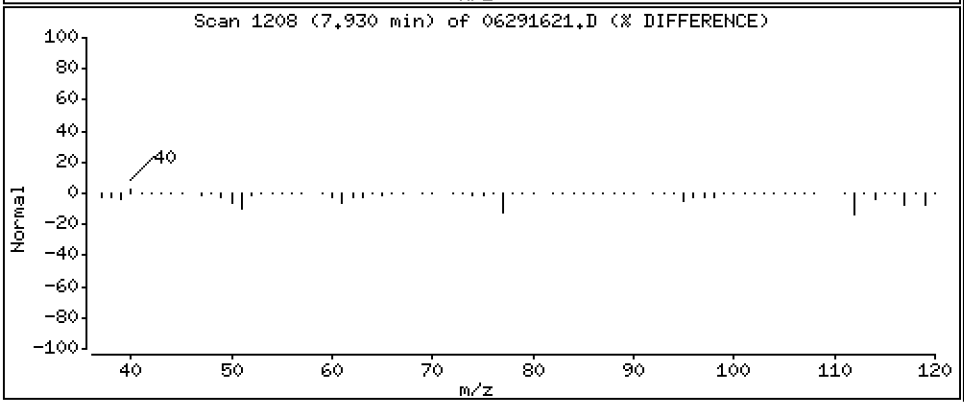












Data File: \\target\share\chem1\nt5.i\20160629.b\06291621.D

Date : 29-JUN-2016 22:48

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-16

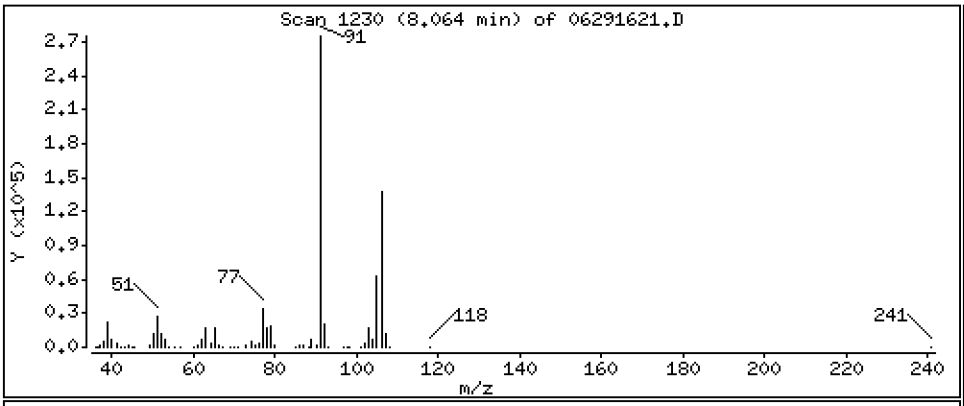
Operator: PB

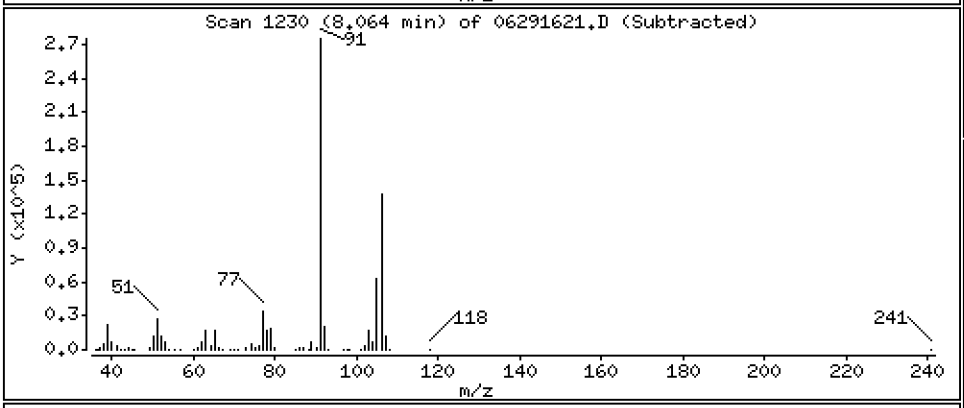
Column phase: RTXVMS

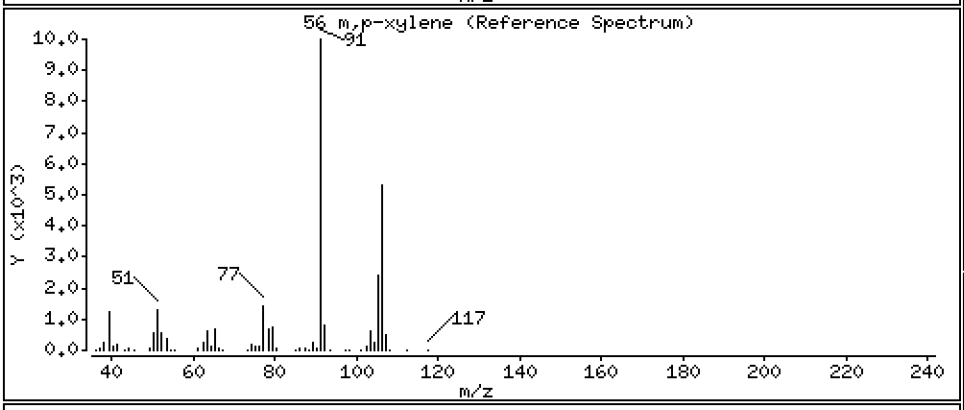
Column diameter: 0.18

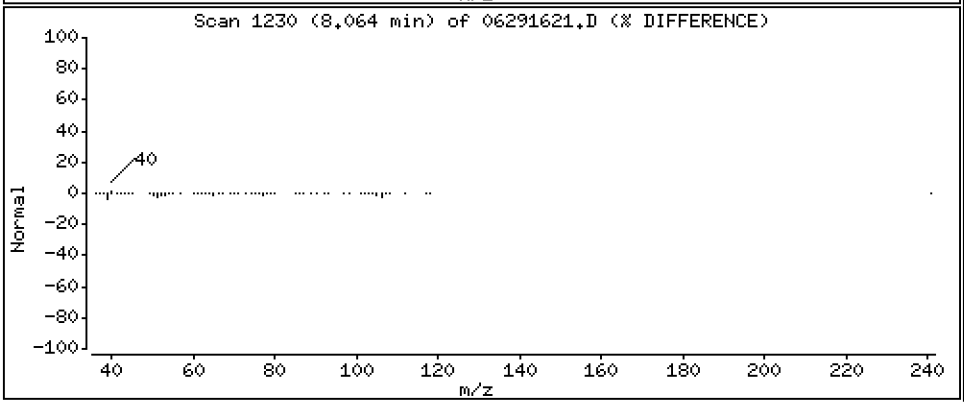
56 m,p-xylene

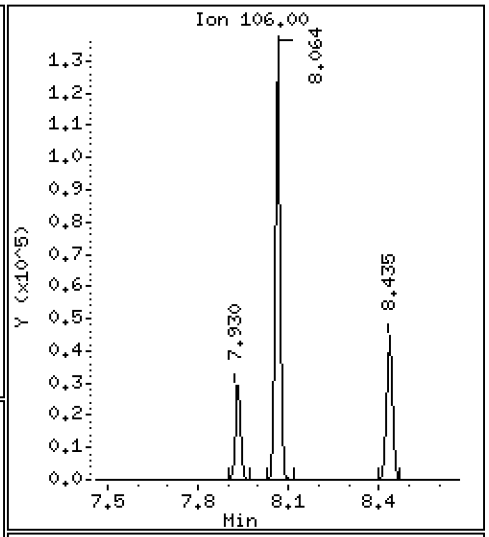
Concentration: 6.435 ug/Kg

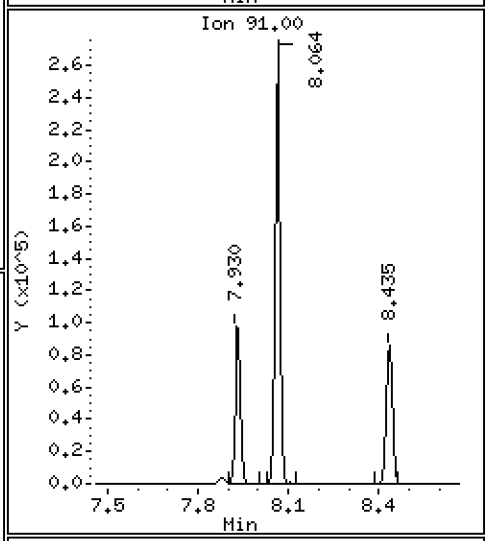


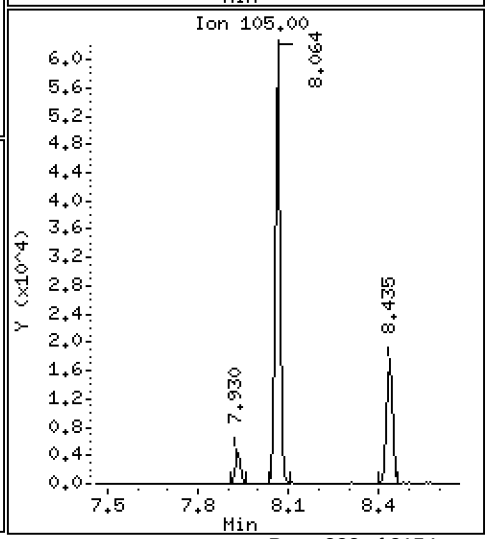












Data File: \\target\share\chem1\nt5.i\20160629.b\06291621.D

Date : 29-JUN-2016 22:48

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-16

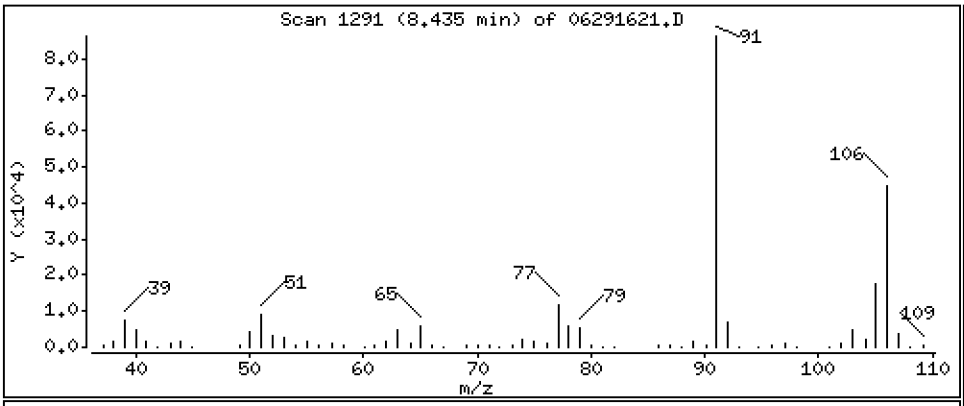
Operator: PB

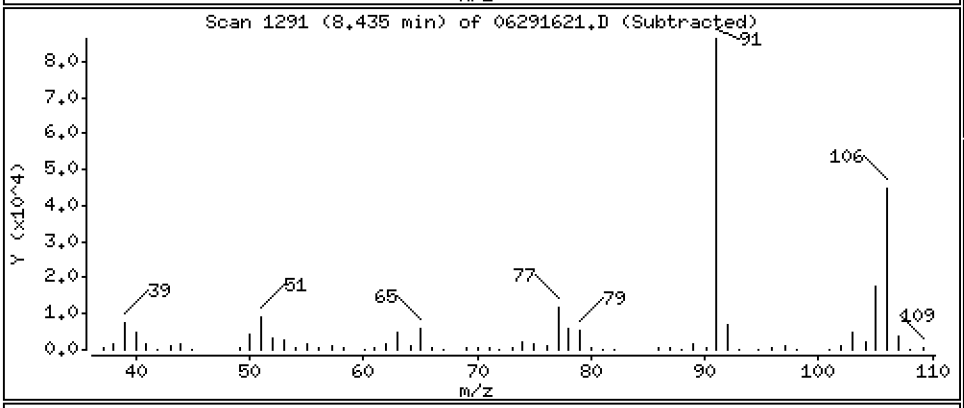
Column phase: RTXVMS

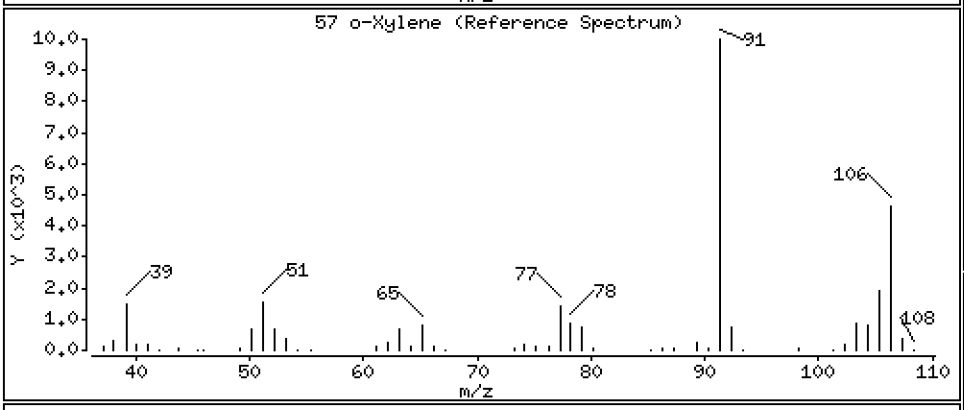
Column diameter: 0.18

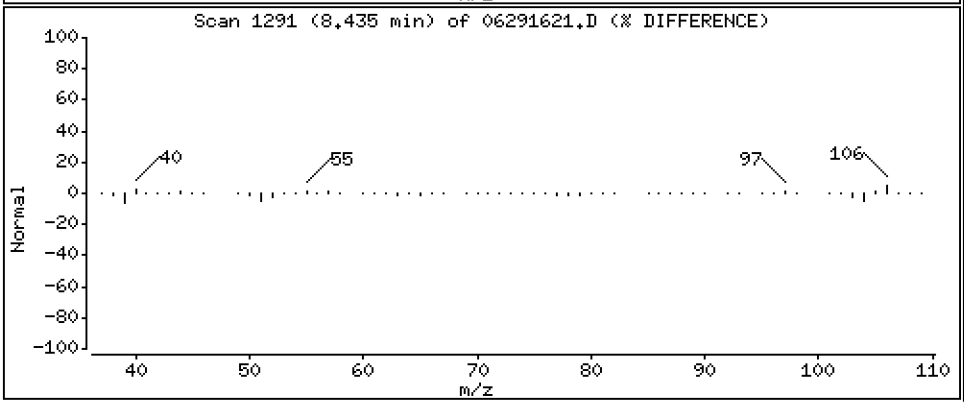
57 o-Xylene

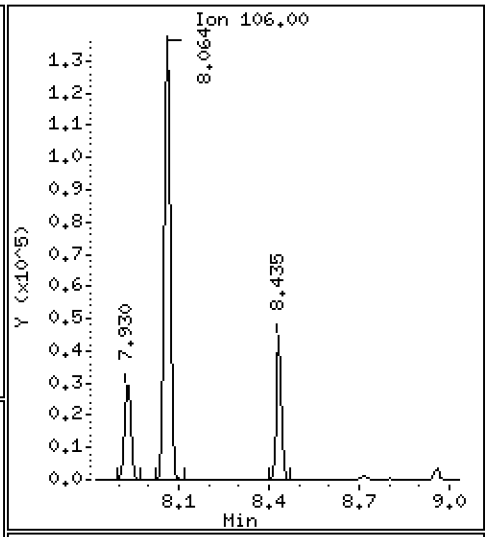
Concentration: 2.053 ug/Kg

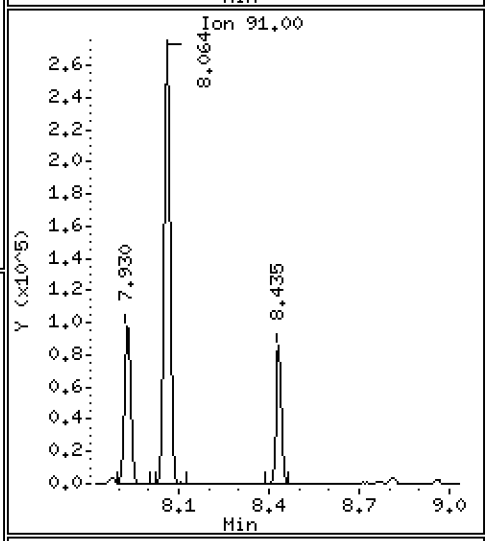


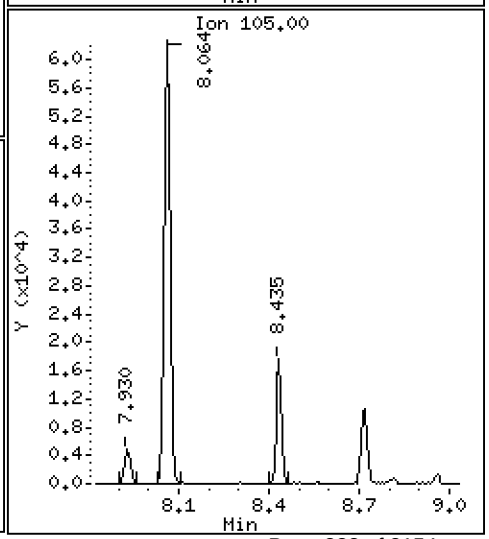












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291621.D
Lab Smp Id: 16F0096-16
Inj Date : 29-JUN-2016 22:48
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-16
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	1.584	1.584	(0.320)	3468	0.26007	0.2601
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.054	4.048	(0.818)	11141	0.67462	0.6746
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.492	4.486	(0.907)	823651	52.8529	52.853
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.955	4.949	(1.000)	653842	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.000)	805112	51.6801	51.680
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2247360	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.561	6.561	(1.215)	2817870	48.9354	48.935
	43 Toluene	92	6.603	6.603	(1.223)	398939	10.2170	10.217
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2418115	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.930	7.930	(1.006)	137330	1.86075	1.861
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.063	8.063	(1.023)	184384	6.43531	6.435
	57 o-Xylene	106	8.434	8.428	(1.070)	58091	2.05262	2.053
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1281751	49.2886	49.289
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1257017	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1280106	50.5729	50.573
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291621.D
Lab Smp Id: 16F0096-16
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	653842	8.98
35 1,4-Difluorobenze	2041239	1020620	4082478	2247360	10.10
52 d5-Chlorobenzene	2118314	1059157	4236628	2418115	14.15
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1257017	19.14

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.12
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.11
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 13:11

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-16
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	52.853	105.71	70-130
$ 32 d4-1,2-Dichloroeth	50.000	51.680	103.36	80-149
$ 42 d8-Toluene	50.000	48.935	97.87	77-120
$ 62 4-Bromofluorobenze	50.000	49.289	98.58	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.573	101.15	80-120

REVIEW SUMMARY FOR FILE - 06291621.D

Lab ID: 16F0096-16
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 22:48

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-Q-02-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-17	File ID:	06291622.D
Sampled:	06/29/16 12:55	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 23:10
Solids:	90.03	Preparation:	No Prep - Volatiles	Initial/Final:	5.91 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	0.94	U	0.22	0.94
74-83-9	Bromomethane	1	0.94	U	0.18	0.94
156-59-2	cis-1,2-Dichloroethene	1	261	E	0.23	0.94
71-43-2	Benzene	1	0.55	J	0.28	0.94
79-01-6	Trichloroethene	1	1.13		0.20	0.94
108-88-3	Toluene	1	188	E	0.14	0.94
127-18-4	Tetrachloroethene	1	0.94	U	0.24	0.94
100-41-4	Ethylbenzene	1	10.0		0.19	0.94
179601-23-1	m,p-Xylene	1	46.2		0.37	0.94
95-47-6	o-Xylene	1	17.9		0.21	0.94

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	50.6	101	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.6	101	80 - 120	
Toluene-d8	50.000	49.1	98.3	77 - 120	
4-Bromofluorobenzene	50.000	50.3	101	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291622.D

Date : 29-JUN-2016 23:10

Client ID:

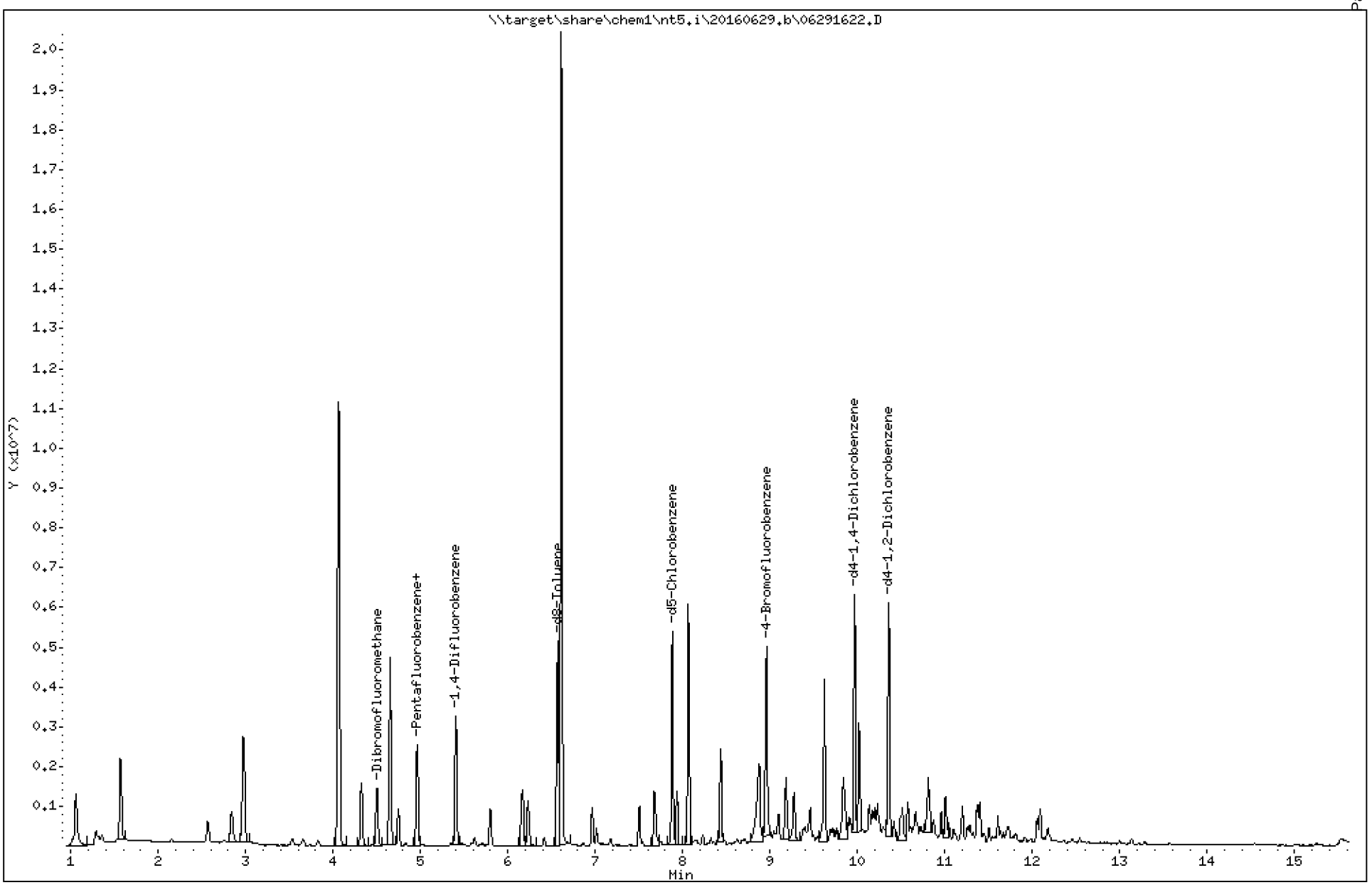
Instrument: nt5.i

Sample Info: 16F0096-17

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160629.b\06291622.D

Date : 29-JUN-2016 23:10

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-17

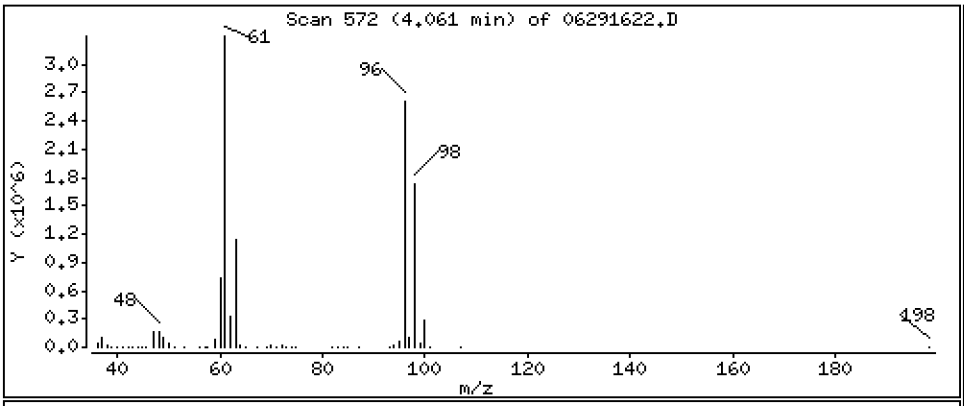
Operator: PB

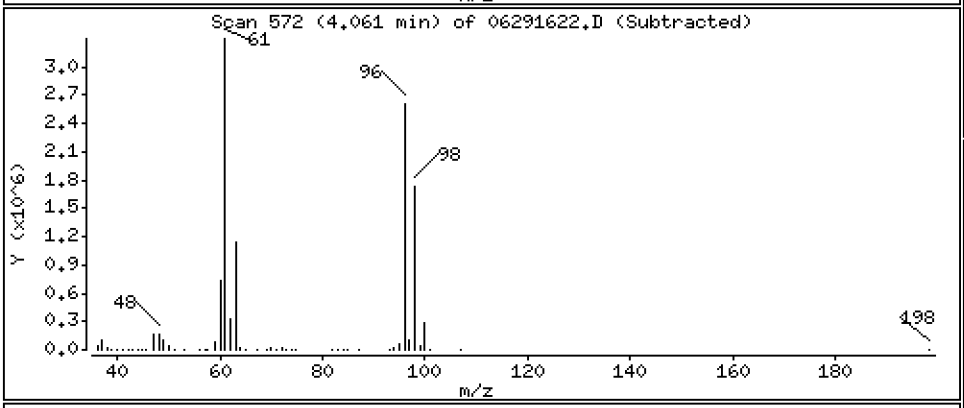
Column phase: RTXVMS

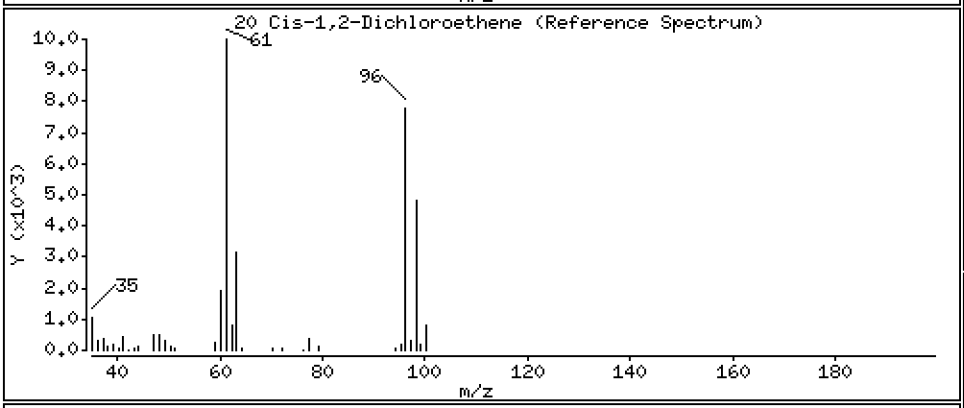
Column diameter: 0.18

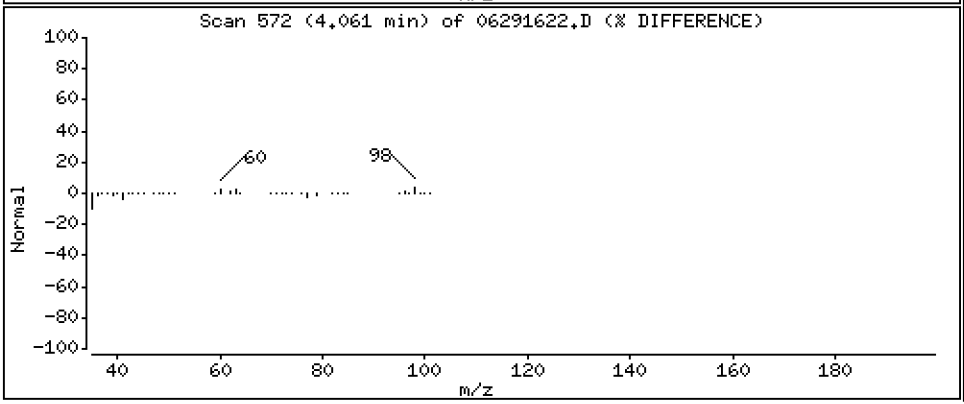
20 Cis-1,2-Dichloroethene

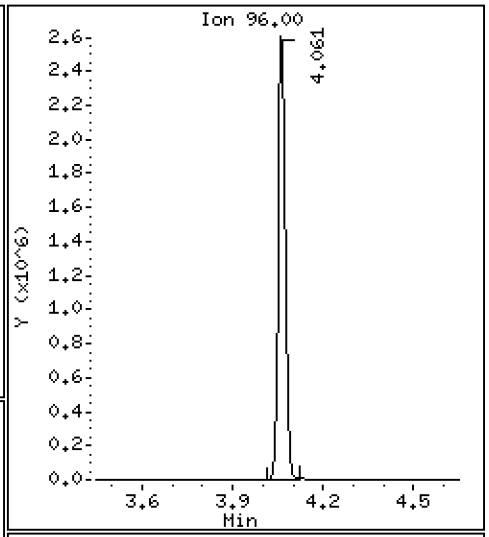
Concentration: 277.93 ug/Kg

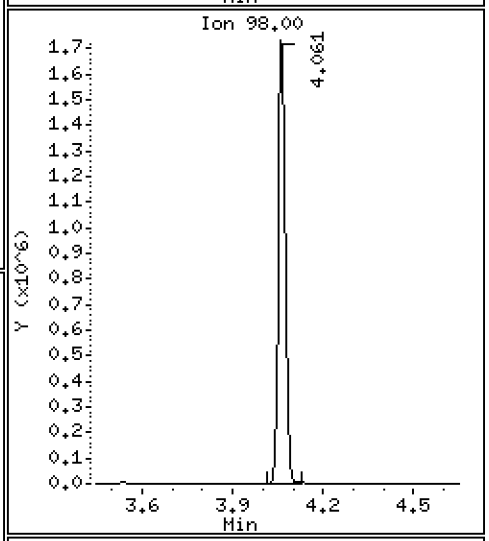


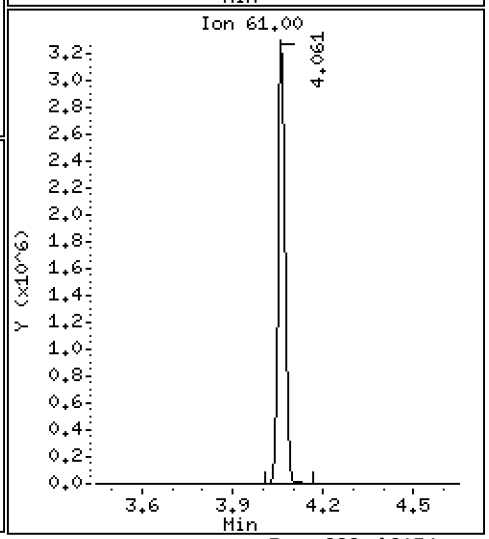












Data File: \\target\share\chem1\nt5.i\20160629.b\06291622.D

Date : 29-JUN-2016 23:10

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-17

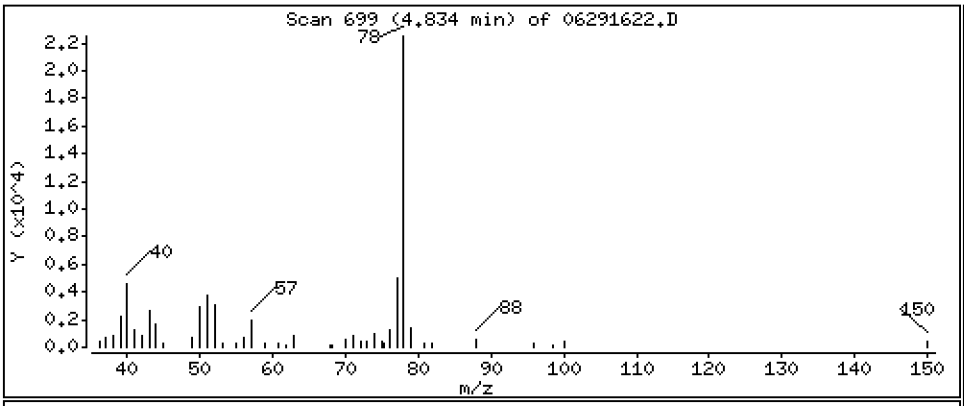
Operator: PB

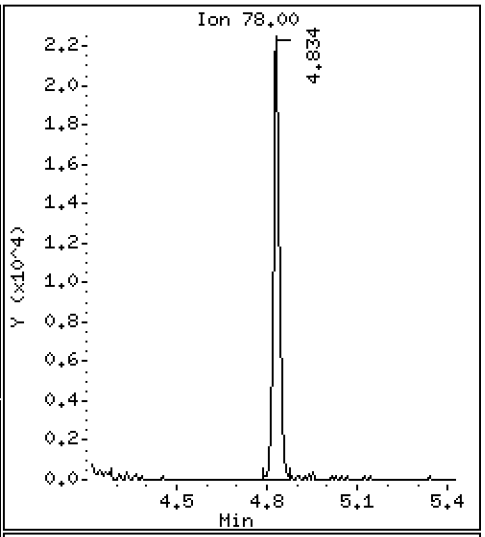
Column phase: RTXVMS

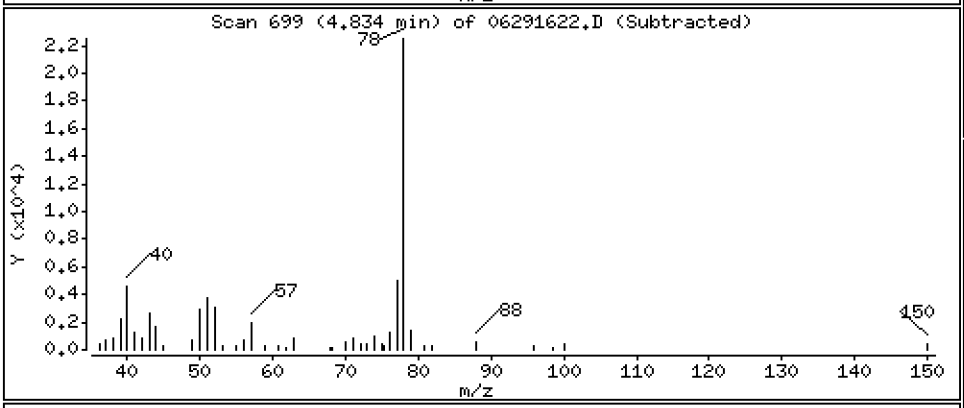
Column diameter: 0.18

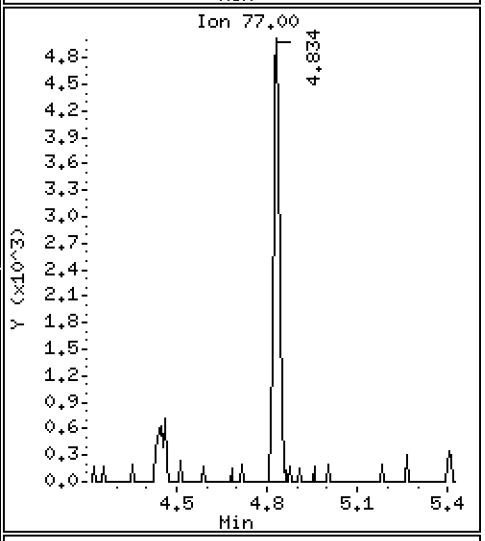
30 Benzene

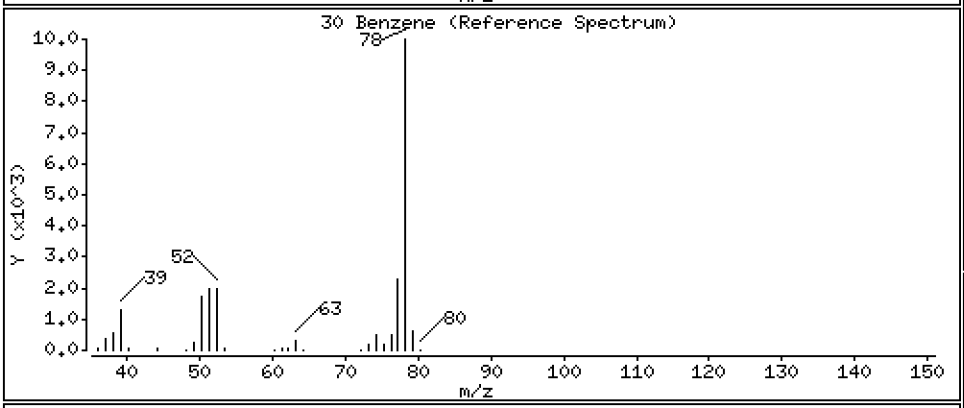
Concentration: 0.5834 ug/Kg

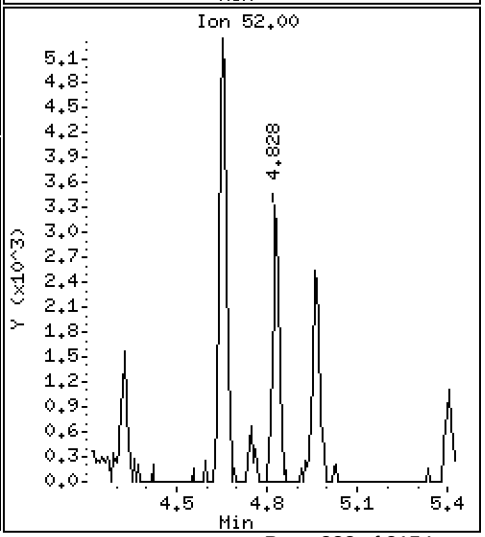


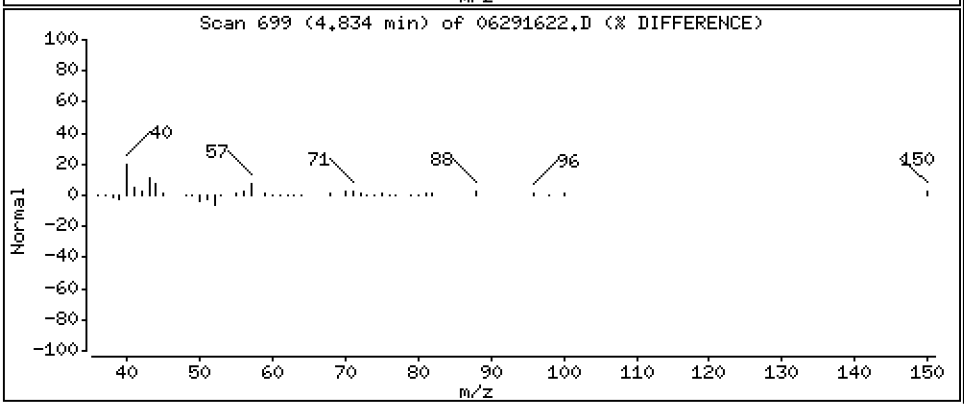












Data File: \\target\share\chem1\nt5.i\20160629.b\06291622.D

Date : 29-JUN-2016 23:10

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-17

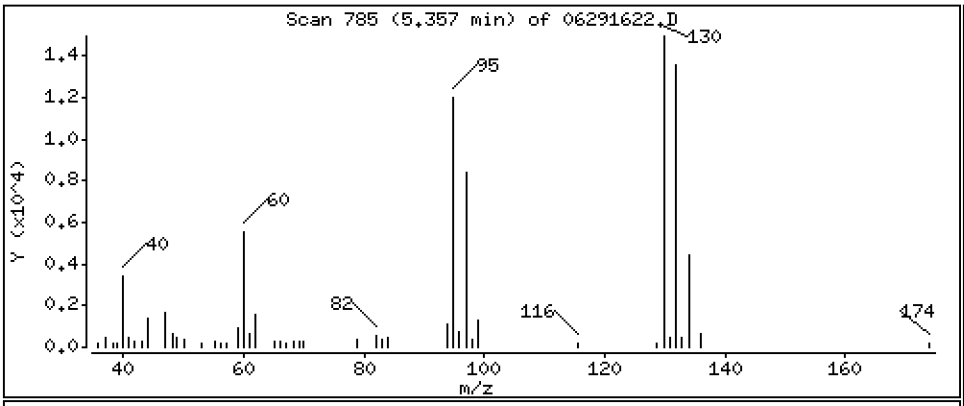
Operator: PB

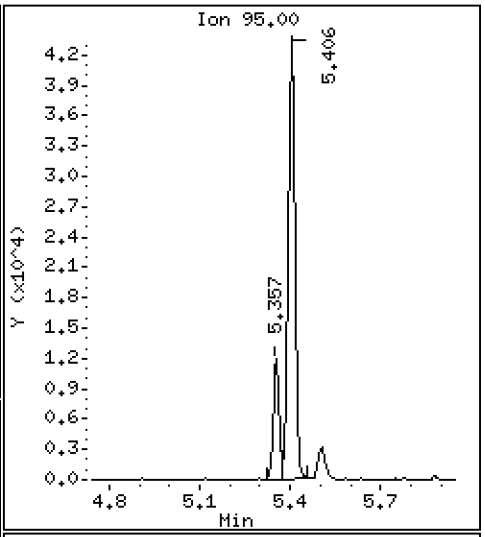
Column phase: RTXVMS

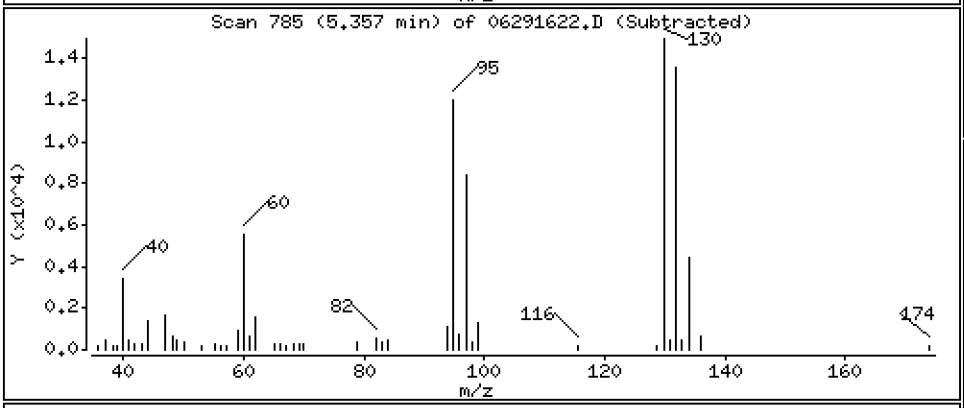
Column diameter: 0.18

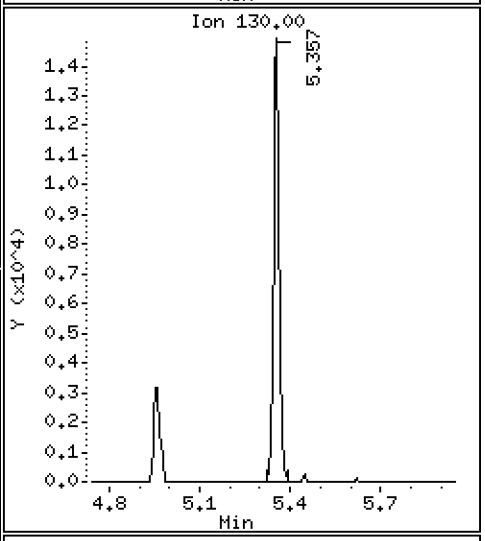
34 Trichloroethene

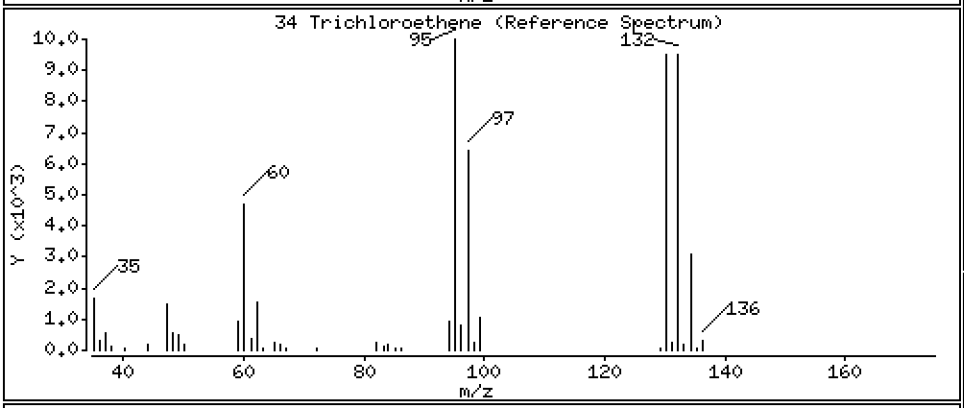
Concentration: 1.208 ug/Kg

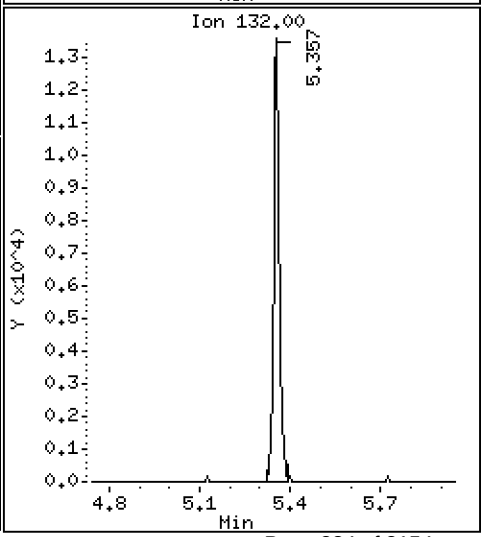


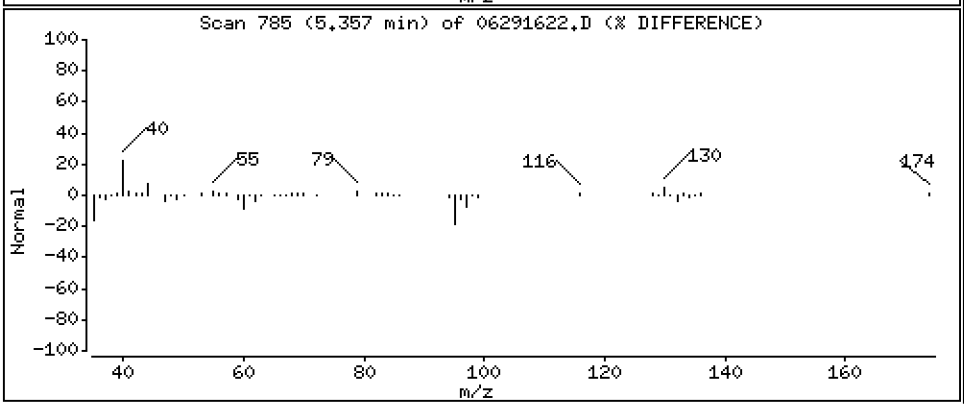












Data File: \\target\share\chem1\nt5.i\20160629.b\06291622.D

Date : 29-JUN-2016 23:10

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-17

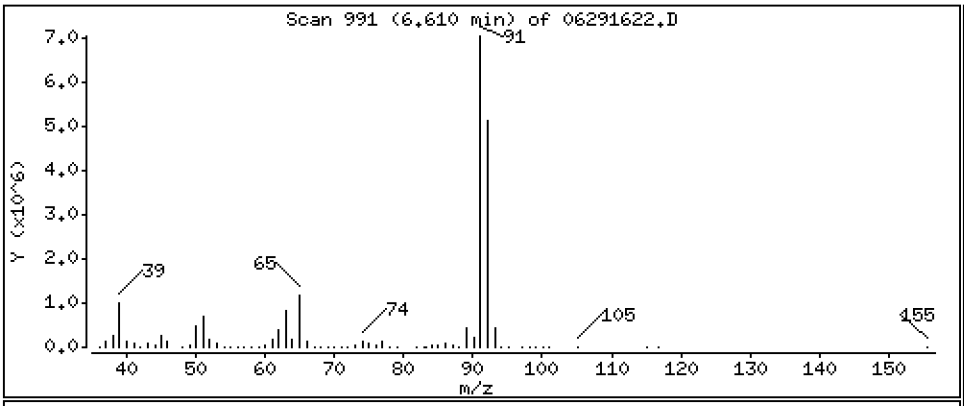
Operator: PB

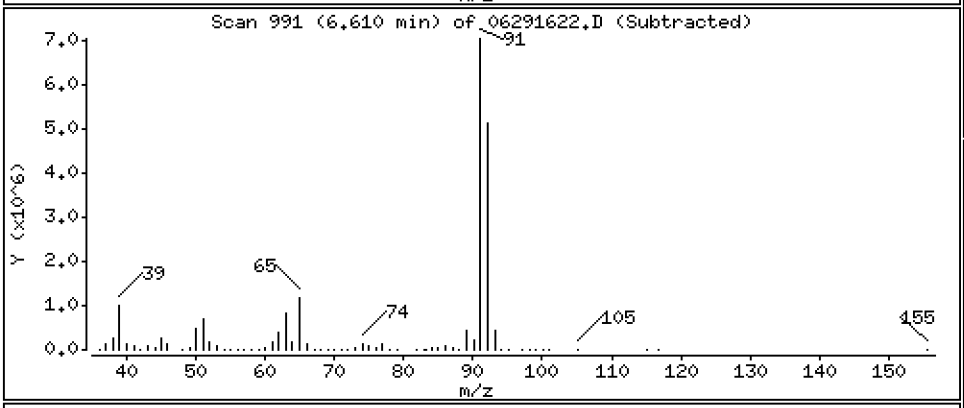
Column phase: RTXVMS

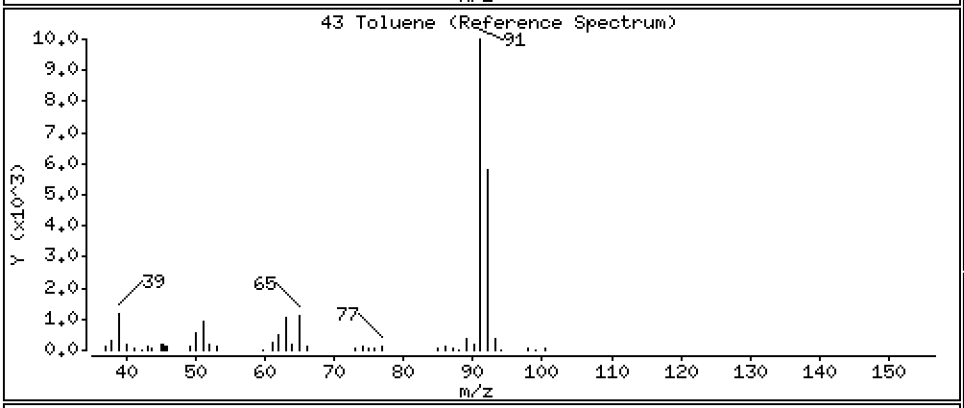
Column diameter: 0.18

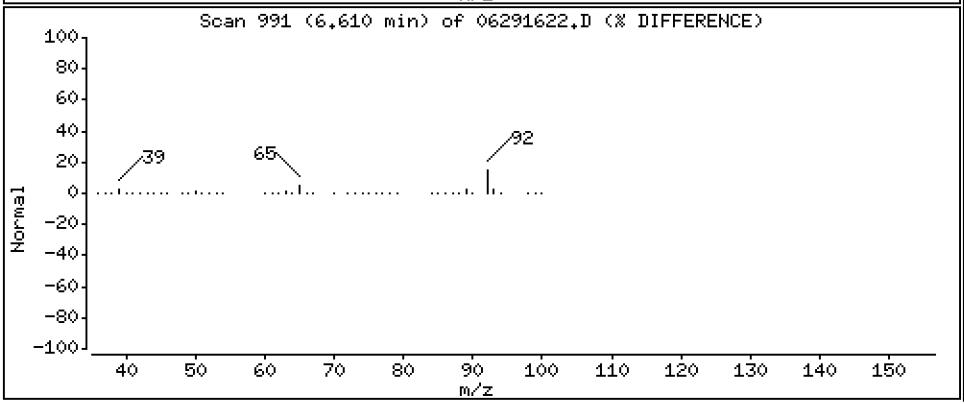
43 Toluene

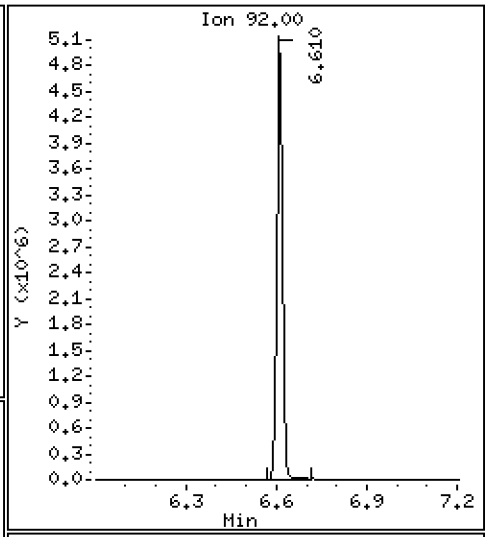
Concentration: 200.57 ug/Kg

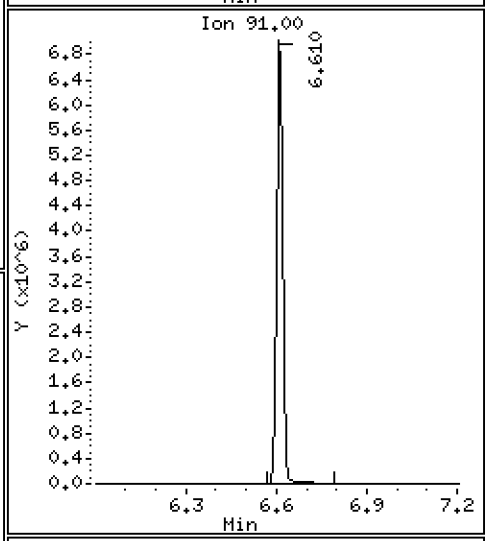


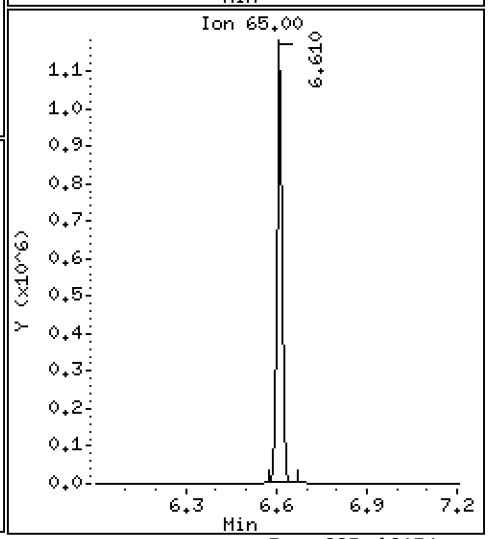












Data File: \\target\share\chem1\nt5.i\20160629.b\06291622.D

Date : 29-JUN-2016 23:10

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-17

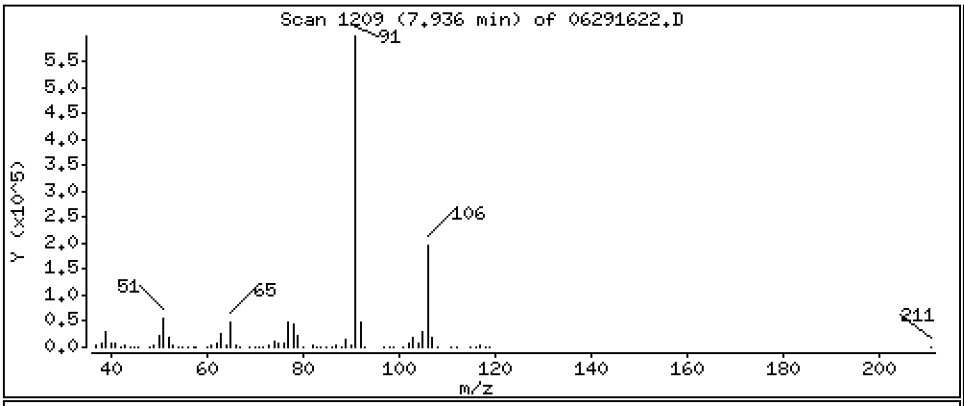
Operator: PB

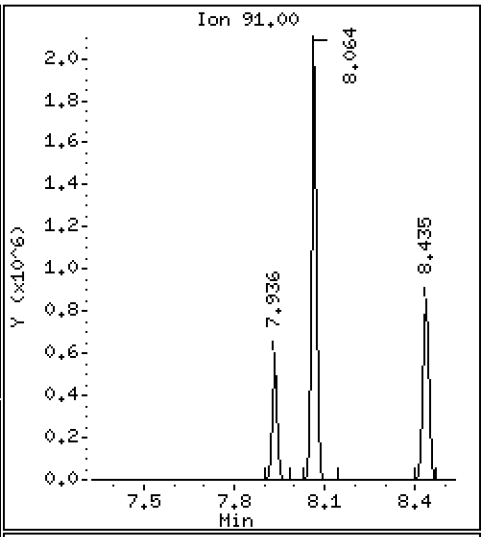
Column phase: RTXVMS

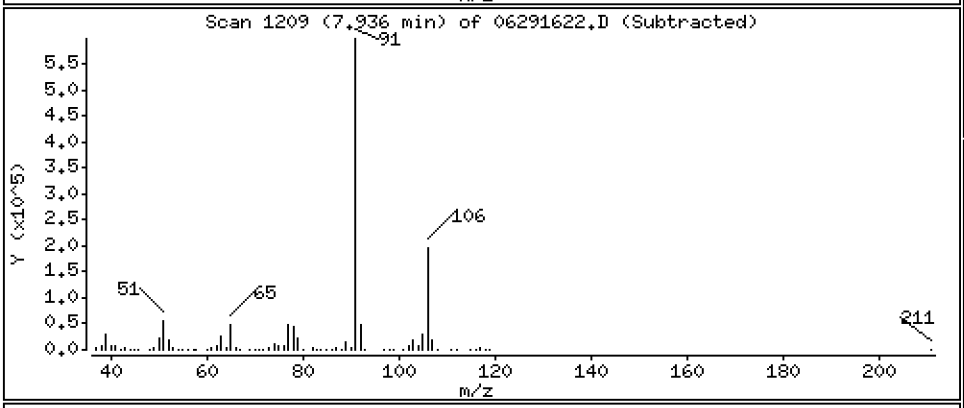
Column diameter: 0.18

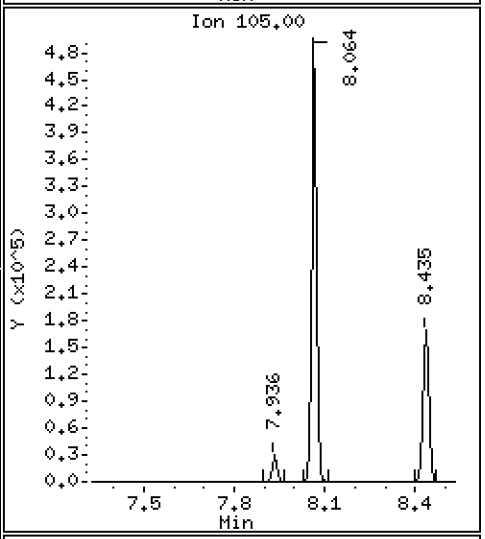
54 Ethyl Benzene

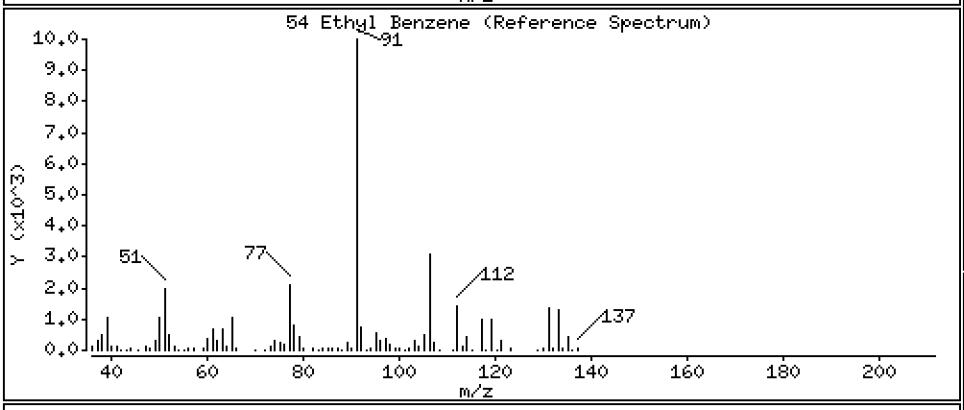
Concentration: 10.663 ug/Kg

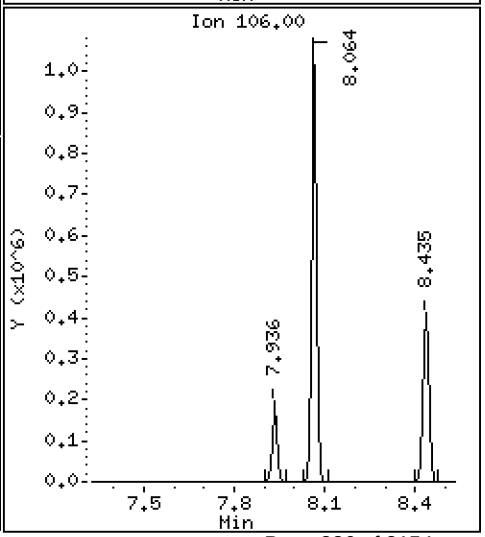


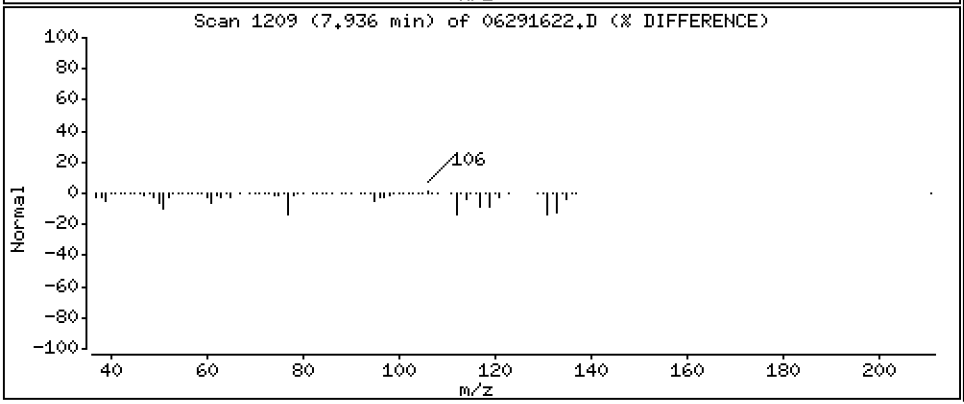












Data File: \\target\share\chem1\nt5.i\20160629.b\06291622.D

Date : 29-JUN-2016 23:10

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-17

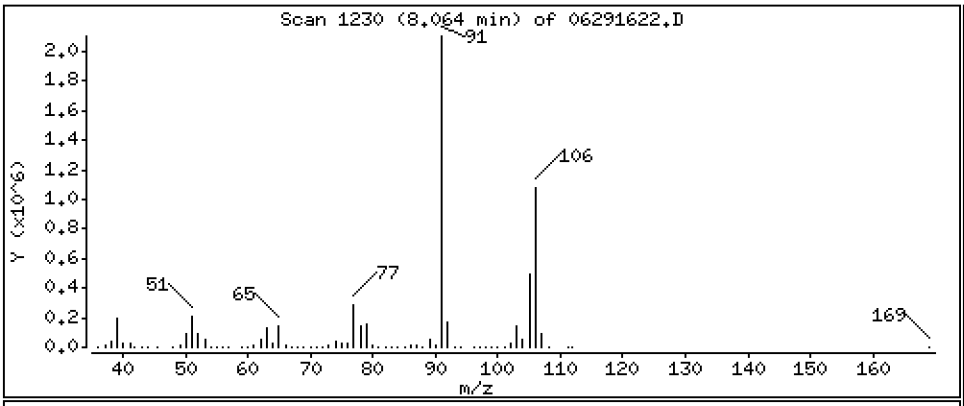
Operator: PB

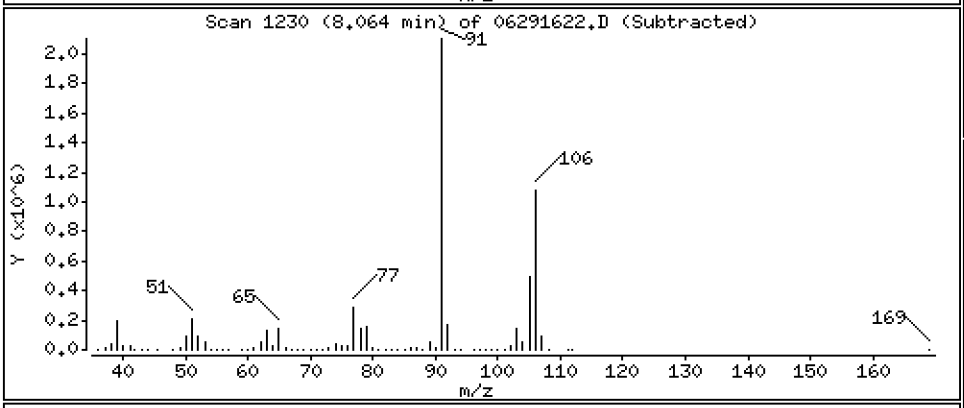
Column phase: RTXVMS

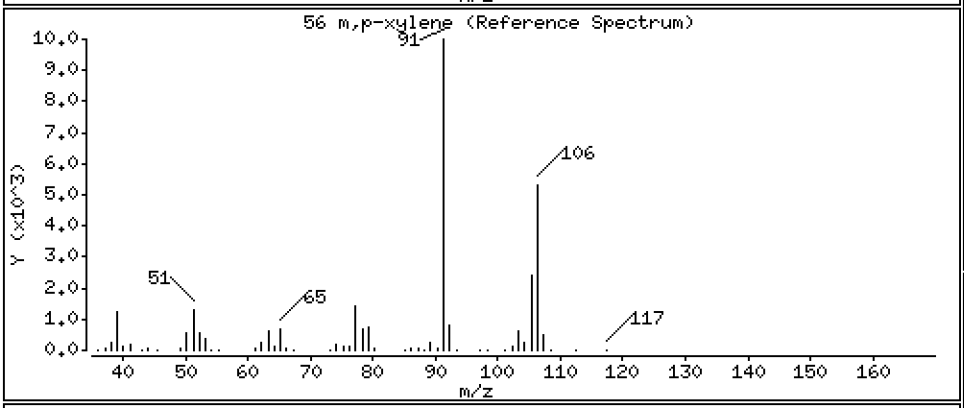
Column diameter: 0.18

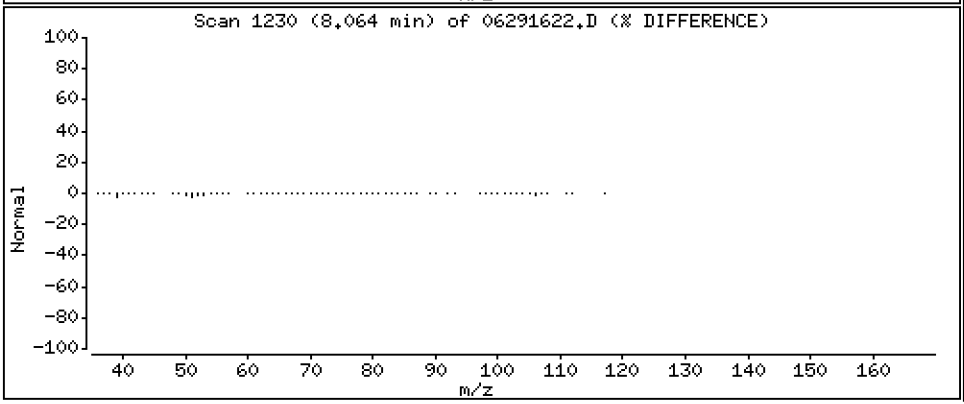
56 m,p-xylene

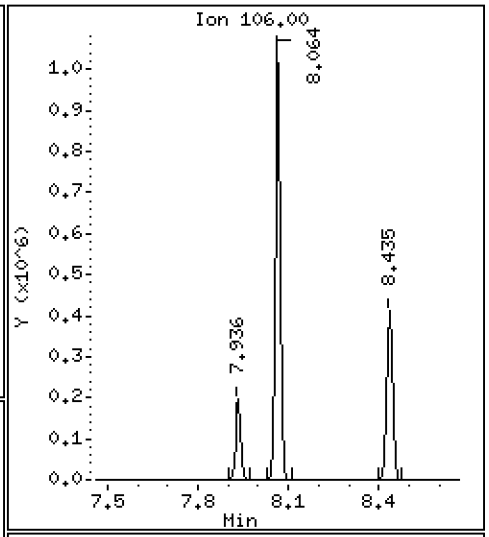
Concentration: 49.191 ug/Kg

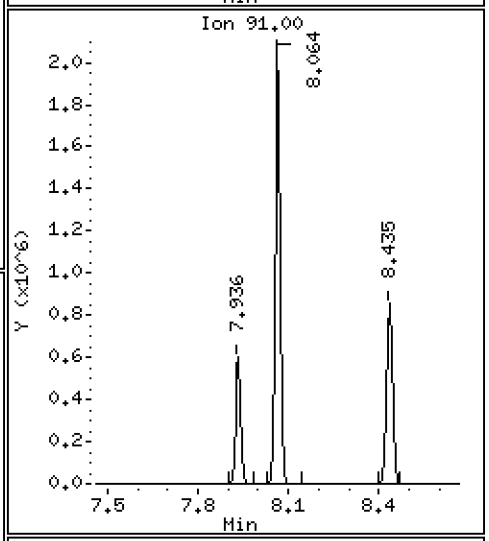


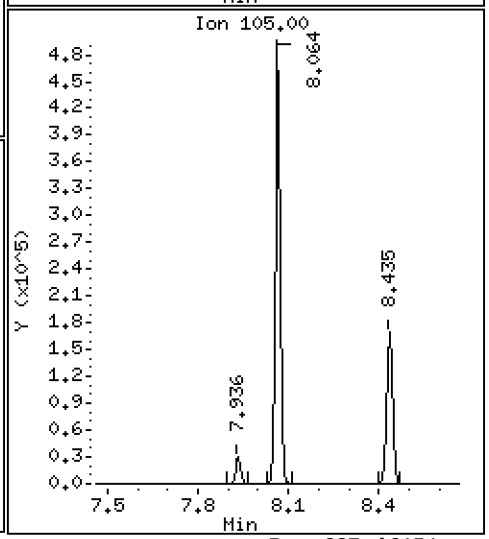












Data File: \\target\share\chem1\nt5.i\20160629.b\06291622.D

Date : 29-JUN-2016 23:10

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-17

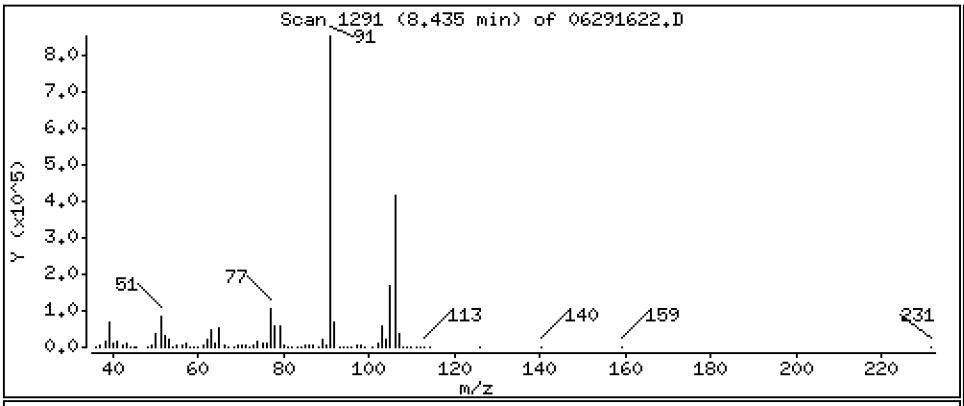
Operator: PB

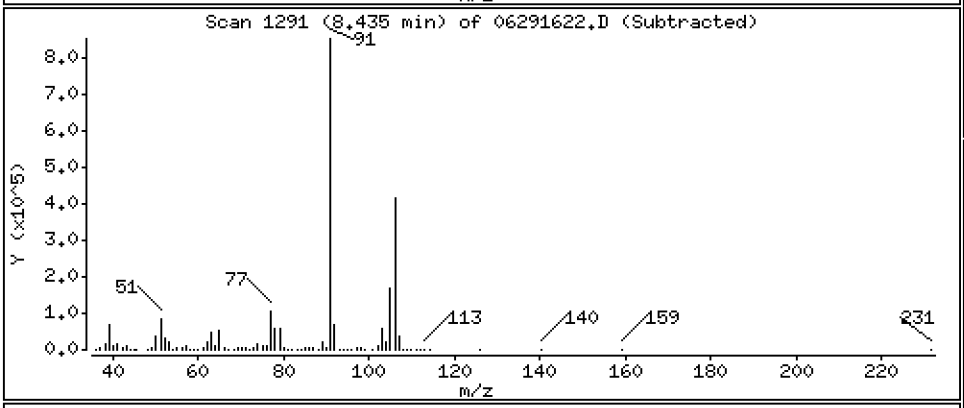
Column phase: RTXVMS

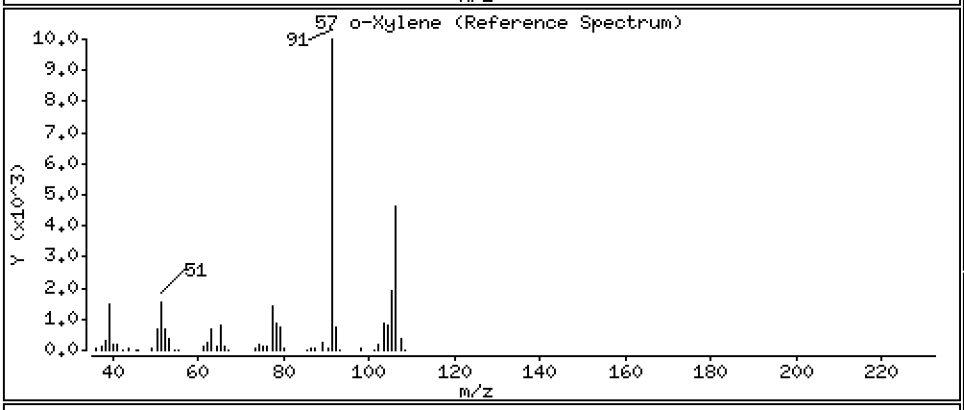
Column diameter: 0.18

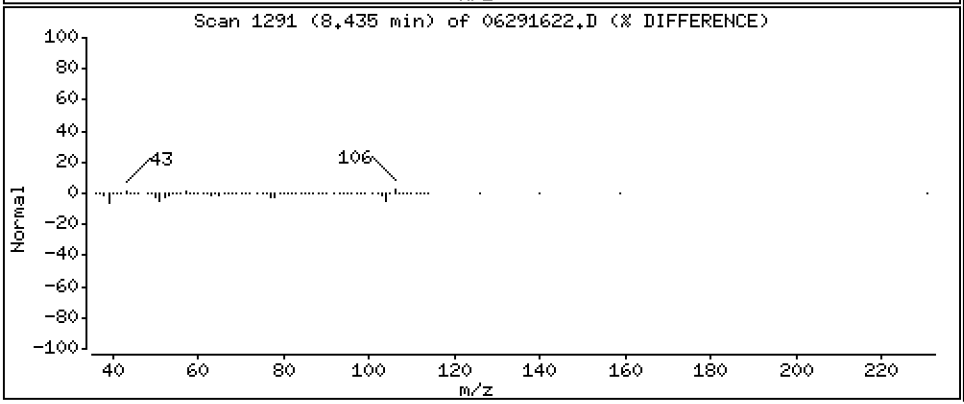
57 o-Xylene

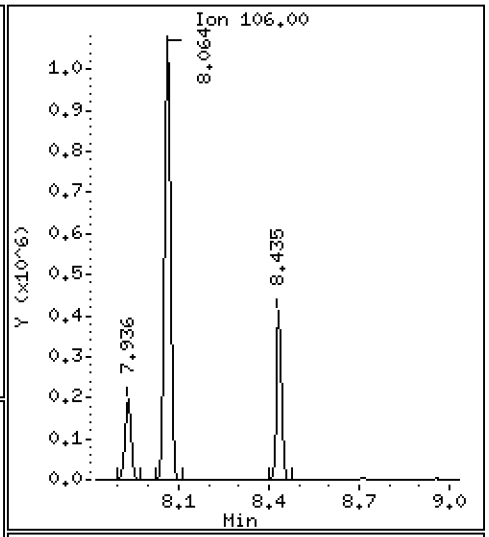
Concentration: 19.101 ug/Kg

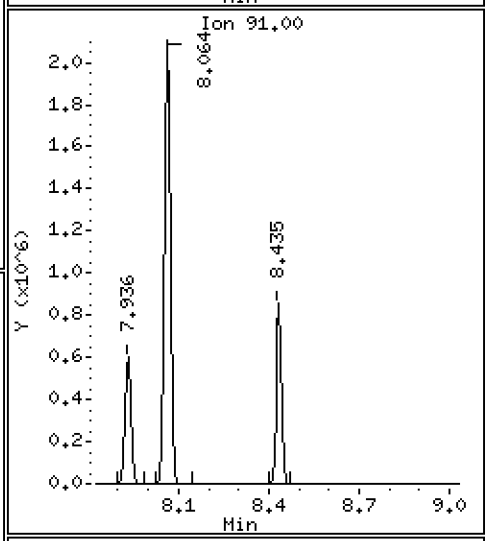


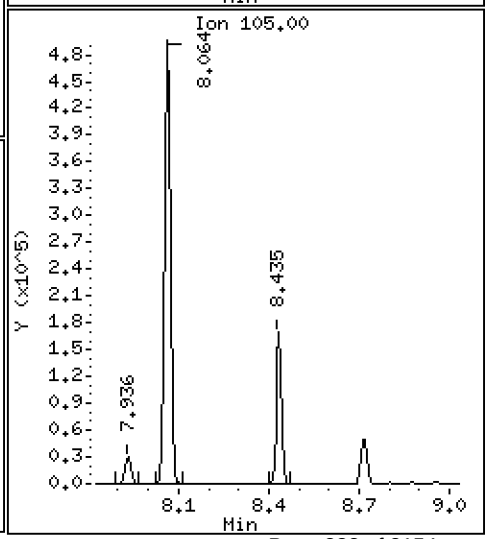












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291622.D
Lab Smp Id: 16F0096-17
Inj Date : 29-JUN-2016 23:10
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-17
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.061	4.048	(0.819)	4660171	277.929	277.93
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.499	4.486	(0.907)	817656	51.6765	51.676
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	4.833	4.821	(0.894)	35588	0.58337	0.5834
*	31 Pentafluorobenzene	168	4.961	4.949	(1.000)	663859	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.000)	800163	50.5874	50.587
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.356	5.344	(0.991)	19090	1.20760	1.208
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2258871	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.561	(1.215)	2844307	49.1428	49.143
	43 Toluene	92	6.610	6.603	(1.223)	7871789	200.572	200.57
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2458070	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.936	7.930	(1.007)	799988	10.6633	10.663
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.064	8.063	(1.023)	1432714	49.1913	49.191
	57 o-Xylene	106	8.435	8.428	(1.070)	549516	19.1013	19.101
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1329505	50.2939	50.294
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1282405	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	Compound Not Detected.					
$	79 d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1307658	50.6387	50.639
	80 1,2-Dichlorobenzene	146	Compound Not Detected.					
	81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
	82 Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
	83 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	84 Naphthalene	128	Compound Not Detected.					
	85 1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291622.D
Lab Smp Id: 16F0096-17
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	663859	10.65
35 1,4-Difluorobenze	2041239	1020620	4082478	2258871	10.66
52 d5-Chlorobenzene	2118314	1059157	4236628	2458070	16.04
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1282405	21.55

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-17
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	51.676	103.35	70-130
$ 32 d4-1,2-Dichloroeth	50.000	50.587	101.17	80-149
$ 42 d8-Toluene	50.000	49.143	98.29	77-120
$ 62 4-Bromofluorobenze	50.000	50.294	100.59	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.639	101.28	80-120

REVIEW SUMMARY FOR FILE - 06291622.D

Lab ID: 16F0096-17
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 23:10

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-Q-02-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid (MeOH extraction)

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-17RE1	File ID:	06301618.D
Sampled:	06/29/16 12:55	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 18:37
Solids:	90.03	Preparation:	No Prep - Volatiles	Initial/Final:	5.862 g / 5 g
Batch:	BEG0006	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	52.9	U	8.25	52.9
74-83-9	Bromomethane	1	54.3		10.8	52.9
156-59-2	cis-1,2-Dichloroethene	1	422		9.52	52.9
71-43-2	Benzene	1	52.9	U	8.68	52.9
79-01-6	Trichloroethene	1	52.9	U	9.52	52.9
108-88-3	Toluene	1	420		9.10	52.9
127-18-4	Tetrachloroethene	1	52.9	U	14.6	52.9
100-41-4	Ethylbenzene	1	23.6	J	14.4	52.9
179601-23-1	m,p-Xylene	1	112		29.5	52.9
95-47-6	o-Xylene	1	40.0	J	12.1	52.9

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	43.0	86.1	80 - 124	
Toluene-d8	50.000	48.4	96.7	80 - 120	
4-Bromofluorobenzene	50.000	48.7	97.4	80 - 120	
1,2-Dichlorobenzene-d4	50.000	48.7	97.4	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301618.D

Date : 30-JUN-2016 18:37

Client ID:

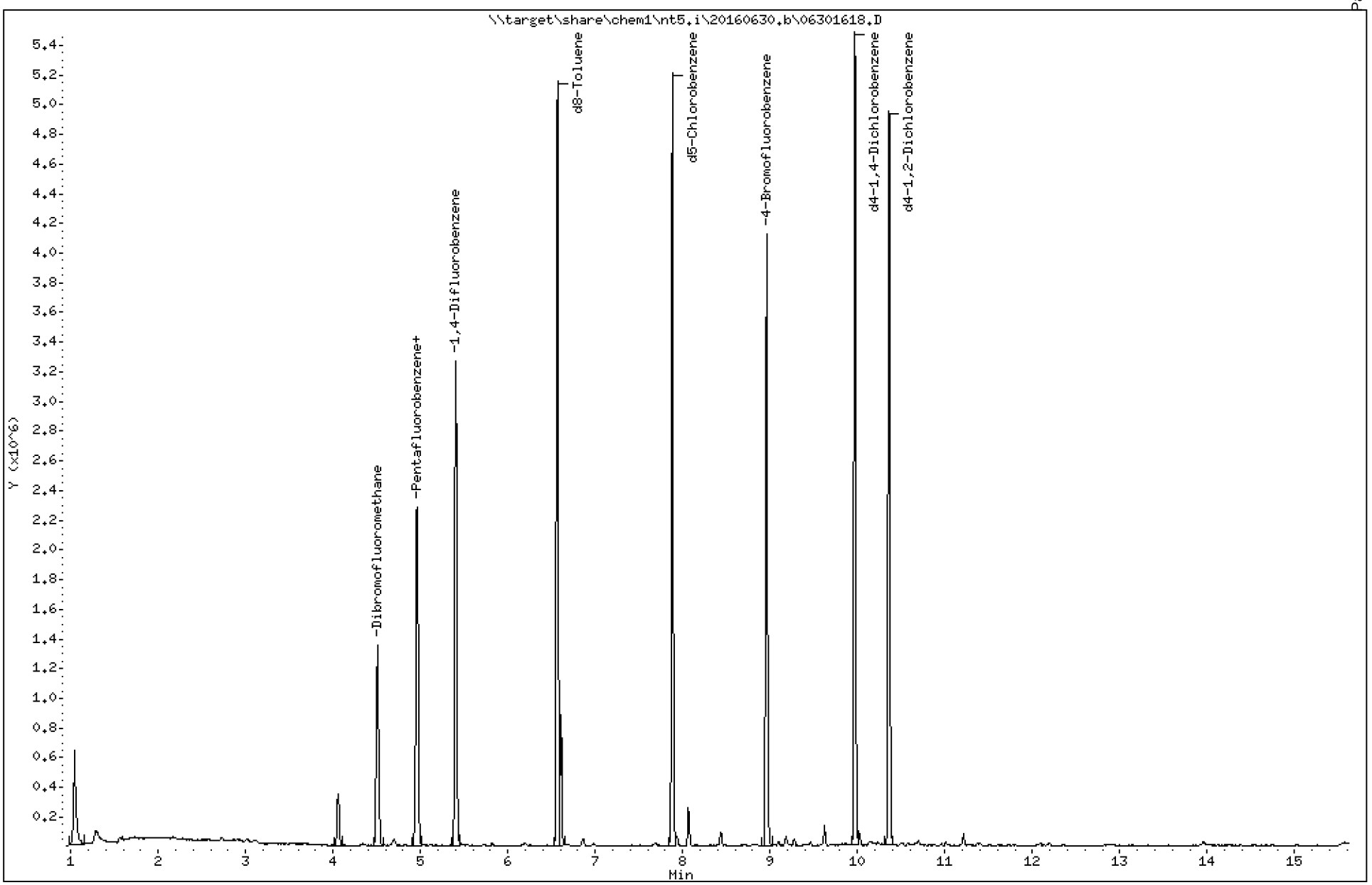
Instrument: nt5.i

Sample Info: 16F0096-17RE1

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\06301618.D

Date : 30-JUN-2016 18:37

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-17RE1

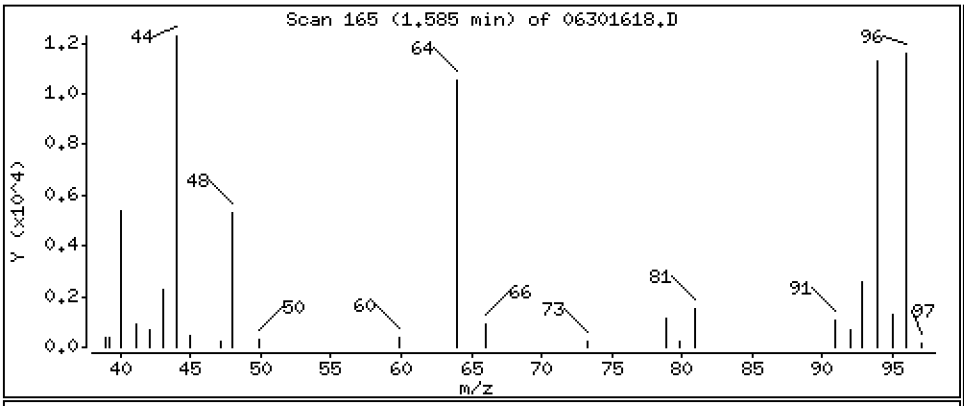
Operator: PB

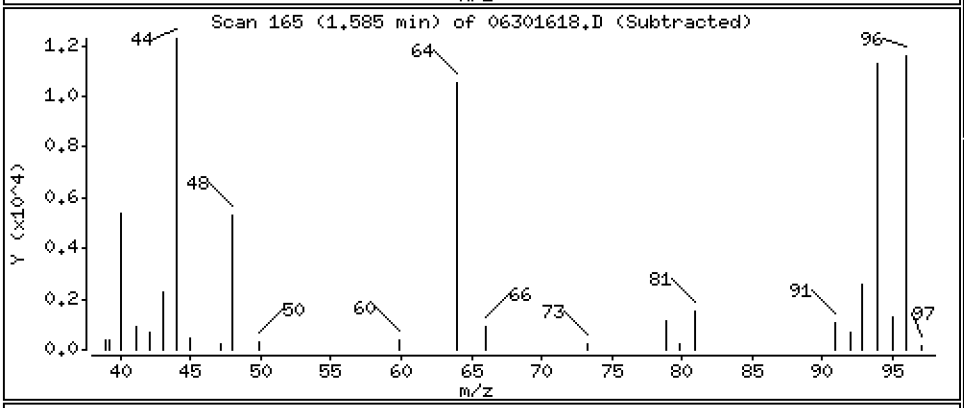
Column phase: RTXVMS

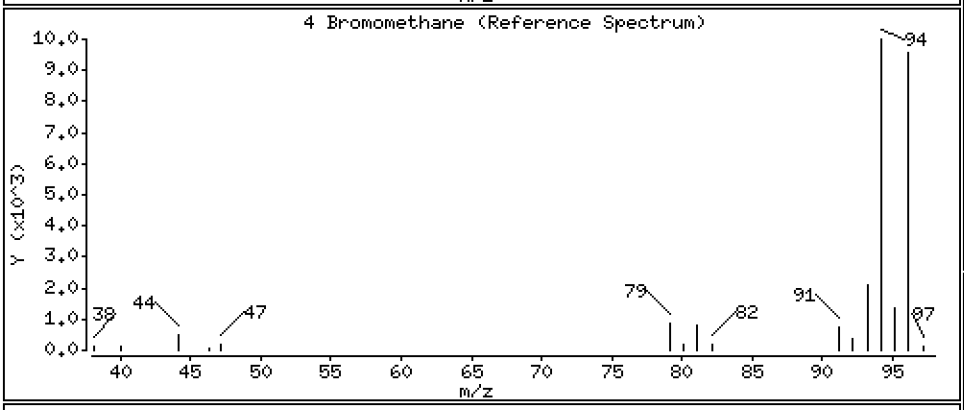
Column diameter: 0.18

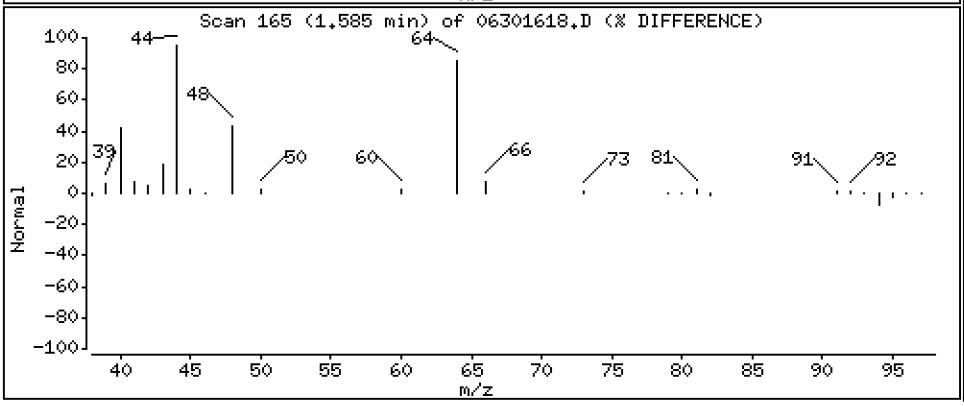
4 Bromomethane

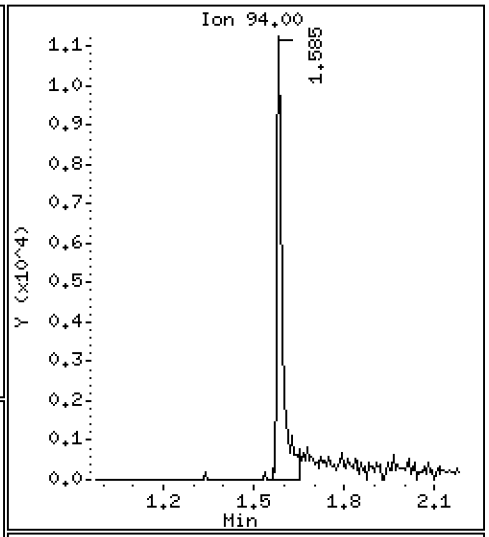
Concentration: 1.026 ug/Kg

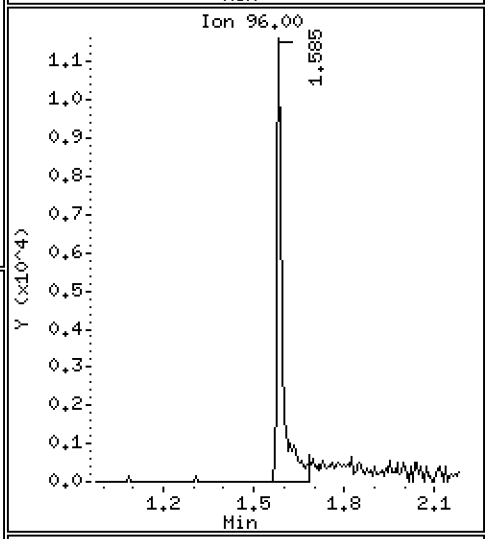


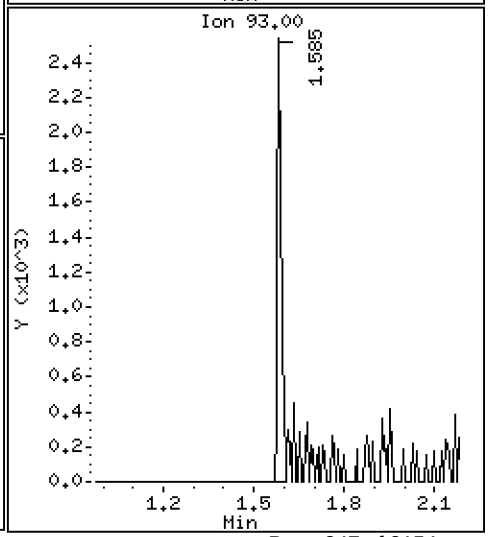












Data File: \\target\share\chem1\nt5.i\20160630.b\06301618.D

Date : 30-JUN-2016 18:37

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-17RE1

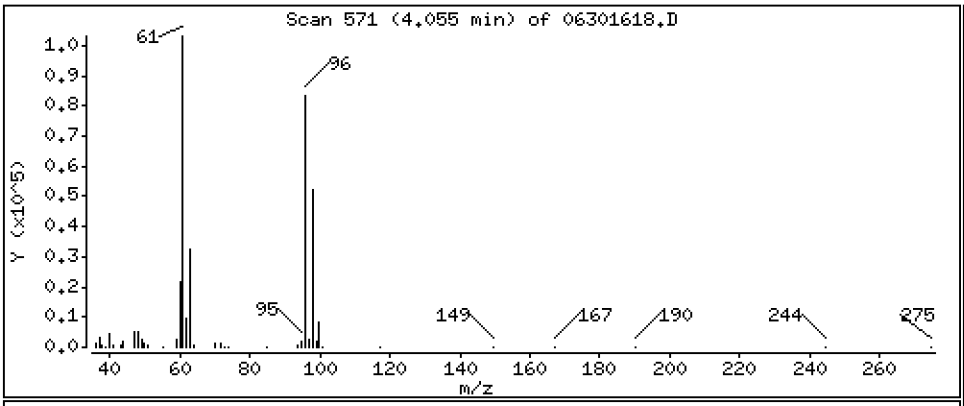
Operator: PB

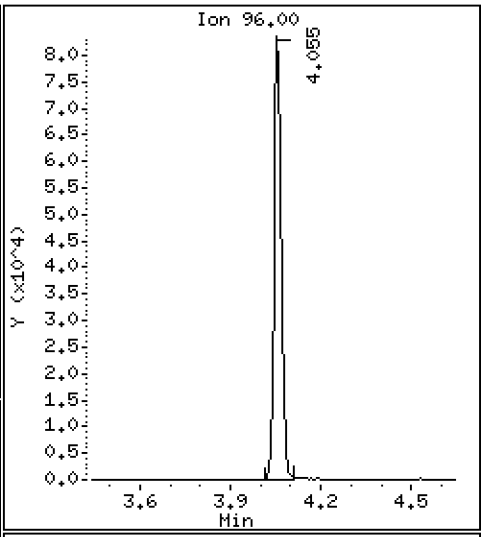
Column phase: RTXVMS

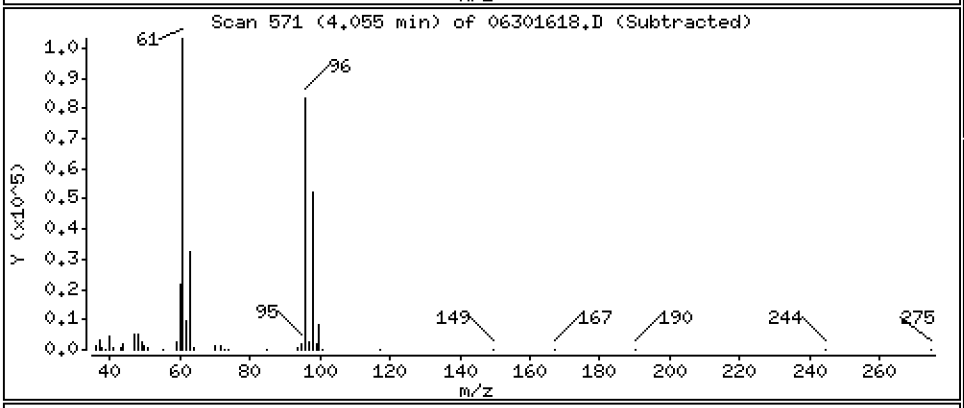
Column diameter: 0.18

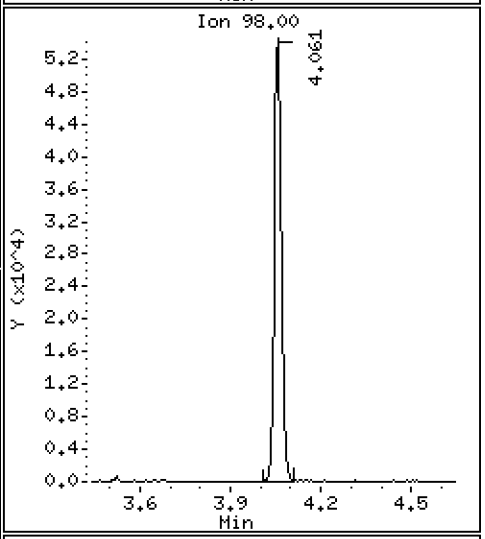
20 Cis-1,2-Dichloroethene

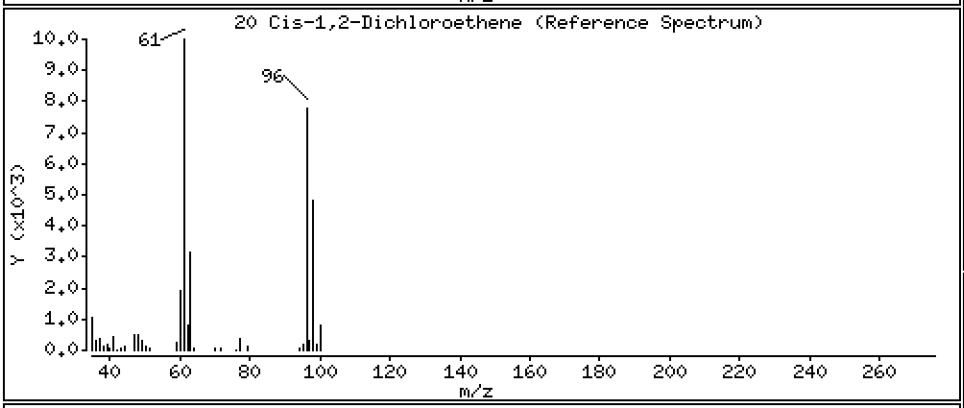
Concentration: 7.982 ug/Kg

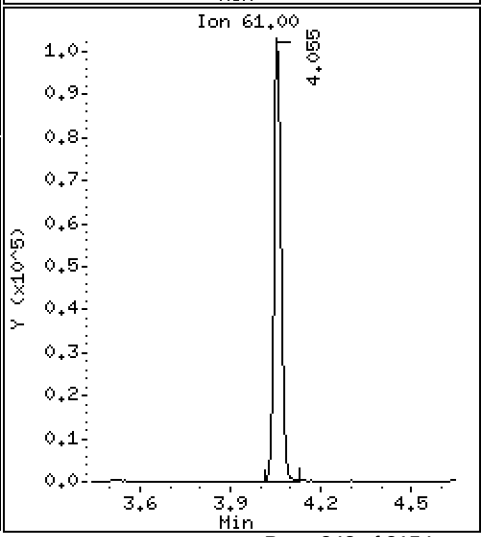


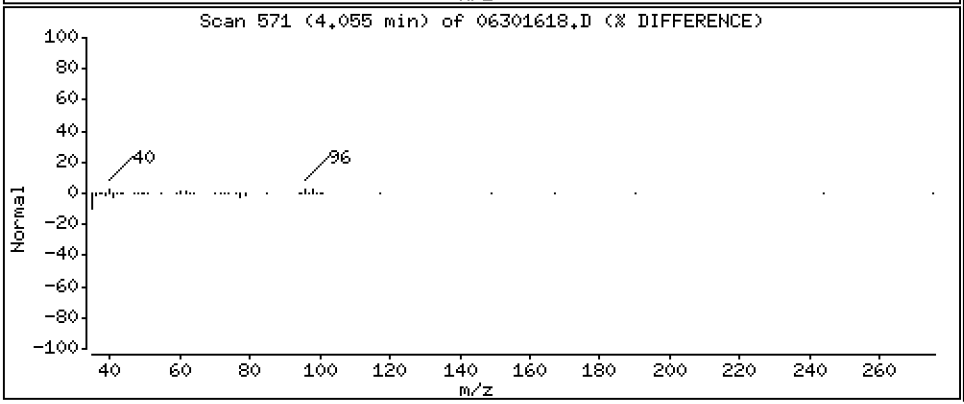












Data File: \\target\share\chem1\nt5.i\20160630.b\06301618.D

Date : 30-JUN-2016 18:37

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-17RE1

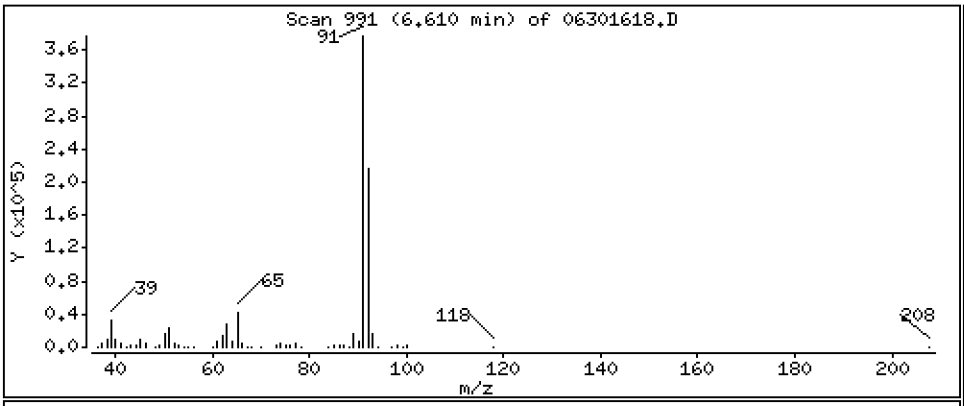
Operator: PB

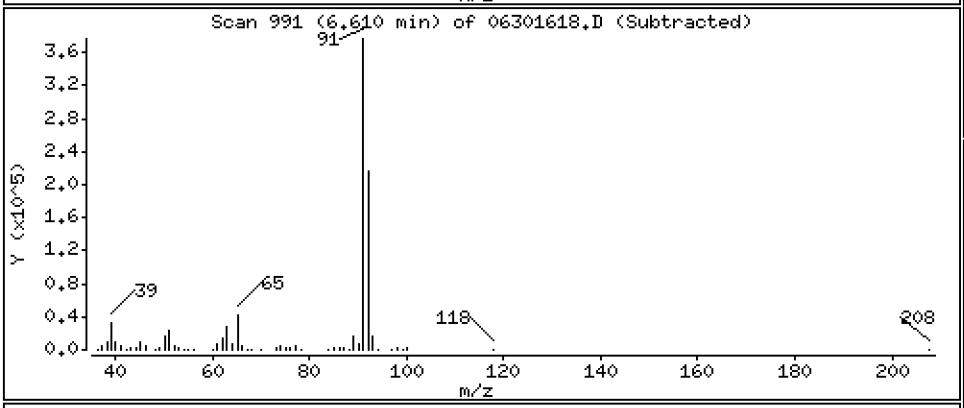
Column phase: RTXVMS

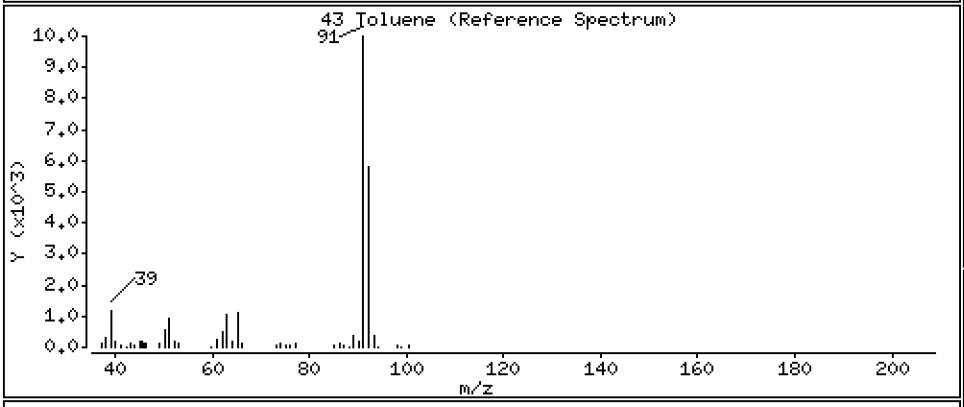
Column diameter: 0.18

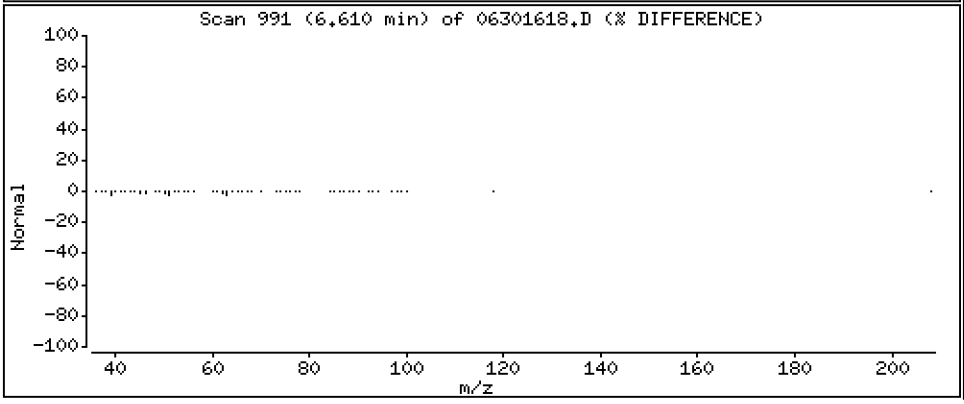
43 Toluene

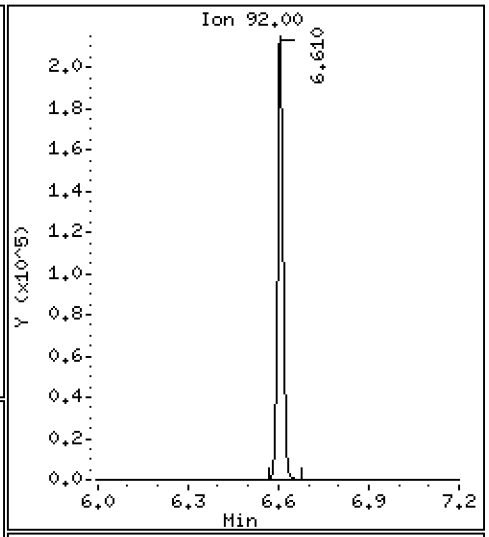
Concentration: 7.942 ug/Kg

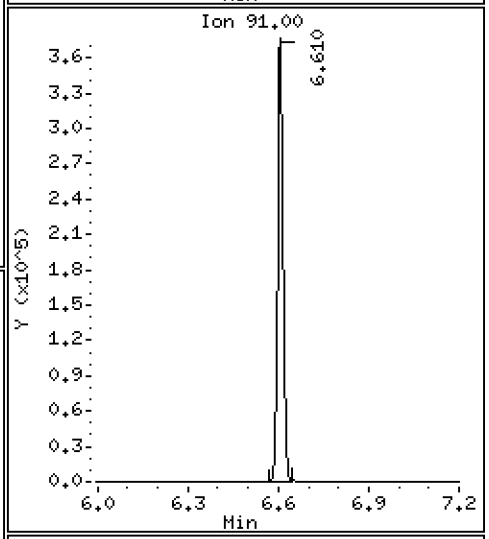


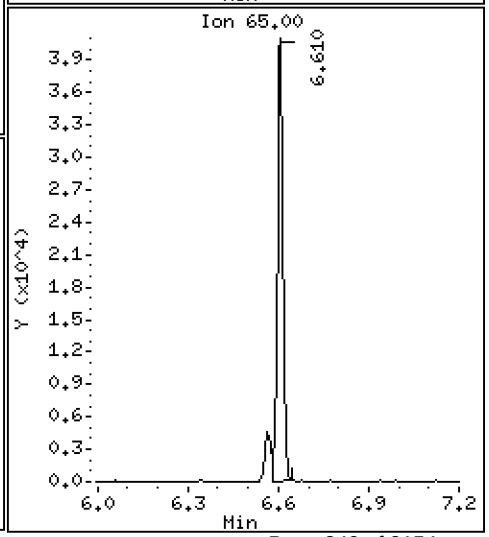












Data File: \\target\share\chem1\nt5.i\20160630.b\06301618.D

Date : 30-JUN-2016 18:37

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-17RE1

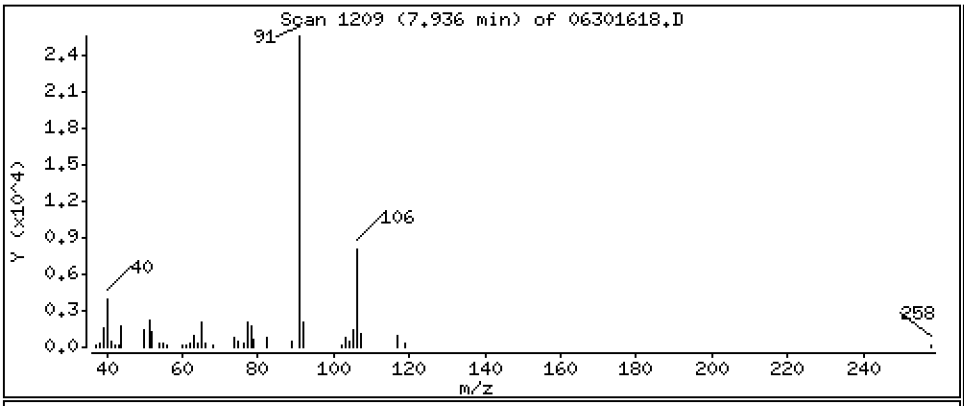
Operator: PB

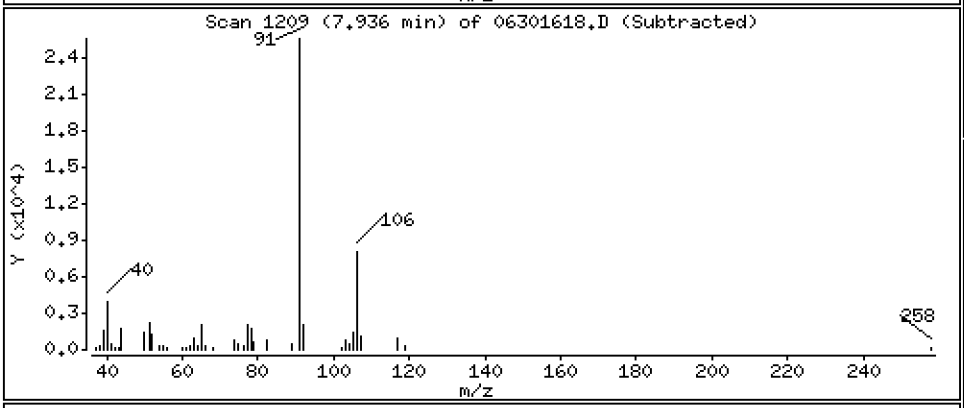
Column phase: RTXVMS

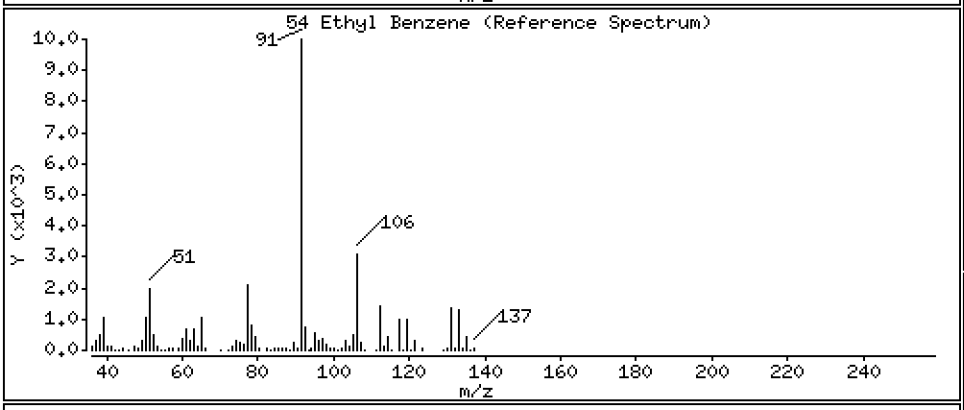
Column diameter: 0.18

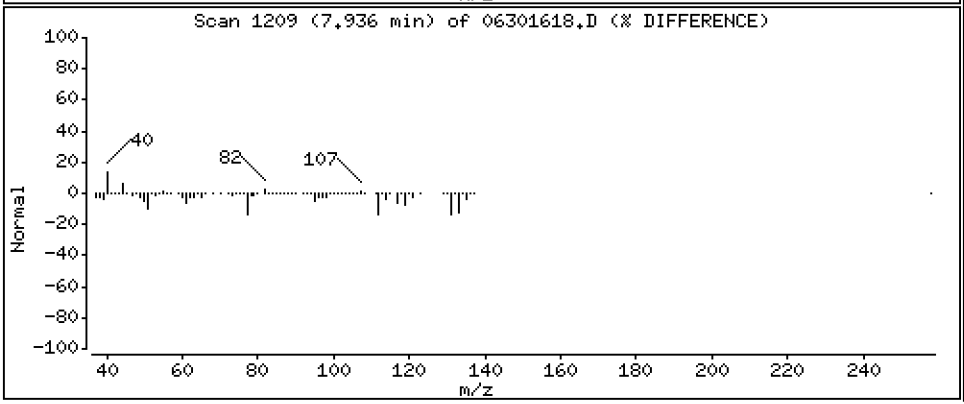
54 Ethyl Benzene

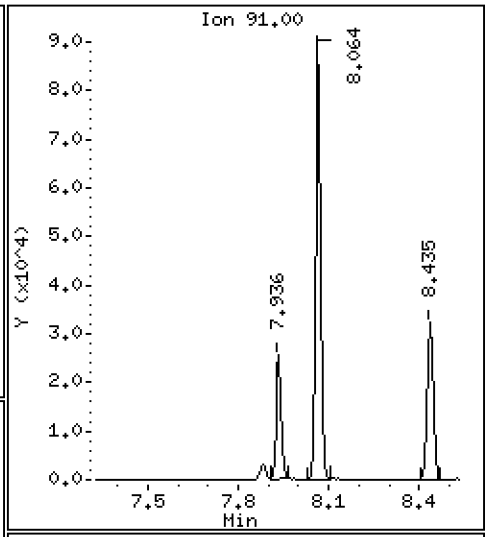
Concentration: 0.4455 ug/Kg

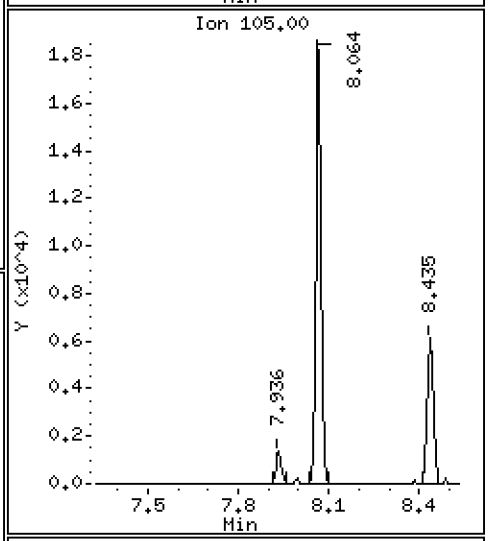


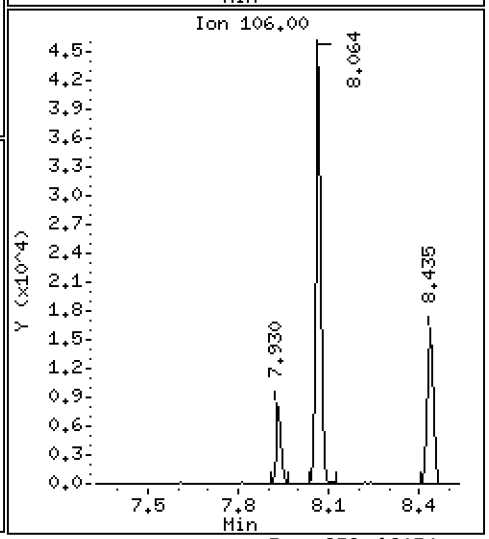












Data File: \\target\share\chem1\nt5.i\20160630.b\06301618.D

Date : 30-JUN-2016 18:37

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-17RE1

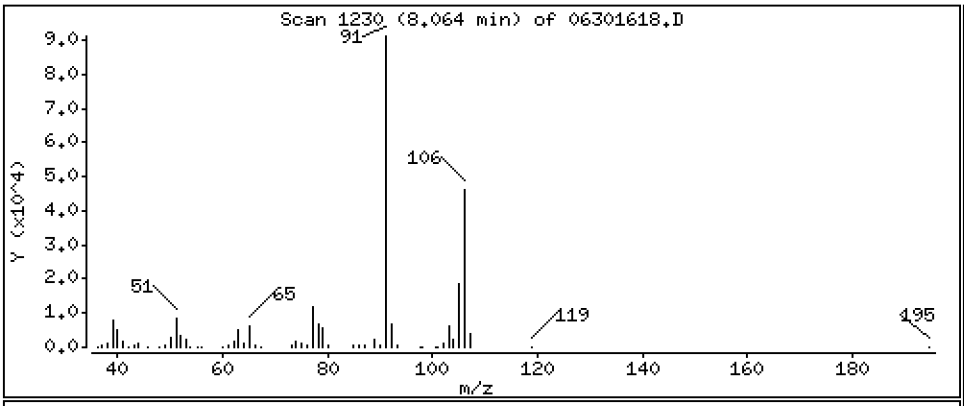
Operator: PB

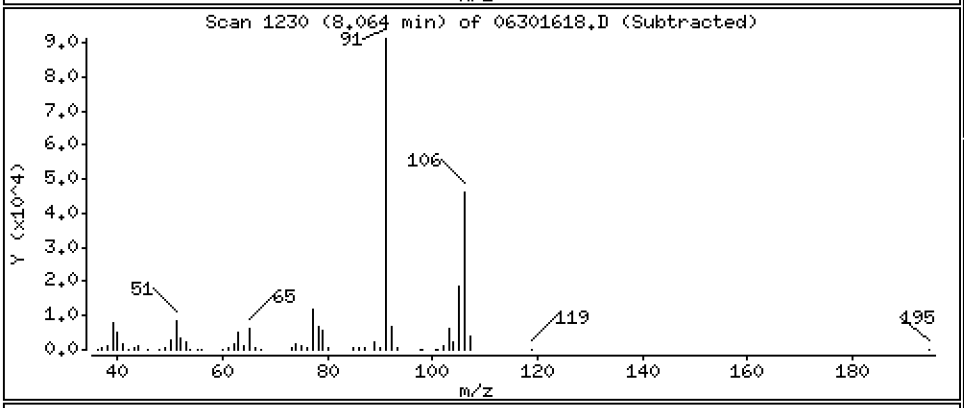
Column phase: RTXVMS

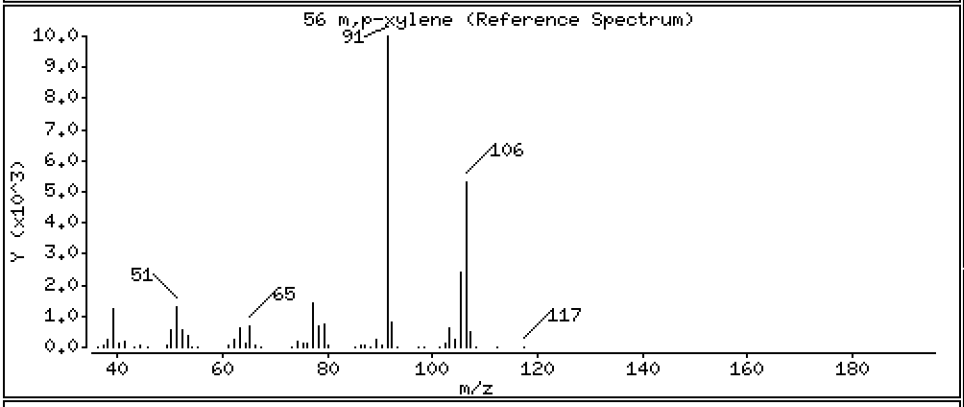
Column diameter: 0.18

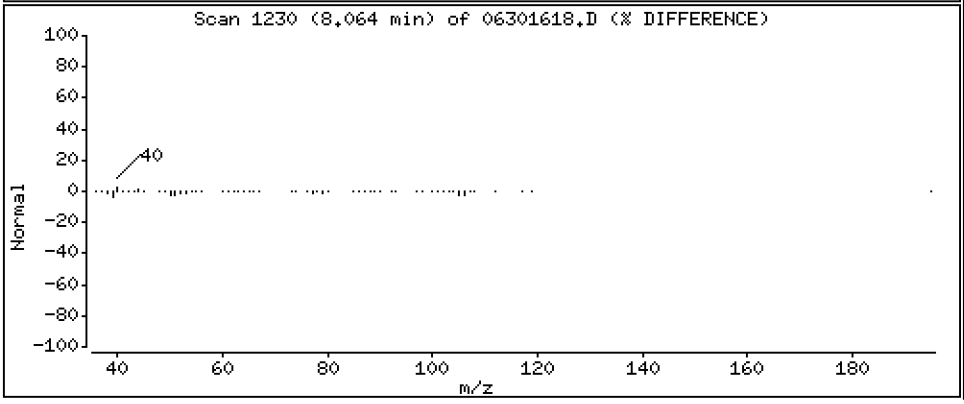
56 m,p-xylene

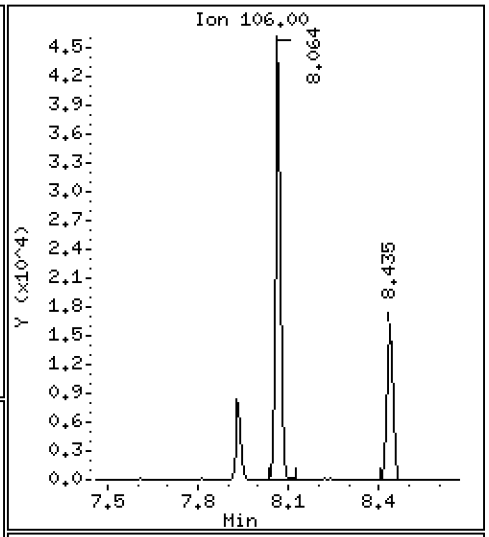
Concentration: 2.122 ug/Kg

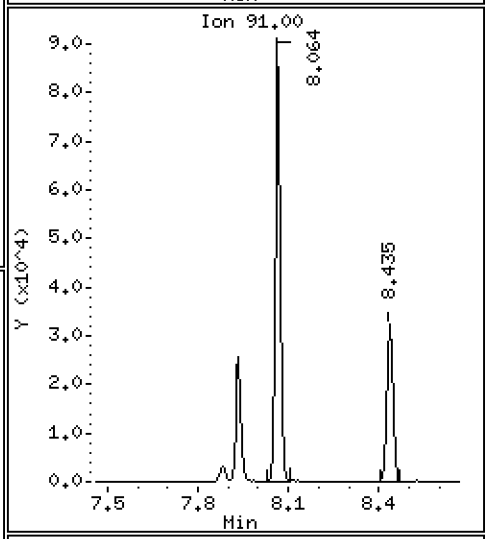


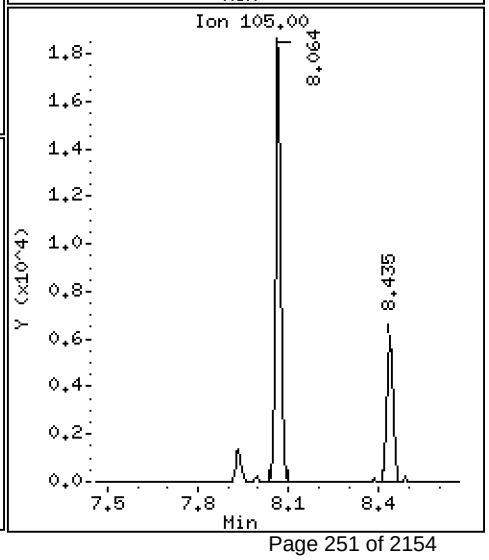












Data File: \\target\share\chem1\nt5.i\20160630.b\06301618.D

Date : 30-JUN-2016 18:37

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-17RE1

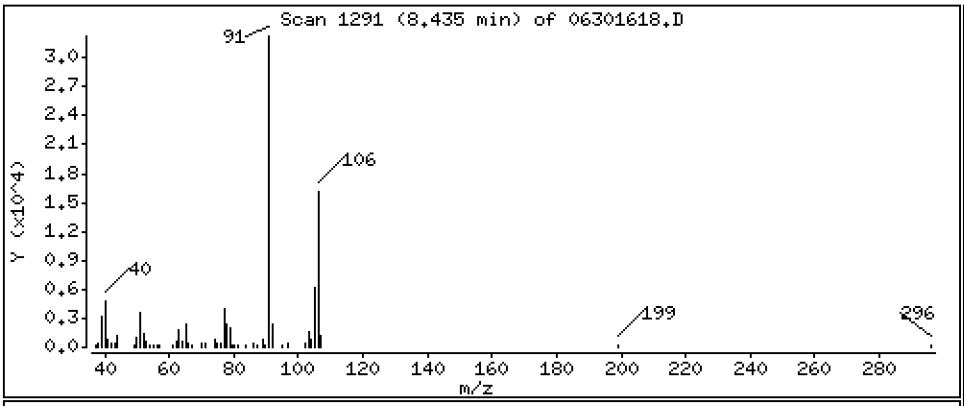
Operator: PB

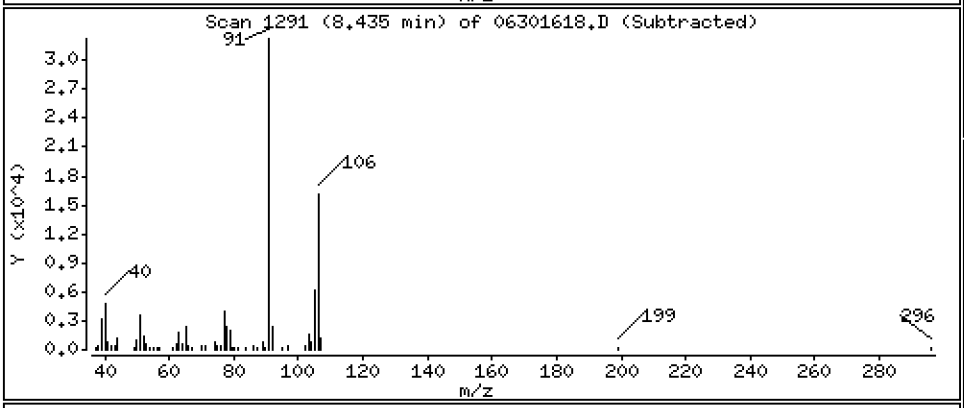
Column phase: RTXVMS

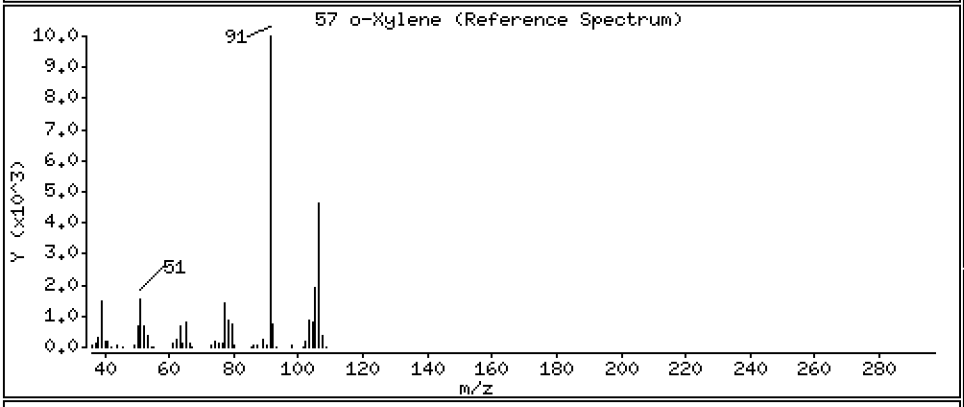
Column diameter: 0.18

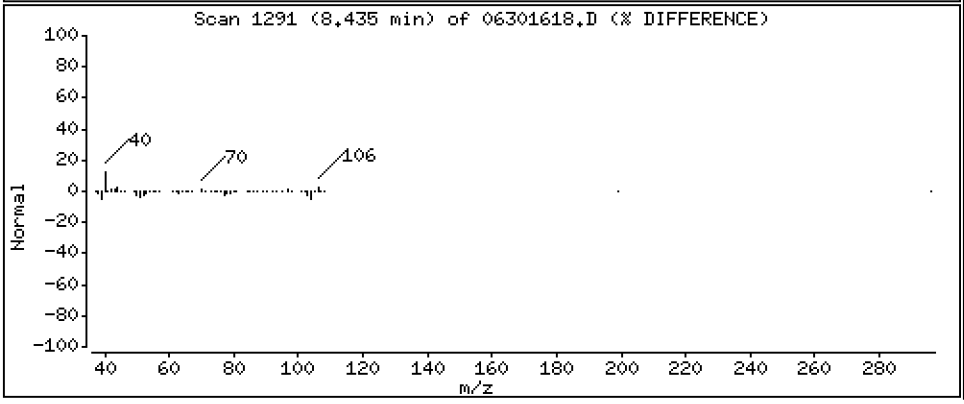
57 o-Xylene

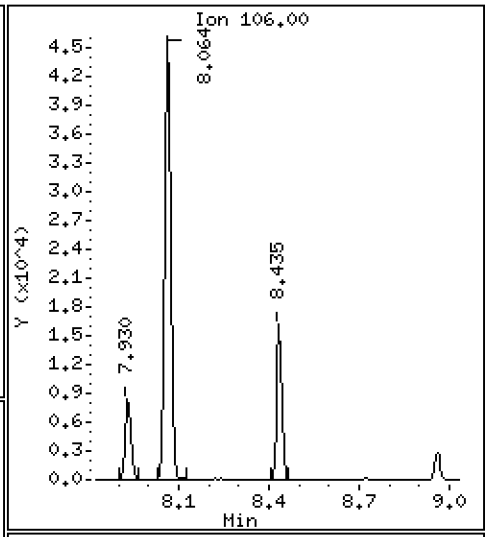
Concentration: 0.7556 ug/Kg

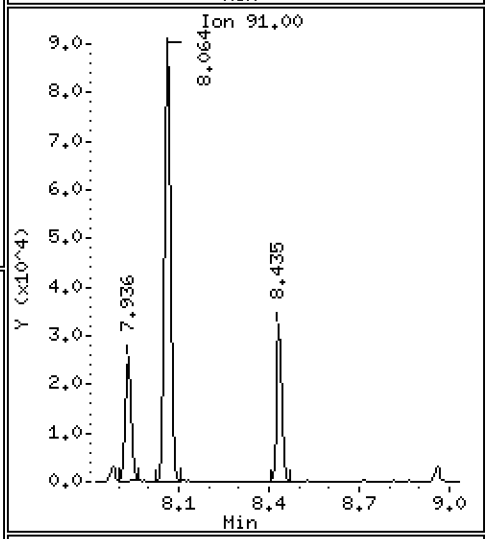


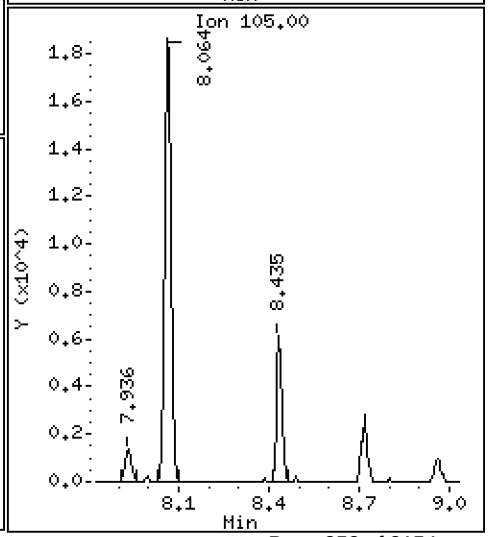












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301618.D
Lab Smp Id: 16F0096-17RE1
Inj Date : 30-JUN-2016 18:37
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-17RE1
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	1.584	1.578	(0.320)	15460	1.02620	1.026
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.054	4.042	(0.818)	148918	7.98169	7.982
22	2,2-Dichloropropane	77	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
	23	Bromochloromethane	128	Compound Not Detected.					
	24	Chloroform	83	Compound Not Detected.					
	25	Carbon Tetrachloride	117	Compound Not Detected.					
$	27	Dibromofluoromethane	111	4.505	4.486	(0.909)	800676	45.4774	45.477
	26	1,1,1-Trichloroethane	97	Compound Not Detected.					
	28	1,1-Dichloropropene	75	Compound Not Detected.					
	29	2-Butanone	72	Compound Not Detected.					
	30	Benzene	78	Compound Not Detected.					
*	31	Pentafluorobenzene	168	4.955	4.943	(1.000)	738686	50.0000	
$	32	d4-1,2-Dichloroethane	65	4.967	4.949	(1.002)	757266	43.0258	43.026
	33	1,2-Dichloroethane	62	Compound Not Detected.					
	34	Trichloroethene	95	Compound Not Detected.					
*	35	1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2308607	50.0000	
	37	Dibromomethane	93	Compound Not Detected.					
	38	1,2-Dichloropropane	63	Compound Not Detected.					
	39	Bromodichloromethane	83	Compound Not Detected.					
	172	2-Pentanone	86	Compound Not Detected.					
	40	2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41	Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42	d8-Toluene	98	6.567	6.555	(1.215)	2861032	48.3669	48.367
	43	Toluene	92	6.609	6.597	(1.223)	318559	7.94198	7.942
	44	Tetrachloroethene	166	Compound Not Detected.					
	45	4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46	Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47	1,1,2-Trichloroethane	97	Compound Not Detected.					
	48	Chlorodibromomethane	129	Compound Not Detected.					
	49	1,3-Dichloropropane	76	Compound Not Detected.					
	50	1,2-Dibromoethane	107	Compound Not Detected.					
	51	2-Hexanone	43	Compound Not Detected.					
*	52	d5-Chlorobenzene	117	7.881	7.875	(1.000)	2447909	50.0000	
	53	Chlorobenzene	112	Compound Not Detected.					
	54	Ethyl Benzene	91	7.936	7.930	(1.007)	33287	0.44553	0.4455
	55	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56	m,p-xylene	106	8.063	8.063	(1.023)	61540	2.12171	2.122
	57	o-Xylene	106	8.435	8.428	(1.070)	21647	0.75558	0.7556
	58	Styrene	104	Compound Not Detected.					
	59	Bromoform	173	Compound Not Detected.					
	60	Isopropyl Benzene	105	Compound Not Detected.					
$	62	4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1282520	48.7179	48.718
	63	Bromobenzene	156	Compound Not Detected.					
	64	N-Propyl Benzene	91	Compound Not Detected.					
	65	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66	2-Chloro Toluene	91	Compound Not Detected.					
	67	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68	1,2,3-Trichloropropane	110	Compound Not Detected.					
	69	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70	4-Chloro Toluene	91	Compound Not Detected.					
	71	T-Butyl Benzene	119	Compound Not Detected.					
	72	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73	S-Butyl Benzene	105	Compound Not Detected.					
	74	4-Isopropyl Toluene	119	Compound Not Detected.					
	75	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76	d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1235610	50.0000	
	77	1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.363	10.357	(1.040)	1211947	48.7097	48.710
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301618.D
Lab Smp Id: 16F0096-17RE1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	738686	23.12
35 1,4-Difluorobenze	2041239	1020620	4082478	2308607	13.10
52 d5-Chlorobenzene	2118314	1059157	4236628	2447909	15.56
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1235610	17.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-17RE1
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	45.477	90.95	70-130
$ 32 d4-1,2-Dichloroeth	50.000	43.026	86.05	80-149
$ 42 d8-Toluene	50.000	48.367	96.73	77-120
$ 62 4-Bromofluorobenze	50.000	48.718	97.44	80-120
$ 79 d4-1,2-Dichloroben	50.000	48.710	97.42	80-120

REVIEW SUMMARY FOR FILE - 06301618.D

Lab ID: 16F0096-17RE1
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 18:37

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-Q-03-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-18	File ID:	06291623.D
Sampled:	06/29/16 12:45	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 23:33
Solids:	93.23	Preparation:	No Prep - Volatiles	Initial/Final:	5.11 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.05	U	0.25	1.05
74-83-9	Bromomethane	1	1.05	U	0.20	1.05
156-59-2	cis-1,2-Dichloroethene	1	232	E	0.25	1.05
71-43-2	Benzene	1	0.57	J	0.31	1.05
79-01-6	Trichloroethene	1	2.17		0.22	1.05
108-88-3	Toluene	1	368	E	0.16	1.05
127-18-4	Tetrachloroethene	1	1.05	U	0.27	1.05
100-41-4	Ethylbenzene	1	22.2		0.21	1.05
179601-23-1	m,p-Xylene	1	98.4		0.41	1.05
95-47-6	o-Xylene	1	39.7		0.24	1.05

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	51.0	102	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.4	101	80 - 120	
Toluene-d8	50.000	49.0	98.1	77 - 120	
4-Bromofluorobenzene	50.000	49.3	98.6	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291623.D

Date : 29-JUN-2016 23:33

Client ID:

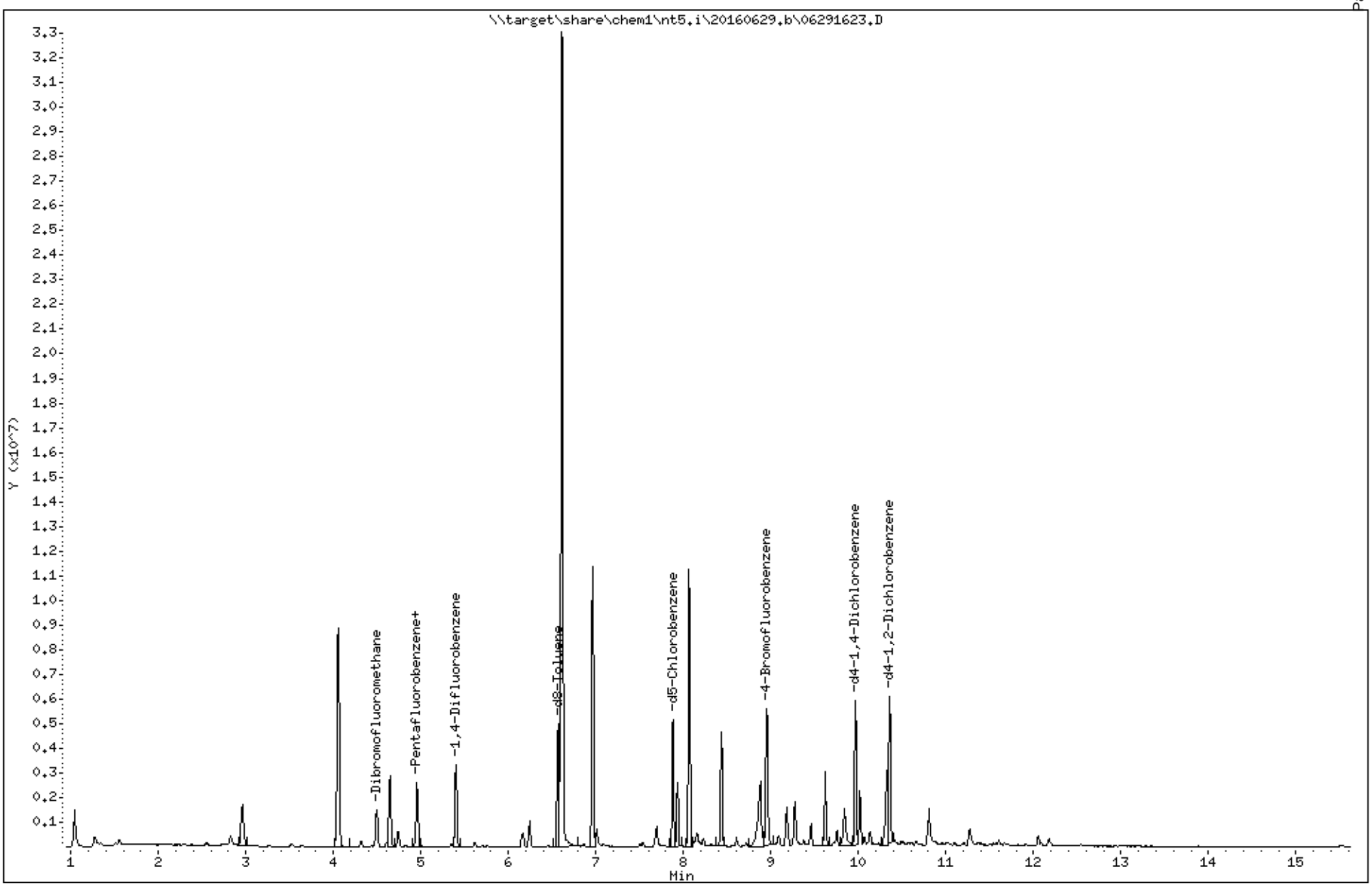
Instrument: nt5.i

Sample Info: 16F0096-18

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160629.b\06291623.D

Date : 29-JUN-2016 23:33

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-18

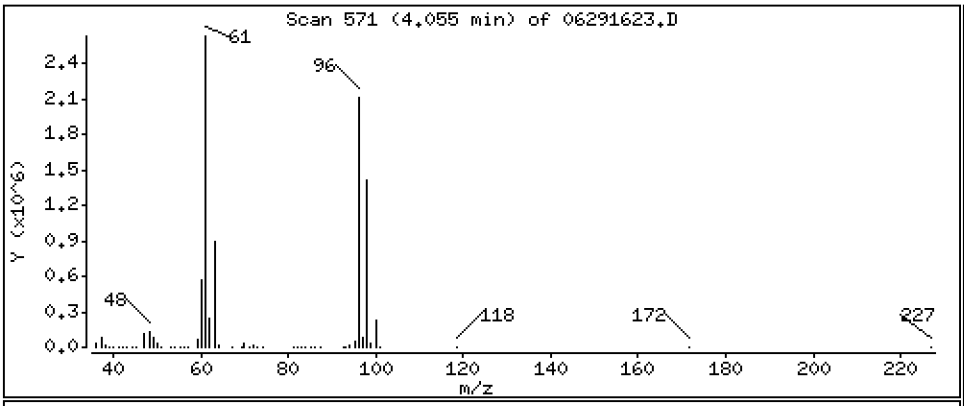
Operator: PB

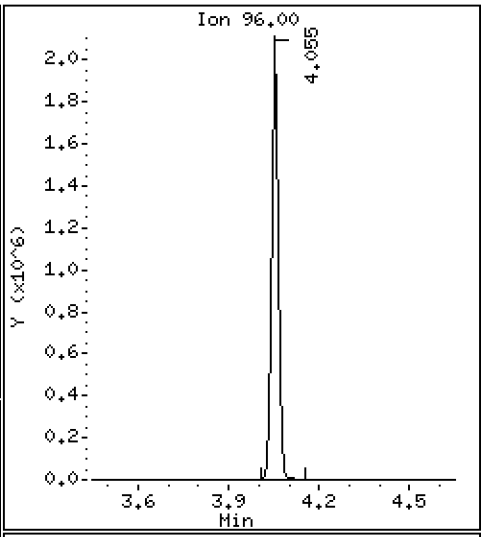
Column phase: RTXVMS

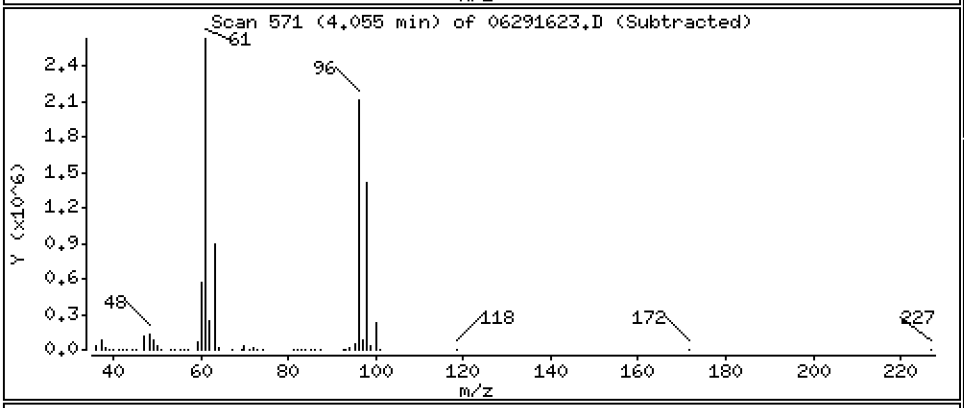
Column diameter: 0.18

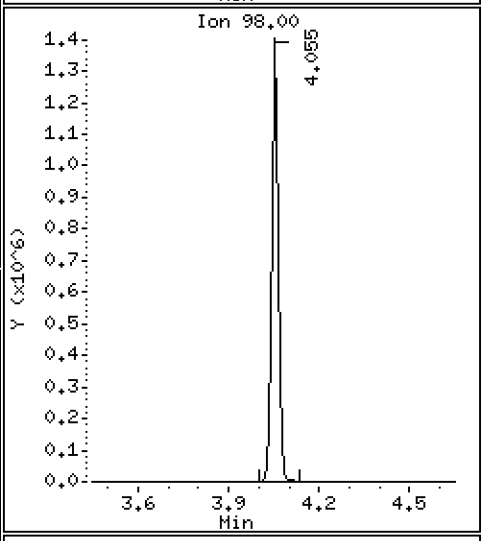
20 Cis-1,2-Dichloroethene

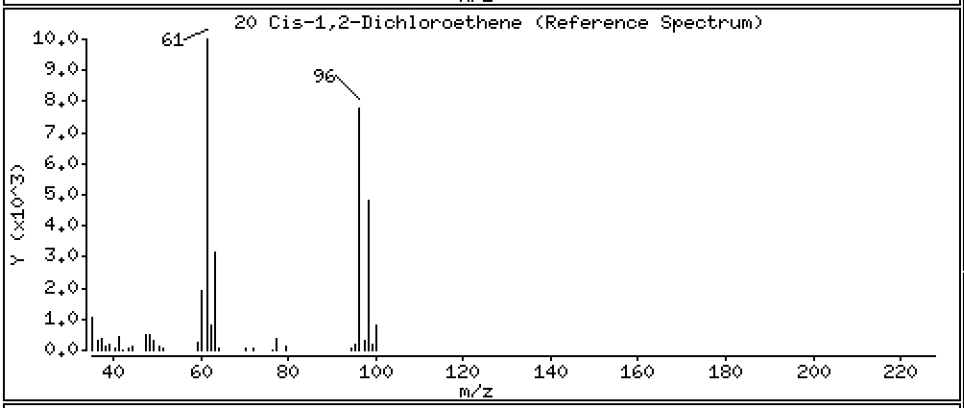
Concentration: 221.33 ug/Kg

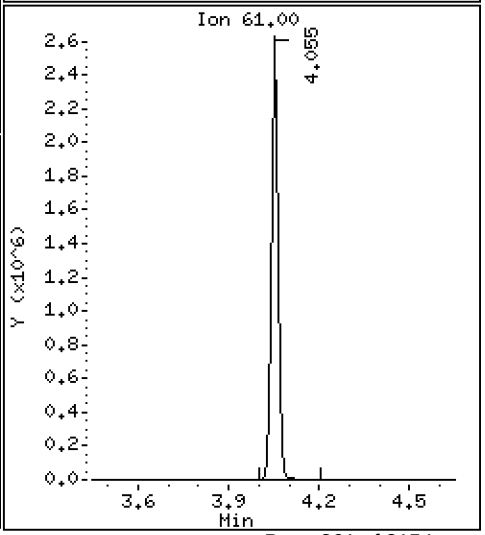


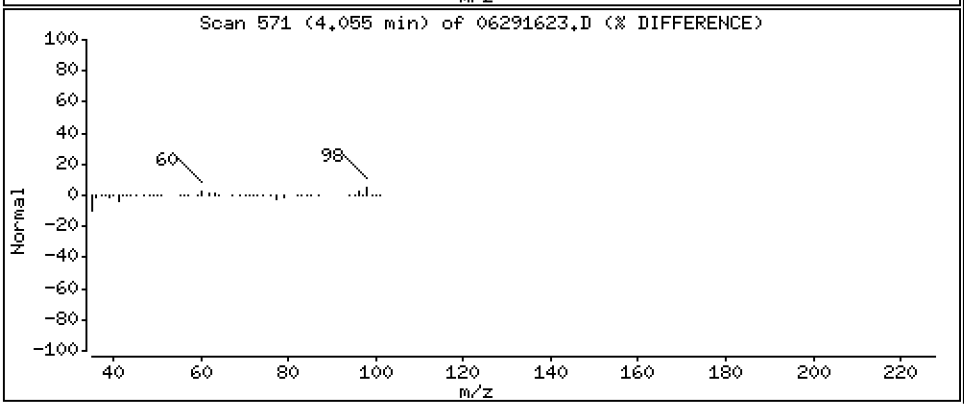












Data File: \\target\share\chem1\nt5.i\20160629.b\06291623.D

Date : 29-JUN-2016 23:33

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-18

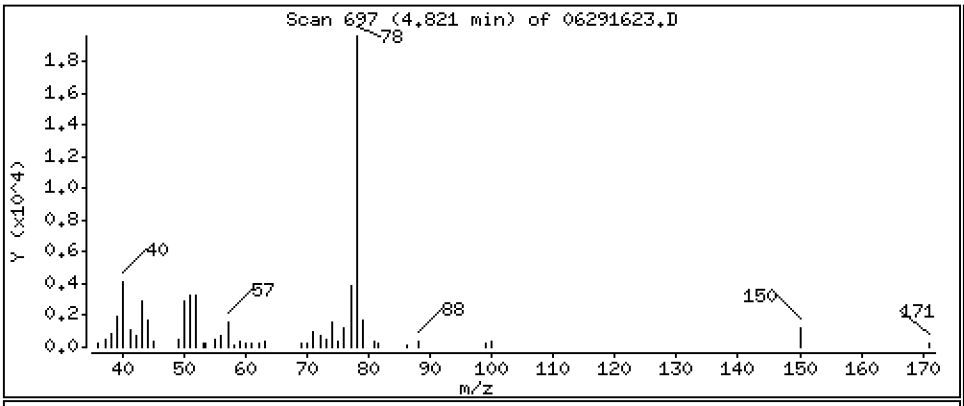
Operator: PB

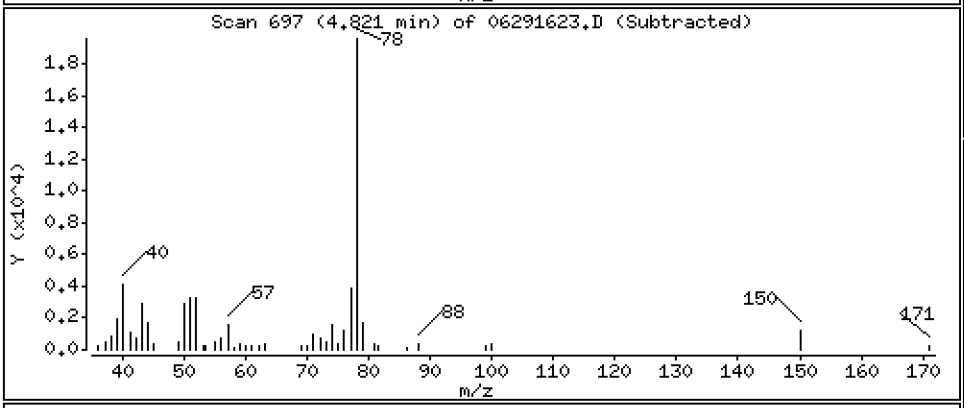
Column phase: RTXVMS

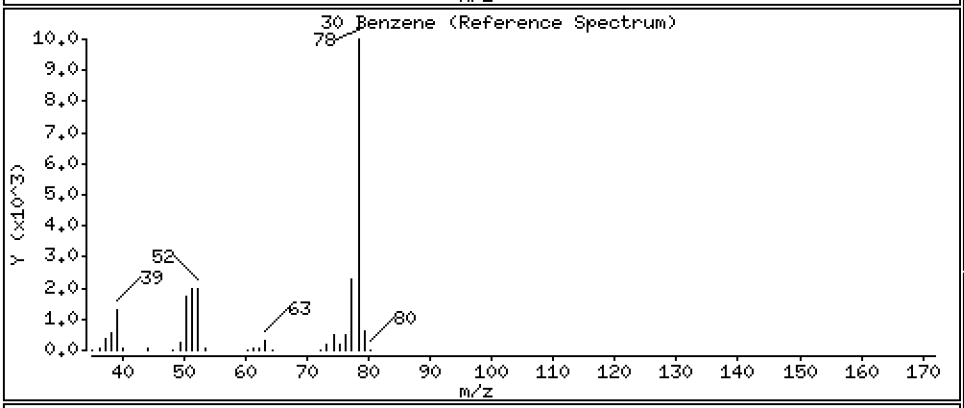
Column diameter: 0.18

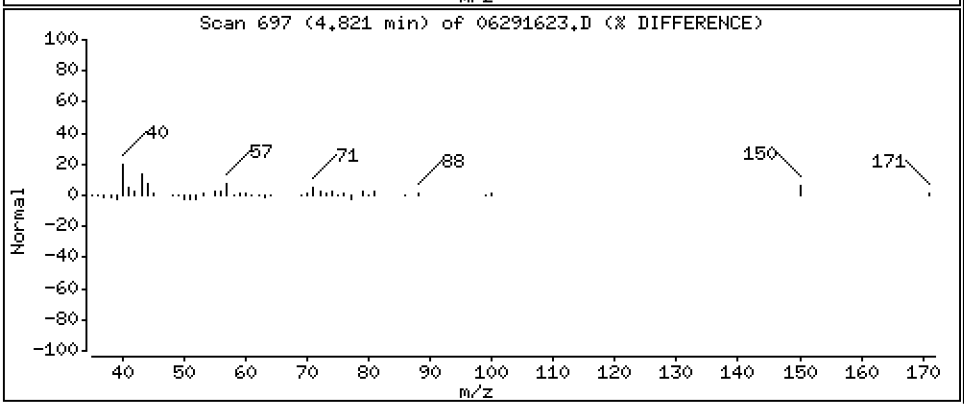
30 Benzene

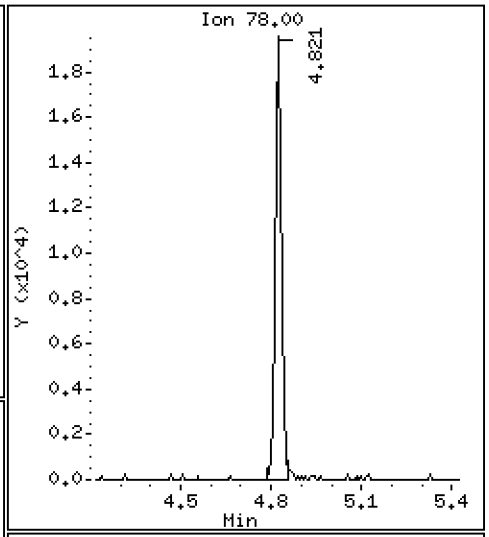
Concentration: 0.5450 ug/Kg

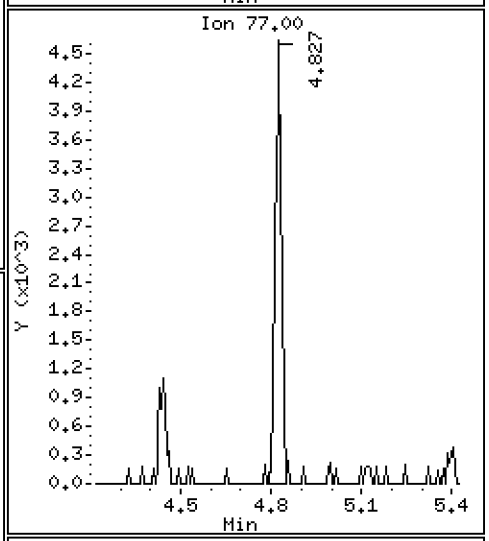


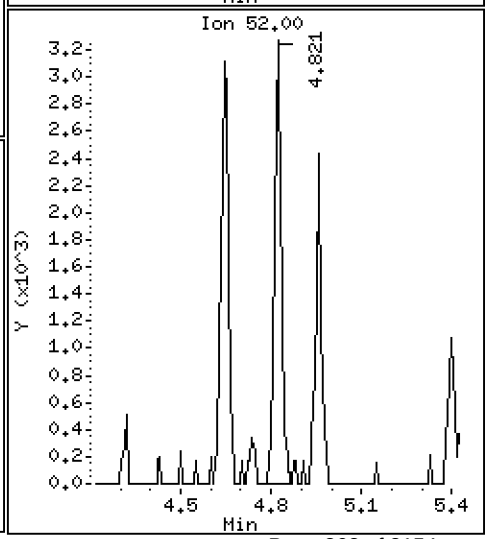












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Date : 29-JUN-2016 23:33

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-18

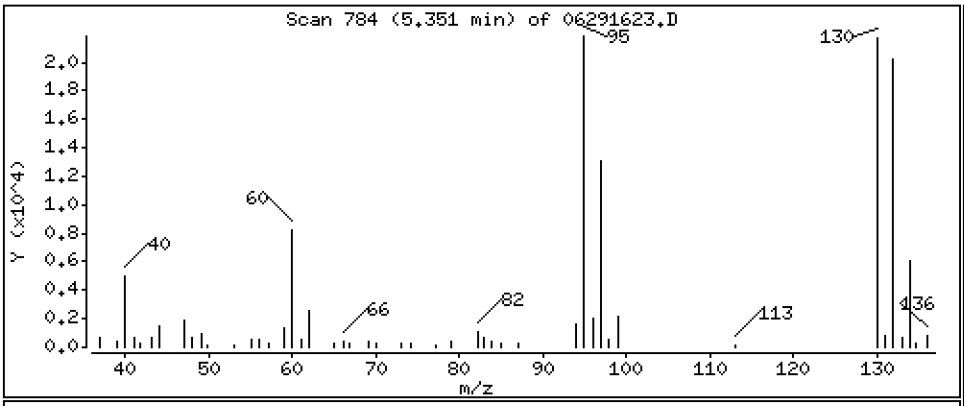
Operator: PB

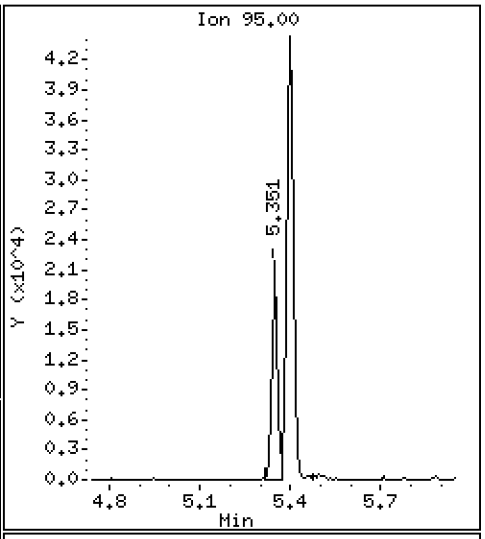
Column phase: RTXVMS

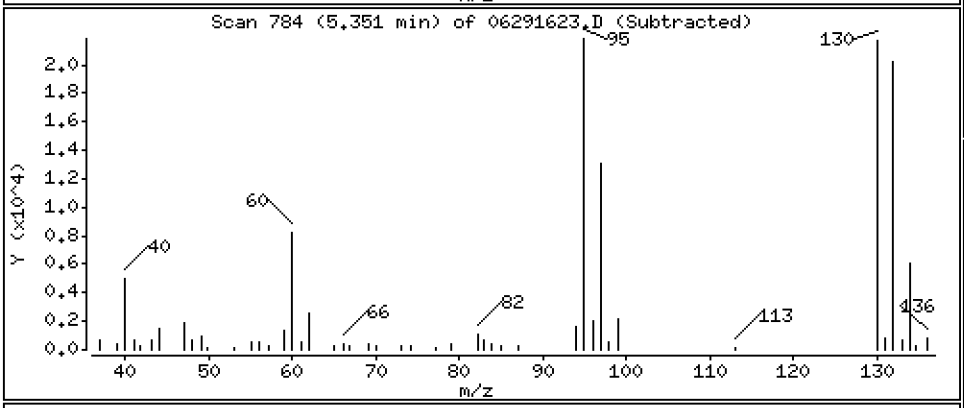
Column diameter: 0.18

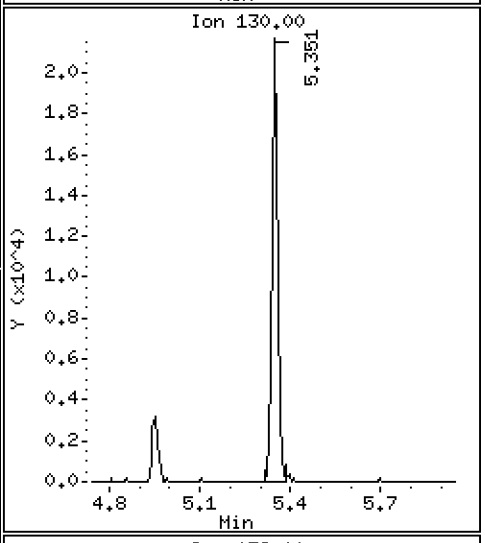
34 Trichloroethene

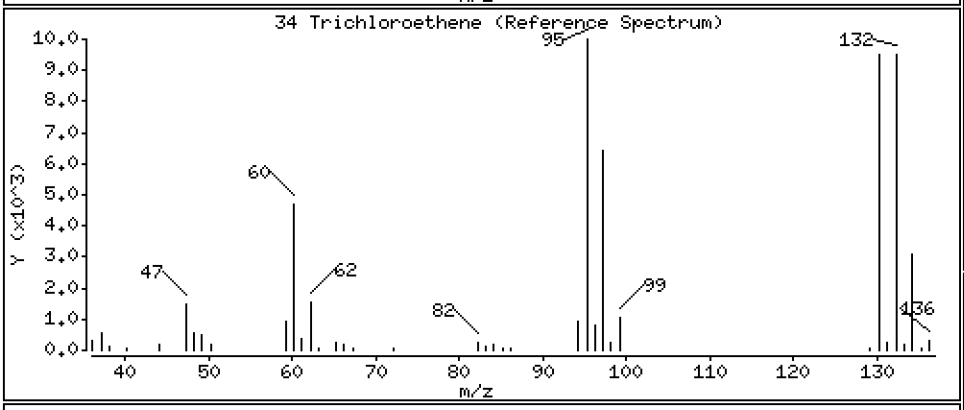
Concentration: 2.071 ug/Kg

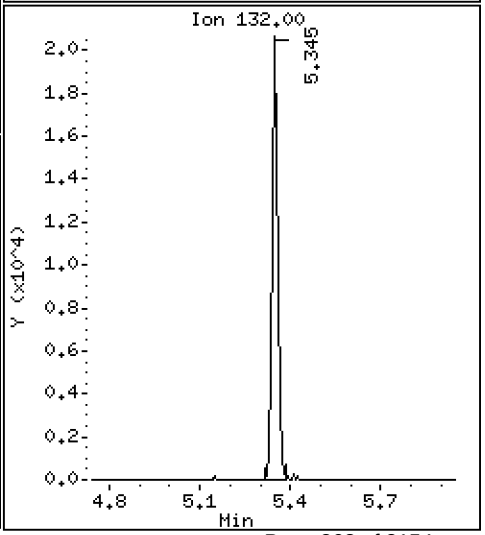


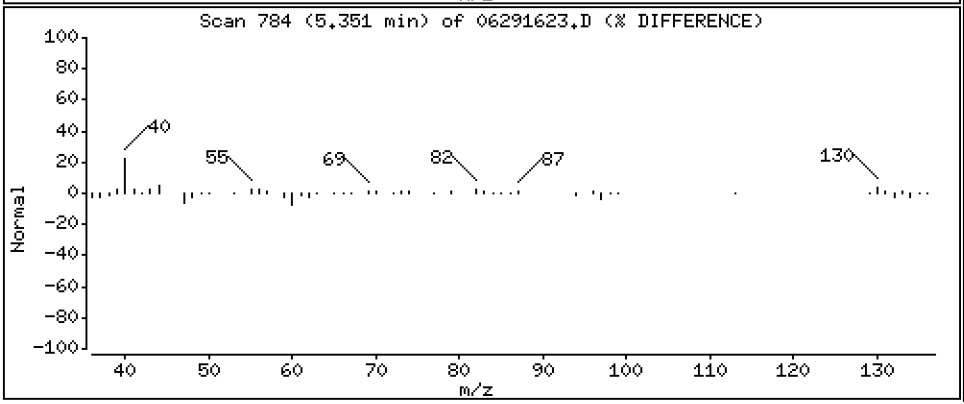












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Date : 29-JUN-2016 23:33

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-18

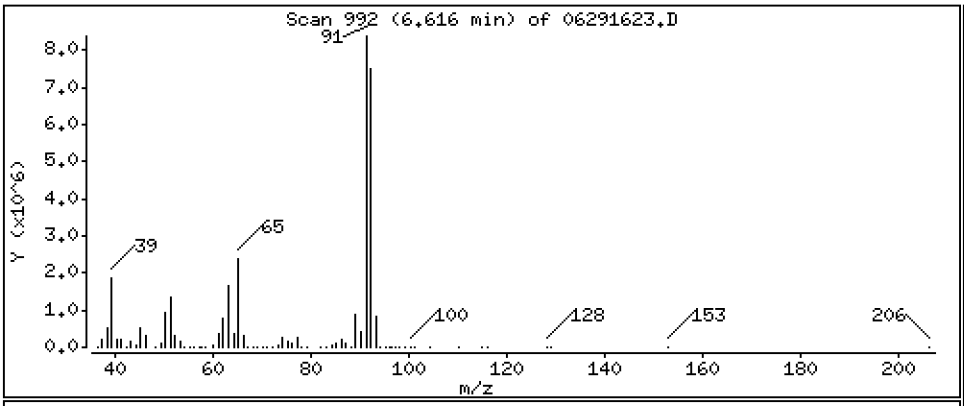
Operator: PB

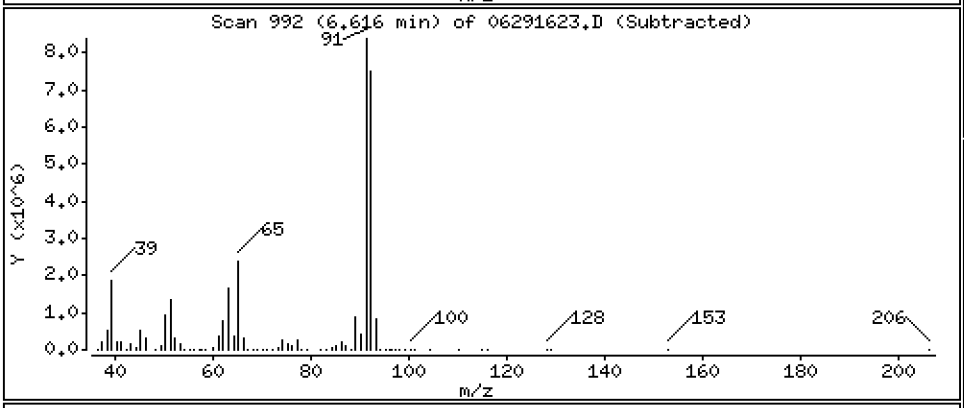
Column phase: RTXVMS

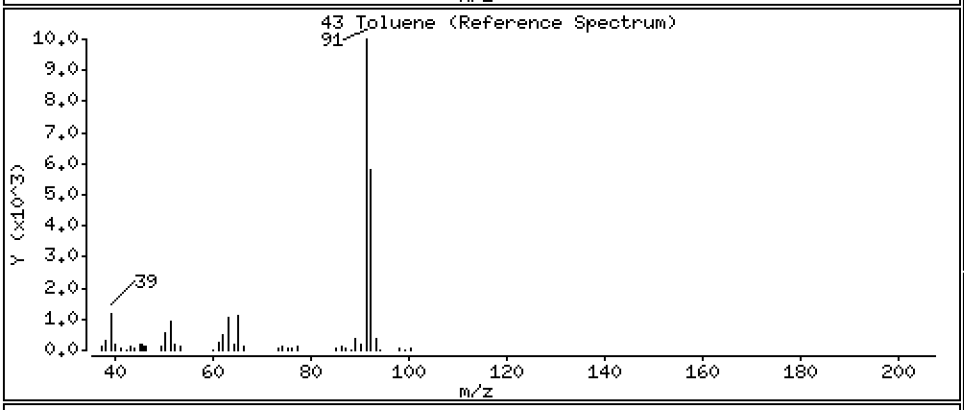
Column diameter: 0.18

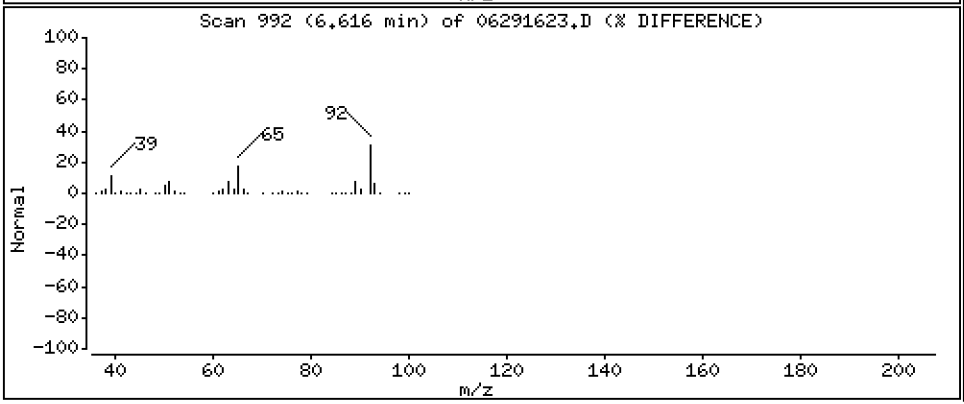
43 Toluene

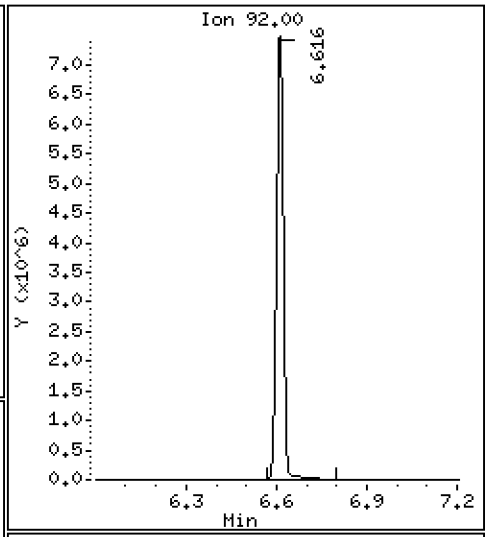
Concentration: 350.72 ug/Kg

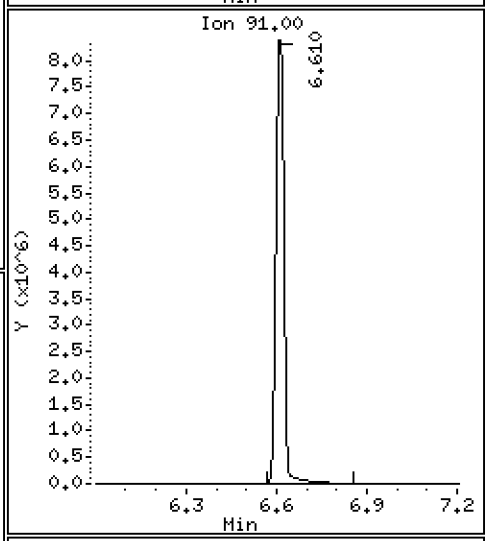


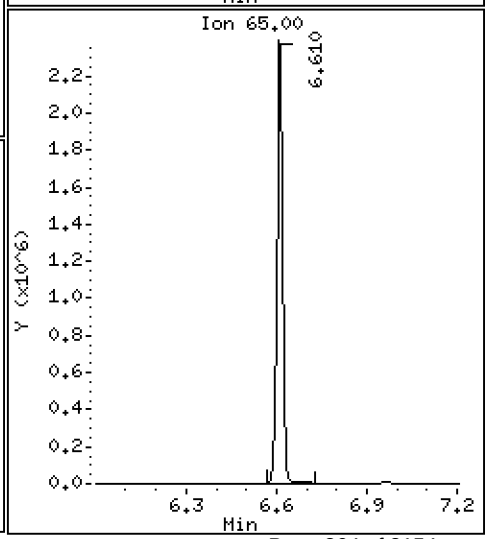












Data File: \\target\share\chem1\nt5.i\20160629.b\06291623.D

Date : 29-JUN-2016 23:33

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-18

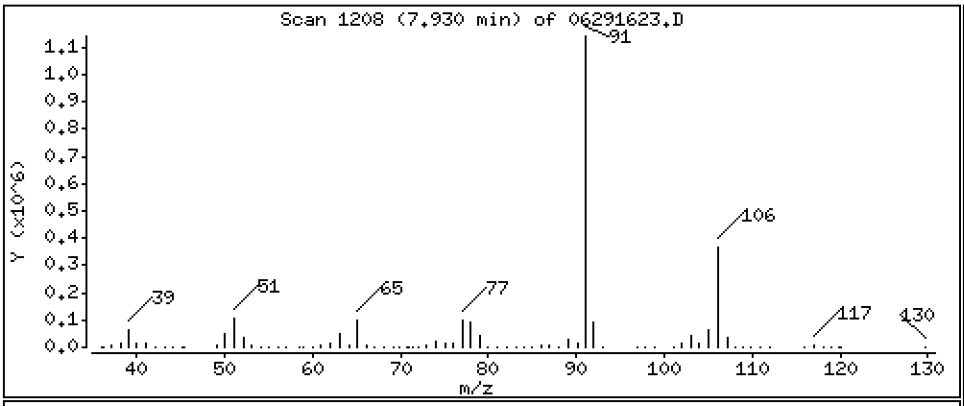
Operator: PB

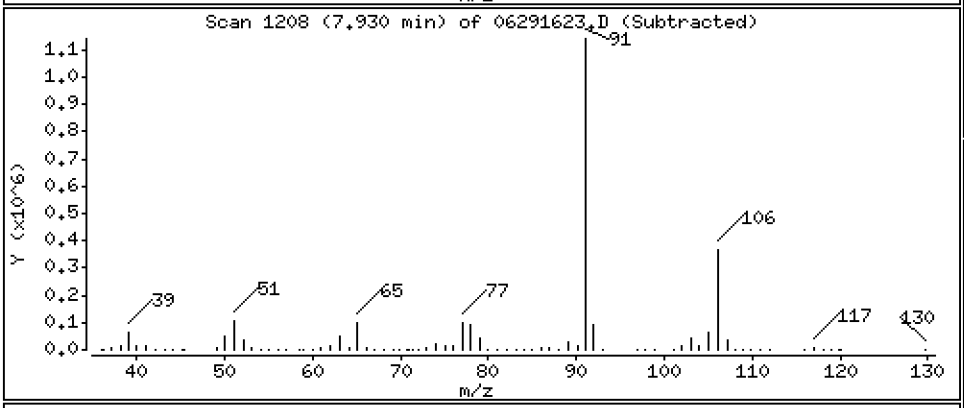
Column phase: RTXVMS

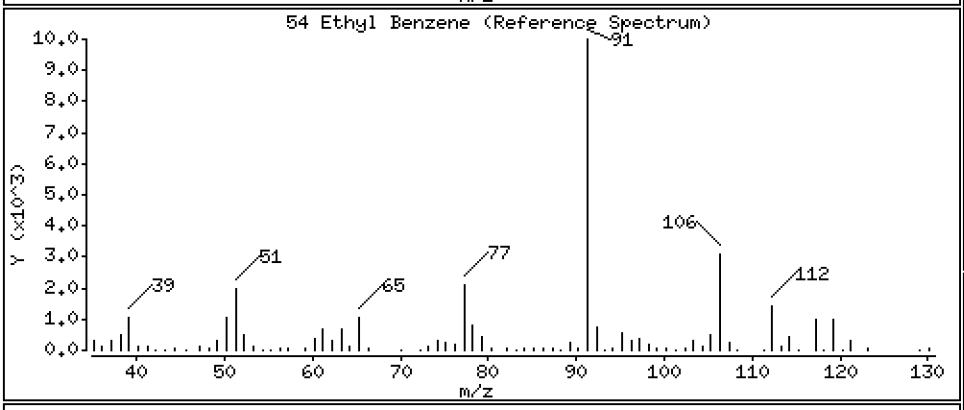
Column diameter: 0.18

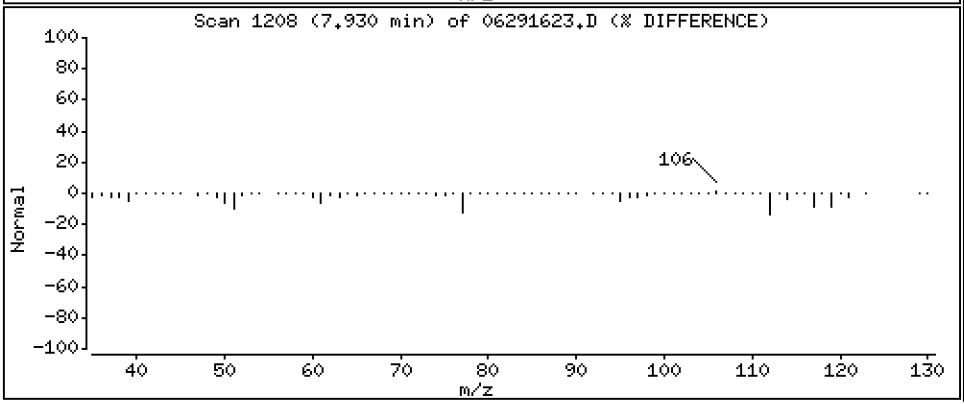
54 Ethyl Benzene

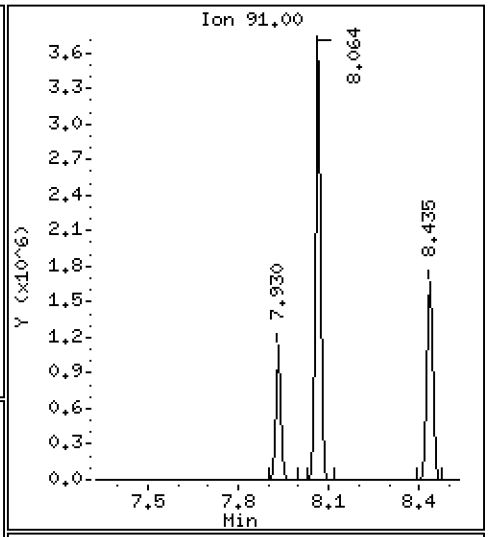
Concentration: 21.129 ug/Kg

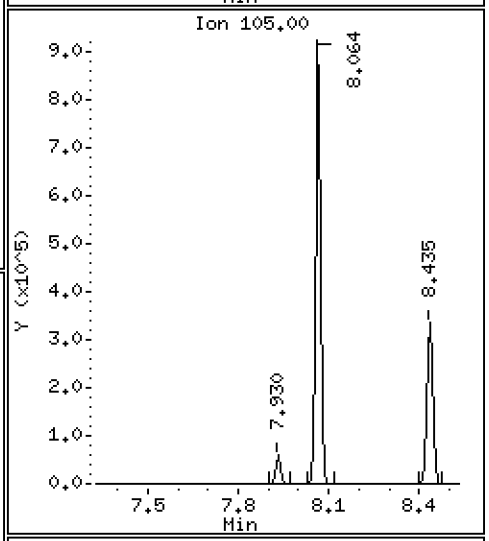


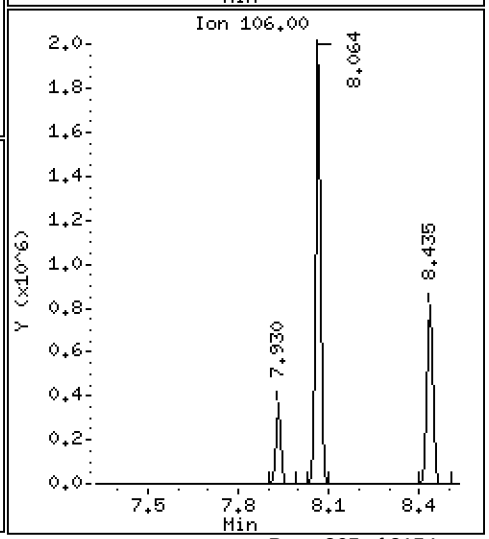












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Date : 29-JUN-2016 23:33

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-18

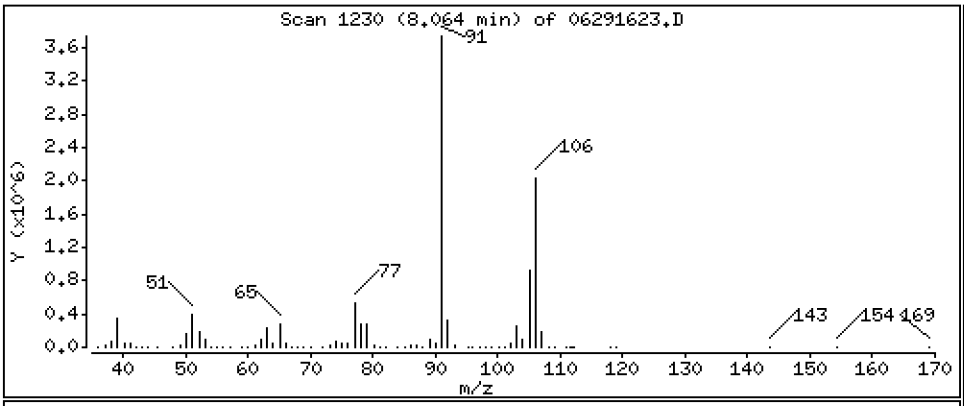
Operator: PB

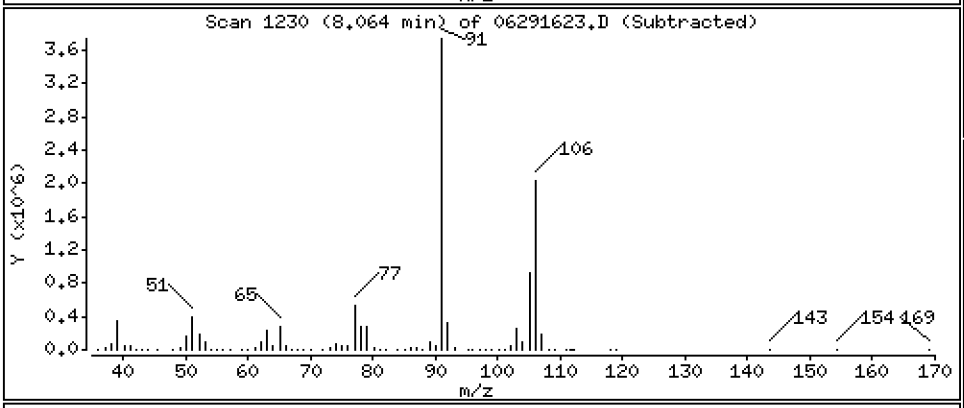
Column phase: RTXVMS

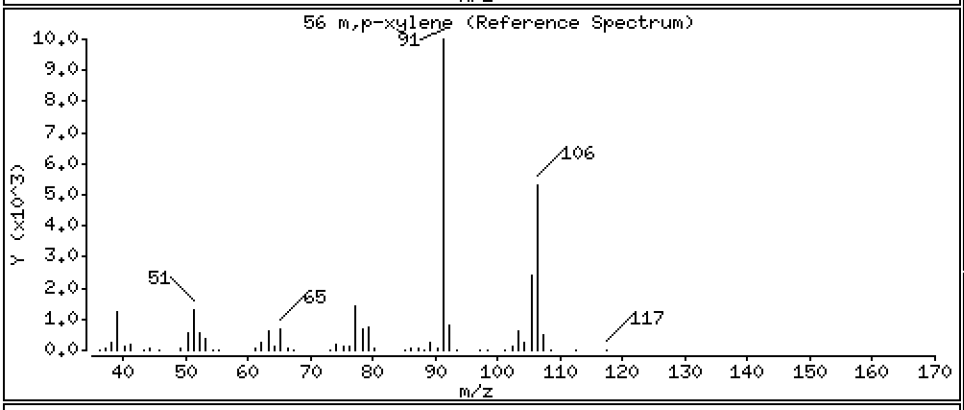
Column diameter: 0.18

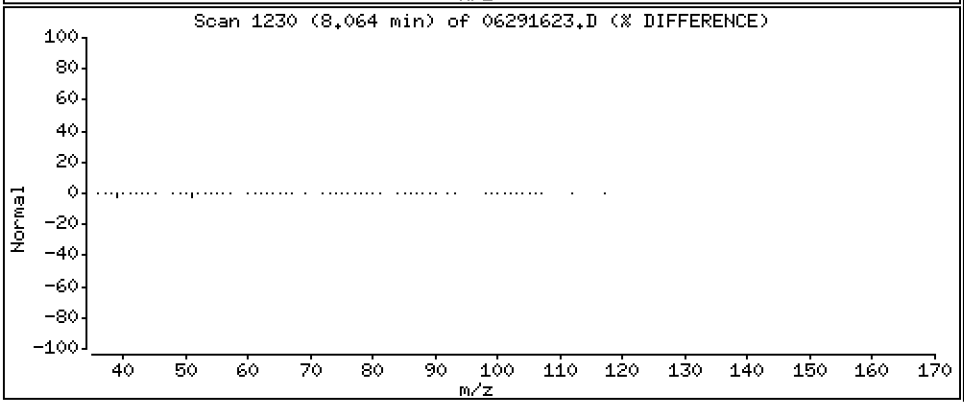
56 m,p-xylene

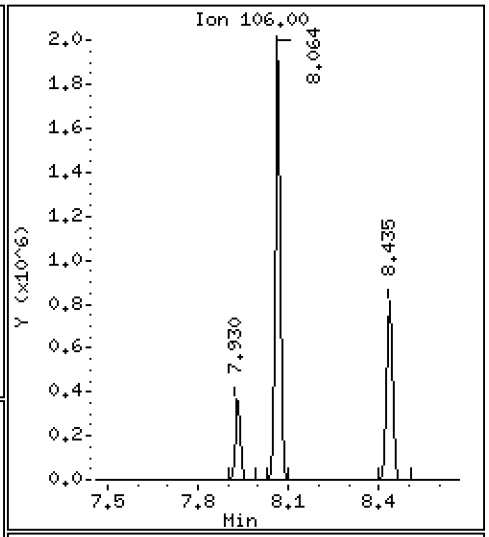
Concentration: 93.774 ug/Kg

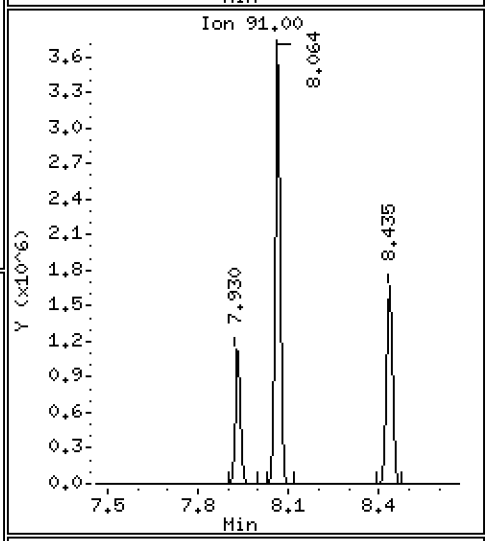


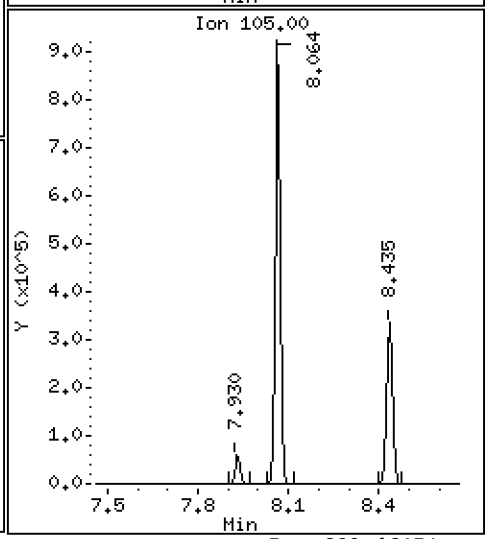












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Date : 29-JUN-2016 23:33

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-18

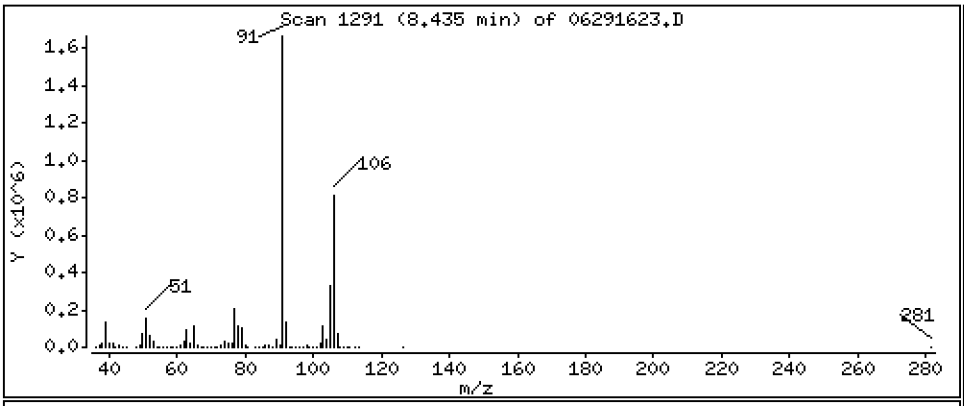
Operator: PB

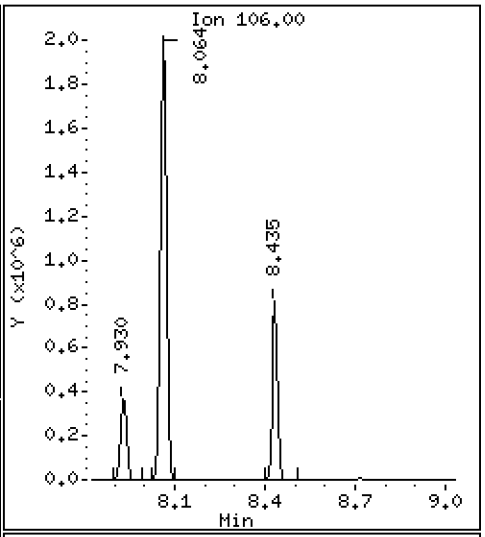
Column phase: RTXVMS

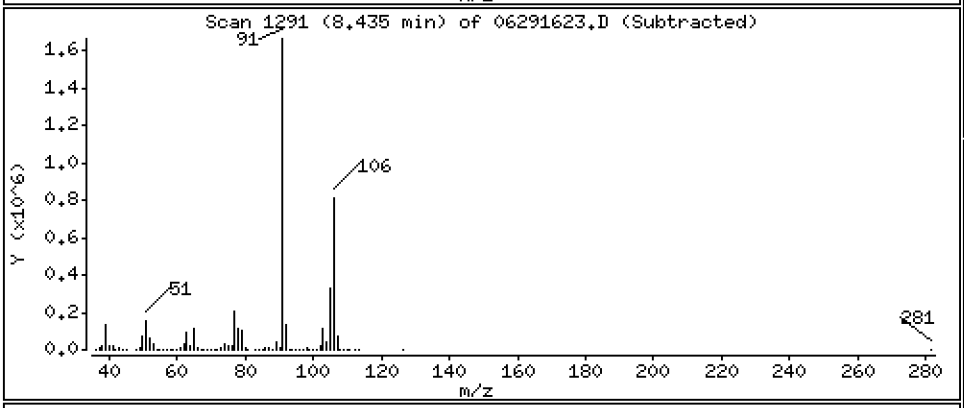
Column diameter: 0.18

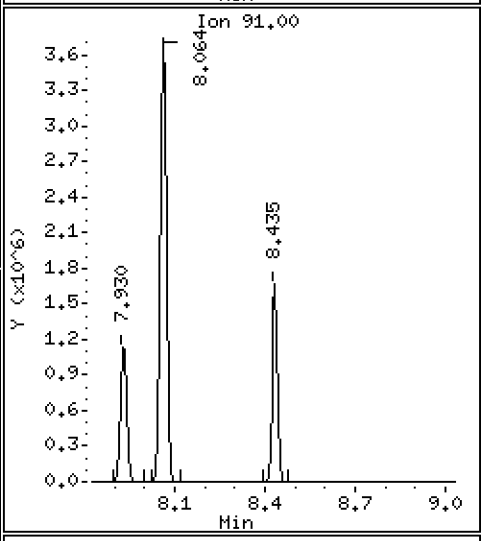
57 o-Xylene

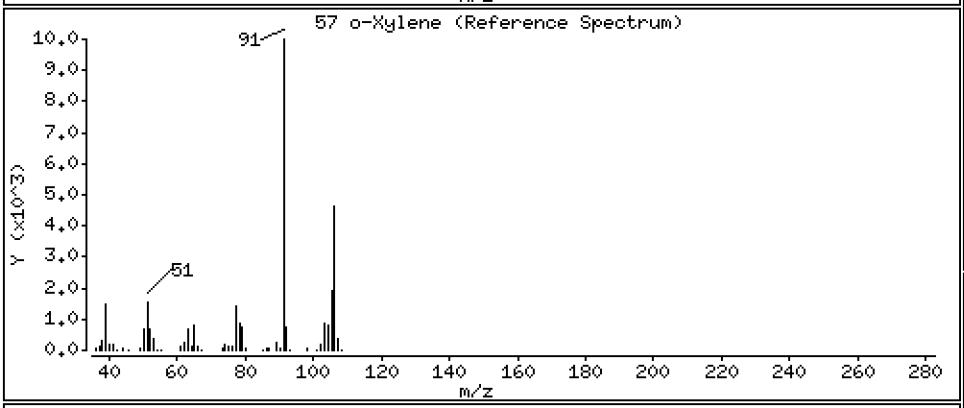
Concentration: 37.780 ug/Kg

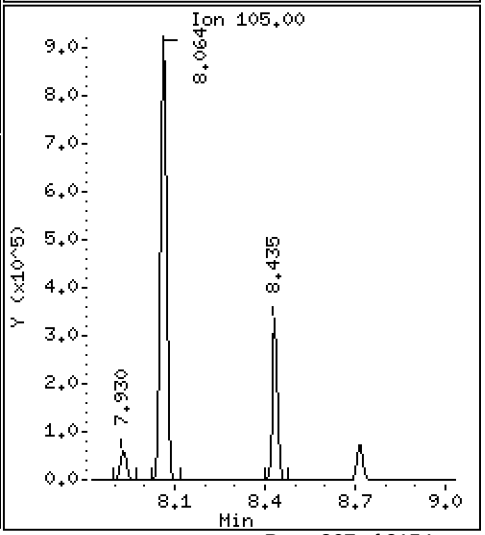


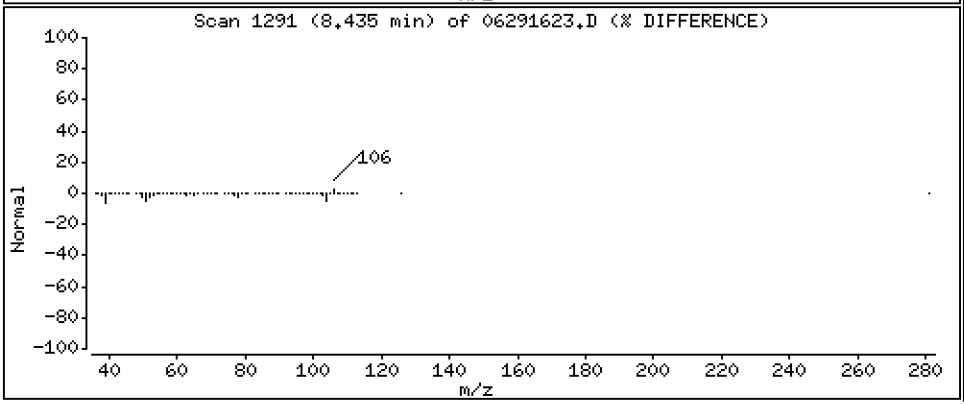












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291623.D
Lab Smp Id: 16F0096-18
Inj Date : 29-JUN-2016 23:33
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-18
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.054	4.048	(0.818)	3735686	221.330	221.33
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.492	4.486	(0.907)	831955	52.2348	52.235
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	4.821	4.821	(0.893)	33520	0.54503	0.5450
*	31 Pentafluorobenzene	168	4.955	4.949	(1.000)	668249	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.000)	811330	50.9565	50.956
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.350	5.344	(0.991)	32998	2.07052	2.071
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2277286	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.561	(1.216)	2861657	49.0428	49.043
	43 Toluene	92	6.616	6.603	(1.225)	13876906	350.723	350.72
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2458692	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.930	7.930	(1.006)	1585548	21.1289	21.129
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.063	8.063	(1.023)	2731888	93.7739	93.774
	57 o-Xylene	106	8.435	8.428	(1.070)	1087147	37.7799	37.780
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1303985	49.3160	49.316
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1255813	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1274954	50.4177	50.418
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291623.D
Lab Smp Id: 16F0096-18
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	668249	11.38
35 1,4-Difluorobenze	2041239	1020620	4082478	2277286	11.56
52 d5-Chlorobenzene	2118314	1059157	4236628	2458692	16.07
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1255813	19.03

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.12
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.11
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 13:11

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-18
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	52.235	104.47	70-130
$ 32 d4-1,2-Dichloroeth	50.000	50.956	101.91	80-149
$ 42 d8-Toluene	50.000	49.043	98.09	77-120
$ 62 4-Bromofluorobenze	50.000	49.316	98.63	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.418	100.84	80-120

REVIEW SUMMARY FOR FILE - 06291623.D

Lab ID: 16F0096-18
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 23:33

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-Q-03-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid (MeOH extraction)

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-18RE1	File ID:	06301619.D
Sampled:	06/29/16 12:45	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 19:00
Solids:	93.23	Preparation:	No Prep - Volatiles	Initial/Final:	5.243 g / 5 g
Batch:	BEG0006	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	54.8	U	8.55	54.8
74-83-9	Bromomethane	1	51.1	J	11.2	54.8
156-59-2	cis-1,2-Dichloroethene	1	276		9.86	54.8
71-43-2	Benzene	1	54.8	U	8.98	54.8
79-01-6	Trichloroethene	1	54.8	U	9.86	54.8
108-88-3	Toluene	1	759		9.42	54.8
127-18-4	Tetrachloroethene	1	54.8	U	15.1	54.8
100-41-4	Ethylbenzene	1	39.3	J	14.9	54.8
179601-23-1	m,p-Xylene	1	189		30.6	54.8
95-47-6	o-Xylene	1	67.8		12.5	54.8

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	43.3	86.6	80 - 124	
Toluene-d8	50.000	48.7	97.4	80 - 120	
4-Bromofluorobenzene	50.000	49.8	99.6	80 - 120	
1,2-Dichlorobenzene-d4	50.000	48.5	96.9	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301619.D

Date : 30-JUN-2016 19:00

Client ID:

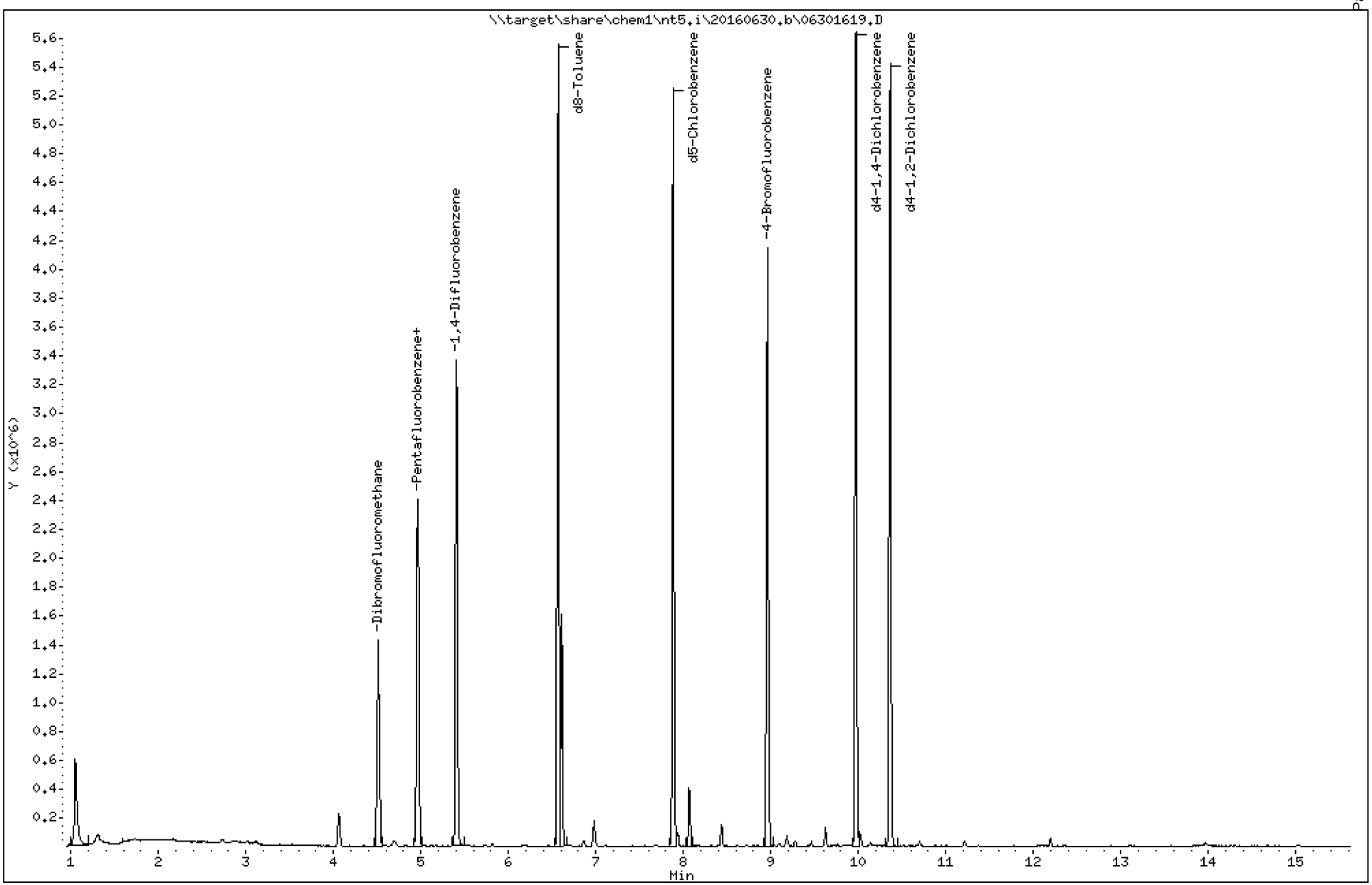
Instrument: nt5.i

Sample Info: 16F0096-18RE1

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\06301619.D

Date : 30-JUN-2016 19:00

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-18RE1

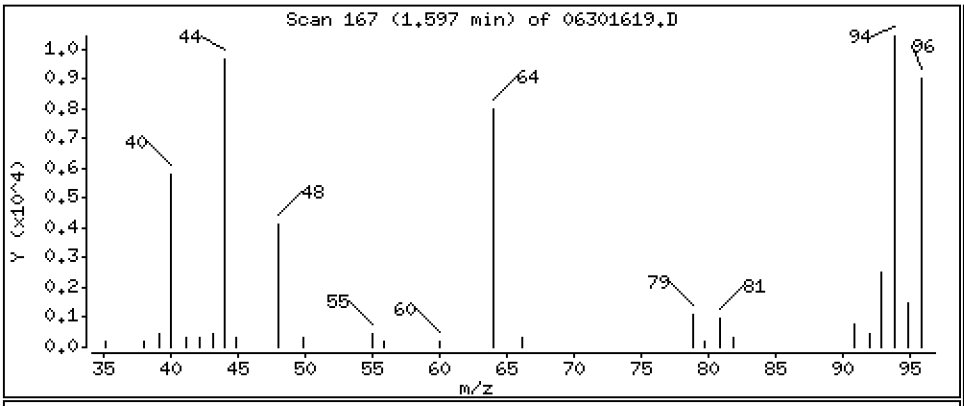
Operator: PB

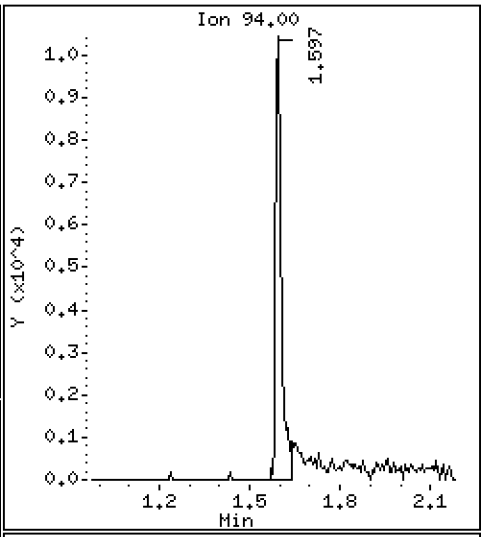
Column phase: RTXVMS

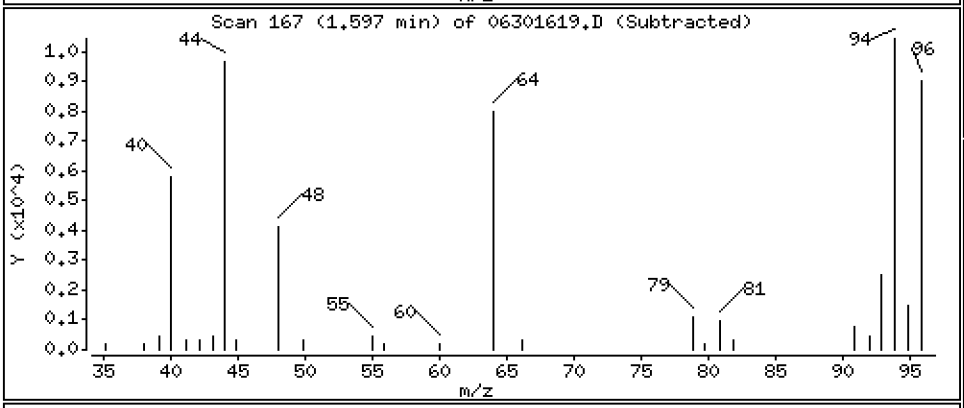
Column diameter: 0.18

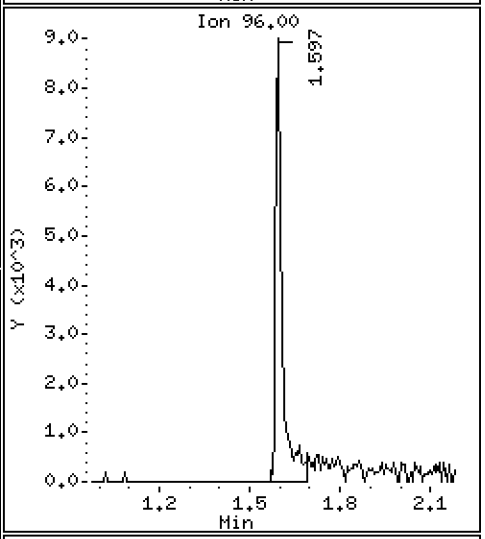
4 Bromomethane

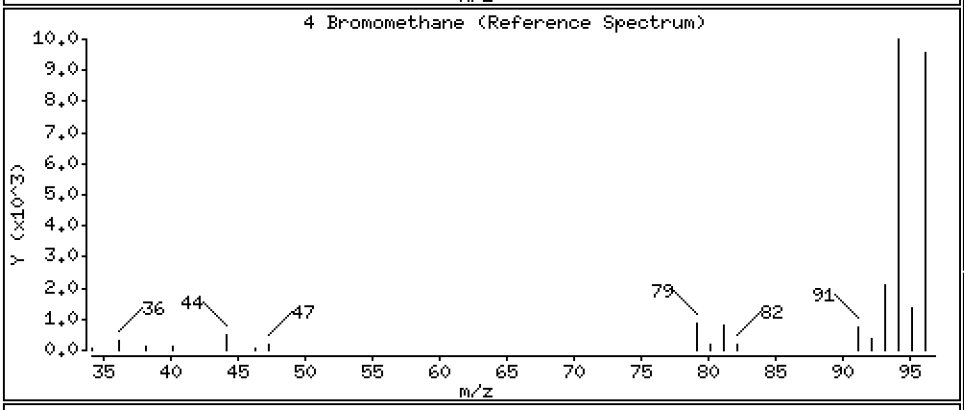
Concentration: 0.9332 ug/Kg

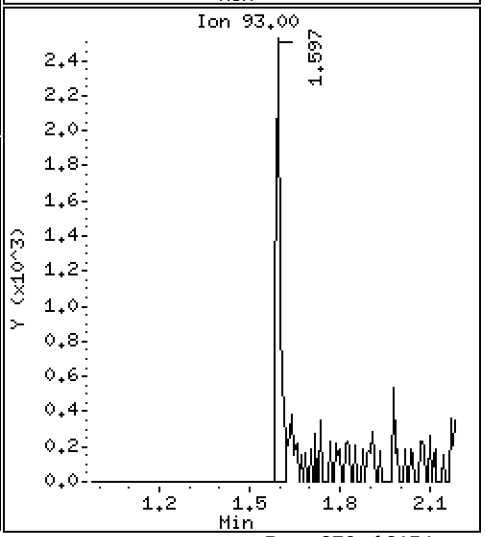


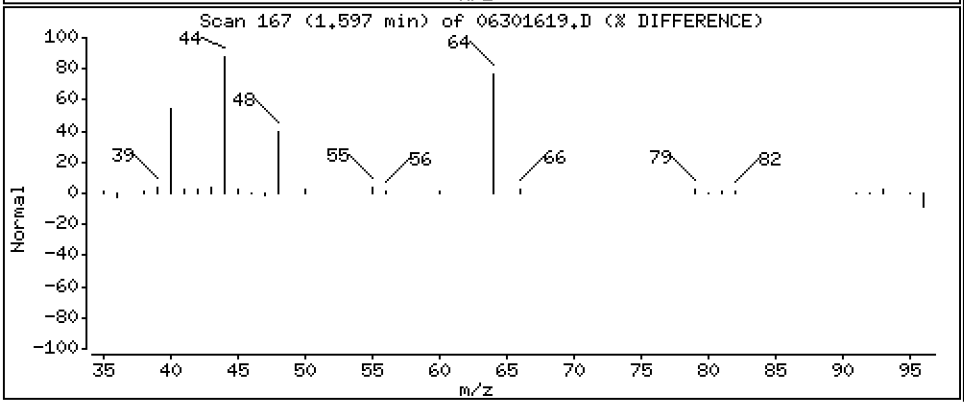












Data File: \\target\share\chem1\nt5.i\20160630.b\06301619.D

Date : 30-JUN-2016 19:00

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-18RE1

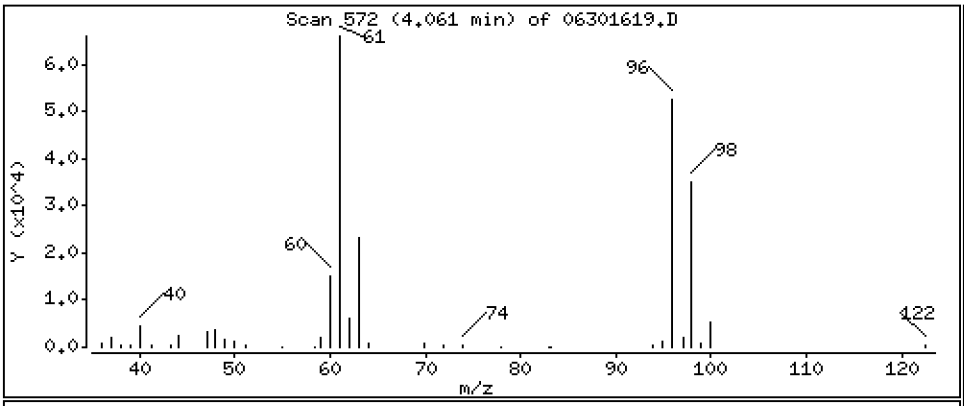
Operator: PB

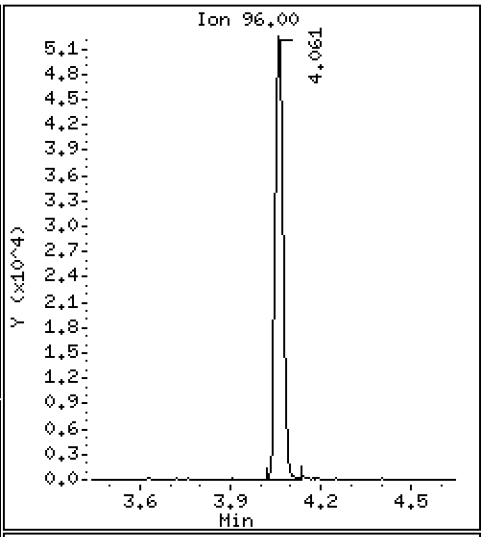
Column phase: RTXVMS

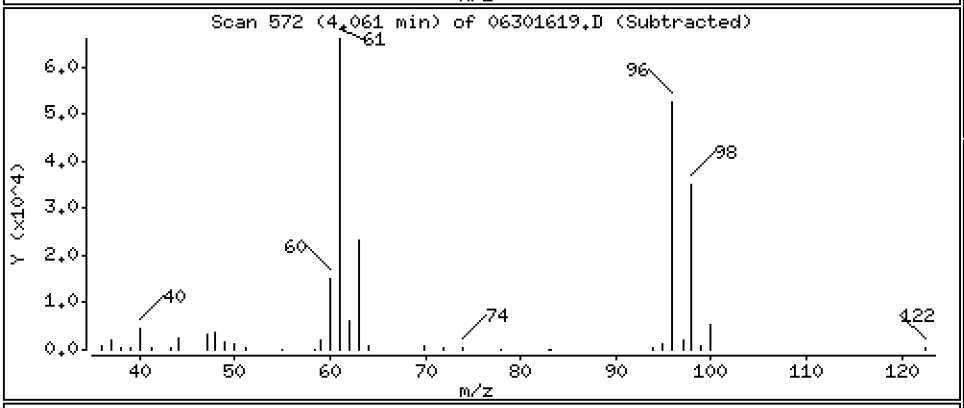
Column diameter: 0.18

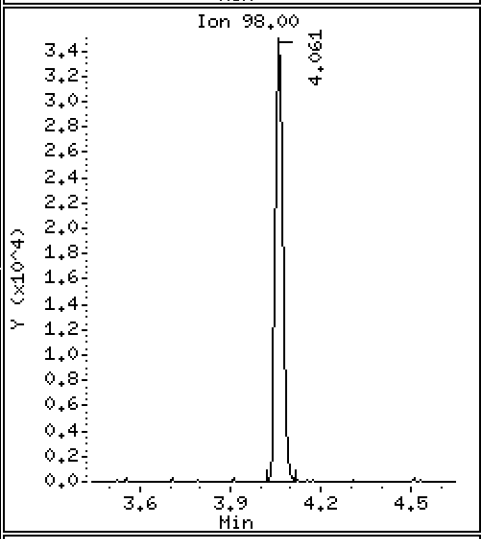
20 Cis-1,2-Dichloroethene

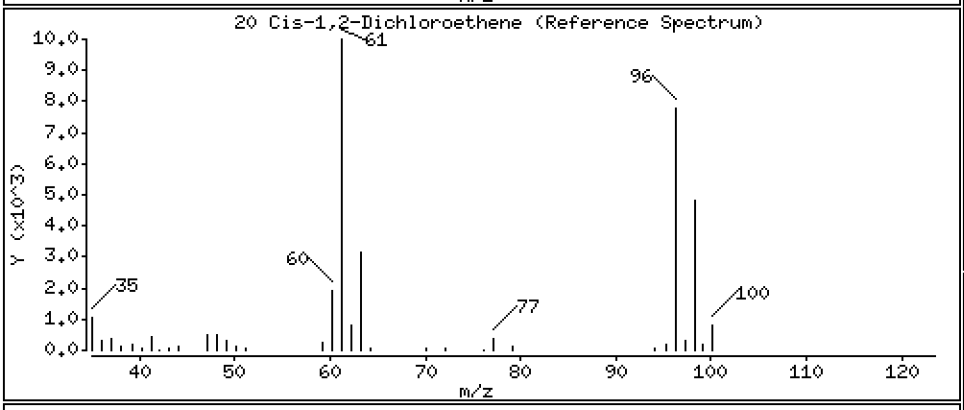
Concentration: 5.032 ug/Kg

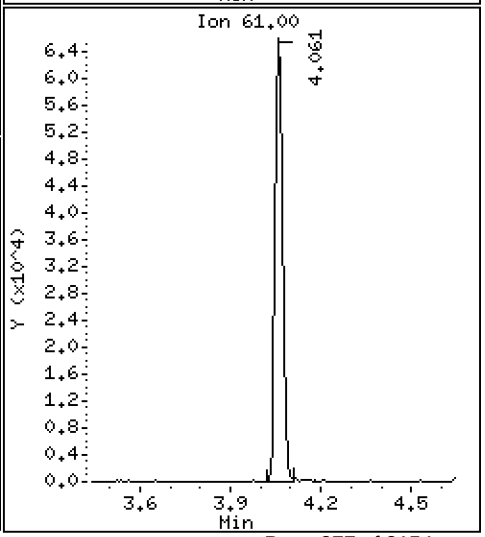


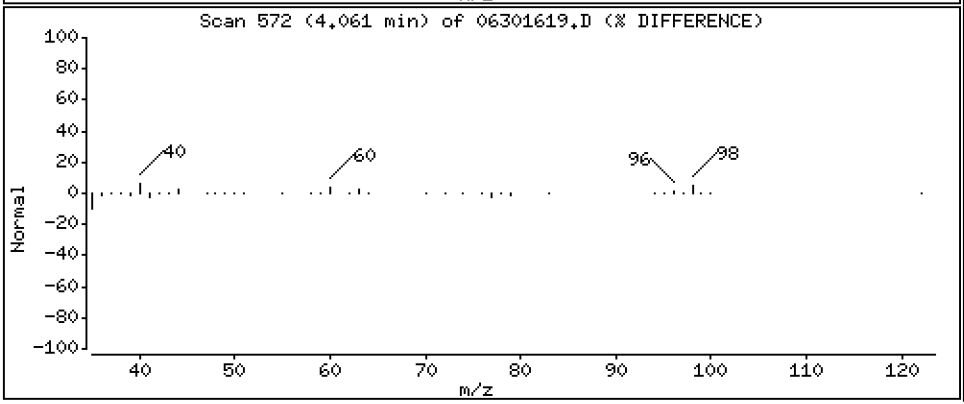












Data File: \\target\share\chem1\nt5.i\20160630.b\06301619.D

Date : 30-JUN-2016 19:00

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-18RE1

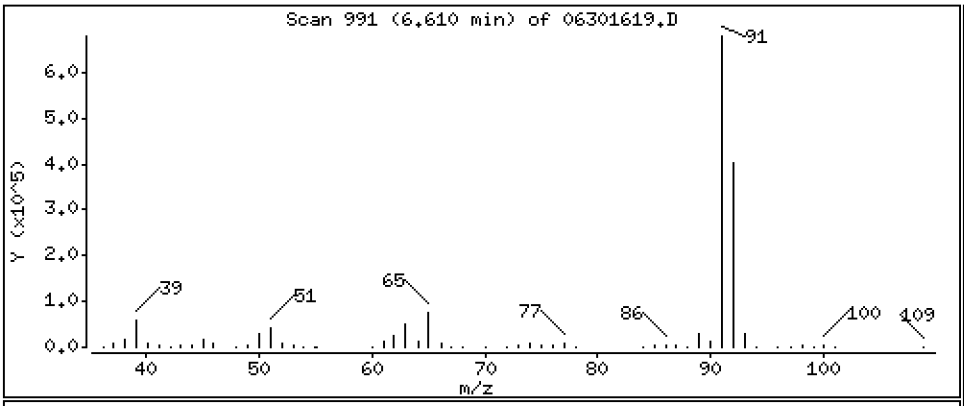
Operator: PB

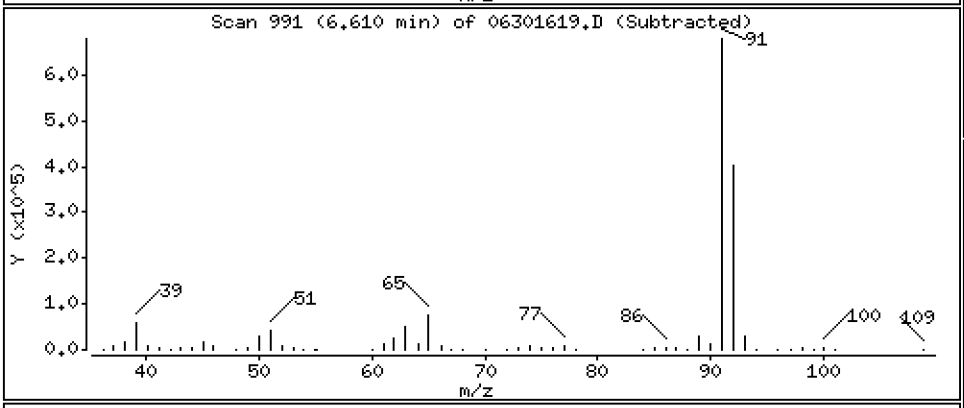
Column phase: RTXVMS

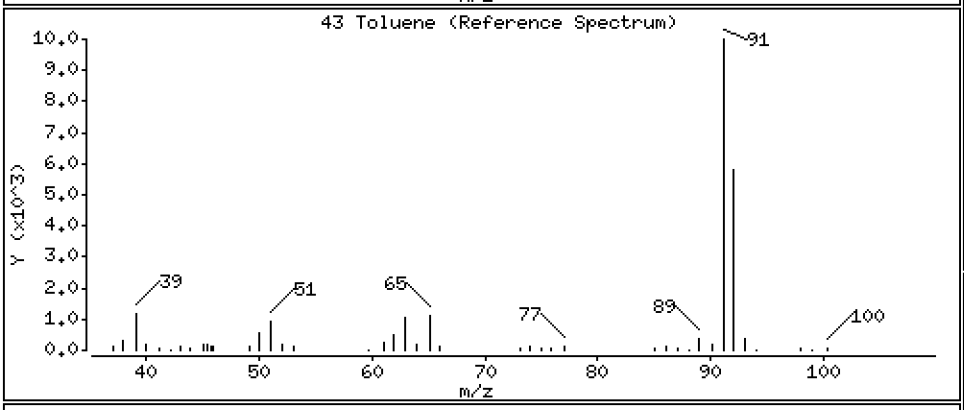
Column diameter: 0.18

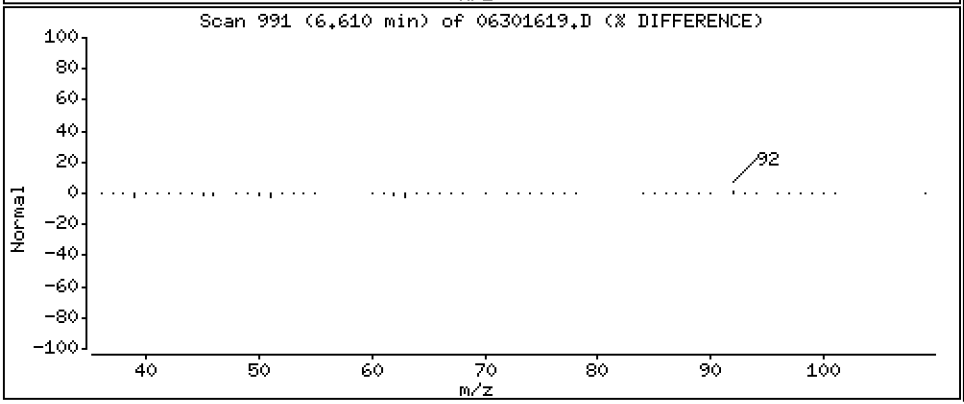
43 Toluene

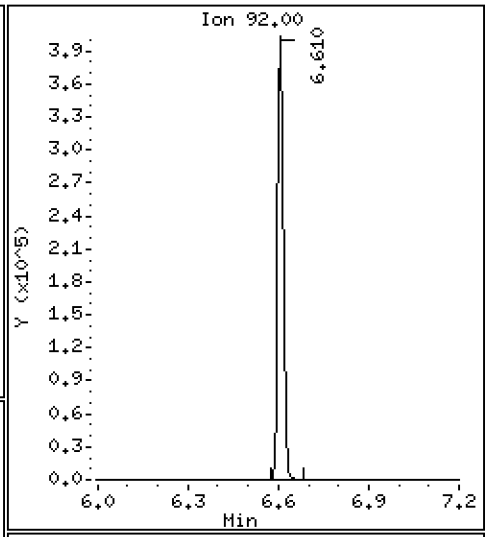
Concentration: 13.848 ug/Kg

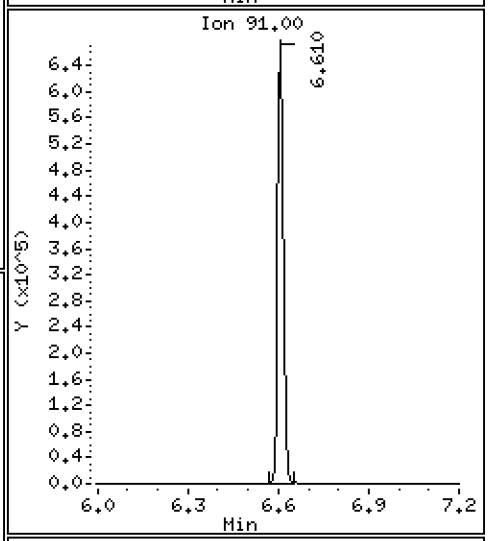


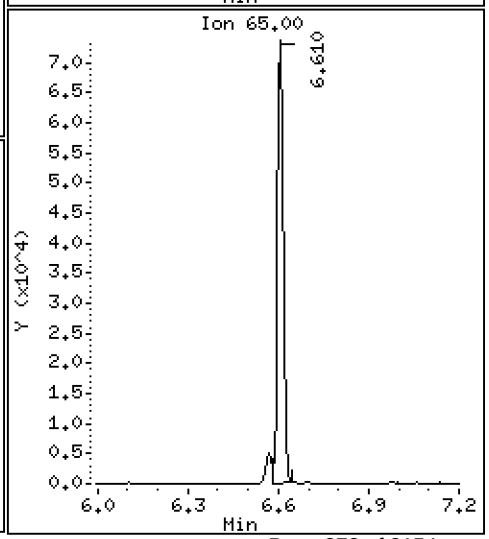












Data File: \\target\share\chem1\nt5.i\20160630.b\06301619.D

Date : 30-JUN-2016 19:00

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-18RE1

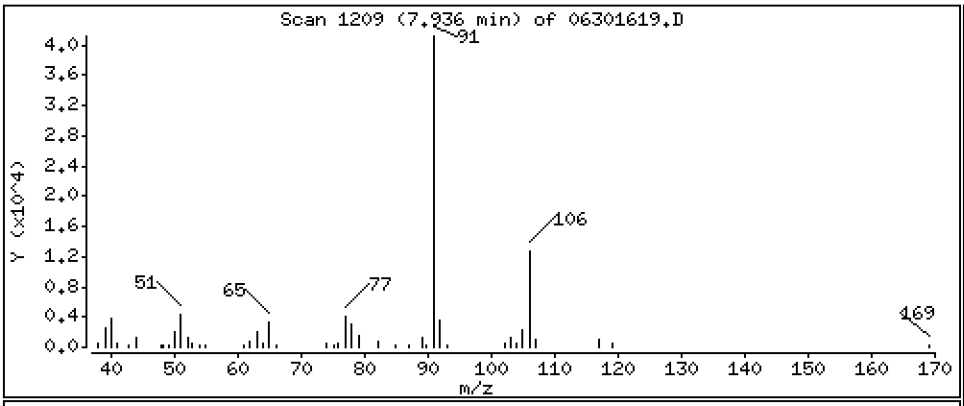
Operator: PB

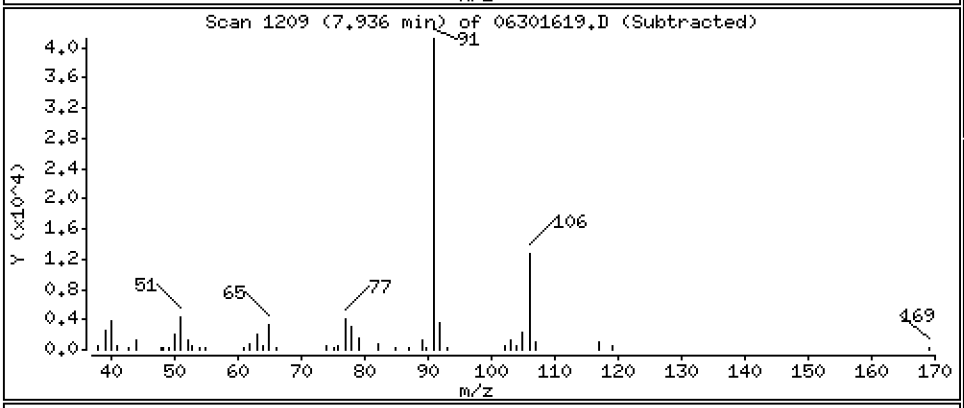
Column phase: RTXVMS

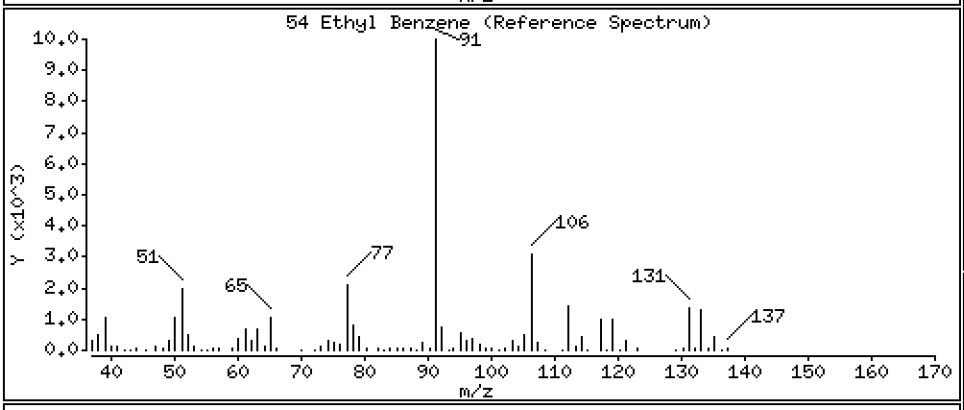
Column diameter: 0.18

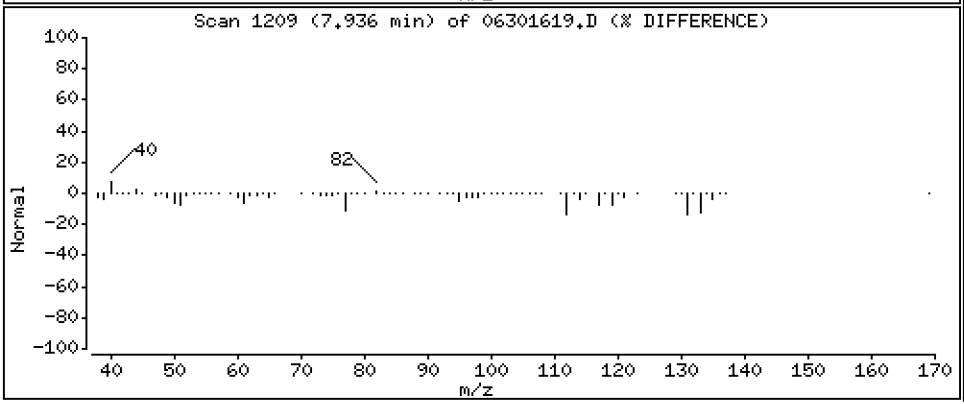
54 Ethyl Benzene

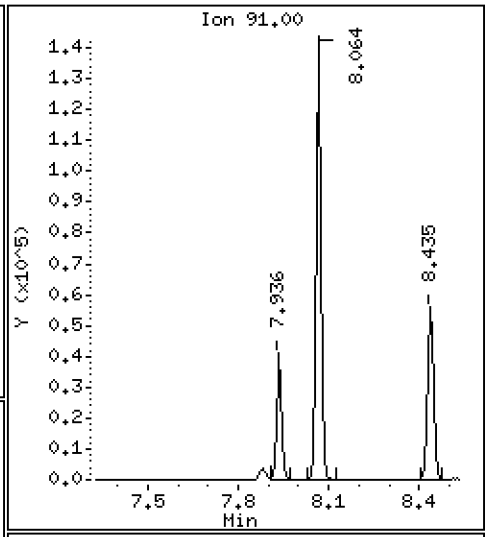
Concentration: 0.7183 ug/Kg

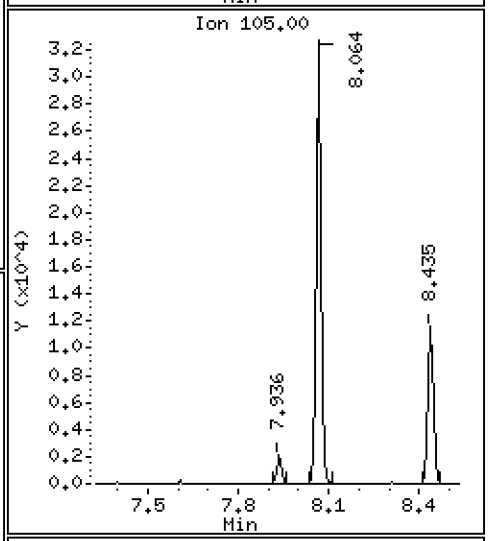


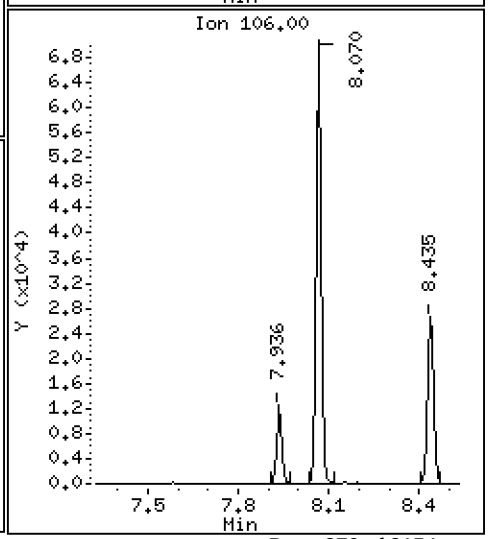












Data File: \\target\share\chem1\nt5.i\20160630.b\06301619.D

Date : 30-JUN-2016 19:00

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-18RE1

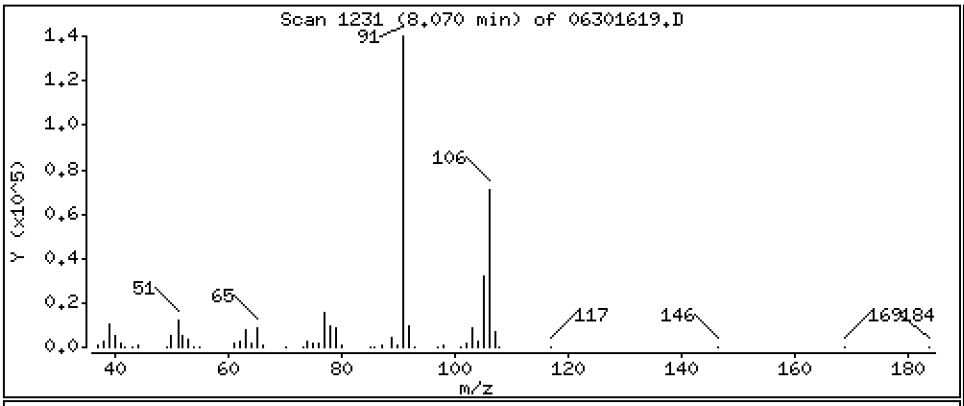
Operator: PB

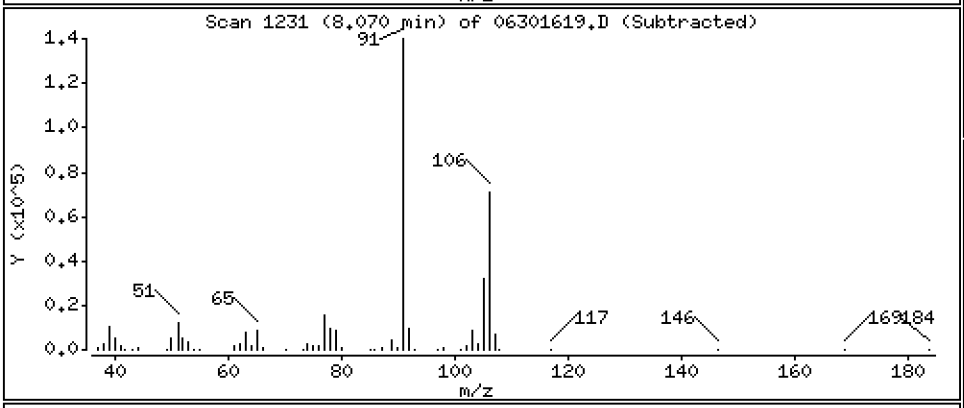
Column phase: RTXVMS

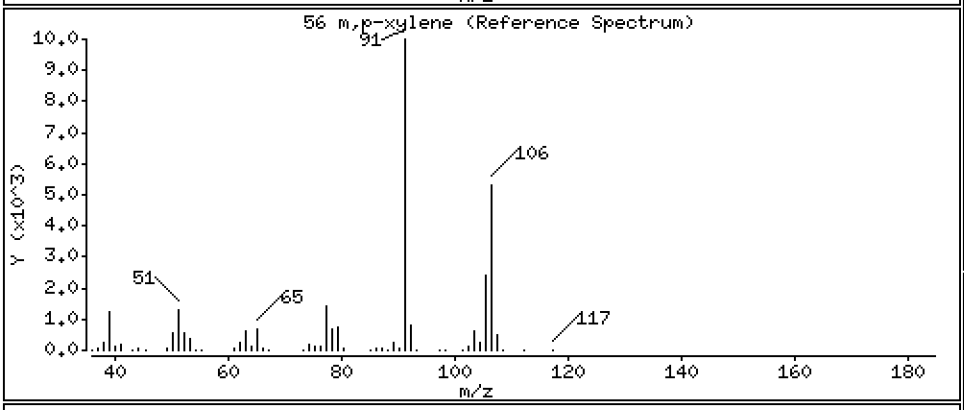
Column diameter: 0.18

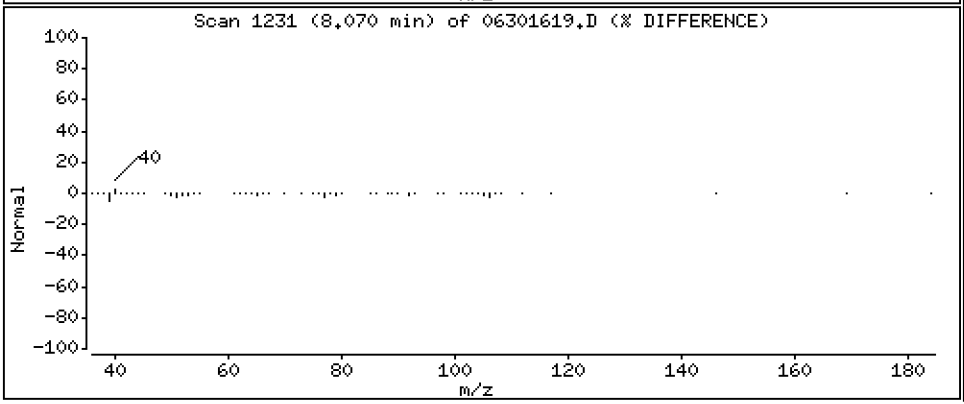
56 m,p-xylene

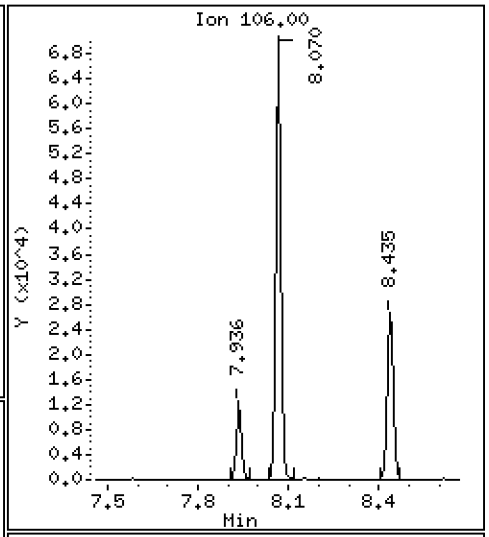
Concentration: 3.448 ug/Kg

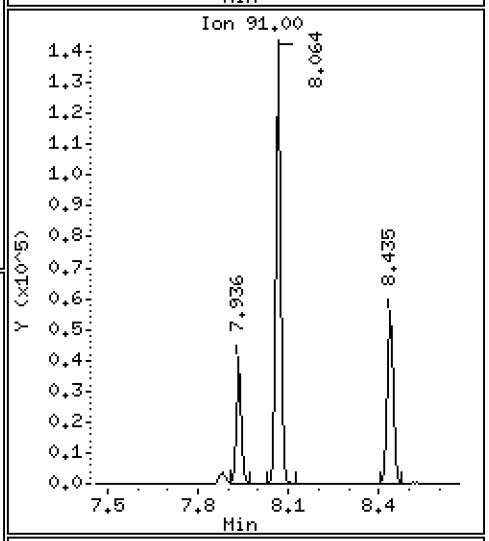


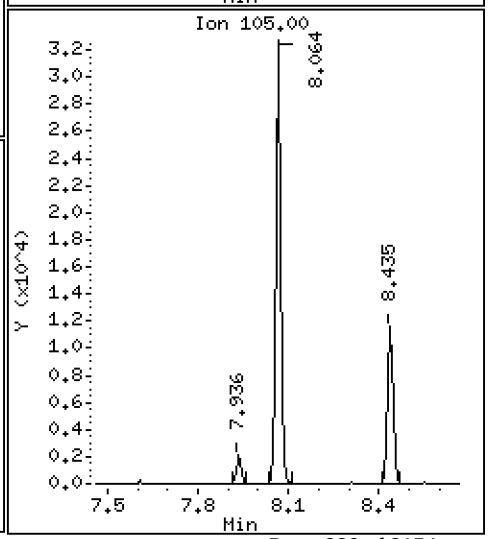












Data File: \\target\share\chem1\nt5.i\20160630.b\06301619.D

Date : 30-JUN-2016 19:00

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-18RE1

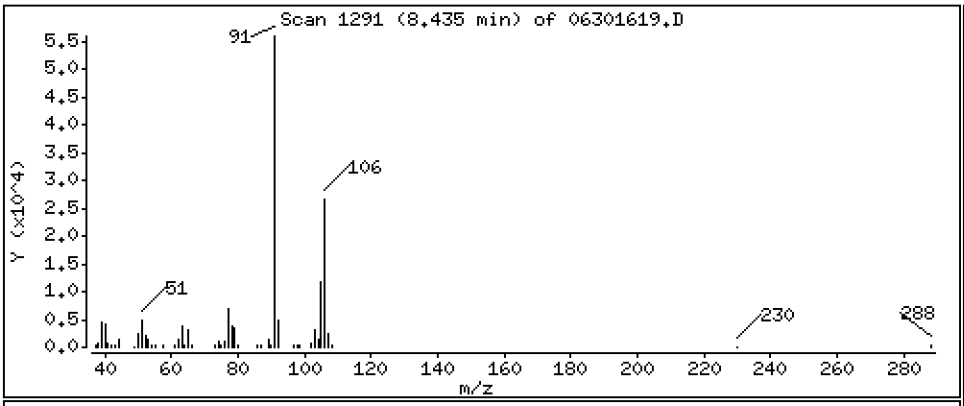
Operator: PB

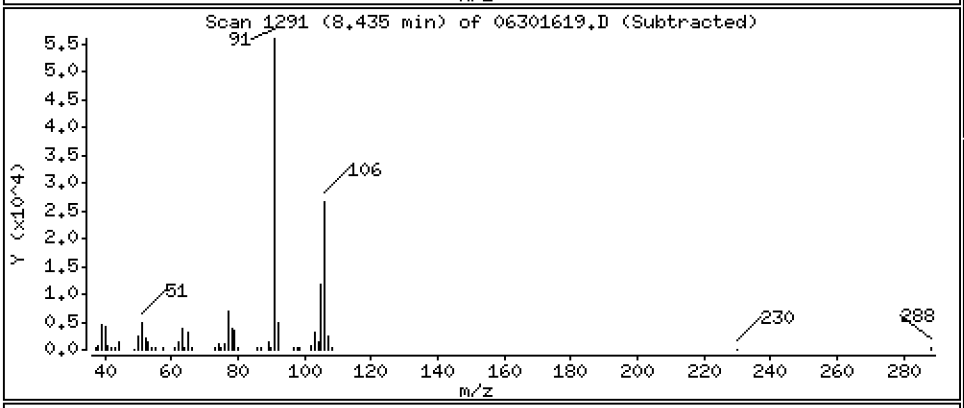
Column phase: RTXVMS

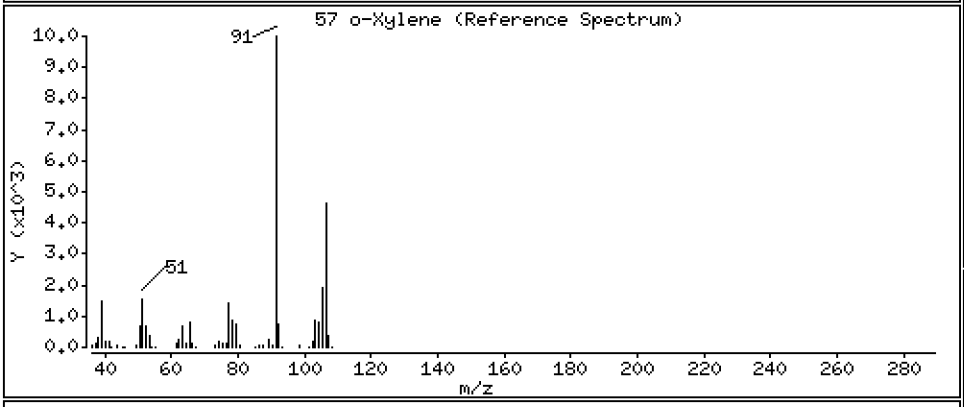
Column diameter: 0.18

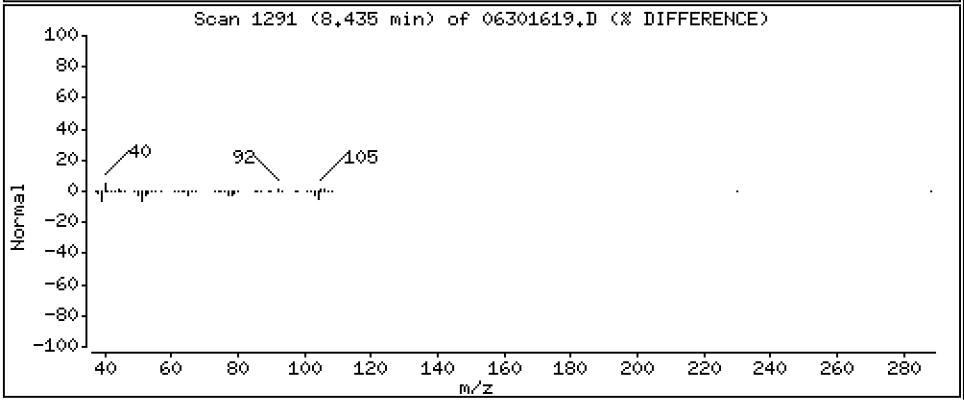
57 o-Xylene

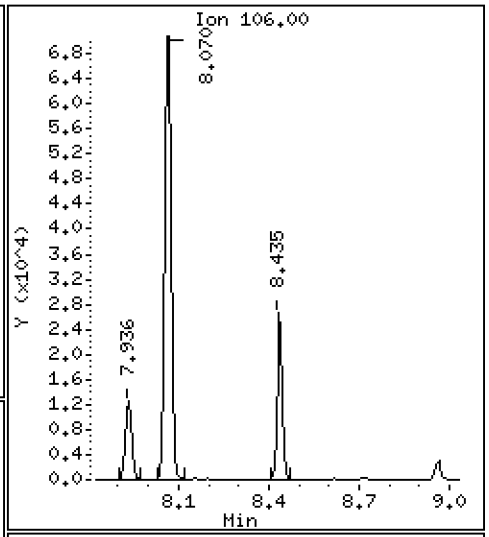
Concentration: 1.238 ug/Kg

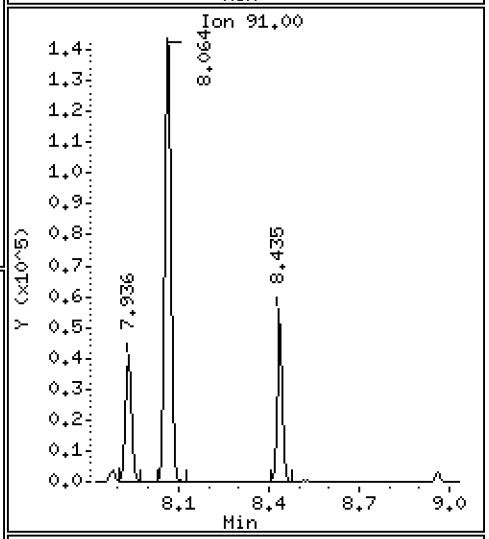


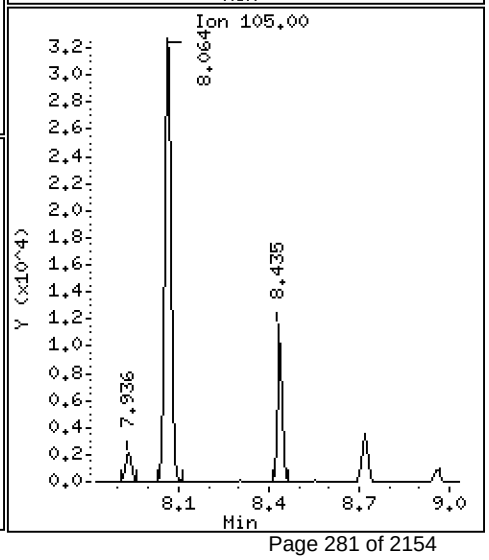












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301619.D
Lab Smp Id: 16F0096-18RE1
Inj Date : 30-JUN-2016 19:00
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-18RE1
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	1.597	1.578	(0.322)	14393	0.93322	0.9332
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.061	4.042	(0.819)	96114	5.03205	5.032
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.511	4.486	(0.909)	818395	45.4059	45.406
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.961	4.943	(1.000)	756222	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.967	4.949	(1.001)	780409	43.3125	43.312
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2352717	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.555	(1.215)	2936080	48.7050	48.705
	43 Toluene	92	6.610	6.597	(1.223)	566073	13.8482	13.848
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2492167	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.936	7.930	(1.007)	54635	0.71828	0.7183
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.070	8.063	(1.024)	101816	3.44796	3.448
	57 o-Xylene	106	8.435	8.428	(1.070)	36108	1.23795	1.238
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1335324	49.8229	49.823
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.968	(1.000)	1296480	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.363	10.357	(1.039)	1265377	48.4694	48.469
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301619.D
Lab Smp Id: 16F0096-18RE1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	756222	26.04
35 1,4-Difluorobenze	2041239	1020620	4082478	2352717	15.26
52 d5-Chlorobenzene	2118314	1059157	4236628	2492167	17.65
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1296480	22.88

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.37
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 15:50

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-18RE1
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	45.406	90.81	70-130
$ 32 d4-1,2-Dichloroeth	50.000	43.312	86.62	80-149
$ 42 d8-Toluene	50.000	48.705	97.41	77-120
$ 62 4-Bromofluorobenze	50.000	49.823	99.65	80-120
$ 79 d4-1,2-Dichloroben	50.000	48.469	96.94	80-120

REVIEW SUMMARY FOR FILE - 06301619.D

Lab ID: 16F0096-18RE1
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 19:00

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-Q-04-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-19	File ID:	06291624.D
Sampled:	06/29/16 12:35	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 23:56
Solids:	92.14	Preparation:	No Prep - Volatiles	Initial/Final:	5.23 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.04	U	0.24	1.04
74-83-9	Bromomethane	1	1.04	U	0.19	1.04
156-59-2	cis-1,2-Dichloroethene	1	0.70	J	0.25	1.04
71-43-2	Benzene	1	1.04	U	0.31	1.04
79-01-6	Trichloroethene	1	1.04	U	0.22	1.04
108-88-3	Toluene	1	5.61		0.16	1.04
127-18-4	Tetrachloroethene	1	1.04	U	0.27	1.04
100-41-4	Ethylbenzene	1	1.92		0.21	1.04
179601-23-1	m,p-Xylene	1	6.79		0.41	1.04
95-47-6	o-Xylene	1	2.02		0.23	1.04

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	49.9	99.7	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.7	101	80 - 120	
Toluene-d8	50.000	49.2	98.4	77 - 120	
4-Bromofluorobenzene	50.000	50.0	100	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291624.D

Date : 29-JUN-2016 23:56

Client ID:

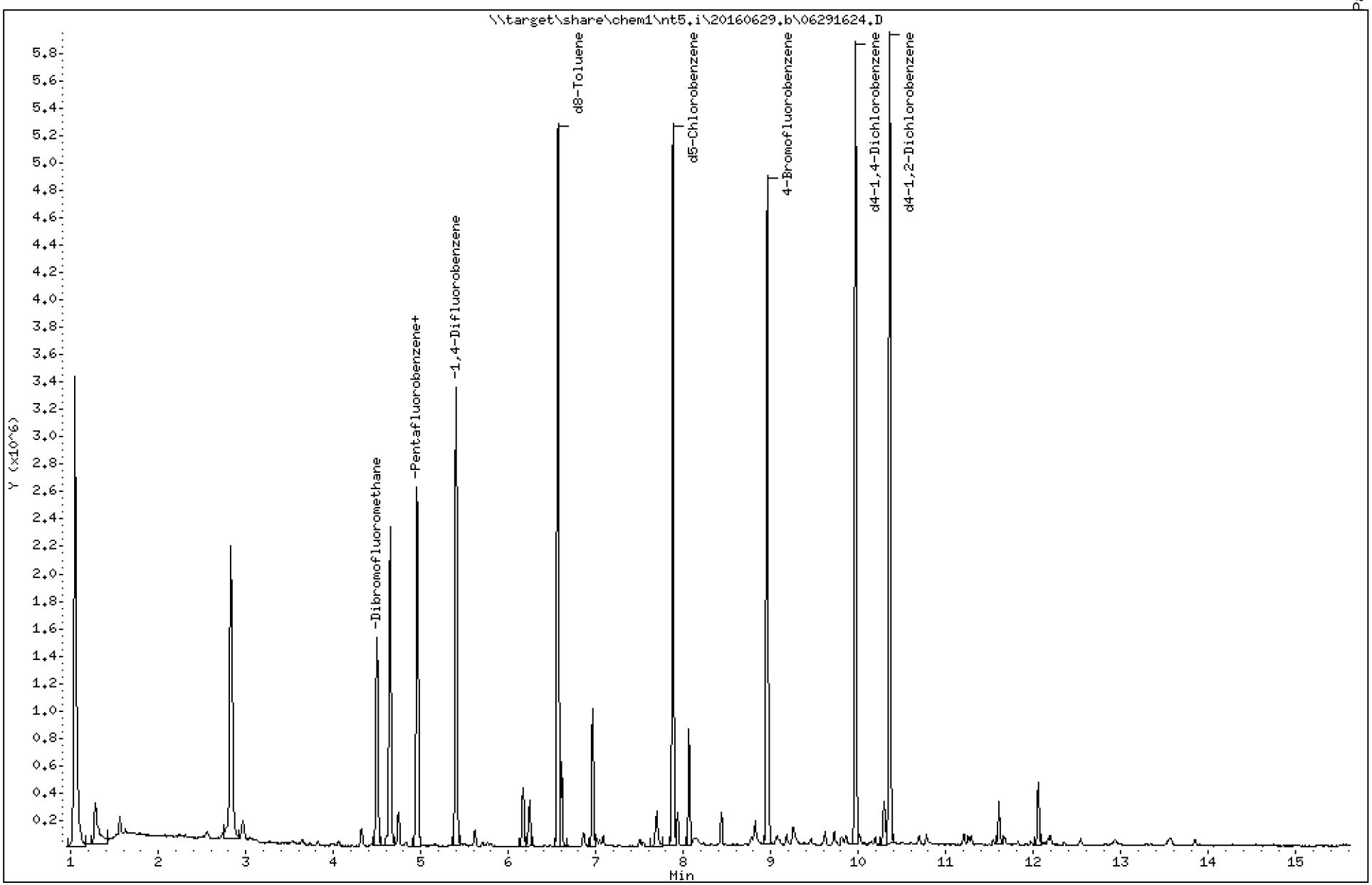
Instrument: nt5.i

Sample Info: 16F0096-19

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160629.b\06291624.D

Date : 29-JUN-2016 23:56

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-19

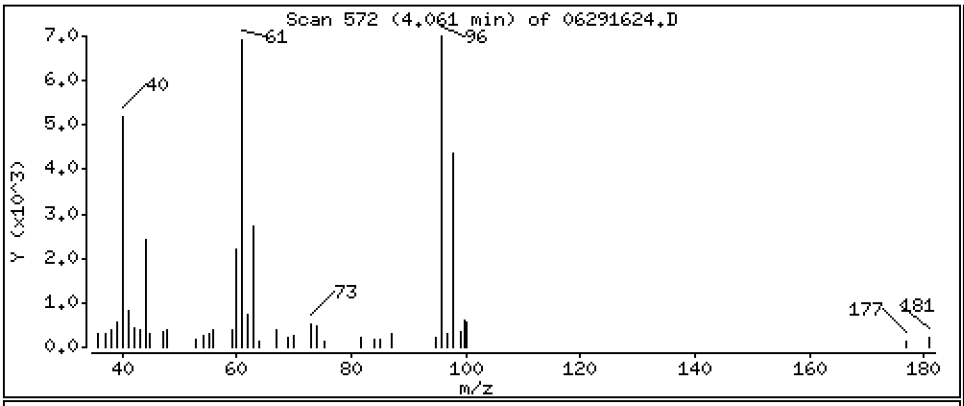
Operator: PB

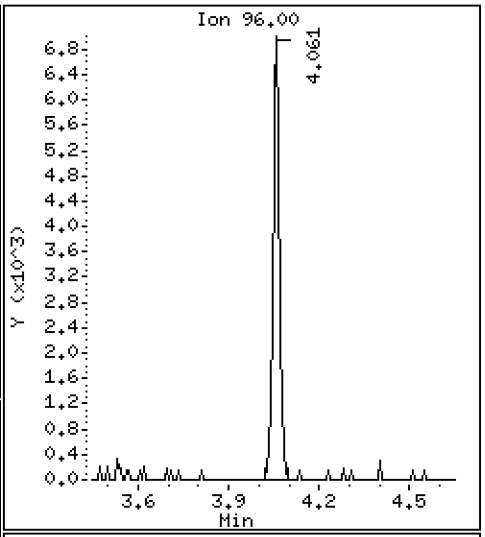
Column phase: RTXVMS

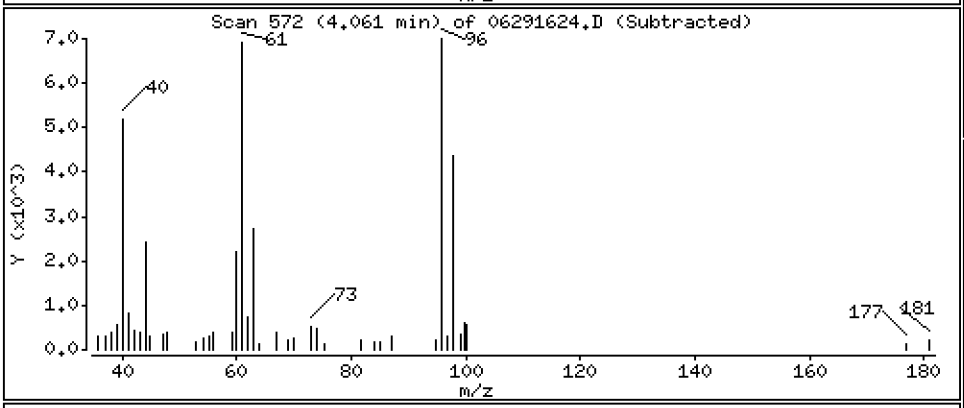
Column diameter: 0.18

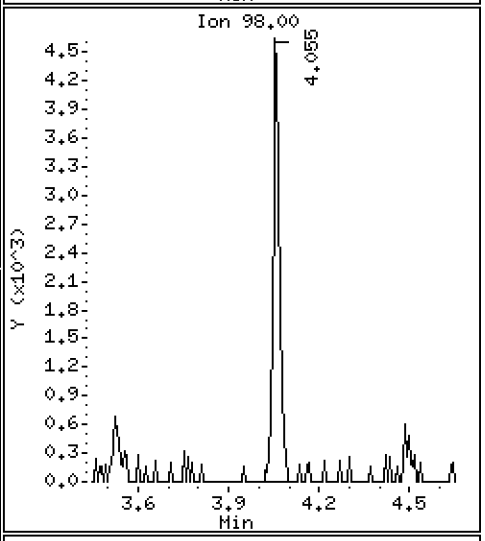
20 Cis-1,2-Dichloroethene

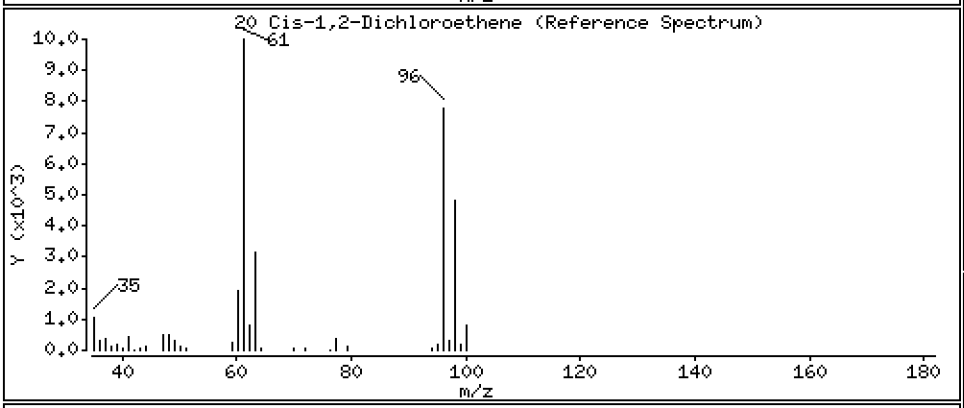
Concentration: 0.6701 ug/Kg

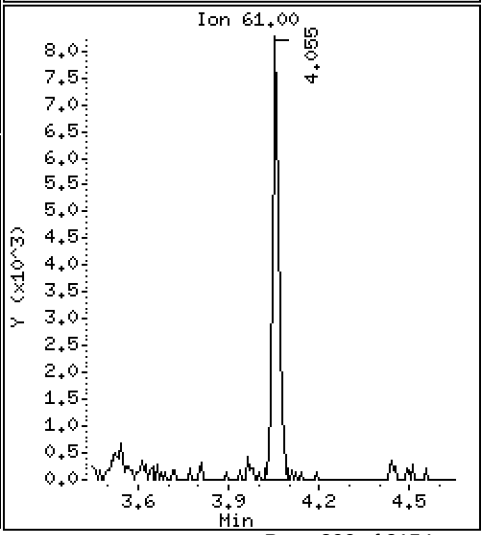


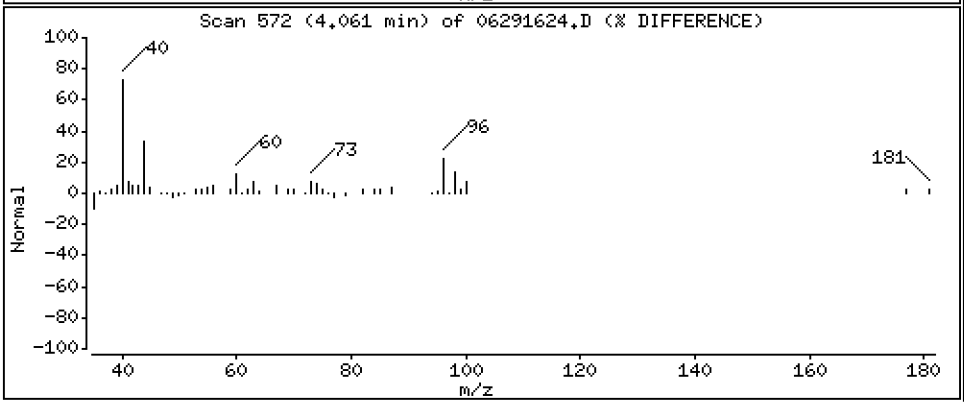












Data File: \\target\share\chem1\nt5.i\20160629.b\06291624.D

Date : 29-JUN-2016 23:56

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-19

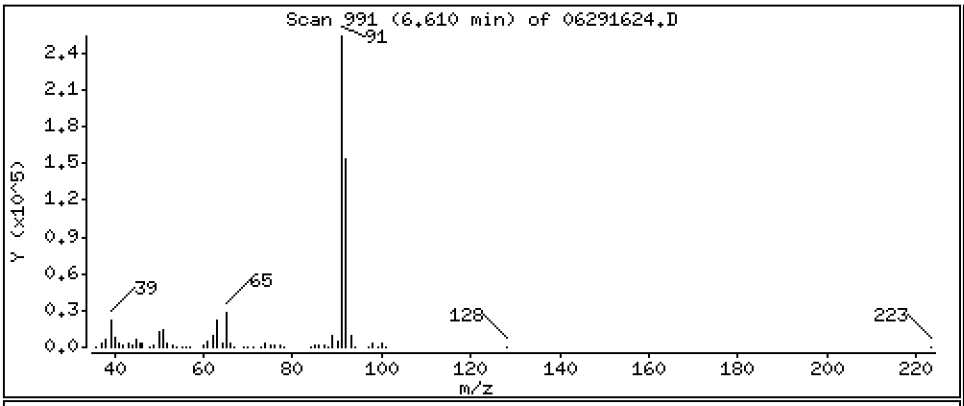
Operator: PB

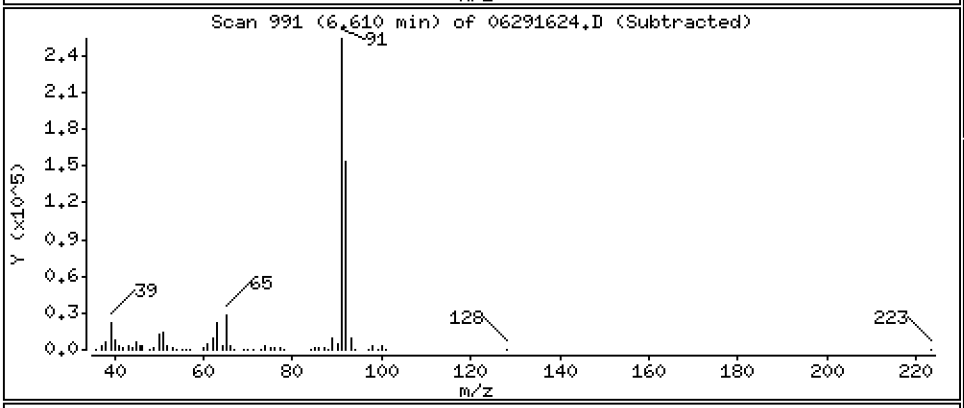
Column phase: RTXVMS

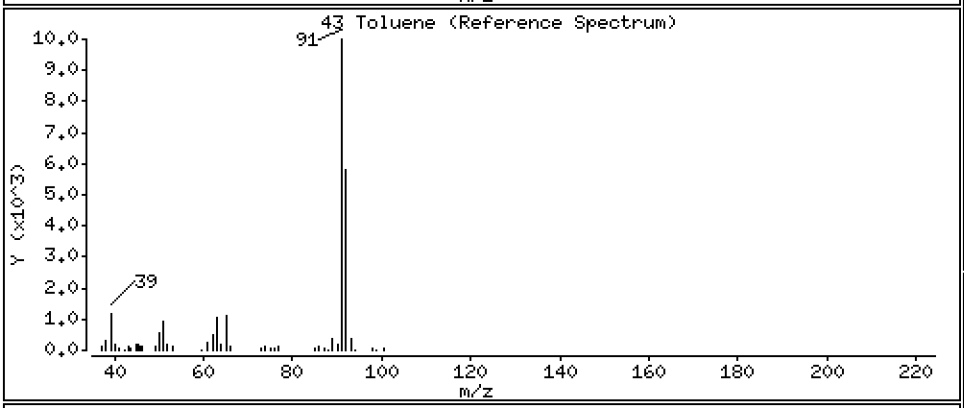
Column diameter: 0.18

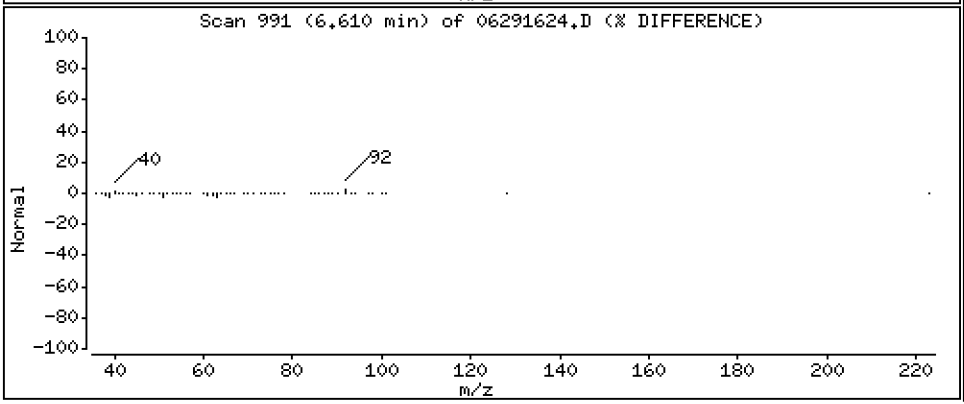
43 Toluene

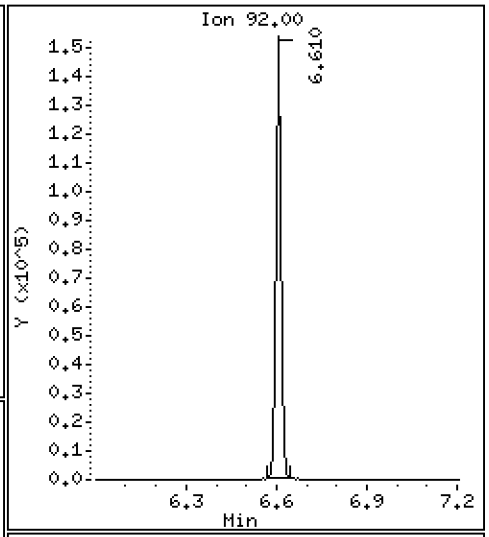
Concentration: 5.410 ug/Kg

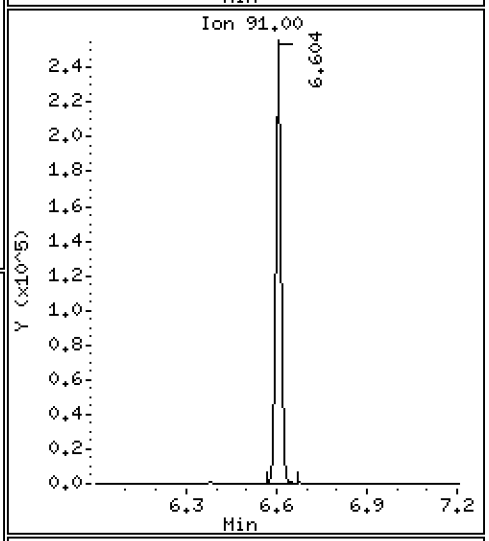


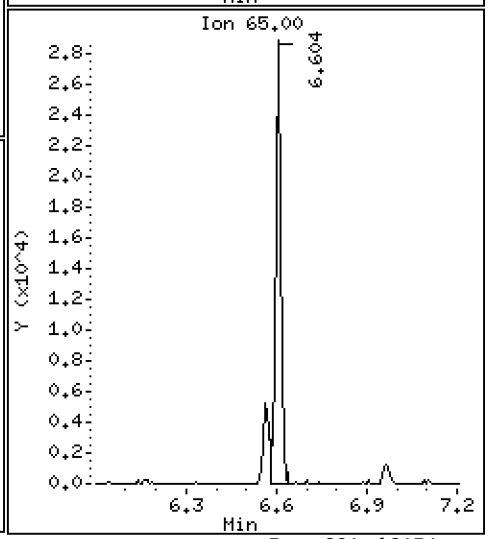












Data File: \\target\share\chem1\nt5.i\20160629.b\06291624.D

Date : 29-JUN-2016 23:56

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-19

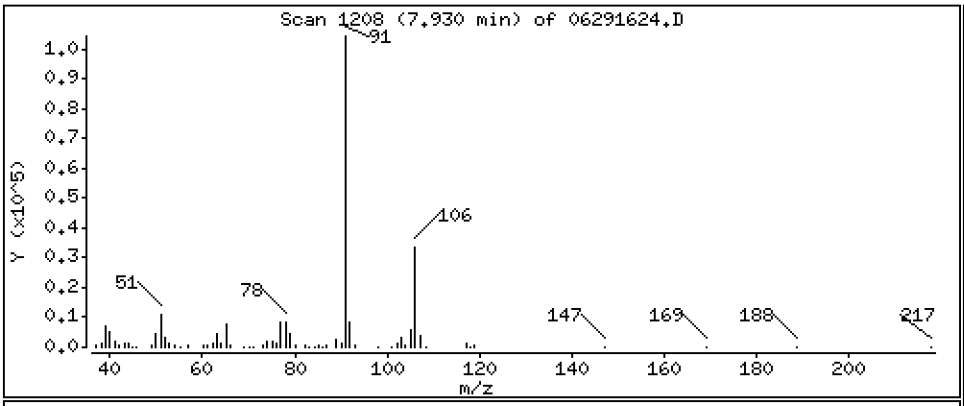
Operator: PB

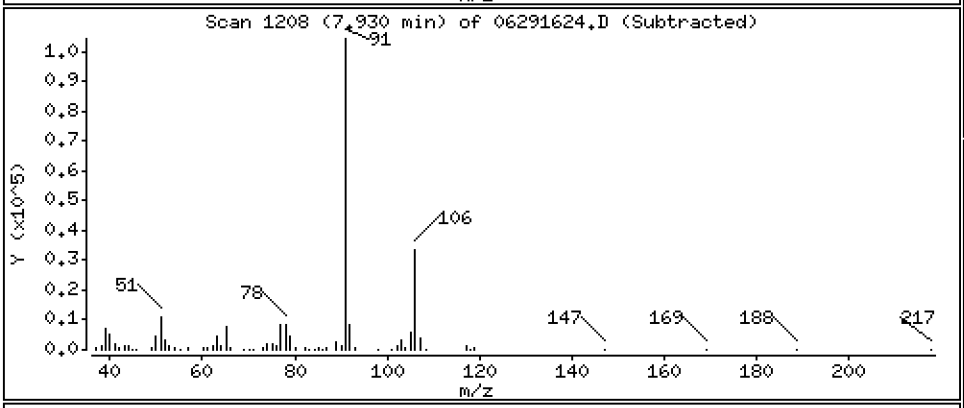
Column phase: RTXVMS

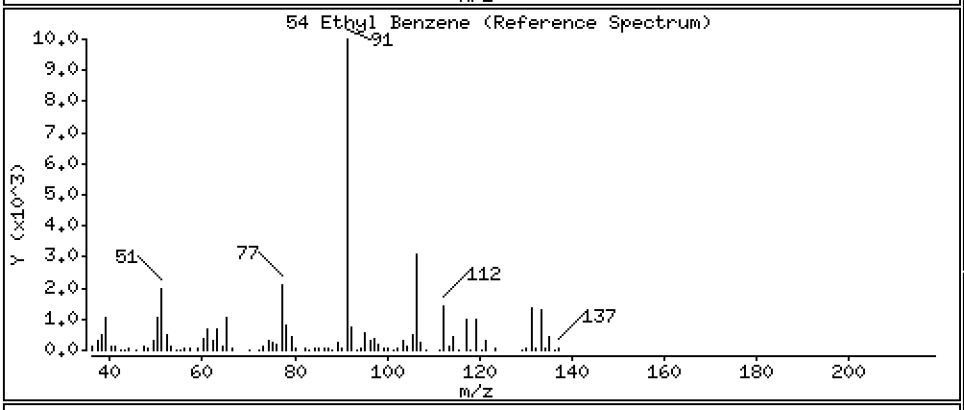
Column diameter: 0.18

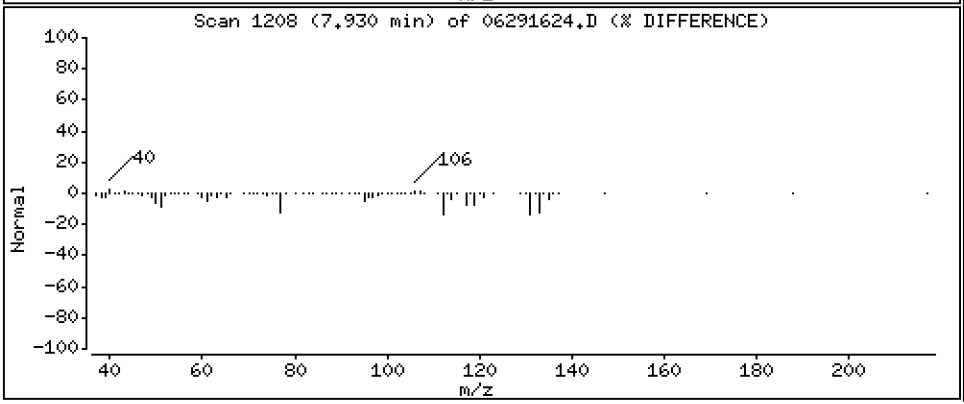
54 Ethyl Benzene

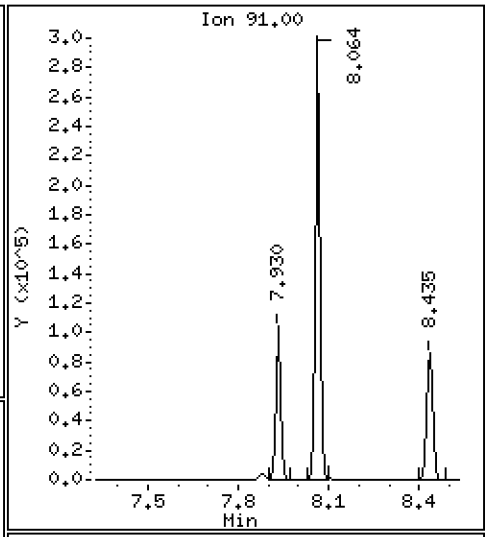
Concentration: 1.853 ug/Kg

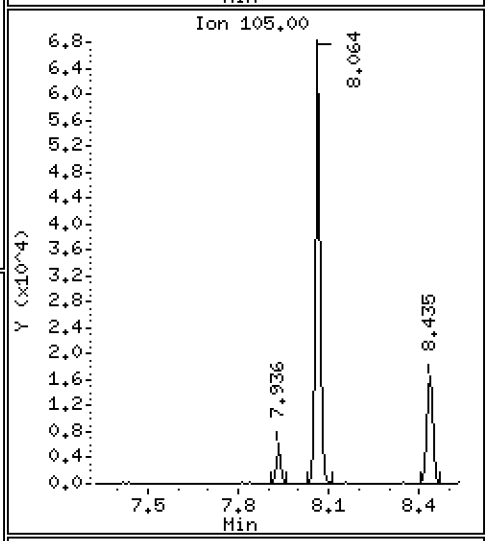


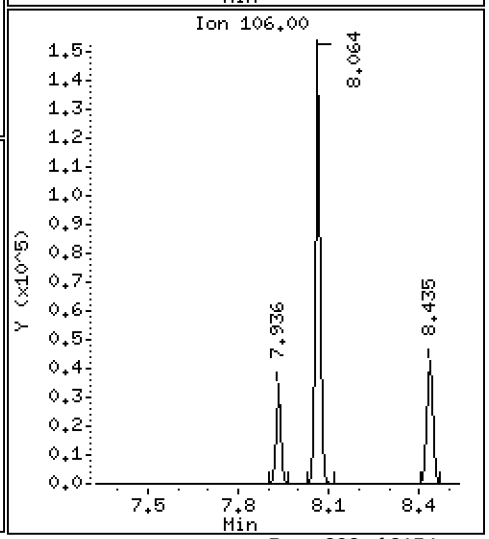












Data File: \\target\share\chem1\nt5.i\20160629.b\06291624.D

Date : 29-JUN-2016 23:56

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-19

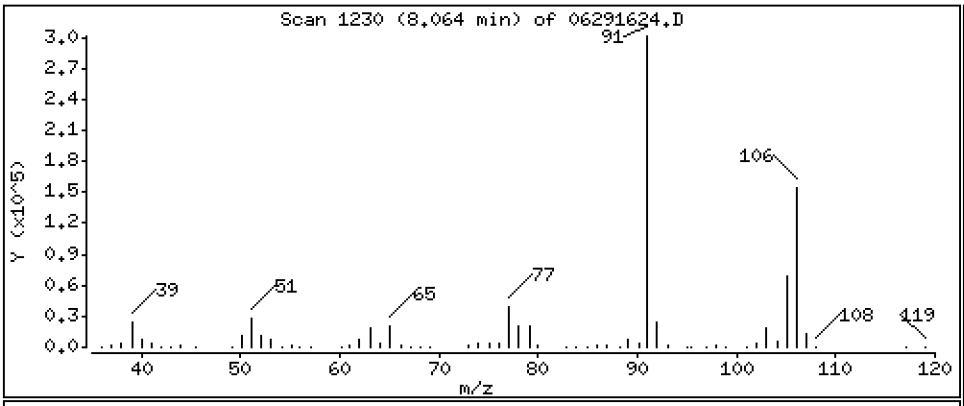
Operator: PB

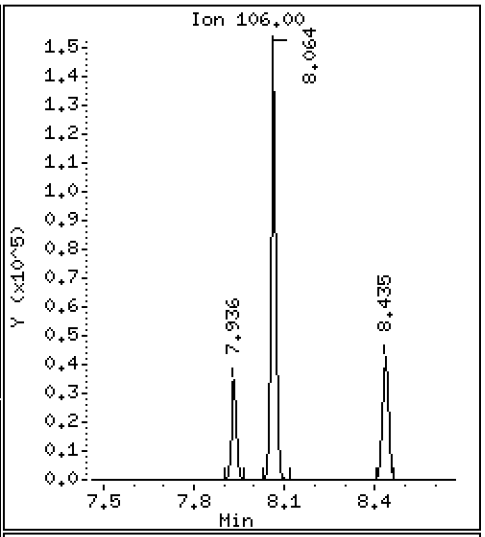
Column phase: RTXVMS

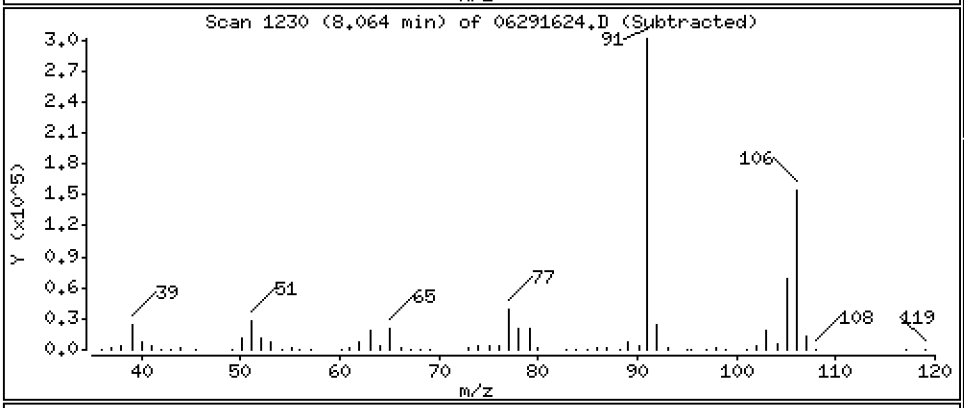
Column diameter: 0.18

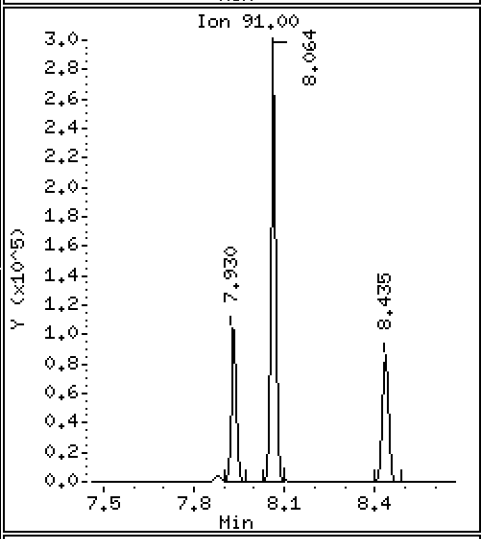
56 m,p-xylene

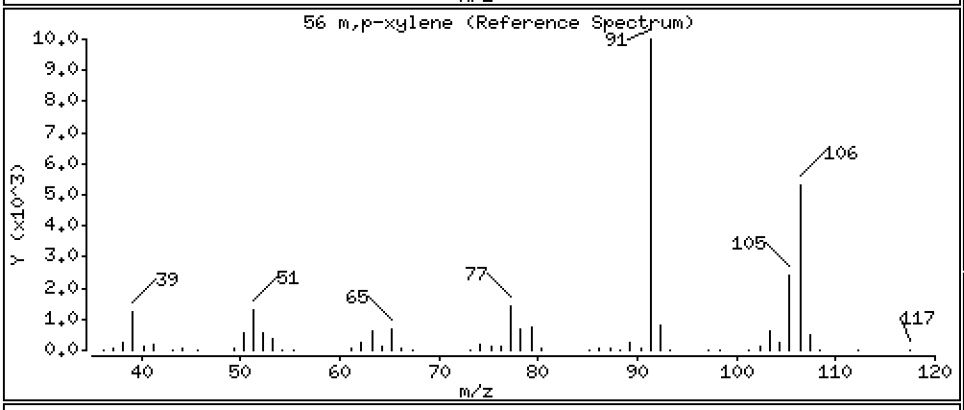
Concentration: 6.549 ug/Kg

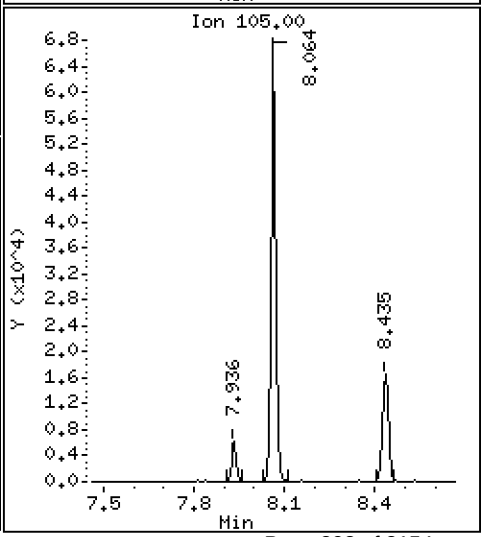


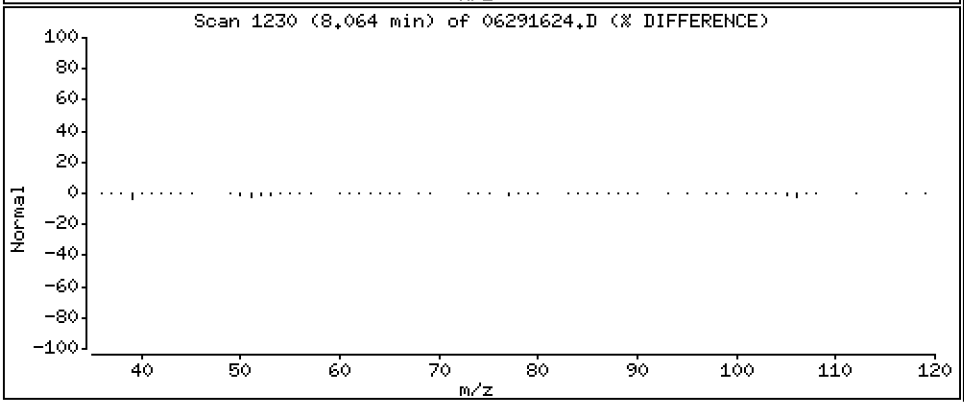












Data File: \\target\share\chem1\nt5.i\20160629.b\06291624.D

Date : 29-JUN-2016 23:56

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-19

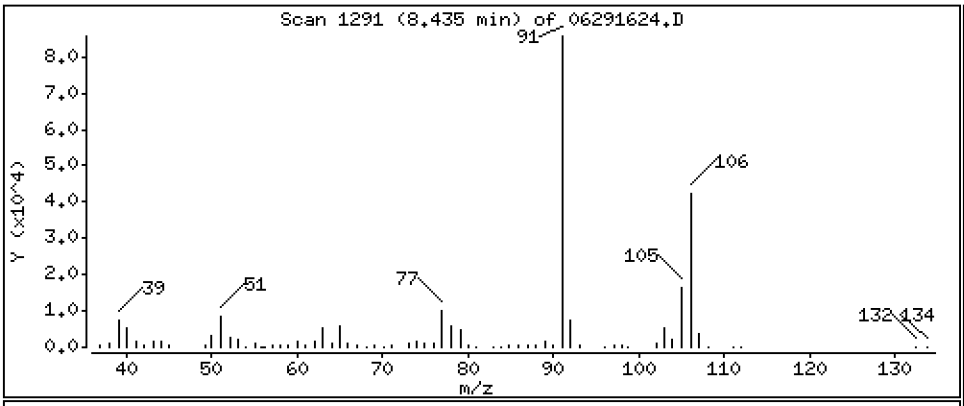
Operator: PB

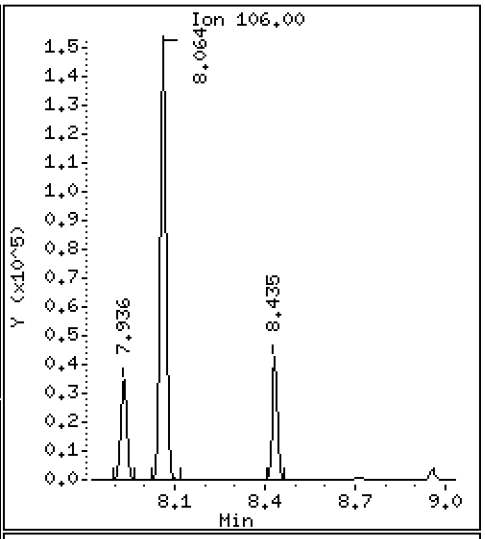
Column phase: RTXVMS

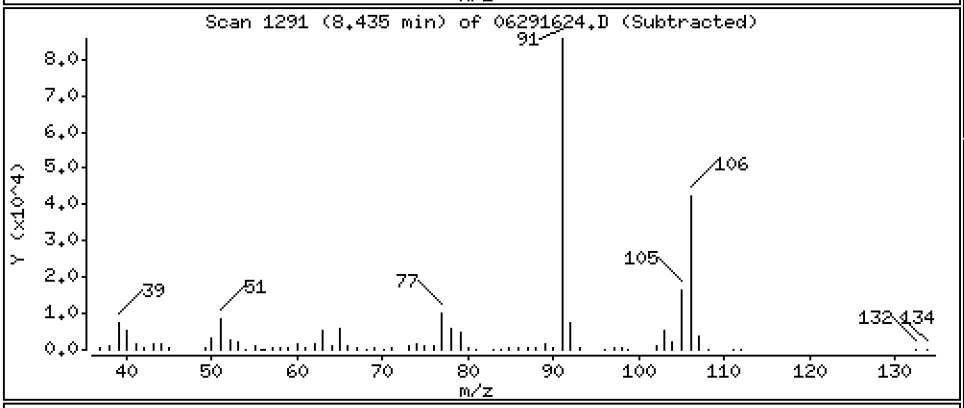
Column diameter: 0.18

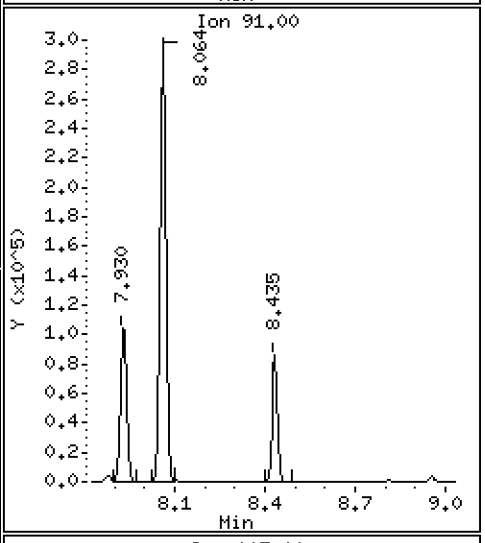
57 o-Xylene

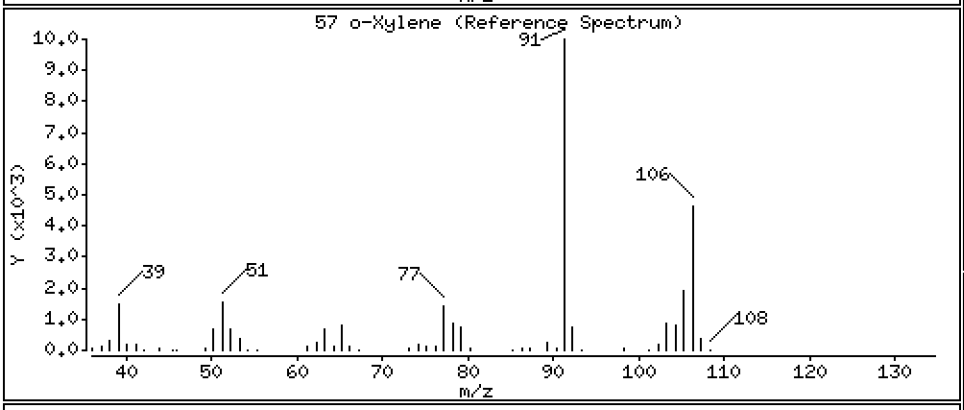
Concentration: 1.948 ug/Kg

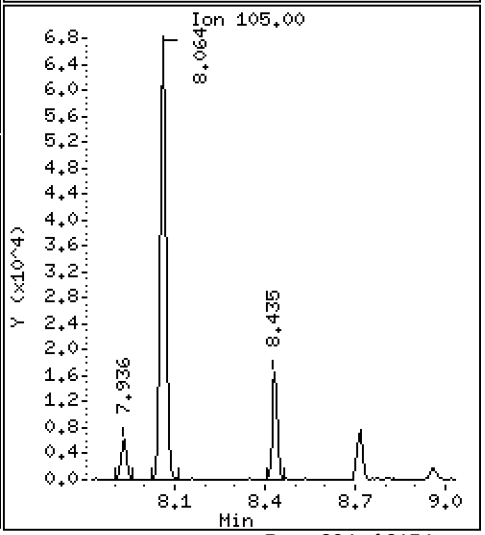


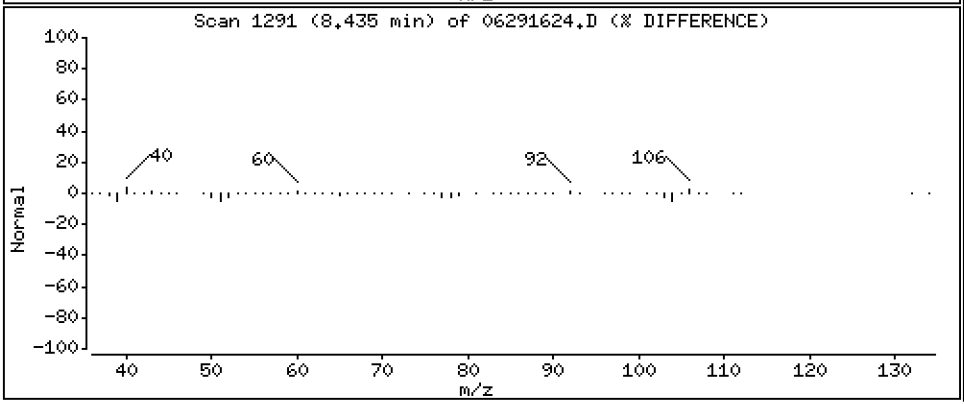












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291624.D
Lab Smp Id: 16F0096-19
Inj Date : 29-JUN-2016 23:56
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-19
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.060	4.048	(0.820)	11744	0.67009	0.6701
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.498	4.486	(0.908)	851887	51.5098	51.510
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.955	4.949	(1.000)	693890	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.001)	824538	49.8724	49.872
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2332638	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.561	(1.216)	2939377	49.1794	49.179
	43 Toluene	92	6.609	6.603	(1.224)	219253	5.40988	5.410
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2514764	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.930	7.930	(1.006)	142245	1.85328	1.853
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.063	8.063	(1.023)	195128	6.54856	6.549
	57 o-Xylene	106	8.435	8.428	(1.070)	57345	1.94839	1.948
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1351616	49.9776	49.978
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1299629	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1327011	50.7071	50.707
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291624.D
Lab Smp Id: 16F0096-19
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	693890	15.65
35 1,4-Difluorobenze	2041239	1020620	4082478	2332638	14.28
52 d5-Chlorobenzene	2118314	1059157	4236628	2514764	18.72
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1299629	23.18

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.12
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.11
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 13:11

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-19
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	51.510	103.02	70-130
$ 32 d4-1,2-Dichloroeth	50.000	49.872	99.74	80-149
$ 42 d8-Toluene	50.000	49.179	98.36	77-120
$ 62 4-Bromofluorobenze	50.000	49.978	99.96	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.707	101.41	80-120

REVIEW SUMMARY FOR FILE - 06291624.D

Lab ID: 16F0096-19
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 23:56

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-Q-05-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-20	File ID:	06301607.D
Sampled:	06/29/16 12:25	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 14:29
Solids:	92.63	Preparation:	No Prep - Volatiles	Initial/Final:	5.16 g / 5 g
Batch:	BEG0004	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.05	U	0.25	1.05
74-83-9	Bromomethane	1	1.05	U	0.20	1.05
156-59-2	cis-1,2-Dichloroethene	1	1.05	U	0.25	1.05
71-43-2	Benzene	1	1.05	U	0.31	1.05
79-01-6	Trichloroethene	1	1.05	U	0.22	1.05
108-88-3	Toluene	1	0.46	J	0.16	1.05
127-18-4	Tetrachloroethene	1	1.05	U	0.27	1.05
100-41-4	Ethylbenzene	1	0.43	J	0.21	1.05
179601-23-1	m,p-Xylene	1	1.57		0.41	1.05
95-47-6	o-Xylene	1	0.44	J	0.23	1.05

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	46.6	93.3	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.4	101	80 - 120	
Toluene-d8	50.000	48.4	96.8	77 - 120	
4-Bromofluorobenzene	50.000	48.6	97.3	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301607.D

Date : 30-JUN-2016 14:29

Client ID:

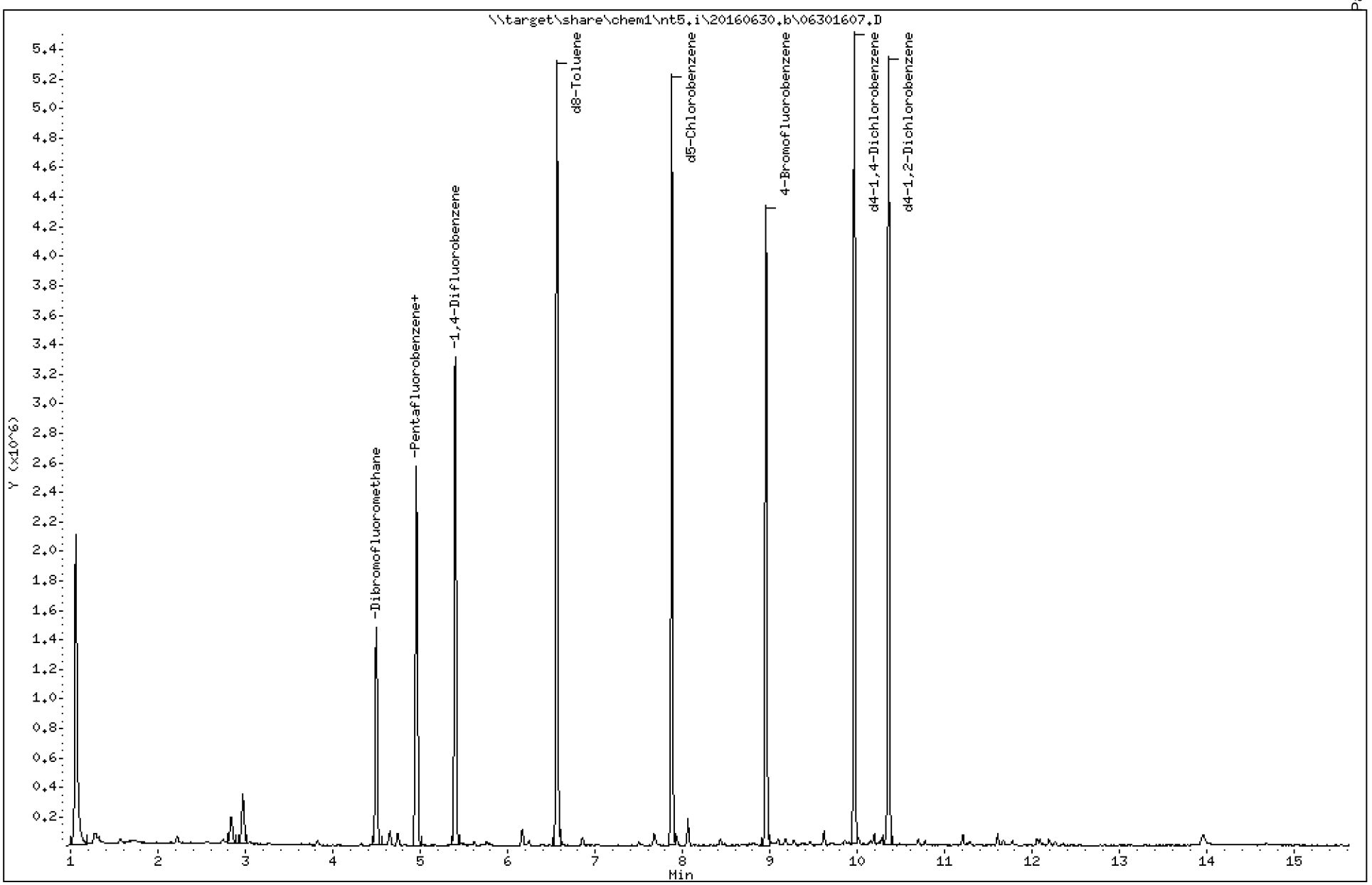
Sample Info: 16F0096-20

Instrument: nt5.i

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\06301607.D

Date : 30-JUN-2016 14:29

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-20

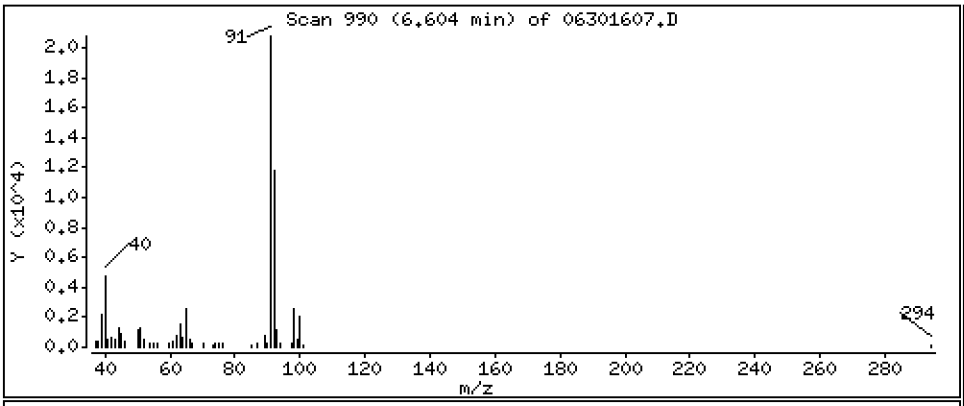
Operator: PB

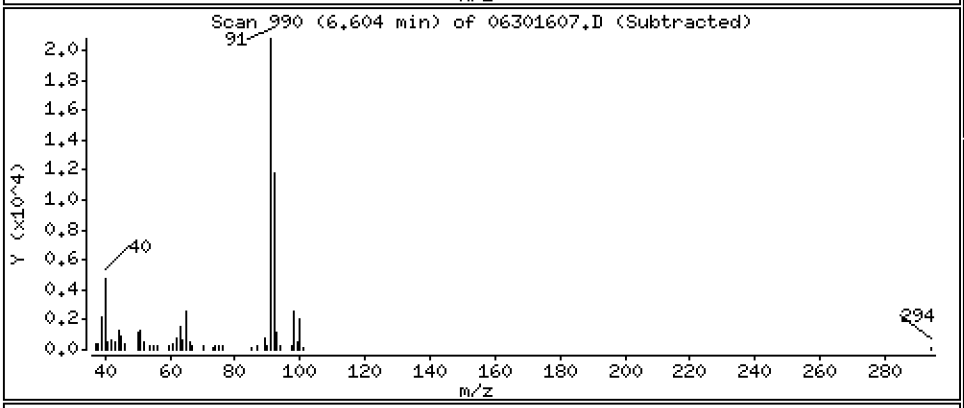
Column phase: RTXVMS

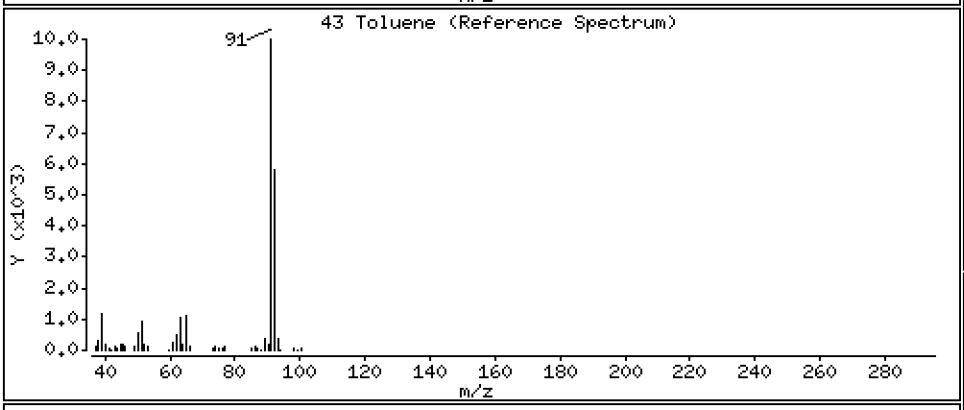
Column diameter: 0.18

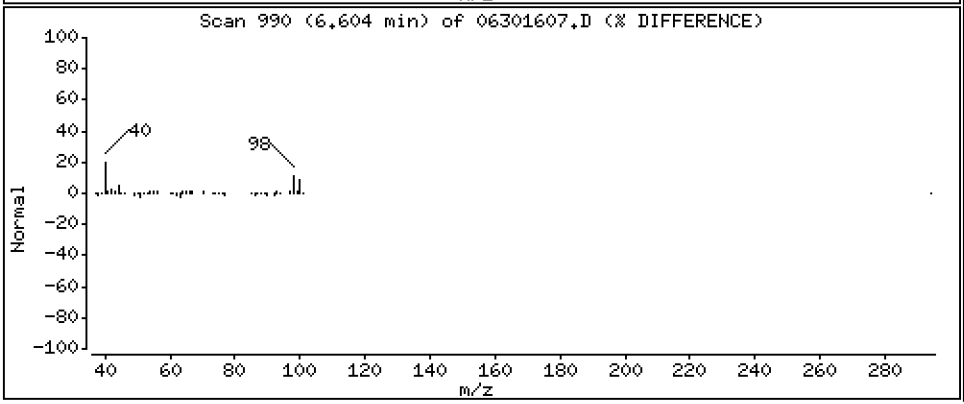
43 Toluene

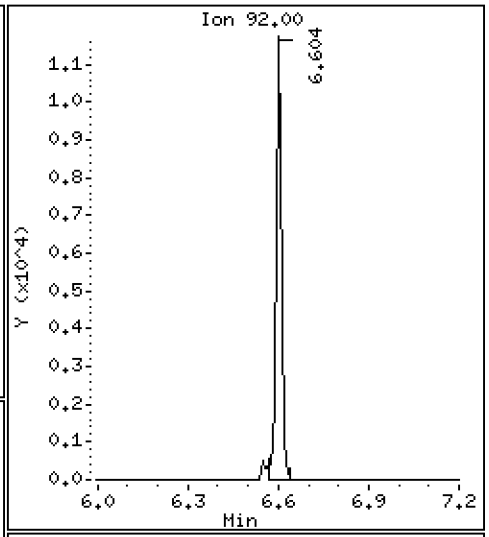
Concentration: 0.4358 ug/Kg

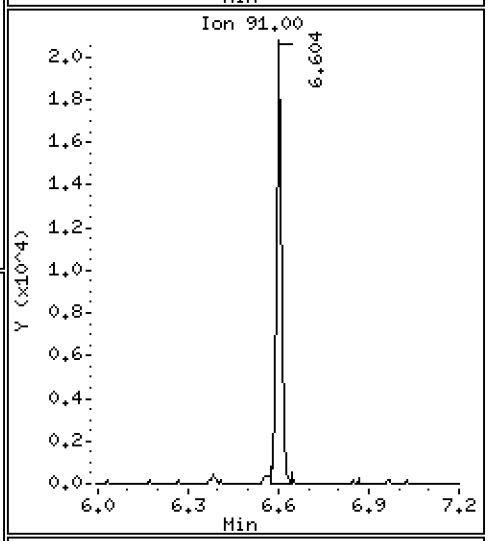


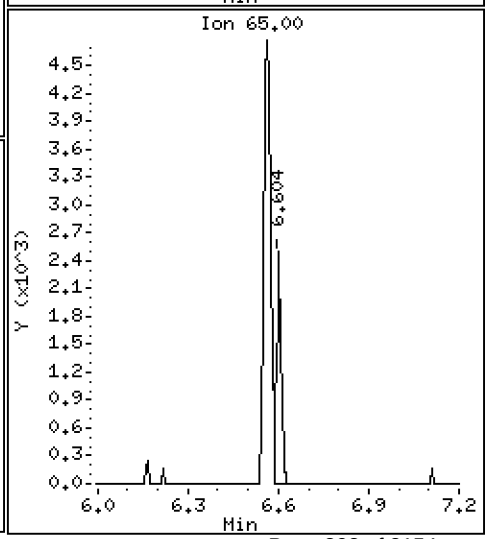












Data File: \\target\share\chem1\nt5.i\20160630.b\06301607.D

Date : 30-JUN-2016 14:29

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-20

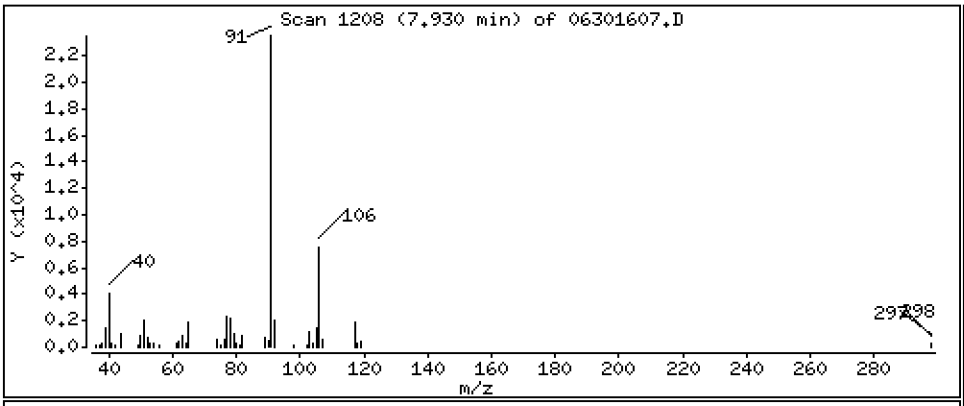
Operator: PB

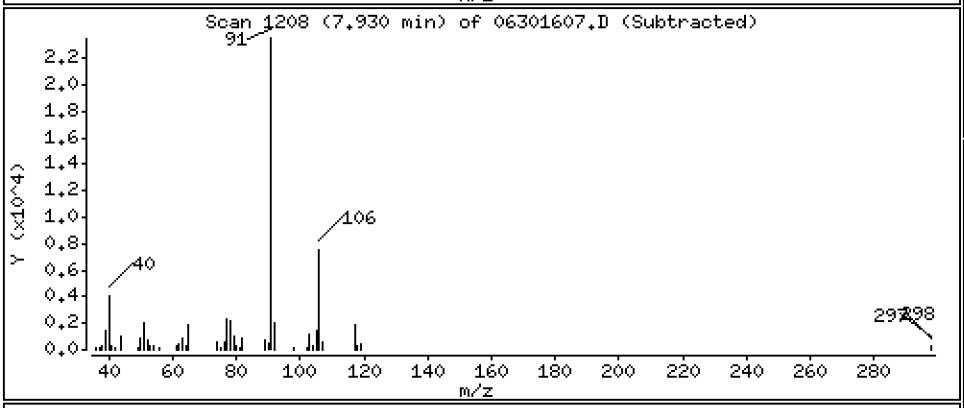
Column phase: RTXVMS

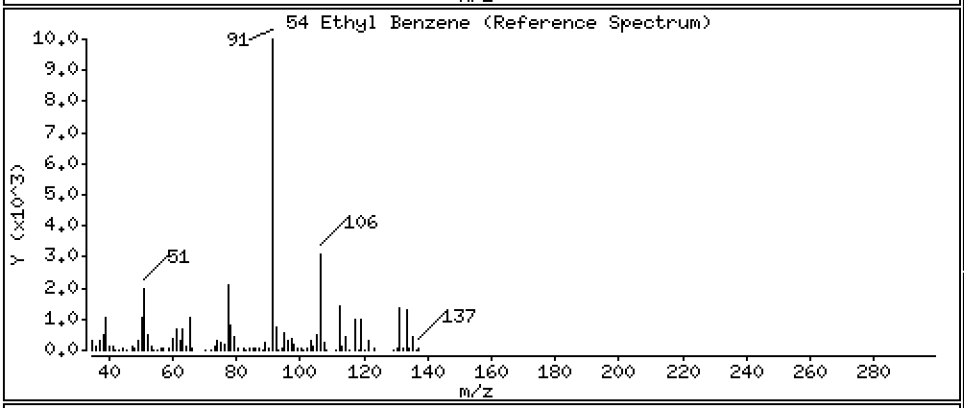
Column diameter: 0.18

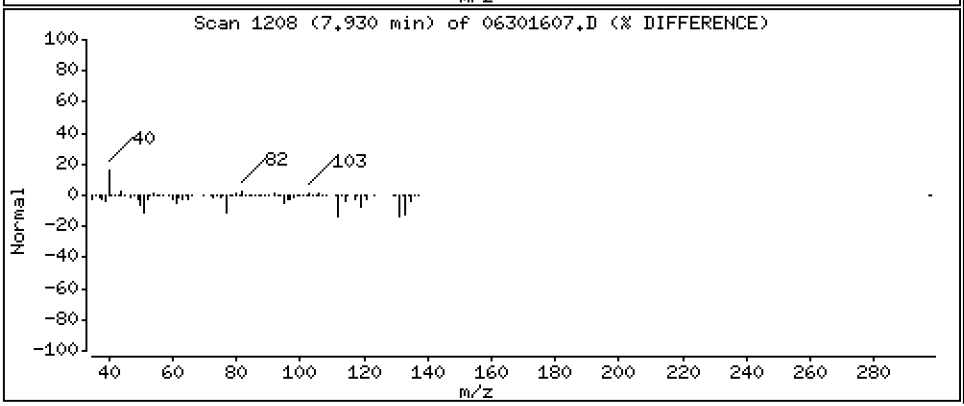
54 Ethyl Benzene

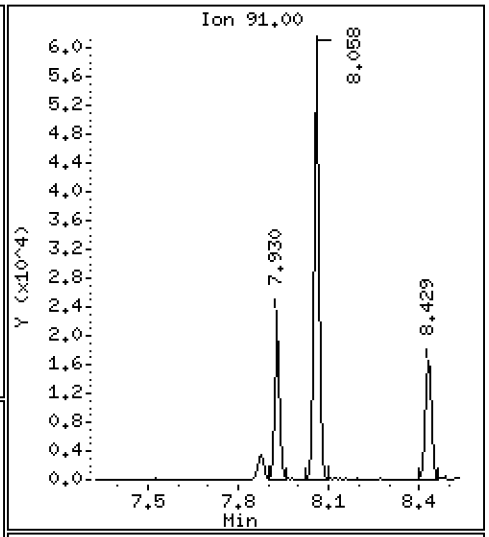
Concentration: 0.4077 ug/Kg

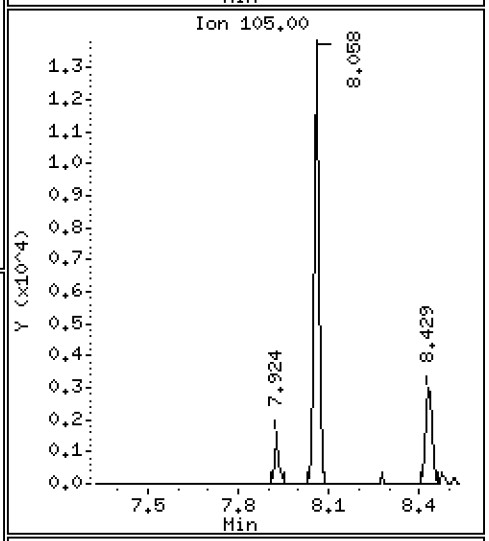


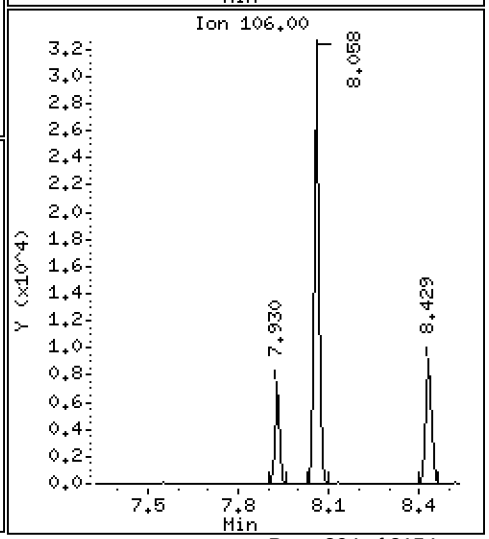












Data File: \\target\share\chem1\nt5.i\20160630.b\06301607.D

Date : 30-JUN-2016 14:29

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-20

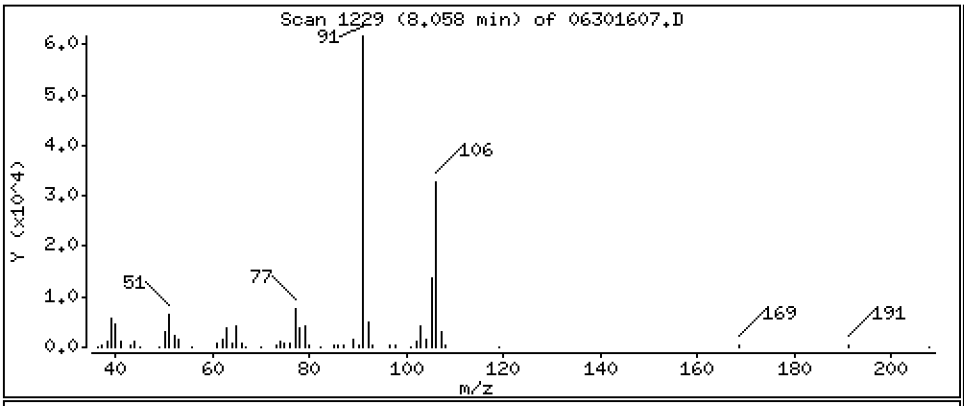
Operator: PB

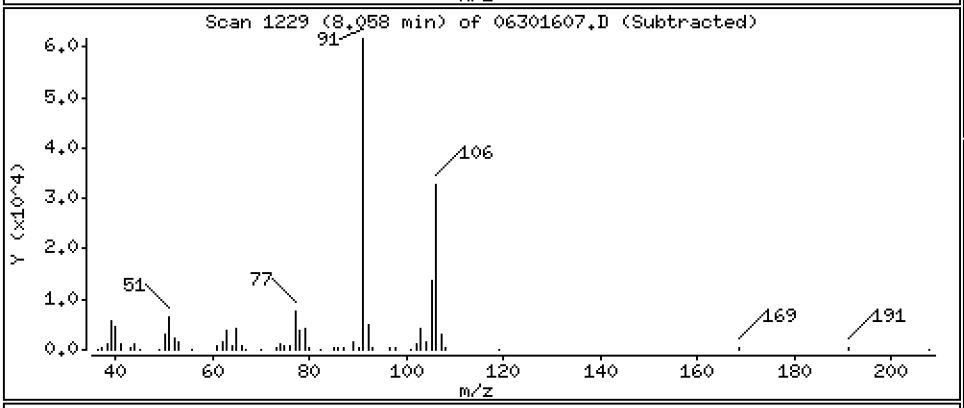
Column phase: RTXVMS

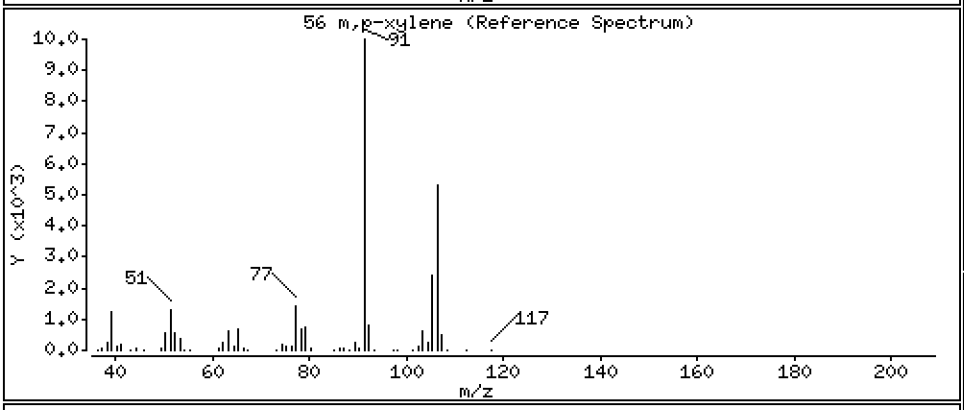
Column diameter: 0.18

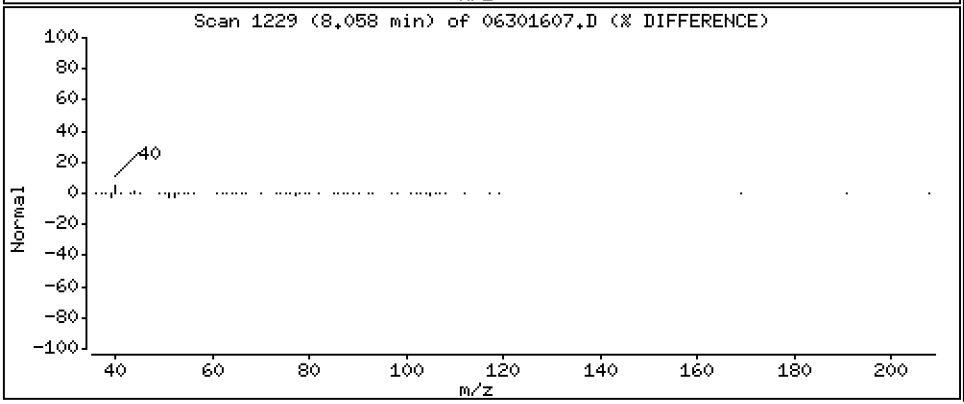
56 m,p-xylene

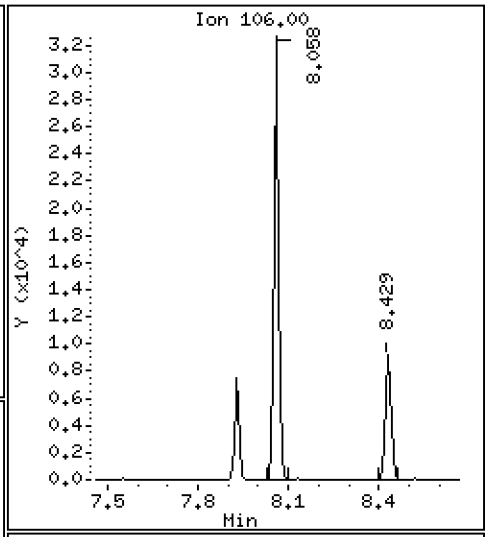
Concentration: 1.498 ug/Kg

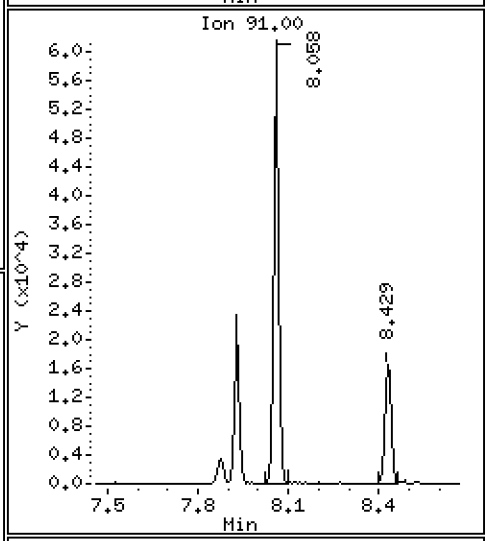


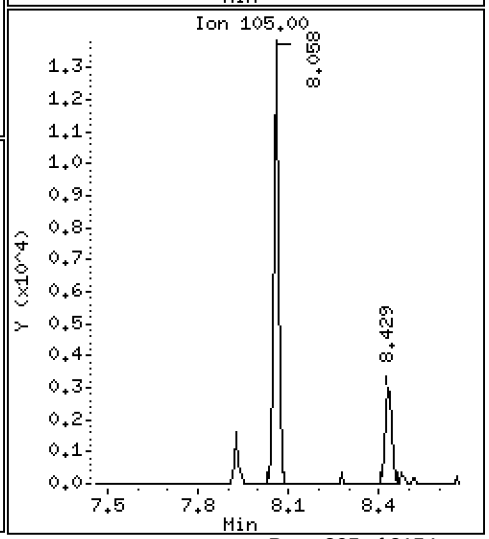












Data File: \\target\share\chem1\nt5.i\20160630.b\06301607.D

Date : 30-JUN-2016 14:29

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-20

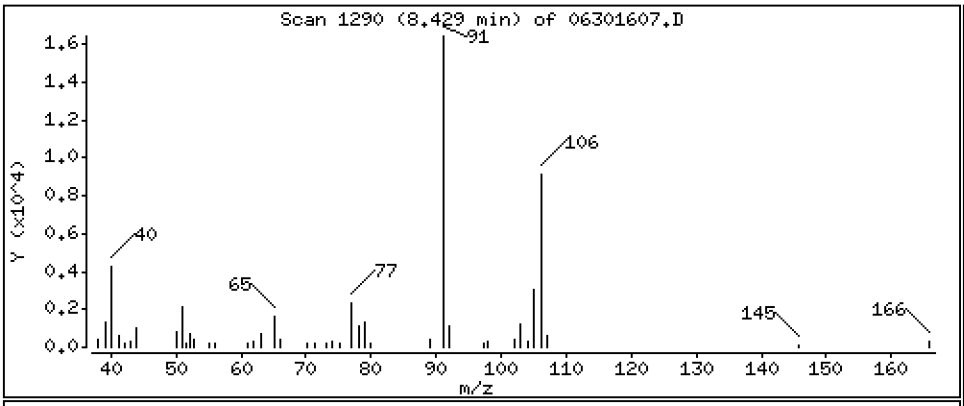
Operator: PB

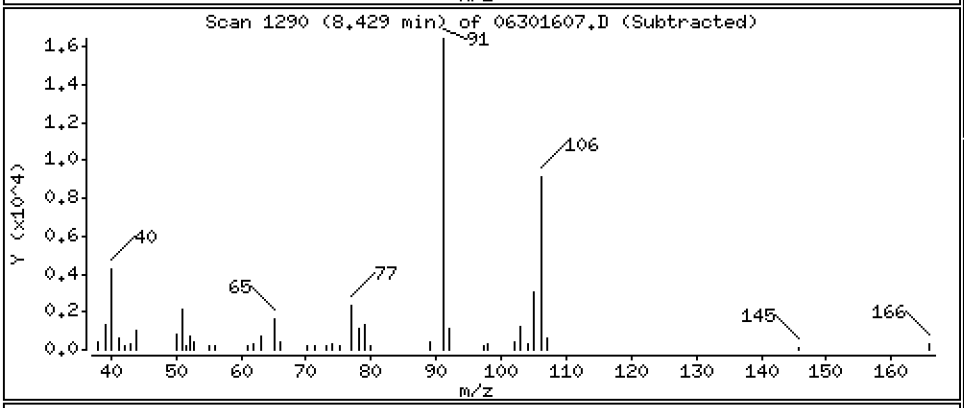
Column phase: RTXVMS

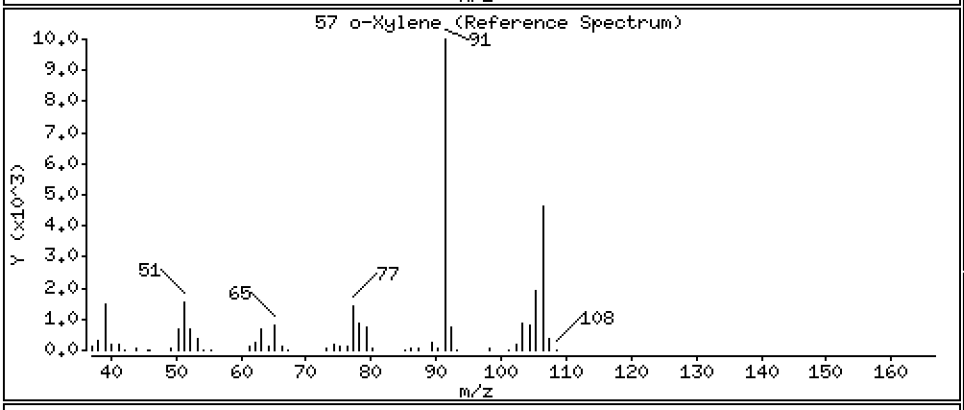
Column diameter: 0.18

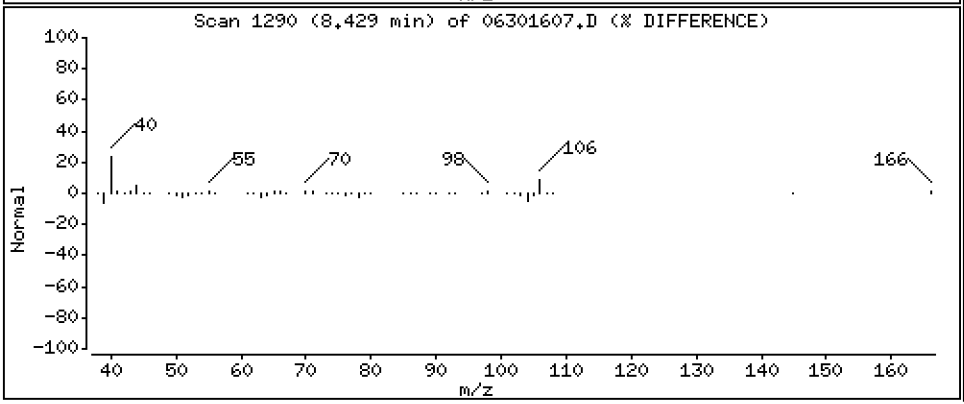
57 o-Xylene

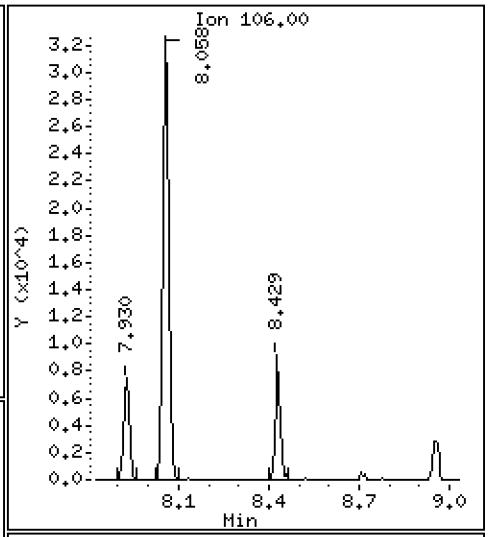
Concentration: 0.4197 ug/Kg

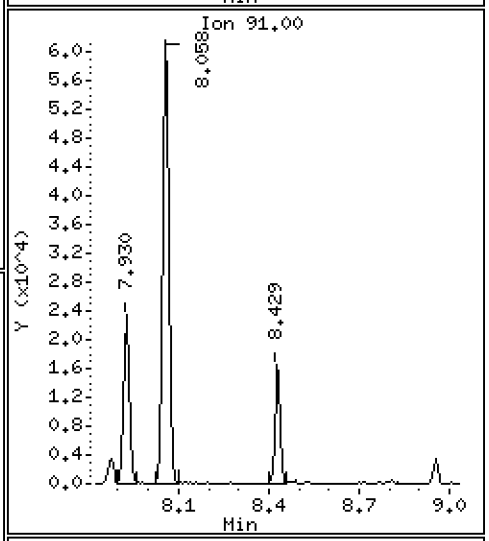


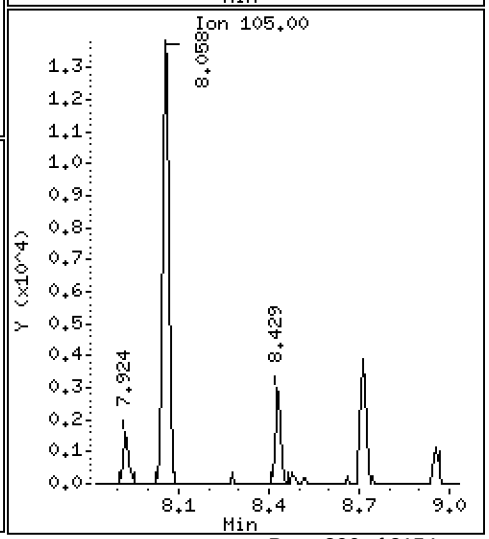












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301607.D
Lab Smp Id: 16F0096-20
Inj Date : 30-JUN-2016 14:29
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-20
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	Compound Not Detected.					
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.493	4.486	(0.908)	810266	47.6998	47.700
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.949	4.943	(1.000)	712704	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.001)	791807	46.6284	46.628
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2317548	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.561	6.555	(1.215)	2873817	48.3956	48.396
	43 Toluene	92	6.604	6.597	(1.223)	17548	0.43580	0.4358
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.875	7.875	(1.000)	2400892	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.930	7.930	(1.007)	29875	0.40770	0.4077
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.058	8.063	(1.023)	42619	1.49814	1.498
	57 o-Xylene	106	8.429	8.428	(1.070)	11792	0.41965	0.4197
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.952	8.952	(1.137)	1256079	48.6479	48.648
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.962	9.968	(1.000)	1227562	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.040)	1246156	50.4130	50.413
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301607.D
Lab Smp Id: 16F0096-20
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	712704	18.79
35 1,4-Difluorobenze	2041239	1020620	4082478	2317548	13.54
52 d5-Chlorobenzene	2118314	1059157	4236628	2400892	13.34
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1227562	16.35

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.95	0.13
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.12
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.96	-0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-20
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	47.700	95.40	70-130
$ 32 d4-1,2-Dichloroeth	50.000	46.628	93.26	80-149
$ 42 d8-Toluene	50.000	48.396	96.79	77-120
$ 62 4-Bromofluorobenze	50.000	48.648	97.30	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.413	100.83	80-120

REVIEW SUMMARY FOR FILE - 06301607.D

Lab ID: 16F0096-20
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 14:29

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-P-01-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-21	File ID:	06301608.D
Sampled:	06/29/16 13:00	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 14:52
Solids:	93.15	Preparation:	No Prep - Volatiles	Initial/Final:	5.17 g / 5 g
Batch:	BEG0004	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.04	U	0.24	1.04
74-83-9	Bromomethane	1	0.33	J	0.19	1.04
156-59-2	cis-1,2-Dichloroethene	1	1.04	U	0.25	1.04
71-43-2	Benzene	1	1.04	U	0.31	1.04
79-01-6	Trichloroethene	1	1.04	U	0.22	1.04
108-88-3	Toluene	1	3.67		0.16	1.04
127-18-4	Tetrachloroethene	1	1.04	U	0.27	1.04
100-41-4	Ethylbenzene	1	2.12		0.21	1.04
179601-23-1	m,p-Xylene	1	6.21		0.41	1.04
95-47-6	o-Xylene	1	1.19		0.23	1.04

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	48.1	96.2	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.6	101	80 - 120	
Toluene-d8	50.000	48.1	96.1	77 - 120	
4-Bromofluorobenzene	50.000	49.0	98.0	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301608.D

Date : 30-JUN-2016 14:52

Client ID:

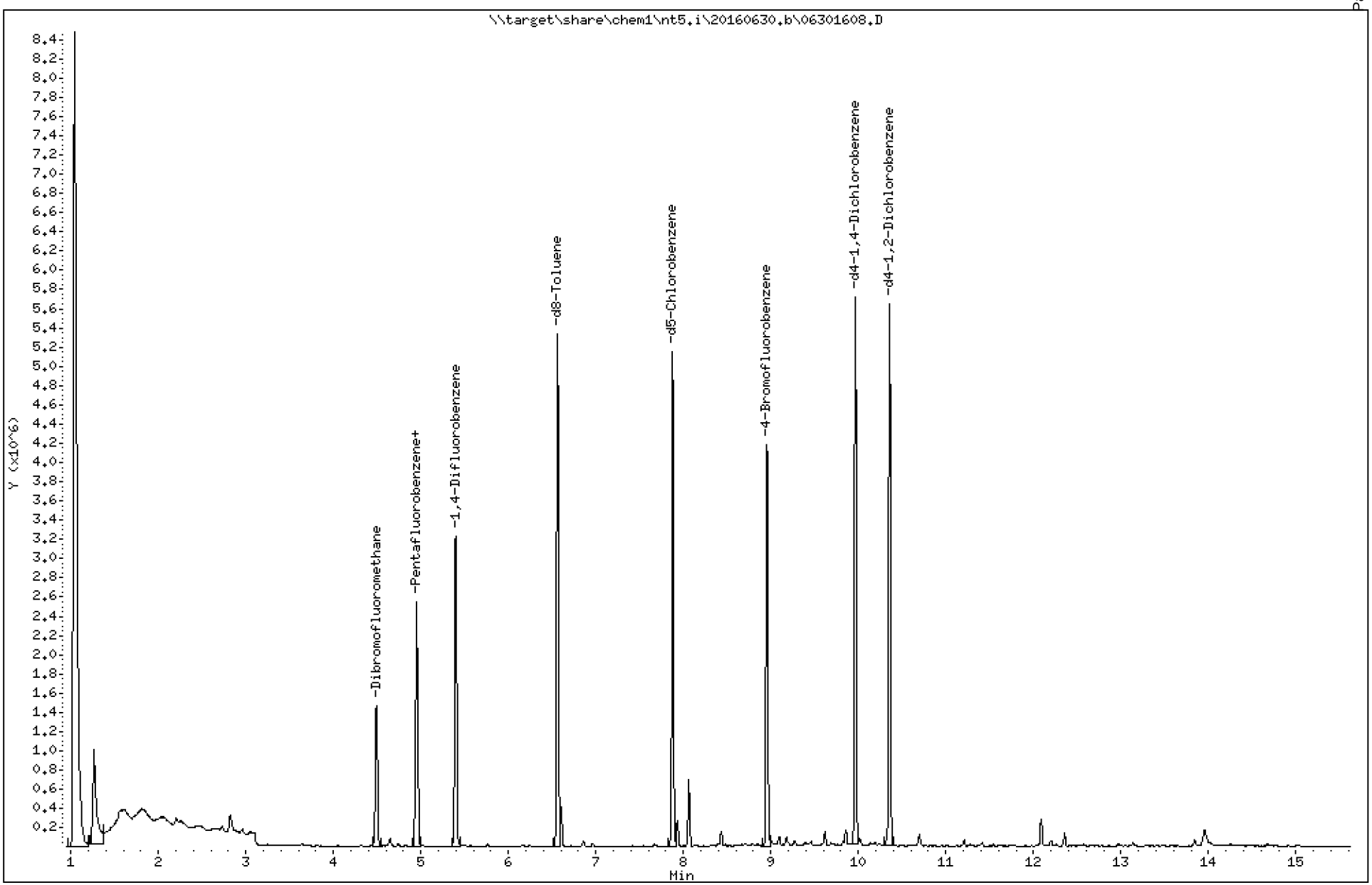
Instrument: nt5.i

Sample Info: 16F0096-21

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



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Date : 30-JUN-2016 14:52

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-21

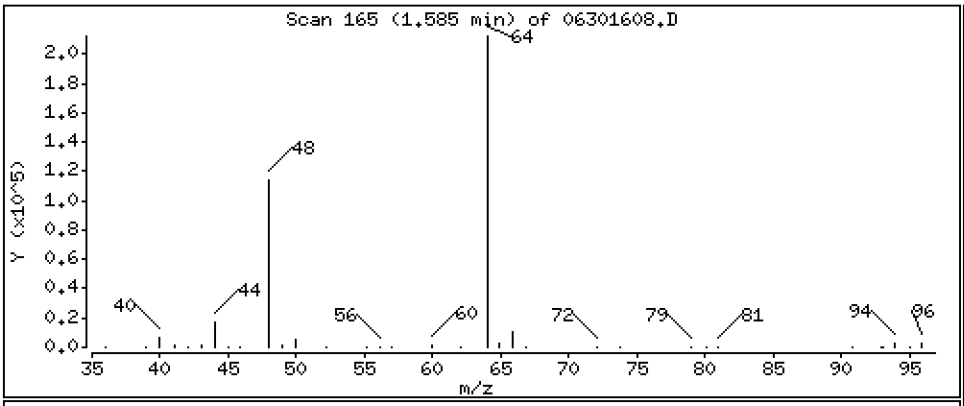
Operator: PB

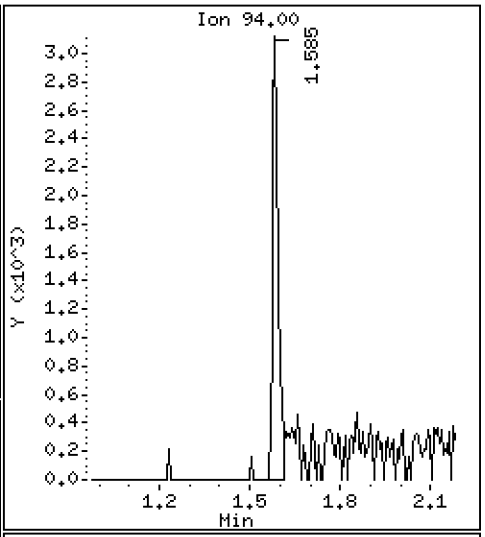
Column phase: RTXVMS

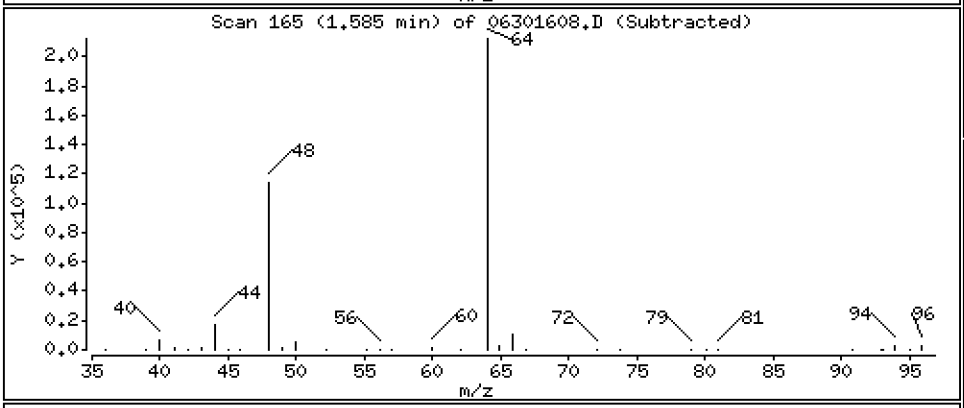
Column diameter: 0.18

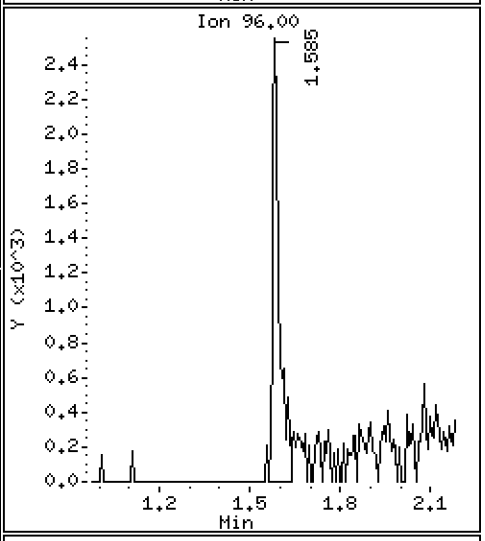
4 Bromomethane

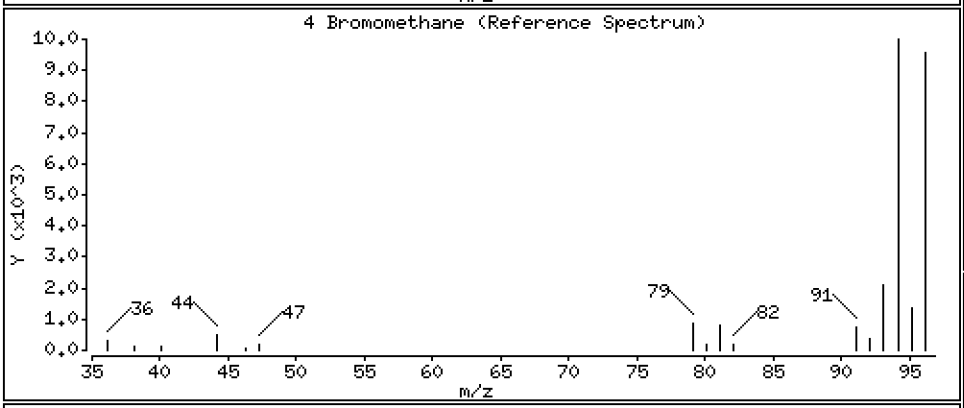
Concentration: 0.3144 ug/Kg

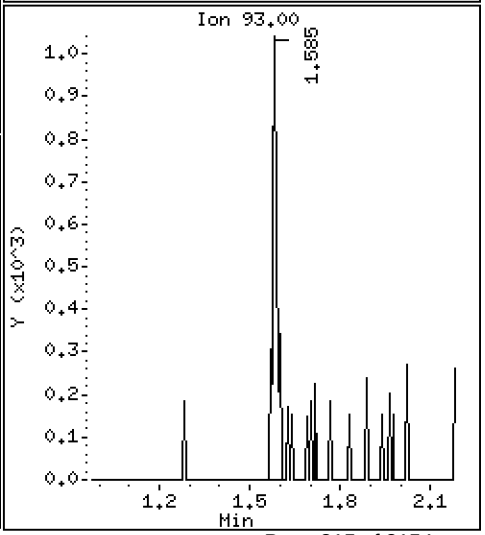


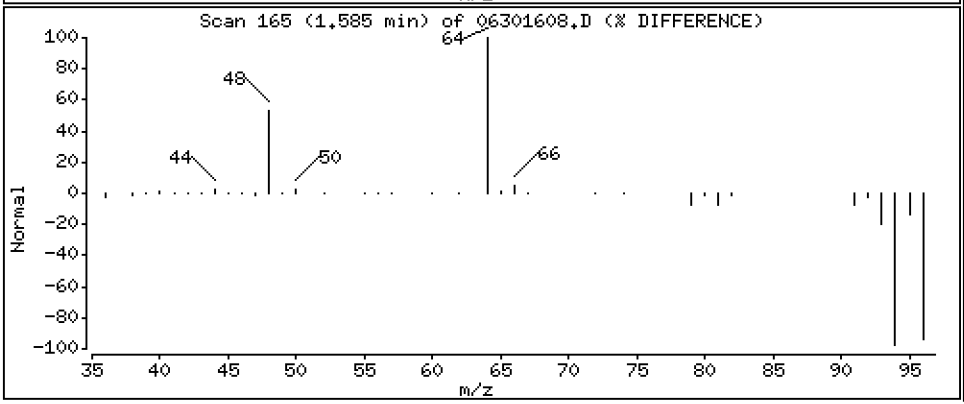












Data File: \\target\share\chem1\nt5.i\20160630.b\06301608.D

Date : 30-JUN-2016 14:52

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-21

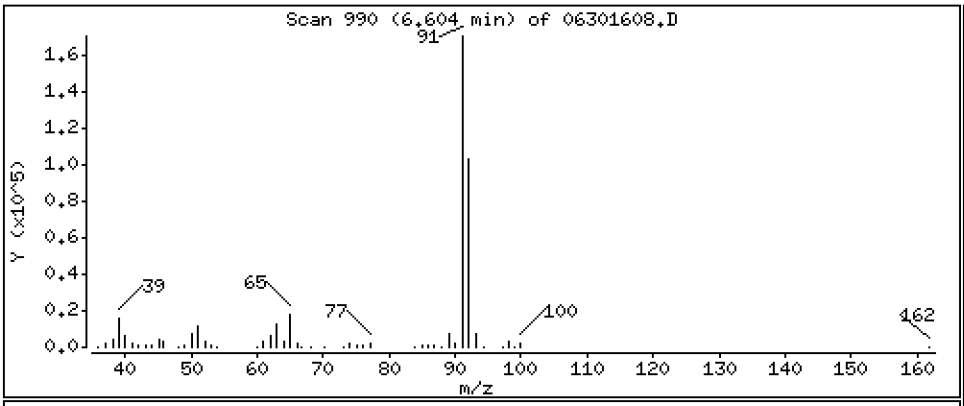
Operator: PB

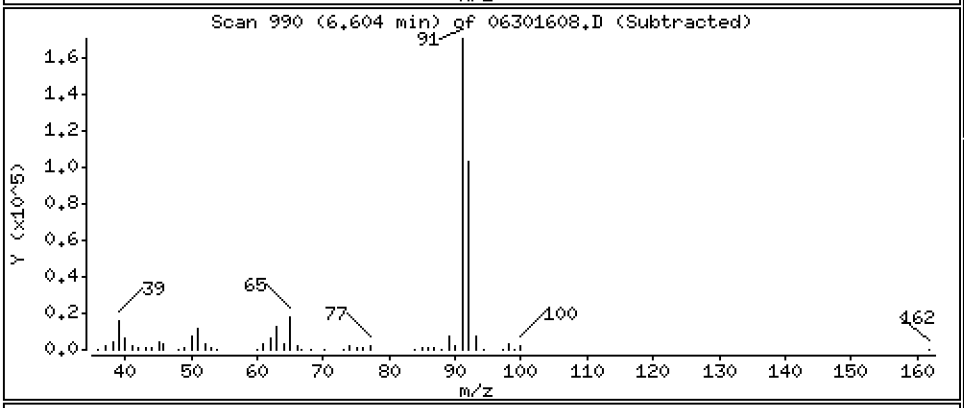
Column phase: RTXVMS

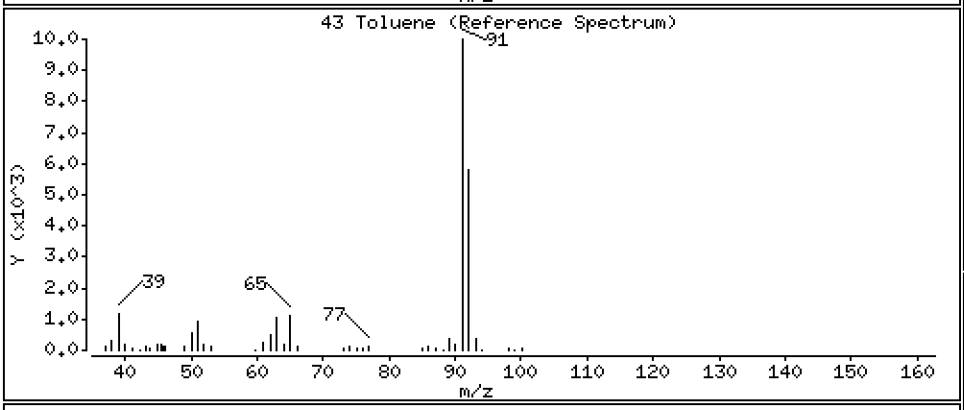
Column diameter: 0.18

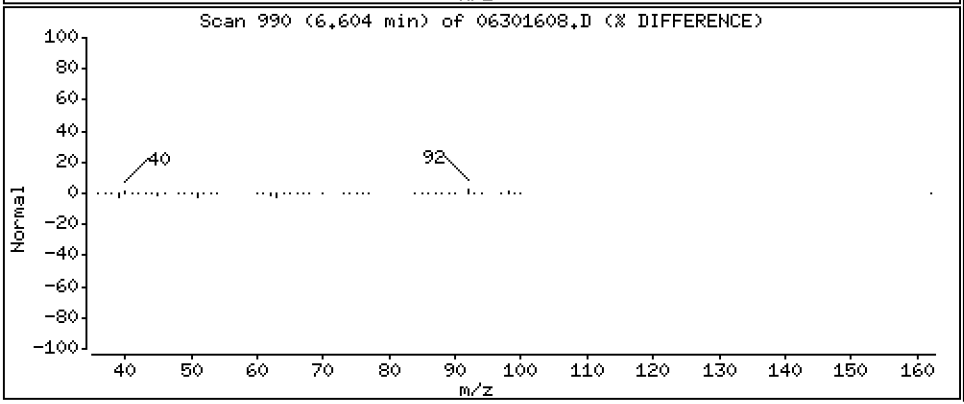
43 Toluene

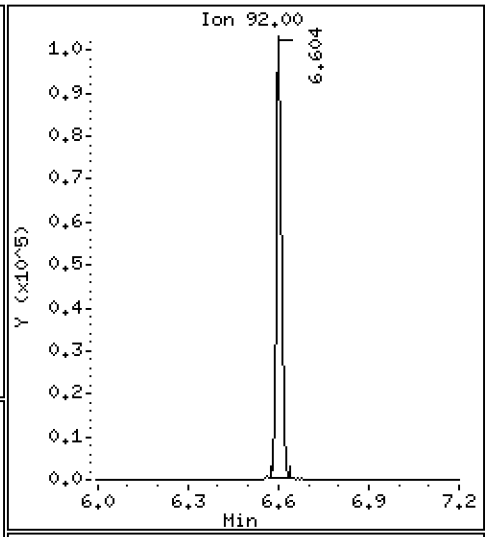
Concentration: 3.532 ug/Kg

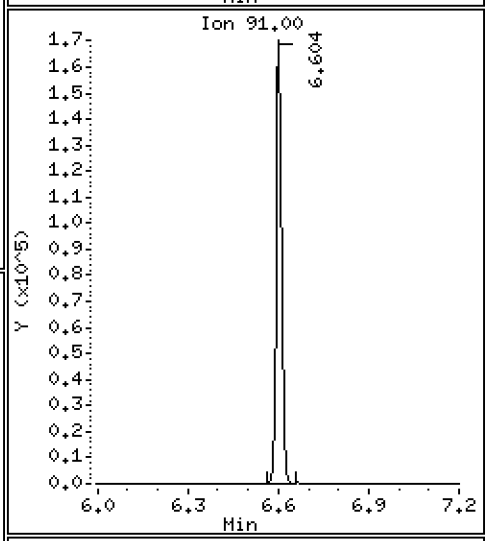


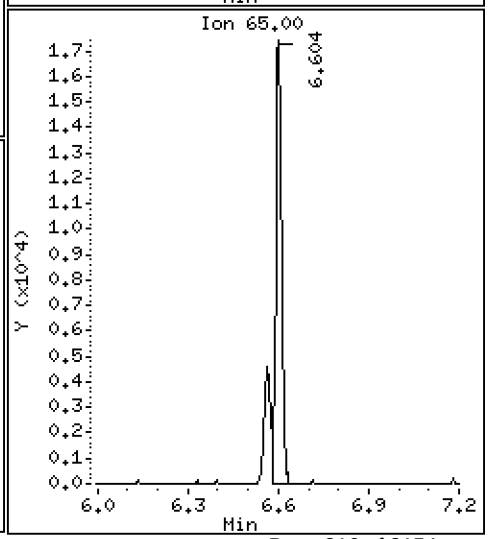












Data File: \\target\share\chem1\nt5.i\20160630.b\06301608.D

Date : 30-JUN-2016 14:52

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-21

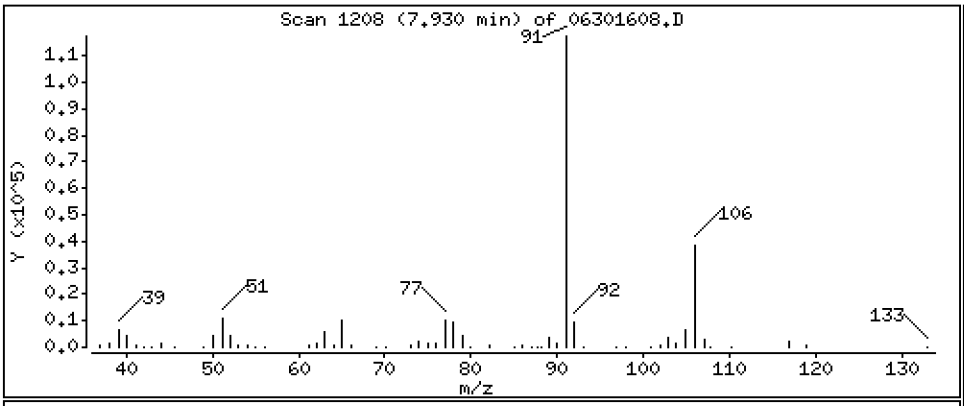
Operator: PB

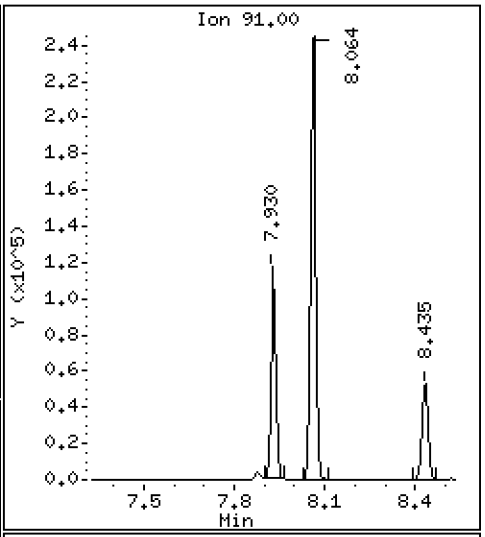
Column phase: RTXVMS

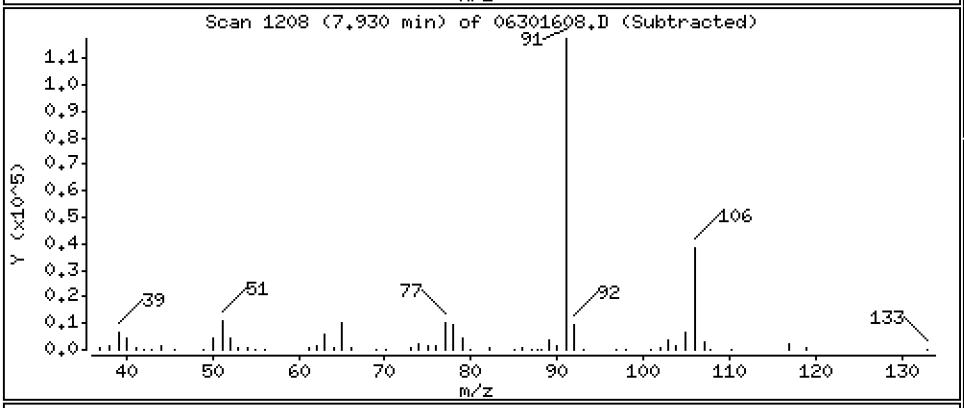
Column diameter: 0.18

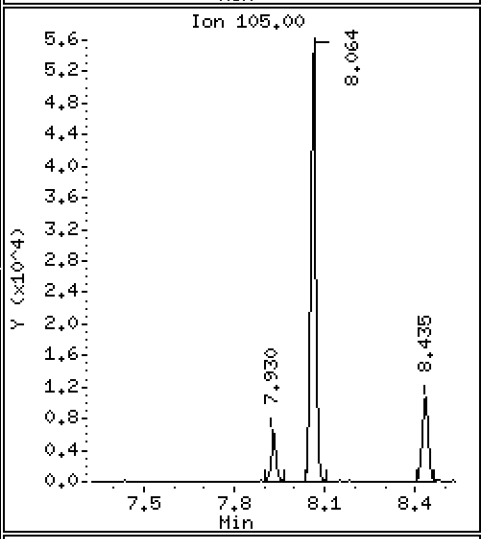
54 Ethyl Benzene

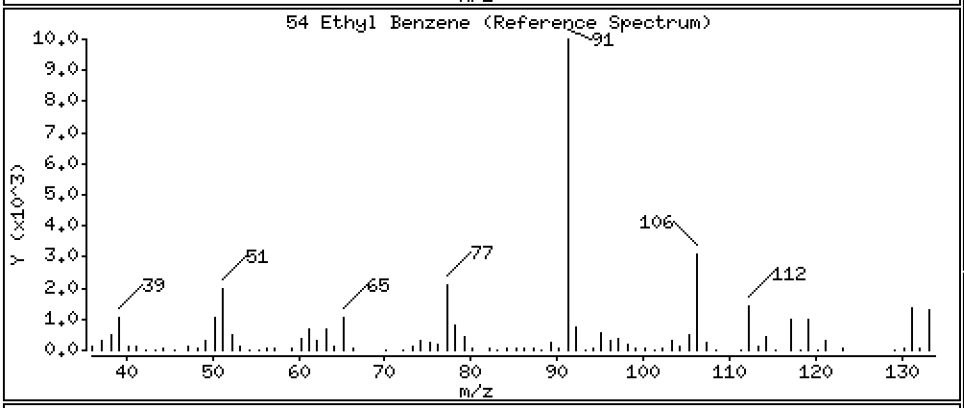
Concentration: 2.042 ug/Kg

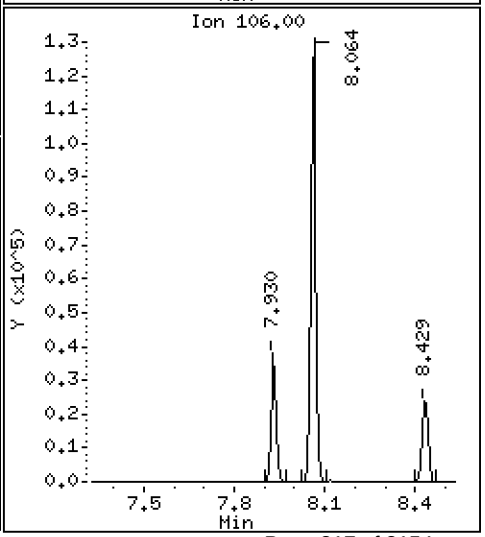


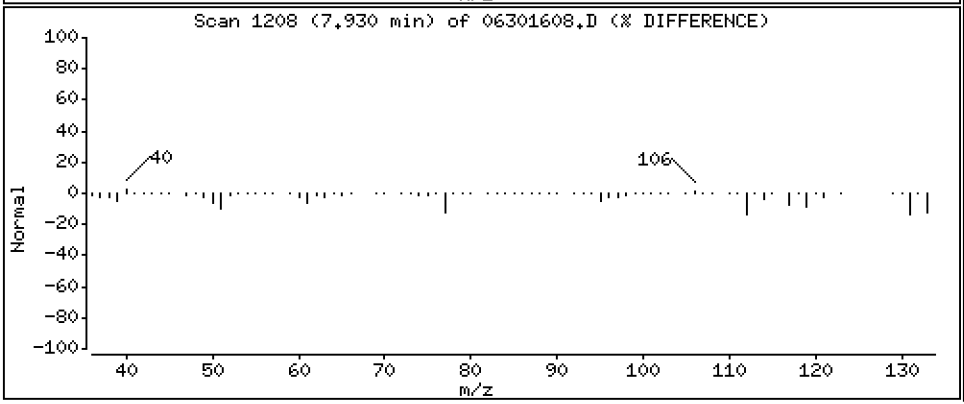












Data File: \\target\share\chem1\nt5.i\20160630.b\06301608.D

Date : 30-JUN-2016 14:52

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-21

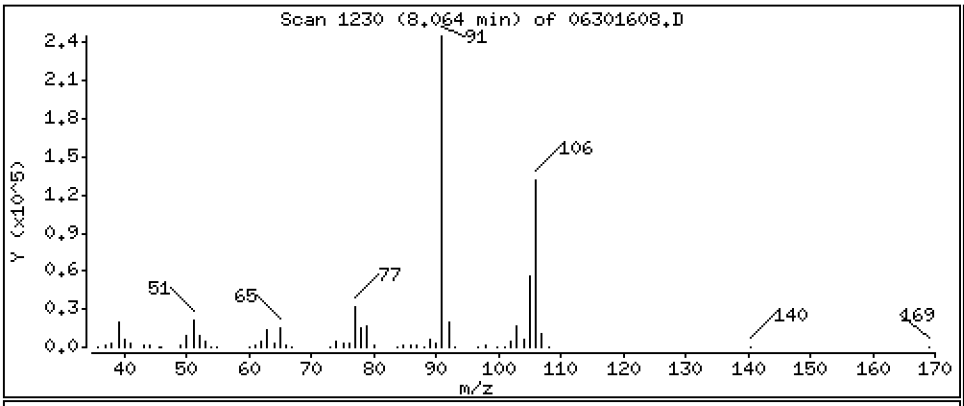
Operator: PB

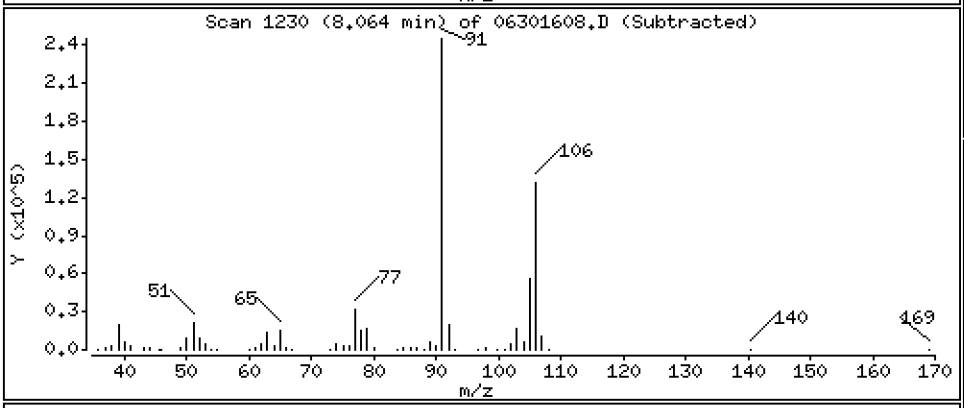
Column phase: RTXVMS

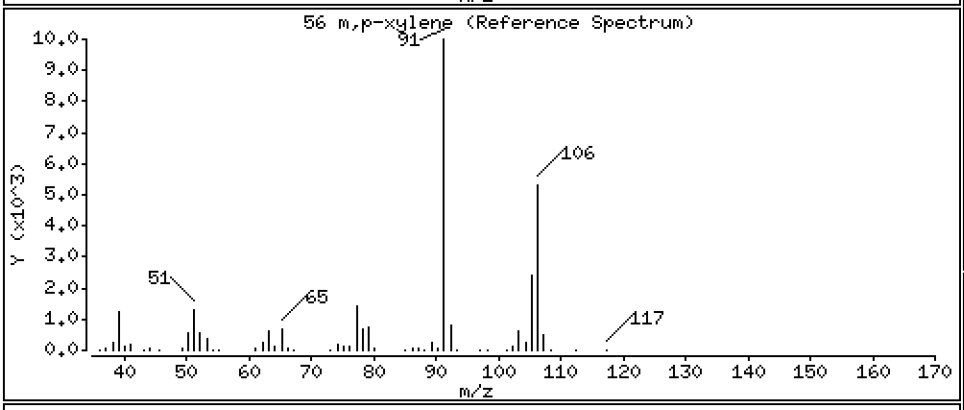
Column diameter: 0.18

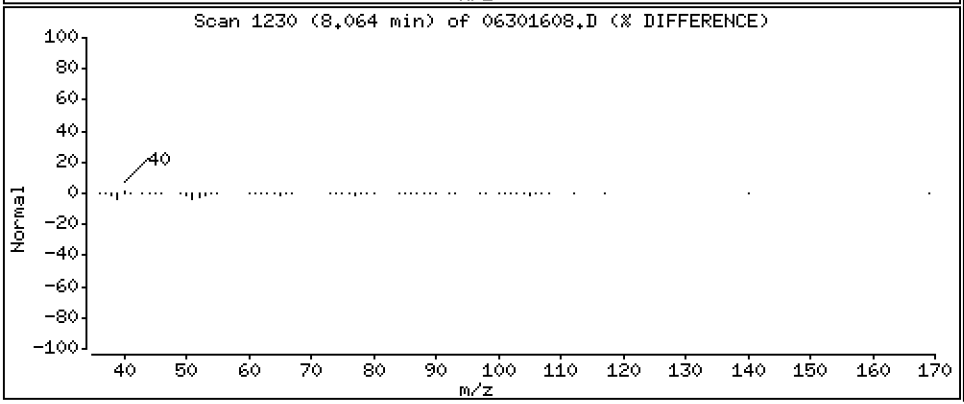
56 m,p-xylene

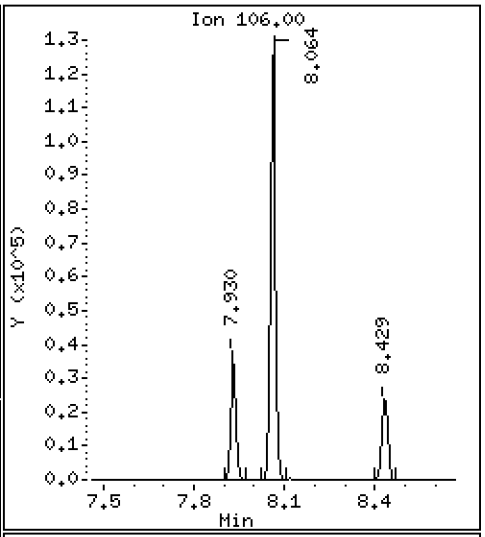
Concentration: 5.983 ug/Kg

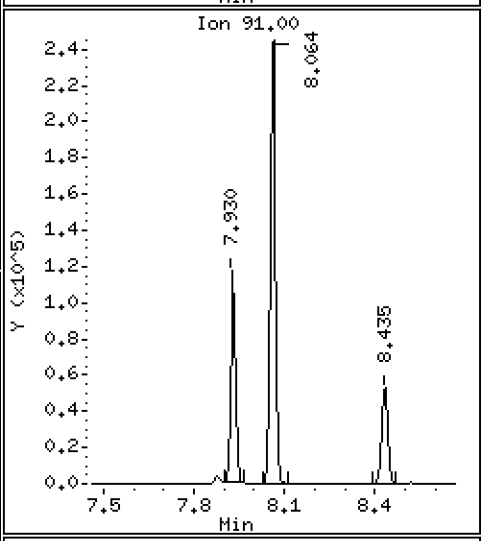


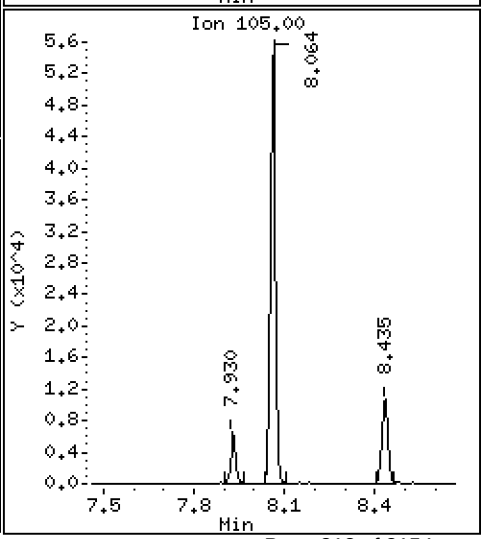












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Date : 30-JUN-2016 14:52

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-21

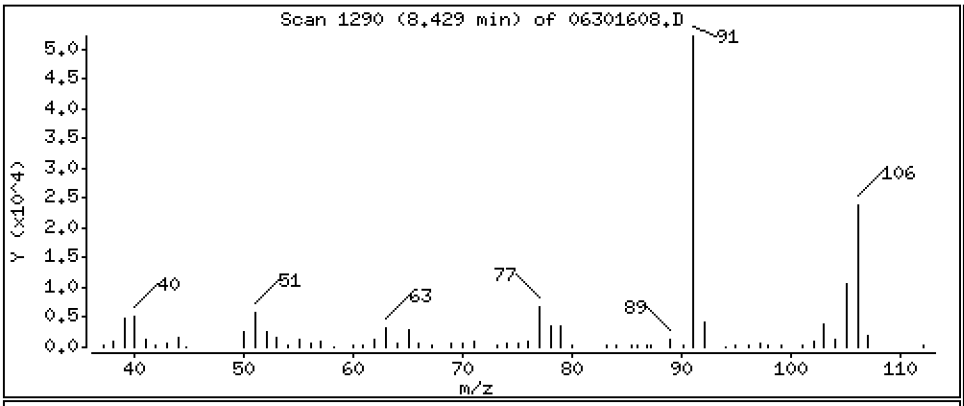
Operator: PB

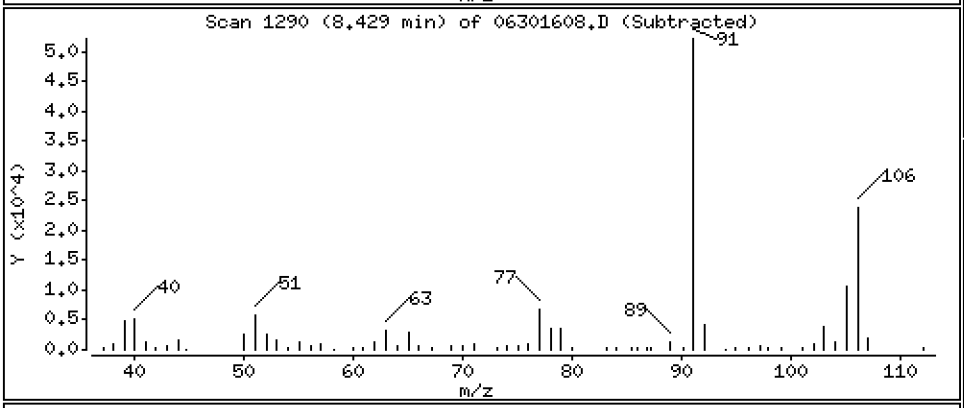
Column phase: RTXVMS

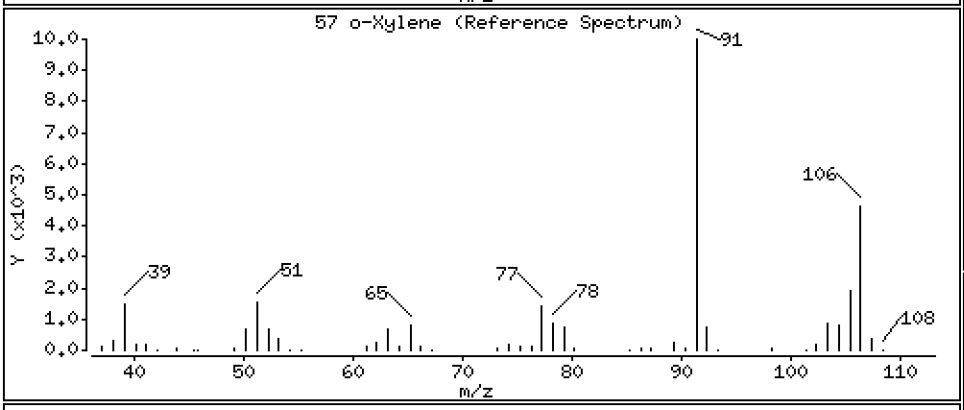
Column diameter: 0.18

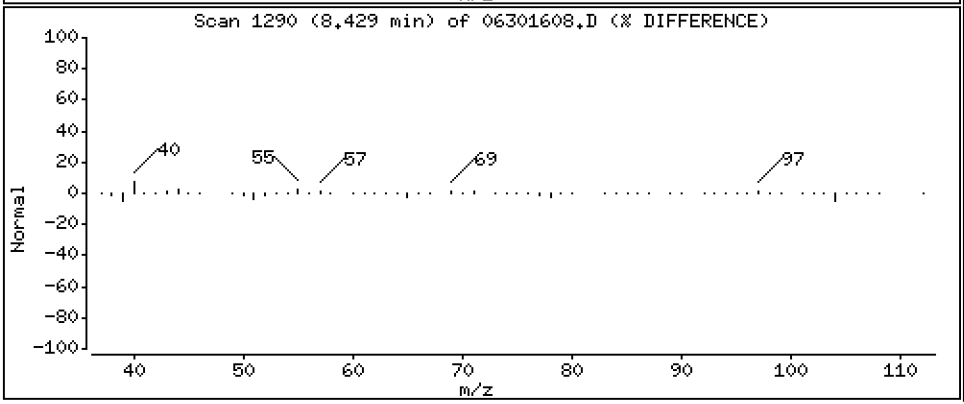
57 o-Xylene

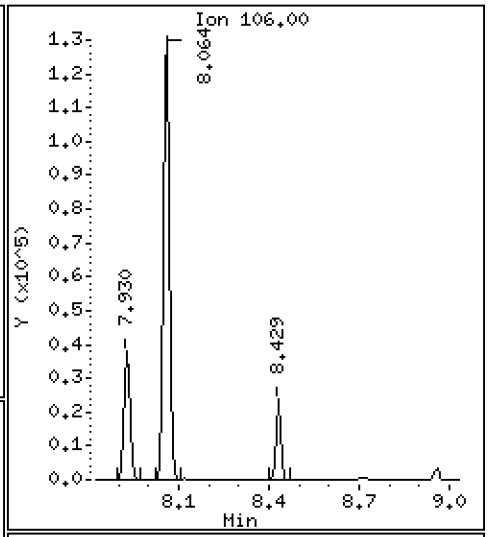
Concentration: 1.150 ug/Kg

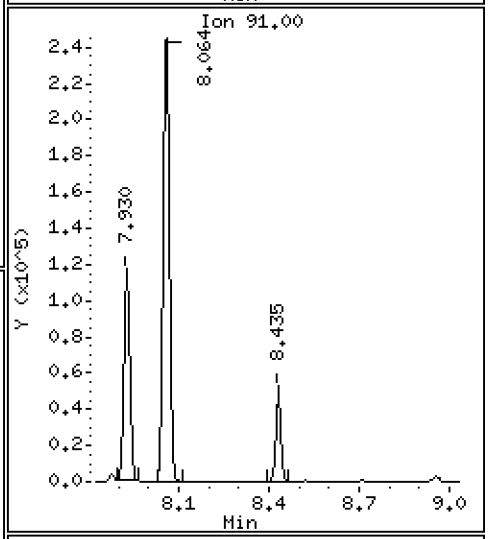


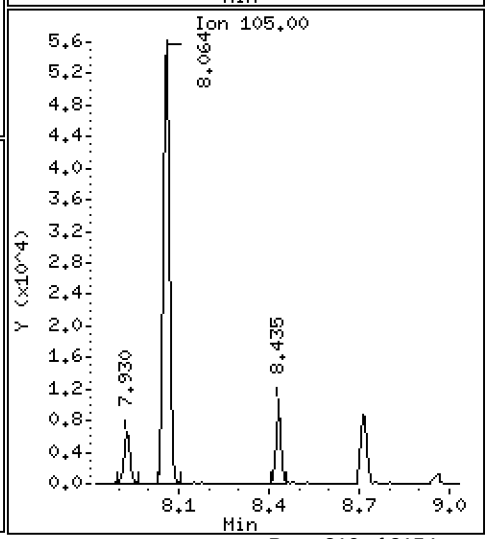












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301608.D
Lab Smp Id: 16F0096-21
Inj Date : 30-JUN-2016 14:52
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-21
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	1.584	1.578	(0.320)	4498	0.31437	0.3144
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	Compound Not Detected.					
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.492	4.486	(0.908)	818796	48.9690	48.969
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.949	4.943	(1.000)	701540	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.001)	803663	48.0797	48.080
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2292101	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.561	6.555	(1.215)	2823166	48.0704	48.070
	43 Toluene	92	6.603	6.597	(1.223)	140640	3.53154	3.532
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.875	7.875	(1.000)	2436838	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.930	7.930	(1.007)	151874	2.04201	2.042
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.063	8.063	(1.024)	172742	5.98266	5.983
	57 o-Xylene	106	8.428	8.428	(1.070)	32804	1.15021	1.150
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.952	8.952	(1.137)	1284129	49.0006	49.001
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1267726	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1291099	50.5764	50.576
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301608.D
Lab Smp Id: 16F0096-21
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	701540	16.93
35 1,4-Difluorobenze	2041239	1020620	4082478	2292101	12.29
52 d5-Chlorobenzene	2118314	1059157	4236628	2436838	15.04
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1267726	20.16

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.95	0.12
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.11
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-21
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	48.969	97.94	70-130
$ 32 d4-1,2-Dichloroeth	50.000	48.080	96.16	80-149
$ 42 d8-Toluene	50.000	48.070	96.14	77-120
$ 62 4-Bromofluorobenze	50.000	49.001	98.00	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.576	101.15	80-120

REVIEW SUMMARY FOR FILE - 06301608.D

Lab ID: 16F0096-21
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 14:52

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-P-02-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-22	File ID:	06301609.D
Sampled:	06/29/16 13:10	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 15:14
Solids:	92.91	Preparation:	No Prep - Volatiles	Initial/Final:	5.49 g / 5 g
Batch:	BEG0004	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	0.98	U	0.23	0.98
74-83-9	Bromomethane	1	0.26	J	0.18	0.98
156-59-2	cis-1,2-Dichloroethene	1	83.2		0.24	0.98
71-43-2	Benzene	1	0.60	J	0.29	0.98
79-01-6	Trichloroethene	1	28.8		0.21	0.98
108-88-3	Toluene	1	137		0.15	0.98
127-18-4	Tetrachloroethene	1	0.98	U	0.25	0.98
100-41-4	Ethylbenzene	1	5.53		0.20	0.98
179601-23-1	m,p-Xylene	1	22.1		0.38	0.98
95-47-6	o-Xylene	1	9.31		0.22	0.98

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	47.6	95.3	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.1	100	80 - 120	
Toluene-d8	50.000	48.6	97.1	77 - 120	
4-Bromofluorobenzene	50.000	48.7	97.5	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301609.D

Date : 30-JUN-2016 15:14

Client ID:

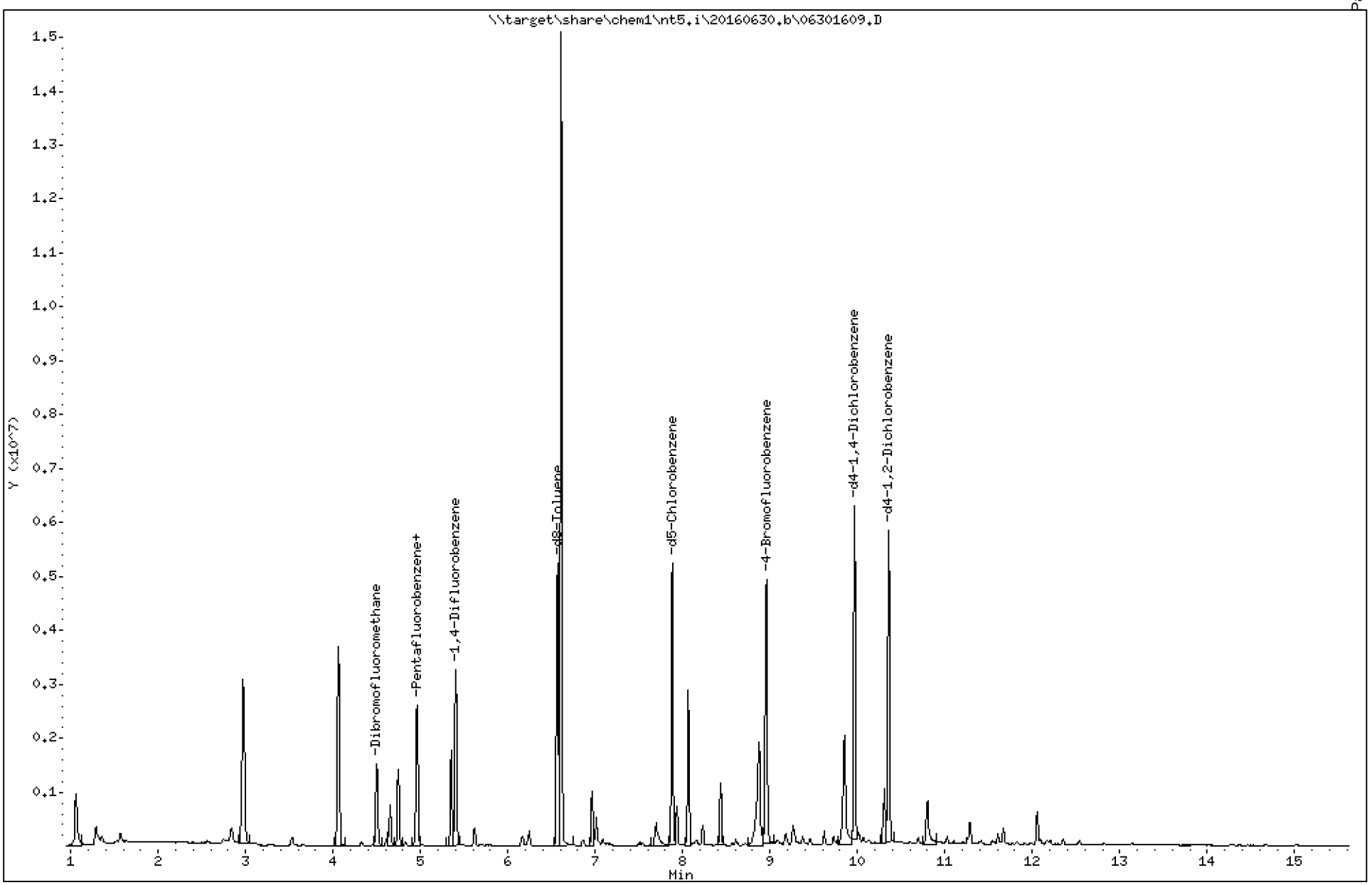
Instrument: nt5.i

Sample Info: 16F0096-22

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\06301609.D

Date : 30-JUN-2016 15:14

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-22

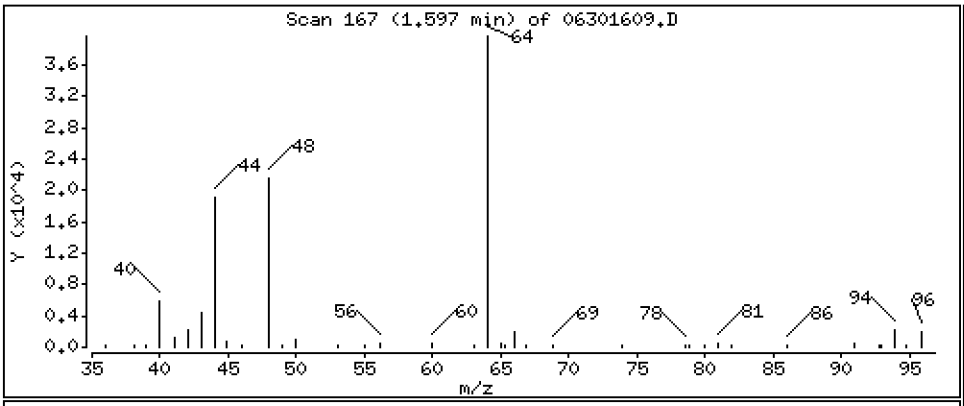
Operator: PB

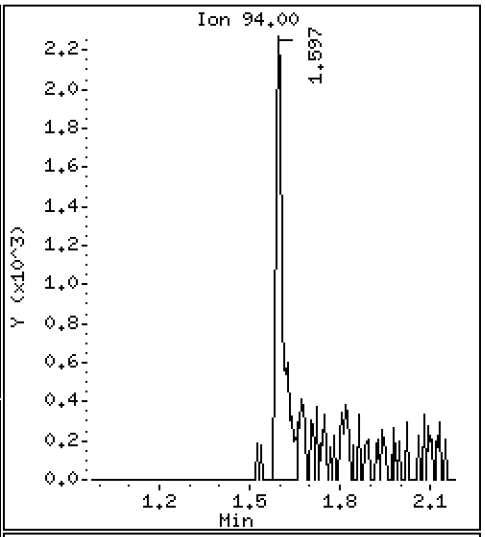
Column phase: RTXVMS

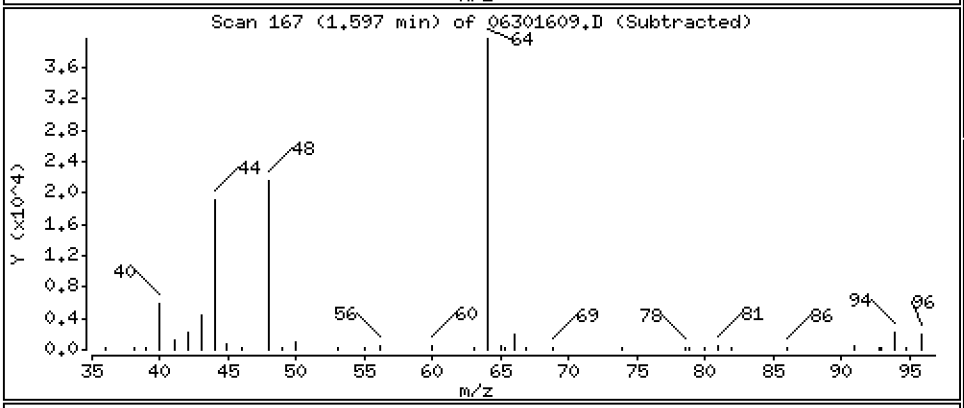
Column diameter: 0.18

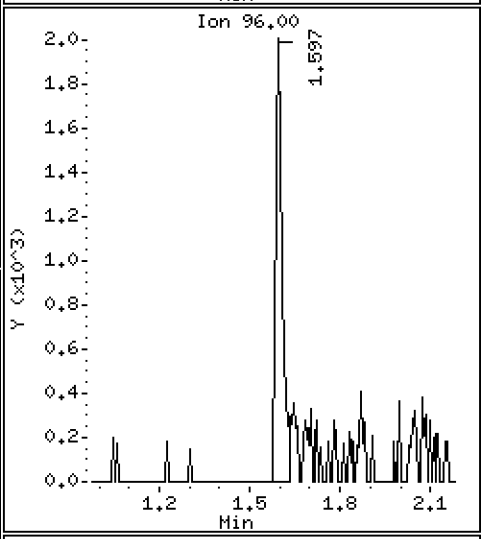
4 Bromomethane

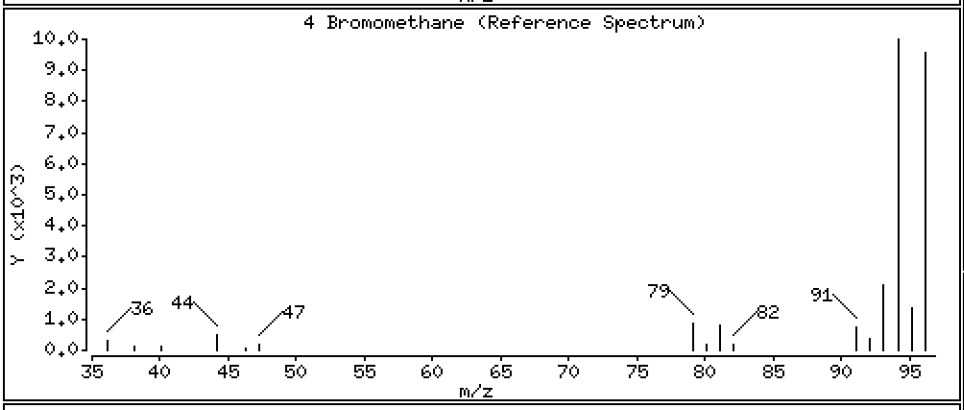
Concentration: 0.2649 ug/Kg

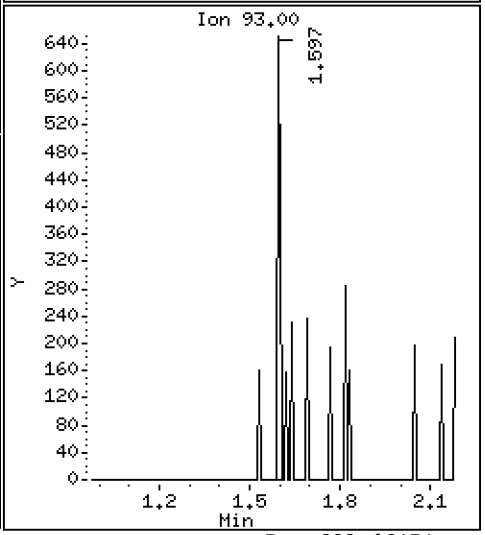


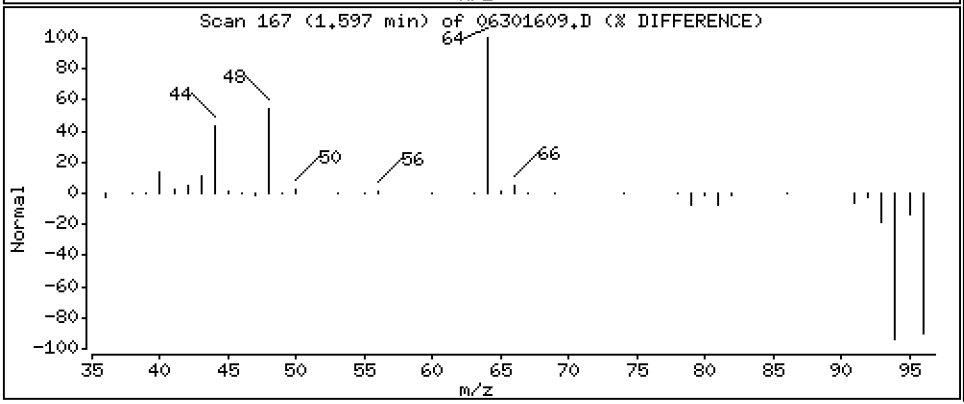












Data File: \\target\share\chem1\nt5.i\20160630.b\06301609.D

Date : 30-JUN-2016 15:14

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-22

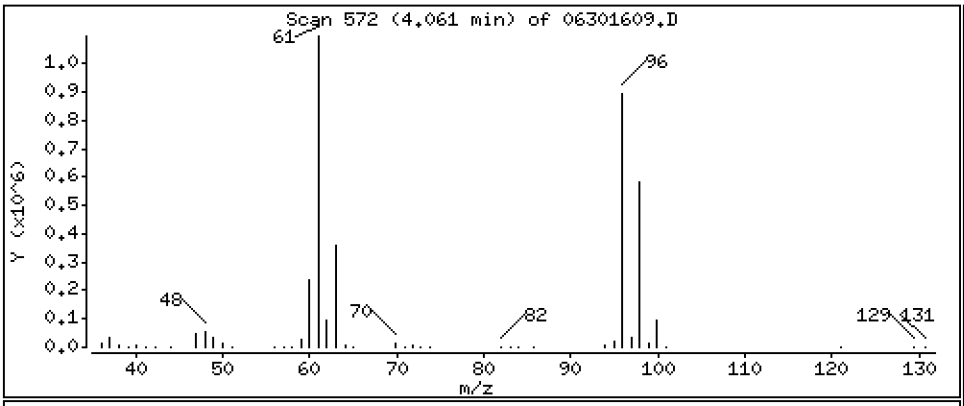
Operator: PB

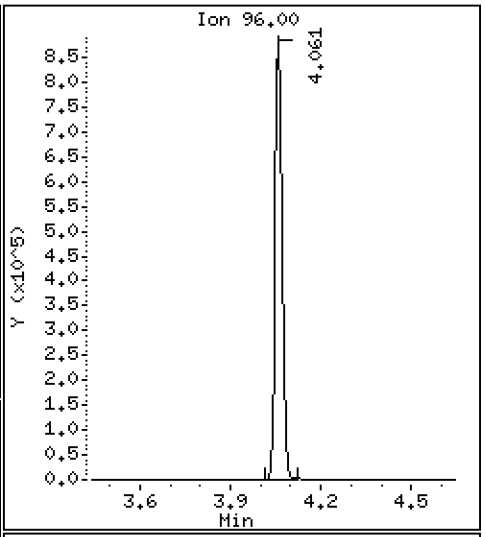
Column phase: RTXVMS

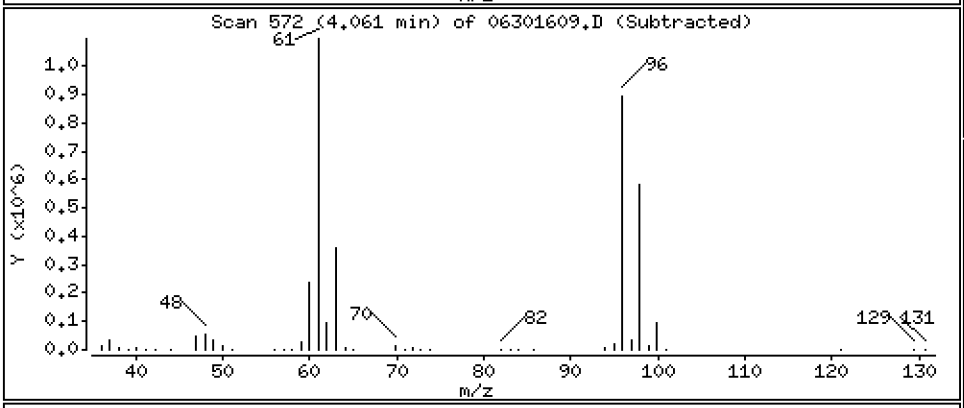
Column diameter: 0.18

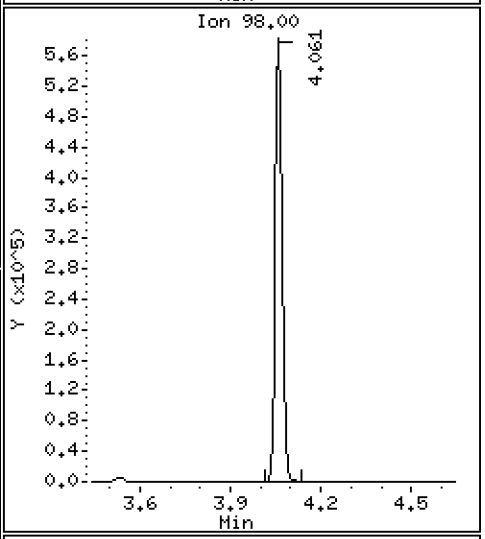
20 Cis-1,2-Dichloroethene

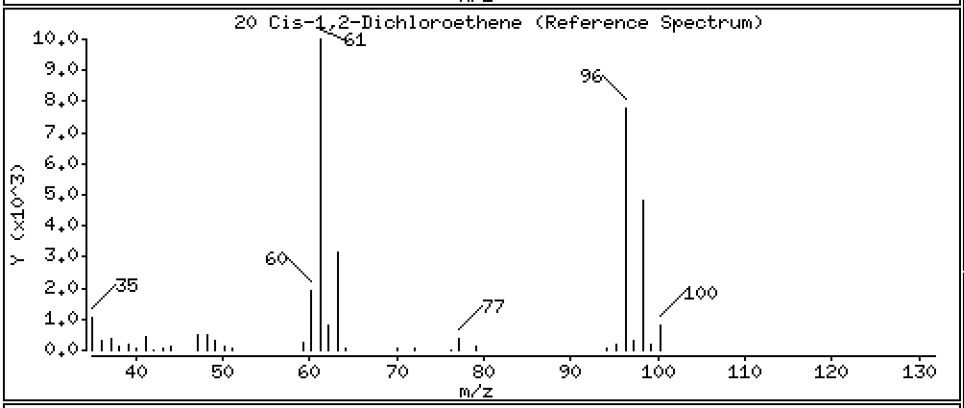
Concentration: 84.894 ug/Kg

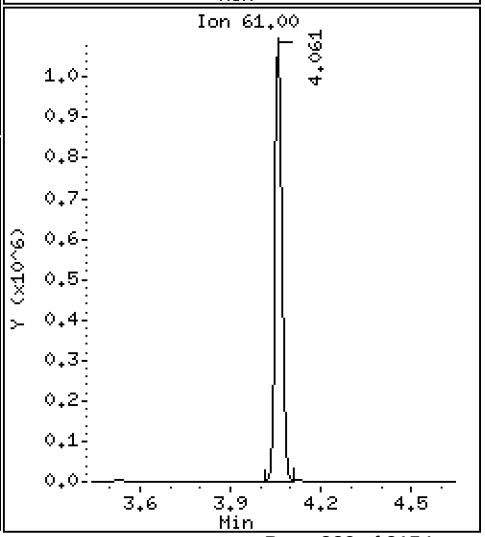


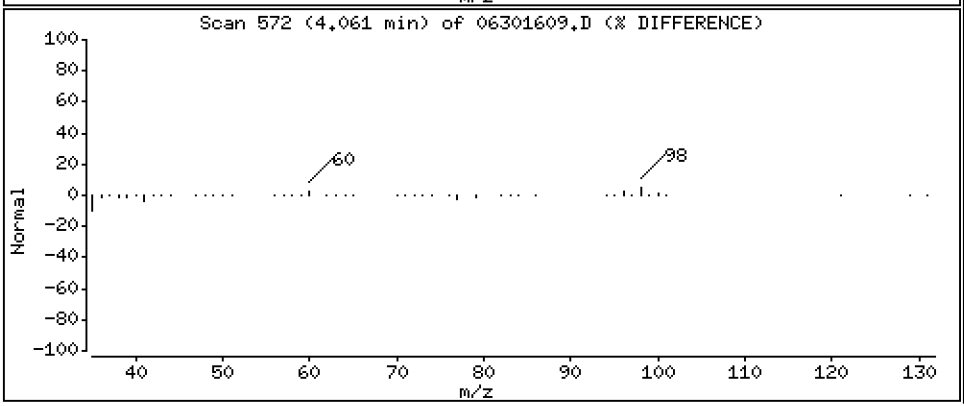












Data File: \\target\share\chem1\nt5.i\20160630.b\06301609.D

Date : 30-JUN-2016 15:14

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-22

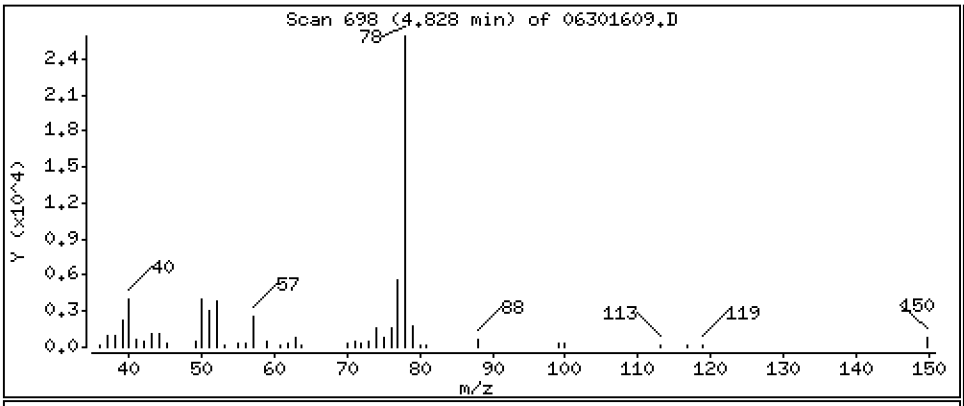
Operator: PB

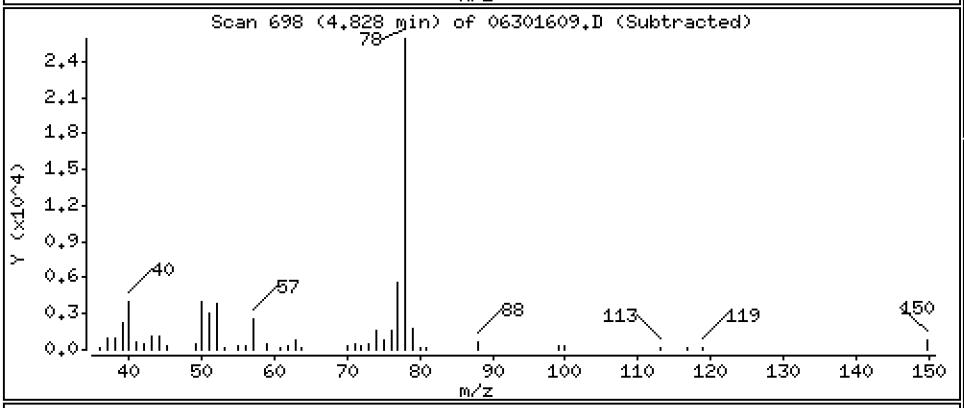
Column phase: RTXVMS

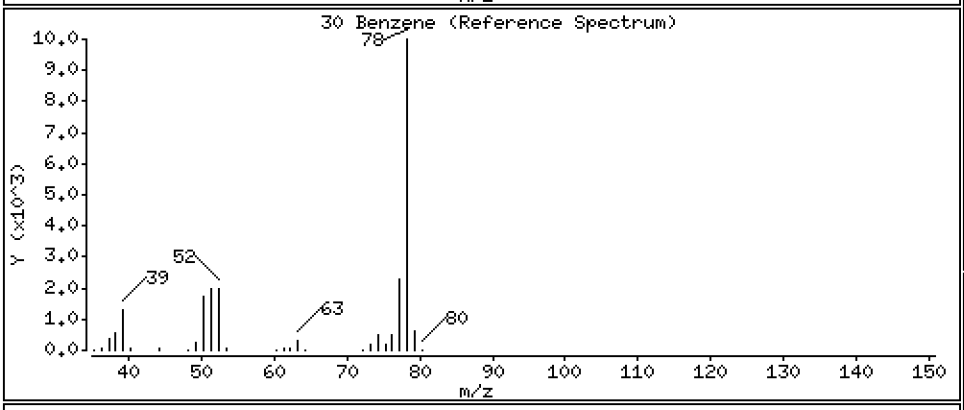
Column diameter: 0.18

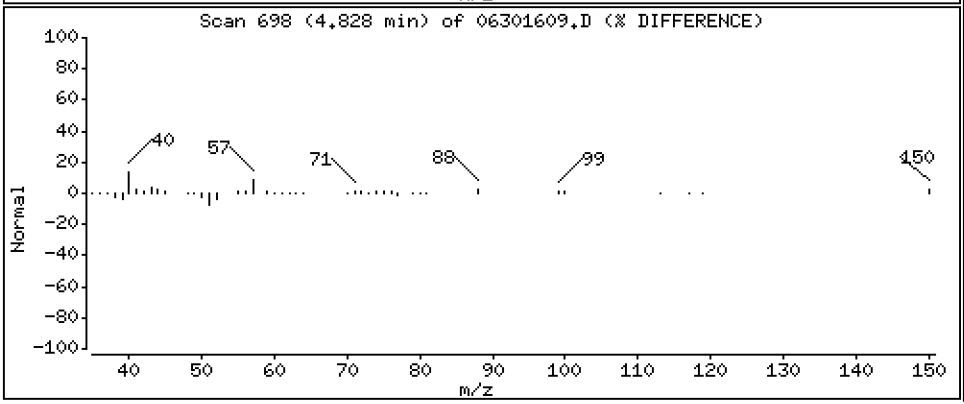
30 Benzene

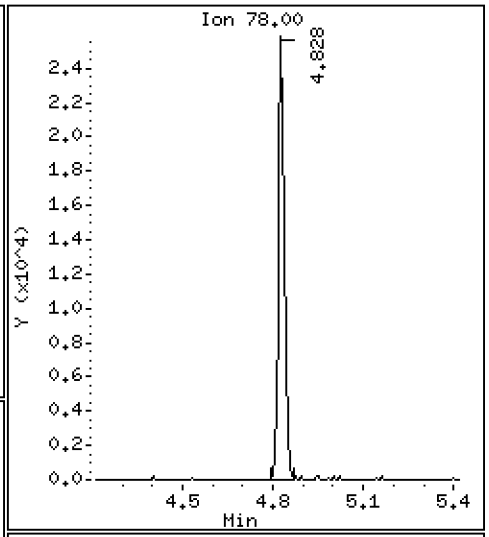
Concentration: 0.6152 ug/Kg

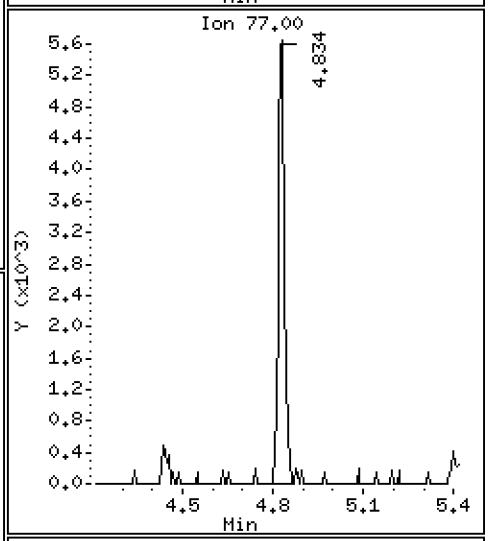


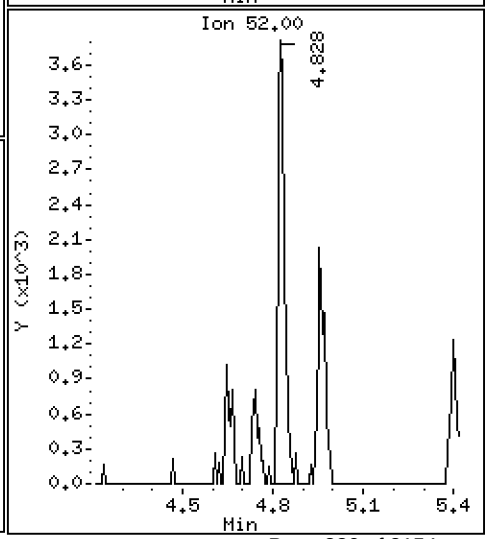












Data File: \\target\share\chem1\nt5.i\20160630.b\06301609.D

Date : 30-JUN-2016 15:14

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-22

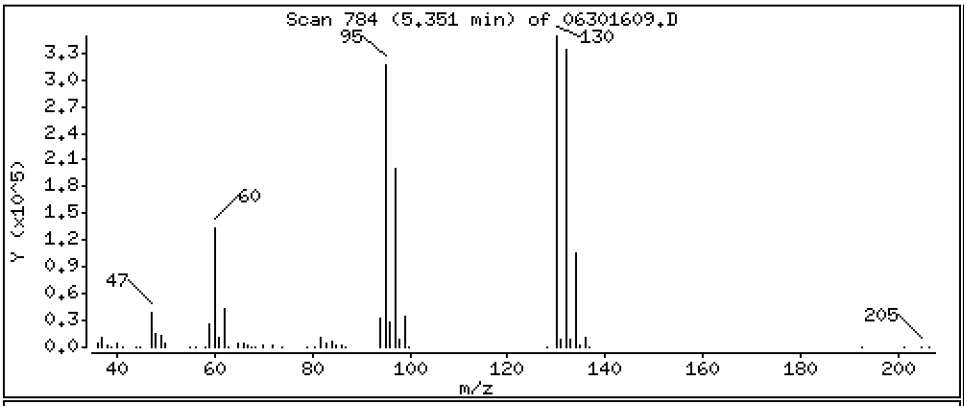
Operator: PB

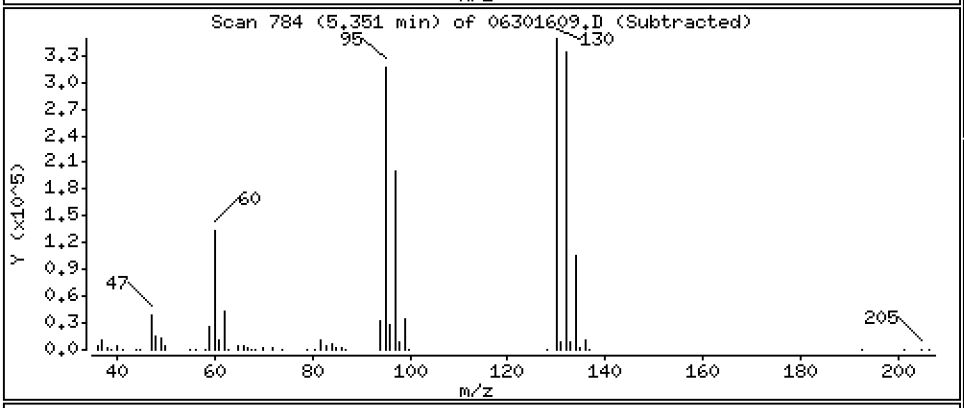
Column phase: RTXVMS

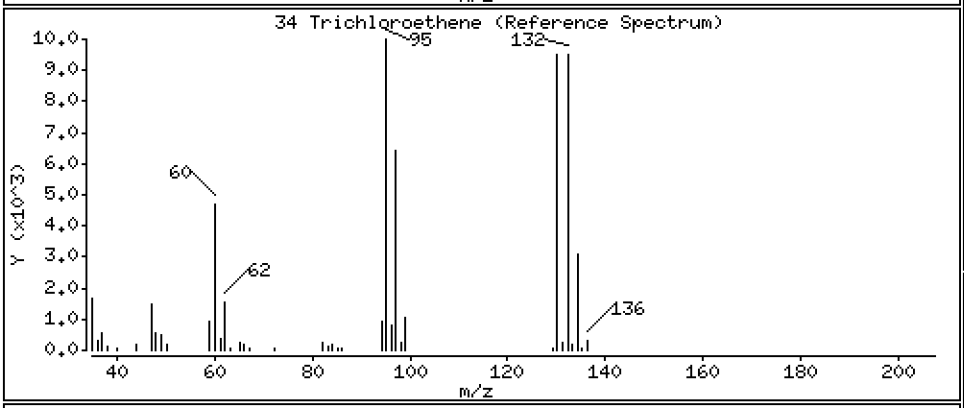
Column diameter: 0.18

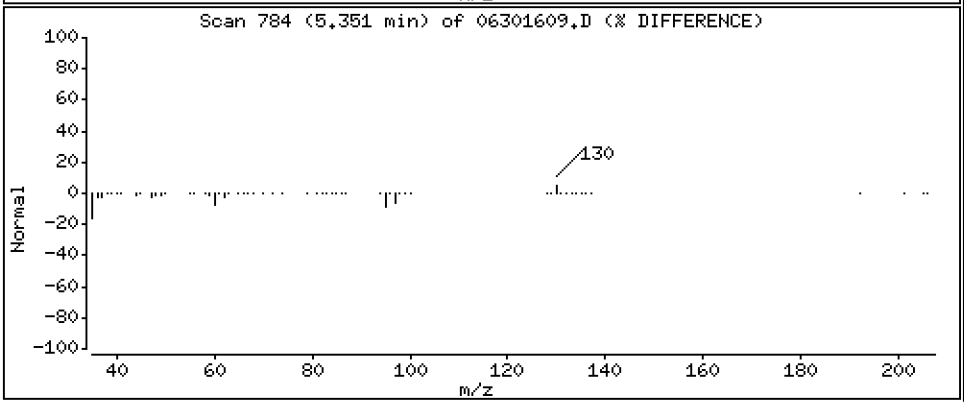
34 Trichloroethene

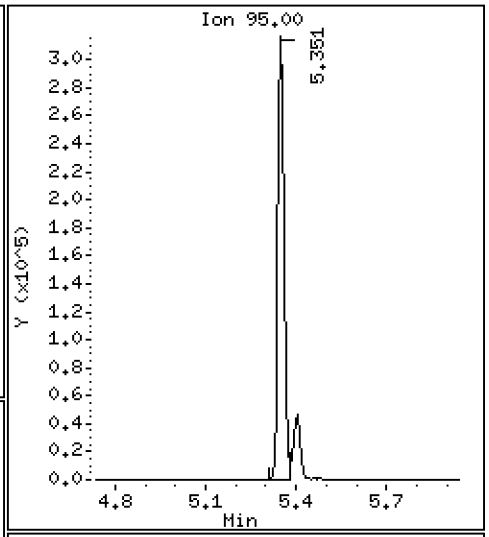
Concentration: 29.423 ug/Kg

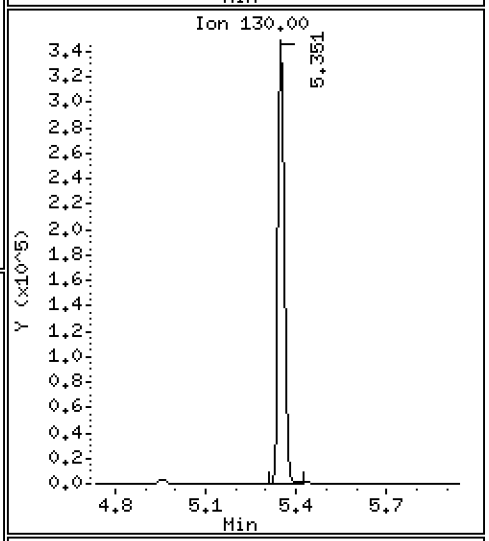


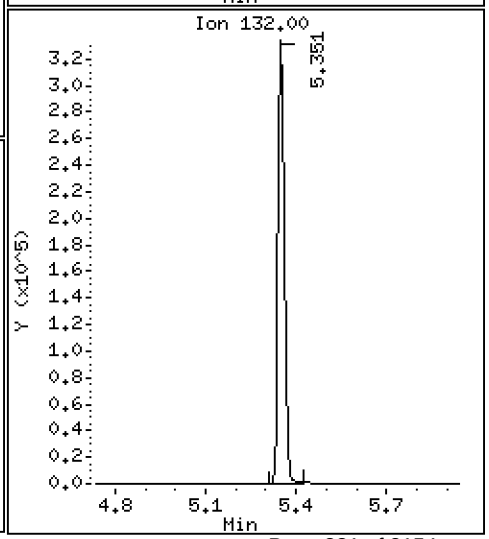












Data File: \\target\share\chem1\nt5.i\20160630.b\06301609.D

Date : 30-JUN-2016 15:14

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-22

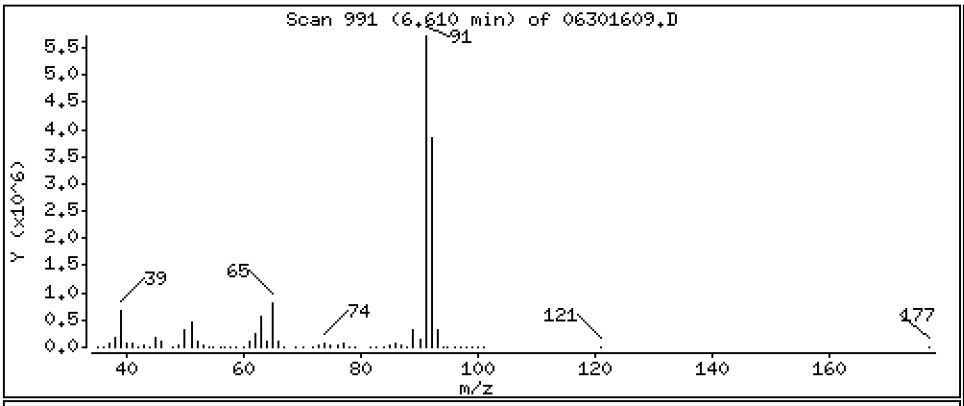
Operator: PB

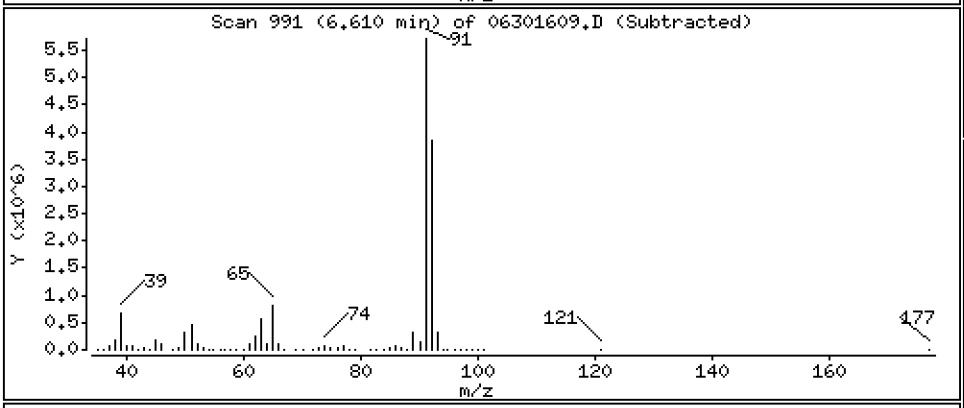
Column phase: RTXVMS

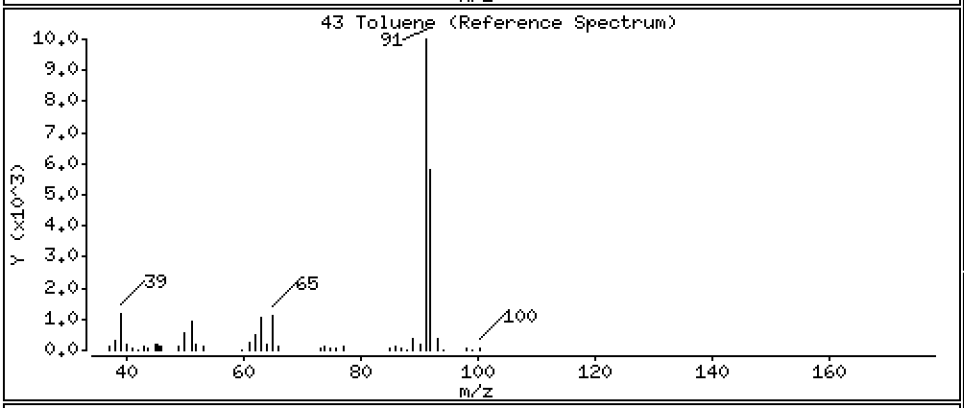
Column diameter: 0.18

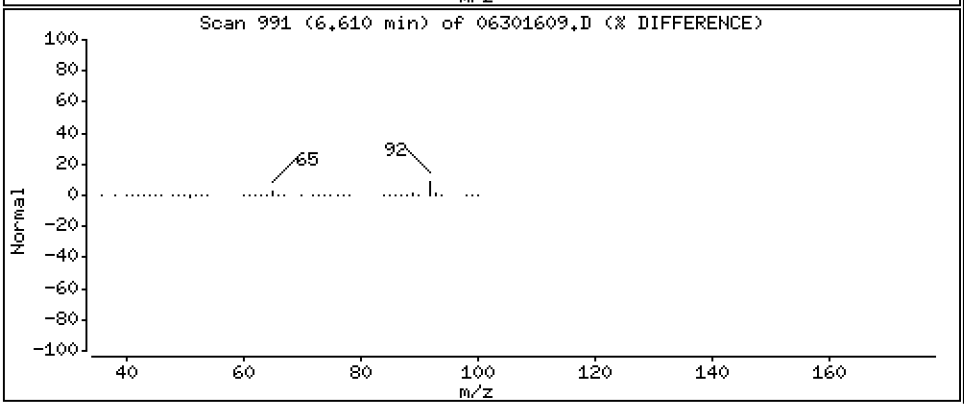
43 Toluene

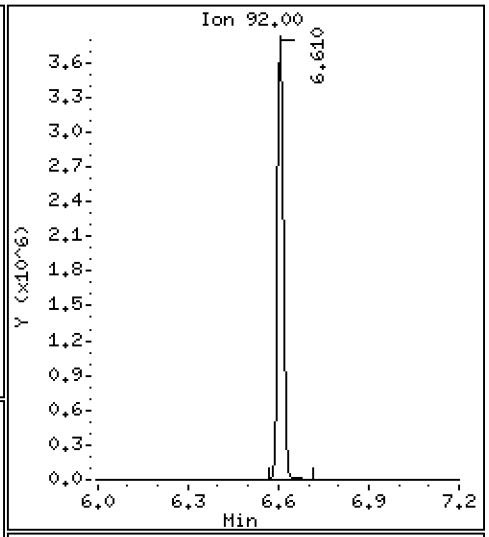
Concentration: 139.52 ug/Kg

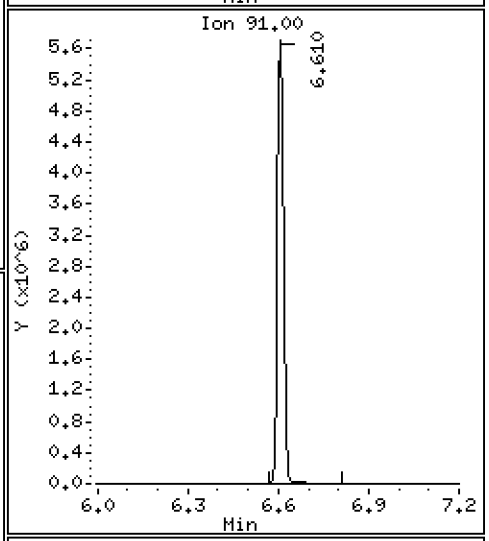


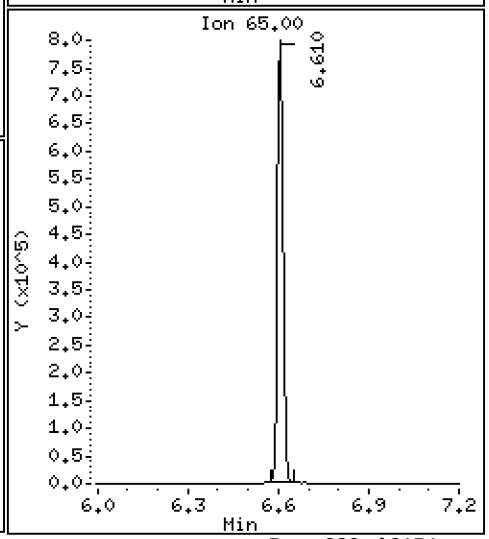












Data File: \\target\share\chem1\nt5.i\20160630.b\06301609.D

Date : 30-JUN-2016 15:14

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-22

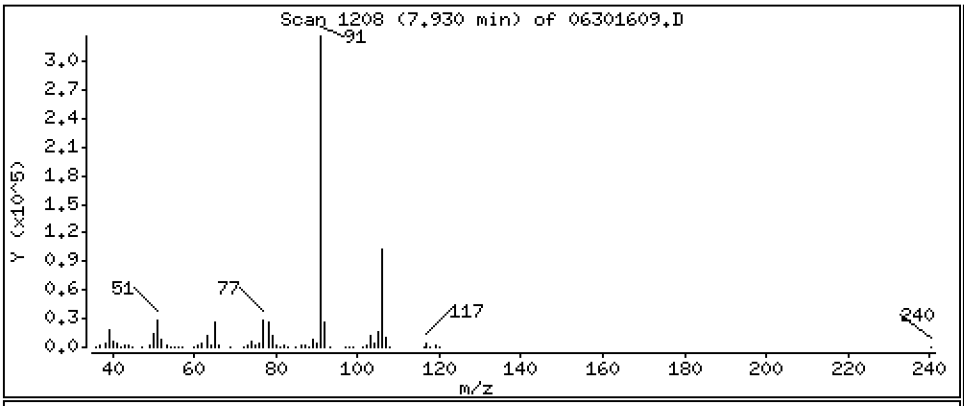
Operator: PB

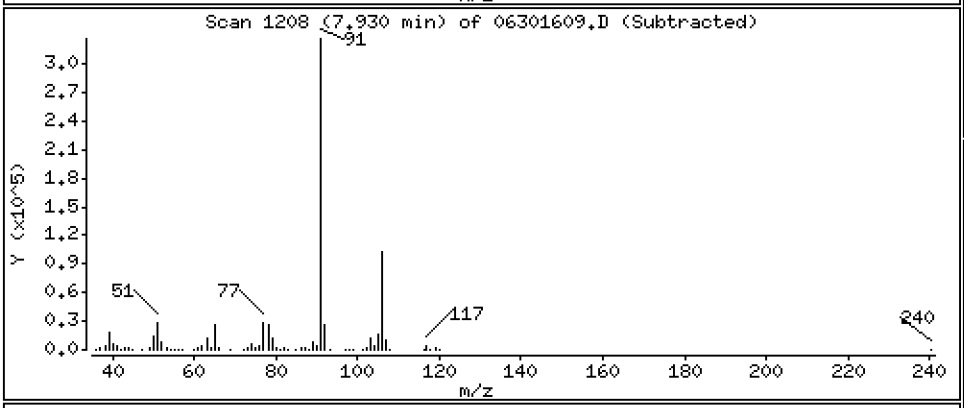
Column phase: RTXVMS

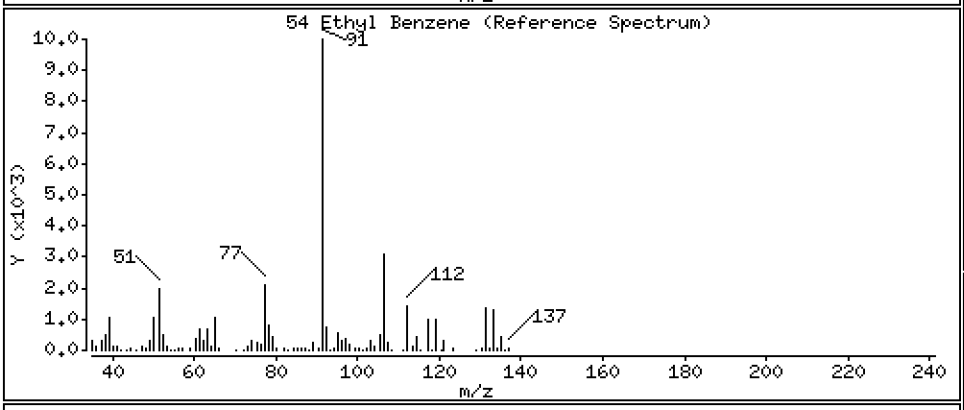
Column diameter: 0.18

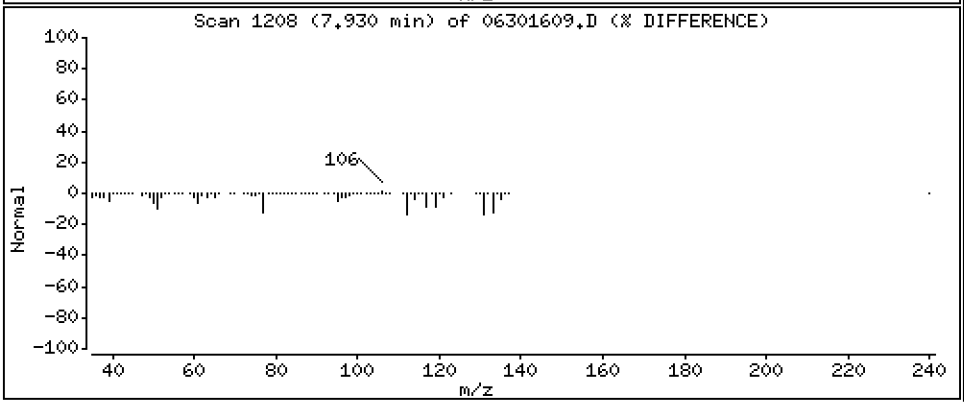
54 Ethyl Benzene

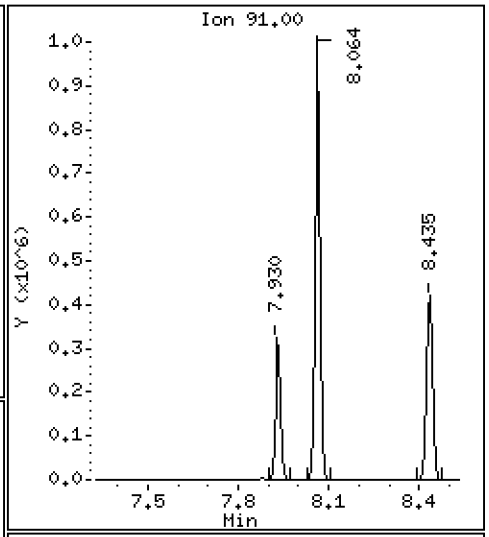
Concentration: 5.642 ug/Kg

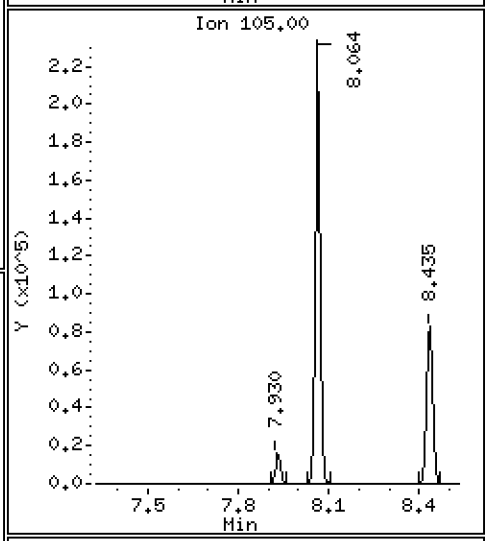


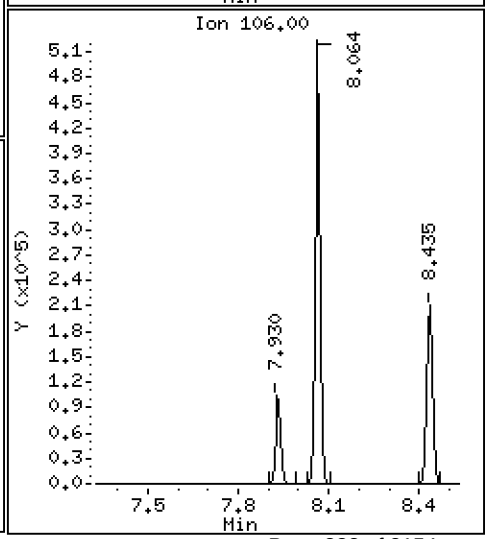












Data File: \\target\share\chem1\nt5.i\20160630.b\06301609.D

Date : 30-JUN-2016 15:14

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-22

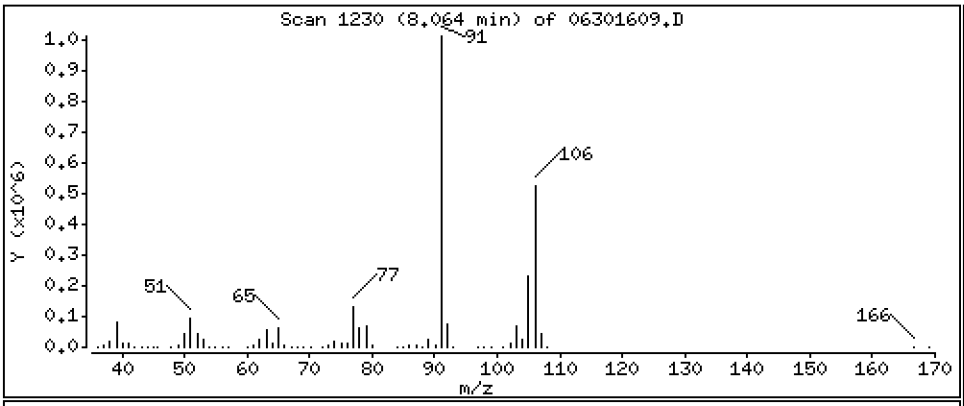
Operator: PB

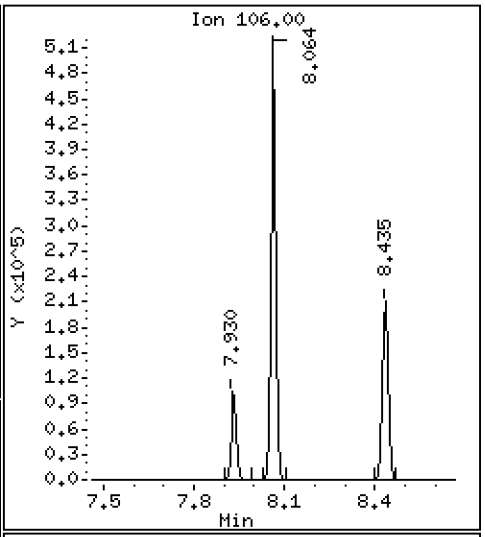
Column phase: RTXVMS

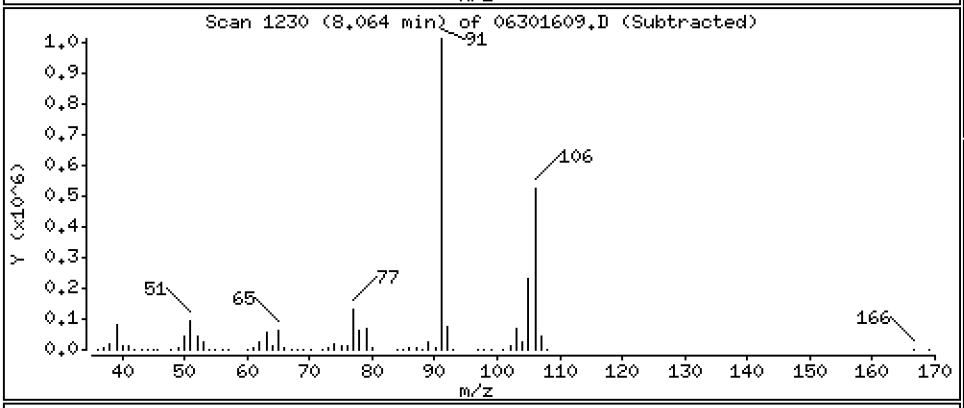
Column diameter: 0.18

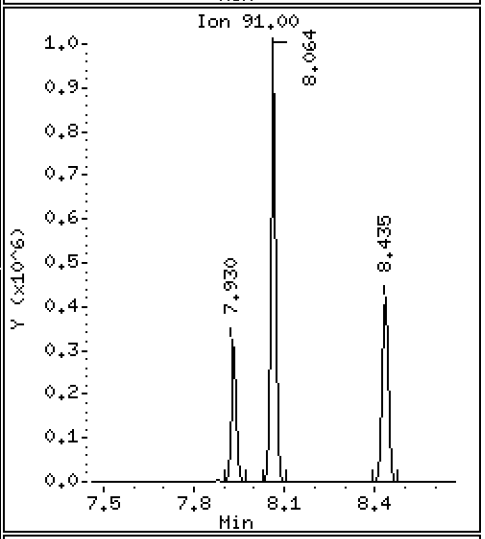
56 m,p-xylene

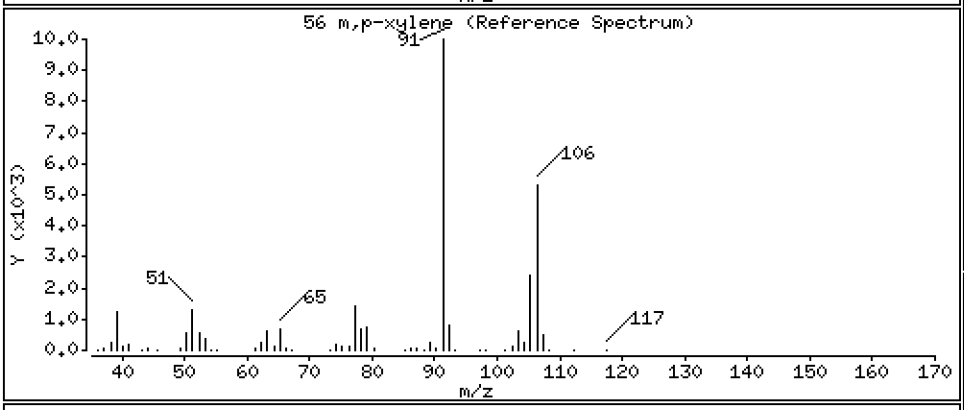
Concentration: 22.572 ug/Kg

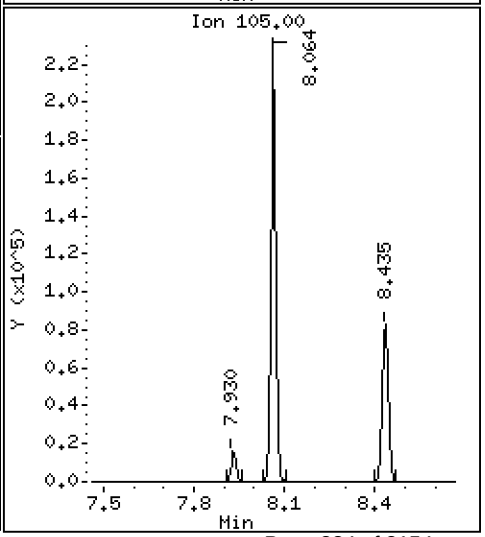


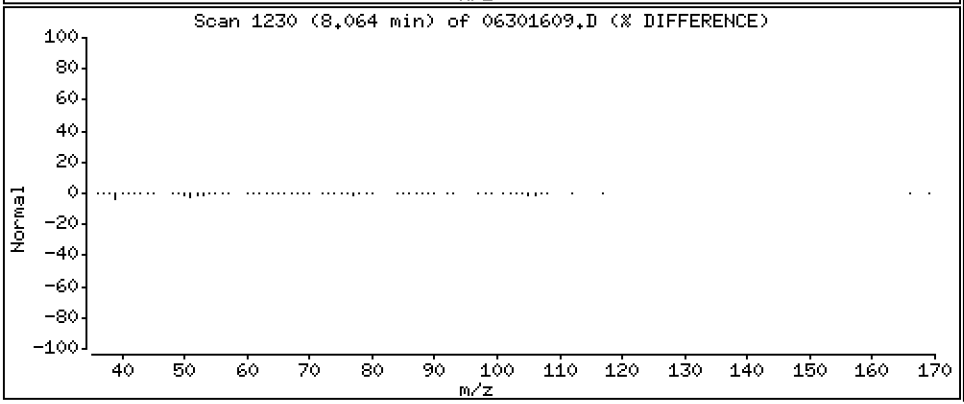












Data File: \\target\share\chem1\nt5.i\20160630.b\06301609.D

Date : 30-JUN-2016 15:14

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-22

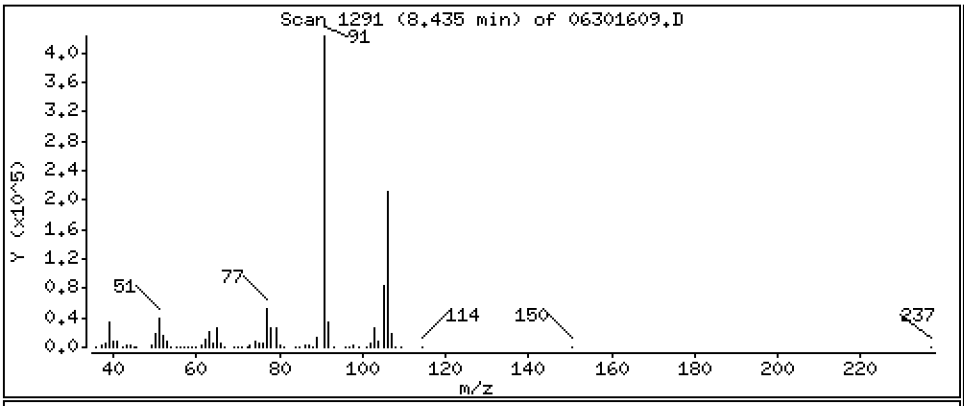
Operator: PB

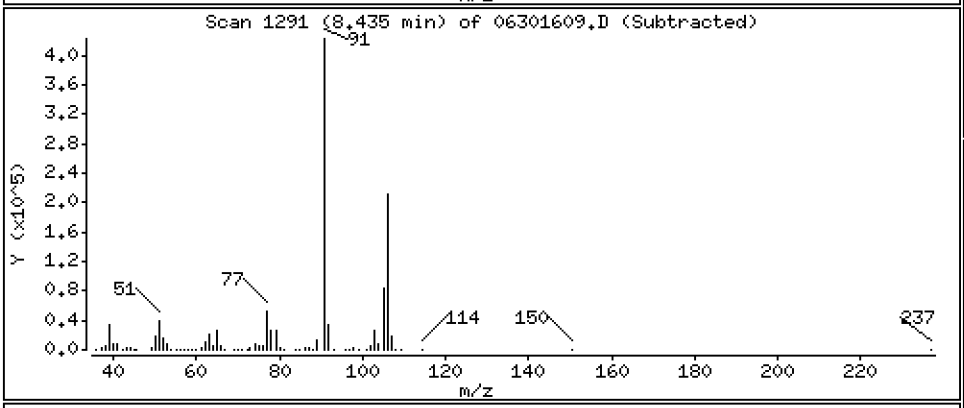
Column phase: RTXVMS

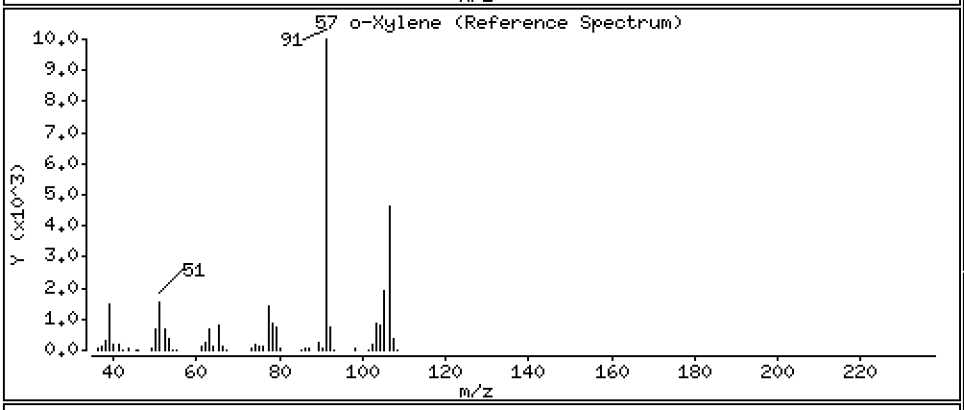
Column diameter: 0.18

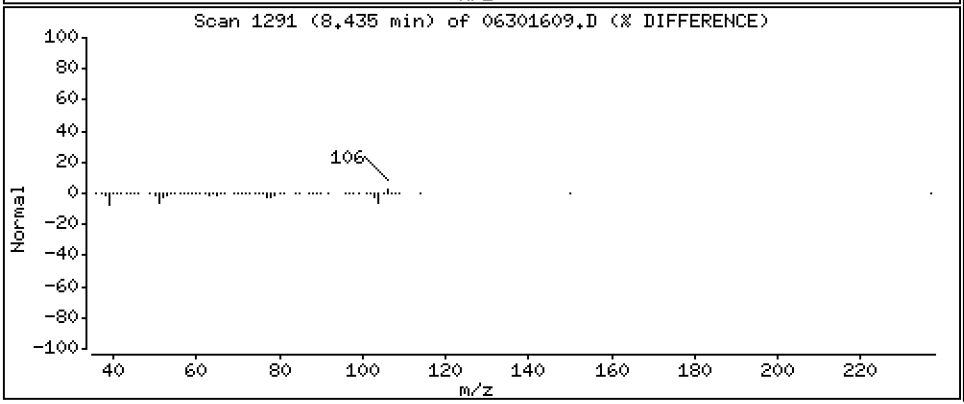
57 o-Xylene

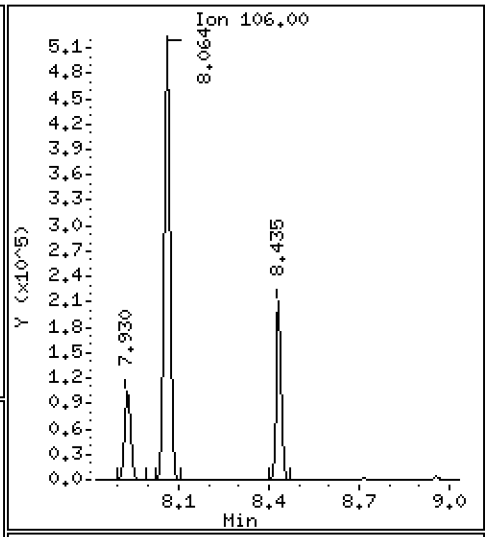
Concentration: 9.497 ug/Kg

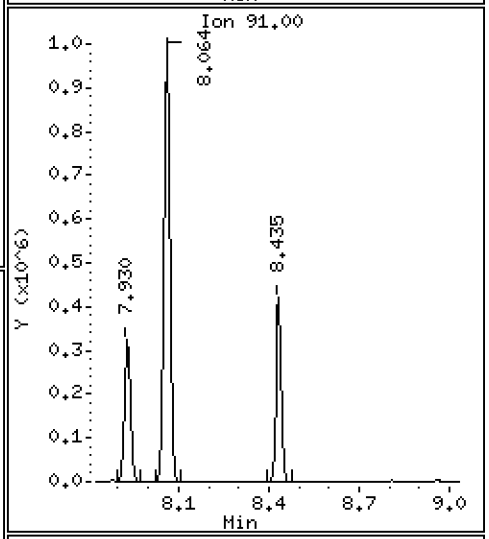


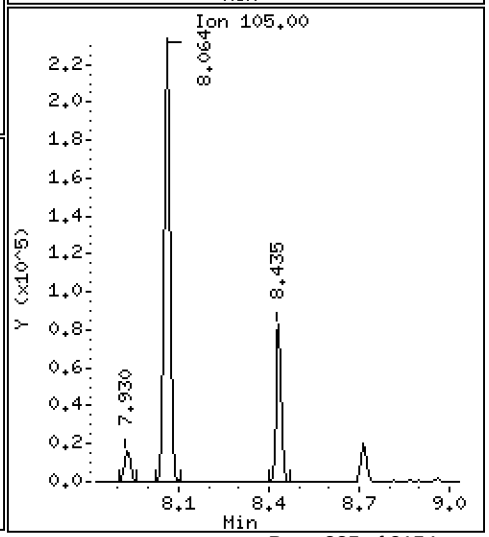












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301609.D
Lab Smp Id: 16F0096-22
Inj Date : 30-JUN-2016 15:14
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-22
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	1.597	1.578	(0.322)	3855	0.26489	0.2649
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.061	4.042	(0.820)	1530036	84.8941	84.894
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.499	4.486	(0.908)	821551	48.3060	48.306
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	4.827	4.815	(0.893)	38676	0.61522	0.6152
*	31 Pentafluorobenzene	168	4.955	4.943	(1.000)	713562	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.001)	809786	47.6298	47.630
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.350	5.338	(0.990)	479311	29.4228	29.423
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2327777	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.555	(1.215)	2896292	48.5597	48.560
	43 Toluene	92	6.610	6.597	(1.223)	5642667	139.519	139.52
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2495166	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.930	7.930	(1.006)	429632	5.64154	5.642
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.064	8.063	(1.023)	667331	22.5717	22.572
	57 o-Xylene	106	8.435	8.428	(1.070)	277339	9.49704	9.497
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1307519	48.7268	48.727
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1296872	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1308242	50.0962	50.096
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301609.D
Lab Smp Id: 16F0096-22
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	713562	18.93
35 1,4-Difluorobenze	2041239	1020620	4082478	2327777	14.04
52 d5-Chlorobenzene	2118314	1059157	4236628	2495166	17.79
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1296872	22.92

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-22
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	48.306	96.61	70-130
$ 32 d4-1,2-Dichloroeth	50.000	47.630	95.26	80-149
$ 42 d8-Toluene	50.000	48.560	97.12	77-120
$ 62 4-Bromofluorobenze	50.000	48.727	97.45	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.096	100.19	80-120

REVIEW SUMMARY FOR FILE - 06301609.D

Lab ID: 16F0096-22
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 15:14

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-P-52-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-23	File ID:	06301610.D
Sampled:	06/29/16 13:15	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 15:37
Solids:	92.75	Preparation:	No Prep - Volatiles	Initial/Final:	5.24 g / 5 g
Batch:	BEG0004	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	9.24		0.24	1.03
74-83-9	Bromomethane	1	1.03	U	0.19	1.03
156-59-2	cis-1,2-Dichloroethene	1	173		0.25	1.03
71-43-2	Benzene	1	1.30		0.30	1.03
79-01-6	Trichloroethene	1	52.1		0.22	1.03
108-88-3	Toluene	1	233	E	0.16	1.03
127-18-4	Tetrachloroethene	1	1.03	U	0.26	1.03
100-41-4	Ethylbenzene	1	8.69		0.21	1.03
179601-23-1	m,p-Xylene	1	33.9		0.40	1.03
95-47-6	o-Xylene	1	14.4		0.23	1.03

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	47.2	94.4	80 - 149	
1,2-Dichlorobenzene-d4	50.000	49.8	99.7	80 - 120	
Toluene-d8	50.000	48.3	96.5	77 - 120	
4-Bromofluorobenzene	50.000	49.0	98.0	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301610.D

Date : 30-JUN-2016 15:37

Client ID:

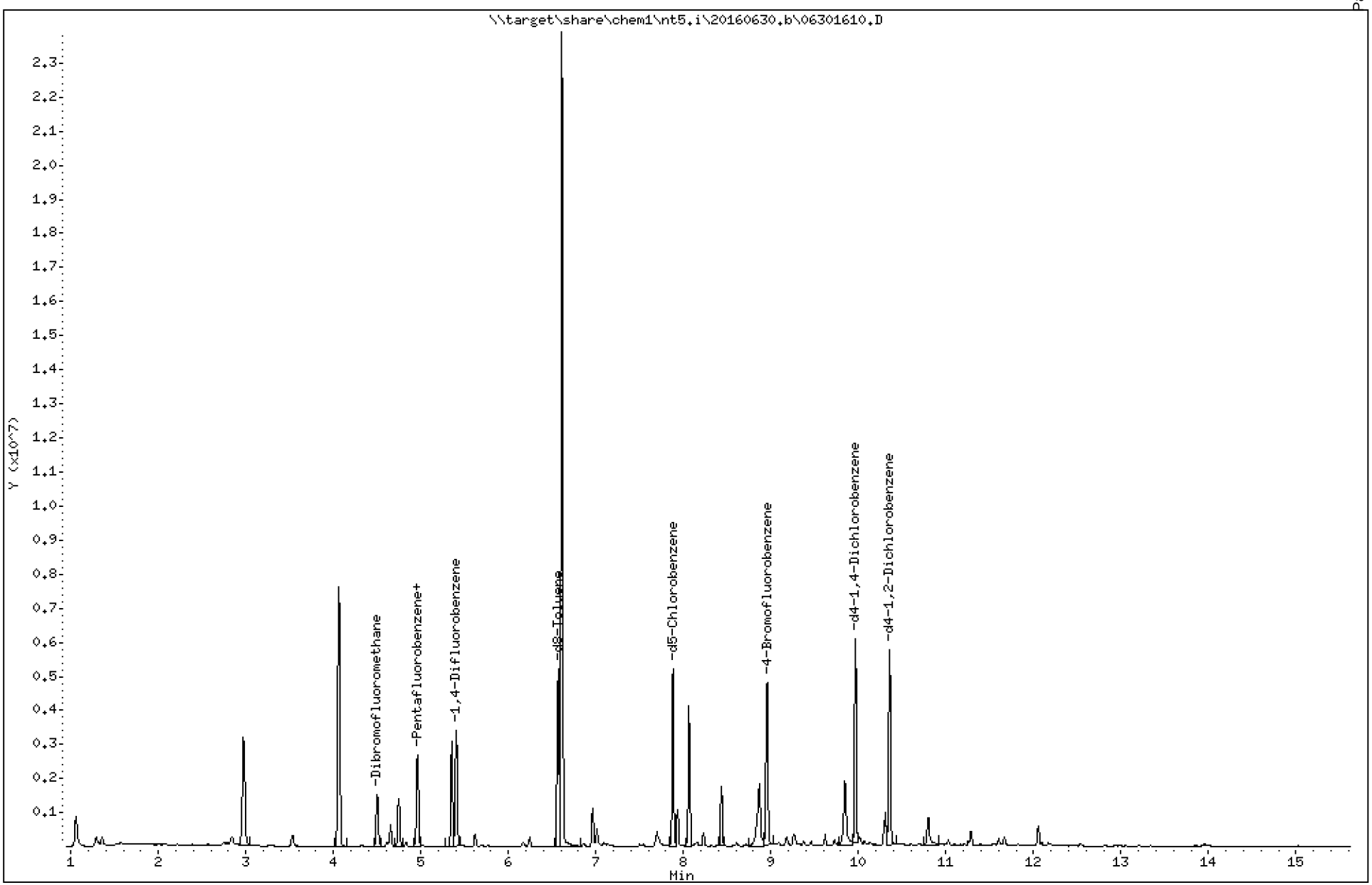
Instrument: nt5.i

Sample Info: 16F0096-23

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\06301610.D

Date : 30-JUN-2016 15:37

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-23

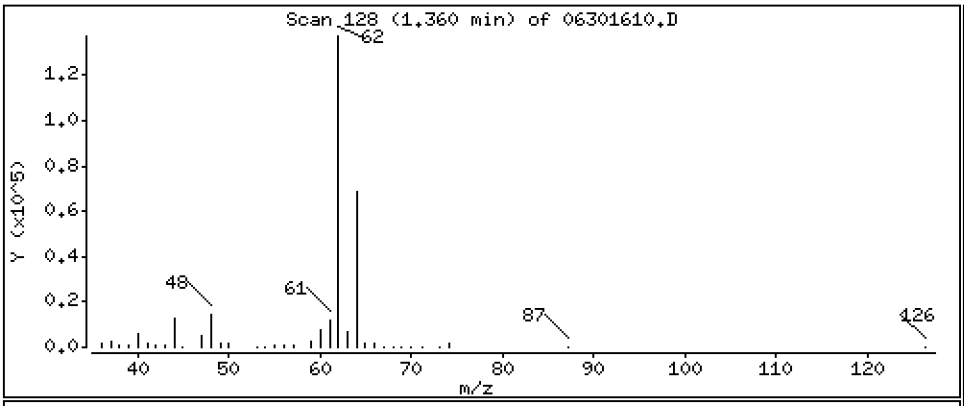
Operator: PB

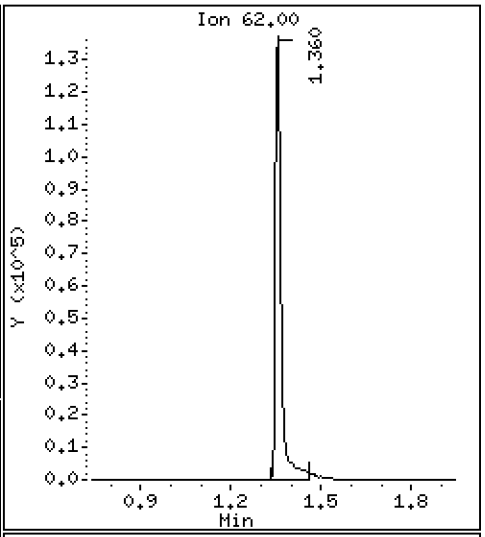
Column phase: RTXVMS

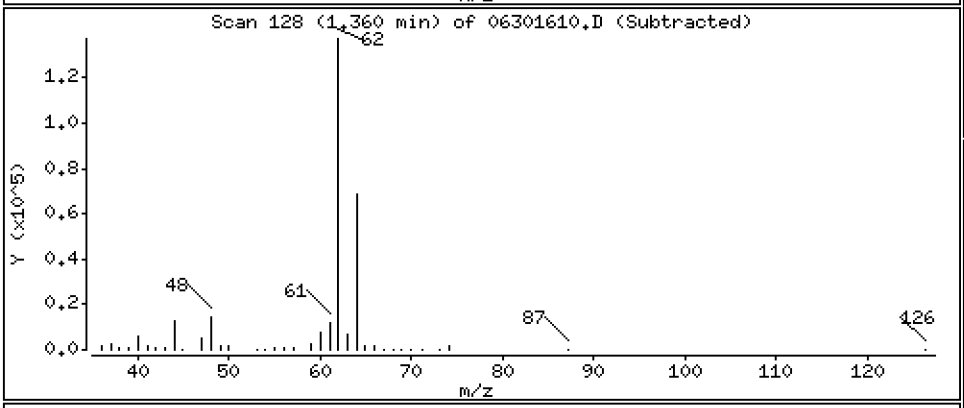
Column diameter: 0.18

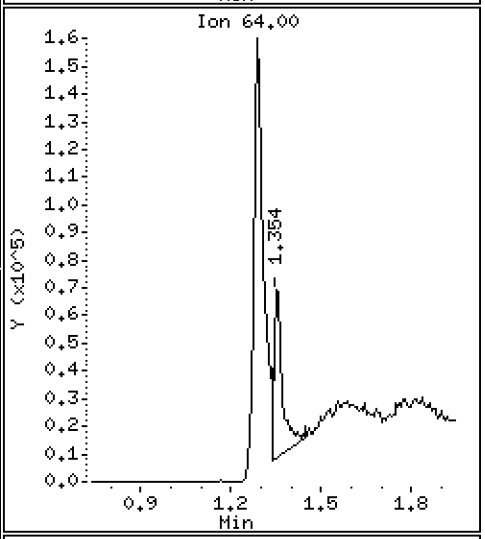
3 Vinyl Chloride

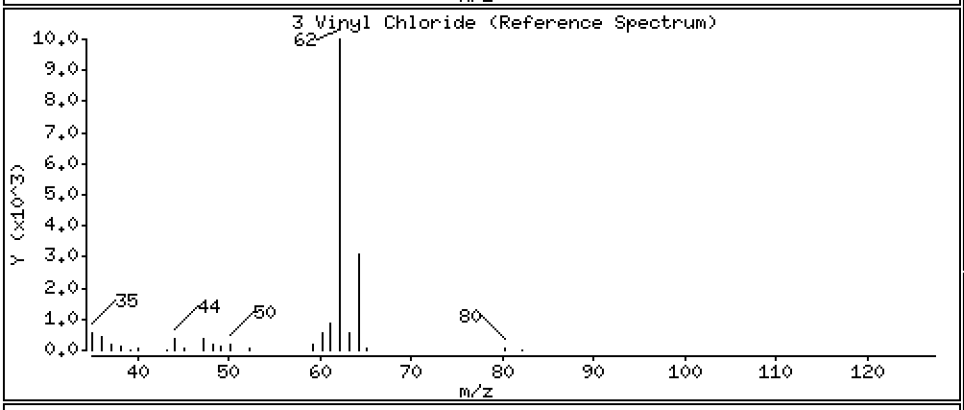
Concentration: 8.979 ug/Kg

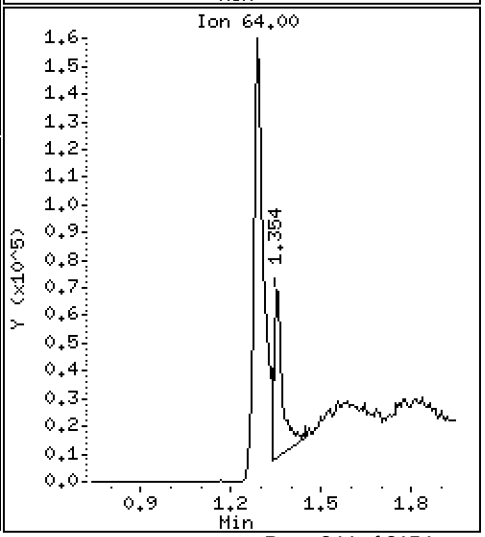


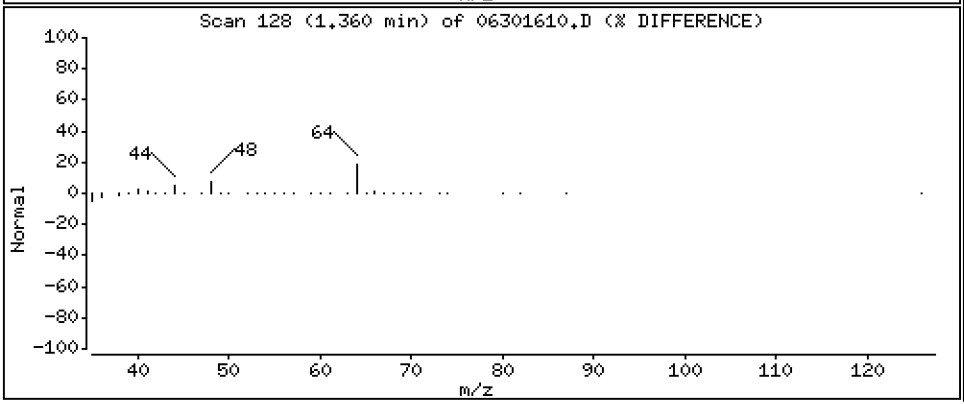












Data File: \\target\share\chem1\nt5.i\20160630.b\06301610.D

Date : 30-JUN-2016 15:37

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-23

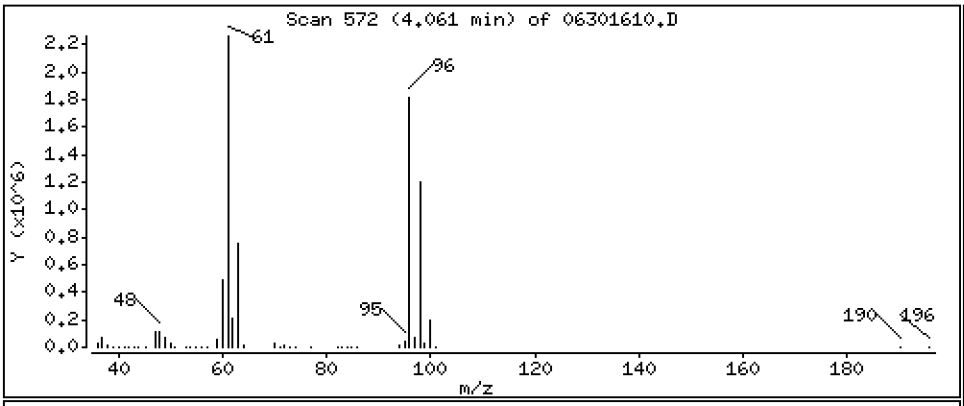
Operator: PB

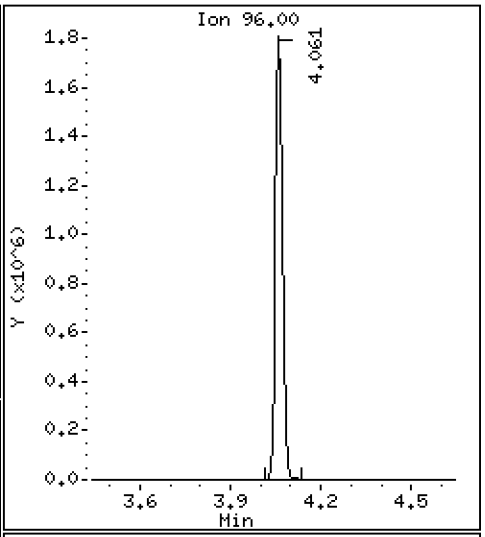
Column phase: RTXVMS

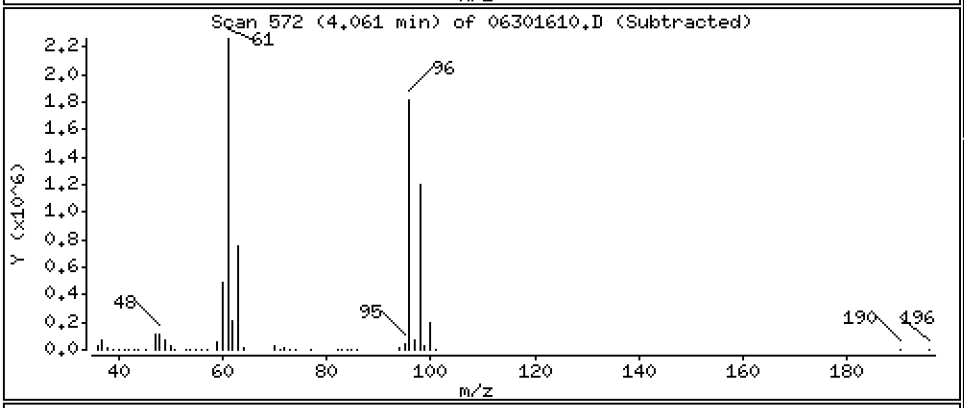
Column diameter: 0.18

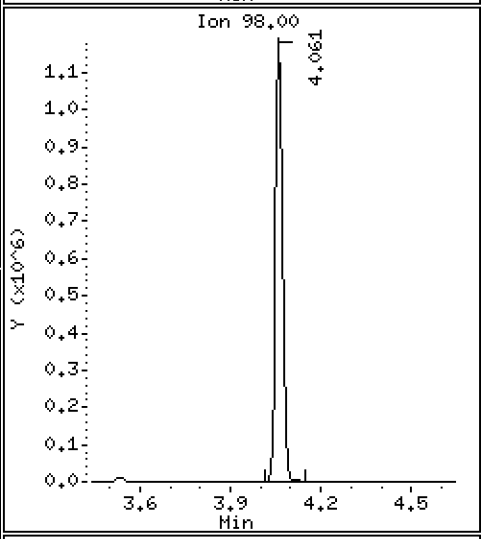
20 Cis-1,2-Dichloroethene

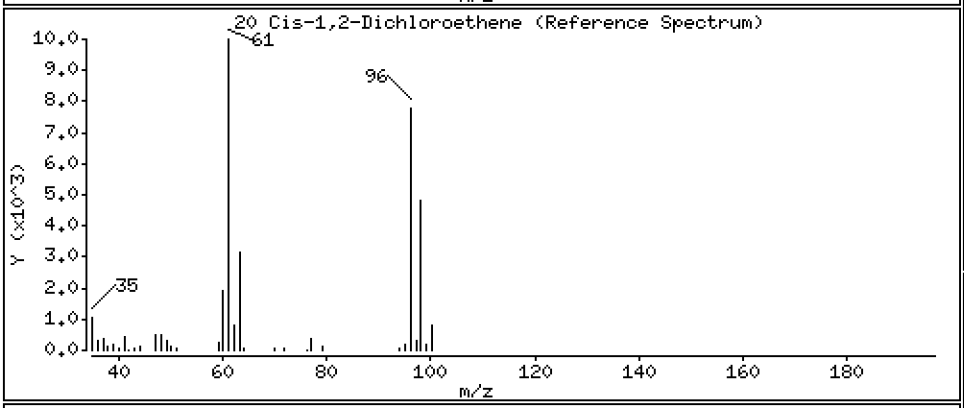
Concentration: 168.19 ug/Kg

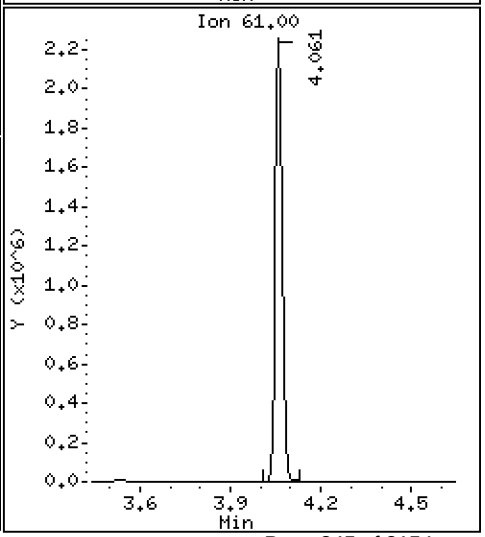


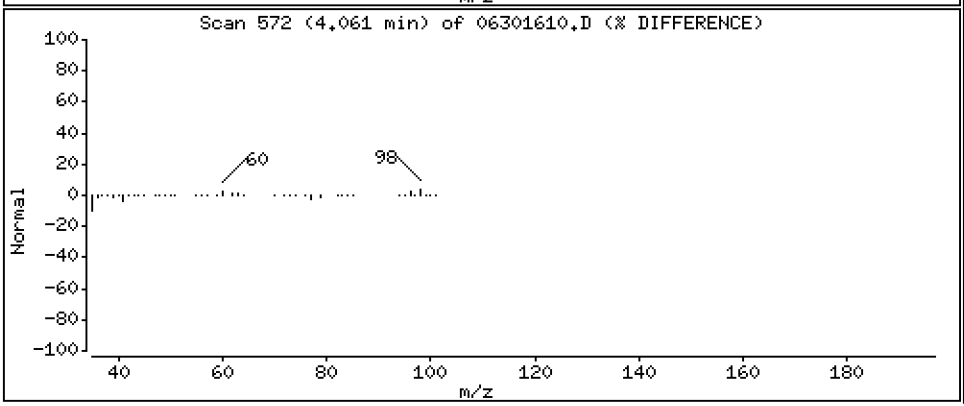












Data File: \\target\share\chem1\nt5.i\20160630.b\06301610.D

Date : 30-JUN-2016 15:37

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-23

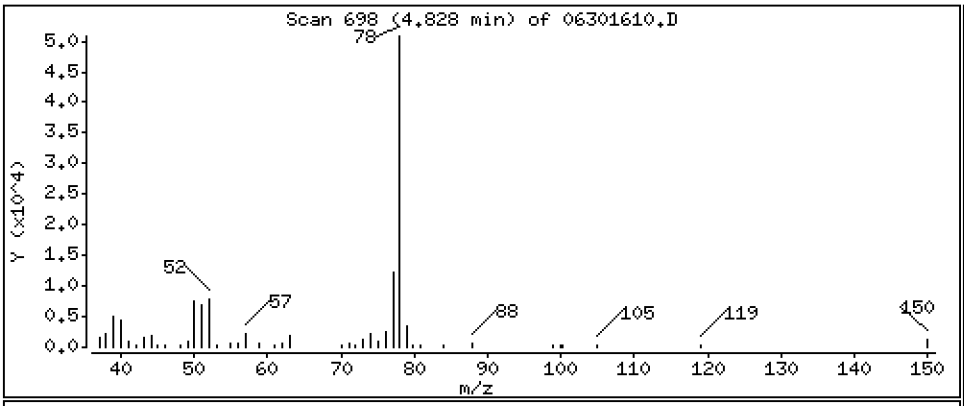
Operator: PB

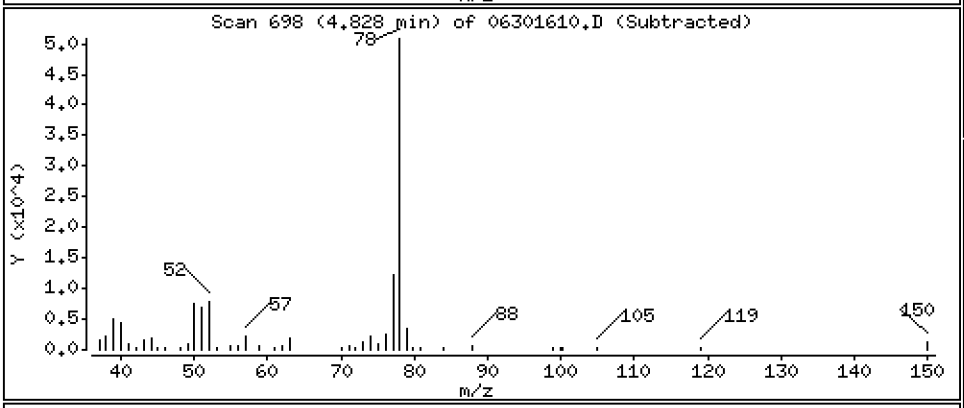
Column phase: RTXVMS

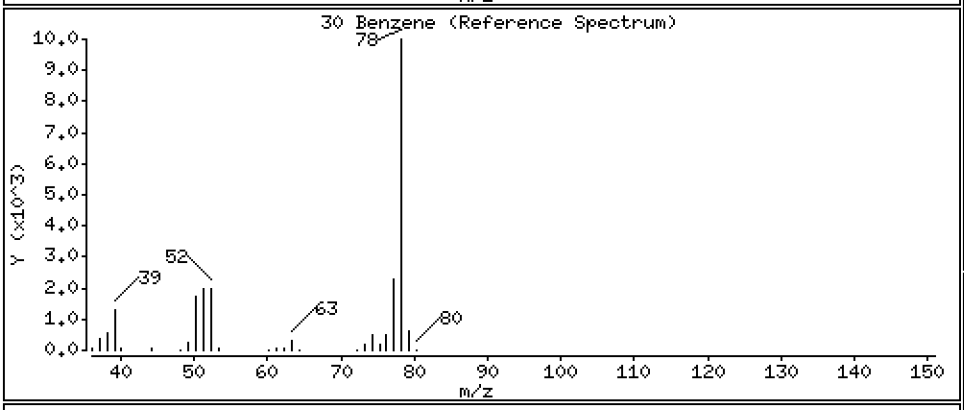
Column diameter: 0.18

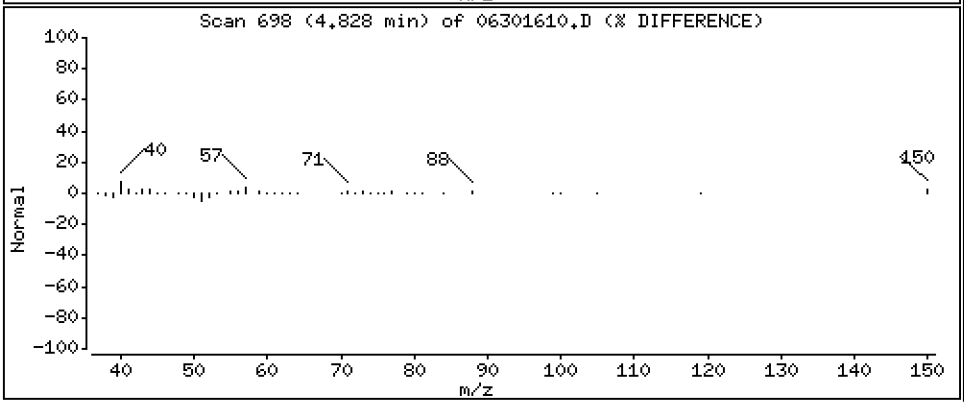
30 Benzene

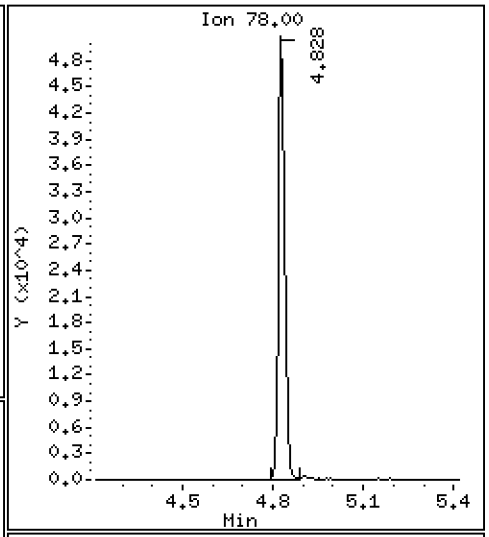
Concentration: 1.261 ug/Kg

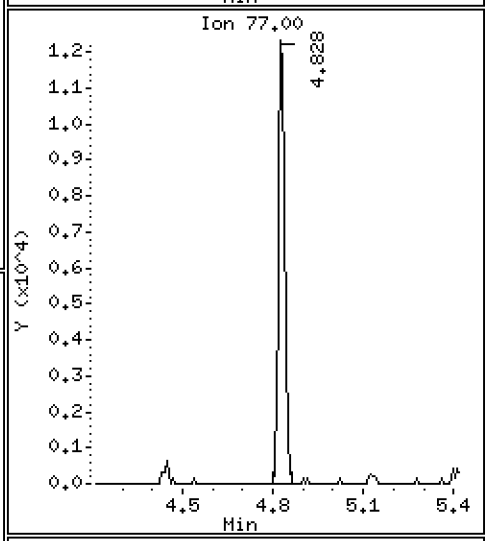


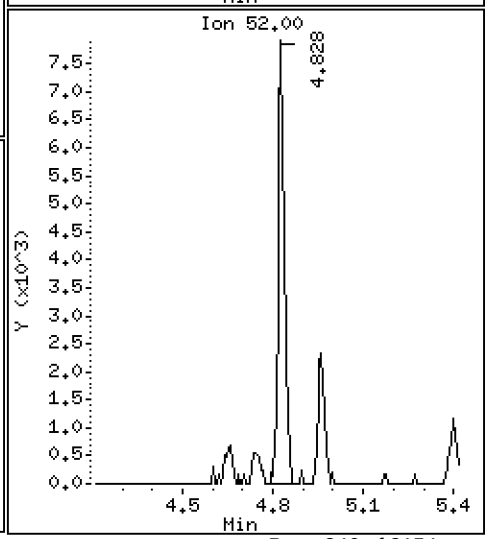












Data File: \\target\share\chem1\nt5.i\20160630.b\06301610.D

Date : 30-JUN-2016 15:37

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-23

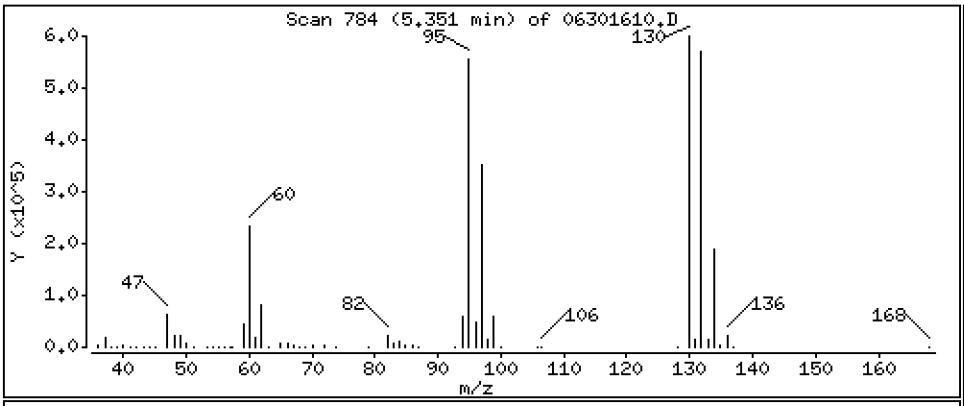
Operator: PB

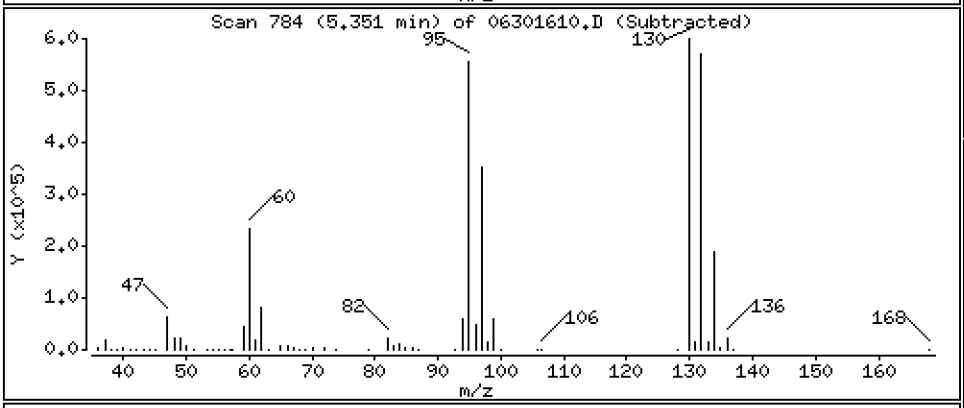
Column phase: RTXVMS

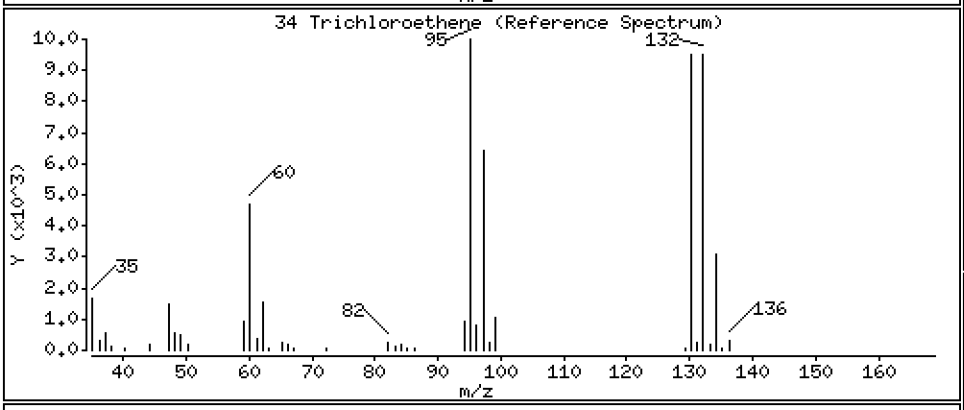
Column diameter: 0.18

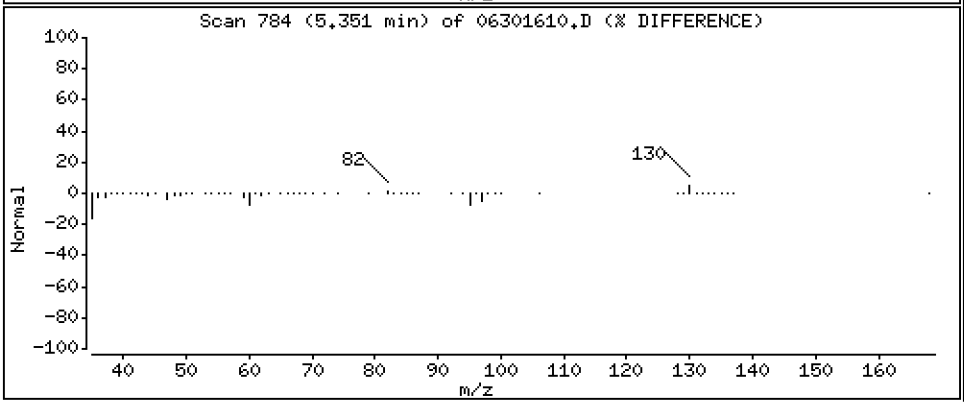
34 Trichloroethene

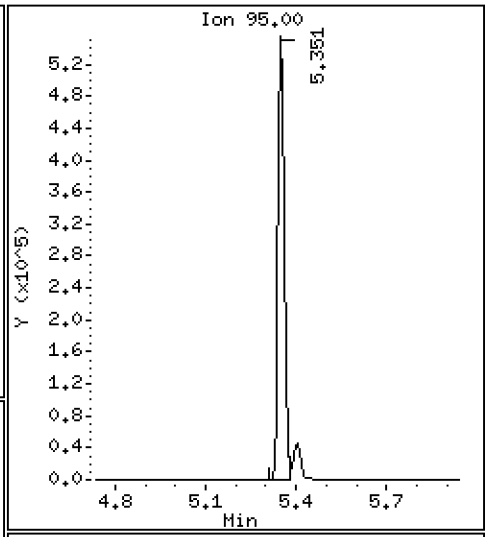
Concentration: 50.673 ug/Kg

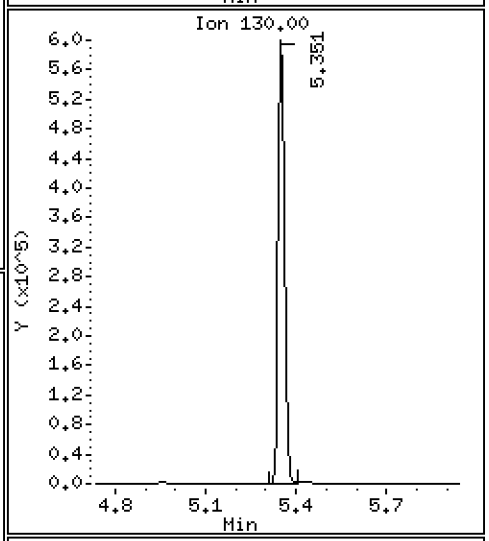


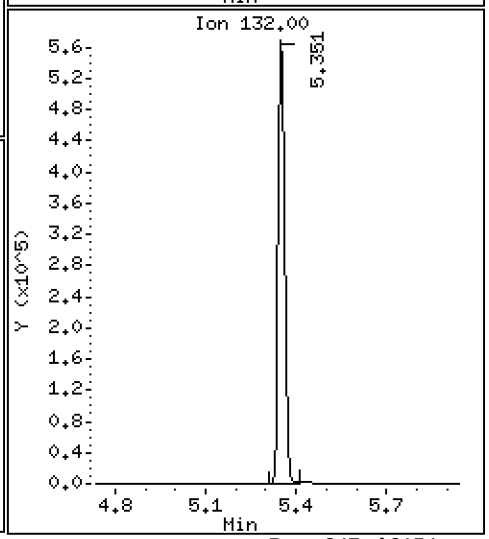












Data File: \\target\share\chem1\nt5.i\20160630.b\06301610.D

Date : 30-JUN-2016 15:37

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-23

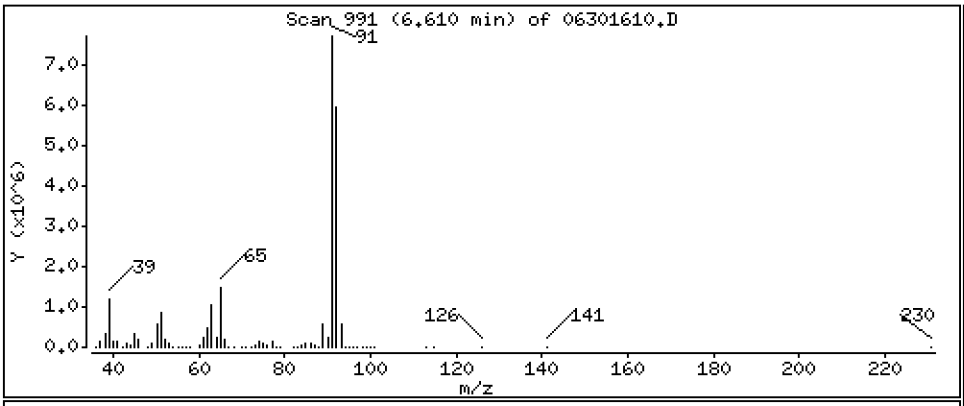
Operator: PB

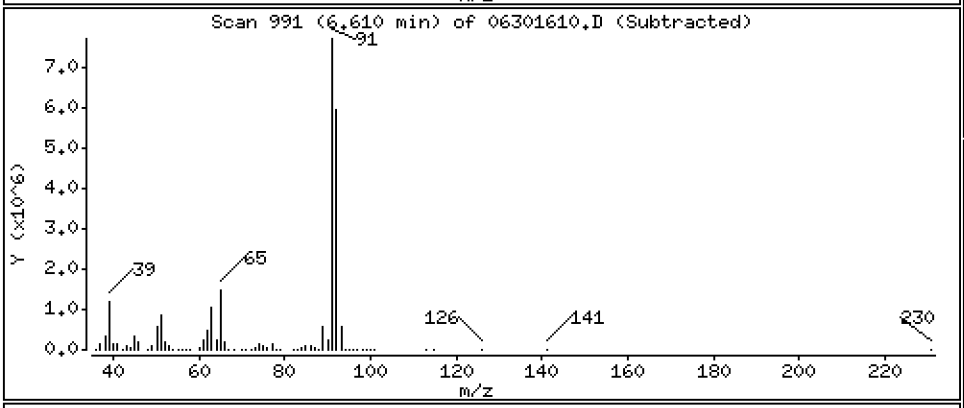
Column phase: RTXVMS

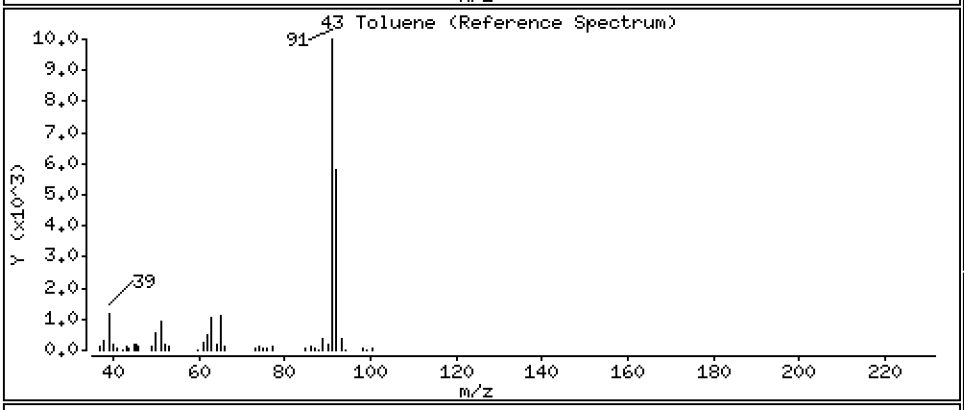
Column diameter: 0.18

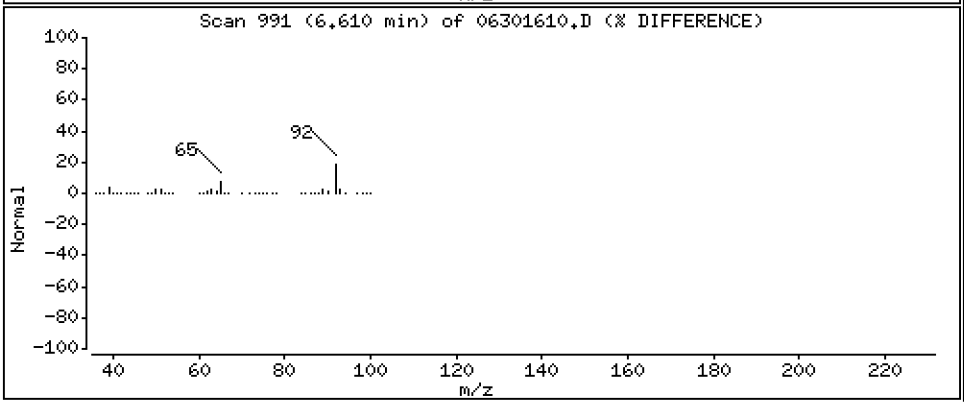
43 Toluene

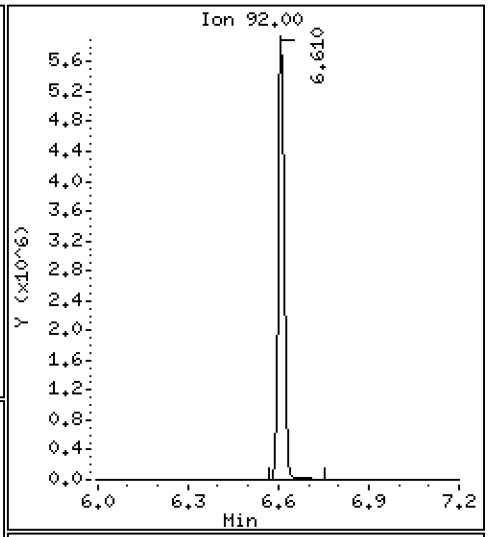
Concentration: 225.99 ug/Kg

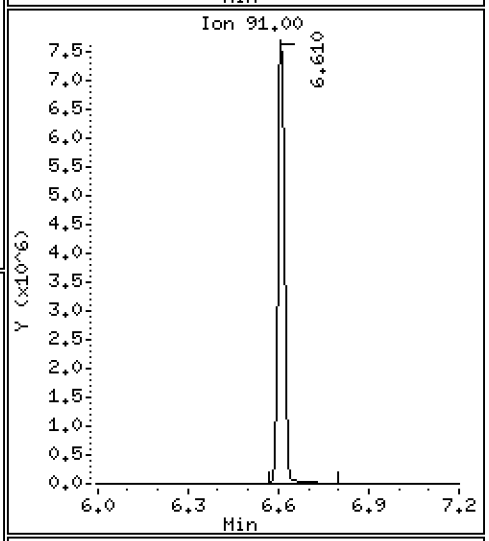


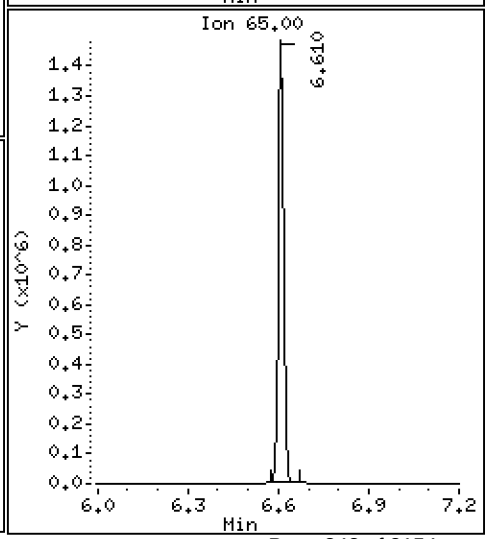












Data File: \\target\share\chem1\nt5.i\20160630.b\06301610.D

Date : 30-JUN-2016 15:37

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-23

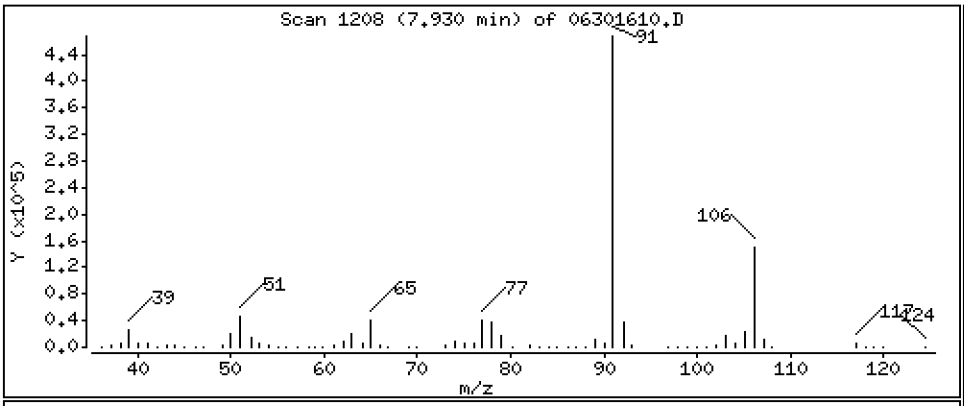
Operator: PB

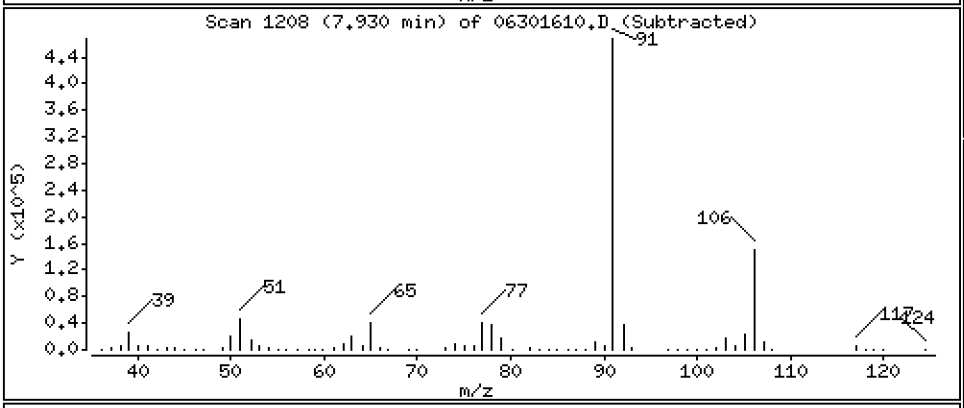
Column phase: RTXVMS

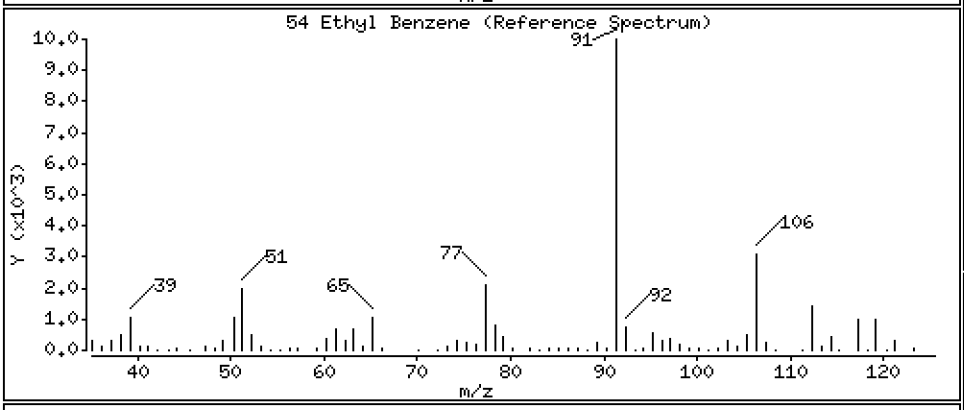
Column diameter: 0.18

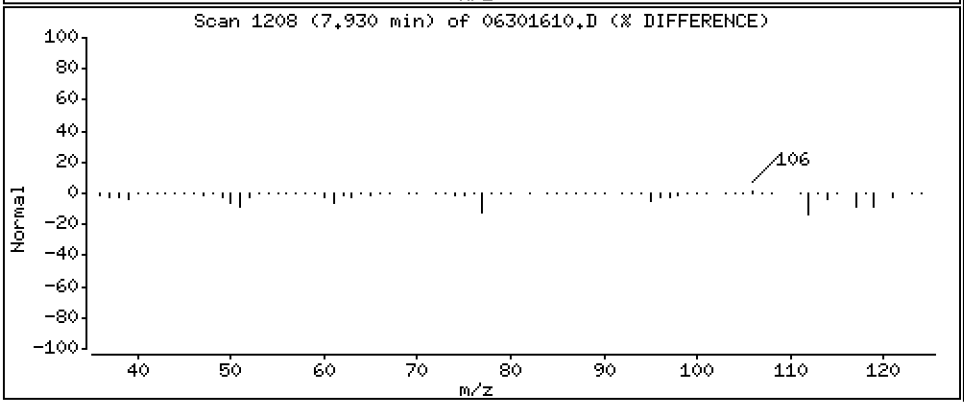
54 Ethyl Benzene

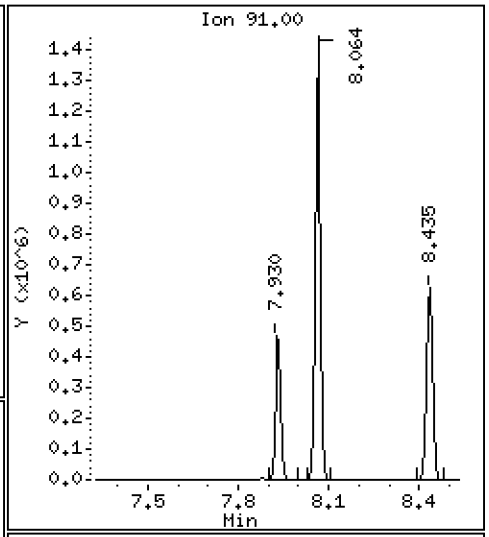
Concentration: 8.443 ug/Kg

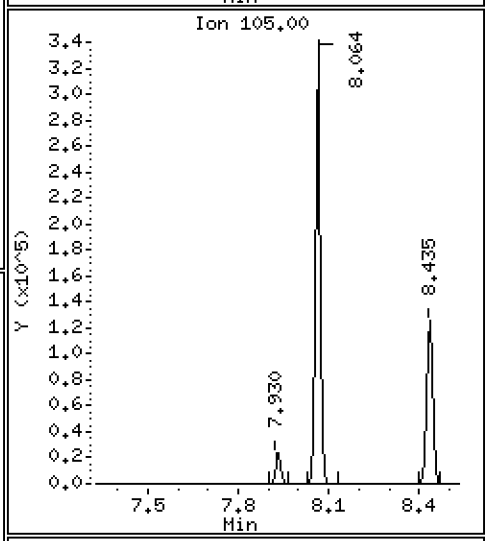


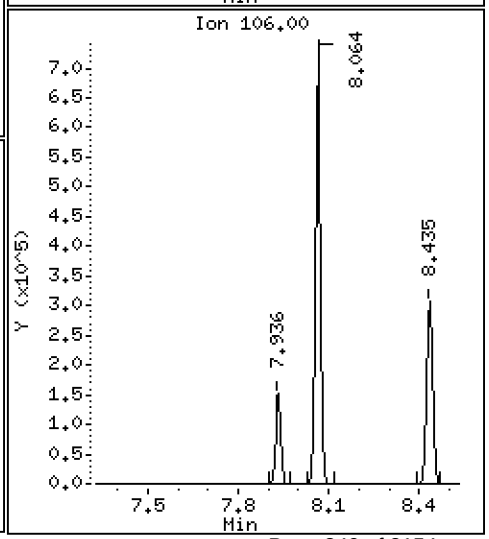












Data File: \\target\share\chem1\nt5.i\20160630.b\06301610.D

Date : 30-JUN-2016 15:37

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-23

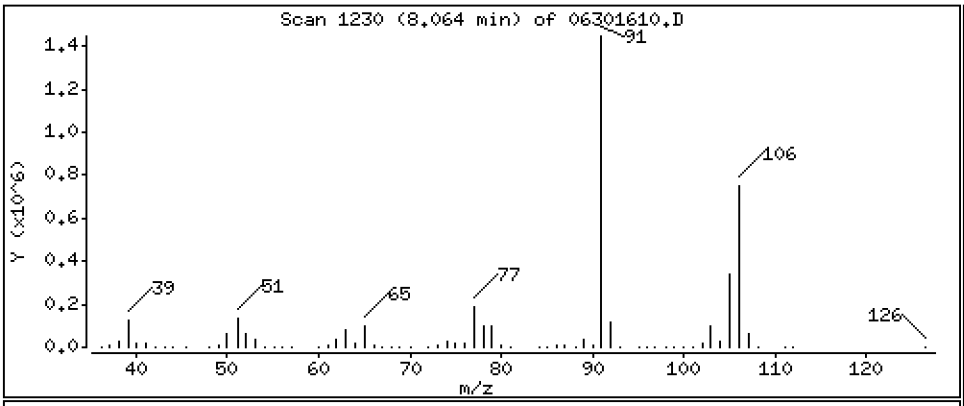
Operator: PB

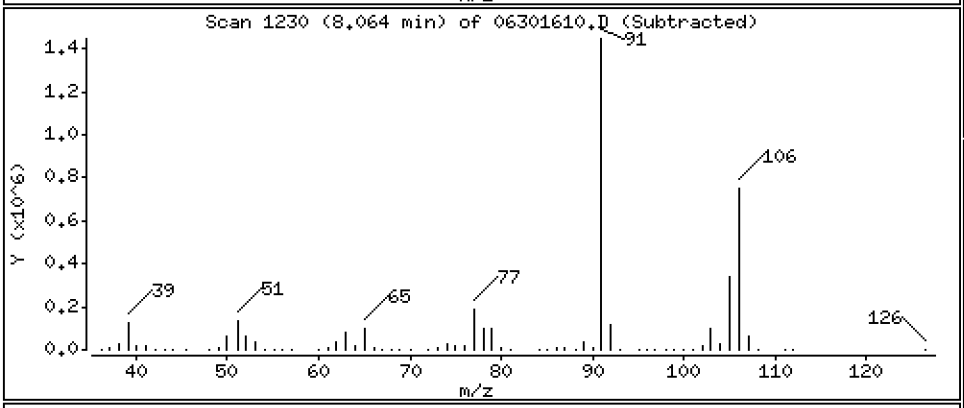
Column phase: RTXVMS

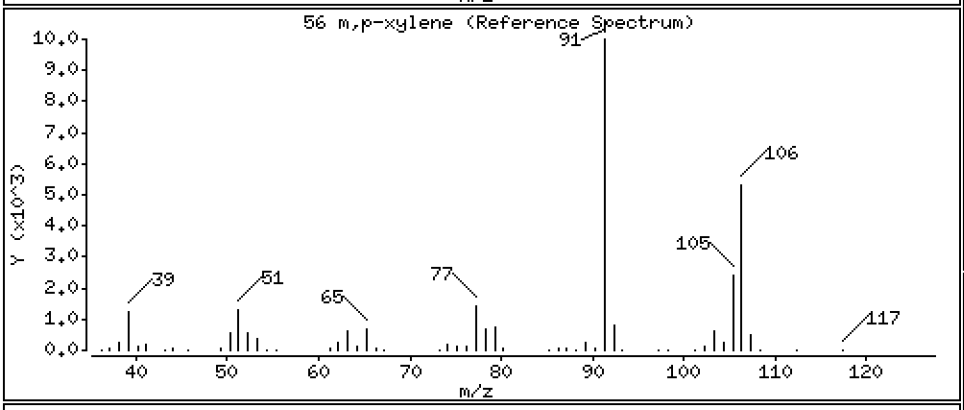
Column diameter: 0.18

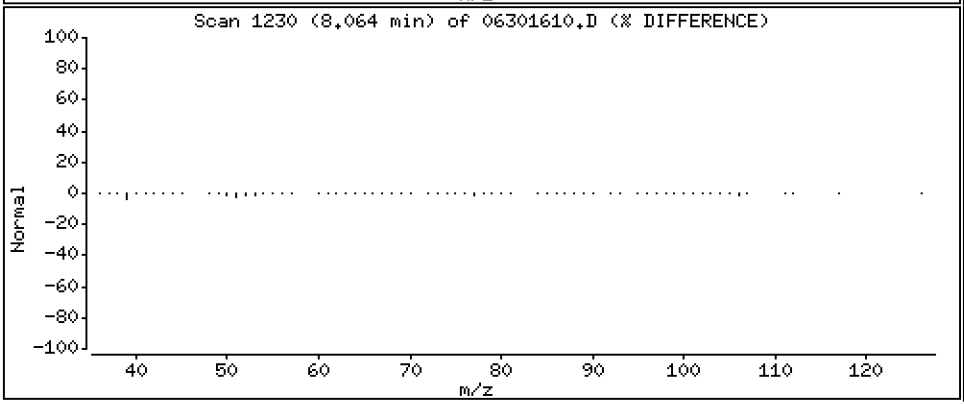
56 m,p-xylene

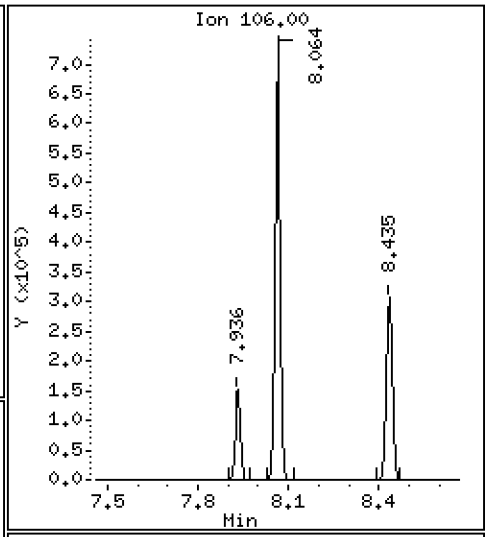
Concentration: 32.945 ug/Kg

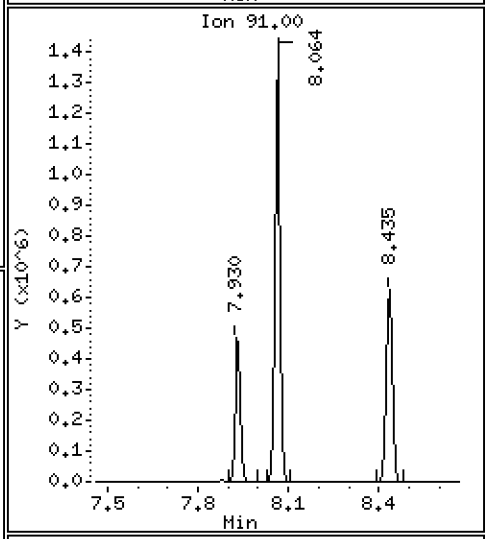


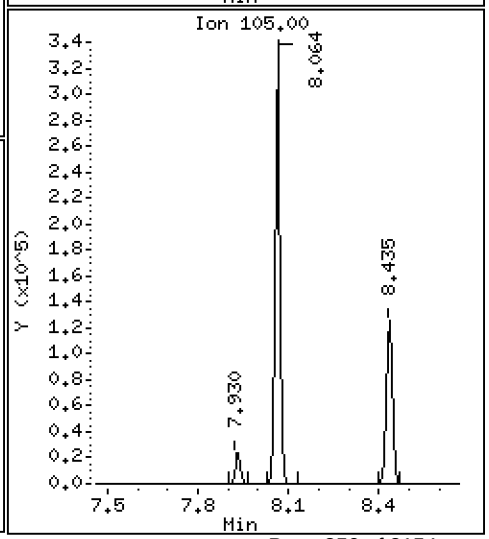












Data File: \\target\share\chem1\nt5.i\20160630.b\06301610.D

Date : 30-JUN-2016 15:37

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-23

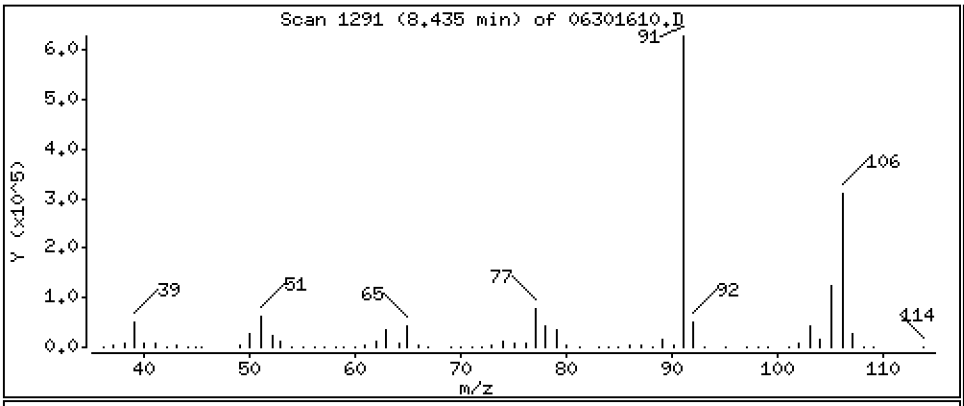
Operator: PB

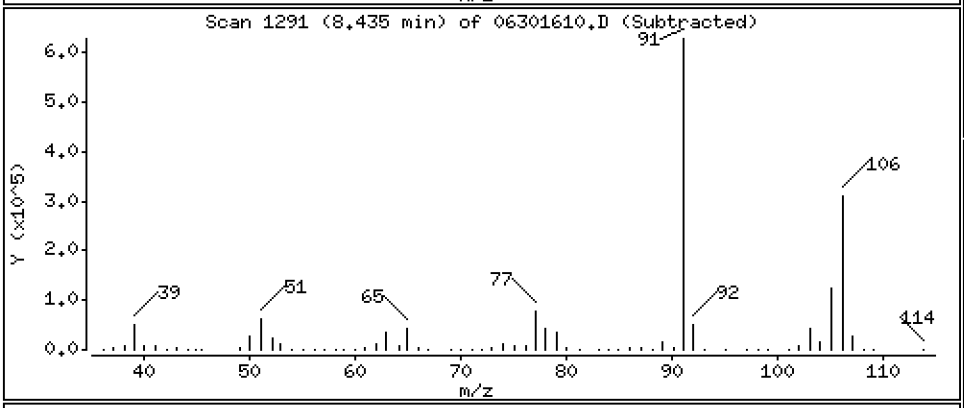
Column phase: RTXVMS

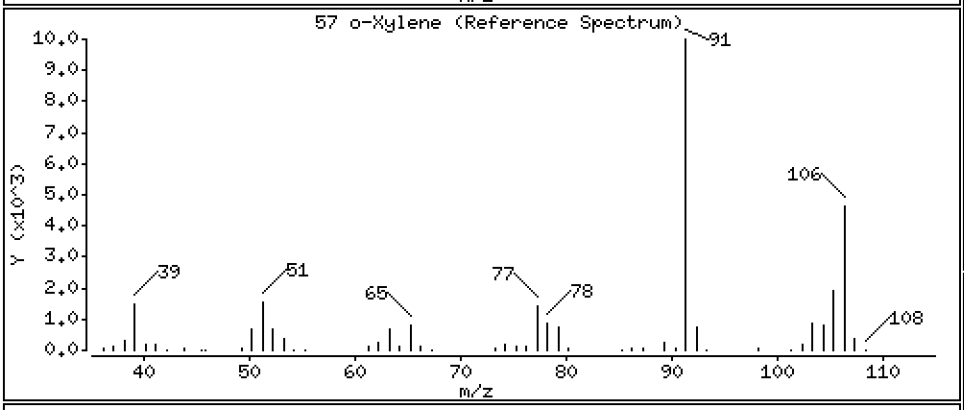
Column diameter: 0.18

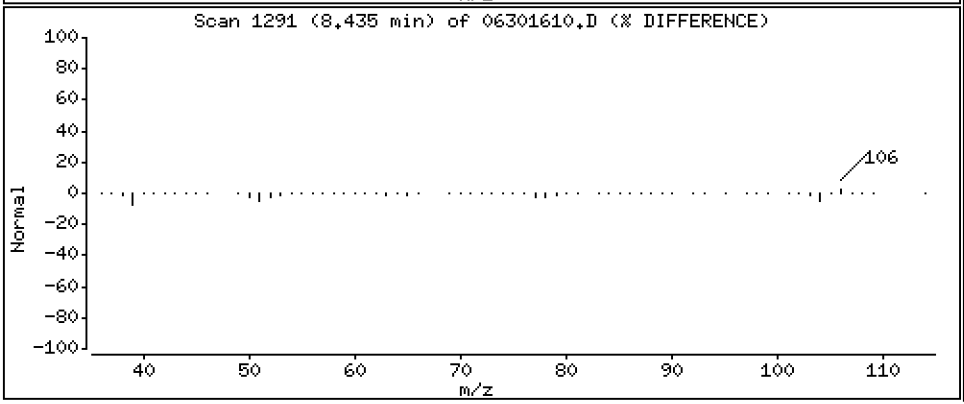
57 o-Xylene

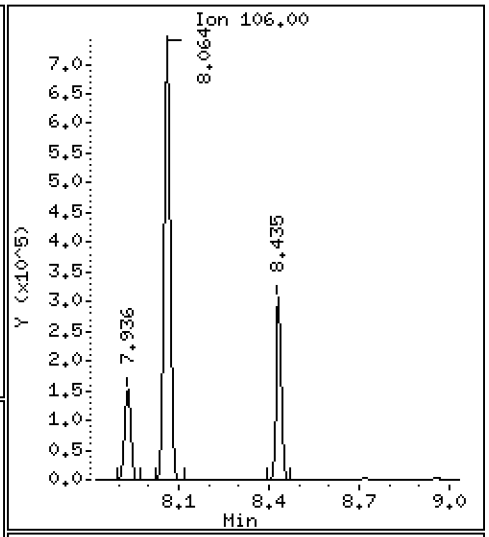
Concentration: 14.034 ug/Kg

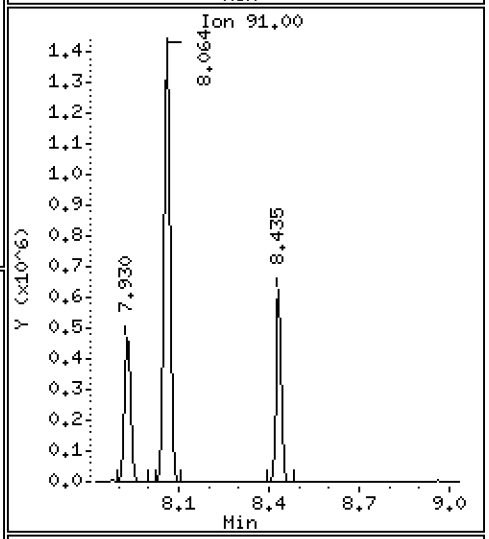


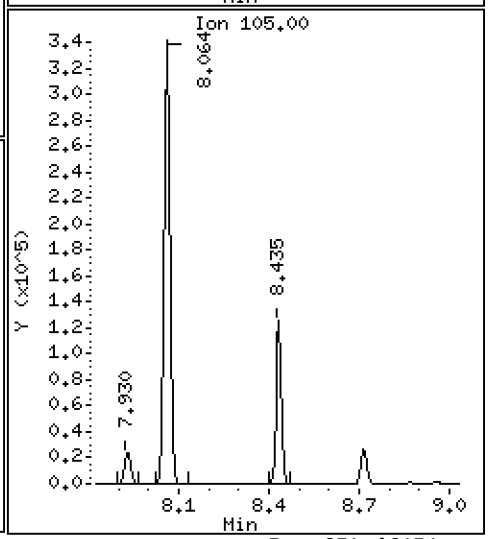












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301610.D
Lab Smp Id: 16F0096-23
Inj Date : 30-JUN-2016 15:37
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-23
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	Compound Not Detected.					
3 Vinyl Chloride	62	1.359	1.341	(0.274)	192237	8.97919	8.979
4 Bromomethane	94	Compound Not Detected.					
5 Chloroethane	64	Compound Not Detected.					
6 Trichlorofluoromethane	101	Compound Not Detected.					
7 1,1-Dichloroethene	96	Compound Not Detected.					
8 Carbon Disulfide	76	Compound Not Detected.					
9 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10 Iodomethane	142	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Acrolein	56	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acetone	43	Compound Not Detected.					
15 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16 Methyl tert butyl ether	73	Compound Not Detected.					
17 1,1-Dichloroethane	63	Compound Not Detected.					
18 Acrylonitrile	53	Compound Not Detected.					
19 Vinyl Acetate	43	Compound Not Detected.					
20 Cis-1,2-Dichloroethene	96	4.060	4.042	(0.819)	3138155	168.186	168.19
22 2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.498	4.486	(0.907)	841584	47.7973	47.797
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	4.827	4.815	(0.893)	80648	1.26094	1.261
*	31 Pentafluorobenzene	168	4.961	4.943	(1.000)	738741	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.000)	830386	47.1767	47.177
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.350	5.338	(0.990)	839849	50.6734	50.673
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2368263	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.555	(1.215)	2928824	48.2657	48.266
	43 Toluene	92	6.609	6.597	(1.223)	9299056	225.995	225.99
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2528887	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.930	7.930	(1.006)	651662	8.44294	8.443
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.063	8.063	(1.023)	987181	32.9451	32.945
	57 o-Xylene	106	8.435	8.428	(1.070)	415372	14.0341	14.034
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1333130	49.0188	49.019
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1288898	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1293234	49.8278	49.828
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301610.D
Lab Smp Id: 16F0096-23
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	738741	23.13
35 1,4-Difluorobenze	2041239	1020620	4082478	2368263	16.02
52 d5-Chlorobenzene	2118314	1059157	4236628	2528887	19.38
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1288898	22.16

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.37
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 15:49

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-23
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	47.797	95.59	70-130
$ 32 d4-1,2-Dichloroeth	50.000	47.177	94.35	80-149
$ 42 d8-Toluene	50.000	48.266	96.53	77-120
$ 62 4-Bromofluorobenze	50.000	49.019	98.04	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.828	99.66	80-120

REVIEW SUMMARY FOR FILE - 06301610.D

Lab ID: 16F0096-23
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 15:37

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-P-52-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid (MeOH extraction)

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-23RE1	File ID:	06301620.D
Sampled:	06/29/16 13:15	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 19:23
Solids:	92.75	Preparation:	No Prep - Volatiles	Initial/Final:	5.028 g / 5 g
Batch:	BEG0006	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	57.5	U	8.97	57.5
74-83-9	Bromomethane	1	52.1	J	11.7	57.5
156-59-2	cis-1,2-Dichloroethene	1	62.7		10.4	57.5
71-43-2	Benzene	1	57.5	U	9.43	57.5
79-01-6	Trichloroethene	1	38.9	J	10.4	57.5
108-88-3	Toluene	1	150		9.89	57.5
127-18-4	Tetrachloroethene	1	57.5	U	15.9	57.5
100-41-4	Ethylbenzene	1	57.5	U	15.6	57.5
179601-23-1	m,p-Xylene	1	39.1	J	32.1	57.5
95-47-6	o-Xylene	1	57.5	U	13.1	57.5

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	42.8	85.6	80 - 124	
Toluene-d8	50.000	48.0	96.0	80 - 120	
4-Bromofluorobenzene	50.000	49.5	99.0	80 - 120	
1,2-Dichlorobenzene-d4	50.000	48.9	97.8	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301620.D

Date : 30-JUN-2016 19:23

Client ID:

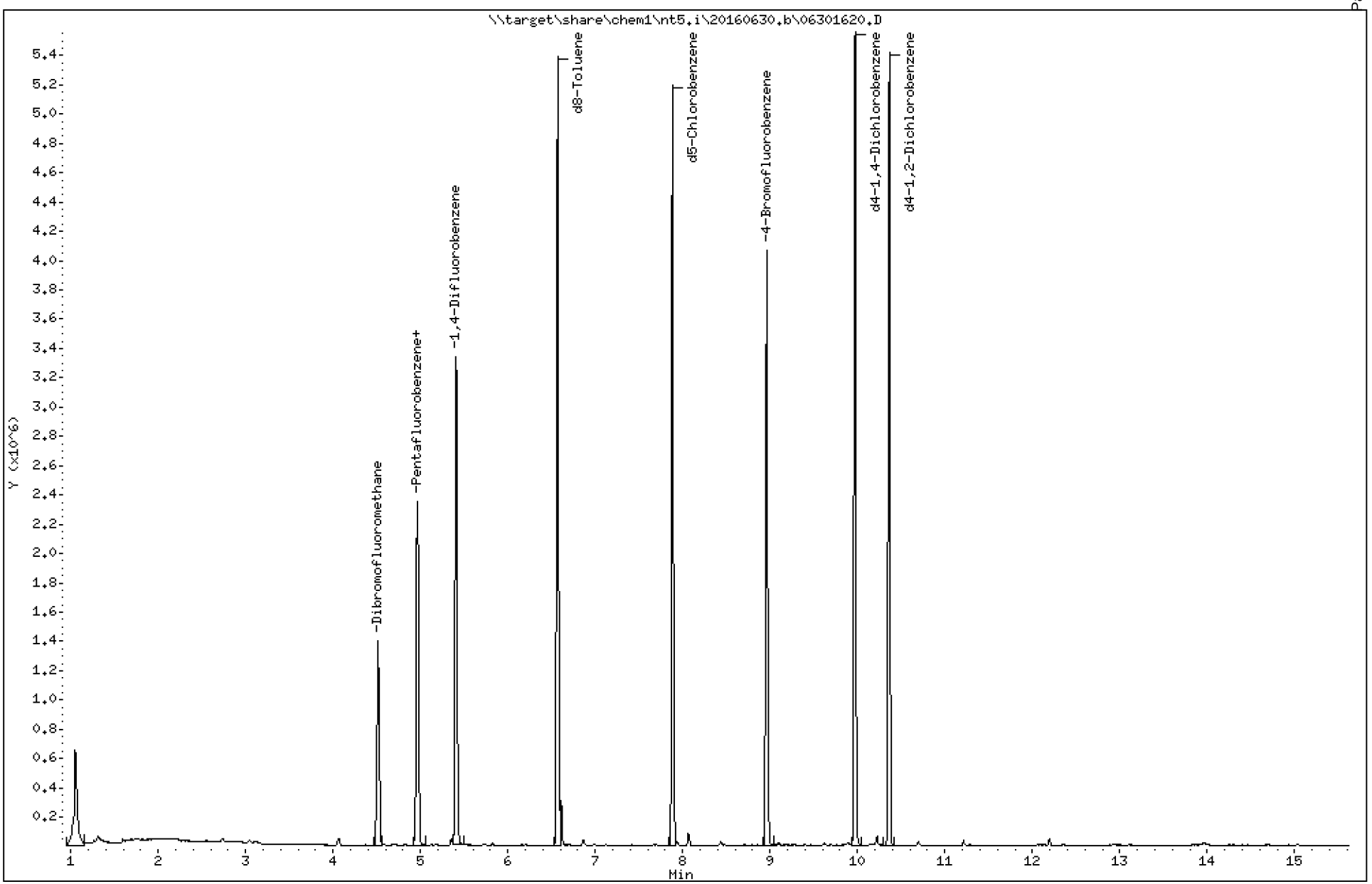
Instrument: nt5.i

Sample Info: 16F0096-23RE1

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



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Date : 30-JUN-2016 19:23

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-23RE1

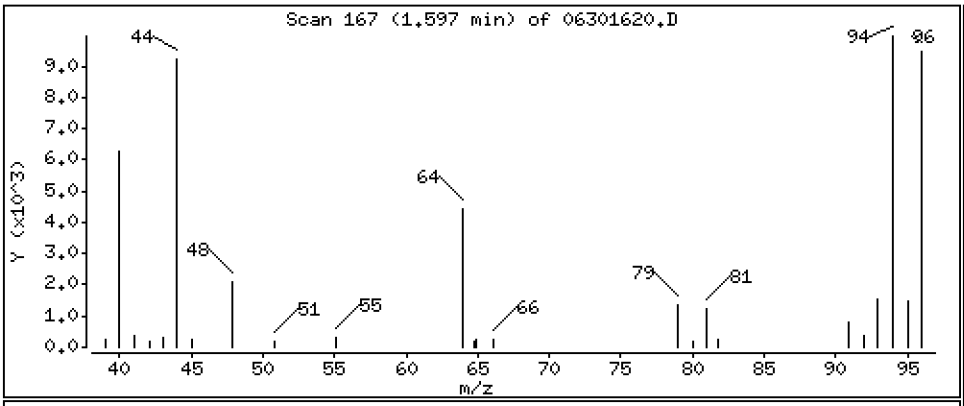
Operator: PB

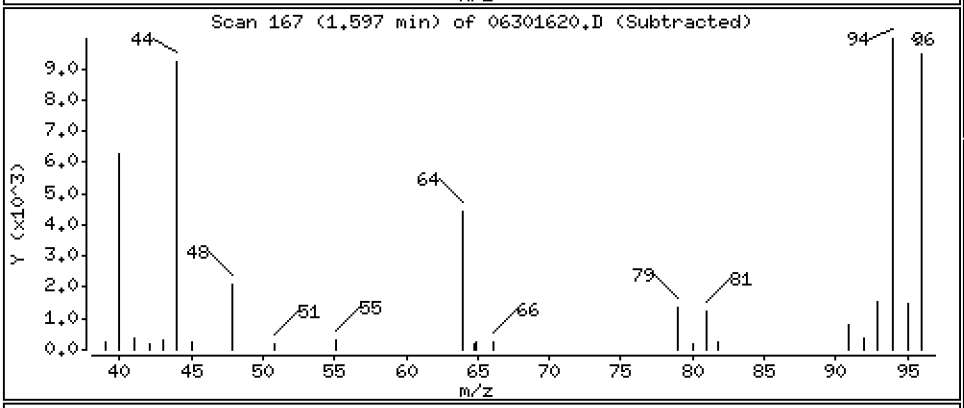
Column phase: RTXVMS

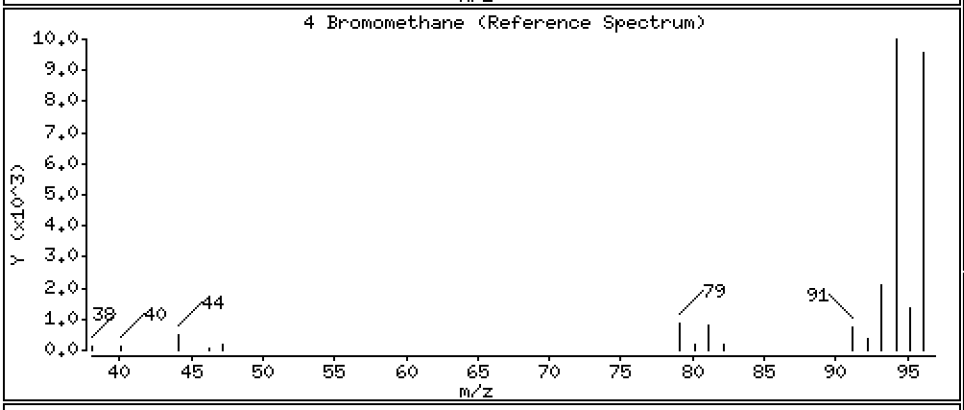
Column diameter: 0.18

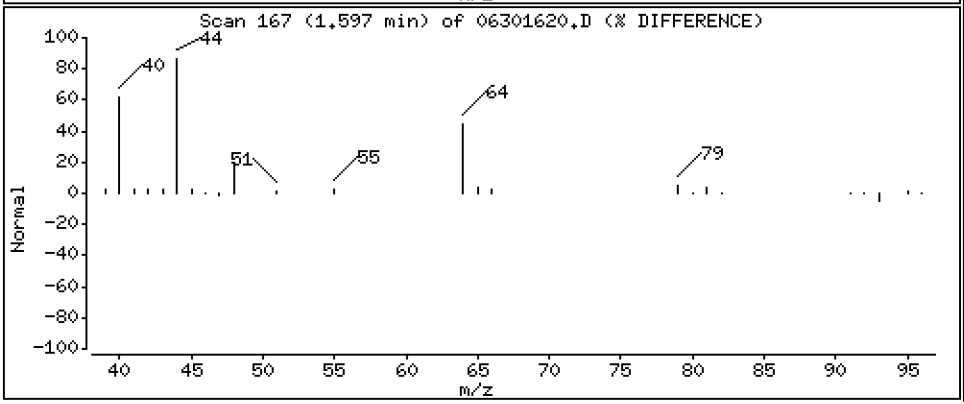
4 Bromomethane

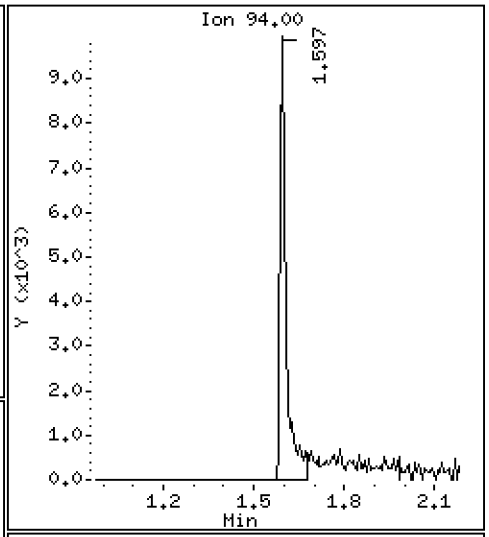
Concentration: 0.9066 ug/Kg

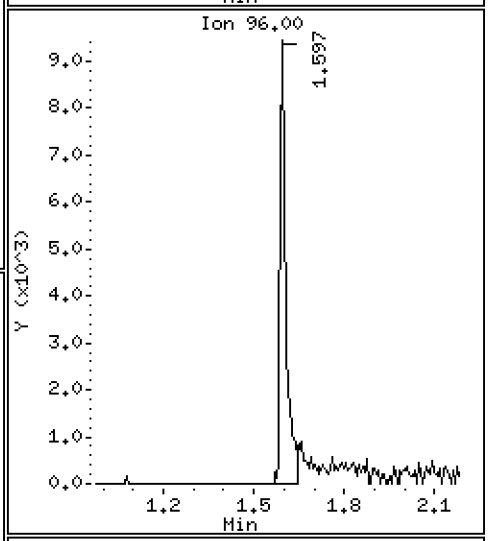


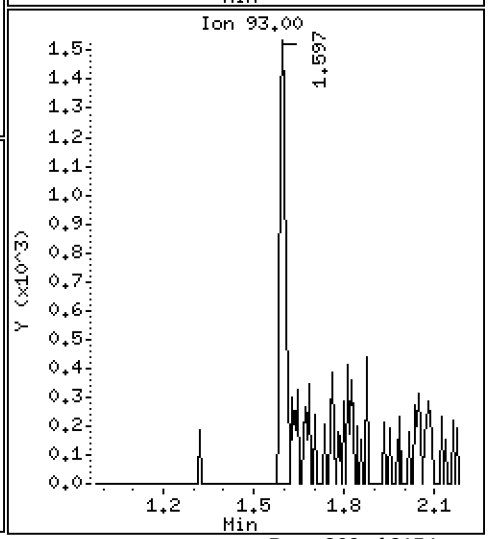












Data File: \\target\share\chem1\nt5.i\20160630.b\06301620.D

Date : 30-JUN-2016 19:23

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-23RE1

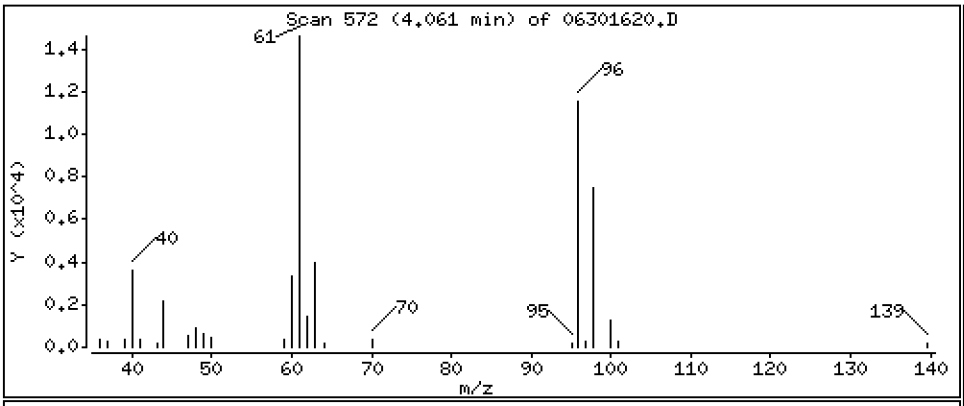
Operator: PB

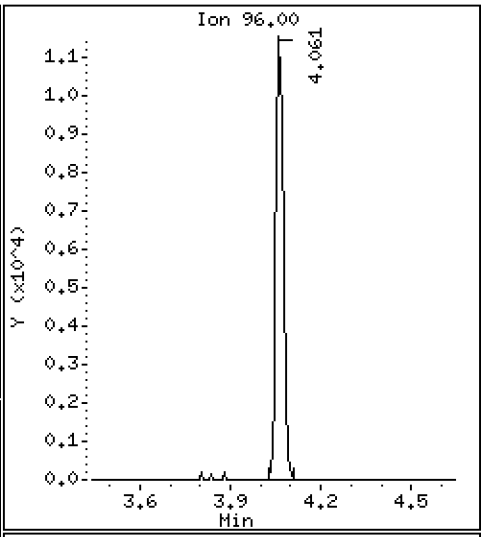
Column phase: RTXVMS

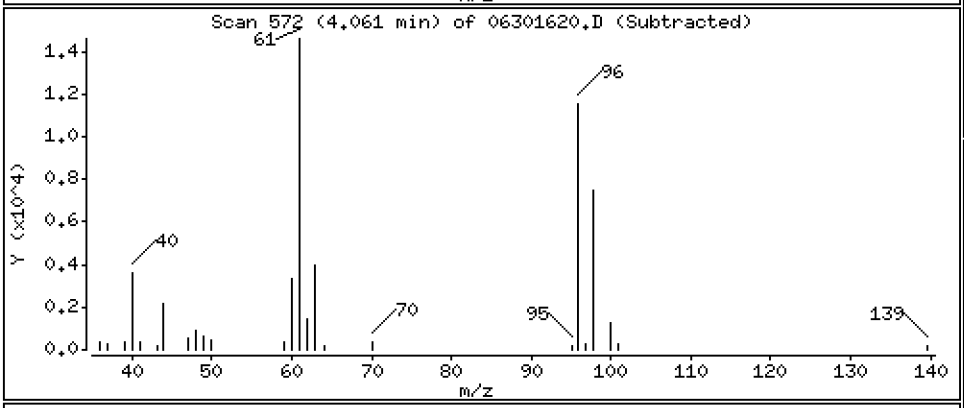
Column diameter: 0.18

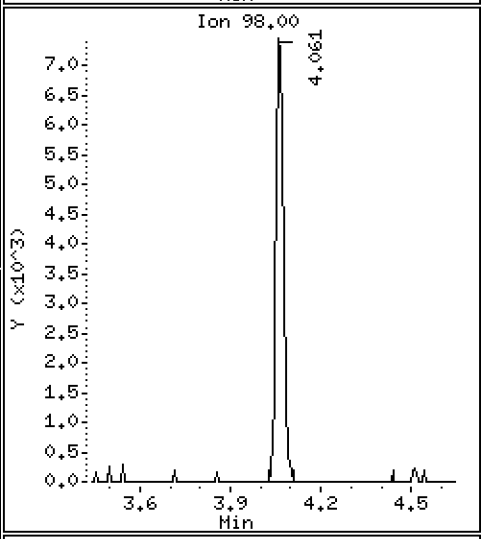
20 Cis-1,2-Dichloroethene

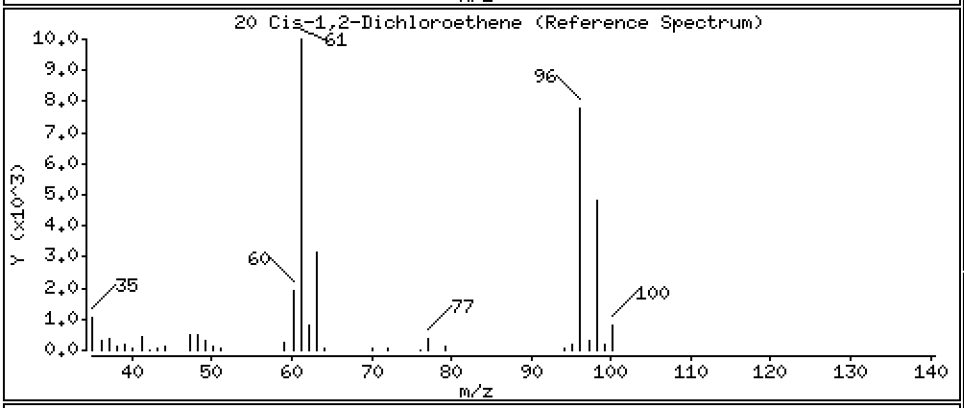
Concentration: 1.089 ug/Kg

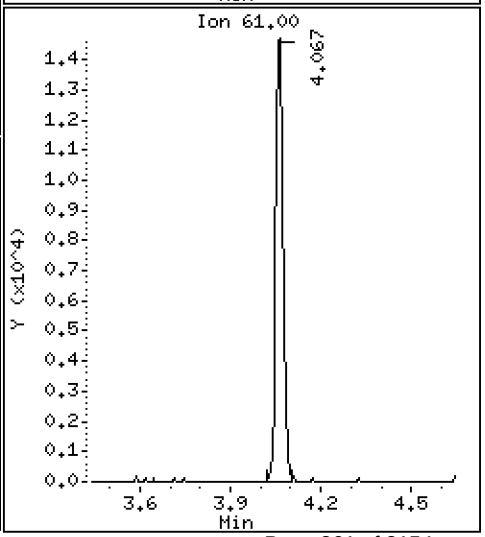


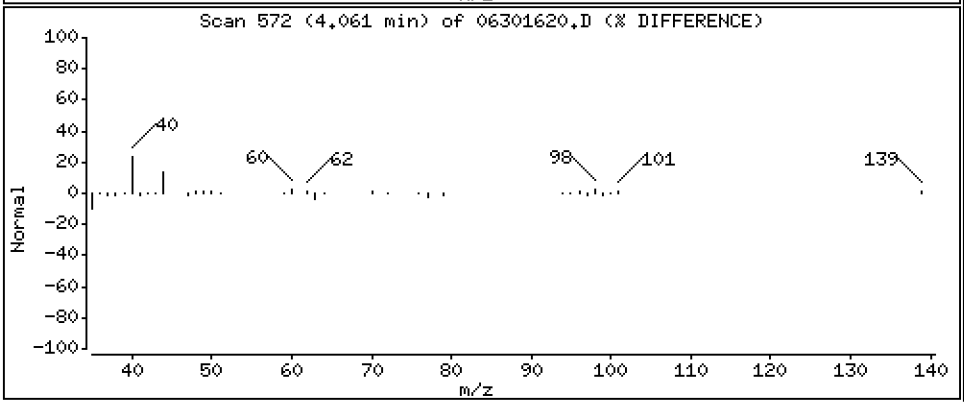












Data File: \\target\share\chem1\nt5.i\20160630.b\06301620.D

Date : 30-JUN-2016 19:23

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-23RE1

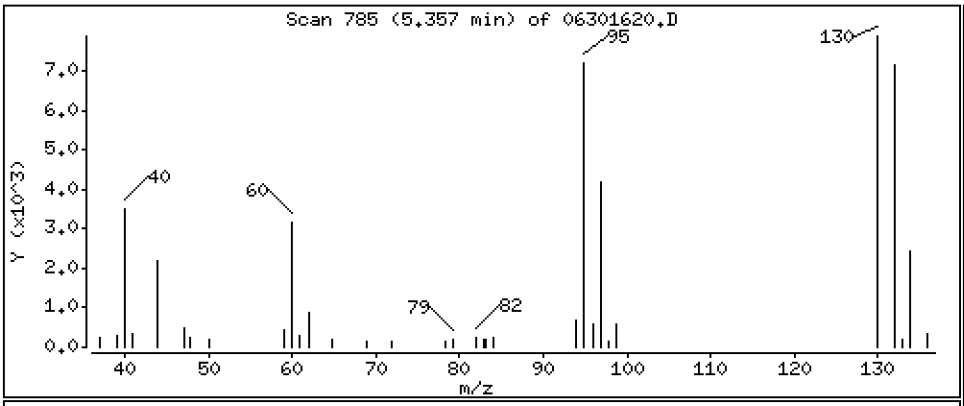
Operator: PB

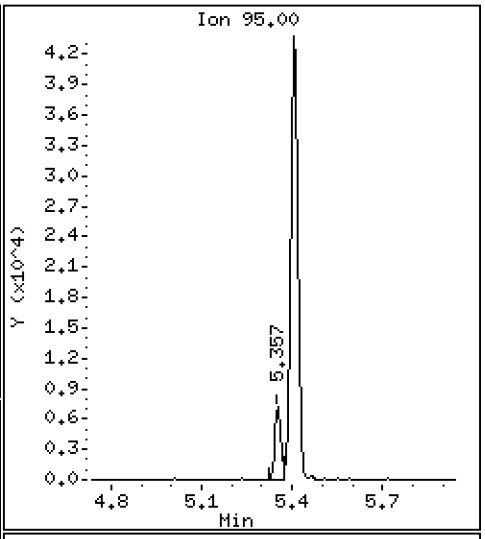
Column phase: RTXVMS

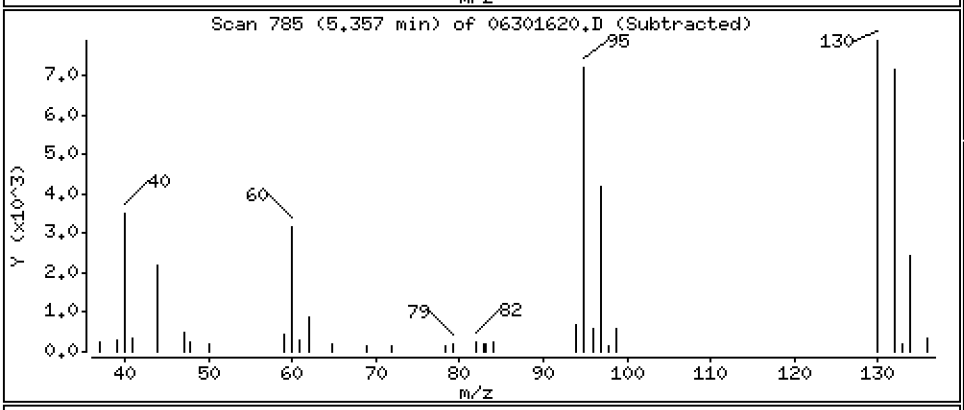
Column diameter: 0.18

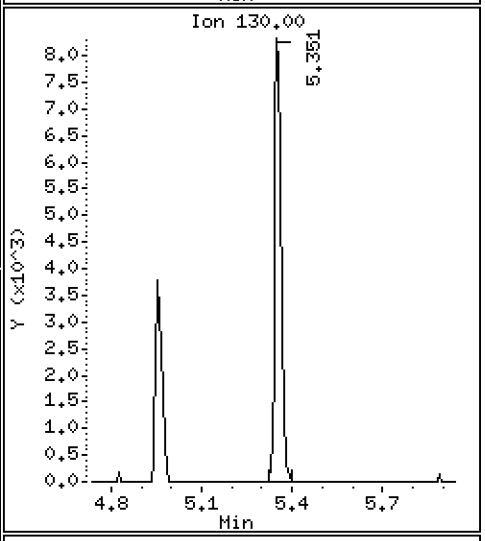
34 Trichloroethene

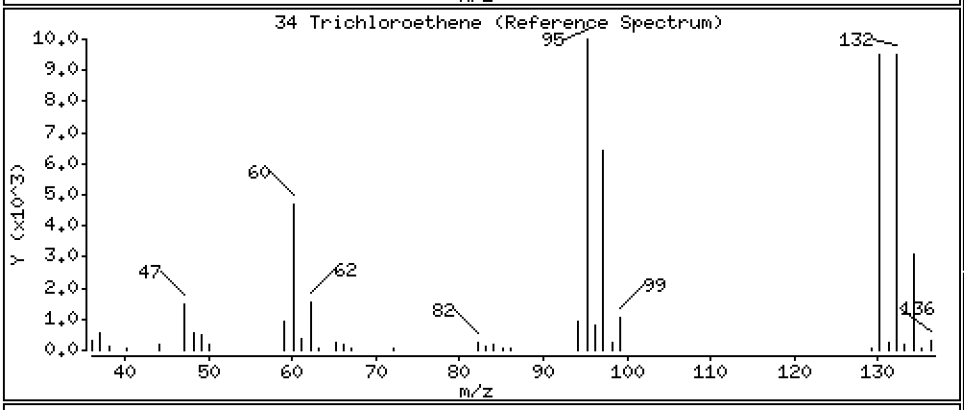
Concentration: 0.6768 ug/Kg

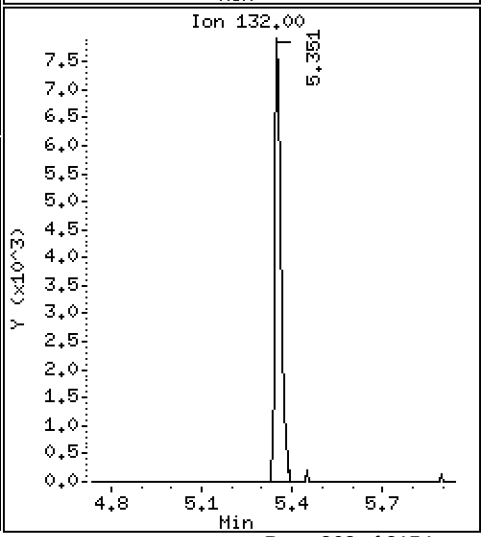


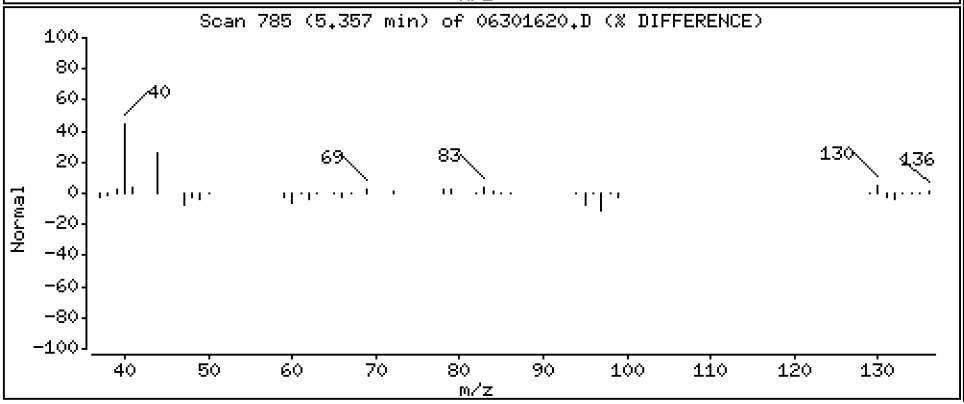












Data File: \\target\share\chem1\nt5.i\20160630.b\06301620.D

Date : 30-JUN-2016 19:23

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-23RE1

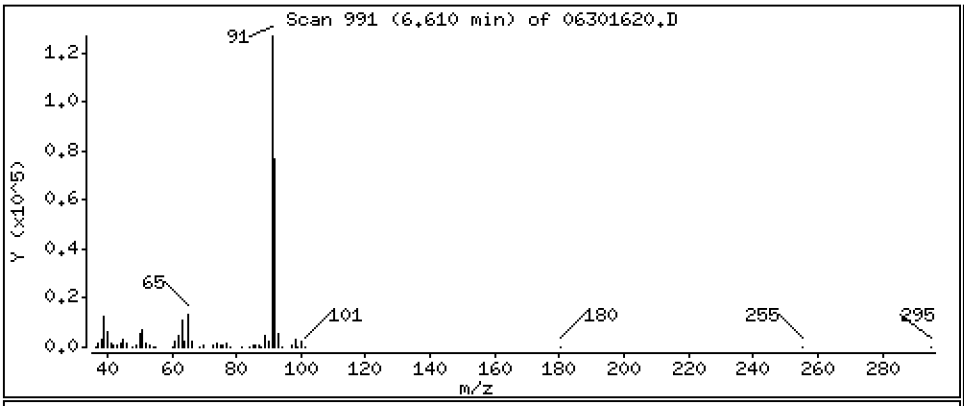
Operator: PB

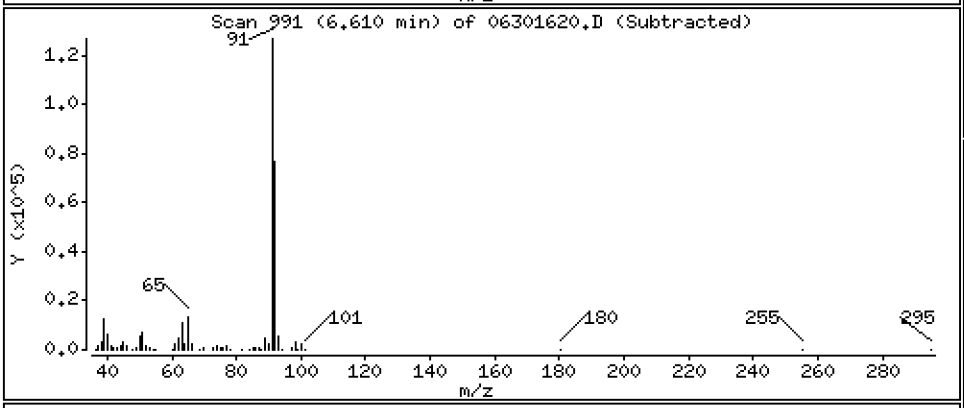
Column phase: RTXVMS

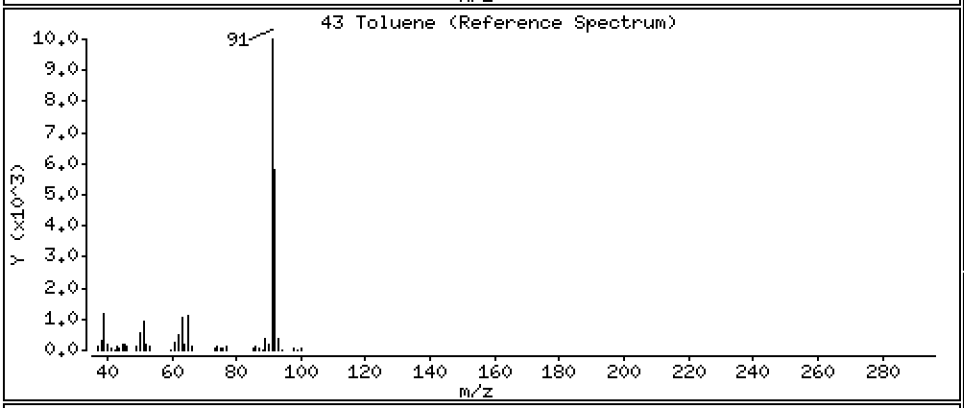
Column diameter: 0.18

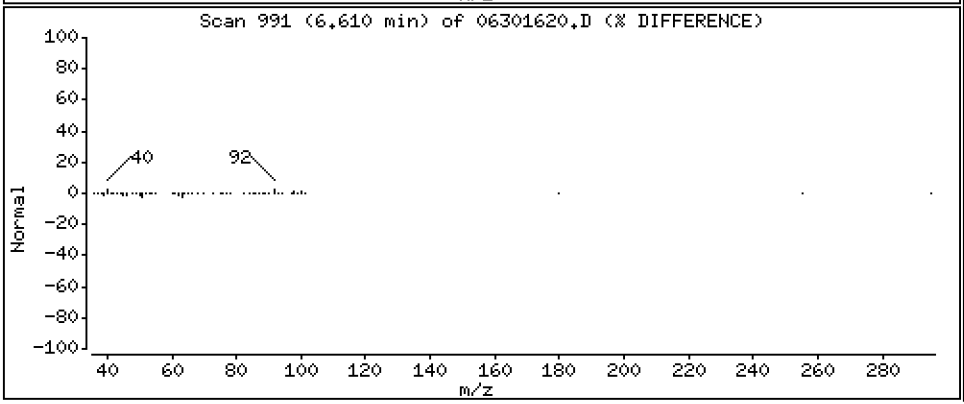
43 Toluene

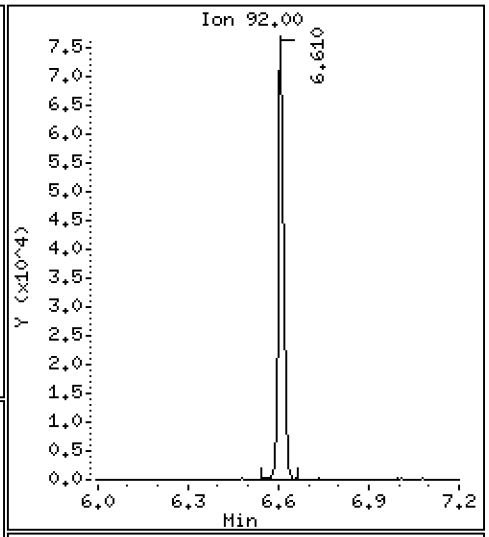
Concentration: 2.612 ug/Kg

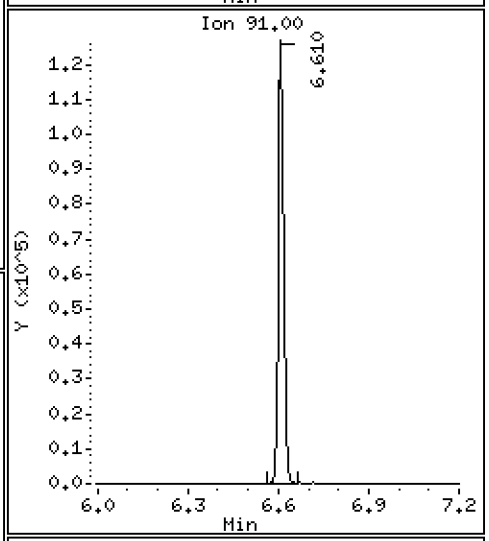


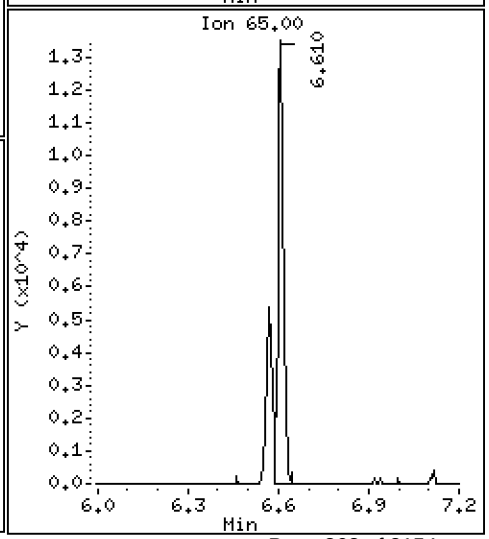












Data File: \\target\share\chem1\nt5.i\20160630.b\06301620.D

Date : 30-JUN-2016 19:23

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-23RE1

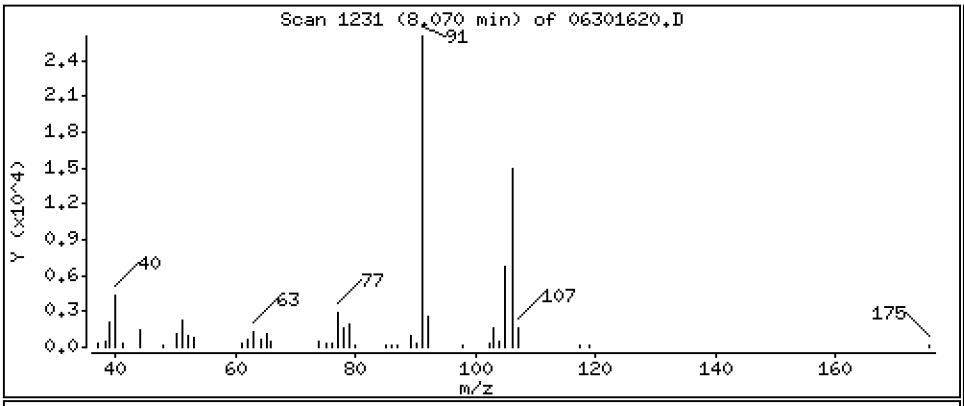
Operator: PB

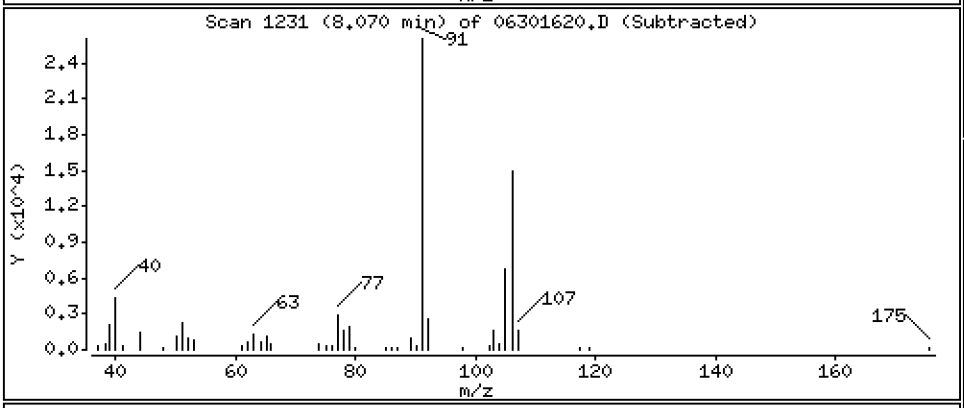
Column phase: RTXVMS

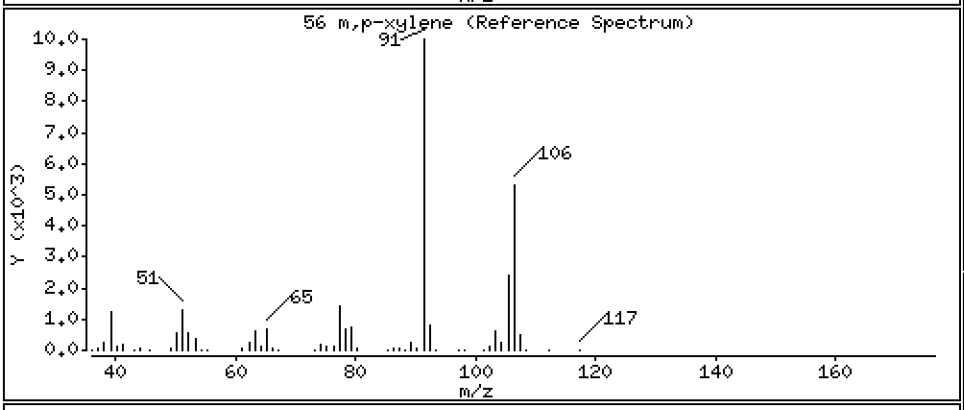
Column diameter: 0.18

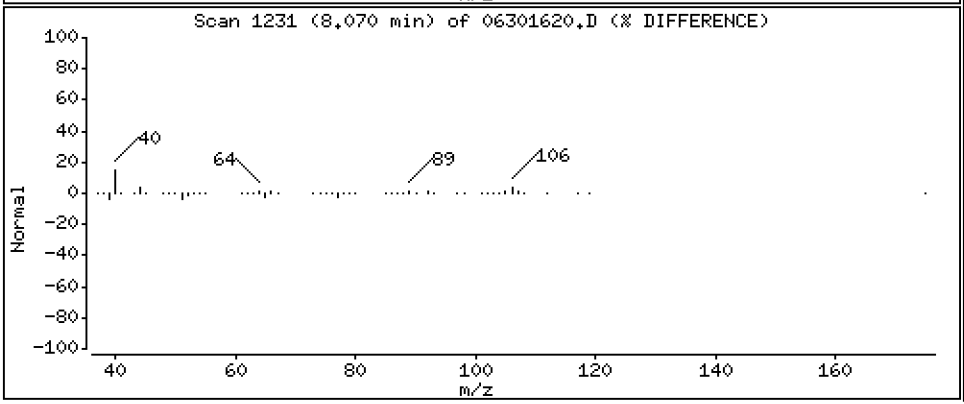
56 m,p-xylene

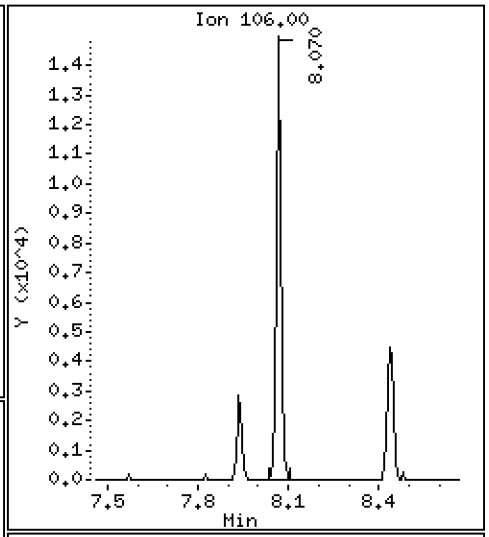
Concentration: 0.6797 ug/Kg

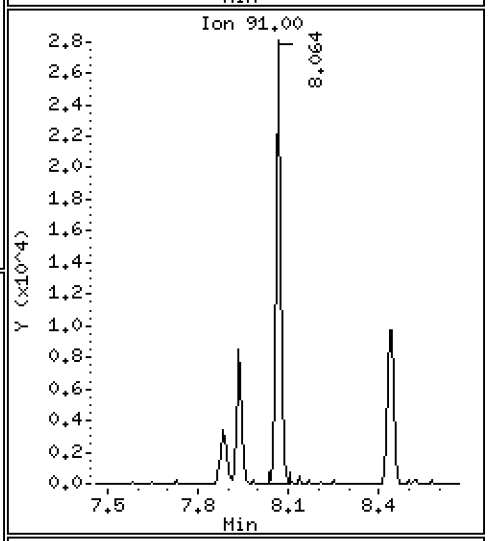


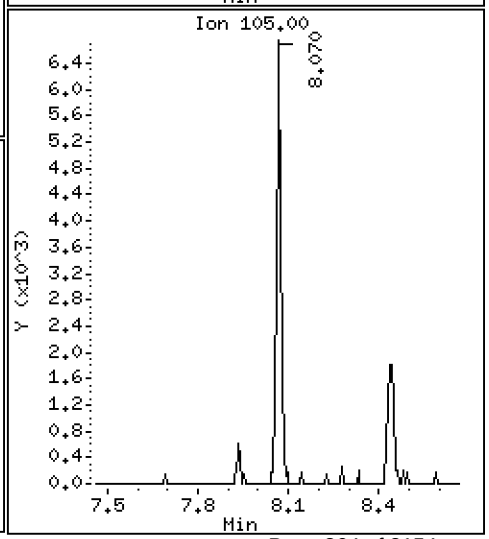












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301620.D
Lab Smp Id: 16F0096-23RE1
Inj Date : 30-JUN-2016 19:23
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-23RE1
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	1.597	1.578	(0.322)	14145	0.90662	0.9066
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.060	4.042	(0.819)	21047	1.08928	1.089
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.517	4.486	(0.910)	811826	44.5248	44.525
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.961	4.943	(1.000)	764997	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.967	4.949	(1.001)	779717	42.7777	42.778
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.356	5.338	(0.991)	11277	0.67679	0.6768
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2380932	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.555	(1.215)	2926860	47.9767	47.977
	43 Toluene	92	6.609	6.597	(1.223)	108059	2.61218	2.612
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2492982	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.069	8.063	(1.024)	20079	0.67975	0.6797
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1326587	49.4807	49.481
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.968	(1.000)	1284763	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.363	10.357	(1.039)	1264497	48.8774	48.877
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301620.D
Lab Smp Id: 16F0096-23RE1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	764997	27.51
35 1,4-Difluorobenze	2041239	1020620	4082478	2380932	16.64
52 d5-Chlorobenzene	2118314	1059157	4236628	2492982	17.69
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1284763	21.77

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.37
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-23RE1
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	44.525	89.05	70-130
$ 32 d4-1,2-Dichloroeth	50.000	42.778	85.56	80-149
$ 42 d8-Toluene	50.000	47.977	95.95	77-120
$ 62 4-Bromofluorobenze	50.000	49.481	98.96	80-120
$ 79 d4-1,2-Dichloroben	50.000	48.877	97.75	80-120

REVIEW SUMMARY FOR FILE - 06301620.D

Lab ID: 16F0096-23RE1
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 19:23

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-P-03-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid (MeOH extraction)

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-24	File ID:	06301611.D
Sampled:	06/29/16 13:25	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 15:59
Solids:	91.20	Preparation:	No Prep - Volatiles	Initial/Final:	5.335 g / 5 g
Batch:	BEG0006	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	56.2	U	8.77	56.2
74-83-9	Bromomethane	1	66.1		11.5	56.2
156-59-2	cis-1,2-Dichloroethene	1	2100		10.1	56.2
71-43-2	Benzene	1	56.2	U	9.22	56.2
79-01-6	Trichloroethene	1	3040		10.1	56.2
108-88-3	Toluene	1	1930		9.67	56.2
127-18-4	Tetrachloroethene	1	56.2	U	15.5	56.2
100-41-4	Ethylbenzene	1	43.2	J	15.3	56.2
179601-23-1	m,p-Xylene	1	193		31.4	56.2
95-47-6	o-Xylene	1	77.4		12.8	56.2

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	43.5	87.0	80 - 124	
Toluene-d8	50.000	48.5	97.1	80 - 120	
4-Bromofluorobenzene	50.000	49.5	99.1	80 - 120	
1,2-Dichlorobenzene-d4	50.000	49.1	98.2	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301611.D

Date : 30-JUN-2016 15:59

Client ID:

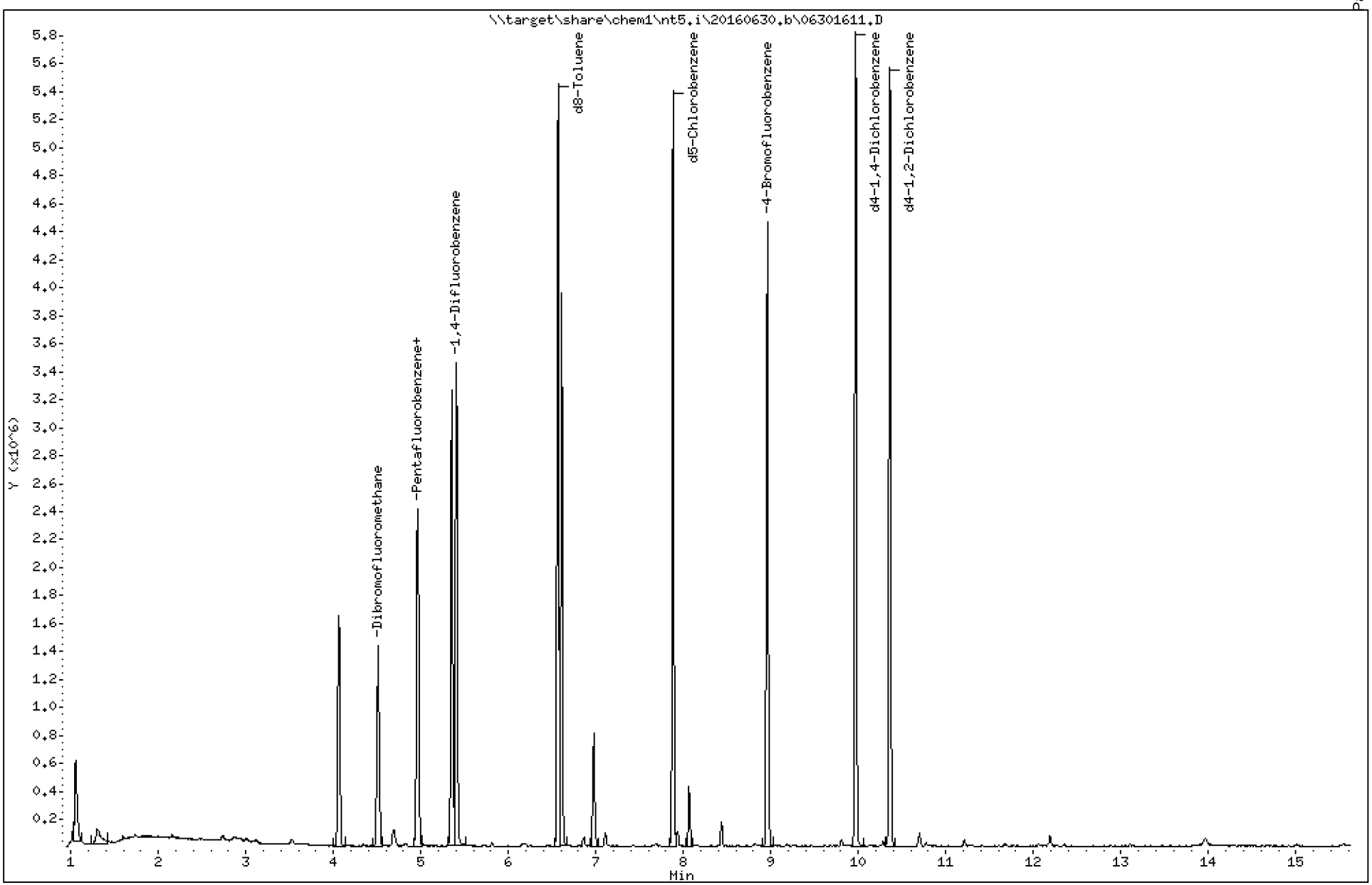
Instrument: nt5.i

Sample Info: 16F0096-24

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\06301611.D

Date : 30-JUN-2016 15:59

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-24

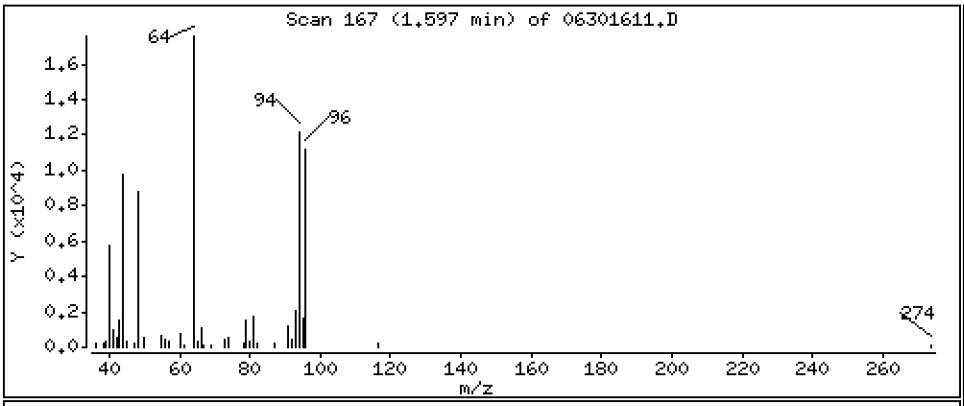
Operator: PB

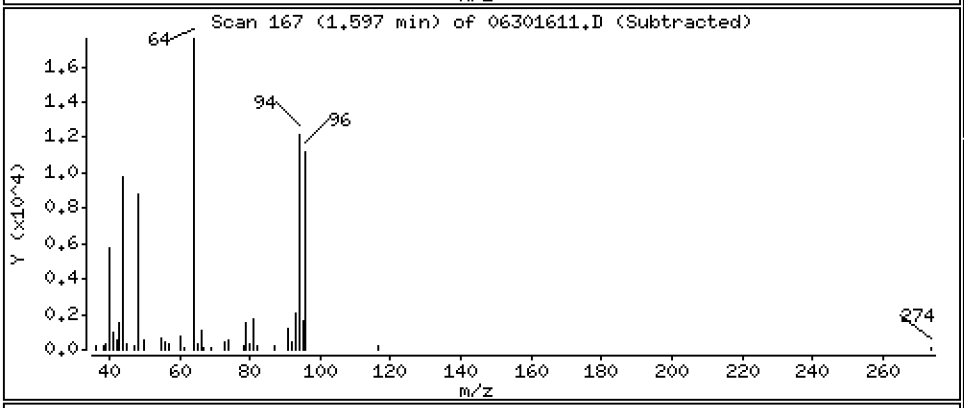
Column phase: RTXVMS

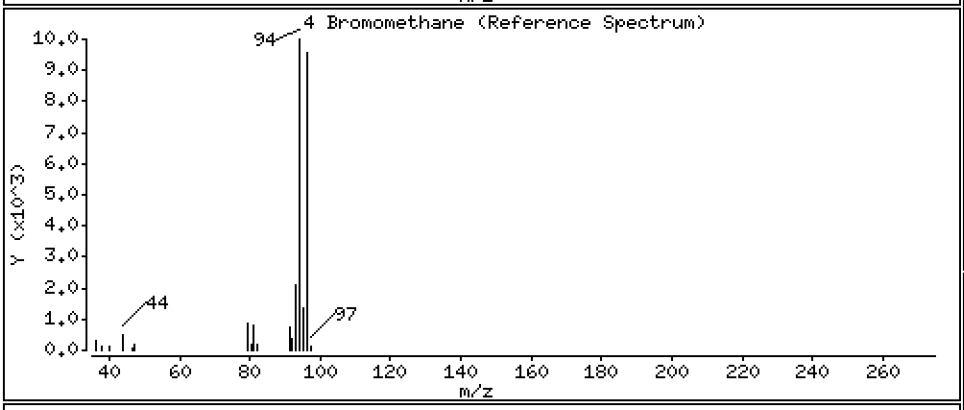
Column diameter: 0.18

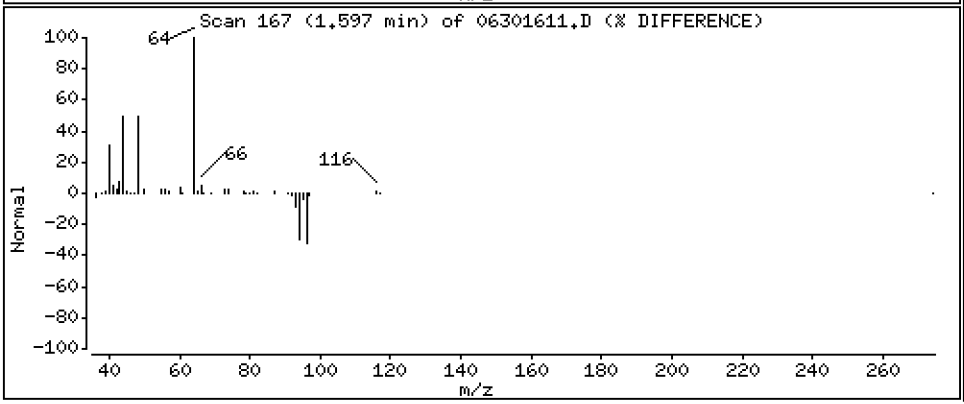
4 Bromomethane

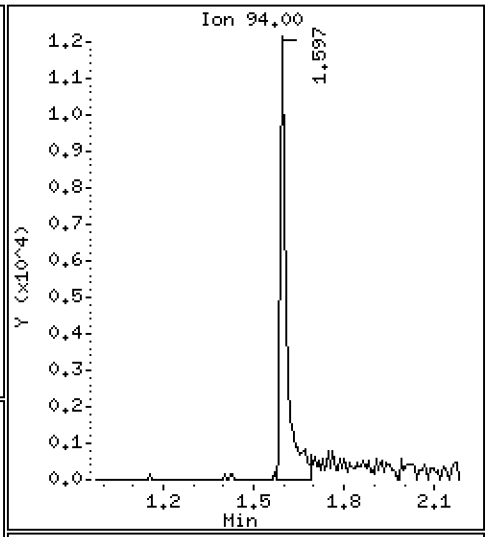
Concentration: 1.176 ug/Kg

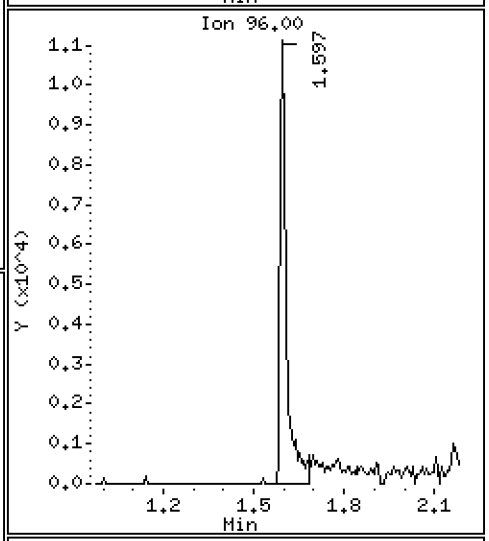


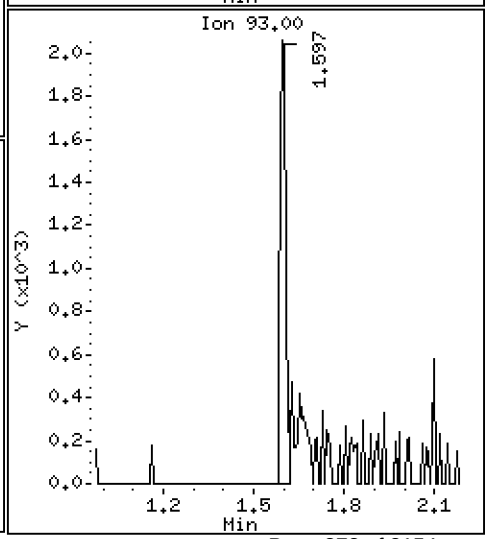












Data File: \\target\share\chem1\nt5.i\20160630.b\06301611.D

Date : 30-JUN-2016 15:59

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-24

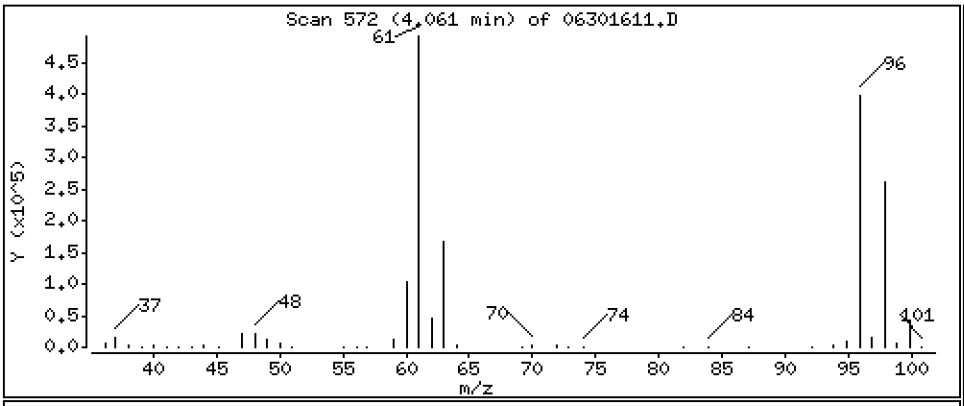
Operator: PB

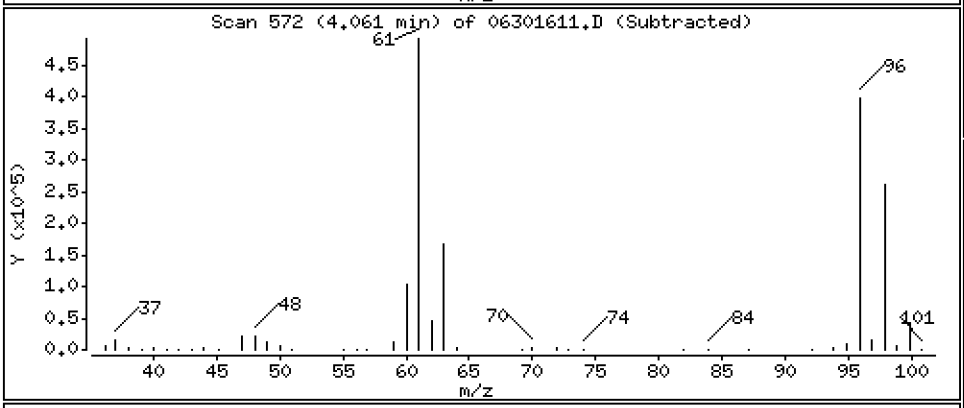
Column phase: RTXVMS

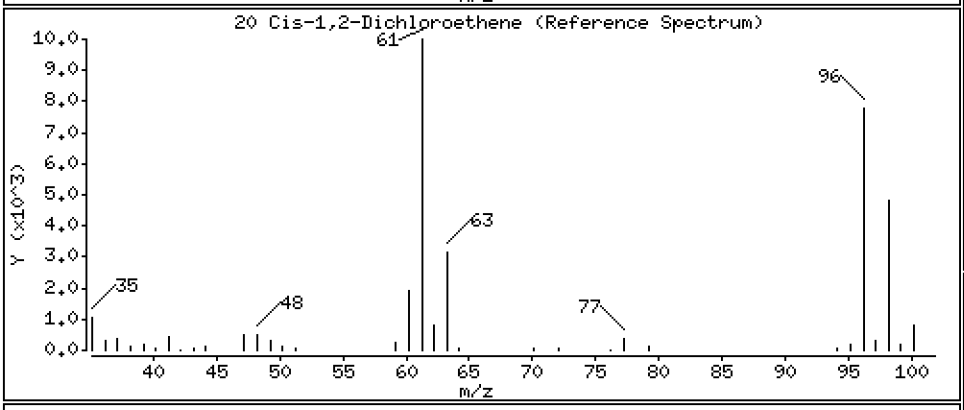
Column diameter: 0.18

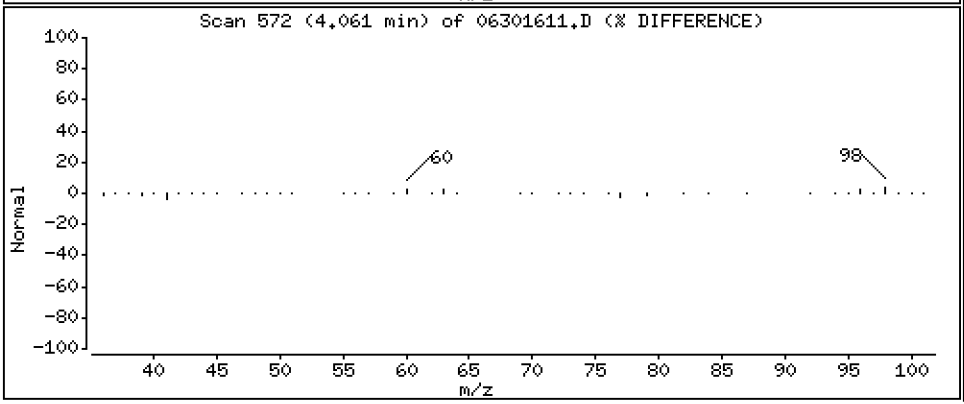
20 Cis-1,2-Dichloroethene

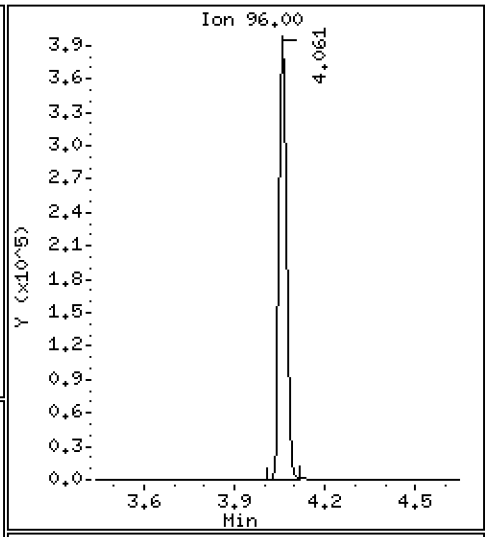
Concentration: 37.274 ug/Kg

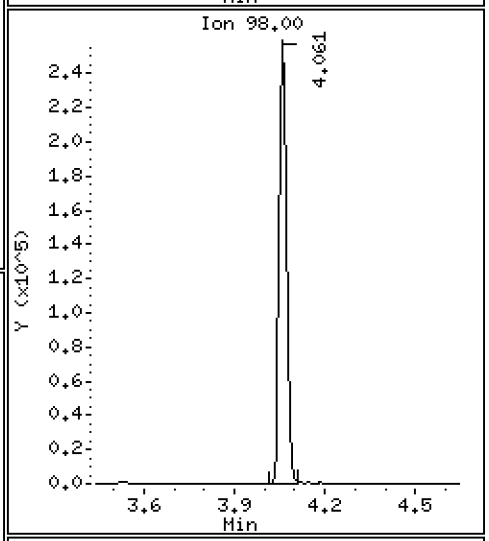


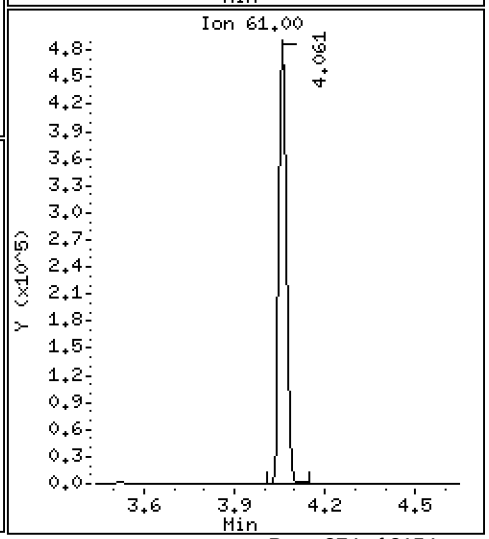












Data File: \\target\share\chem1\nt5.i\20160630.b\06301611.D

Date : 30-JUN-2016 15:59

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-24

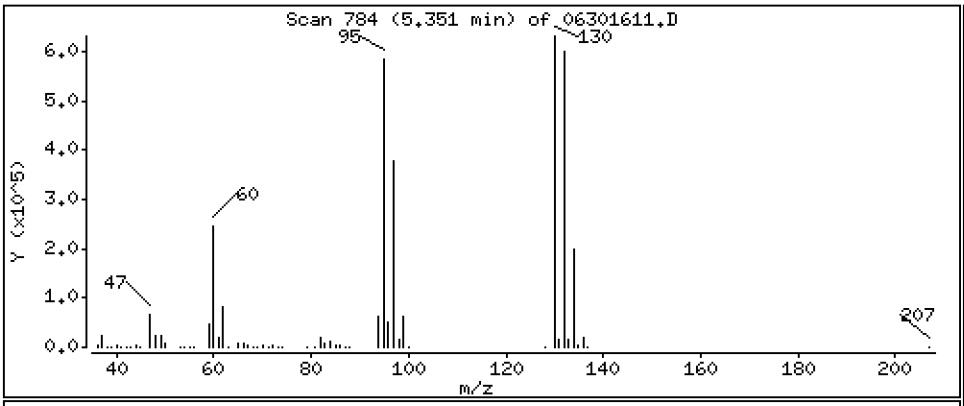
Operator: PB

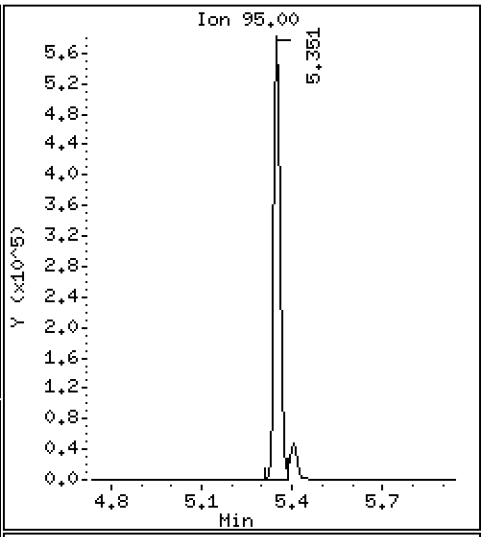
Column phase: RTXVMS

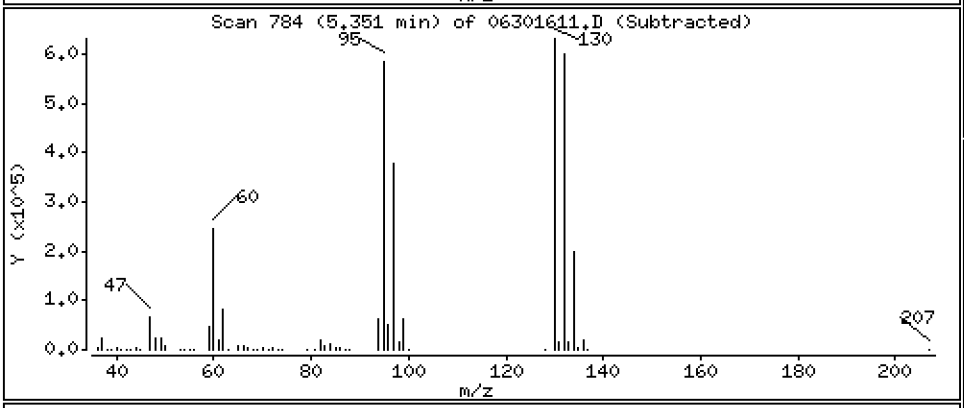
Column diameter: 0.18

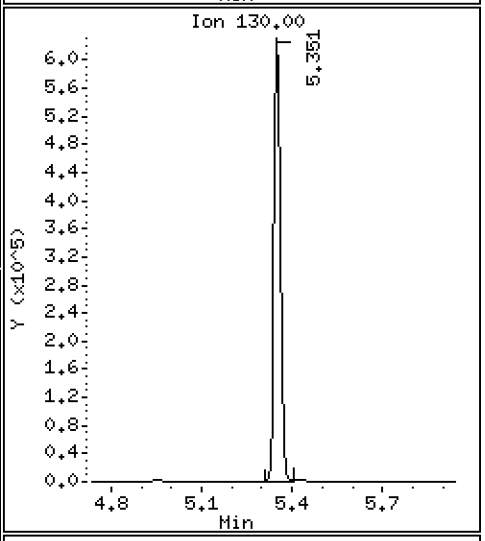
34 Trichloroethene

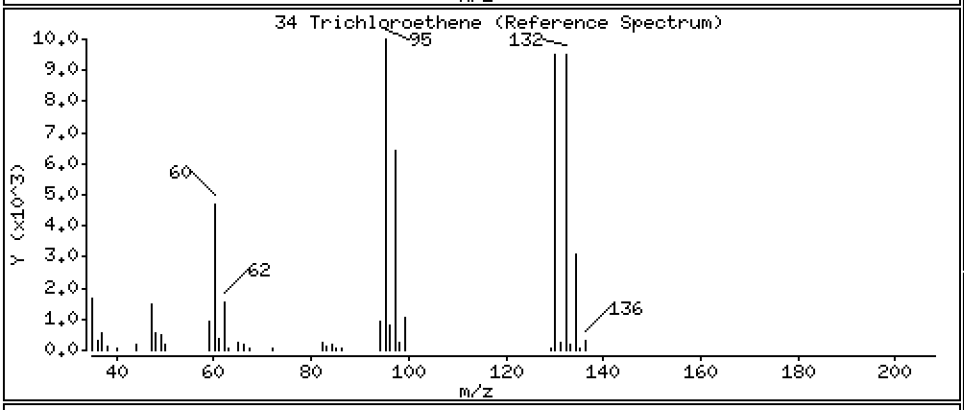
Concentration: 54.167 ug/Kg

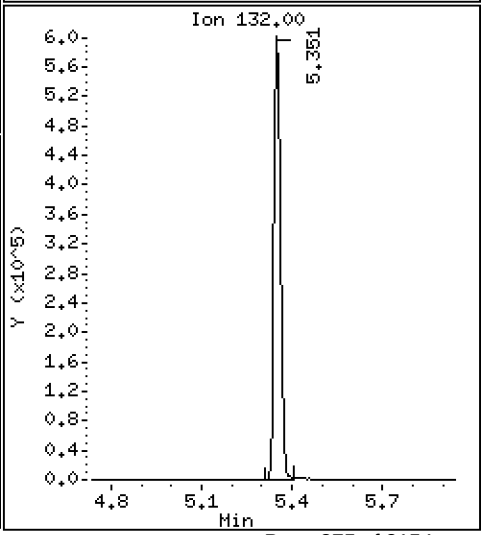


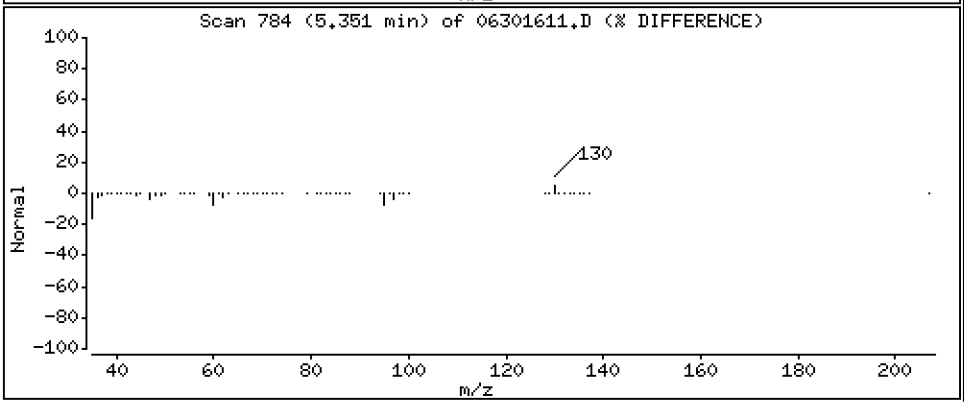












Data File: \\target\share\chem1\nt5.i\20160630.b\06301611.D

Date : 30-JUN-2016 15:59

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-24

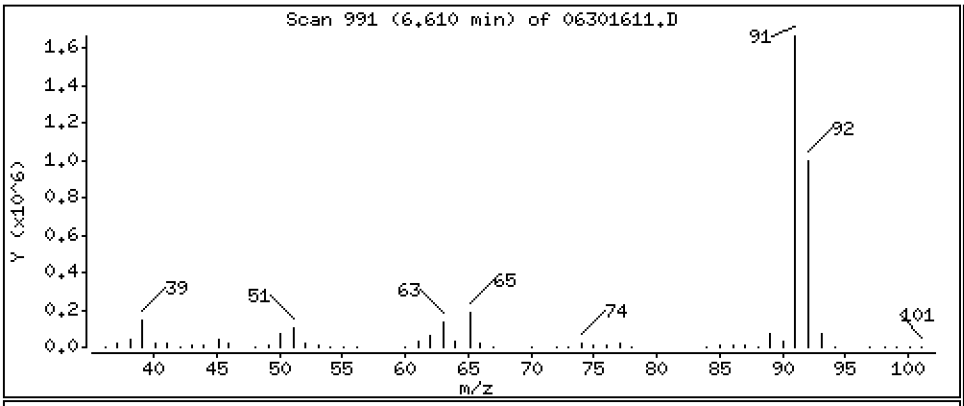
Operator: PB

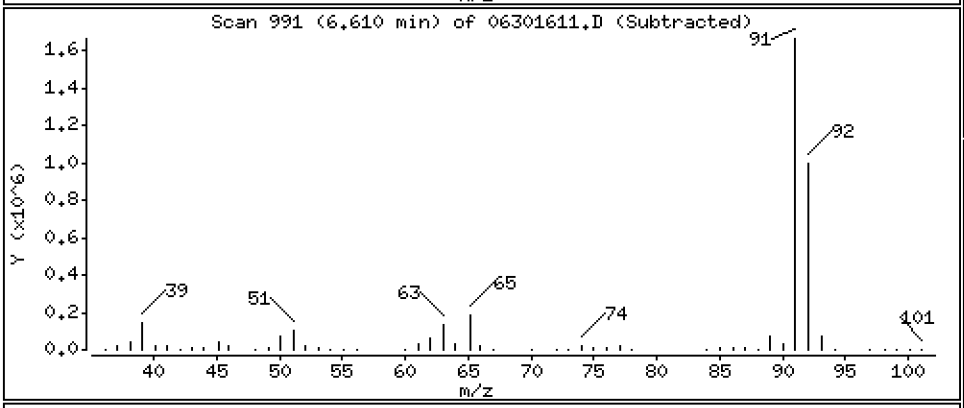
Column phase: RTXVMS

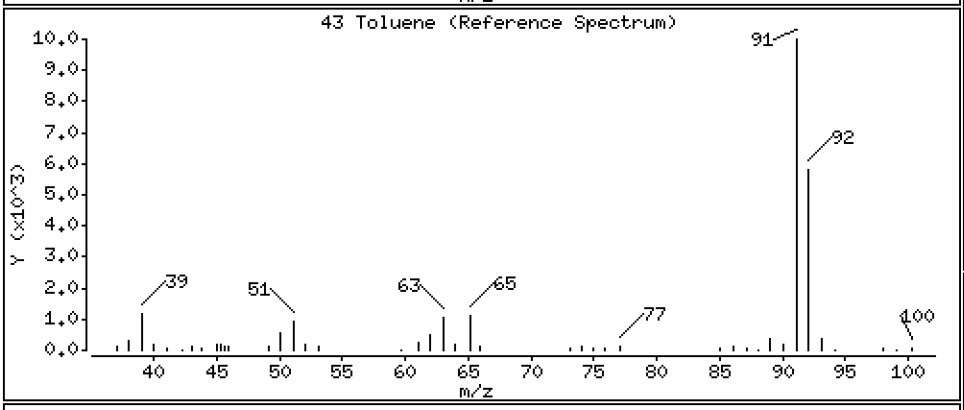
Column diameter: 0.18

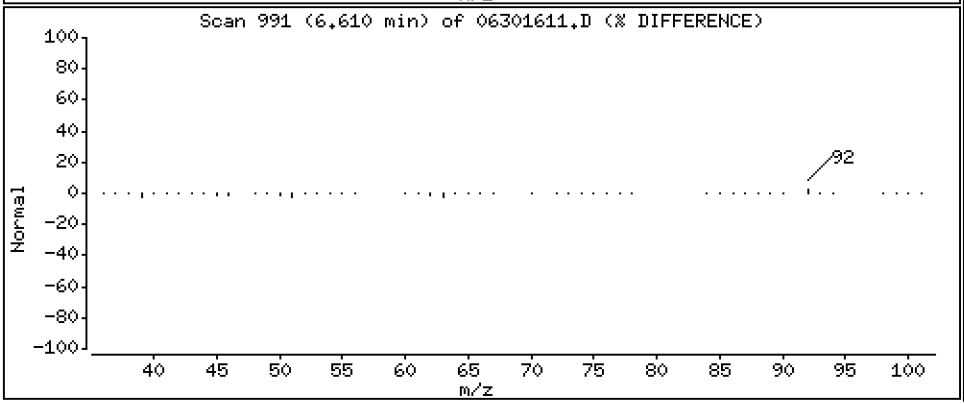
43 Toluene

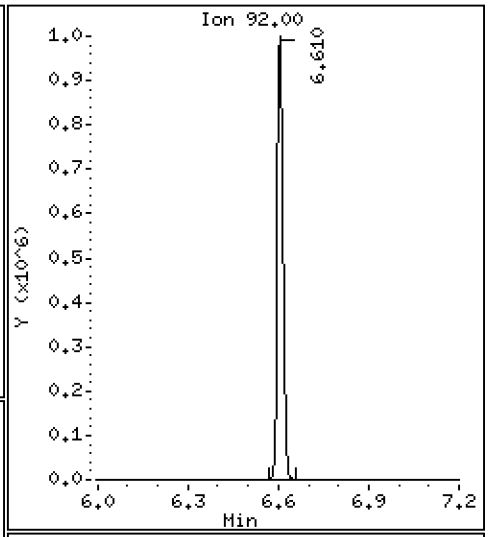
Concentration: 34.409 ug/Kg

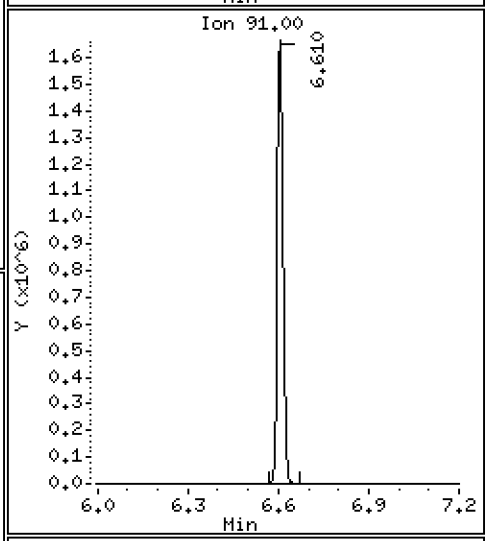


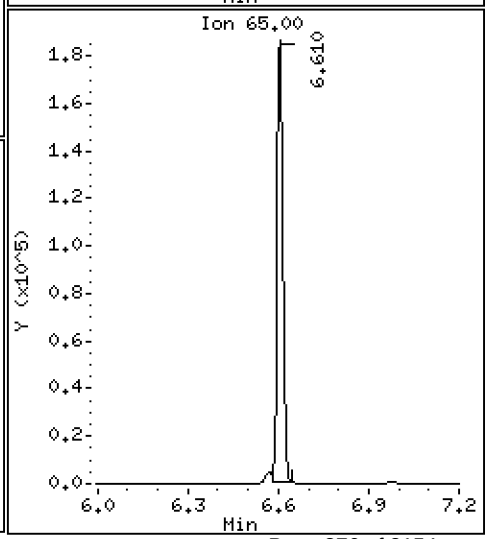












Data File: \\target\share\chem1\nt5.i\20160630.b\06301611.D

Date : 30-JUN-2016 15:59

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-24

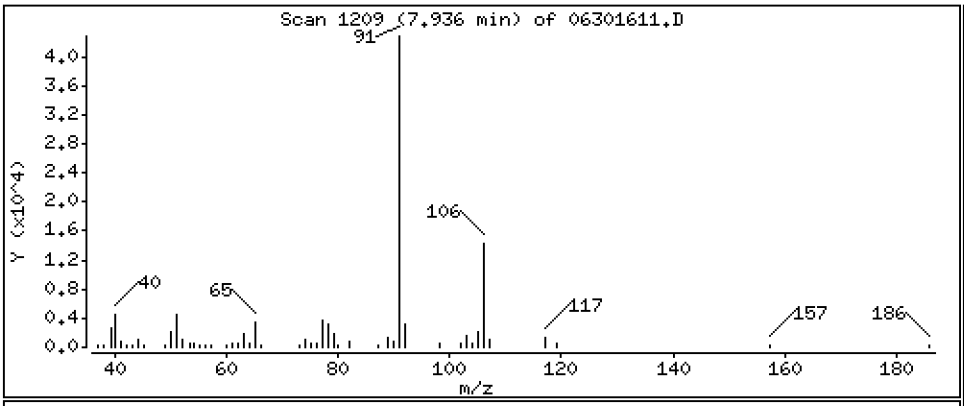
Operator: PB

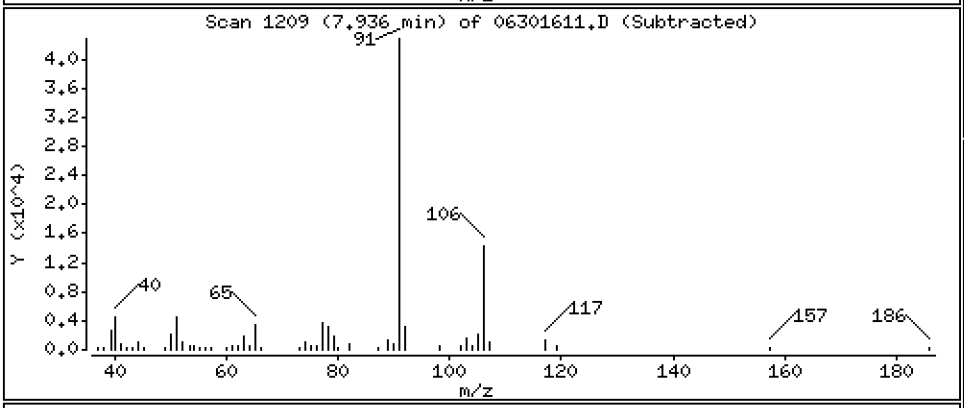
Column phase: RTXVMS

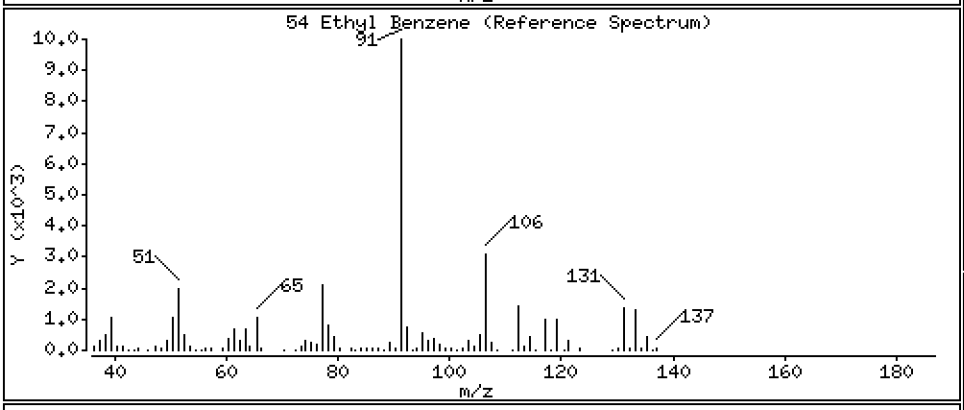
Column diameter: 0.18

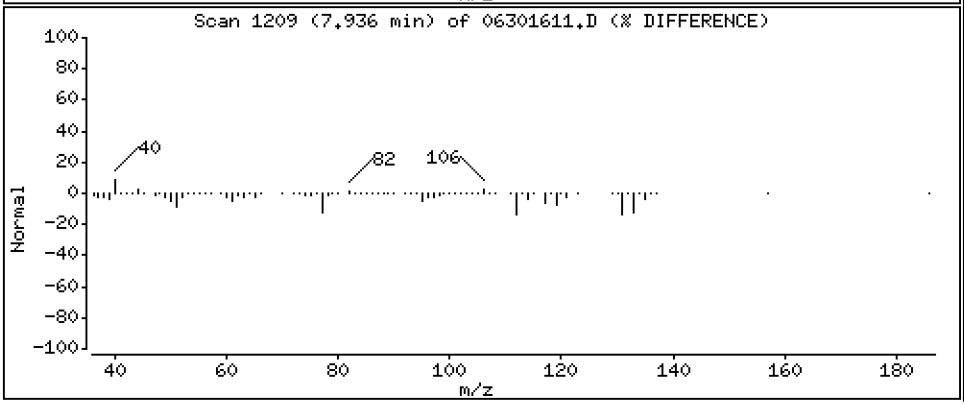
54 Ethyl Benzene

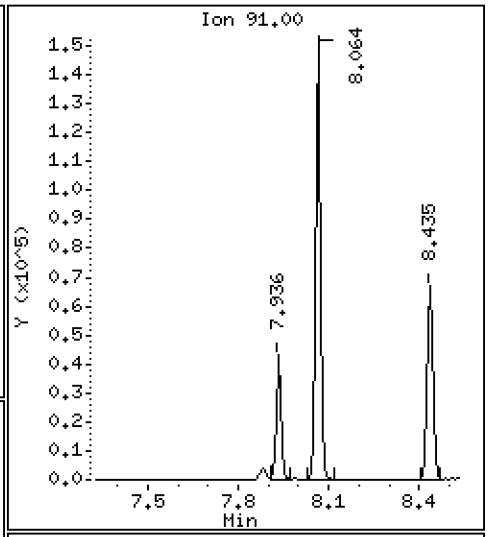
Concentration: 0.7692 ug/Kg

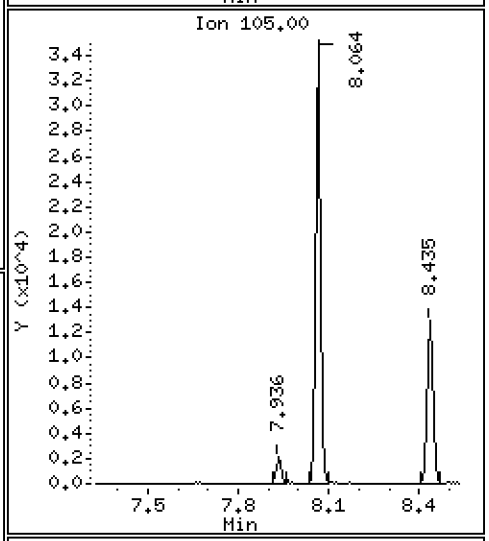


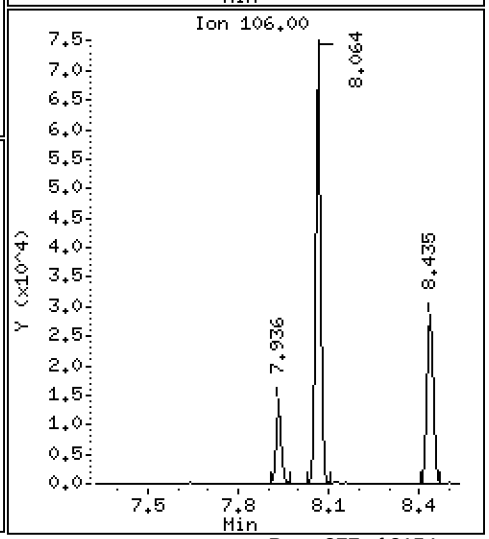












Data File: \\target\share\chem1\nt5.i\20160630.b\06301611.D

Date : 30-JUN-2016 15:59

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-24

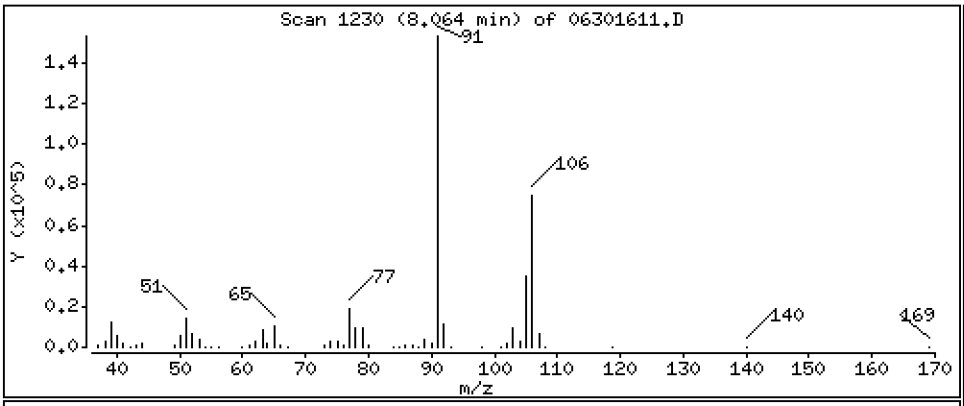
Operator: PB

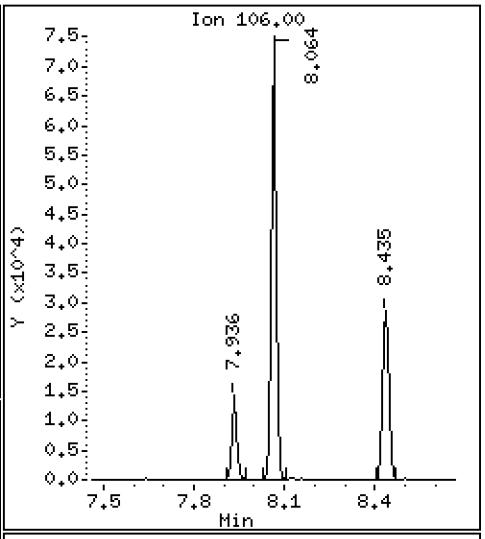
Column phase: RTXVMS

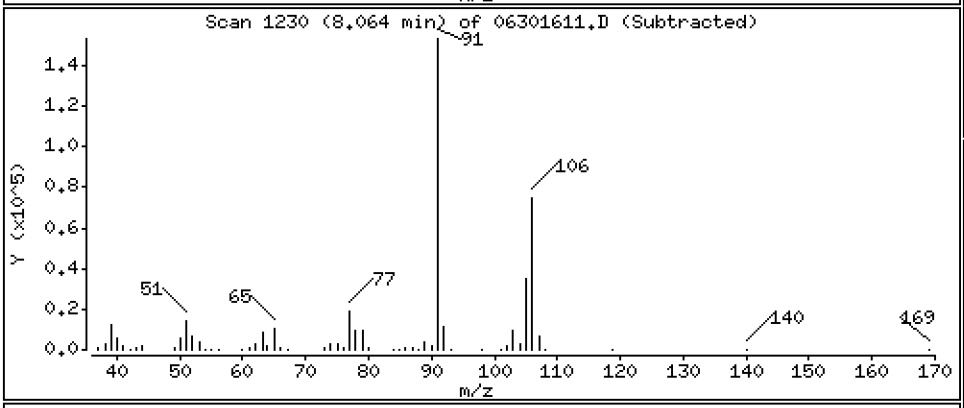
Column diameter: 0.18

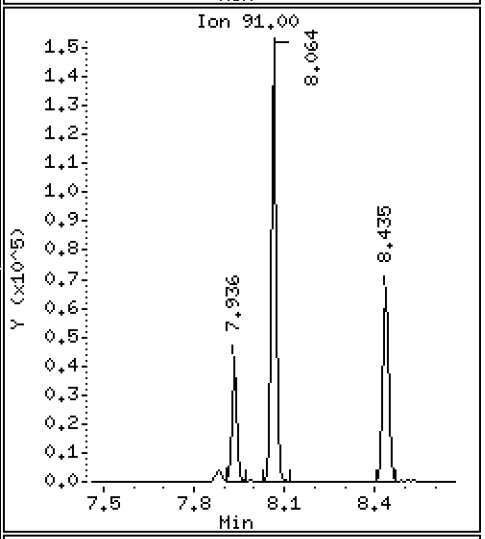
56 m,p-xylene

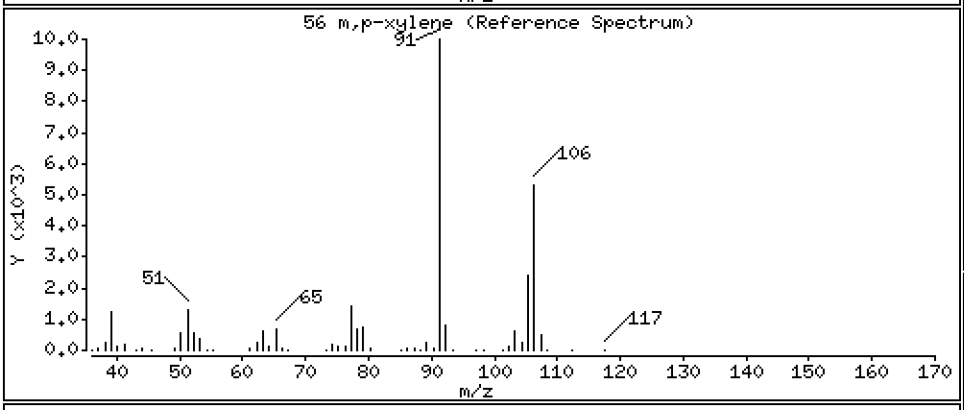
Concentration: 3.434 ug/Kg

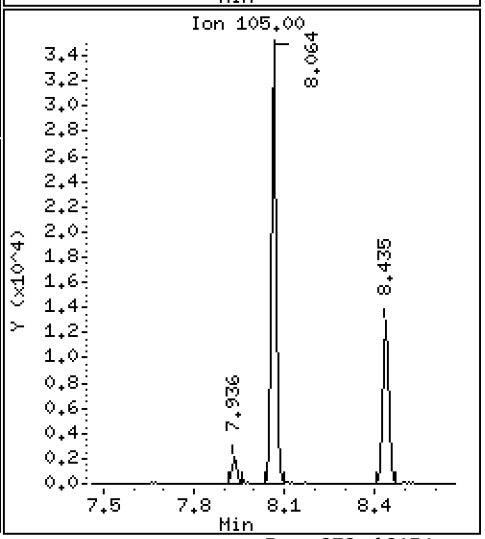


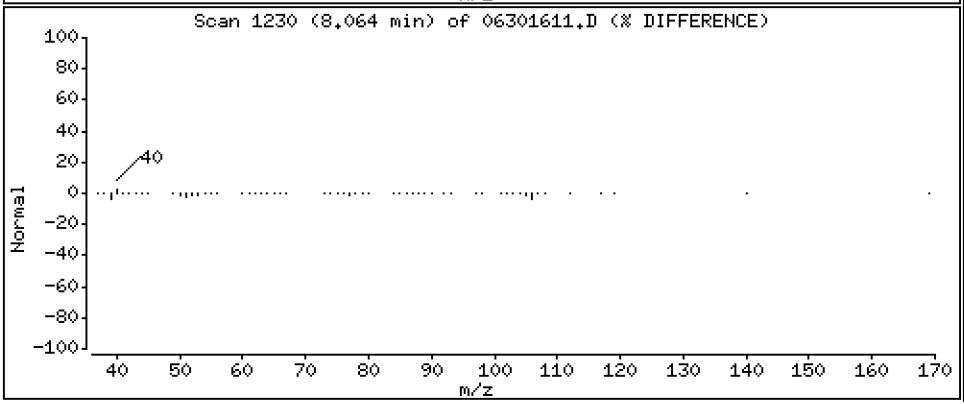












Data File: \\target\share\chem1\nt5.i\20160630.b\06301611.D

Date : 30-JUN-2016 15:59

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-24

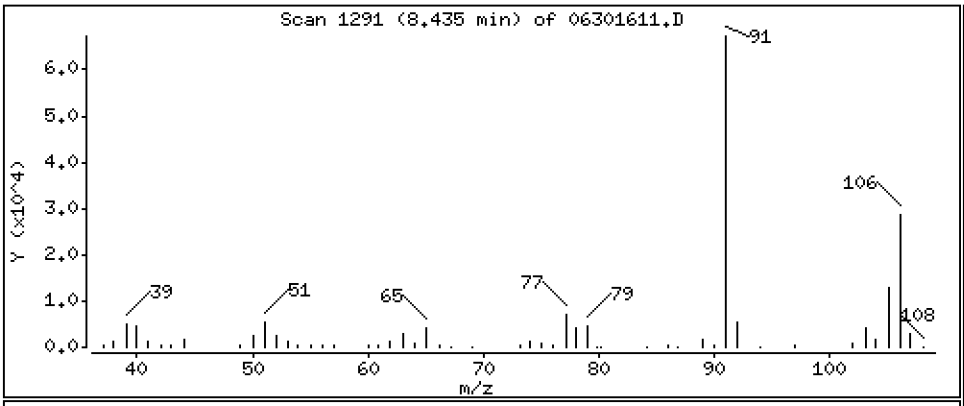
Operator: PB

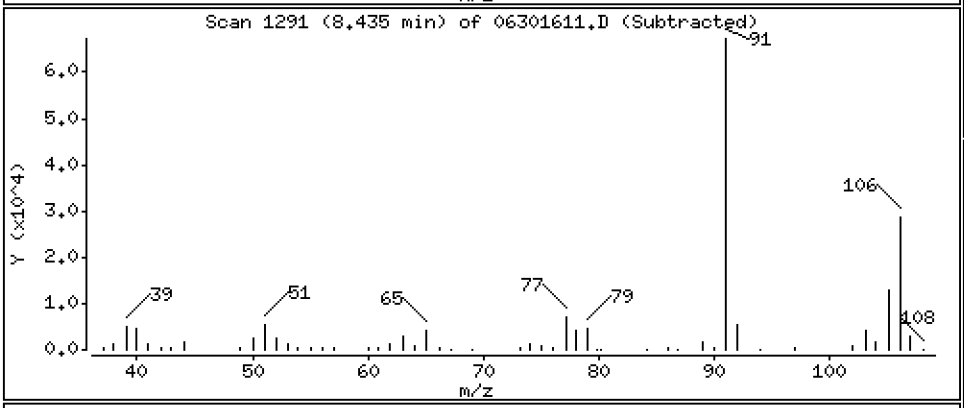
Column phase: RTXVMS

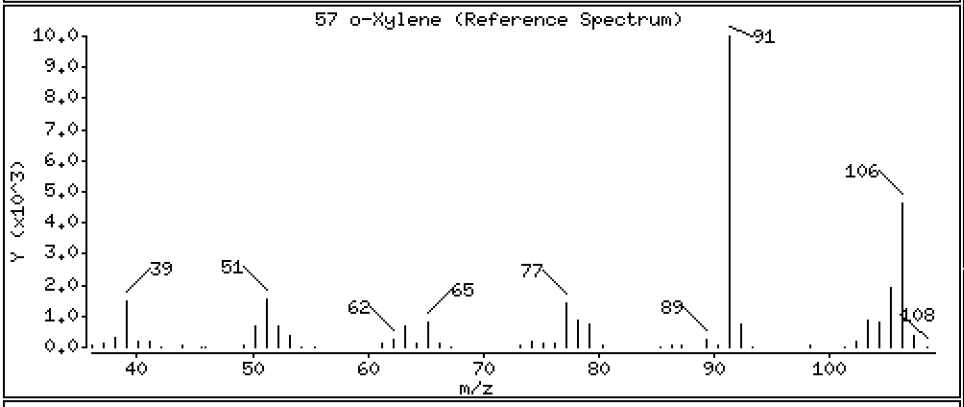
Column diameter: 0.18

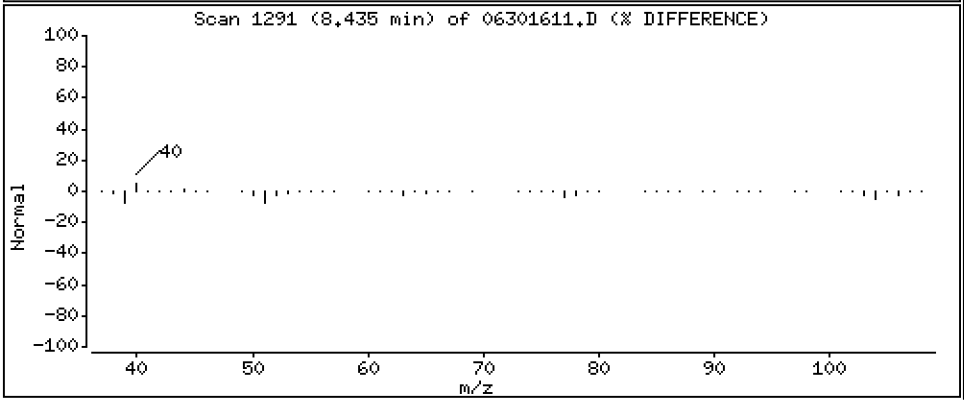
57 o-Xylene

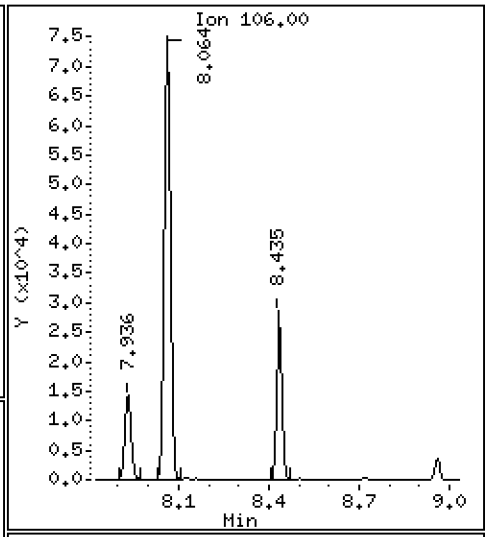
Concentration: 1.376 ug/Kg

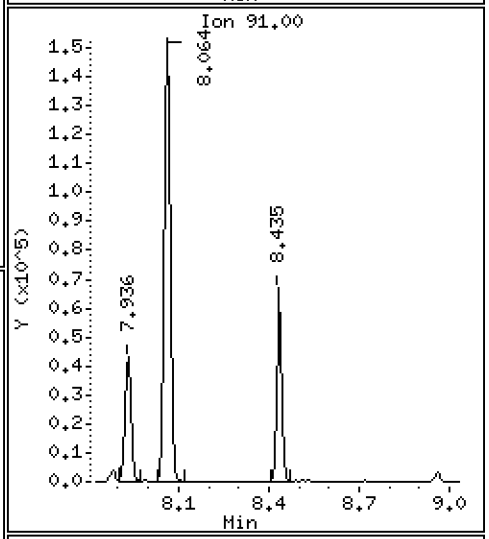


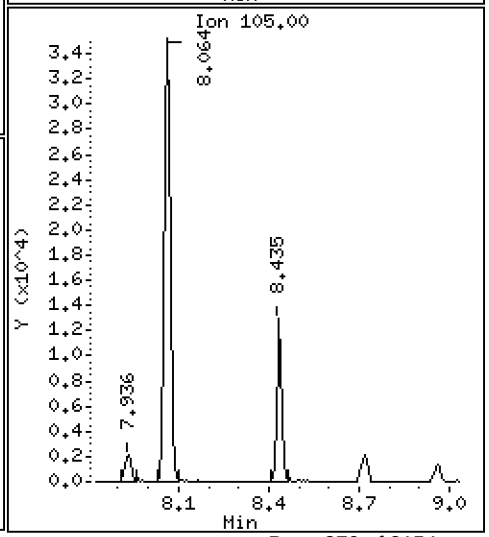












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301611.D
Lab Smp Id: 16F0096-24
Inj Date : 30-JUN-2016 15:59
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-24
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	1.597	1.578	(0.322)	17722	1.17555	1.176
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.061	4.042	(0.820)	695911	37.2742	37.274
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.511	4.486	(0.910)	828386	47.0196	47.020
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.955	4.943	(1.000)	739184	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.967	4.949	(1.002)	766482	43.5201	43.520
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.350	5.338	(0.990)	902684	54.1673	54.167
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2381261	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.555	(1.215)	2961214	48.5331	48.533
	43 Toluene	92	6.610	6.597	(1.223)	1423620	34.4093	34.409
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2524333	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.936	7.930	(1.007)	59267	0.76925	0.7692
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.064	8.063	(1.023)	102719	3.43421	3.434
	57 o-Xylene	106	8.435	8.428	(1.070)	40665	1.37642	1.376
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1344585	49.5292	49.529
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1322616	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.363	10.357	(1.040)	1307118	49.0789	49.079
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301611.D
Lab Smp Id: 16F0096-24
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	739184	23.20
35 1,4-Difluorobenze	2041239	1020620	4082478	2381261	16.66
52 d5-Chlorobenzene	2118314	1059157	4236628	2524333	19.17
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1322616	25.36

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 15:50

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-24
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	47.020	94.04	70-130
$ 32 d4-1,2-Dichloroeth	50.000	43.520	87.04	80-149
$ 42 d8-Toluene	50.000	48.533	97.07	77-120
$ 62 4-Bromofluorobenze	50.000	49.529	99.06	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.079	98.16	80-120

REVIEW SUMMARY FOR FILE - 06301611.D

Lab ID: 16F0096-24
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 15:59

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-P-04-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-25	File ID:	06301612.D
Sampled:	06/29/16 12:25	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 16:22
Solids:	94.03	Preparation:	No Prep - Volatiles	Initial/Final:	5.56 g / 5 g
Batch:	BEG0004	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	0.96	U	0.22	0.96
74-83-9	Bromomethane	1	0.24	J	0.18	0.96
156-59-2	cis-1,2-Dichloroethene	1	64.8		0.23	0.96
71-43-2	Benzene	1	0.70	J	0.28	0.96
79-01-6	Trichloroethene	1	15.5		0.20	0.96
108-88-3	Toluene	1	4.27		0.14	0.96
127-18-4	Tetrachloroethene	1	0.96	U	0.25	0.96
100-41-4	Ethylbenzene	1	0.96	U	0.19	0.96
179601-23-1	m,p-Xylene	1	0.96	U	0.37	0.96
95-47-6	o-Xylene	1	0.96	U	0.21	0.96

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	48.0	96.1	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.3	101	80 - 120	
Toluene-d8	50.000	47.9	95.8	77 - 120	
4-Bromofluorobenzene	50.000	49.4	98.8	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301612.D

Date : 30-JUN-2016 16:22

Client ID:

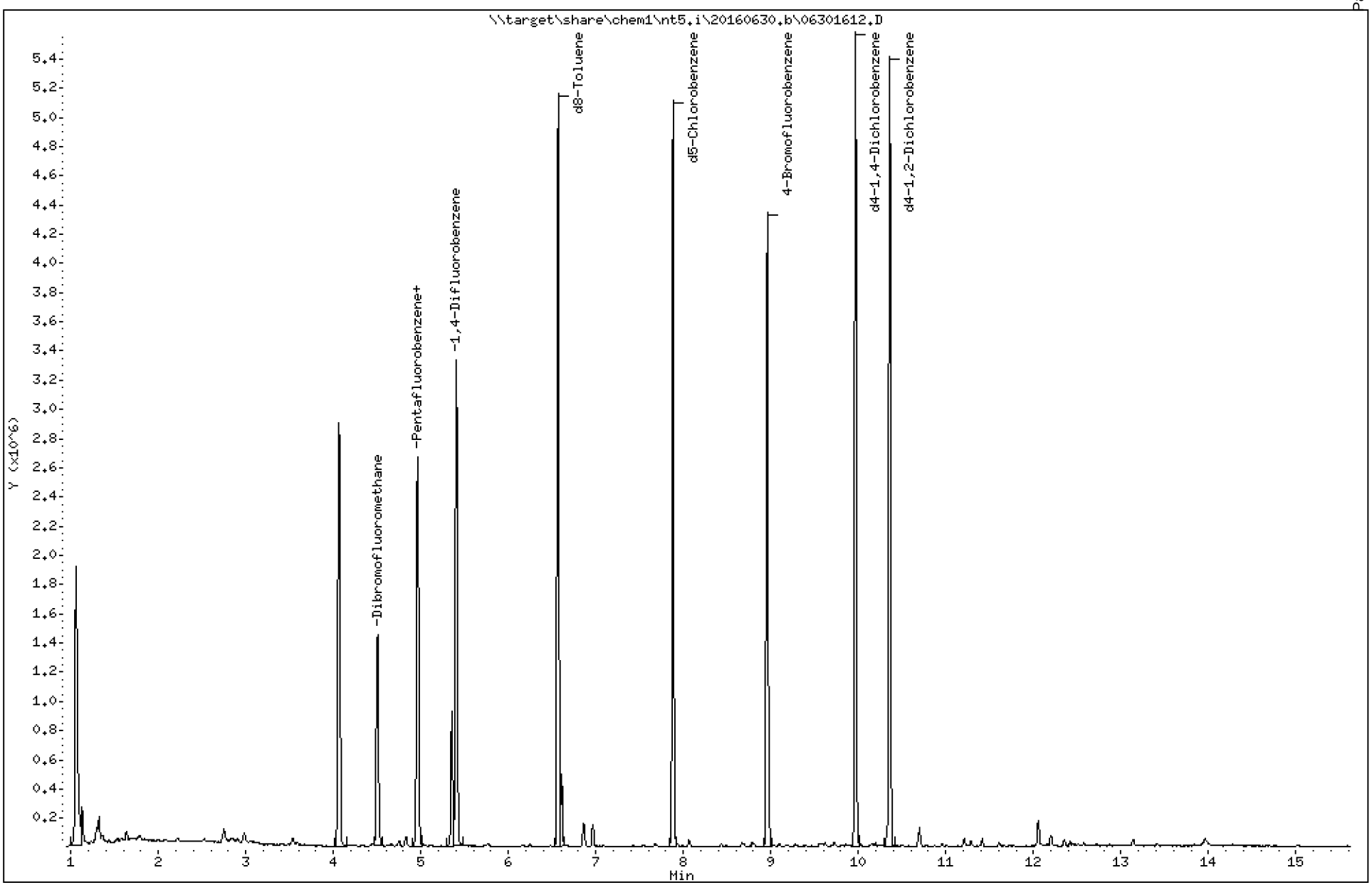
Sample Info: 16F0096-25

Instrument: nt5.i

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\06301612.D

Date : 30-JUN-2016 16:22

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-25

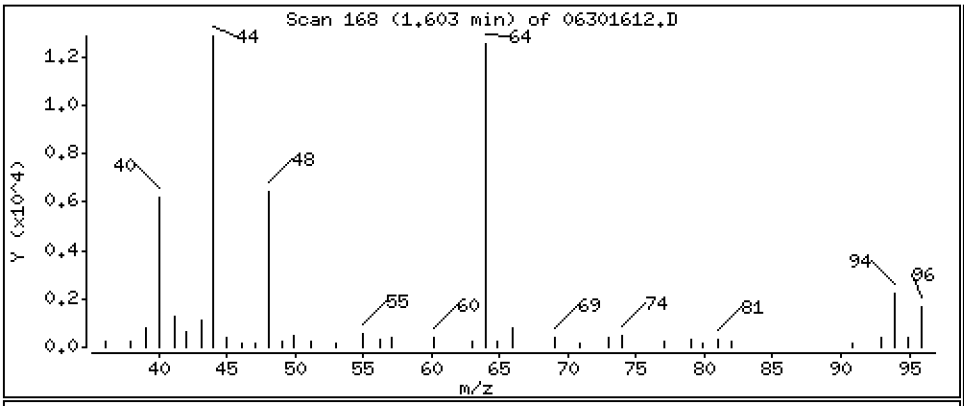
Operator: PB

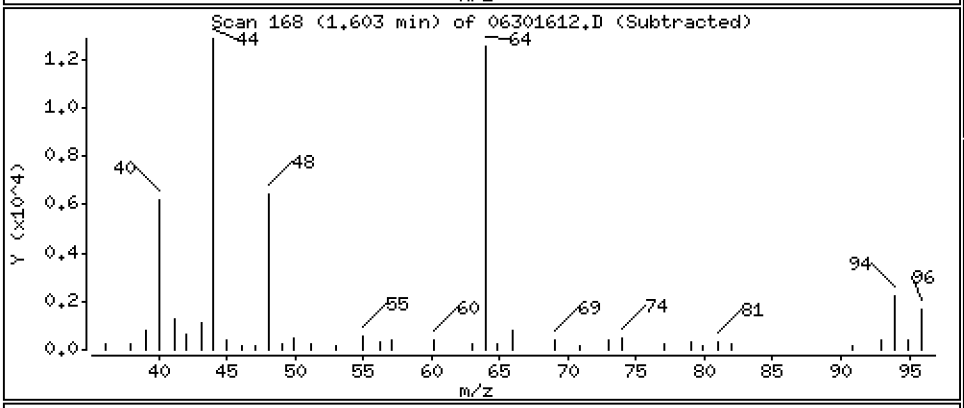
Column phase: RTXVMS

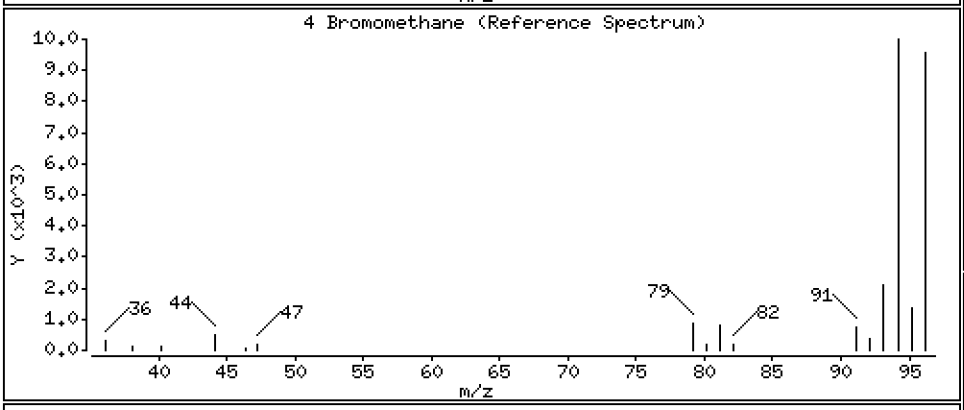
Column diameter: 0.18

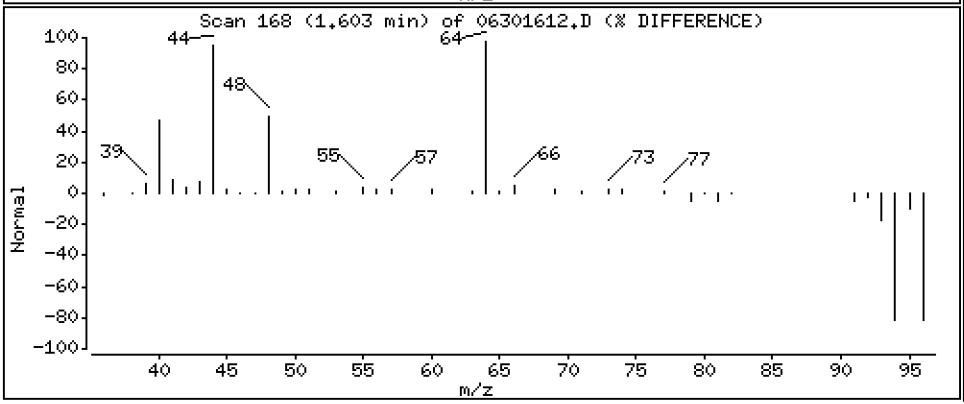
4 Bromomethane

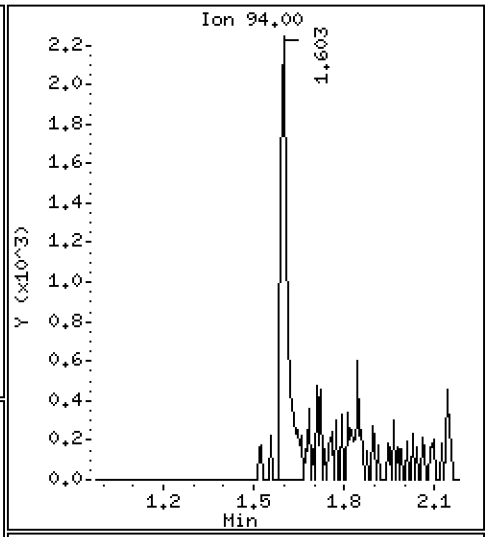
Concentration: 0.2553 ug/Kg

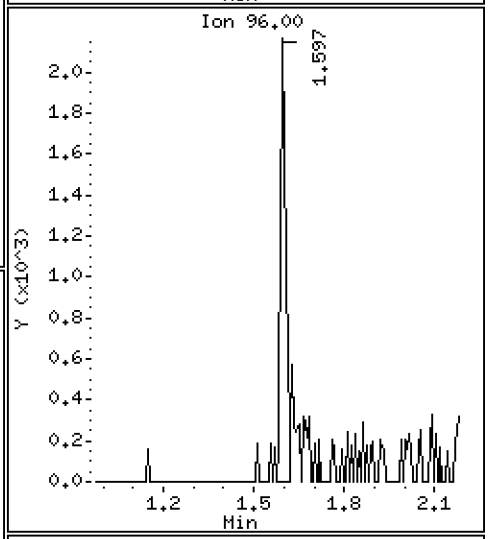


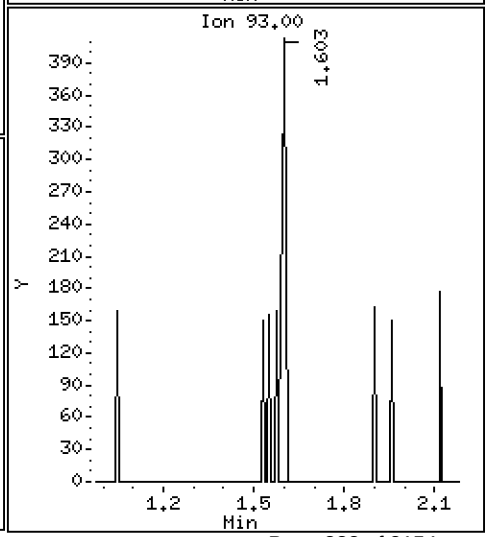












Data File: \\target\share\chem1\nt5.i\20160630.b\06301612.D

Date : 30-JUN-2016 16:22

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-25

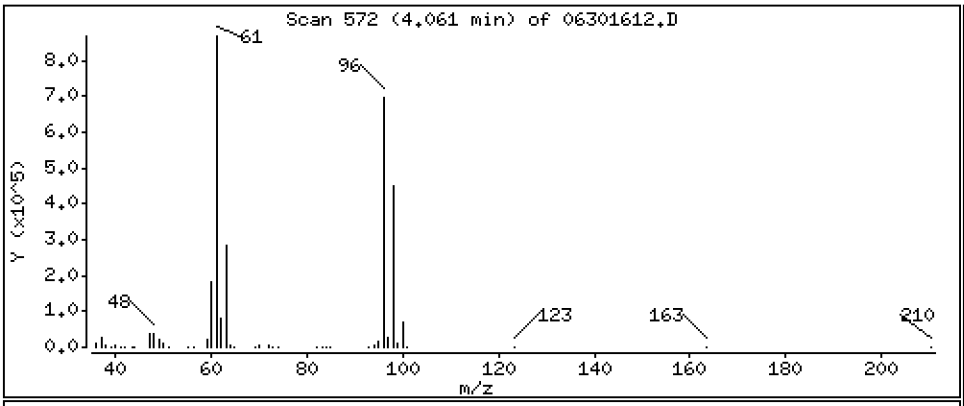
Operator: PB

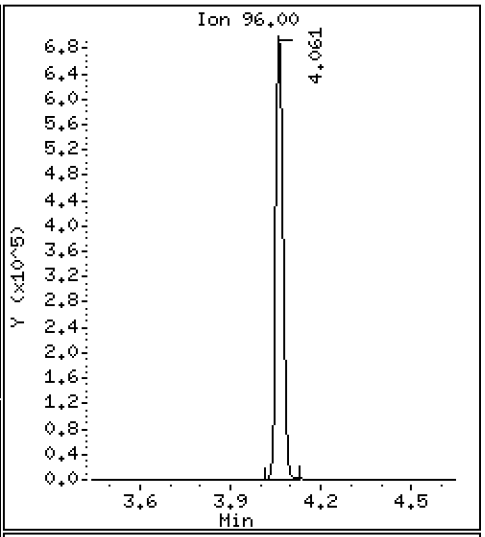
Column phase: RTXVMS

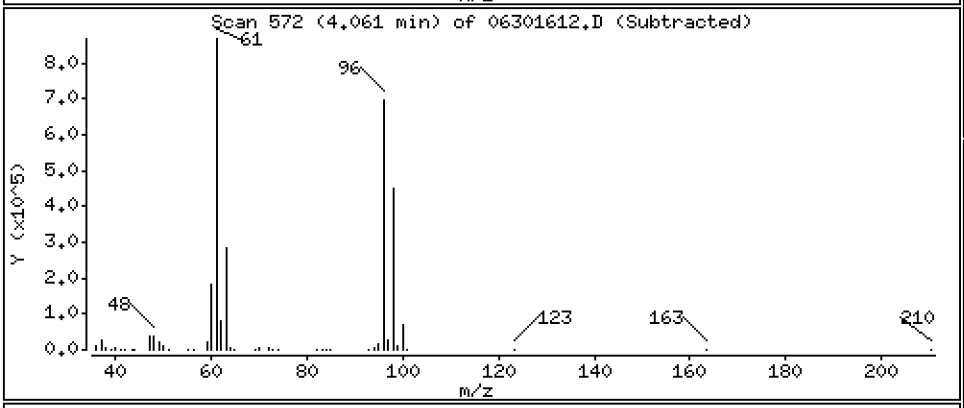
Column diameter: 0.18

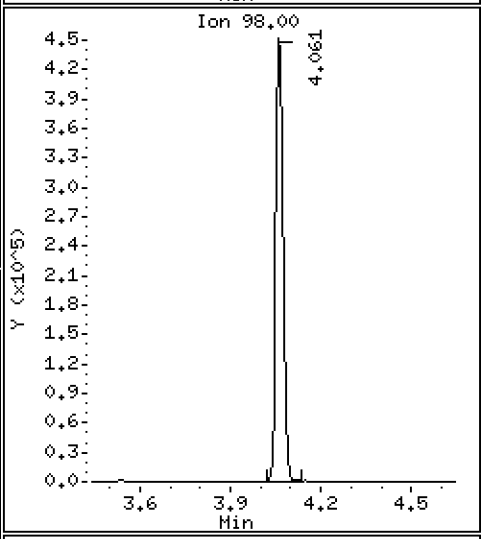
20 Cis-1,2-Dichloroethene

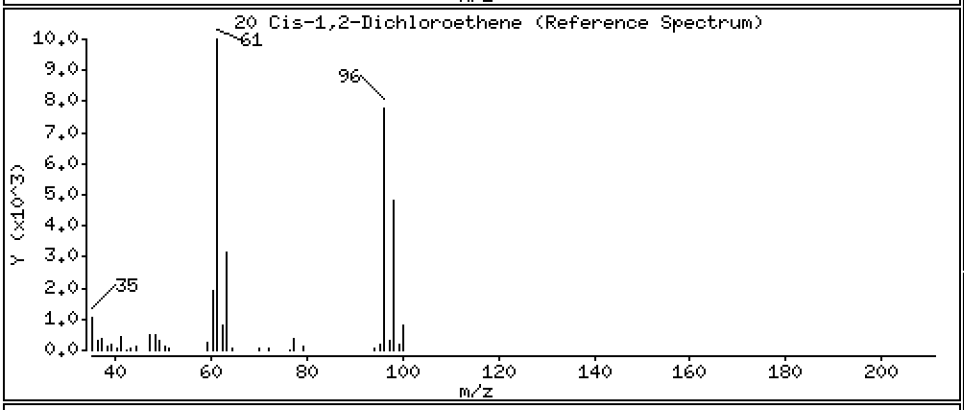
Concentration: 67.798 ug/Kg

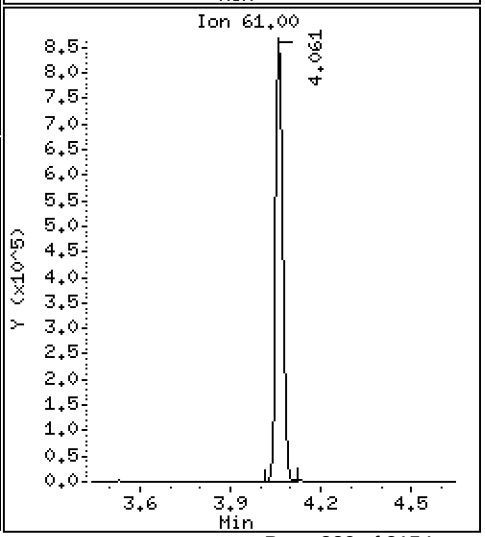


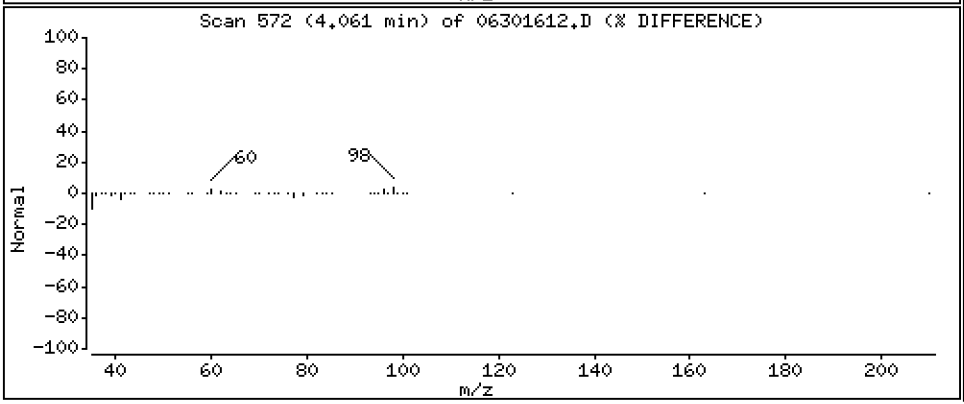












Data File: \\target\share\chem1\nt5.i\20160630.b\06301612.D

Date : 30-JUN-2016 16:22

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-25

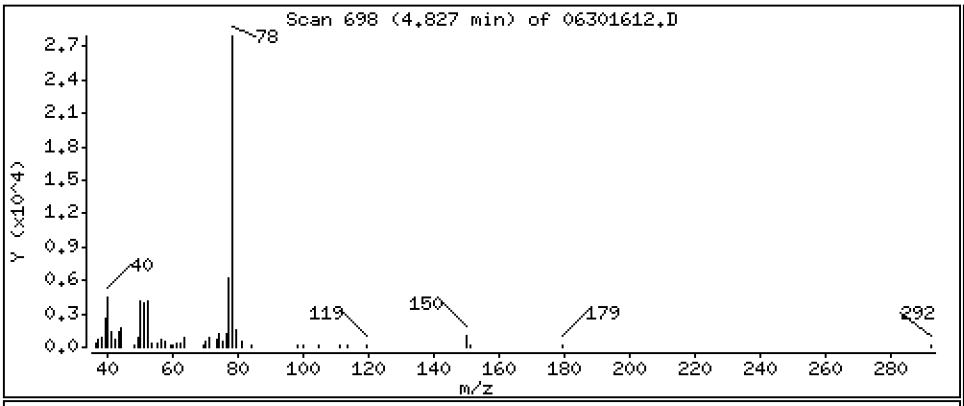
Operator: PB

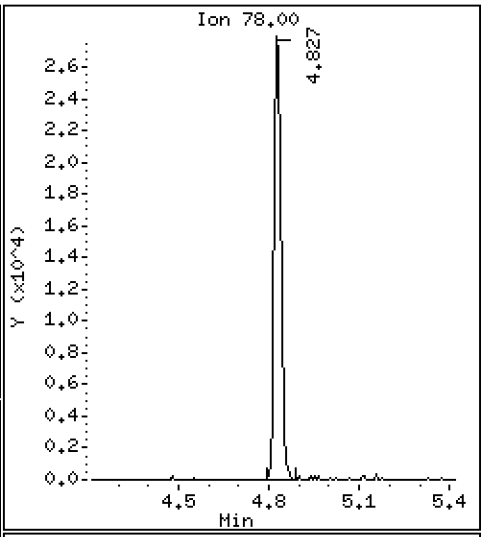
Column phase: RTXVMS

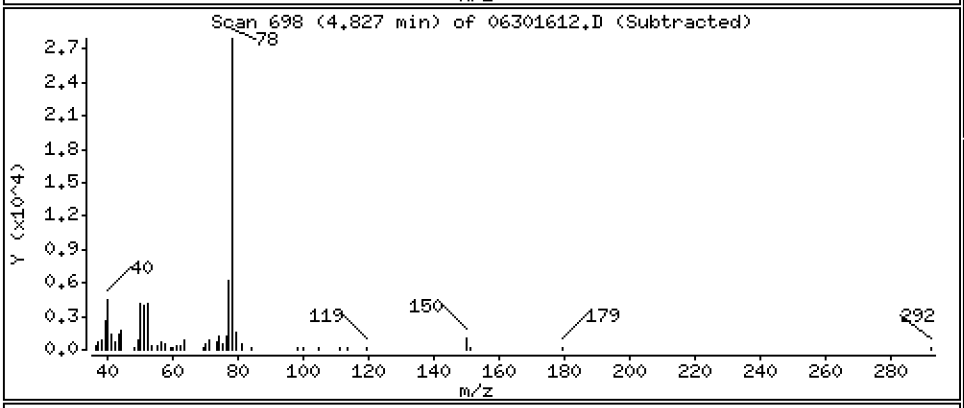
Column diameter: 0.18

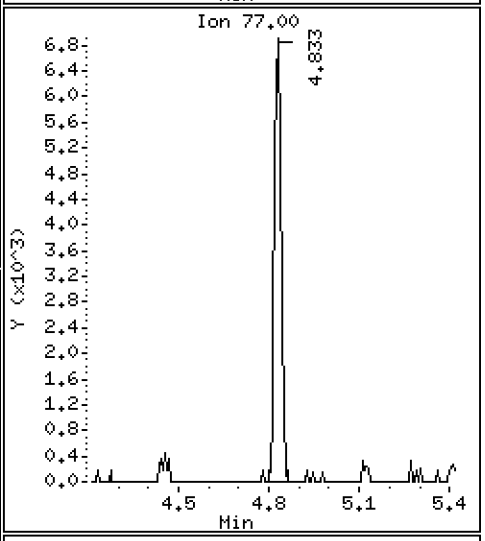
30 Benzene

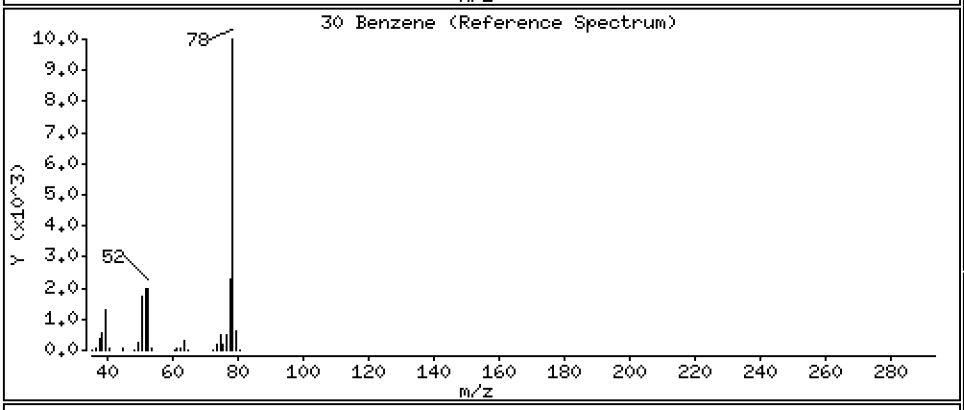
Concentration: 0.7354 ug/Kg

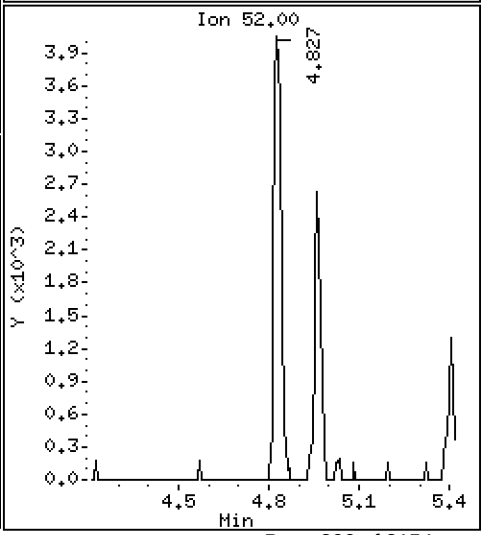


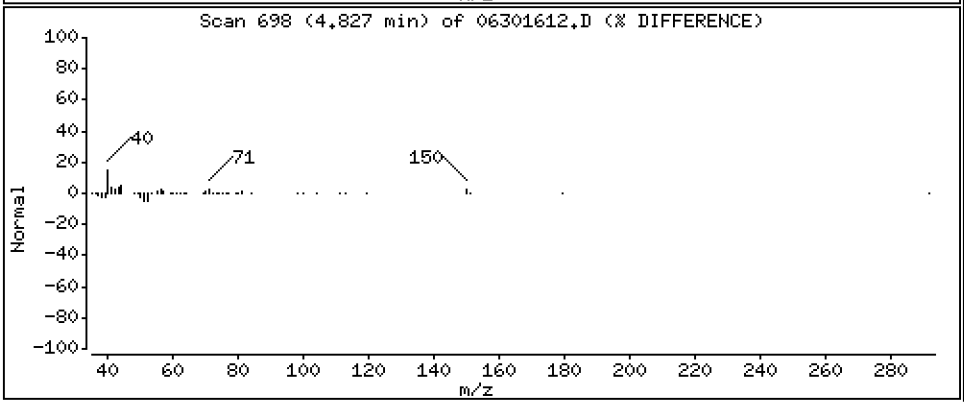












Data File: \\target\share\chem1\nt5.i\20160630.b\06301612.D

Date : 30-JUN-2016 16:22

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-25

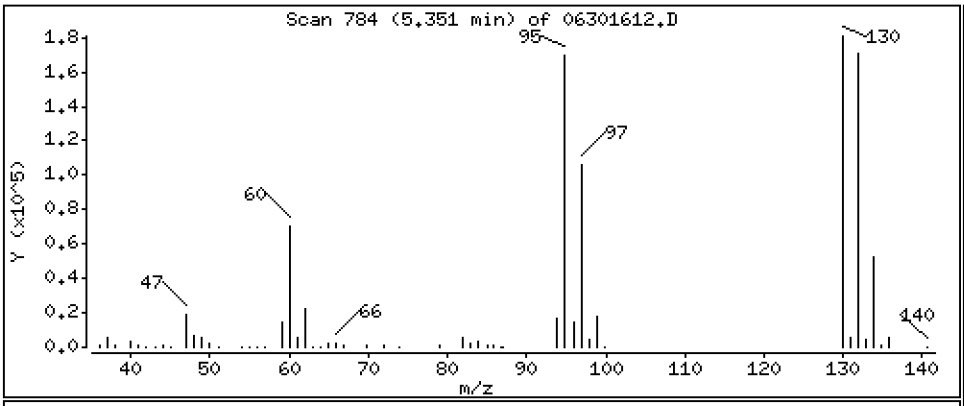
Operator: PB

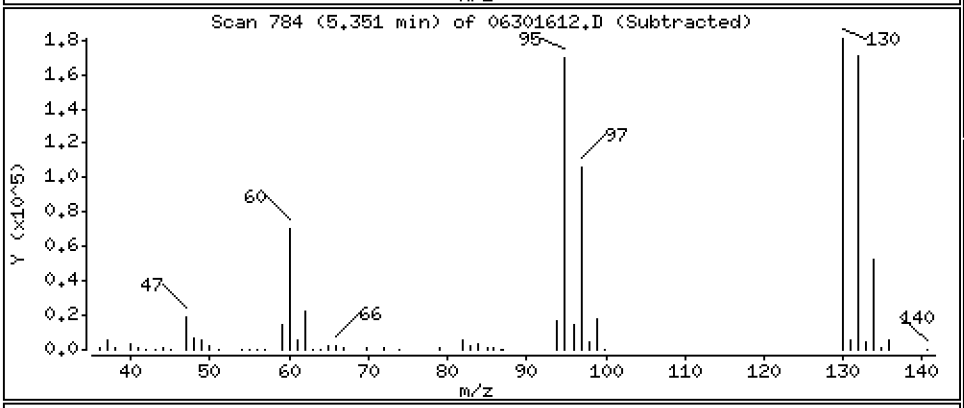
Column phase: RTXVMS

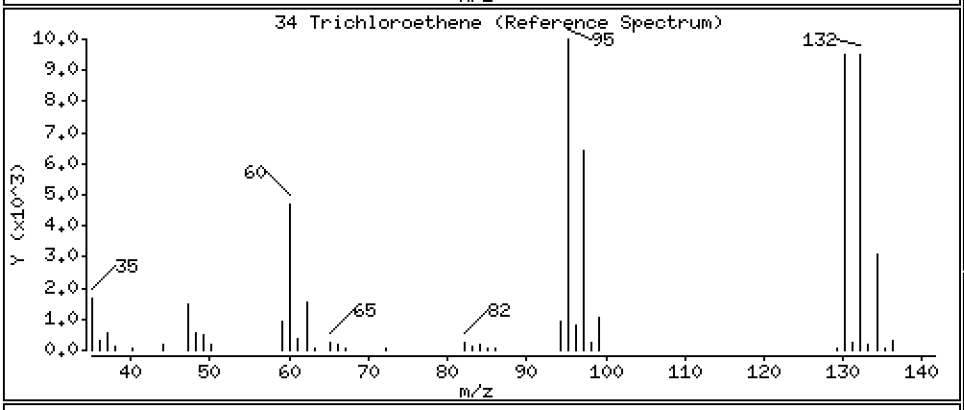
Column diameter: 0.18

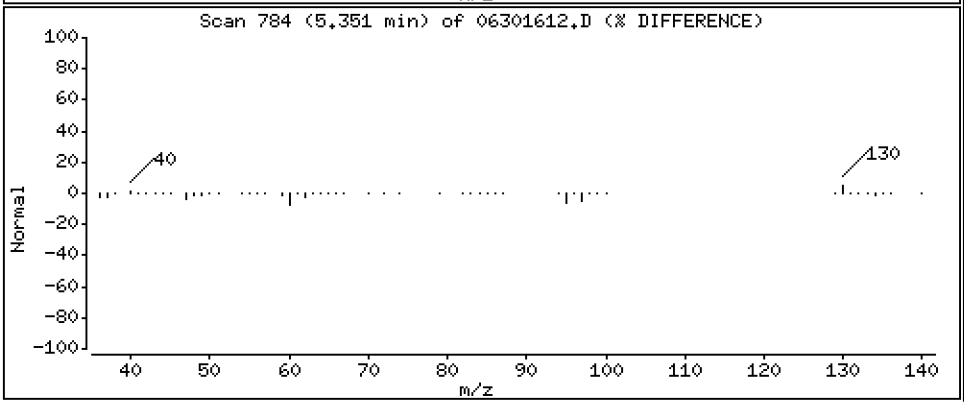
34 Trichloroethene

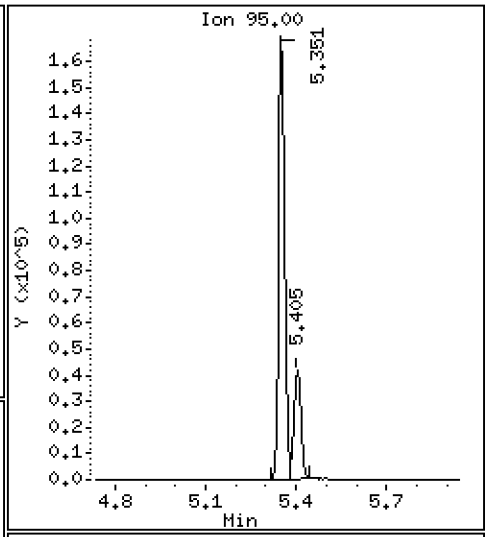
Concentration: 16.193 ug/Kg

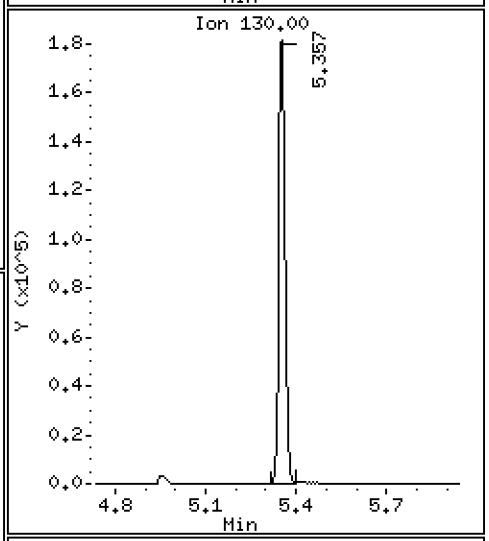


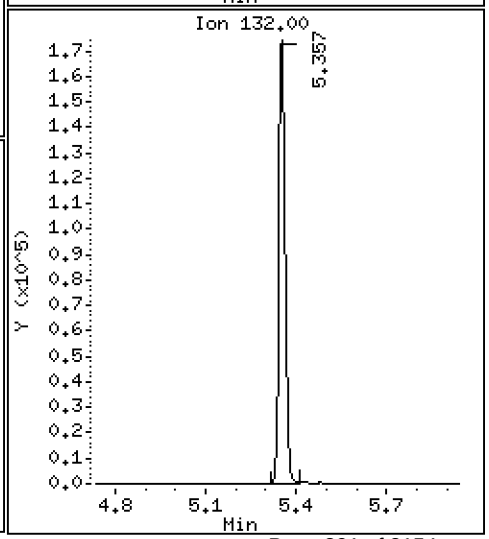












Data File: \\target\share\chem1\nt5.i\20160630.b\06301612.D

Date : 30-JUN-2016 16:22

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-25

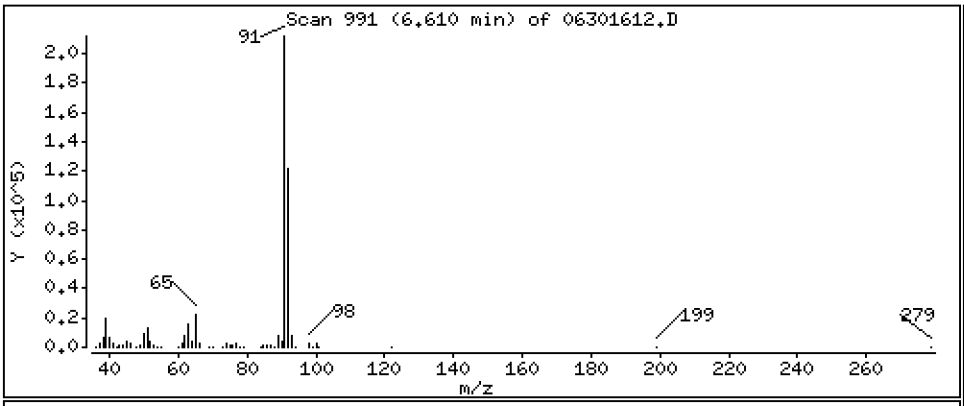
Operator: PB

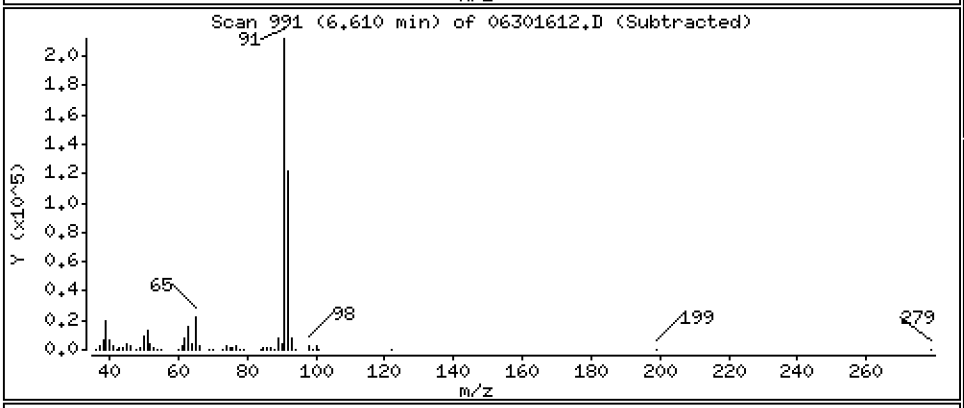
Column phase: RTXVMS

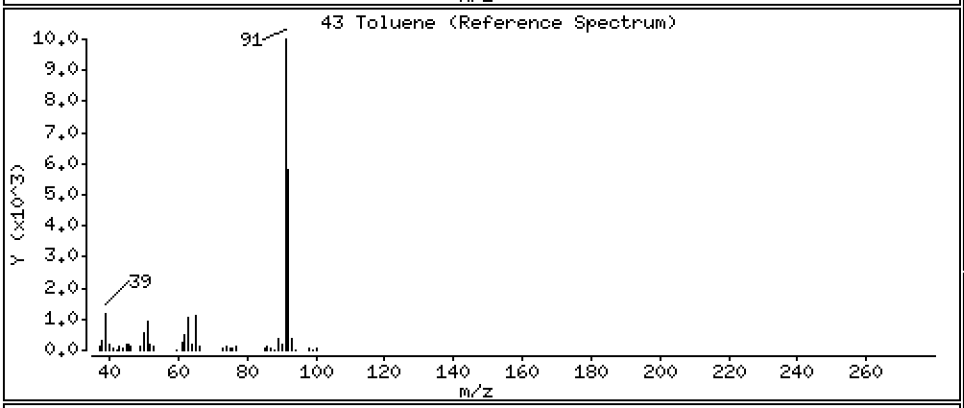
Column diameter: 0.18

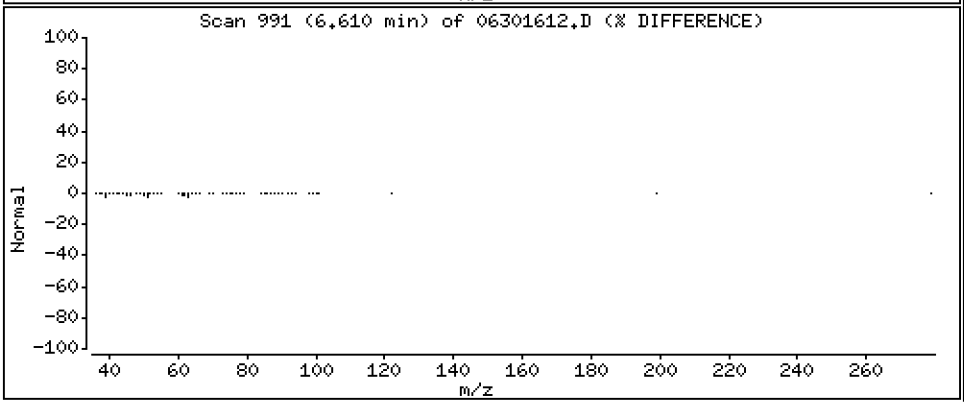
43 Toluene

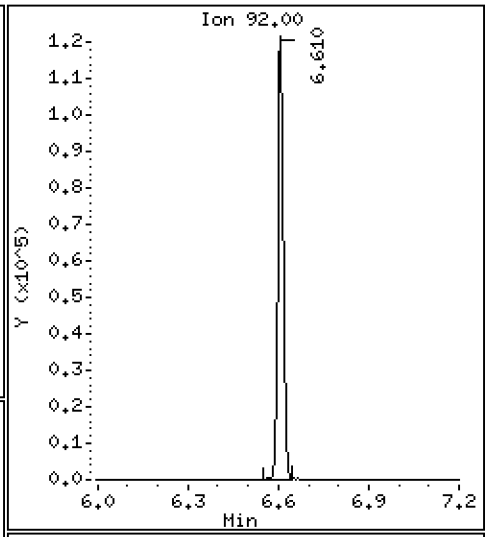
Concentration: 4.463 ug/Kg

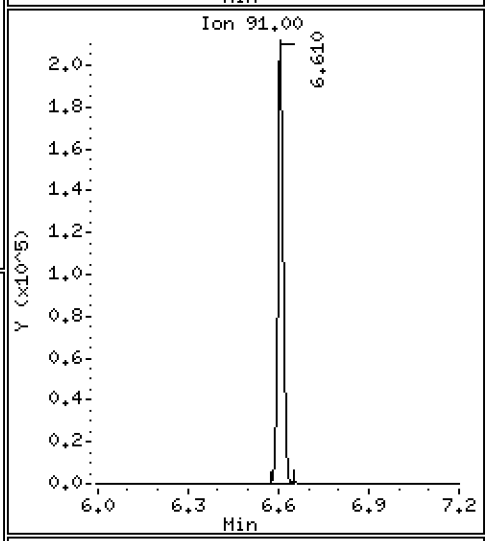


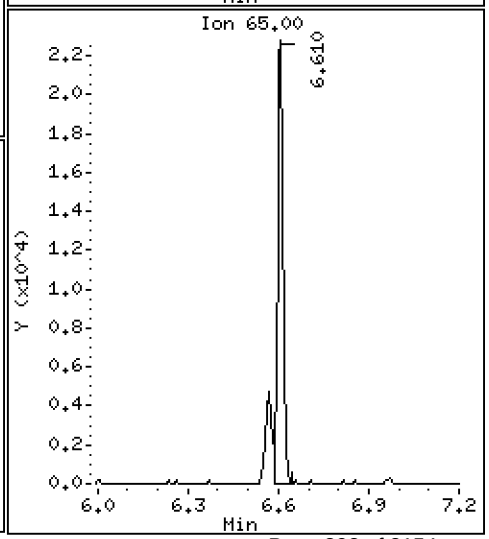












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301612.D
Lab Smp Id: 16F0096-25
Inj Date : 30-JUN-2016 16:22
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-25
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	1.603	1.578	(0.323)	3725	0.25532	0.2553
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.060	4.042	(0.819)	1224972	67.7977	67.798
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.505	4.486	(0.908)	814196	47.7539	47.754
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	4.827	4.815	(0.893)	45541	0.73540	0.7354
*	31 Pentafluorobenzene	168	4.961	4.943	(1.000)	715350	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.000)	818838	48.0418	48.042
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.350	5.338	(0.990)	259851	16.1927	16.193
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2293043	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.555	(1.215)	2813004	47.8777	47.878
	43 Toluene	92	6.609	6.597	(1.223)	177819	4.46329	4.463
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2385574	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1267351	49.3996	49.400
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1204128	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1219581	50.2981	50.298
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301612.D
Lab Smp Id: 16F0096-25
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	715350	19.23
35 1,4-Difluorobenze	2041239	1020620	4082478	2293043	12.34
52 d5-Chlorobenzene	2118314	1059157	4236628	2385574	12.62
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1204128	14.13

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.37
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-25
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	47.754	95.51	70-130
$ 32 d4-1,2-Dichloroeth	50.000	48.042	96.08	80-149
$ 42 d8-Toluene	50.000	47.878	95.76	77-120
$ 62 4-Bromofluorobenze	50.000	49.400	98.80	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.298	100.60	80-120

REVIEW SUMMARY FOR FILE - 06301612.D

Lab ID: 16F0096-25
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 16:22

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-P-05-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-26	File ID:	06301613.D
Sampled:	06/29/16 12:20	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 16:45
Solids:	91.24	Preparation:	No Prep - Volatiles	Initial/Final:	5.69 g / 5 g
Batch:	BEG0004	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	0.96	U	0.23	0.96
74-83-9	Bromomethane	1	0.96	U	0.18	0.96
156-59-2	cis-1,2-Dichloroethene	1	0.96	U	0.23	0.96
71-43-2	Benzene	1	0.43	J	0.29	0.96
79-01-6	Trichloroethene	1	0.96	U	0.20	0.96
108-88-3	Toluene	1	0.97		0.15	0.96
127-18-4	Tetrachloroethene	1	0.96	U	0.25	0.96
100-41-4	Ethylbenzene	1	0.96	U	0.19	0.96
179601-23-1	m,p-Xylene	1	0.80	J	0.38	0.96
95-47-6	o-Xylene	1	0.96	J	0.22	0.96

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	47.9	95.7	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.3	101	80 - 120	
Toluene-d8	50.000	48.5	97.0	77 - 120	
4-Bromofluorobenzene	50.000	48.6	97.2	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301613.D

Date : 30-JUN-2016 16:45

Client ID:

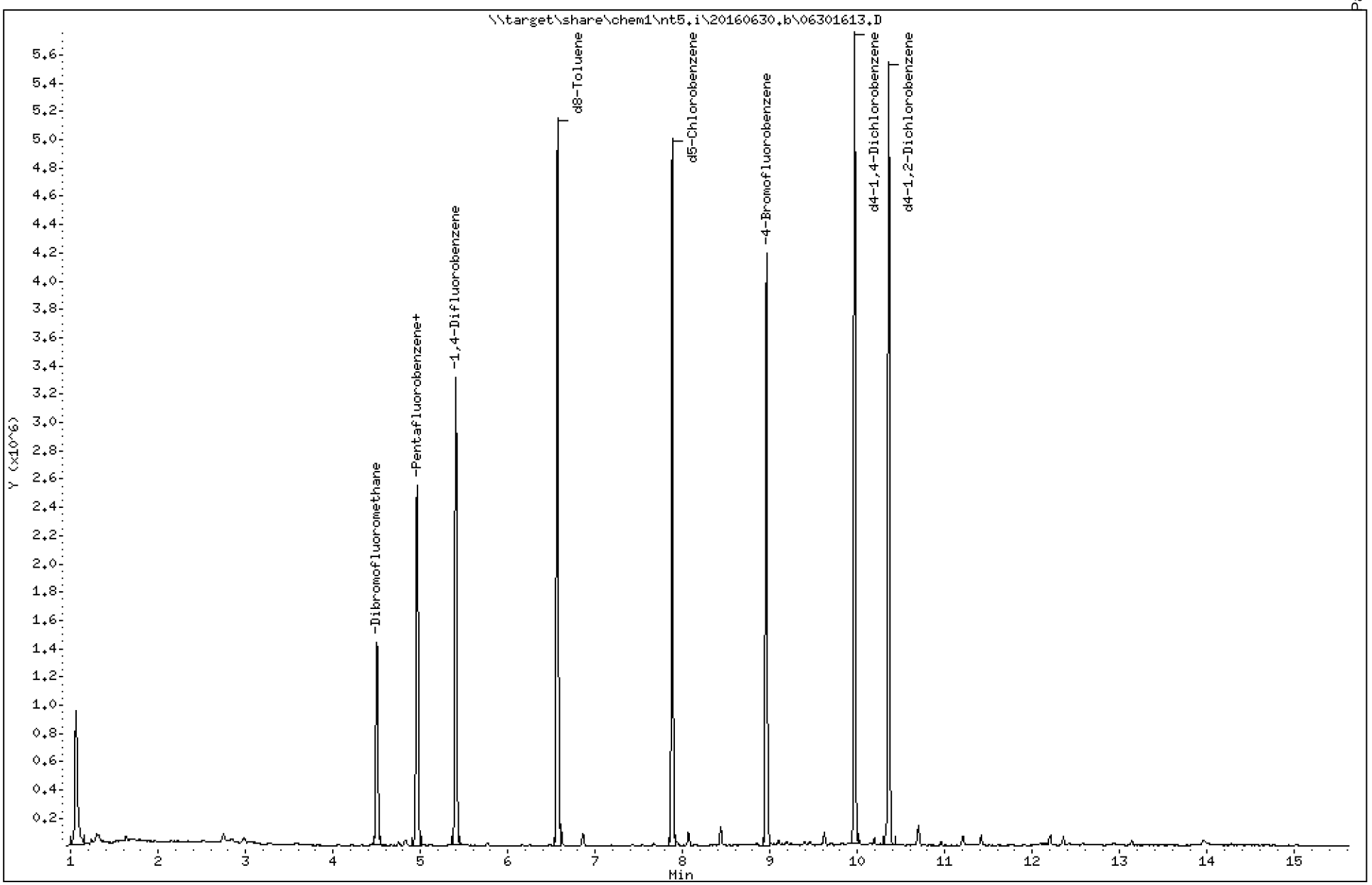
Instrument: nt5.i

Sample Info: 16F0096-26

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\06301613.D

Date : 30-JUN-2016 16:45

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-26

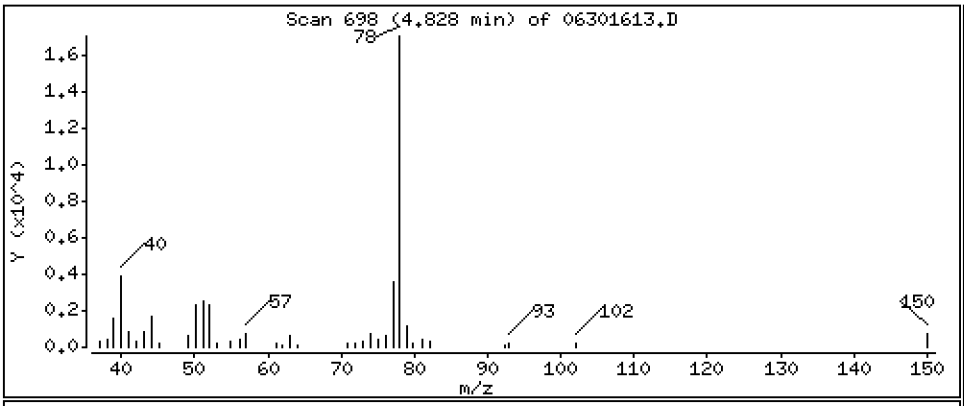
Operator: PB

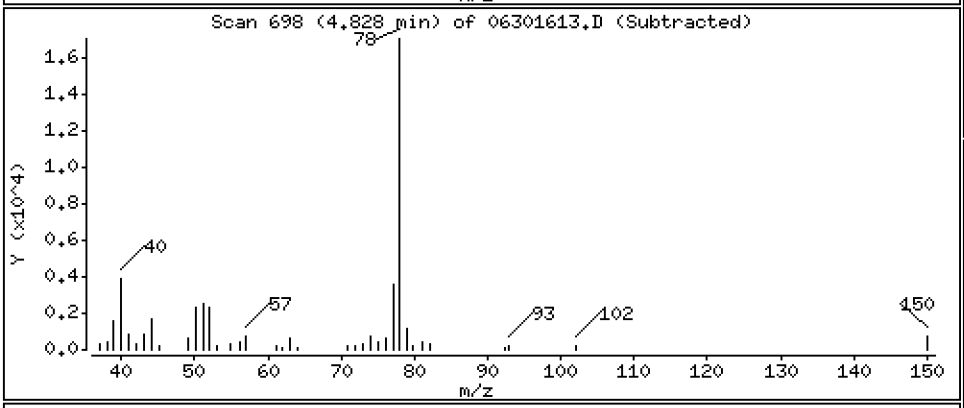
Column phase: RTXVMS

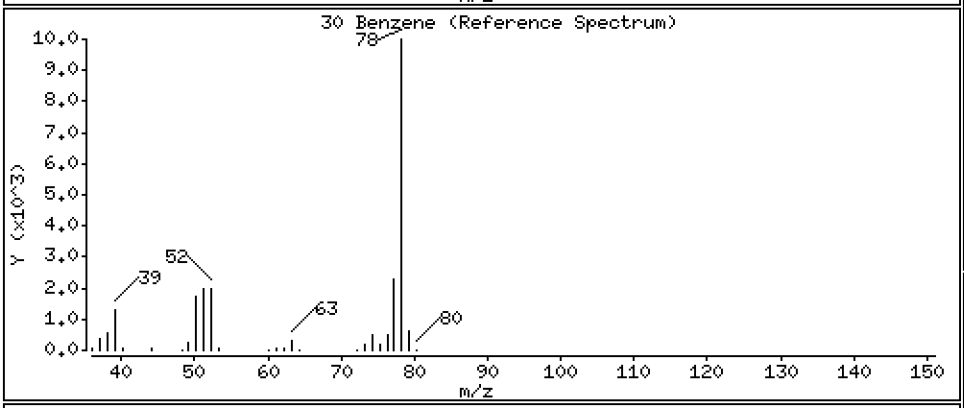
Column diameter: 0.18

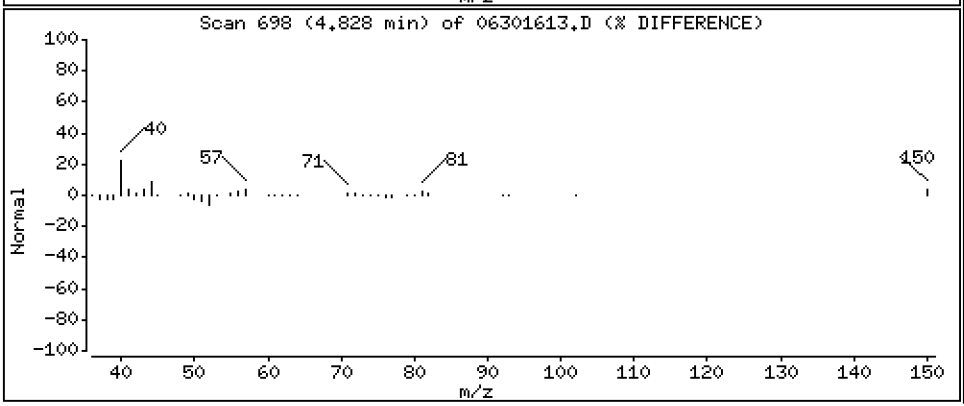
30 Benzene

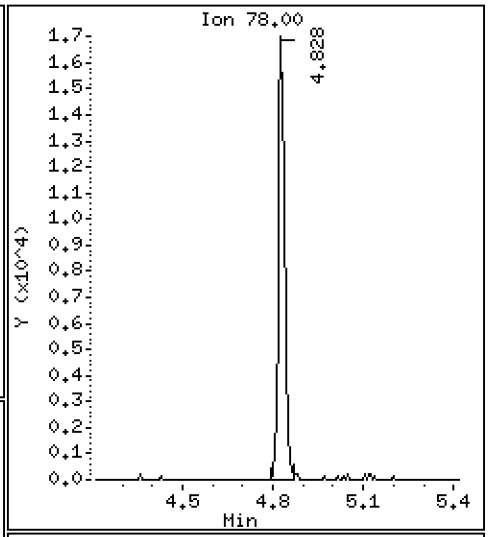
Concentration: 0.4501 ug/Kg

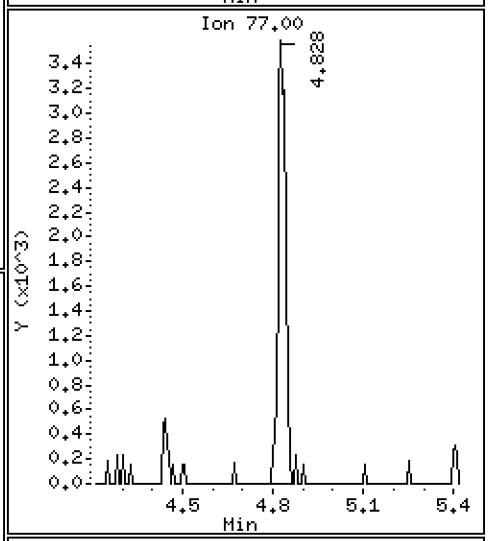


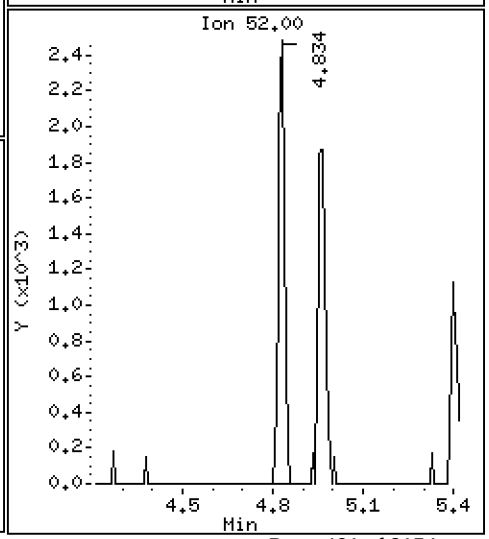












Data File: \\target\share\chem1\nt5.i\20160630.b\06301613.D

Date : 30-JUN-2016 16:45

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-26

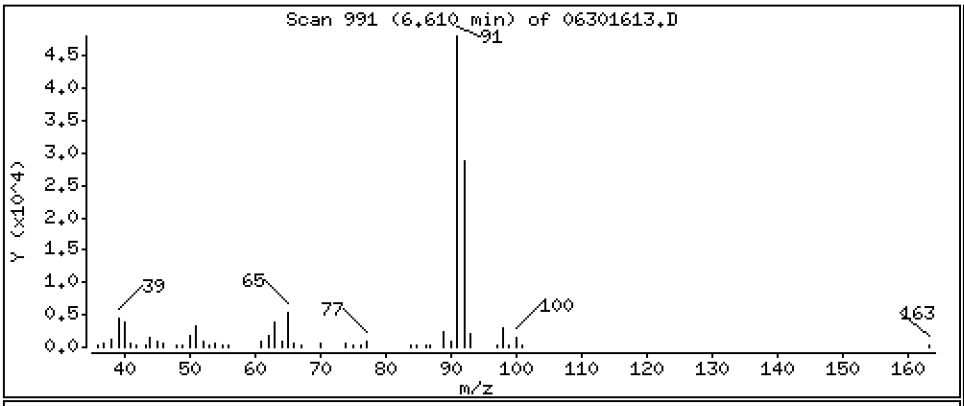
Operator: PB

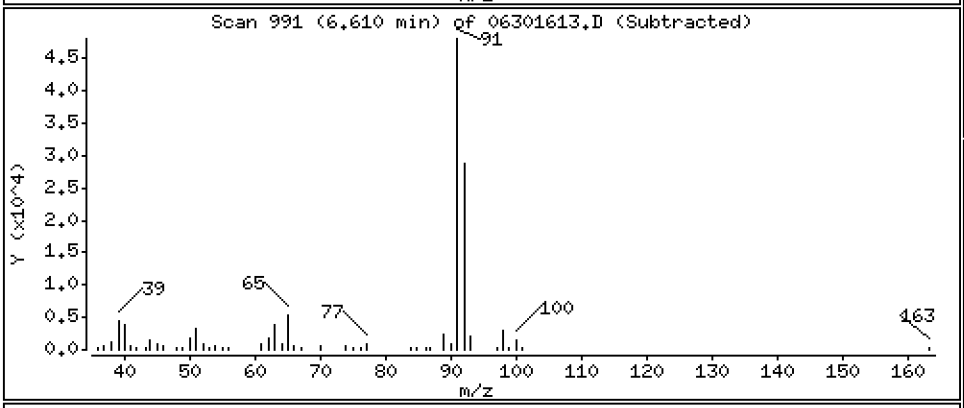
Column phase: RTXVMS

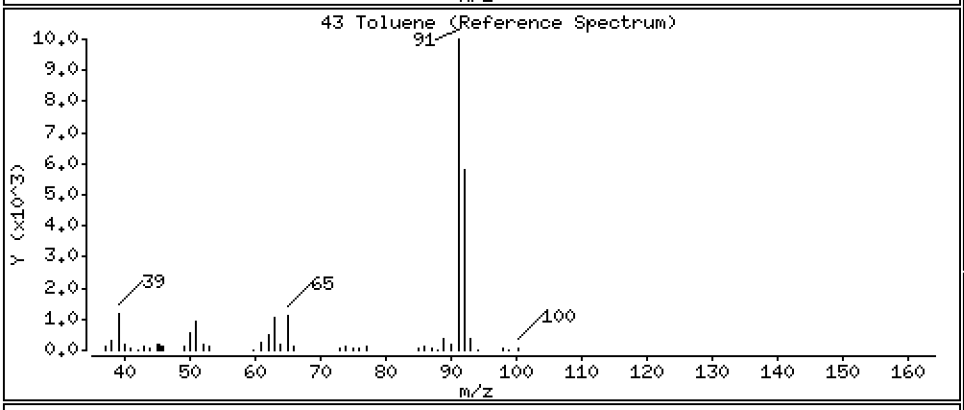
Column diameter: 0.18

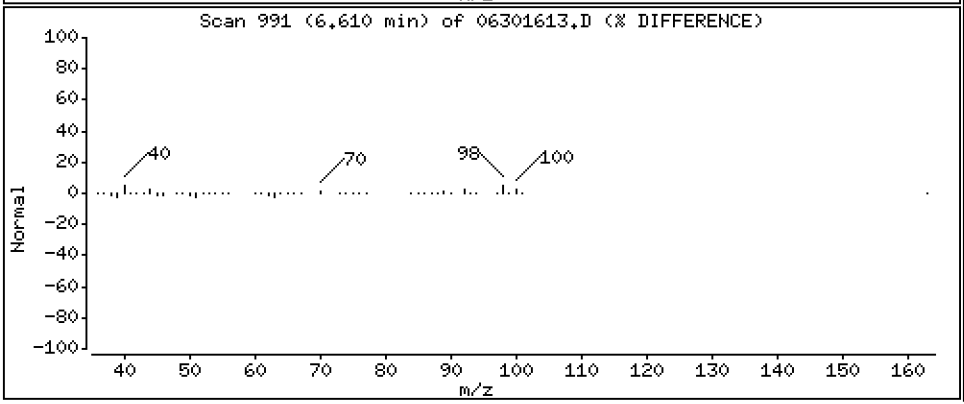
43 Toluene

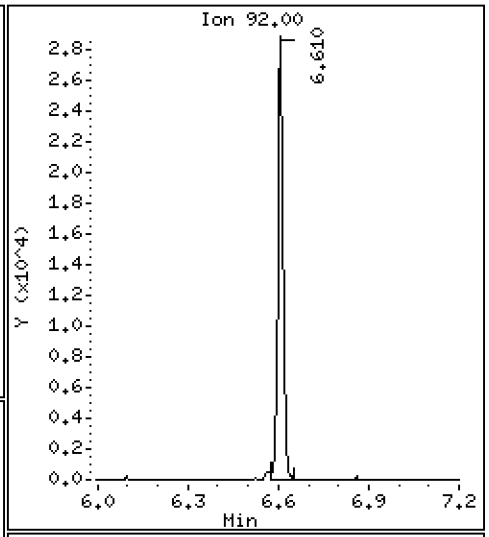
Concentration: 1.010 ug/Kg

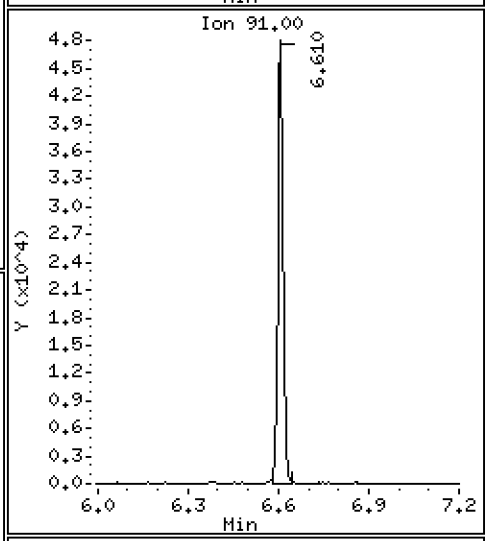


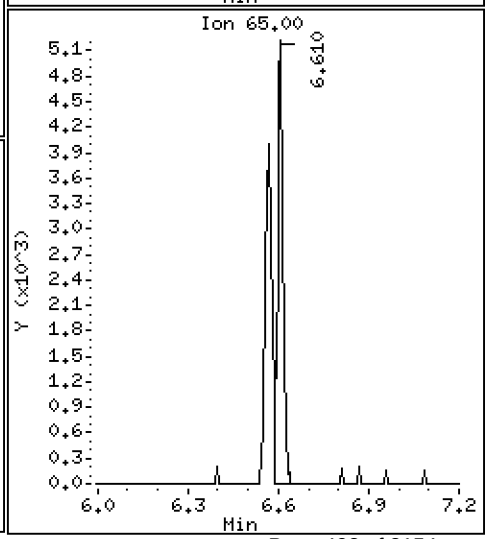












Data File: \\target\share\chem1\nt5.i\20160630.b\06301613.D

Date : 30-JUN-2016 16:45

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-26

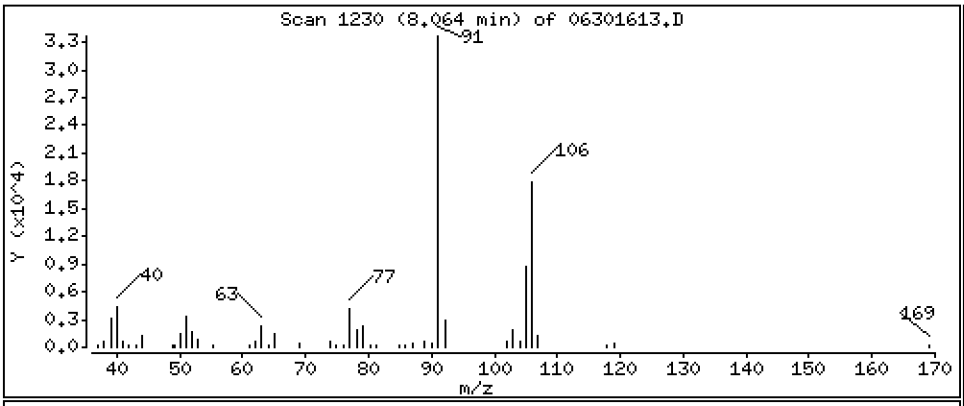
Operator: PB

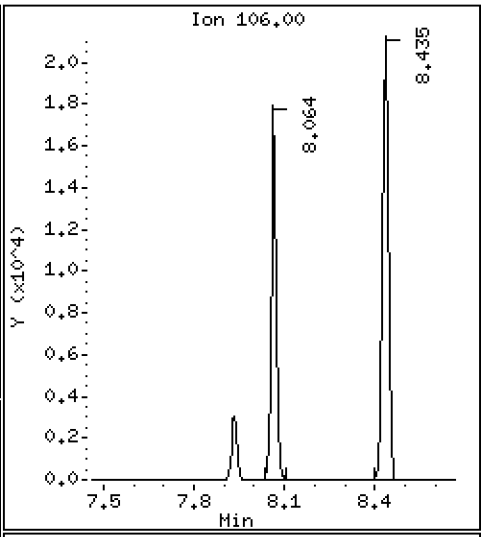
Column phase: RTXVMS

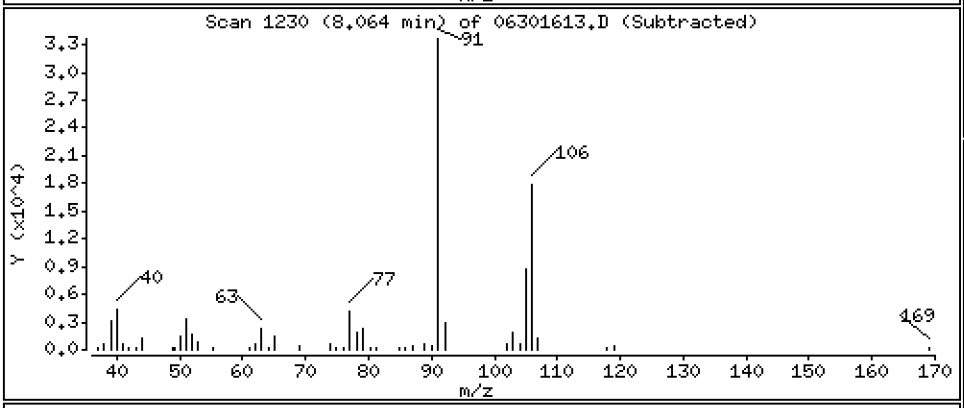
Column diameter: 0.18

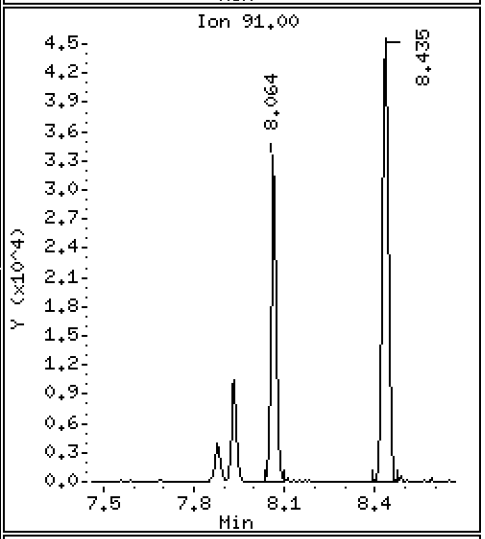
56 m,p-xylene

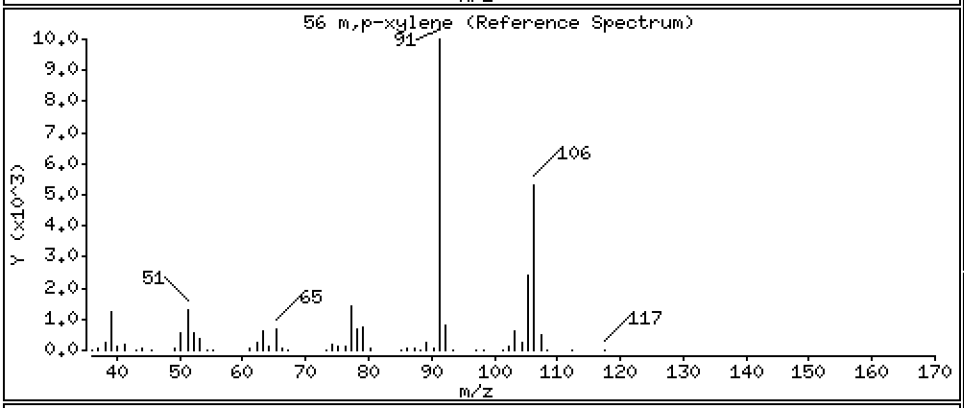
Concentration: 0.8348 ug/Kg

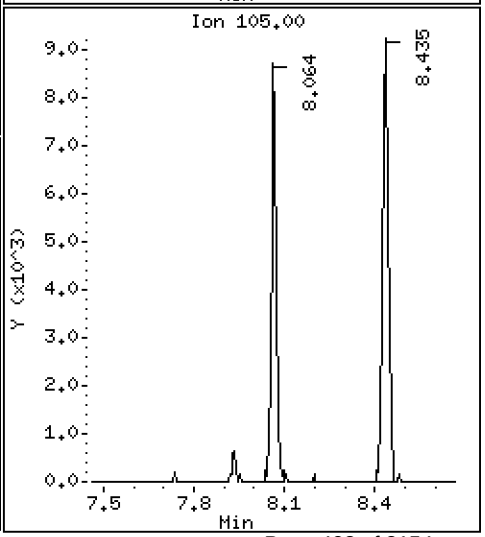


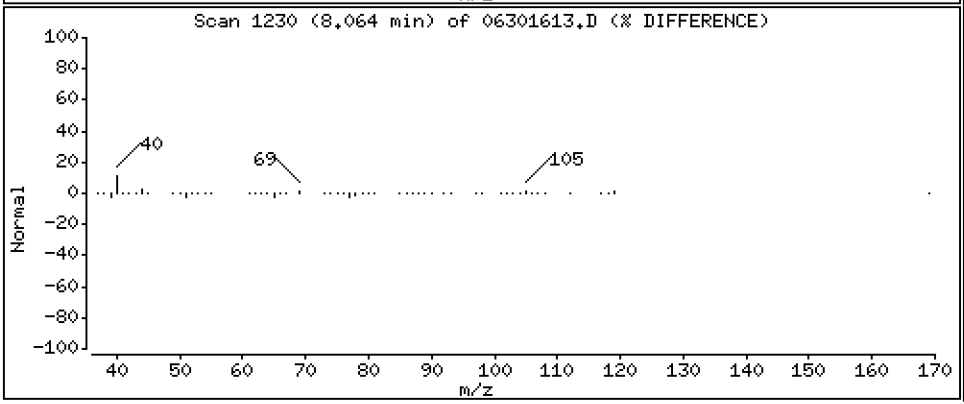












Data File: \\target\share\chem1\nt5.i\20160630.b\06301613.D

Date : 30-JUN-2016 16:45

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-26

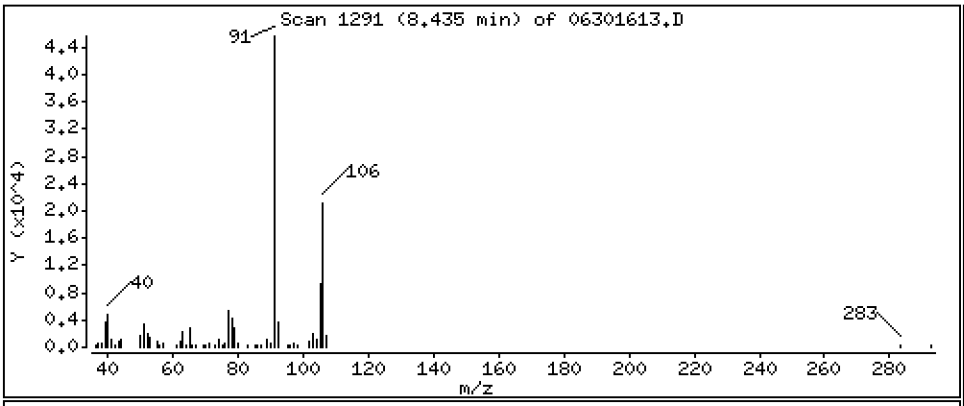
Operator: PB

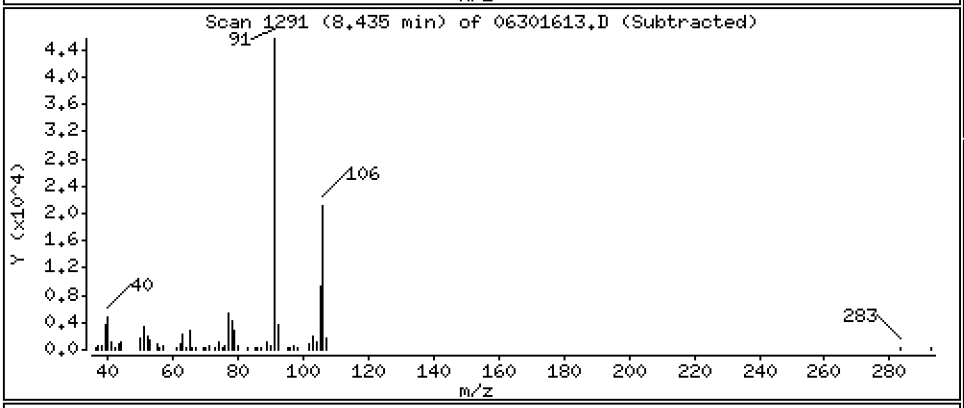
Column phase: RTXVMS

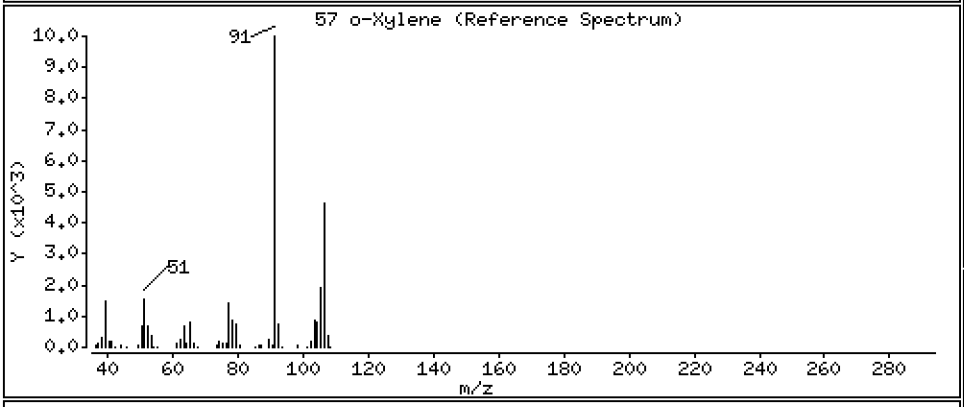
Column diameter: 0.18

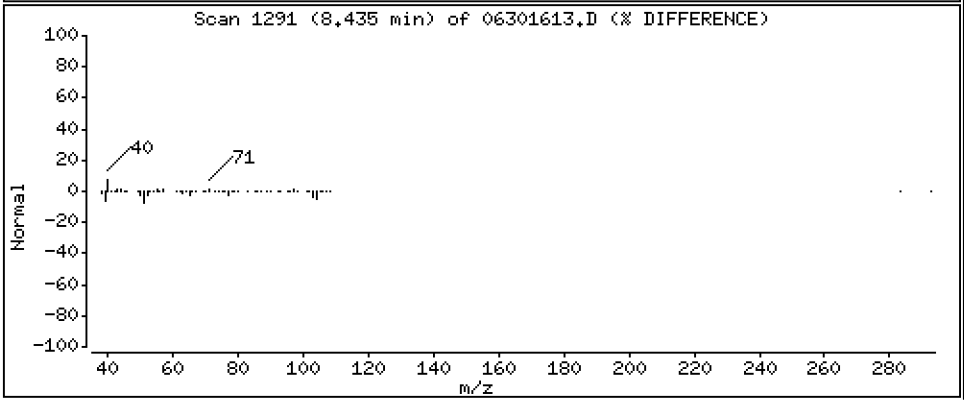
57 o-Xylene

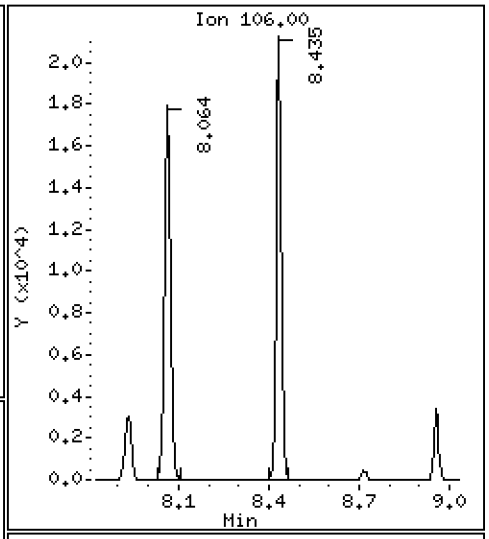
Concentration: 0.9996 ug/Kg

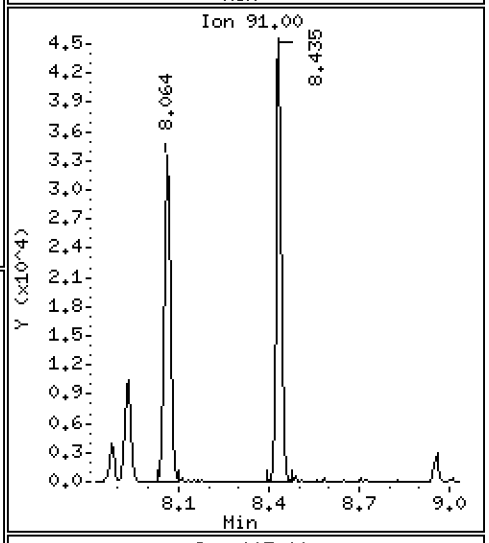


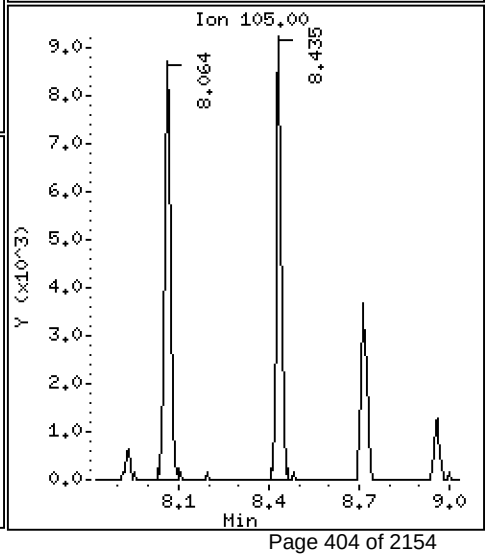












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301613.D
Lab Smp Id: 16F0096-26
Inj Date : 30-JUN-2016 16:45
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-26
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	Compound Not Detected.					
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.499	4.486	(0.907)	799125	47.8237	47.824
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	4.827	4.815	(0.893)	27287	0.45006	0.4501
*	31 Pentafluorobenzene	168	4.961	4.943	(1.000)	701083	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.000)	799347	47.8527	47.853
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2245006	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.555	(1.215)	2790358	48.5085	48.508
	43 Toluene	92	6.610	6.597	(1.223)	39406	1.01026	1.010
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2387522	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.064	8.063	(1.023)	23615	0.83476	0.8348
	57 o-Xylene	106	8.435	8.428	(1.070)	27932	0.99961	0.9996
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1247279	48.5776	48.578
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1244524	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1260790	50.3098	50.310
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301613.D
Lab Smp Id: 16F0096-26
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	701083	16.85
35 1,4-Difluorobenze	2041239	1020620	4082478	2245006	9.98
52 d5-Chlorobenzene	2118314	1059157	4236628	2387522	12.71
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1244524	17.96

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.37
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-26
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	47.824	95.65	70-130
$ 32 d4-1,2-Dichloroeth	50.000	47.853	95.71	80-149
$ 42 d8-Toluene	50.000	48.508	97.02	77-120
$ 62 4-Bromofluorobenze	50.000	48.578	97.16	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.310	100.62	80-120

REVIEW SUMMARY FOR FILE - 06301613.D

Lab ID: 16F0096-26
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 16:45

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-R-02-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-27	File ID:	06301614.D
Sampled:	06/29/16 13:45	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 17:07
Solids:	91.92	Preparation:	No Prep - Volatiles	Initial/Final:	6.46 g / 5 g
Batch:	BEG0004	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	0.84	U	0.20	0.84
74-83-9	Bromomethane	1	0.84	U	0.16	0.84
156-59-2	cis-1,2-Dichloroethene	1	18.8		0.20	0.84
71-43-2	Benzene	1	0.84	U	0.25	0.84
79-01-6	Trichloroethene	1	0.85		0.18	0.84
108-88-3	Toluene	1	6.85		0.13	0.84
127-18-4	Tetrachloroethene	1	0.84	U	0.22	0.84
100-41-4	Ethylbenzene	1	3.04		0.17	0.84
179601-23-1	m,p-Xylene	1	10.6		0.33	0.84
95-47-6	o-Xylene	1	2.84		0.19	0.84

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	46.5	93.1	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.5	101	80 - 120	
Toluene-d8	50.000	48.4	96.8	77 - 120	
4-Bromofluorobenzene	50.000	50.1	100	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301614.D

Date : 30-JUN-2016 17:07

Client ID:

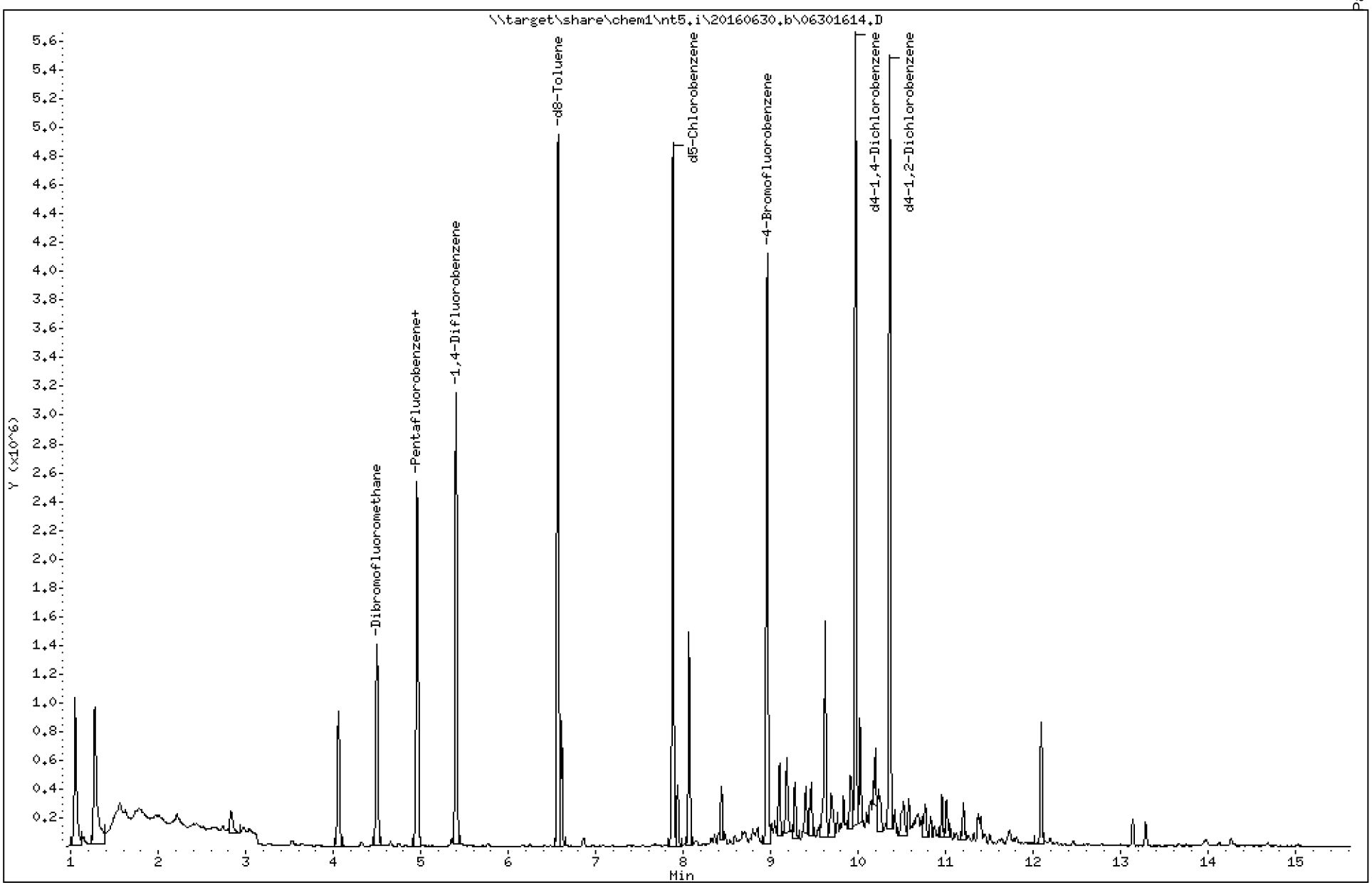
Instrument: nt5.i

Sample Info: 16F0096-27

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\06301614.D

Date : 30-JUN-2016 17:07

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-27

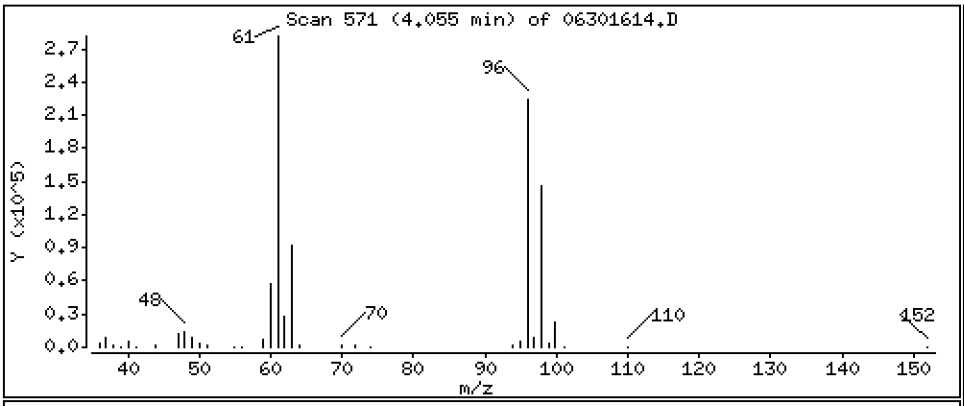
Operator: PB

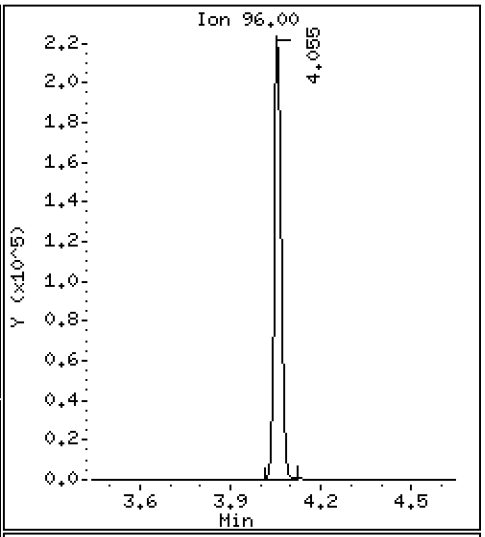
Column phase: RTXVMS

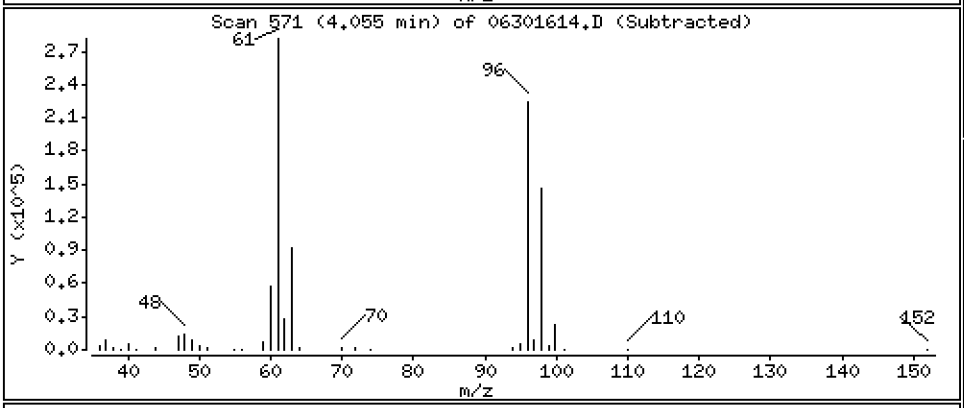
Column diameter: 0.18

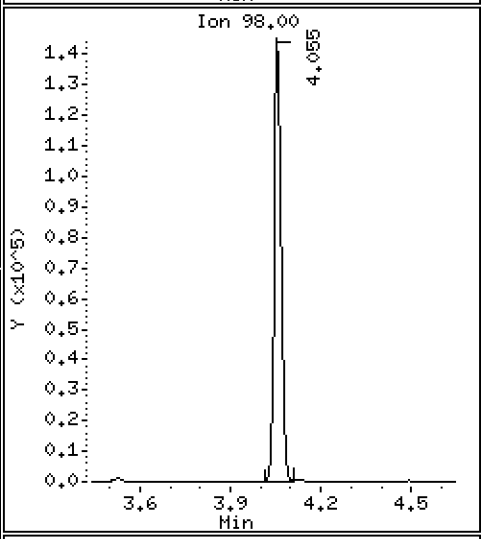
20 Cis-1,2-Dichloroethene

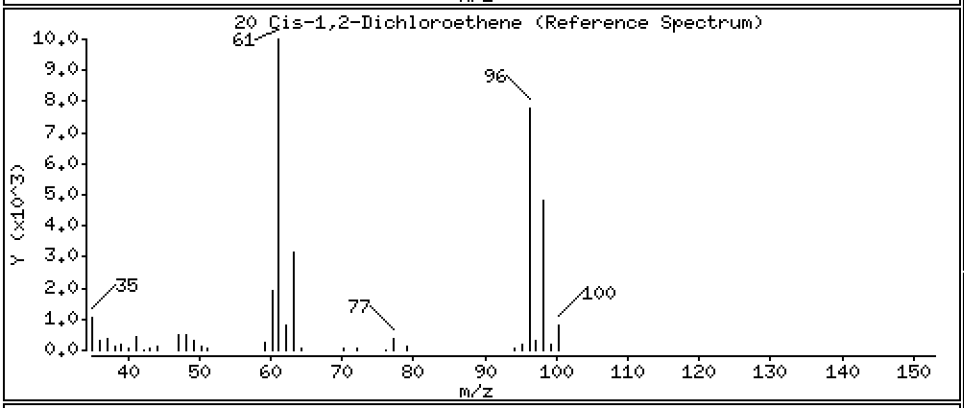
Concentration: 22.376 ug/Kg

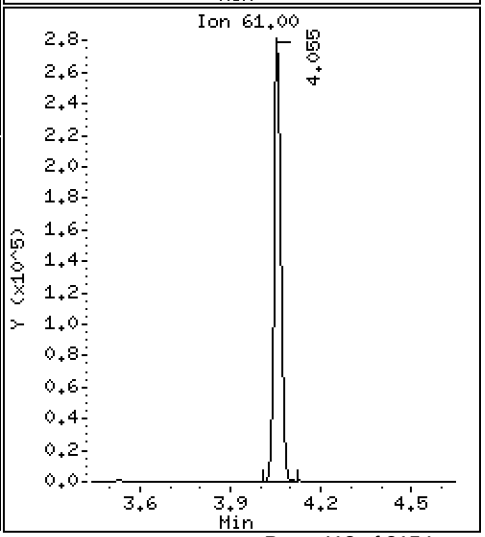


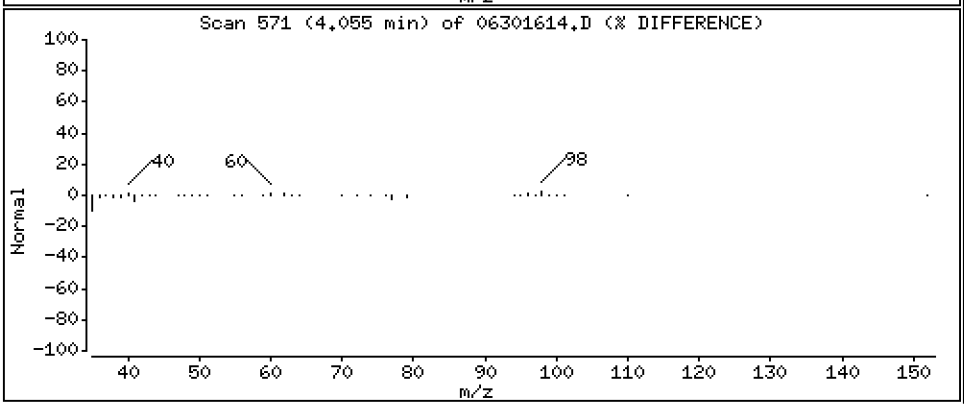












Data File: \\target\share\chem1\nt5.i\20160630.b\06301614.D

Date : 30-JUN-2016 17:07

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-27

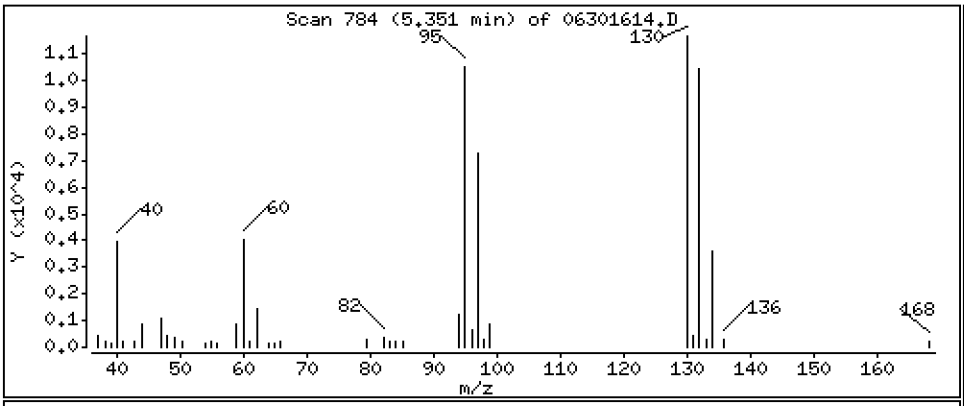
Operator: PB

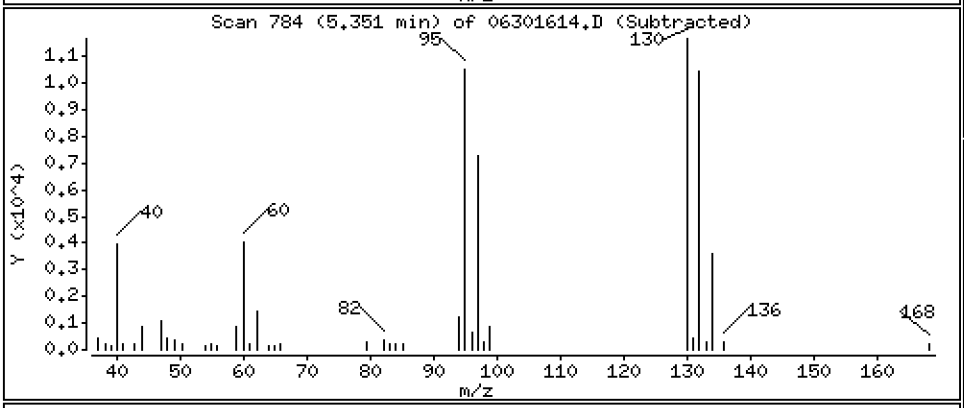
Column phase: RTXVMS

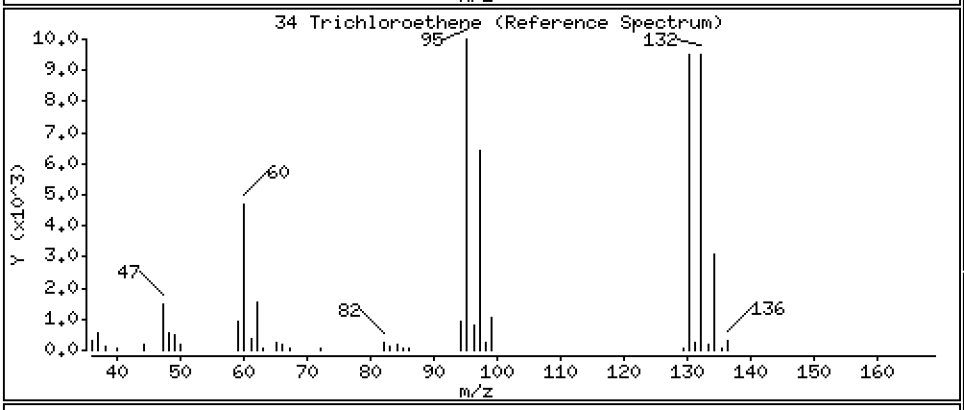
Column diameter: 0.18

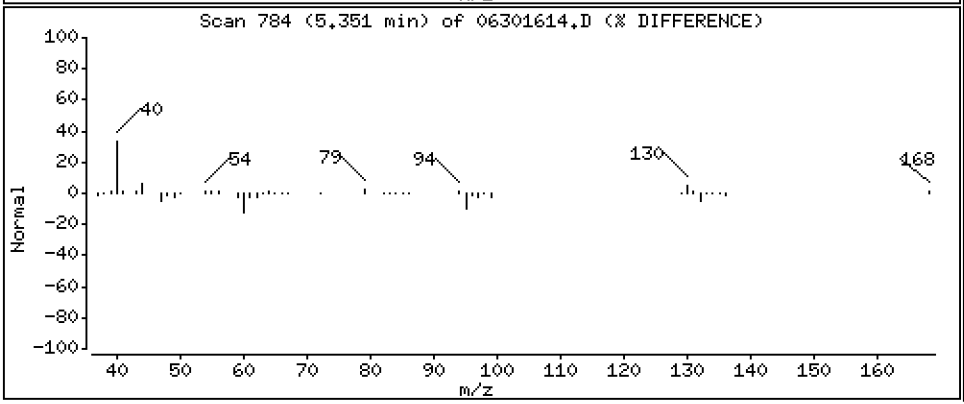
34 Trichloroethene

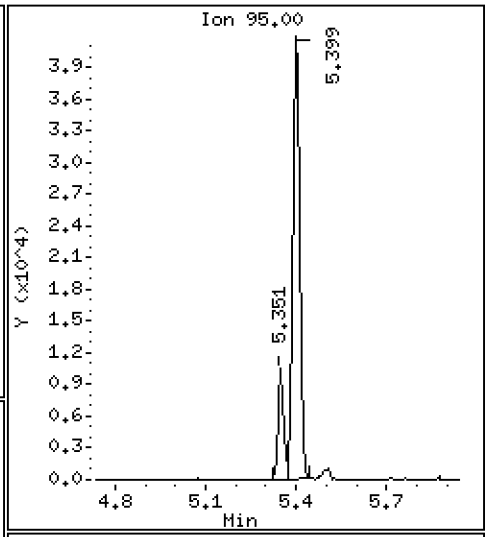
Concentration: 1.009 ug/Kg

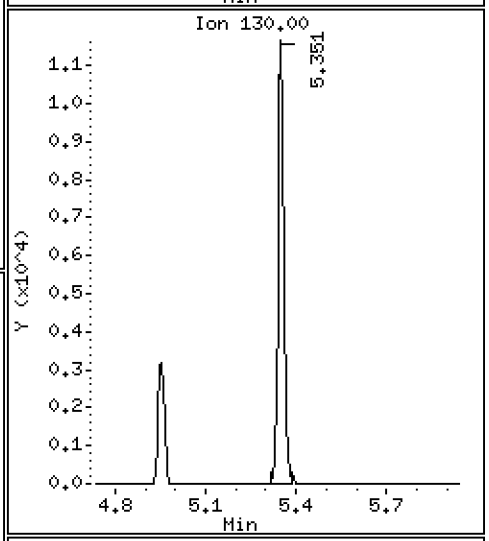


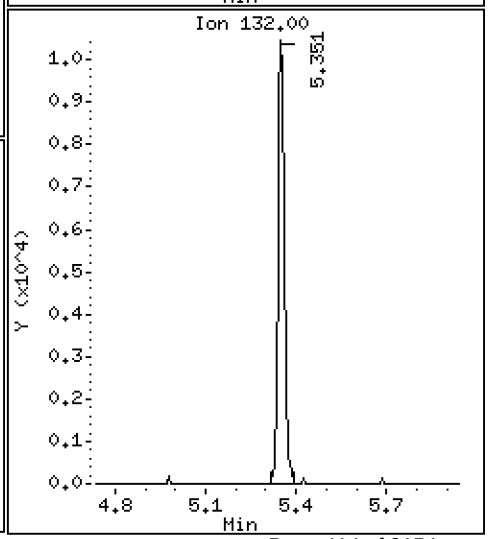












Data File: \\target\share\chem1\nt5.i\20160630.b\06301614.D

Date : 30-JUN-2016 17:07

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-27

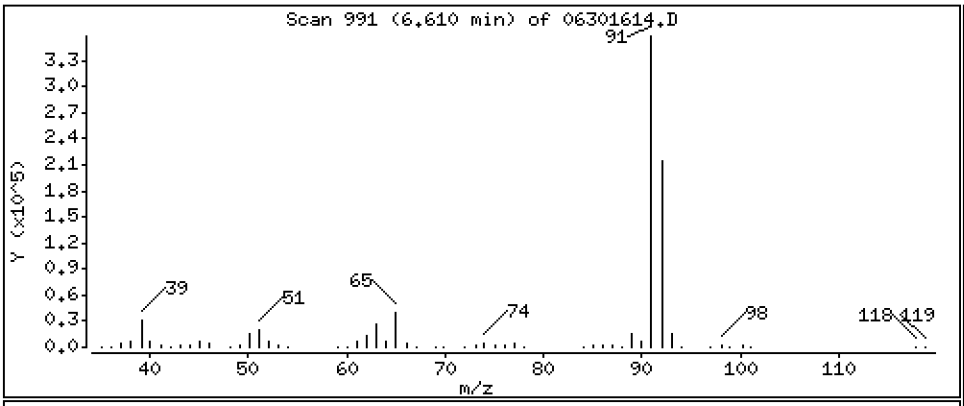
Operator: PB

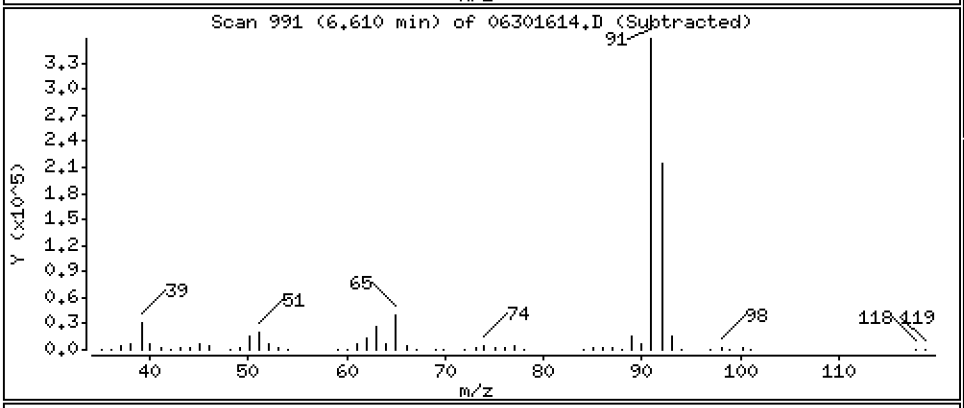
Column phase: RTXVMS

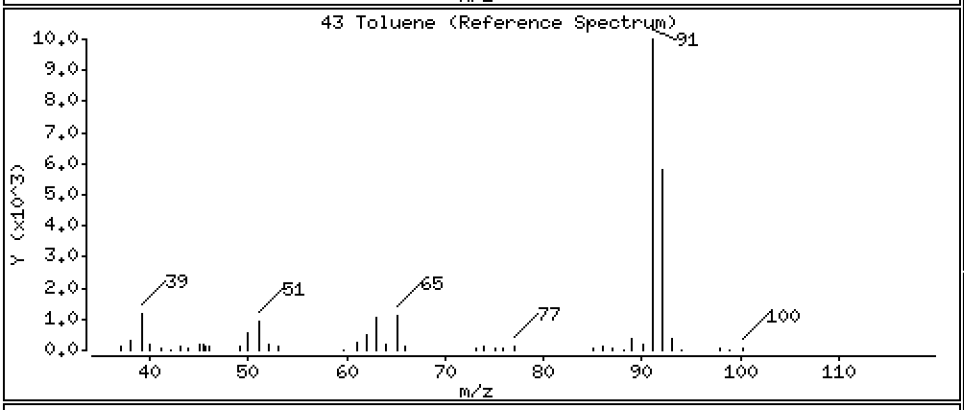
Column diameter: 0.18

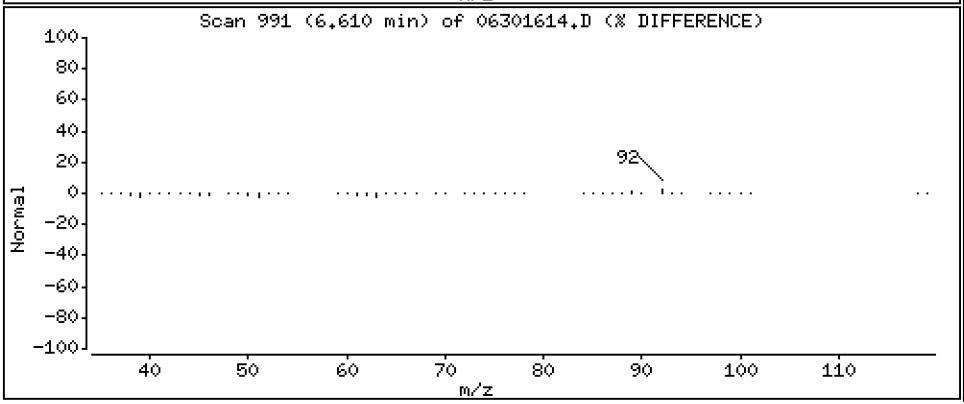
43 Toluene

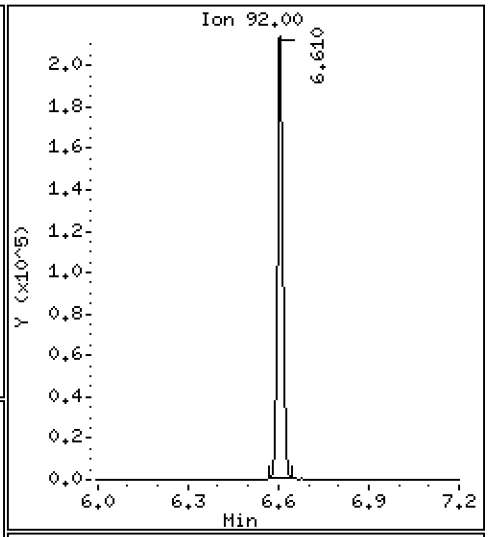
Concentration: 8.138 ug/Kg

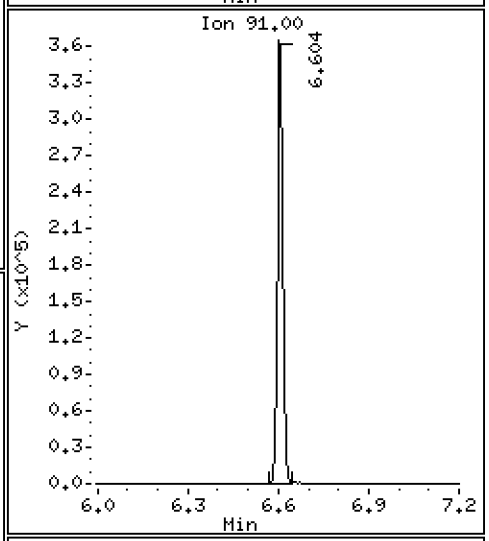


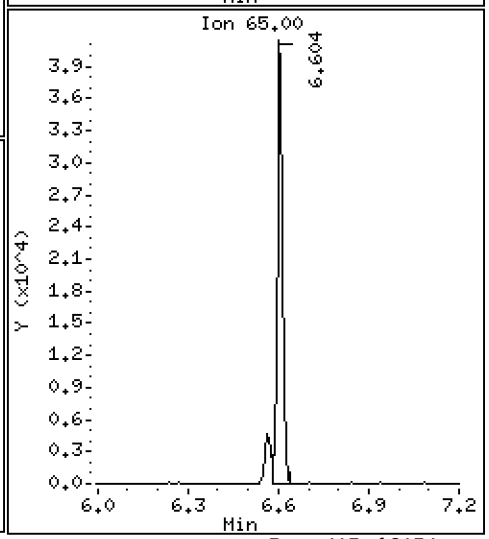












Data File: \\target\share\chem1\nt5.i\20160630.b\06301614.D

Date : 30-JUN-2016 17:07

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-27

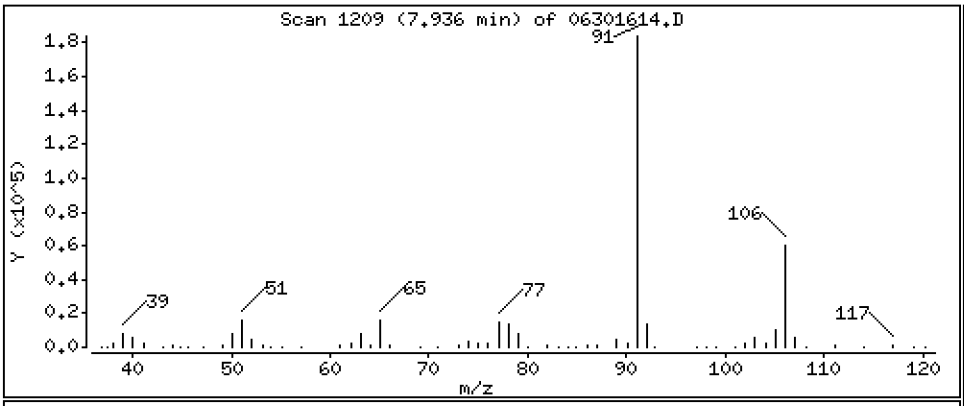
Operator: PB

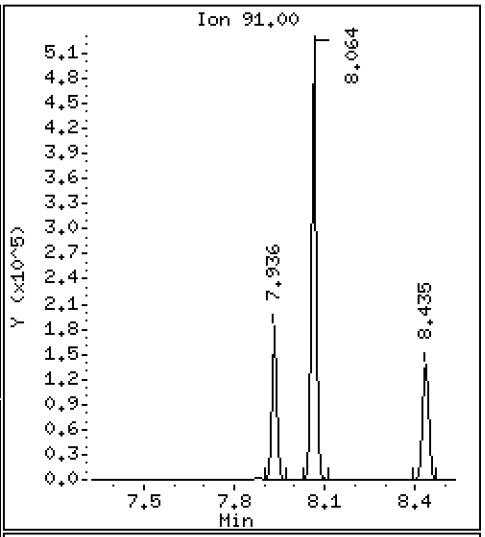
Column phase: RTXVMS

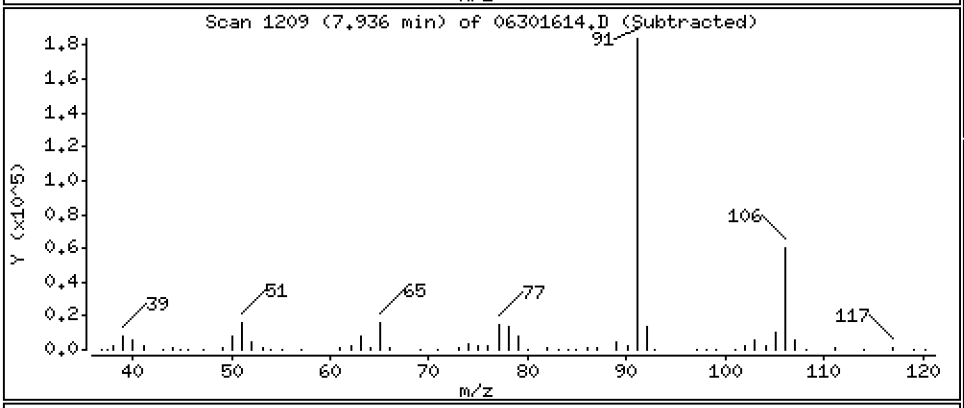
Column diameter: 0.18

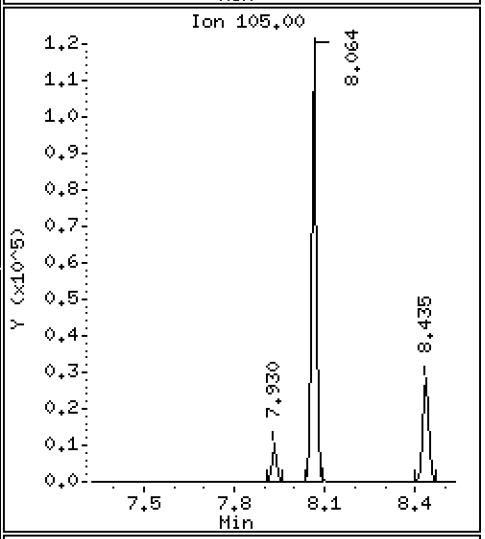
54 Ethyl Benzene

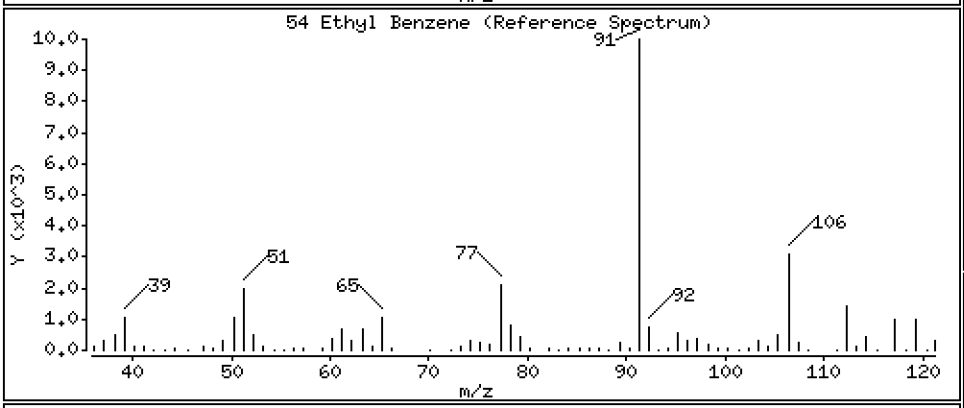
Concentration: 3.614 ug/Kg

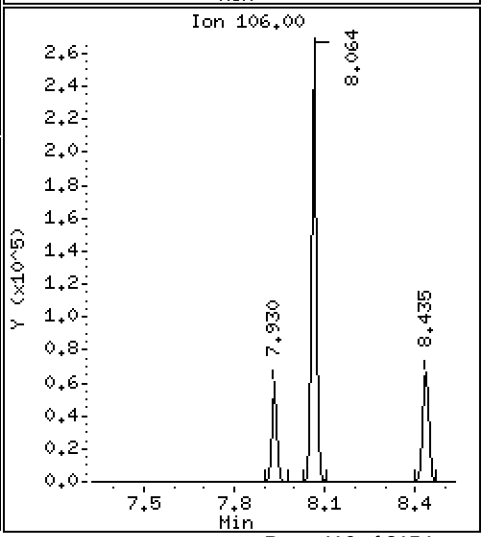


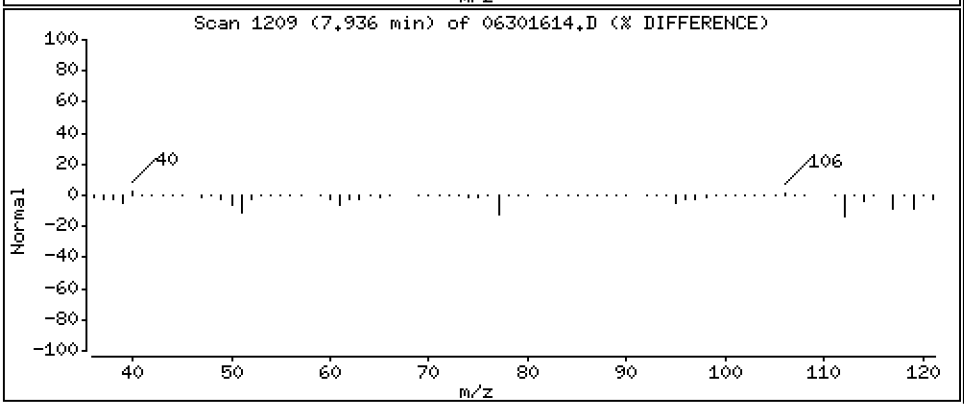












Data File: \\target\share\chem1\nt5.i\20160630.b\06301614.D

Date : 30-JUN-2016 17:07

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-27

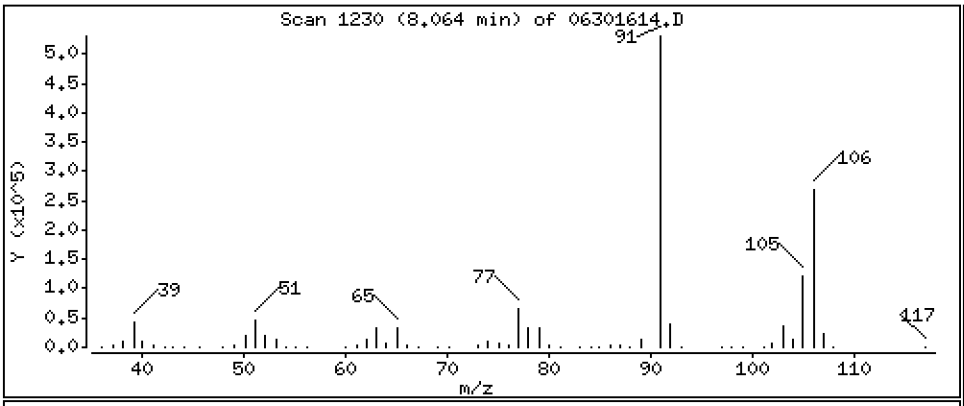
Operator: PB

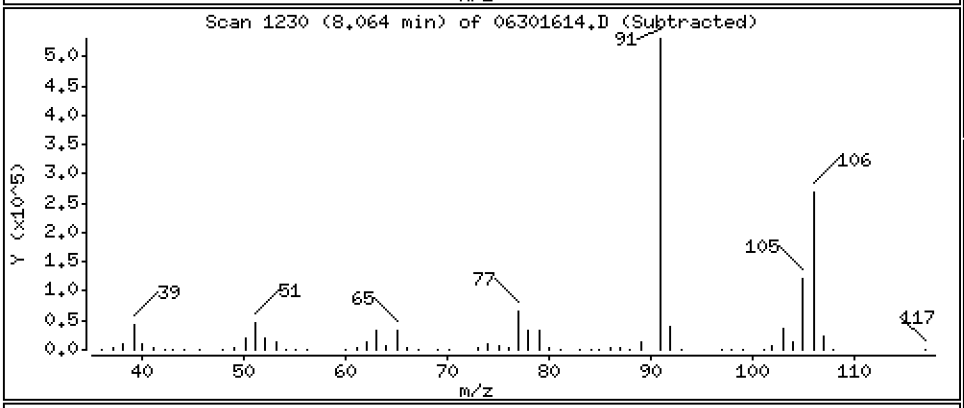
Column phase: RTXVMS

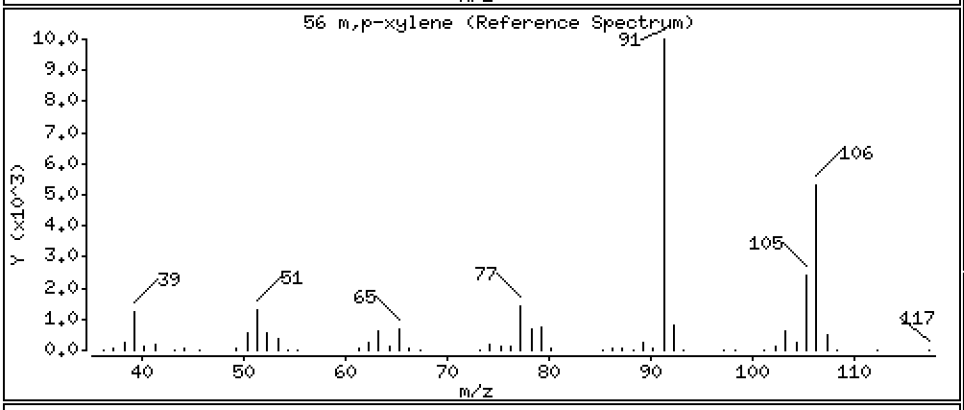
Column diameter: 0.18

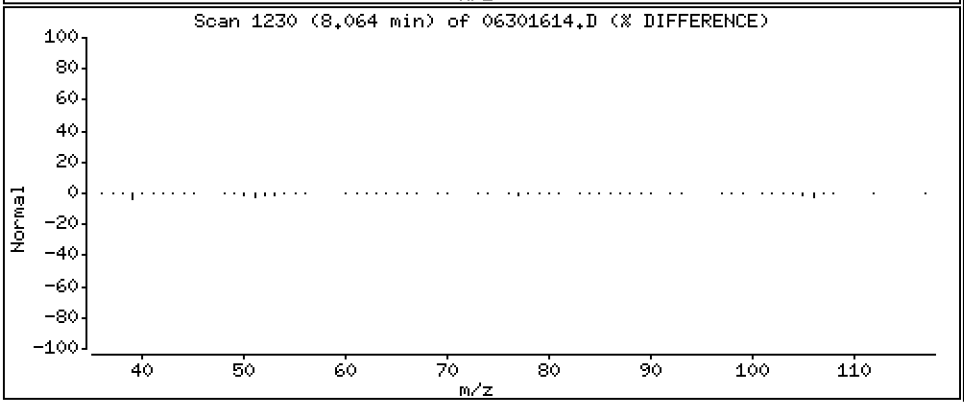
56 m,p-xylene

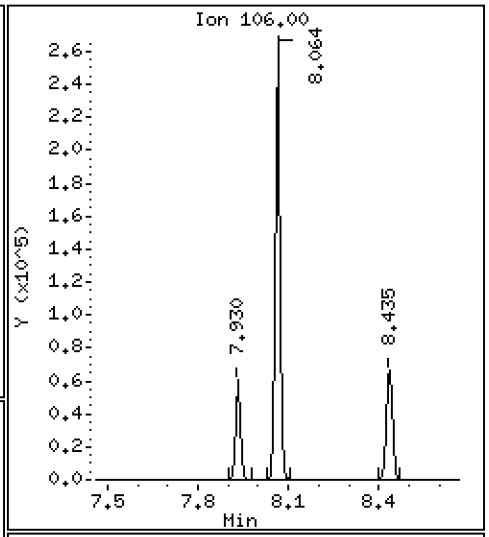
Concentration: 12.642 ug/Kg

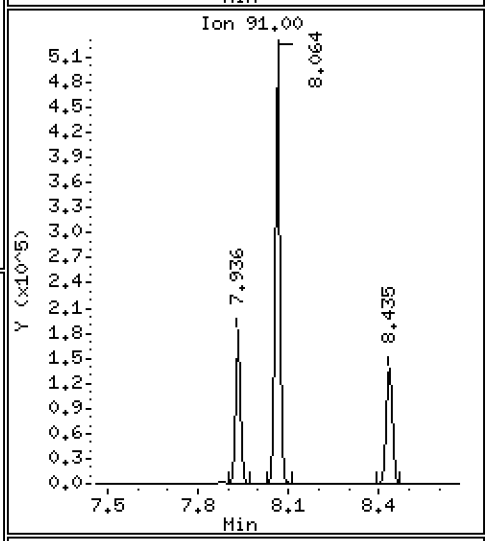


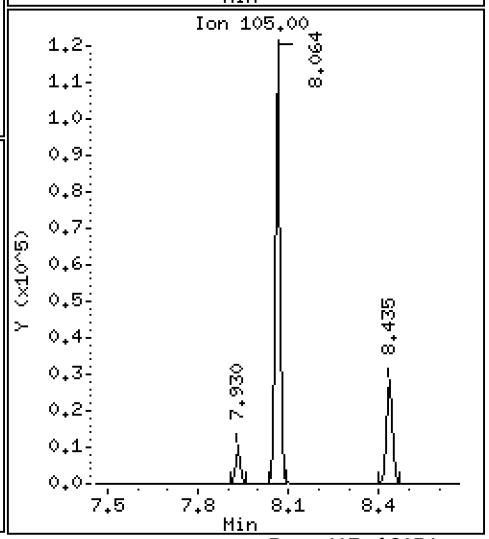












Data File: \\target\share\chem1\nt5.i\20160630.b\06301614.D

Date : 30-JUN-2016 17:07

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-27

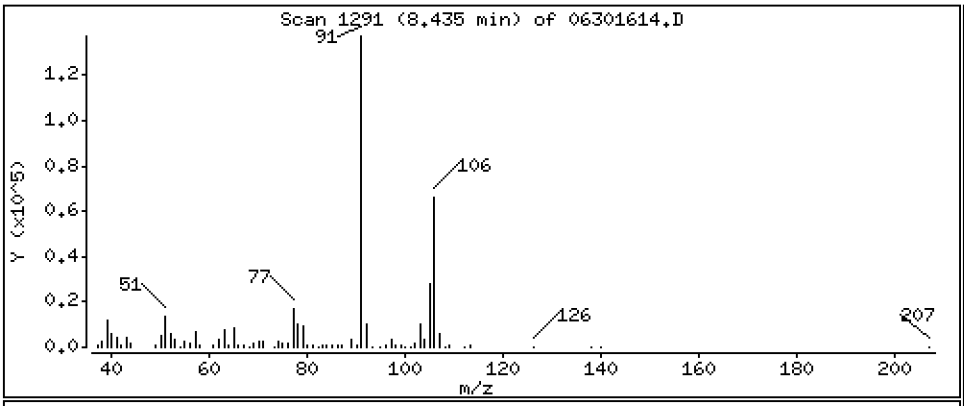
Operator: PB

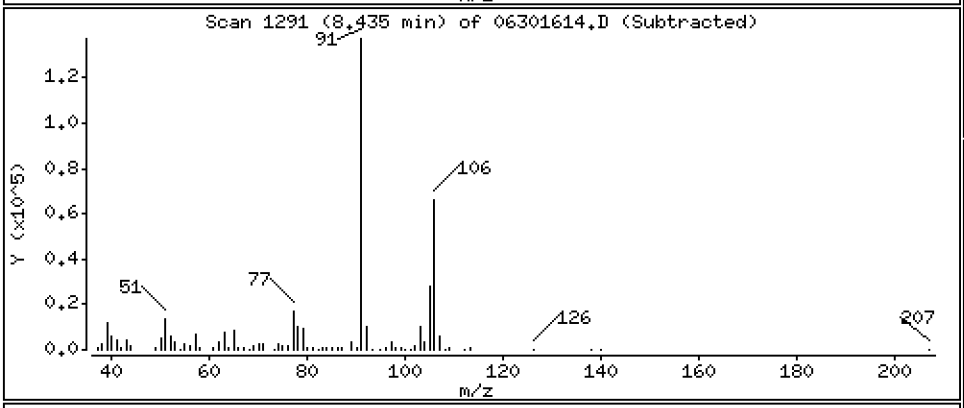
Column phase: RTXVMS

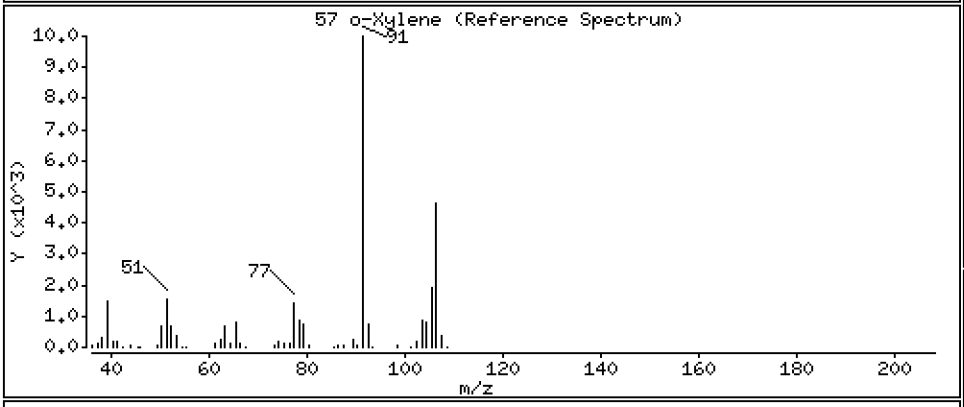
Column diameter: 0.18

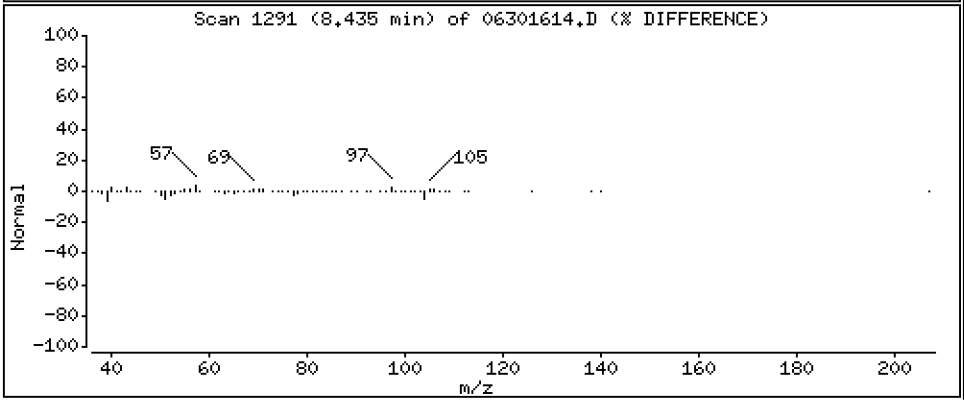
57 o-Xylene

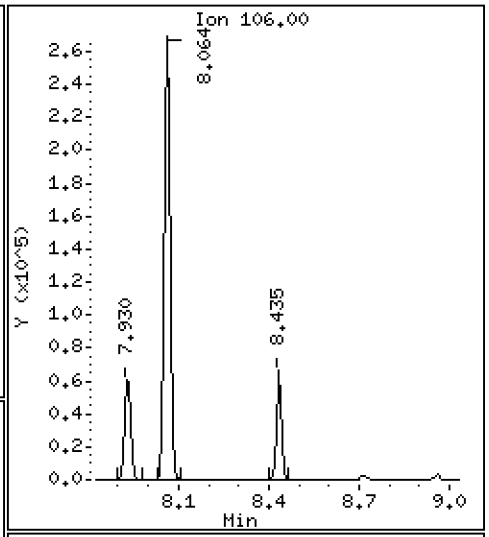
Concentration: 3.369 ug/Kg

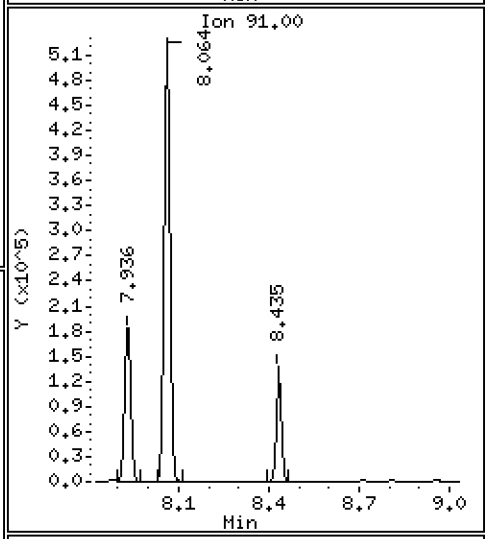


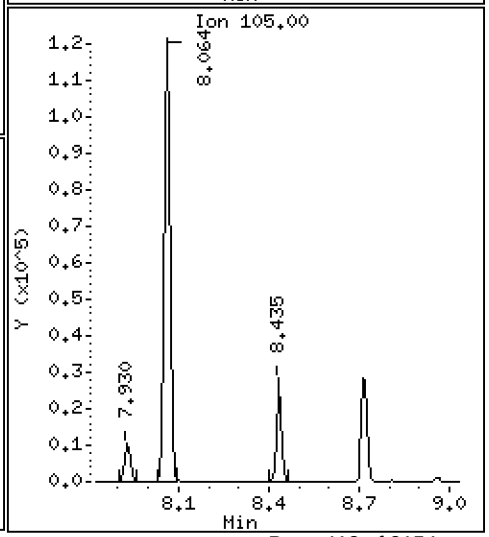












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301614.D
Lab Smp Id: 16F0096-27
Inj Date : 30-JUN-2016 17:07
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-27
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.055	4.042	(0.818)	391003	22.3763	22.376
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.499	4.486	(0.908)	783095	47.4912	47.491
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.955	4.943	(1.000)	691830	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.001)	766992	46.5298	46.530
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.350	5.338	(0.991)	15540	1.00899	1.009
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2200756	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.555	(1.216)	2730203	48.4170	48.417
	43 Toluene	92	6.610	6.597	(1.224)	311173	8.13803	8.138
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2327858	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.936	7.930	(1.007)	256740	3.61358	3.614
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.064	8.063	(1.023)	348706	12.6423	12.642
	57 o-Xylene	106	8.435	8.428	(1.070)	91786	3.36897	3.369
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1253837	50.0846	50.085
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1224573	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1244460	50.4673	50.467
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301614.D
Lab Smp Id: 16F0096-27
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	691830	15.31
35 1,4-Difluorobenze	2041239	1020620	4082478	2200756	7.81
52 d5-Chlorobenzene	2118314	1059157	4236628	2327858	9.89
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1224573	16.07

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.12
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 15:50

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-27
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	47.491	94.98	70-130
$ 32 d4-1,2-Dichloroeth	50.000	46.530	93.06	80-149
$ 42 d8-Toluene	50.000	48.417	96.83	77-120
$ 62 4-Bromofluorobenze	50.000	50.085	100.17	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.467	100.93	80-120

REVIEW SUMMARY FOR FILE - 06301614.D

Lab ID: 16F0096-27
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 17:07

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-R-03-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-28	File ID:	06301615.D
Sampled:	06/29/16 13:50	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 17:30
Solids:	94.04	Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g
Batch:	BEG0004	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.06	U	0.25	1.06
74-83-9	Bromomethane	1	1.06	U	0.20	1.06
156-59-2	cis-1,2-Dichloroethene	1	3.54		0.26	1.06
71-43-2	Benzene	1	1.06	U	0.31	1.06
79-01-6	Trichloroethene	1	1.06	U	0.23	1.06
108-88-3	Toluene	1	45.2		0.16	1.06
127-18-4	Tetrachloroethene	1	1.06	U	0.27	1.06
100-41-4	Ethylbenzene	1	3.42		0.21	1.06
179601-23-1	m,p-Xylene	1	15.8		0.42	1.06
95-47-6	o-Xylene	1	5.02		0.24	1.06

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	46.3	92.6	80 - 149	
1,2-Dichlorobenzene-d4	50.000	49.7	99.4	80 - 120	
Toluene-d8	50.000	48.5	97.1	77 - 120	
4-Bromofluorobenzene	50.000	49.6	99.2	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301615.D

Date : 30-JUN-2016 17:30

Client ID:

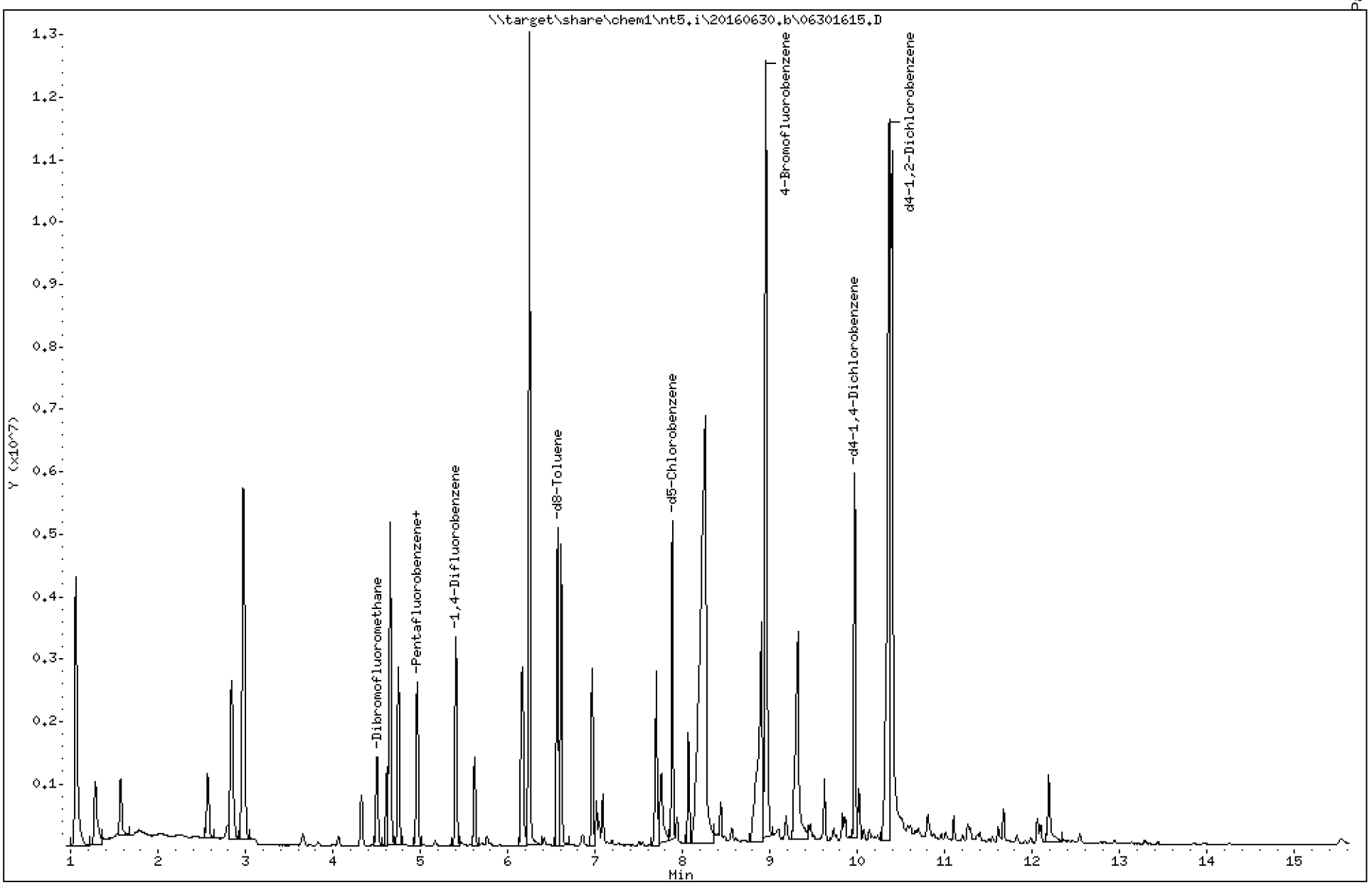
Instrument: nt5.i

Sample Info: 16F0096-28

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\06301615.D

Date : 30-JUN-2016 17:30

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-28

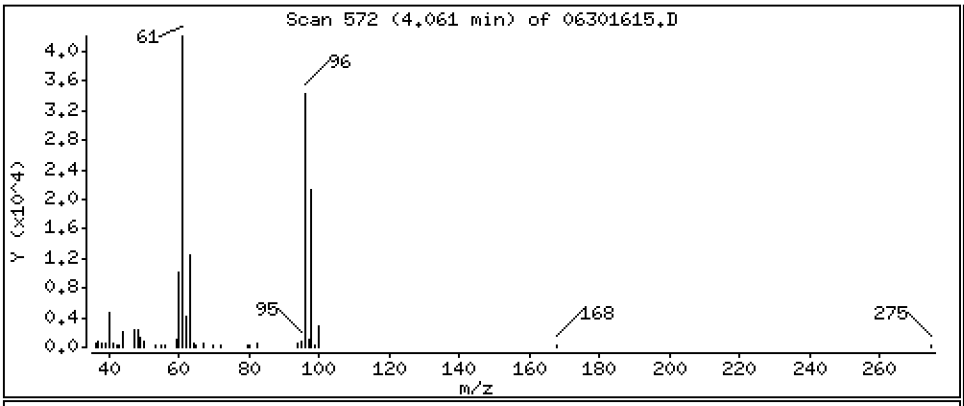
Operator: PB

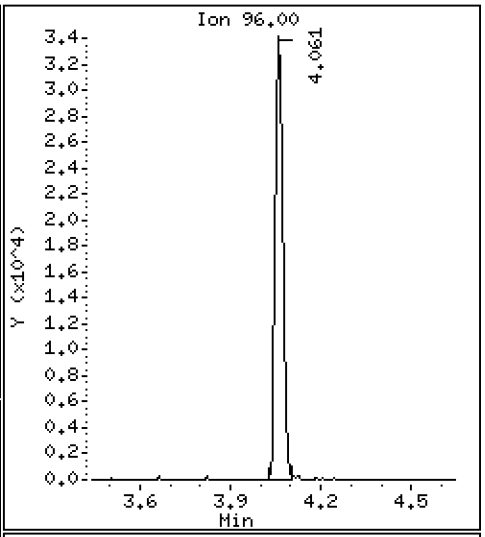
Column phase: RTXVMS

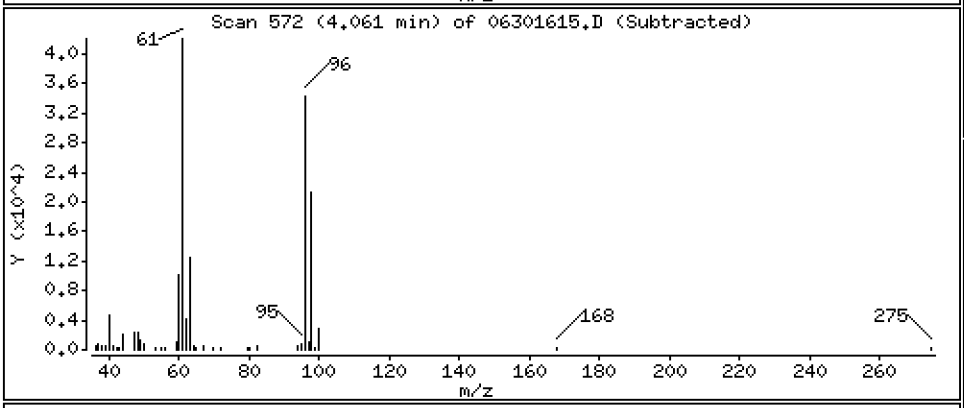
Column diameter: 0.18

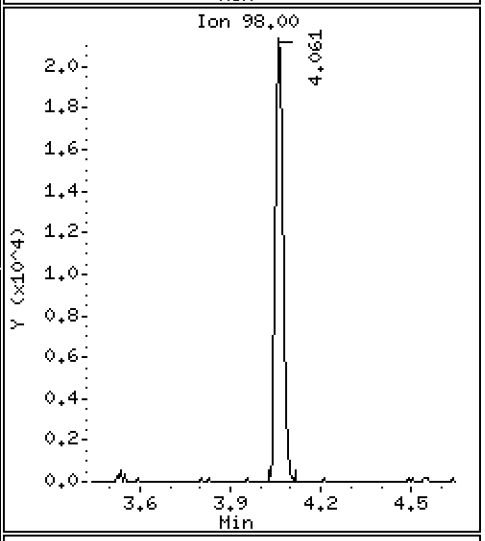
20 Cis-1,2-Dichloroethene

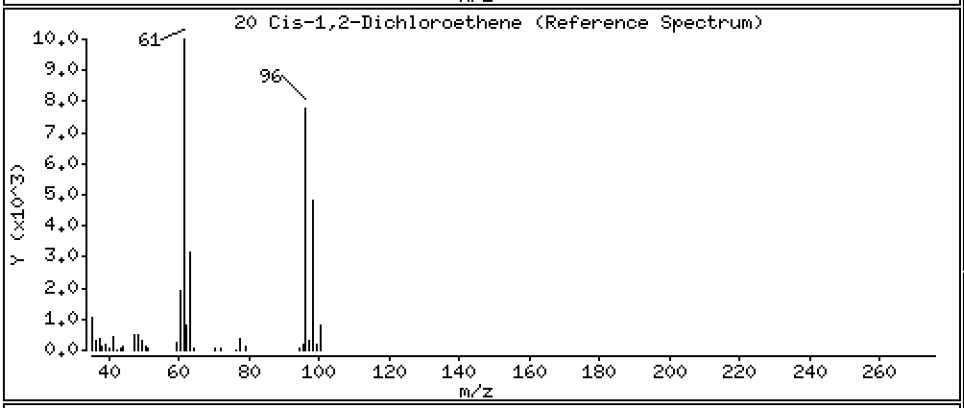
Concentration: 3.328 ug/Kg

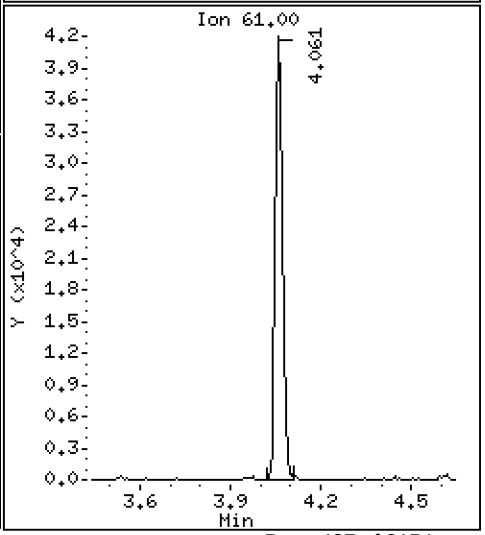


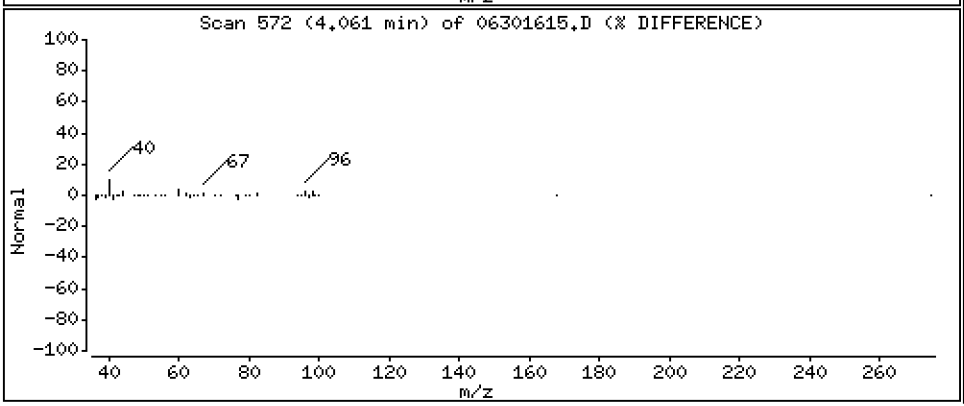












Data File: \\target\share\chem1\nt5.i\20160630.b\06301615.D

Date : 30-JUN-2016 17:30

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-28

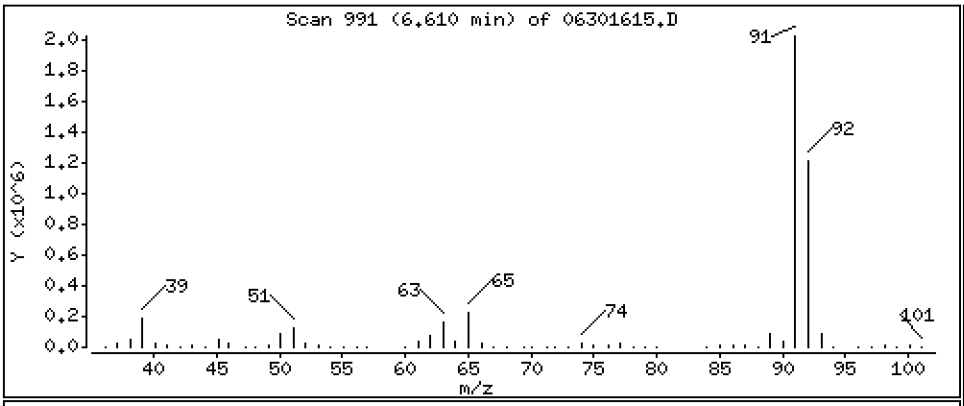
Operator: PB

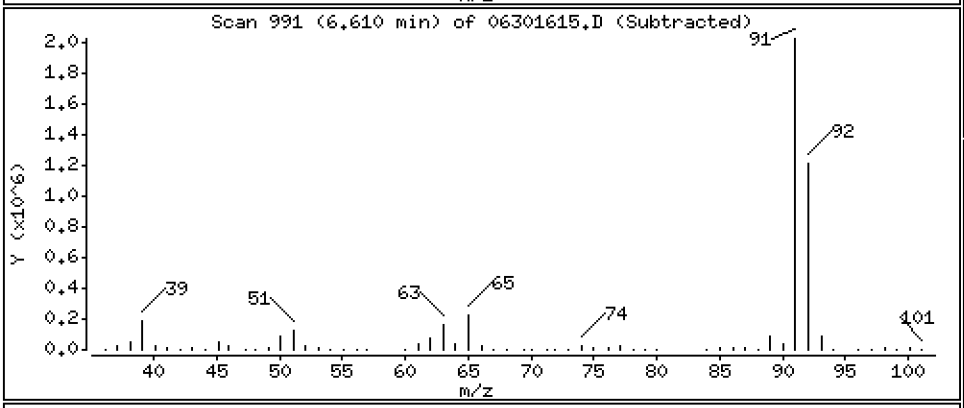
Column phase: RTXVMS

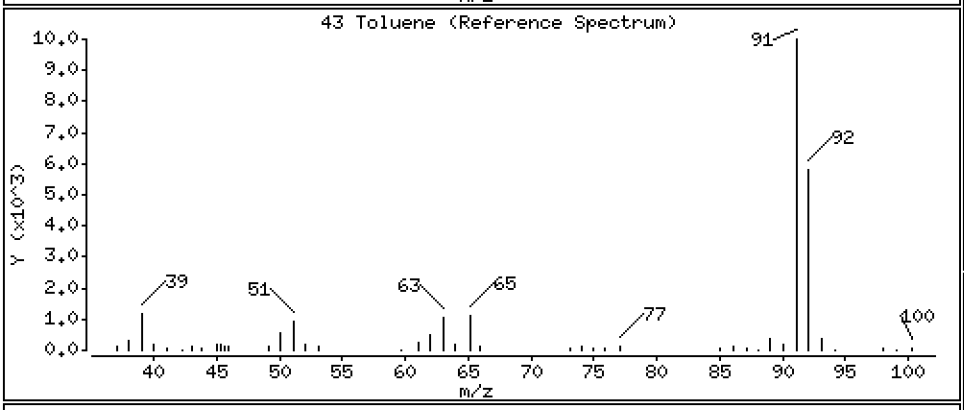
Column diameter: 0.18

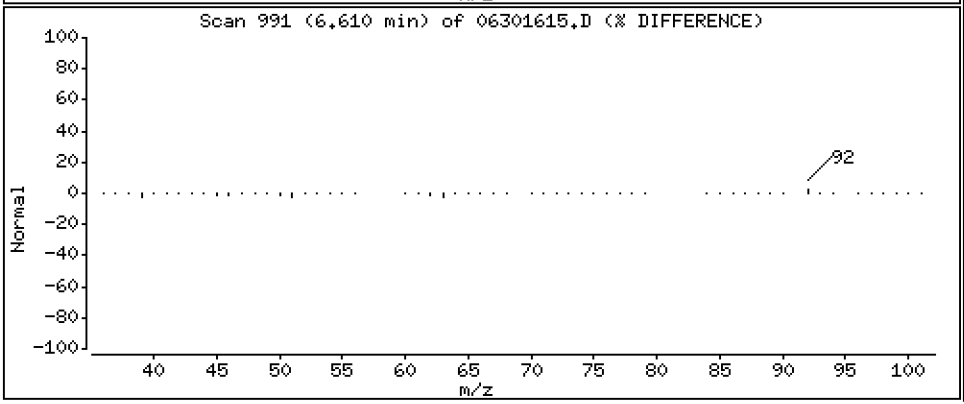
43 Toluene

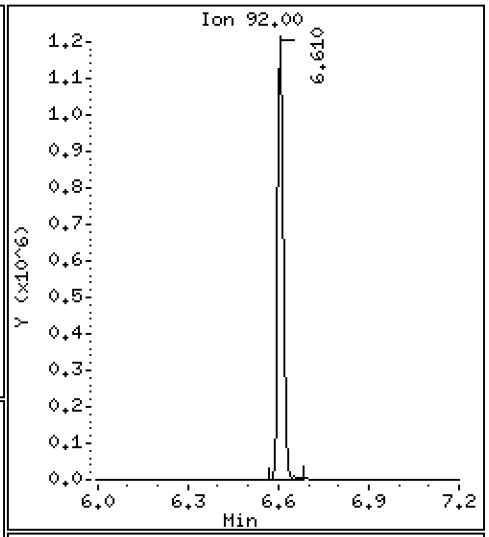
Concentration: 42.482 ug/Kg

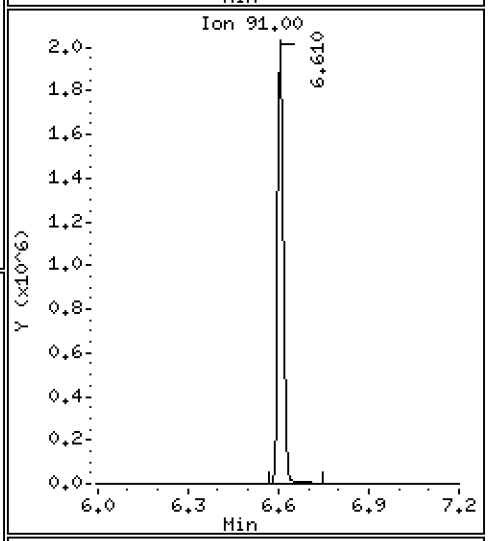


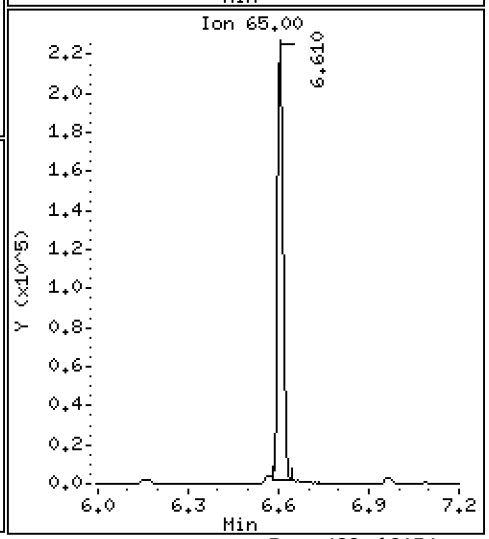












Data File: \\target\share\chem1\nt5.i\20160630.b\06301615.D

Date : 30-JUN-2016 17:30

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-28

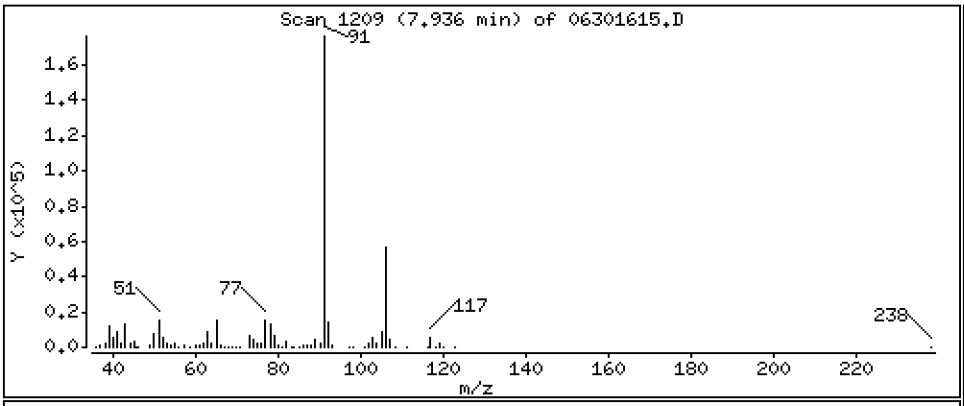
Operator: PB

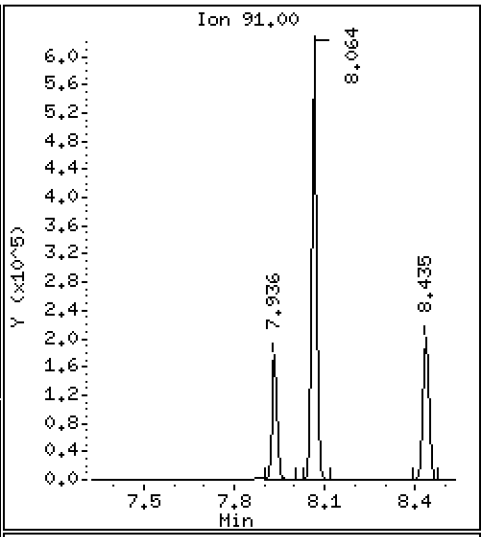
Column phase: RTXVMS

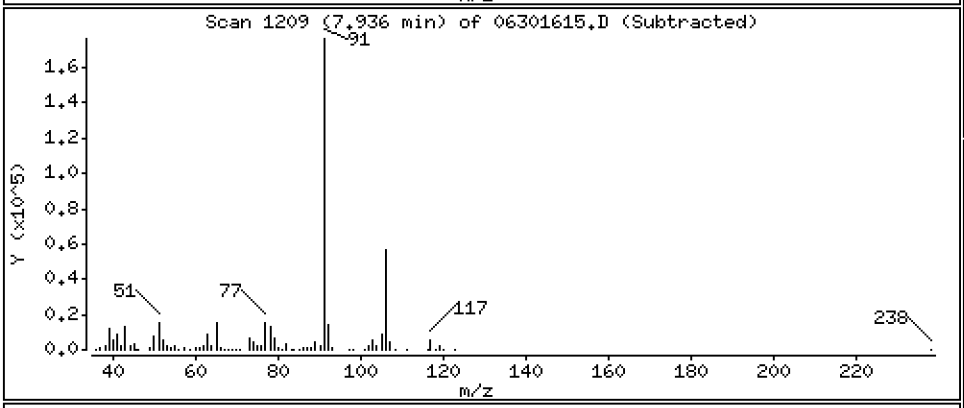
Column diameter: 0.18

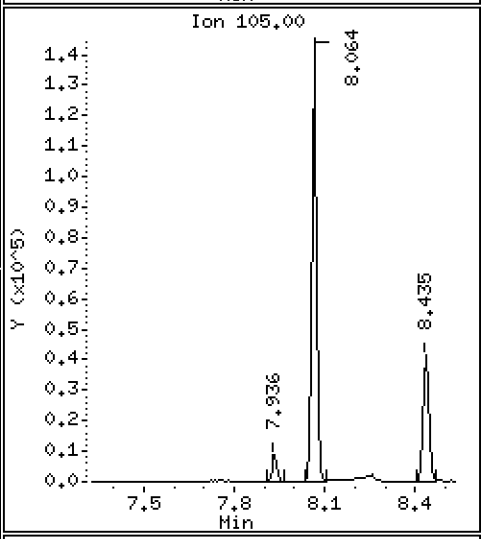
54 Ethyl Benzene

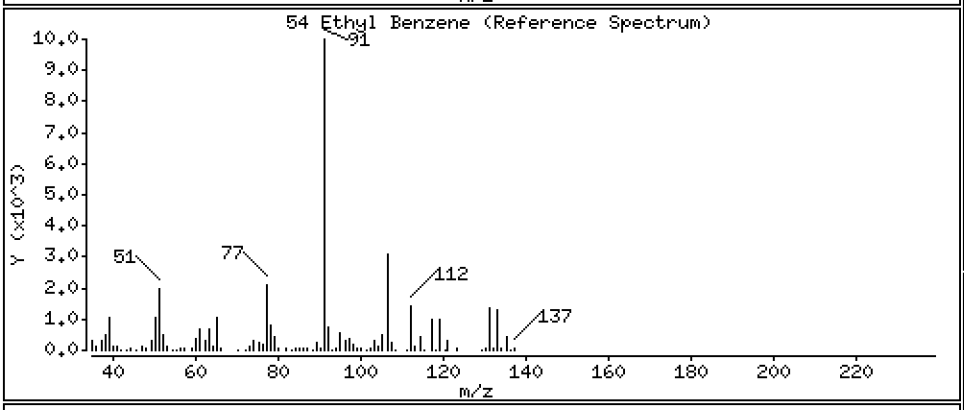
Concentration: 3.221 ug/Kg

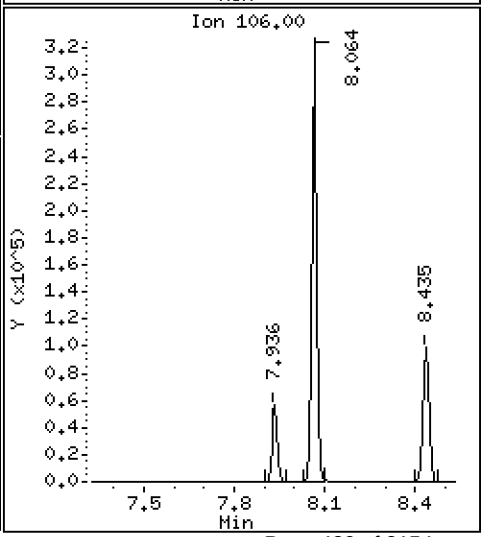


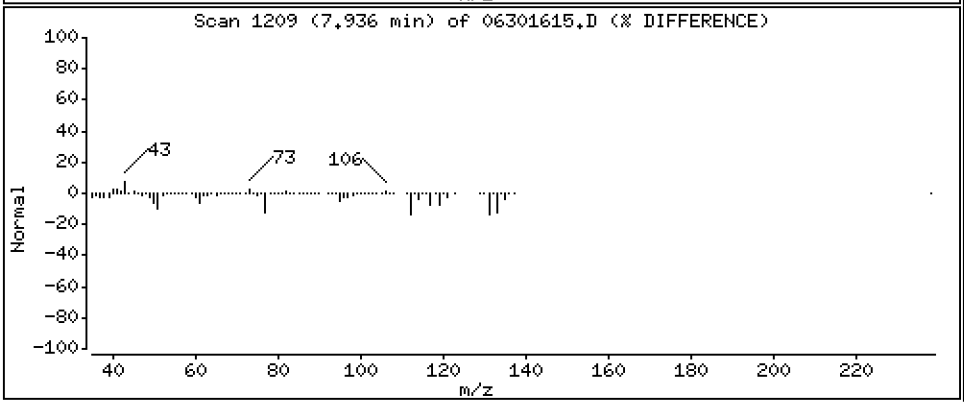












Data File: \\target\share\chem1\nt5.i\20160630.b\06301615.D

Date : 30-JUN-2016 17:30

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-28

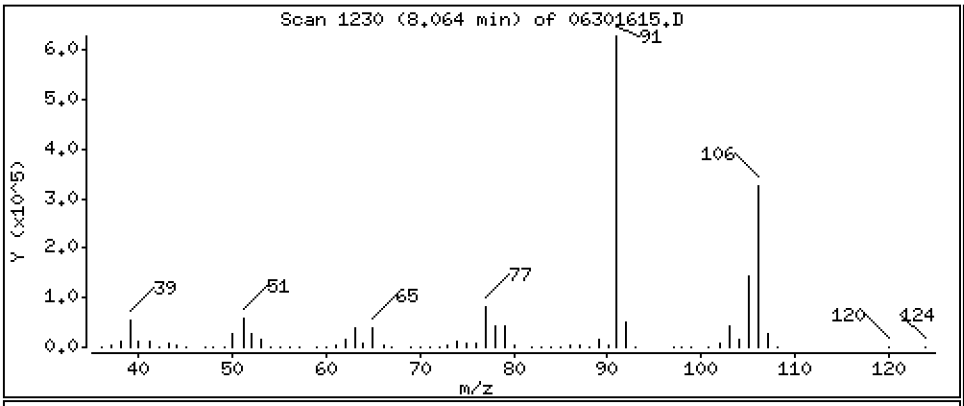
Operator: PB

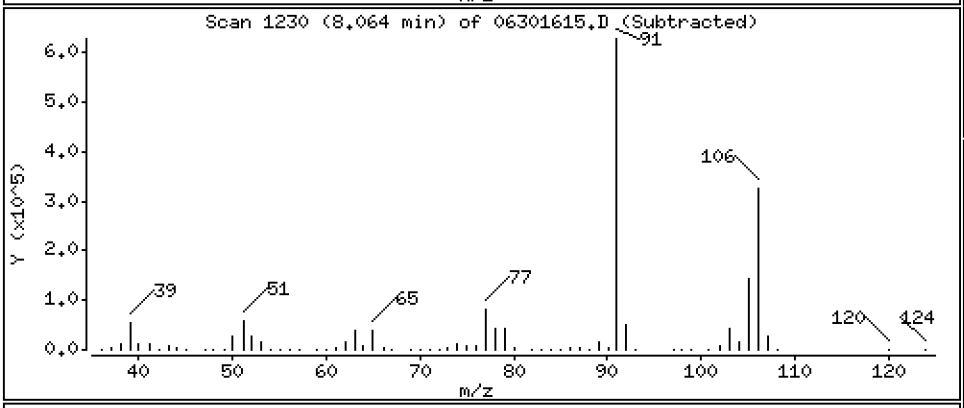
Column phase: RTXVMS

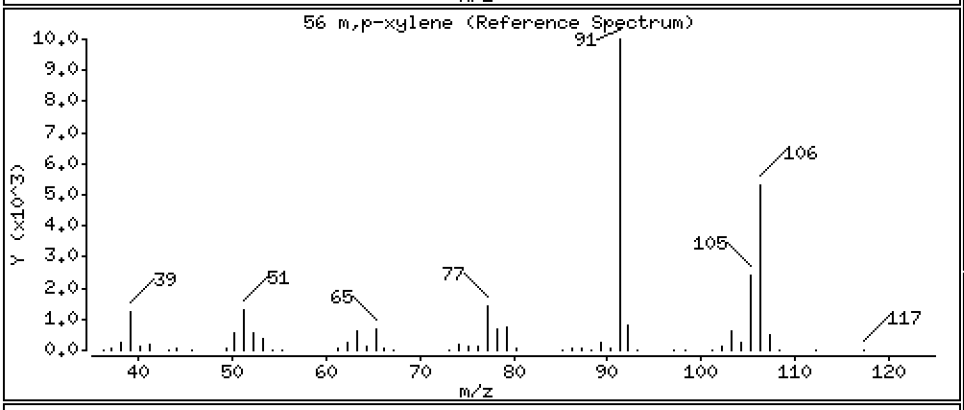
Column diameter: 0.18

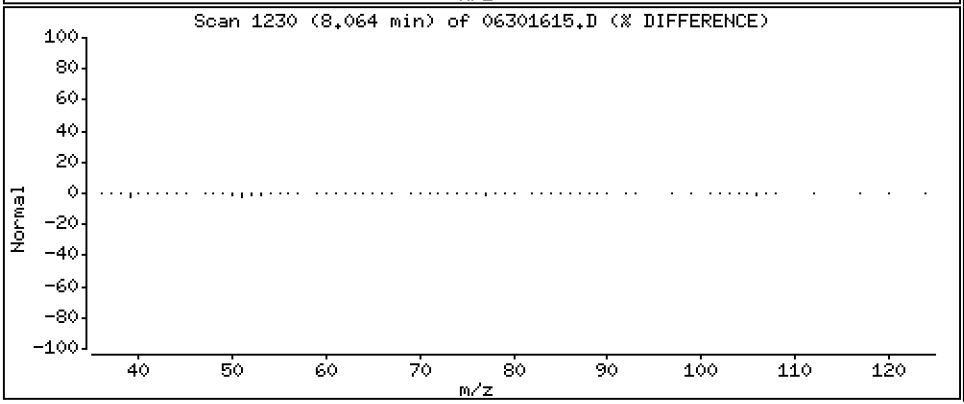
56 m,p-xylene

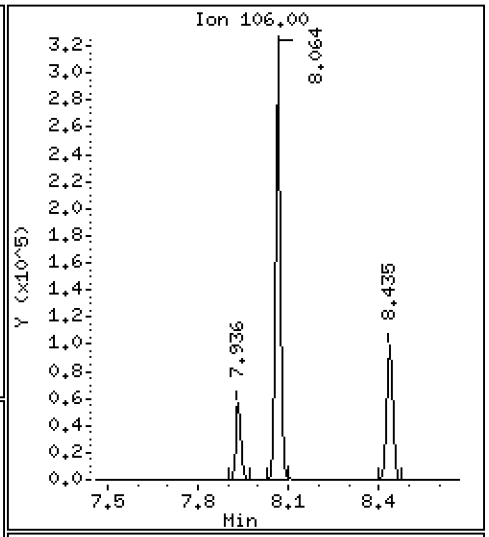
Concentration: 14.852 ug/Kg

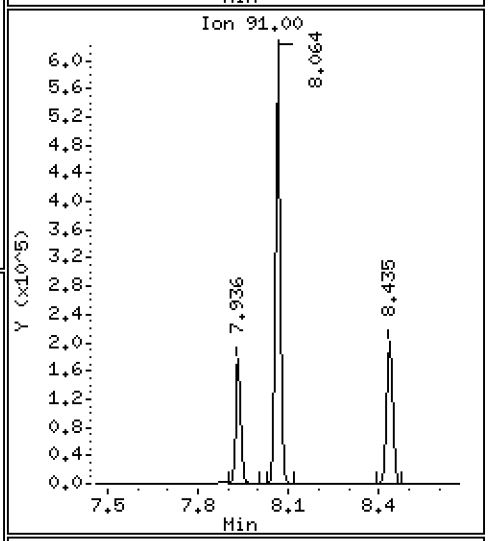


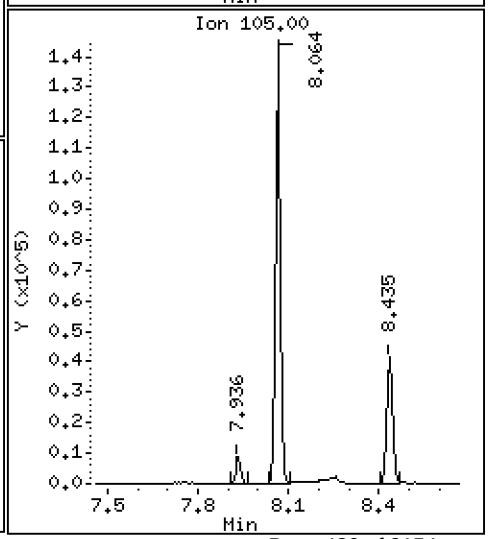












Data File: \\target\share\chem1\nt5.i\20160630.b\06301615.D

Date : 30-JUN-2016 17:30

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-28

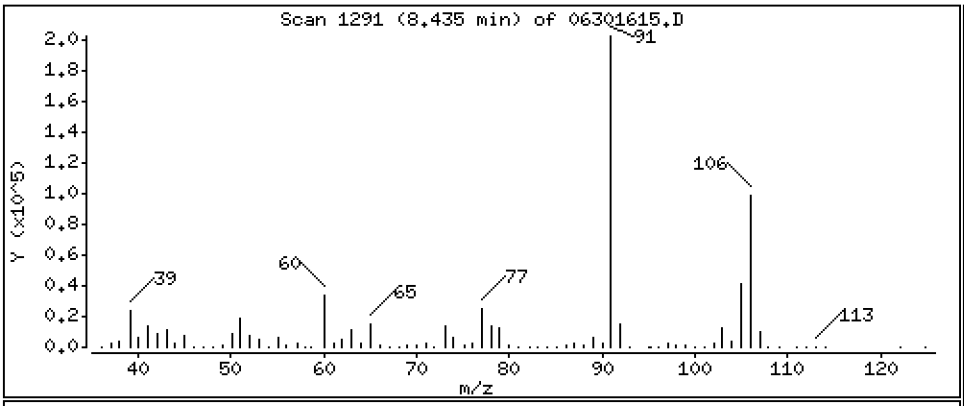
Operator: PB

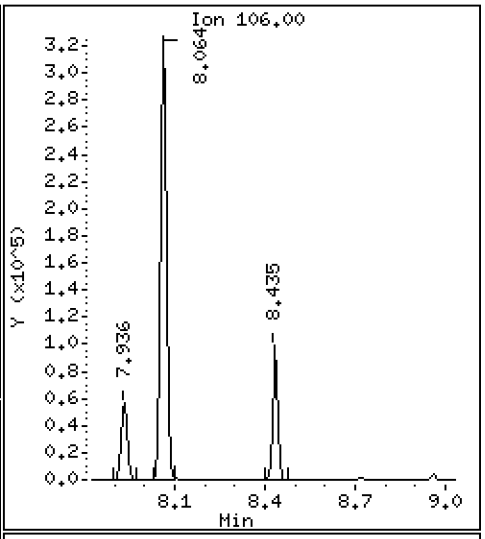
Column phase: RTXVMS

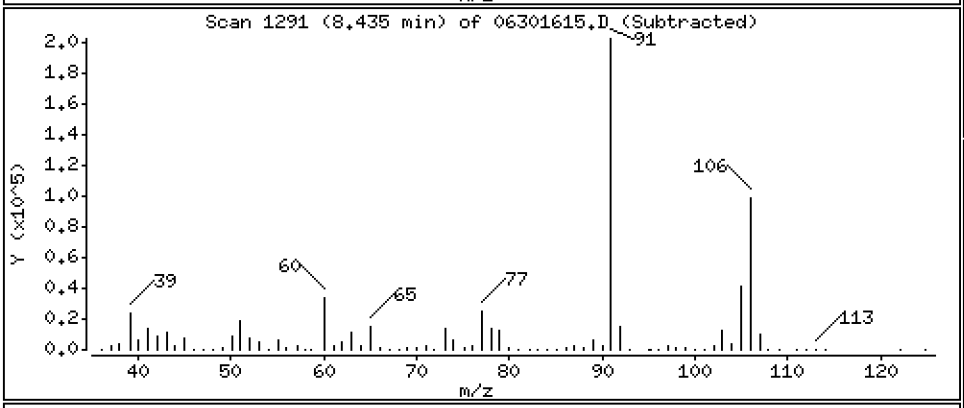
Column diameter: 0.18

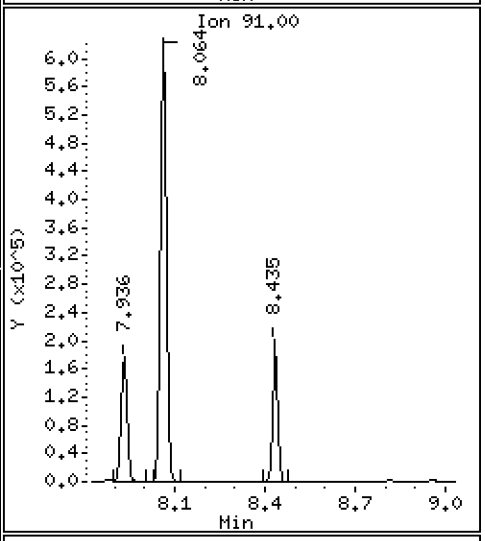
57 o-Xylene

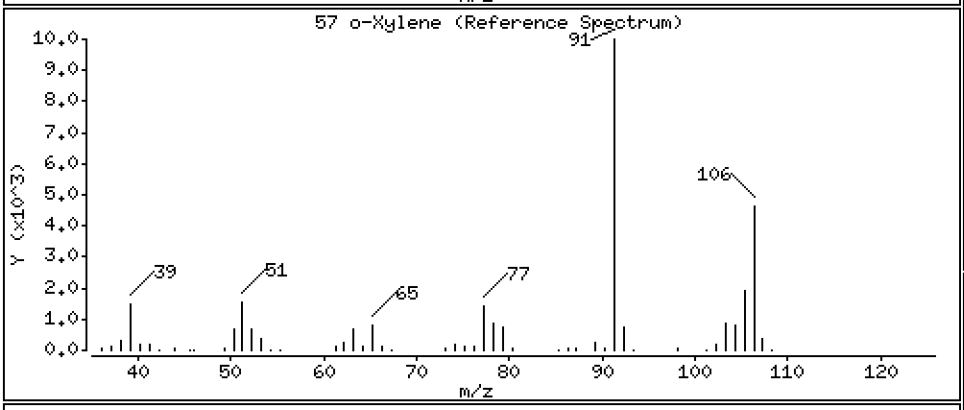
Concentration: 4.716 ug/Kg

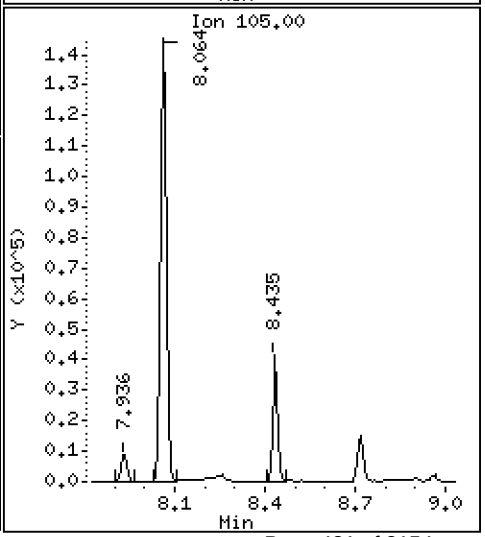


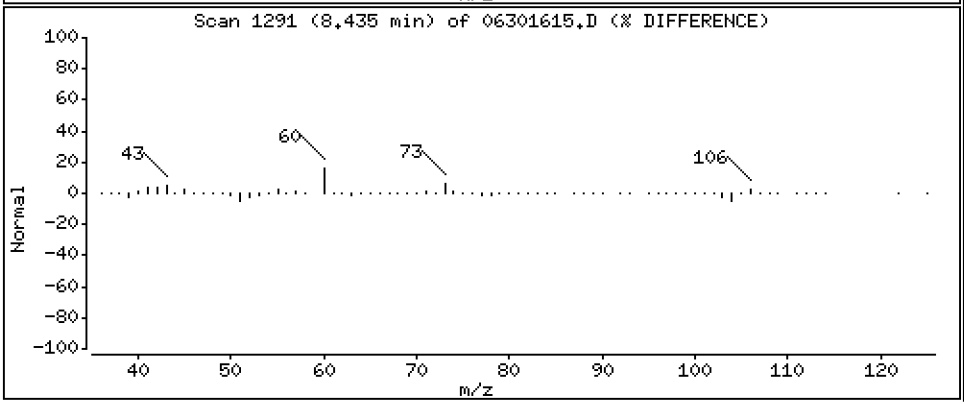












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301615.D
Lab Smp Id: 16F0096-28
Inj Date : 30-JUN-2016 17:30
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-28
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.060	4.042	(0.819)	59861	3.32815	3.328
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.498	4.486	(0.907)	809879	47.7166	47.717
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.961	4.943	(1.000)	712113	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.000)	785901	46.3190	46.319
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2274788	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.555	(1.215)	2829525	48.5454	48.545
	43 Toluene	92	6.609	6.597	(1.223)	1679036	42.4823	42.482
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2426808	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.936	7.930	(1.007)	238563	3.22083	3.221
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.063	8.063	(1.023)	427079	14.8524	14.852
	57 o-Xylene	106	8.435	8.428	(1.070)	133960	4.71646	4.716
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1294965	49.6183	49.618
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1264047	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1264716	49.6870	49.687
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301615.D
Lab Smp Id: 16F0096-28
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	712113	18.69
35 1,4-Difluorobenze	2041239	1020620	4082478	2274788	11.44
52 d5-Chlorobenzene	2118314	1059157	4236628	2426808	14.56
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1264047	19.81

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.37
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 15:50

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-28
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	47.717	95.43	70-130
$ 32 d4-1,2-Dichloroeth	50.000	46.319	92.64	80-149
$ 42 d8-Toluene	50.000	48.545	97.09	77-120
$ 62 4-Bromofluorobenze	50.000	49.618	99.24	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.687	99.37	80-120

REVIEW SUMMARY FOR FILE - 06301615.D

Lab ID: 16F0096-28
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 17:30

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-R-04-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-29	File ID:	06301616.D
Sampled:	06/29/16 13:30	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 17:52
Solids:	90.00	Preparation:	No Prep - Volatiles	Initial/Final:	5.49 g / 5 g
Batch:	BEG0004	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.01	U	0.24	1.01
74-83-9	Bromomethane	1	1.01	U	0.19	1.01
156-59-2	cis-1,2-Dichloroethene	1	1.01	U	0.24	1.01
71-43-2	Benzene	1	1.01	U	0.30	1.01
79-01-6	Trichloroethene	1	1.01	U	0.21	1.01
108-88-3	Toluene	1	1.26		0.15	1.01
127-18-4	Tetrachloroethene	1	1.01	U	0.26	1.01
100-41-4	Ethylbenzene	1	1.30		0.20	1.01
179601-23-1	m,p-Xylene	1	5.07		0.40	1.01
95-47-6	o-Xylene	1	0.56	J	0.23	1.01

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	46.6	93.2	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.6	101	80 - 120	
Toluene-d8	50.000	48.8	97.6	77 - 120	
4-Bromofluorobenzene	50.000	49.5	98.9	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301616.D

Date : 30-JUN-2016 17:52

Client ID:

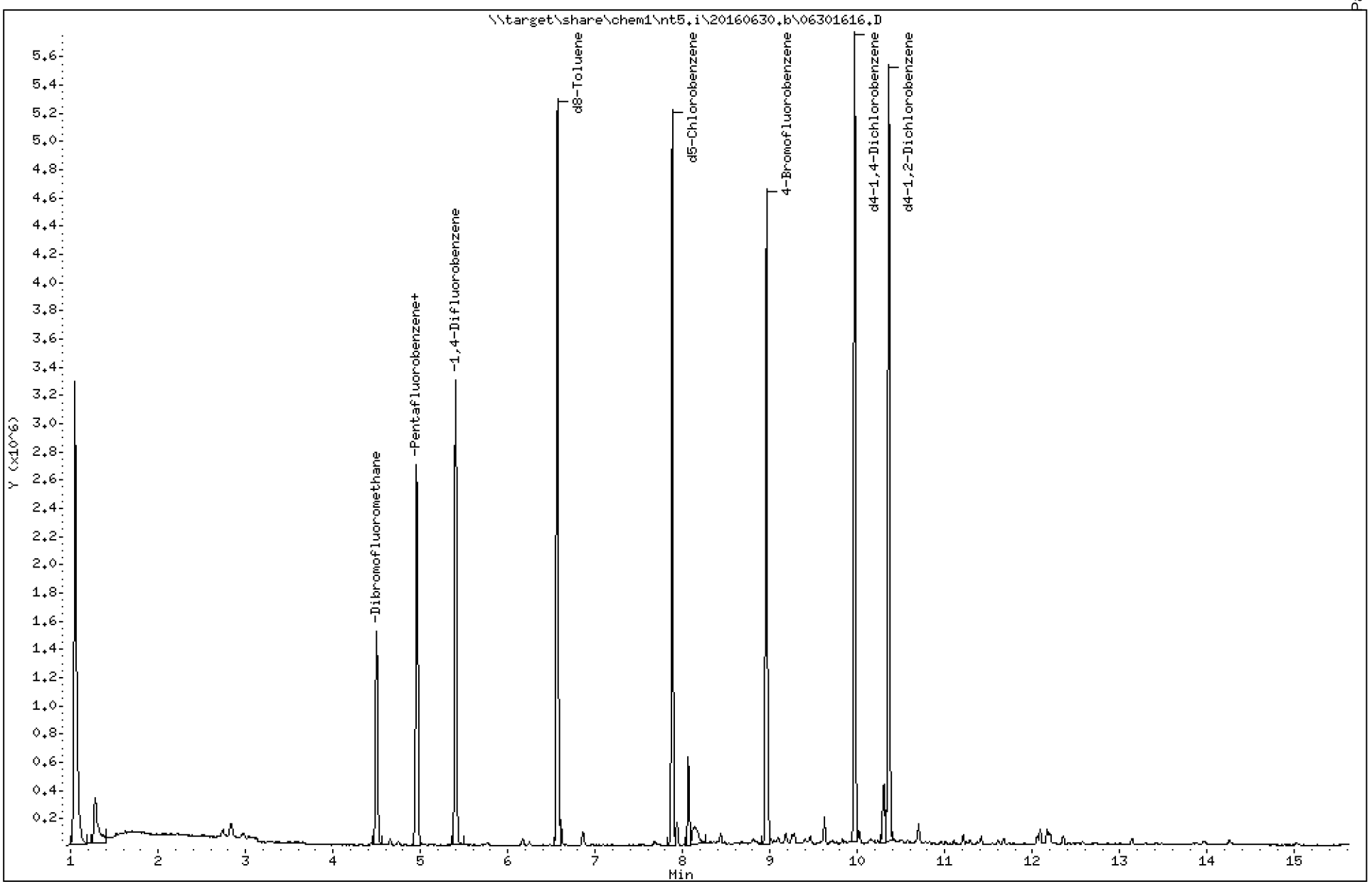
Instrument: nt5.i

Sample Info: 16F0096-29

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\06301616.D

Date : 30-JUN-2016 17:52

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-29

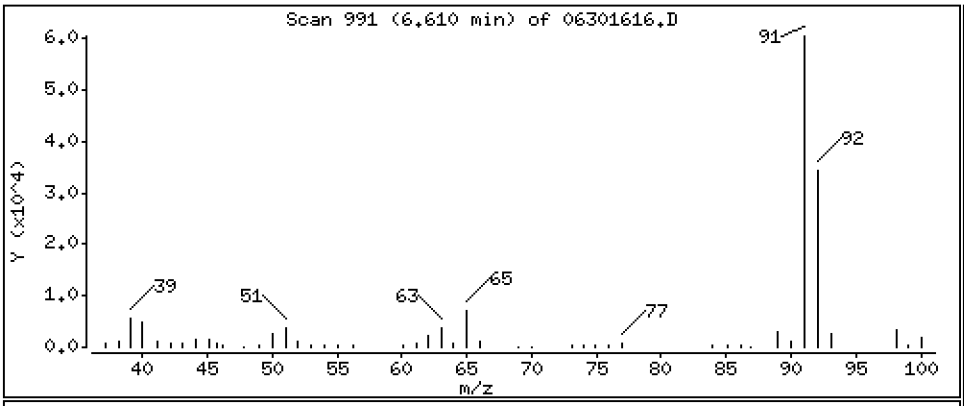
Operator: PB

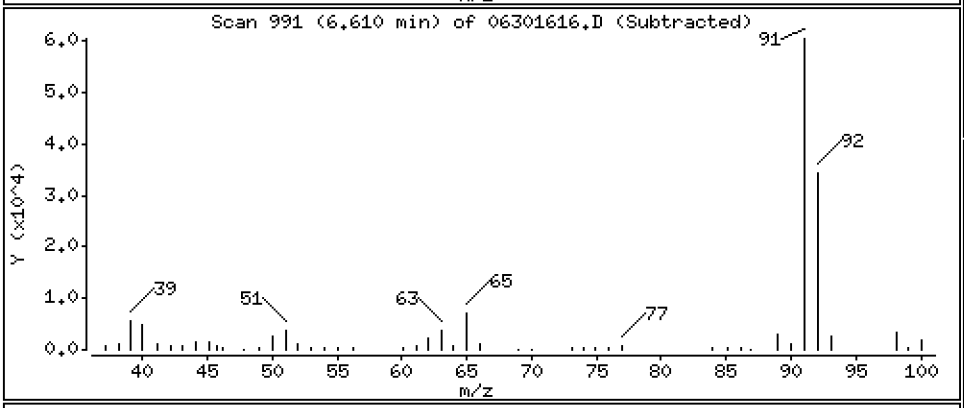
Column phase: RTXVMS

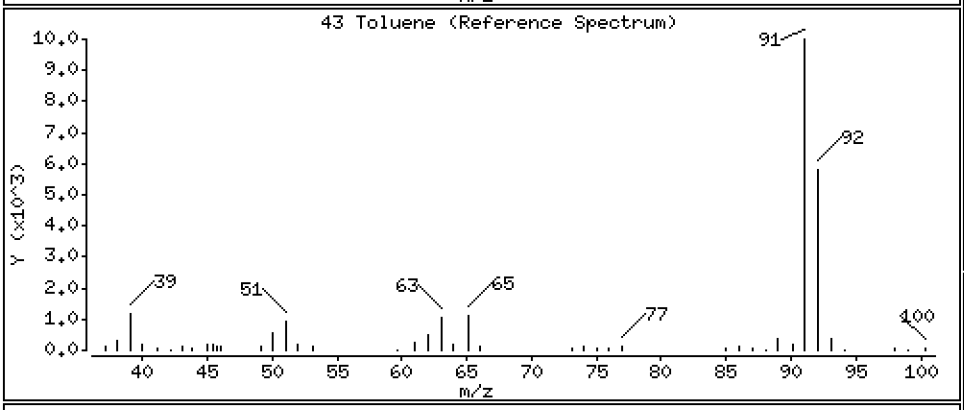
Column diameter: 0.18

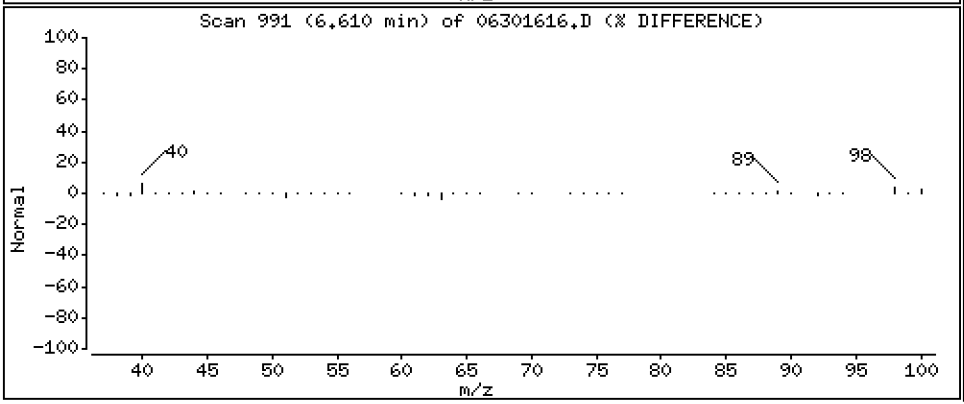
43 Toluene

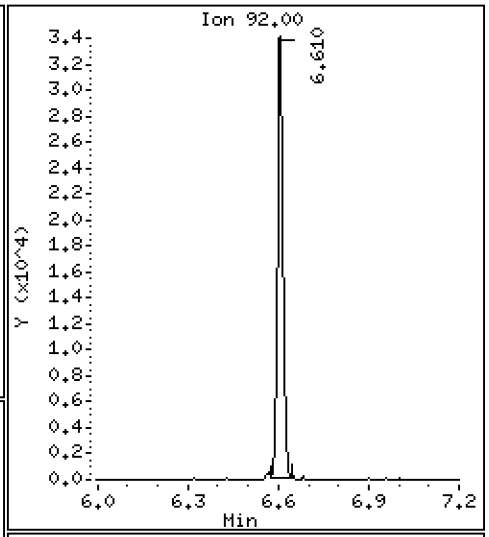
Concentration: 1.244 ug/Kg

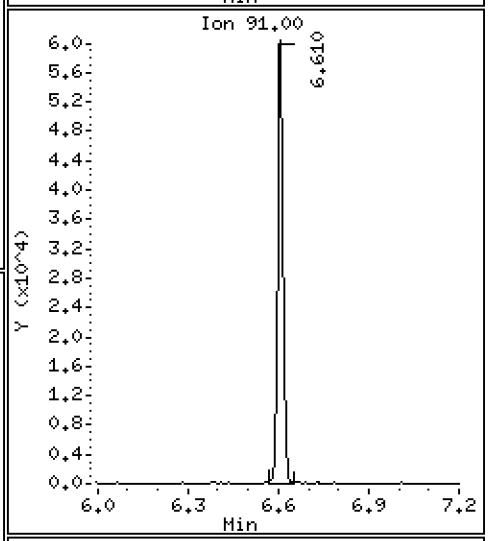


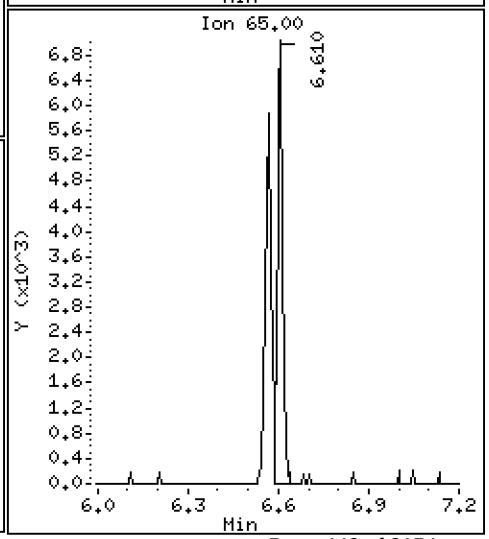












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Date : 30-JUN-2016 17:52

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-29

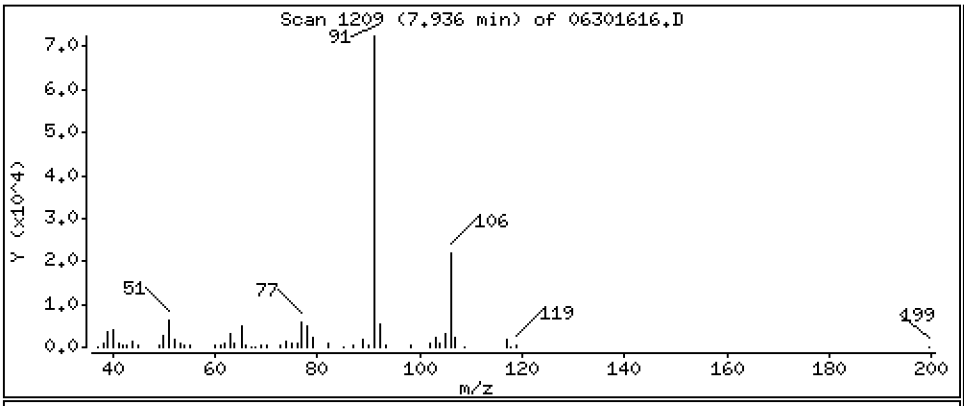
Operator: PB

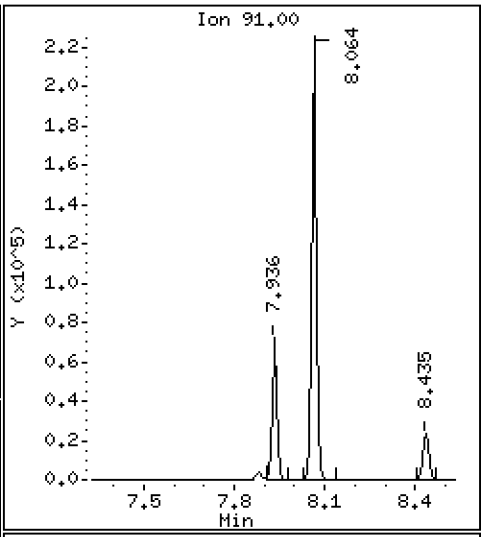
Column phase: RTXVMS

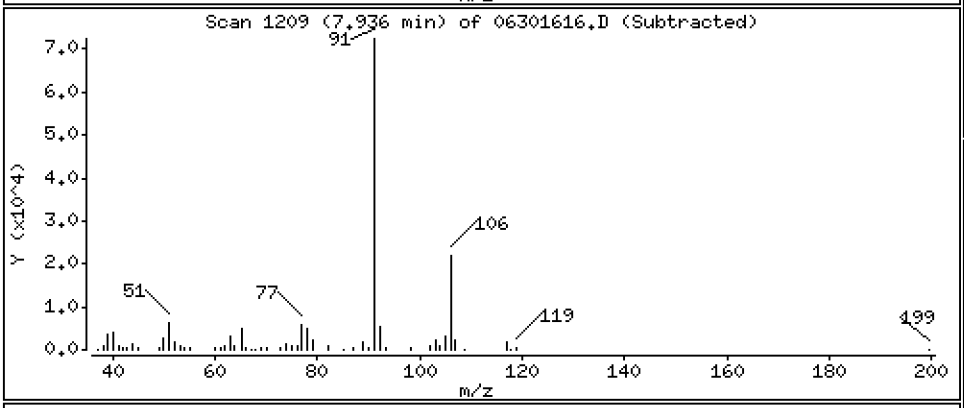
Column diameter: 0.18

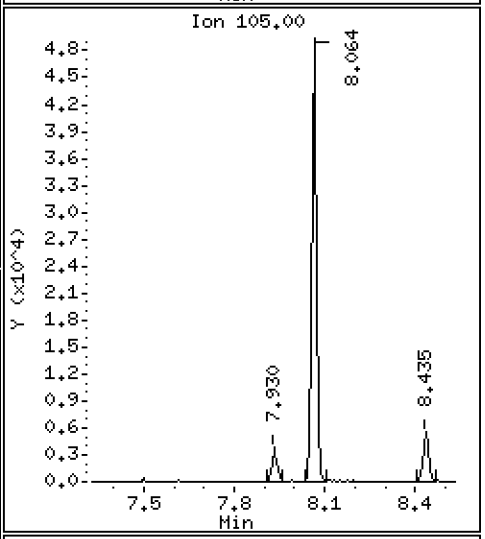
54 Ethyl Benzene

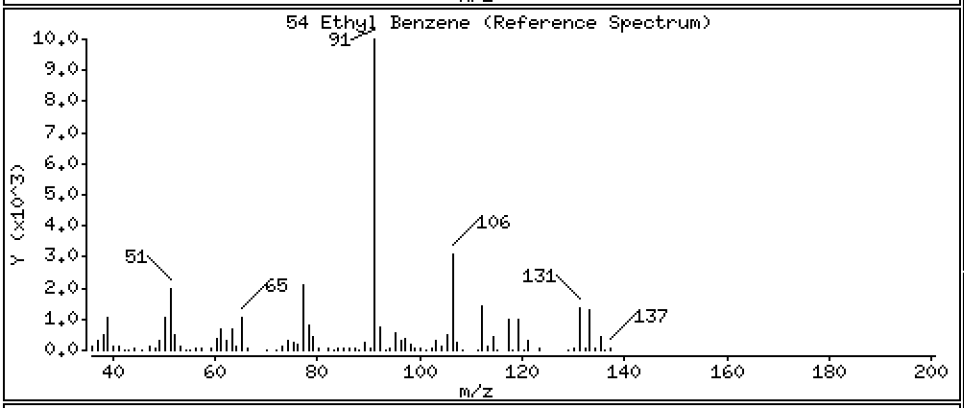
Concentration: 1.282 ug/Kg

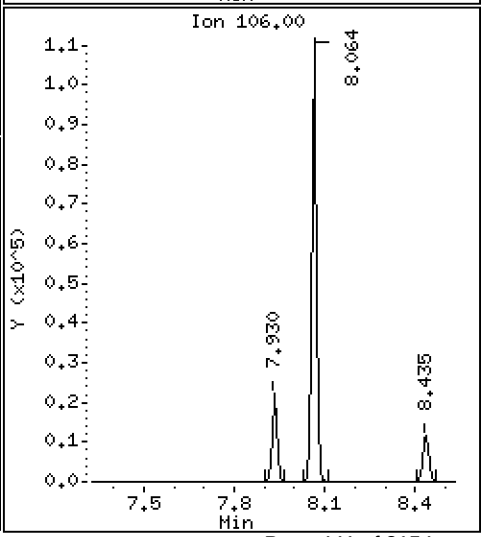


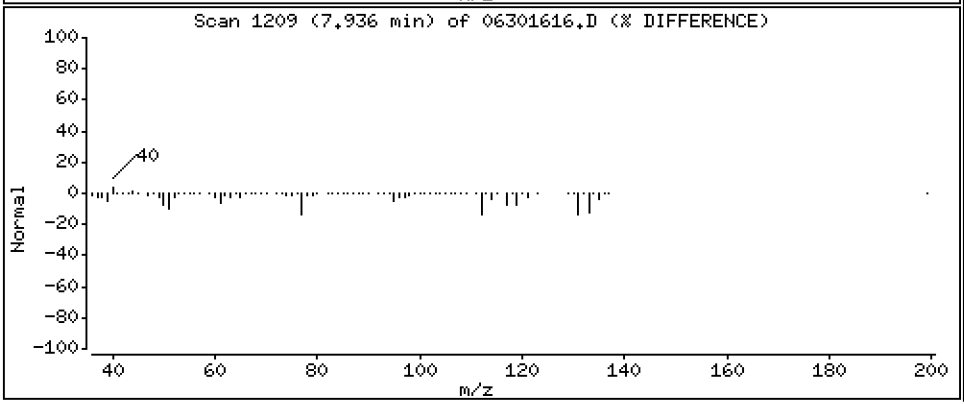












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Date : 30-JUN-2016 17:52

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-29

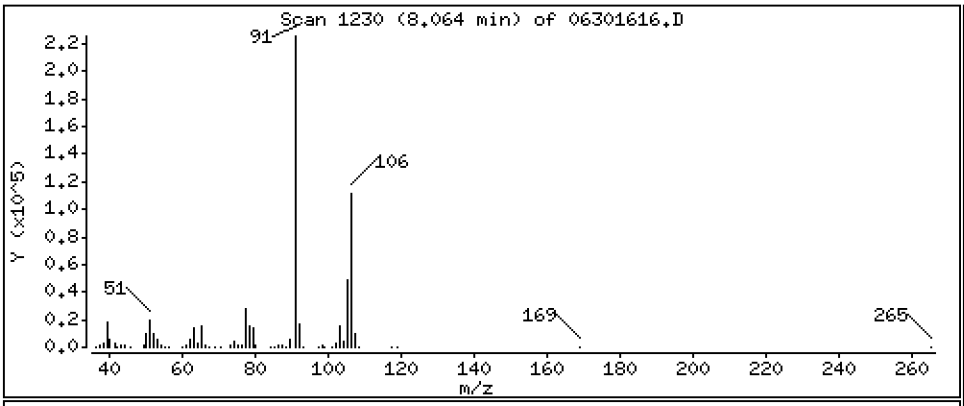
Operator: PB

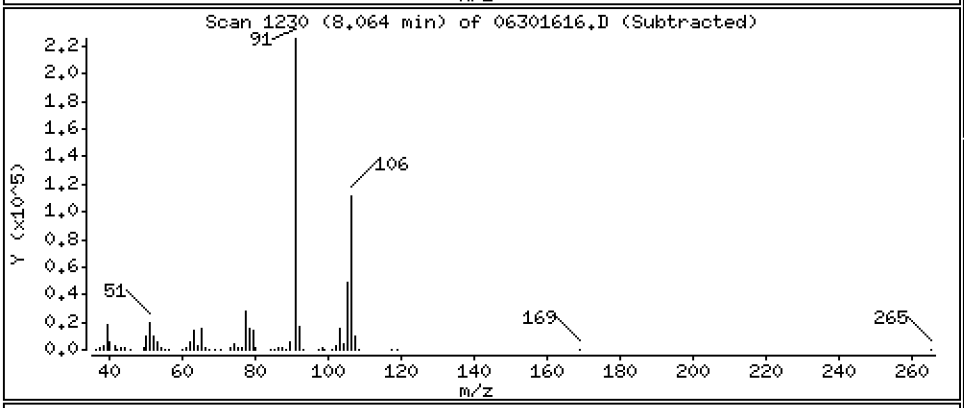
Column phase: RTXVMS

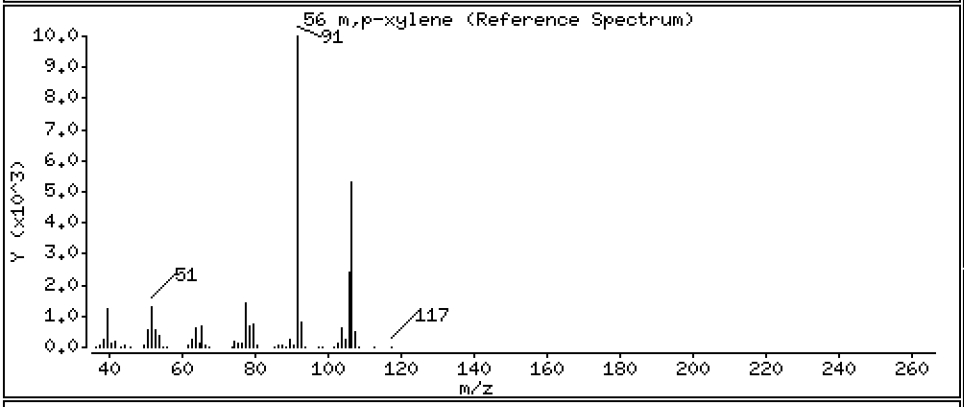
Column diameter: 0.18

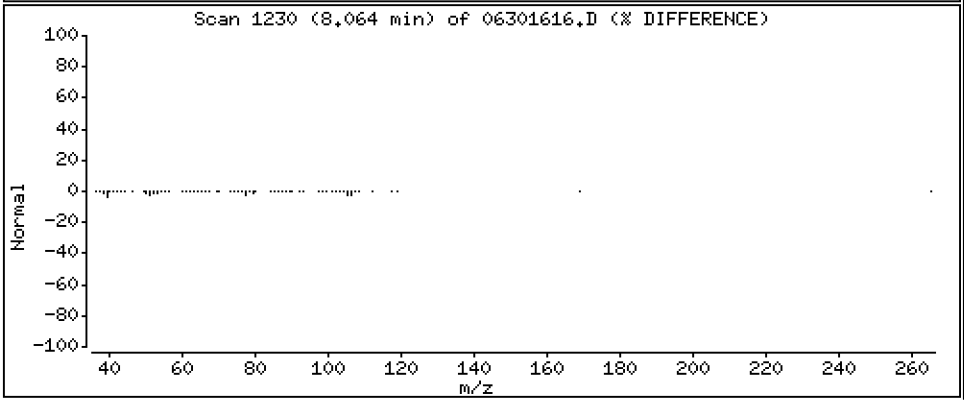
56 m,p-xylene

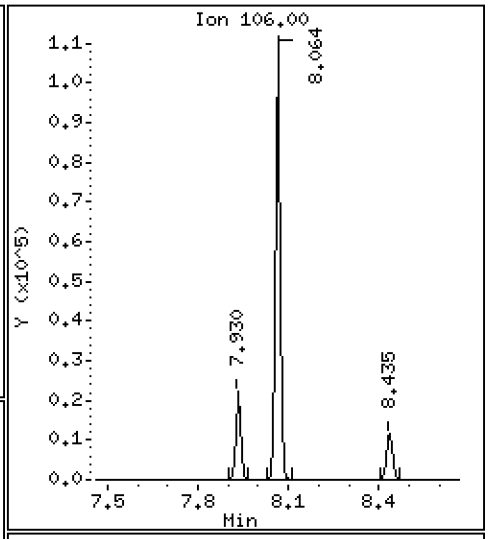
Concentration: 5.007 ug/Kg

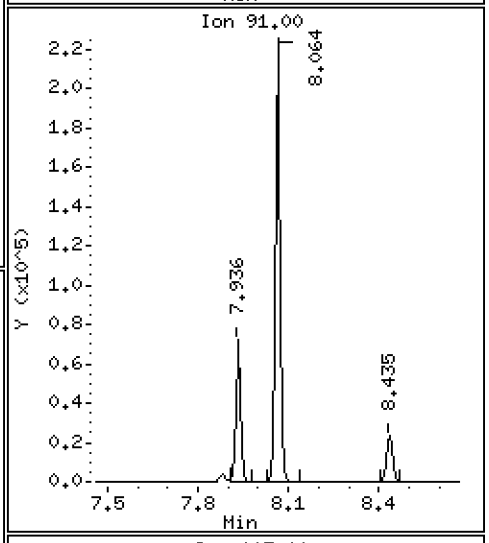


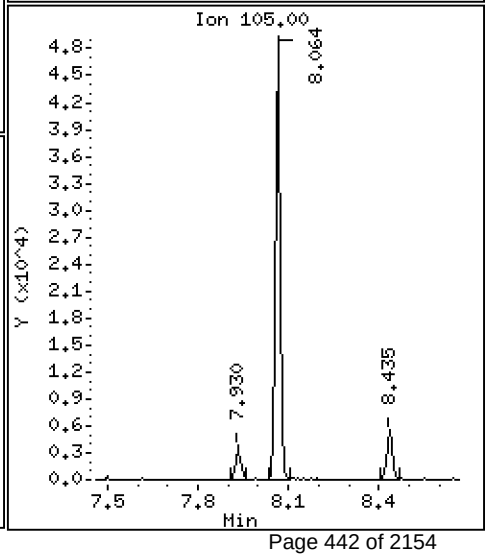












Data File: \\target\share\chem1\nt5.i\20160630.b\06301616.D

Date : 30-JUN-2016 17:52

Client ID:

Instrument: nt5.i

Sample Info: 16F0096-29

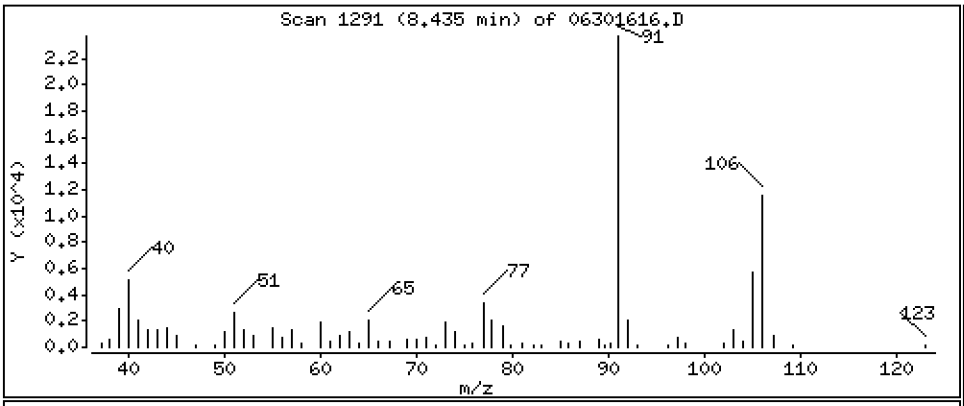
Operator: PB

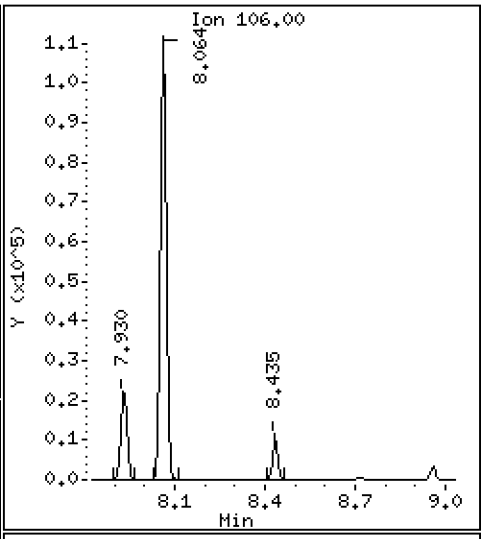
Column phase: RTXVMS

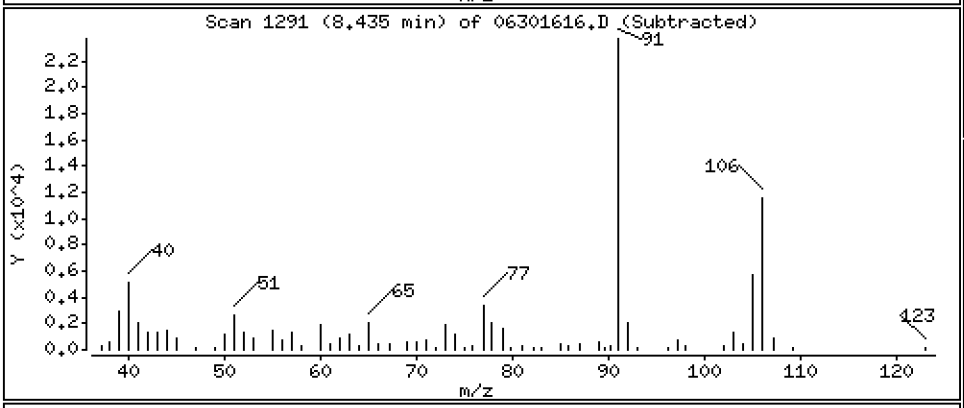
Column diameter: 0.18

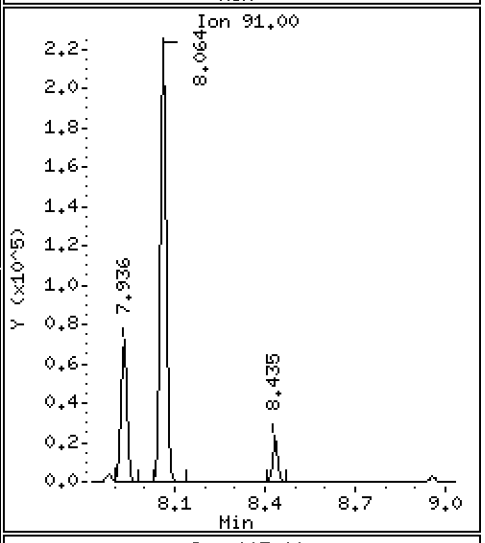
57 o-Xylene

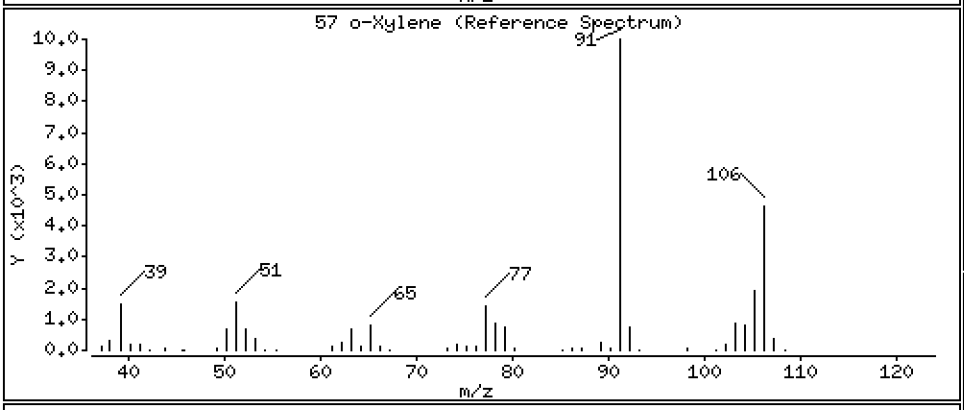
Concentration: 0.5508 ug/Kg

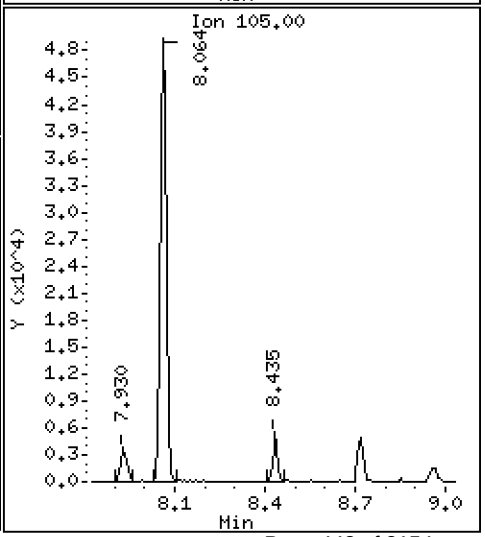


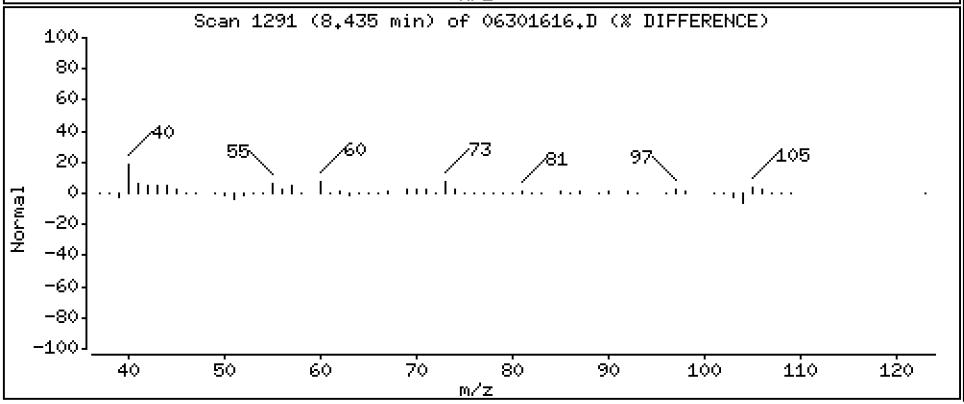












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301616.D
Lab Smp Id: 16F0096-29
Inj Date : 30-JUN-2016 17:52
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-29
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	Compound Not Detected.					
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.498	4.486	(0.908)	833087	47.6209	47.621
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.955	4.943	(1.000)	733992	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.001)	814702	46.5852	46.585
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2327119	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.555	(1.215)	2910490	48.8116	48.812
	43 Toluene	92	6.609	6.597	(1.223)	50283	1.24363	1.244
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2455591	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	7.936	7.930	(1.007)	96082	1.28200	1.282
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	8.063	8.063	(1.023)	145672	5.00660	5.007
	57 o-Xylene	106	8.435	8.428	(1.070)	15829	0.55078	0.5508
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1306376	49.4688	49.469
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1270183	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1293093	50.5565	50.556
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301616.D
Lab Smp Id: 16F0096-29
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	733992	22.34
35 1,4-Difluorobenze	2041239	1020620	4082478	2327119	14.01
52 d5-Chlorobenzene	2118314	1059157	4236628	2455591	15.92
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1270183	20.39

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-29
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	47.621	95.24	70-130
$ 32 d4-1,2-Dichloroeth	50.000	46.585	93.17	80-149
$ 42 d8-Toluene	50.000	48.812	97.62	77-120
$ 62 4-Bromofluorobenze	50.000	49.469	98.94	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.556	101.11	80-120

REVIEW SUMMARY FOR FILE - 06301616.D

Lab ID: 16F0096-29
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 17:52

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-TB-160629

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Water	Laboratory ID:	16F0096-30	File ID:	06301617.D
Sampled:	06/29/16 00:00	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 18:15
Solids:		Preparation:	No Prep - Volatiles	Initial/Final:	5 mL / 5 mL
Batch:	BEG0005	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q	DL	RL
75-01-4	Vinyl Chloride	1	0.20	U	0.06	0.20
74-83-9	Bromomethane	1	1.00	U	0.25	1.00
156-59-2	cis-1,2-Dichloroethene	1	0.20	U	0.04	0.20
71-43-2	Benzene	1	0.20	U	0.03	0.20
79-01-6	Trichloroethene	1	0.20	U	0.05	0.20
108-88-3	Toluene	1	0.20	U	0.04	0.20
127-18-4	Tetrachloroethene	1	0.20	U	0.05	0.20
100-41-4	Ethylbenzene	1	0.20	U	0.04	0.20
179601-23-1	m,p-Xylene	1	0.40	U	0.05	0.40
95-47-6	o-Xylene	1	0.20	U	0.03	0.20

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	43.2	86.4	80 - 129	
Toluene-d8	50.000	48.0	96.0	80 - 120	
4-Bromofluorobenzene	50.000	48.2	96.4	80 - 120	
1,2-Dichlorobenzene-d4	50.000	49.2	98.4	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301617.D

Date : 30-JUN-2016 18:15

Client ID:

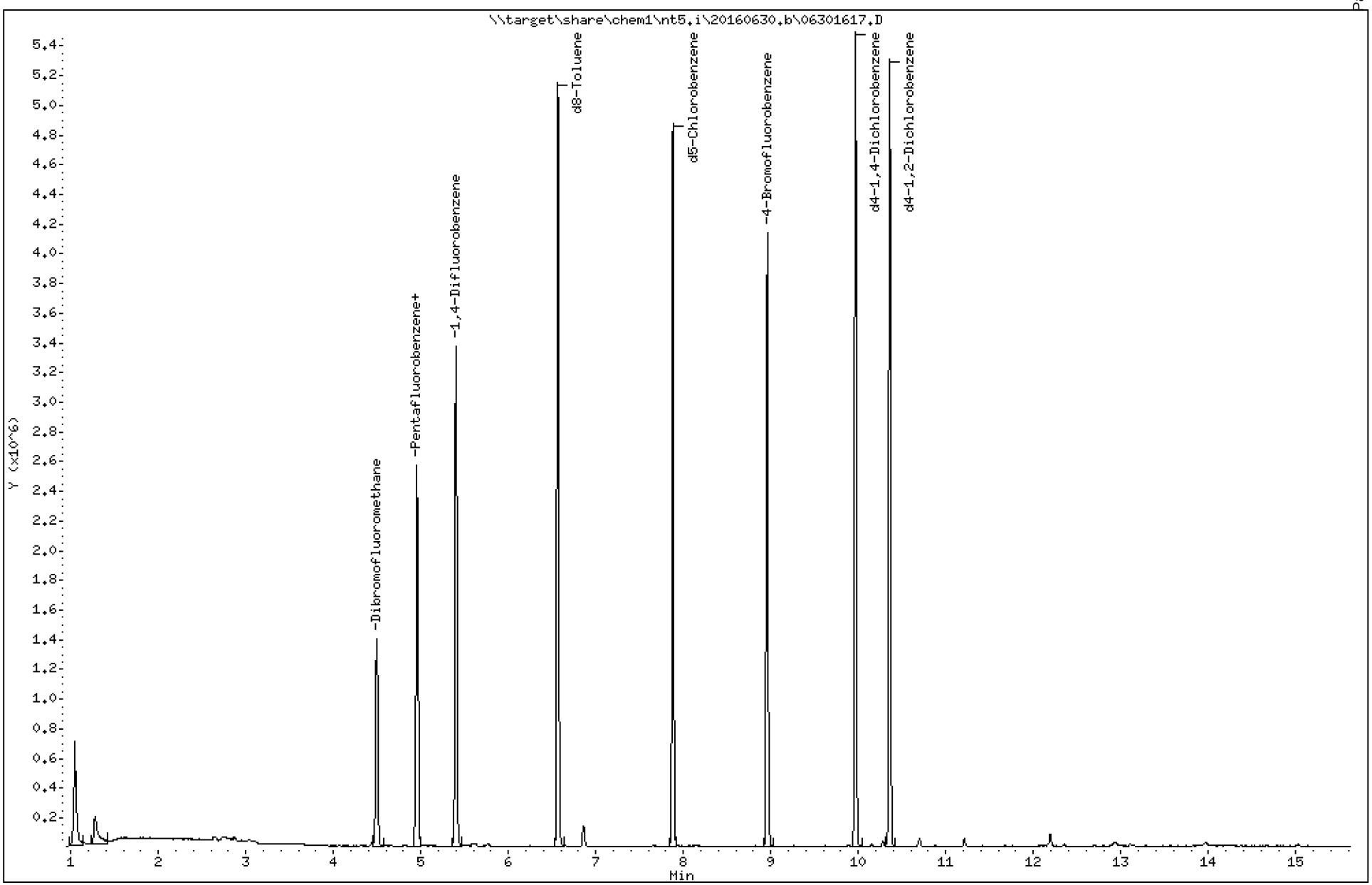
Sample Info: 16F0096-30

Column phase: RTXVMS

Instrument: nt5.i

Operator: PB

Column diameter: 0.18



ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301617.D
Lab Smp Id: 16F0096-30
Inj Date : 30-JUN-2016 18:15
Operator : PB Inst ID: nt5.i
Smp Info : 16F0096-30
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	Compound Not Detected.					
3 Vinyl Chloride	62	Compound Not Detected.					
4 Bromomethane	94	Compound Not Detected.					
5 Chloroethane	64	Compound Not Detected.					
6 Trichlorofluoromethane	101	Compound Not Detected.					
7 1,1-Dichloroethene	96	Compound Not Detected.					
8 Carbon Disulfide	76	Compound Not Detected.					
9 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10 Iodomethane	142	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Acrolein	56	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acetone	43	Compound Not Detected.					
15 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16 Methyl tert butyl ether	73	Compound Not Detected.					
17 1,1-Dichloroethane	63	Compound Not Detected.					
18 Acrylonitrile	53	Compound Not Detected.					
19 Vinyl Acetate	43	Compound Not Detected.					
20 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
22 2,2-Dichloropropane	77	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/Kg)	(ug/Kg)
	23	Bromochloromethane	128	Compound Not Detected.					
	24	Chloroform	83	Compound Not Detected.					
	25	Carbon Tetrachloride	117	Compound Not Detected.					
$	27	Dibromofluoromethane	111	4.493	4.486	(0.907)	787345	45.5399	45.540
	26	1,1,1-Trichloroethane	97	Compound Not Detected.					
	28	1,1-Dichloropropene	75	Compound Not Detected.					
	29	2-Butanone	72	Compound Not Detected.					
	30	Benzene	78	Compound Not Detected.					
*	31	Pentafluorobenzene	168	4.955	4.943	(1.000)	725390	50.0000	
$	32	d4-1,2-Dichloroethane	65	4.955	4.949	(1.000)	746960	43.2181	43.218
	33	1,2-Dichloroethane	62	Compound Not Detected.					
	34	Trichloroethene	95	Compound Not Detected.					
*	35	1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2289660	50.0000	
	37	Dibromomethane	93	Compound Not Detected.					
	38	1,2-Dichloropropane	63	Compound Not Detected.					
	39	Bromodichloromethane	83	Compound Not Detected.					
	172	2-Pentanone	86	Compound Not Detected.					
	40	2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41	Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42	d8-Toluene	98	6.561	6.555	(1.215)	2815347	47.9884	47.988
	43	Toluene	92	Compound Not Detected.					
	44	Tetrachloroethene	166	Compound Not Detected.					
	45	4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46	Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47	1,1,2-Trichloroethane	97	Compound Not Detected.					
	48	Chlorodibromomethane	129	Compound Not Detected.					
	49	1,3-Dichloropropane	76	Compound Not Detected.					
	50	1,2-Dibromoethane	107	Compound Not Detected.					
	51	2-Hexanone	43	Compound Not Detected.					
*	52	d5-Chlorobenzene	117	7.881	7.875	(1.000)	2378880	50.0000	
	53	Chlorobenzene	112	Compound Not Detected.					
	54	Ethyl Benzene	91	Compound Not Detected.					
	55	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56	m,p-xylene	106	Compound Not Detected.					
	57	o-Xylene	106	Compound Not Detected.					
	58	Styrene	104	Compound Not Detected.					
	59	Bromoform	173	Compound Not Detected.					
	60	Isopropyl Benzene	105	Compound Not Detected.					
$	62	4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1232980	48.1951	48.195
	63	Bromobenzene	156	Compound Not Detected.					
	64	N-Propyl Benzene	91	Compound Not Detected.					
	65	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66	2-Chloro Toluene	91	Compound Not Detected.					
	67	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68	1,2,3-Trichloropropane	110	Compound Not Detected.					
	69	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70	4-Chloro Toluene	91	Compound Not Detected.					
	71	T-Butyl Benzene	119	Compound Not Detected.					
	72	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73	S-Butyl Benzene	105	Compound Not Detected.					
	74	4-Isopropyl Toluene	119	Compound Not Detected.					
	75	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76	d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1214301	50.0000	
	77	1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1202512	49.1786	49.179
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301617.D
Lab Smp Id: 16F0096-30
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	725390	20.90
35 1,4-Difluorobenze	2041239	1020620	4082478	2289660	12.17
52 d5-Chlorobenzene	2118314	1059157	4236628	2378880	12.30
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1214301	15.09

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.12
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16F0096-30
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	45.540	91.08	70-130
$ 32 d4-1,2-Dichloroeth	50.000	43.218	86.44	80-149
$ 42 d8-Toluene	50.000	47.988	95.98	77-120
$ 62 4-Bromofluorobenze	50.000	48.195	96.39	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.179	98.36	80-120

REVIEW SUMMARY FOR FILE - 06301617.D

Lab ID: 16F0096-30
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 18:15

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

Analytical Resources, Incorporated

Form I

METHOD BLANK DATA SHEET

EPA 8260C

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Solid	Laboratory ID:	BEF0232-BLK1	File ID:	06291605.D
Sampled:	N/A	Prepared:	06/29/16 13:43	Analyzed:	06/29/16 16:00
Solids:		Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g
Batch:	BEF0232	Sequence:	SEG0001	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg wet)	Q	DL	RL	LOQ
75-01-4	Vinyl Chloride	1	1.00	U	0.24	1.00	1.00
74-83-9	Bromomethane	1	1.00	U	0.19	1.00	1.00
156-59-2	cis-1,2-Dichloroethene	1	1.00	U	0.24	1.00	1.00
71-43-2	Benzene	1	1.00	U	0.30	1.00	1.00
79-01-6	Trichloroethene	1	1.00	U	0.21	1.00	1.00
108-88-3	Toluene	1	1.00	U	0.15	1.00	1.00
127-18-4	Tetrachloroethene	1	1.00	U	0.26	1.00	1.00
100-41-4	Ethylbenzene	1	1.00	U	0.20	1.00	1.00
179601-23-1	m,p-Xylene	1	1.00	U	0.39	1.00	1.00
95-47-6	o-Xylene	1	1.00	U	0.22	1.00	1.00

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	49.6	99.1	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.5	101	80 - 120	
Toluene-d8	50.000	49.5	98.9	77 - 120	
4-Bromofluorobenzene	50.000	48.8	97.6	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291605.D

Date : 29-JUN-2016 16:00

Client ID: MB0629

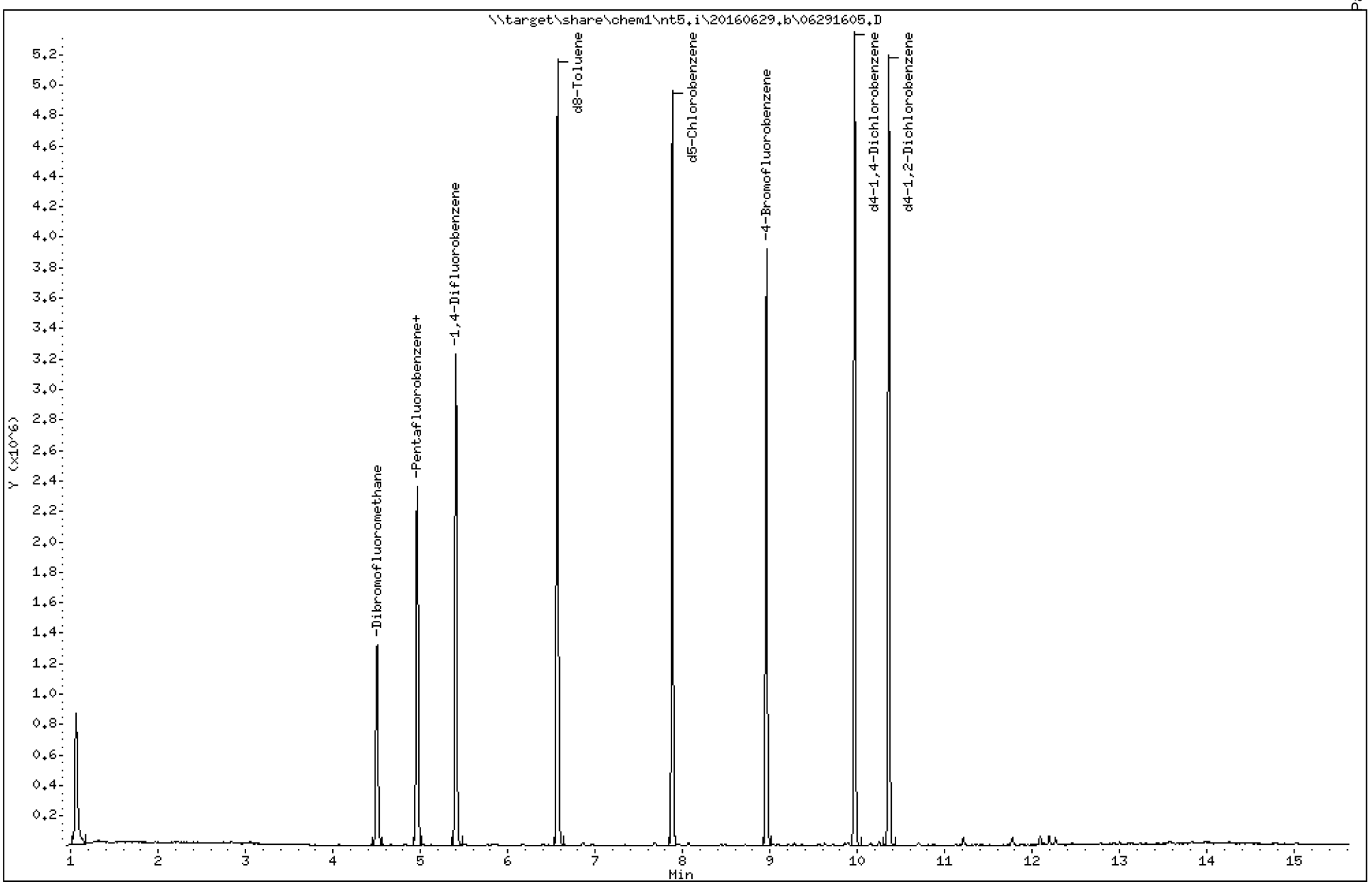
Instrument: nt5.i

Sample Info: MB0629,5,5,0

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160629.b\06291605.D

Date : 29-JUN-2016 16:00

Client ID: MB0629

Instrument: nt5.i

Sample Info: MB0629,5,5,0

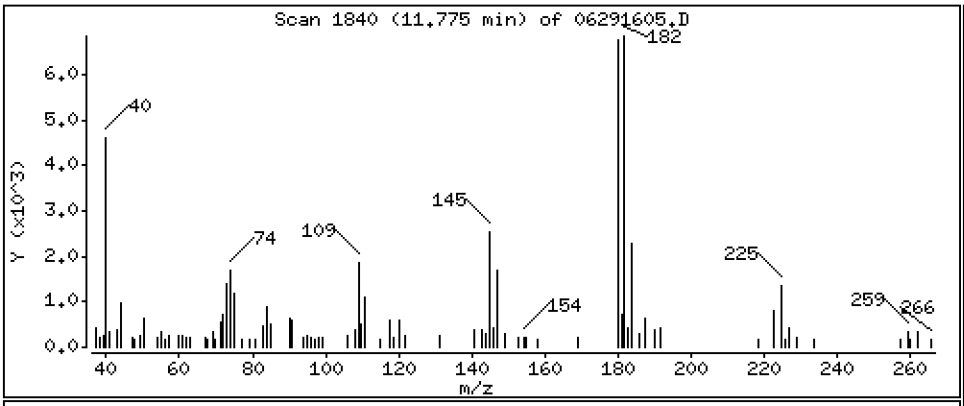
Operator: PB

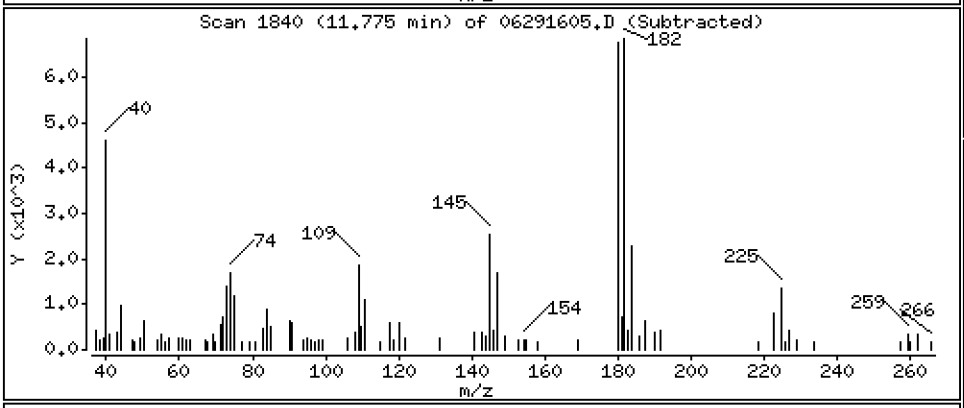
Column phase: RTXVMS

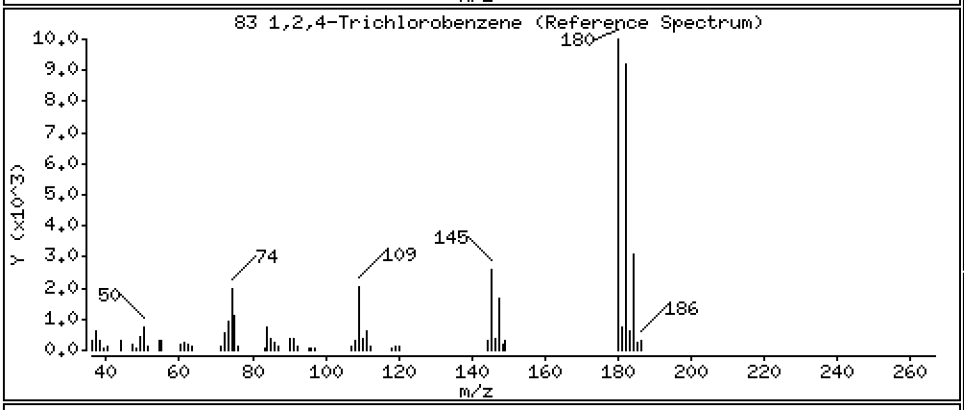
Column diameter: 0.18

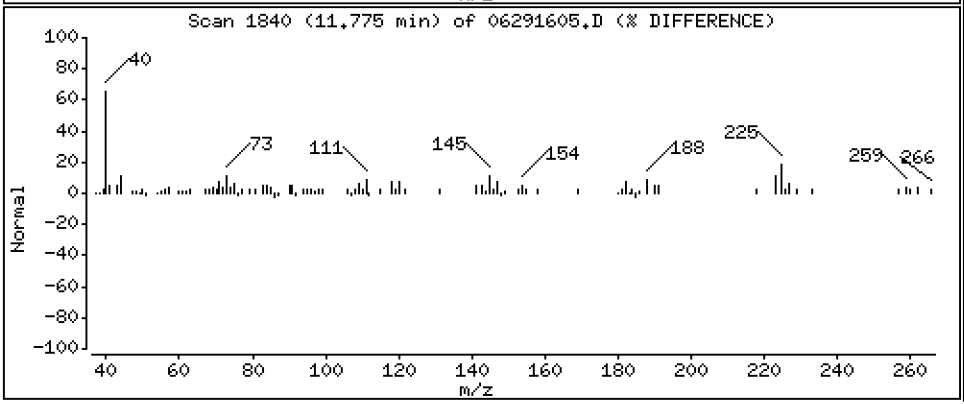
83 1,2,4-Trichlorobenzene

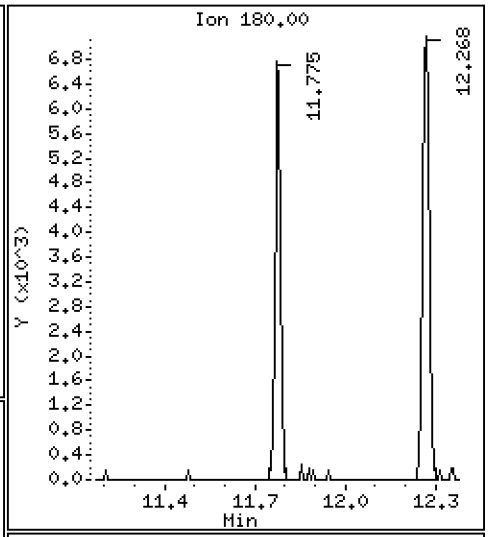
Concentration: 0.5859 ug/Kg

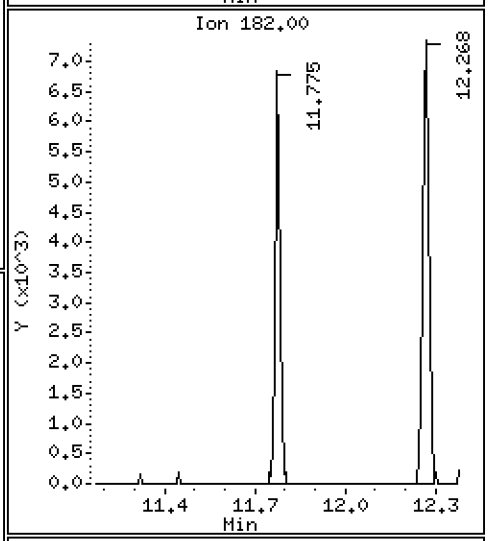


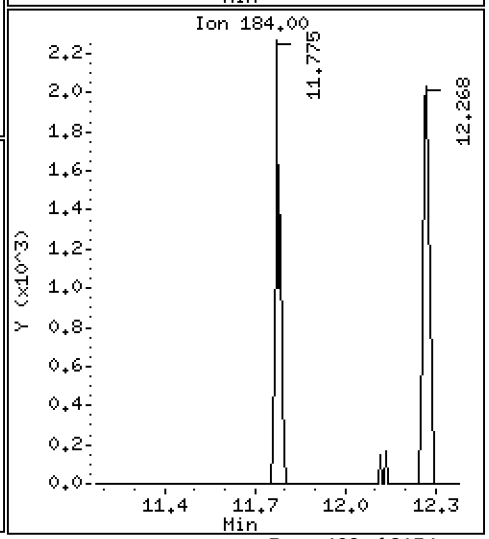












Data File: \\target\share\chem1\nt5.i\20160629.b\06291605.D

Date : 29-JUN-2016 16:00

Client ID: MB0629

Instrument: nt5.i

Sample Info: MB0629,5,5,0

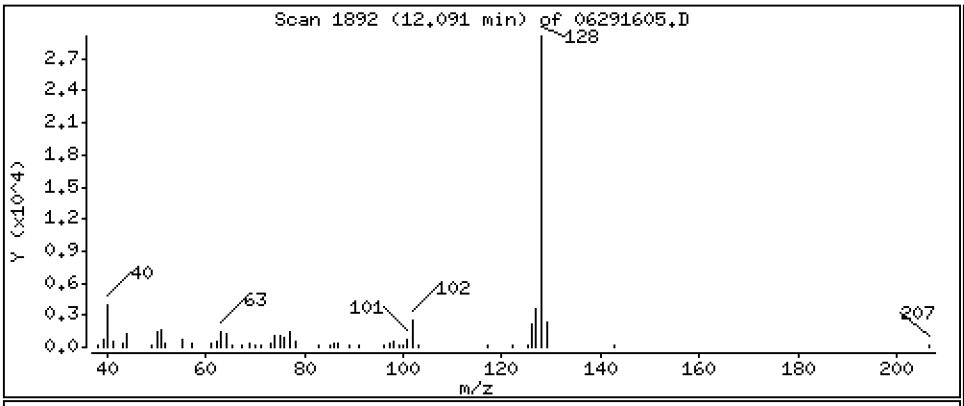
Operator: PB

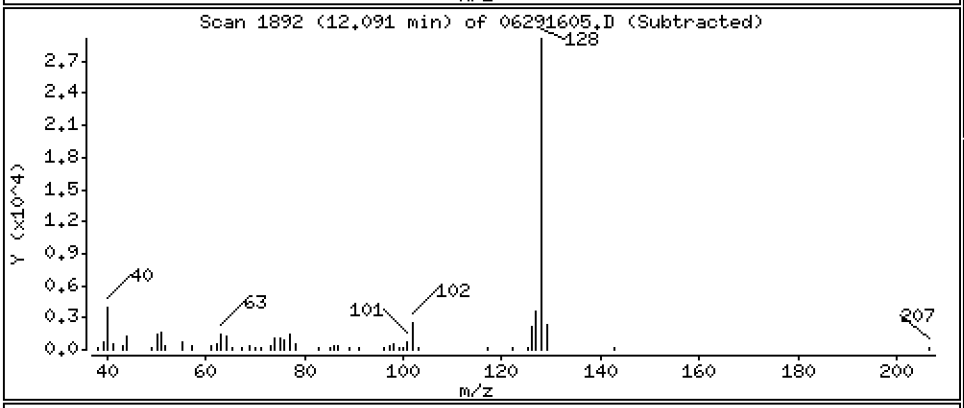
Column phase: RTXVMS

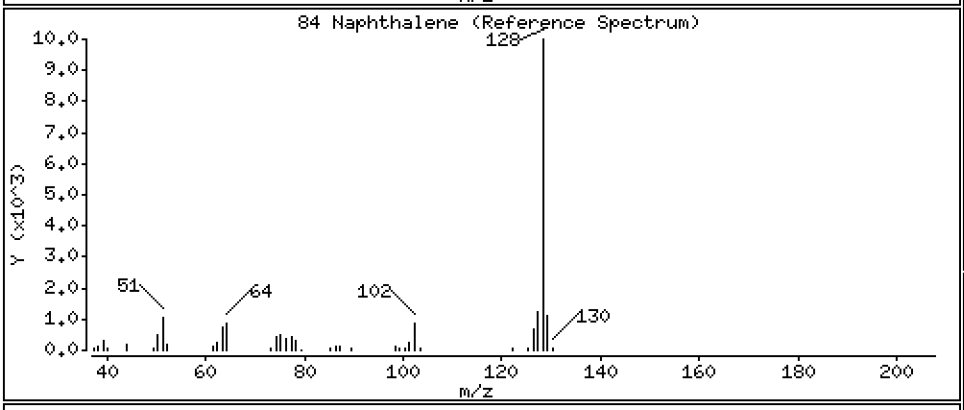
Column diameter: 0.18

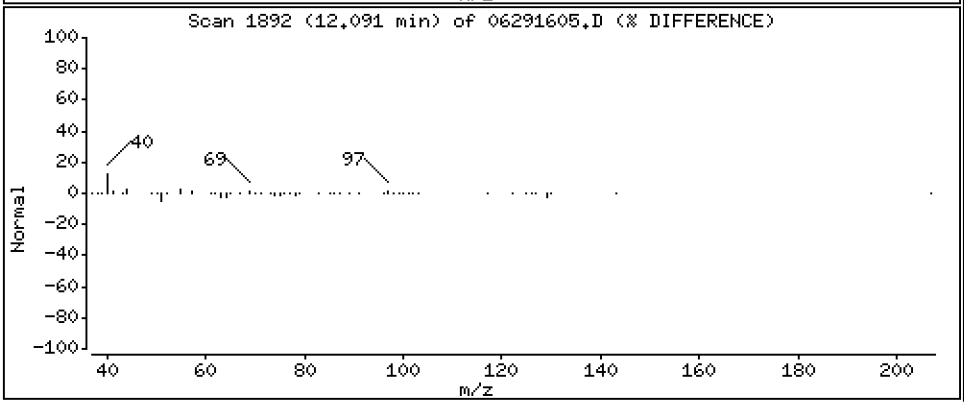
84 Naphthalene

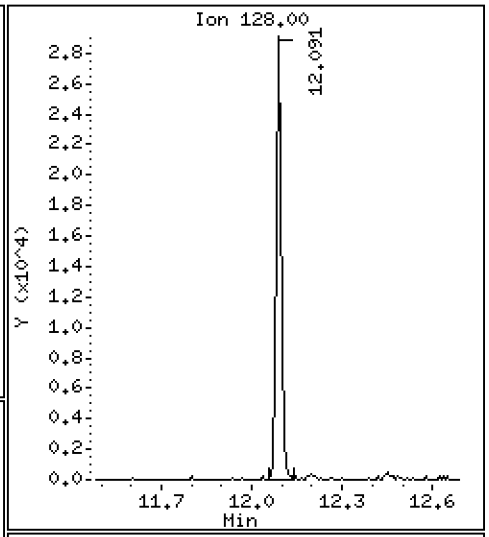
Concentration: 0.8742 ug/Kg

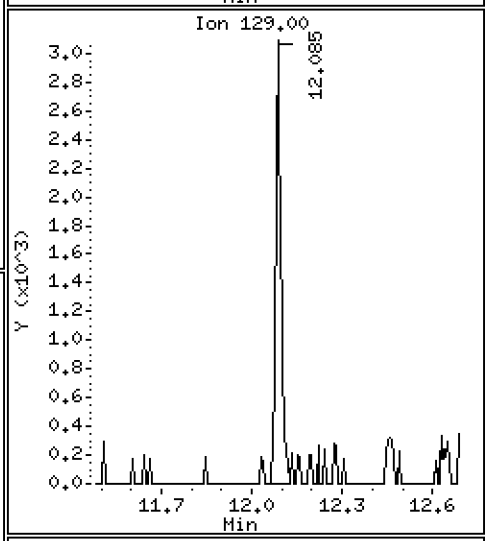


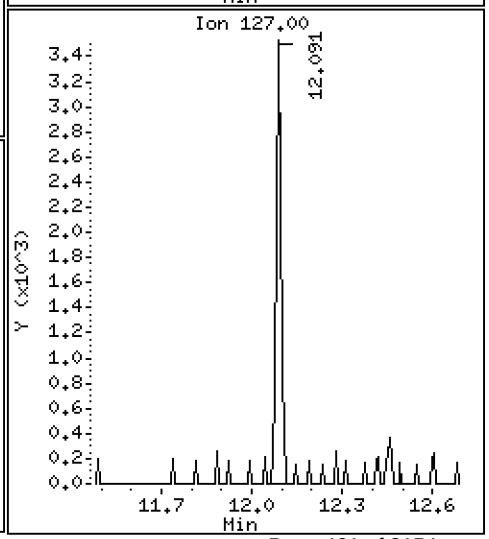












Data File: \\target\share\chem1\nt5.i\20160629.b\06291605.D

Date : 29-JUN-2016 16:00

Client ID: MB0629

Instrument: nt5.i

Sample Info: MB0629,5,5,0

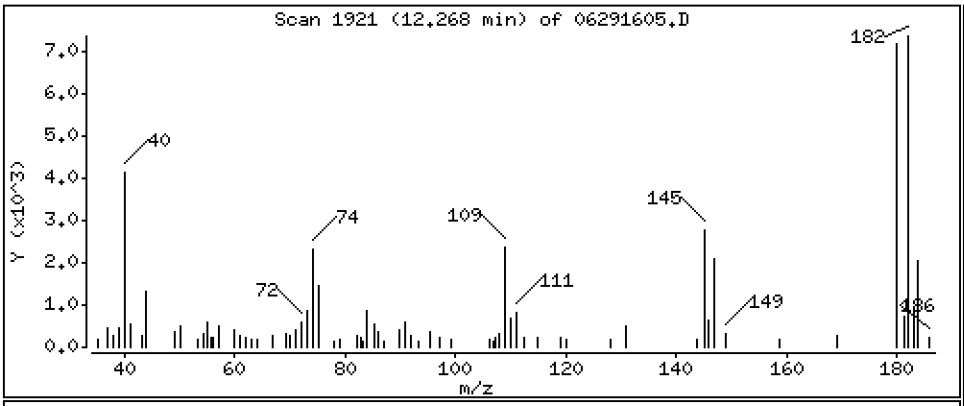
Operator: PB

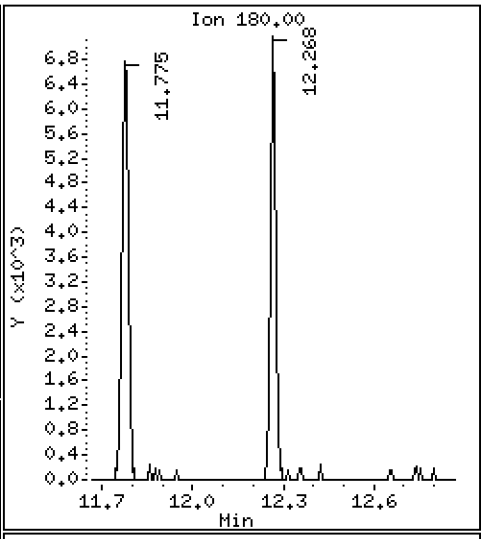
Column phase: RTXVMS

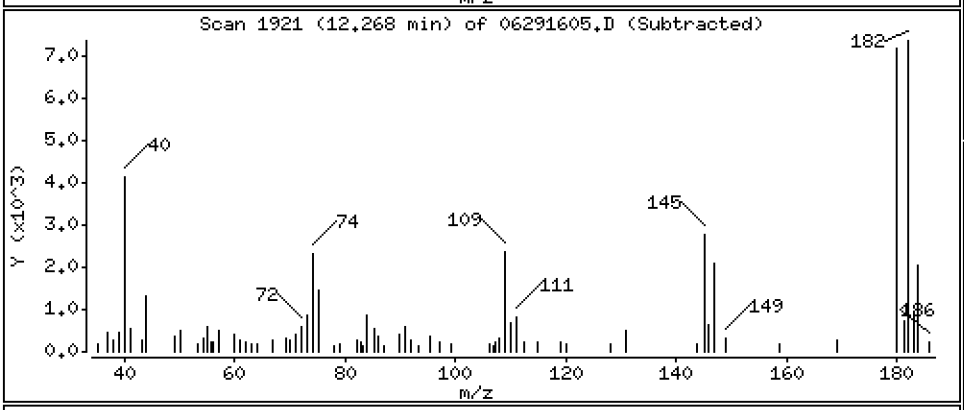
Column diameter: 0.18

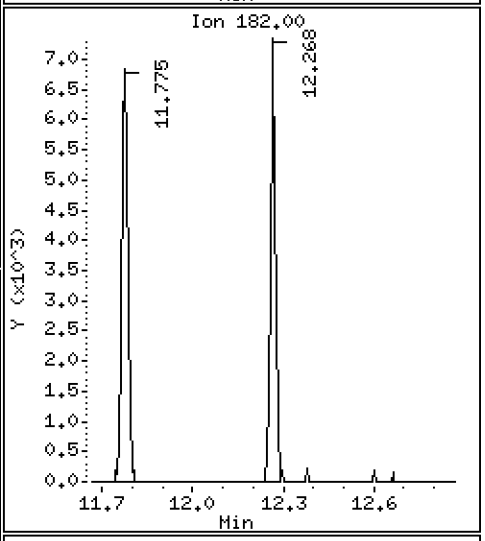
85 1,2,3-Trichlorobenzene

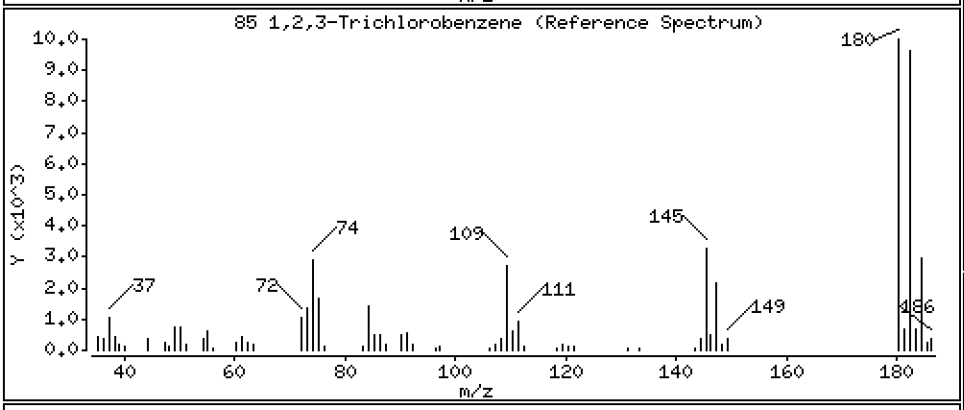
Concentration: 0.6853 ug/Kg

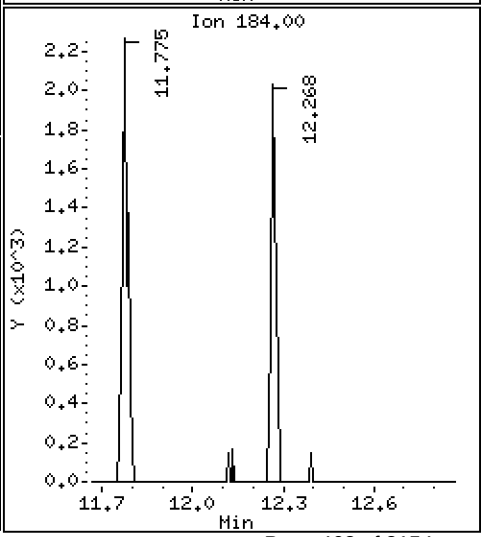


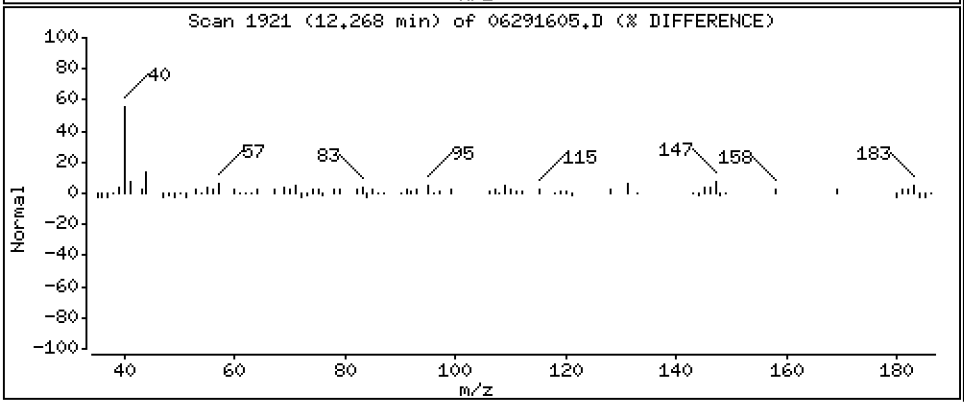












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291605.D
Lab Smp Id: BEF0232-BLK1 Client Smp ID: MB0629
Inj Date : 29-JUN-2016 16:00
Operator : PB Inst ID: nt5.i
Smp Info : MB0629,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	Compound Not Detected.					
22	2,2-Dichloropropane	77	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/Kg)	(ug/Kg)
	23	Bromochloromethane	128	Compound Not Detected.					
	24	Chloroform	83	Compound Not Detected.					
	25	Carbon Tetrachloride	117	Compound Not Detected.					
$	27	Dibromofluoromethane	111	4.505	4.486	(0.908)	744196	50.7973	50.797
	26	1,1,1-Trichloroethane	97	Compound Not Detected.					
	28	1,1-Dichloropropene	75	Compound Not Detected.					
	29	2-Butanone	72	Compound Not Detected.					
	30	Benzene	78	Compound Not Detected.					
*	31	Pentafluorobenzene	168	4.961	4.949	(1.000)	614674	50.0000	
$	32	d4-1,2-Dichloroethane	65	4.961	4.949	(1.000)	725882	49.5634	49.563
	33	1,2-Dichloroethane	62	Compound Not Detected.					
	34	Trichloroethene	95	Compound Not Detected.					
*	35	1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2134498	50.0000	
	37	Dibromomethane	93	Compound Not Detected.					
	38	1,2-Dichloropropane	63	Compound Not Detected.					
	39	Bromodichloromethane	83	Compound Not Detected.					
	172	2-Pentanone	86	Compound Not Detected.					
	40	2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41	Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42	d8-Toluene	98	6.567	6.561	(1.215)	2705808	49.4739	49.474
	43	Toluene	92	Compound Not Detected.					
	44	Tetrachloroethene	166	Compound Not Detected.					
	45	4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46	Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47	1,1,2-Trichloroethane	97	Compound Not Detected.					
	48	Chlorodibromomethane	129	Compound Not Detected.					
	49	1,3-Dichloropropane	76	Compound Not Detected.					
	50	1,2-Dibromoethane	107	Compound Not Detected.					
	51	2-Hexanone	43	Compound Not Detected.					
*	52	d5-Chlorobenzene	117	7.881	7.875	(1.000)	2259040	50.0000	
	53	Chlorobenzene	112	Compound Not Detected.					
	54	Ethyl Benzene	91	Compound Not Detected.					
	55	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56	m,p-xylene	106	Compound Not Detected.					
	57	o-Xylene	106	Compound Not Detected.					
	58	Styrene	104	Compound Not Detected.					
	59	Bromoform	173	Compound Not Detected.					
	60	Isopropyl Benzene	105	Compound Not Detected.					
$	62	4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1185867	48.8126	48.813
	63	Bromobenzene	156	Compound Not Detected.					
	64	N-Propyl Benzene	91	Compound Not Detected.					
	65	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66	2-Chloro Toluene	91	Compound Not Detected.					
	67	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68	1,2,3-Trichloropropane	110	Compound Not Detected.					
	69	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70	4-Chloro Toluene	91	Compound Not Detected.					
	71	T-Butyl Benzene	119	Compound Not Detected.					
	72	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73	S-Butyl Benzene	105	Compound Not Detected.					
	74	4-Isopropyl Toluene	119	Compound Not Detected.					
	75	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76	d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1137277	50.0000	
	77	1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1157276	50.5341	50.534
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	11.775	11.774	(1.181)	9777	0.58587	0.5859
84	Naphthalene	128	12.091	12.085	(1.213)	42803	0.87418	0.8742
85	1,2,3-Trichlorobenzene	180	12.267	12.267	(1.231)	10728	0.68535	0.6853

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291605.D
Lab Smp Id: BEF0232-BLK1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Client Smp ID: MB0629
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	614674	2.45
35 1,4-Difluorobenze	2041239	1020620	4082478	2134498	4.57
52 d5-Chlorobenzene	2118314	1059157	4236628	2259040	6.64
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1137277	7.79

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEF0232-BLK1 Client Smp ID: MB0629
Level: LOW Operator: PB
Data Type: MS DATA SampleType: BLANK
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	50.797	101.59	70-130
$ 32 d4-1,2-Dichloroeth	50.000	49.563	99.13	80-149
$ 42 d8-Toluene	50.000	49.474	98.95	77-120
$ 62 4-Bromofluorobenze	50.000	48.813	97.63	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.534	101.07	80-120

REVIEW SUMMARY FOR FILE - 06291605.D

Lab ID: BEF0232-BLK1
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 16:00

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

Analytical Resources, Incorporated

Form I
METHOD BLANK DATA SHEET
EPA 8260C

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Solid	Laboratory ID:	BEG0004-BLK1	File ID:	06301606.D
Sampled:	N/A	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 13:31
Solids:		Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g
Batch:	BEG0004	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg wet)	Q	DL	RL	LOQ
75-01-4	Vinyl Chloride	1	1.00	U	0.24	1.00	1.00
74-83-9	Bromomethane	1	1.00	U	0.19	1.00	1.00
156-59-2	cis-1,2-Dichloroethene	1	1.00	U	0.24	1.00	1.00
71-43-2	Benzene	1	1.00	U	0.30	1.00	1.00
79-01-6	Trichloroethene	1	1.00	U	0.21	1.00	1.00
108-88-3	Toluene	1	1.00	U	0.15	1.00	1.00
127-18-4	Tetrachloroethene	1	1.00	U	0.26	1.00	1.00
100-41-4	Ethylbenzene	1	1.00	U	0.20	1.00	1.00
179601-23-1	m,p-Xylene	1	1.00	U	0.39	1.00	1.00
95-47-6	o-Xylene	1	1.00	U	0.22	1.00	1.00

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	43.4	86.8	80 - 149	
1,2-Dichlorobenzene-d4	50.000	49.5	99.0	80 - 120	
Toluene-d8	50.000	48.5	96.9	77 - 120	
4-Bromofluorobenzene	50.000	47.8	95.6	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301606.D

Date : 30-JUN-2016 13:31

Client ID: MB0630

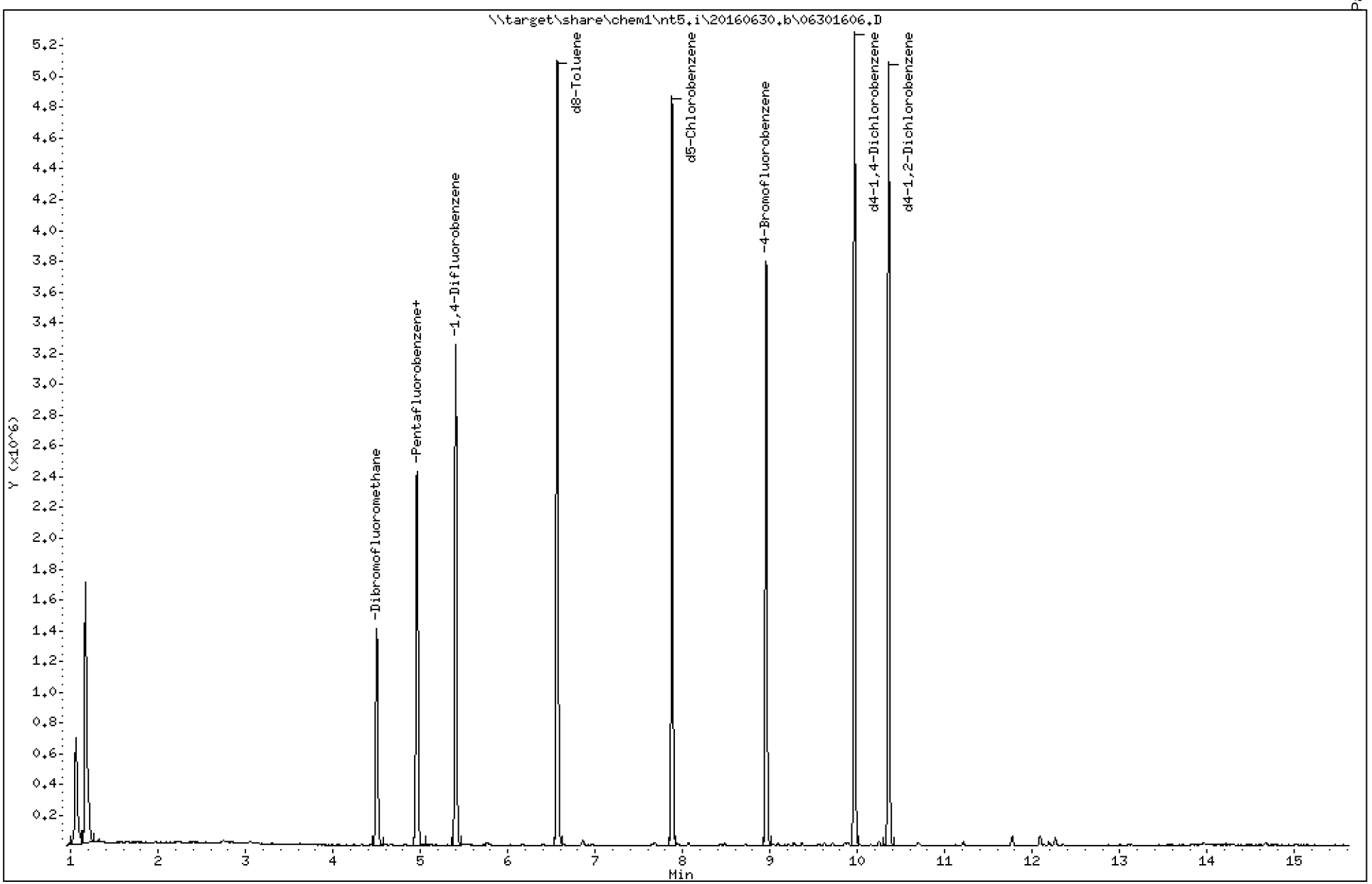
Instrument: nt5.i

Sample Info: MB0630,5,5,0

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\06301606.D

Date : 30-JUN-2016 13:31

Client ID: MB0630

Instrument: nt5.i

Sample Info: MB0630,5,5,0

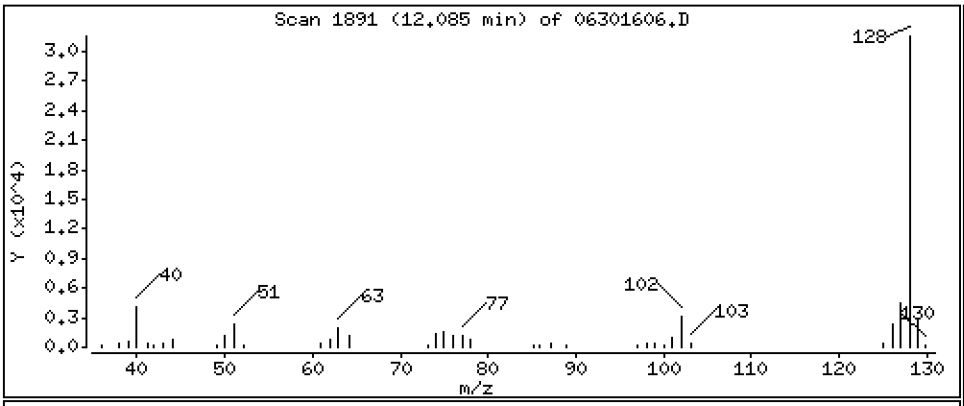
Operator: PB

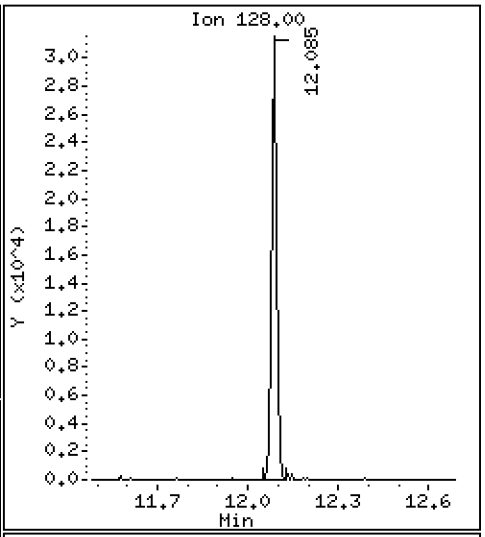
Column phase: RTXVMS

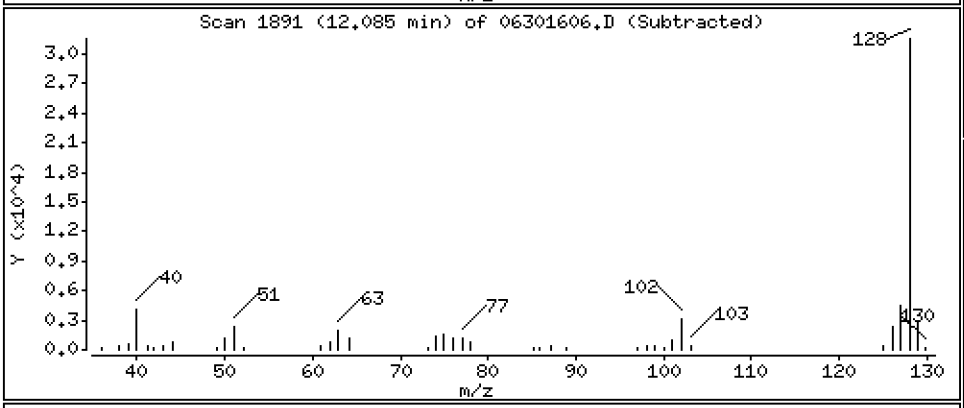
Column diameter: 0.18

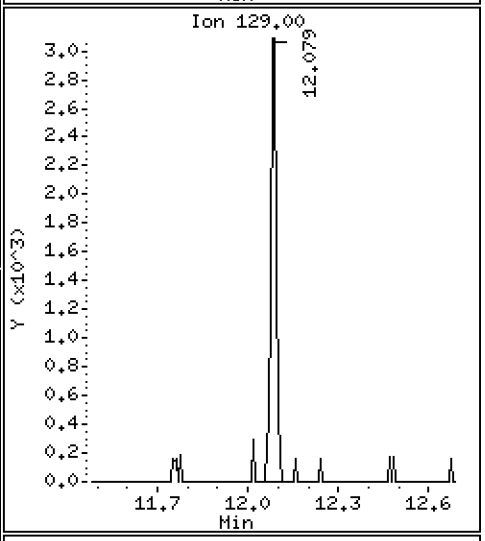
84 Naphthalene

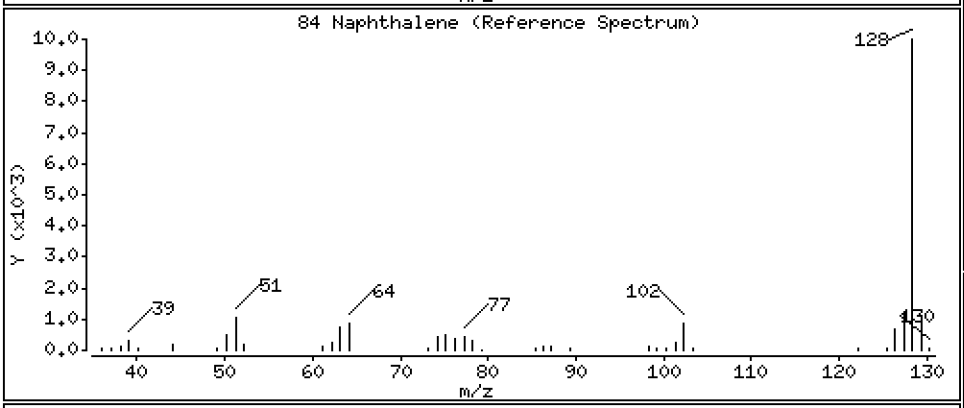
Concentration: 0.8934 ug/Kg

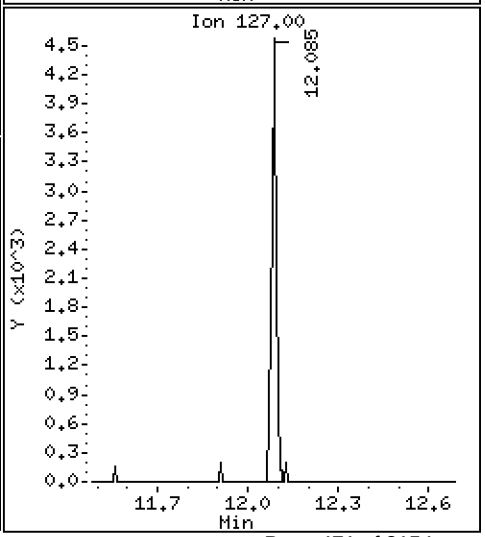


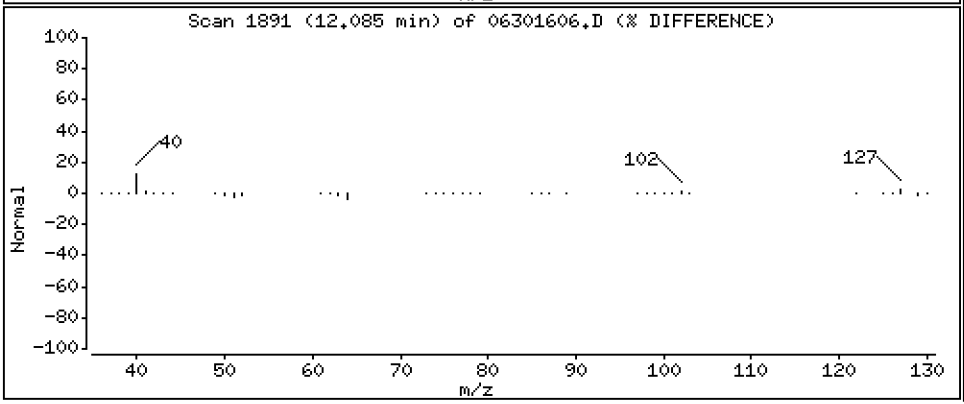












Data File: \\target\share\chem1\nt5.i\20160630.b\06301606.D

Date : 30-JUN-2016 13:31

Client ID: MB0630

Instrument: nt5.i

Sample Info: MB0630,5,5,0

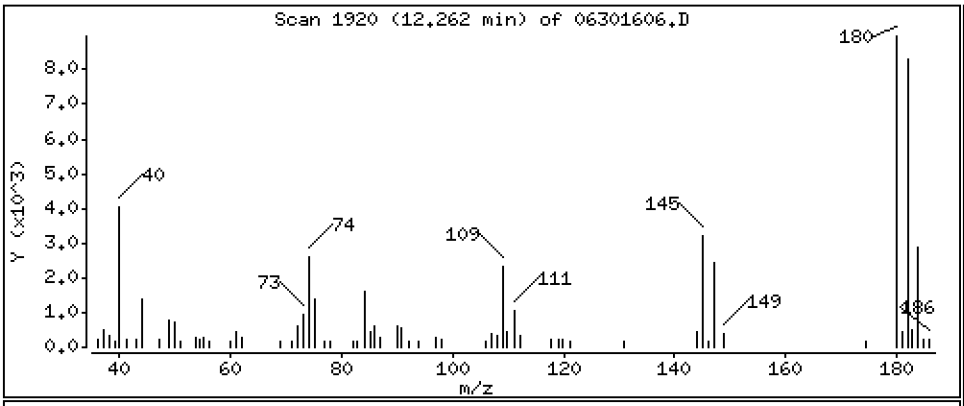
Operator: PB

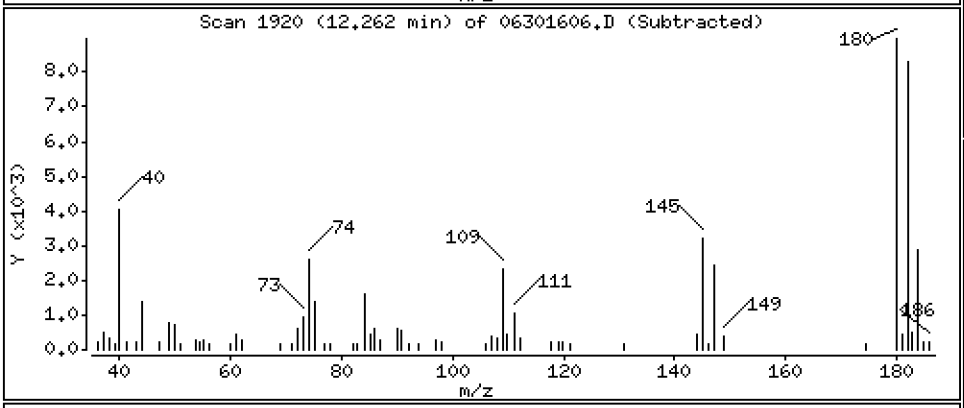
Column phase: RTXVMS

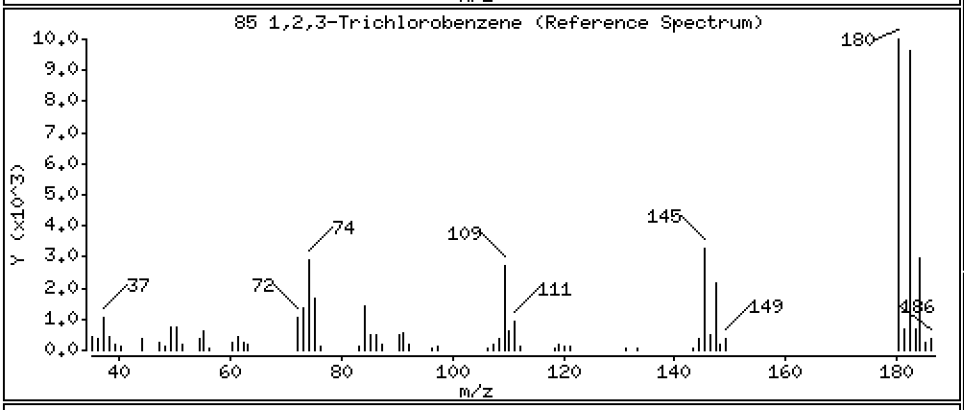
Column diameter: 0.18

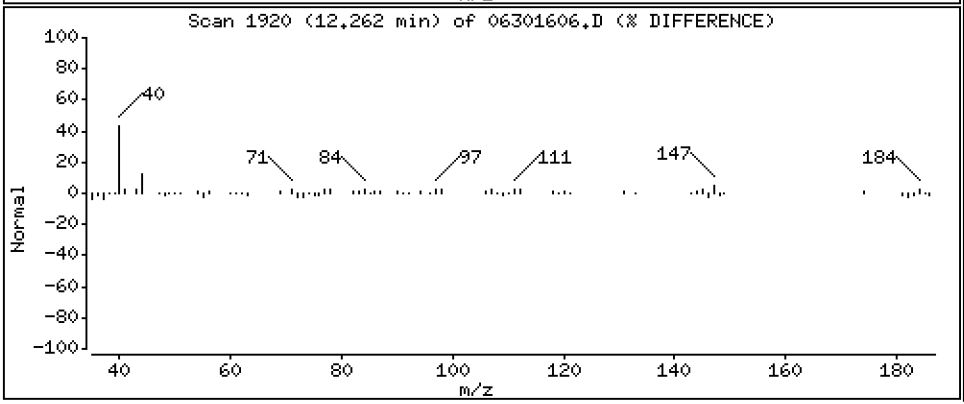
85 1,2,3-Trichlorobenzene

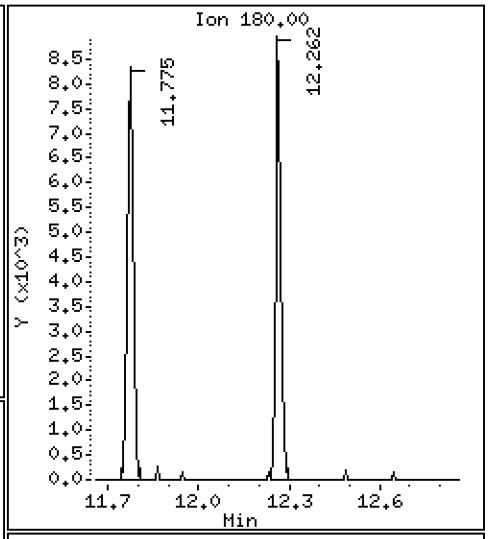
Concentration: 0.7301 ug/Kg

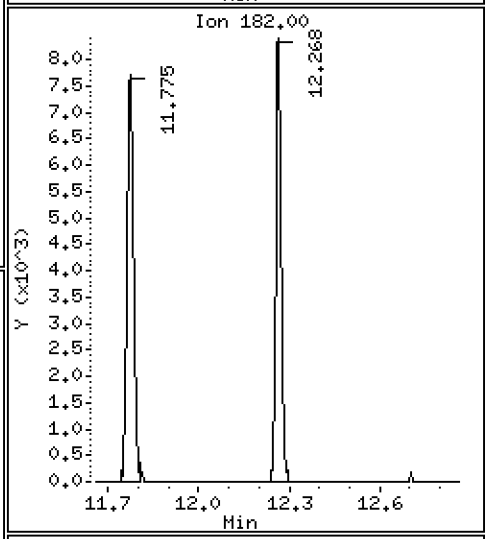


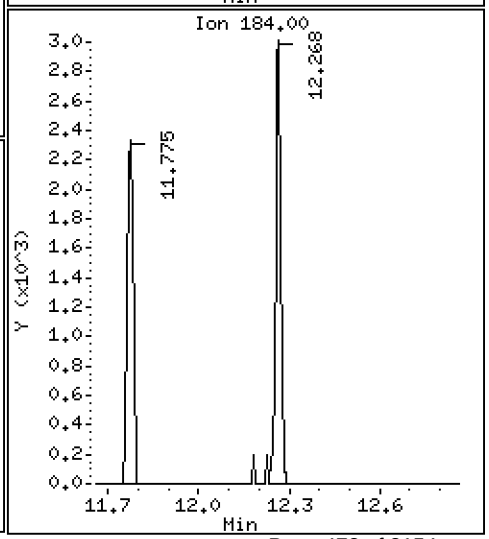












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301606.D
Lab Smp Id: BEG0004-BLK1 Client Smp ID: MB0630
Inj Date : 30-JUN-2016 13:31
Operator : PB Inst ID: nt5.i
Smp Info : MB0630,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	Compound Not Detected.					
3 Vinyl Chloride	62	Compound Not Detected.					
4 Bromomethane	94	Compound Not Detected.					
5 Chloroethane	64	Compound Not Detected.					
6 Trichlorofluoromethane	101	Compound Not Detected.					
7 1,1-Dichloroethene	96	Compound Not Detected.					
8 Carbon Disulfide	76	Compound Not Detected.					
9 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10 Iodomethane	142	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Acrolein	56	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acetone	43	Compound Not Detected.					
15 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16 Methyl tert butyl ether	73	Compound Not Detected.					
17 1,1-Dichloroethane	63	Compound Not Detected.					
18 Acrylonitrile	53	Compound Not Detected.					
19 Vinyl Acetate	43	Compound Not Detected.					
20 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
22 2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.499	4.486	(0.908)	777111	46.2263	46.226
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.955	4.943	(1.000)	705329	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.001)	729195	43.3902	43.390
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2280984	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.555	(1.215)	2832850	48.4704	48.470
	43 Toluene	92	Compound Not Detected.					
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2382638	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.952	8.952	(1.136)	1225054	47.8098	47.810
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1192894	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1188905	49.4947	49.495
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	12.085	12.085	(1.212)	45882	0.89337	0.8934
85	1,2,3-Trichlorobenzene	180	12.261	12.261	(1.230)	11988	0.73013	0.7301

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301606.D
Lab Smp Id: BEG0004-BLK1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Client Smp ID: MB0630
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	705329	17.56
35 1,4-Difluorobenze	2041239	1020620	4082478	2280984	11.75
52 d5-Chlorobenzene	2118314	1059157	4236628	2382638	12.48
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1192894	13.07

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEG0004-BLK1 Client Smp ID: MB0630
Level: LOW Operator: PB
Data Type: MS DATA SampleType: BLANK
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	46.226	92.45	70-130
$ 32 d4-1,2-Dichloroeth	50.000	43.390	86.78	80-149
$ 42 d8-Toluene	50.000	48.470	96.94	77-120
$ 62 4-Bromofluorobenze	50.000	47.810	95.62	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.495	98.99	80-120

REVIEW SUMMARY FOR FILE - 06301606.D

Lab ID: BEG0004-BLK1
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 13:31

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

Analytical Resources, Incorporated

Form I

METHOD BLANK DATA SHEET

EPA 8260C

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Water	Laboratory ID:	BEG0005-BLK1	File ID:	06301606A.D
Sampled:	N/A	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 13:31
Solids:		Preparation:	No Prep - Volatiles	Initial/Final:	5 mL / 5 mL
Batch:	BEG0005	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q	DL	RL	LOQ
75-01-4	Vinyl Chloride	1	0.20	U	0.06	0.20	0.20
74-83-9	Bromomethane	1	1.00	U	0.25	1.00	1.00
156-59-2	cis-1,2-Dichloroethene	1	0.20	U	0.04	0.20	0.20
71-43-2	Benzene	1	0.20	U	0.03	0.20	0.20
79-01-6	Trichloroethene	1	0.20	U	0.05	0.20	0.20
108-88-3	Toluene	1	0.20	U	0.04	0.20	0.20
127-18-4	Tetrachloroethene	1	0.20	U	0.05	0.20	0.20
100-41-4	Ethylbenzene	1	0.20	U	0.04	0.20	0.20
179601-23-1	m,p-Xylene	1	0.40	U	0.05	0.40	0.40
95-47-6	o-Xylene	1	0.20	U	0.03	0.20	0.20

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	43.4	86.8	80 - 129	
Toluene-d8	50.000	48.5	96.9	80 - 120	
4-Bromofluorobenzene	50.000	47.8	95.6	80 - 120	
1,2-Dichlorobenzene-d4	50.000	49.5	99.0	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301606A.D

Date : 30-JUN-2016 13:31

Client ID: MB0630

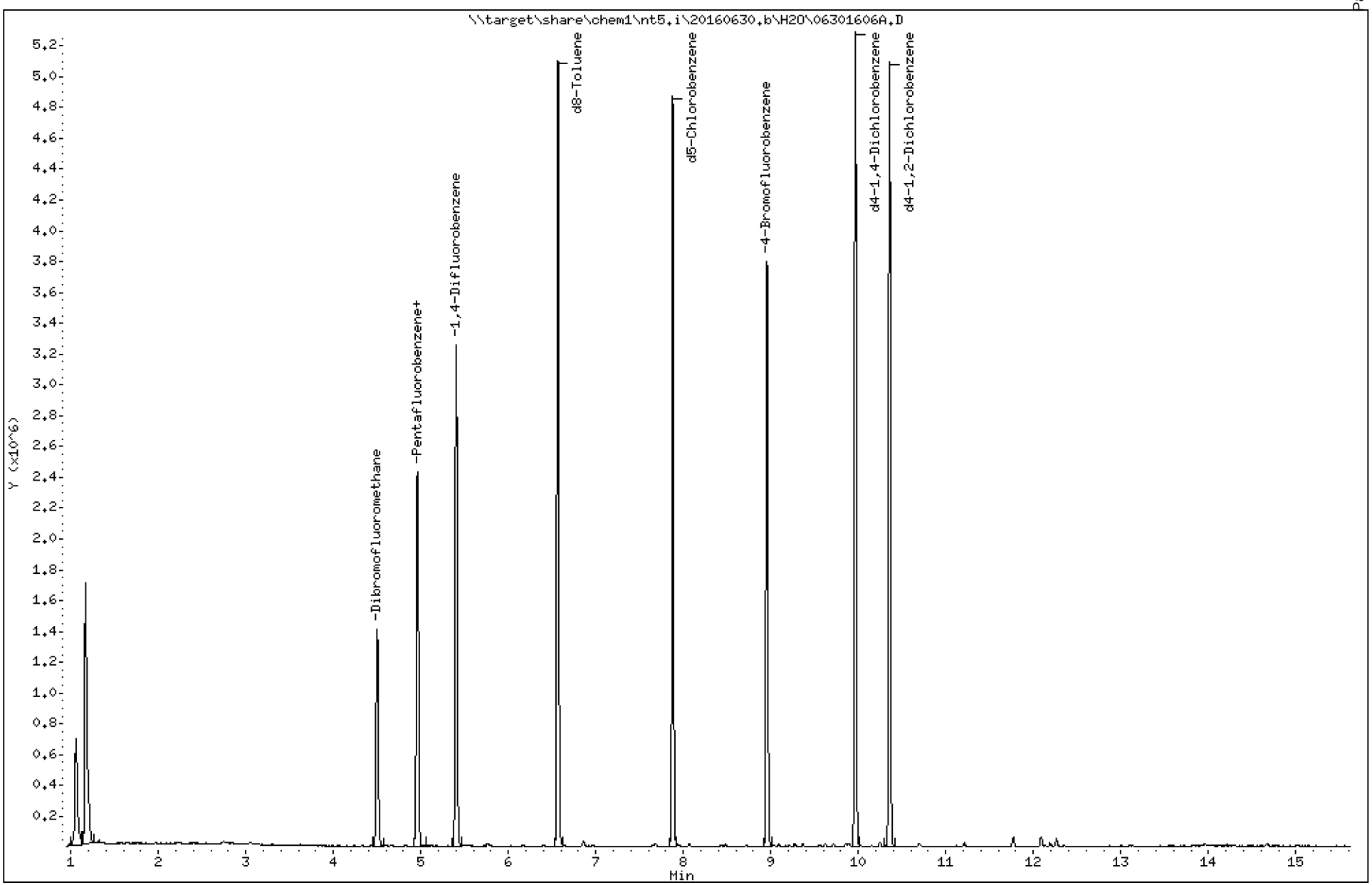
Instrument: nt5.i

Sample Info: MB0630,5,5,0

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301606A.D

Date : 30-JUN-2016 13:31

Client ID: MB0630

Instrument: nt5.i

Sample Info: MB0630,5,5,0

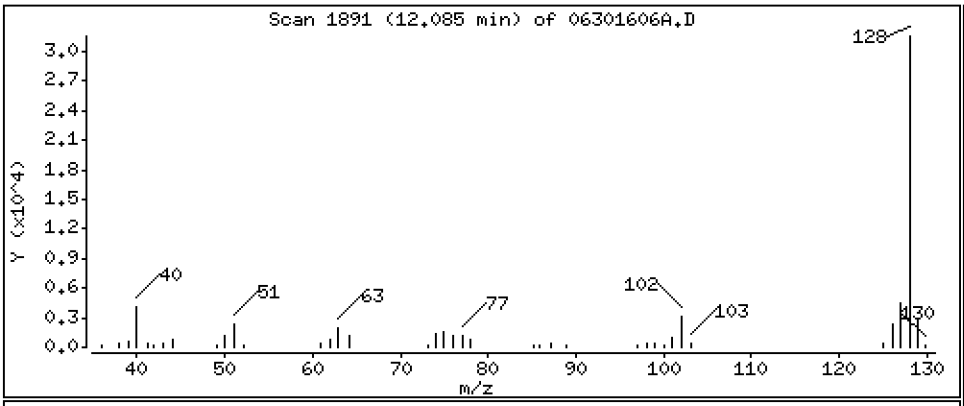
Operator: PB

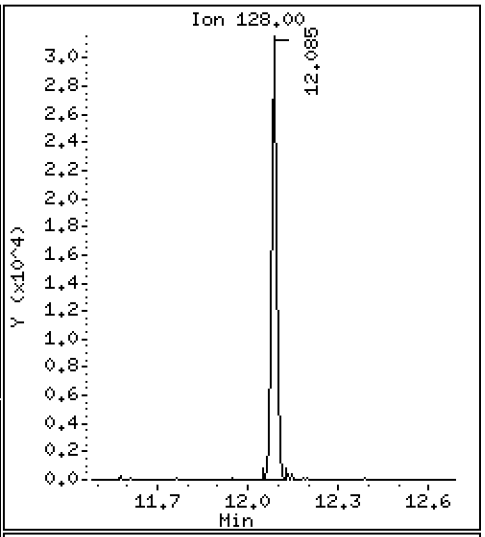
Column phase: RTXVMS

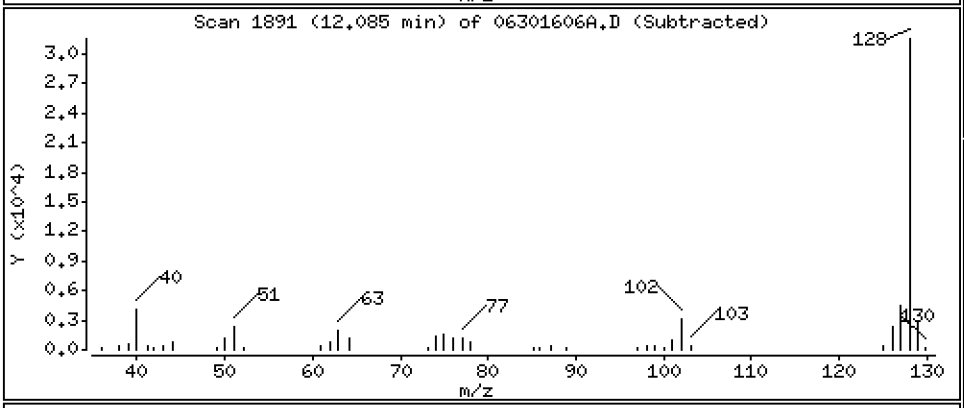
Column diameter: 0.18

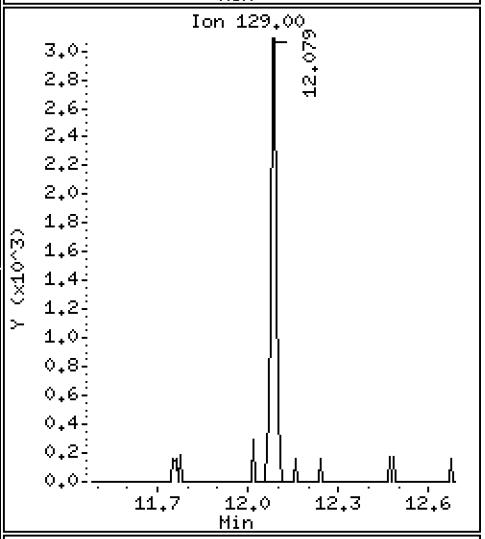
84 Naphthalene

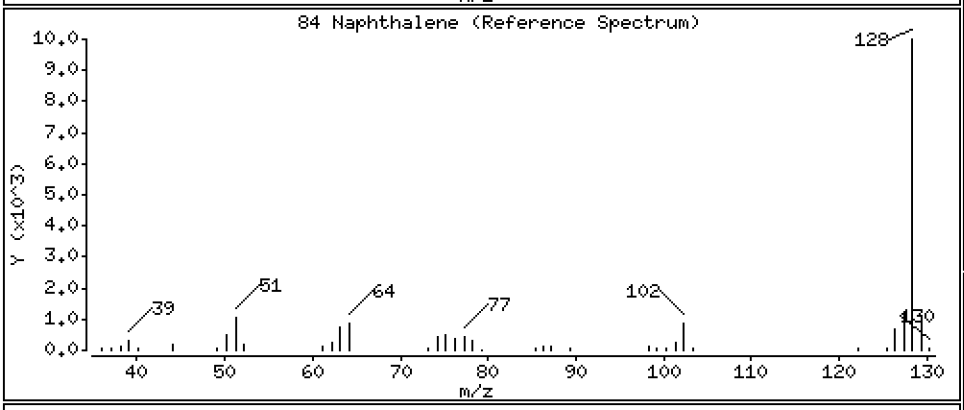
Concentration: 0.8934 ug/Kg

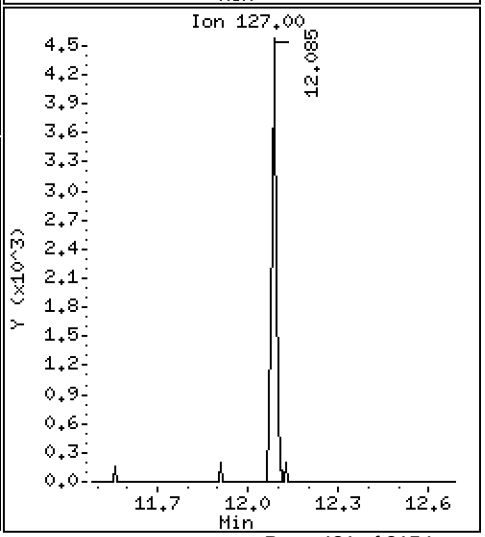


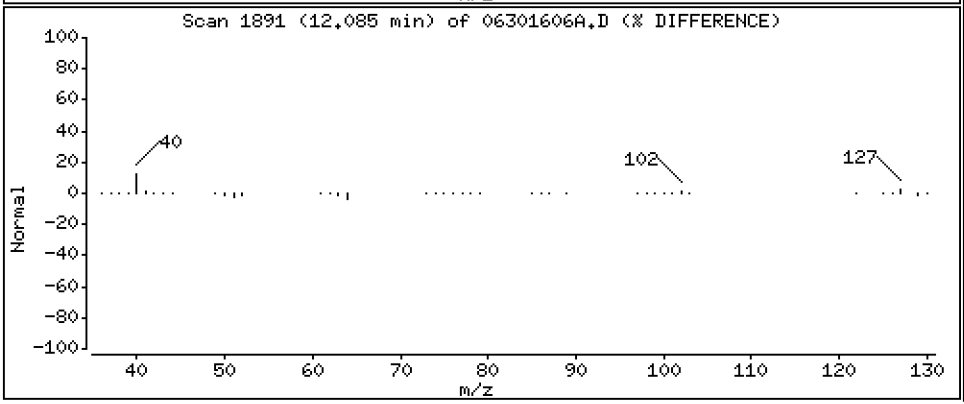












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301606A.D

Date : 30-JUN-2016 13:31

Client ID: MB0630

Instrument: nt5.i

Sample Info: MB0630,5,5,0

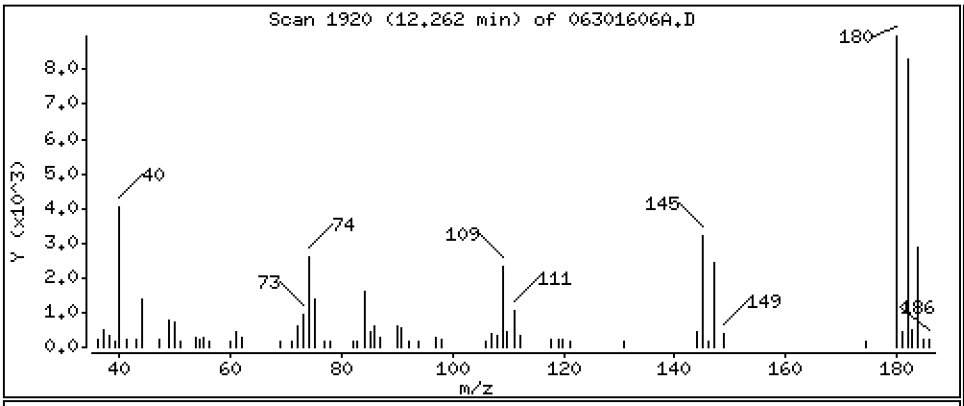
Operator: PB

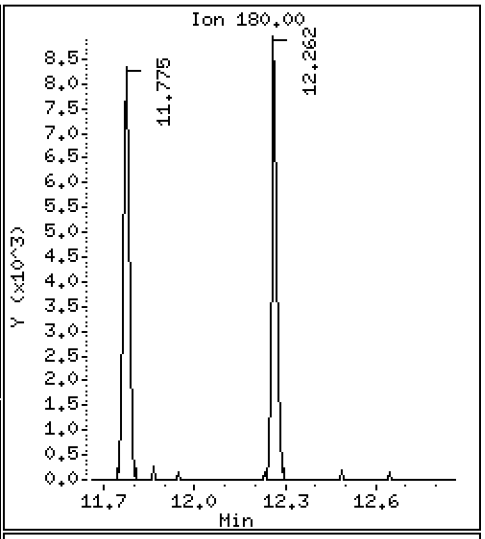
Column phase: RTXVMS

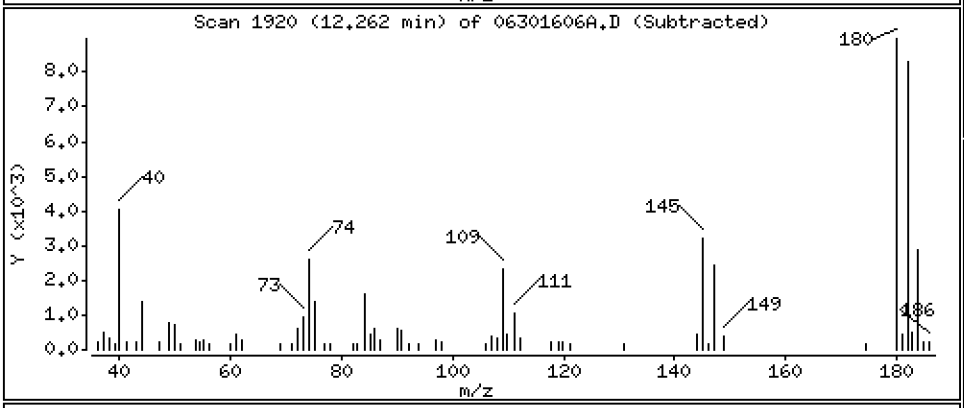
Column diameter: 0.18

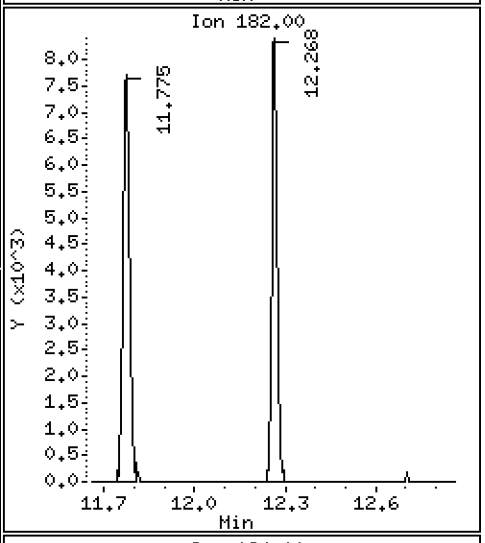
85 1,2,3-Trichlorobenzene

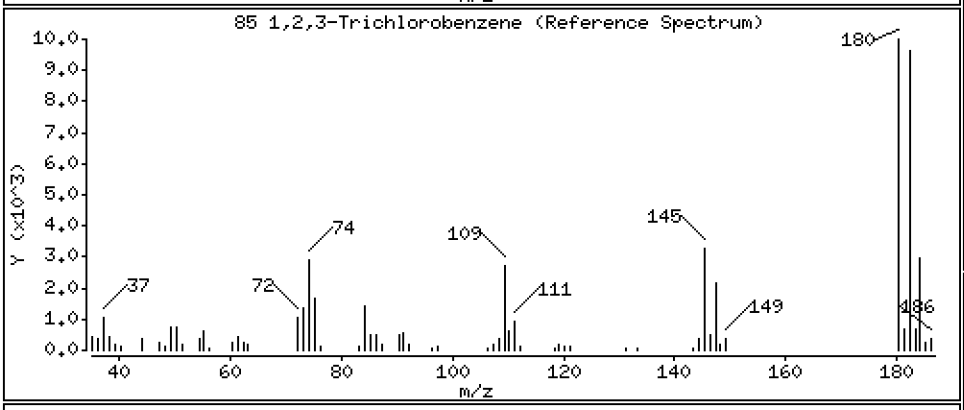
Concentration: 0.7301 ug/Kg

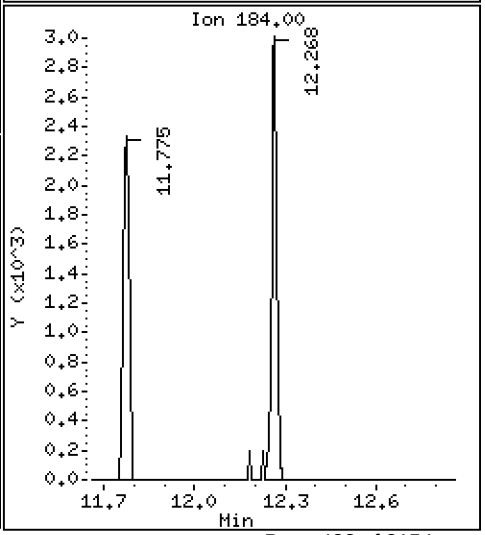


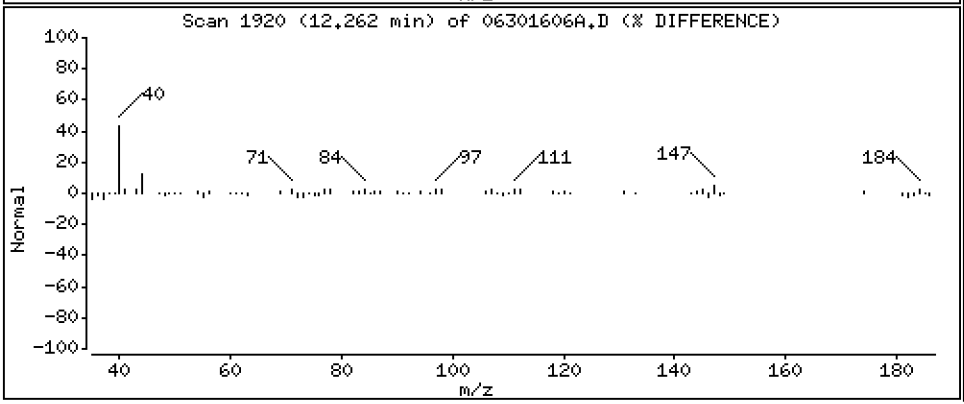












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\H2O\06301606A.D
Lab Smp Id: BEG0005-BLK1 Client Smp ID: MB0630
Inj Date : 30-JUN-2016 13:31
Operator : PB Inst ID: nt5.i
Smp Info : MB0630,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\H2O\VO051314S.m
Meth Date : 01-Jul-2016 15:49 patrickb Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	Compound Not Detected.					
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.499	4.486	(0.908)	777111	46.2263	46.226
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.955	4.943	(1.000)	705329	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.949	(1.001)	729195	43.3902	43.390
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2280984	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.567	6.555	(1.215)	2832850	48.4704	48.470
	43 Toluene	92	Compound Not Detected.					
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.881	7.875	(1.000)	2382638	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.952	8.952	(1.136)	1225054	47.8098	47.810
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1192894	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	Compound Not Detected.					
$	79 d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1188905	49.4947	49.495
	80 1,2-Dichlorobenzene	146	Compound Not Detected.					
	81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
	82 Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
	83 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	84 Naphthalene	128	12.085	12.085	(1.212)	45882	0.89337	0.8934
	85 1,2,3-Trichlorobenzene	180	12.261	12.261	(1.230)	11988	0.73013	0.7301

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301606A.D
Lab Smp Id: BEG0005-BLK1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\H2O\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Client Smp ID: MB0630
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	705329	17.56
35 1,4-Difluorobenze	2041239	1020620	4082478	2280984	11.75
52 d5-Chlorobenzene	2118314	1059157	4236628	2382638	12.48
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1192894	13.07

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEG0005-BLK1 Client Smp ID: MB0630
Level: LOW Operator: PB
Data Type: MS DATA SampleType: BLANK
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\H2O\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	46.226	92.45	70-130
$ 32 d4-1,2-Dichloroeth	50.000	43.390	86.78	80-149
$ 42 d8-Toluene	50.000	48.470	96.94	77-120
$ 62 4-Bromofluorobenze	50.000	47.810	95.62	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.495	98.99	80-120

REVIEW SUMMARY FOR FILE - 06301606A.D

Lab ID: BEG0005-BLK1
nt5.i, 20160630.b\H2O\VO051314S.m,   30-JUN-2016 13:31

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,H2O\VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

Analytical Resources, Incorporated

Form I

METHOD BLANK DATA SHEET

EPA 8260C

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Solid	Laboratory ID:	BEG0006-BLK1	File ID:	06301606B.D
Sampled:	N/A	Prepared:	06/30/16 10:04	Analyzed:	06/30/16 13:31
Solids:		Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g
Batch:	BEG0006	Sequence:	SEG0003	Calibration:	ZF00019
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg wet)	Q	DL	RL	LOQ
75-01-4	Vinyl Chloride	50	50.0	U	7.80	50.0	50.0
74-83-9	Bromomethane	50	50.0	U	10.2	50.0	50.0
156-59-2	cis-1,2-Dichloroethene	50	50.0	U	9.00	50.0	50.0
71-43-2	Benzene	50	50.0	U	8.20	50.0	50.0
79-01-6	Trichloroethene	50	50.0	U	9.00	50.0	50.0
108-88-3	Toluene	50	50.0	U	8.60	50.0	50.0
127-18-4	Tetrachloroethene	50	50.0	U	13.8	50.0	50.0
100-41-4	Ethylbenzene	50	50.0	U	13.6	50.0	50.0
179601-23-1	m,p-Xylene	50	50.0	U	27.9	50.0	50.0
95-47-6	o-Xylene	50	50.0	U	11.4	50.0	50.0

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	43.4	86.8	80 - 124	
Toluene-d8	50.000	48.5	96.9	80 - 120	
4-Bromofluorobenzene	50.000	47.8	95.6	80 - 120	
1,2-Dichlorobenzene-d4	50.000	49.5	99.0	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301606B.D

Date : 30-JUN-2016 13:31

Client ID: MB0630

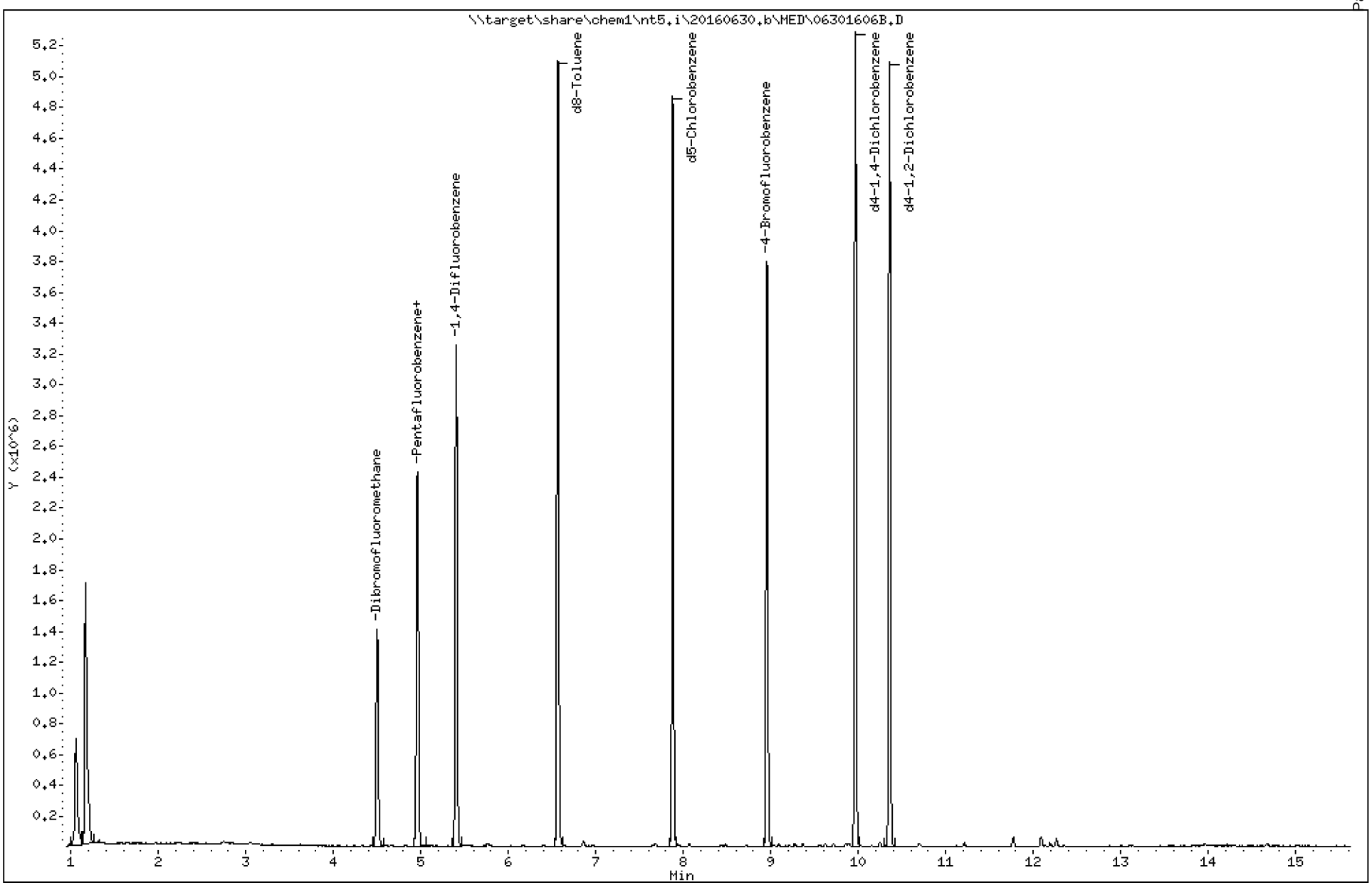
Instrument: nt5.i

Sample Info: MB0630,5,5,0

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301606B.D

Date : 30-JUN-2016 13:31

Client ID: MB0630

Instrument: nt5.i

Sample Info: MB0630,5,5,0

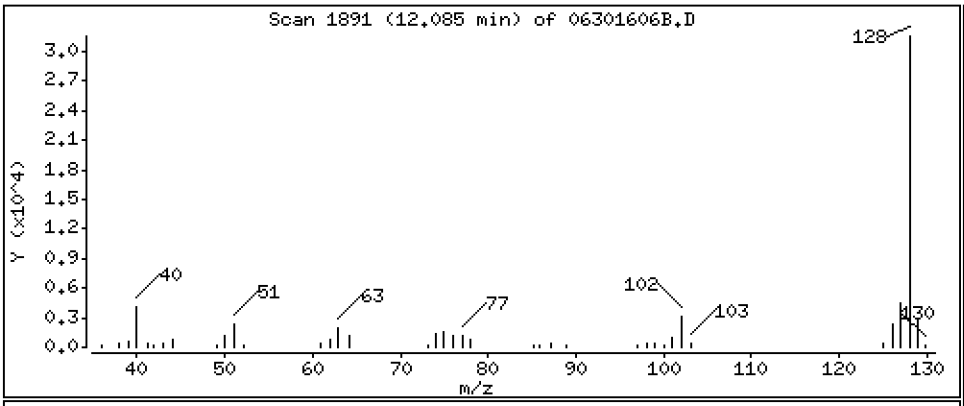
Operator: PB

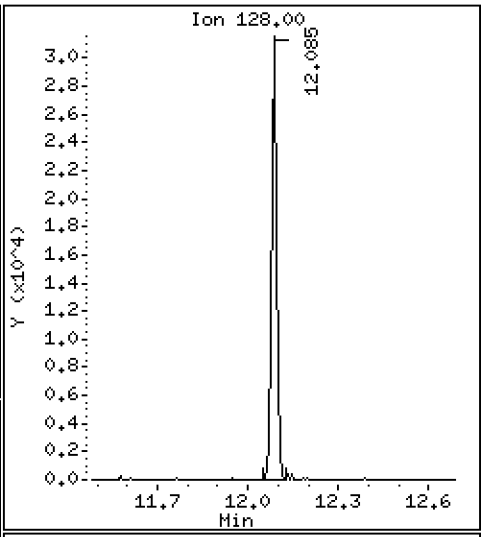
Column phase: RTXVMS

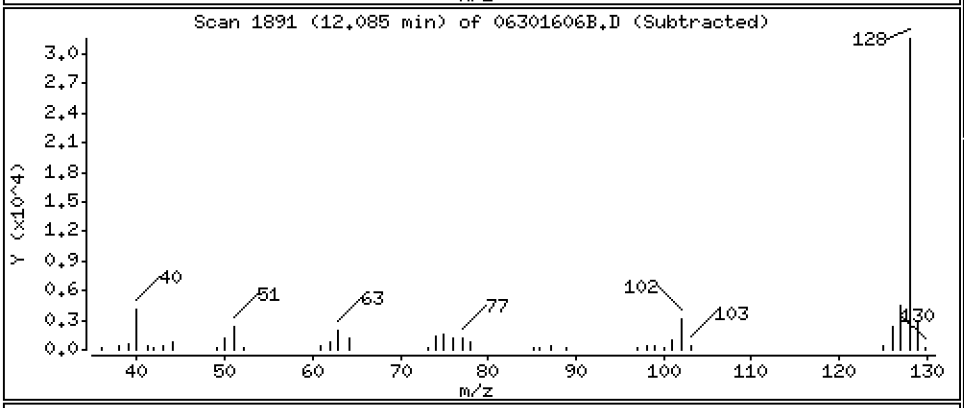
Column diameter: 0.18

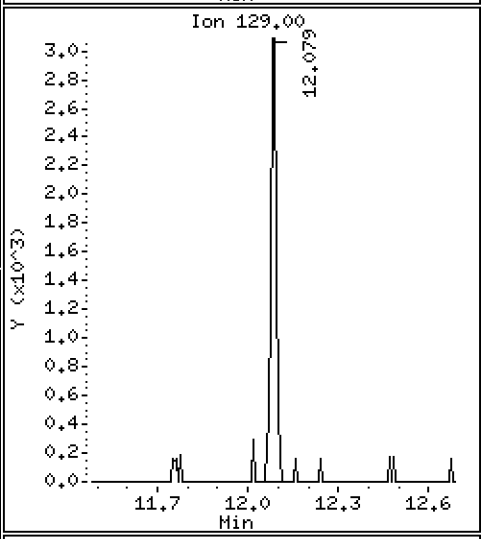
84 Naphthalene

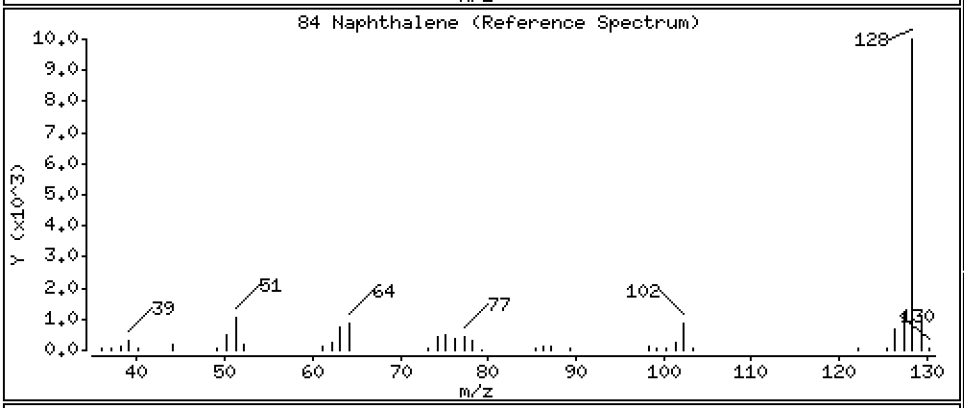
Concentration: 0.8934 ug/Kg

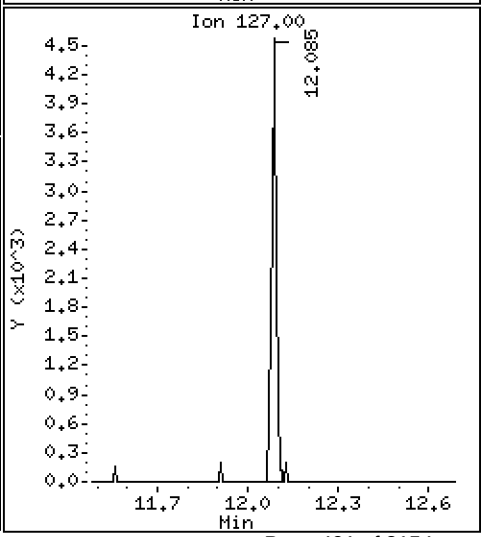


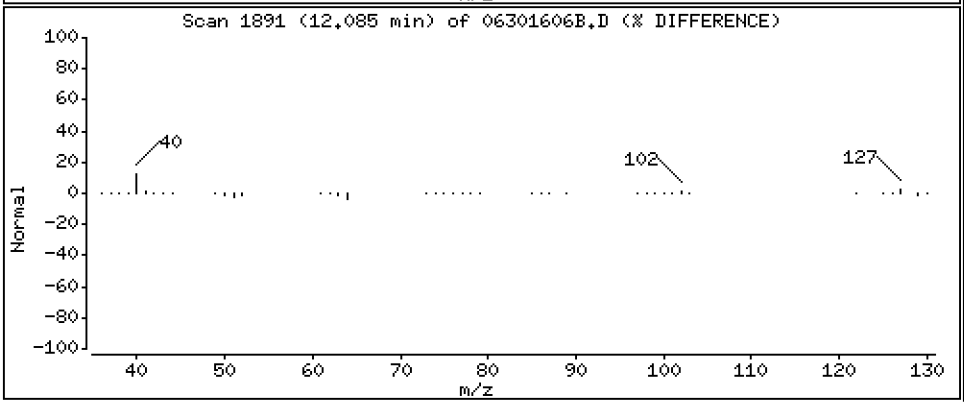












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301606B.D

Date : 30-JUN-2016 13:31

Client ID: MB0630

Instrument: nt5.i

Sample Info: MB0630,5,5,0

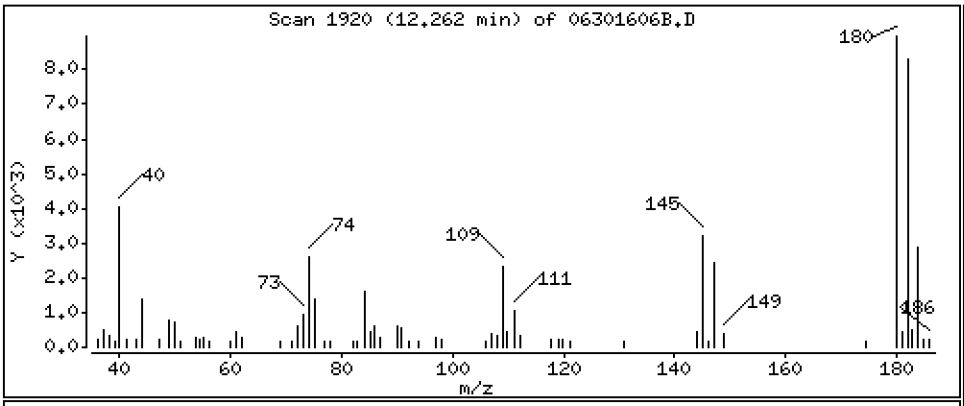
Operator: PB

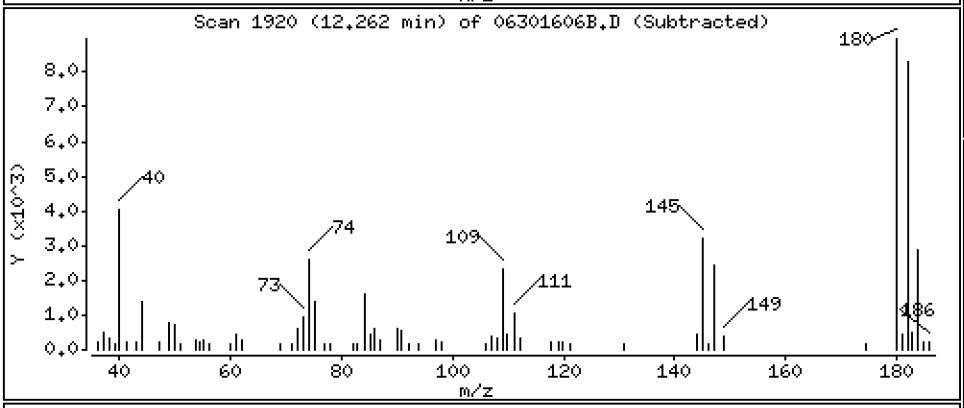
Column phase: RTXVMS

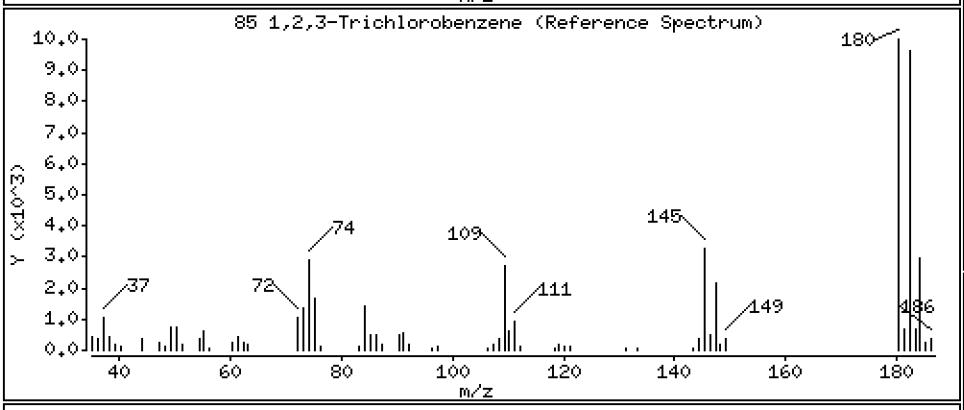
Column diameter: 0.18

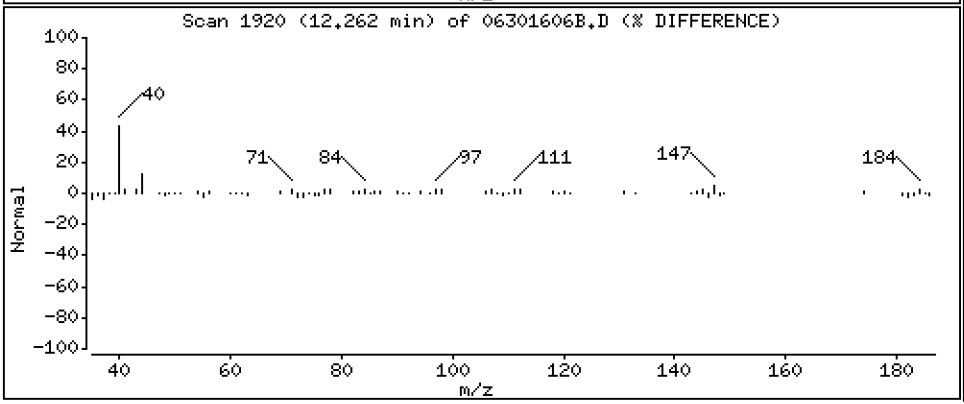
85 1,2,3-Trichlorobenzene

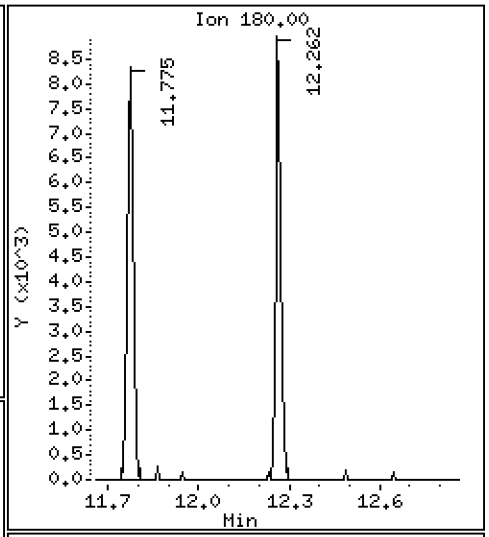
Concentration: 0.7301 ug/Kg

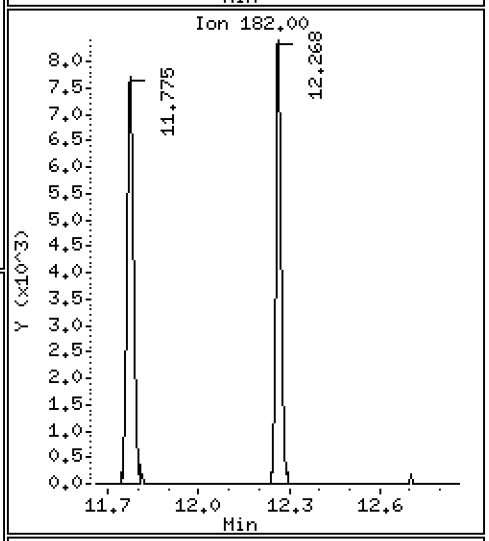


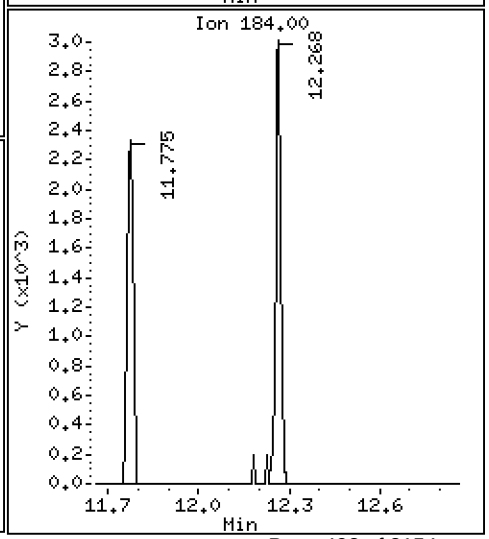












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\MED\06301606B.D
Lab Smp Id: BEG0006-BLK1 Client Smp ID: MB0630
Inj Date : 30-JUN-2016 13:31
Operator : PB Inst ID: nt5.i
Smp Info : MB0630,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\MED\VO051314S.m
Meth Date : 01-Jul-2016 15:50 patrickb Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	Compound Not Detected.					
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
23	Bromochloromethane	128	Compound Not Detected.					
24	Chloroform	83	Compound Not Detected.					
25	Carbon Tetrachloride	117	Compound Not Detected.					
$ 27	Dibromofluoromethane	111	4.499	4.486	(0.908)	777111	46.2263	46.226
26	1,1,1-Trichloroethane	97	Compound Not Detected.					
28	1,1-Dichloropropene	75	Compound Not Detected.					
29	2-Butanone	72	Compound Not Detected.					
30	Benzene	78	Compound Not Detected.					
* 31	Pentafluorobenzene	168	4.955	4.943	(1.000)	705329	50.0000	
$ 32	d4-1,2-Dichloroethane	65	4.961	4.949	(1.001)	729195	43.3902	43.390
33	1,2-Dichloroethane	62	Compound Not Detected.					
34	Trichloroethene	95	Compound Not Detected.					
* 35	1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2280984	50.0000	
37	Dibromomethane	93	Compound Not Detected.					
38	1,2-Dichloropropane	63	Compound Not Detected.					
39	Bromodichloromethane	83	Compound Not Detected.					
172	2-Pentanone	86	Compound Not Detected.					
40	2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
41	Cis 1,3-dichloropropene	75	Compound Not Detected.					
$ 42	d8-Toluene	98	6.567	6.555	(1.215)	2832850	48.4704	48.470
43	Toluene	92	Compound Not Detected.					
44	Tetrachloroethene	166	Compound Not Detected.					
45	4-Methyl-2-Pentanone	58	Compound Not Detected.					
46	Trans 1,3-Dichloropropene	75	Compound Not Detected.					
47	1,1,2-Trichloroethane	97	Compound Not Detected.					
48	Chlorodibromomethane	129	Compound Not Detected.					
49	1,3-Dichloropropane	76	Compound Not Detected.					
50	1,2-Dibromoethane	107	Compound Not Detected.					
51	2-Hexanone	43	Compound Not Detected.					
* 52	d5-Chlorobenzene	117	7.881	7.875	(1.000)	2382638	50.0000	
53	Chlorobenzene	112	Compound Not Detected.					
54	Ethyl Benzene	91	Compound Not Detected.					
55	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
56	m,p-xylene	106	Compound Not Detected.					
57	o-Xylene	106	Compound Not Detected.					
58	Styrene	104	Compound Not Detected.					
59	Bromoform	173	Compound Not Detected.					
60	Isopropyl Benzene	105	Compound Not Detected.					
$ 62	4-Bromofluorobenzene	95	8.952	8.952	(1.136)	1225054	47.8098	47.810
63	Bromobenzene	156	Compound Not Detected.					
64	N-Propyl Benzene	91	Compound Not Detected.					
65	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
66	2-Chloro Toluene	91	Compound Not Detected.					
67	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
68	1,2,3-Trichloropropane	110	Compound Not Detected.					
69	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
70	4-Chloro Toluene	91	Compound Not Detected.					
71	T-Butyl Benzene	119	Compound Not Detected.					
72	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
73	S-Butyl Benzene	105	Compound Not Detected.					
74	4-Isopropyl Toluene	119	Compound Not Detected.					
75	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 76	d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1192894	50.0000	
77	1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	Compound Not Detected.					
$	79 d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1188905	49.4947	49.495
	80 1,2-Dichlorobenzene	146	Compound Not Detected.					
	81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
	82 Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
	83 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	84 Naphthalene	128	12.085	12.085	(1.212)	45882	0.89337	0.8934
	85 1,2,3-Trichlorobenzene	180	12.261	12.261	(1.230)	11988	0.73013	0.7301

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301606B.D
Lab Smp Id: BEG0006-BLK1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\MED\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Client Smp ID: MB0630
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	705329	17.56
35 1,4-Difluorobenze	2041239	1020620	4082478	2280984	11.75
52 d5-Chlorobenzene	2118314	1059157	4236628	2382638	12.48
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1192894	13.07

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEG0006-BLK1 Client Smp ID: MB0630
Level: LOW Operator: PB
Data Type: MS DATA SampleType: BLANK
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\MED\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	46.226	92.45	70-130
$ 32 d4-1,2-Dichloroeth	50.000	43.390	86.78	80-149
$ 42 d8-Toluene	50.000	48.470	96.94	77-120
$ 62 4-Bromofluorobenze	50.000	47.810	95.62	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.495	98.99	80-120

REVIEW SUMMARY FOR FILE - 06301606B.D

Lab ID: BEG0006-BLK1
nt5.i, 20160630.b\MED\VO051314S.m,   30-JUN-2016 13:31

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,MED\VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Solid	Analyzed:	06/30/16 12:46
Batch:	BEG0004	Laboratory ID:	BEG0004-BS1
Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Vinyl Chloride	50.0	42.0	83.9	74 - 135
Bromomethane	50.0	27.3	54.6	53 - 144
cis-1,2-Dichloroethene	50.0	43.5	87.0	80 - 125
Benzene	50.0	44.4	88.9	80 - 120
Trichloroethene	50.0	45.5	91.0	80 - 120
Toluene	50.0	44.0	88.0	75 - 120
Tetrachloroethene	50.0	49.0	98.1	74 - 124
Ethylbenzene	50.0	45.8	91.6	80 - 125
m,p-Xylene	100	94.2	94.2	76 - 121
o-Xylene	50.0	46.2	92.4	67 - 132

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Solid	Analyzed:	06/30/16 13:09
Batch:	BEG0004	Laboratory ID:	BEG0004-BSD1
Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Vinyl Chloride	50.0	40.2	80.5	4.16	30	74 - 135
Bromomethane	50.0	27.1	54.2	0.736	30	53 - 144
cis-1,2-Dichloroethene	50.0	43.2	86.4	0.733	30	80 - 125
Benzene	50.0	44.6	89.2	0.349	30	80 - 120
Trichloroethene	50.0	46.0	92.0	1.06	30	80 - 120
Toluene	50.0	44.9	89.8	2.02	30	75 - 120
Tetrachloroethene	50.0	49.6	99.1	1.09	30	74 - 124
Ethylbenzene	50.0	46.4	92.9	1.38	30	80 - 125
m,p-Xylene	100	94.9	94.9	0.774	30	76 - 121
o-Xylene	50.0	46.7	93.5	1.11	30	67 - 132

* Values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Page 1

Date : 30-JUN-2016 12:46

Client ID: LCS0630

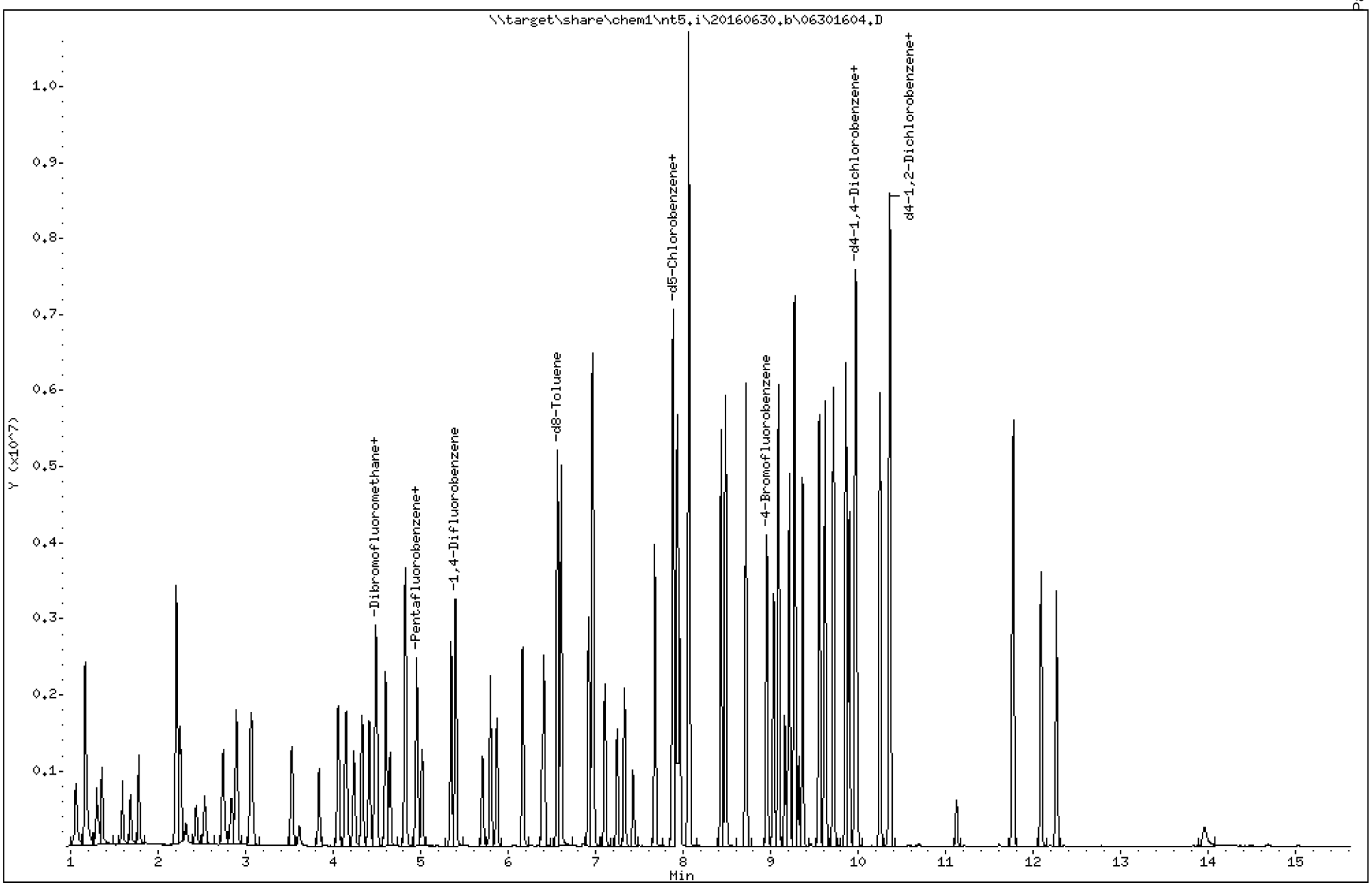
Instrument: nt5.i

Sample Info: LCS0630,5,5,0

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

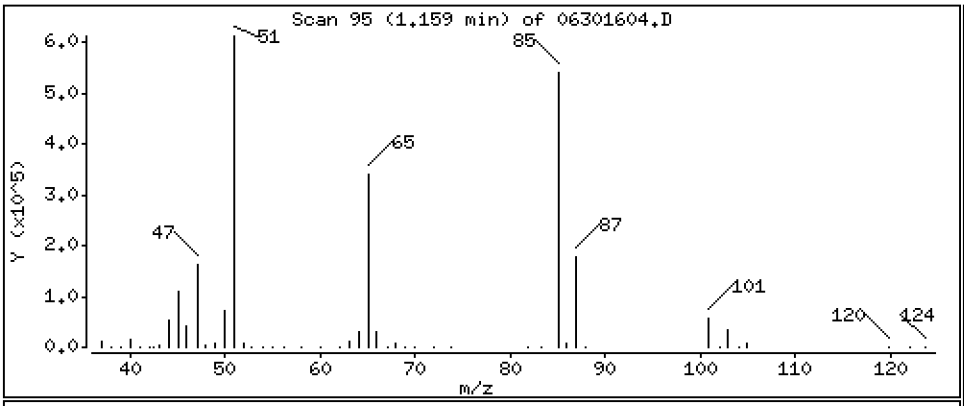
Operator: PB

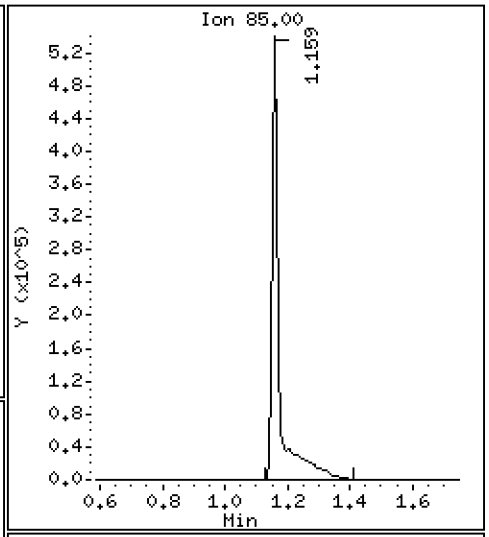
Column phase: RTXVMS

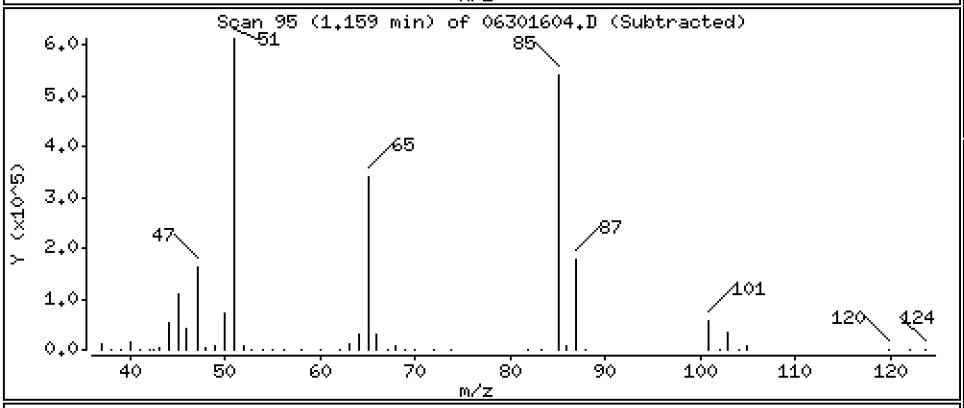
Column diameter: 0.18

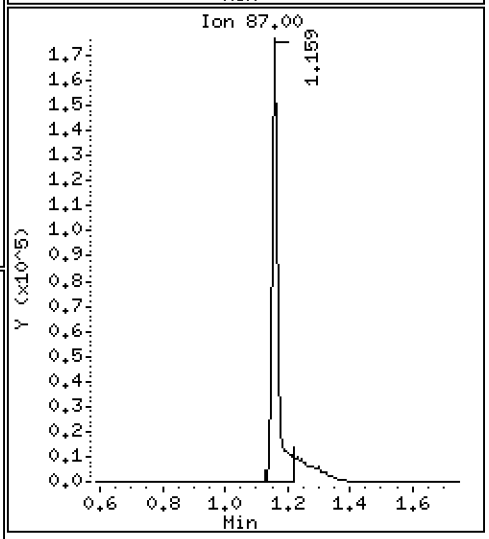
1 Dichlorodifluoromethane

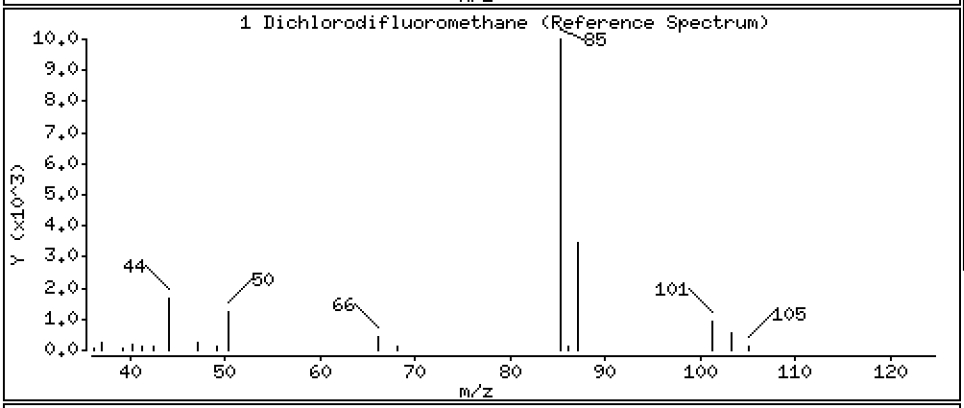
Concentration: 41.888 ug/Kg

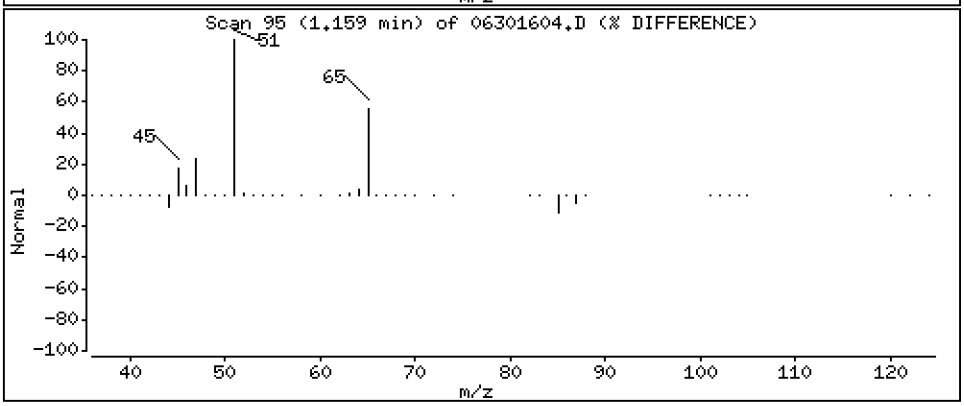












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

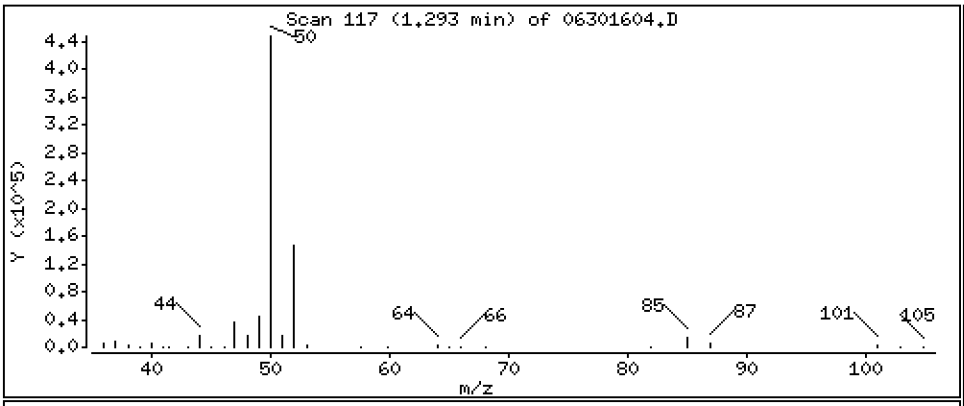
Operator: PB

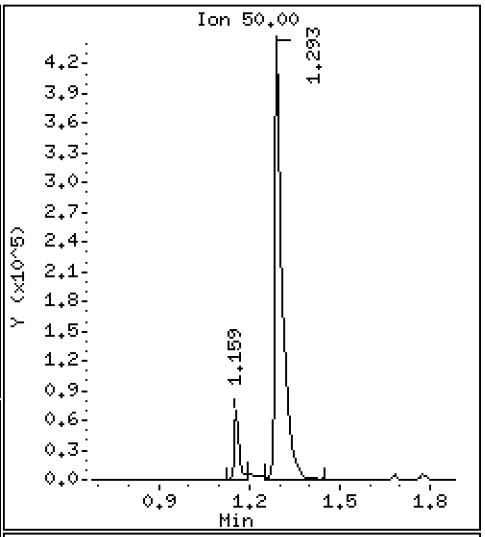
Column phase: RTXVMS

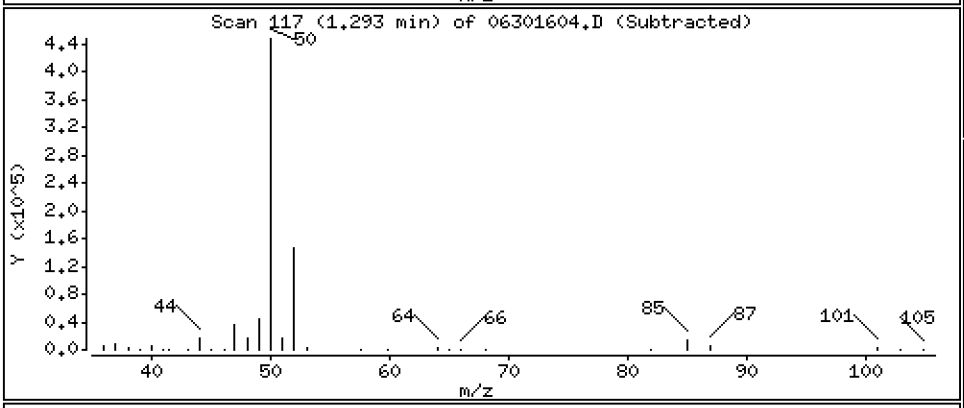
Column diameter: 0.18

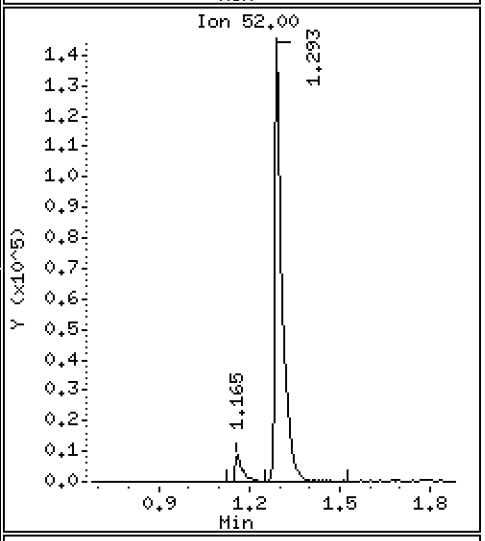
2 Chloromethane

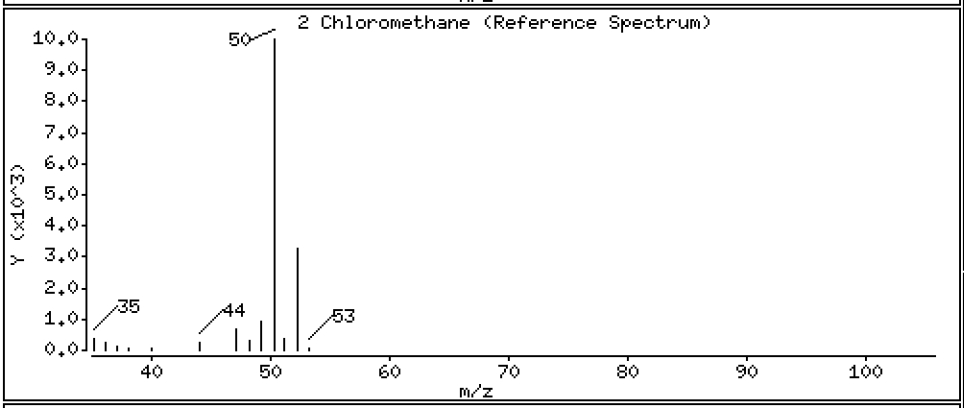
Concentration: 33.970 ug/Kg

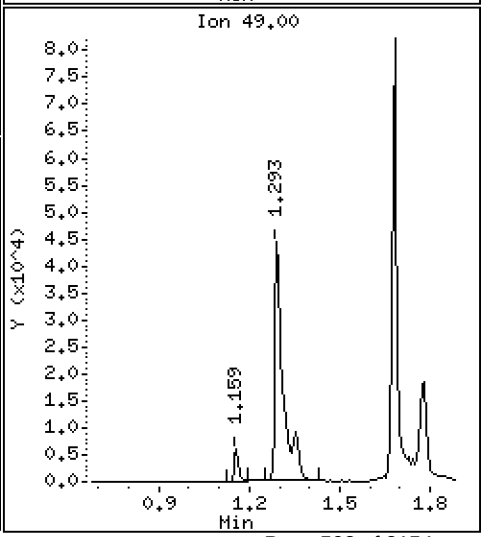


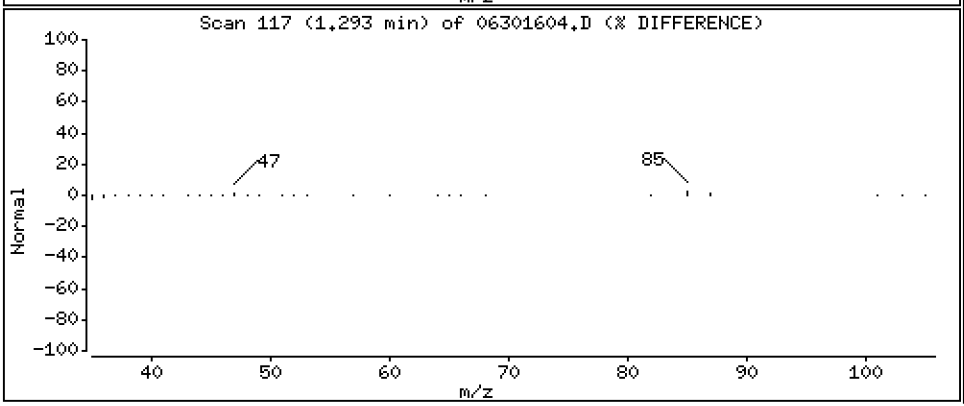












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

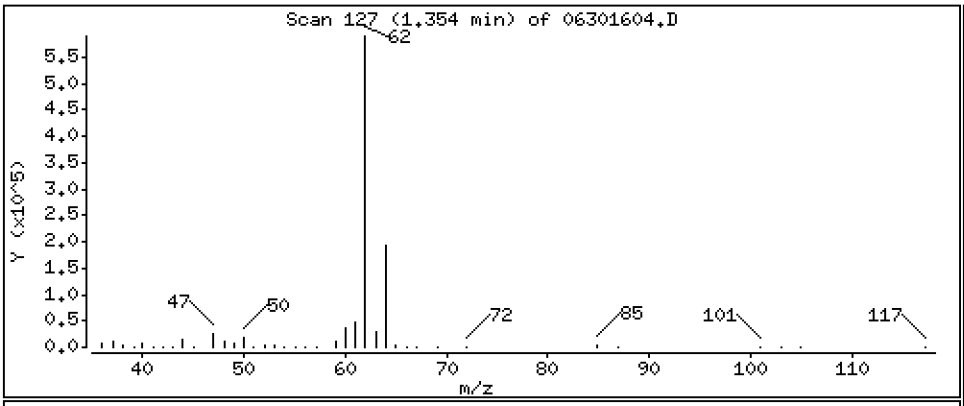
Operator: PB

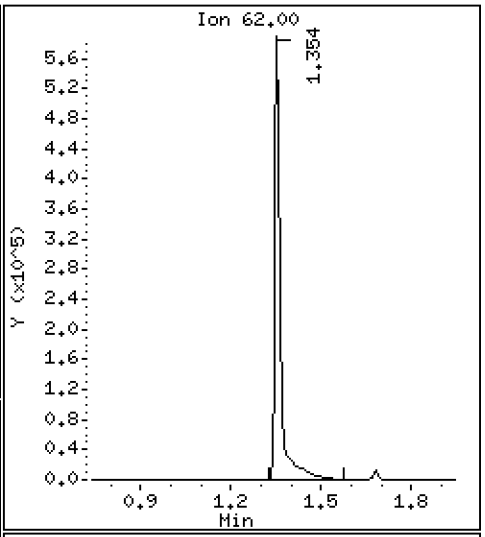
Column phase: RTXVMS

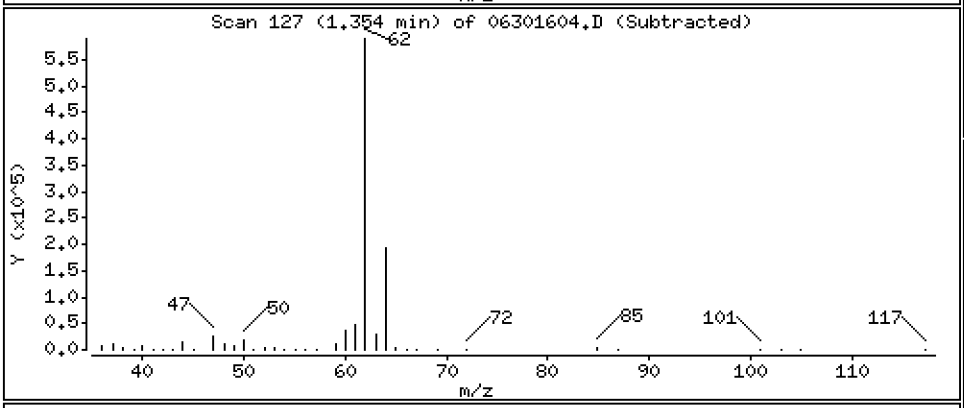
Column diameter: 0.18

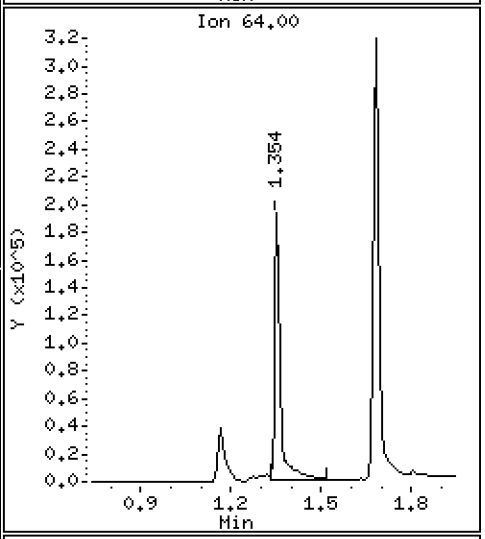
3 Vinyl Chloride

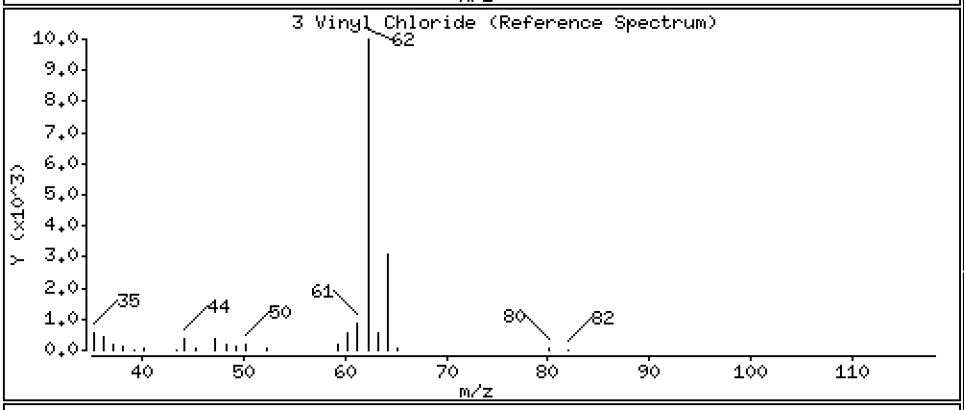
Concentration: 41.957 ug/Kg

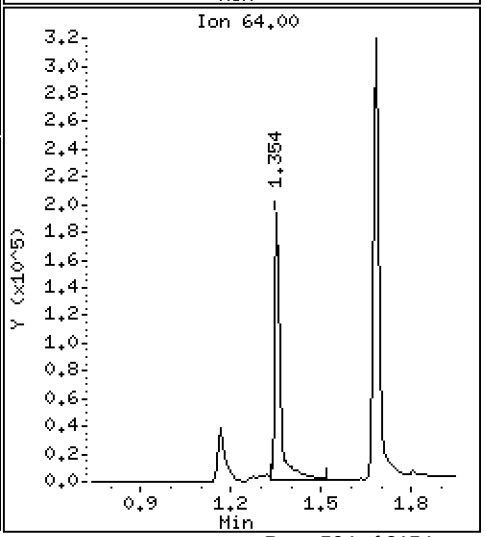


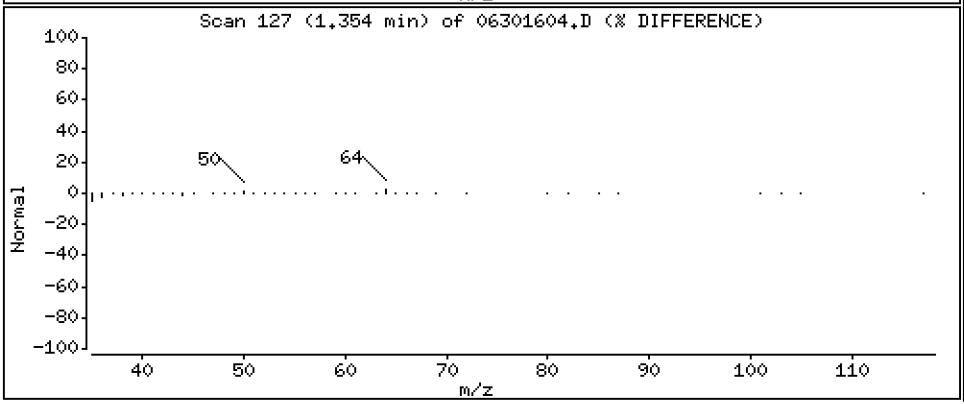












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

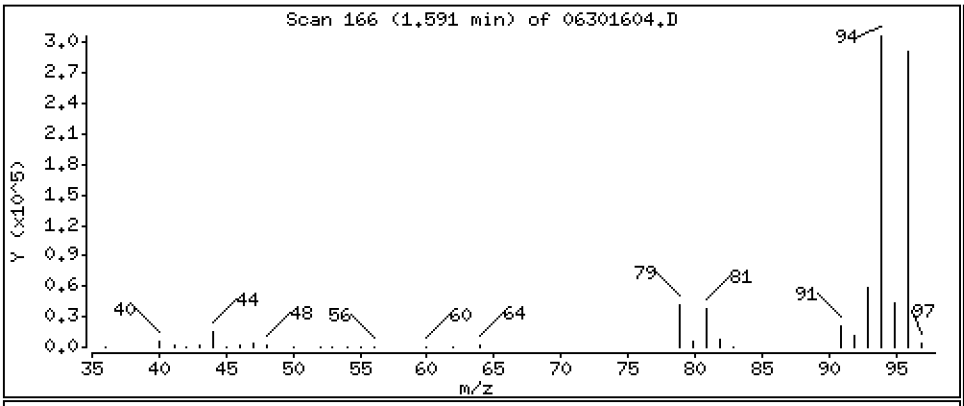
Operator: PB

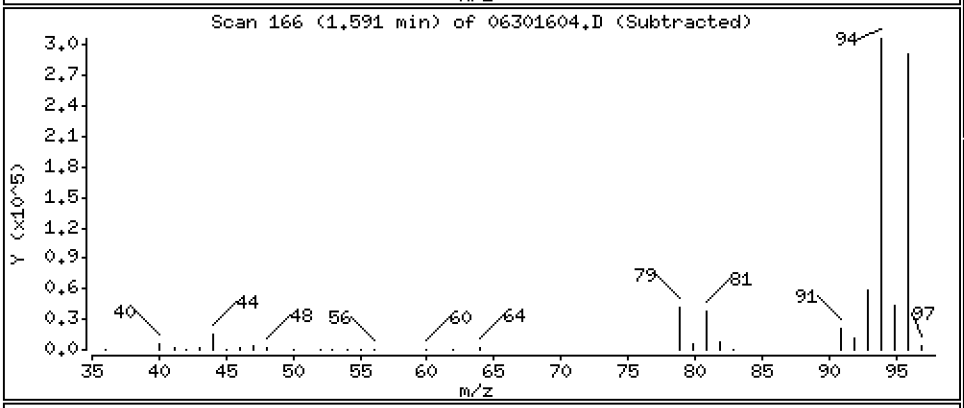
Column phase: RTXVMS

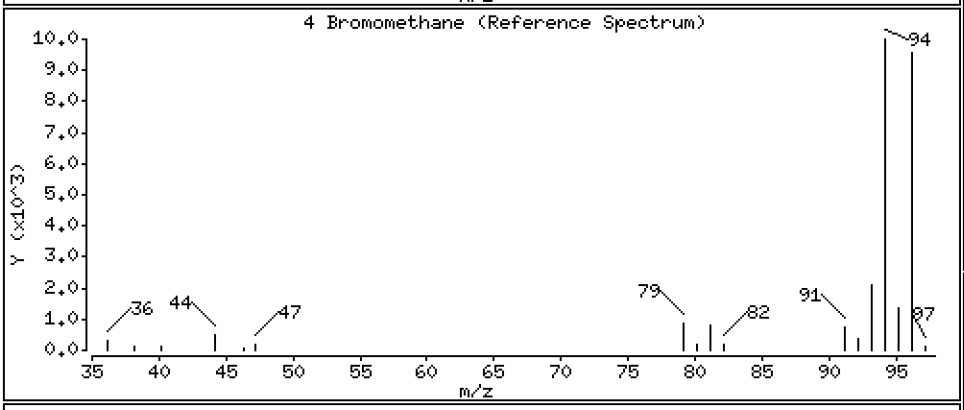
Column diameter: 0.18

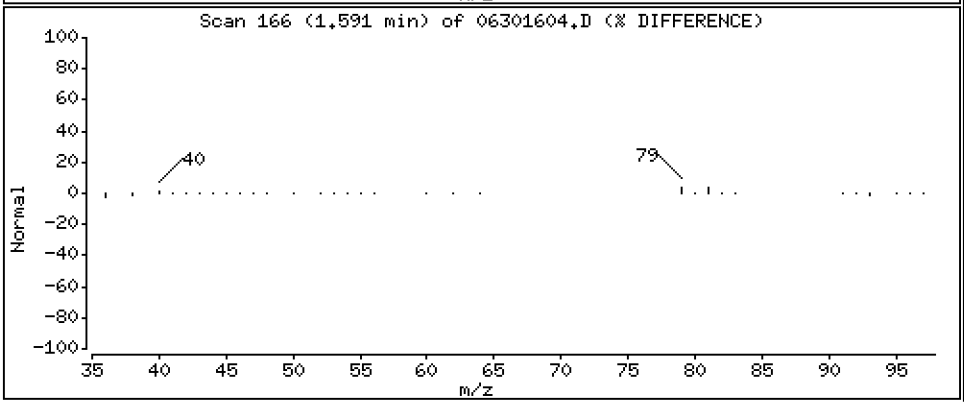
4 Bromomethane

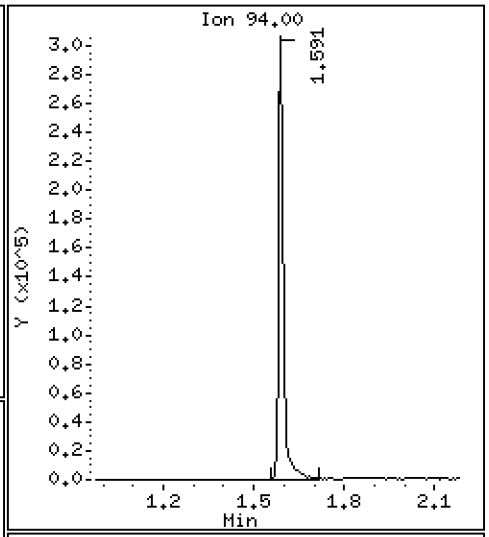
Concentration: 27.312 ug/Kg

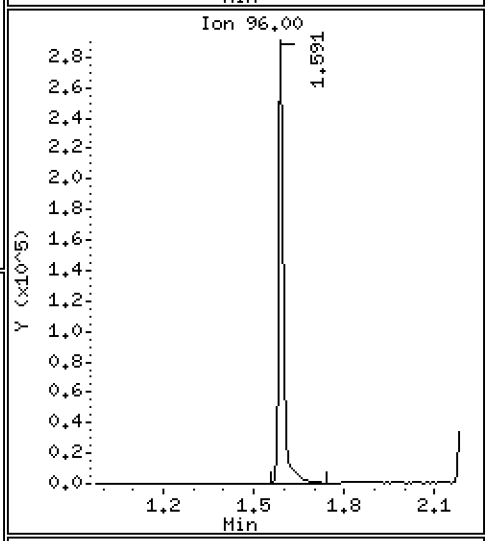


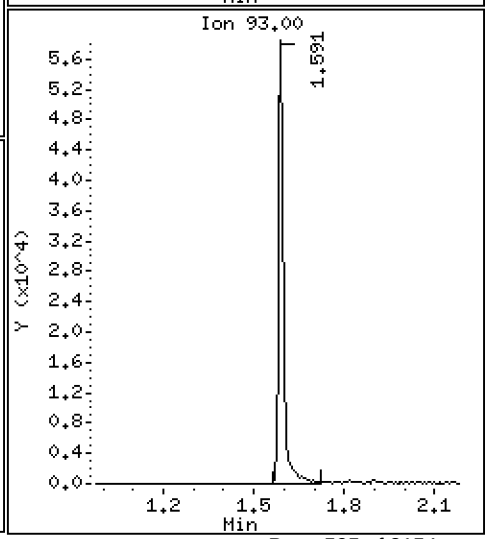












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

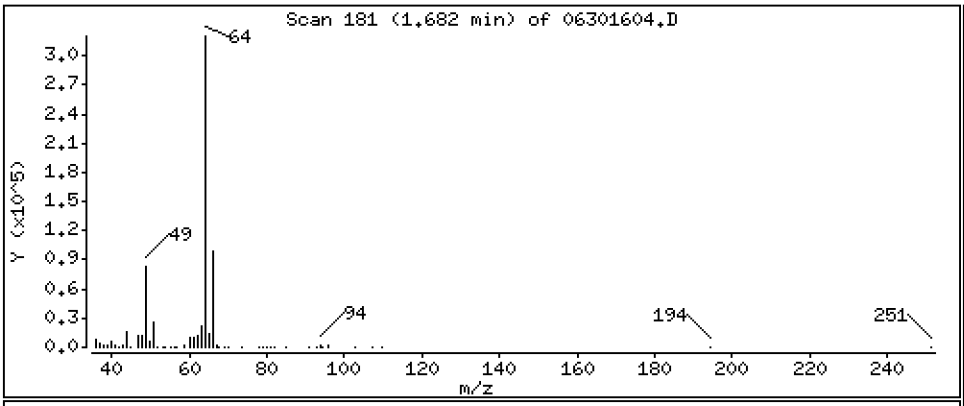
Operator: PB

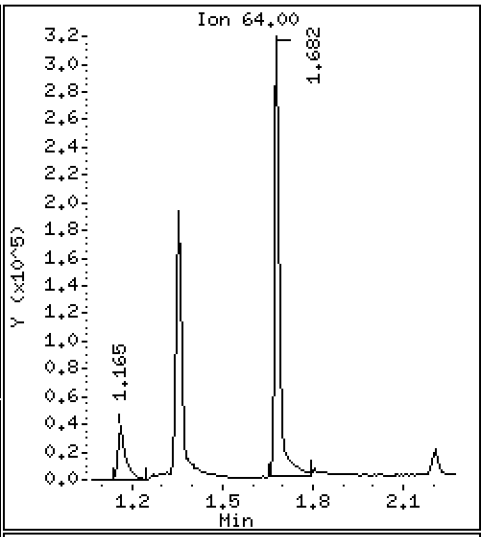
Column phase: RTXVMS

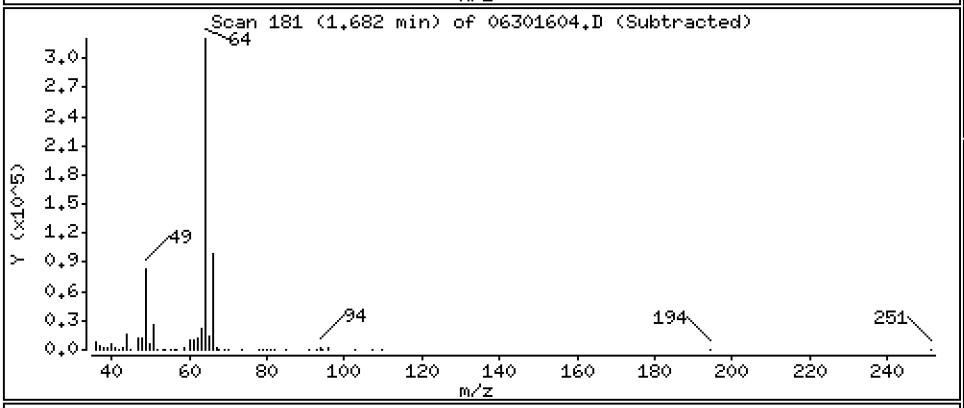
Column diameter: 0.18

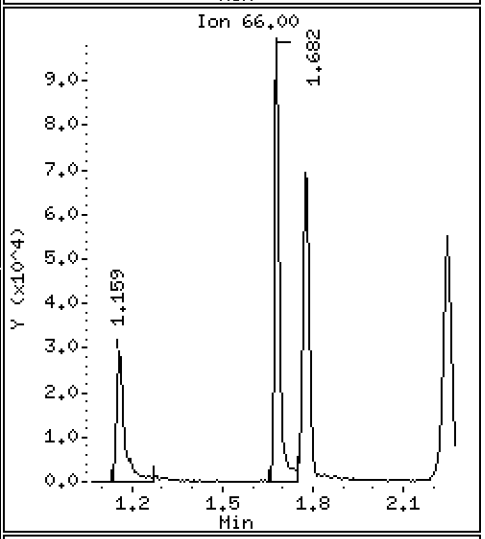
5 Chloroethane

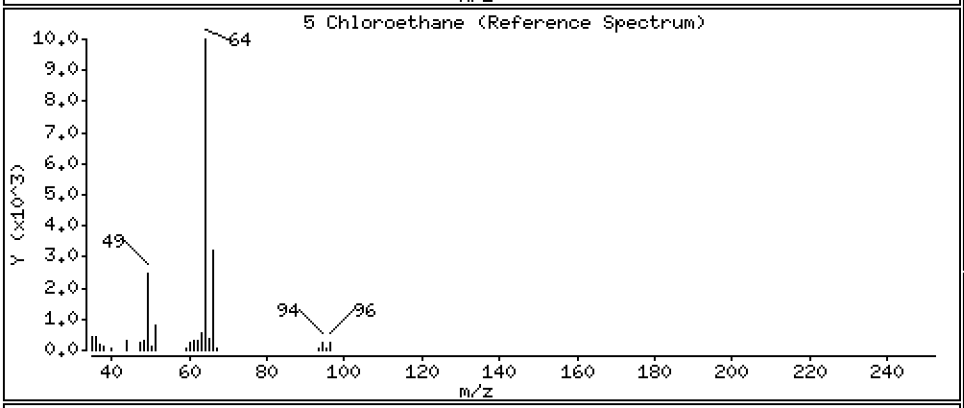
Concentration: 41.566 ug/Kg

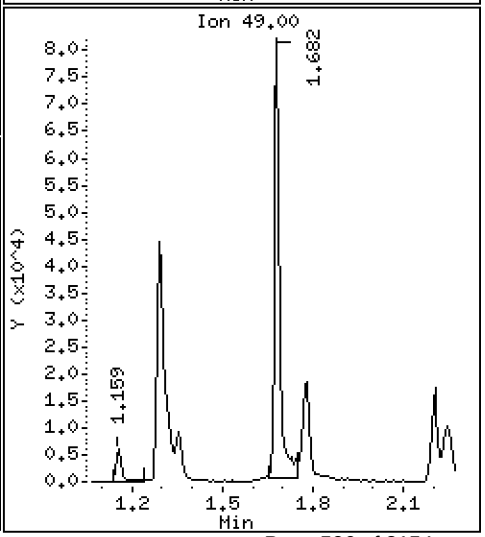


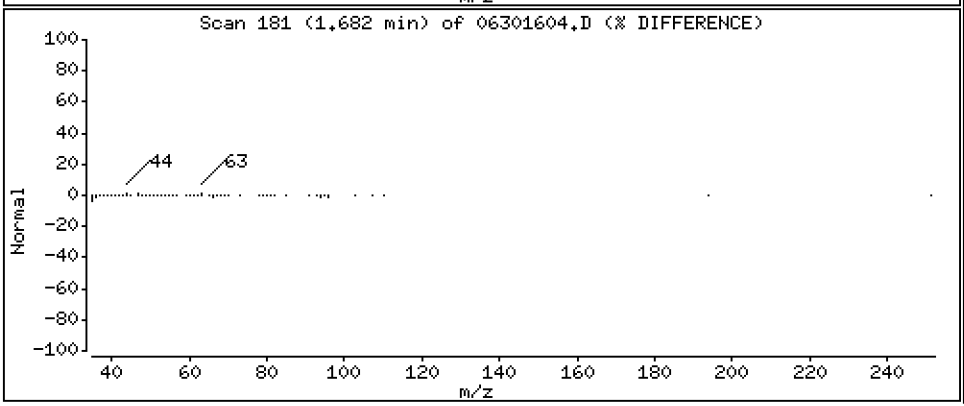












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

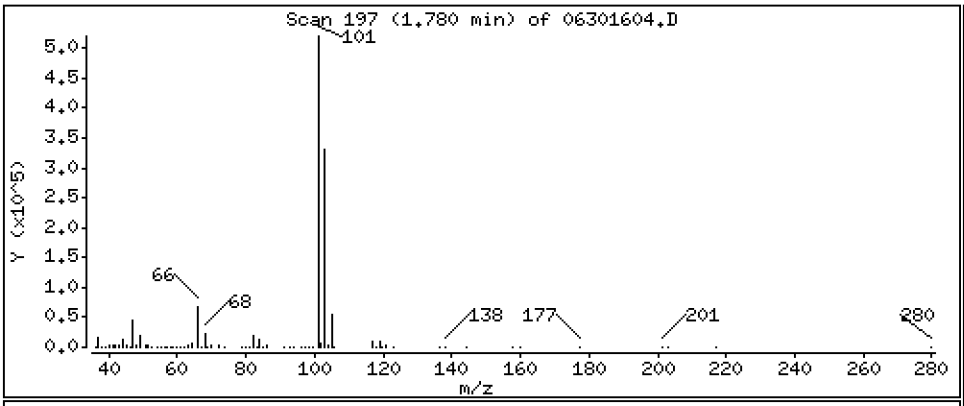
Operator: PB

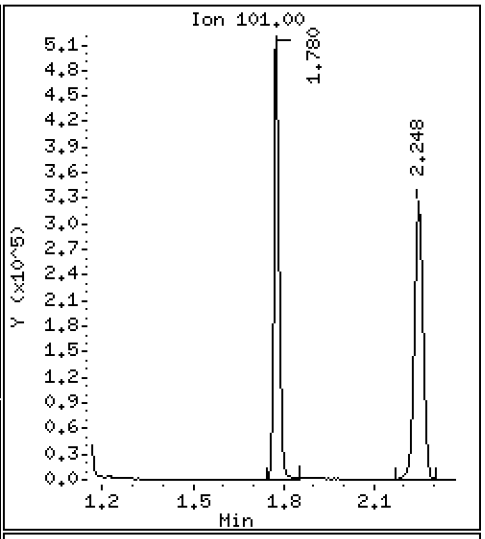
Column phase: RTXVMS

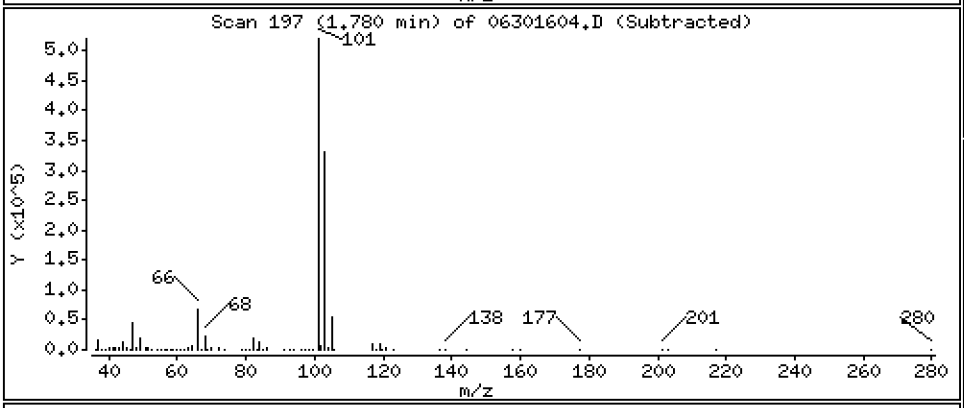
Column diameter: 0.18

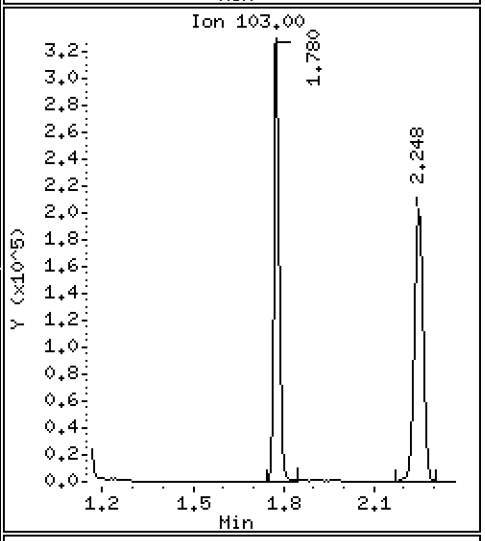
6 Trichlorofluoromethane

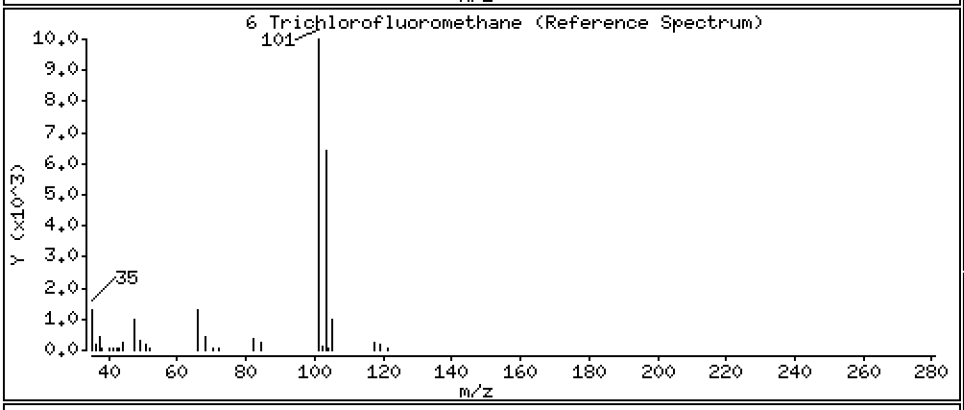
Concentration: 61.820 ug/Kg

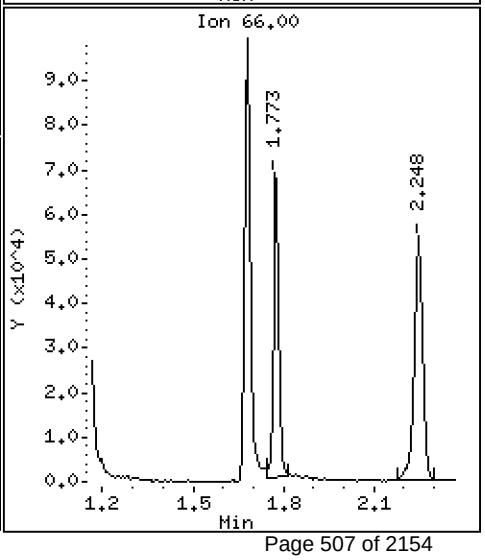


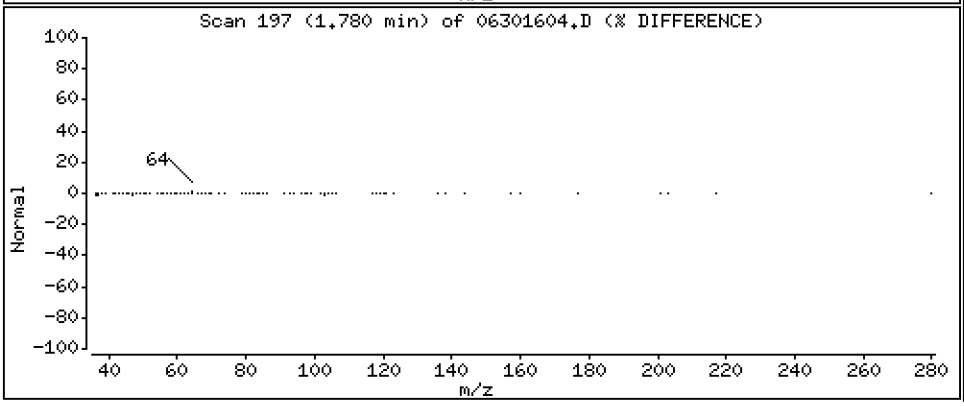












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

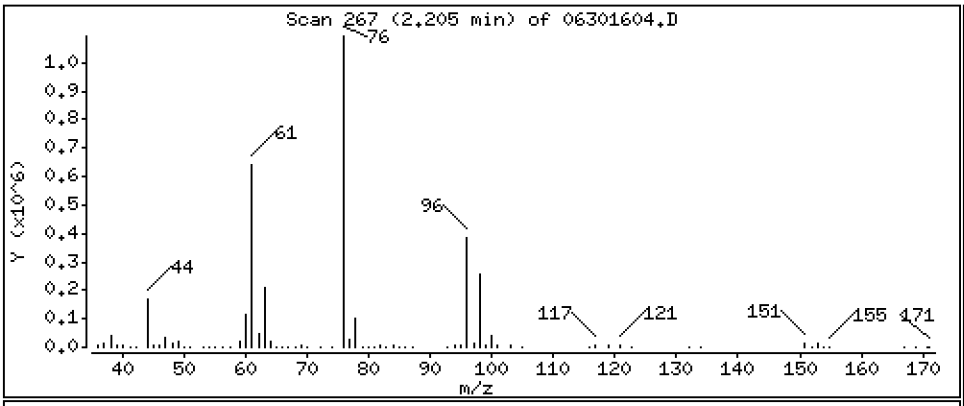
Operator: PB

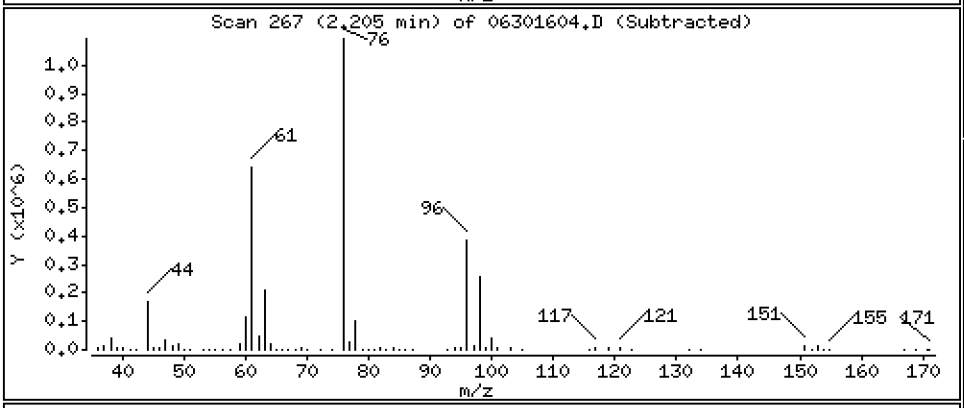
Column phase: RTXVMS

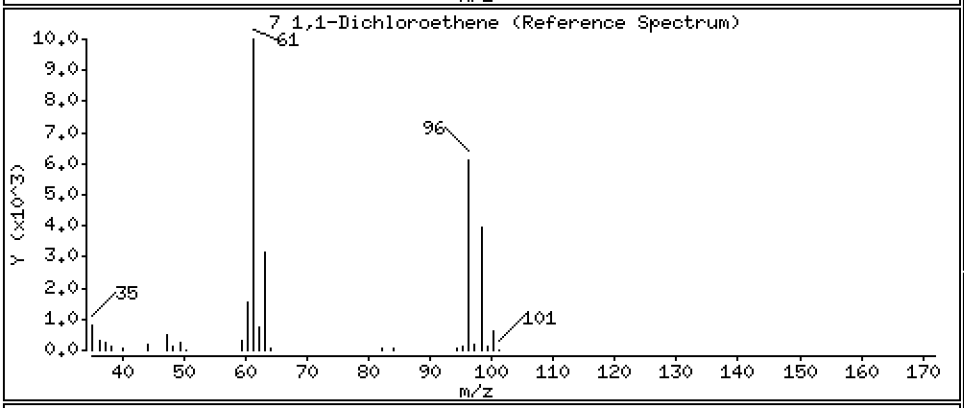
Column diameter: 0.18

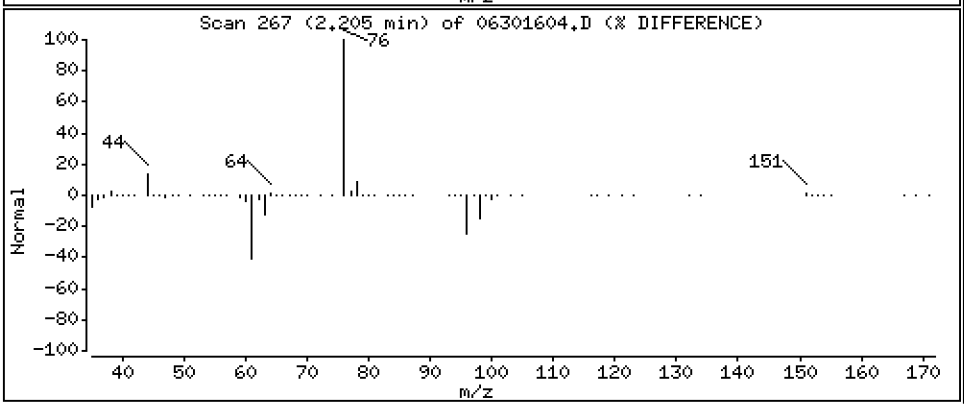
7 1,1-Dichloroethene

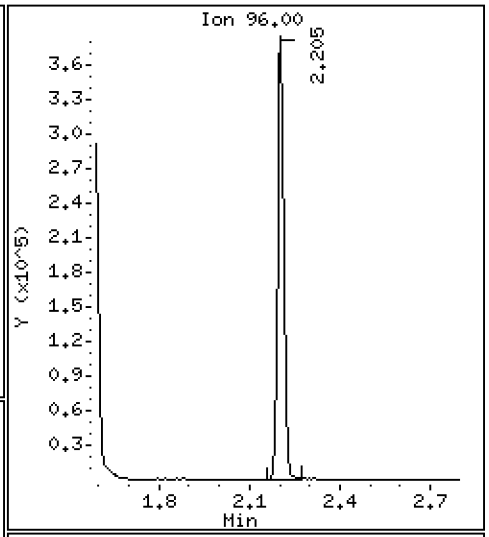
Concentration: 46.183 ug/Kg

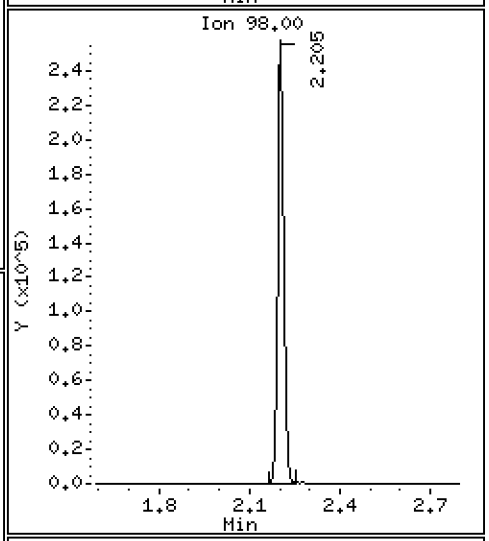


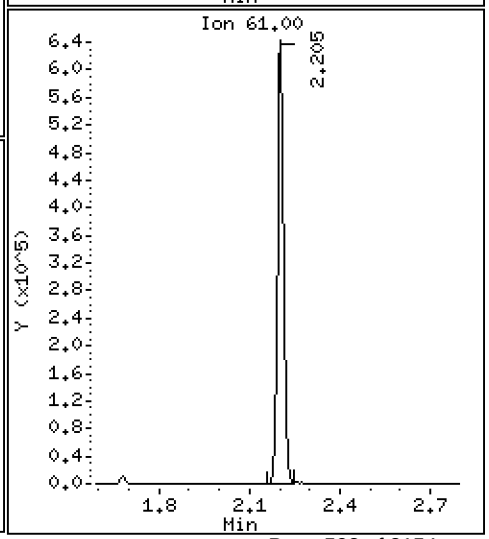












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

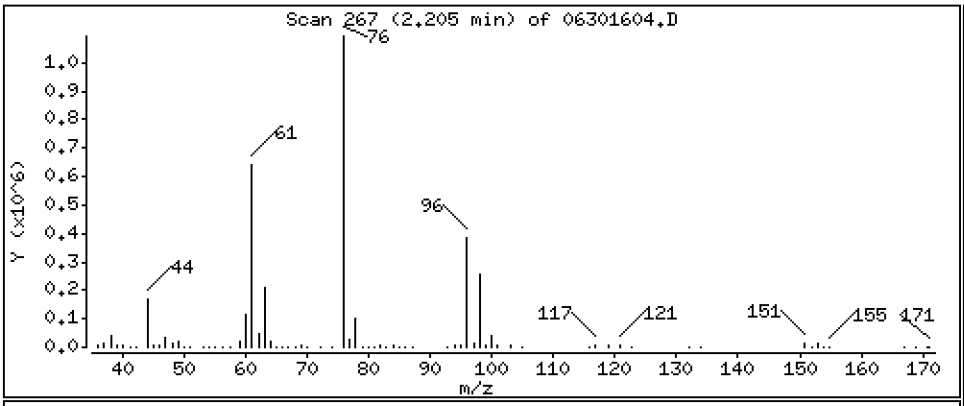
Operator: PB

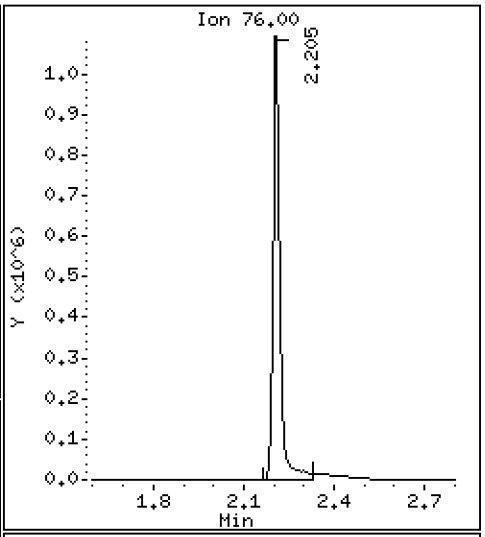
Column phase: RTXVMS

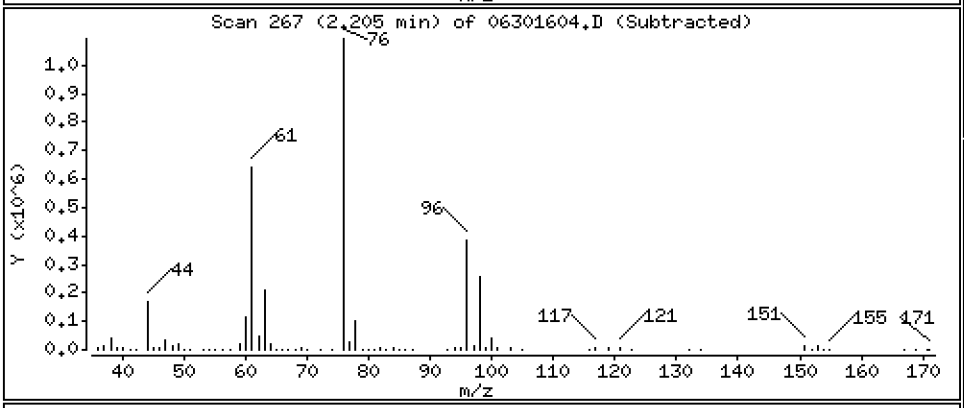
Column diameter: 0.18

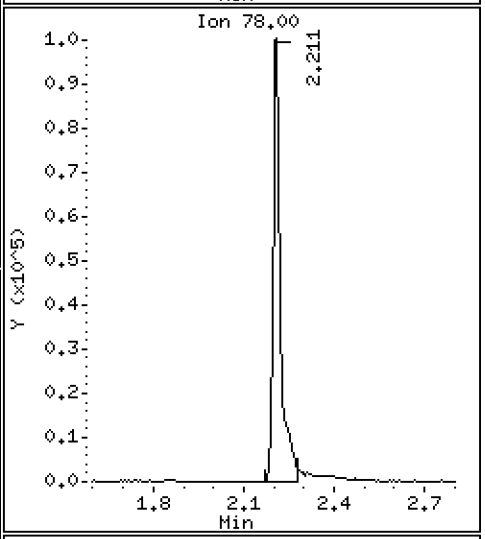
8 Carbon Disulfide

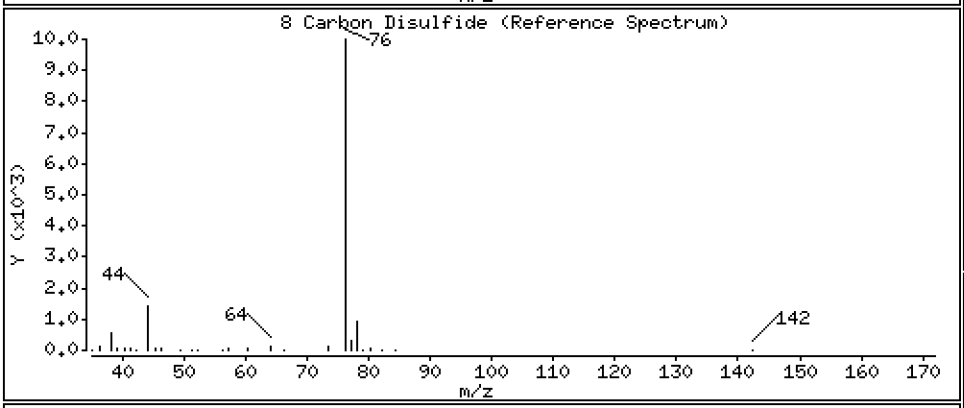
Concentration: 45.543 ug/Kg

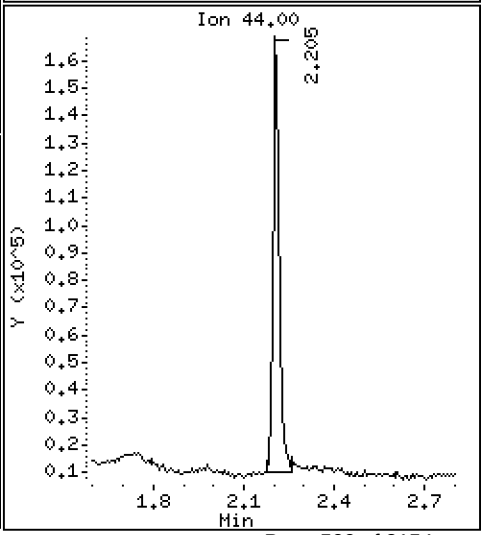


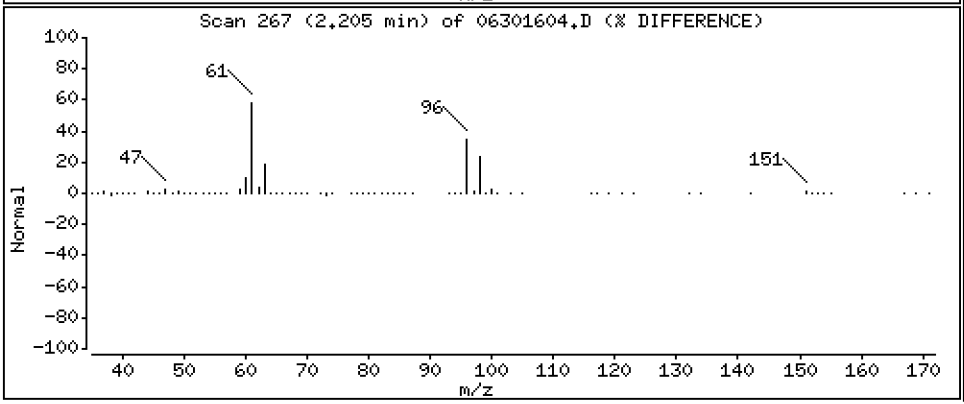












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

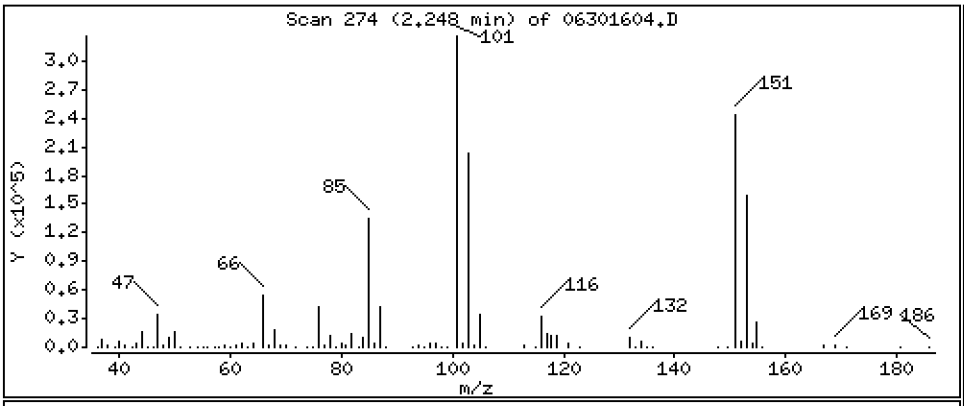
Operator: PB

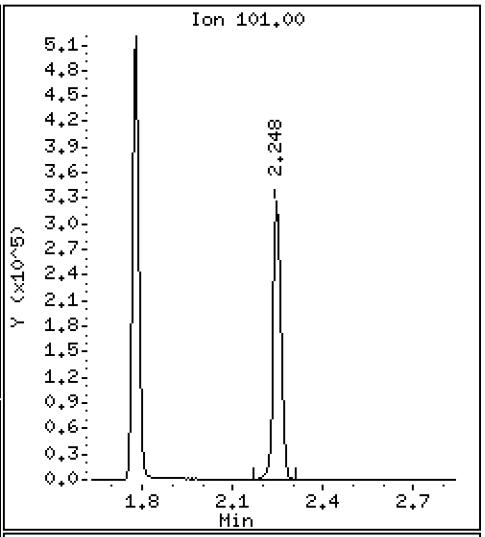
Column phase: RTXVMS

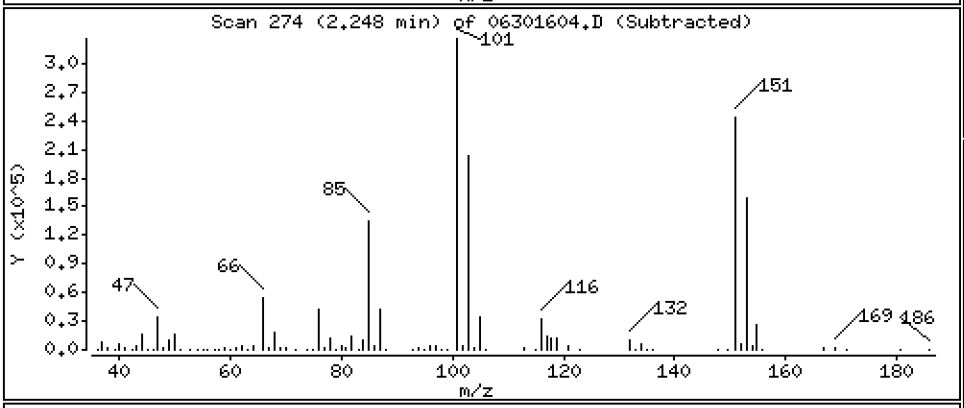
Column diameter: 0.18

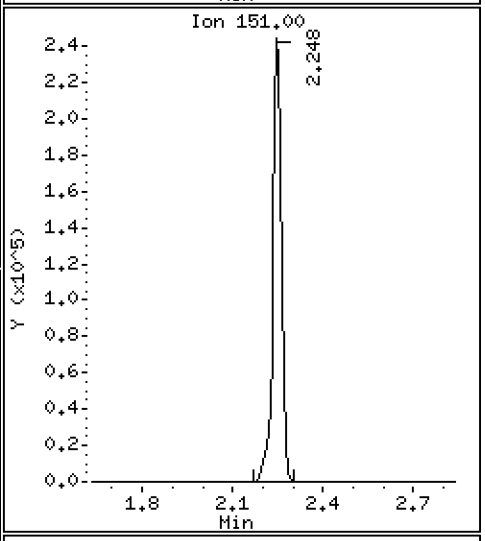
9 112Trichloro122Trifluoroethane

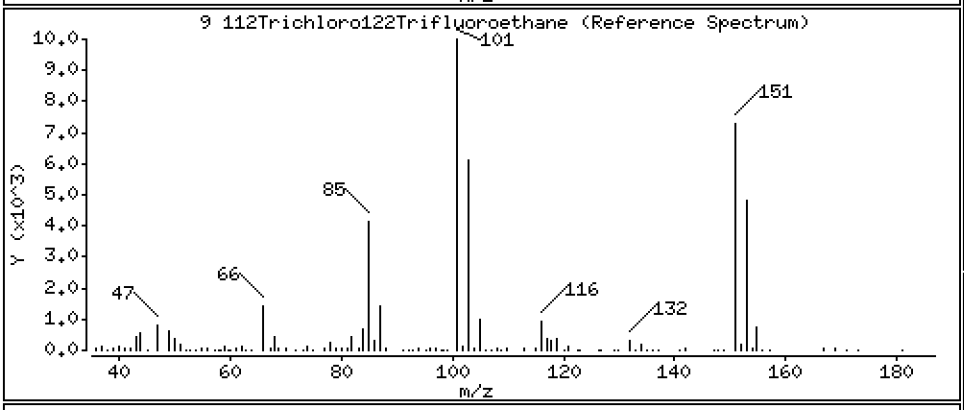
Concentration: 47.293 ug/Kg

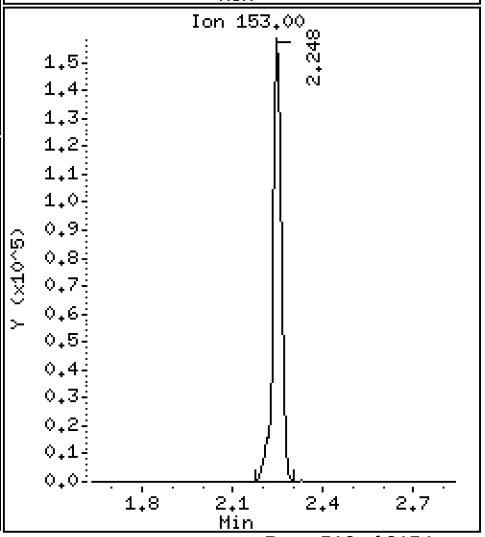


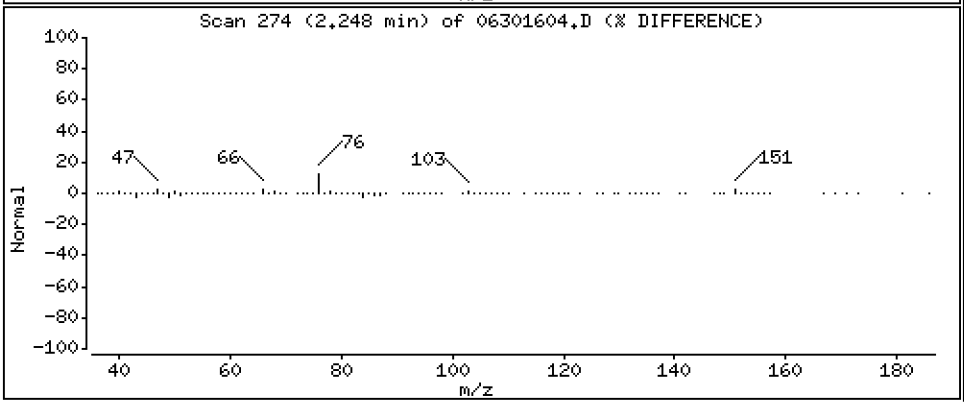












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

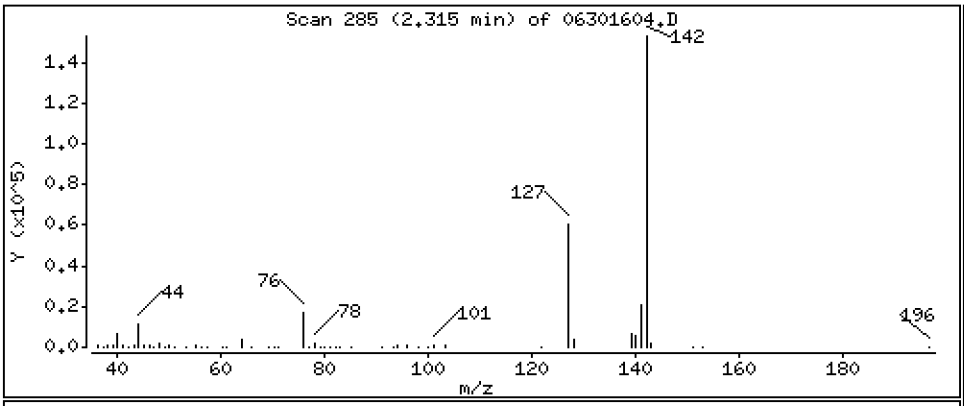
Operator: PB

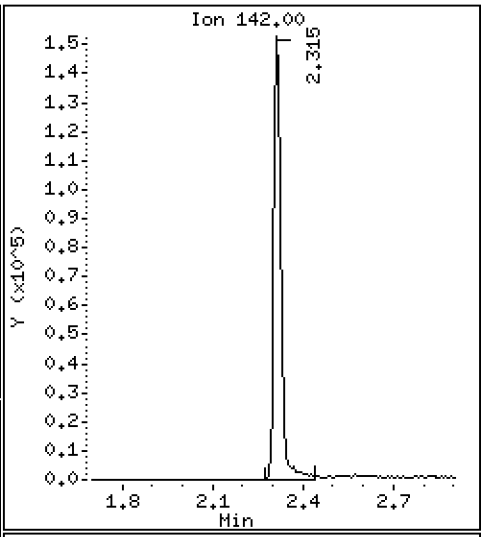
Column phase: RTXVMS

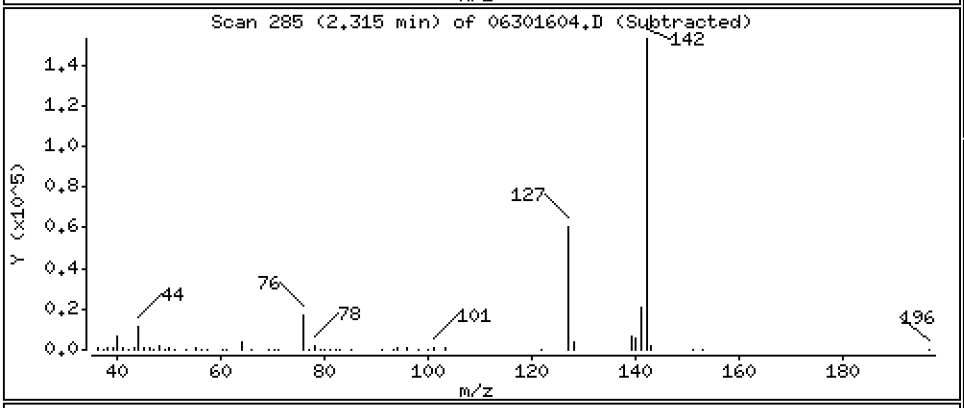
Column diameter: 0.18

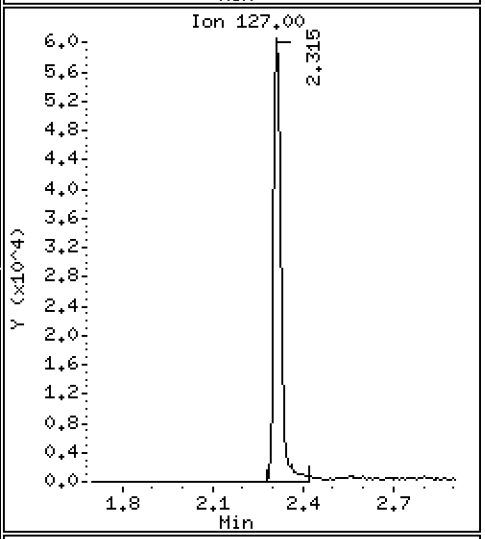
10 Iodomethane

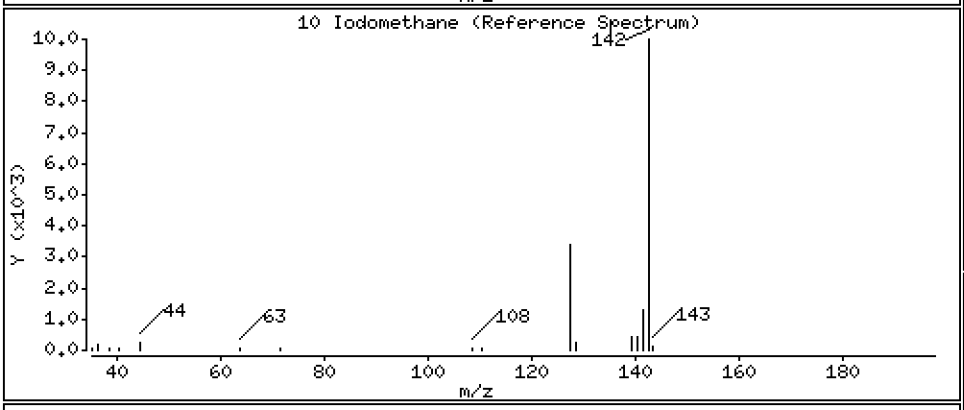
Concentration: 31.682 ug/Kg

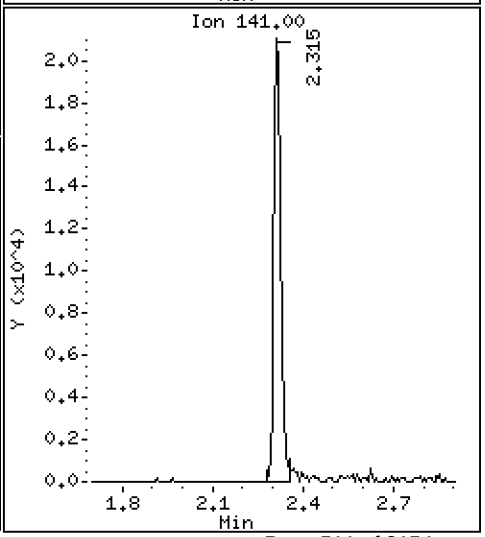


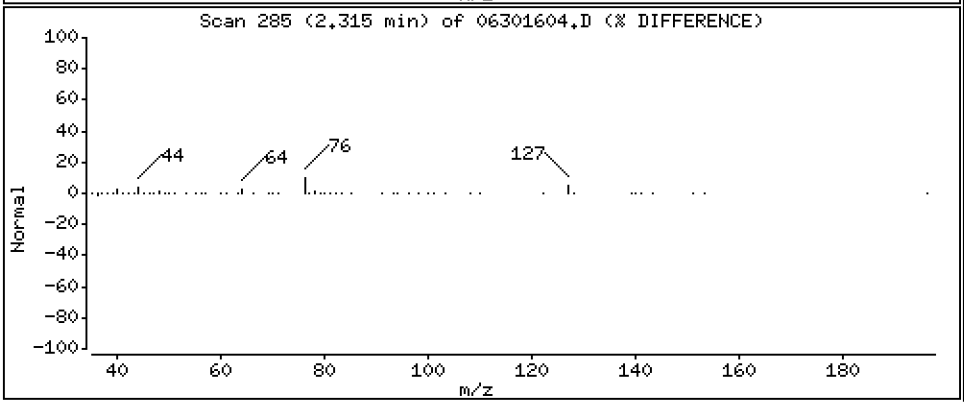












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

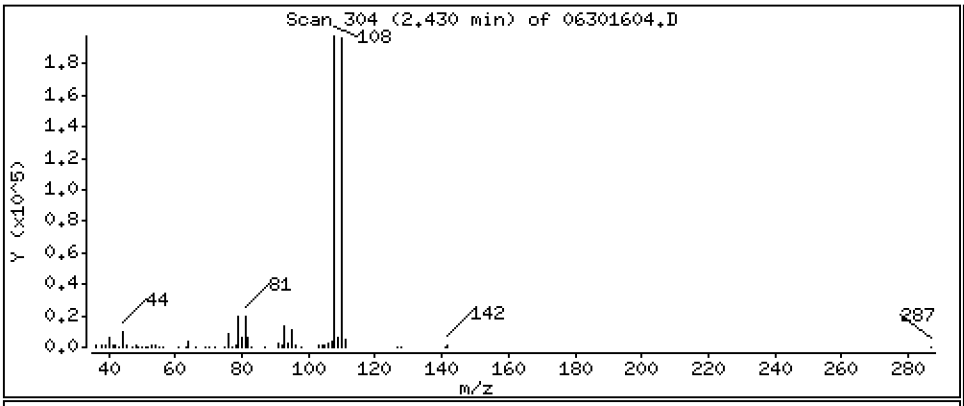
Operator: PB

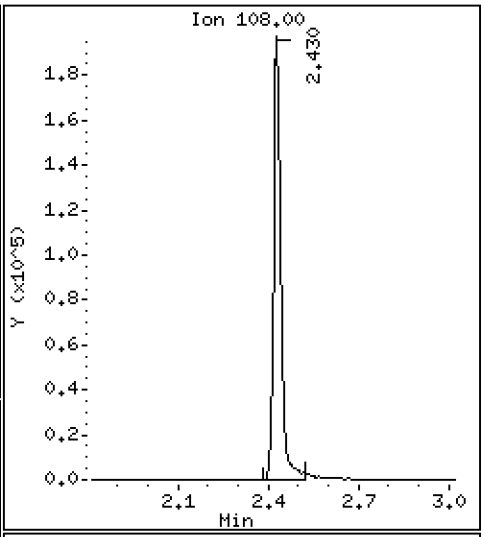
Column phase: RTXVMS

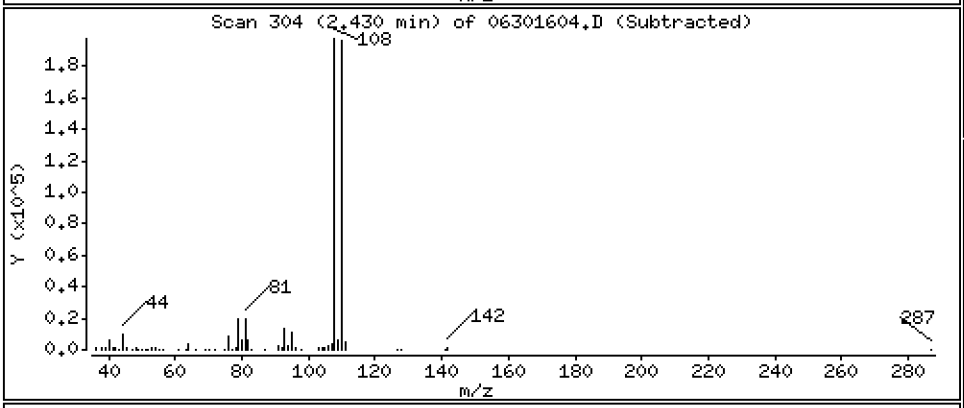
Column diameter: 0.18

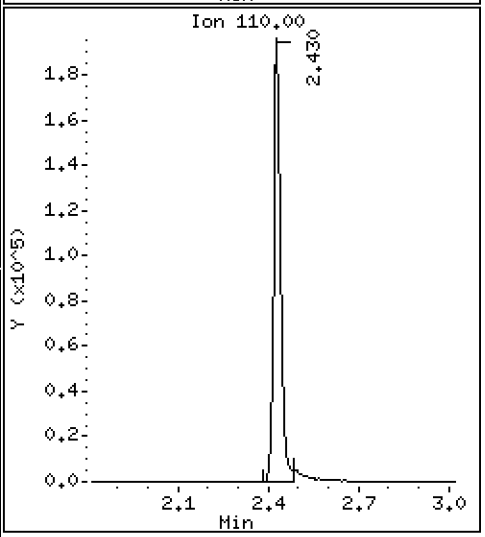
11 Bromoethane

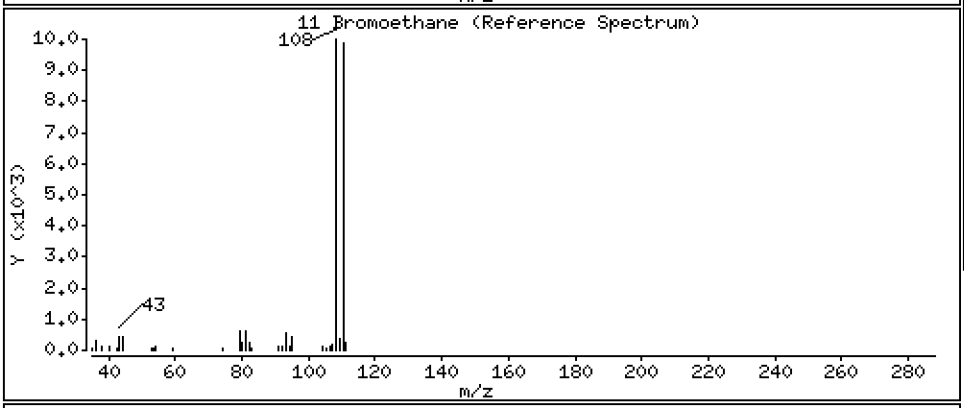
Concentration: 47.457 ug/Kg

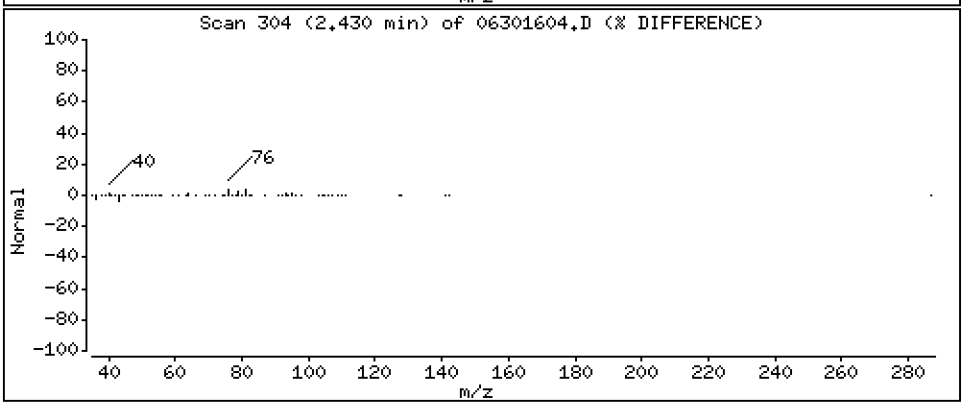












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

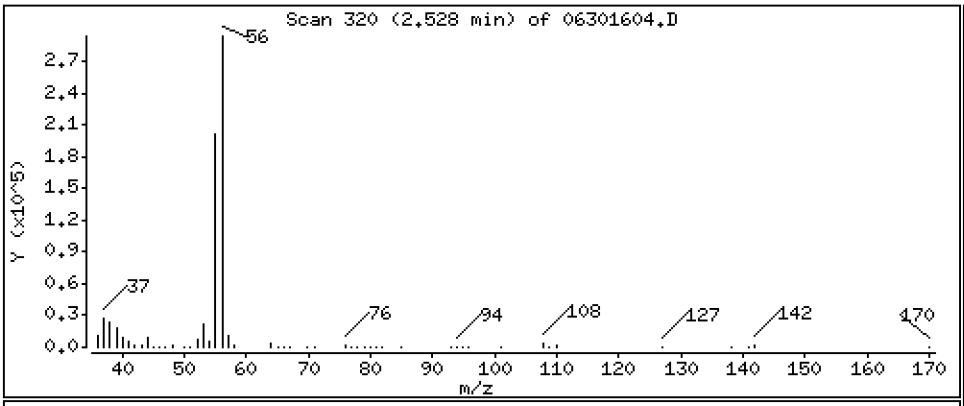
Operator: PB

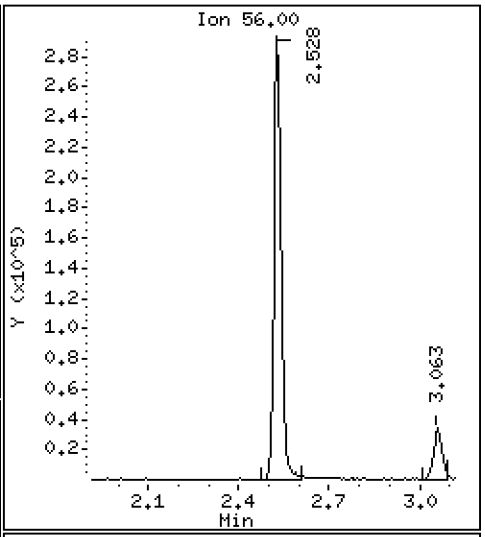
Column phase: RTXVMS

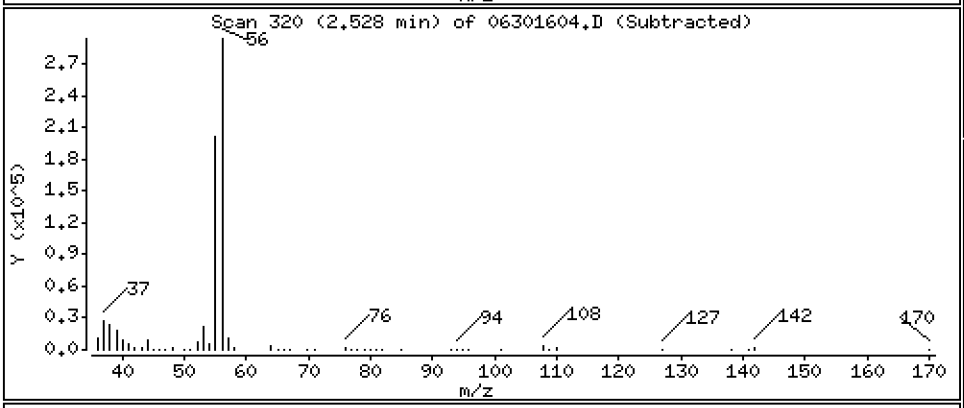
Column diameter: 0.18

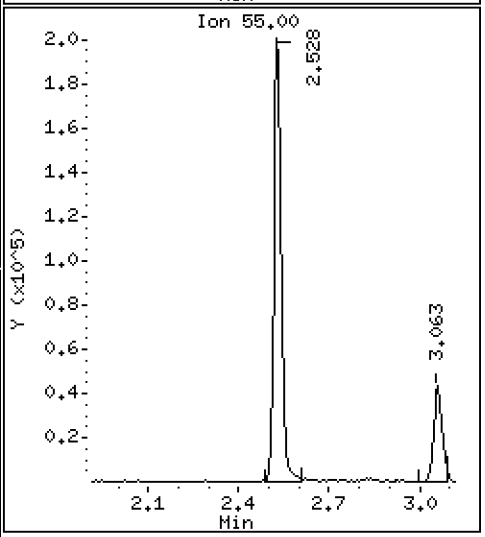
12 Acrolein

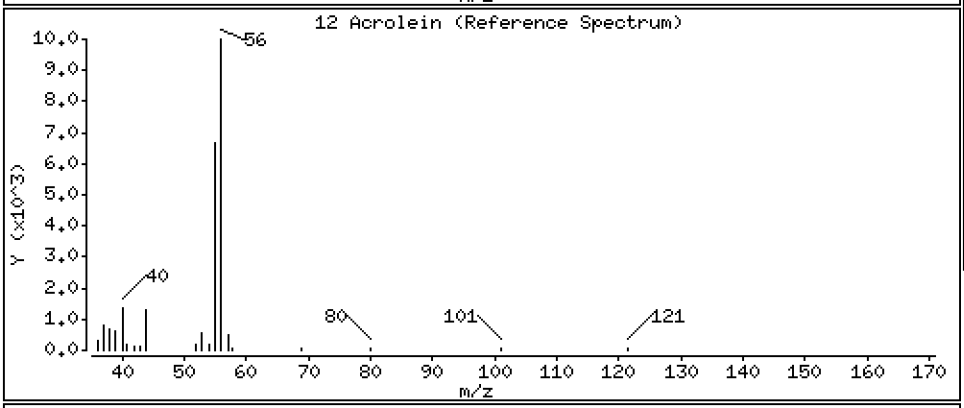
Concentration: 201.28 ug/Kg

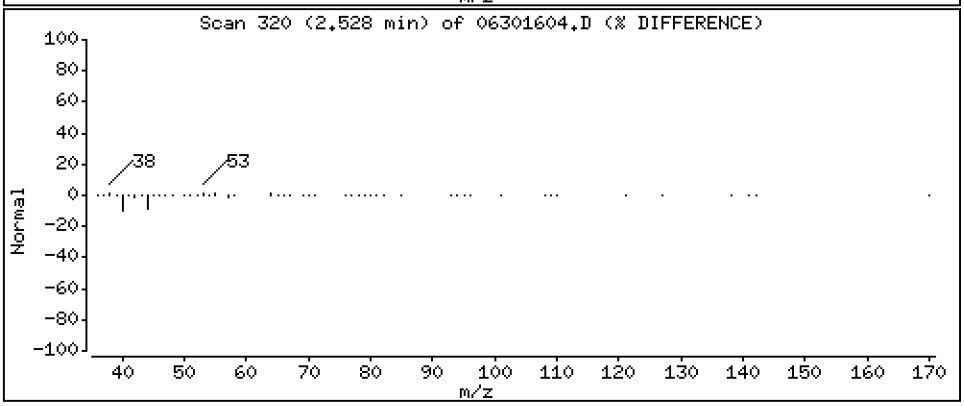












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

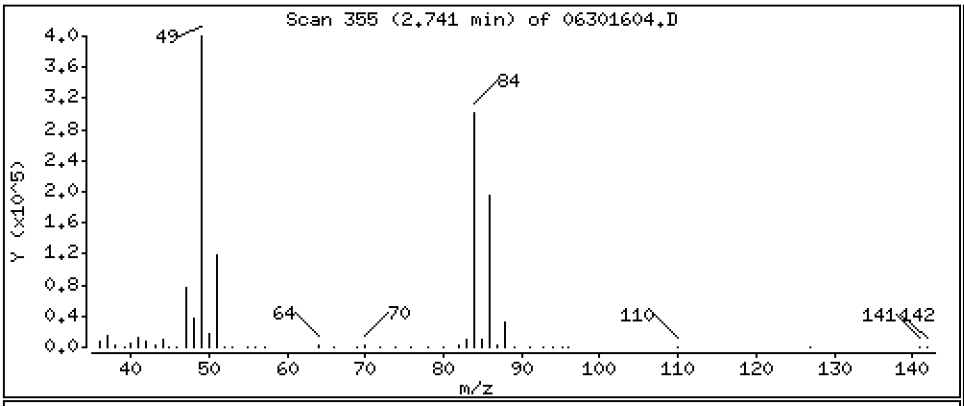
Operator: PB

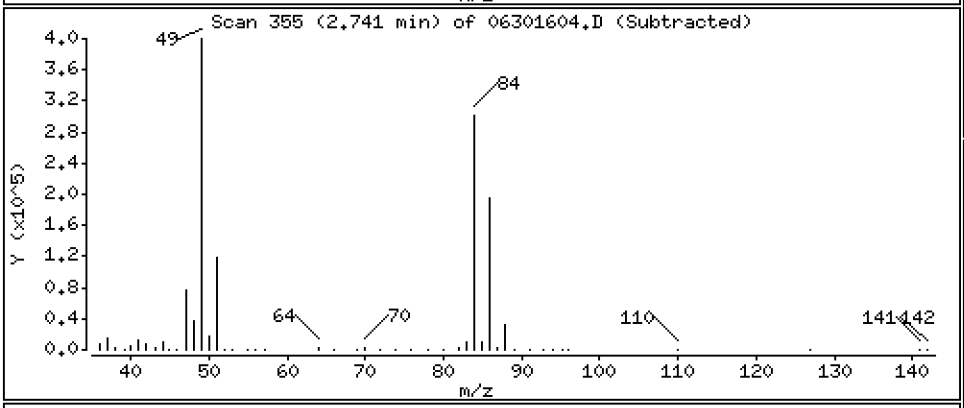
Column phase: RTXVMS

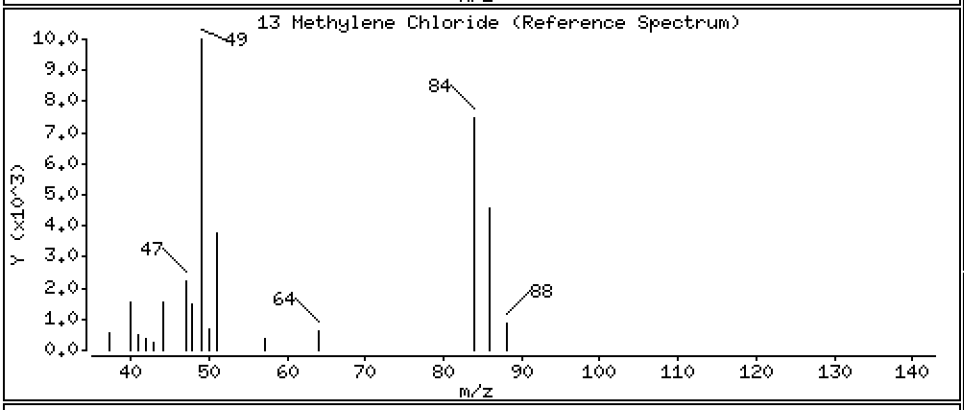
Column diameter: 0.18

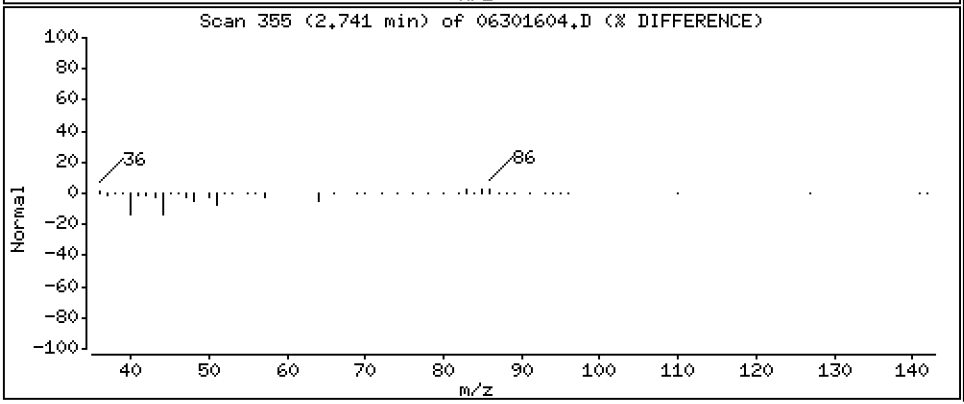
13 Methylene Chloride

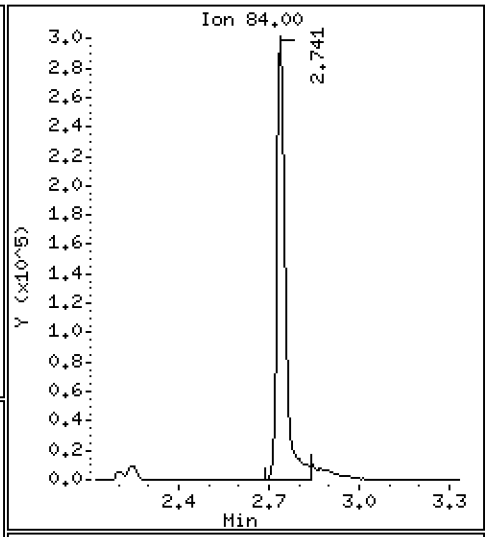
Concentration: 46.388 ug/Kg

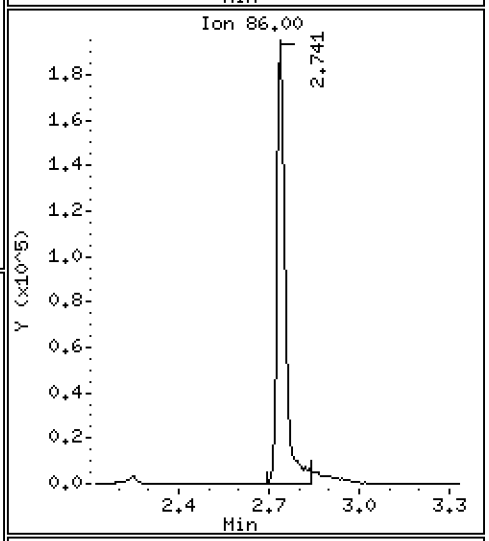


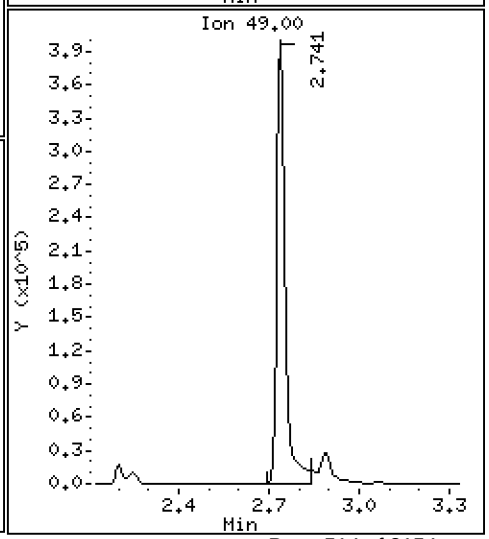












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

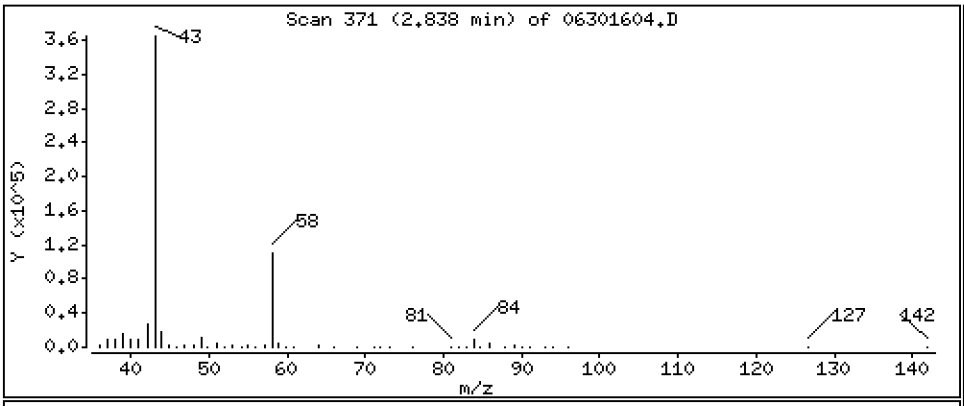
Operator: PB

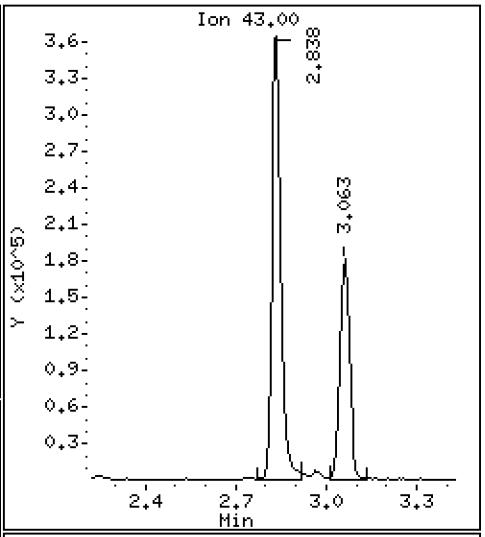
Column phase: RTXVMS

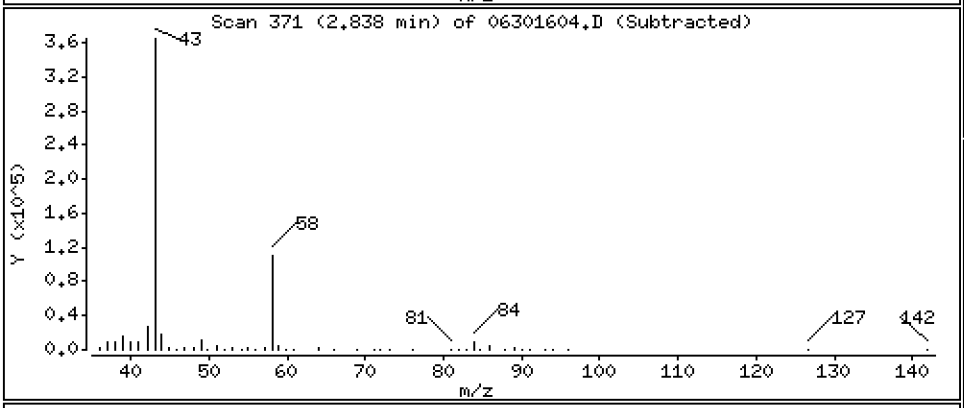
Column diameter: 0.18

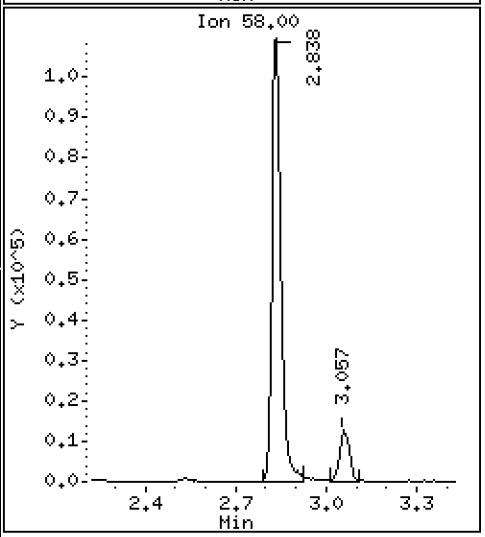
14 Acetone

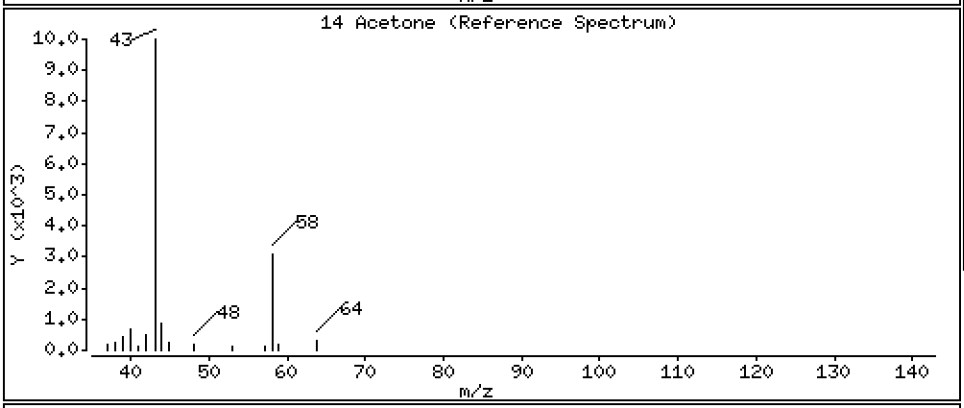
Concentration: 180.78 ug/Kg

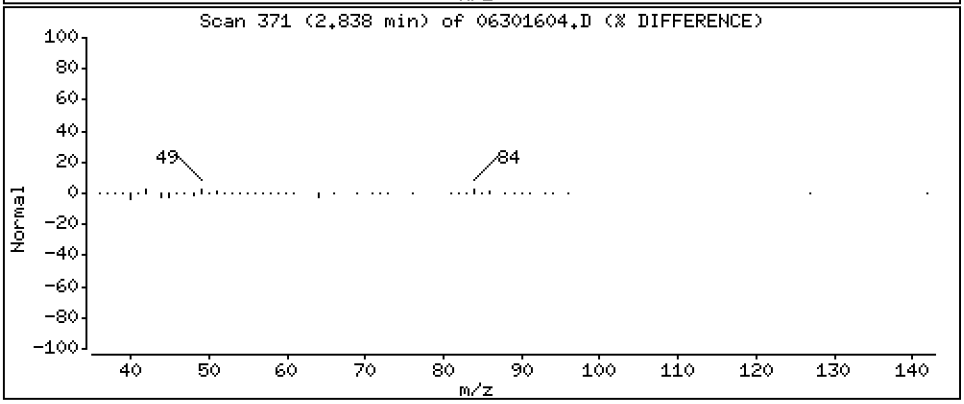












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

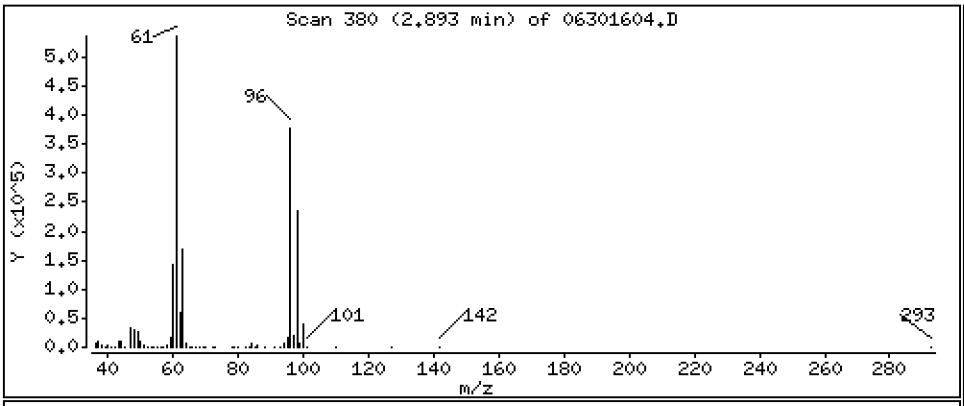
Operator: PB

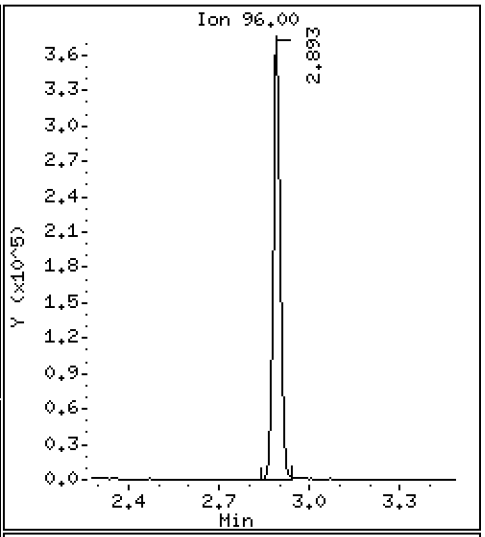
Column phase: RTXVMS

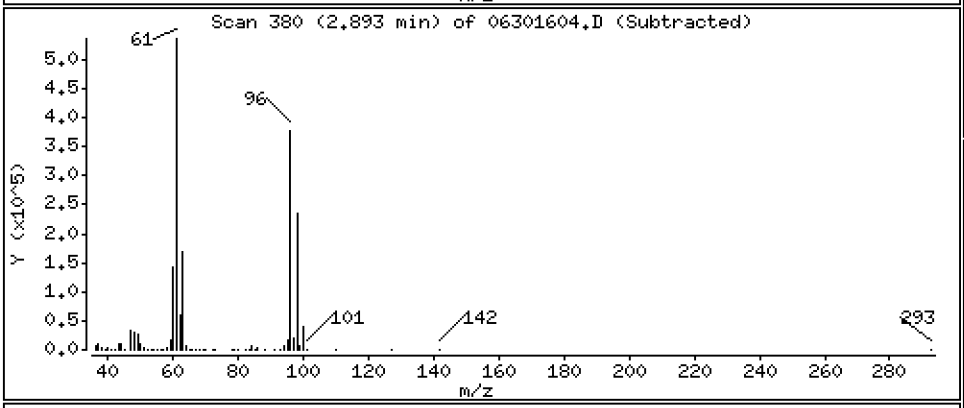
Column diameter: 0.18

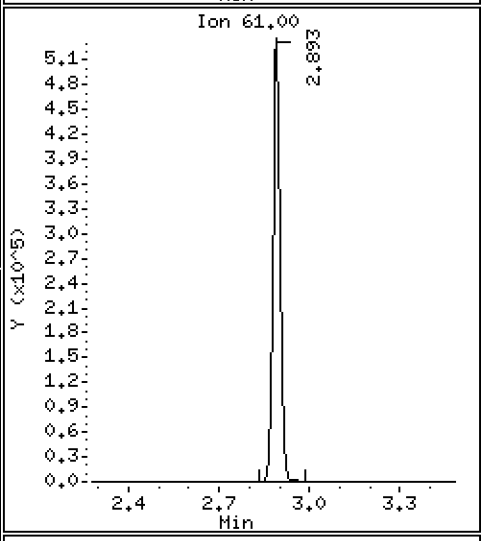
15 Trans-1,2-Dichloroethene

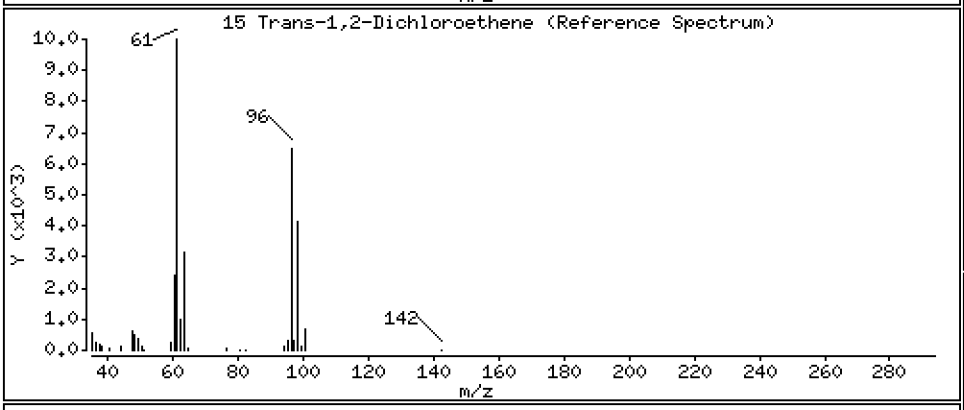
Concentration: 45.501 ug/Kg

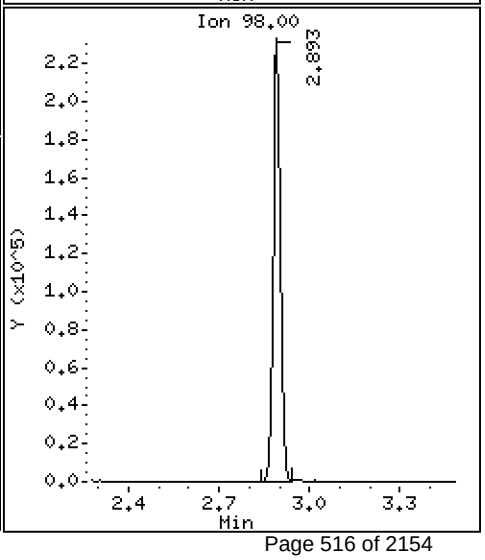


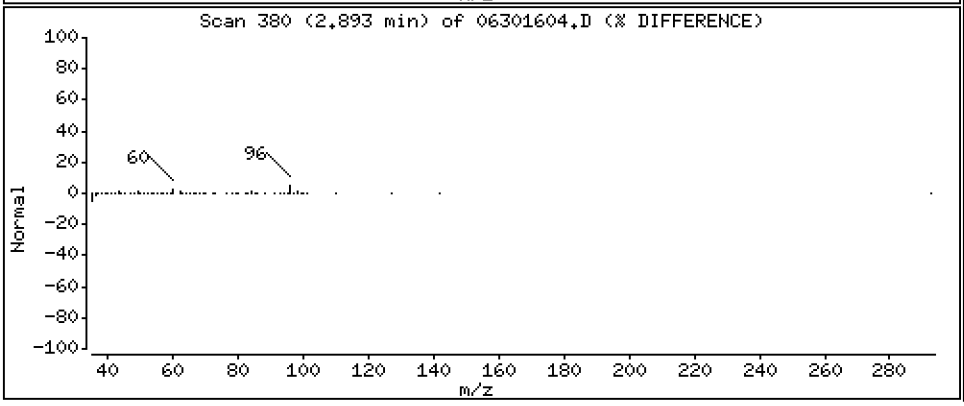












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

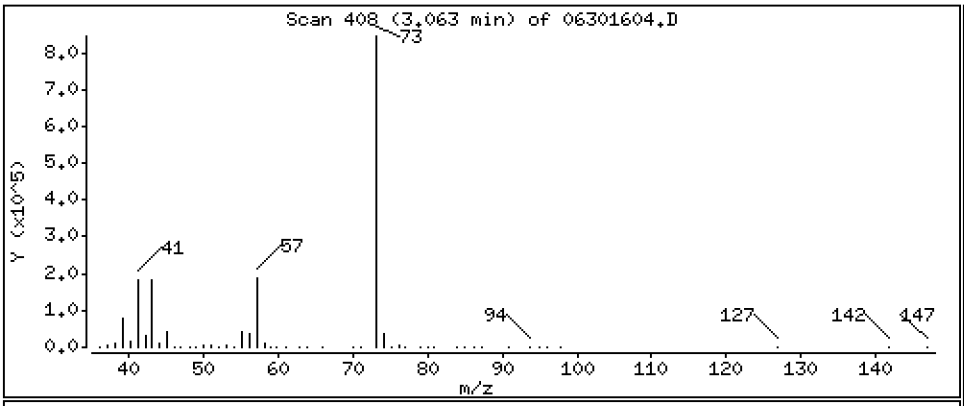
Operator: PB

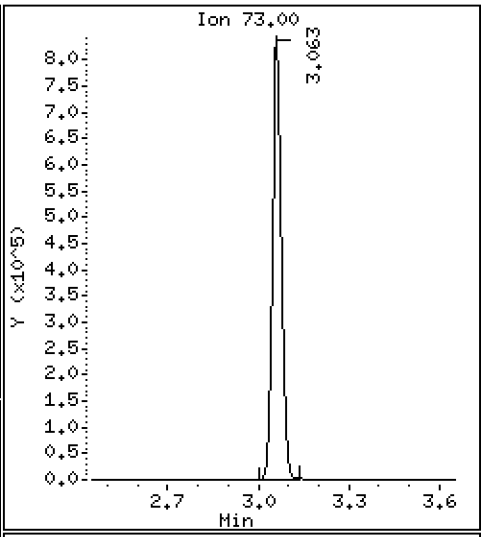
Column phase: RTXVMS

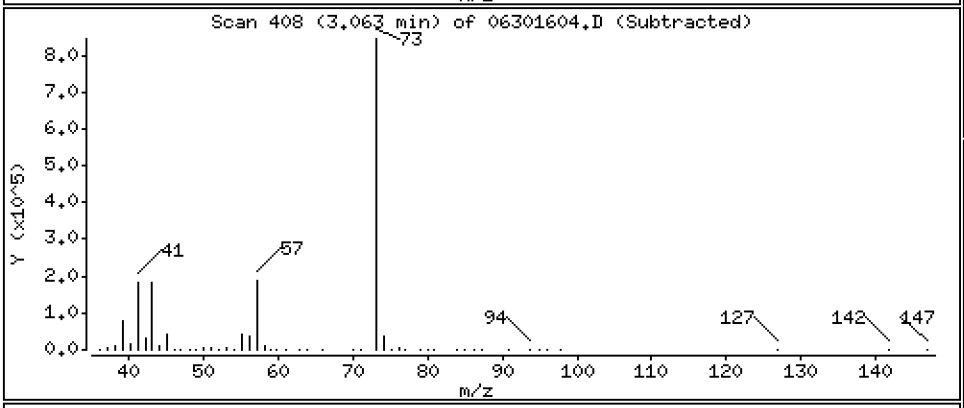
Column diameter: 0.18

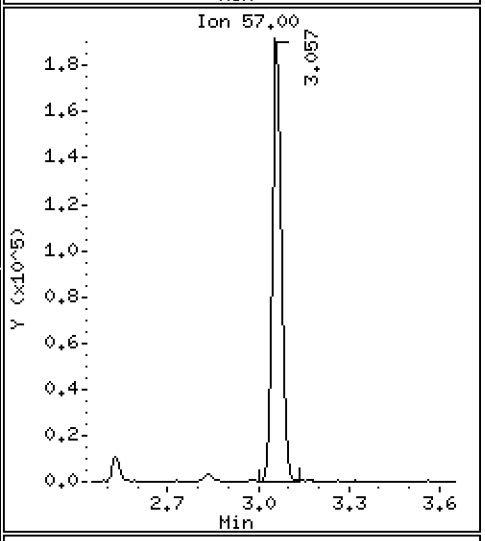
16 Methyl tert butyl ether

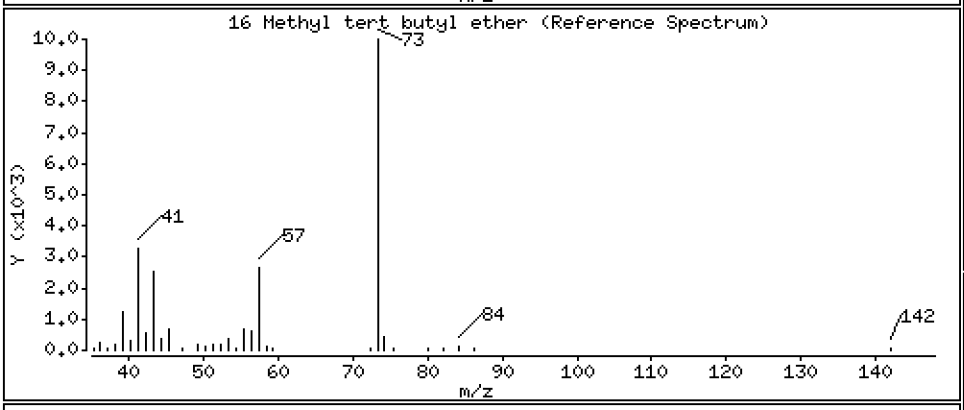
Concentration: 42.550 ug/Kg

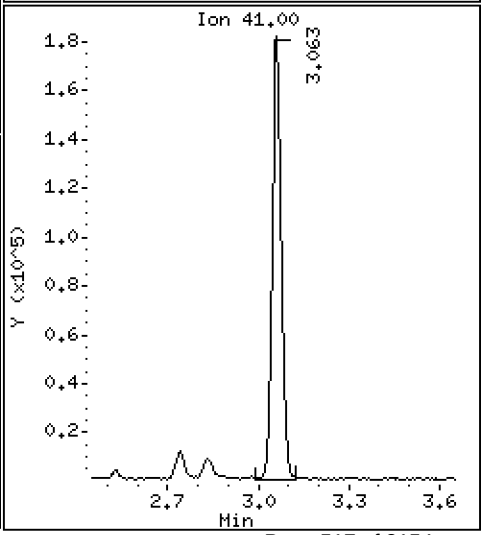


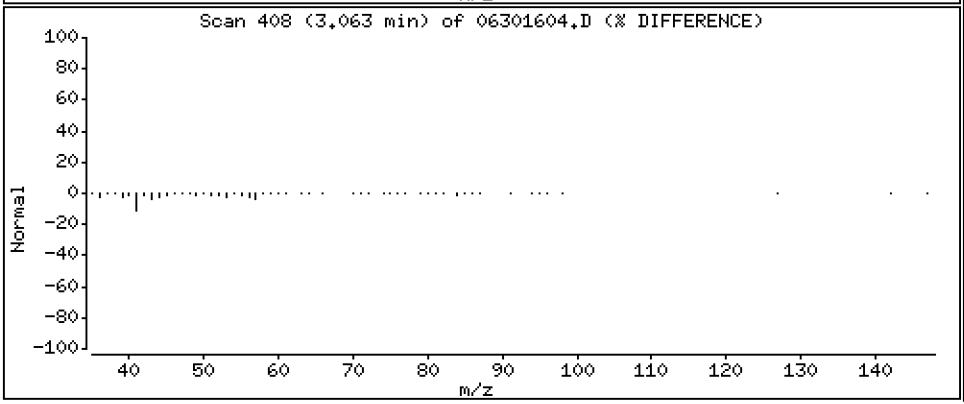












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

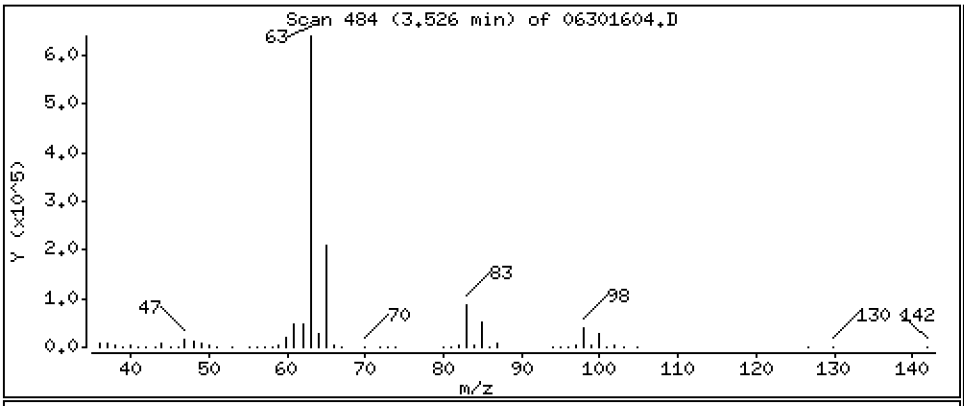
Operator: PB

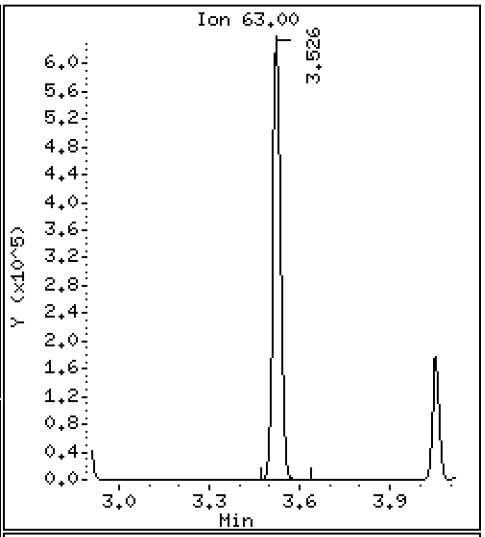
Column phase: RTXVMS

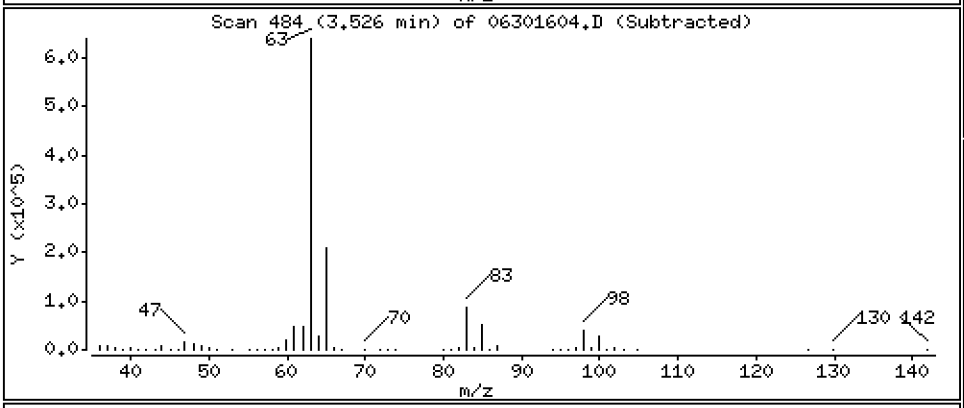
Column diameter: 0.18

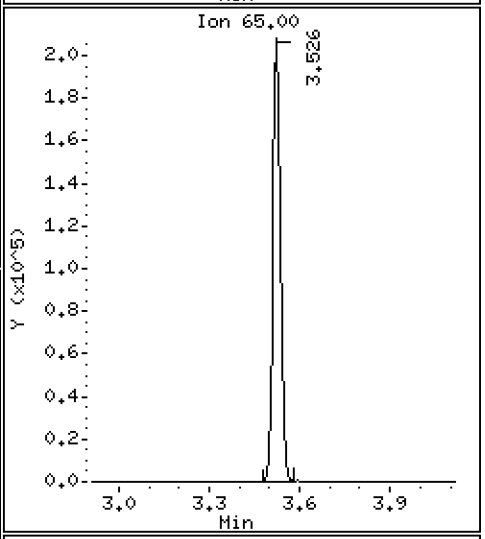
17 1,1-Dichloroethane

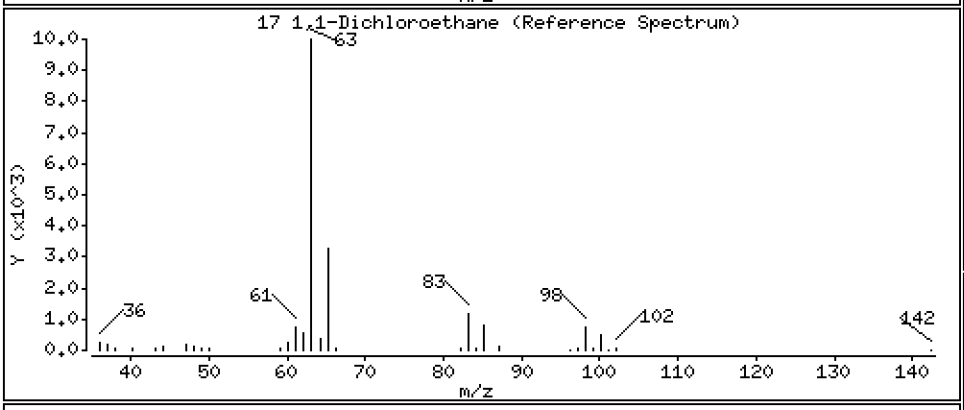
Concentration: 41.498 ug/Kg

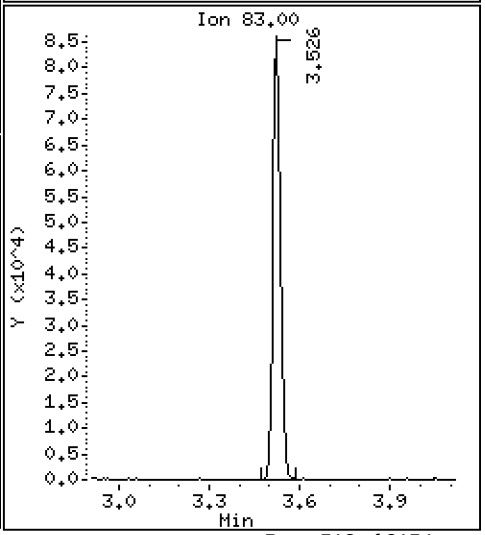


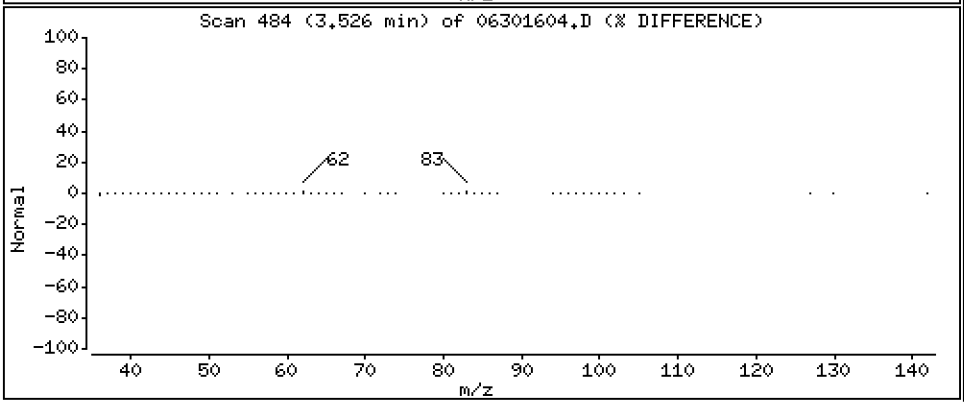












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

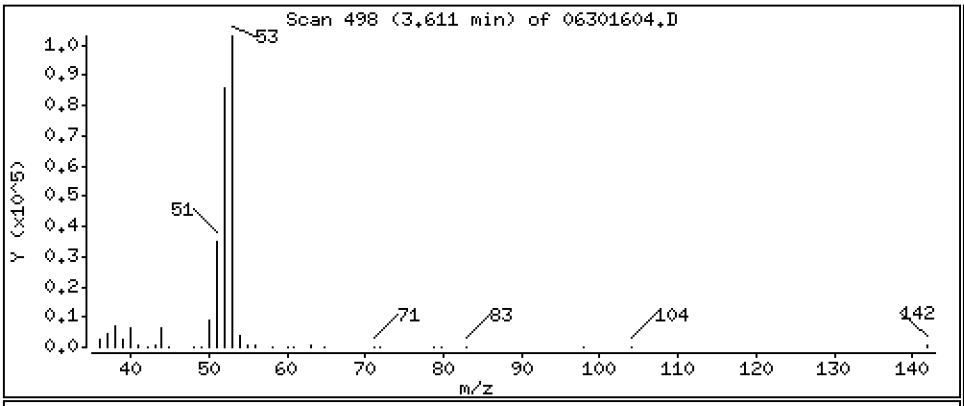
Operator: PB

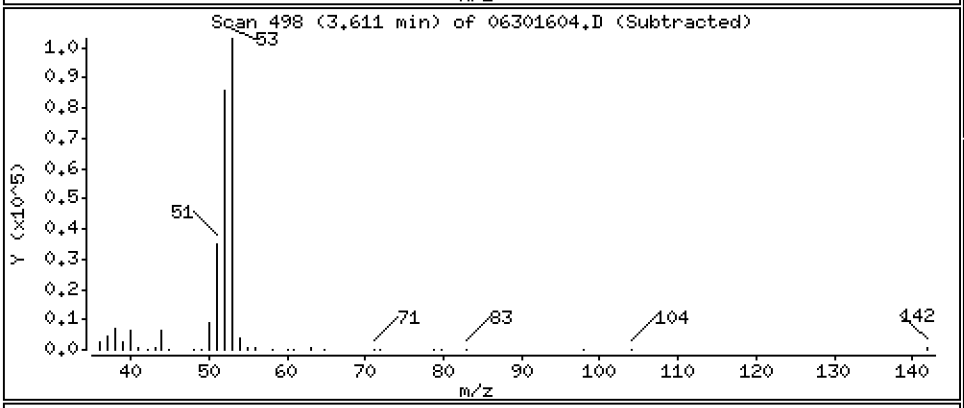
Column phase: RTXVMS

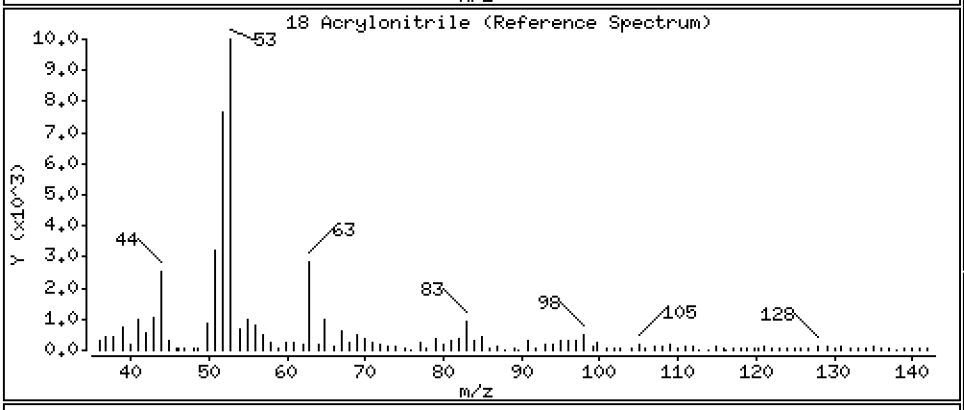
Column diameter: 0.18

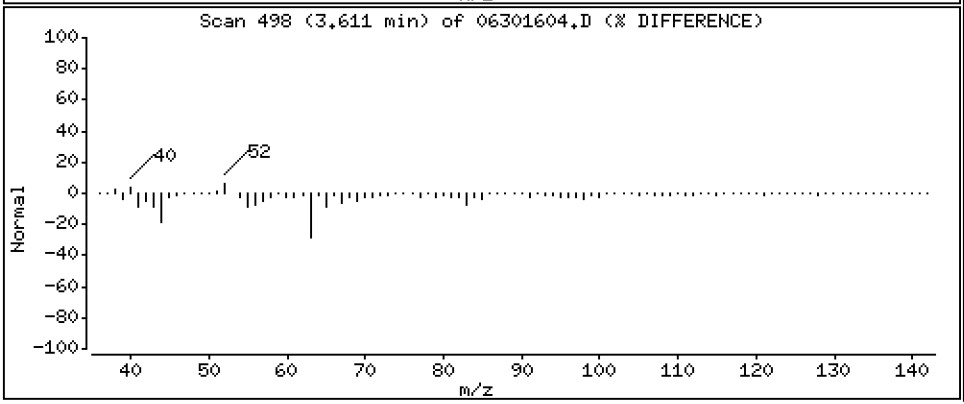
18 Acrylonitrile

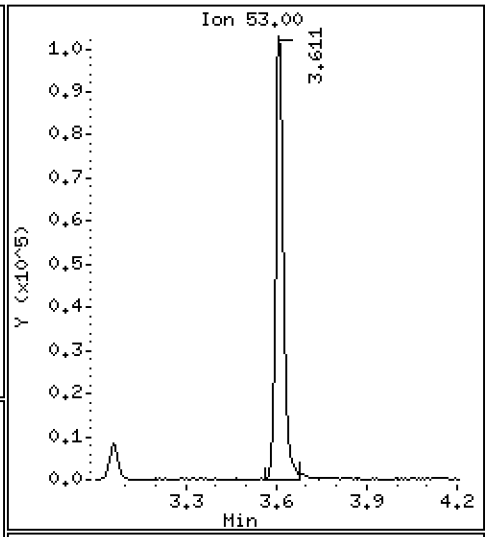
Concentration: 39.165 ug/Kg

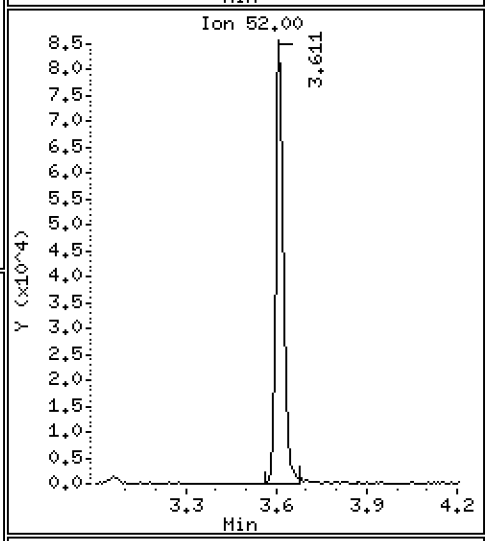


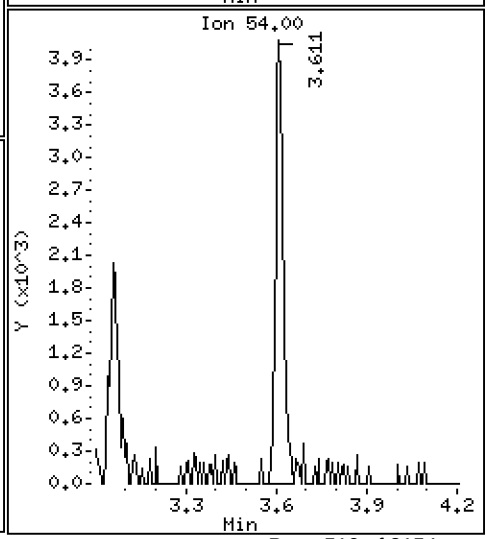












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

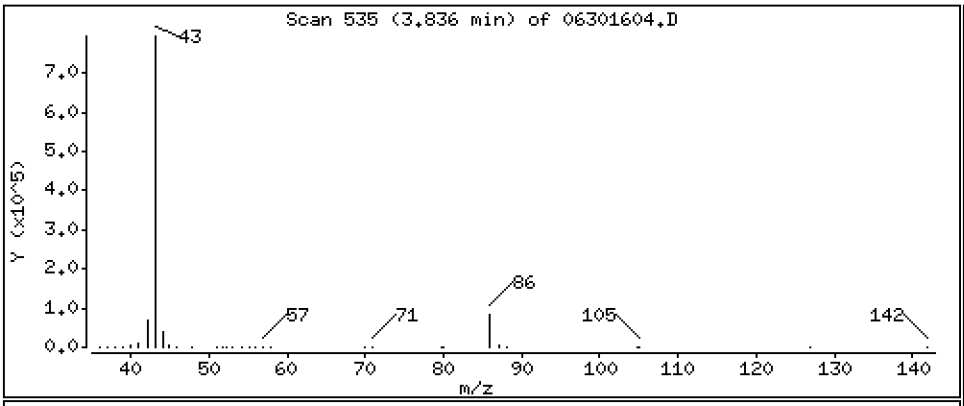
Operator: PB

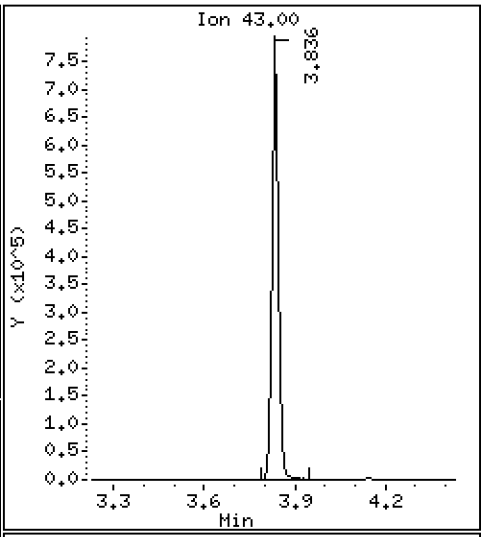
Column phase: RTXVMS

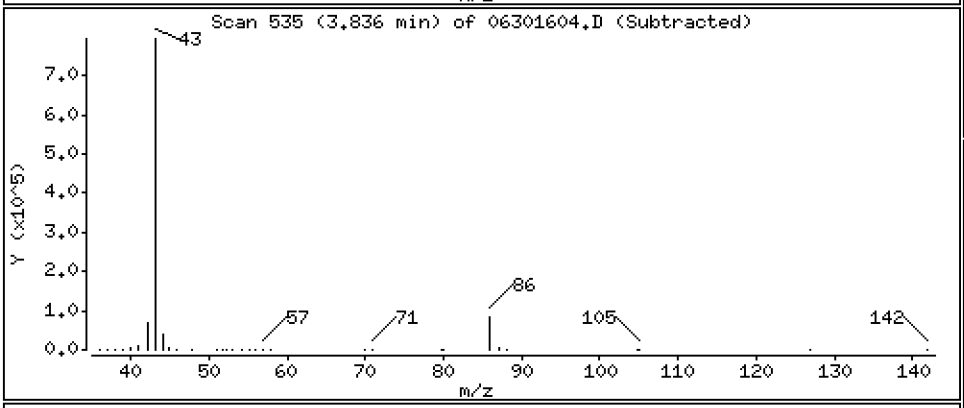
Column diameter: 0.18

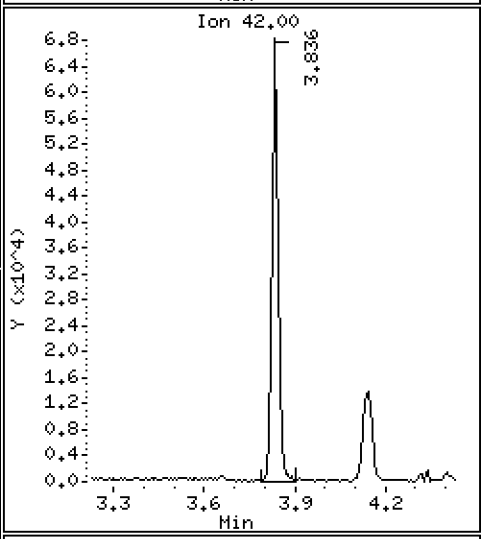
19 Vinyl Acetate

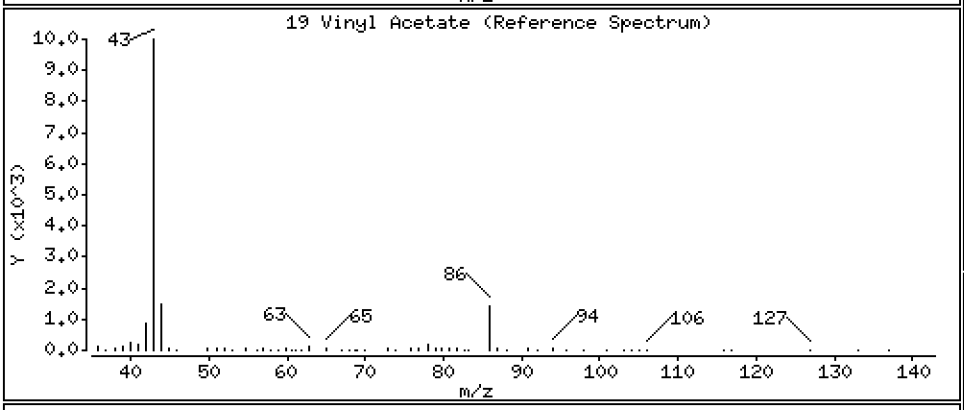
Concentration: 38.646 ug/Kg

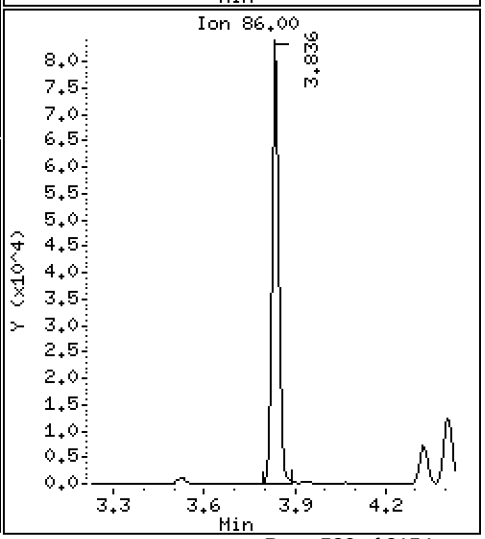


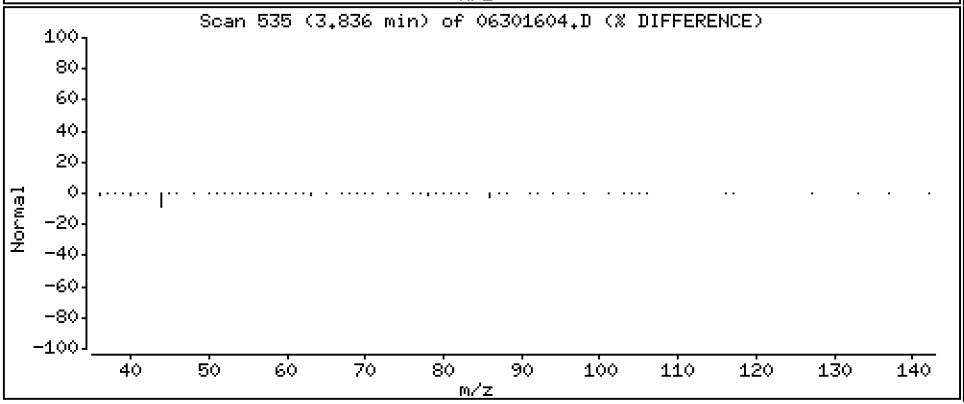












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

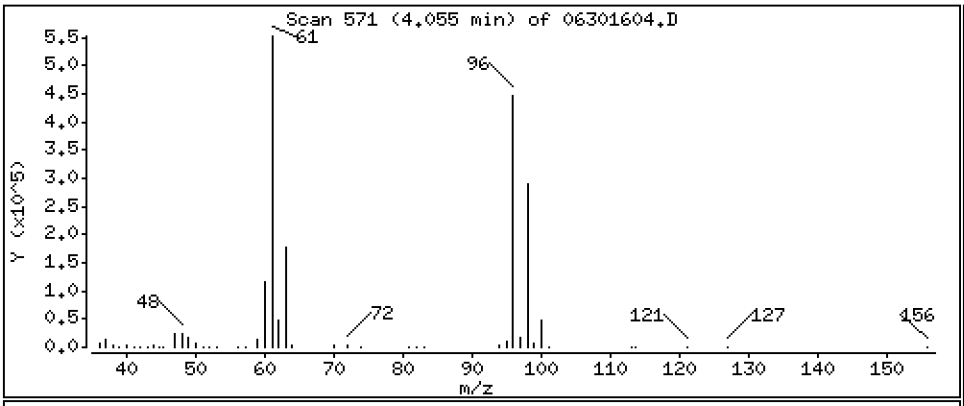
Operator: PB

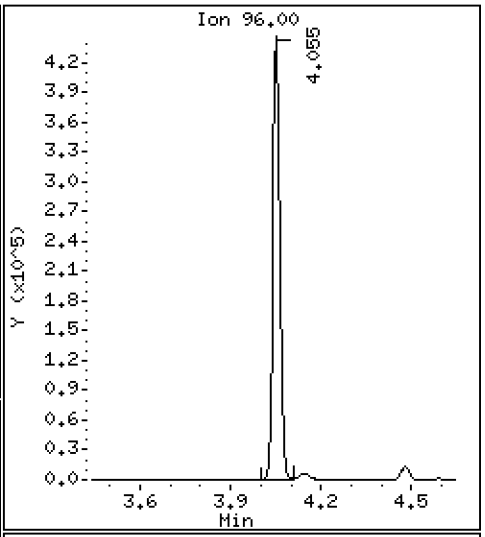
Column phase: RTXVMS

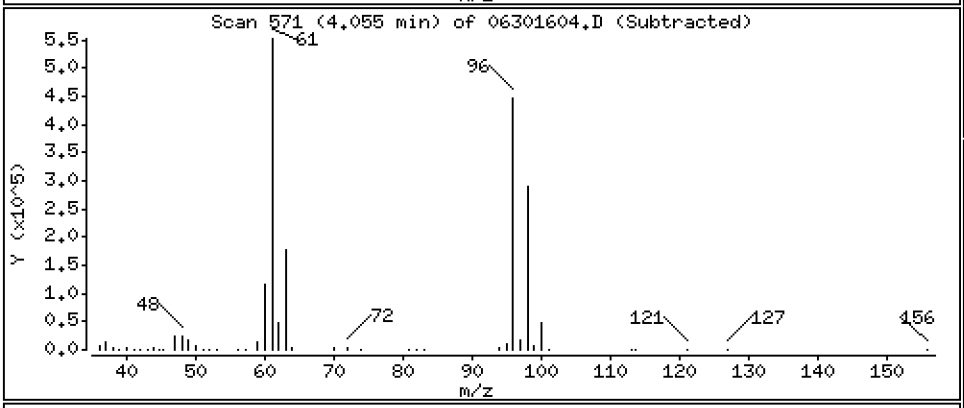
Column diameter: 0.18

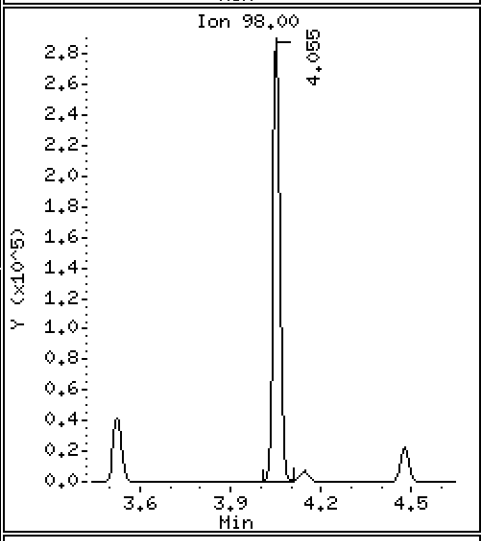
20 Cis-1,2-Dichloroethene

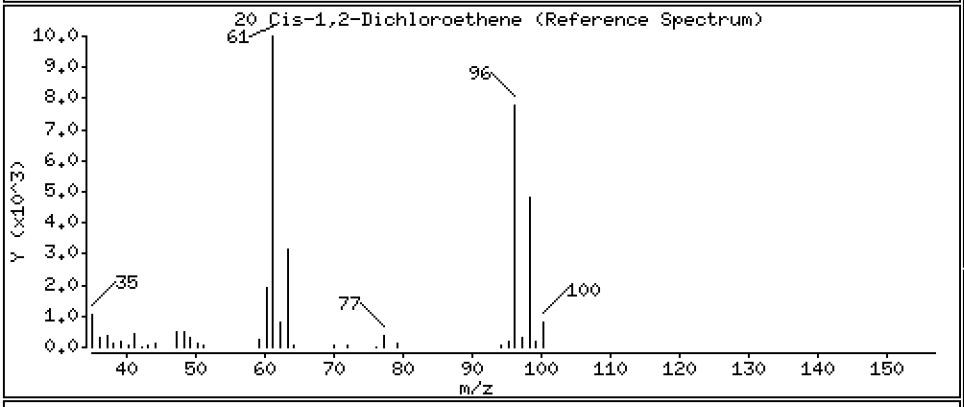
Concentration: 43.506 ug/Kg

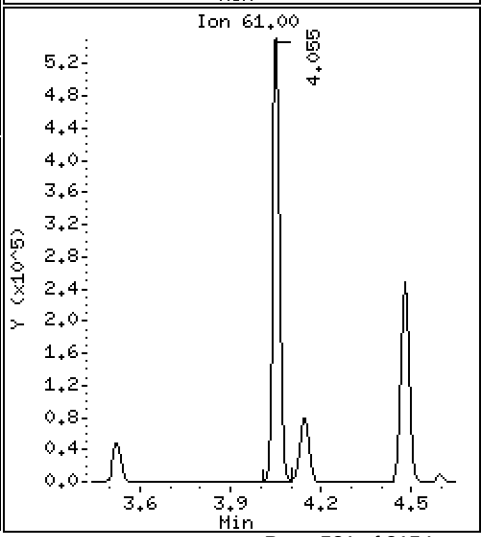


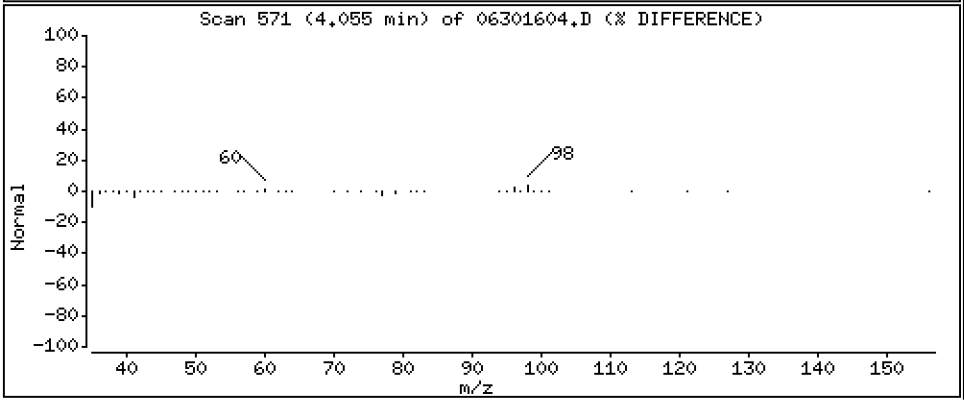












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

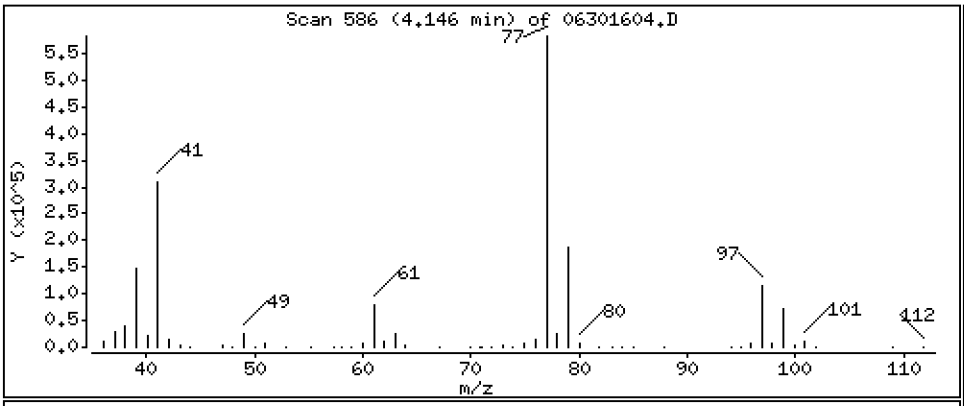
Operator: PB

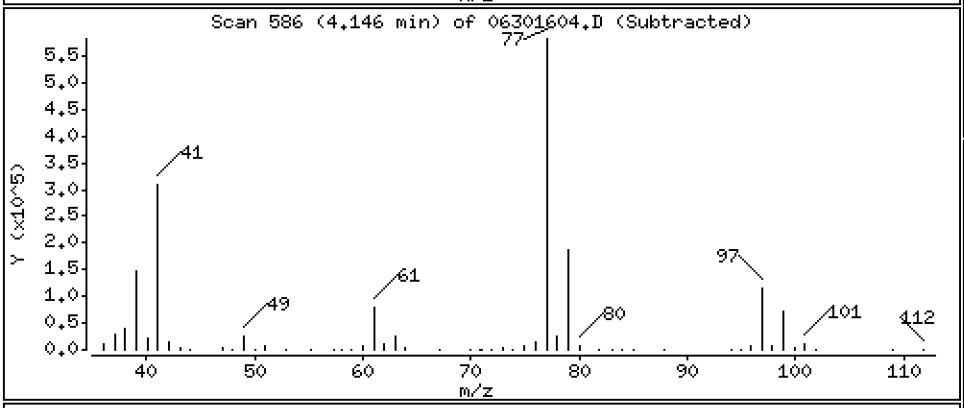
Column phase: RTXVMS

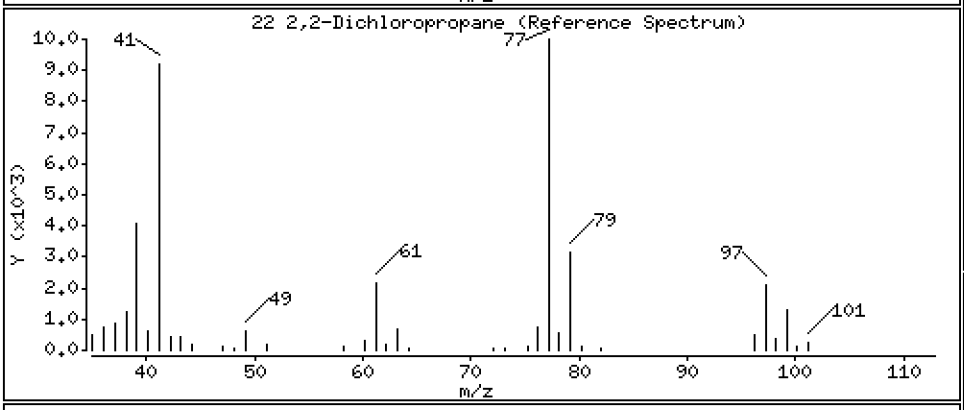
Column diameter: 0.18

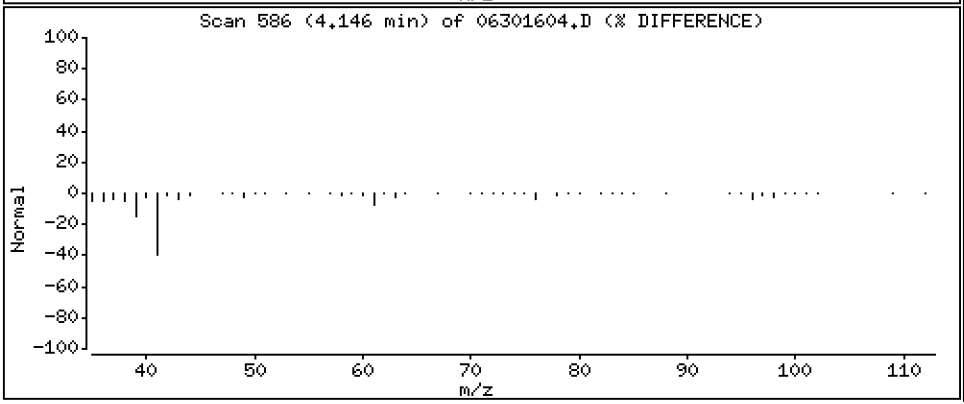
22 2,2-Dichloropropane

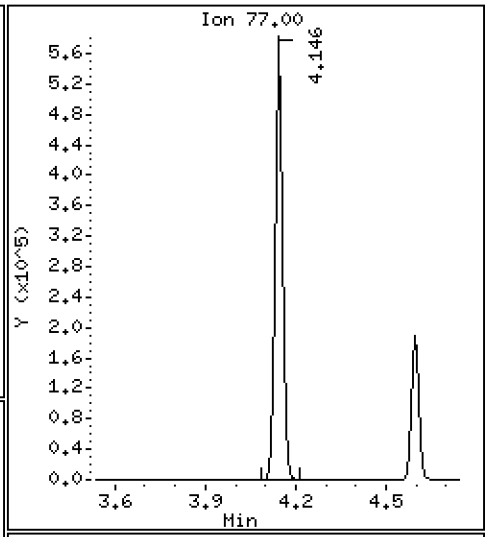
Concentration: 44.765 ug/Kg

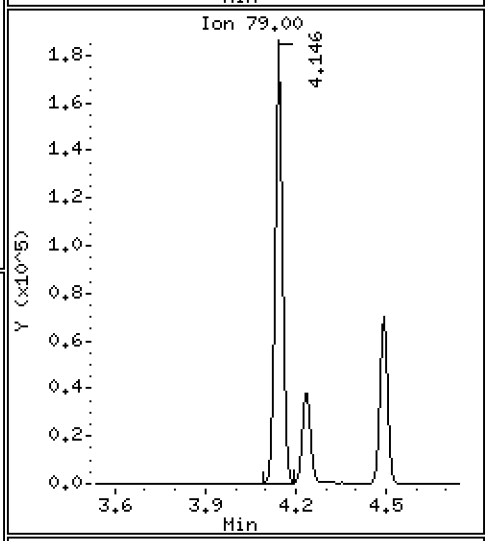


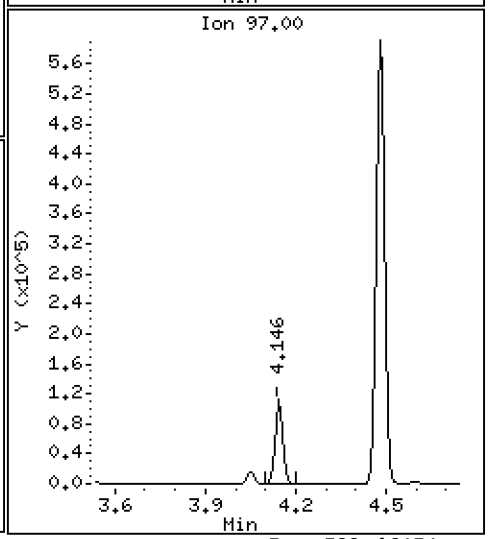












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

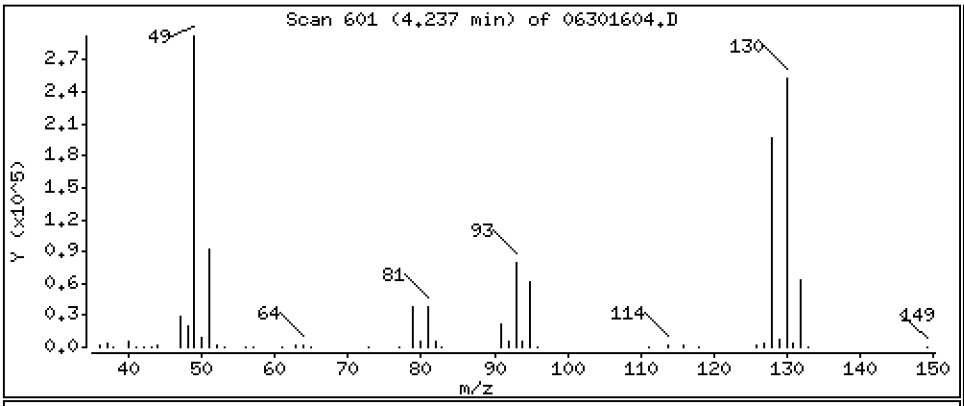
Operator: PB

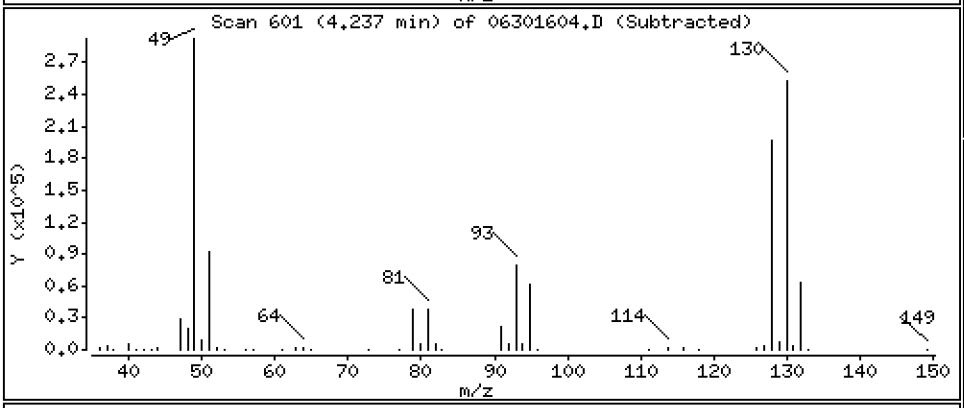
Column phase: RTXVMS

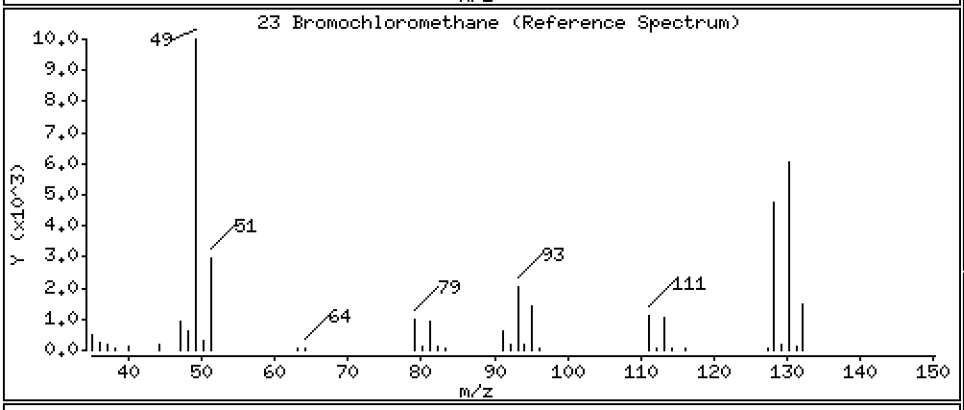
Column diameter: 0.18

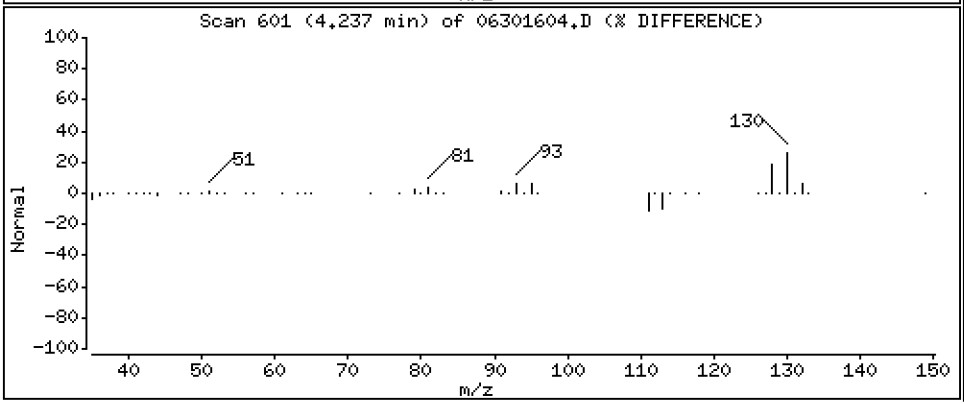
23 Bromochloromethane

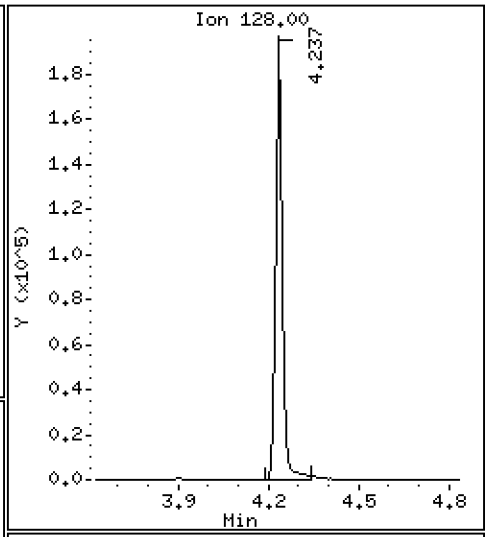
Concentration: 45.167 ug/Kg

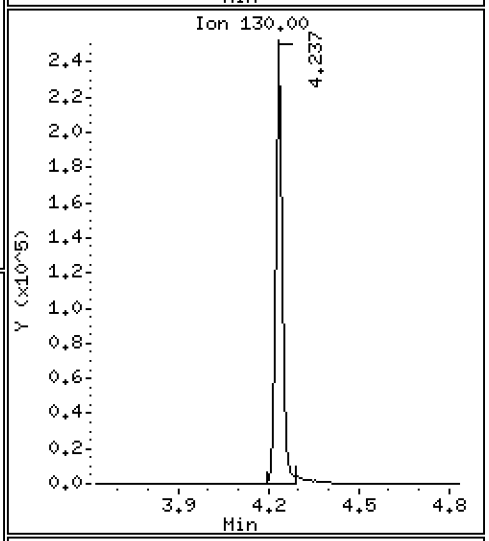


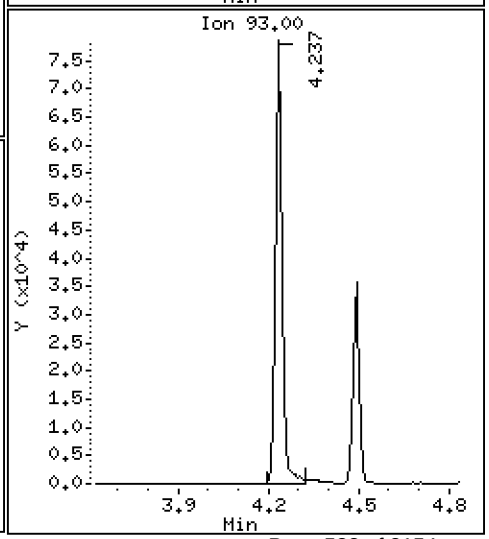












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

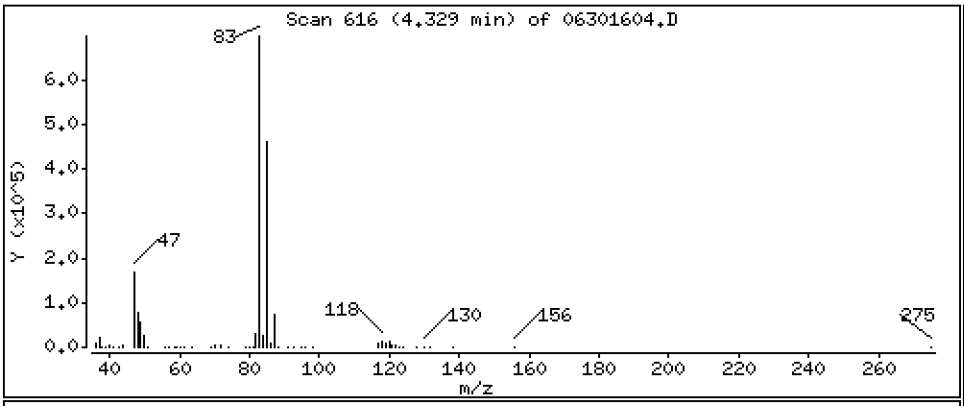
Operator: PB

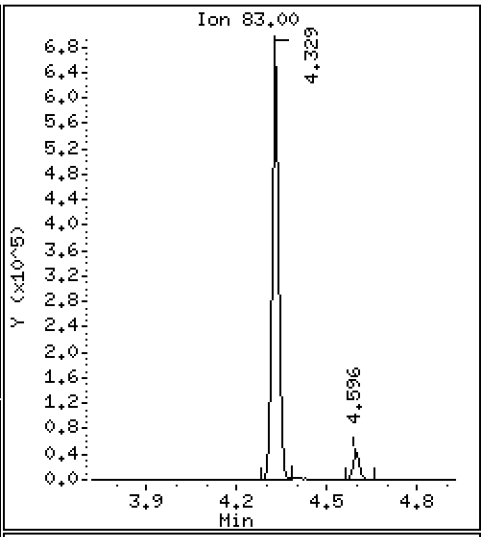
Column phase: RTXVMS

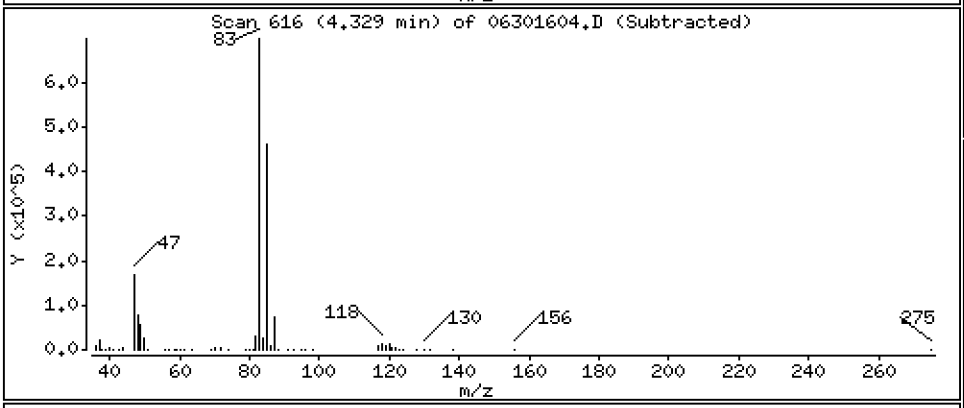
Column diameter: 0.18

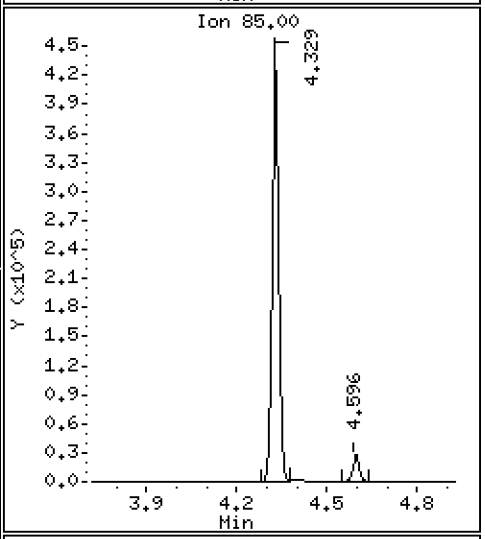
24 Chloroform

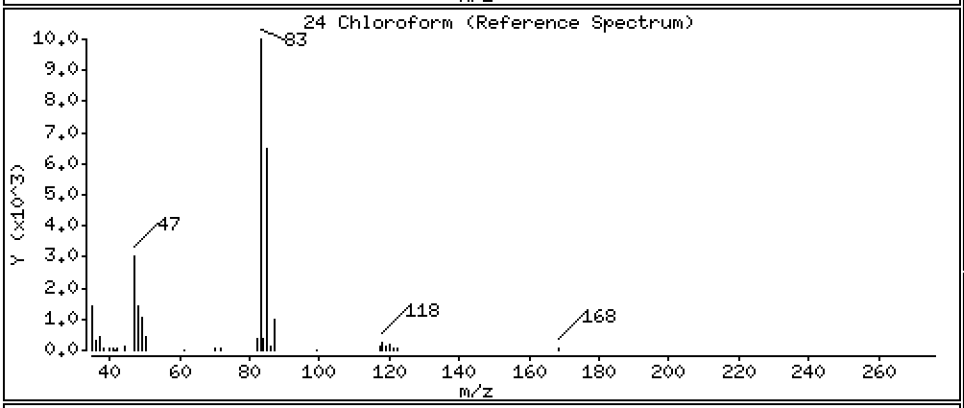
Concentration: 43.353 ug/Kg

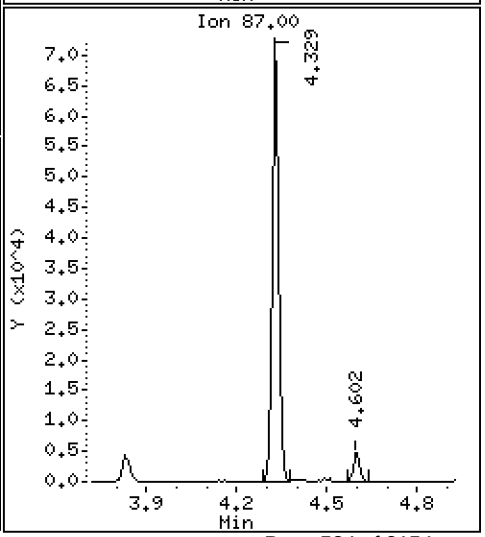


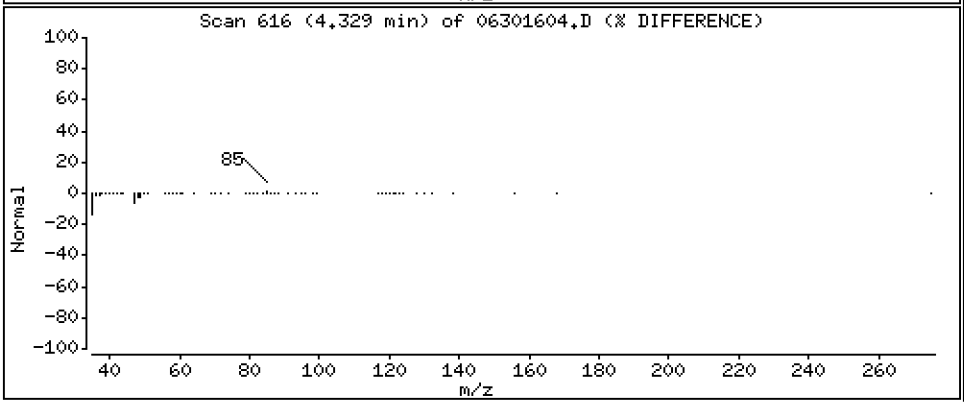












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

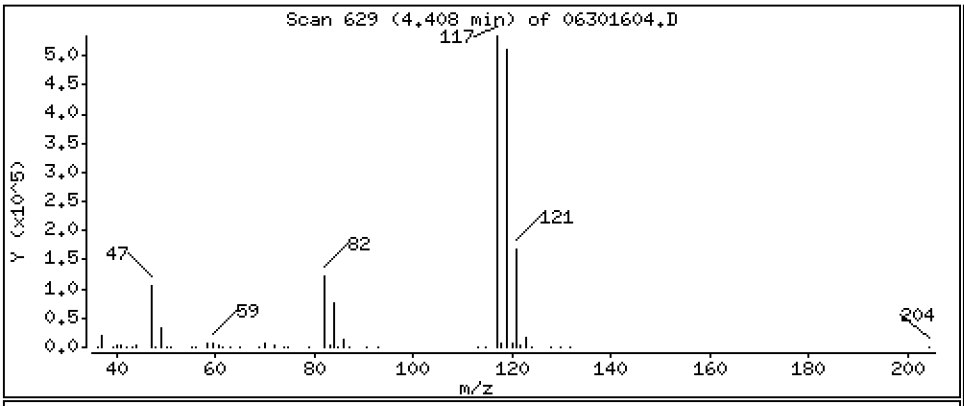
Operator: PB

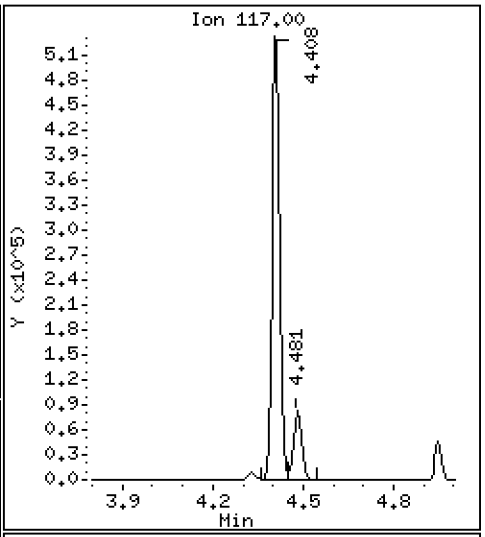
Column phase: RTXVMS

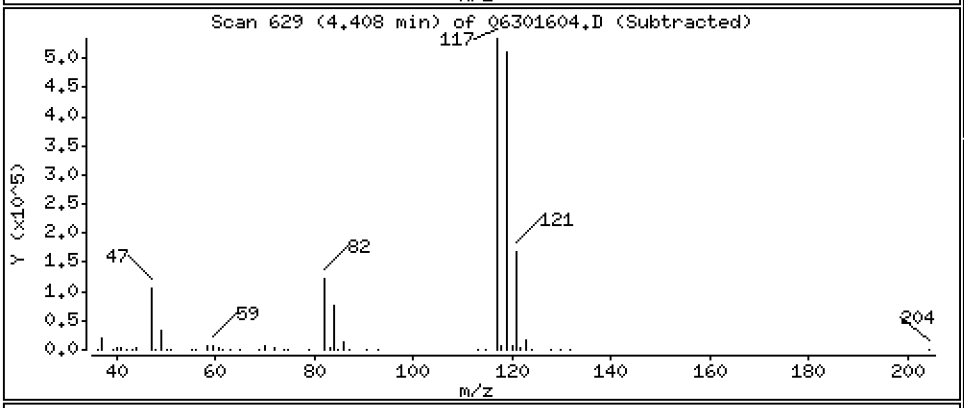
Column diameter: 0.18

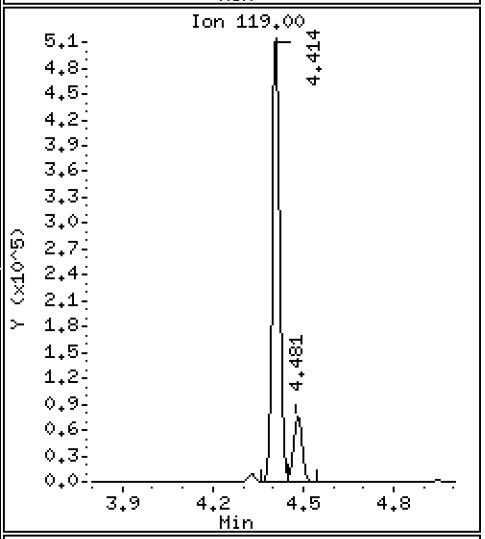
25 Carbon Tetrachloride

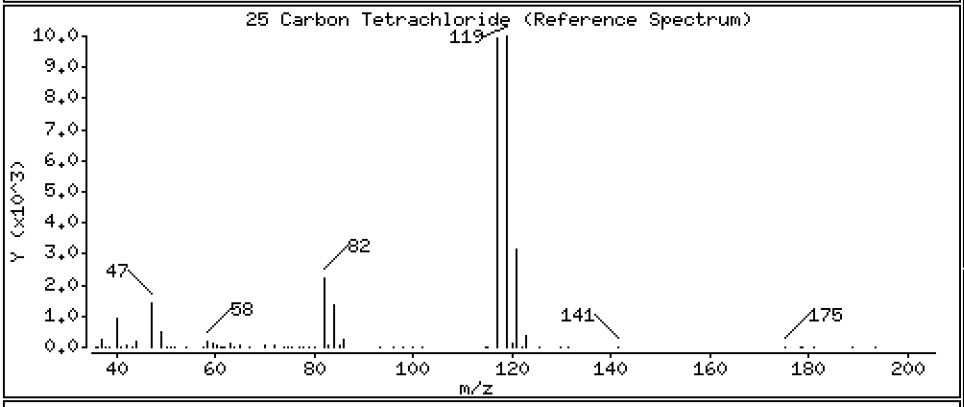
Concentration: 47.269 ug/Kg

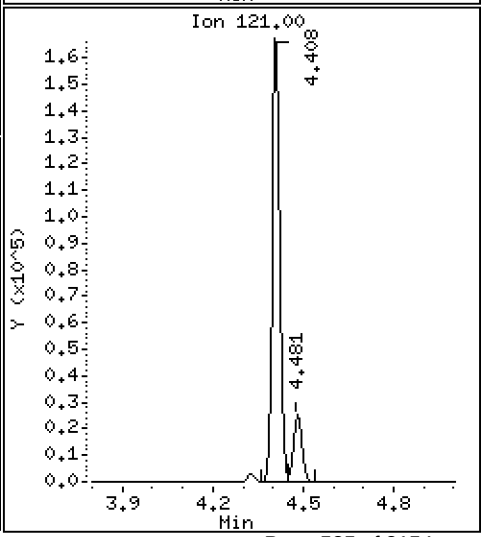


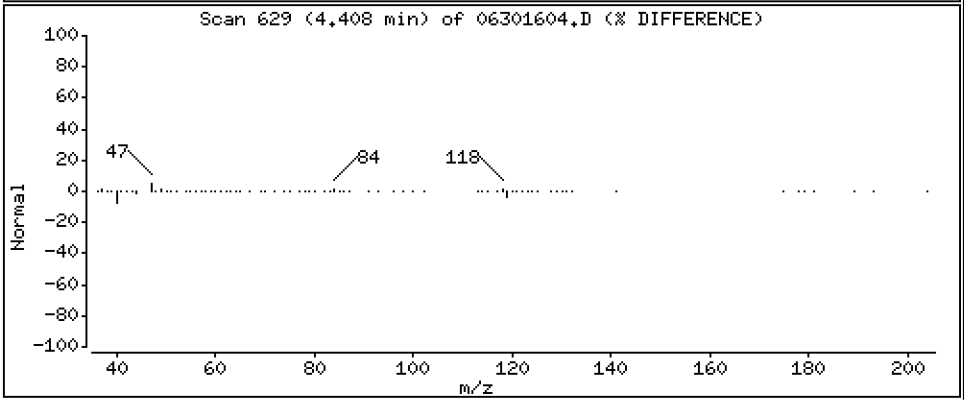












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

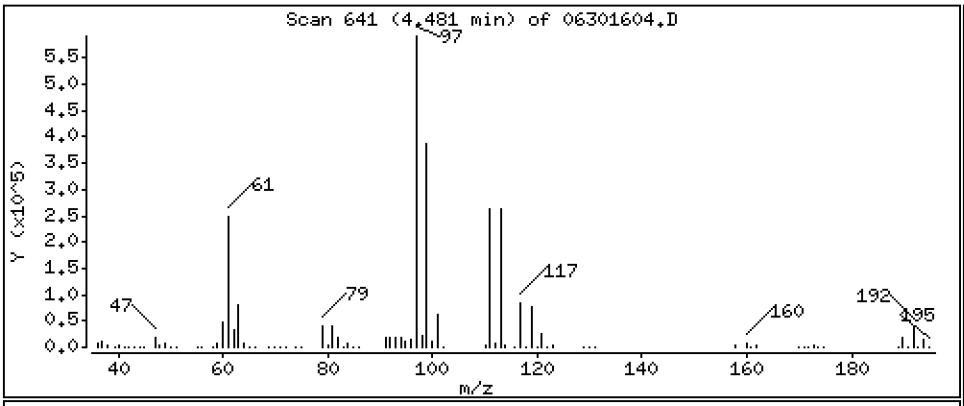
Operator: PB

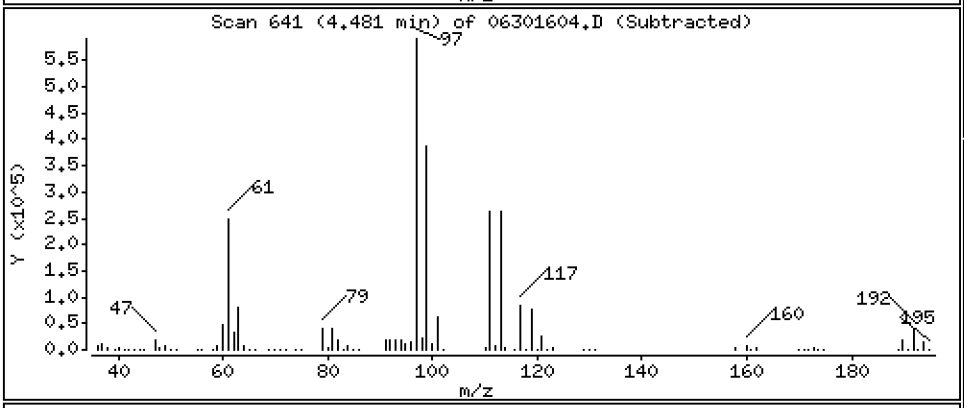
Column phase: RTXVMS

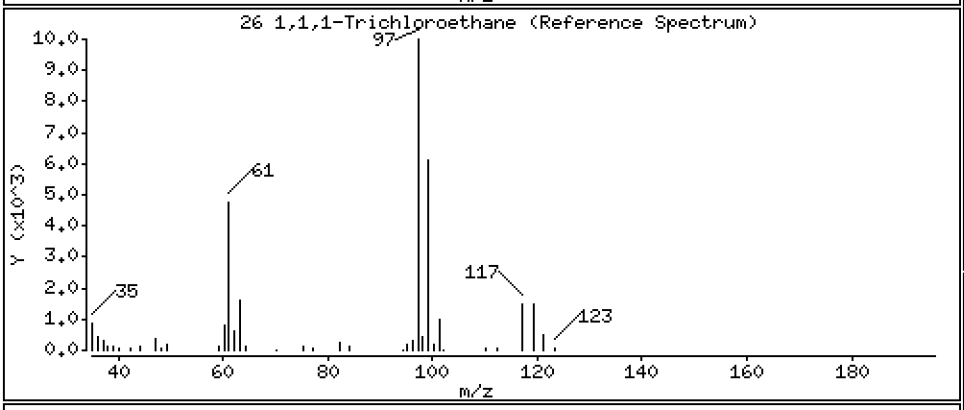
Column diameter: 0.18

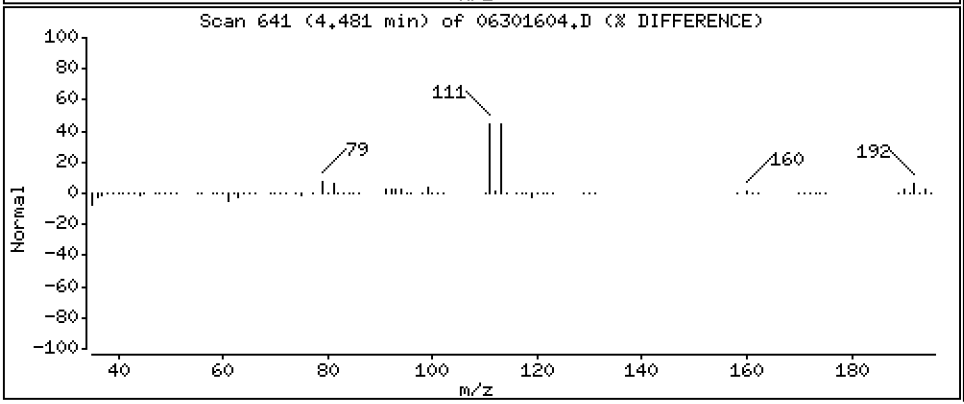
26 1,1,1-Trichloroethane

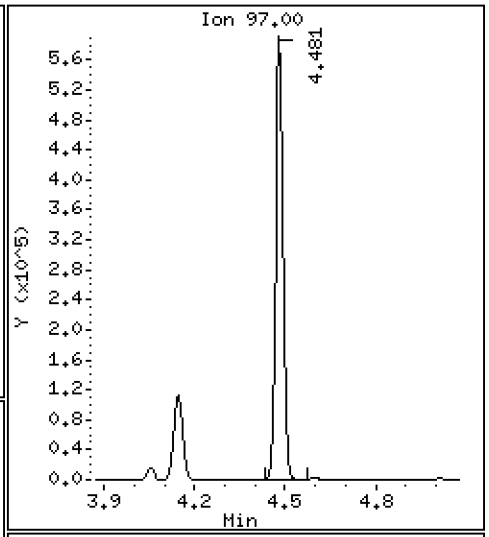
Concentration: 43.119 ug/Kg

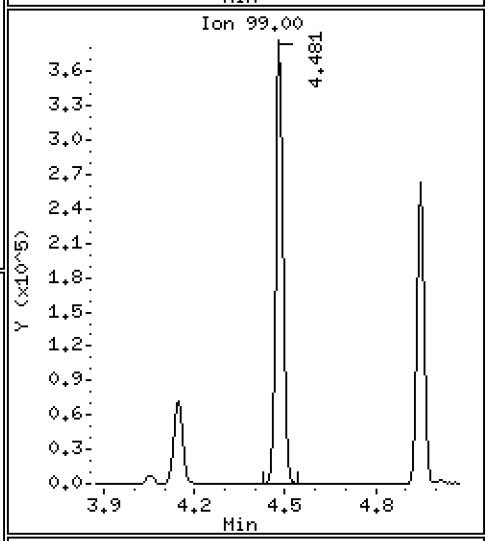


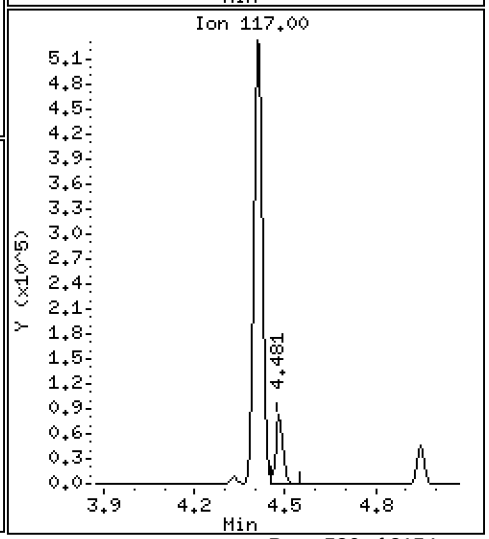












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

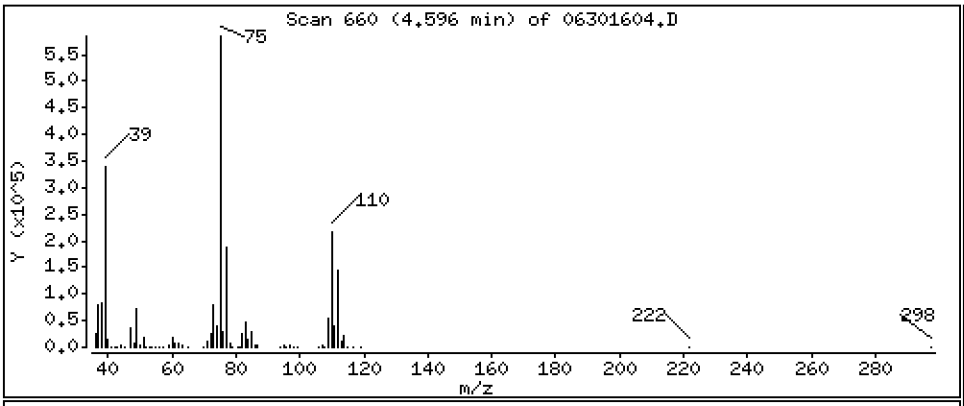
Operator: PB

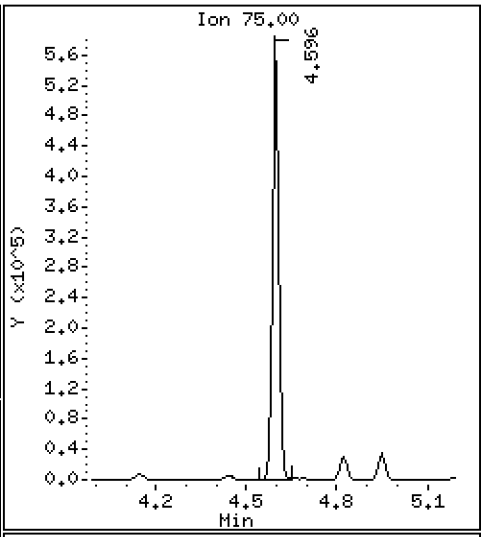
Column phase: RTXVMS

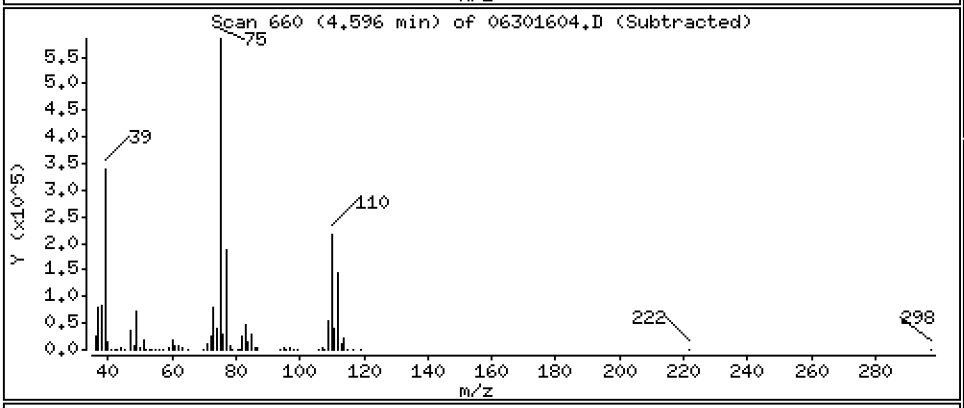
Column diameter: 0.18

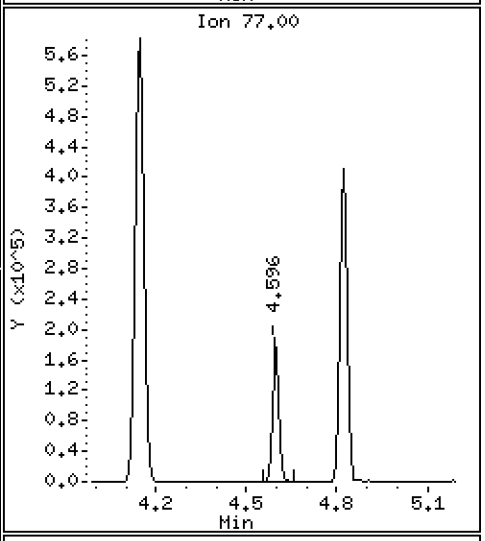
28 1,1-Dichloropropene

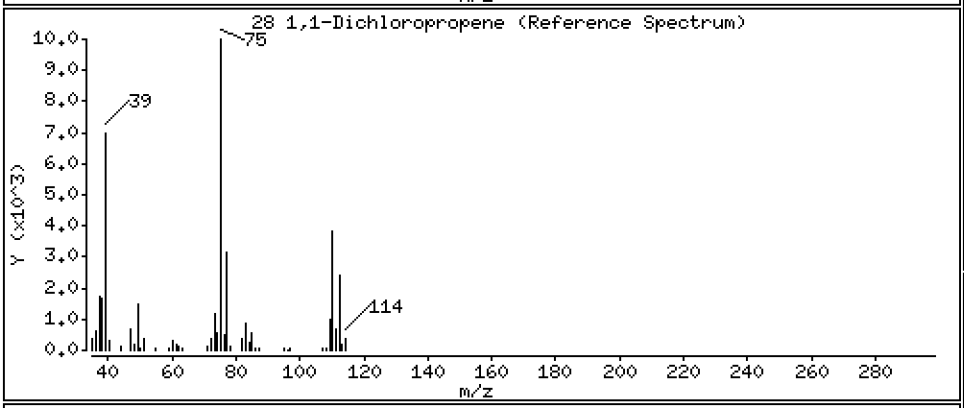
Concentration: 44.103 ug/Kg

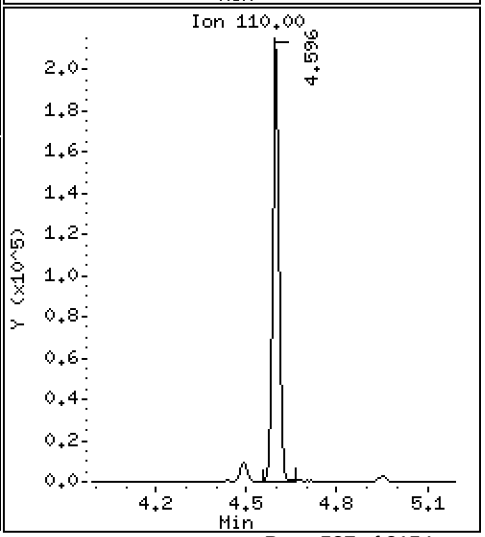


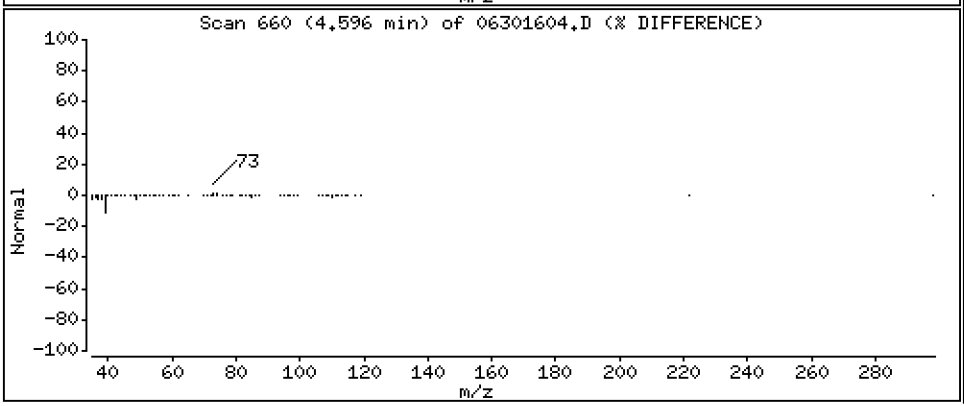












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

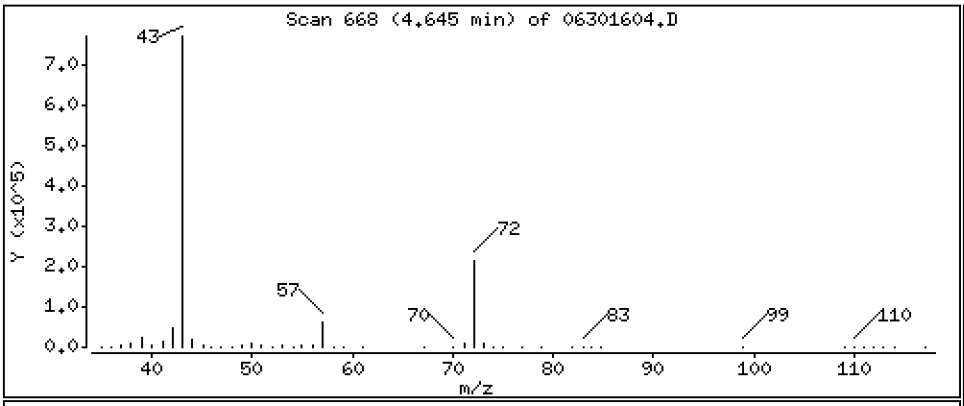
Operator: PB

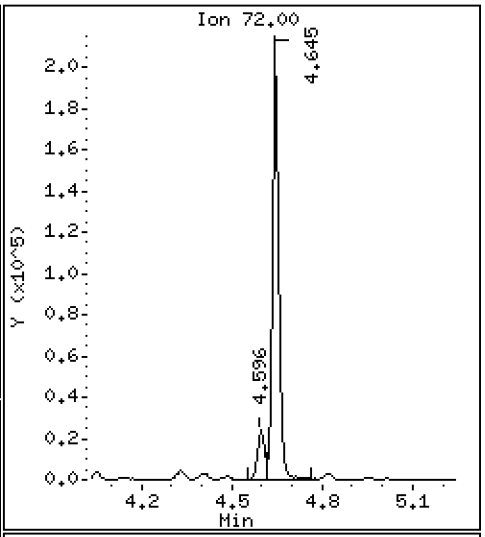
Column phase: RTXVMS

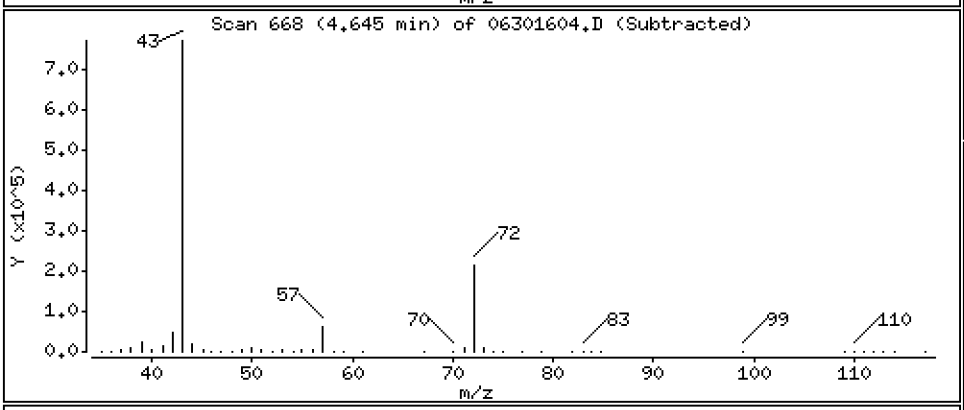
Column diameter: 0.18

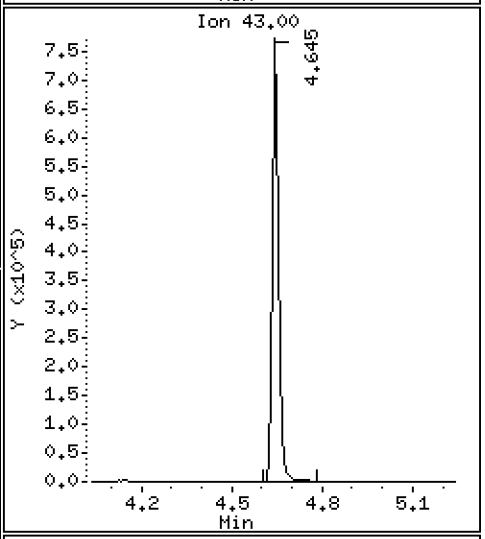
29 2-Butanone

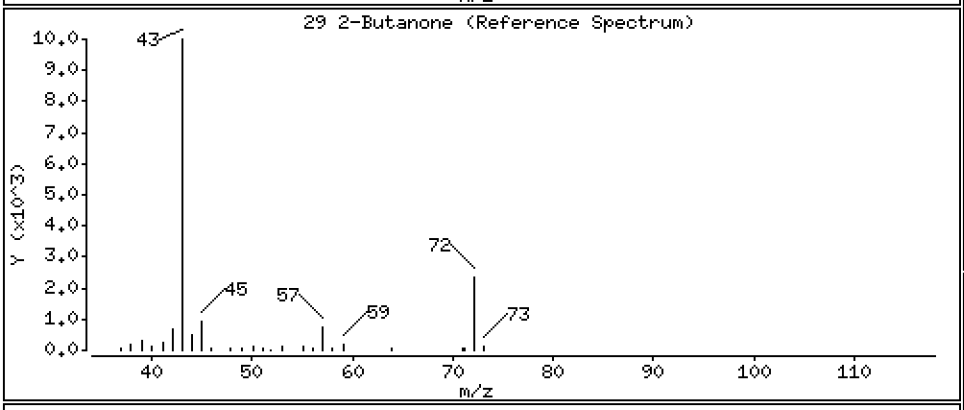
Concentration: 192.17 ug/Kg

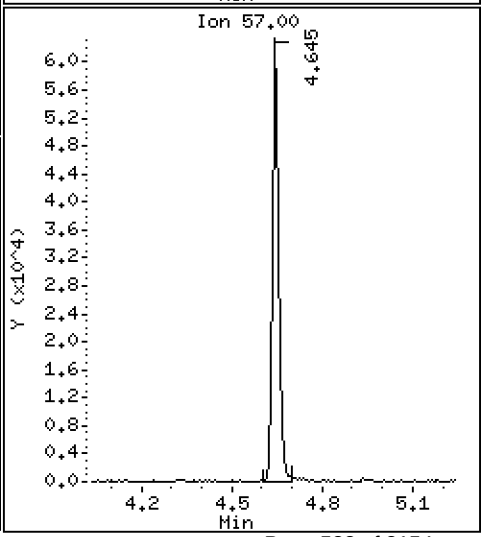


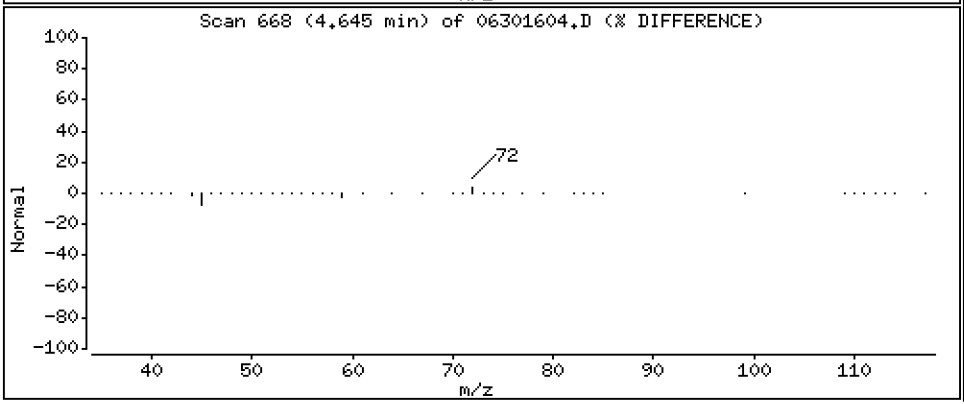












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

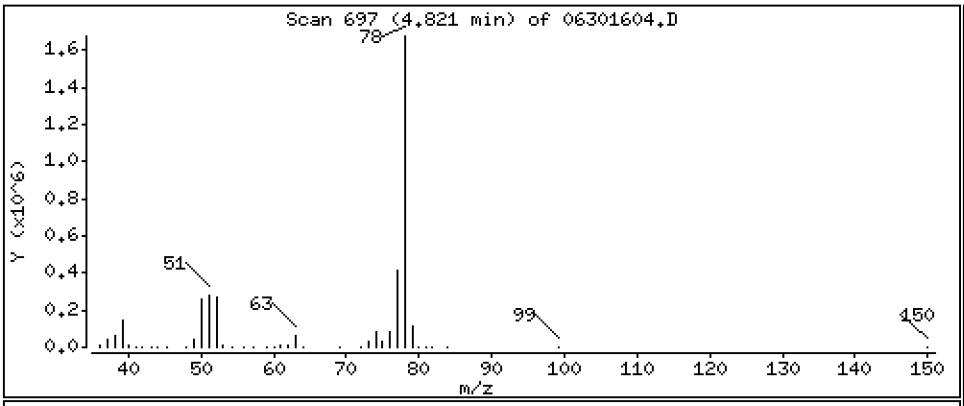
Operator: PB

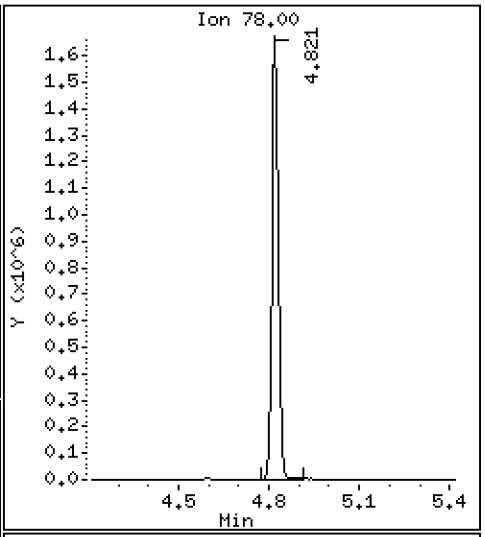
Column phase: RTXVMS

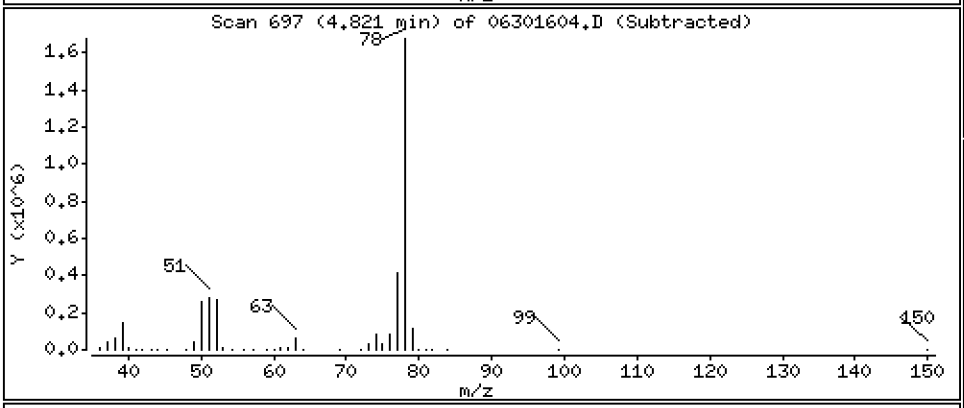
Column diameter: 0.18

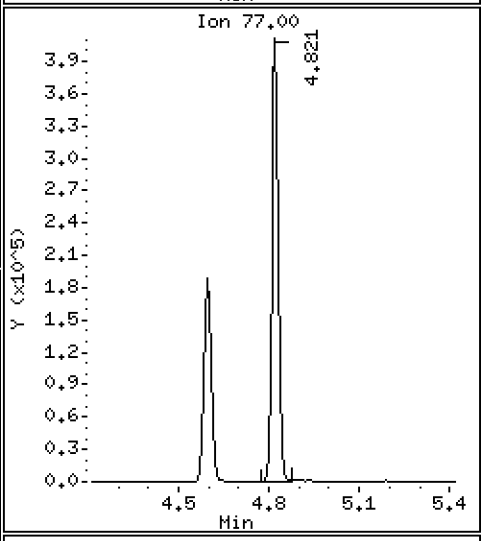
30 Benzene

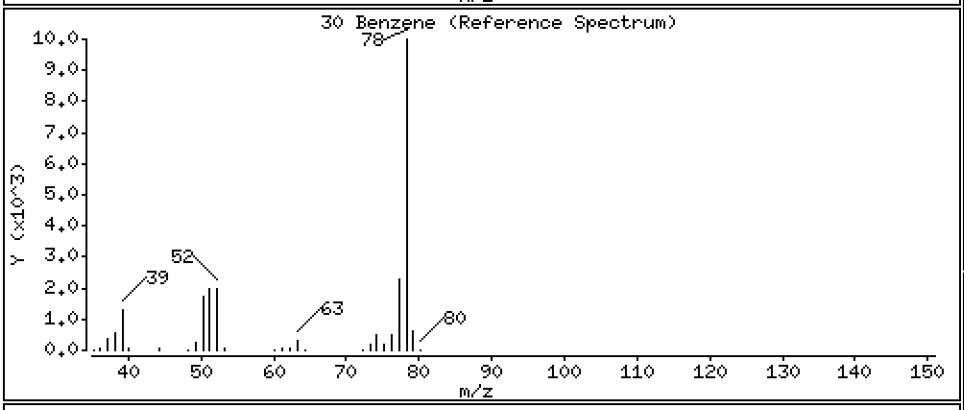
Concentration: 44.450 ug/Kg

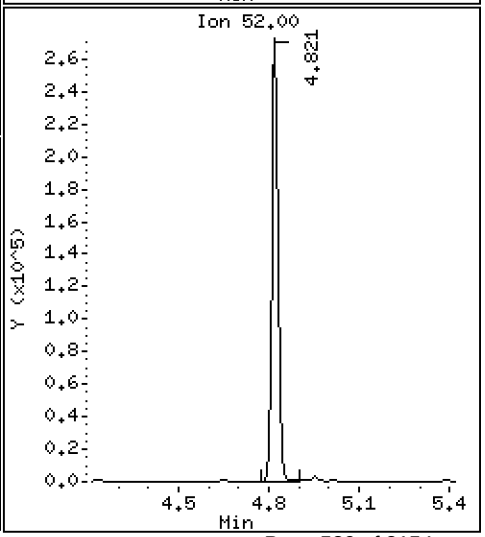


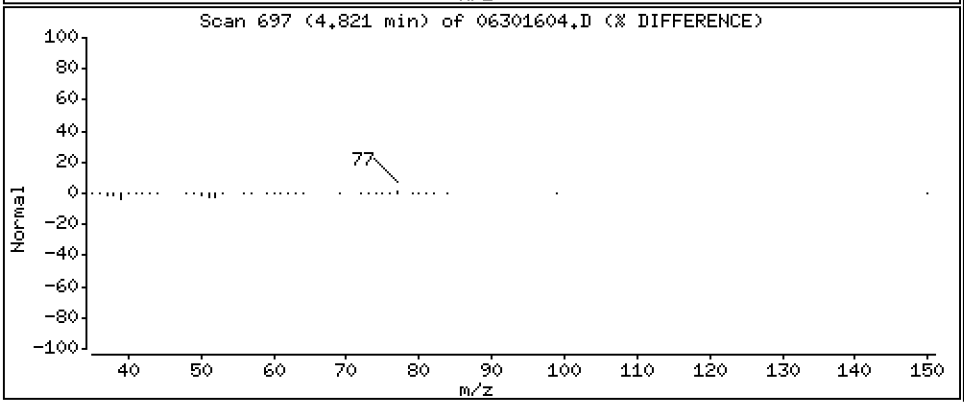












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

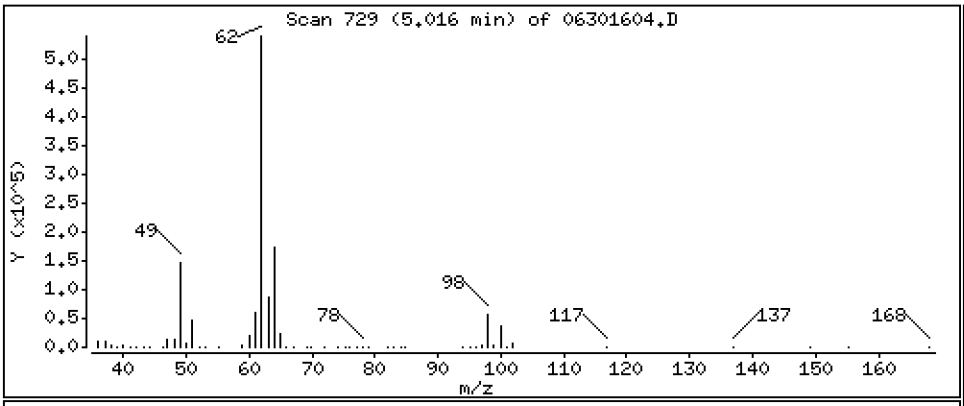
Operator: PB

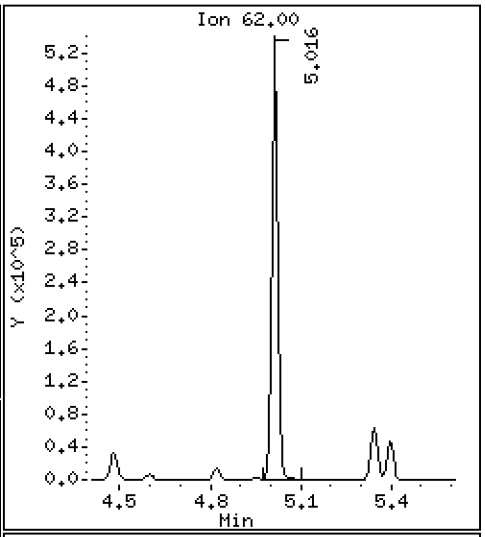
Column phase: RTXVMS

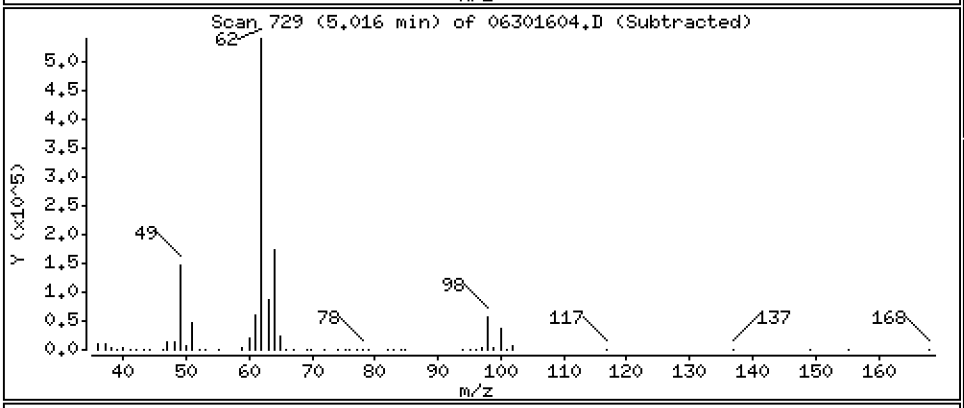
Column diameter: 0.18

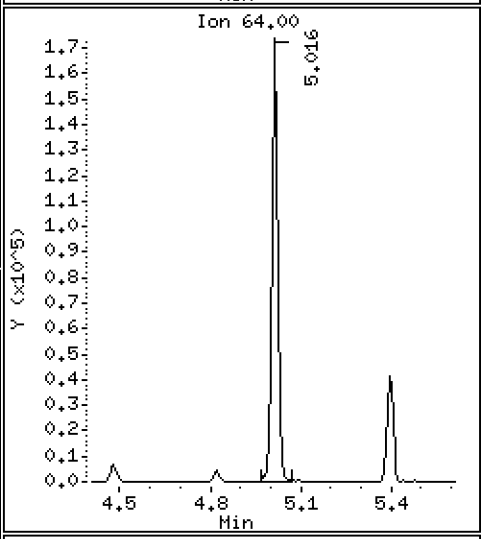
33 1,2-Dichloroethane

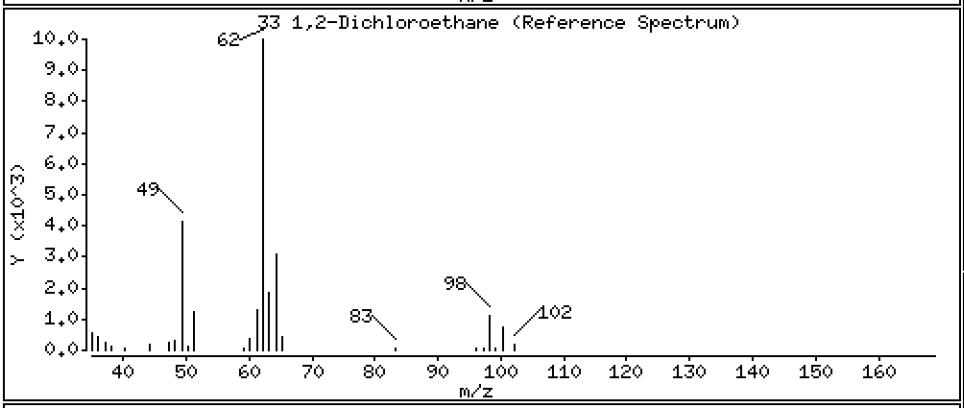
Concentration: 41.563 ug/Kg

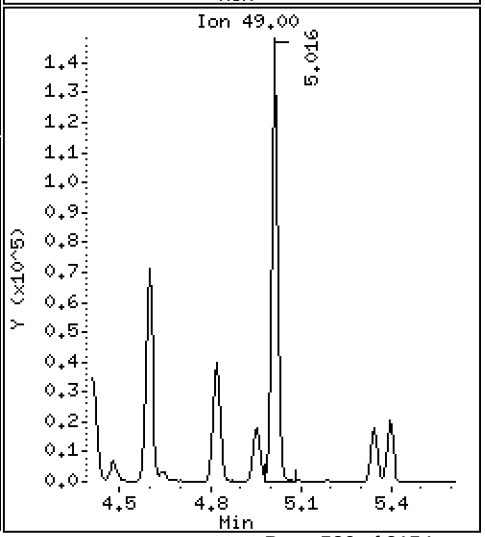


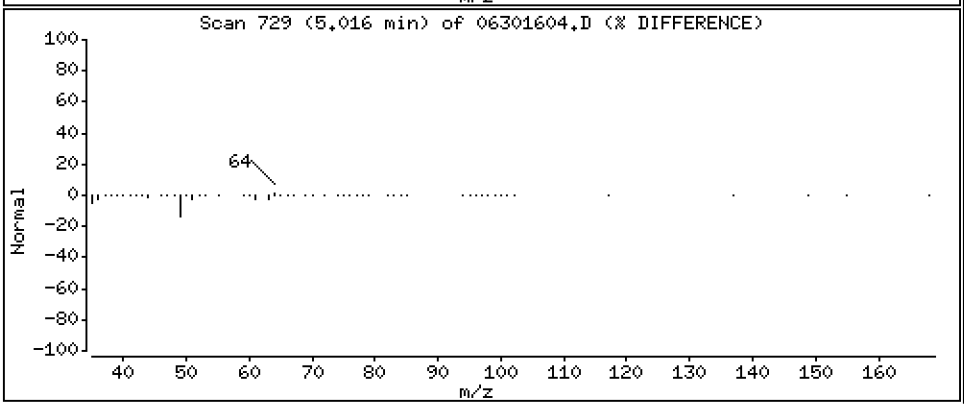












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

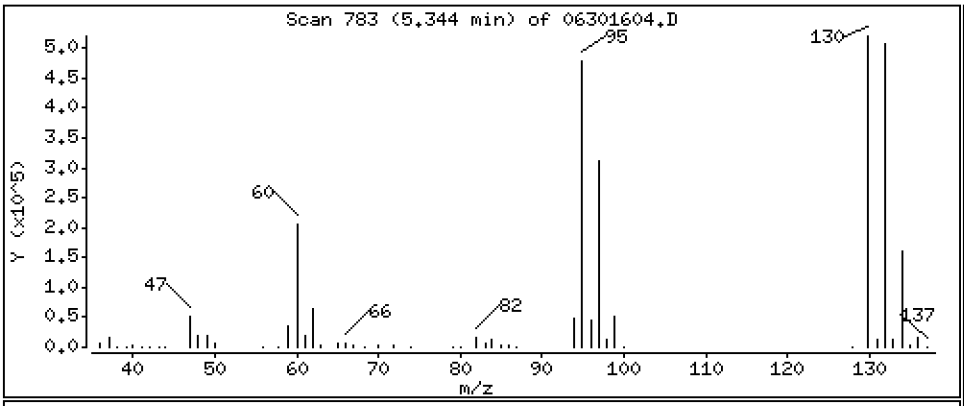
Operator: PB

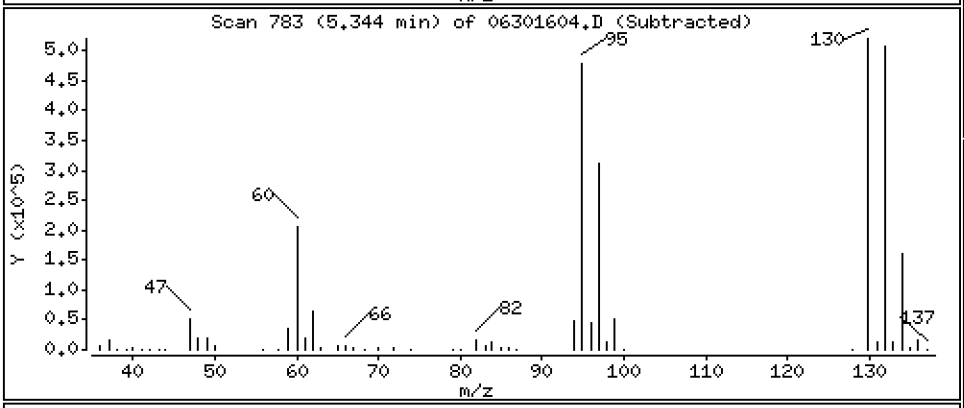
Column phase: RTXVMS

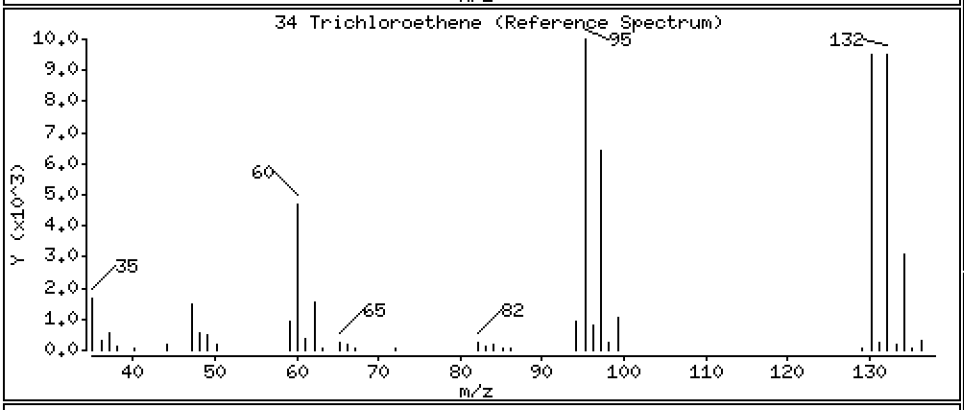
Column diameter: 0.18

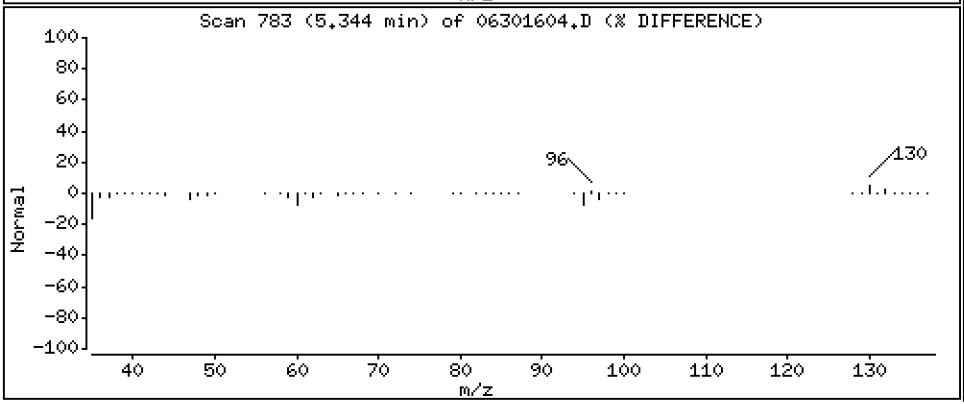
34 Trichloroethene

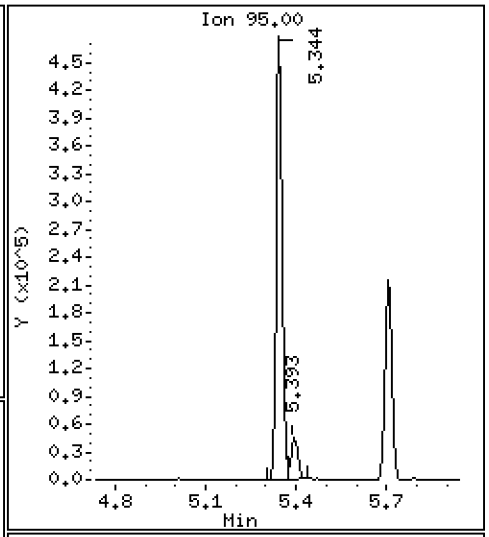
Concentration: 45.491 ug/Kg

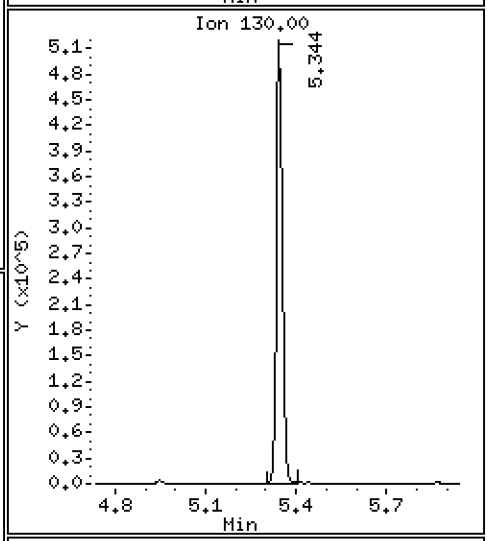


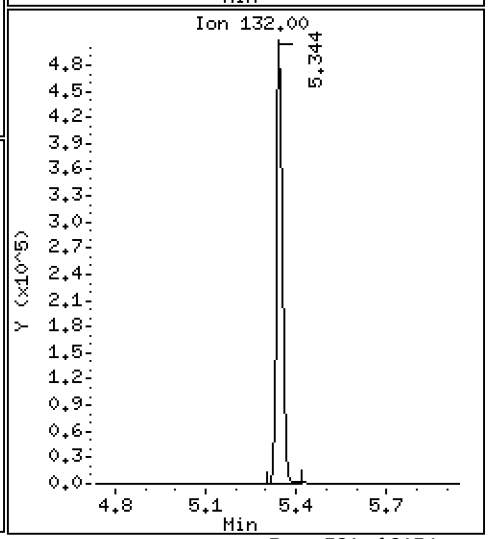












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

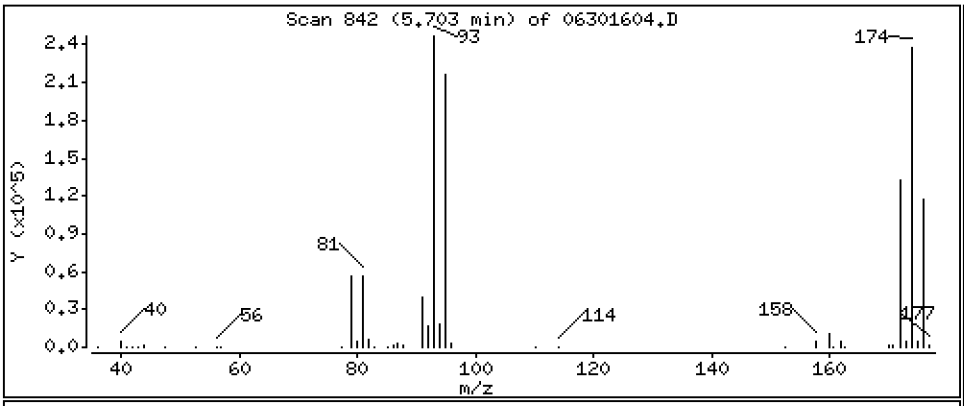
Operator: PB

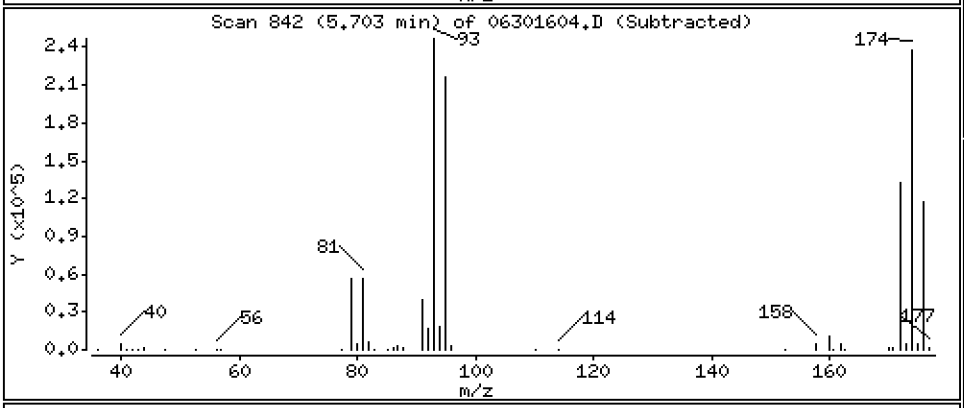
Column phase: RTXVMS

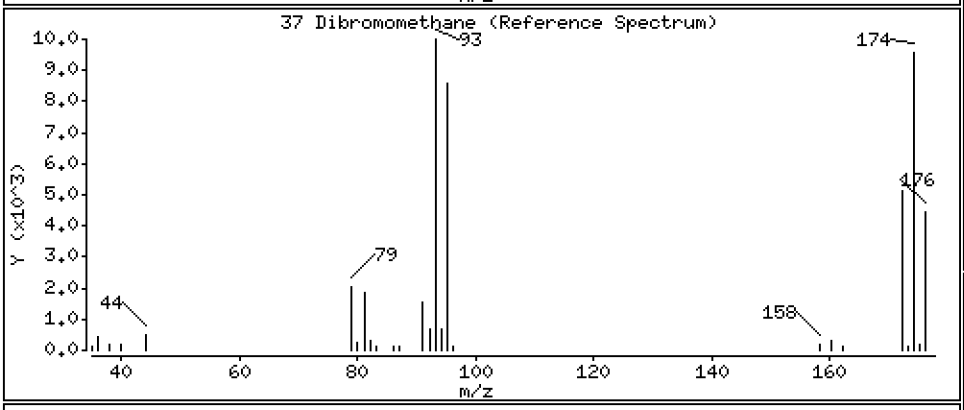
Column diameter: 0.18

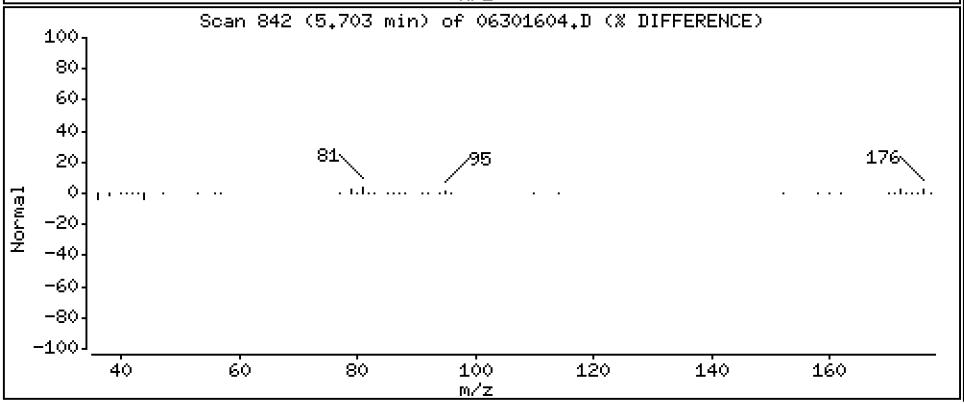
37 Dibromomethane

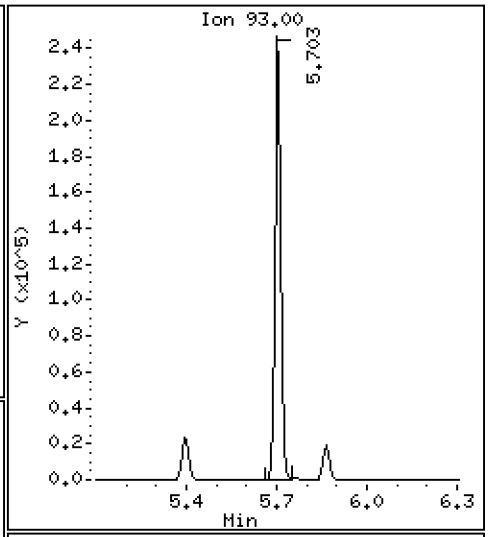
Concentration: 44.049 ug/Kg

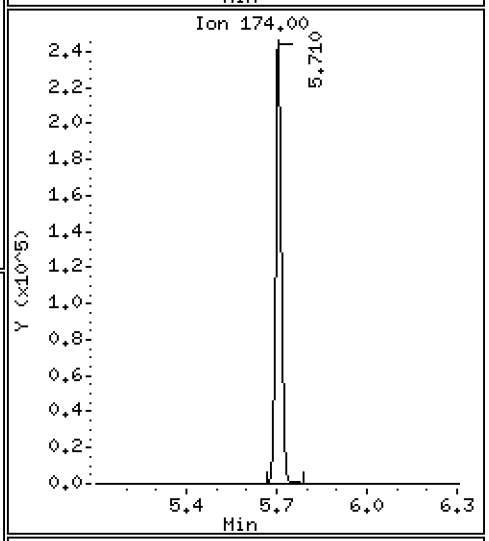


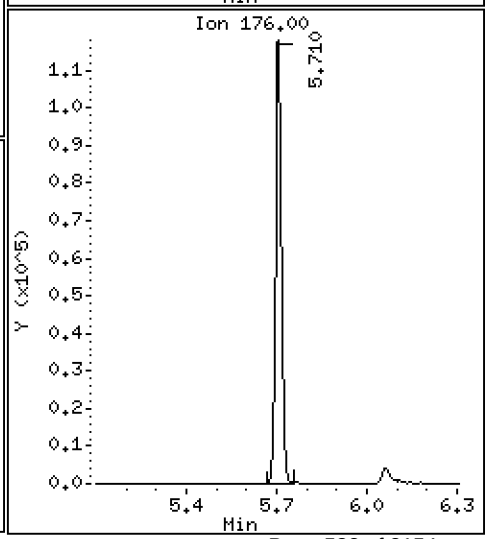












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

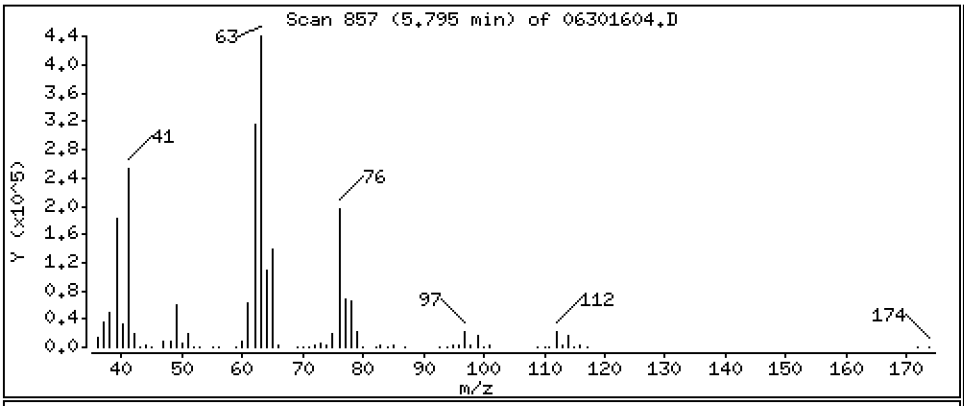
Operator: PB

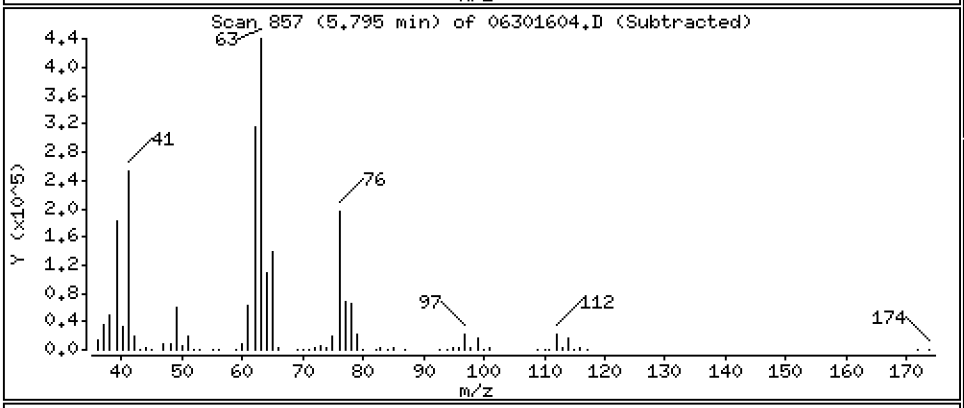
Column phase: RTXVMS

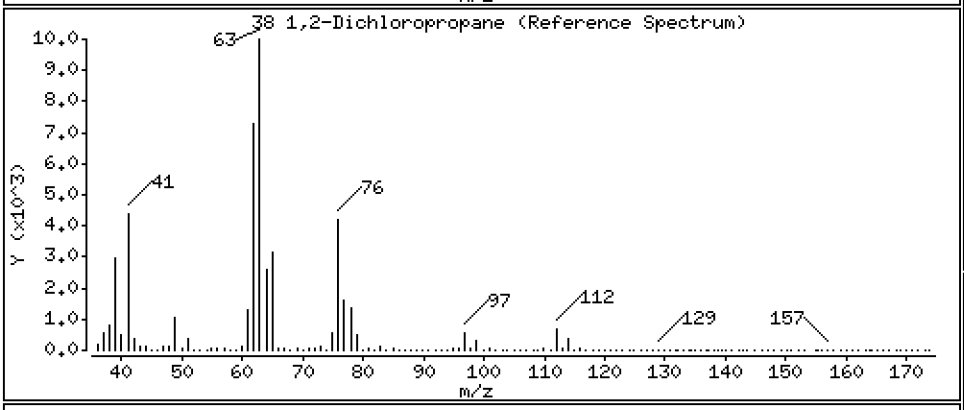
Column diameter: 0.18

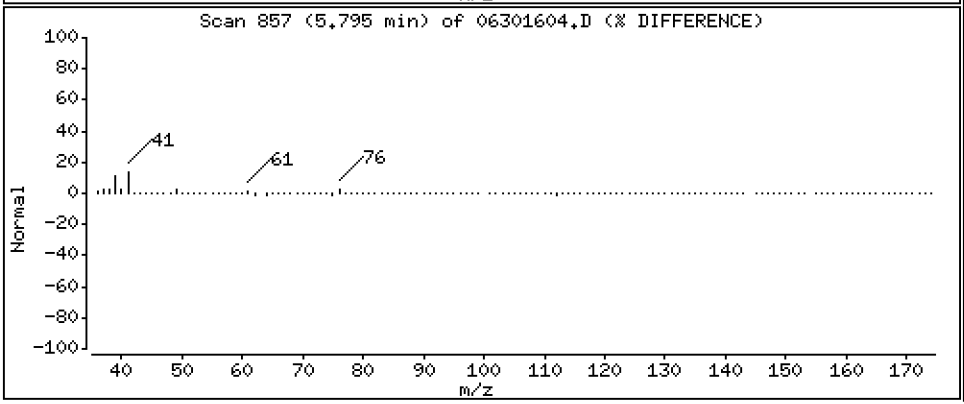
38 1,2-Dichloropropane

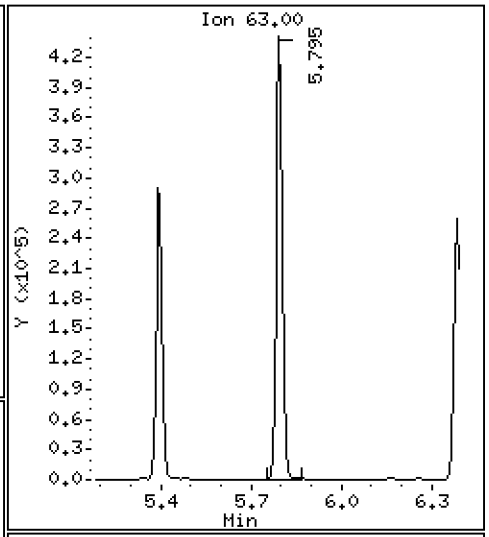
Concentration: 42.474 ug/Kg

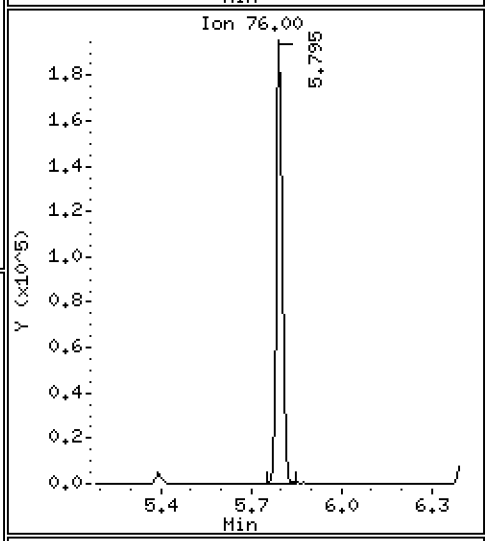


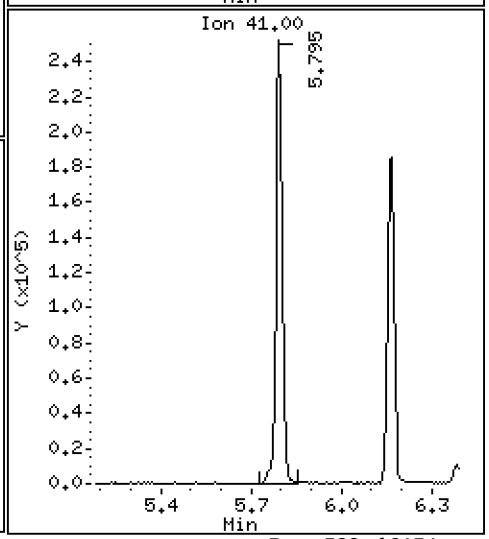












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

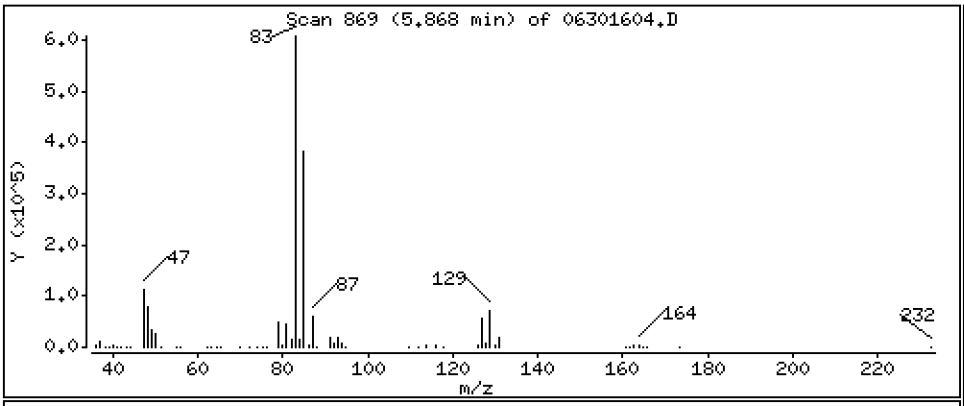
Operator: PB

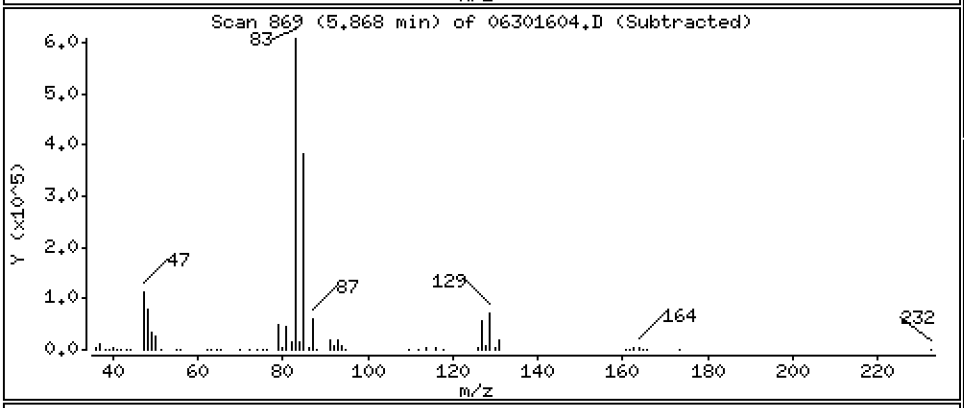
Column phase: RTXVMS

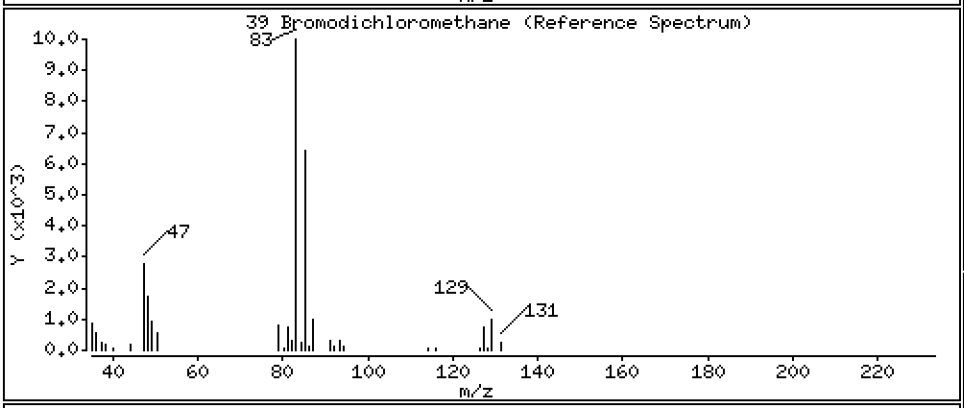
Column diameter: 0.18

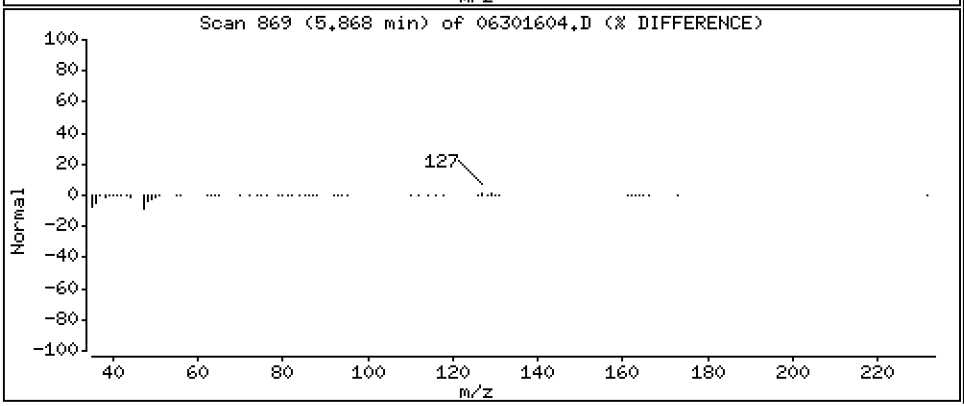
39 Bromodichloromethane

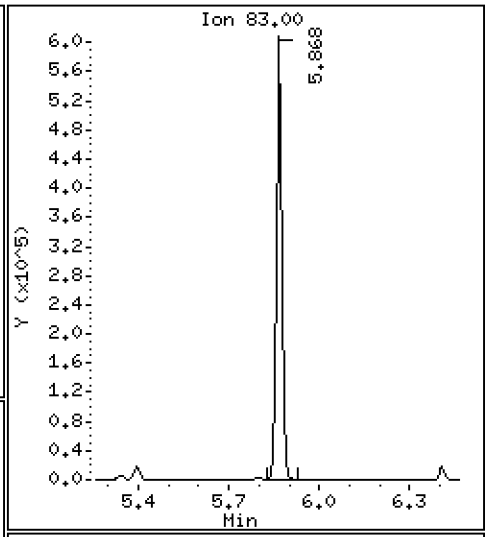
Concentration: 46.258 ug/Kg

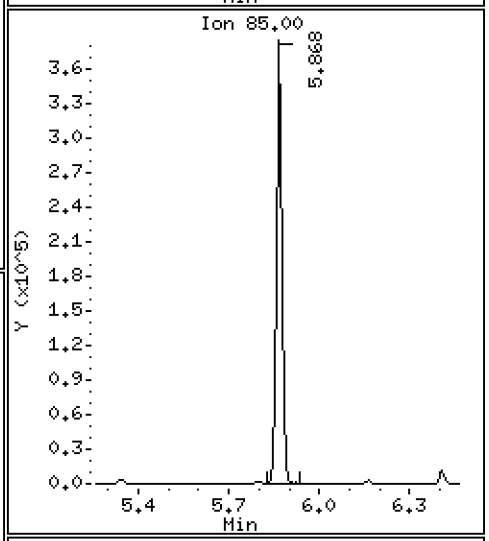


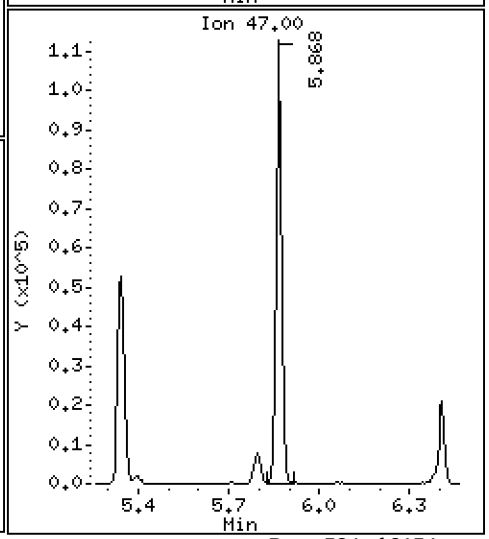












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

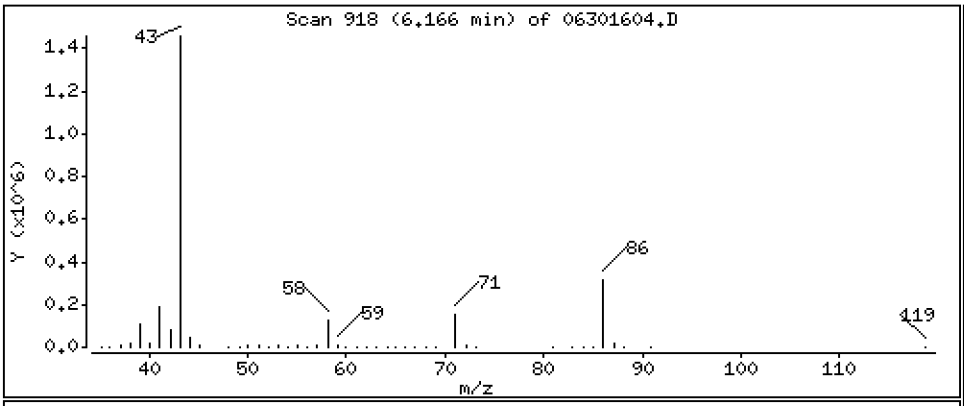
Operator: PB

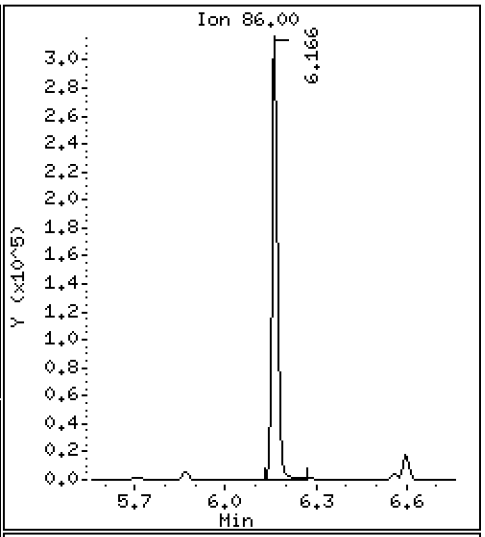
Column phase: RTXVMS

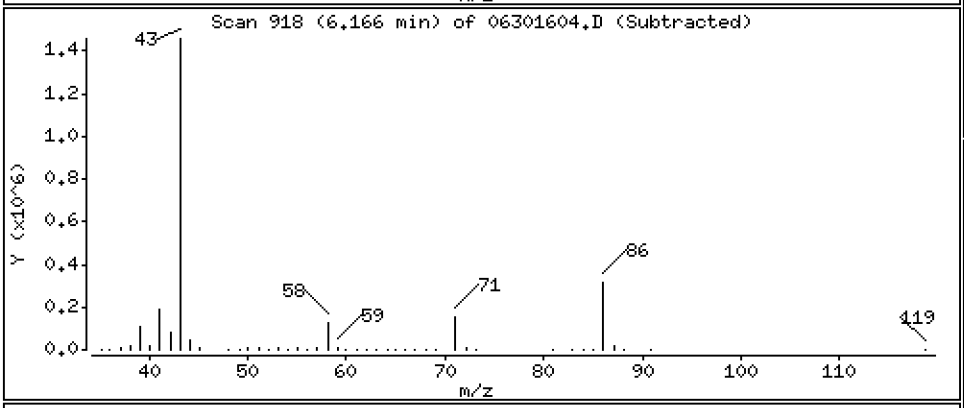
Column diameter: 0.18

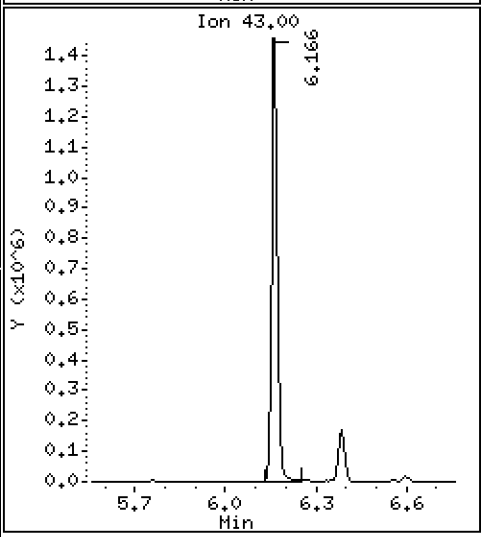
172 2-Pentanone

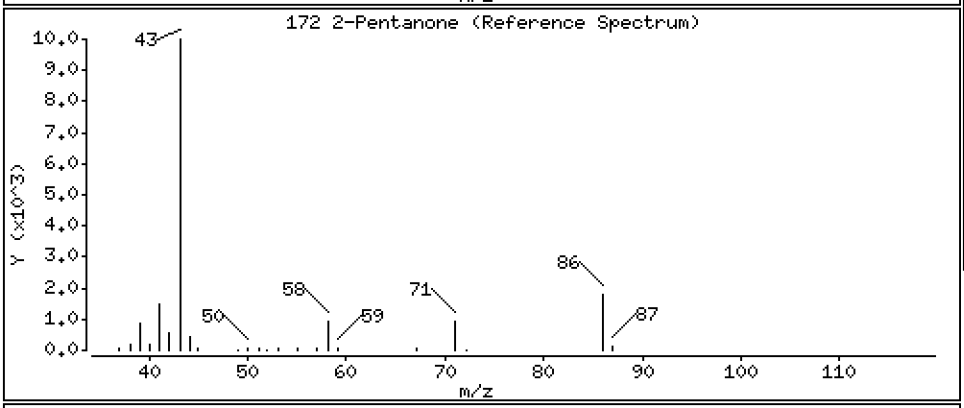
Concentration: 201.87 ug/Kg

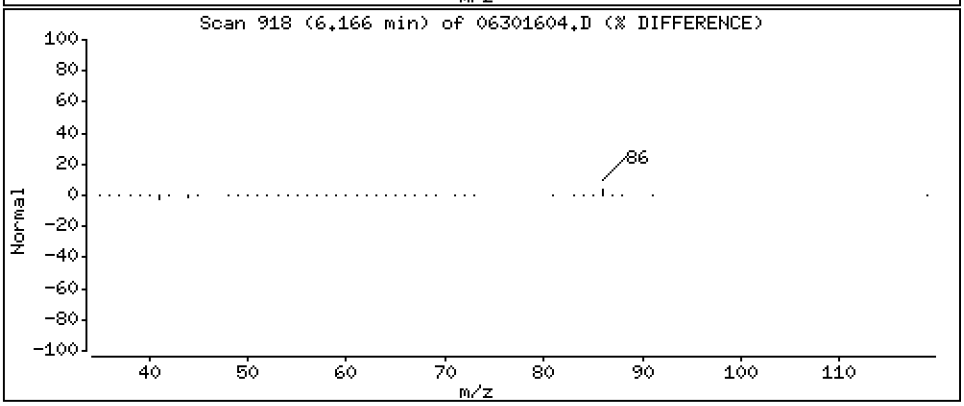












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

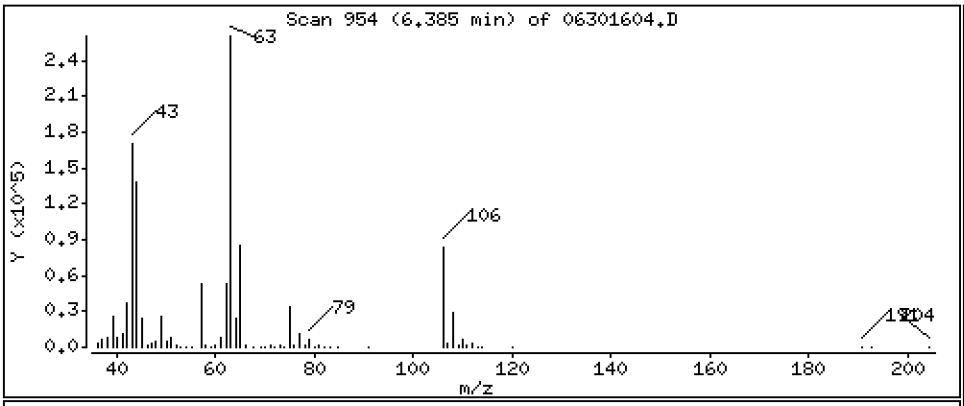
Operator: PB

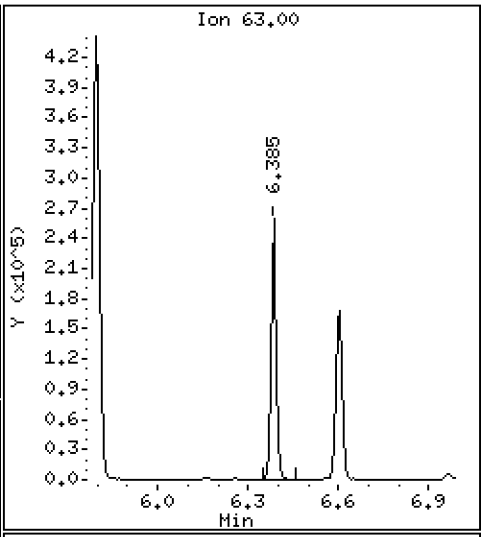
Column phase: RTXVMS

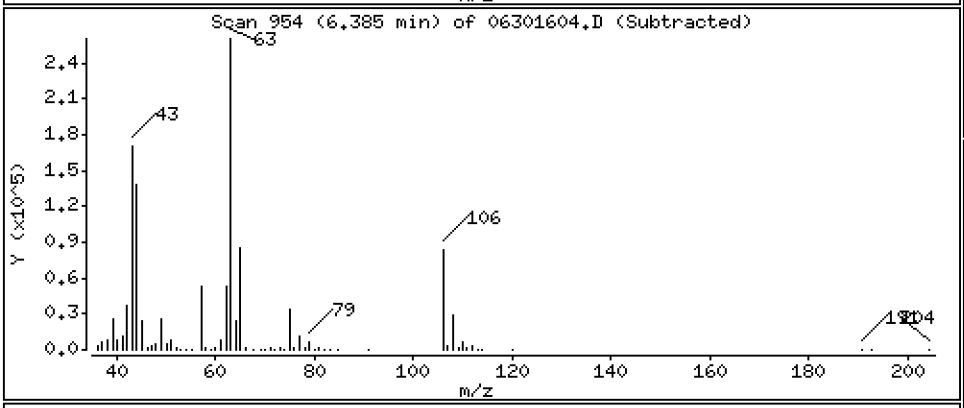
Column diameter: 0.18

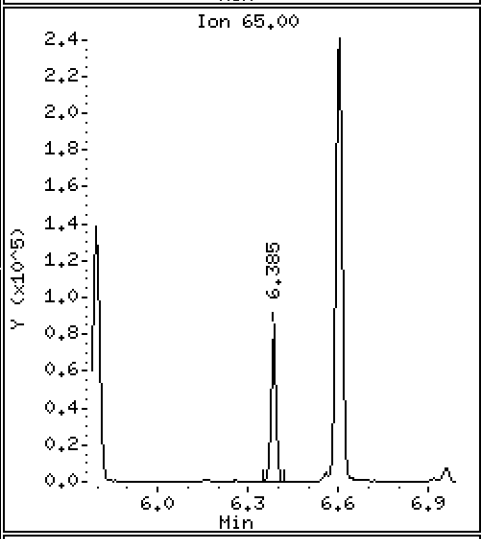
40 2-Chloroethyl Vinyl Ether

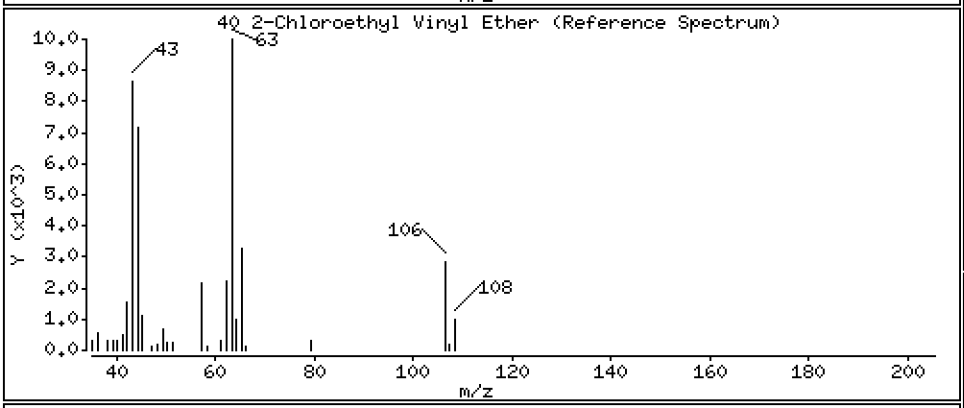
Concentration: 53.138 ug/Kg

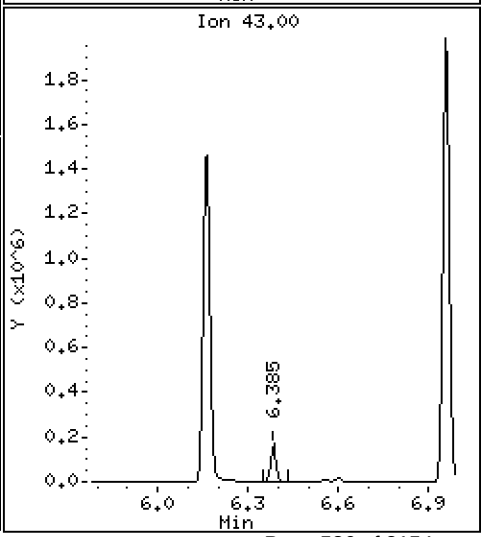


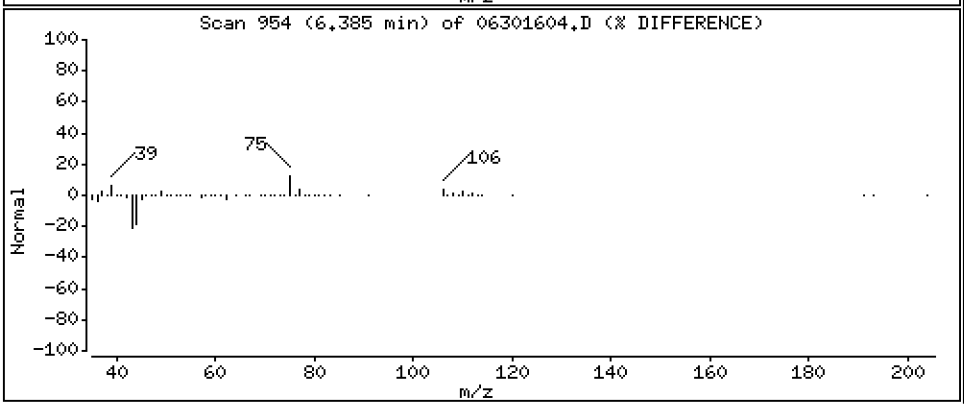












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

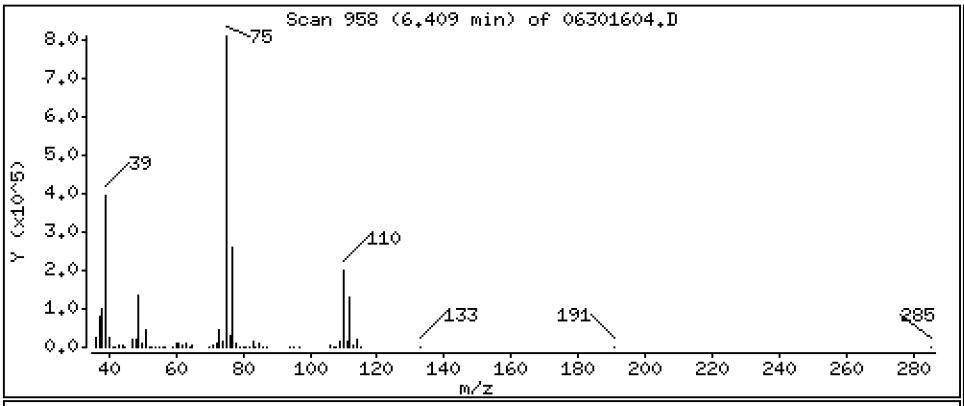
Operator: PB

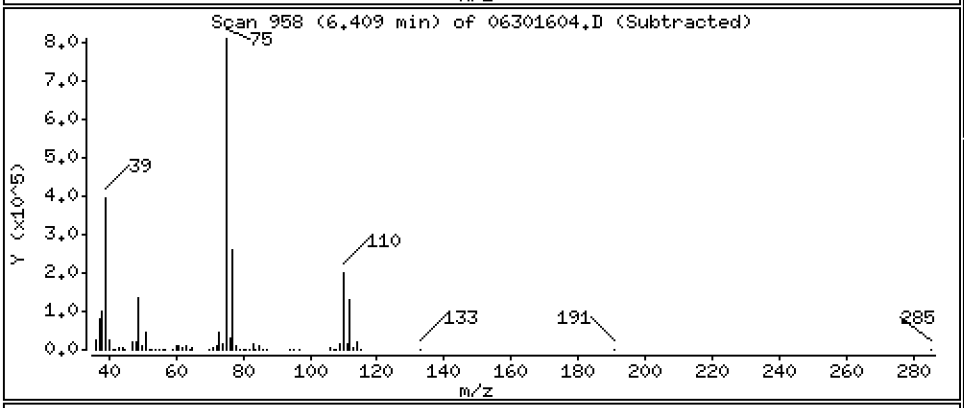
Column phase: RTXVMS

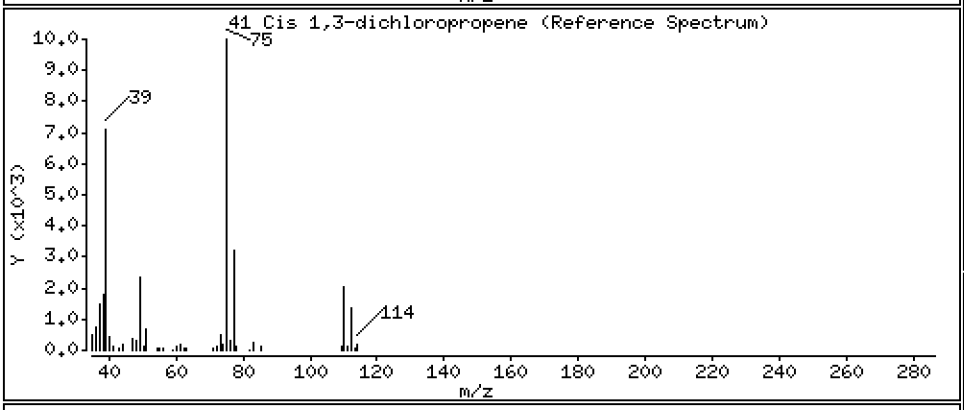
Column diameter: 0.18

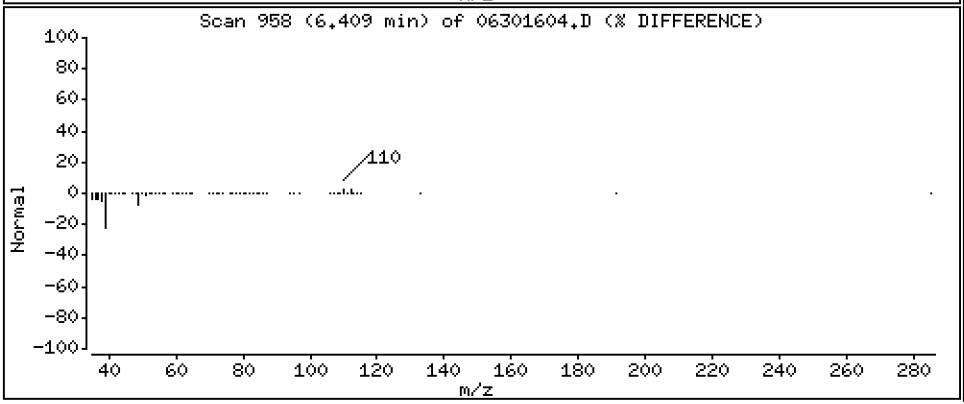
41 Cis 1,3-dichloropropene

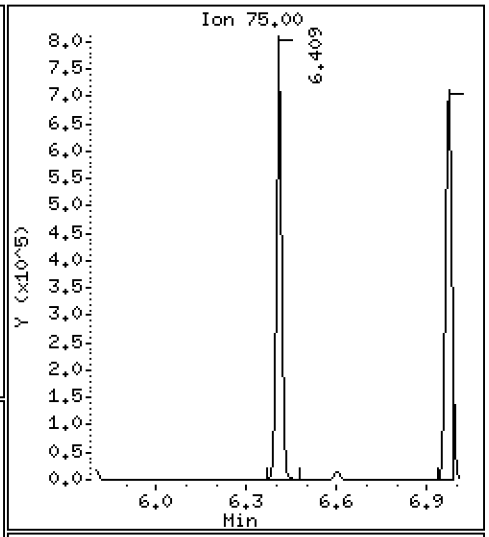
Concentration: 45.105 ug/Kg

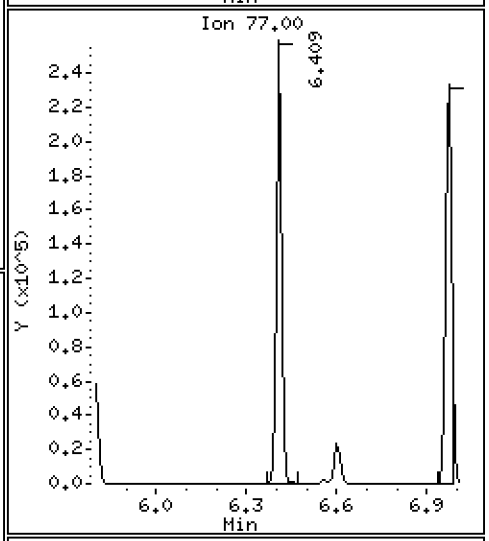


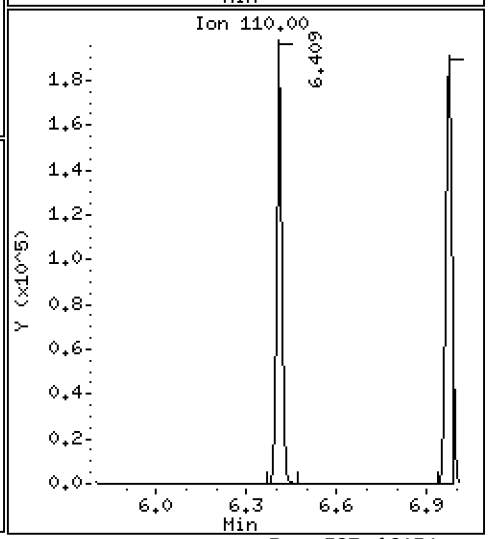












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

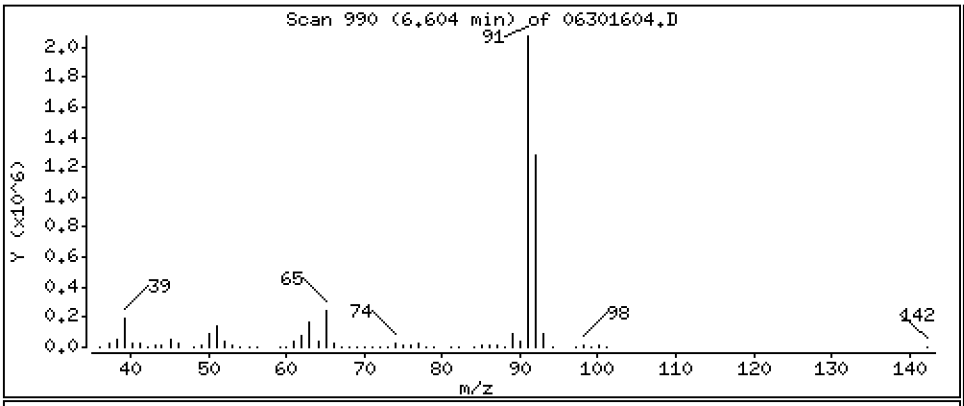
Operator: PB

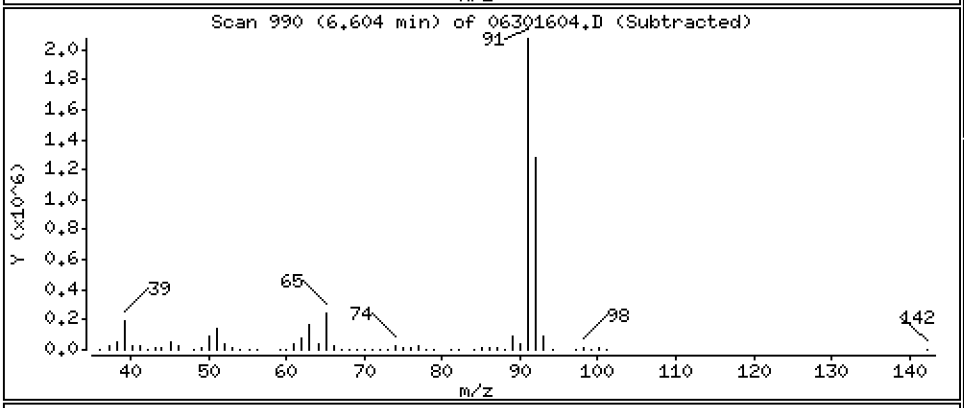
Column phase: RTXVMS

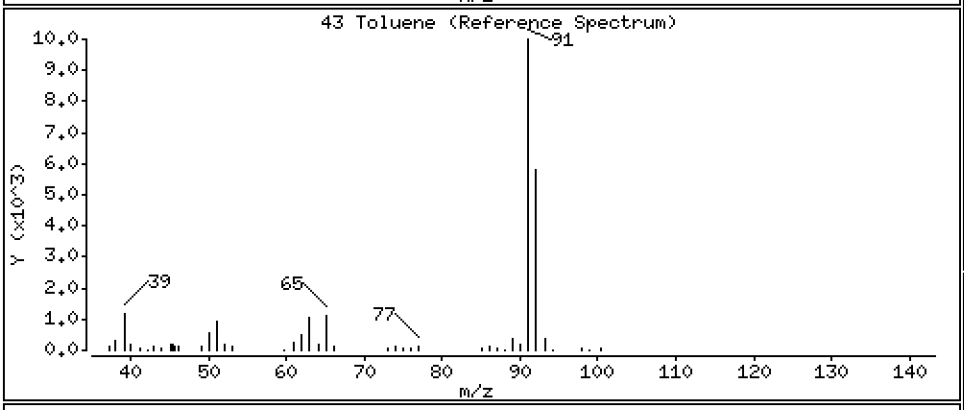
Column diameter: 0.18

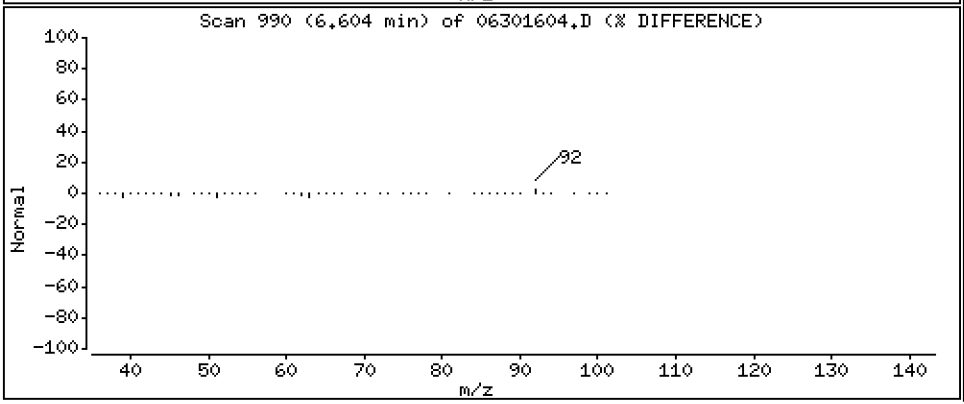
43 Toluene

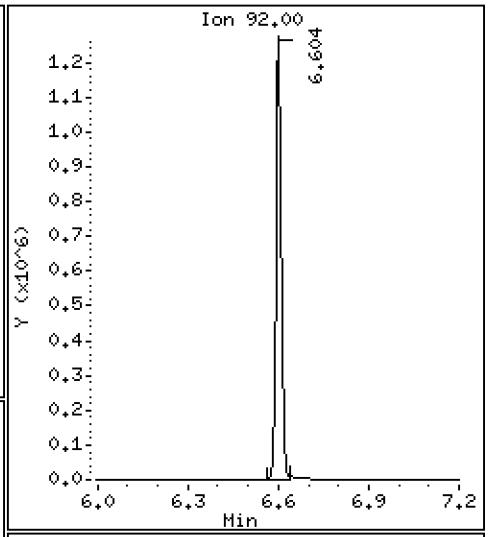
Concentration: 44.022 ug/Kg

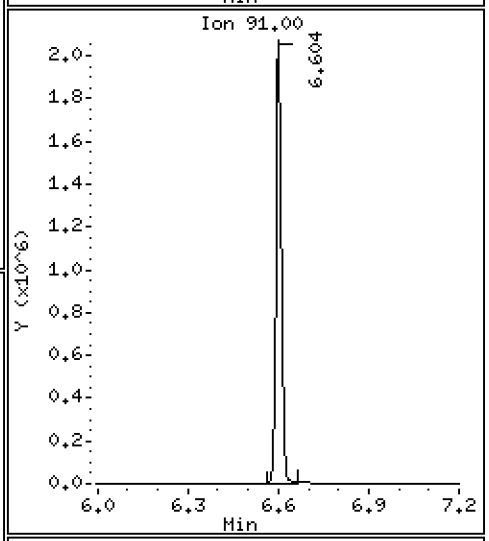


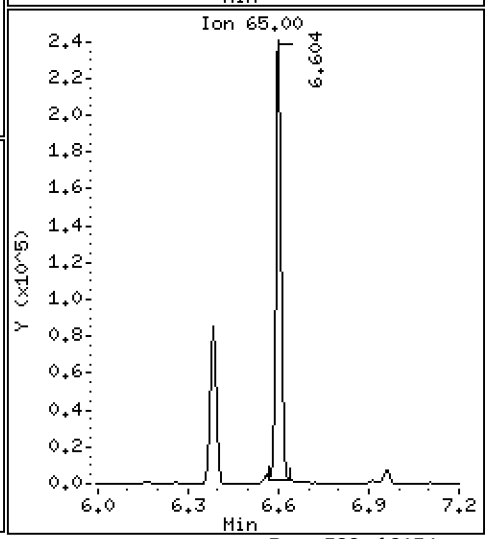












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

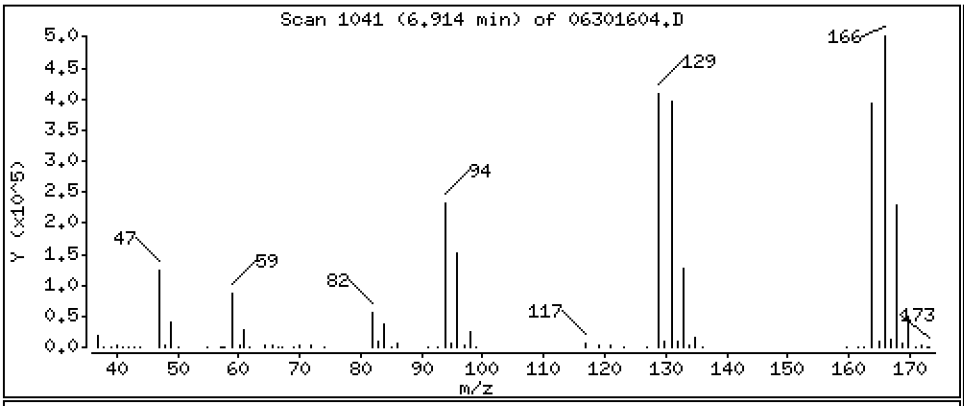
Operator: PB

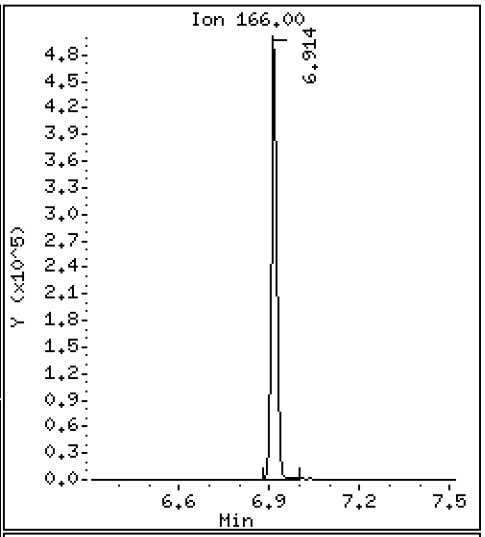
Column phase: RTXVMS

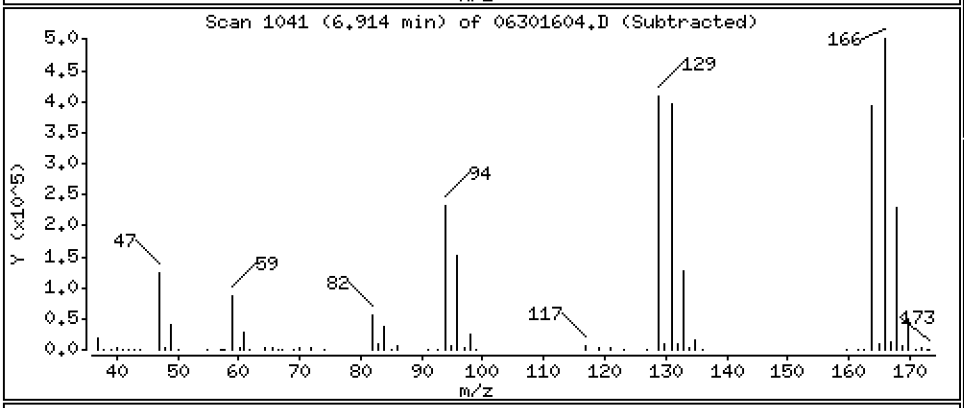
Column diameter: 0.18

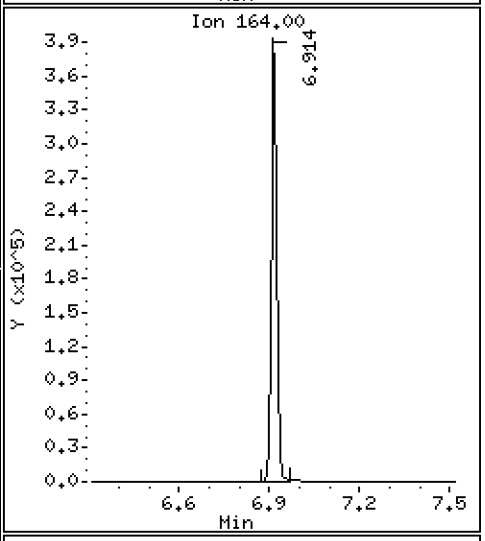
44 Tetrachloroethene

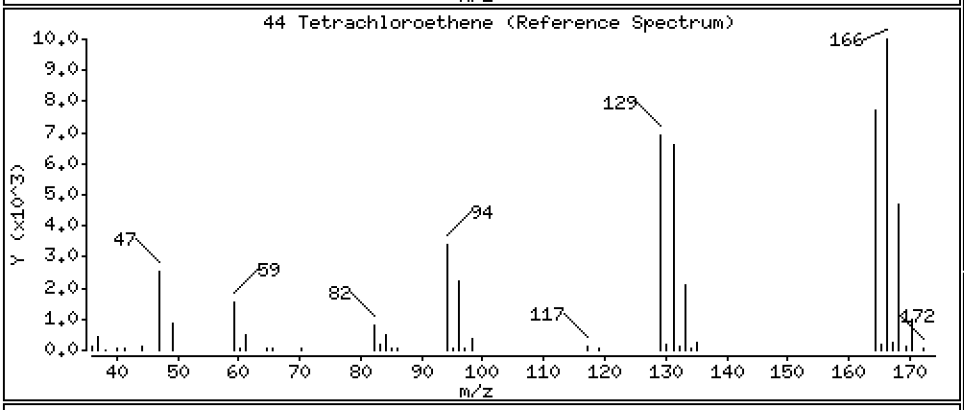
Concentration: 49.037 ug/Kg

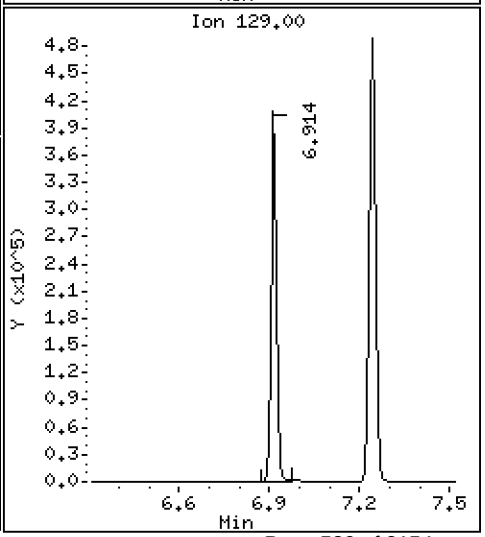


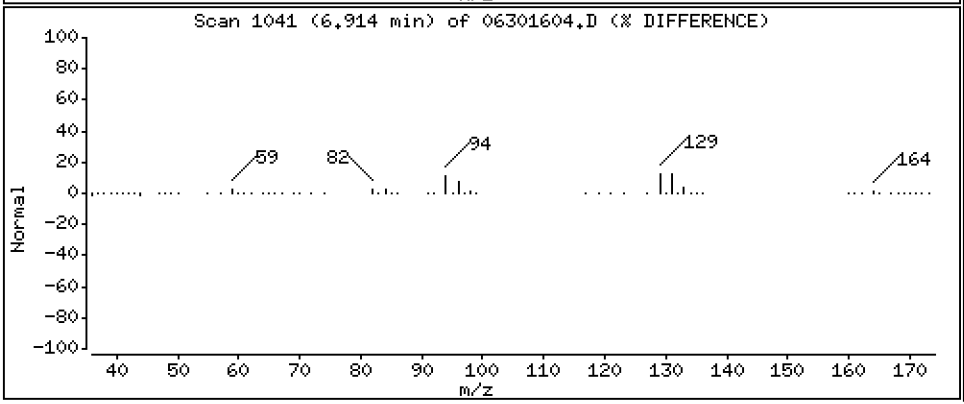












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

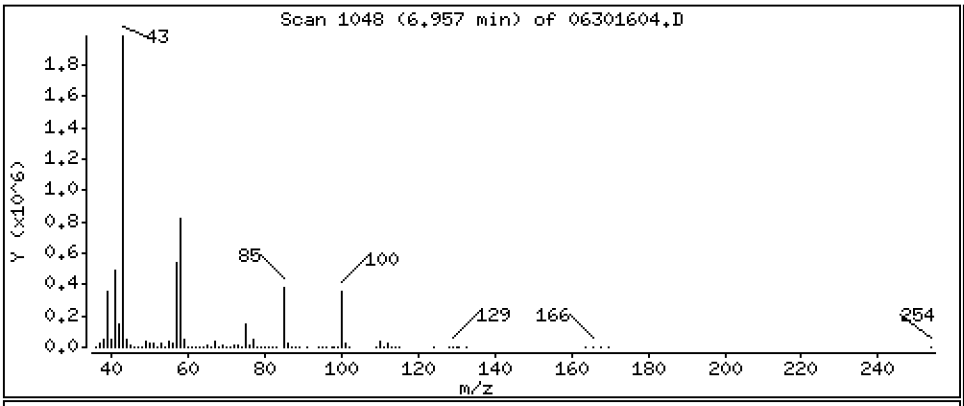
Operator: PB

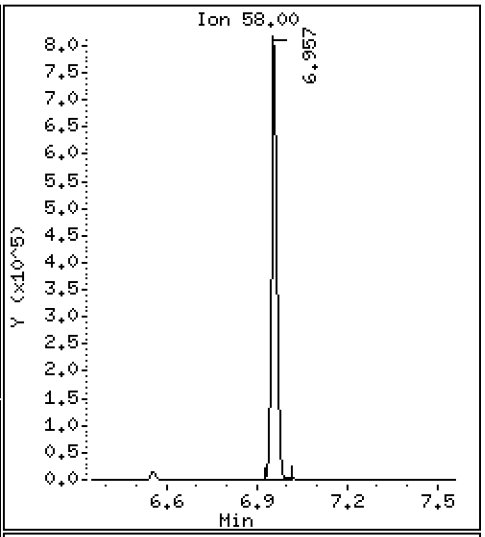
Column phase: RTXVMS

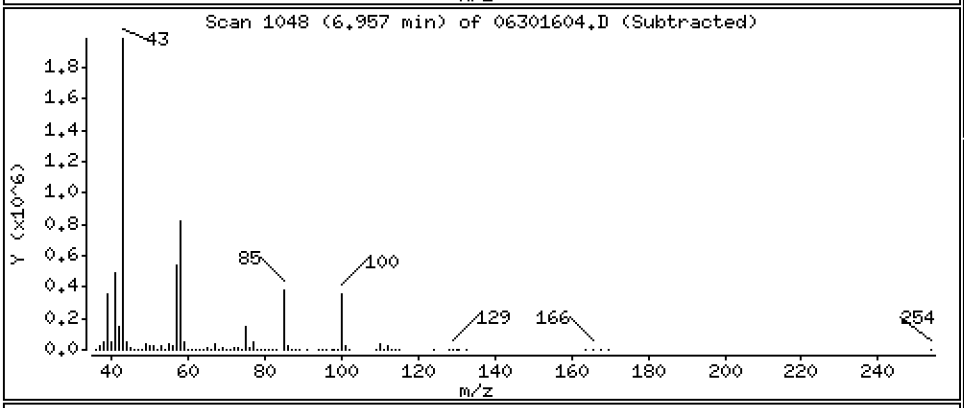
Column diameter: 0.18

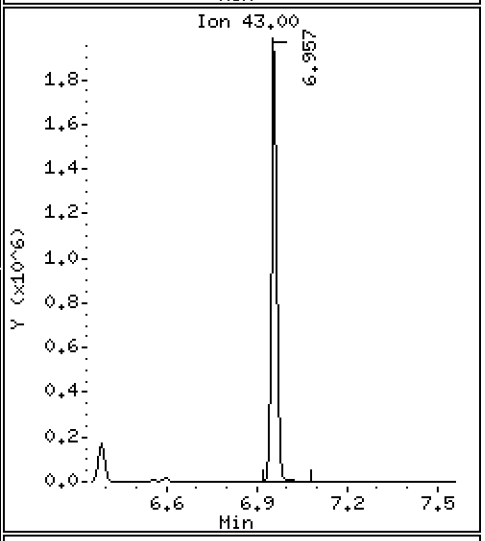
45 4-Methyl-2-Pentanone

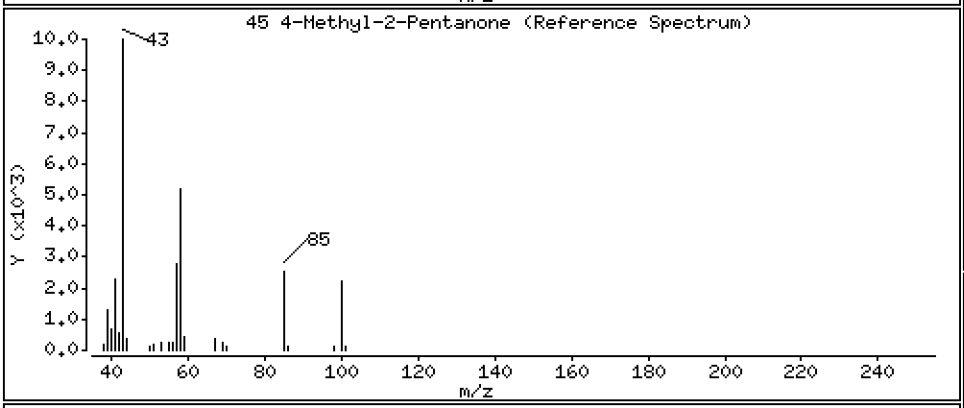
Concentration: 192.56 ug/Kg

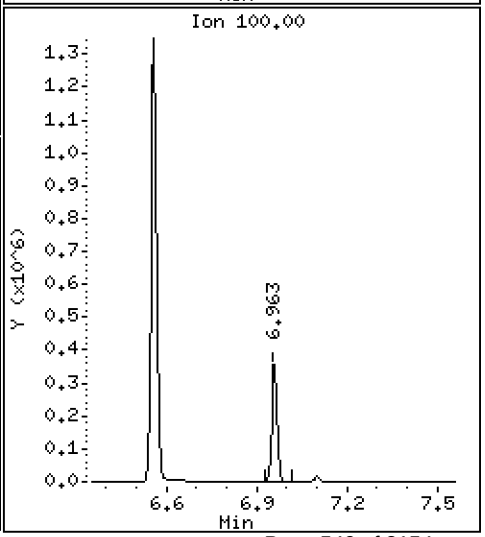


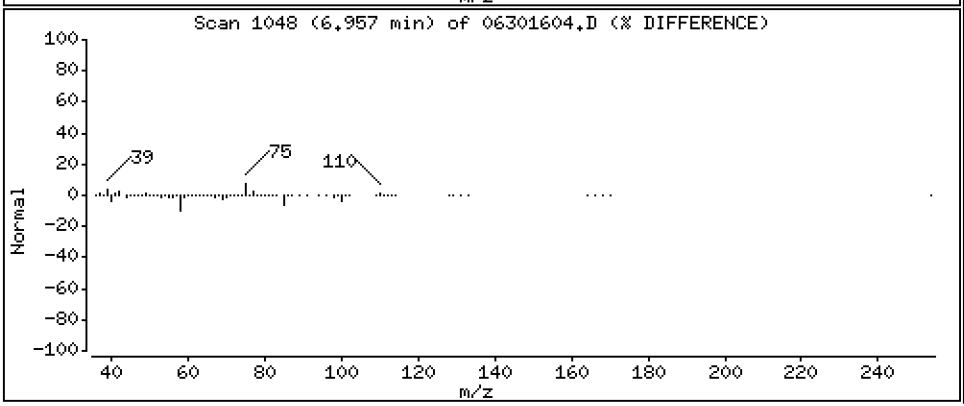












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

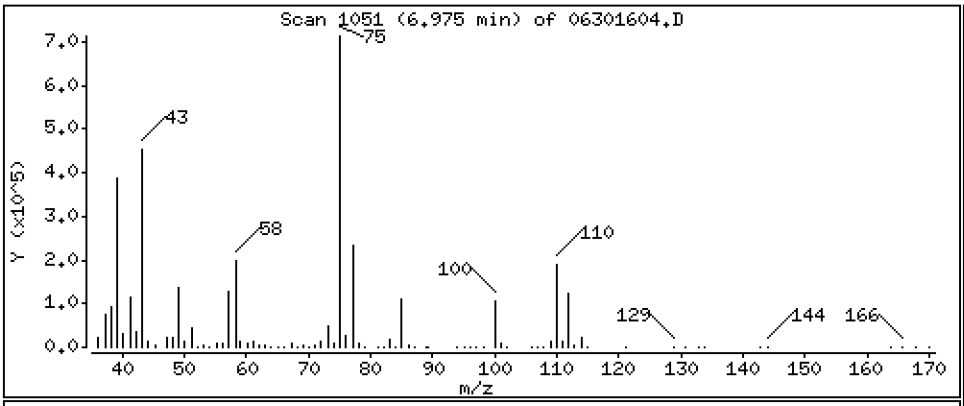
Operator: PB

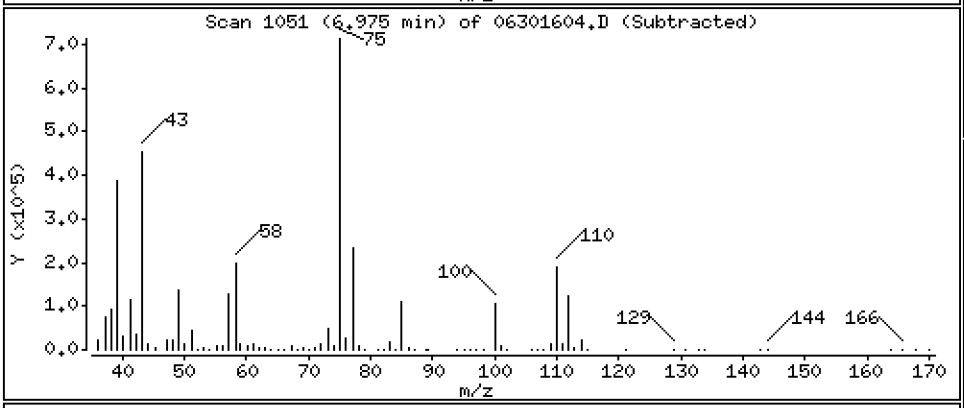
Column phase: RTXVMS

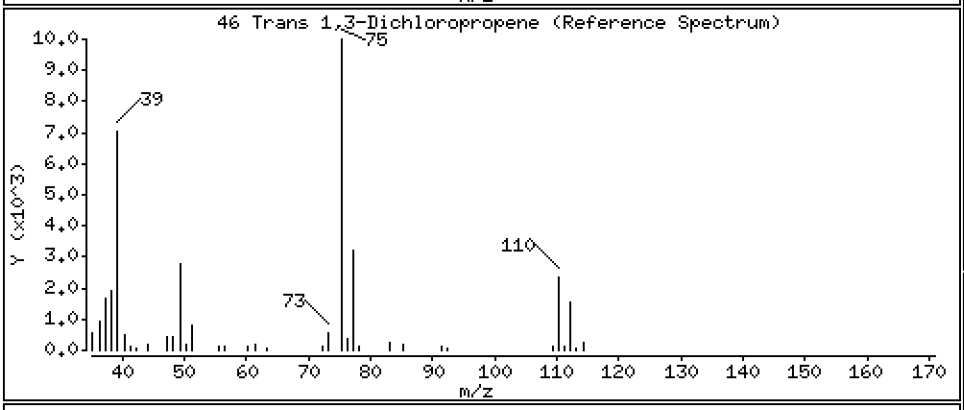
Column diameter: 0.18

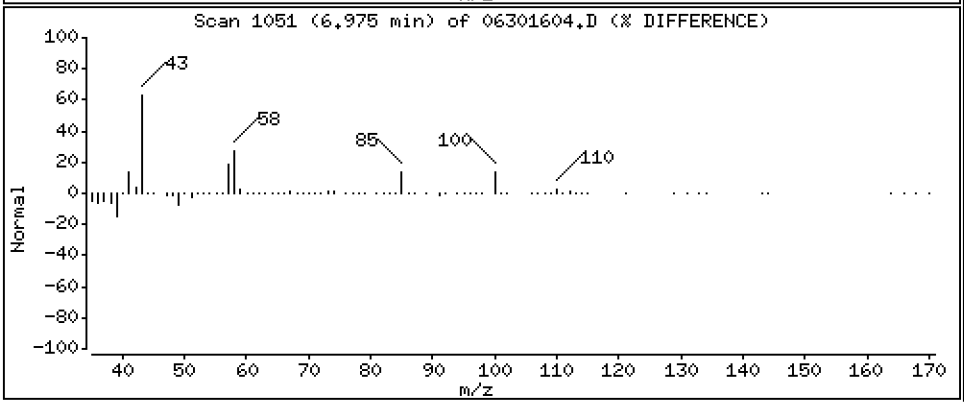
46 Trans 1,3-Dichloropropene

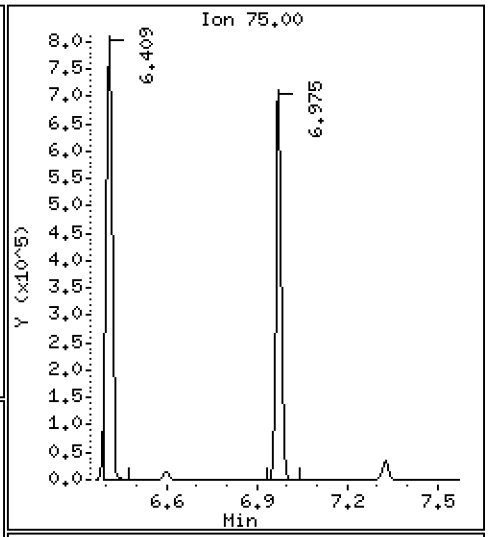
Concentration: 45.733 ug/Kg

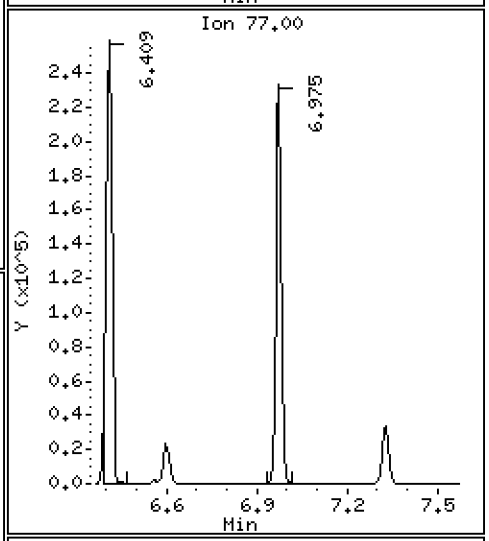


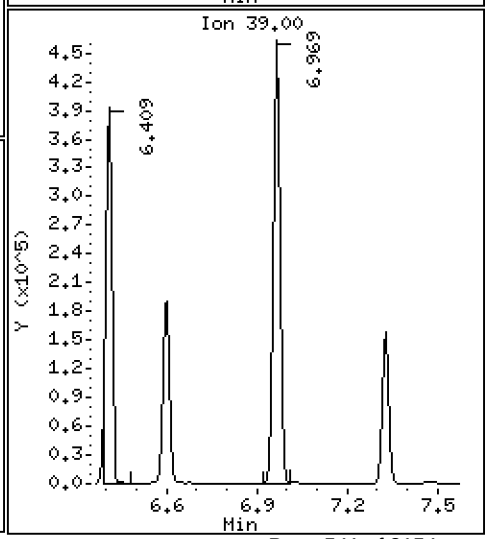












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

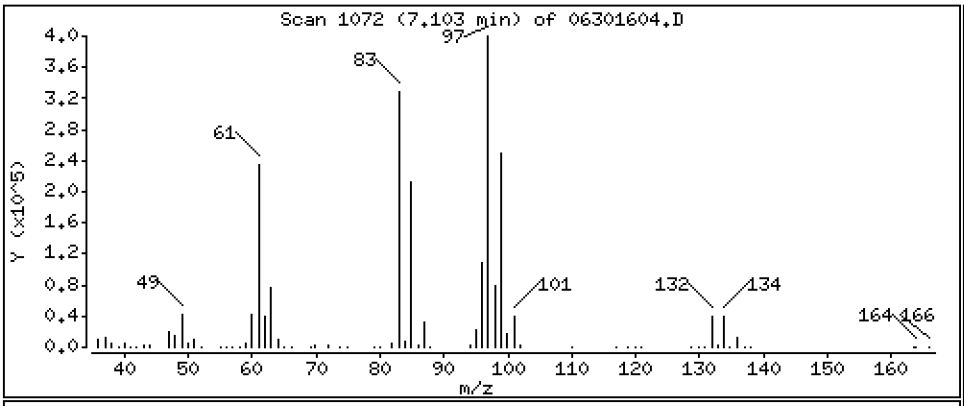
Operator: PB

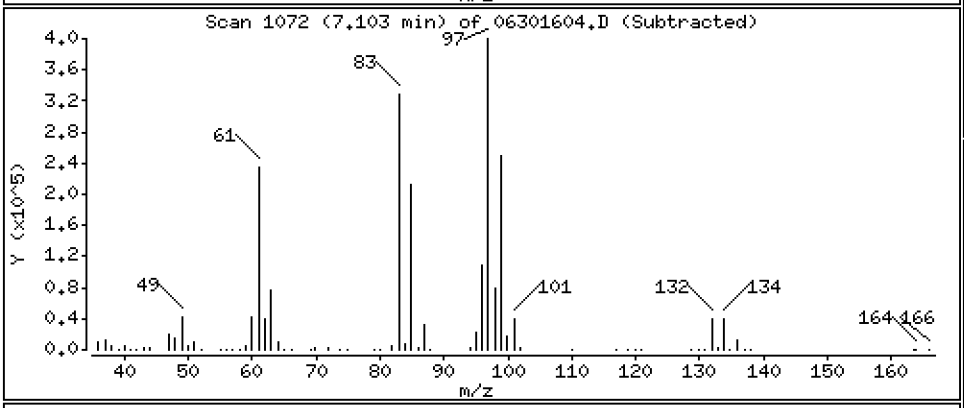
Column phase: RTXVMS

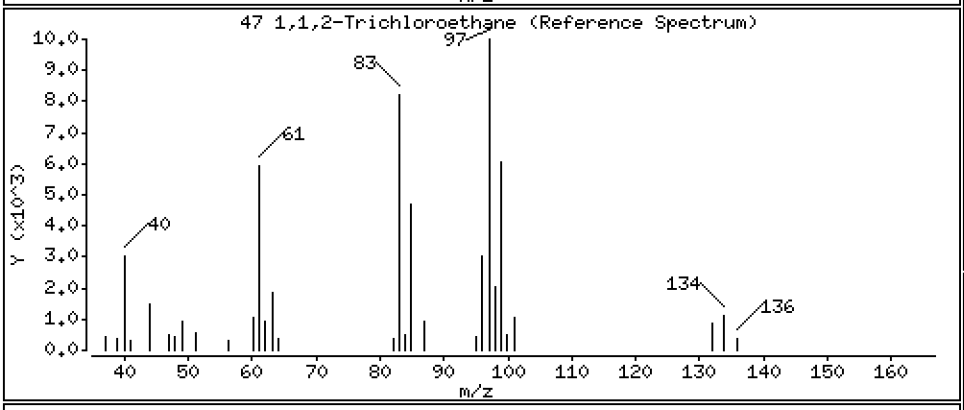
Column diameter: 0.18

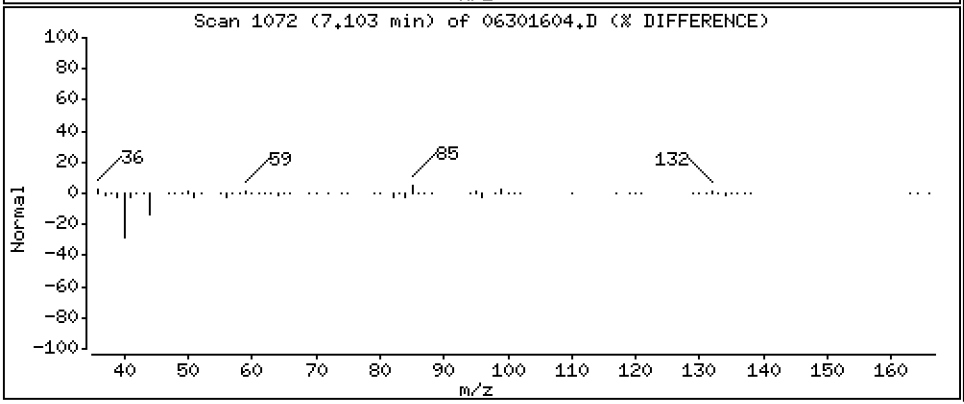
47 1,1,2-Trichloroethane

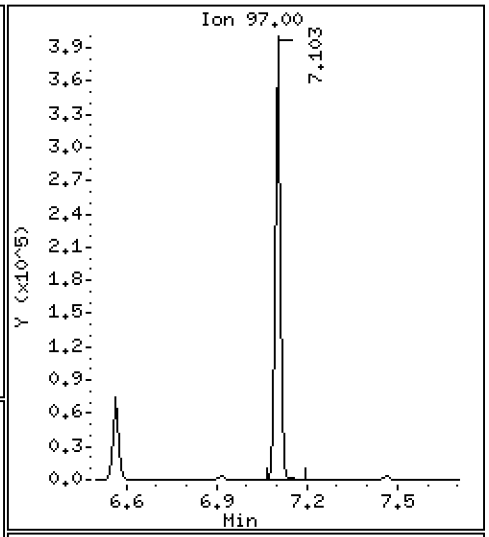
Concentration: 44.937 ug/Kg

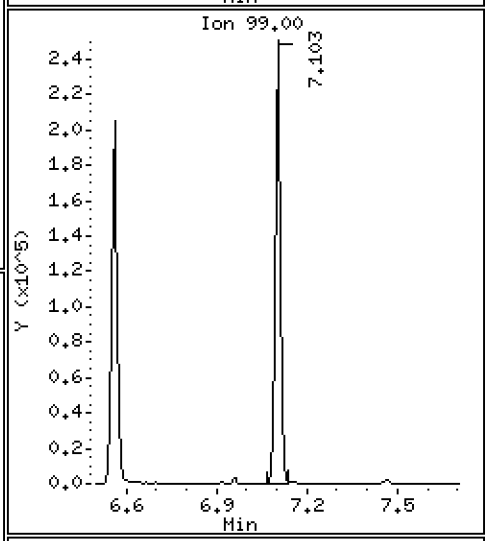


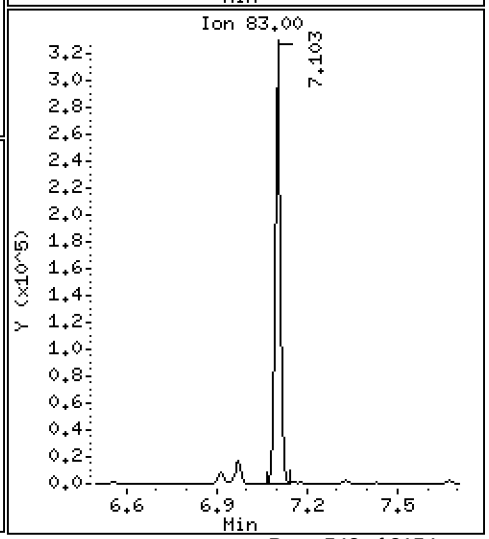












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

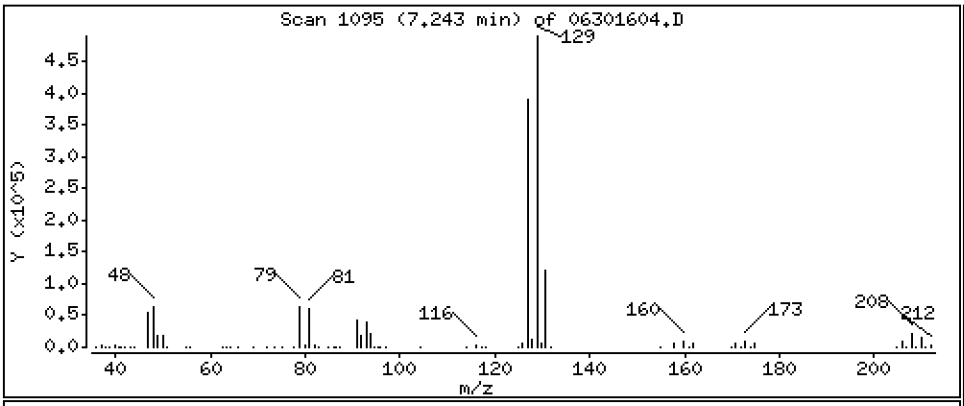
Operator: PB

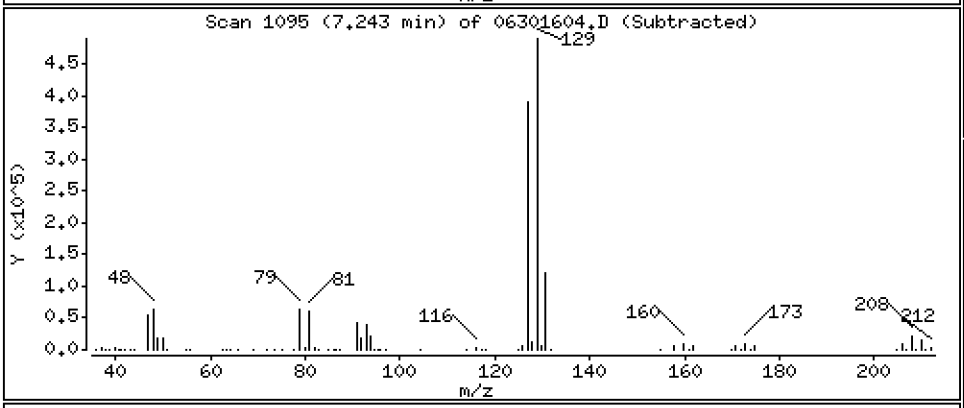
Column phase: RTXVMS

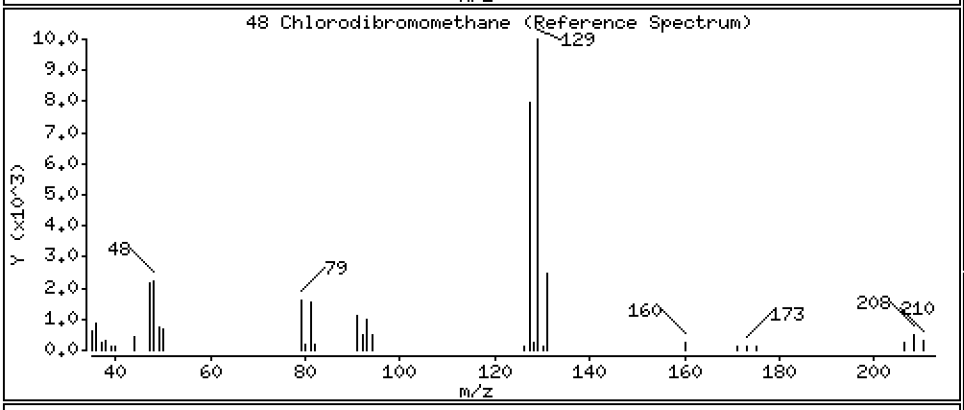
Column diameter: 0.18

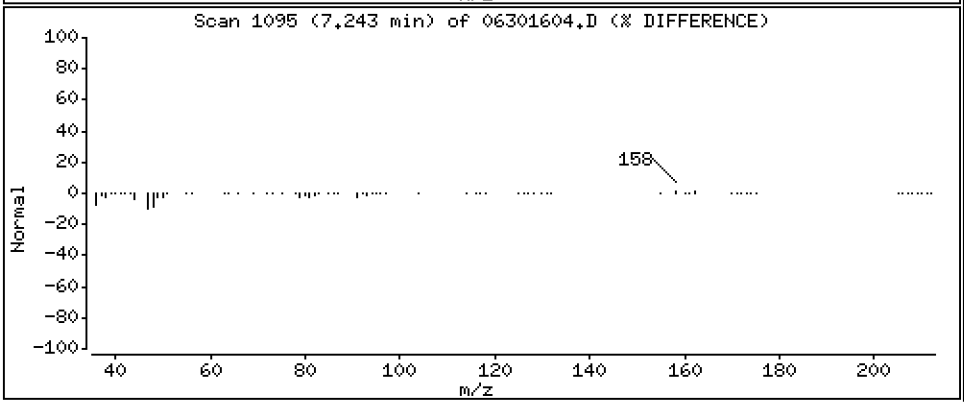
48 Chlorodibromomethane

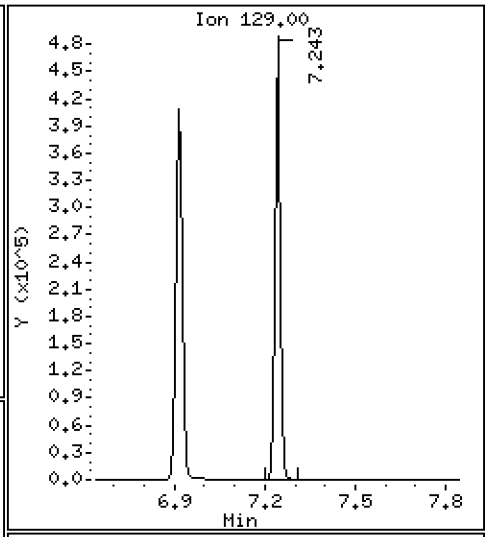
Concentration: 48.504 ug/Kg

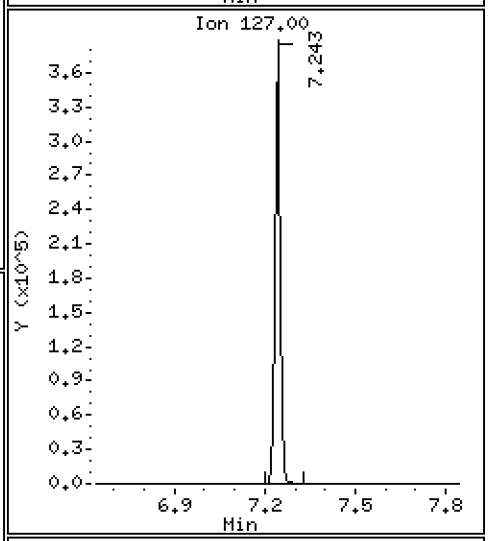


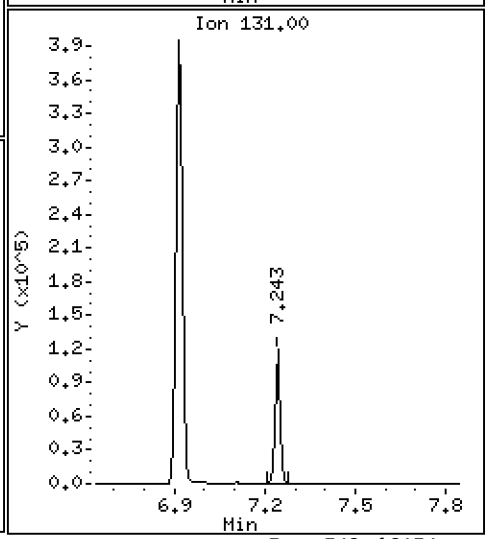












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

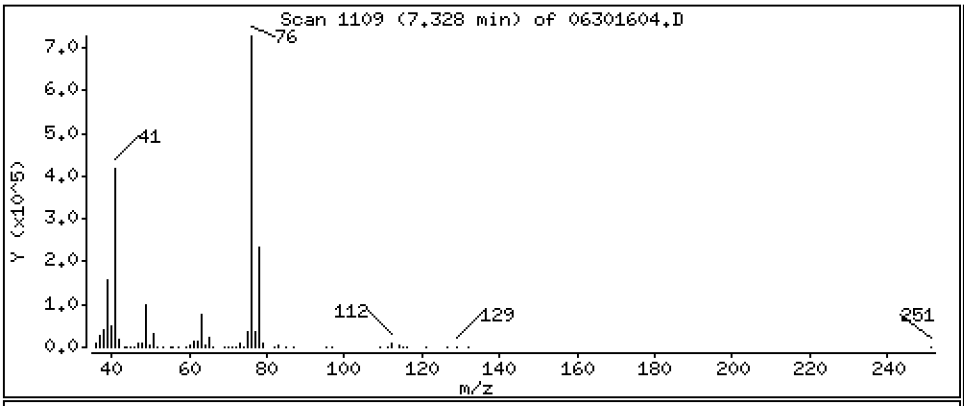
Operator: PB

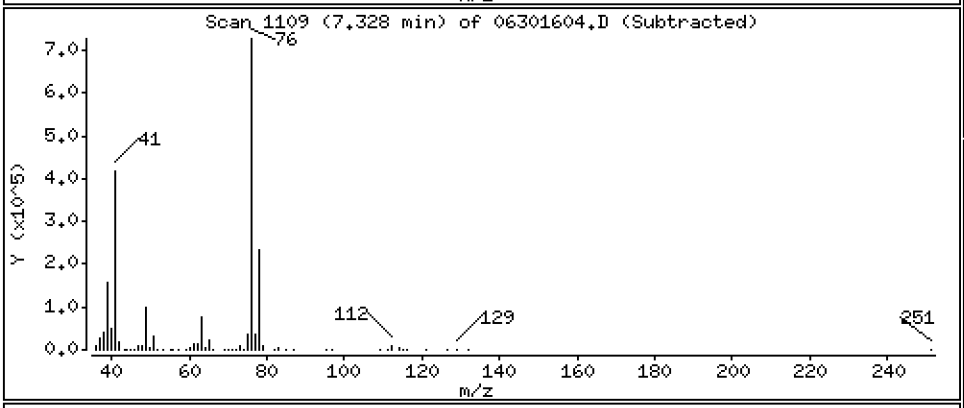
Column phase: RTXVMS

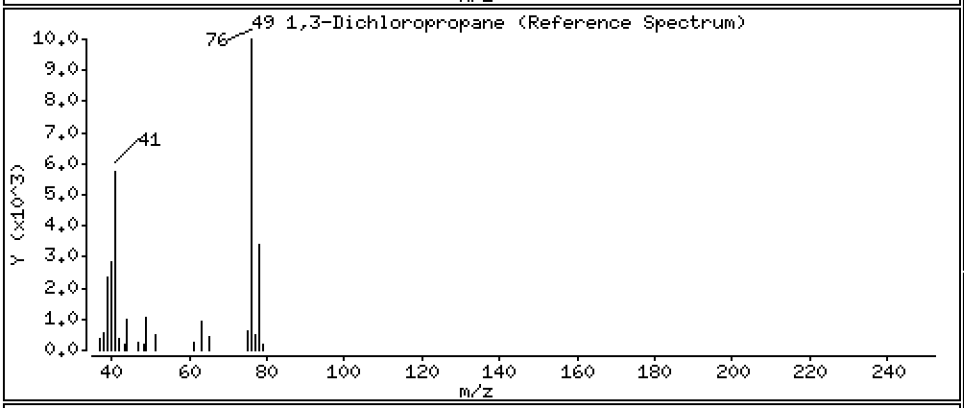
Column diameter: 0.18

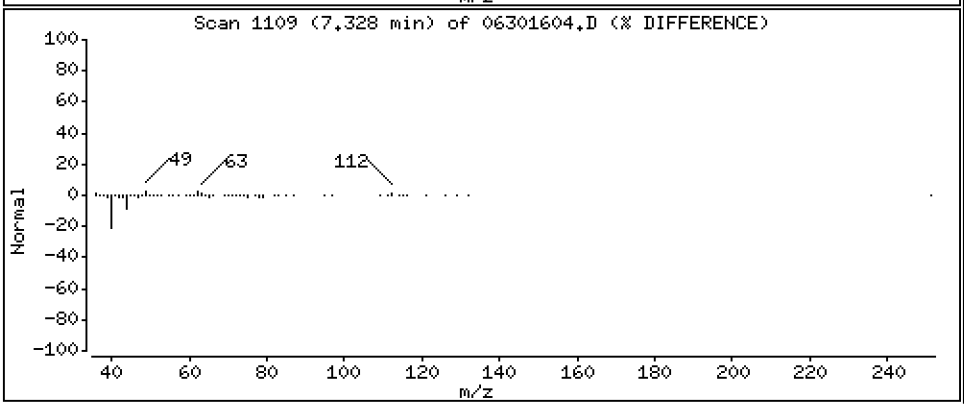
49 1,3-Dichloropropane

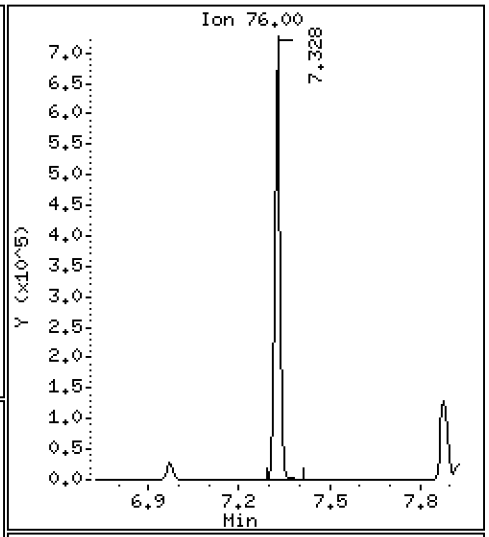
Concentration: 44.287 ug/Kg

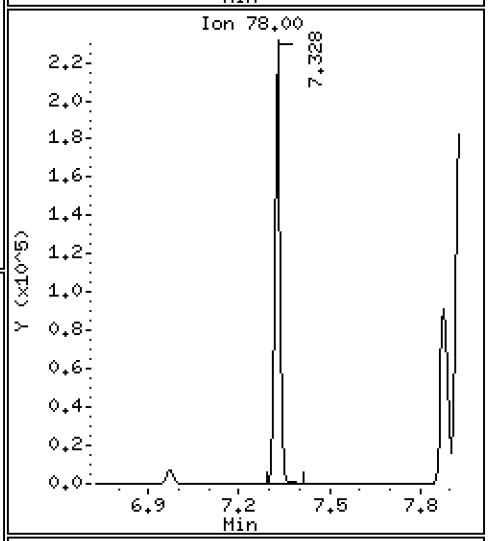


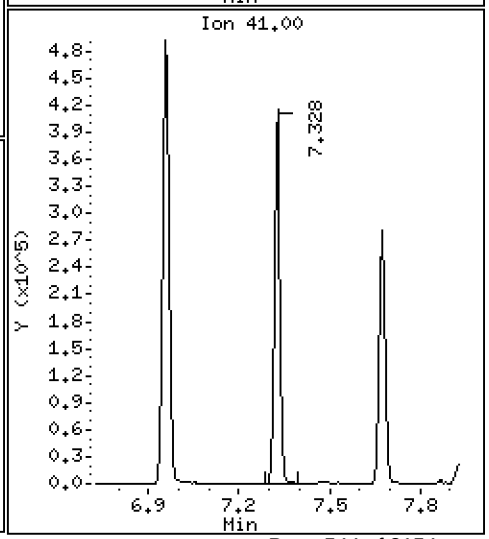












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

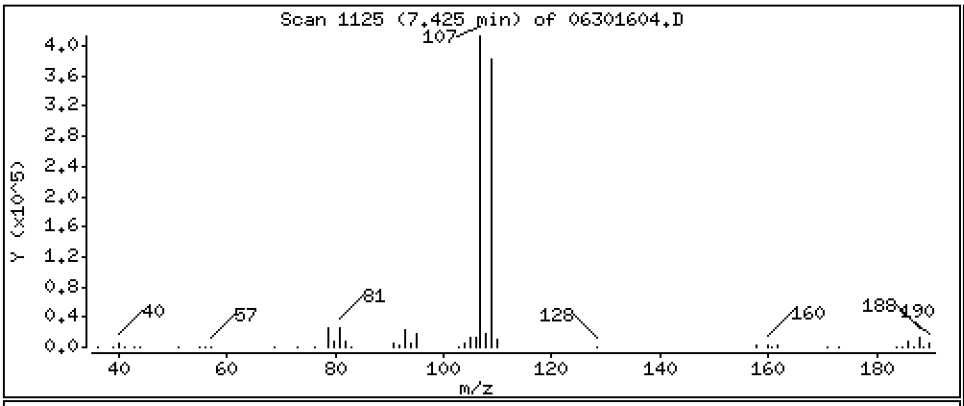
Operator: PB

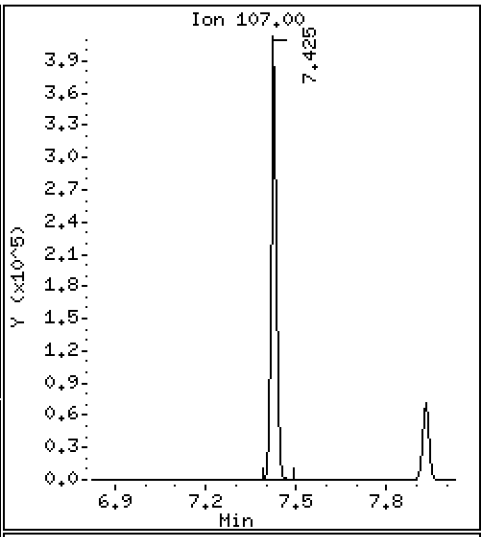
Column phase: RTXVMS

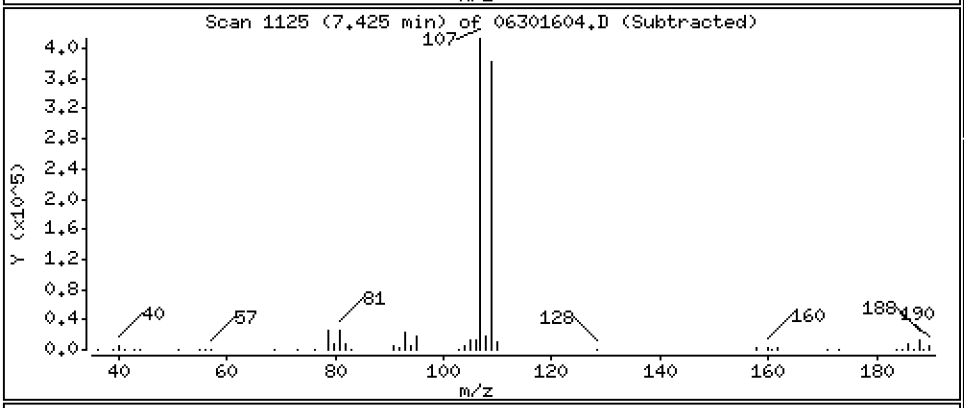
Column diameter: 0.18

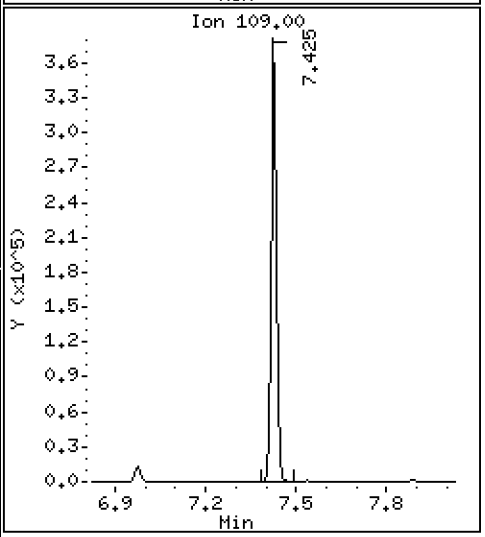
50 1,2-Dibromoethane

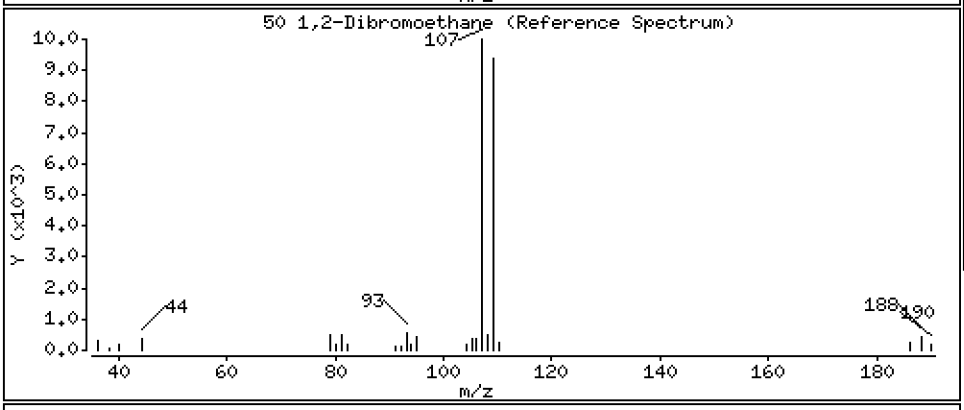
Concentration: 45.299 ug/Kg

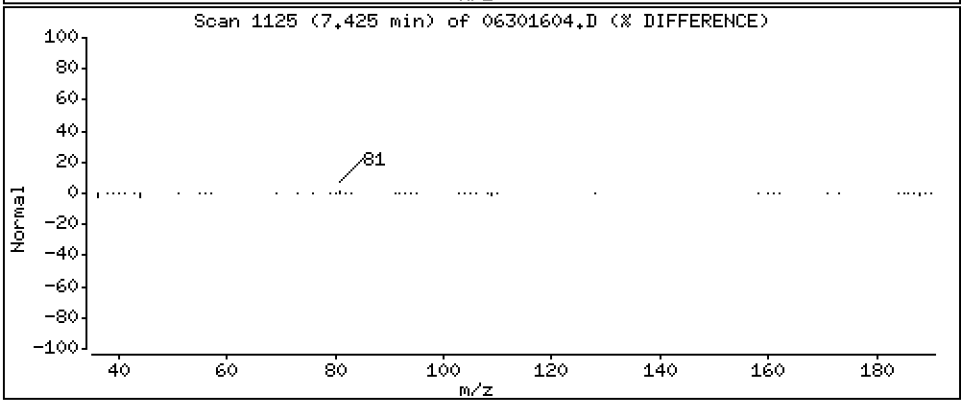












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

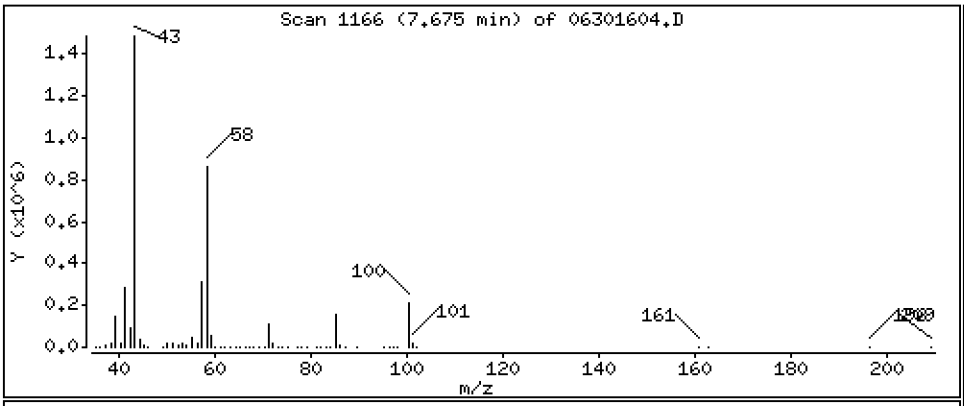
Operator: PB

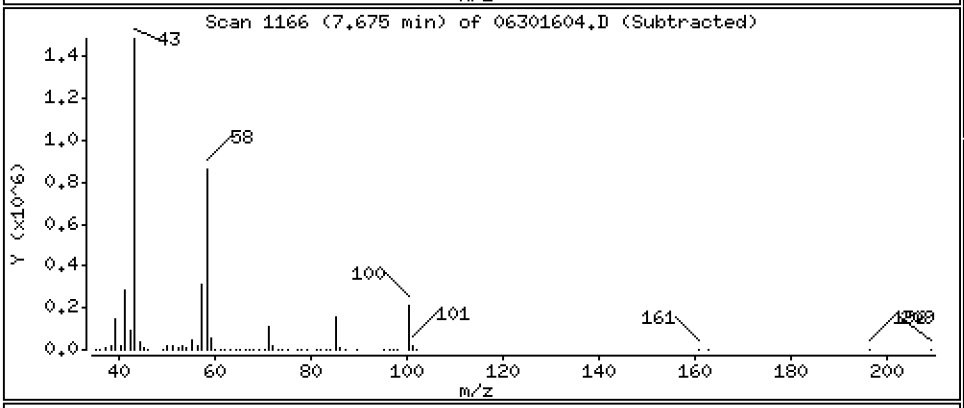
Column phase: RTXVMS

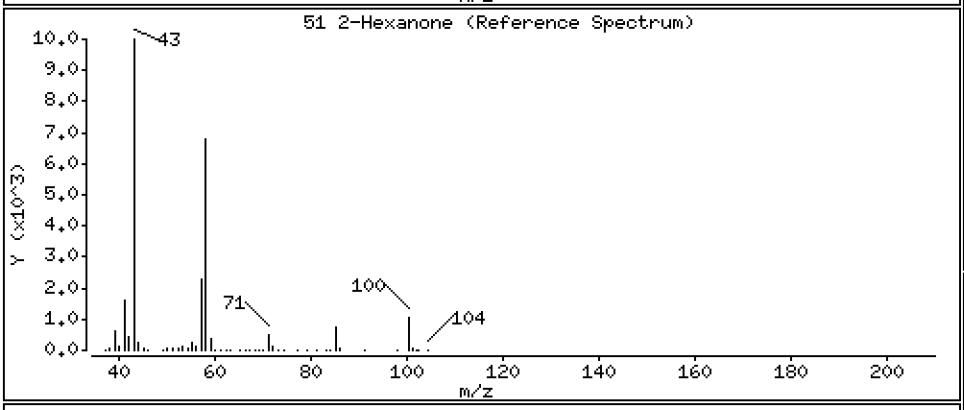
Column diameter: 0.18

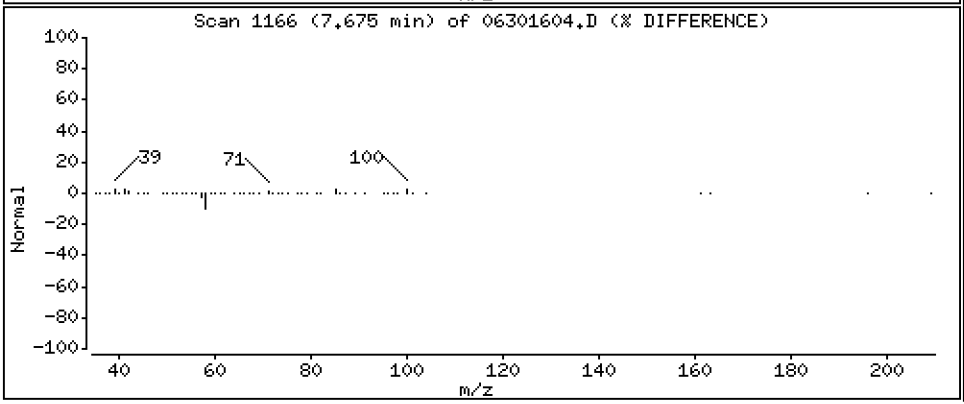
51 2-Hexanone

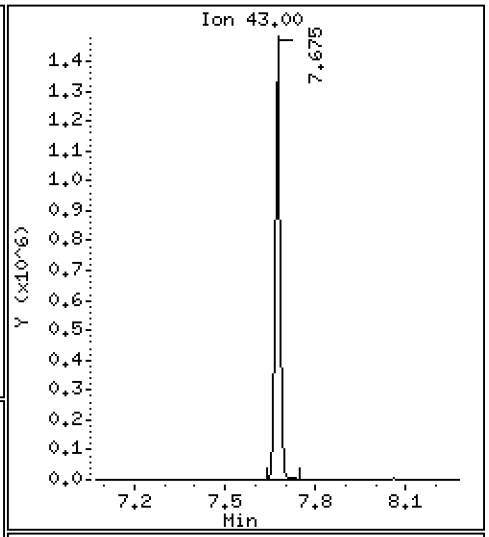
Concentration: 183.94 ug/Kg

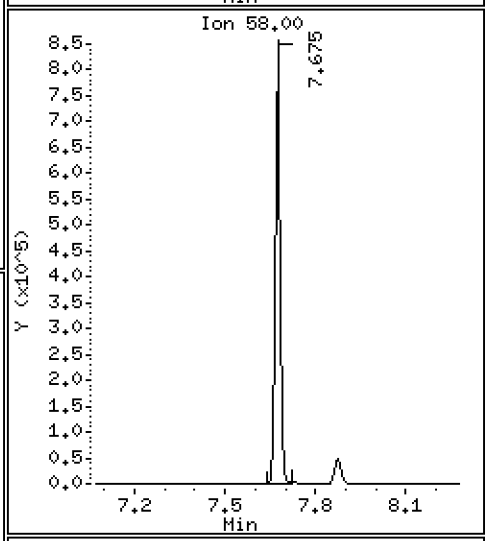


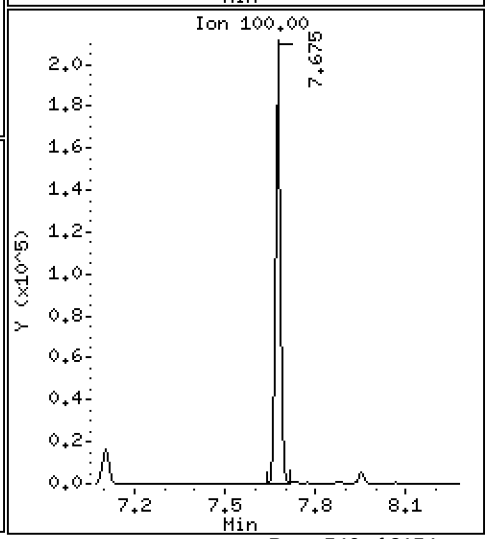












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

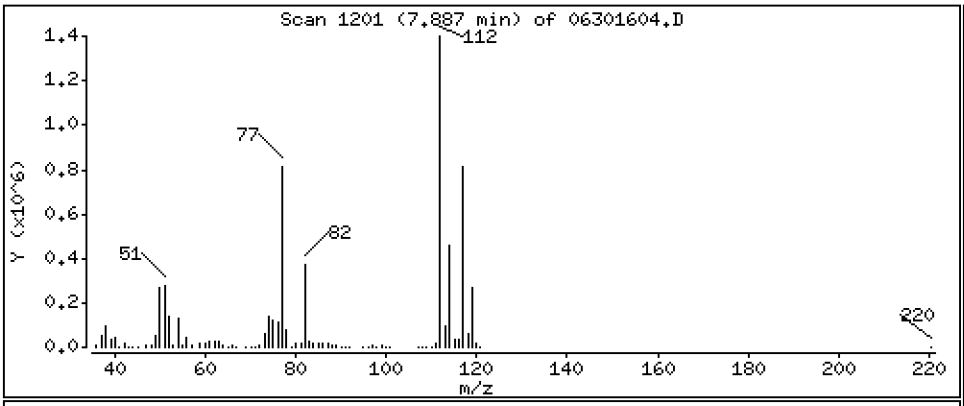
Operator: PB

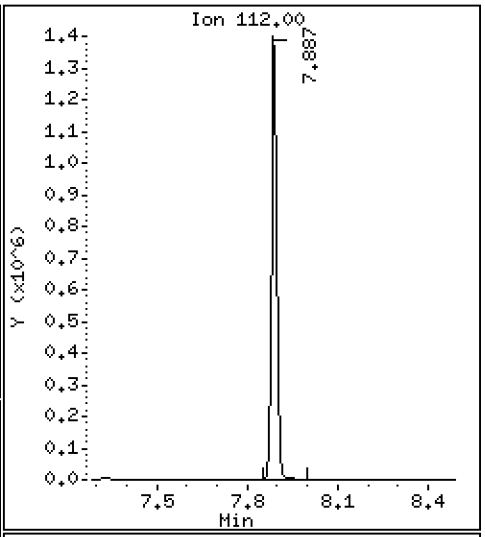
Column phase: RTXVMS

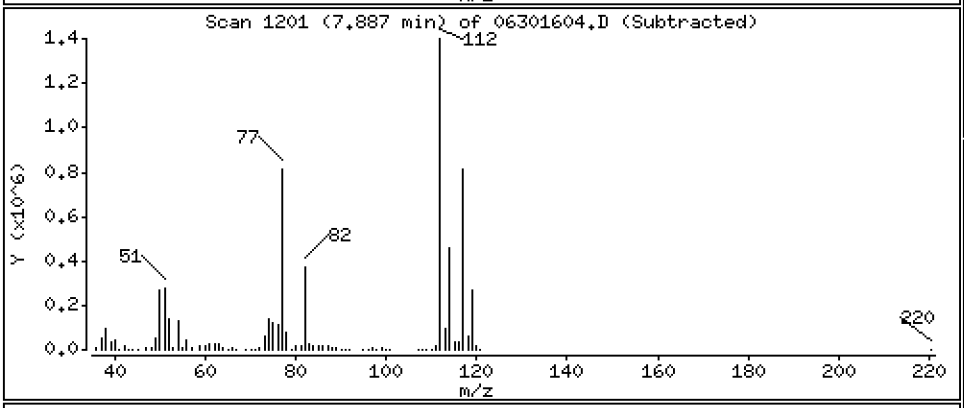
Column diameter: 0.18

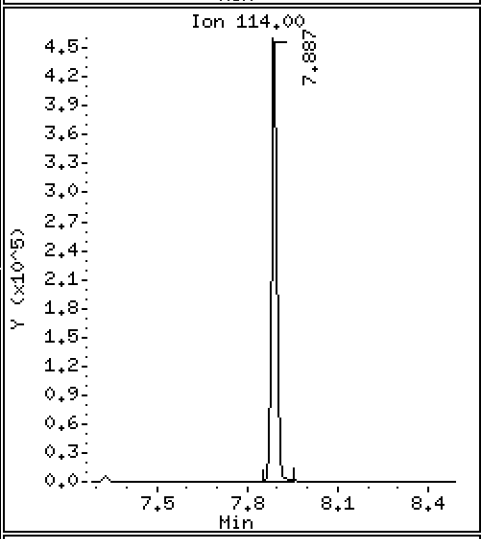
53 Chlorobenzene

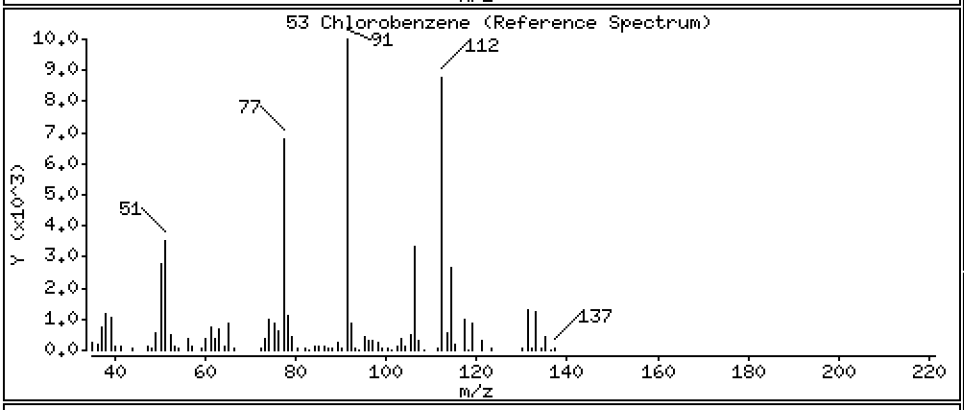
Concentration: 46.195 ug/Kg

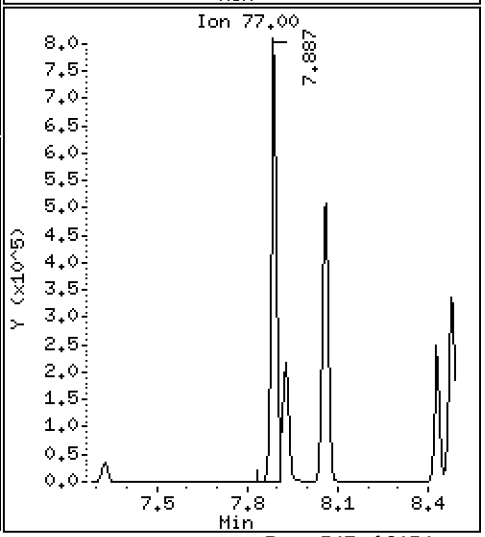


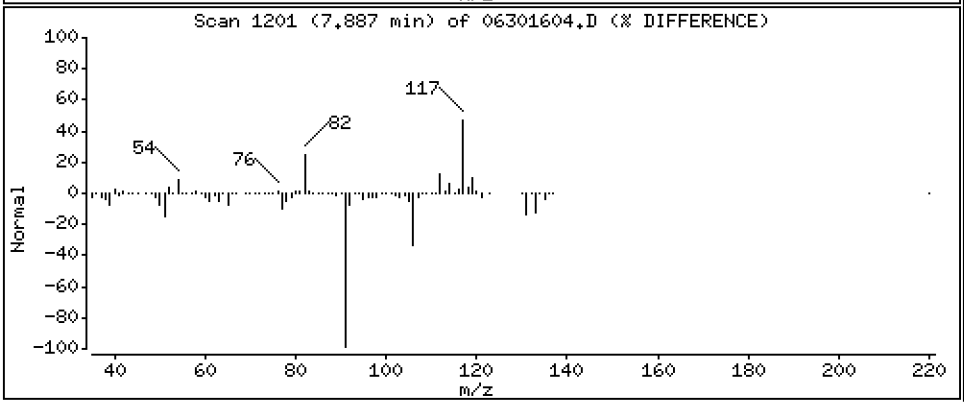












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

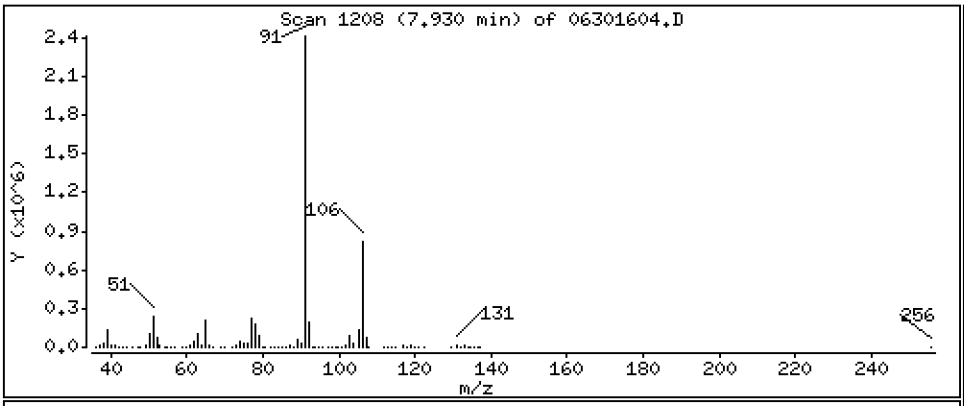
Operator: PB

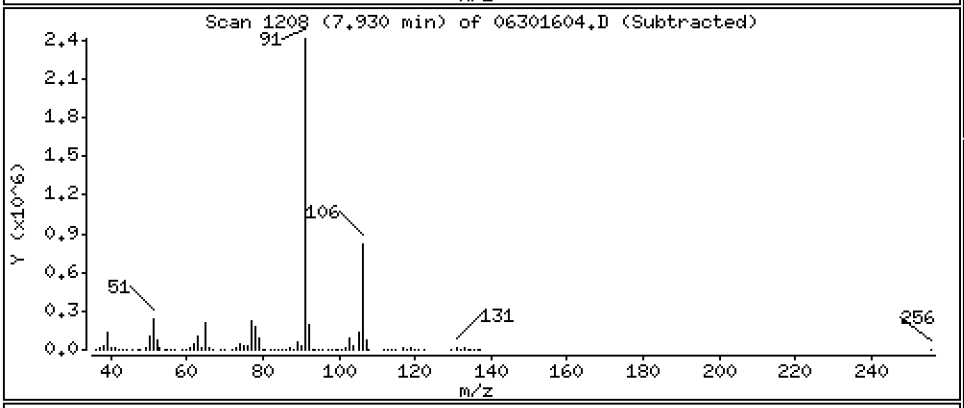
Column phase: RTXVMS

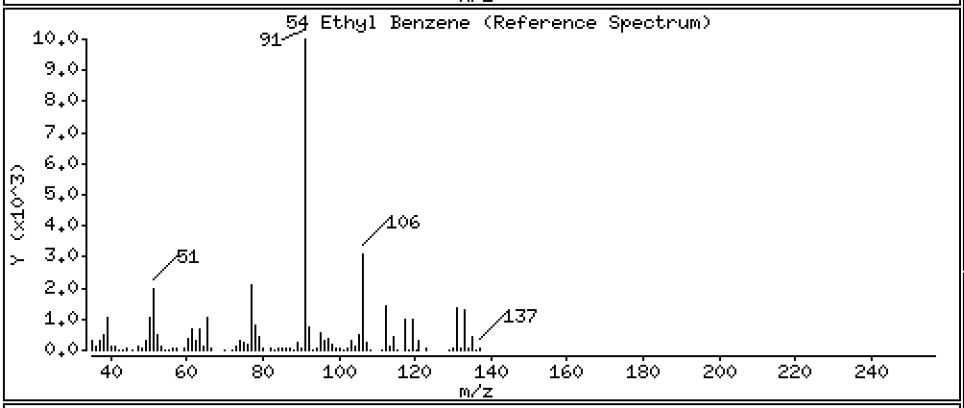
Column diameter: 0.18

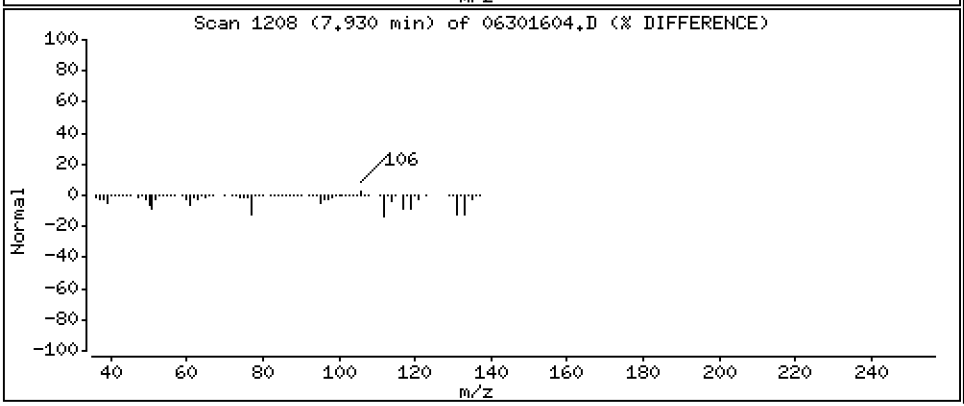
54 Ethyl Benzene

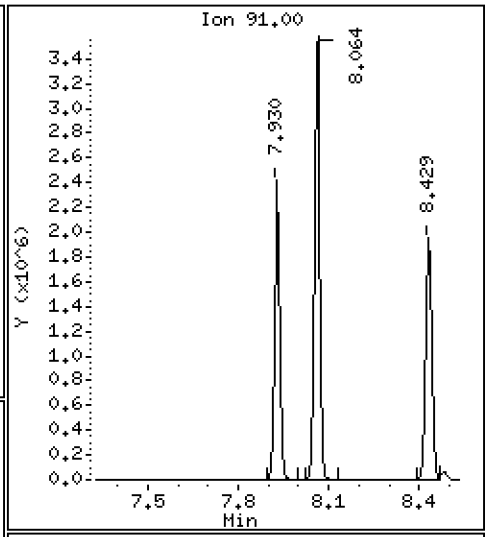
Concentration: 45.808 ug/Kg

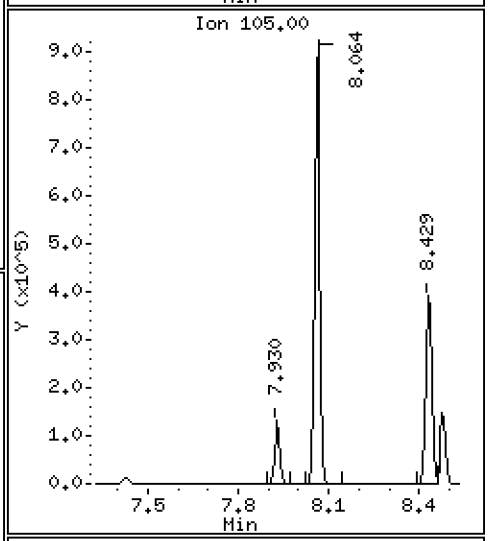


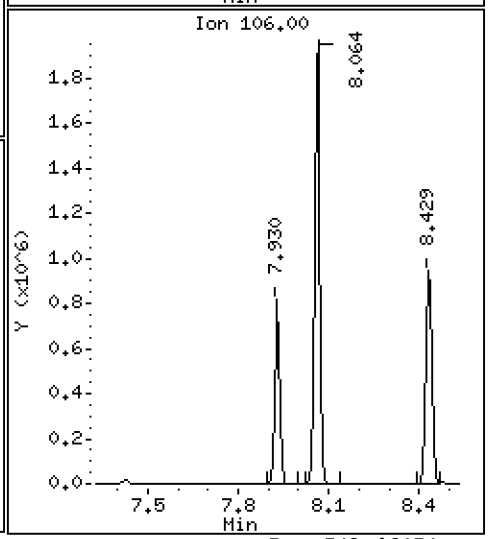












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

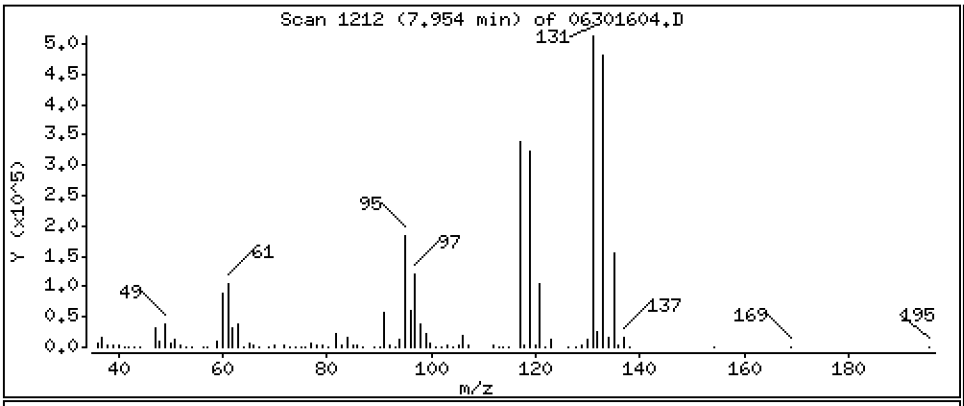
Operator: PB

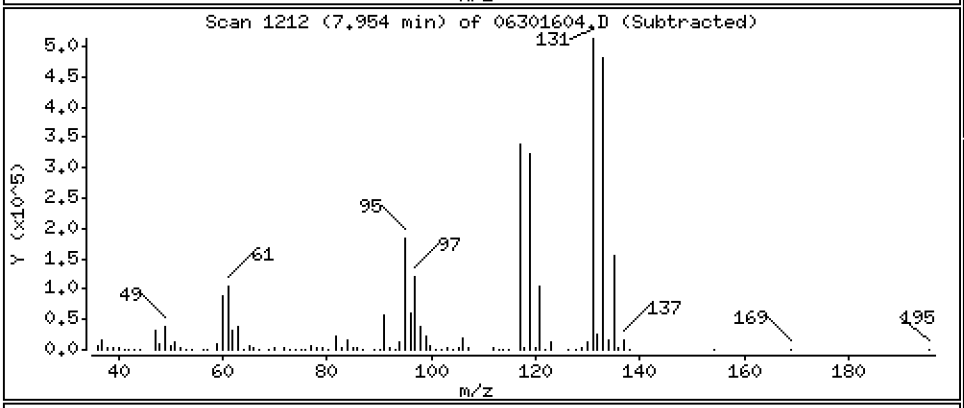
Column phase: RTXVMS

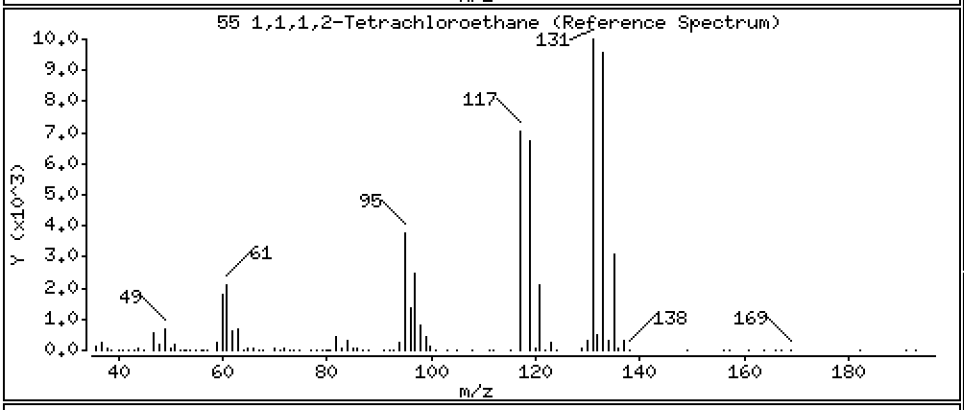
Column diameter: 0.18

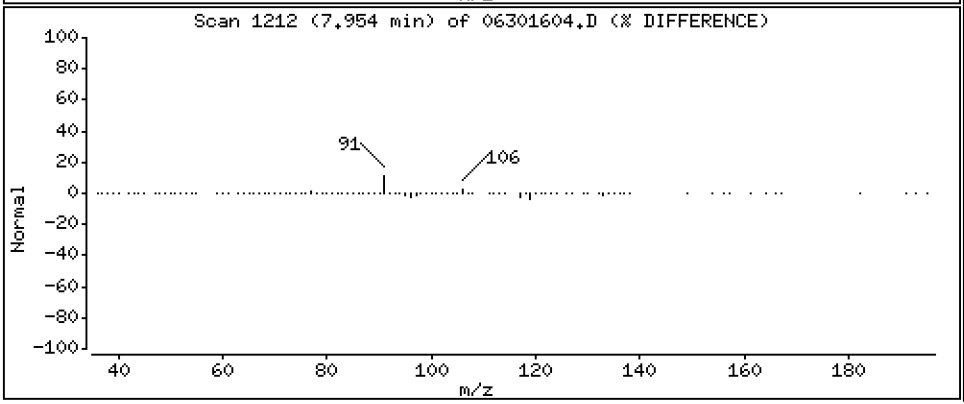
55 1,1,1,2-Tetrachloroethane

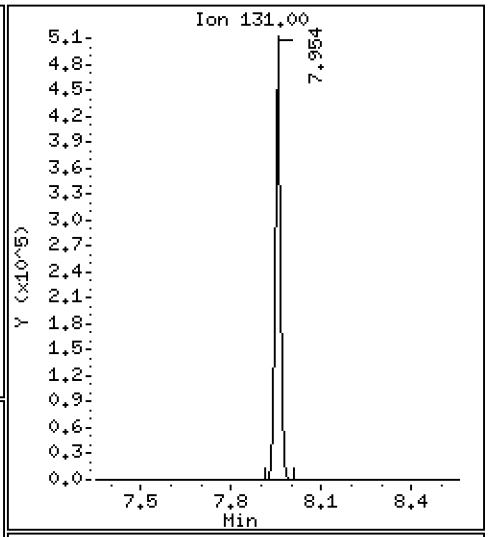
Concentration: 47.289 ug/Kg

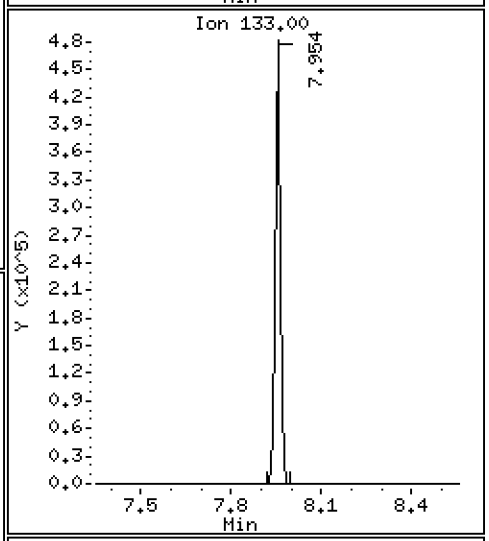


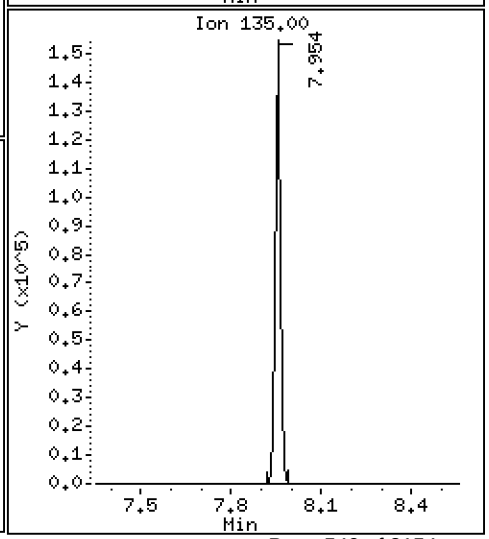












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

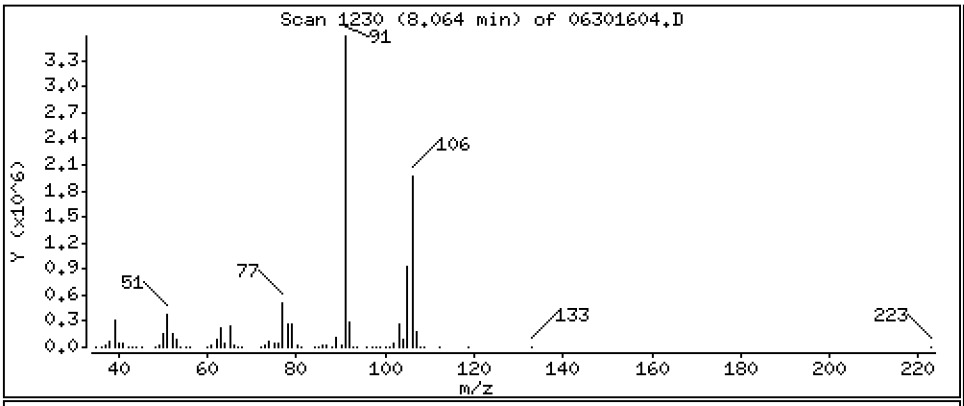
Operator: PB

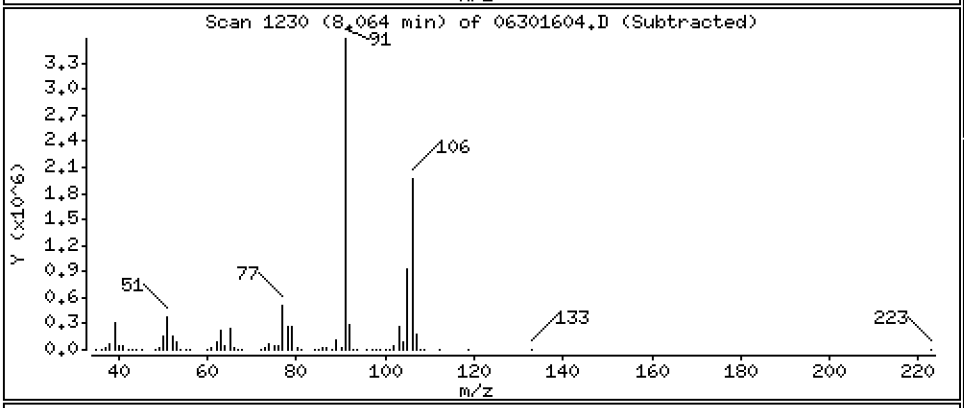
Column phase: RTXVMS

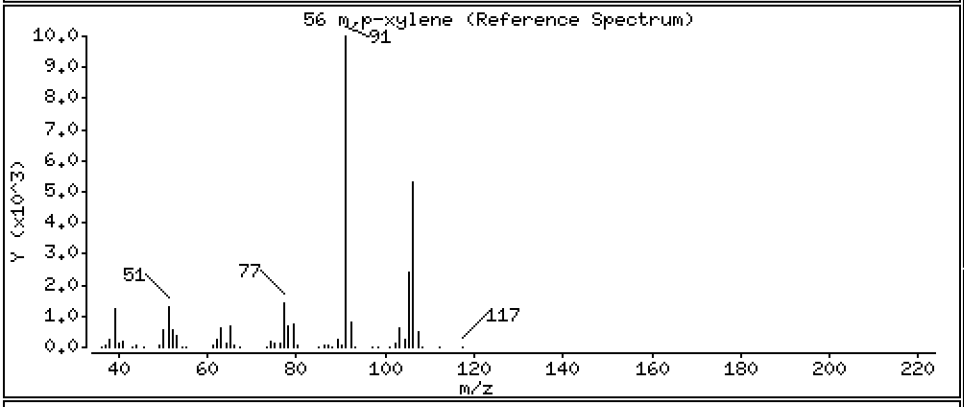
Column diameter: 0.18

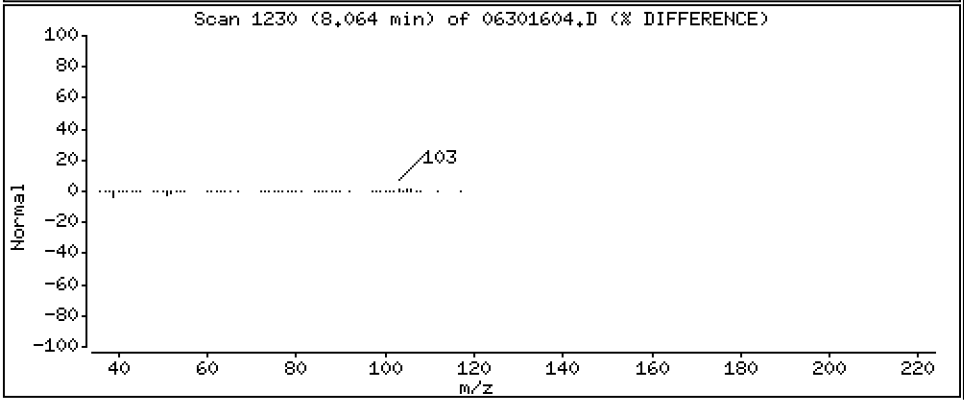
56 m,p-xylene

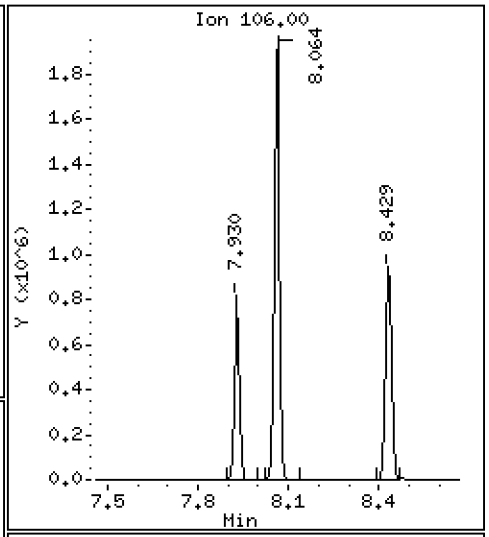
Concentration: 94.214 ug/Kg

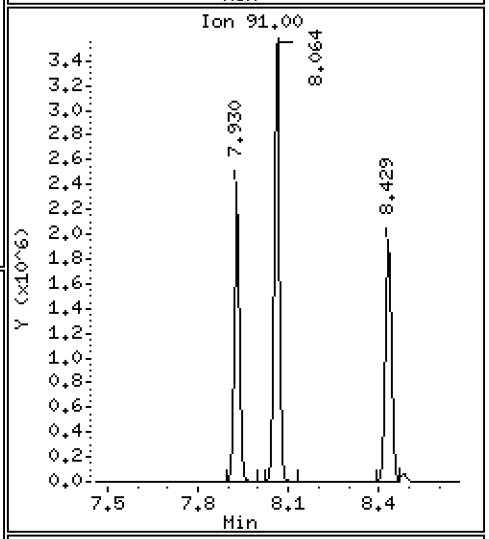


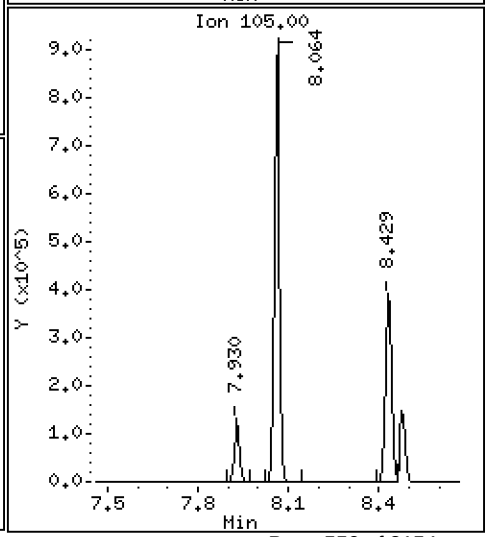












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

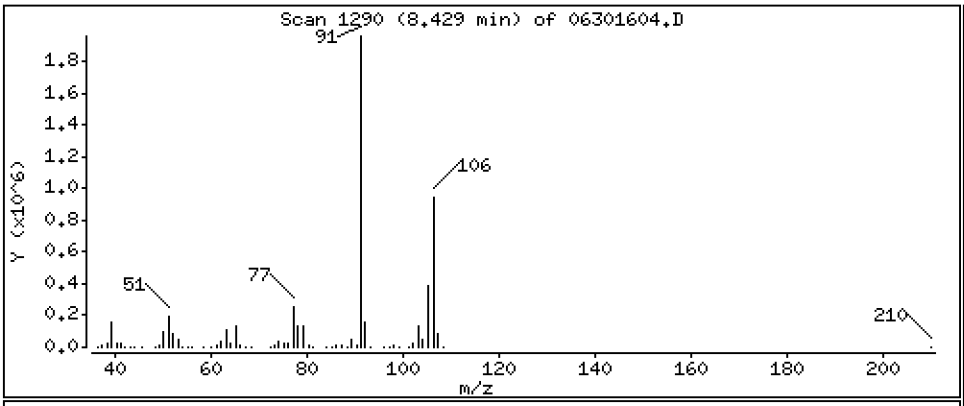
Operator: PB

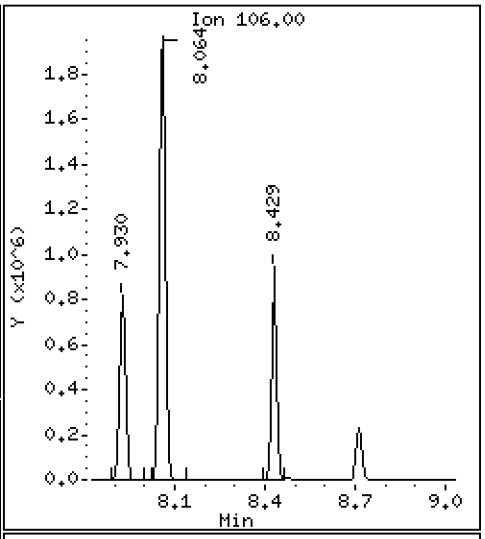
Column phase: RTXVMS

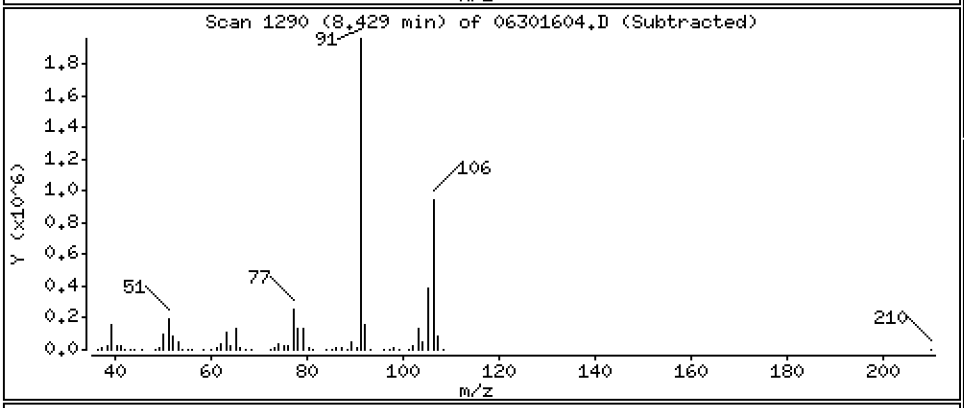
Column diameter: 0.18

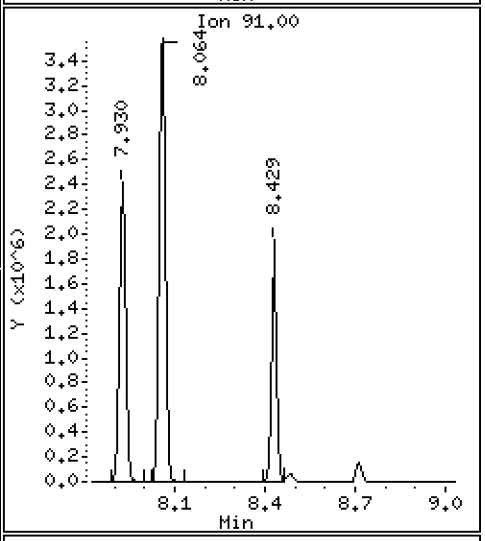
57 o-Xylene

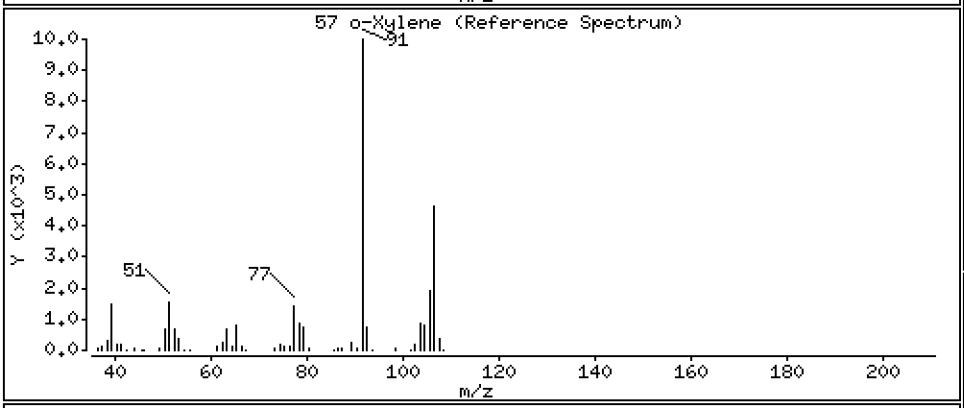
Concentration: 46.218 ug/Kg

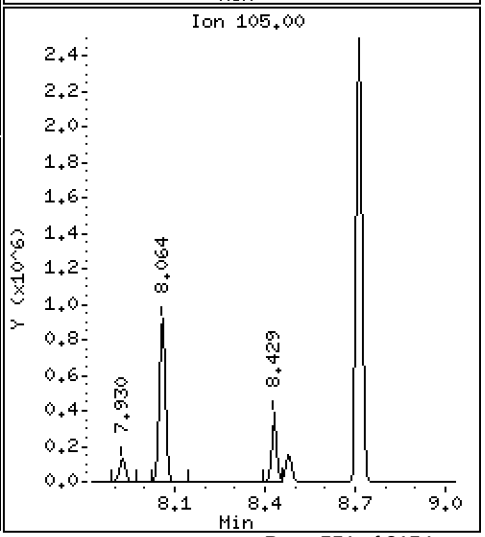


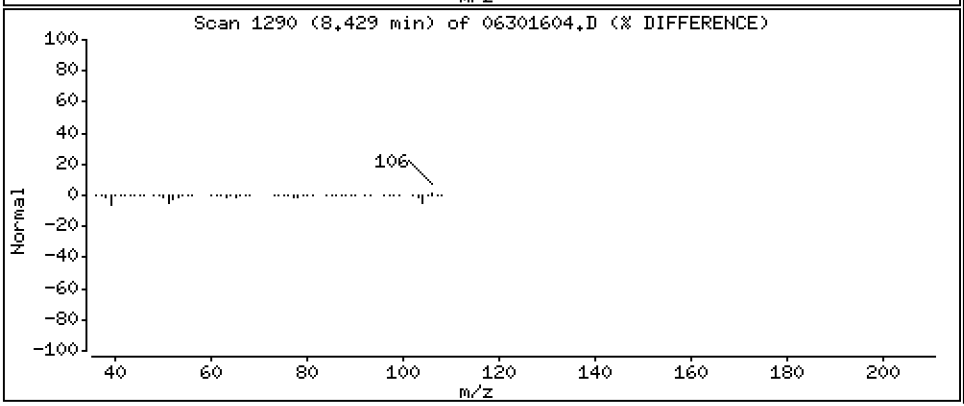












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

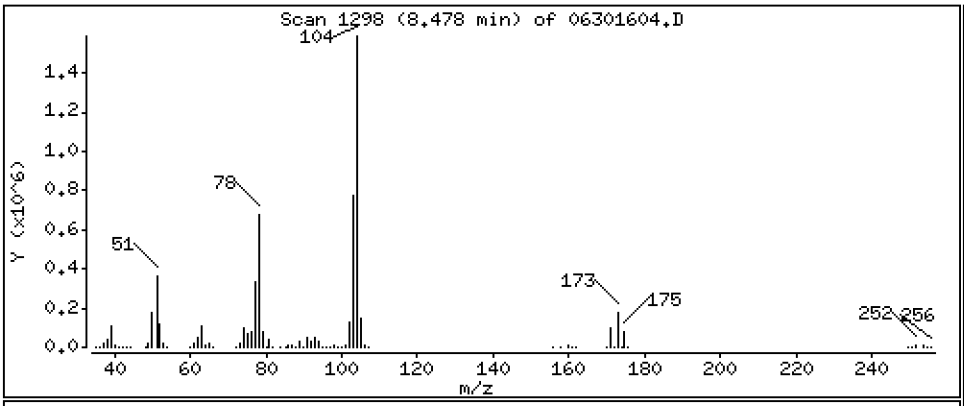
Operator: PB

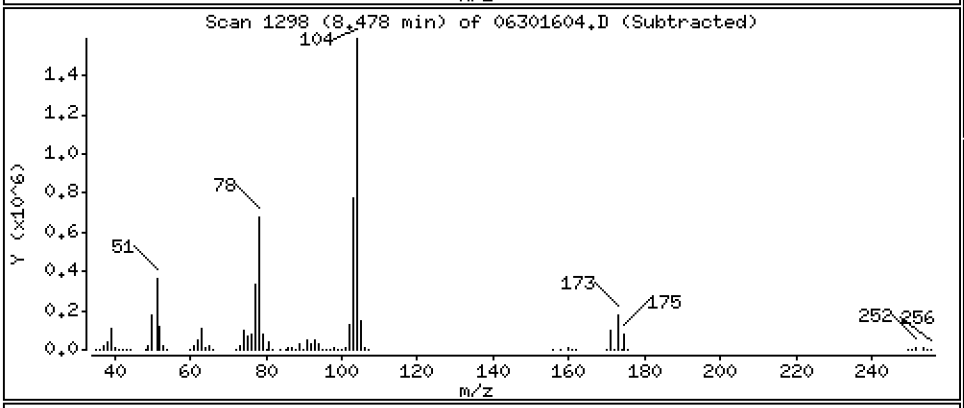
Column phase: RTXVMS

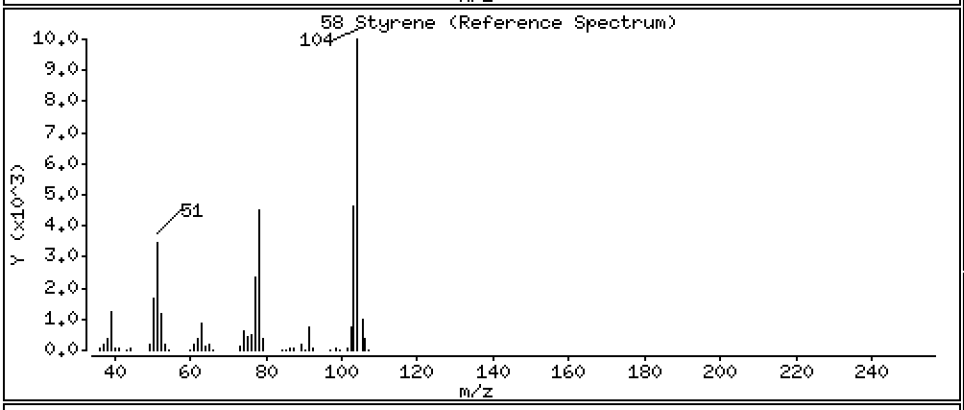
Column diameter: 0.18

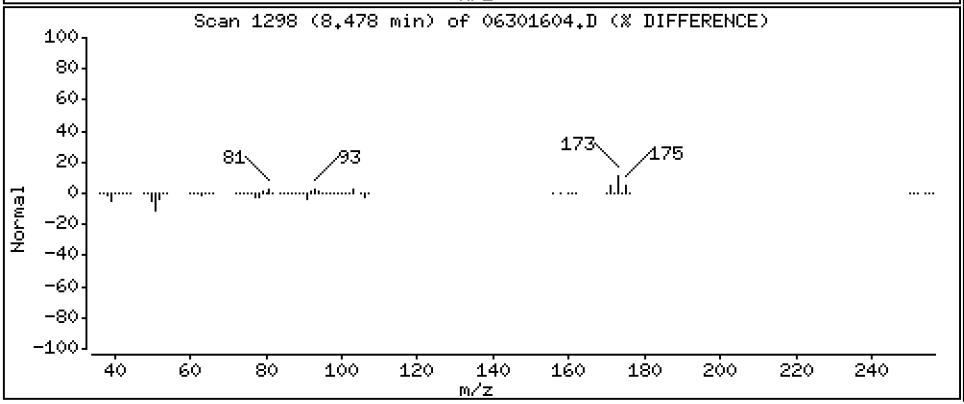
58 Styrene

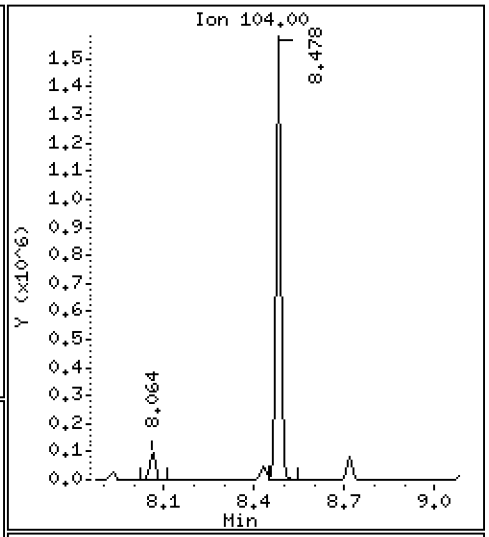
Concentration: 47.176 ug/Kg

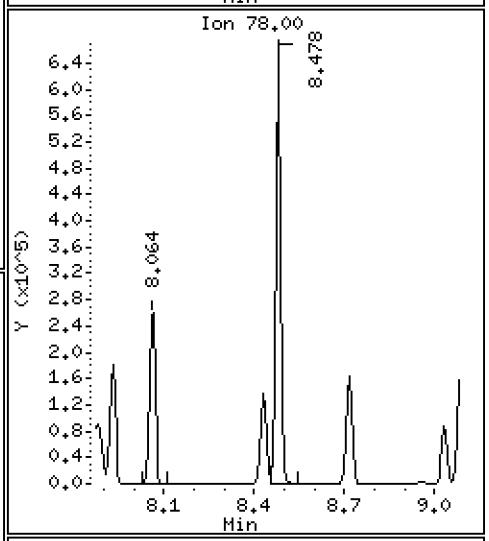


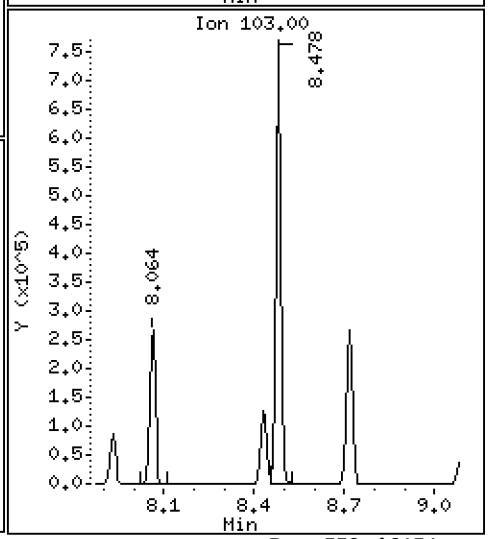












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

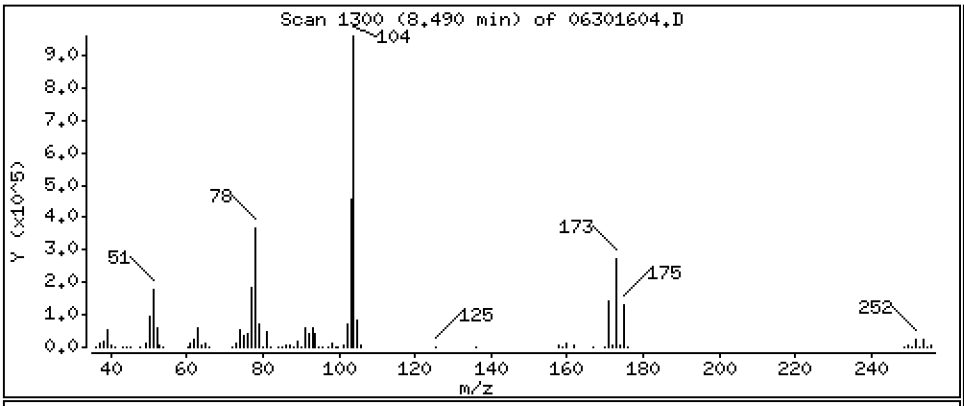
Operator: PB

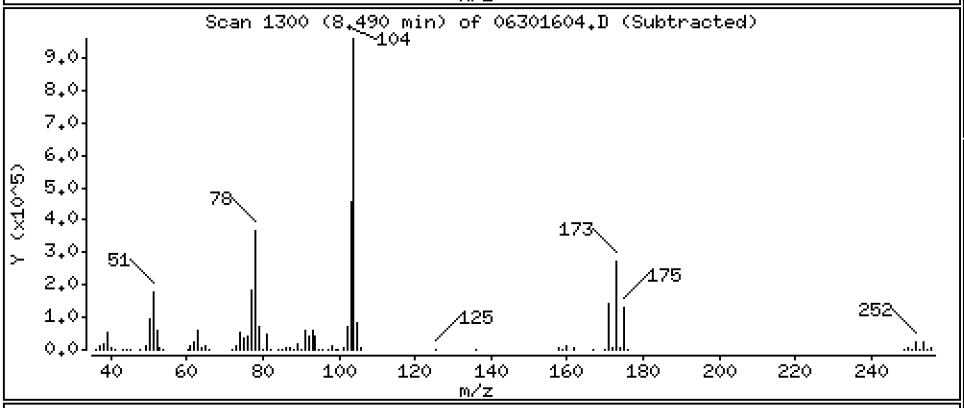
Column phase: RTXVMS

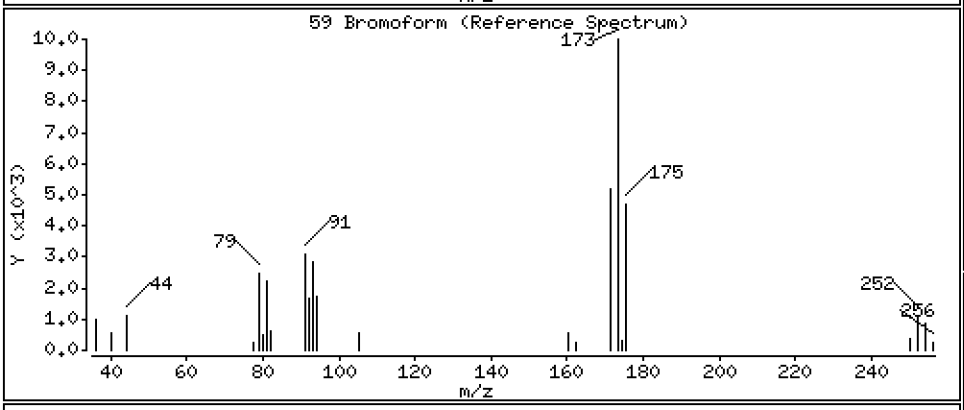
Column diameter: 0.18

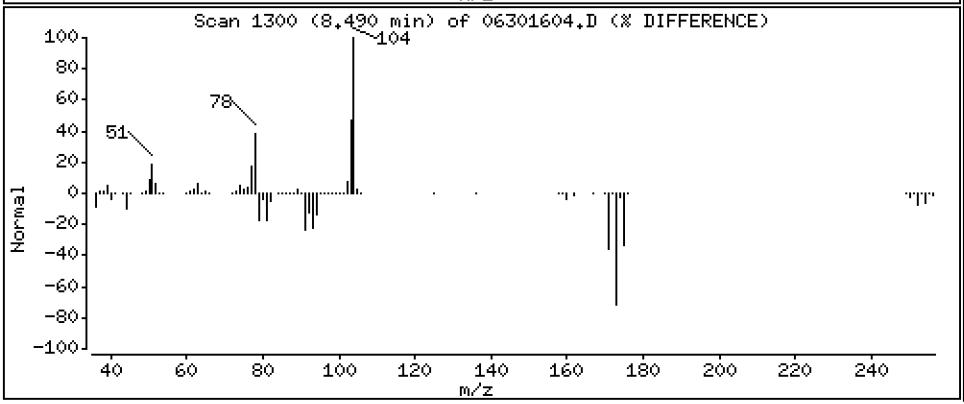
59 Bromoform

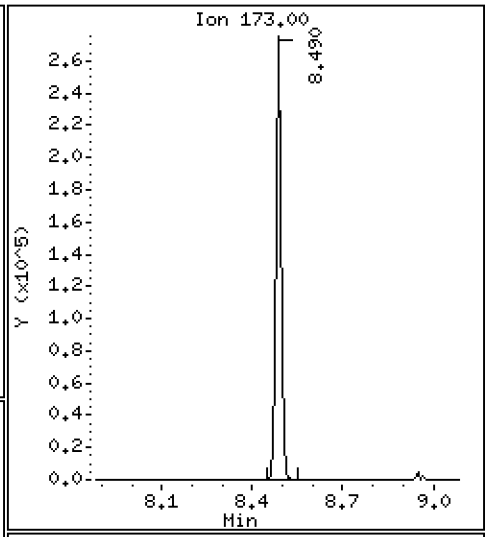
Concentration: 46.833 ug/Kg

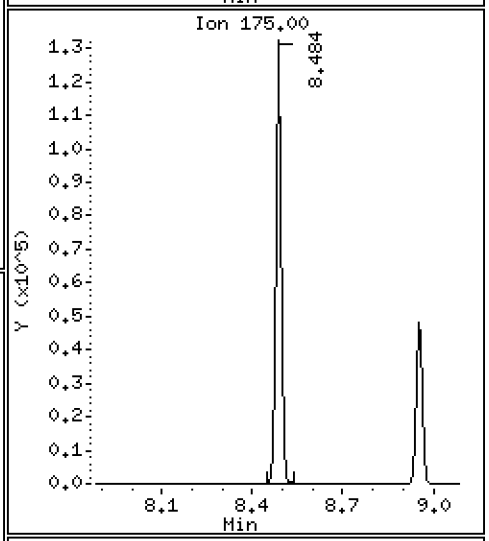


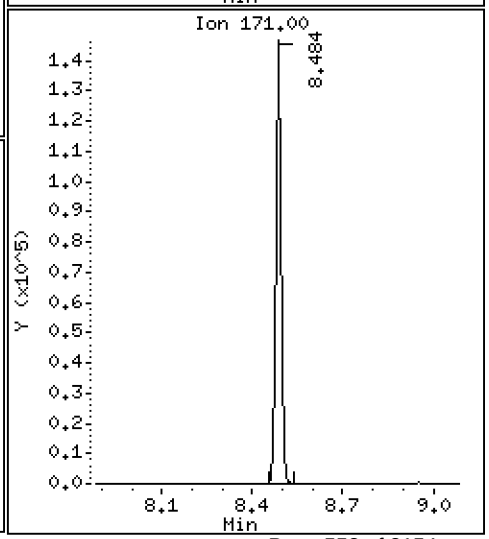












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

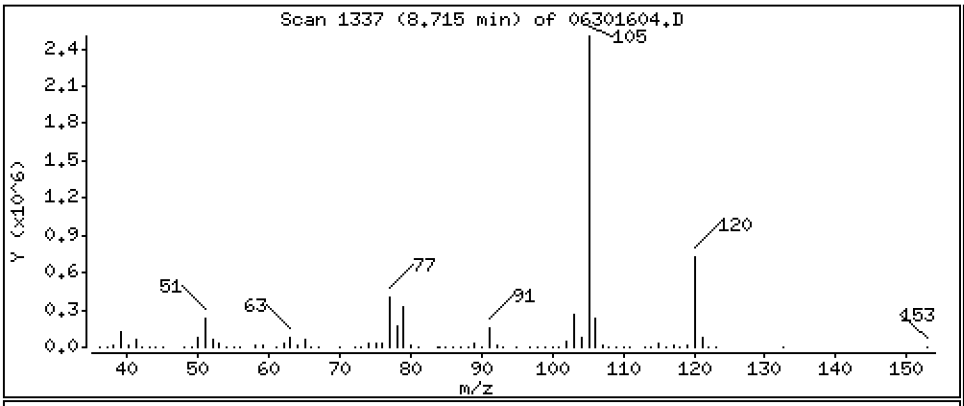
Operator: PB

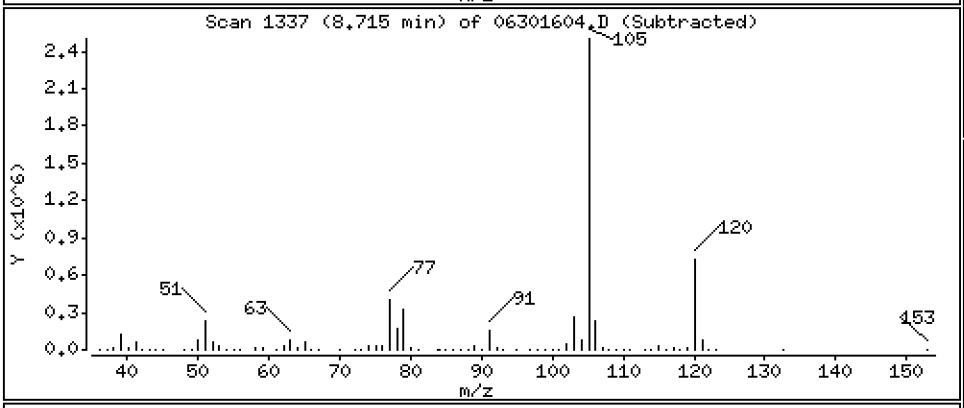
Column phase: RTXVMS

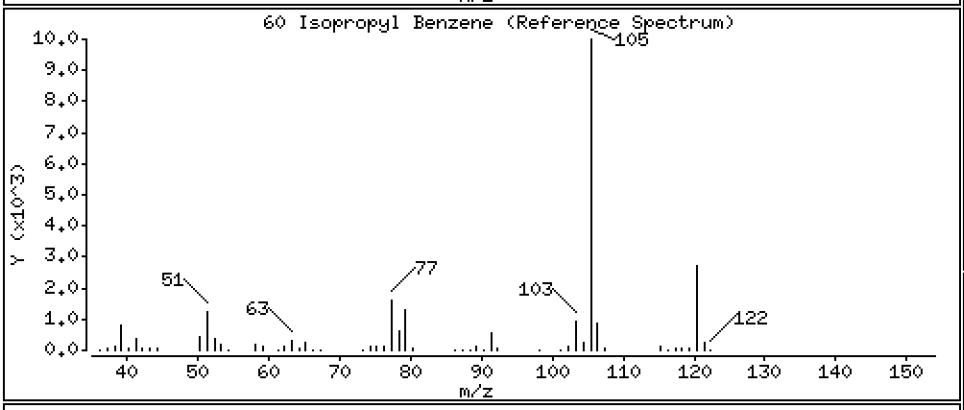
Column diameter: 0.18

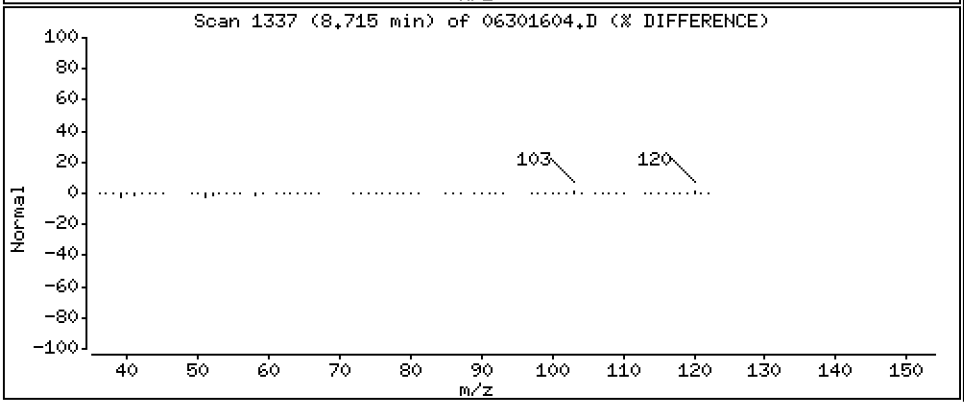
60 Isopropyl Benzene

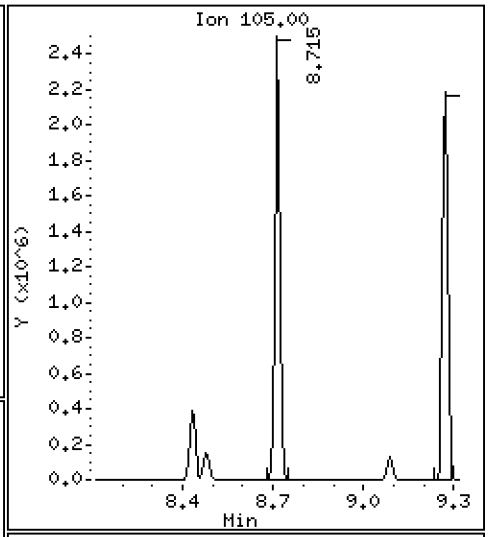
Concentration: 45.784 ug/Kg

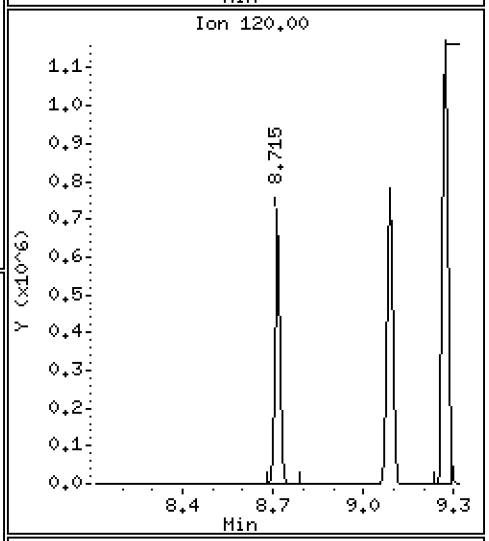


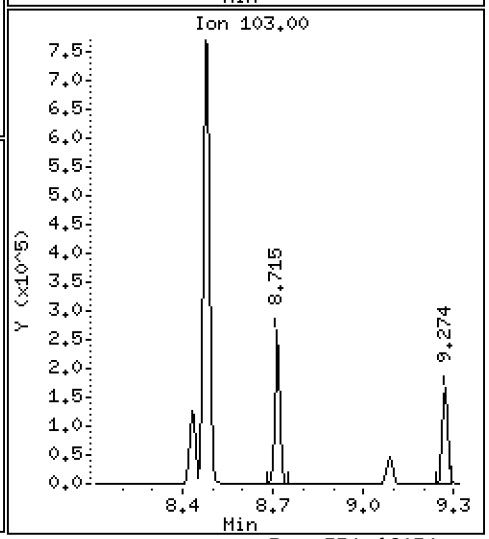












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

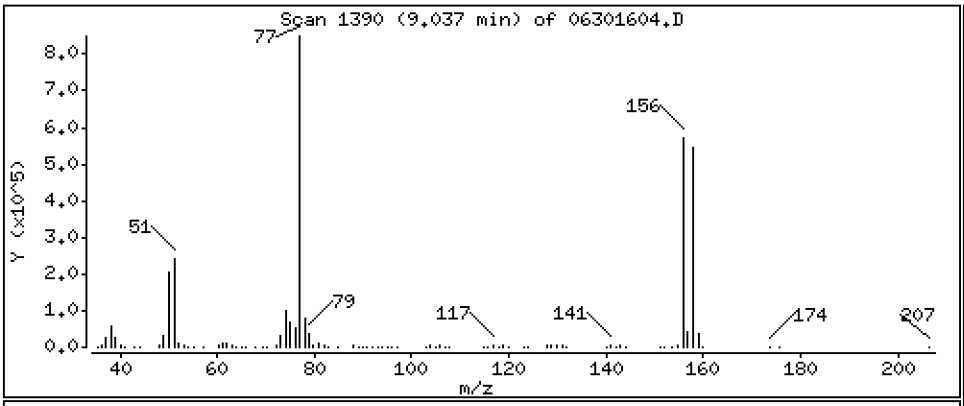
Operator: PB

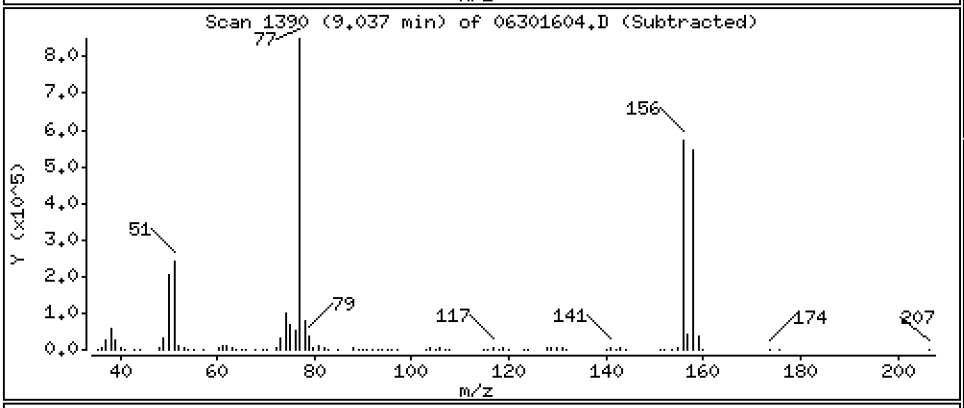
Column phase: RTXVMS

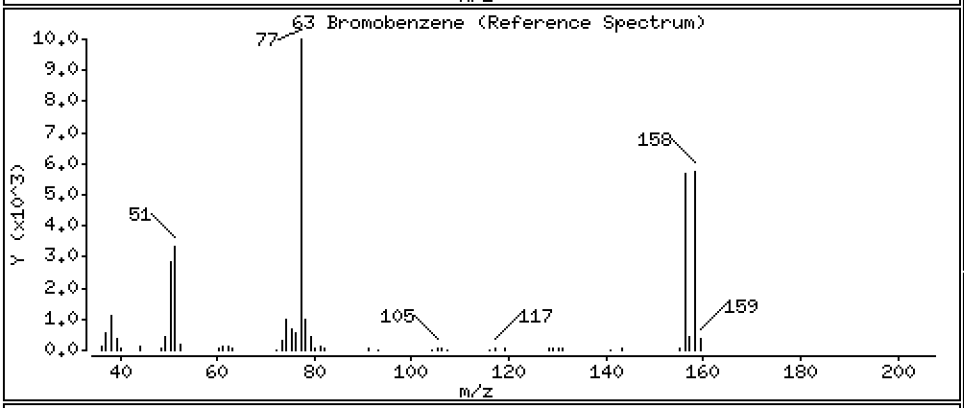
Column diameter: 0.18

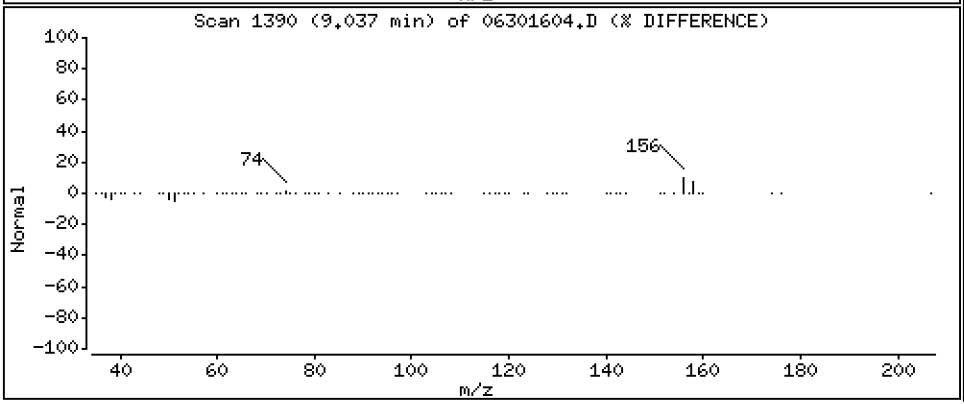
63 Bromobenzene

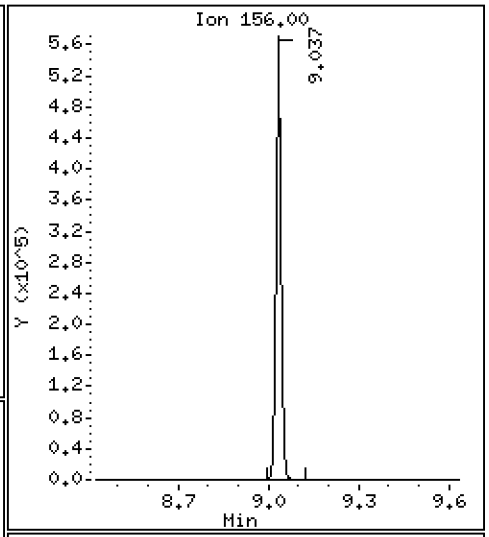
Concentration: 46.810 ug/Kg

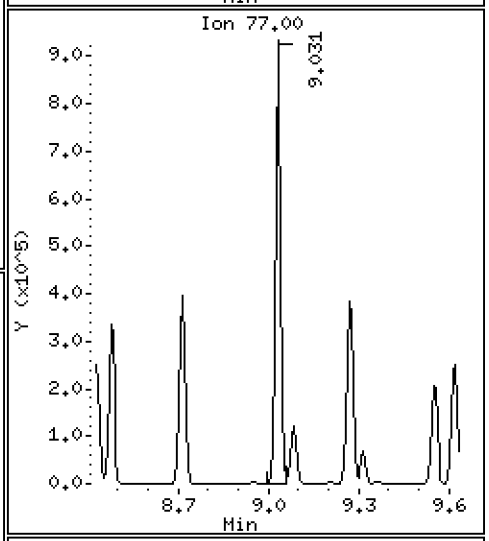


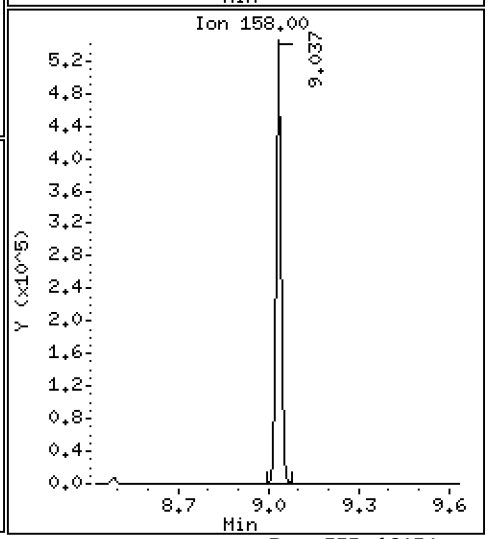












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

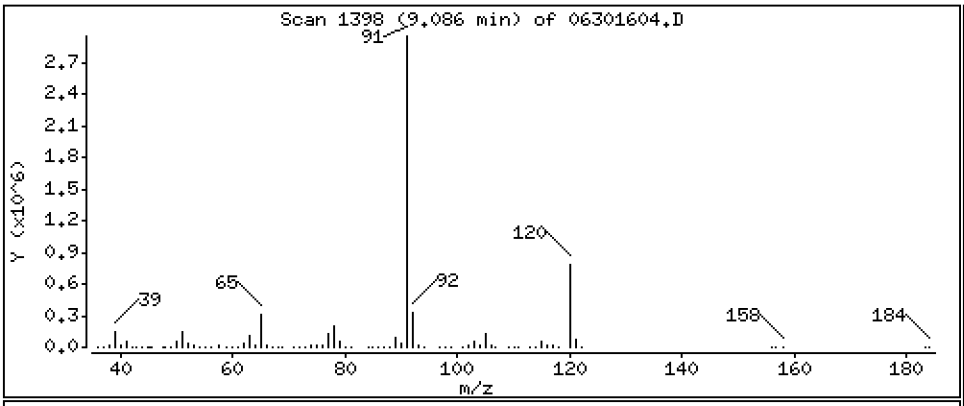
Operator: PB

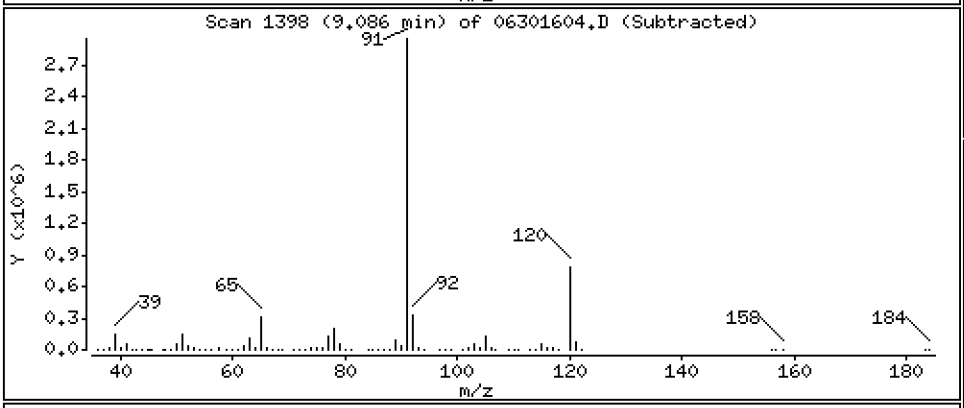
Column phase: RTXVMS

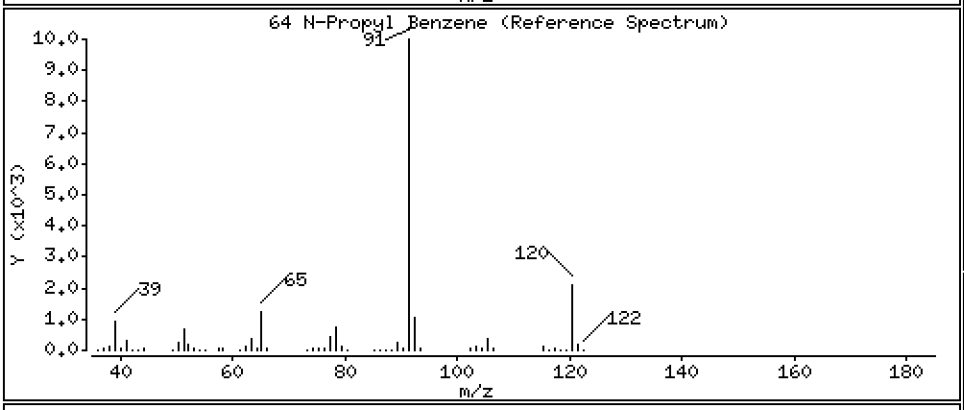
Column diameter: 0.18

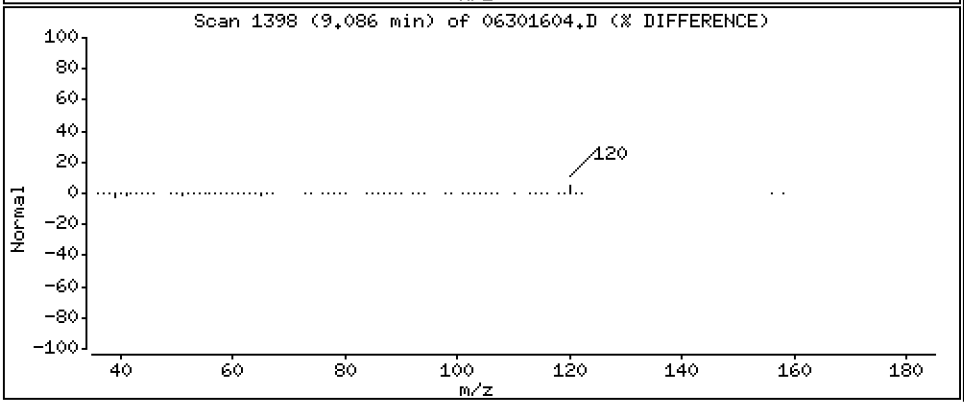
64 N-Propyl Benzene

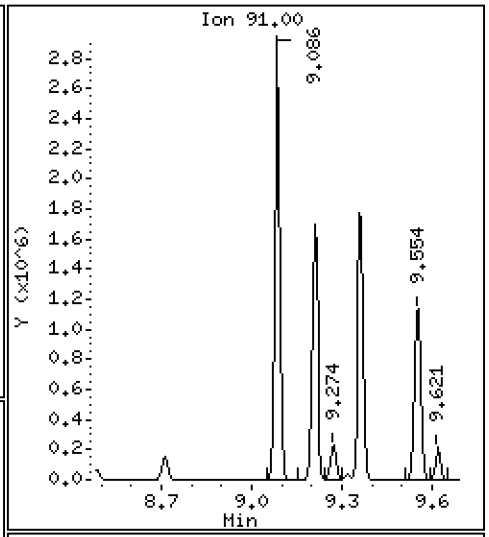
Concentration: 44.226 ug/Kg

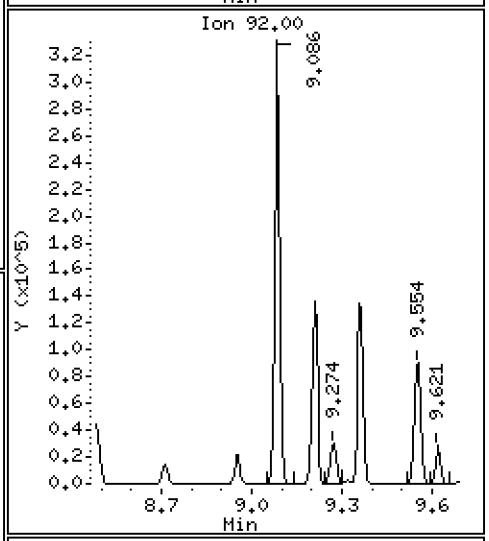


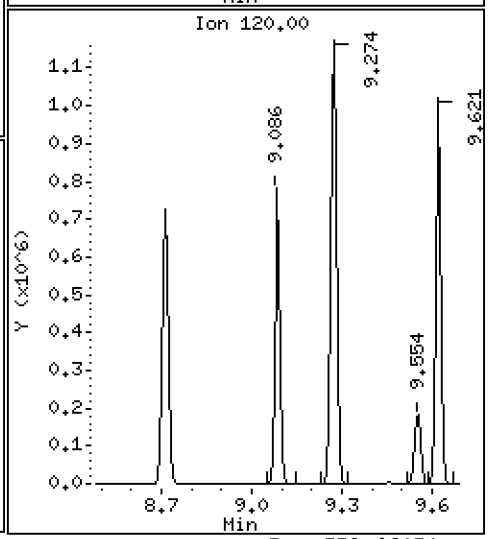












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

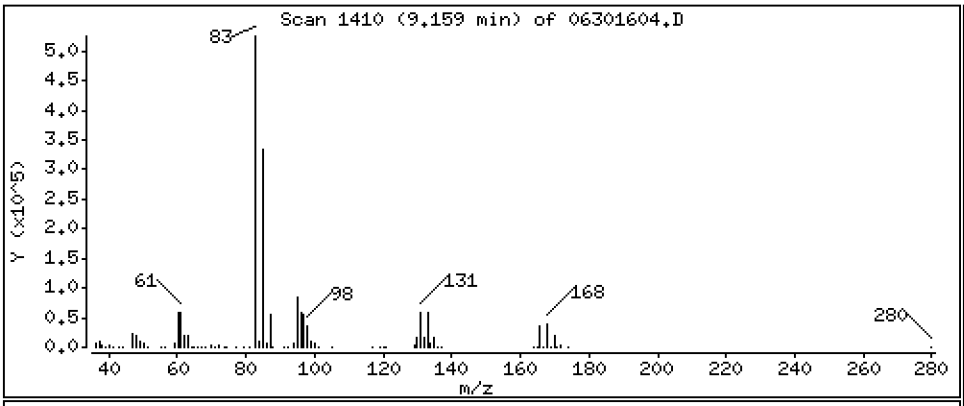
Operator: PB

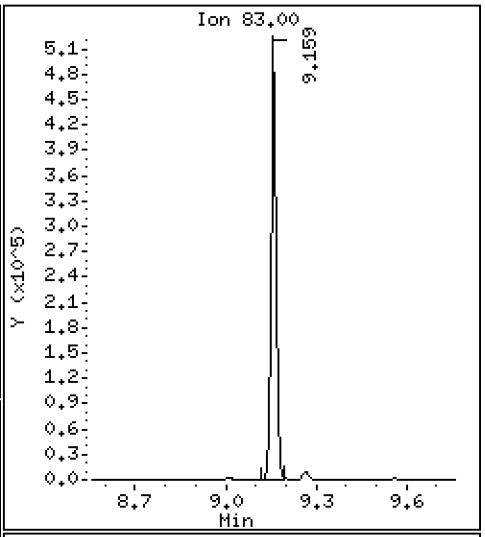
Column phase: RTXVMS

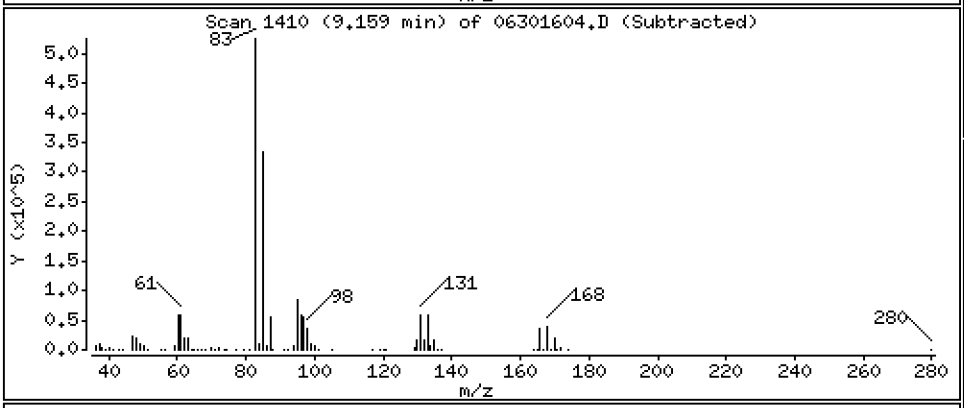
Column diameter: 0.18

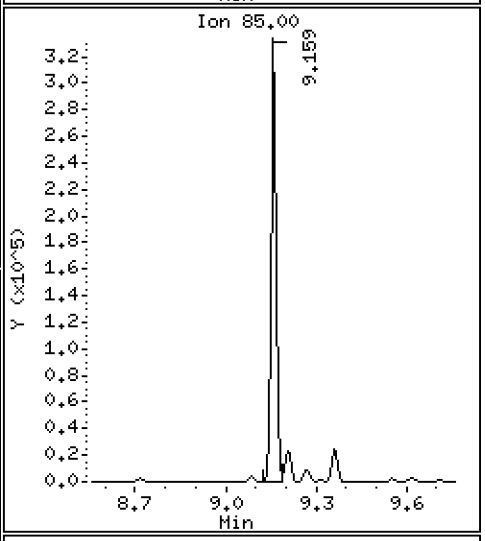
65 1,1,2,2-Tetrachloroethane

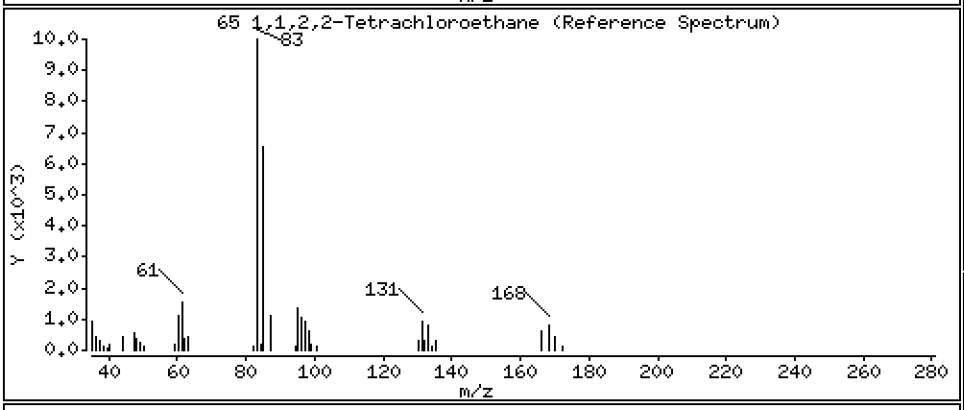
Concentration: 41.142 ug/Kg

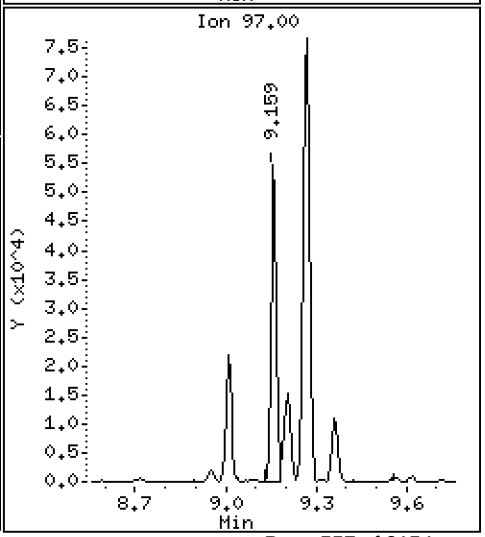


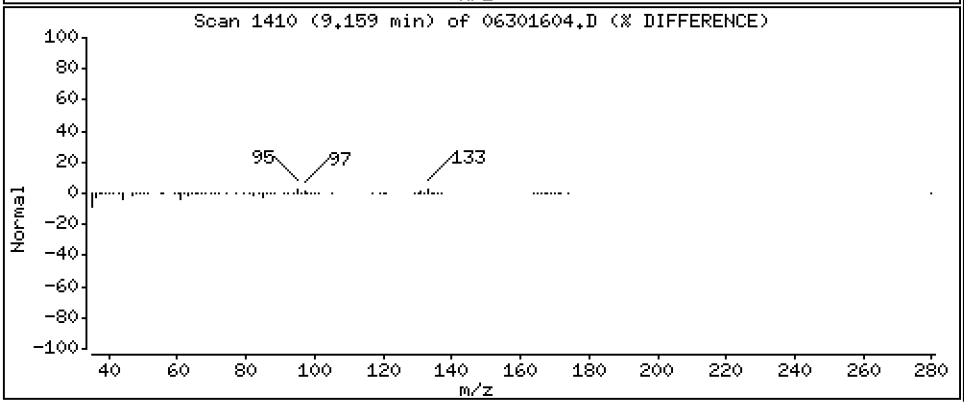












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

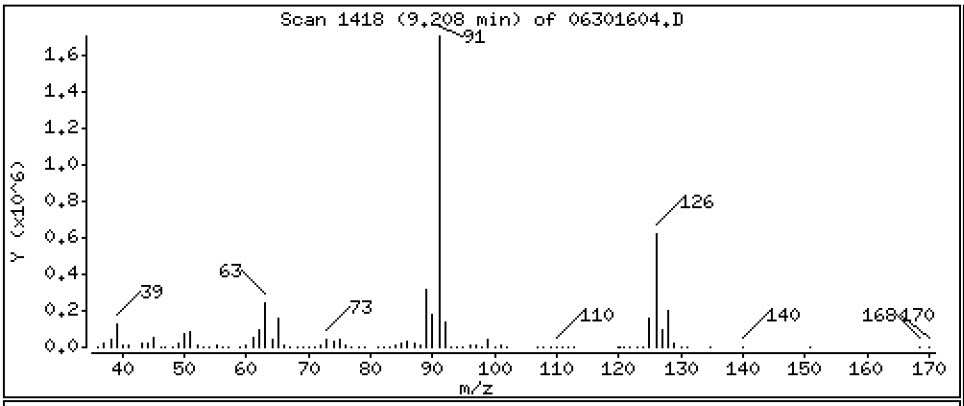
Operator: PB

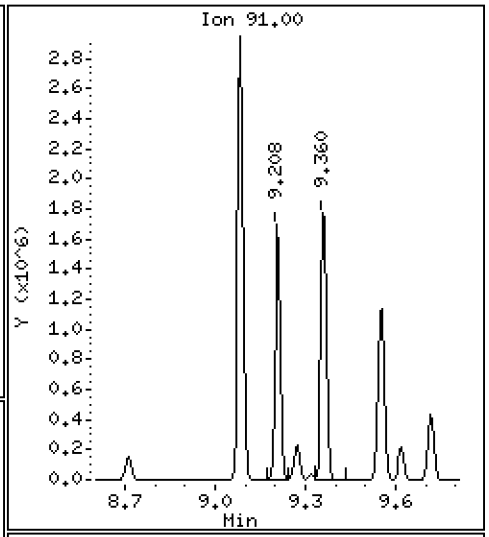
Column phase: RTXVMS

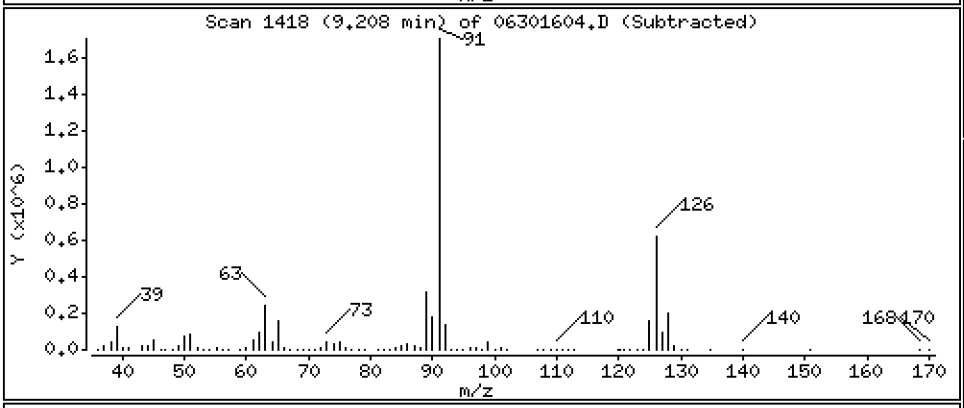
Column diameter: 0.18

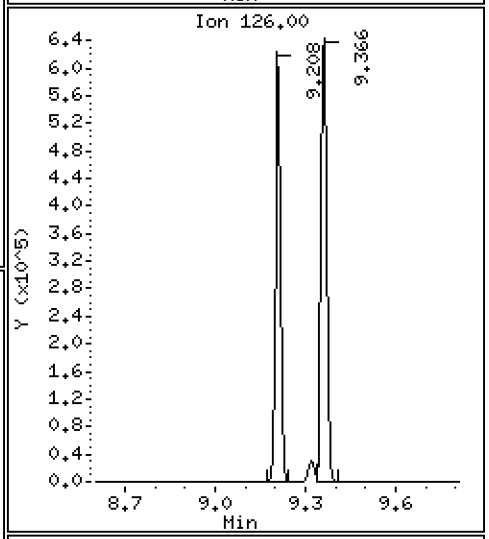
66 2-Chloro Toluene

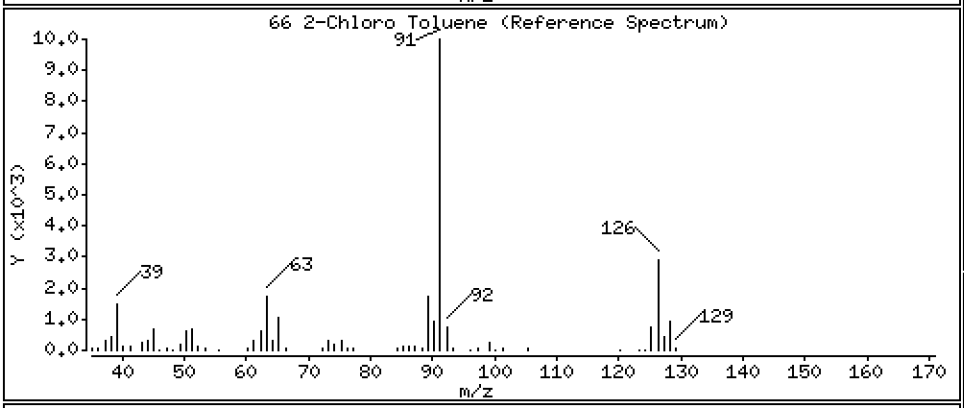
Concentration: 44.543 ug/Kg

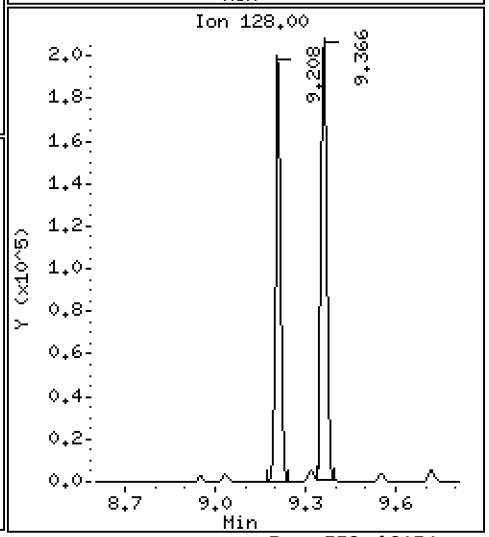


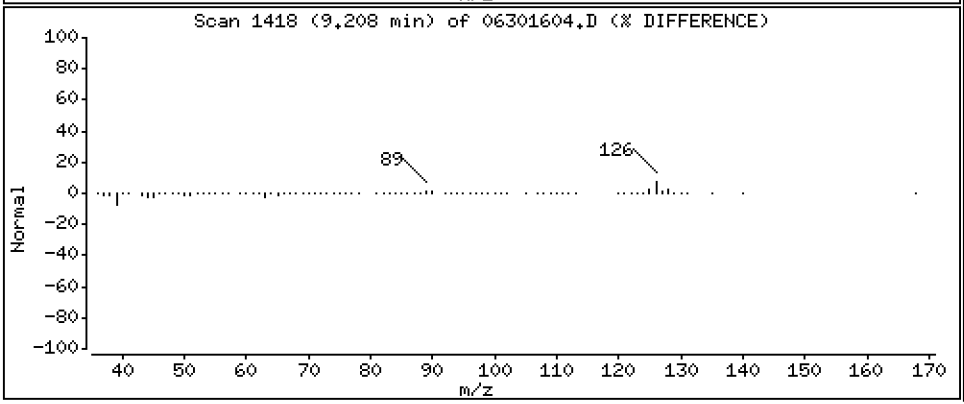












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

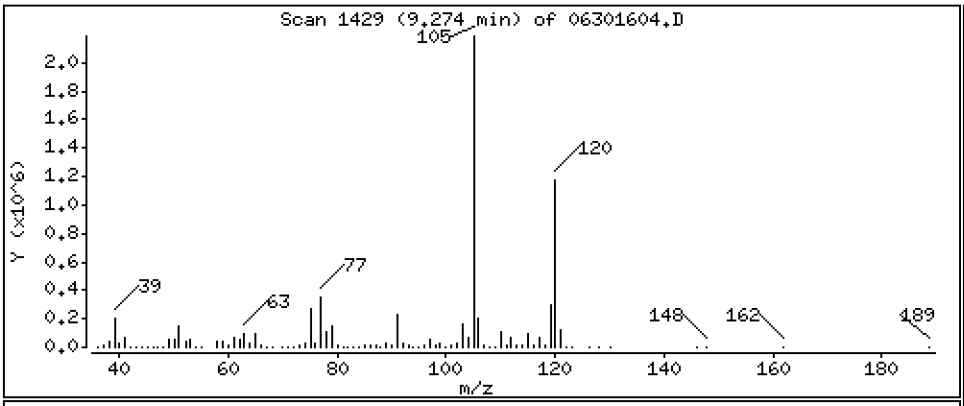
Operator: PB

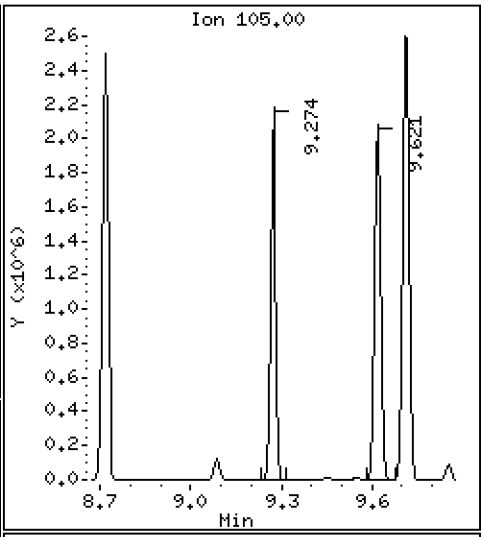
Column phase: RTXVMS

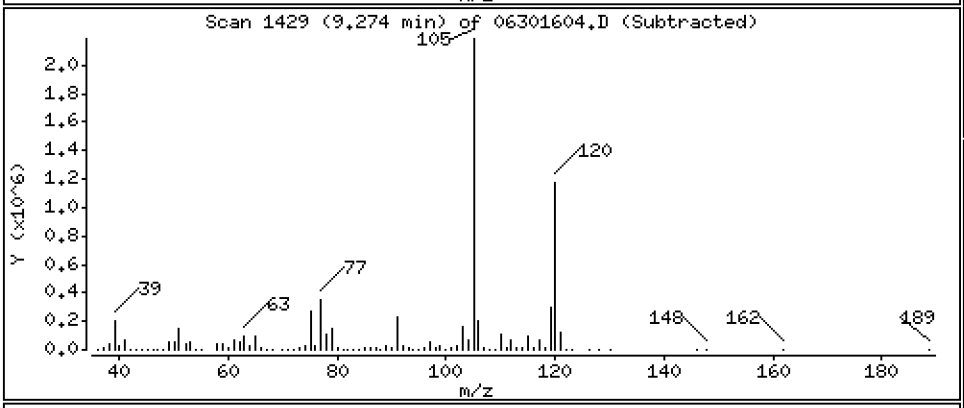
Column diameter: 0.18

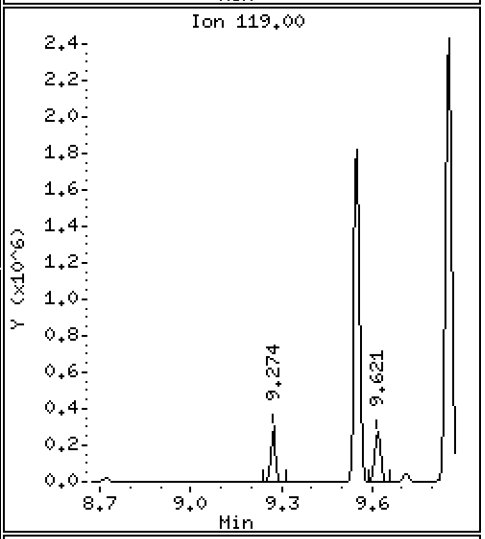
67 1,3,5-Trimethyl Benzene

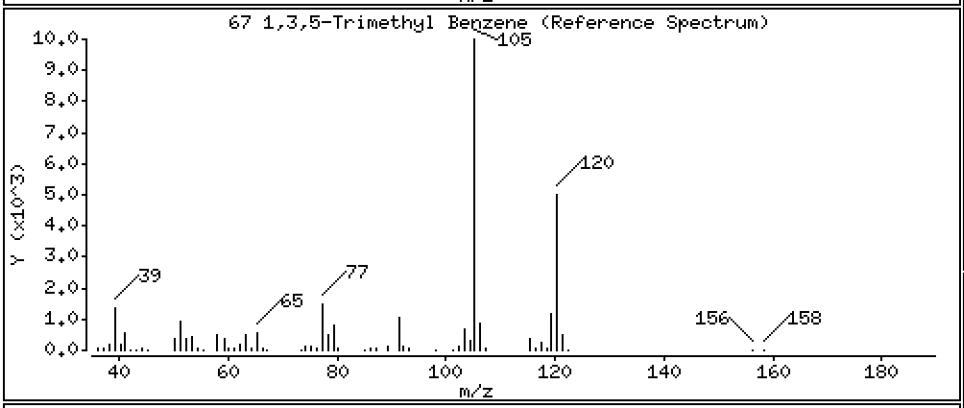
Concentration: 46.117 ug/Kg

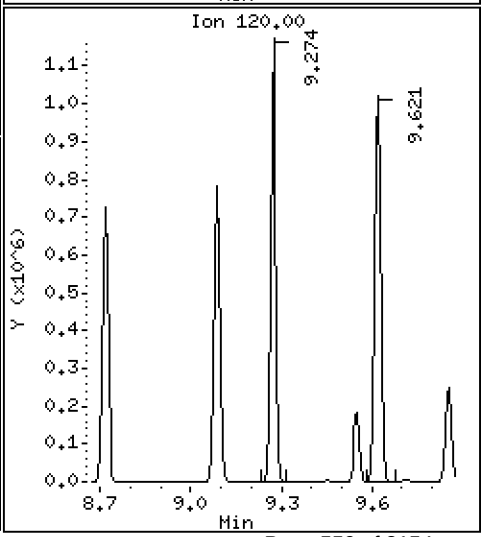


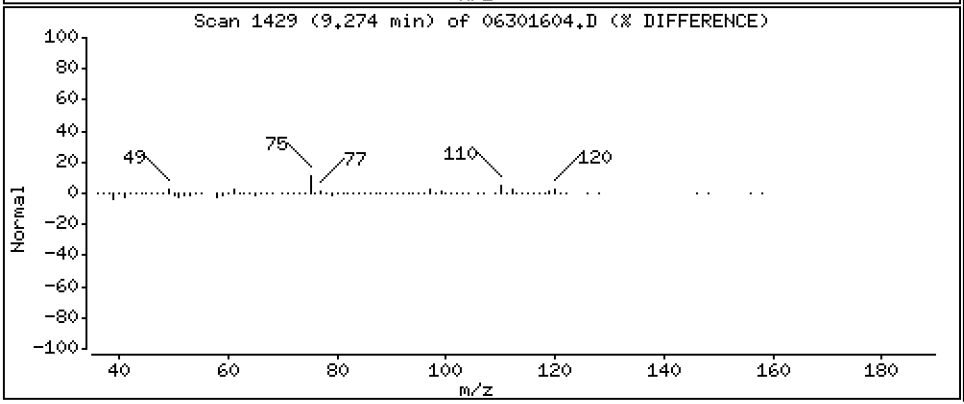












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

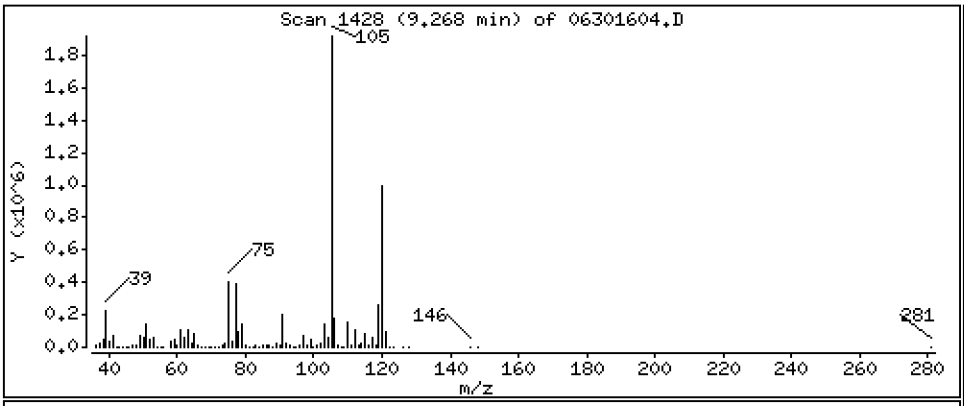
Operator: PB

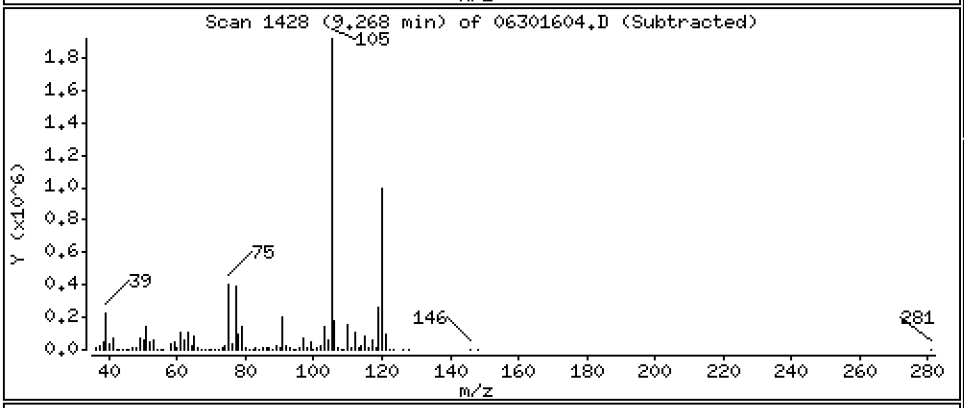
Column phase: RTXVMS

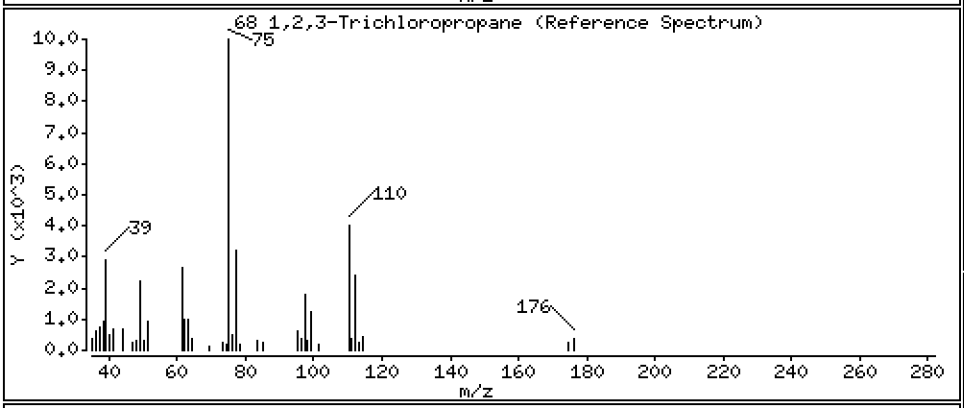
Column diameter: 0.18

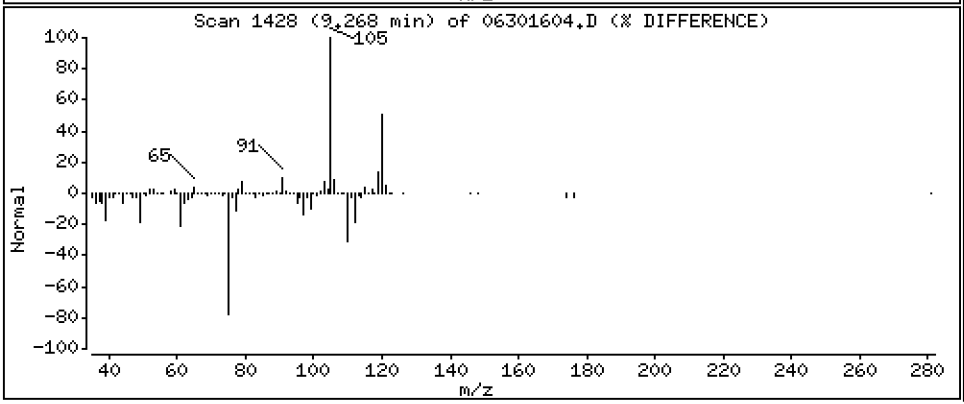
68 1,2,3-Trichloropropane

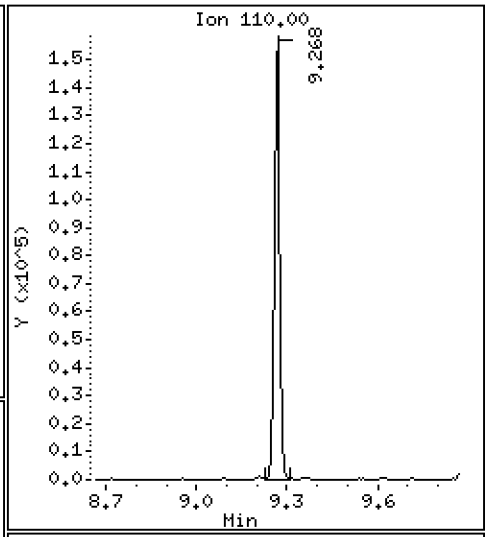
Concentration: 43.841 ug/Kg

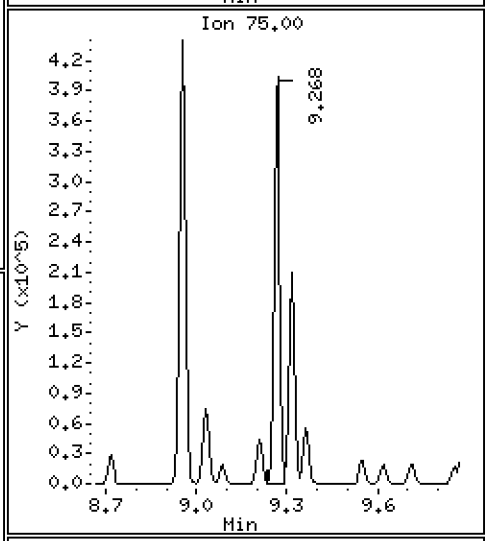


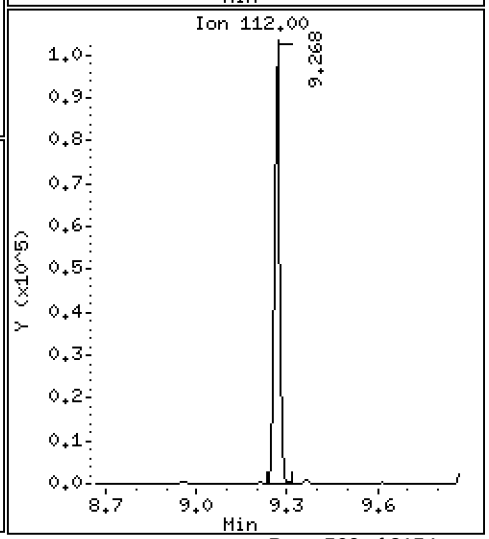












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

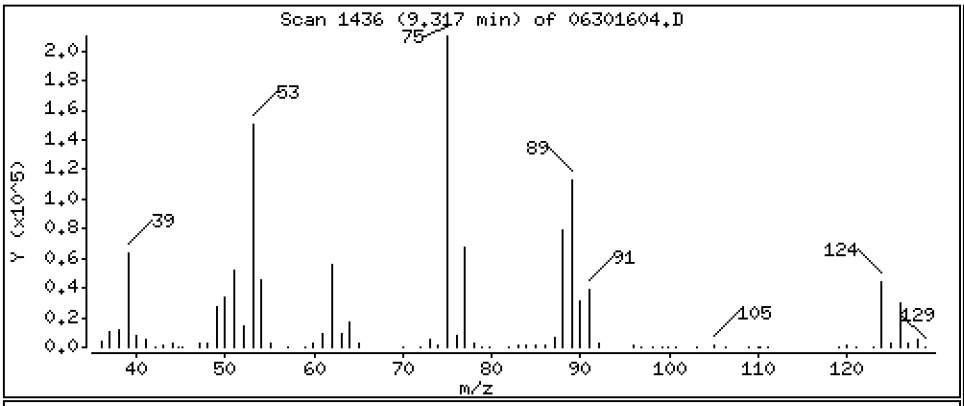
Operator: PB

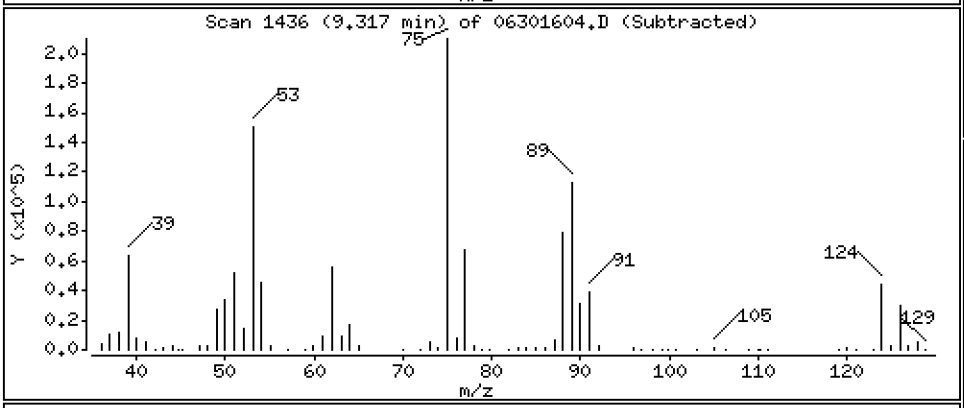
Column phase: RTXVMS

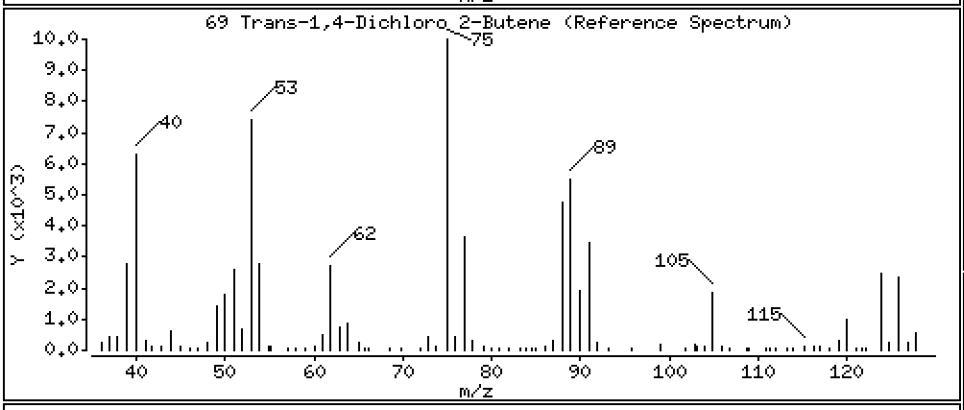
Column diameter: 0.18

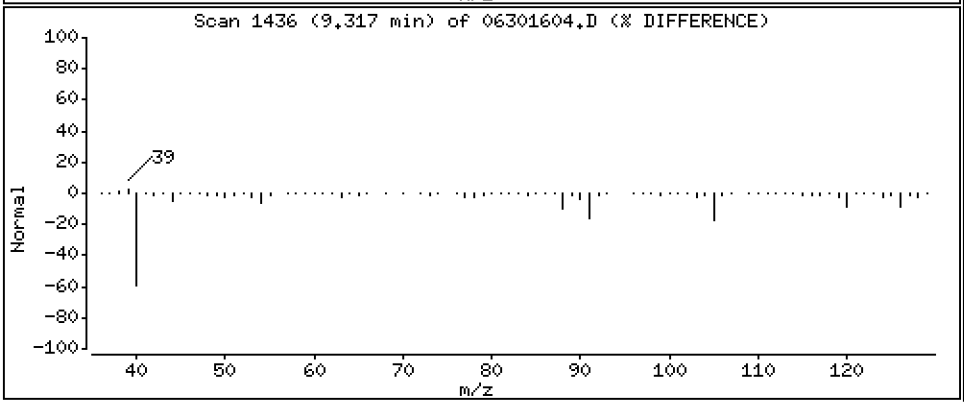
69 Trans-1,4-Dichloro 2-Butene

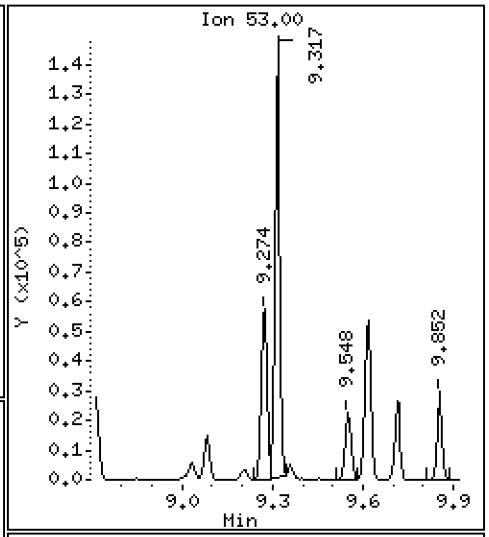
Concentration: 40.423 ug/Kg

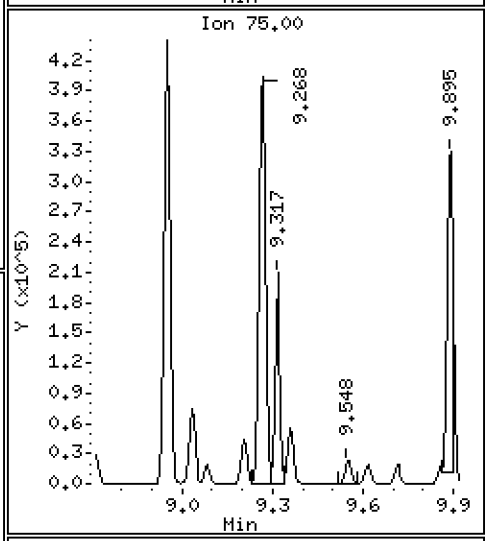


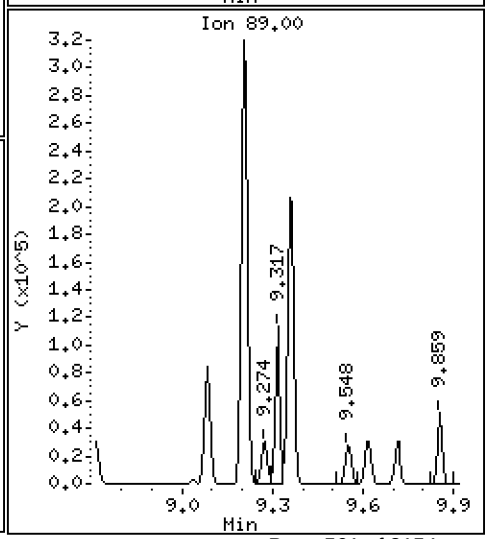












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

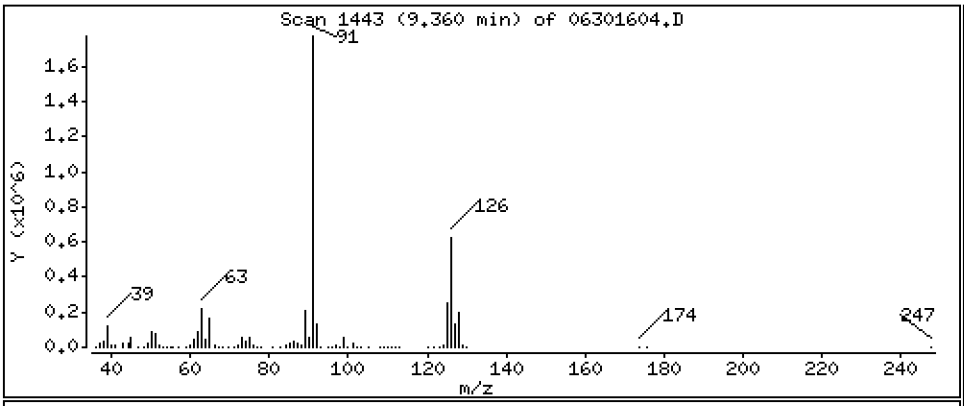
Operator: PB

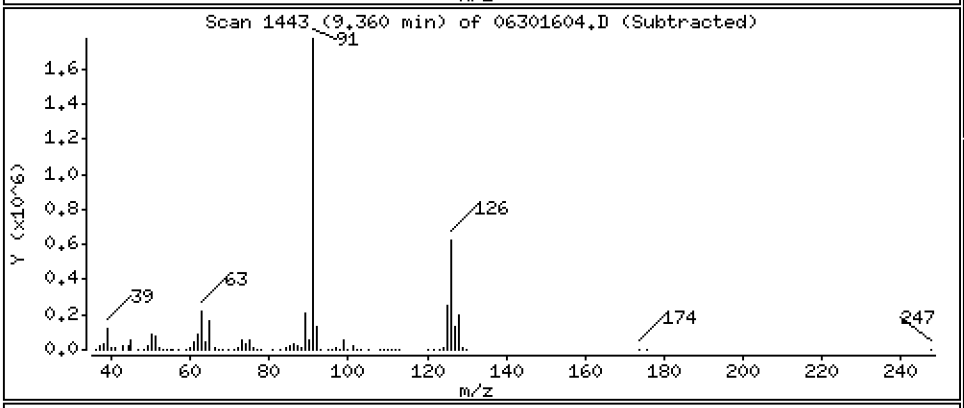
Column phase: RTXVMS

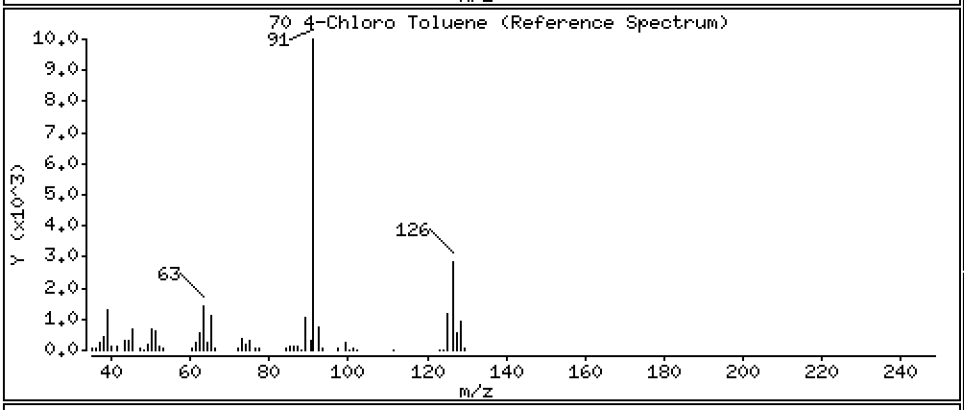
Column diameter: 0.18

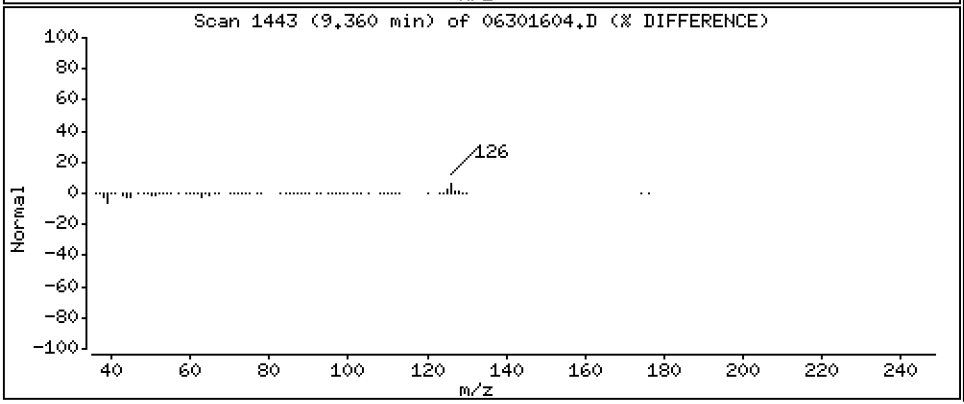
70 4-Chloro Toluene

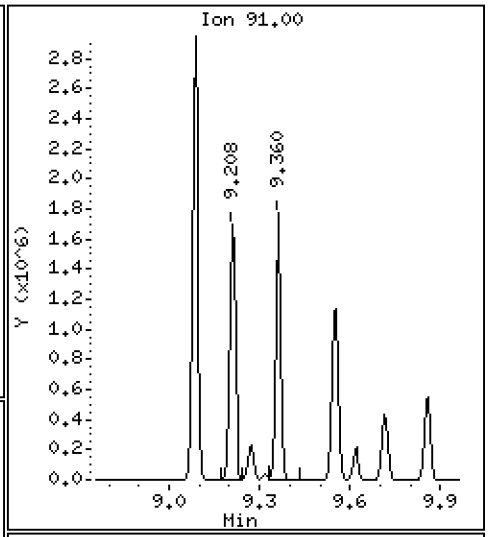
Concentration: 45.495 ug/Kg

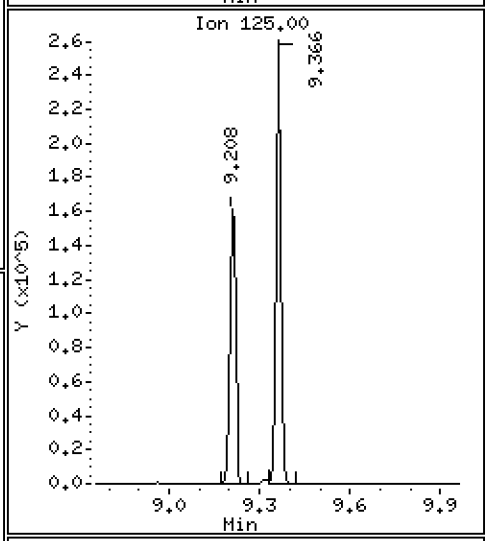


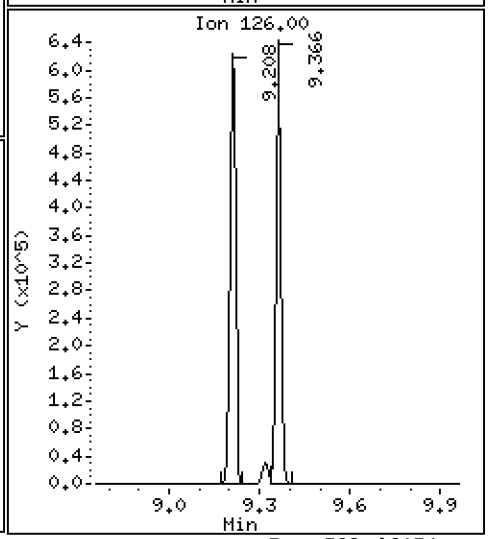












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

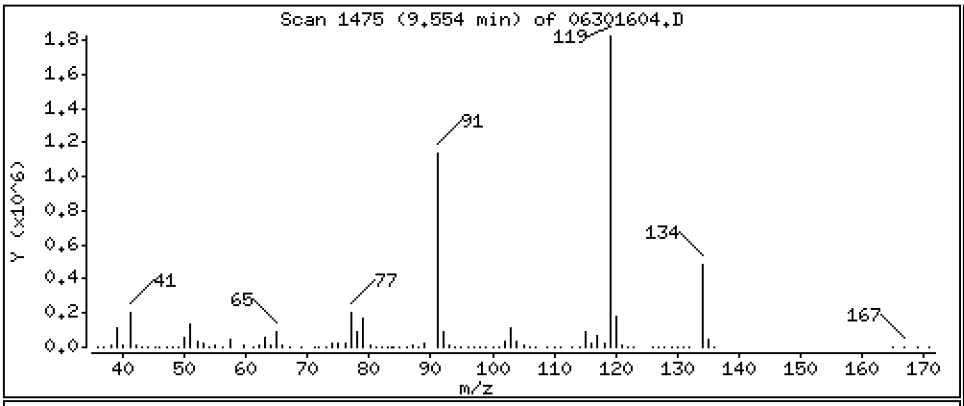
Operator: PB

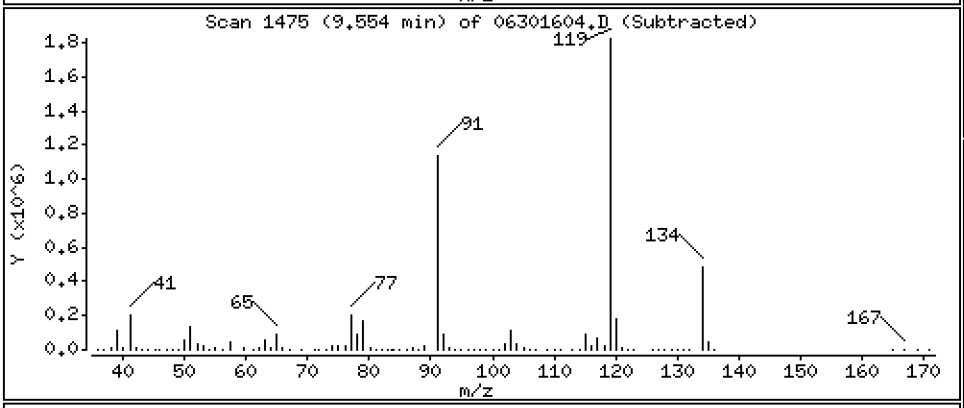
Column phase: RTXVMS

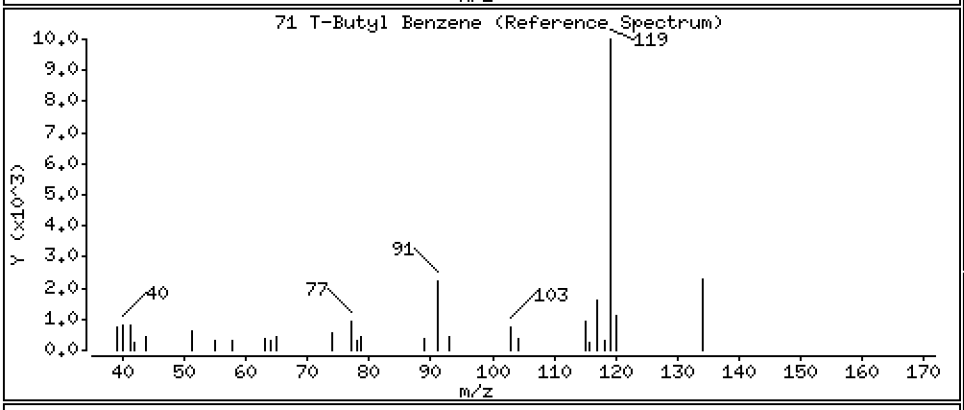
Column diameter: 0.18

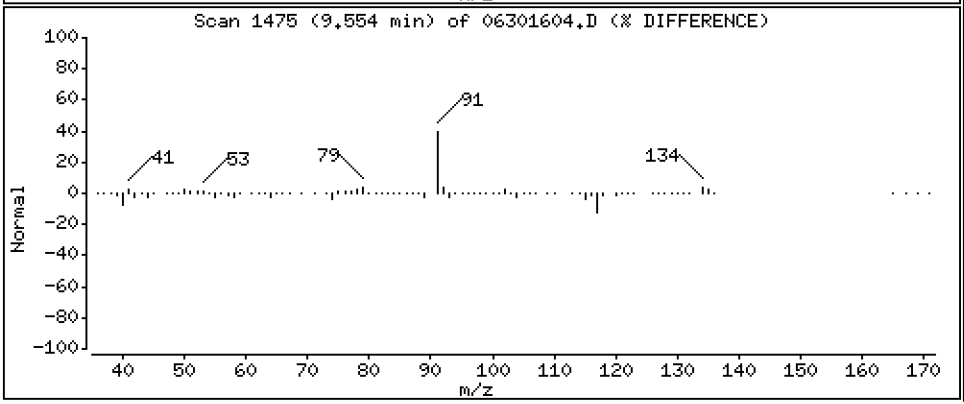
71 T-Butyl Benzene

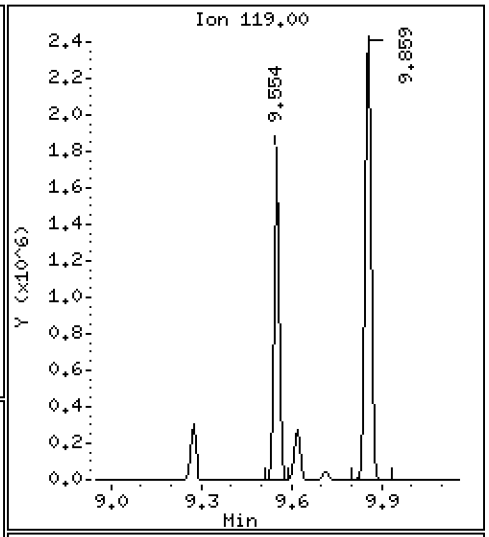
Concentration: 45.515 ug/Kg

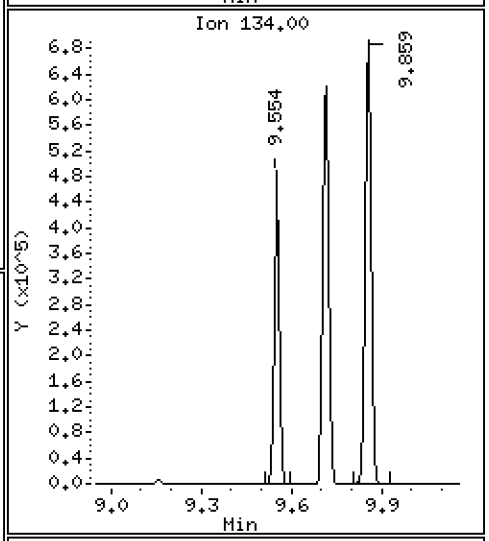


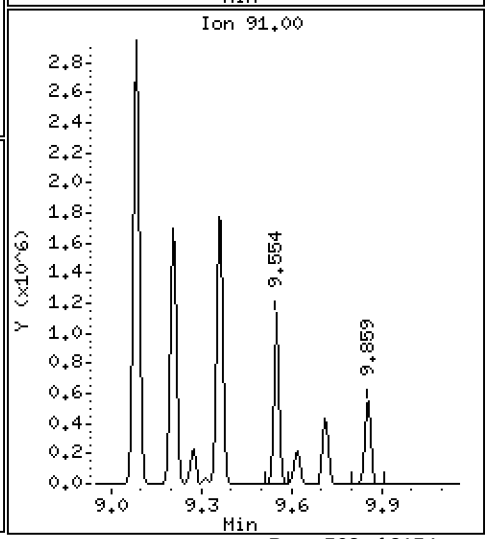












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

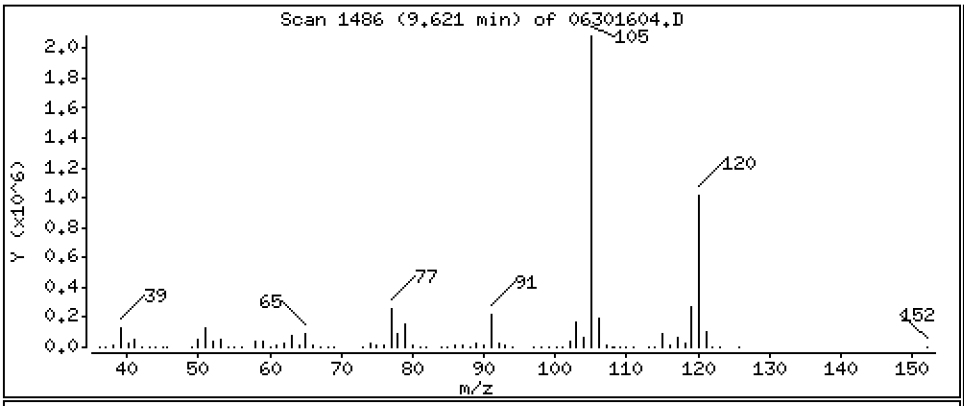
Operator: PB

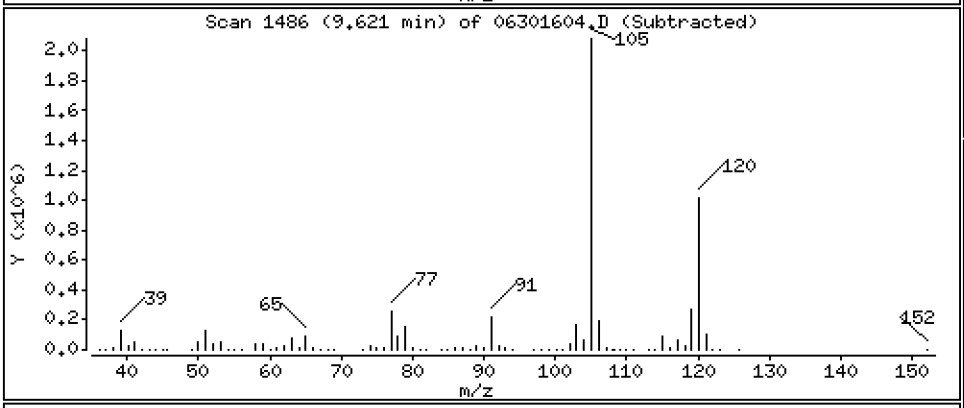
Column phase: RTXVMS

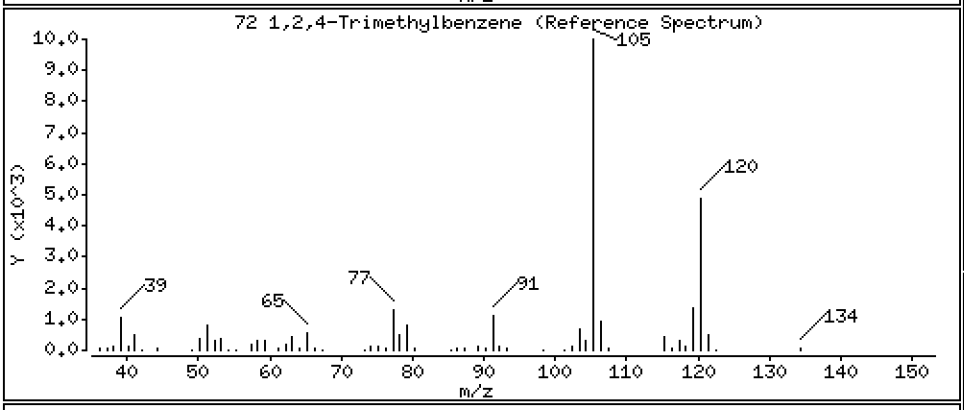
Column diameter: 0.18

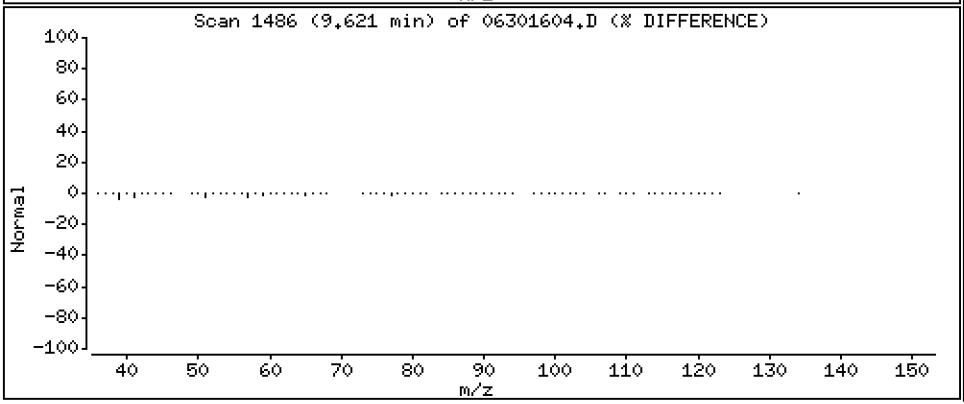
72 1,2,4-Trimethylbenzene

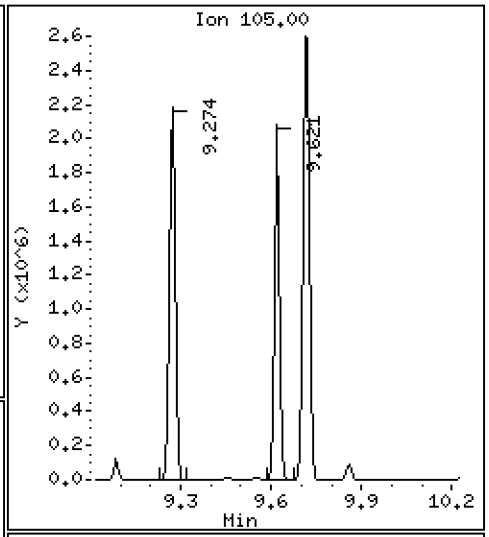
Concentration: 46.384 ug/Kg

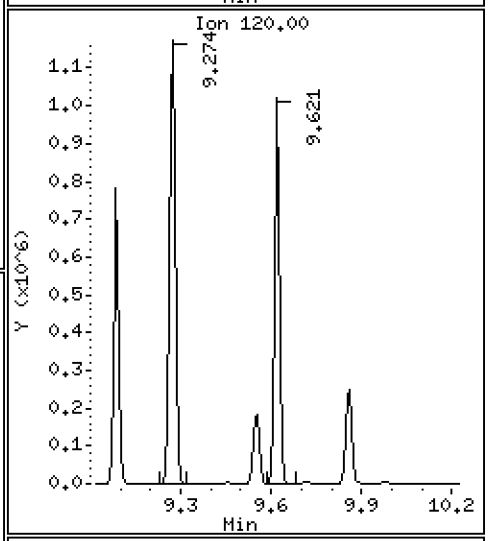


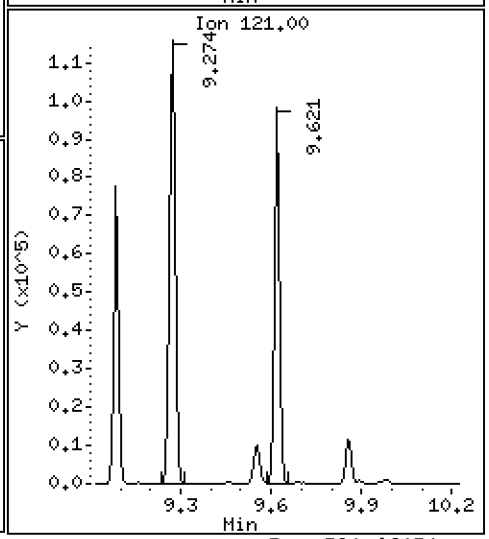












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

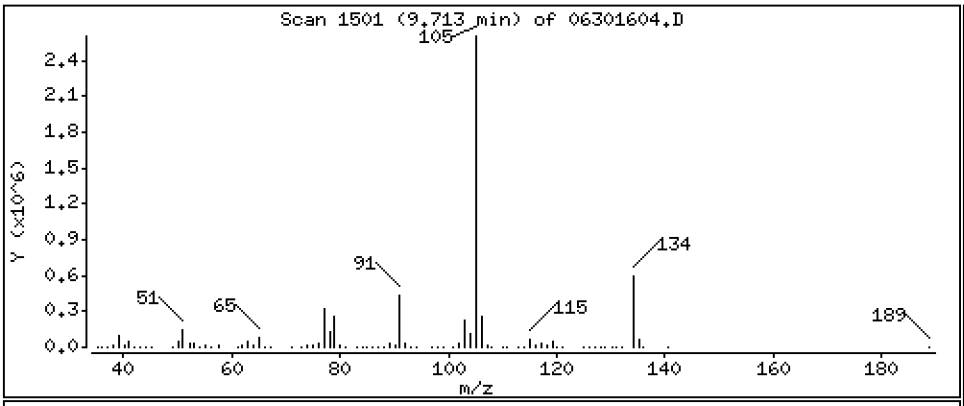
Operator: PB

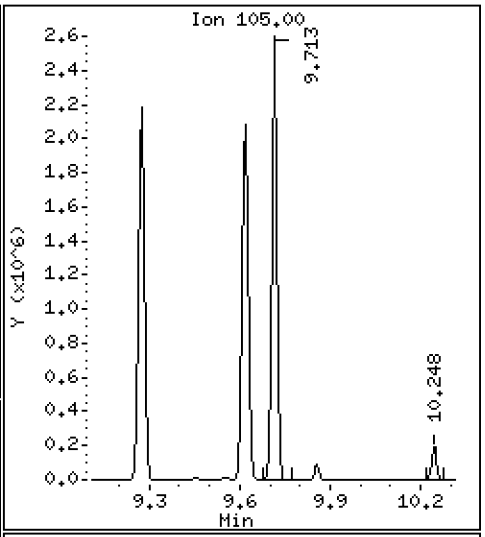
Column phase: RTXVMS

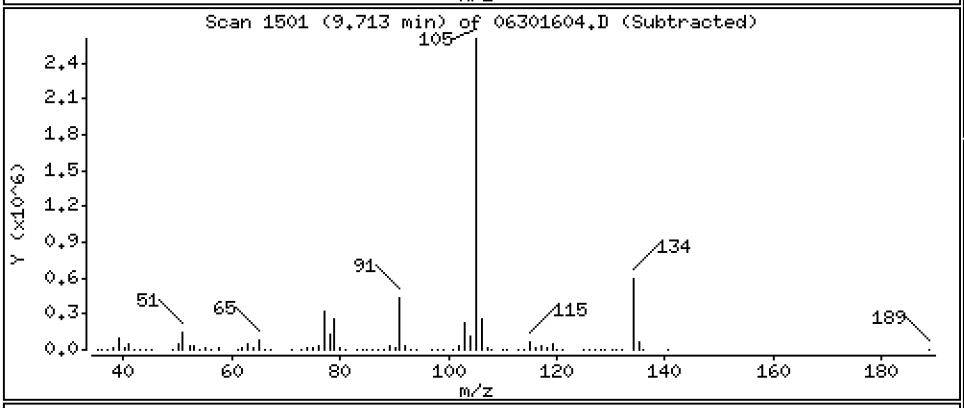
Column diameter: 0.18

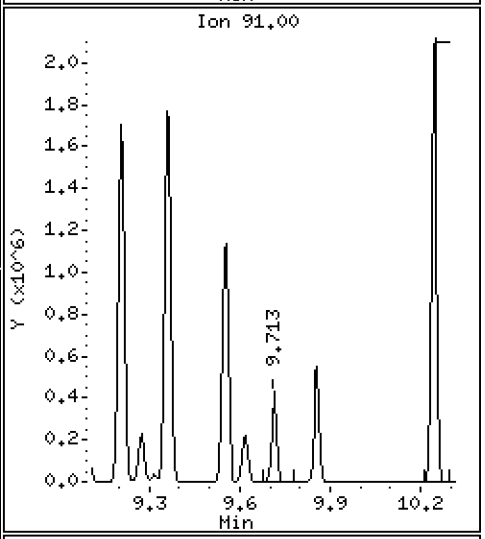
73 S-Butyl Benzene

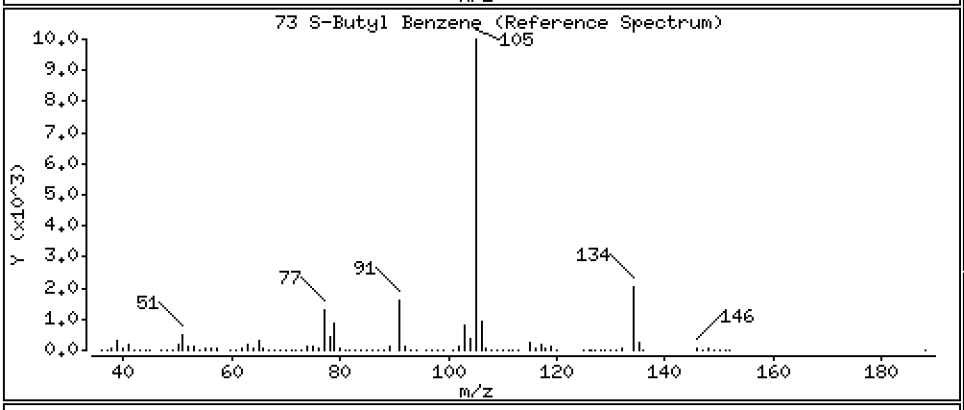
Concentration: 44.656 ug/Kg

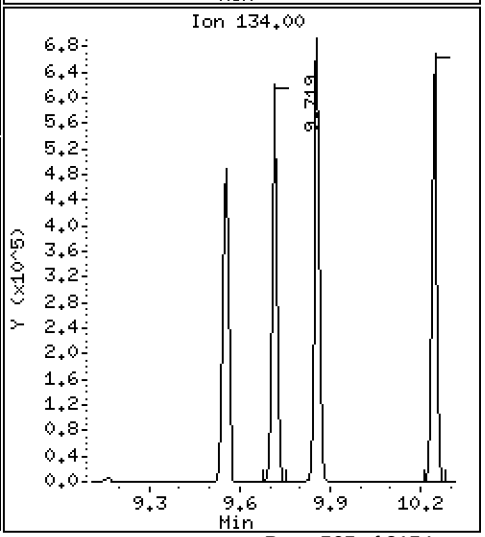


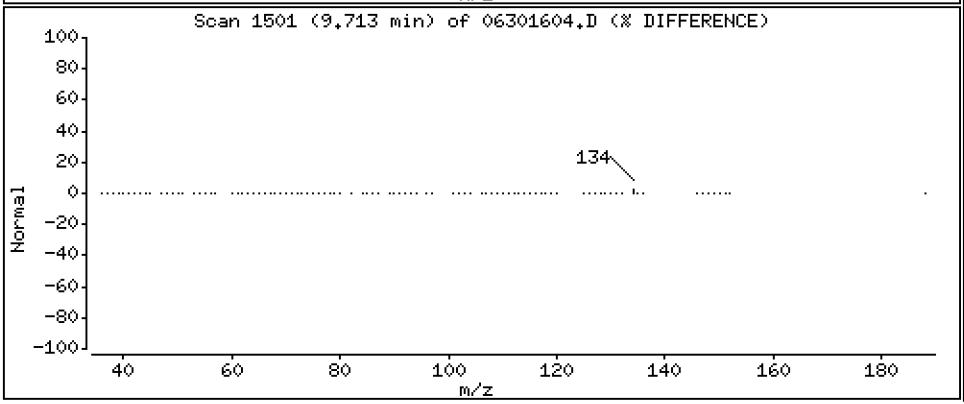












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

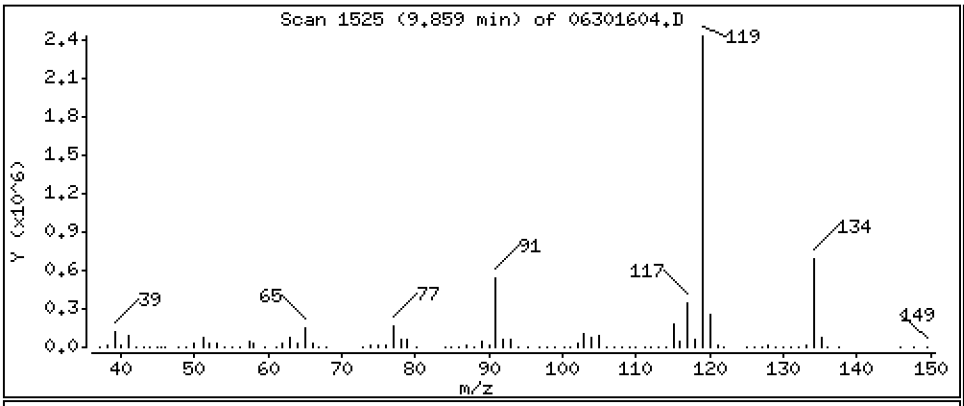
Operator: PB

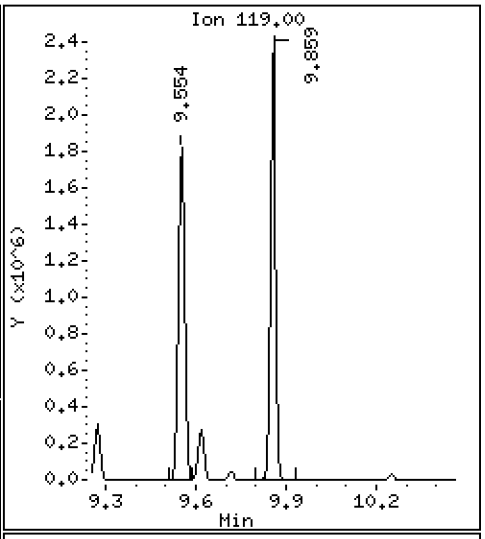
Column phase: RTXVMS

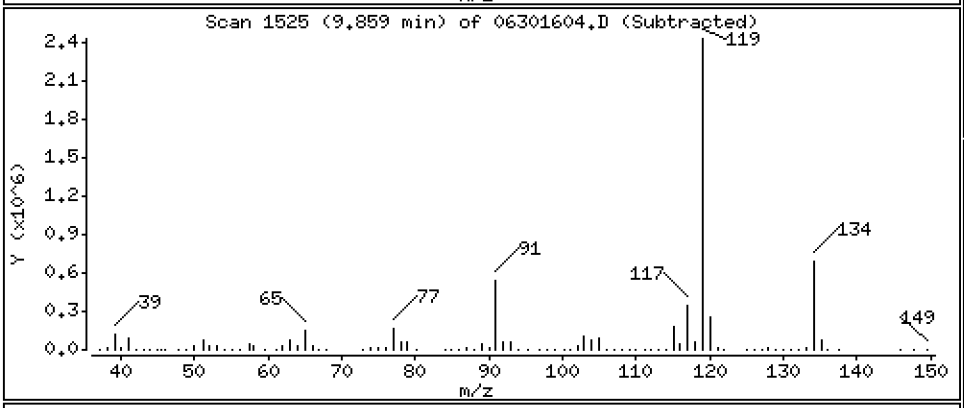
Column diameter: 0.18

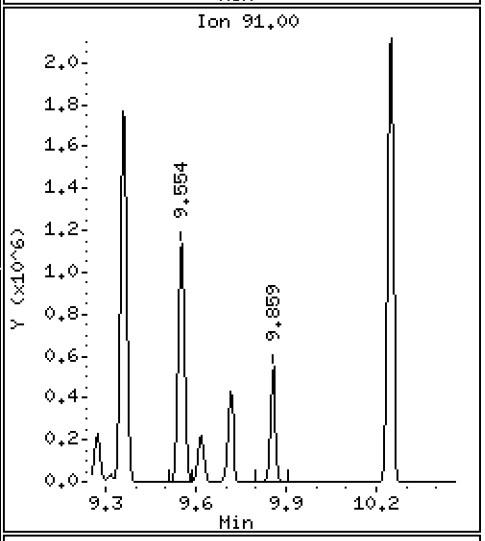
74 4-Isopropyl Toluene

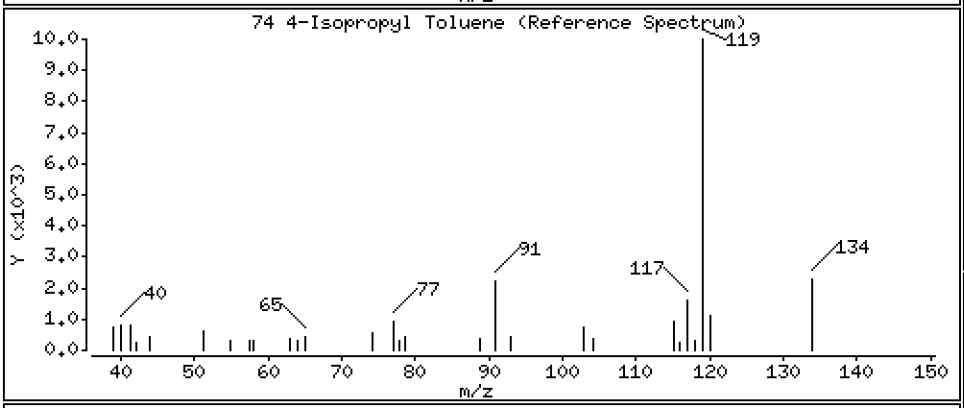
Concentration: 47.450 ug/Kg

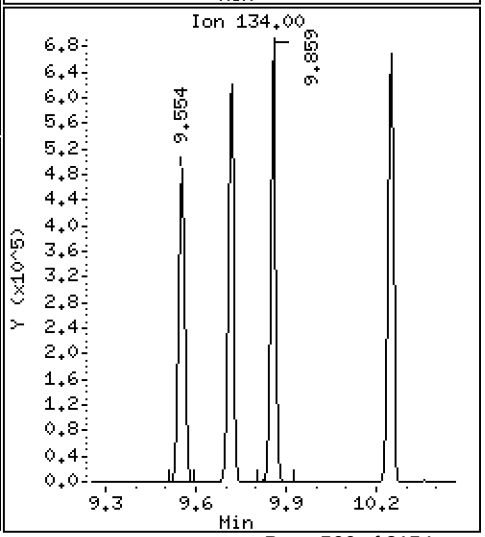


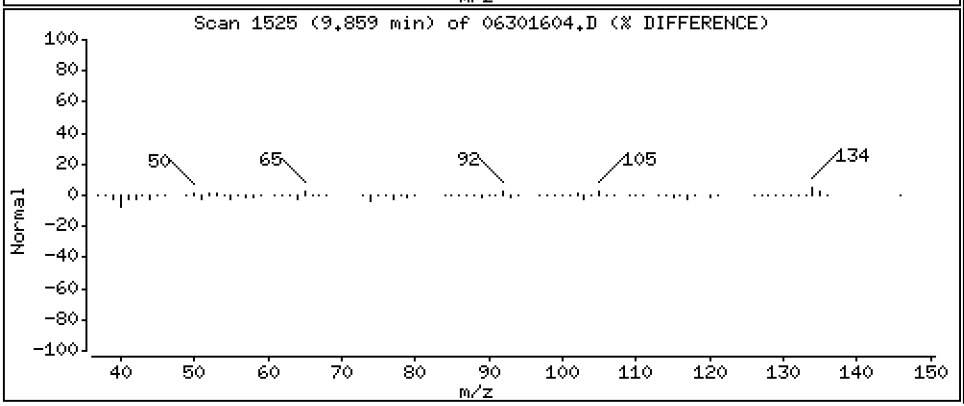












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

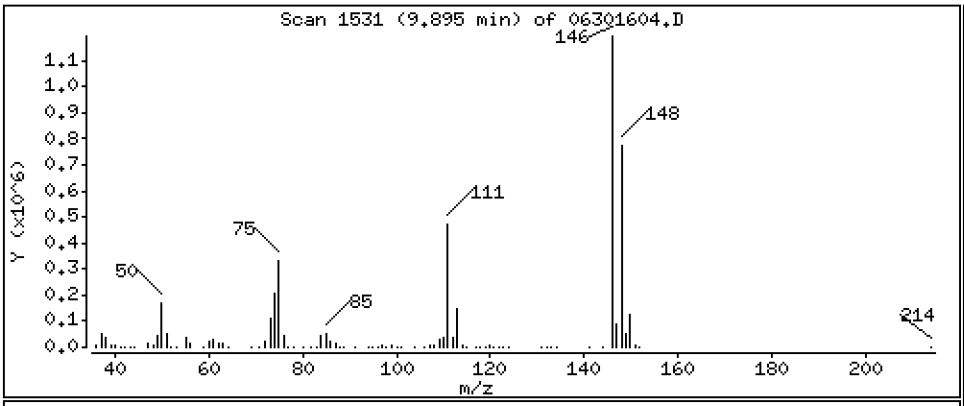
Operator: PB

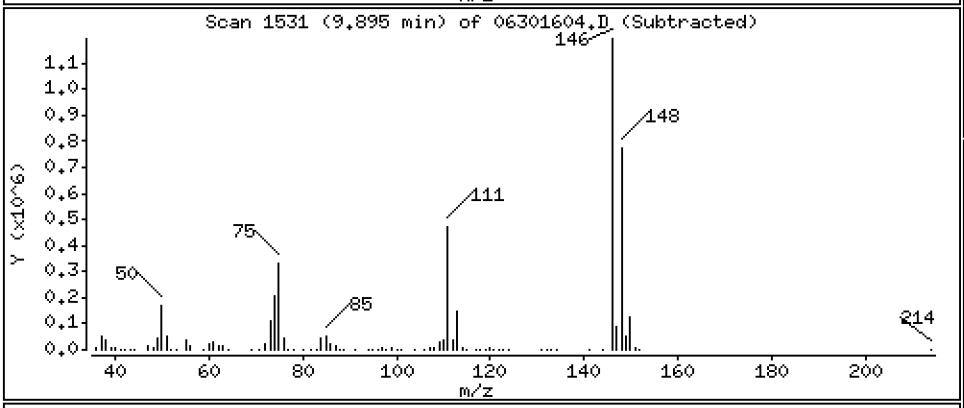
Column phase: RTXVMS

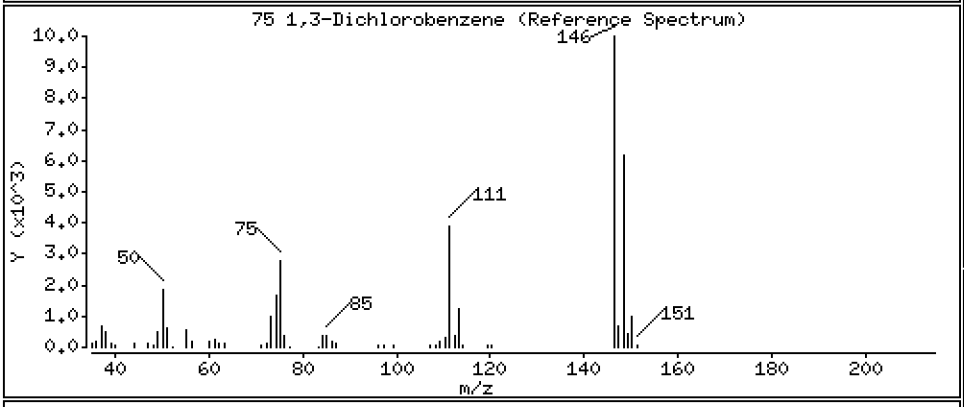
Column diameter: 0.18

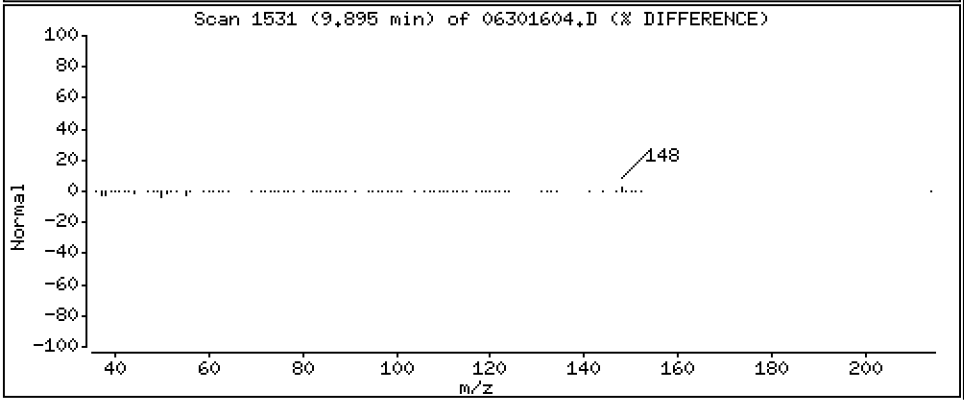
75 1,3-Dichlorobenzene

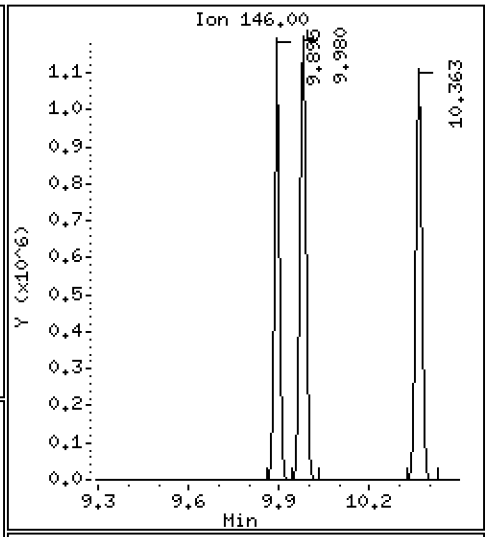
Concentration: 48.351 ug/Kg

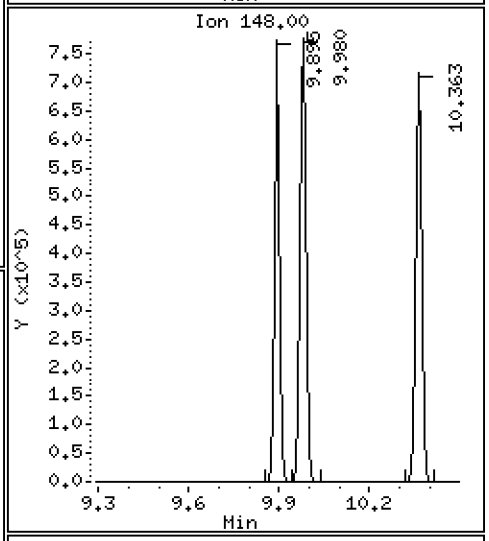


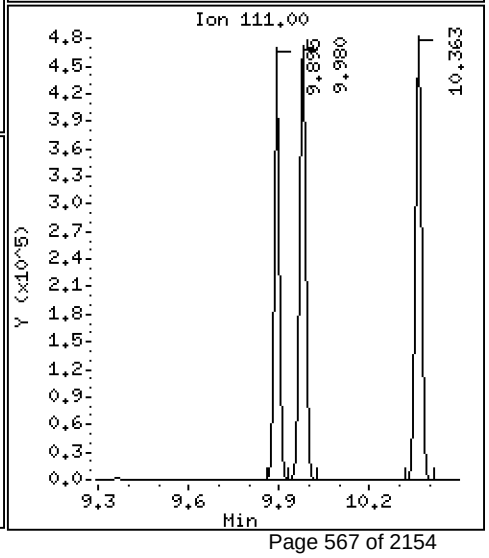












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

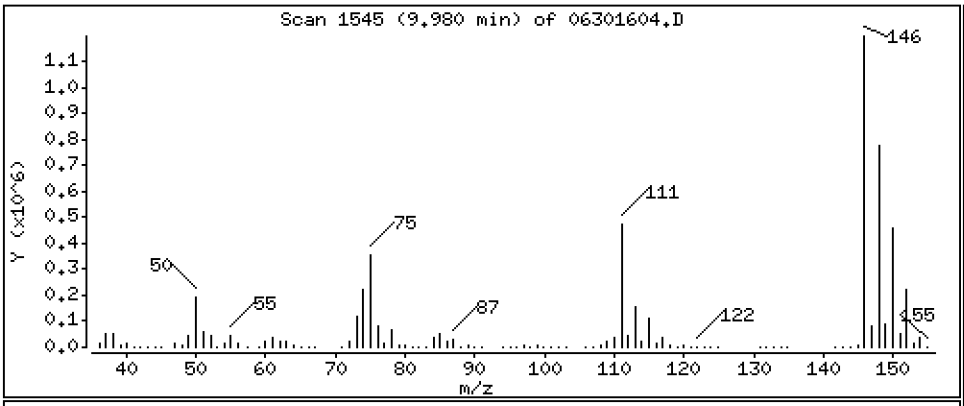
Operator: PB

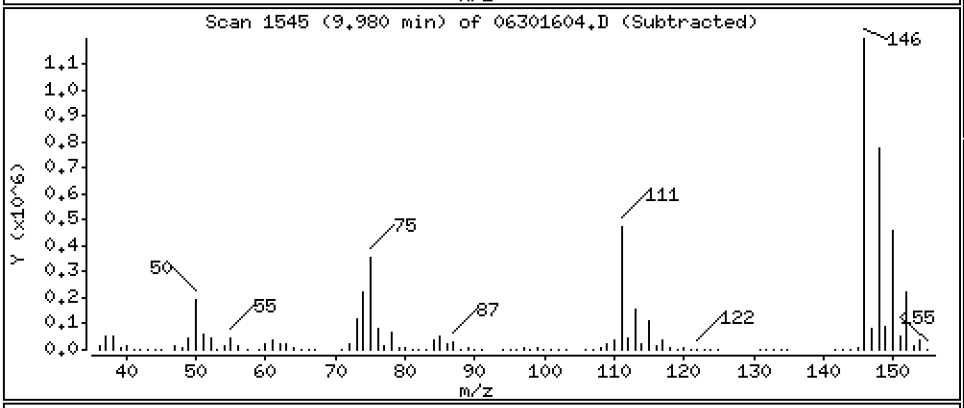
Column phase: RTXVMS

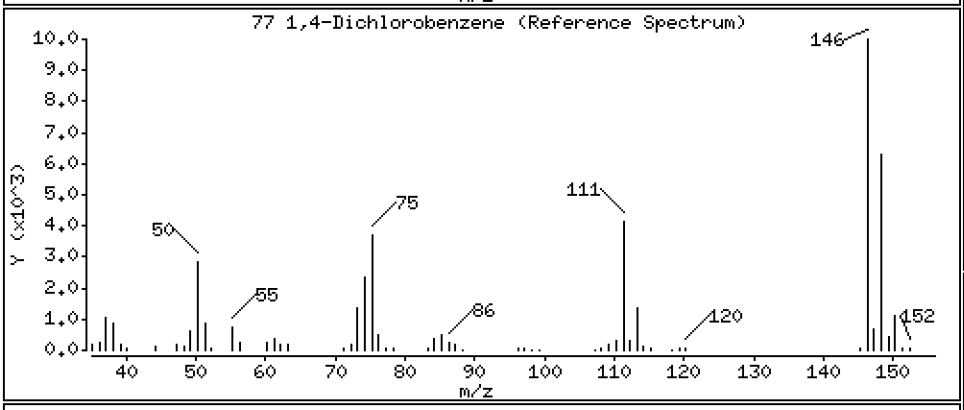
Column diameter: 0.18

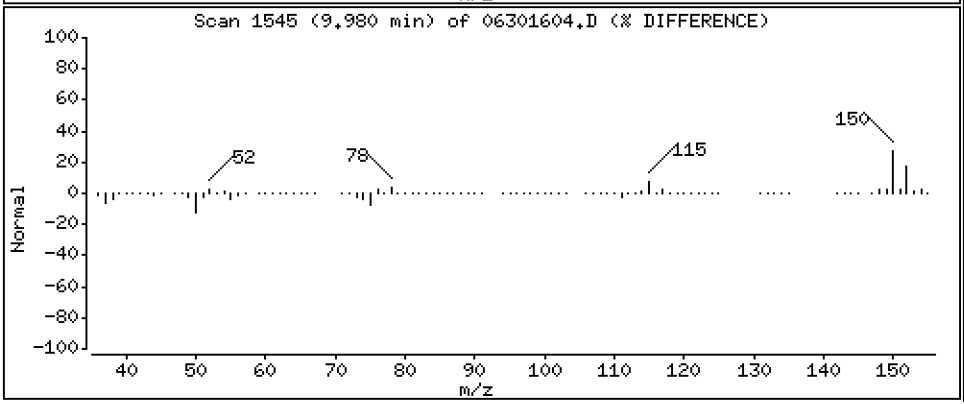
77 1,4-Dichlorobenzene

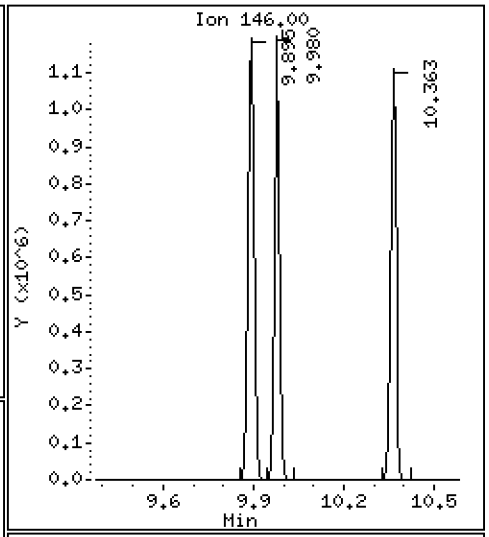
Concentration: 47.553 ug/Kg

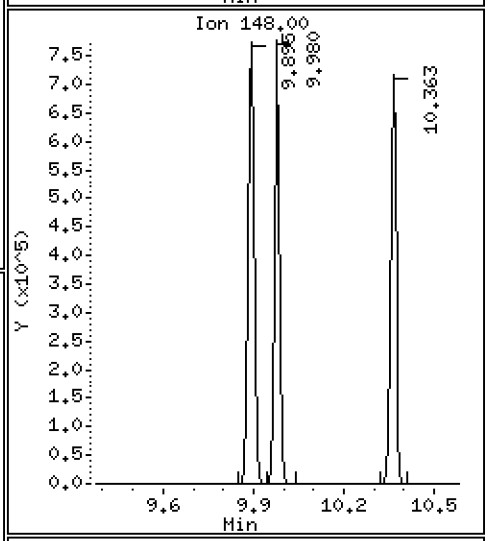


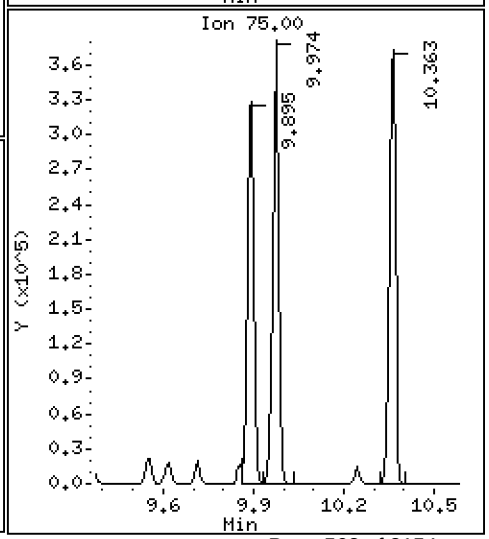












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

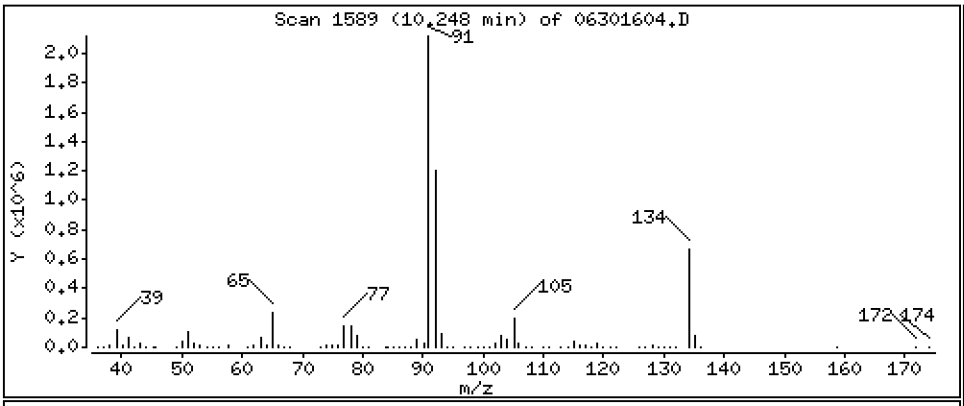
Operator: PB

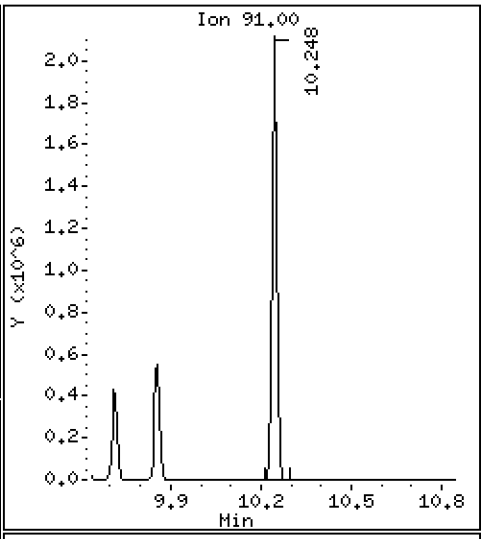
Column phase: RTXVMS

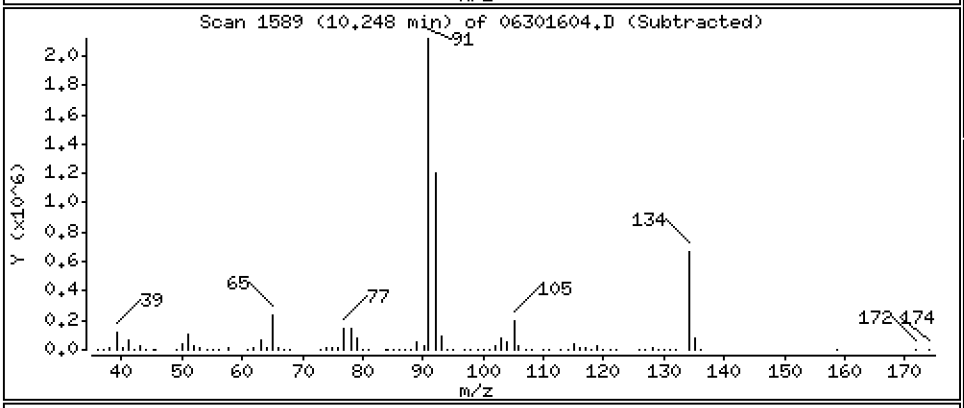
Column diameter: 0.18

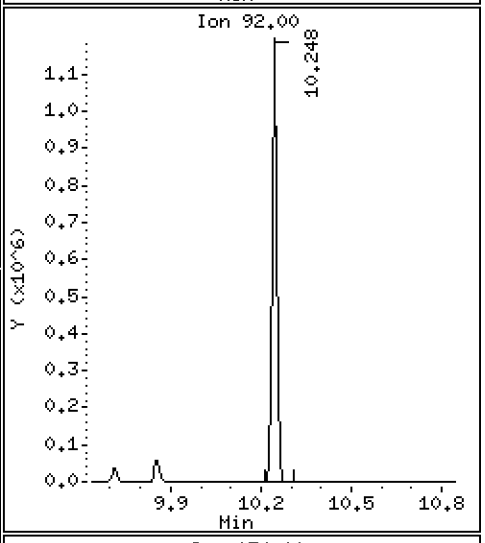
78 N-Butyl Benzene

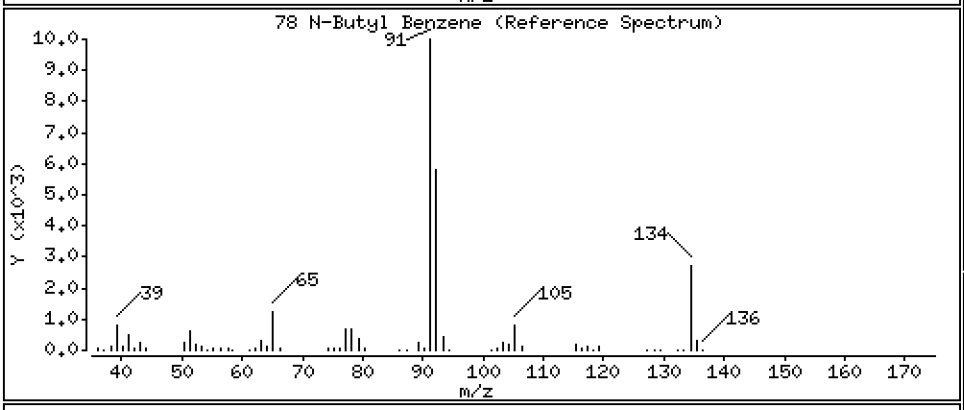
Concentration: 47.328 ug/Kg

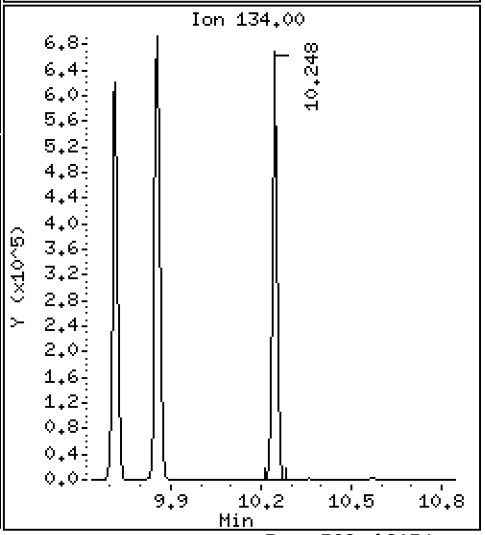


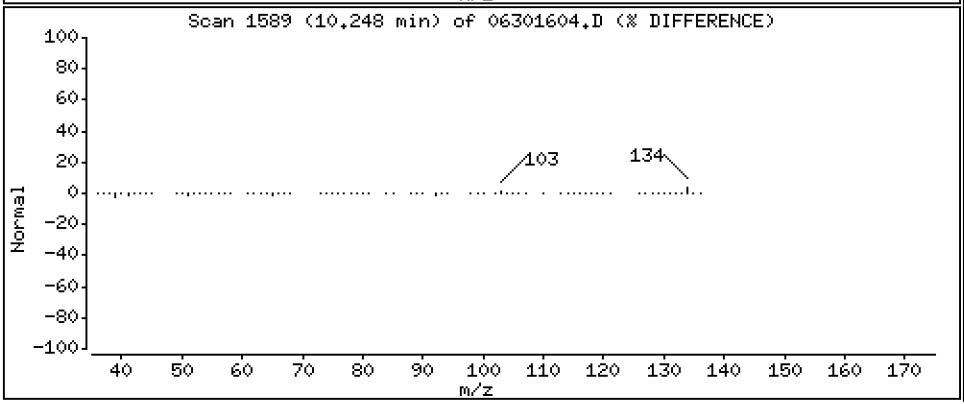












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

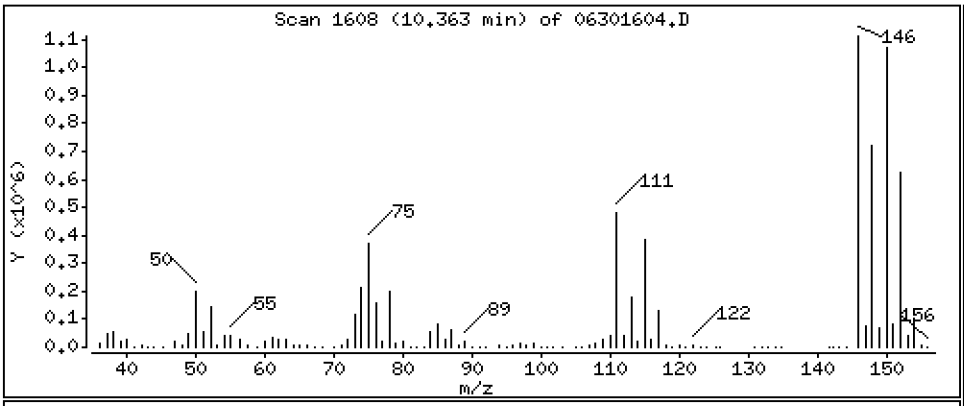
Operator: PB

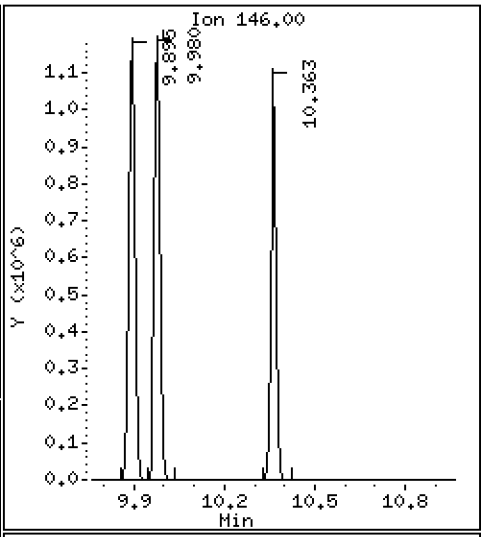
Column phase: RTXVMS

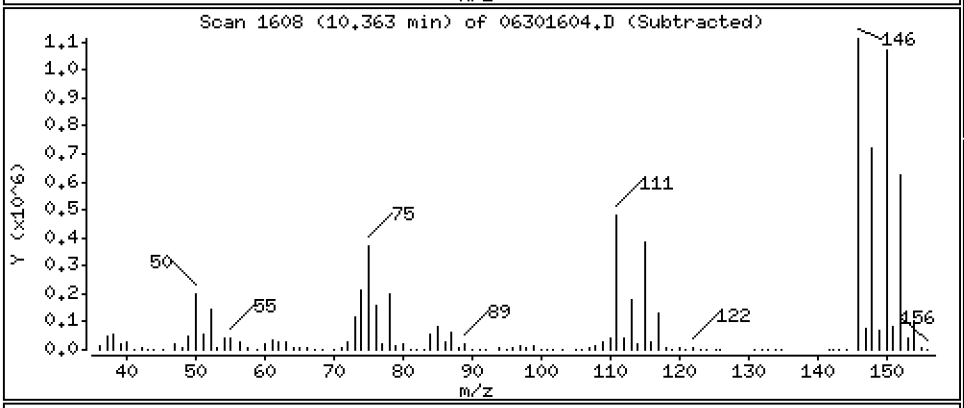
Column diameter: 0.18

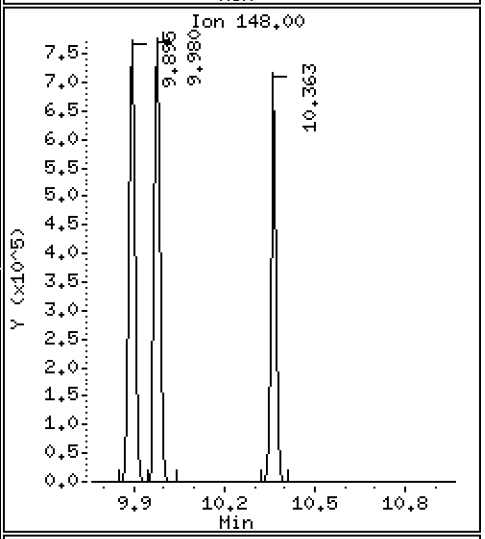
80 1,2-Dichlorobenzene

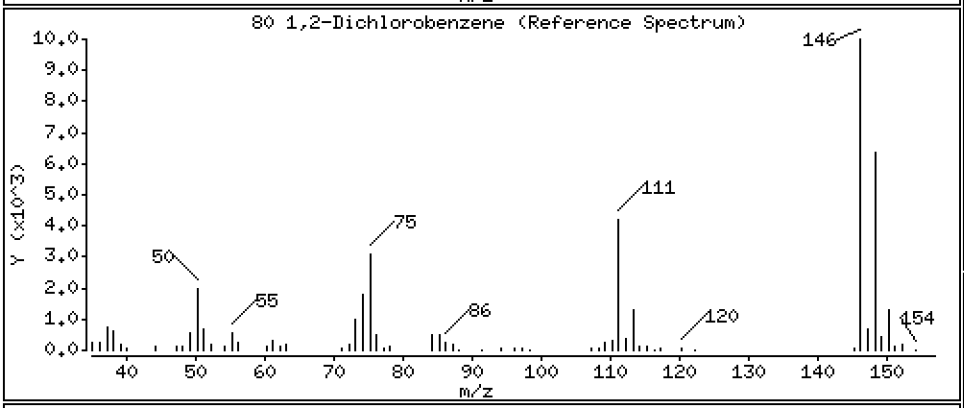
Concentration: 46.666 ug/Kg

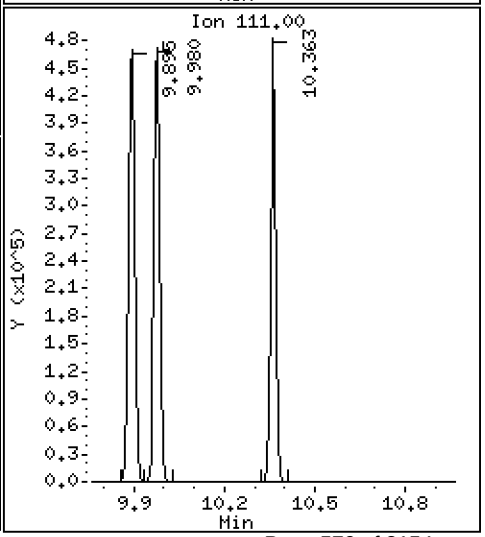


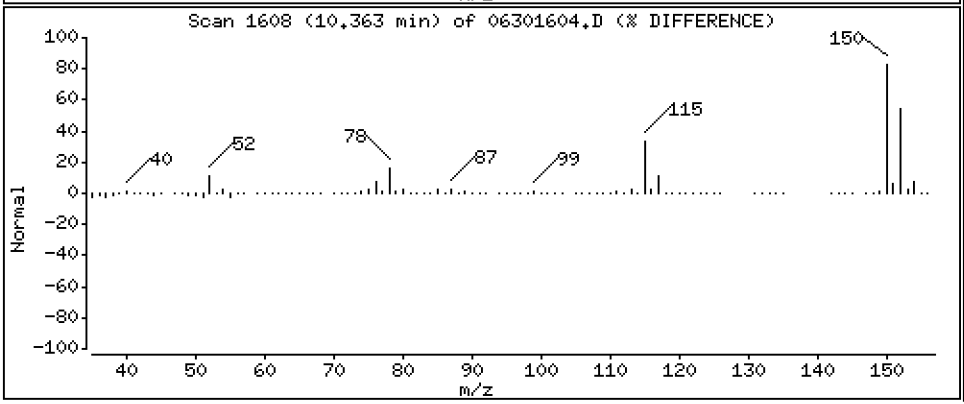












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

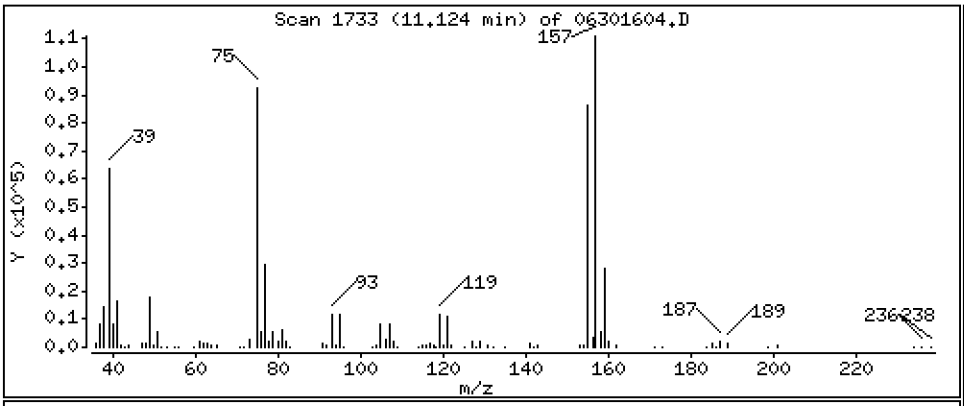
Operator: PB

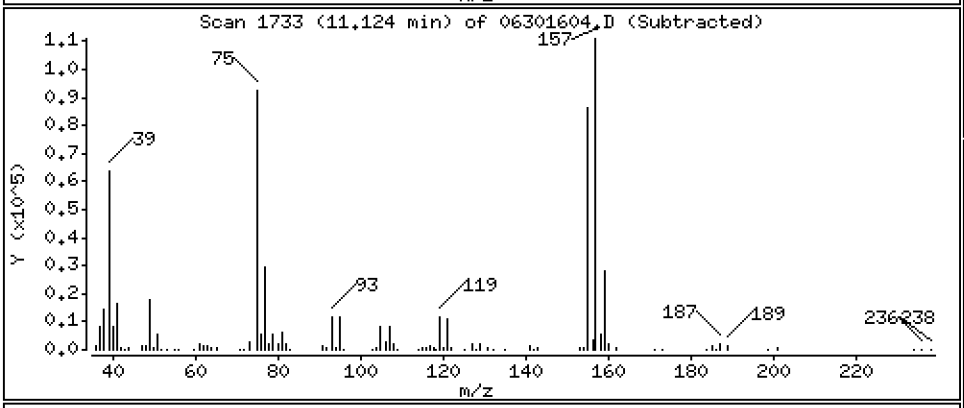
Column phase: RTXVMS

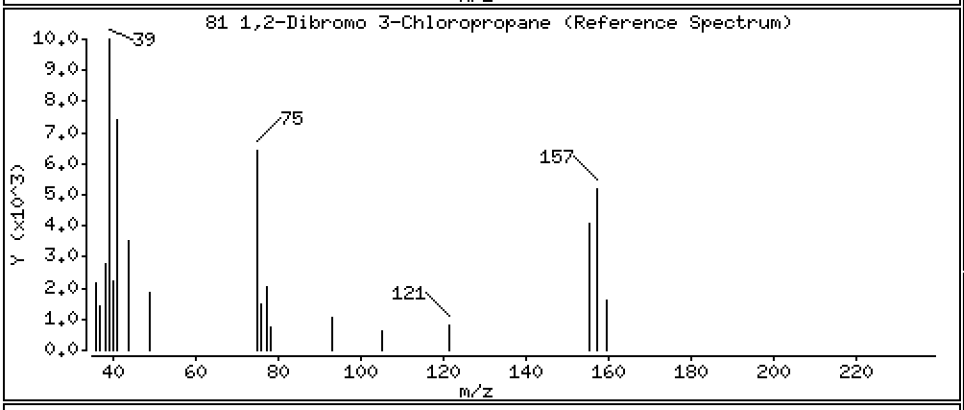
Column diameter: 0.18

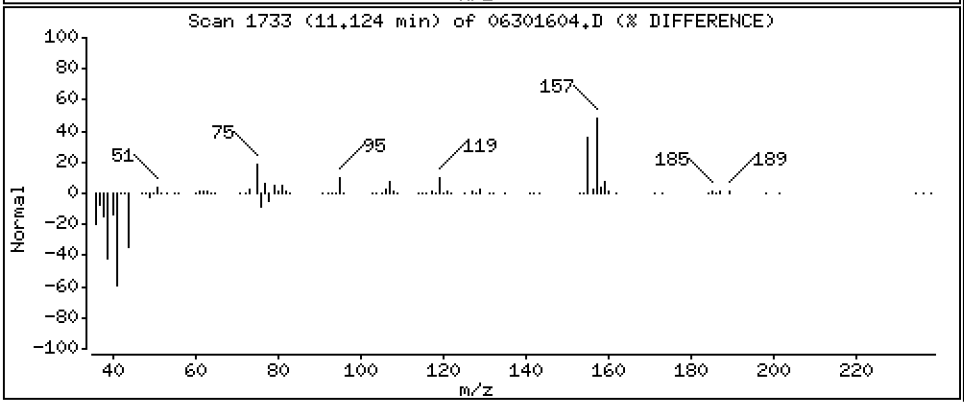
81 1,2-Dibromo 3-Chloropropane

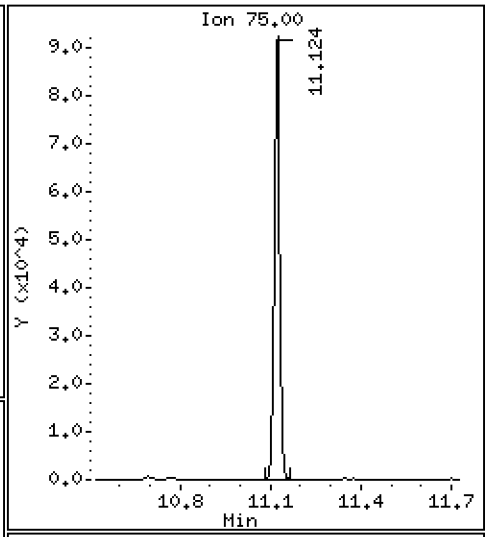
Concentration: 40.815 ug/Kg

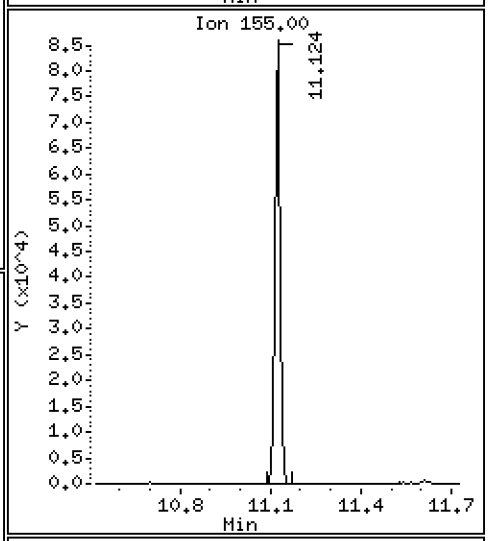


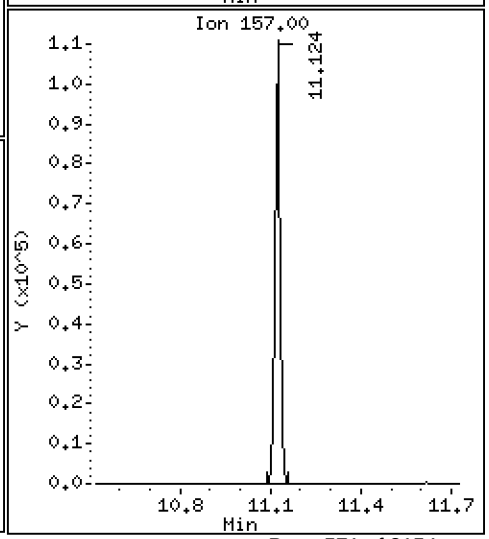












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

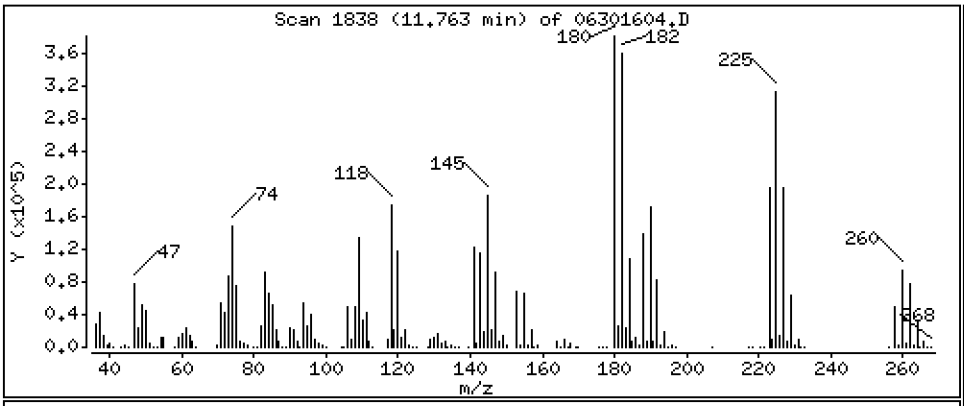
Operator: PB

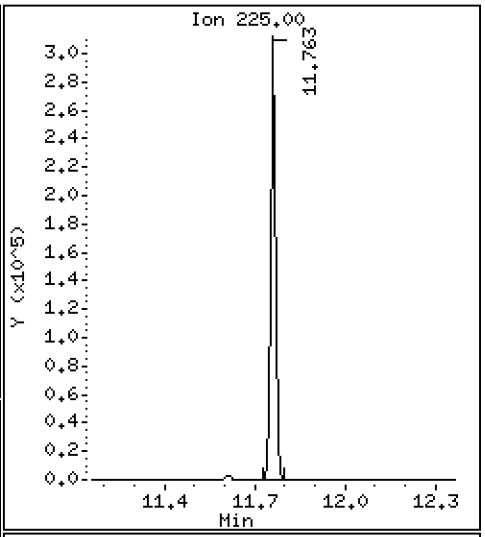
Column phase: RTXVMS

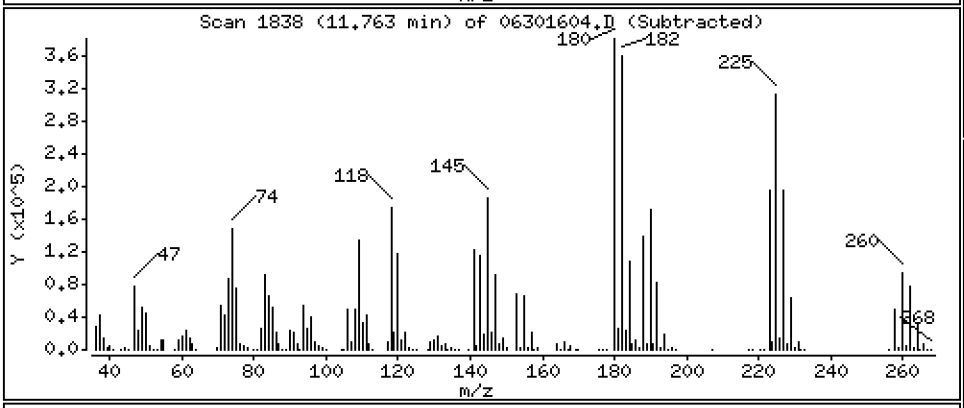
Column diameter: 0.18

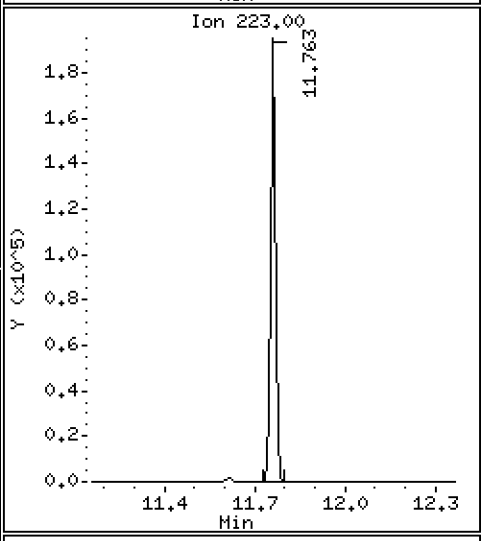
82 Hexachloro 1,3-Butadiene

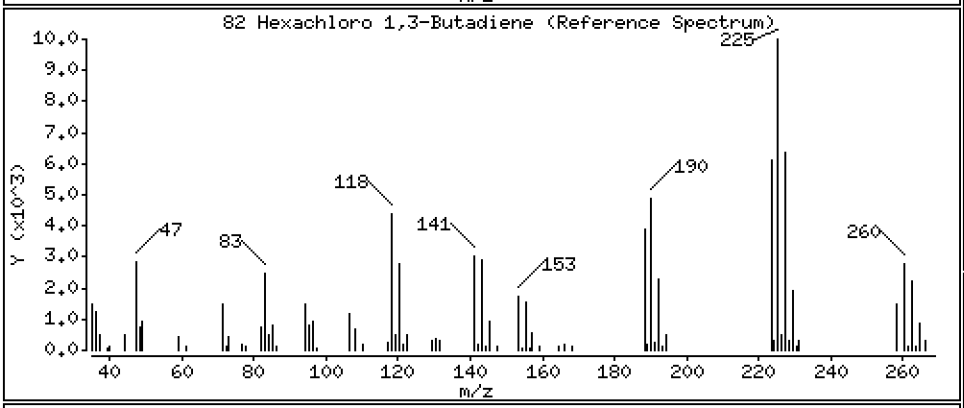
Concentration: 49.939 ug/Kg

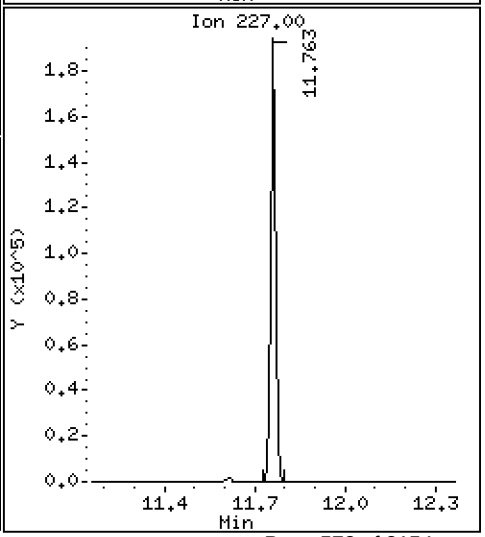


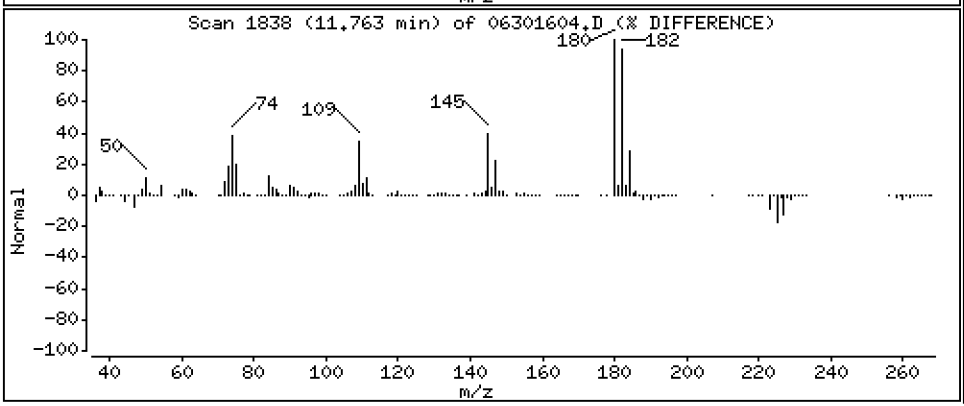












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

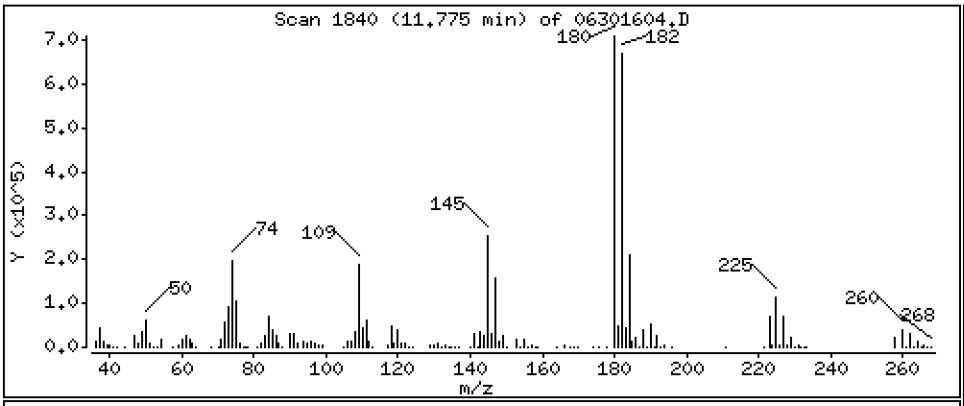
Operator: PB

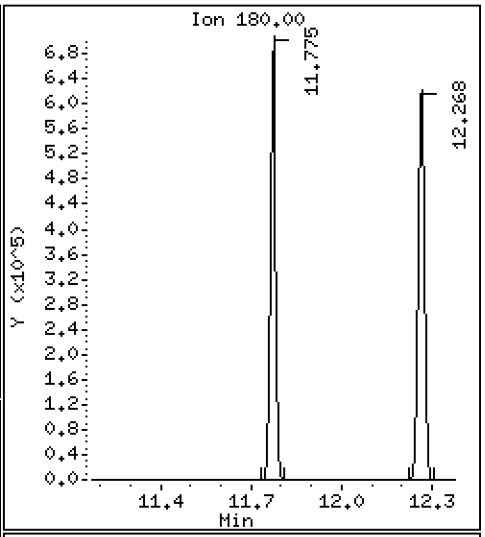
Column phase: RTXVMS

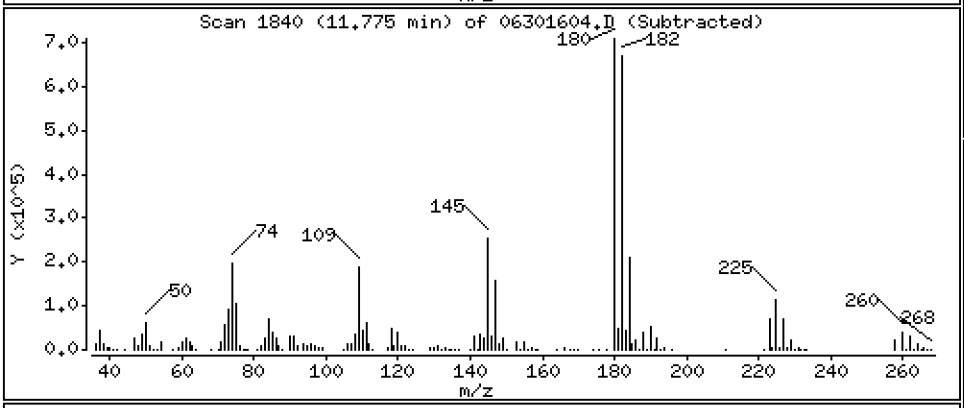
Column diameter: 0.18

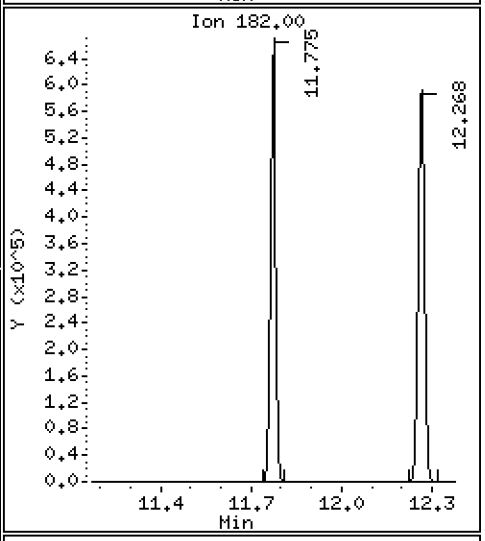
83 1,2,4-Trichlorobenzene

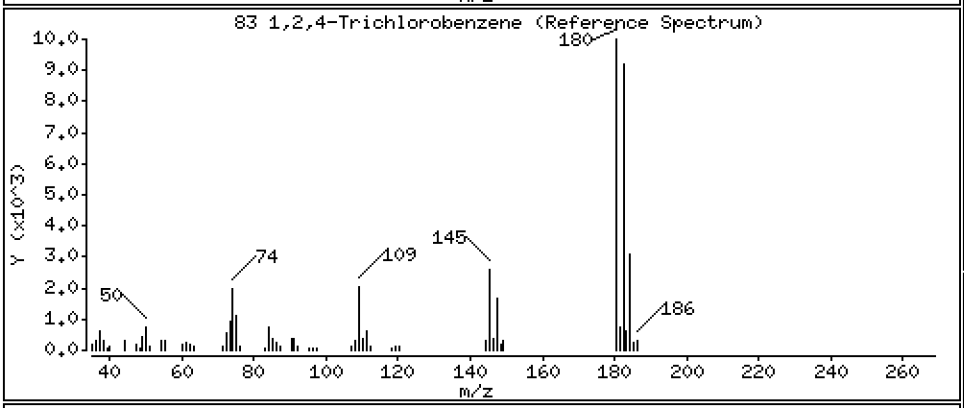
Concentration: 53.635 ug/Kg

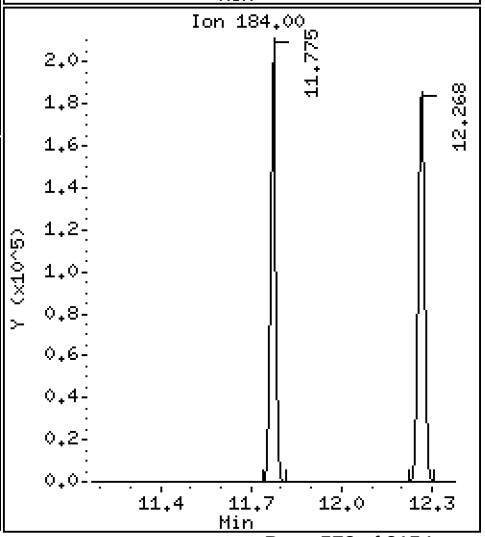


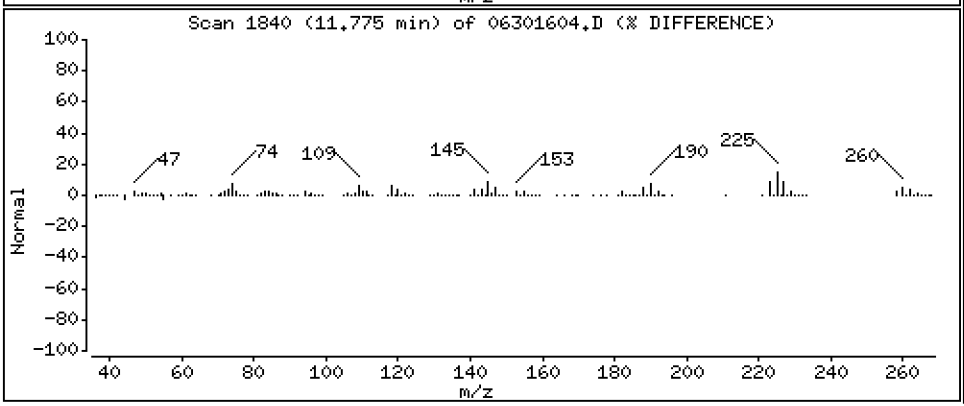












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

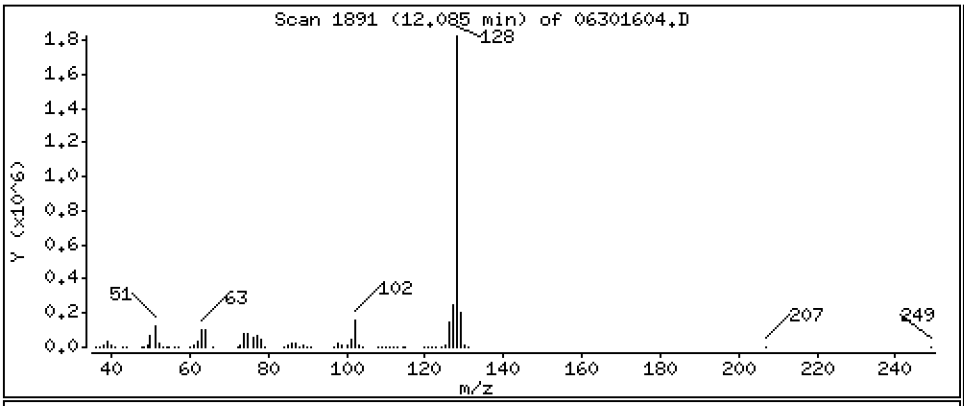
Operator: PB

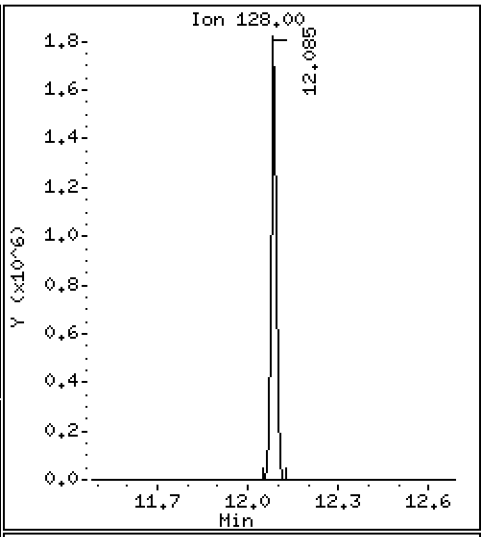
Column phase: RTXVMS

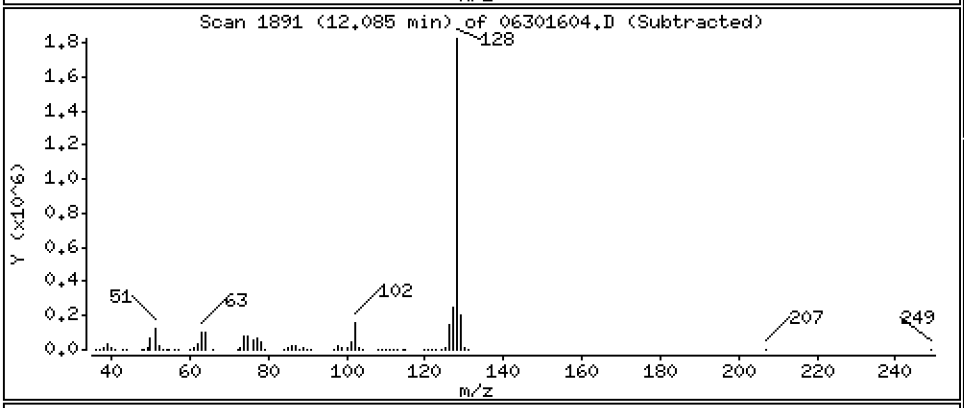
Column diameter: 0.18

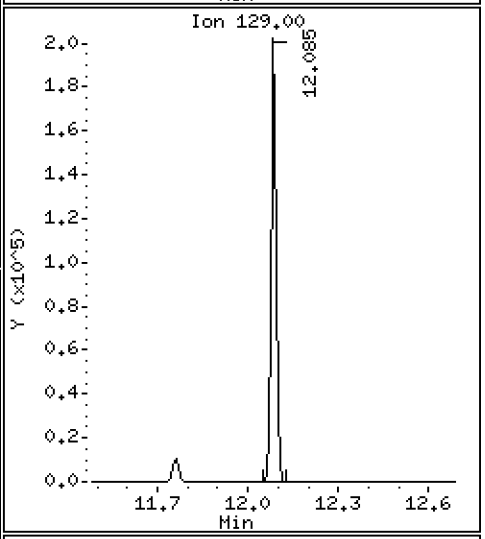
84 Naphthalene

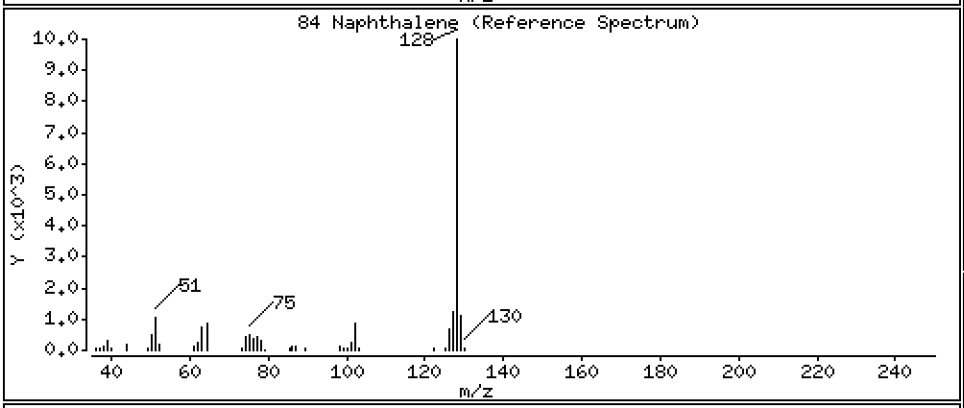
Concentration: 47.797 ug/Kg

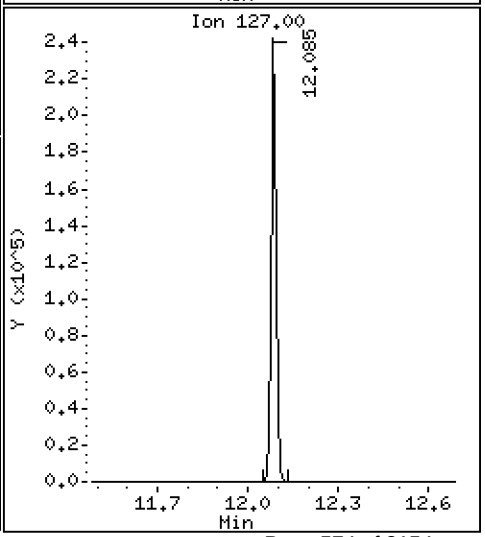


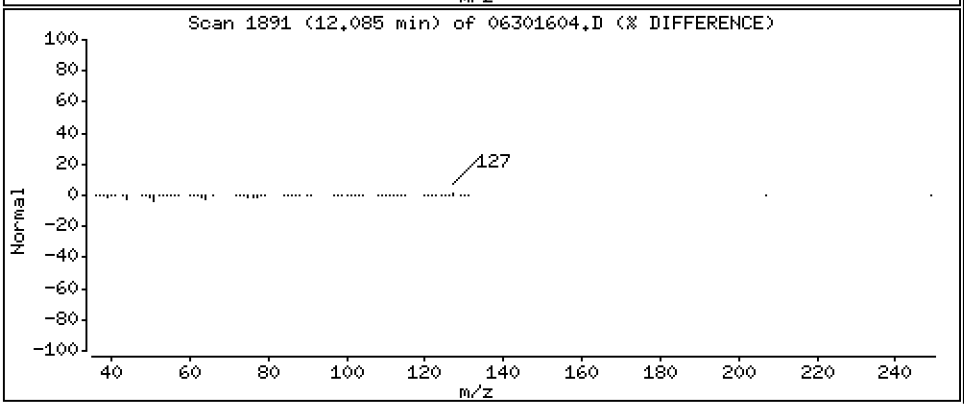












Data File: \\target\share\chem1\nt5.i\20160630.b\06301604.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

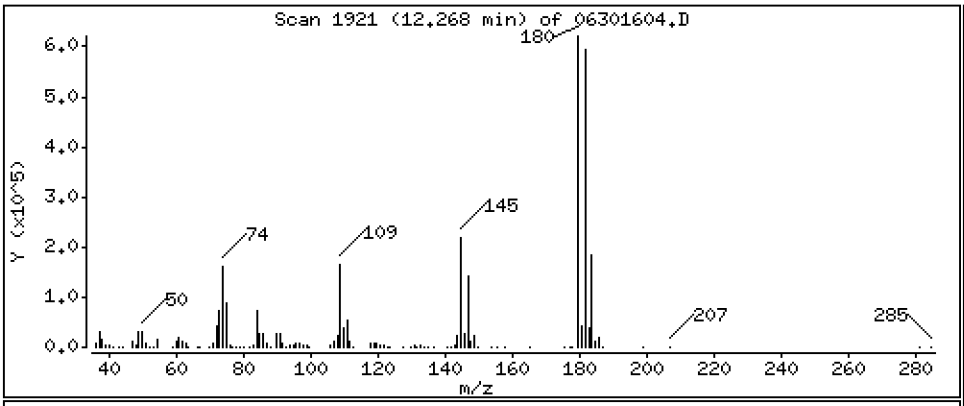
Operator: PB

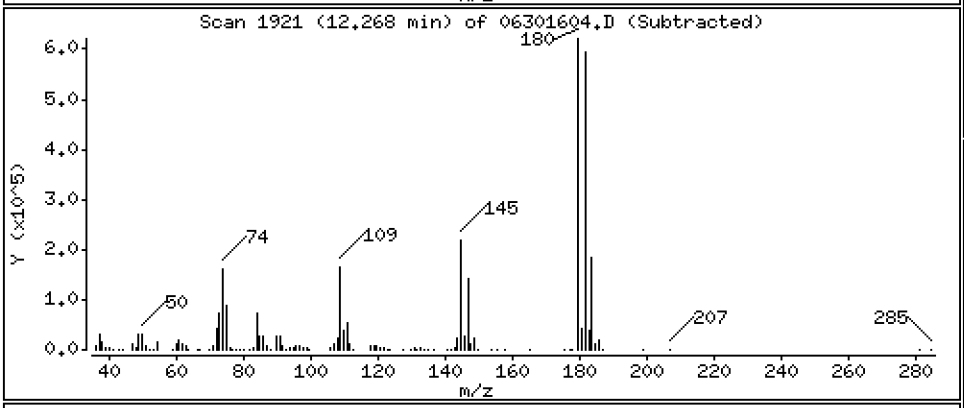
Column phase: RTXVMS

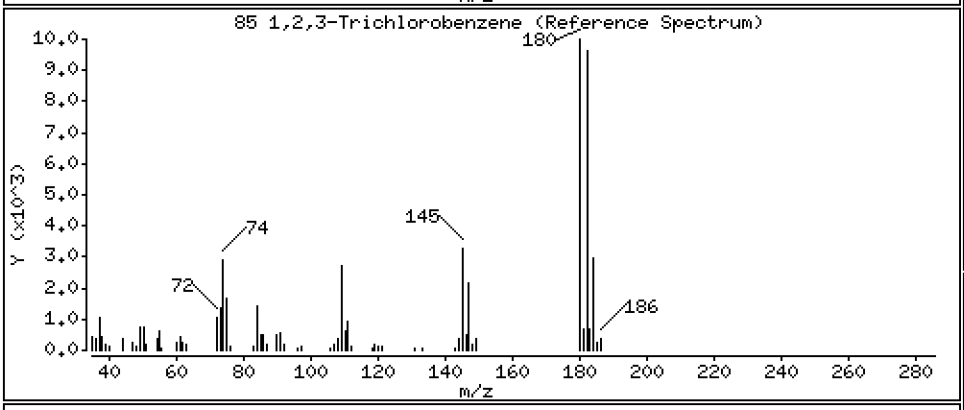
Column diameter: 0.18

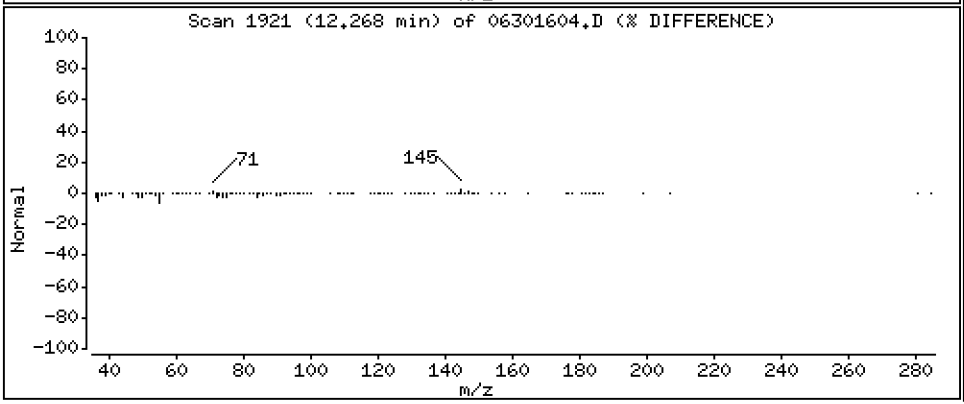
85 1,2,3-Trichlorobenzene

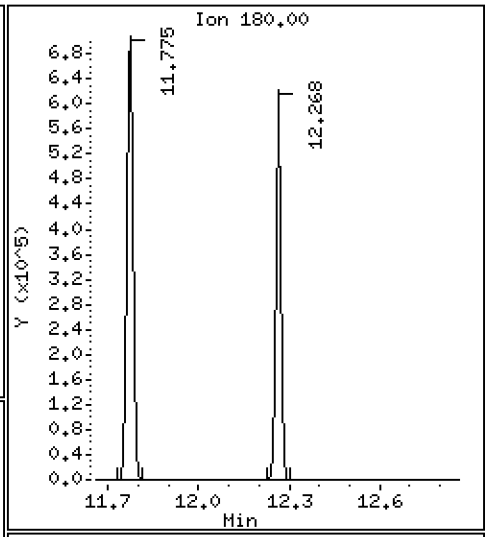
Concentration: 51.416 ug/Kg

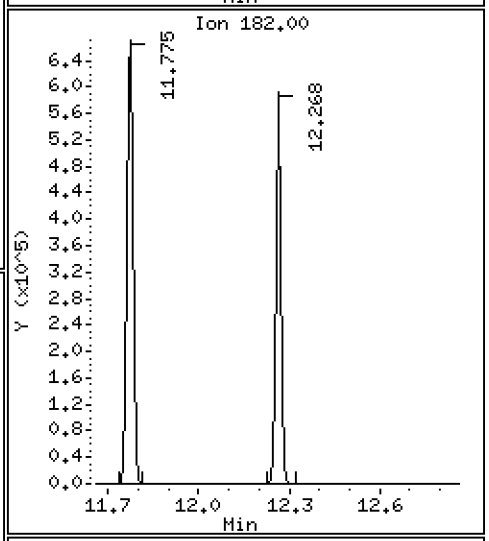


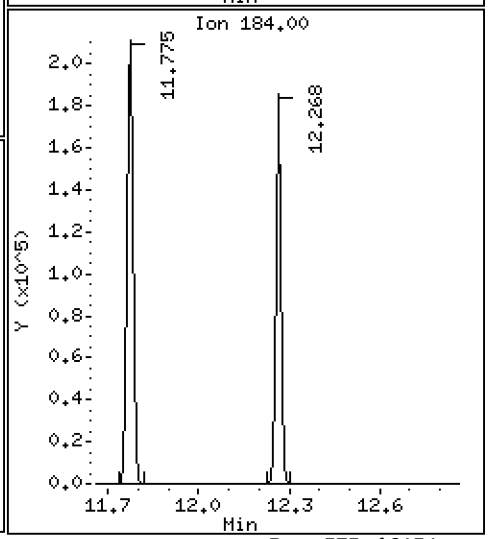












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301604.D
Lab Smp Id: BEG0004-BS1 Client Smp ID: LCS0630
Inj Date : 30-JUN-2016 12:46
Operator : PB Inst ID: nt5.i
Smp Info : LCS0630,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.159	1.146	(0.234)	833534	41.8882	41.888
2	Chloromethane	50	1.292	1.280	(0.261)	795860	33.9700	33.970
3	Vinyl Chloride	62	1.353	1.341	(0.274)	852374	41.9571	41.957
4	Bromomethane	94	1.590	1.578	(0.321)	390472	27.3120	27.312
5	Chloroethane	64	1.682	1.670	(0.340)	417916	41.5656	41.566
6	Trichlorofluoromethane	101	1.779	1.767	(0.360)	721143	61.8201	61.820
7	1,1-Dichloroethene	96	2.205	2.193	(0.446)	623610	46.1828	46.183
8	Carbon Disulfide	76	2.205	2.199	(0.446)	1977103	45.5432	45.543
9	112Trichloro122Trifluoroethane	101	2.247	2.235	(0.454)	626656	47.2932	47.293
10	Iodomethane	142	2.314	2.302	(0.468)	268064	31.6818	31.682
11	Bromoethane	108	2.430	2.418	(0.491)	366790	47.4566	47.457
12	Acrolein	56	2.527	2.515	(0.511)	530936	201.278	201.28
13	Methylene Chloride	84	2.740	2.728	(0.554)	628310	46.3883	46.388
14	Acetone	43	2.838	2.825	(0.573)	792517	180.779	180.78
15	Trans-1,2-Dichloroethene	96	2.892	2.880	(0.585)	682513	45.5014	45.501
16	Methyl tert butyl ether	73	3.063	3.051	(0.619)	1897081	42.5500	42.550
17	1,1-Dichloroethane	63	3.525	3.513	(0.712)	1221944	41.4976	41.498
18	Acrylonitrile	53	3.610	3.604	(0.730)	205372	39.1647	39.165
19	Vinyl Acetate	43	3.835	3.829	(0.775)	1350076	38.6463	38.646
20	Cis-1,2-Dichloroethene	96	4.054	4.042	(0.819)	770296	43.5059	43.506
22	2,2-Dichloropropane	77	4.146	4.140	(0.838)	1129721	44.7653	44.765

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	4.237	4.231	(0.856)	349326	45.1671	45.167
	24 Chloroform	83	4.328	4.322	(0.875)	1186674	43.3532	43.353
	25 Carbon Tetrachloride	117	4.407	4.401	(0.816)	998380	47.2688	47.269
$	27 Dibromofluoromethane	111	4.492	4.486	(0.908)	802424	48.0270	48.027
	26 1,1,1-Trichloroethane	97	4.480	4.474	(0.905)	1096613	43.1194	43.119
	28 1,1-Dichloropropene	75	4.596	4.590	(0.851)	969026	44.1030	44.103
	29 2-Butanone	72	4.644	4.638	(0.939)	356850	192.170	192.17
	30 Benzene	78	4.821	4.815	(0.893)	2764538	44.4496	44.450
*	31 Pentafluorobenzene	168	4.949	4.943	(1.000)	700998	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.001)	742692	44.4664	44.466
	33 1,2-Dichloroethane	62	5.015	5.009	(0.929)	853919	41.5625	41.563
	34 Trichloroethene	95	5.344	5.338	(0.990)	733163	45.4908	45.491
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2302955	50.0000	
	37 Dibromomethane	93	5.703	5.703	(1.056)	378779	44.0492	44.049
	38 1,2-Dichloropropane	63	5.794	5.788	(1.073)	682626	42.4739	42.474
	39 Bromodichloromethane	83	5.867	5.861	(1.087)	897565	46.2585	46.258
	172 2-Pentanone	86	6.165	6.159	(1.142)	463016	201.872	201.87
	40 2-Chloroethyl Vinyl Ether	63	6.384	6.384	(1.183)	359551	53.1384	53.138
	41 Cis 1,3-dichloropropene	75	6.409	6.403	(1.187)	1137190	45.1051	45.105
$	42 d8-Toluene	98	6.561	6.555	(1.215)	2831730	47.9890	47.989
	43 Toluene	92	6.603	6.597	(1.223)	1761432	44.0220	44.022
	44 Tetrachloroethene	166	6.914	6.914	(0.878)	727025	49.0365	49.037
	45 4-Methyl-2-Pentanone	58	6.956	6.956	(1.288)	1159448	192.565	192.56
	46 Trans 1,3-Dichloropropene	75	6.974	6.968	(1.292)	1003609	45.7333	45.733
	47 1,1,2-Trichloroethane	97	7.102	7.102	(1.315)	564687	44.9369	44.937
	48 Chlorodibromomethane	129	7.242	7.242	(0.920)	692384	48.5041	48.504
	49 1,3-Dichloropropane	76	7.327	7.327	(0.930)	1010462	44.2867	44.287
	50 1,2-Dibromoethane	107	7.425	7.425	(1.375)	572401	45.2990	45.299
	51 2-Hexanone	43	7.674	7.674	(0.975)	1969016	183.938	183.94
*	52 d5-Chlorobenzene	117	7.875	7.875	(1.000)	2391523	50.0000	
	53 Chlorobenzene	112	7.887	7.887	(1.002)	1994538	46.1948	46.195
	54 Ethyl Benzene	91	7.930	7.930	(1.007)	3343624	45.8082	45.808
	55 1,1,1,2-Tetrachloroethane	131	7.954	7.954	(1.010)	722923	47.2889	47.289
	56 m,p-xylene	106	8.063	8.063	(1.024)	2669715	94.2136	94.214
	57 o-Xylene	106	8.428	8.428	(1.070)	1293629	46.2181	46.218
	58 Styrene	104	8.477	8.477	(1.076)	2180687	47.1755	47.176
	59 Bromoform	173	8.489	8.483	(0.852)	407390	46.8325	46.833
	60 Isopropyl Benzene	105	8.714	8.714	(0.874)	3374020	45.7839	45.784
$	62 4-Bromofluorobenzene	95	8.952	8.952	(1.137)	1238538	48.1564	48.156
	63 Bromobenzene	156	9.037	9.031	(0.907)	799445	46.8099	46.810
	64 N-Propyl Benzene	91	9.085	9.085	(0.912)	3919012	44.2264	44.226
	65 1,1,2,2-Tetrachloroethane	83	9.158	9.158	(0.919)	714981	41.1415	41.142
	66 2-Chloro Toluene	91	9.207	9.207	(0.924)	2305833	44.5432	44.543
	67 1,3,5-Trimethyl Benzene	105	9.274	9.274	(0.930)	2851360	46.1173	46.117
	68 1,2,3-Trichloropropane	110	9.268	9.268	(0.930)	225152	43.8415	43.841
	69 Trans-1,4-Dichloro 2-Butene	53	9.317	9.317	(0.935)	187487	40.4228	40.423
	70 4-Chloro Toluene	91	9.359	9.359	(0.939)	2439176	45.4950	45.495
	71 T-Butyl Benzene	119	9.554	9.554	(0.958)	2562089	45.5152	45.515
	72 1,2,4-Trimethylbenzene	105	9.621	9.621	(0.965)	2872931	46.3835	46.384
	73 S-Butyl Benzene	105	9.712	9.712	(0.974)	3700755	44.6556	44.656
	74 4-Isopropyl Toluene	119	9.858	9.858	(0.989)	3267201	47.4502	47.450
	75 1,3-Dichlorobenzene	146	9.895	9.895	(0.993)	1619071	48.3509	48.351
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1234567	50.0000	
	77 1,4-Dichlorobenzene	146	9.980	9.980	(1.001)	1610685	47.5528	47.553

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	10.247	10.241	(1.028)	2884986	47.3283	47.328
$	79 d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1217204	48.9623	48.962
	80 1,2-Dichlorobenzene	146	10.363	10.363	(1.040)	1478840	46.6661	46.666
	81 1,2-Dibromo 3-Chloropropane	75	11.123	11.123	(1.116)	133803	40.8150	40.815
	82 Hexachloro 1,3-Butadiene	225	11.762	11.762	(1.180)	423257	49.9389	49.939
	83 1,2,4-Trichlorobenzene	180	11.774	11.774	(1.181)	971636	53.6350	53.635
	84 Naphthalene	128	12.085	12.085	(1.212)	2540496	47.7965	47.797
	85 1,2,3-Trichlorobenzene	180	12.267	12.261	(1.231)	873687	51.4160	51.416

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301604.D
Lab Smp Id: BEG0004-BS1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Client Smp ID: LCS0630
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	700998	16.84
35 1,4-Difluorobenze	2041239	1020620	4082478	2302955	12.82
52 d5-Chlorobenzene	2118314	1059157	4236628	2391523	12.90
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1234567	17.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.95	0.12
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.11
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	-0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEG0004-BS1 Client Smp ID: LCS0630
Level: LOW Operator: PB
Data Type: MS DATA SampleType: LCS
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	41.888	83.78	67-142
2	Chloromethane	50.000	33.970	67.94	65-129
3	Vinyl Chloride	50.000	41.957	83.91	74-134
4	Bromomethane	50.000	27.312	54.62	40-172
5	Chloroethane	50.000	41.566	83.13	53-154
6	Trichlorofluoromet	50.000	61.820	123.64	57-161
12	Acrolein	250.00	201.28	80.51	60-130
9	112Trichloro122Tri	50.000	47.293	94.59	72-142
14	Acetone	250.00	180.78	72.31	48-132
7	1,1-Dichloroethene	50.000	46.183	92.37	73-138
11	Bromoethane	50.000	47.457	94.91	74-132
10	Iodomethane	50.000	31.682	63.36	34-181
13	Methylene Chloride	50.000	46.388	92.78	61-128
8	Carbon Disulfide	50.000	45.543	91.09	72-146
18	Acrylonitrile	50.000	39.165	78.33	59-124
15	Trans-1,2-Dichloro	50.000	45.501	91.00	73-131
19	Vinyl Acetate	50.000	38.646	77.29	54-138
17	1,1-Dichloroethane	50.000	41.498	83.00	65-139
29	2-Butanone	250.00	192.17	76.87	64-120
22	2,2-Dichloropropan	50.000	44.765	89.53	77-137
20	Cis-1,2-Dichloroet	50.000	43.506	87.01	74-124
24	Chloroform	50.000	43.353	86.71	75-126
23	Bromochloromethane	50.000	45.167	90.33	69-133
26	1,1,1-Trichloroeth	50.000	43.119	86.24	78-133
28	1,1-Dichloropropen	50.000	44.103	88.21	80-123
25	Carbon Tetrachlori	50.000	47.269	94.54	76-136
33	1,2-Dichloroethane	50.000	41.563	83.13	77-120
30	Benzene	50.000	44.450	88.90	80-120
34	Trichloroethene	50.000	45.491	90.98	80-120
38	1,2-Dichloropropan	50.000	42.474	84.95	74-120
39	Bromodichlorometha	50.000	46.258	92.52	80-122
172	2-Pentanone	250.00	201.87	80.75	70-130
37	Dibromomethane	50.000	44.049	88.10	80-120
40	2-Chloroethyl Viny	50.000	53.138	106.28	20-157
45	4-Methyl-2-Pentano	250.00	192.56	77.03	70-124
41	Cis 1,3-dichloropr	50.000	45.105	90.21	80-124
43	Toluene	50.000	44.022	88.04	78-120
46	Trans 1,3-Dichloro	50.000	45.733	91.47	80-126
51	2-Hexanone	250.00	183.94	73.58	62-128
47	1,1,2-Trichloroeth	50.000	44.937	89.87	77-120

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
49	1,3-Dichloropropan	50.000	44.287	88.57	77-120
44	Tetrachloroethene	50.000	49.037	98.07	76-131
48	Chlorodibromometha	50.000	48.504	97.01	77-123
50	1,2-Dibromoethane	50.000	45.299	90.60	79-120
53	Chlorobenzene	50.000	46.195	92.39	80-120
55	1,1,1,2-Tetrachlor	50.000	47.289	94.58	80-120
54	Ethyl Benzene	50.000	45.808	91.62	80-120
56	m,p-xylene	100.00	94.214	94.21	80-123
57	o-Xylene	50.000	46.218	92.44	80-120
58	Styrene	50.000	47.176	94.35	80-122
60	Isopropyl Benzene	50.000	45.784	91.57	77-127
59	Bromoform	50.000	46.833	93.67	63-120
65	1,1,2,2-Tetrachlor	50.000	41.142	82.28	71-120
68	1,2,3-Trichloropro	50.000	43.841	87.68	75-120
69	Trans-1,4-Dichloro	50.000	40.423	80.85	62-127
64	N-Propyl Benzene	50.000	44.226	88.45	76-126
63	Bromobenzene	50.000	46.810	93.62	75-120
67	1,3,5-Trimethyl Be	50.000	46.117	92.23	77-126
66	2-Chloro Toluene	50.000	44.543	89.09	76-120
70	4-Chloro Toluene	50.000	45.495	90.99	75-121
71	T-Butyl Benzene	50.000	45.515	91.03	77-125
72	1,2,4-Trimethylben	50.000	46.384	92.77	77-125
73	S-Butyl Benzene	50.000	44.656	89.31	77-127
74	4-Isopropyl Toluen	50.000	47.450	94.90	78-131
75	1,3-Dichlorobenzen	50.000	48.351	96.70	76-120
77	1,4-Dichlorobenzen	50.000	47.553	95.11	75-120
78	N-Butyl Benzene	50.000	47.328	94.66	75-134
80	1,2-Dichlorobenzen	50.000	46.666	93.33	77-120
81	1,2-Dibromo 3-Chlo	50.000	40.815	81.63	61-128
83	1,2,4-Trichloroben	50.000	53.635	107.27	75-130
82	Hexachloro 1,3-But	50.000	49.939	99.88	72-135
84	Naphthalene	50.000	47.797	95.59	71-122
85	1,2,3-Trichloroben	50.000	51.416	102.83	76-122

	SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27	Dibromofluorometha	50.000	48.027	96.05	70-130
$ 32	d4-1,2-Dichloroeth	50.000	44.466	88.93	80-149
$ 42	d8-Toluene	50.000	47.989	95.98	77-120
$ 62	4-Bromofluorobenze	50.000	48.156	96.31	80-120
$ 79	d4-1,2-Dichloroben	50.000	48.962	97.92	80-120

REVIEW SUMMARY FOR FILE - 06301604.D

Lab ID: BEG0004-BS1
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 12:46

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

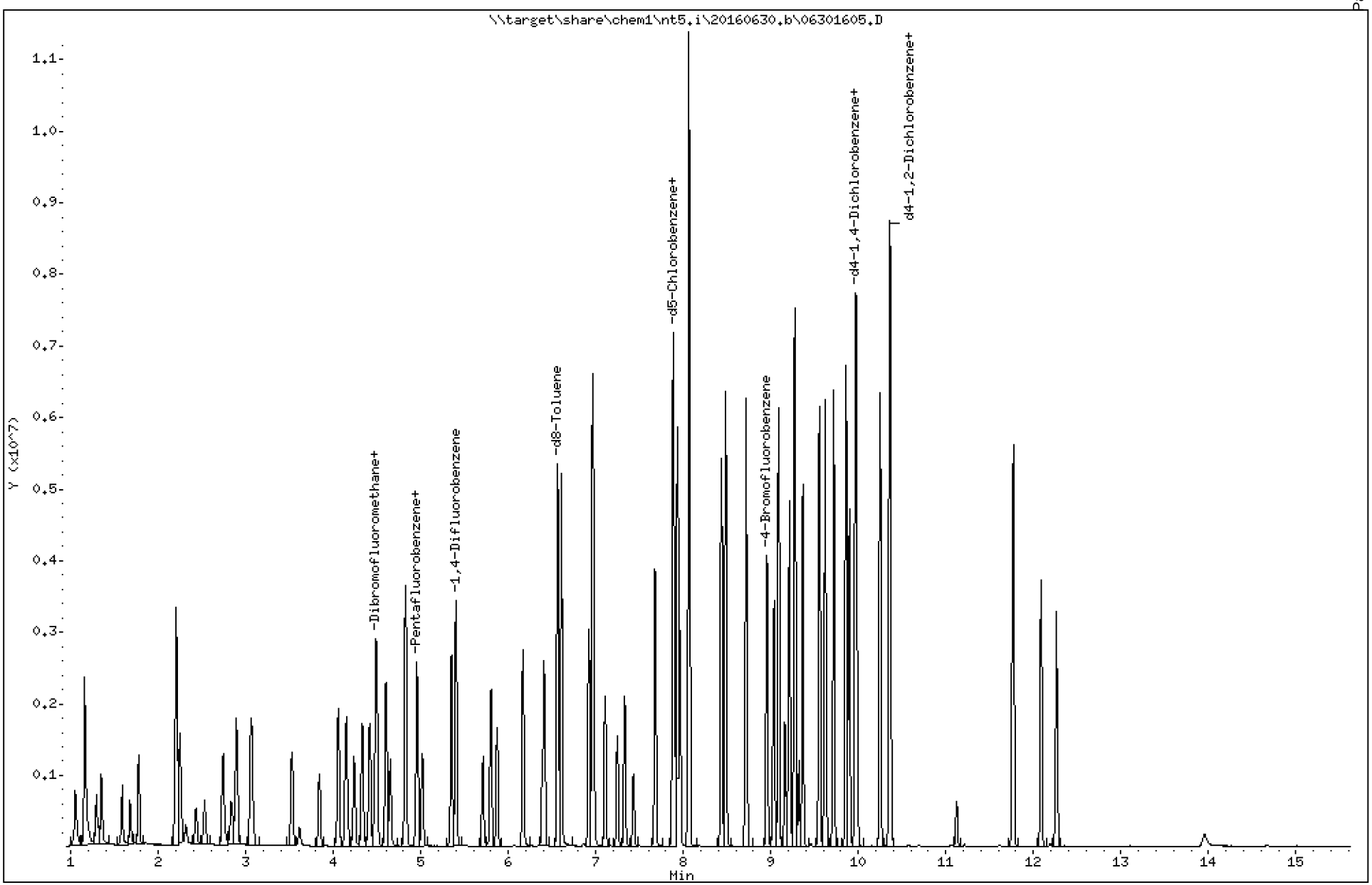
Sample Info: LCS0630,5,5,0

Instrument: nt5.i

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

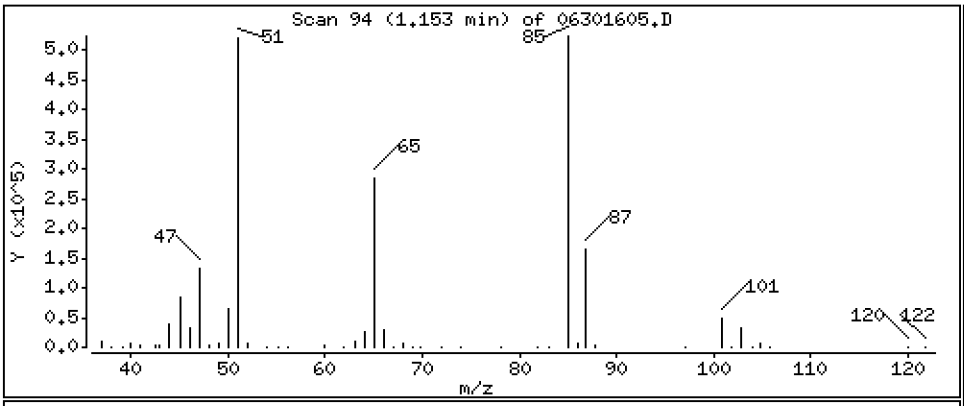
Operator: PB

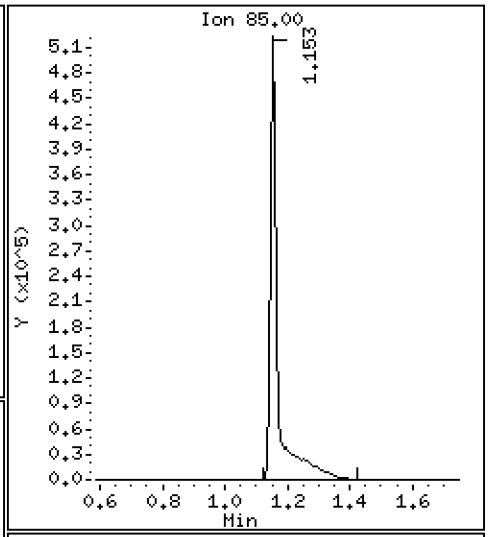
Column phase: RTXVMS

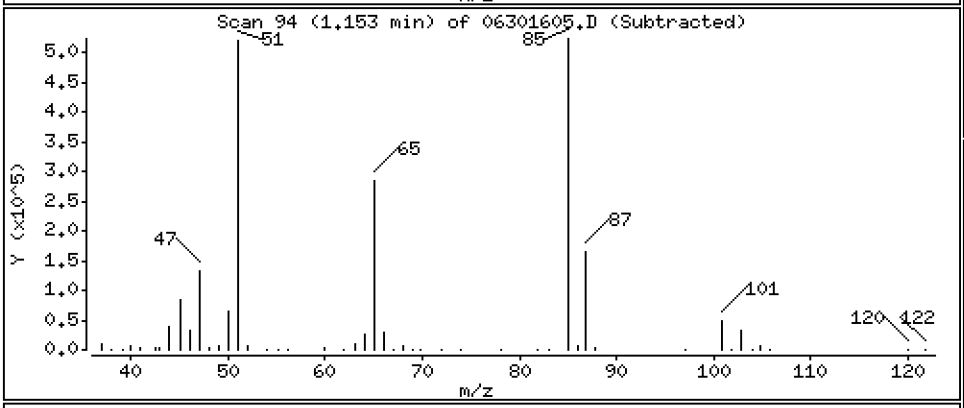
Column diameter: 0.18

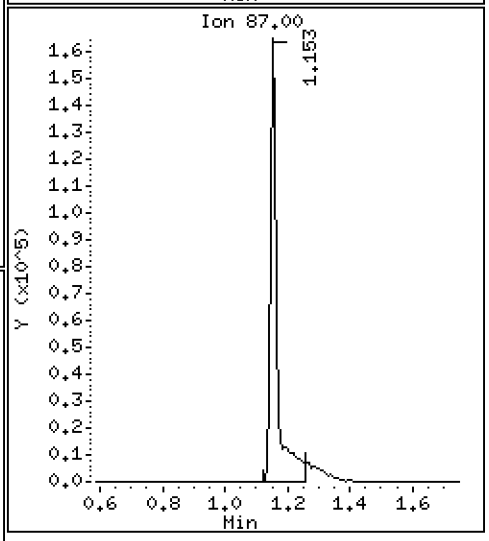
1 Dichlorodifluoromethane

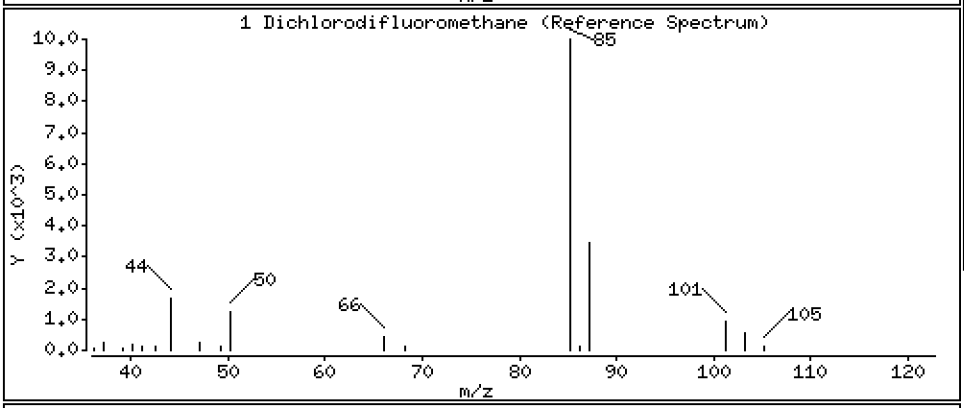
Concentration: 40.400 ug/Kg

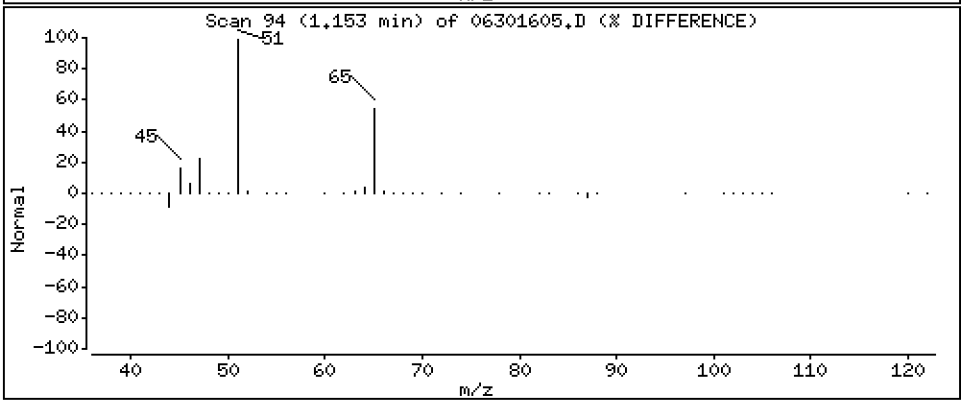












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

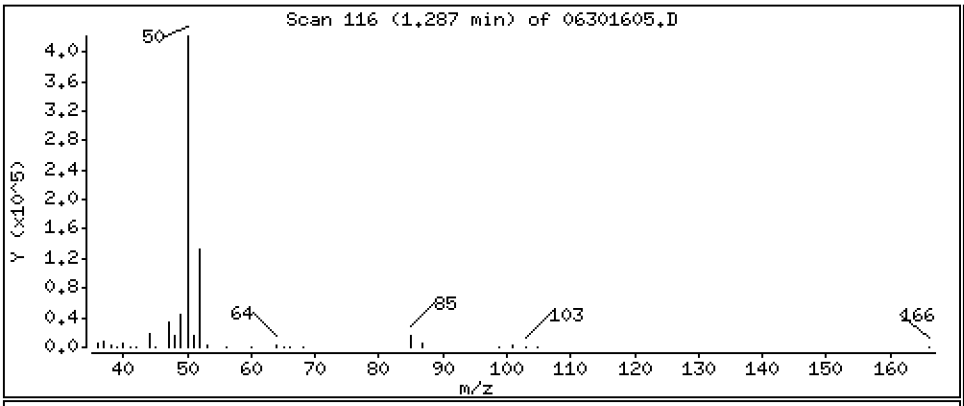
Operator: PB

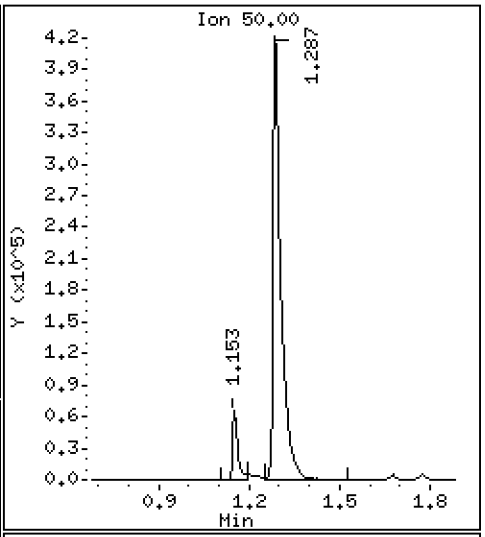
Column phase: RTXVMS

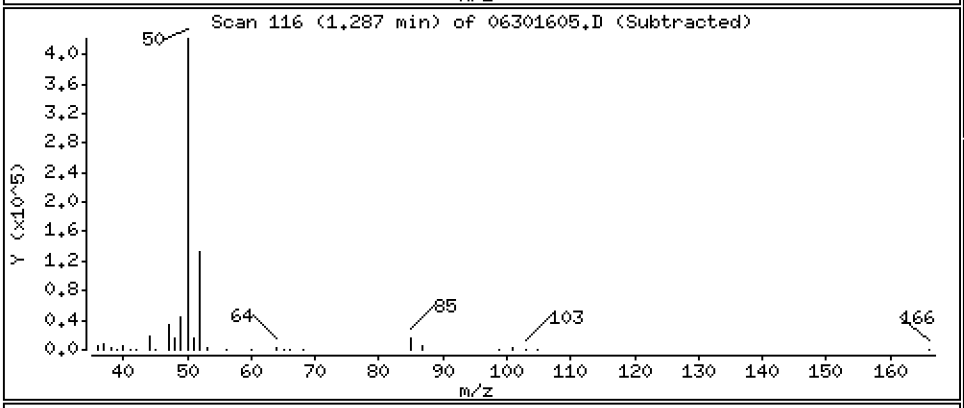
Column diameter: 0.18

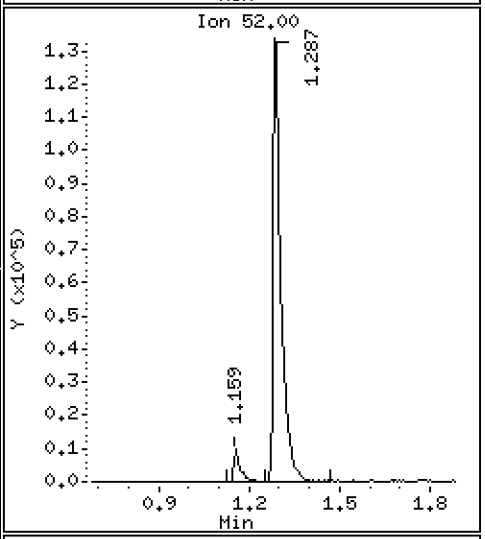
2 Chloromethane

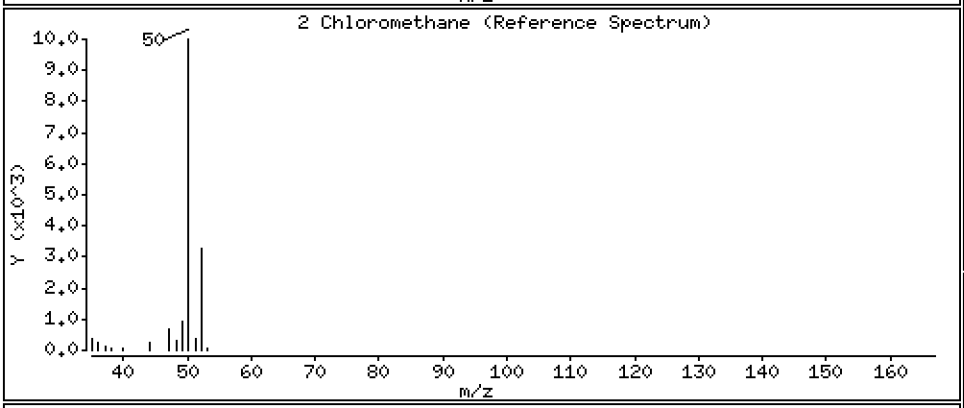
Concentration: 32.336 ug/Kg

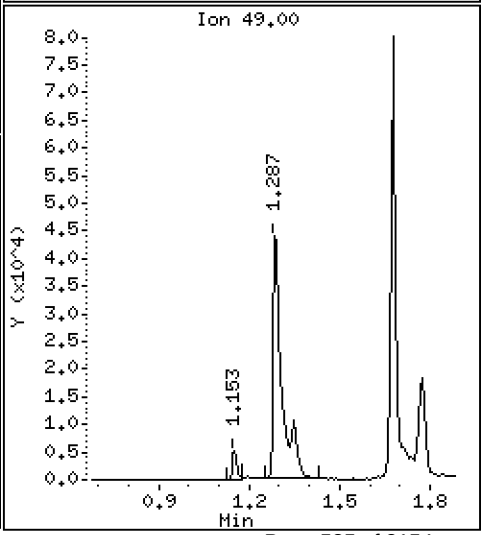


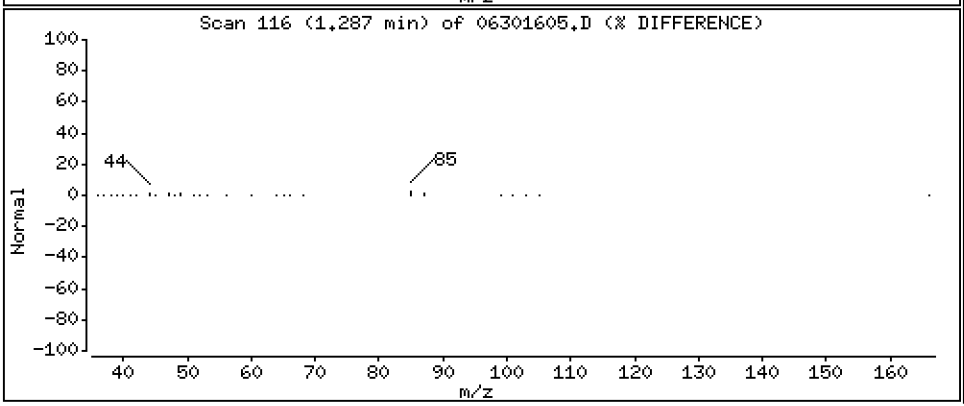












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

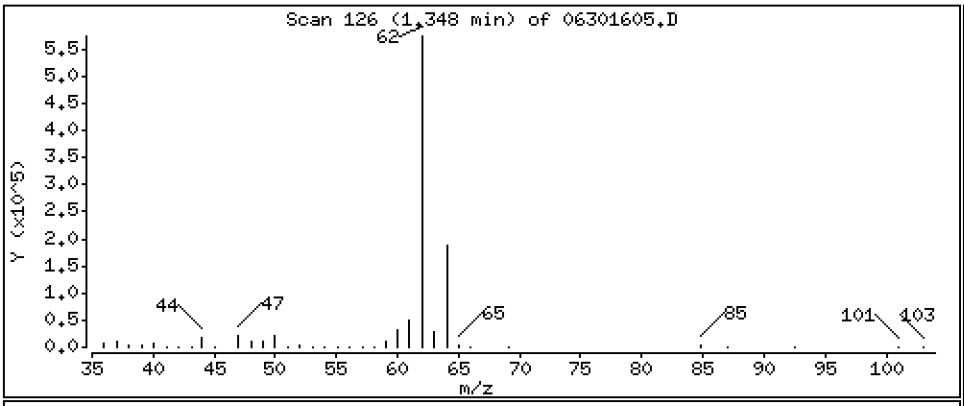
Operator: PB

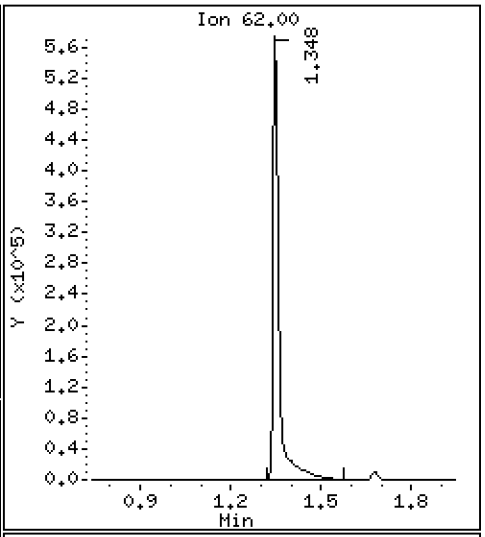
Column phase: RTXVMS

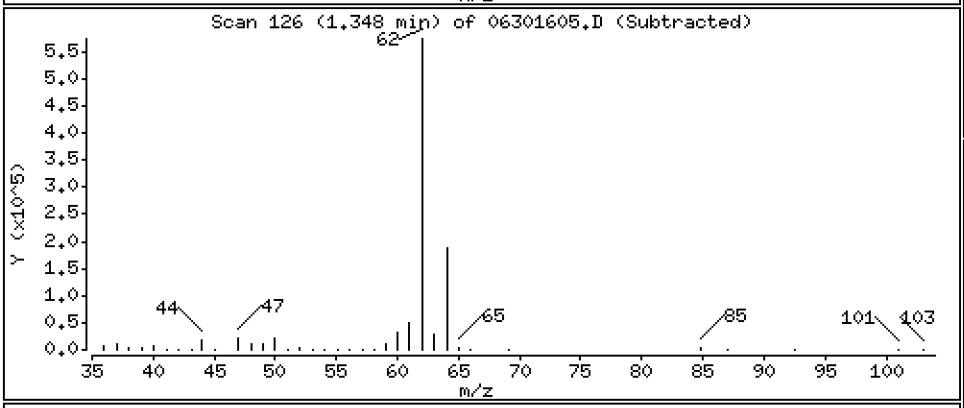
Column diameter: 0.18

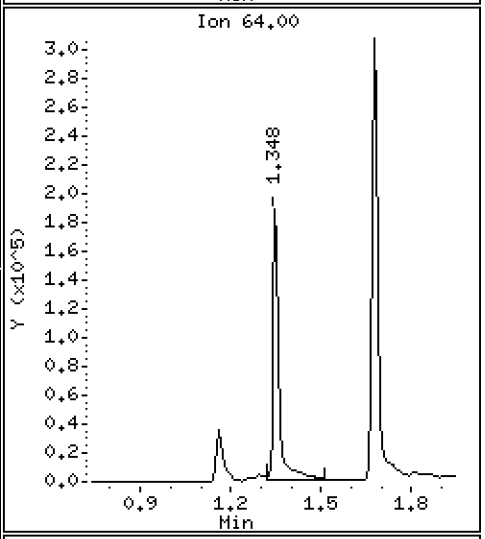
3 Vinyl Chloride

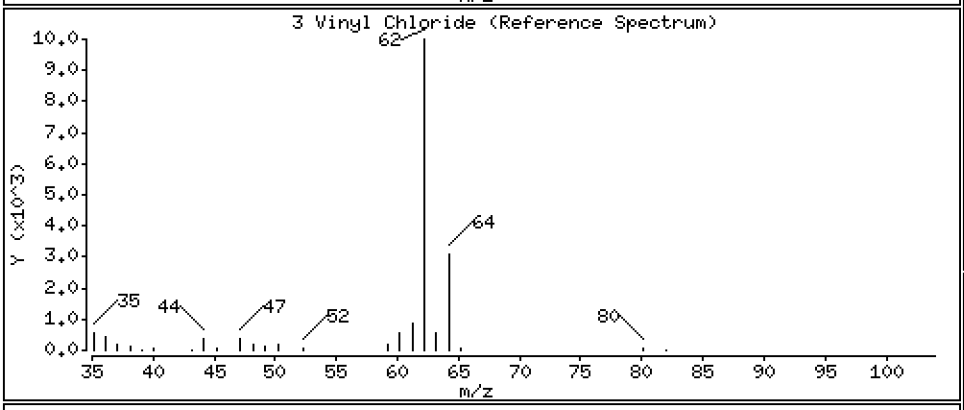
Concentration: 40.246 ug/Kg

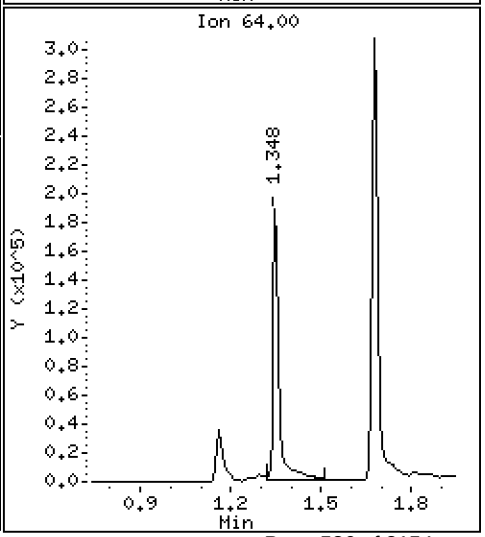


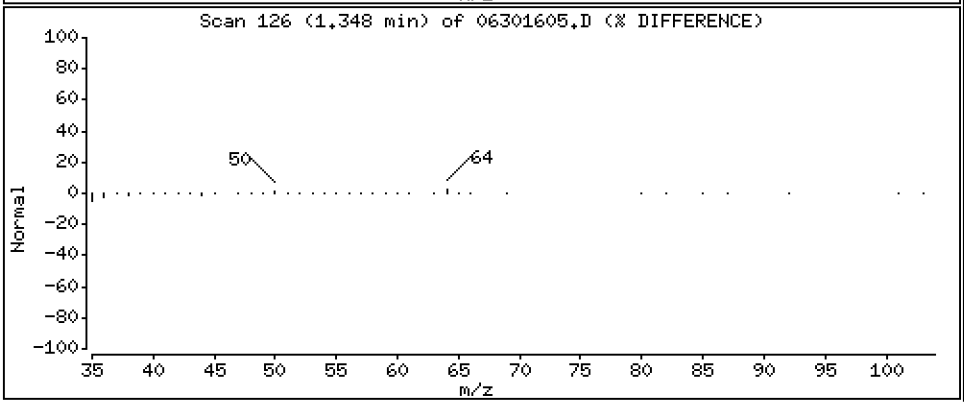












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

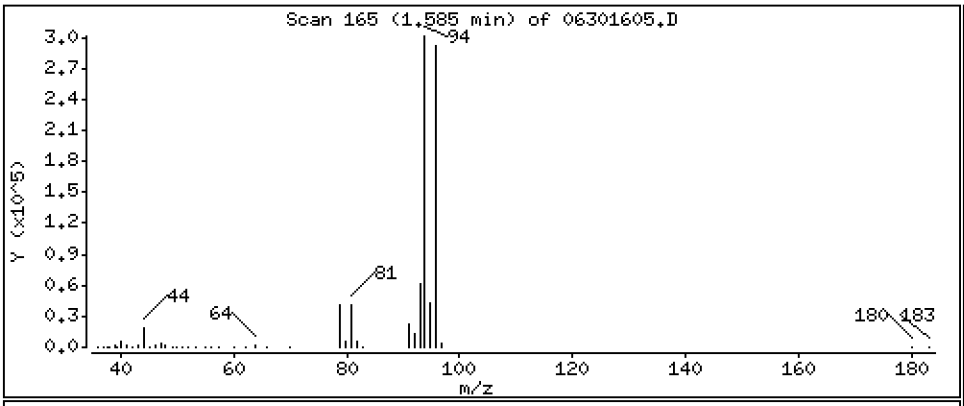
Operator: PB

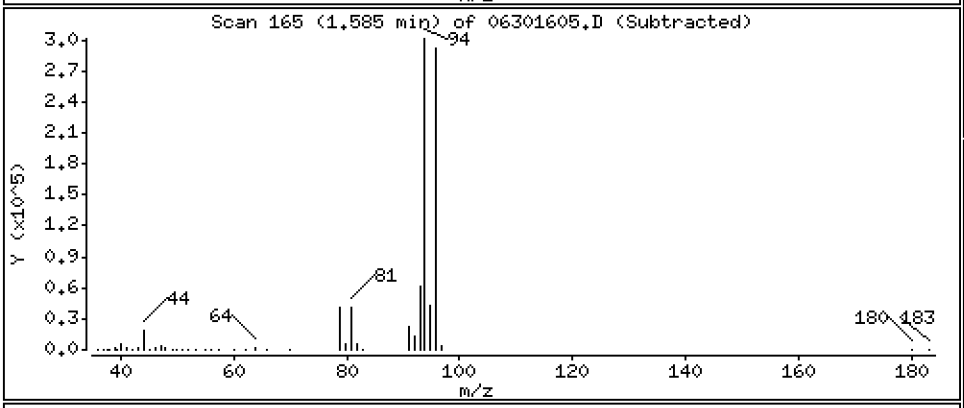
Column phase: RTXVMS

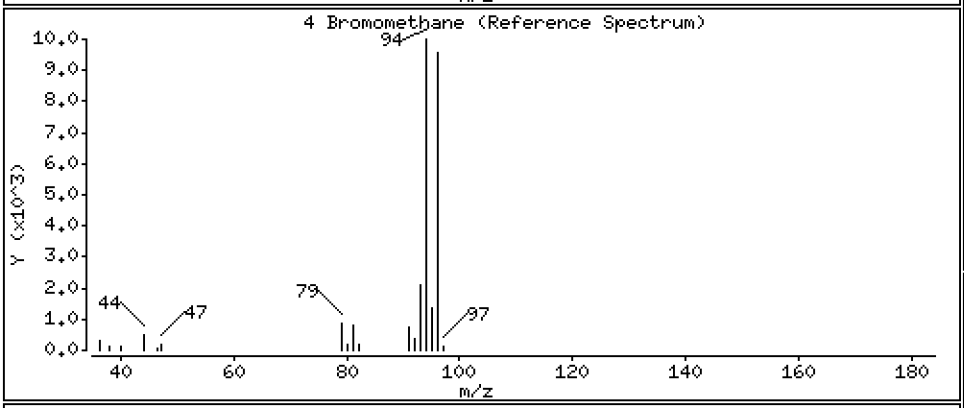
Column diameter: 0.18

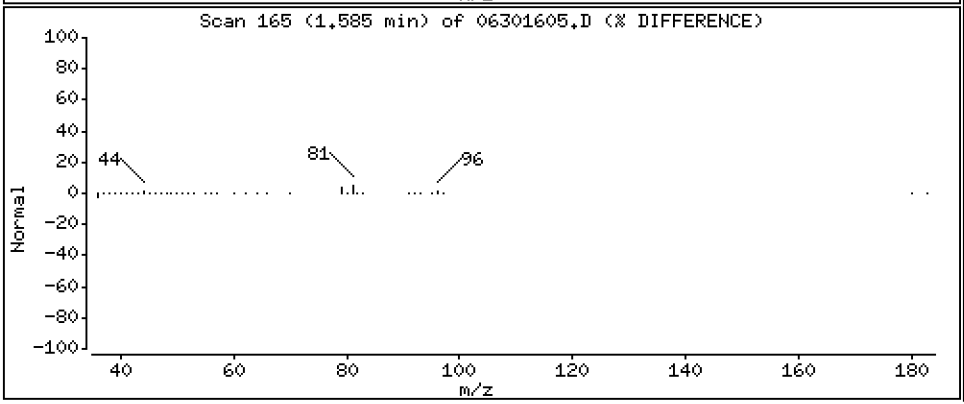
4 Bromomethane

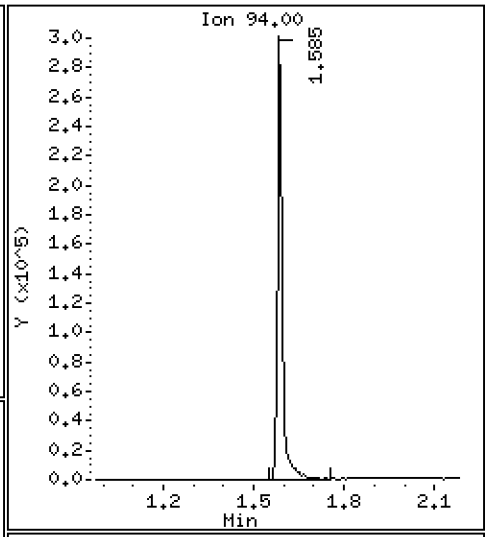
Concentration: 27.112 ug/Kg

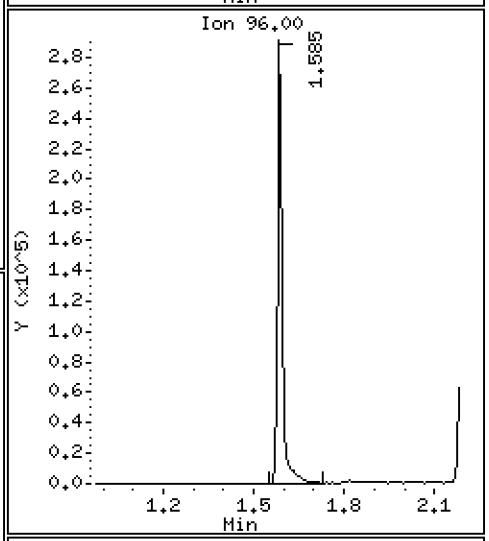


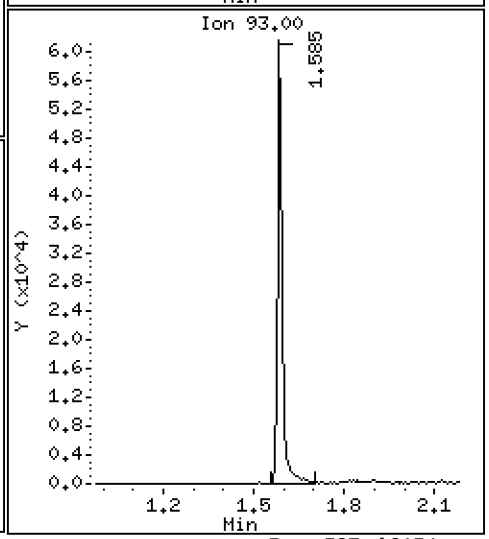












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

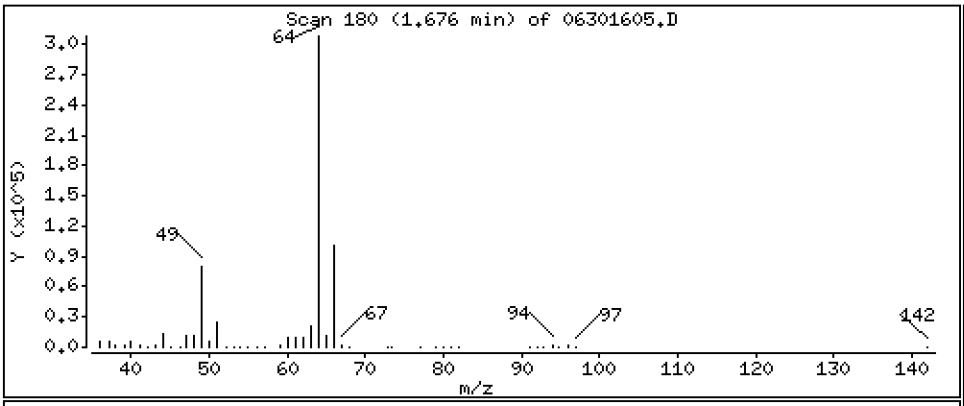
Operator: PB

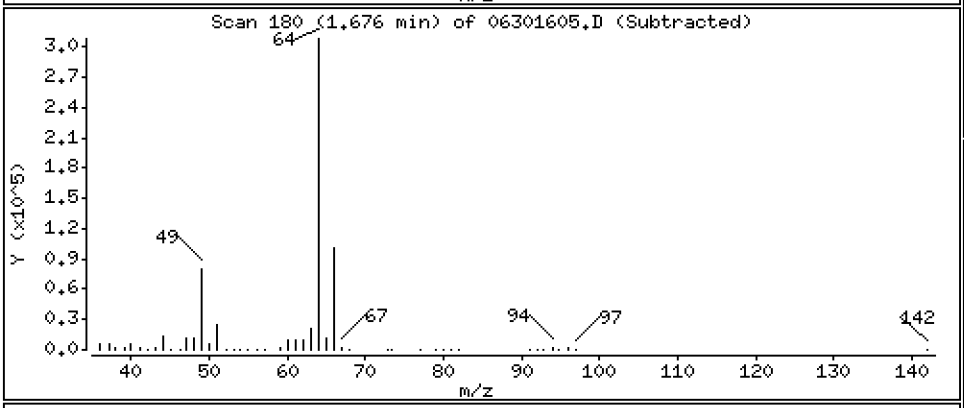
Column phase: RTXVMS

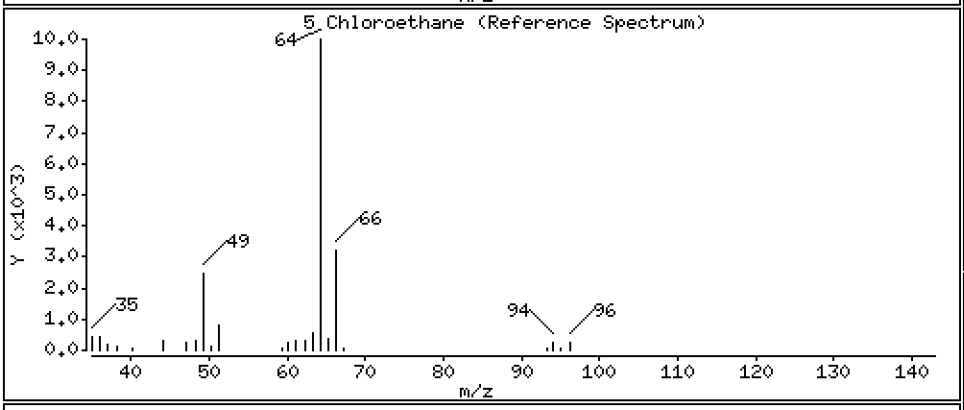
Column diameter: 0.18

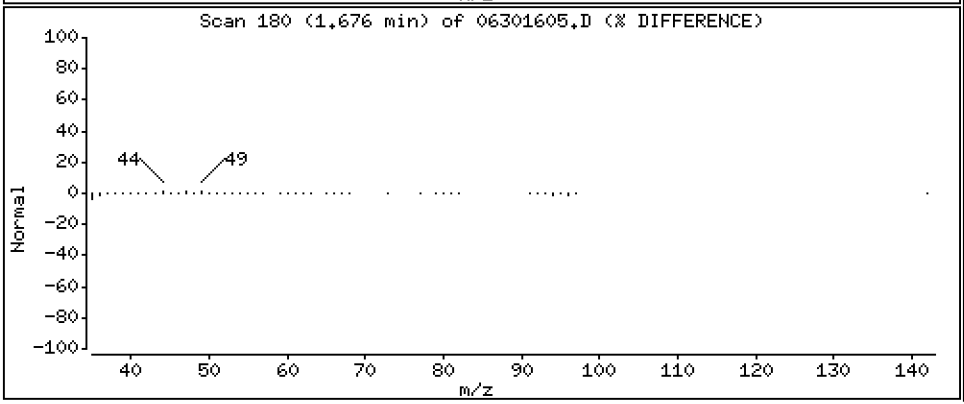
5 Chloroethane

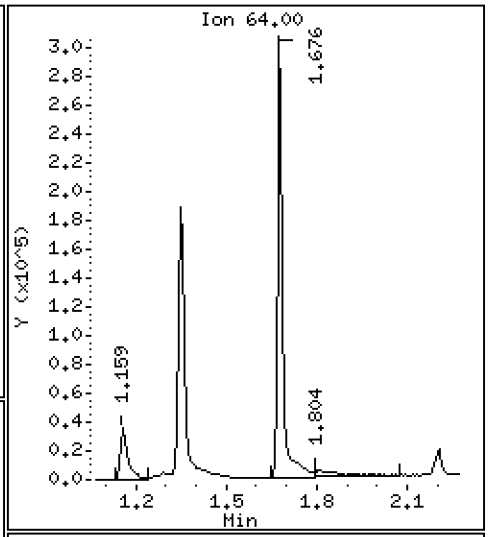
Concentration: 40.063 ug/Kg

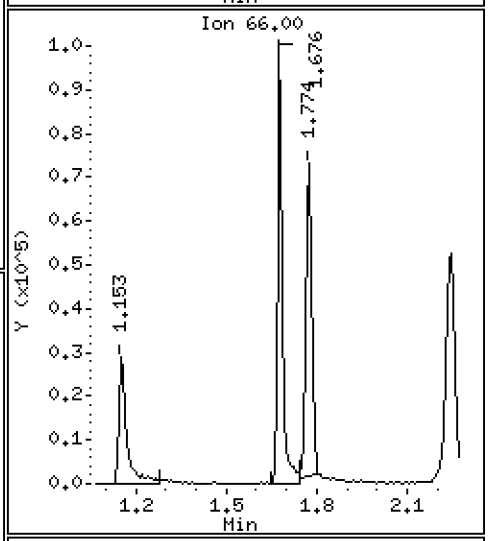


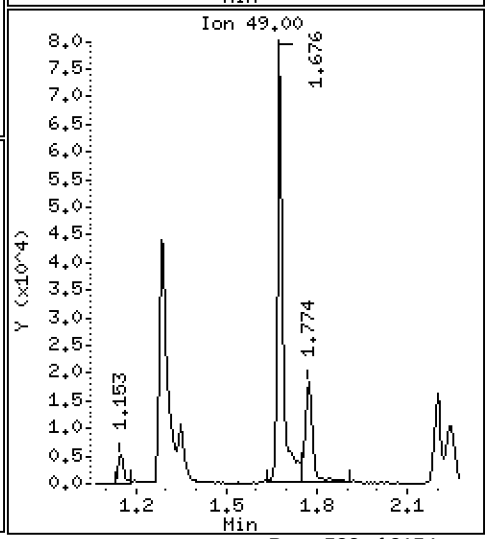












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

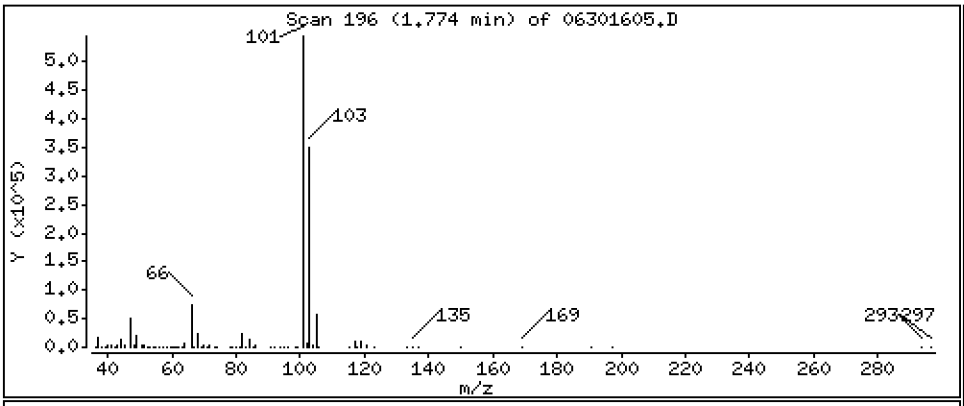
Operator: PB

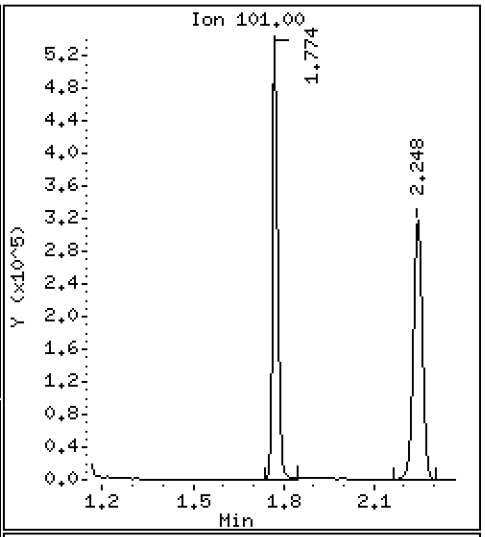
Column phase: RTXVMS

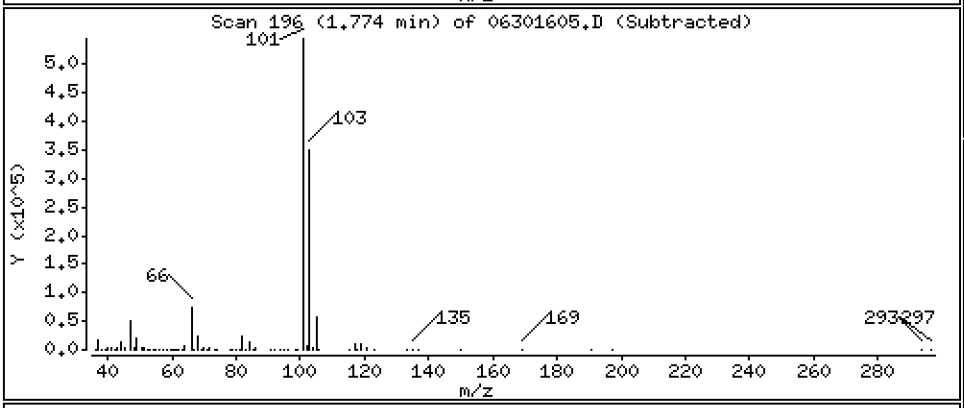
Column diameter: 0.18

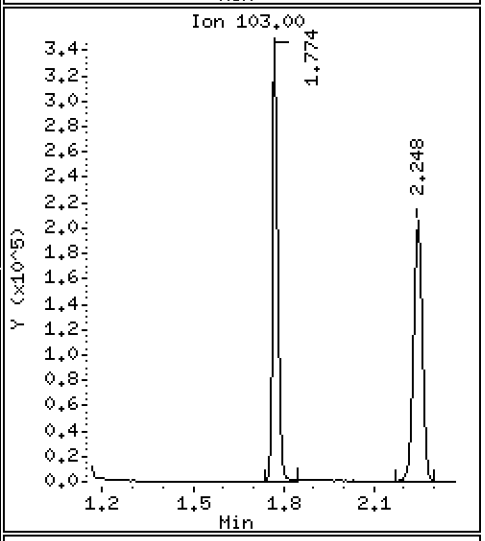
6 Trichlorofluoromethane

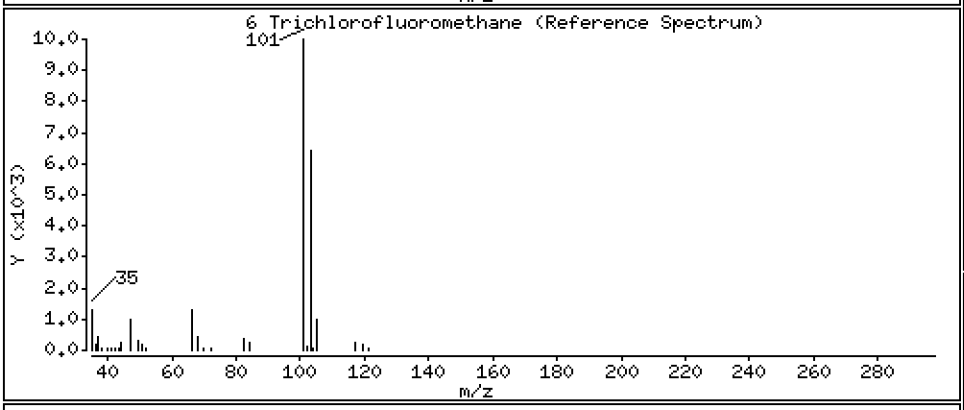
Concentration: 60.218 ug/Kg

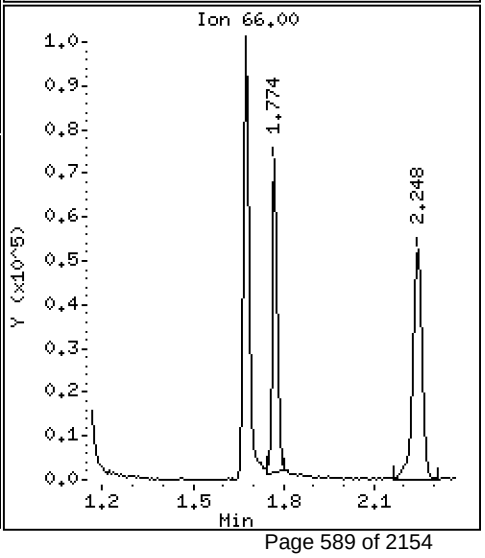


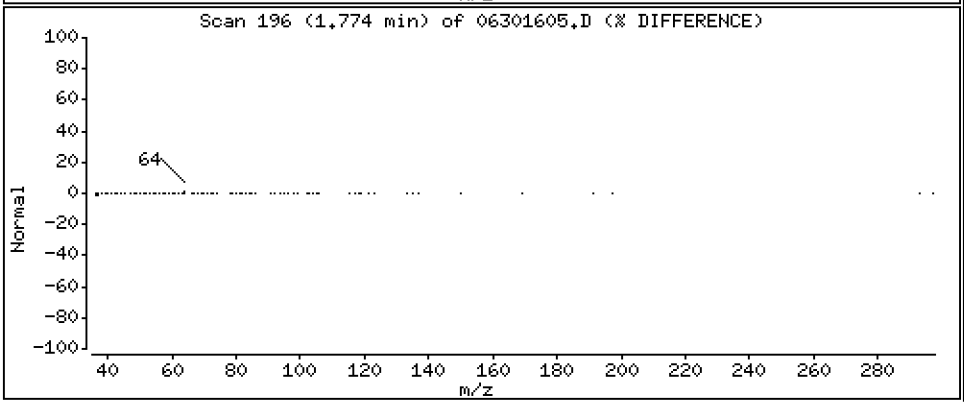












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

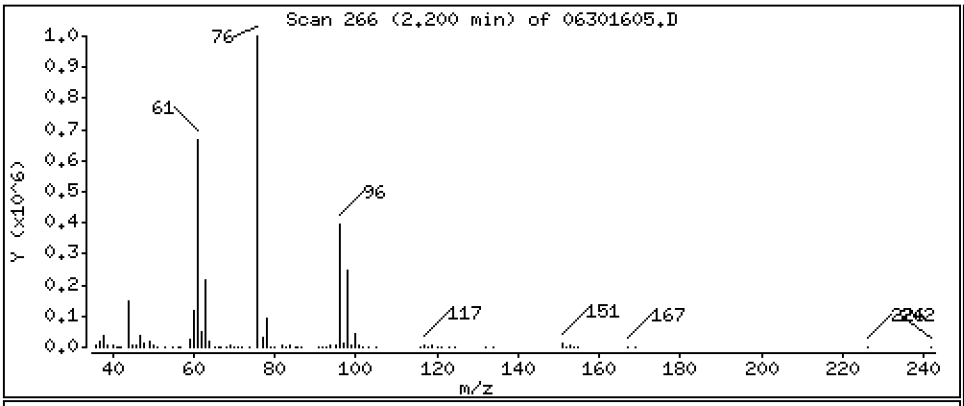
Operator: PB

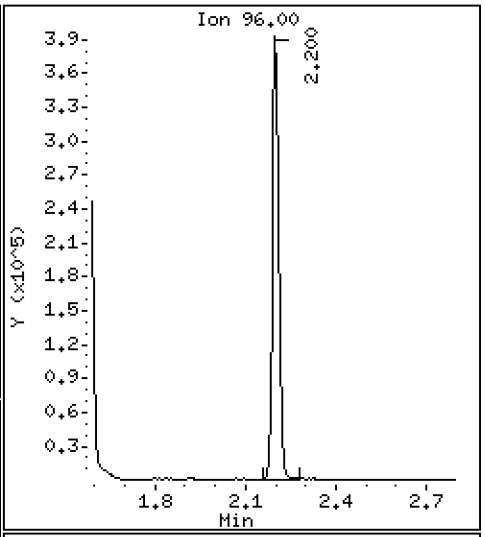
Column phase: RTXVMS

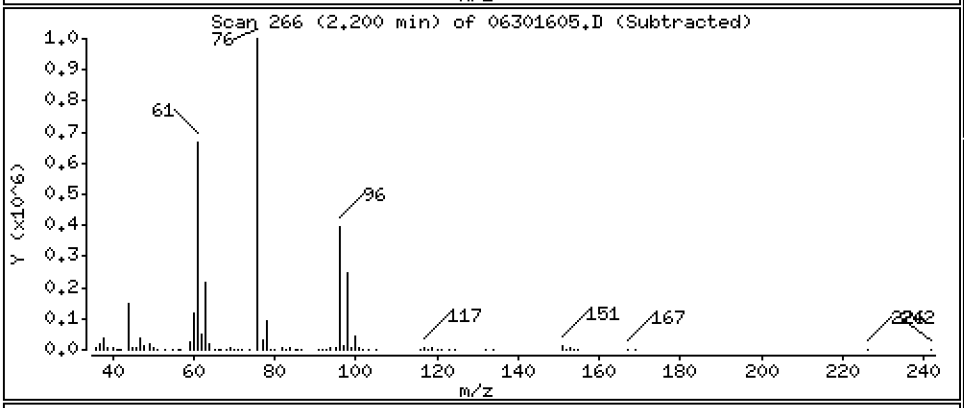
Column diameter: 0.18

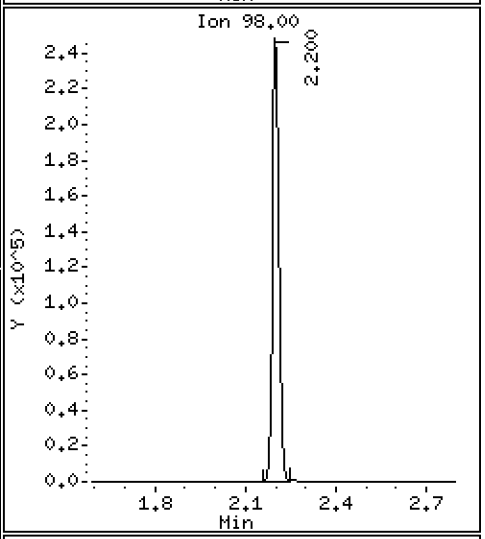
7 1,1-Dichloroethene

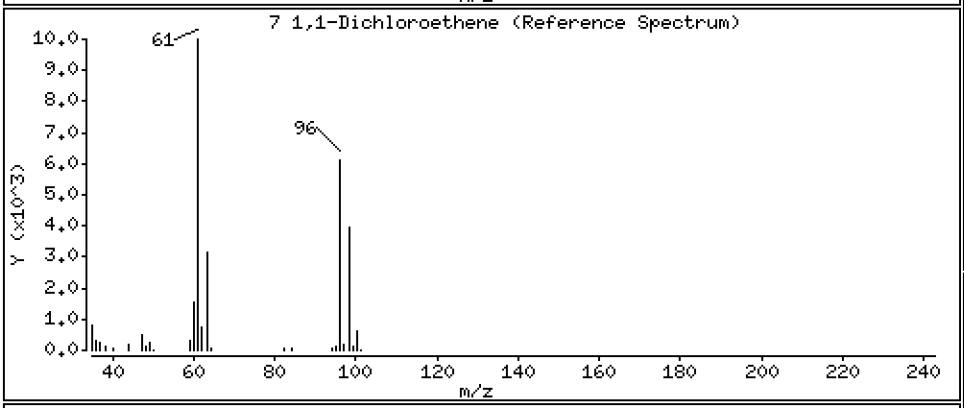
Concentration: 45.068 ug/Kg

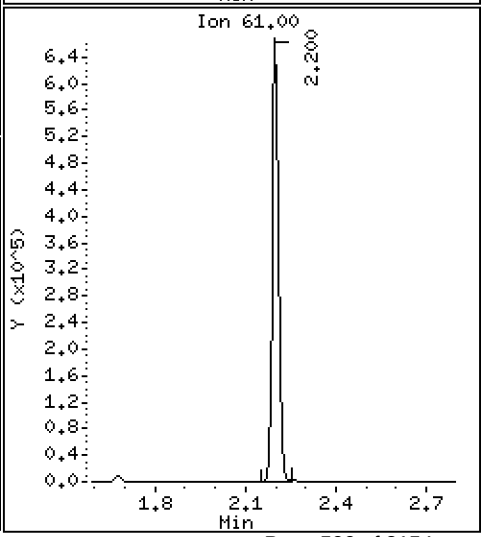


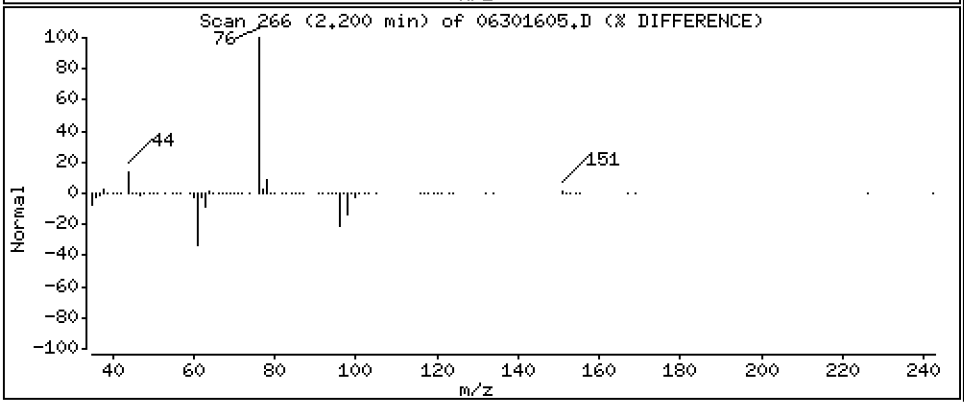












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

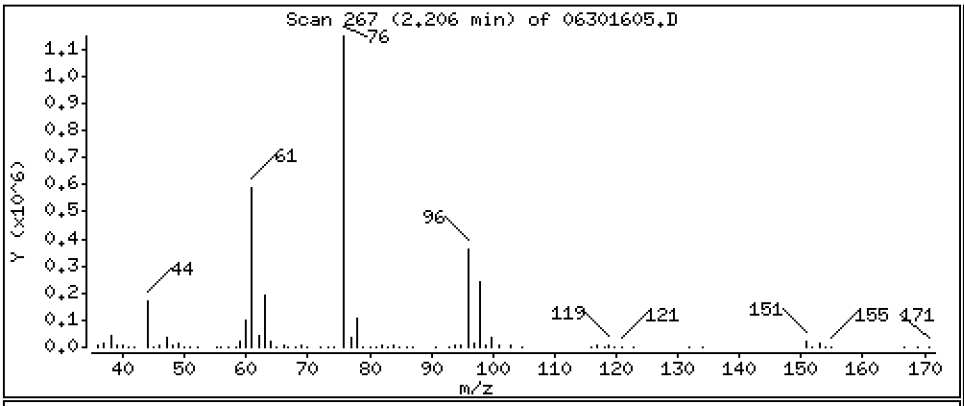
Operator: PB

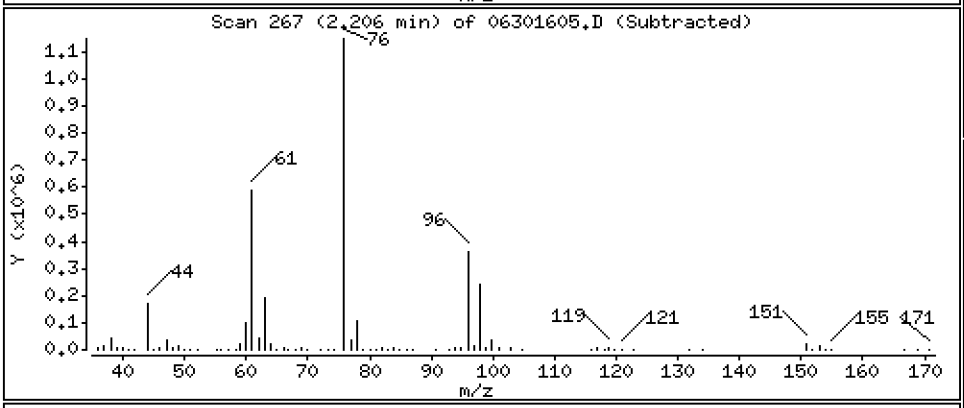
Column phase: RTXVMS

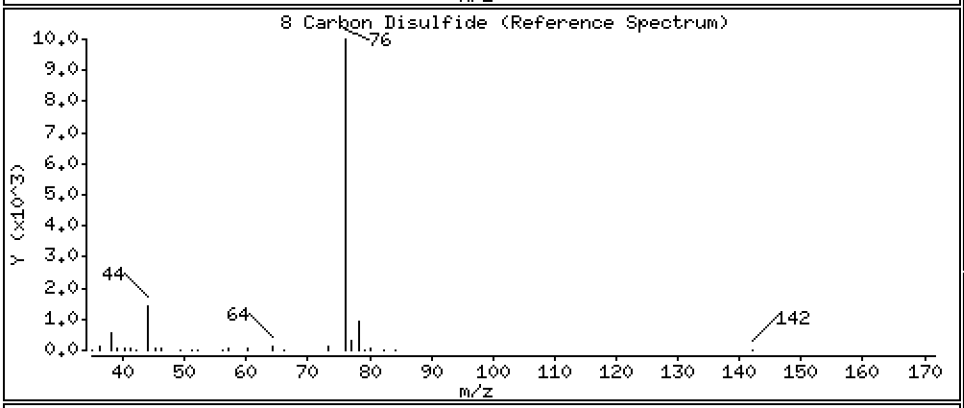
Column diameter: 0.18

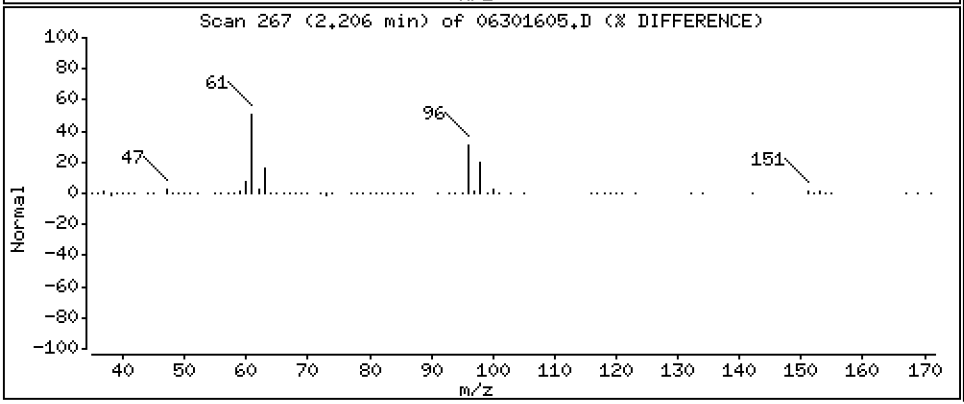
8 Carbon Disulfide

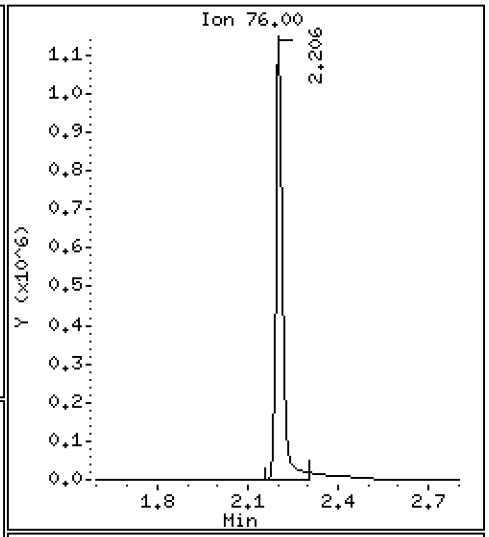
Concentration: 43.698 ug/Kg

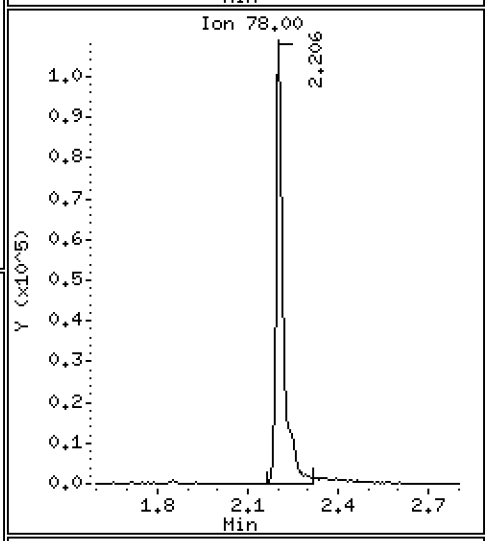


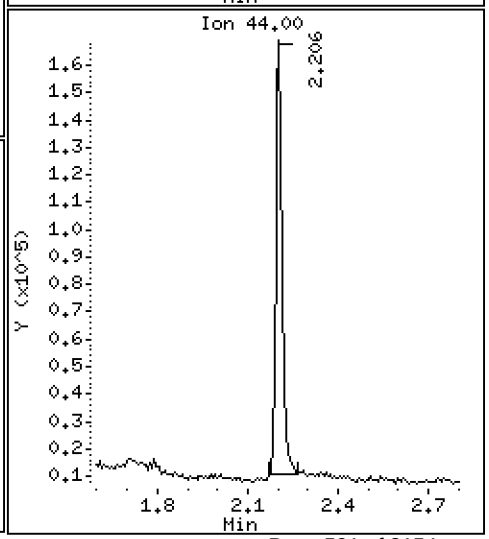












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

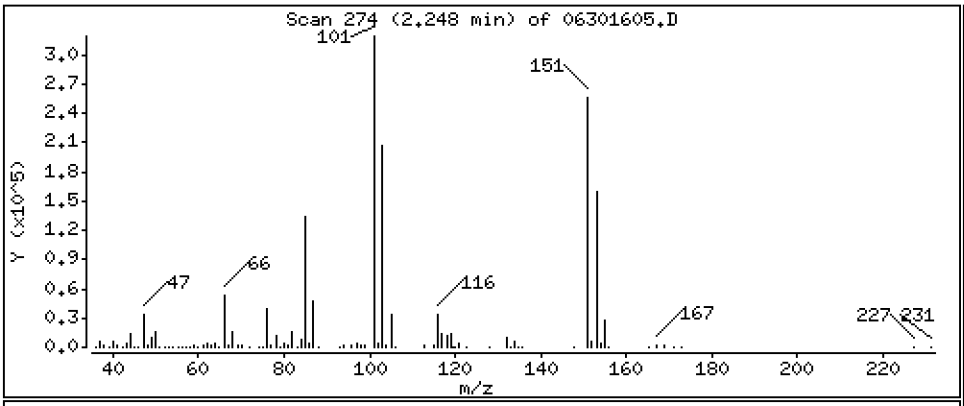
Operator: PB

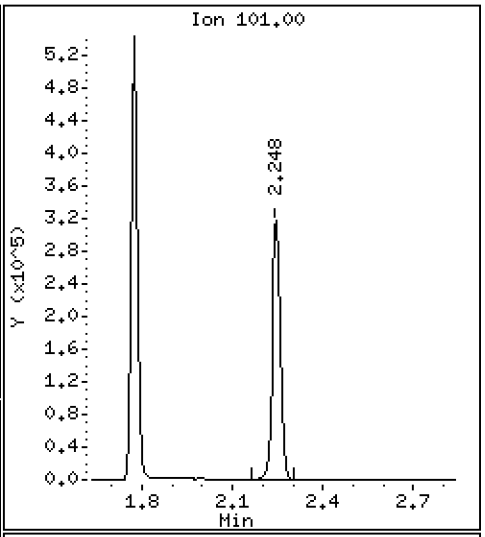
Column phase: RTXVMS

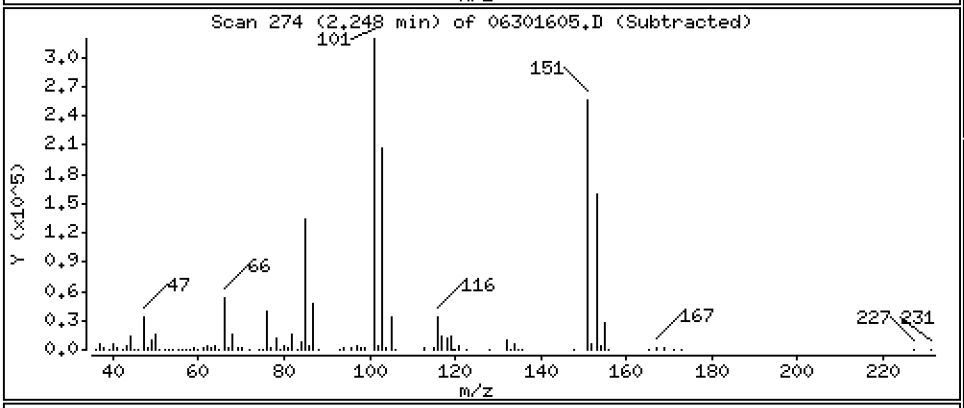
Column diameter: 0.18

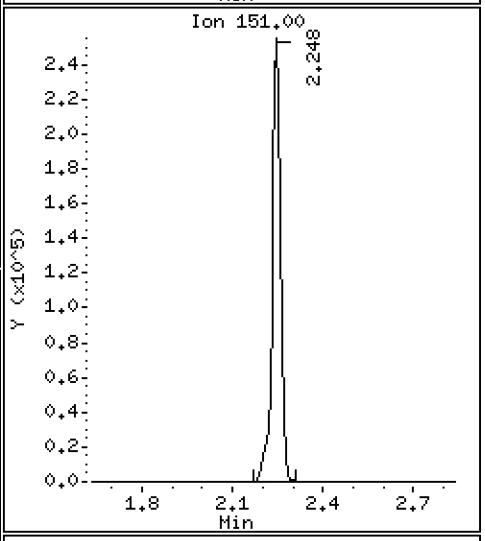
9 112Trichloro122Trifluoroethane

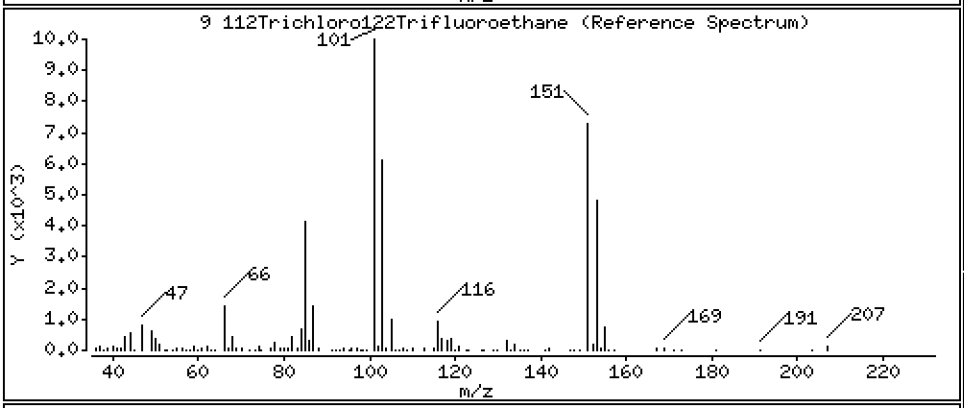
Concentration: 46.066 ug/Kg

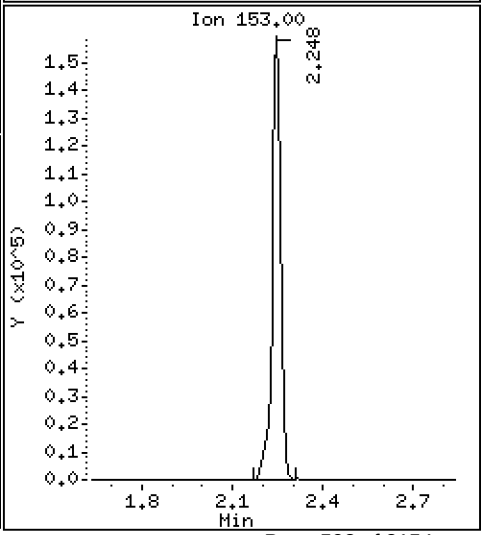


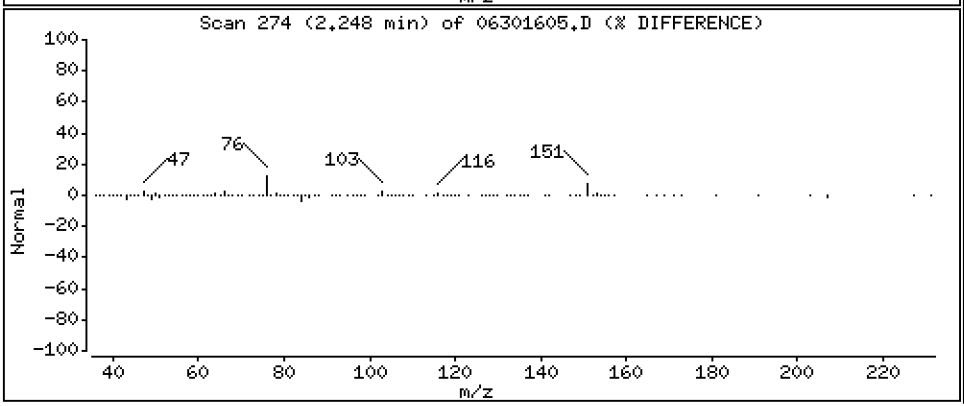












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

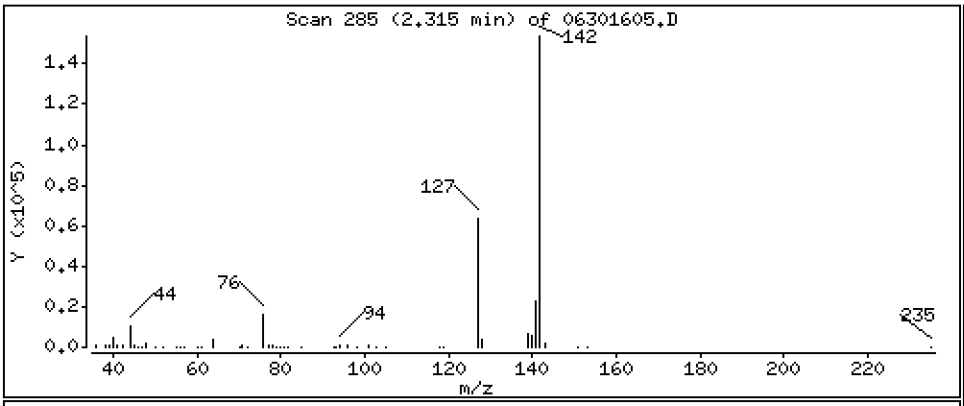
Operator: PB

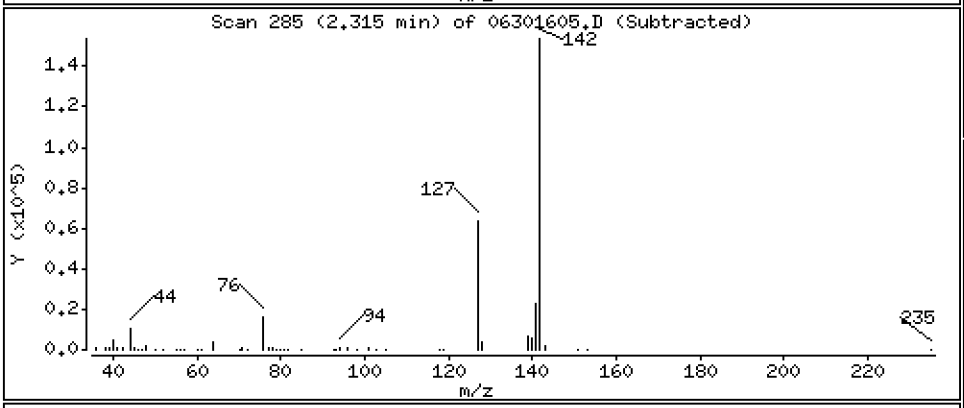
Column phase: RTXVMS

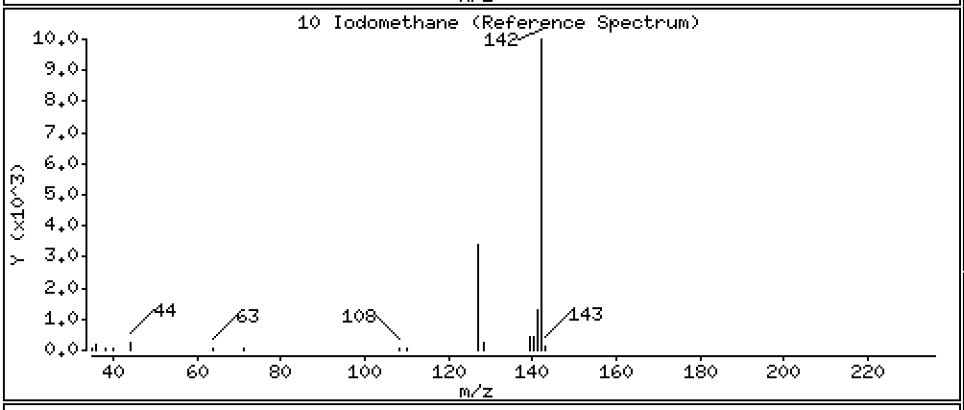
Column diameter: 0.18

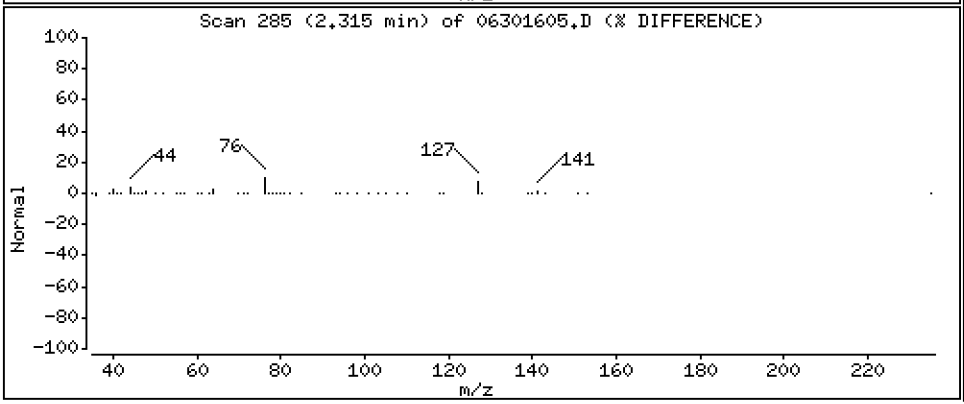
10 Iodomethane

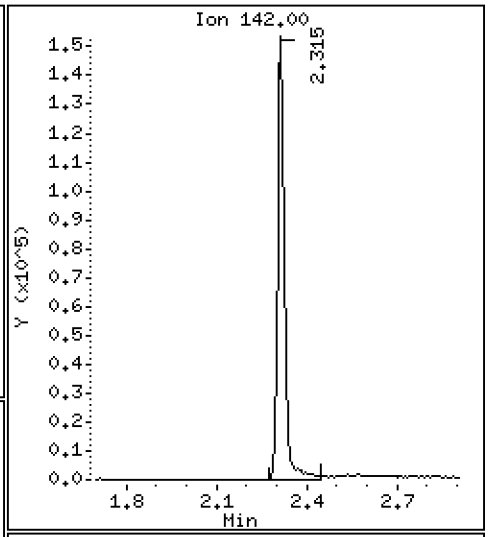
Concentration: 31.127 ug/Kg

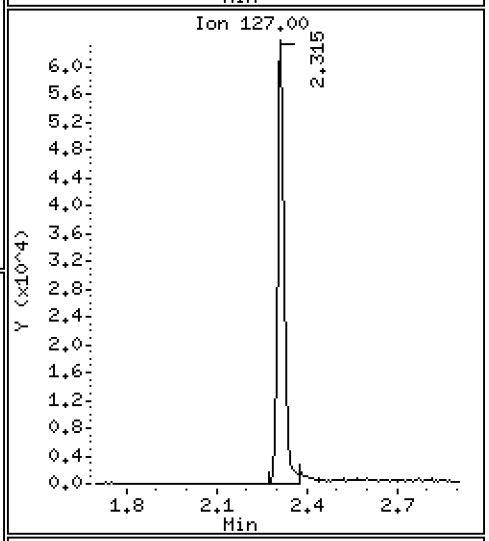


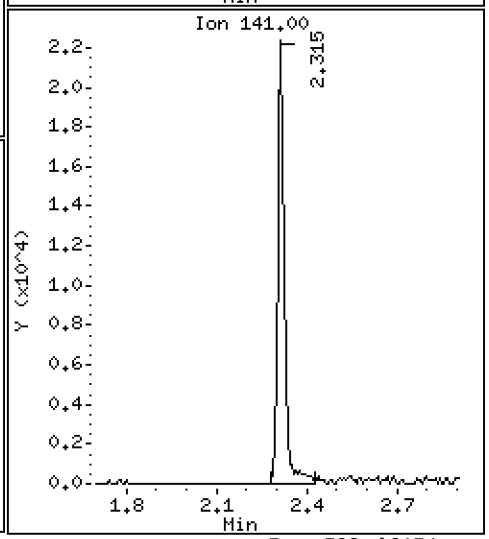












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

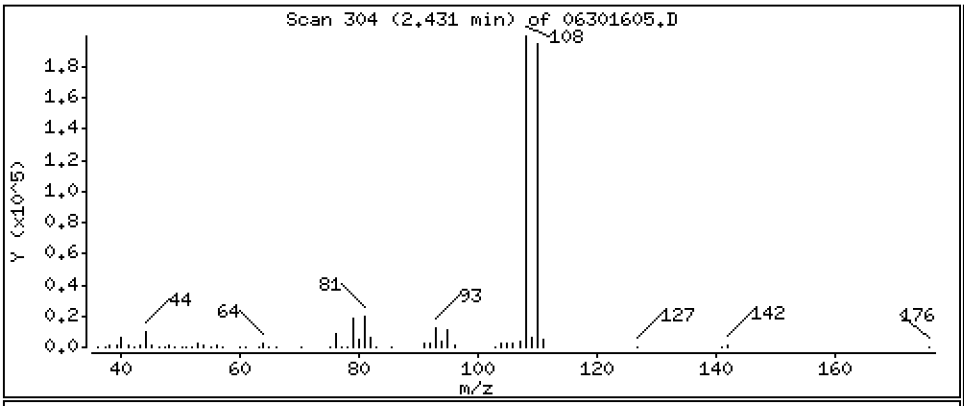
Operator: PB

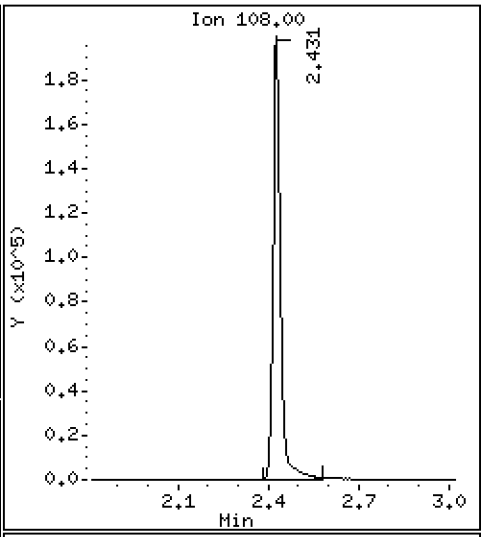
Column phase: RTXVMS

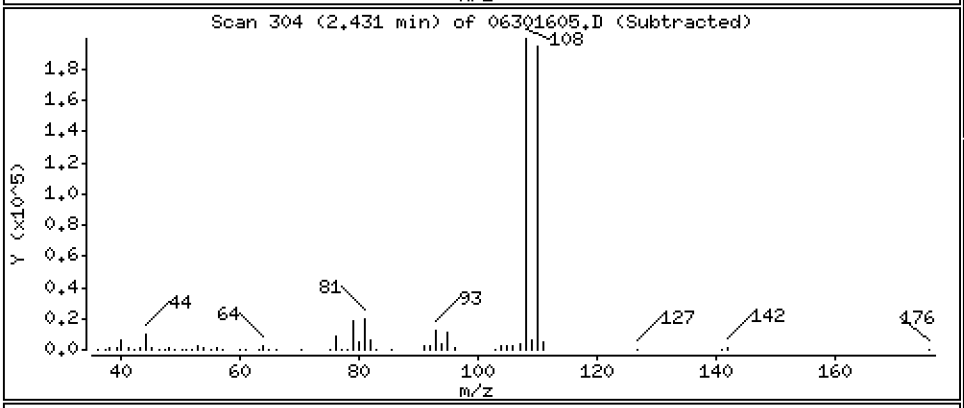
Column diameter: 0.18

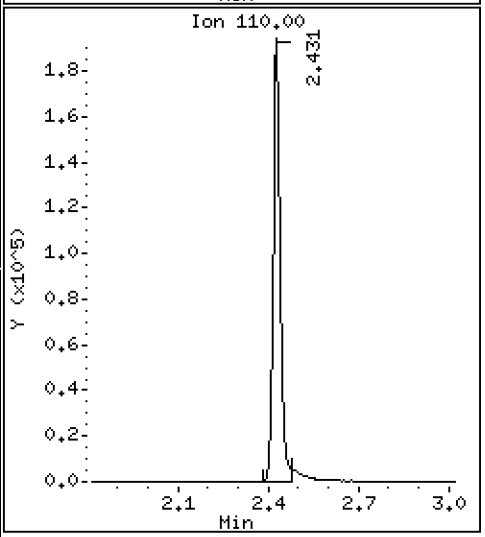
11 Bromoethane

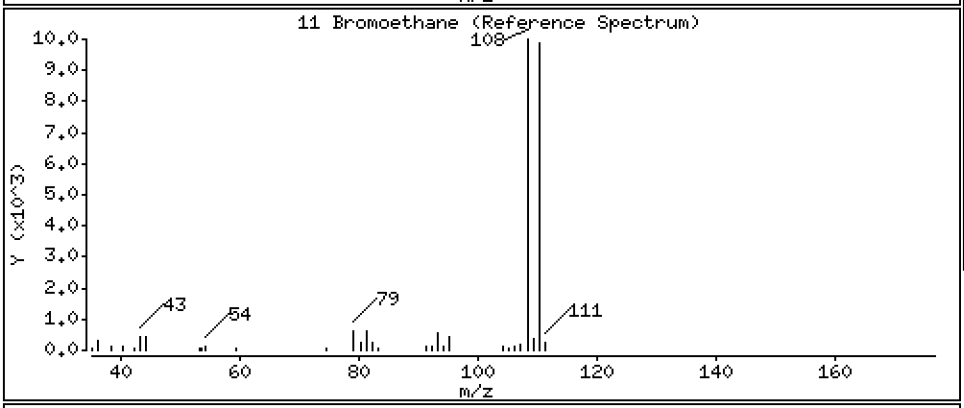
Concentration: 47.755 ug/Kg

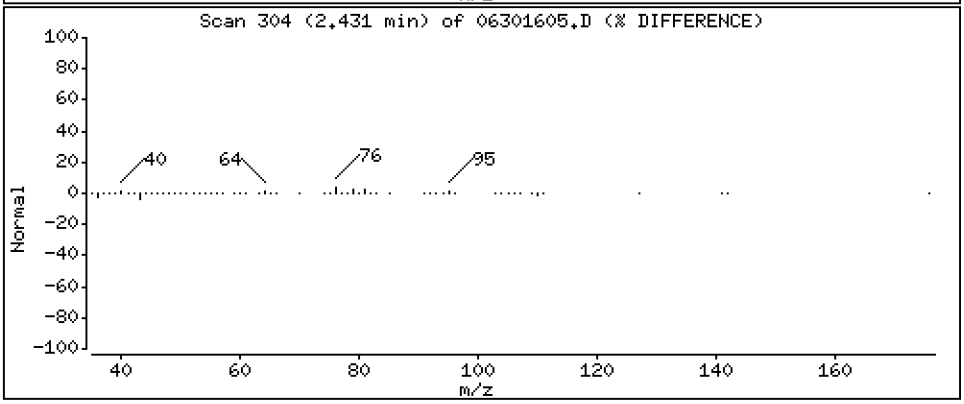












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

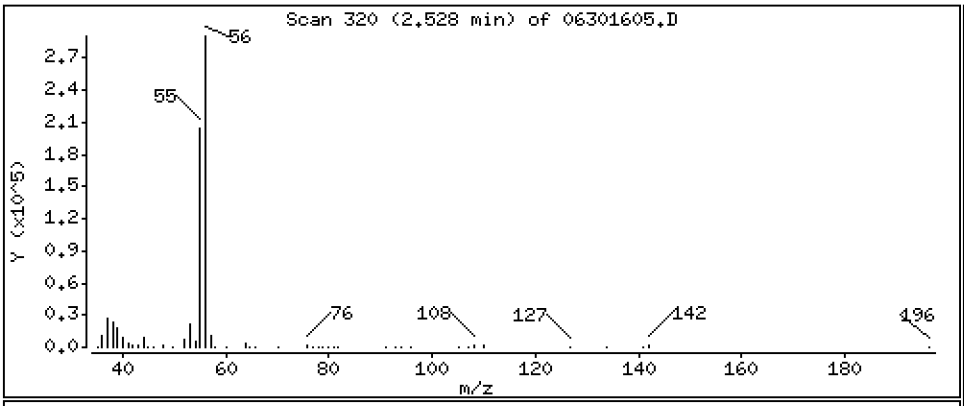
Operator: PB

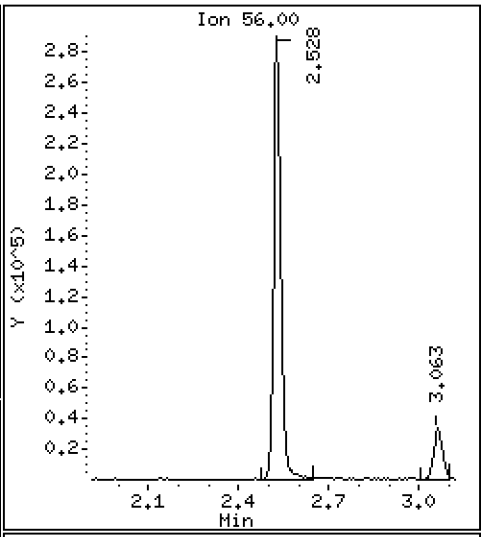
Column phase: RTXVMS

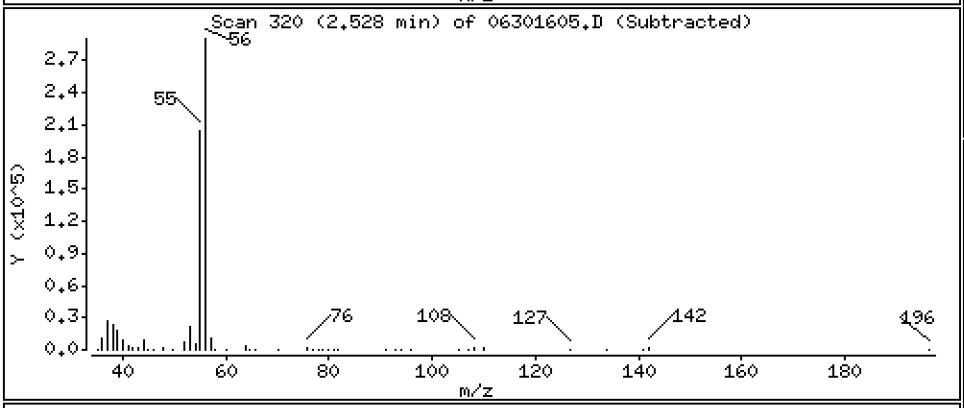
Column diameter: 0.18

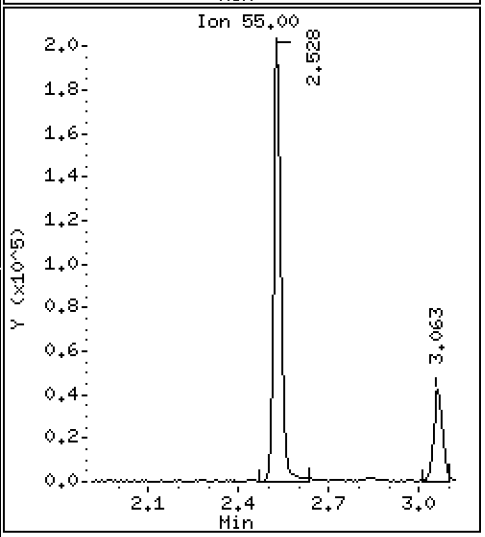
12 Acrolein

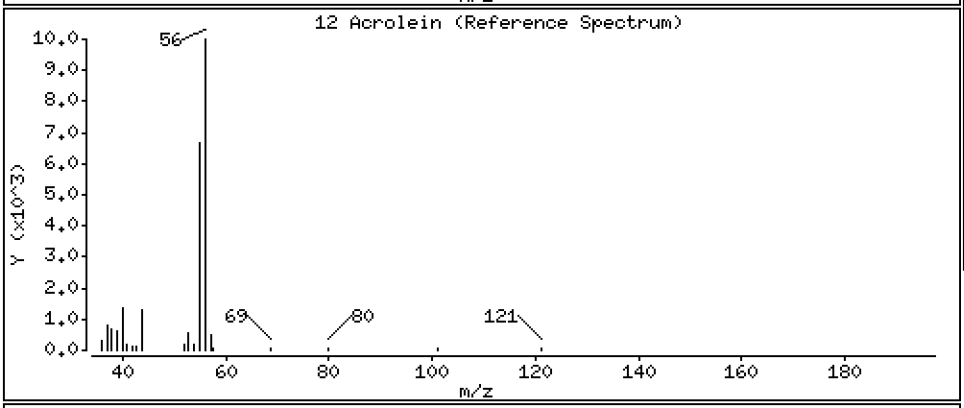
Concentration: 194.63 ug/Kg

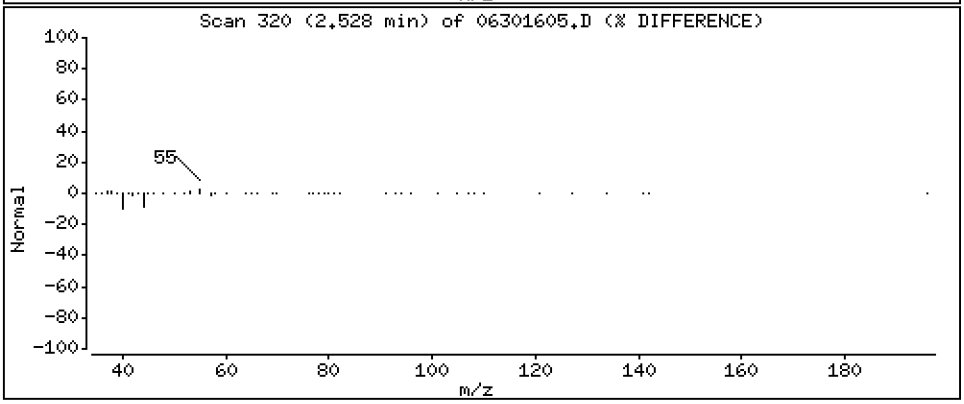












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

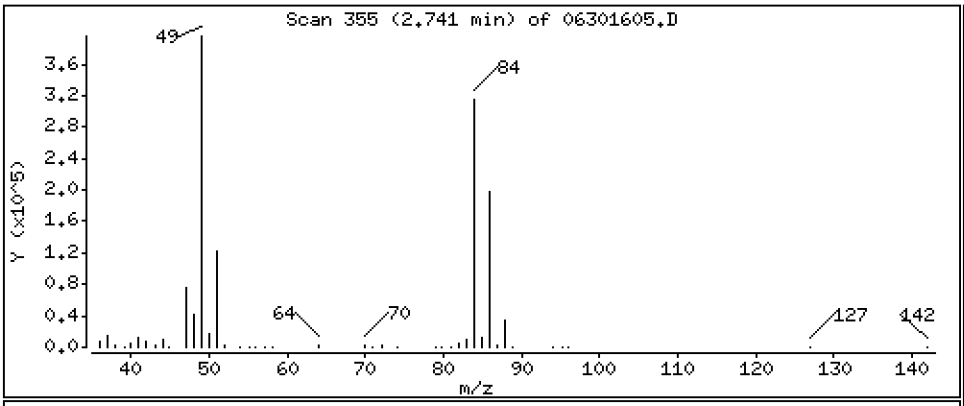
Operator: PB

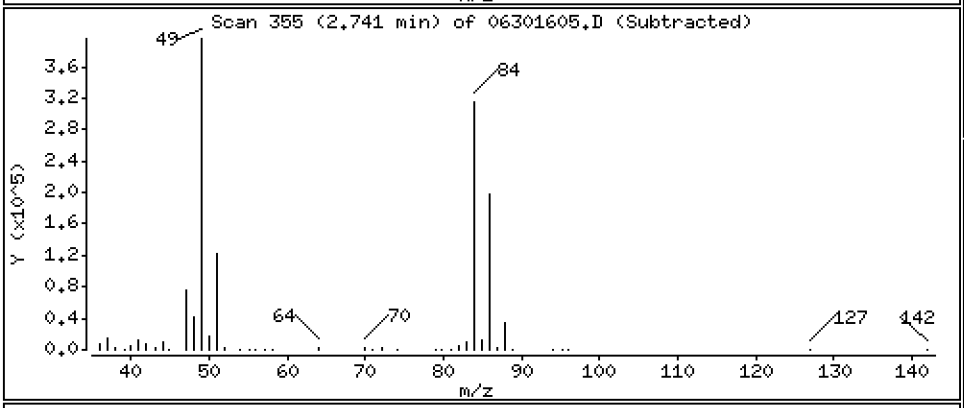
Column phase: RTXVMS

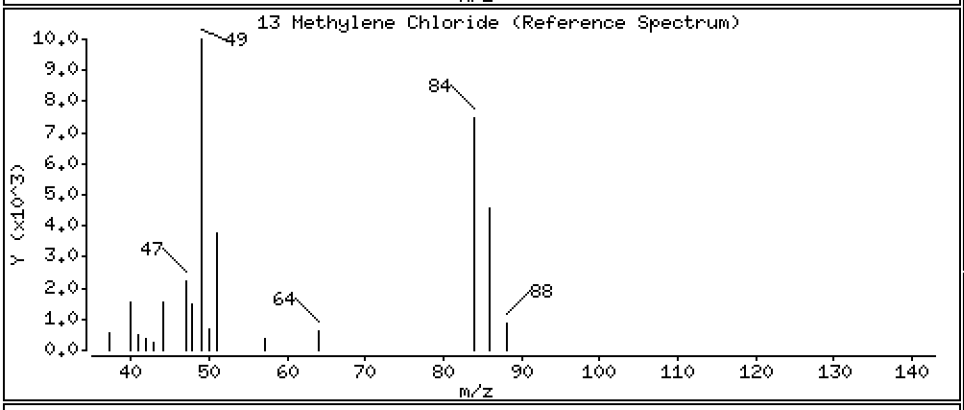
Column diameter: 0.18

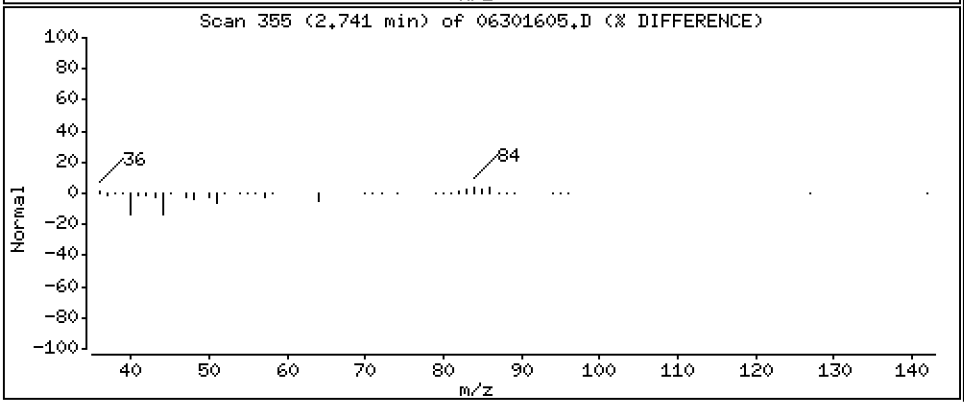
13 Methylene Chloride

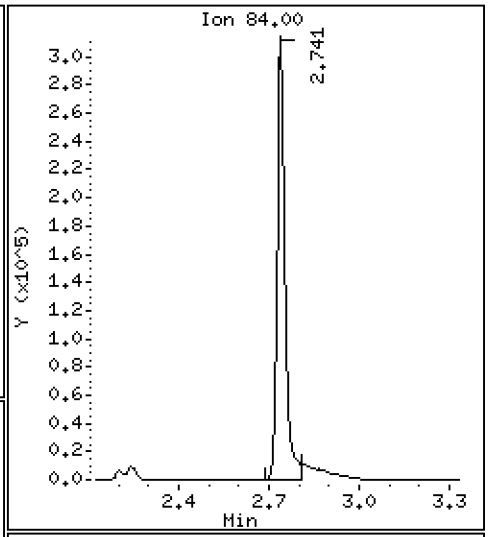
Concentration: 44.412 ug/Kg

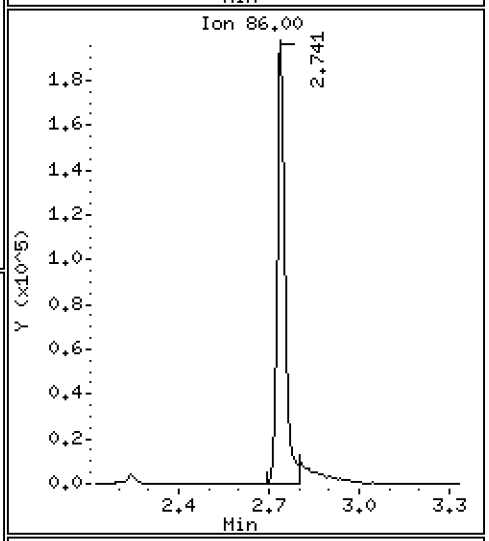


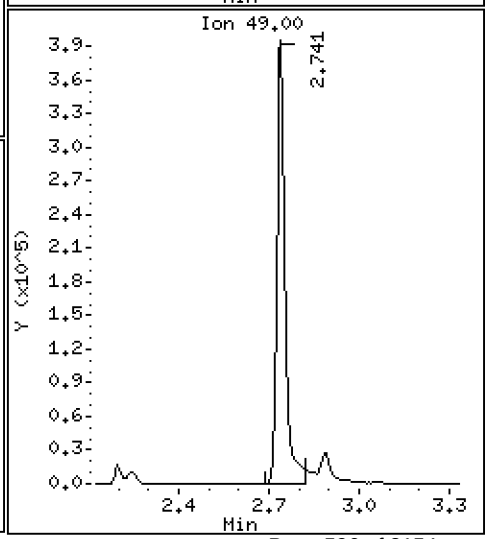












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

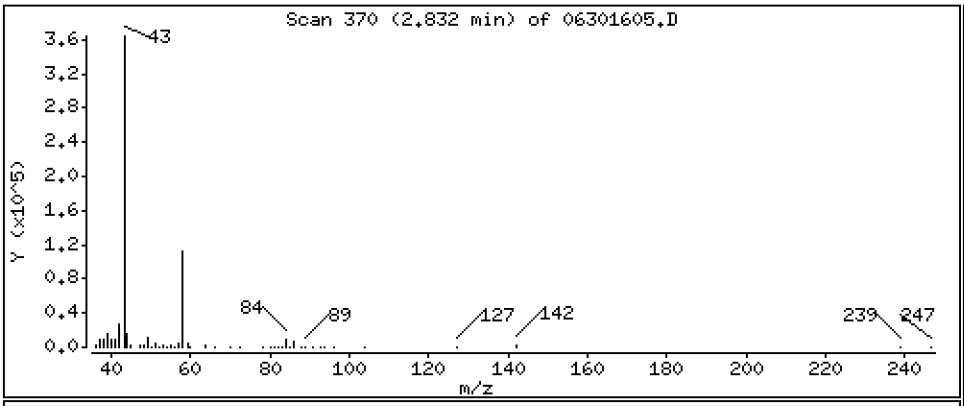
Operator: PB

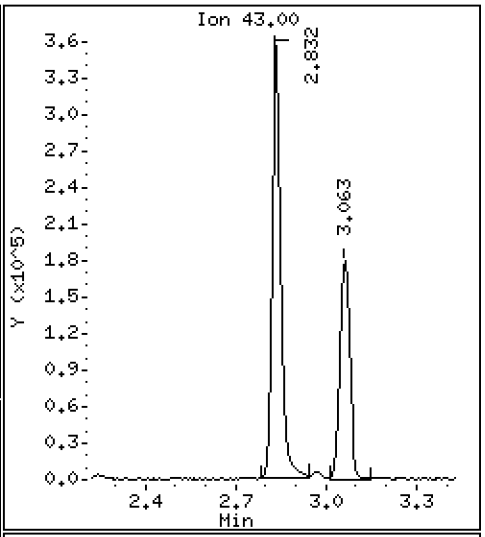
Column phase: RTXVMS

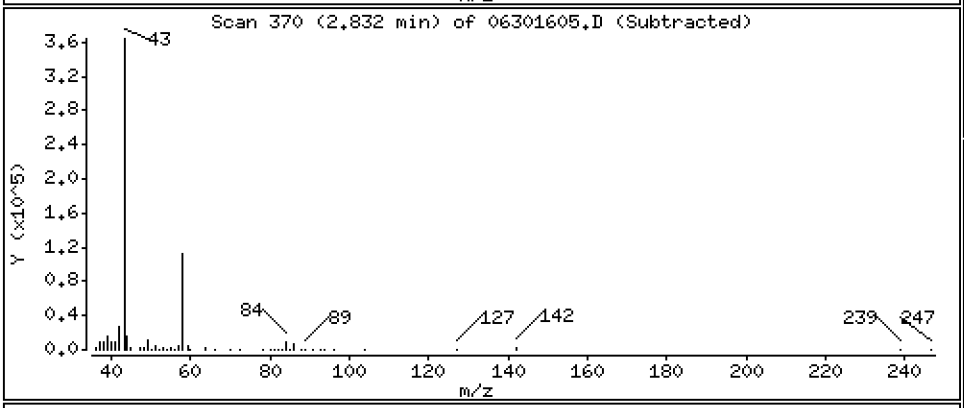
Column diameter: 0.18

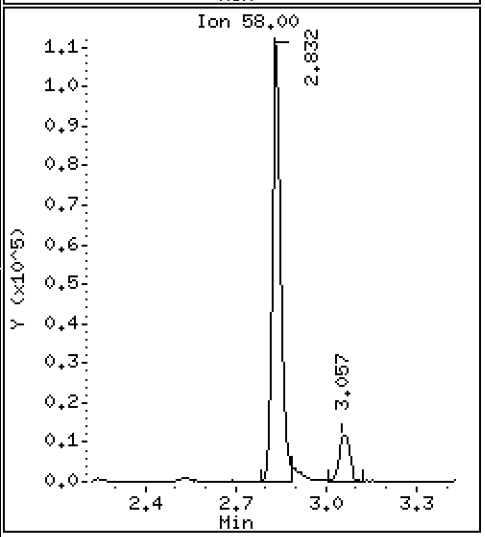
14 Acetone

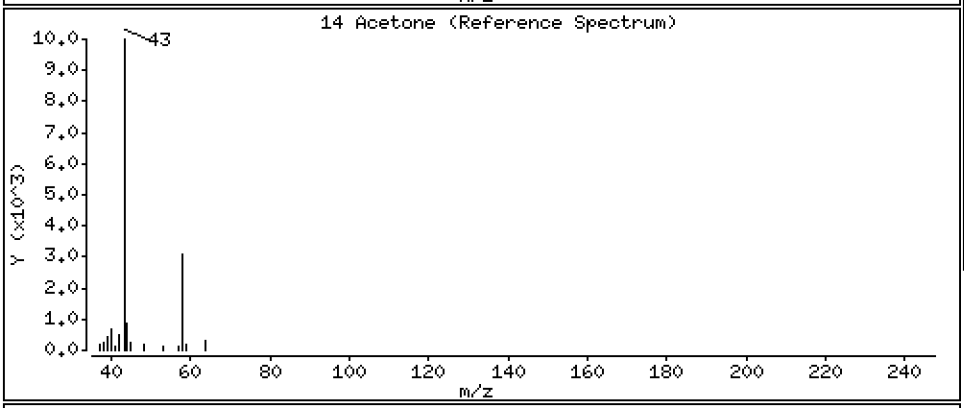
Concentration: 173.08 ug/Kg

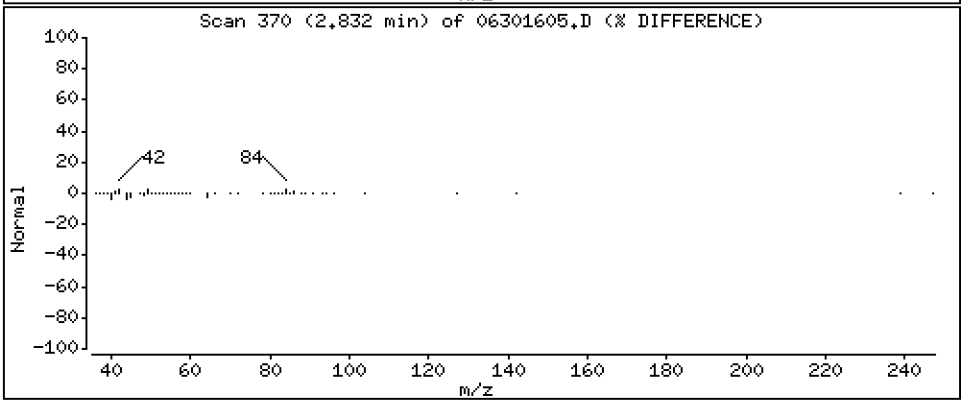












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

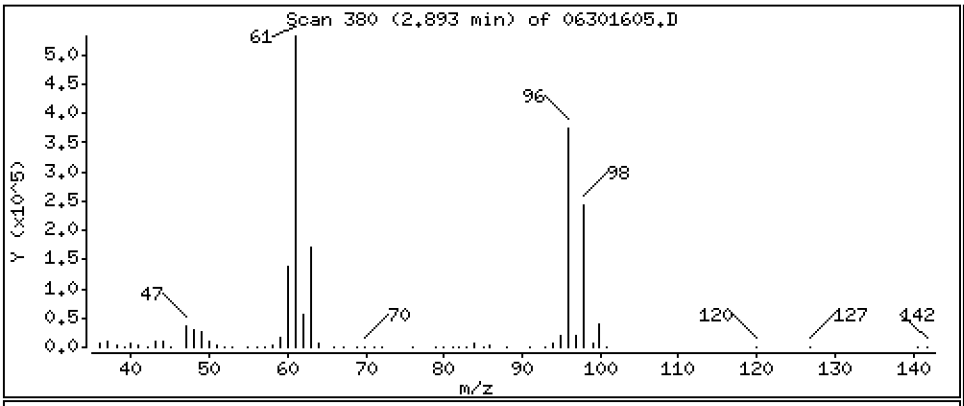
Operator: PB

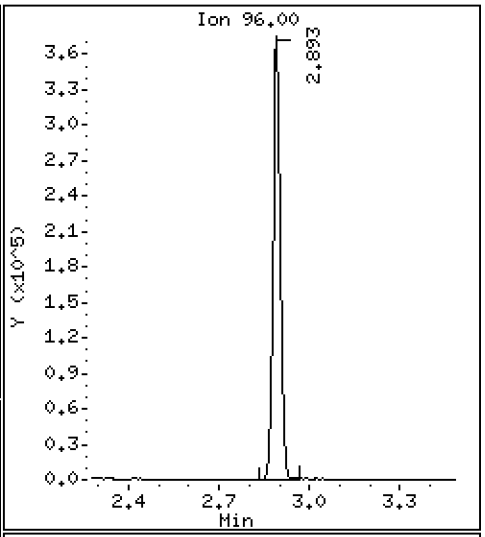
Column phase: RTXVMS

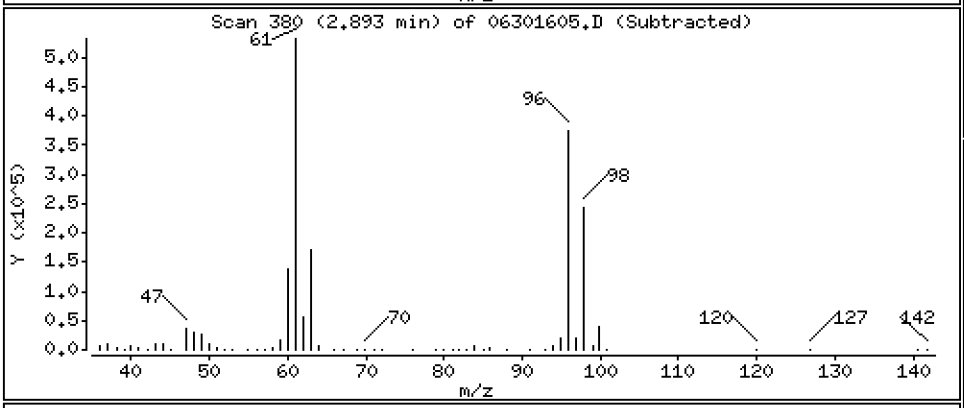
Column diameter: 0.18

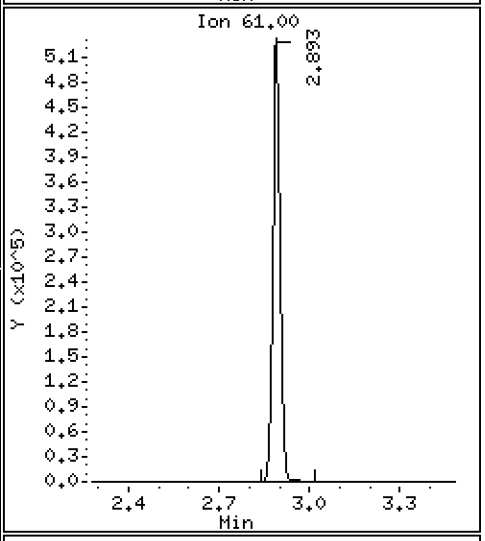
15 Trans-1,2-Dichloroethene

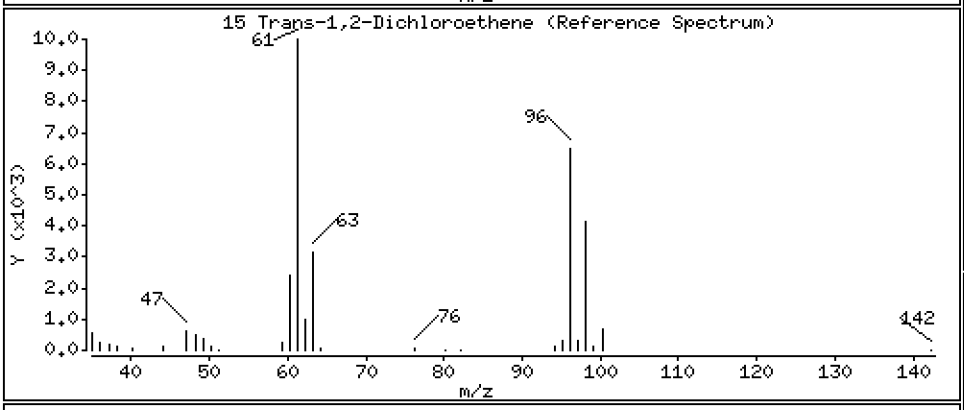
Concentration: 44.676 ug/Kg

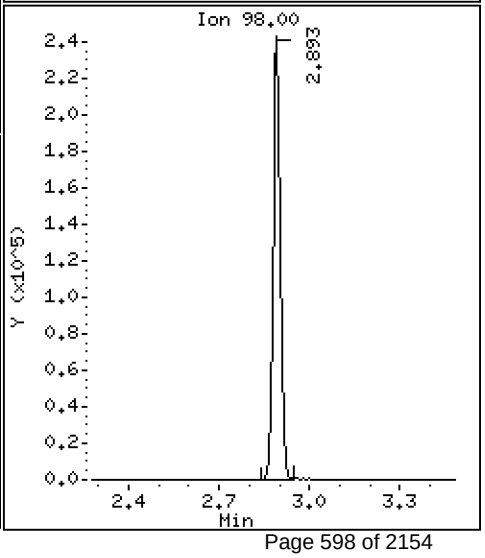


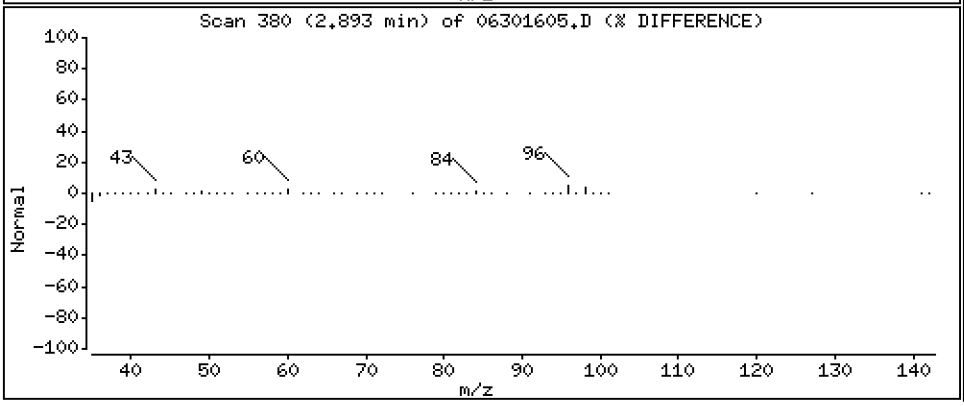












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

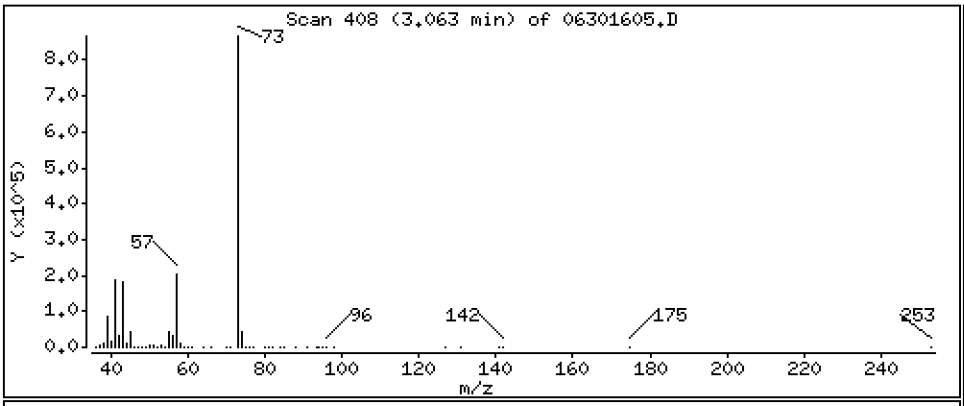
Operator: PB

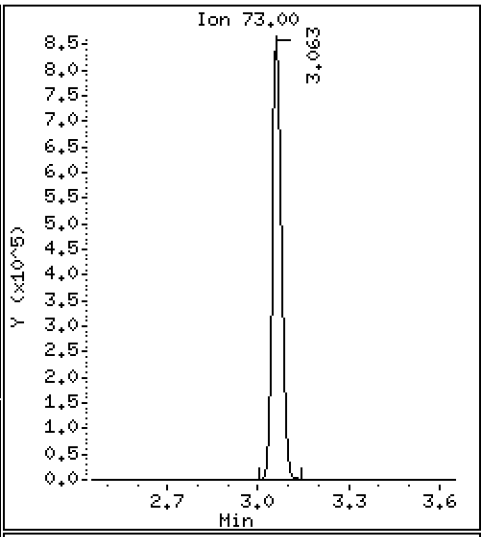
Column phase: RTXVMS

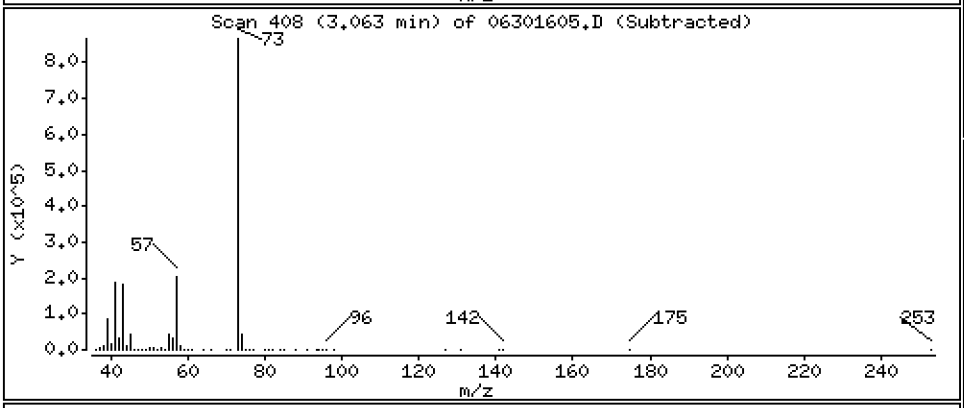
Column diameter: 0.18

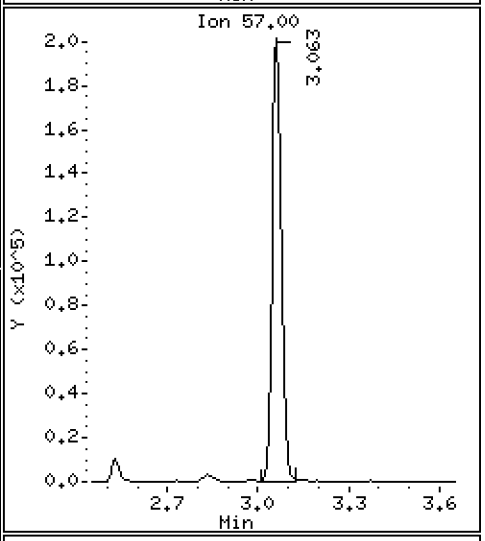
16 Methyl tert butyl ether

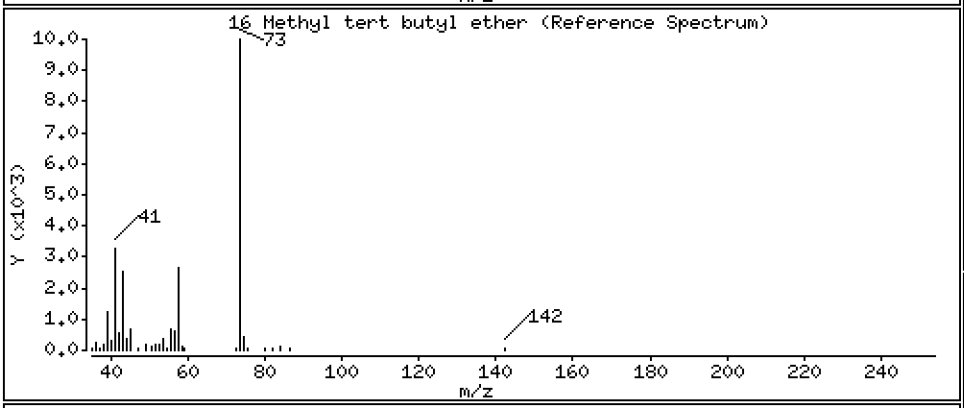
Concentration: 41.868 ug/Kg

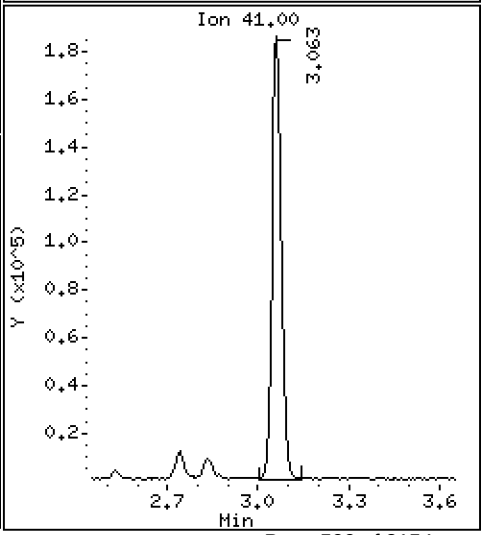


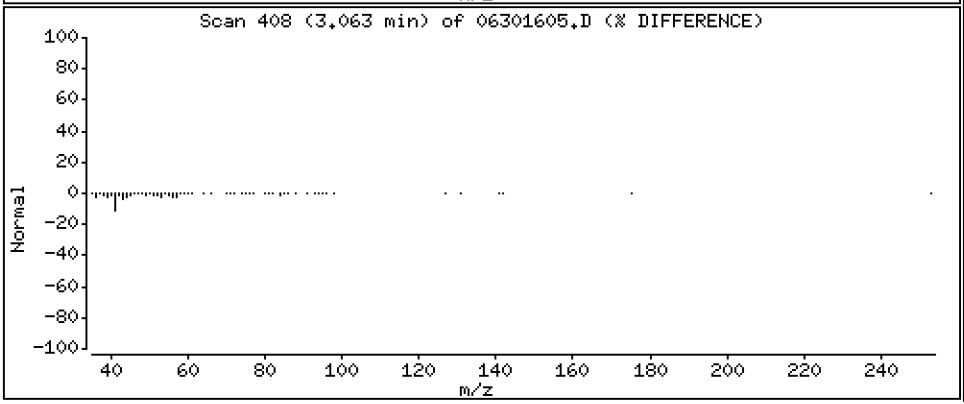












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

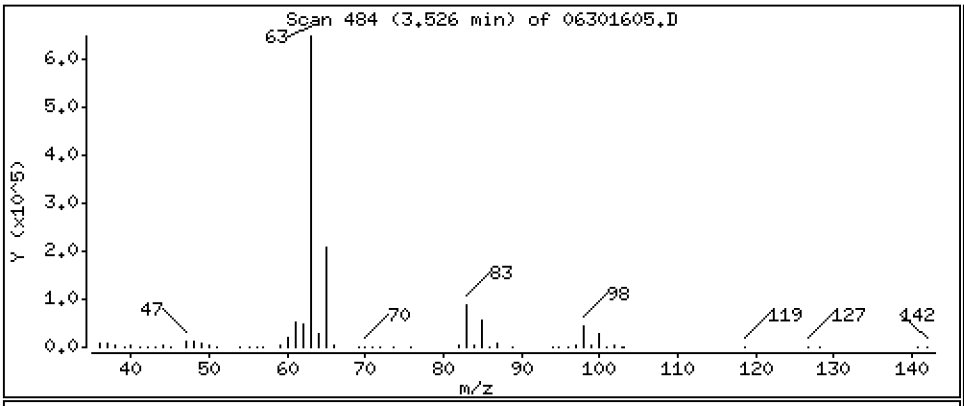
Operator: PB

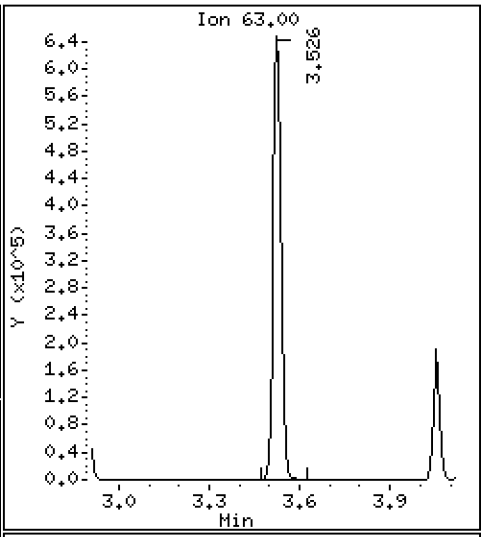
Column phase: RTXVMS

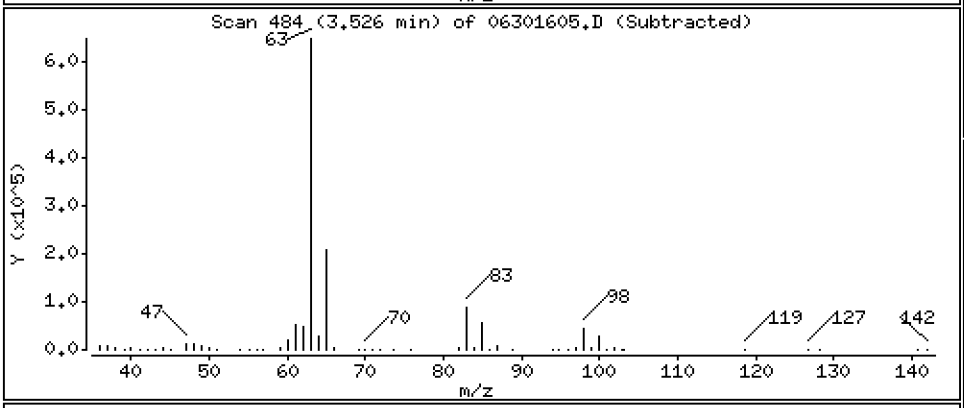
Column diameter: 0.18

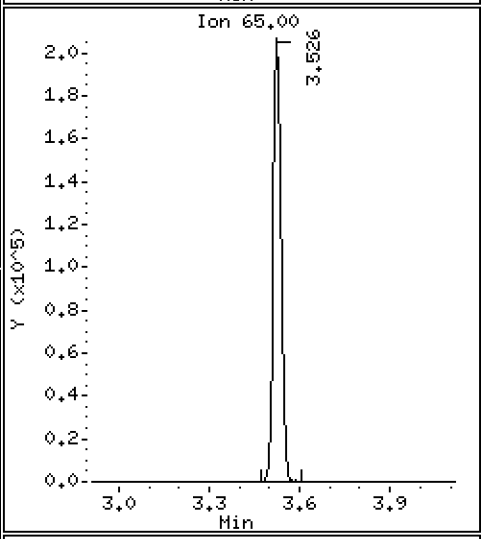
17 1,1-Dichloroethane

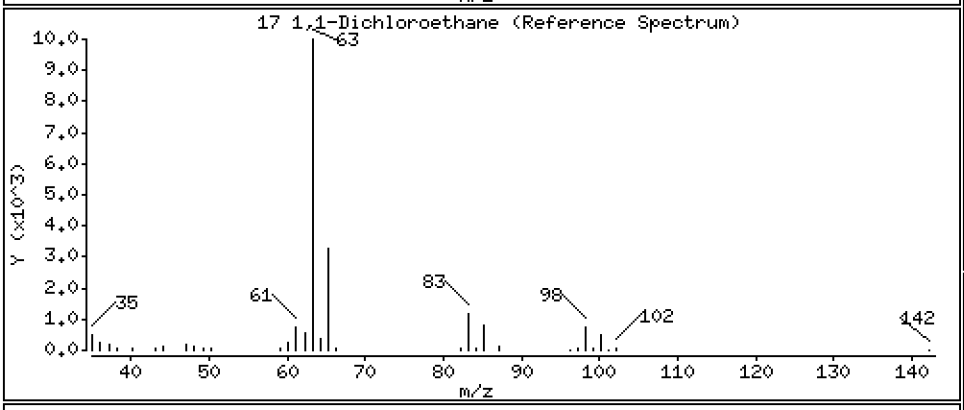
Concentration: 40.932 ug/Kg

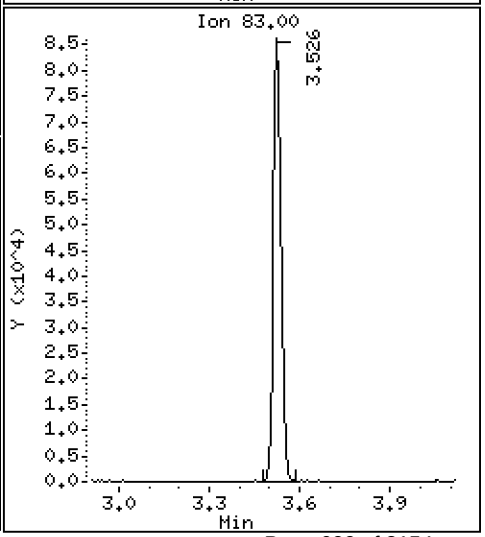


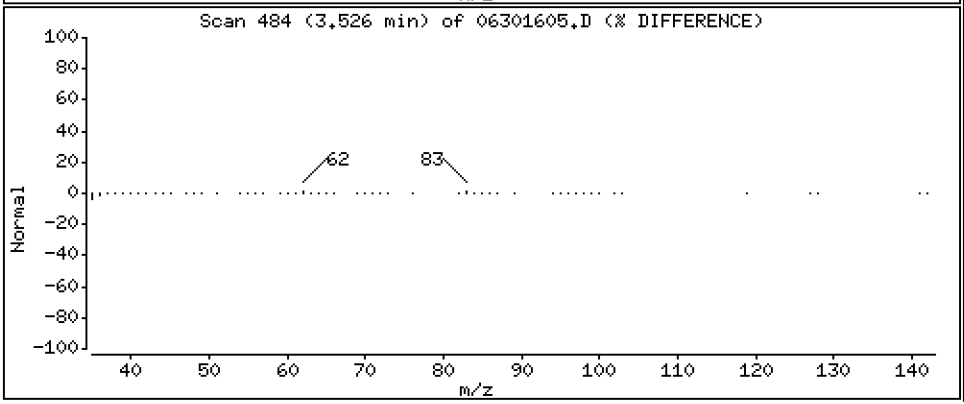












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

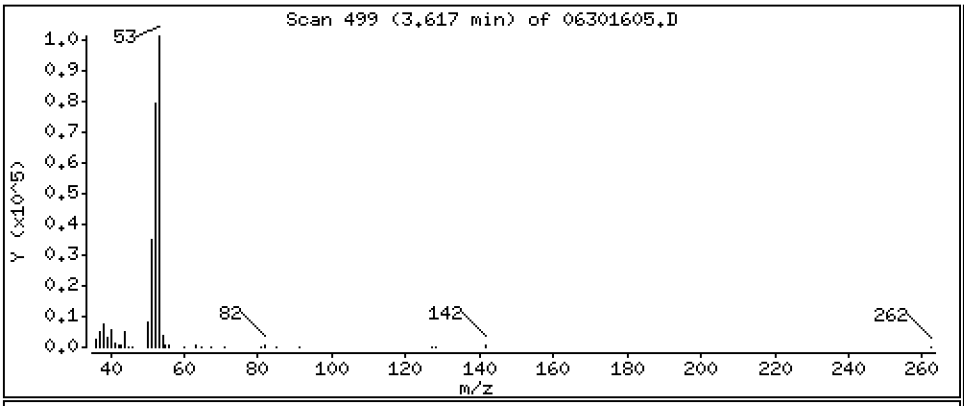
Operator: PB

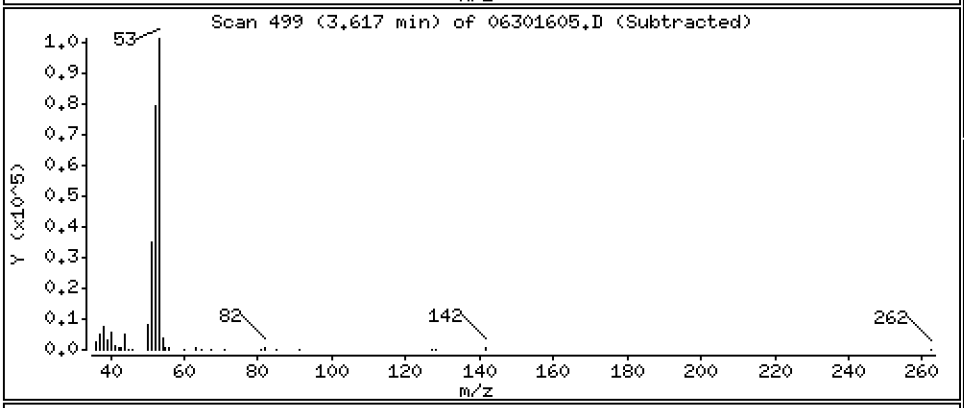
Column phase: RTXVMS

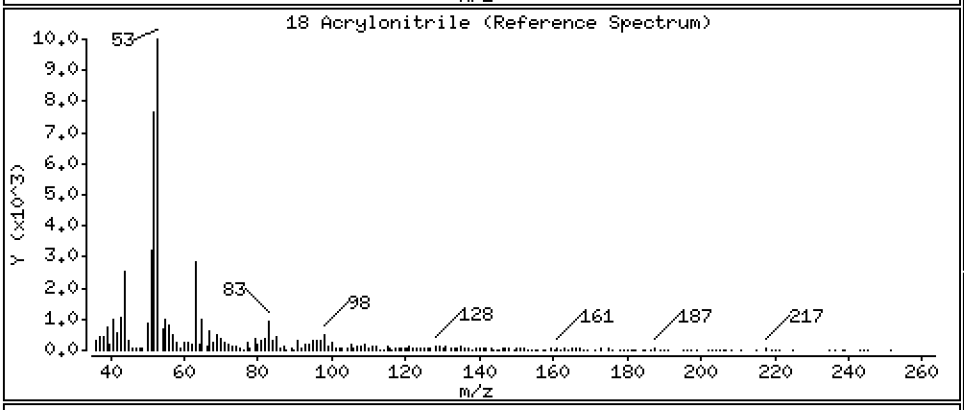
Column diameter: 0.18

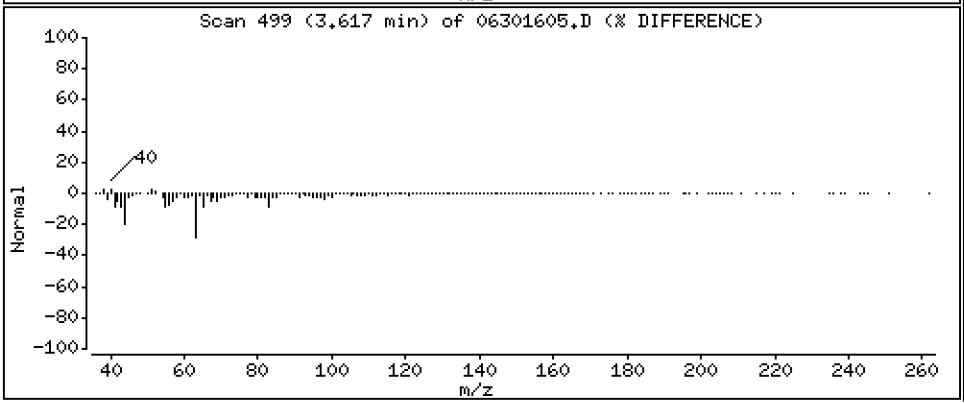
18 Acrylonitrile

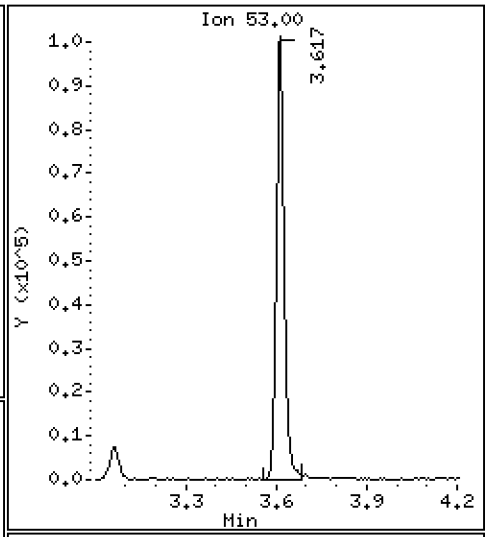
Concentration: 37.627 ug/Kg

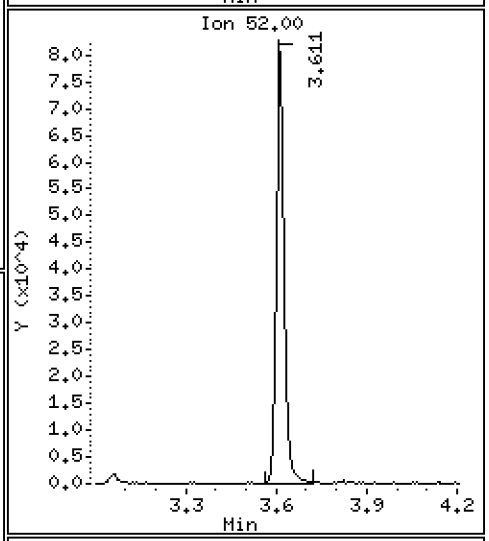


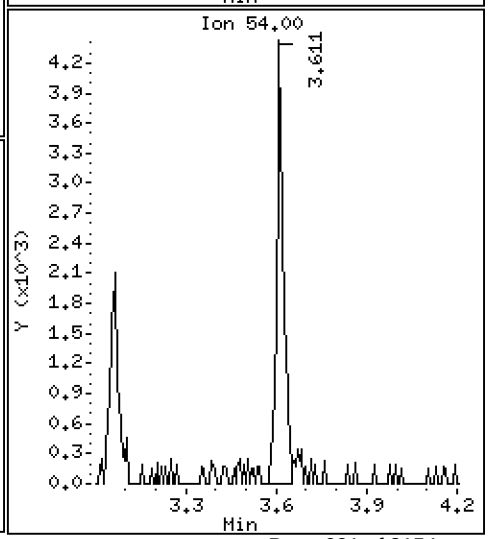












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

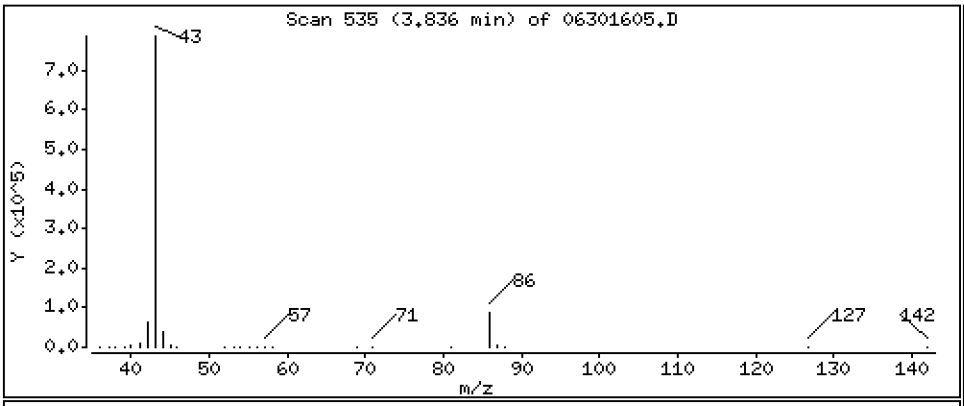
Operator: PB

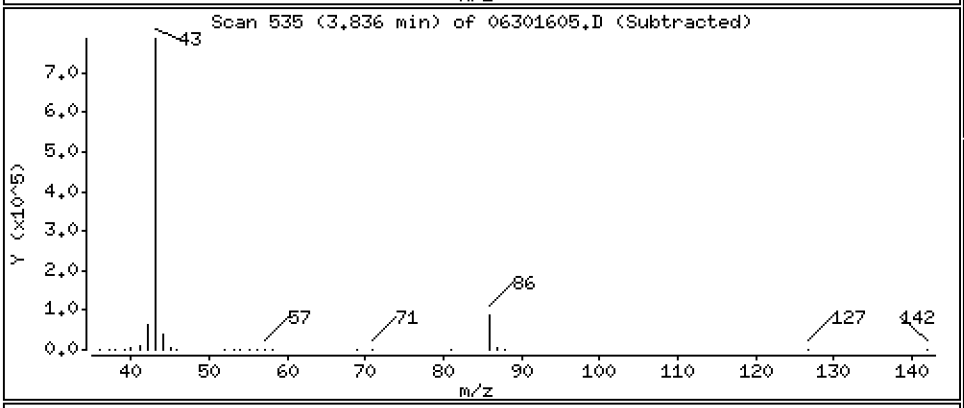
Column phase: RTXVMS

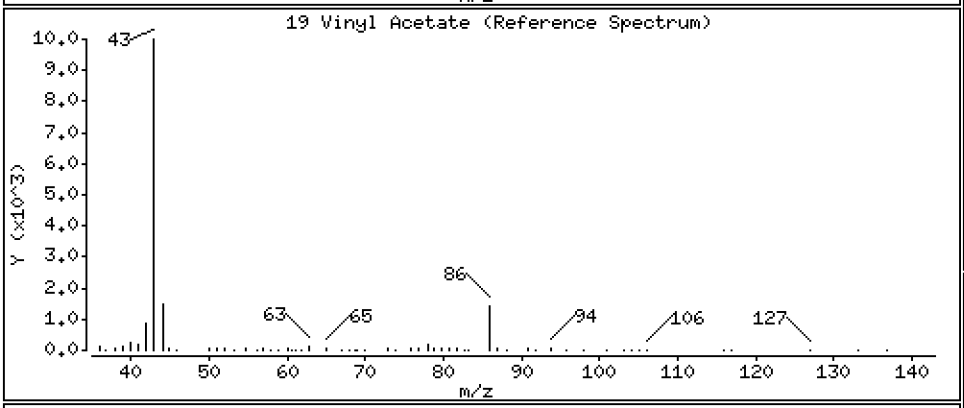
Column diameter: 0.18

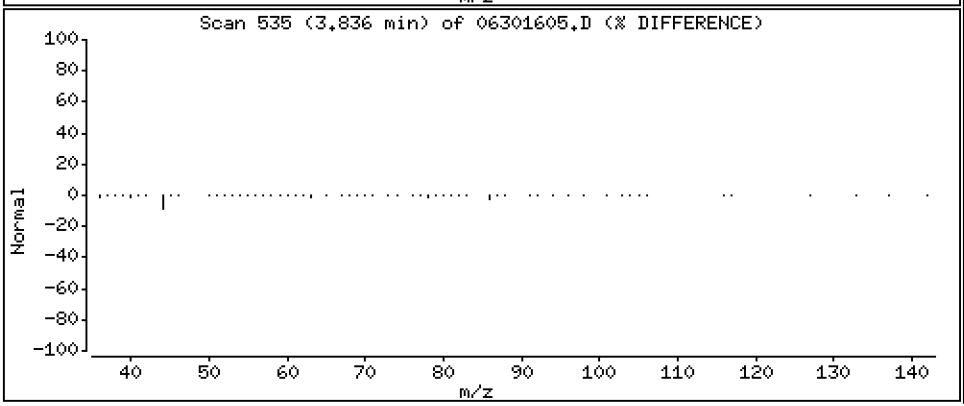
19 Vinyl Acetate

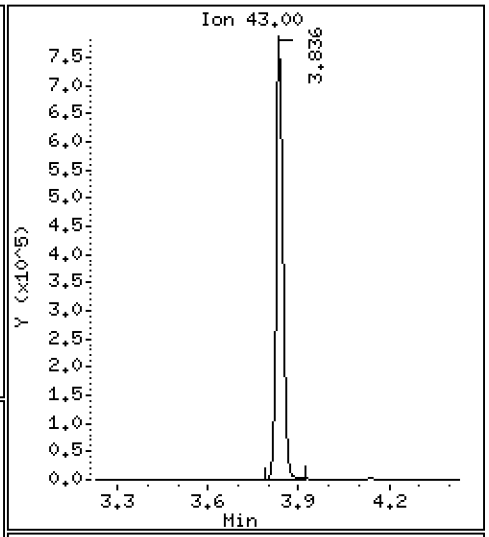
Concentration: 36.878 ug/Kg

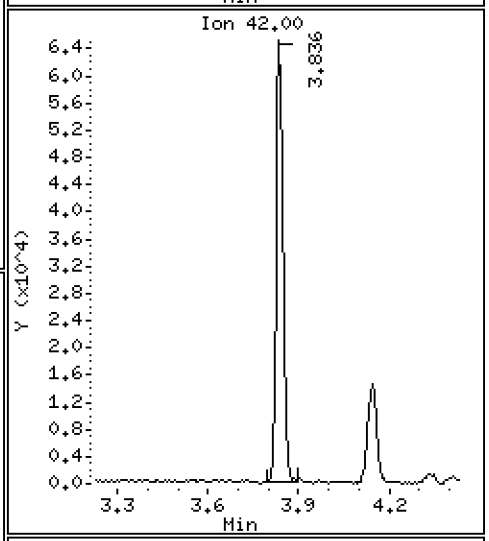


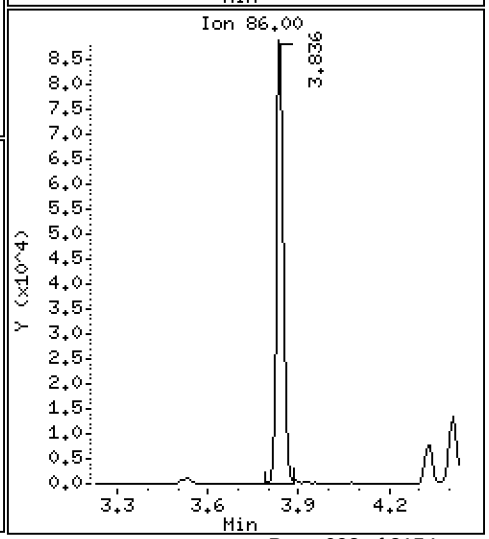












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

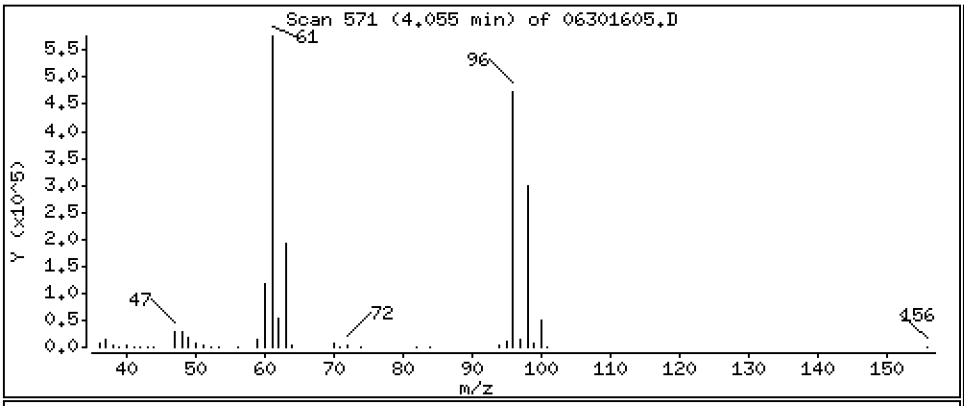
Operator: PB

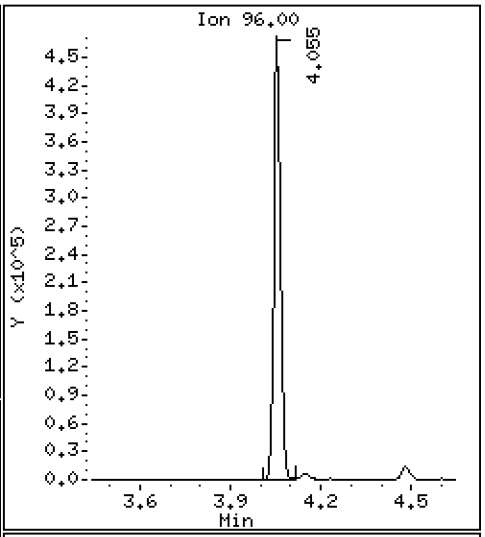
Column phase: RTXVMS

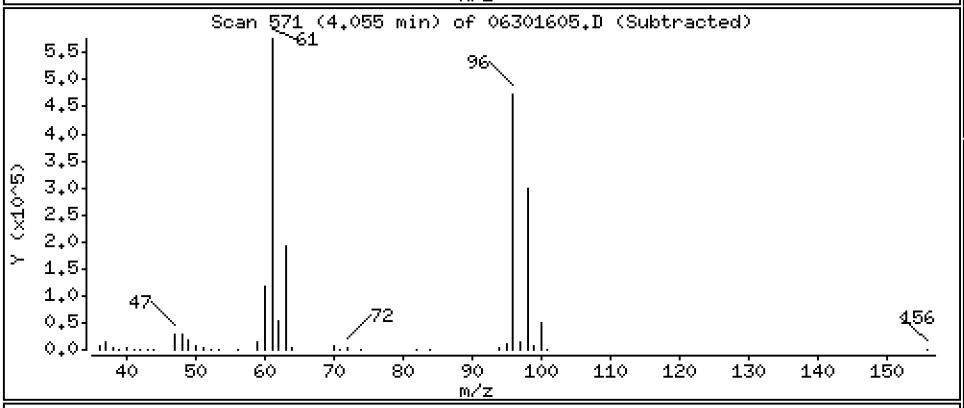
Column diameter: 0.18

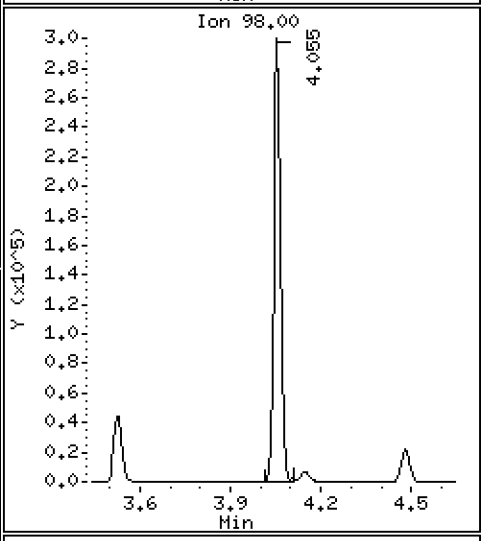
20 Cis-1,2-Dichloroethene

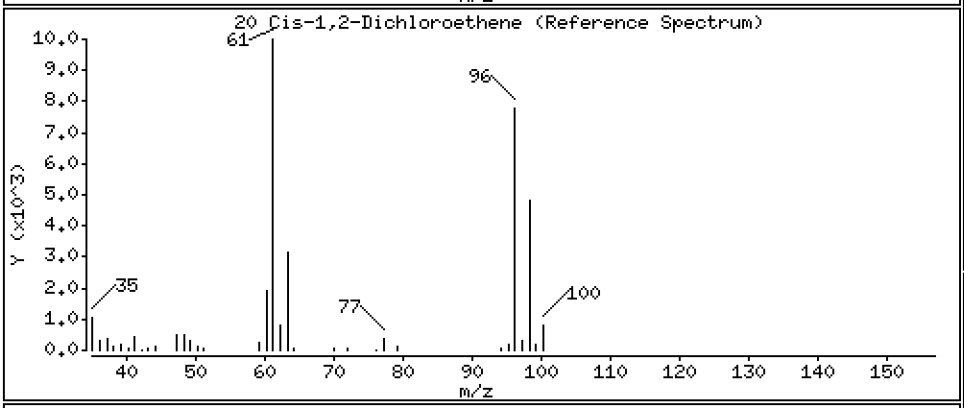
Concentration: 43.188 ug/Kg

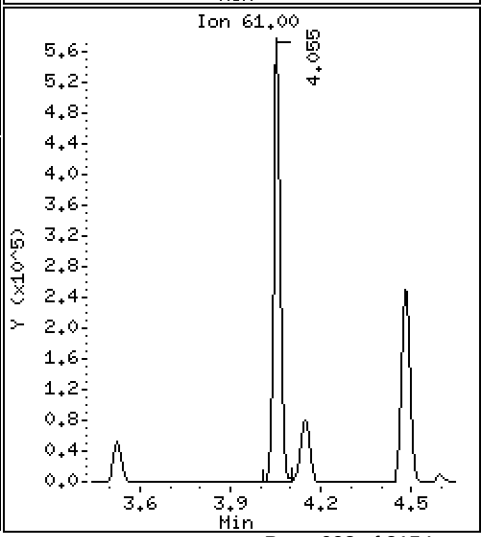


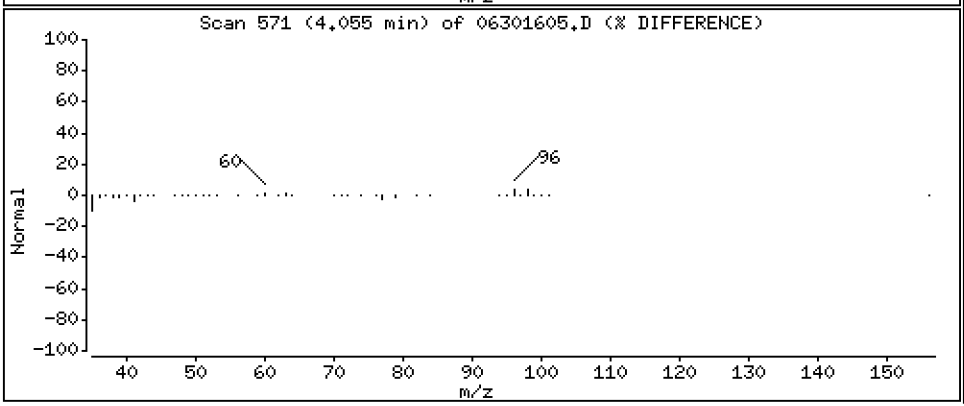












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

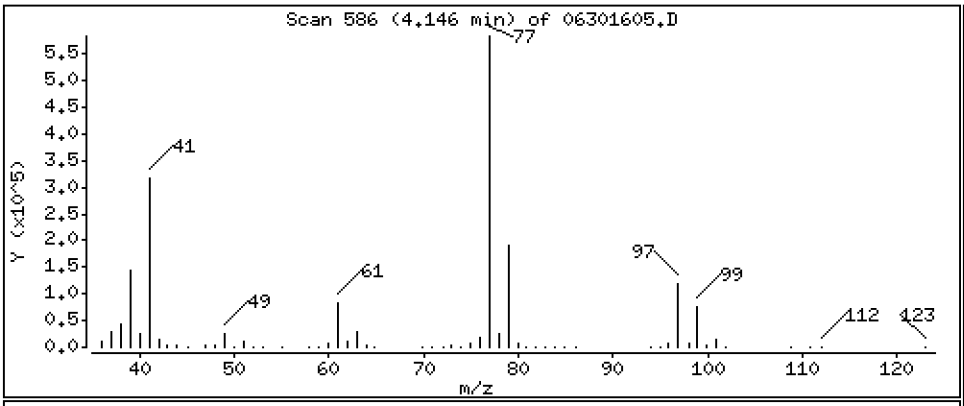
Operator: PB

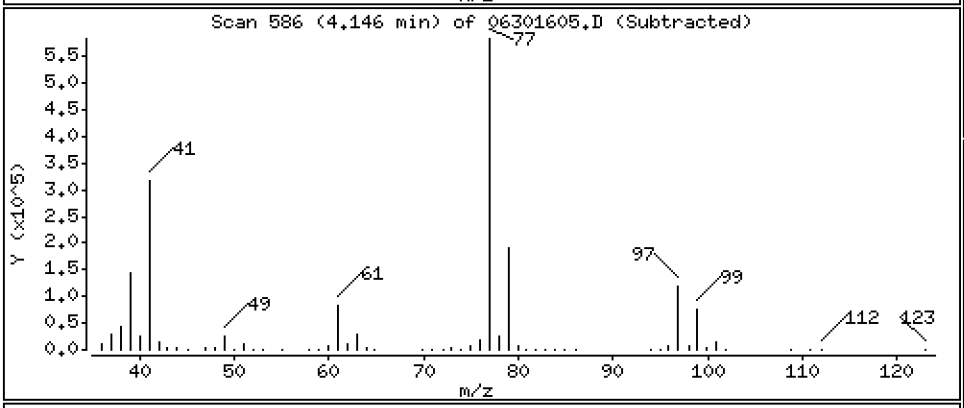
Column phase: RTXVMS

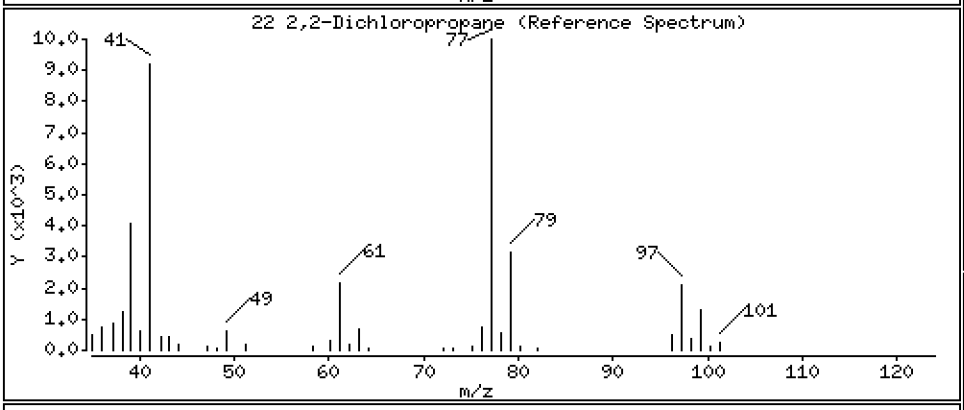
Column diameter: 0.18

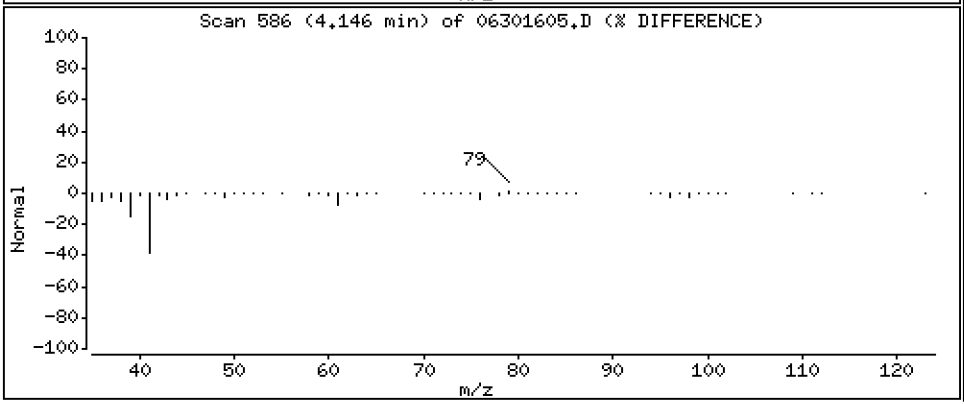
22 2,2-Dichloropropane

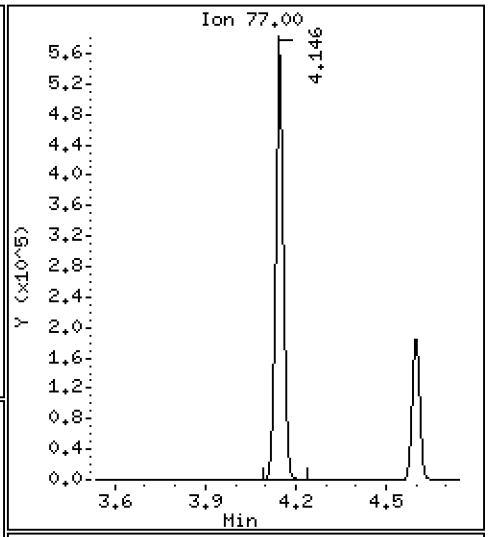
Concentration: 43.725 ug/Kg

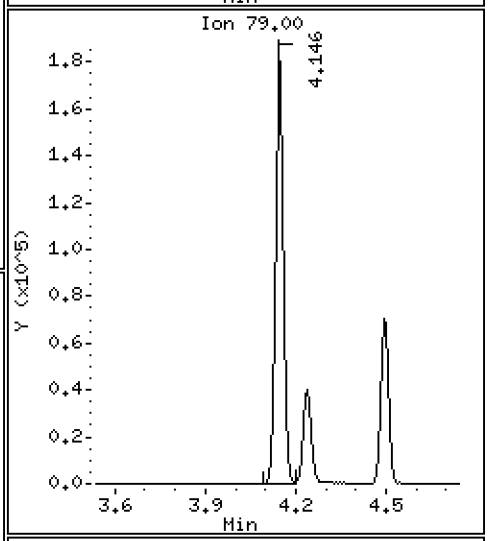


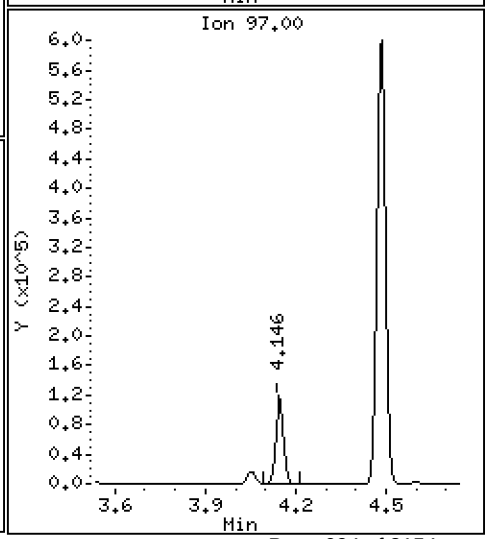












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

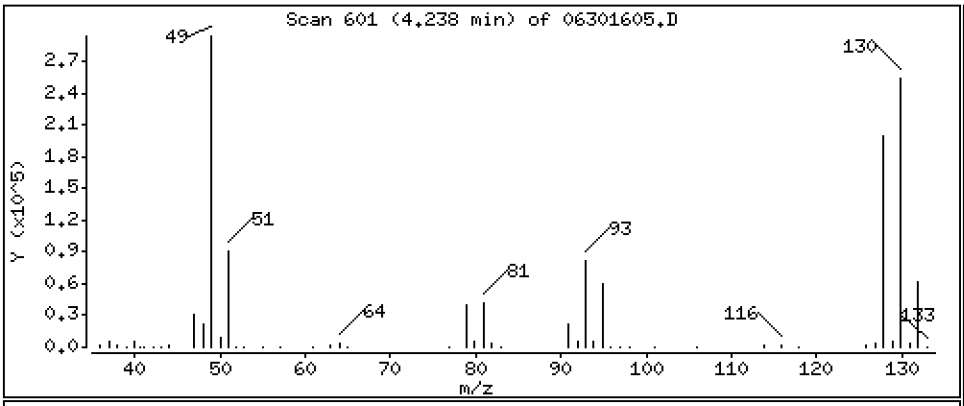
Operator: PB

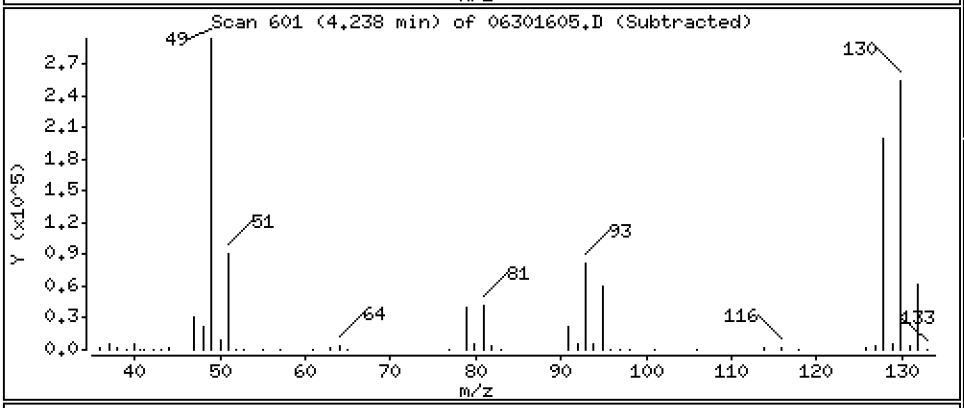
Column phase: RTXVMS

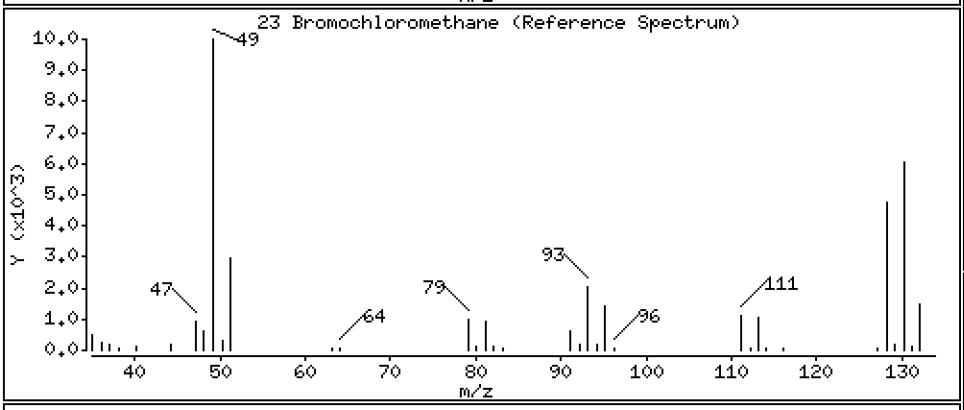
Column diameter: 0.18

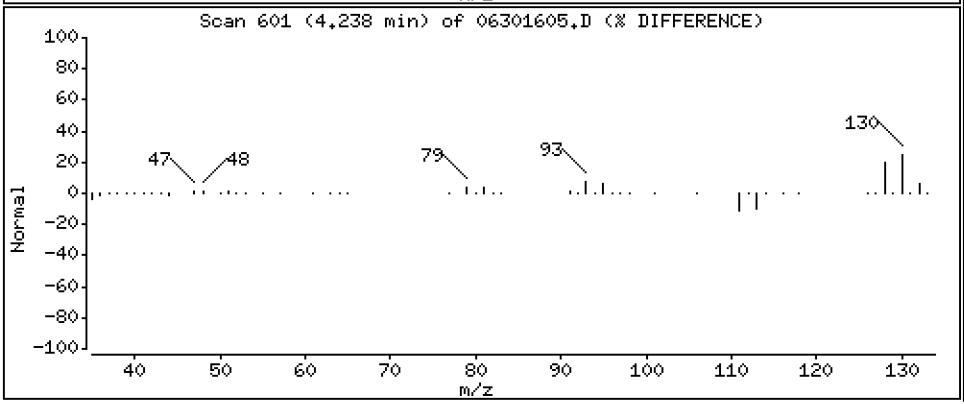
23 Bromochloromethane

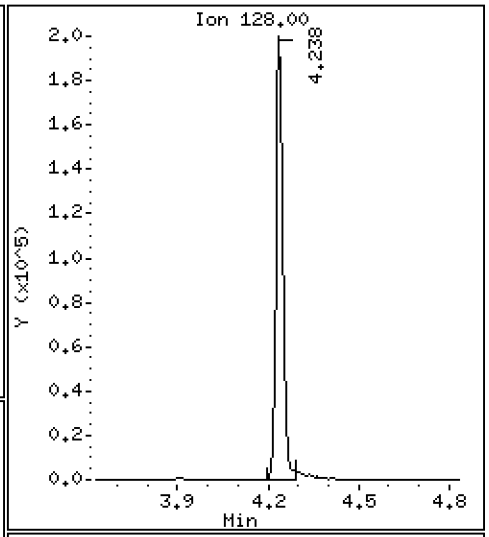
Concentration: 43.885 ug/Kg

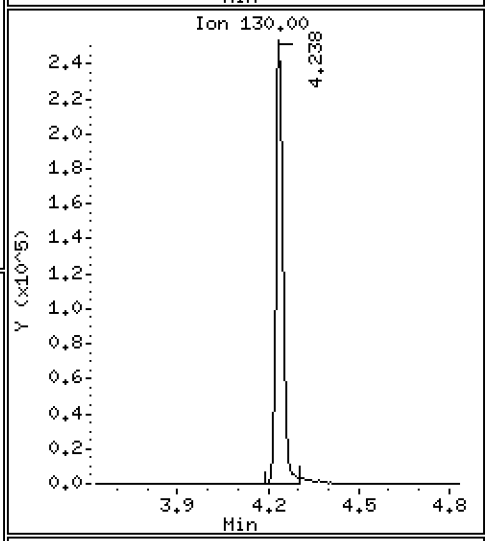


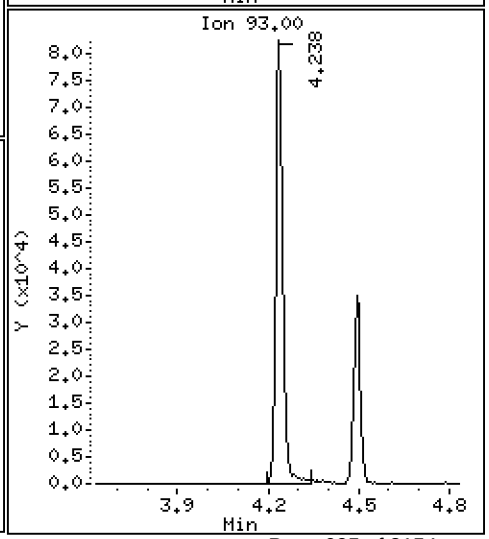












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

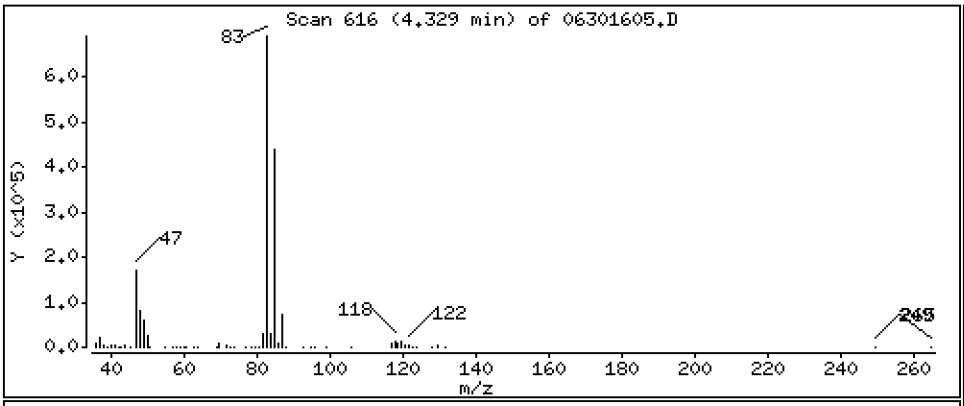
Operator: PB

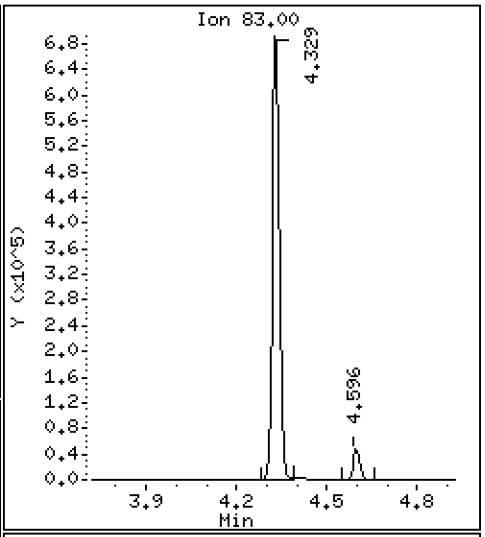
Column phase: RTXVMS

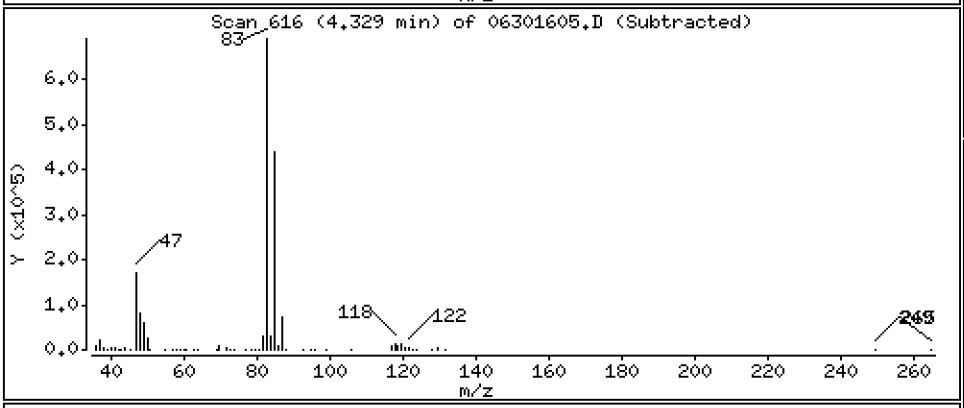
Column diameter: 0.18

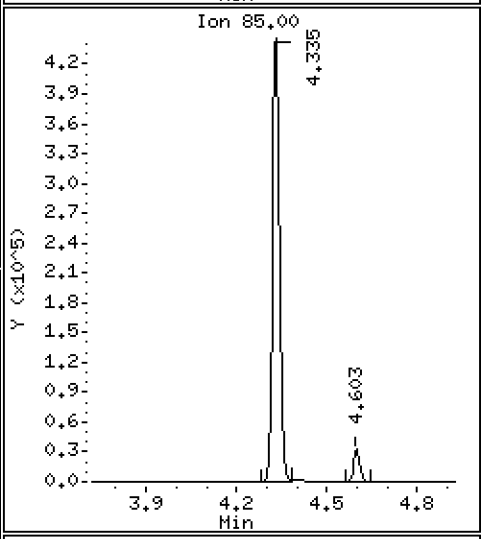
24 Chloroform

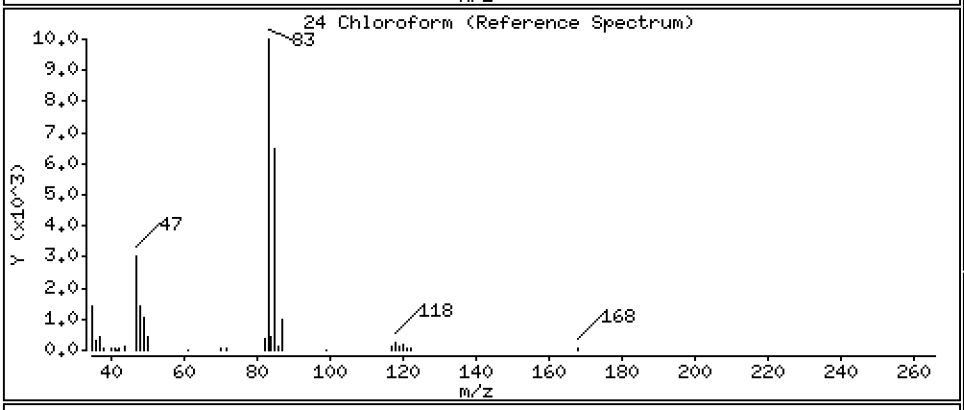
Concentration: 42.610 ug/Kg

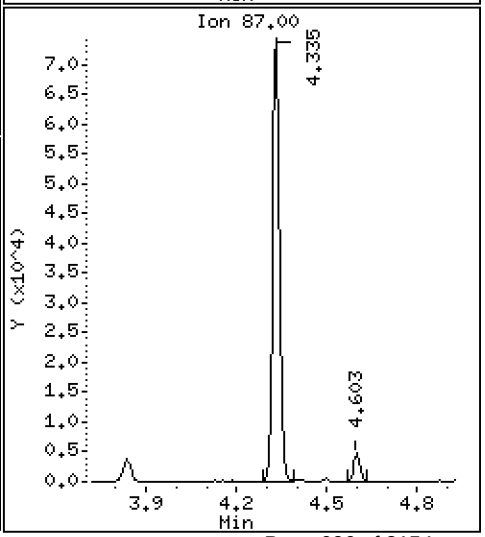


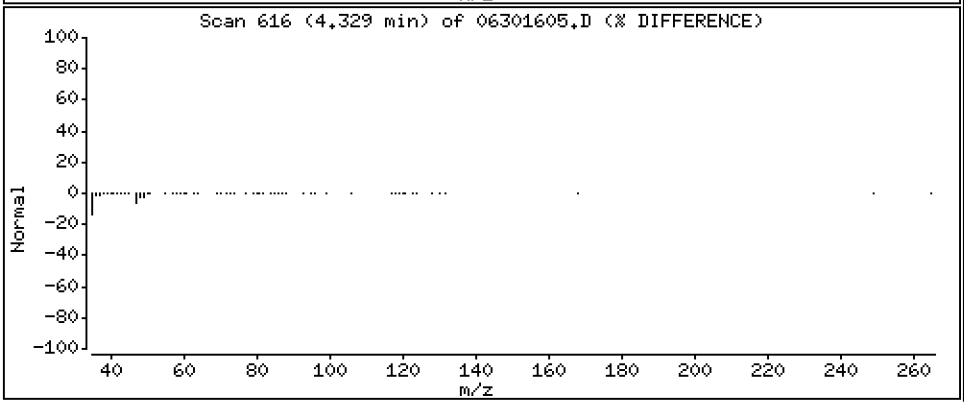












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

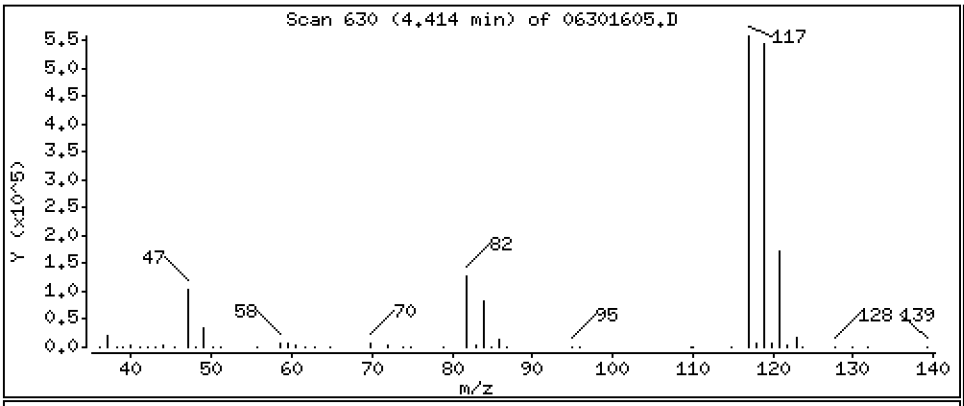
Operator: PB

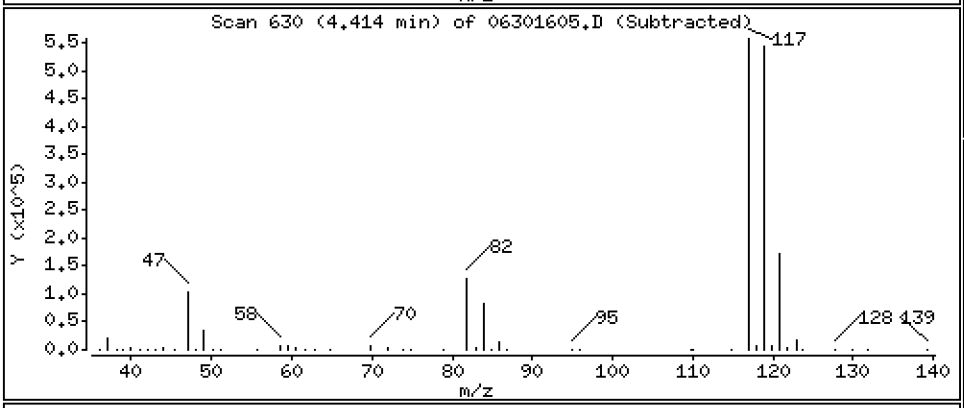
Column phase: RTXVMS

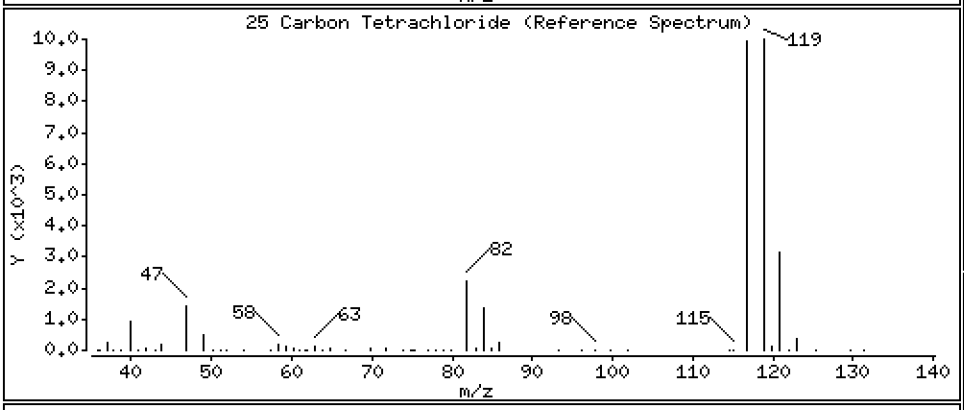
Column diameter: 0.18

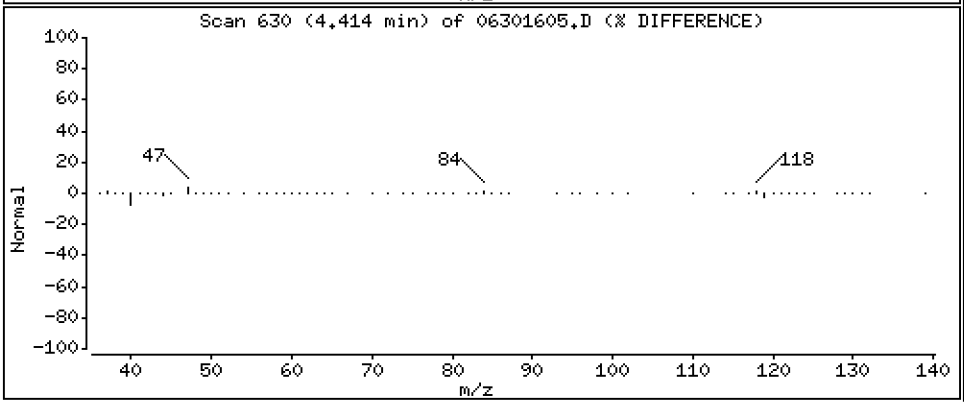
25 Carbon Tetrachloride

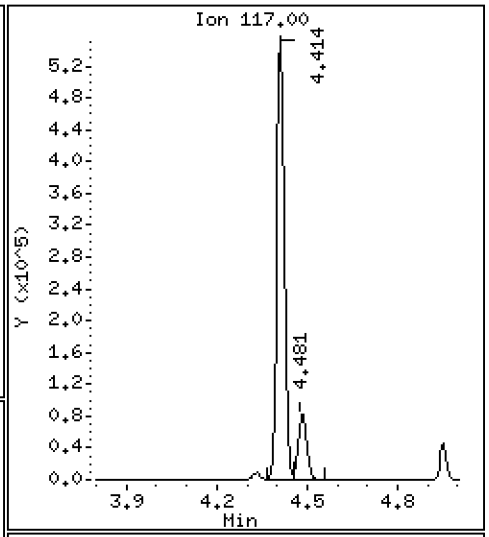
Concentration: 47.937 ug/Kg

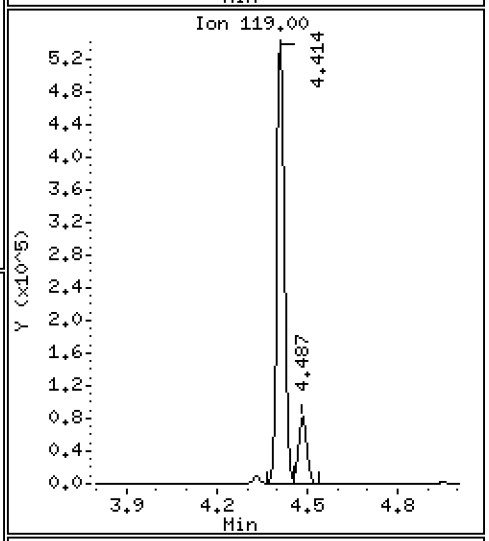


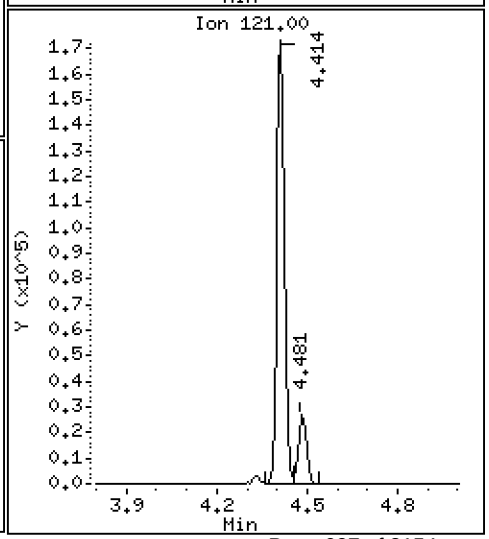












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

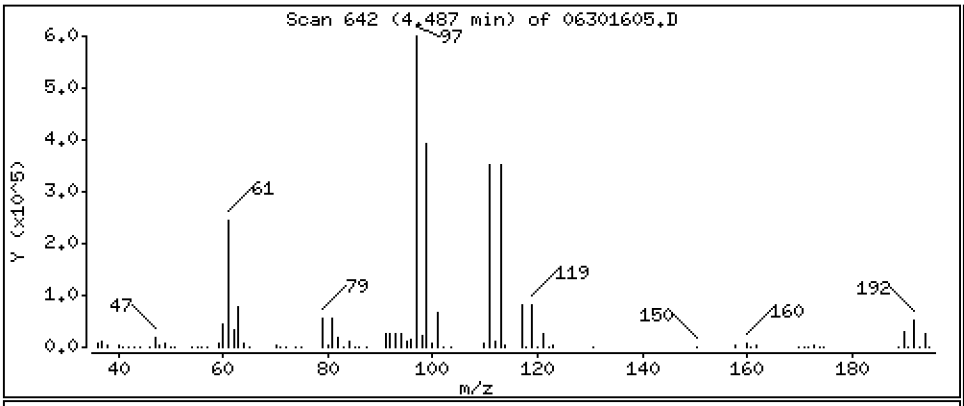
Operator: PB

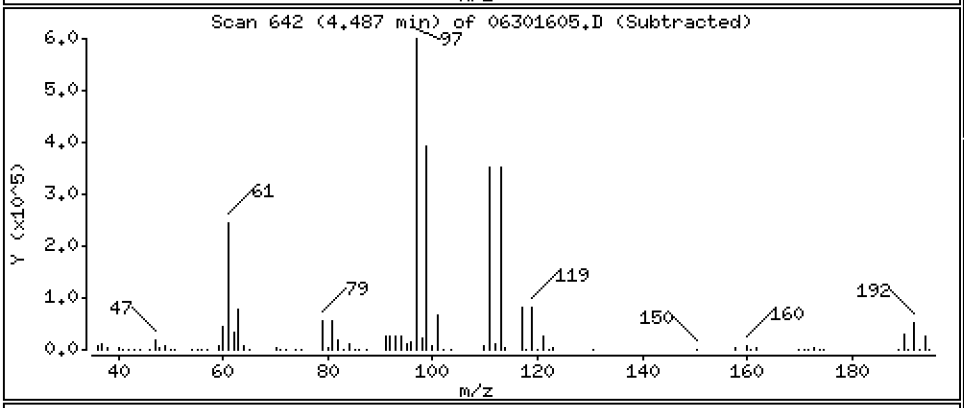
Column phase: RTXVMS

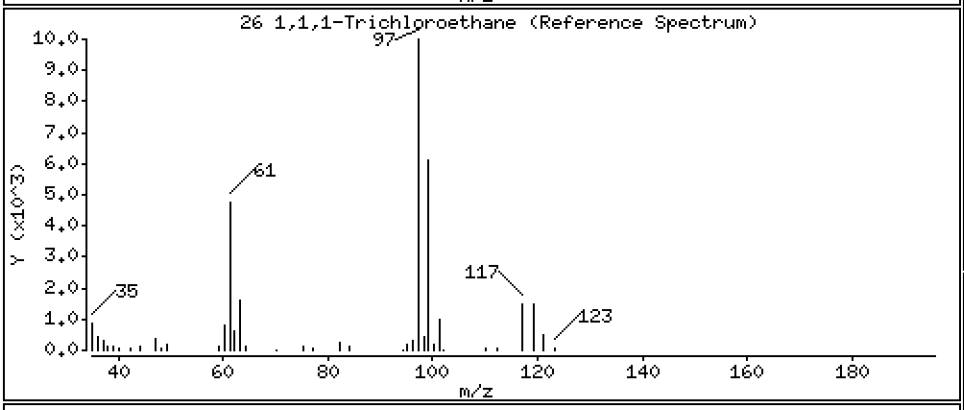
Column diameter: 0.18

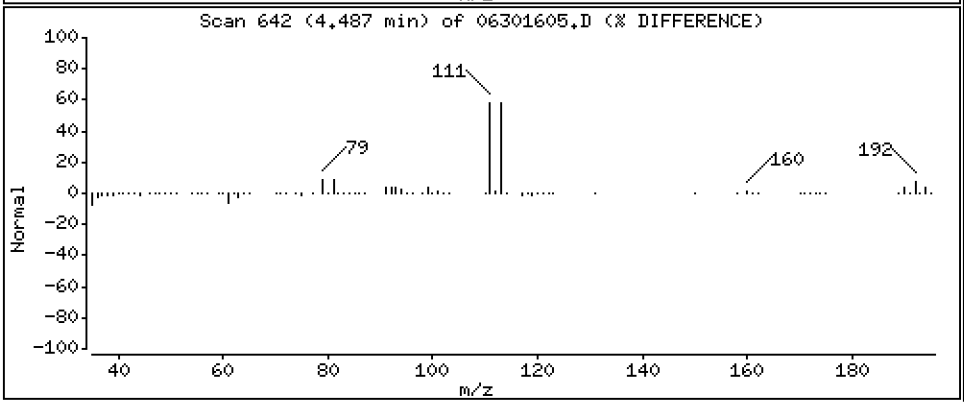
26 1,1,1-Trichloroethane

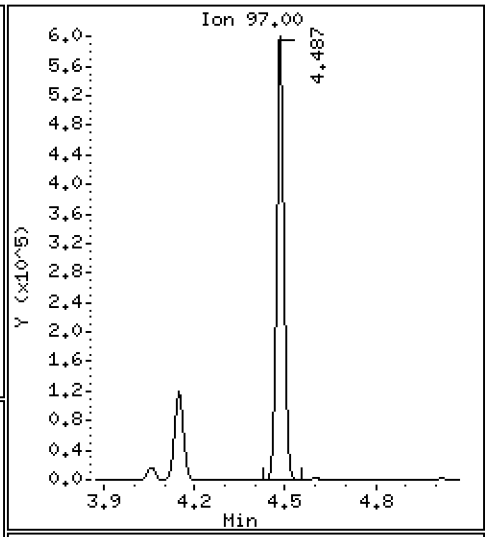
Concentration: 42.995 ug/Kg

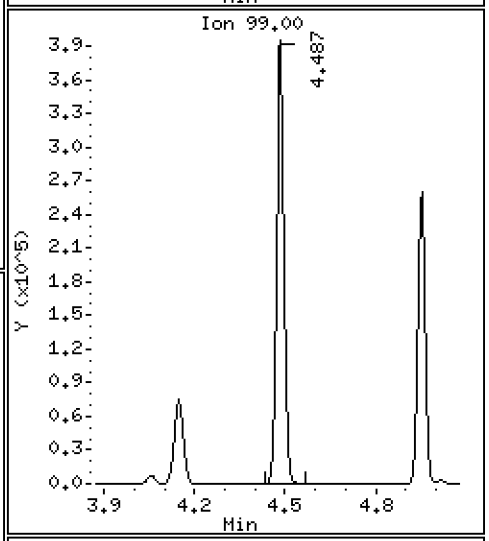


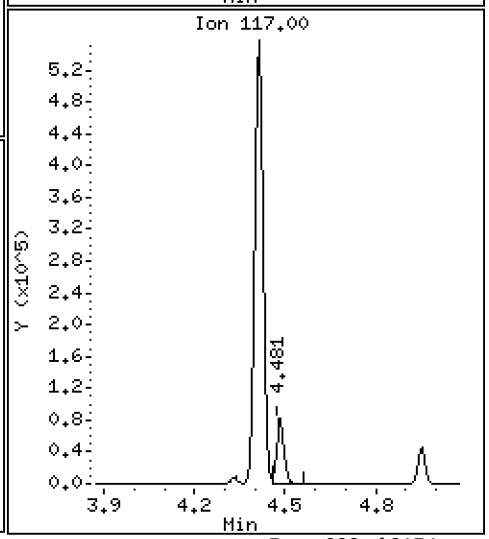












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

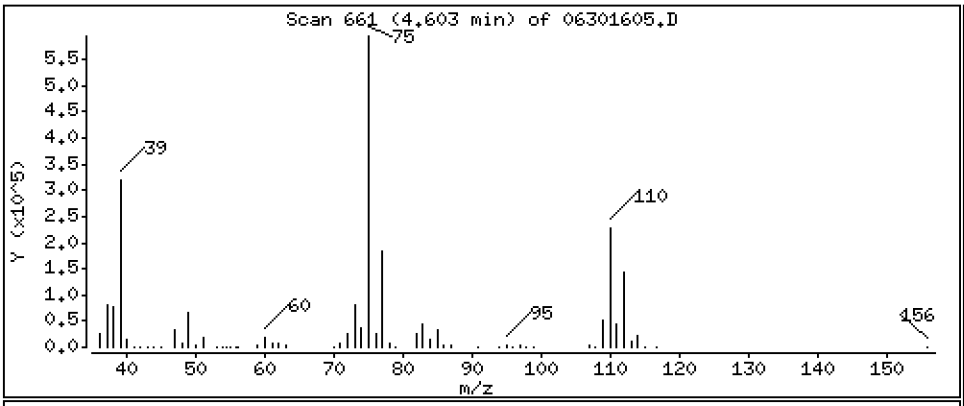
Operator: PB

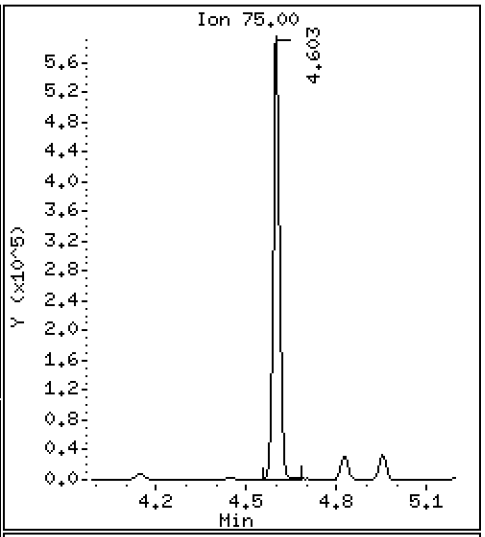
Column phase: RTXVMS

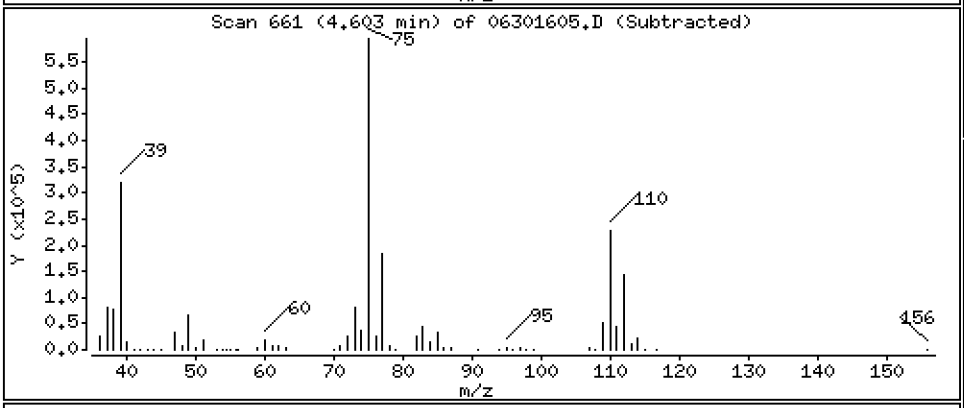
Column diameter: 0.18

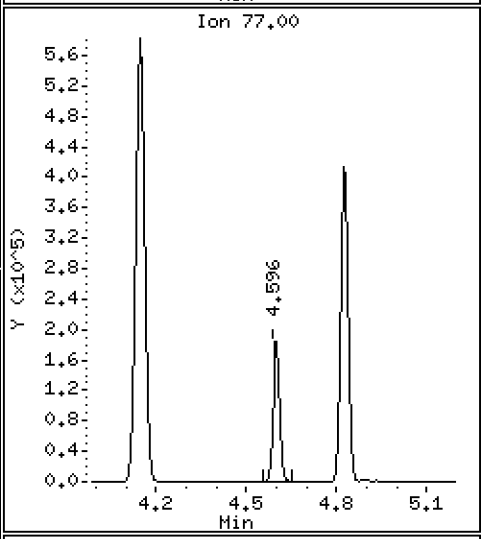
28 1,1-Dichloropropene

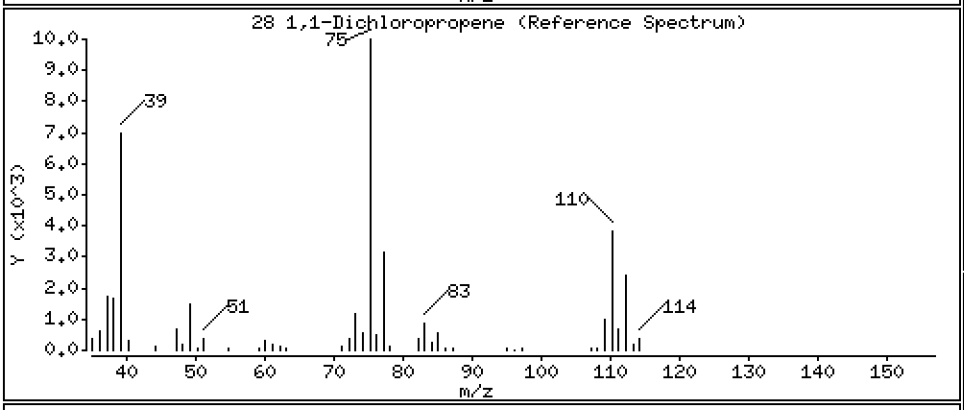
Concentration: 44.356 ug/Kg

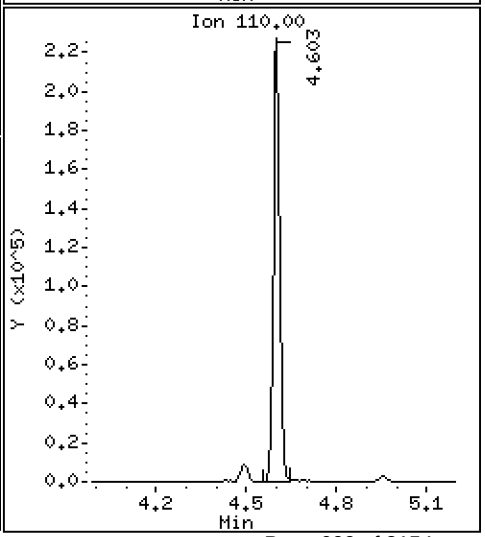


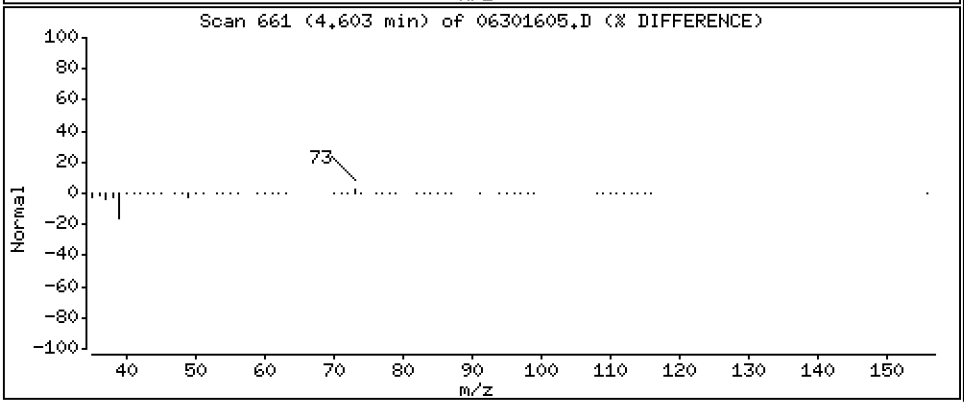












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

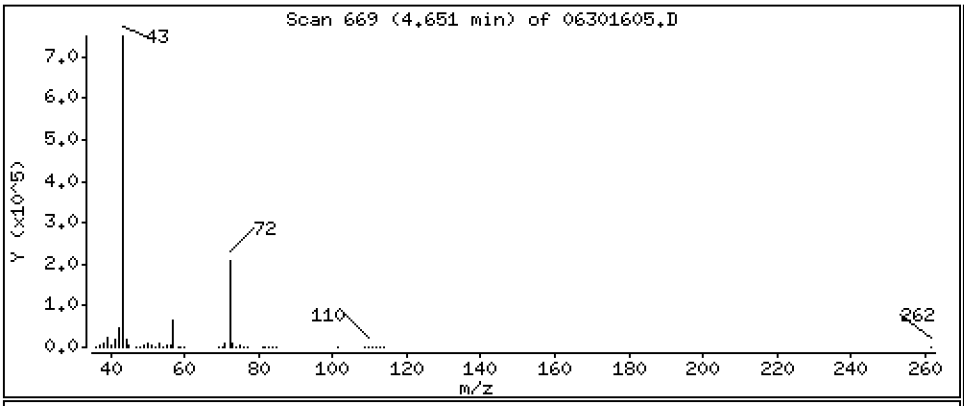
Operator: PB

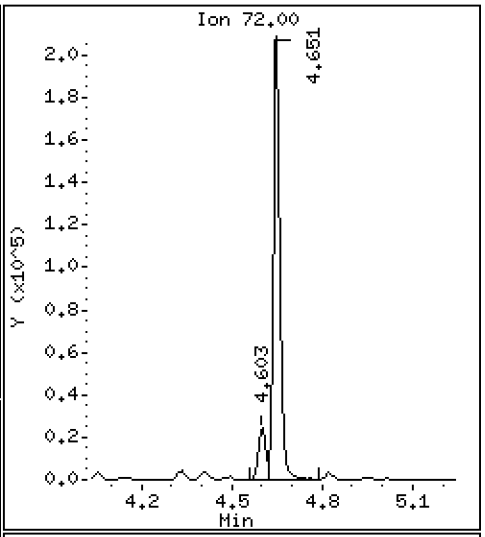
Column phase: RTXVMS

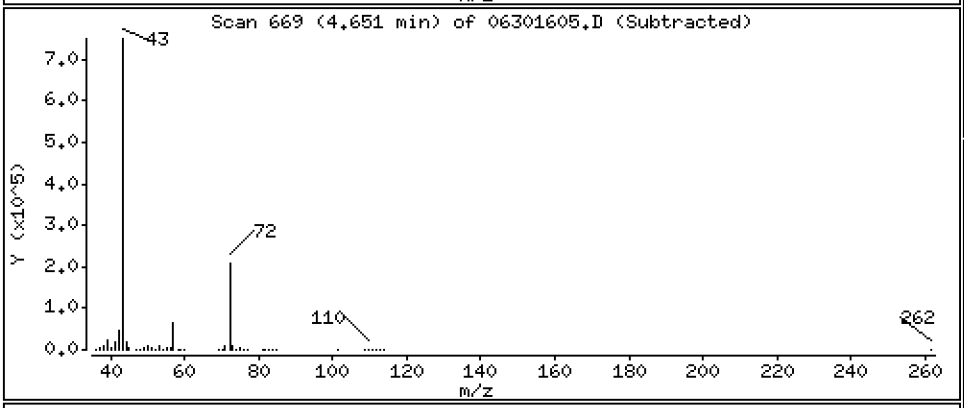
Column diameter: 0.18

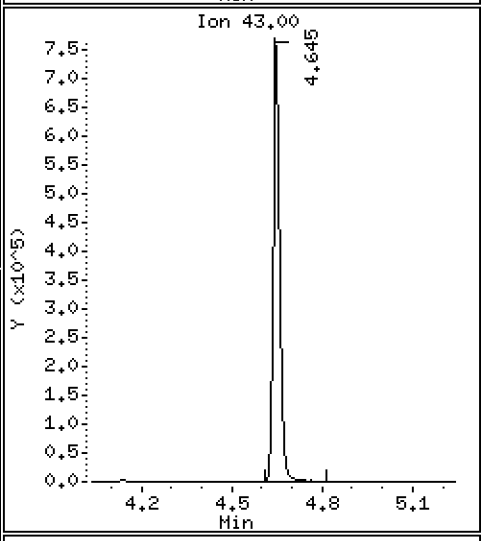
29 2-Butanone

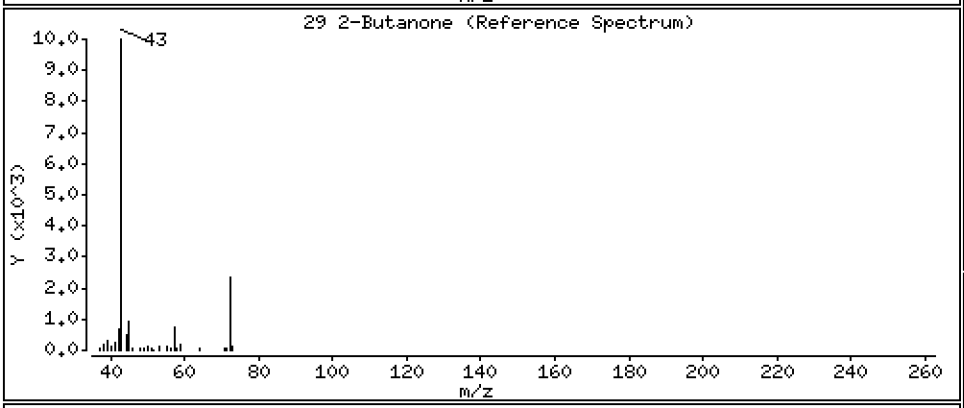
Concentration: 186.98 ug/Kg

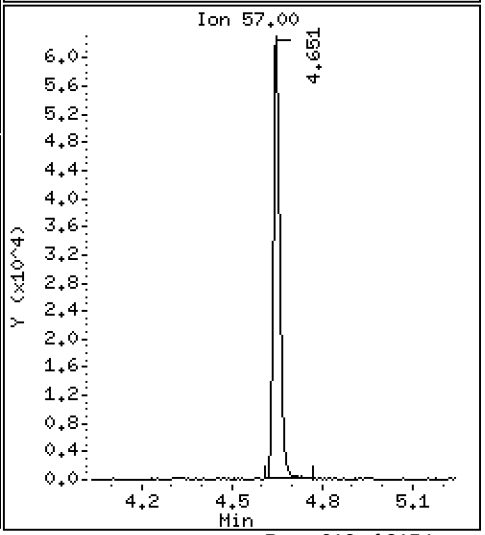


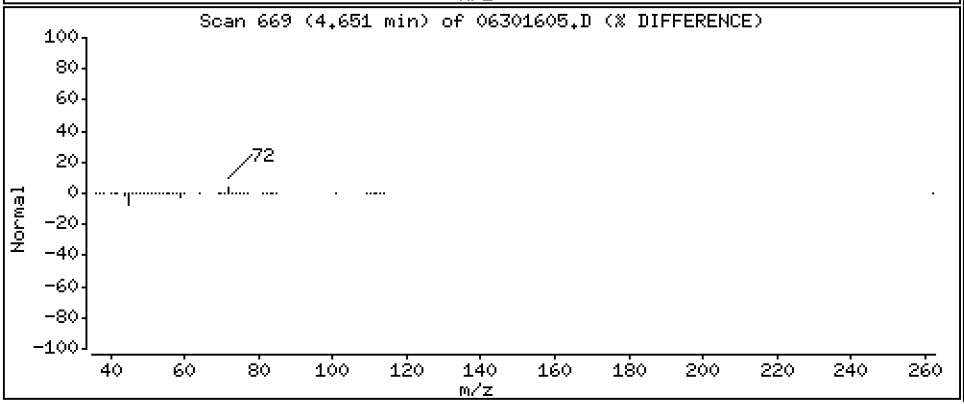












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

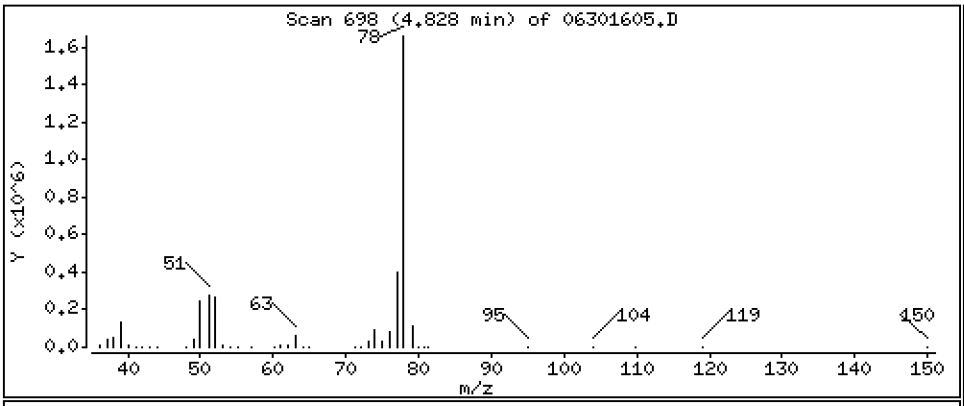
Operator: PB

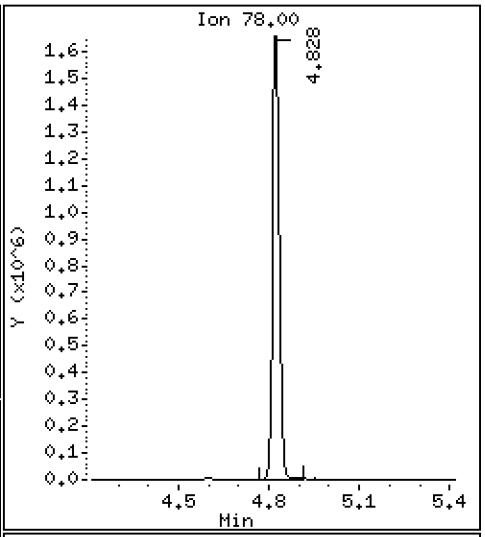
Column phase: RTXVMS

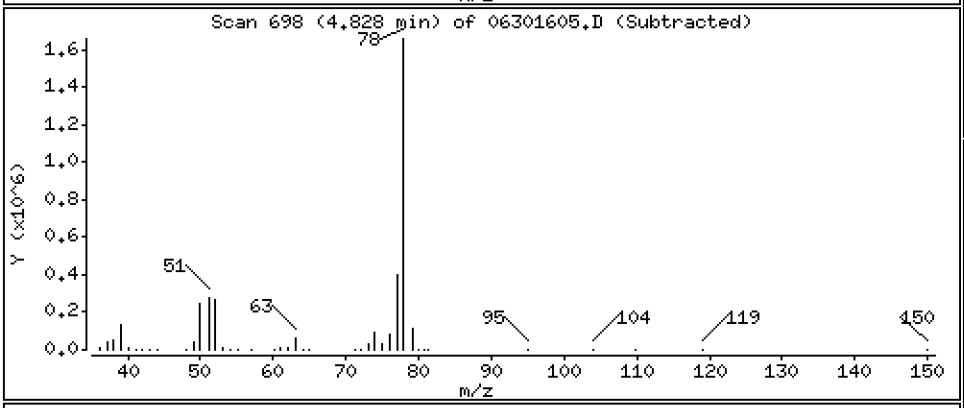
Column diameter: 0.18

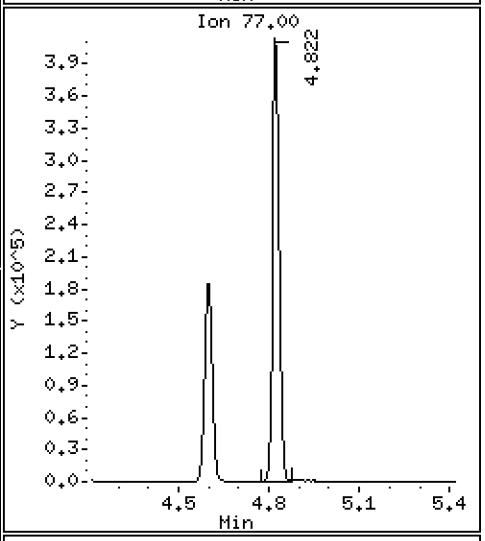
30 Benzene

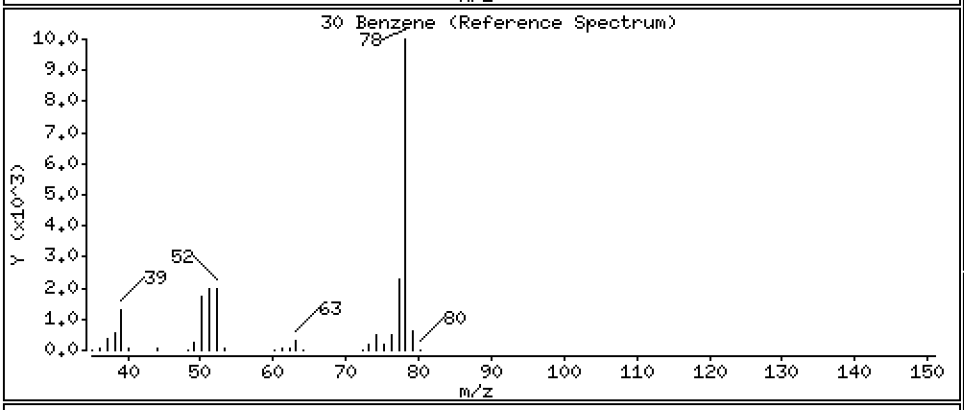
Concentration: 44.605 ug/Kg

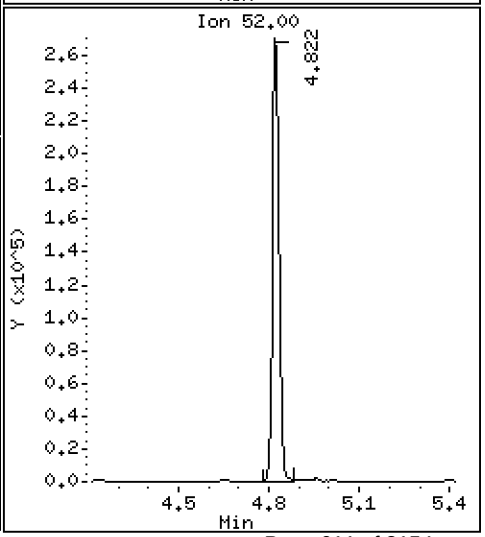


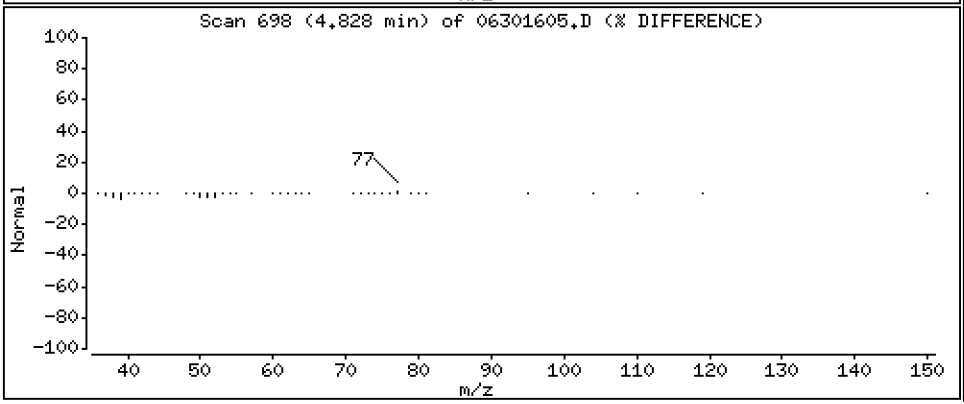












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

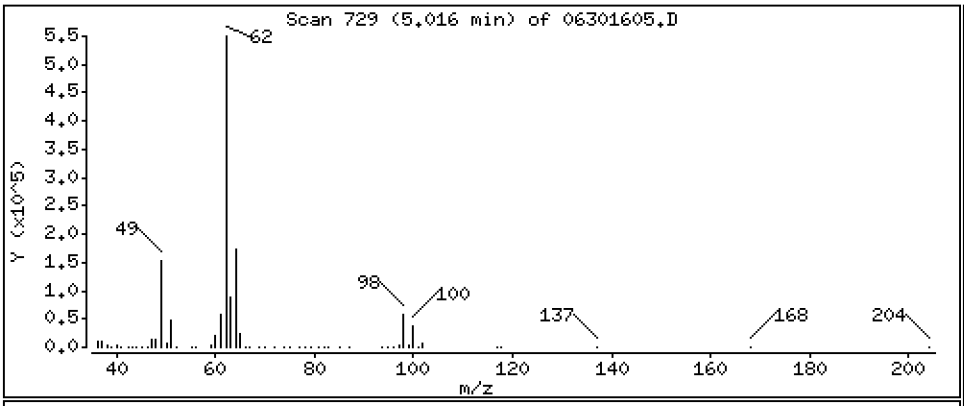
Operator: PB

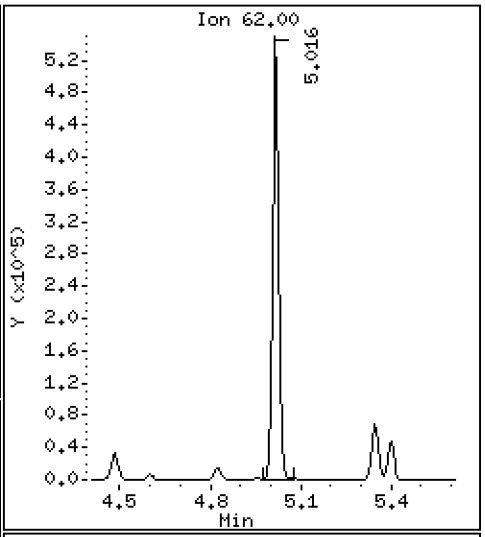
Column phase: RTXVMS

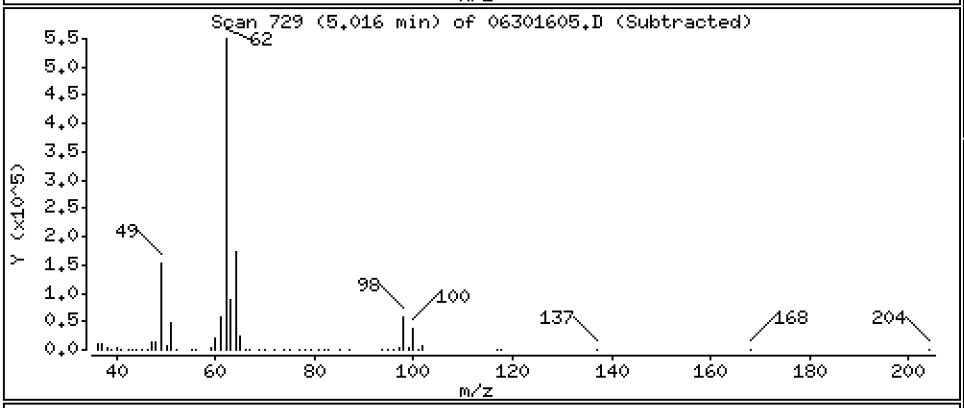
Column diameter: 0.18

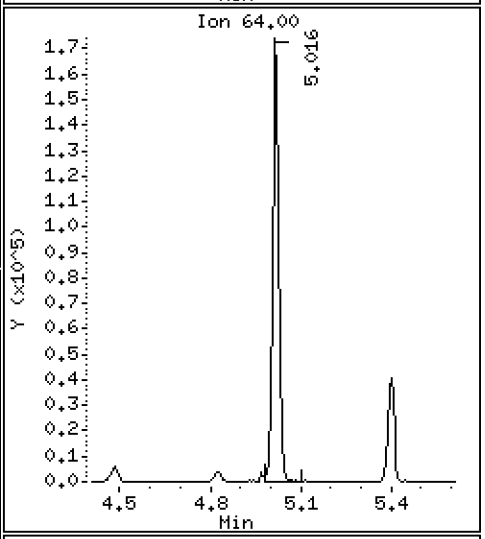
33 1,2-Dichloroethane

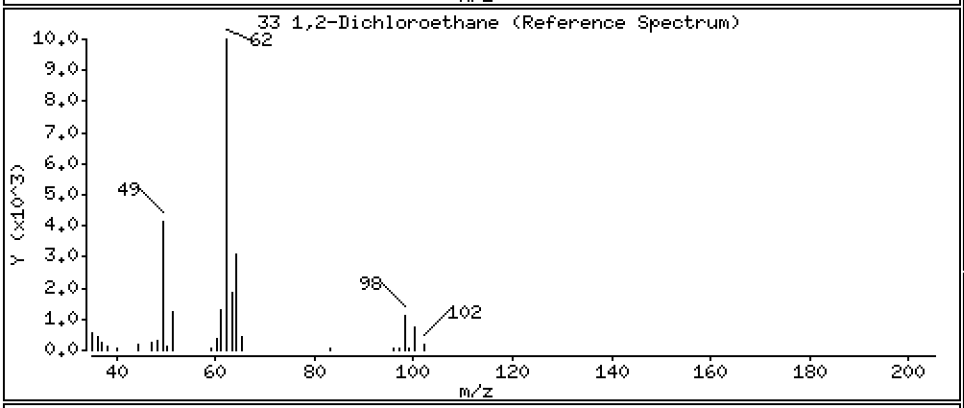
Concentration: 41.542 ug/Kg

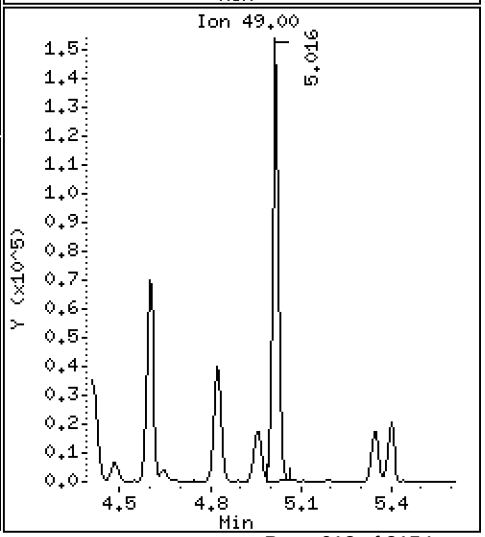


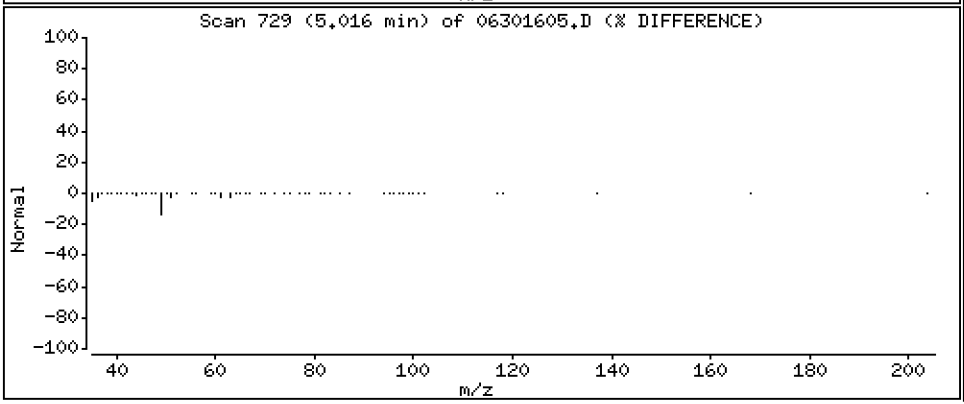












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

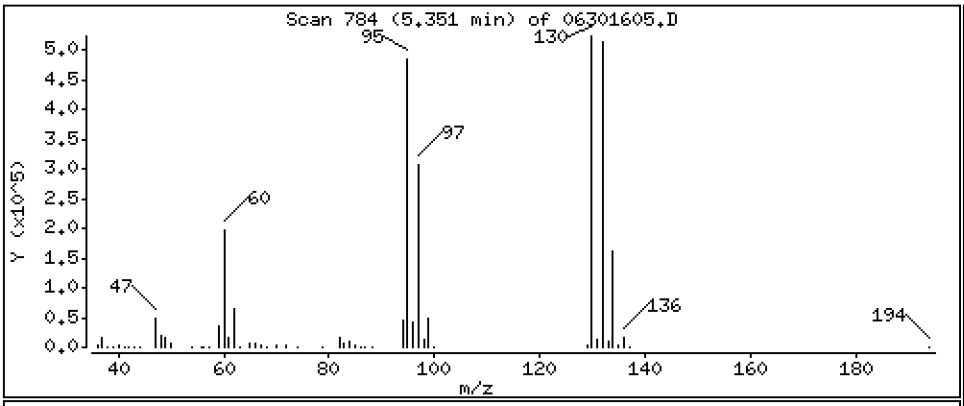
Operator: PB

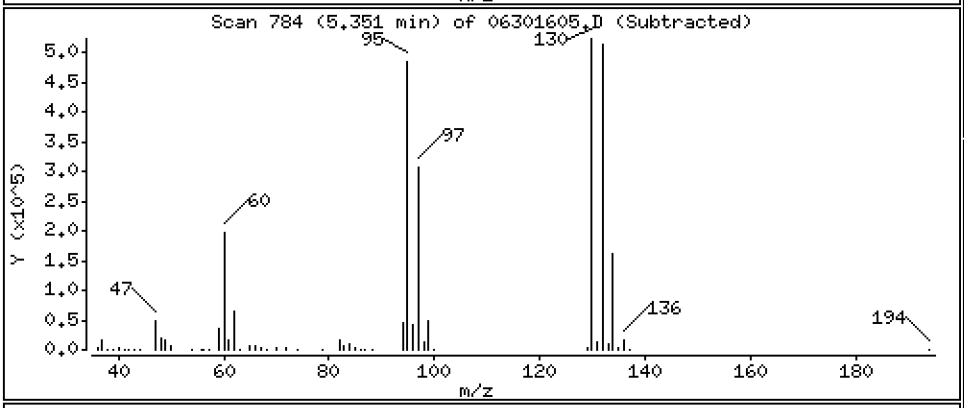
Column phase: RTXVMS

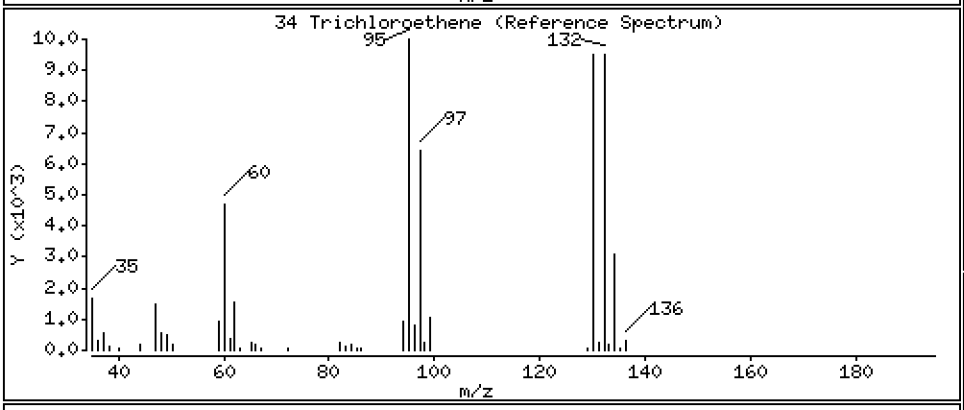
Column diameter: 0.18

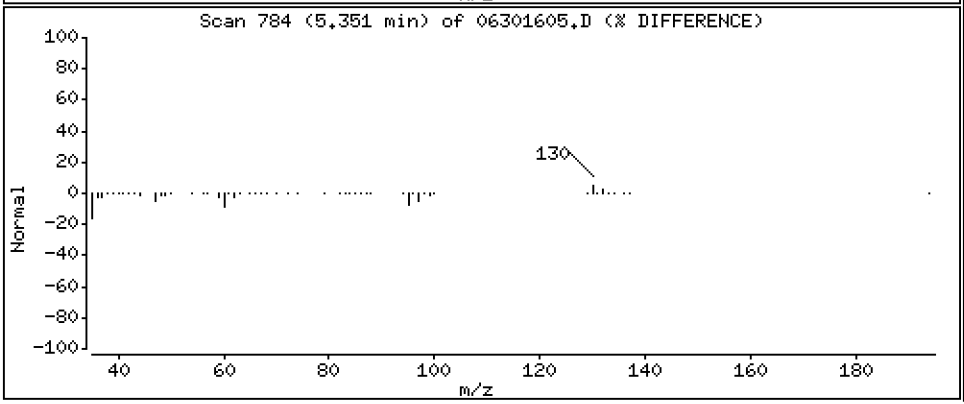
34 Trichloroethene

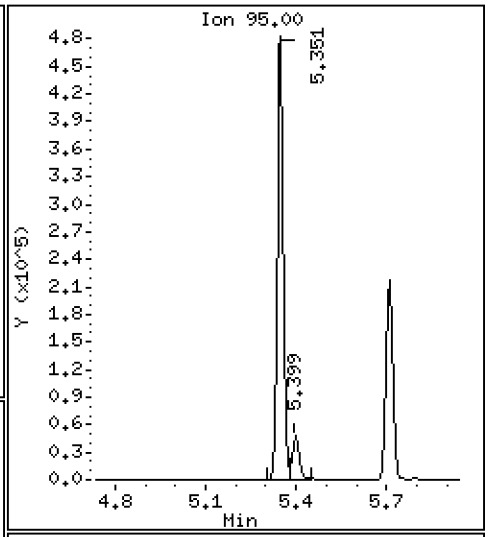
Concentration: 45.977 ug/Kg

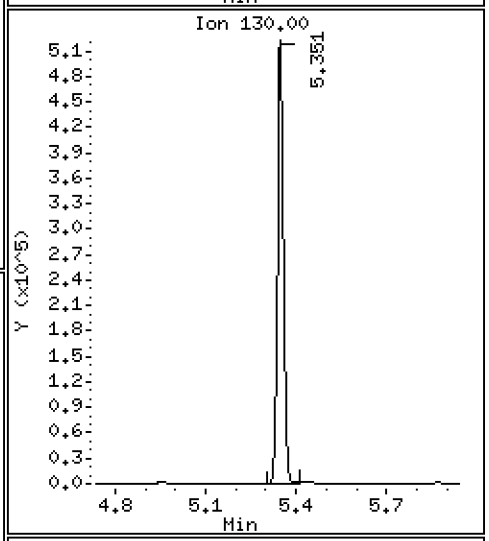


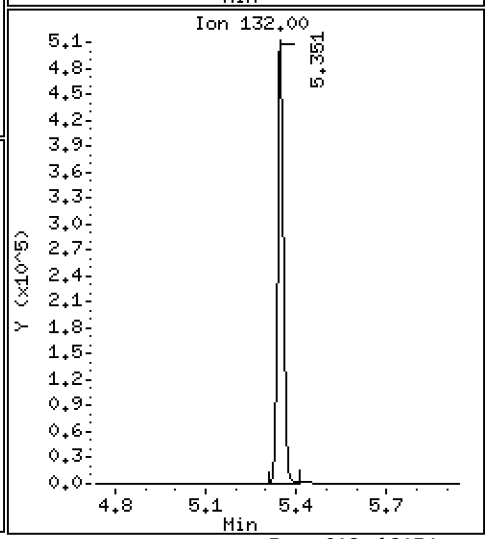












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

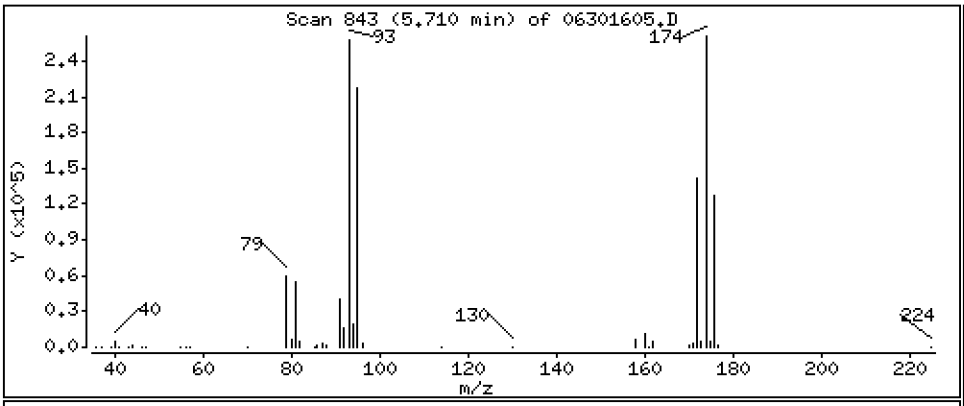
Operator: PB

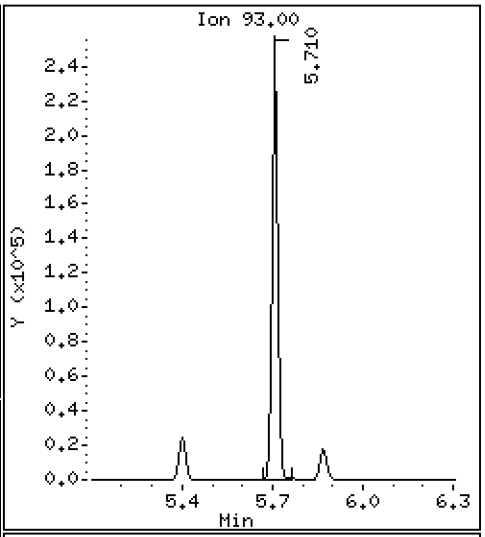
Column phase: RTXVMS

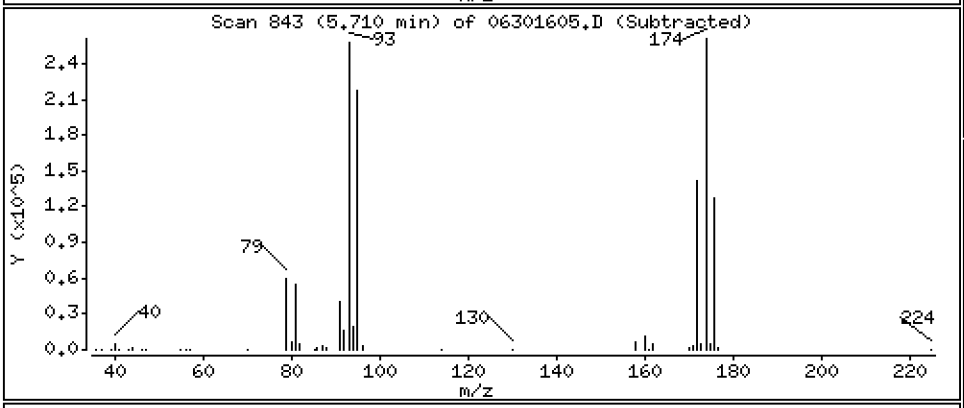
Column diameter: 0.18

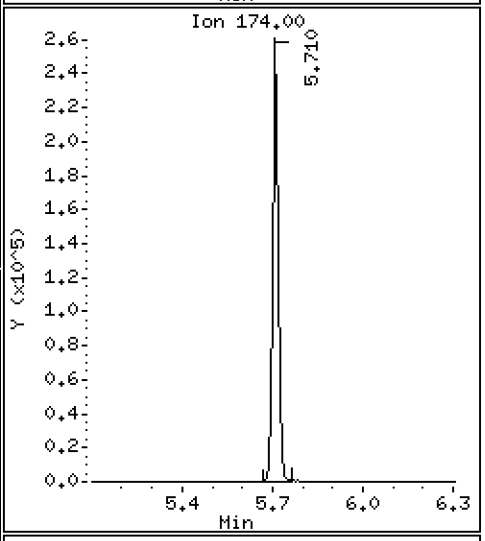
37 Dibromomethane

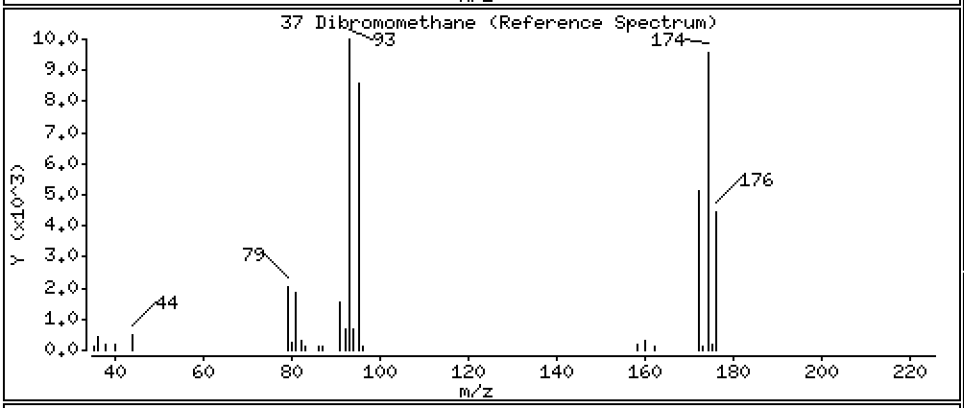
Concentration: 44.475 ug/Kg

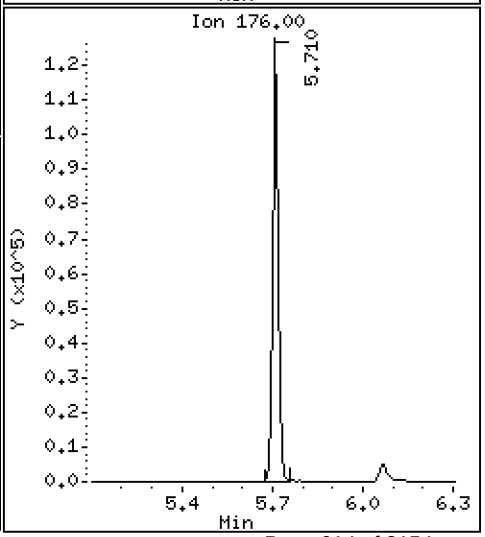


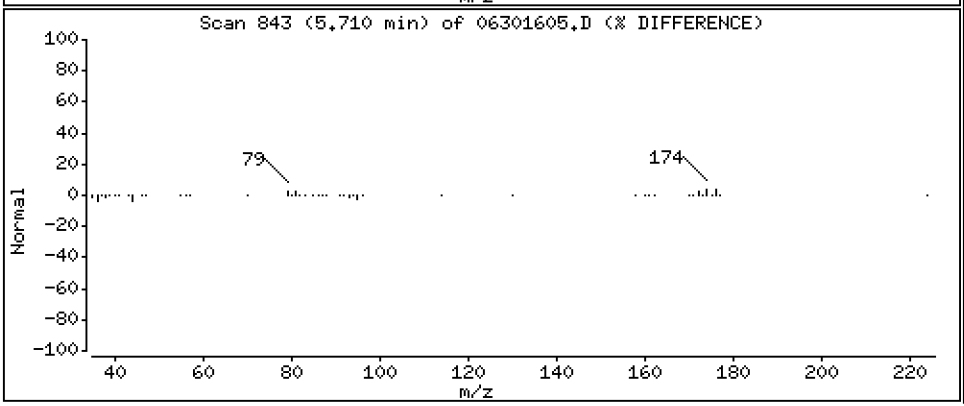












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

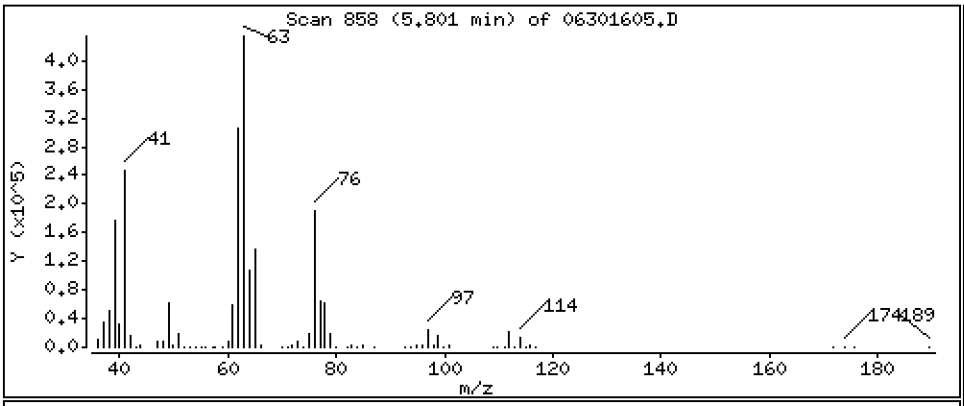
Operator: PB

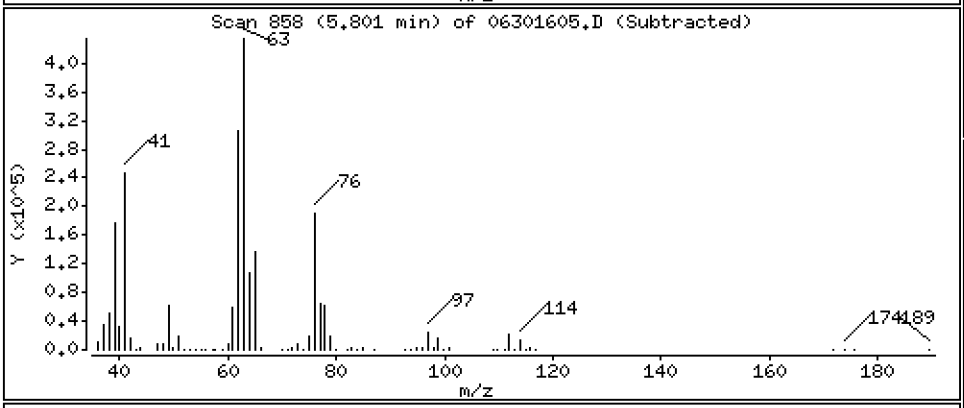
Column phase: RTXVMS

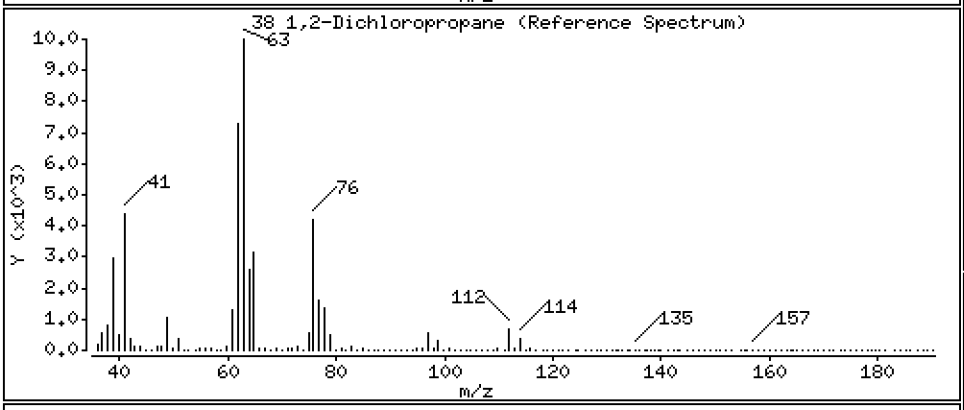
Column diameter: 0.18

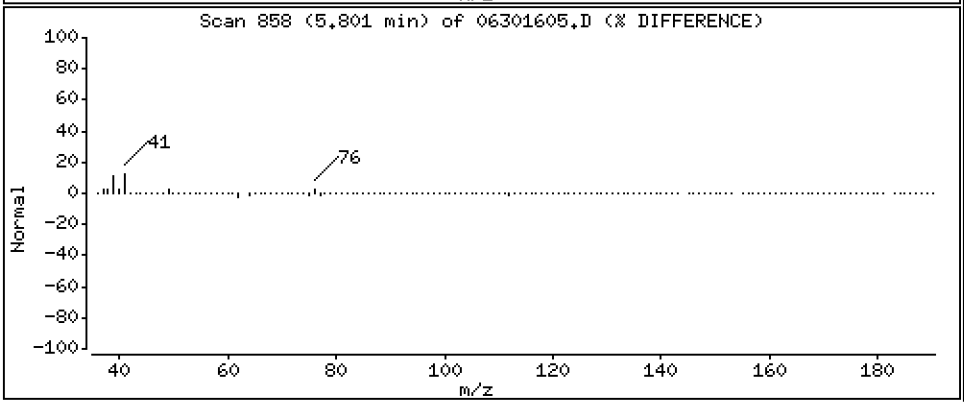
38 1,2-Dichloropropane

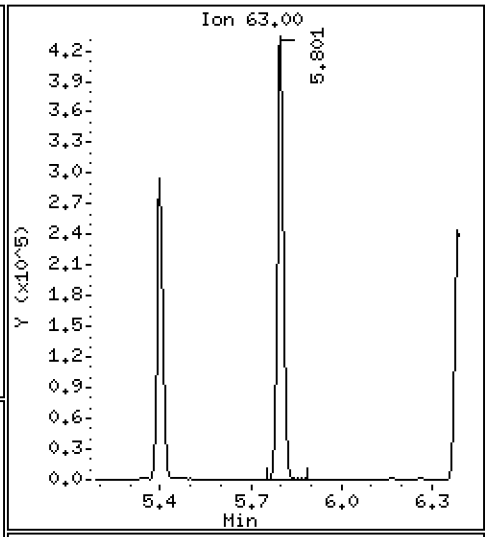
Concentration: 42.568 ug/Kg

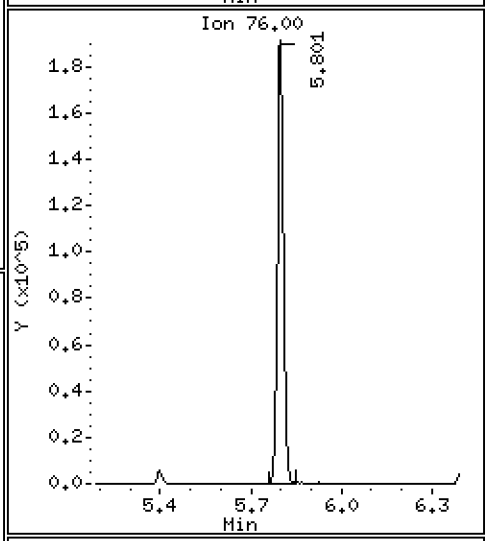


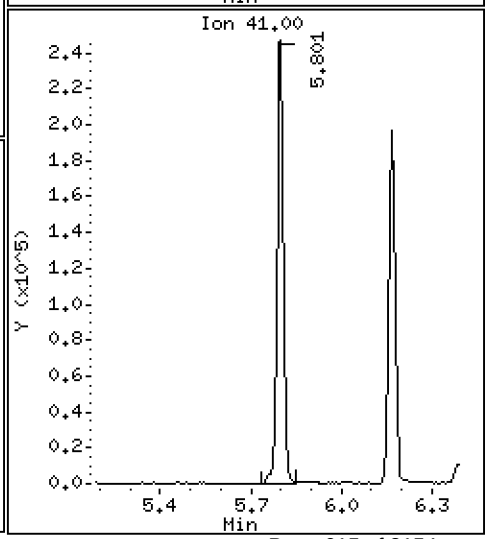












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

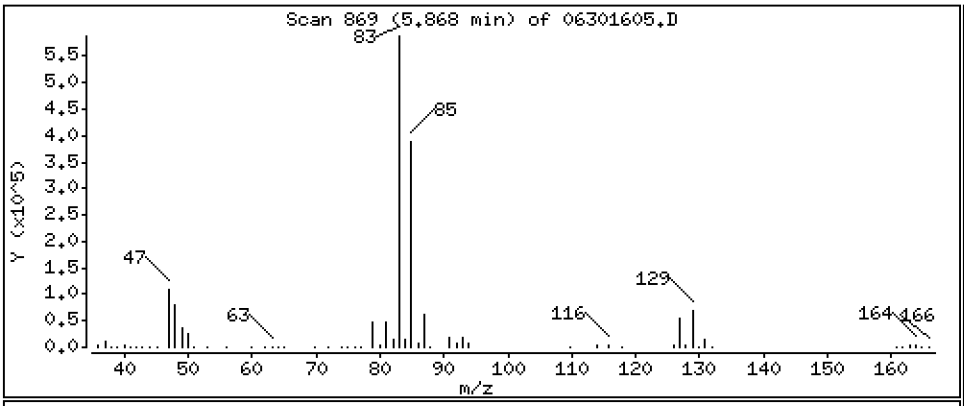
Operator: PB

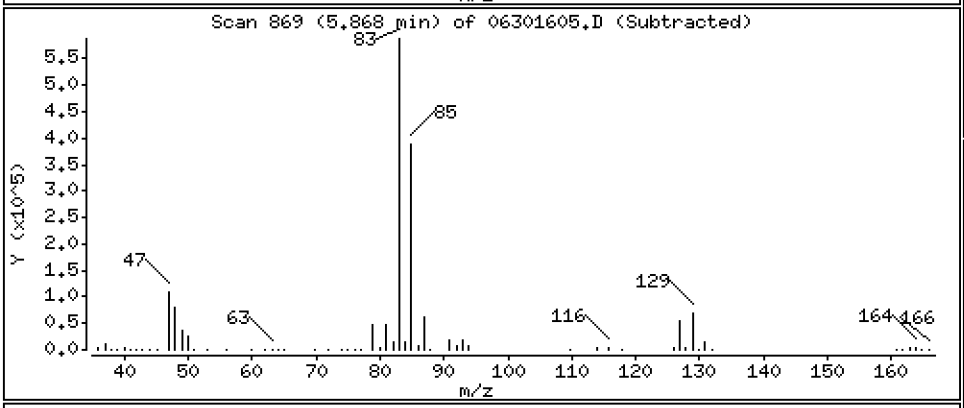
Column phase: RTXVMS

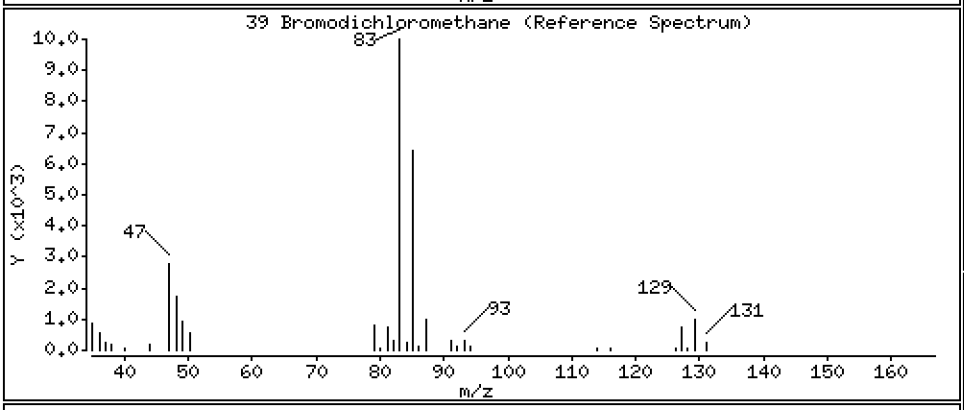
Column diameter: 0.18

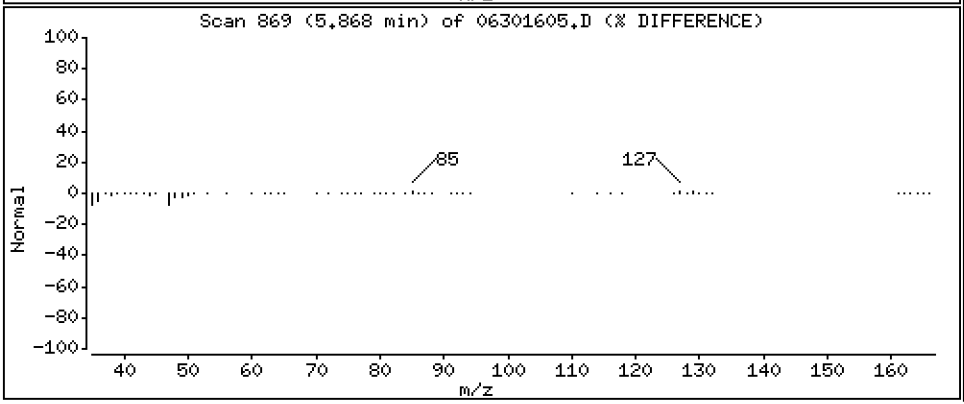
39 Bromodichloromethane

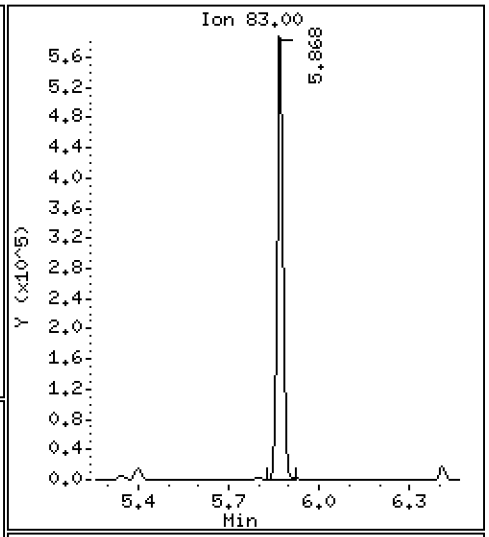
Concentration: 46.619 ug/Kg

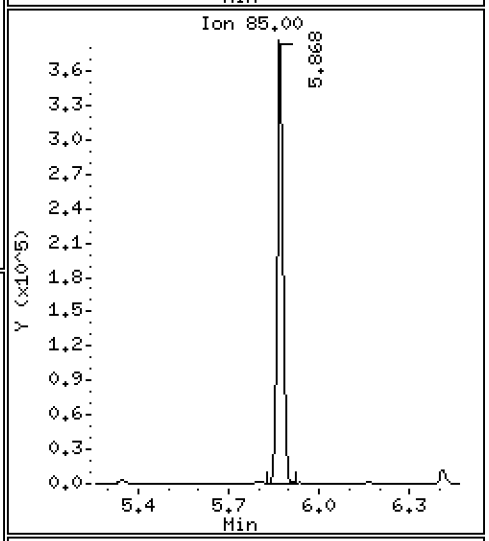


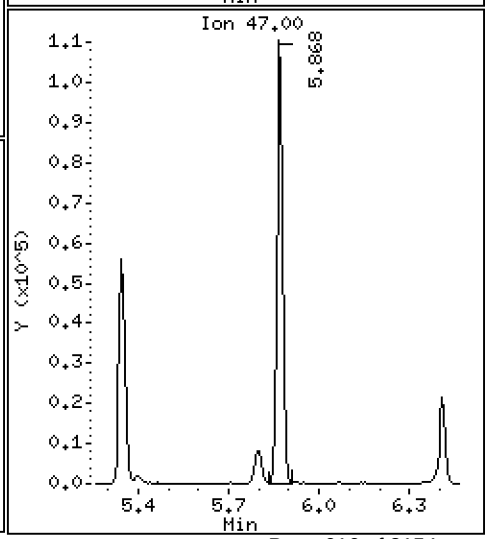












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

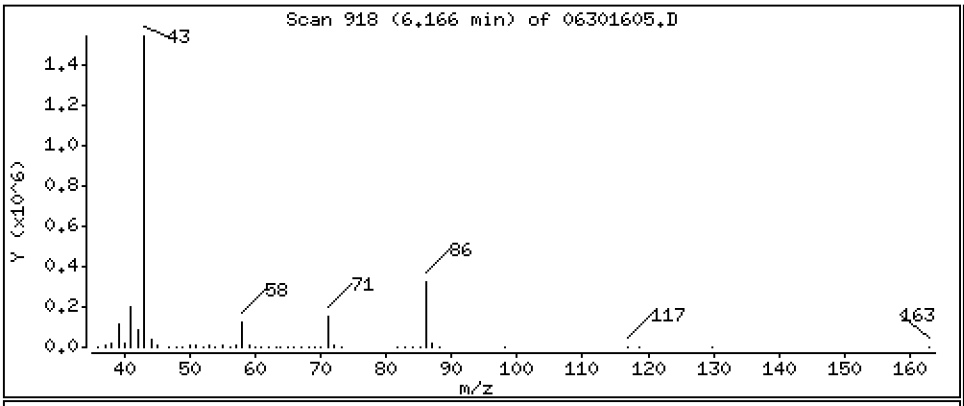
Operator: PB

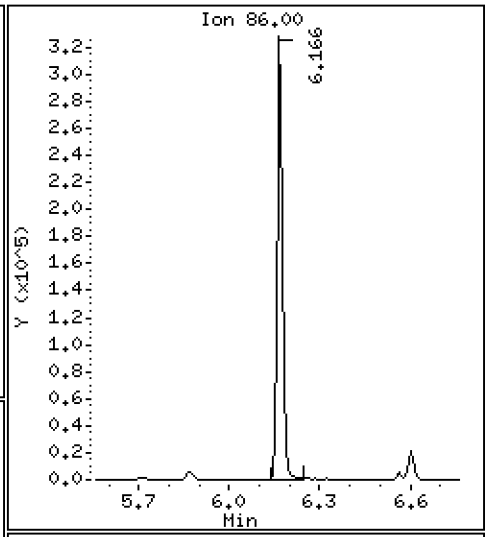
Column phase: RTXVMS

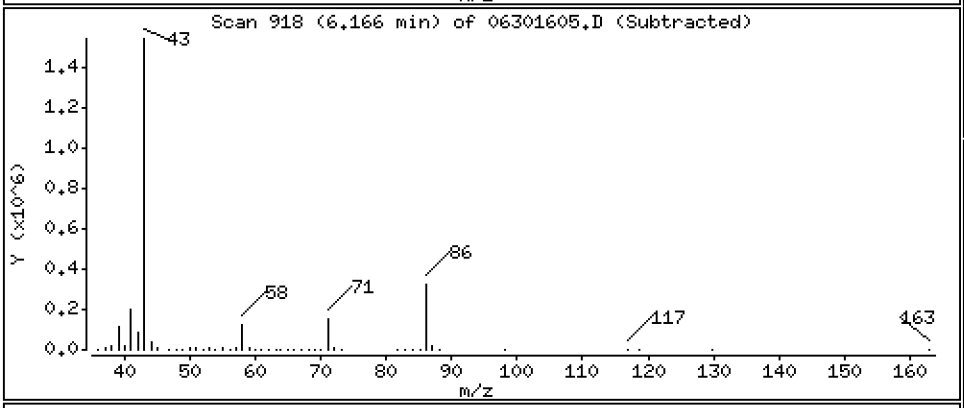
Column diameter: 0.18

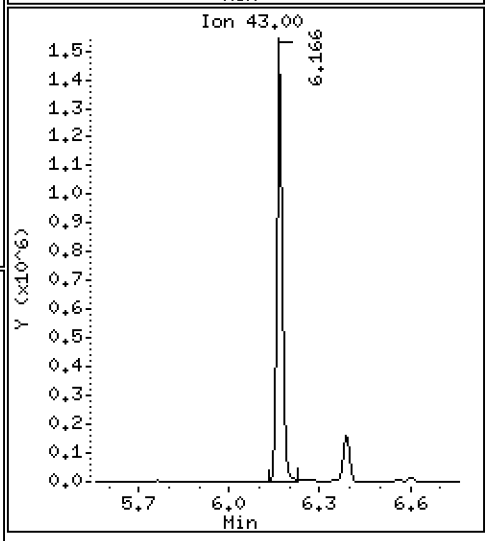
172 2-Pentanone

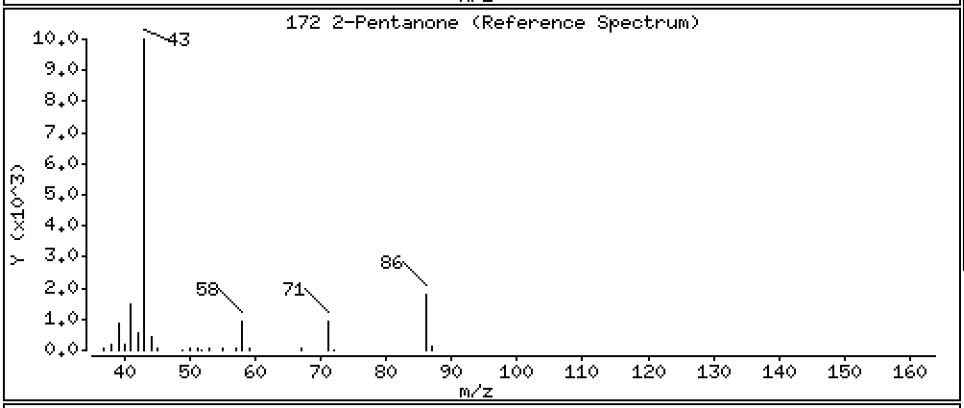
Concentration: 201.66 ug/Kg

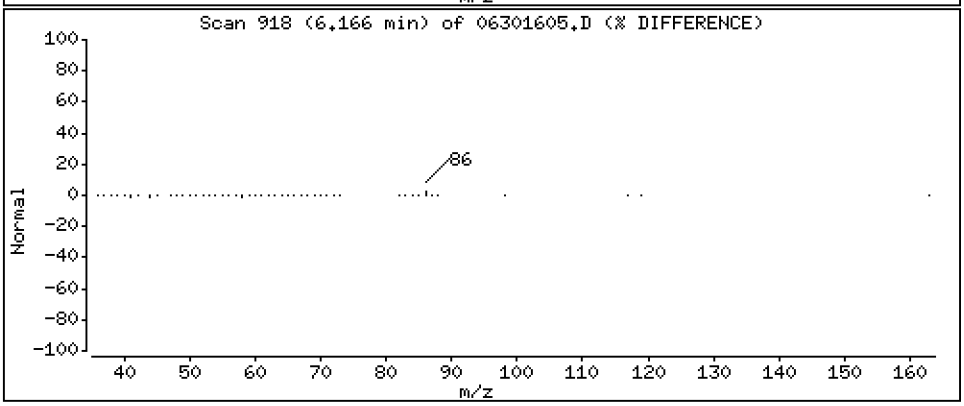












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

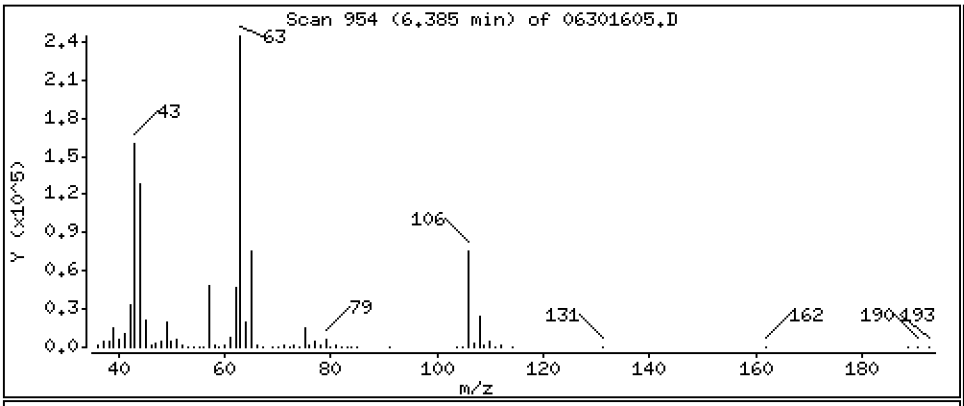
Operator: PB

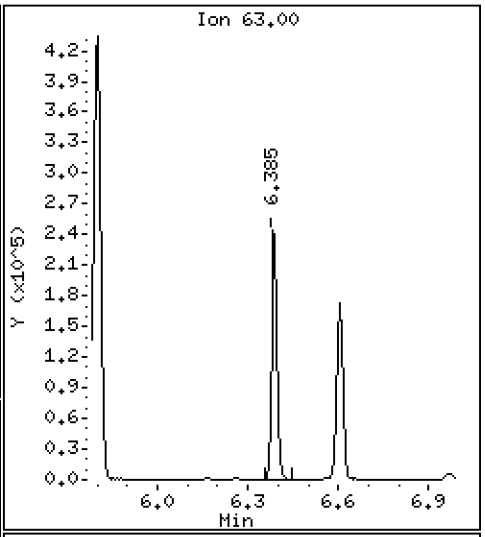
Column phase: RTXVMS

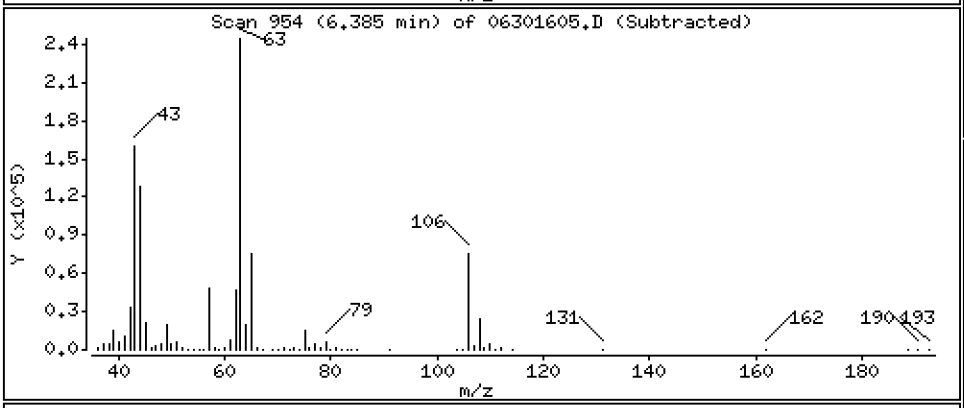
Column diameter: 0.18

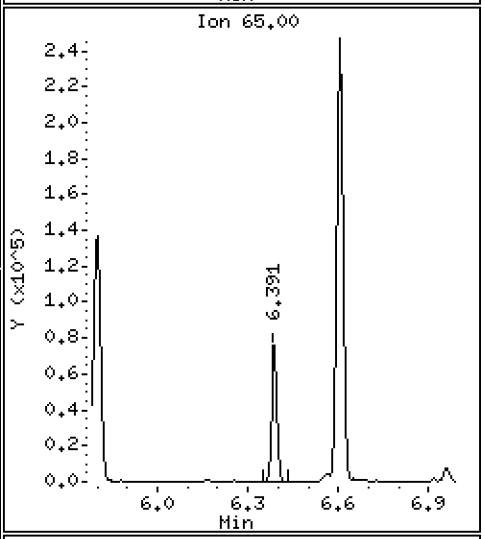
40 2-Chloroethyl Vinyl Ether

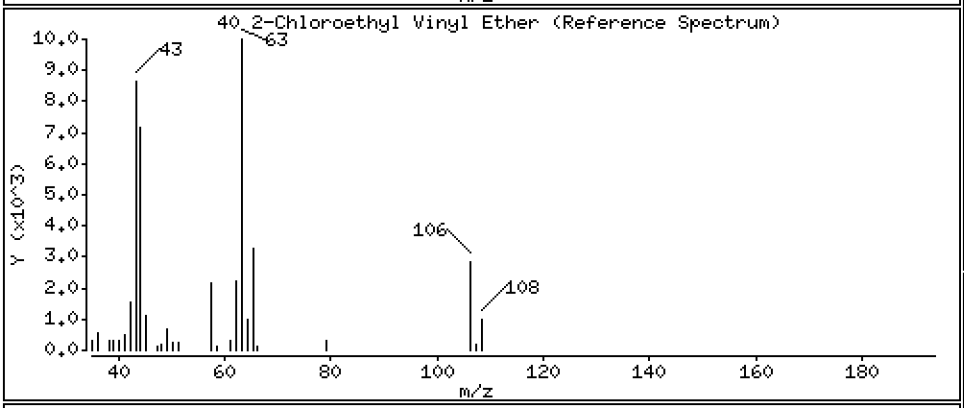
Concentration: 50.486 ug/Kg

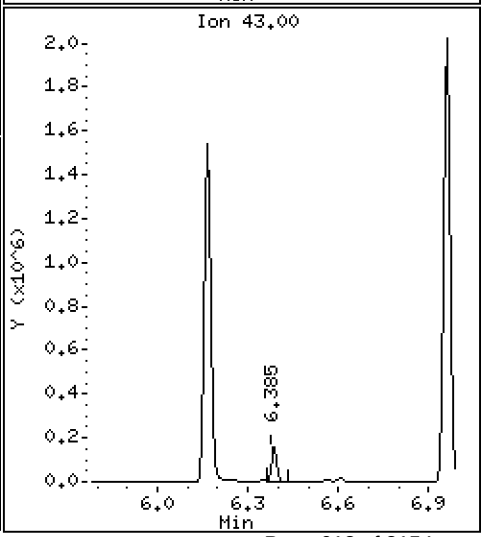


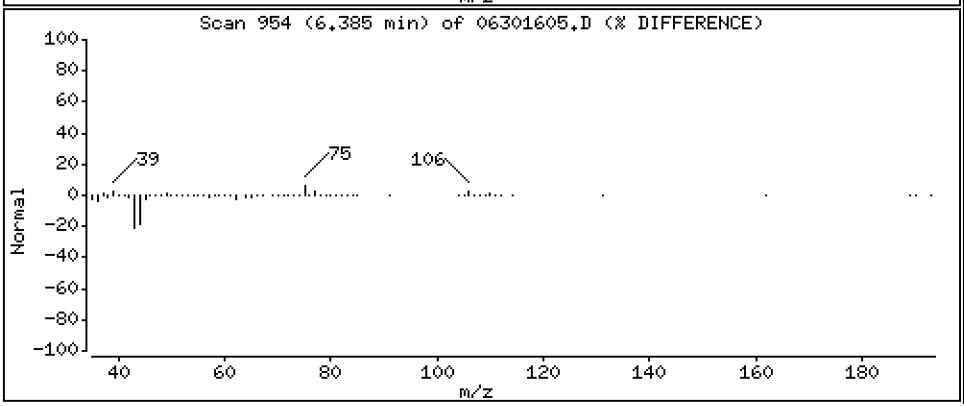












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

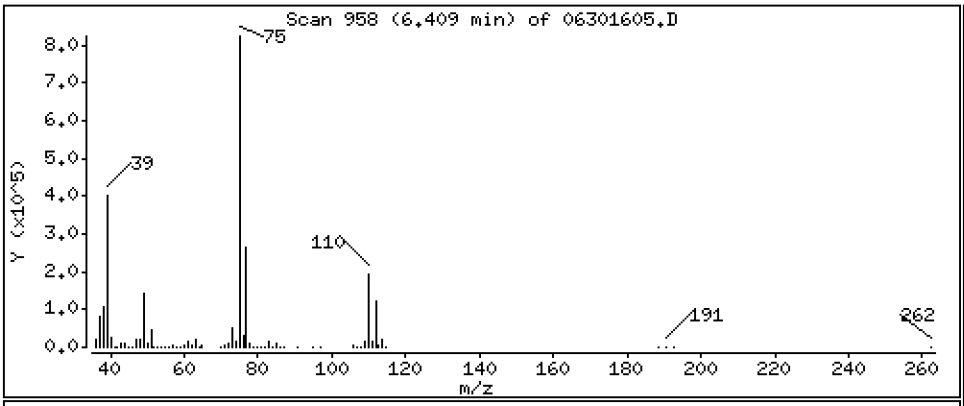
Operator: PB

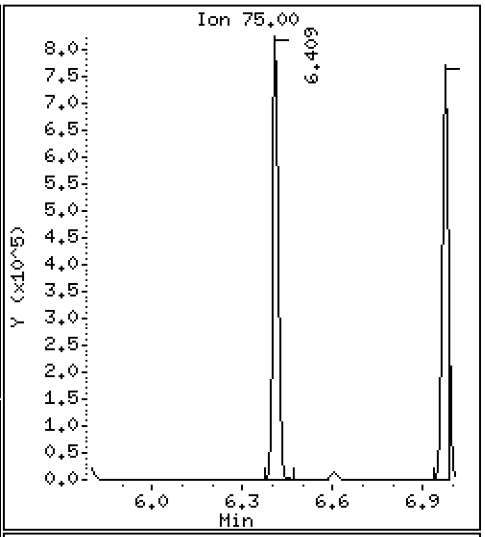
Column phase: RTXVMS

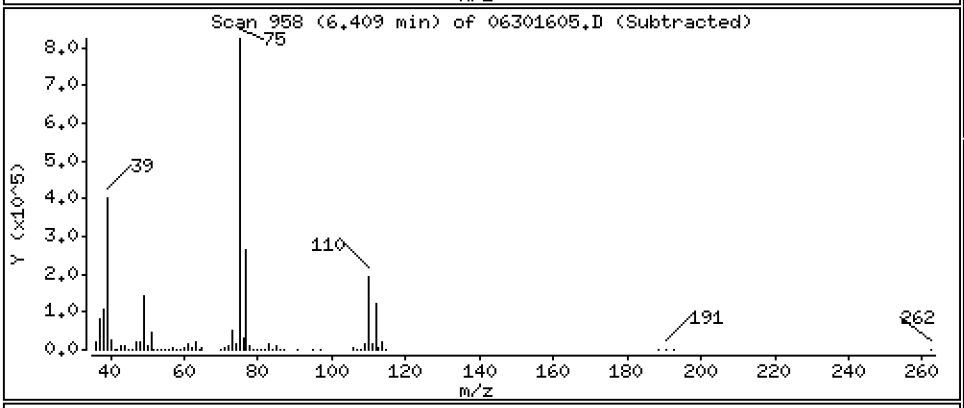
Column diameter: 0.18

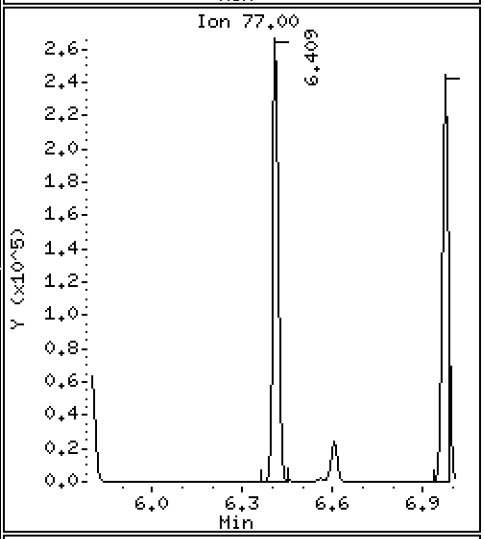
41 Cis 1,3-dichloropropene

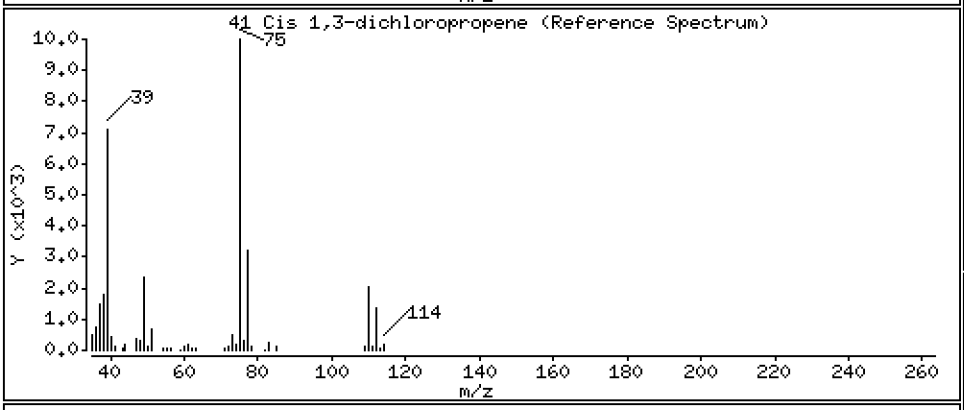
Concentration: 45.396 ug/Kg

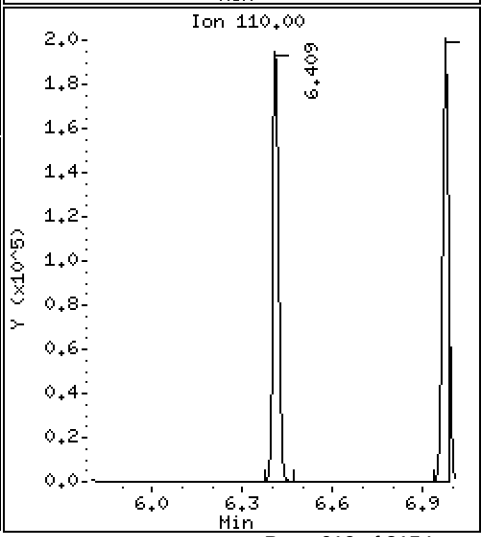


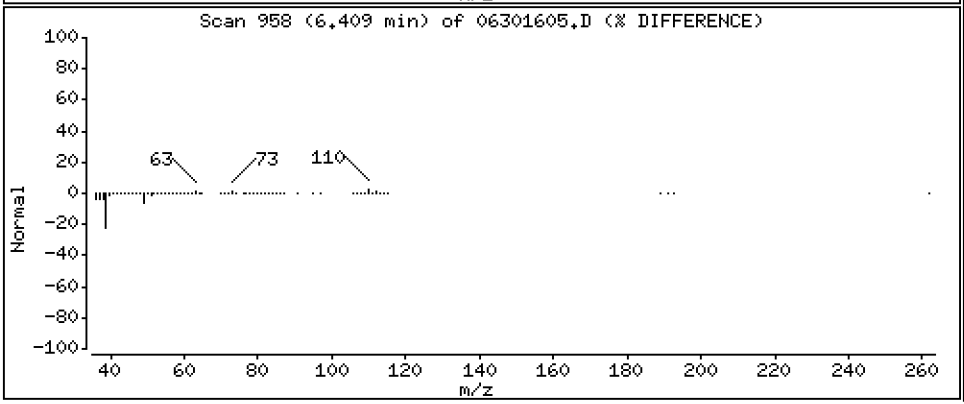












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

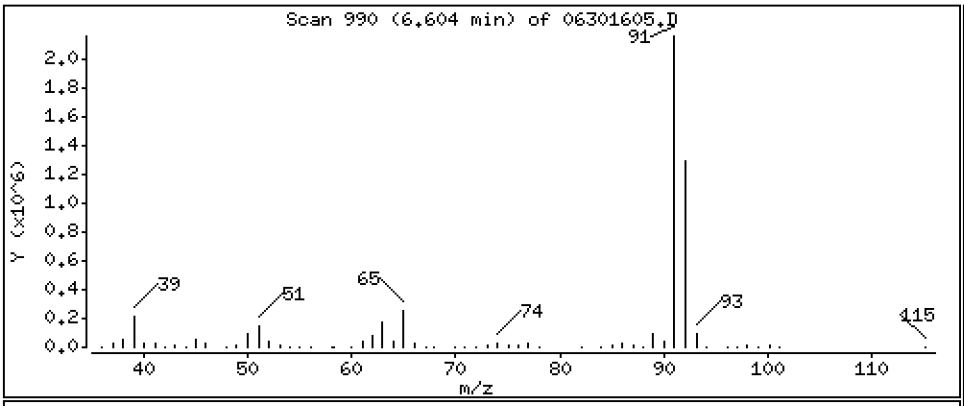
Operator: PB

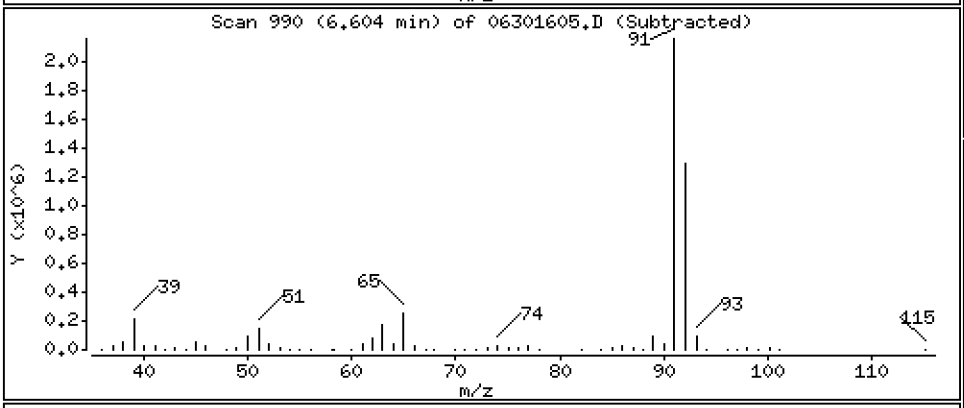
Column phase: RTXVMS

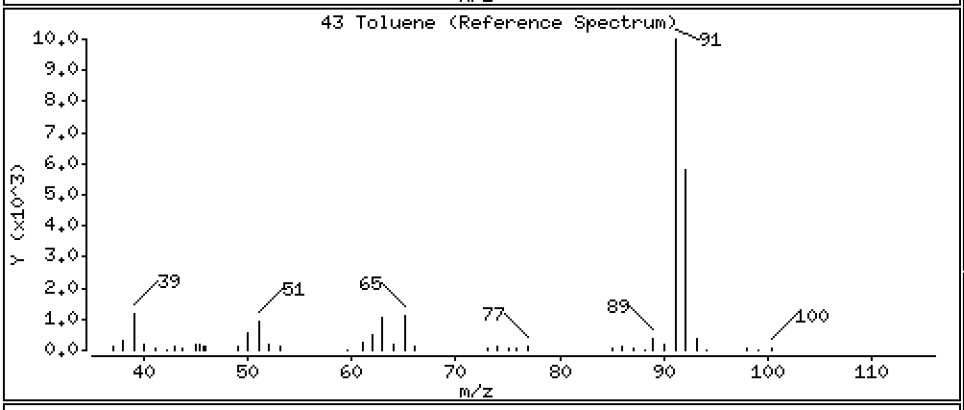
Column diameter: 0.18

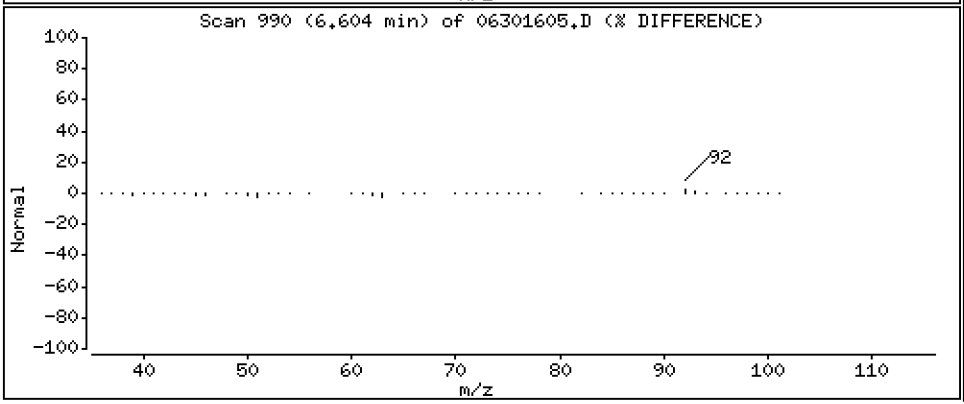
43 Toluene

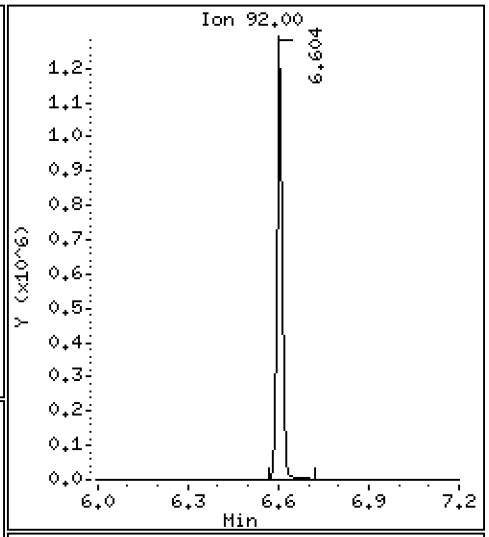
Concentration: 44.919 ug/Kg

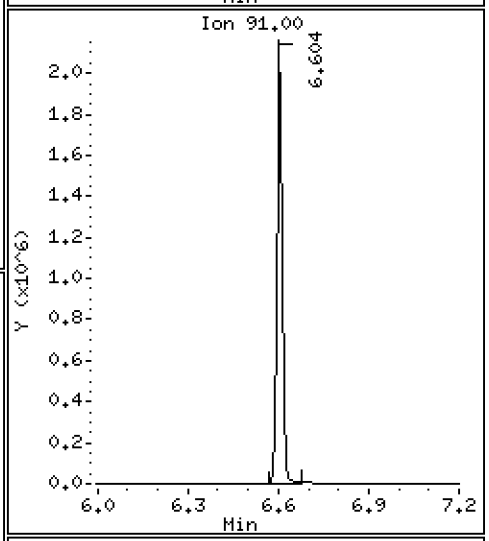


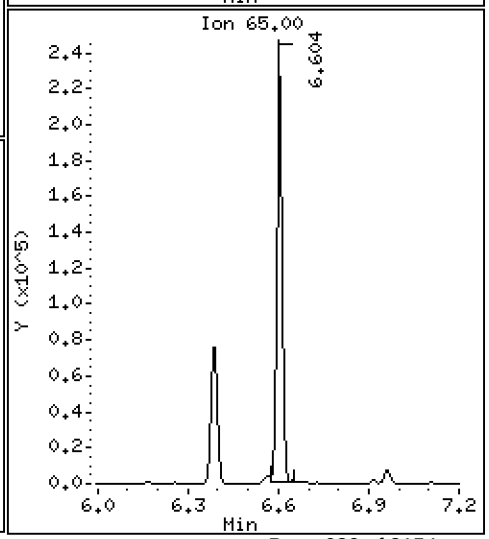












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

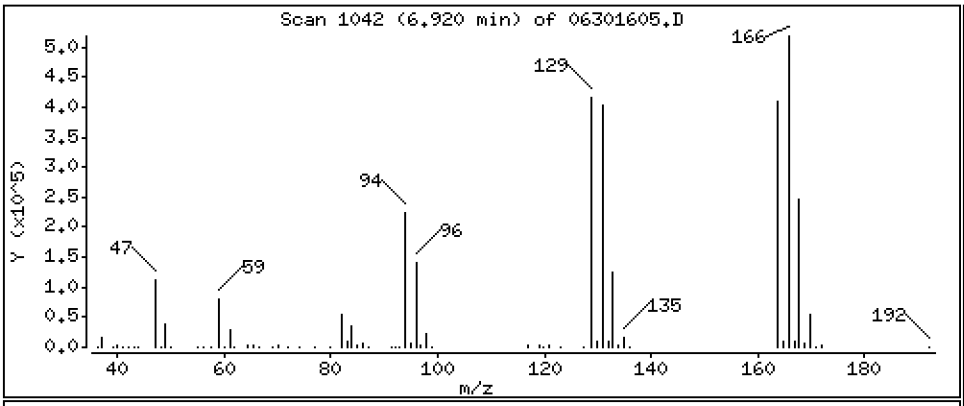
Operator: PB

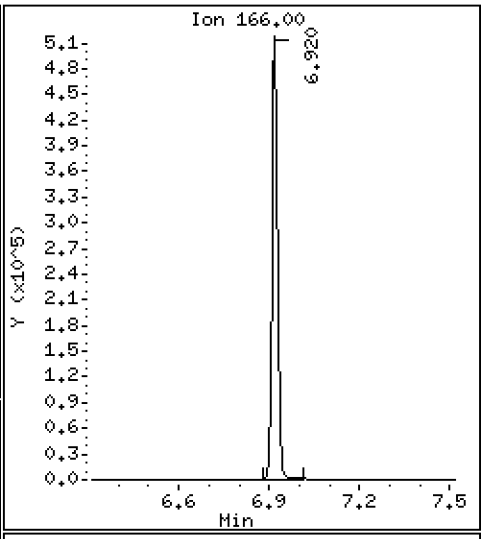
Column phase: RTXVMS

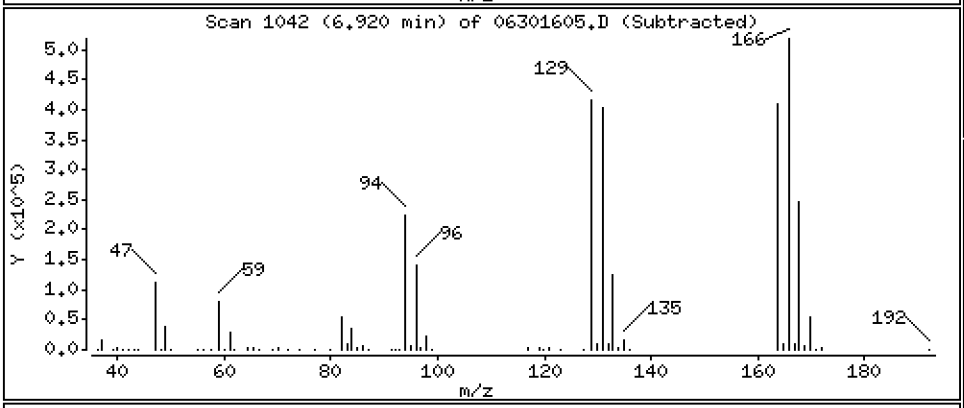
Column diameter: 0.18

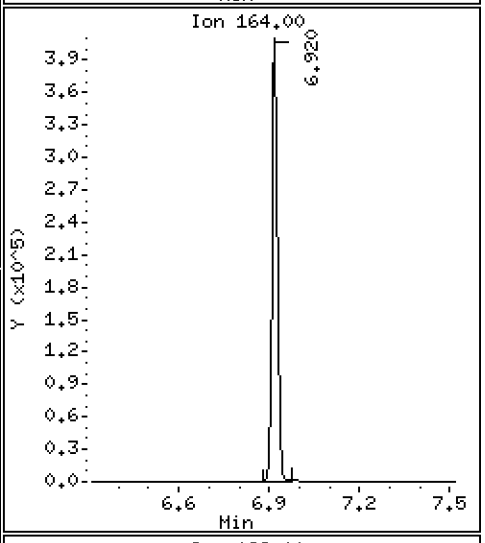
44 Tetrachloroethene

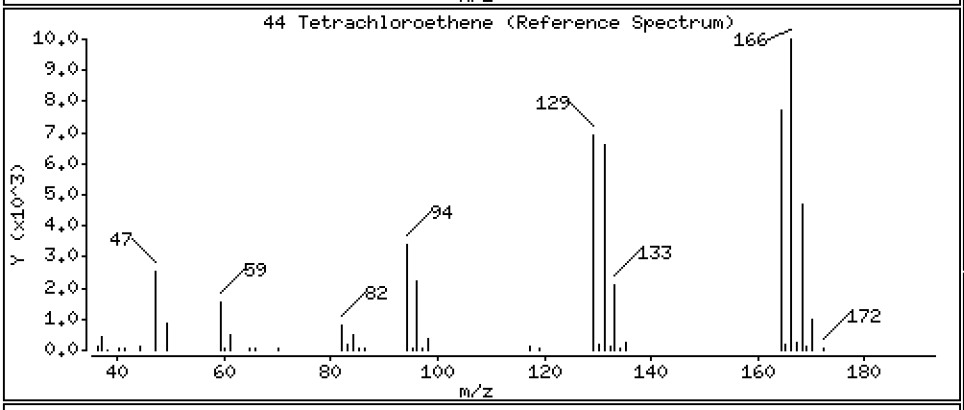
Concentration: 49.574 ug/Kg

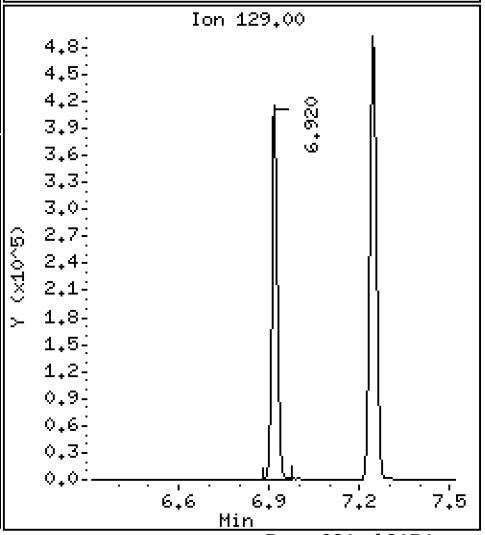


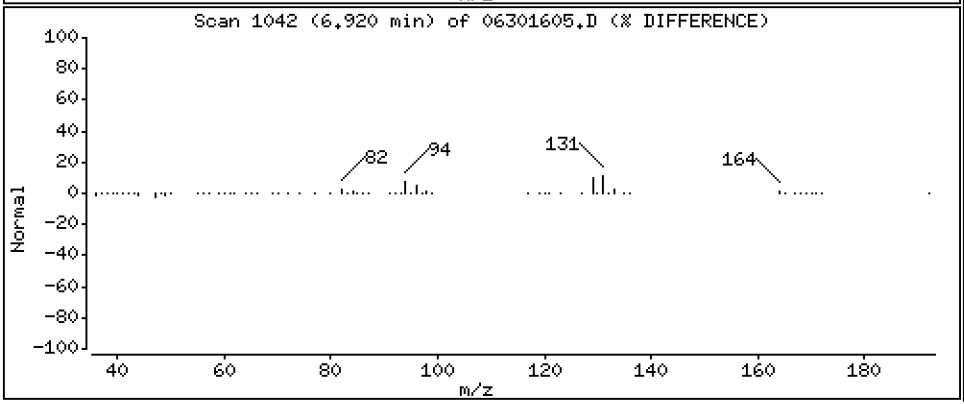












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

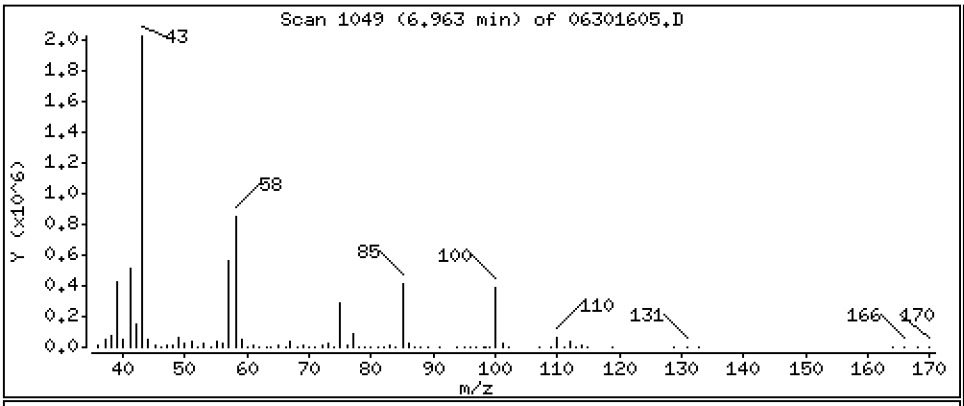
Operator: PB

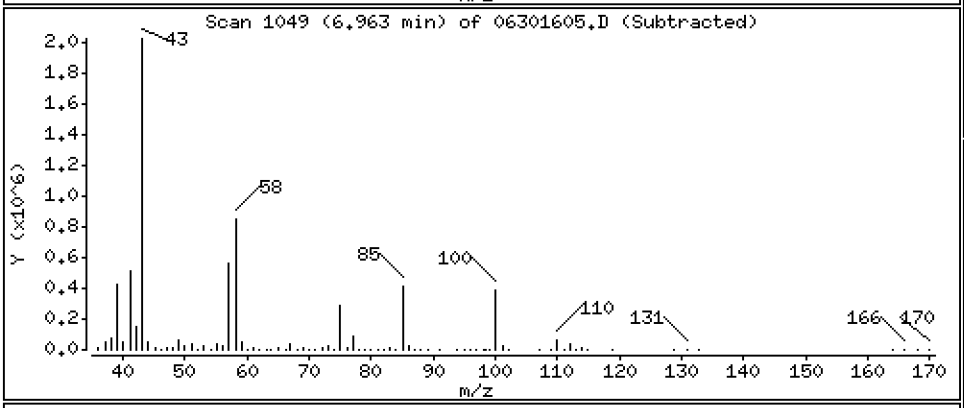
Column phase: RTXVMS

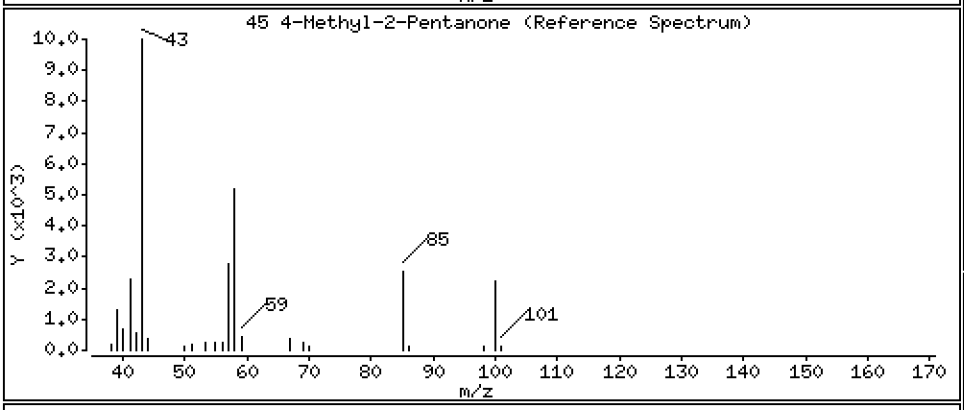
Column diameter: 0.18

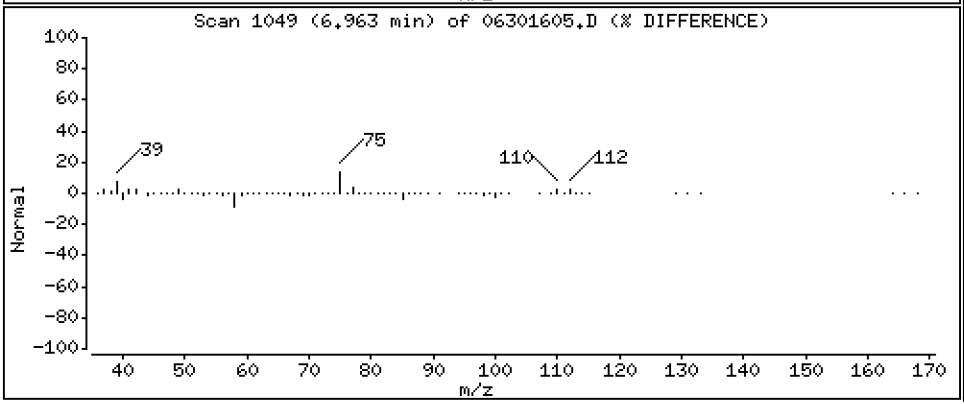
45 4-Methyl-2-Pentanone

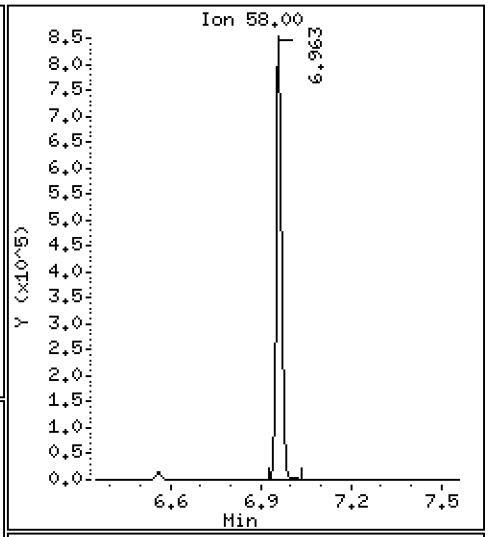
Concentration: 194.00 ug/Kg

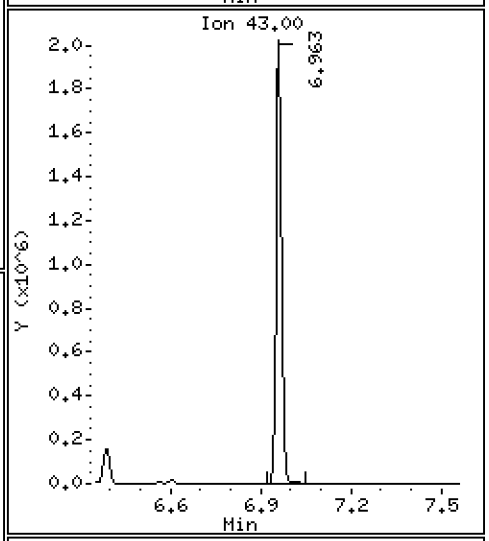


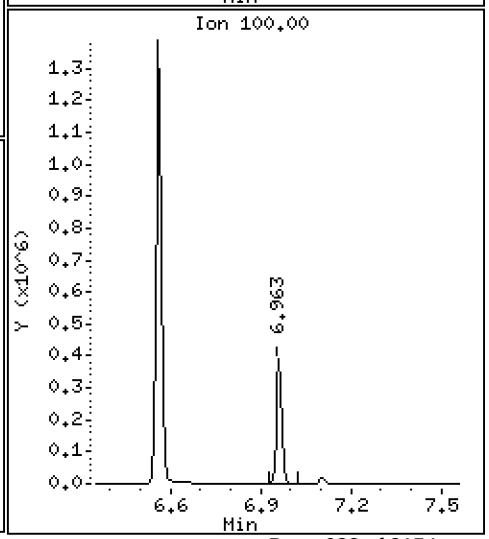












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

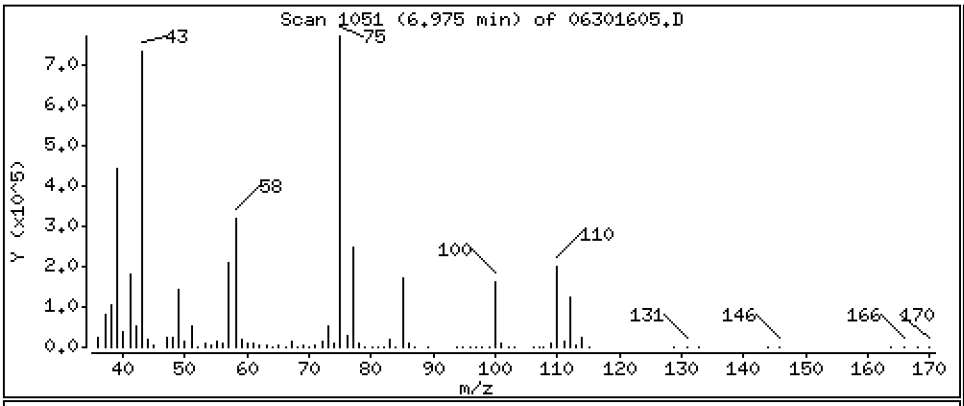
Operator: PB

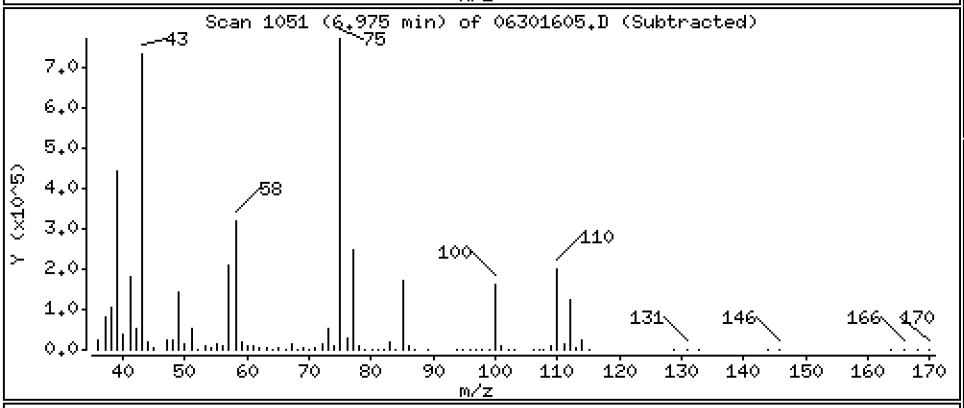
Column phase: RTXVMS

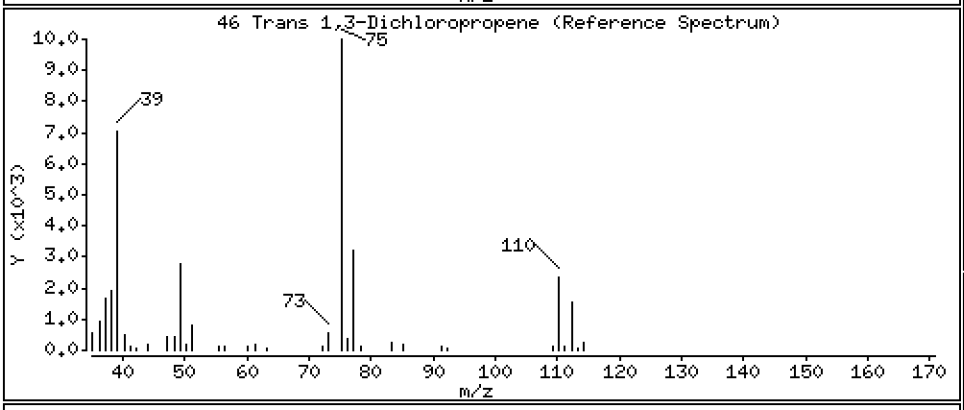
Column diameter: 0.18

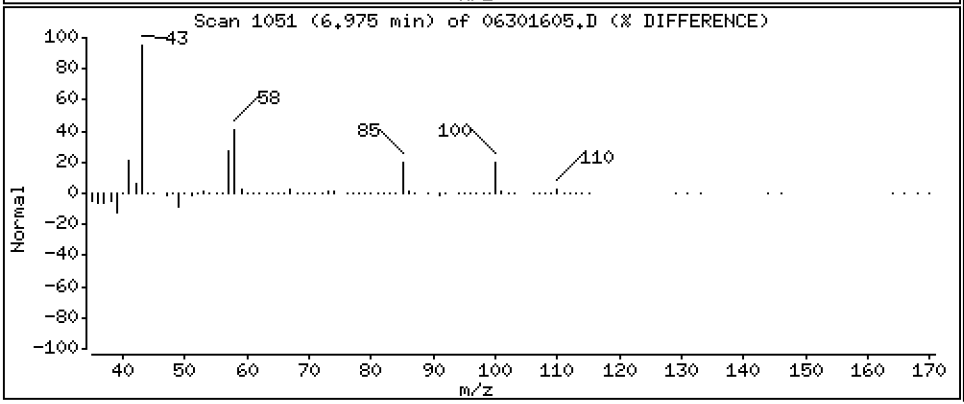
46 Trans 1,3-Dichloropropene

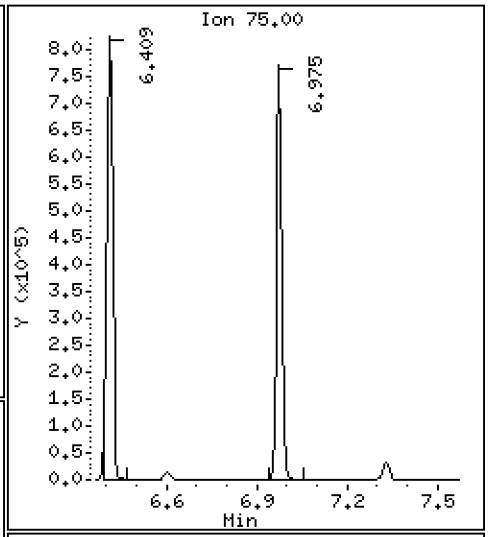
Concentration: 46.070 ug/Kg

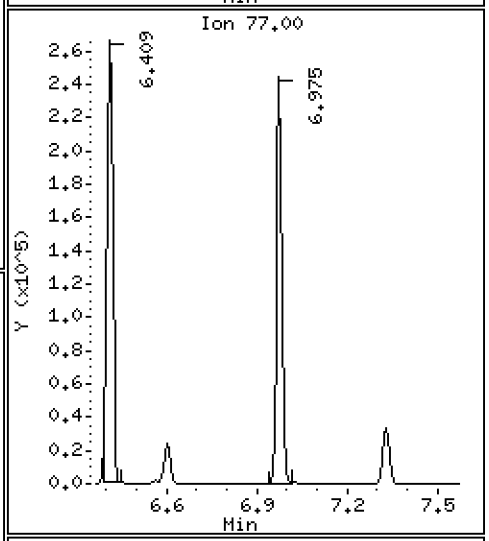


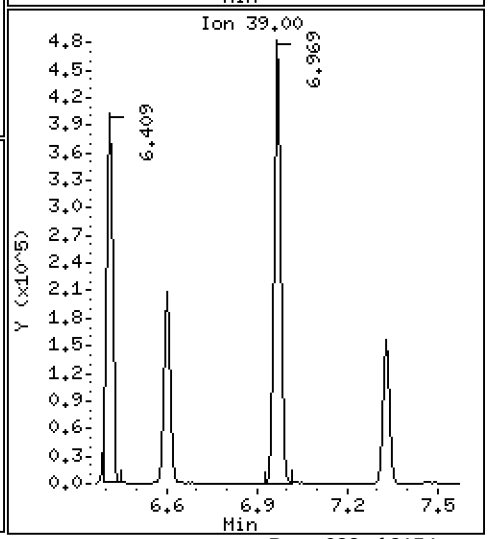












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

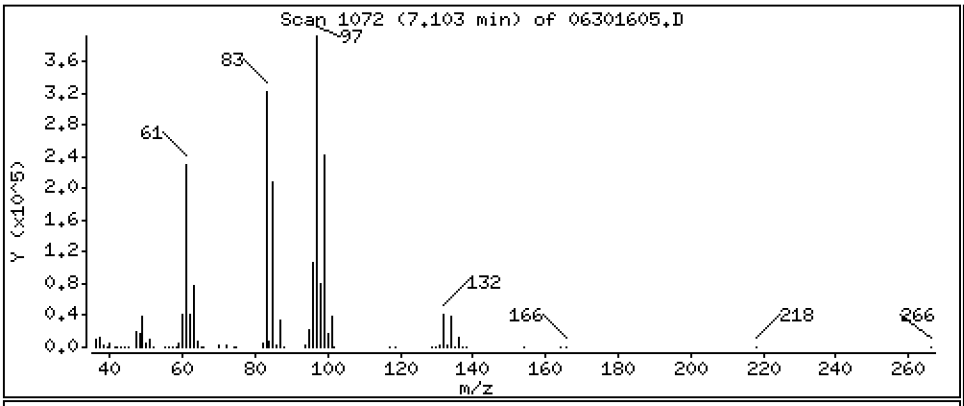
Operator: PB

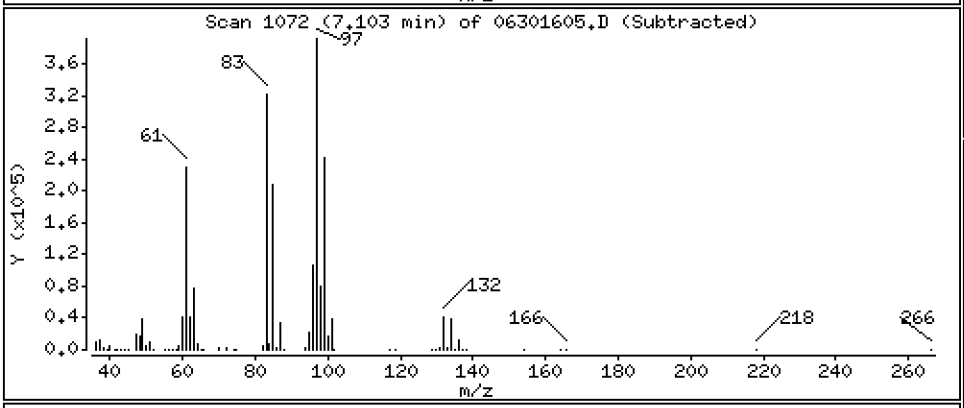
Column phase: RTXVMS

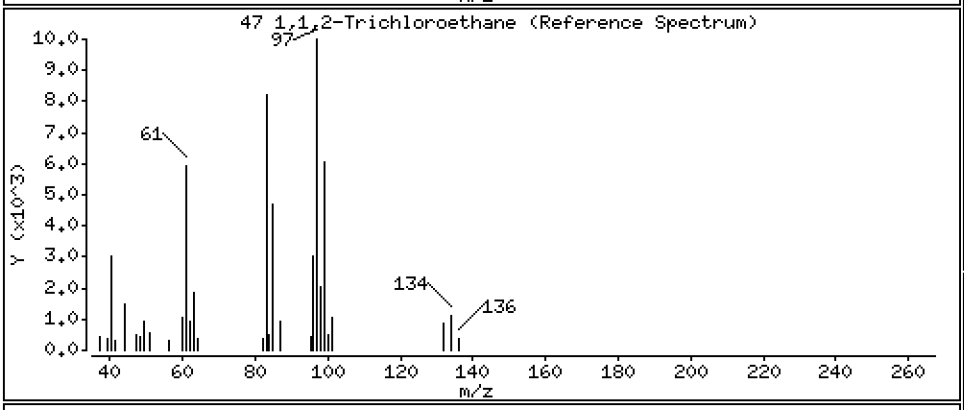
Column diameter: 0.18

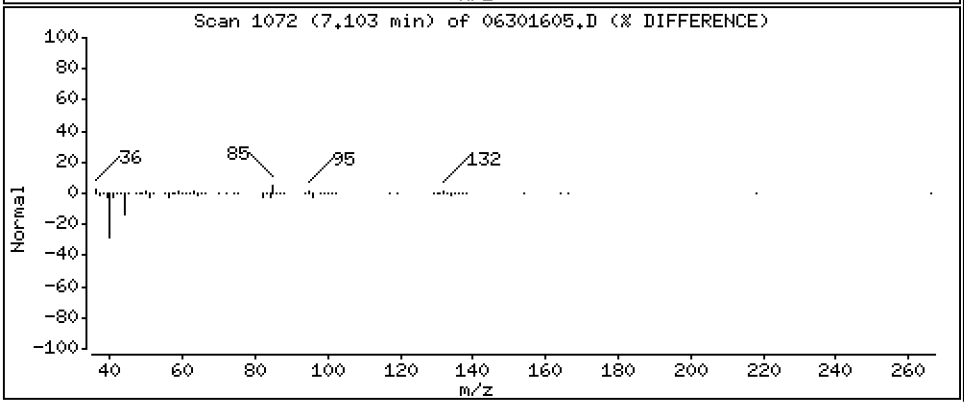
47 1,1,2-Trichloroethane

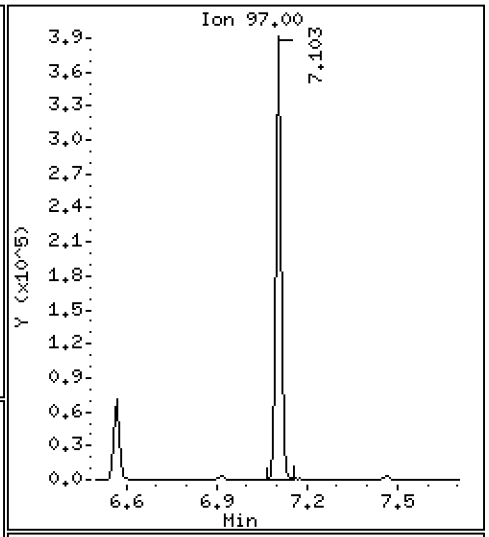
Concentration: 45.228 ug/Kg

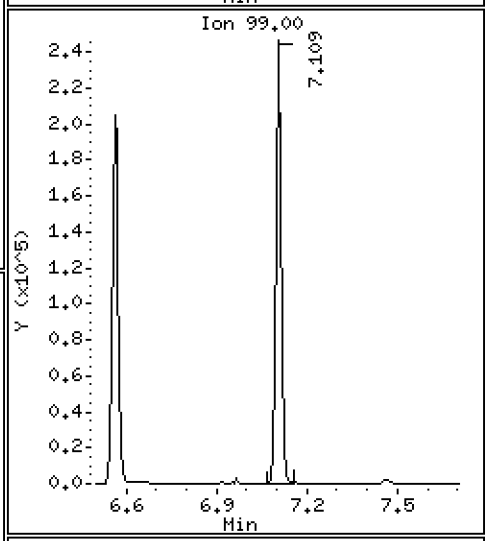


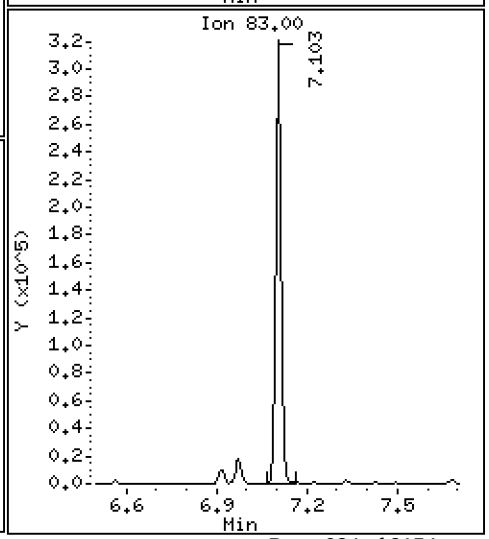












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

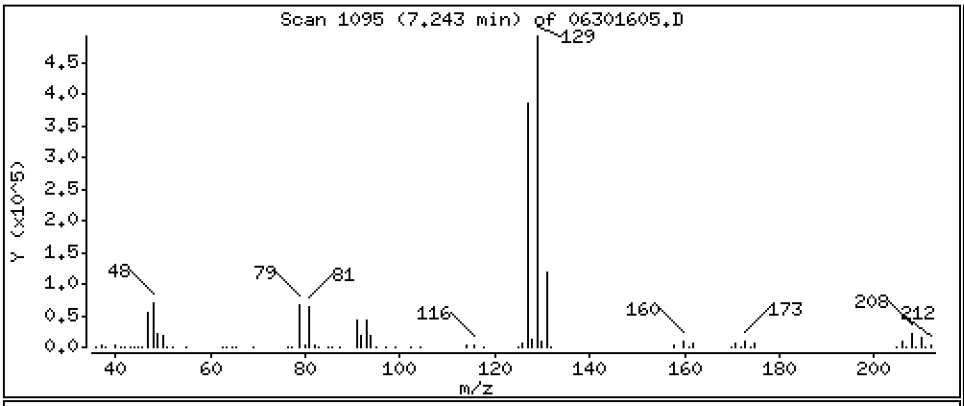
Operator: PB

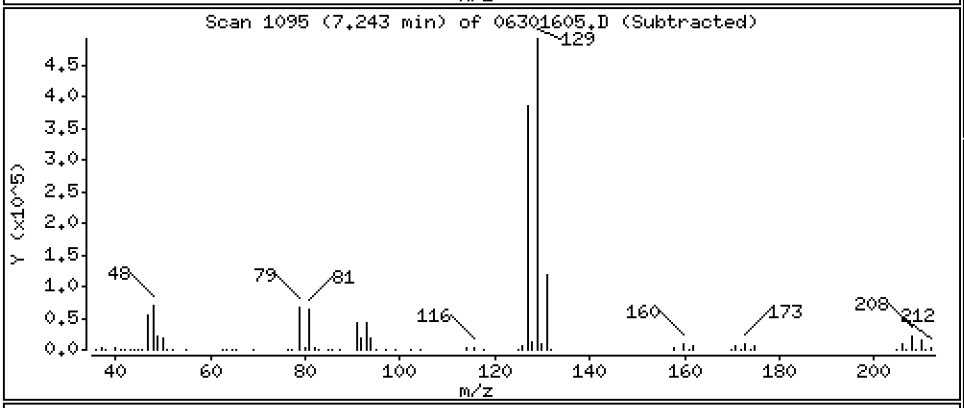
Column phase: RTXVMS

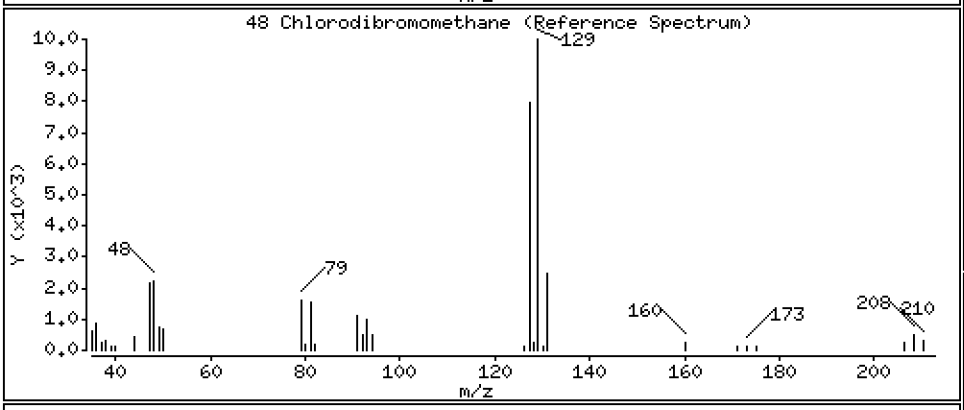
Column diameter: 0.18

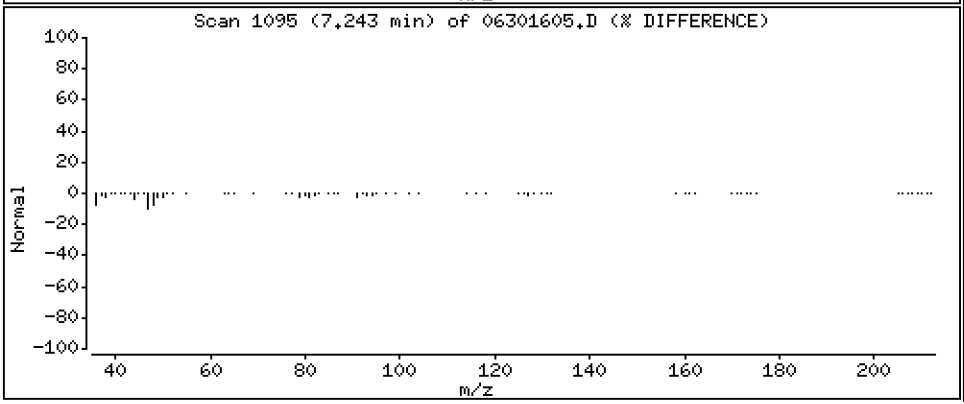
48 Chlorodibromomethane

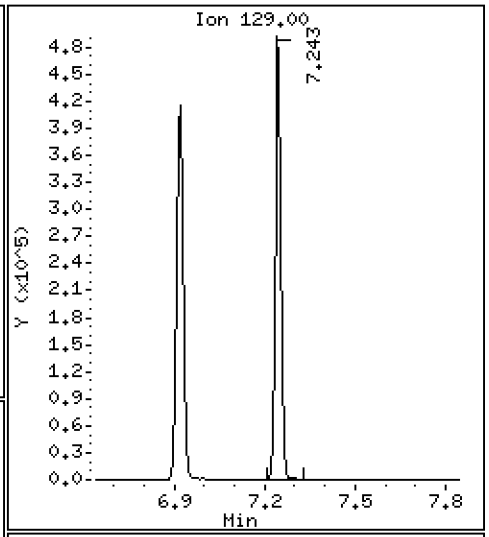
Concentration: 49.454 ug/Kg

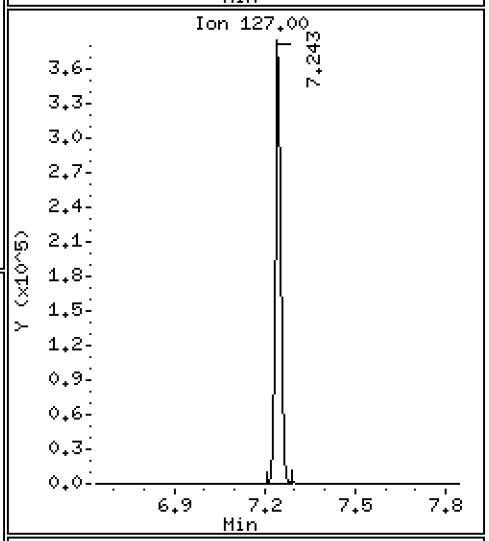


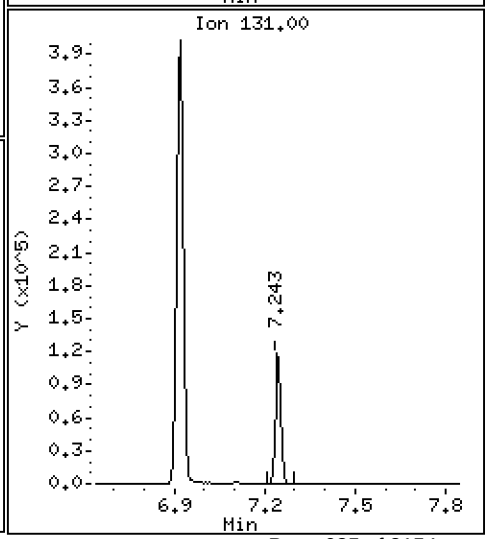












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

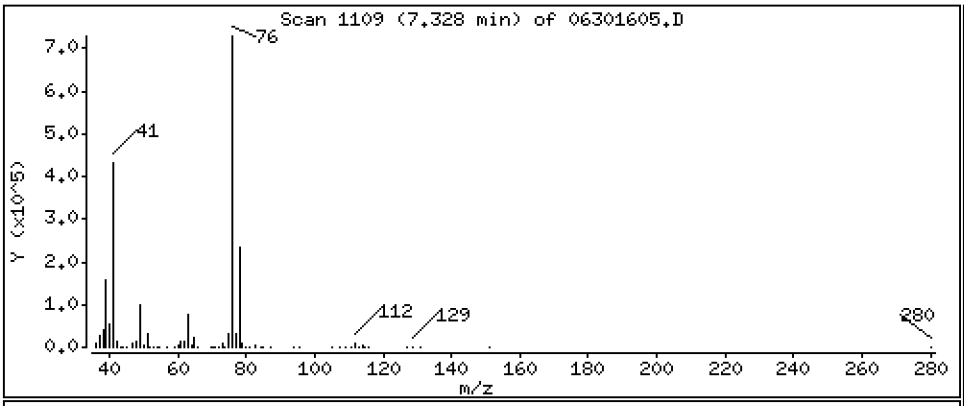
Operator: PB

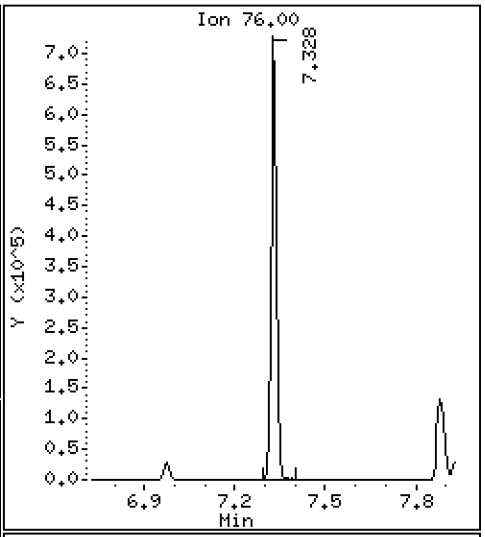
Column phase: RTXVMS

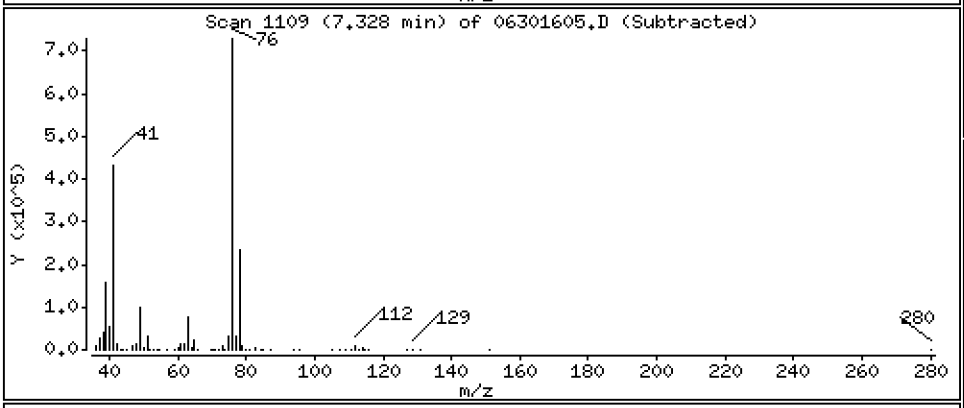
Column diameter: 0.18

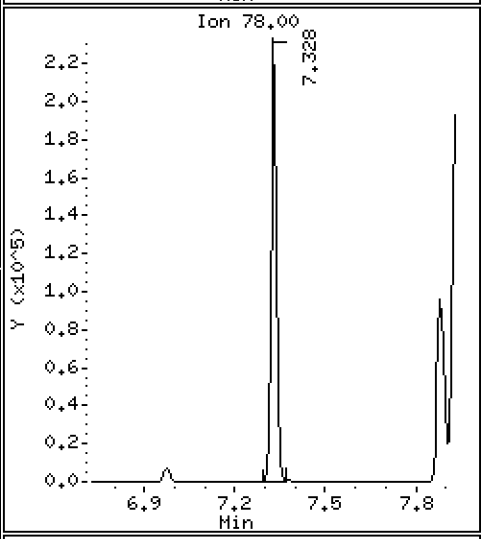
49 1,3-Dichloropropane

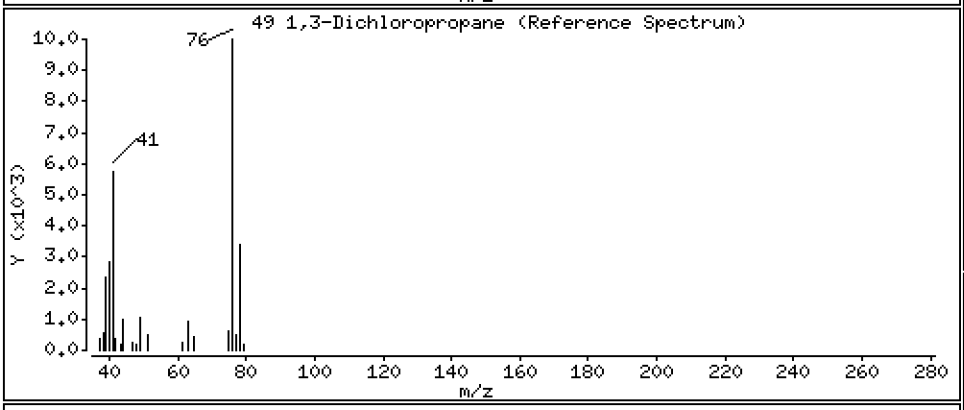
Concentration: 44.135 ug/Kg

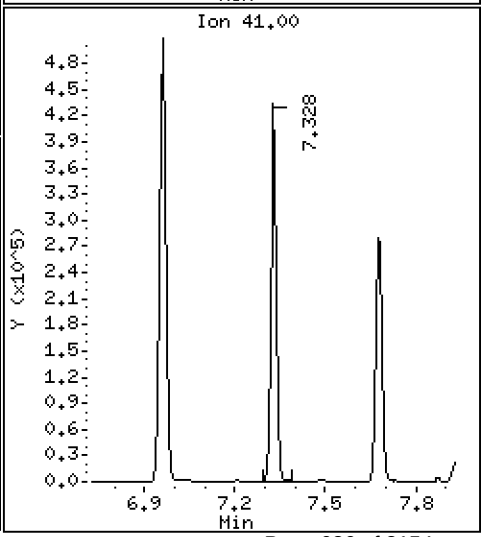


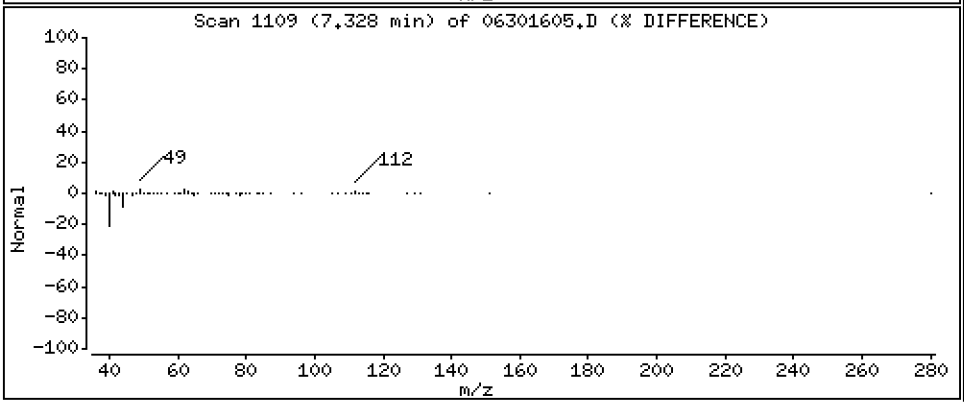












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

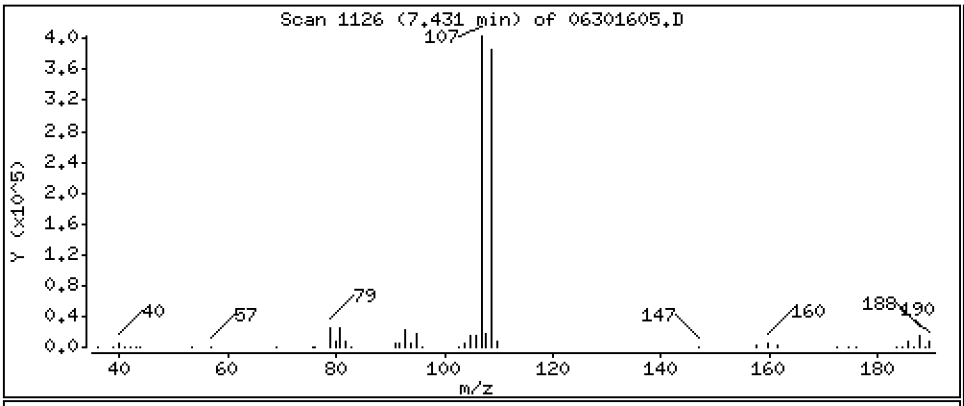
Operator: PB

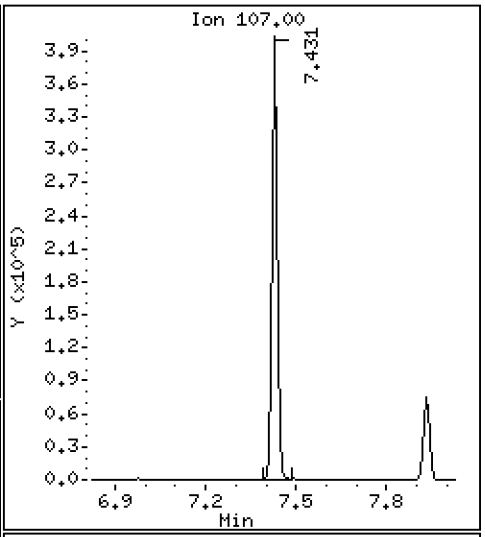
Column phase: RTXVMS

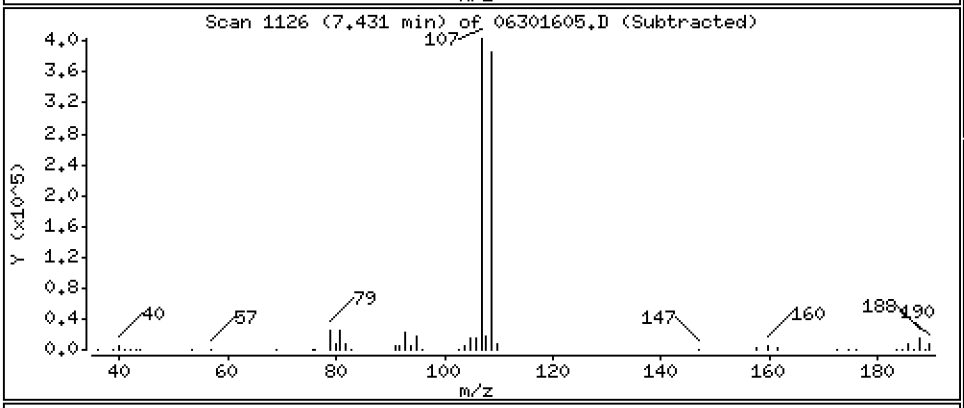
Column diameter: 0.18

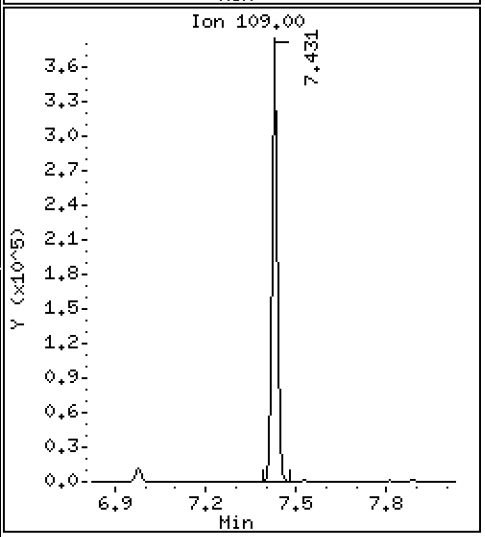
50 1,2-Dibromoethane

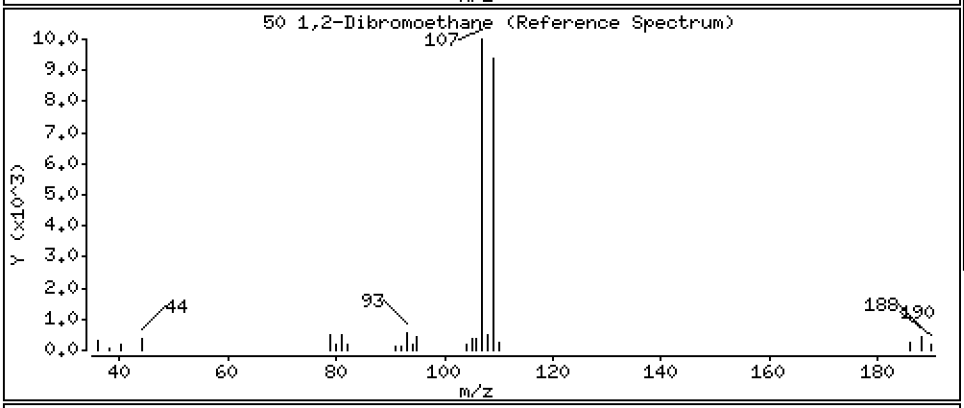
Concentration: 46.046 ug/Kg

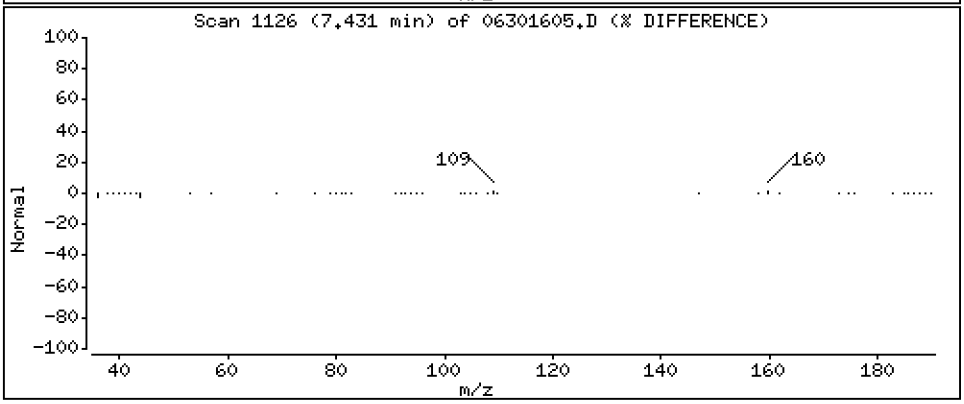












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

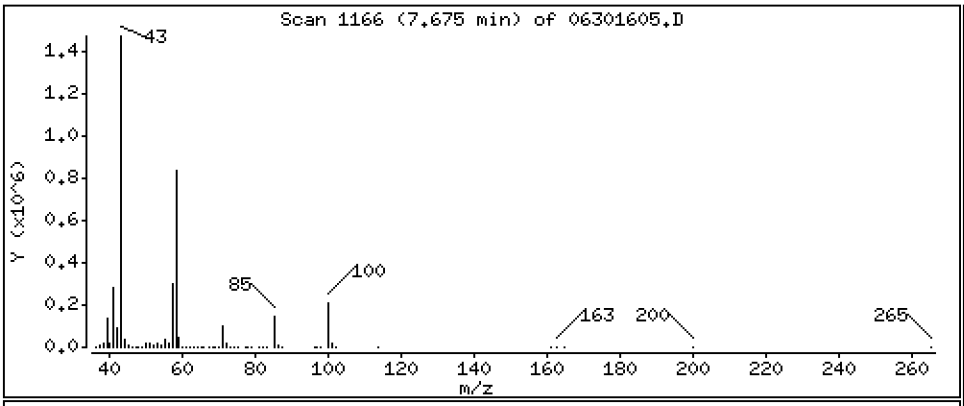
Operator: PB

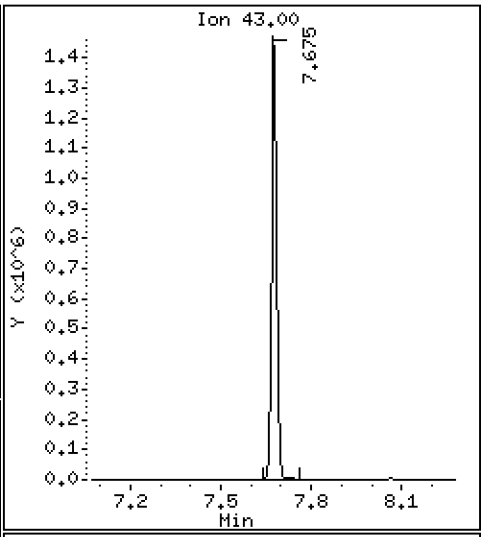
Column phase: RTXVMS

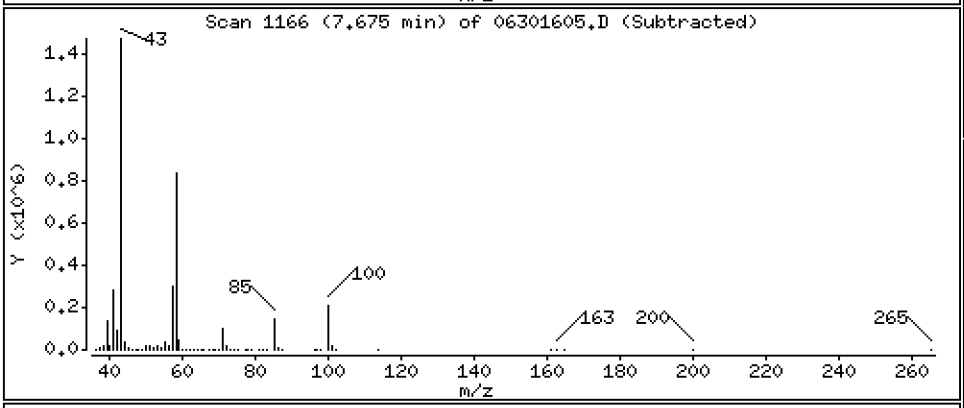
Column diameter: 0.18

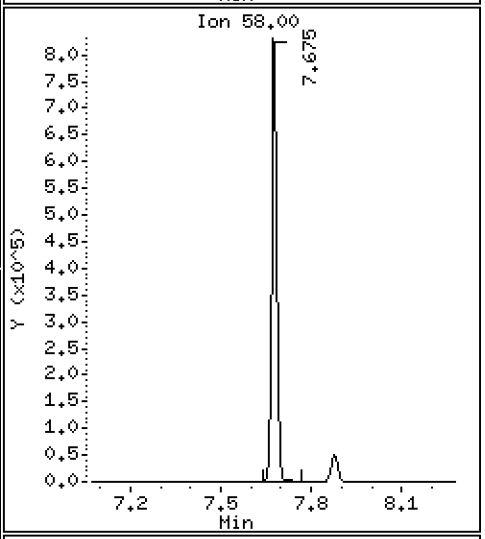
51 2-Hexanone

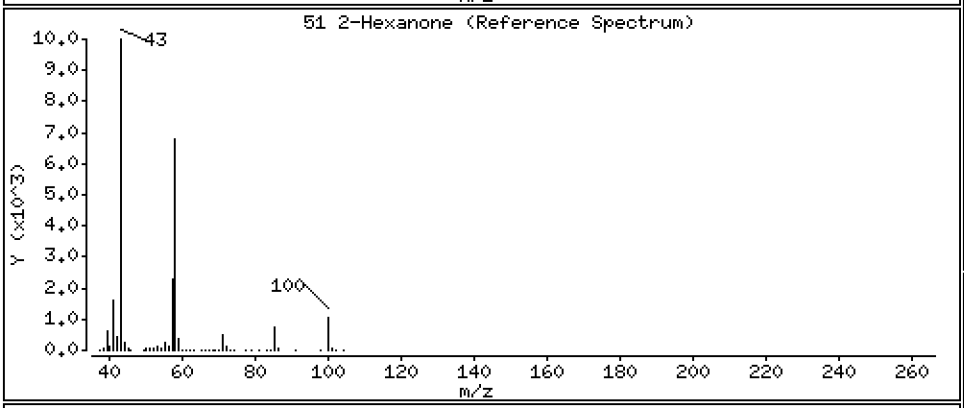
Concentration: 184.53 ug/Kg

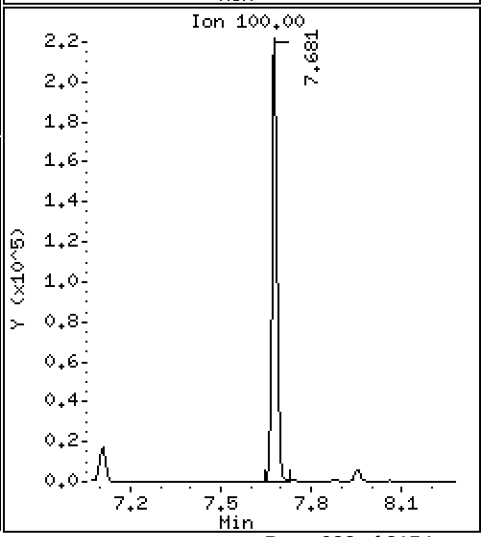


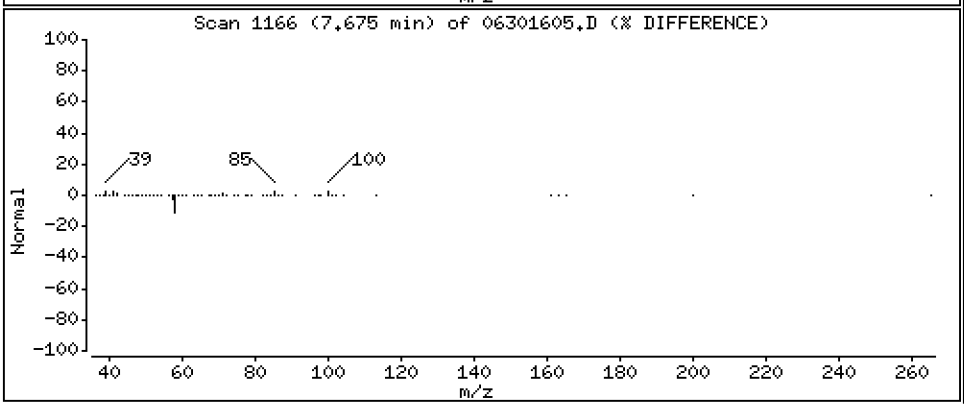












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

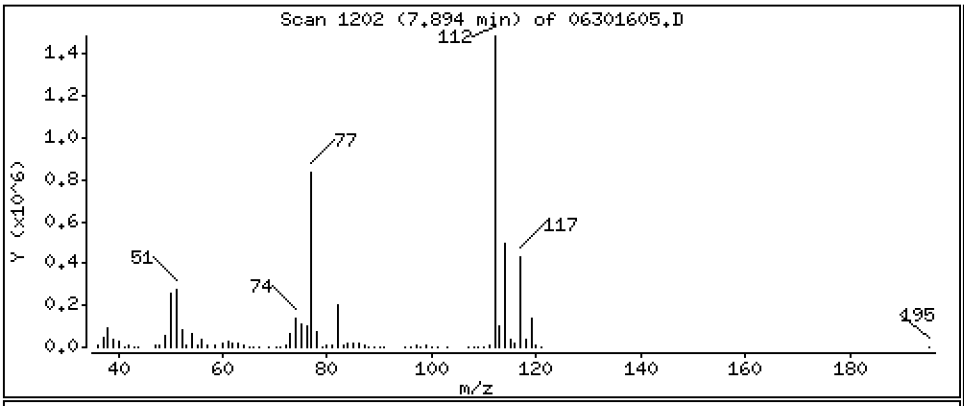
Operator: PB

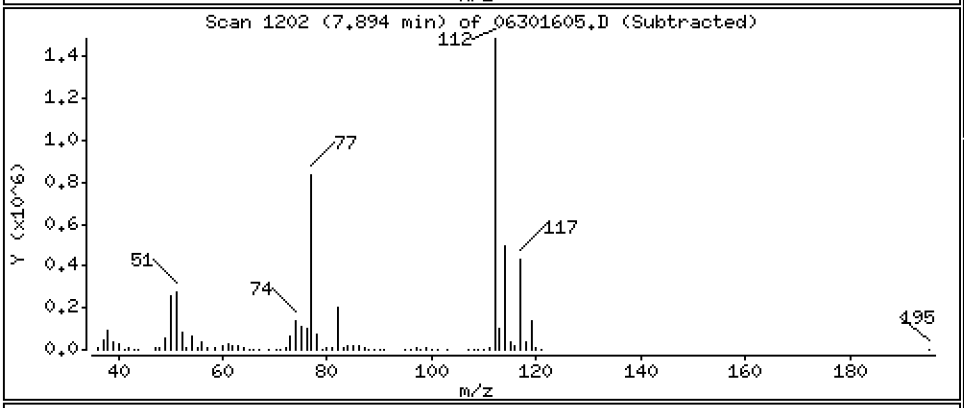
Column phase: RTXVMS

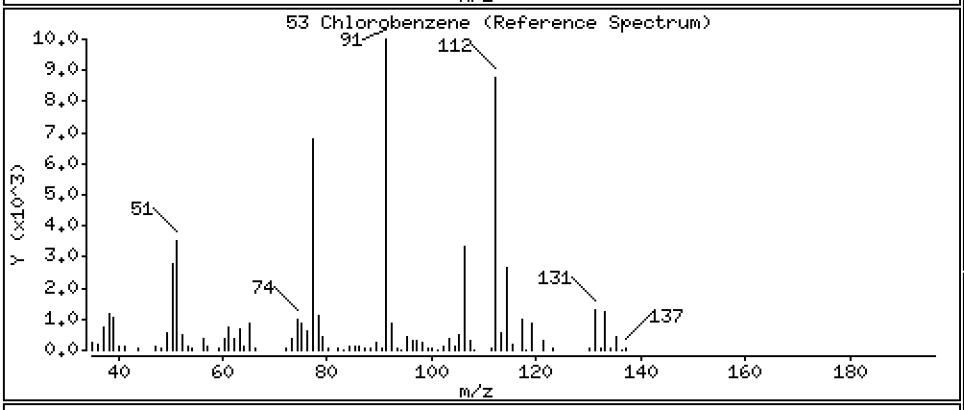
Column diameter: 0.18

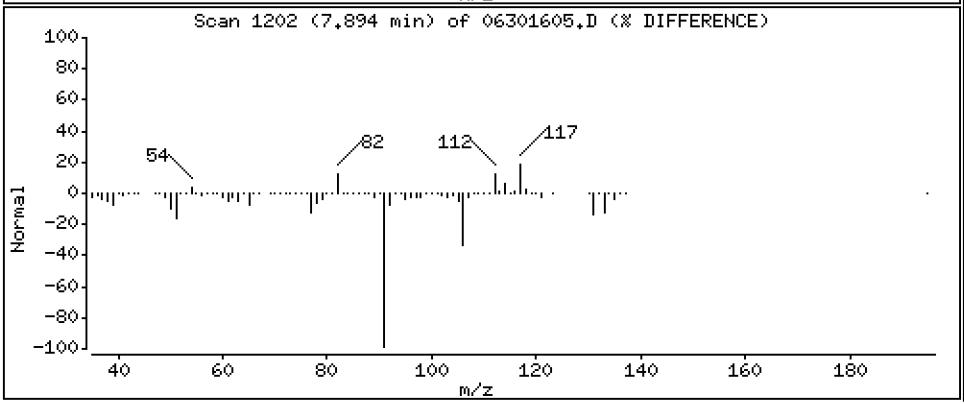
53 Chlorobenzene

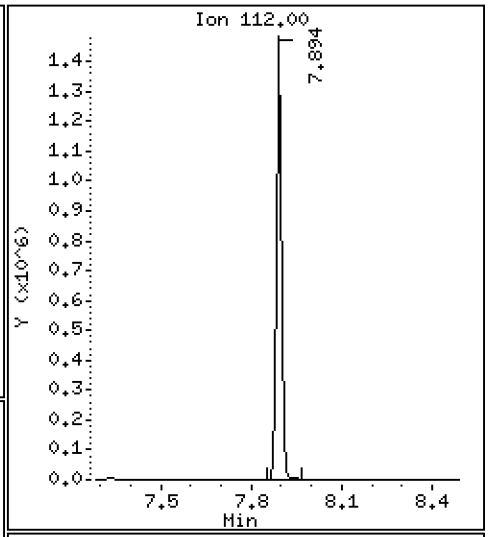
Concentration: 46.967 ug/Kg

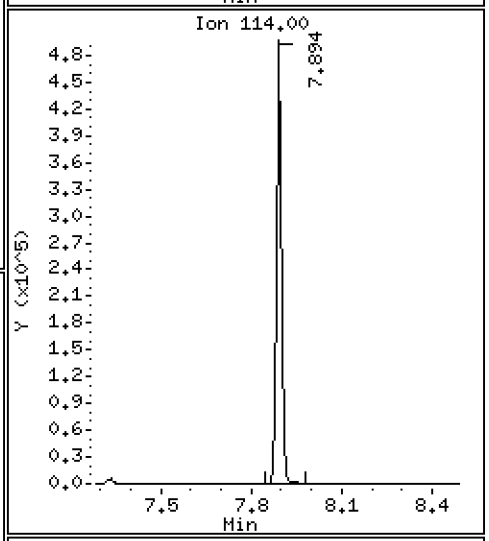


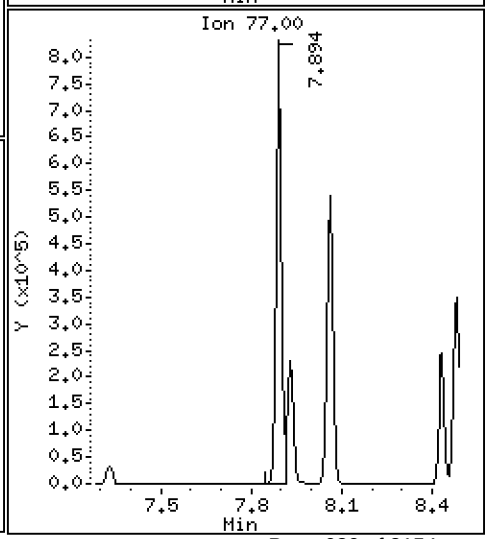












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

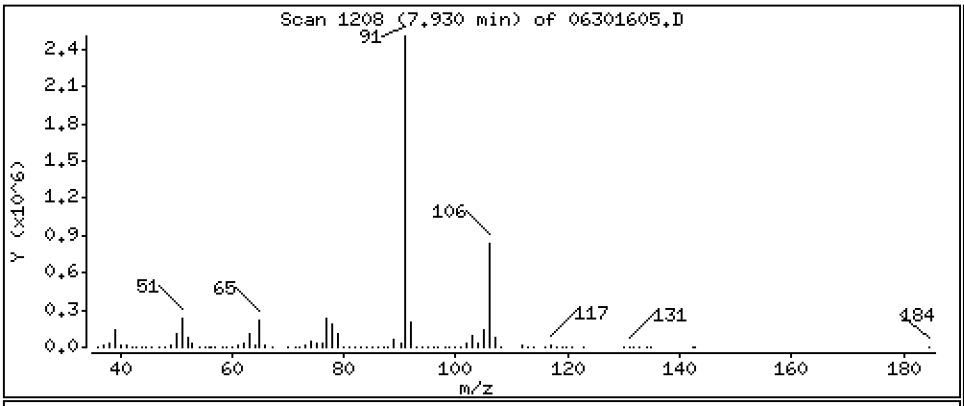
Operator: PB

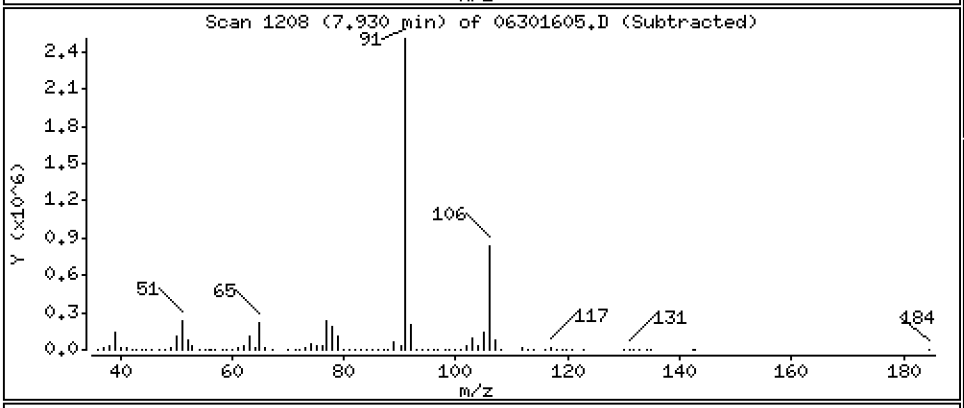
Column phase: RTXVMS

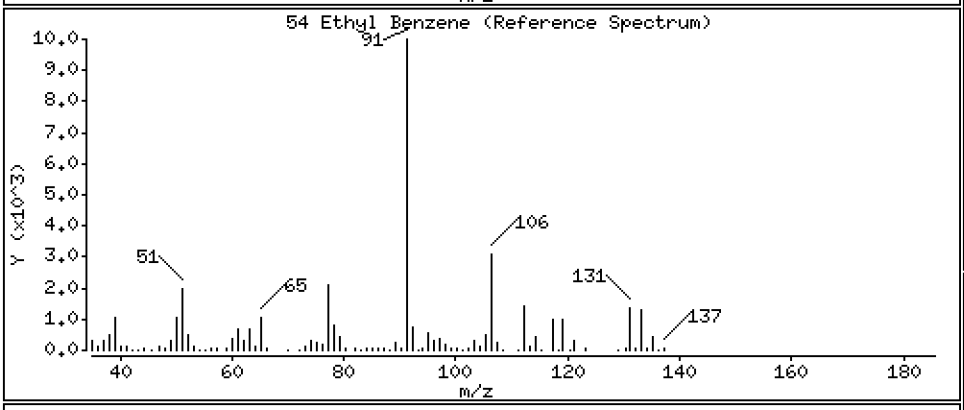
Column diameter: 0.18

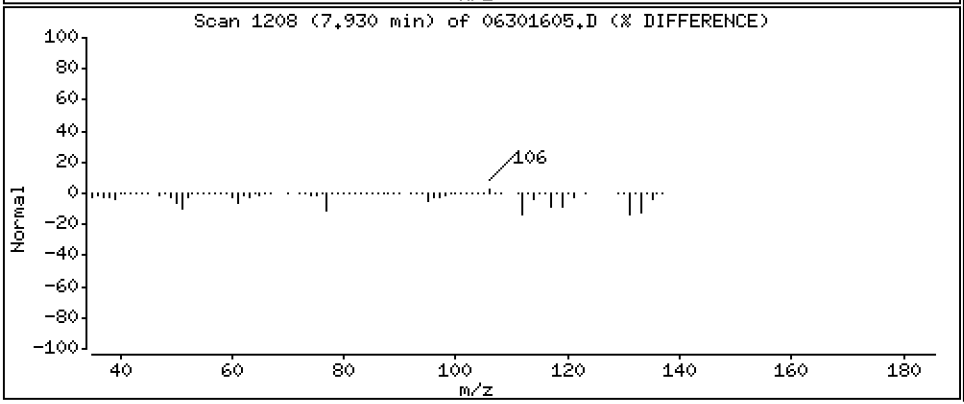
54 Ethyl Benzene

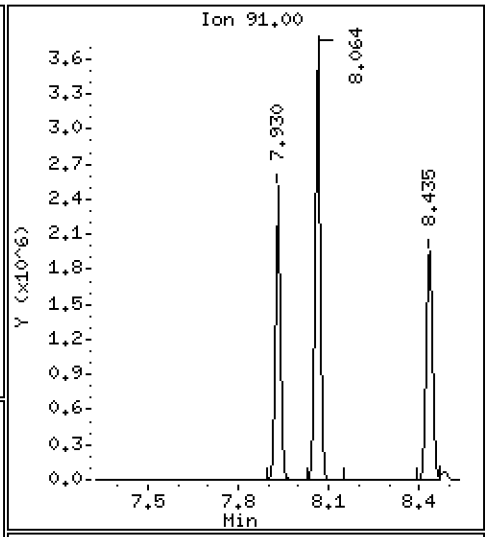
Concentration: 46.445 ug/Kg

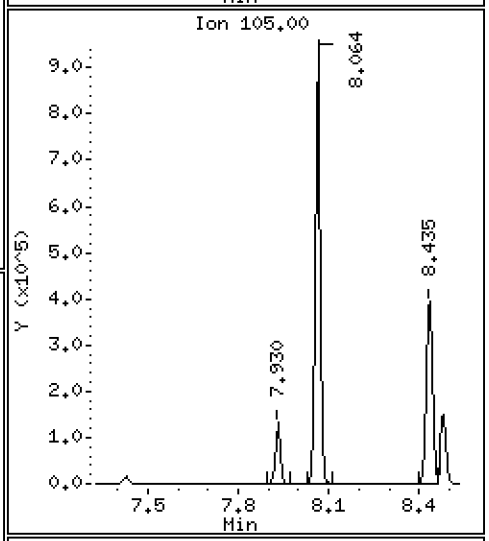


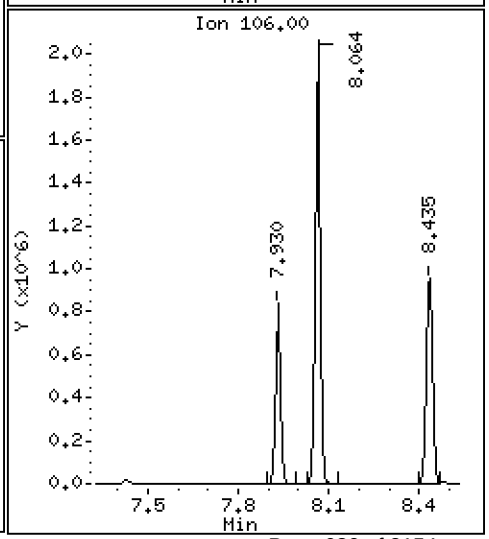












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

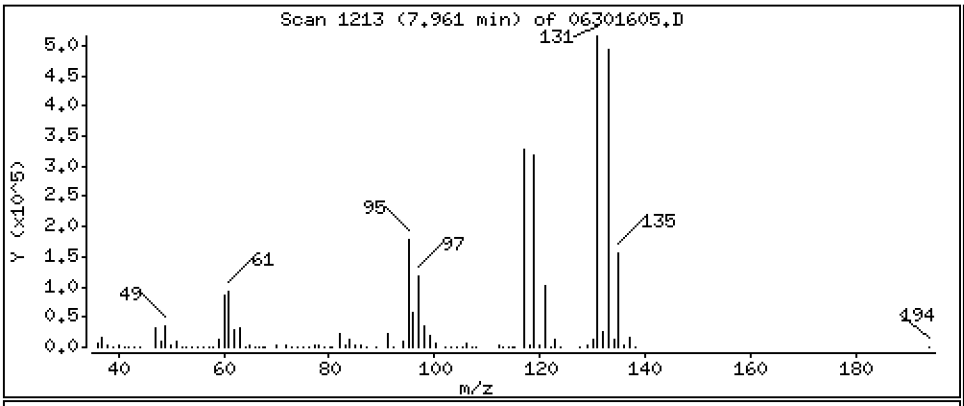
Operator: PB

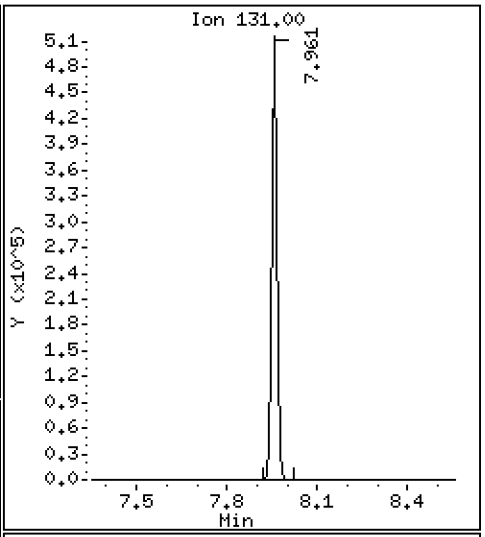
Column phase: RTXVMS

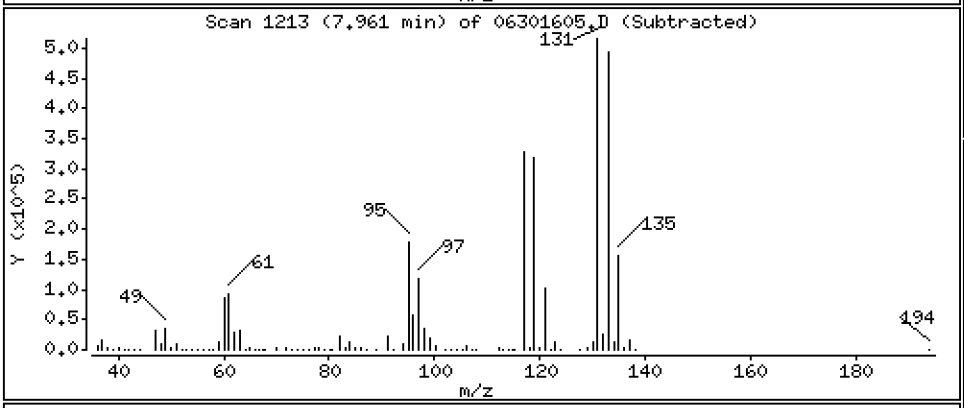
Column diameter: 0.18

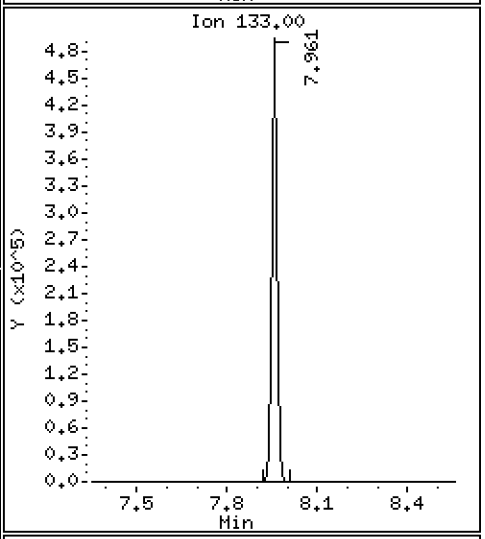
55 1,1,1,2-Tetrachloroethane

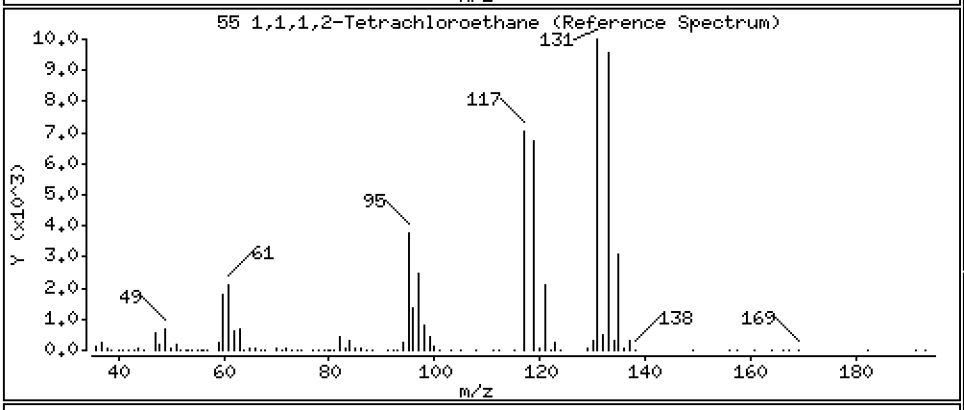
Concentration: 48.504 ug/Kg

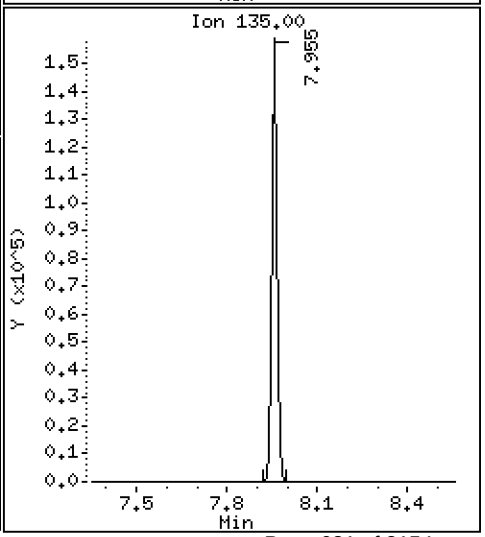


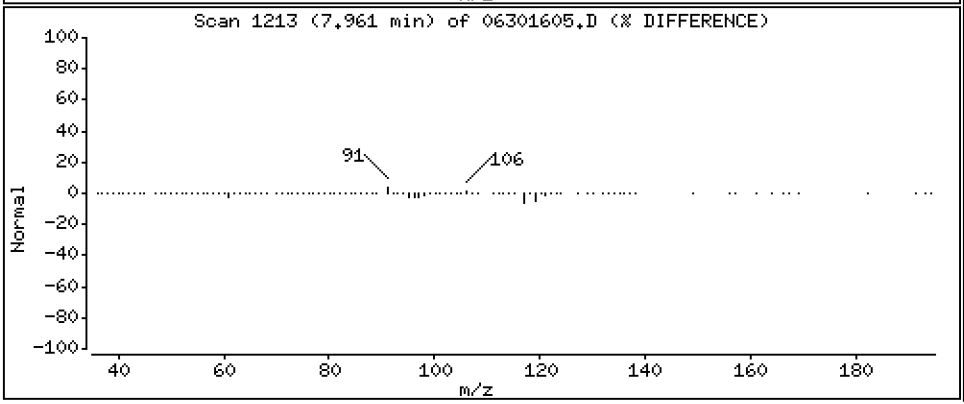












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

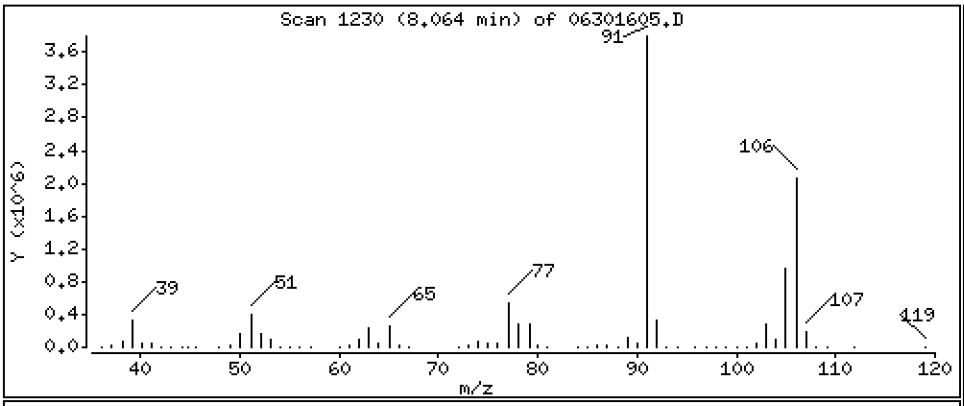
Operator: PB

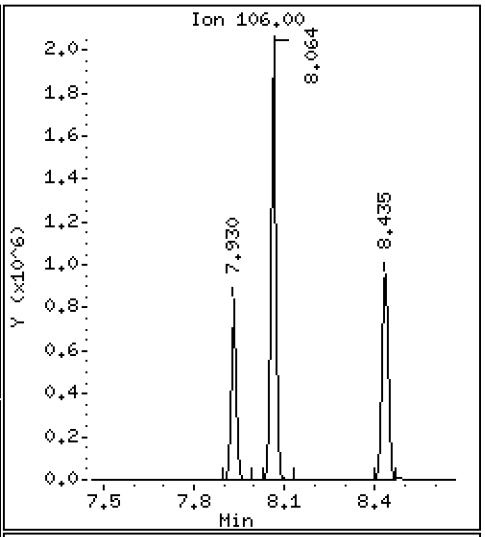
Column phase: RTXVMS

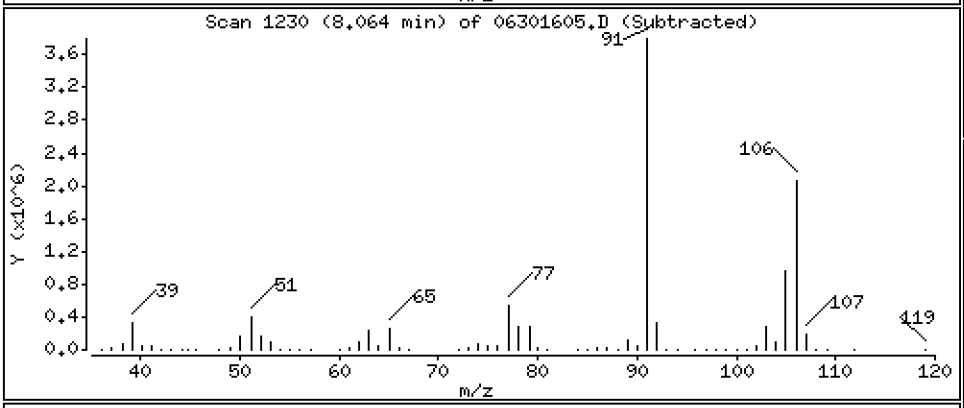
Column diameter: 0.18

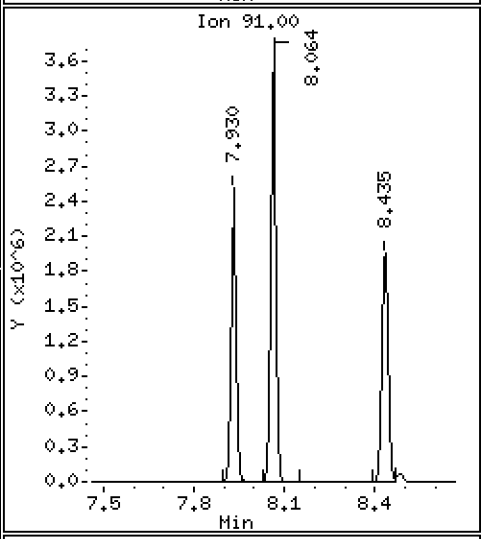
56 m,p-xylene

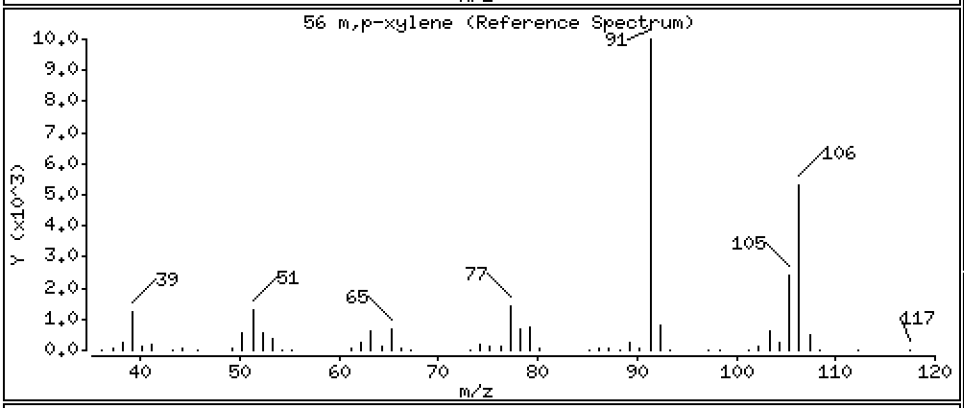
Concentration: 94.946 ug/Kg

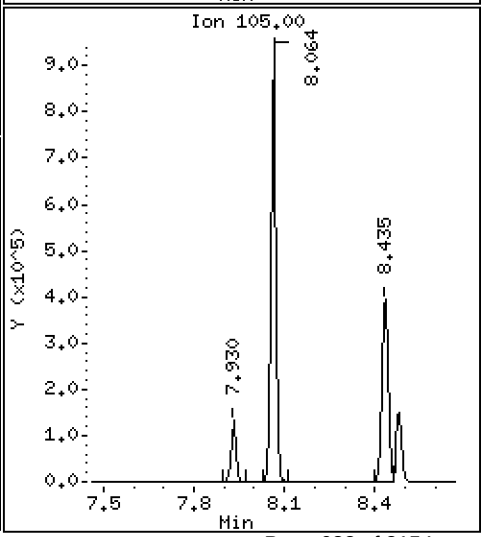


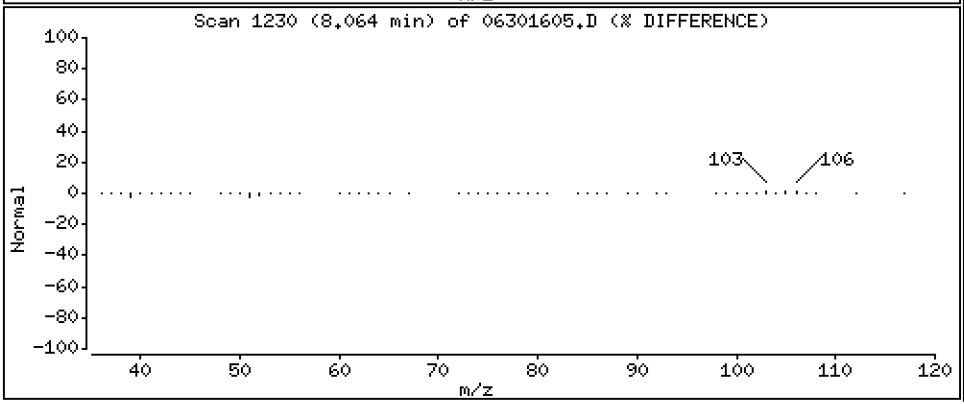












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

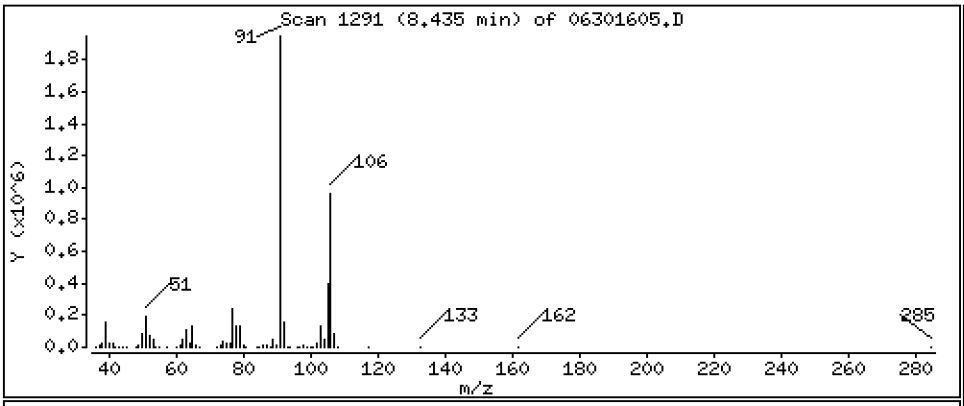
Operator: PB

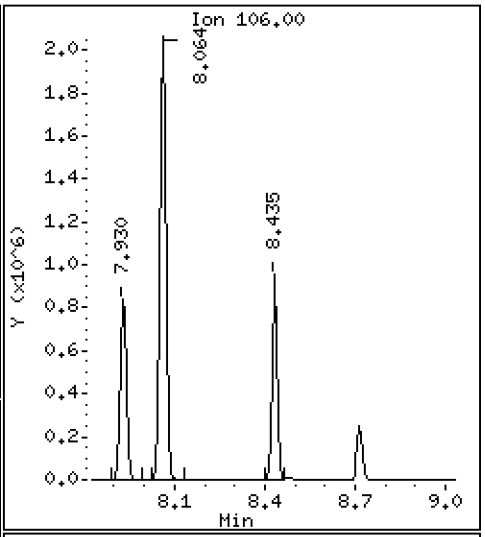
Column phase: RTXVMS

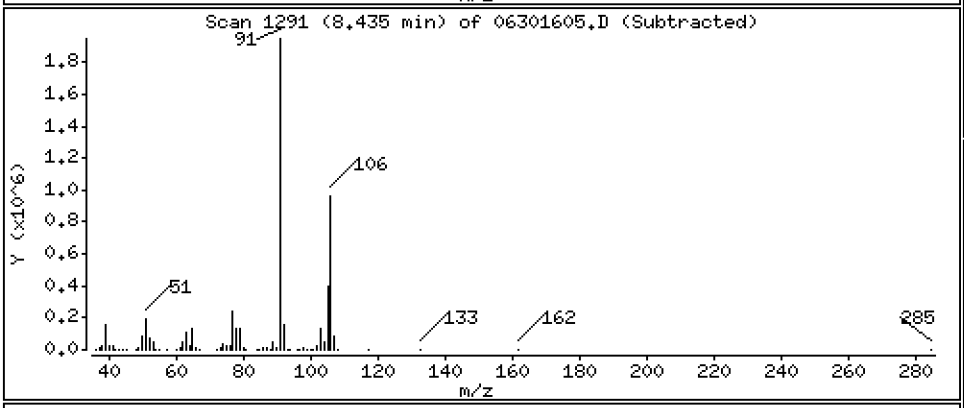
Column diameter: 0.18

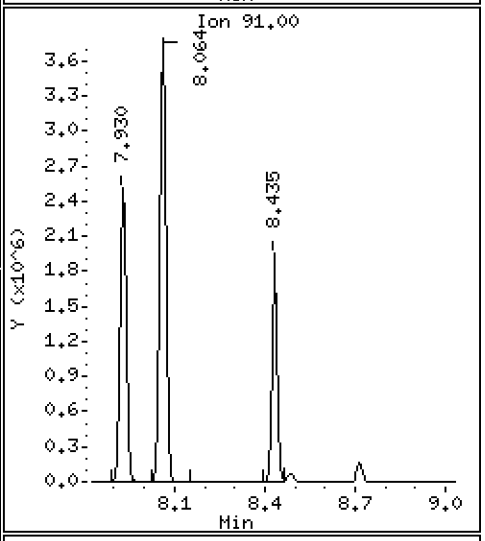
57 o-Xylene

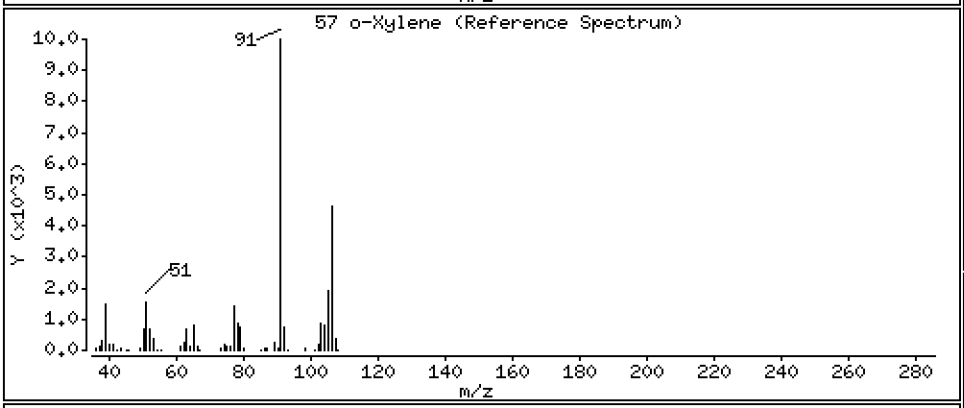
Concentration: 46.732 ug/Kg

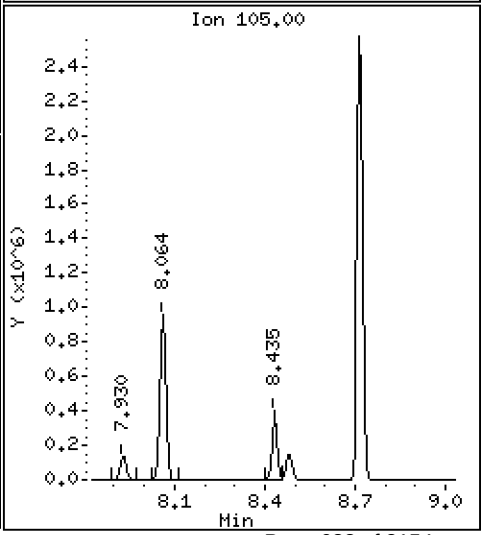


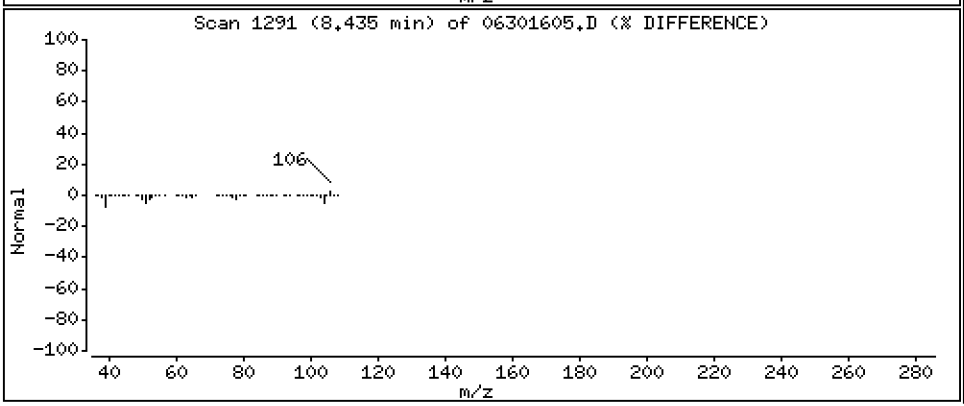












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

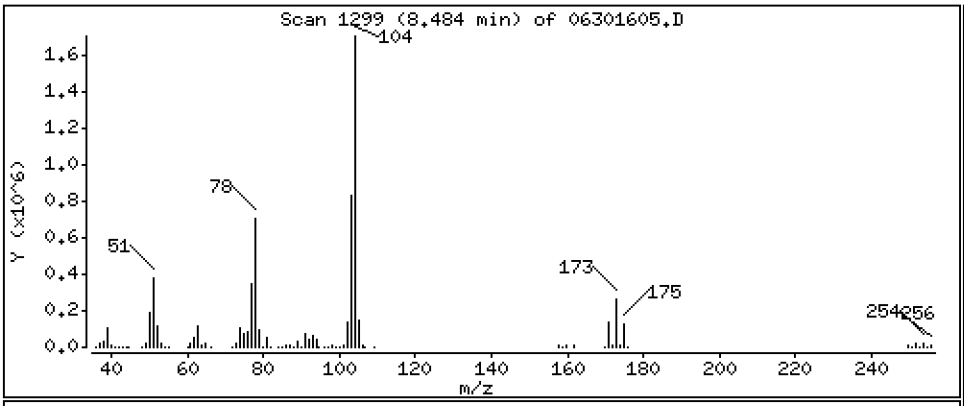
Operator: PB

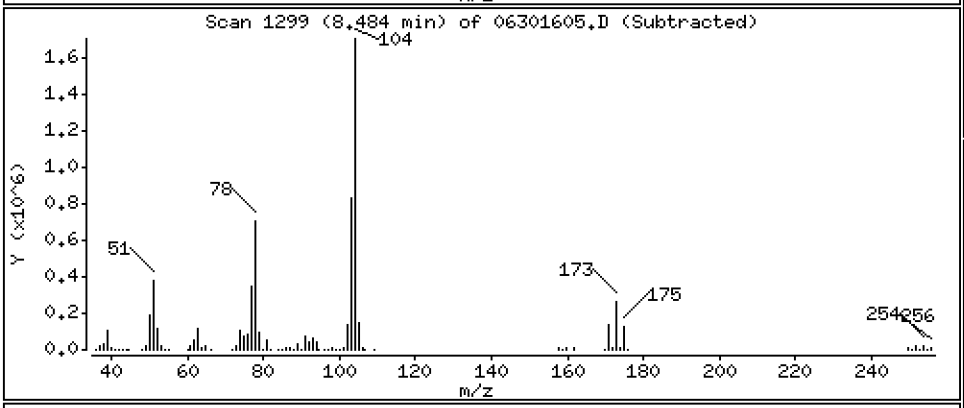
Column phase: RTXVMS

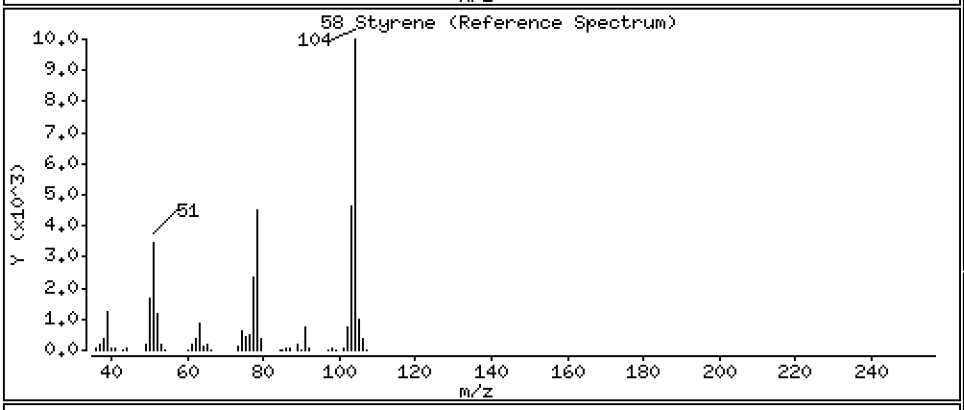
Column diameter: 0.18

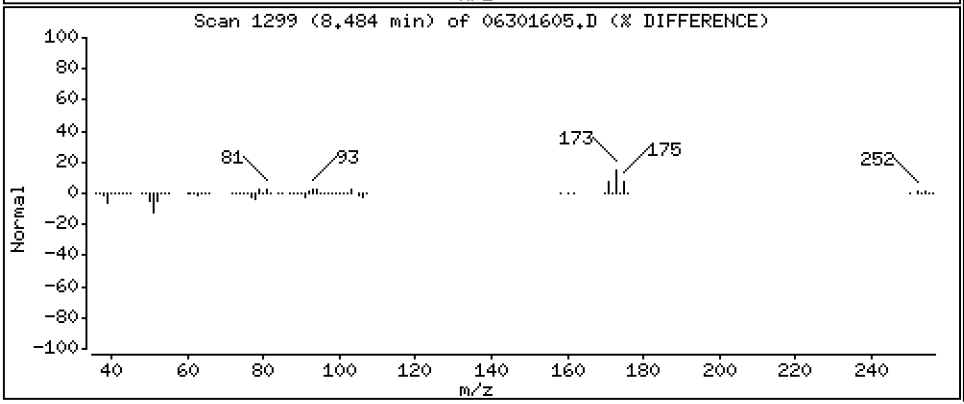
58 Styrene

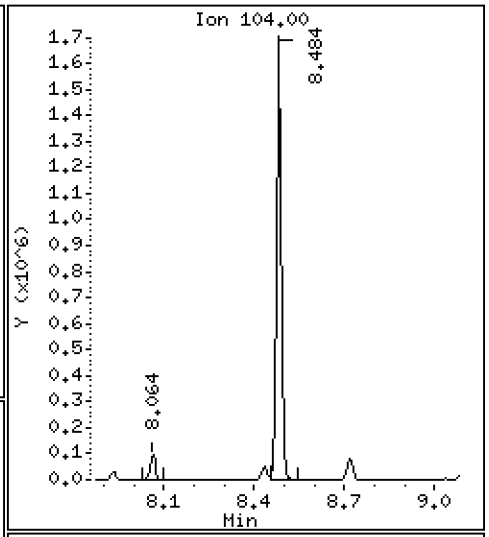
Concentration: 47.434 ug/Kg

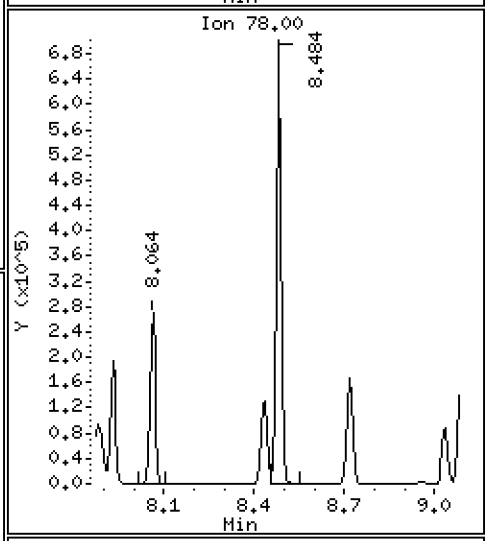


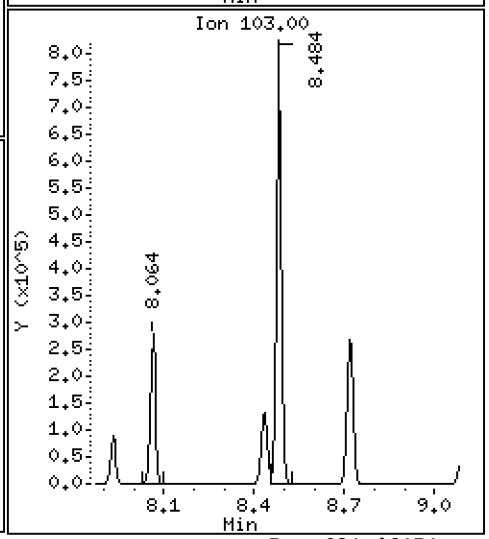












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

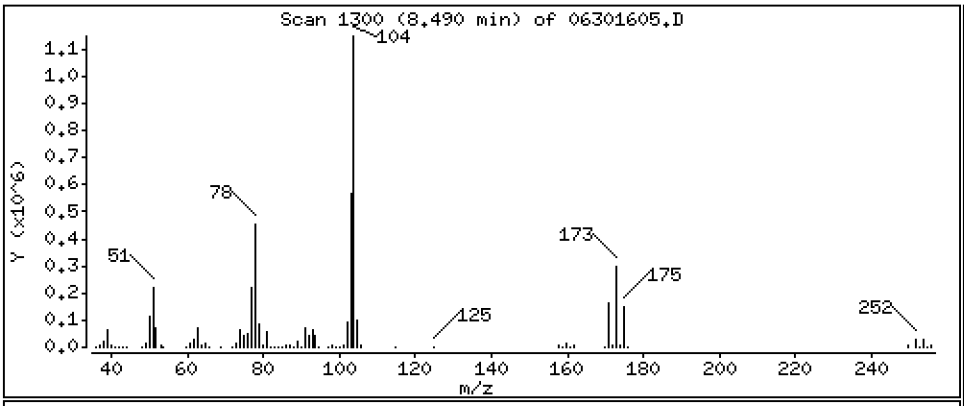
Operator: PB

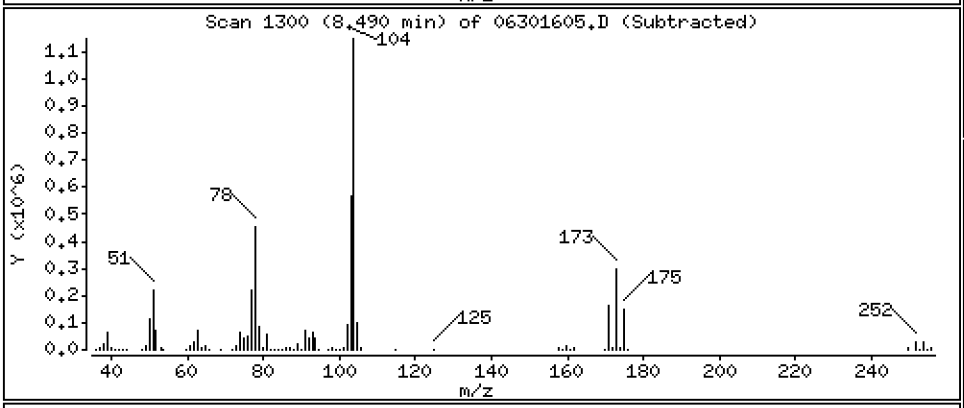
Column phase: RTXVMS

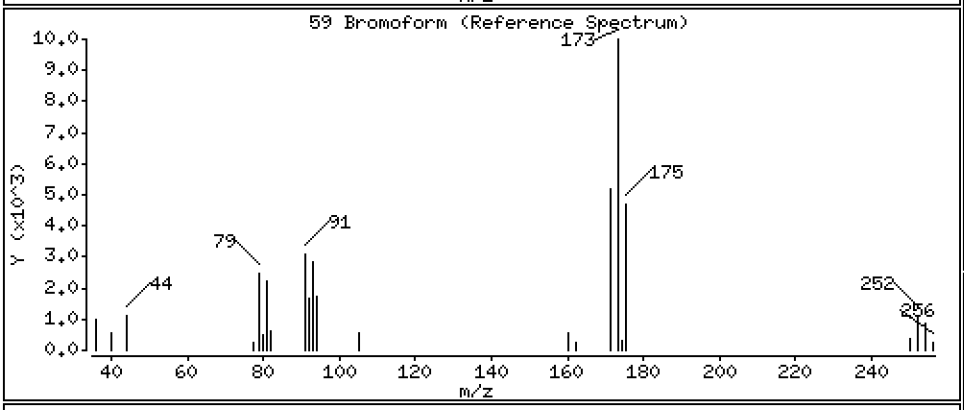
Column diameter: 0.18

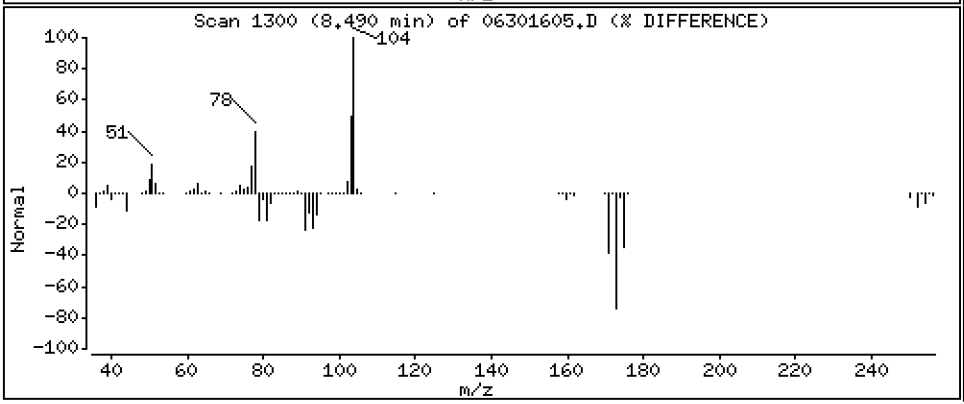
59 Bromoform

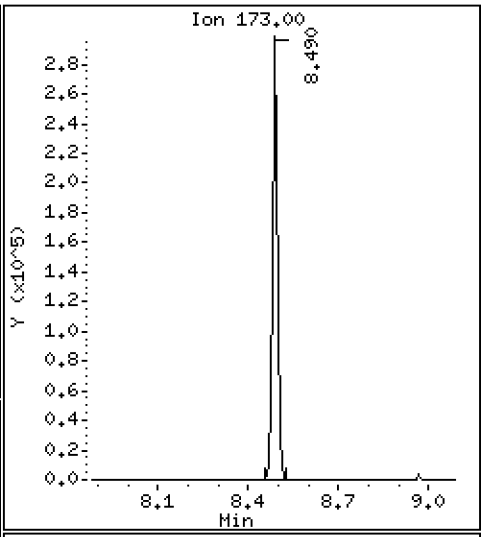
Concentration: 46.455 ug/Kg

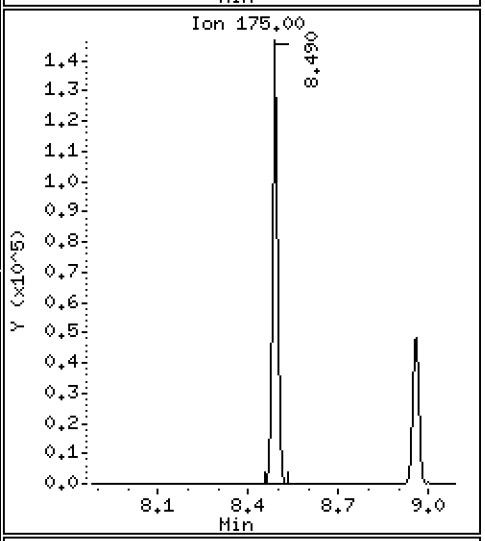


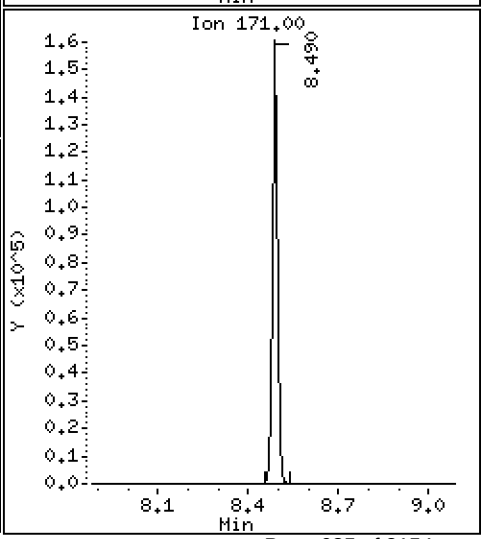












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

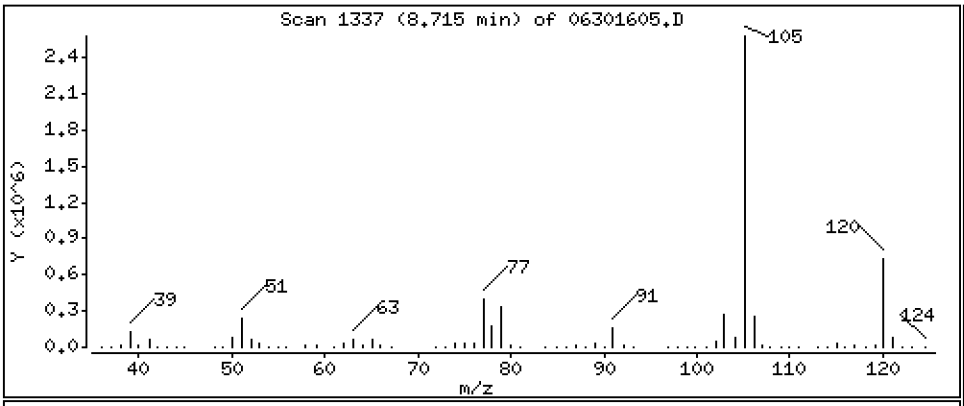
Operator: PB

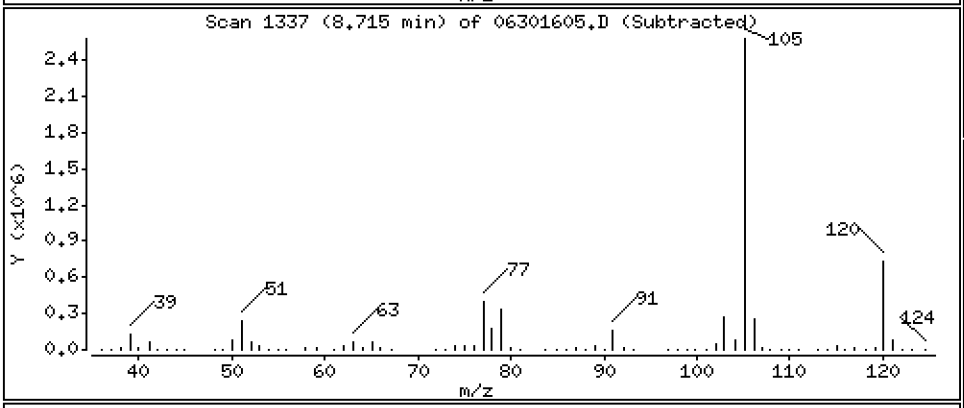
Column phase: RTXVMS

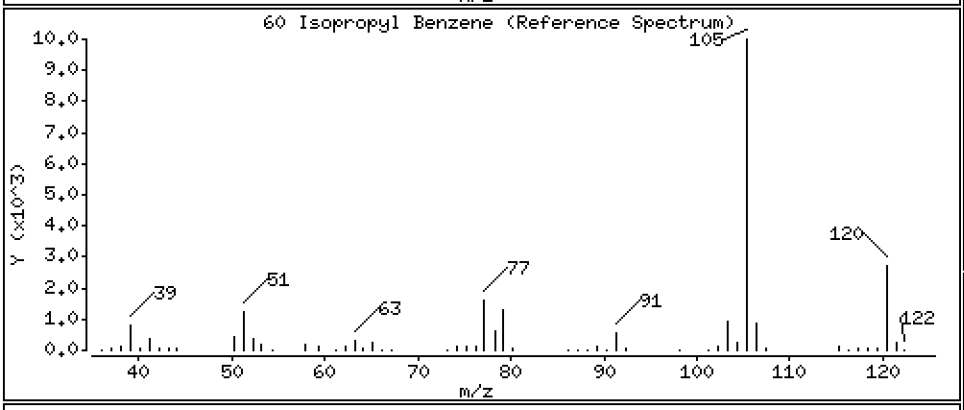
Column diameter: 0.18

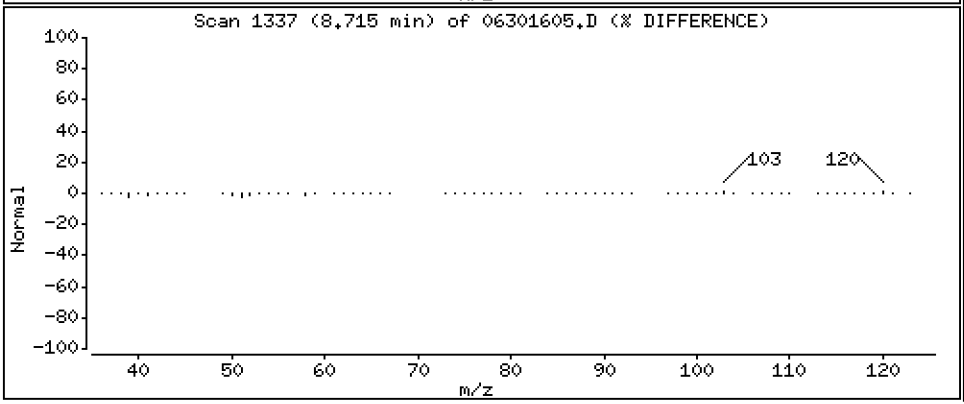
60 Isopropyl Benzene

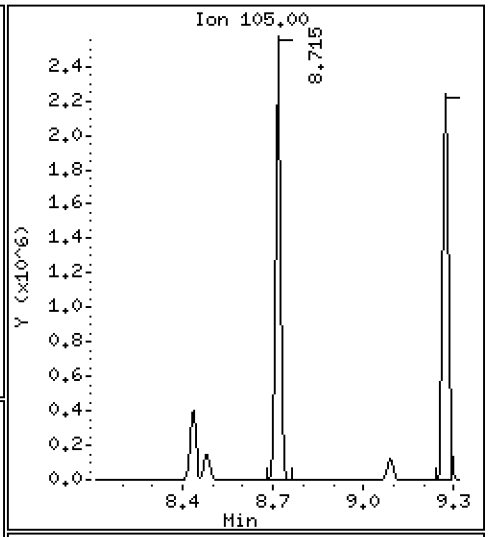
Concentration: 46.381 ug/Kg

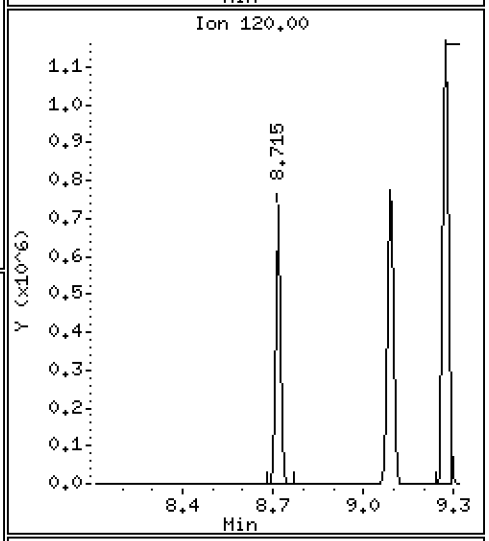


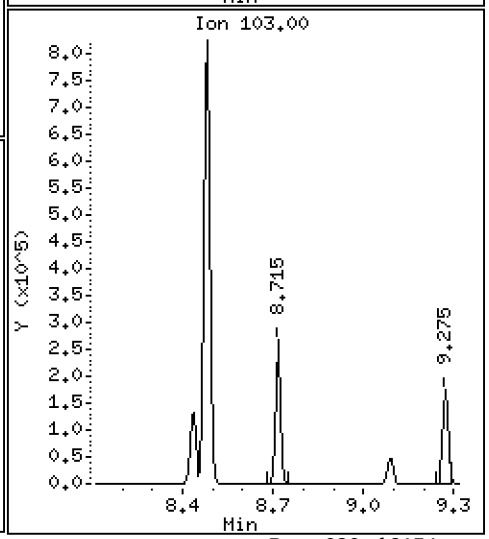












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

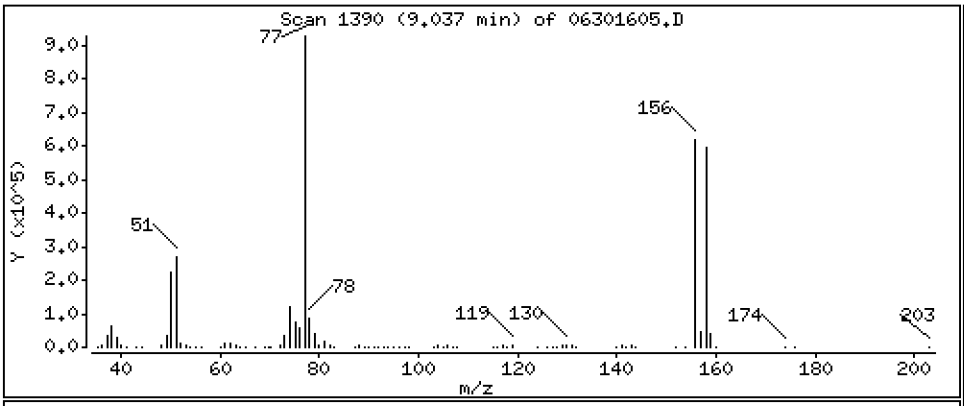
Operator: PB

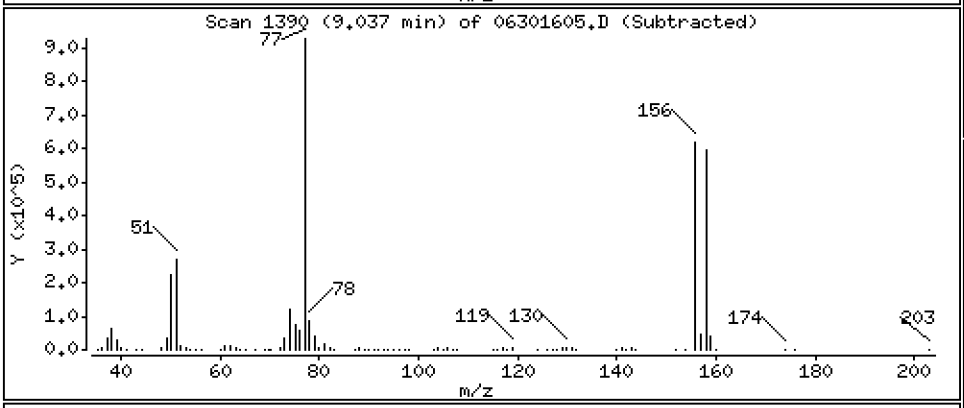
Column phase: RTXVMS

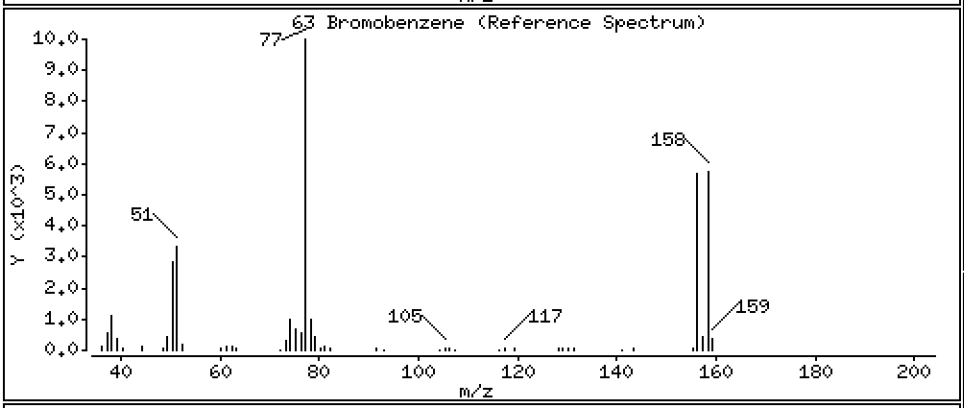
Column diameter: 0.18

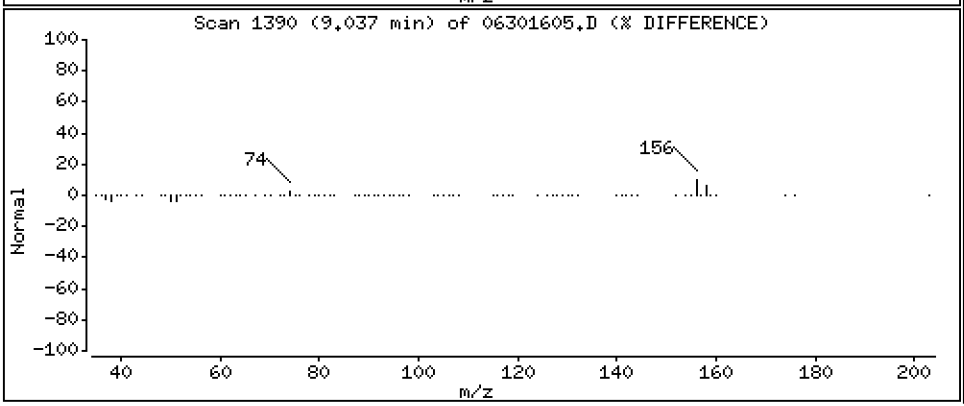
63 Bromobenzene

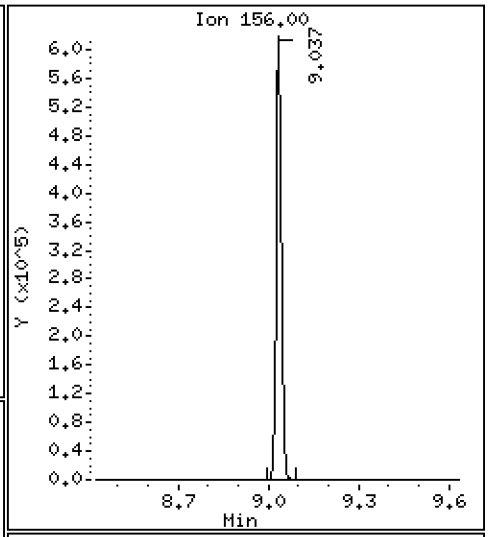
Concentration: 47.673 ug/Kg

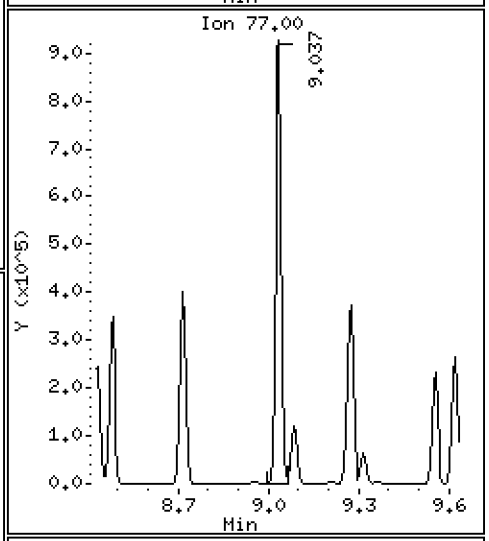


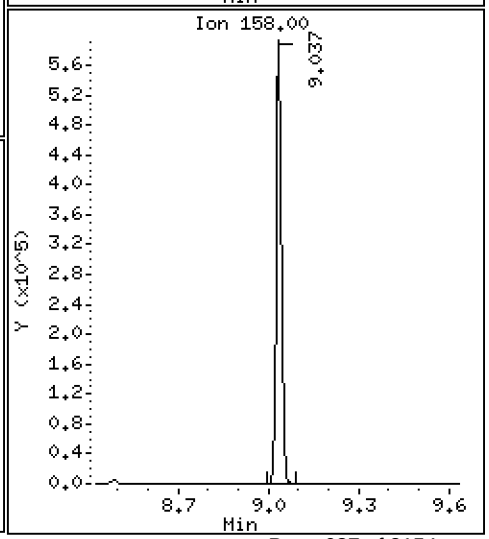












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

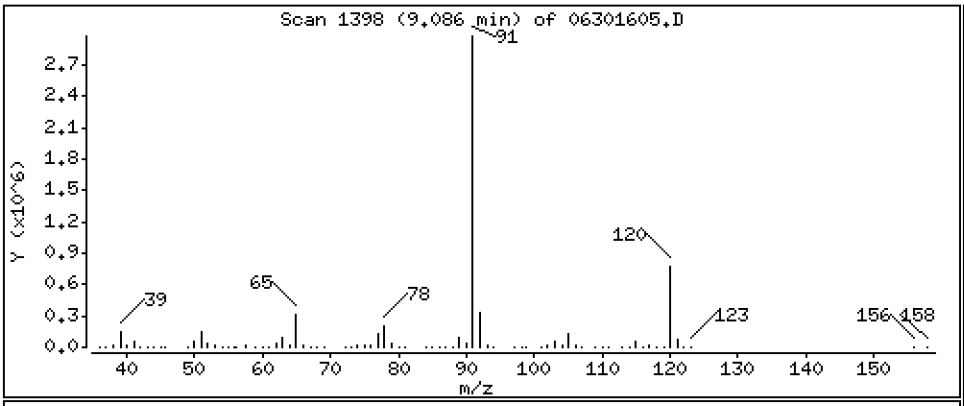
Operator: PB

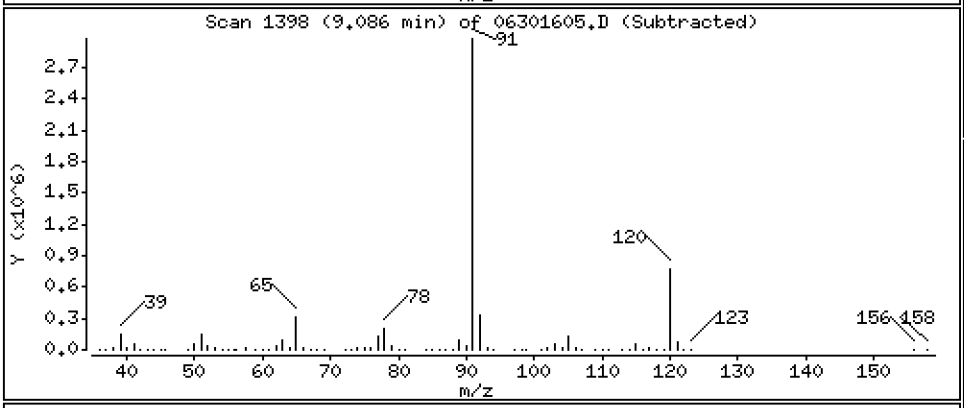
Column phase: RTXVMS

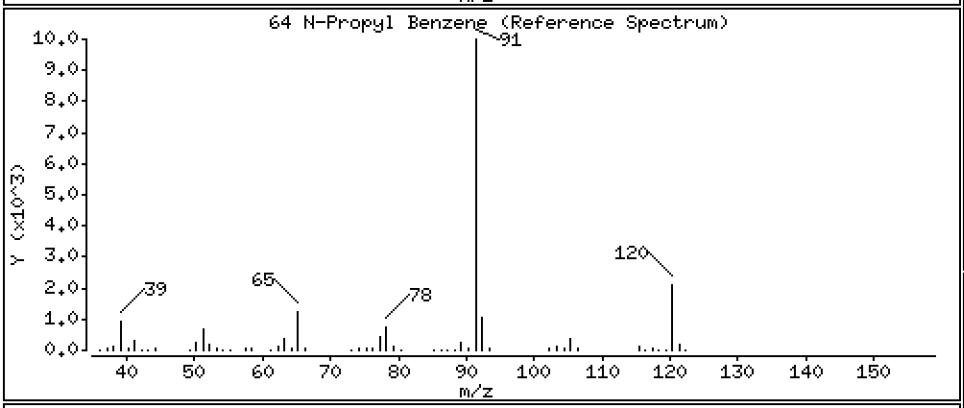
Column diameter: 0.18

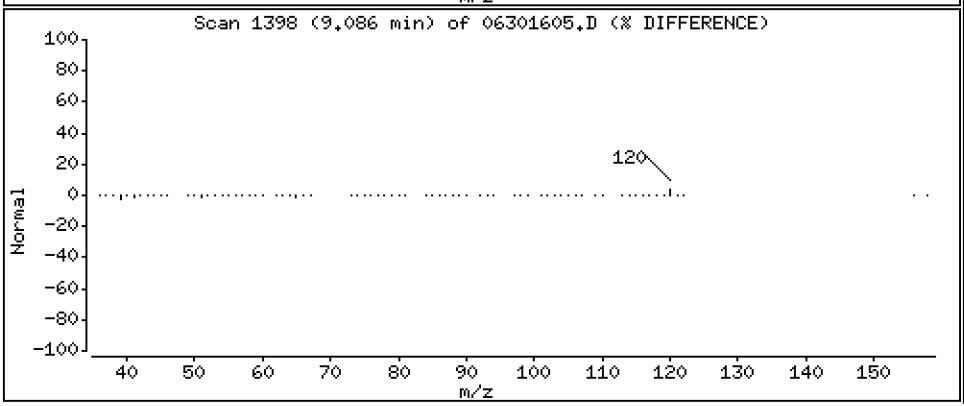
64 N-Propyl Benzene

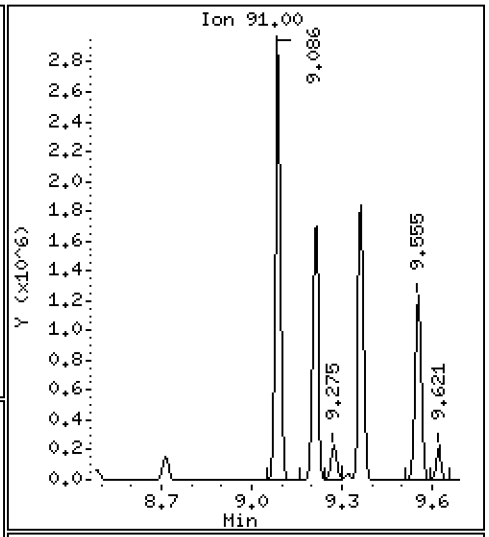
Concentration: 44.472 ug/Kg

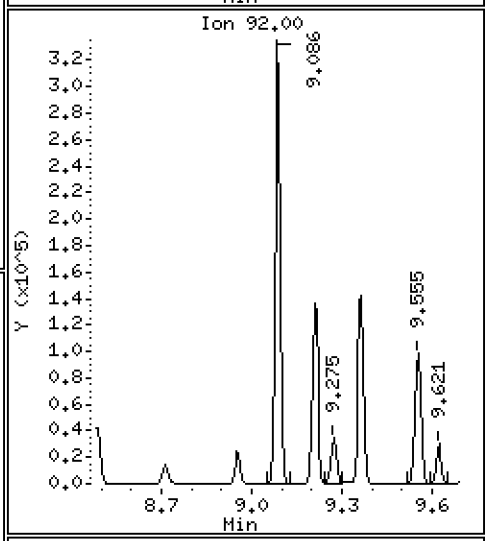


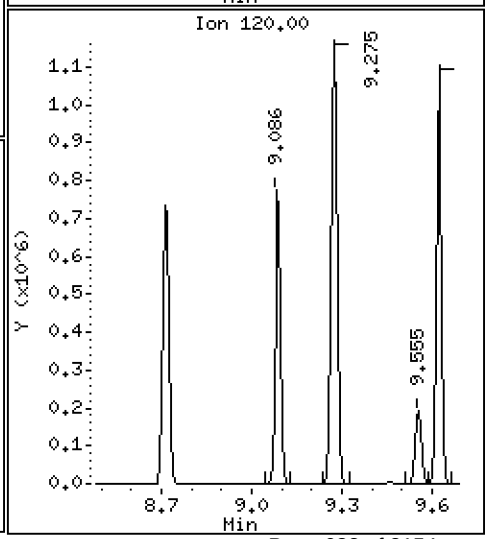












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

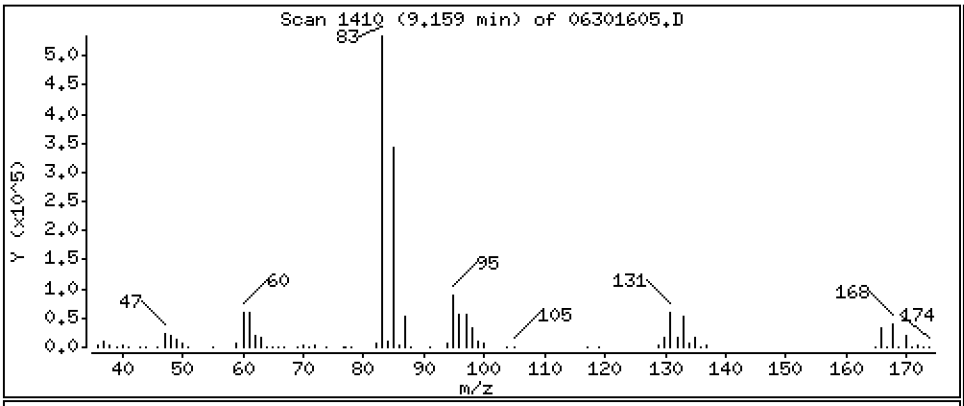
Operator: PB

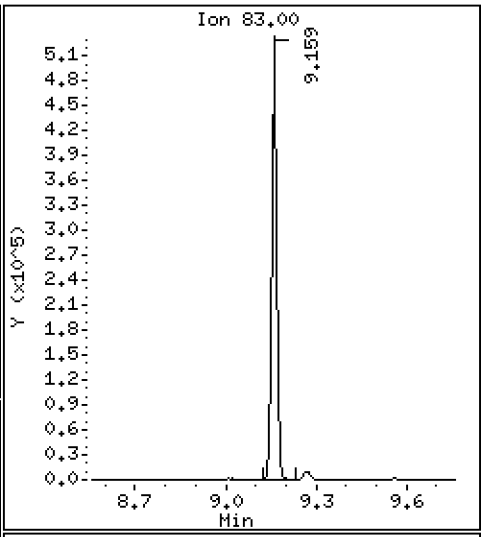
Column phase: RTXVMS

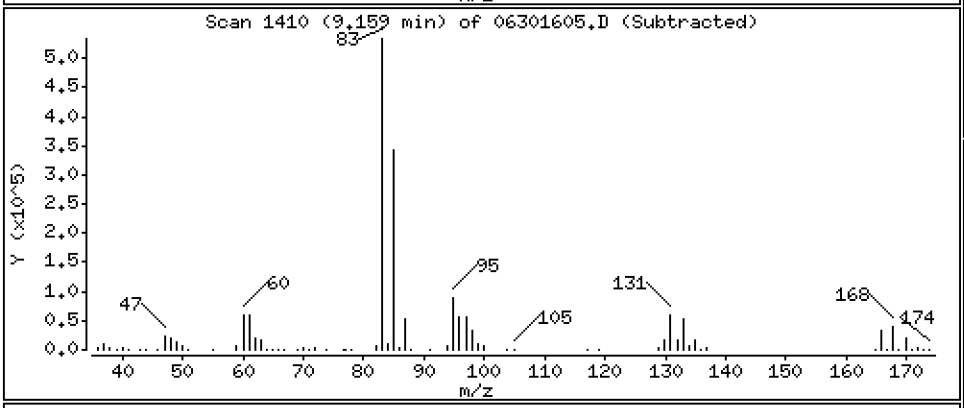
Column diameter: 0.18

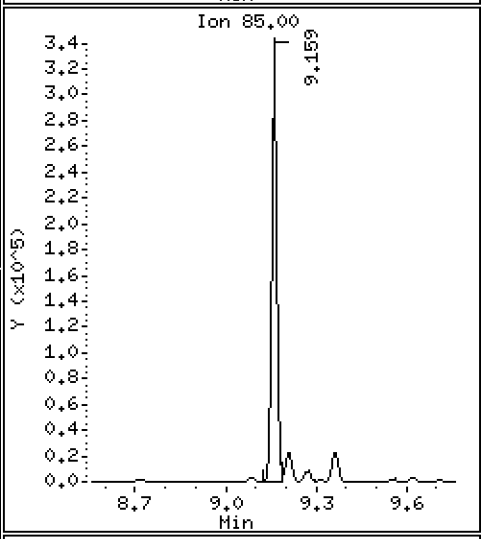
65 1,1,2,2-Tetrachloroethane

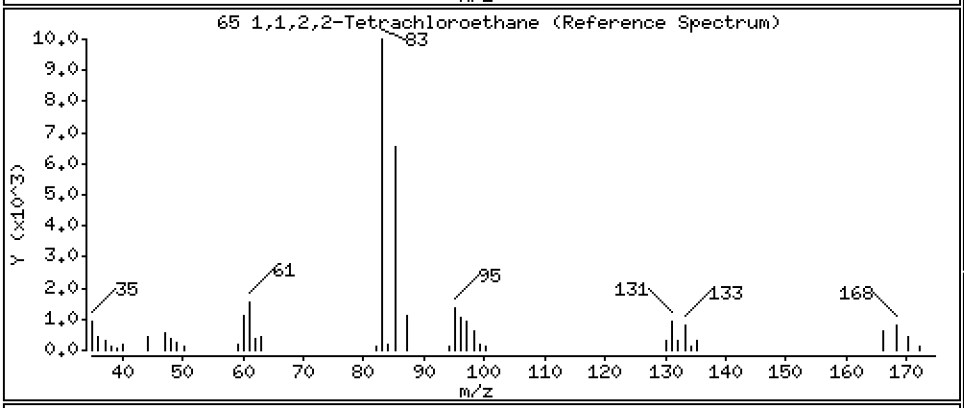
Concentration: 41.212 ug/Kg

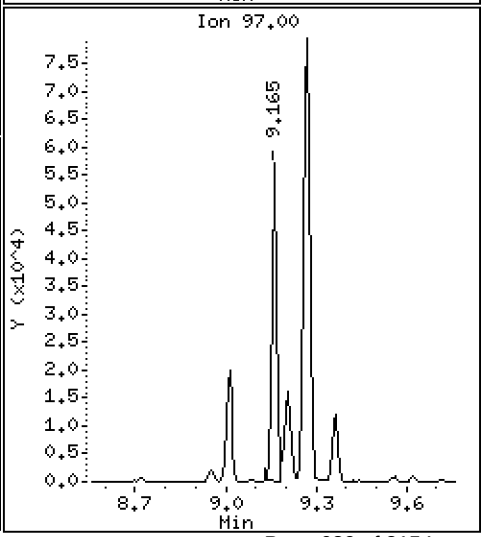


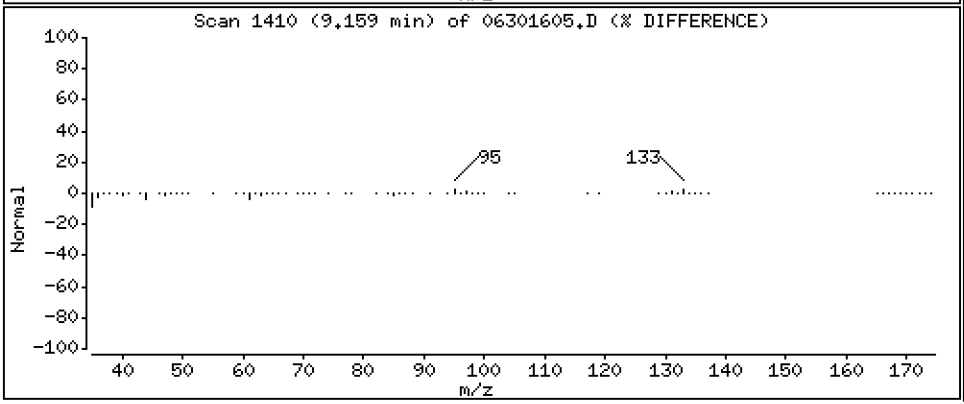












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

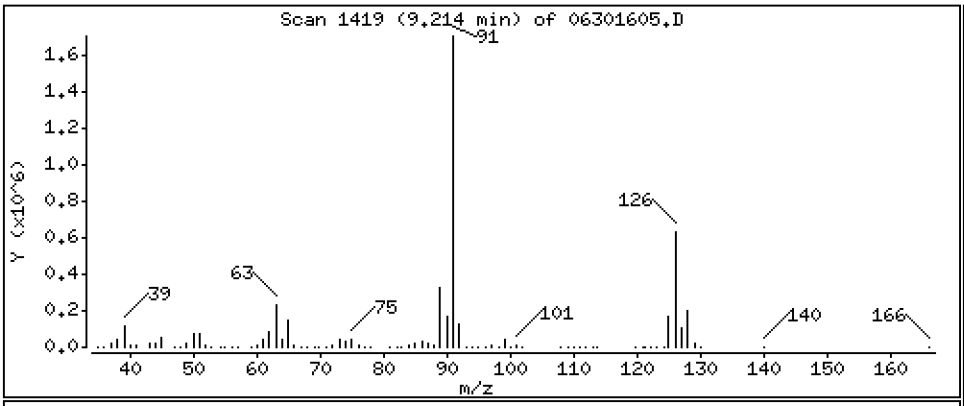
Operator: PB

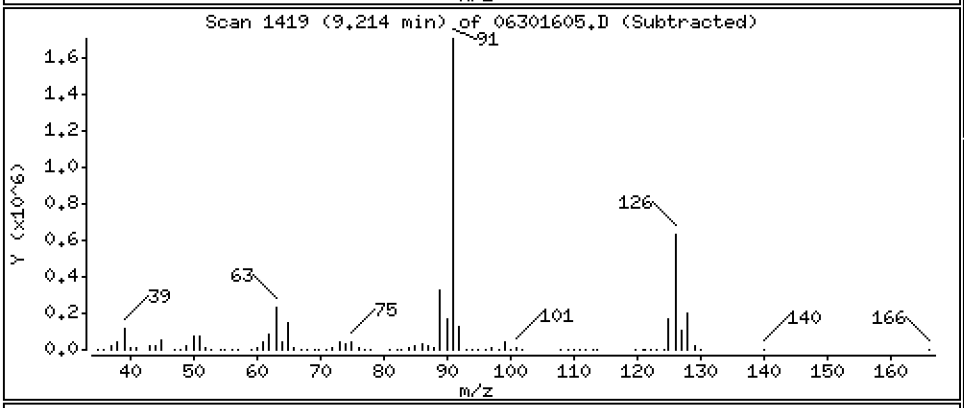
Column phase: RTXVMS

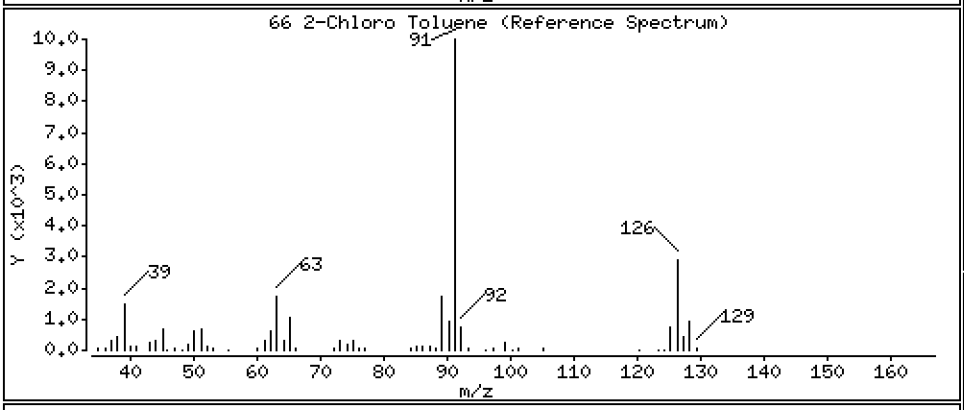
Column diameter: 0.18

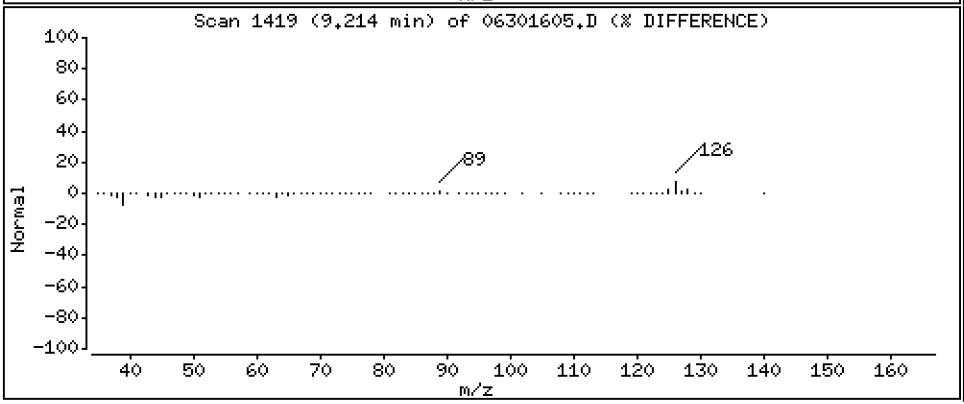
66 2-Chloro Toluene

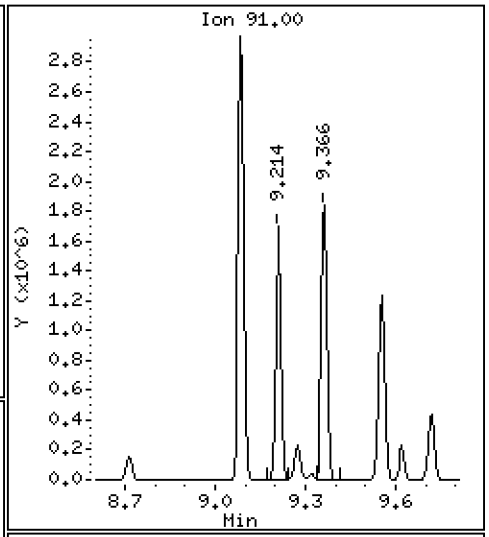
Concentration: 44.872 ug/Kg

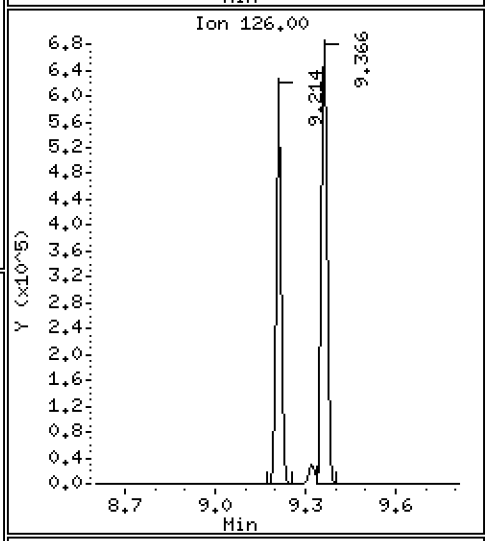


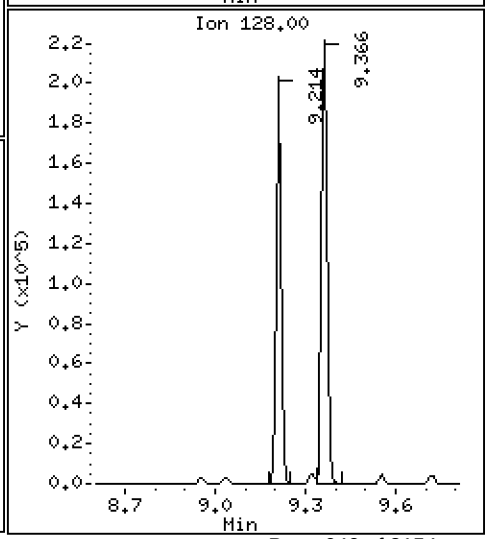












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

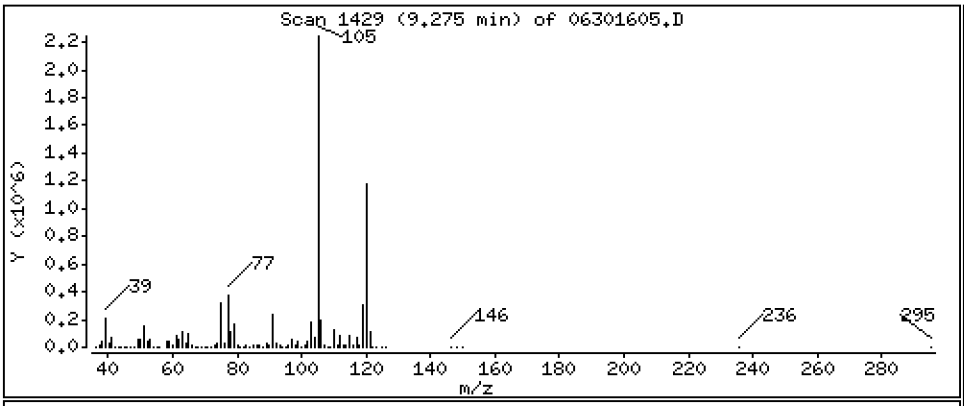
Operator: PB

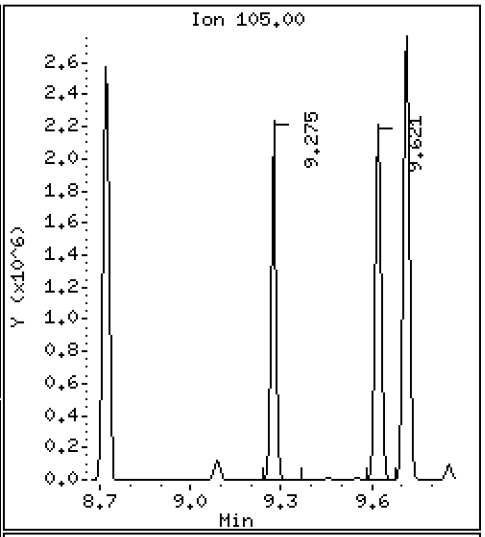
Column phase: RTXVMS

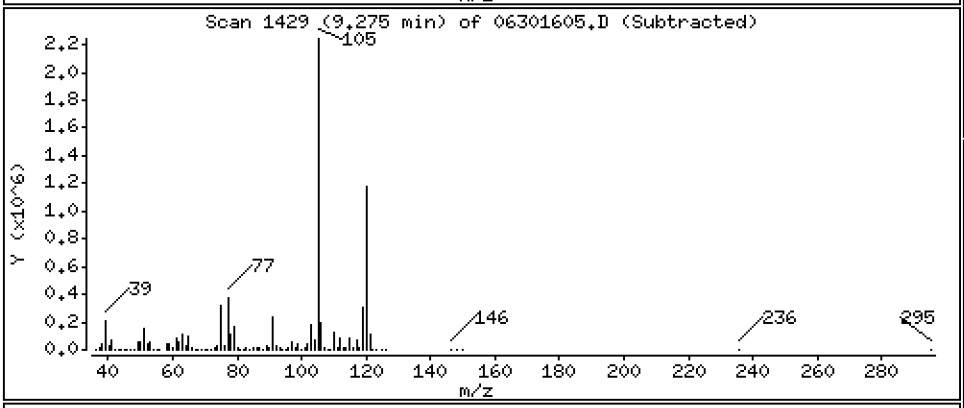
Column diameter: 0.18

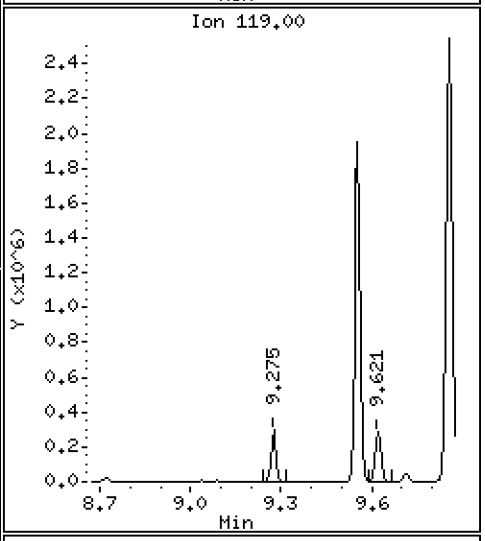
67 1,3,5-Trimethyl Benzene

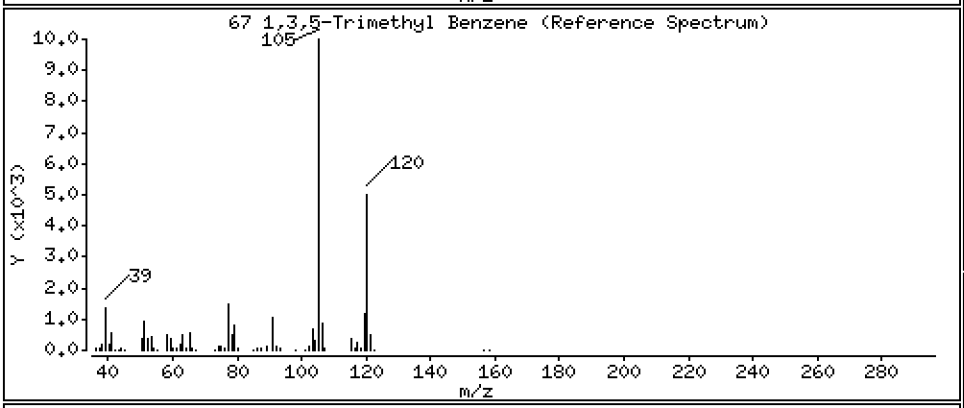
Concentration: 46.456 ug/Kg

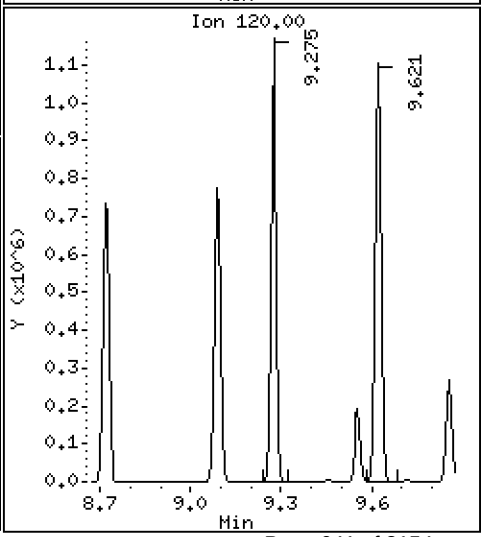


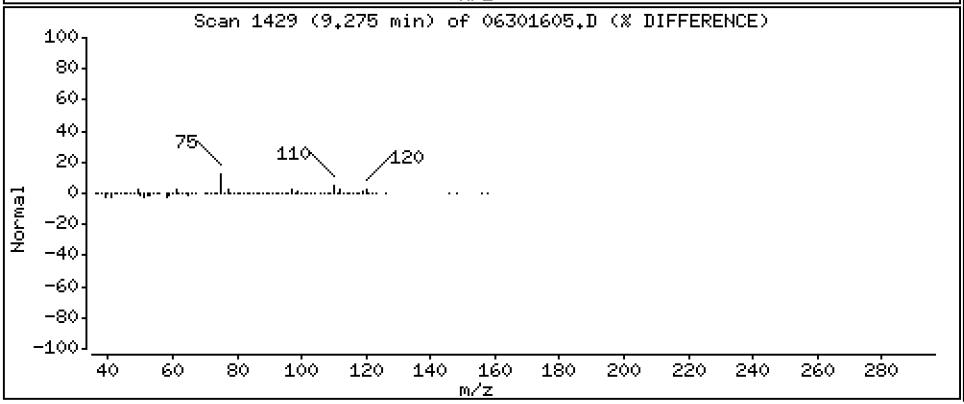












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

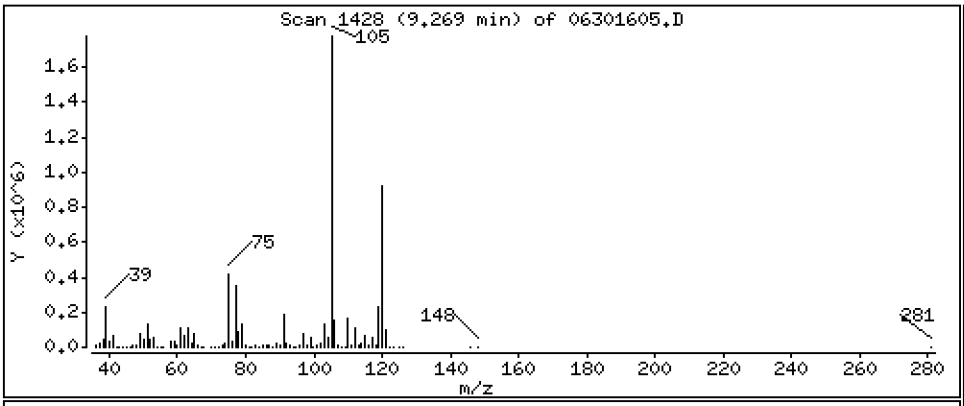
Operator: PB

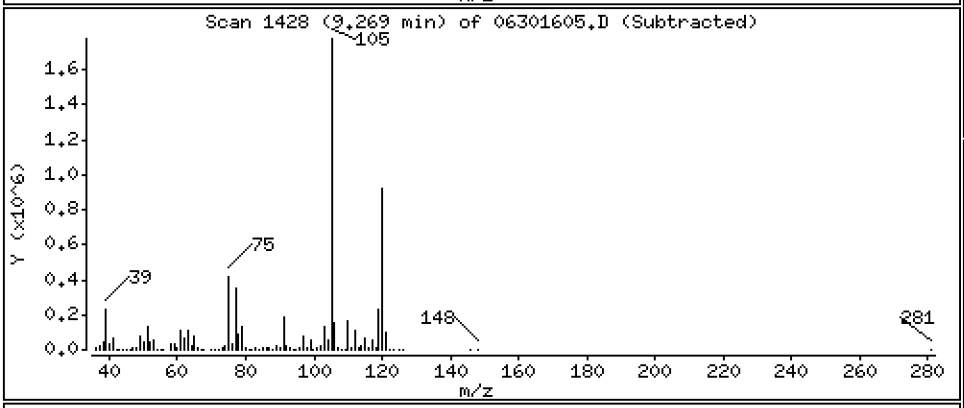
Column phase: RTXVMS

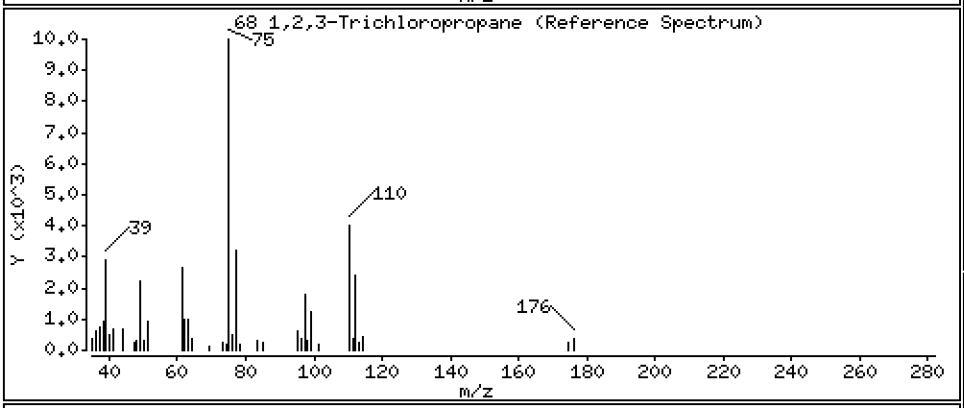
Column diameter: 0.18

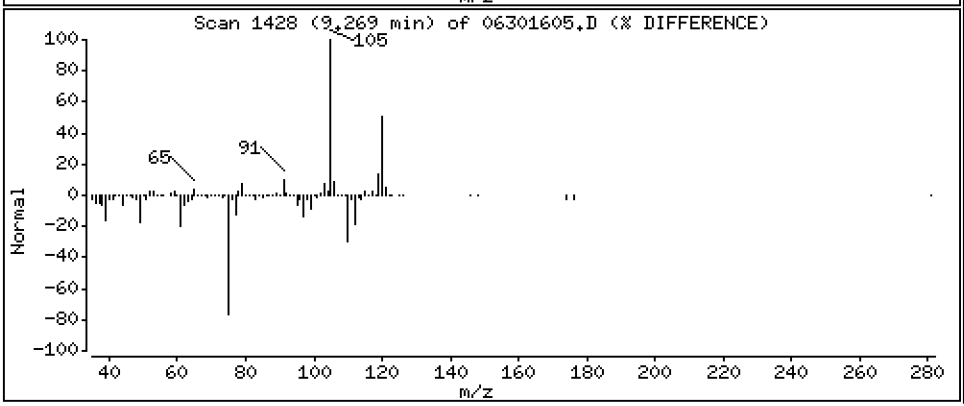
68 1,2,3-Trichloropropane

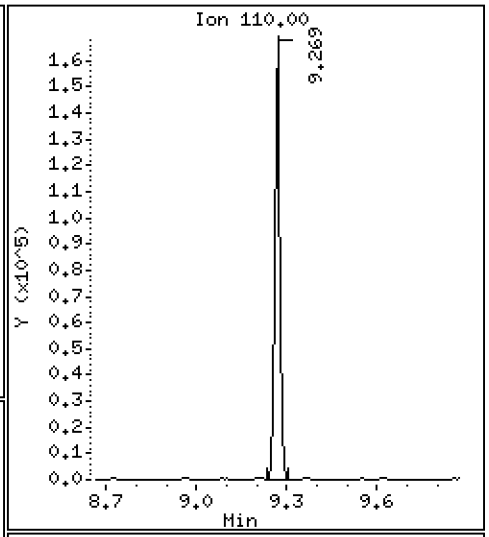
Concentration: 43.823 ug/Kg

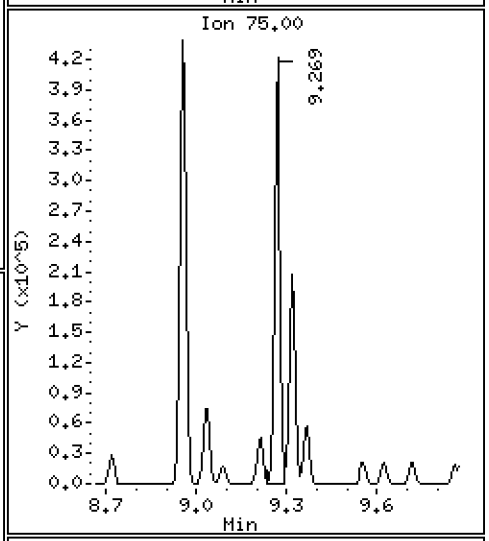


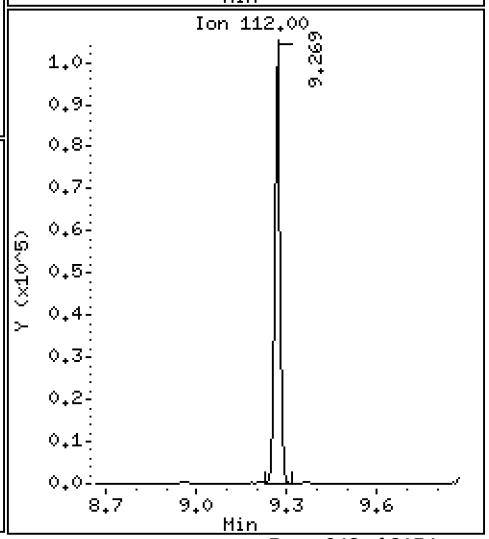












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

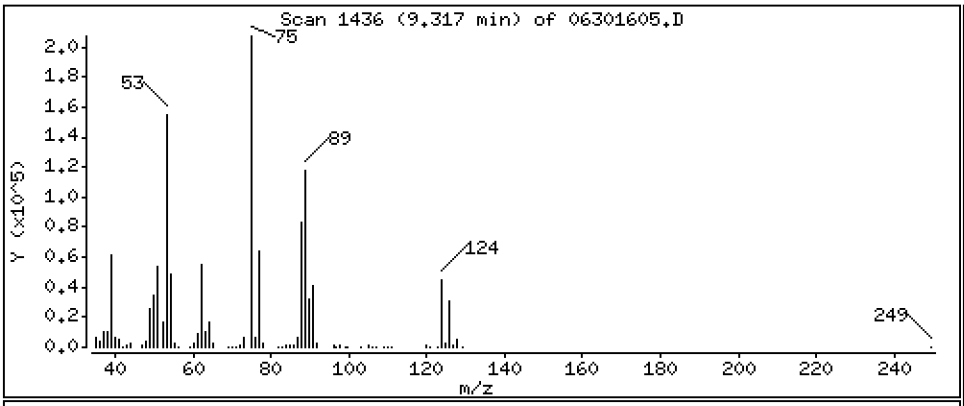
Operator: PB

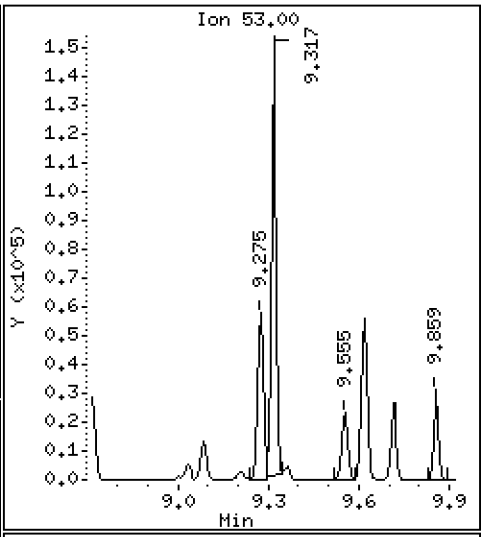
Column phase: RTXVMS

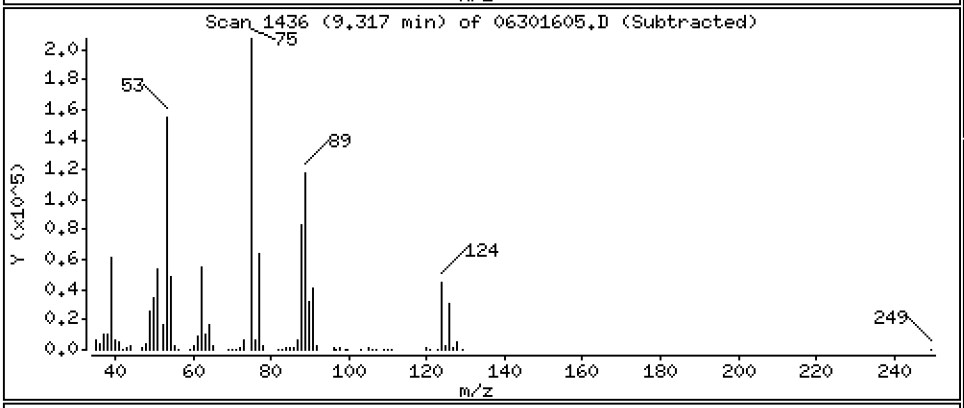
Column diameter: 0.18

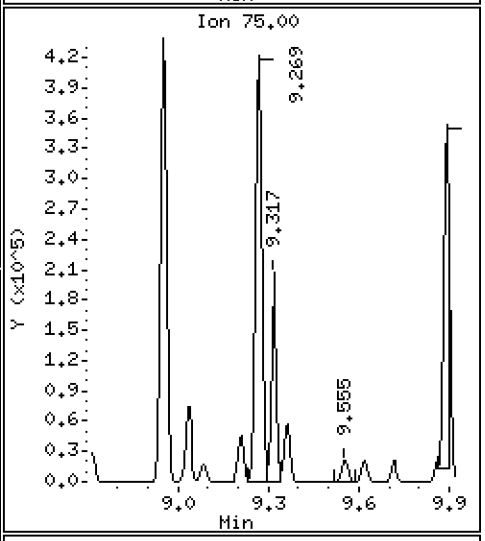
69 Trans-1,4-Dichloro 2-Butene

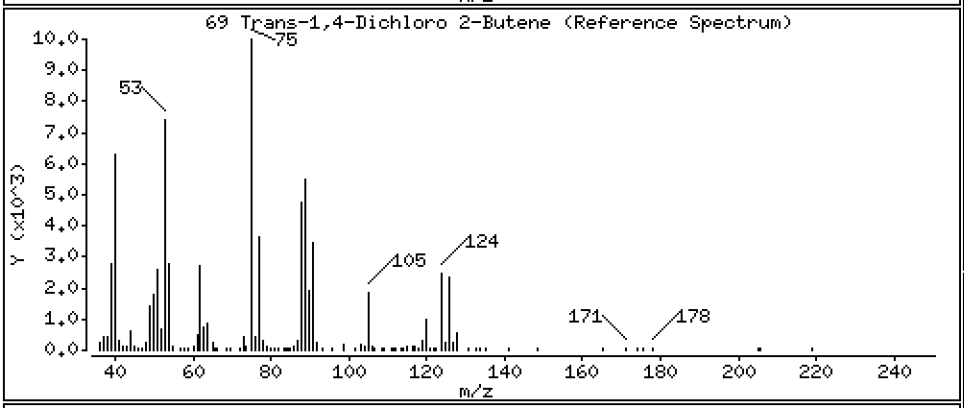
Concentration: 39.366 ug/Kg

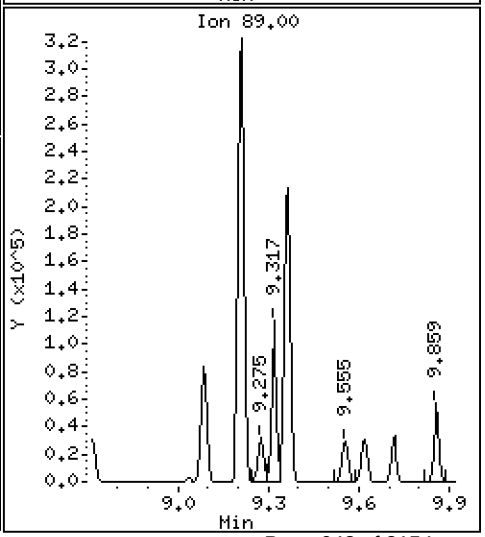


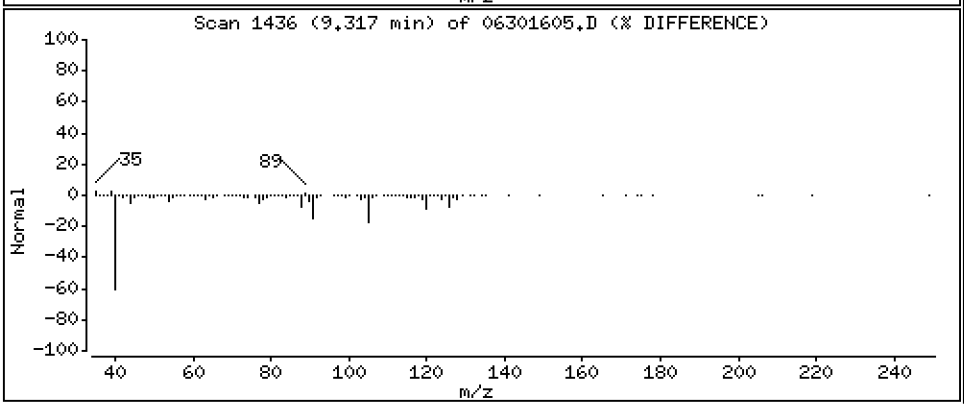












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

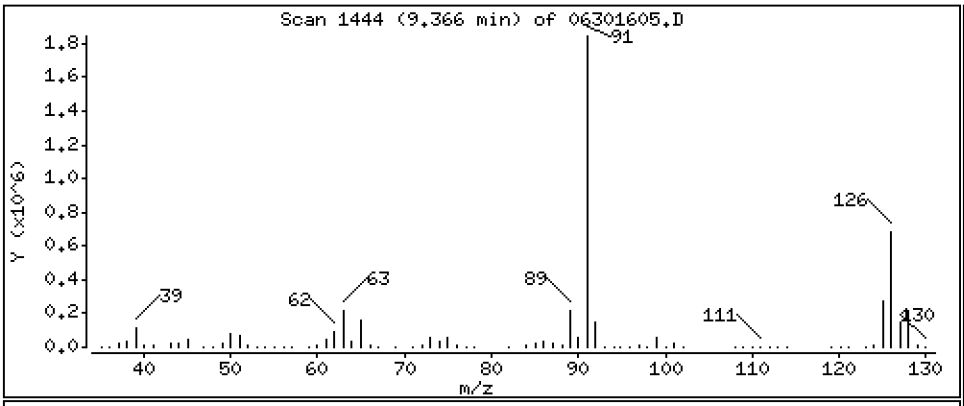
Operator: PB

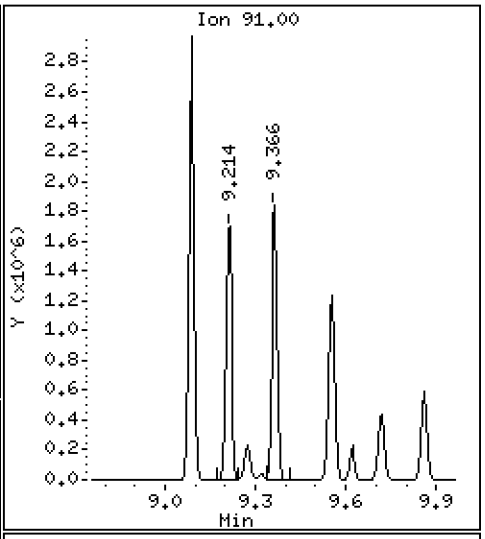
Column phase: RTXVMS

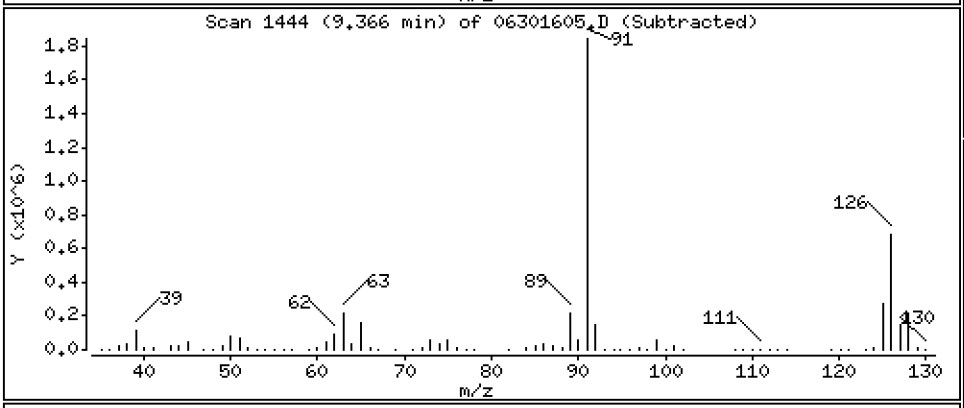
Column diameter: 0.18

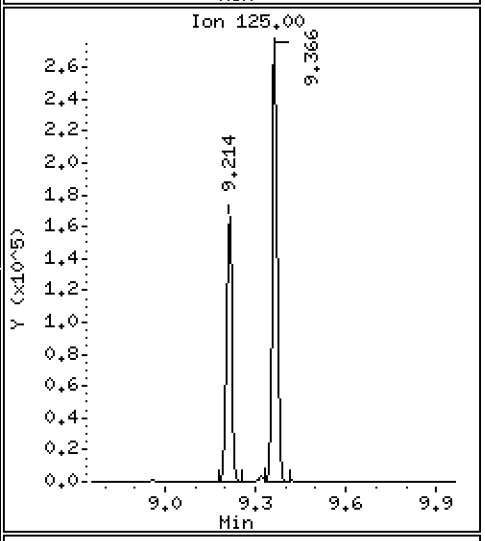
70 4-Chloro Toluene

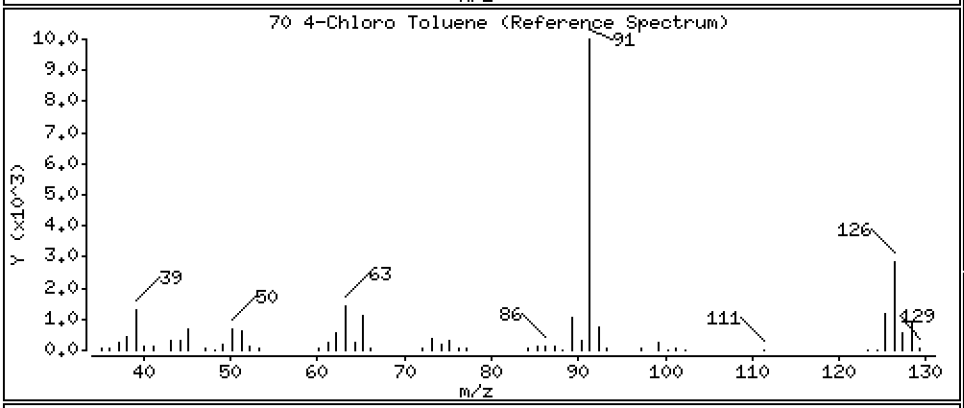
Concentration: 45.431 ug/Kg

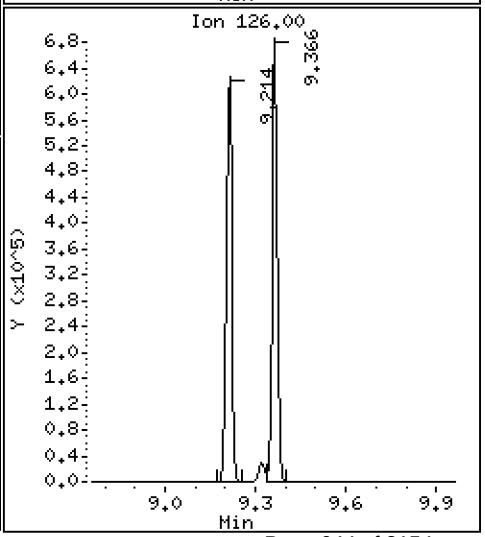


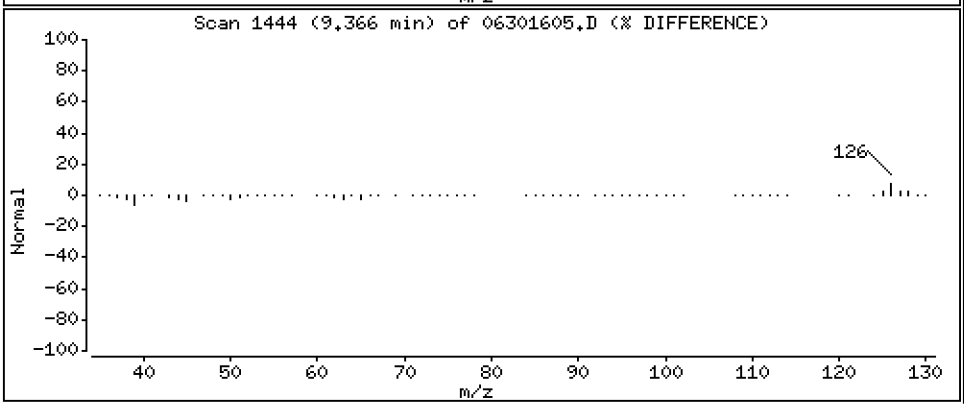












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

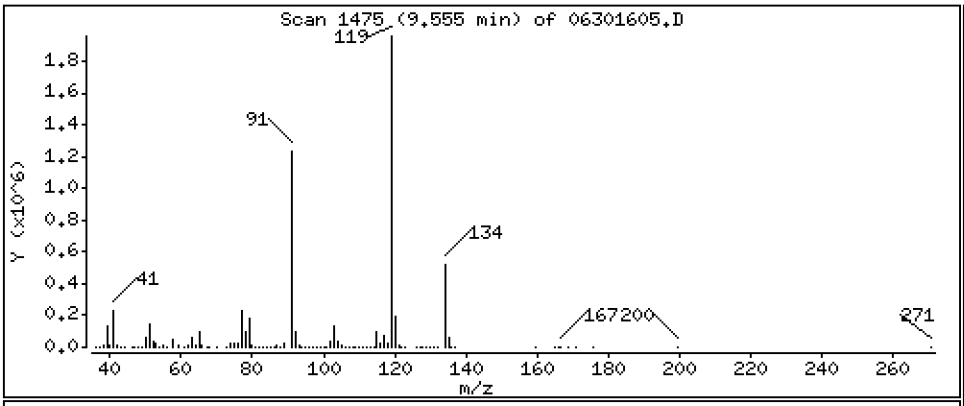
Operator: PB

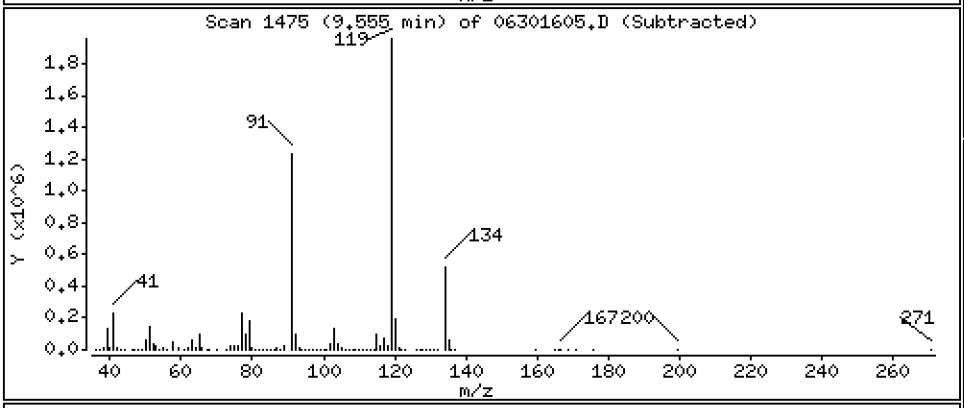
Column phase: RTXVMS

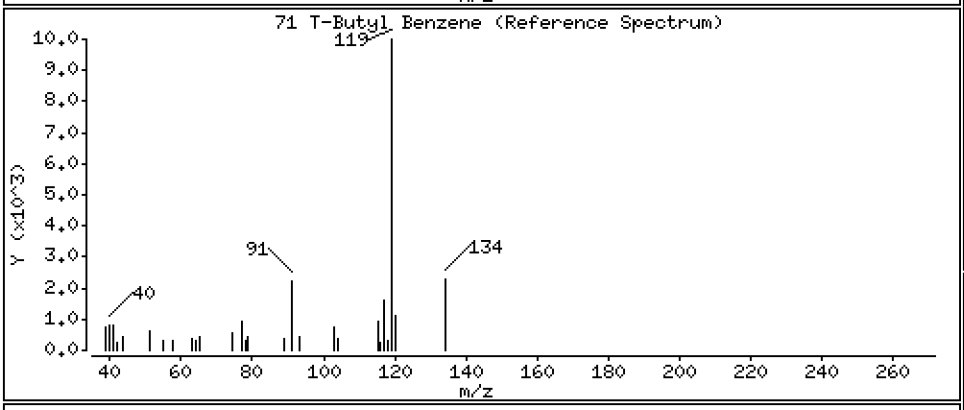
Column diameter: 0.18

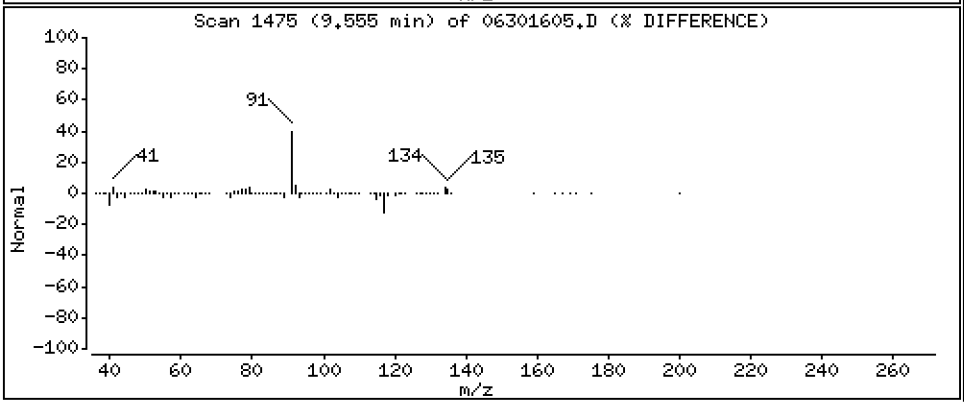
71 T-Butyl Benzene

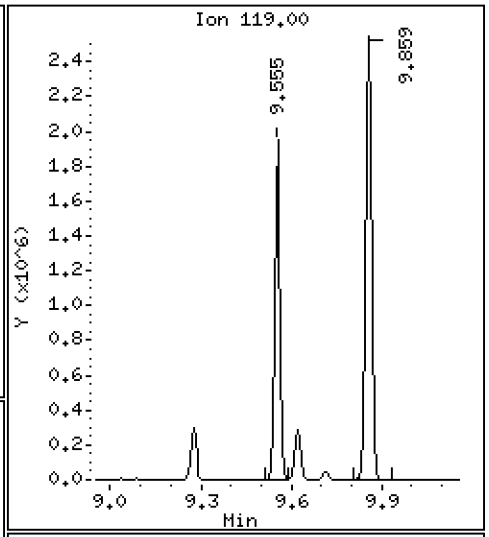
Concentration: 45.909 ug/Kg

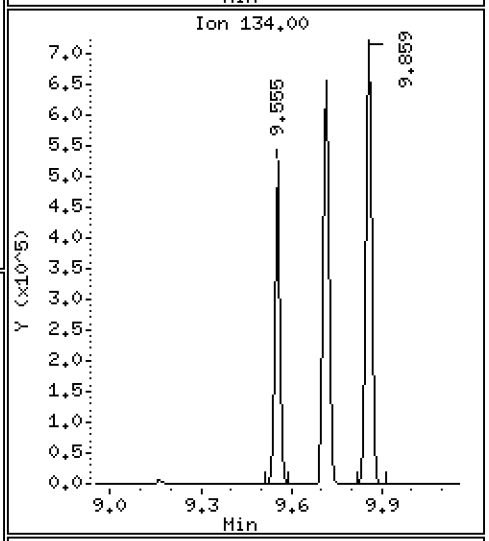


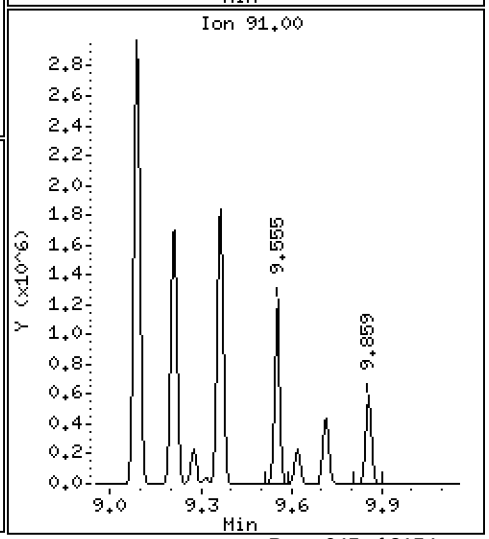












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

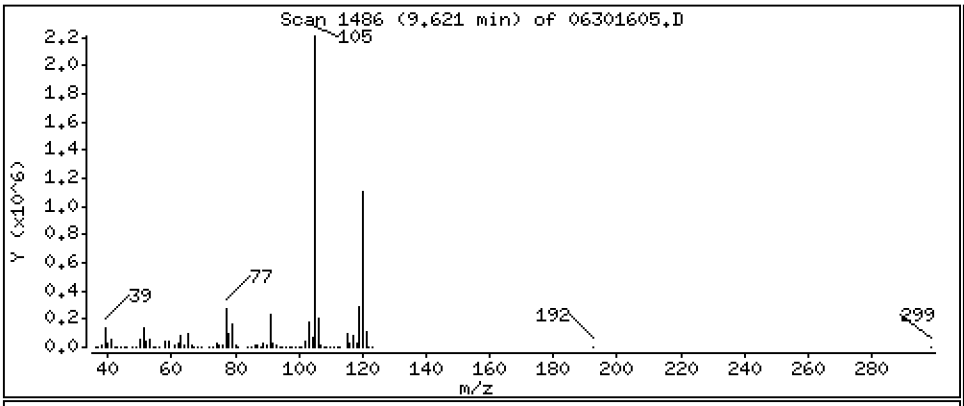
Operator: PB

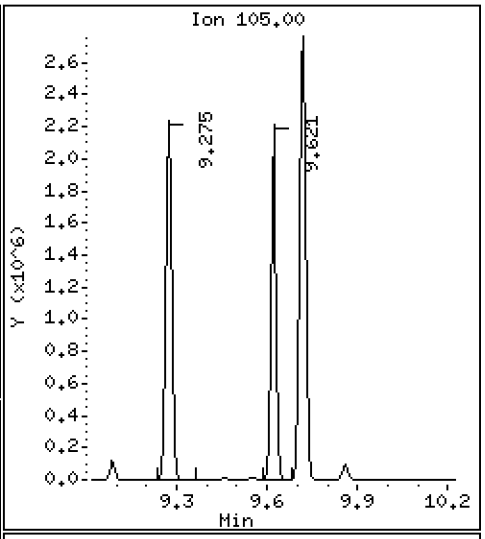
Column phase: RTXVMS

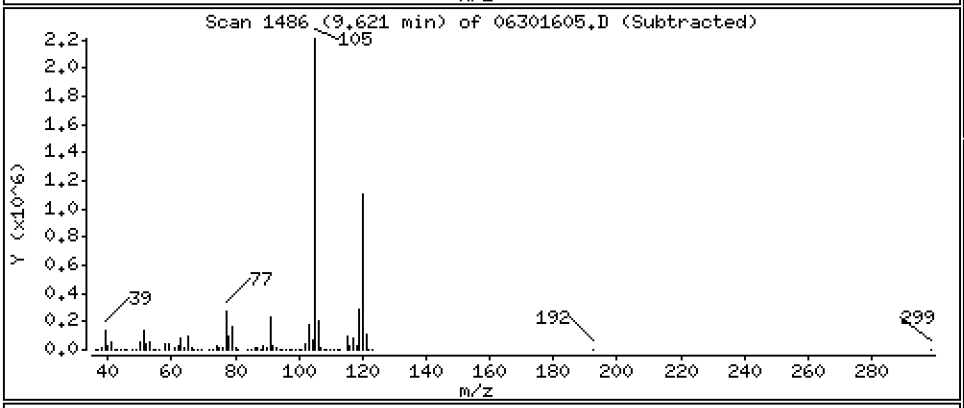
Column diameter: 0.18

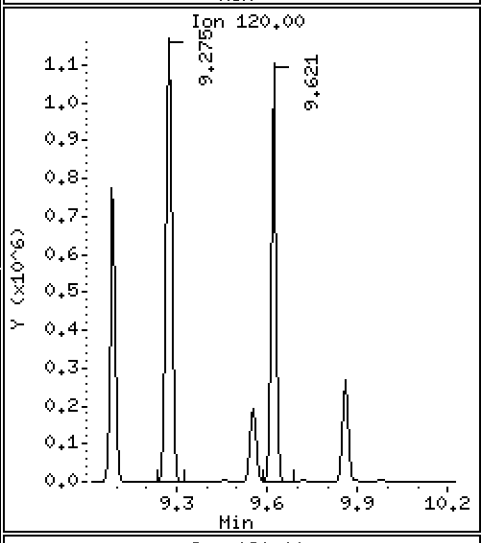
72 1,2,4-Trimethylbenzene

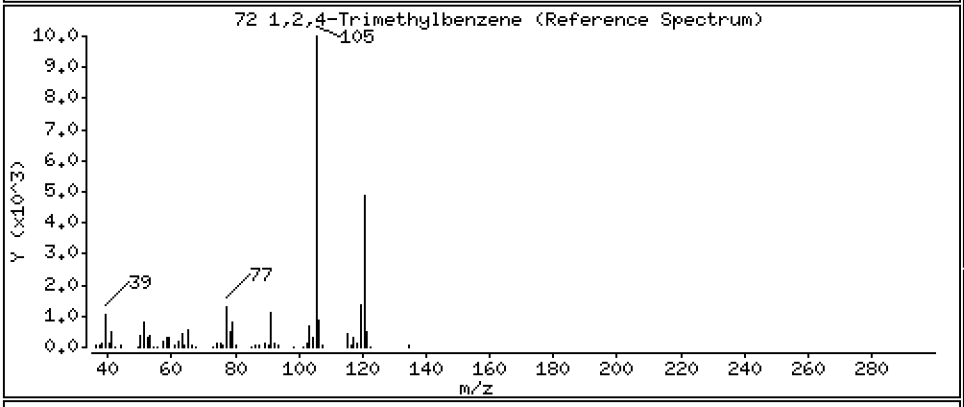
Concentration: 46.201 ug/Kg

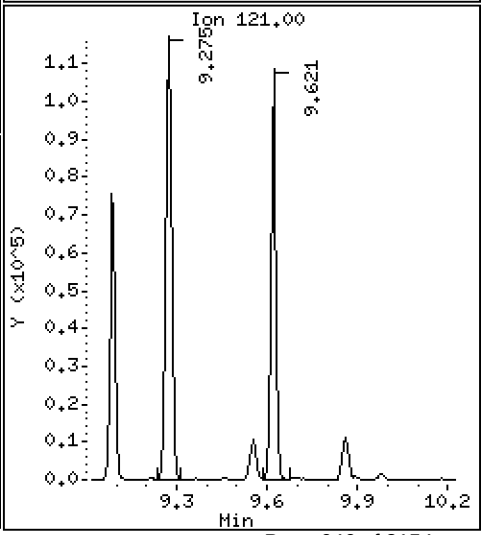


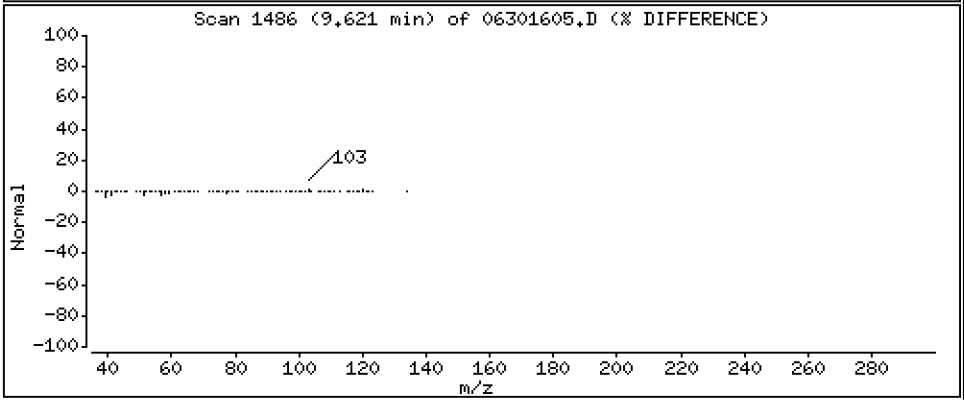












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

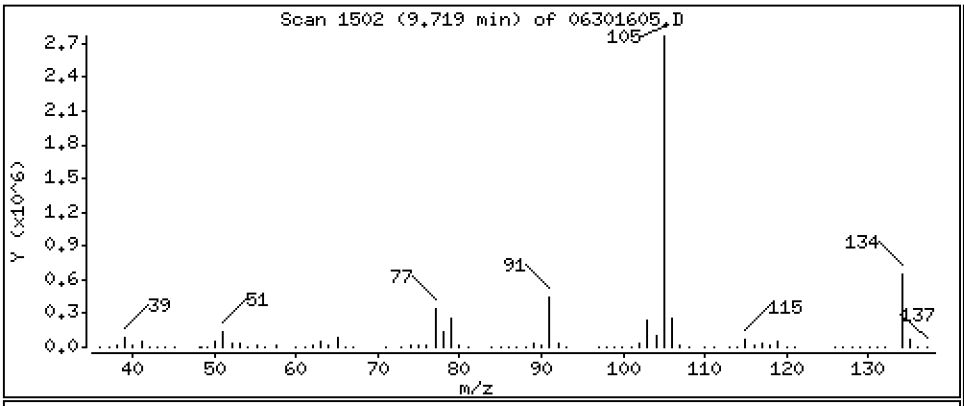
Operator: PB

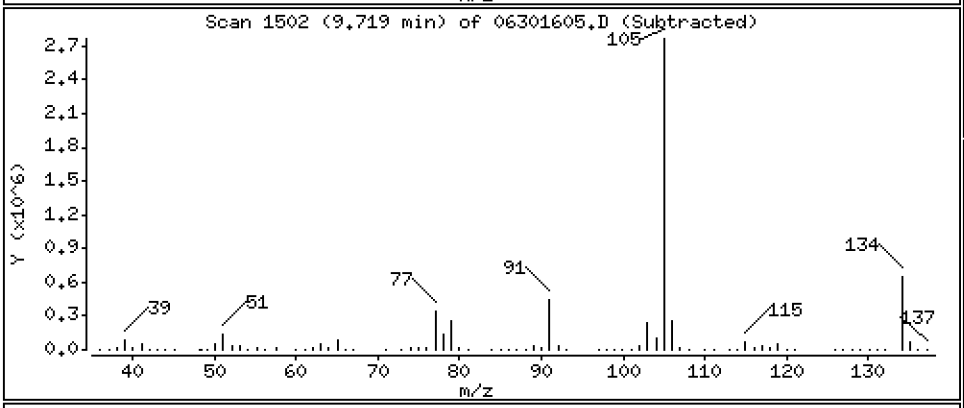
Column phase: RTXVMS

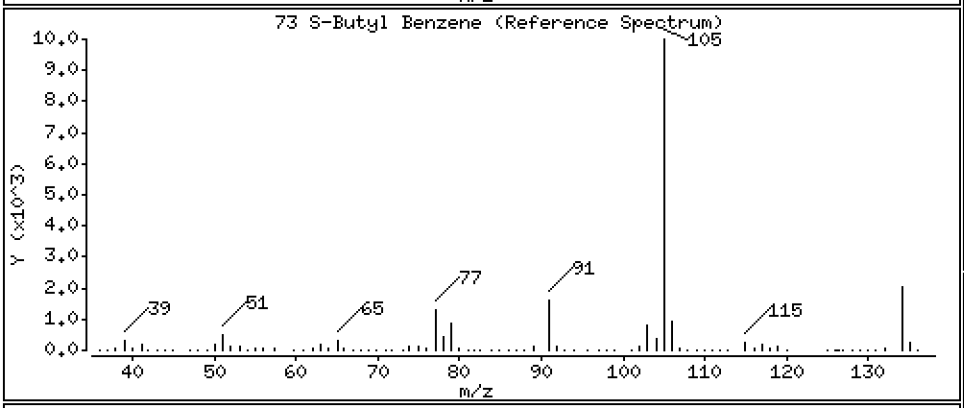
Column diameter: 0.18

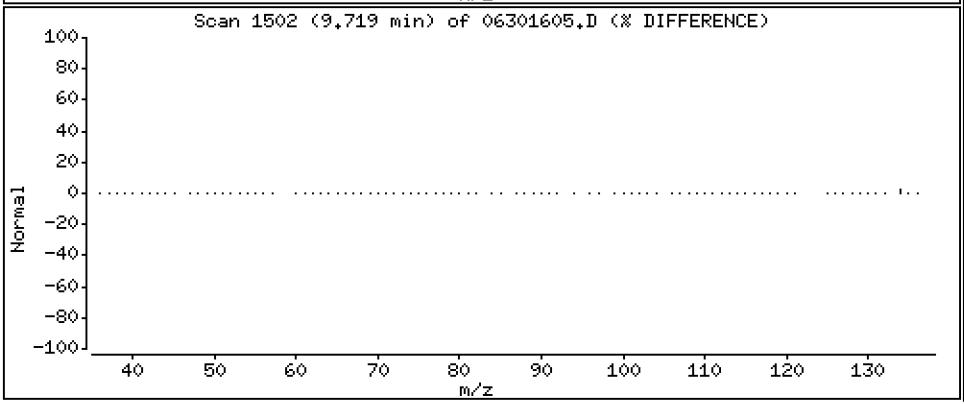
73 S-Butyl Benzene

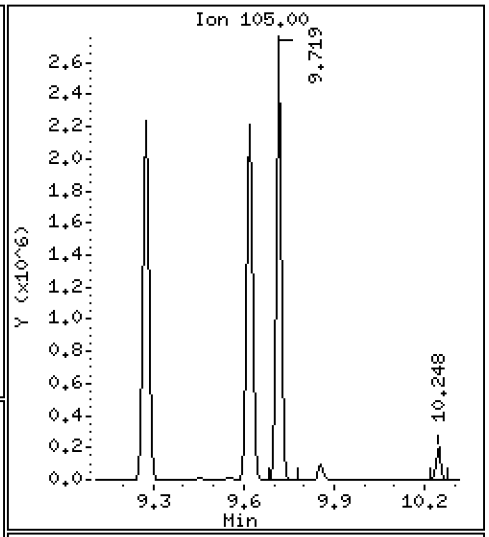
Concentration: 44.626 ug/Kg

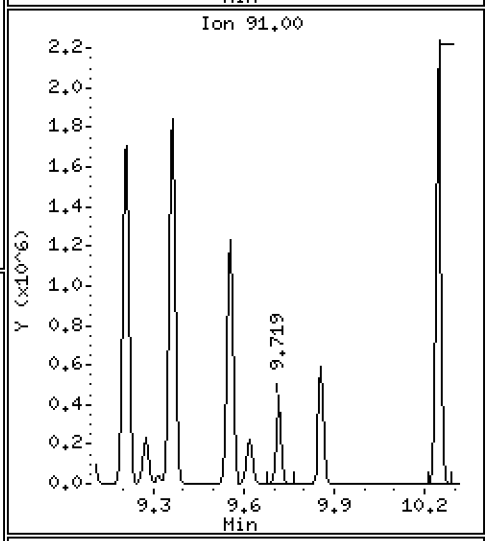


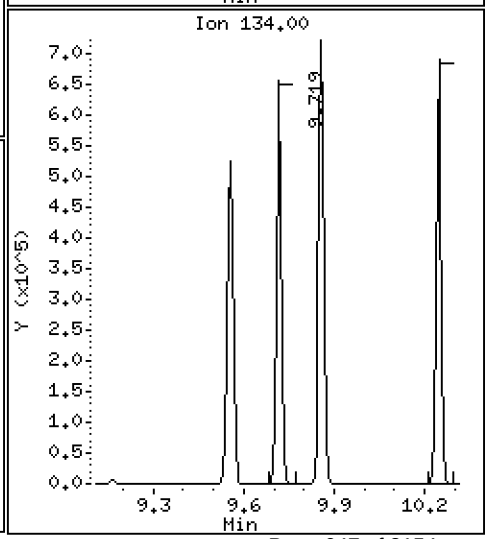












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

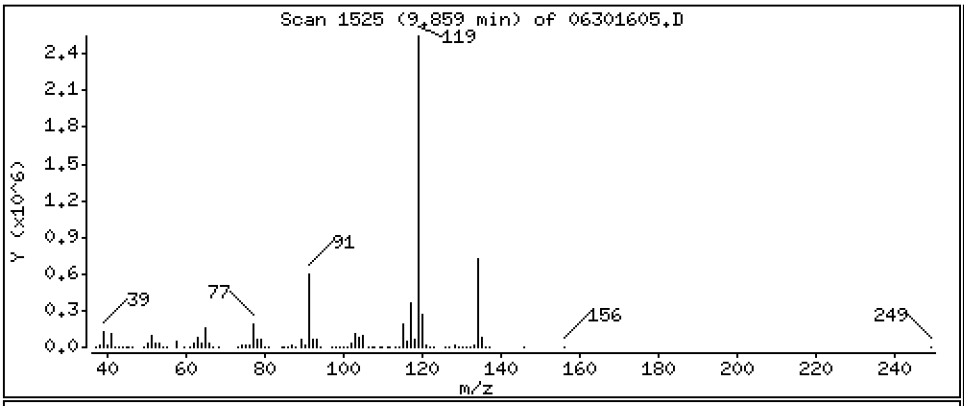
Operator: PB

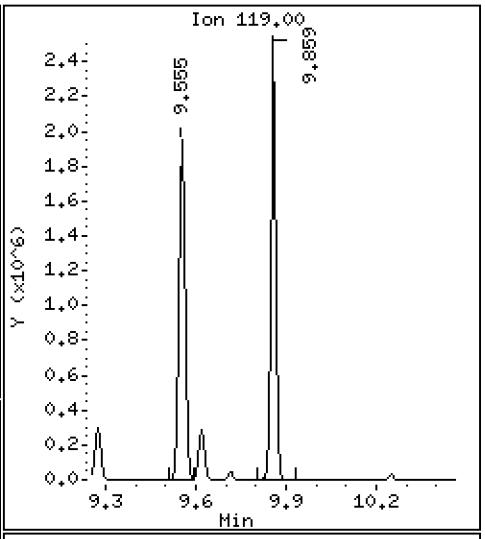
Column phase: RTXVMS

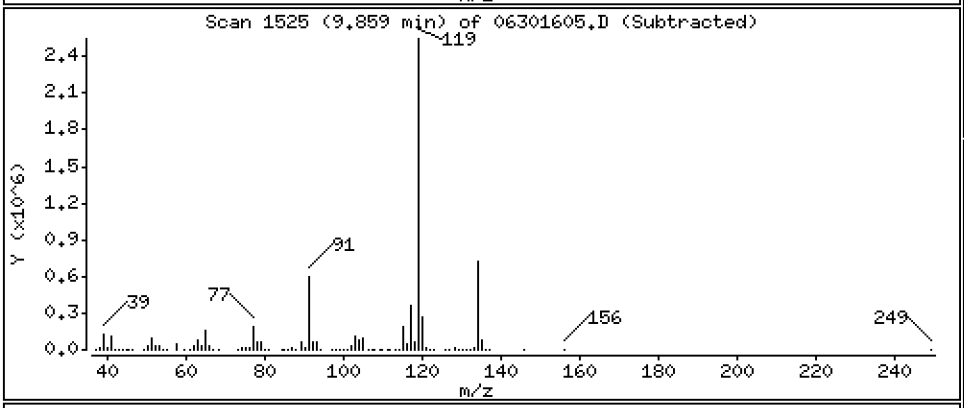
Column diameter: 0.18

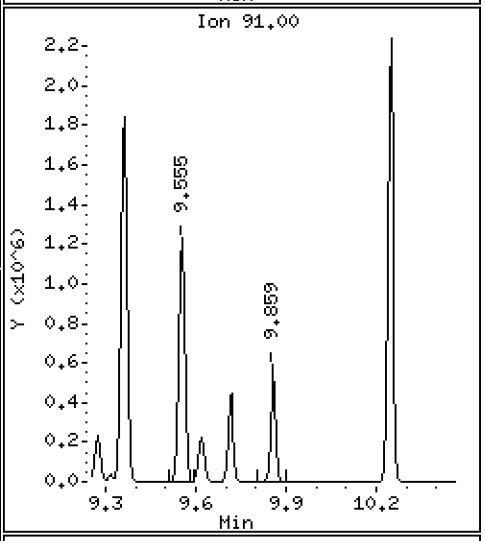
74 4-Isopropyl Toluene

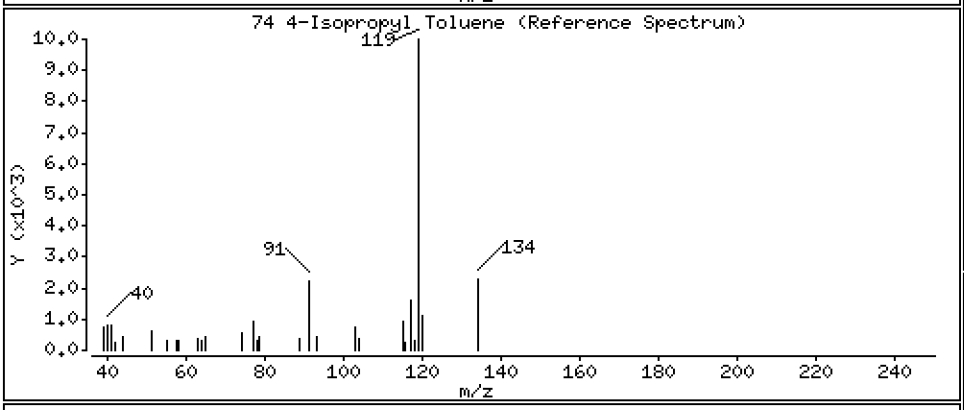
Concentration: 47.225 ug/Kg

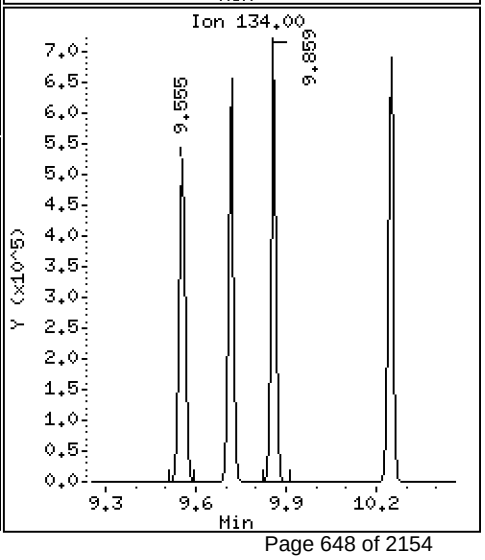


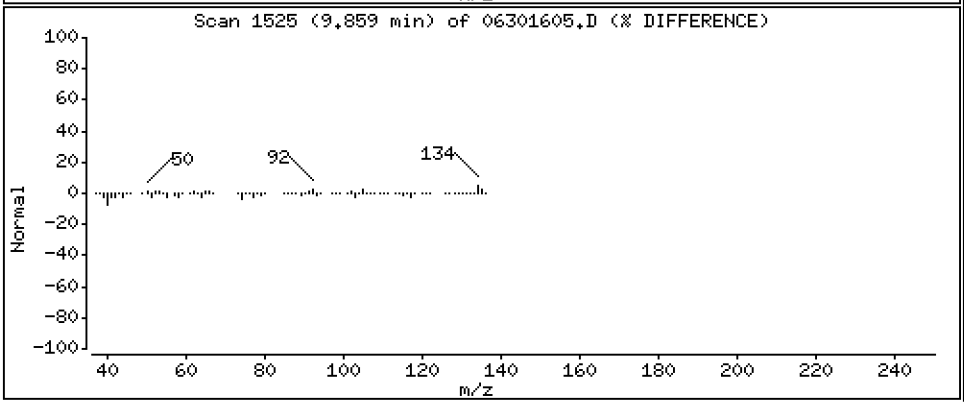












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

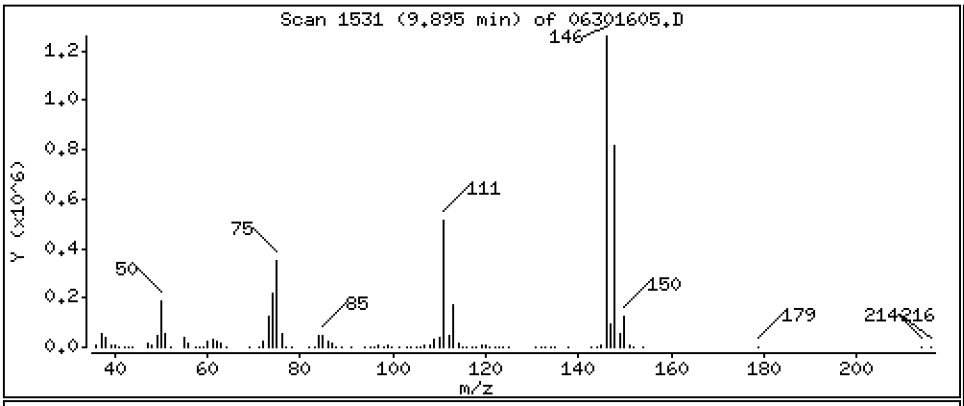
Operator: PB

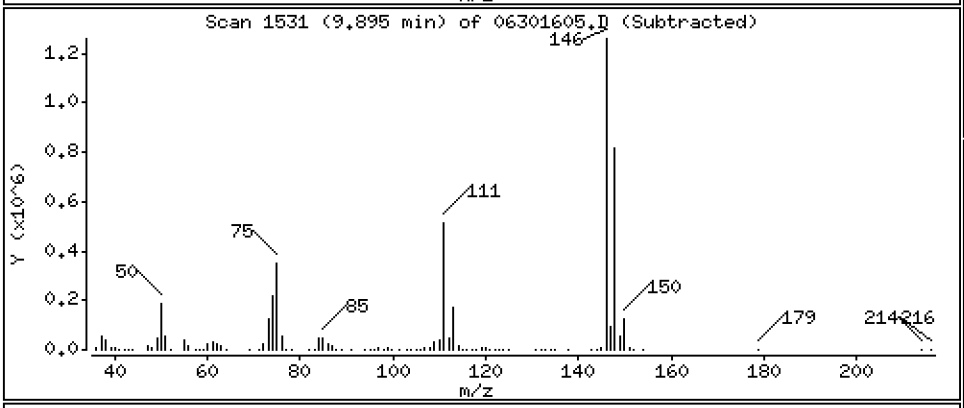
Column phase: RTXVMS

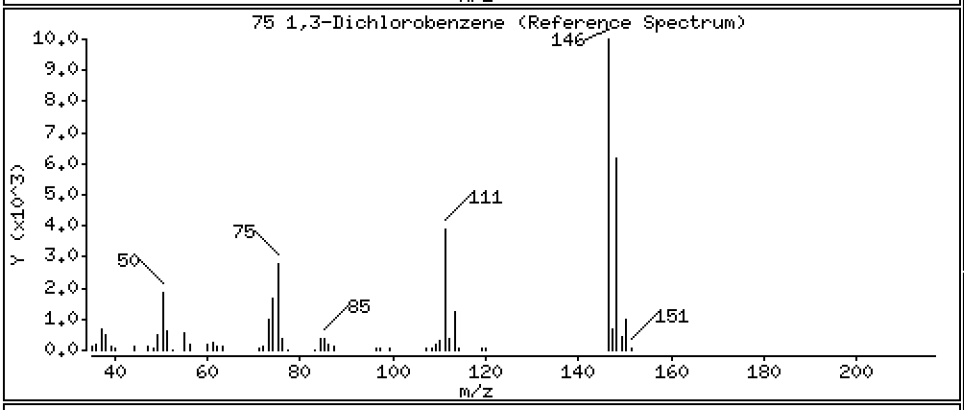
Column diameter: 0.18

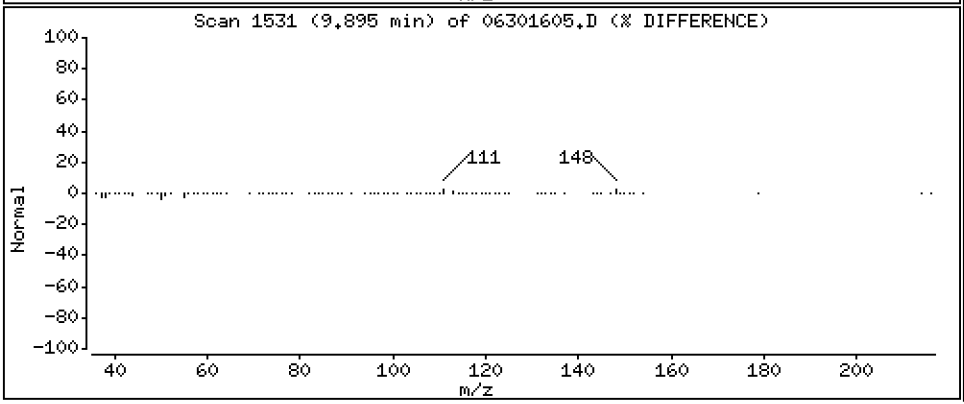
75 1,3-Dichlorobenzene

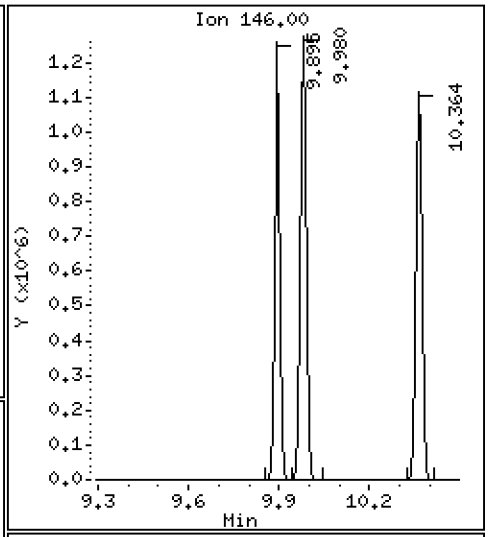
Concentration: 48.382 ug/Kg

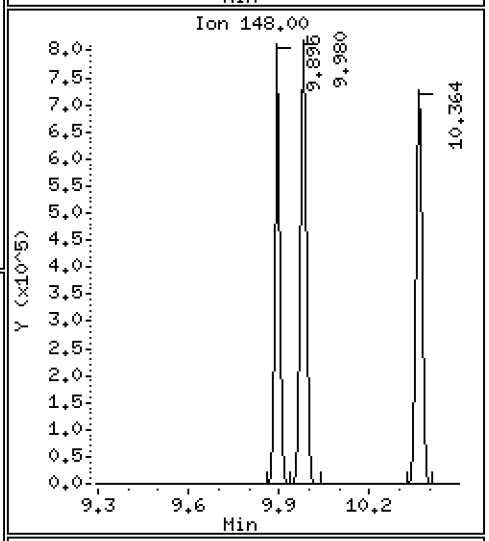


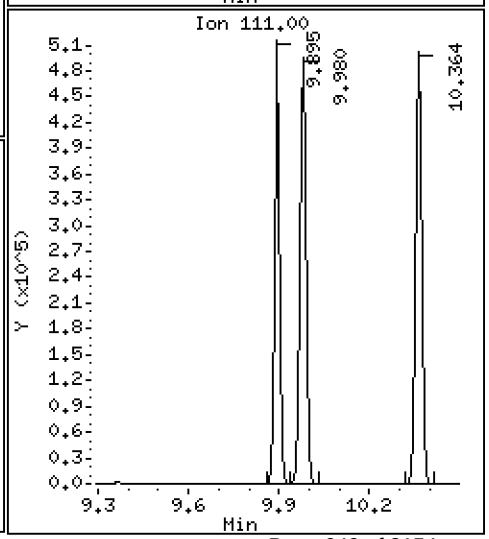












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

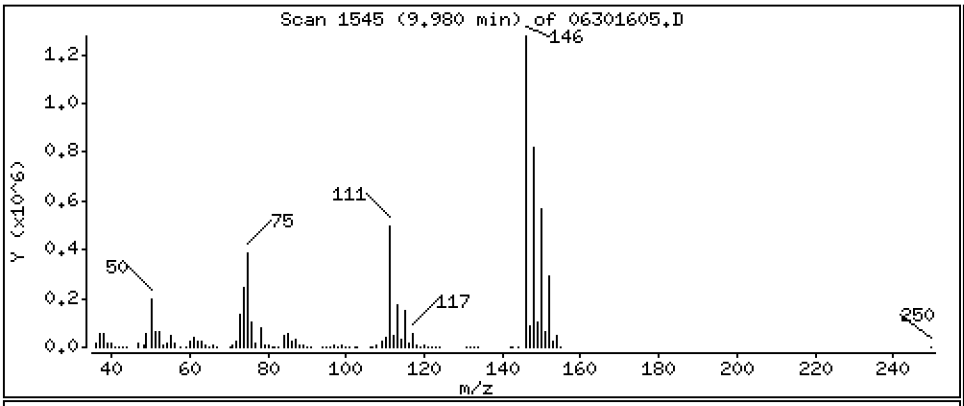
Operator: PB

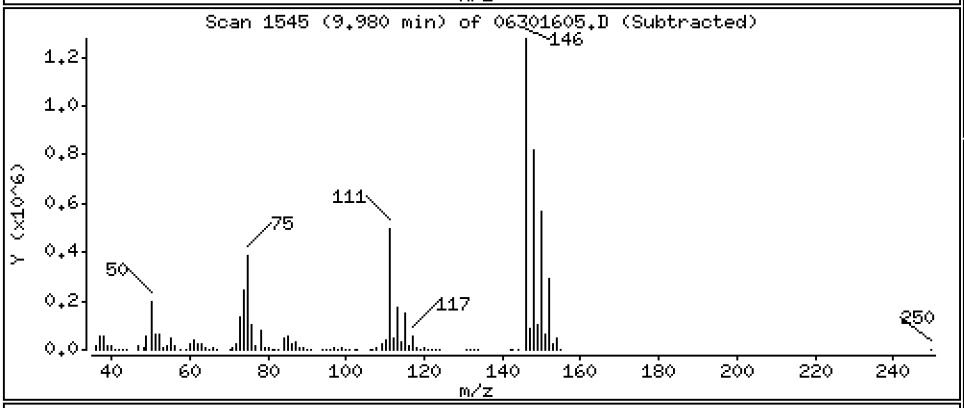
Column phase: RTXVMS

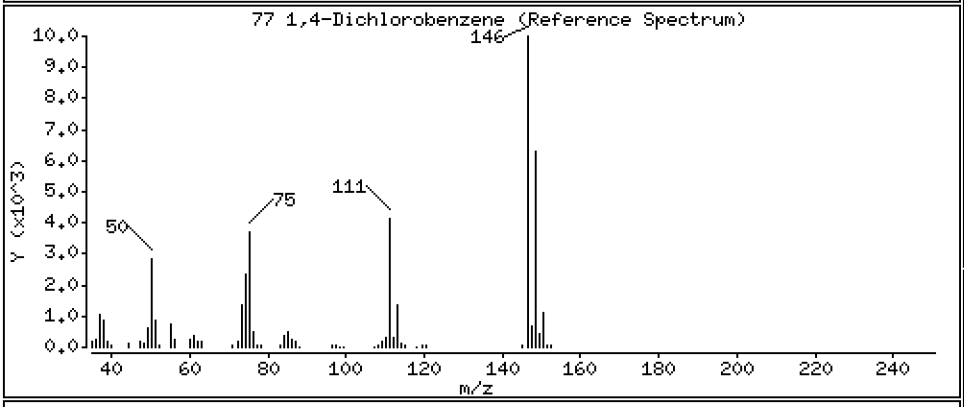
Column diameter: 0.18

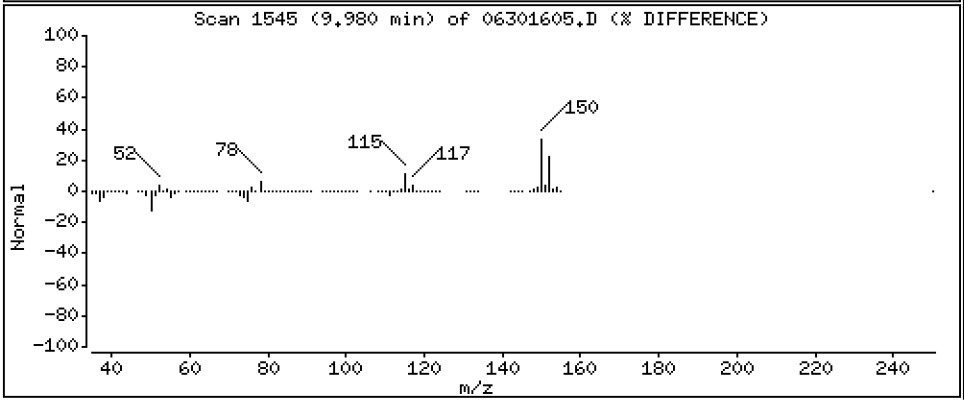
77 1,4-Dichlorobenzene

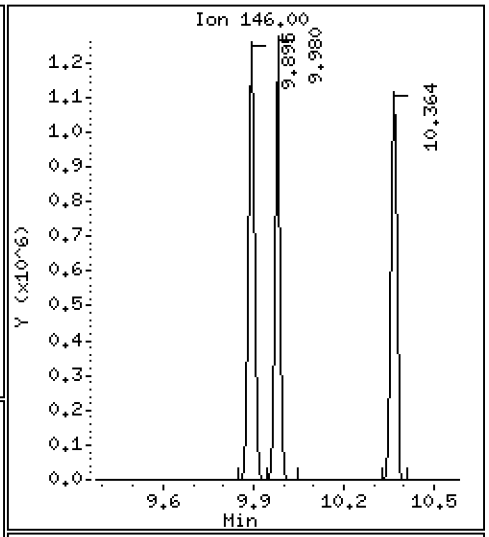
Concentration: 47.953 ug/Kg

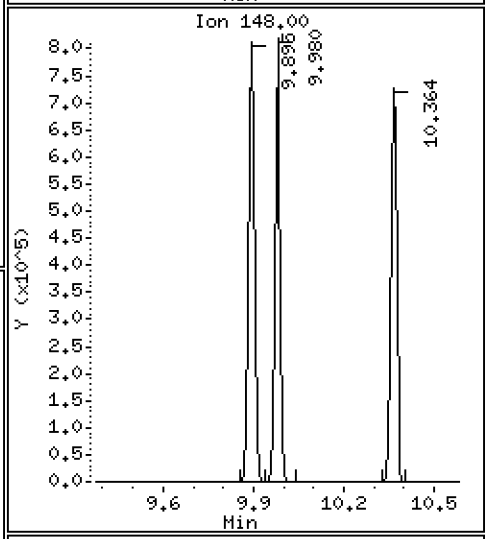


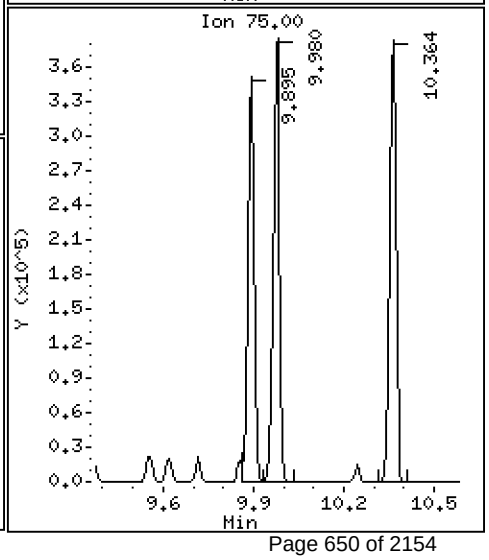












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

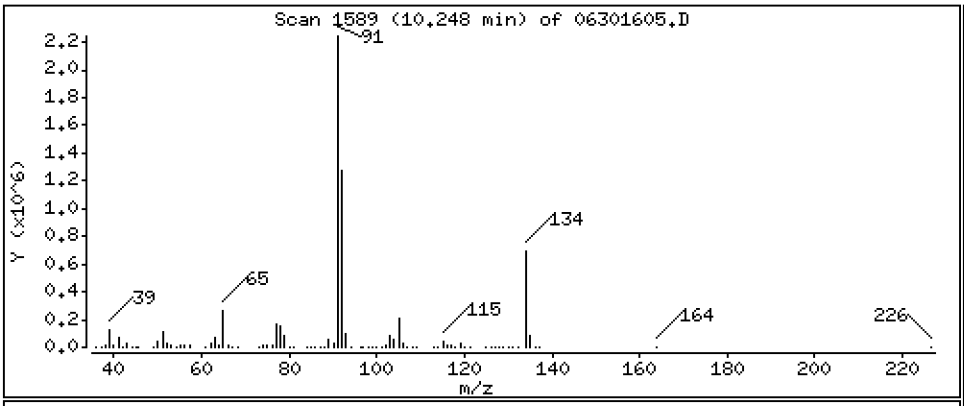
Operator: PB

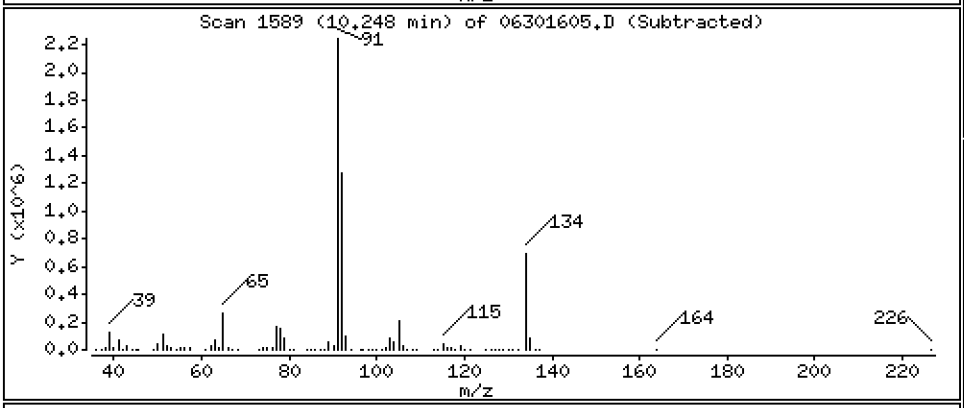
Column phase: RTXVMS

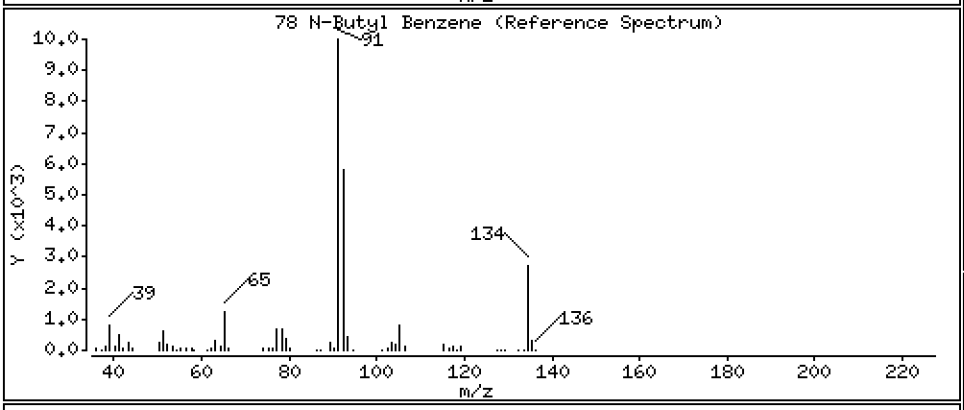
Column diameter: 0.18

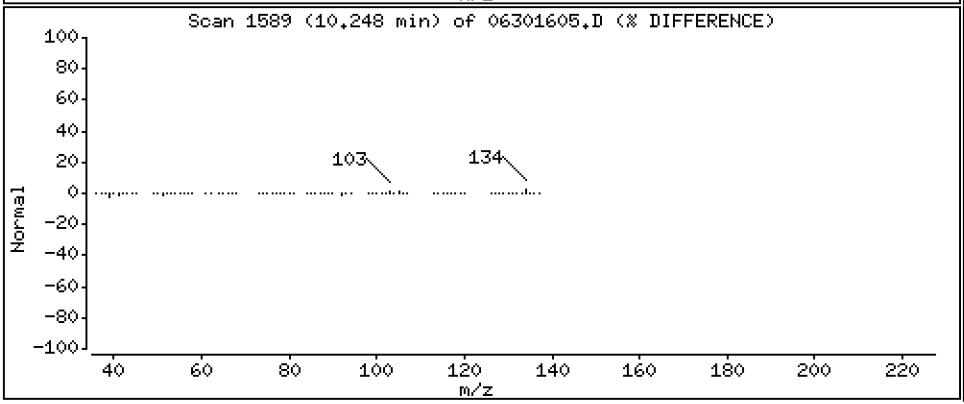
78 N-Butyl Benzene

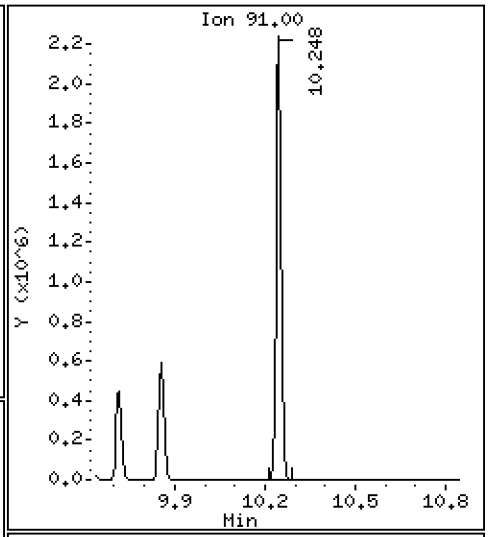
Concentration: 46.622 ug/Kg

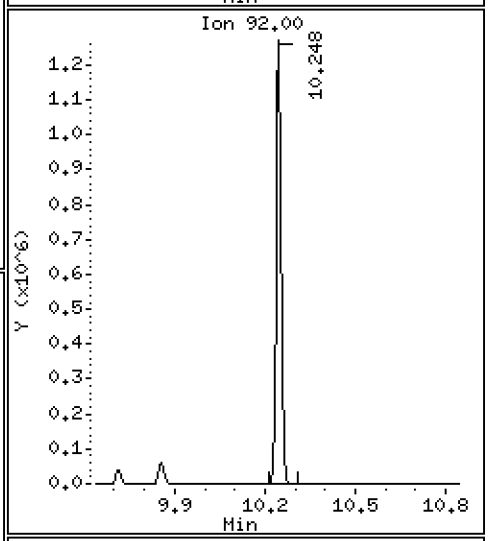


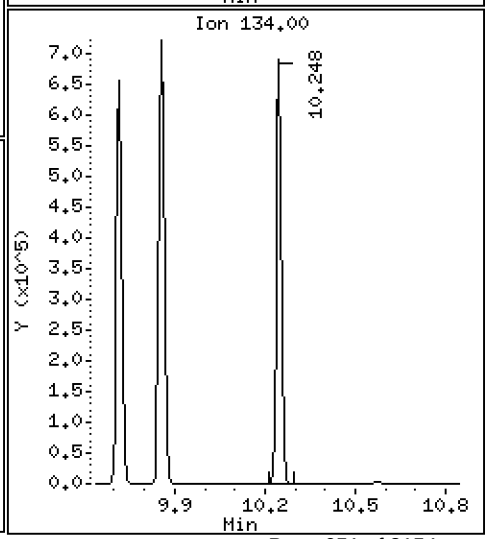












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

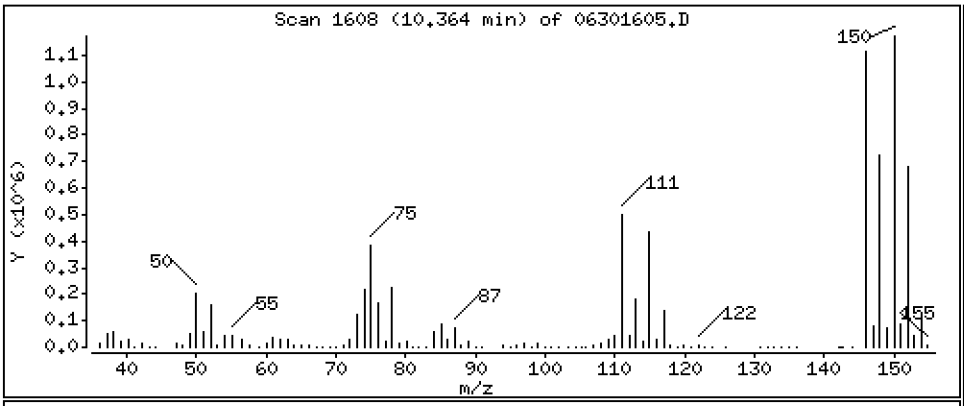
Operator: PB

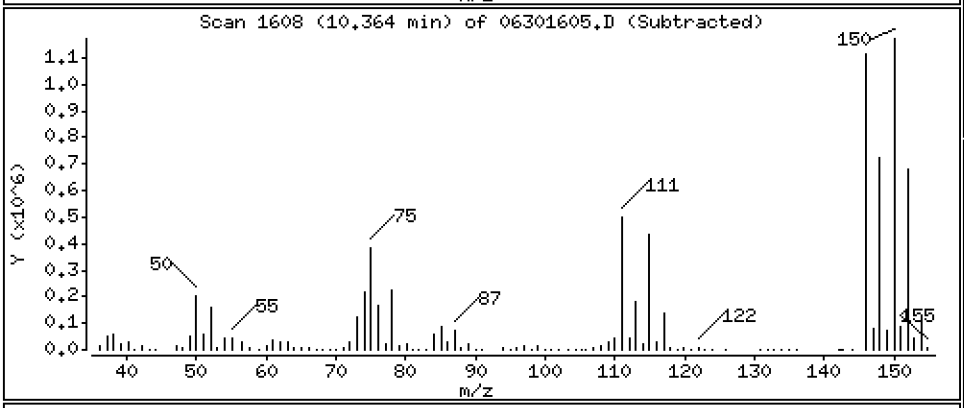
Column phase: RTXVMS

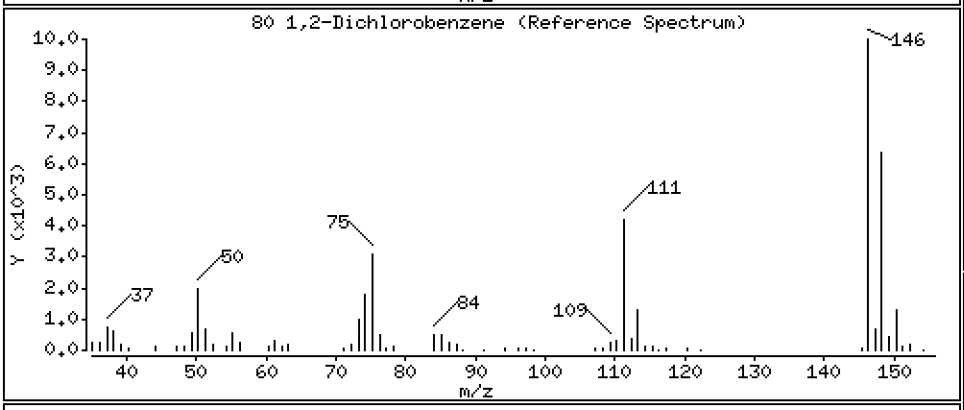
Column diameter: 0.18

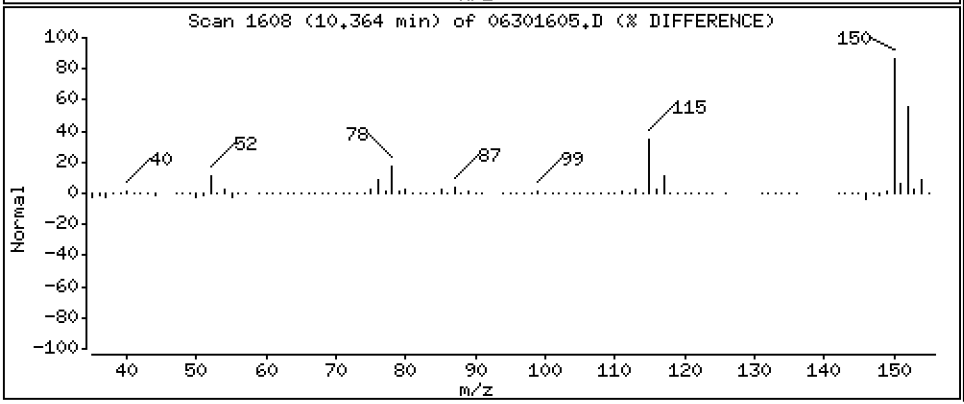
80 1,2-Dichlorobenzene

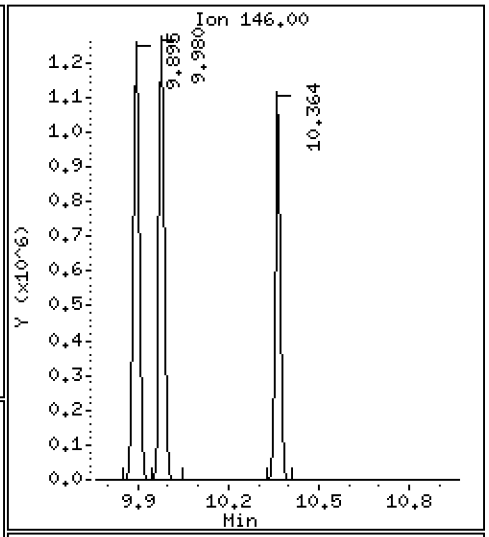
Concentration: 46.853 ug/Kg

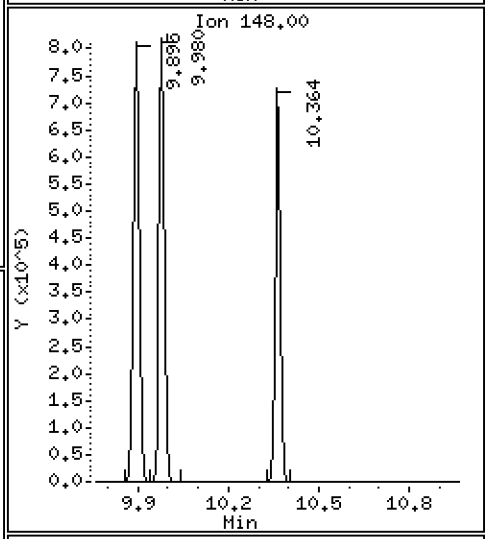


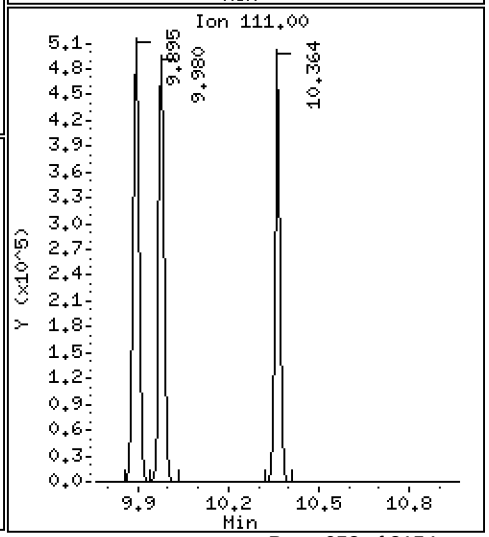












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

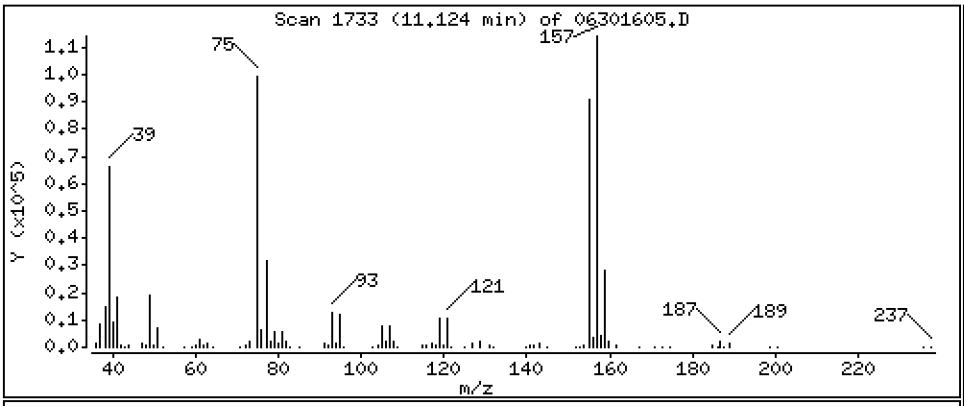
Operator: PB

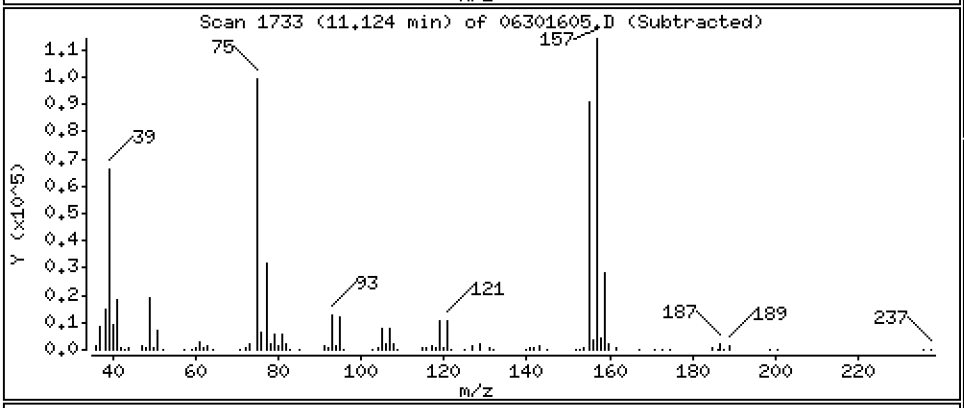
Column phase: RTXVMS

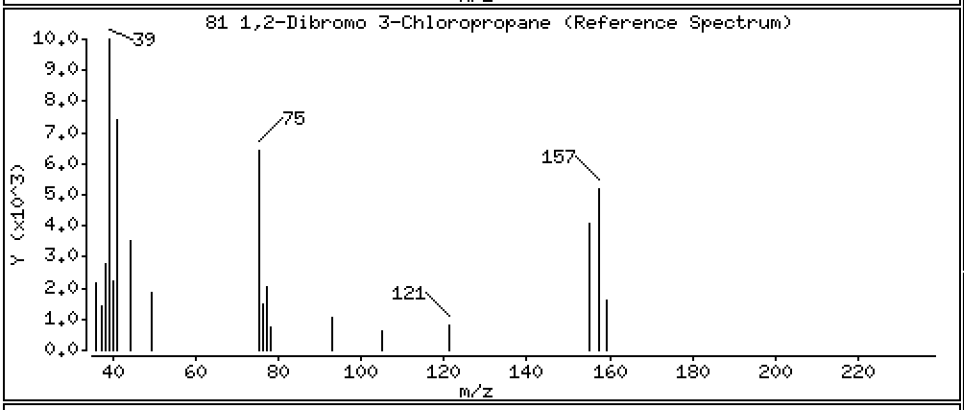
Column diameter: 0.18

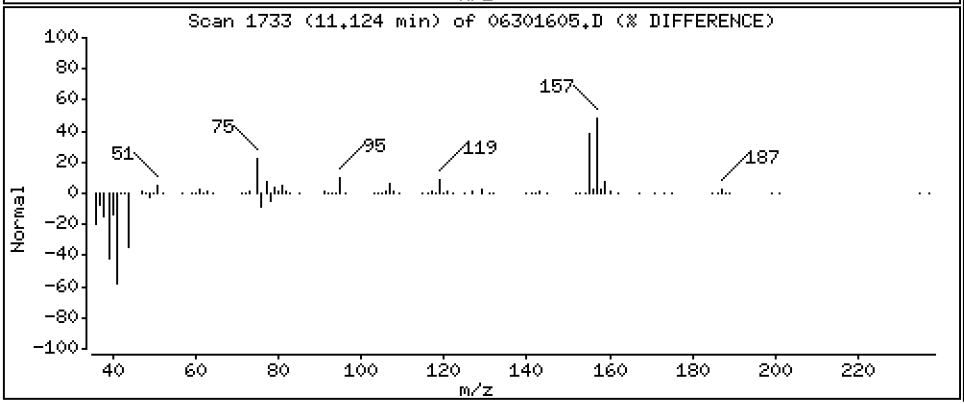
81 1,2-Dibromo 3-Chloropropane

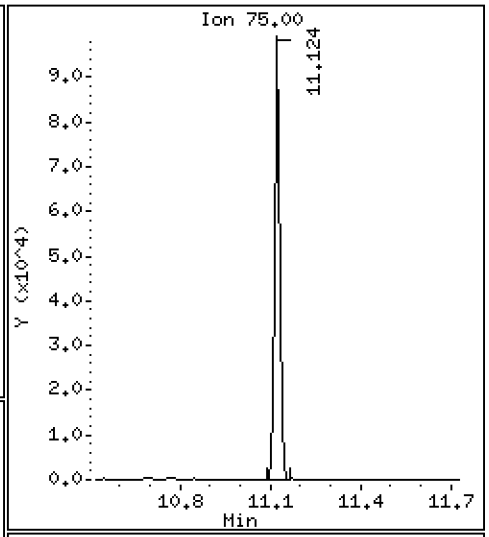
Concentration: 41.618 ug/Kg

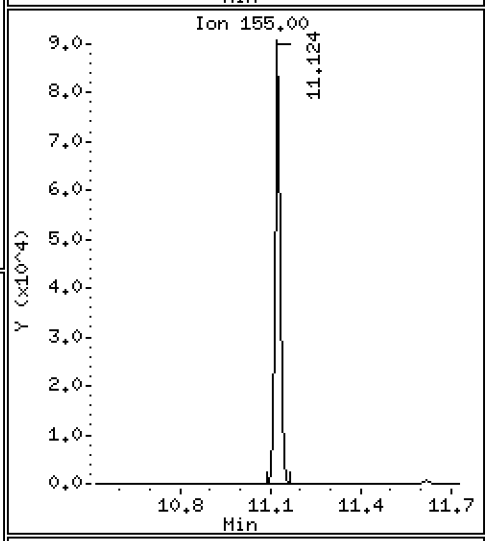


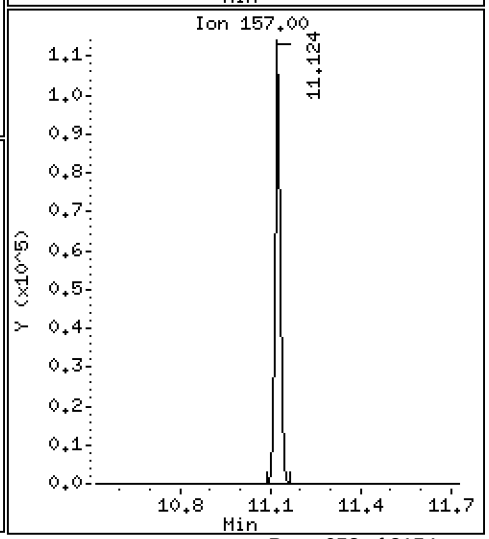












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

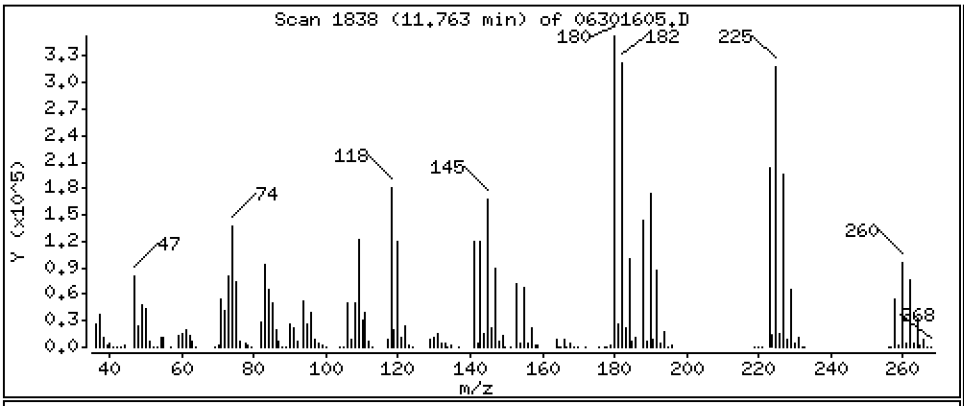
Operator: PB

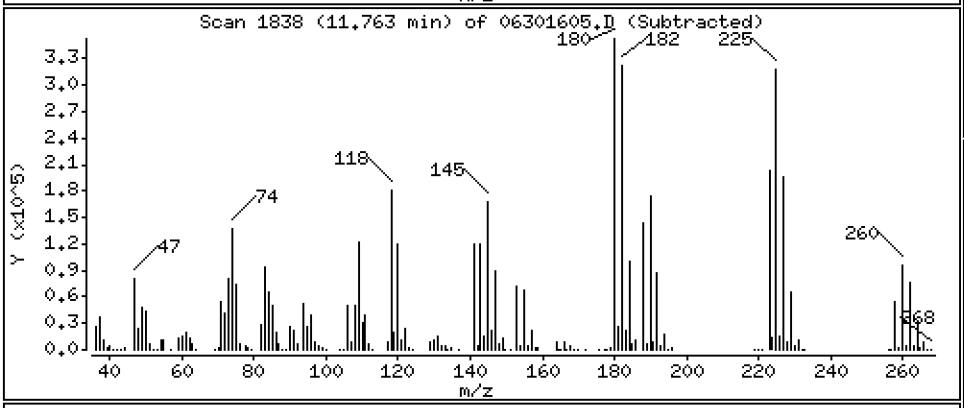
Column phase: RTXVMS

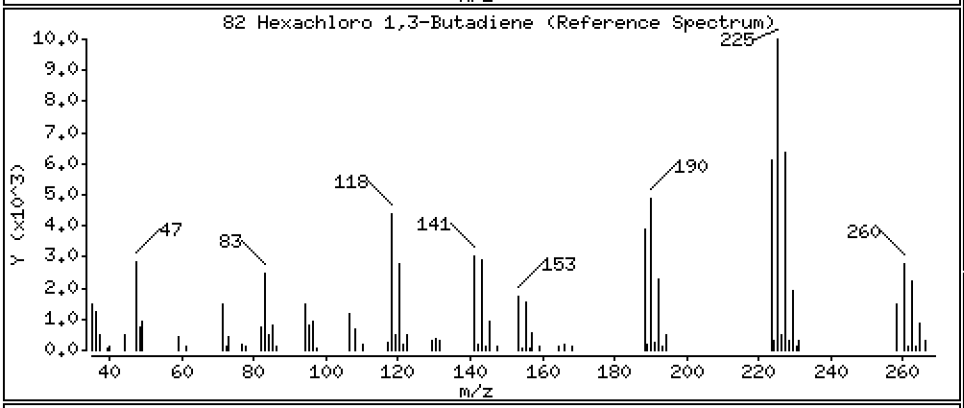
Column diameter: 0.18

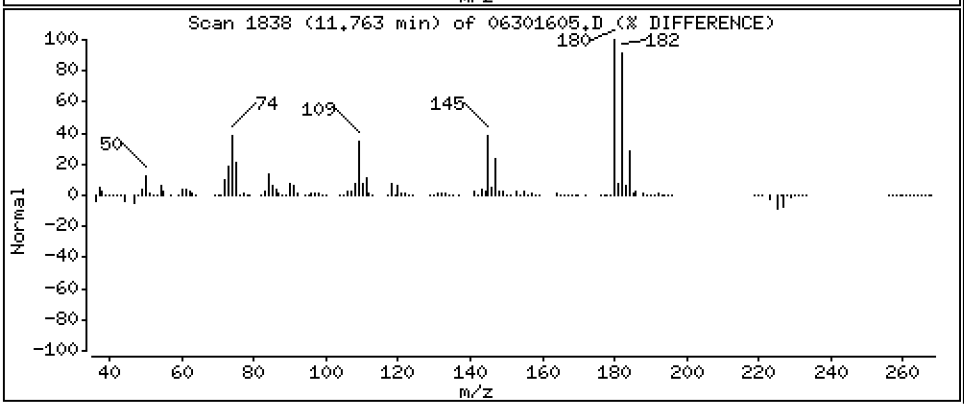
82 Hexachloro 1,3-Butadiene

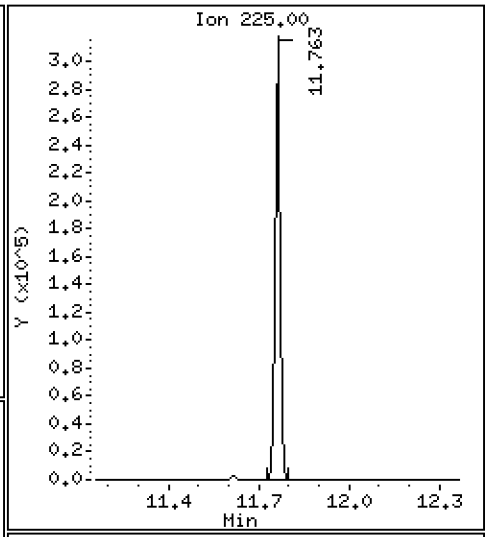
Concentration: 49.315 ug/Kg

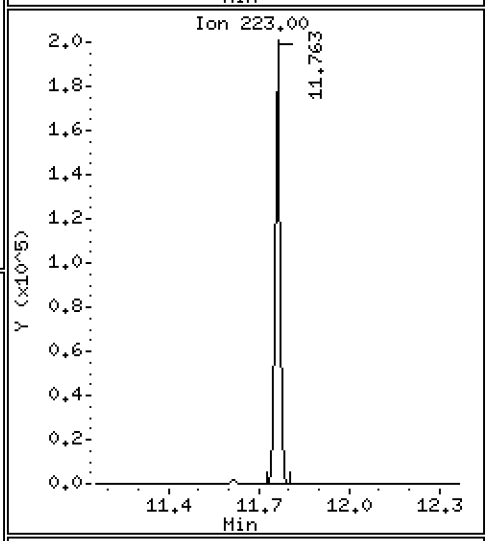


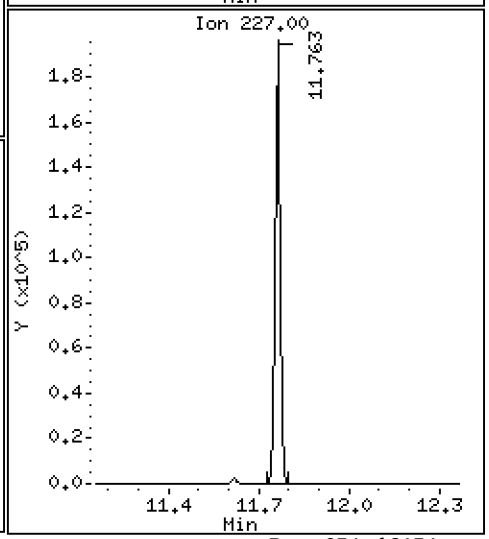












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

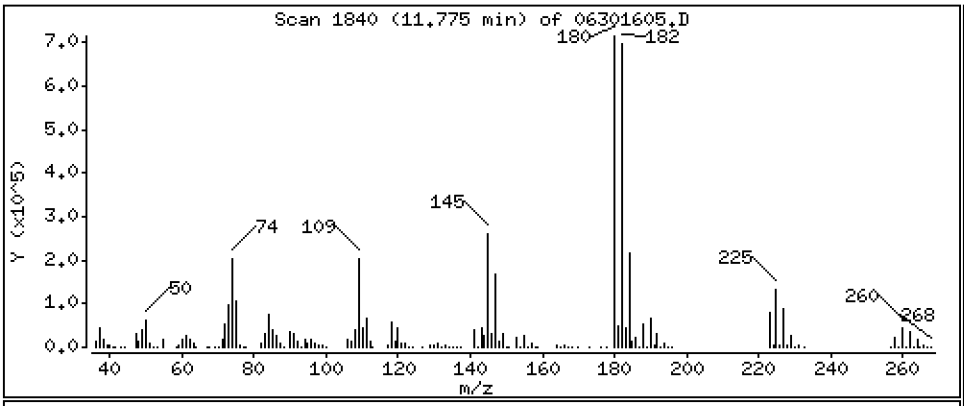
Operator: PB

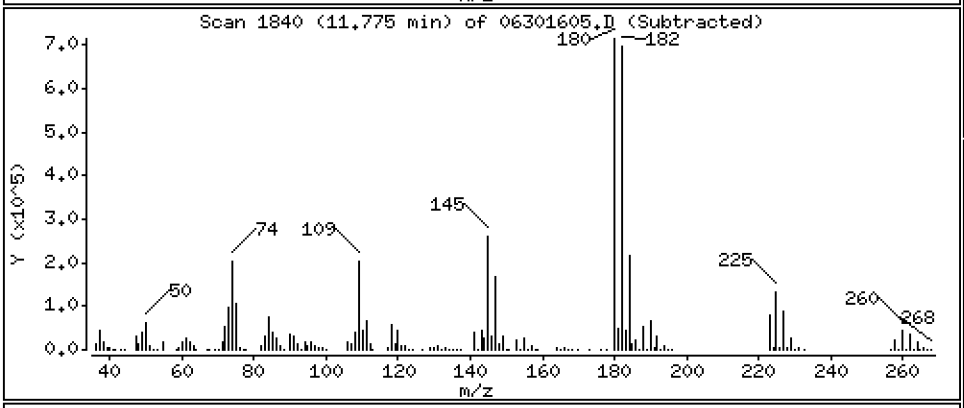
Column phase: RTXVMS

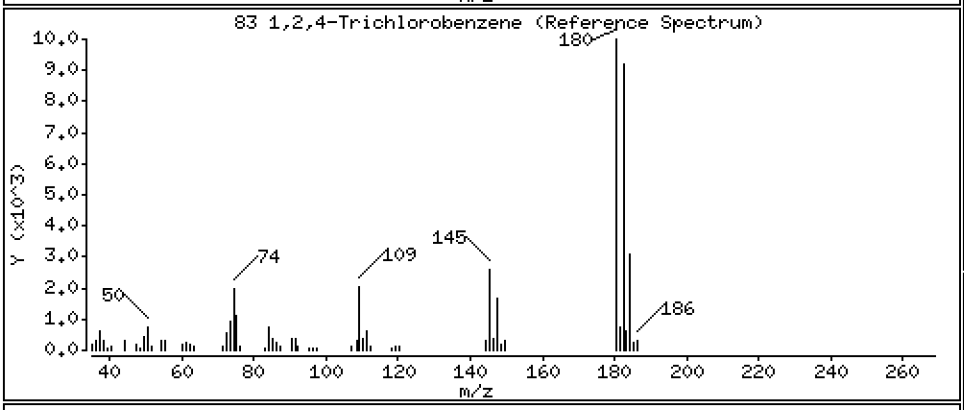
Column diameter: 0.18

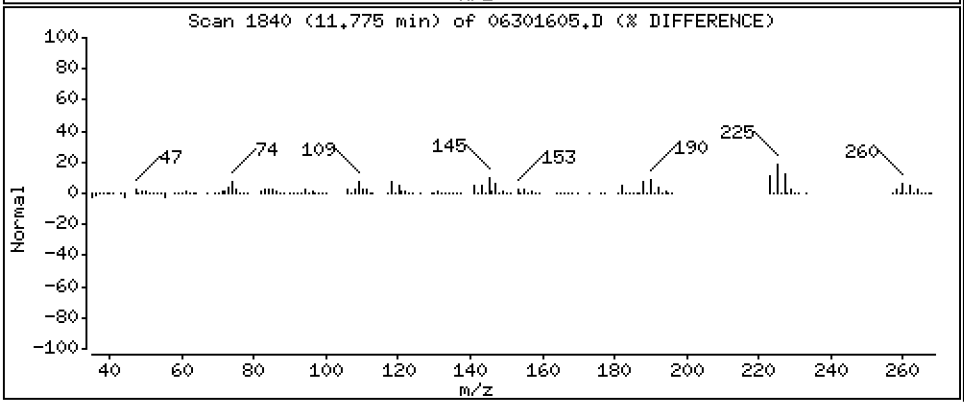
83 1,2,4-Trichlorobenzene

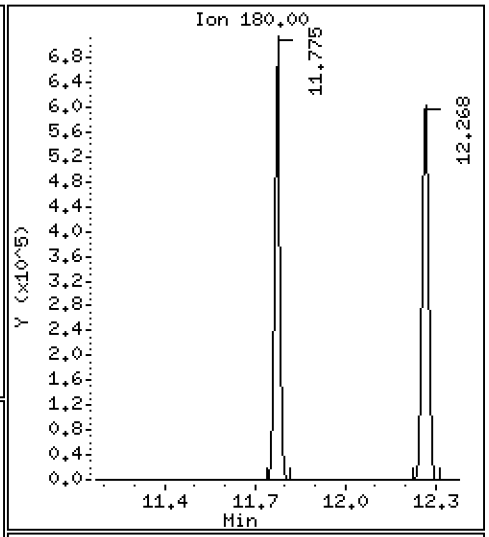
Concentration: 52.254 ug/Kg

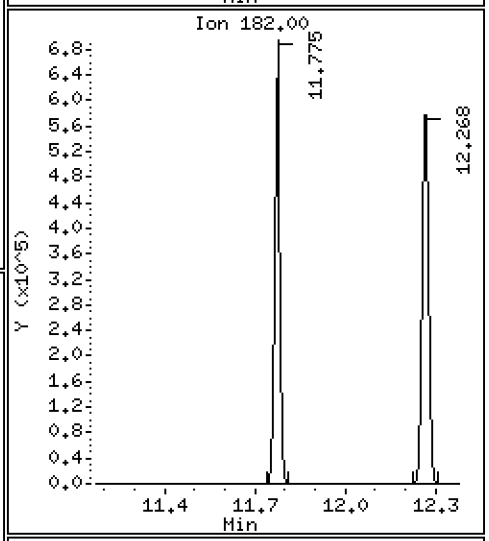


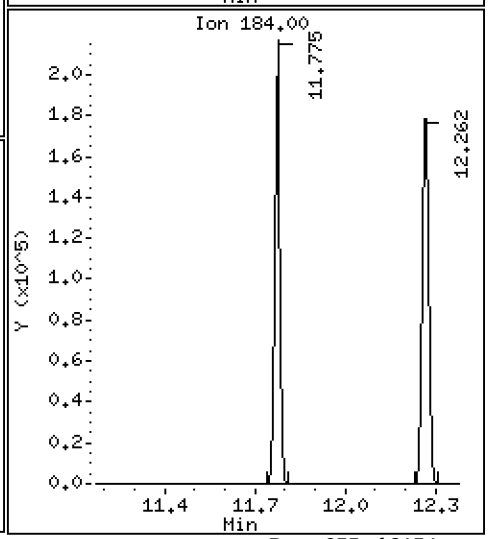












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

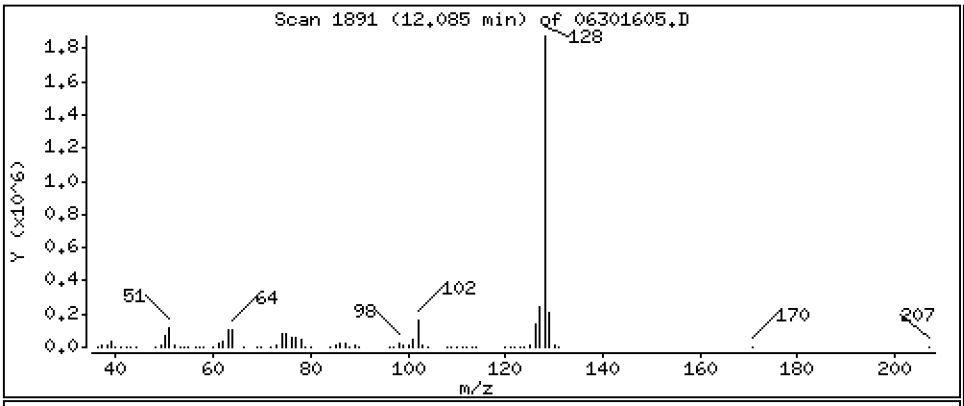
Operator: PB

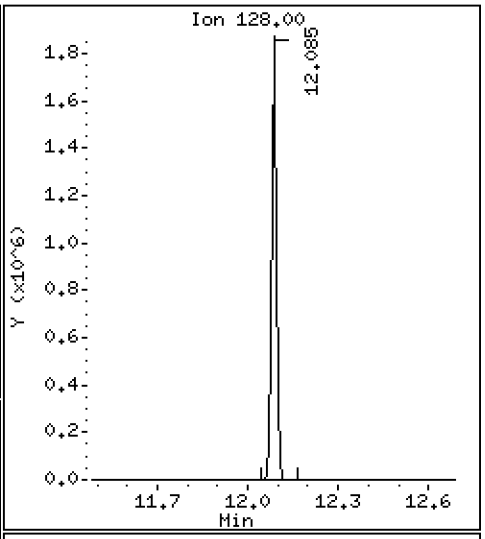
Column phase: RTXVMS

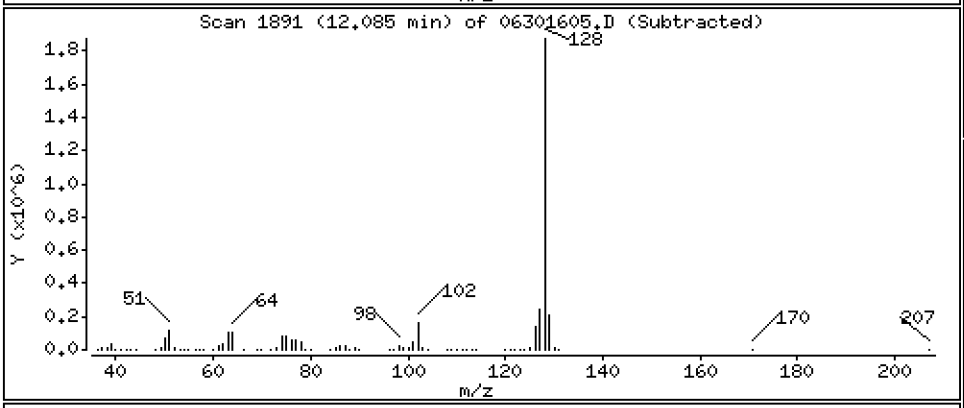
Column diameter: 0.18

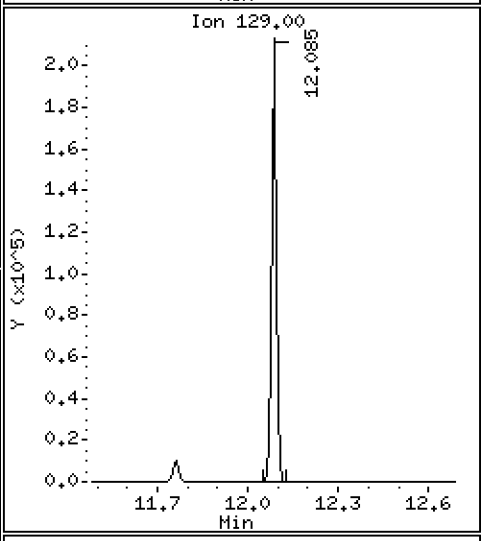
84 Naphthalene

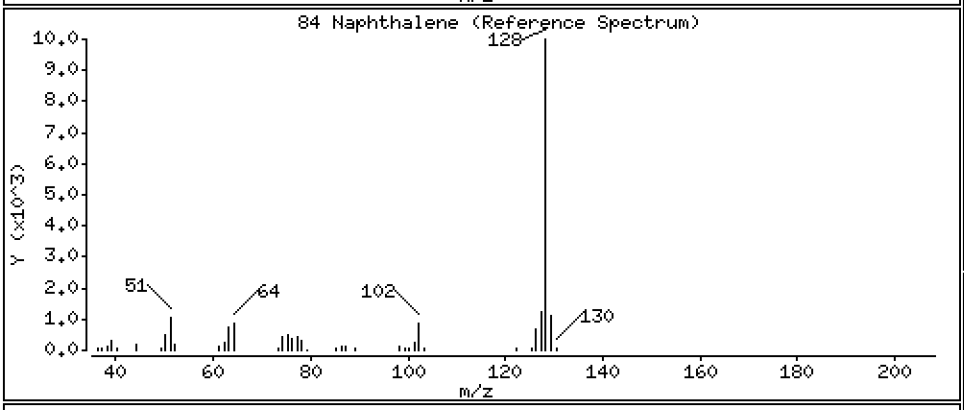
Concentration: 46.543 ug/Kg

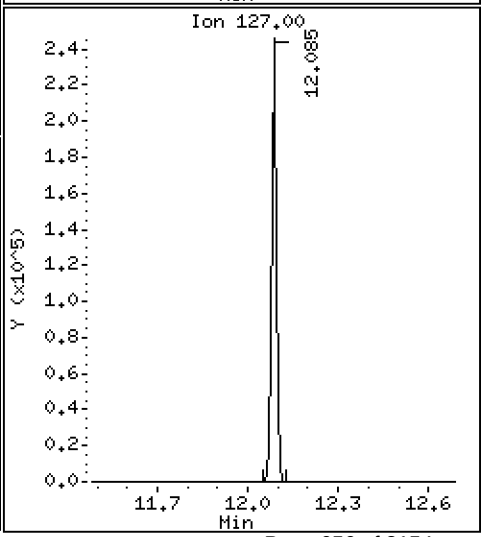


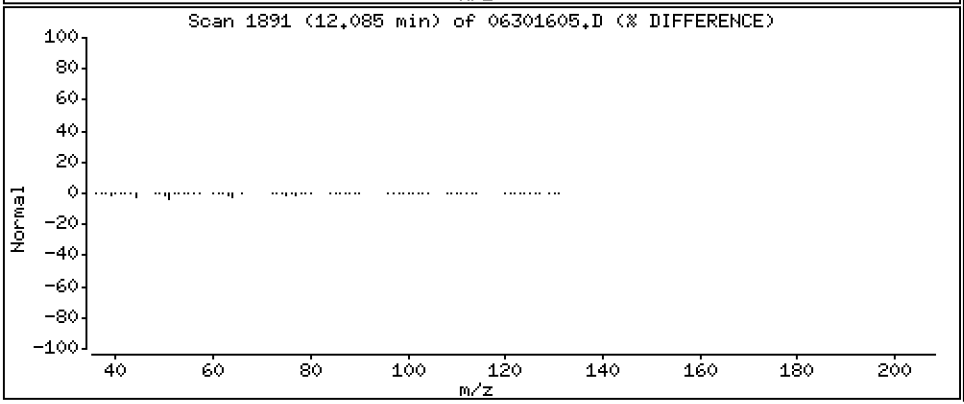












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

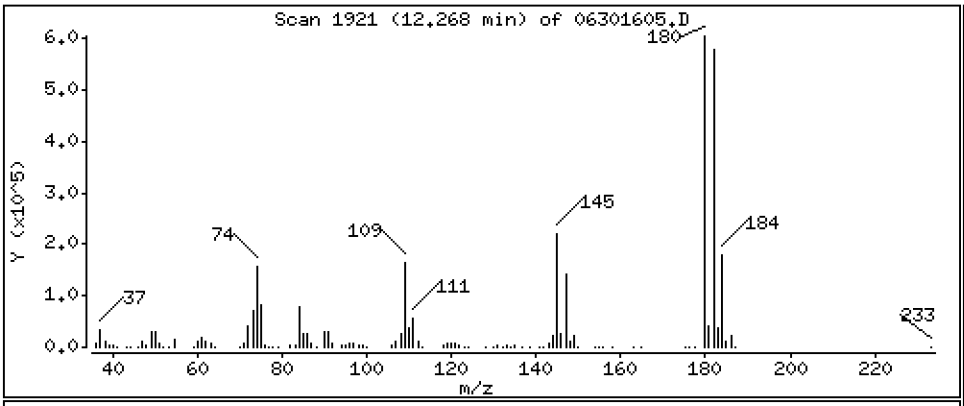
Operator: PB

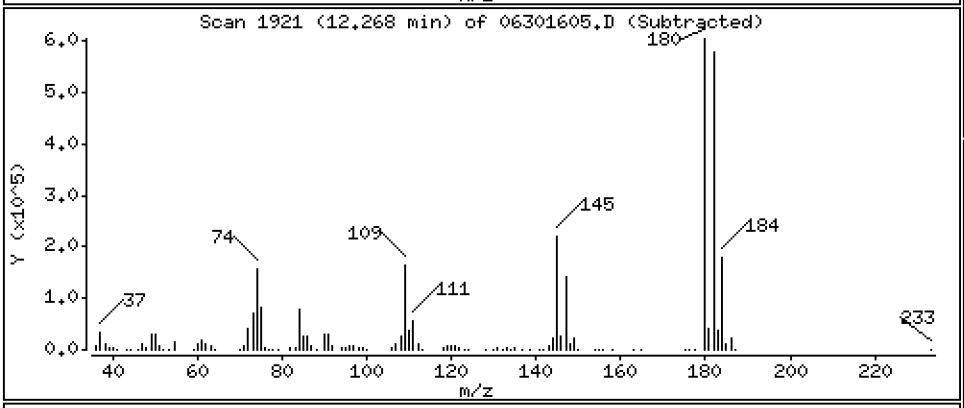
Column phase: RTXVMS

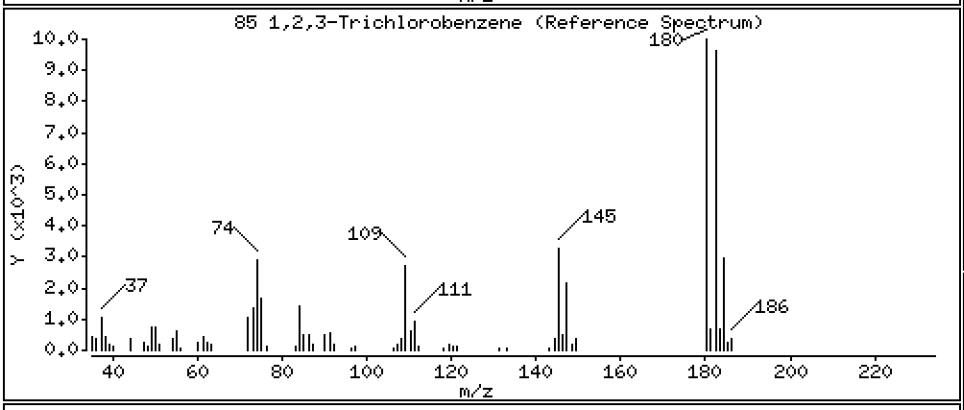
Column diameter: 0.18

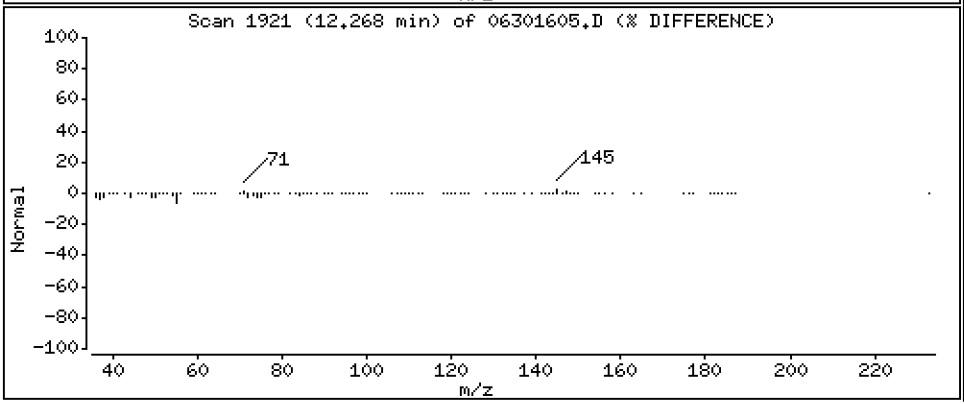
85 1,2,3-Trichlorobenzene

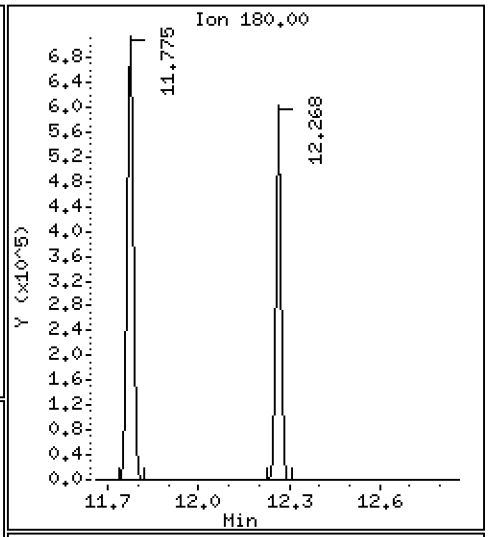
Concentration: 50.056 ug/Kg

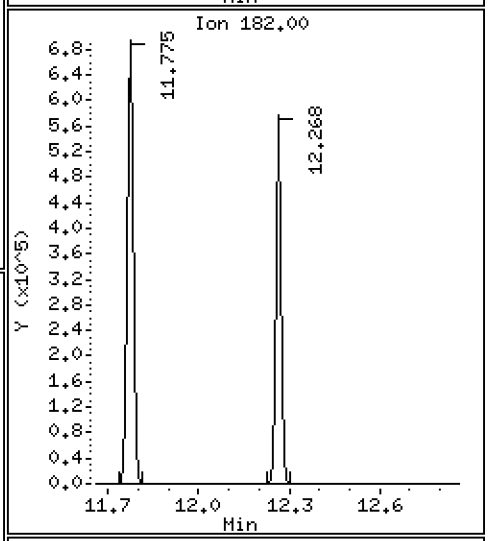


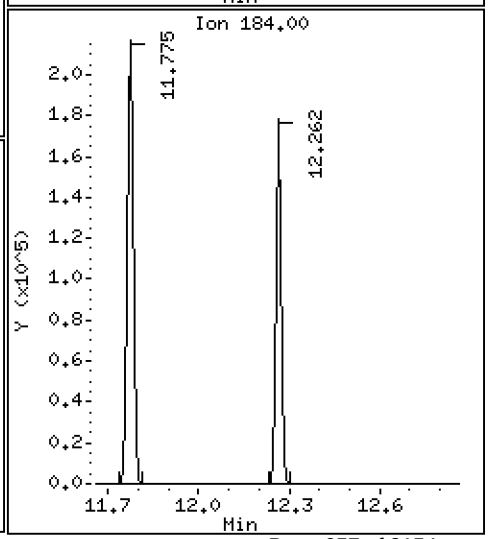












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301605.D
Lab Smp Id: BEG0004-BSD1 Client Smp ID: LCS0630
Inj Date : 30-JUN-2016 13:09
Operator : PB Inst ID: nt5.i
Smp Info : LCS0630,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.153	1.146	(0.233)	835451	40.3998	40.400
2	Chloromethane	50	1.286	1.280	(0.260)	787306	32.3364	32.336(R)
3	Vinyl Chloride	62	1.347	1.341	(0.272)	849687	40.2461	40.246
4	Bromomethane	94	1.585	1.578	(0.320)	402813	27.1117	27.112
5	Chloroethane	64	1.676	1.670	(0.338)	418609	40.0630	40.063
6	Trichlorofluoromethane	101	1.773	1.767	(0.358)	730004	60.2176	60.218
7	1,1-Dichloroethene	96	2.199	2.193	(0.444)	632434	45.0684	45.068
8	Carbon Disulfide	76	2.205	2.199	(0.445)	1971423	43.6982	43.698
9	112Trichloro122Trifluoroethane	101	2.248	2.235	(0.454)	634340	46.0660	46.066
10	Iodomethane	142	2.315	2.302	(0.467)	273700	31.1268	31.127
11	Bromoethane	108	2.430	2.418	(0.491)	383573	47.7548	47.755
12	Acrolein	56	2.528	2.515	(0.510)	533541	194.631	194.63
13	Methylene Chloride	84	2.740	2.728	(0.553)	625144	44.4124	44.412
14	Acetone	43	2.832	2.825	(0.572)	788546	173.084	173.08
15	Trans-1,2-Dichloroethene	96	2.893	2.880	(0.584)	696421	44.6761	44.676
16	Methyl tert butyl ether	73	3.063	3.051	(0.618)	1939903	41.8681	41.868
17	1,1-Dichloroethane	63	3.525	3.513	(0.711)	1252561	40.9317	40.932
18	Acrylonitrile	53	3.617	3.604	(0.730)	205049	37.6271	37.627
19	Vinyl Acetate	43	3.836	3.829	(0.774)	1338856	36.8785	36.878
20	Cis-1,2-Dichloroethene	96	4.055	4.042	(0.818)	794667	43.1882	43.188
22	2,2-Dichloropropane	77	4.146	4.140	(0.837)	1146761	43.7253	43.725

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	4.237	4.231	(0.855)	352725	43.8851	43.885
	24 Chloroform	83	4.328	4.322	(0.874)	1212070	42.6096	42.610
	25 Carbon Tetrachloride	117	4.413	4.401	(0.817)	1035262	47.9373	47.937
$	27 Dibromofluoromethane	111	4.493	4.486	(0.907)	816448	47.0218	47.022
	26 1,1,1-Trichloroethane	97	4.486	4.474	(0.905)	1136344	42.9950	42.995
	28 1,1-Dichloropropene	75	4.602	4.590	(0.852)	996490	44.3558	44.356
	29 2-Butanone	72	4.651	4.638	(0.939)	360840	186.984	186.98
	30 Benzene	78	4.827	4.815	(0.894)	2836558	44.6048	44.605
*	31 Pentafluorobenzene	168	4.955	4.943	(1.000)	728496	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.000)	752117	43.3310	43.331
	33 1,2-Dichloroethane	62	5.016	5.009	(0.929)	872693	41.5423	41.542
	34 Trichloroethene	95	5.350	5.338	(0.991)	757651	45.9765	45.977
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2354732	50.0000	
	37 Dibromomethane	93	5.709	5.703	(1.057)	391038	44.4749	44.475
	38 1,2-Dichloropropane	63	5.801	5.788	(1.074)	699517	42.5678	42.568
	39 Bromodichloromethane	83	5.867	5.861	(1.087)	924890	46.6186	46.619
	172 2-Pentanone	86	6.166	6.159	(1.142)	472926	201.659	201.66
	40 2-Chloroethyl Vinyl Ether	63	6.385	6.384	(1.183)	349282	50.4857	50.486
	41 Cis 1,3-dichloropropene	75	6.409	6.403	(1.187)	1170259	45.3961	45.396
$	42 d8-Toluene	98	6.561	6.555	(1.215)	2921809	48.4268	48.427
	43 Toluene	92	6.604	6.597	(1.223)	1837745	44.9193	44.919
	44 Tetrachloroethene	166	6.920	6.914	(0.879)	753272	49.5741	49.574
	45 4-Methyl-2-Pentanone	58	6.962	6.956	(1.290)	1194335	193.997	194.00
	46 Trans 1,3-Dichloropropene	75	6.975	6.968	(1.292)	1033732	46.0701	46.070
	47 1,1,2-Trichloroethane	97	7.102	7.102	(1.315)	581119	45.2277	45.228
	48 Chlorodibromomethane	129	7.242	7.242	(0.920)	723496	49.4538	49.454
	49 1,3-Dichloropropane	76	7.327	7.327	(0.930)	1032047	44.1352	44.135
	50 1,2-Dibromoethane	107	7.431	7.425	(1.376)	594920	46.0458	46.046
	51 2-Hexanone	43	7.674	7.674	(0.975)	2024528	184.535	184.53
*	52 d5-Chlorobenzene	117	7.875	7.875	(1.000)	2450991	50.0000	
	53 Chlorobenzene	112	7.893	7.887	(1.002)	2078290	46.9666	46.967
	54 Ethyl Benzene	91	7.930	7.930	(1.007)	3474369	46.4446	46.445
	55 1,1,1,2-Tetrachloroethane	131	7.960	7.954	(1.011)	759942	48.5043	48.504
	56 m,p-xylene	106	8.064	8.063	(1.024)	2757364	94.9458	94.946
	57 o-Xylene	106	8.435	8.428	(1.071)	1340530	46.7317	46.732
	58 Styrene	104	8.483	8.477	(1.077)	2247178	47.4344	47.434
	59 Bromoform	173	8.489	8.483	(0.852)	416542	46.4551	46.455
	60 Isopropyl Benzene	105	8.715	8.714	(0.874)	3523244	46.3815	46.381
$	62 4-Bromofluorobenzene	95	8.952	8.952	(1.137)	1279466	48.5408	48.541
	63 Bromobenzene	156	9.037	9.031	(0.907)	839248	47.6734	47.673
	64 N-Propyl Benzene	91	9.086	9.085	(0.912)	4062002	44.4716	44.472
	65 1,1,2,2-Tetrachloroethane	83	9.159	9.158	(0.919)	738237	41.2116	41.212
	66 2-Chloro Toluene	91	9.213	9.207	(0.924)	2394331	44.8719	44.872
	67 1,3,5-Trimethyl Benzene	105	9.274	9.274	(0.930)	2960685	46.4559	46.456
	68 1,2,3-Trichloropropane	110	9.268	9.268	(0.930)	231983	43.8230	43.823
	69 Trans-1,4-Dichloro 2-Butene	53	9.317	9.317	(0.935)	188206	39.3664	39.366
	70 4-Chloro Toluene	91	9.365	9.359	(0.940)	2510705	45.4311	45.431
	71 T-Butyl Benzene	119	9.554	9.554	(0.958)	2663804	45.9094	45.909
	72 1,2,4-Trimethylbenzene	105	9.621	9.621	(0.965)	2949662	46.2006	46.201
	73 S-Butyl Benzene	105	9.718	9.712	(0.975)	3812139	44.6263	44.626
	74 4-Isopropyl Toluene	119	9.858	9.858	(0.989)	3351780	47.2253	47.225
	75 1,3-Dichlorobenzene	146	9.895	9.895	(0.993)	1669972	48.3821	48.382
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1272558	50.0000	
	77 1,4-Dichlorobenzene	146	9.980	9.980	(1.001)	1674238	47.9534	47.953

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	10.248	10.241	(1.028)	2929402	46.6222	46.622
$	79 d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1251665	48.8454	48.845
	80 1,2-Dichlorobenzene	146	10.363	10.363	(1.040)	1530458	46.8531	46.853
	81 1,2-Dibromo 3-Chloropropane	75	11.124	11.123	(1.116)	140633	41.6177	41.618
	82 Hexachloro 1,3-Butadiene	225	11.762	11.762	(1.180)	430835	49.3154	49.315
	83 1,2,4-Trichlorobenzene	180	11.775	11.774	(1.181)	975743	52.2537	52.254
	84 Naphthalene	128	12.085	12.085	(1.212)	2550008	46.5432	46.543
	85 1,2,3-Trichlorobenzene	180	12.267	12.261	(1.231)	876747	50.0557	50.056

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301605.D
Lab Smp Id: BEG0004-BSD1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Client Smp ID: LCS0630
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	728496	21.42
35 1,4-Difluorobenze	2041239	1020620	4082478	2354732	15.36
52 d5-Chlorobenzene	2118314	1059157	4236628	2450991	15.70
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1272558	20.62

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.12
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEG0004-BSD1 Client Smp ID: LCS0630
Level: LOW Operator: PB
Data Type: MS DATA SampleType: LCSD
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	40.400	80.80	67-142
2	Chloromethane	50.000	32.336	64.67*	65-129
3	Vinyl Chloride	50.000	40.246	80.49	74-134
4	Bromomethane	50.000	27.112	54.22	40-172
5	Chloroethane	50.000	40.063	80.13	53-154
6	Trichlorofluoromet	50.000	60.218	120.44	57-161
12	Acrolein	250.00	194.63	77.85	60-130
9	112Trichloro122Tri	50.000	46.066	92.13	72-142
14	Acetone	250.00	173.08	69.23	48-132
7	1,1-Dichloroethene	50.000	45.068	90.14	73-138
11	Bromoethane	50.000	47.755	95.51	74-132
10	Iodomethane	50.000	31.127	62.25	34-181
13	Methylene Chloride	50.000	44.412	88.82	61-128
8	Carbon Disulfide	50.000	43.698	87.40	72-146
18	Acrylonitrile	50.000	37.627	75.25	59-124
15	Trans-1,2-Dichloro	50.000	44.676	89.35	73-131
19	Vinyl Acetate	50.000	36.878	73.76	54-138
17	1,1-Dichloroethane	50.000	40.932	81.86	65-139
29	2-Butanone	250.00	186.98	74.79	64-120
22	2,2-Dichloropropan	50.000	43.725	87.45	77-137
20	Cis-1,2-Dichloroet	50.000	43.188	86.38	74-124
24	Chloroform	50.000	42.610	85.22	75-126
23	Bromochloromethane	50.000	43.885	87.77	69-133
26	1,1,1-Trichloroeth	50.000	42.995	85.99	78-133
28	1,1-Dichloropropen	50.000	44.356	88.71	80-123
25	Carbon Tetrachlori	50.000	47.937	95.87	76-136
33	1,2-Dichloroethane	50.000	41.542	83.08	77-120
30	Benzene	50.000	44.605	89.21	80-120
34	Trichloroethene	50.000	45.977	91.95	80-120
38	1,2-Dichloropropan	50.000	42.568	85.14	74-120
39	Bromodichlorometha	50.000	46.619	93.24	80-122
172	2-Pentanone	250.00	201.66	80.66	70-130
37	Dibromomethane	50.000	44.475	88.95	80-120
40	2-Chloroethyl Viny	50.000	50.486	100.97	20-157
45	4-Methyl-2-Pentano	250.00	194.00	77.60	70-124
41	Cis 1,3-dichloropr	50.000	45.396	90.79	80-124
43	Toluene	50.000	44.919	89.84	78-120
46	Trans 1,3-Dichloro	50.000	46.070	92.14	80-126
51	2-Hexanone	250.00	184.53	73.81	62-128
47	1,1,2-Trichloroeth	50.000	45.228	90.46	77-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
49 1,3-Dichloropropan	50.000	44.135	88.27	77-120
44 Tetrachloroethene	50.000	49.574	99.15	76-131
48 Chlorodibromometha	50.000	49.454	98.91	77-123
50 1,2-Dibromoethane	50.000	46.046	92.09	79-120
53 Chlorobenzene	50.000	46.967	93.93	80-120
55 1,1,1,2-Tetrachlor	50.000	48.504	97.01	80-120
54 Ethyl Benzene	50.000	46.445	92.89	80-120
56 m,p-xylene	100.00	94.946	94.95	80-123
57 o-Xylene	50.000	46.732	93.46	80-120
58 Styrene	50.000	47.434	94.87	80-122
60 Isopropyl Benzene	50.000	46.381	92.76	77-127
59 Bromoform	50.000	46.455	92.91	63-120
65 1,1,2,2-Tetrachlor	50.000	41.212	82.42	71-120
68 1,2,3-Trichloropro	50.000	43.823	87.65	75-120
69 Trans-1,4-Dichloro	50.000	39.366	78.73	62-127
64 N-Propyl Benzene	50.000	44.472	88.94	76-126
63 Bromobenzene	50.000	47.673	95.35	75-120
67 1,3,5-Trimethyl Be	50.000	46.456	92.91	77-126
66 2-Chloro Toluene	50.000	44.872	89.74	76-120
70 4-Chloro Toluene	50.000	45.431	90.86	75-121
71 T-Butyl Benzene	50.000	45.909	91.82	77-125
72 1,2,4-Trimethylben	50.000	46.201	92.40	77-125
73 S-Butyl Benzene	50.000	44.626	89.25	77-127
74 4-Isopropyl Toluen	50.000	47.225	94.45	78-131
75 1,3-Dichlorobenzen	50.000	48.382	96.76	76-120
77 1,4-Dichlorobenzen	50.000	47.953	95.91	75-120
78 N-Butyl Benzene	50.000	46.622	93.24	75-134
80 1,2-Dichlorobenzen	50.000	46.853	93.71	77-120
81 1,2-Dibromo 3-Chlo	50.000	41.618	83.24	61-128
83 1,2,4-Trichloroben	50.000	52.254	104.51	75-130
82 Hexachloro 1,3-But	50.000	49.315	98.63	72-135
84 Naphthalene	50.000	46.543	93.09	71-122
85 1,2,3-Trichloroben	50.000	50.056	100.11	76-122

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	47.022	94.04	70-130
$ 32 d4-1,2-Dichloroeth	50.000	43.331	86.66	80-149
$ 42 d8-Toluene	50.000	48.427	96.85	77-120
$ 62 4-Bromofluorobenze	50.000	48.541	97.08	80-120
$ 79 d4-1,2-Dichloroben	50.000	48.845	97.69	80-120

REVIEW SUMMARY FOR FILE - 06301605.D

Lab ID: BEG0004-BSD1
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 13:09

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Water	Analyzed:	06/30/16 12:46
Batch:	BEG0005	Laboratory ID:	BEG0005-BS1
Preparation:	No Prep - Volatiles	Initial/Final:	5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Vinyl Chloride	50.0	42.0	83.9	66 - 133
Bromomethane	50.0	27.3	54.6 *	72 - 131
cis-1,2-Dichloroethene	50.0	43.5	87.0	80 - 121
Benzene	50.0	44.4	88.9	80 - 120
Trichloroethene	50.0	45.5	91.0	80 - 120
Toluene	50.0	44.0	88.0	80 - 120
Tetrachloroethene	50.0	49.0	98.1	80 - 120
Ethylbenzene	50.0	45.8	91.6	80 - 120
m,p-Xylene	100	94.2	94.2	80 - 121
o-Xylene	50.0	46.2	92.4	80 - 121

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Water	Analyzed:	06/30/16 13:09
Batch:	BEG0005	Laboratory ID:	BEG0005-BSD1
Preparation:	No Prep - Volatiles	Initial/Final:	5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Vinyl Chloride	50.0	40.2	80.5	4.16	30	66 - 133
Bromomethane	50.0	27.1	54.2 *	0.736	30	72 - 131
cis-1,2-Dichloroethene	50.0	43.2	86.4	0.733	30	80 - 121
Benzene	50.0	44.6	89.2	0.349	30	80 - 120
Trichloroethene	50.0	46.0	92.0	1.06	30	80 - 120
Toluene	50.0	44.9	89.8	2.02	30	80 - 120
Tetrachloroethene	50.0	49.6	99.1	1.09	30	80 - 120
Ethylbenzene	50.0	46.4	92.9	1.38	30	80 - 120
m,p-Xylene	100	94.9	94.9	0.774	30	80 - 121
o-Xylene	50.0	46.7	93.5	1.11	30	80 - 121

* Values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

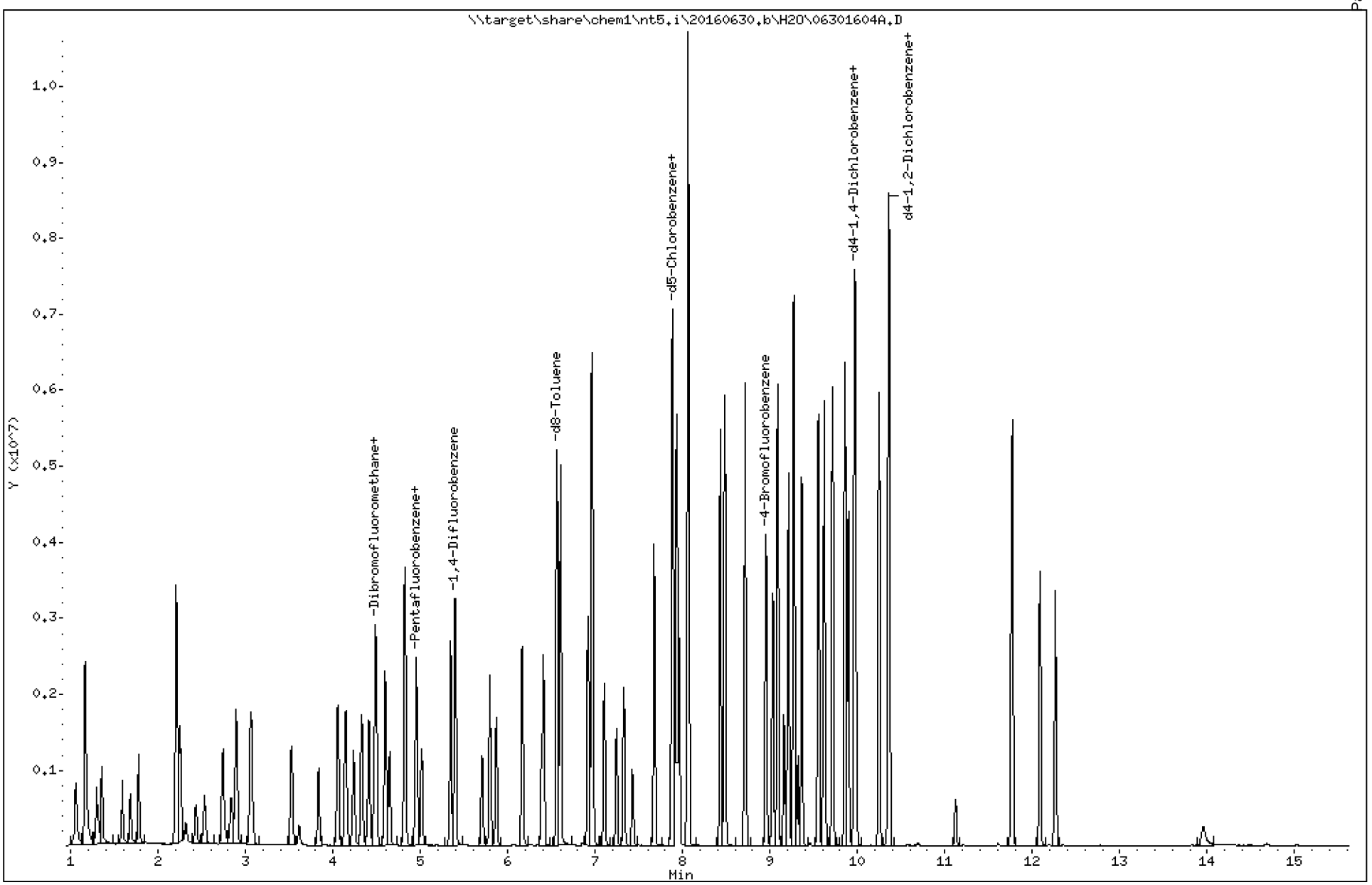
Sample Info: LCS0630,5,5,0

Column phase: RTXVMS

Instrument: nt5.i

Operator: PB

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

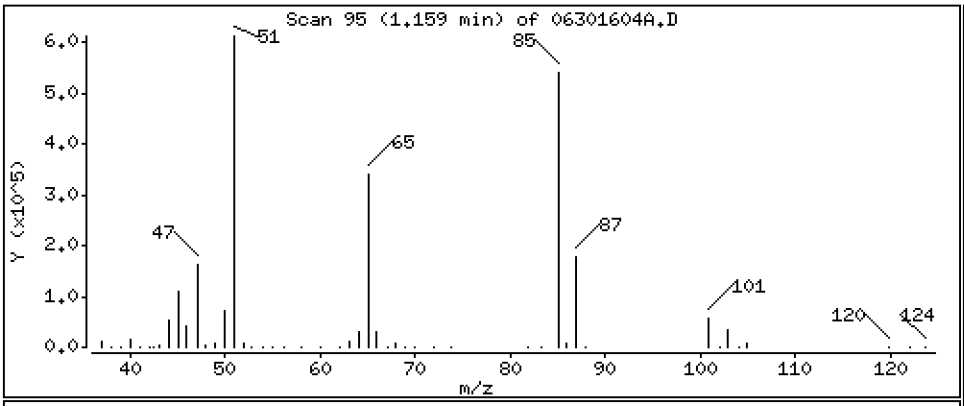
Operator: PB

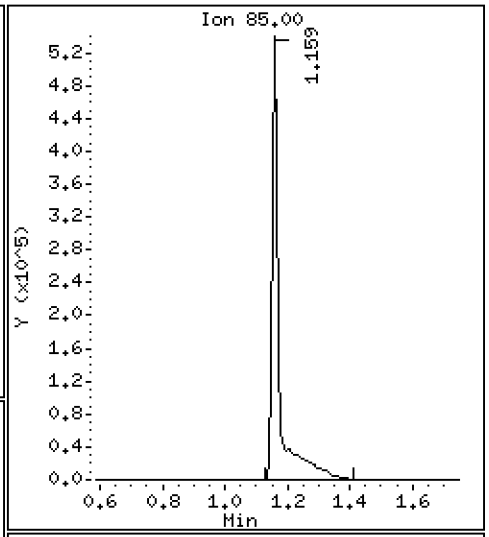
Column phase: RTXVMS

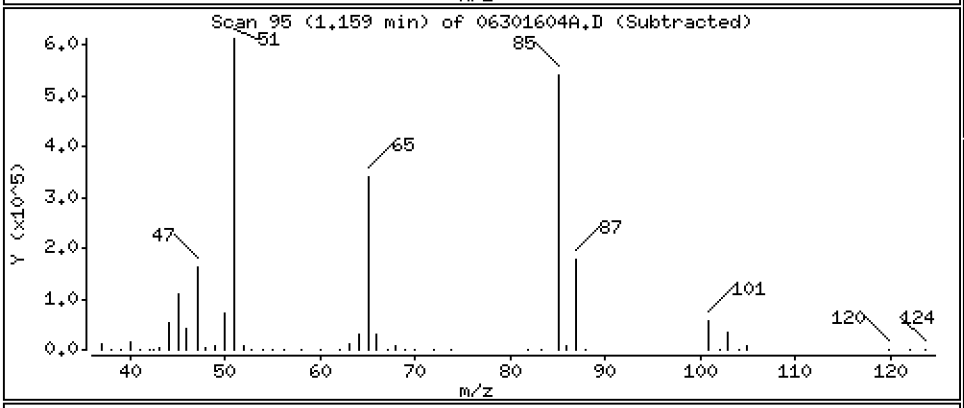
Column diameter: 0.18

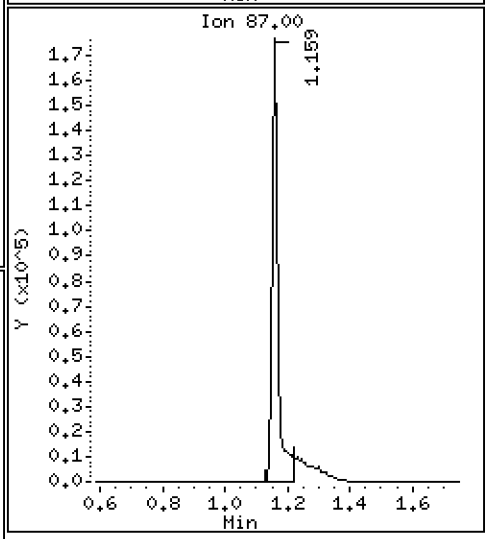
1 Dichlorodifluoromethane

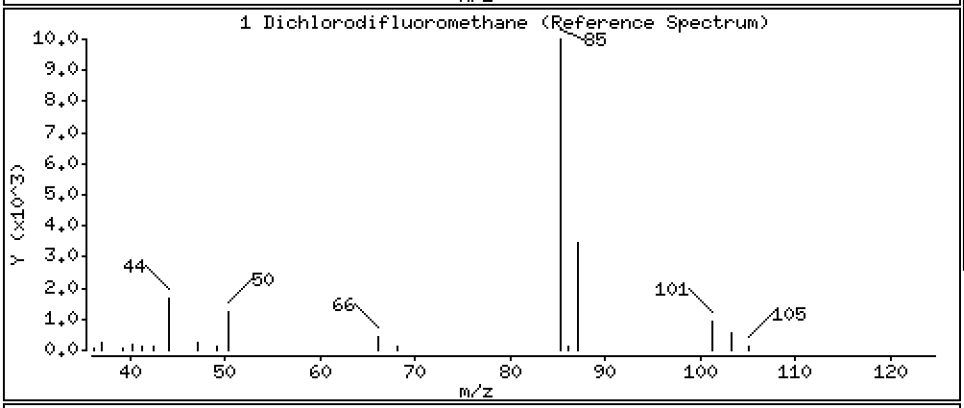
Concentration: 41.888 ug/Kg

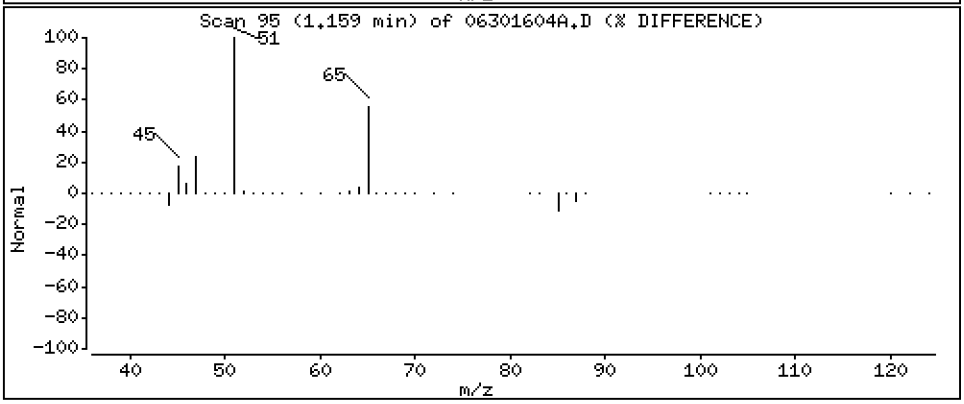












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

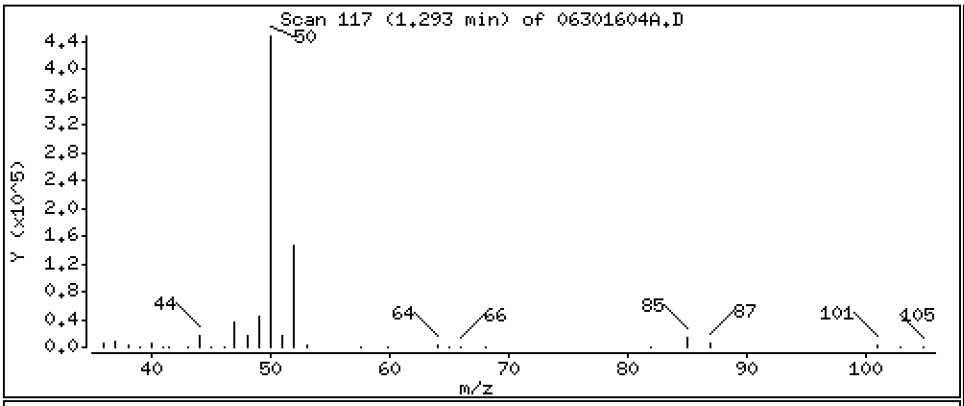
Operator: PB

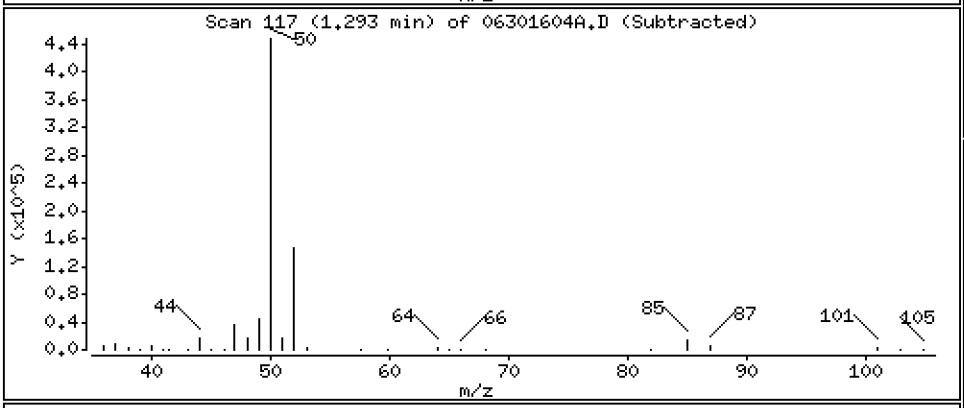
Column phase: RTXVMS

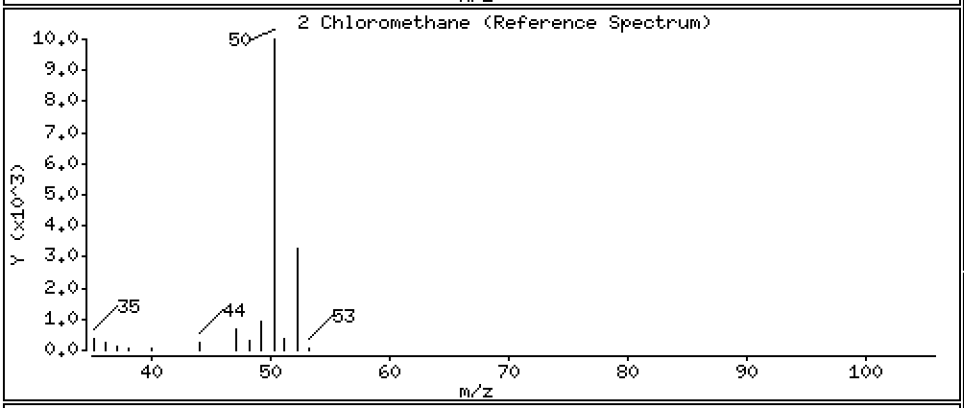
Column diameter: 0.18

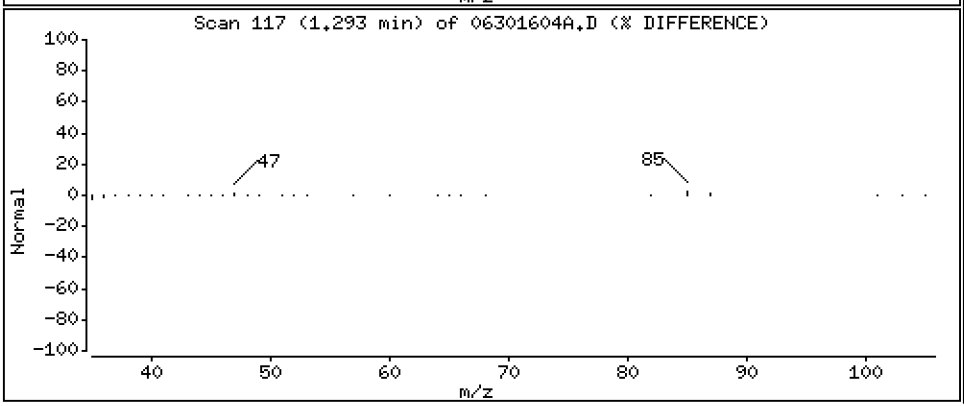
2 Chloromethane

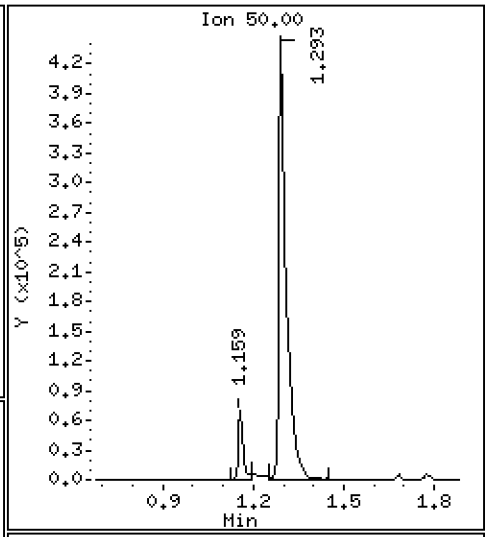
Concentration: 33.970 ug/Kg

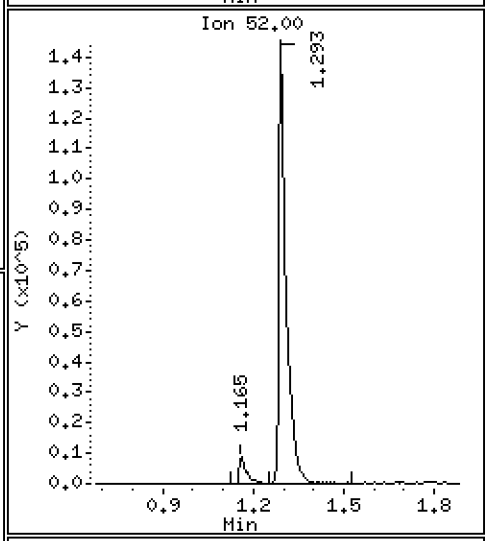


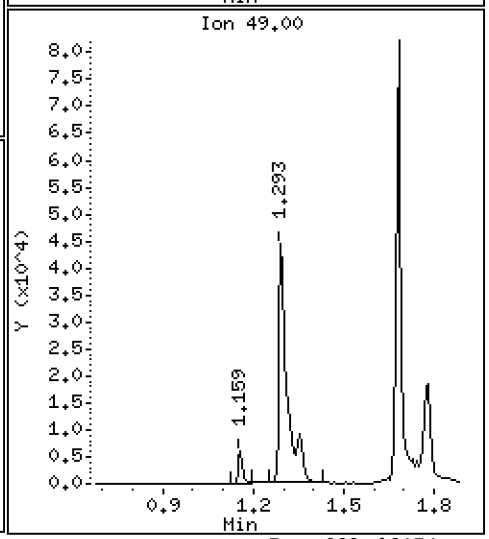












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

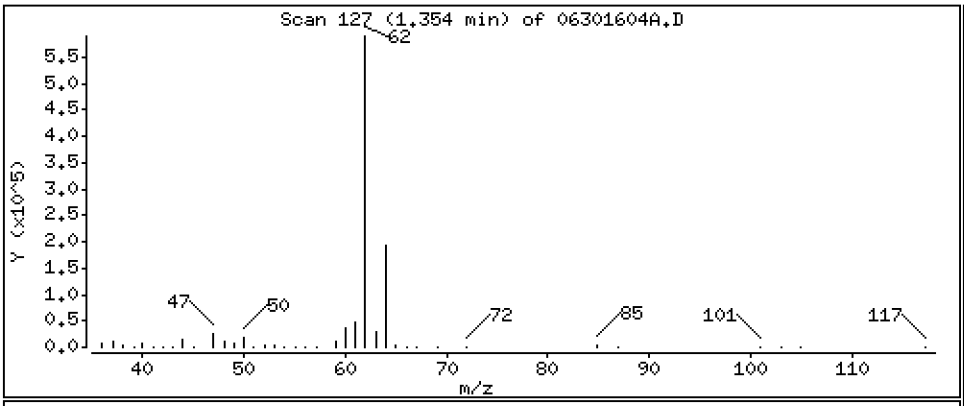
Operator: PB

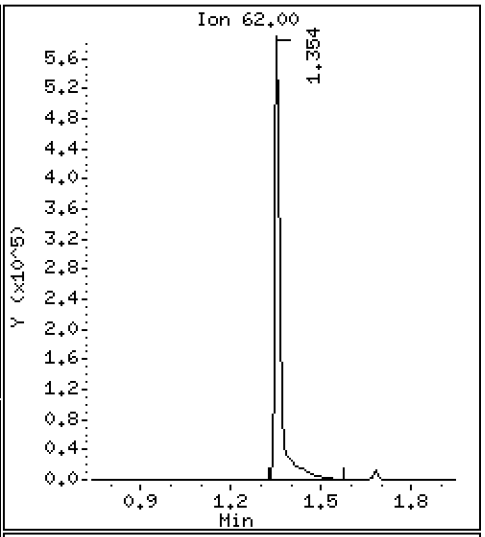
Column phase: RTXVMS

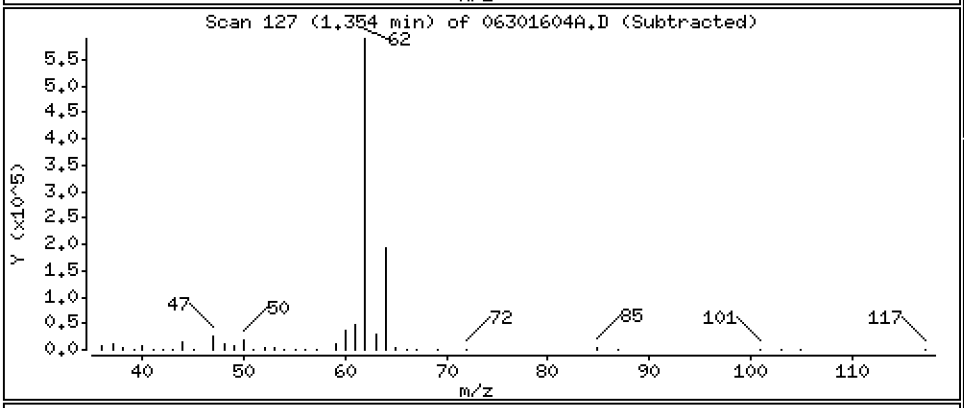
Column diameter: 0.18

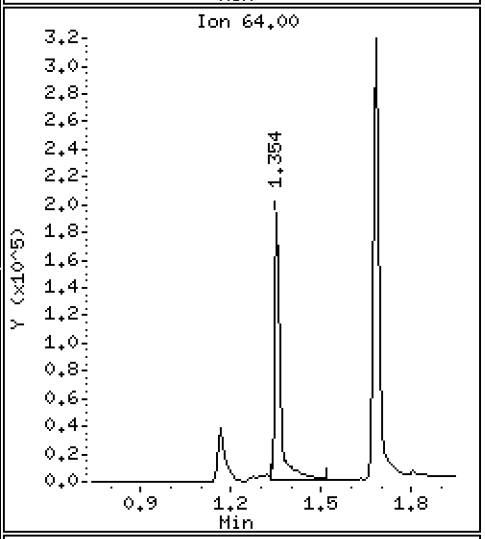
3 Vinyl Chloride

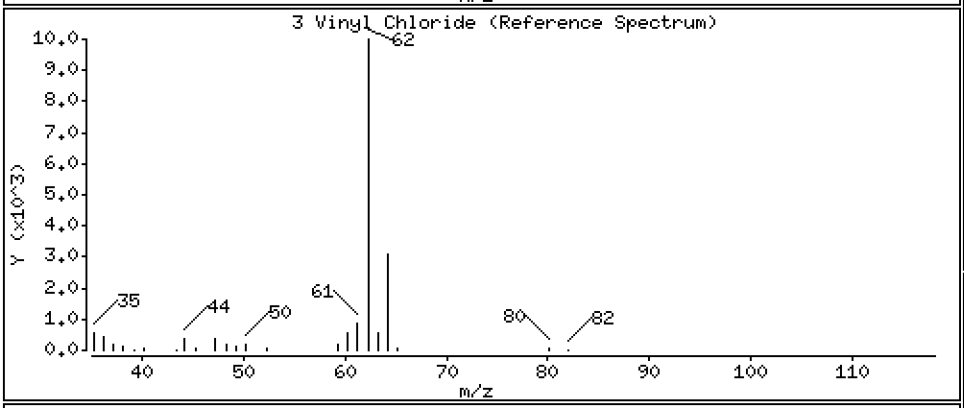
Concentration: 41.957 ug/Kg

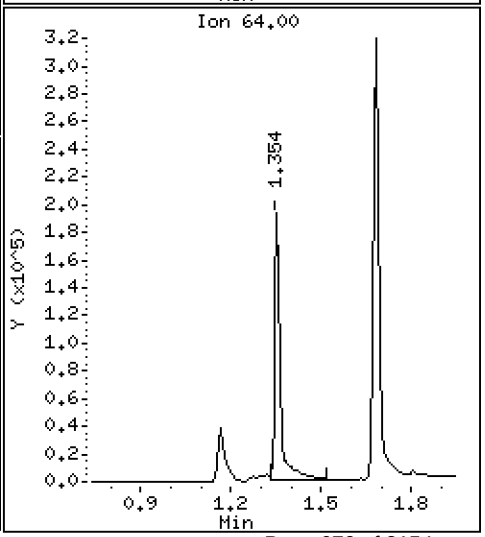


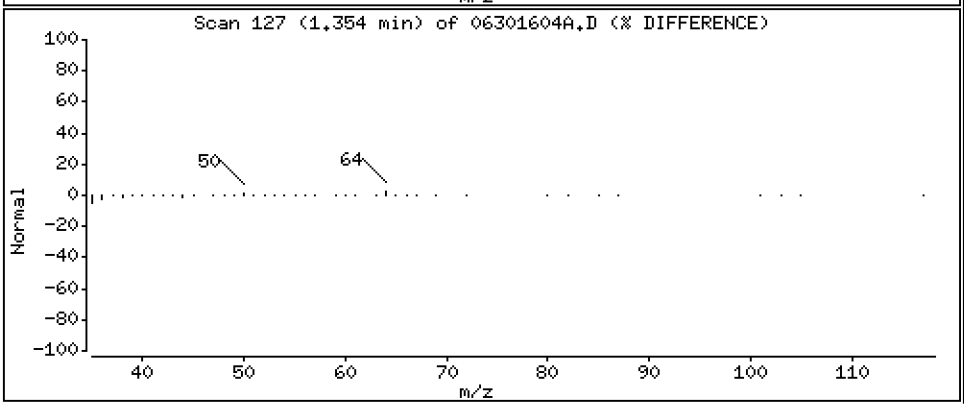












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

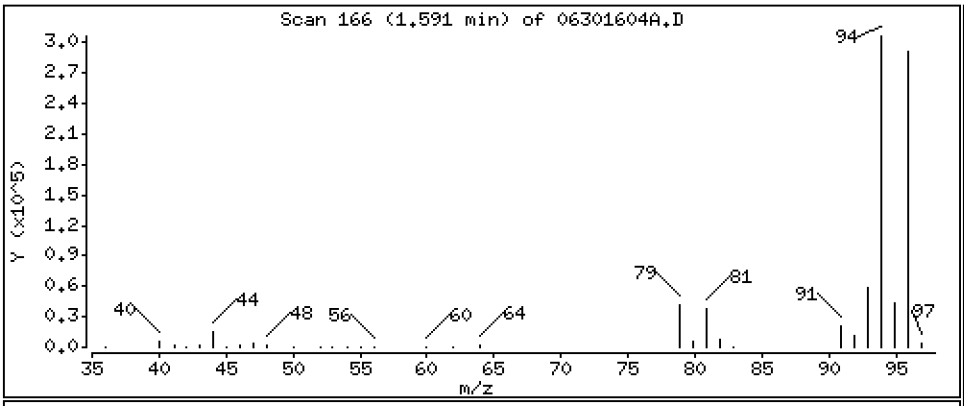
Operator: PB

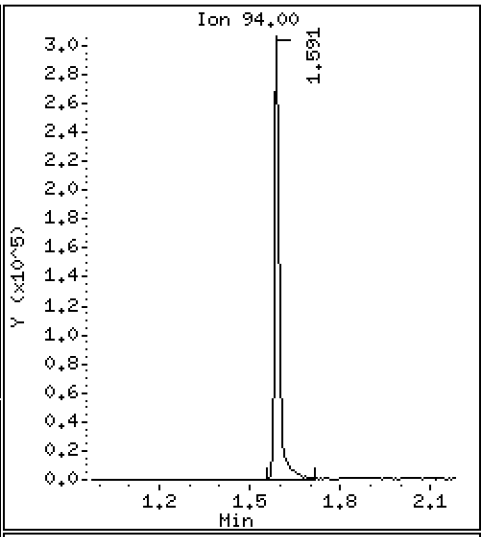
Column phase: RTXVMS

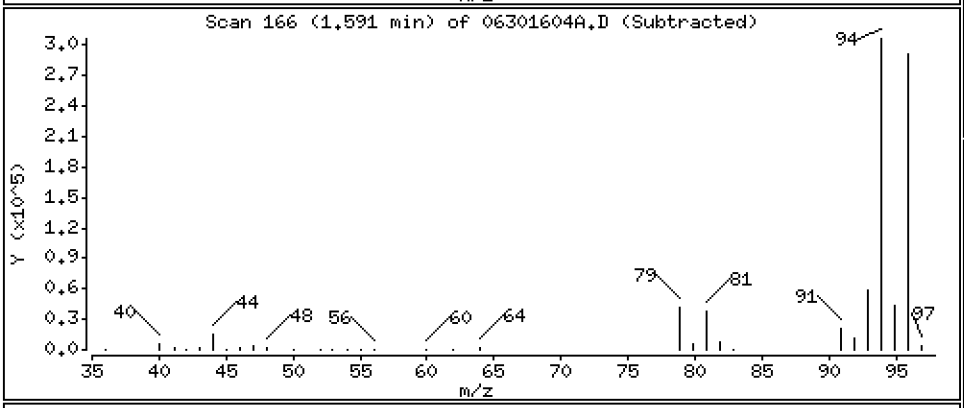
Column diameter: 0.18

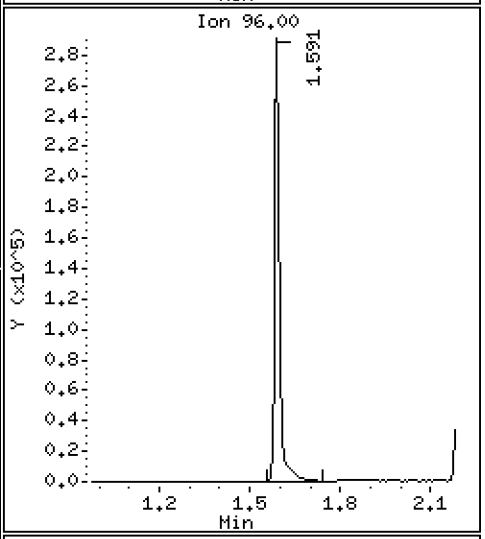
4 Bromomethane

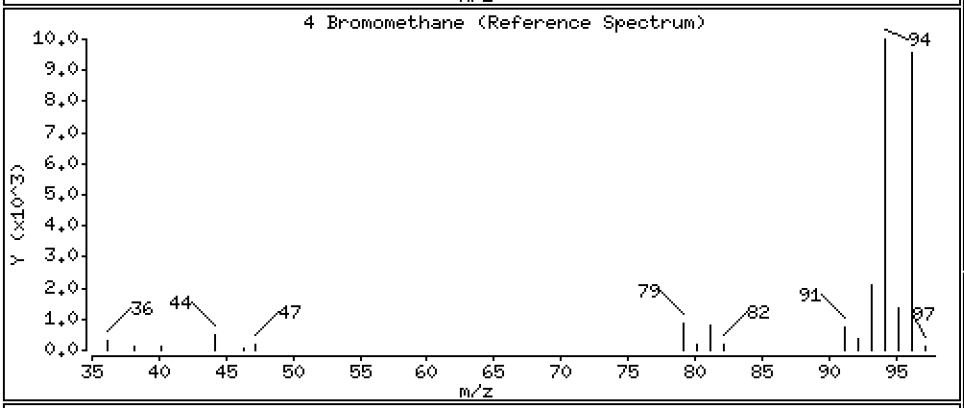
Concentration: 27.312 ug/Kg

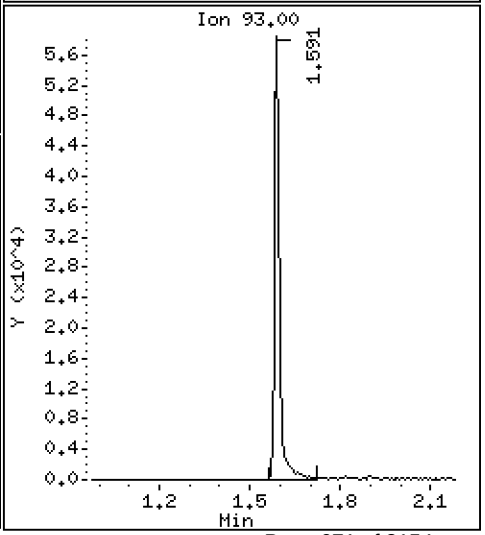


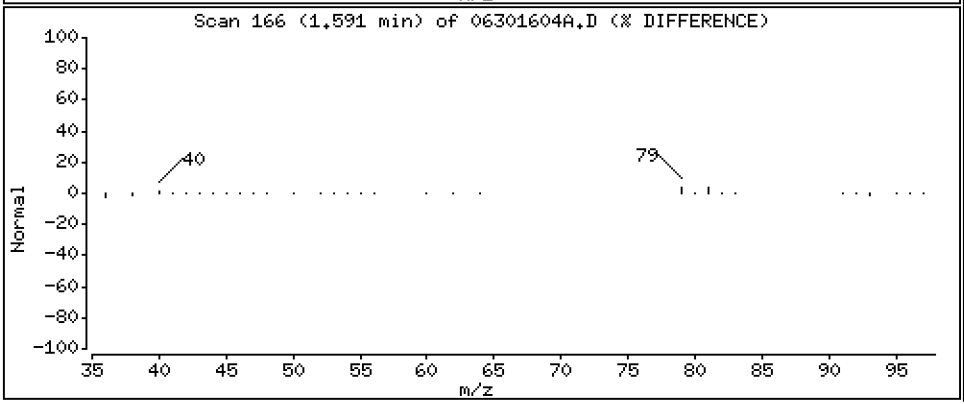












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

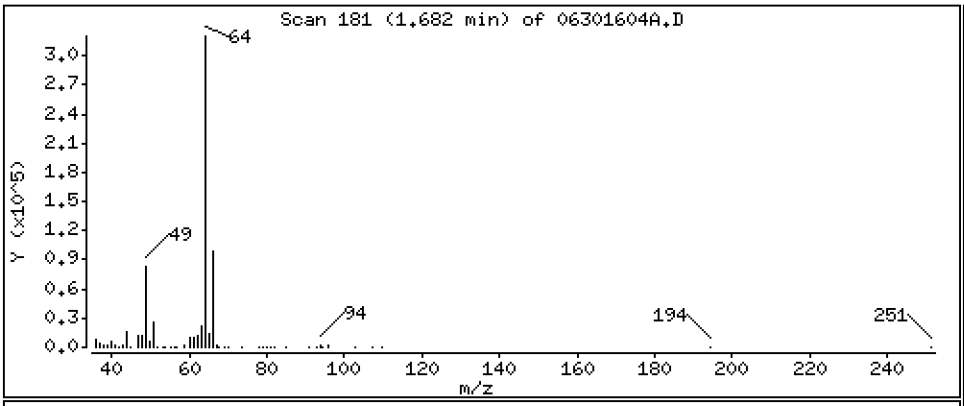
Operator: PB

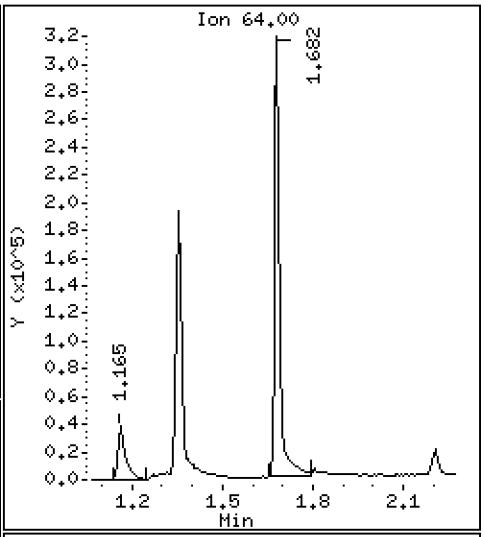
Column phase: RTXVMS

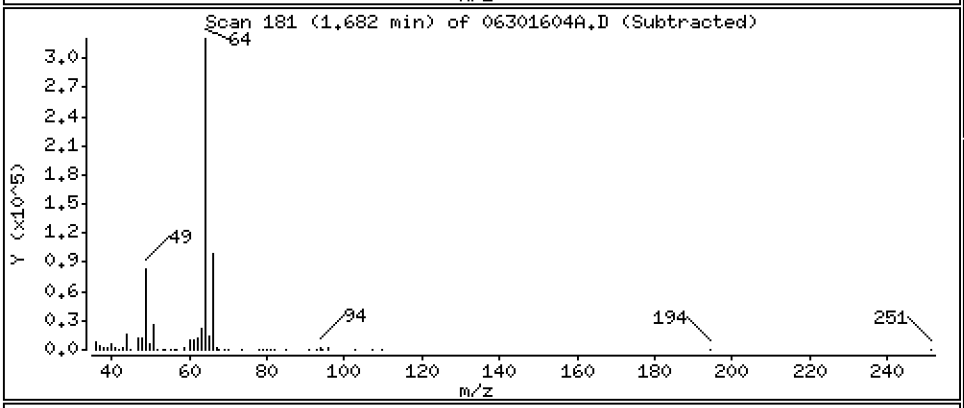
Column diameter: 0.18

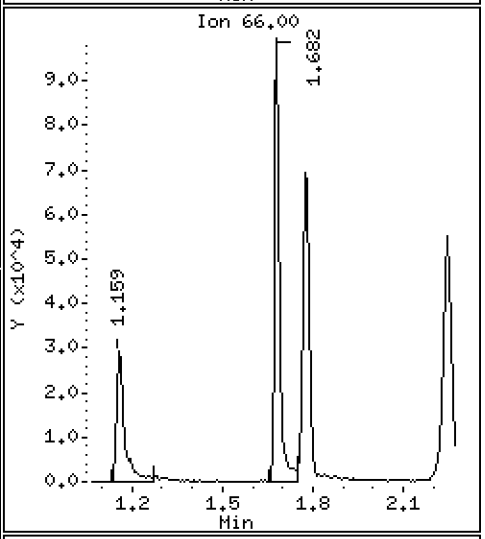
5 Chloroethane

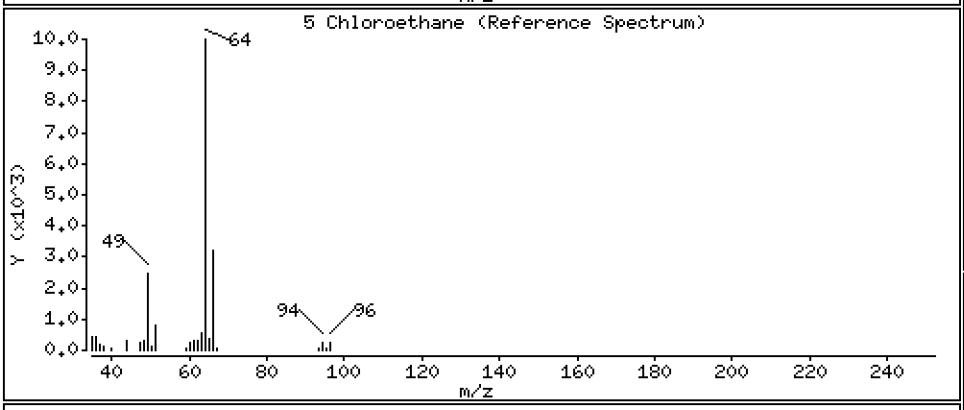
Concentration: 41.566 ug/Kg

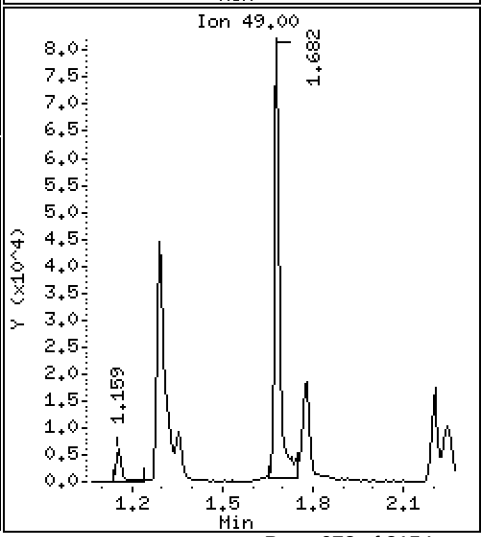


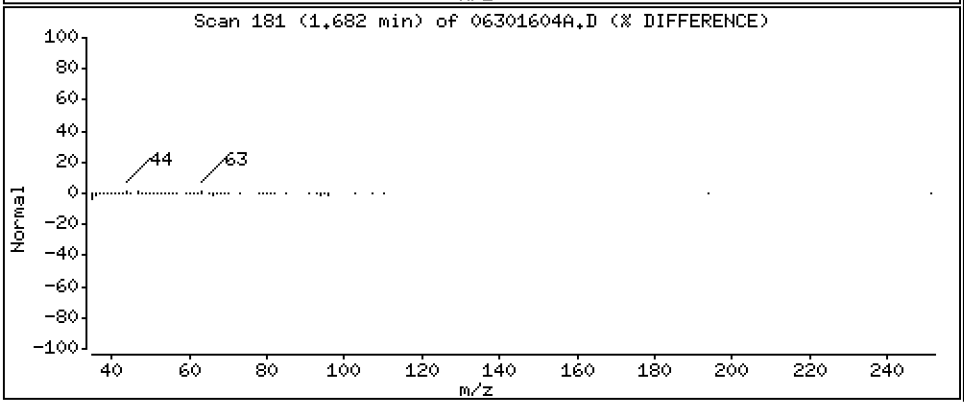












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

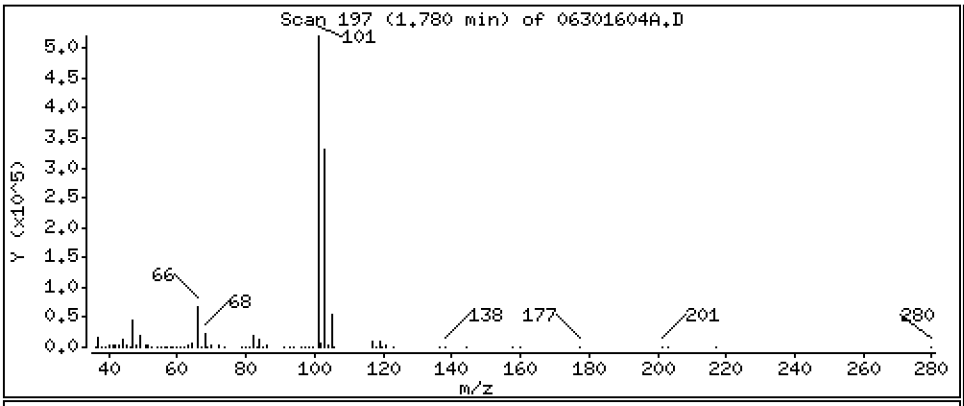
Operator: PB

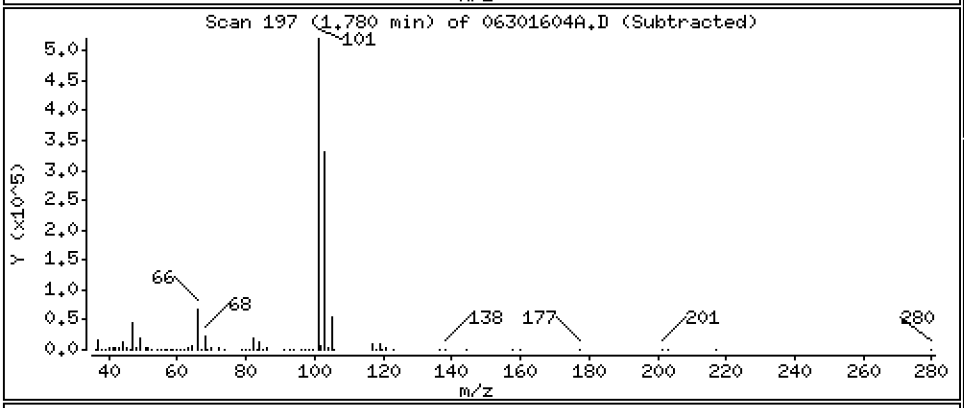
Column phase: RTXVMS

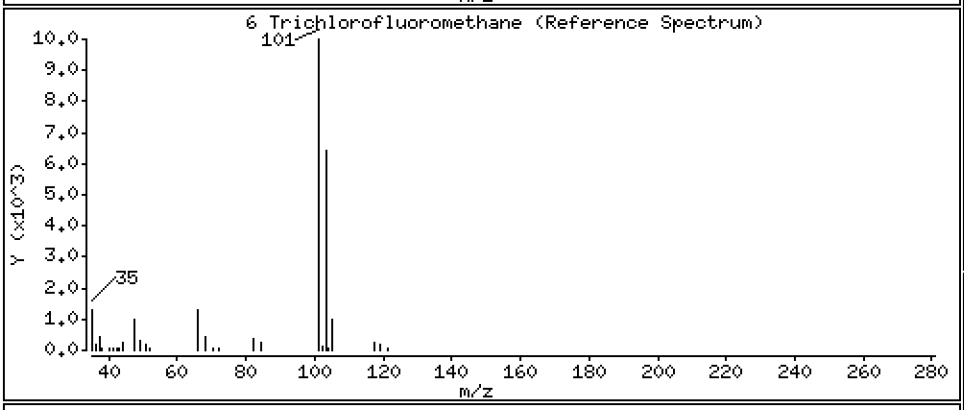
Column diameter: 0.18

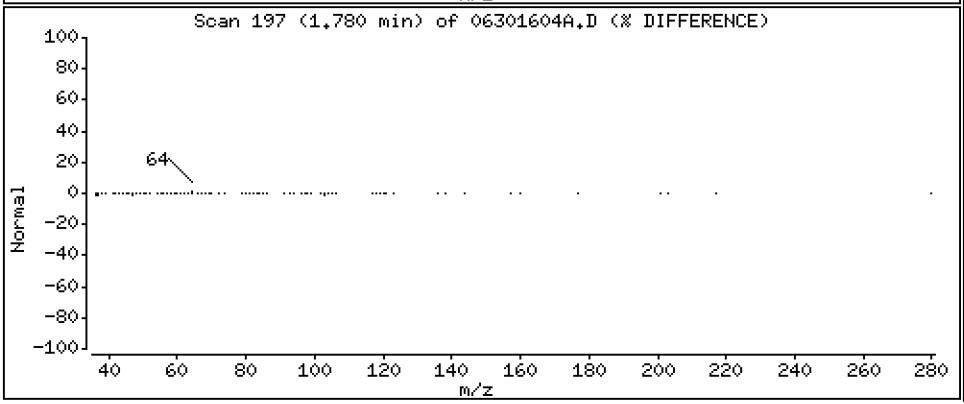
6 Trichlorofluoromethane

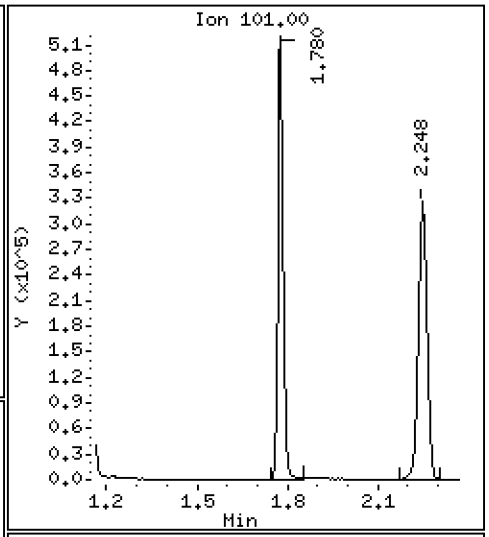
Concentration: 61.820 ug/Kg

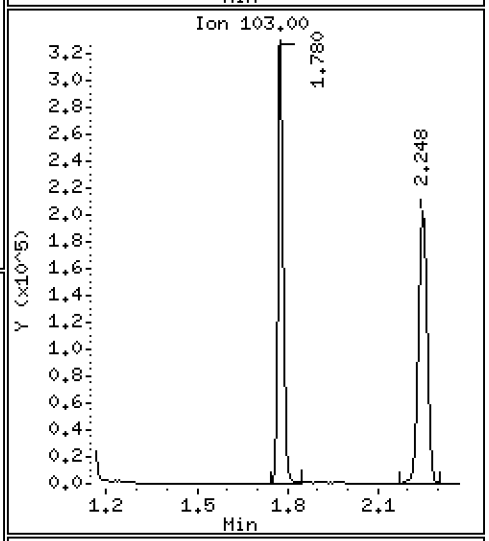


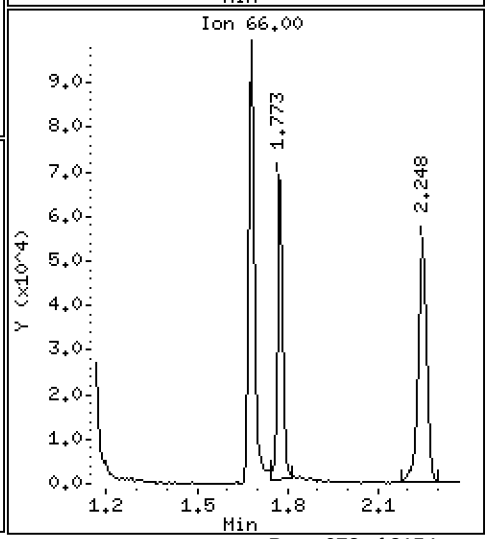












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

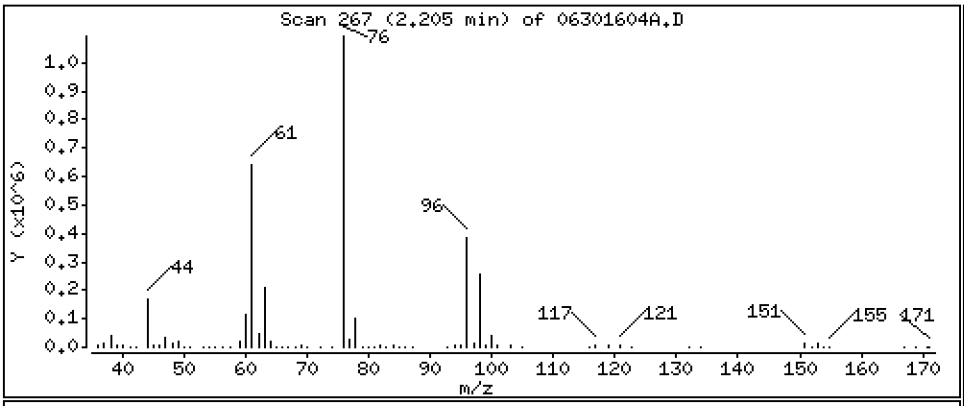
Operator: PB

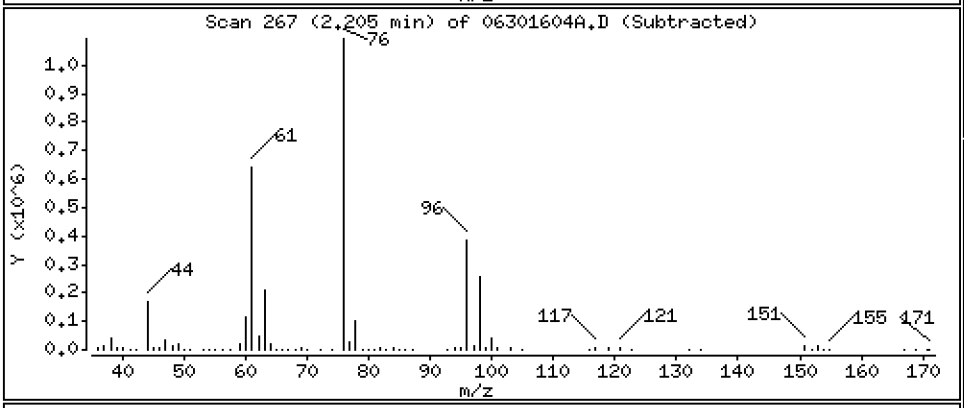
Column phase: RTXVMS

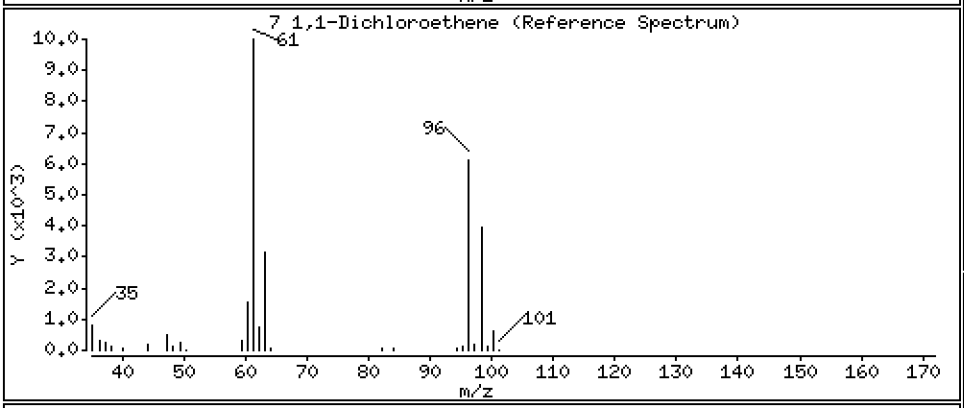
Column diameter: 0.18

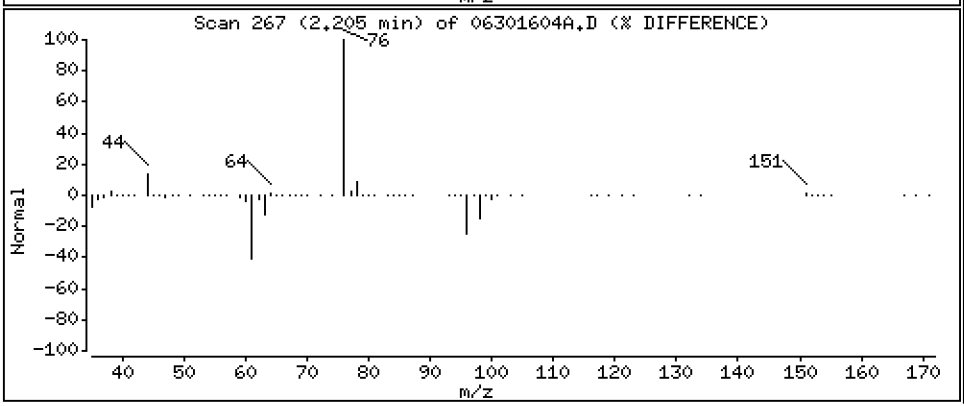
7 1,1-Dichloroethene

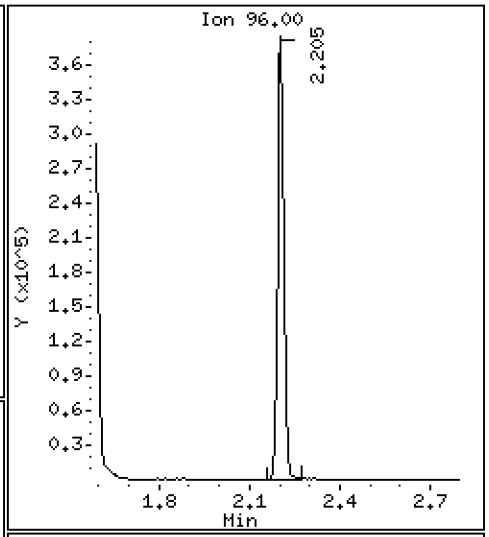
Concentration: 46.183 ug/Kg

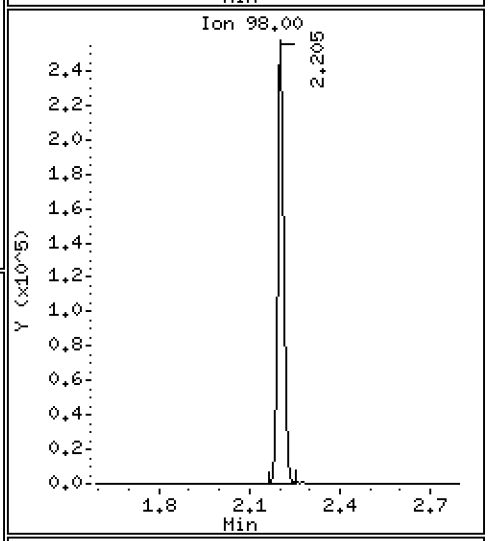


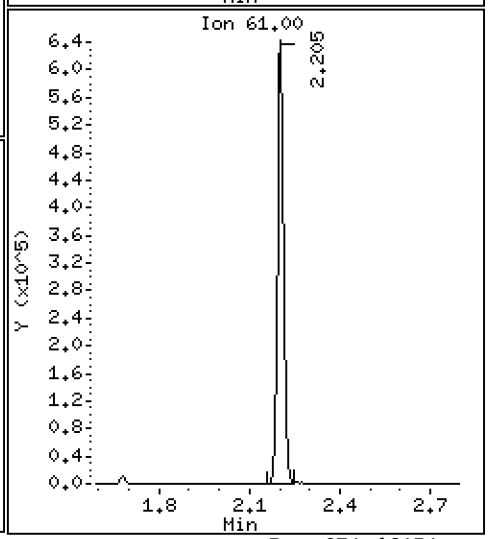












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

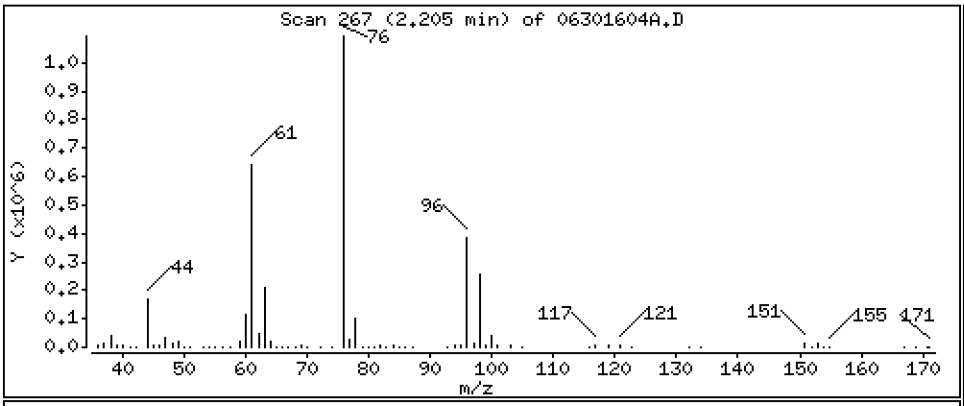
Operator: PB

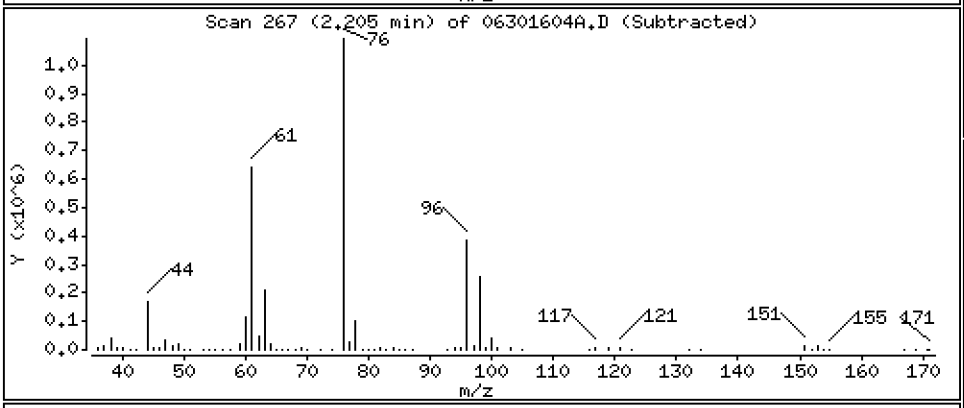
Column phase: RTXVMS

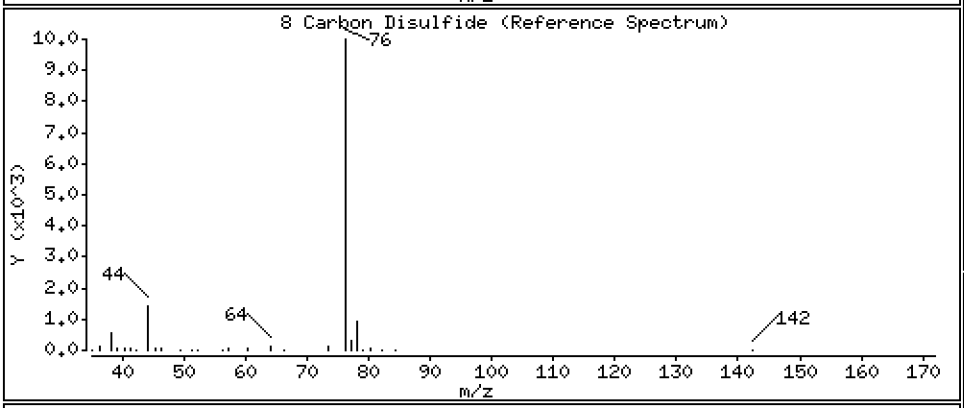
Column diameter: 0.18

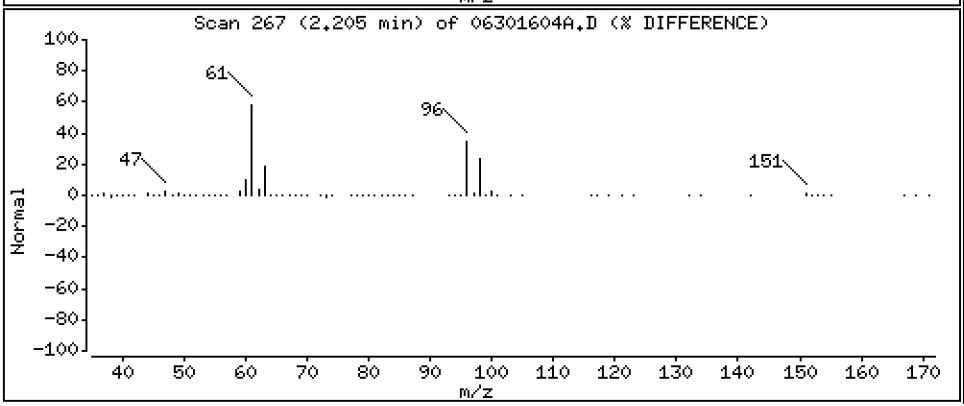
8 Carbon Disulfide

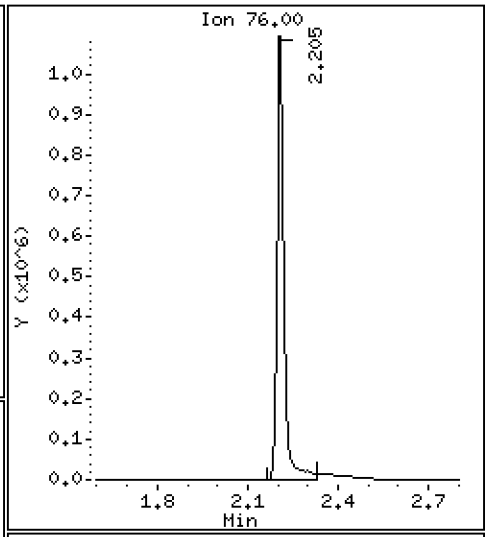
Concentration: 45.543 ug/Kg

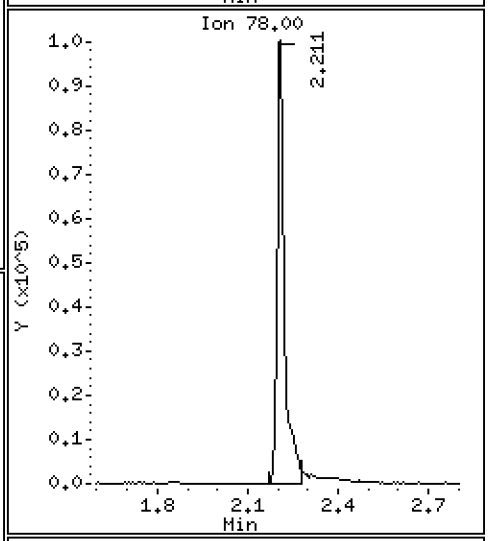


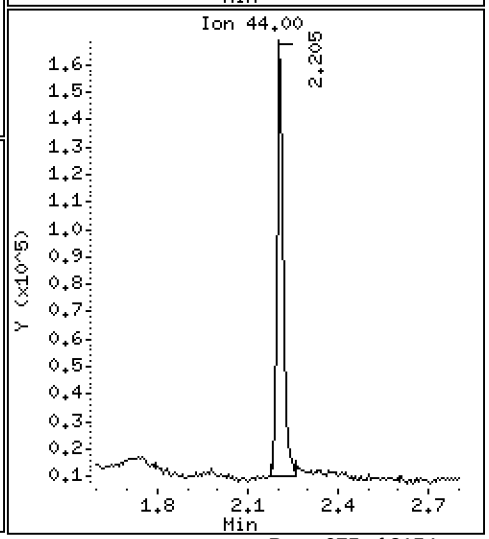












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

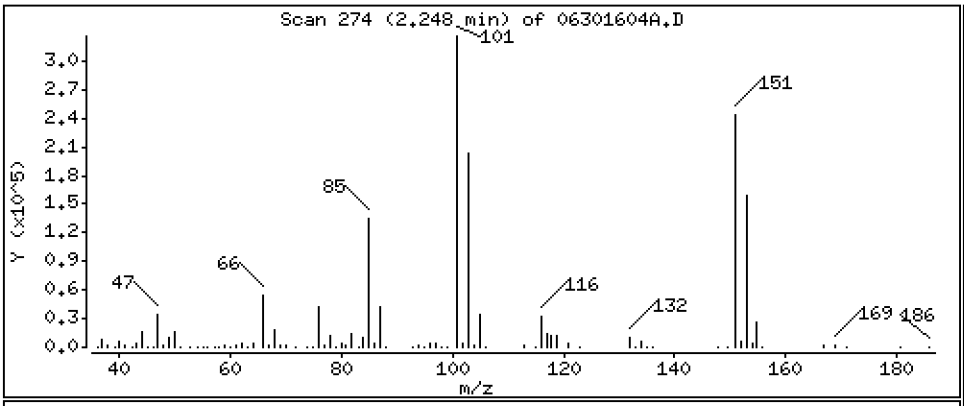
Operator: PB

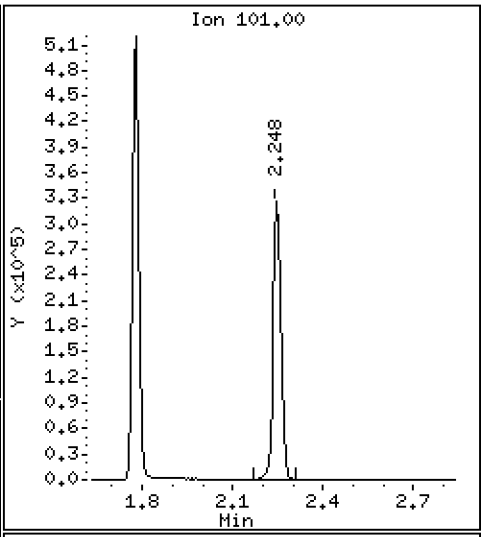
Column phase: RTXVMS

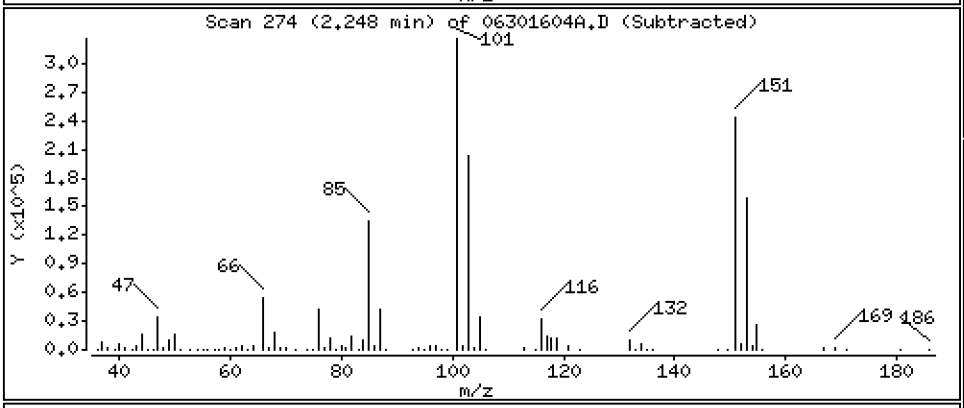
Column diameter: 0.18

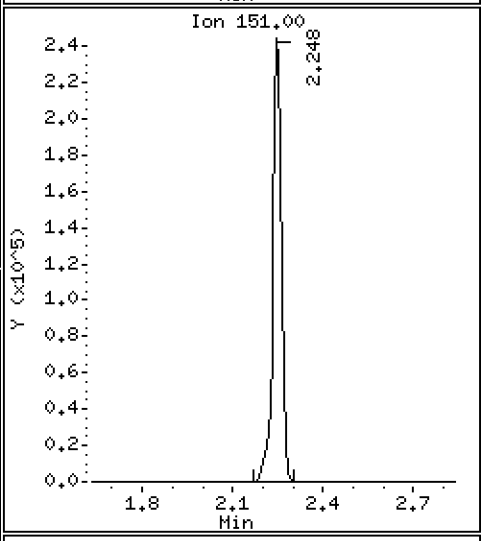
9 112Trichloro122Trifluoroethane

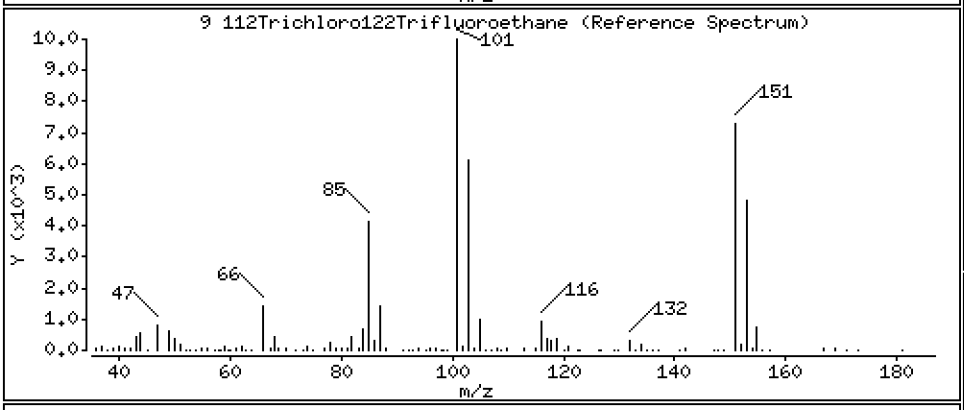
Concentration: 47.293 ug/Kg

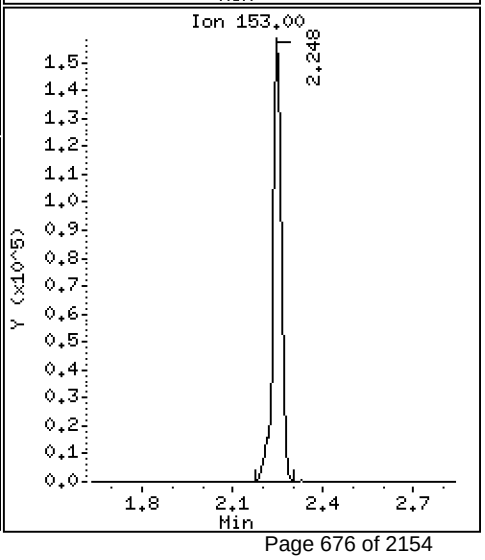


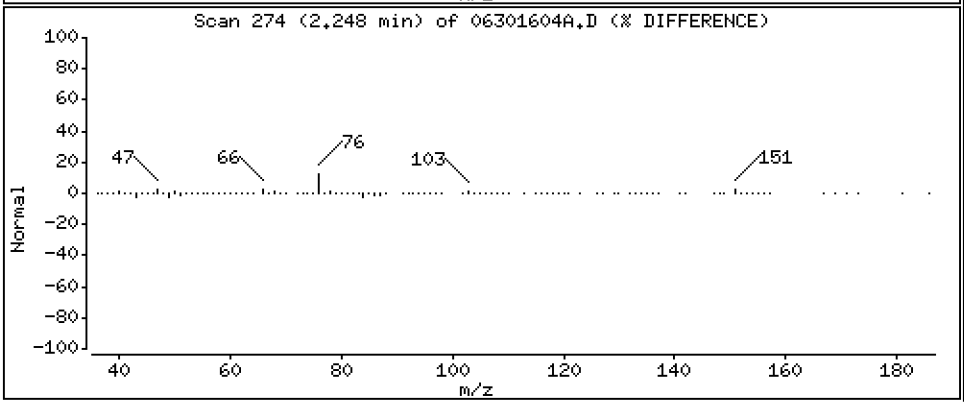












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

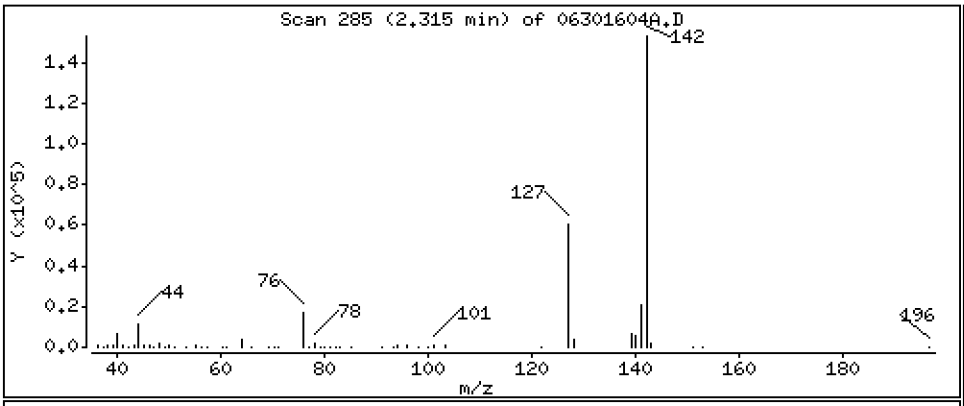
Operator: PB

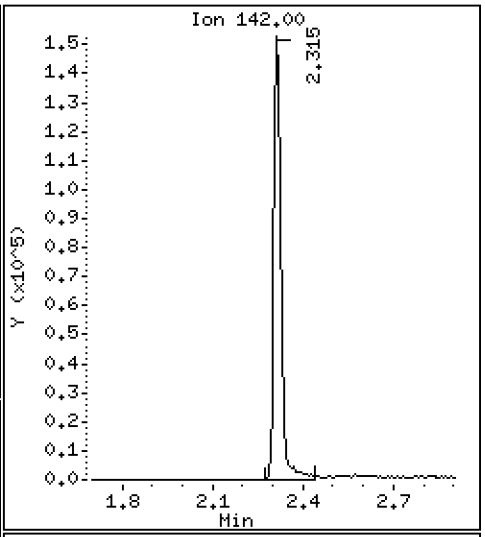
Column phase: RTXVMS

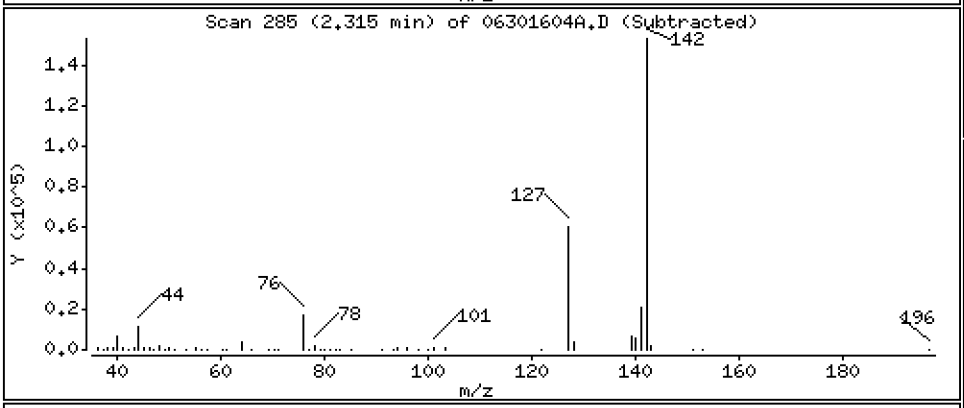
Column diameter: 0.18

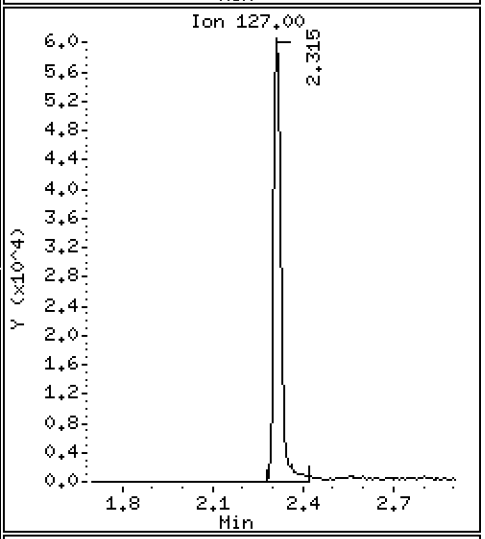
10 Iodomethane

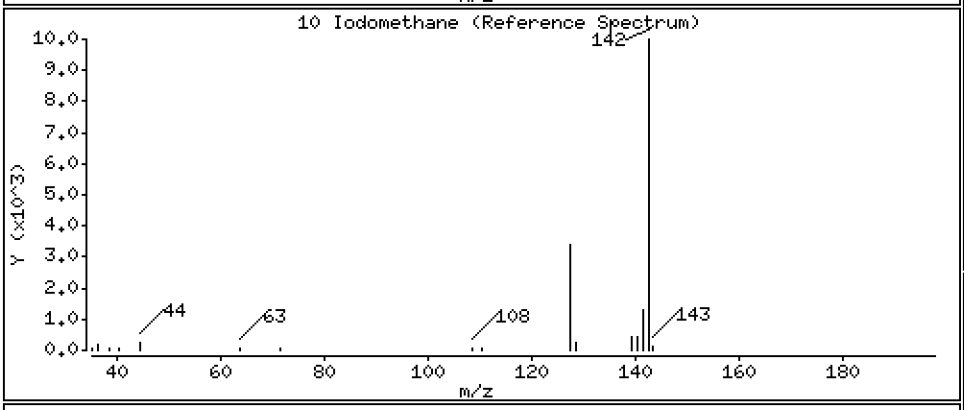
Concentration: 31.682 ug/Kg

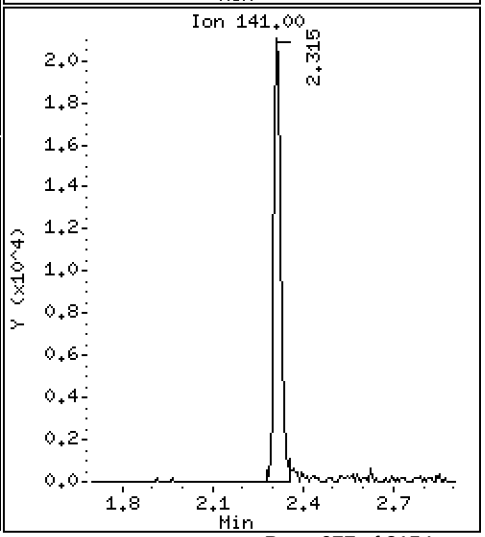


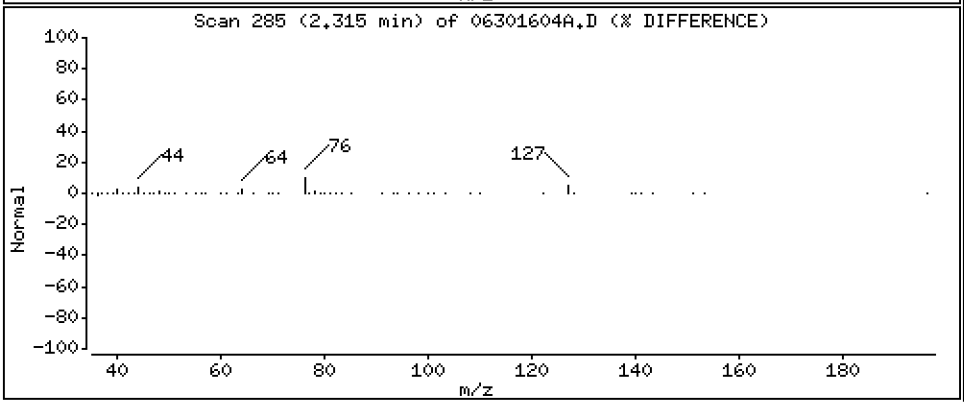












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

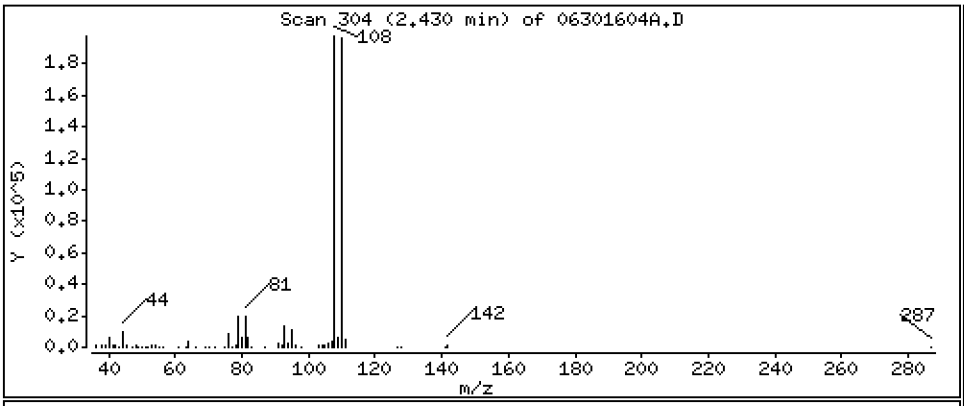
Operator: PB

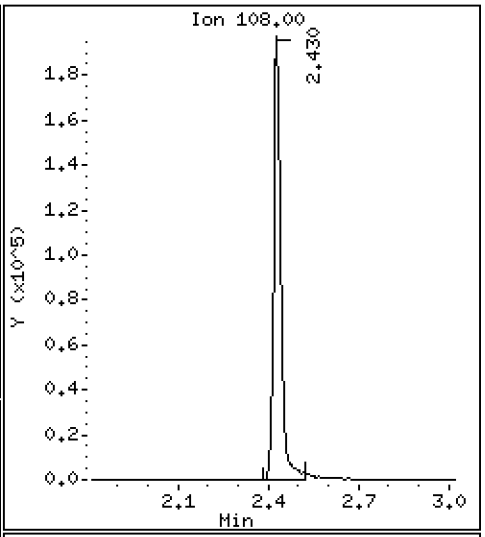
Column phase: RTXVMS

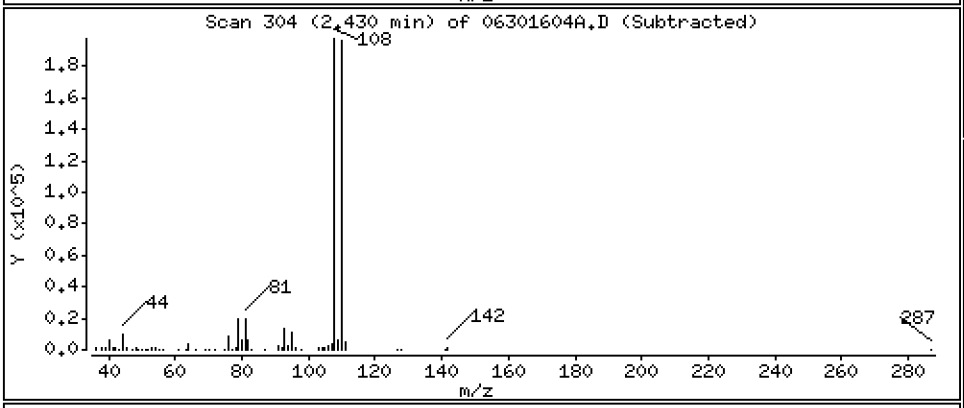
Column diameter: 0.18

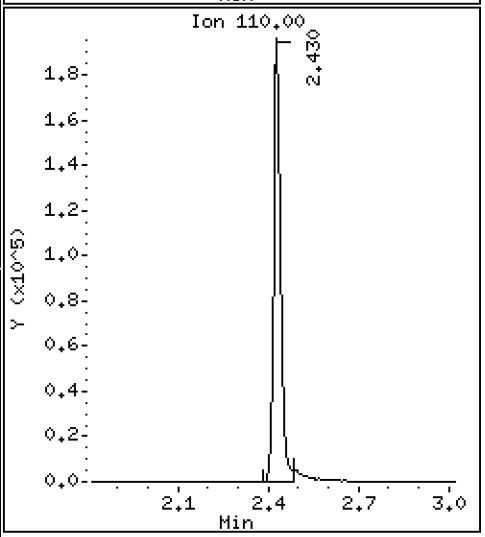
11 Bromoethane

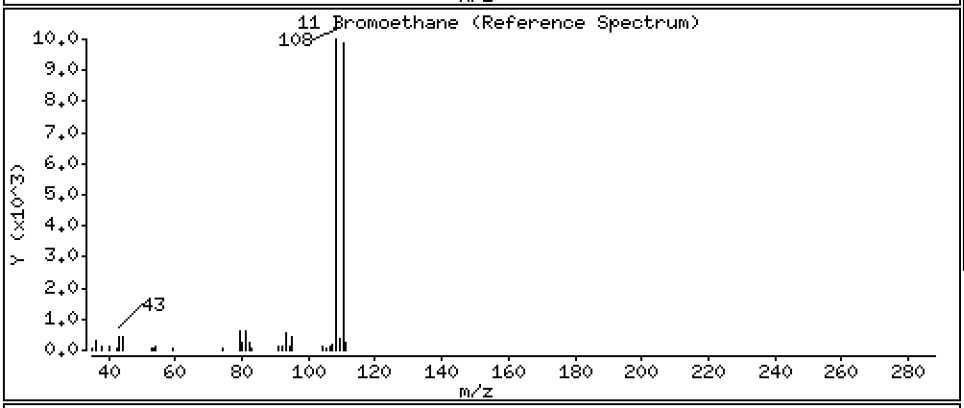
Concentration: 47.457 ug/Kg

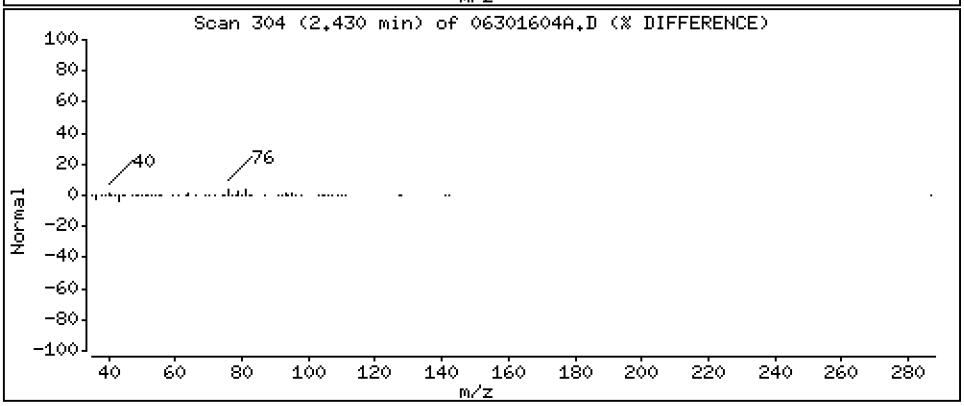












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

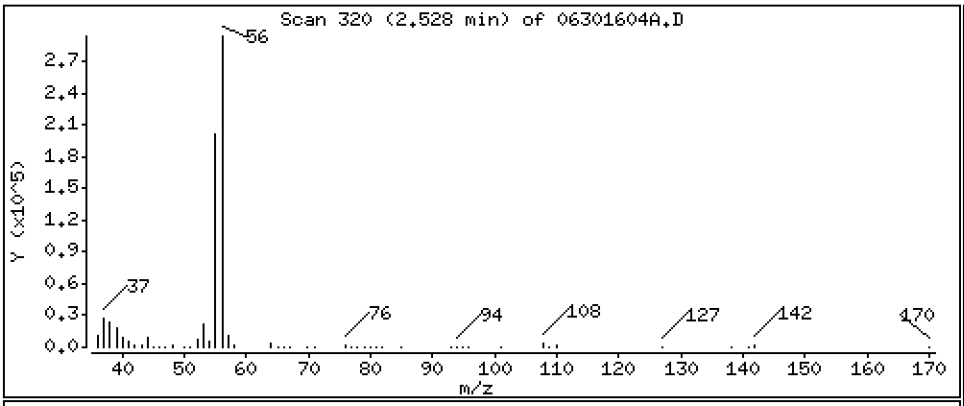
Operator: PB

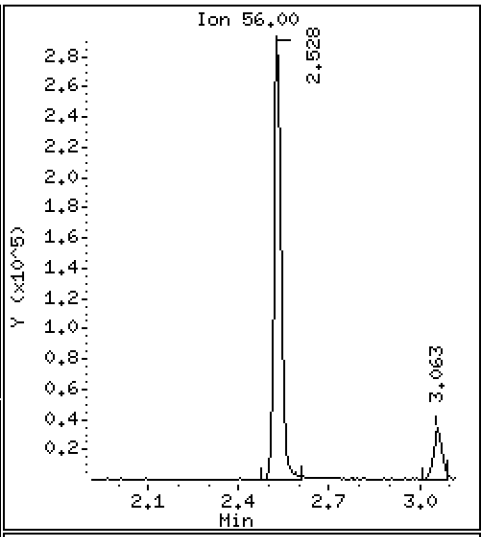
Column phase: RTXVMS

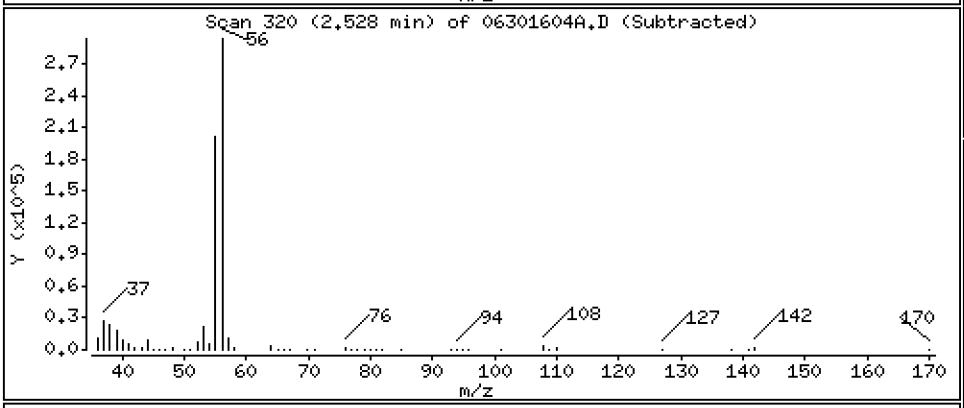
Column diameter: 0.18

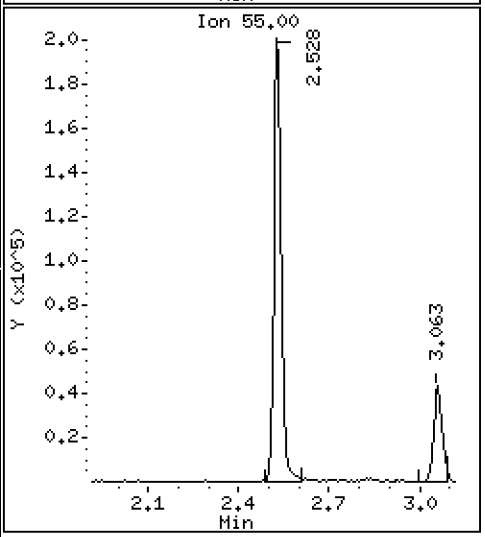
12 Acrolein

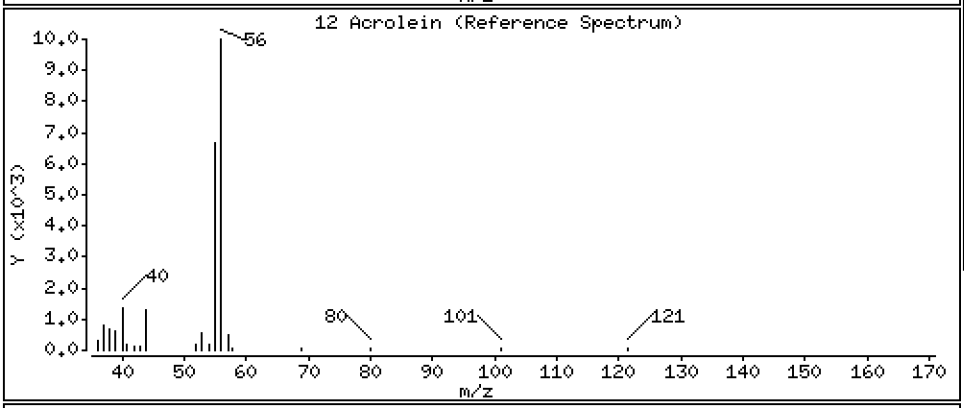
Concentration: 201.28 ug/Kg

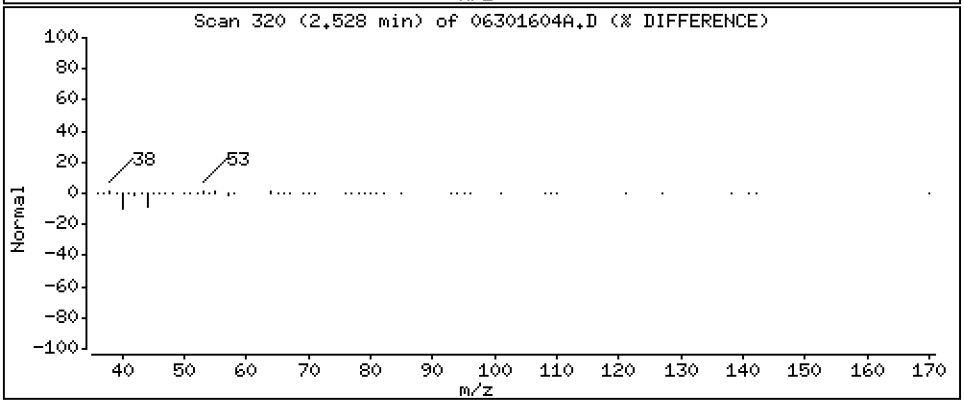












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

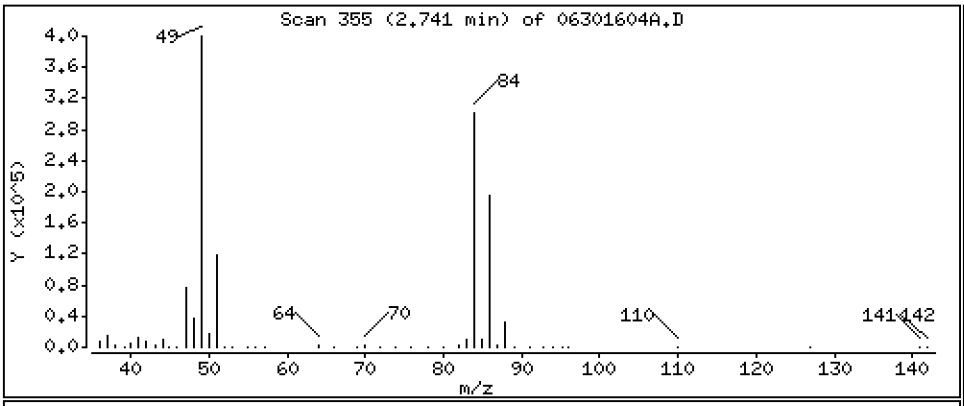
Operator: PB

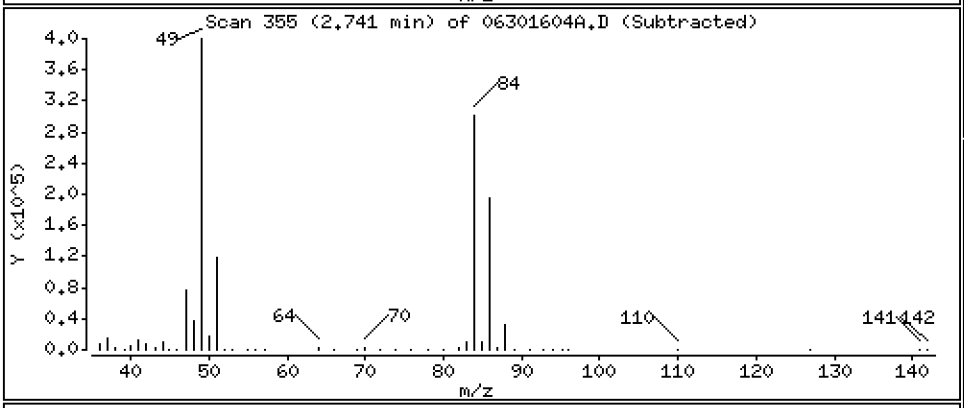
Column phase: RTXVMS

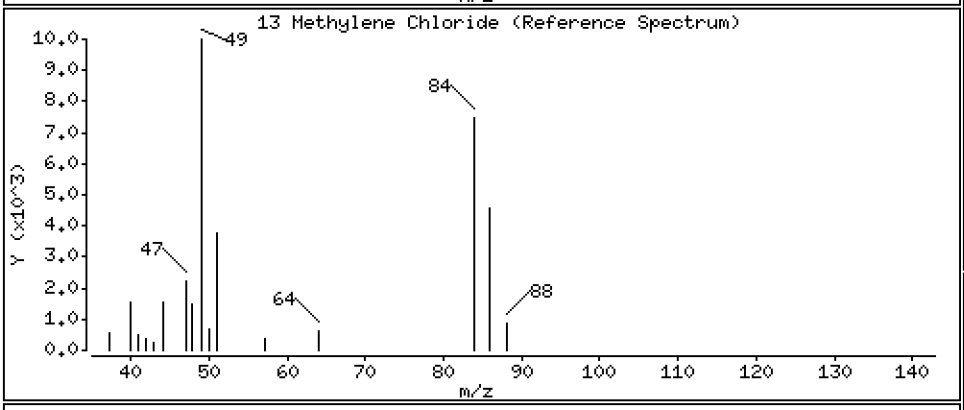
Column diameter: 0.18

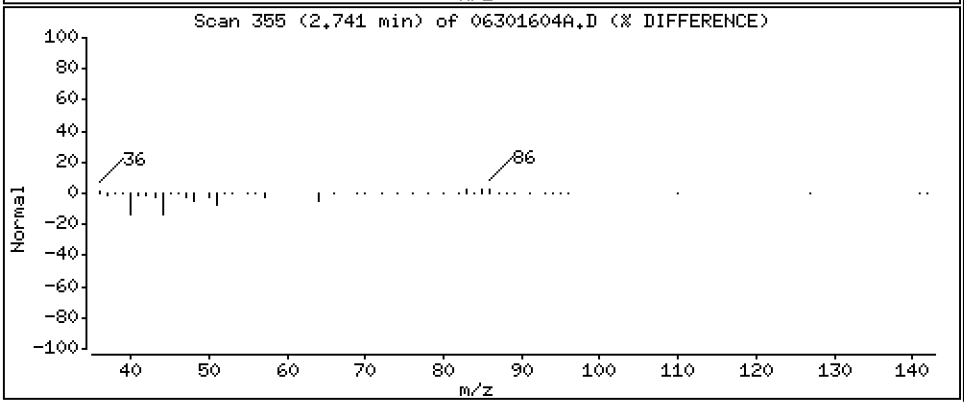
13 Methylene Chloride

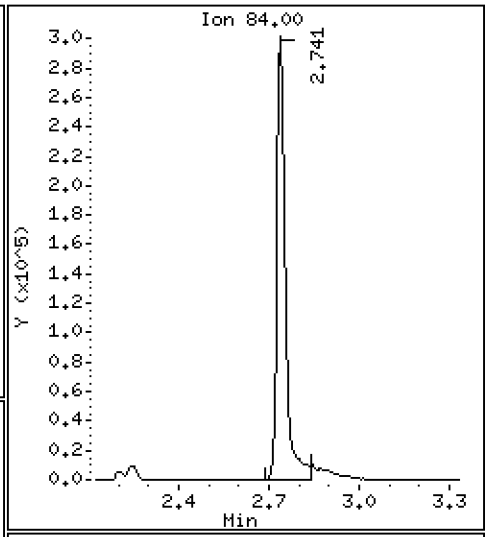
Concentration: 46.388 ug/Kg

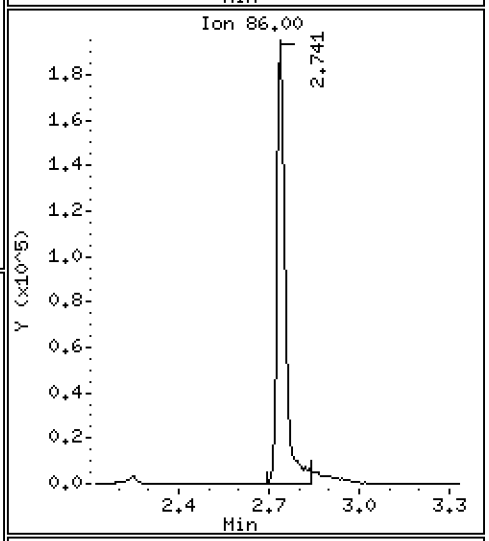


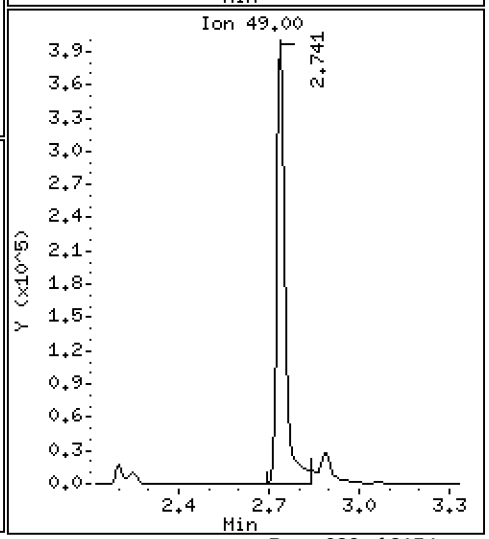












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

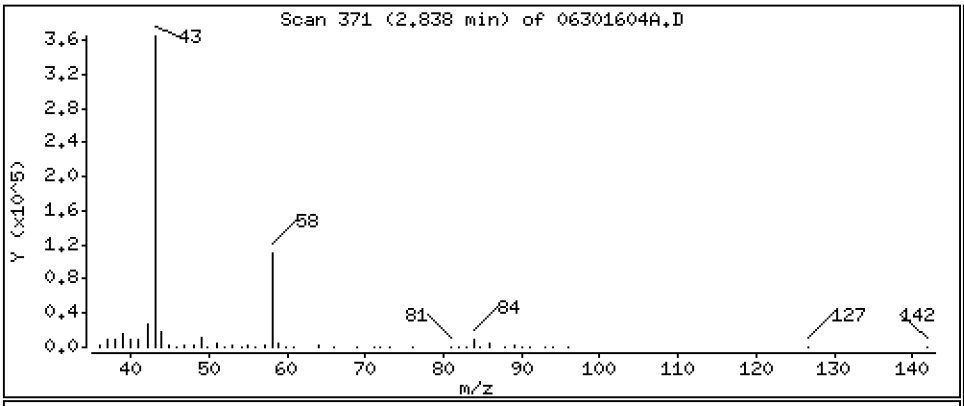
Operator: PB

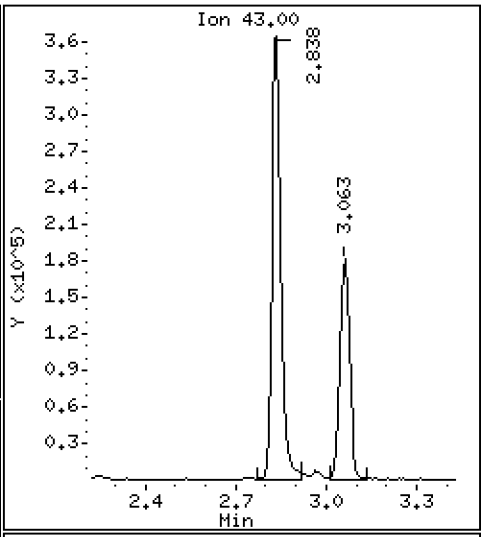
Column phase: RTXVMS

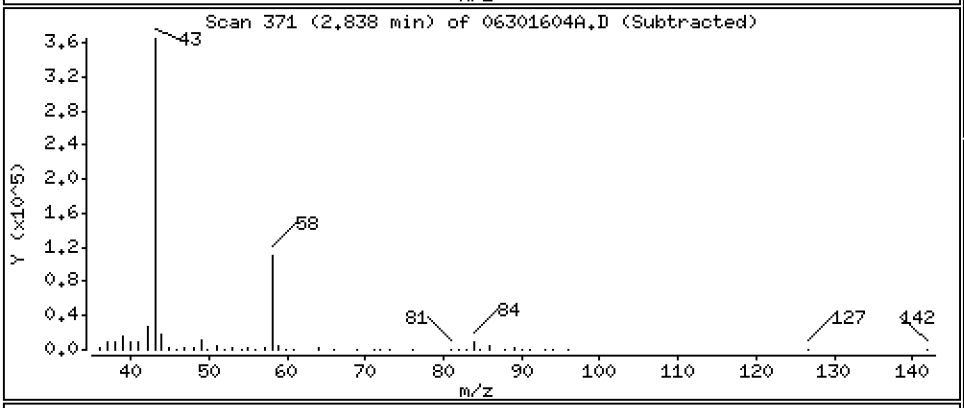
Column diameter: 0.18

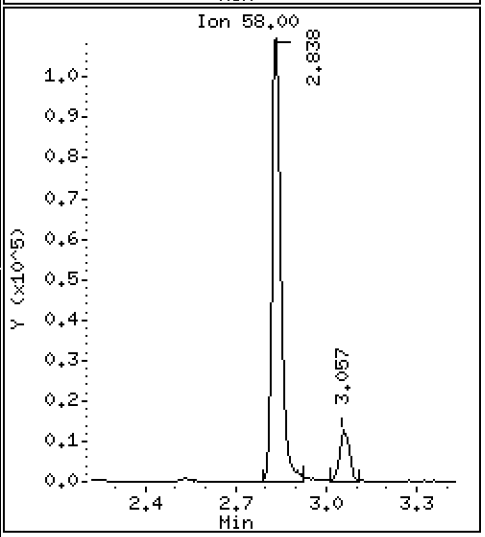
14 Acetone

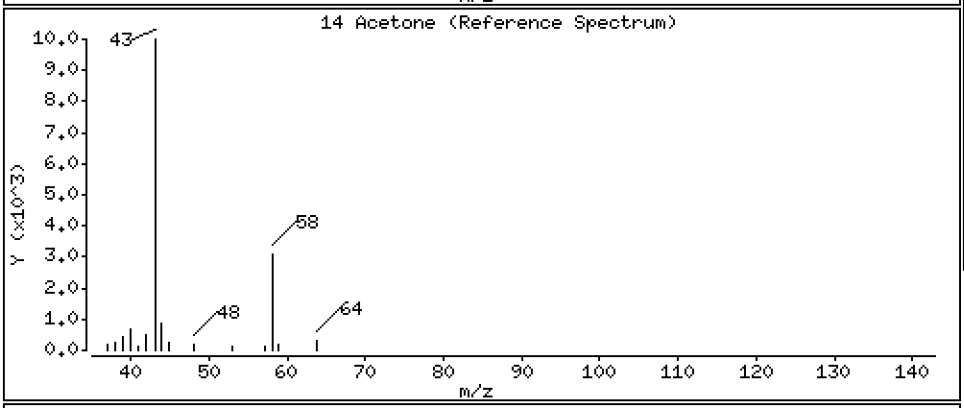
Concentration: 180.78 ug/Kg

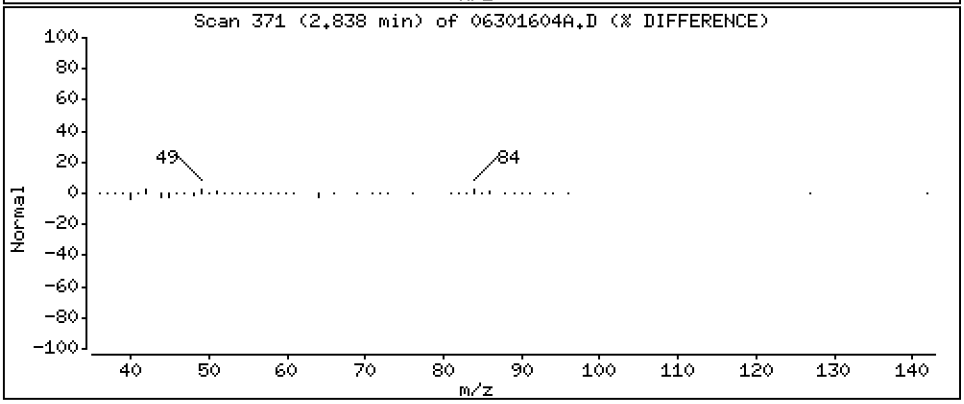












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

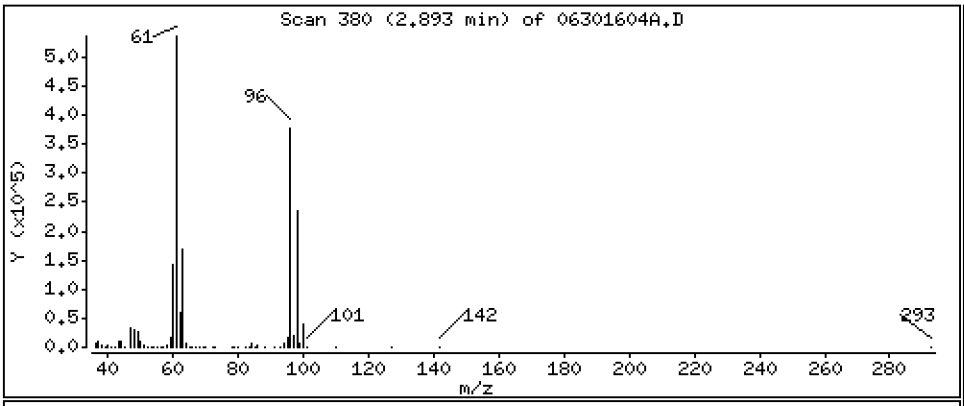
Operator: PB

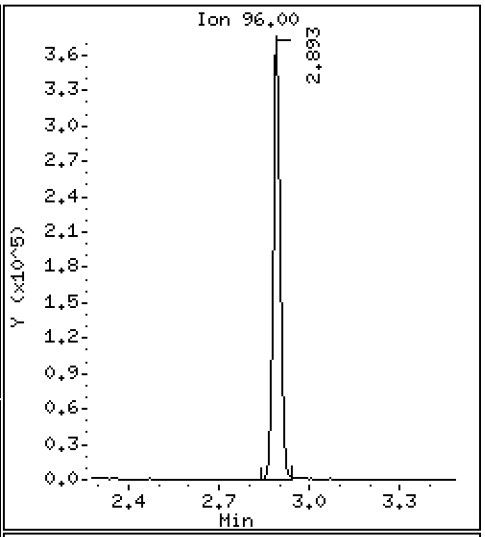
Column phase: RTXVMS

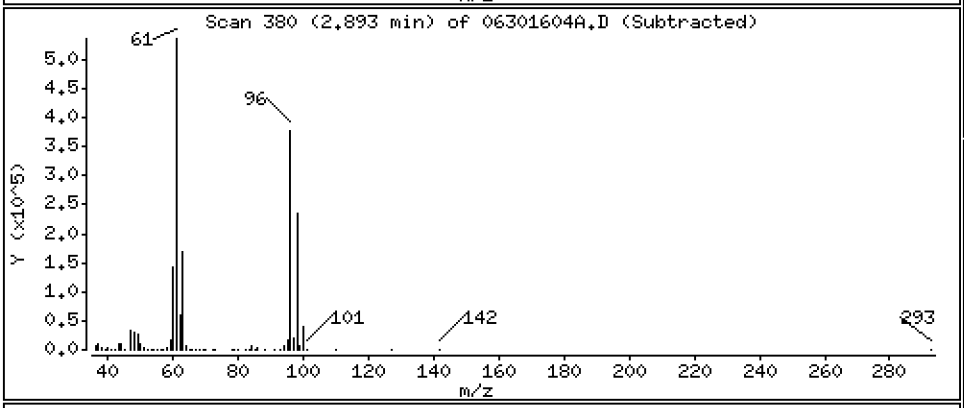
Column diameter: 0.18

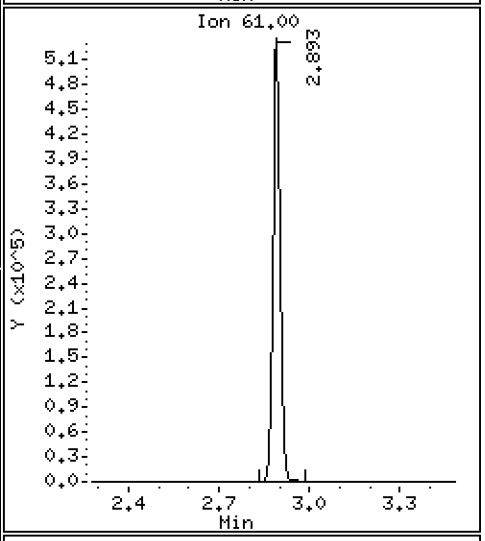
15 Trans-1,2-Dichloroethene

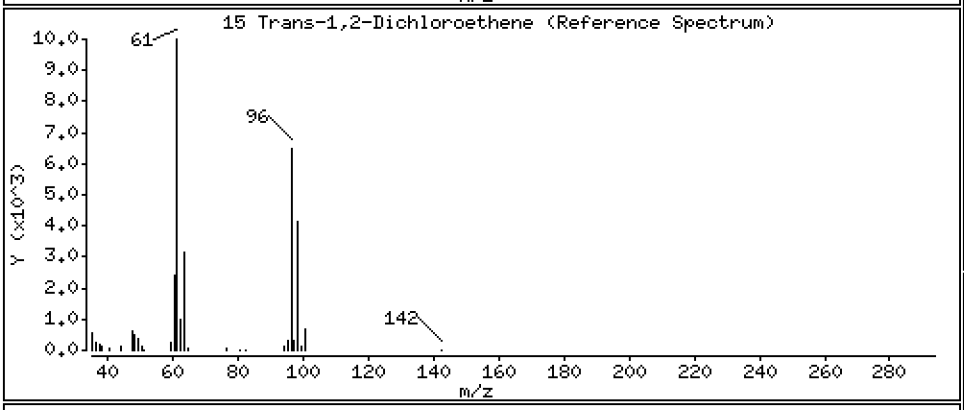
Concentration: 45.501 ug/Kg

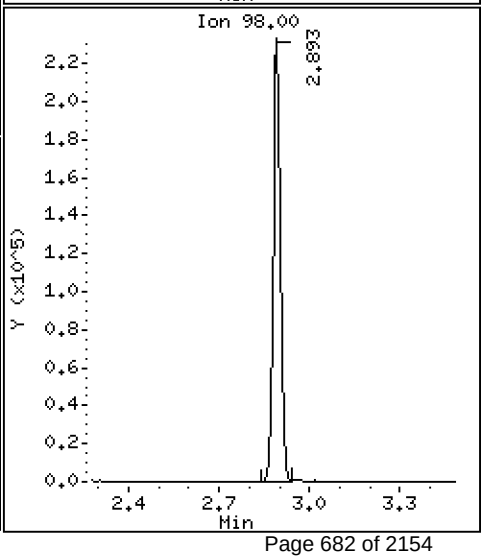


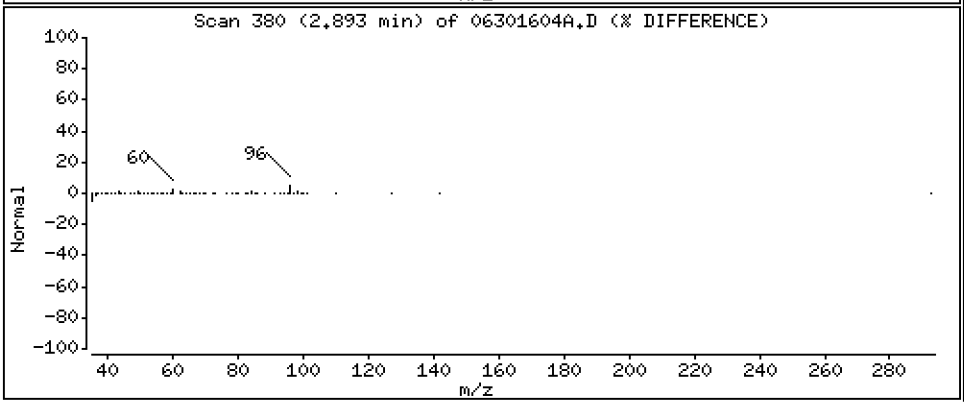












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

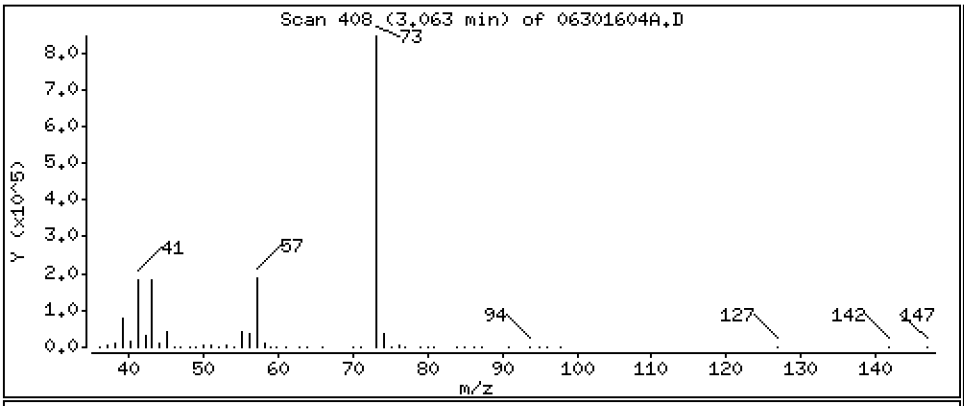
Operator: PB

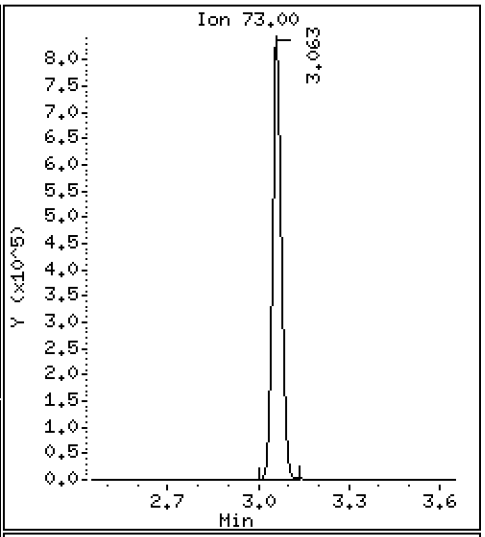
Column phase: RTXVMS

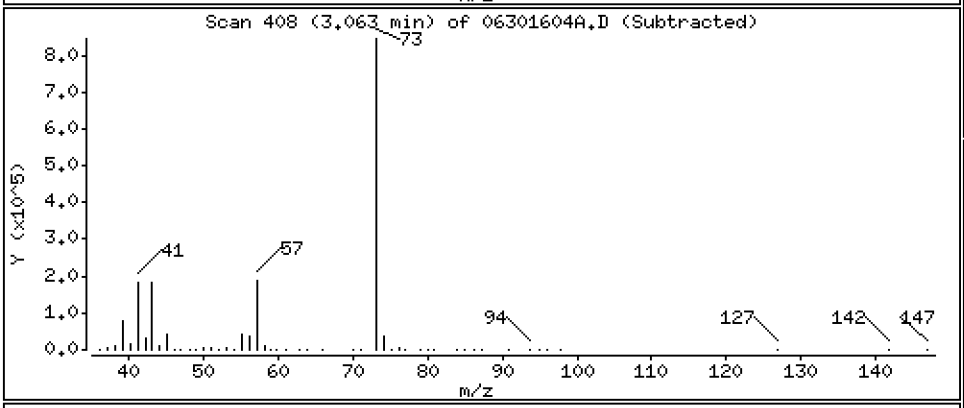
Column diameter: 0.18

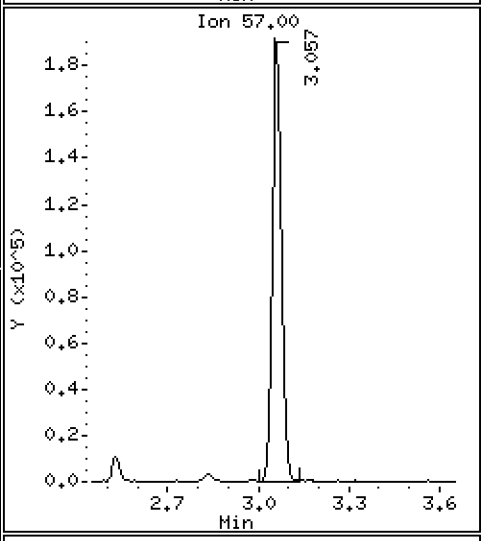
16 Methyl tert butyl ether

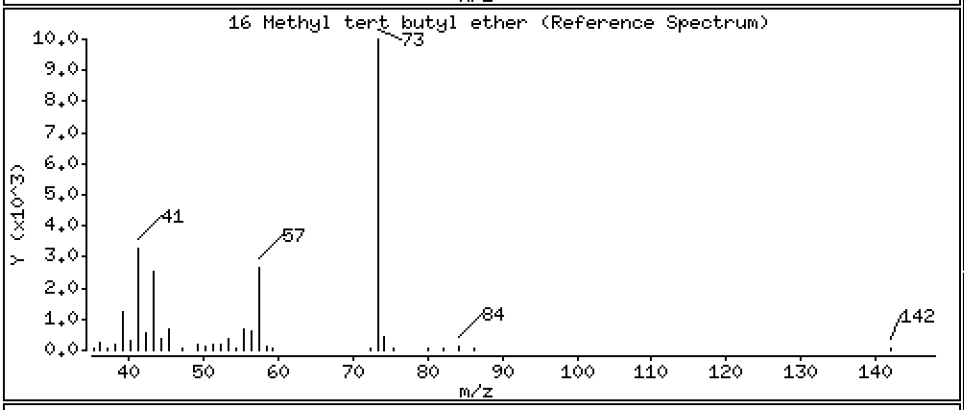
Concentration: 42.550 ug/Kg

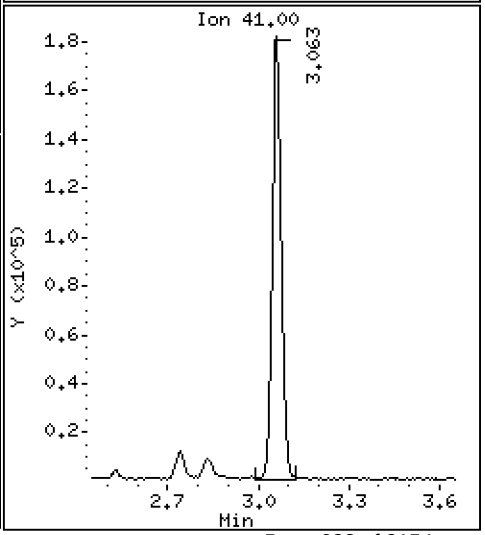


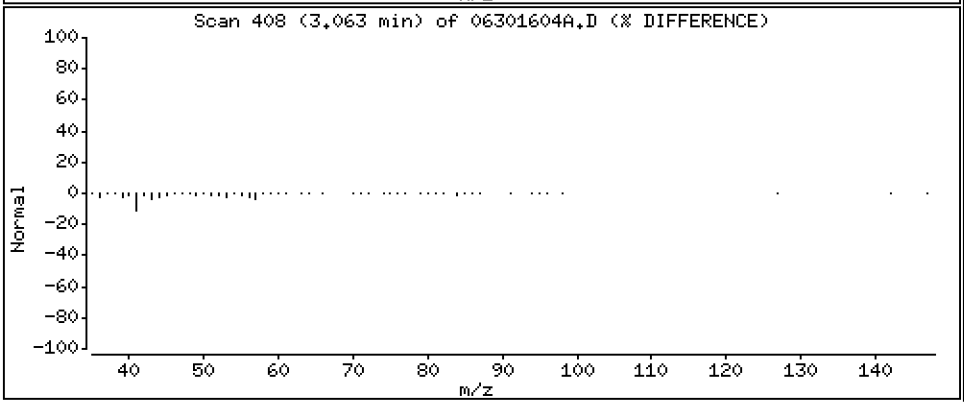












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

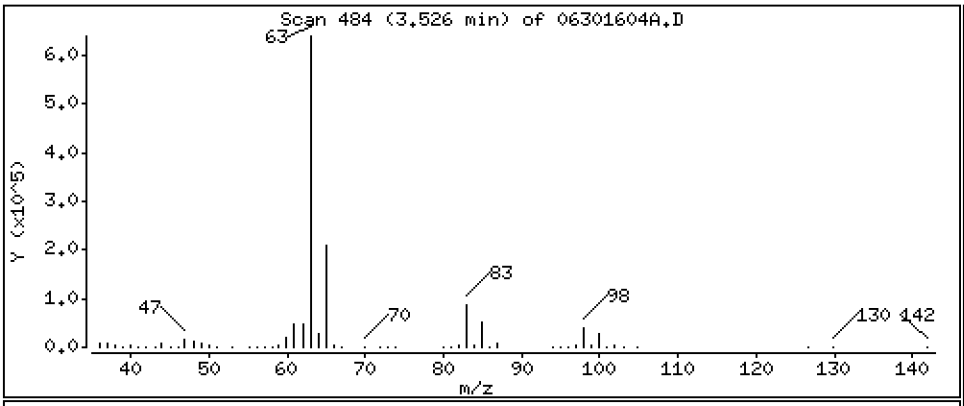
Operator: PB

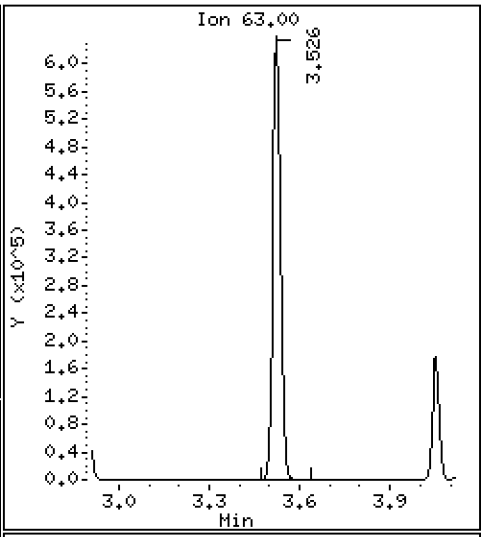
Column phase: RTXVMS

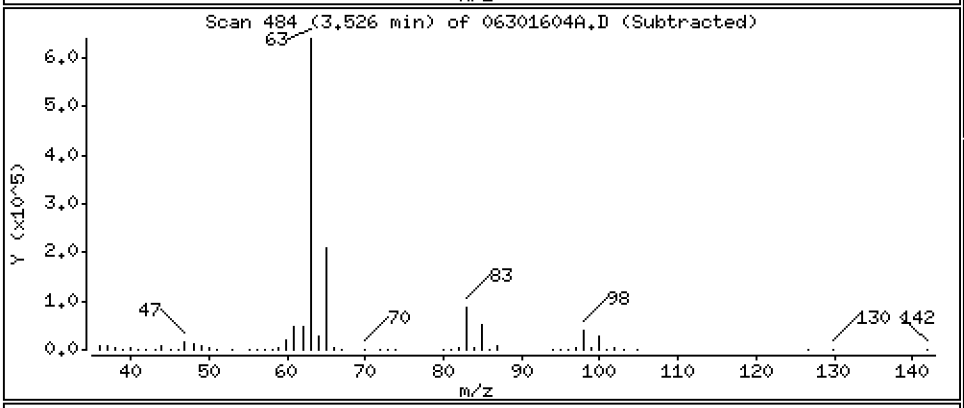
Column diameter: 0.18

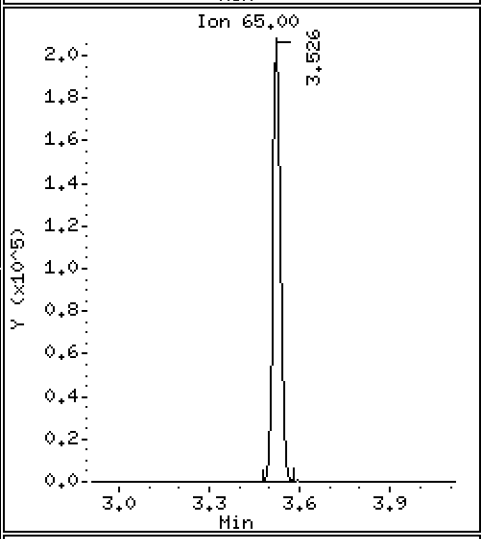
17 1,1-Dichloroethane

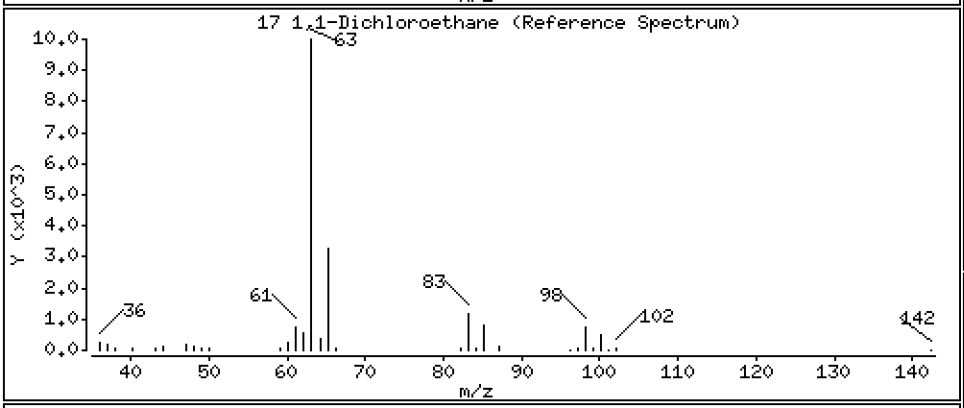
Concentration: 41.498 ug/Kg

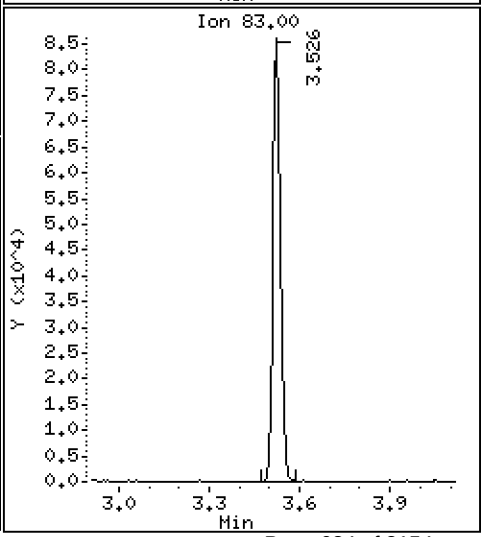


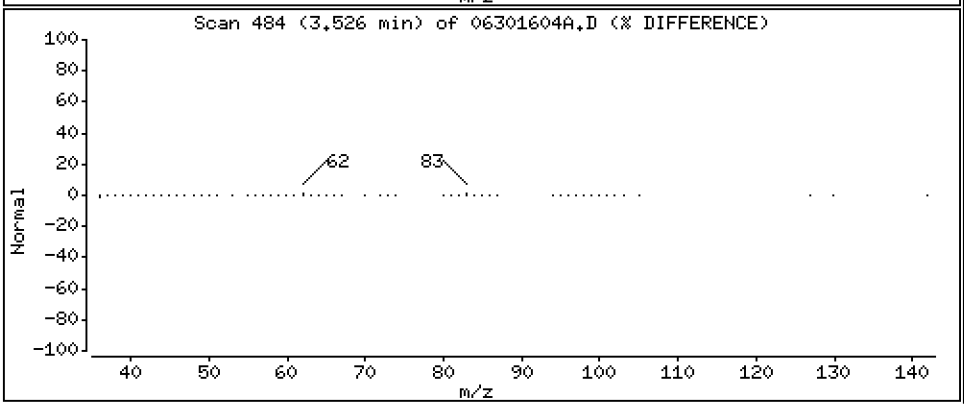












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

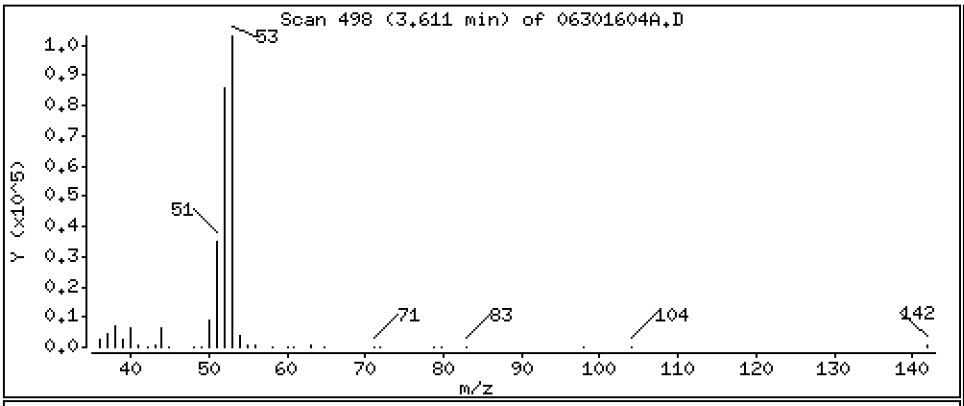
Operator: PB

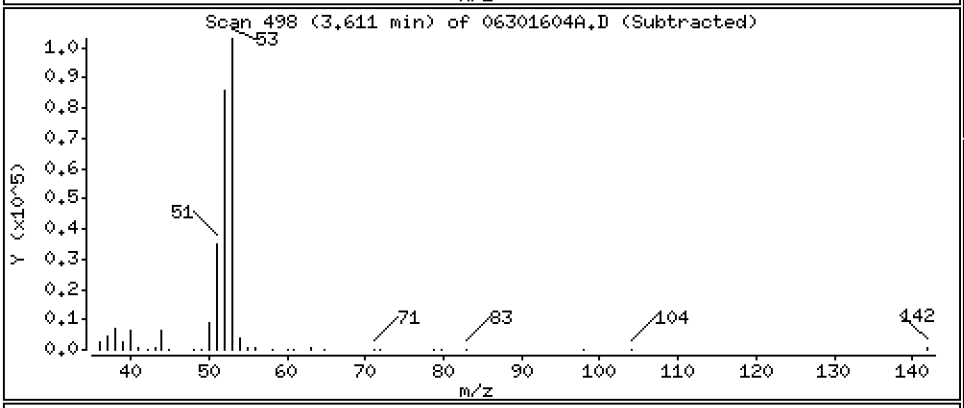
Column phase: RTXVMS

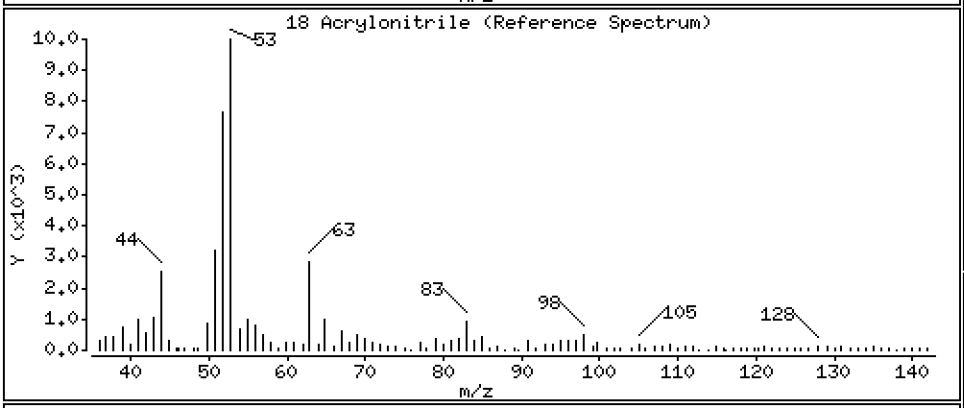
Column diameter: 0.18

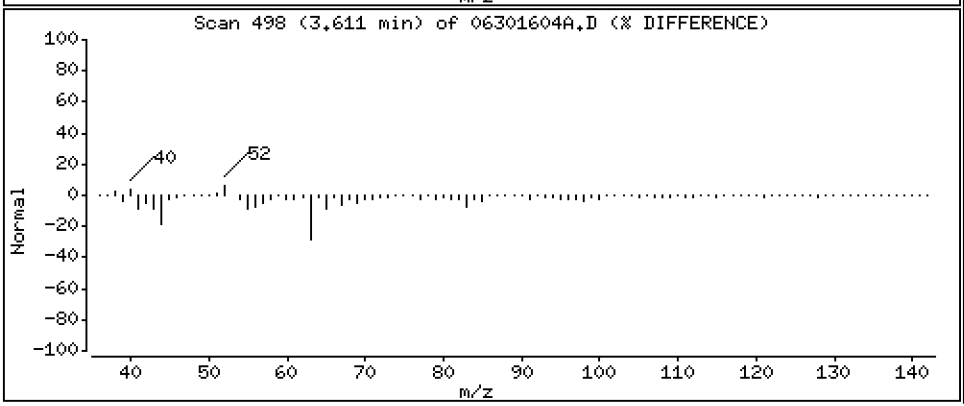
18 Acrylonitrile

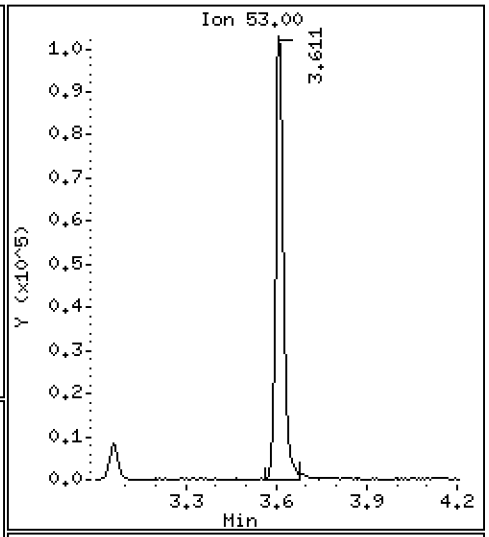
Concentration: 39.165 ug/Kg

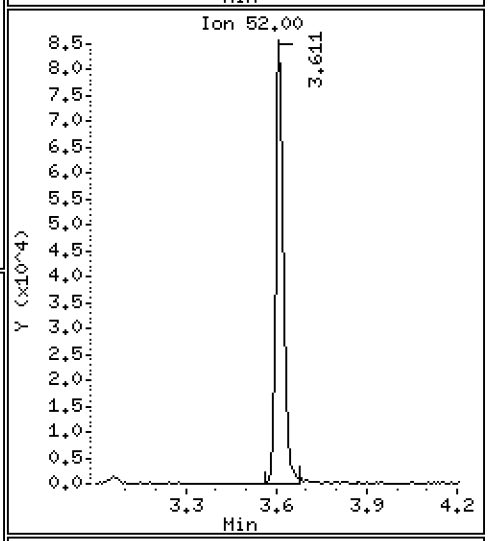


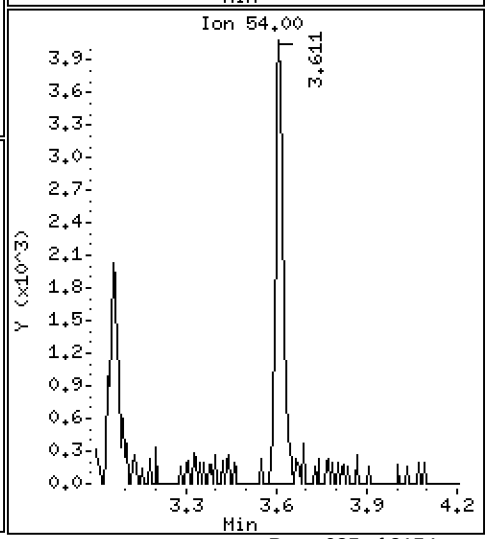












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

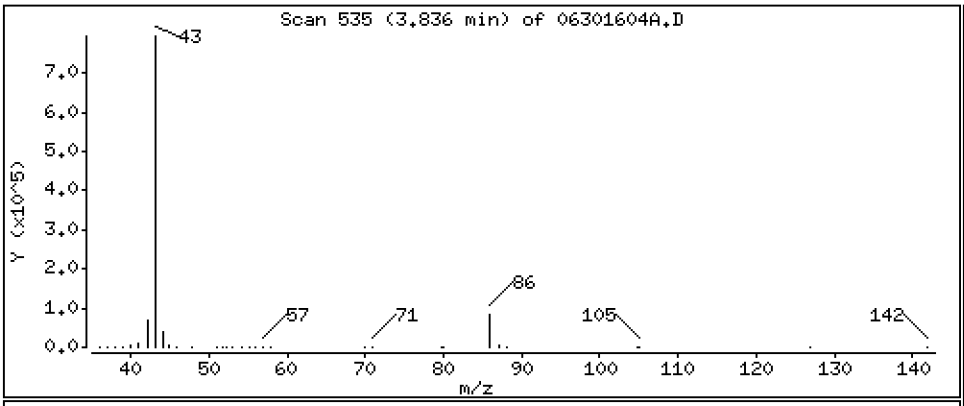
Operator: PB

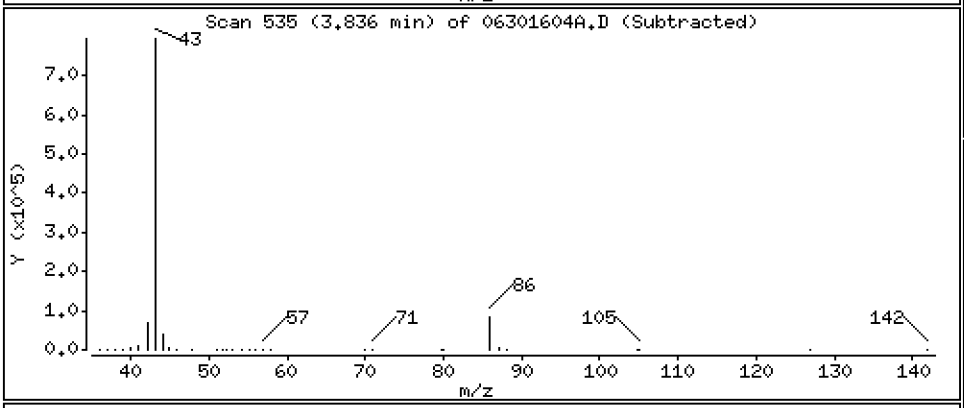
Column phase: RTXVMS

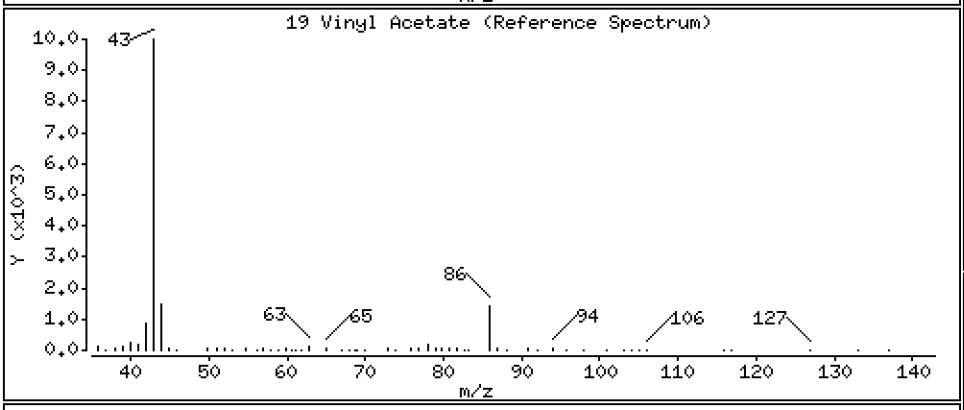
Column diameter: 0.18

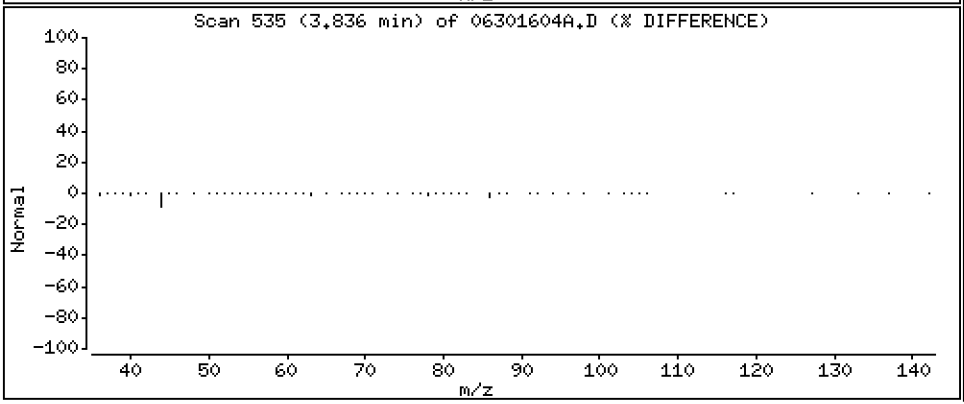
19 Vinyl Acetate

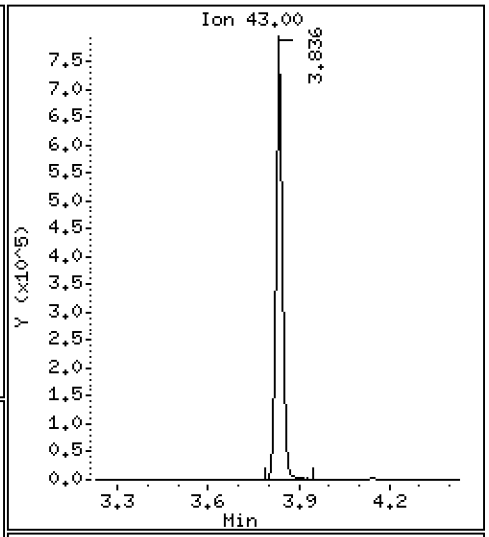
Concentration: 38.646 ug/Kg

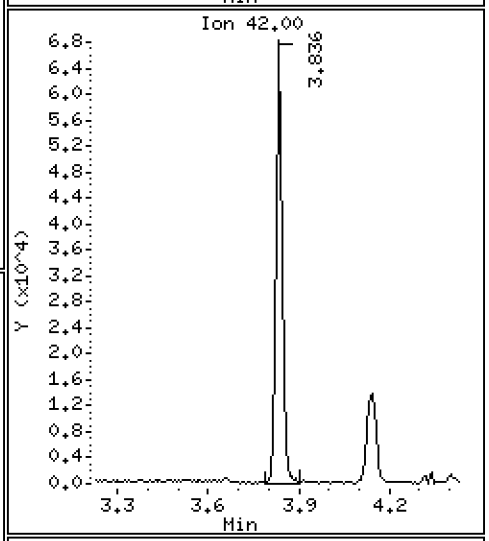


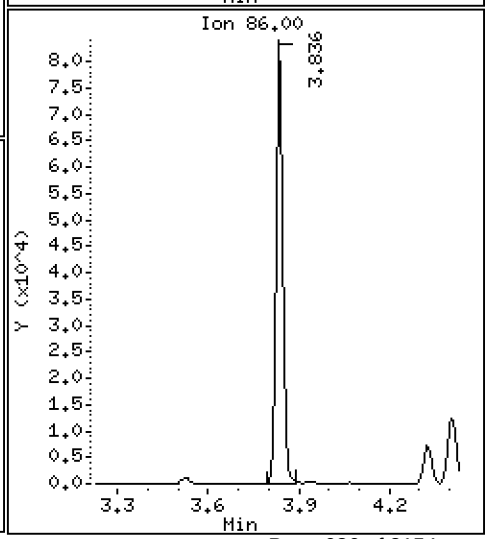












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

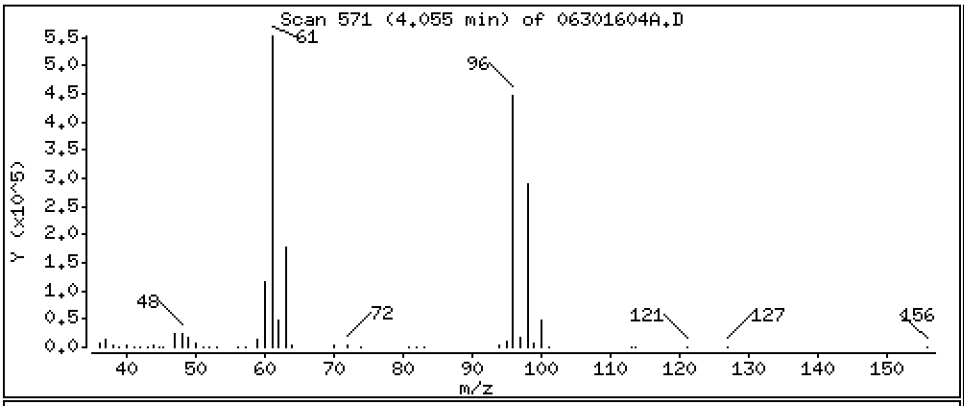
Operator: PB

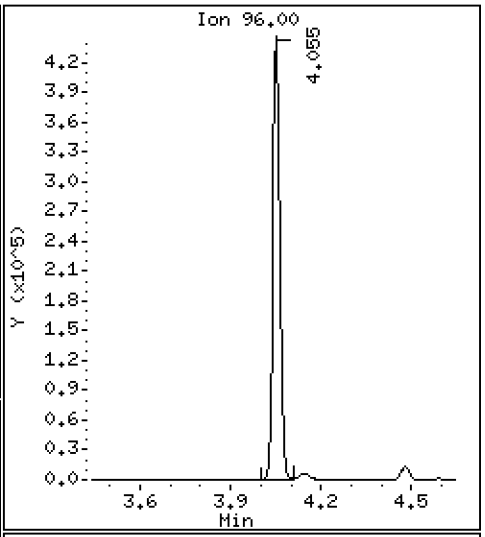
Column phase: RTXVMS

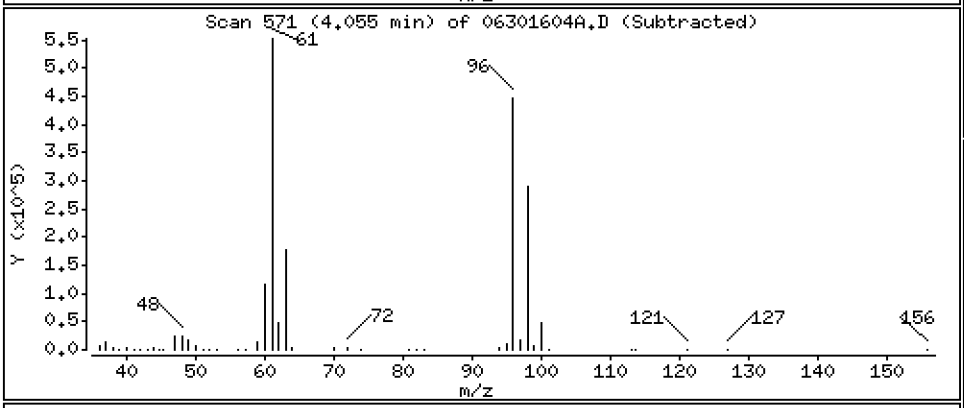
Column diameter: 0.18

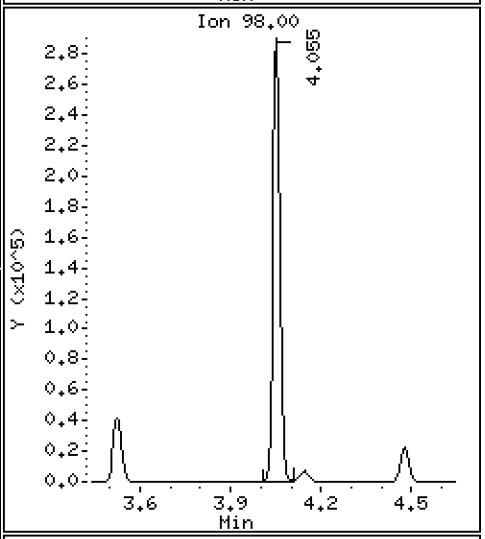
20 Cis-1,2-Dichloroethene

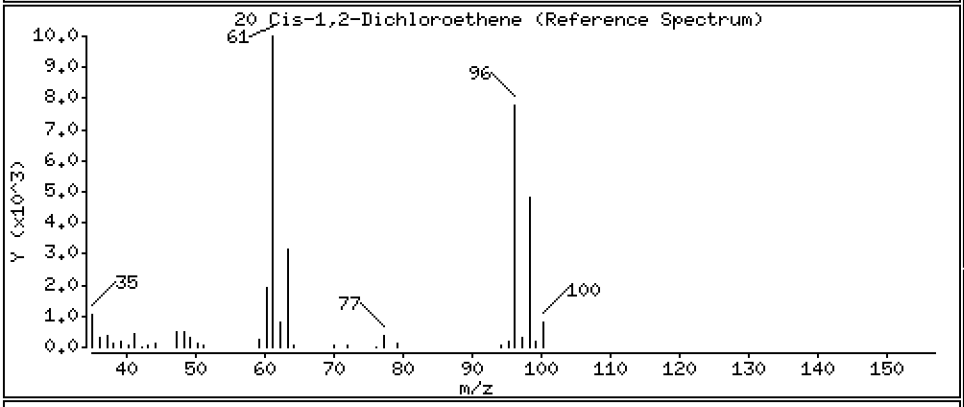
Concentration: 43.506 ug/Kg

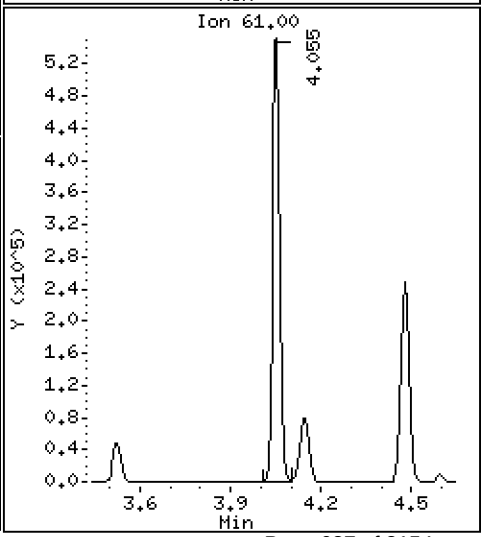


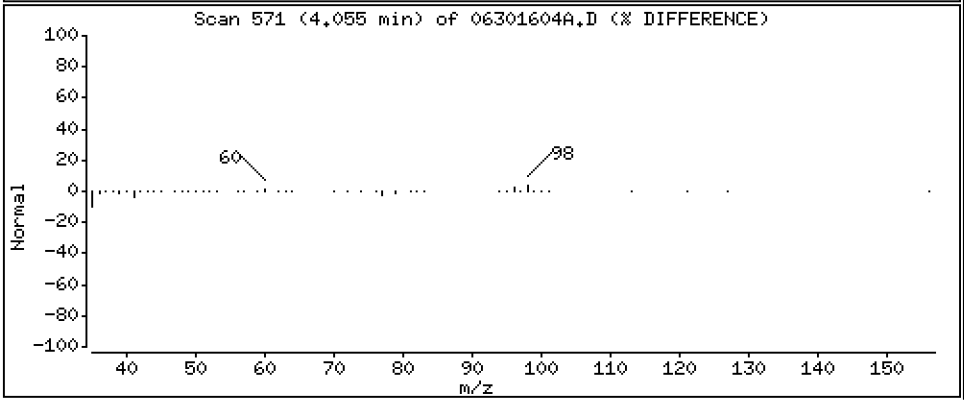












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

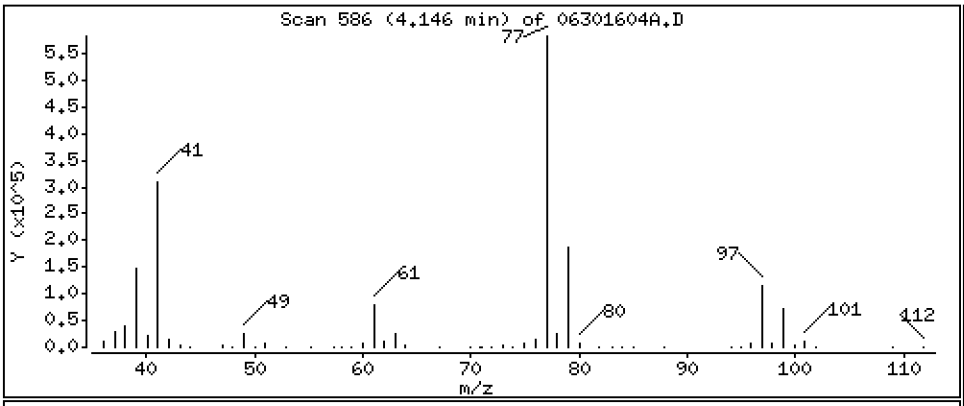
Operator: PB

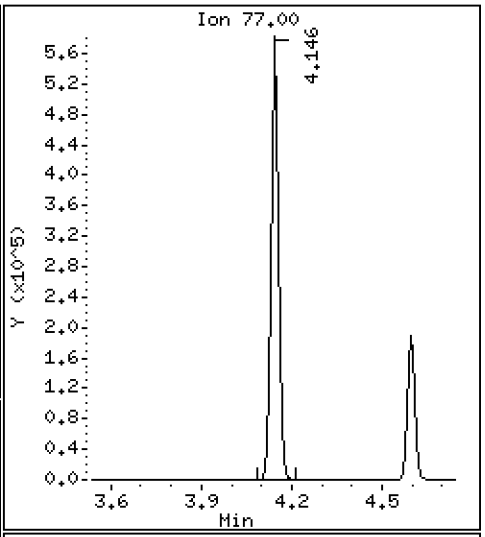
Column phase: RTXVMS

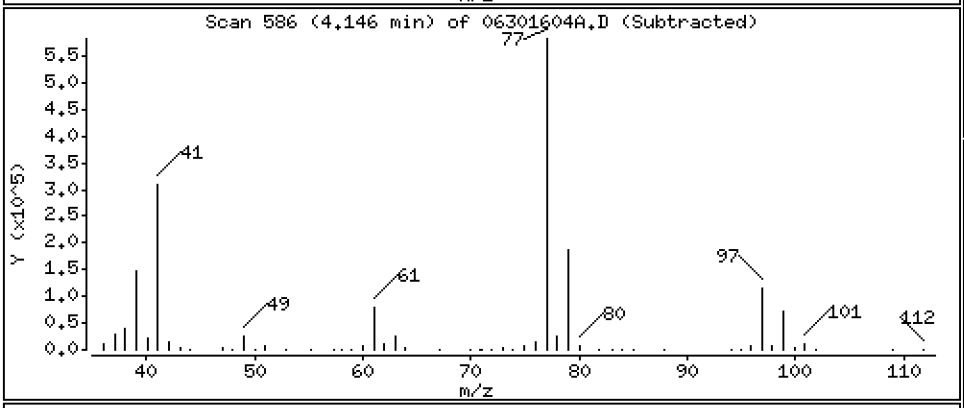
Column diameter: 0.18

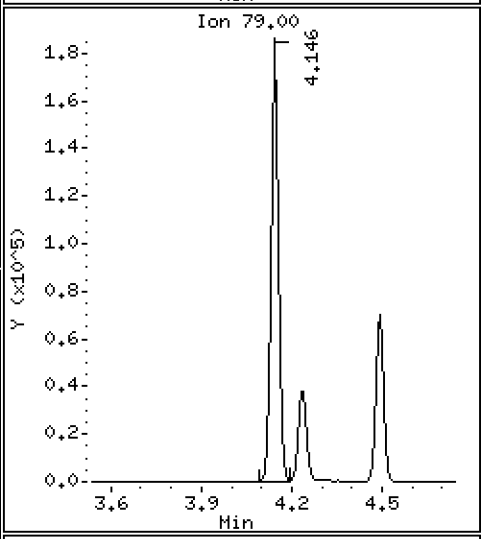
22 2,2-Dichloropropane

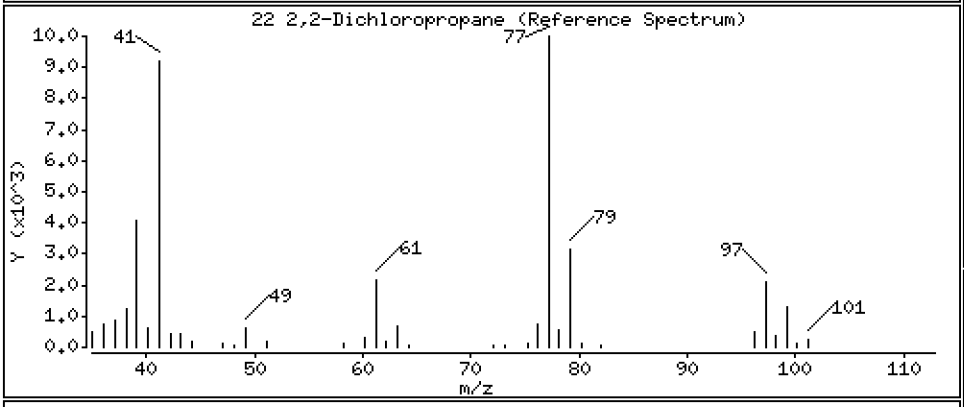
Concentration: 44.765 ug/Kg

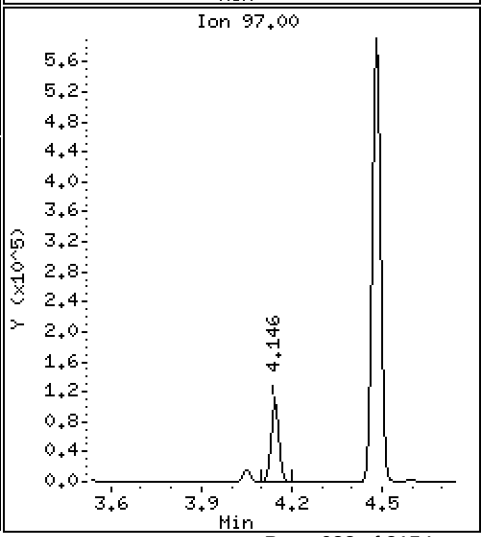


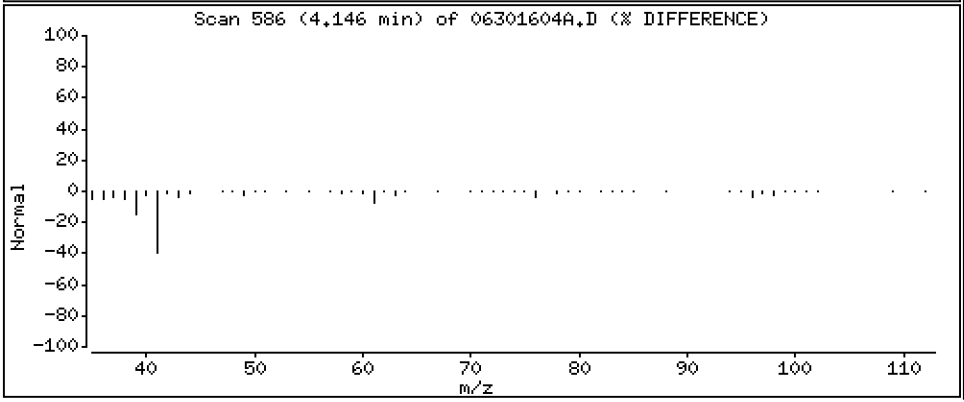












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

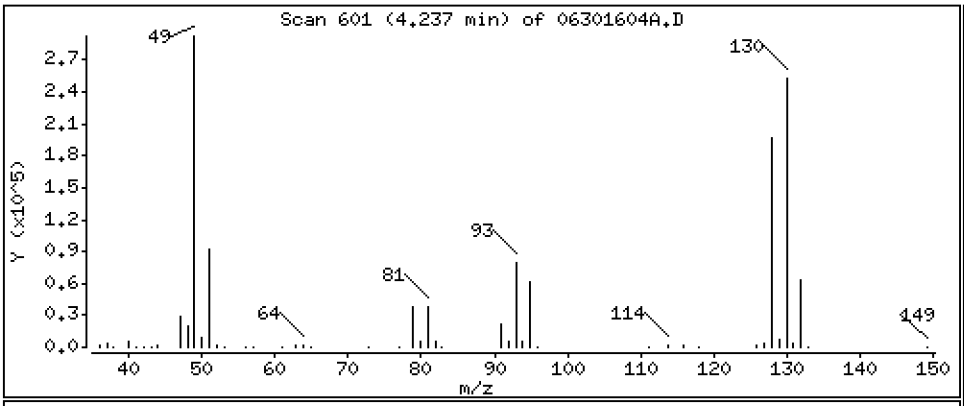
Operator: PB

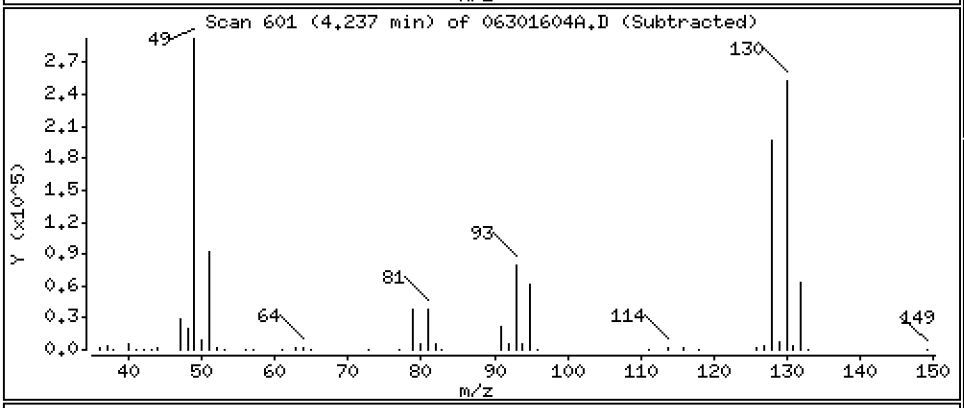
Column phase: RTXVMS

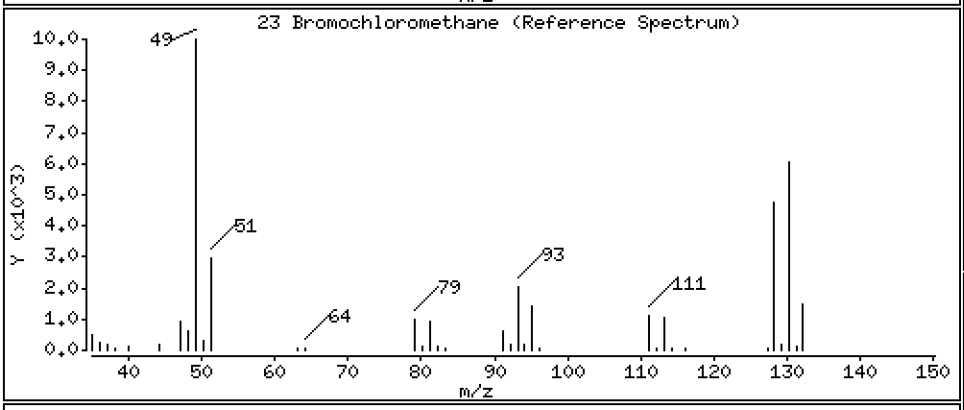
Column diameter: 0.18

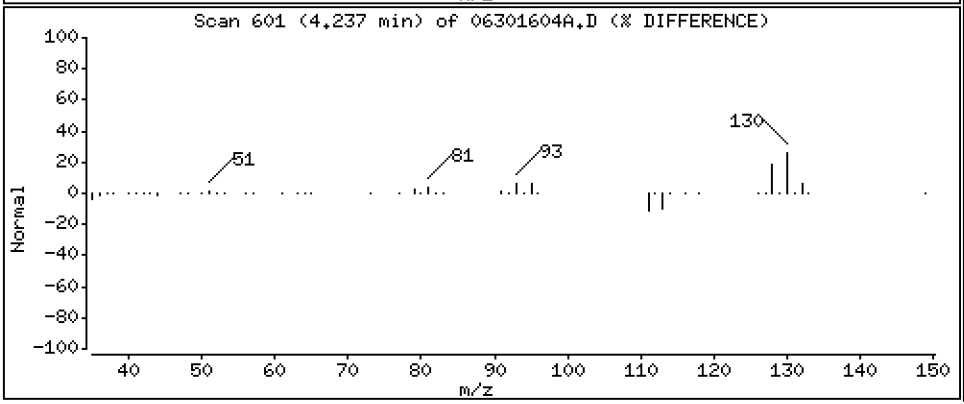
23 Bromochloromethane

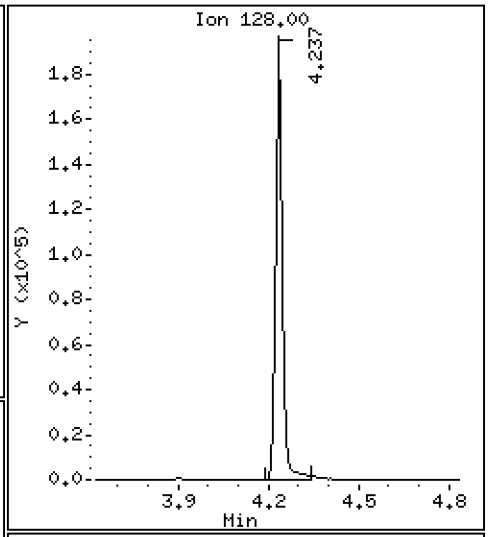
Concentration: 45.167 ug/Kg

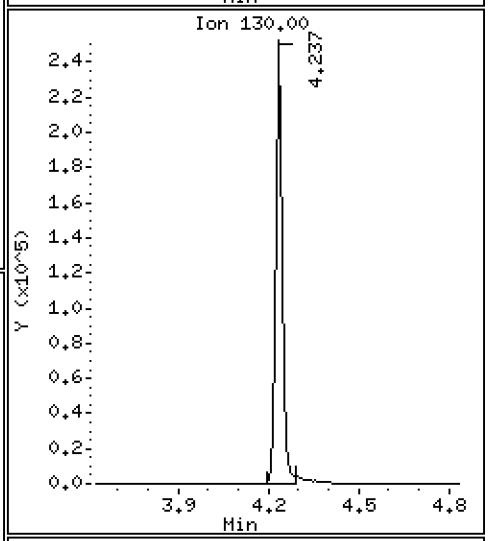


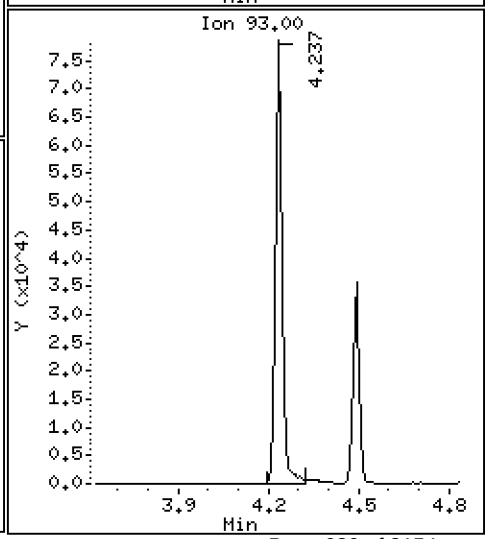












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

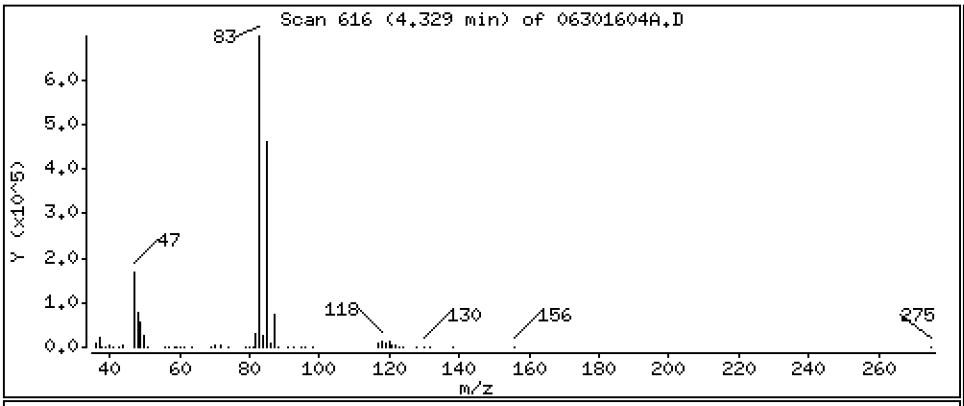
Operator: PB

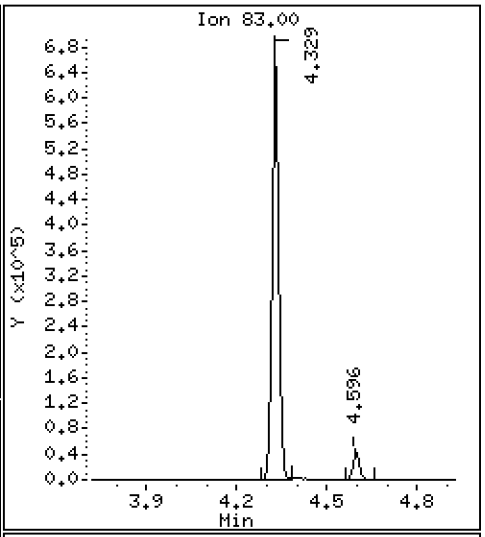
Column phase: RTXVMS

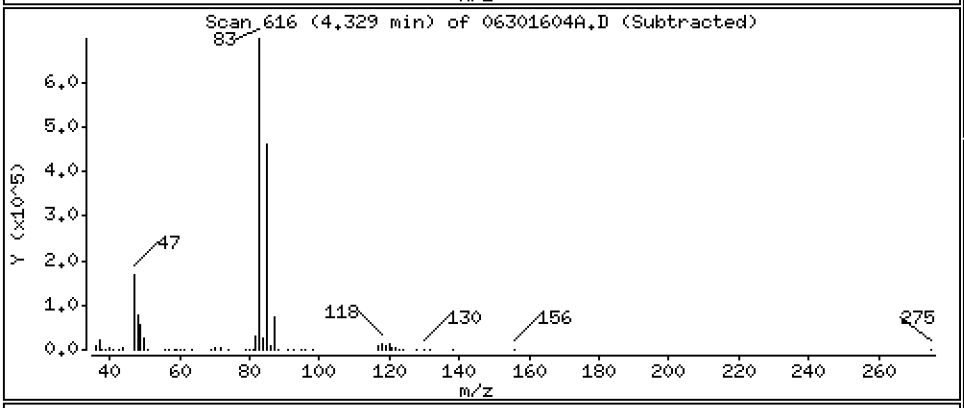
Column diameter: 0.18

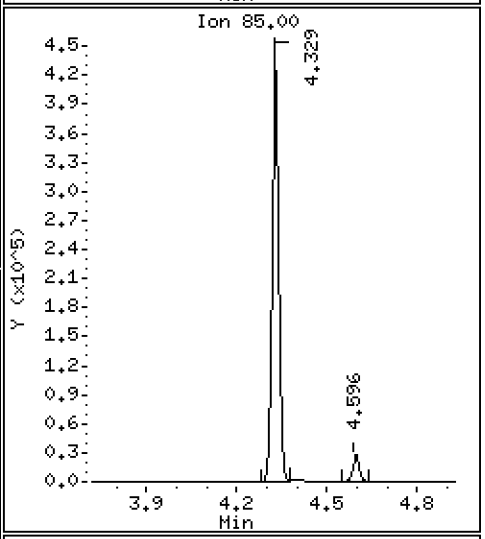
24 Chloroform

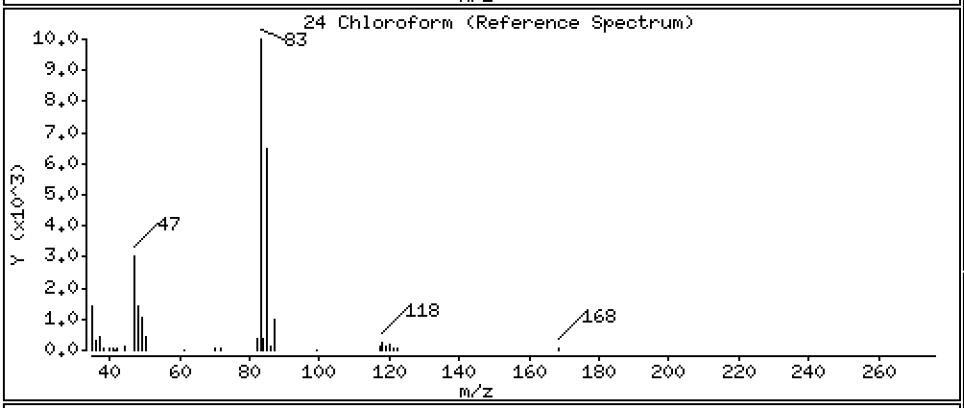
Concentration: 43.353 ug/Kg

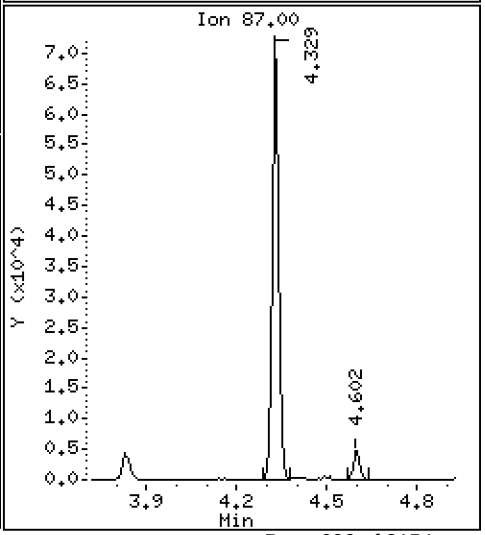


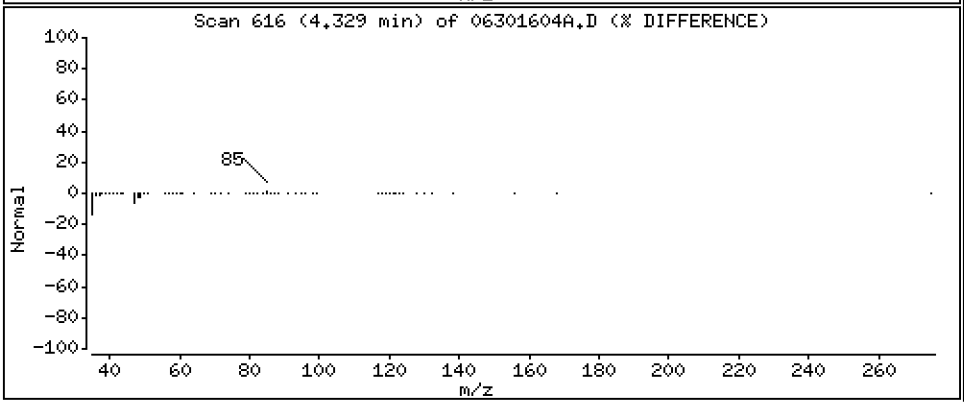












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

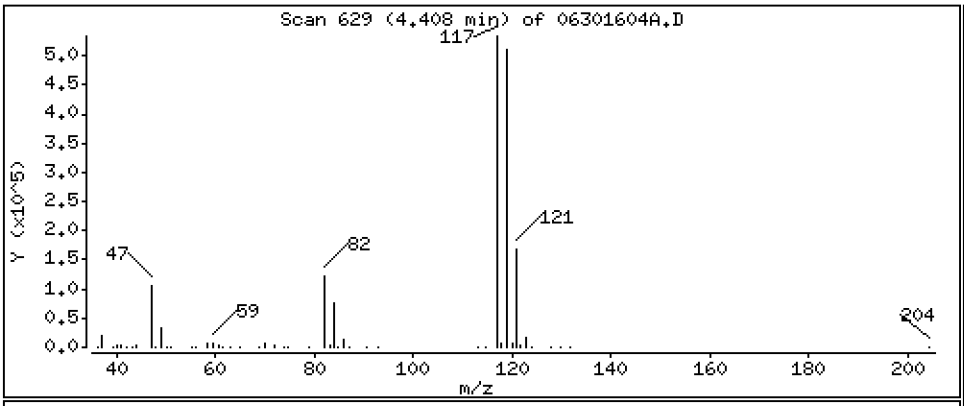
Operator: PB

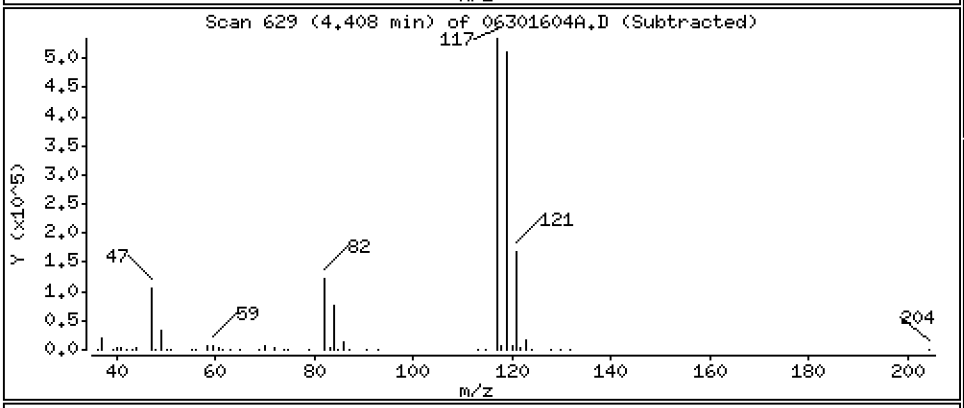
Column phase: RTXVMS

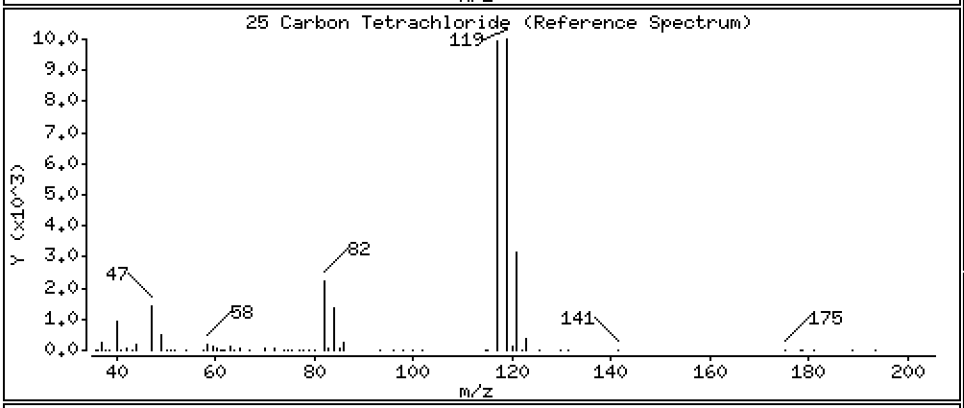
Column diameter: 0.18

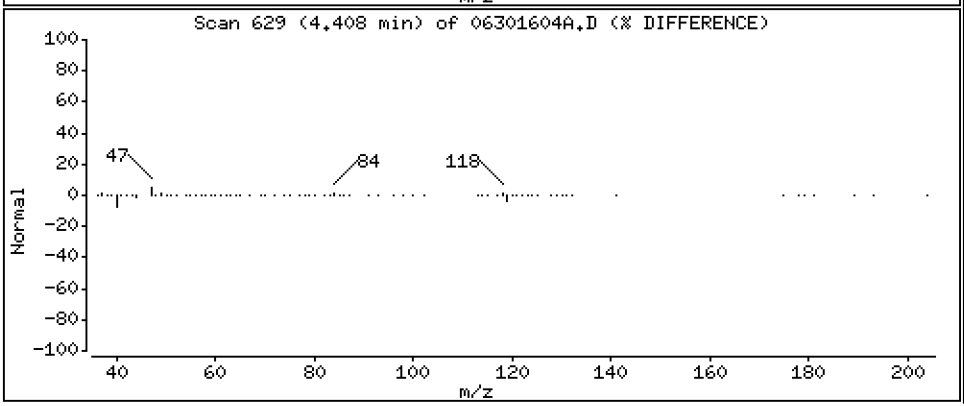
25 Carbon Tetrachloride

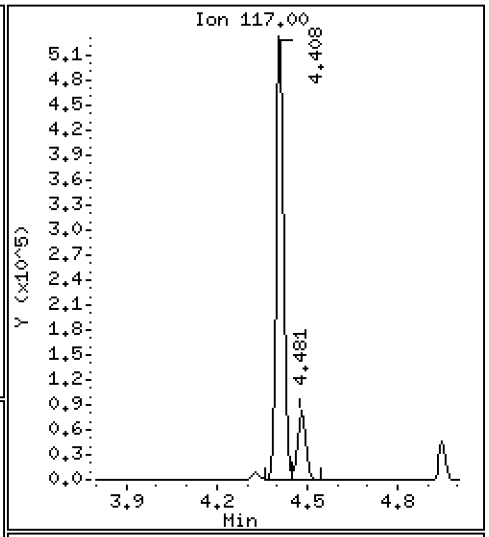
Concentration: 47.269 ug/Kg

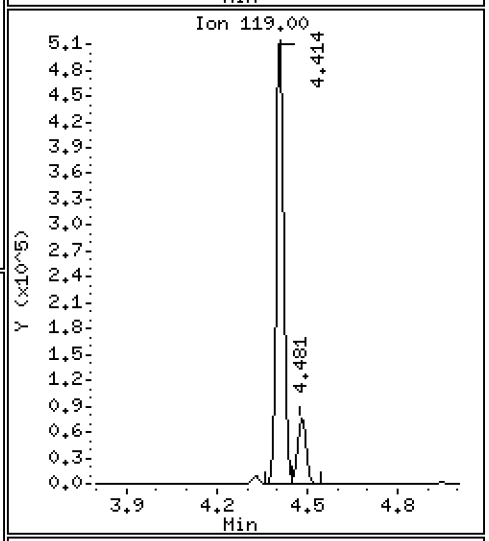


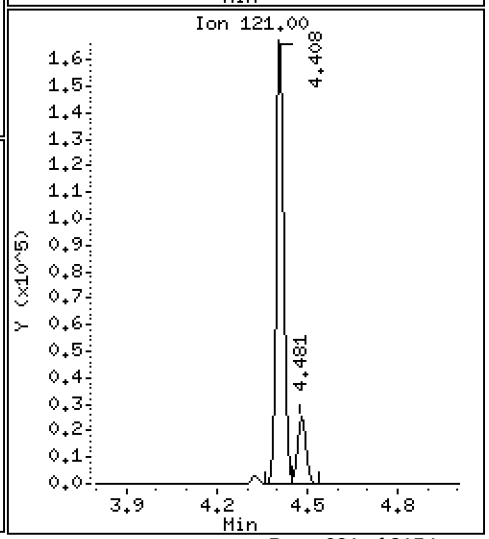












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

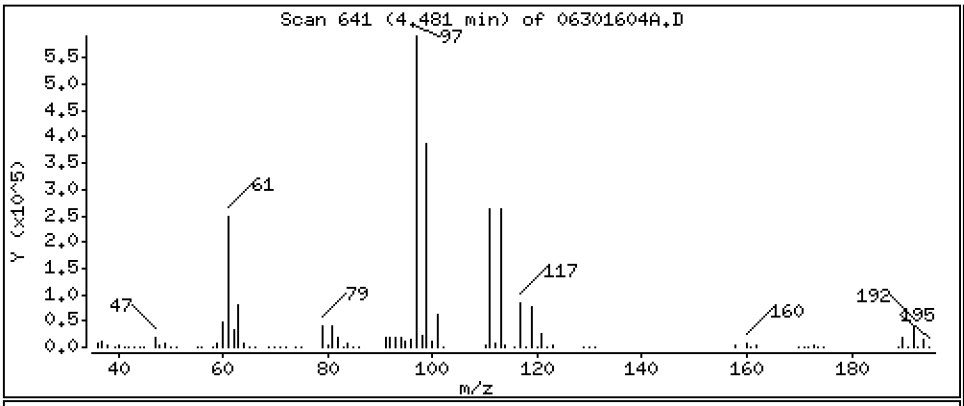
Operator: PB

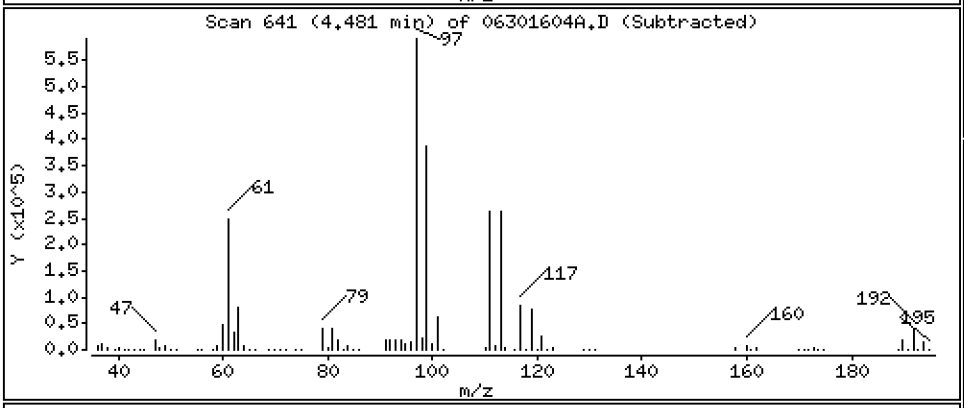
Column phase: RTXVMS

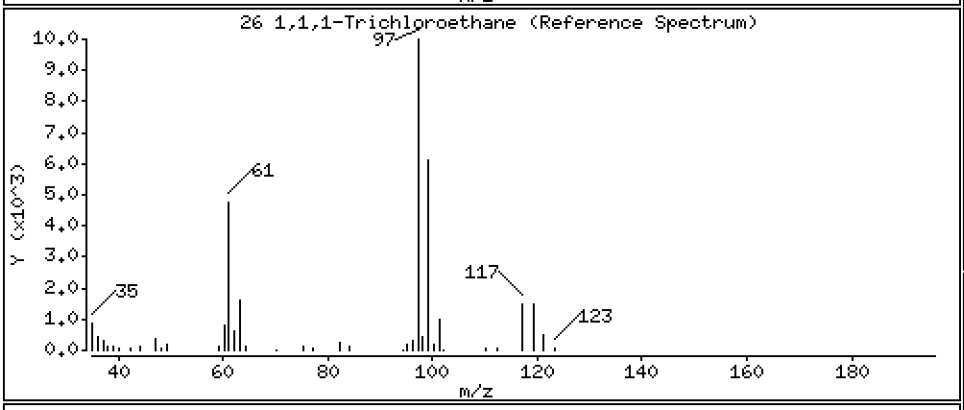
Column diameter: 0.18

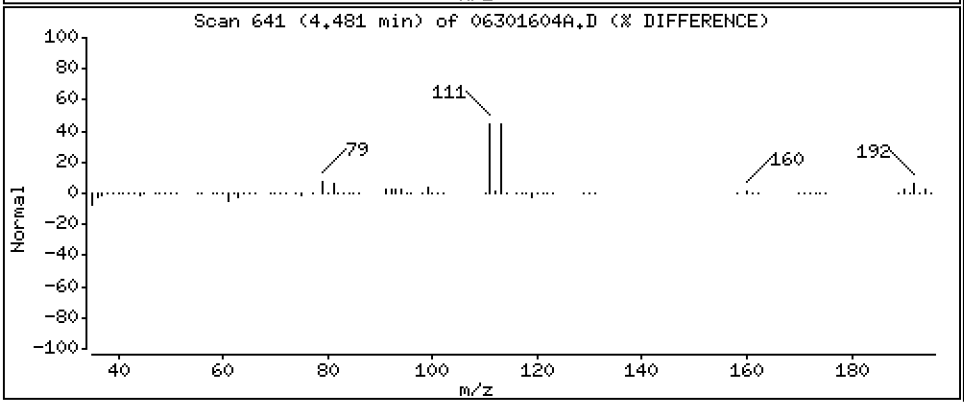
26 1,1,1-Trichloroethane

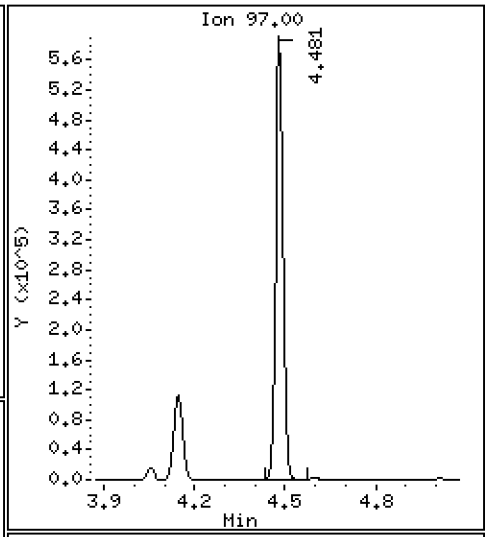
Concentration: 43.119 ug/Kg

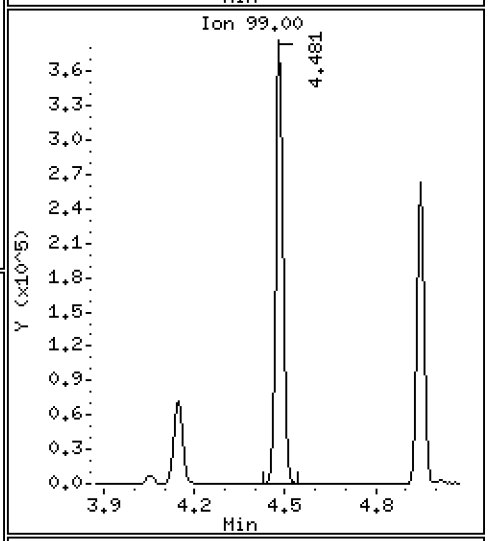


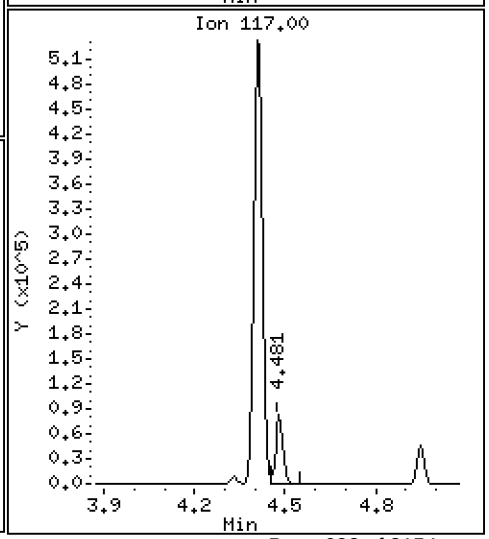












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

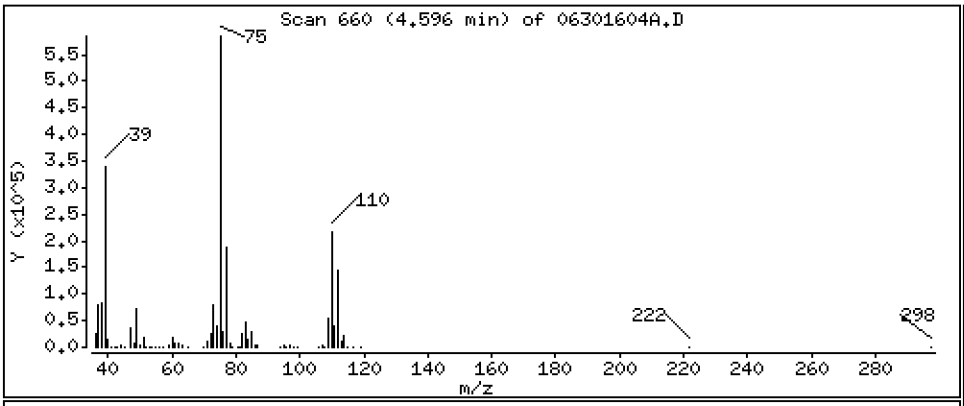
Operator: PB

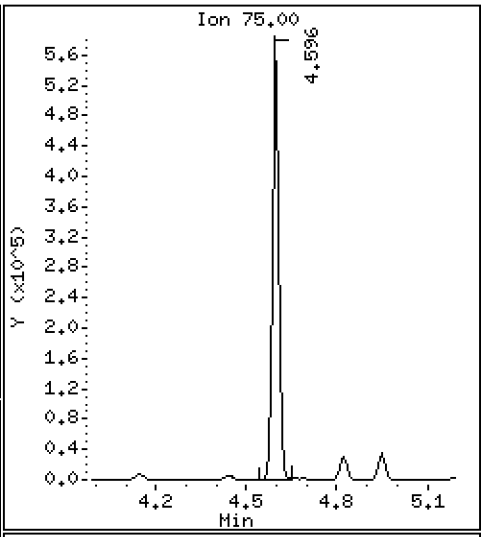
Column phase: RTXVMS

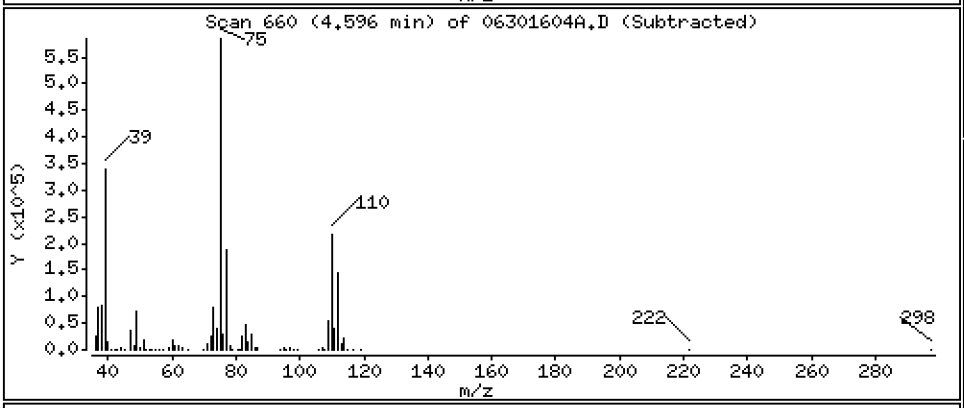
Column diameter: 0.18

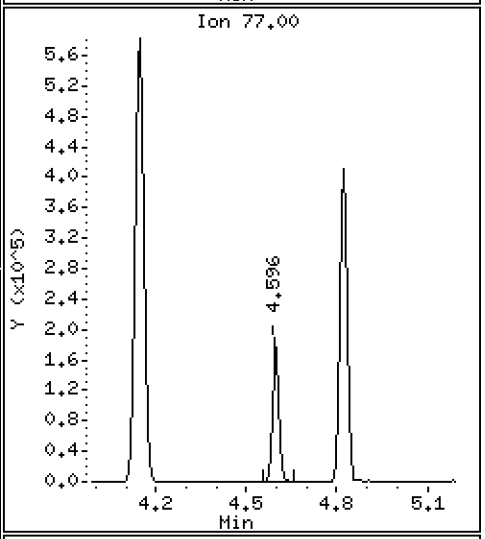
28 1,1-Dichloropropene

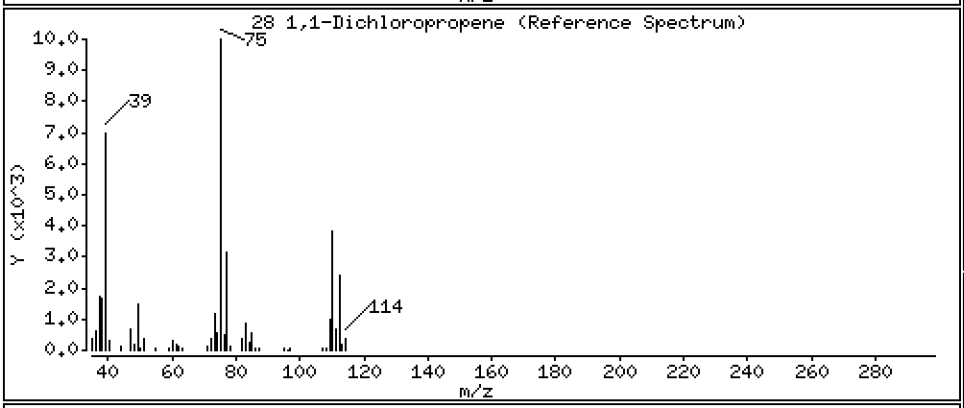
Concentration: 44.103 ug/Kg

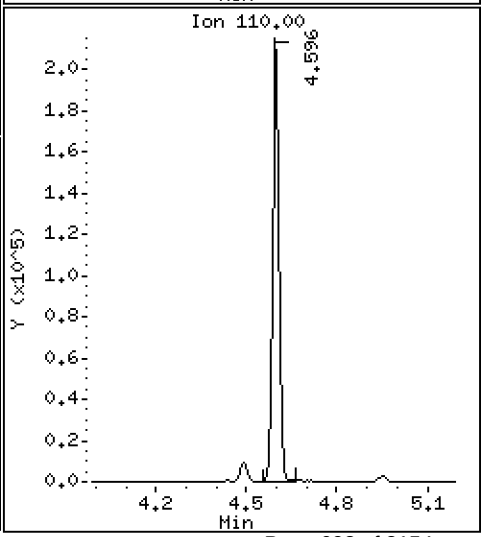


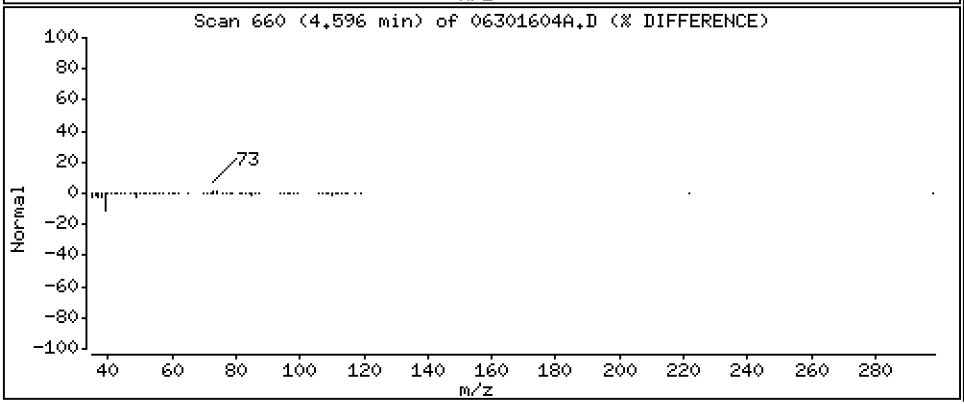












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

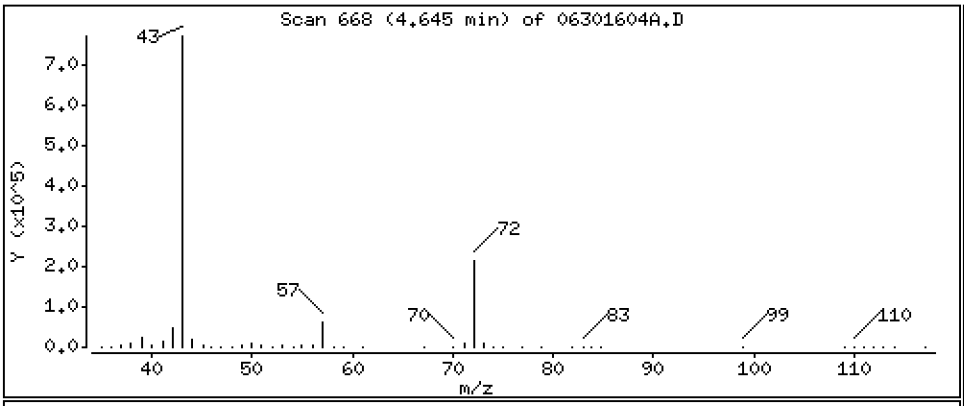
Operator: PB

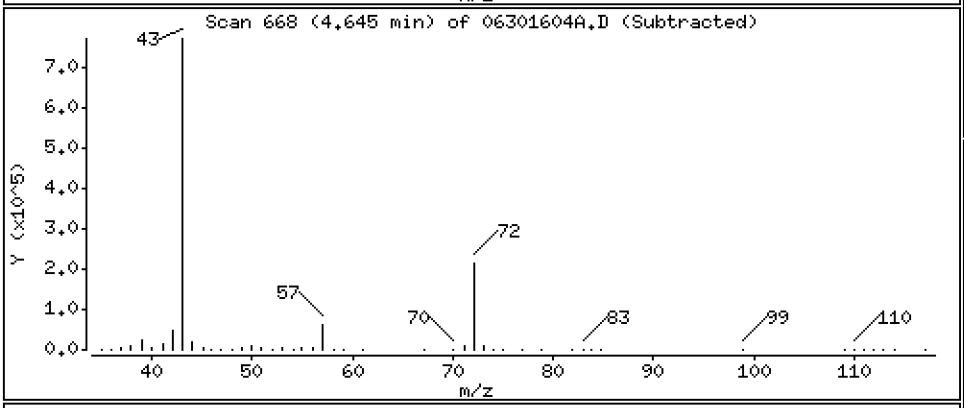
Column phase: RTXVMS

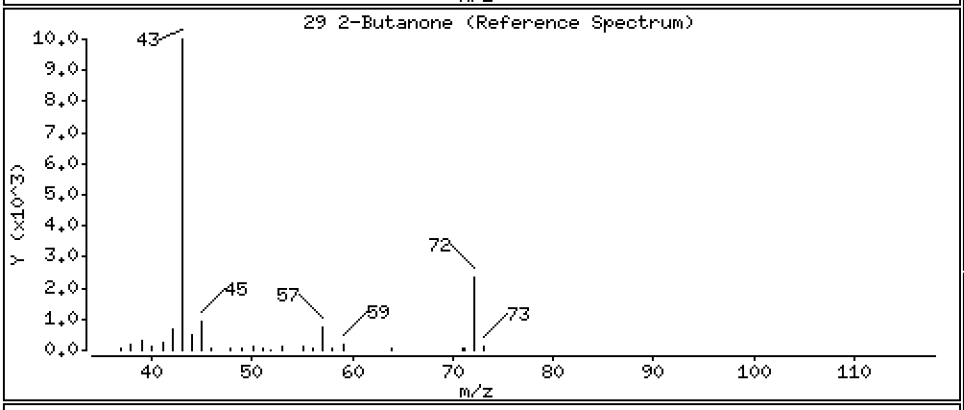
Column diameter: 0.18

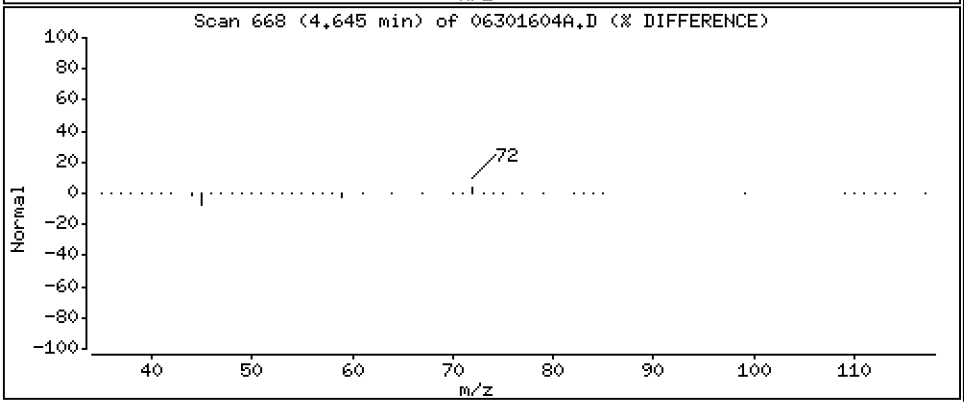
29 2-Butanone

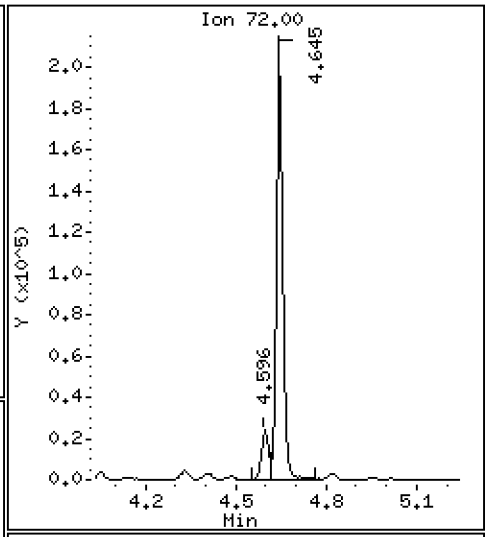
Concentration: 192.17 ug/Kg

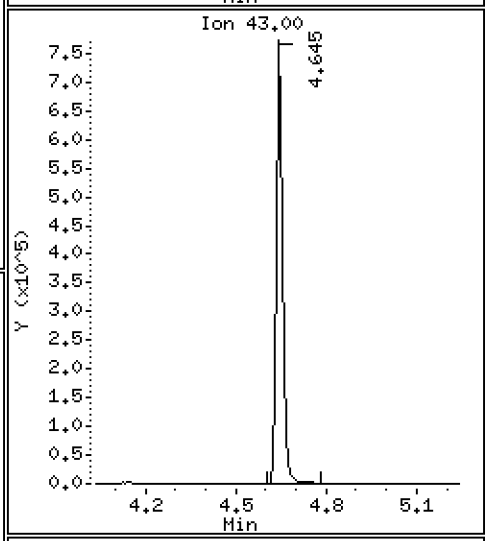


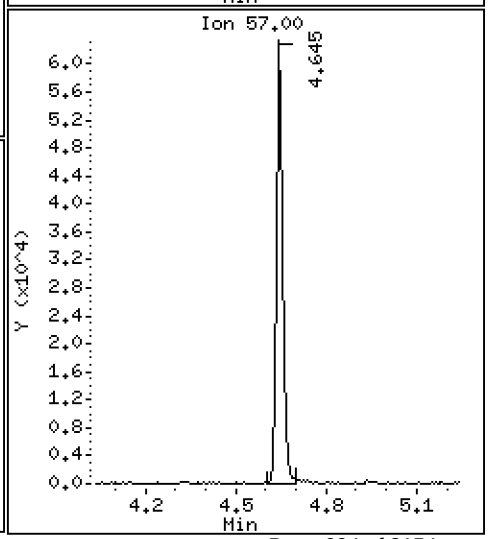












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

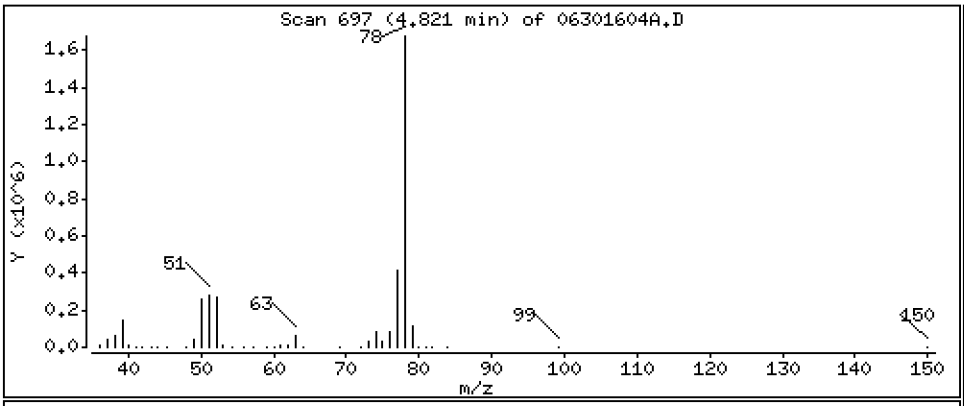
Operator: PB

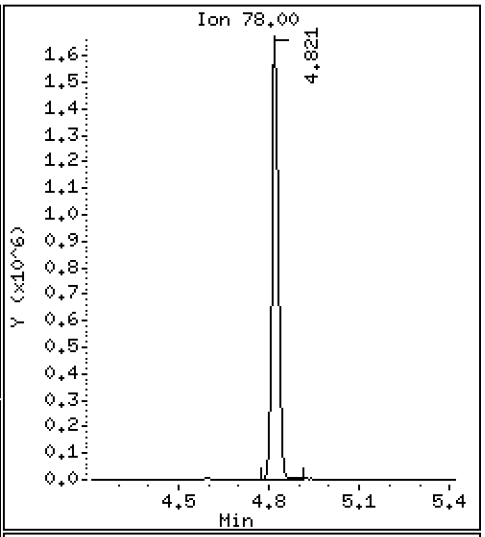
Column phase: RTXVMS

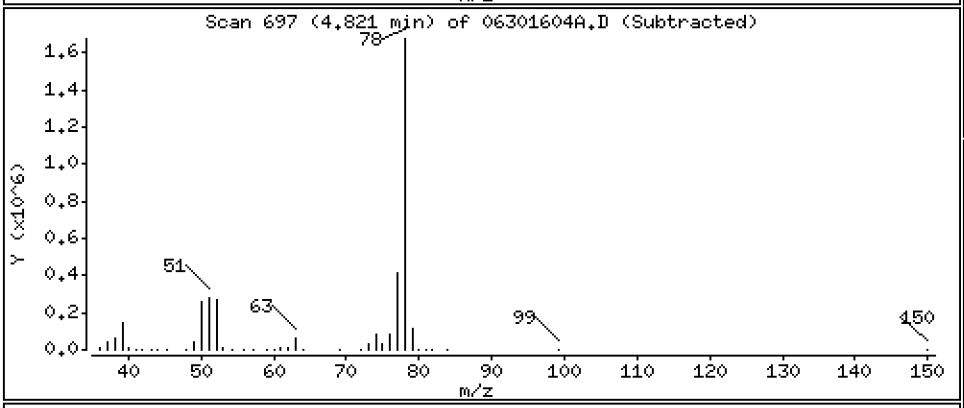
Column diameter: 0.18

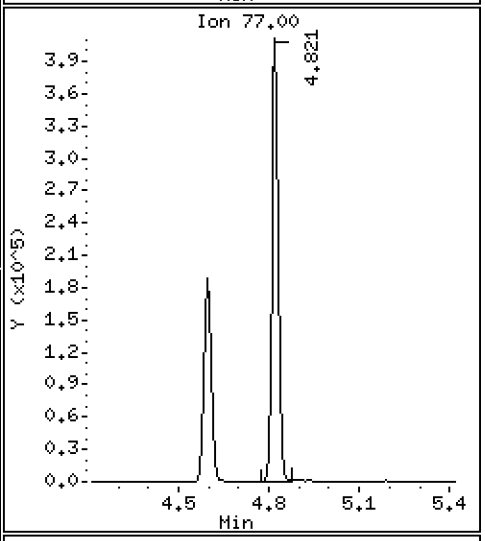
30 Benzene

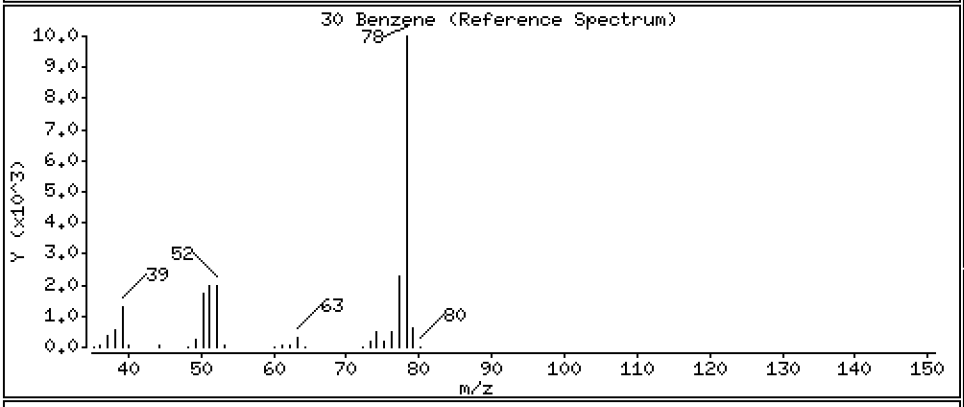
Concentration: 44.450 ug/Kg

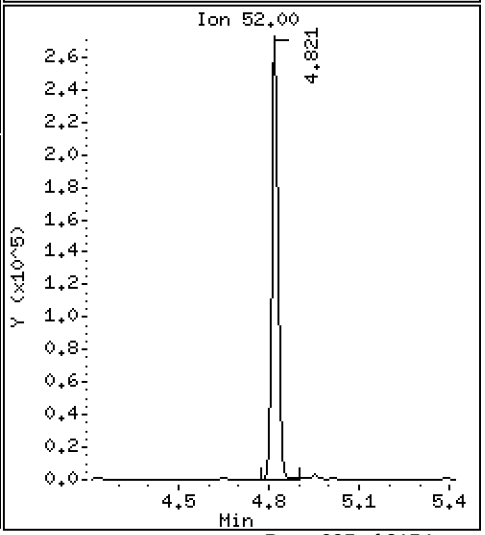


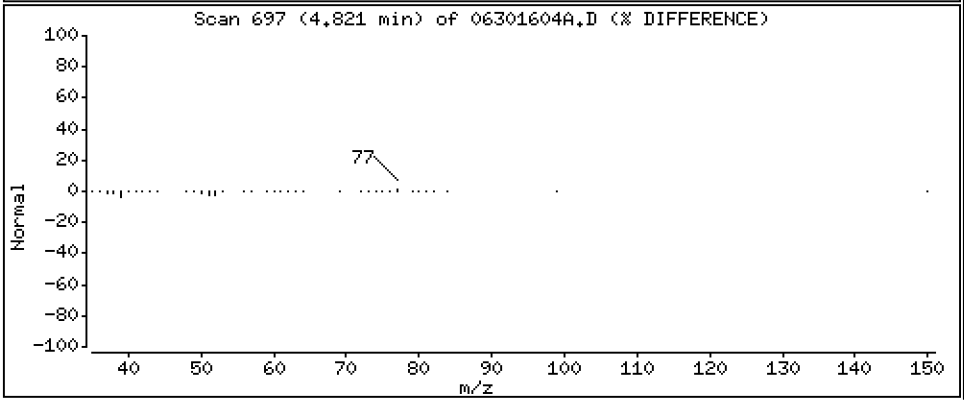












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

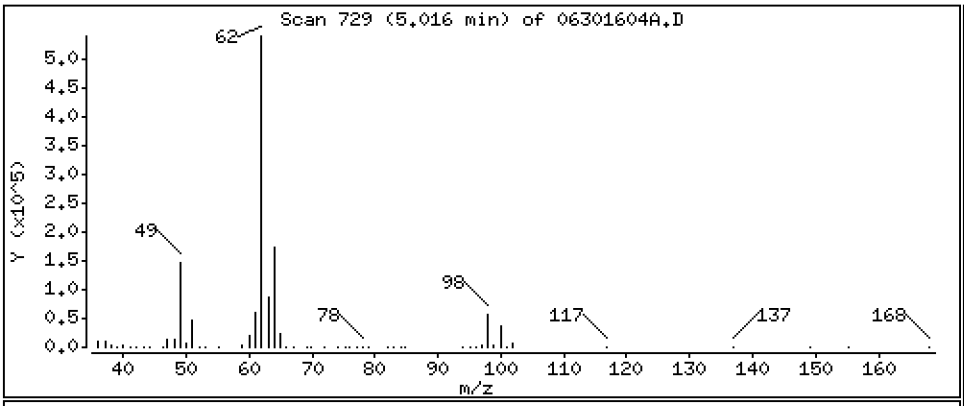
Operator: PB

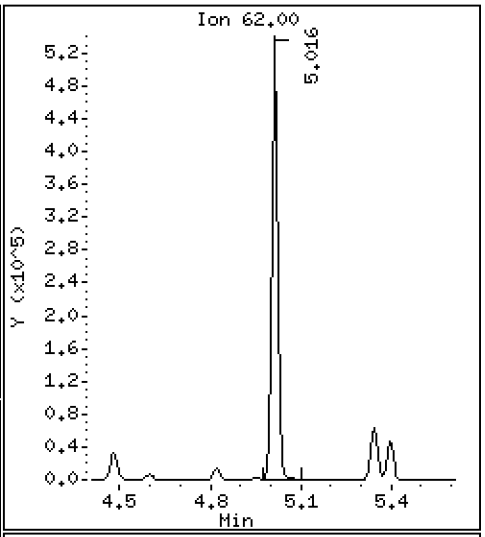
Column phase: RTXVMS

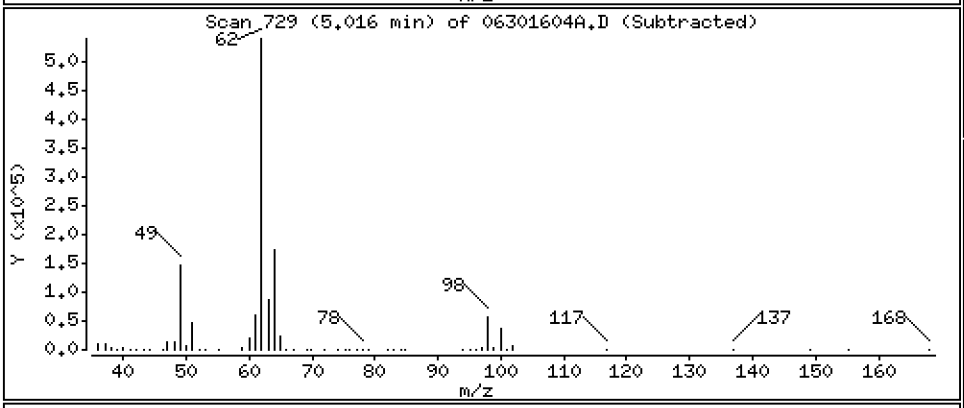
Column diameter: 0.18

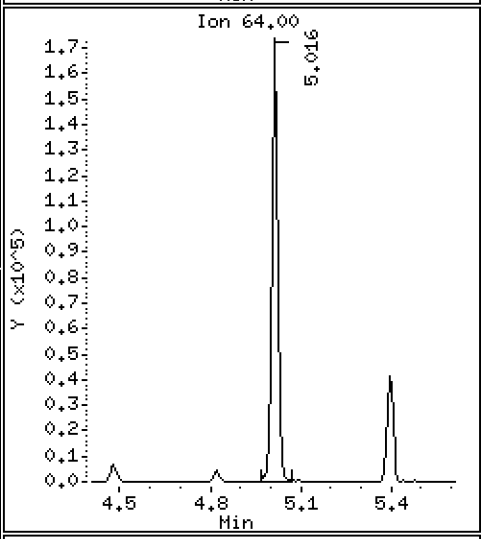
33 1,2-Dichloroethane

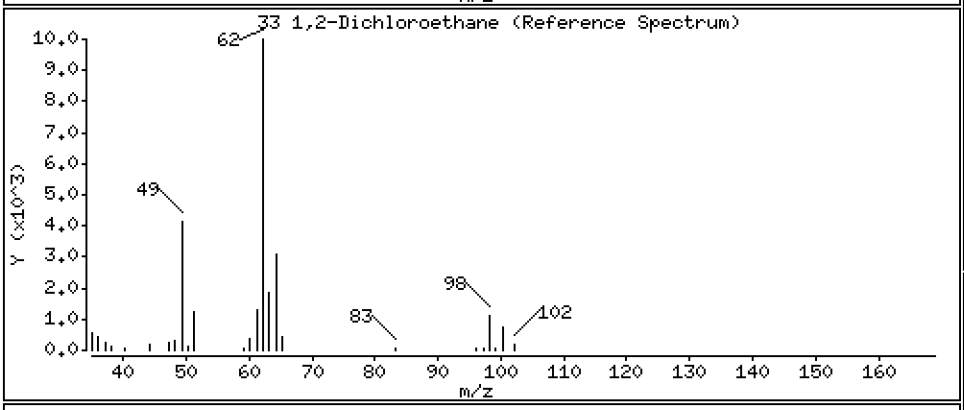
Concentration: 41.563 ug/Kg

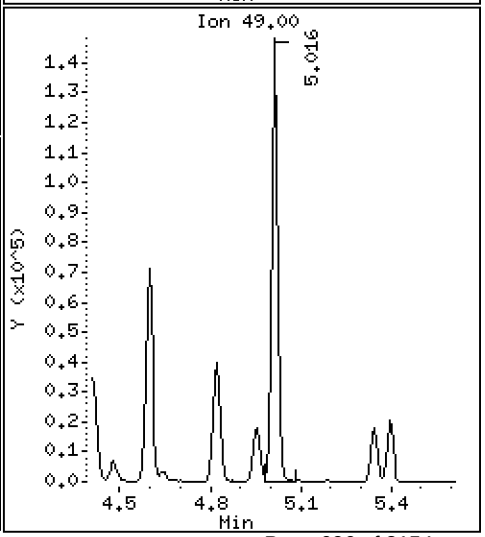


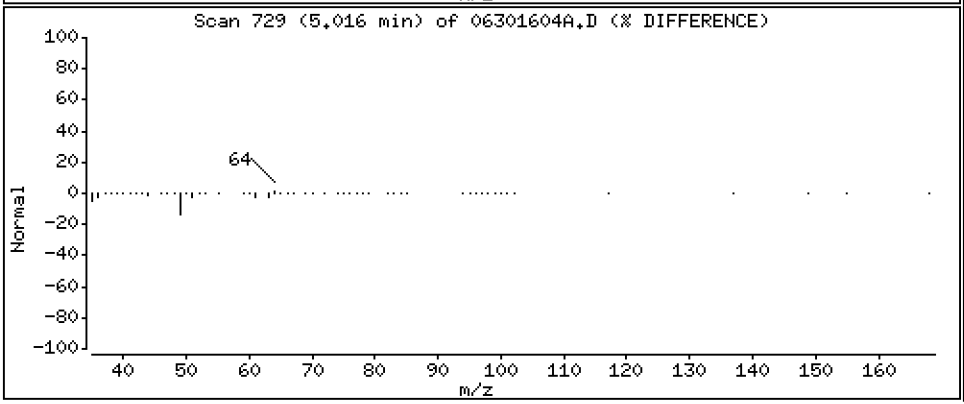












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

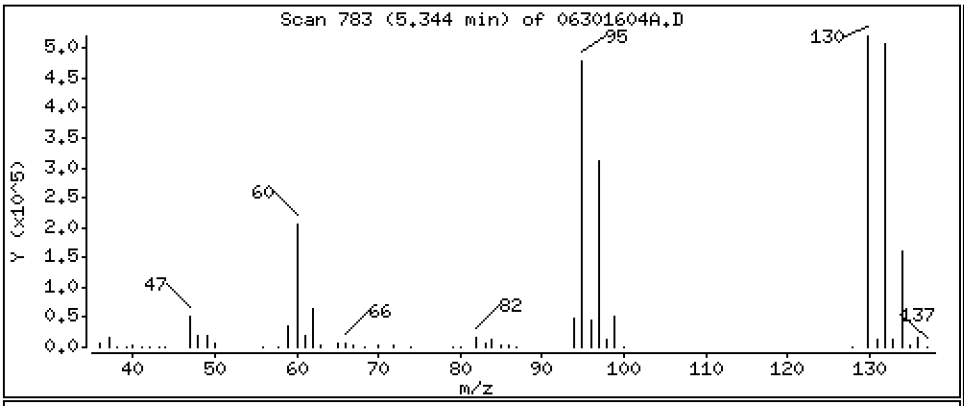
Operator: PB

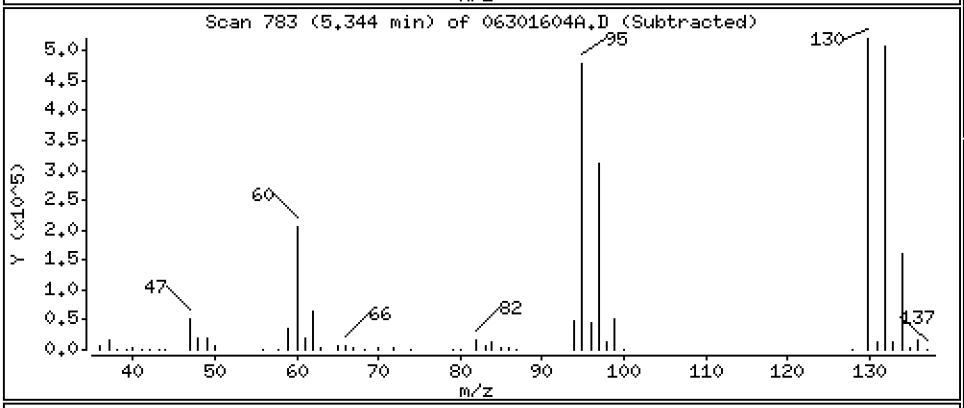
Column phase: RTXVMS

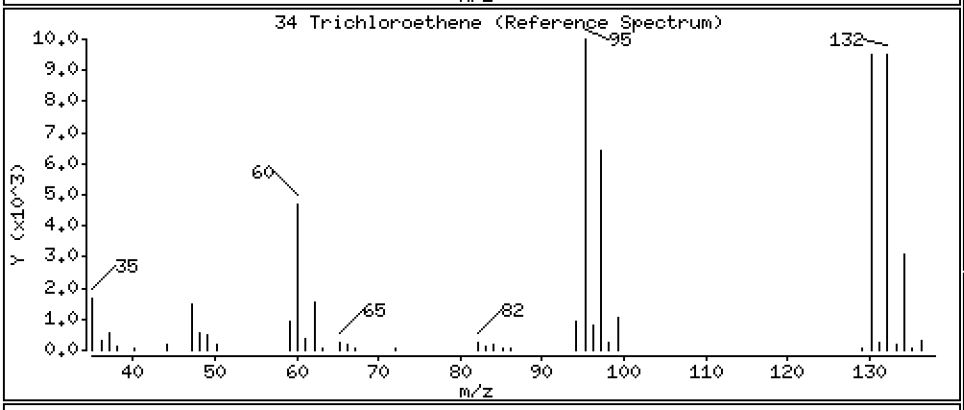
Column diameter: 0.18

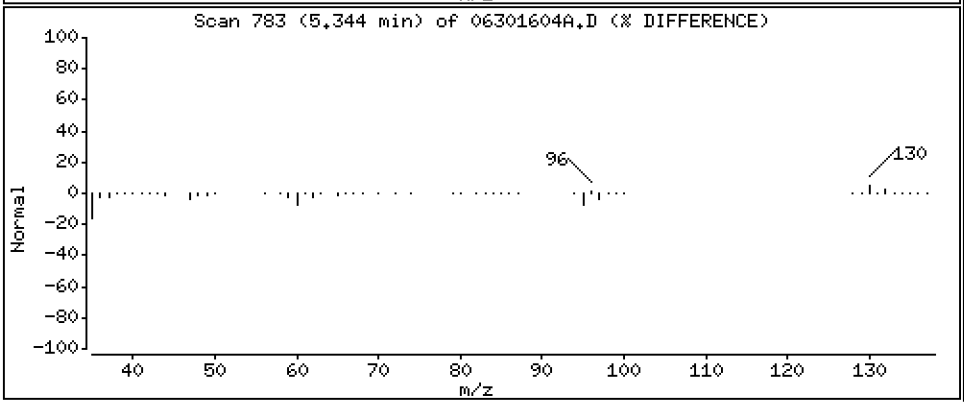
34 Trichloroethene

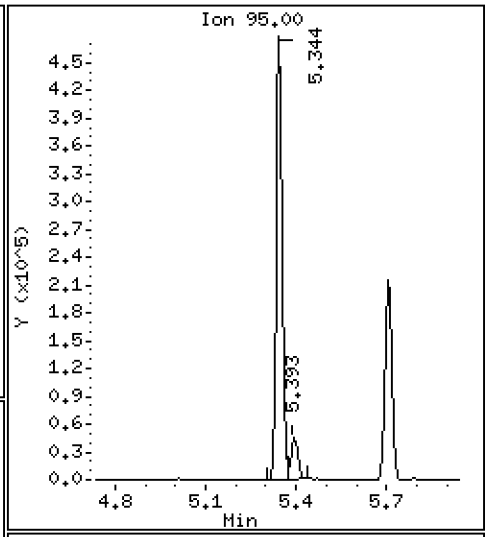
Concentration: 45.491 ug/Kg

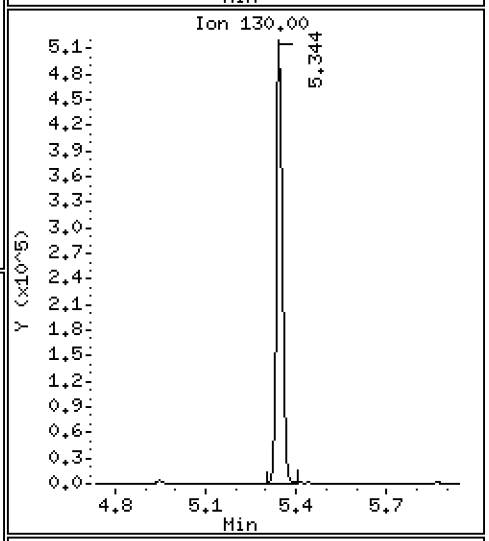


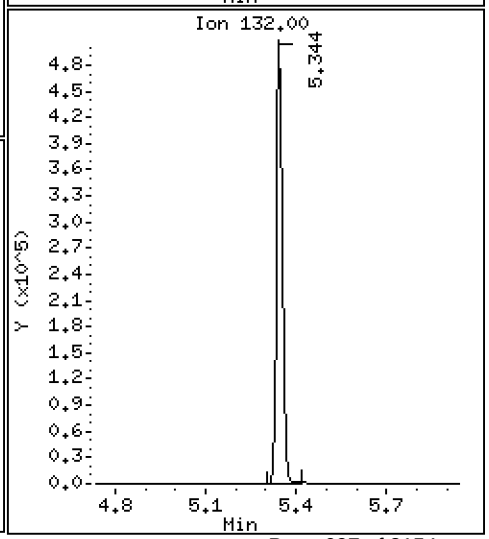












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

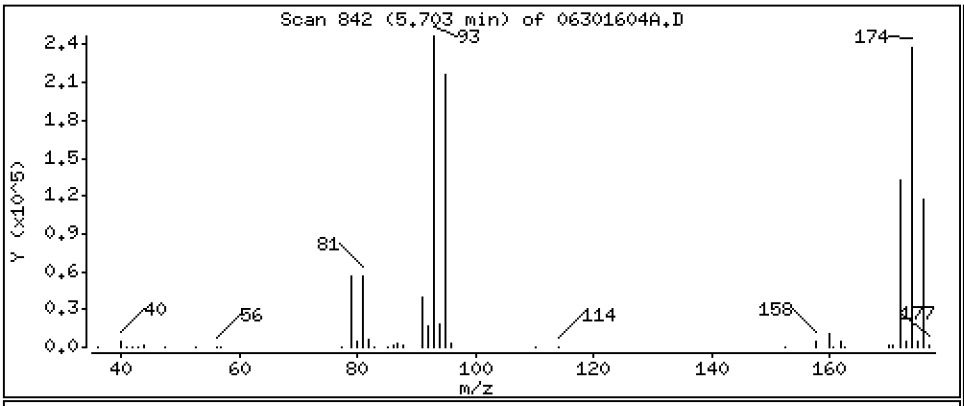
Operator: PB

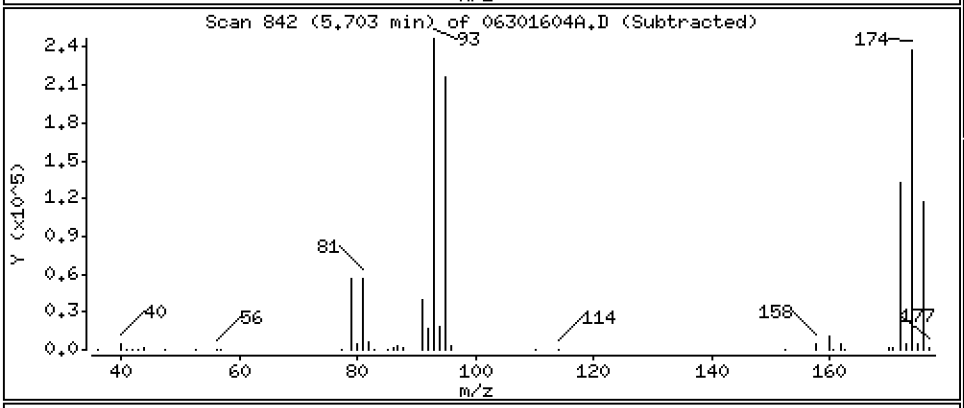
Column phase: RTXVMS

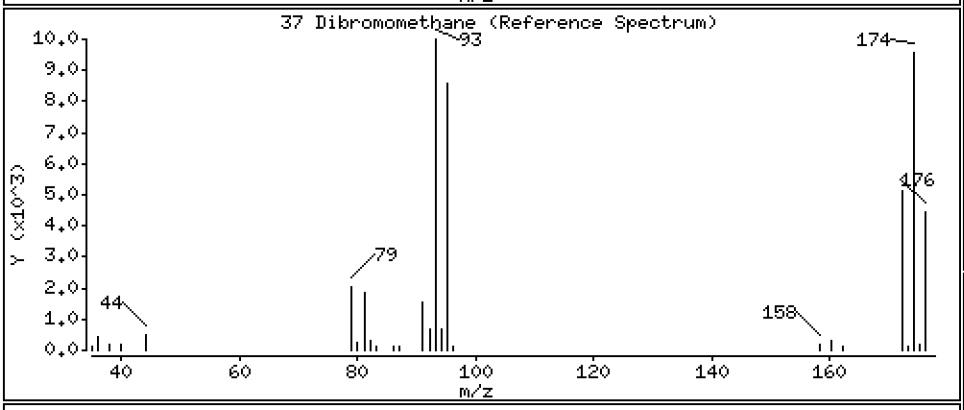
Column diameter: 0.18

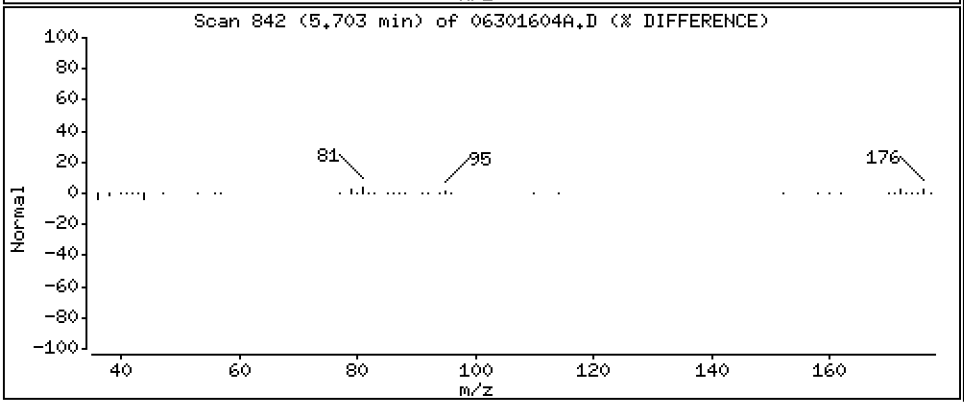
37 Dibromomethane

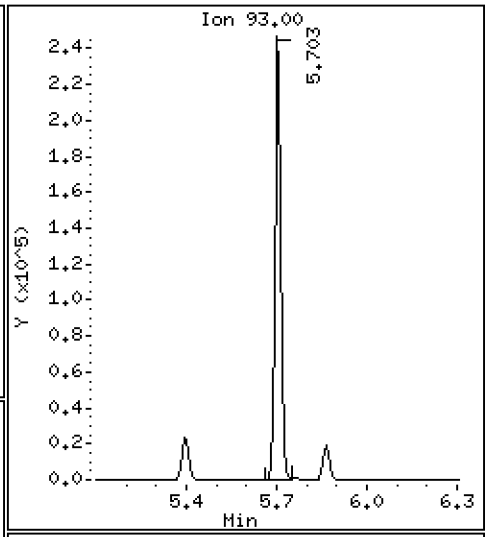
Concentration: 44.049 ug/Kg

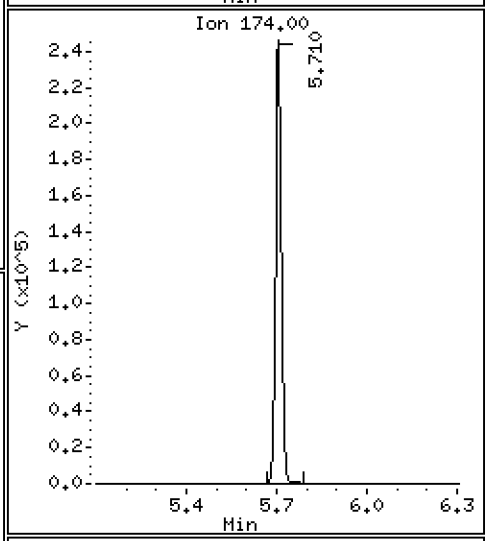


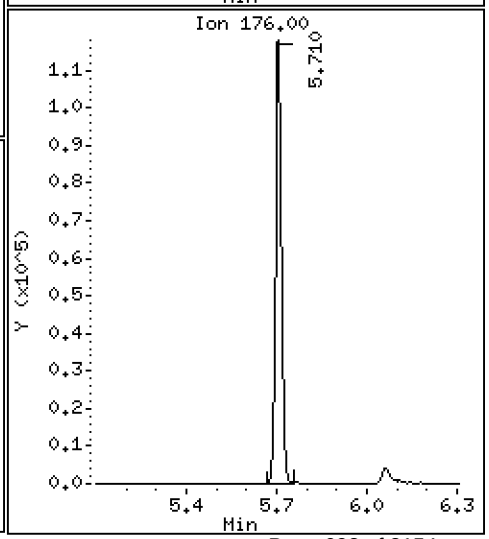












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

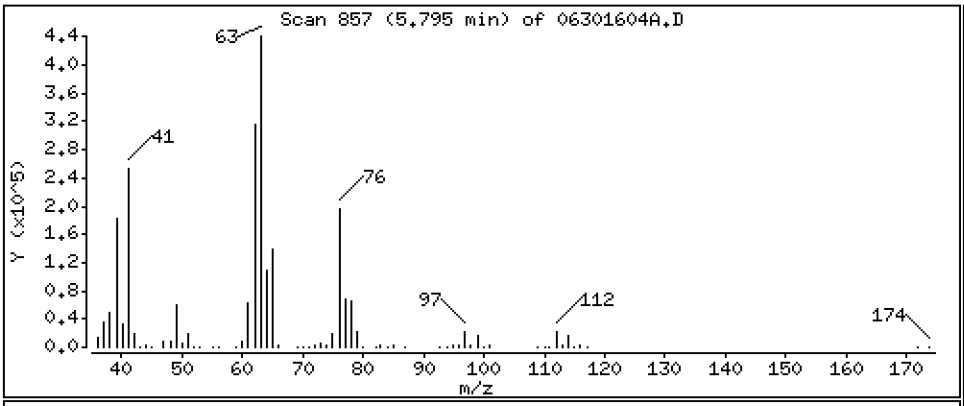
Operator: PB

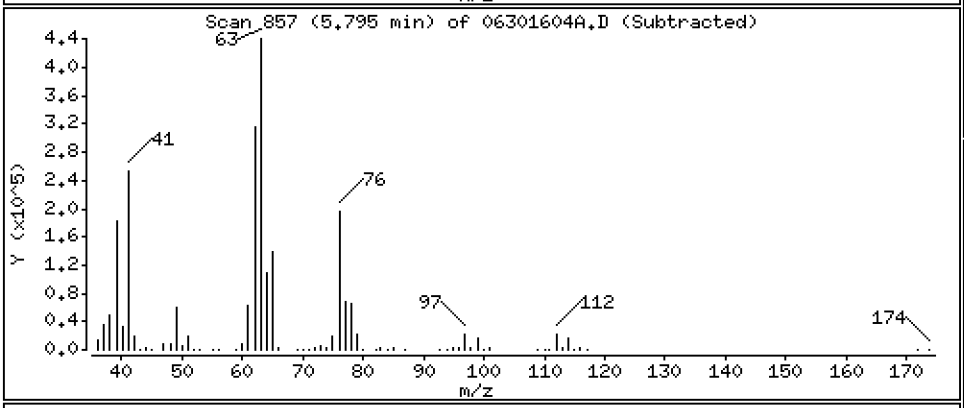
Column phase: RTXVMS

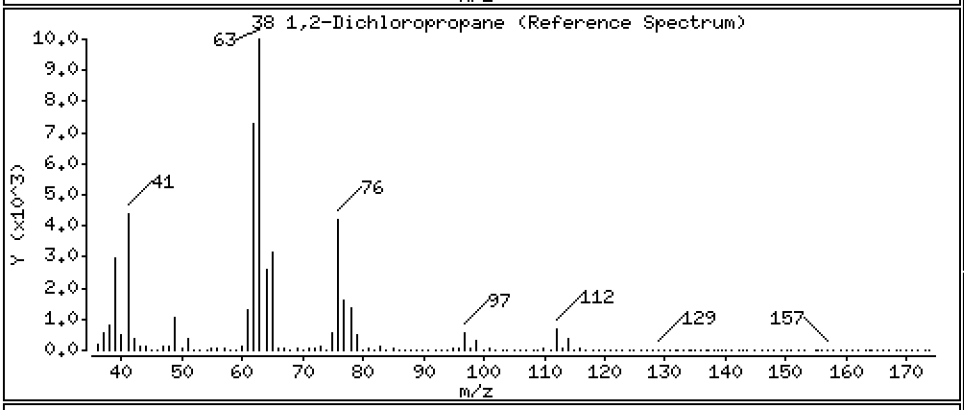
Column diameter: 0.18

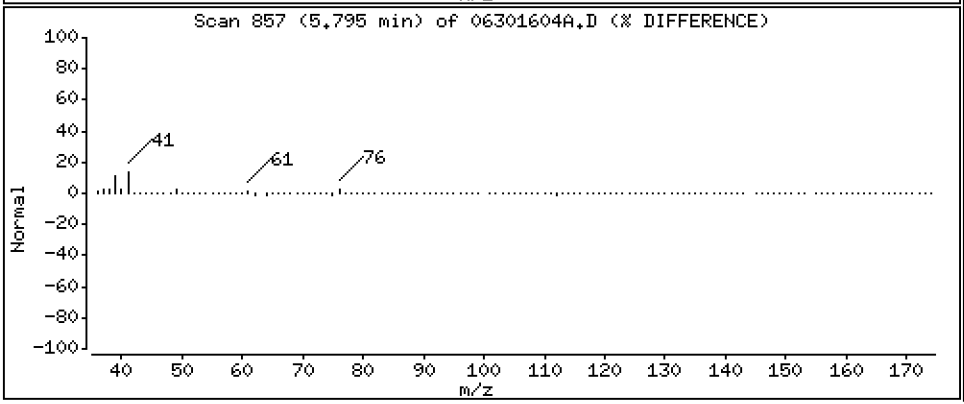
38 1,2-Dichloropropane

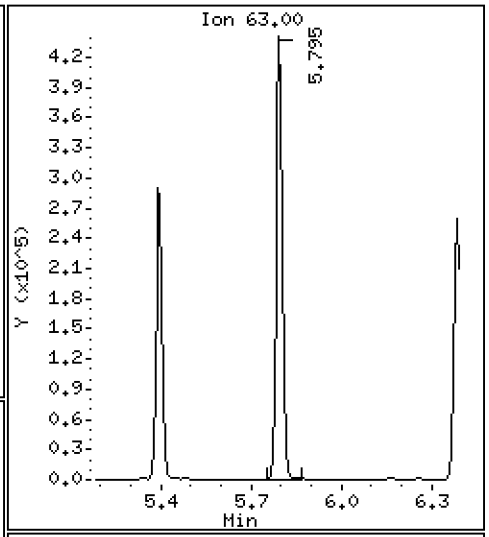
Concentration: 42.474 ug/Kg

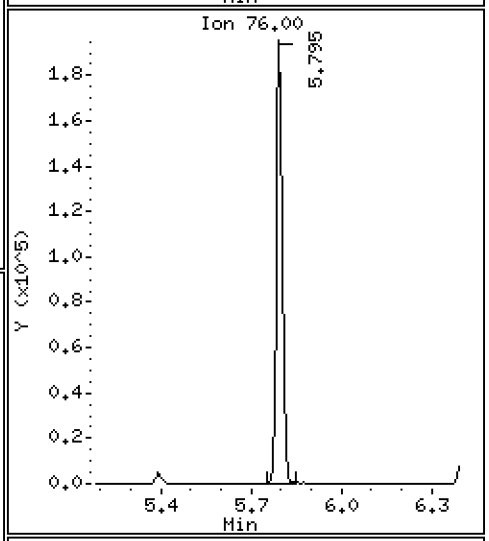


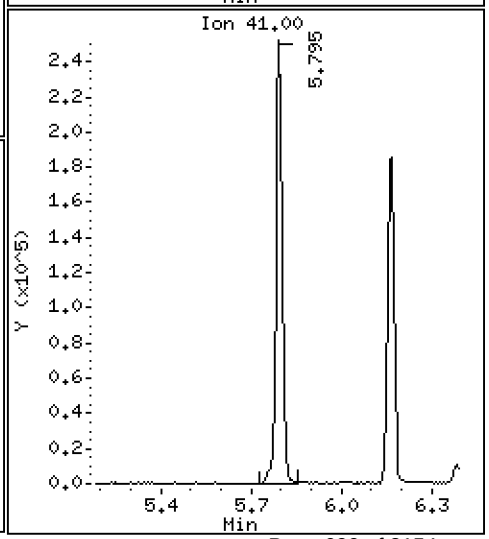












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

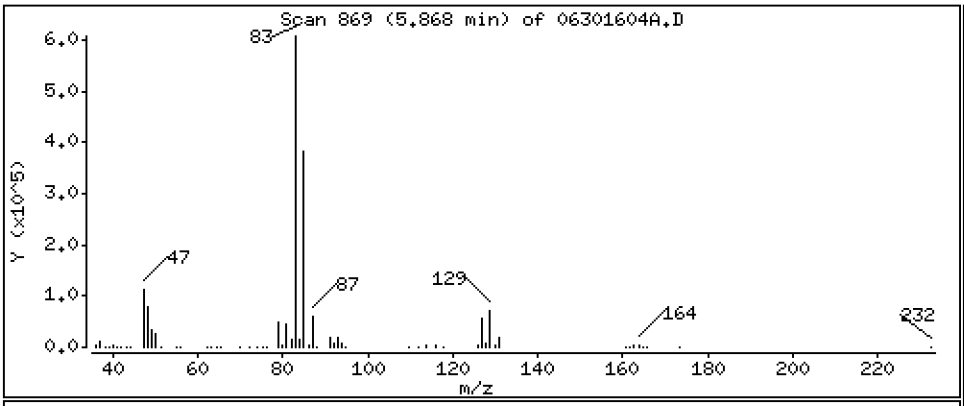
Operator: PB

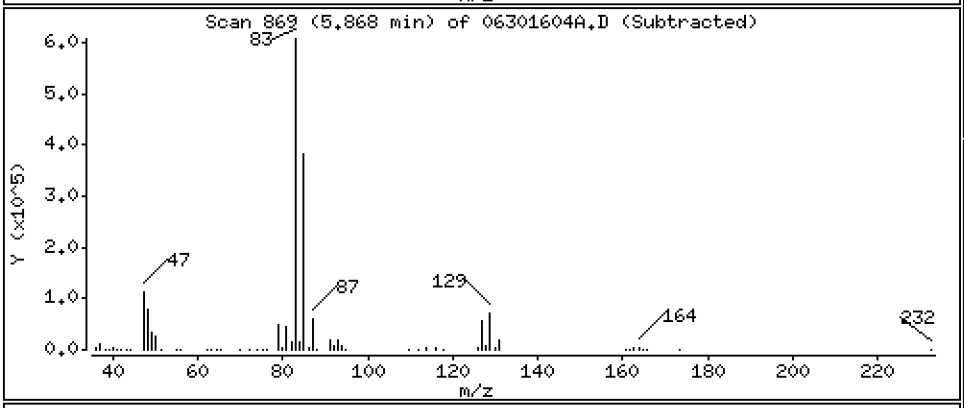
Column phase: RTXVMS

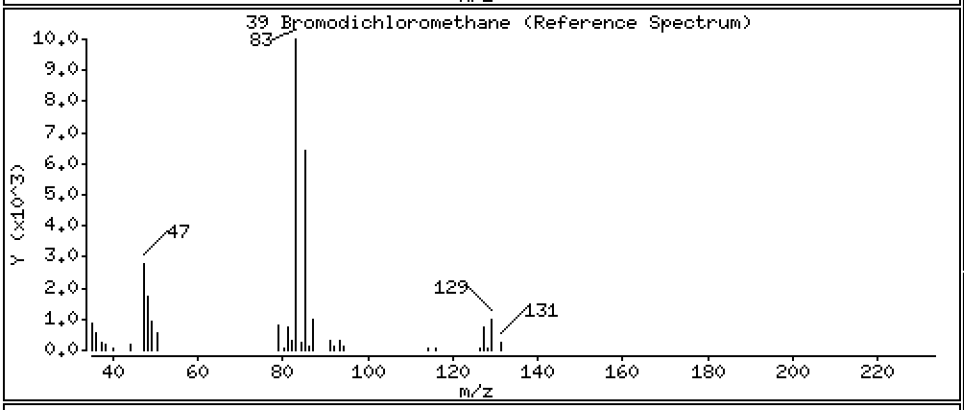
Column diameter: 0.18

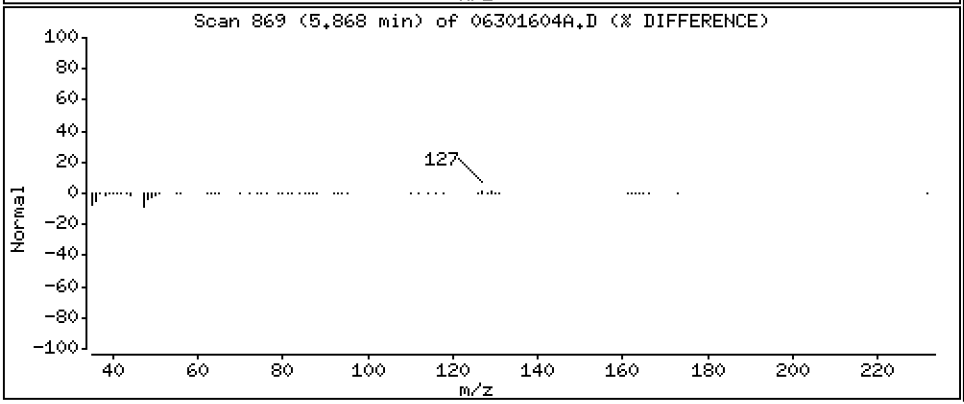
39 Bromodichloromethane

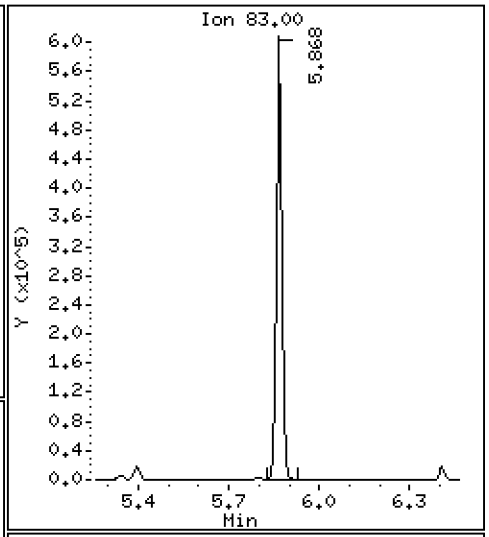
Concentration: 46.258 ug/Kg

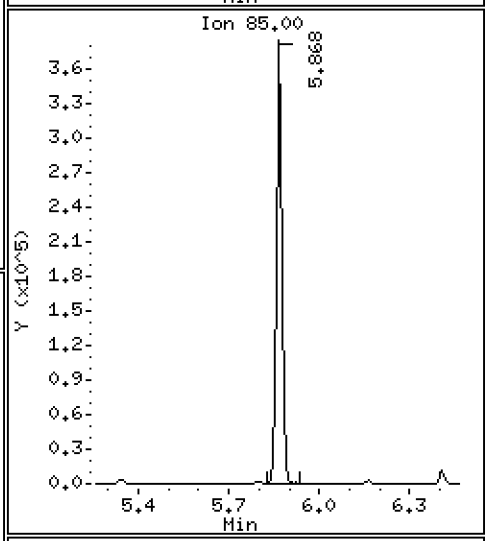


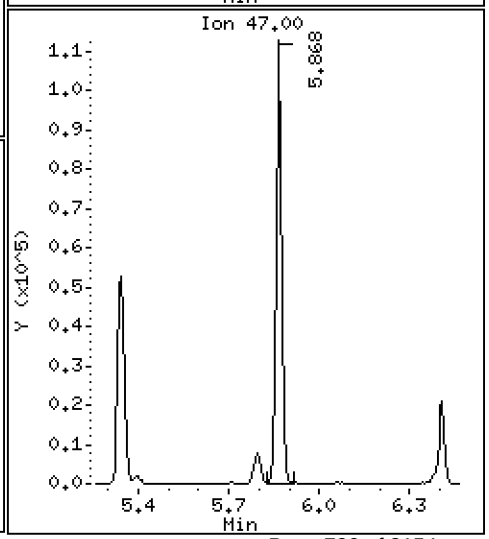












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

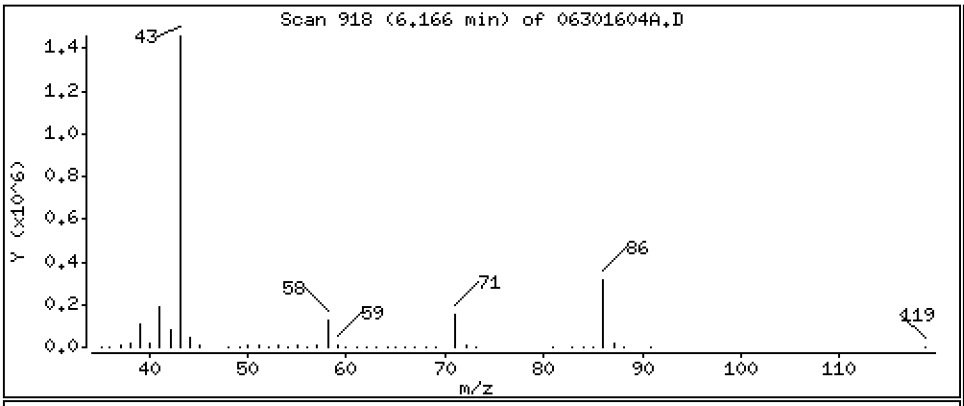
Operator: PB

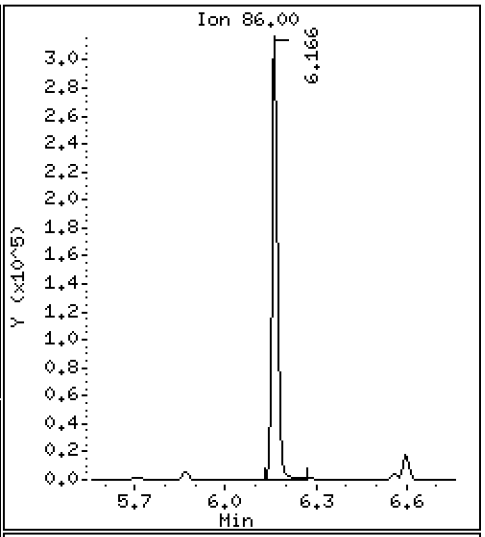
Column phase: RTXVMS

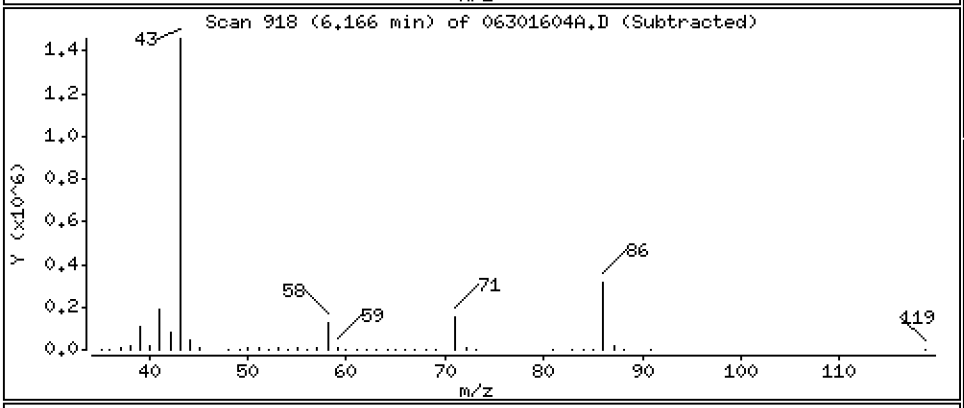
Column diameter: 0.18

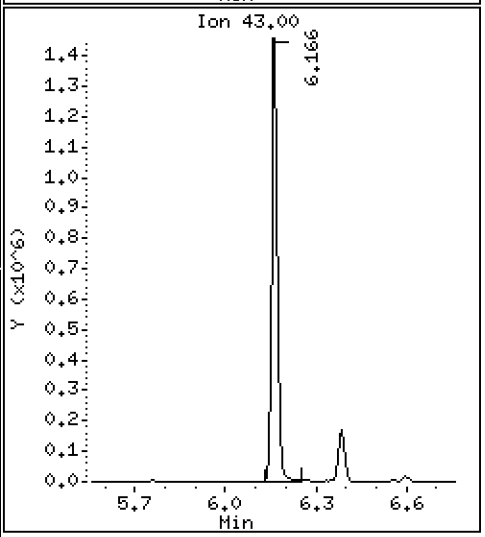
172 2-Pentanone

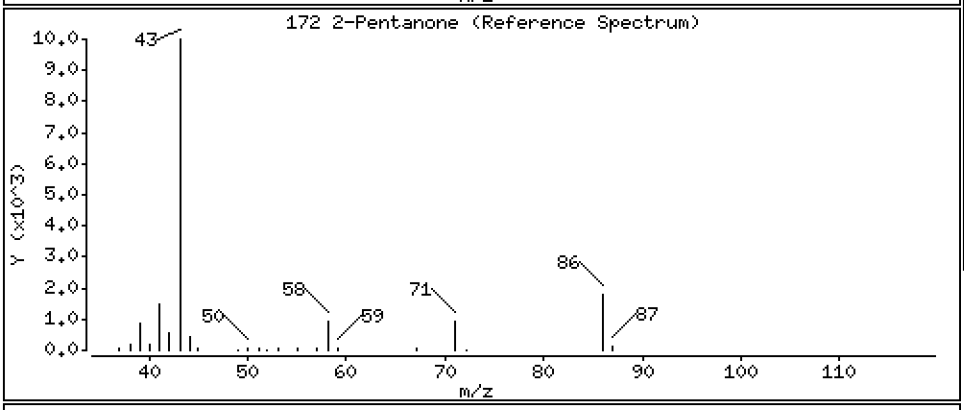
Concentration: 201.87 ug/Kg

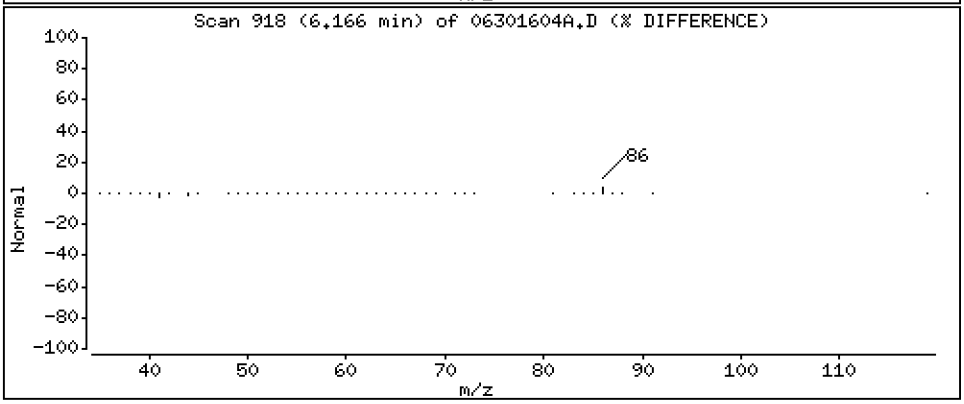












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

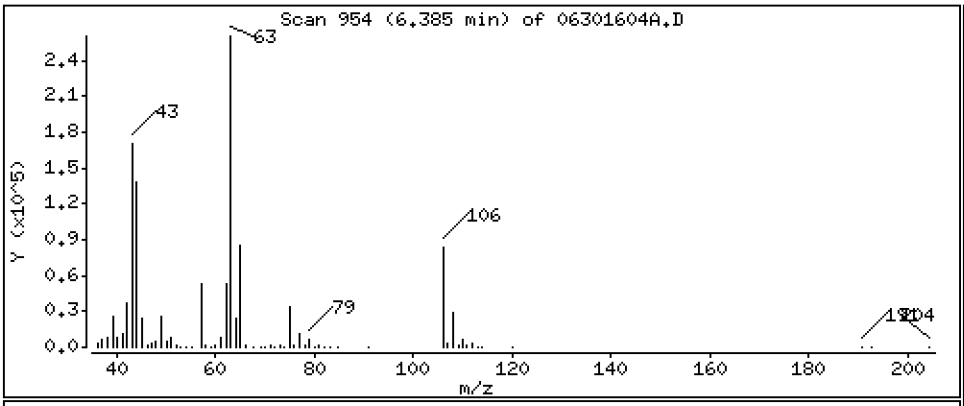
Operator: PB

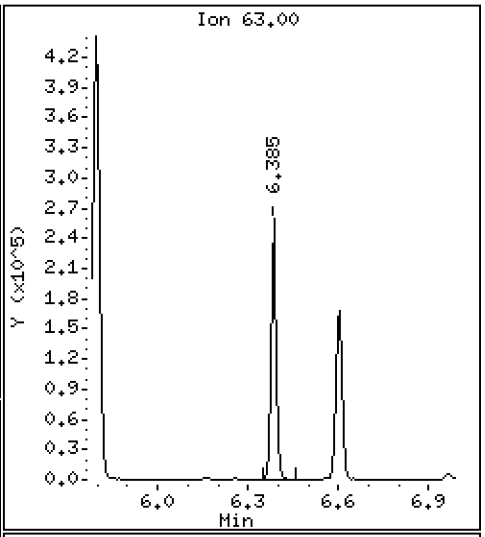
Column phase: RTXVMS

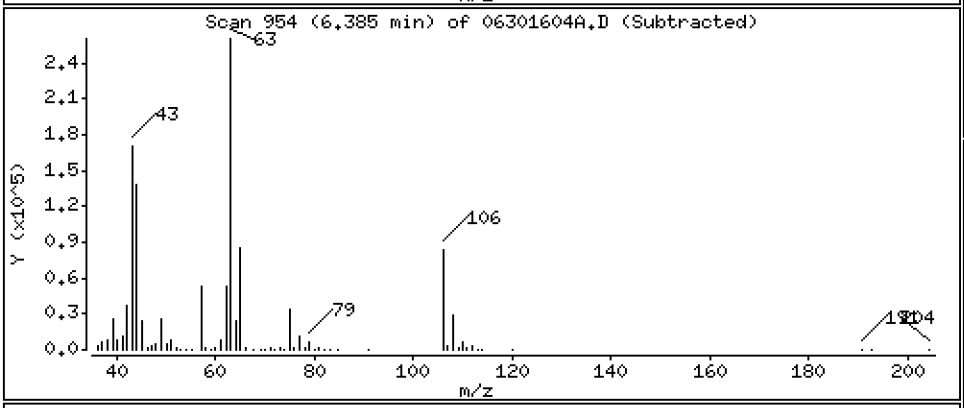
Column diameter: 0.18

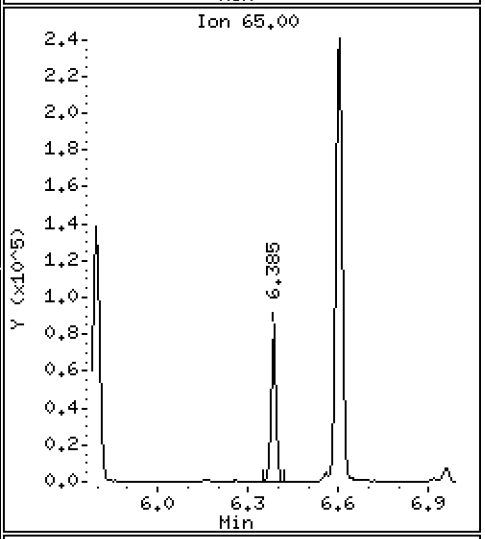
40 2-Chloroethyl Vinyl Ether

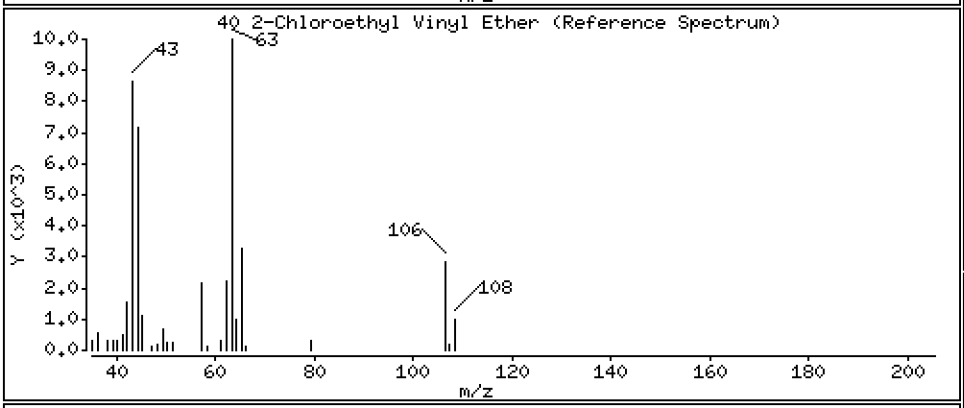
Concentration: 53.138 ug/Kg

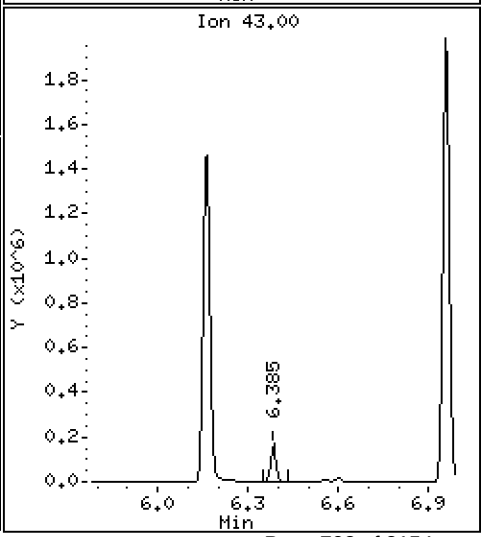


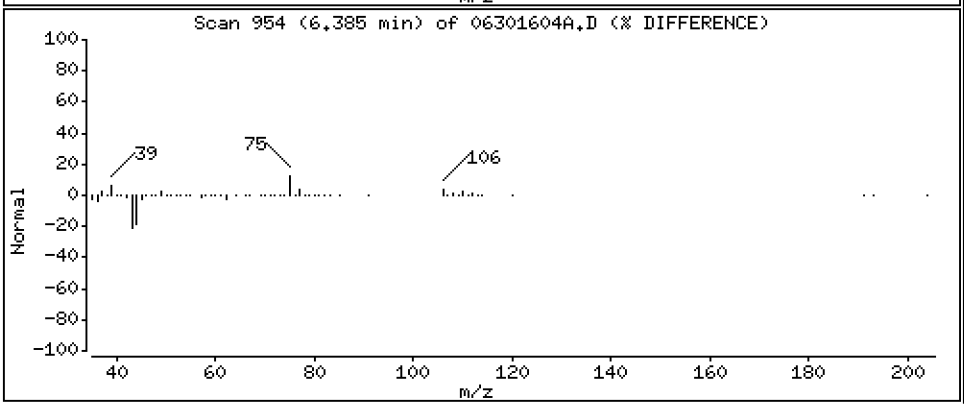












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

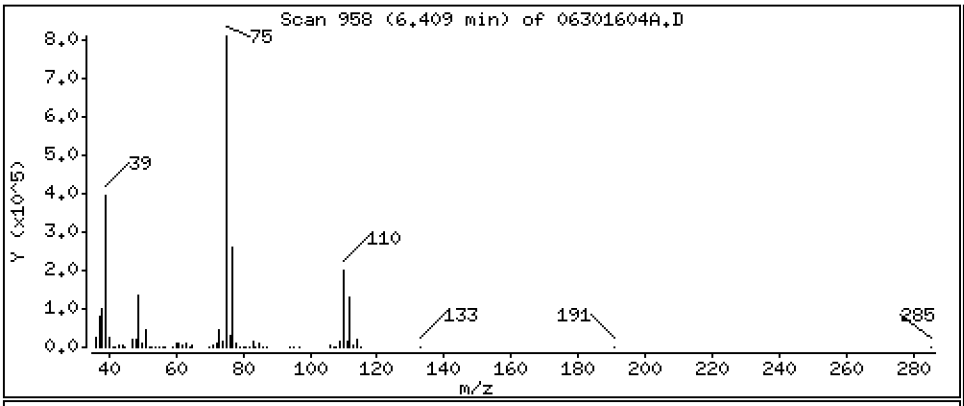
Operator: PB

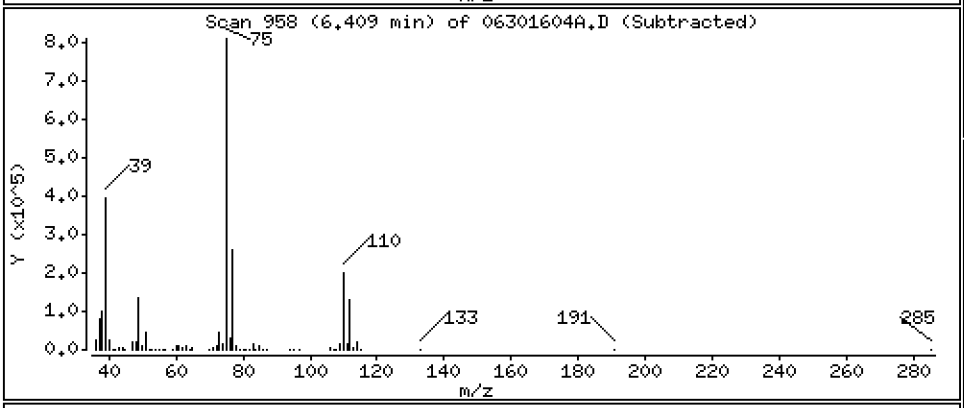
Column phase: RTXVMS

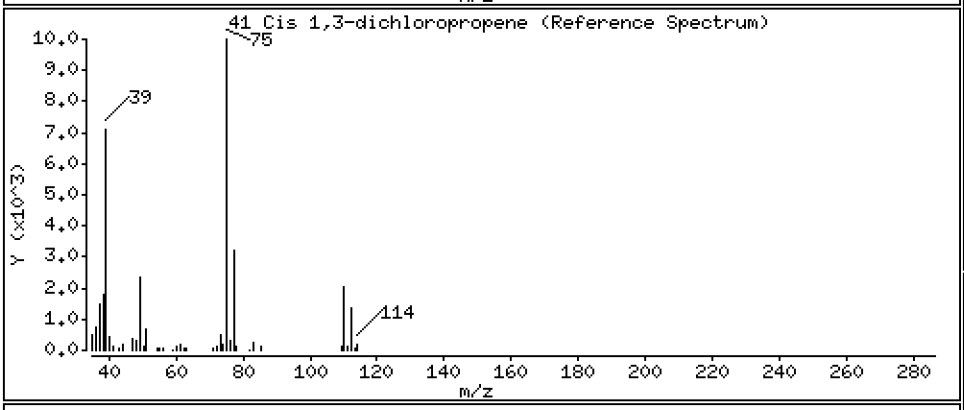
Column diameter: 0.18

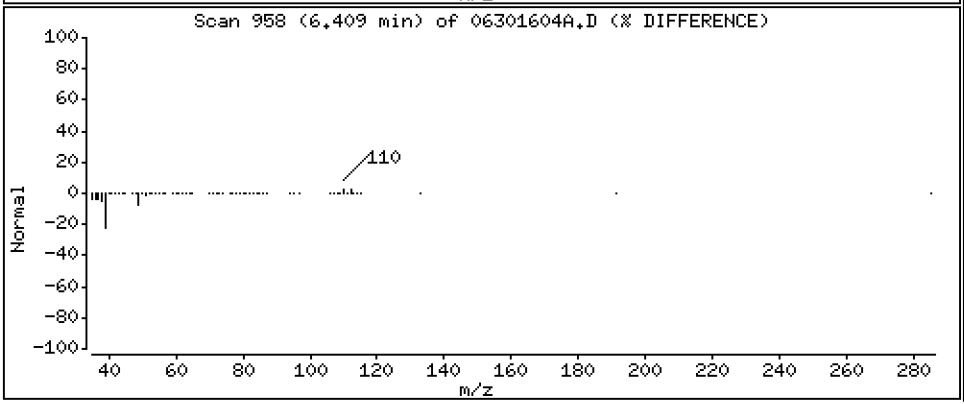
41 Cis 1,3-dichloropropene

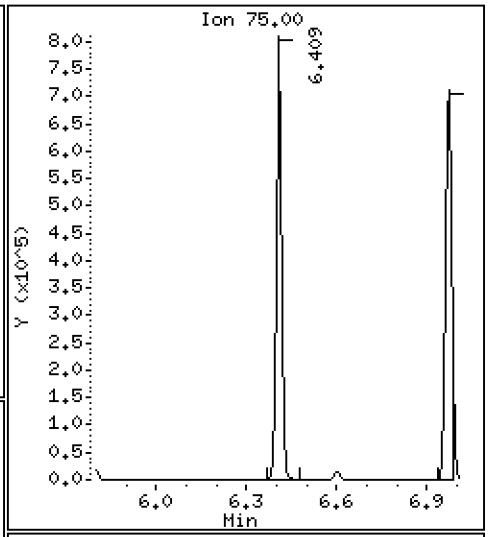
Concentration: 45.105 ug/Kg

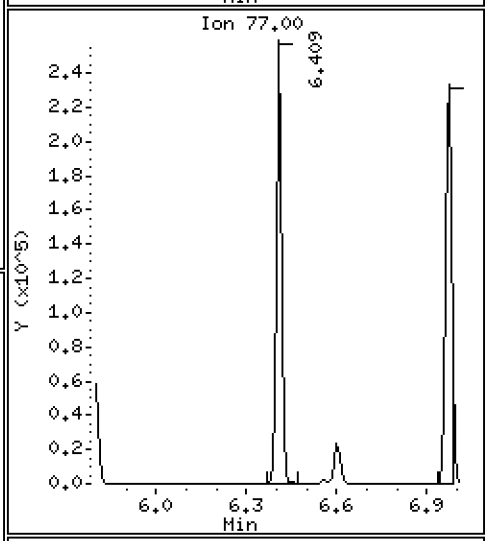


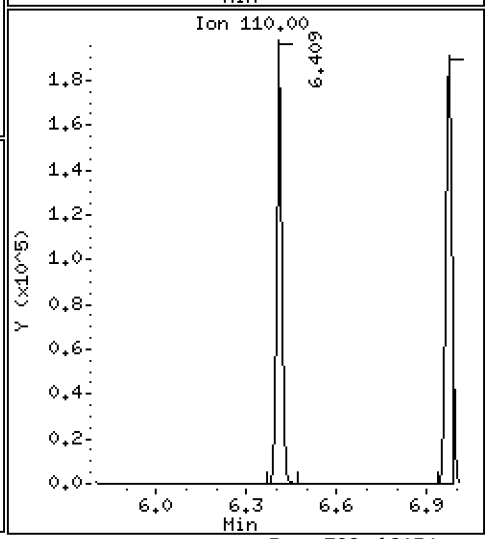












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

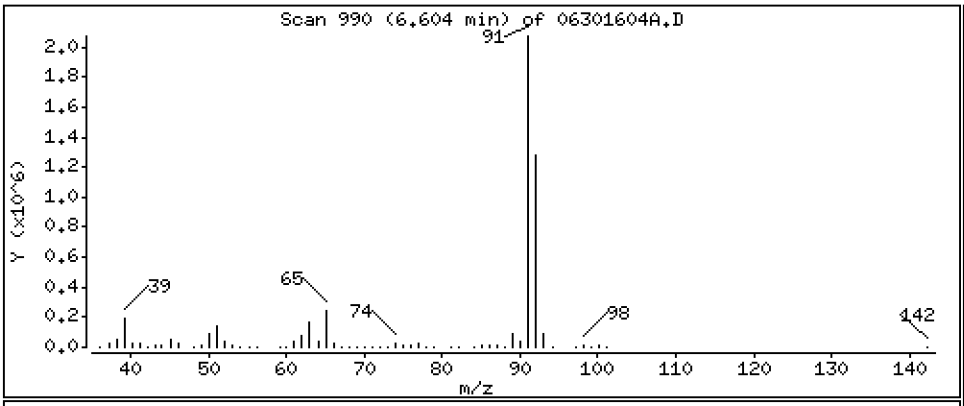
Operator: PB

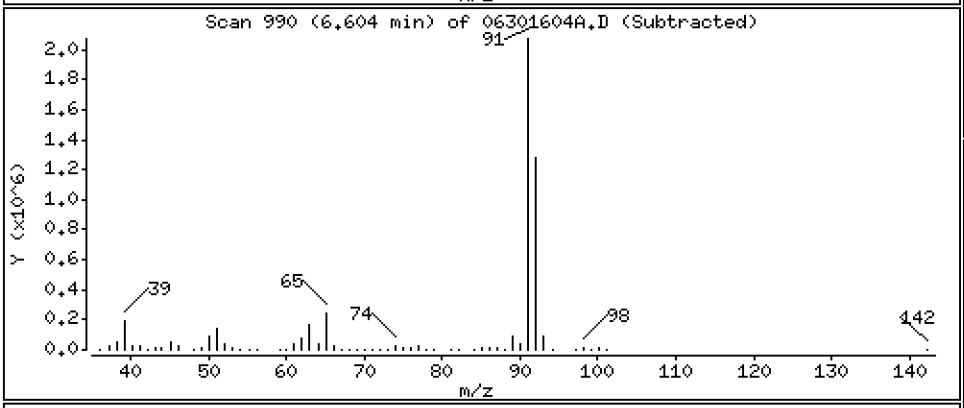
Column phase: RTXVMS

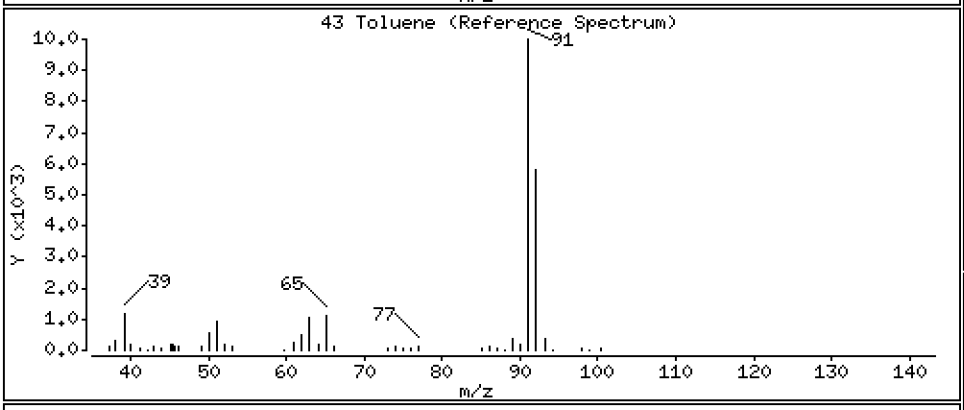
Column diameter: 0.18

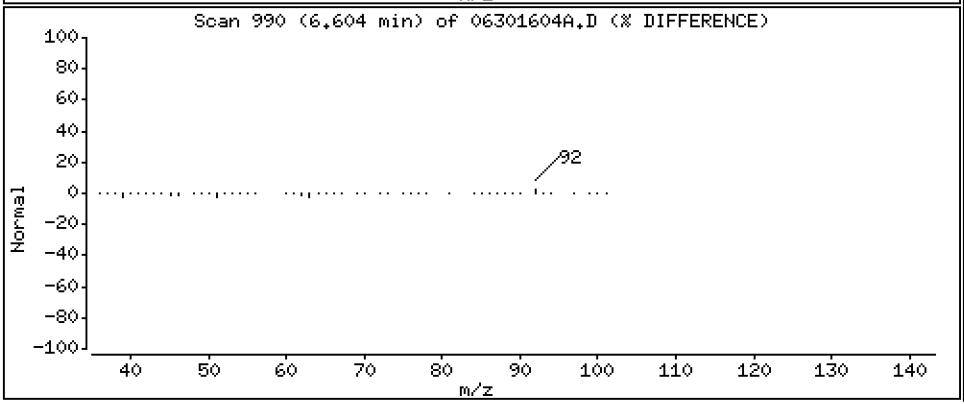
43 Toluene

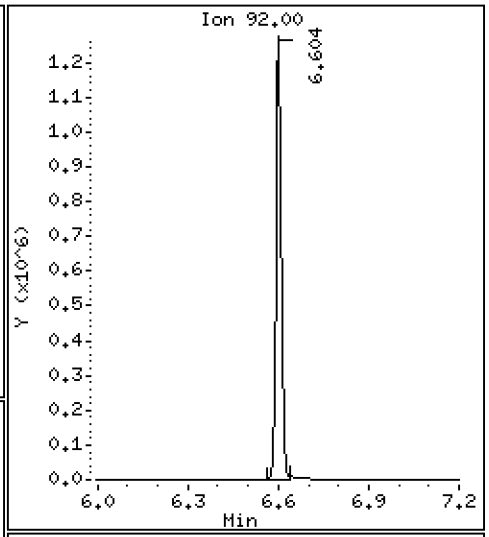
Concentration: 44.022 ug/Kg

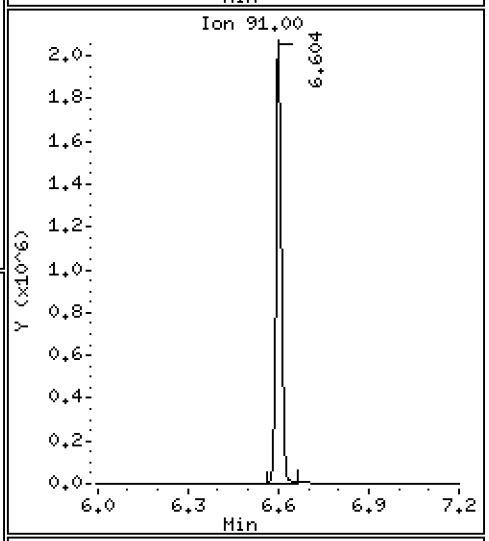


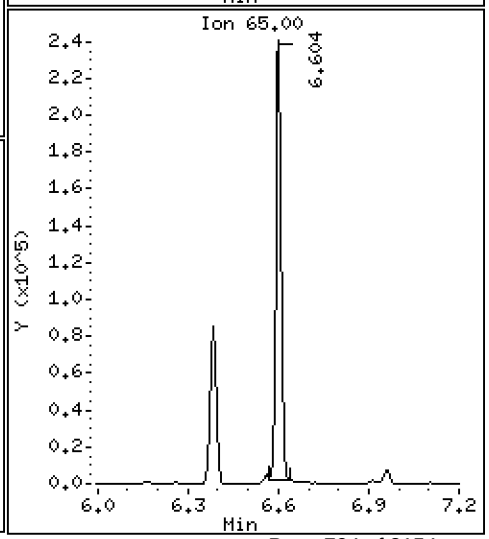












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

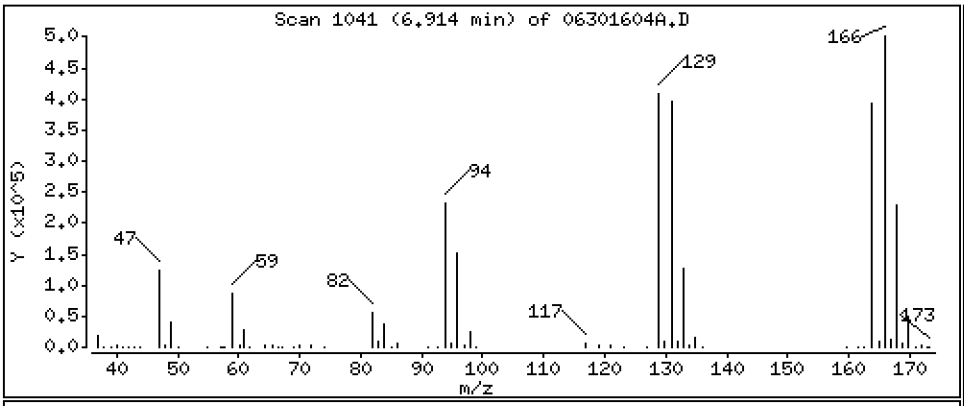
Operator: PB

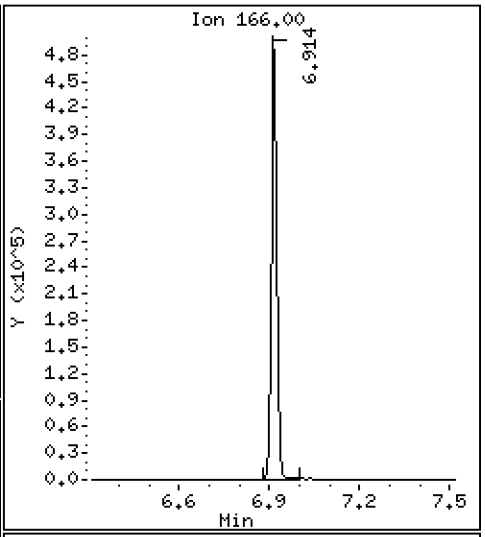
Column phase: RTXVMS

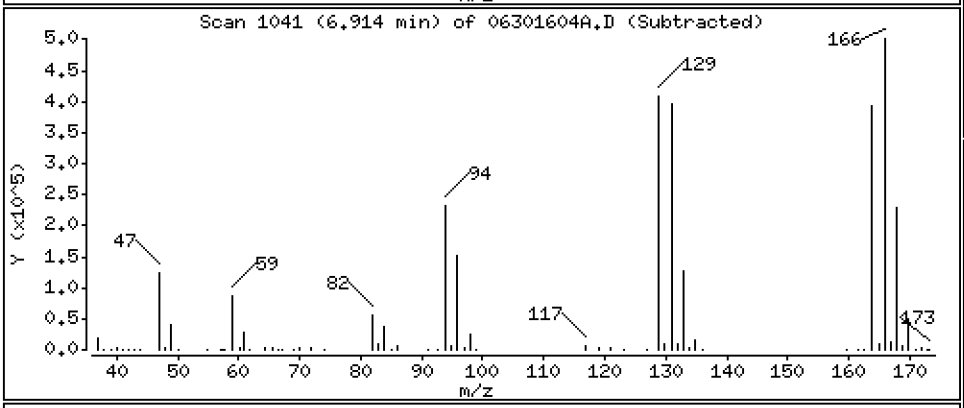
Column diameter: 0.18

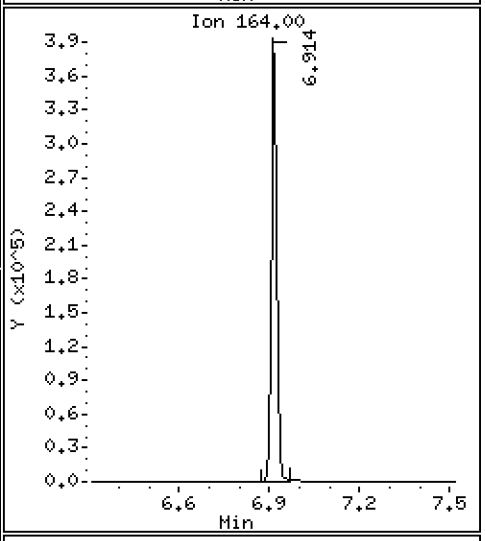
44 Tetrachloroethene

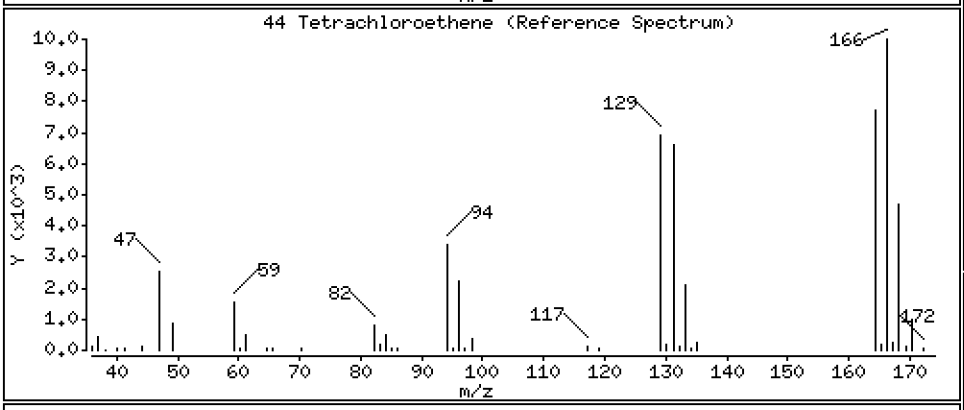
Concentration: 49.037 ug/Kg

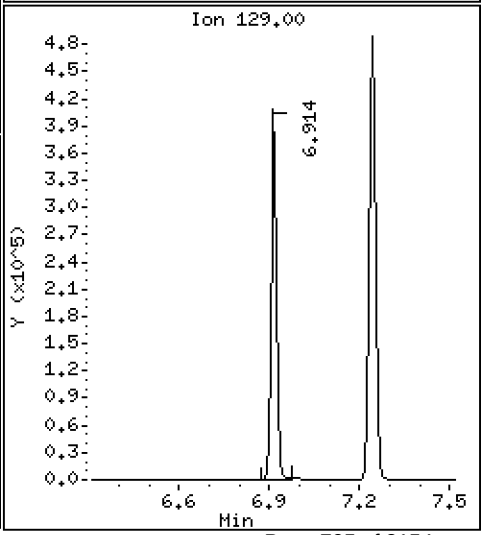


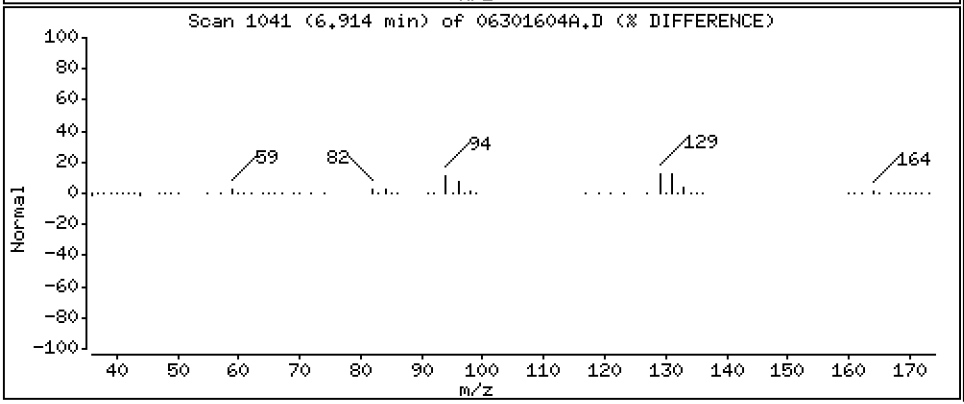












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

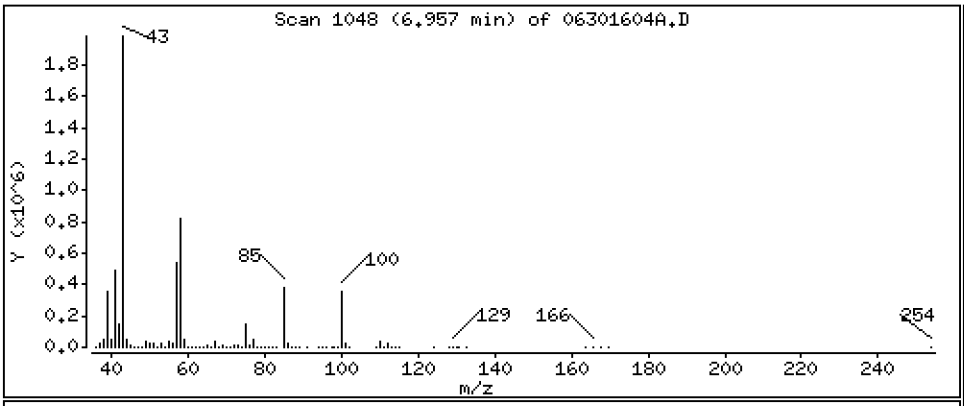
Operator: PB

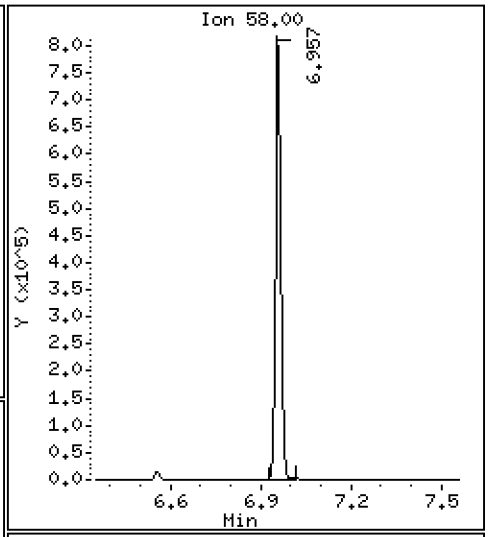
Column phase: RTXVMS

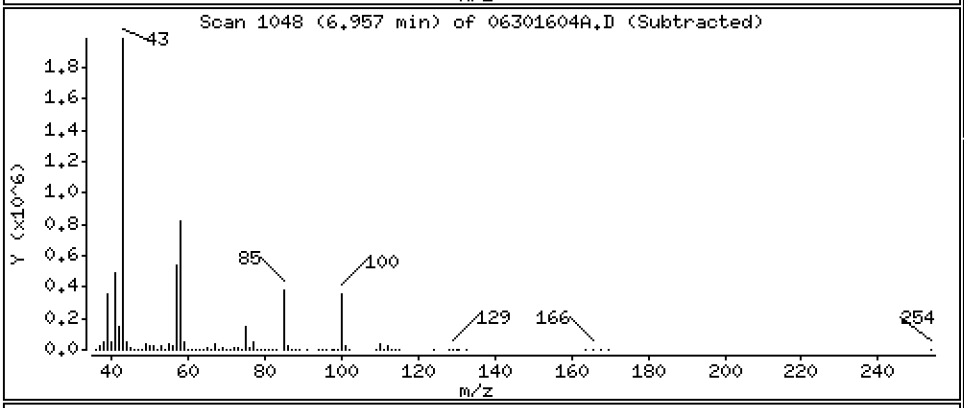
Column diameter: 0.18

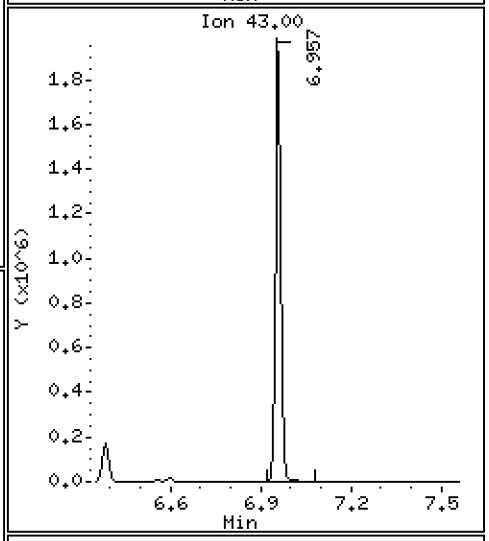
45 4-Methyl-2-Pentanone

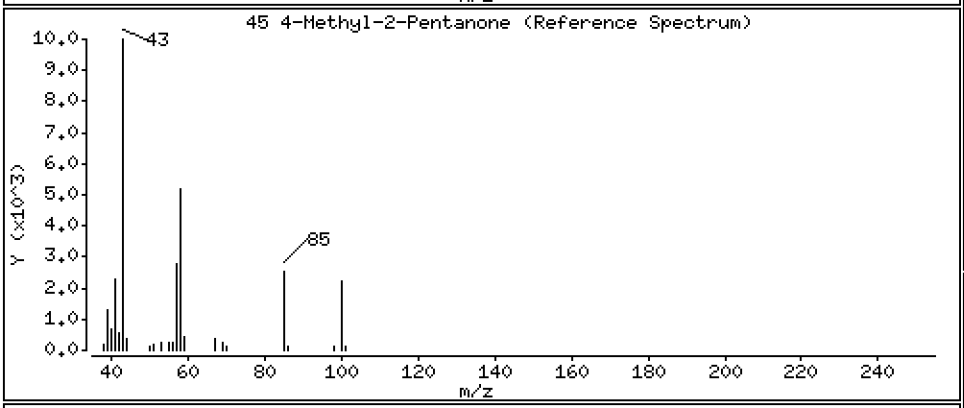
Concentration: 192.56 ug/Kg

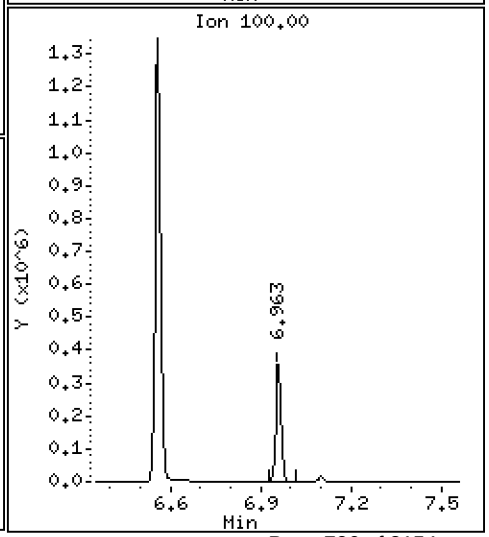


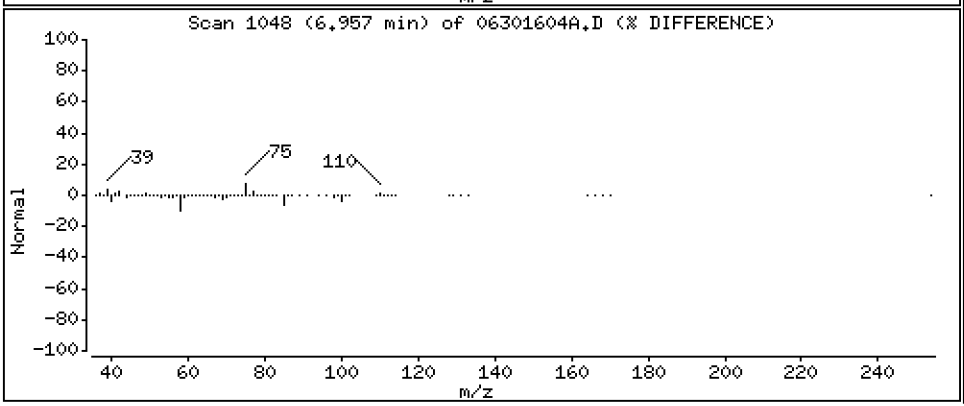












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

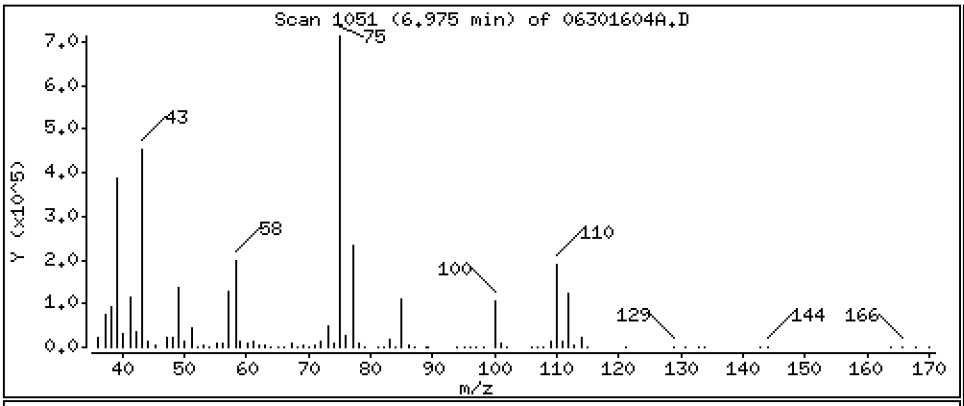
Operator: PB

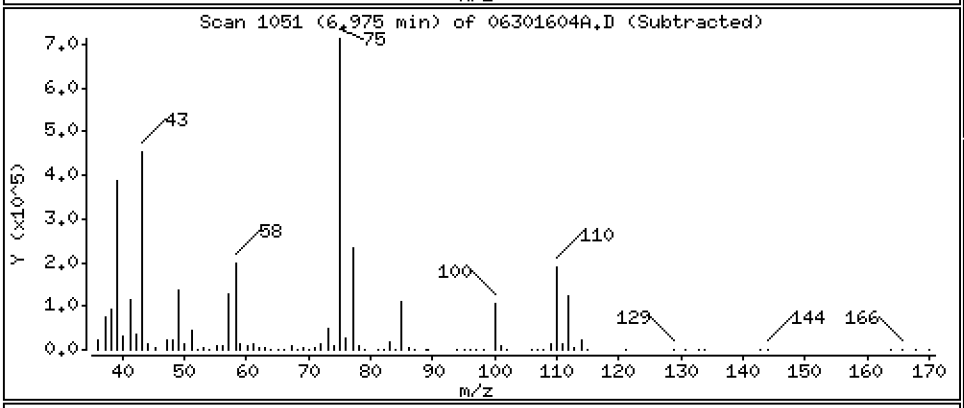
Column phase: RTXVMS

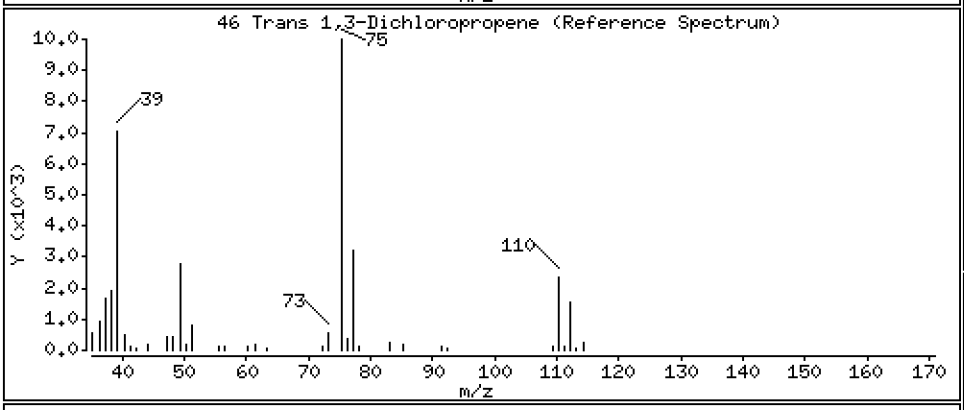
Column diameter: 0.18

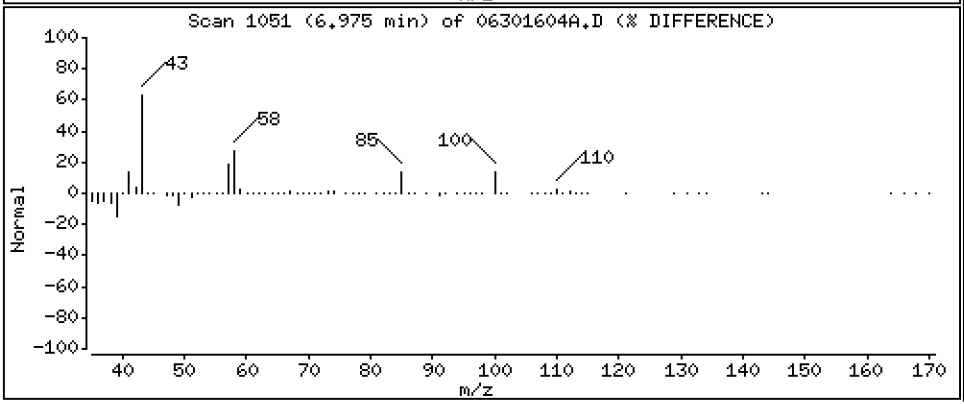
46 Trans 1,3-Dichloropropene

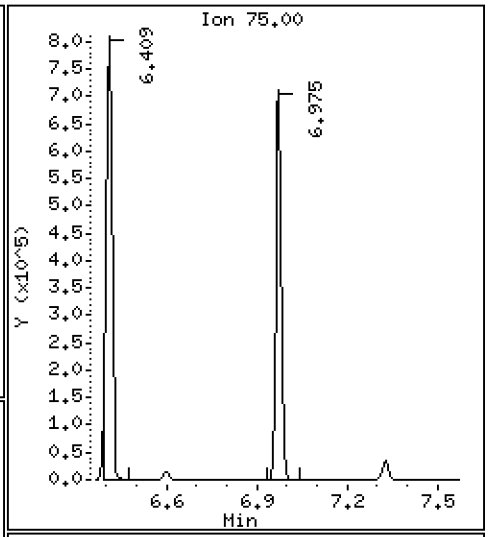
Concentration: 45.733 ug/Kg

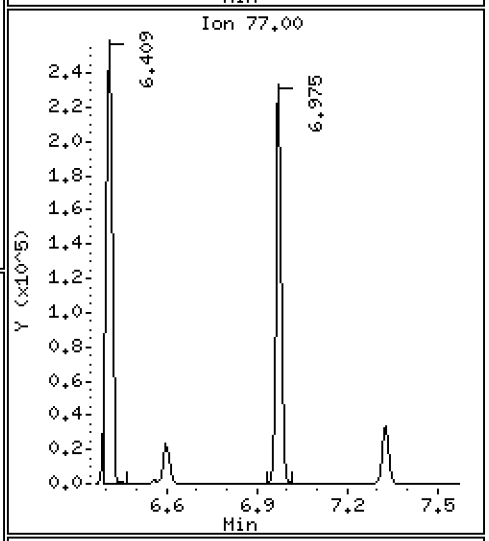


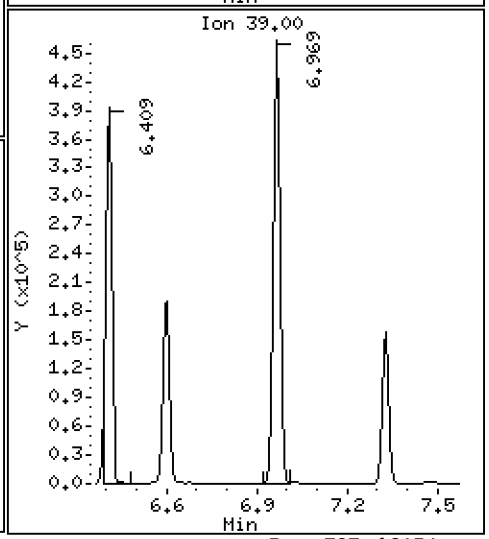












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

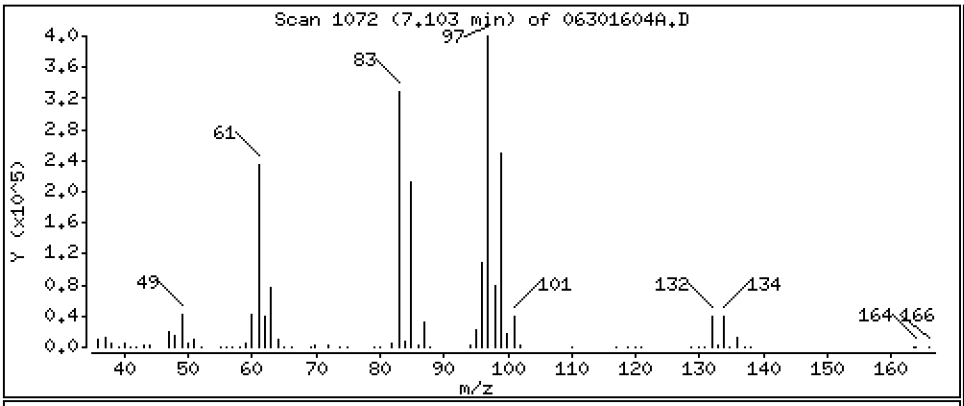
Operator: PB

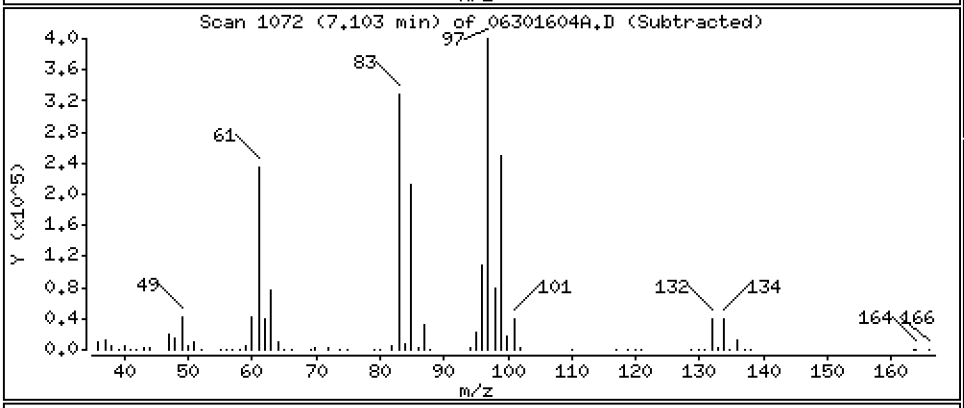
Column phase: RTXVMS

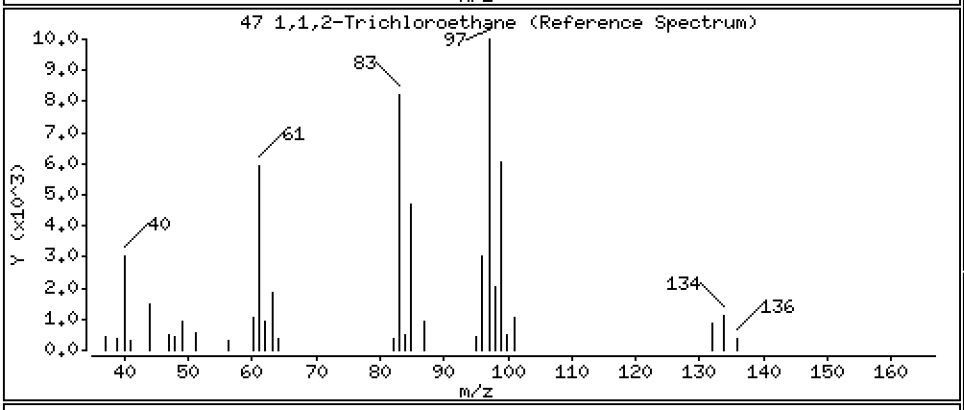
Column diameter: 0.18

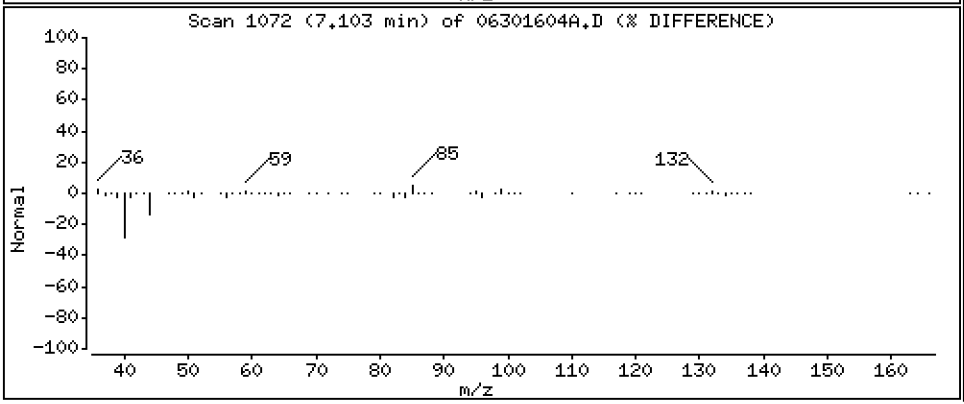
47 1,1,2-Trichloroethane

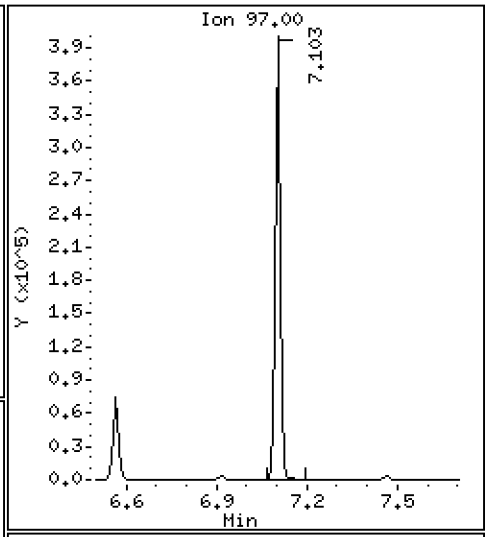
Concentration: 44.937 ug/Kg

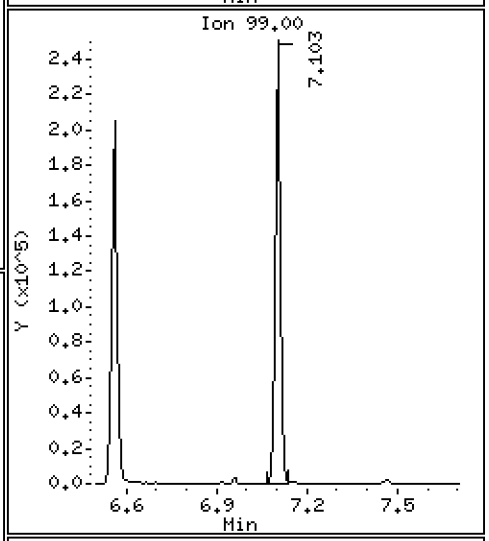


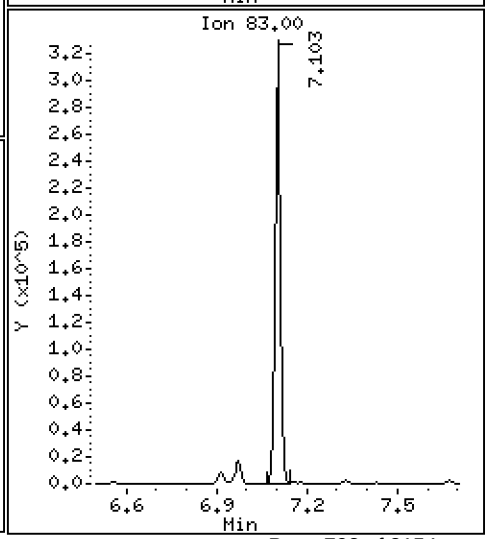












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

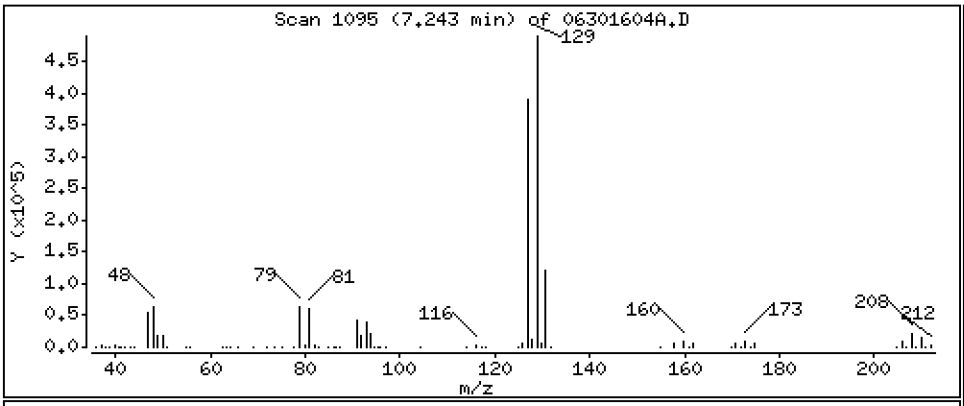
Operator: PB

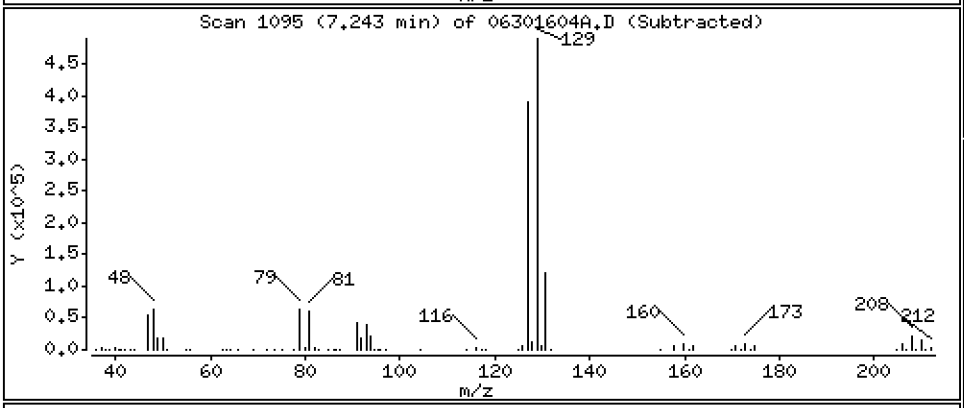
Column phase: RTXVMS

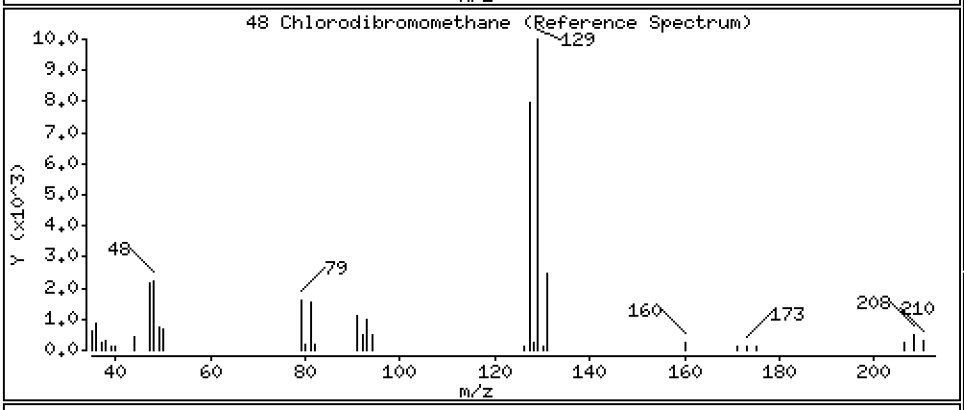
Column diameter: 0.18

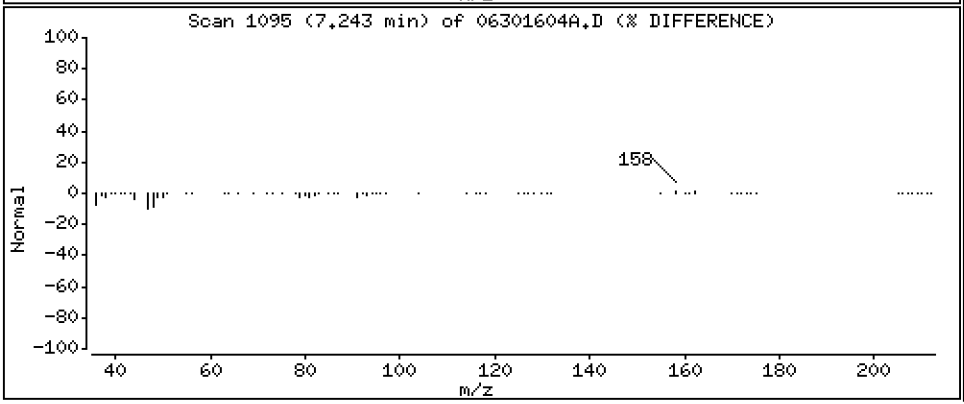
48 Chlorodibromomethane

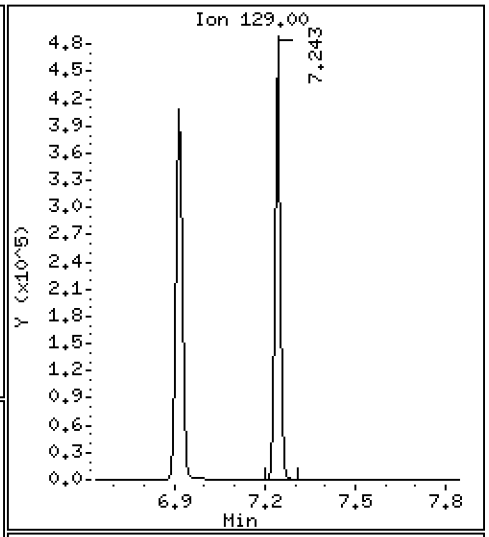
Concentration: 48.504 ug/Kg

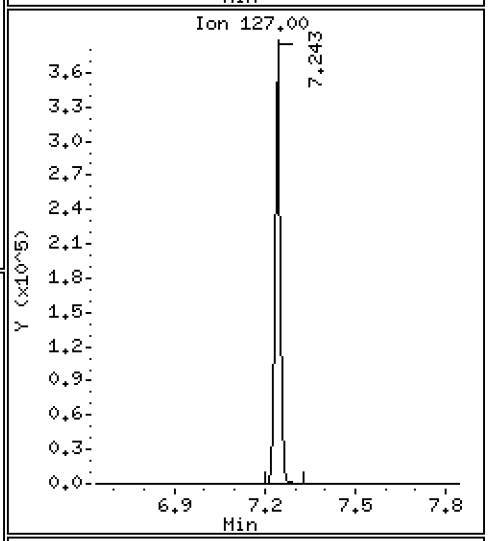


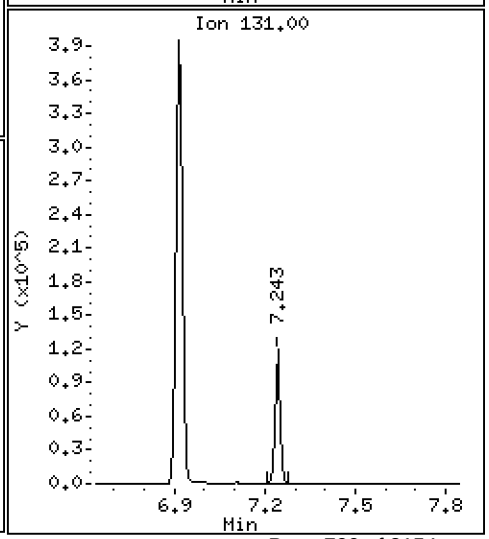












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

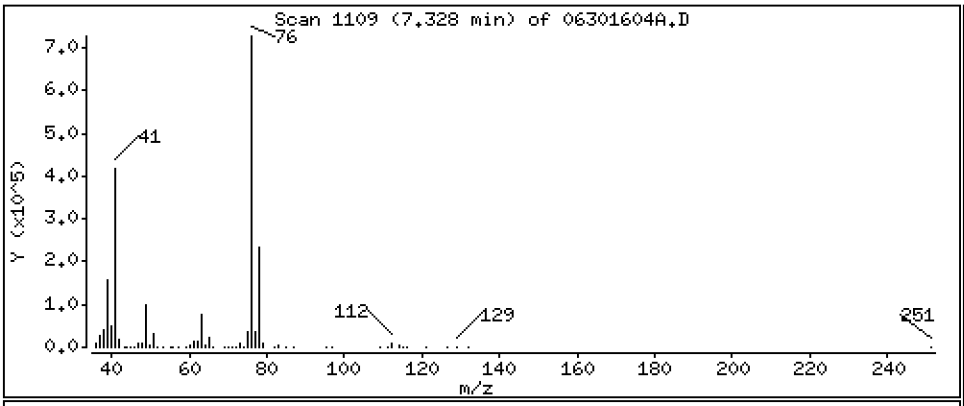
Operator: PB

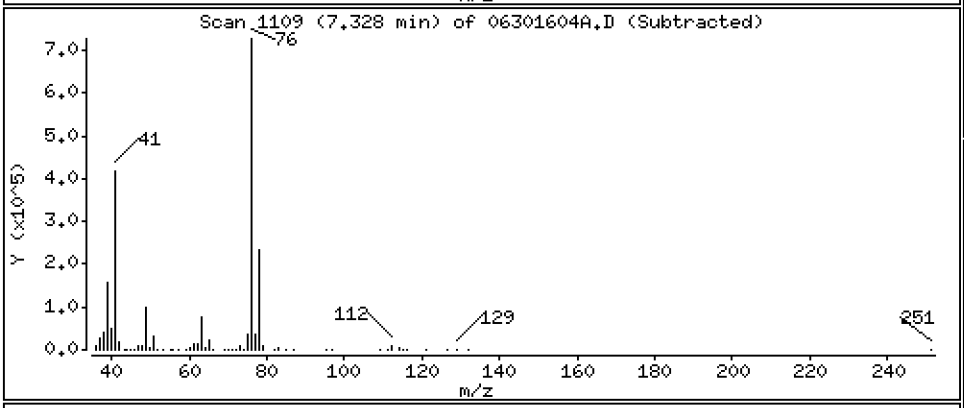
Column phase: RTXVMS

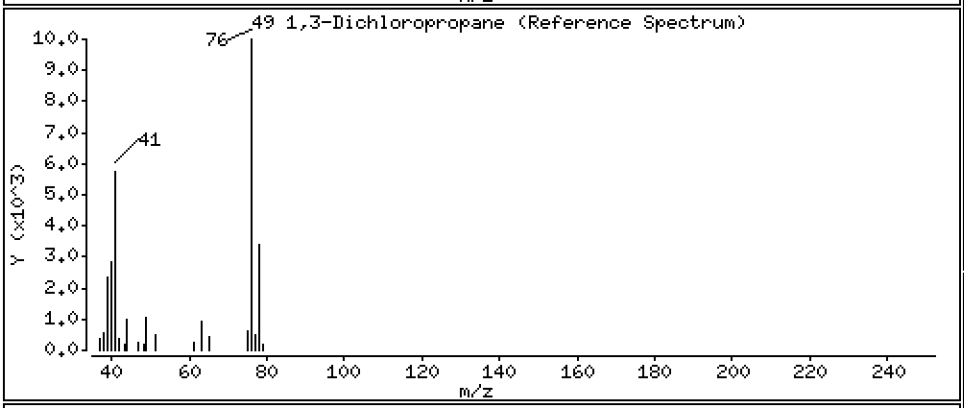
Column diameter: 0.18

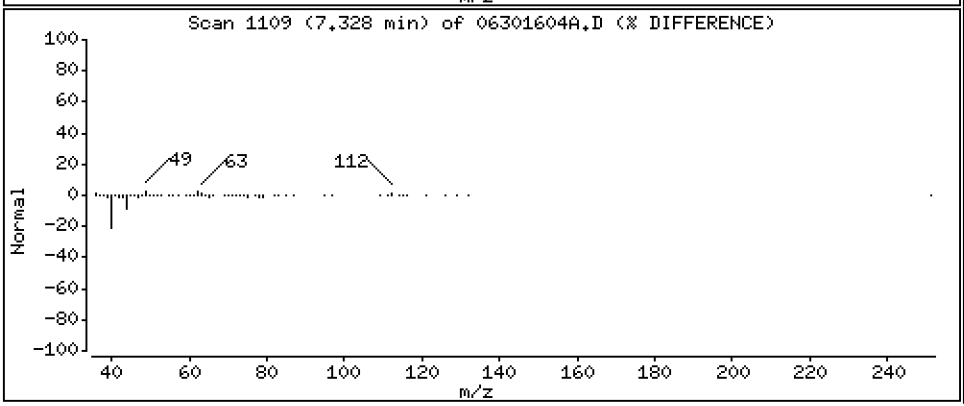
49 1,3-Dichloropropane

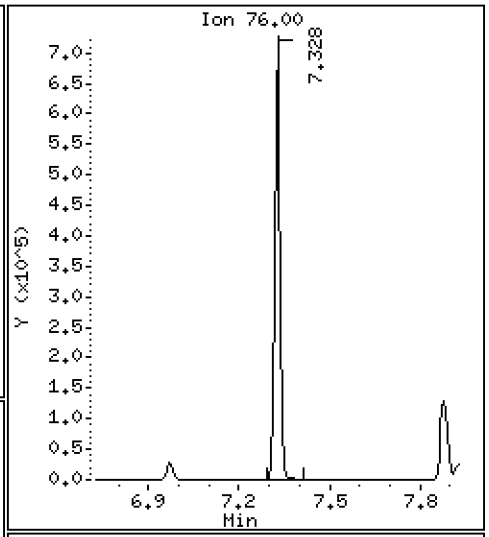
Concentration: 44.287 ug/Kg

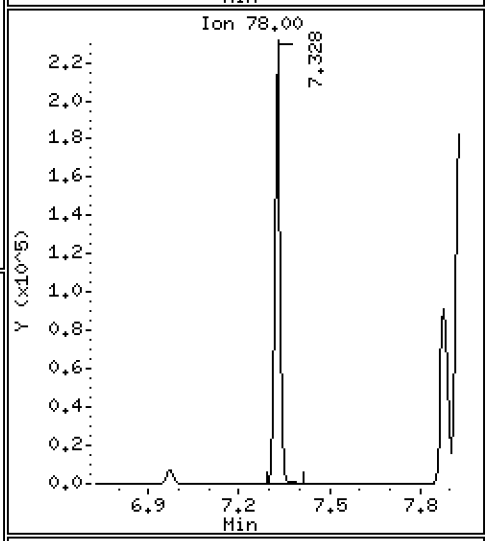


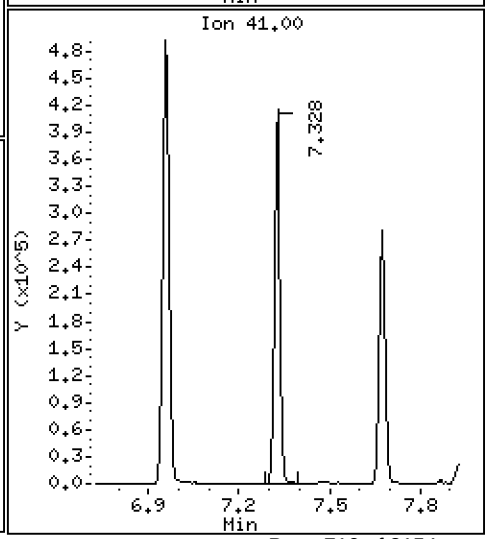












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

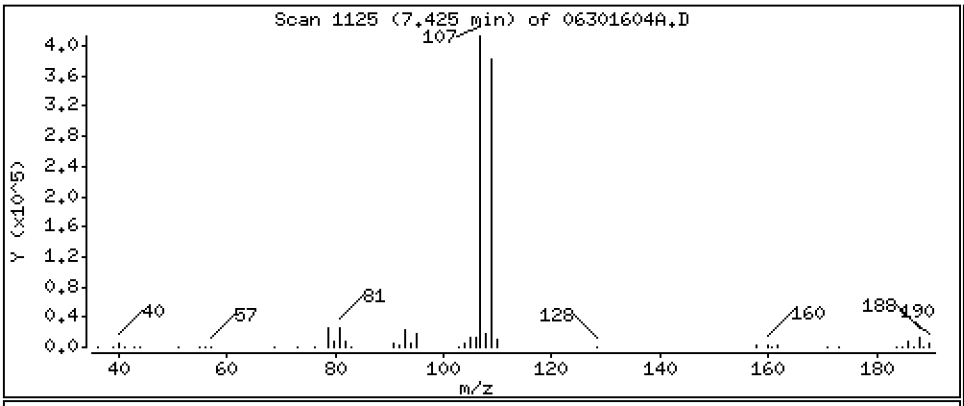
Operator: PB

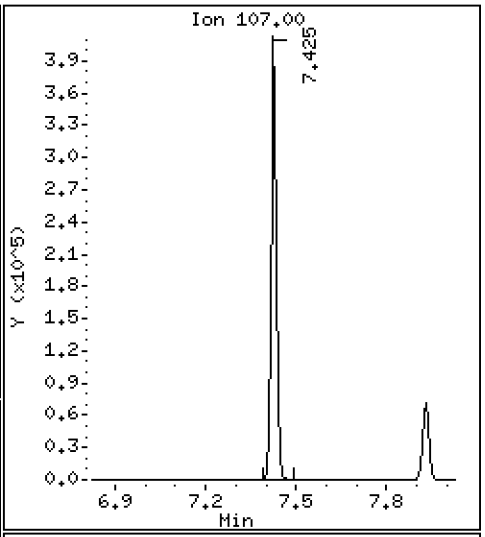
Column phase: RTXVMS

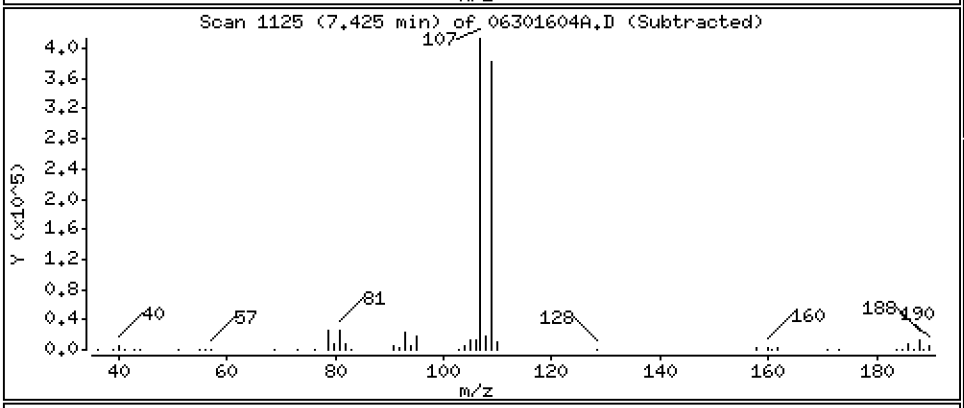
Column diameter: 0.18

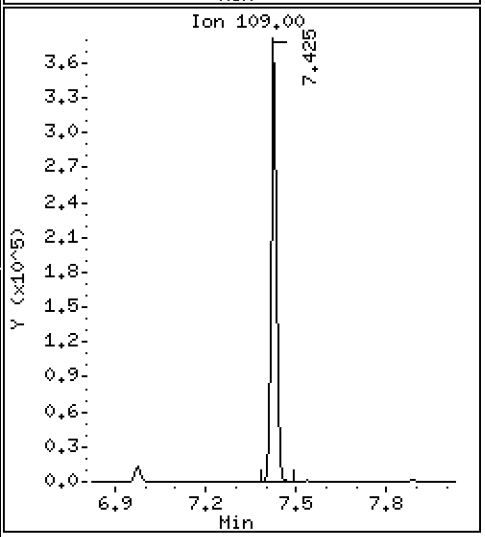
50 1,2-Dibromoethane

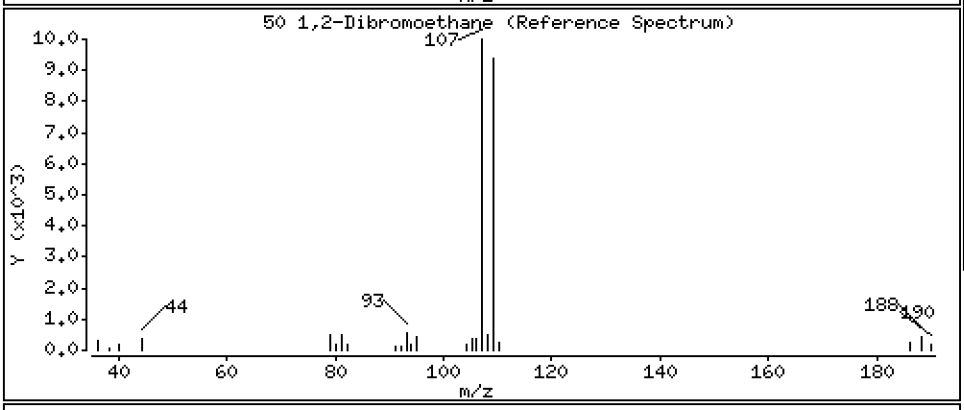
Concentration: 45.299 ug/Kg

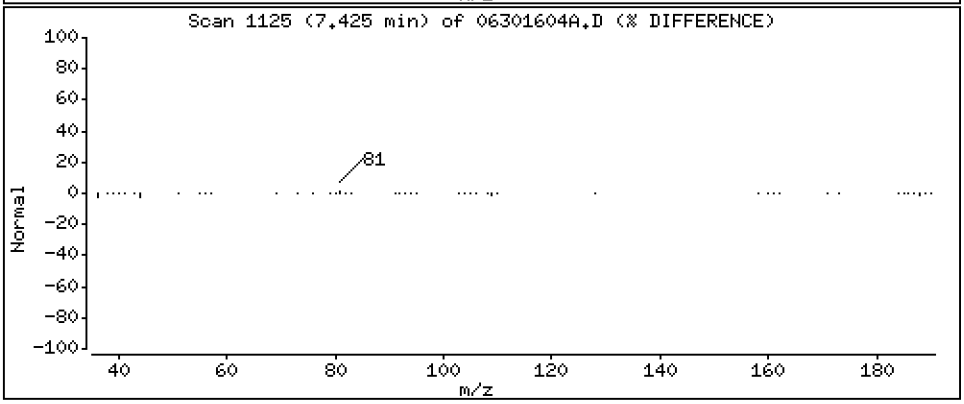












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

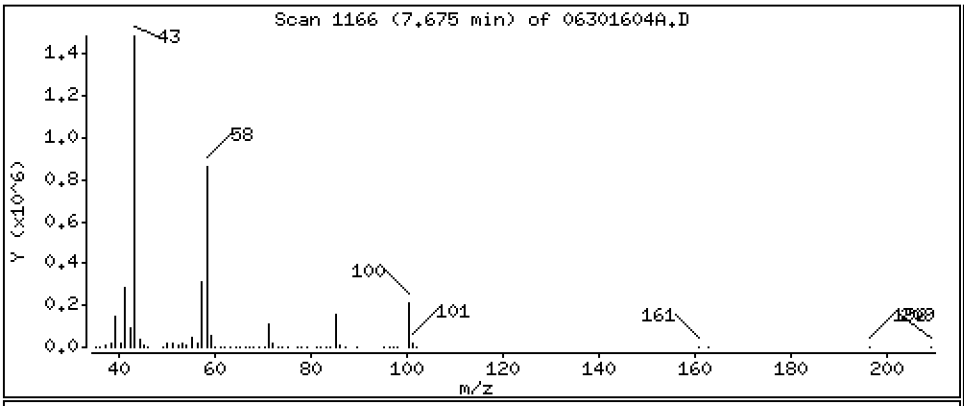
Operator: PB

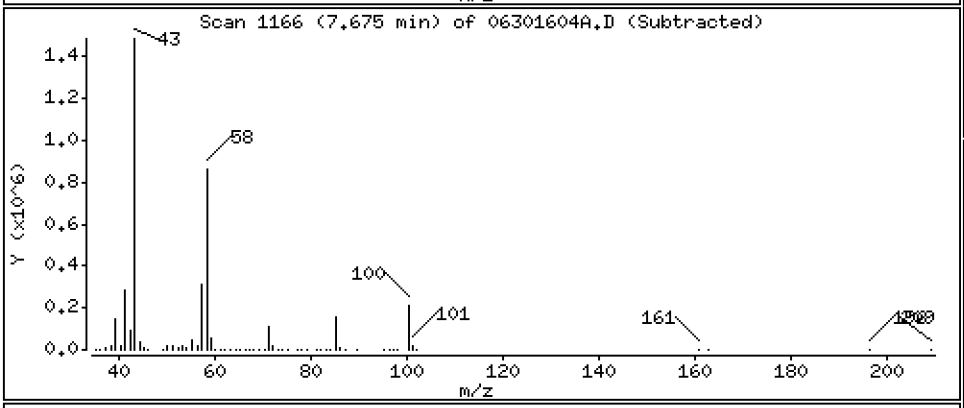
Column phase: RTXVMS

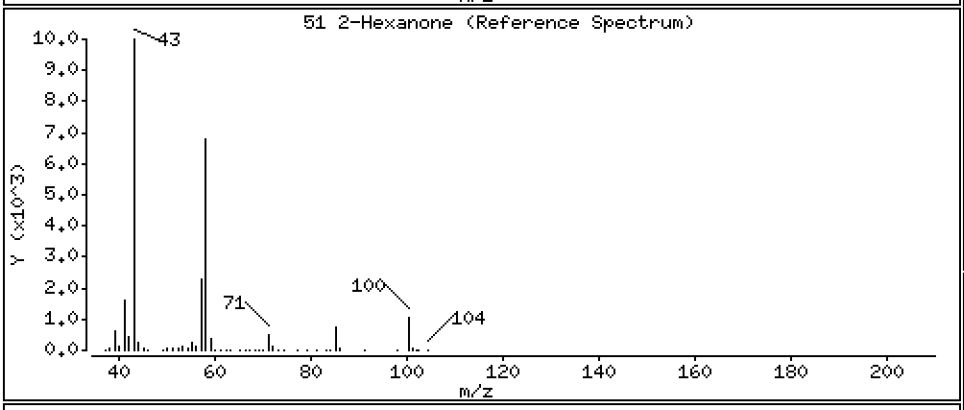
Column diameter: 0.18

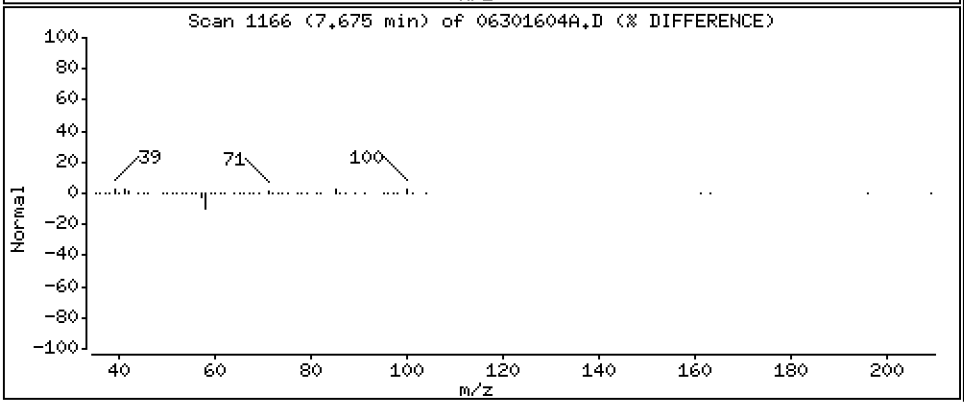
51 2-Hexanone

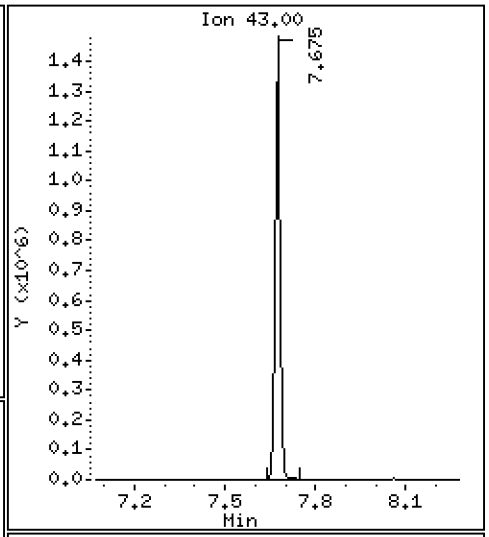
Concentration: 183.94 ug/Kg

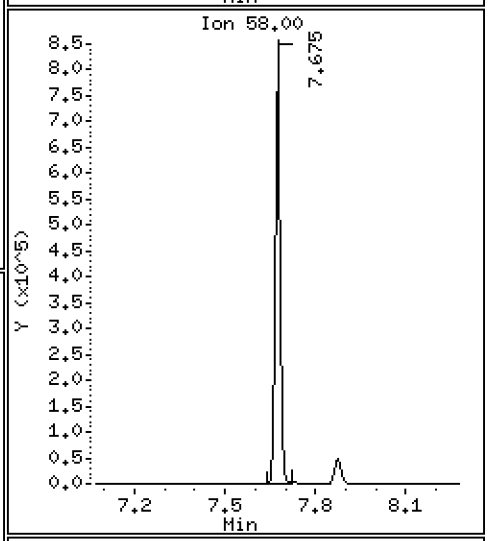


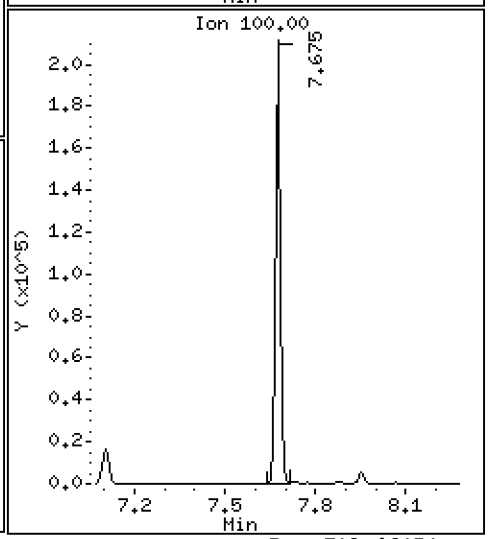












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

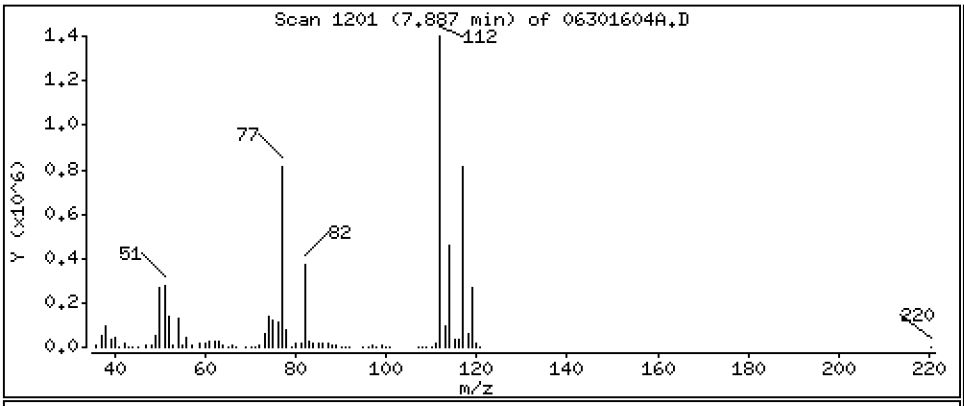
Operator: PB

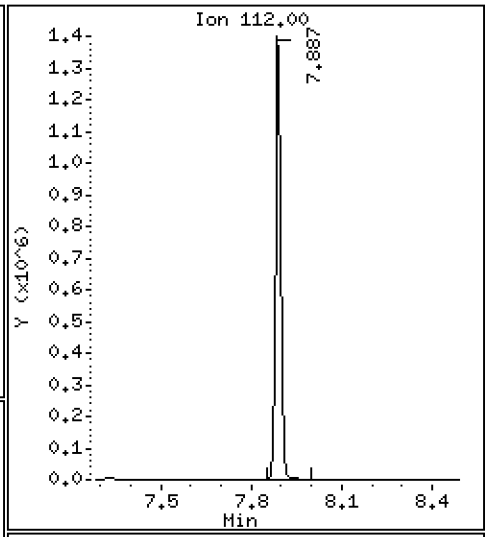
Column phase: RTXVMS

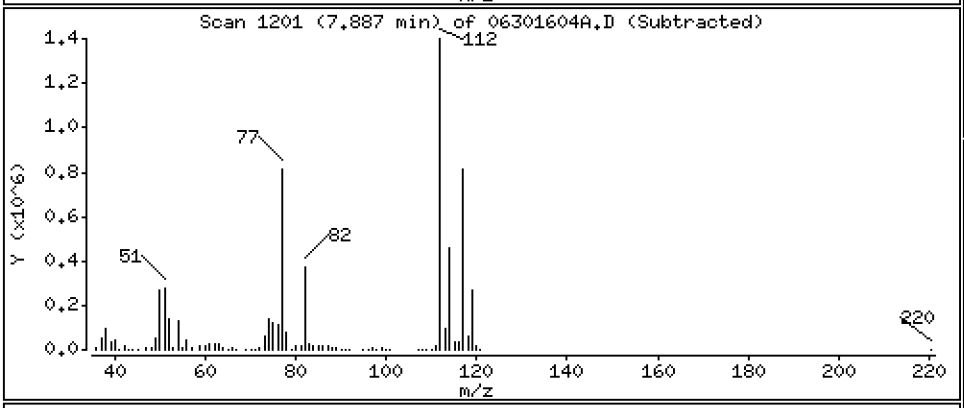
Column diameter: 0.18

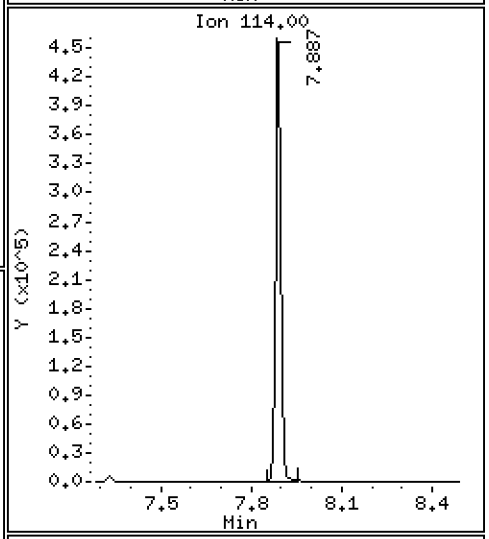
53 Chlorobenzene

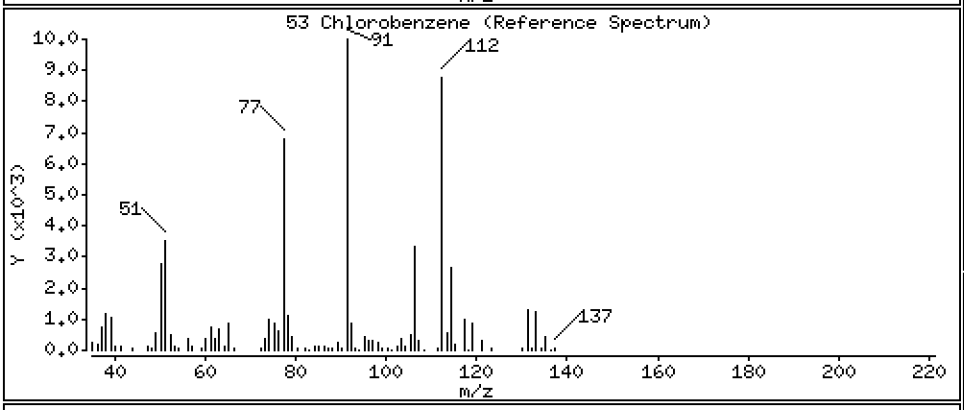
Concentration: 46.195 ug/Kg

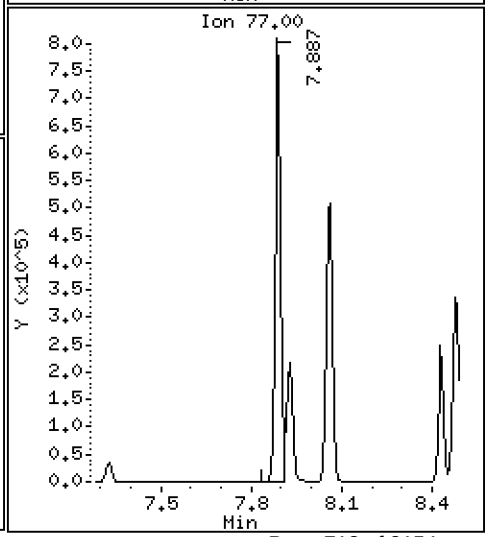


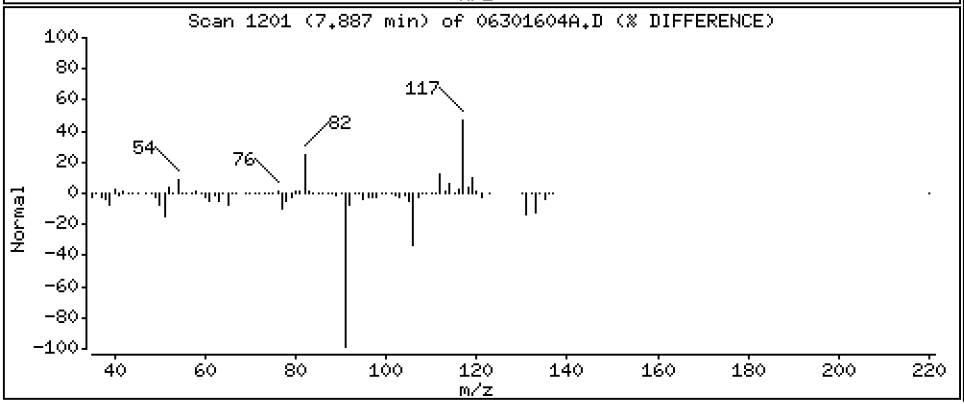












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

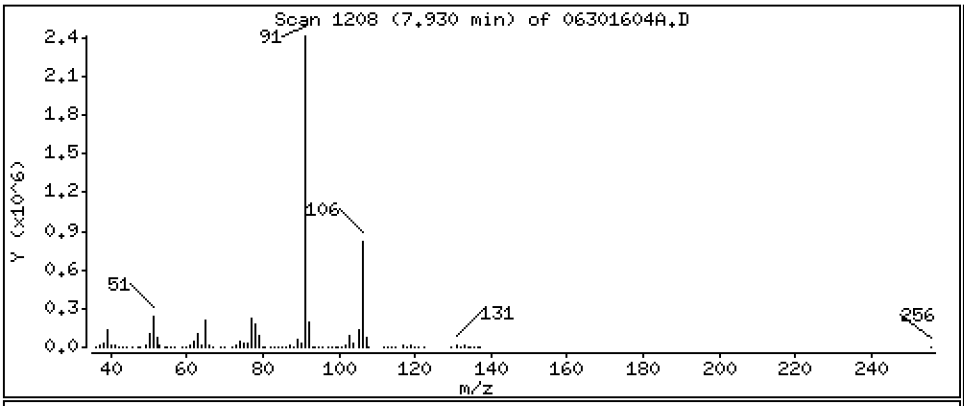
Operator: PB

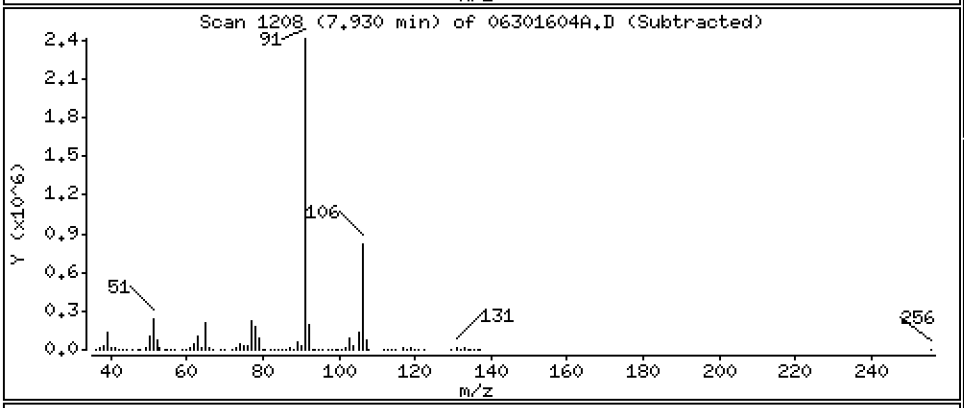
Column phase: RTXVMS

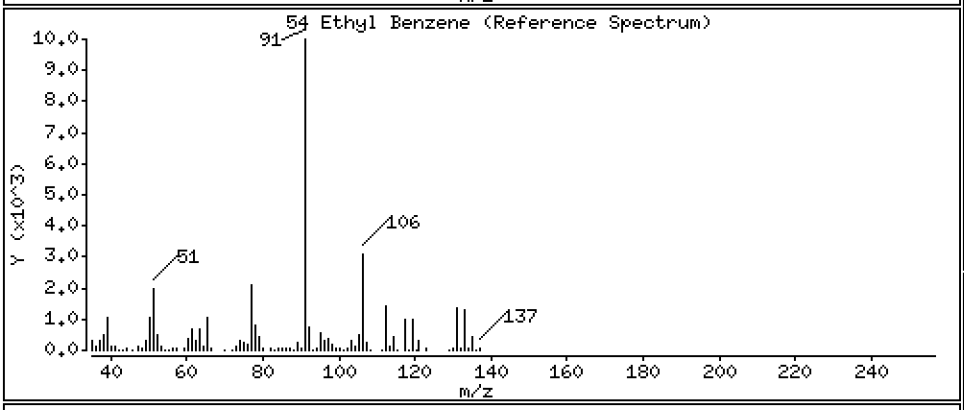
Column diameter: 0.18

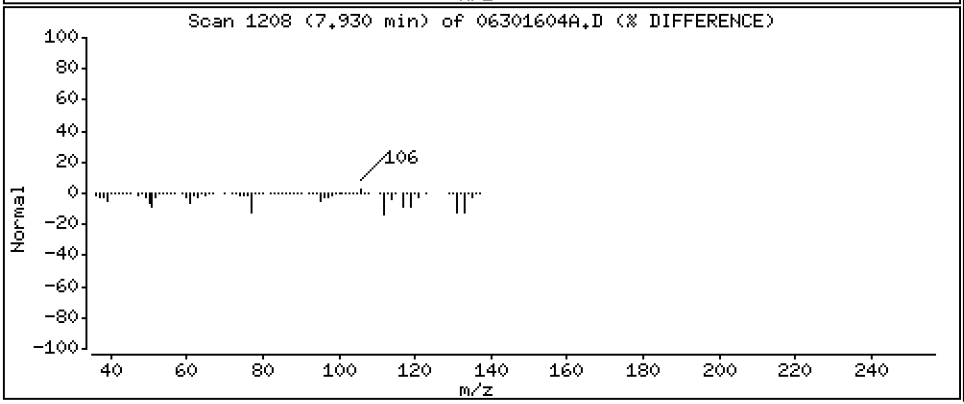
54 Ethyl Benzene

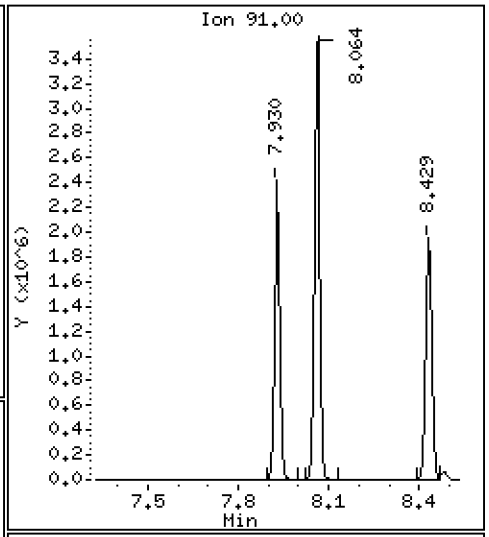
Concentration: 45.808 ug/Kg

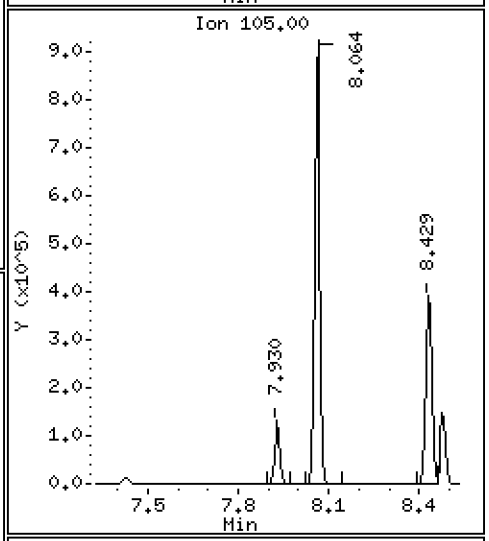


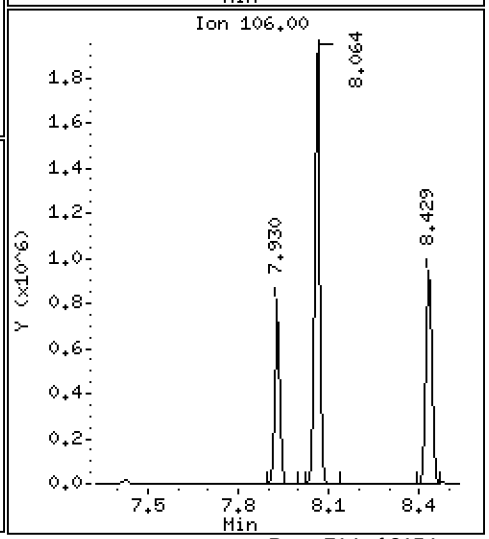












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

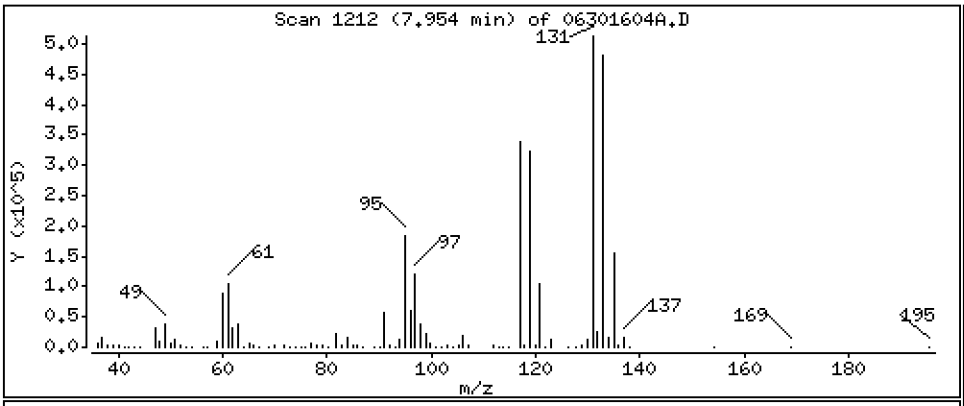
Operator: PB

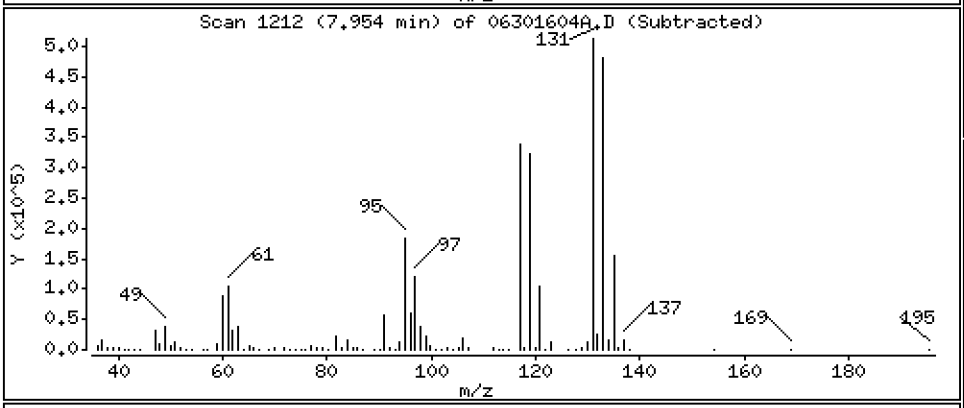
Column phase: RTXVMS

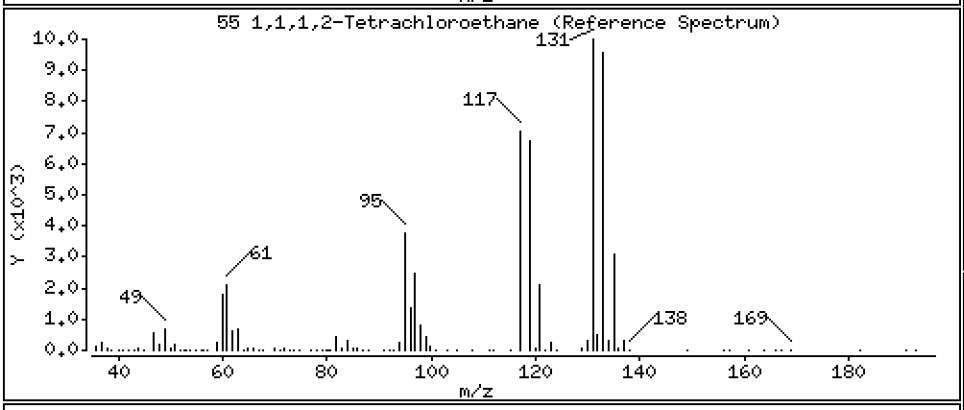
Column diameter: 0.18

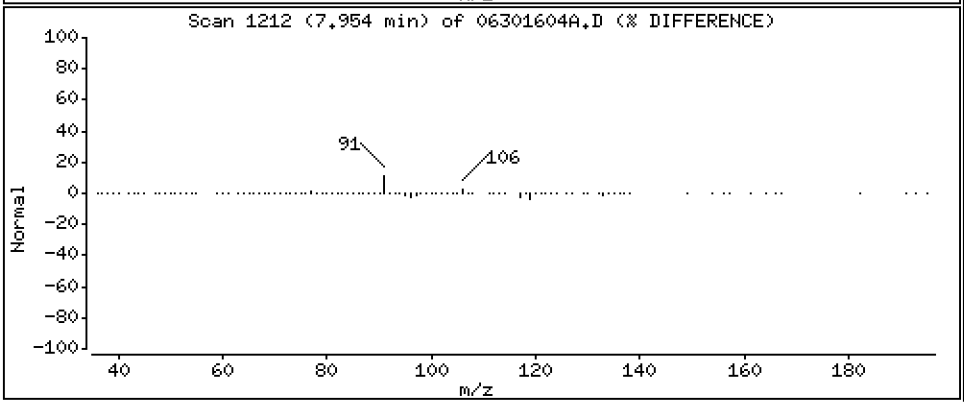
55 1,1,1,2-Tetrachloroethane

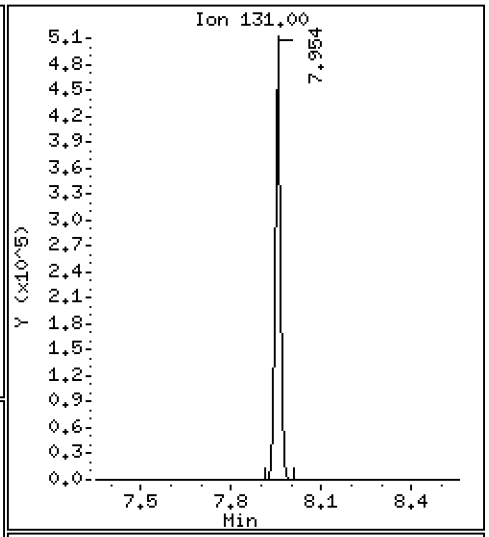
Concentration: 47.289 ug/Kg

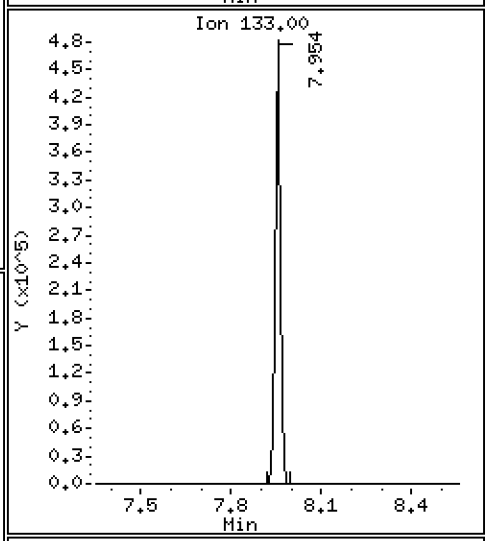


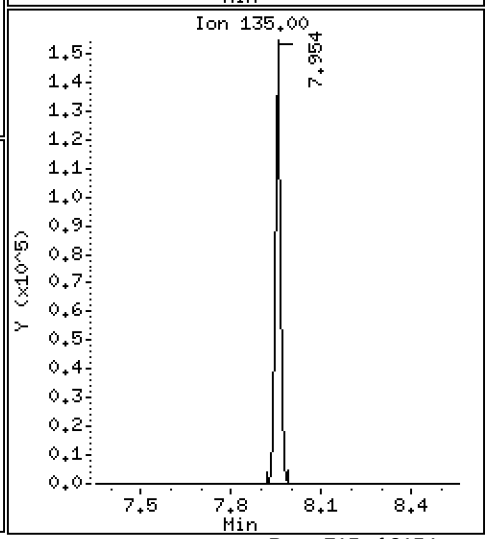












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

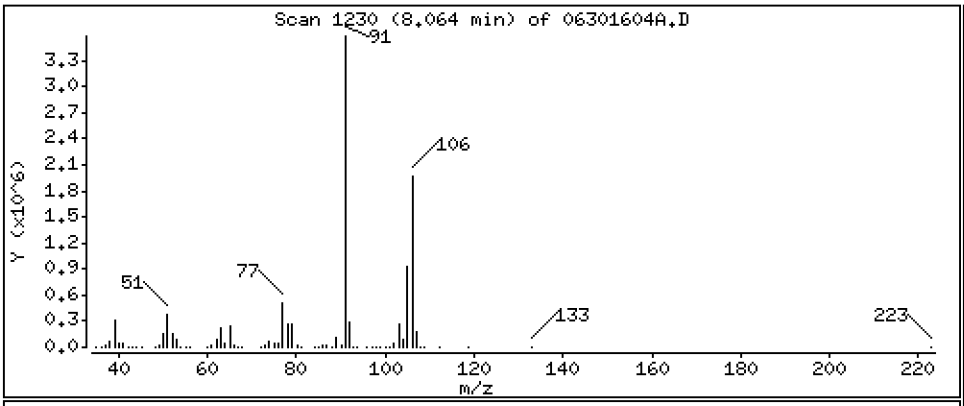
Operator: PB

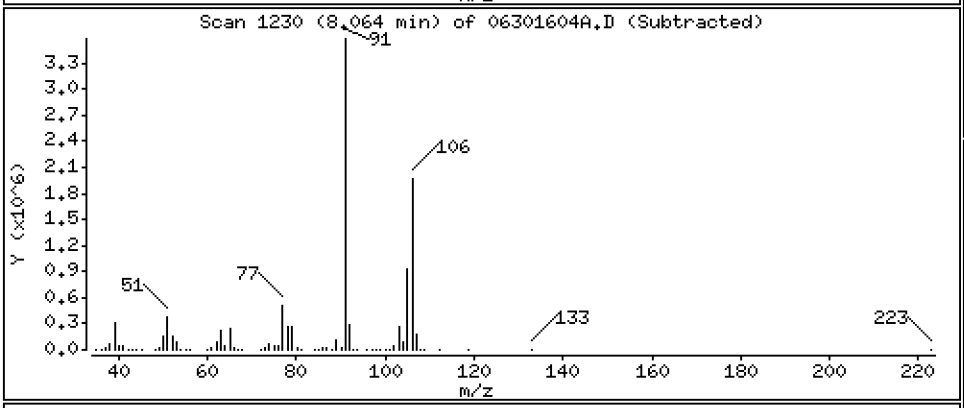
Column phase: RTXVMS

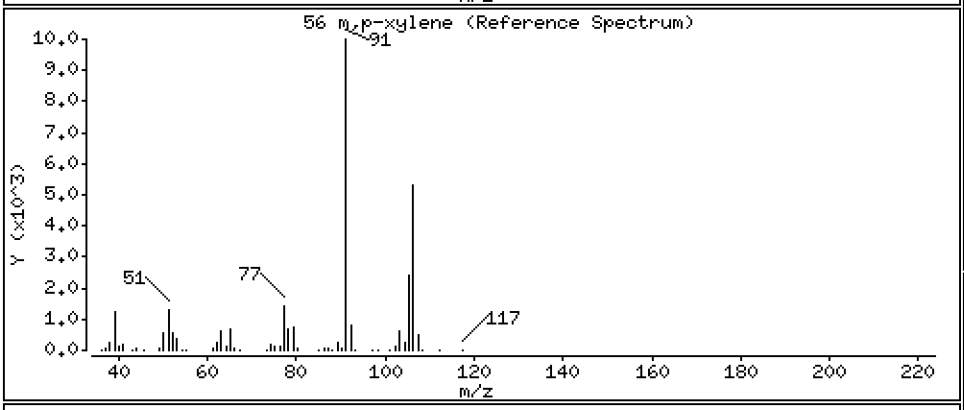
Column diameter: 0.18

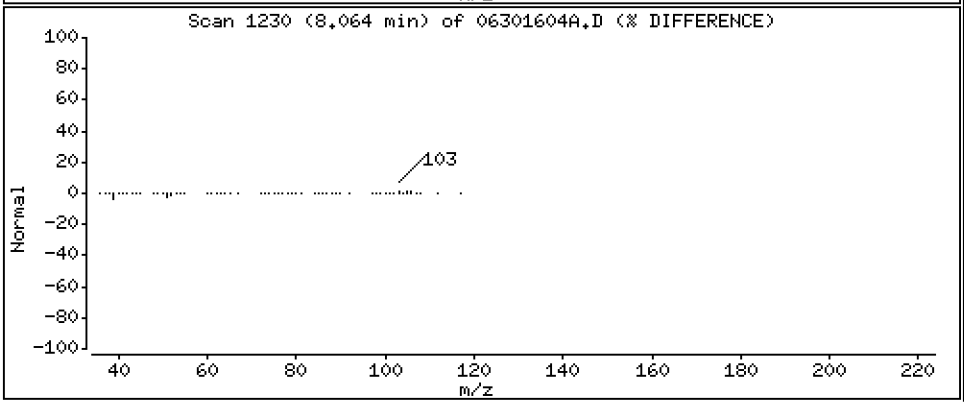
56 m,p-xylene

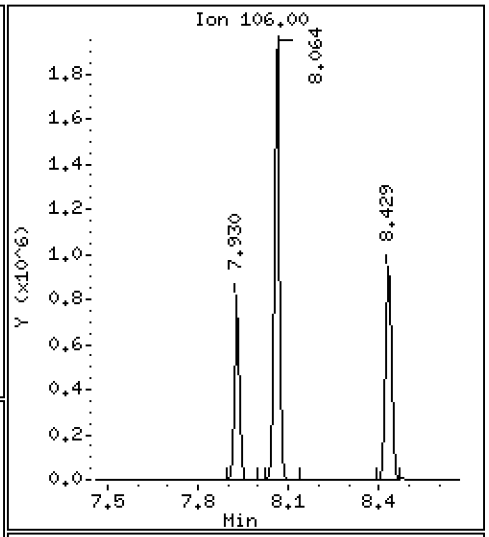
Concentration: 94.214 ug/Kg

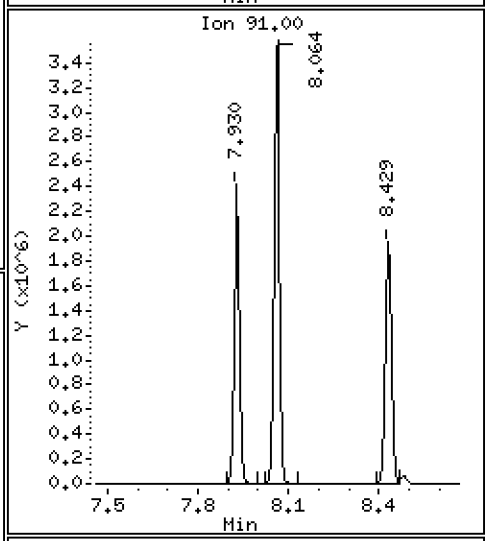


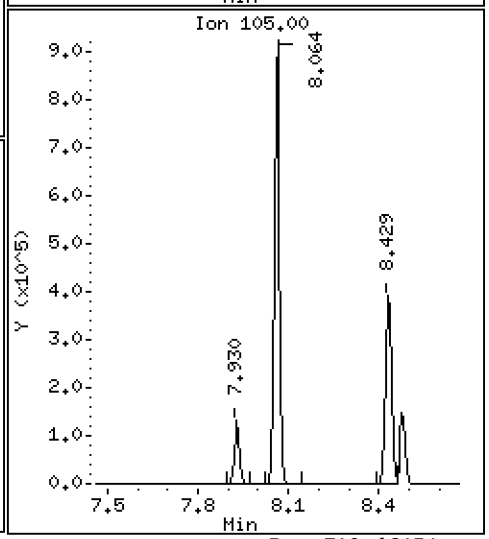












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

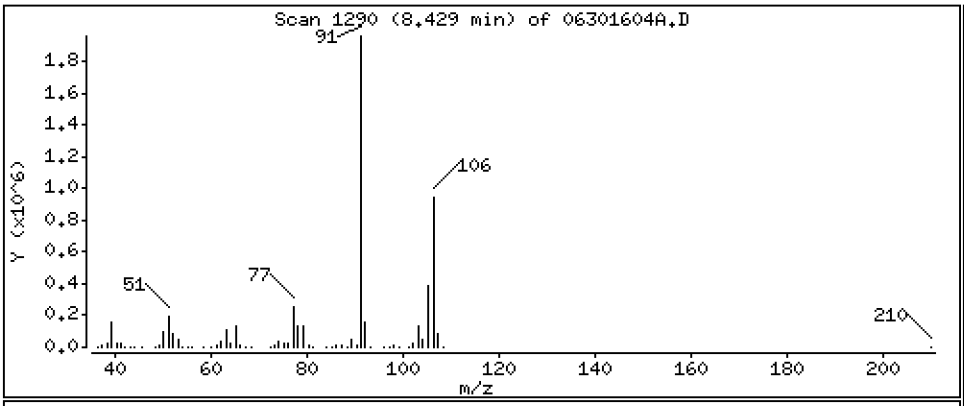
Operator: PB

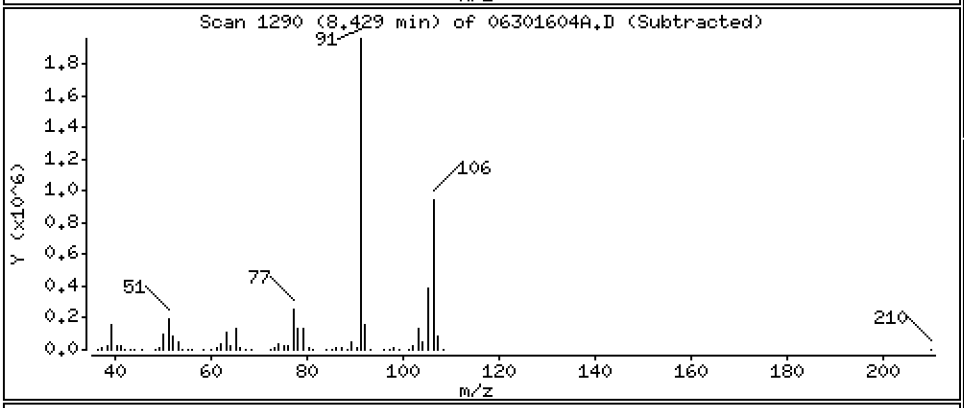
Column phase: RTXVMS

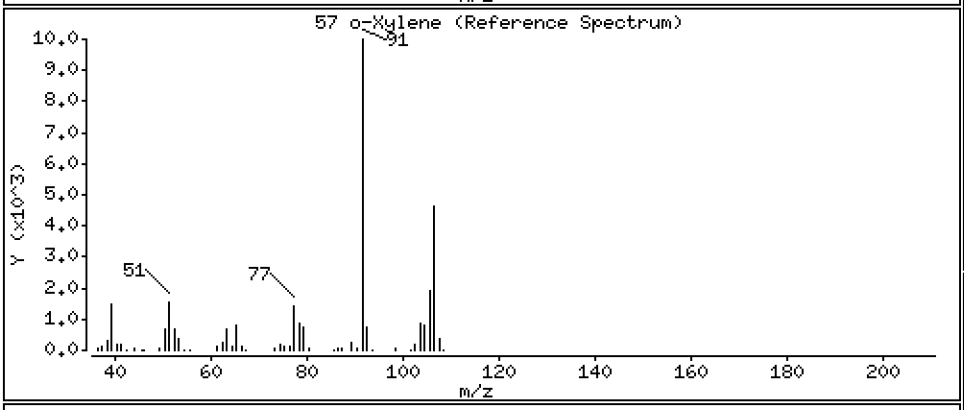
Column diameter: 0.18

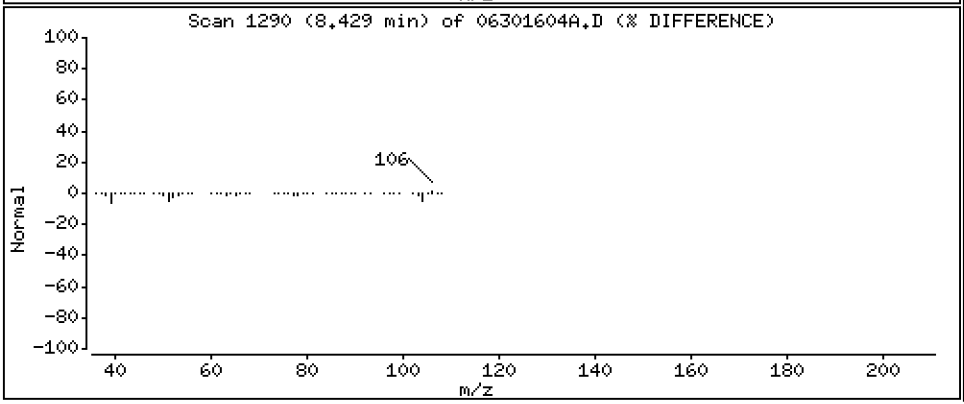
57 o-Xylene

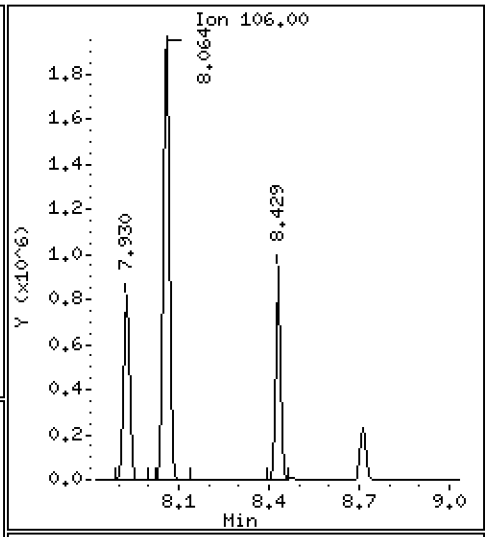
Concentration: 46.218 ug/Kg

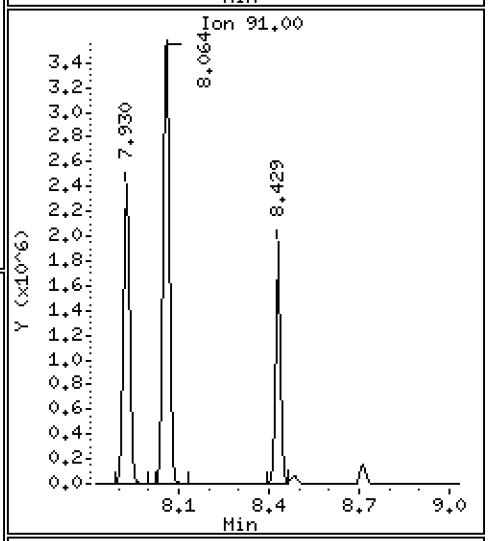


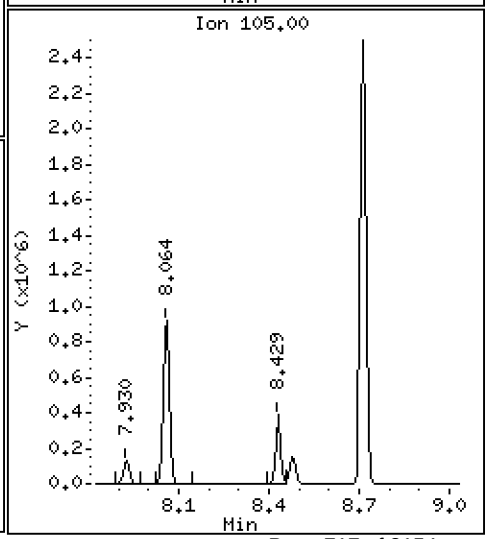












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

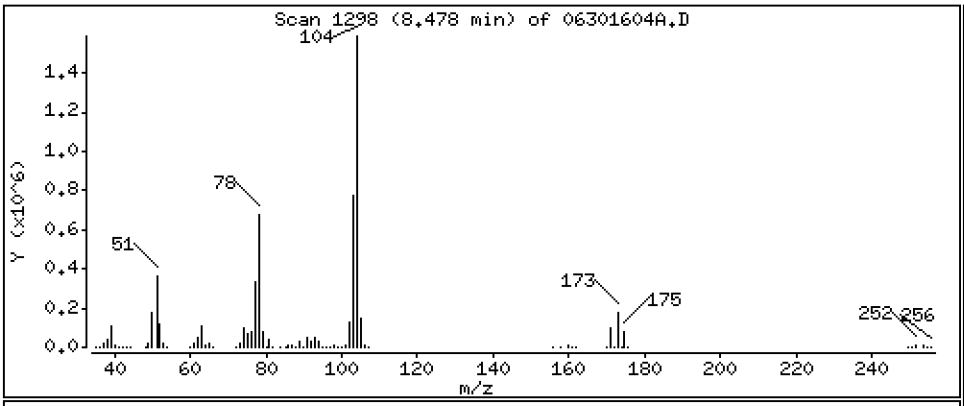
Operator: PB

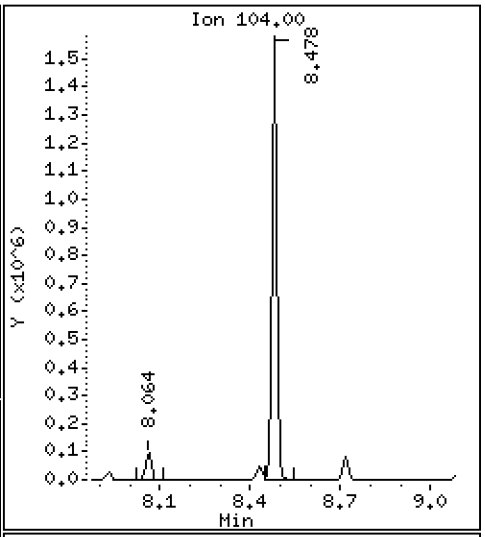
Column phase: RTXVMS

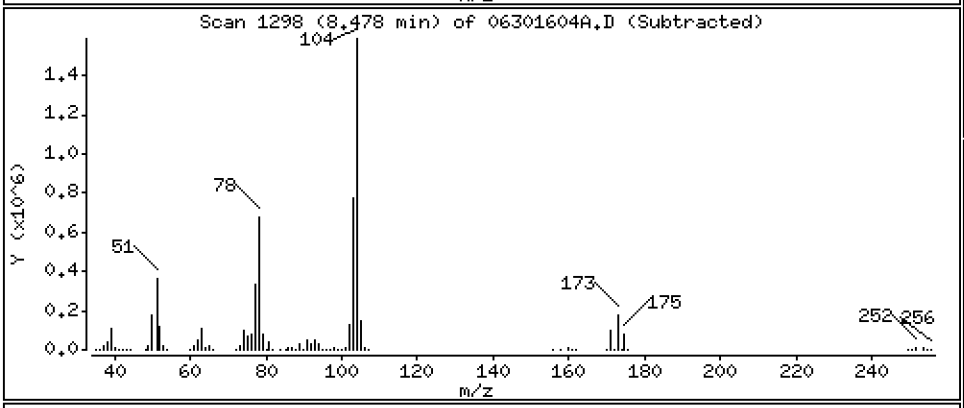
Column diameter: 0.18

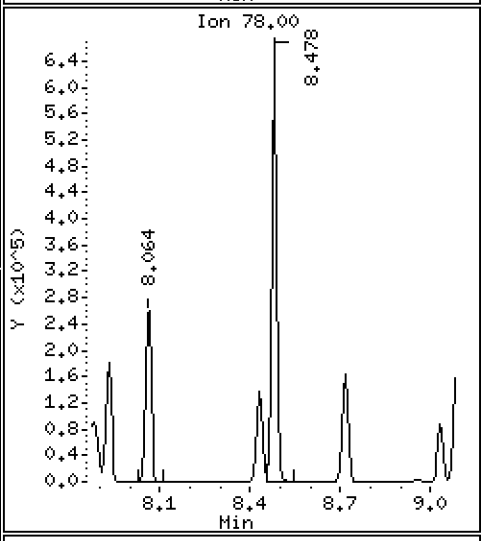
58 Styrene

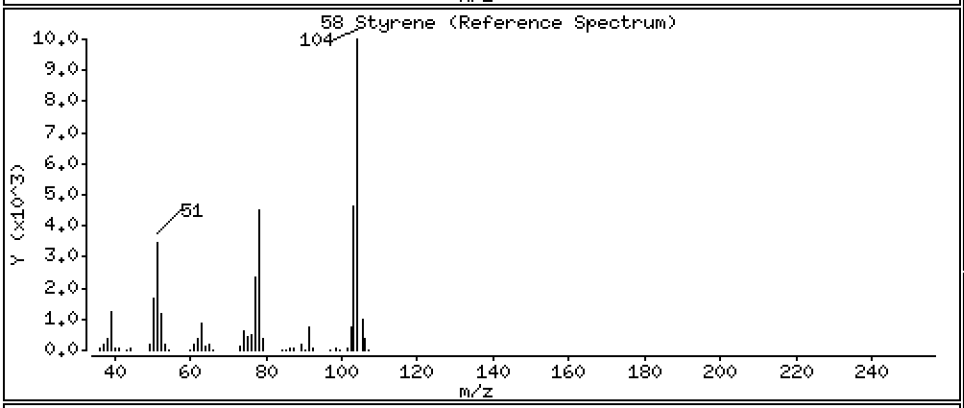
Concentration: 47.176 ug/Kg

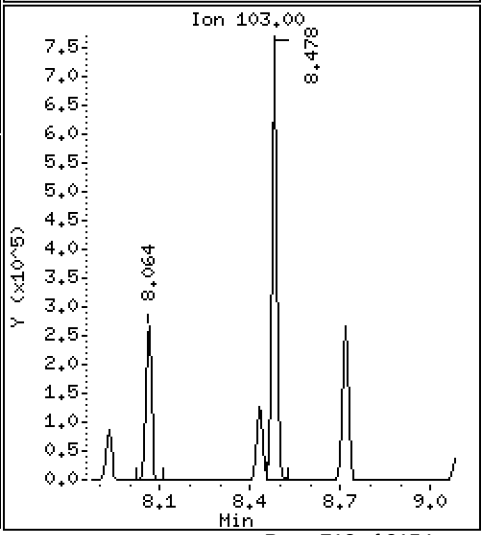


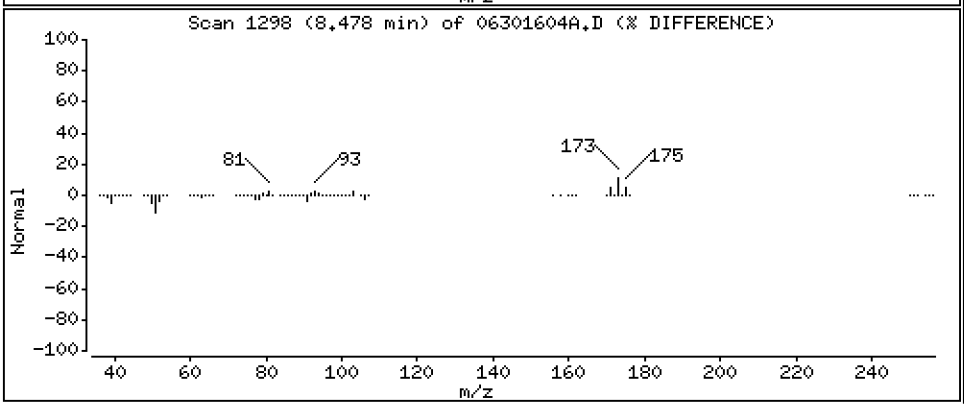












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

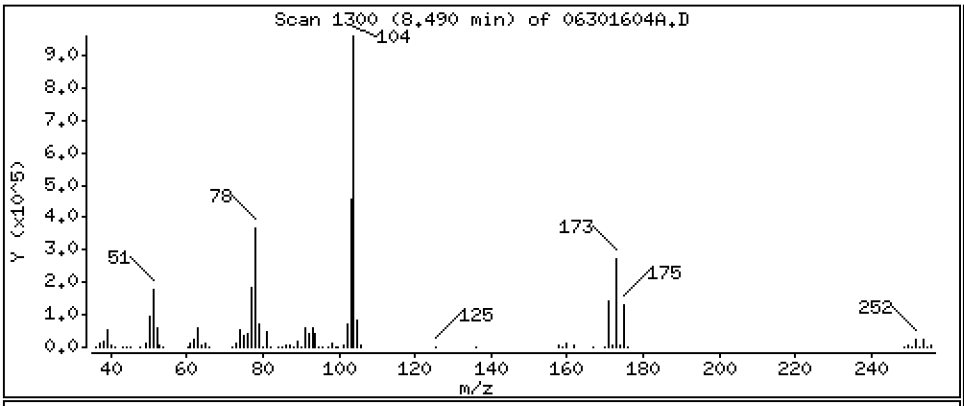
Operator: PB

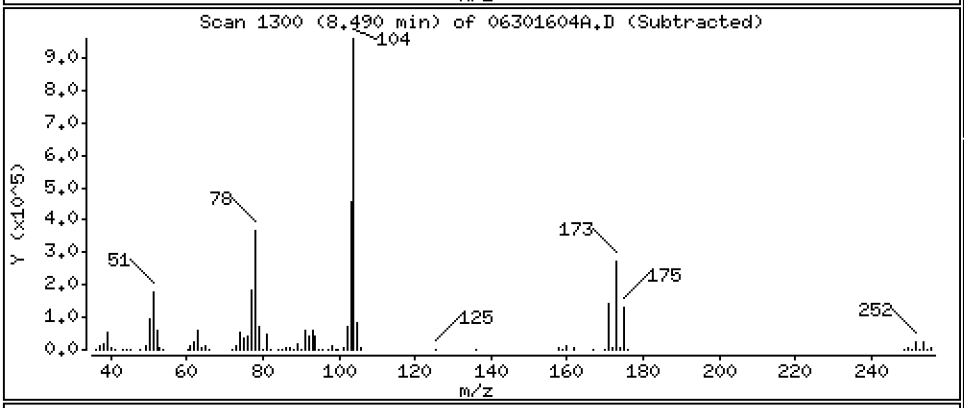
Column phase: RTXVMS

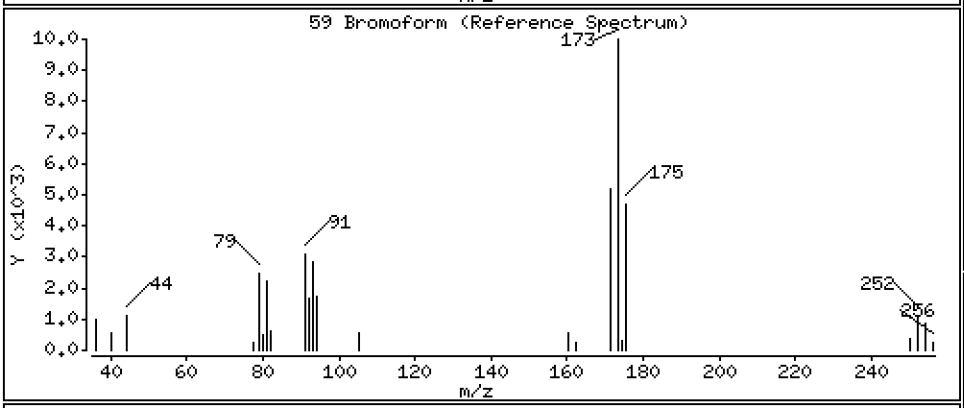
Column diameter: 0.18

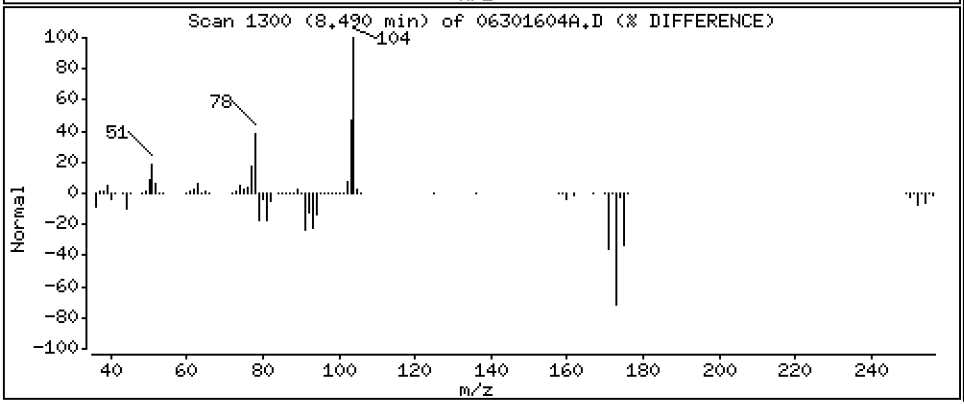
59 Bromoform

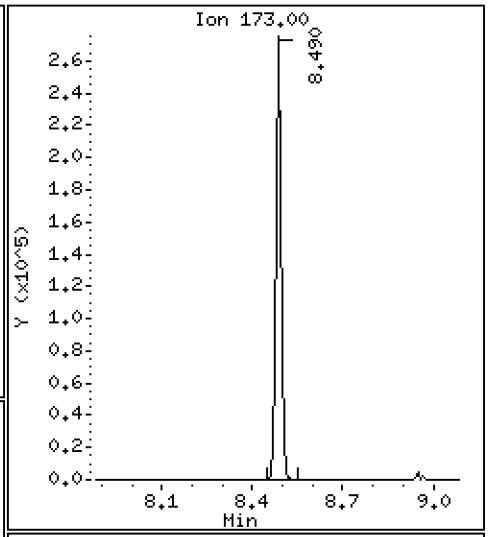
Concentration: 46.833 ug/Kg

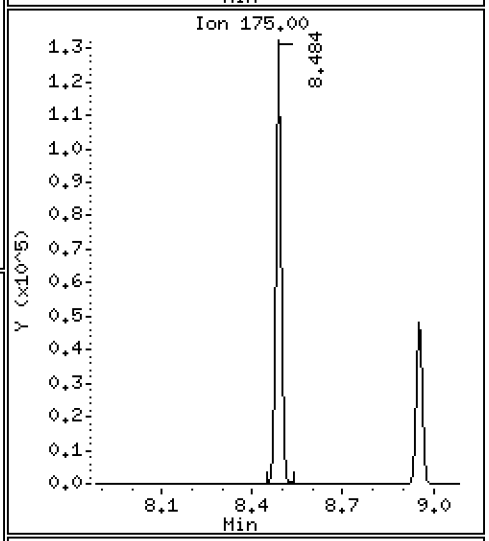


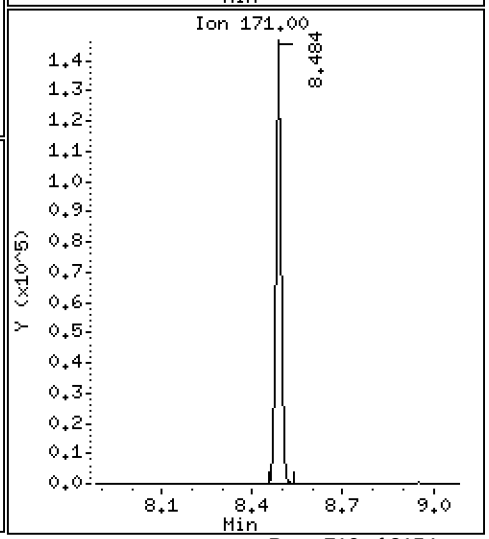












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

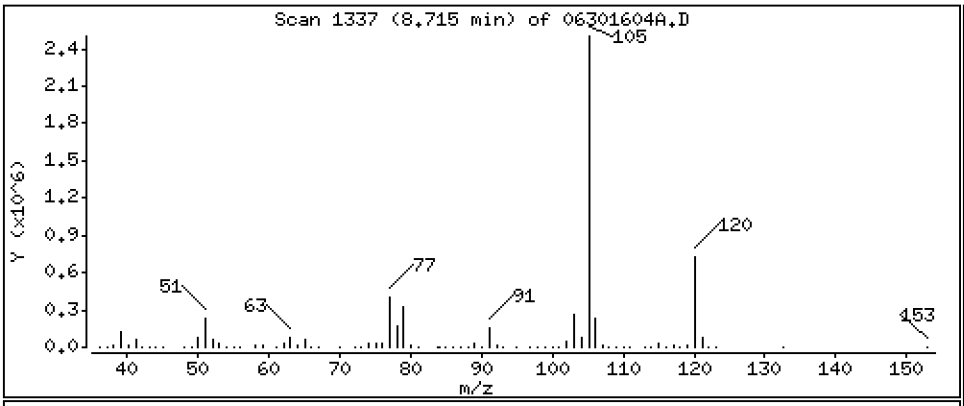
Operator: PB

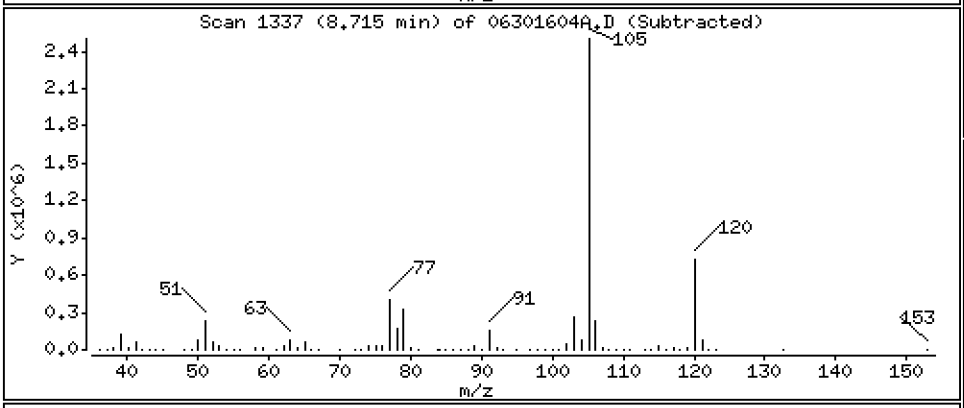
Column phase: RTXVMS

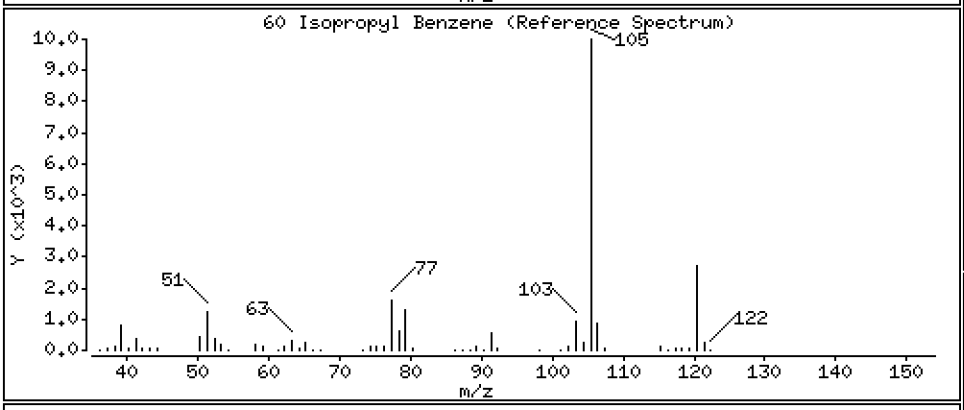
Column diameter: 0.18

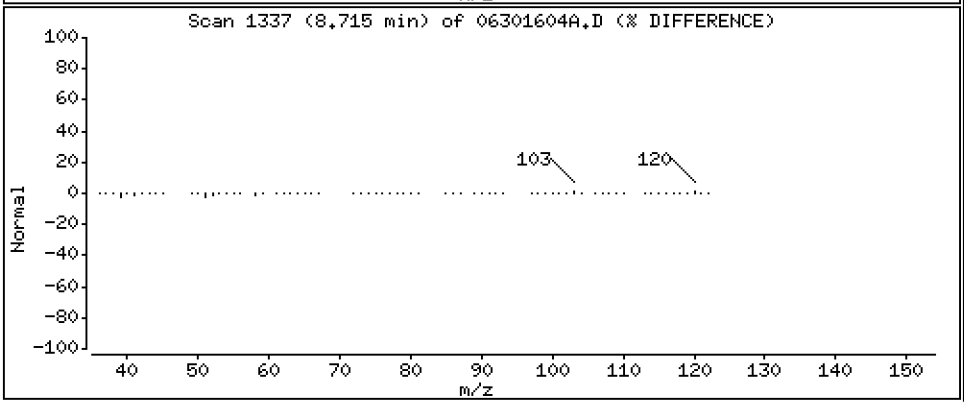
60 Isopropyl Benzene

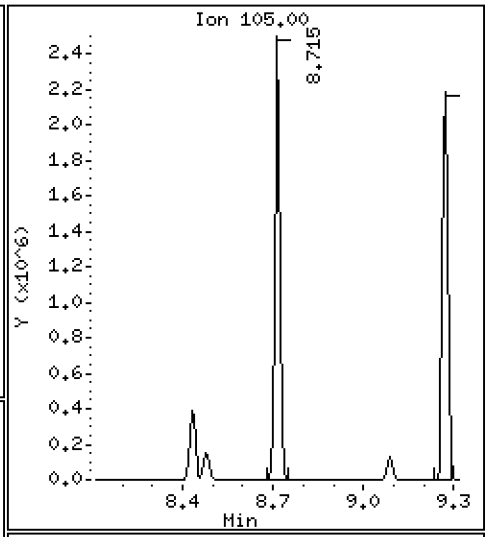
Concentration: 45.784 ug/Kg

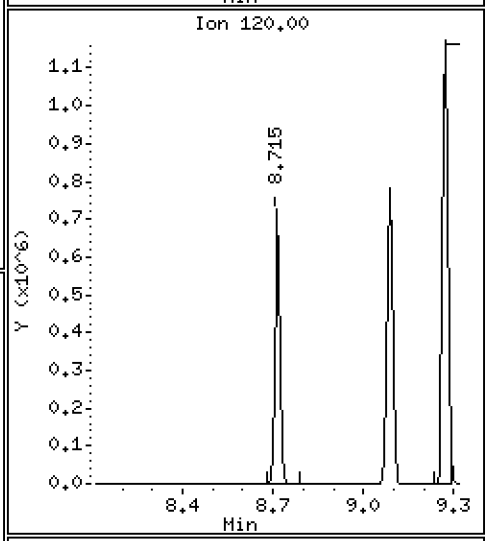


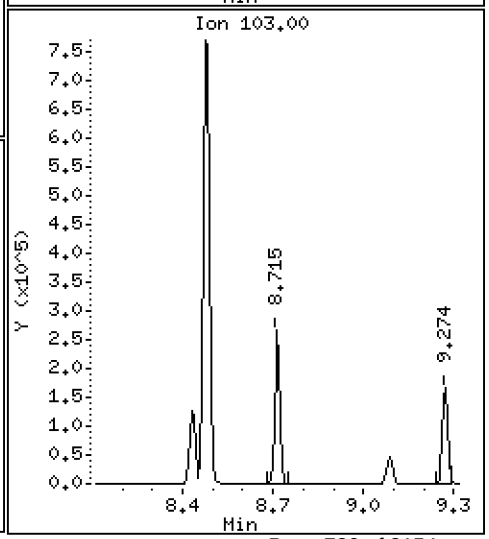












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

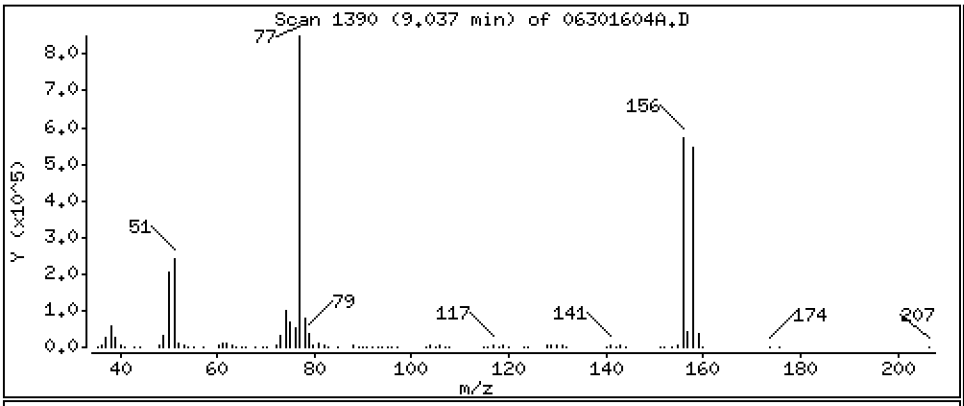
Operator: PB

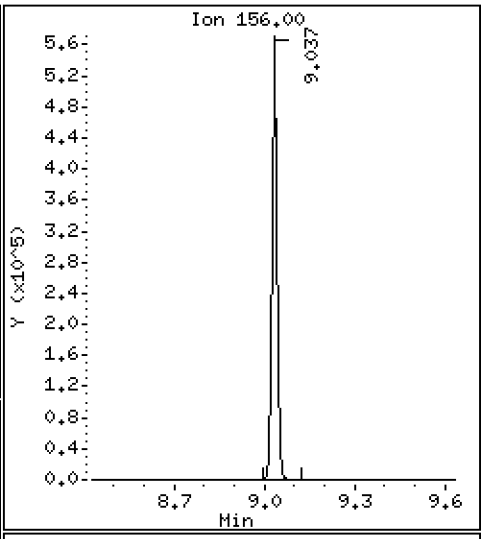
Column phase: RTXVMS

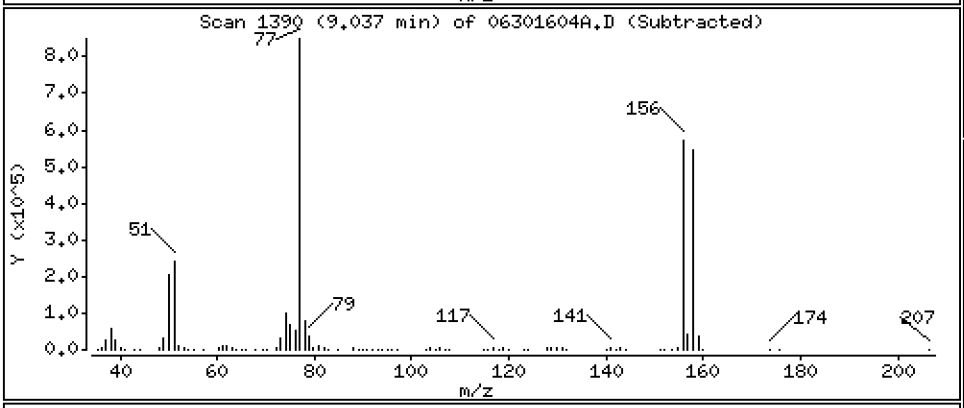
Column diameter: 0.18

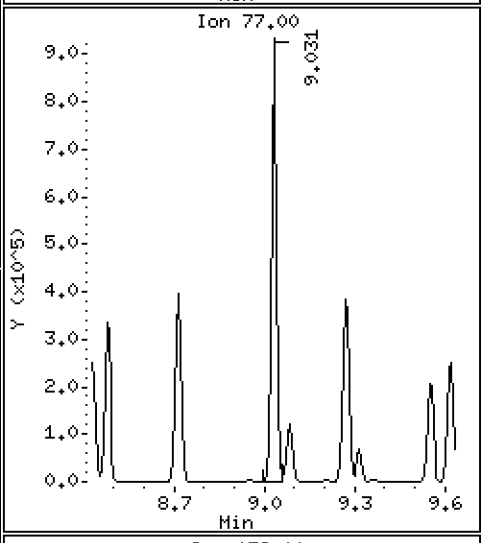
63 Bromobenzene

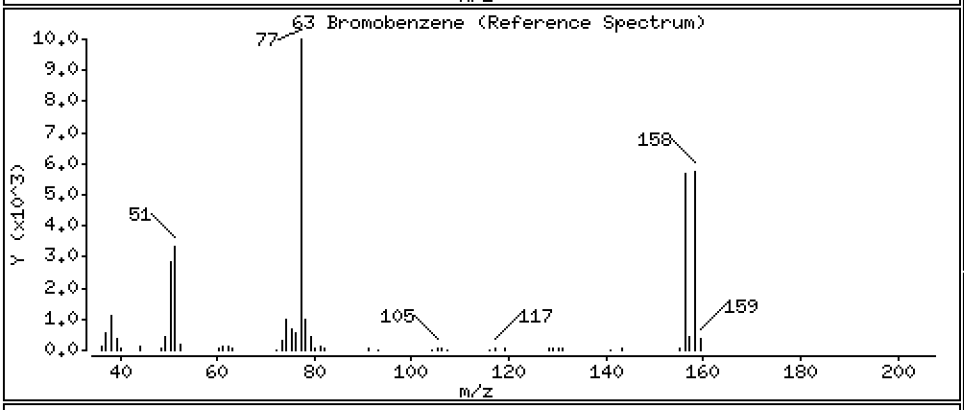
Concentration: 46.810 ug/Kg

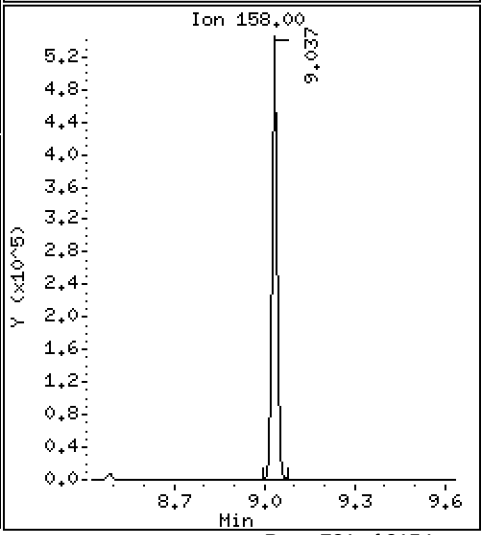


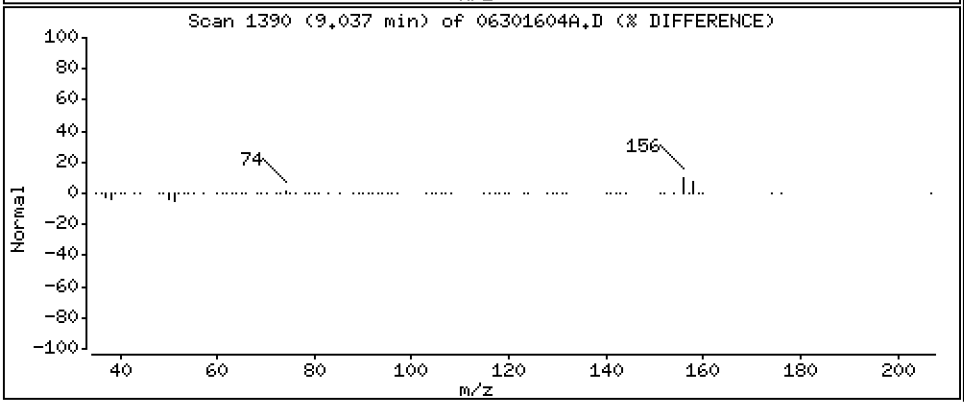












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

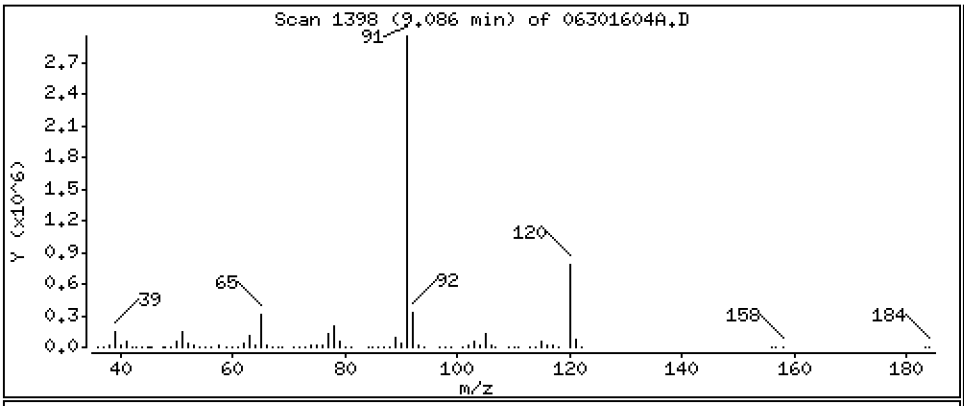
Operator: PB

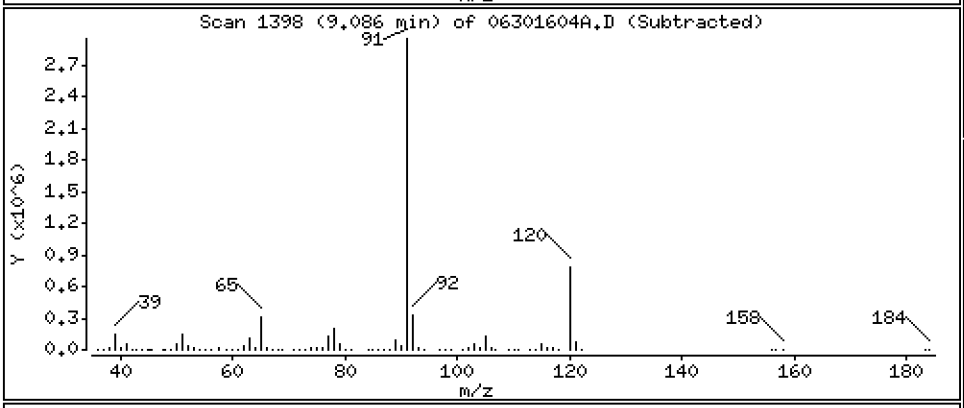
Column phase: RTXVMS

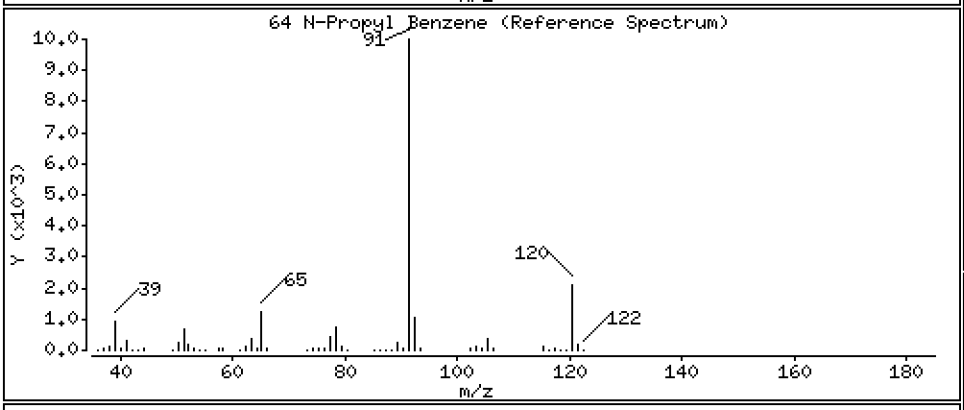
Column diameter: 0.18

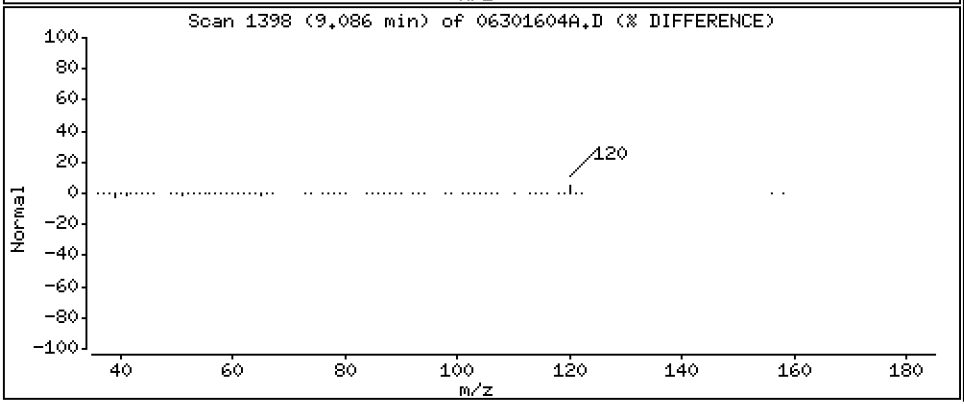
64 N-Propyl Benzene

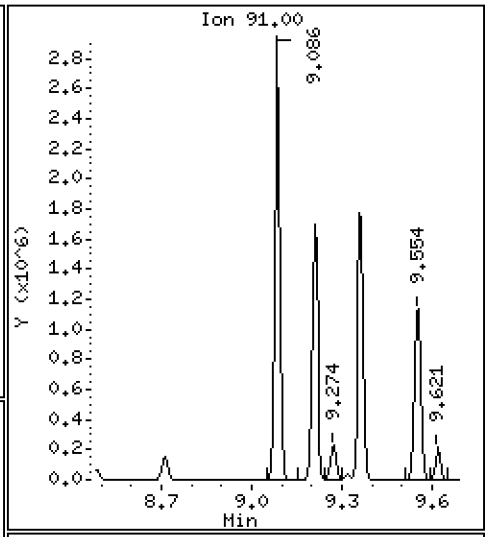
Concentration: 44.226 ug/Kg

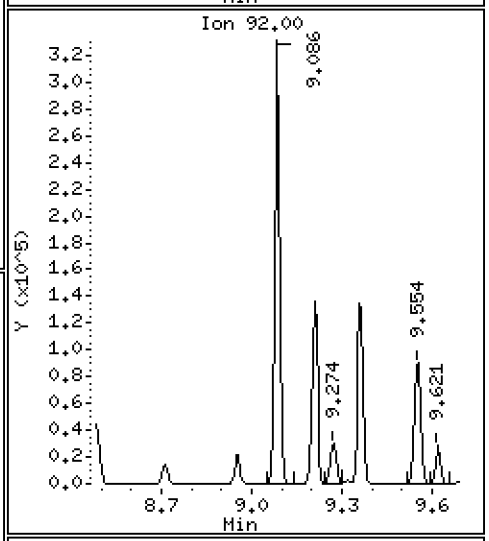


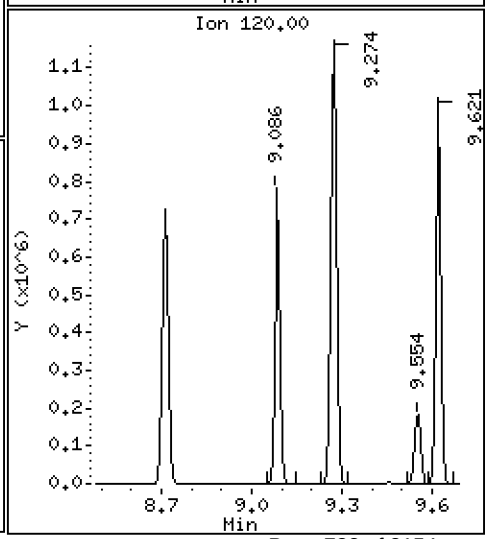












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

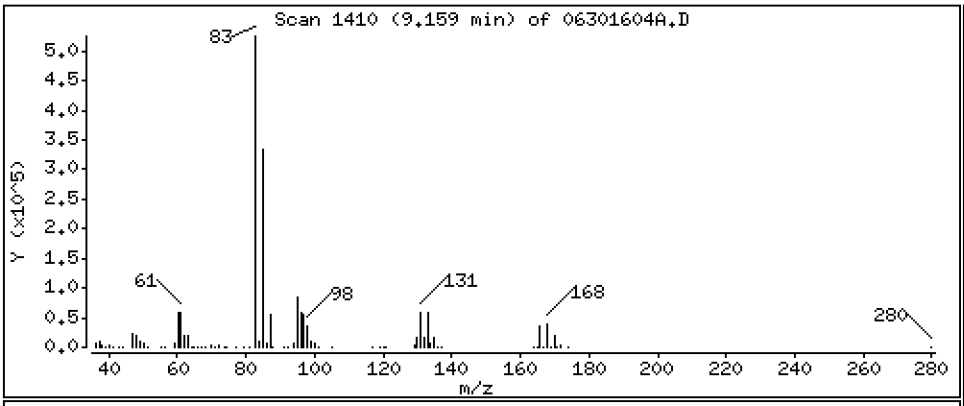
Operator: PB

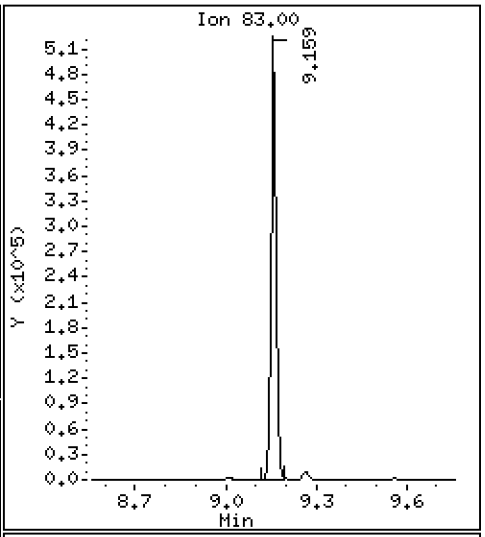
Column phase: RTXVMS

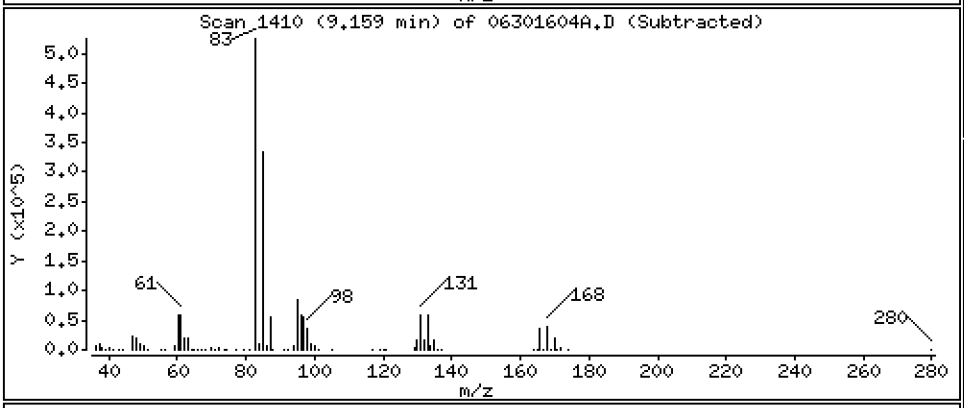
Column diameter: 0.18

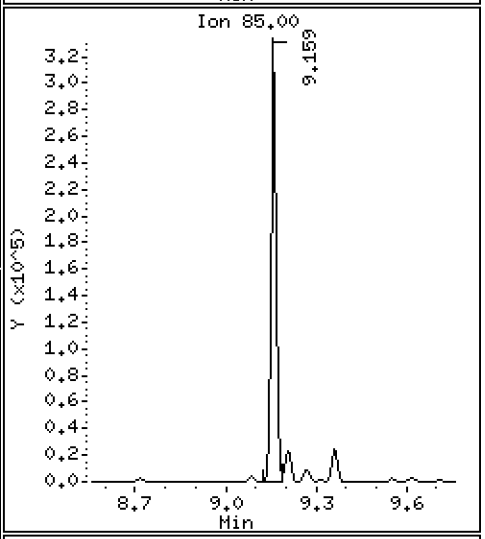
65 1,1,2,2-Tetrachloroethane

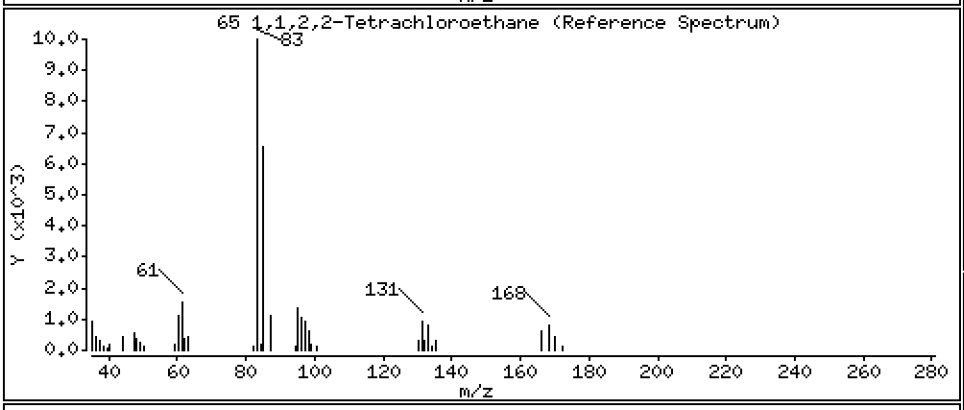
Concentration: 41.142 ug/Kg

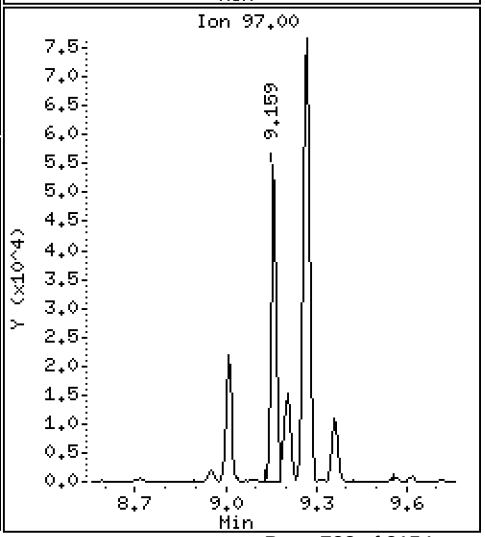


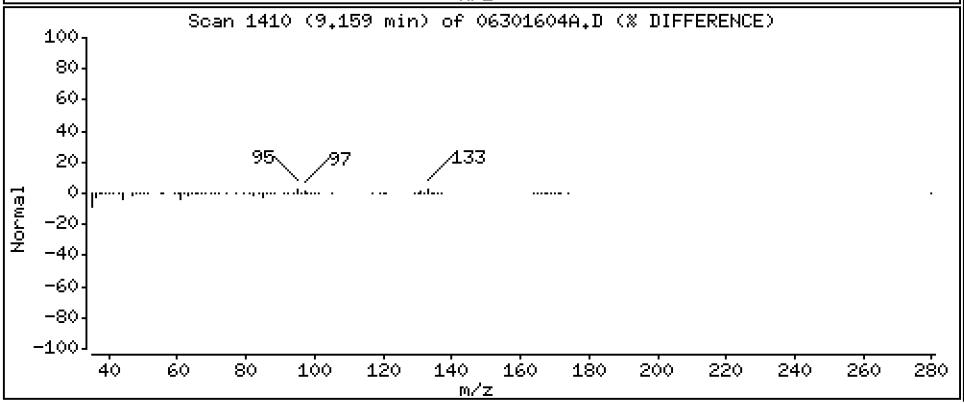












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

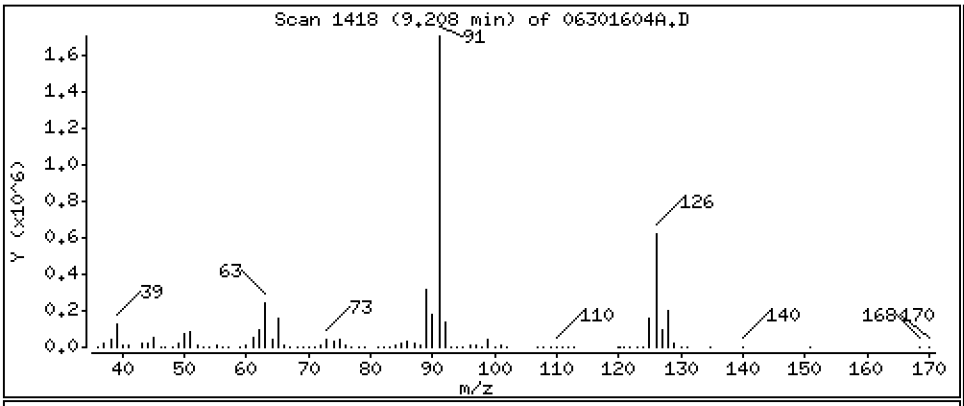
Operator: PB

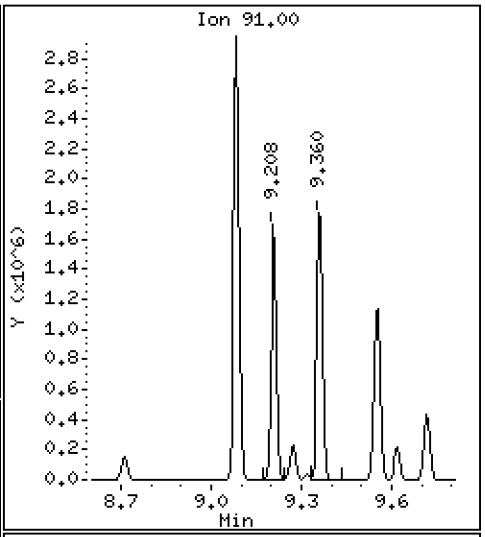
Column phase: RTXVMS

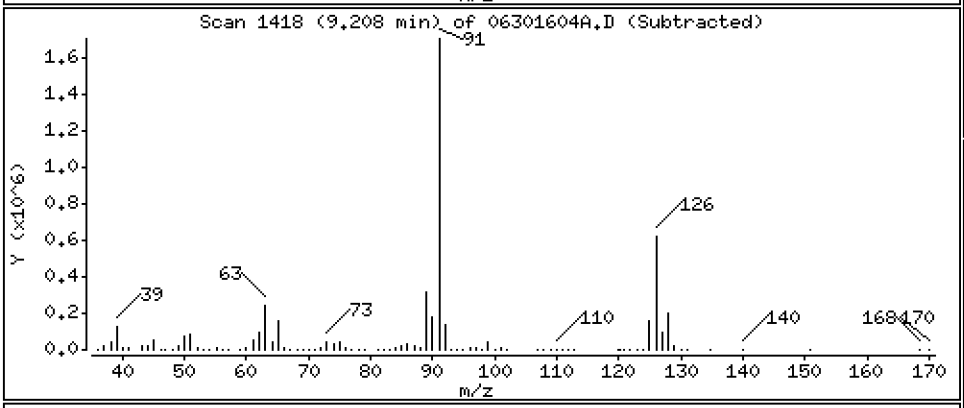
Column diameter: 0.18

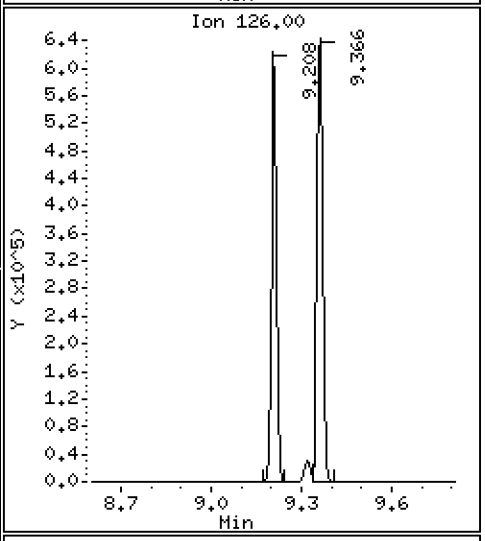
66 2-Chloro Toluene

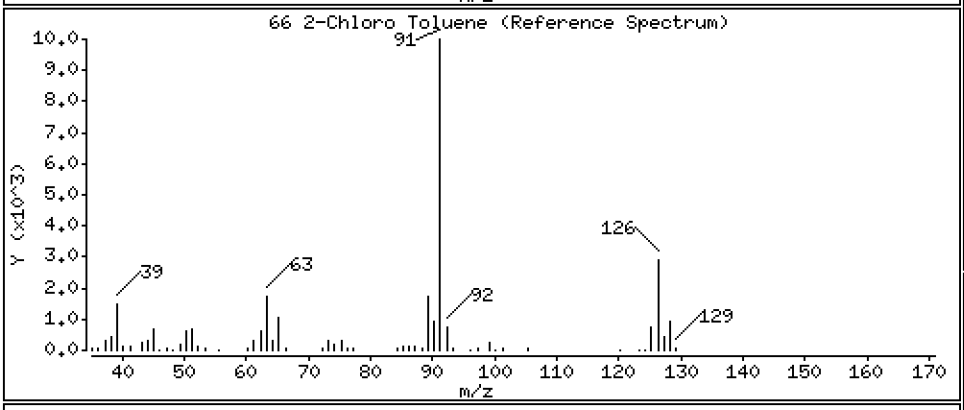
Concentration: 44.543 ug/Kg

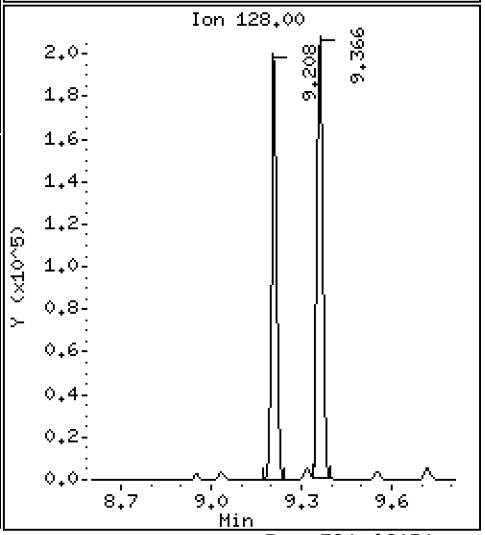


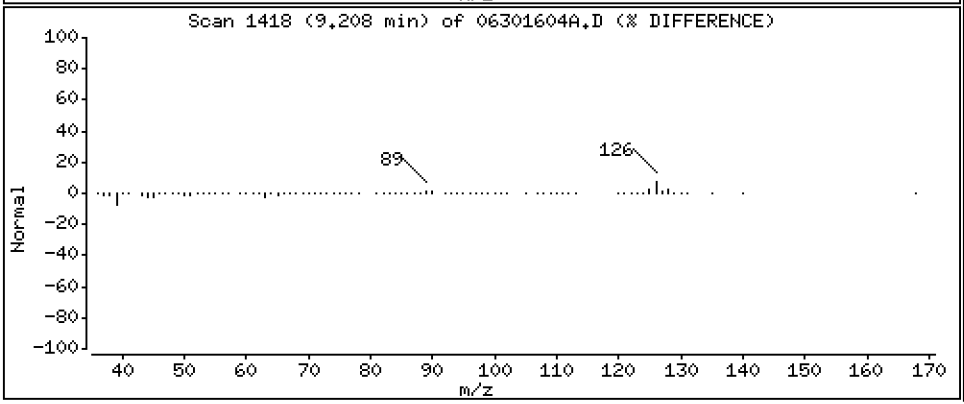












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

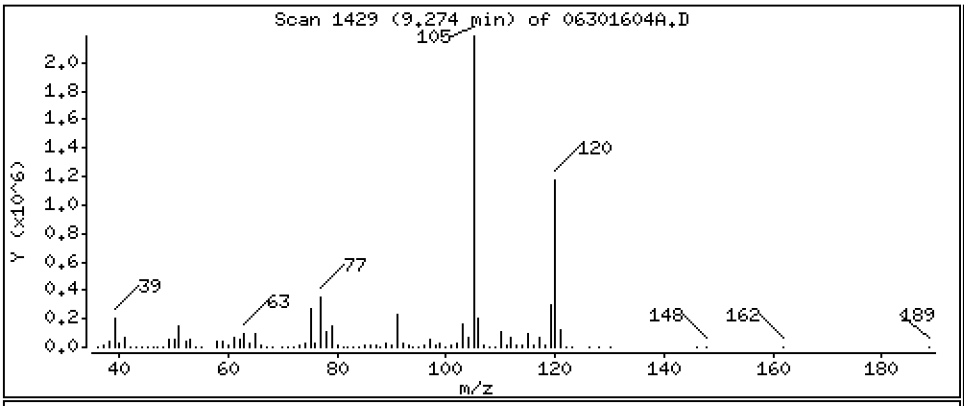
Operator: PB

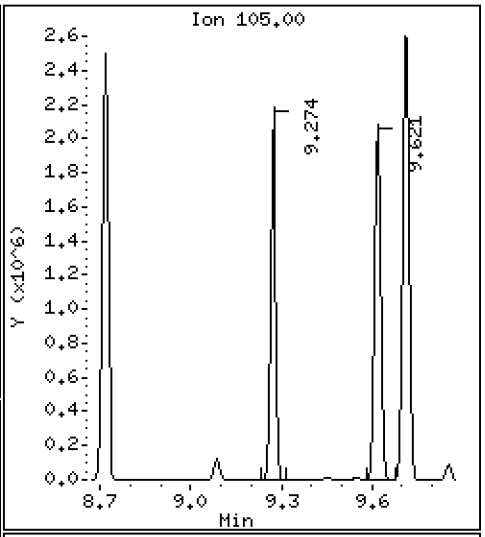
Column phase: RTXVMS

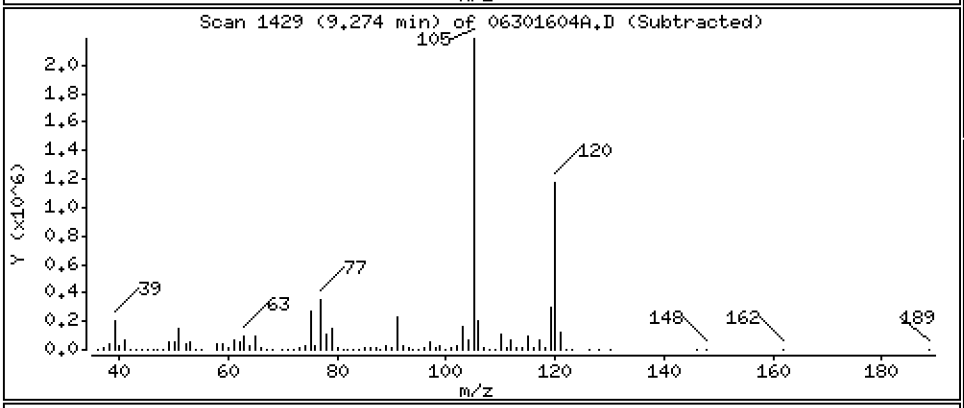
Column diameter: 0.18

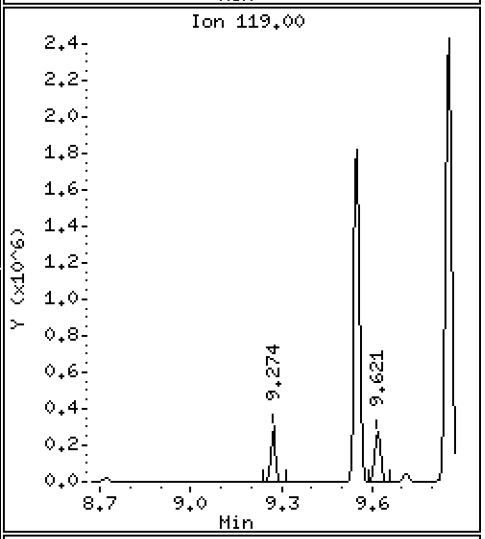
67 1,3,5-Trimethyl Benzene

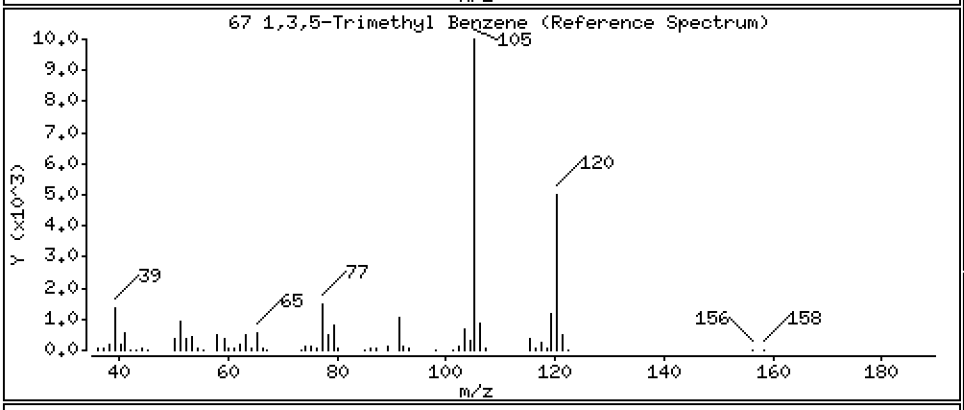
Concentration: 46.117 ug/Kg

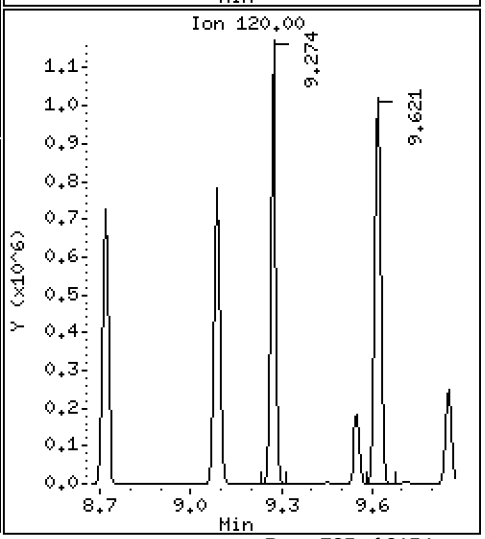


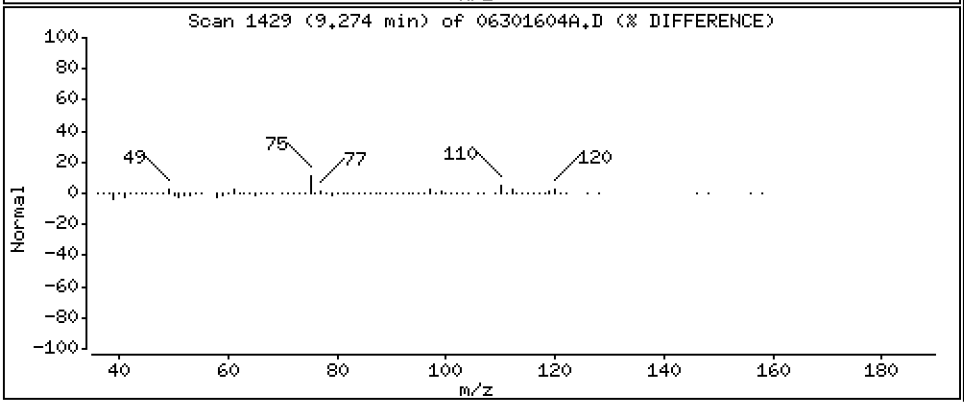












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

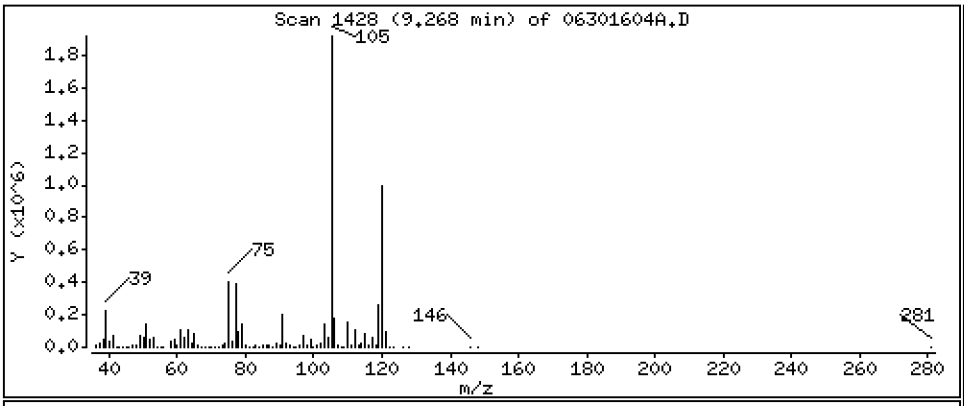
Operator: PB

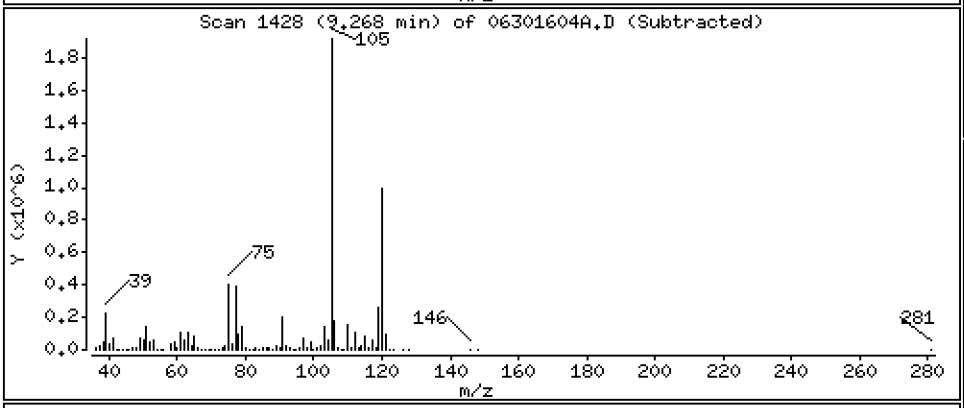
Column phase: RTXVMS

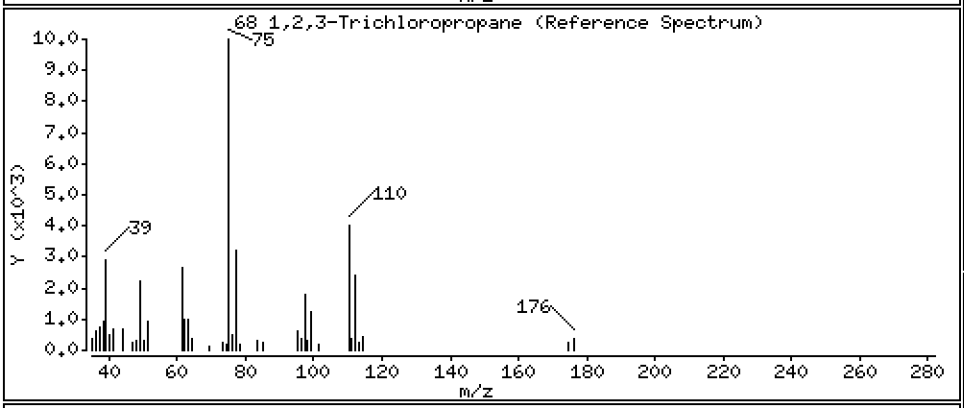
Column diameter: 0.18

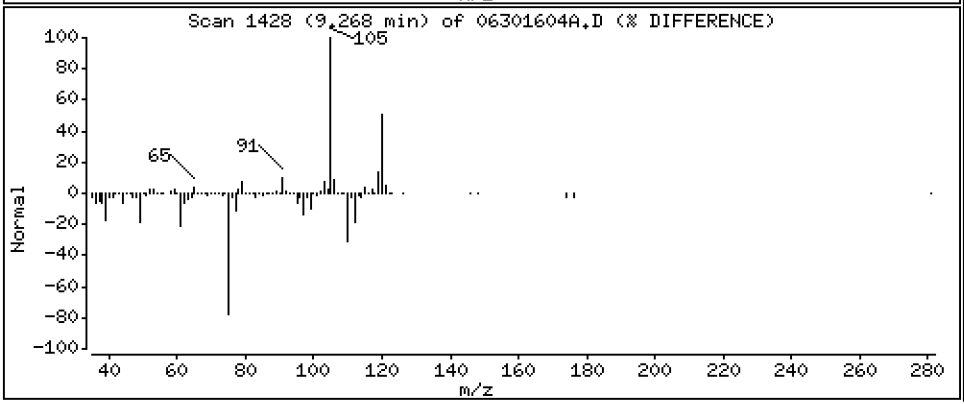
68 1,2,3-Trichloropropane

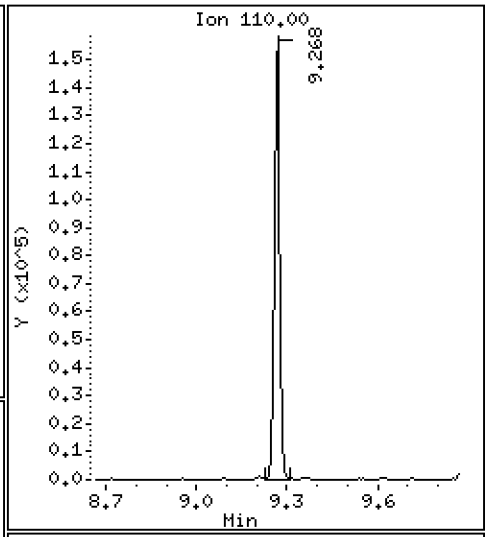
Concentration: 43.841 ug/Kg

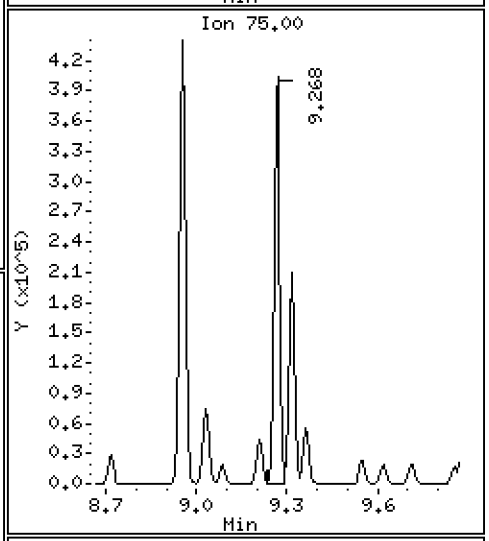


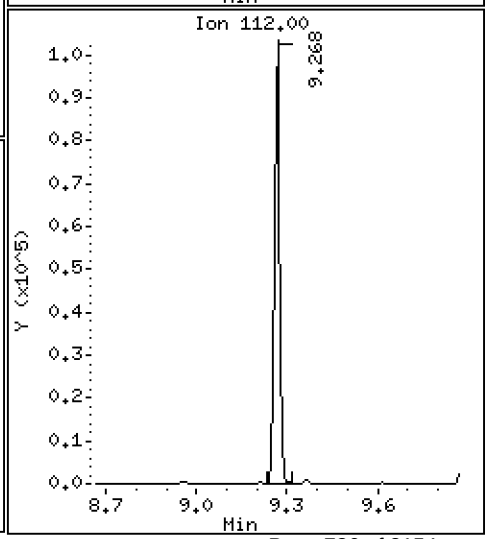












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

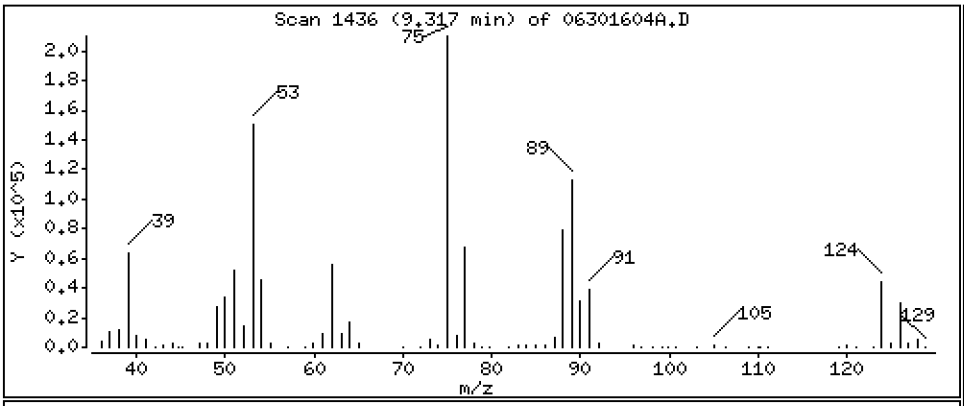
Operator: PB

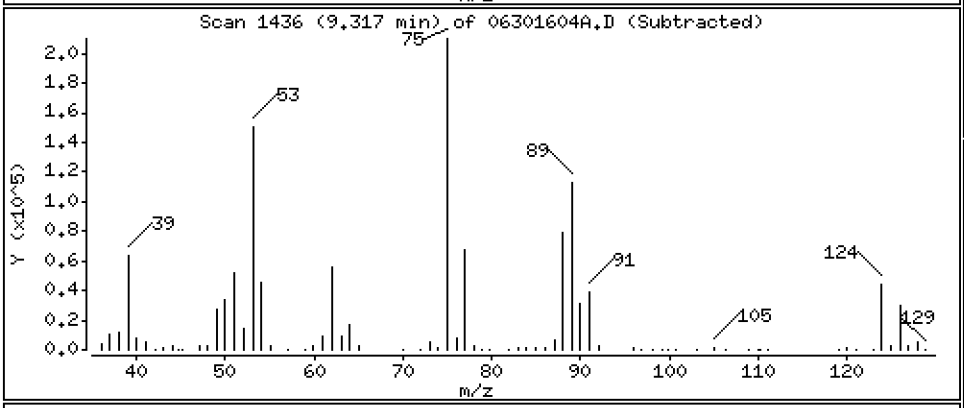
Column phase: RTXVMS

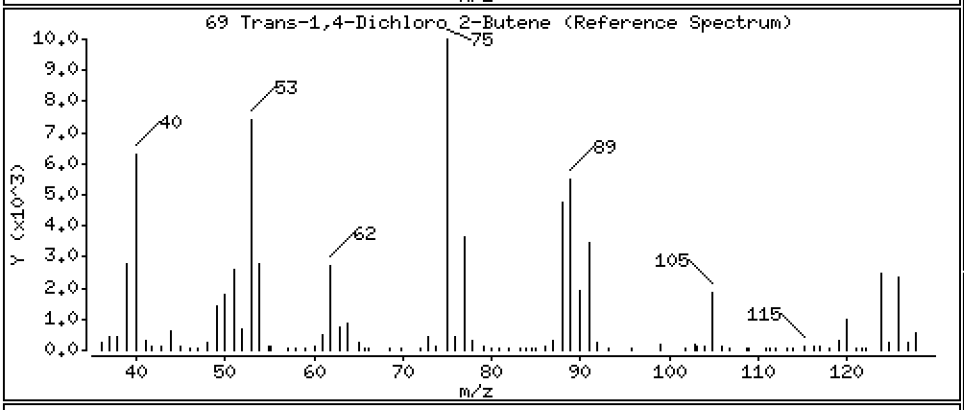
Column diameter: 0.18

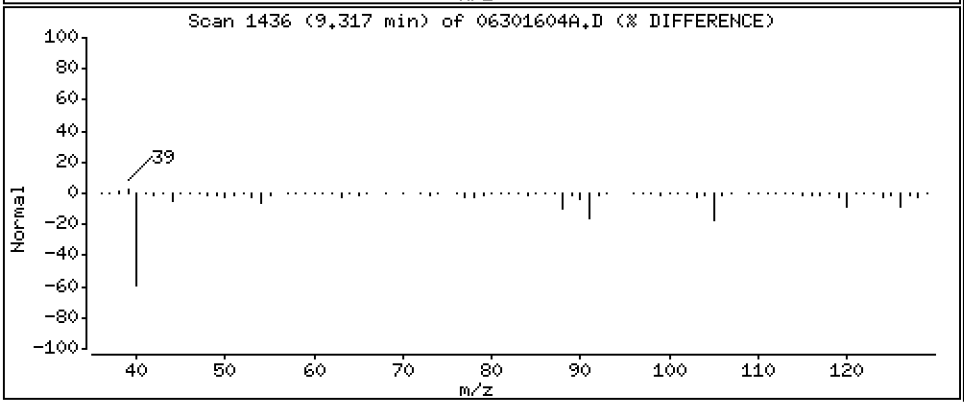
69 Trans-1,4-Dichloro 2-Butene

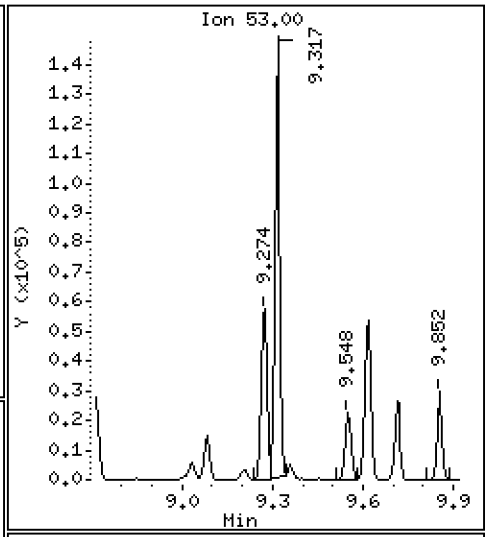
Concentration: 40.423 ug/Kg

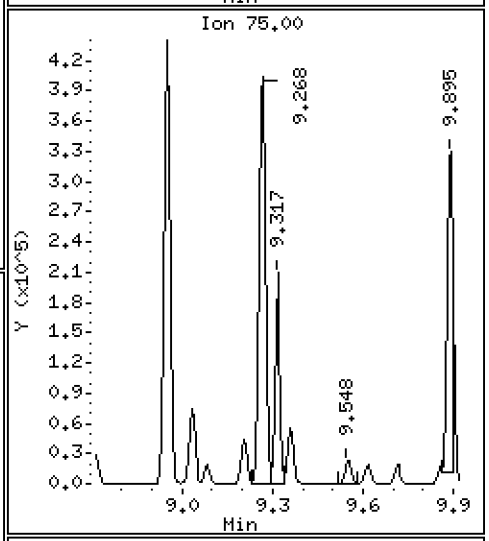


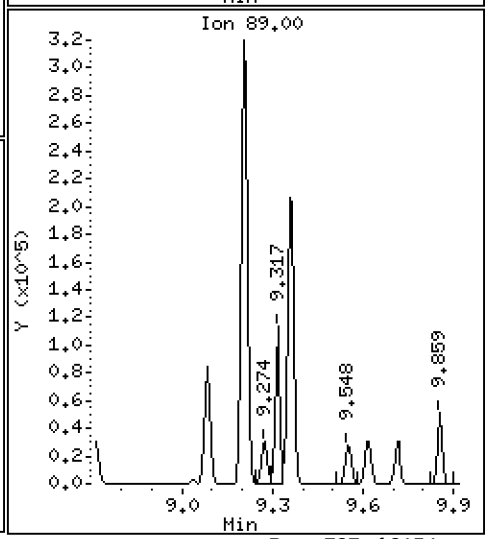












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

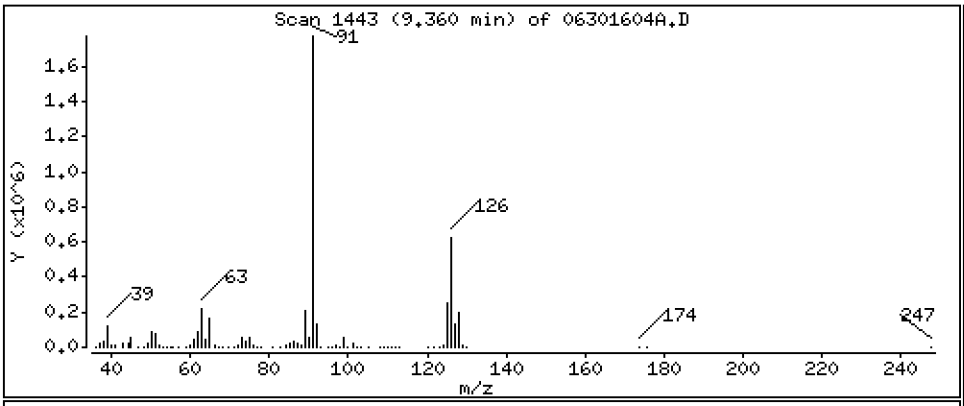
Operator: PB

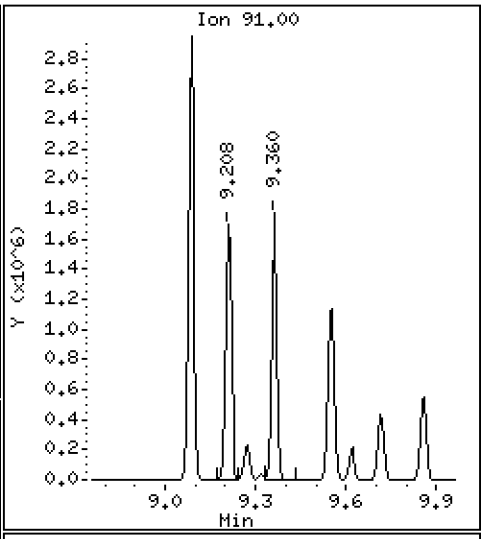
Column phase: RTXVMS

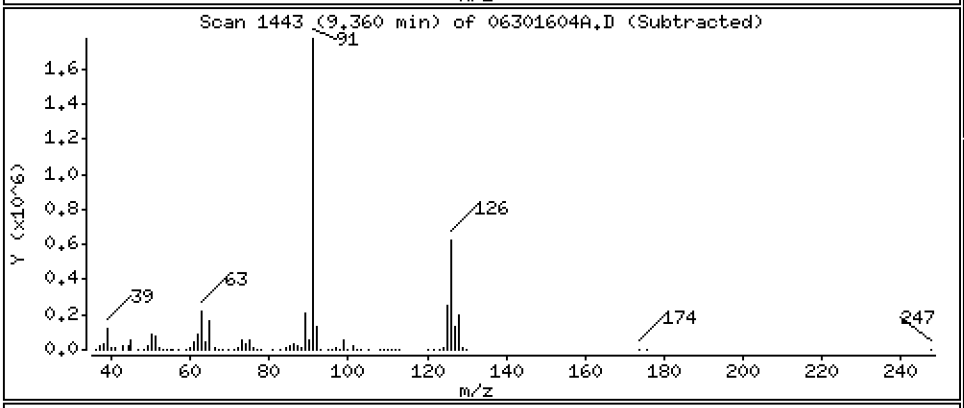
Column diameter: 0.18

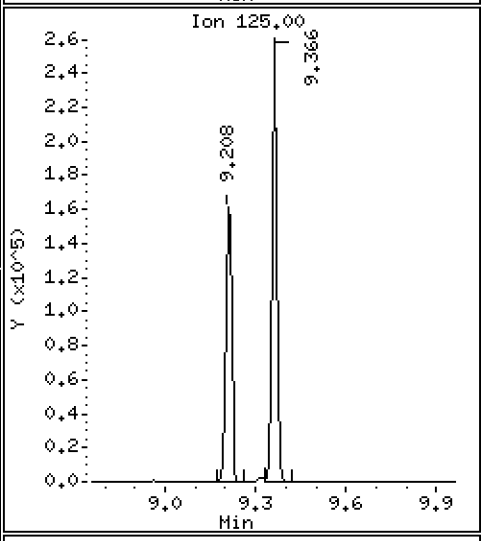
70 4-Chloro Toluene

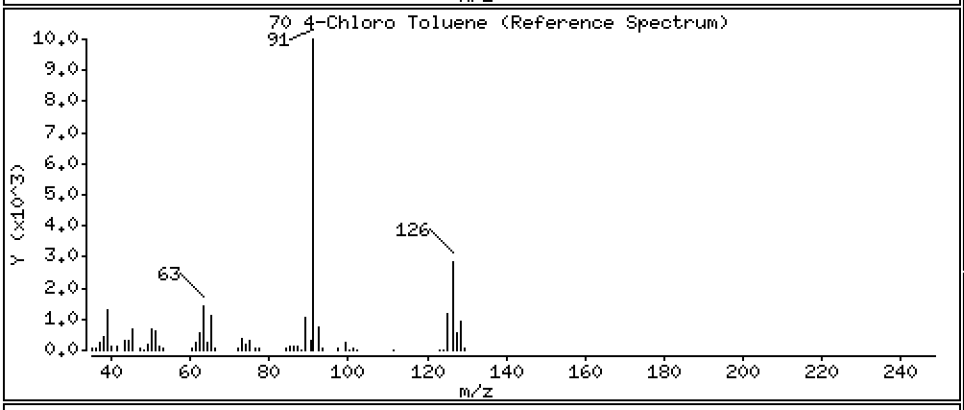
Concentration: 45.495 ug/Kg

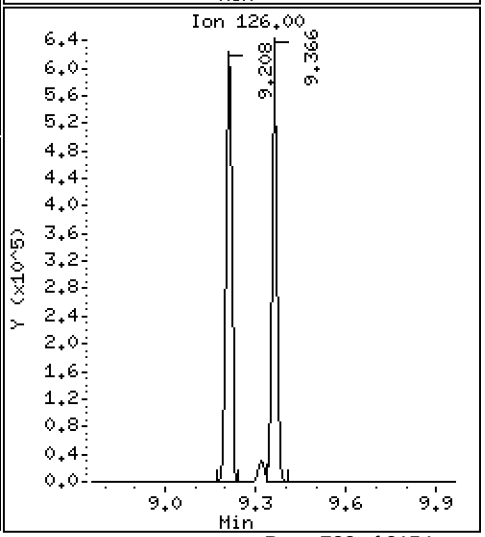


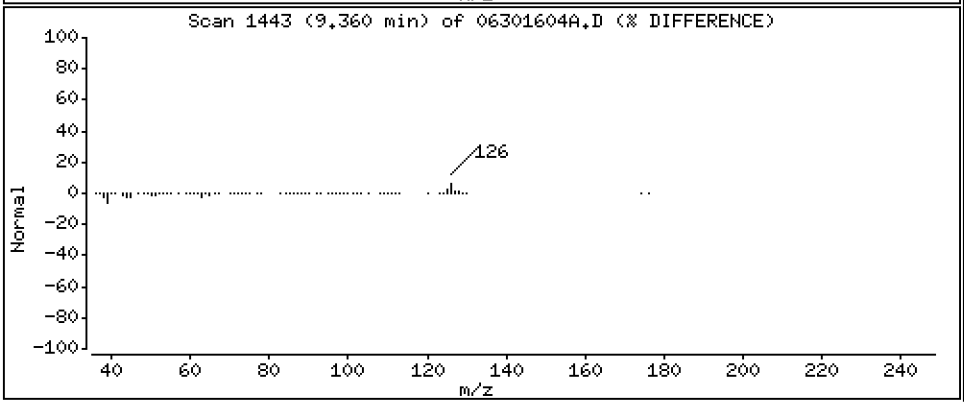












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

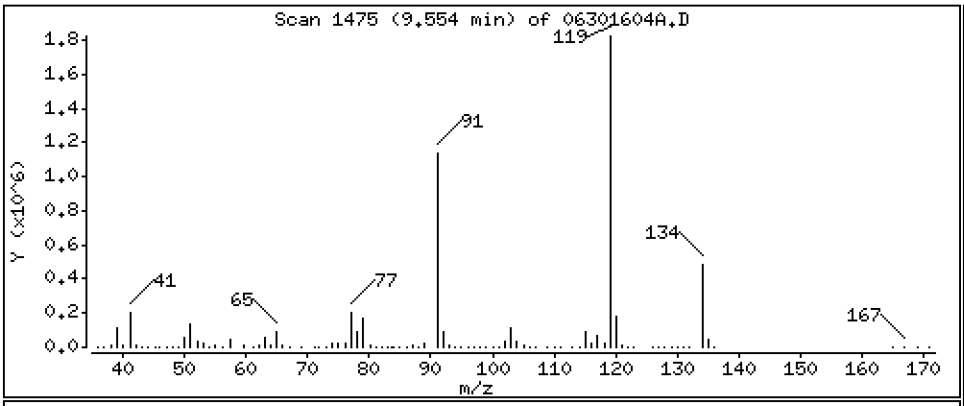
Operator: PB

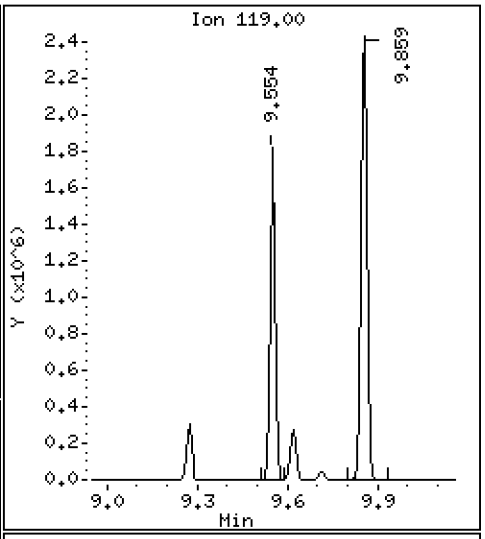
Column phase: RTXVMS

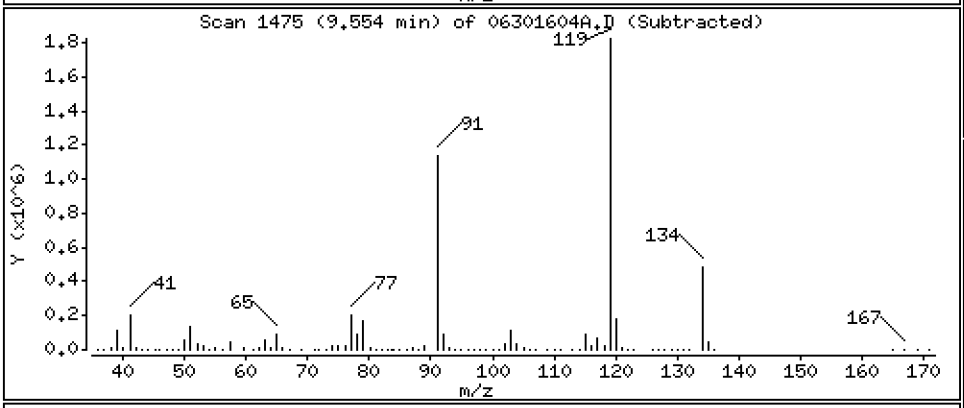
Column diameter: 0.18

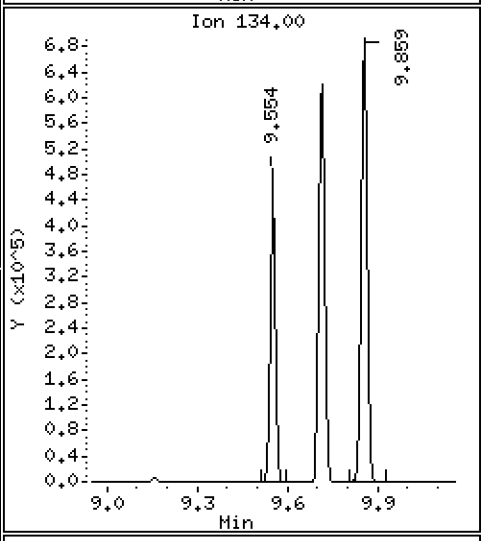
71 T-Butyl Benzene

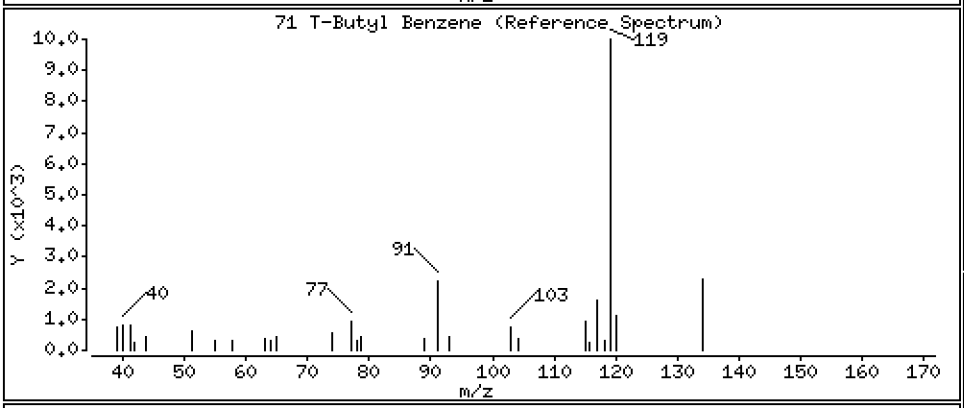
Concentration: 45.515 ug/Kg

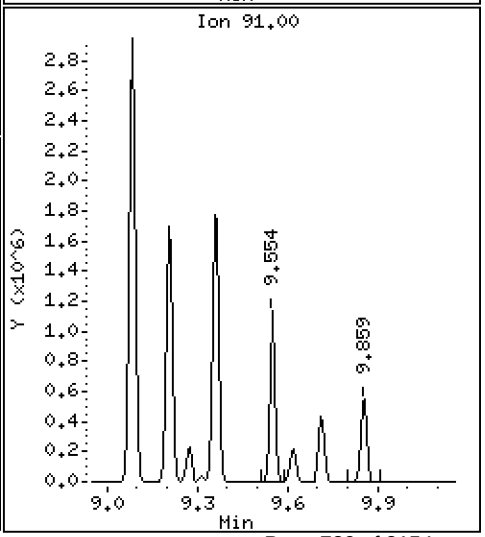


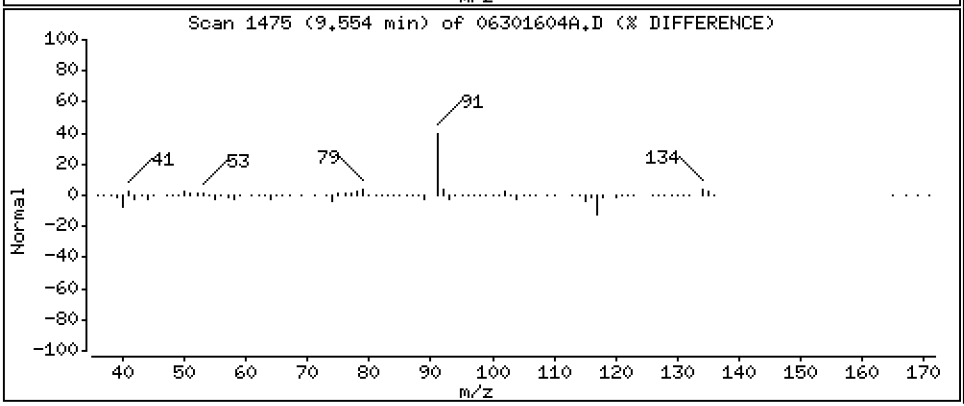












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

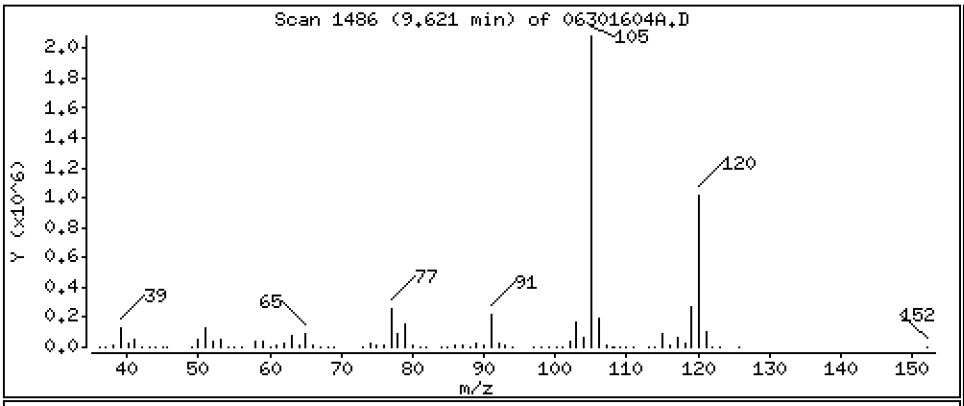
Operator: PB

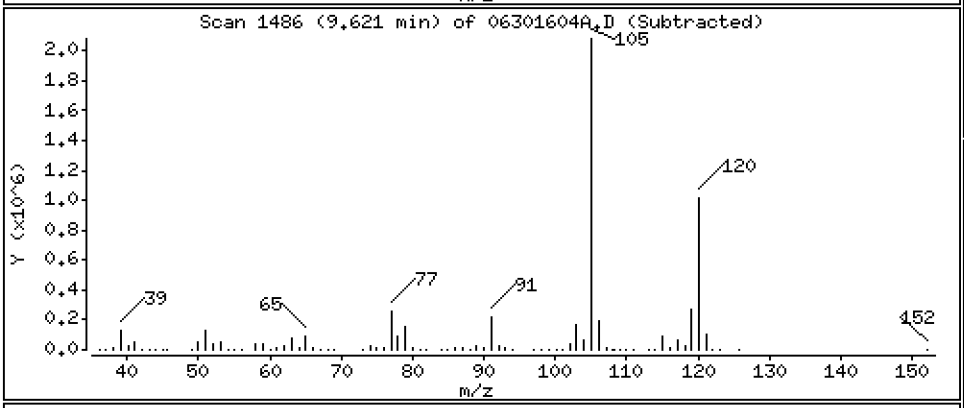
Column phase: RTXVMS

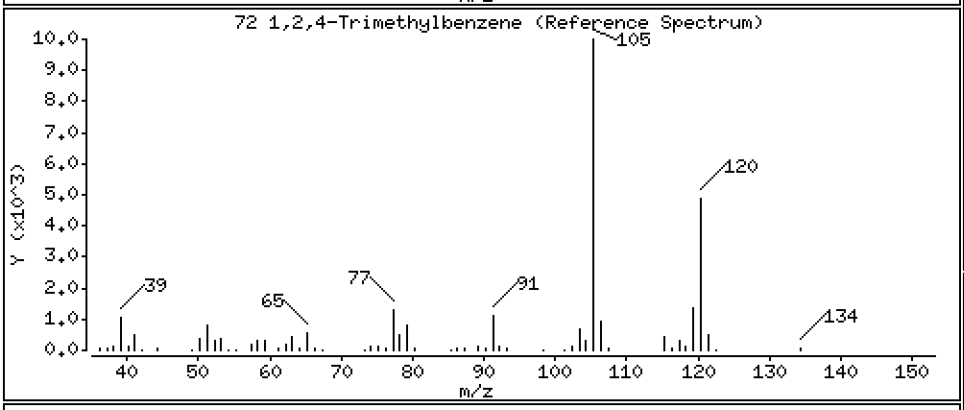
Column diameter: 0.18

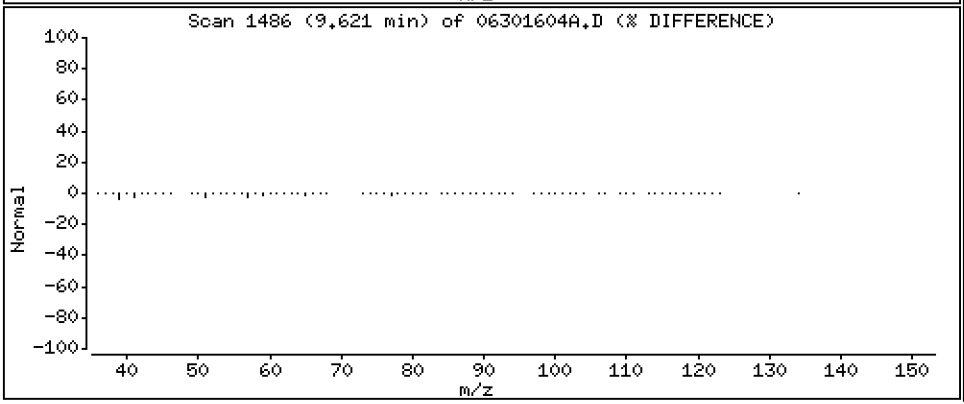
72 1,2,4-Trimethylbenzene

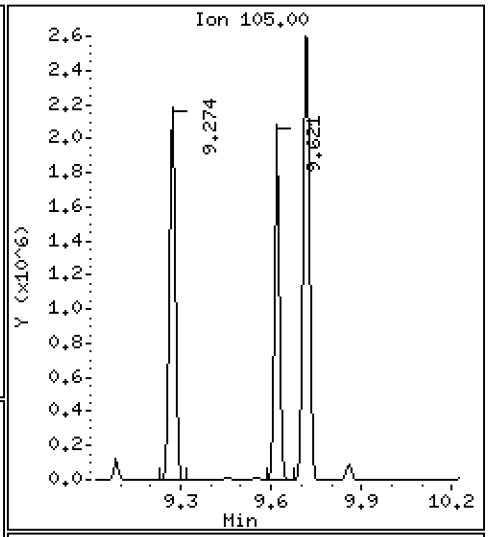
Concentration: 46.384 ug/Kg

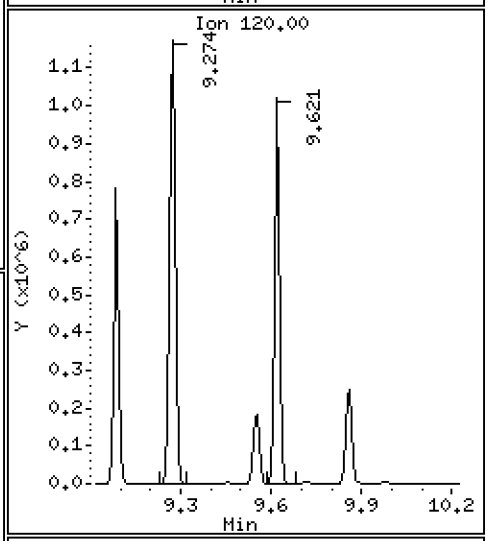


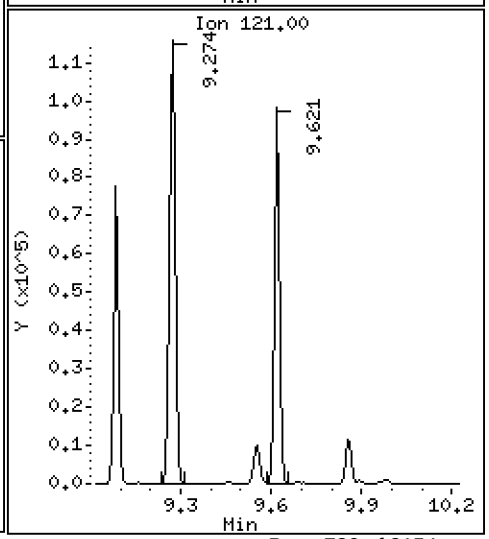












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

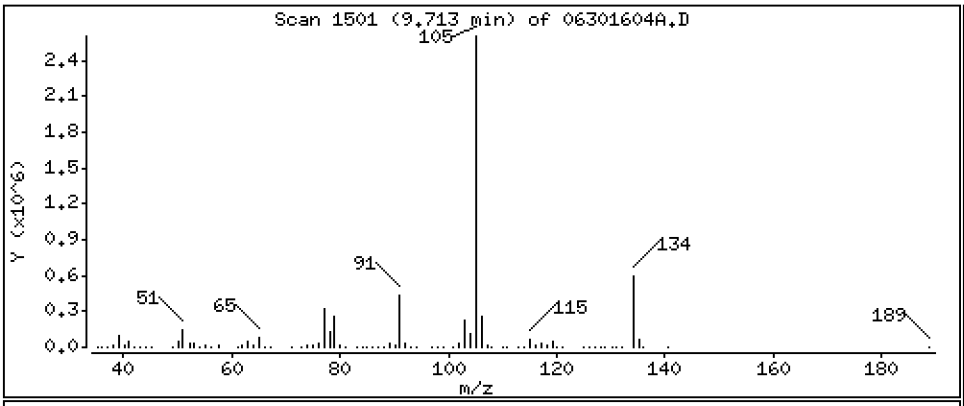
Operator: PB

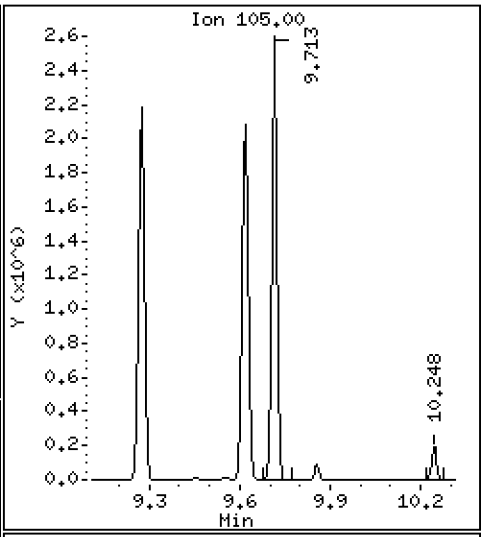
Column phase: RTXVMS

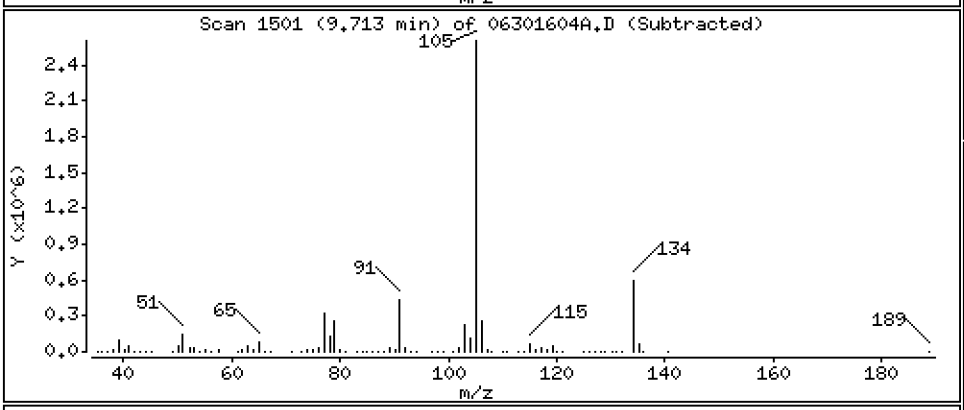
Column diameter: 0.18

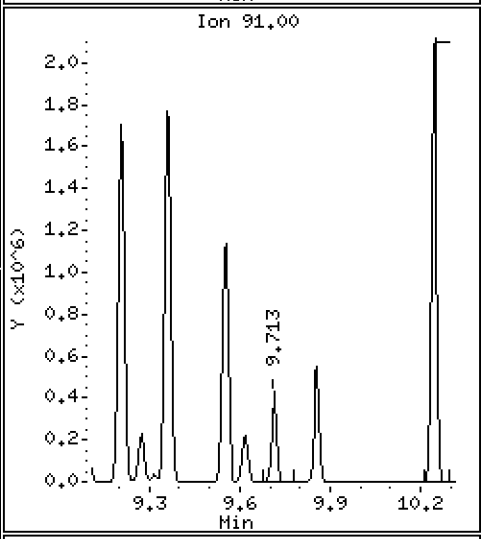
73 S-Butyl Benzene

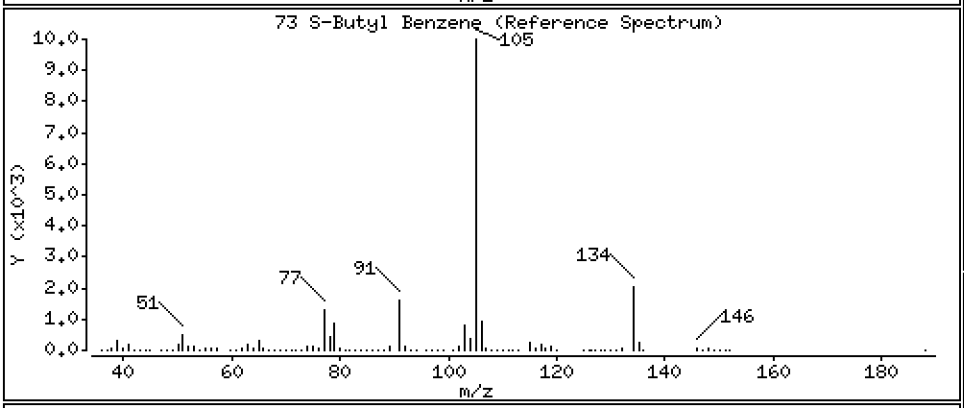
Concentration: 44.656 ug/Kg

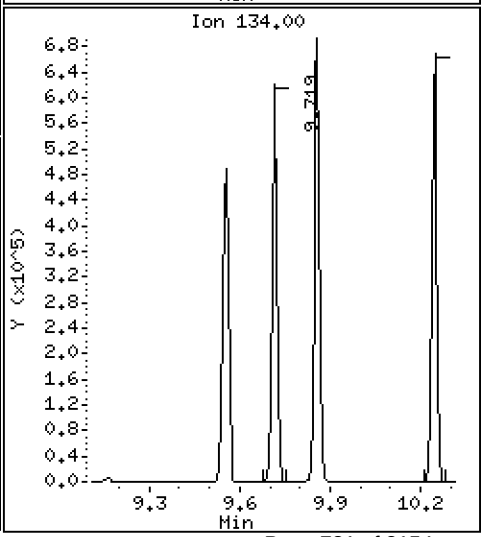


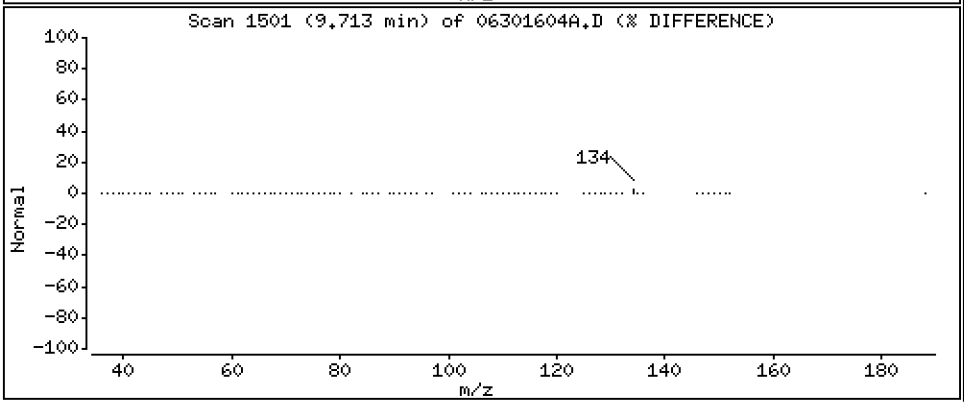












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

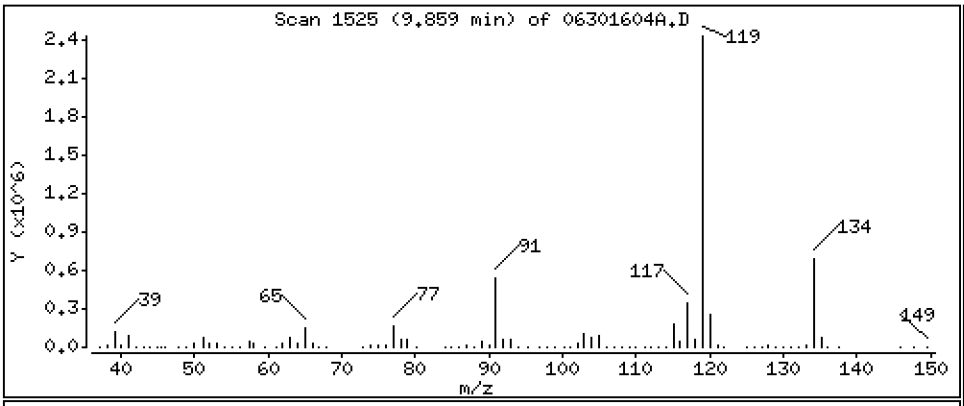
Operator: PB

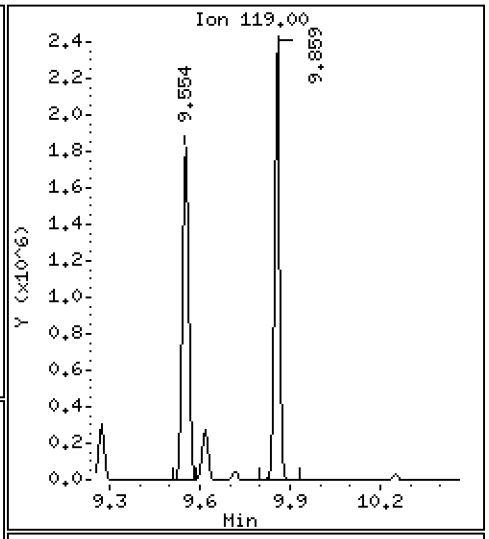
Column phase: RTXVMS

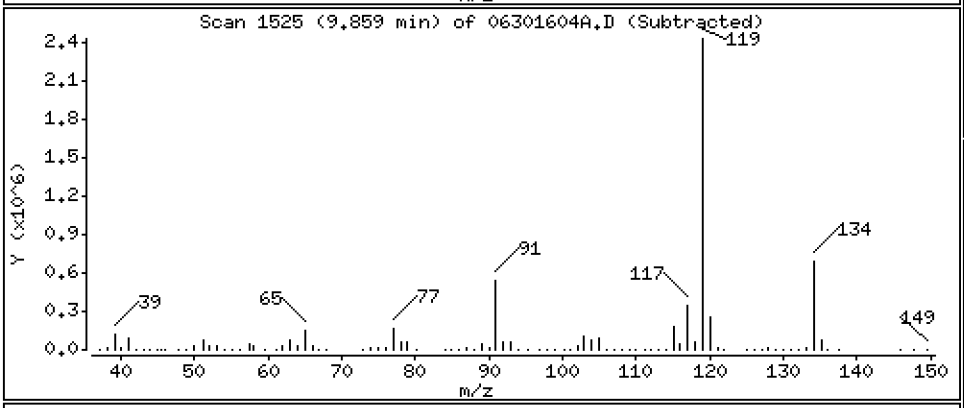
Column diameter: 0.18

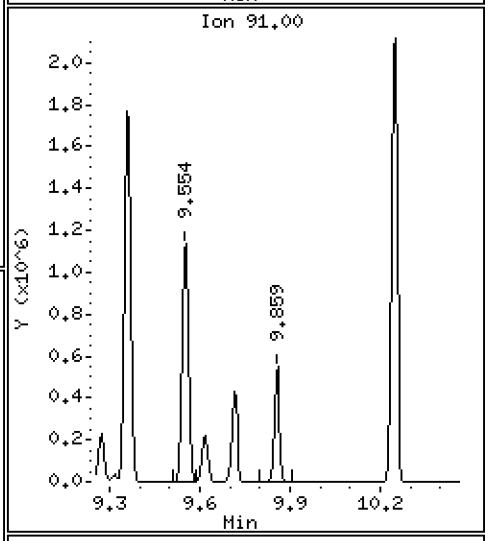
74 4-Isopropyl Toluene

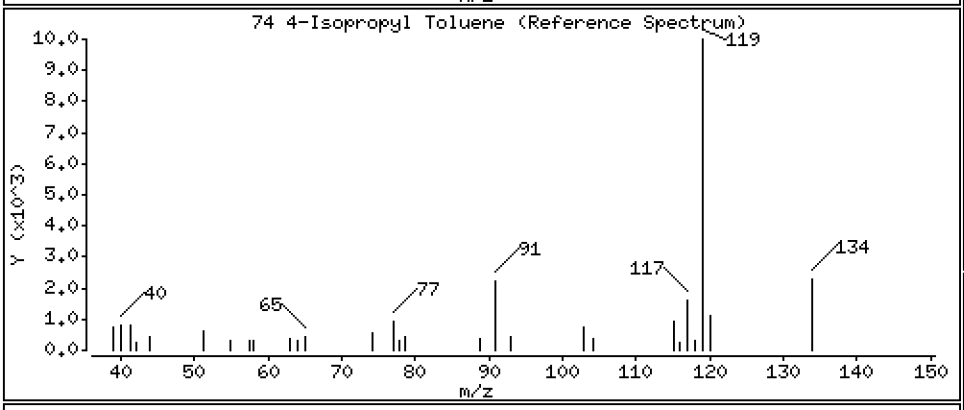
Concentration: 47.450 ug/Kg

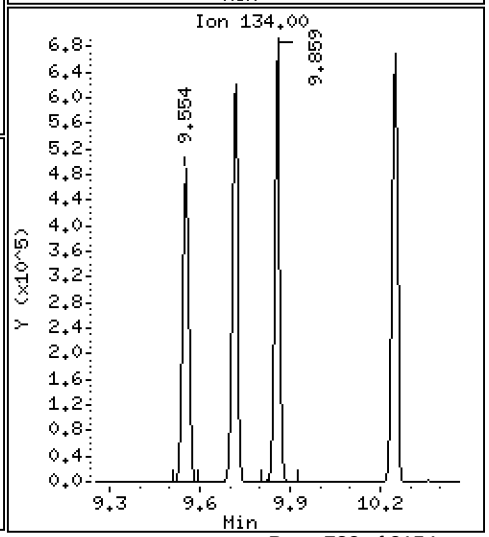


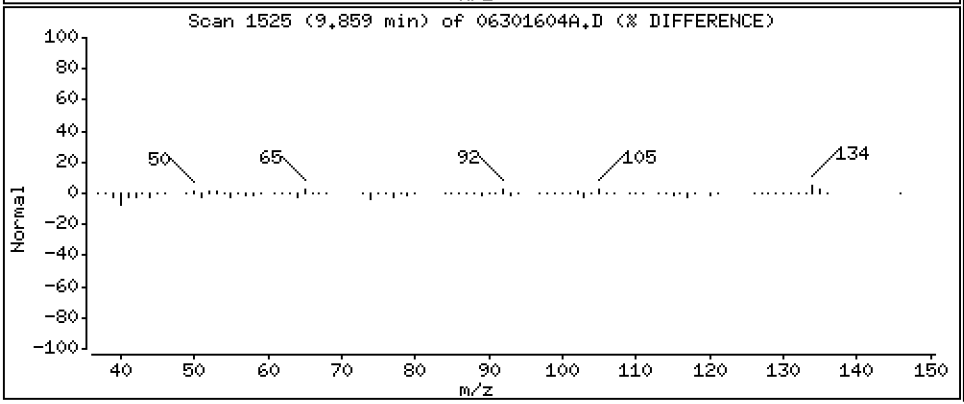












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

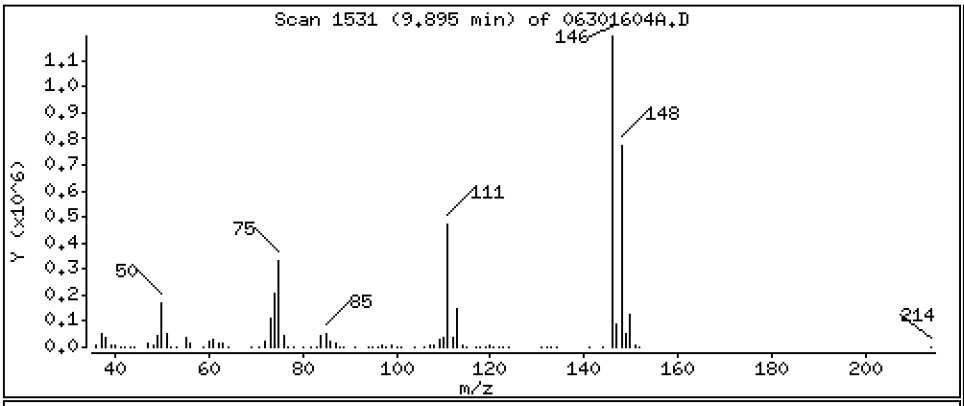
Operator: PB

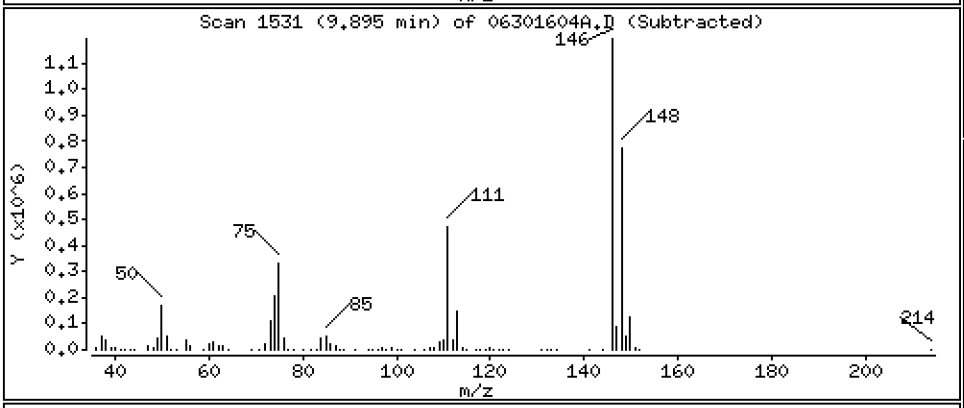
Column phase: RTXVMS

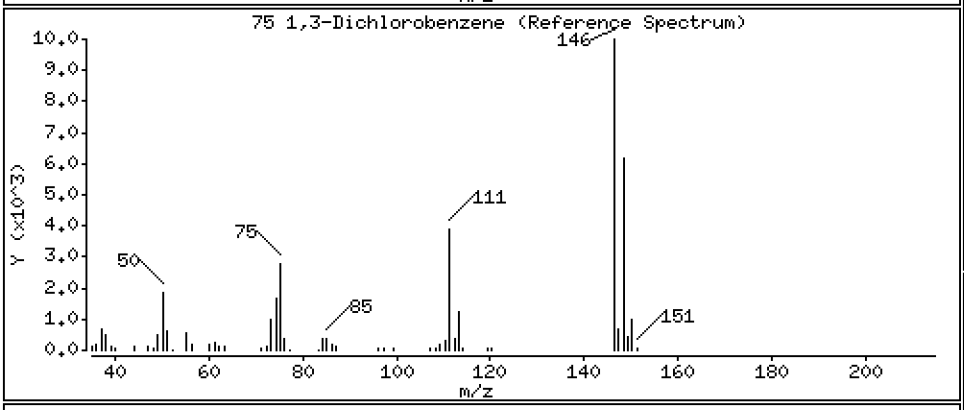
Column diameter: 0.18

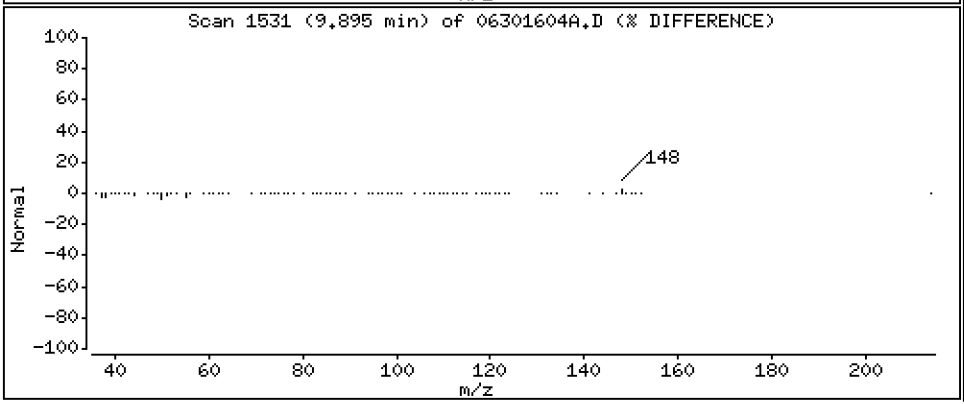
75 1,3-Dichlorobenzene

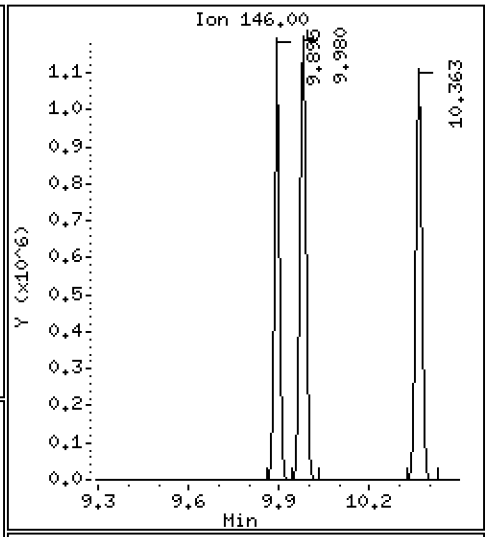
Concentration: 48.351 ug/Kg

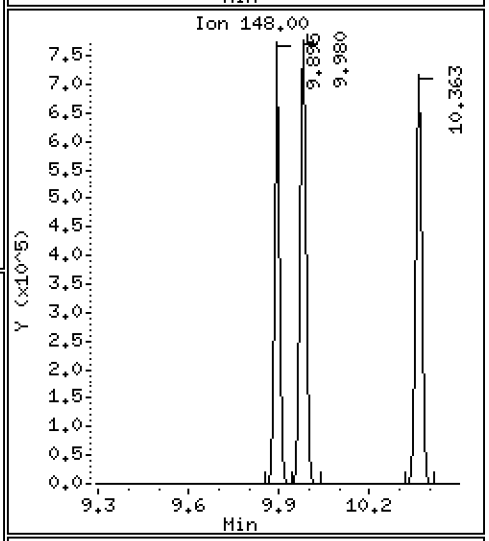


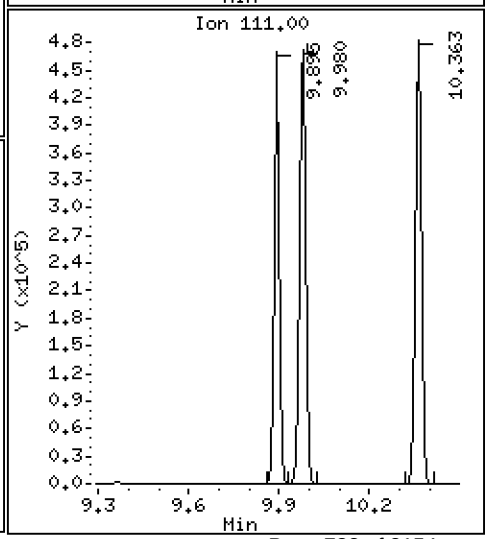












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

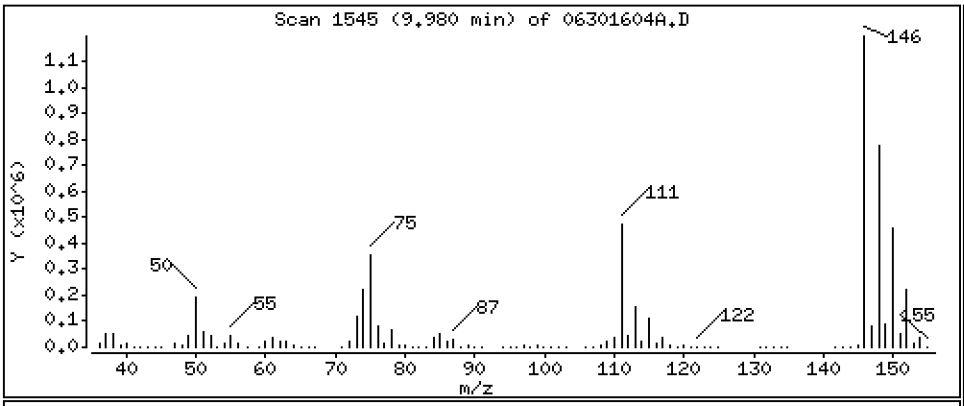
Operator: PB

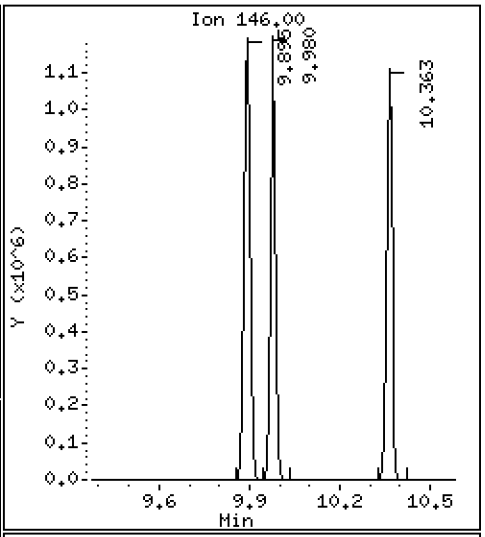
Column phase: RTXVMS

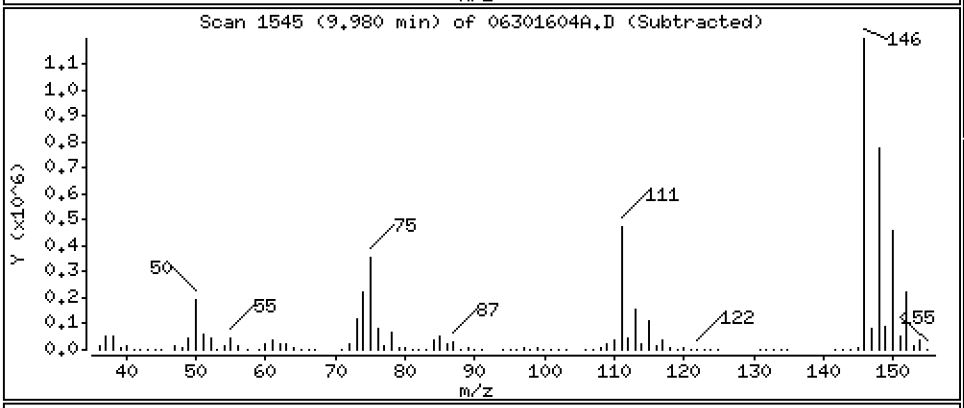
Column diameter: 0.18

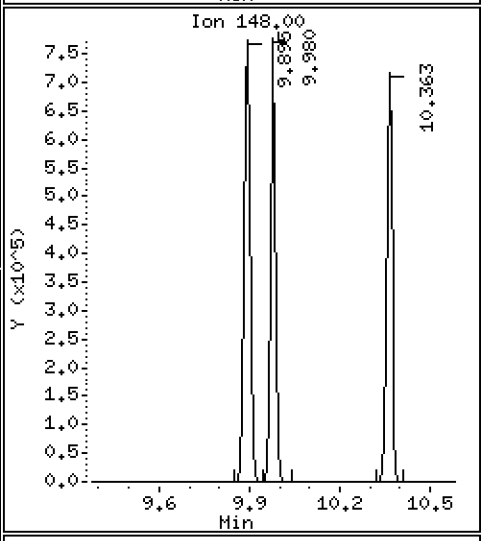
77 1,4-Dichlorobenzene

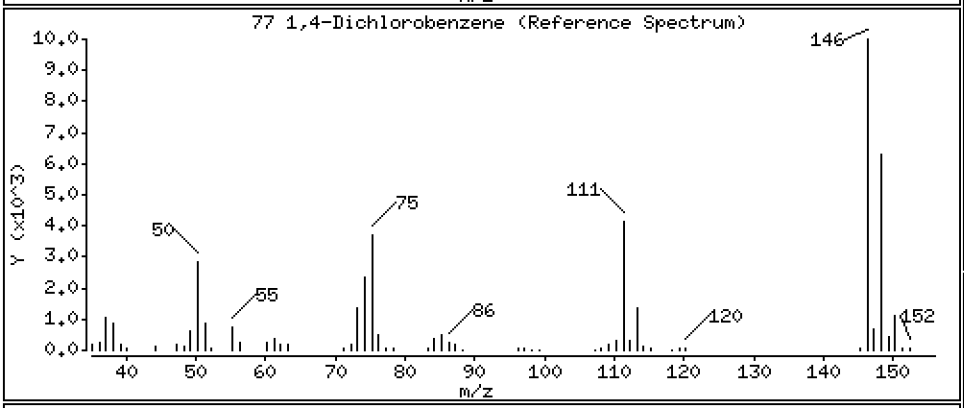
Concentration: 47.553 ug/Kg

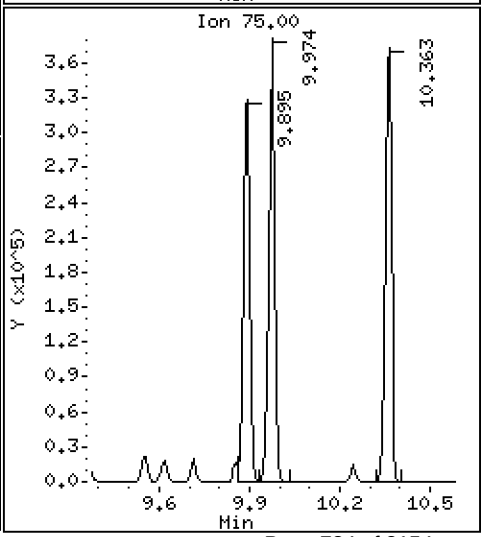


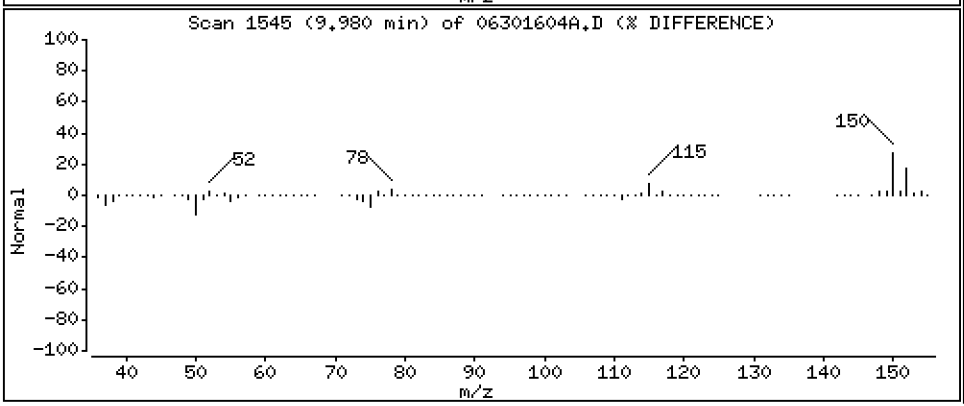












Date : 30-JUN-2016 12:46

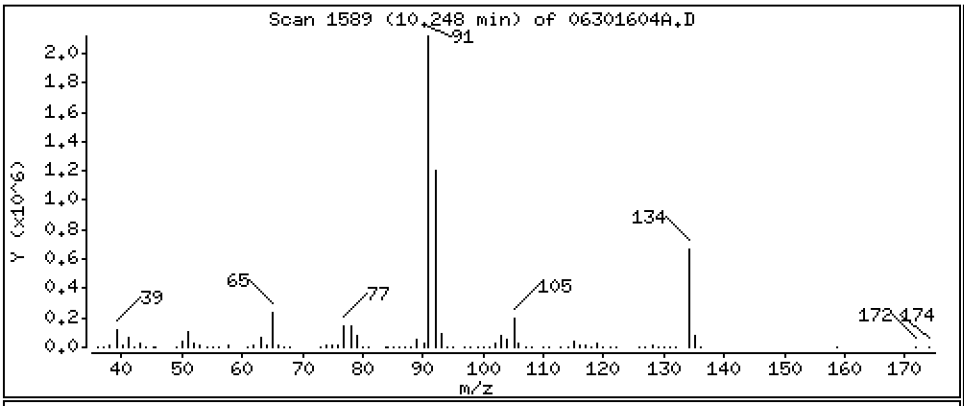
Client ID: LCS0630 Instrument: nt5.i

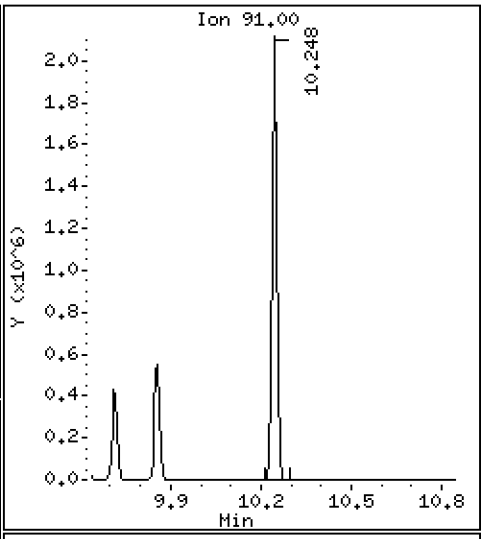
Sample Info: LCS0630,5,5,0

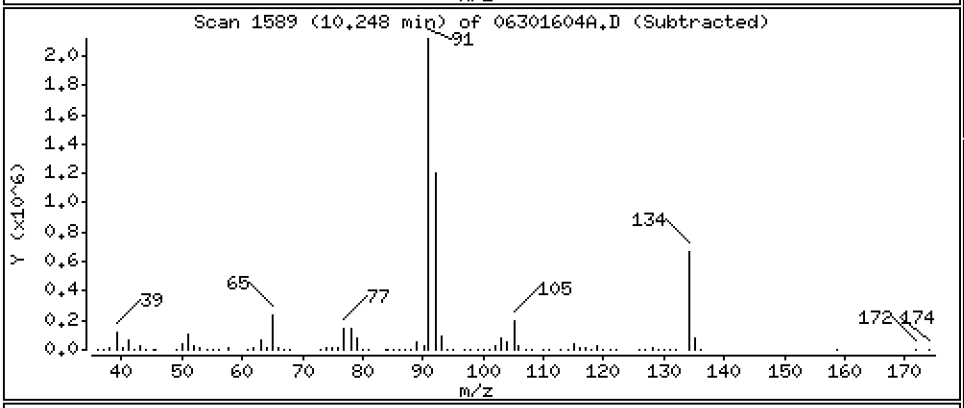
Operator: PB

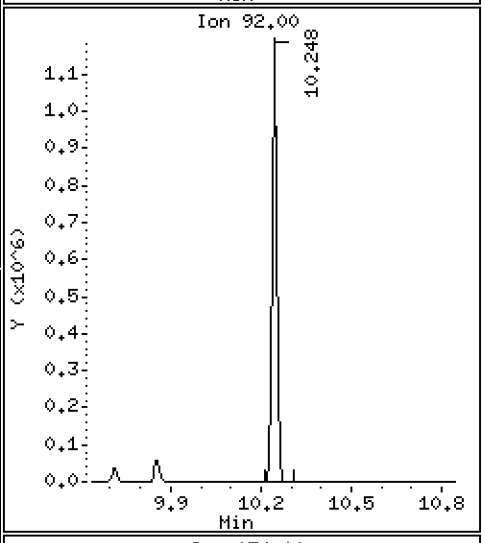
Column phase: RTXVMS Column diameter: 0.18

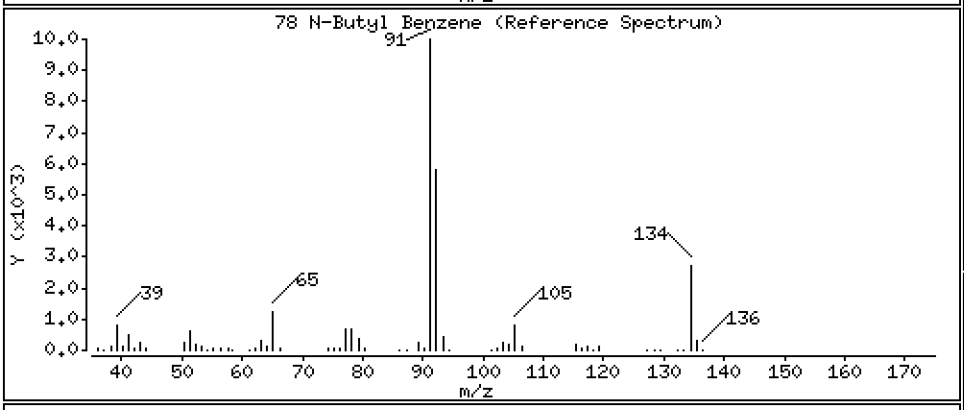
78 N-Butyl Benzene Concentration: 47.328 ug/Kg

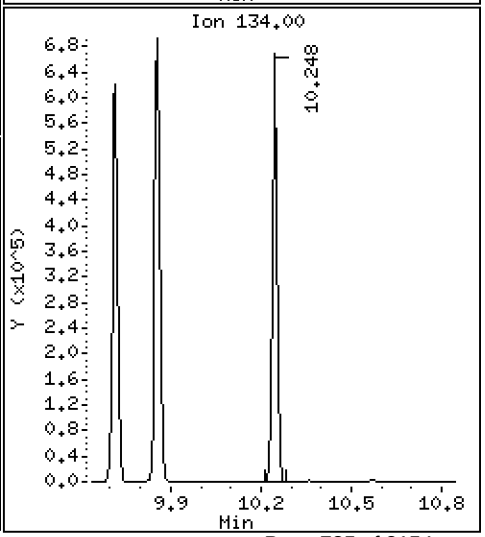


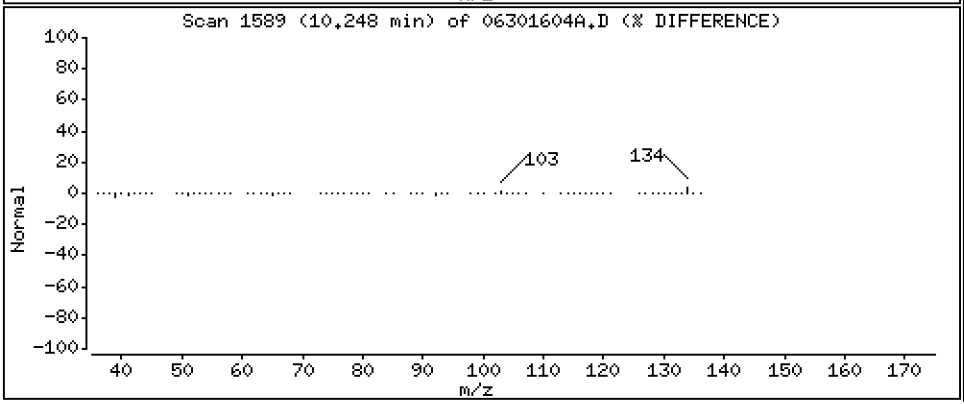












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

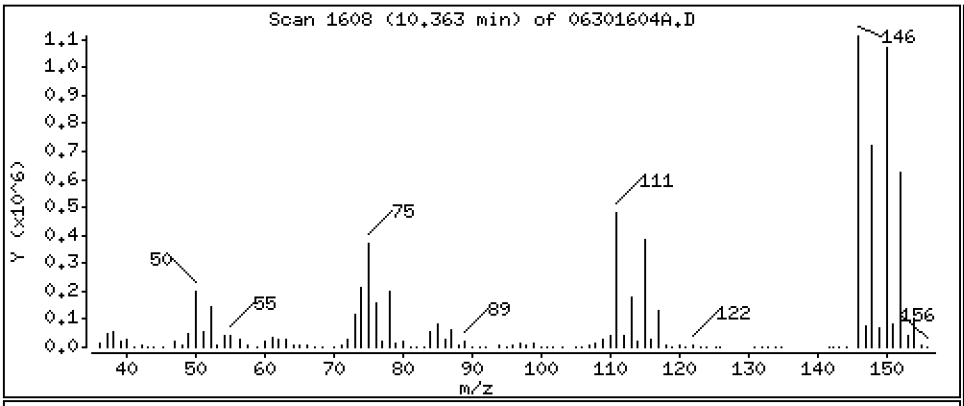
Operator: PB

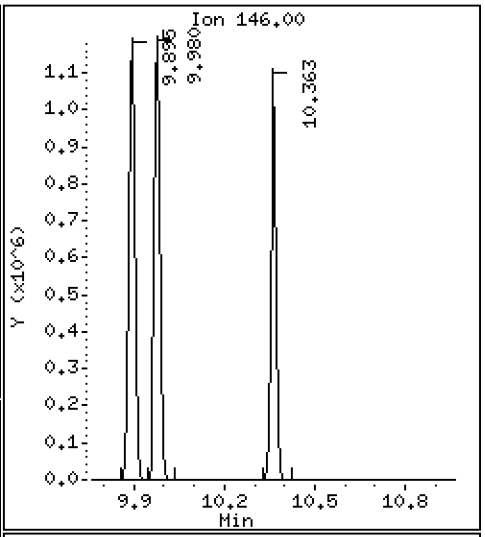
Column phase: RTXVMS

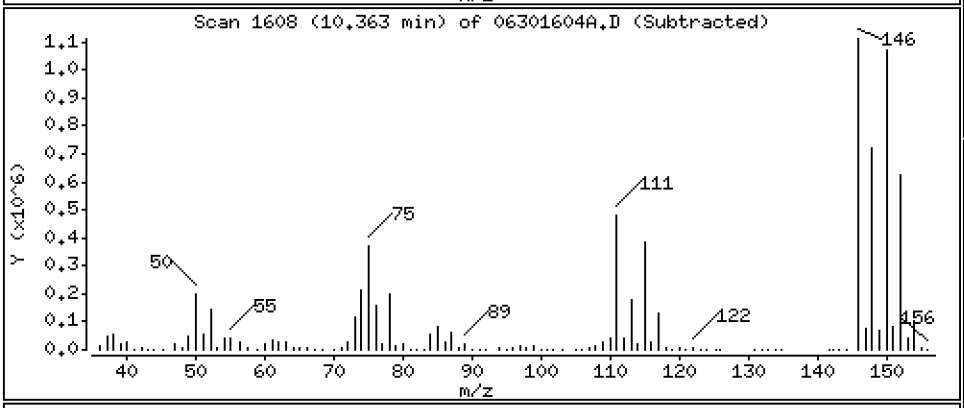
Column diameter: 0.18

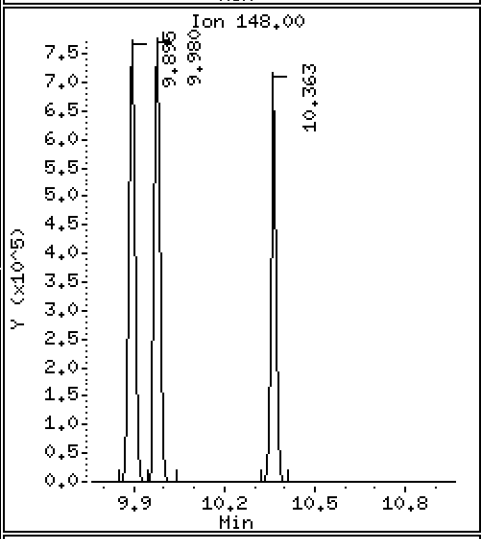
80 1,2-Dichlorobenzene

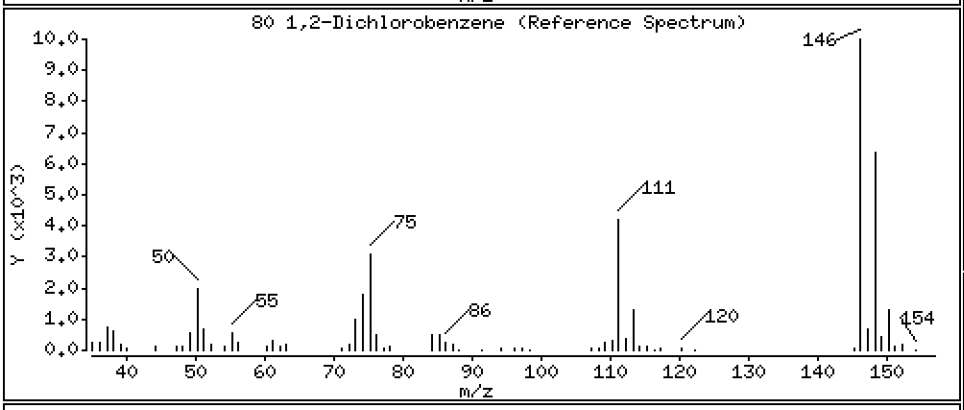
Concentration: 46.666 ug/Kg

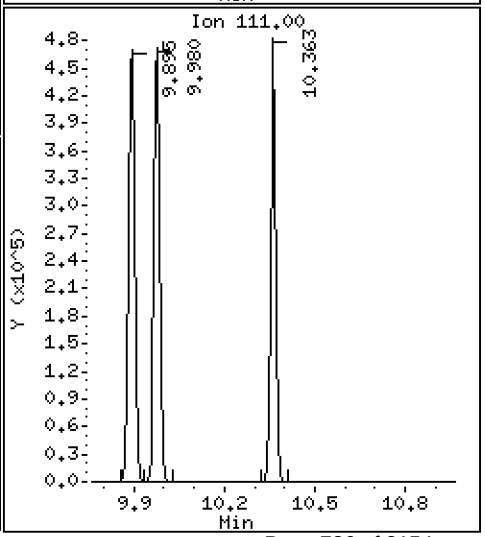


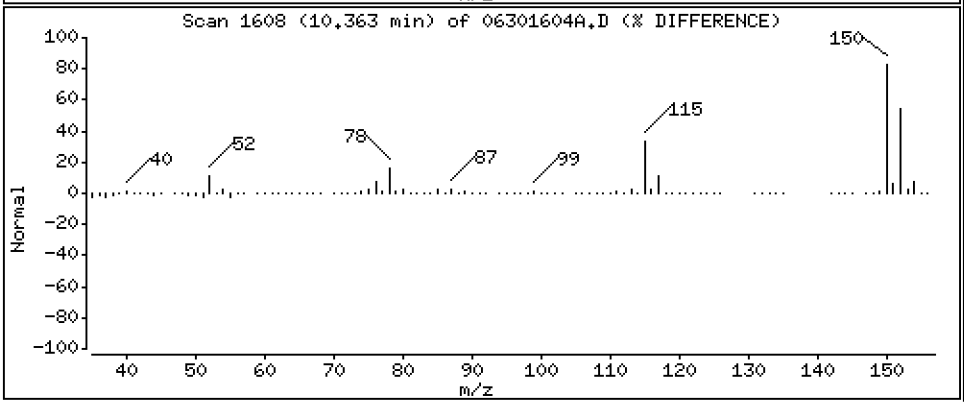












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

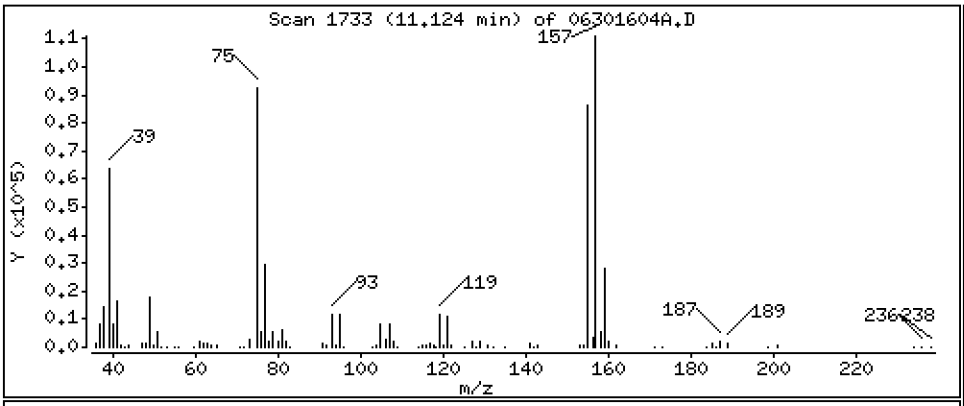
Operator: PB

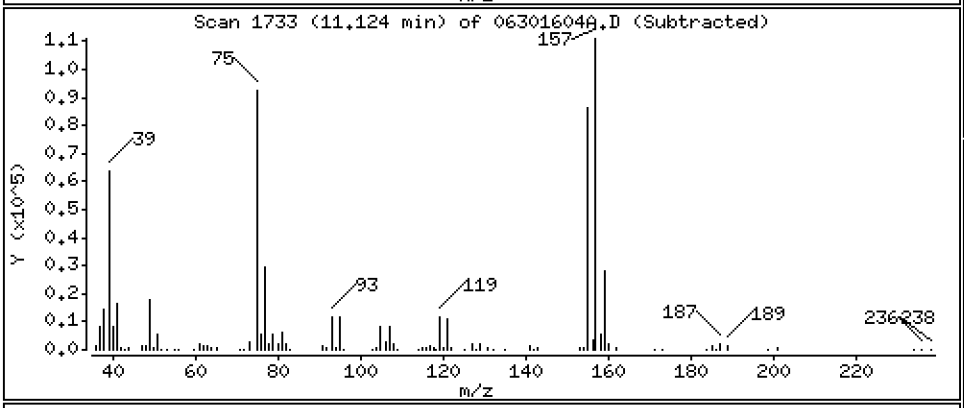
Column phase: RTXVMS

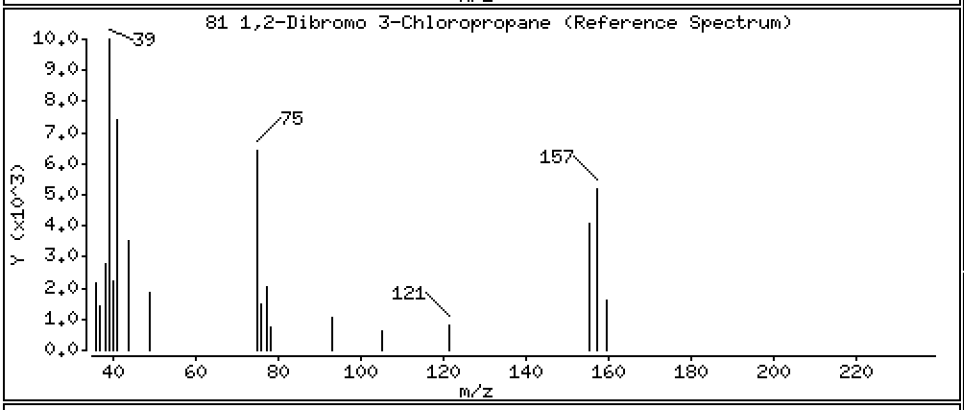
Column diameter: 0.18

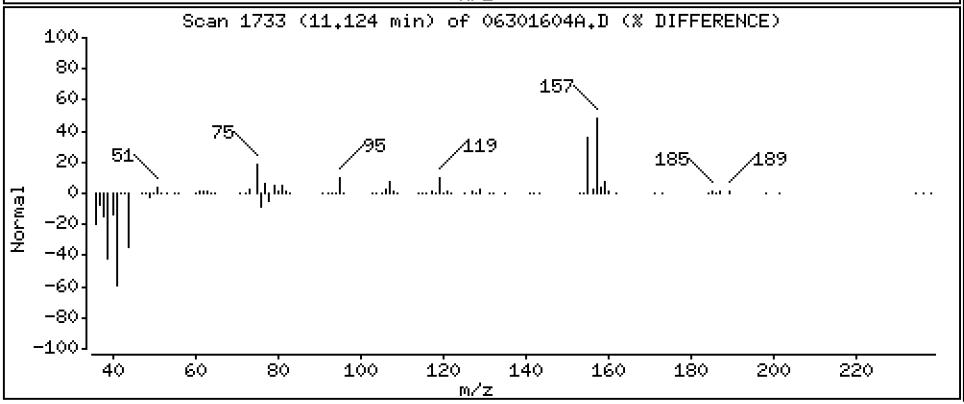
81 1,2-Dibromo 3-Chloropropane

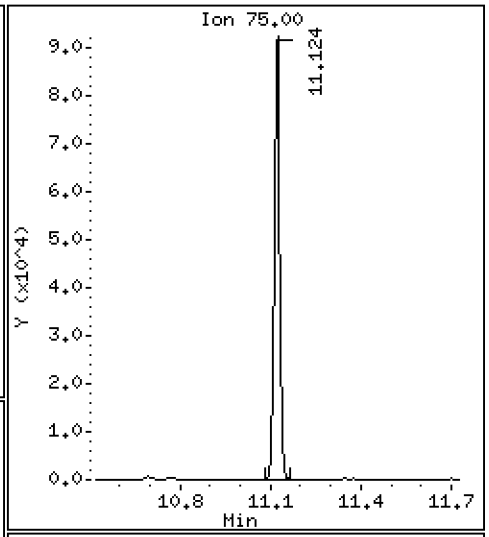
Concentration: 40.815 ug/Kg

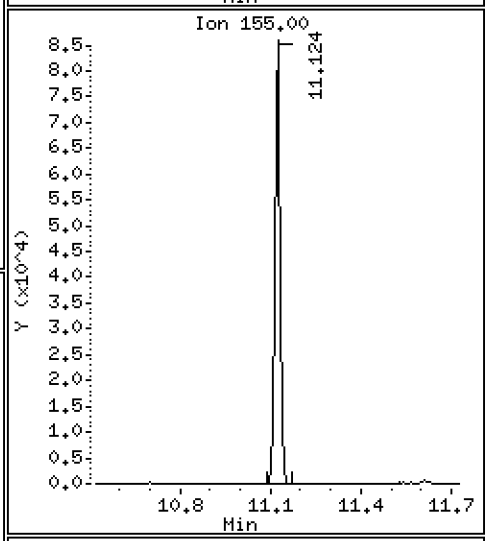


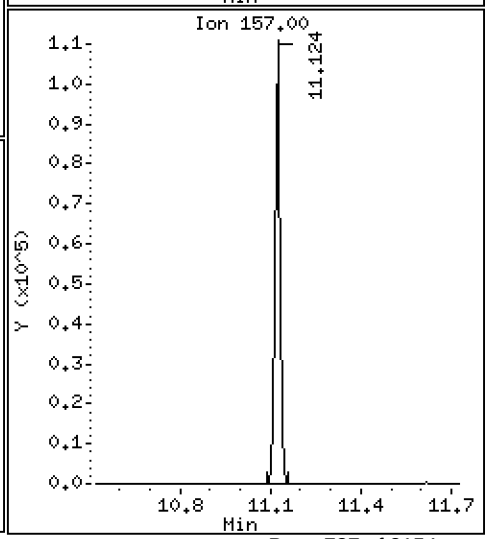












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

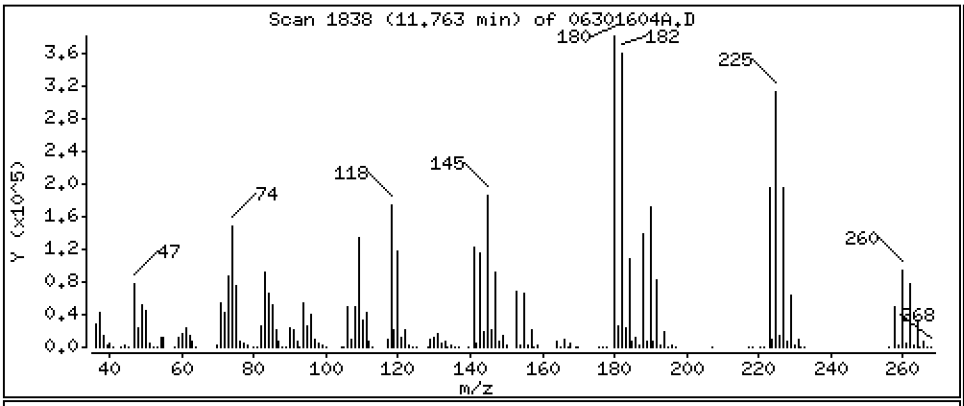
Operator: PB

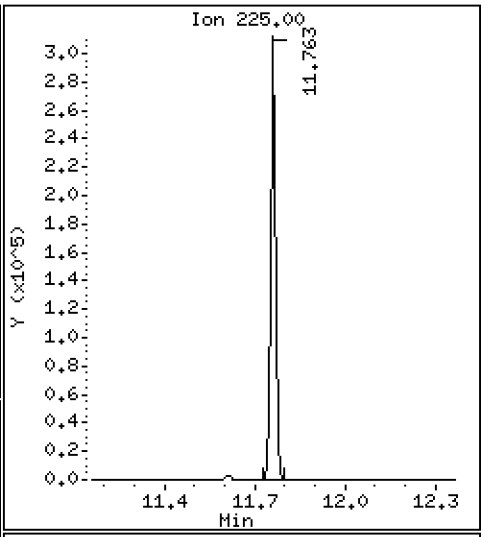
Column phase: RTXVMS

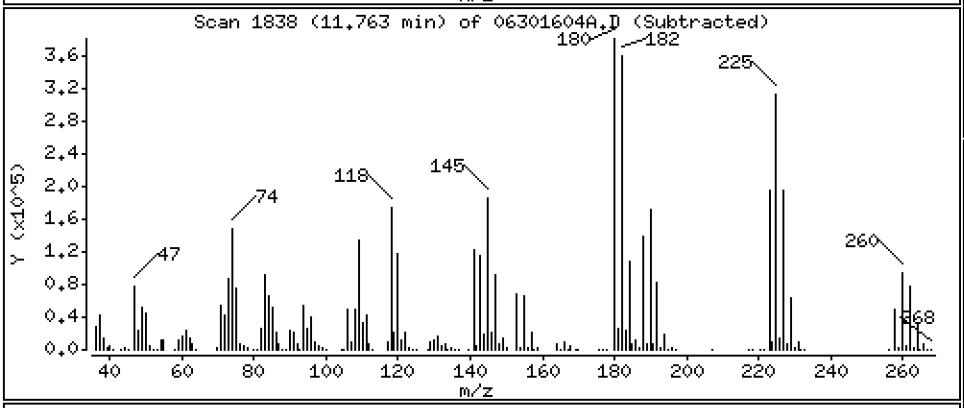
Column diameter: 0.18

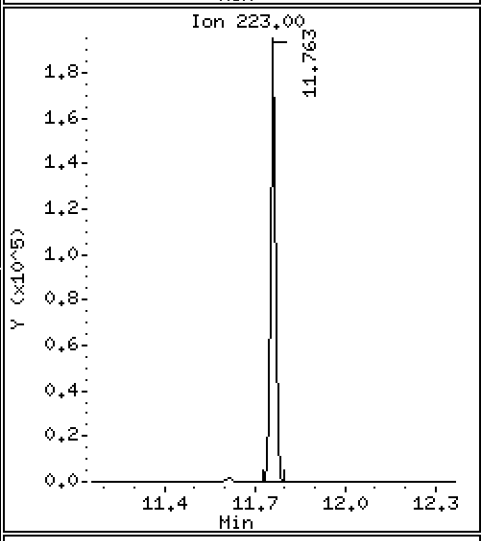
82 Hexachloro 1,3-Butadiene

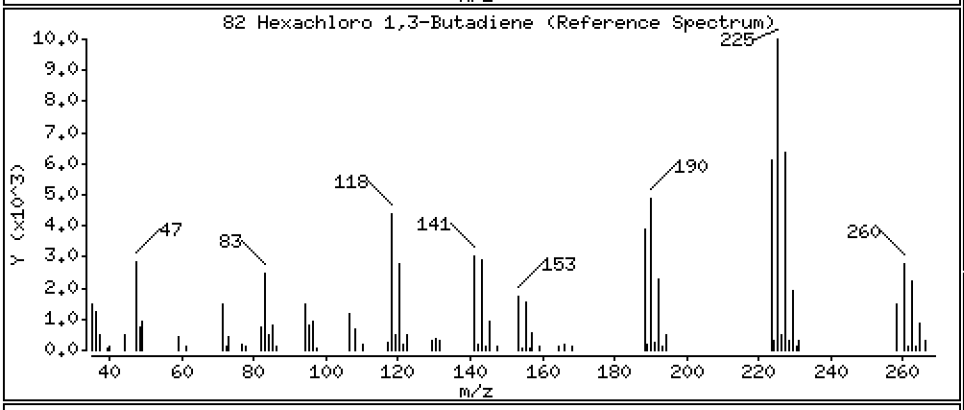
Concentration: 49.939 ug/Kg

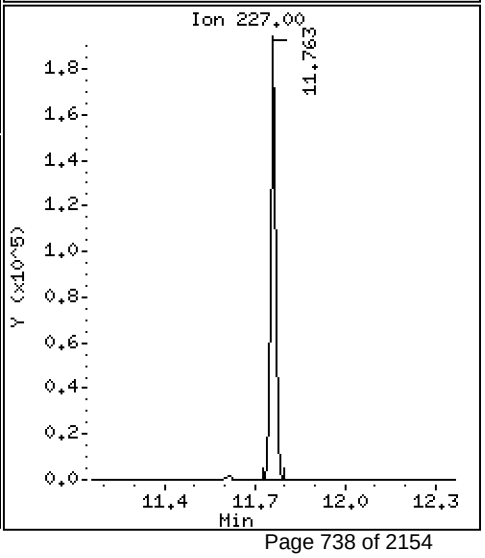


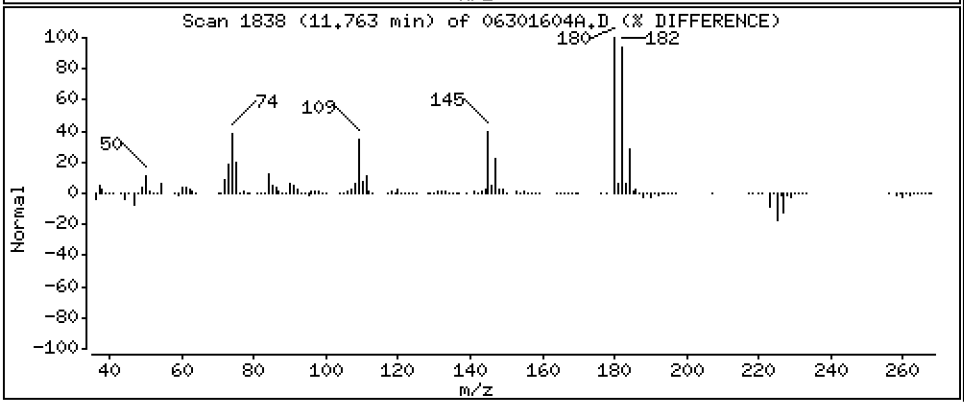












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

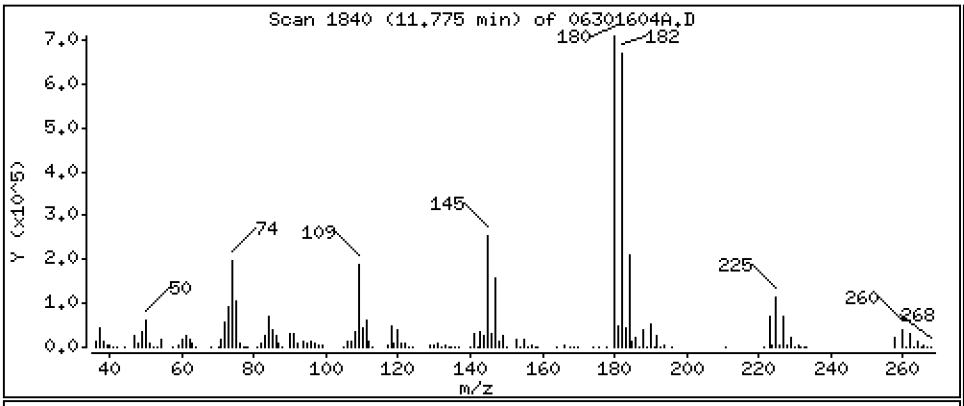
Operator: PB

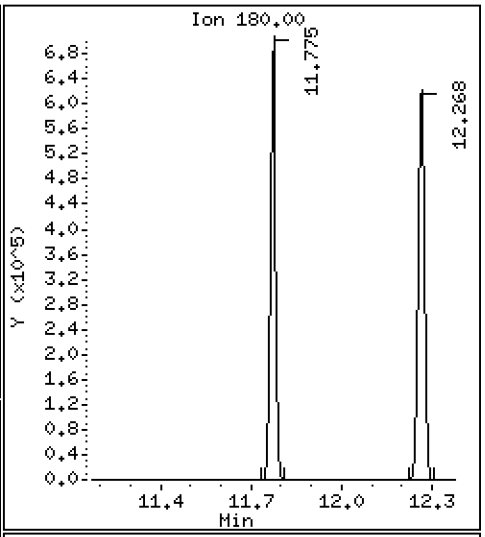
Column phase: RTXVMS

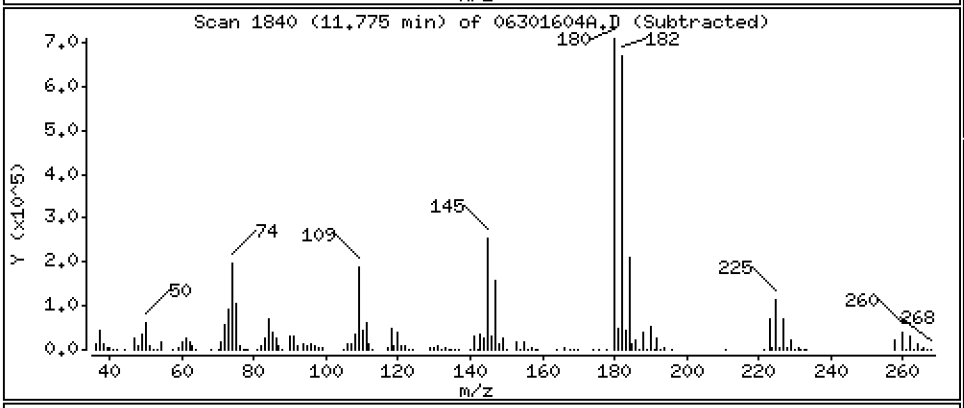
Column diameter: 0.18

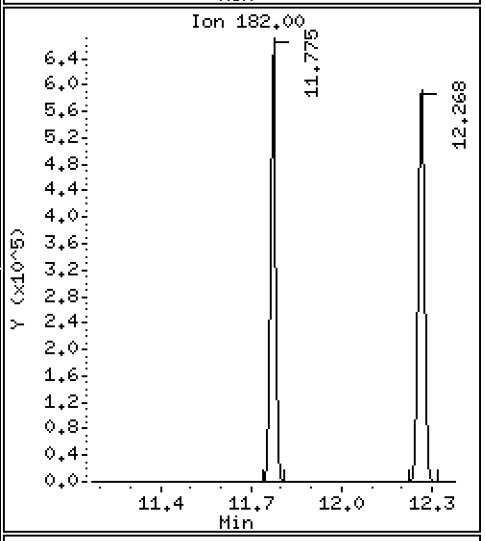
83 1,2,4-Trichlorobenzene

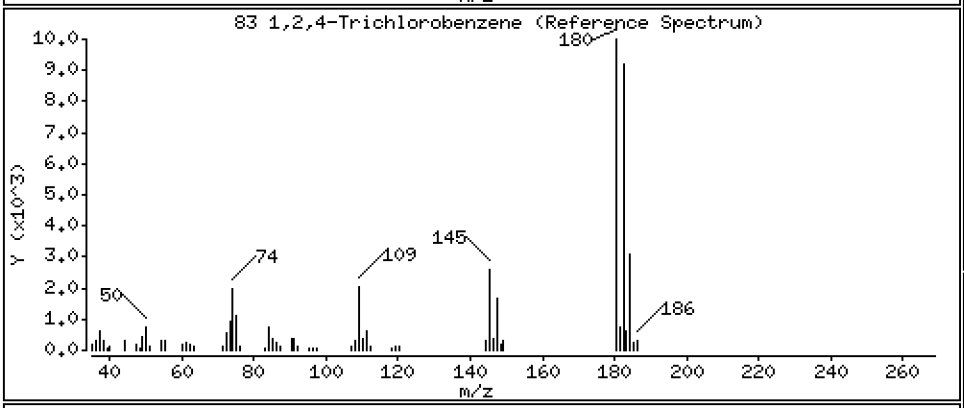
Concentration: 53.635 ug/Kg

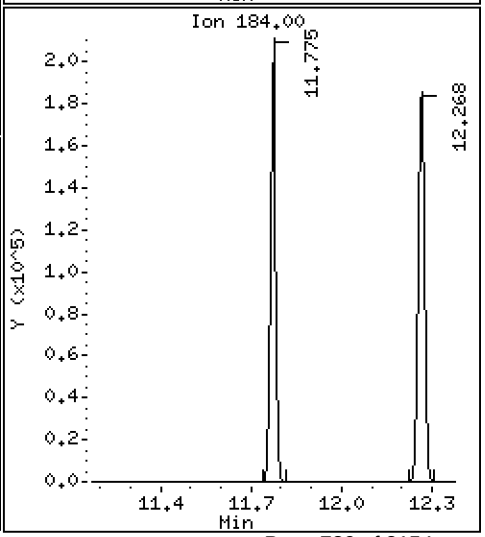


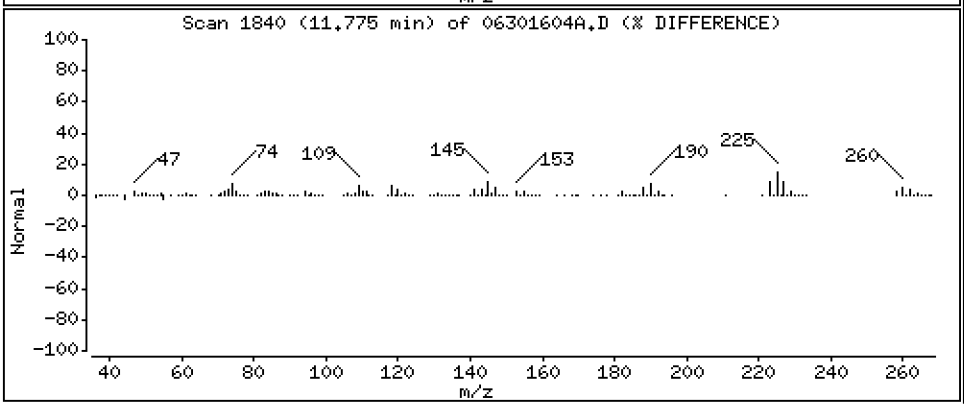












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

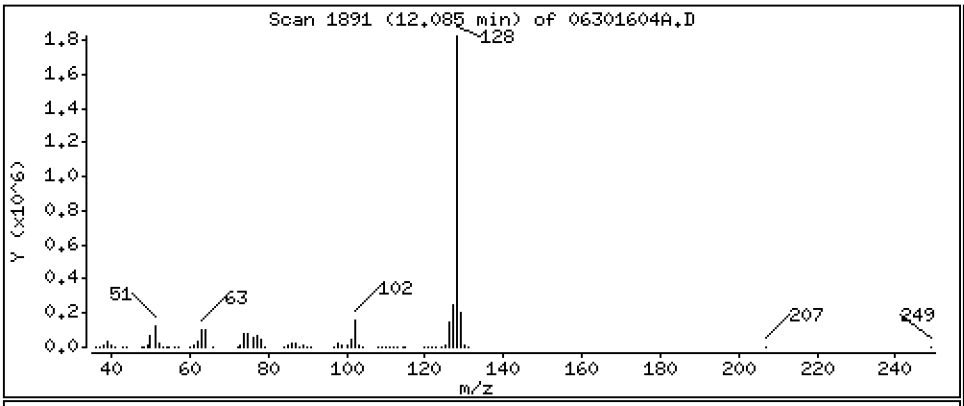
Operator: PB

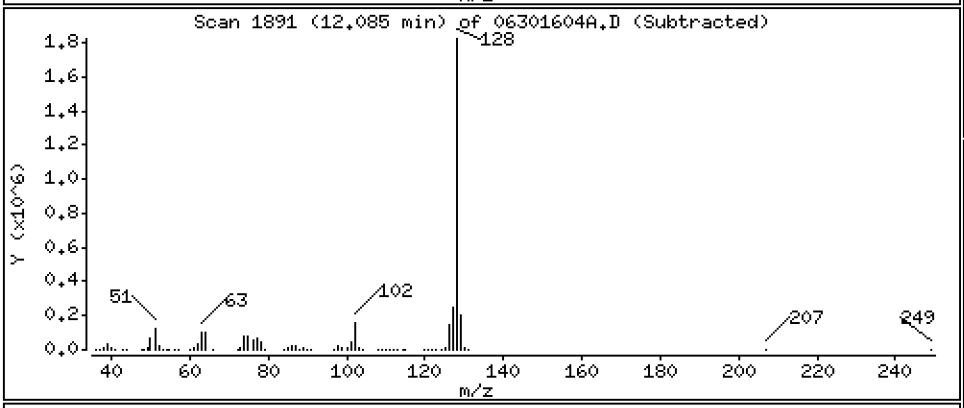
Column phase: RTXVMS

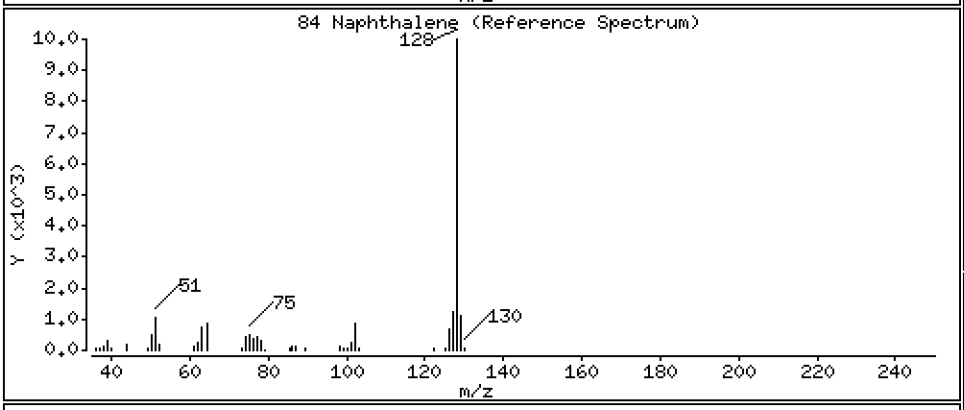
Column diameter: 0.18

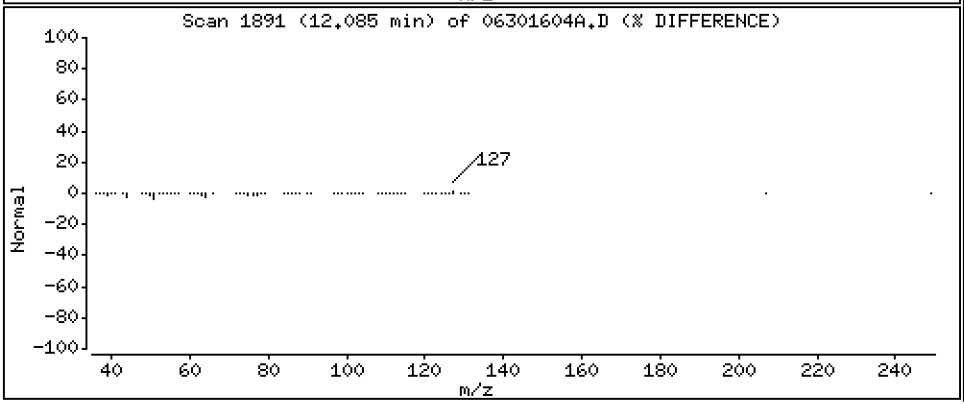
84 Naphthalene

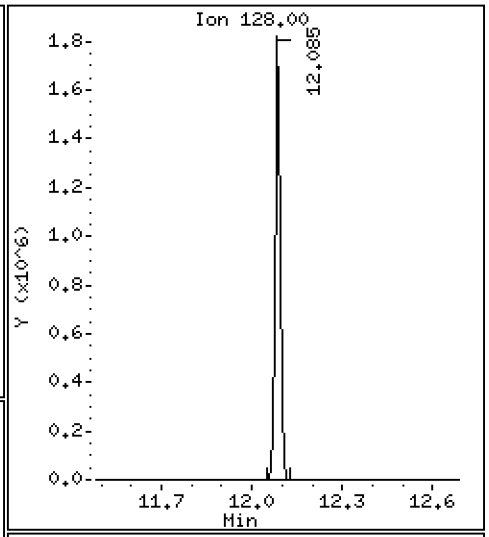
Concentration: 47.797 ug/Kg

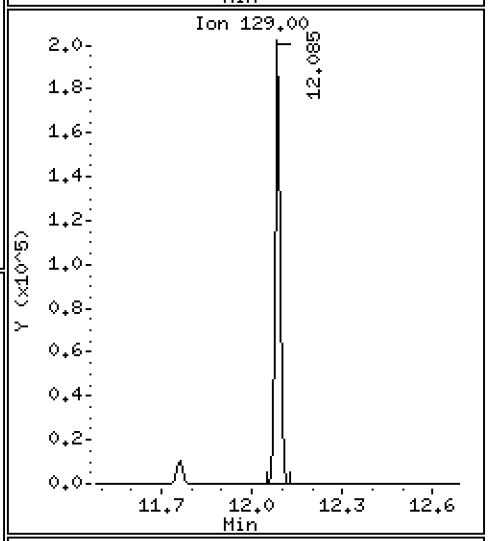


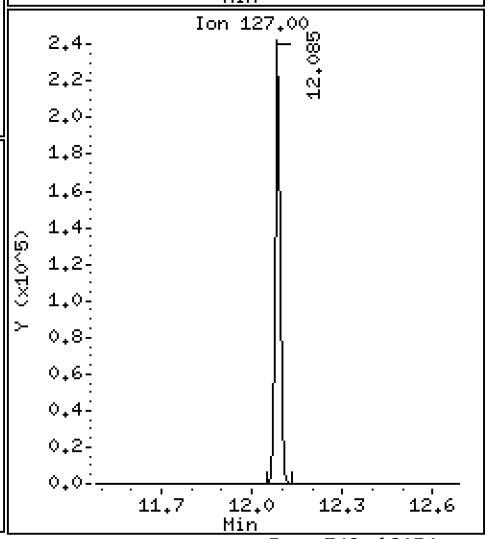












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

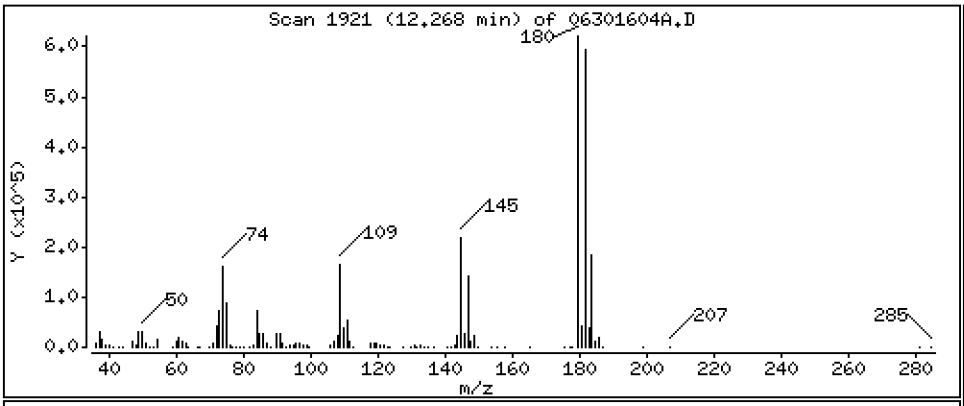
Operator: PB

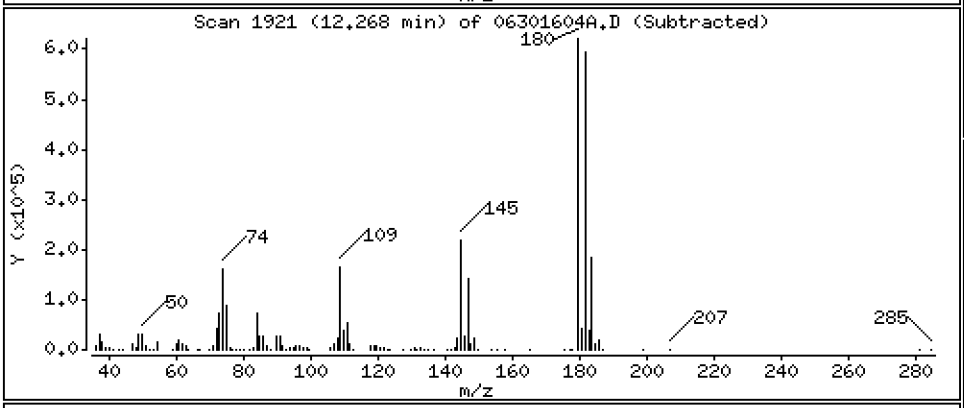
Column phase: RTXVMS

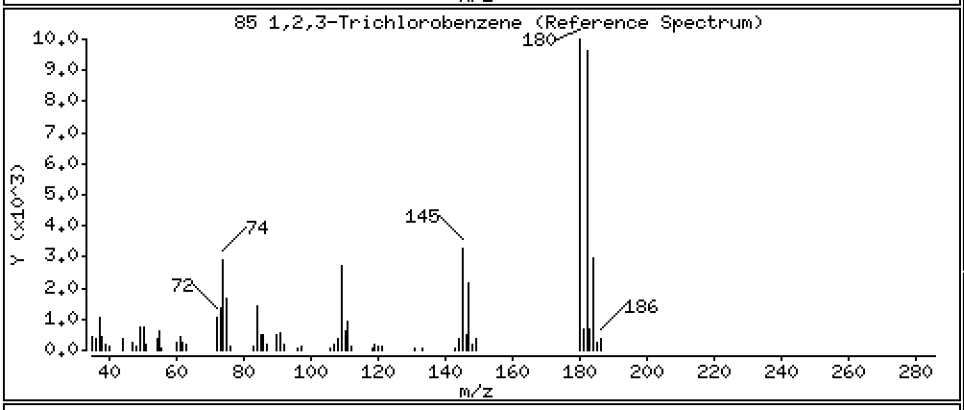
Column diameter: 0.18

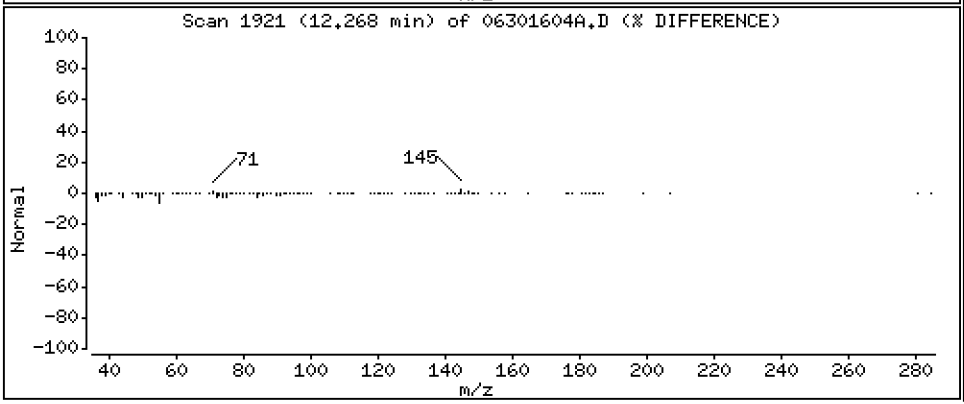
85 1,2,3-Trichlorobenzene

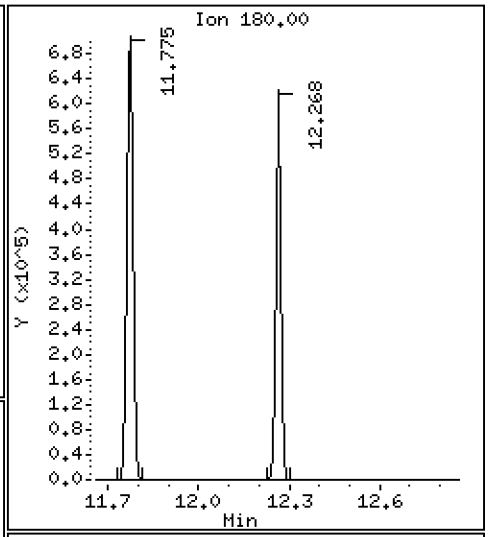
Concentration: 51.416 ug/Kg

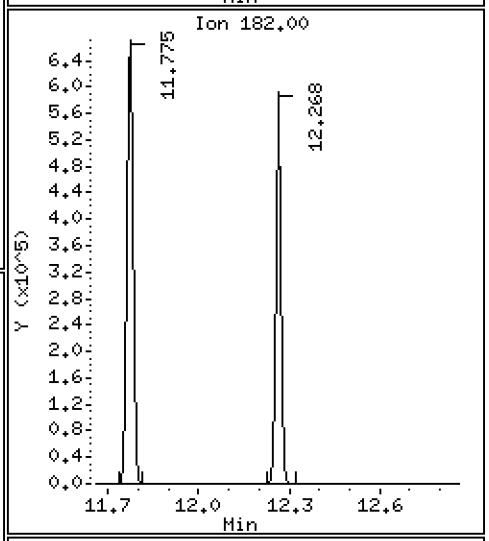


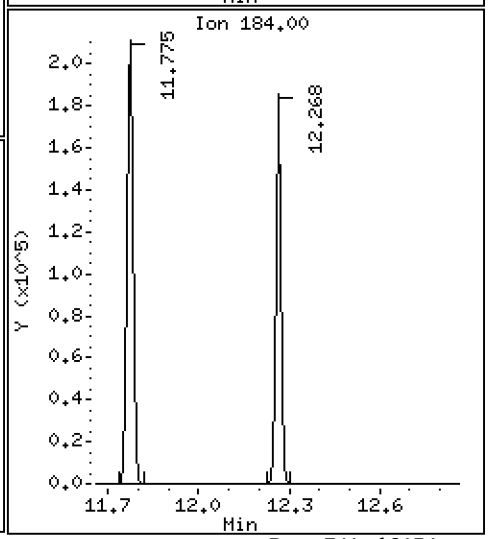












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\H2O\06301604A.D
Lab Smp Id: BEG0005-BS1 Client Smp ID: LCS0630
Inj Date : 30-JUN-2016 12:46
Operator : PB Inst ID: nt5.i
Smp Info : LCS0630,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\H2O\VO051314S.m
Meth Date : 01-Jul-2016 15:49 patrickb Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.159	1.146	(0.234)	833534	41.8882	41.888
2	Chloromethane	50	1.292	1.280	(0.261)	795860	33.9700	33.970
3	Vinyl Chloride	62	1.353	1.341	(0.274)	852374	41.9571	41.957
4	Bromomethane	94	1.590	1.578	(0.321)	390472	27.3120	27.312
5	Chloroethane	64	1.682	1.670	(0.340)	417916	41.5656	41.566
6	Trichlorofluoromethane	101	1.779	1.767	(0.360)	721143	61.8201	61.820
7	1,1-Dichloroethene	96	2.205	2.193	(0.446)	623610	46.1828	46.183
8	Carbon Disulfide	76	2.205	2.199	(0.446)	1977103	45.5432	45.543
9	112Trichloro122Trifluoroethane	101	2.247	2.235	(0.454)	626656	47.2932	47.293
10	Iodomethane	142	2.314	2.302	(0.468)	268064	31.6818	31.682
11	Bromoethane	108	2.430	2.418	(0.491)	366790	47.4566	47.457
12	Acrolein	56	2.527	2.515	(0.511)	530936	201.278	201.28
13	Methylene Chloride	84	2.740	2.728	(0.554)	628310	46.3883	46.388
14	Acetone	43	2.838	2.825	(0.573)	792517	180.779	180.78
15	Trans-1,2-Dichloroethene	96	2.892	2.880	(0.585)	682513	45.5014	45.501
16	Methyl tert butyl ether	73	3.063	3.051	(0.619)	1897081	42.5500	42.550
17	1,1-Dichloroethane	63	3.525	3.513	(0.712)	1221944	41.4976	41.498
18	Acrylonitrile	53	3.610	3.604	(0.730)	205372	39.1647	39.165
19	Vinyl Acetate	43	3.835	3.829	(0.775)	1350076	38.6463	38.646
20	Cis-1,2-Dichloroethene	96	4.054	4.042	(0.819)	770296	43.5059	43.506
22	2,2-Dichloropropane	77	4.146	4.140	(0.838)	1129721	44.7653	44.765

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	4.237	4.231	(0.856)	349326	45.1671	45.167
	24 Chloroform	83	4.328	4.322	(0.875)	1186674	43.3532	43.353
	25 Carbon Tetrachloride	117	4.407	4.401	(0.816)	998380	47.2688	47.269
$	27 Dibromofluoromethane	111	4.492	4.486	(0.908)	802424	48.0270	48.027
	26 1,1,1-Trichloroethane	97	4.480	4.474	(0.905)	1096613	43.1194	43.119
	28 1,1-Dichloropropene	75	4.596	4.590	(0.851)	969026	44.1030	44.103
	29 2-Butanone	72	4.644	4.638	(0.939)	356850	192.170	192.17
	30 Benzene	78	4.821	4.815	(0.893)	2764538	44.4496	44.450
*	31 Pentafluorobenzene	168	4.949	4.943	(1.000)	700998	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.001)	742692	44.4664	44.466
	33 1,2-Dichloroethane	62	5.015	5.009	(0.929)	853919	41.5625	41.563
	34 Trichloroethene	95	5.344	5.338	(0.990)	733163	45.4908	45.491
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2302955	50.0000	
	37 Dibromomethane	93	5.703	5.703	(1.056)	378779	44.0492	44.049
	38 1,2-Dichloropropane	63	5.794	5.788	(1.073)	682626	42.4739	42.474
	39 Bromodichloromethane	83	5.867	5.861	(1.087)	897565	46.2585	46.258
	172 2-Pentanone	86	6.165	6.159	(1.142)	463016	201.872	201.87
	40 2-Chloroethyl Vinyl Ether	63	6.384	6.384	(1.183)	359551	53.1384	53.138
	41 Cis 1,3-dichloropropene	75	6.409	6.403	(1.187)	1137190	45.1051	45.105
$	42 d8-Toluene	98	6.561	6.555	(1.215)	2831730	47.9890	47.989
	43 Toluene	92	6.603	6.597	(1.223)	1761432	44.0220	44.022
	44 Tetrachloroethene	166	6.914	6.914	(0.878)	727025	49.0365	49.037
	45 4-Methyl-2-Pentanone	58	6.956	6.956	(1.288)	1159448	192.565	192.56
	46 Trans 1,3-Dichloropropene	75	6.974	6.968	(1.292)	1003609	45.7333	45.733
	47 1,1,2-Trichloroethane	97	7.102	7.102	(1.315)	564687	44.9369	44.937
	48 Chlorodibromomethane	129	7.242	7.242	(0.920)	692384	48.5041	48.504
	49 1,3-Dichloropropane	76	7.327	7.327	(0.930)	1010462	44.2867	44.287
	50 1,2-Dibromoethane	107	7.425	7.425	(1.375)	572401	45.2990	45.299
	51 2-Hexanone	43	7.674	7.674	(0.975)	1969016	183.938	183.94
*	52 d5-Chlorobenzene	117	7.875	7.875	(1.000)	2391523	50.0000	
	53 Chlorobenzene	112	7.887	7.887	(1.002)	1994538	46.1948	46.195
	54 Ethyl Benzene	91	7.930	7.930	(1.007)	3343624	45.8082	45.808
	55 1,1,1,2-Tetrachloroethane	131	7.954	7.954	(1.010)	722923	47.2889	47.289
	56 m,p-xylene	106	8.063	8.063	(1.024)	2669715	94.2136	94.214
	57 o-Xylene	106	8.428	8.428	(1.070)	1293629	46.2181	46.218
	58 Styrene	104	8.477	8.477	(1.076)	2180687	47.1755	47.176
	59 Bromoform	173	8.489	8.483	(0.852)	407390	46.8325	46.833
	60 Isopropyl Benzene	105	8.714	8.714	(0.874)	3374020	45.7839	45.784
$	62 4-Bromofluorobenzene	95	8.952	8.952	(1.137)	1238538	48.1564	48.156
	63 Bromobenzene	156	9.037	9.031	(0.907)	799445	46.8099	46.810
	64 N-Propyl Benzene	91	9.085	9.085	(0.912)	3919012	44.2264	44.226
	65 1,1,2,2-Tetrachloroethane	83	9.158	9.158	(0.919)	714981	41.1415	41.142
	66 2-Chloro Toluene	91	9.207	9.207	(0.924)	2305833	44.5432	44.543
	67 1,3,5-Trimethyl Benzene	105	9.274	9.274	(0.930)	2851360	46.1173	46.117
	68 1,2,3-Trichloropropane	110	9.268	9.268	(0.930)	225152	43.8415	43.841
	69 Trans-1,4-Dichloro 2-Butene	53	9.317	9.317	(0.935)	187487	40.4228	40.423
	70 4-Chloro Toluene	91	9.359	9.359	(0.939)	2439176	45.4950	45.495
	71 T-Butyl Benzene	119	9.554	9.554	(0.958)	2562089	45.5152	45.515
	72 1,2,4-Trimethylbenzene	105	9.621	9.621	(0.965)	2872931	46.3835	46.384
	73 S-Butyl Benzene	105	9.712	9.712	(0.974)	3700755	44.6556	44.656
	74 4-Isopropyl Toluene	119	9.858	9.858	(0.989)	3267201	47.4502	47.450
	75 1,3-Dichlorobenzene	146	9.895	9.895	(0.993)	1619071	48.3509	48.351
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1234567	50.0000	
	77 1,4-Dichlorobenzene	146	9.980	9.980	(1.001)	1610685	47.5528	47.553

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	10.247	10.241	(1.028)	2884986	47.3283	47.328
$	79 d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1217204	48.9623	48.962
	80 1,2-Dichlorobenzene	146	10.363	10.363	(1.040)	1478840	46.6661	46.666
	81 1,2-Dibromo 3-Chloropropane	75	11.123	11.123	(1.116)	133803	40.8150	40.815
	82 Hexachloro 1,3-Butadiene	225	11.762	11.762	(1.180)	423257	49.9389	49.939
	83 1,2,4-Trichlorobenzene	180	11.774	11.774	(1.181)	971636	53.6350	53.635
	84 Naphthalene	128	12.085	12.085	(1.212)	2540496	47.7965	47.797
	85 1,2,3-Trichlorobenzene	180	12.267	12.261	(1.231)	873687	51.4160	51.416

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301604A.D
Lab Smp Id: BEG0005-BS1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\H2O\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Client Smp ID: LCS0630
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	700998	16.84
35 1,4-Difluorobenze	2041239	1020620	4082478	2302955	12.82
52 d5-Chlorobenzene	2118314	1059157	4236628	2391523	12.90
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1234567	17.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.95	0.12
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.11
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	-0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEG0005-BS1 Client Smp ID: LCS0630
Level: LOW Operator: PB
Data Type: MS DATA SampleType: LCS
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\H2O\VO051314S.m
Misc Info: 1

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	41.888	83.78	67-142
2	Chloromethane	50.000	33.970	67.94	65-129
3	Vinyl Chloride	50.000	41.957	83.91	74-134
4	Bromomethane	50.000	27.312	54.62	40-172
5	Chloroethane	50.000	41.566	83.13	53-154
6	Trichlorofluoromet	50.000	61.820	123.64	57-161
12	Acrolein	250.00	201.28	80.51	60-130
9	112Trichloro122Tri	50.000	47.293	94.59	72-142
14	Acetone	250.00	180.78	72.31	48-132
7	1,1-Dichloroethene	50.000	46.183	92.37	73-138
11	Bromoethane	50.000	47.457	94.91	74-132
10	Iodomethane	50.000	31.682	63.36	34-181
13	Methylene Chloride	50.000	46.388	92.78	61-128
8	Carbon Disulfide	50.000	45.543	91.09	72-146
18	Acrylonitrile	50.000	39.165	78.33	59-124
15	Trans-1,2-Dichloro	50.000	45.501	91.00	73-131
19	Vinyl Acetate	50.000	38.646	77.29	54-138
17	1,1-Dichloroethane	50.000	41.498	83.00	65-139
29	2-Butanone	250.00	192.17	76.87	64-120
22	2,2-Dichloropropan	50.000	44.765	89.53	77-137
20	Cis-1,2-Dichloroet	50.000	43.506	87.01	74-124
24	Chloroform	50.000	43.353	86.71	75-126
23	Bromochloromethane	50.000	45.167	90.33	69-133
26	1,1,1-Trichloroeth	50.000	43.119	86.24	78-133
28	1,1-Dichloropropen	50.000	44.103	88.21	80-123
25	Carbon Tetrachlori	50.000	47.269	94.54	76-136
33	1,2-Dichloroethane	50.000	41.563	83.13	77-120
30	Benzene	50.000	44.450	88.90	80-120
34	Trichloroethene	50.000	45.491	90.98	80-120
38	1,2-Dichloropropan	50.000	42.474	84.95	74-120
39	Bromodichlorometha	50.000	46.258	92.52	80-122
172	2-Pentanone	250.00	201.87	80.75	70-130
37	Dibromomethane	50.000	44.049	88.10	80-120
40	2-Chloroethyl Viny	50.000	53.138	106.28	20-157
45	4-Methyl-2-Pentano	250.00	192.56	77.03	70-124
41	Cis 1,3-dichloropr	50.000	45.105	90.21	80-124
43	Toluene	50.000	44.022	88.04	78-120
46	Trans 1,3-Dichloro	50.000	45.733	91.47	80-126
51	2-Hexanone	250.00	183.94	73.58	62-128
47	1,1,2-Trichloroeth	50.000	44.937	89.87	77-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
49 1,3-Dichloropropan	50.000	44.287	88.57	77-120
44 Tetrachloroethene	50.000	49.037	98.07	76-131
48 Chlorodibromometha	50.000	48.504	97.01	77-123
50 1,2-Dibromoethane	50.000	45.299	90.60	79-120
53 Chlorobenzene	50.000	46.195	92.39	80-120
55 1,1,1,2-Tetrachlor	50.000	47.289	94.58	80-120
54 Ethyl Benzene	50.000	45.808	91.62	80-120
56 m,p-xylene	100.00	94.214	94.21	80-123
57 o-Xylene	50.000	46.218	92.44	80-120
58 Styrene	50.000	47.176	94.35	80-122
60 Isopropyl Benzene	50.000	45.784	91.57	77-127
59 Bromoform	50.000	46.833	93.67	63-120
65 1,1,2,2-Tetrachlor	50.000	41.142	82.28	71-120
68 1,2,3-Trichloropro	50.000	43.841	87.68	75-120
69 Trans-1,4-Dichloro	50.000	40.423	80.85	62-127
64 N-Propyl Benzene	50.000	44.226	88.45	76-126
63 Bromobenzene	50.000	46.810	93.62	75-120
67 1,3,5-Trimethyl Be	50.000	46.117	92.23	77-126
66 2-Chloro Toluene	50.000	44.543	89.09	76-120
70 4-Chloro Toluene	50.000	45.495	90.99	75-121
71 T-Butyl Benzene	50.000	45.515	91.03	77-125
72 1,2,4-Trimethylben	50.000	46.384	92.77	77-125
73 S-Butyl Benzene	50.000	44.656	89.31	77-127
74 4-Isopropyl Toluen	50.000	47.450	94.90	78-131
75 1,3-Dichlorobenzen	50.000	48.351	96.70	76-120
77 1,4-Dichlorobenzen	50.000	47.553	95.11	75-120
78 N-Butyl Benzene	50.000	47.328	94.66	75-134
80 1,2-Dichlorobenzen	50.000	46.666	93.33	77-120
81 1,2-Dibromo 3-Chlo	50.000	40.815	81.63	61-128
83 1,2,4-Trichloroben	50.000	53.635	107.27	75-130
82 Hexachloro 1,3-But	50.000	49.939	99.88	72-135
84 Naphthalene	50.000	47.797	95.59	71-122
85 1,2,3-Trichloroben	50.000	51.416	102.83	76-122

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	48.027	96.05	70-130
$ 32 d4-1,2-Dichloroeth	50.000	44.466	88.93	80-149
$ 42 d8-Toluene	50.000	47.989	95.98	77-120
$ 62 4-Bromofluorobenze	50.000	48.156	96.31	80-120
$ 79 d4-1,2-Dichloroben	50.000	48.962	97.92	80-120

REVIEW SUMMARY FOR FILE - 06301604A.D

Lab ID: BEG0005-BS1
nt5.i, 20160630.b\H2O\VO051314S.m,   30-JUN-2016 12:46

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,H2O\VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

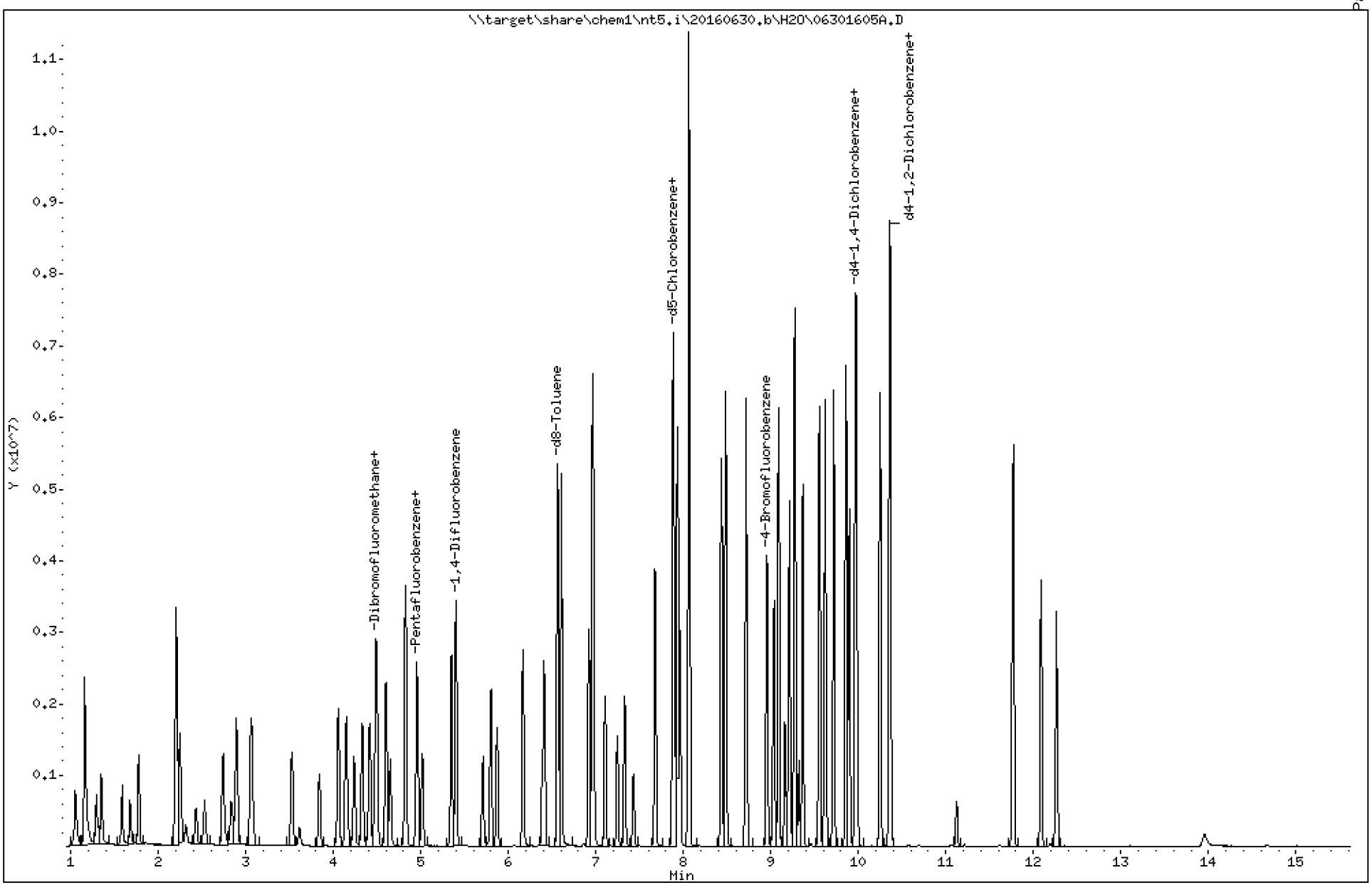
Sample Info: LCS0630,5,5,0

Column phase: RTXVMS

Instrument: nt5.i

Operator: PB

Column diameter: 0.18



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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

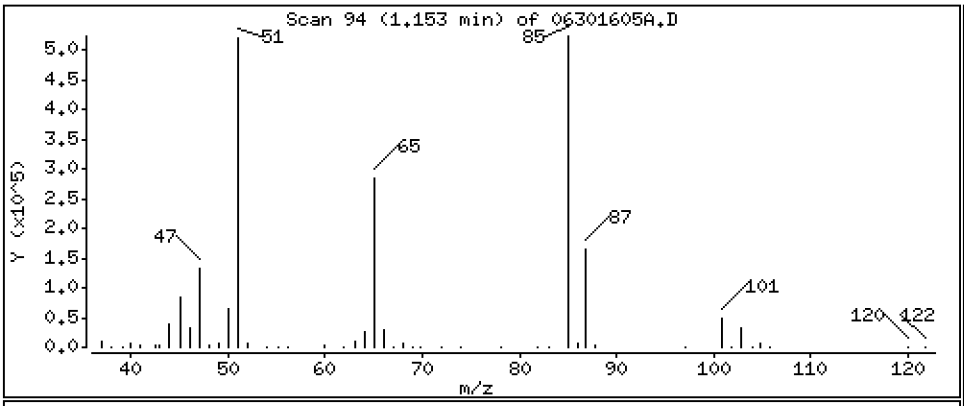
Operator: PB

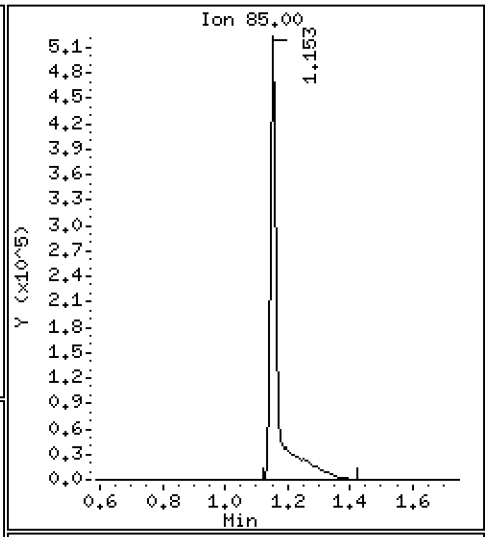
Column phase: RTXVMS

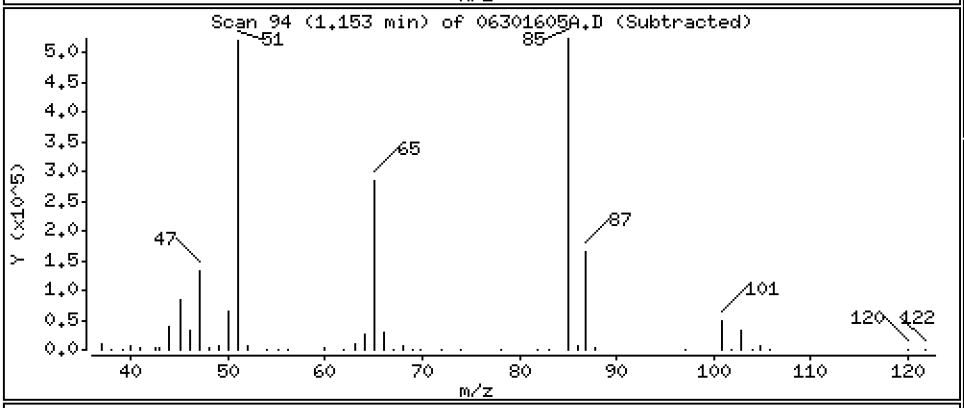
Column diameter: 0.18

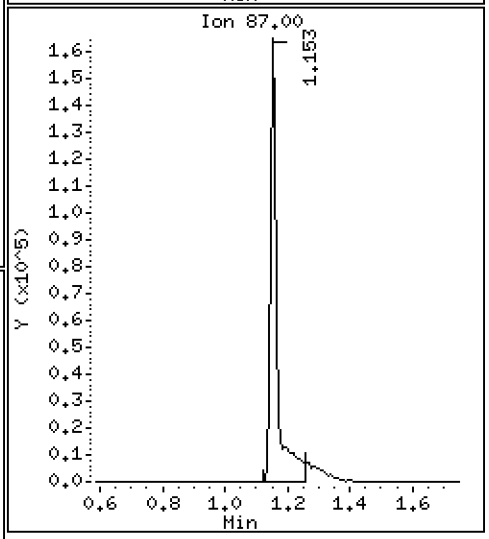
1 Dichlorodifluoromethane

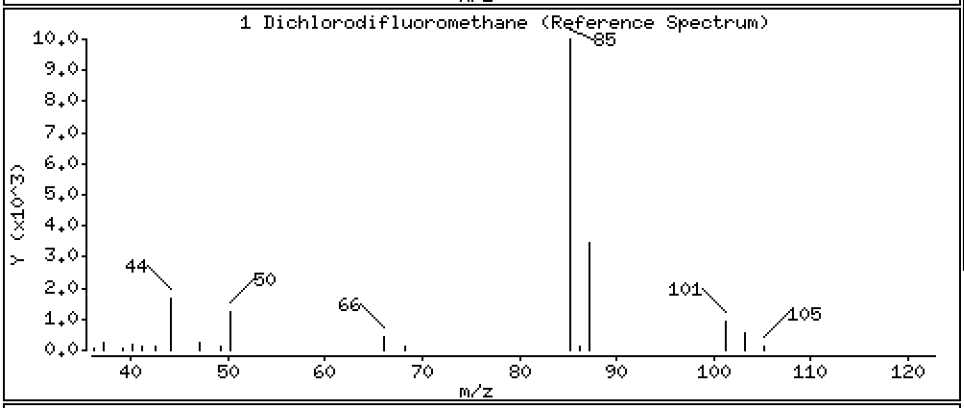
Concentration: 40.400 ug/Kg

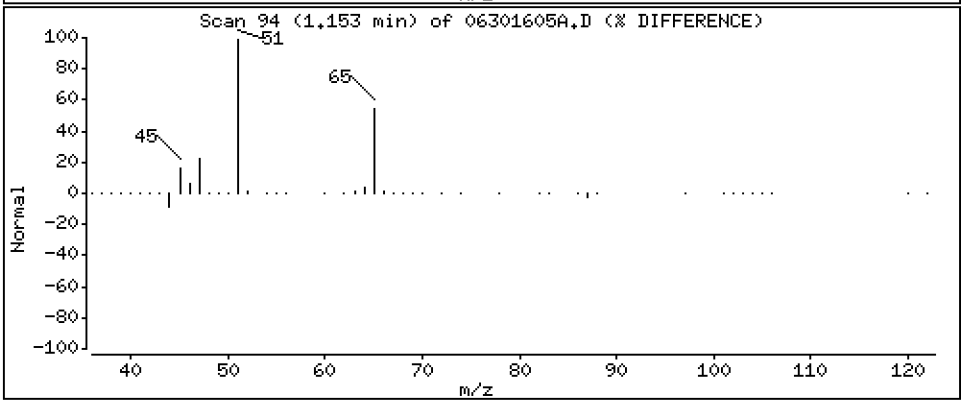












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

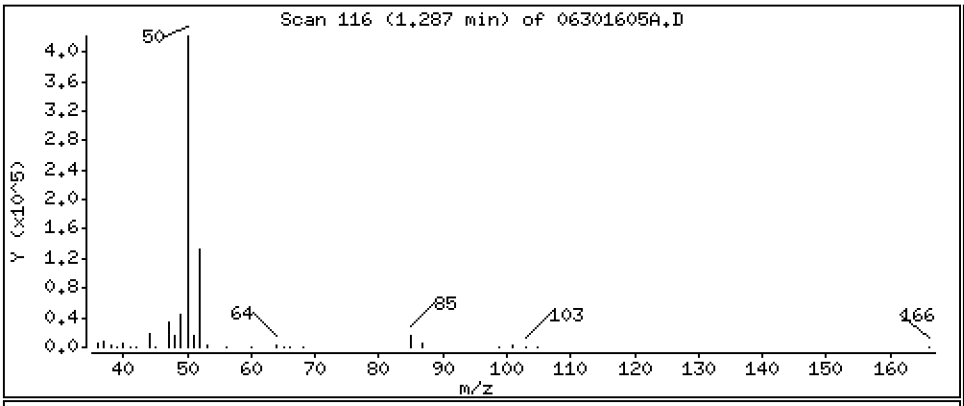
Operator: PB

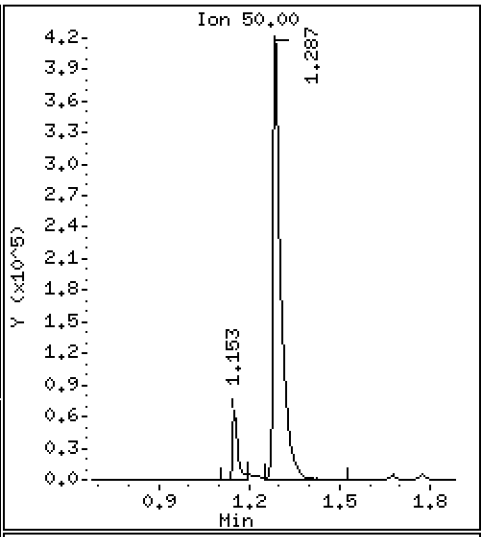
Column phase: RTXVMS

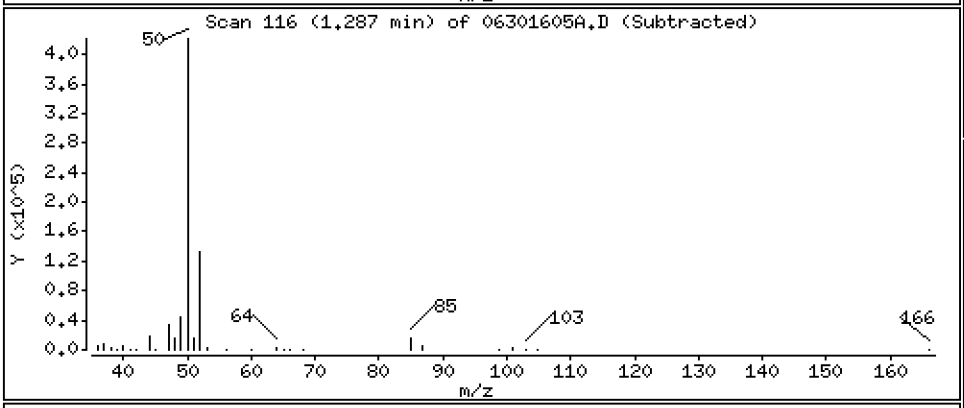
Column diameter: 0.18

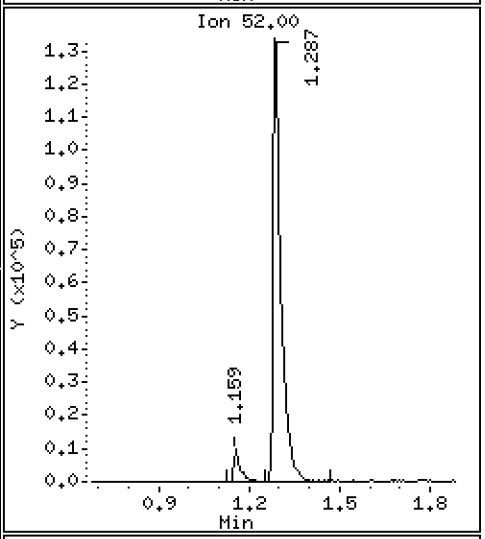
2 Chloromethane

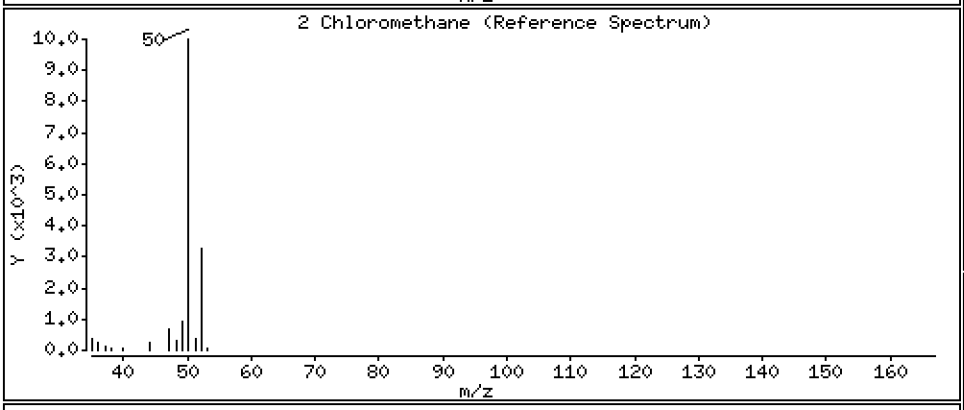
Concentration: 32.336 ug/Kg

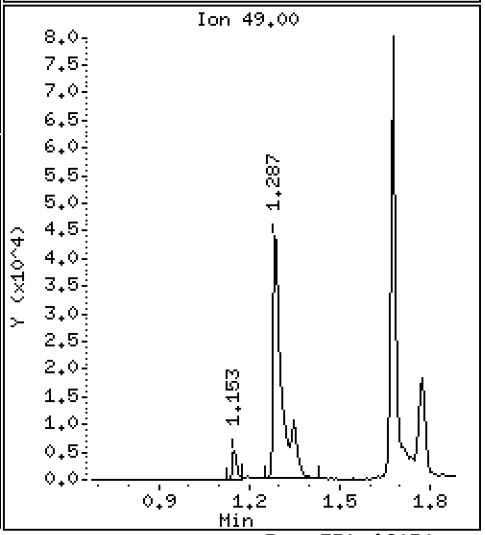


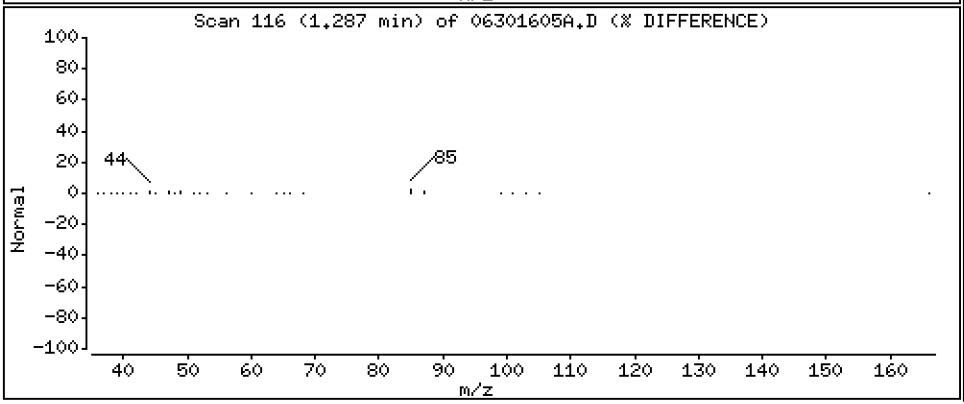












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

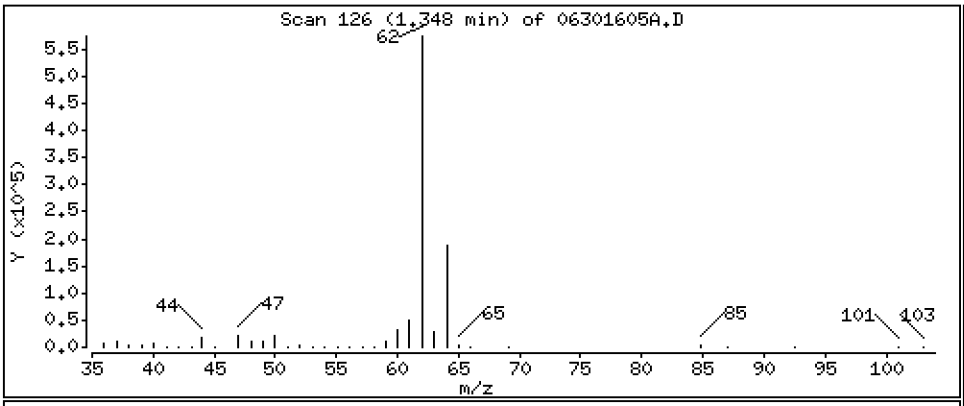
Operator: PB

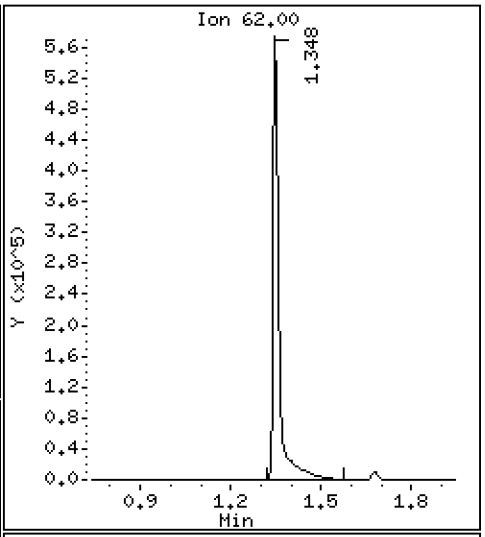
Column phase: RTXVMS

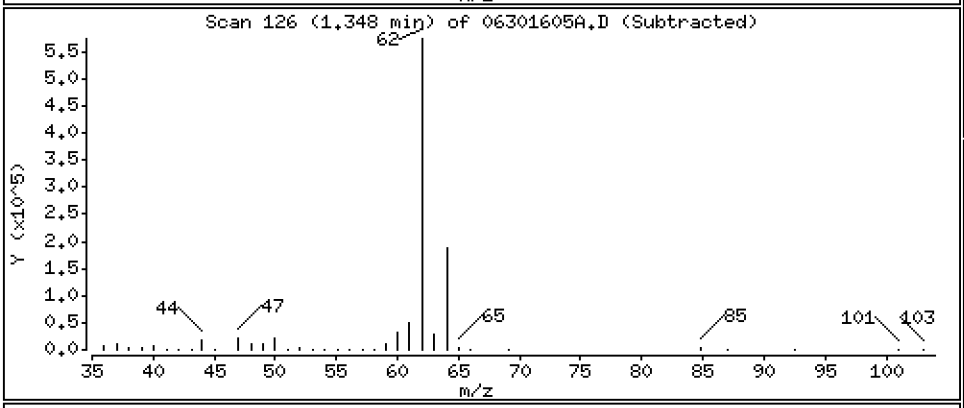
Column diameter: 0.18

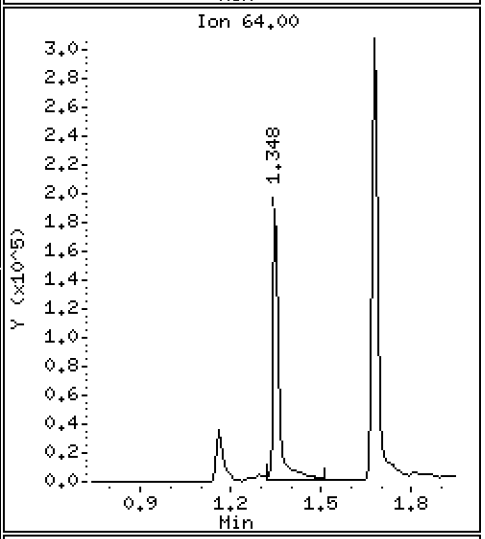
3 Vinyl Chloride

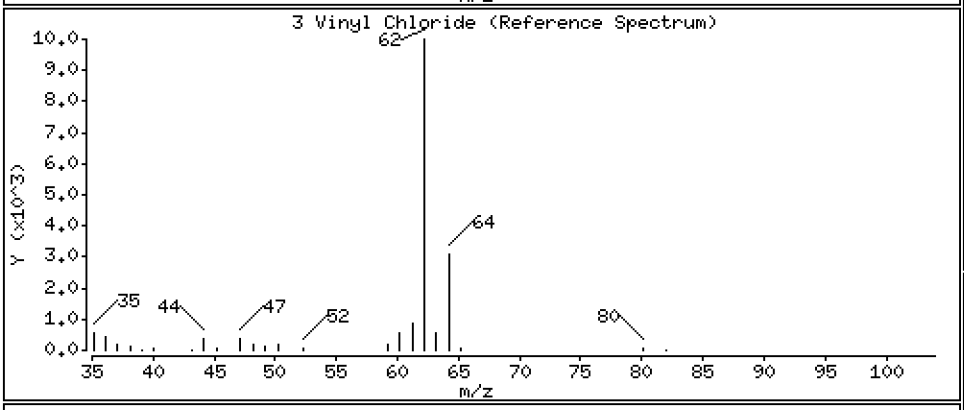
Concentration: 40.246 ug/Kg

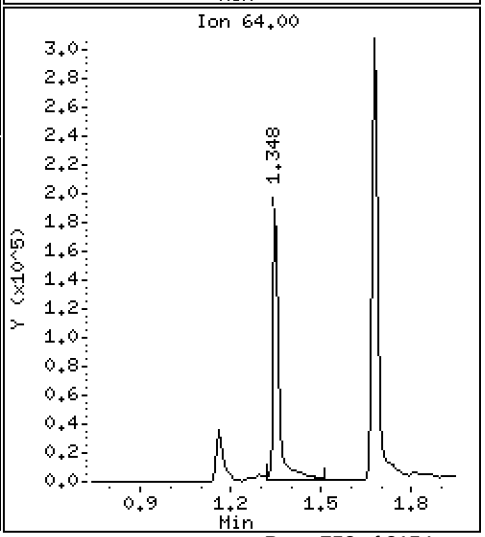


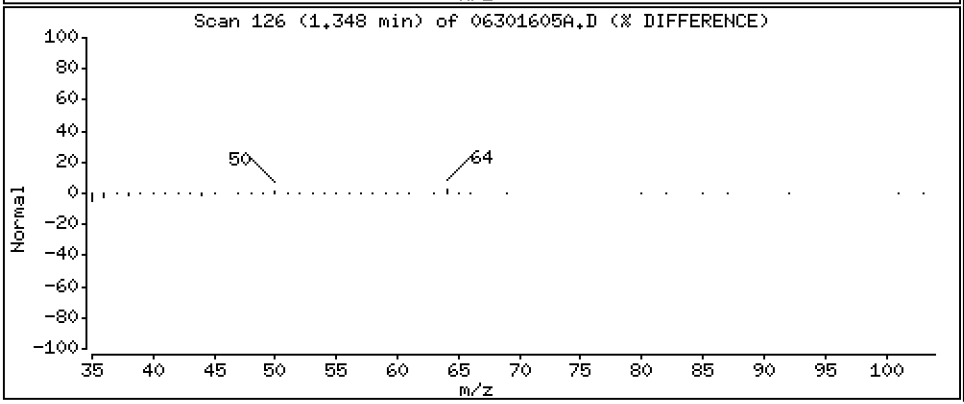












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

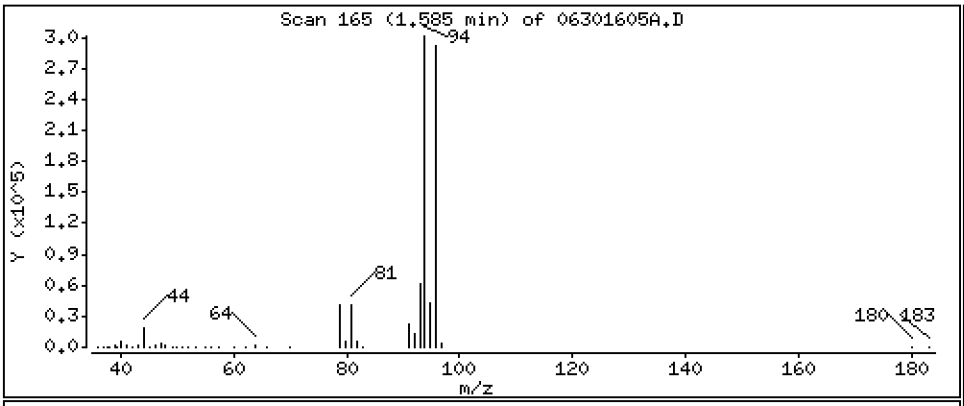
Operator: PB

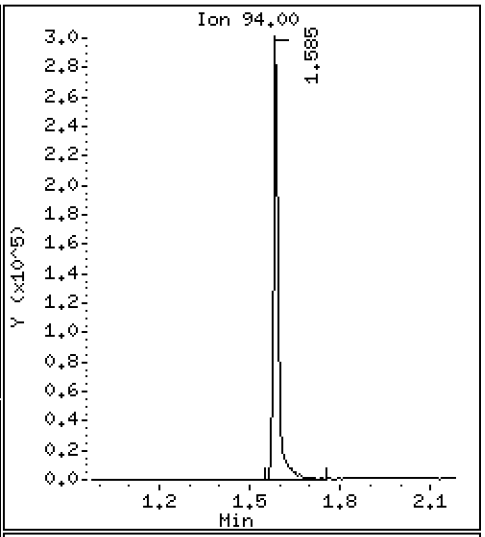
Column phase: RTXVMS

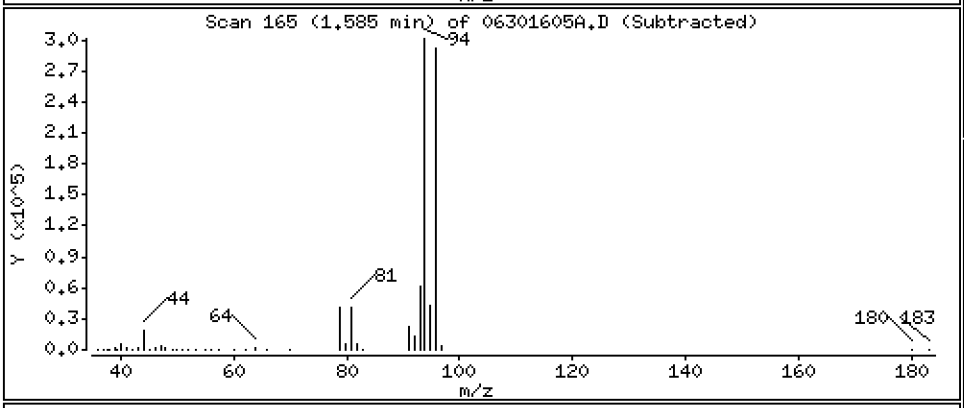
Column diameter: 0.18

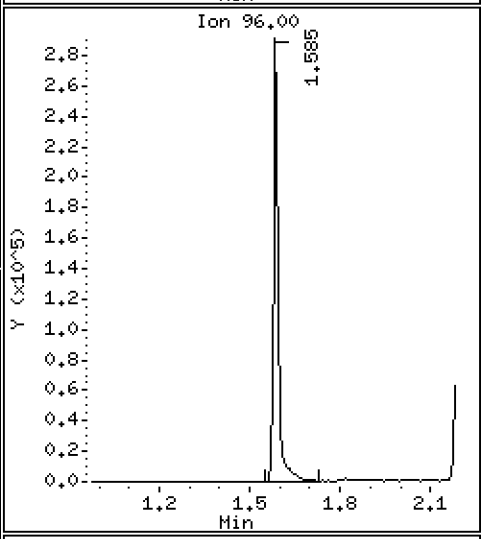
4 Bromomethane

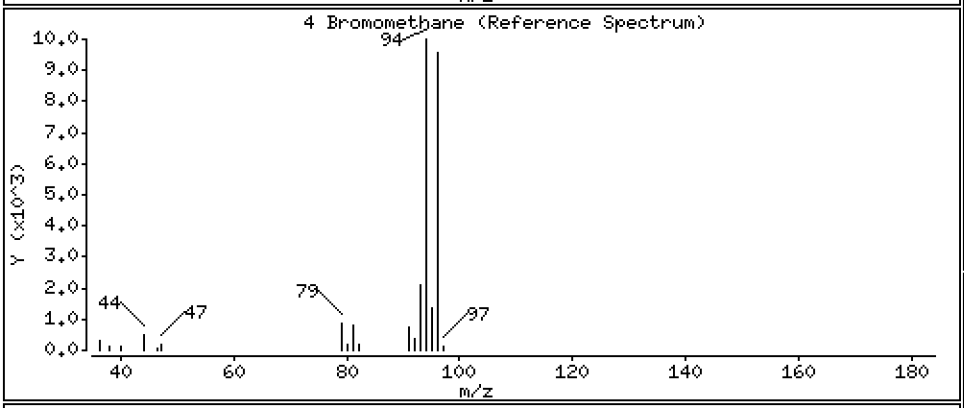
Concentration: 27.112 ug/Kg

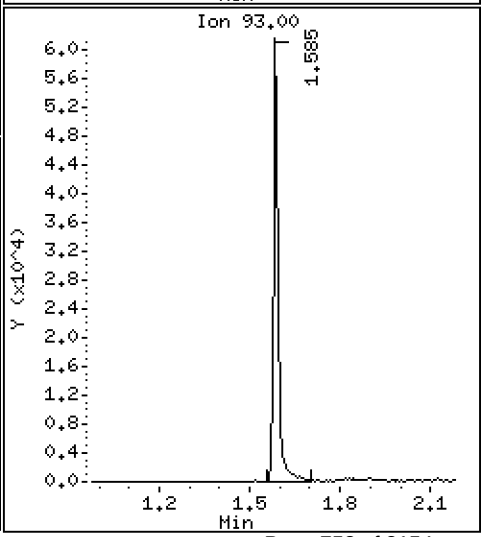


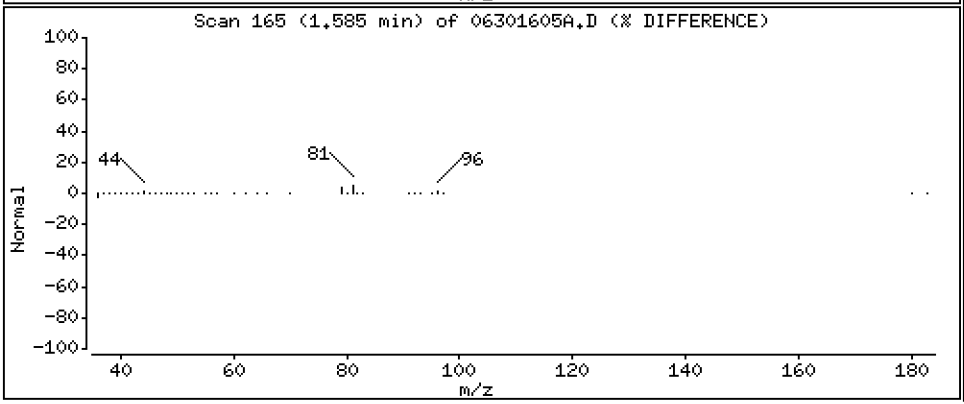












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

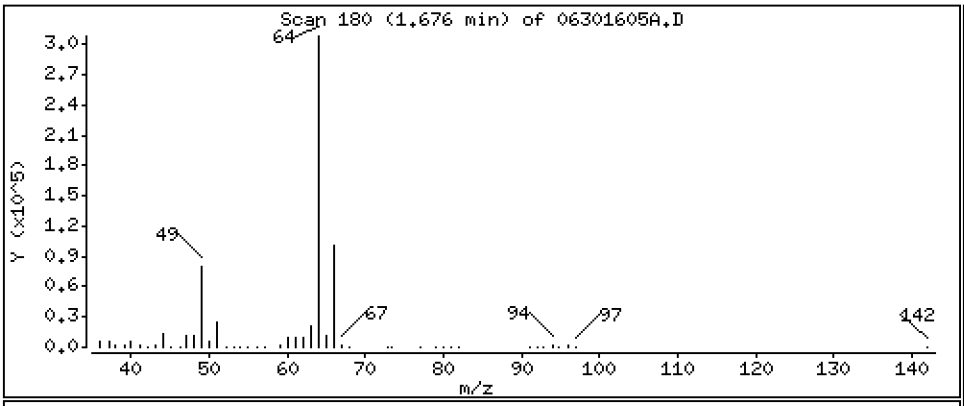
Operator: PB

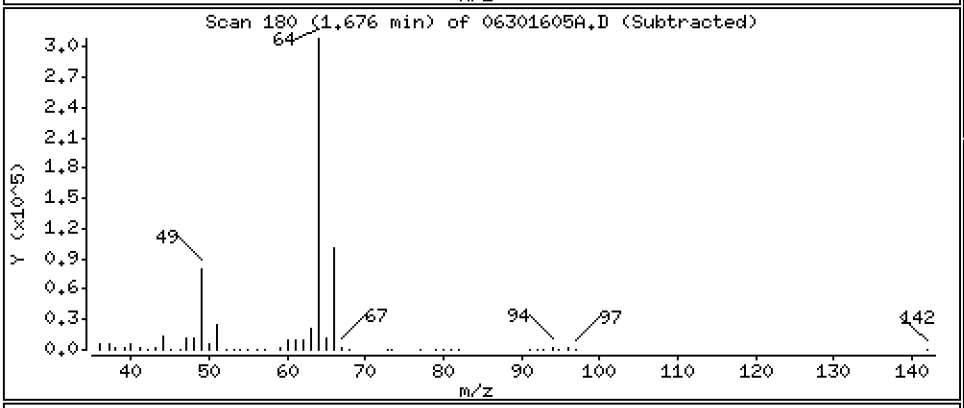
Column phase: RTXVMS

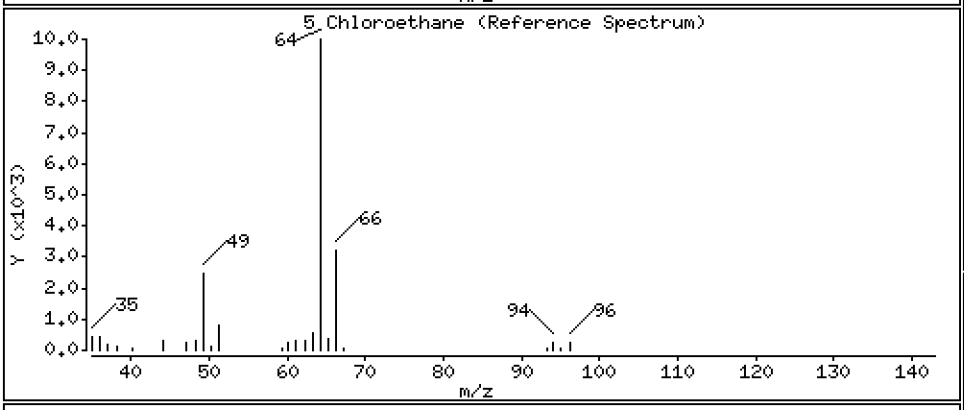
Column diameter: 0.18

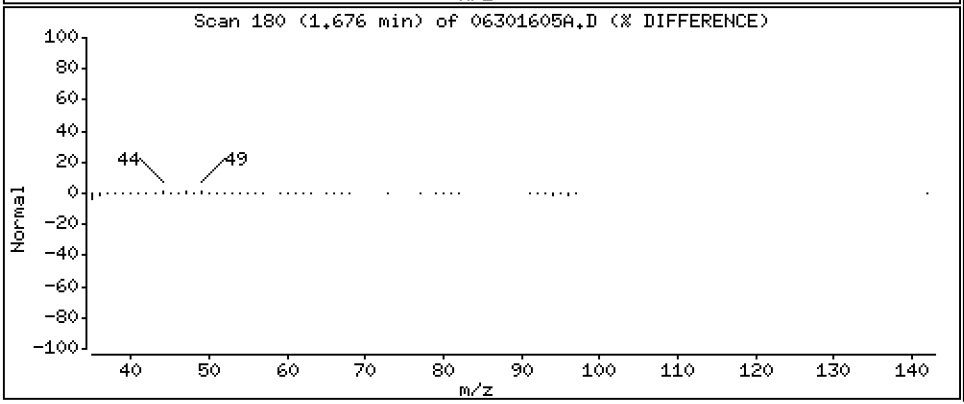
5 Chloroethane

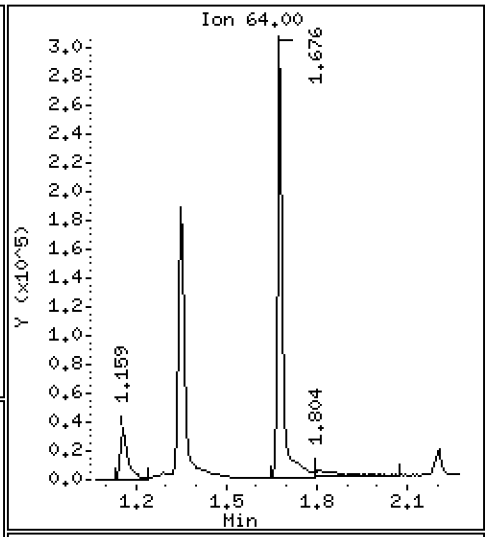
Concentration: 40.063 ug/Kg

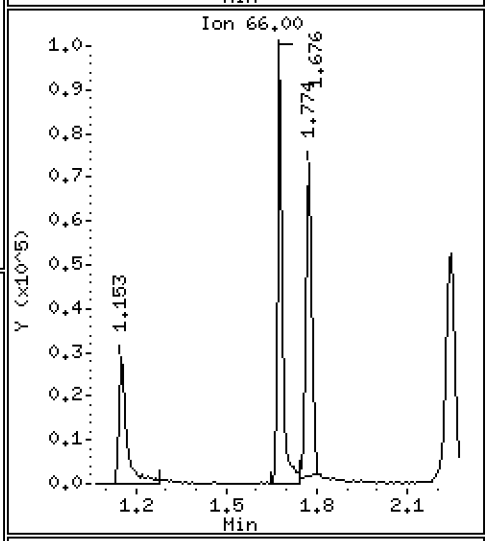


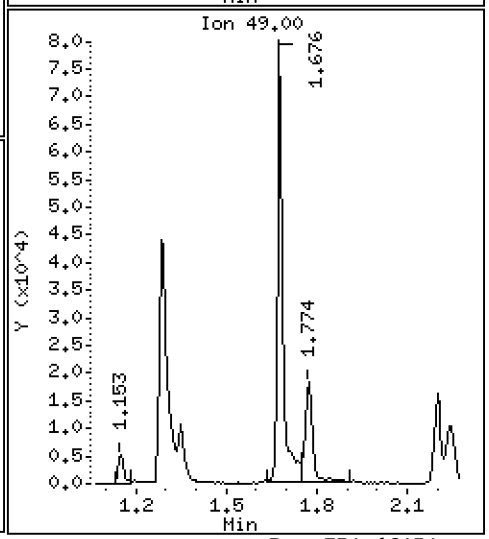












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

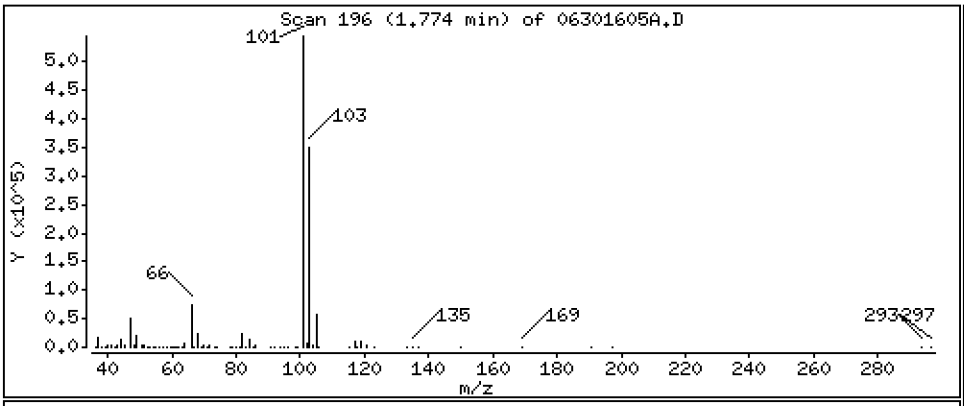
Operator: PB

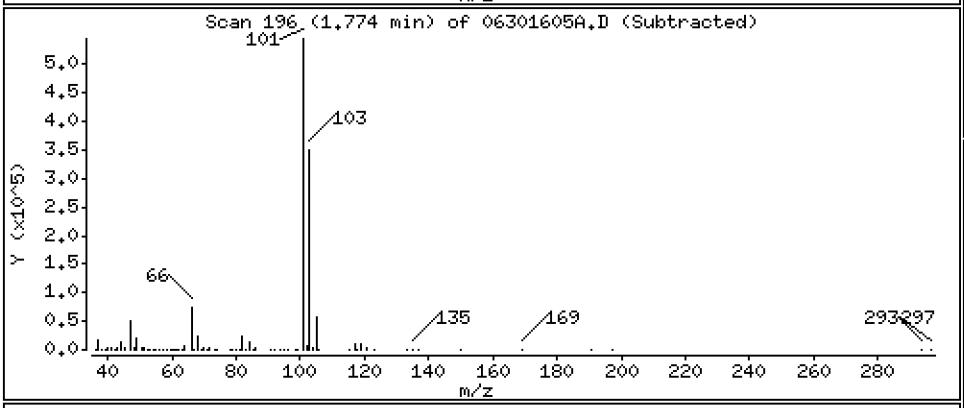
Column phase: RTXVMS

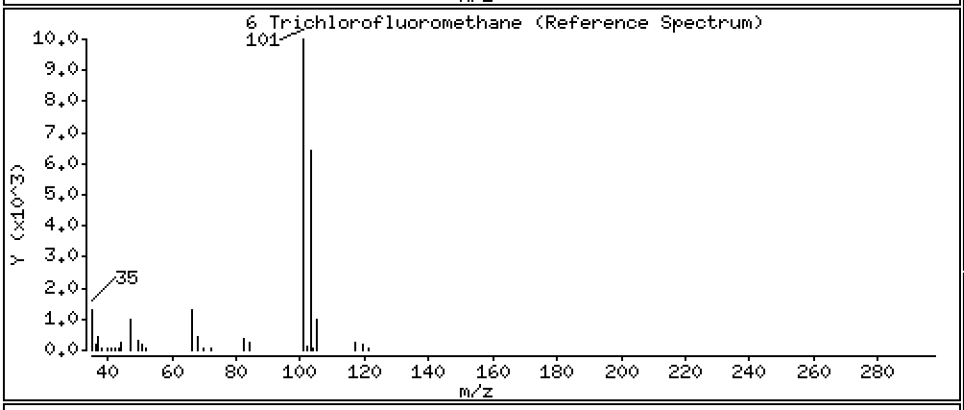
Column diameter: 0.18

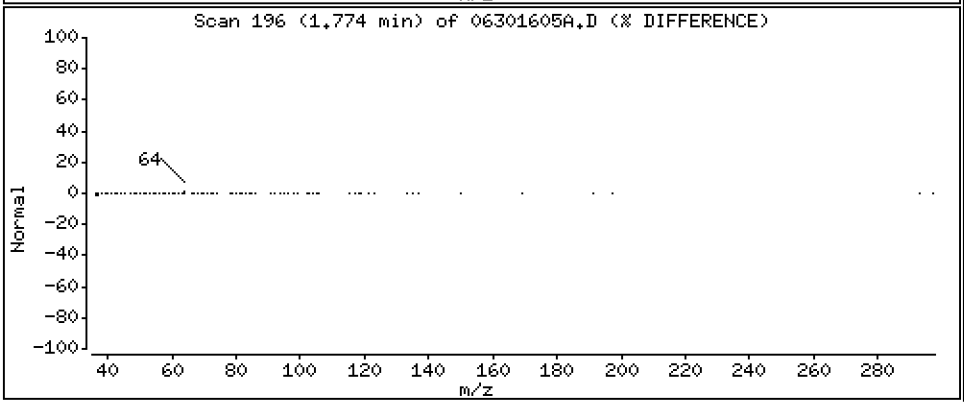
6 Trichlorofluoromethane

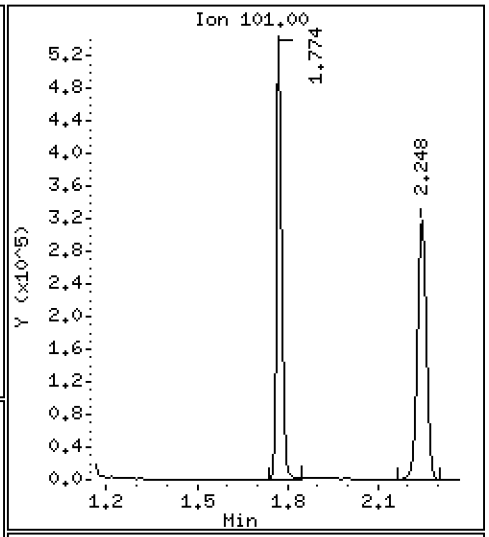
Concentration: 60.218 ug/Kg

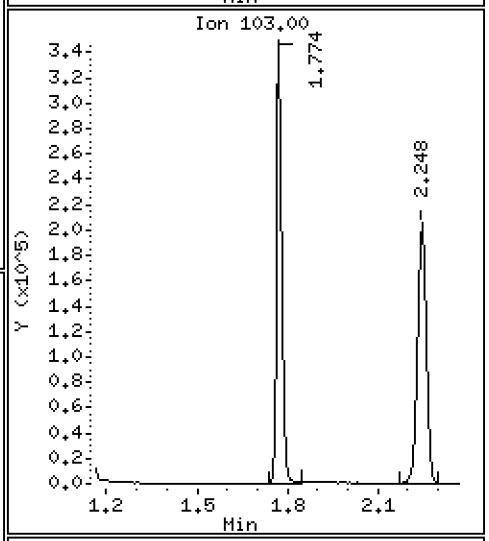


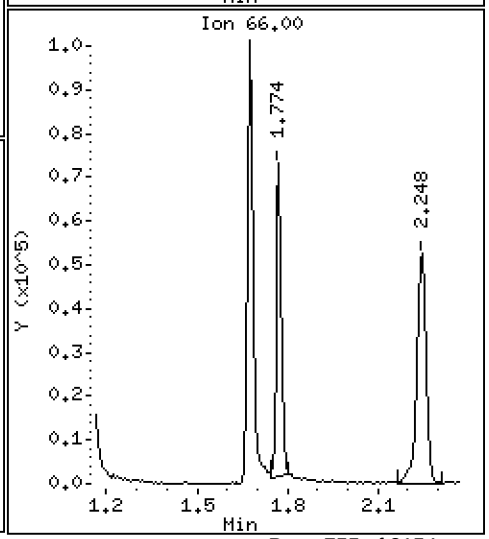












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

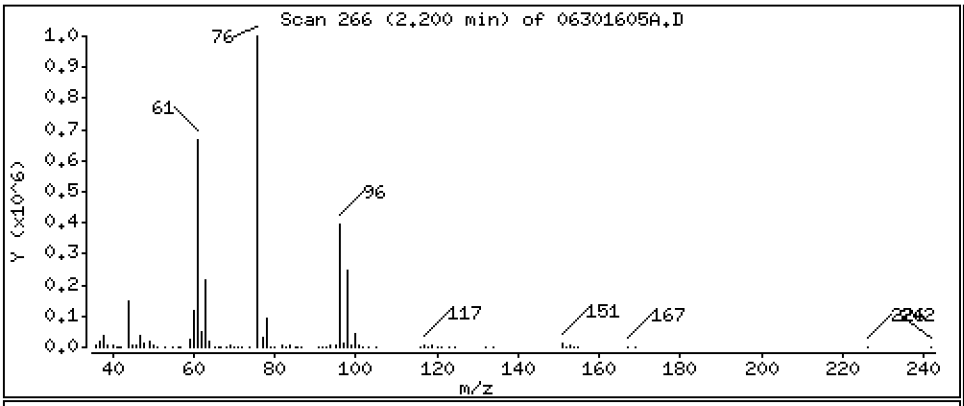
Operator: PB

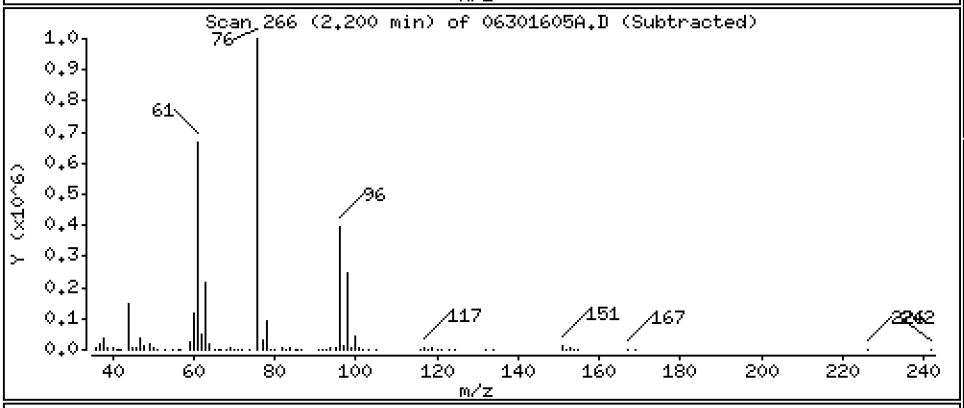
Column phase: RTXVMS

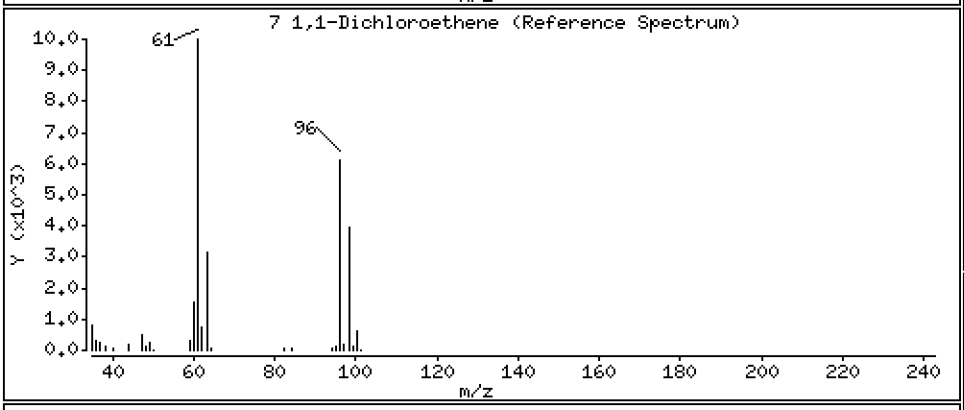
Column diameter: 0.18

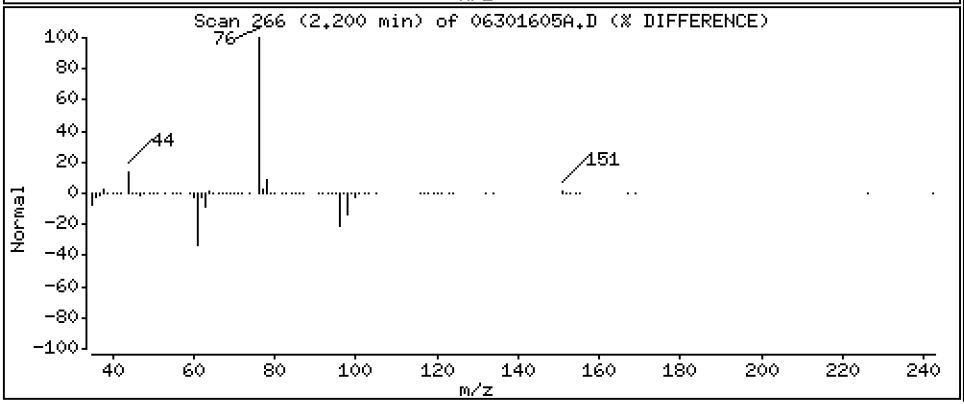
7 1,1-Dichloroethene

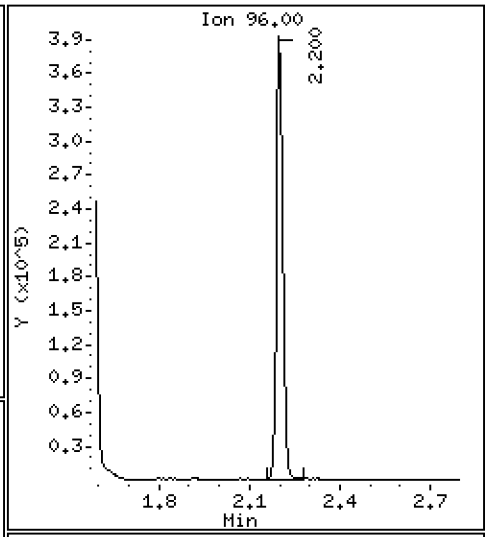
Concentration: 45.068 ug/Kg

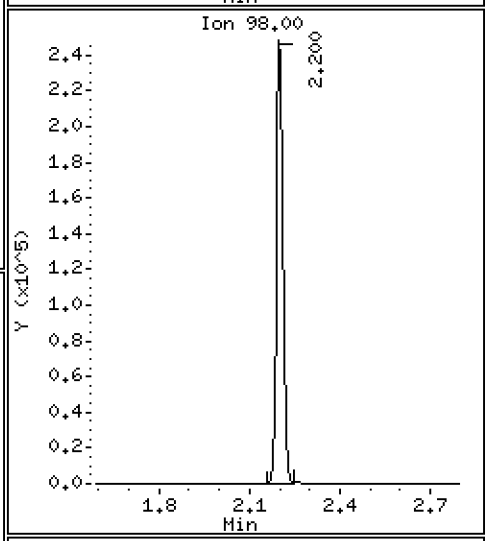


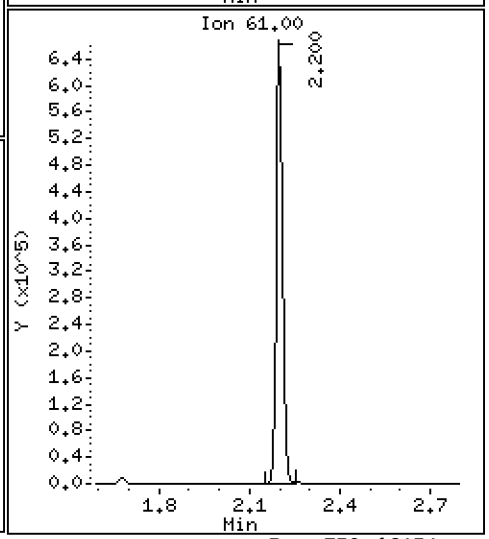












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

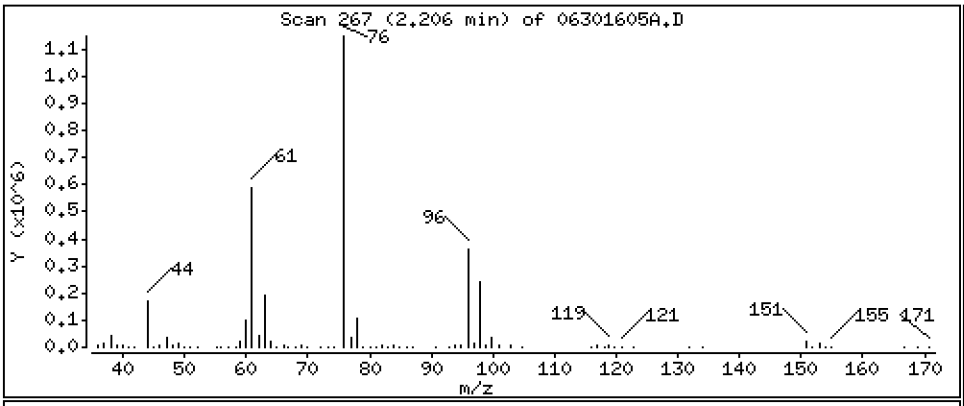
Operator: PB

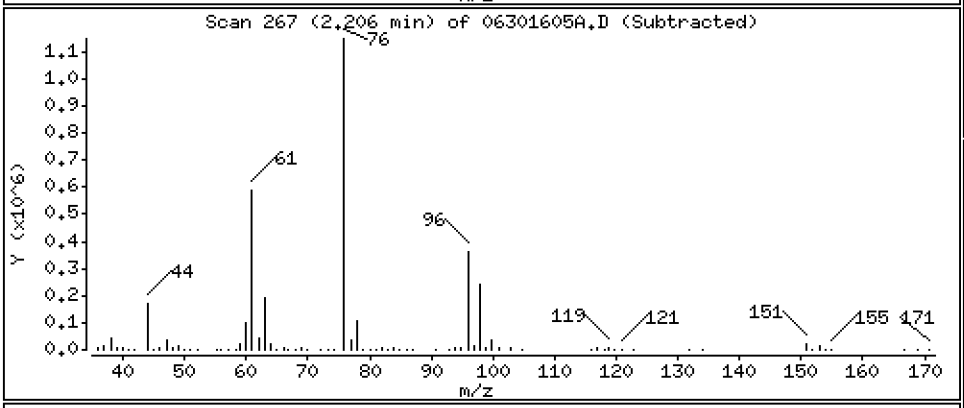
Column phase: RTXVMS

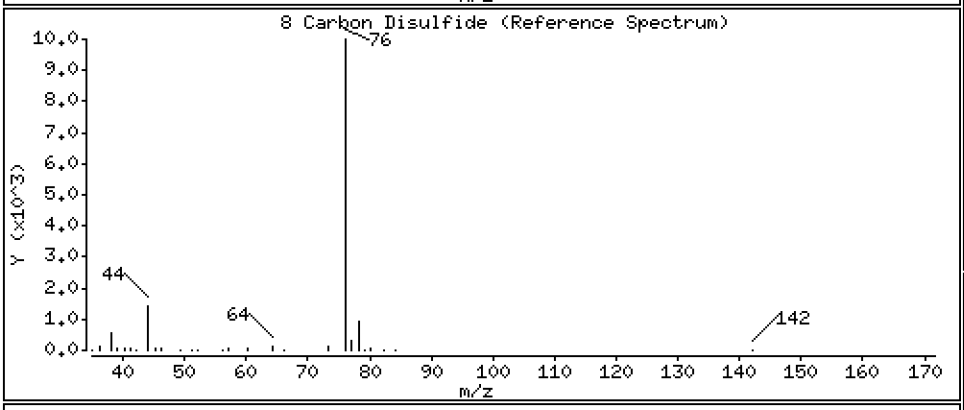
Column diameter: 0.18

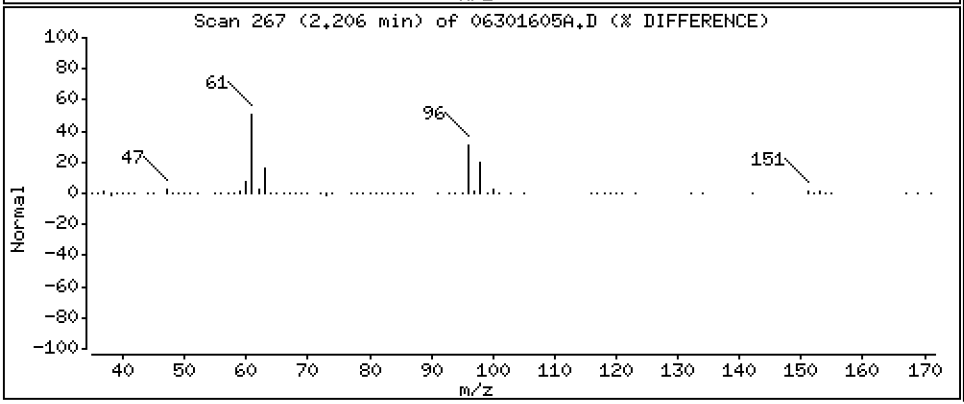
8 Carbon Disulfide

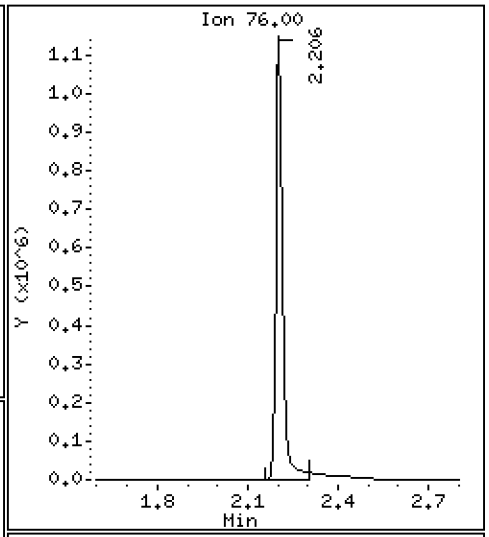
Concentration: 43.698 ug/Kg

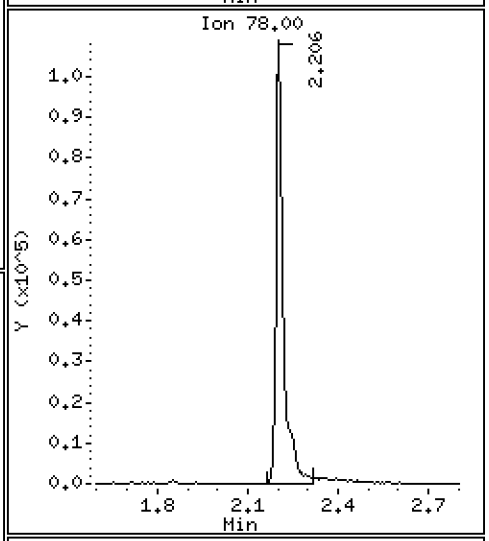


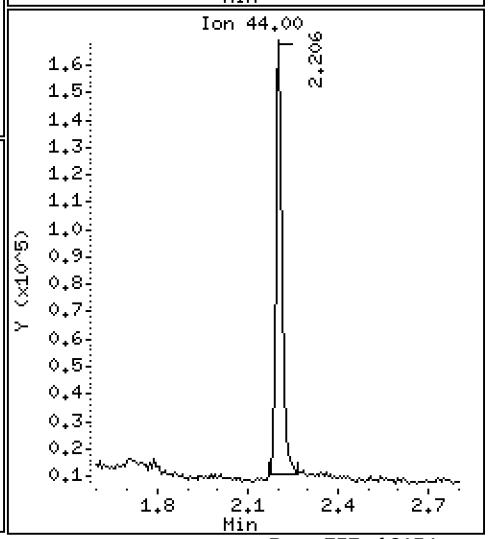












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

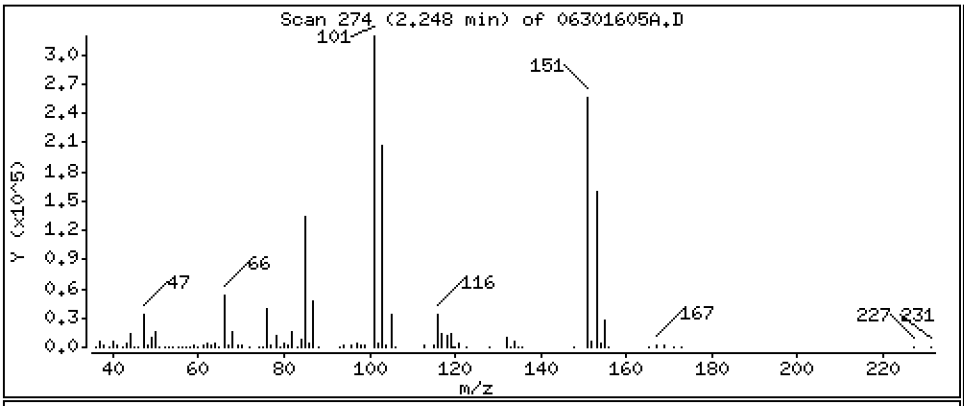
Operator: PB

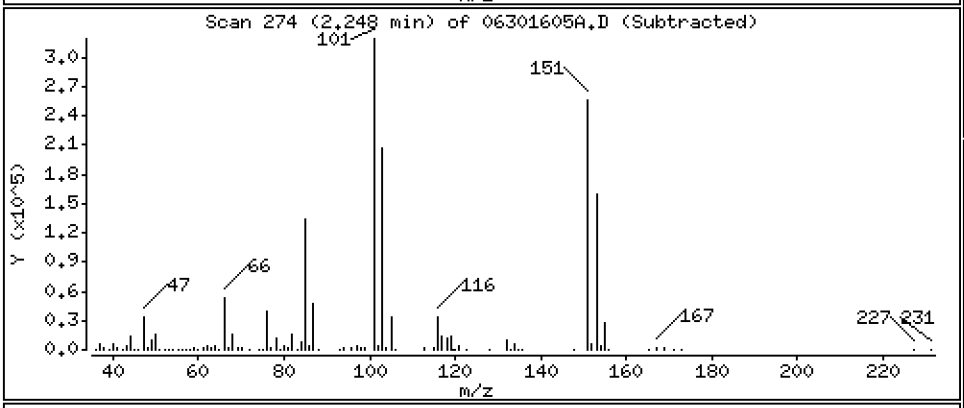
Column phase: RTXVMS

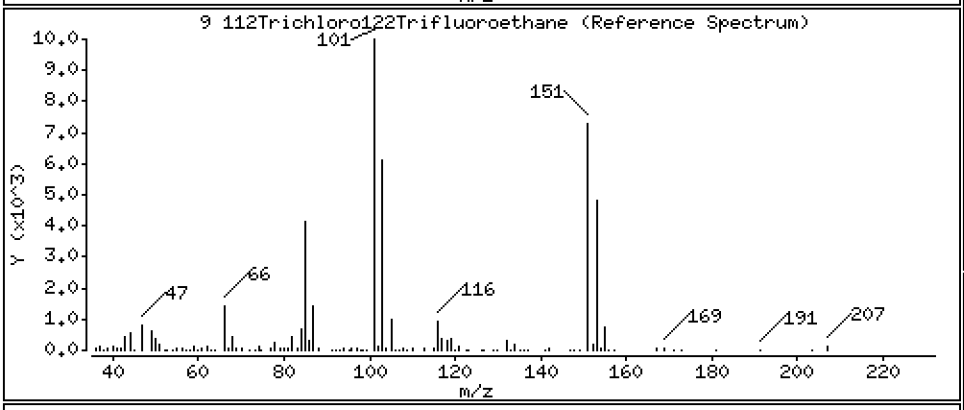
Column diameter: 0.18

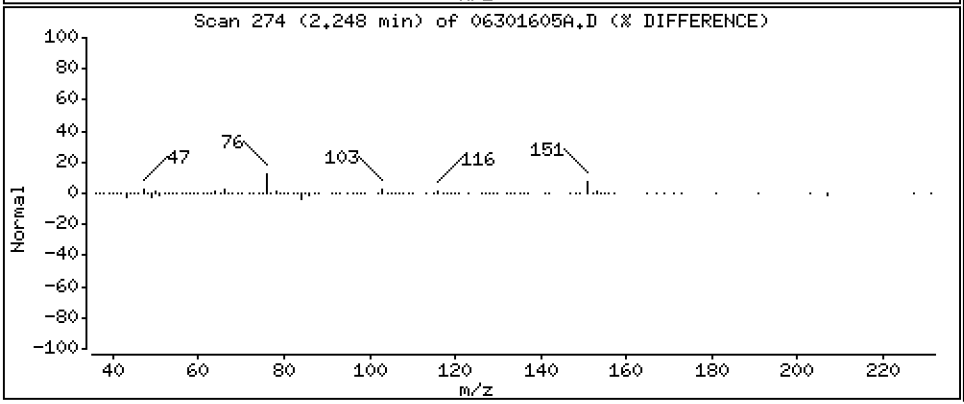
9 112Trichloro122Trifluoroethane

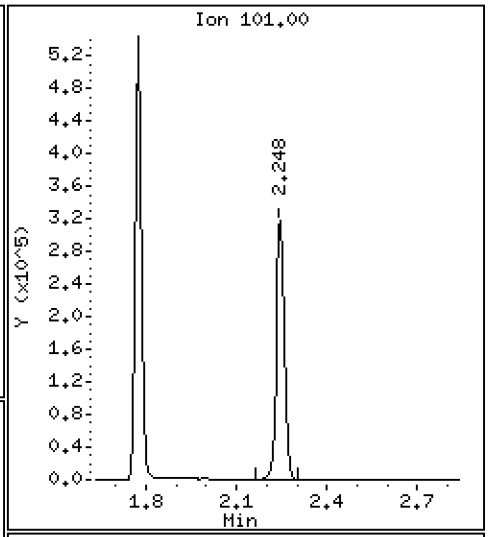
Concentration: 46.066 ug/Kg

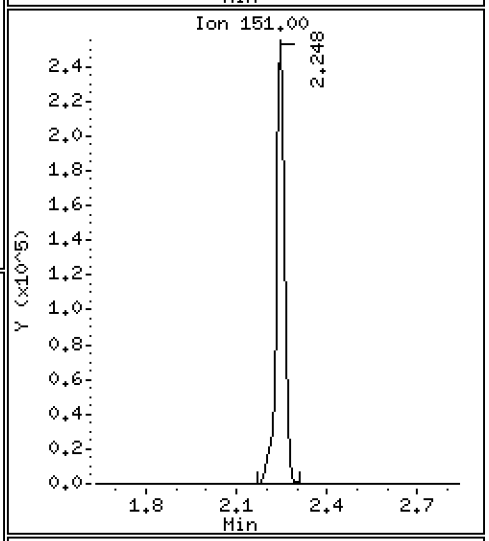


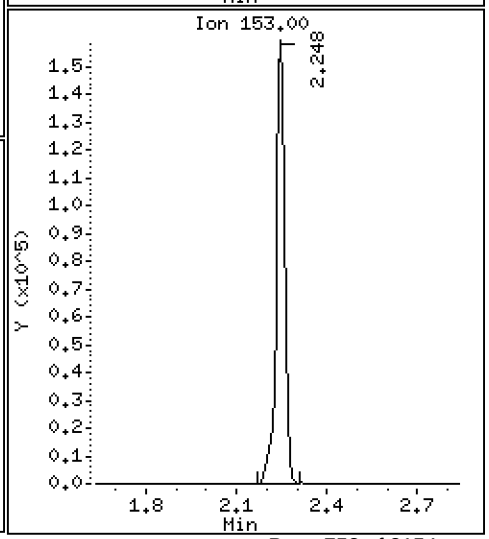












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

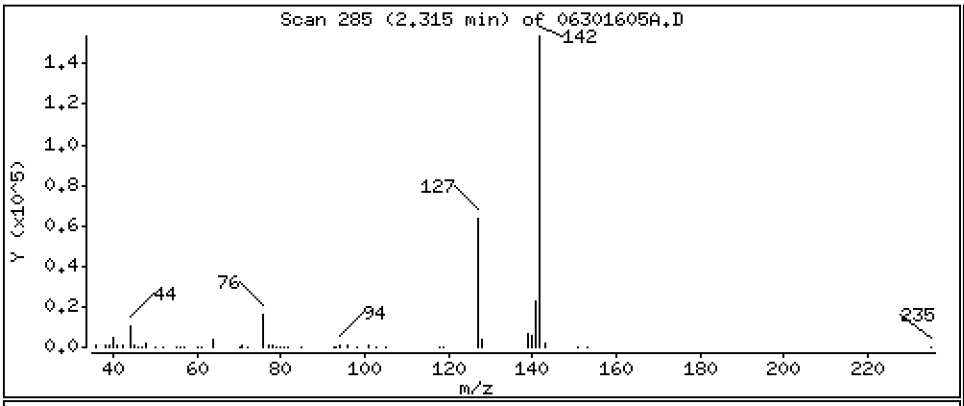
Operator: PB

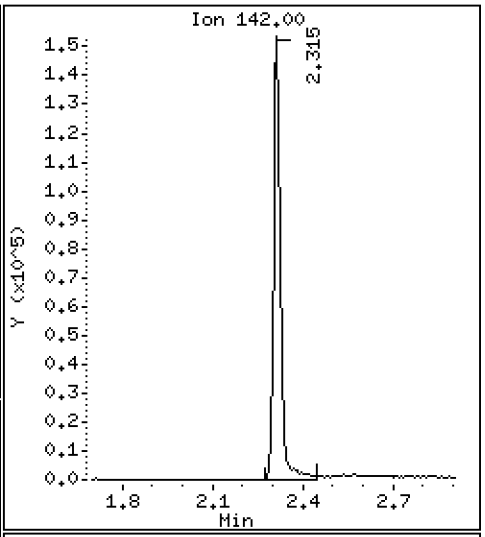
Column phase: RTXVMS

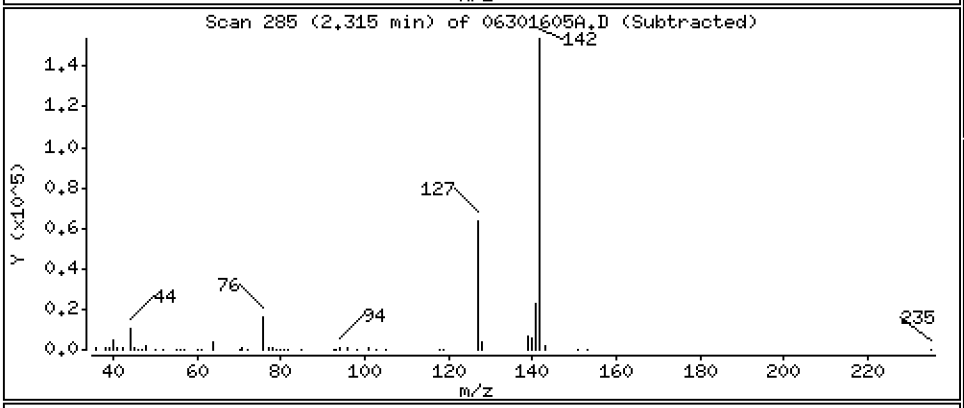
Column diameter: 0.18

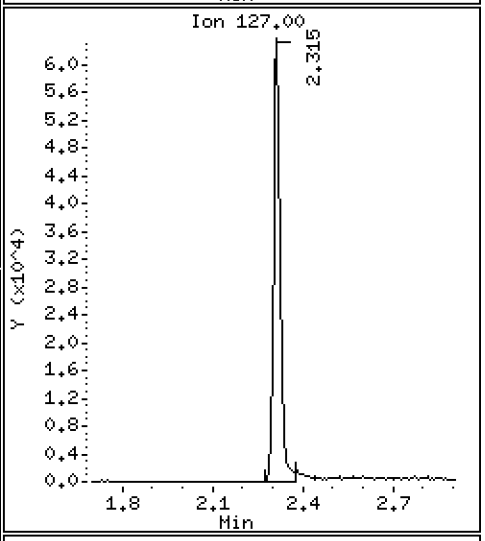
10 Iodomethane

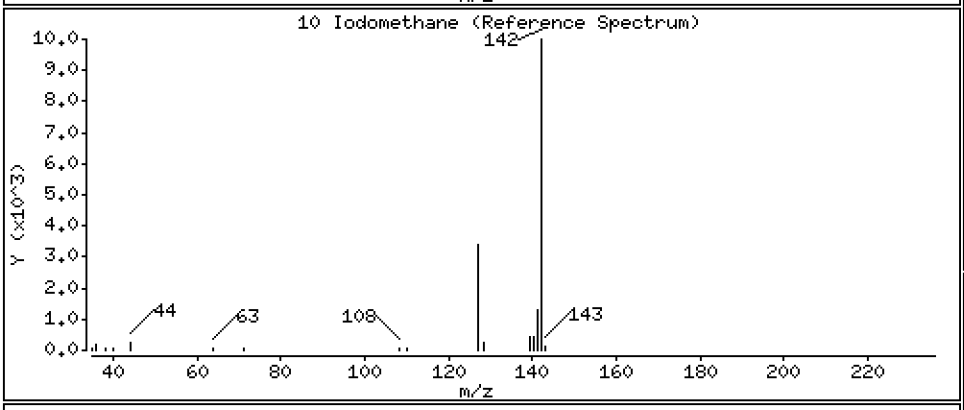
Concentration: 31.127 ug/Kg

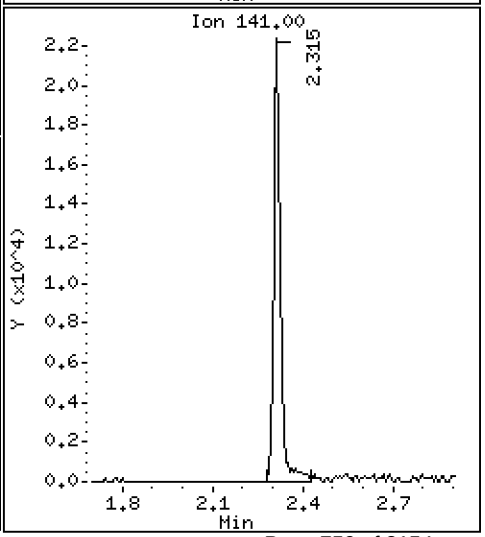


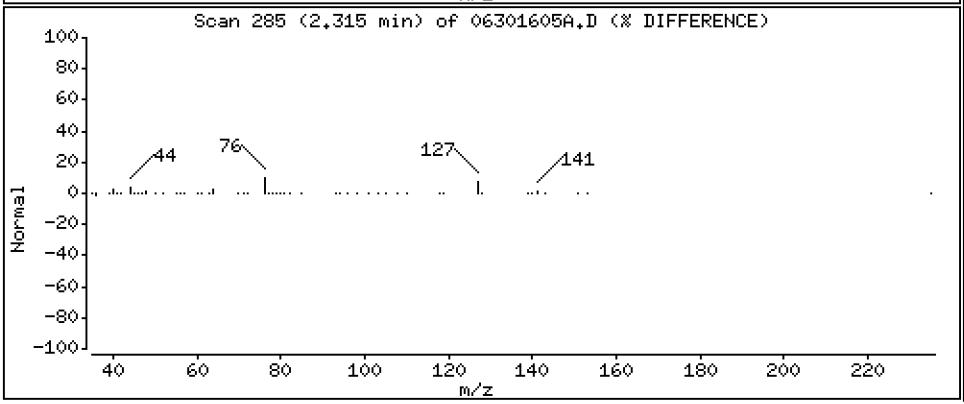












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

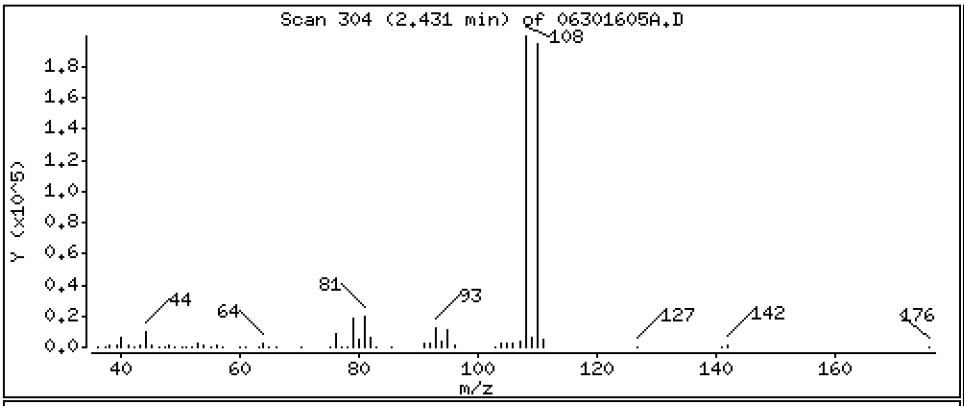
Operator: PB

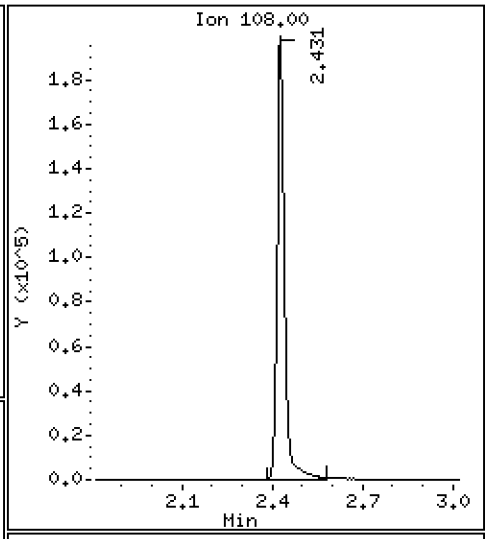
Column phase: RTXVMS

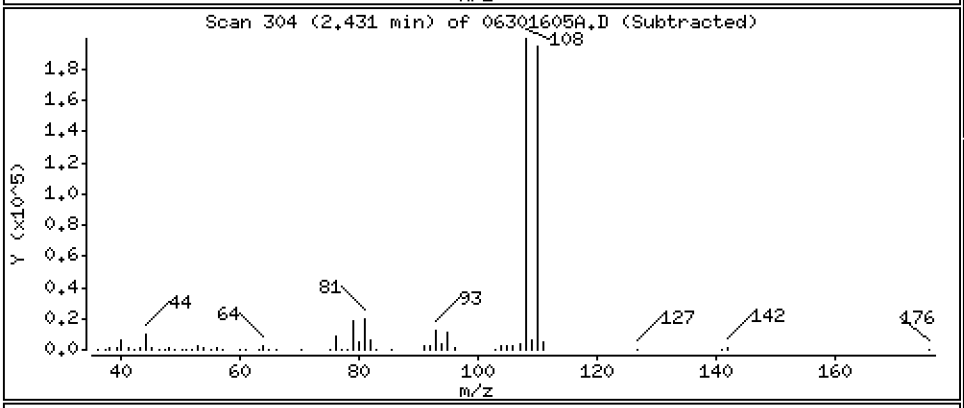
Column diameter: 0.18

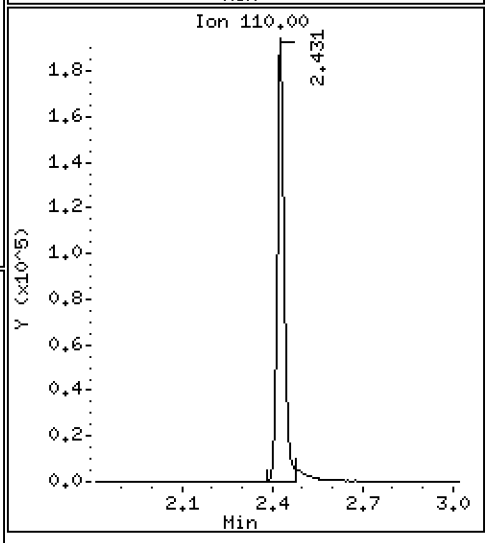
11 Bromoethane

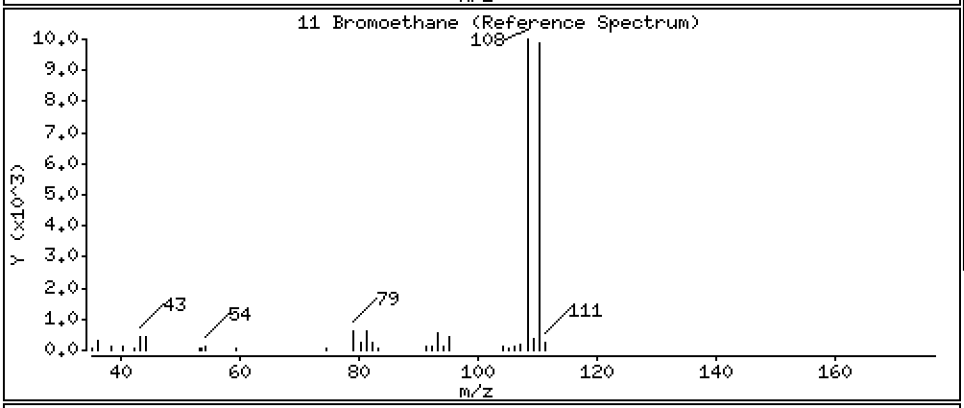
Concentration: 47.755 ug/Kg

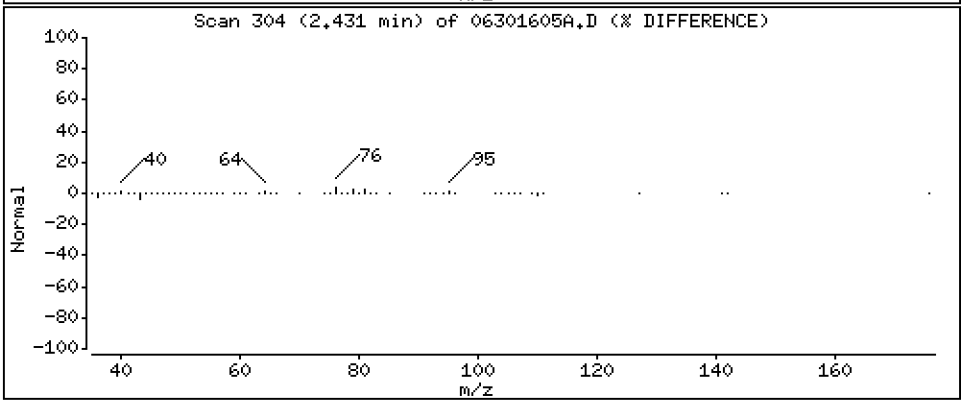












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

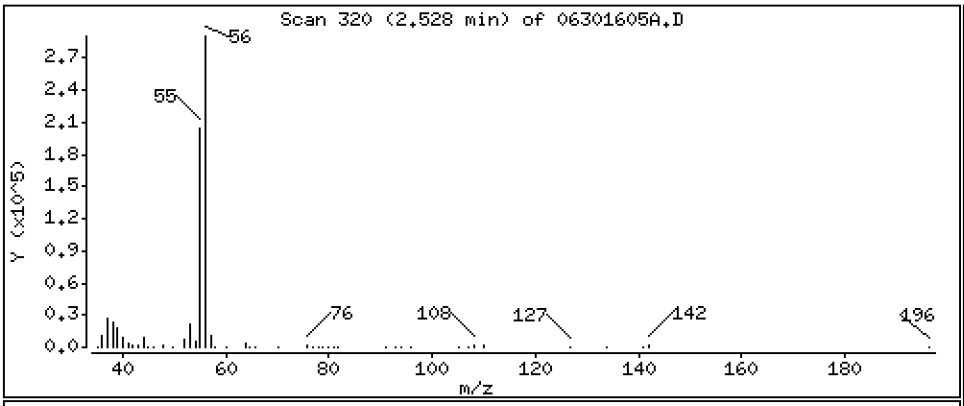
Operator: PB

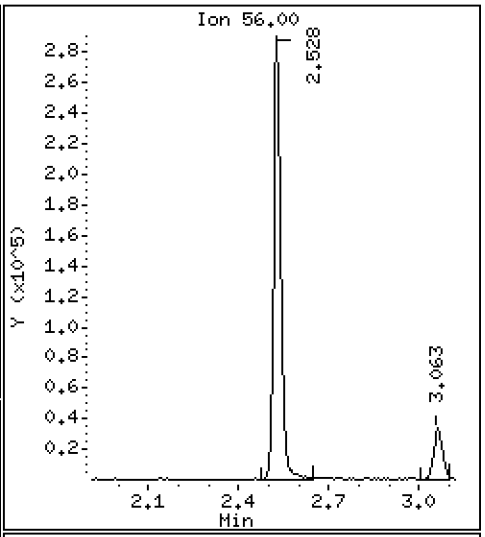
Column phase: RTXVMS

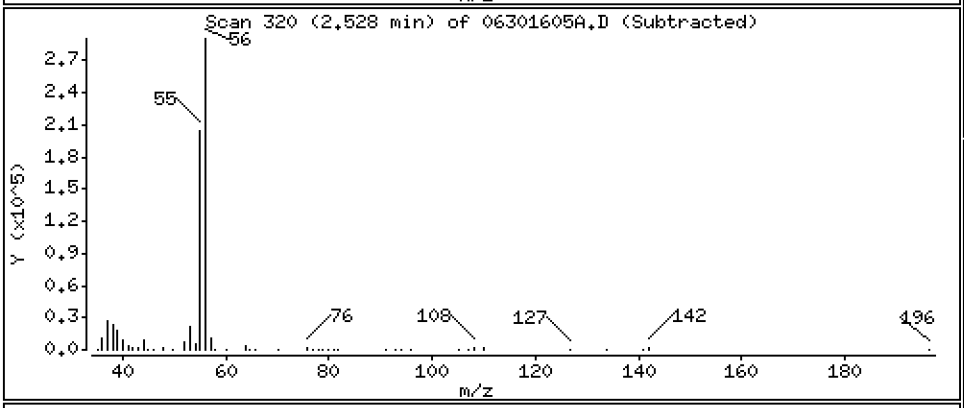
Column diameter: 0.18

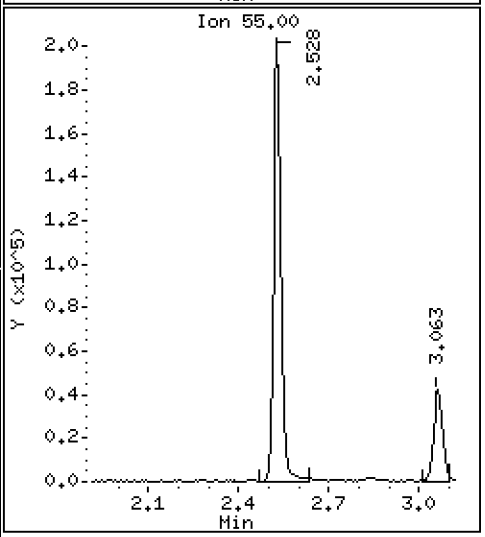
12 Acrolein

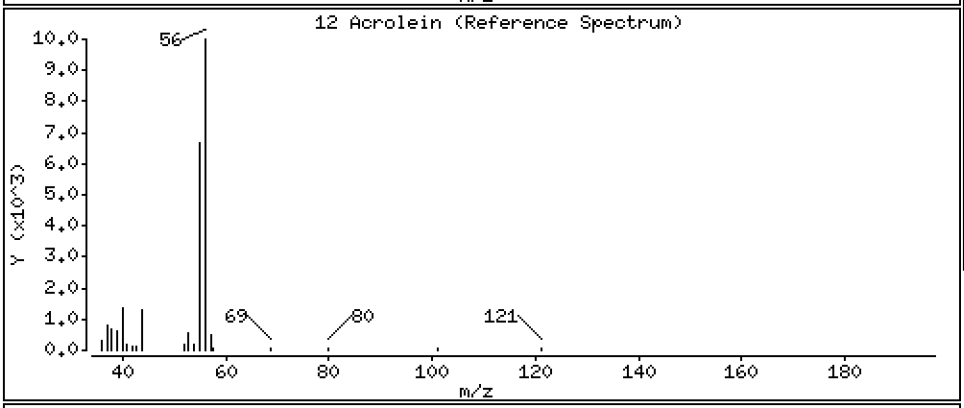
Concentration: 194.63 ug/Kg

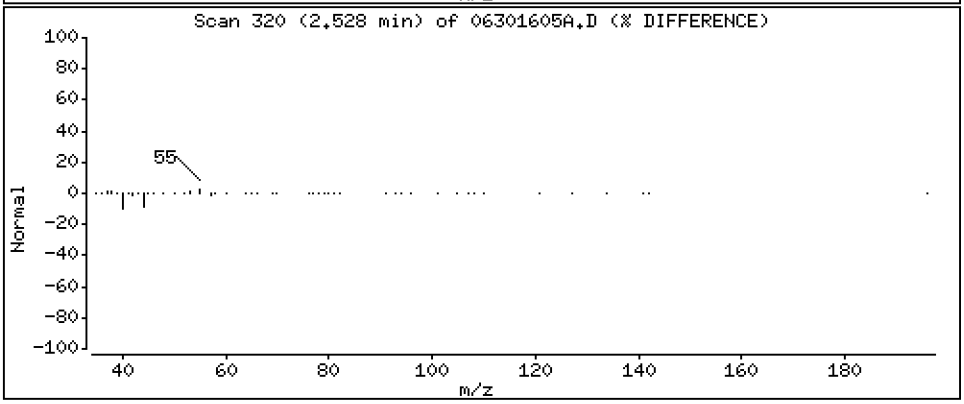












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

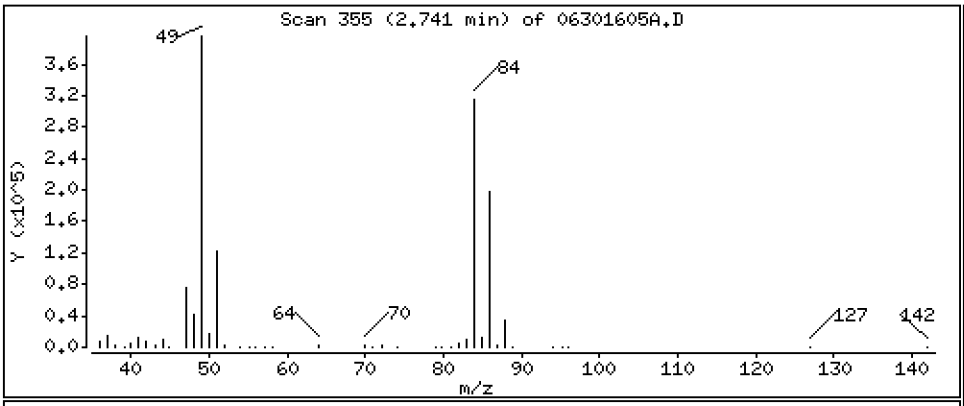
Operator: PB

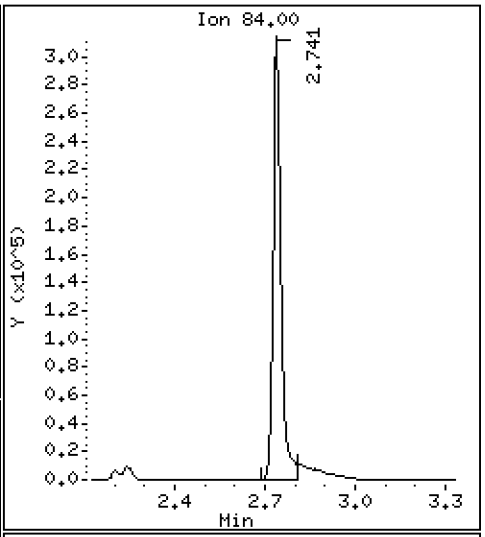
Column phase: RTXVMS

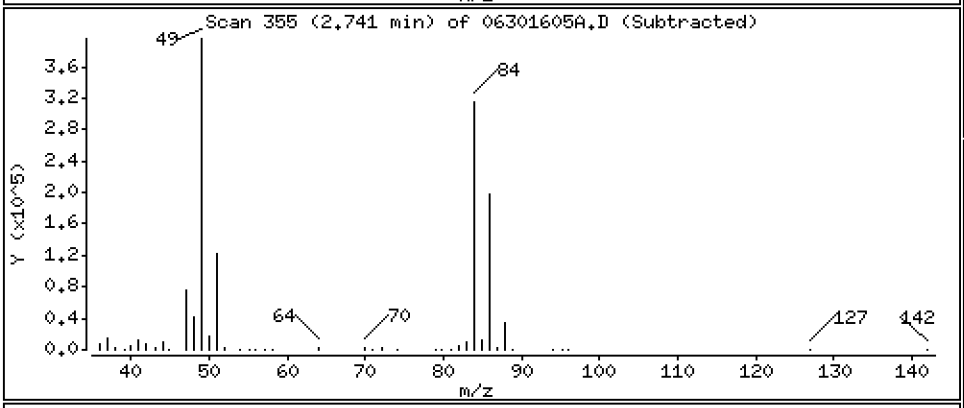
Column diameter: 0.18

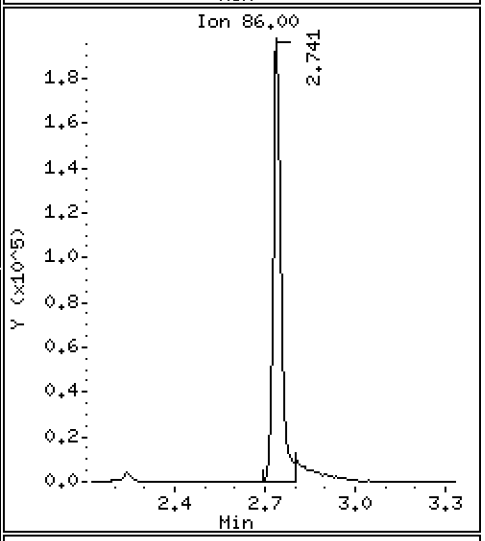
13 Methylene Chloride

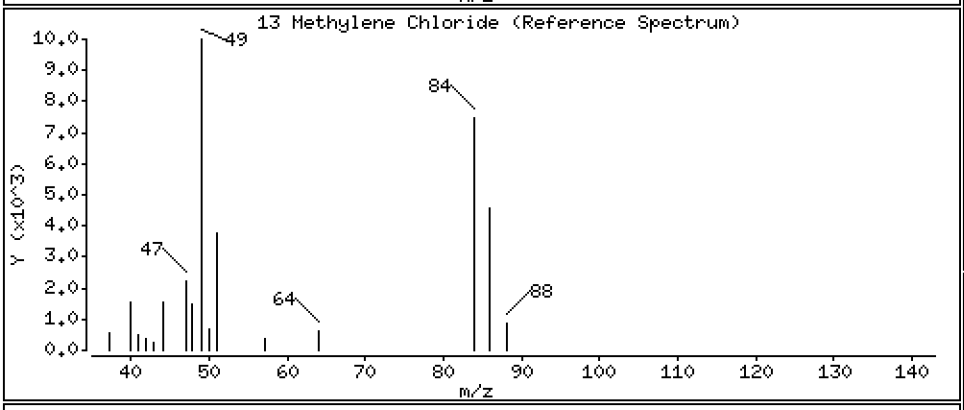
Concentration: 44.412 ug/Kg

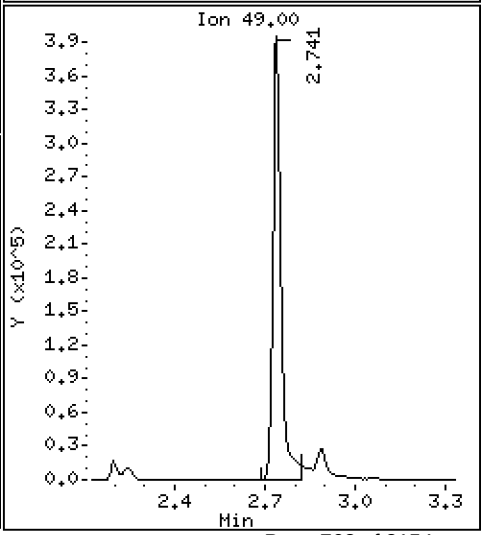


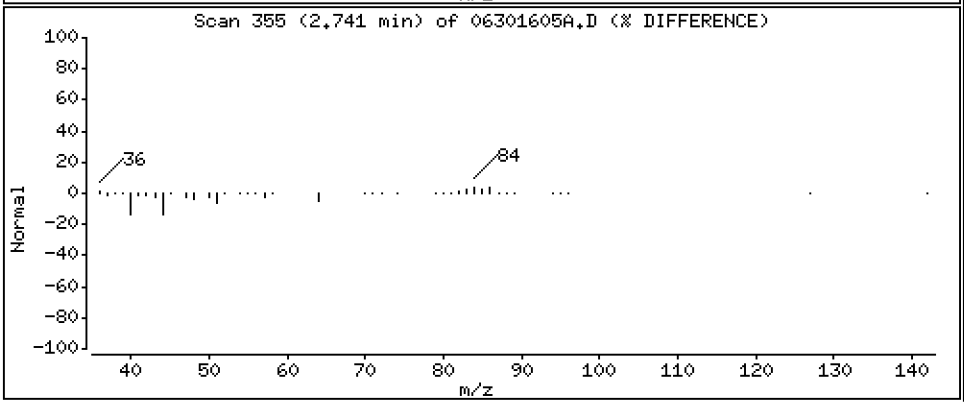












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

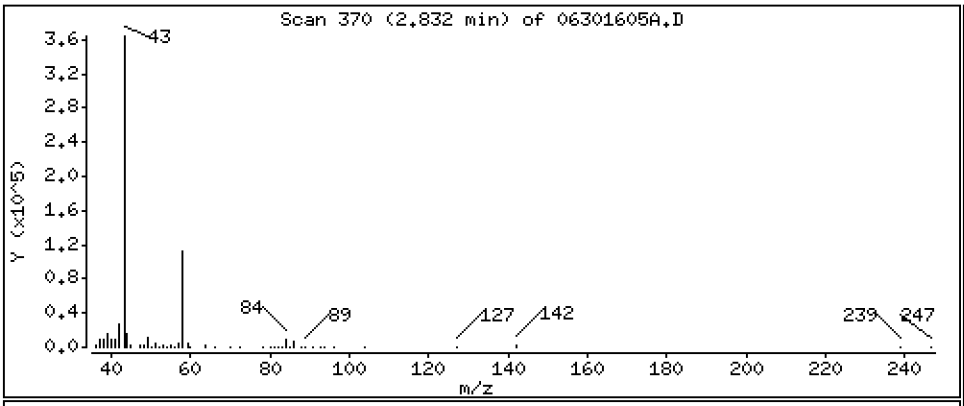
Operator: PB

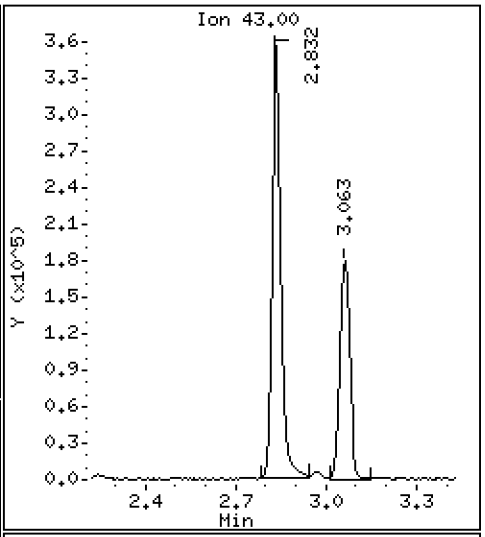
Column phase: RTXVMS

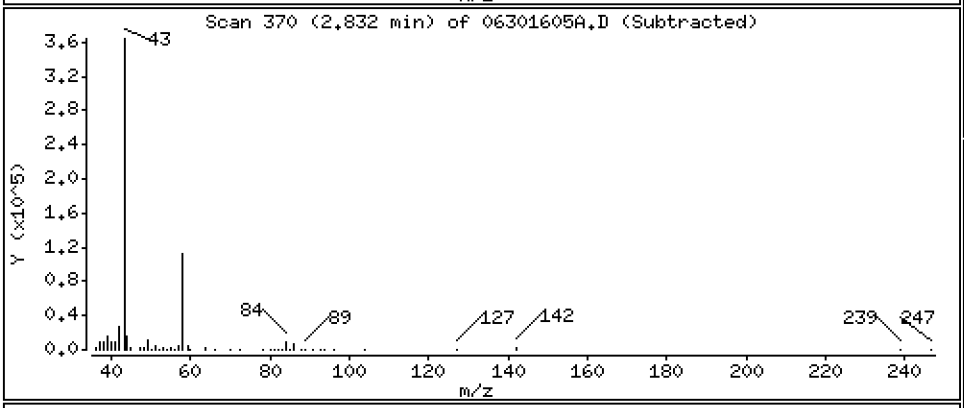
Column diameter: 0.18

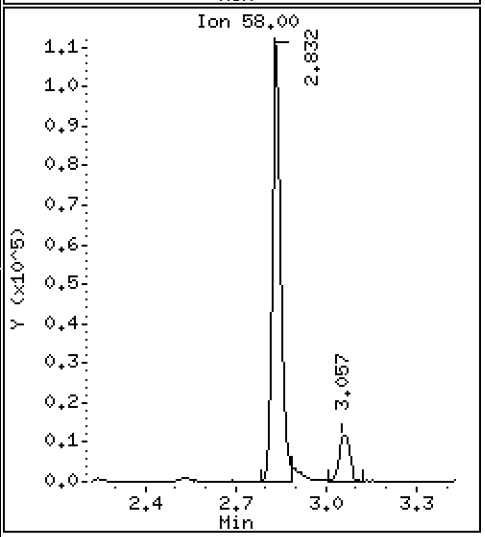
14 Acetone

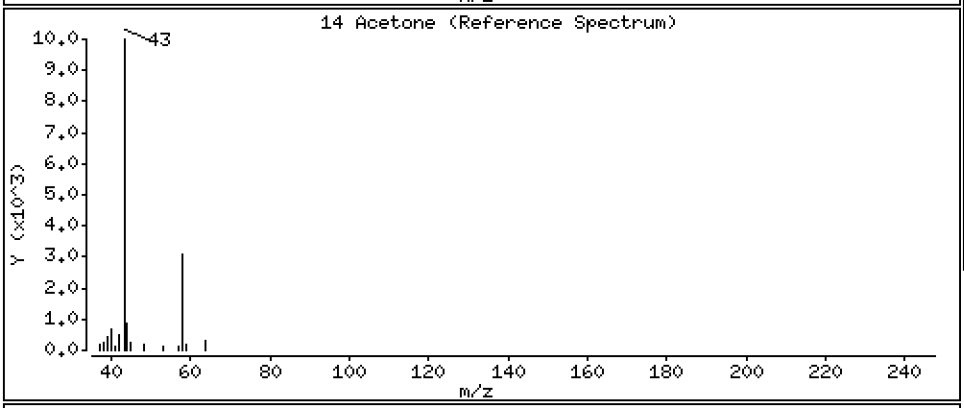
Concentration: 173.08 ug/Kg

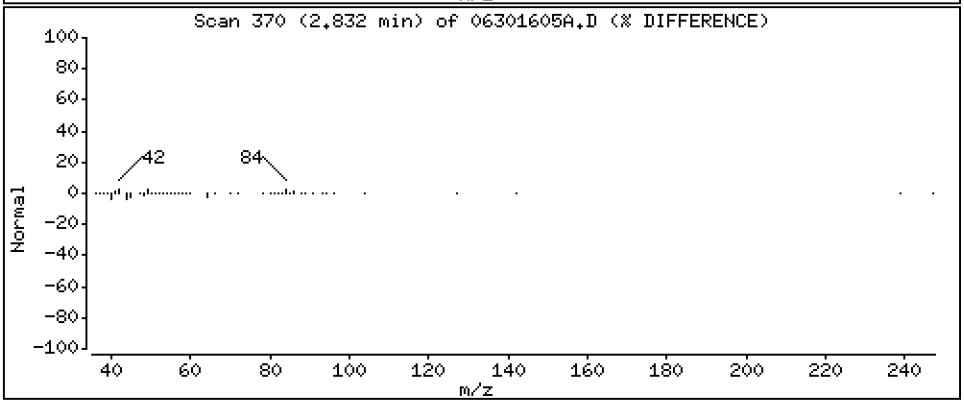












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

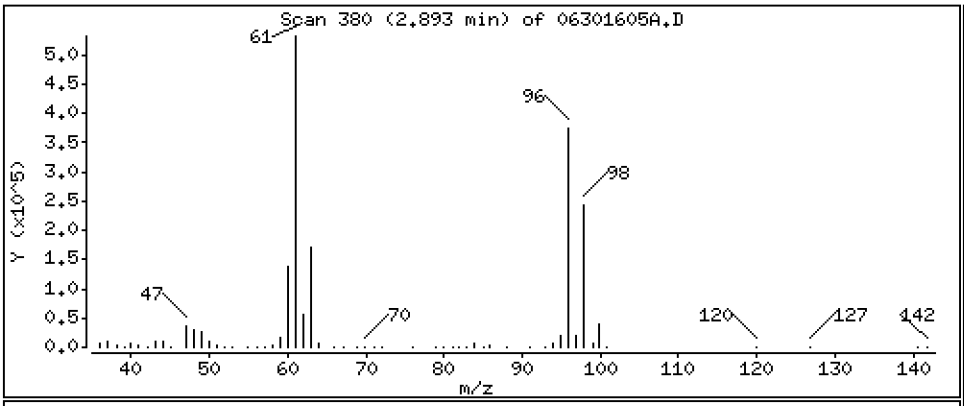
Operator: PB

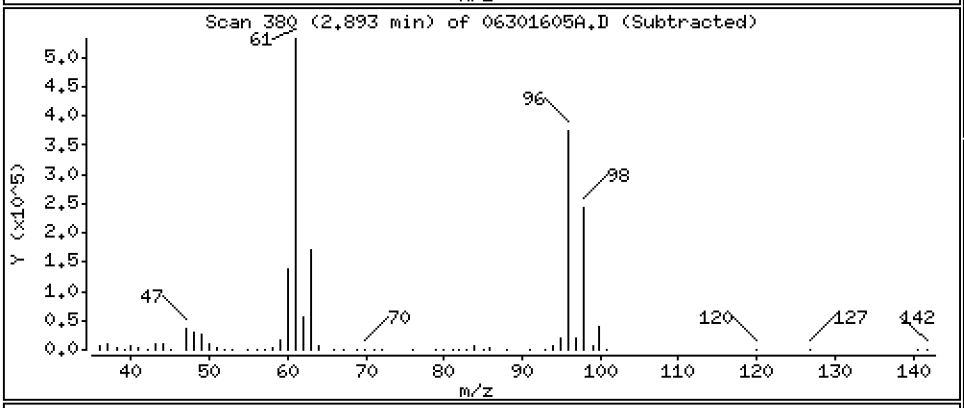
Column phase: RTXVMS

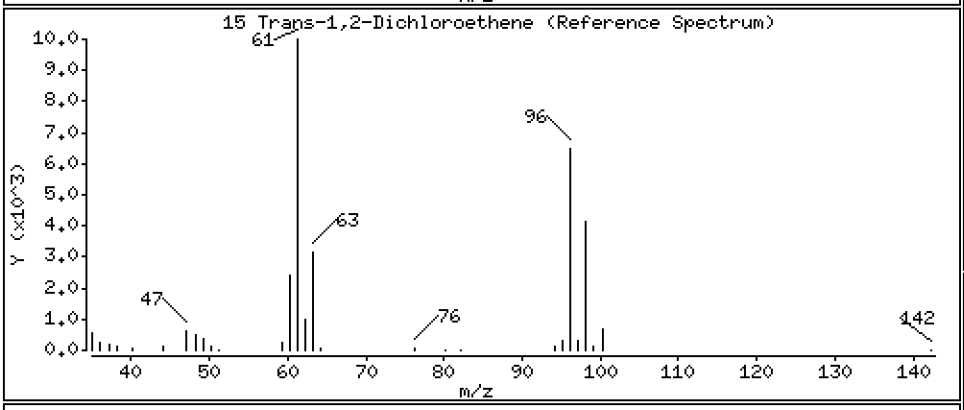
Column diameter: 0.18

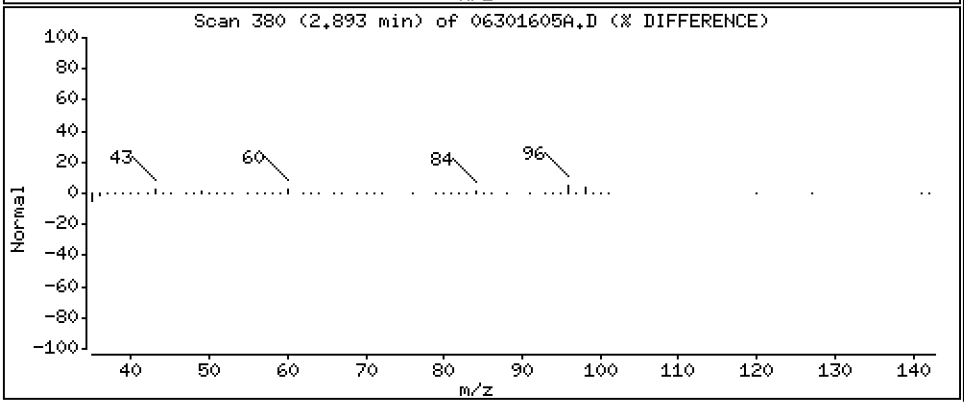
15 Trans-1,2-Dichloroethene

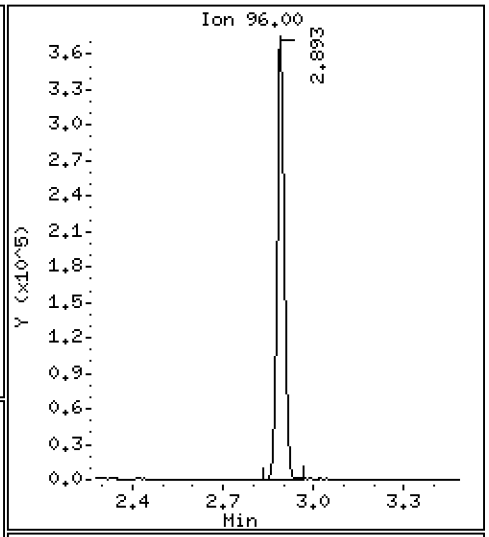
Concentration: 44.676 ug/Kg

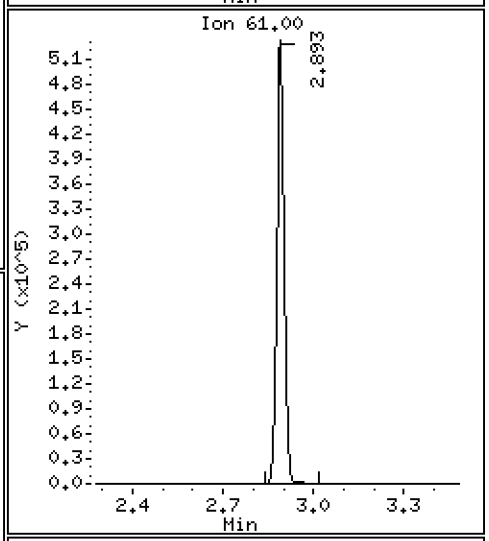


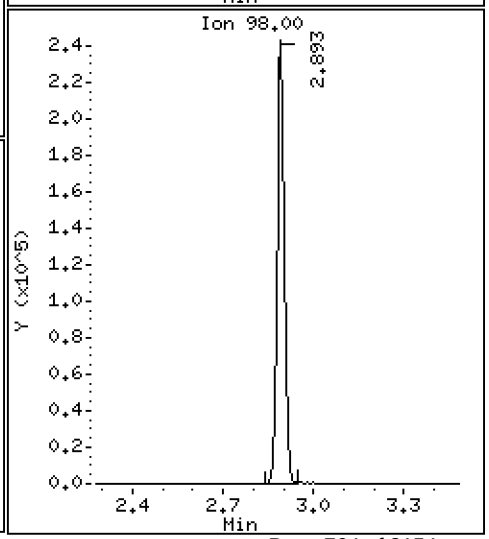












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

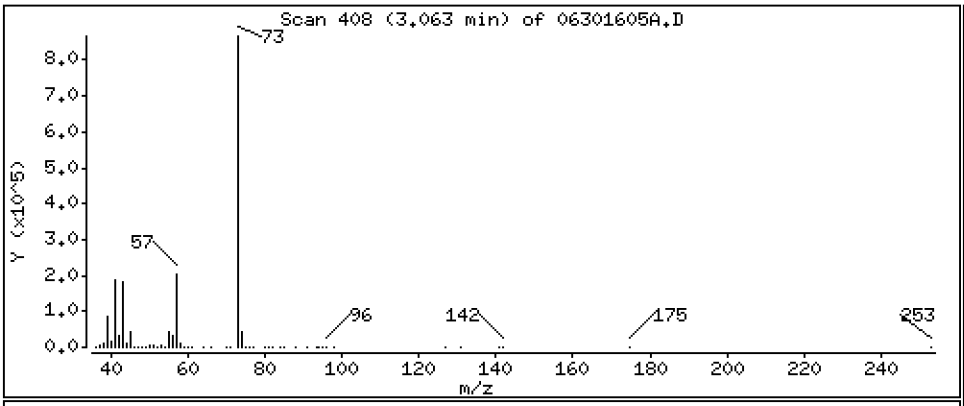
Operator: PB

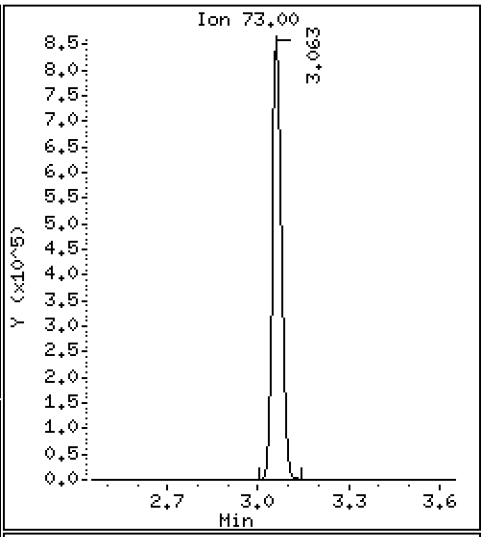
Column phase: RTXVMS

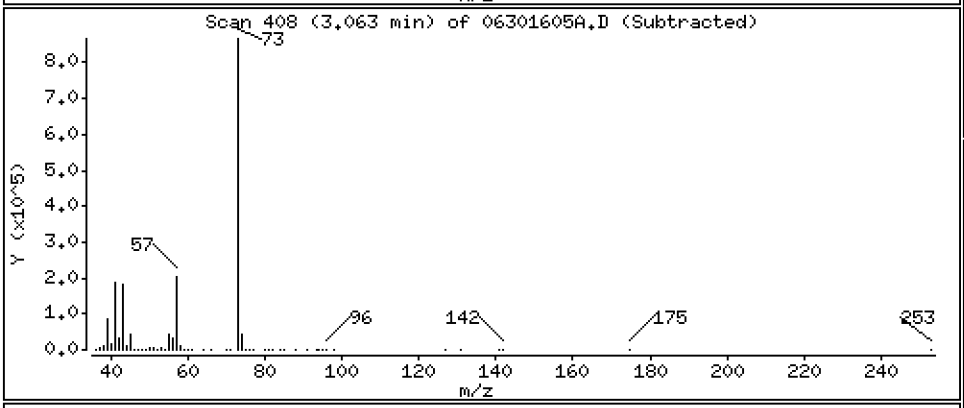
Column diameter: 0.18

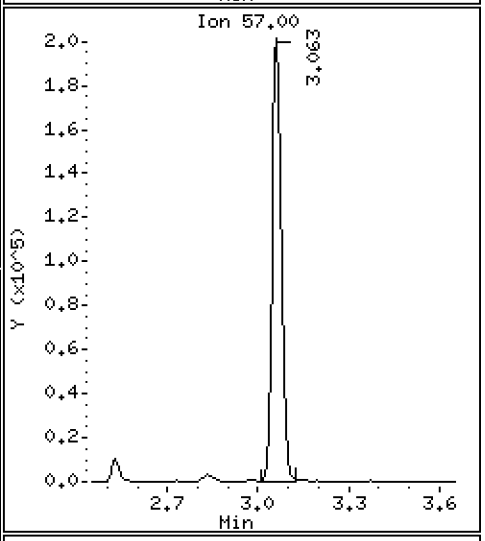
16 Methyl tert butyl ether

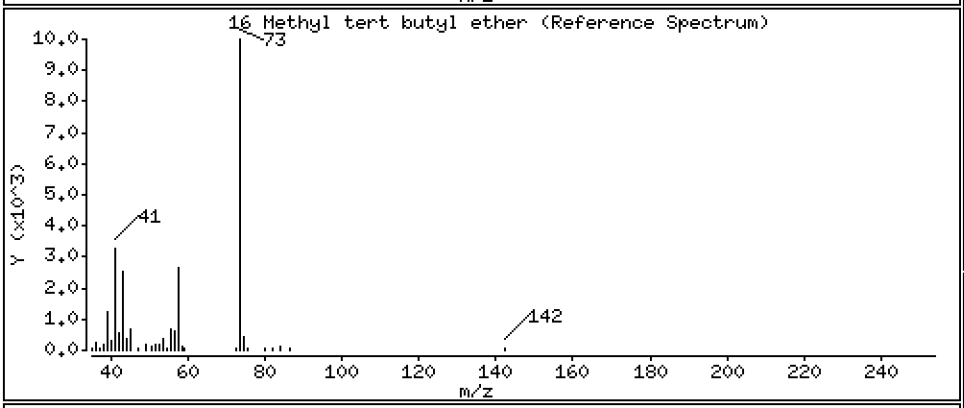
Concentration: 41.868 ug/Kg

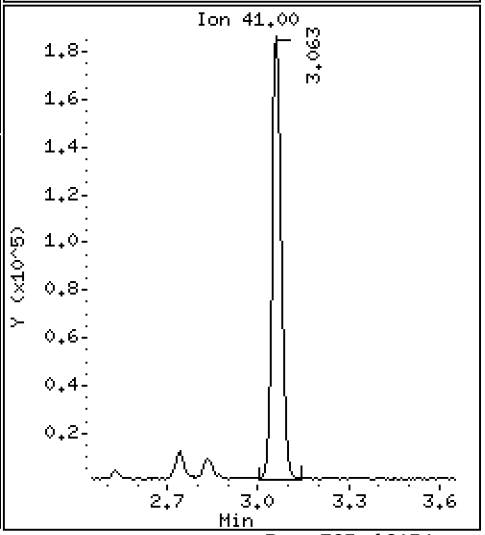


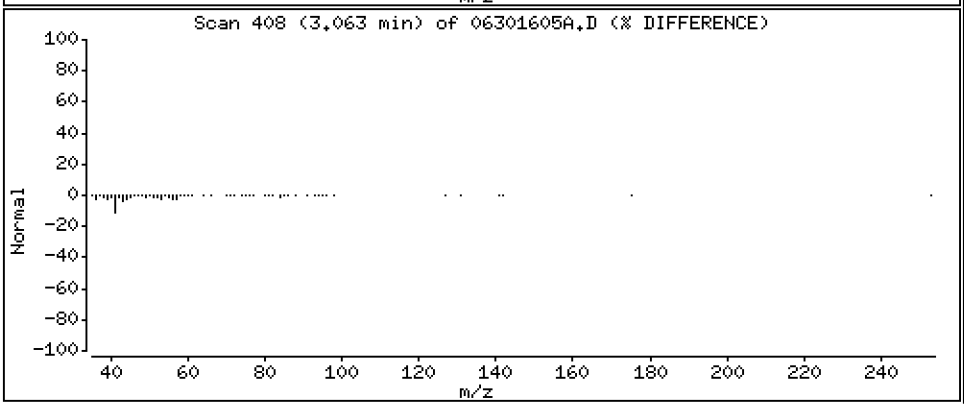












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

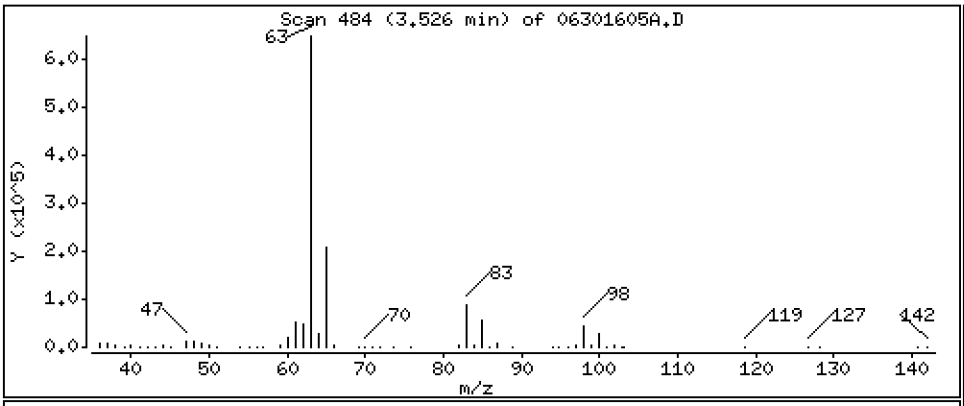
Operator: PB

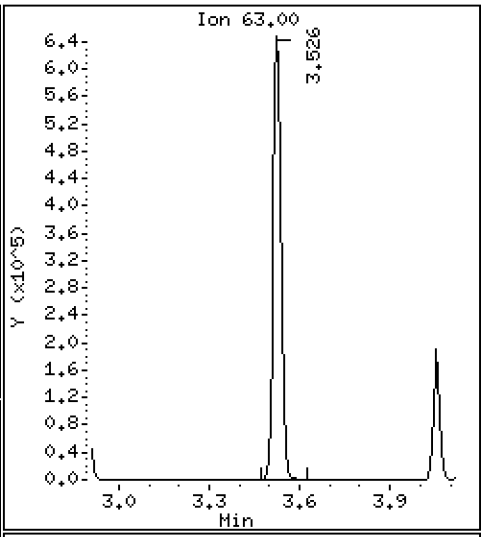
Column phase: RTXVMS

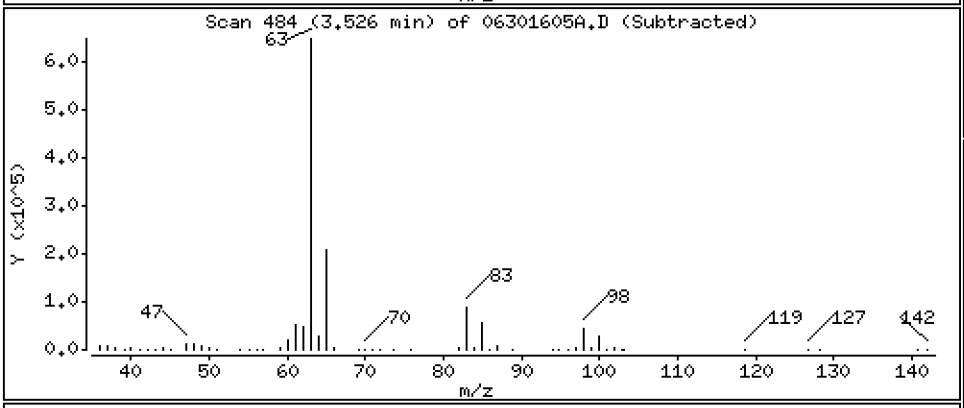
Column diameter: 0.18

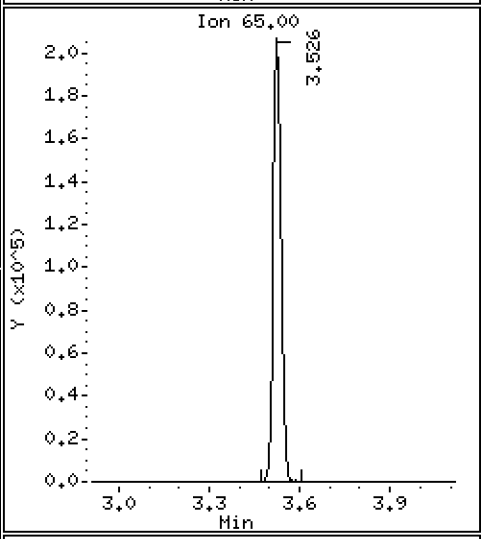
17 1,1-Dichloroethane

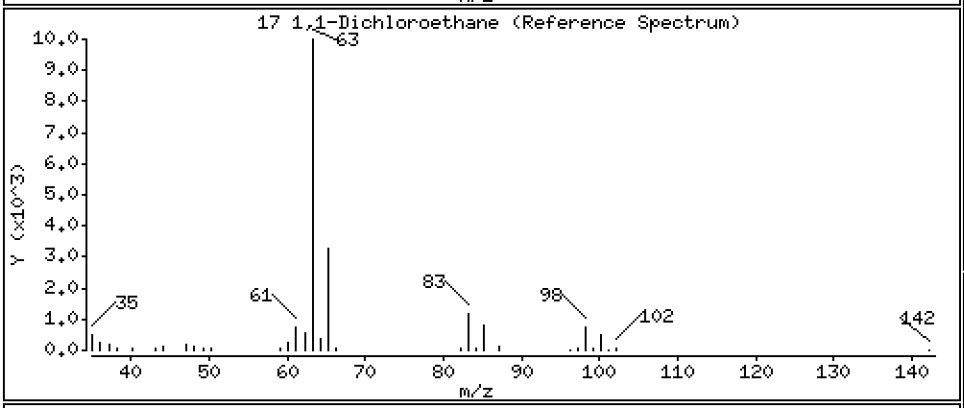
Concentration: 40.932 ug/Kg

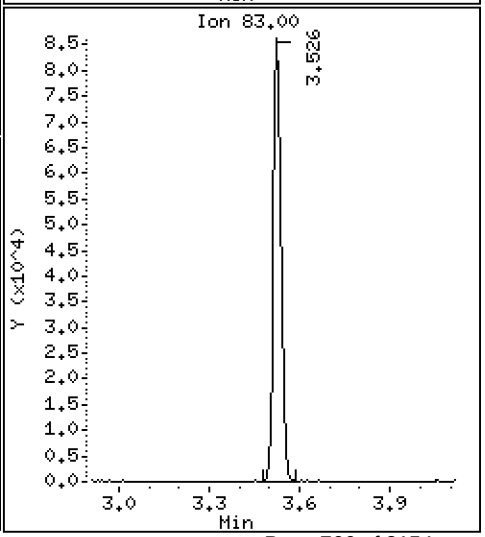


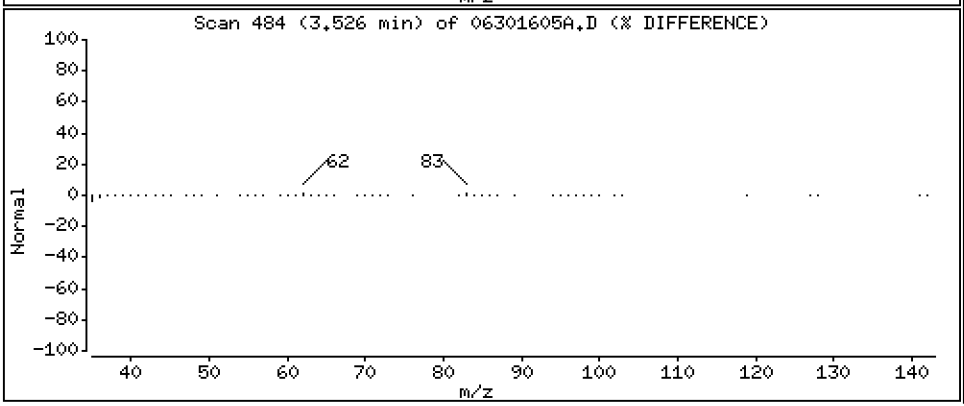












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

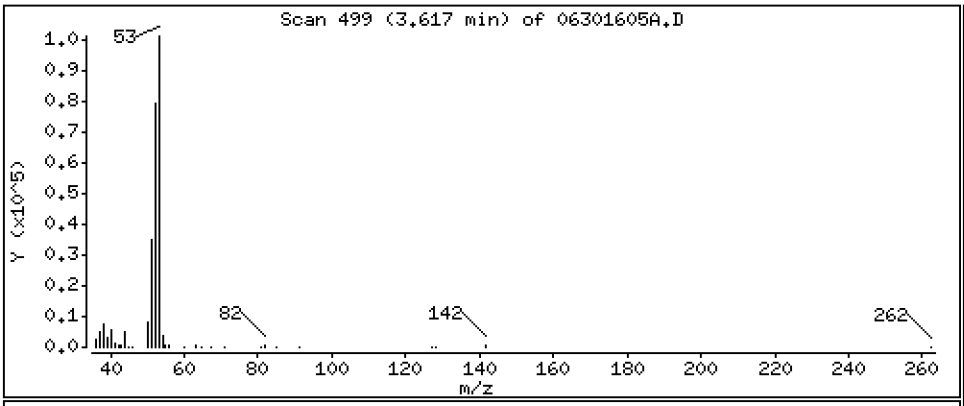
Operator: PB

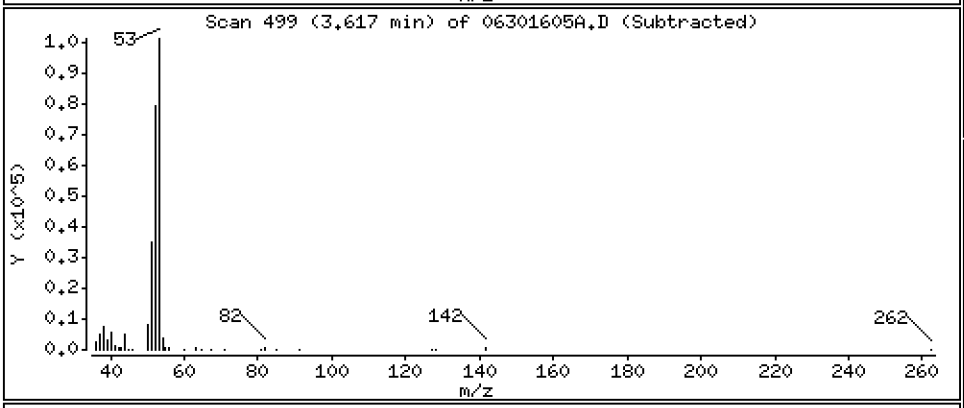
Column phase: RTXVMS

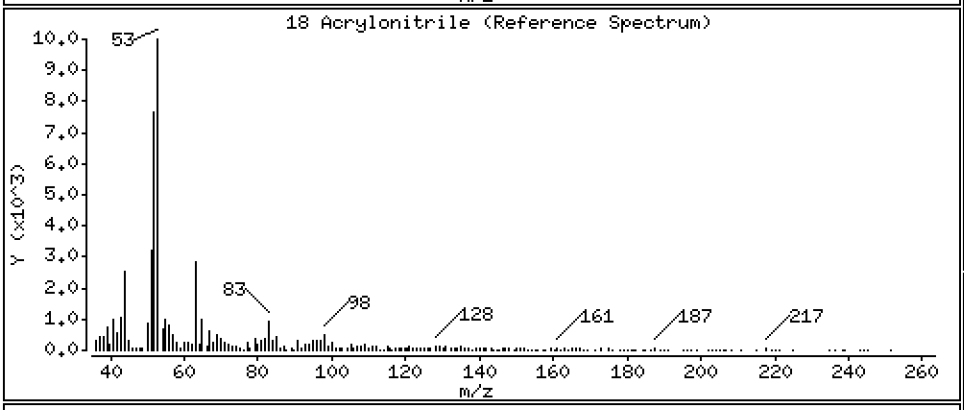
Column diameter: 0.18

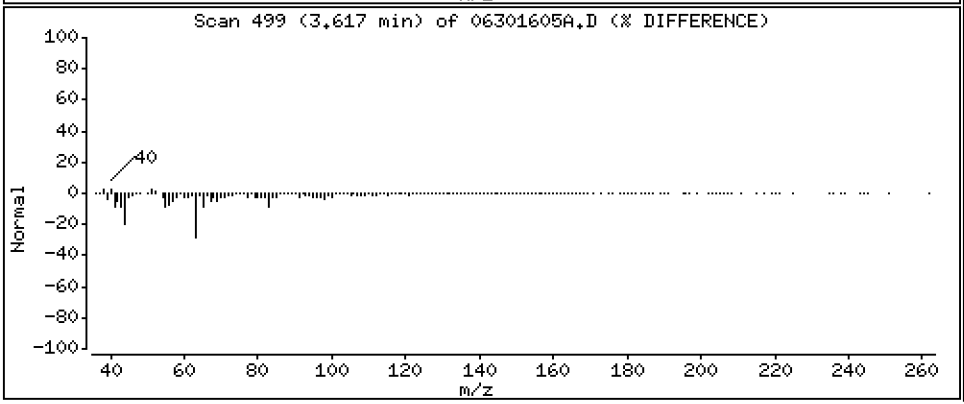
18 Acrylonitrile

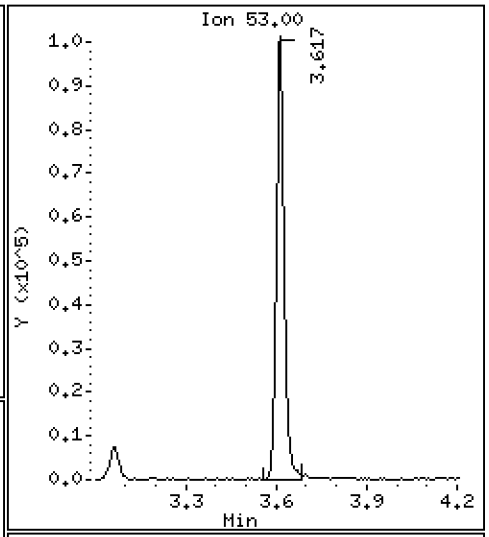
Concentration: 37.627 ug/Kg

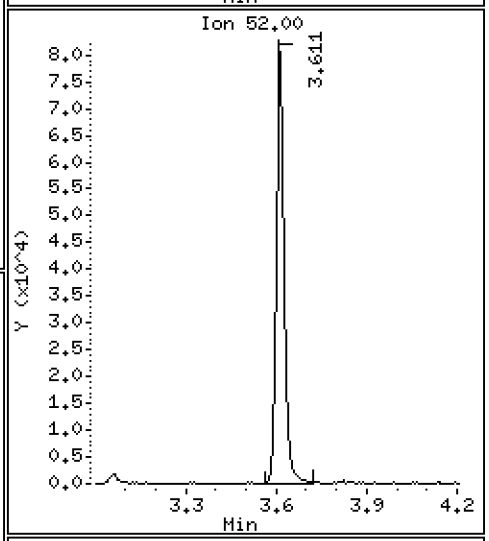


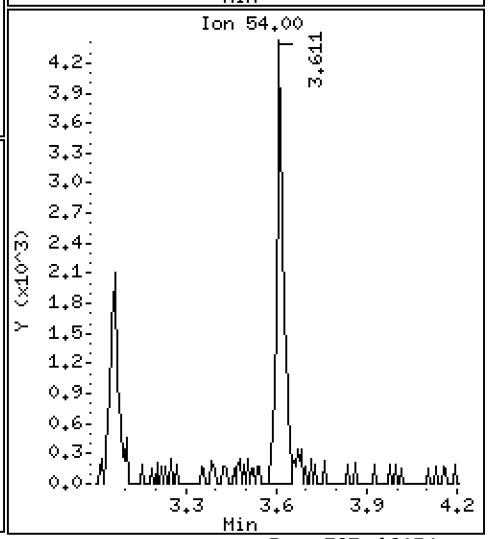












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

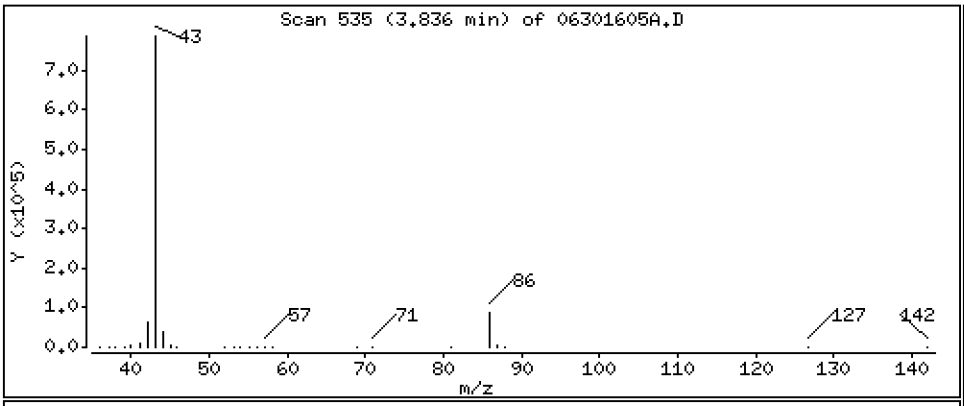
Operator: PB

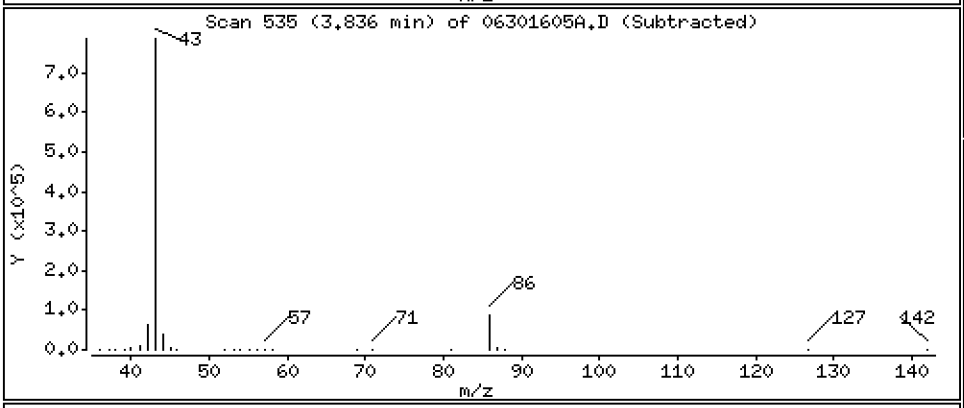
Column phase: RTXVMS

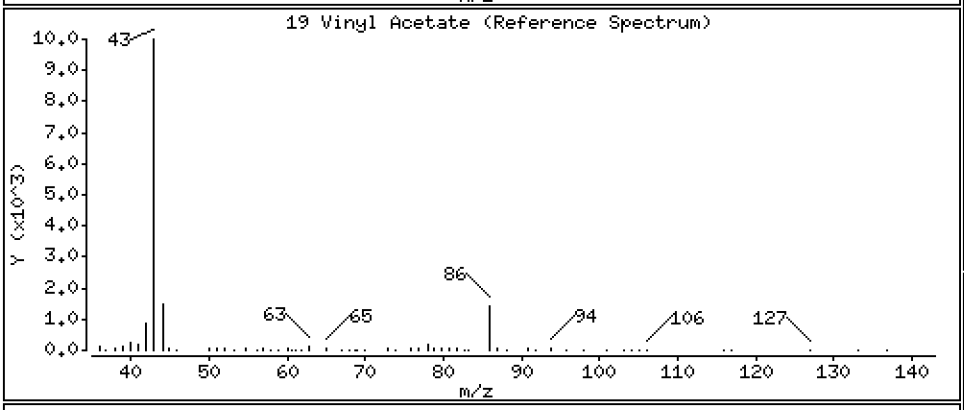
Column diameter: 0.18

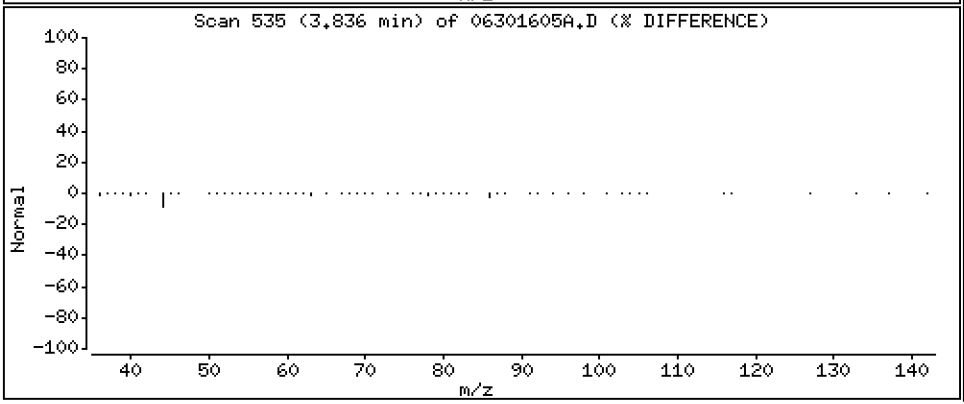
19 Vinyl Acetate

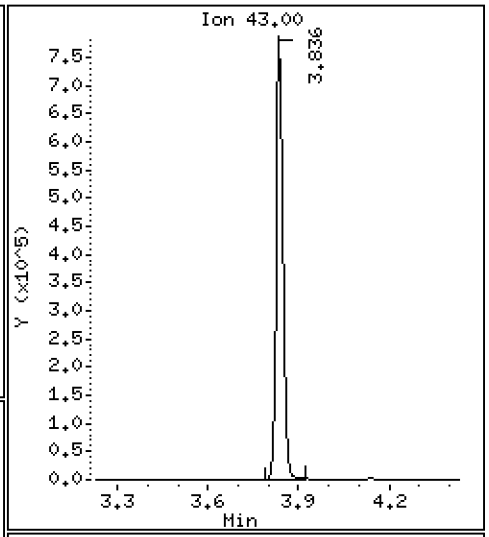
Concentration: 36.878 ug/Kg

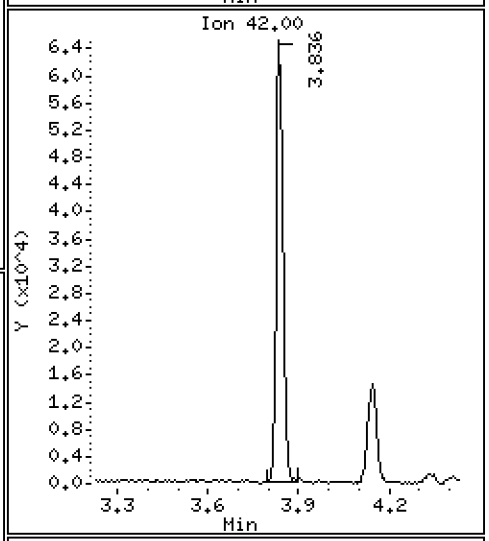


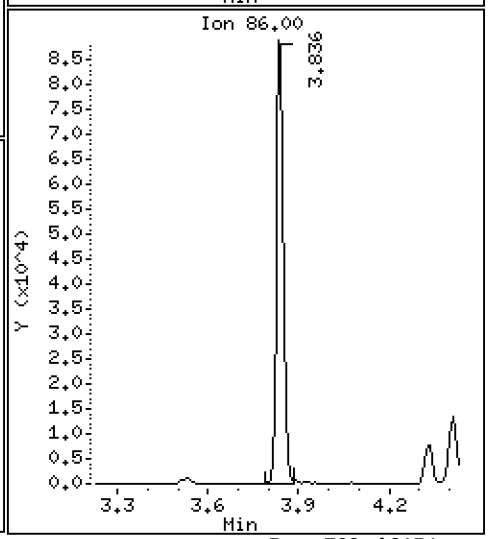












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

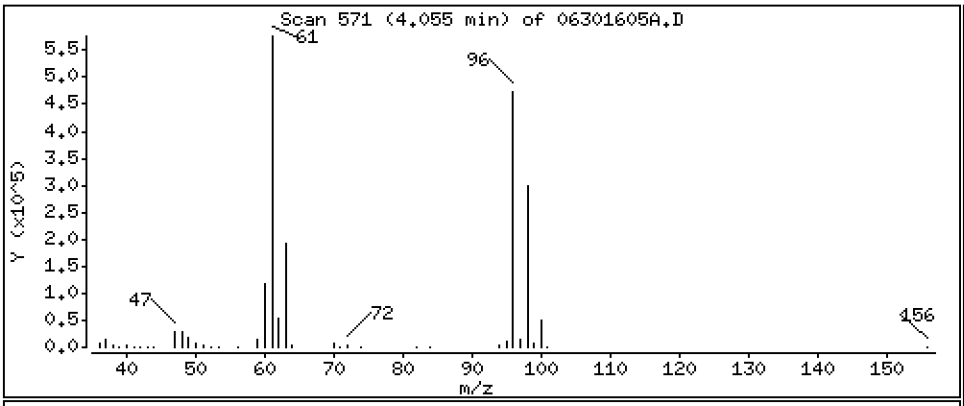
Operator: PB

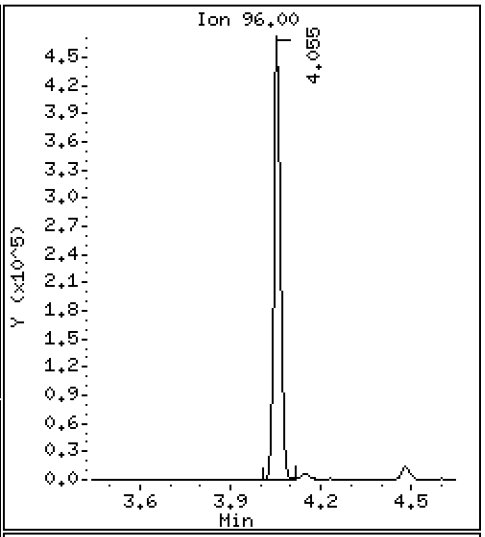
Column phase: RTXVMS

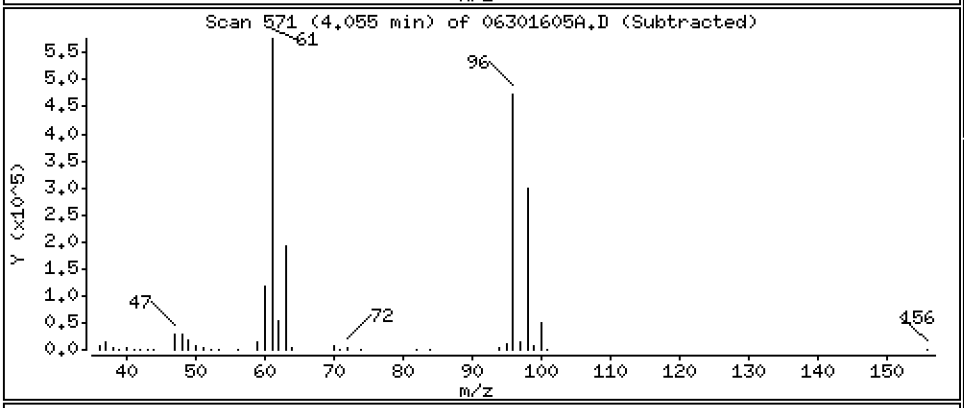
Column diameter: 0.18

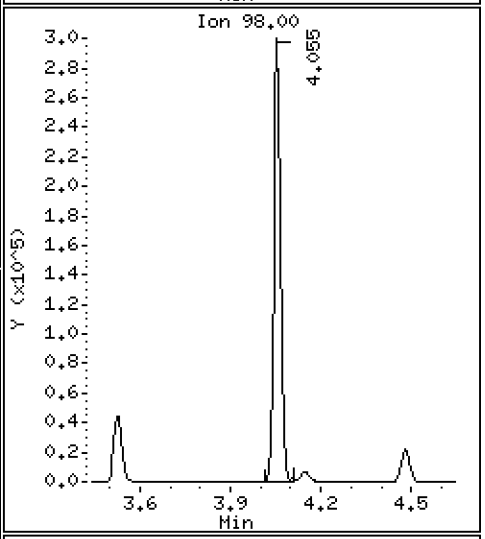
20 Cis-1,2-Dichloroethene

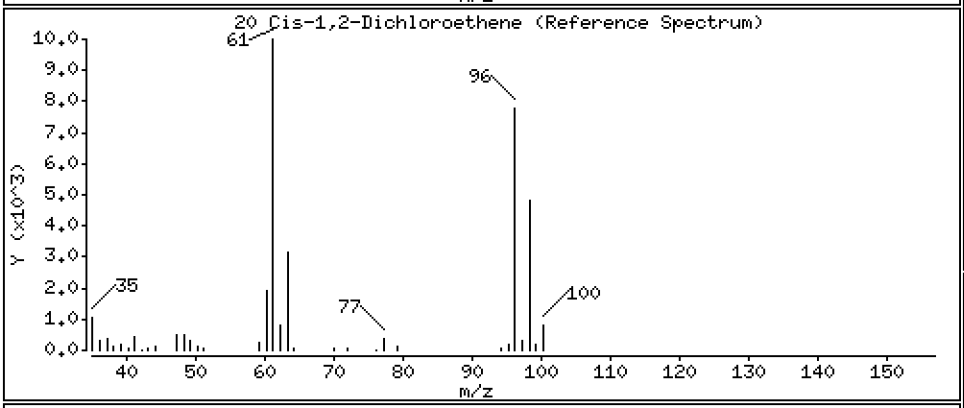
Concentration: 43.188 ug/Kg

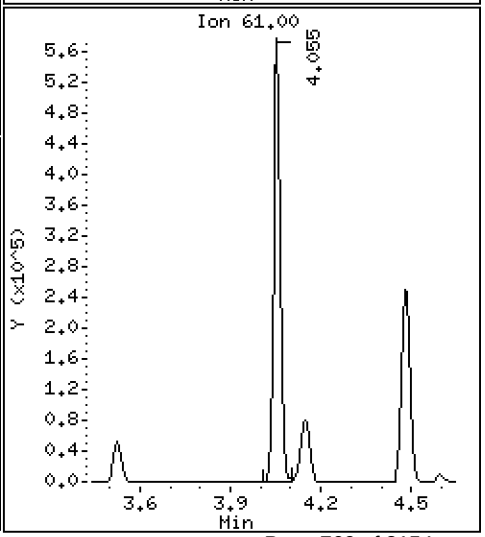


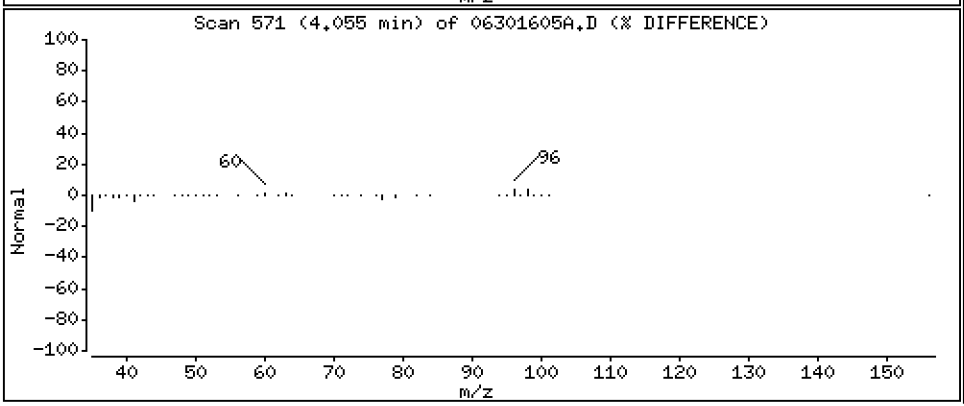












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

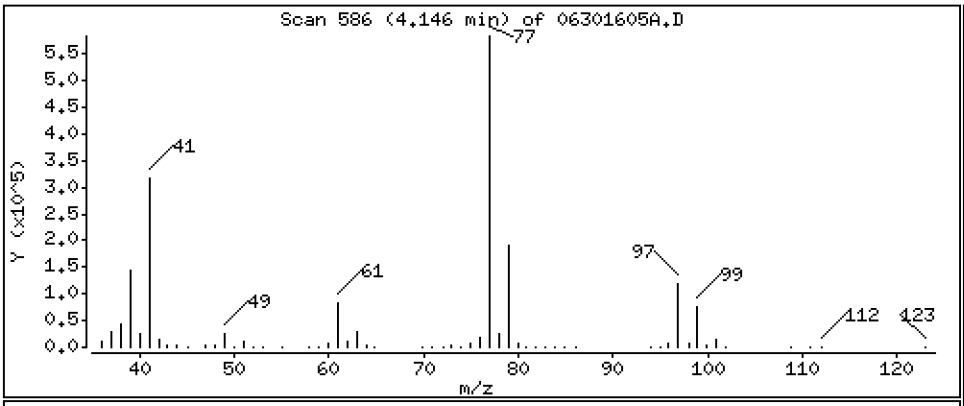
Operator: PB

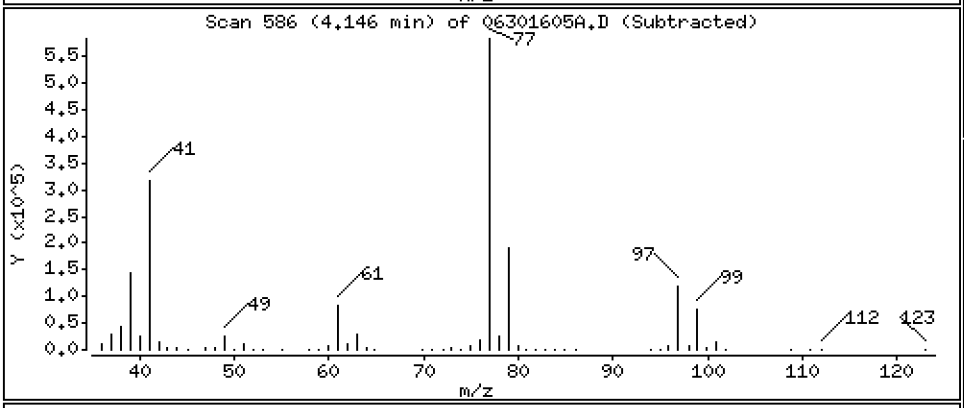
Column phase: RTXVMS

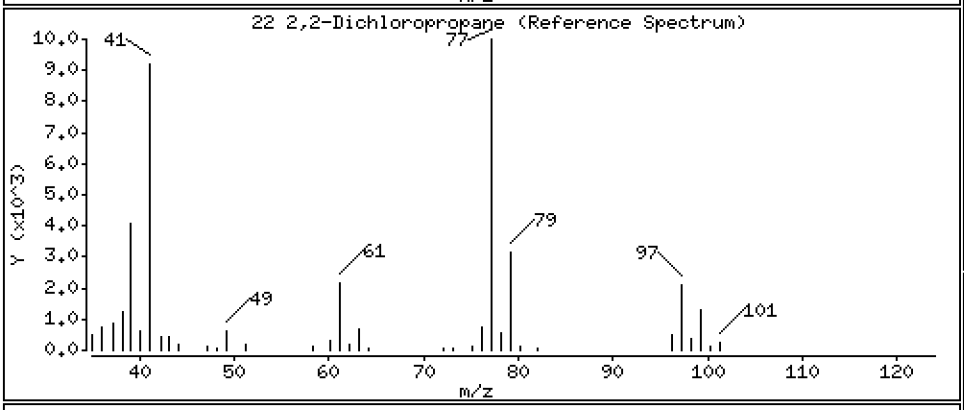
Column diameter: 0.18

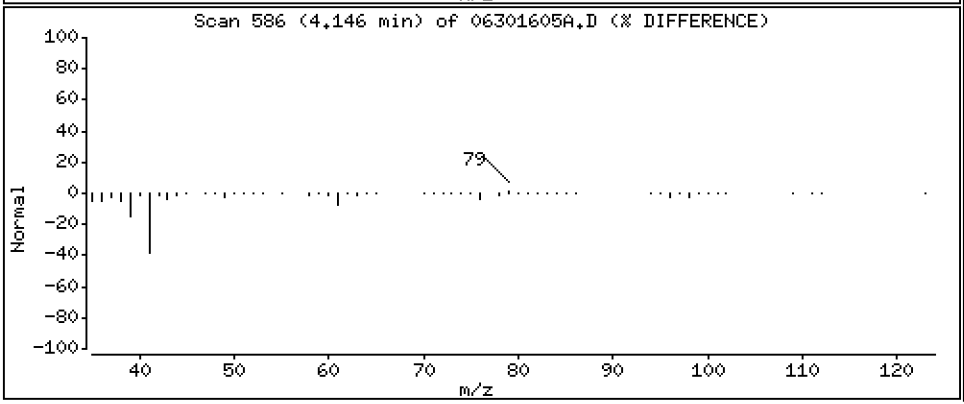
22 2,2-Dichloropropane

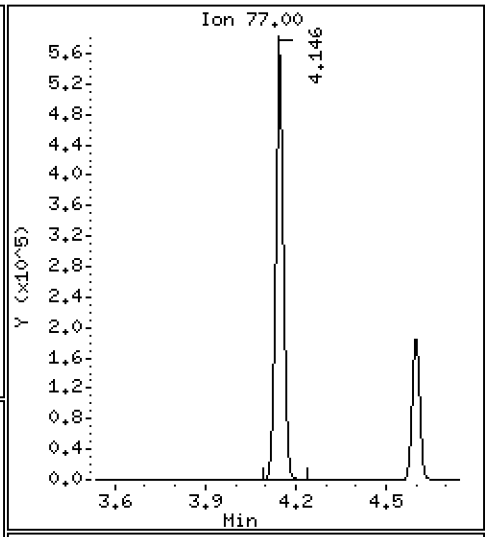
Concentration: 43.725 ug/Kg

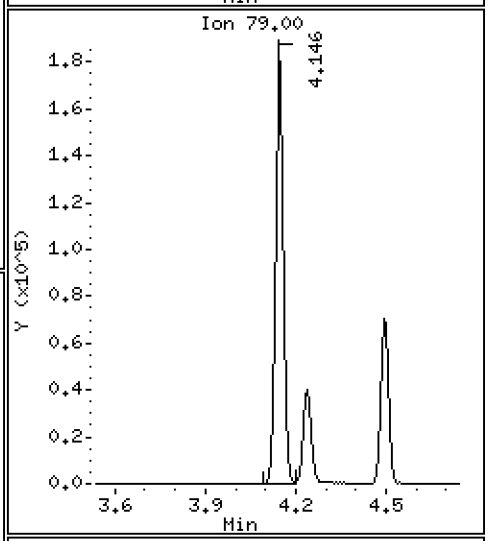


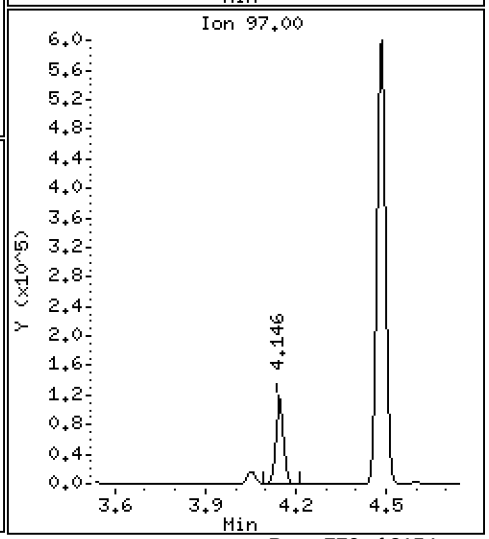












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

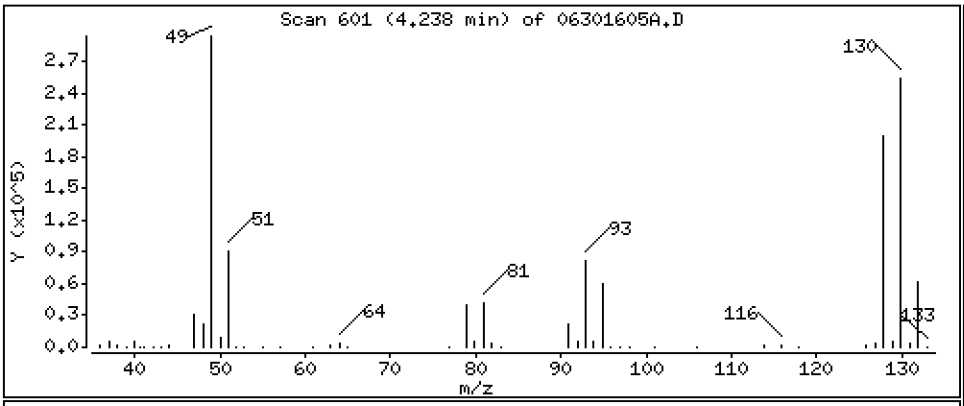
Operator: PB

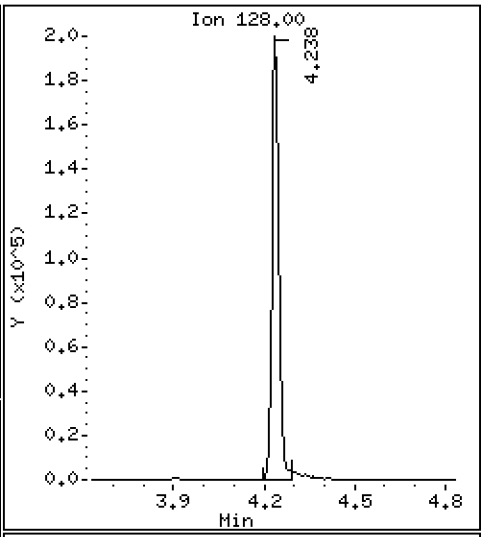
Column phase: RTXVMS

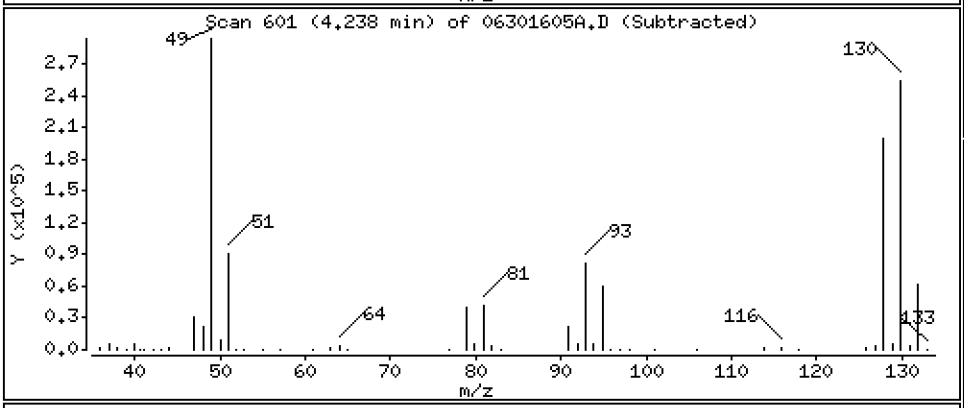
Column diameter: 0.18

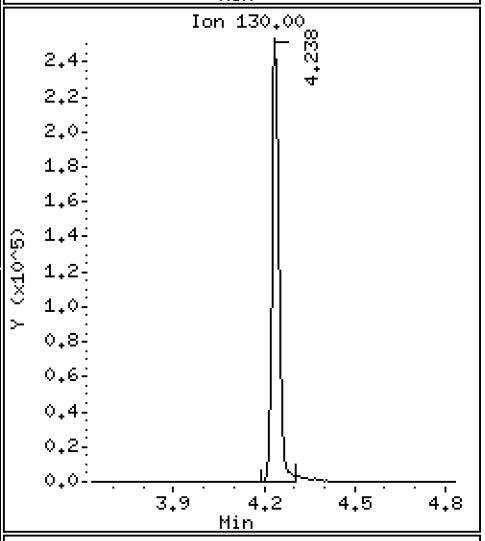
23 Bromochloromethane

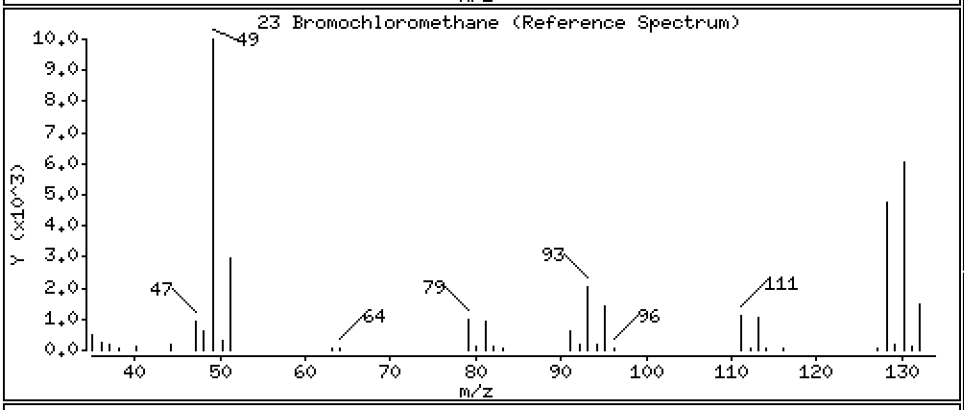
Concentration: 43.885 ug/Kg

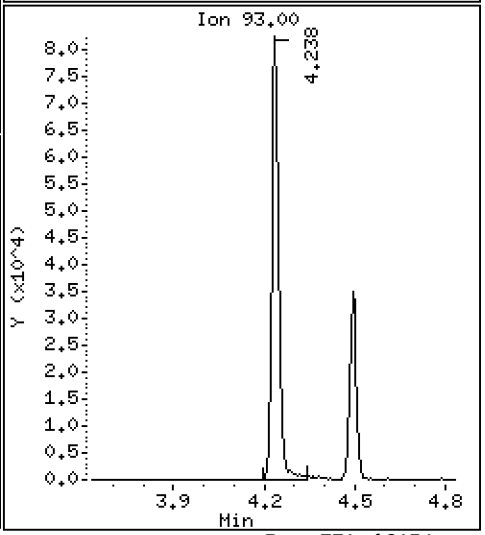


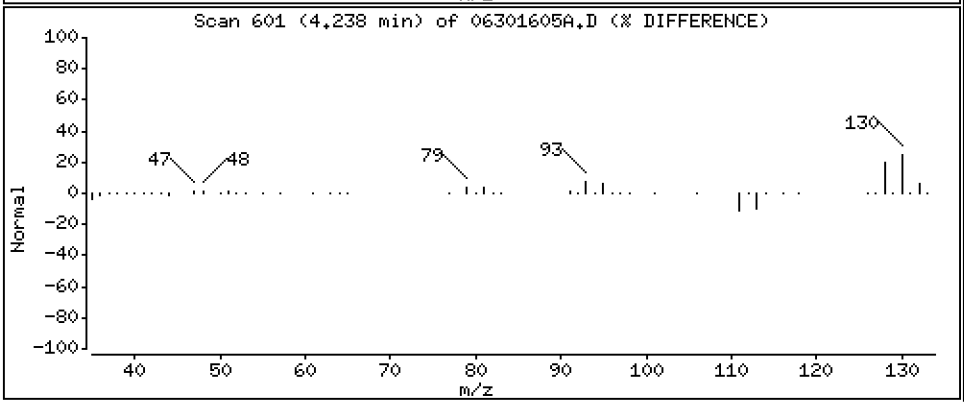












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

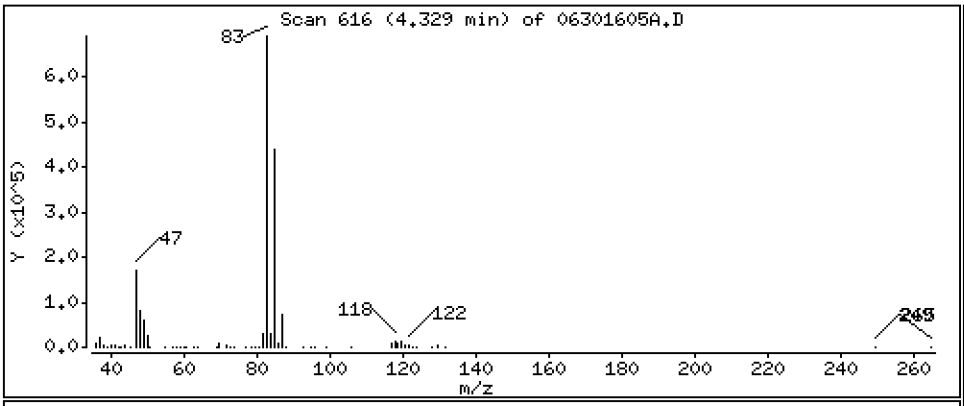
Operator: PB

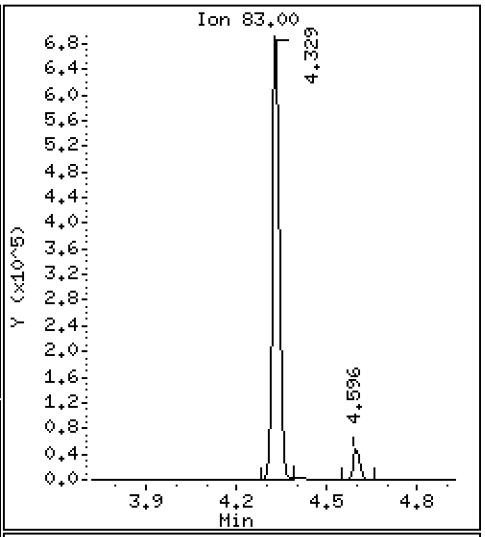
Column phase: RTXVMS

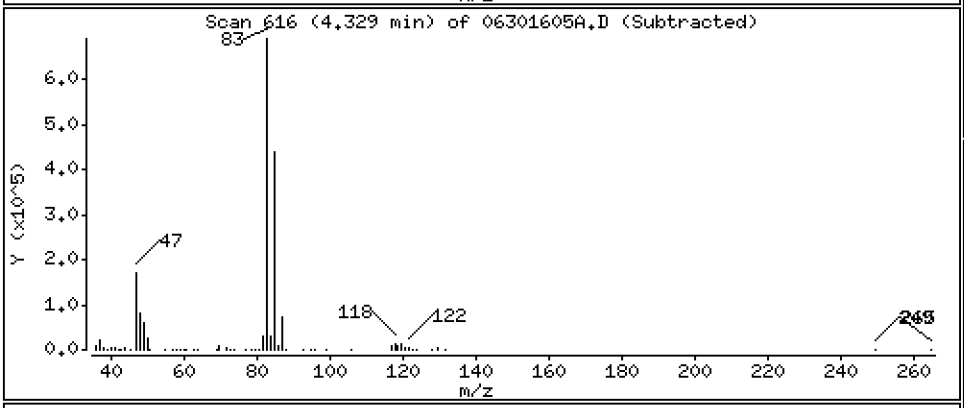
Column diameter: 0.18

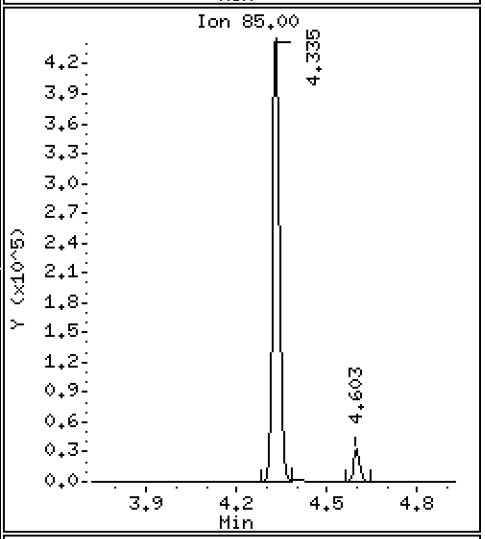
24 Chloroform

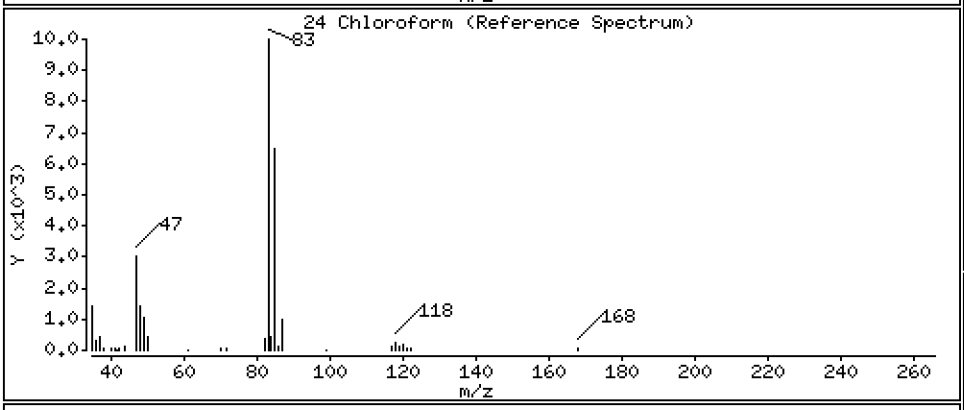
Concentration: 42.610 ug/Kg

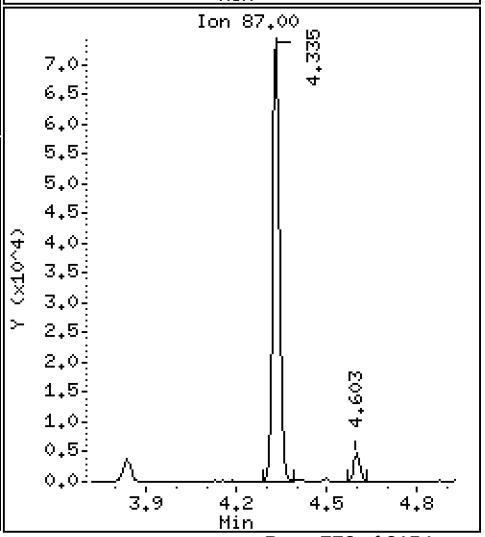


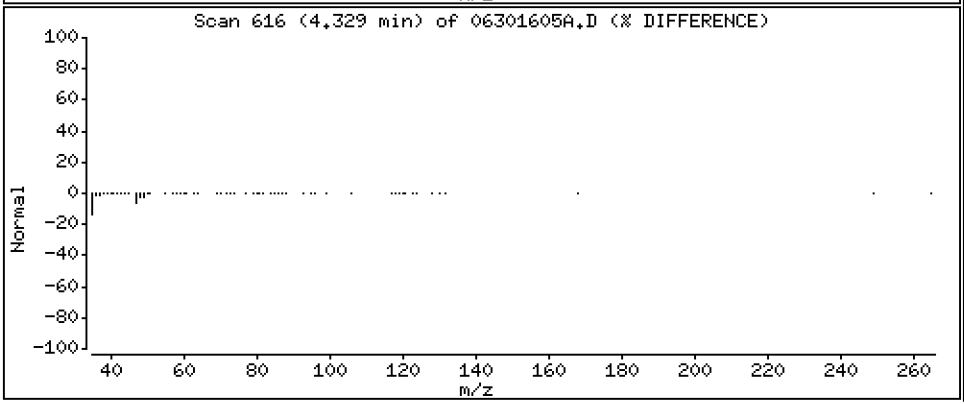












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

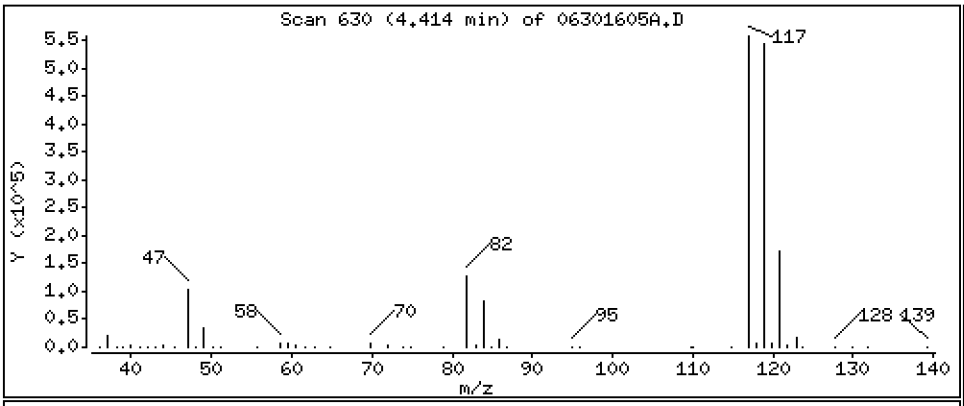
Operator: PB

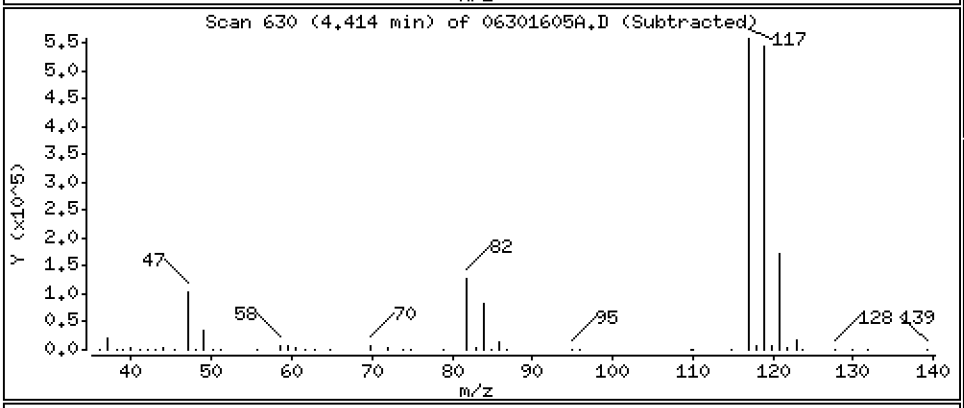
Column phase: RTXVMS

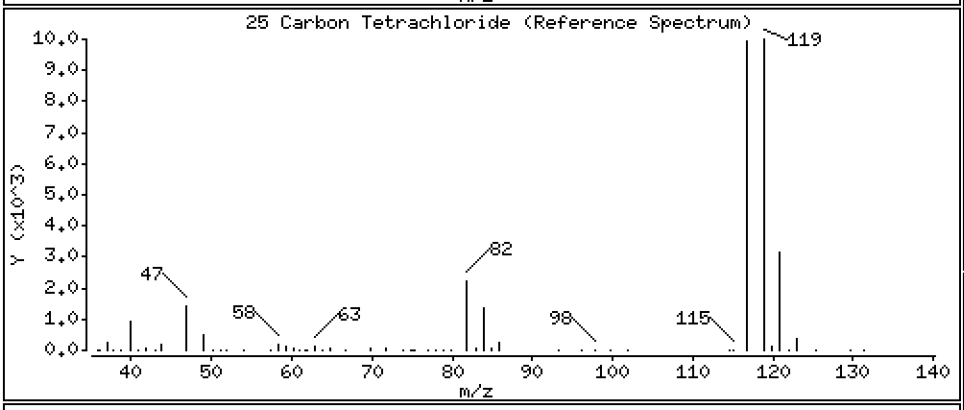
Column diameter: 0.18

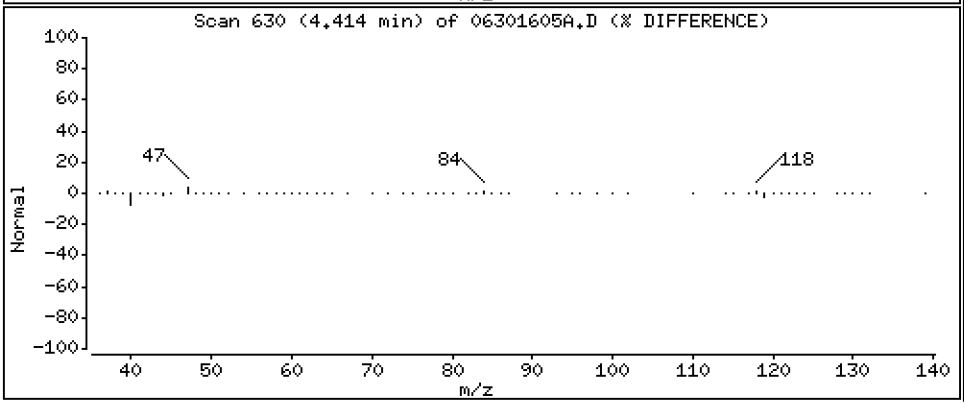
25 Carbon Tetrachloride

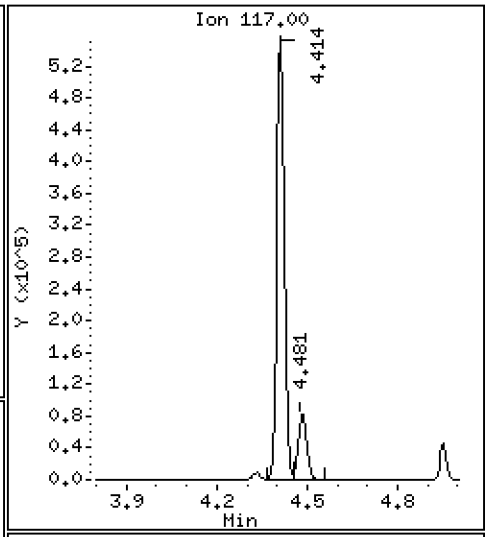
Concentration: 47.937 ug/Kg

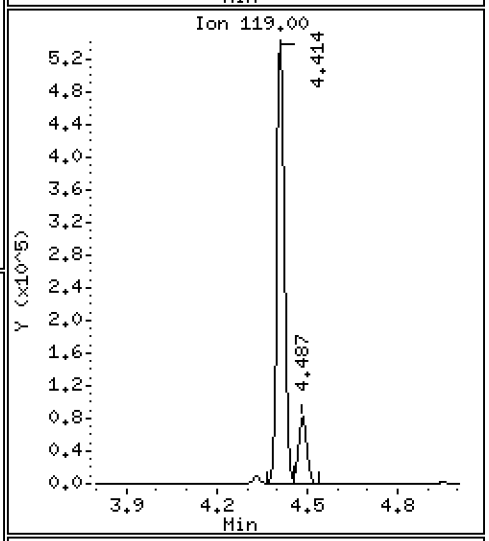


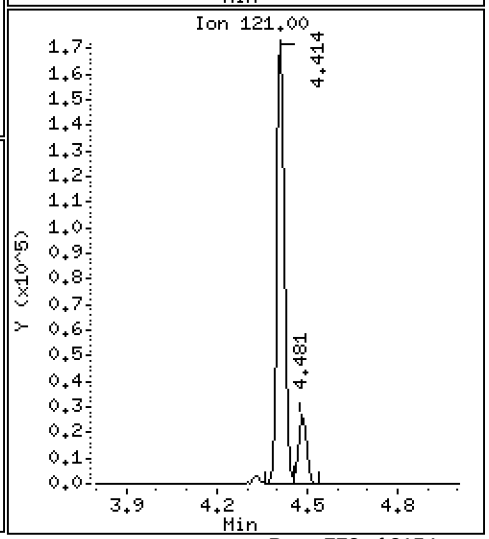












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

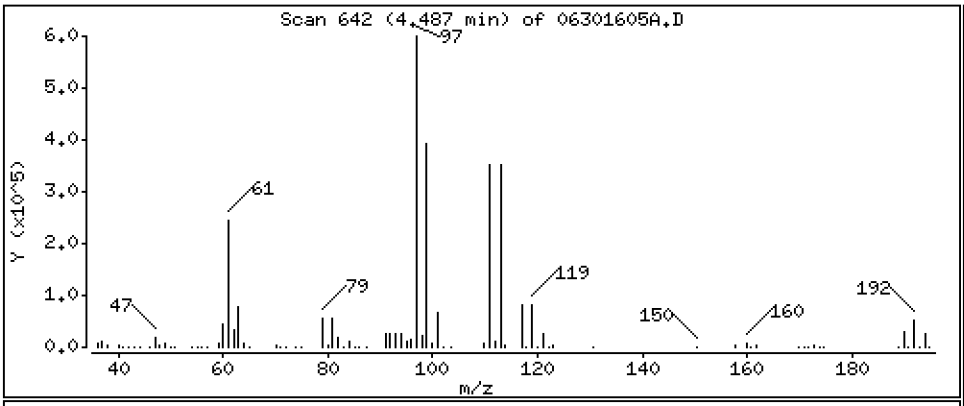
Operator: PB

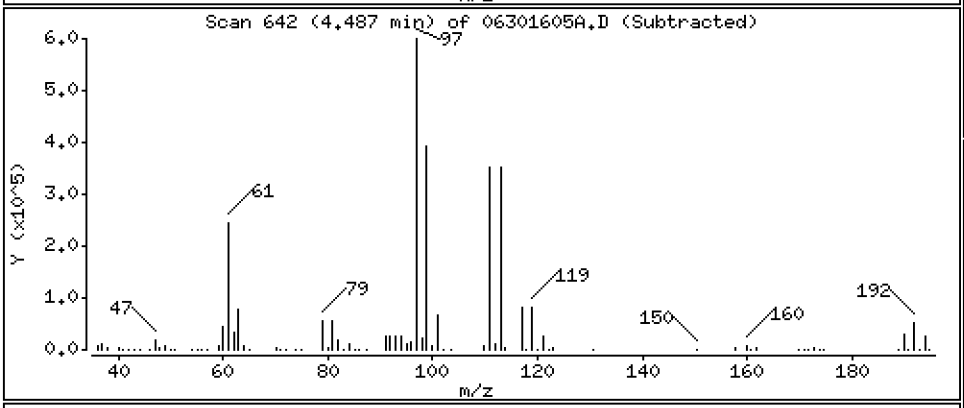
Column phase: RTXVMS

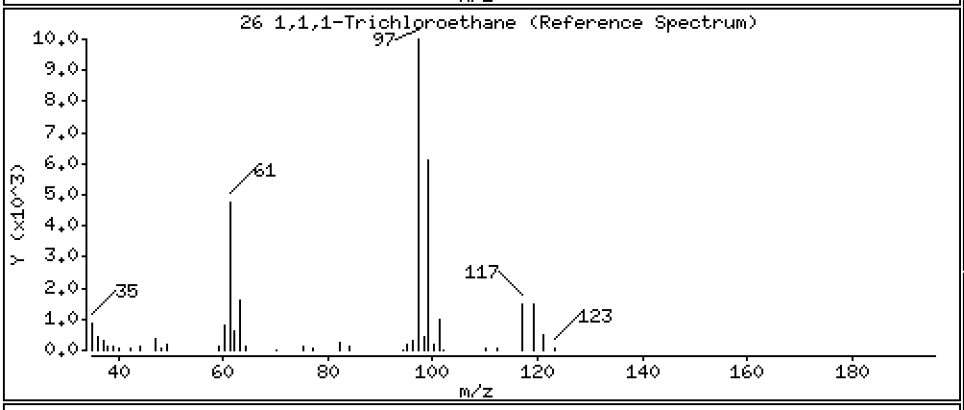
Column diameter: 0.18

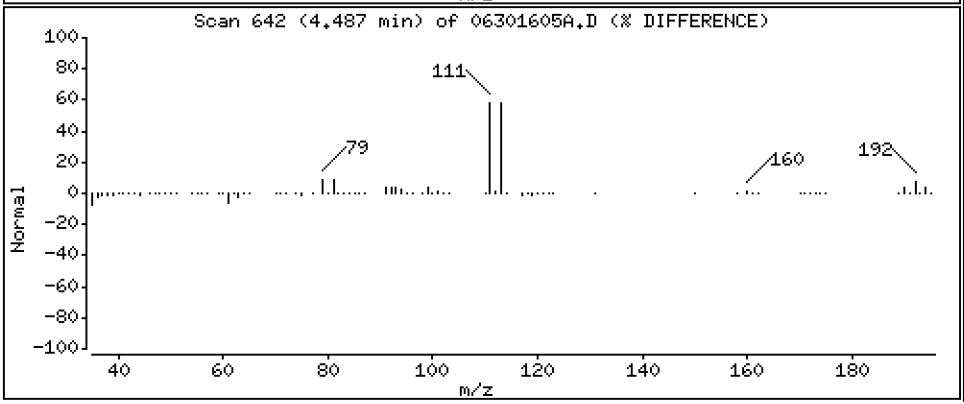
26 1,1,1-Trichloroethane

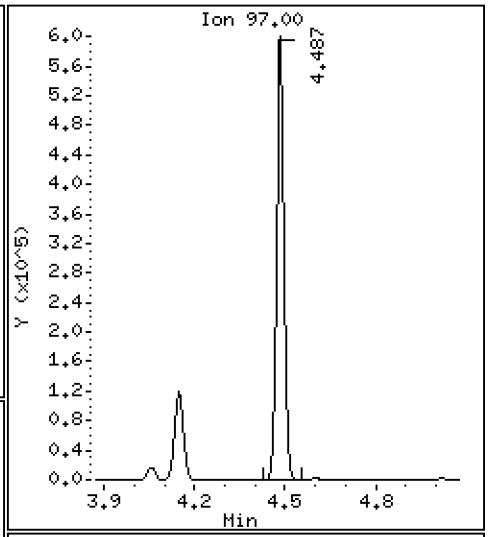
Concentration: 42.995 ug/Kg

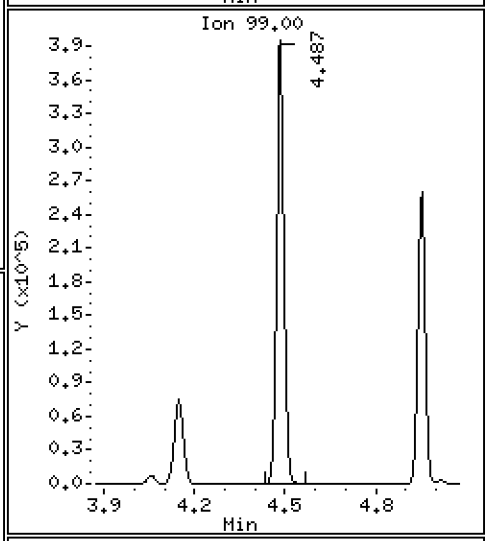


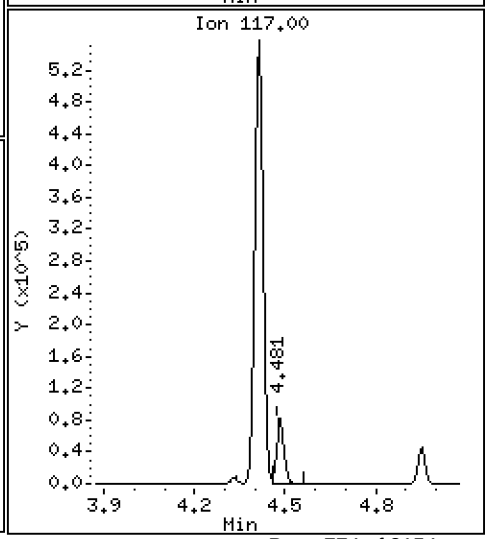












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

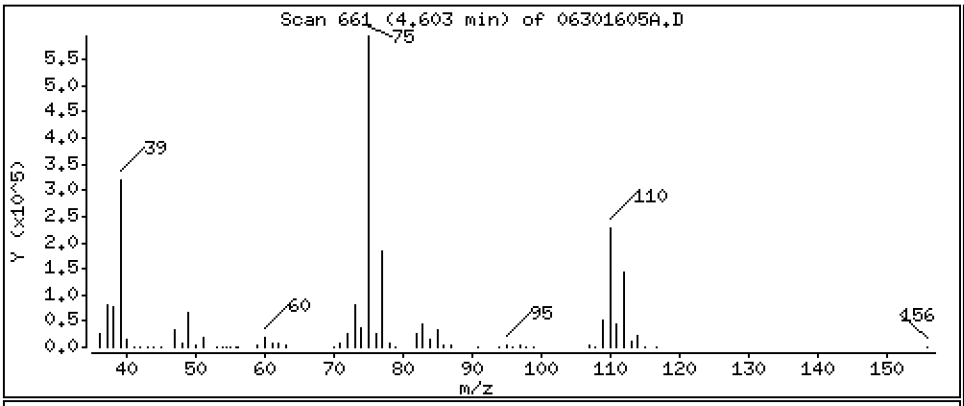
Operator: PB

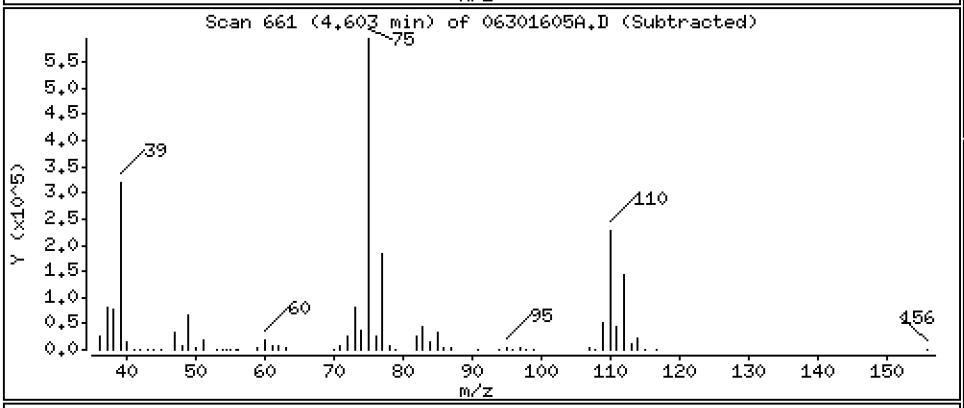
Column phase: RTXVMS

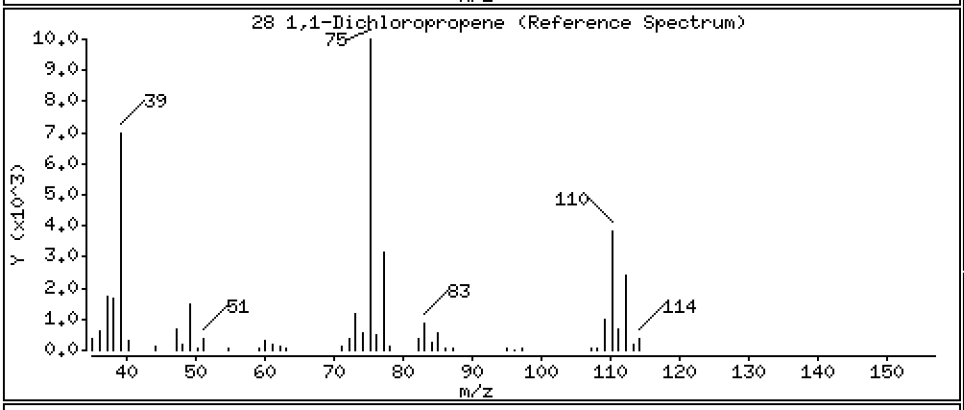
Column diameter: 0.18

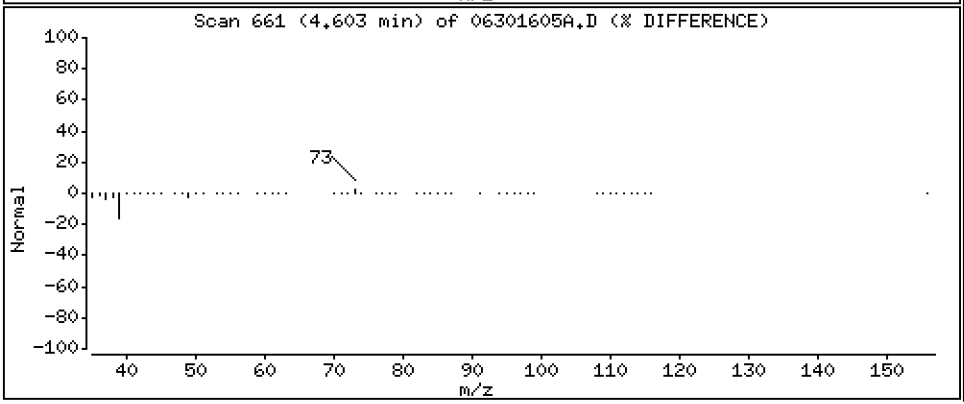
28 1,1-Dichloropropene

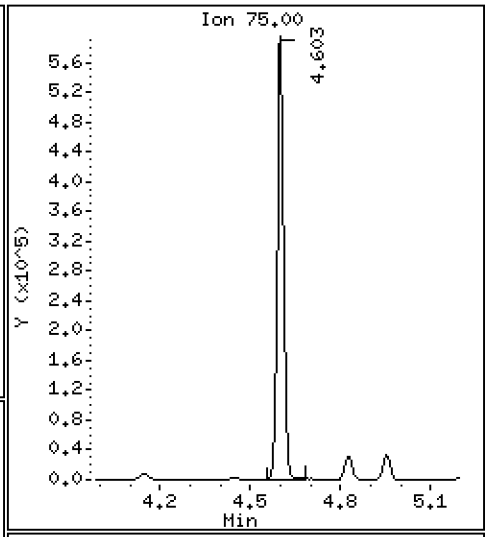
Concentration: 44.356 ug/Kg

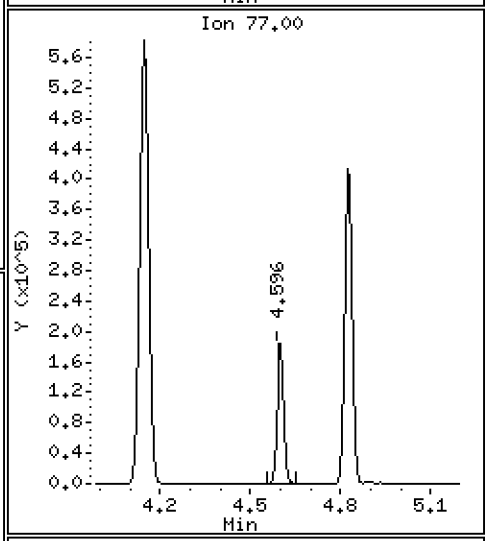


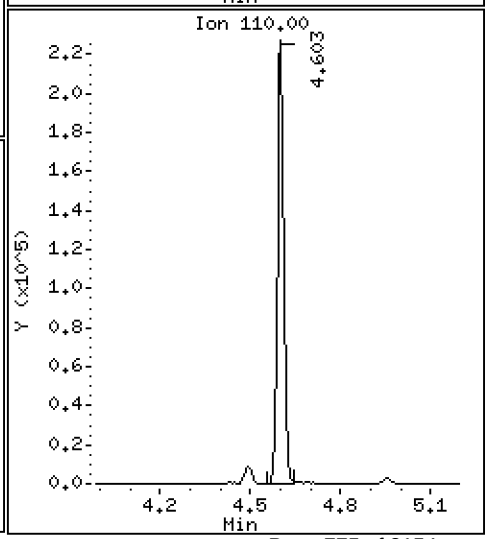












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

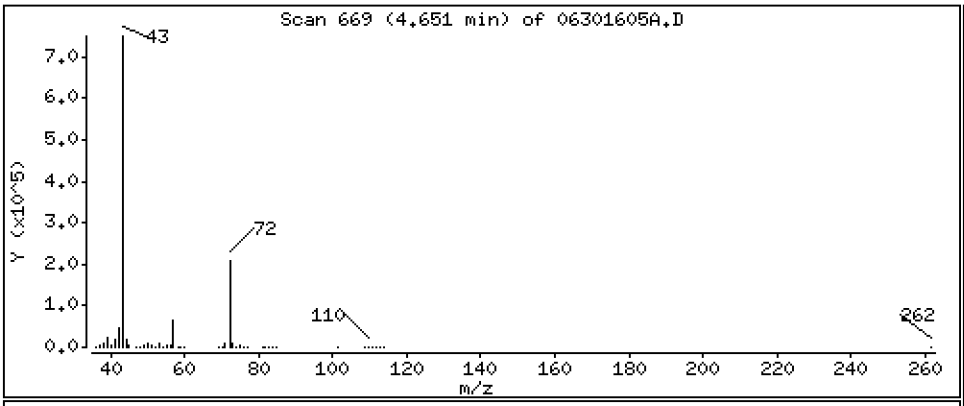
Operator: PB

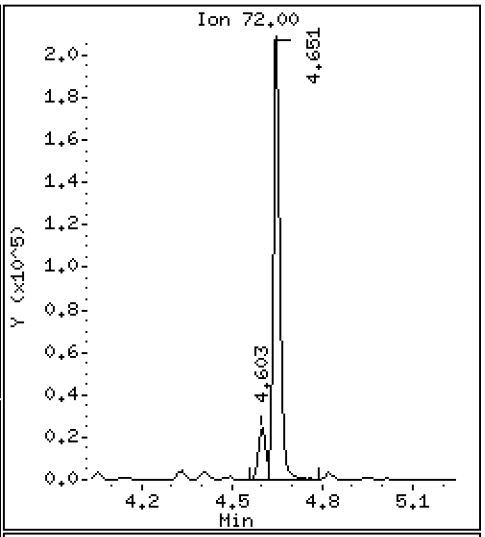
Column phase: RTXVMS

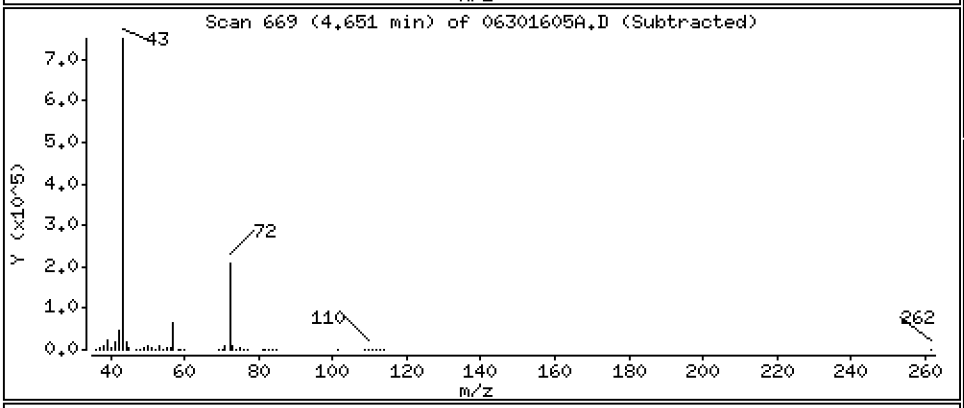
Column diameter: 0.18

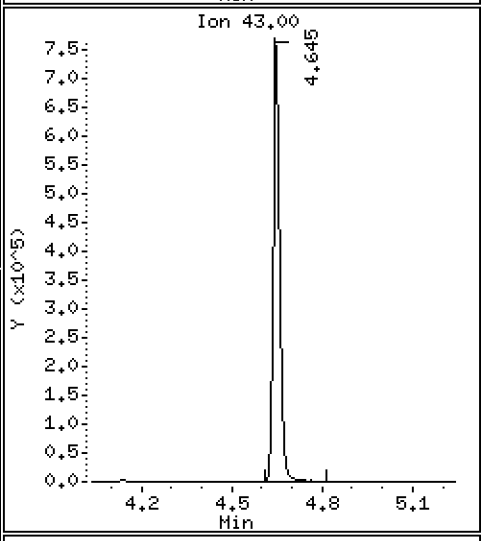
29 2-Butanone

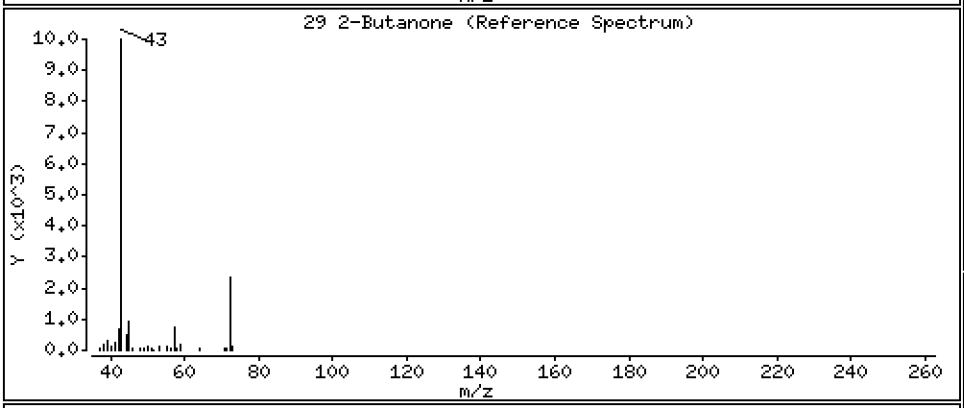
Concentration: 186.98 ug/Kg

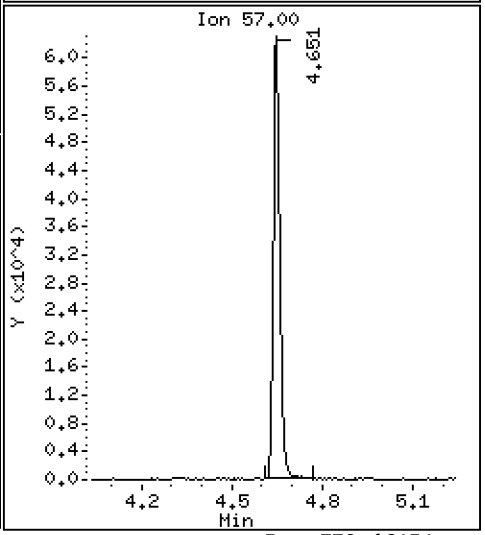


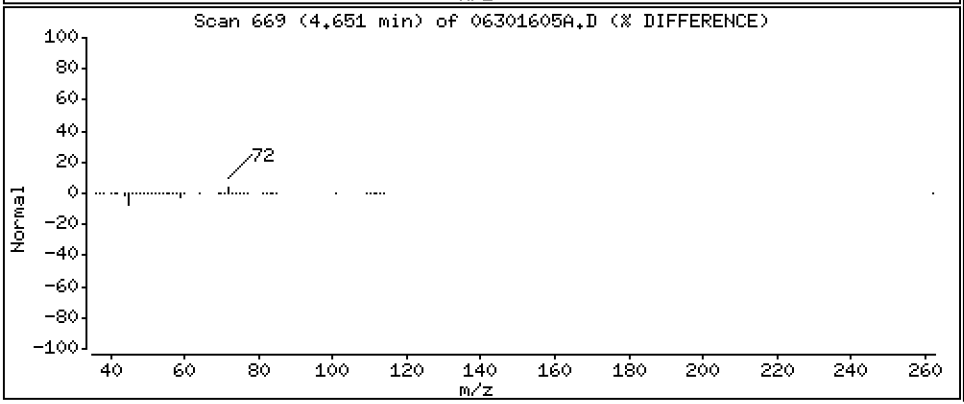












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

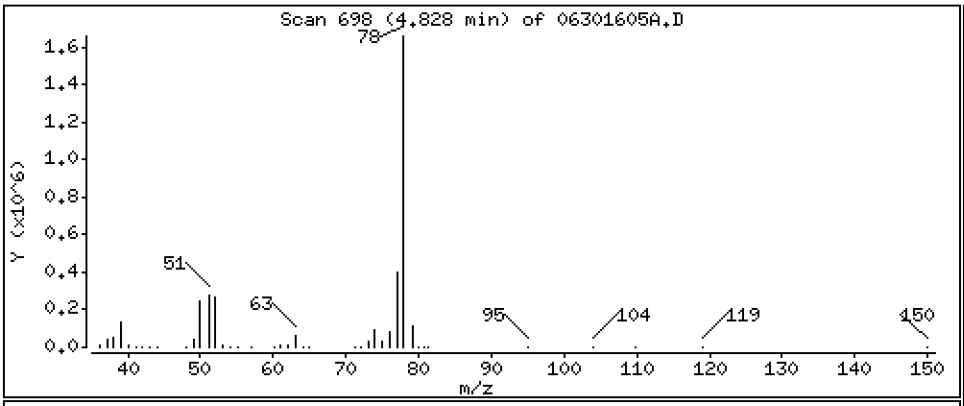
Operator: PB

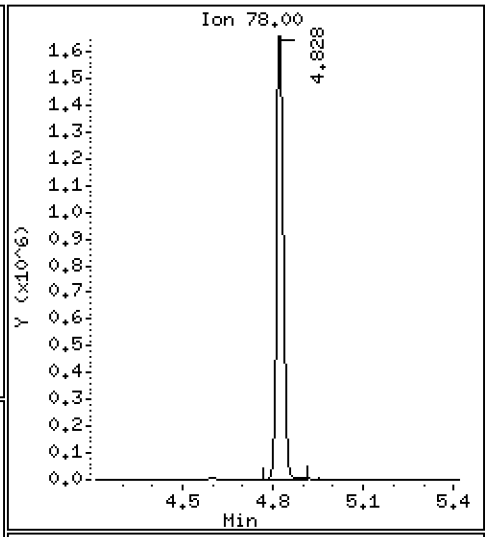
Column phase: RTXVMS

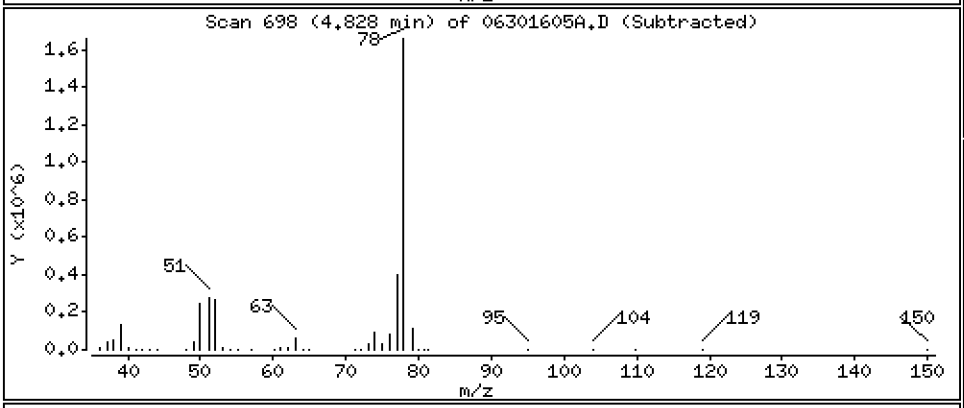
Column diameter: 0.18

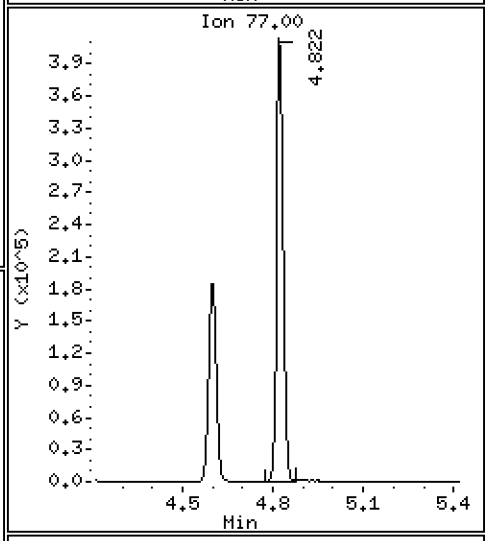
30 Benzene

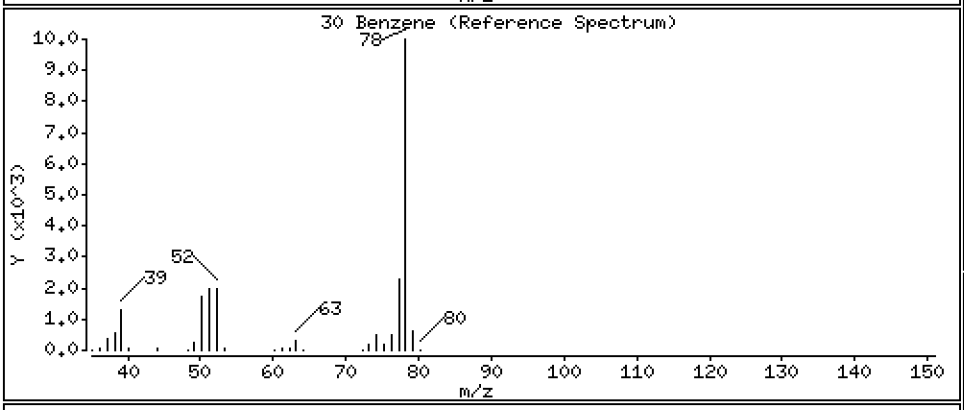
Concentration: 44.605 ug/Kg

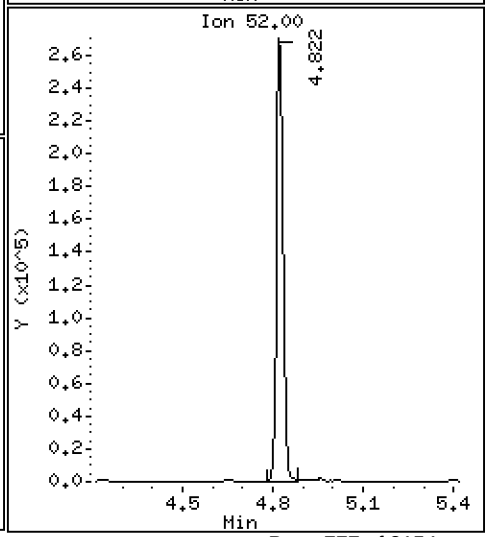


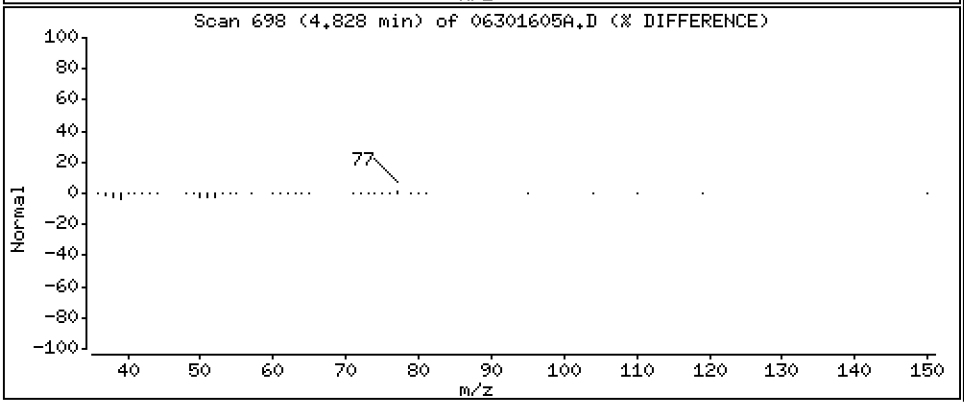












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

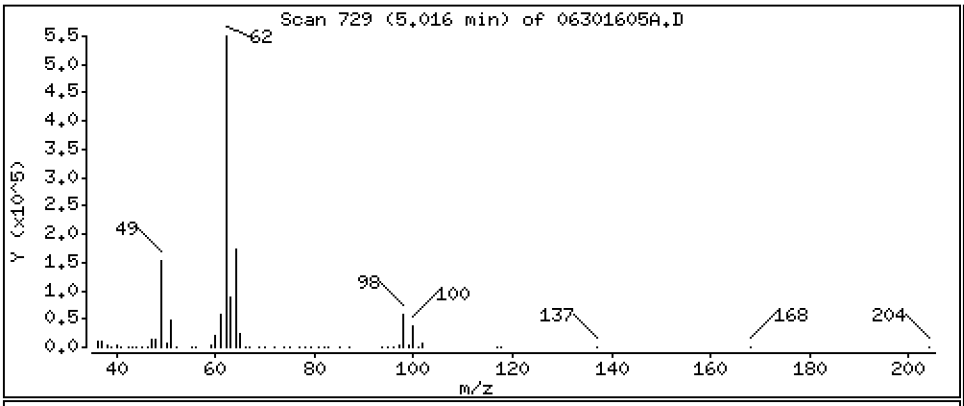
Operator: PB

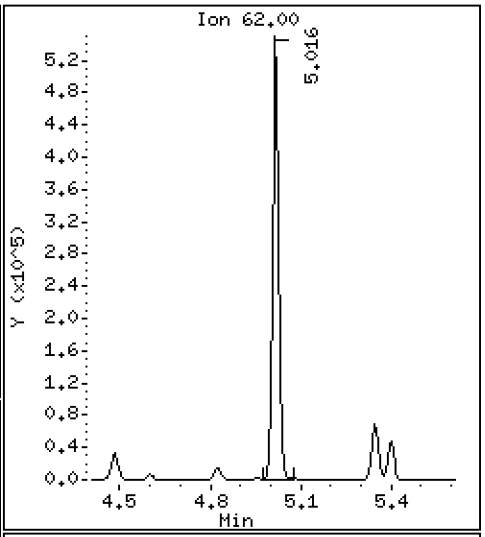
Column phase: RTXVMS

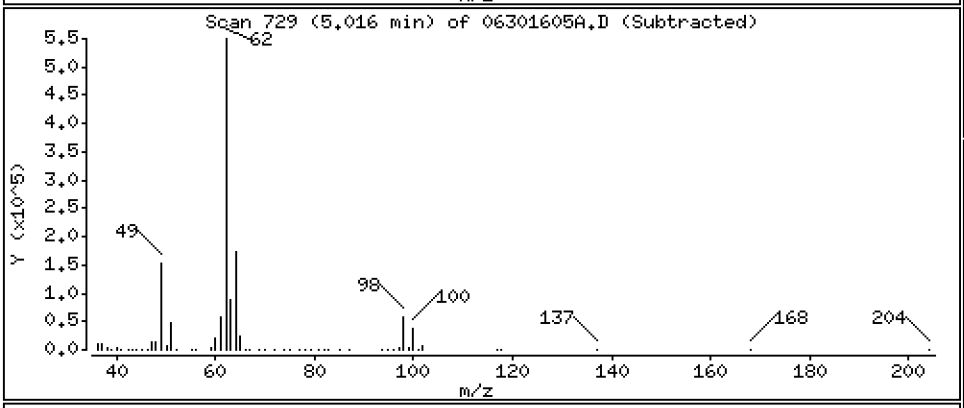
Column diameter: 0.18

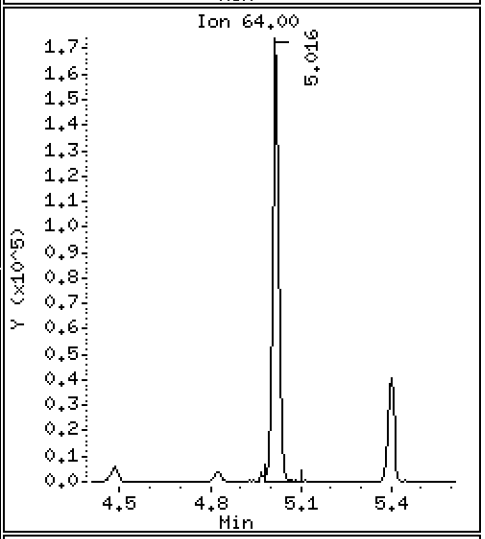
33 1,2-Dichloroethane

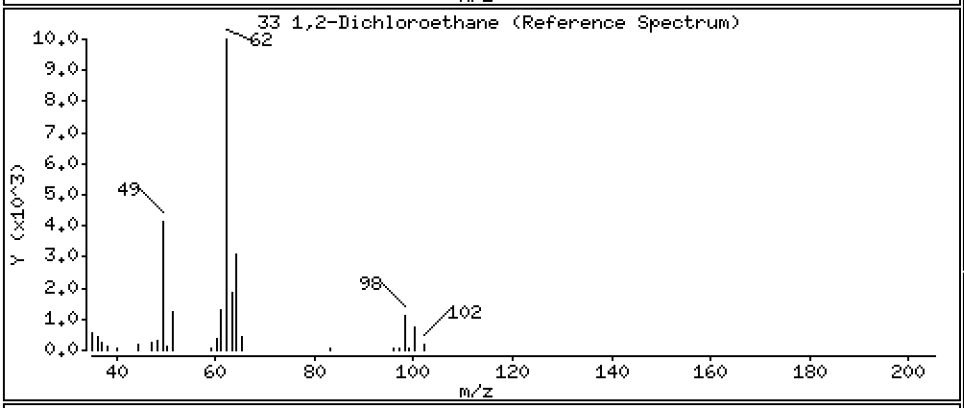
Concentration: 41.542 ug/Kg

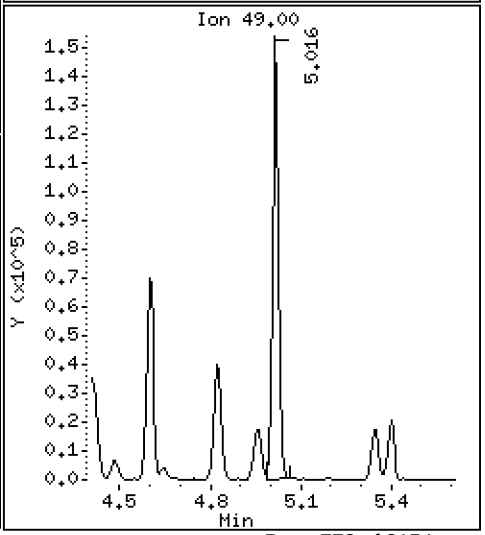


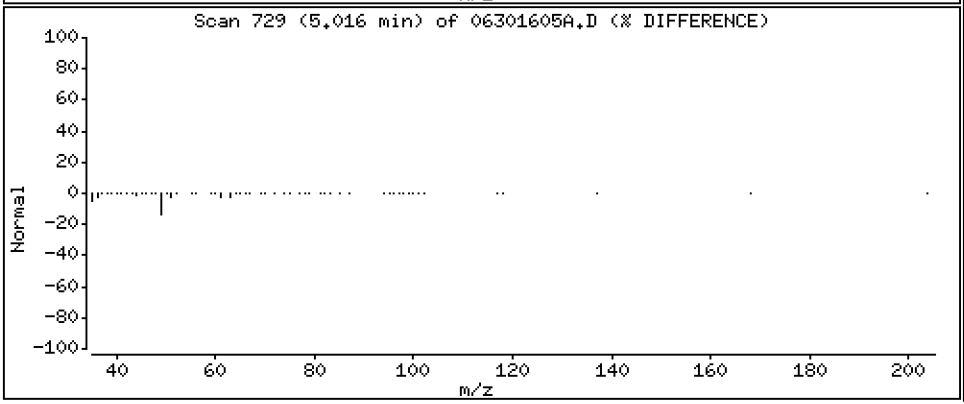












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

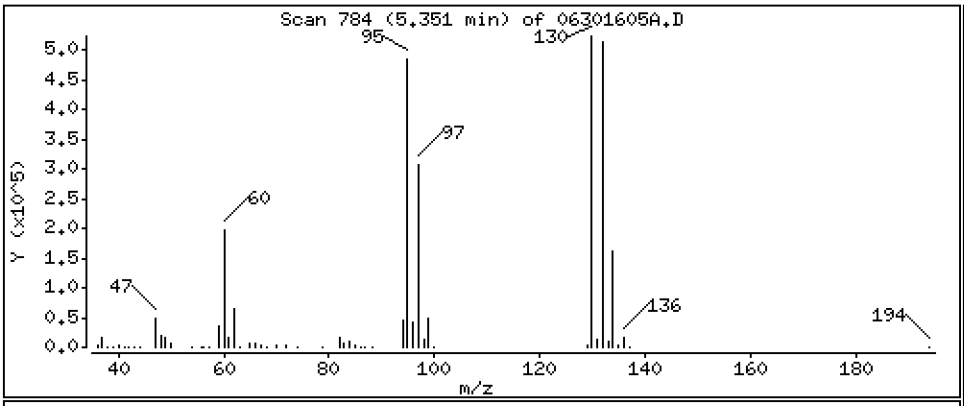
Operator: PB

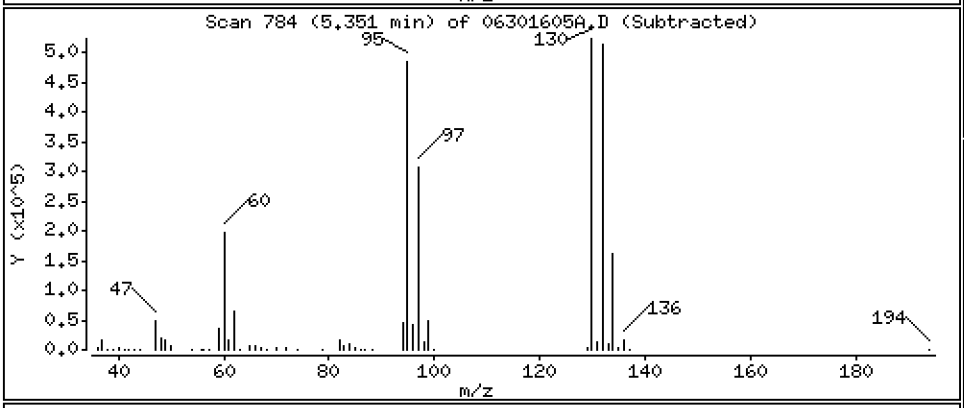
Column phase: RTXVMS

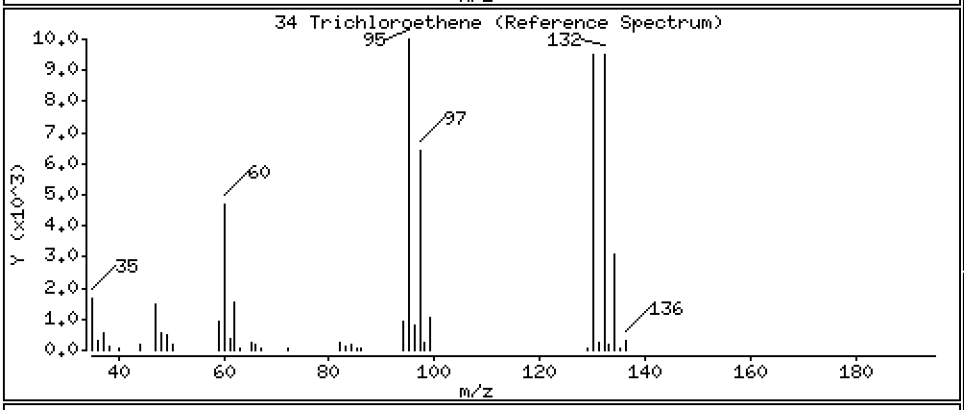
Column diameter: 0.18

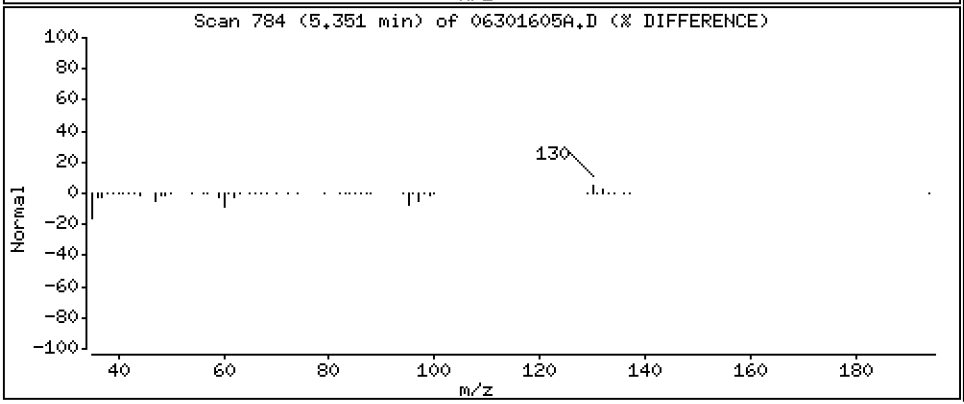
34 Trichloroethene

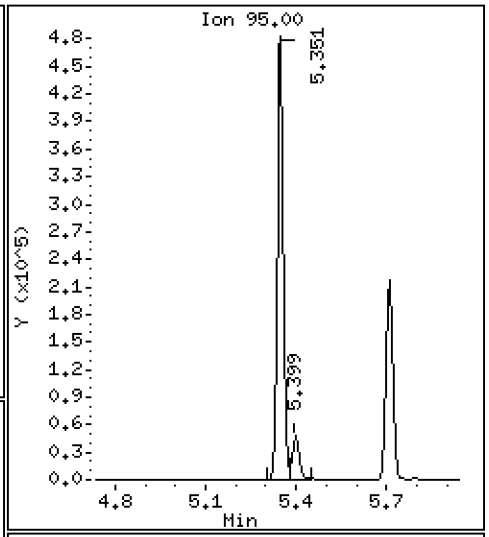
Concentration: 45.977 ug/Kg

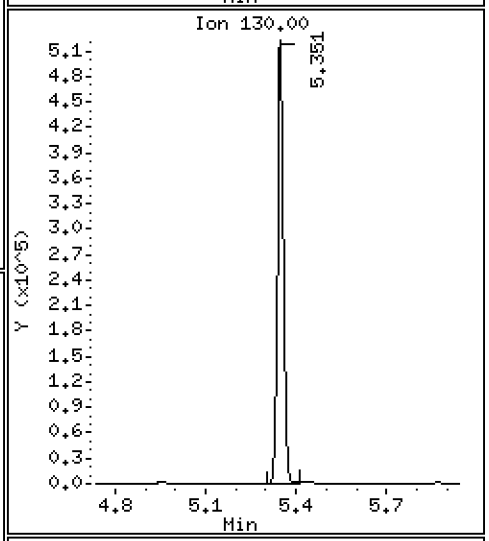


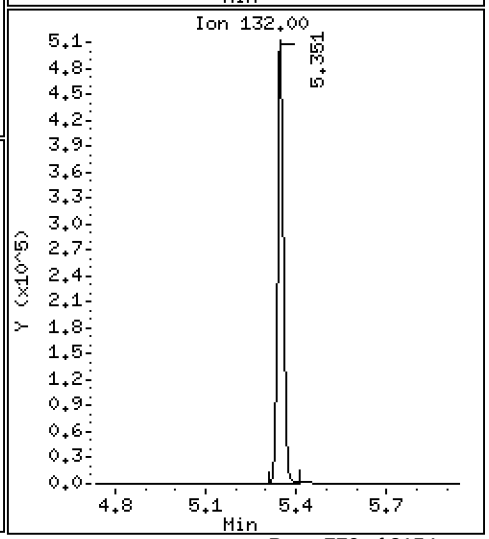












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

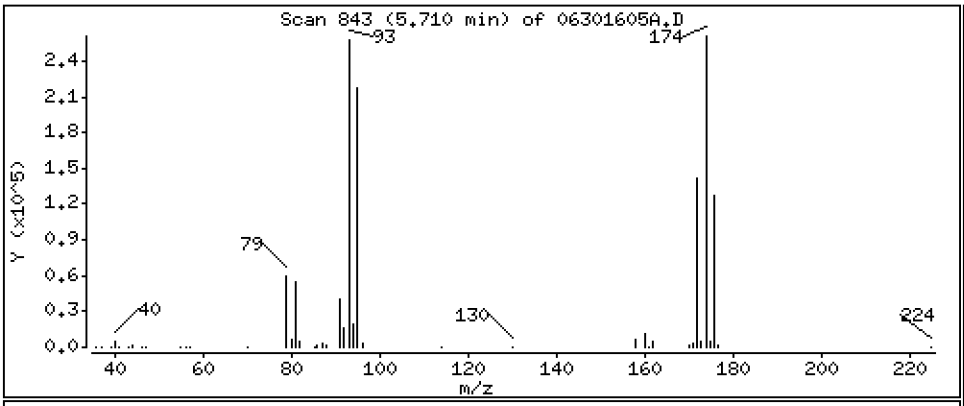
Operator: PB

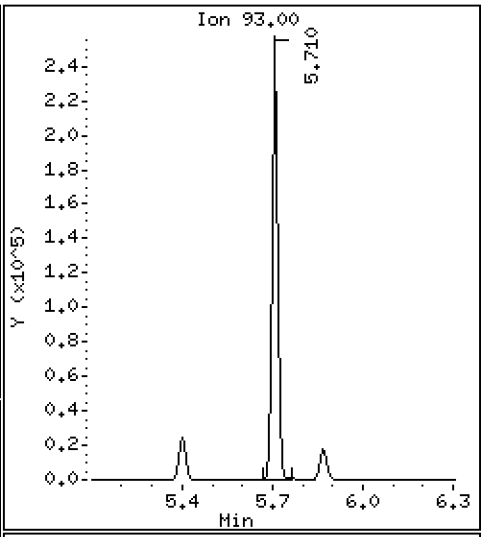
Column phase: RTXVMS

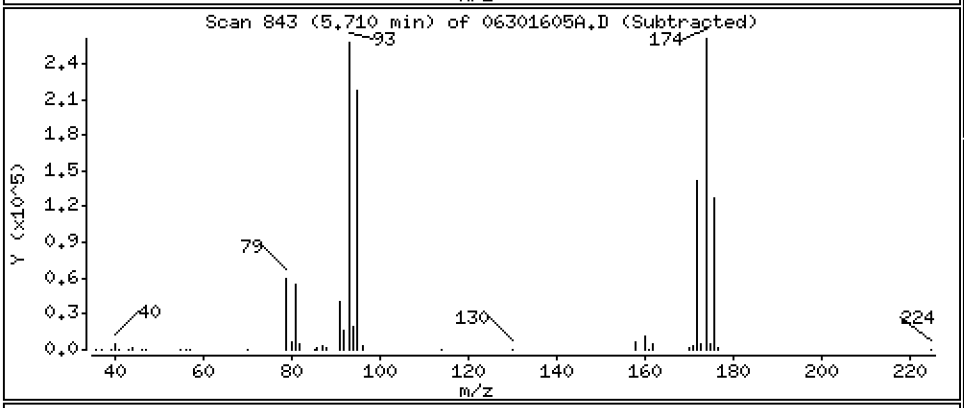
Column diameter: 0.18

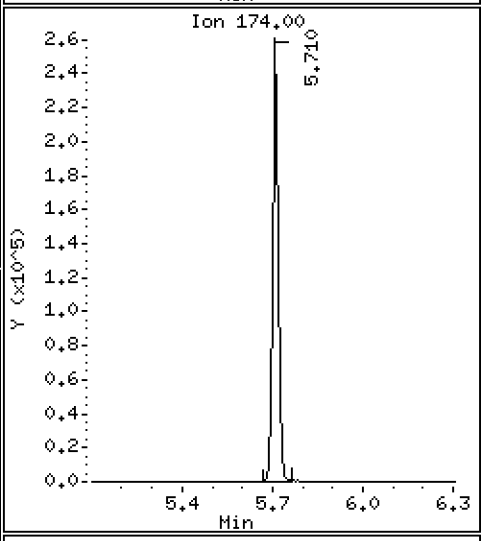
37 Dibromomethane

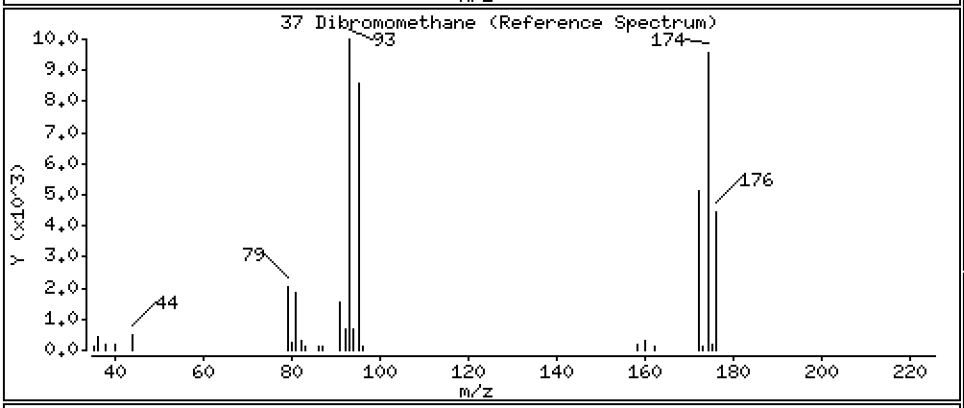
Concentration: 44.475 ug/Kg

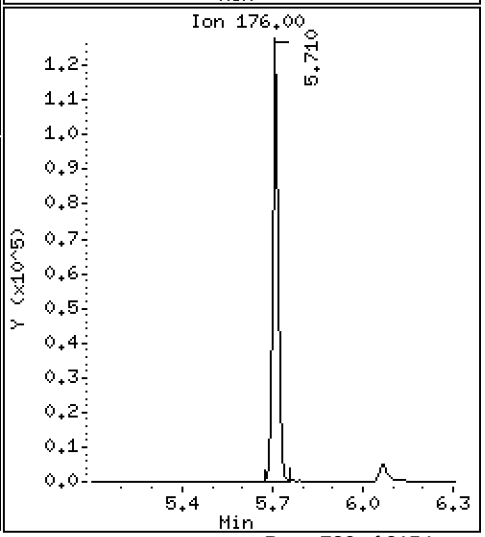


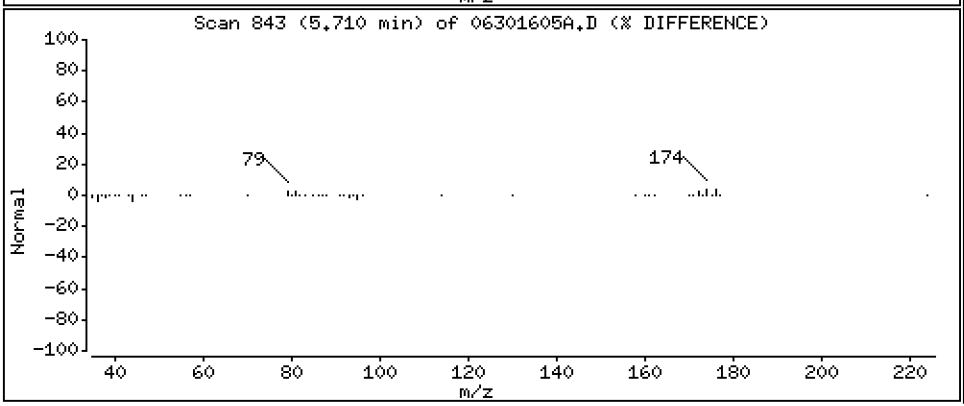












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

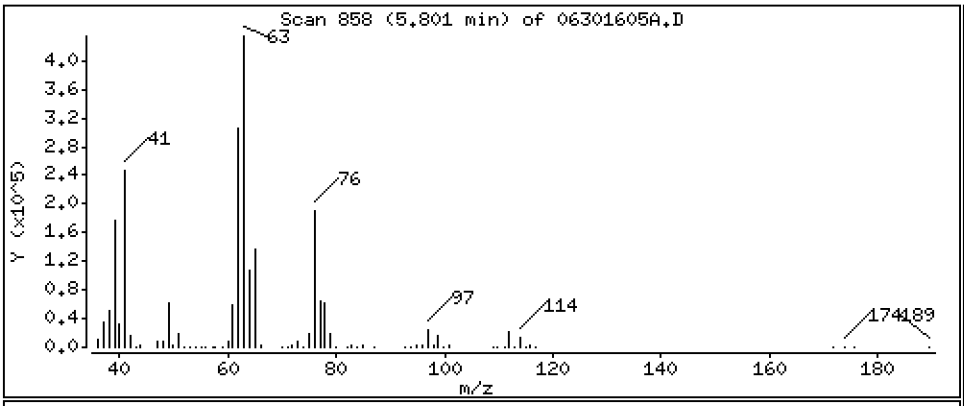
Operator: PB

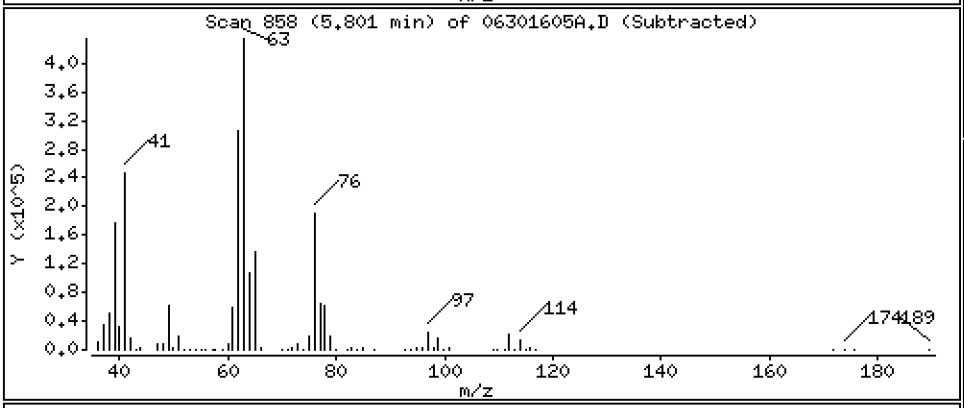
Column phase: RTXVMS

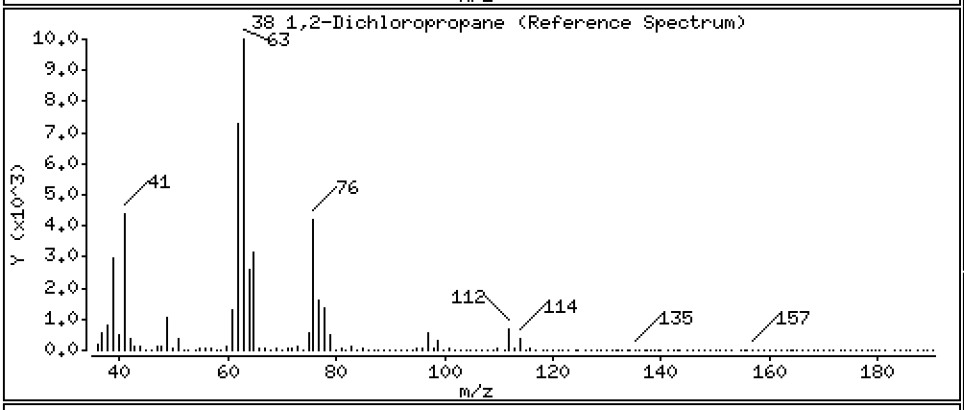
Column diameter: 0.18

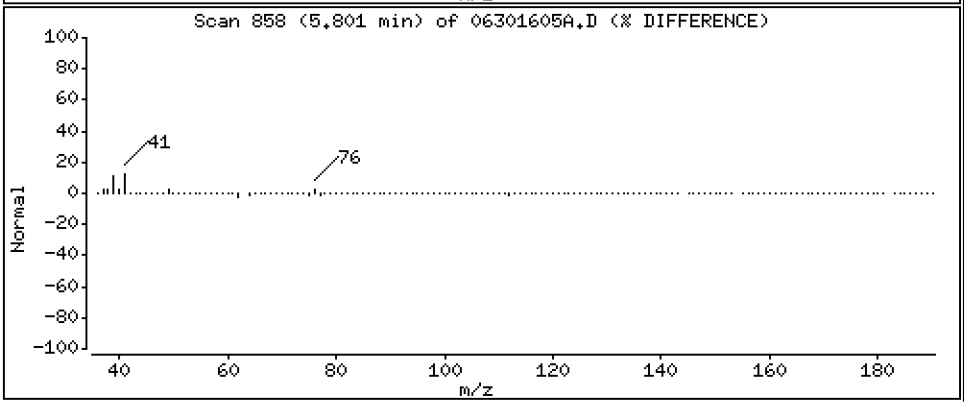
38 1,2-Dichloropropane

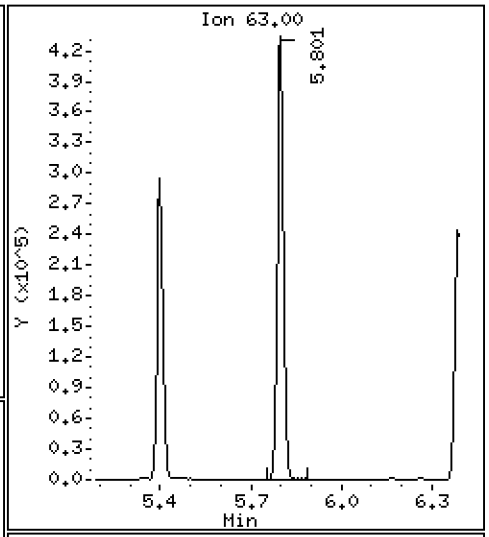
Concentration: 42.568 ug/Kg

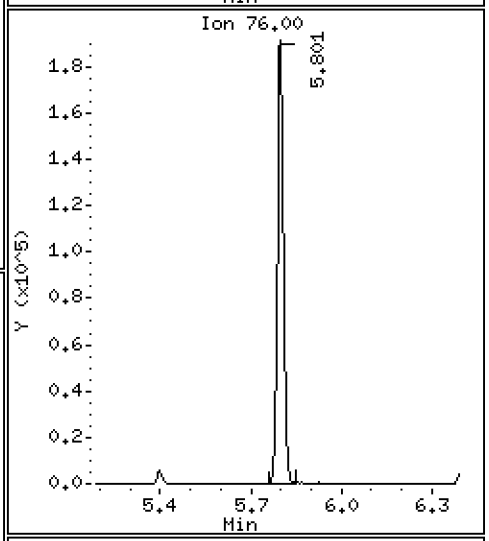


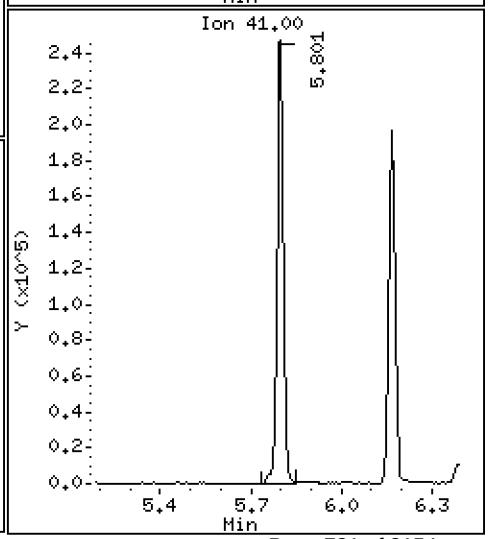












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

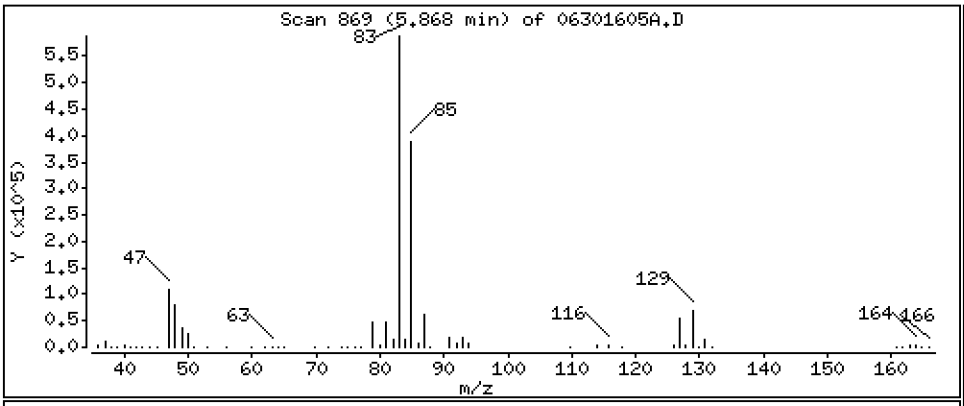
Operator: PB

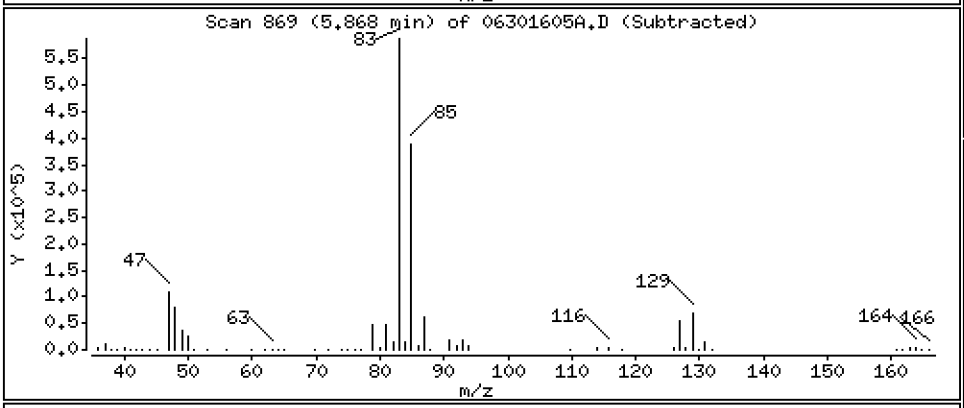
Column phase: RTXVMS

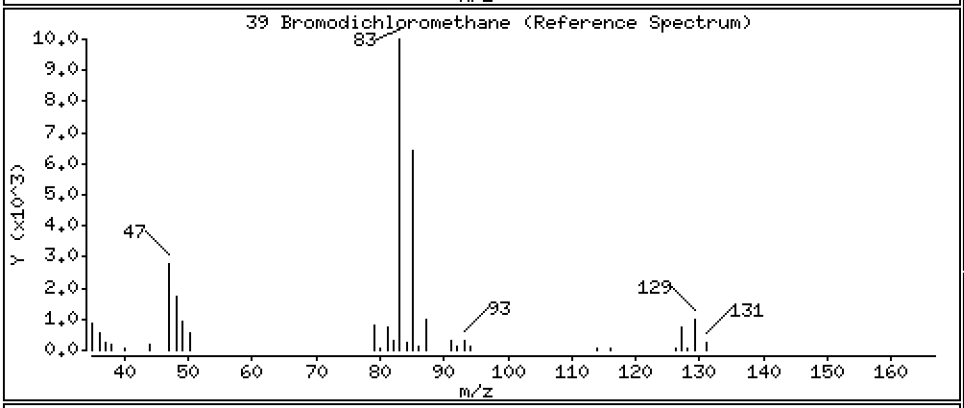
Column diameter: 0.18

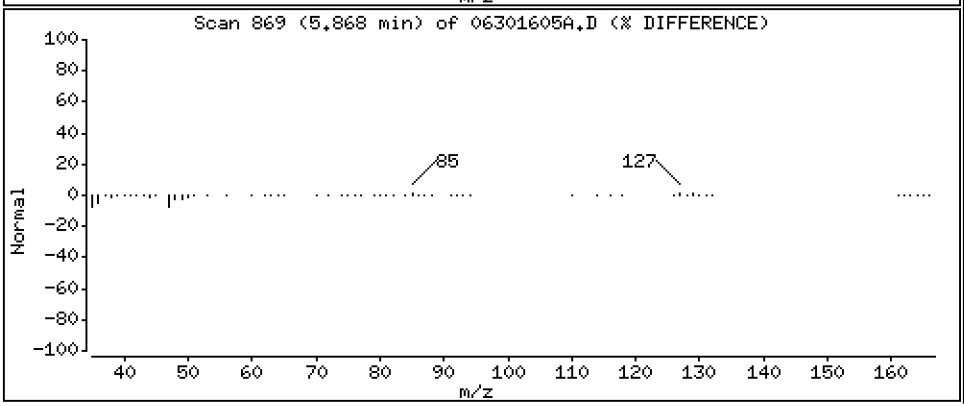
39 Bromodichloromethane

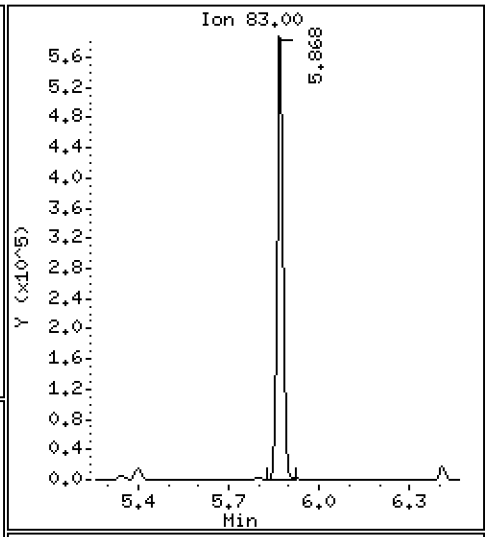
Concentration: 46.619 ug/Kg

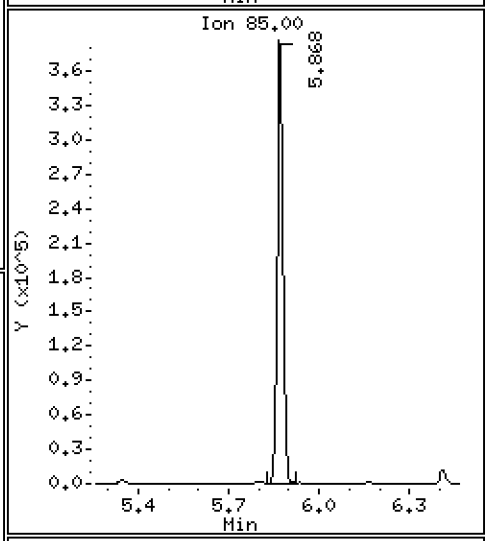


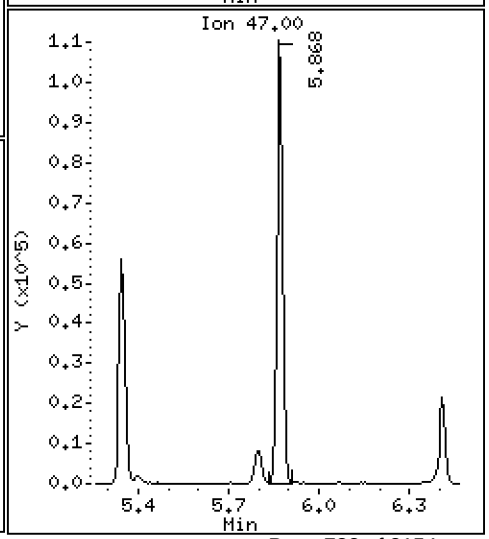












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

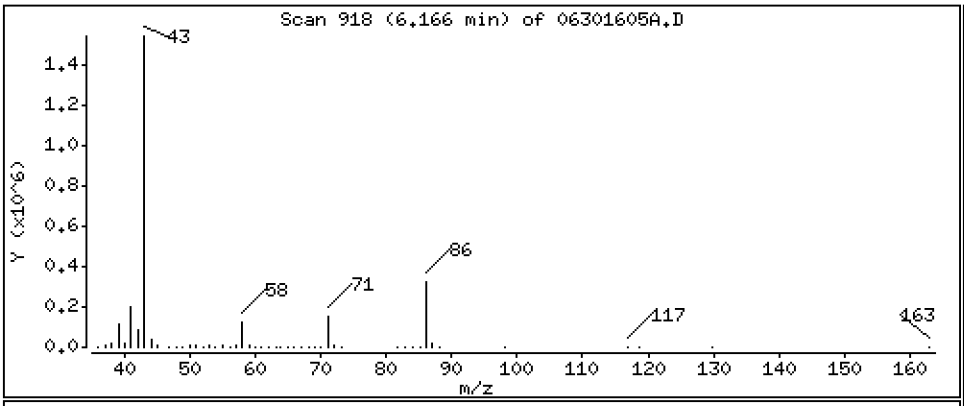
Operator: PB

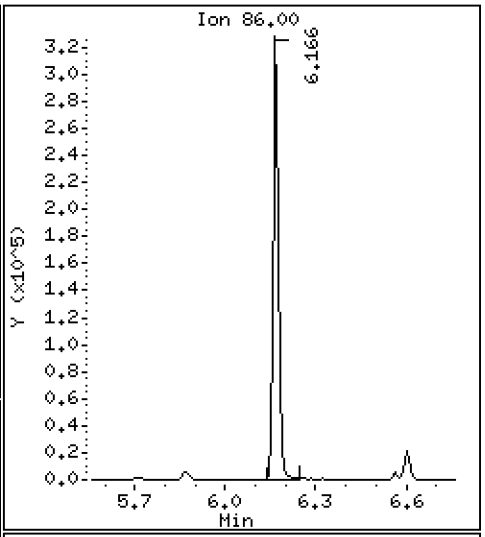
Column phase: RTXVMS

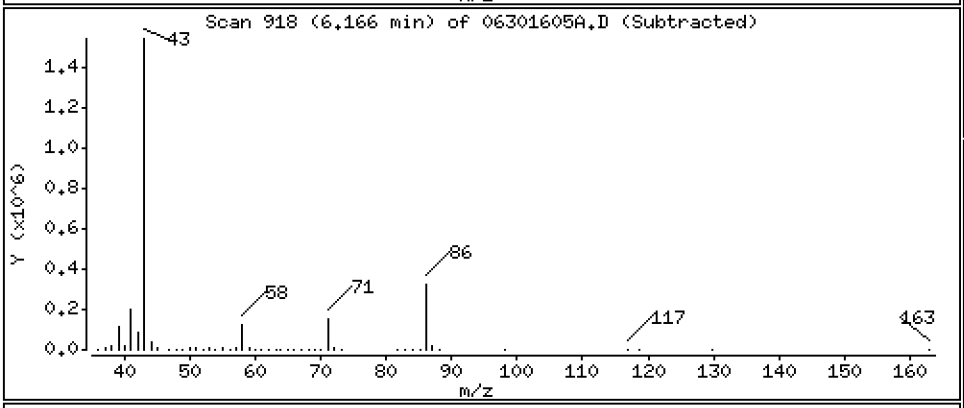
Column diameter: 0.18

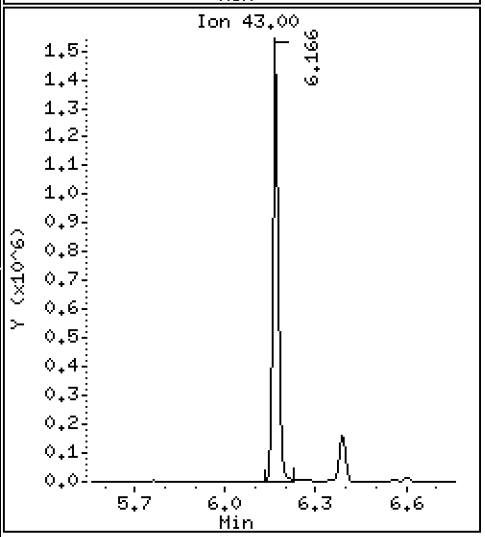
172 2-Pentanone

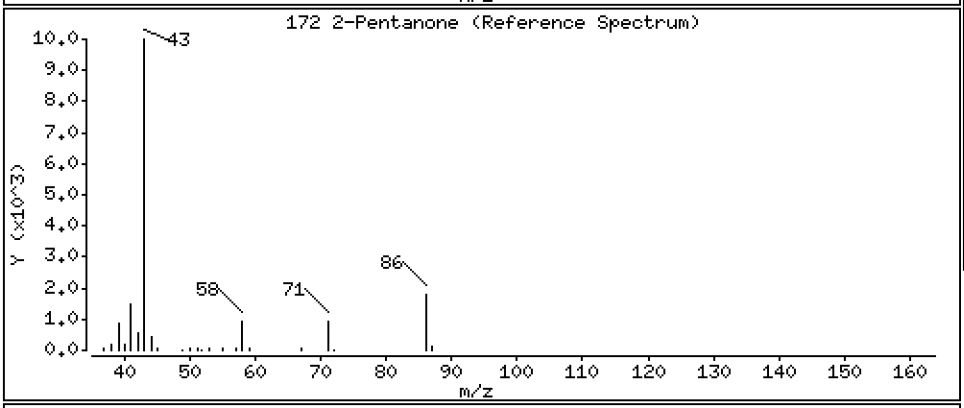
Concentration: 201.66 ug/Kg

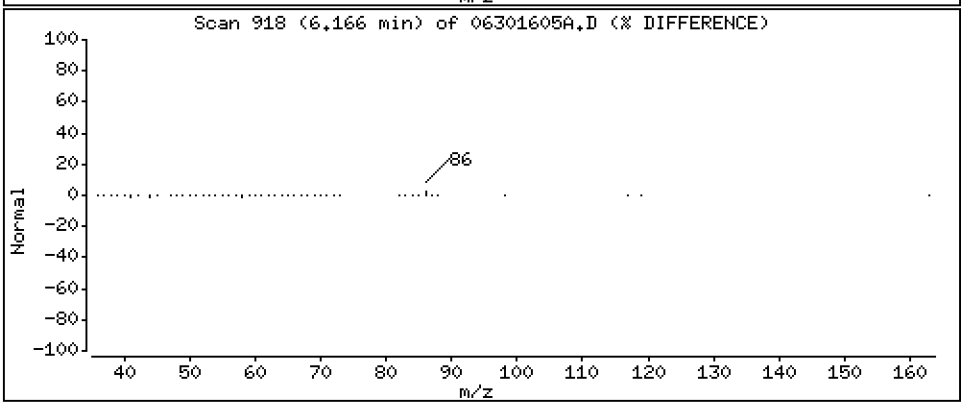












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

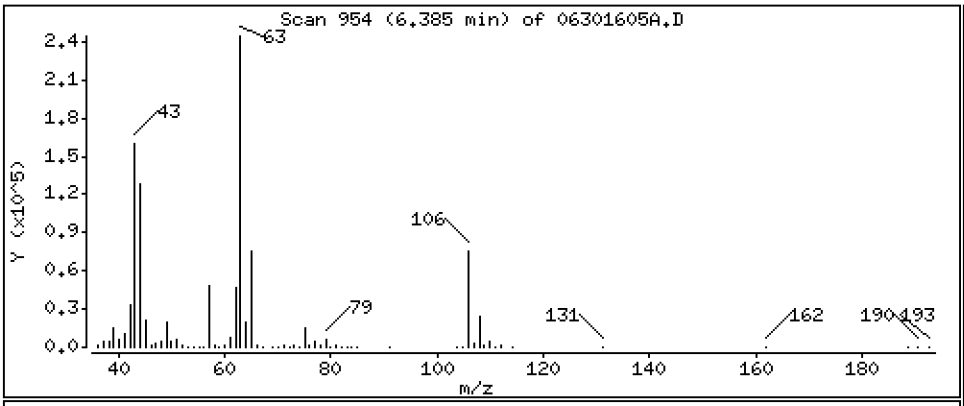
Operator: PB

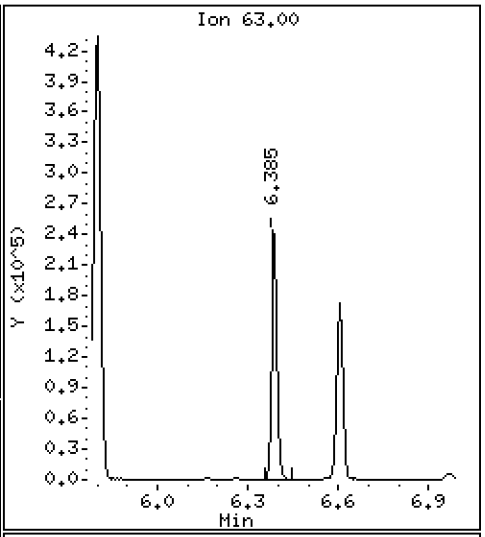
Column phase: RTXVMS

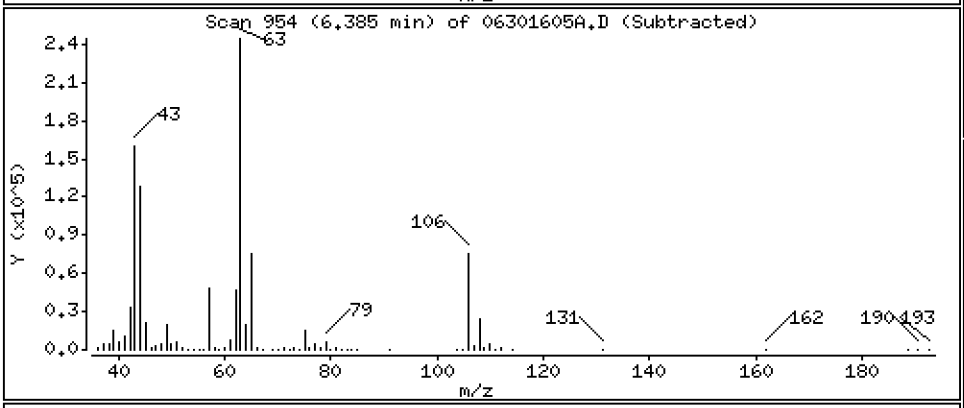
Column diameter: 0.18

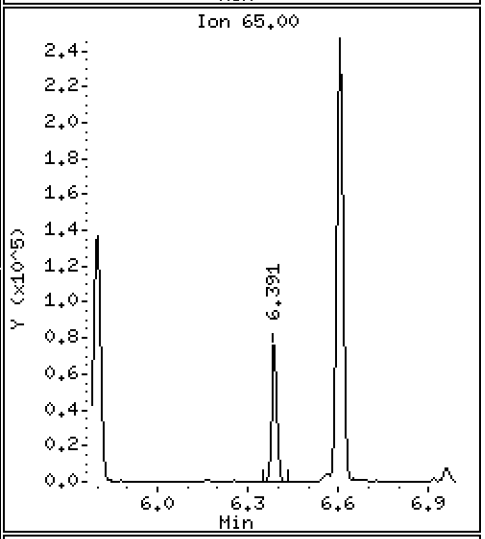
40 2-Chloroethyl Vinyl Ether

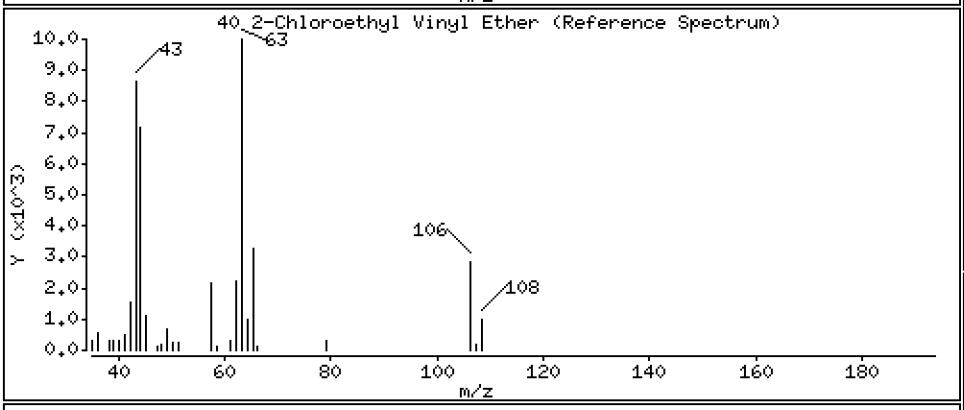
Concentration: 50.486 ug/Kg

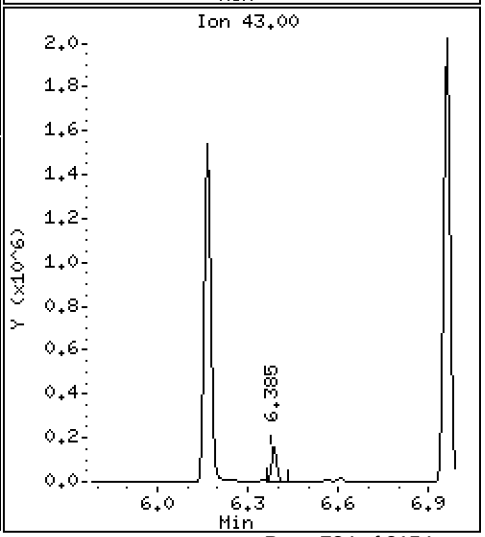


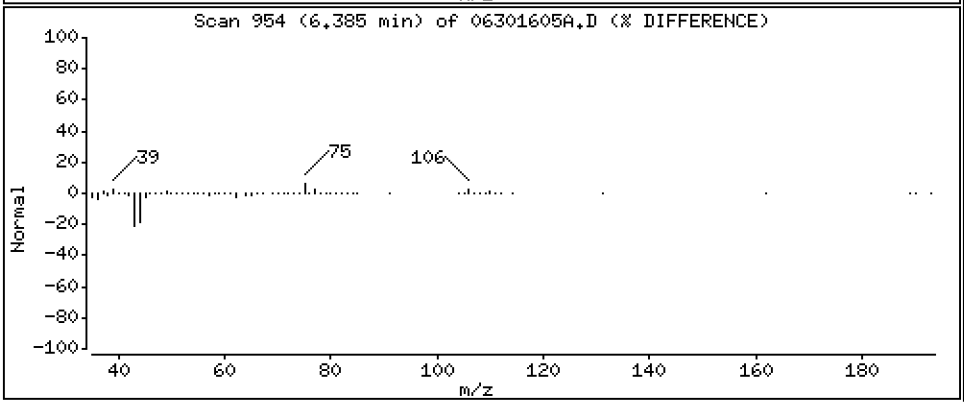












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

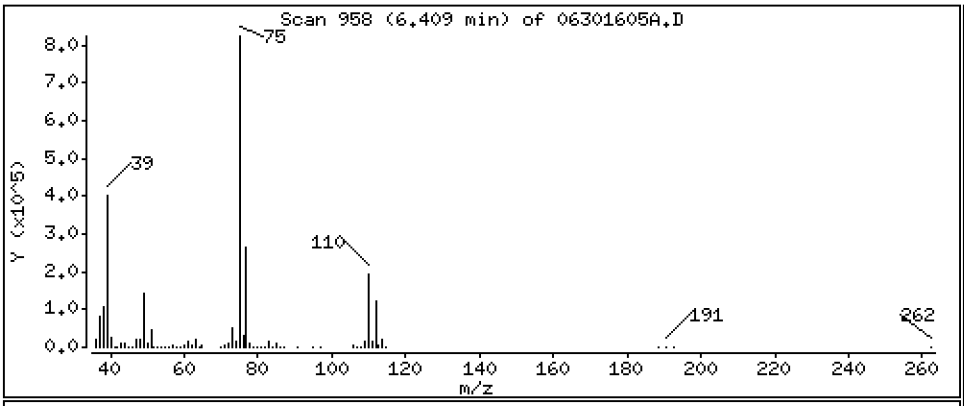
Operator: PB

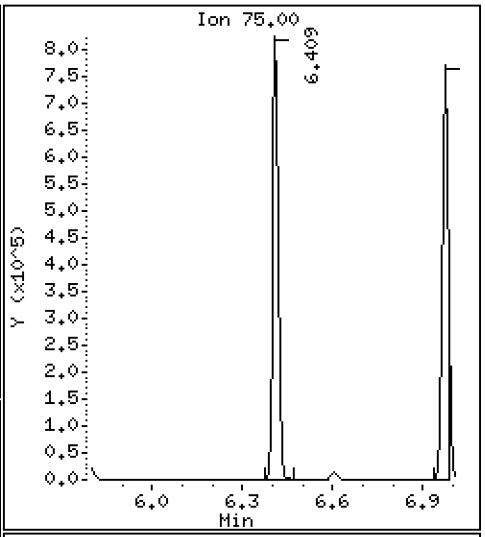
Column phase: RTXVMS

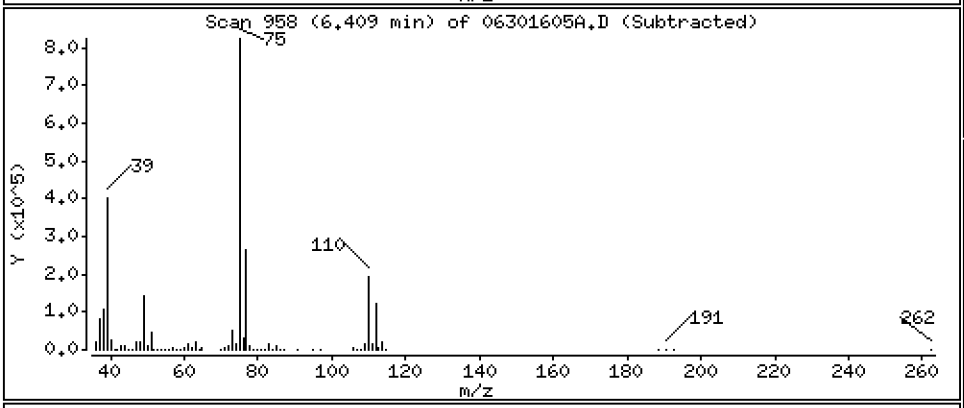
Column diameter: 0.18

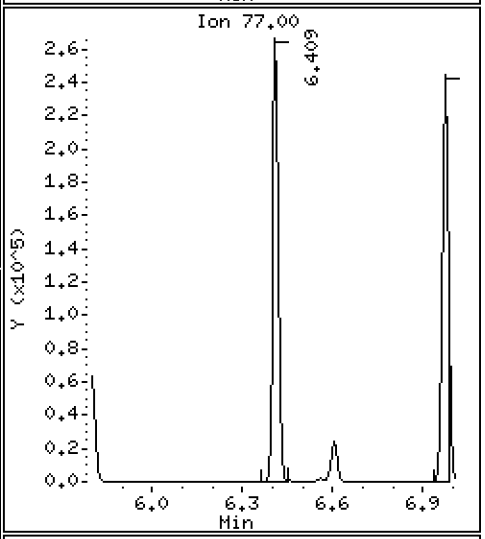
41 Cis 1,3-dichloropropene

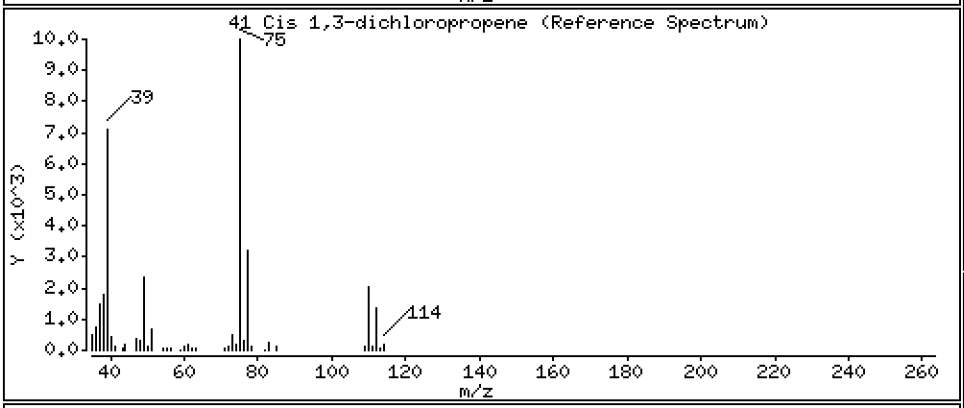
Concentration: 45.396 ug/Kg

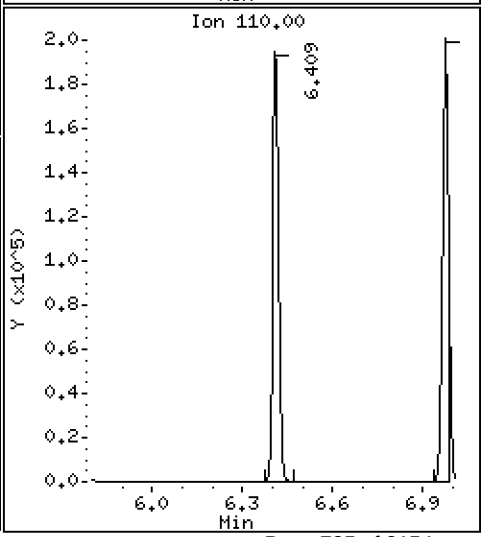


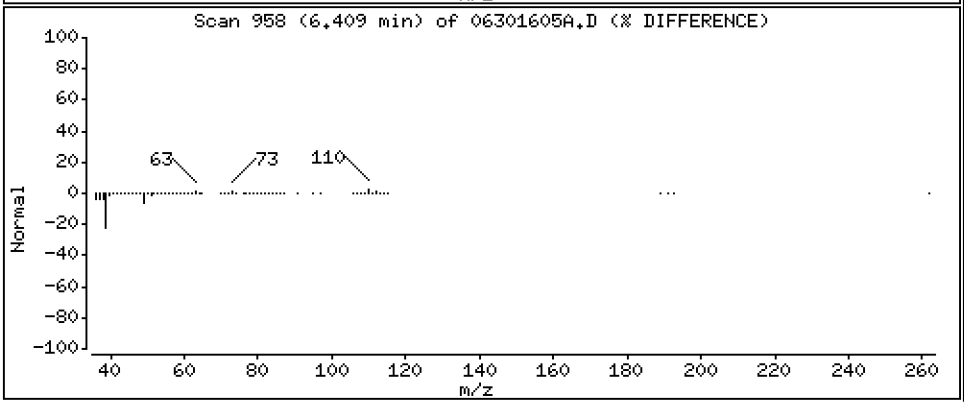












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

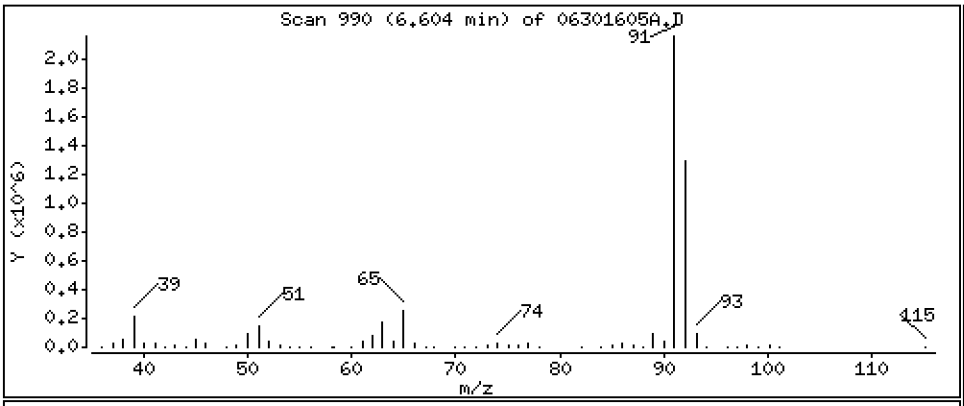
Operator: PB

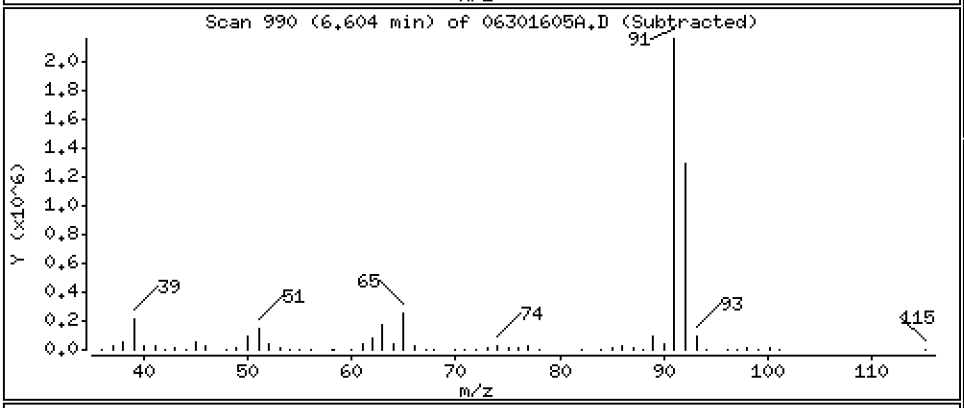
Column phase: RTXVMS

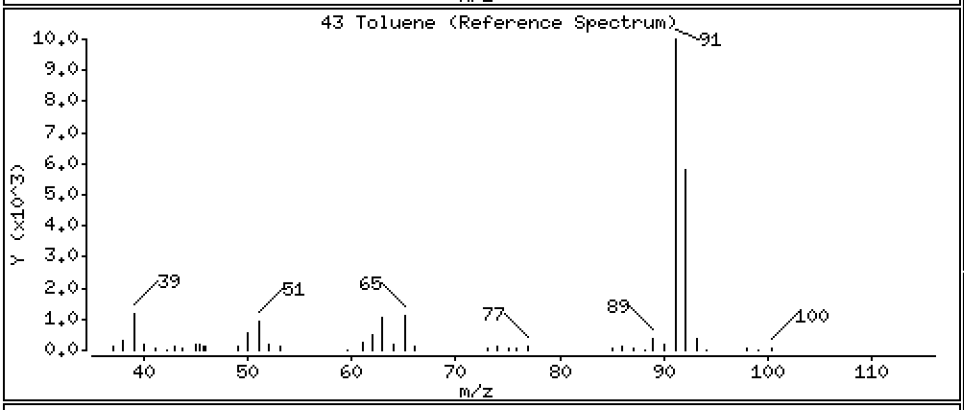
Column diameter: 0.18

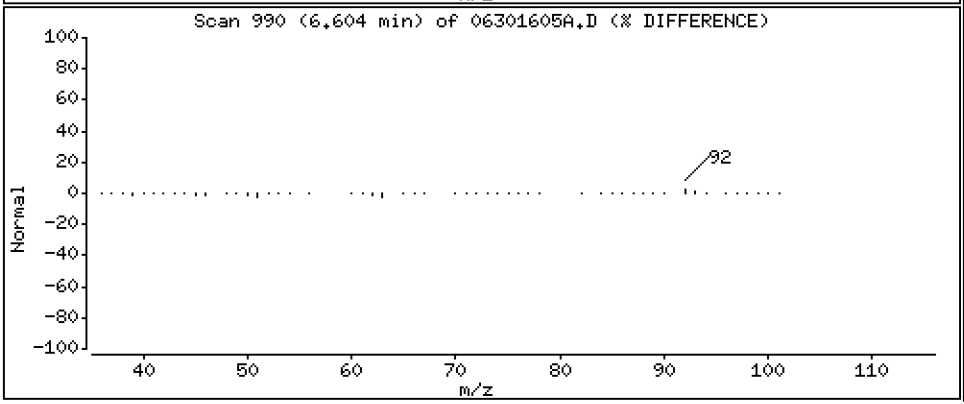
43 Toluene

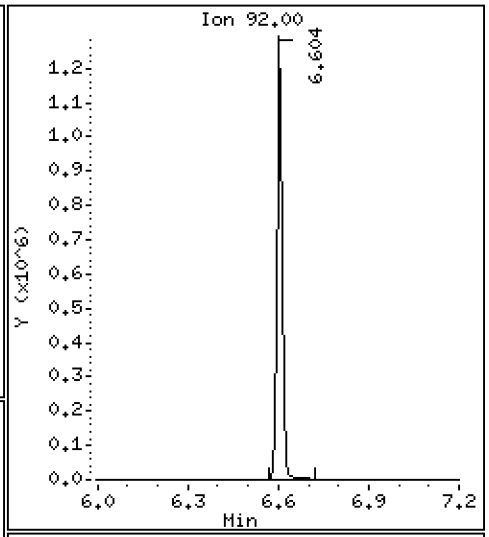
Concentration: 44.919 ug/Kg

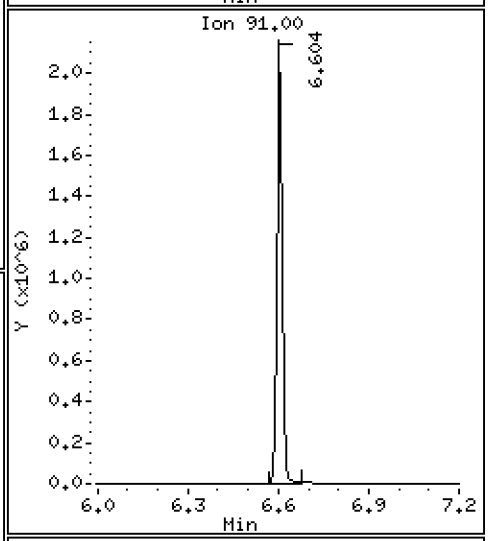


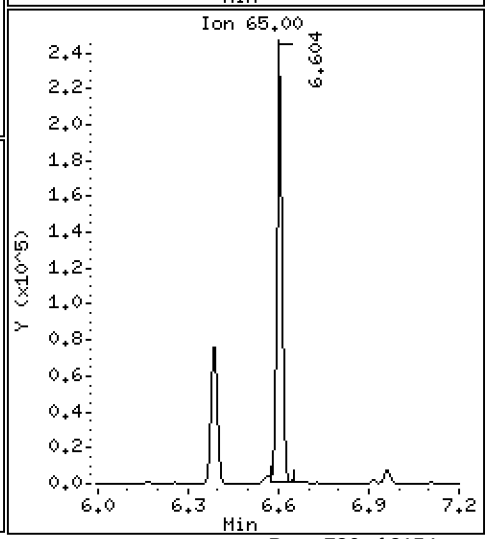












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

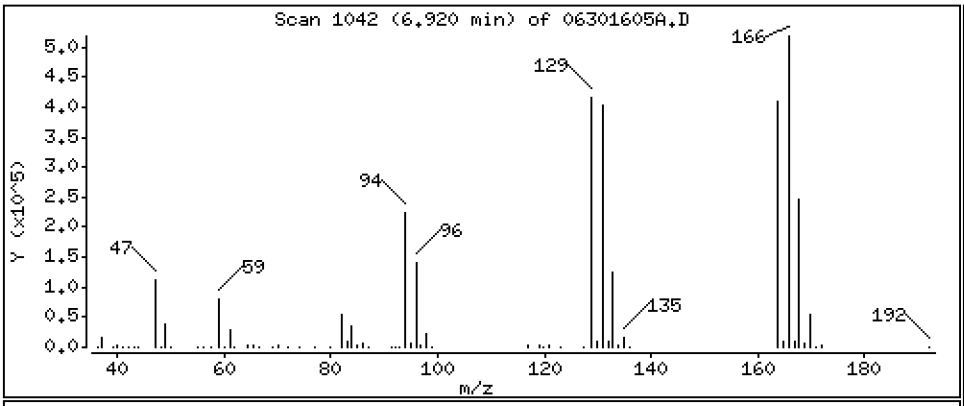
Operator: PB

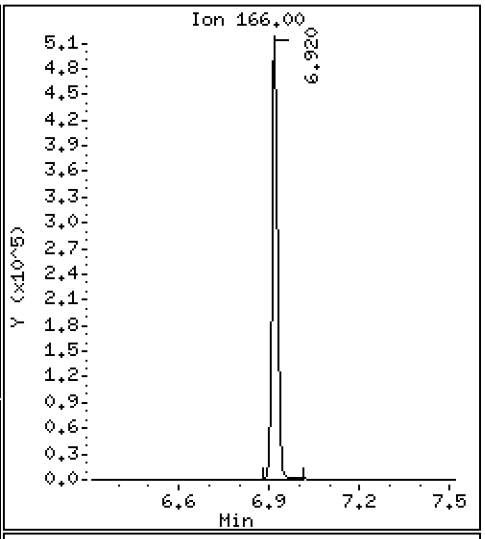
Column phase: RTXVMS

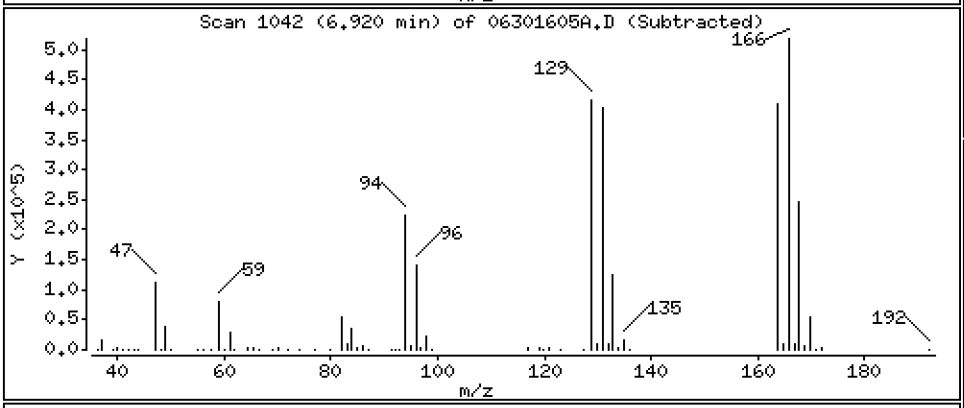
Column diameter: 0.18

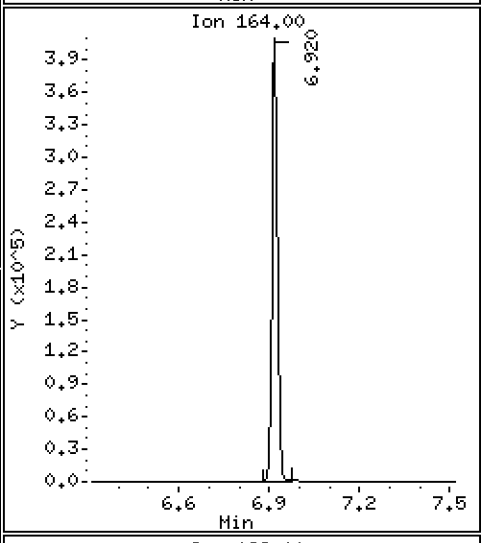
44 Tetrachloroethene

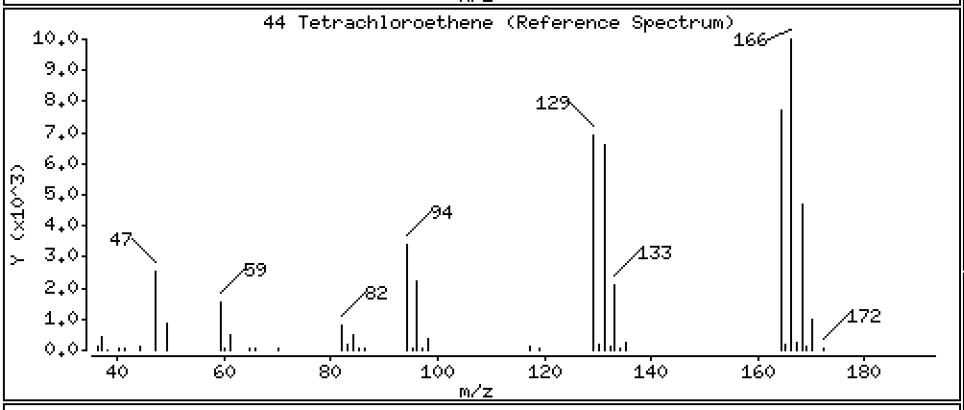
Concentration: 49.574 ug/Kg

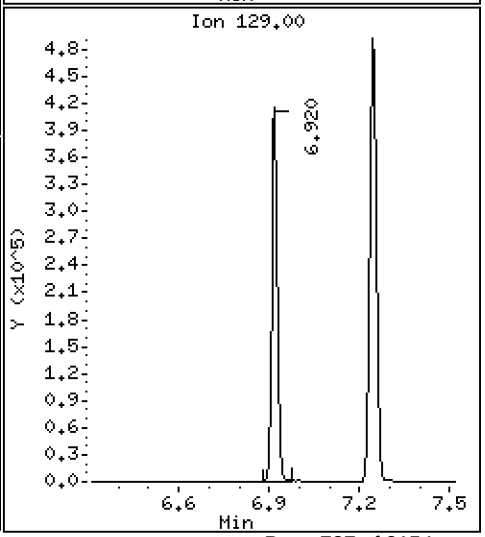


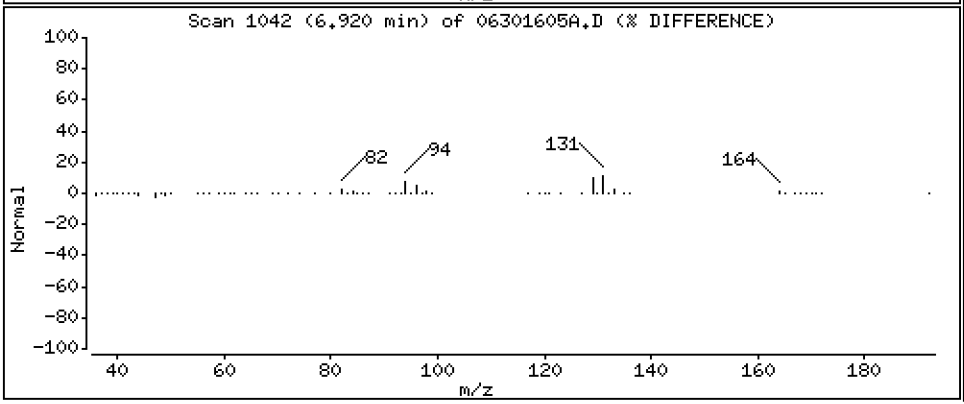












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

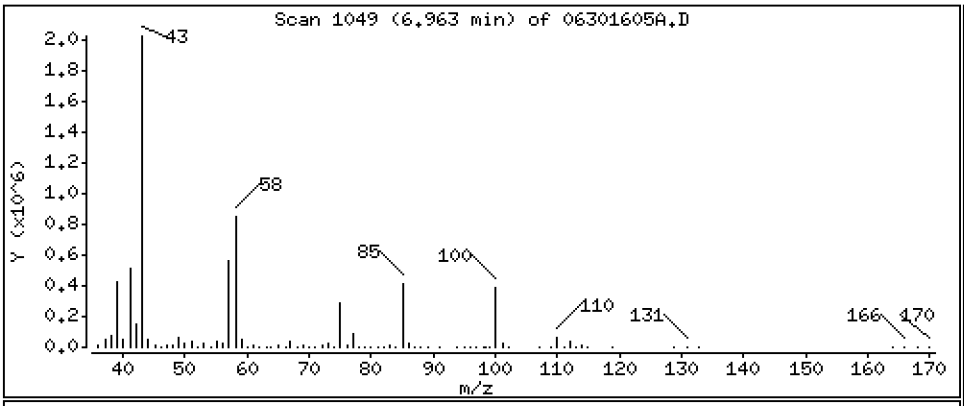
Operator: PB

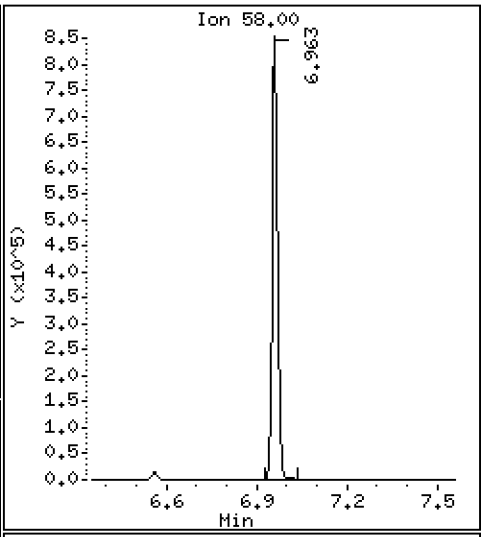
Column phase: RTXVMS

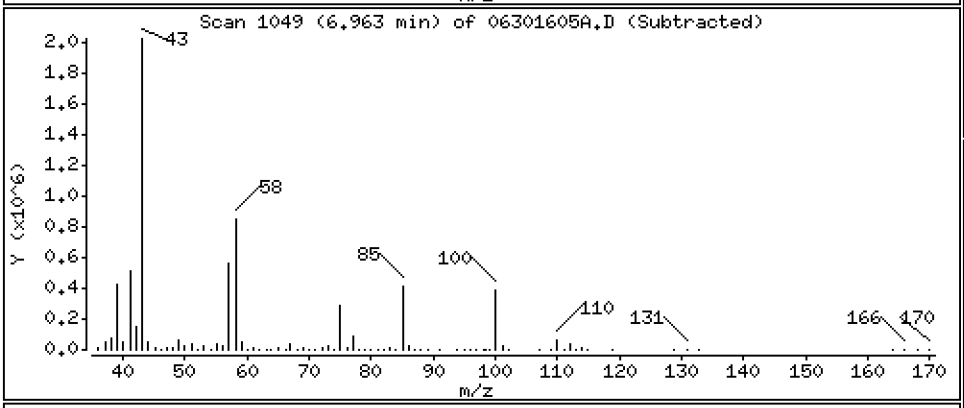
Column diameter: 0.18

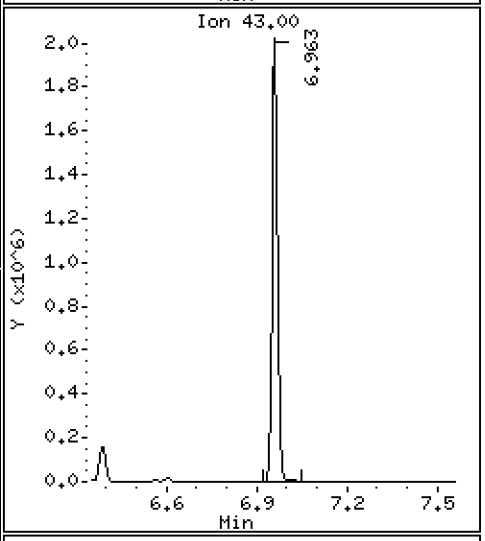
45 4-Methyl-2-Pentanone

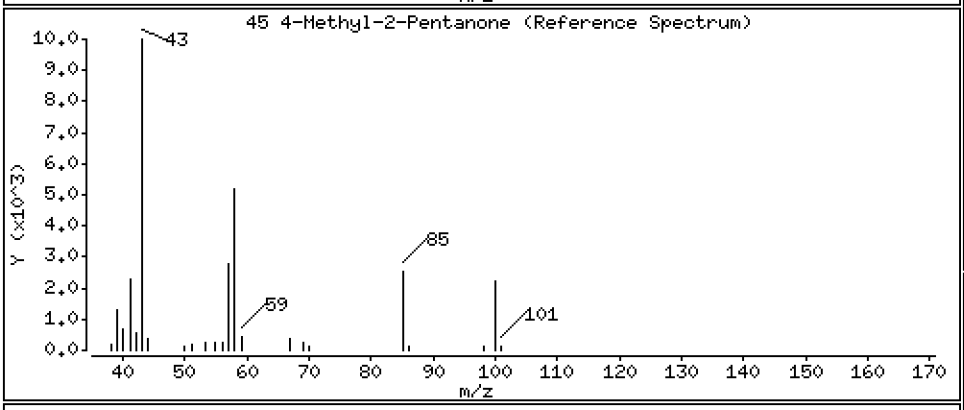
Concentration: 194.00 ug/Kg

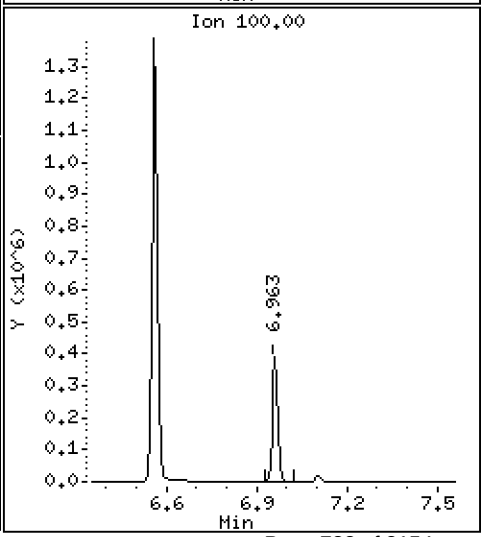


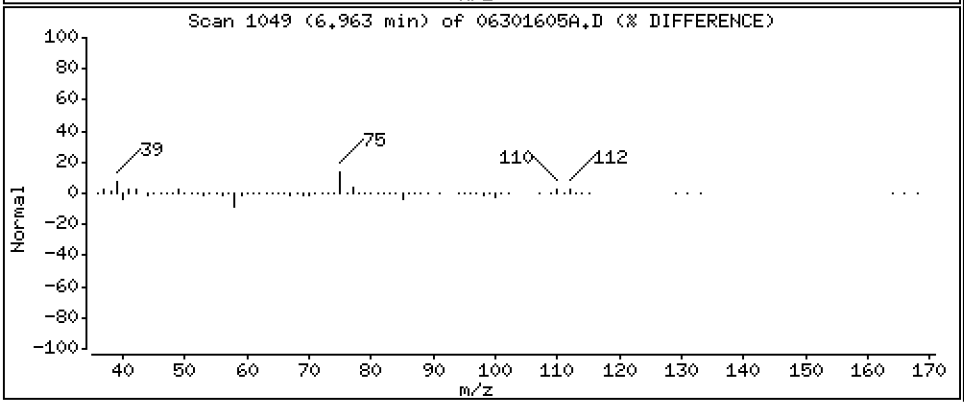












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

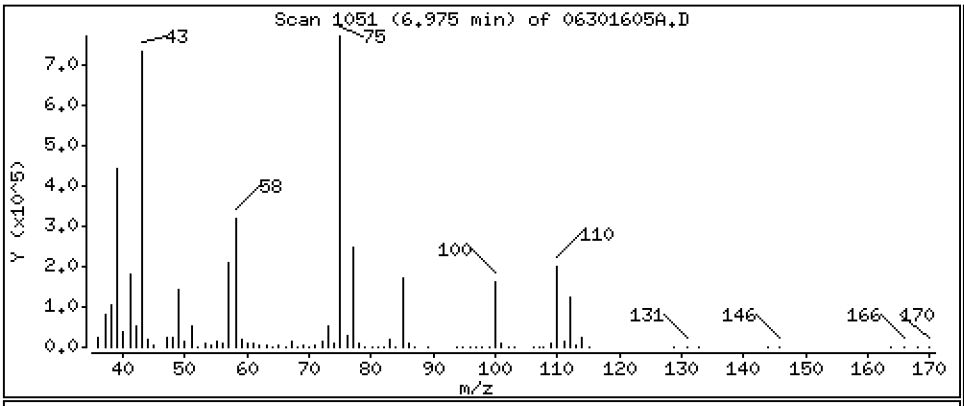
Operator: PB

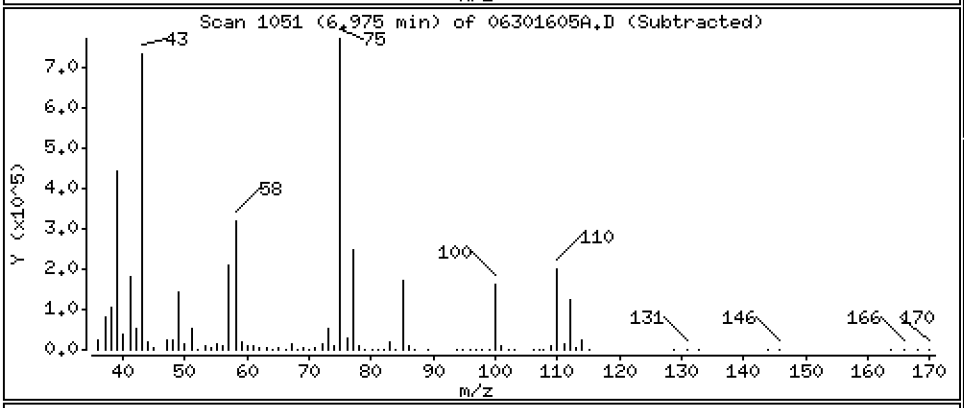
Column phase: RTXVMS

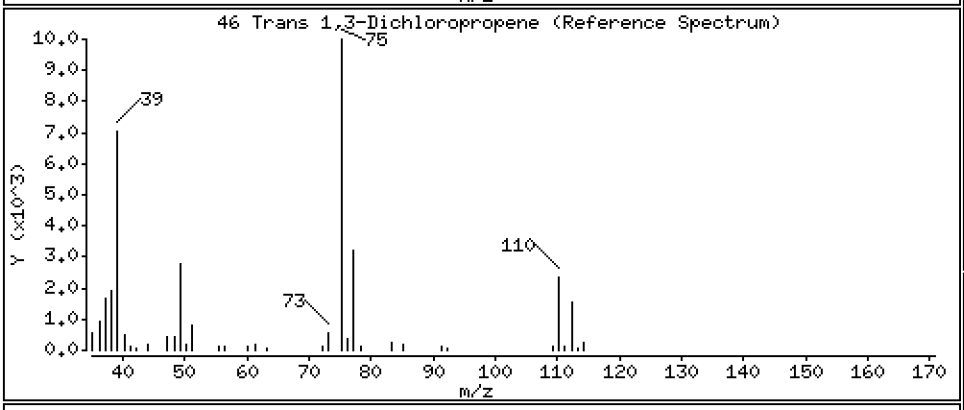
Column diameter: 0.18

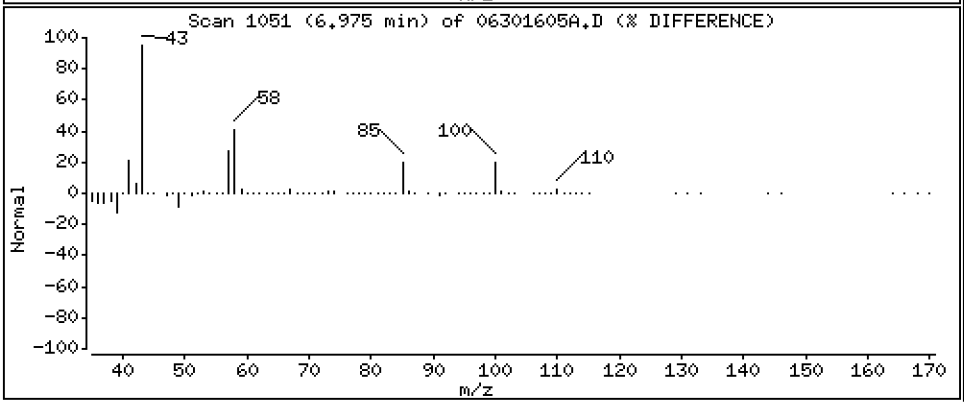
46 Trans 1,3-Dichloropropene

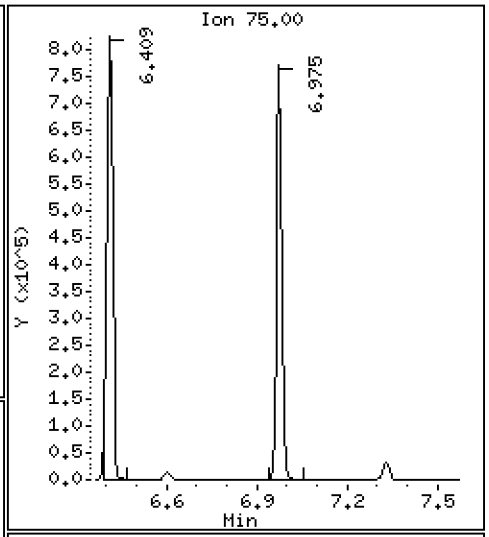
Concentration: 46.070 ug/Kg

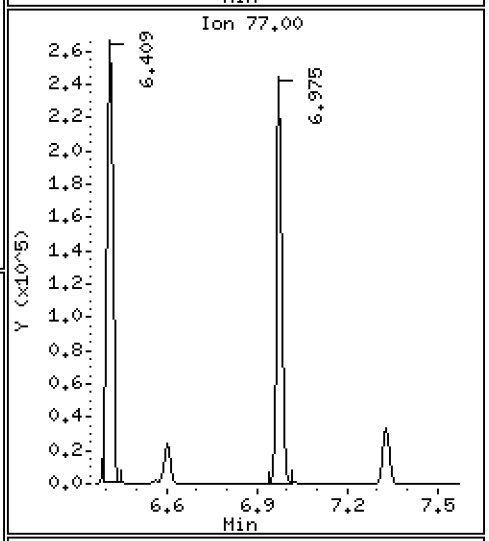


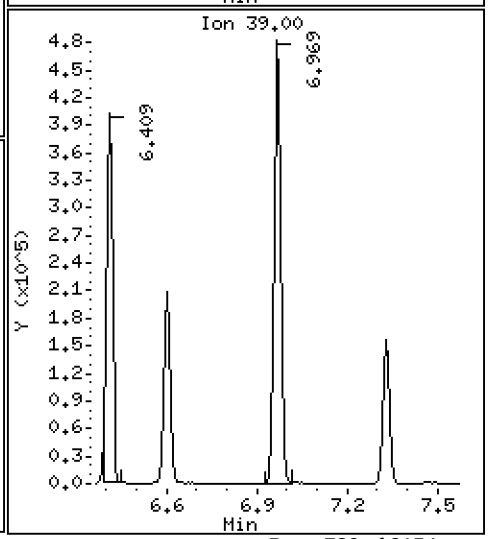












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

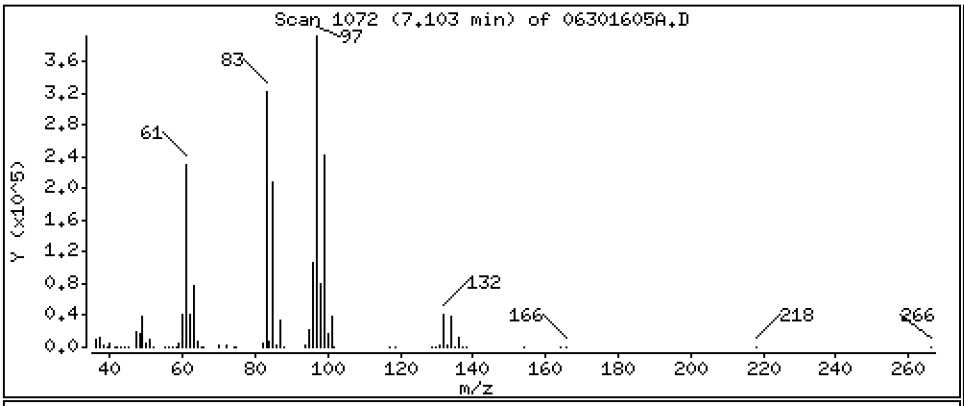
Operator: PB

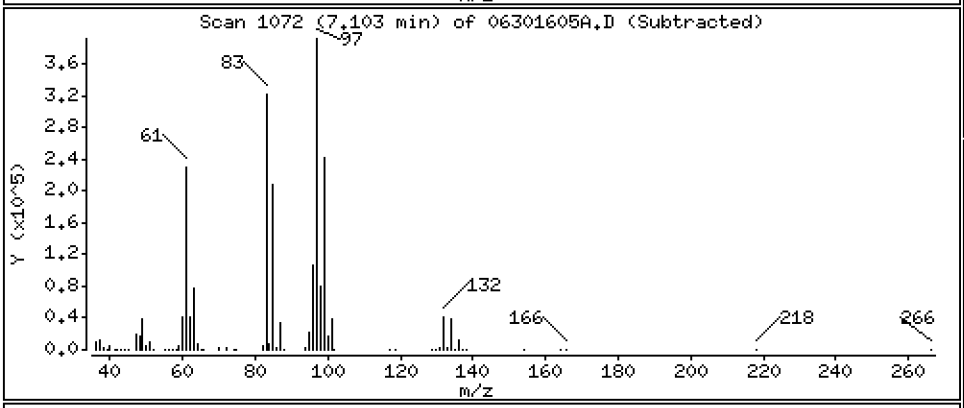
Column phase: RTXVMS

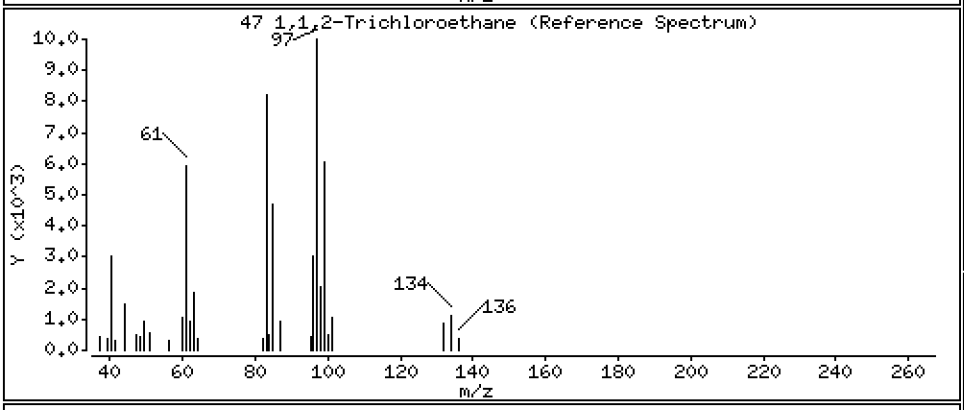
Column diameter: 0.18

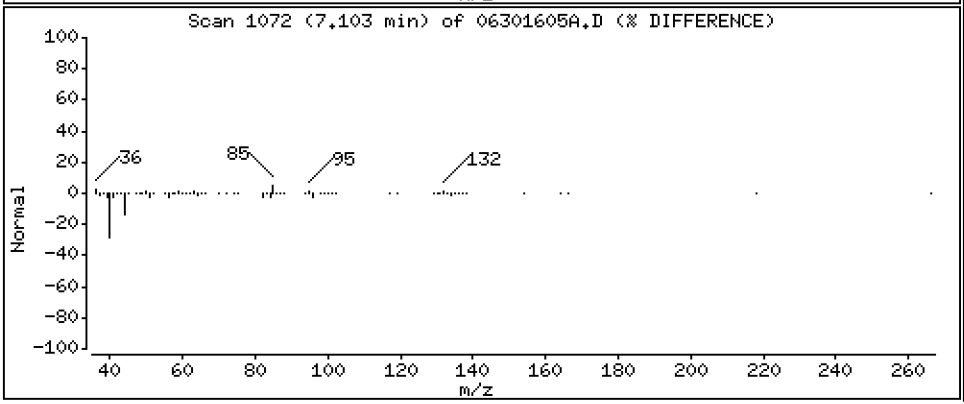
47 1,1,2-Trichloroethane

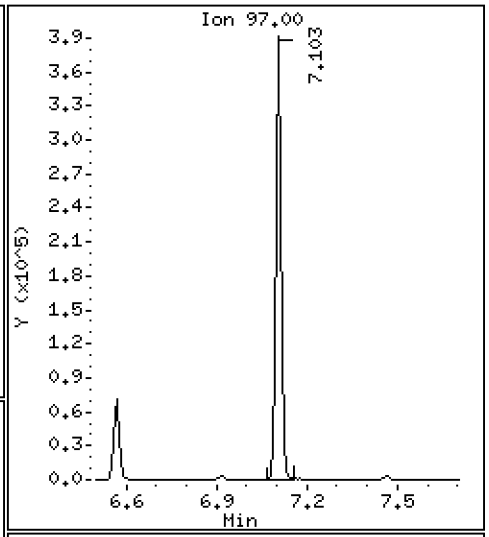
Concentration: 45.228 ug/Kg

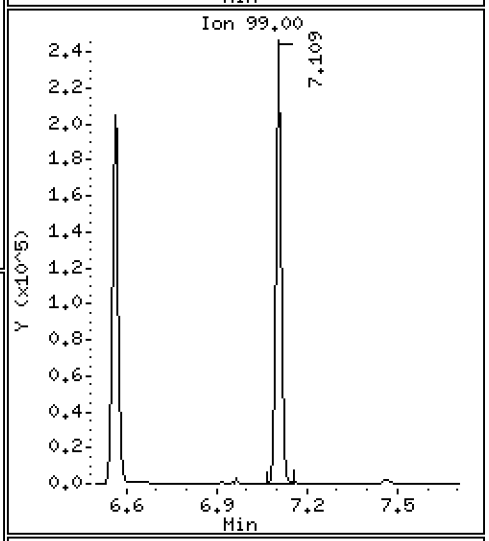


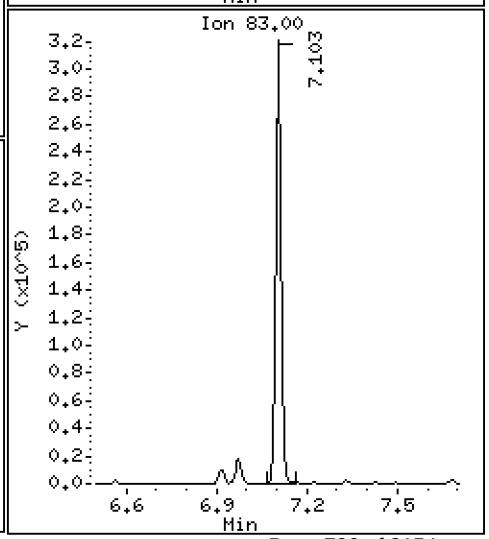












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

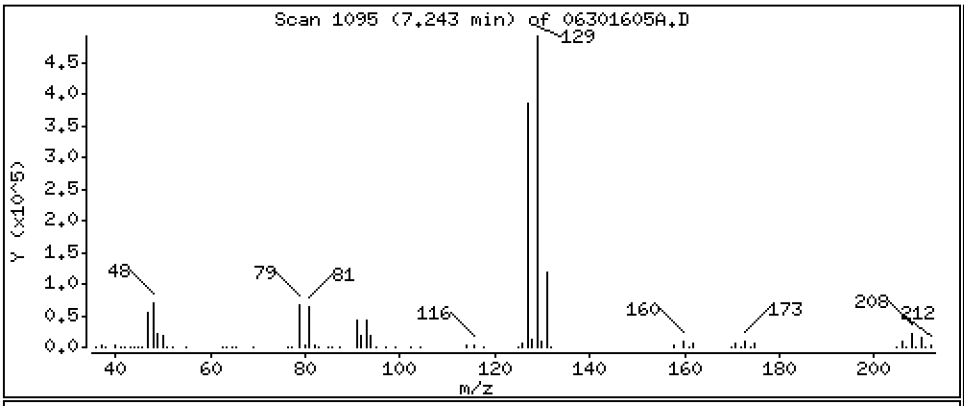
Operator: PB

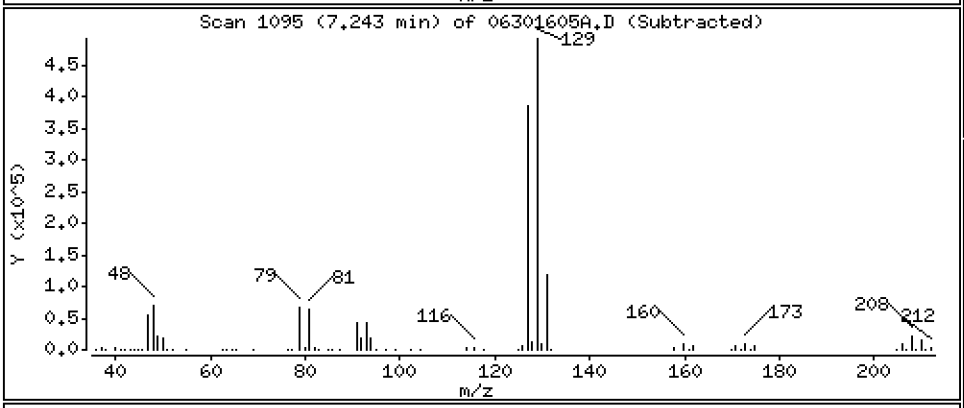
Column phase: RTXVMS

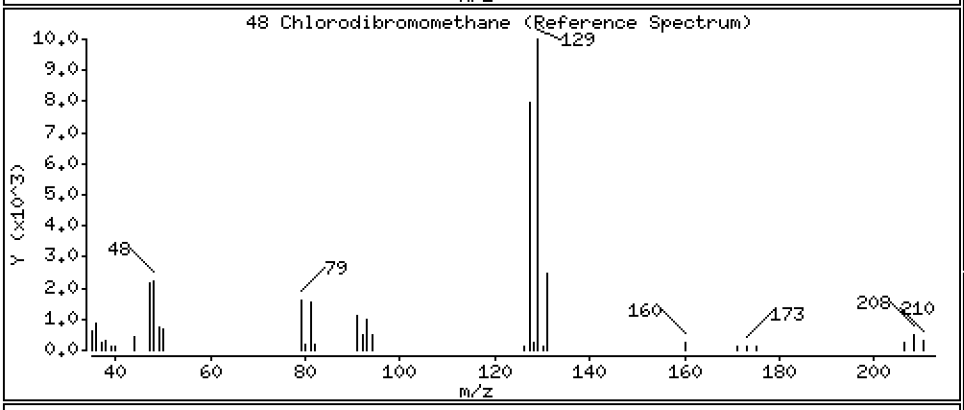
Column diameter: 0.18

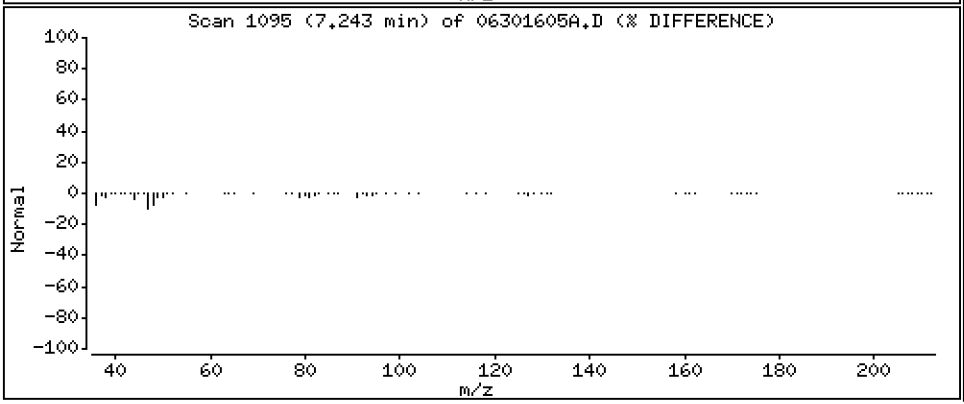
48 Chlorodibromomethane

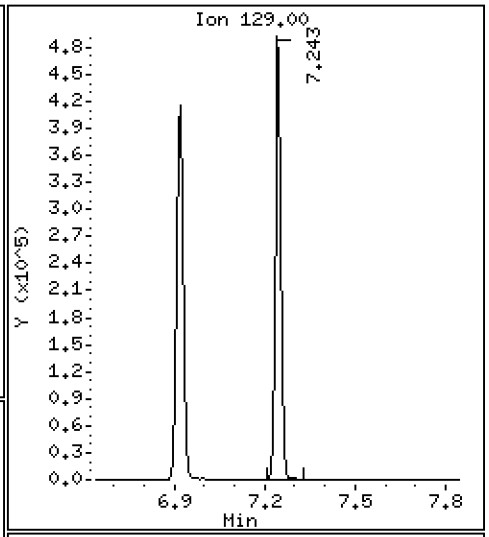
Concentration: 49.454 ug/Kg

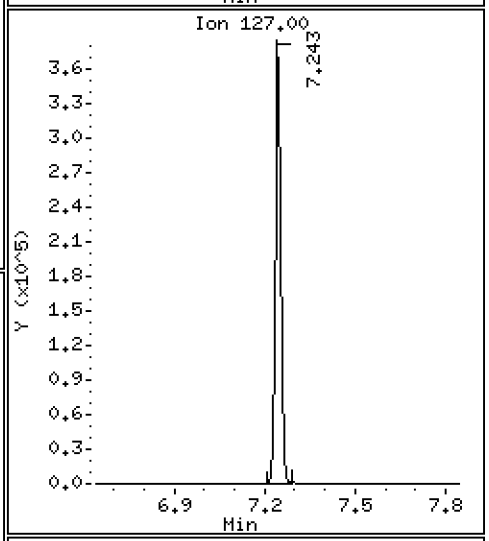


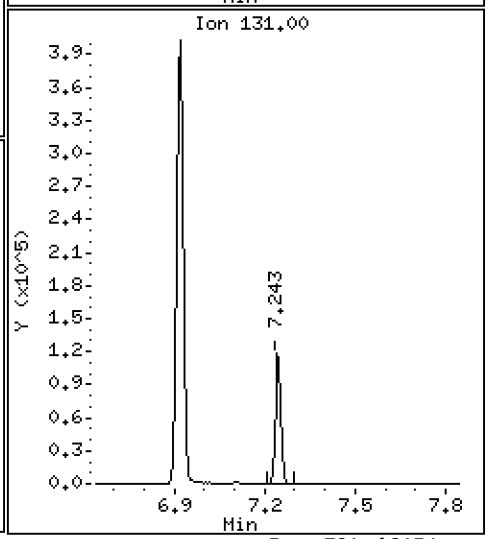












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

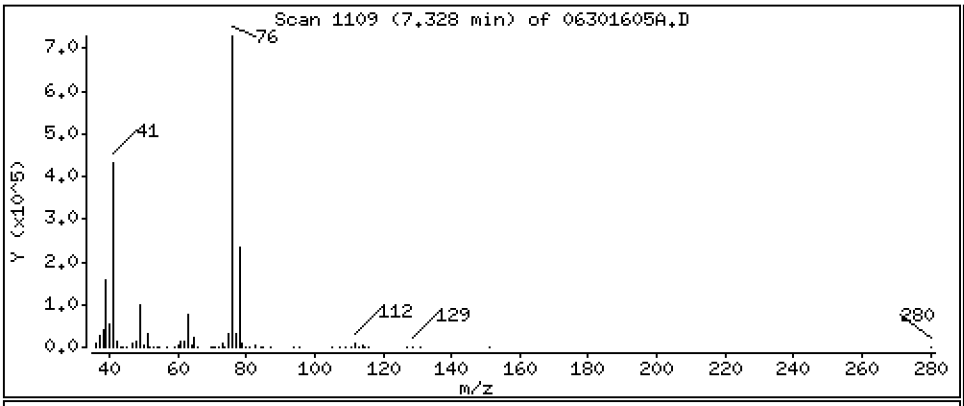
Operator: PB

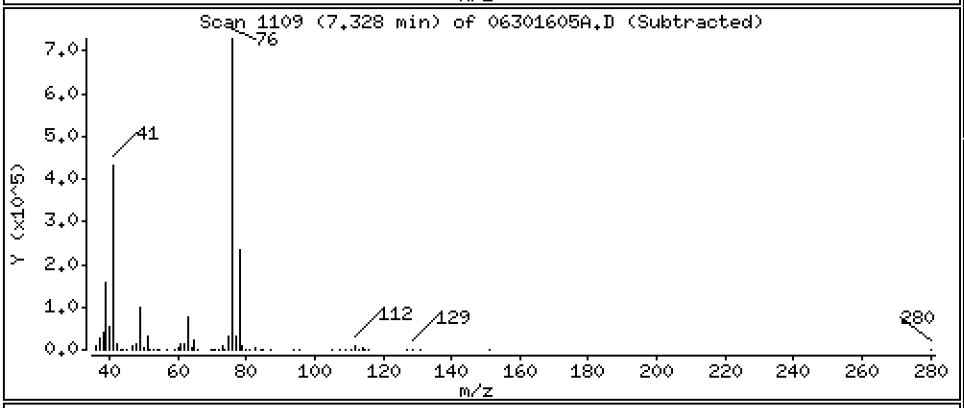
Column phase: RTXVMS

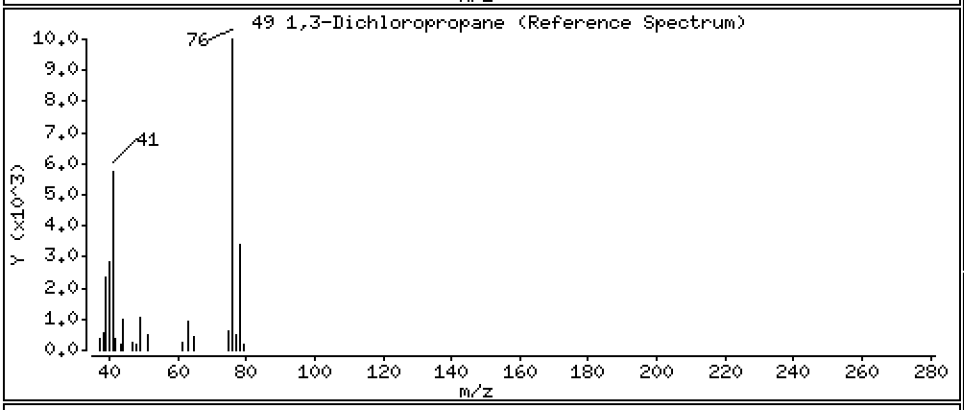
Column diameter: 0.18

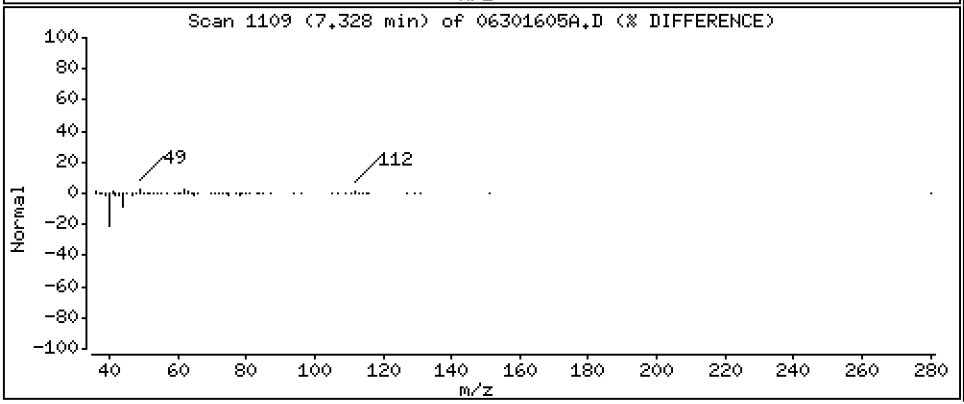
49 1,3-Dichloropropane

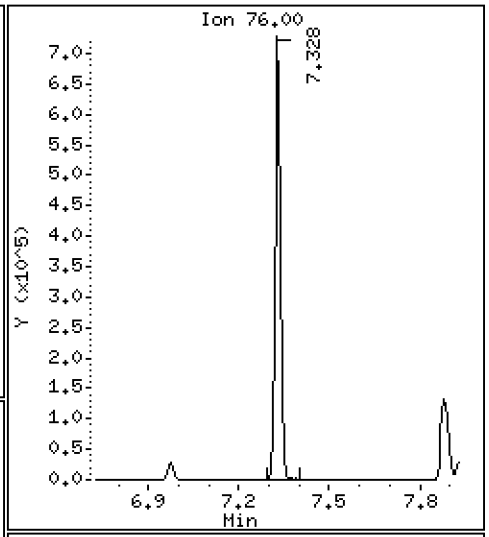
Concentration: 44.135 ug/Kg

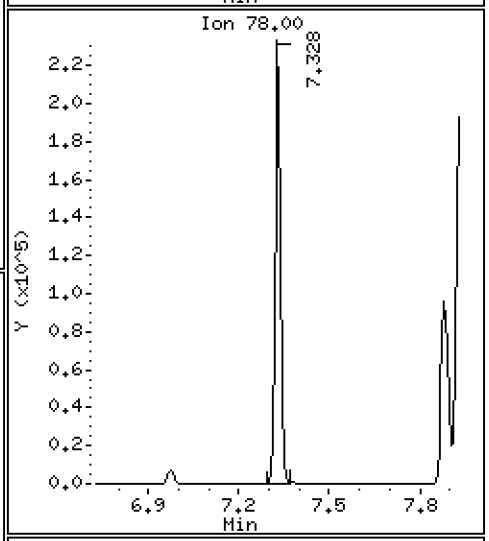


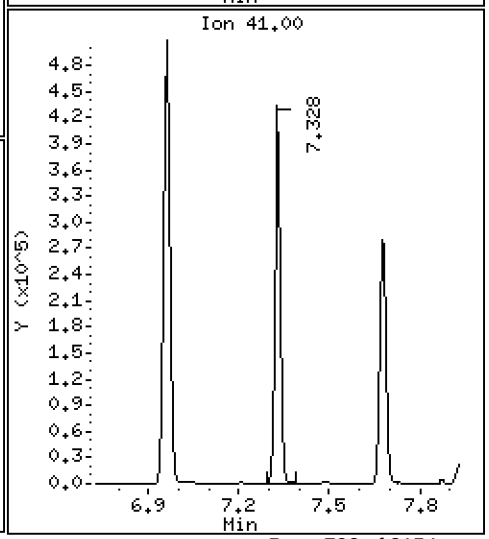












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

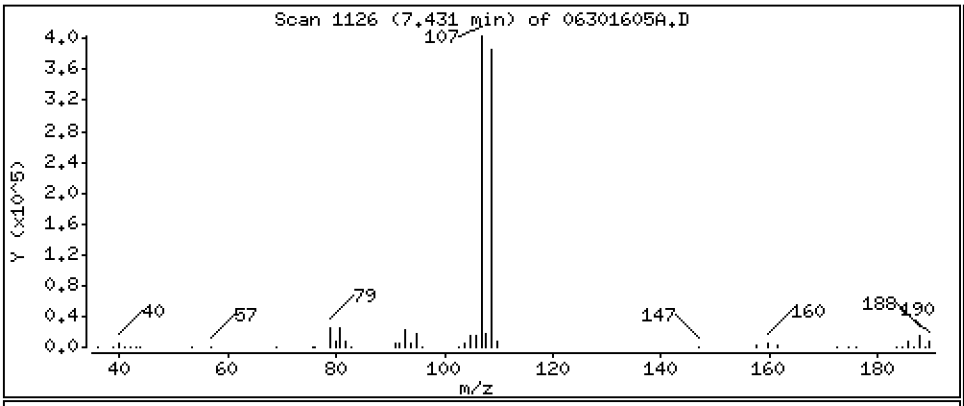
Operator: PB

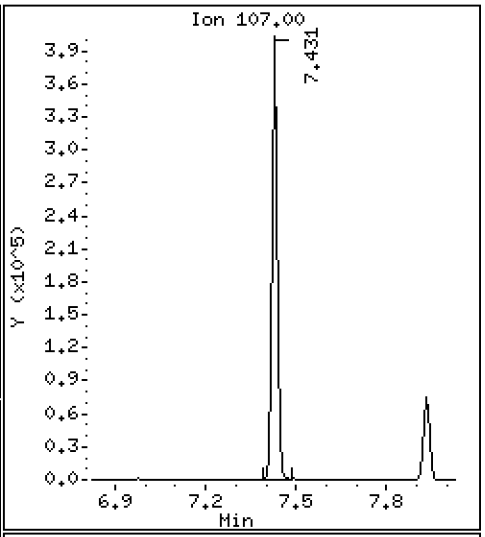
Column phase: RTXVMS

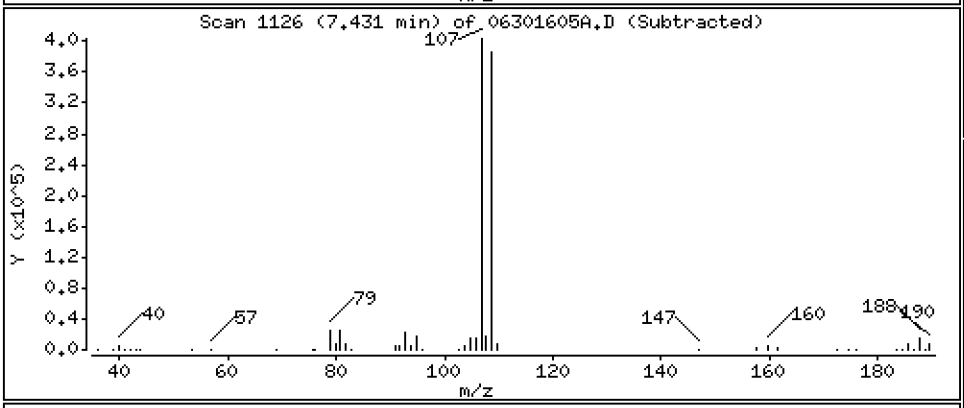
Column diameter: 0.18

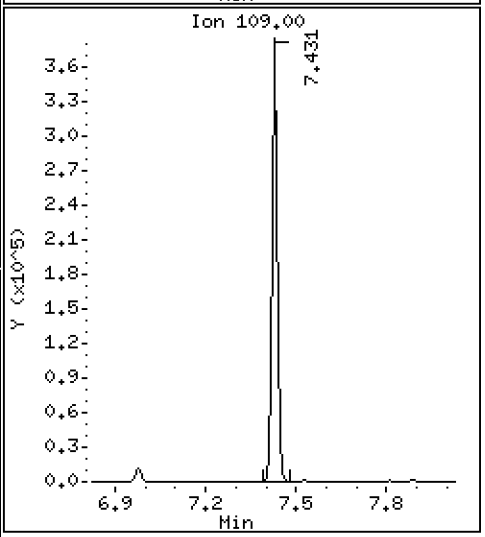
50 1,2-Dibromoethane

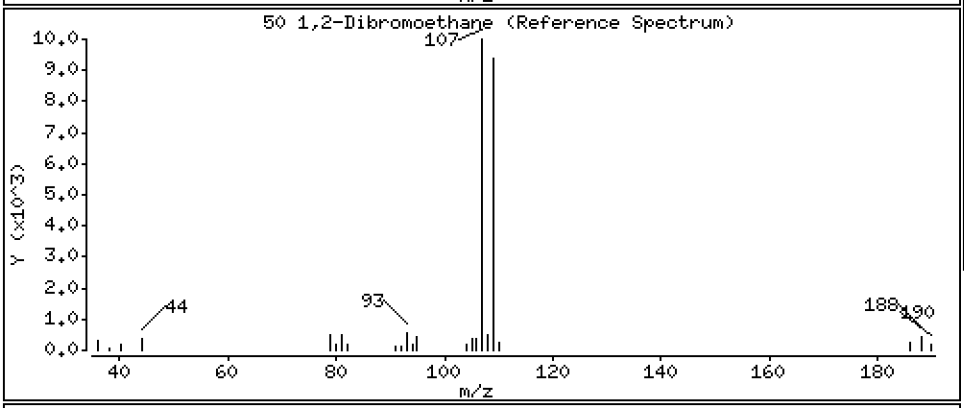
Concentration: 46.046 ug/Kg

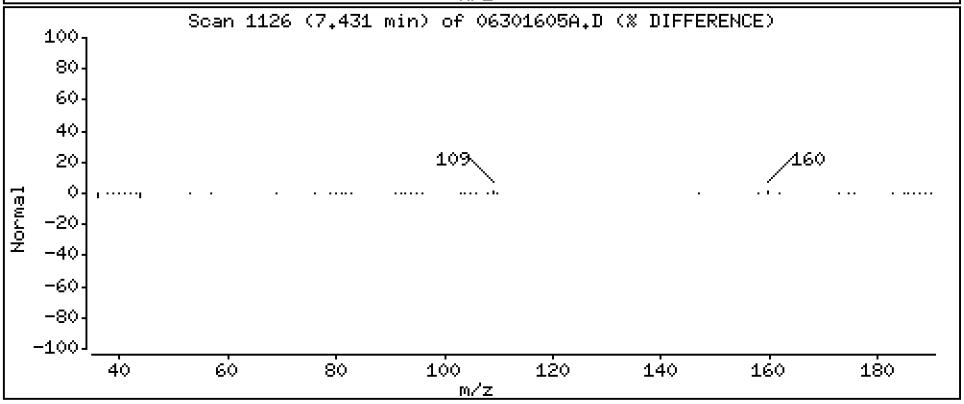












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

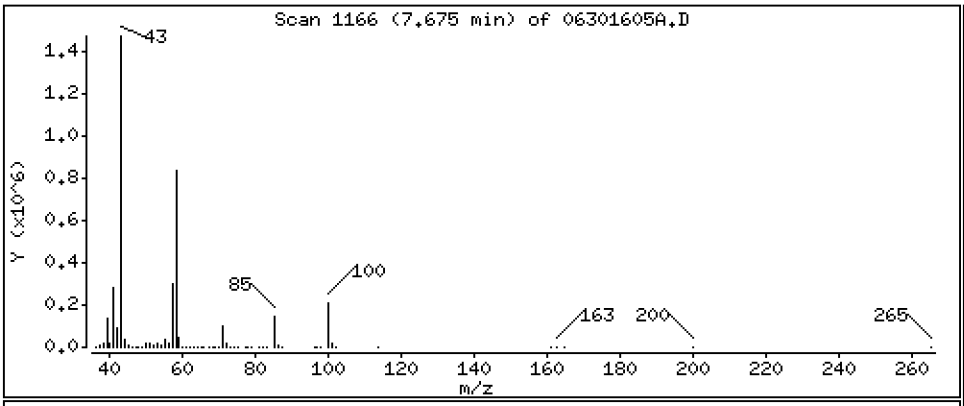
Operator: PB

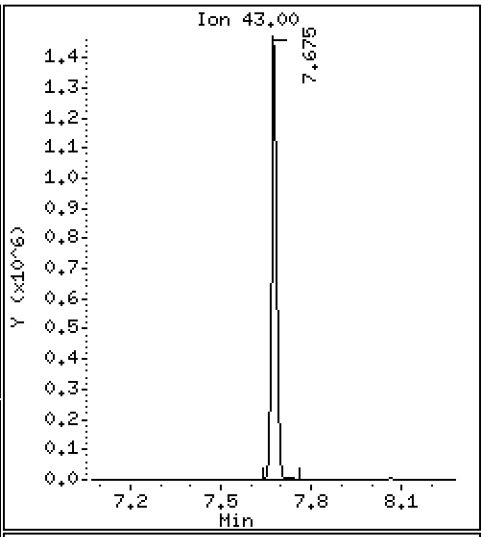
Column phase: RTXVMS

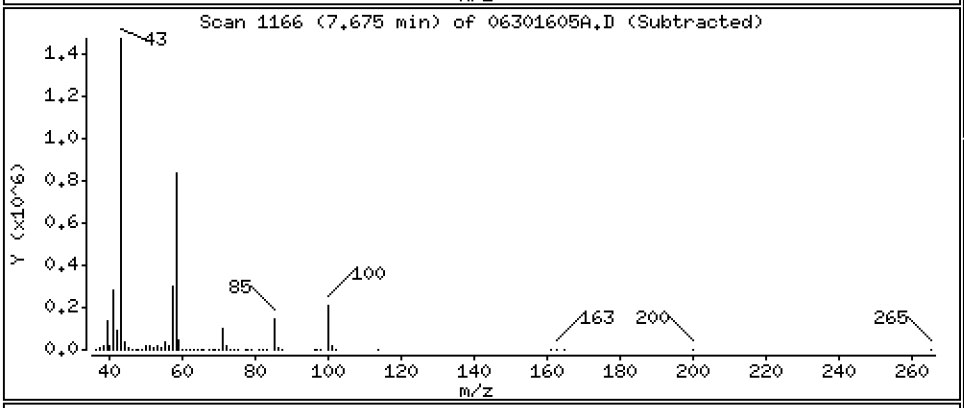
Column diameter: 0.18

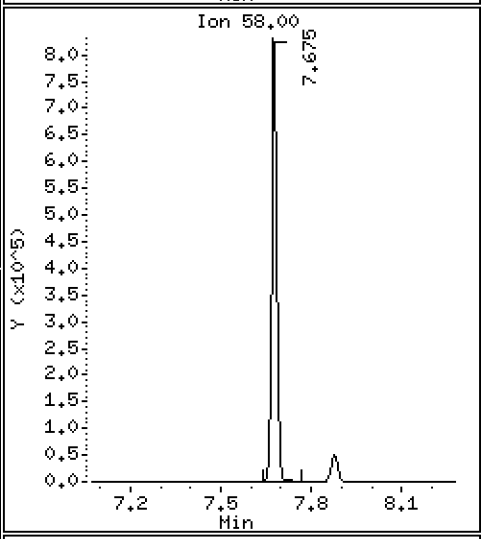
51 2-Hexanone

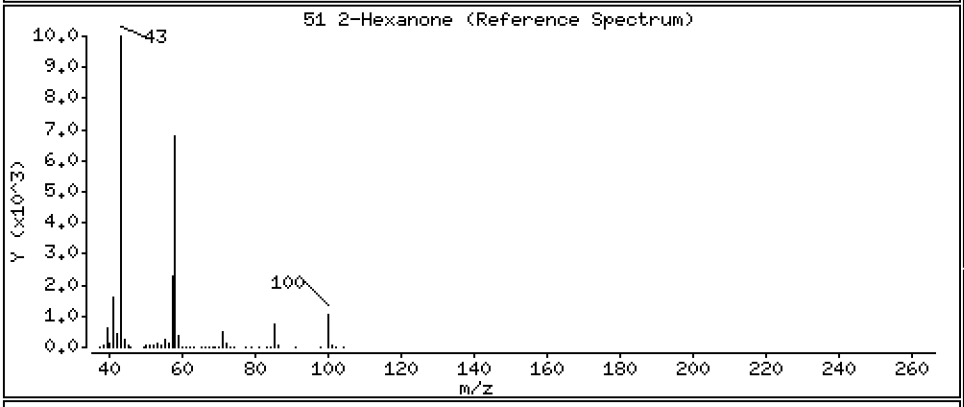
Concentration: 184.53 ug/Kg

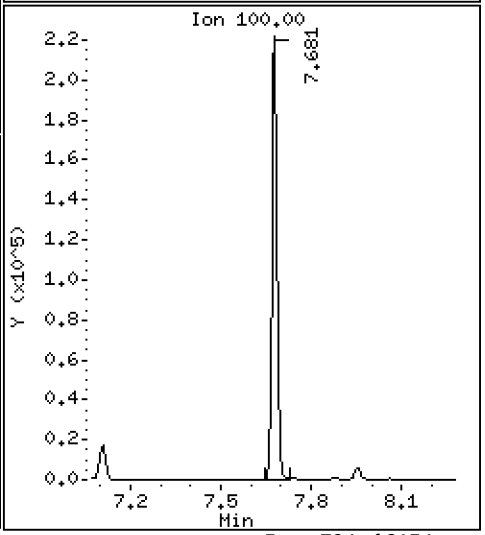


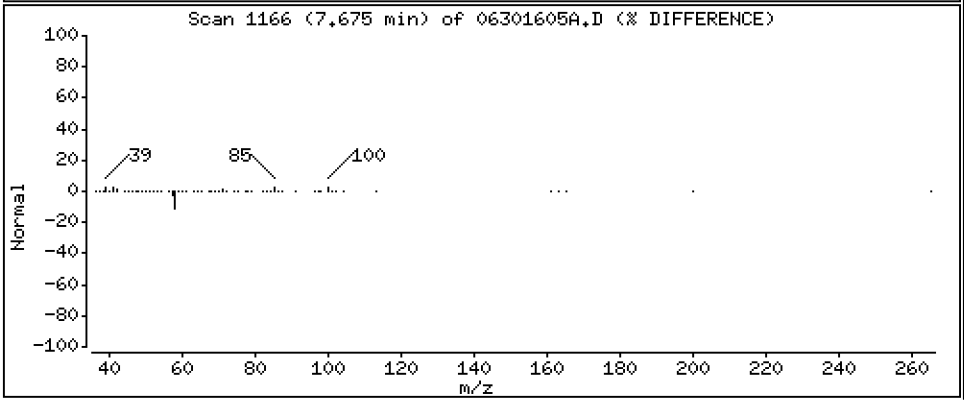












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

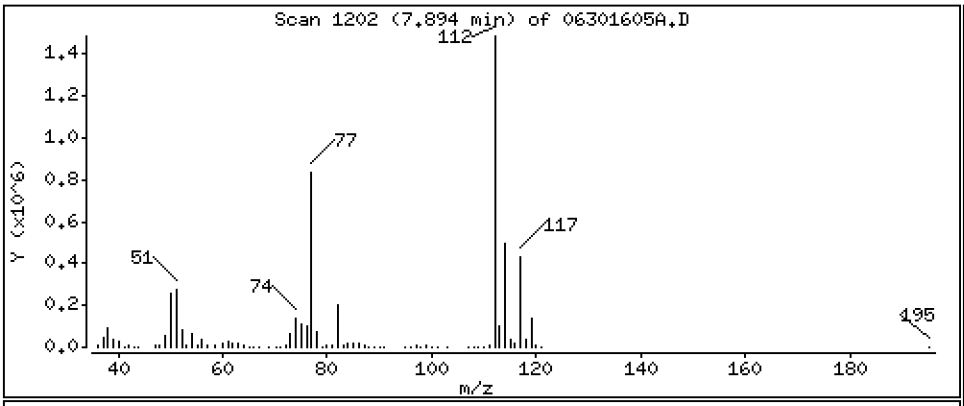
Operator: PB

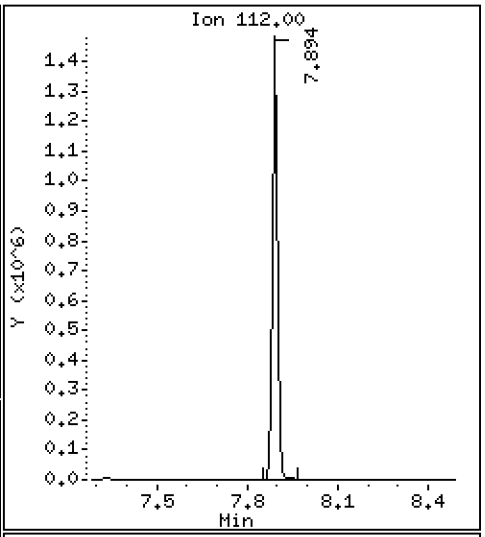
Column phase: RTXVMS

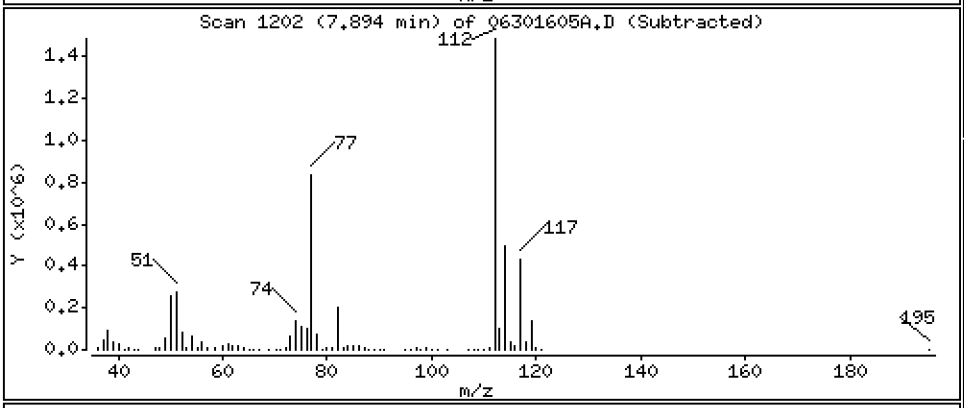
Column diameter: 0.18

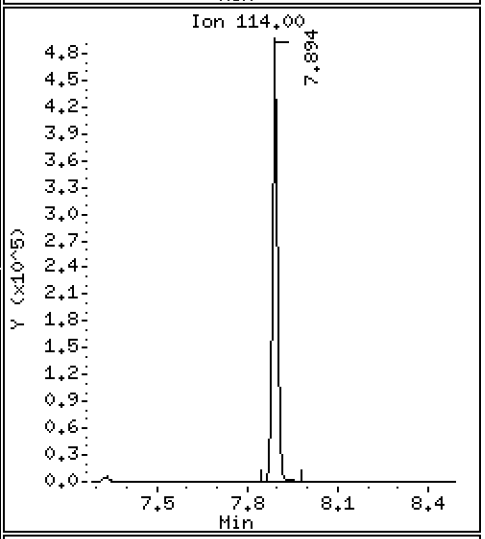
53 Chlorobenzene

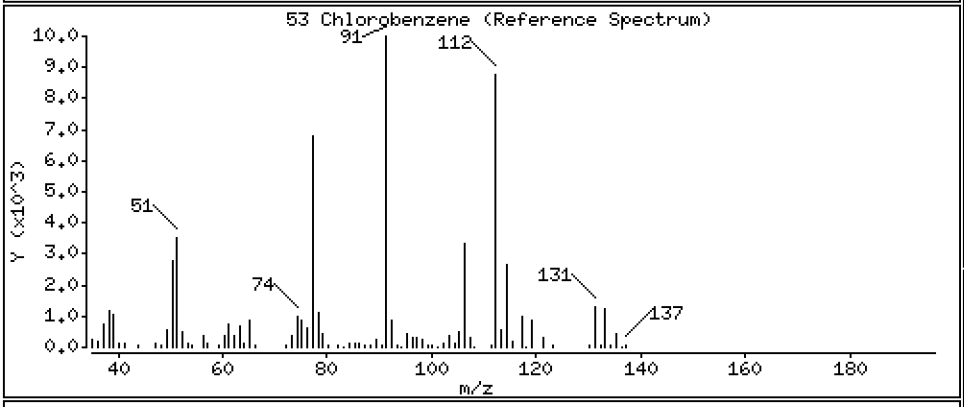
Concentration: 46.967 ug/Kg

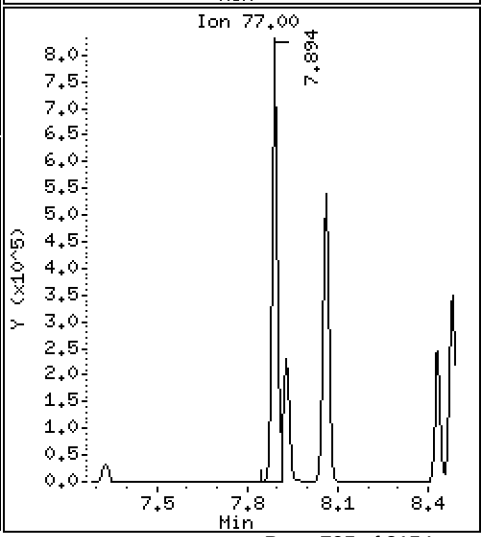


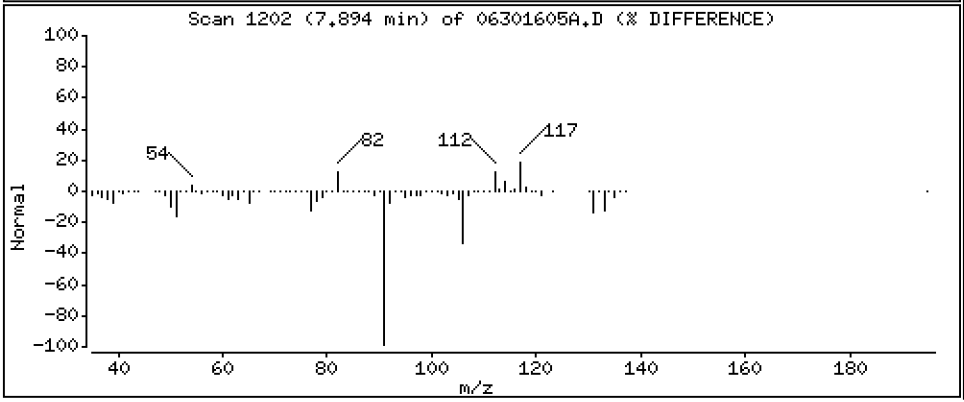












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

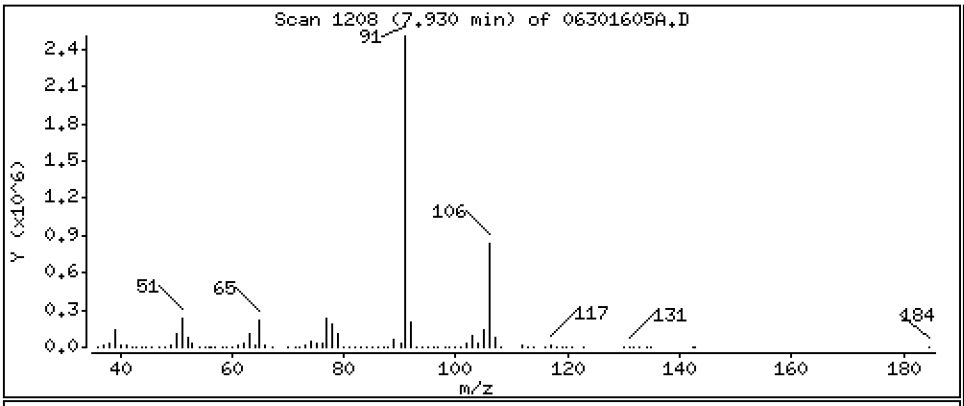
Operator: PB

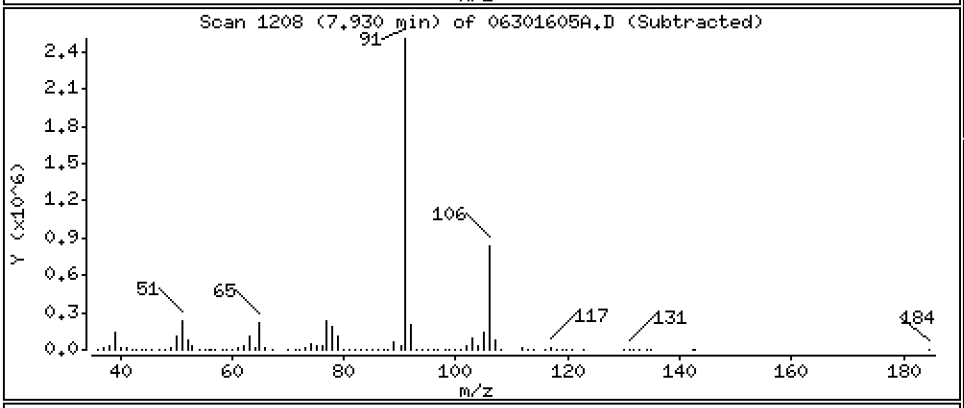
Column phase: RTXVMS

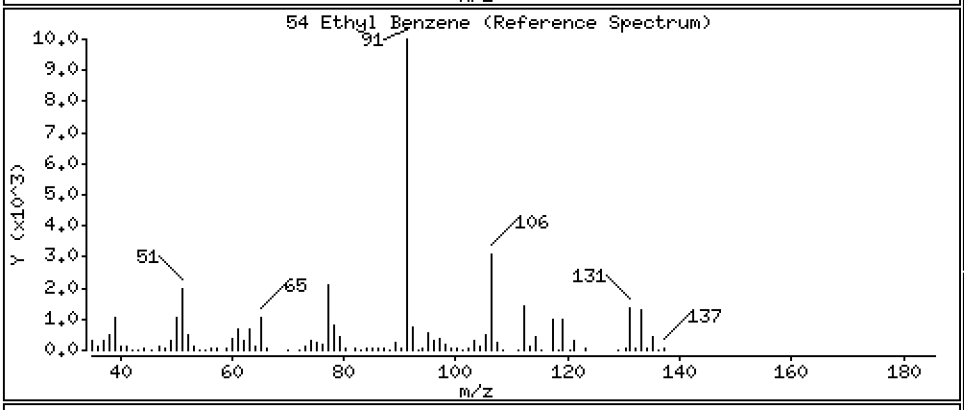
Column diameter: 0.18

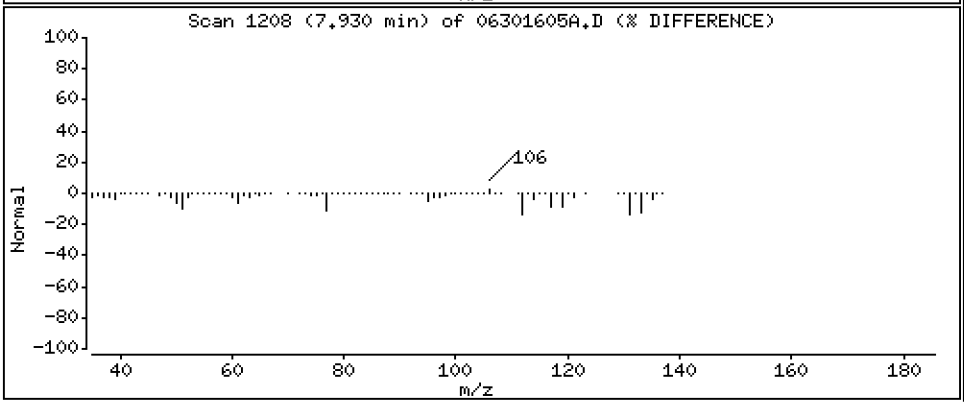
54 Ethyl Benzene

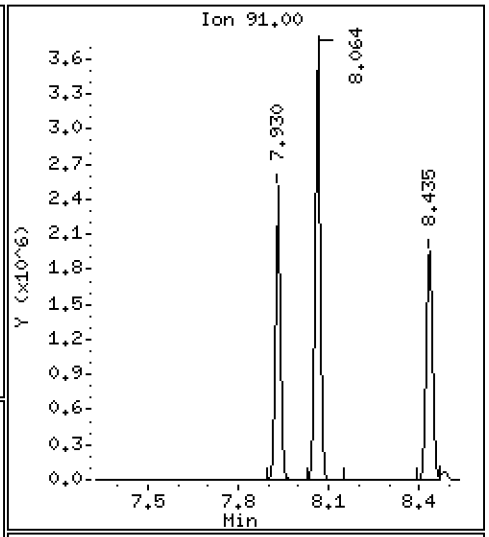
Concentration: 46.445 ug/Kg

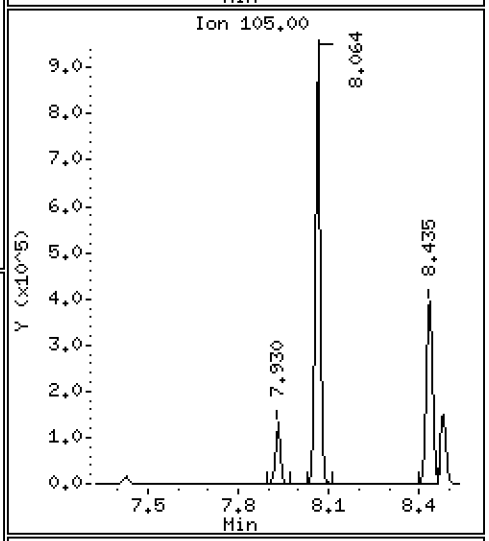


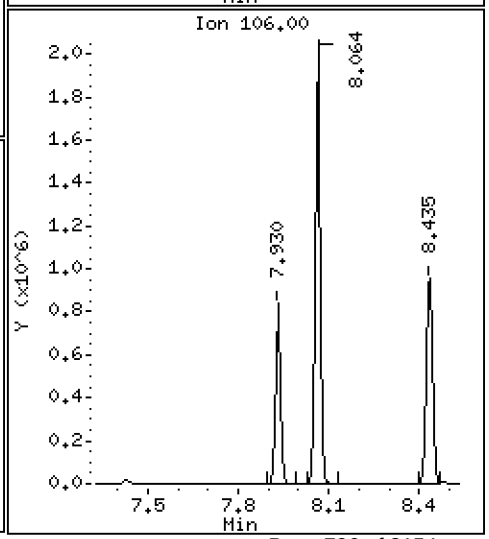












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

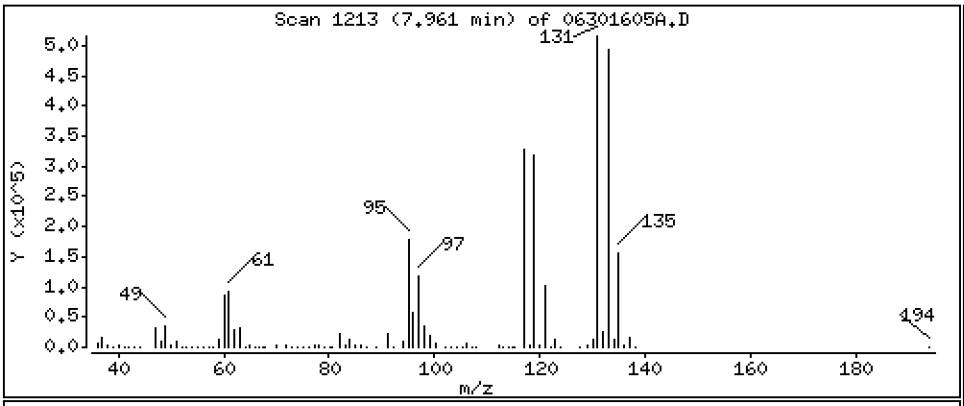
Operator: PB

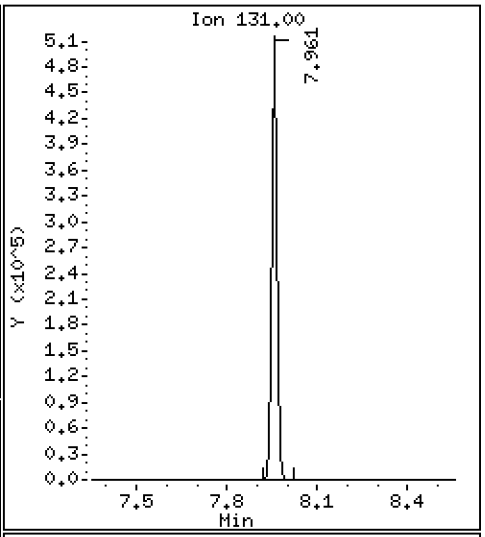
Column phase: RTXVMS

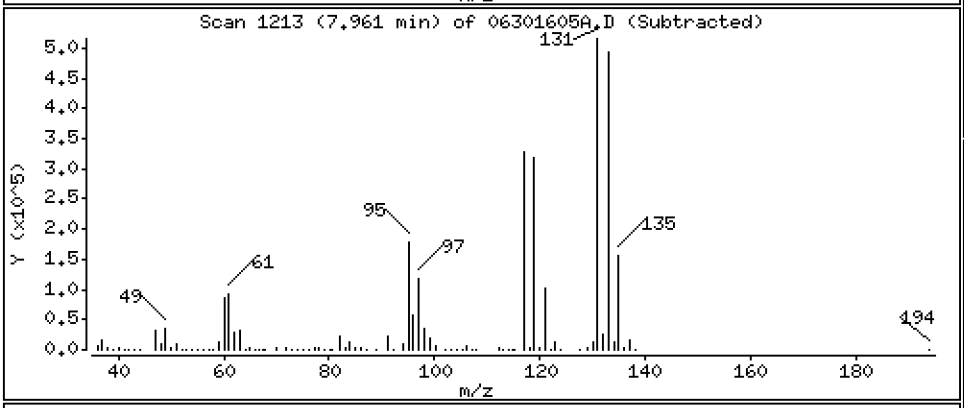
Column diameter: 0.18

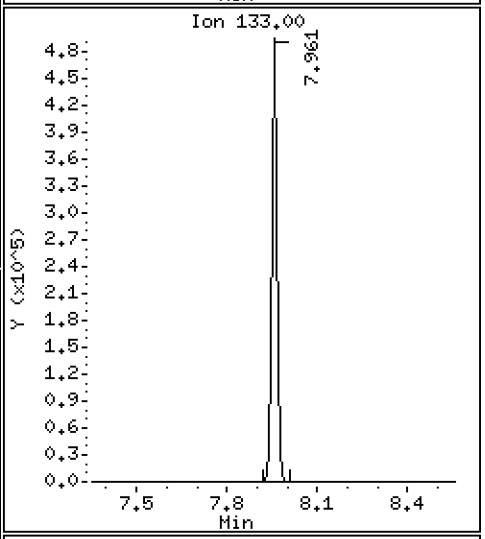
55 1,1,1,2-Tetrachloroethane

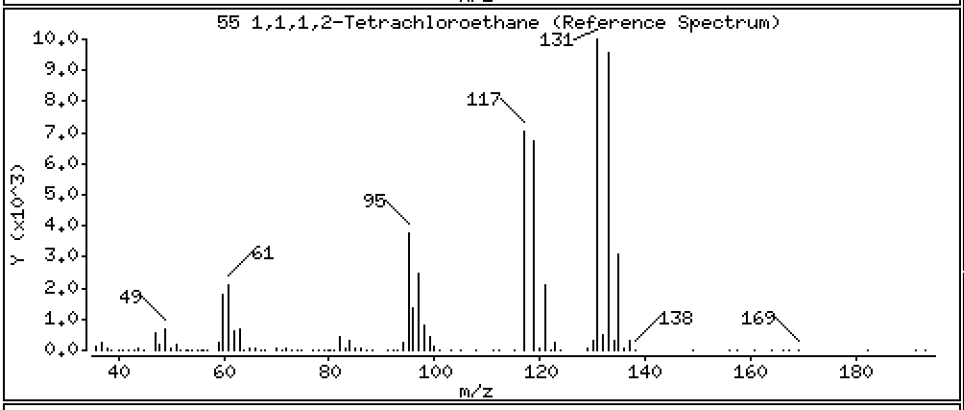
Concentration: 48.504 ug/Kg

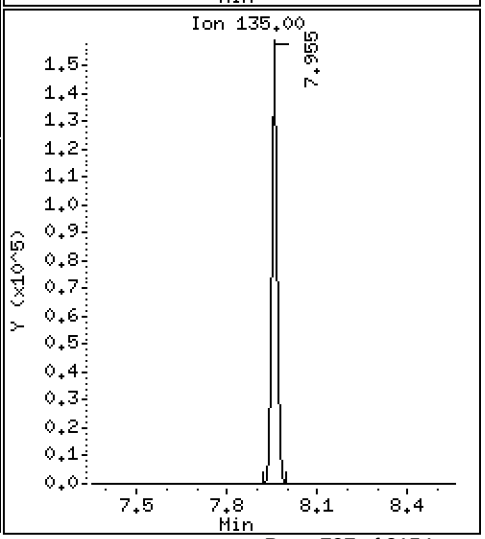


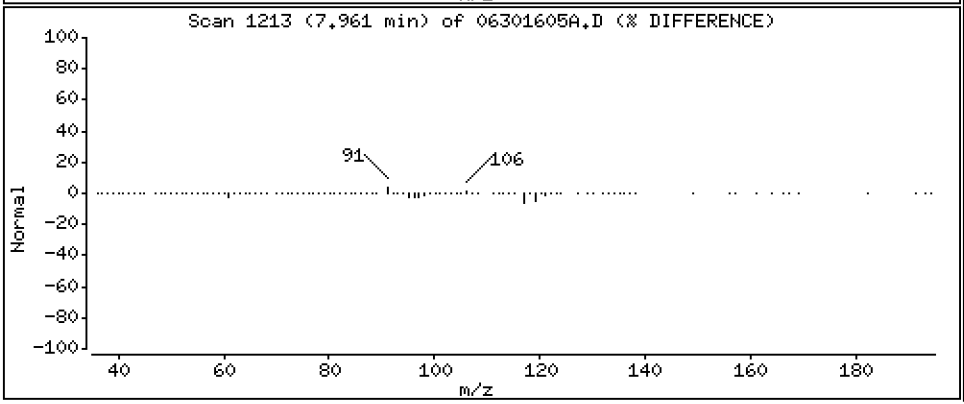












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

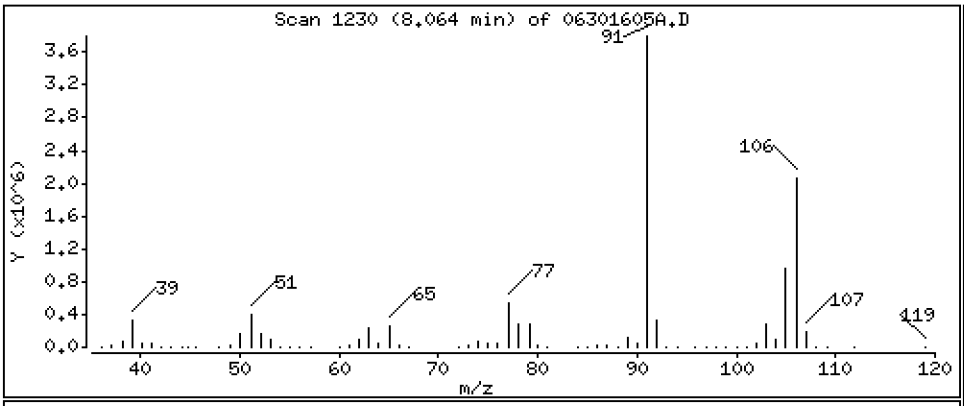
Operator: PB

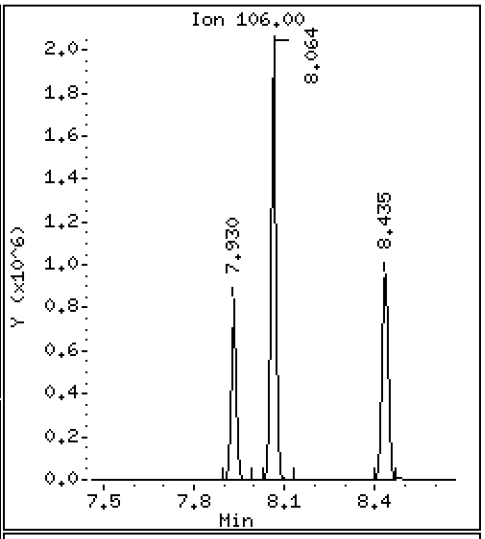
Column phase: RTXVMS

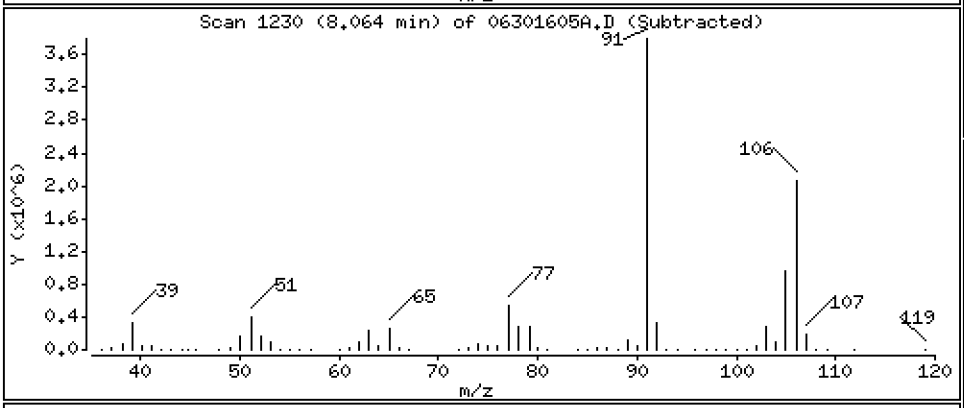
Column diameter: 0.18

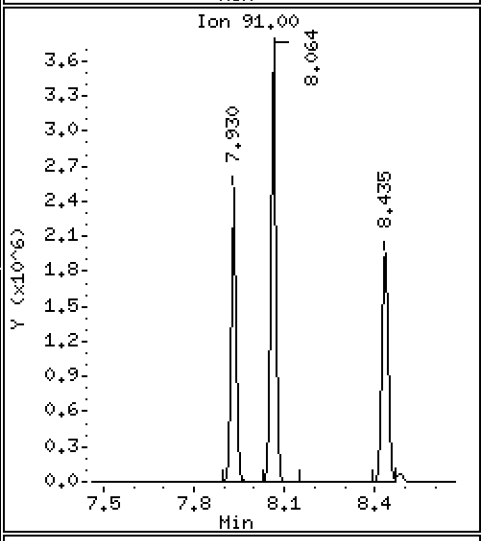
56 m,p-xylene

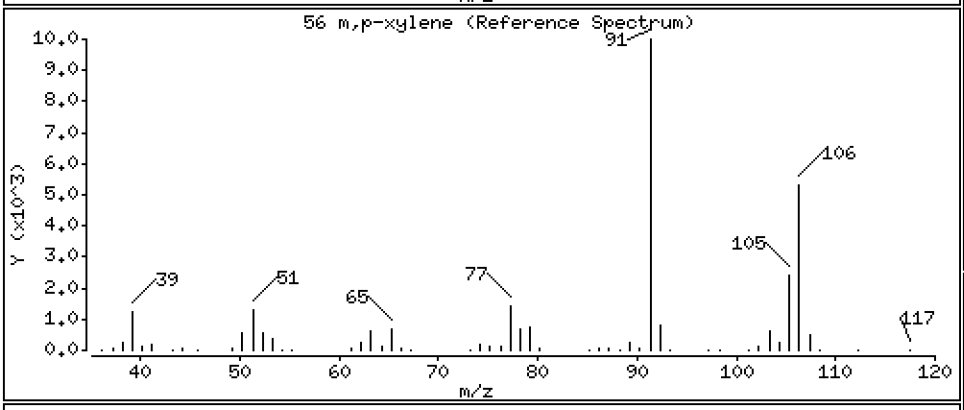
Concentration: 94.946 ug/Kg

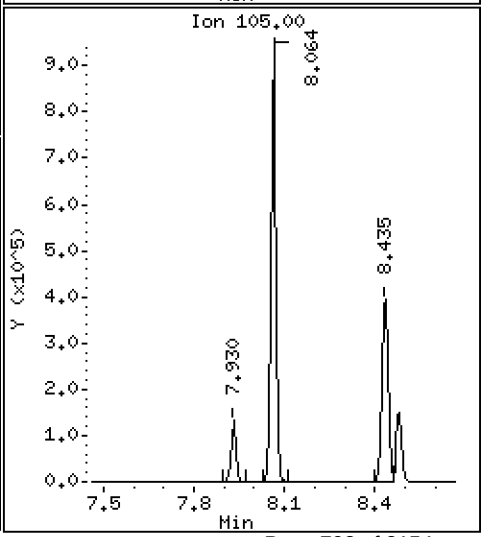


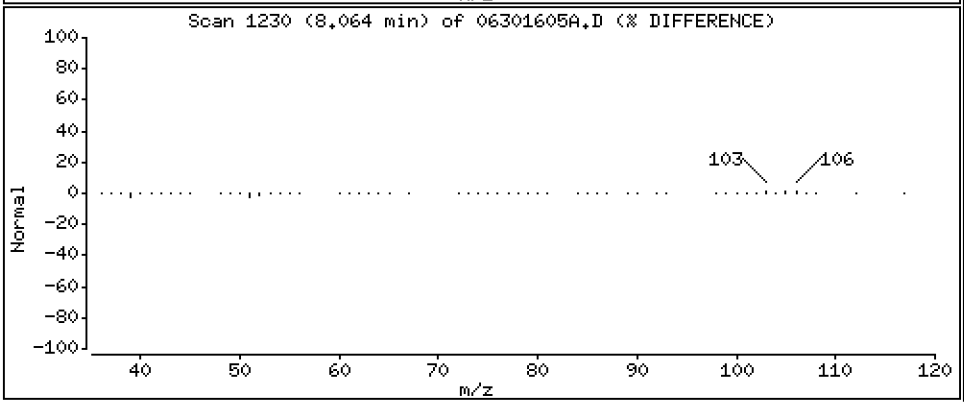












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

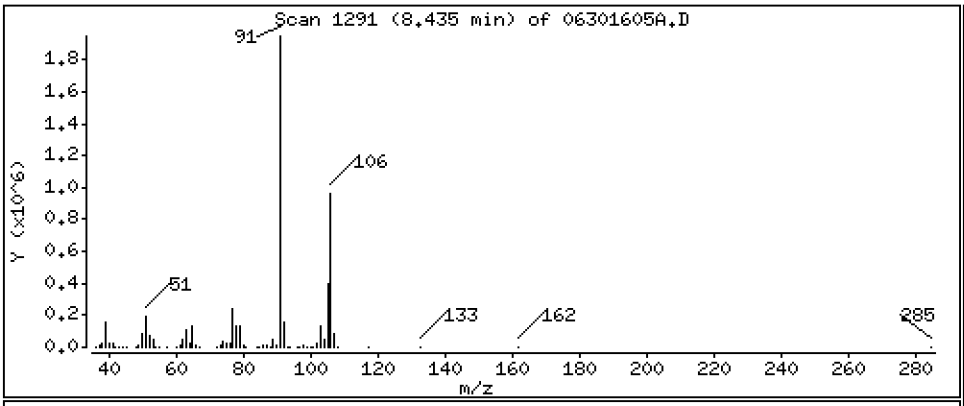
Operator: PB

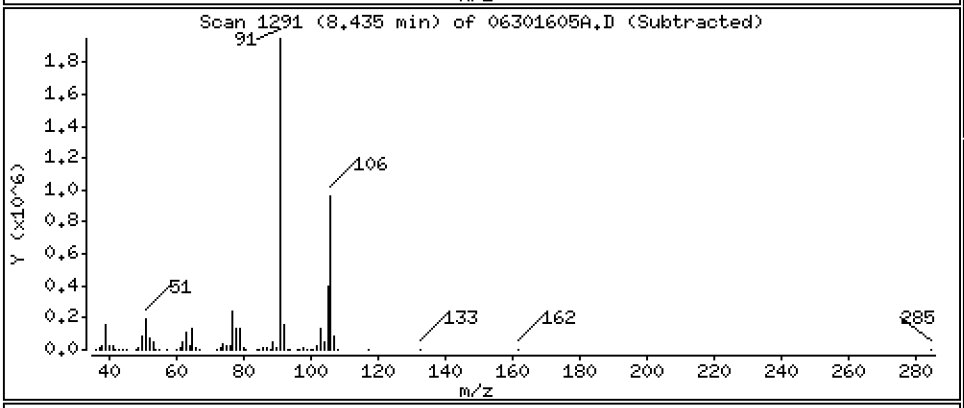
Column phase: RTXVMS

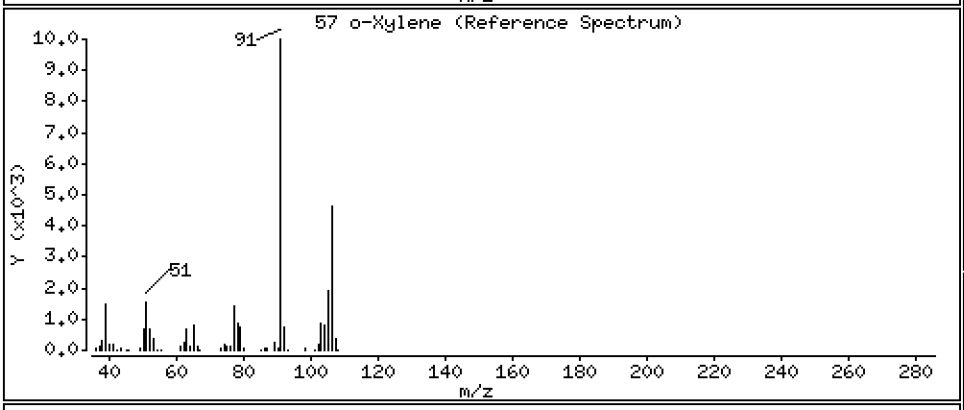
Column diameter: 0.18

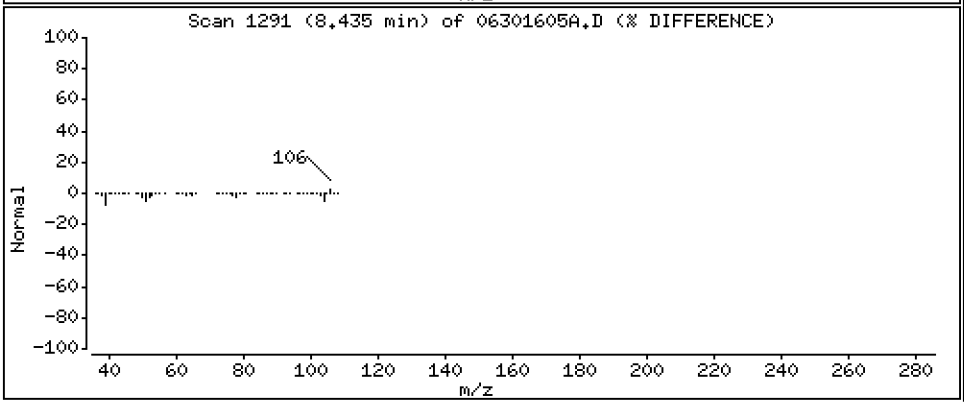
57 o-Xylene

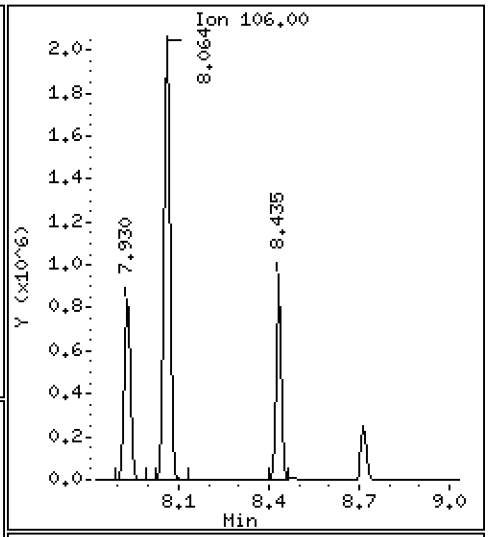
Concentration: 46.732 ug/Kg

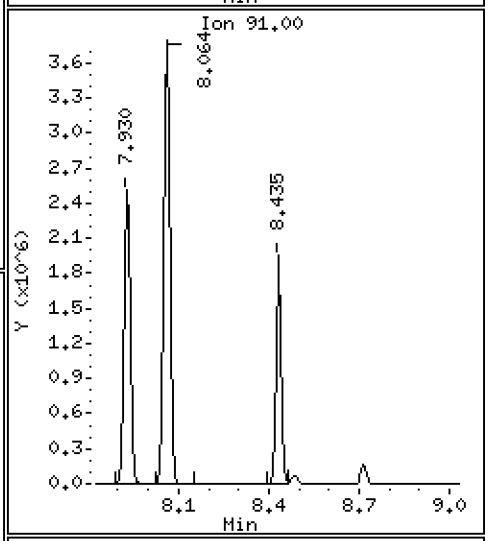


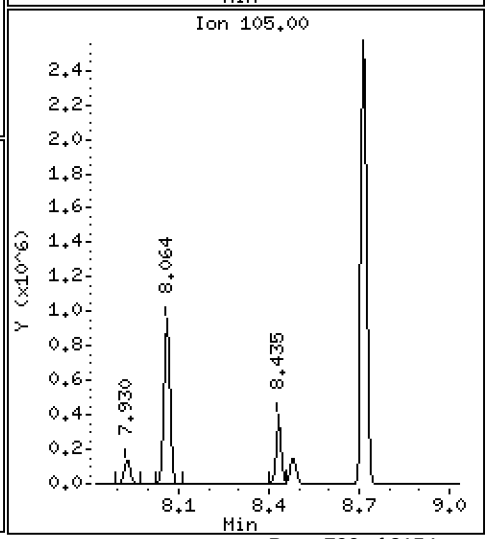












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

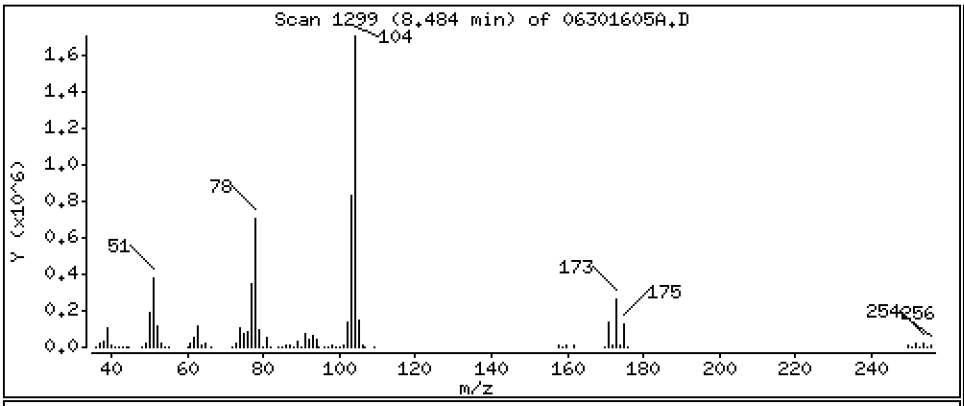
Operator: PB

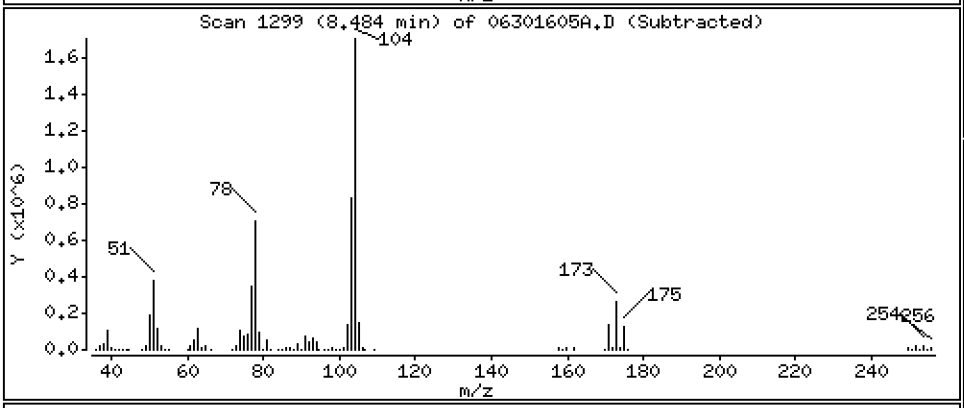
Column phase: RTXVMS

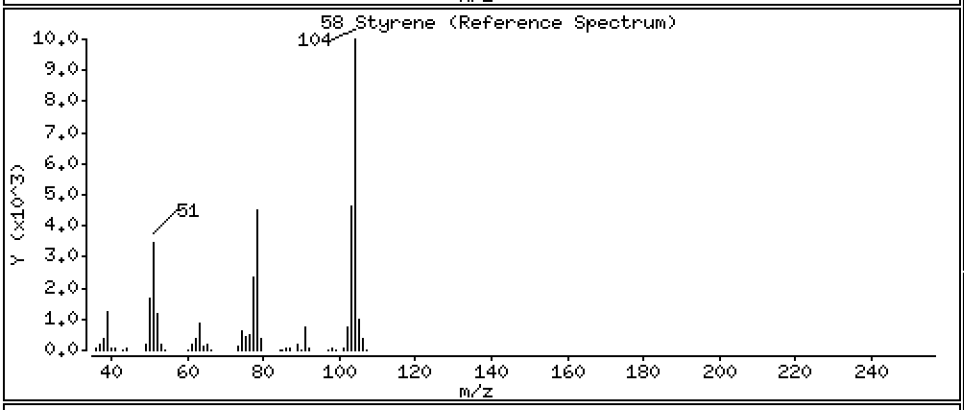
Column diameter: 0.18

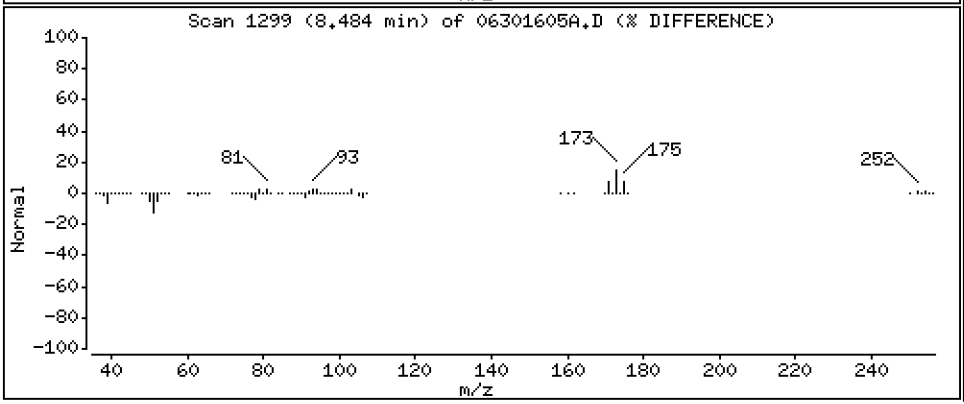
58 Styrene

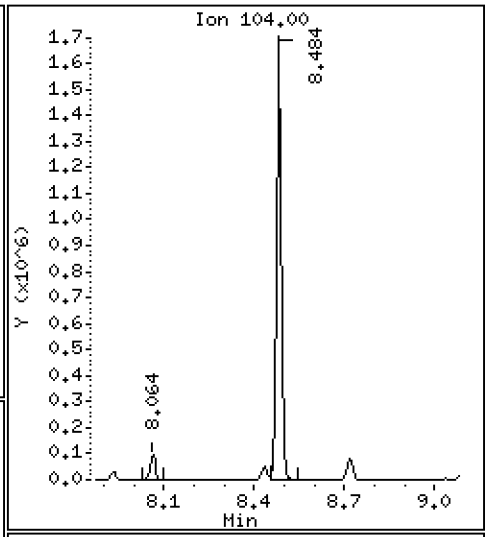
Concentration: 47.434 ug/Kg

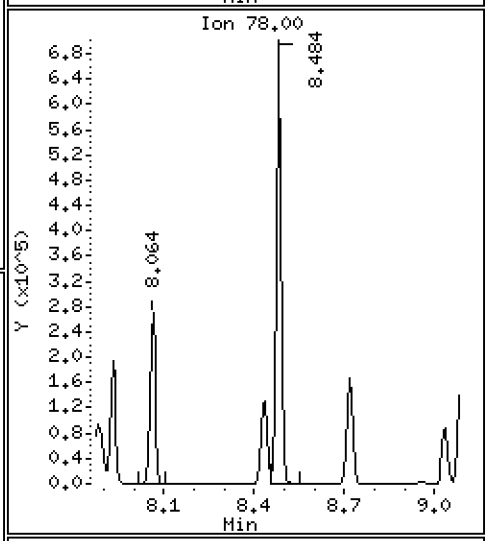


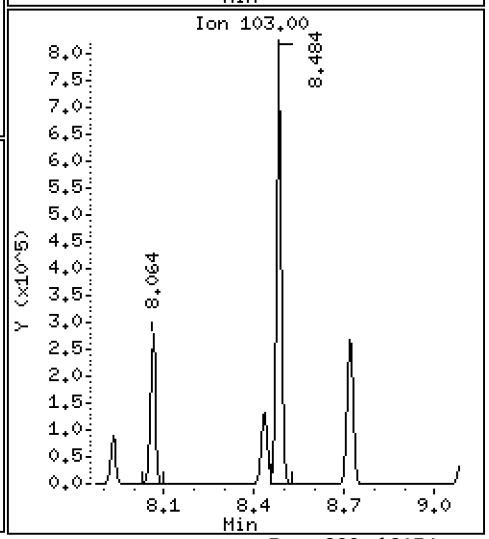












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

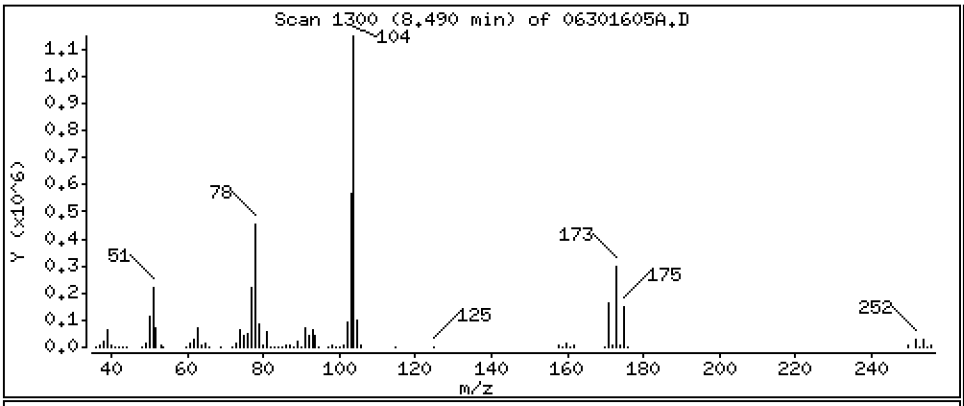
Operator: PB

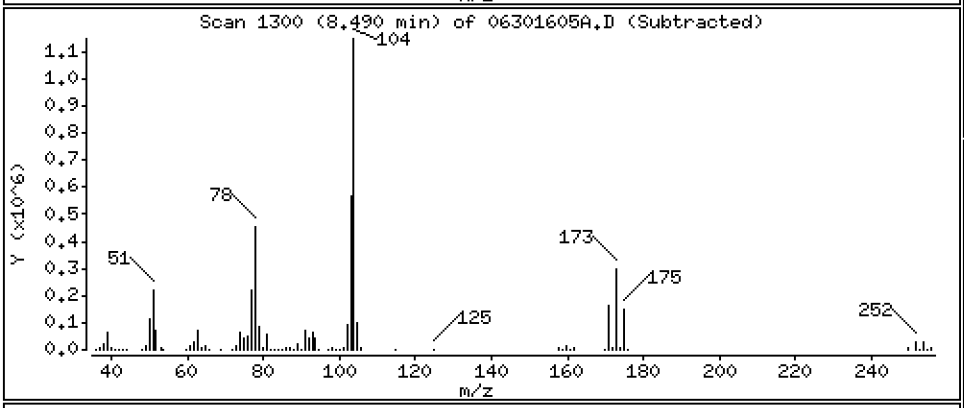
Column phase: RTXVMS

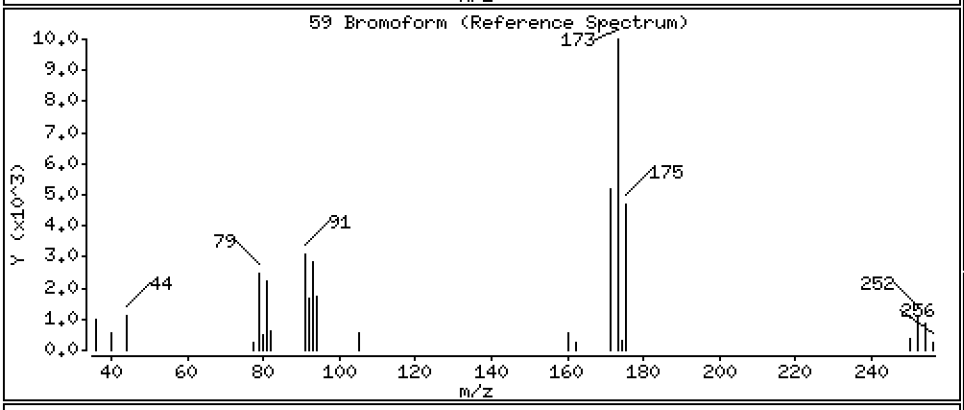
Column diameter: 0.18

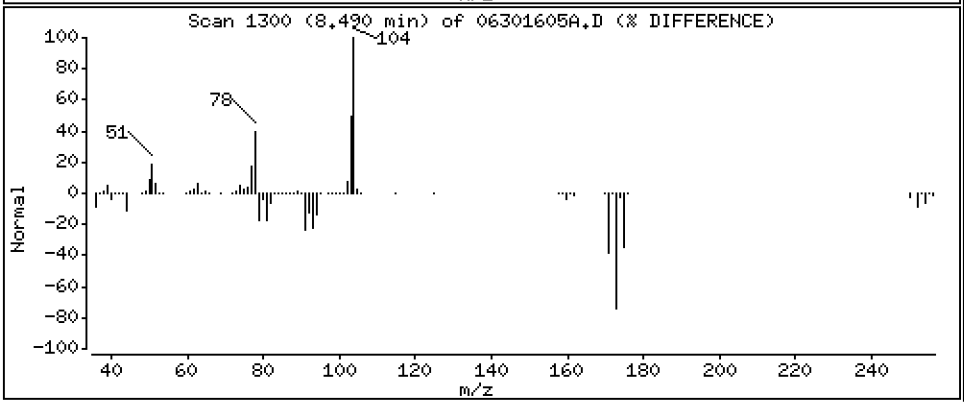
59 Bromoform

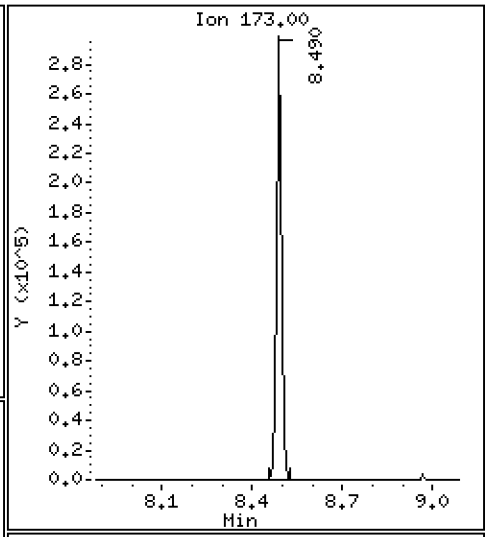
Concentration: 46.455 ug/Kg

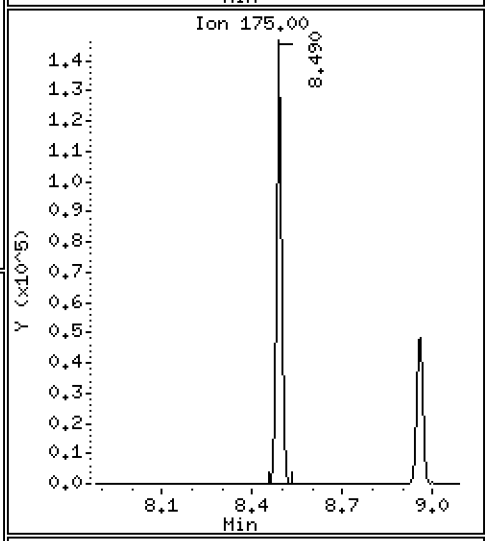


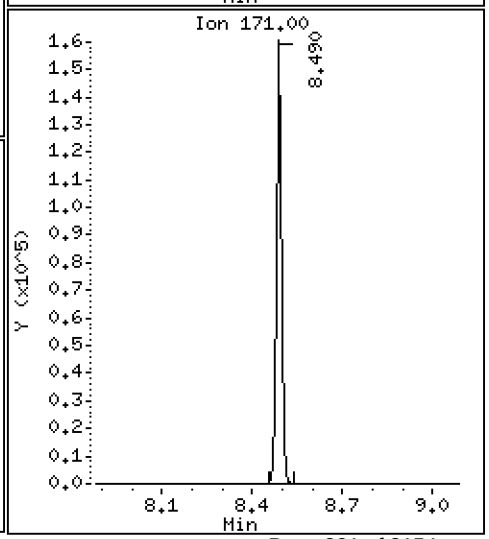












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

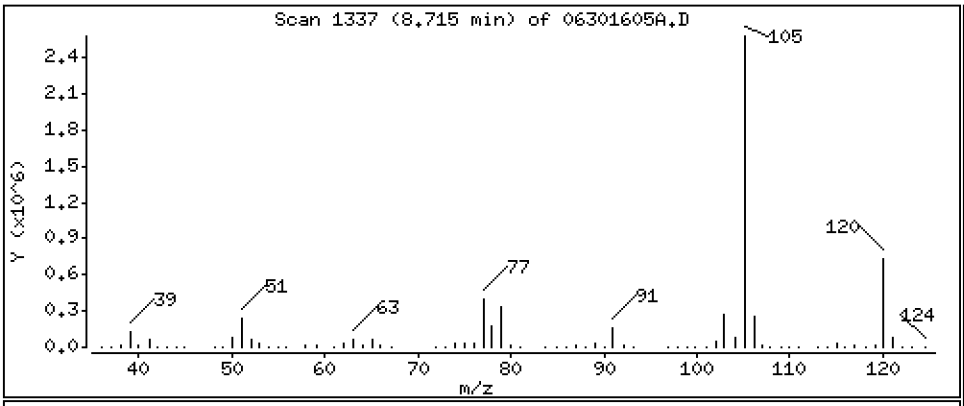
Operator: PB

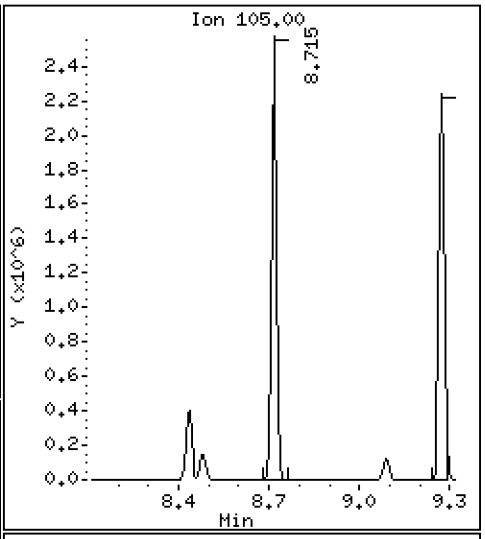
Column phase: RTXVMS

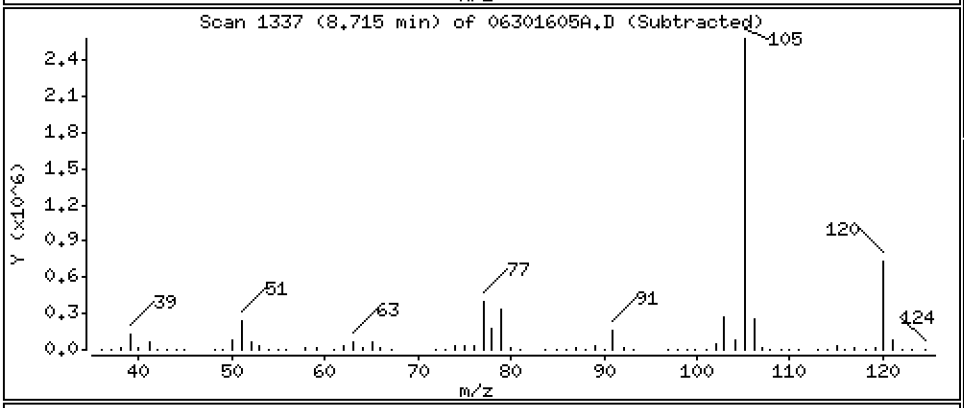
Column diameter: 0.18

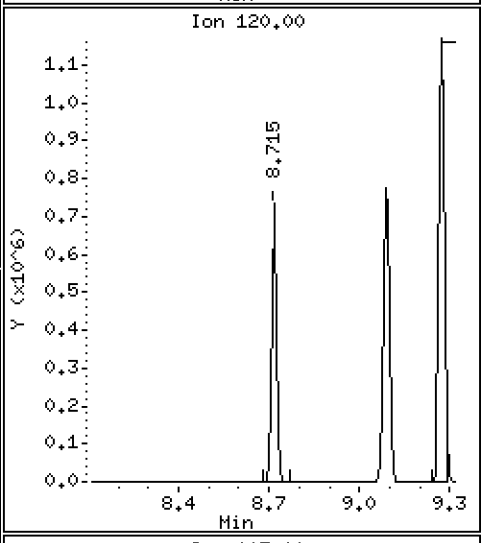
60 Isopropyl Benzene

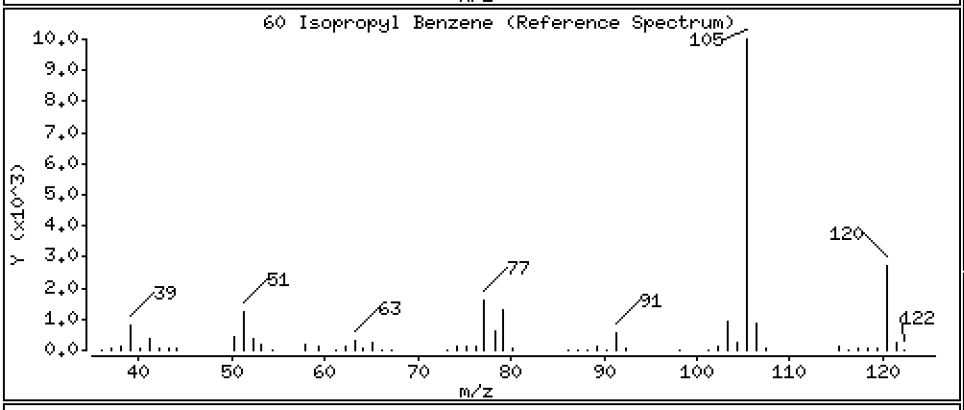
Concentration: 46.381 ug/Kg

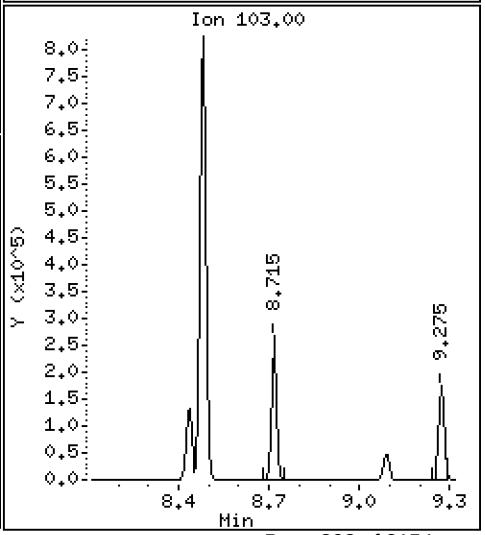


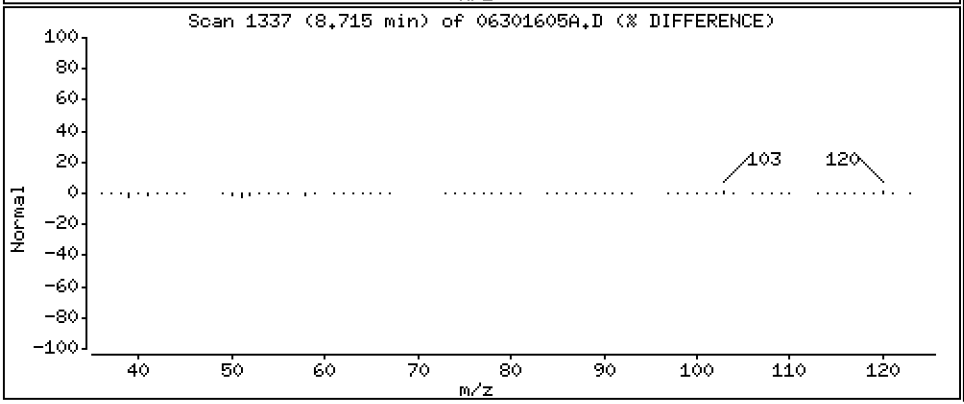












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

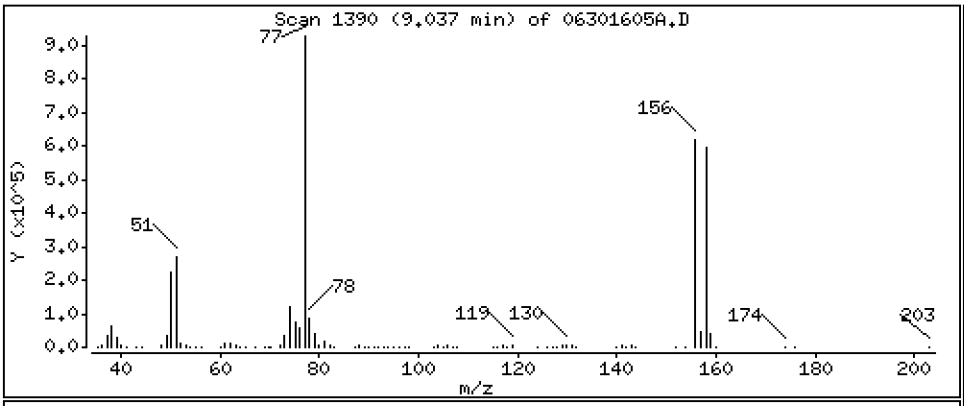
Operator: PB

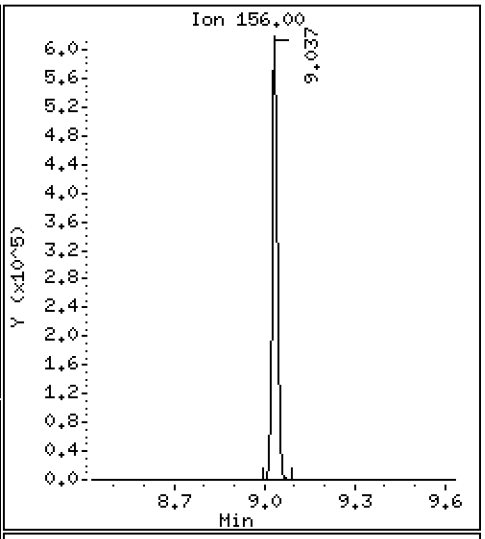
Column phase: RTXVMS

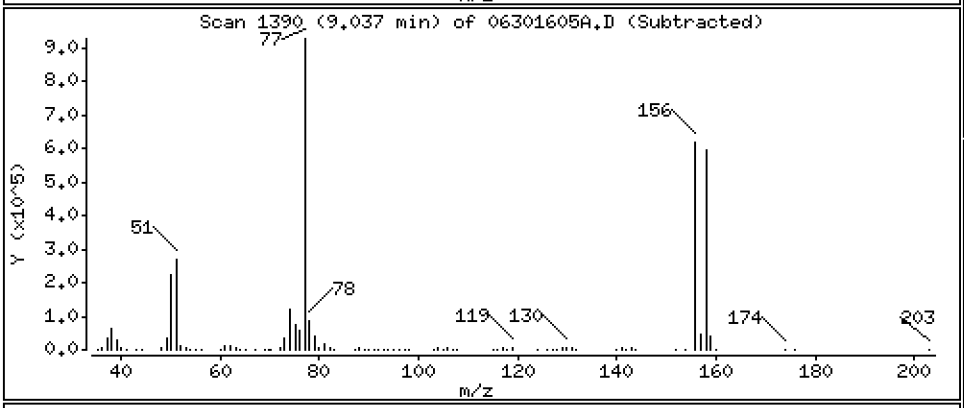
Column diameter: 0.18

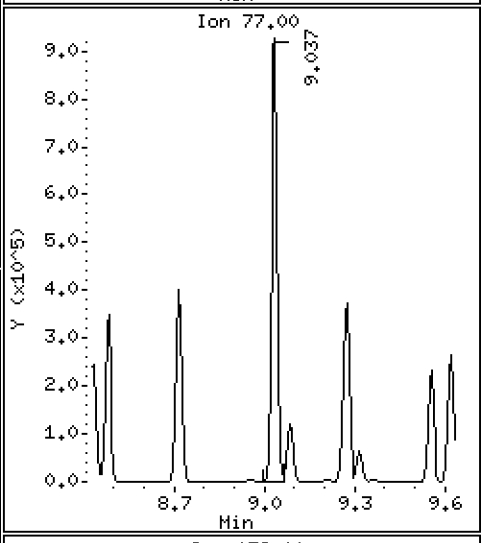
63 Bromobenzene

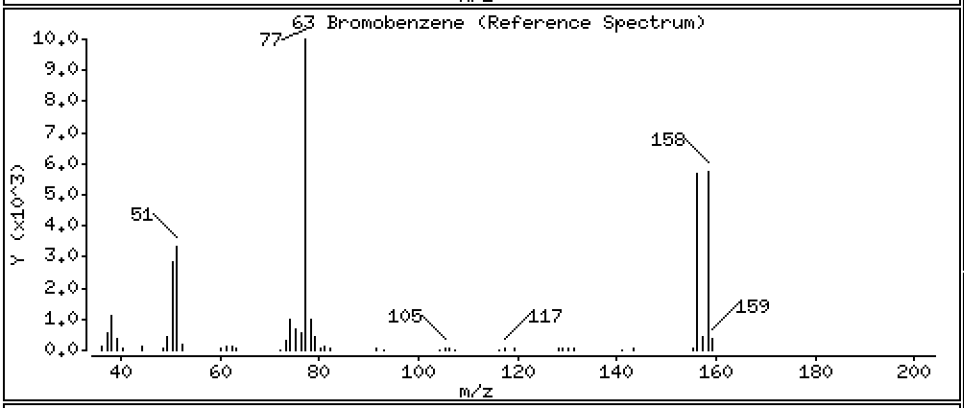
Concentration: 47.673 ug/Kg

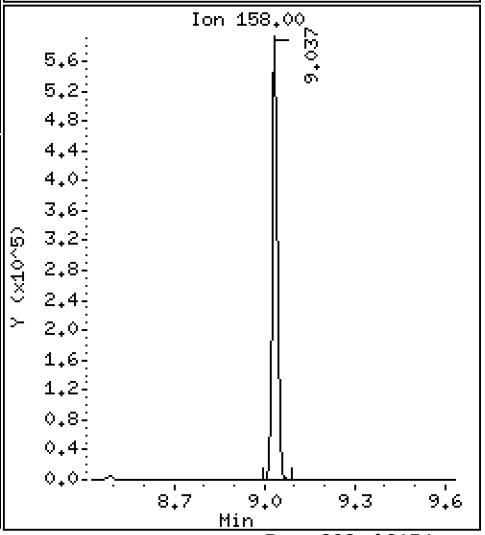


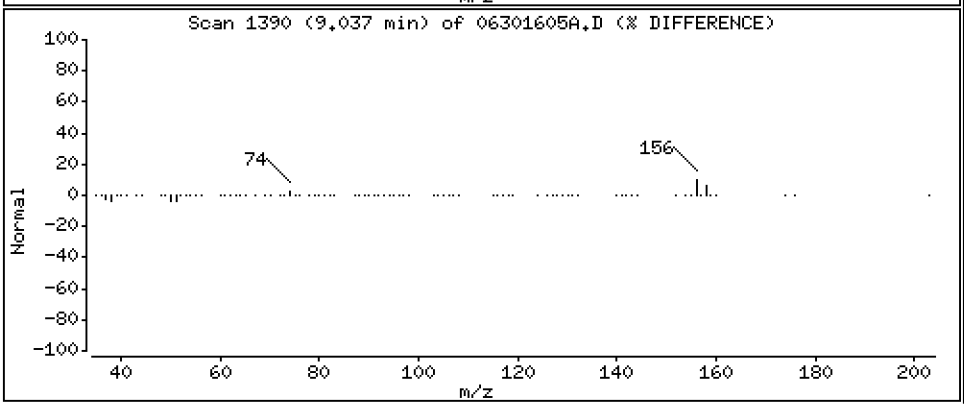












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

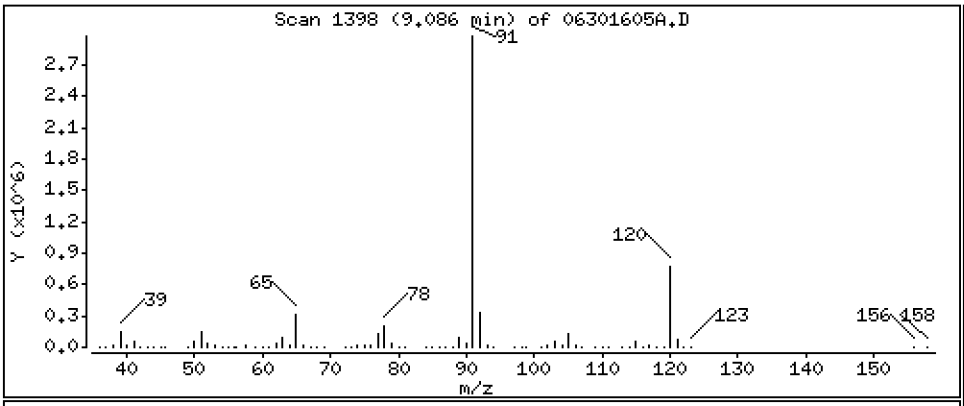
Operator: PB

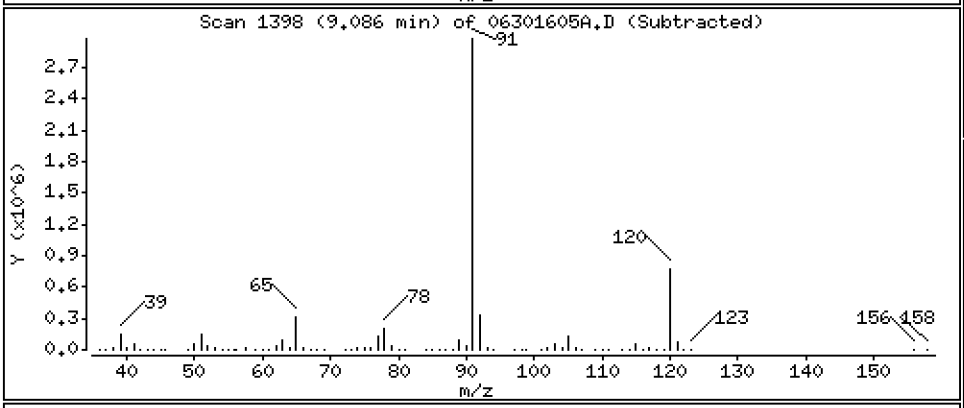
Column phase: RTXVMS

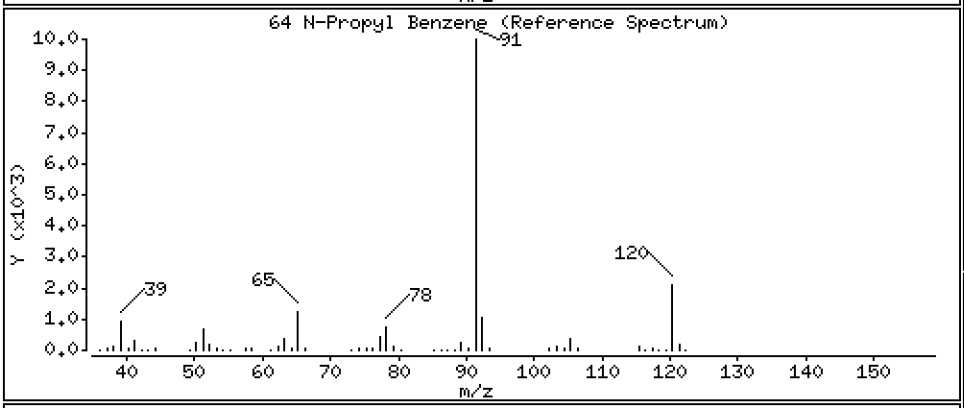
Column diameter: 0.18

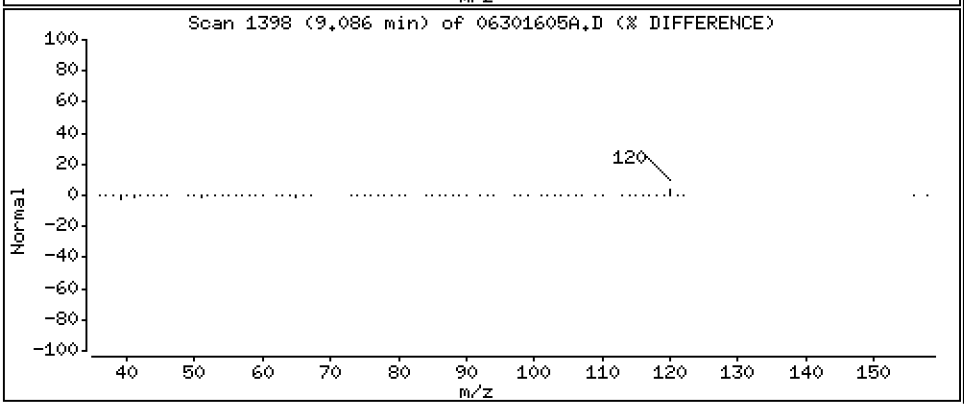
64 N-Propyl Benzene

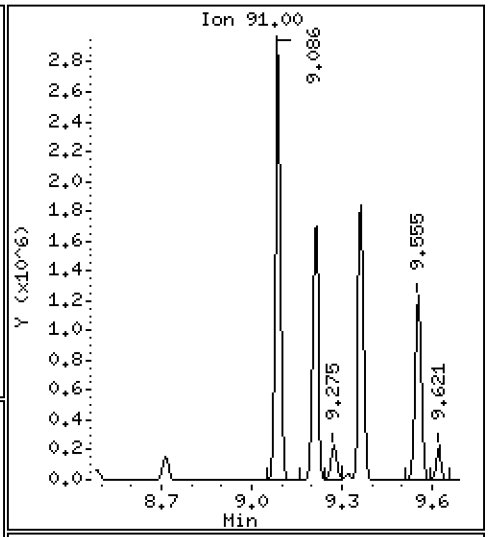
Concentration: 44.472 ug/Kg

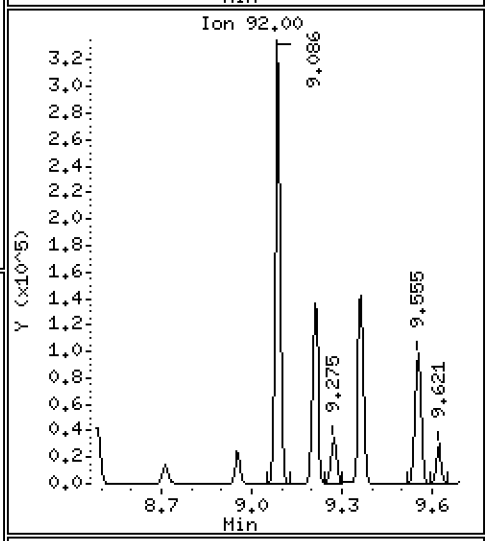


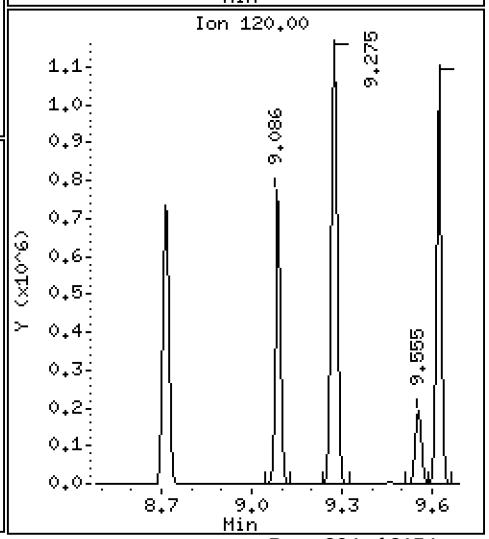












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

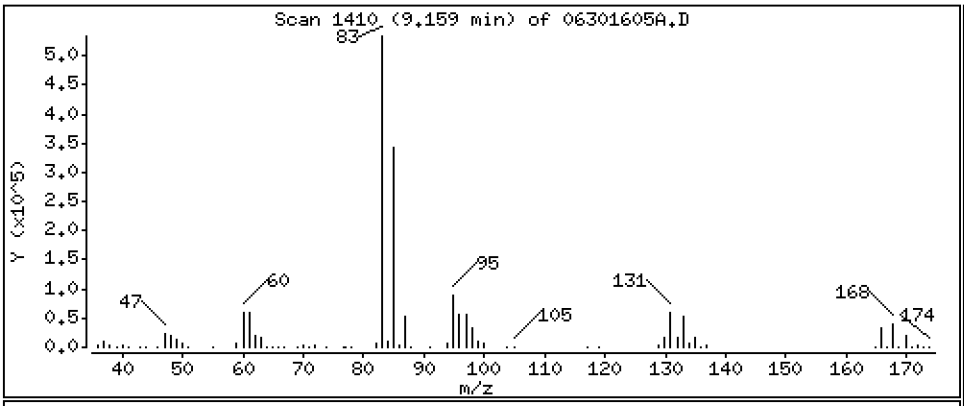
Operator: PB

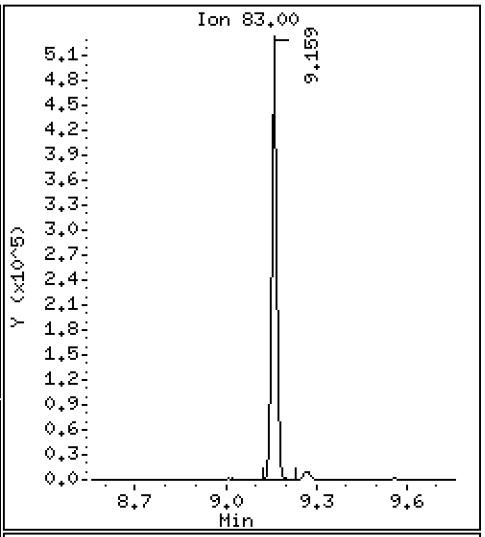
Column phase: RTXVMS

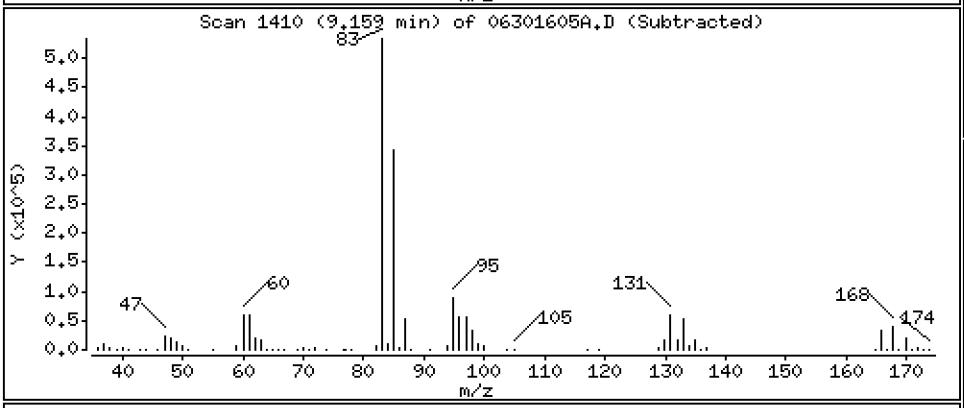
Column diameter: 0.18

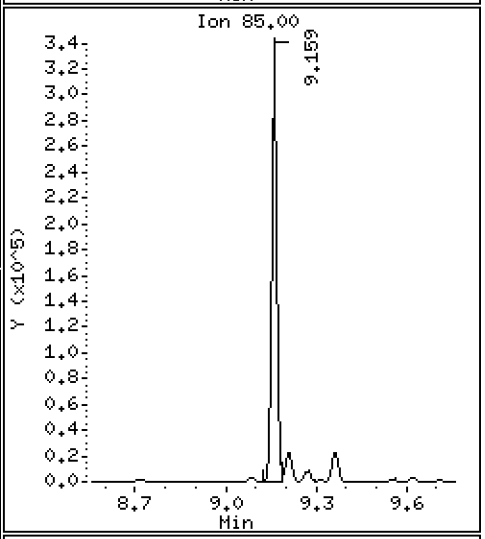
65 1,1,2,2-Tetrachloroethane

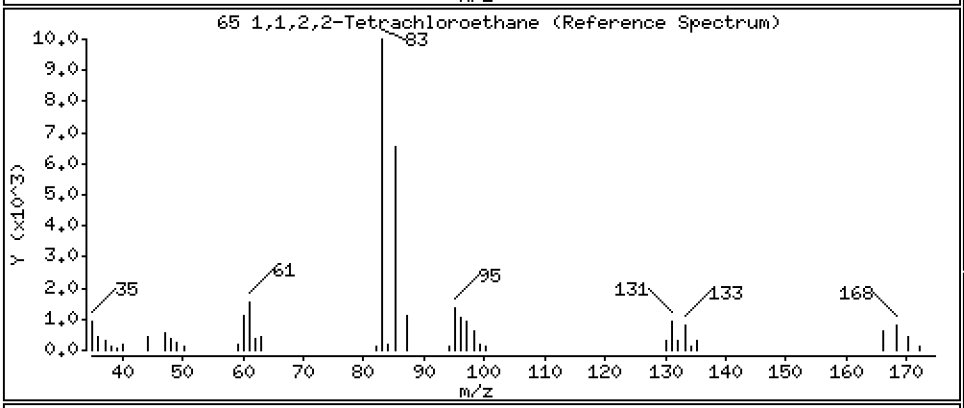
Concentration: 41.212 ug/Kg

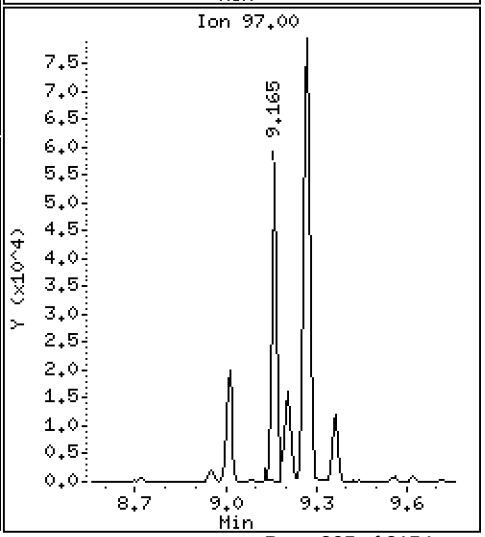


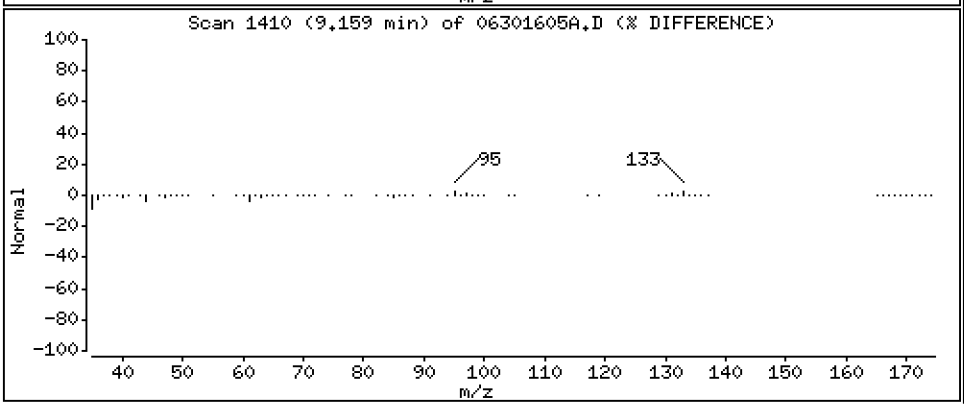












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

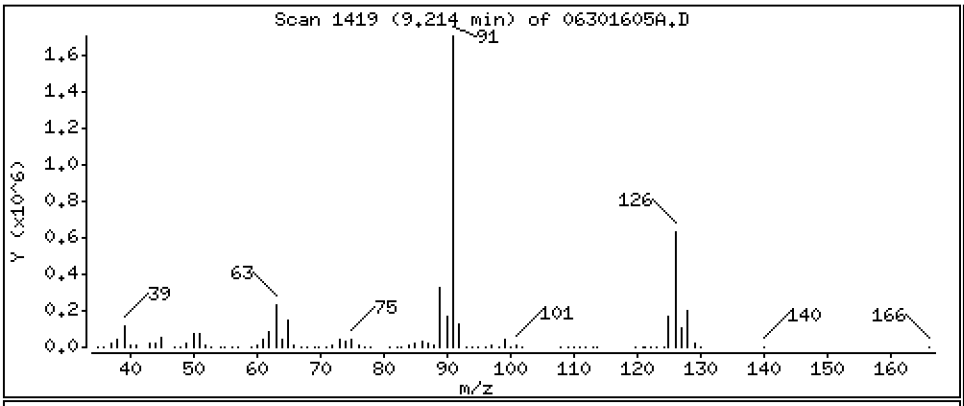
Operator: PB

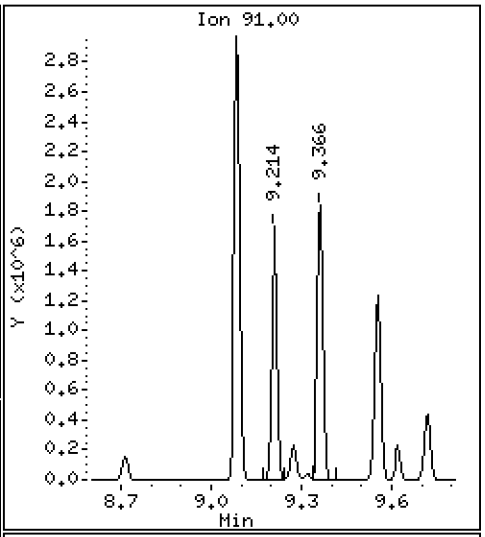
Column phase: RTXVMS

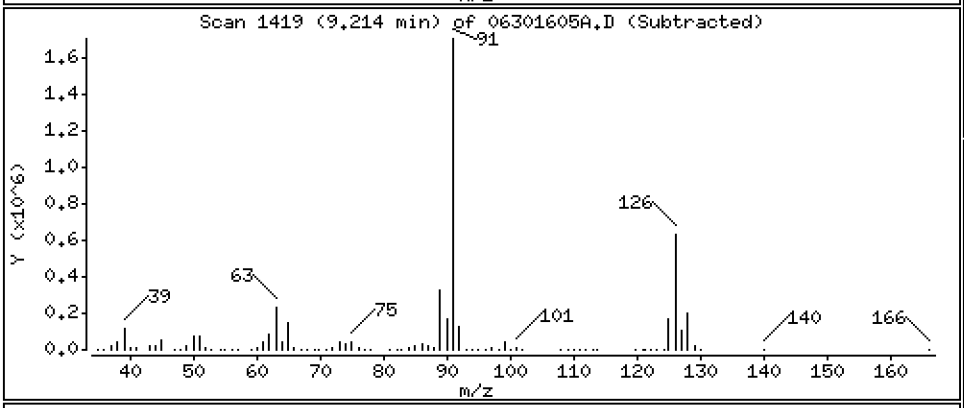
Column diameter: 0.18

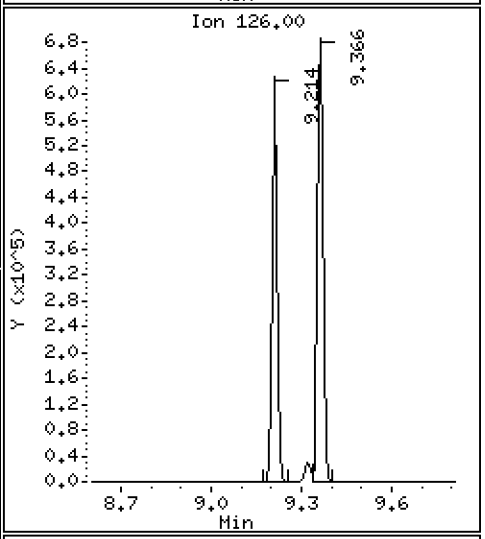
66 2-Chloro Toluene

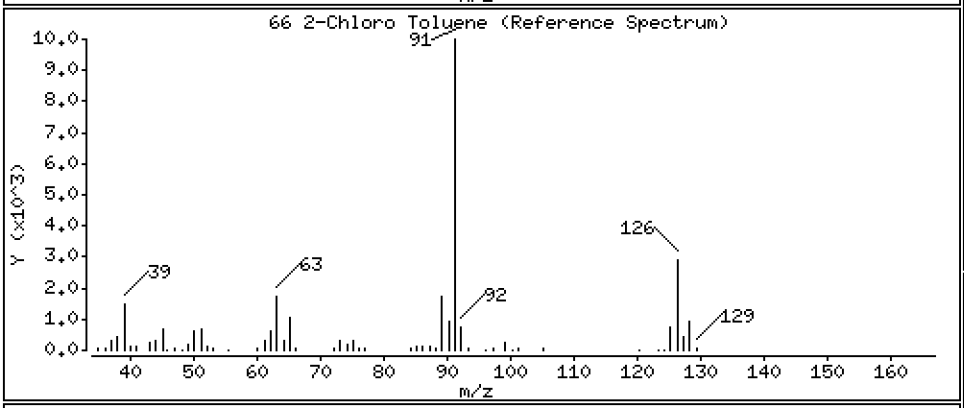
Concentration: 44.872 ug/Kg

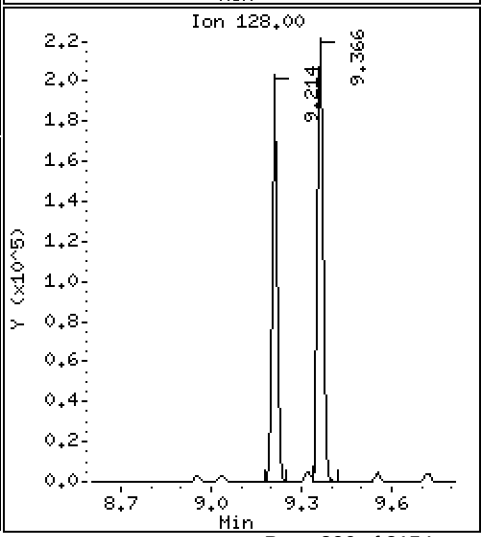


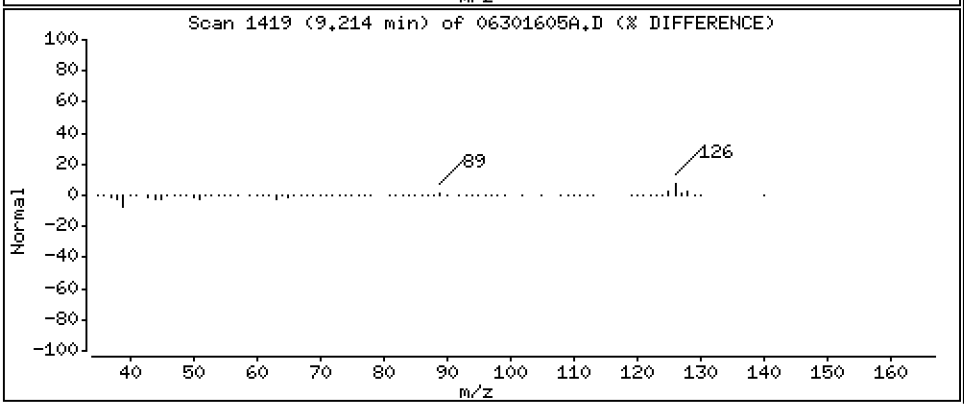












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

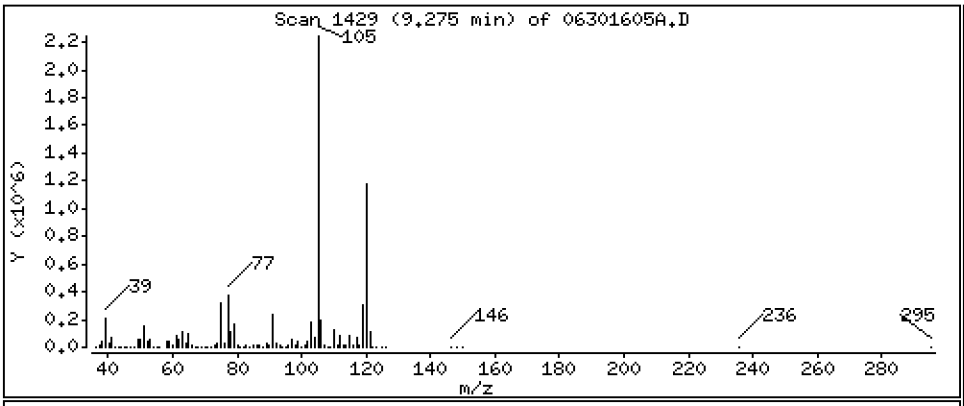
Operator: PB

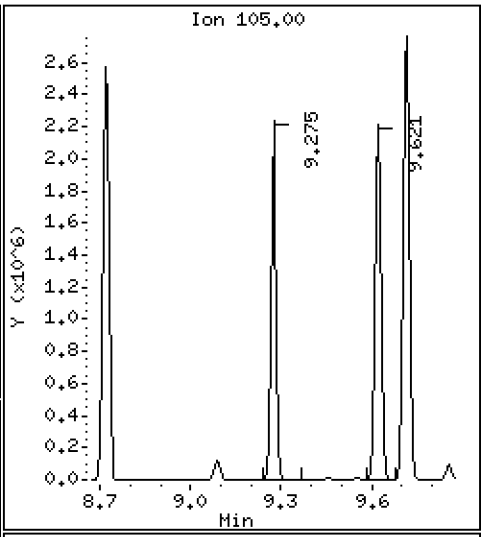
Column phase: RTXVMS

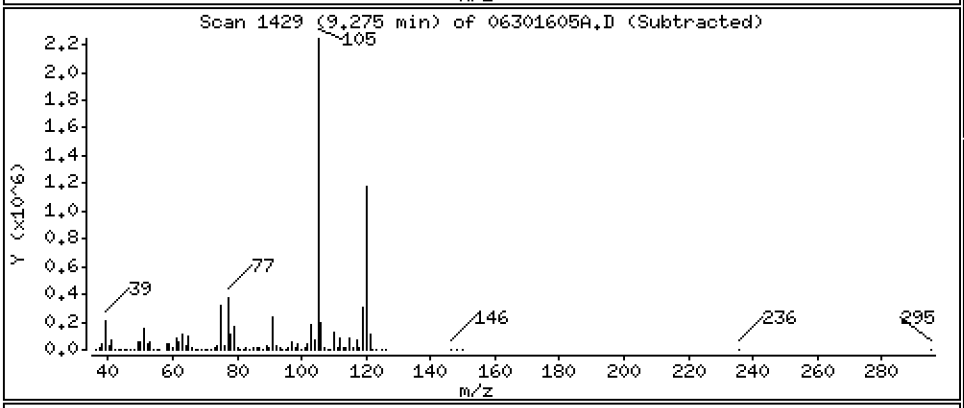
Column diameter: 0.18

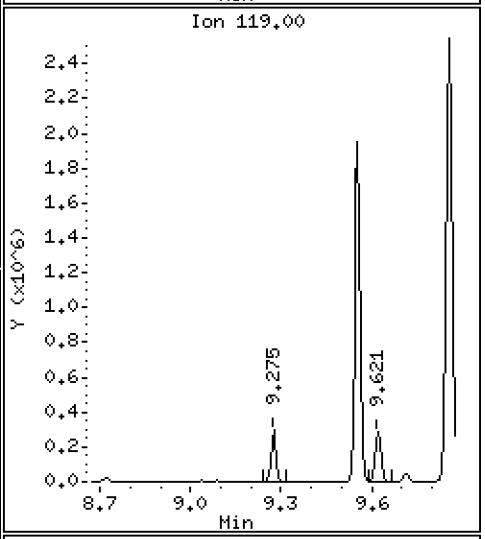
67 1,3,5-Trimethyl Benzene

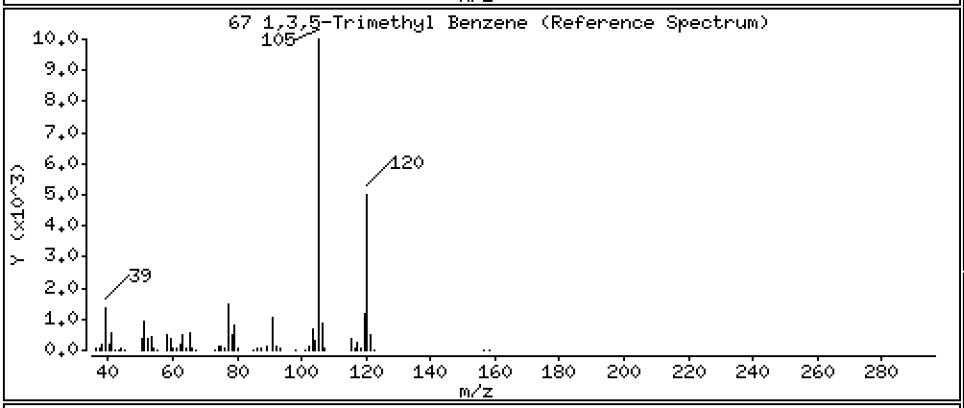
Concentration: 46.456 ug/Kg

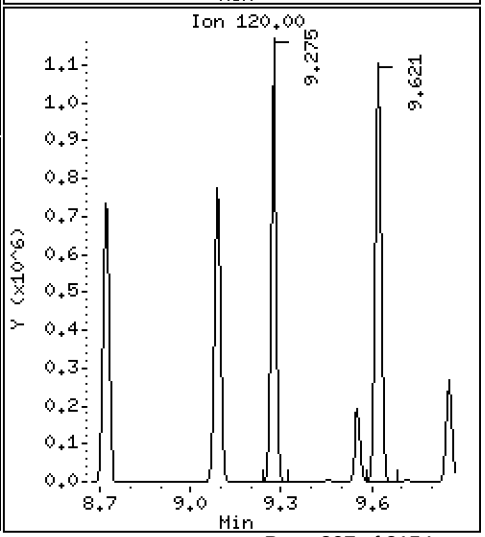


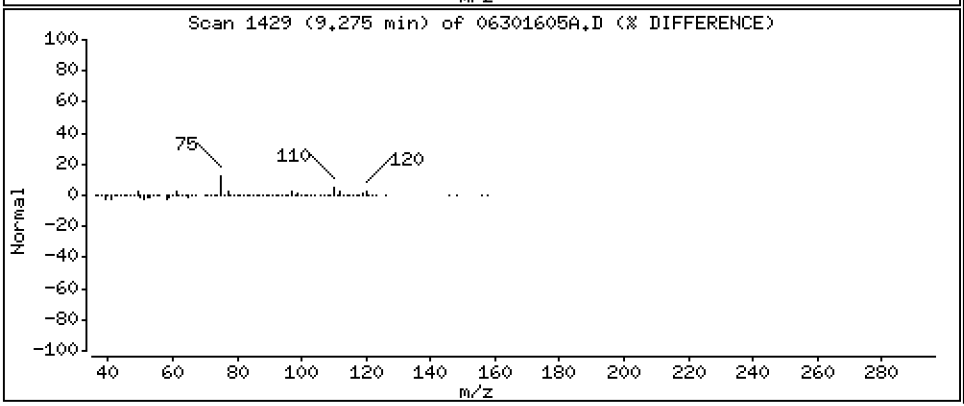












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

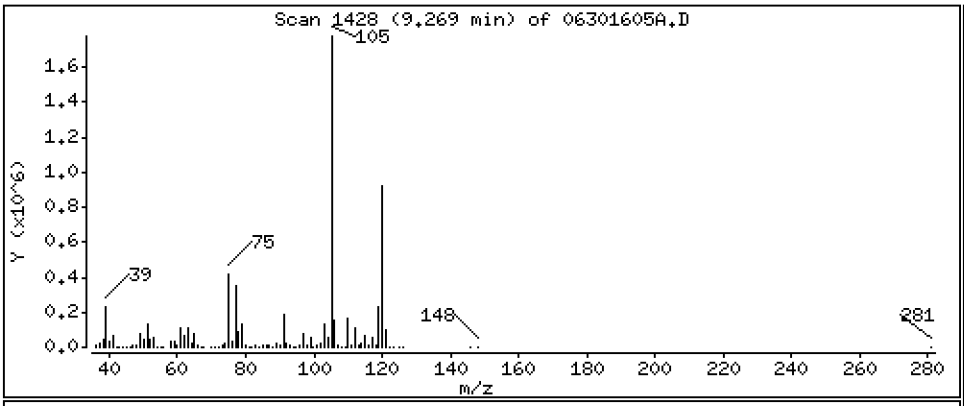
Operator: PB

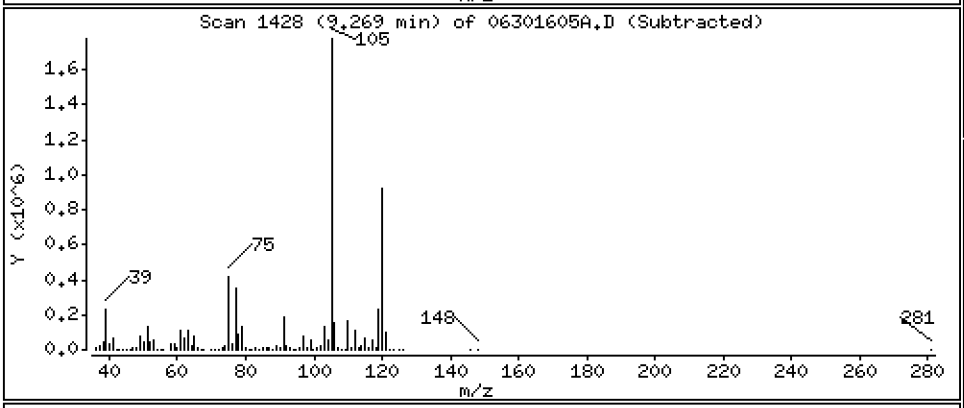
Column phase: RTXVMS

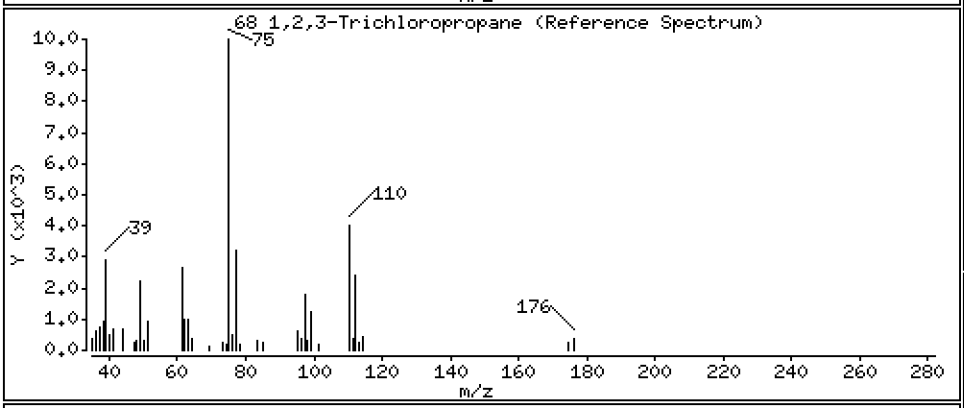
Column diameter: 0.18

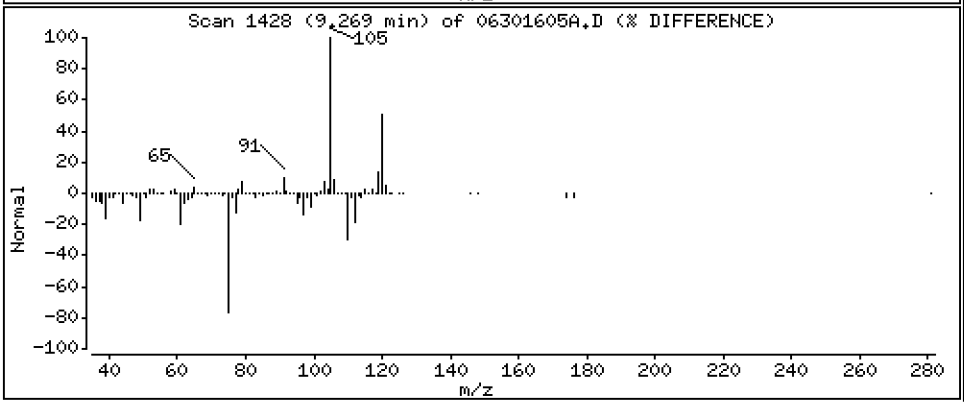
68 1,2,3-Trichloropropane

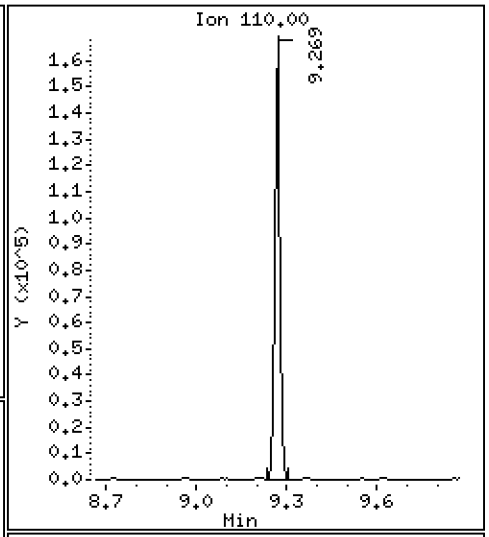
Concentration: 43.823 ug/Kg

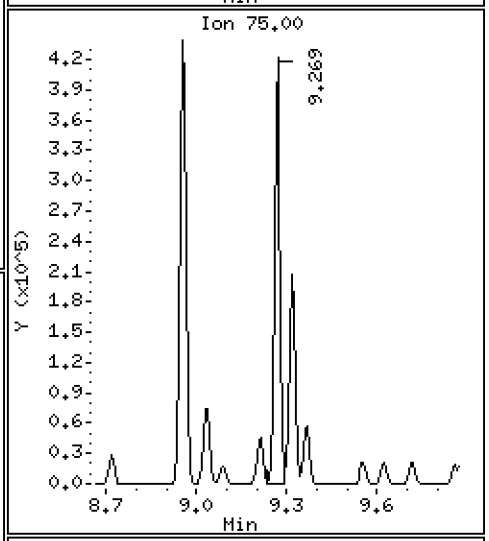


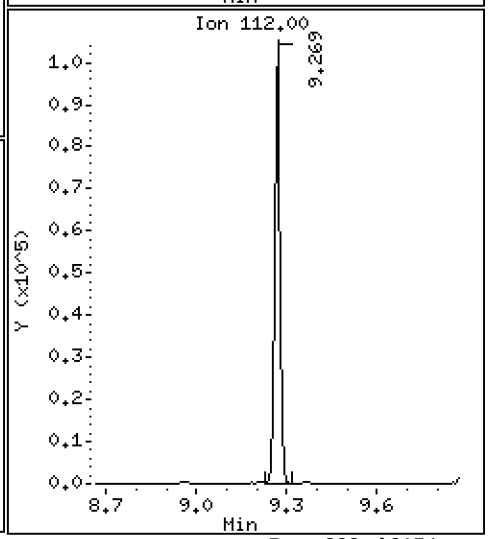












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

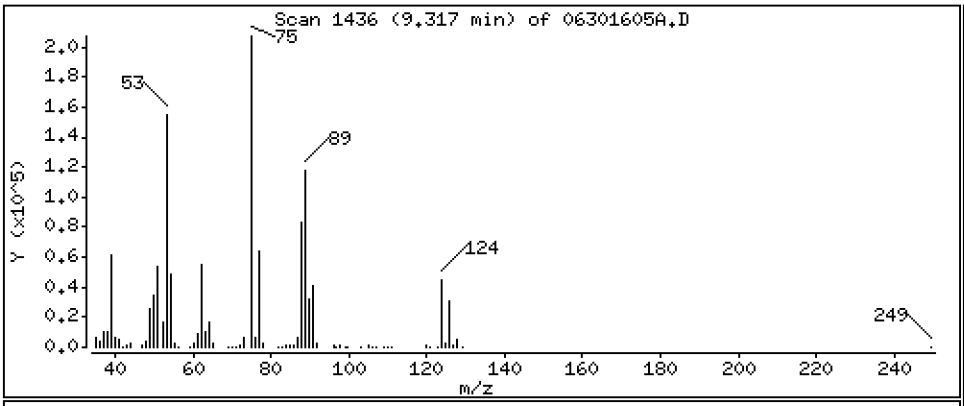
Operator: PB

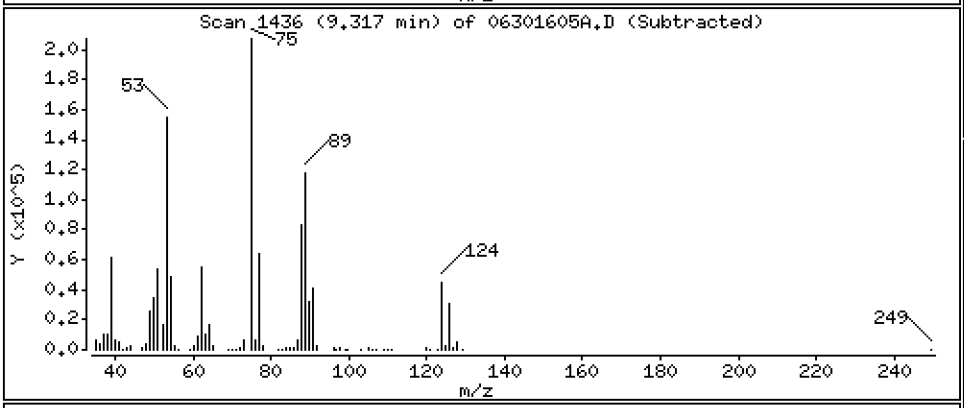
Column phase: RTXVMS

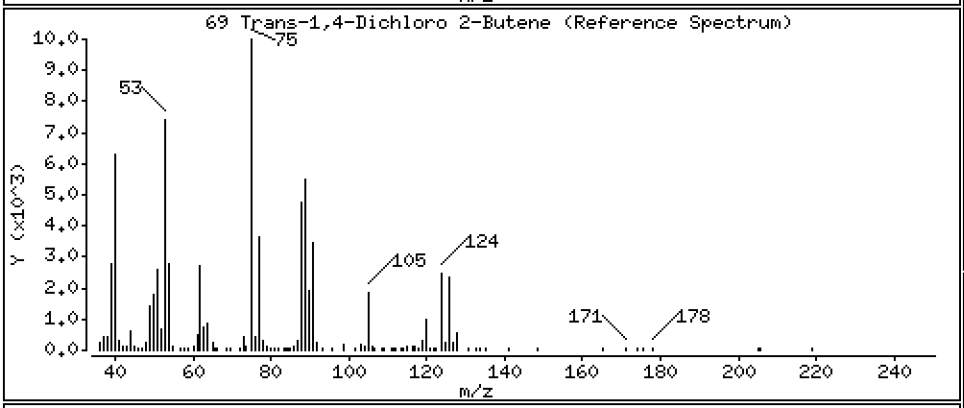
Column diameter: 0.18

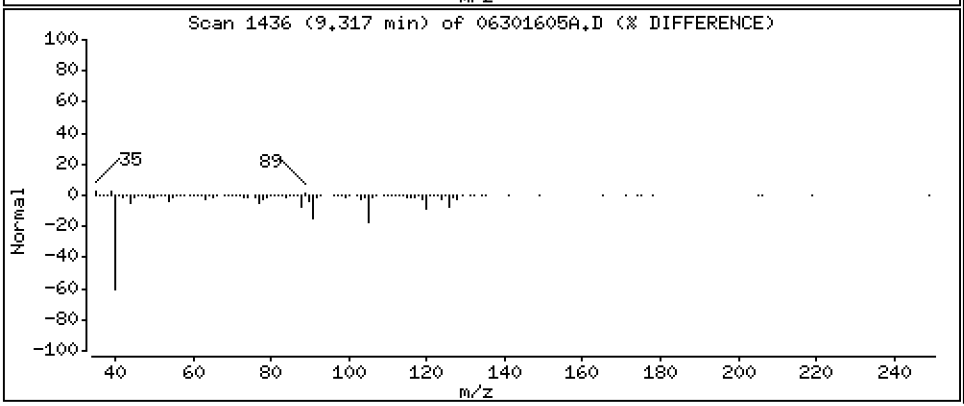
69 Trans-1,4-Dichloro 2-Butene

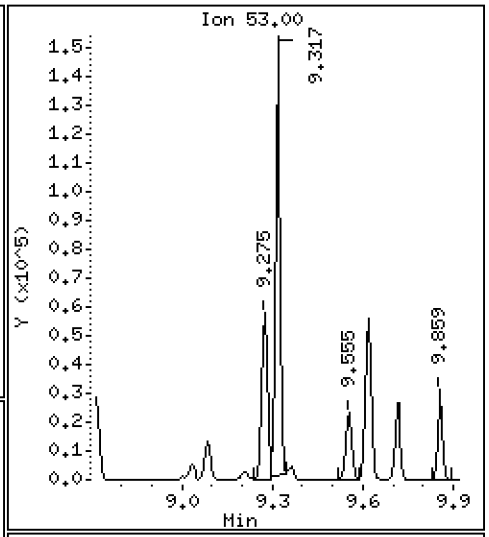
Concentration: 39.366 ug/Kg

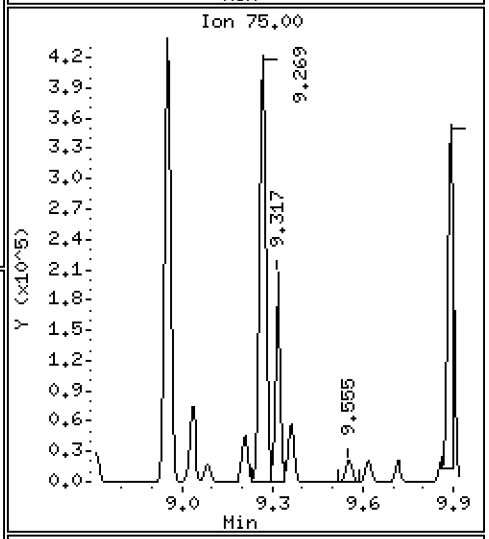


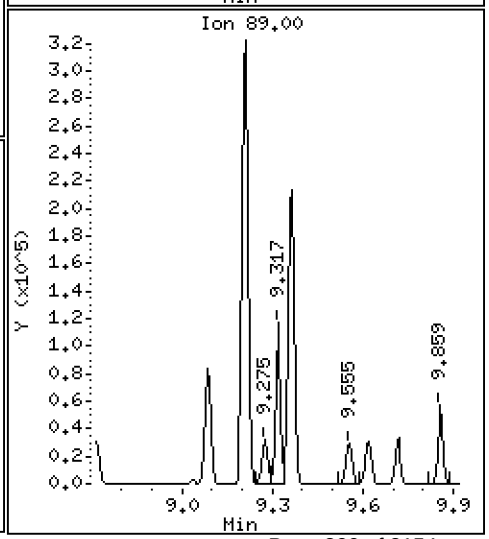












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

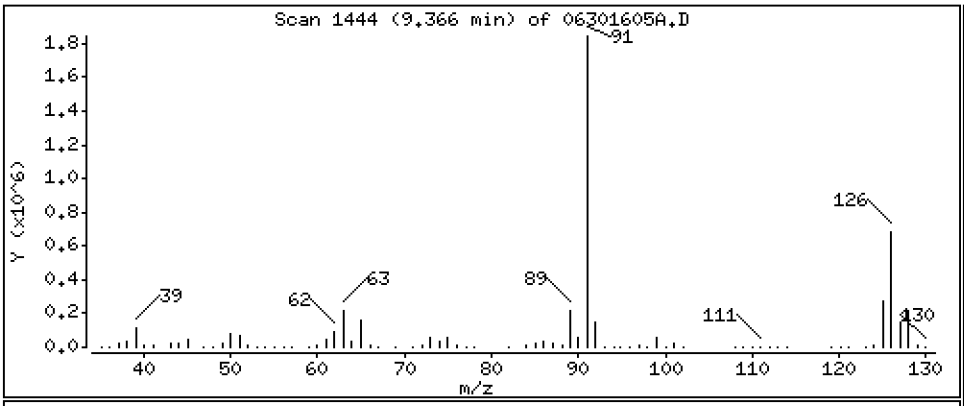
Operator: PB

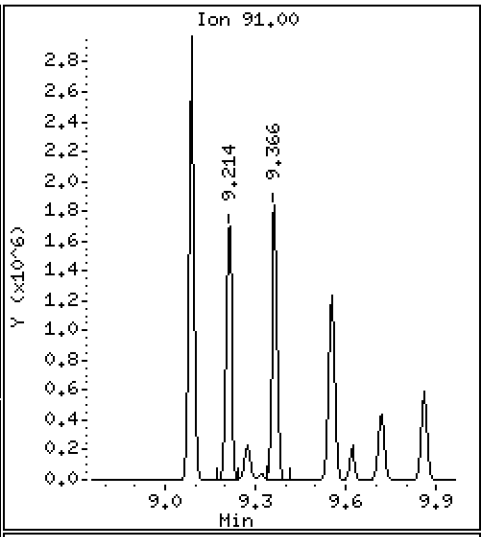
Column phase: RTXVMS

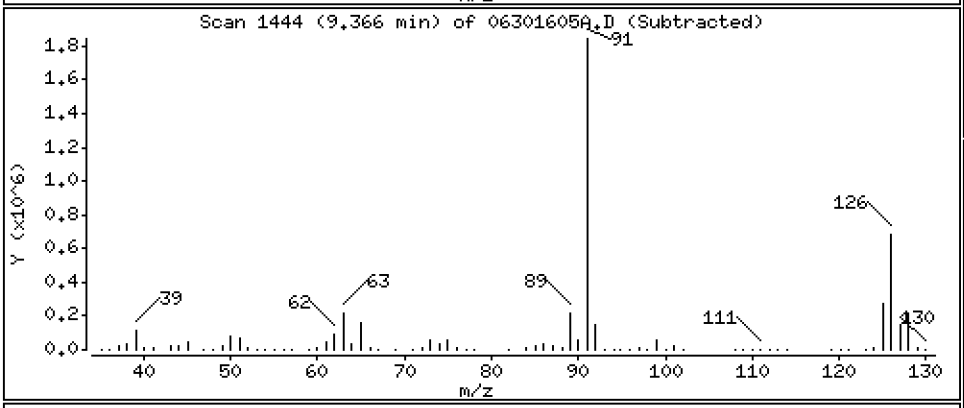
Column diameter: 0.18

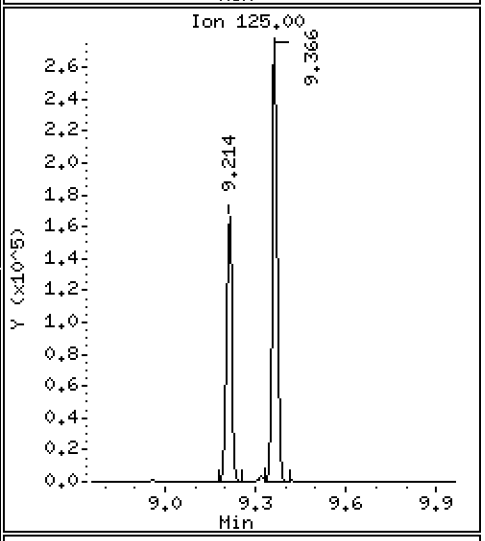
70 4-Chloro Toluene

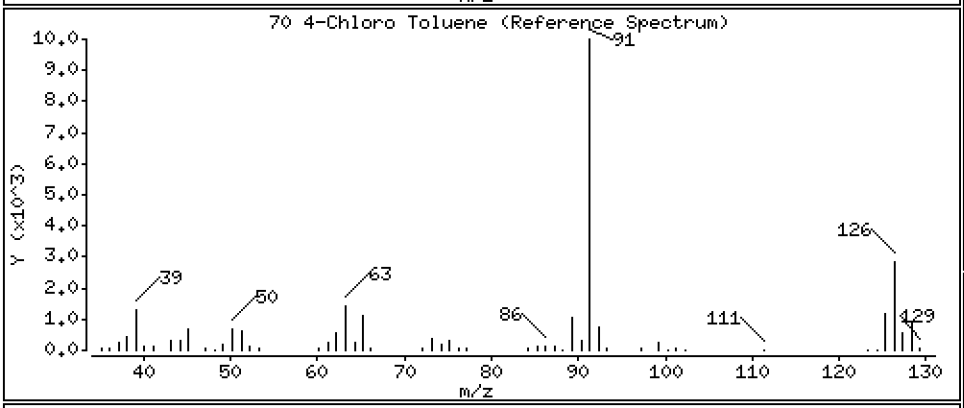
Concentration: 45.431 ug/Kg

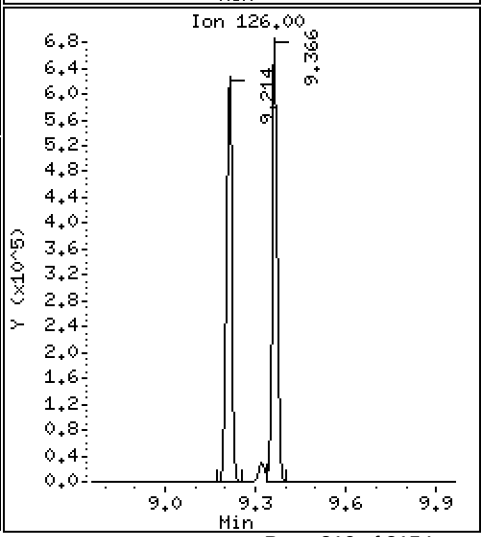


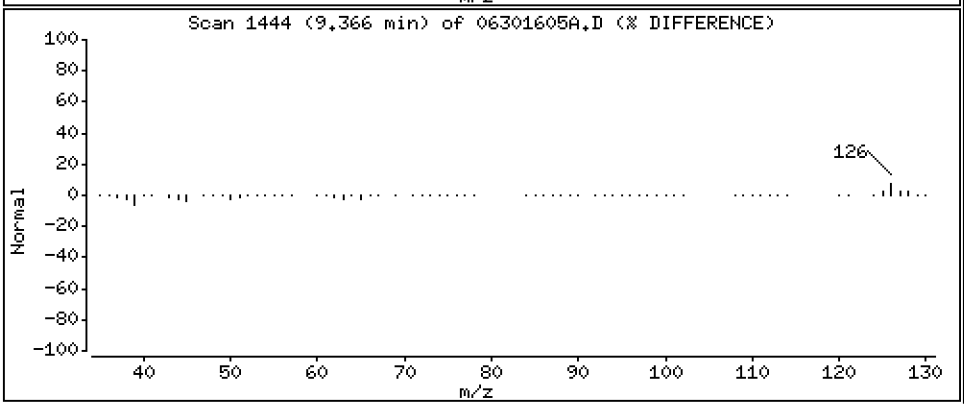












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

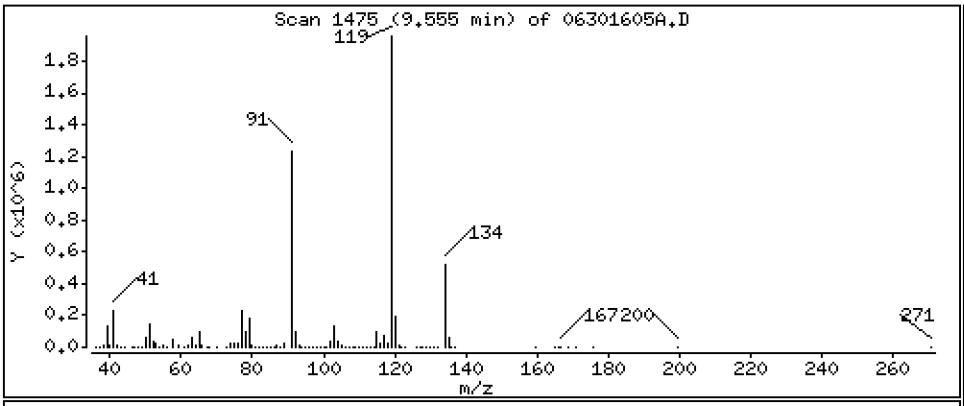
Operator: PB

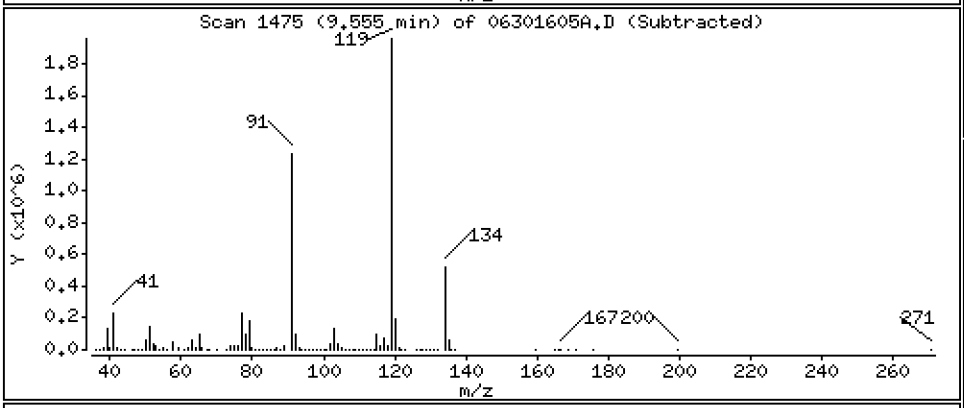
Column phase: RTXVMS

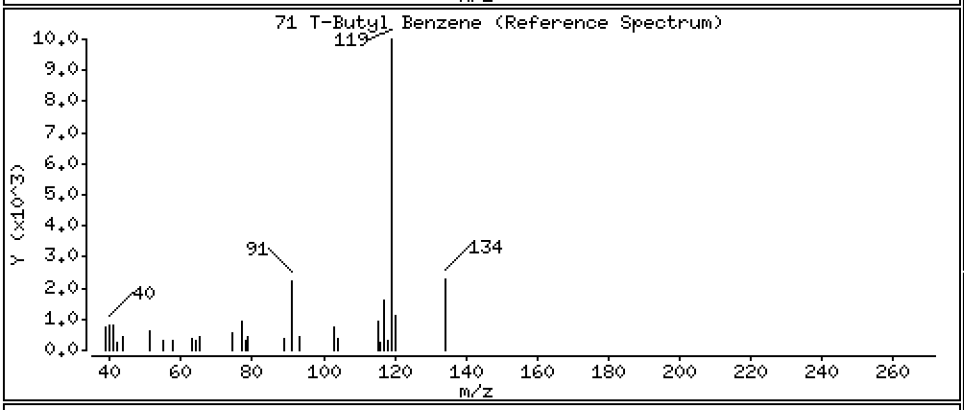
Column diameter: 0.18

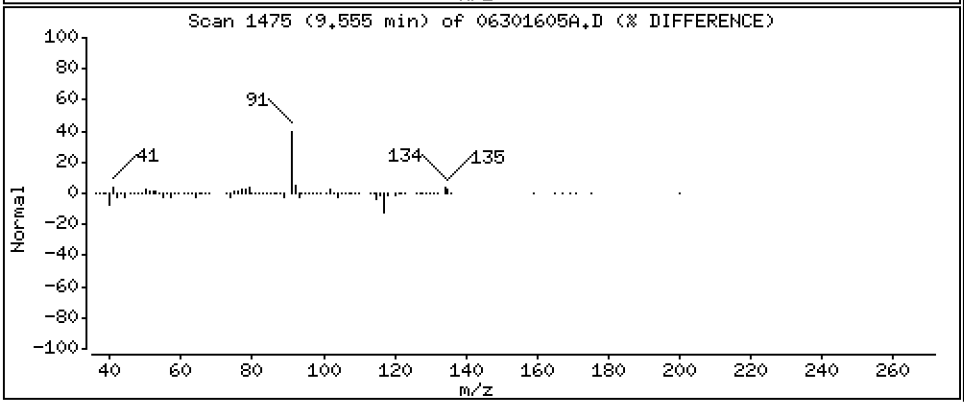
71 T-Butyl Benzene

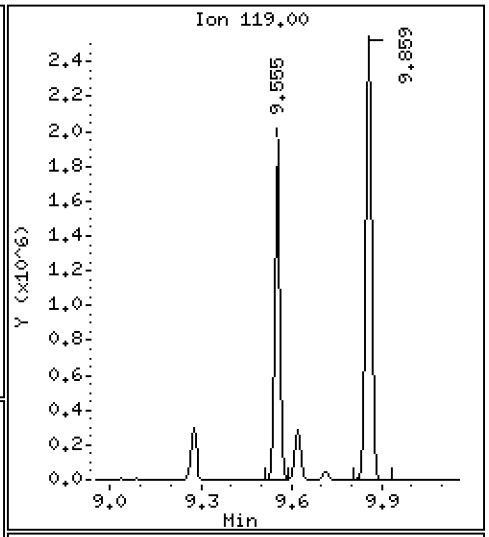
Concentration: 45.909 ug/Kg

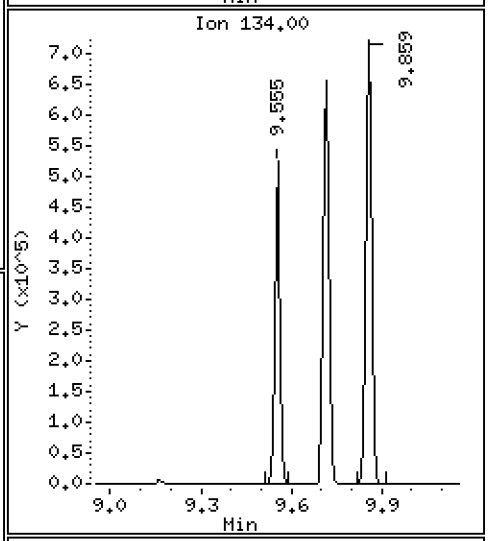


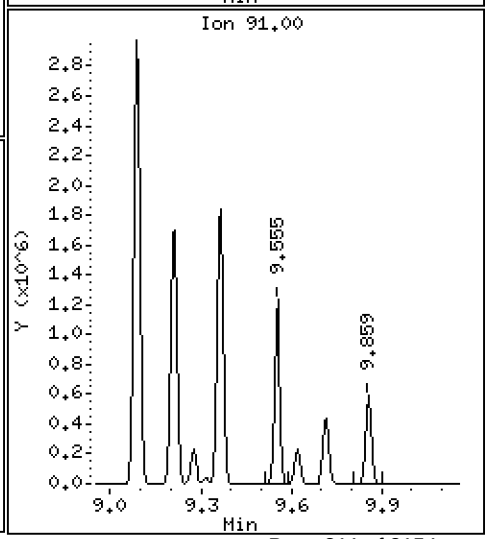












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

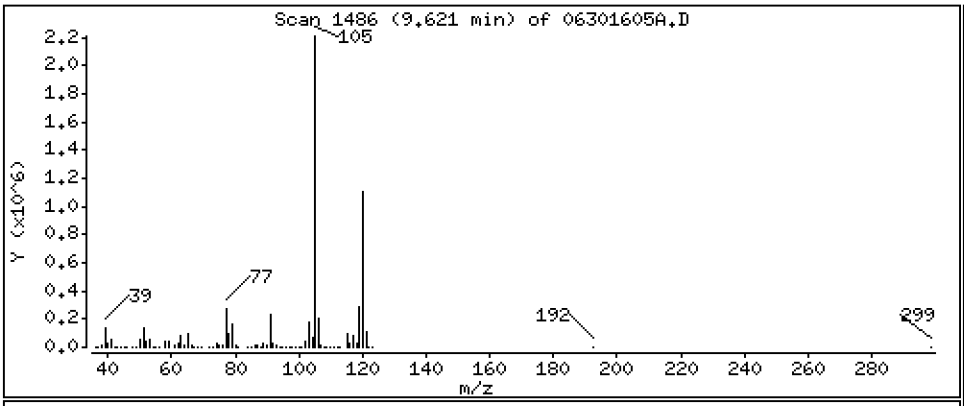
Operator: PB

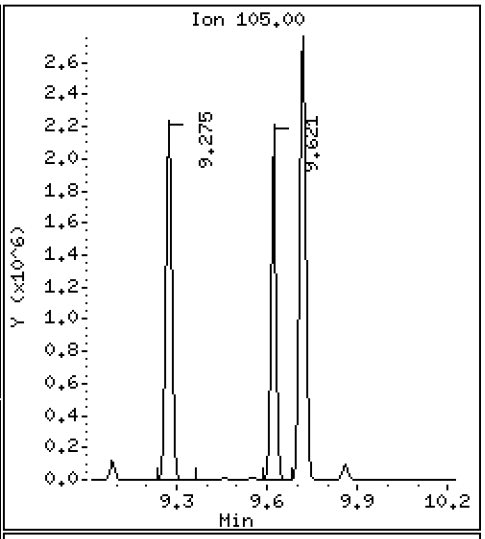
Column phase: RTXVMS

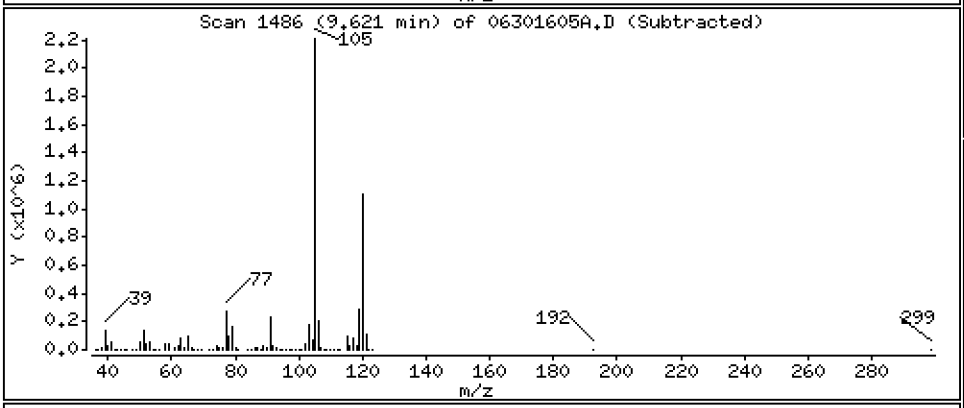
Column diameter: 0.18

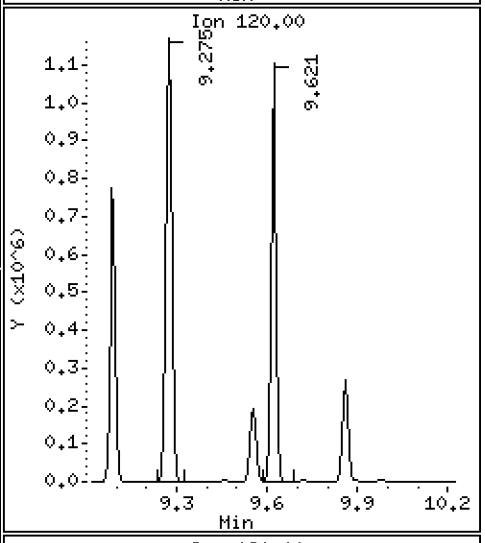
72 1,2,4-Trimethylbenzene

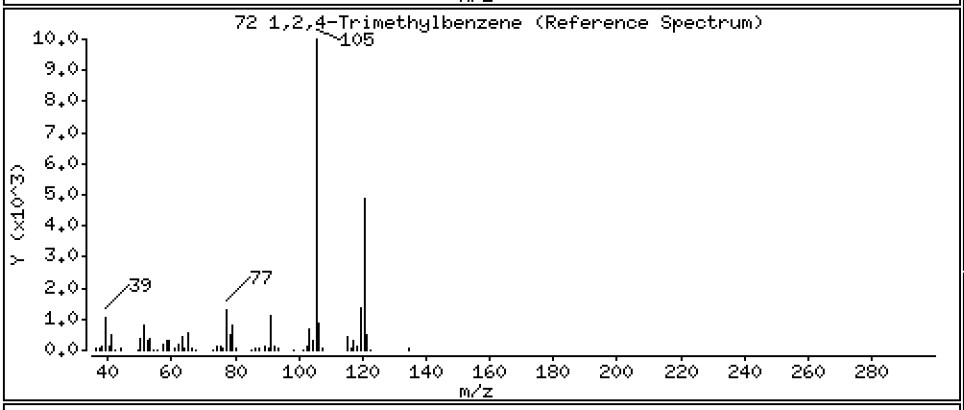
Concentration: 46.201 ug/Kg

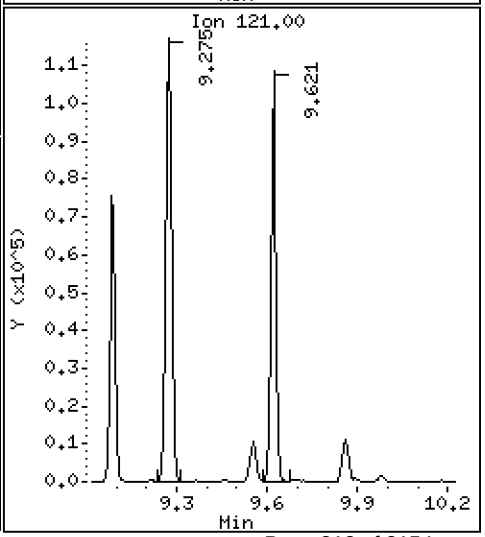


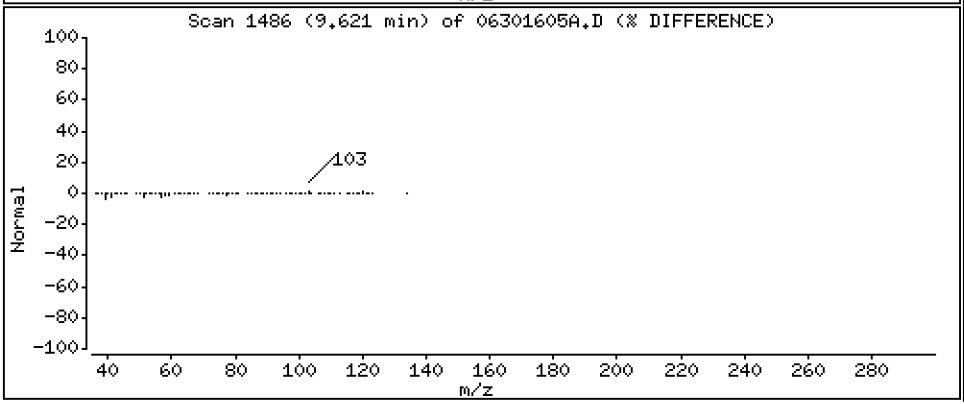












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

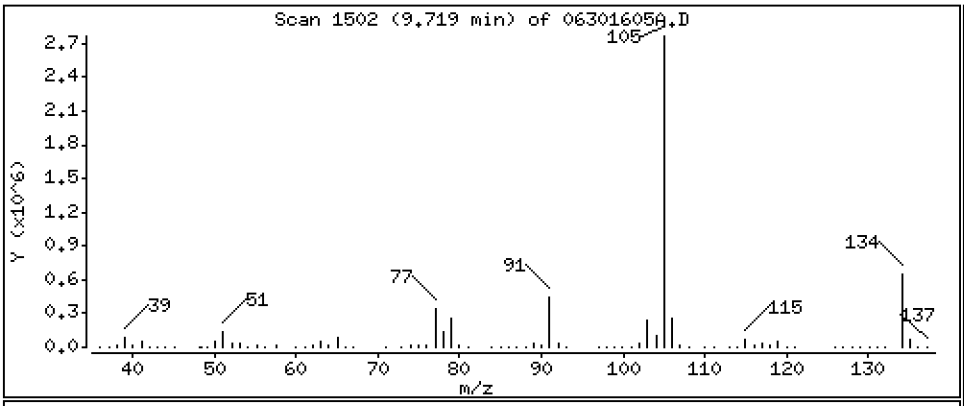
Operator: PB

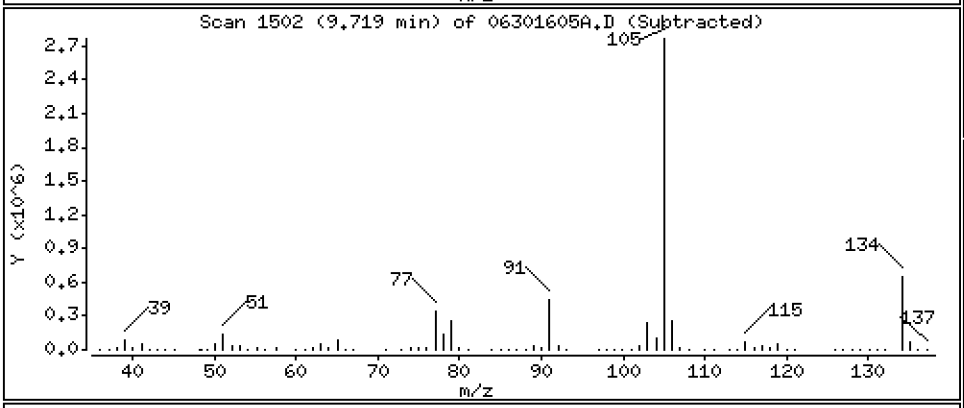
Column phase: RTXVMS

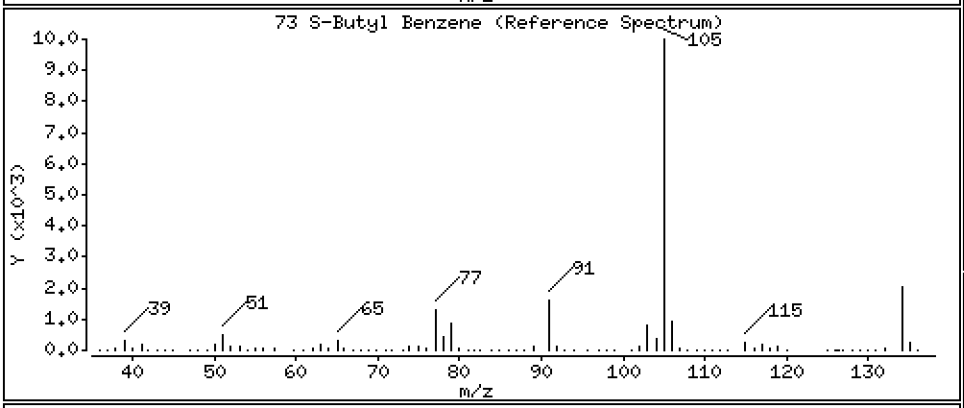
Column diameter: 0.18

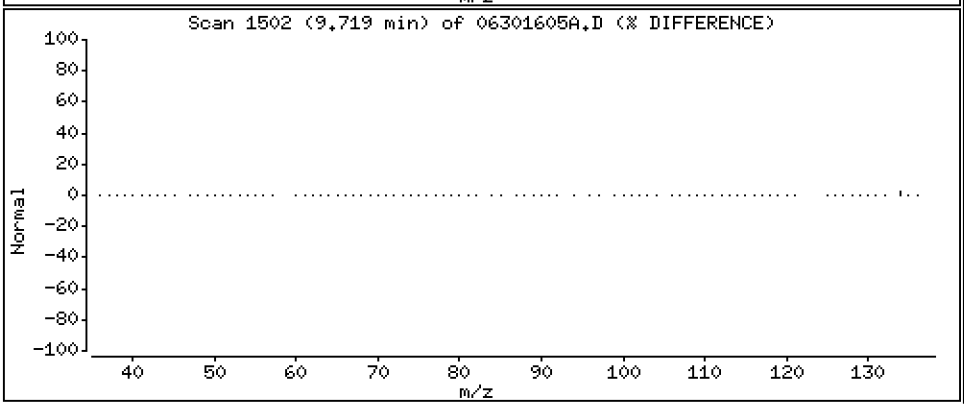
73 S-Butyl Benzene

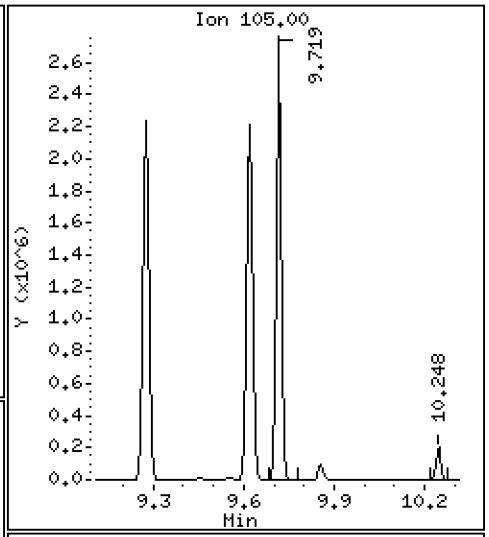
Concentration: 44.626 ug/Kg

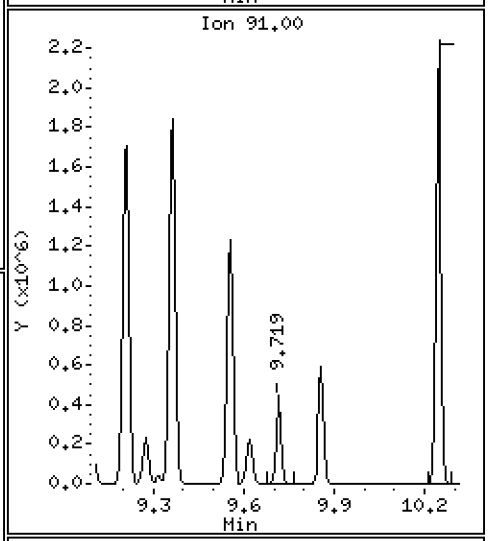


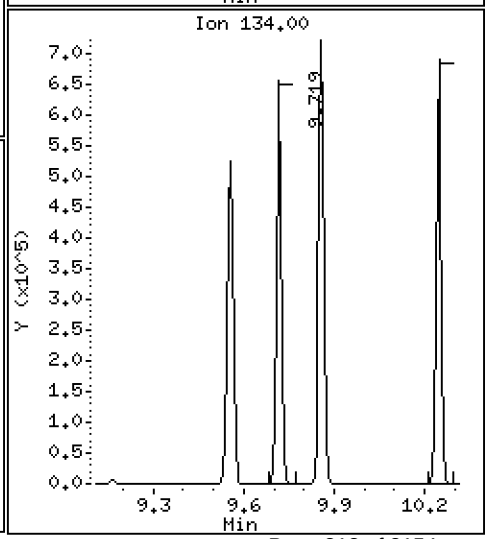












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

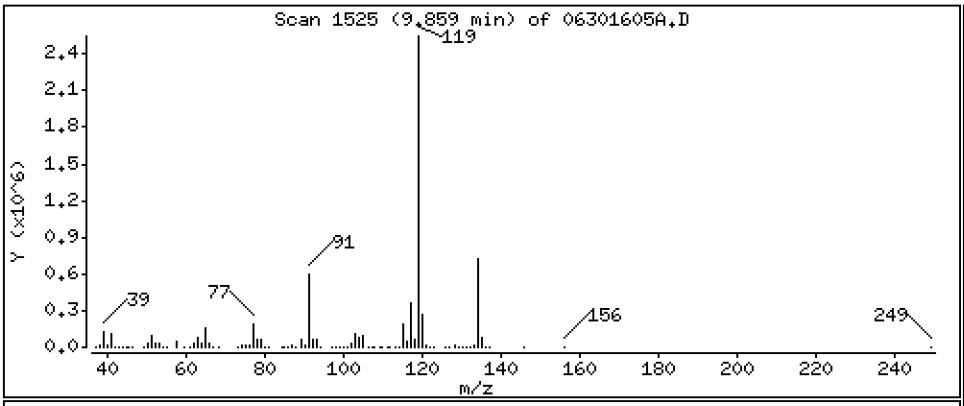
Operator: PB

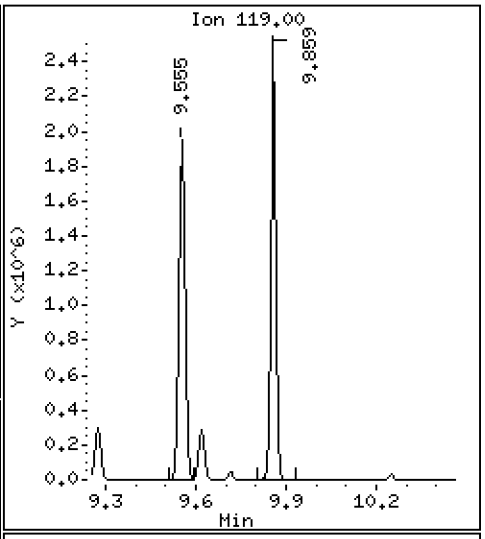
Column phase: RTXVMS

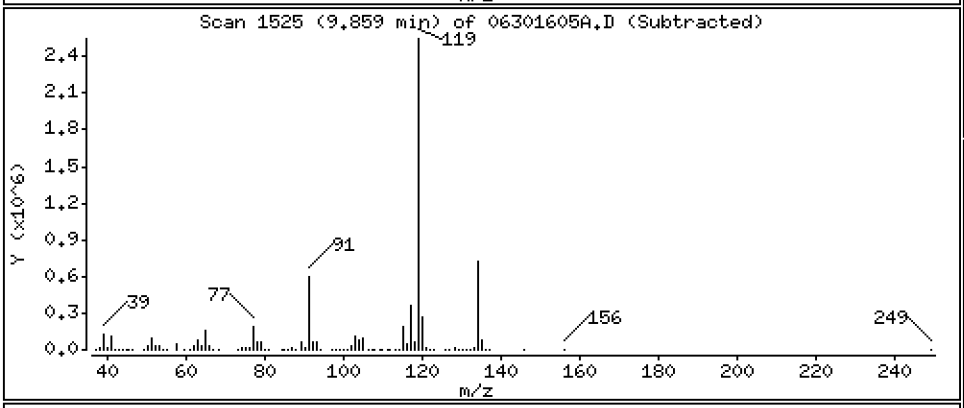
Column diameter: 0.18

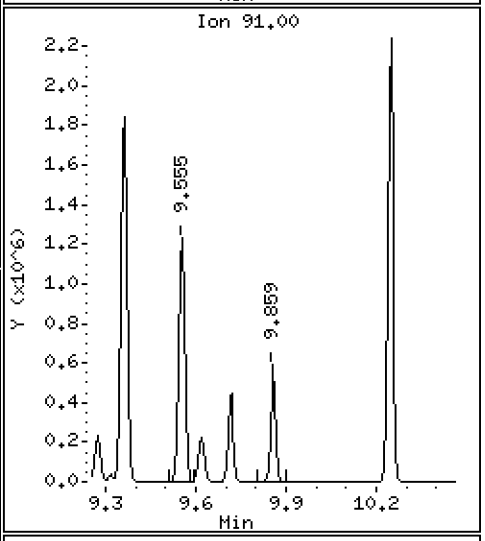
74 4-Isopropyl Toluene

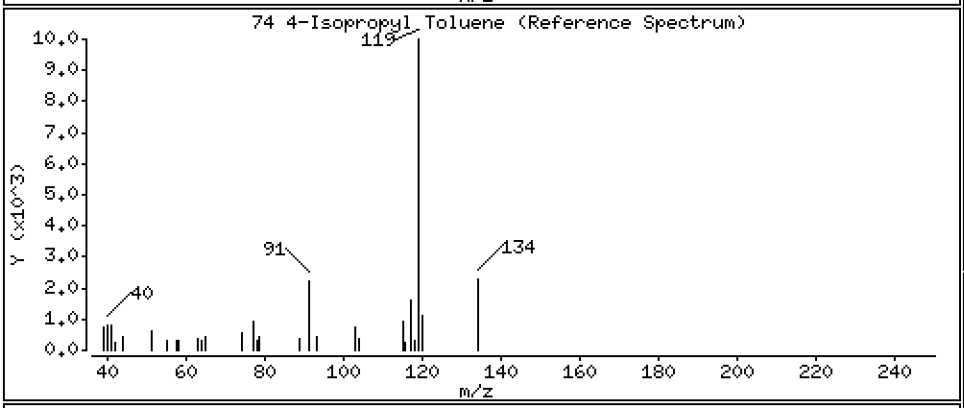
Concentration: 47.225 ug/Kg

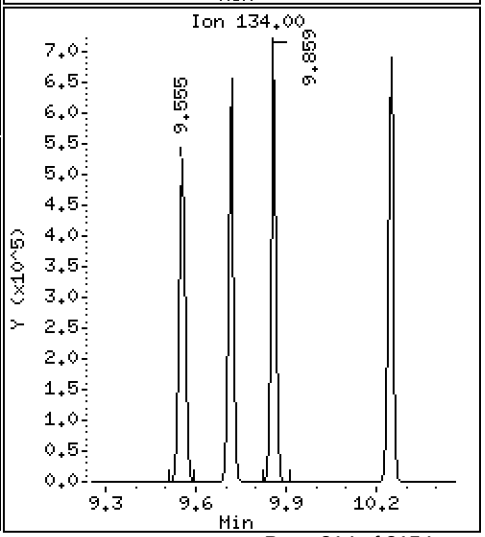


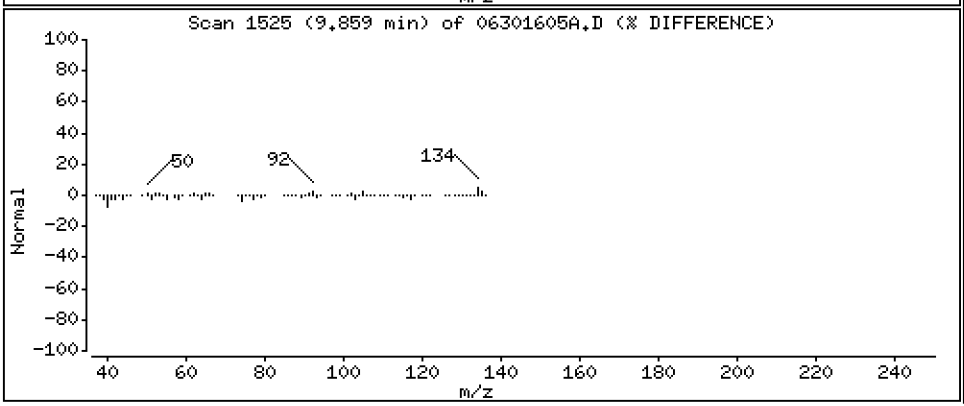












Date : 30-JUN-2016 13:09

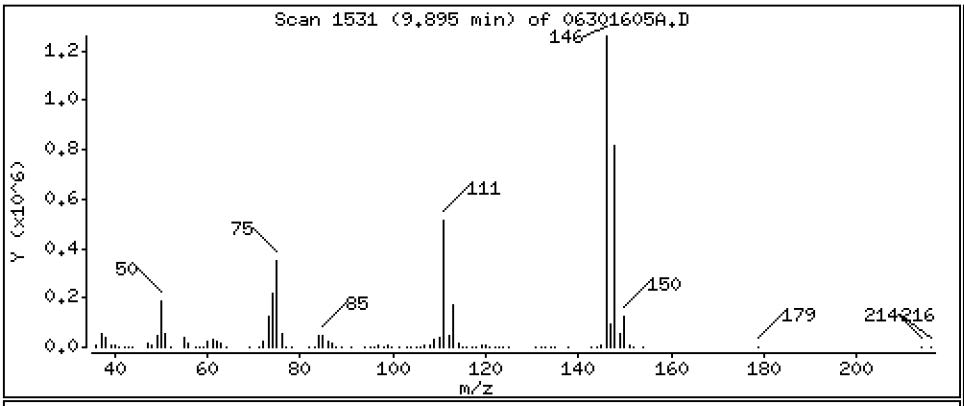
Client ID: LCS0630 Instrument: nt5.i

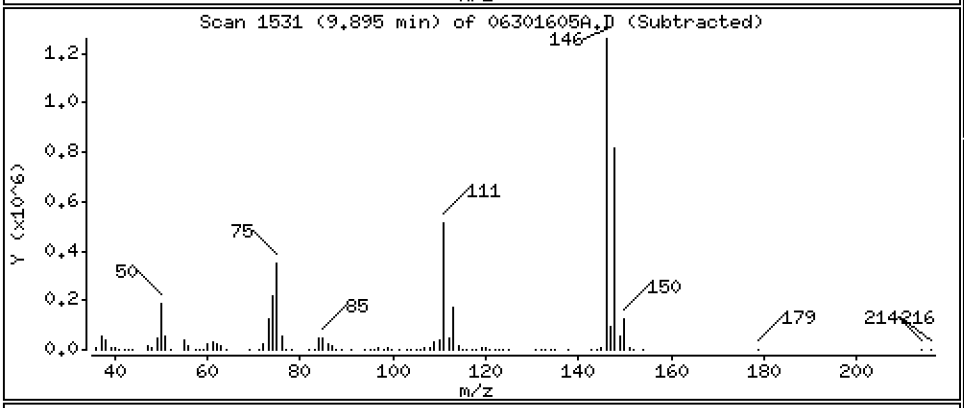
Sample Info: LCS0630,5,5,0

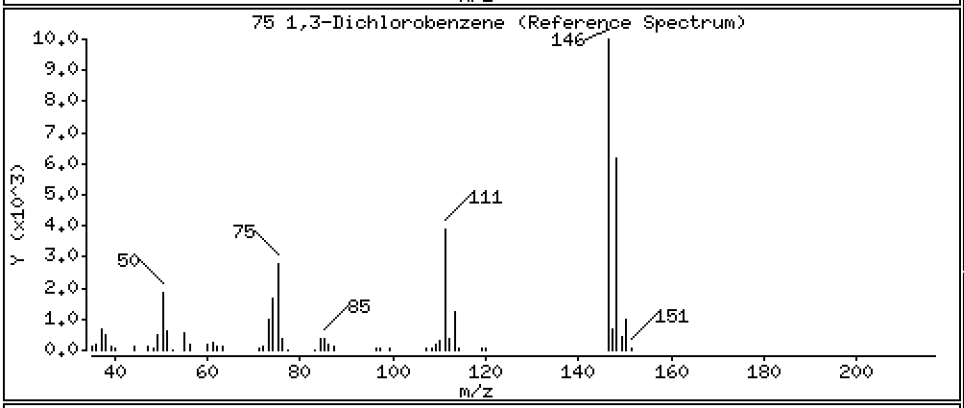
Operator: PB

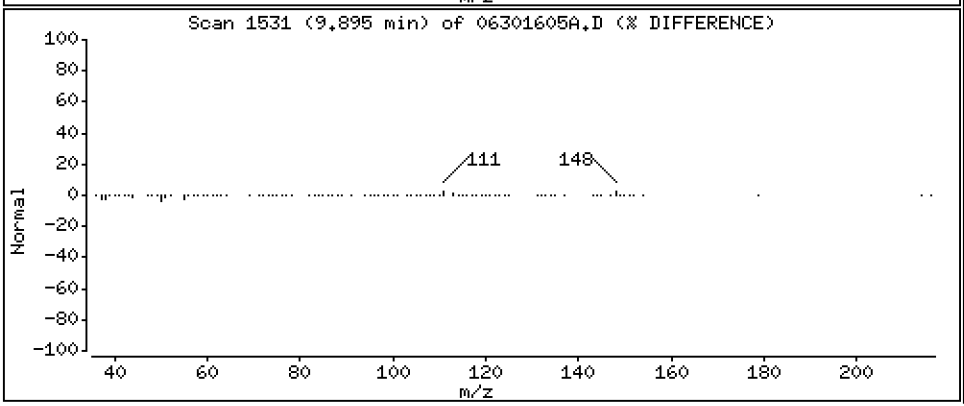
Column phase: RTXVMS Column diameter: 0.18

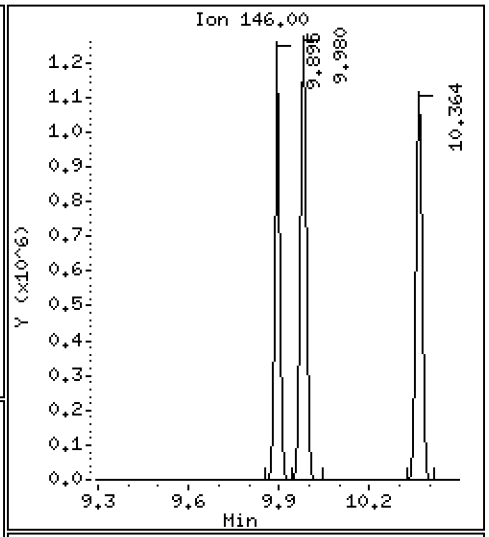
75 1,3-Dichlorobenzene Concentration: 48.382 ug/Kg

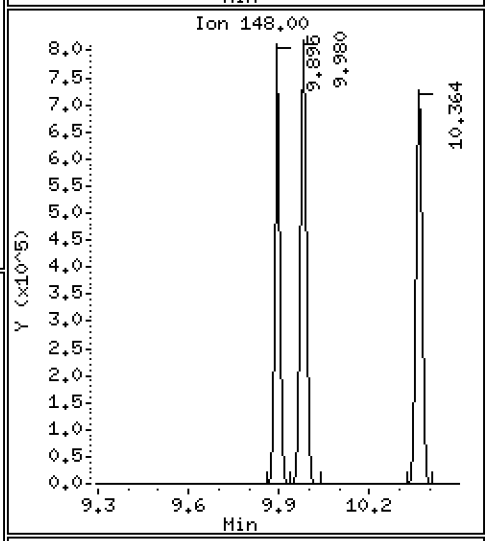


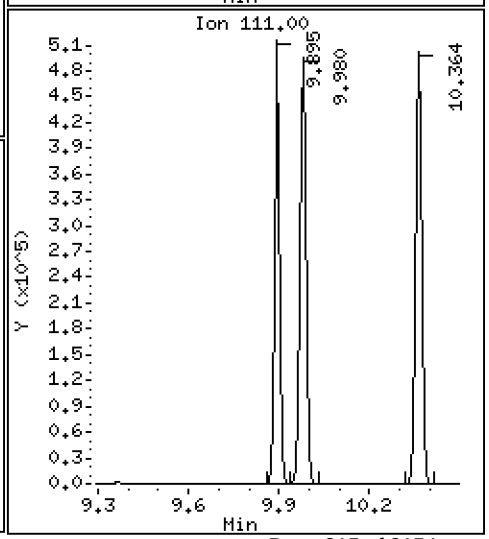












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

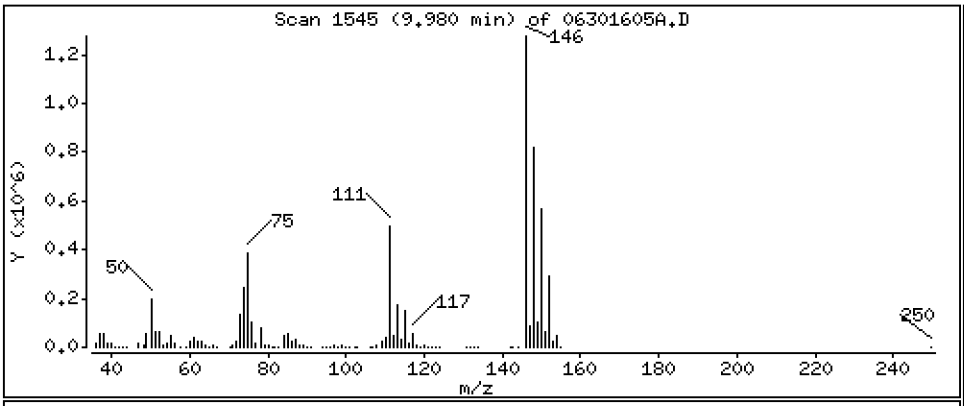
Operator: PB

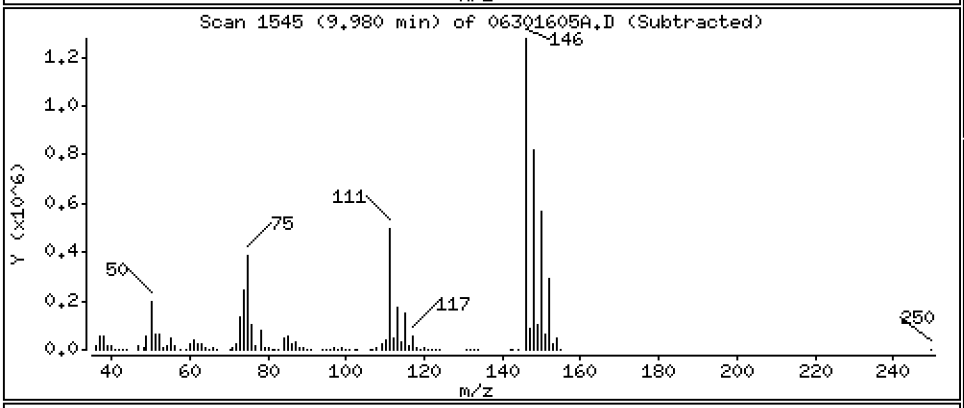
Column phase: RTXVMS

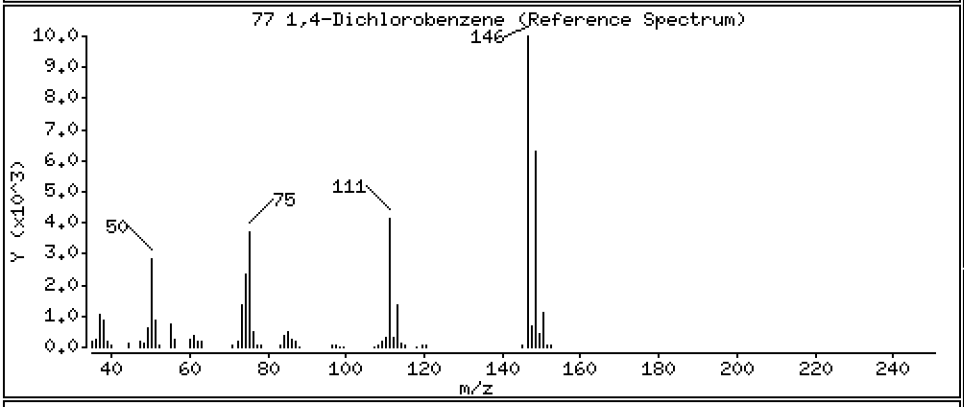
Column diameter: 0.18

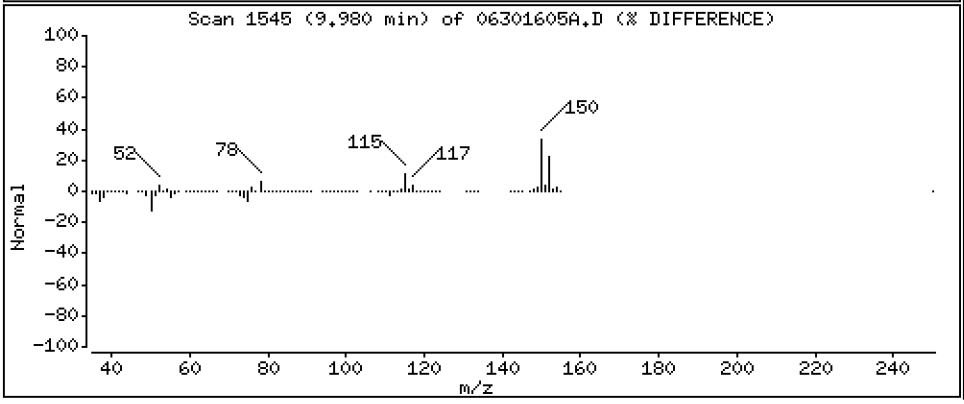
77 1,4-Dichlorobenzene

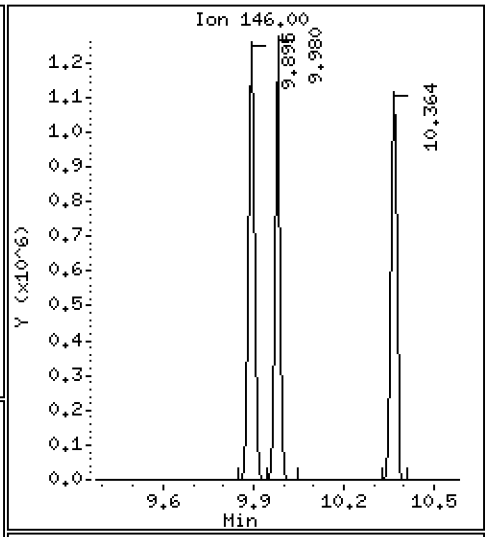
Concentration: 47.953 ug/Kg

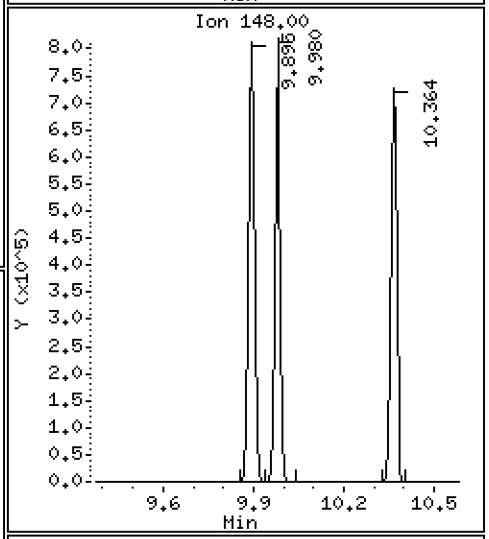


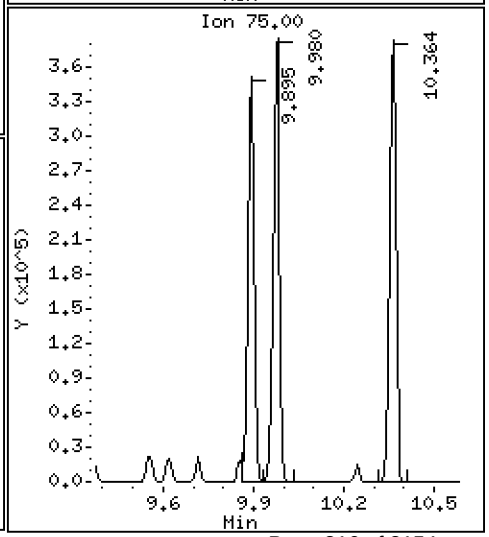












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

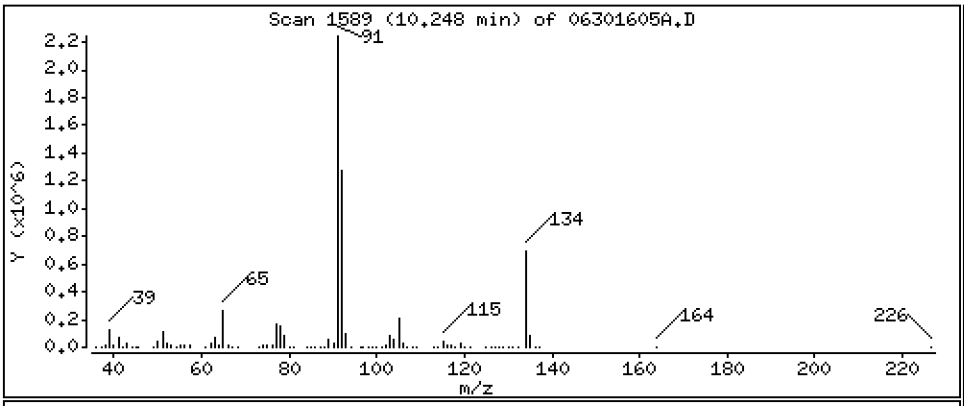
Operator: PB

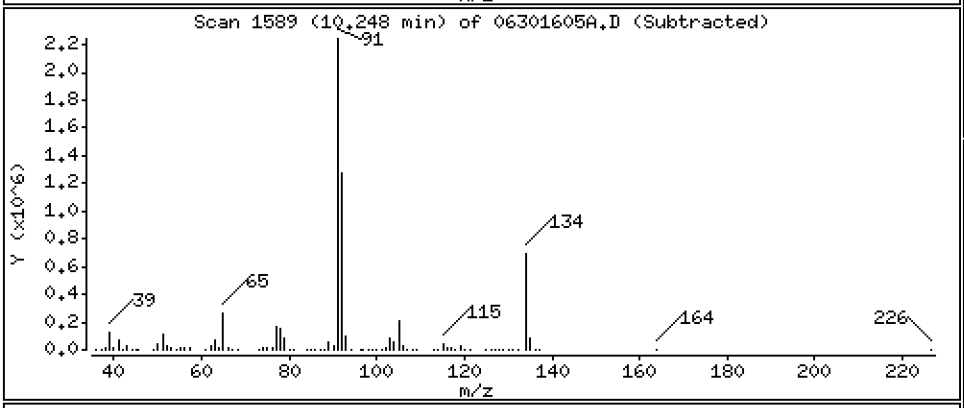
Column phase: RTXVMS

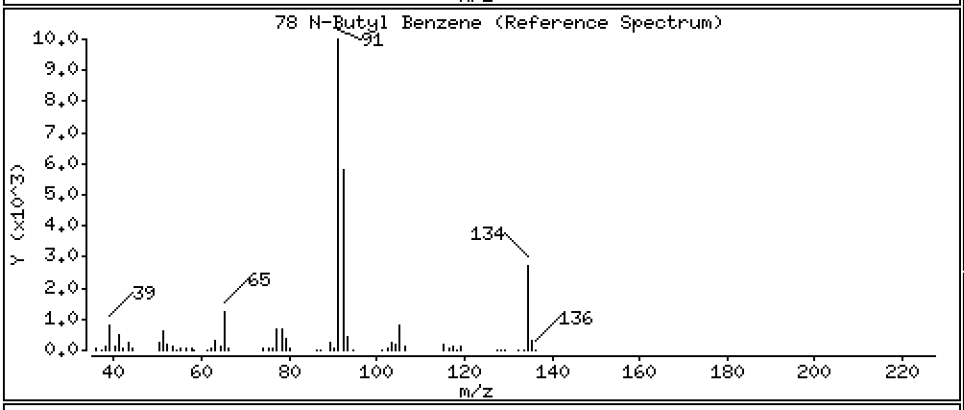
Column diameter: 0.18

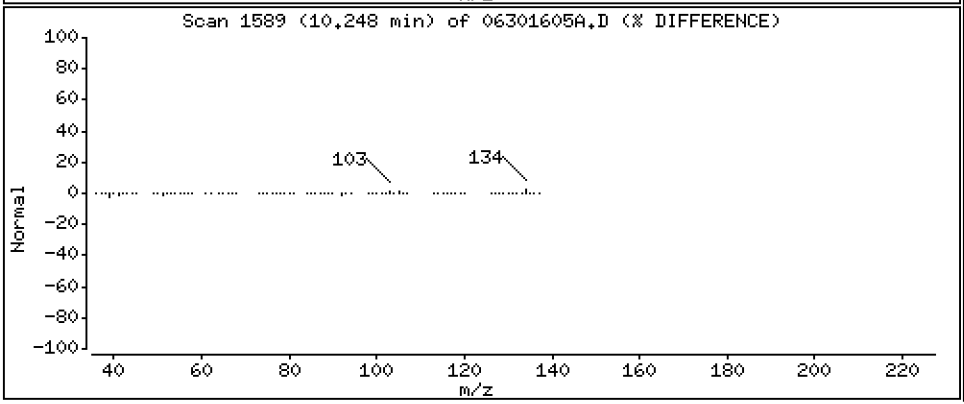
78 N-Butyl Benzene

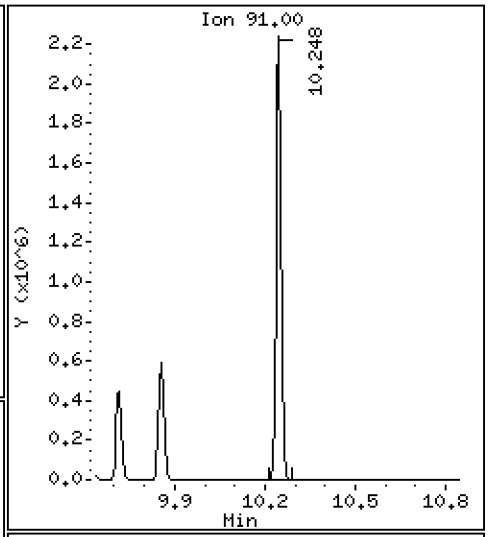
Concentration: 46.622 ug/Kg

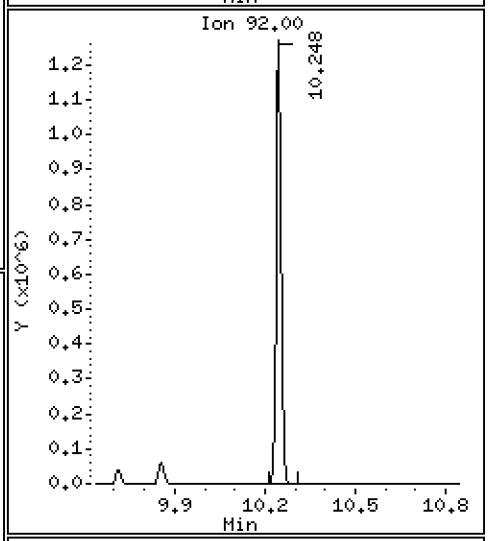


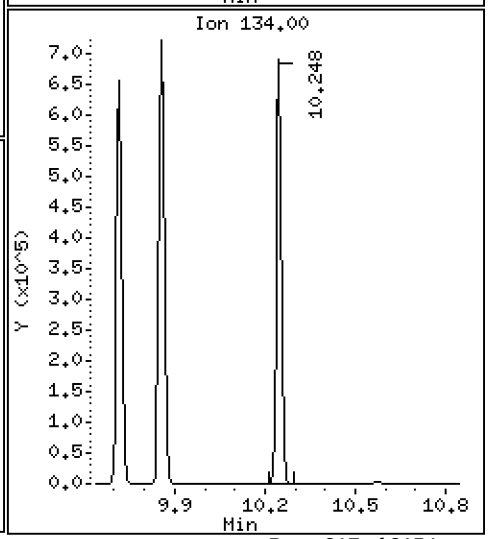












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

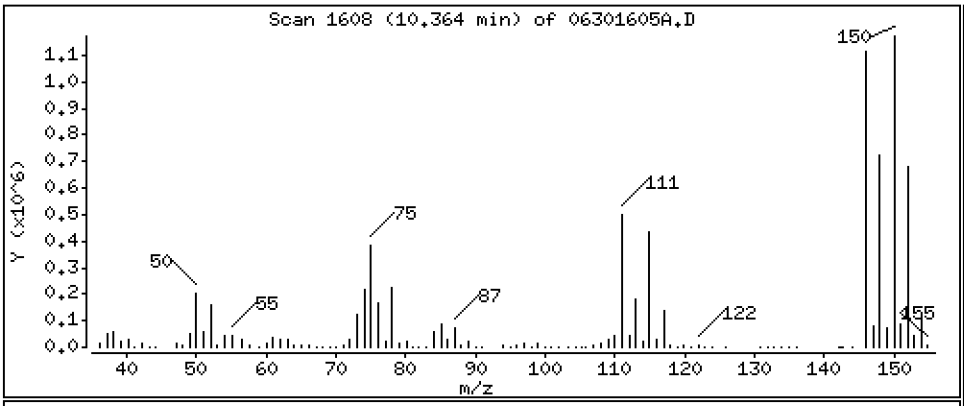
Operator: PB

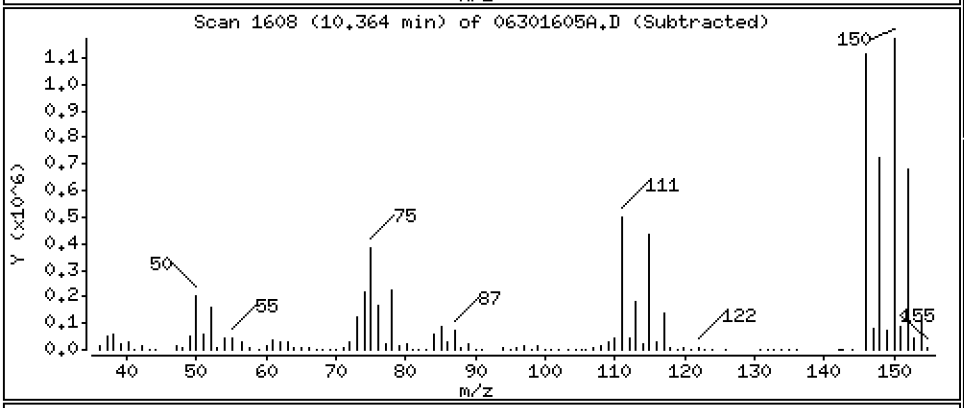
Column phase: RTXVMS

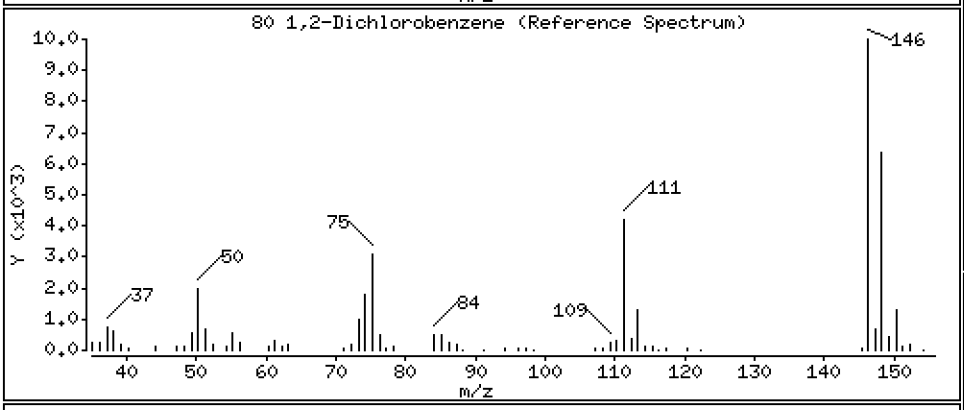
Column diameter: 0.18

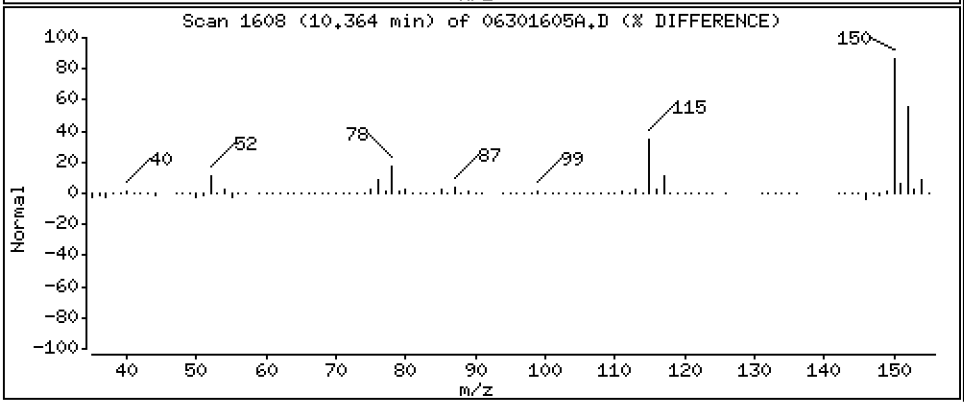
80 1,2-Dichlorobenzene

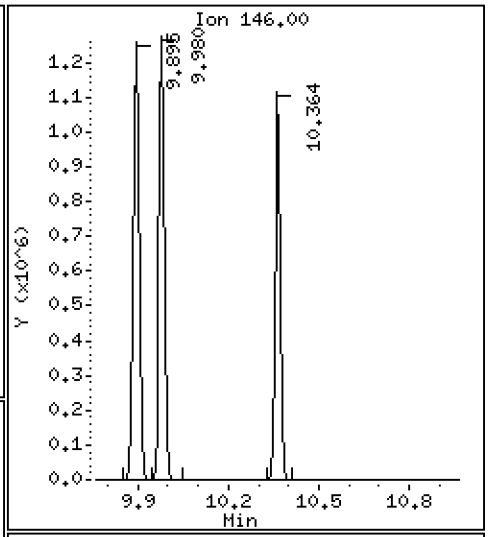
Concentration: 46.853 ug/Kg

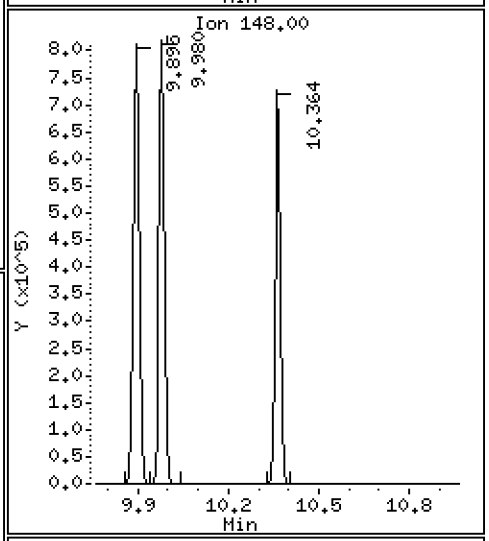


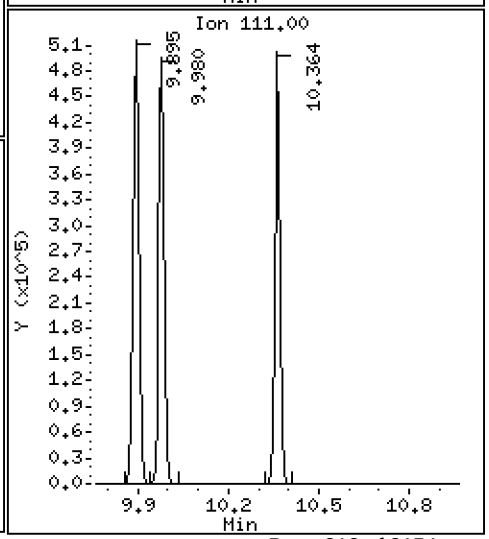












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

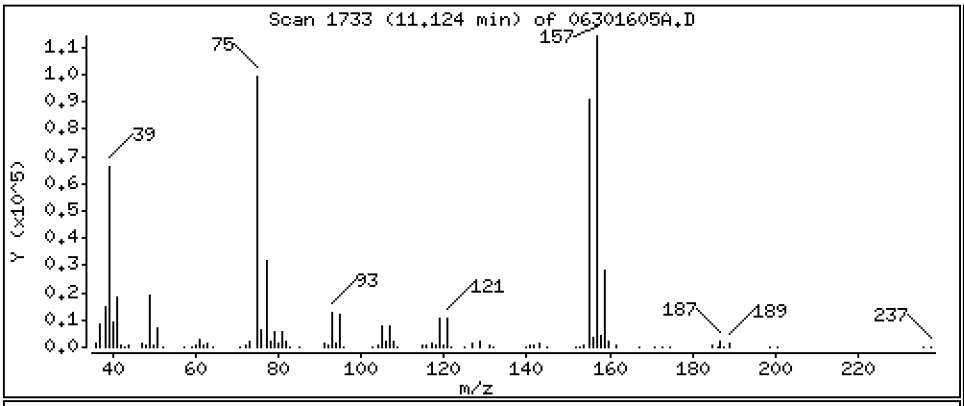
Operator: PB

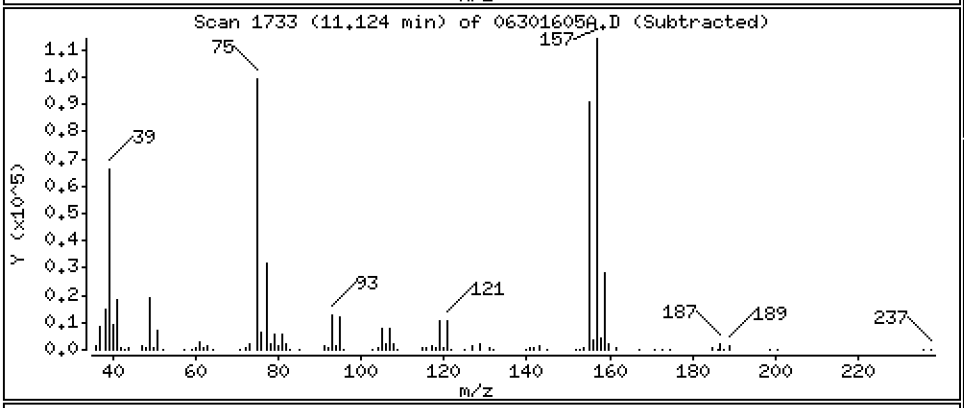
Column phase: RTXVMS

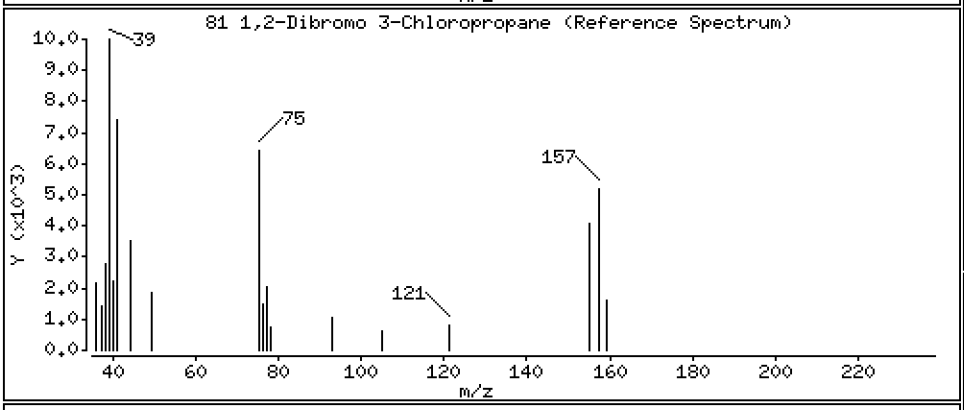
Column diameter: 0.18

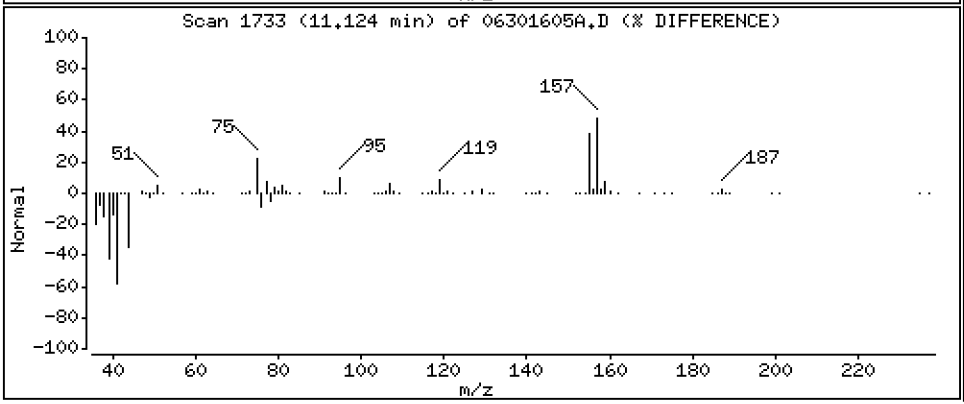
81 1,2-Dibromo 3-Chloropropane

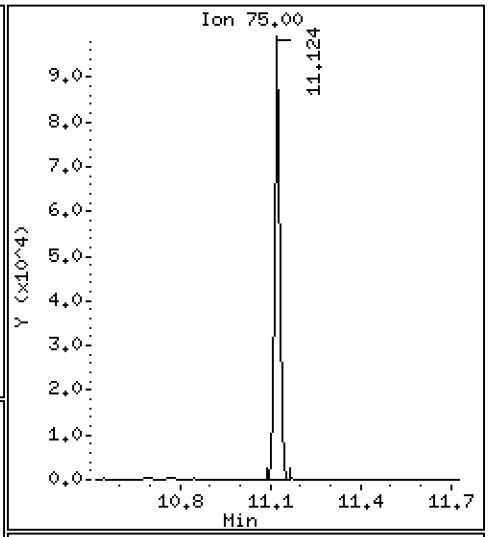
Concentration: 41.618 ug/Kg

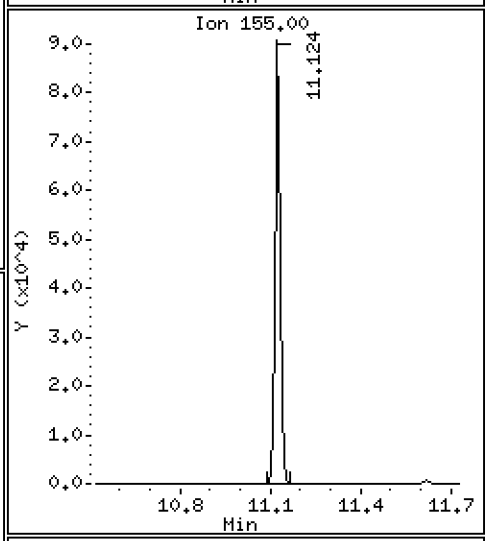


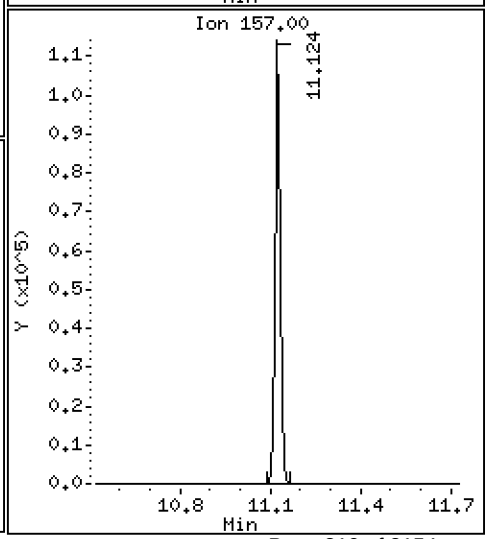












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

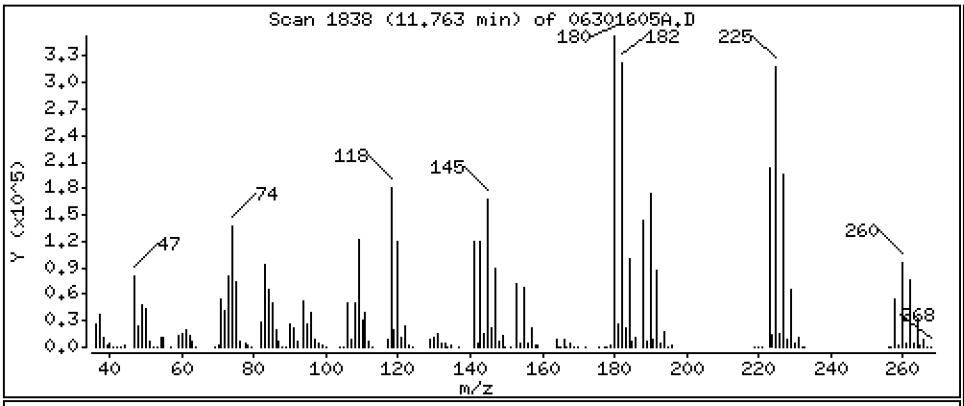
Operator: PB

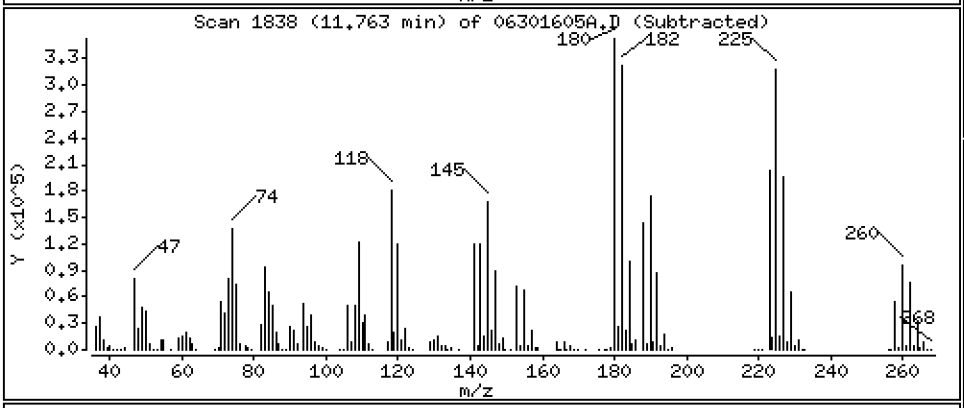
Column phase: RTXVMS

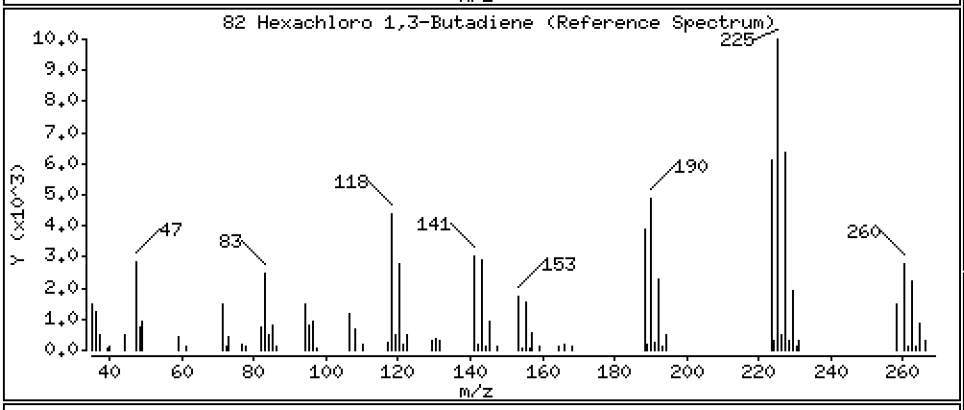
Column diameter: 0.18

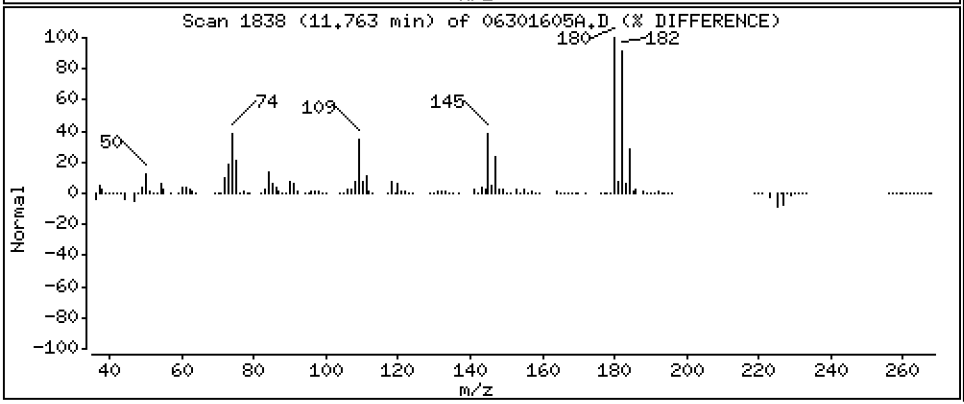
82 Hexachloro 1,3-Butadiene

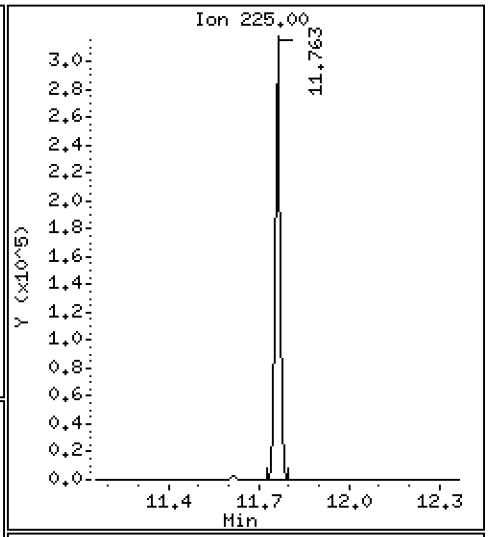
Concentration: 49.315 ug/Kg

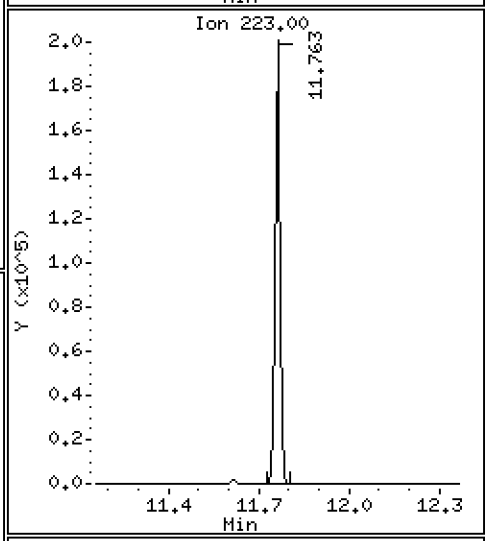


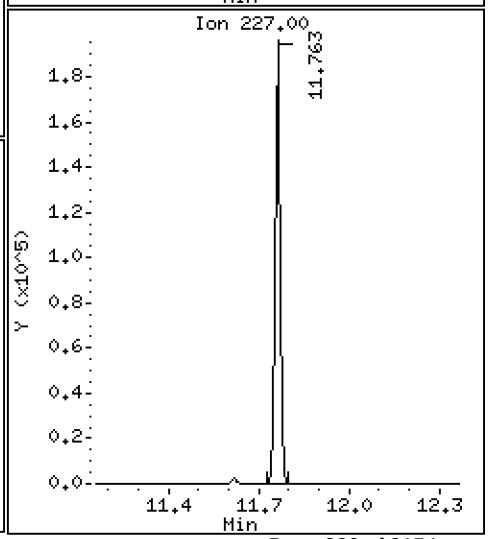












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

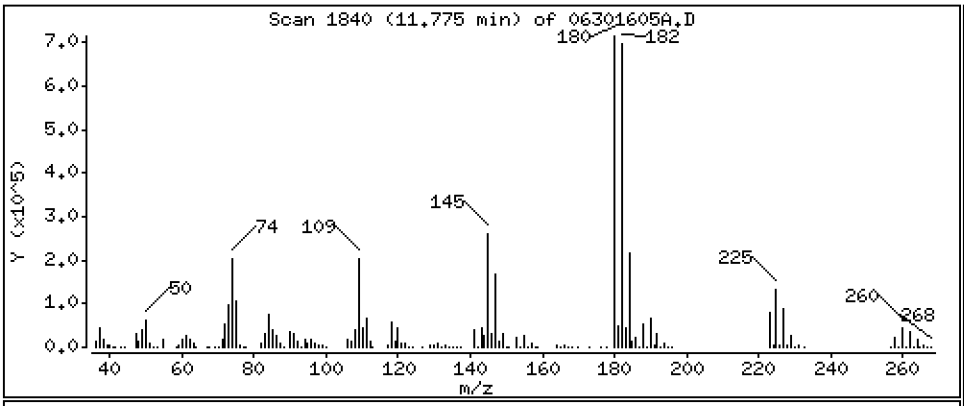
Operator: PB

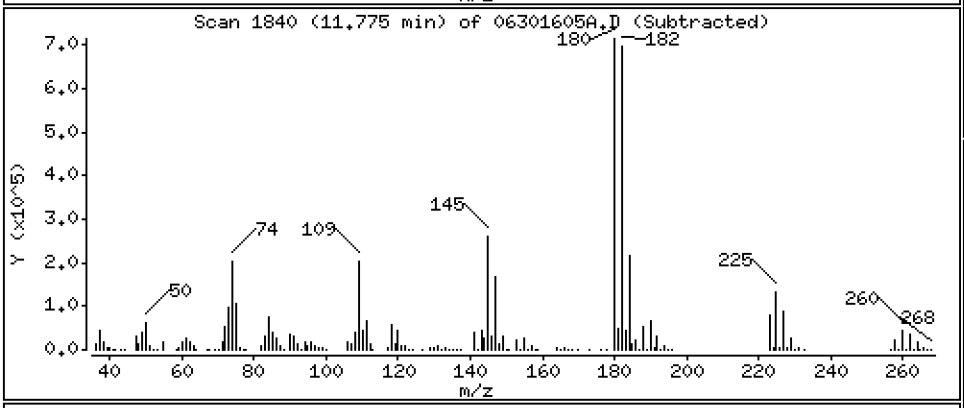
Column phase: RTXVMS

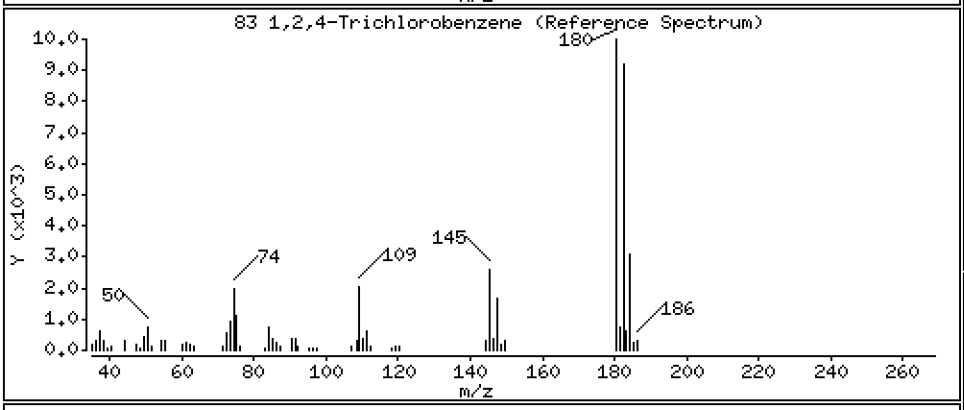
Column diameter: 0.18

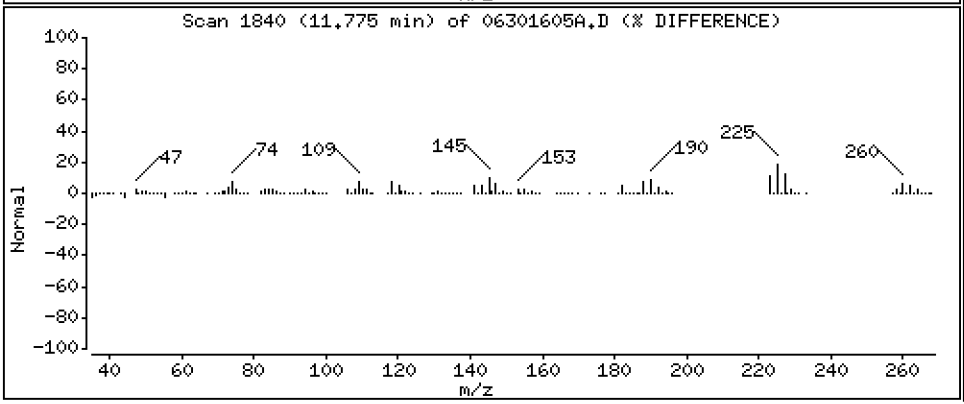
83 1,2,4-Trichlorobenzene

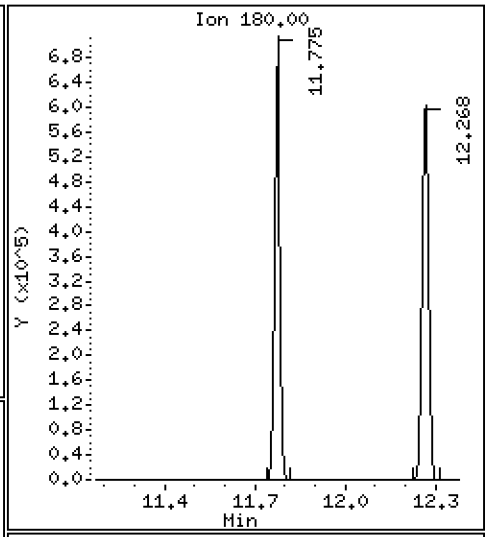
Concentration: 52.254 ug/Kg

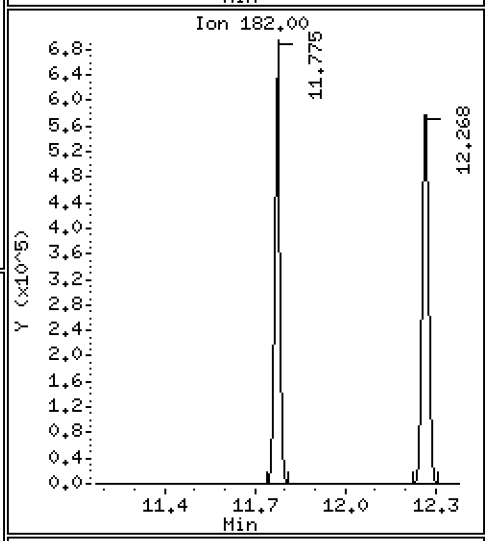


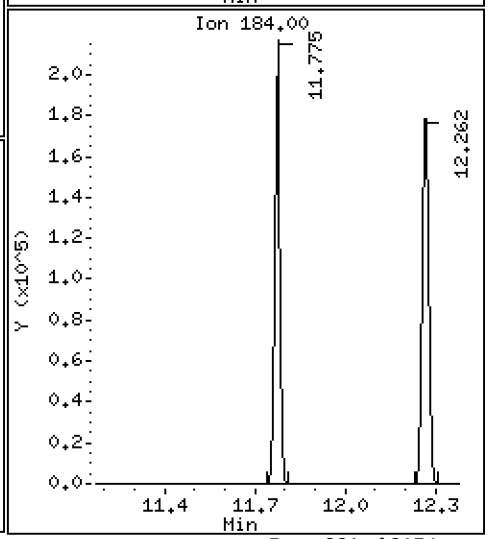












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Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

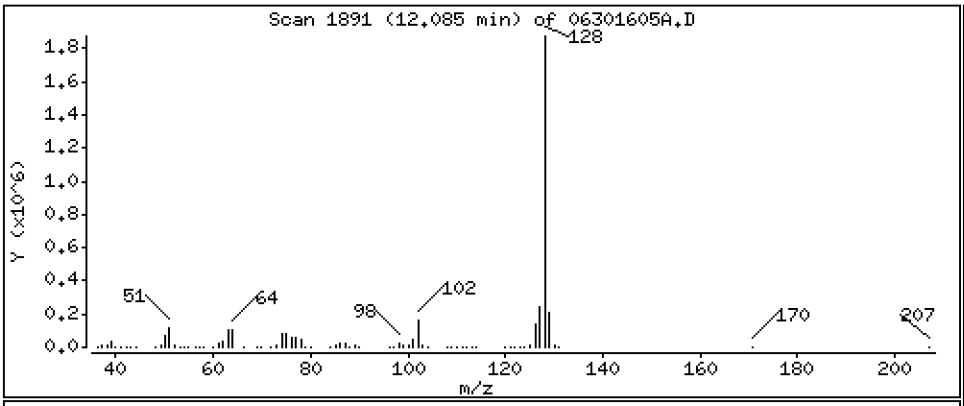
Operator: PB

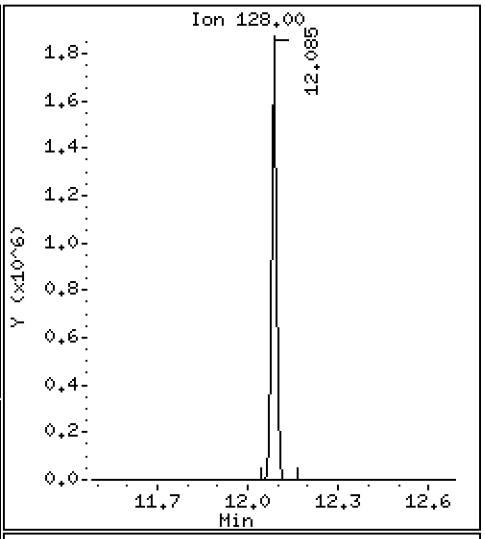
Column phase: RTXVMS

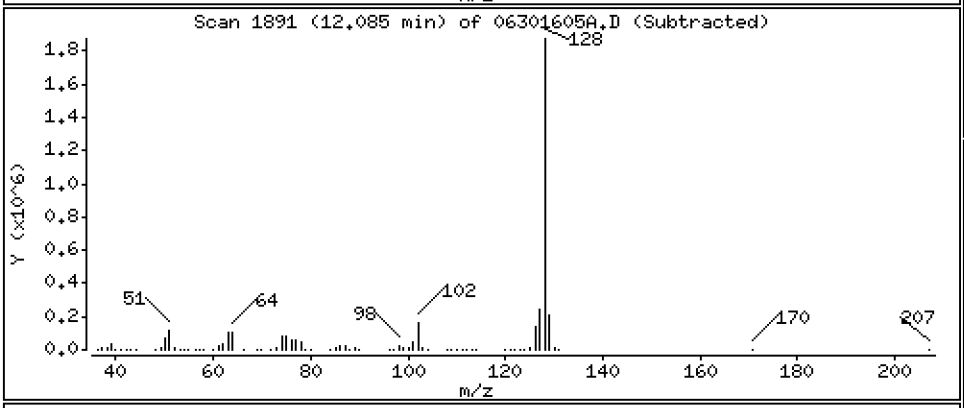
Column diameter: 0.18

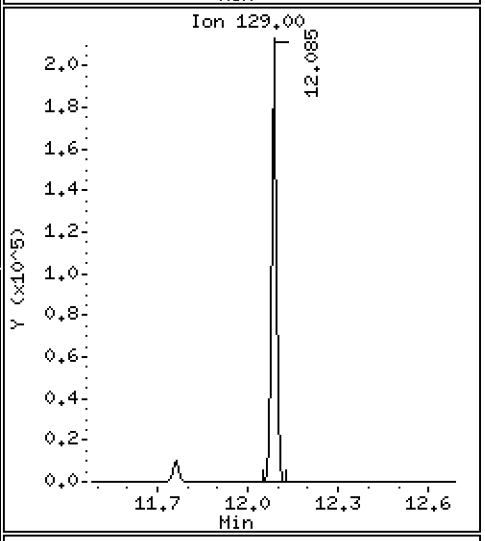
84 Naphthalene

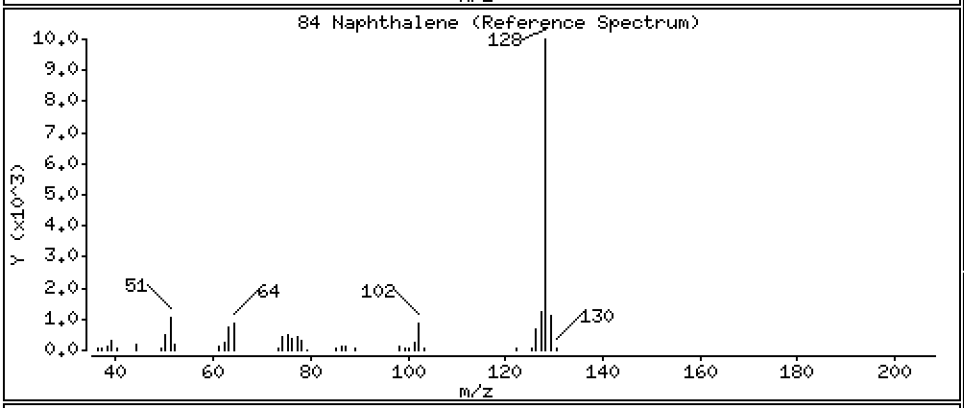
Concentration: 46.543 ug/Kg

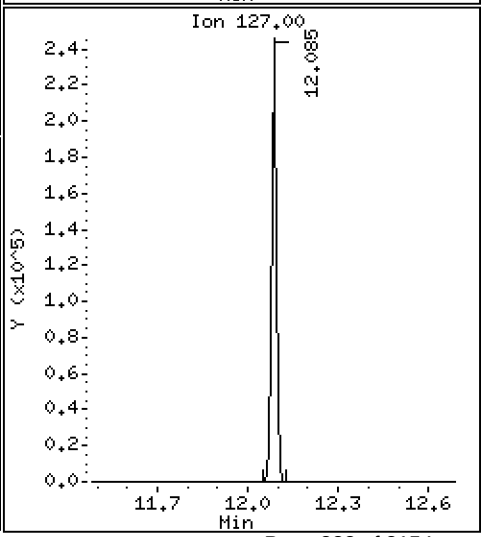


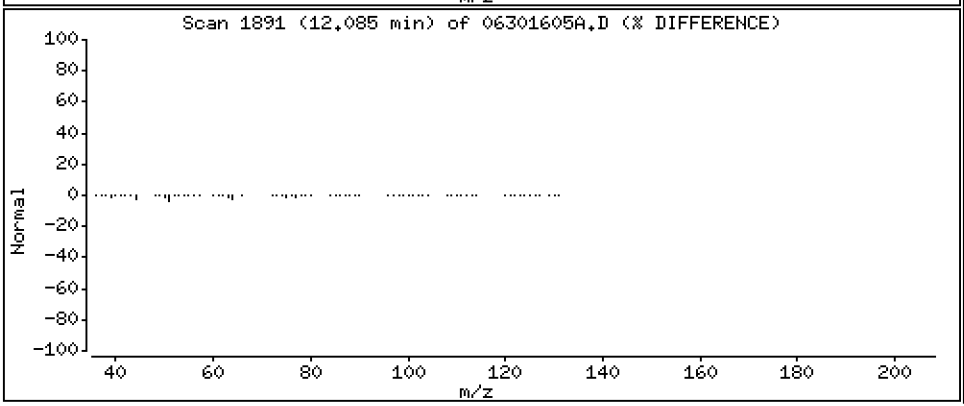












Data File: \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

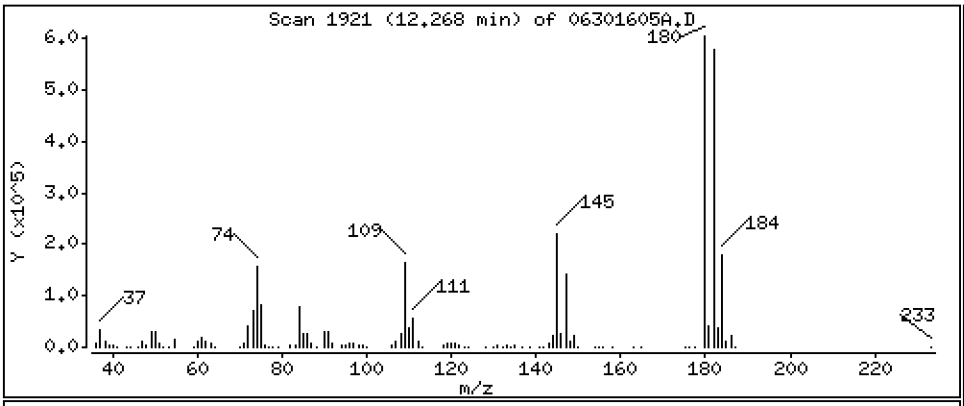
Operator: PB

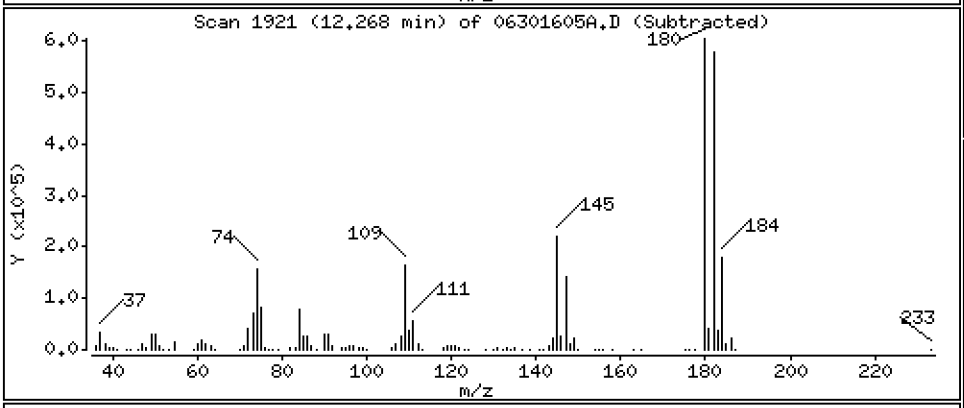
Column phase: RTXVMS

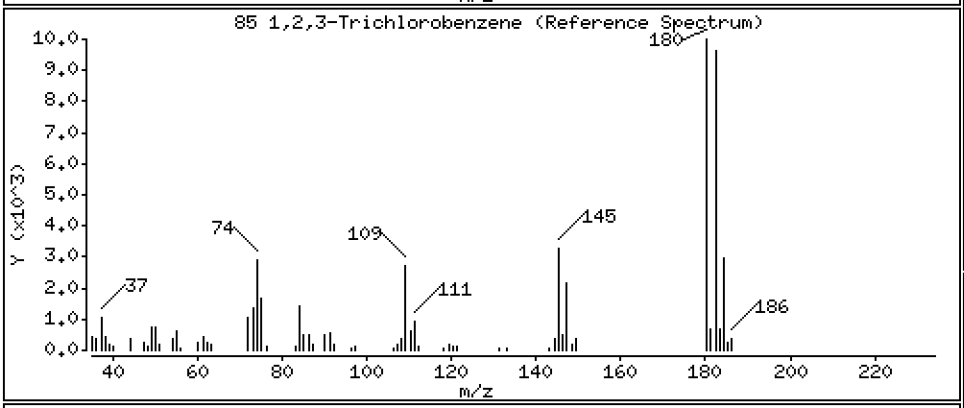
Column diameter: 0.18

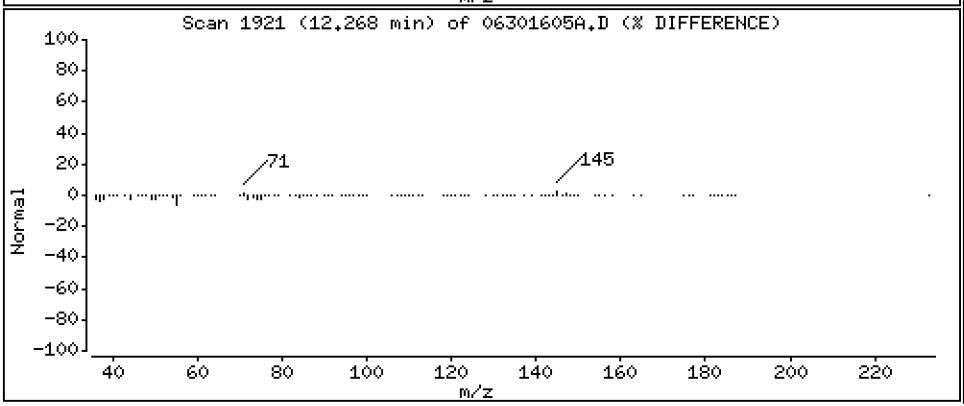
85 1,2,3-Trichlorobenzene

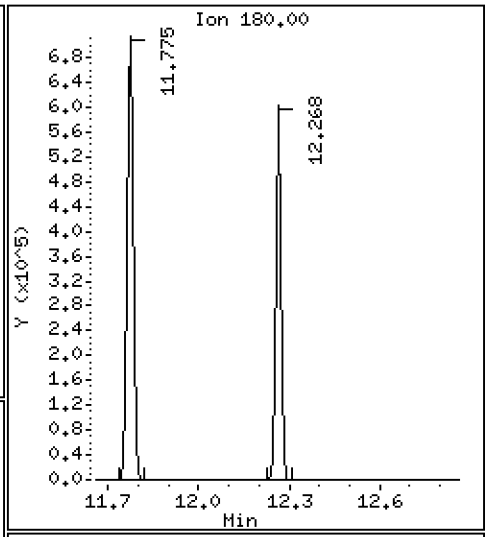
Concentration: 50.056 ug/Kg

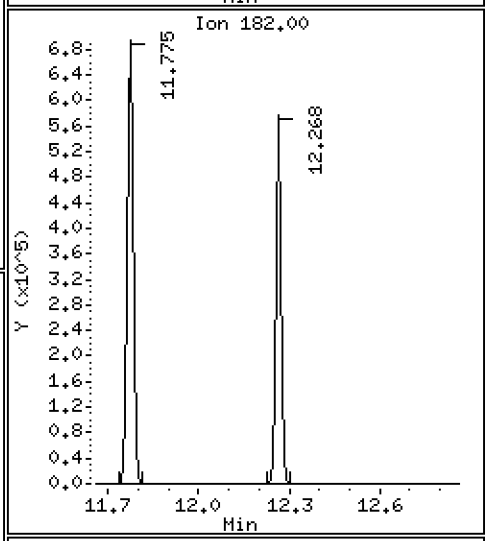


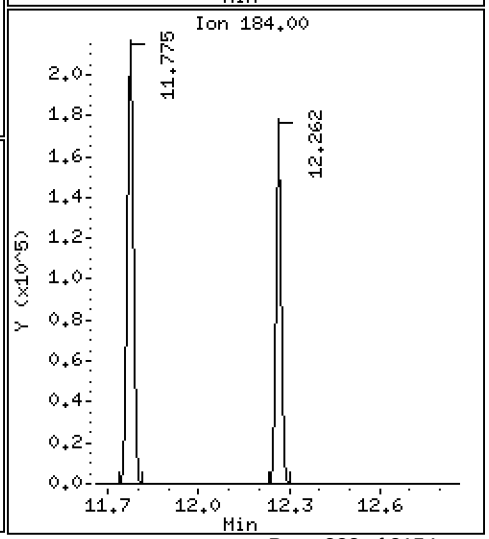












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\H2O\06301605A.D
Lab Smp Id: BEG0005-BSD1 Client Smp ID: LCS0630
Inj Date : 30-JUN-2016 13:09
Operator : PB Inst ID: nt5.i
Smp Info : LCS0630,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\H2O\VO051314S.m
Meth Date : 01-Jul-2016 15:49 patrickb Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.153	1.146	(0.233)	835451	40.3998	40.400
2	Chloromethane	50	1.286	1.280	(0.260)	787306	32.3364	32.336(R)
3	Vinyl Chloride	62	1.347	1.341	(0.272)	849687	40.2461	40.246
4	Bromomethane	94	1.585	1.578	(0.320)	402813	27.1117	27.112
5	Chloroethane	64	1.676	1.670	(0.338)	418609	40.0630	40.063
6	Trichlorofluoromethane	101	1.773	1.767	(0.358)	730004	60.2176	60.218
7	1,1-Dichloroethene	96	2.199	2.193	(0.444)	632434	45.0684	45.068
8	Carbon Disulfide	76	2.205	2.199	(0.445)	1971423	43.6982	43.698
9	112Trichloro122Trifluoroethane	101	2.248	2.235	(0.454)	634340	46.0660	46.066
10	Iodomethane	142	2.315	2.302	(0.467)	273700	31.1268	31.127
11	Bromoethane	108	2.430	2.418	(0.491)	383573	47.7548	47.755
12	Acrolein	56	2.528	2.515	(0.510)	533541	194.631	194.63
13	Methylene Chloride	84	2.740	2.728	(0.553)	625144	44.4124	44.412
14	Acetone	43	2.832	2.825	(0.572)	788546	173.084	173.08
15	Trans-1,2-Dichloroethene	96	2.893	2.880	(0.584)	696421	44.6761	44.676
16	Methyl tert butyl ether	73	3.063	3.051	(0.618)	1939903	41.8681	41.868
17	1,1-Dichloroethane	63	3.525	3.513	(0.711)	1252561	40.9317	40.932
18	Acrylonitrile	53	3.617	3.604	(0.730)	205049	37.6271	37.627
19	Vinyl Acetate	43	3.836	3.829	(0.774)	1338856	36.8785	36.878
20	Cis-1,2-Dichloroethene	96	4.055	4.042	(0.818)	794667	43.1882	43.188
22	2,2-Dichloropropane	77	4.146	4.140	(0.837)	1146761	43.7253	43.725

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
	23 Bromochloromethane	128	4.237	4.231	(0.855)	352725	43.8851	43.885
	24 Chloroform	83	4.328	4.322	(0.874)	1212070	42.6096	42.610
	25 Carbon Tetrachloride	117	4.413	4.401	(0.817)	1035262	47.9373	47.937
$	27 Dibromofluoromethane	111	4.493	4.486	(0.907)	816448	47.0218	47.022
	26 1,1,1-Trichloroethane	97	4.486	4.474	(0.905)	1136344	42.9950	42.995
	28 1,1-Dichloropropene	75	4.602	4.590	(0.852)	996490	44.3558	44.356
	29 2-Butanone	72	4.651	4.638	(0.939)	360840	186.984	186.98
	30 Benzene	78	4.827	4.815	(0.894)	2836558	44.6048	44.605
*	31 Pentafluorobenzene	168	4.955	4.943	(1.000)	728496	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.000)	752117	43.3310	43.331
	33 1,2-Dichloroethane	62	5.016	5.009	(0.929)	872693	41.5423	41.542
	34 Trichloroethene	95	5.350	5.338	(0.991)	757651	45.9765	45.977
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2354732	50.0000	
	37 Dibromomethane	93	5.709	5.703	(1.057)	391038	44.4749	44.475
	38 1,2-Dichloropropane	63	5.801	5.788	(1.074)	699517	42.5678	42.568
	39 Bromodichloromethane	83	5.867	5.861	(1.087)	924890	46.6186	46.619
	172 2-Pentanone	86	6.166	6.159	(1.142)	472926	201.659	201.66
	40 2-Chloroethyl Vinyl Ether	63	6.385	6.384	(1.183)	349282	50.4857	50.486
	41 Cis 1,3-dichloropropene	75	6.409	6.403	(1.187)	1170259	45.3961	45.396
$	42 d8-Toluene	98	6.561	6.555	(1.215)	2921809	48.4268	48.427
	43 Toluene	92	6.604	6.597	(1.223)	1837745	44.9193	44.919
	44 Tetrachloroethene	166	6.920	6.914	(0.879)	753272	49.5741	49.574
	45 4-Methyl-2-Pentanone	58	6.962	6.956	(1.290)	1194335	193.997	194.00
	46 Trans 1,3-Dichloropropene	75	6.975	6.968	(1.292)	1033732	46.0701	46.070
	47 1,1,2-Trichloroethane	97	7.102	7.102	(1.315)	581119	45.2277	45.228
	48 Chlorodibromomethane	129	7.242	7.242	(0.920)	723496	49.4538	49.454
	49 1,3-Dichloropropane	76	7.327	7.327	(0.930)	1032047	44.1352	44.135
	50 1,2-Dibromoethane	107	7.431	7.425	(1.376)	594920	46.0458	46.046
	51 2-Hexanone	43	7.674	7.674	(0.975)	2024528	184.535	184.53
*	52 d5-Chlorobenzene	117	7.875	7.875	(1.000)	2450991	50.0000	
	53 Chlorobenzene	112	7.893	7.887	(1.002)	2078290	46.9666	46.967
	54 Ethyl Benzene	91	7.930	7.930	(1.007)	3474369	46.4446	46.445
	55 1,1,1,2-Tetrachloroethane	131	7.960	7.954	(1.011)	759942	48.5043	48.504
	56 m,p-xylene	106	8.064	8.063	(1.024)	2757364	94.9458	94.946
	57 o-Xylene	106	8.435	8.428	(1.071)	1340530	46.7317	46.732
	58 Styrene	104	8.483	8.477	(1.077)	2247178	47.4344	47.434
	59 Bromoform	173	8.489	8.483	(0.852)	416542	46.4551	46.455
	60 Isopropyl Benzene	105	8.715	8.714	(0.874)	3523244	46.3815	46.381
$	62 4-Bromofluorobenzene	95	8.952	8.952	(1.137)	1279466	48.5408	48.541
	63 Bromobenzene	156	9.037	9.031	(0.907)	839248	47.6734	47.673
	64 N-Propyl Benzene	91	9.086	9.085	(0.912)	4062002	44.4716	44.472
	65 1,1,2,2-Tetrachloroethane	83	9.159	9.158	(0.919)	738237	41.2116	41.212
	66 2-Chloro Toluene	91	9.213	9.207	(0.924)	2394331	44.8719	44.872
	67 1,3,5-Trimethyl Benzene	105	9.274	9.274	(0.930)	2960685	46.4559	46.456
	68 1,2,3-Trichloropropane	110	9.268	9.268	(0.930)	231983	43.8230	43.823
	69 Trans-1,4-Dichloro 2-Butene	53	9.317	9.317	(0.935)	188206	39.3664	39.366
	70 4-Chloro Toluene	91	9.365	9.359	(0.940)	2510705	45.4311	45.431
	71 T-Butyl Benzene	119	9.554	9.554	(0.958)	2663804	45.9094	45.909
	72 1,2,4-Trimethylbenzene	105	9.621	9.621	(0.965)	2949662	46.2006	46.201
	73 S-Butyl Benzene	105	9.718	9.712	(0.975)	3812139	44.6263	44.626
	74 4-Isopropyl Toluene	119	9.858	9.858	(0.989)	3351780	47.2253	47.225
	75 1,3-Dichlorobenzene	146	9.895	9.895	(0.993)	1669972	48.3821	48.382
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1272558	50.0000	
	77 1,4-Dichlorobenzene	146	9.980	9.980	(1.001)	1674238	47.9534	47.953

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	10.248	10.241	(1.028)	2929402	46.6222	46.622
$	79 d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1251665	48.8454	48.845
	80 1,2-Dichlorobenzene	146	10.363	10.363	(1.040)	1530458	46.8531	46.853
	81 1,2-Dibromo 3-Chloropropane	75	11.124	11.123	(1.116)	140633	41.6177	41.618
	82 Hexachloro 1,3-Butadiene	225	11.762	11.762	(1.180)	430835	49.3154	49.315
	83 1,2,4-Trichlorobenzene	180	11.775	11.774	(1.181)	975743	52.2537	52.254
	84 Naphthalene	128	12.085	12.085	(1.212)	2550008	46.5432	46.543
	85 1,2,3-Trichlorobenzene	180	12.267	12.261	(1.231)	876747	50.0557	50.056

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301605A.D
Lab Smp Id: BEG0005-BSD1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\H2O\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Client Smp ID: LCS0630
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	728496	21.42
35 1,4-Difluorobenze	2041239	1020620	4082478	2354732	15.36
52 d5-Chlorobenzene	2118314	1059157	4236628	2450991	15.70
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1272558	20.62

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.12
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEG0005-BSD1 Client Smp ID: LCS0630
Level: LOW Operator: PB
Data Type: MS DATA SampleType: LCSD
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\H2O\VO051314S.m
Misc Info: 1

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	40.400	80.80	67-142
2	Chloromethane	50.000	32.336	64.67*	65-129
3	Vinyl Chloride	50.000	40.246	80.49	74-134
4	Bromomethane	50.000	27.112	54.22	40-172
5	Chloroethane	50.000	40.063	80.13	53-154
6	Trichlorofluoromet	50.000	60.218	120.44	57-161
12	Acrolein	250.00	194.63	77.85	60-130
9	112Trichloro122Tri	50.000	46.066	92.13	72-142
14	Acetone	250.00	173.08	69.23	48-132
7	1,1-Dichloroethene	50.000	45.068	90.14	73-138
11	Bromoethane	50.000	47.755	95.51	74-132
10	Iodomethane	50.000	31.127	62.25	34-181
13	Methylene Chloride	50.000	44.412	88.82	61-128
8	Carbon Disulfide	50.000	43.698	87.40	72-146
18	Acrylonitrile	50.000	37.627	75.25	59-124
15	Trans-1,2-Dichloro	50.000	44.676	89.35	73-131
19	Vinyl Acetate	50.000	36.878	73.76	54-138
17	1,1-Dichloroethane	50.000	40.932	81.86	65-139
29	2-Butanone	250.00	186.98	74.79	64-120
22	2,2-Dichloropropan	50.000	43.725	87.45	77-137
20	Cis-1,2-Dichloroet	50.000	43.188	86.38	74-124
24	Chloroform	50.000	42.610	85.22	75-126
23	Bromochloromethane	50.000	43.885	87.77	69-133
26	1,1,1-Trichloroeth	50.000	42.995	85.99	78-133
28	1,1-Dichloropropen	50.000	44.356	88.71	80-123
25	Carbon Tetrachlori	50.000	47.937	95.87	76-136
33	1,2-Dichloroethane	50.000	41.542	83.08	77-120
30	Benzene	50.000	44.605	89.21	80-120
34	Trichloroethene	50.000	45.977	91.95	80-120
38	1,2-Dichloropropan	50.000	42.568	85.14	74-120
39	Bromodichlorometha	50.000	46.619	93.24	80-122
172	2-Pentanone	250.00	201.66	80.66	70-130
37	Dibromomethane	50.000	44.475	88.95	80-120
40	2-Chloroethyl Viny	50.000	50.486	100.97	20-157
45	4-Methyl-2-Pentano	250.00	194.00	77.60	70-124
41	Cis 1,3-dichloropr	50.000	45.396	90.79	80-124
43	Toluene	50.000	44.919	89.84	78-120
46	Trans 1,3-Dichloro	50.000	46.070	92.14	80-126
51	2-Hexanone	250.00	184.53	73.81	62-128
47	1,1,2-Trichloroeth	50.000	45.228	90.46	77-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
49 1,3-Dichloropropan	50.000	44.135	88.27	77-120
44 Tetrachloroethene	50.000	49.574	99.15	76-131
48 Chlorodibromometha	50.000	49.454	98.91	77-123
50 1,2-Dibromoethane	50.000	46.046	92.09	79-120
53 Chlorobenzene	50.000	46.967	93.93	80-120
55 1,1,1,2-Tetrachlor	50.000	48.504	97.01	80-120
54 Ethyl Benzene	50.000	46.445	92.89	80-120
56 m,p-xylene	100.00	94.946	94.95	80-123
57 o-Xylene	50.000	46.732	93.46	80-120
58 Styrene	50.000	47.434	94.87	80-122
60 Isopropyl Benzene	50.000	46.381	92.76	77-127
59 Bromoform	50.000	46.455	92.91	63-120
65 1,1,2,2-Tetrachlor	50.000	41.212	82.42	71-120
68 1,2,3-Trichloropro	50.000	43.823	87.65	75-120
69 Trans-1,4-Dichloro	50.000	39.366	78.73	62-127
64 N-Propyl Benzene	50.000	44.472	88.94	76-126
63 Bromobenzene	50.000	47.673	95.35	75-120
67 1,3,5-Trimethyl Be	50.000	46.456	92.91	77-126
66 2-Chloro Toluene	50.000	44.872	89.74	76-120
70 4-Chloro Toluene	50.000	45.431	90.86	75-121
71 T-Butyl Benzene	50.000	45.909	91.82	77-125
72 1,2,4-Trimethylben	50.000	46.201	92.40	77-125
73 S-Butyl Benzene	50.000	44.626	89.25	77-127
74 4-Isopropyl Toluen	50.000	47.225	94.45	78-131
75 1,3-Dichlorobenzen	50.000	48.382	96.76	76-120
77 1,4-Dichlorobenzen	50.000	47.953	95.91	75-120
78 N-Butyl Benzene	50.000	46.622	93.24	75-134
80 1,2-Dichlorobenzen	50.000	46.853	93.71	77-120
81 1,2-Dibromo 3-Chlo	50.000	41.618	83.24	61-128
83 1,2,4-Trichloroben	50.000	52.254	104.51	75-130
82 Hexachloro 1,3-But	50.000	49.315	98.63	72-135
84 Naphthalene	50.000	46.543	93.09	71-122
85 1,2,3-Trichloroben	50.000	50.056	100.11	76-122

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	47.022	94.04	70-130
$ 32 d4-1,2-Dichloroeth	50.000	43.331	86.66	80-149
$ 42 d8-Toluene	50.000	48.427	96.85	77-120
$ 62 4-Bromofluorobenze	50.000	48.541	97.08	80-120
$ 79 d4-1,2-Dichloroben	50.000	48.845	97.69	80-120

REVIEW SUMMARY FOR FILE - 06301605A.D

Lab ID: BEG0005-BSD1
nt5.i, 20160630.b\H2O\VO051314S.m,   30-JUN-2016 13:09

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,H2O\VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Solid	Analyzed:	06/30/16 12:46
Batch:	BEG0006	Laboratory ID:	BEG0006-BS1
Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Vinyl Chloride	2500	2100	83.9	74 - 133
Bromomethane	2500	1370	54.6	41 - 147
cis-1,2-Dichloroethene	2500	2180	87.0	77 - 121
Benzene	2500	2220	88.9	80 - 120
Trichloroethene	2500	2270	91.0	77 - 120
Toluene	2500	2200	88.0	77 - 120
Tetrachloroethene	2500	2450	98.1	76 - 120
Ethylbenzene	2500	2290	91.6	79 - 122
m,p-Xylene	5000	4710	94.2	81 - 122
o-Xylene	2500	2310	92.4	79 - 120

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Solid	Analyzed:	06/30/16 13:09
Batch:	BEG0006	Laboratory ID:	BEG0006-BSD1
Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Vinyl Chloride	2500	2010	80.5	4.16	30	74 - 133
Bromomethane	2500	1360	54.2	0.736	30	41 - 147
cis-1,2-Dichloroethene	2500	2160	86.4	0.733	30	77 - 121
Benzene	2500	2230	89.2	0.349	30	80 - 120
Trichloroethene	2500	2300	92.0	1.06	30	77 - 120
Toluene	2500	2250	89.8	2.02	30	77 - 120
Tetrachloroethene	2500	2480	99.1	1.09	30	76 - 120
Ethylbenzene	2500	2320	92.9	1.38	30	79 - 122
m,p-Xylene	5000	4750	94.9	0.774	30	81 - 122
o-Xylene	2500	2340	93.5	1.11	30	79 - 120

* Values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

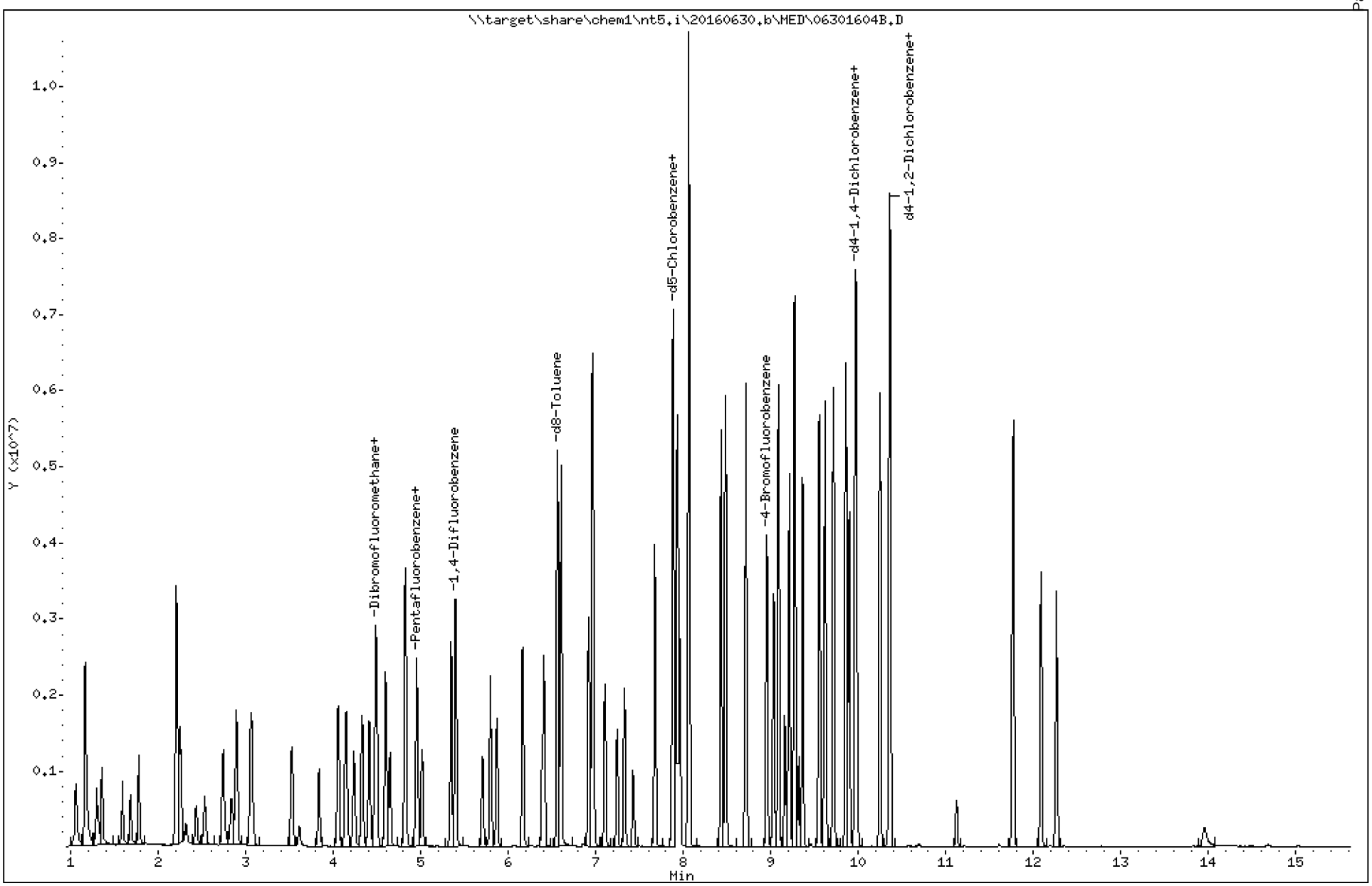
Sample Info: LCS0630,5,5,0

Column phase: RTXVMS

Instrument: nt5.i

Operator: PB

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

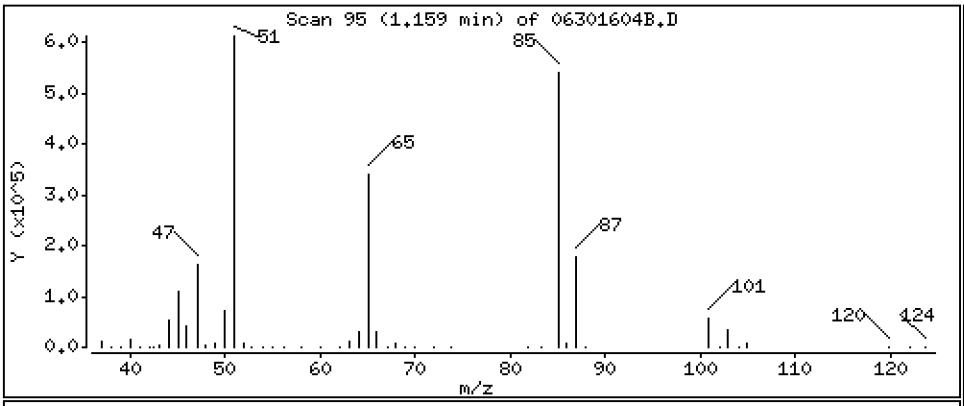
Operator: PB

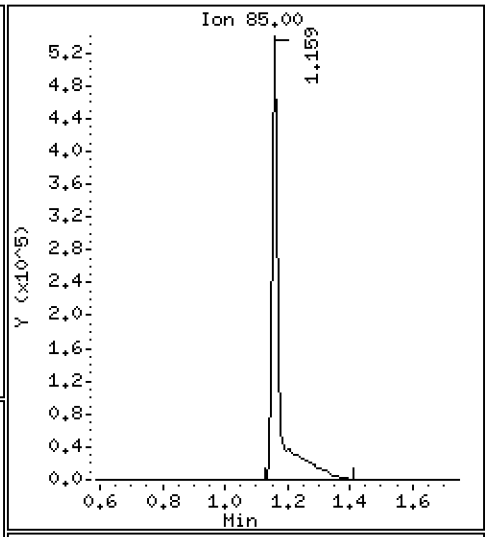
Column phase: RTXVMS

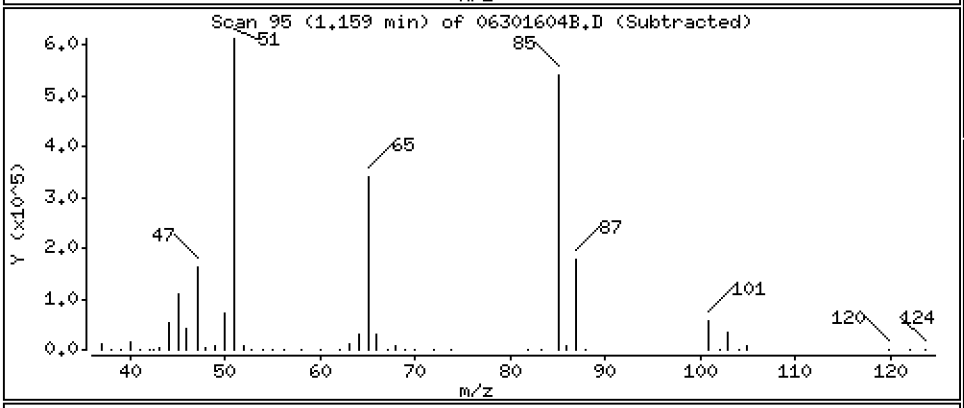
Column diameter: 0.18

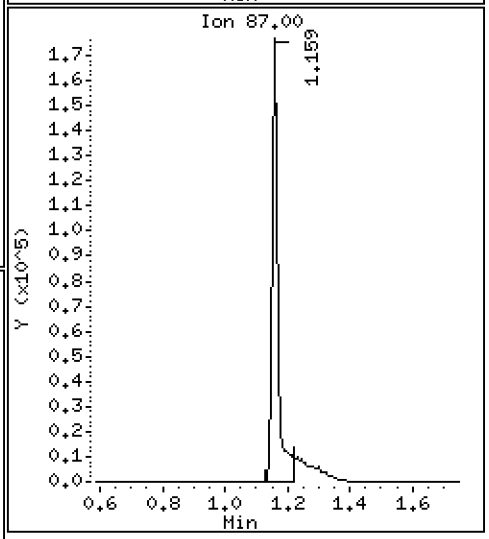
1 Dichlorodifluoromethane

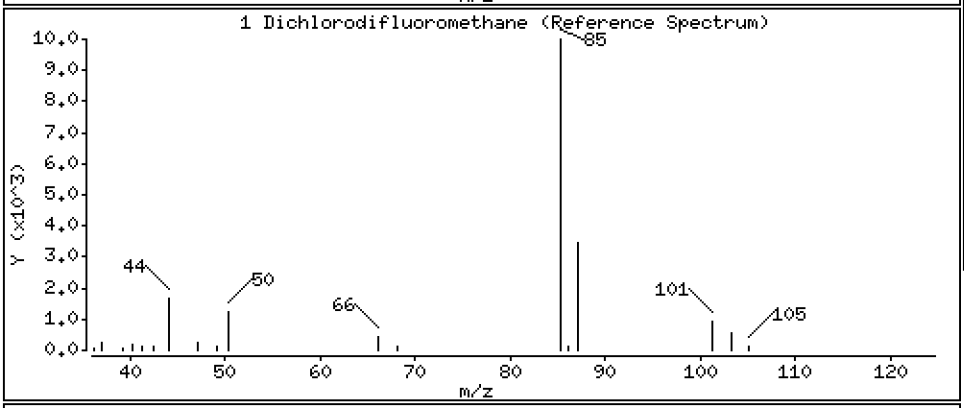
Concentration: 41.888 ug/Kg

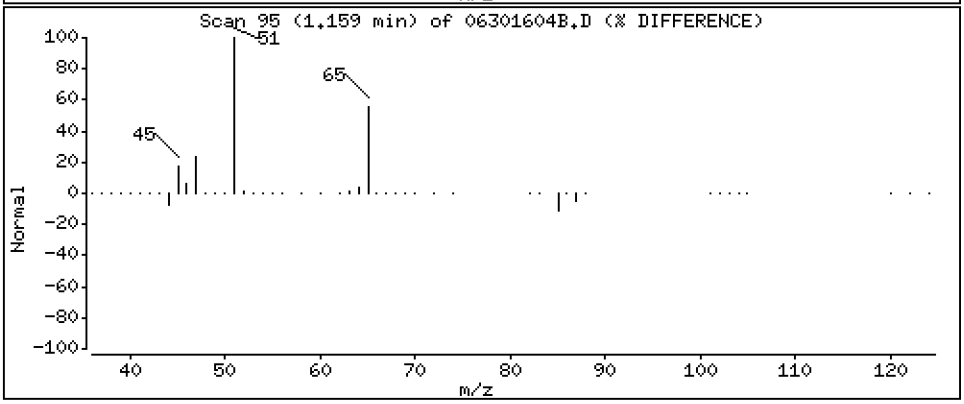












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

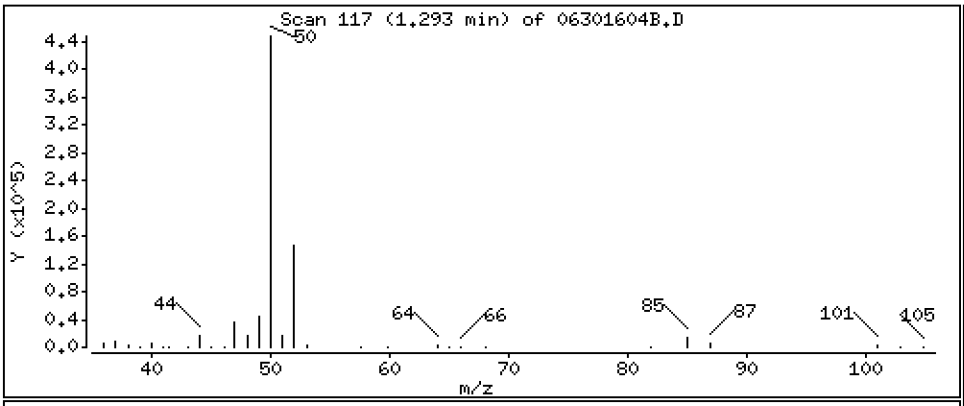
Operator: PB

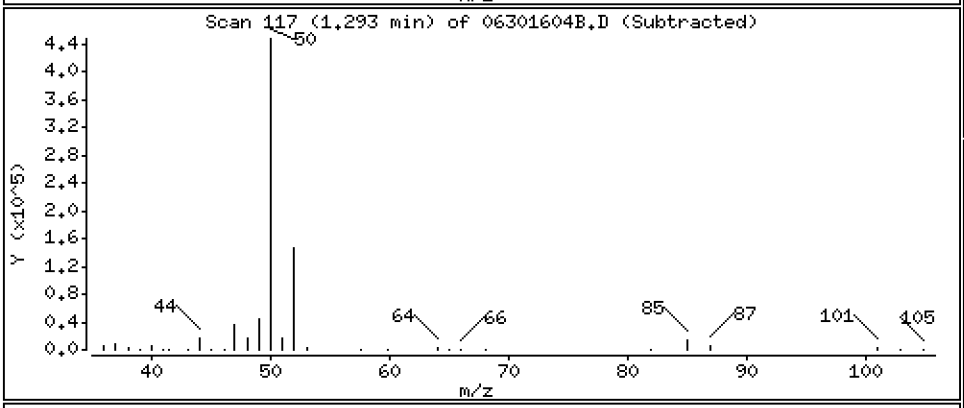
Column phase: RTXVMS

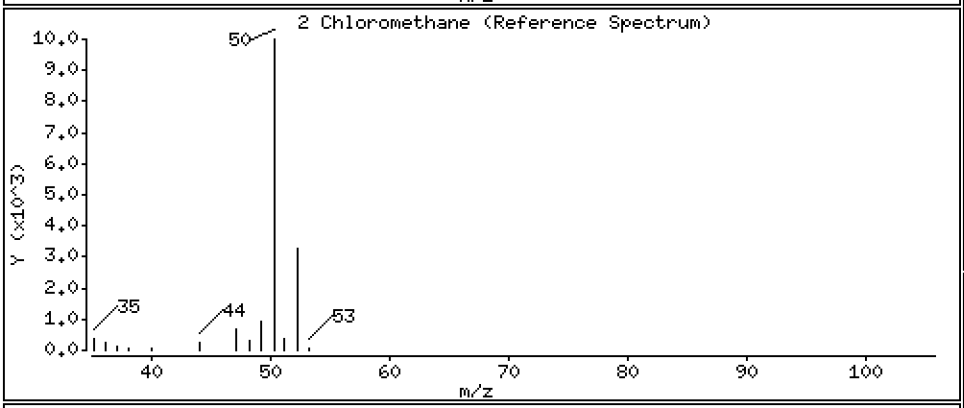
Column diameter: 0.18

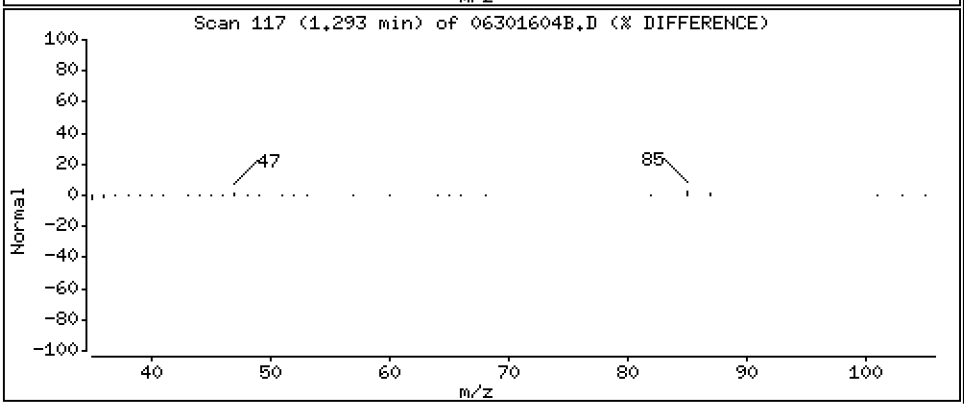
2 Chloromethane

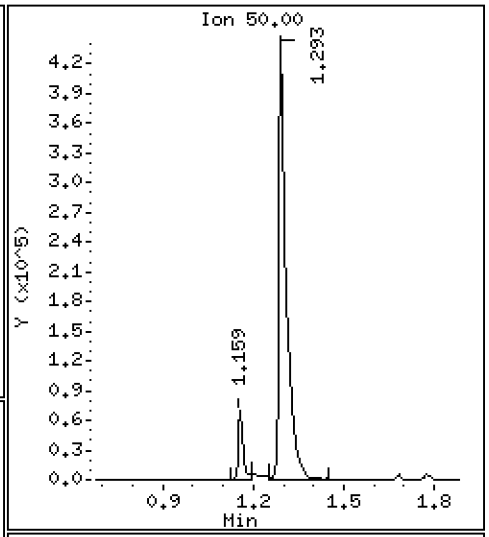
Concentration: 33.970 ug/Kg

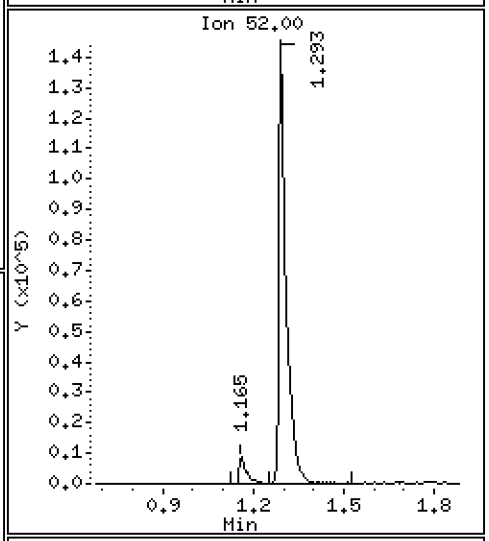


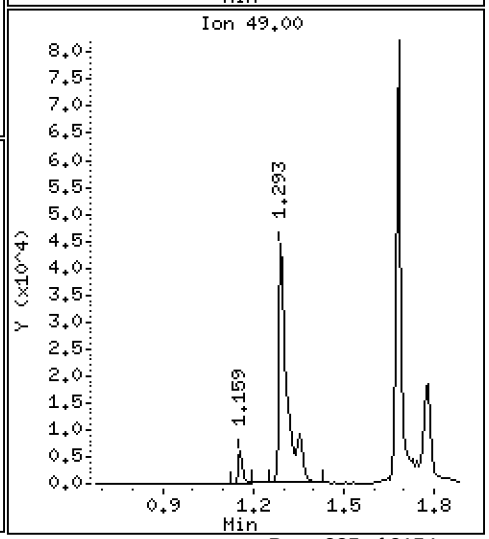












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

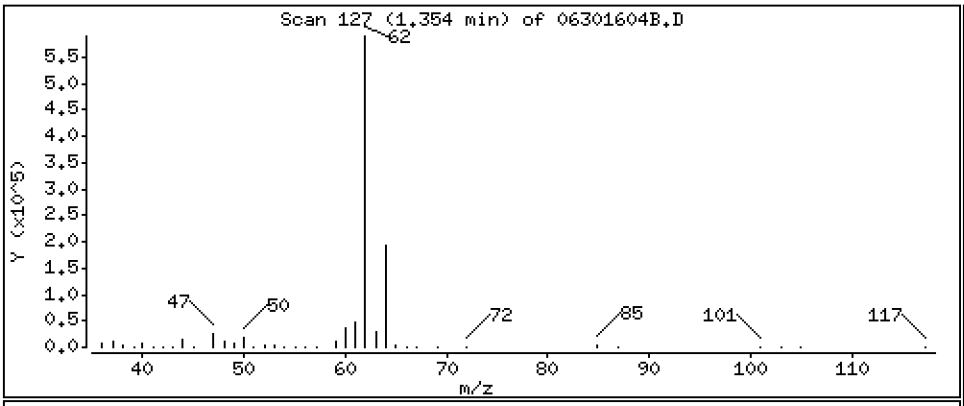
Operator: PB

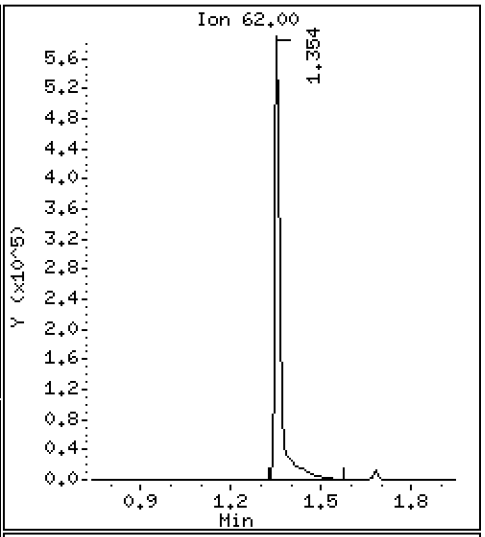
Column phase: RTXVMS

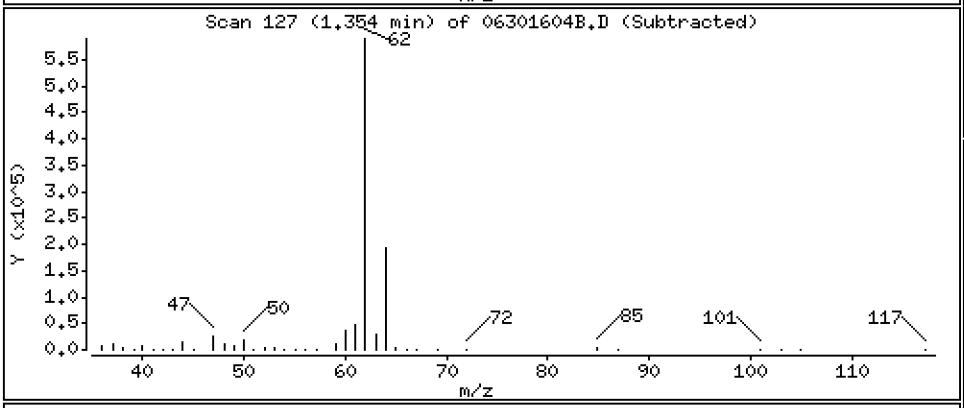
Column diameter: 0.18

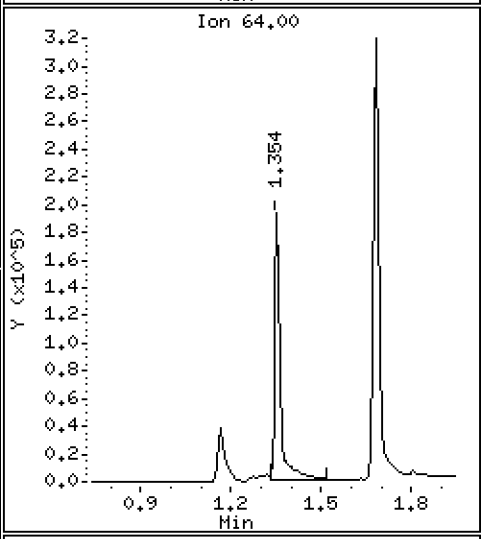
3 Vinyl Chloride

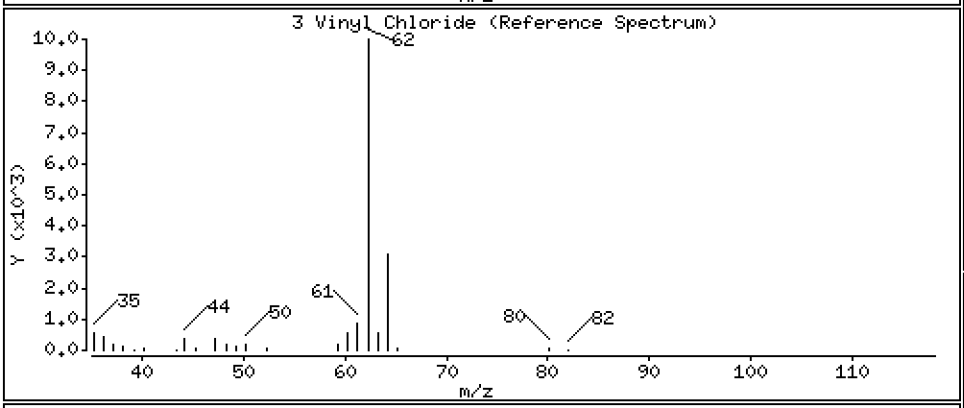
Concentration: 41.957 ug/Kg

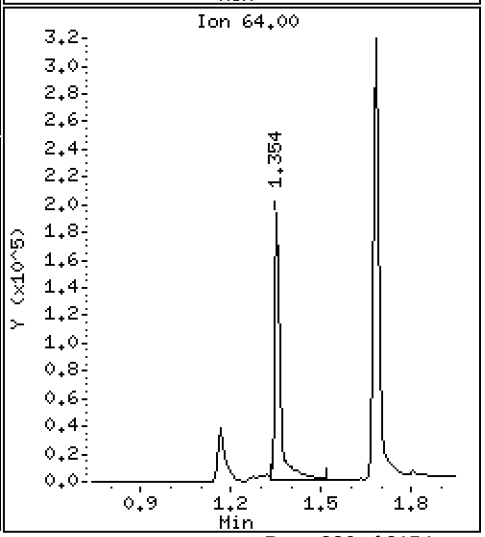


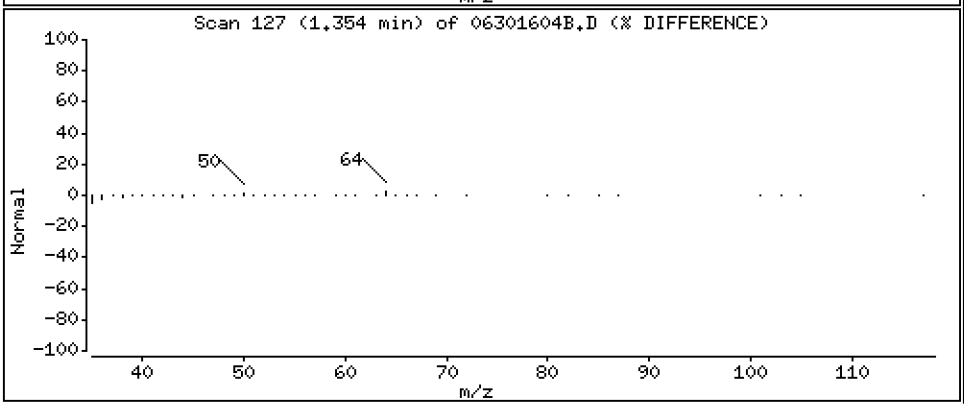












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

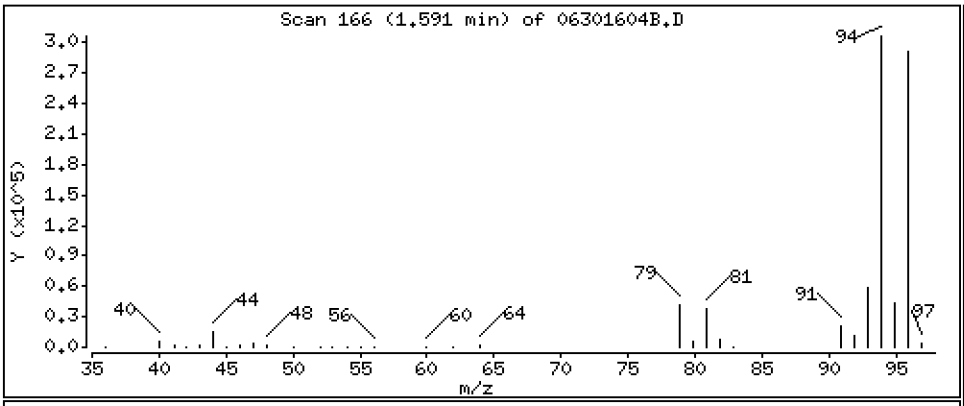
Operator: PB

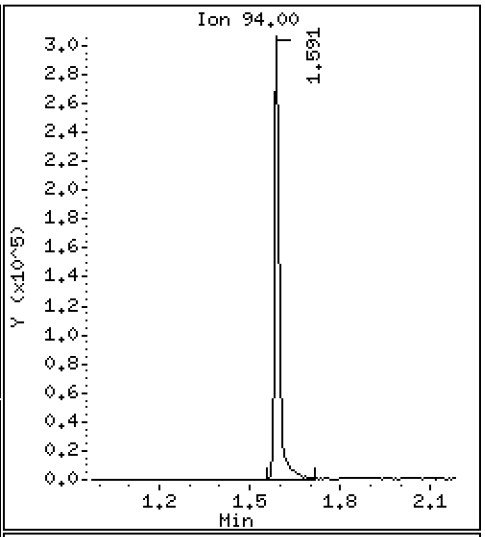
Column phase: RTXVMS

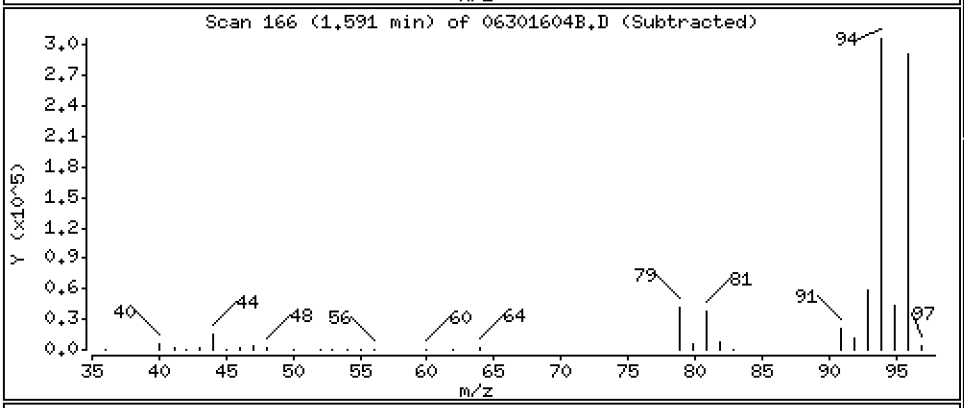
Column diameter: 0.18

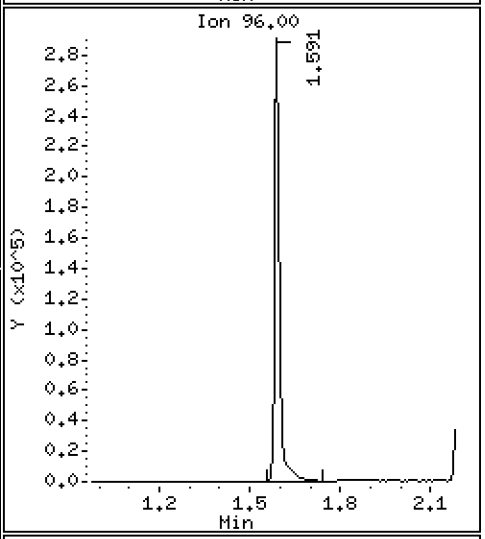
4 Bromomethane

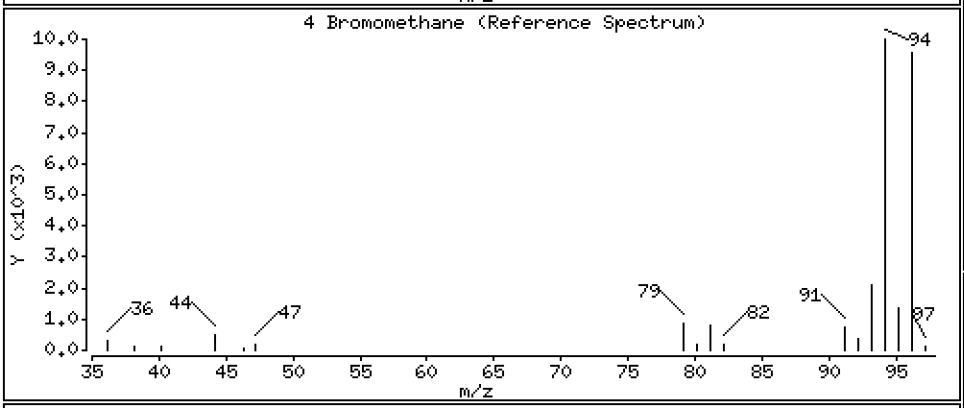
Concentration: 27.312 ug/Kg

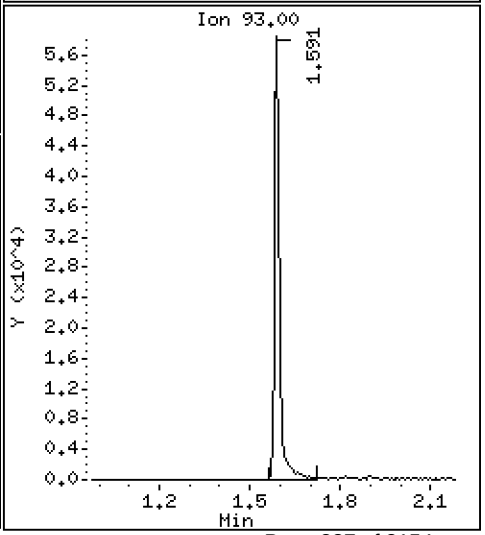


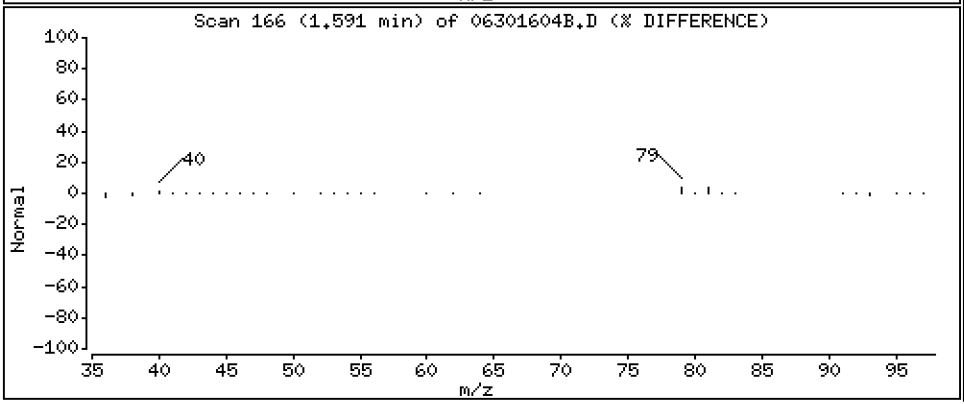












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

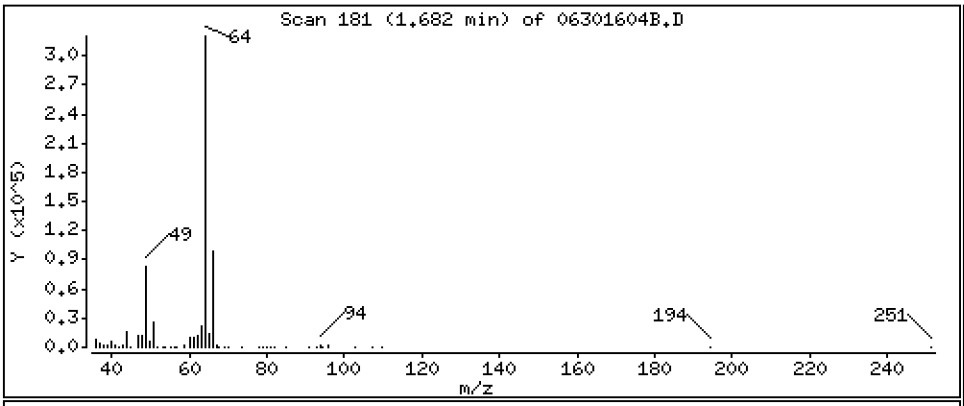
Operator: PB

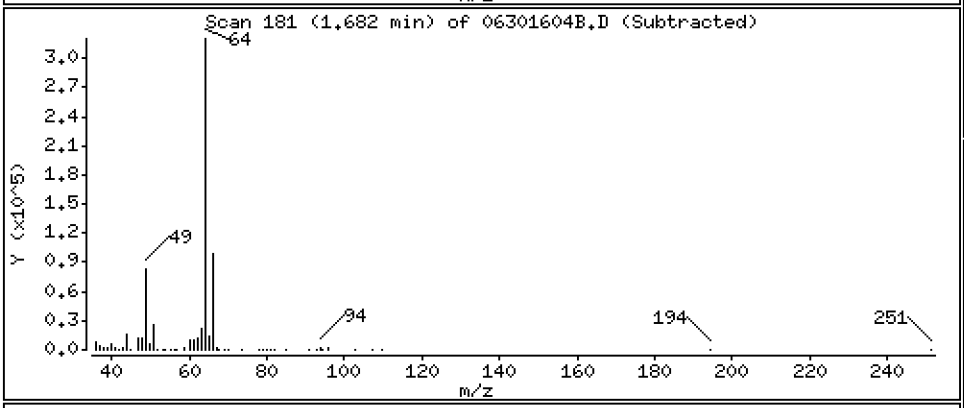
Column phase: RTXVMS

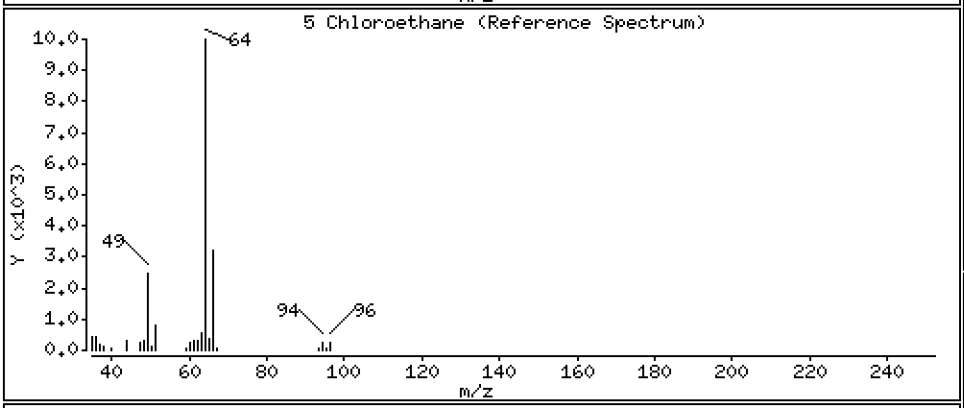
Column diameter: 0.18

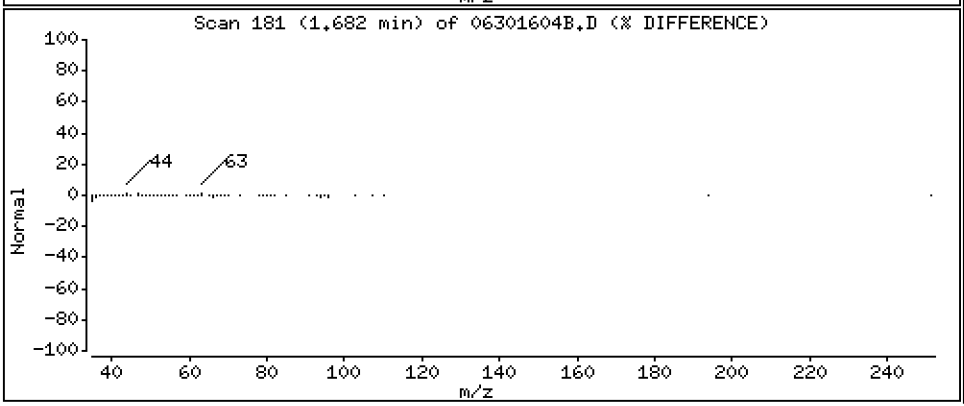
5 Chloroethane

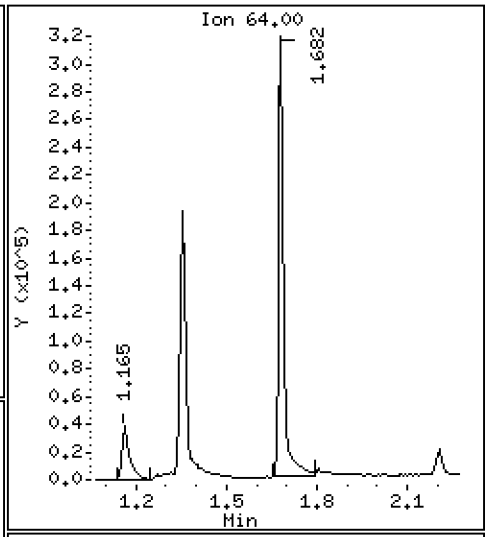
Concentration: 41.566 ug/Kg

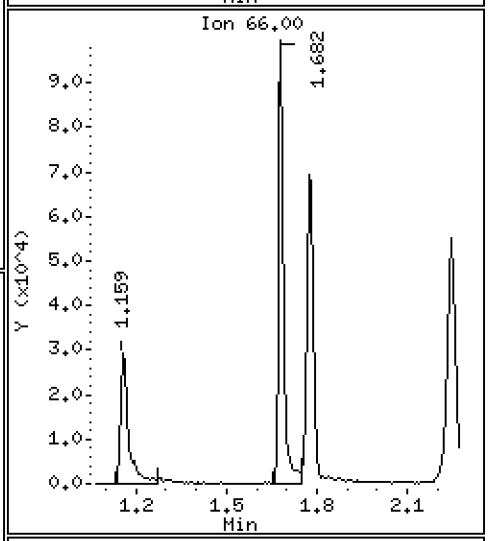


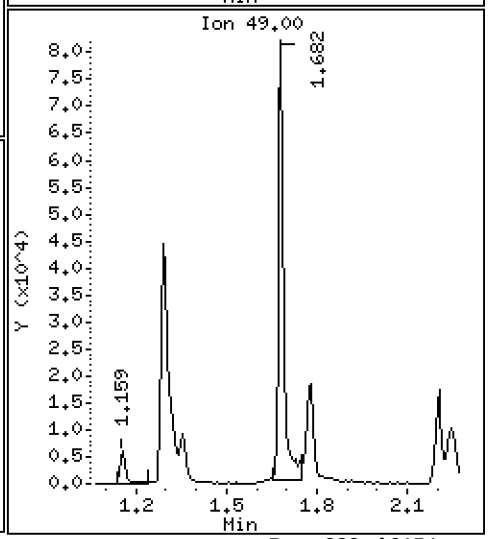












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

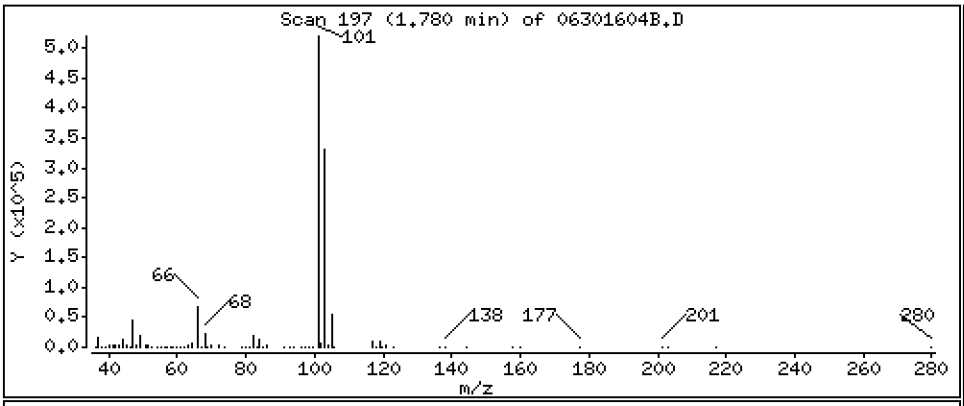
Operator: PB

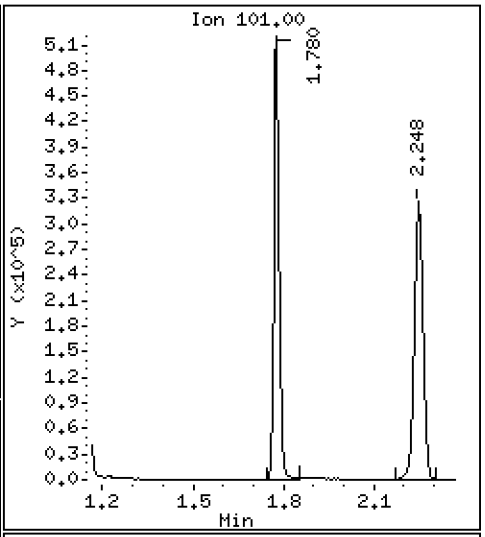
Column phase: RTXVMS

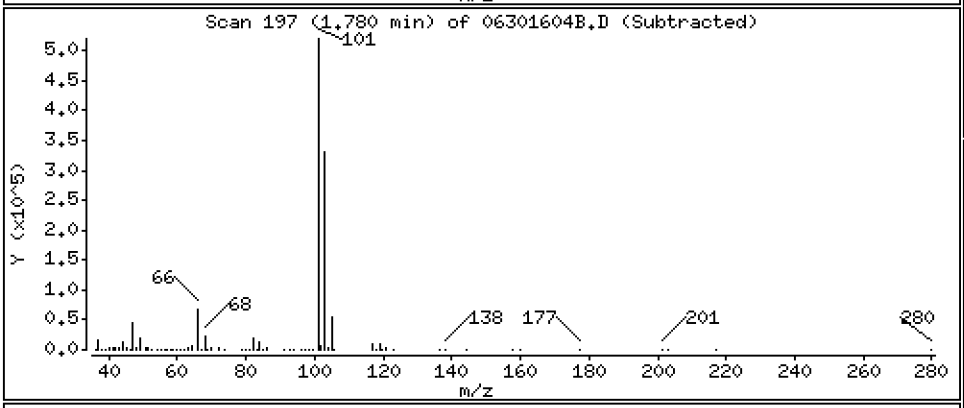
Column diameter: 0.18

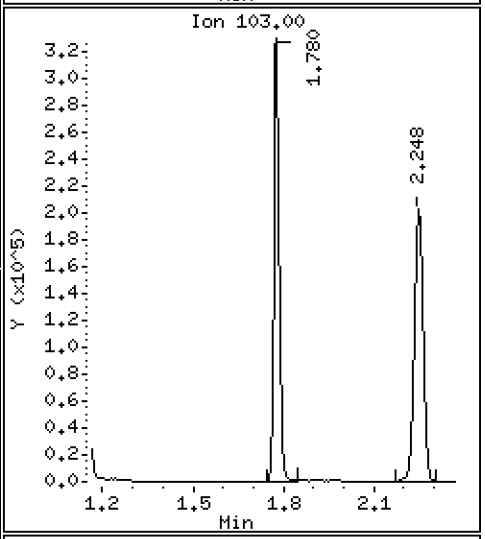
6 Trichlorofluoromethane

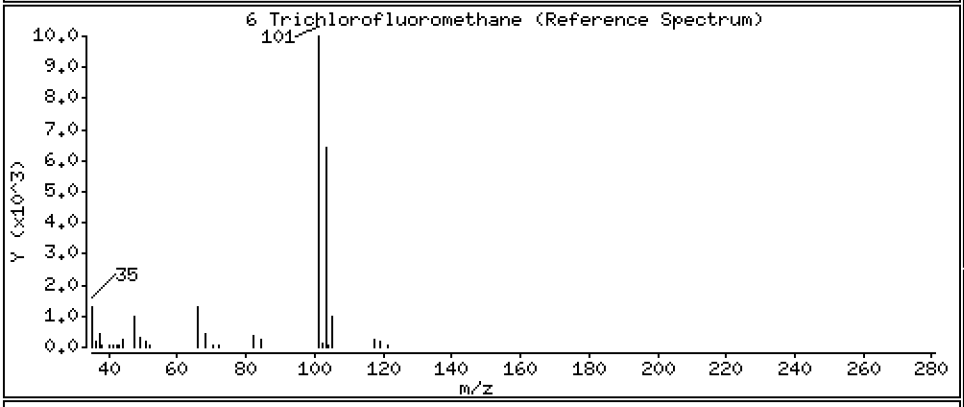
Concentration: 61.820 ug/Kg

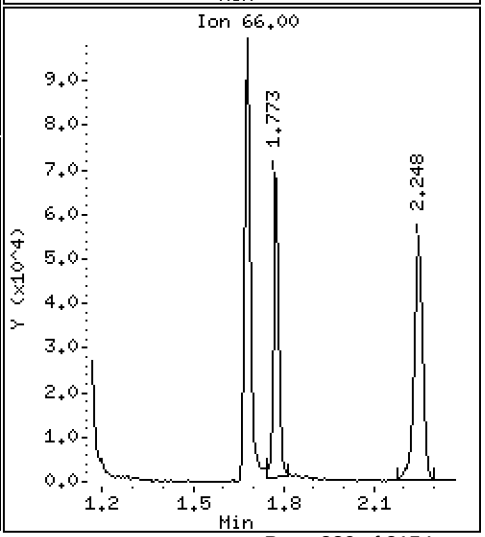


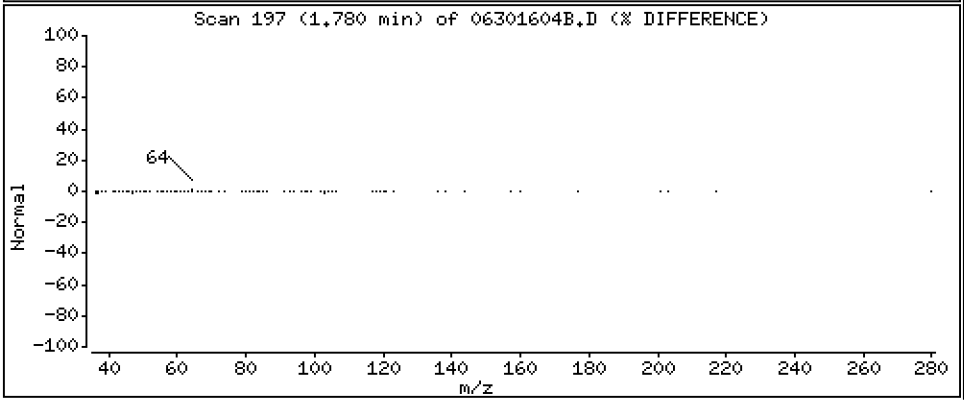












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

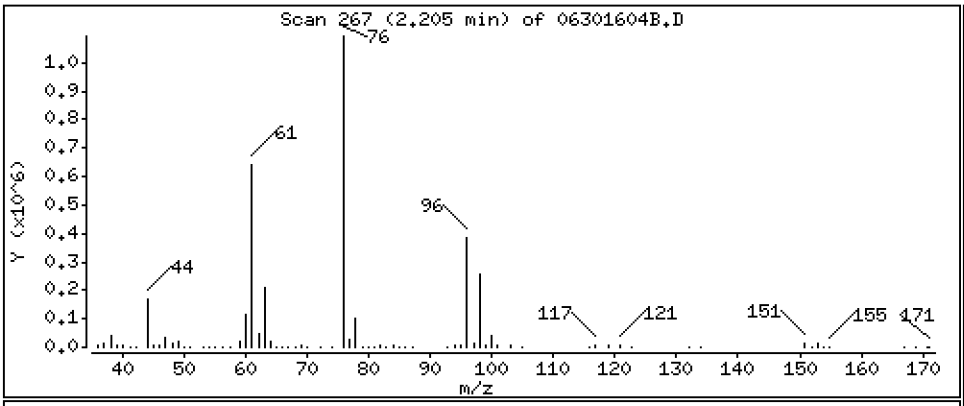
Operator: PB

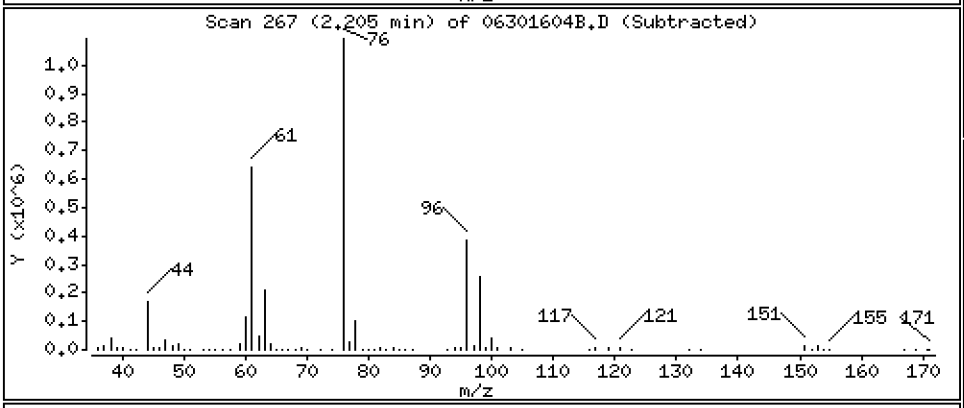
Column phase: RTXVMS

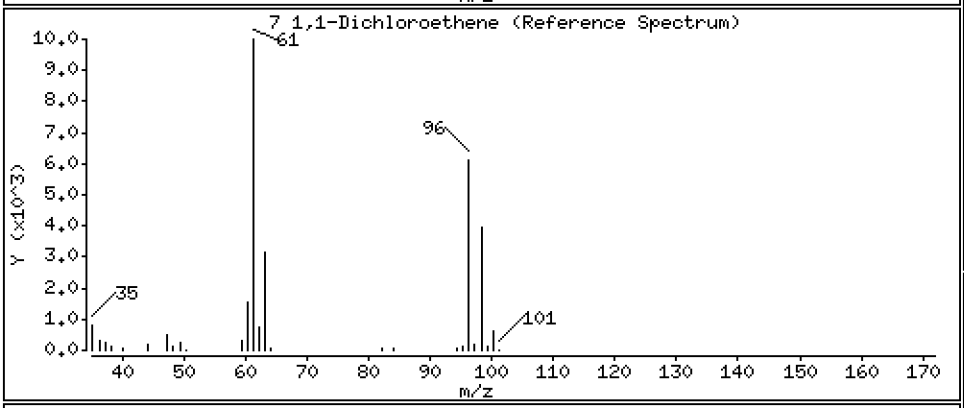
Column diameter: 0.18

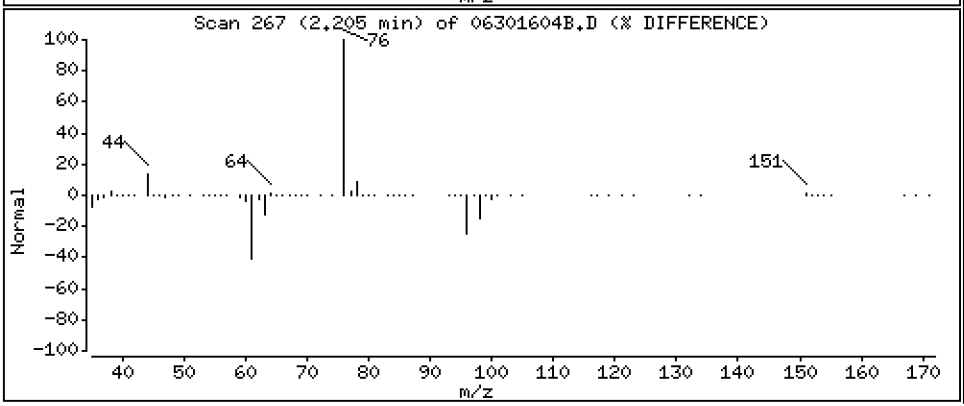
7 1,1-Dichloroethene

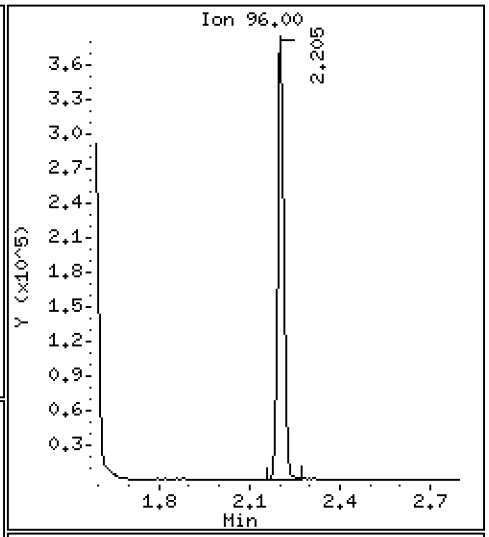
Concentration: 46.183 ug/Kg

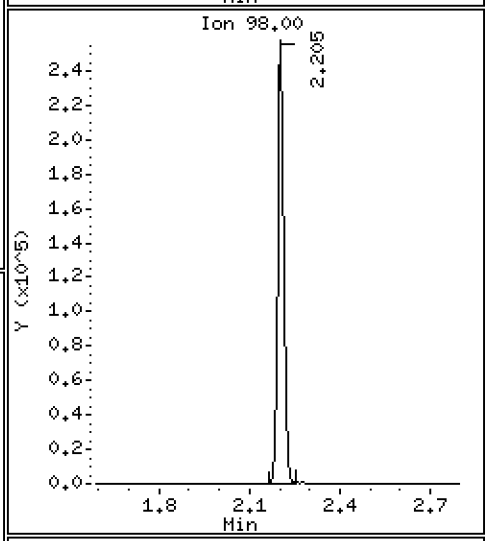


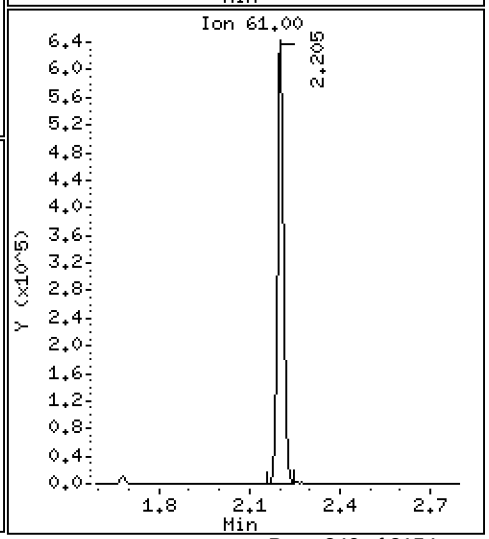












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

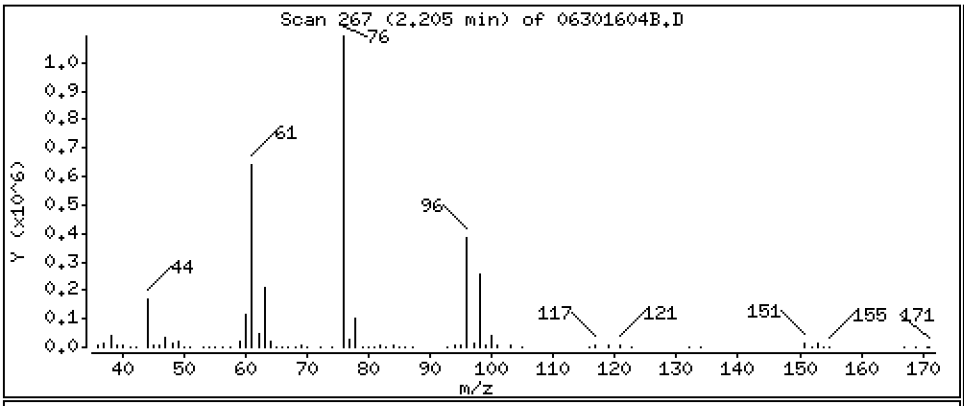
Operator: PB

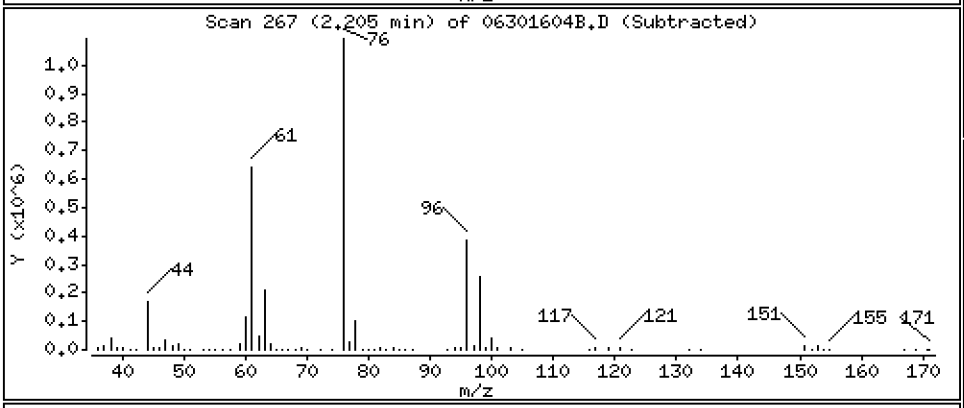
Column phase: RTXVMS

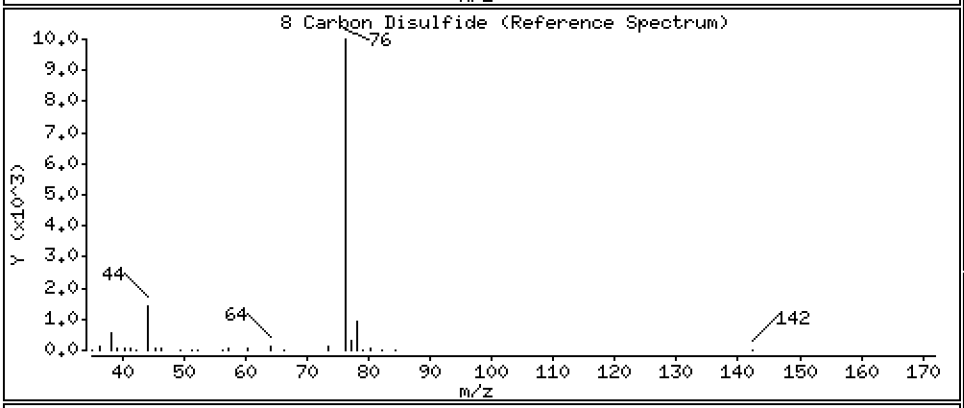
Column diameter: 0.18

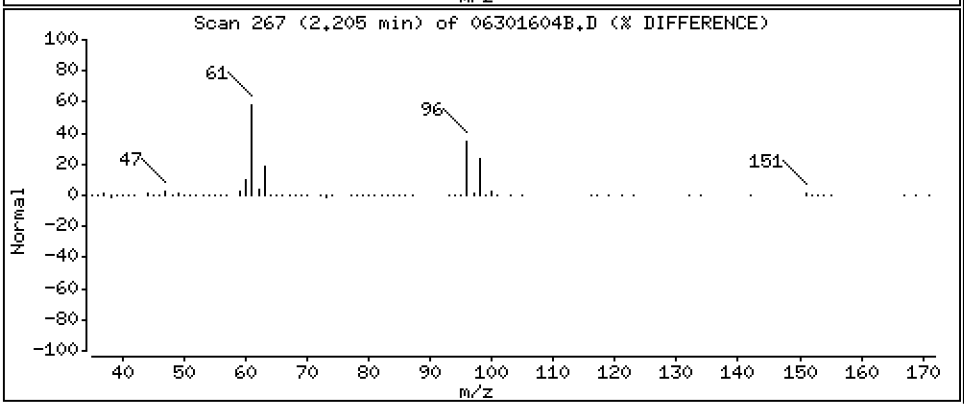
8 Carbon Disulfide

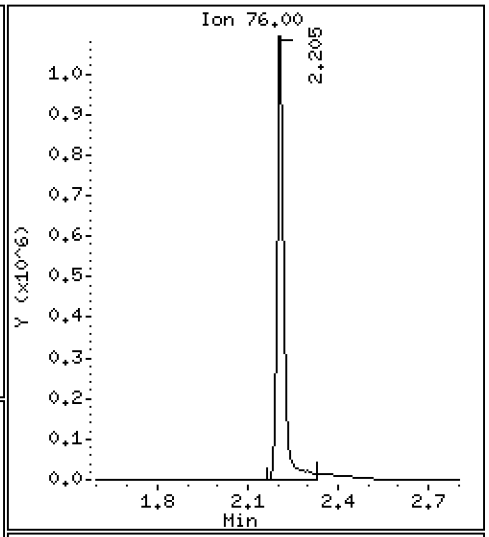
Concentration: 45.543 ug/Kg

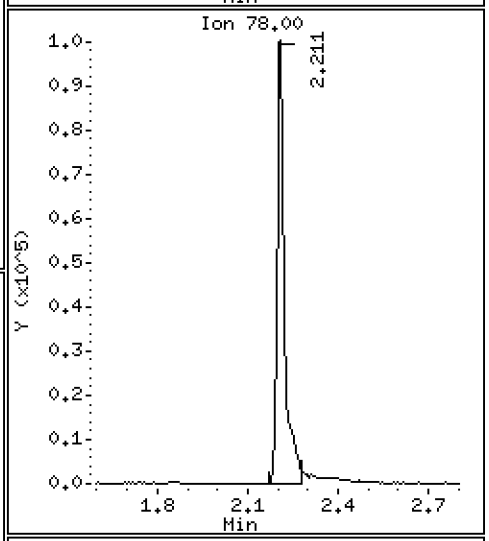


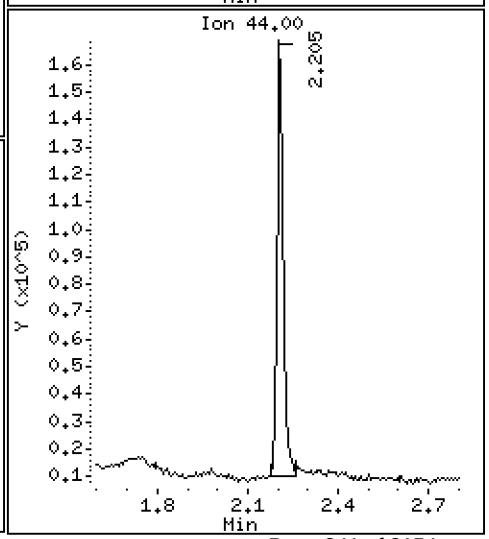












Date : 30-JUN-2016 12:46

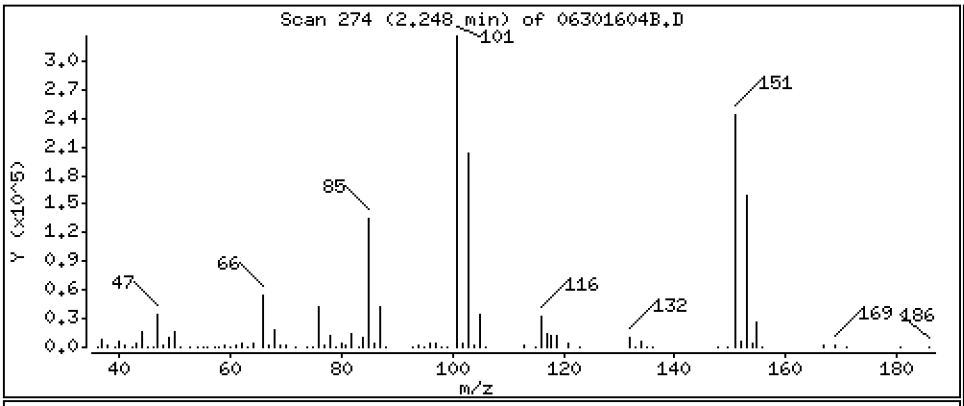
Client ID: LCS0630 Instrument: nt5.i

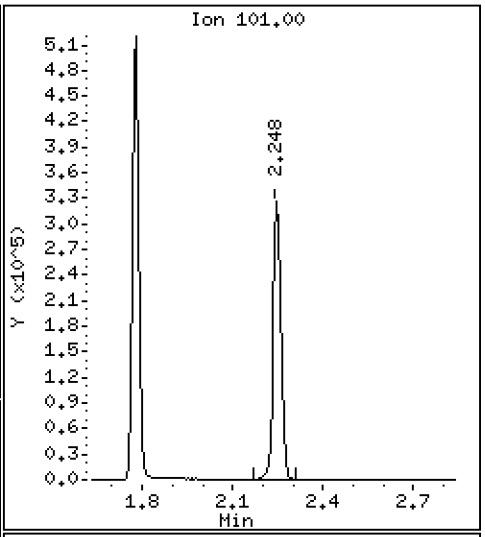
Sample Info: LCS0630,5,5,0

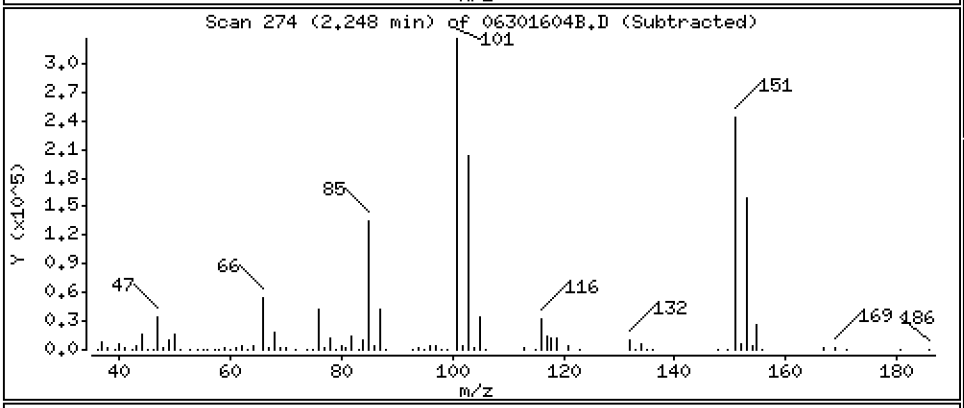
Operator: PB

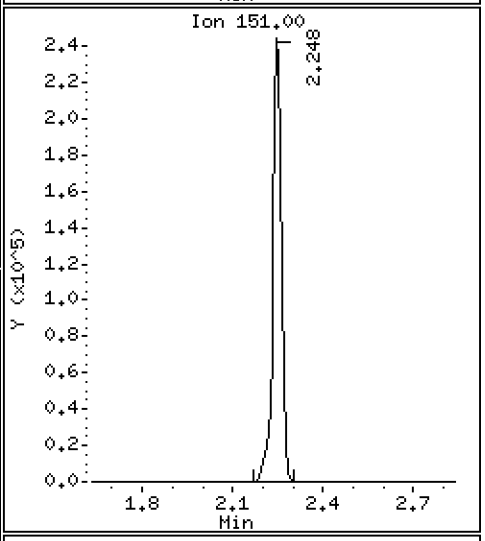
Column phase: RTXVMS Column diameter: 0.18

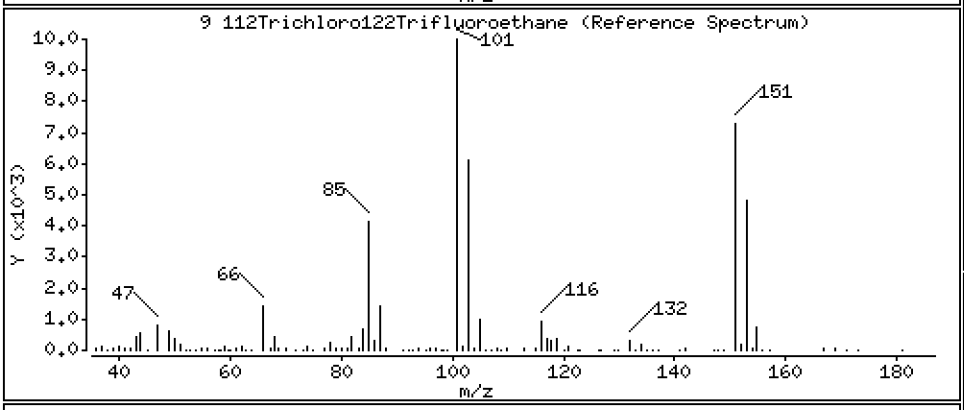
9 112Trichloro122Trifluoroethane Concentration: 47.293 ug/Kg

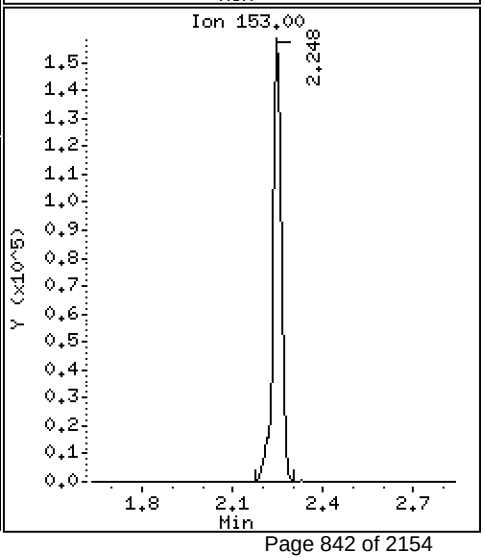


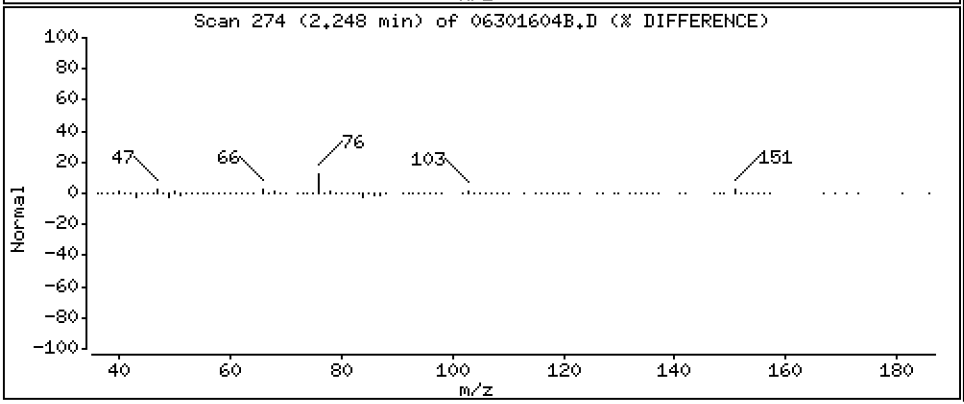












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

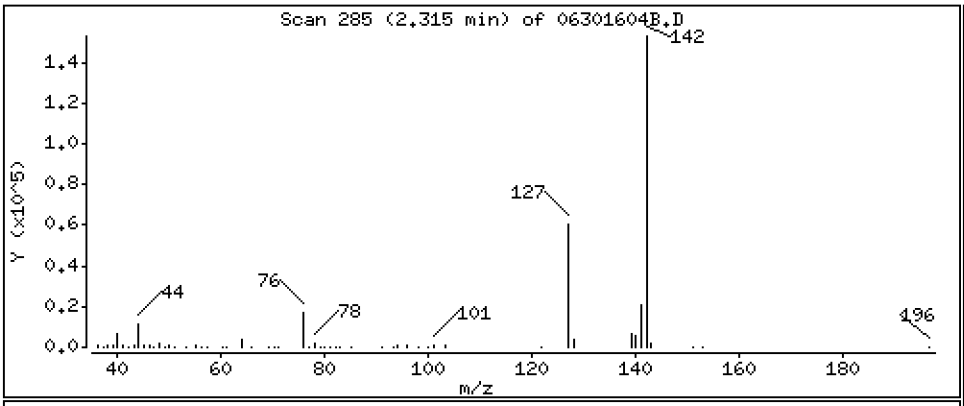
Operator: PB

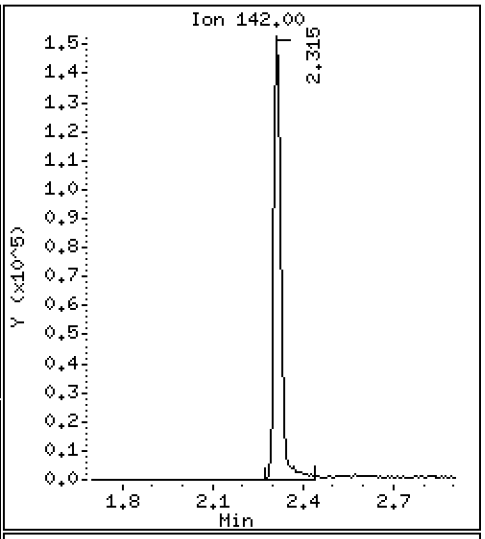
Column phase: RTXVMS

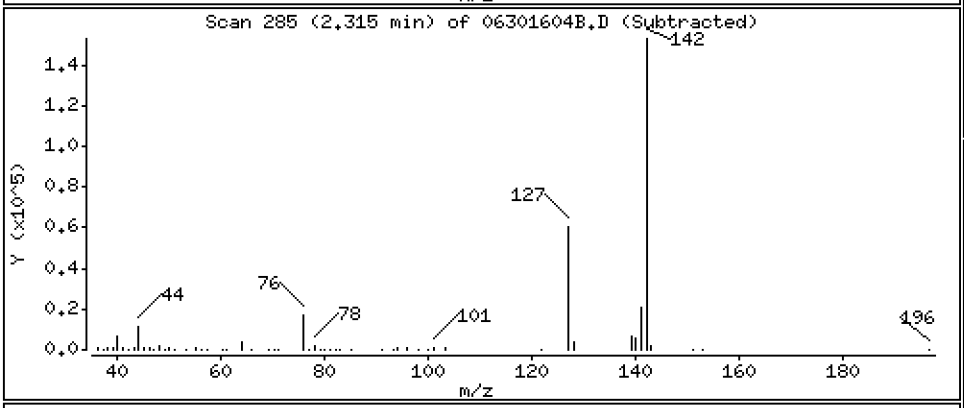
Column diameter: 0.18

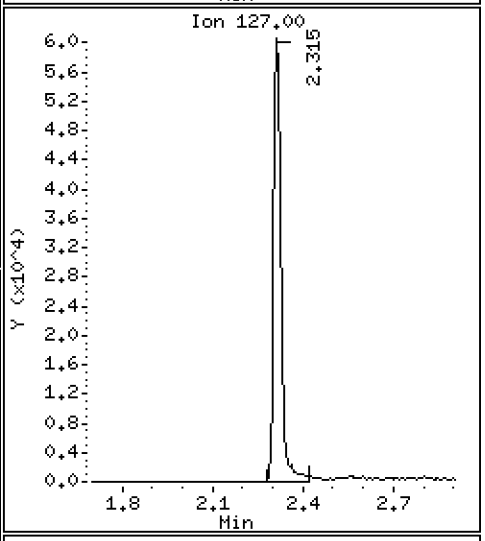
10 Iodomethane

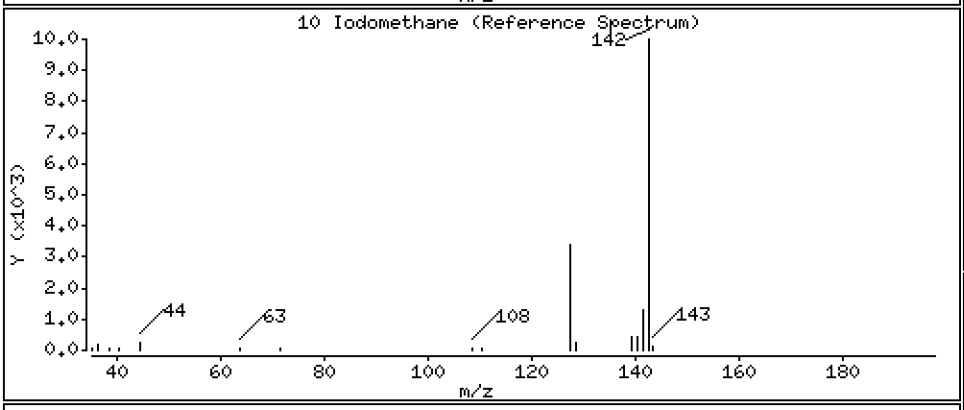
Concentration: 31.682 ug/Kg

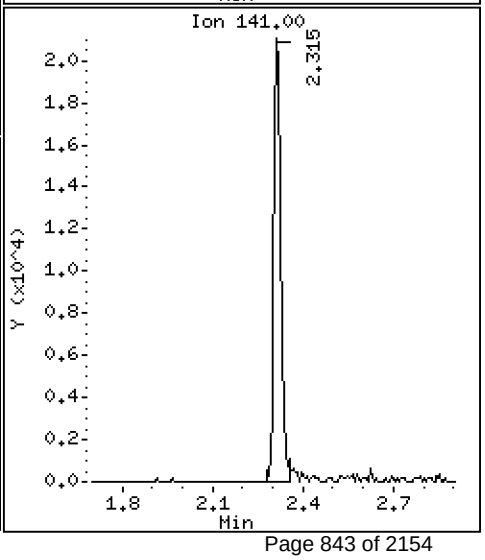


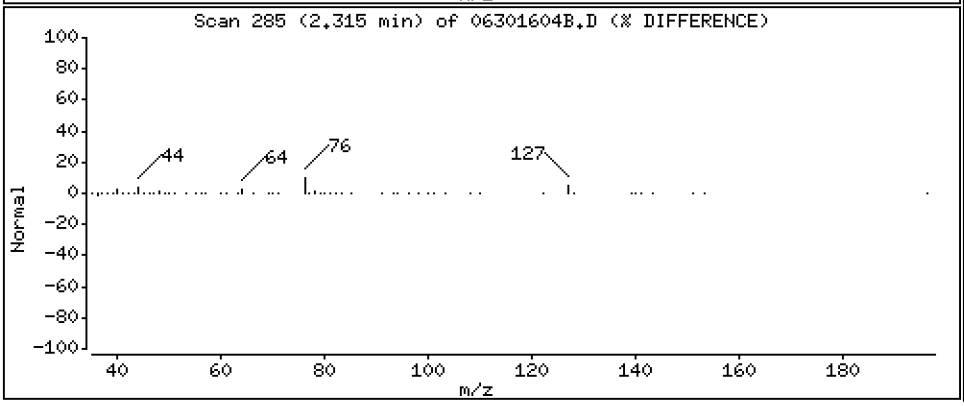












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

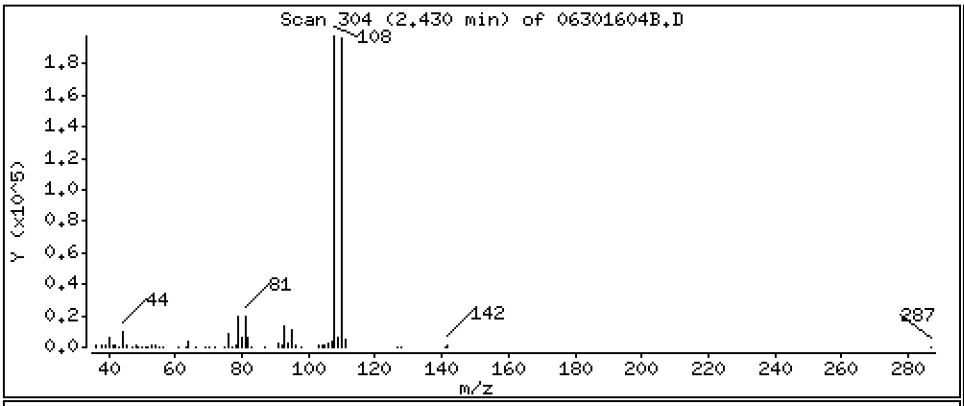
Operator: PB

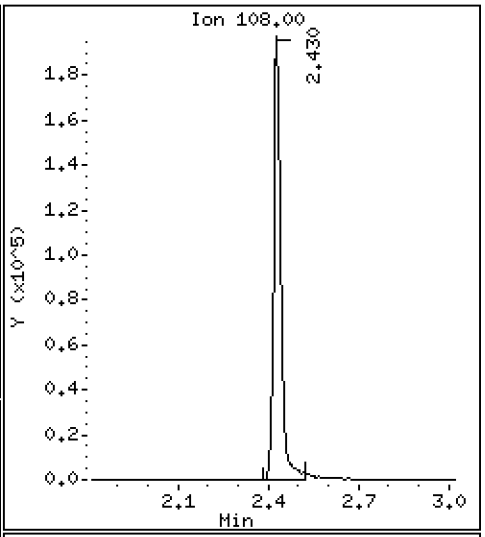
Column phase: RTXVMS

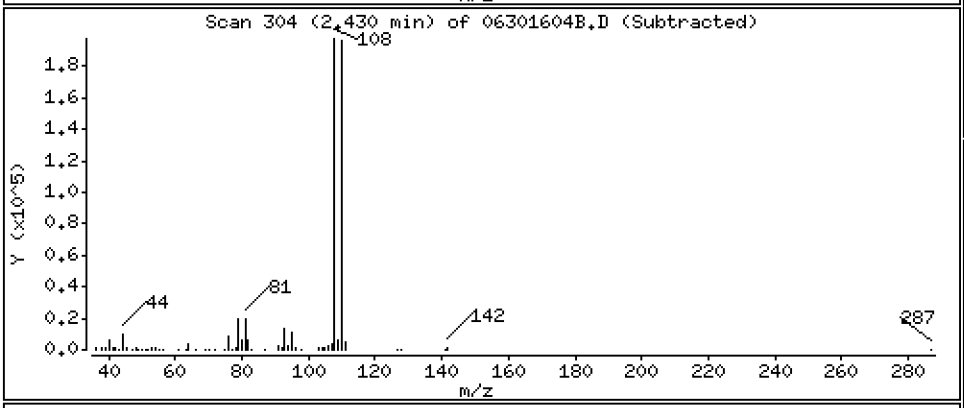
Column diameter: 0.18

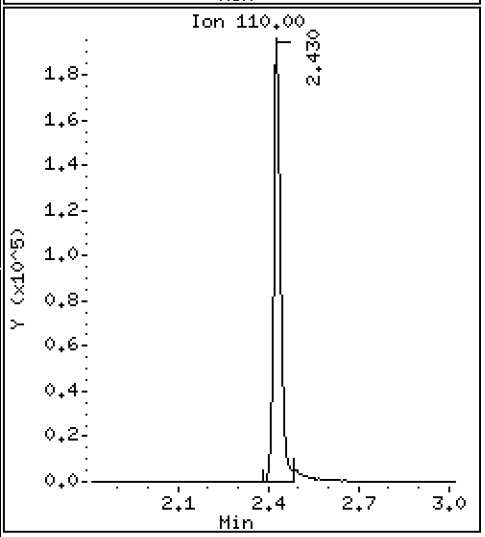
11 Bromoethane

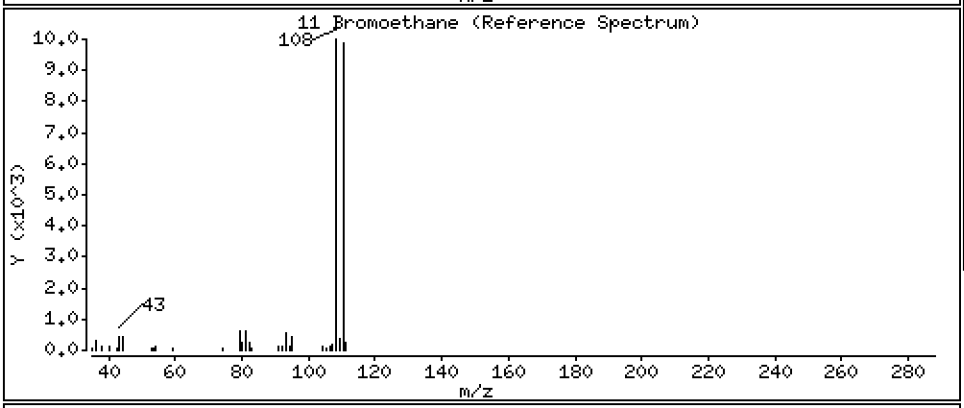
Concentration: 47.457 ug/Kg

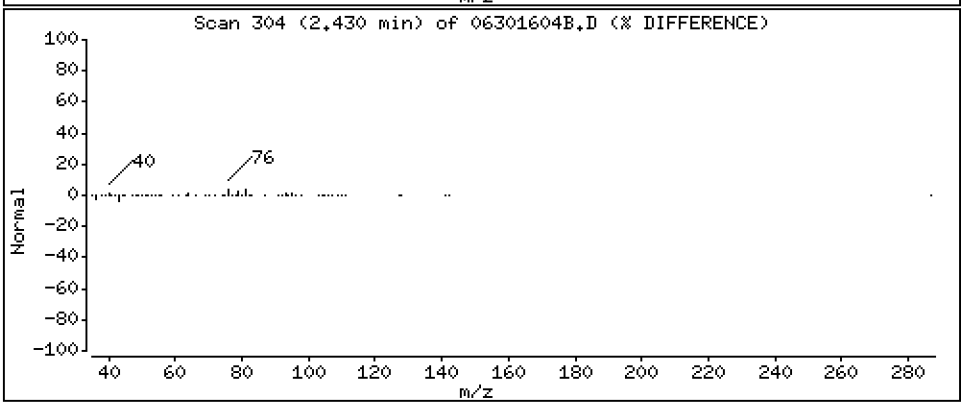












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

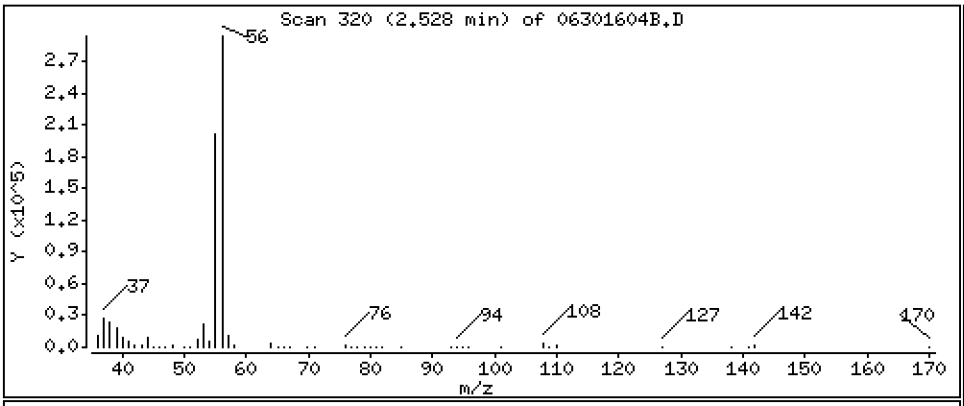
Operator: PB

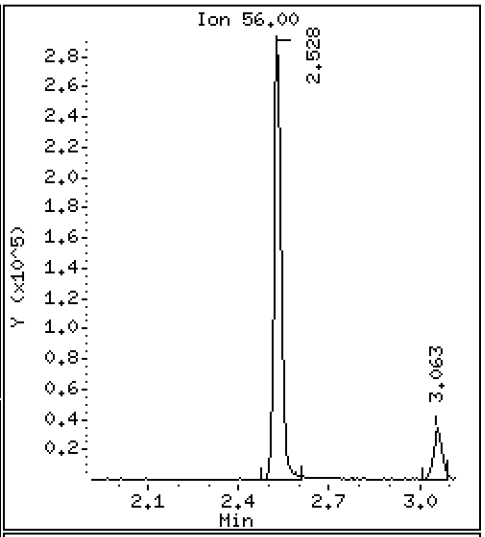
Column phase: RTXVMS

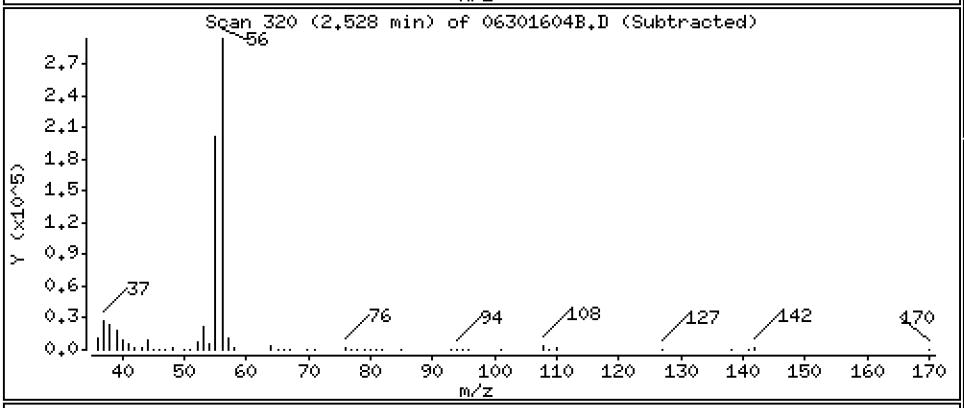
Column diameter: 0.18

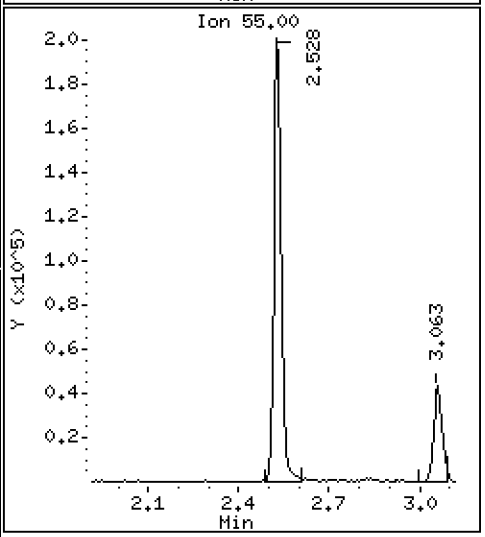
12 Acrolein

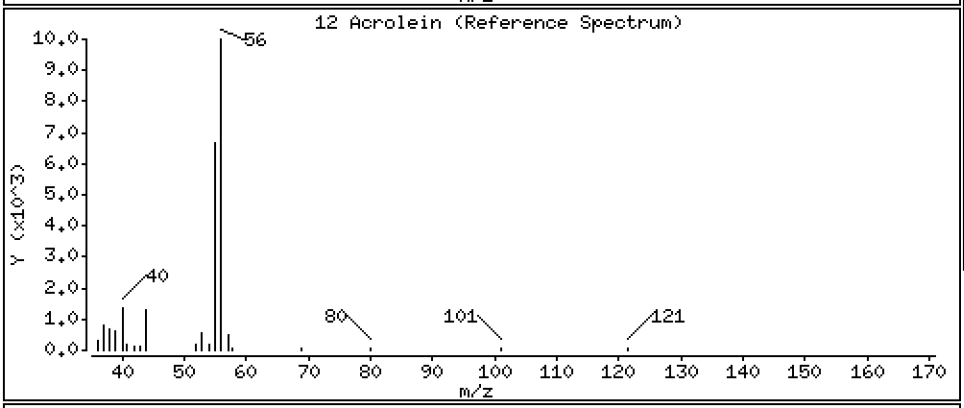
Concentration: 201.28 ug/Kg

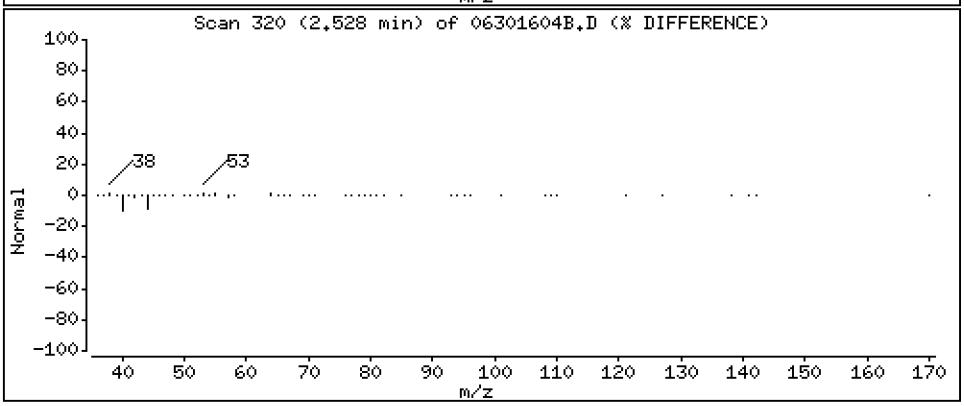












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

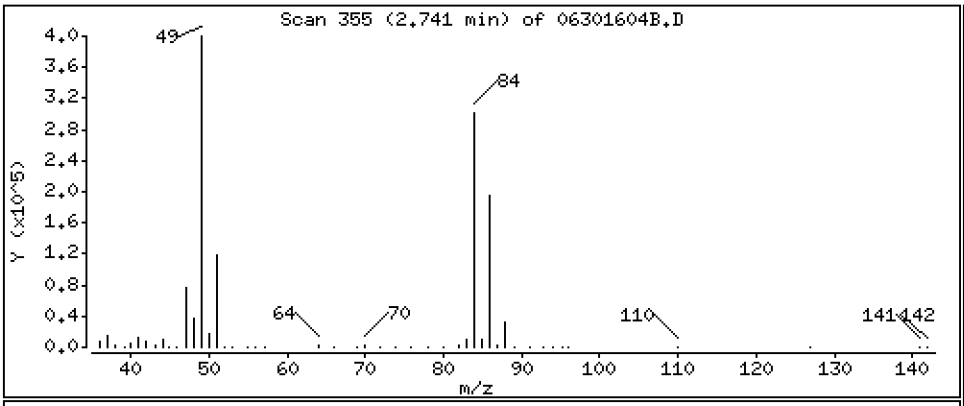
Operator: PB

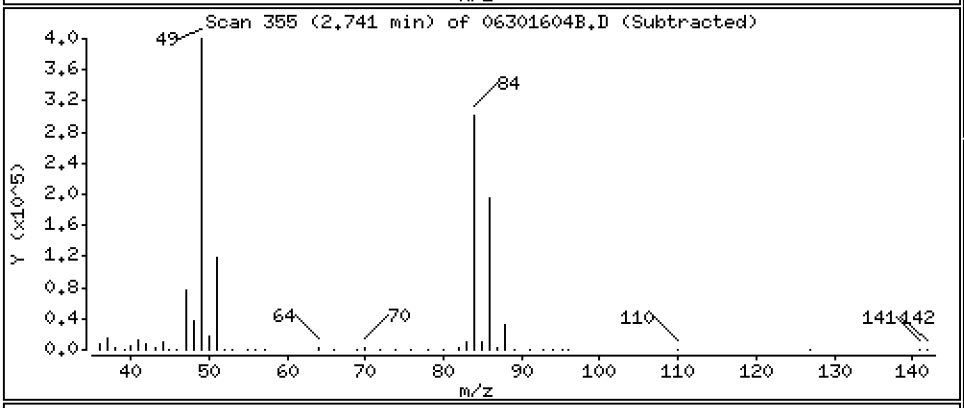
Column phase: RTXVMS

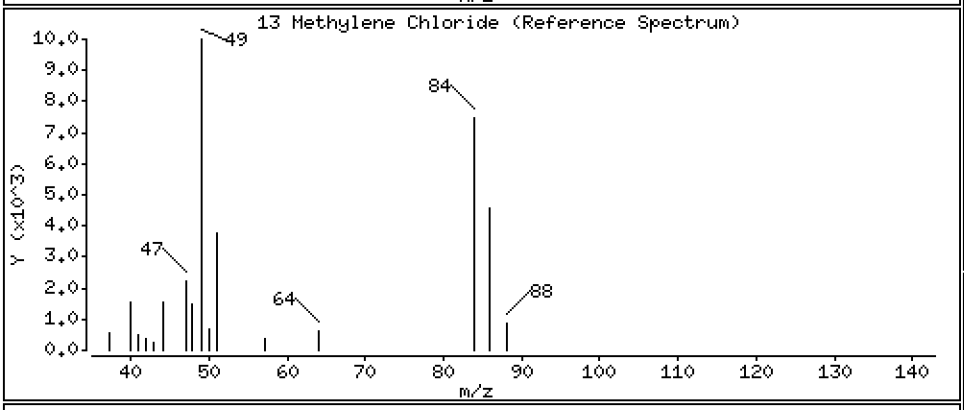
Column diameter: 0.18

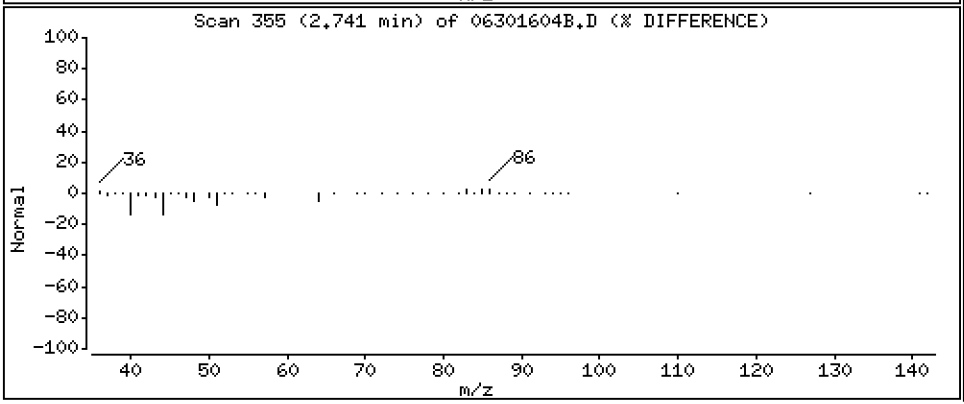
13 Methylene Chloride

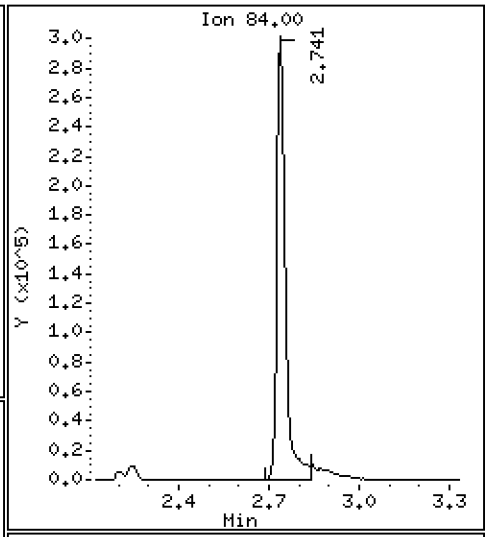
Concentration: 46.388 ug/Kg

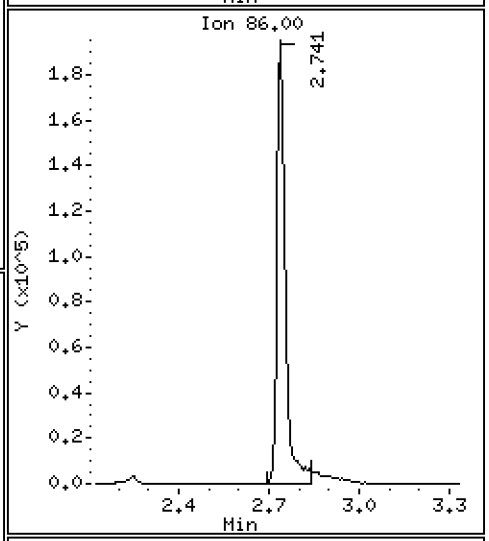


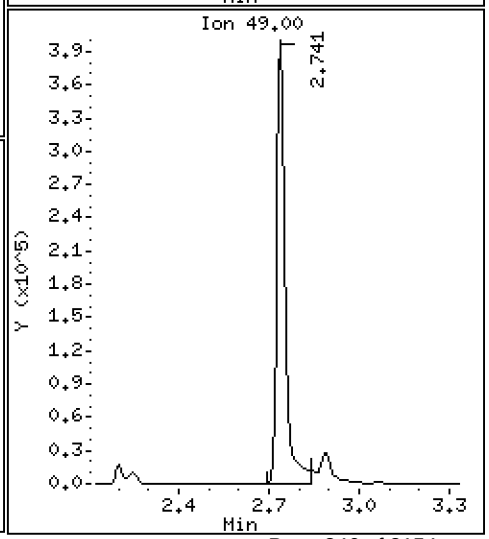












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

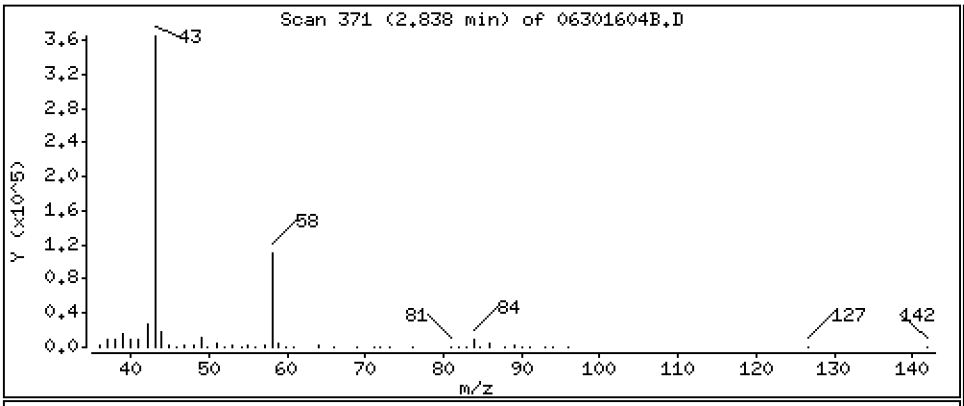
Operator: PB

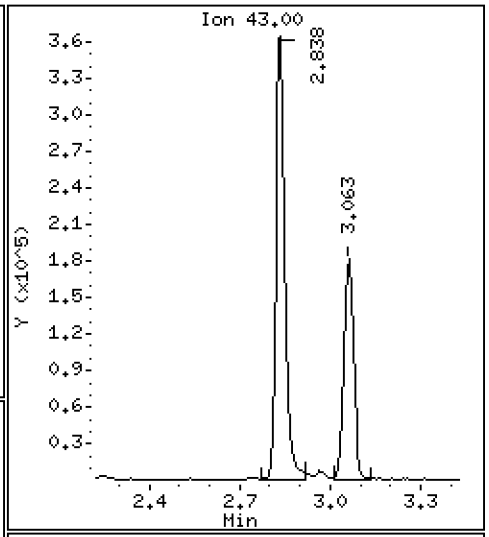
Column phase: RTXVMS

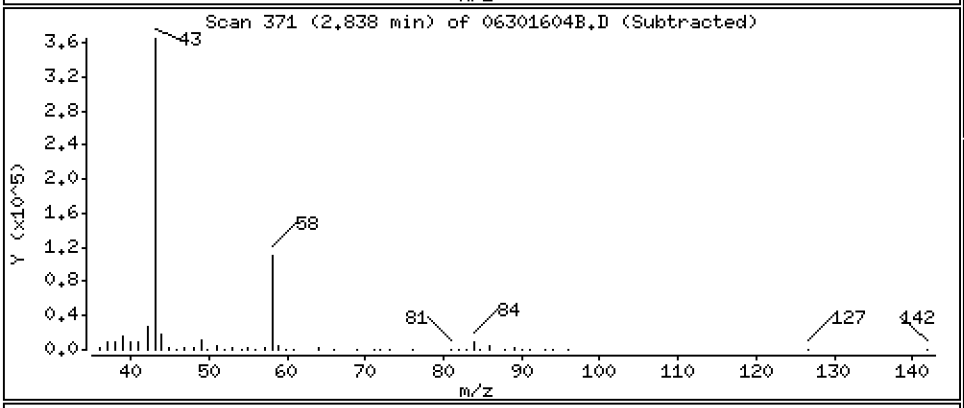
Column diameter: 0.18

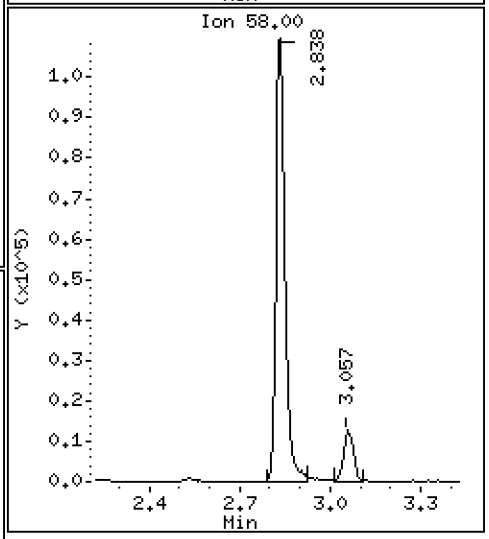
14 Acetone

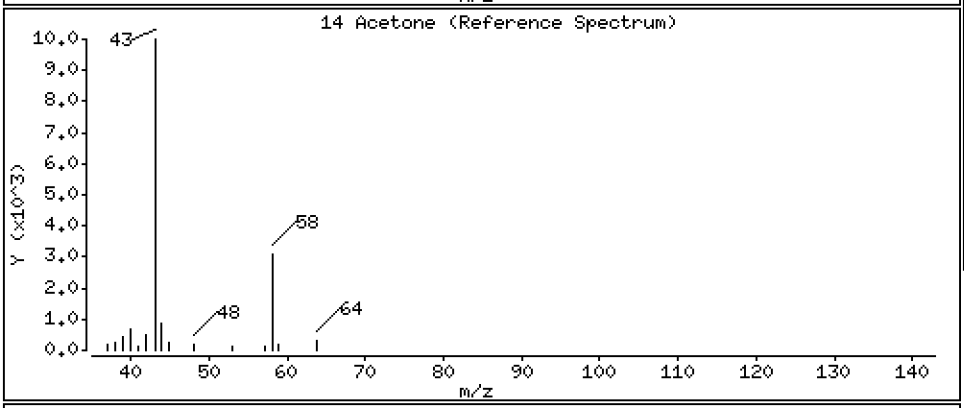
Concentration: 180.78 ug/Kg

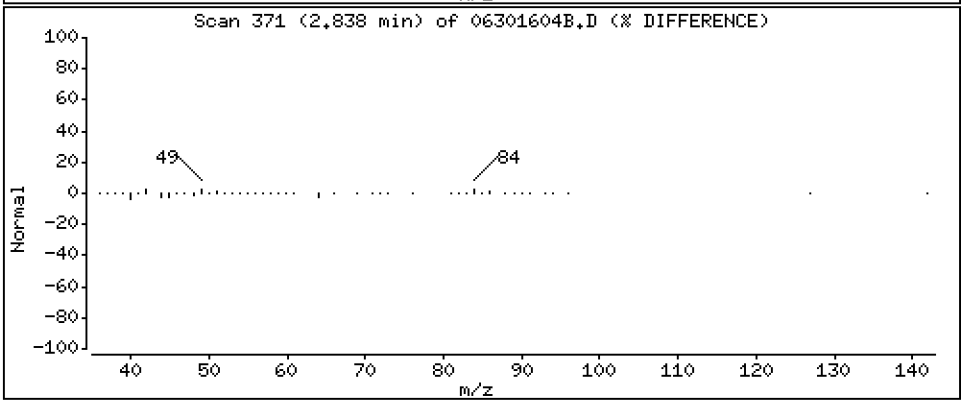












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

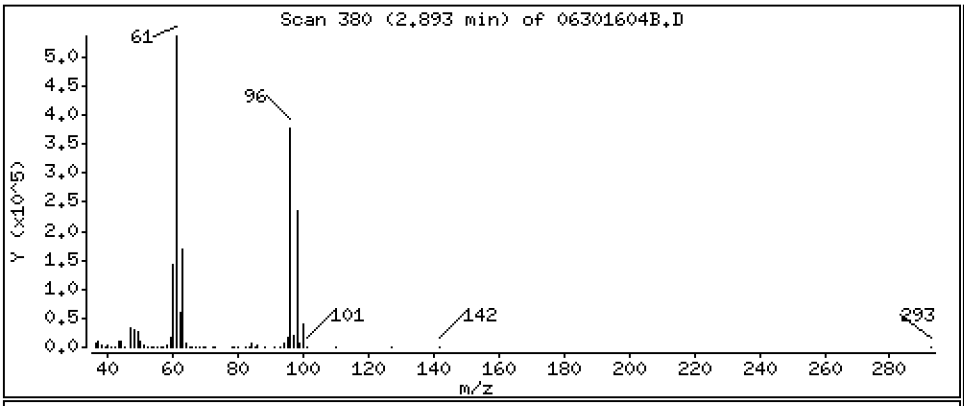
Operator: PB

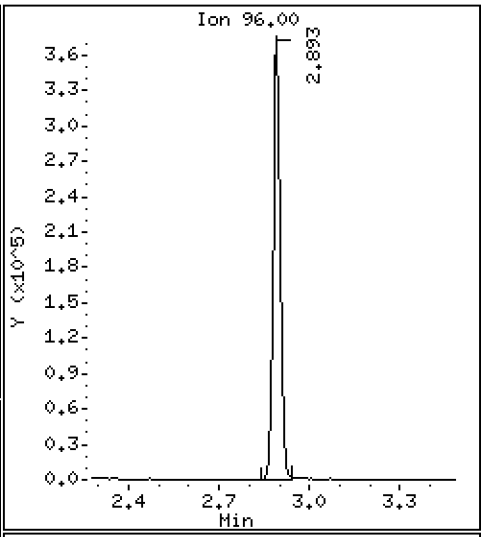
Column phase: RTXVMS

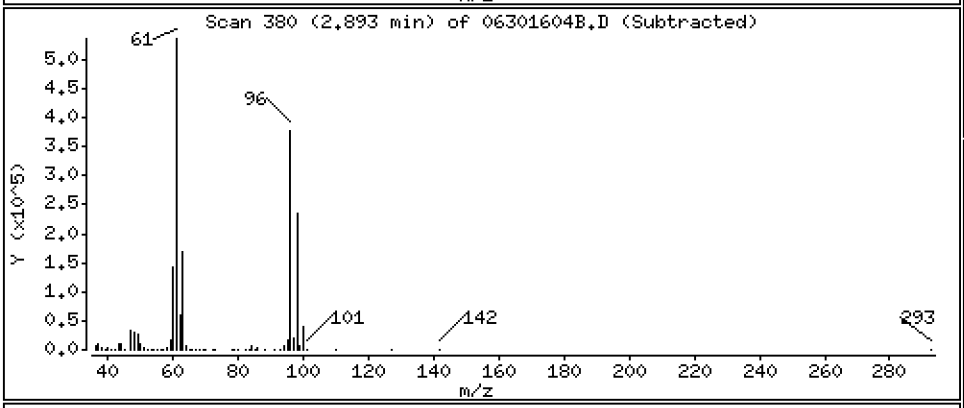
Column diameter: 0.18

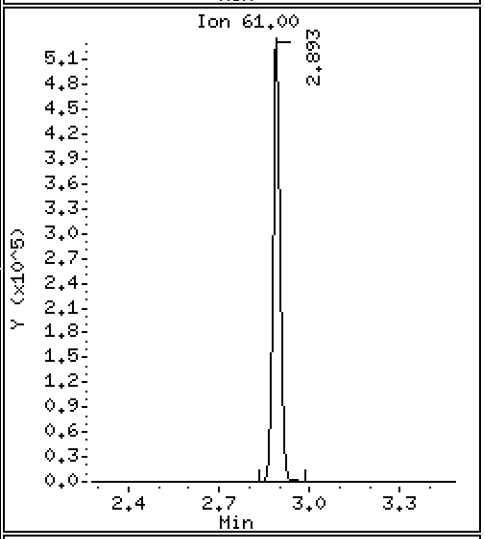
15 Trans-1,2-Dichloroethene

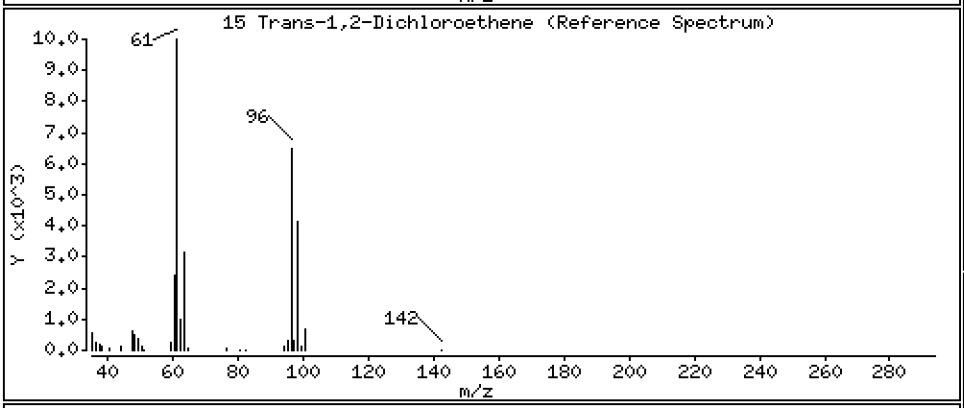
Concentration: 45.501 ug/Kg

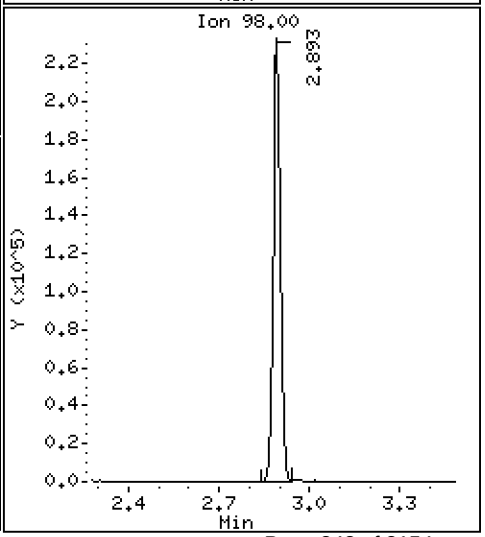


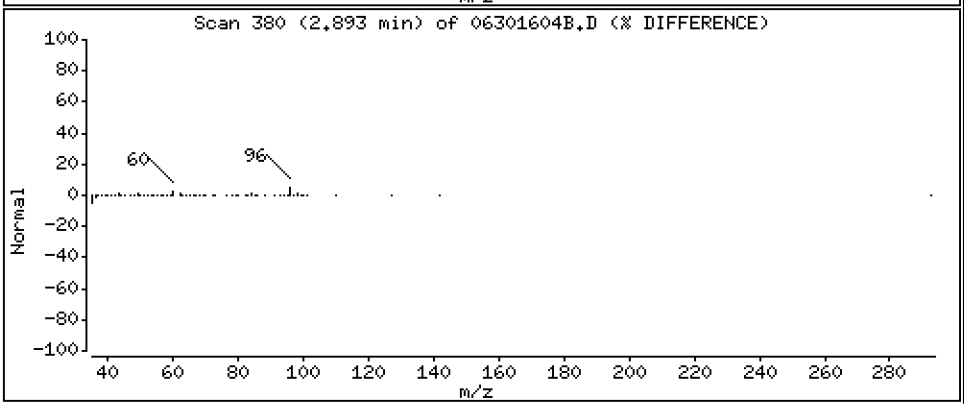












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

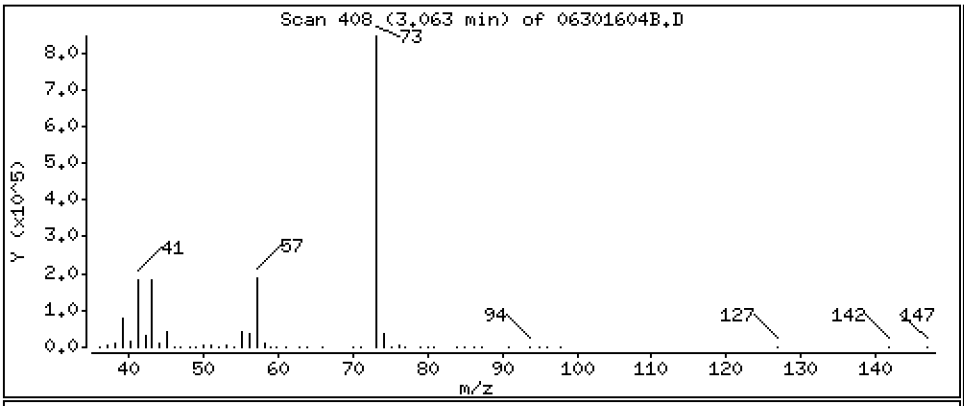
Operator: PB

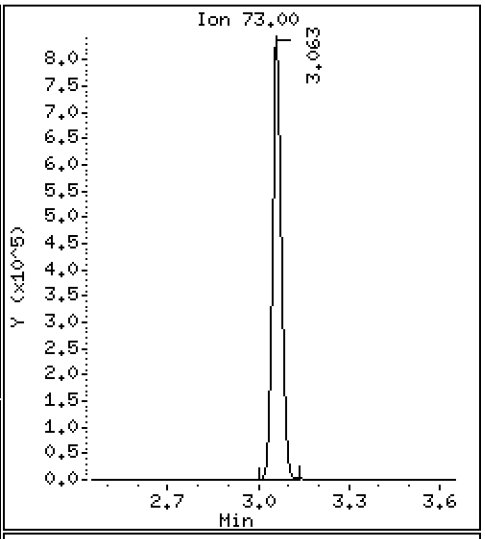
Column phase: RTXVMS

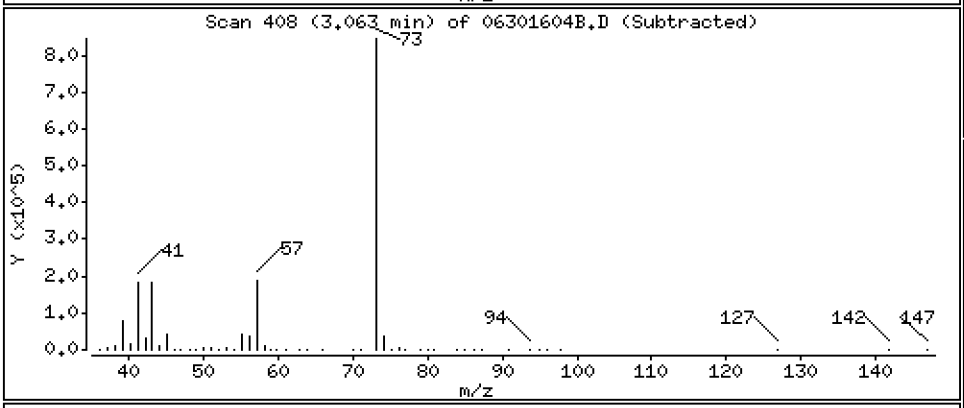
Column diameter: 0.18

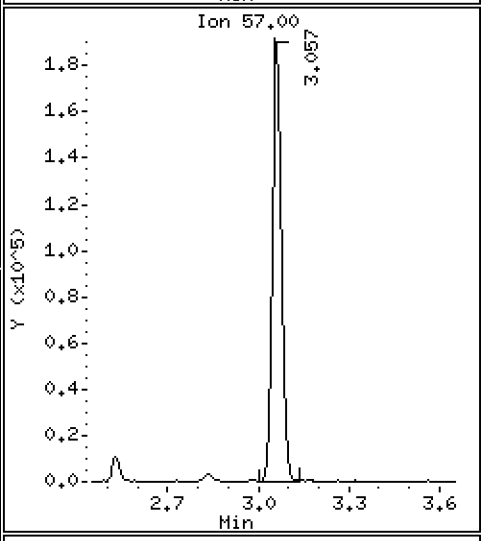
16 Methyl tert butyl ether

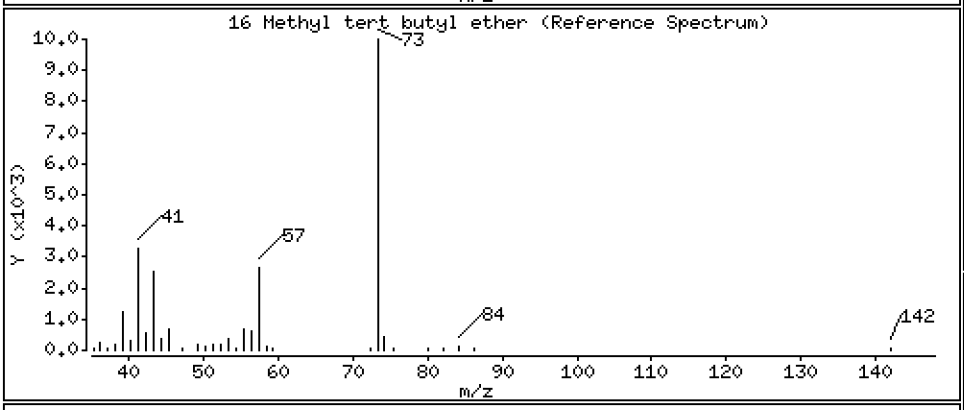
Concentration: 42.550 ug/Kg

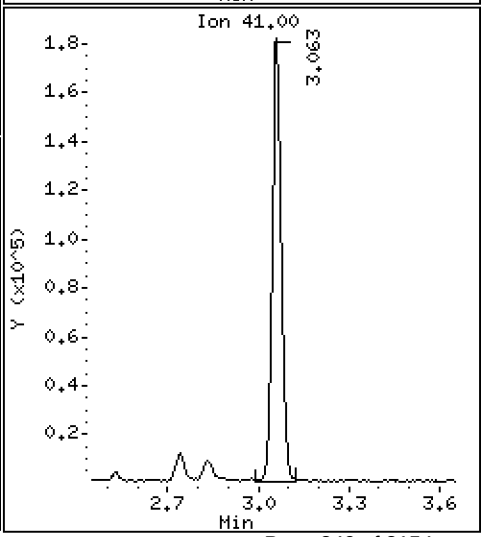


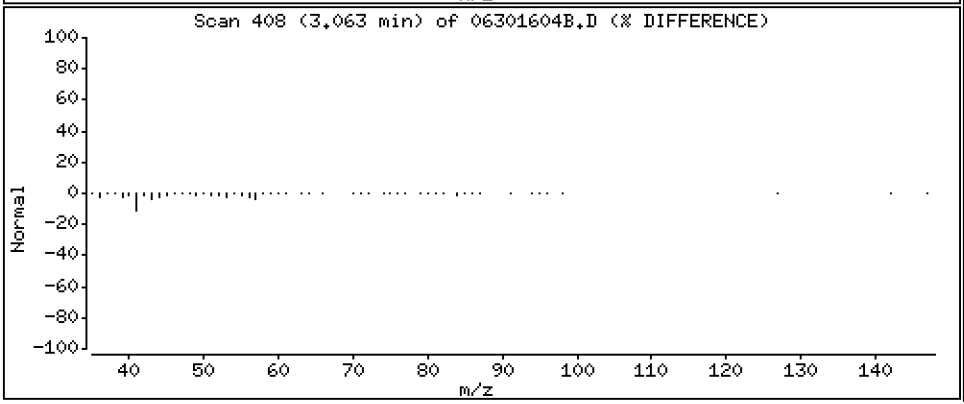












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

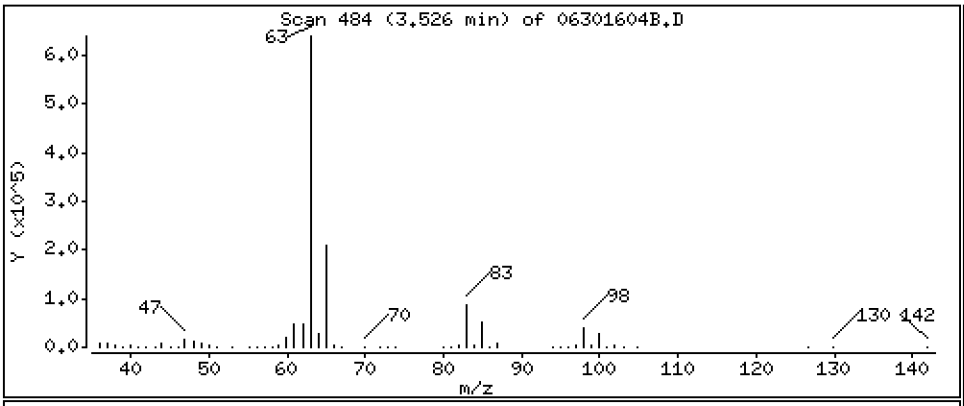
Operator: PB

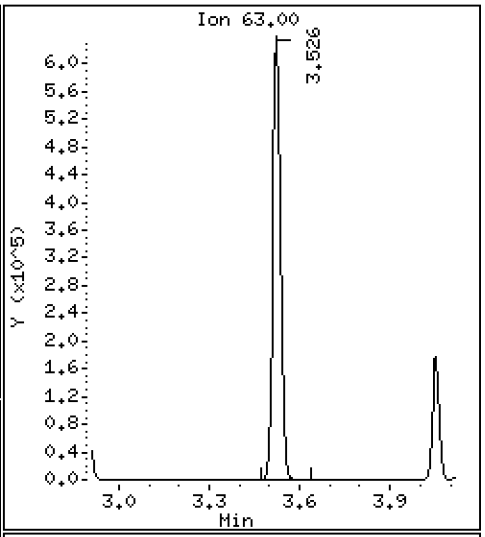
Column phase: RTXVMS

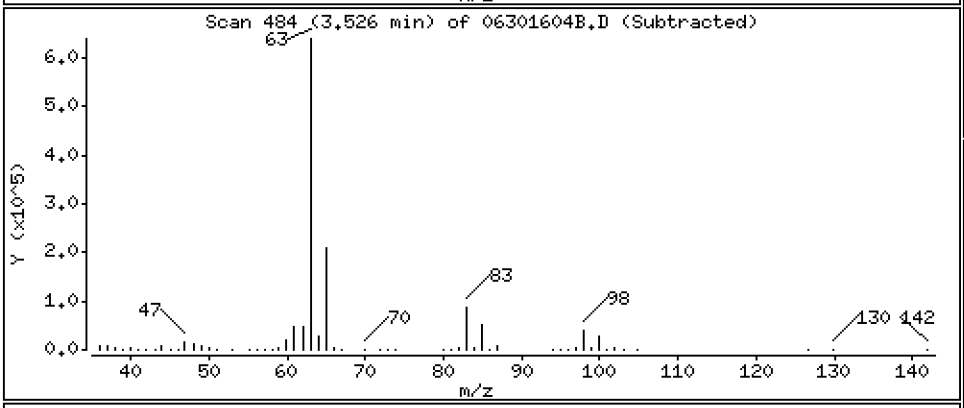
Column diameter: 0.18

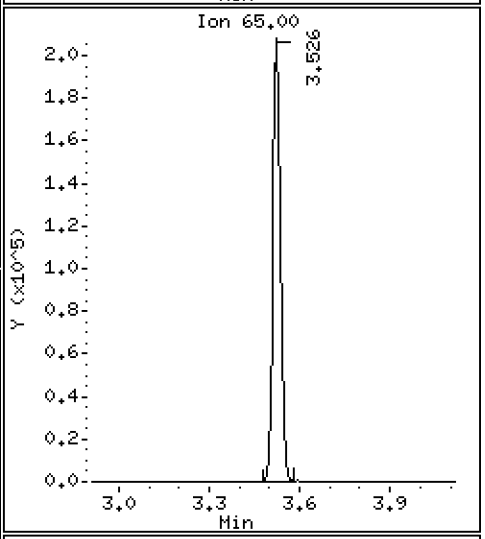
17 1,1-Dichloroethane

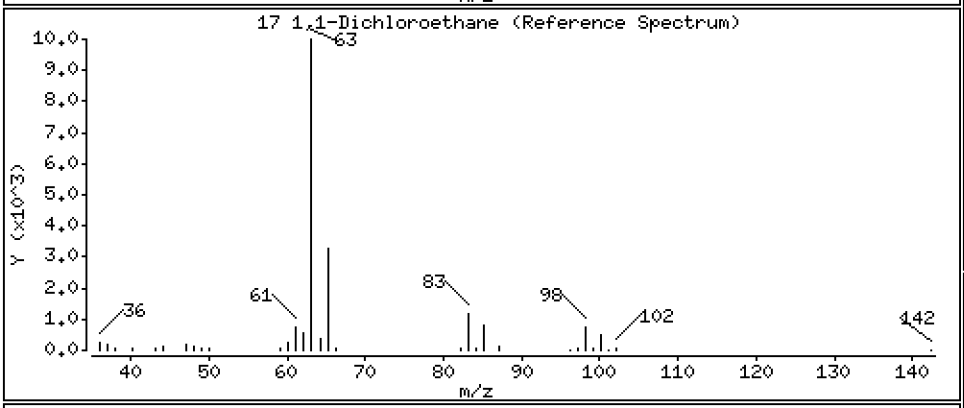
Concentration: 41.498 ug/Kg

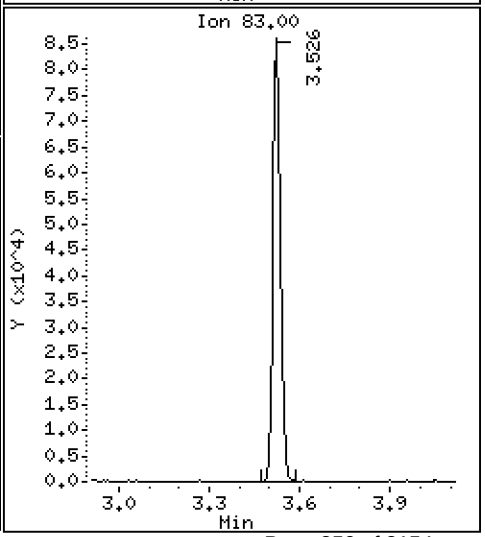


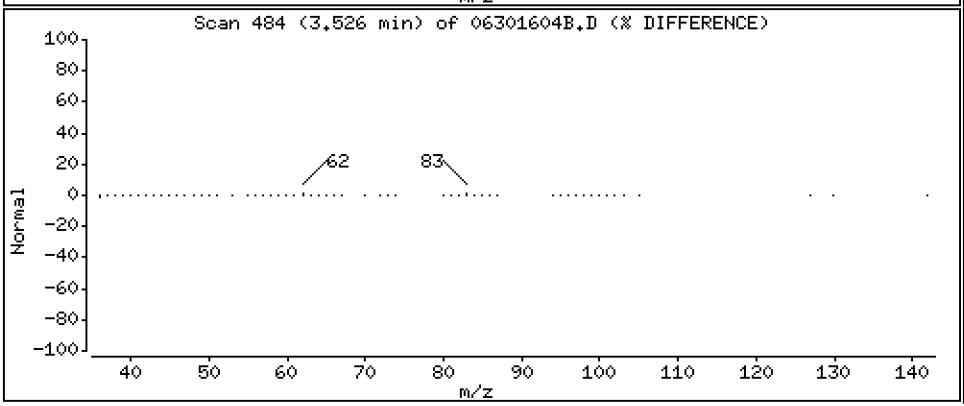












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

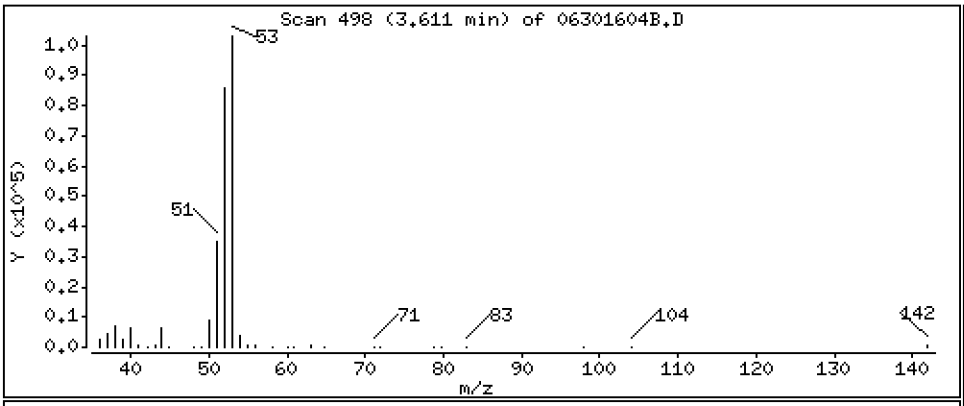
Operator: PB

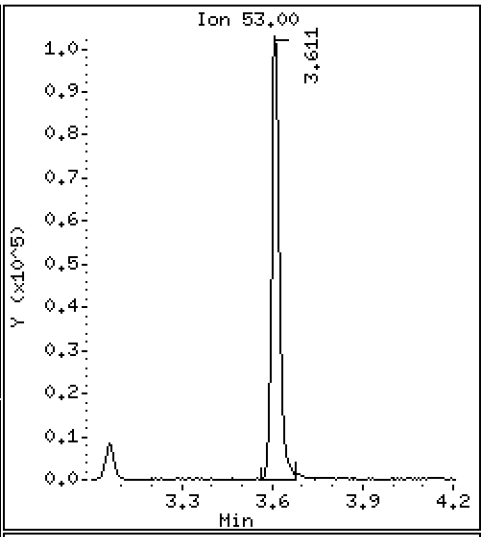
Column phase: RTXVMS

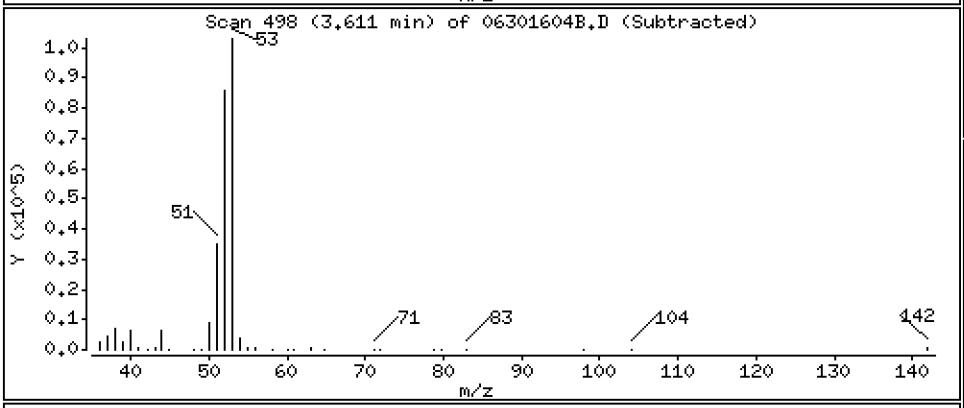
Column diameter: 0.18

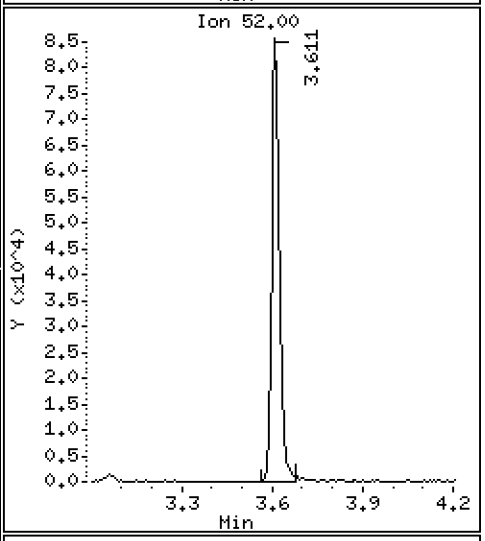
18 Acrylonitrile

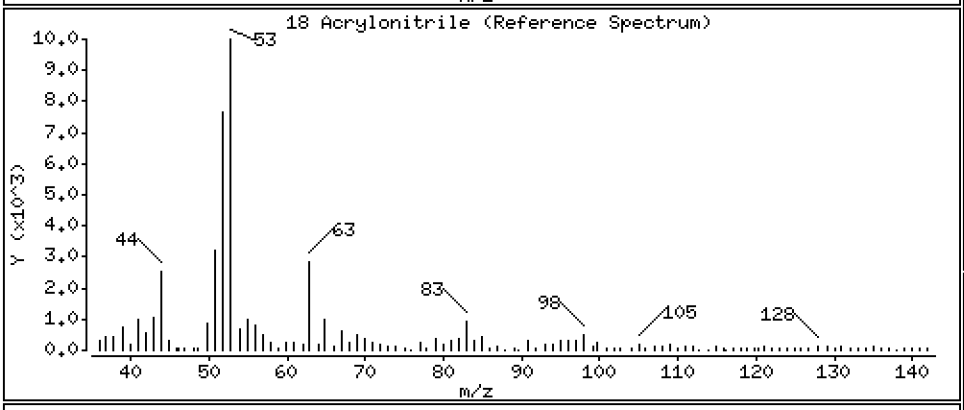
Concentration: 39.165 ug/Kg

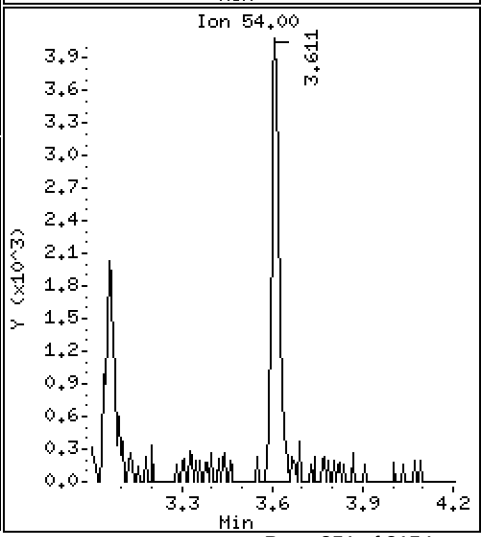


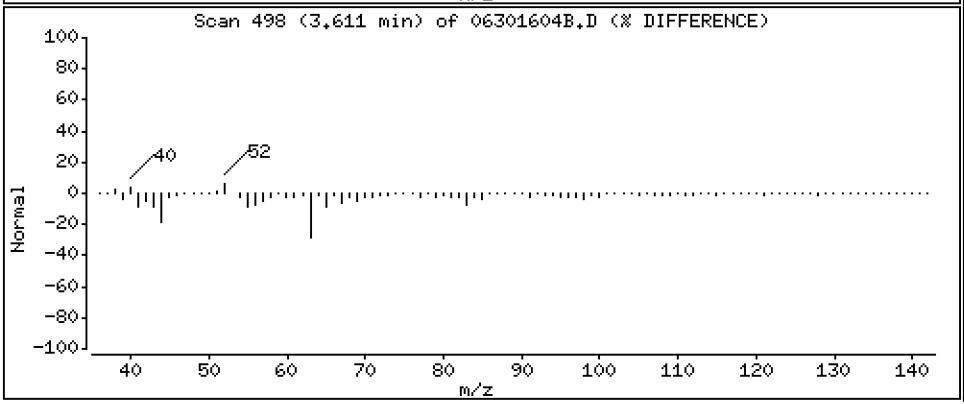












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

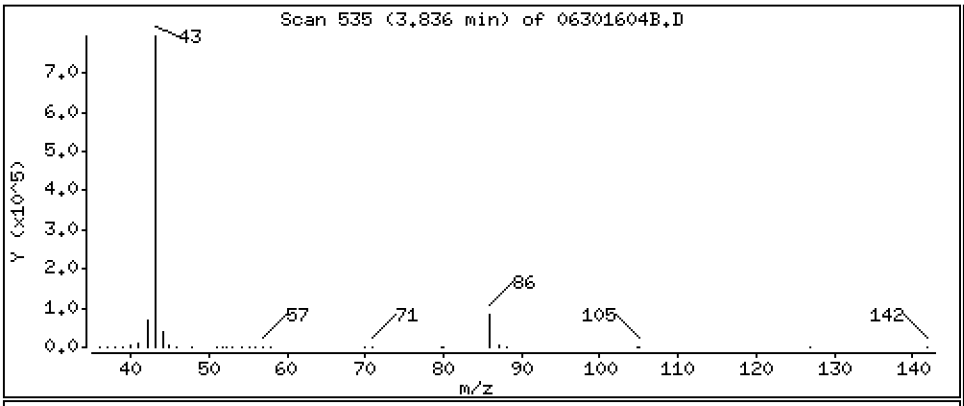
Operator: PB

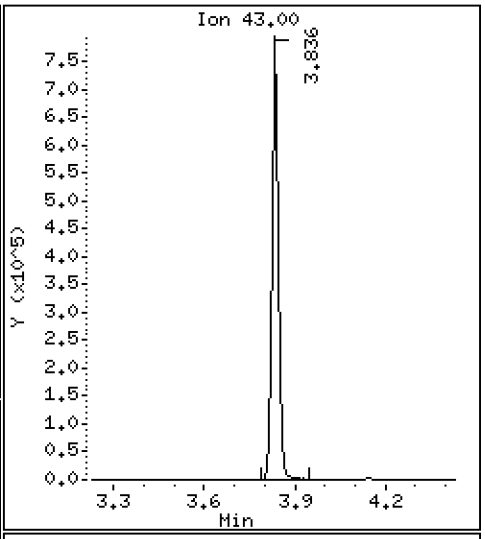
Column phase: RTXVMS

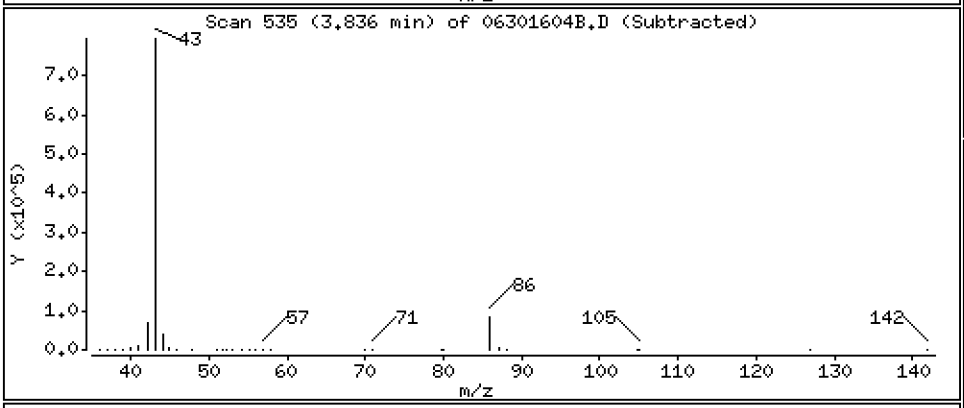
Column diameter: 0.18

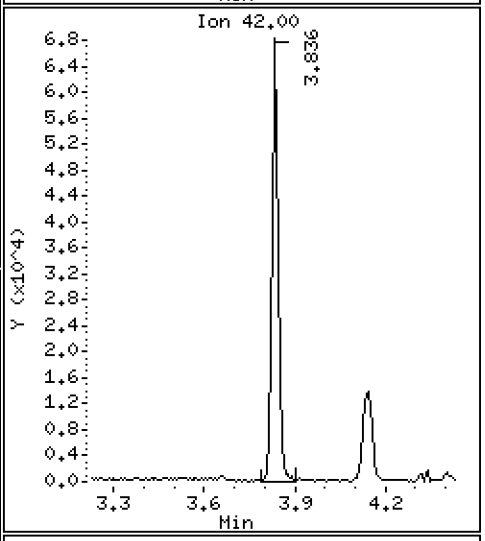
19 Vinyl Acetate

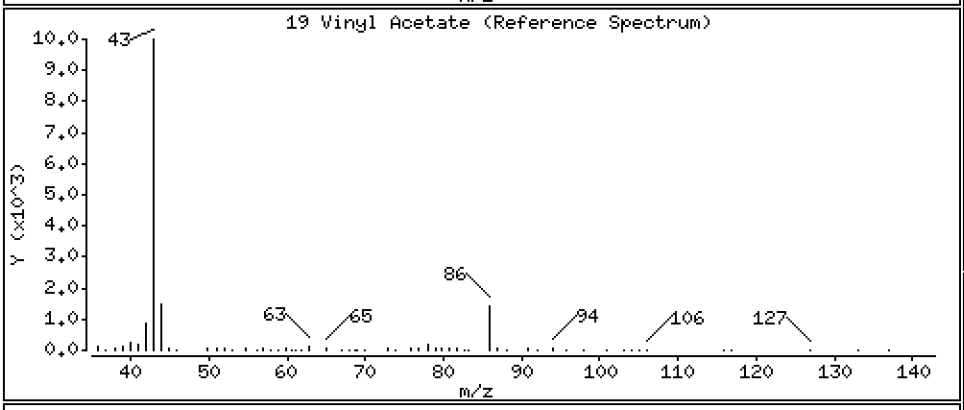
Concentration: 38.646 ug/Kg

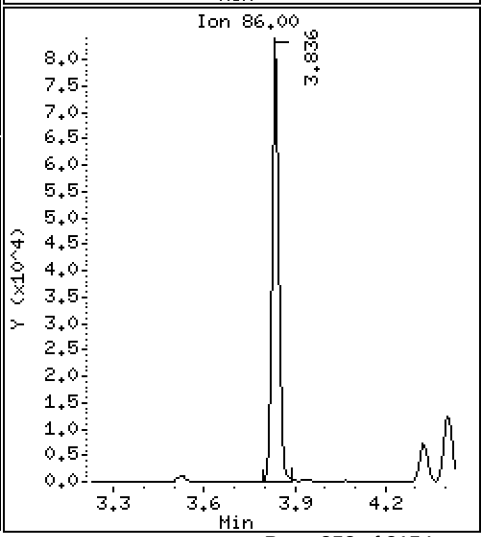


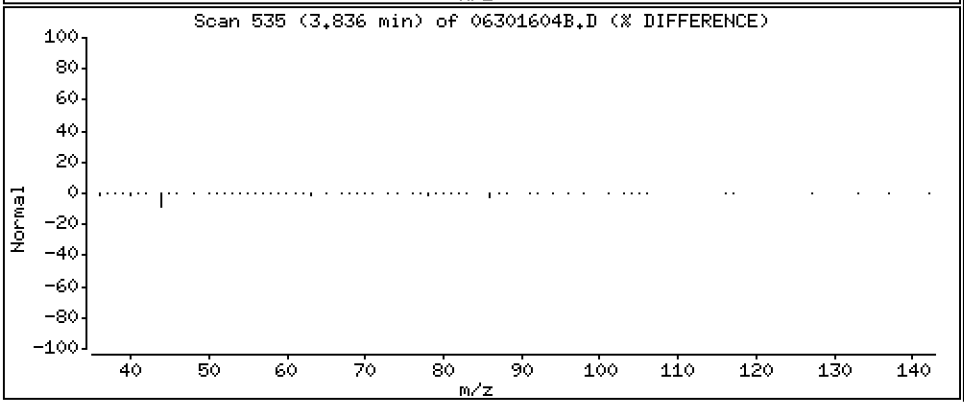












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

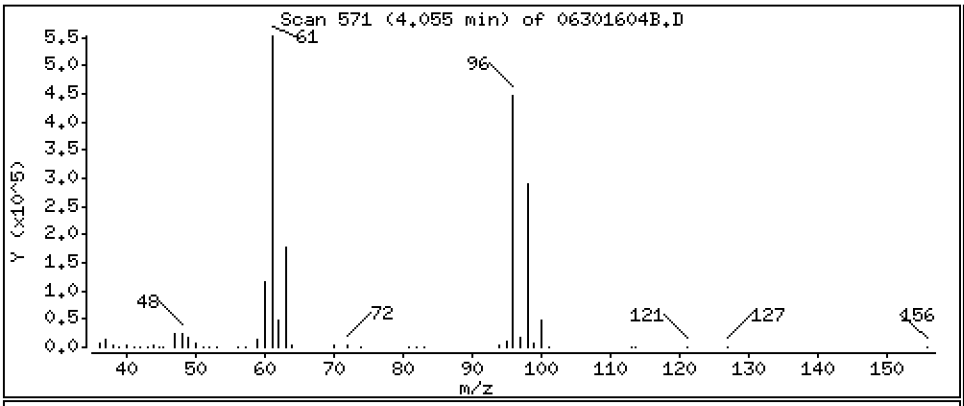
Operator: PB

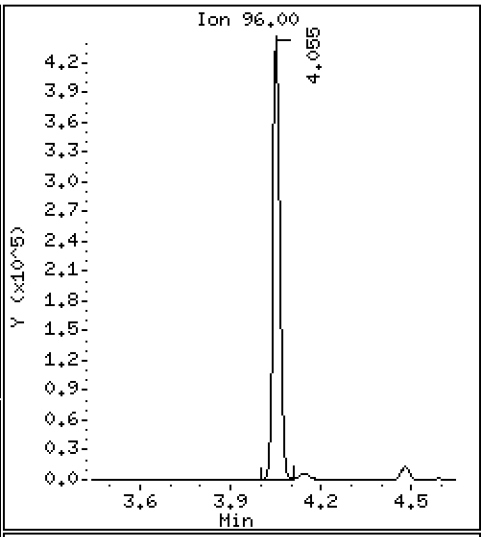
Column phase: RTXVMS

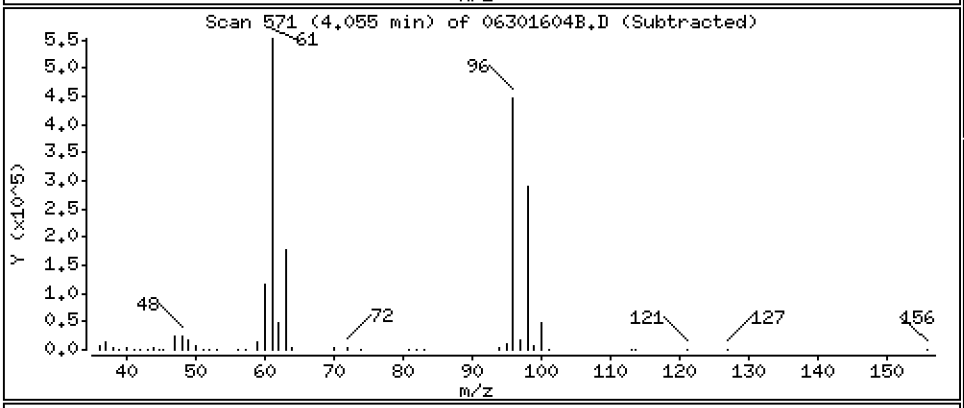
Column diameter: 0.18

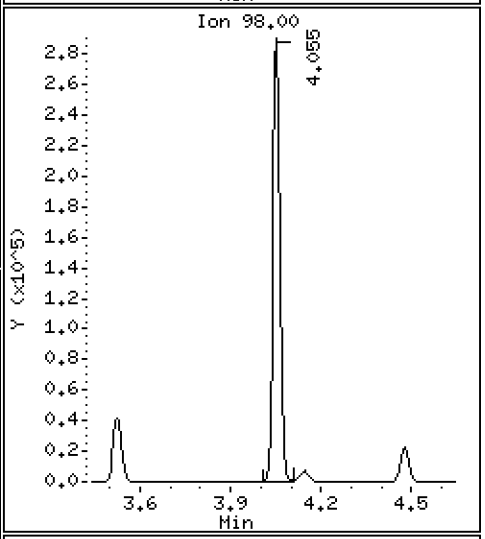
20 Cis-1,2-Dichloroethene

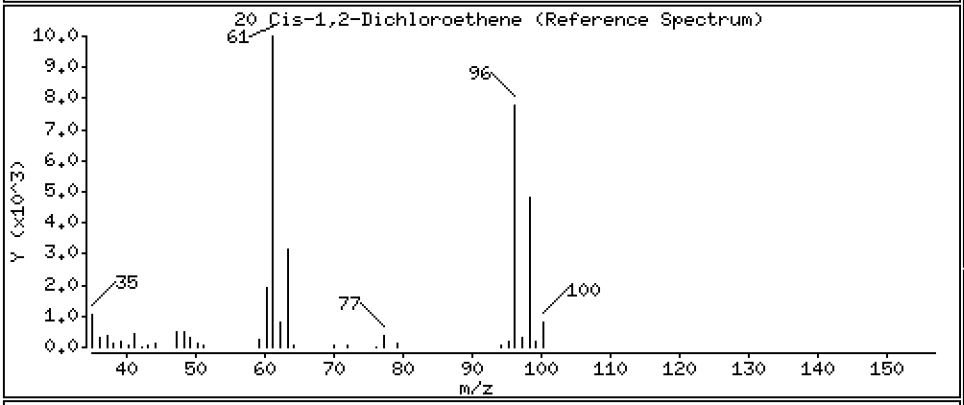
Concentration: 43.506 ug/Kg

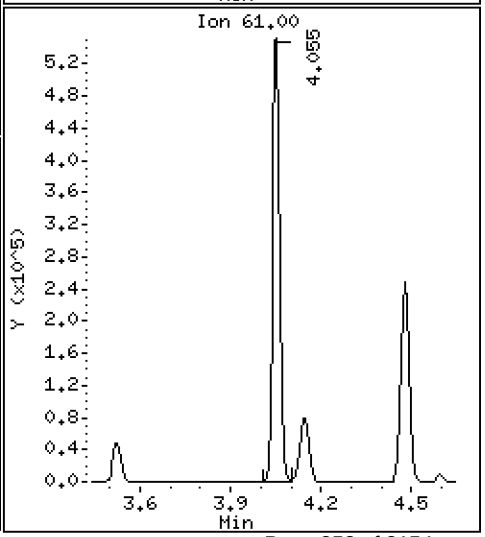


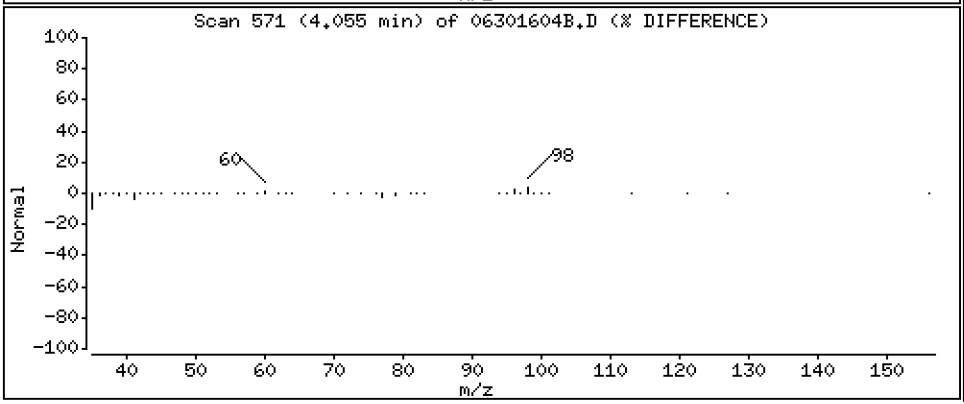












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

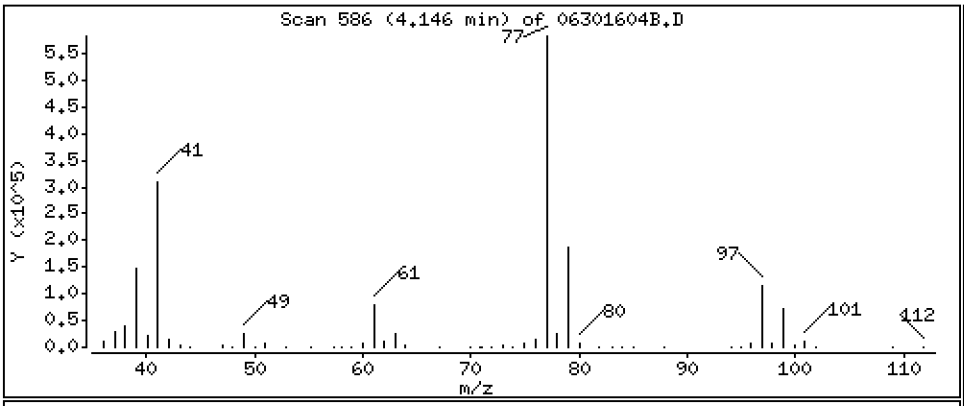
Operator: PB

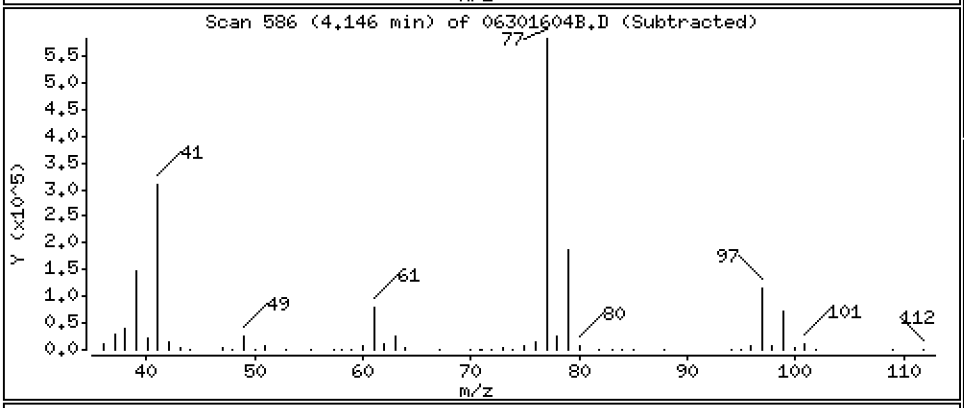
Column phase: RTXVMS

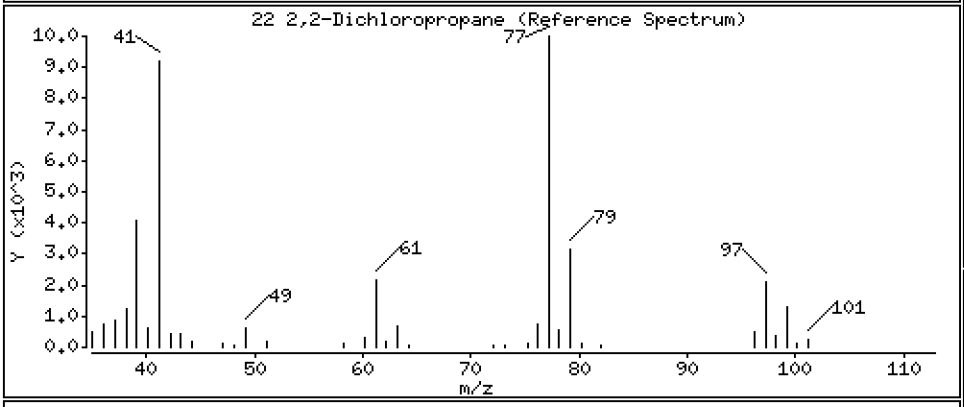
Column diameter: 0.18

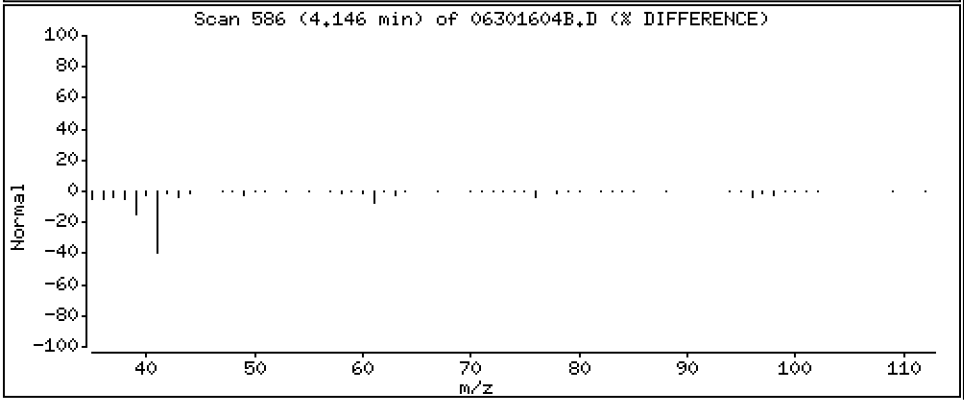
22 2,2-Dichloropropane

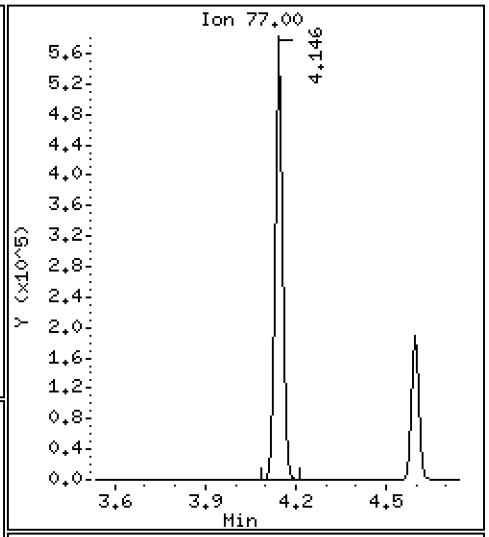
Concentration: 44.765 ug/Kg

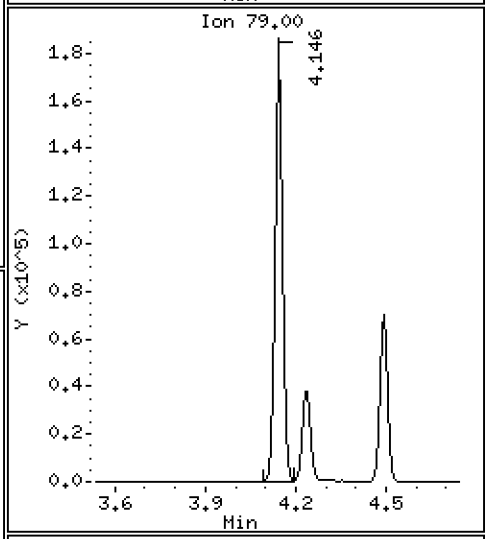


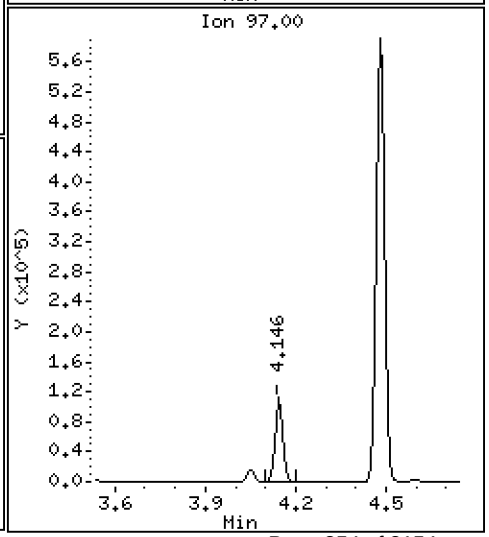












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

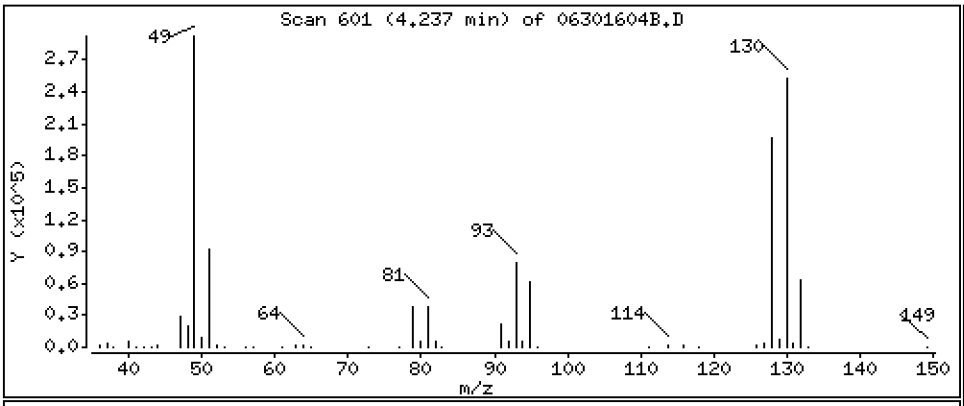
Operator: PB

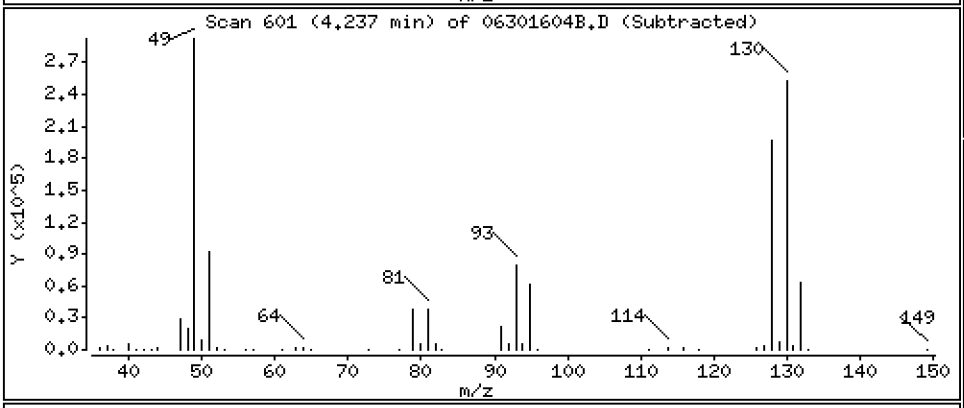
Column phase: RTXVMS

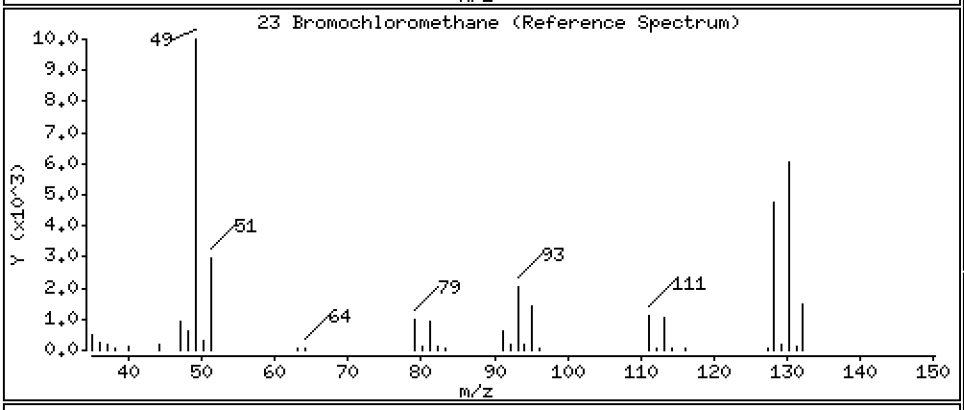
Column diameter: 0.18

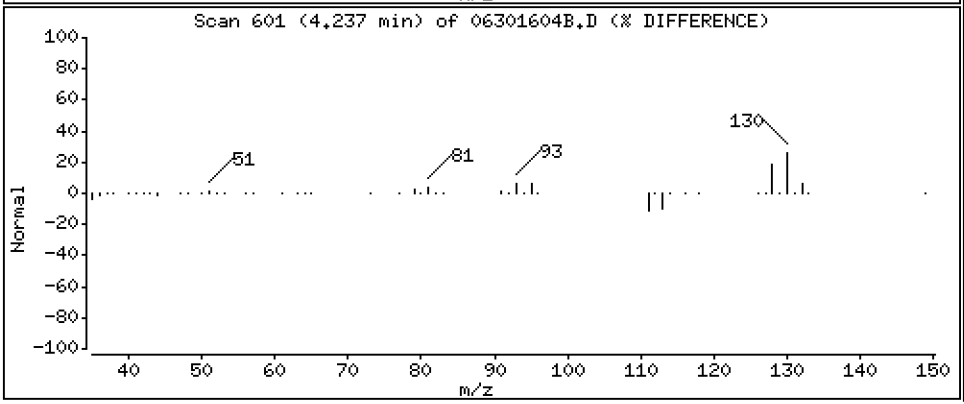
23 Bromochloromethane

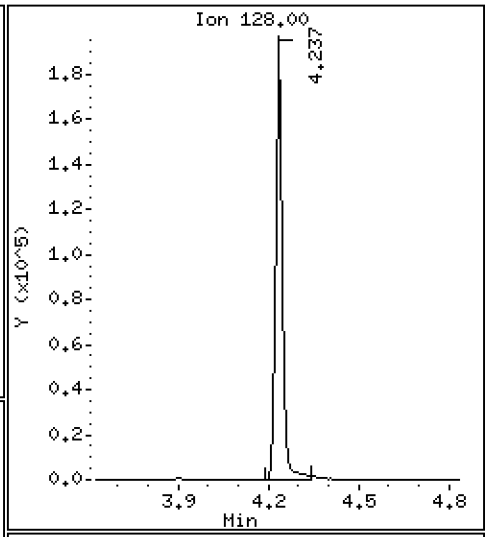
Concentration: 45.167 ug/Kg

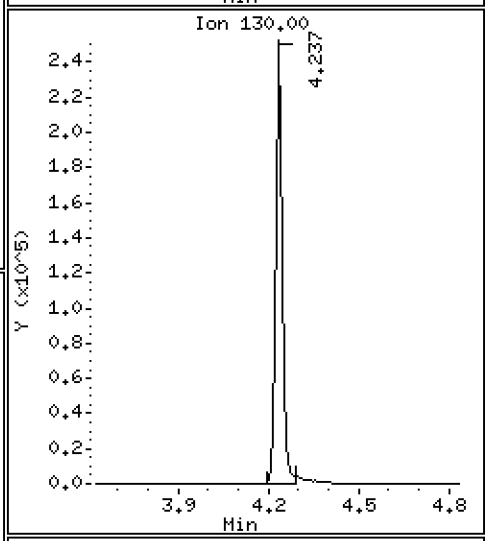


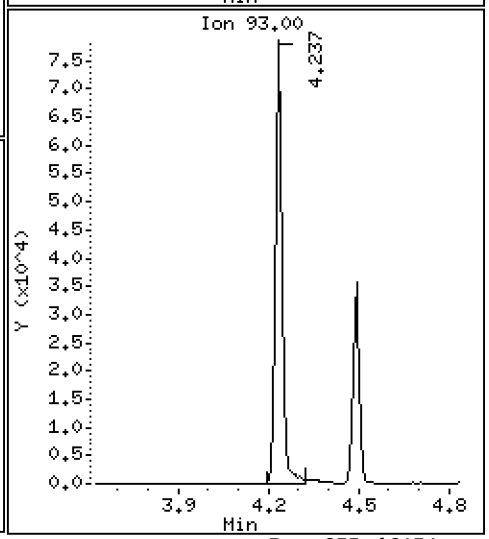












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

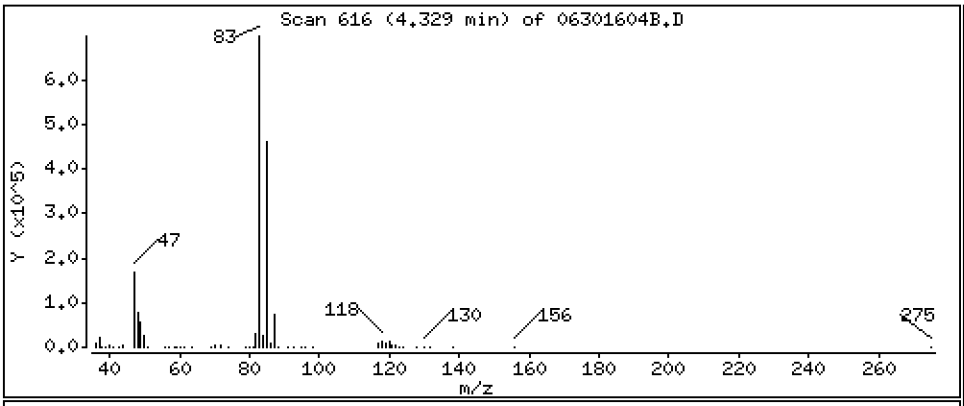
Operator: PB

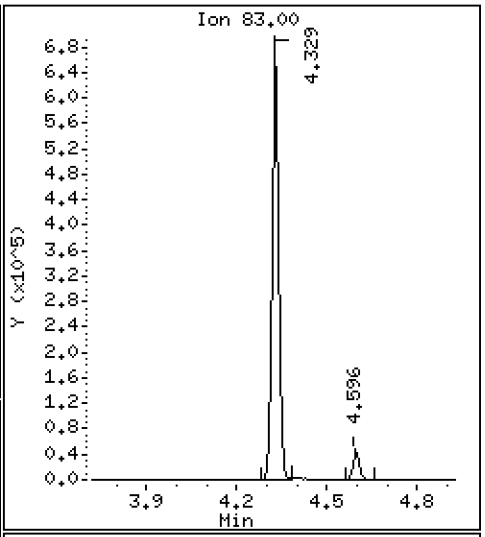
Column phase: RTXVMS

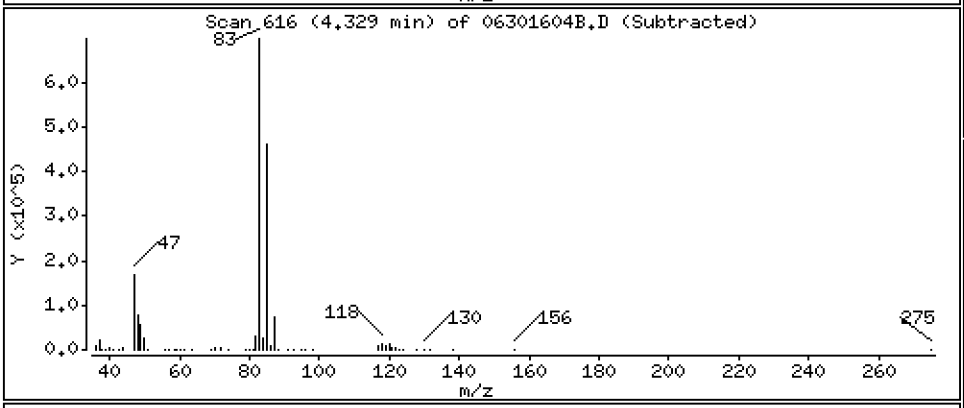
Column diameter: 0.18

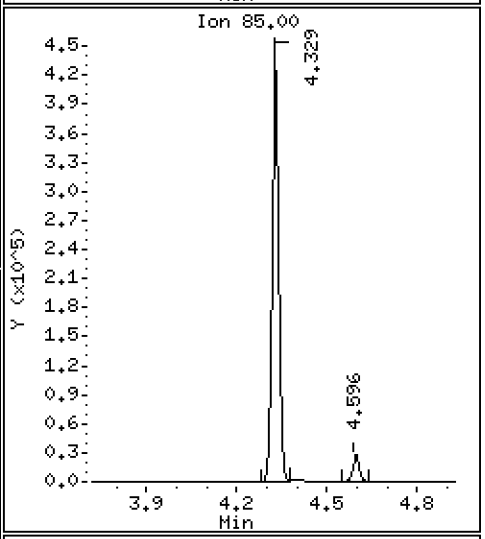
24 Chloroform

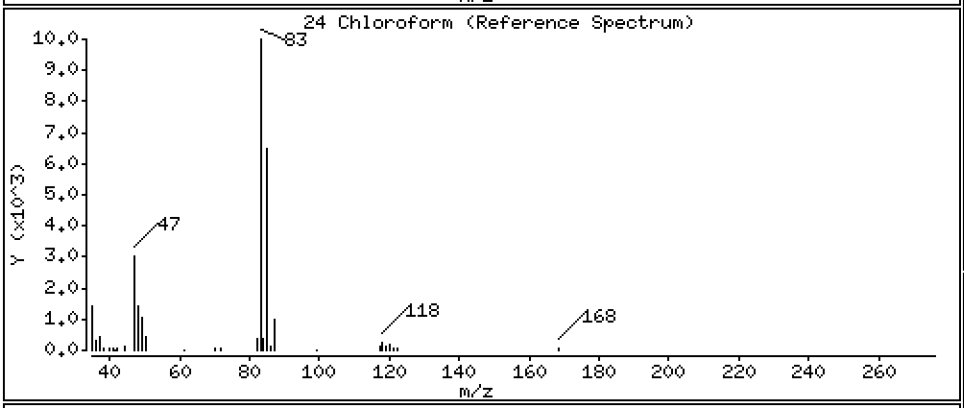
Concentration: 43.353 ug/Kg

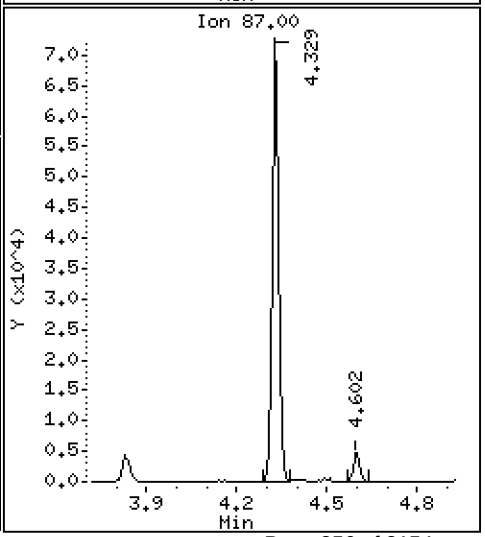


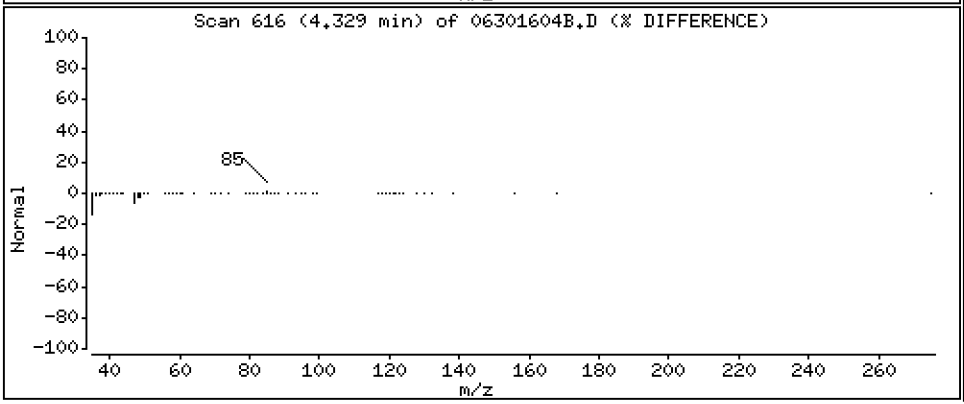












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

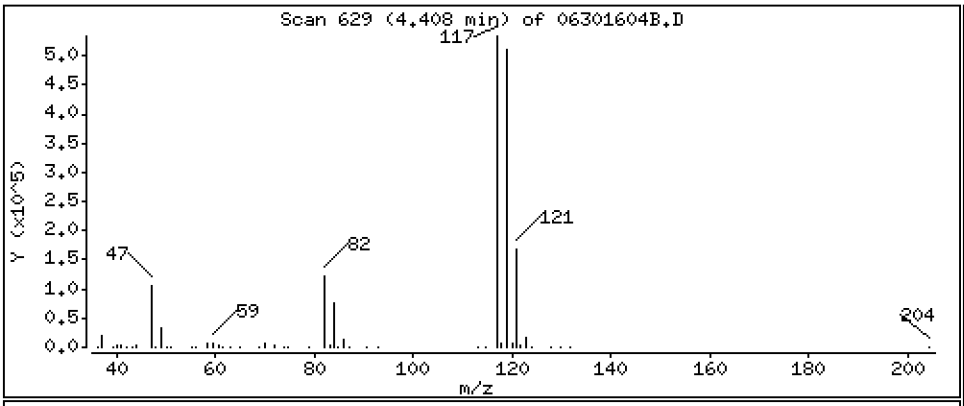
Operator: PB

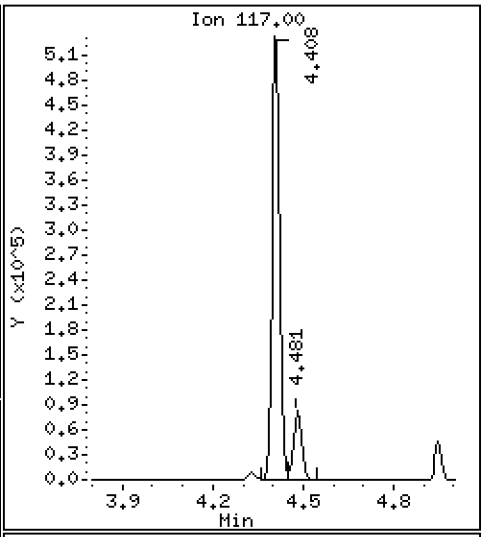
Column phase: RTXVMS

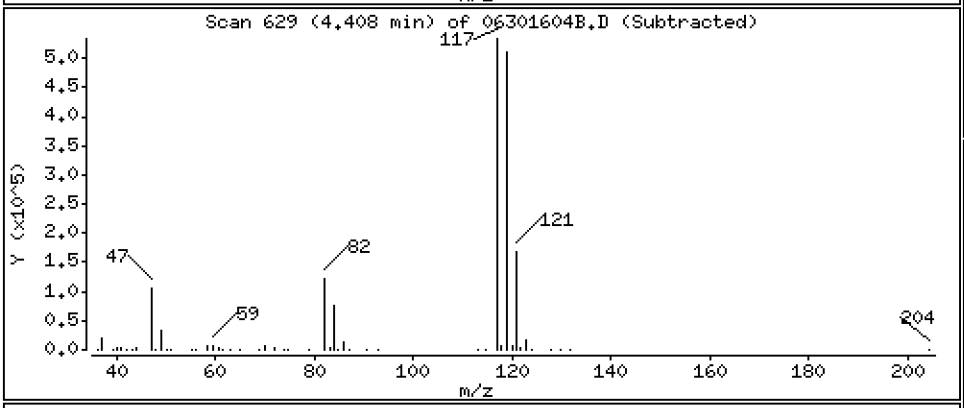
Column diameter: 0.18

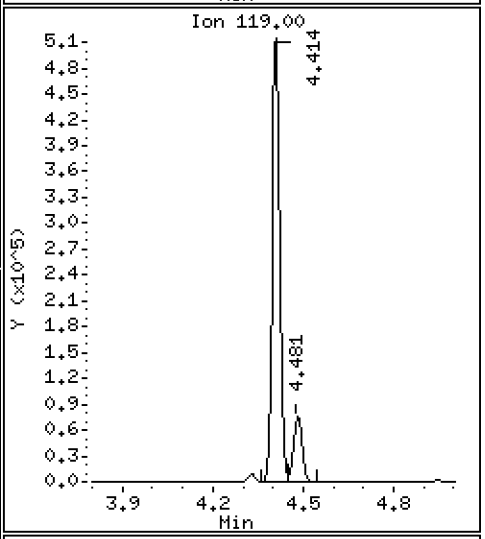
25 Carbon Tetrachloride

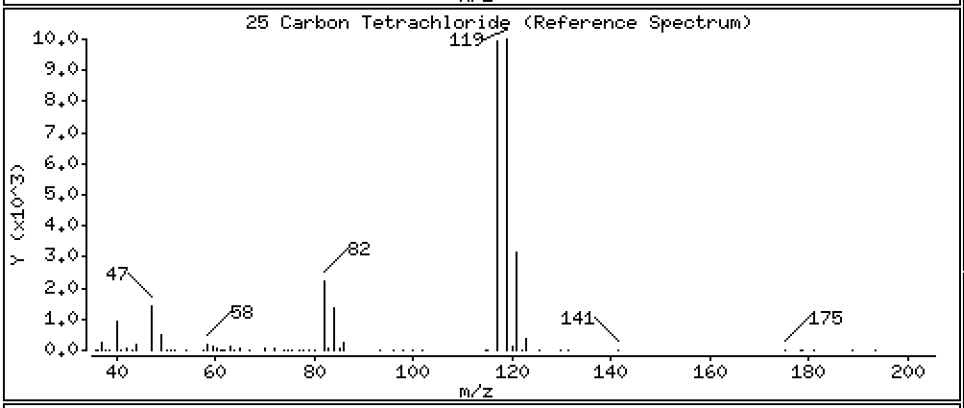
Concentration: 47.269 ug/Kg

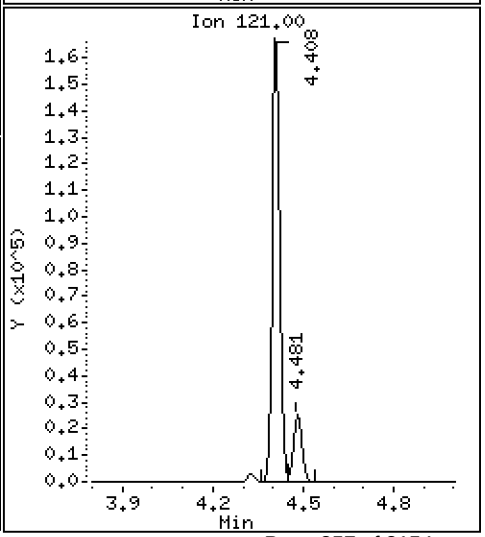


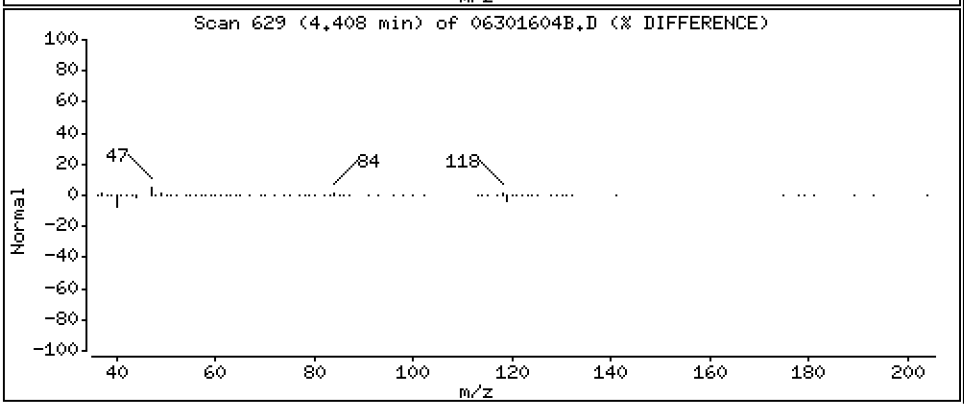












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

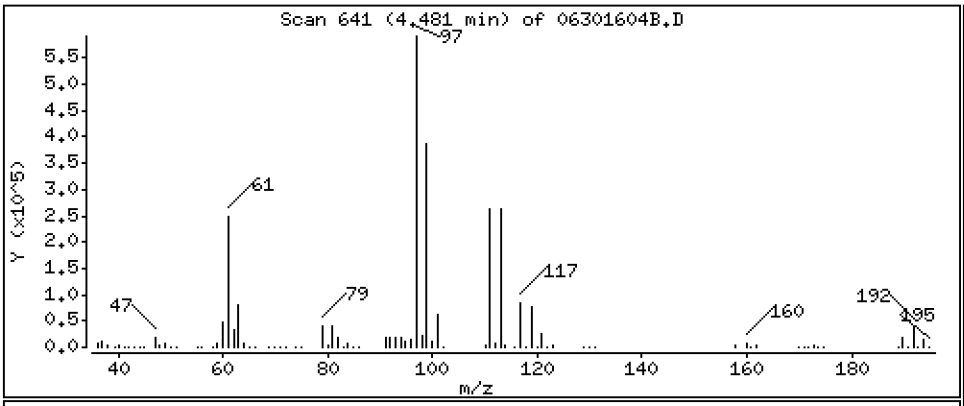
Operator: PB

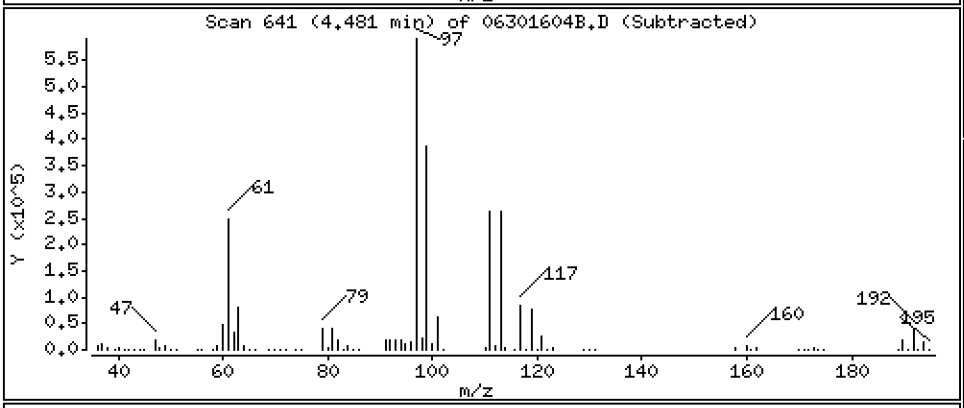
Column phase: RTXVMS

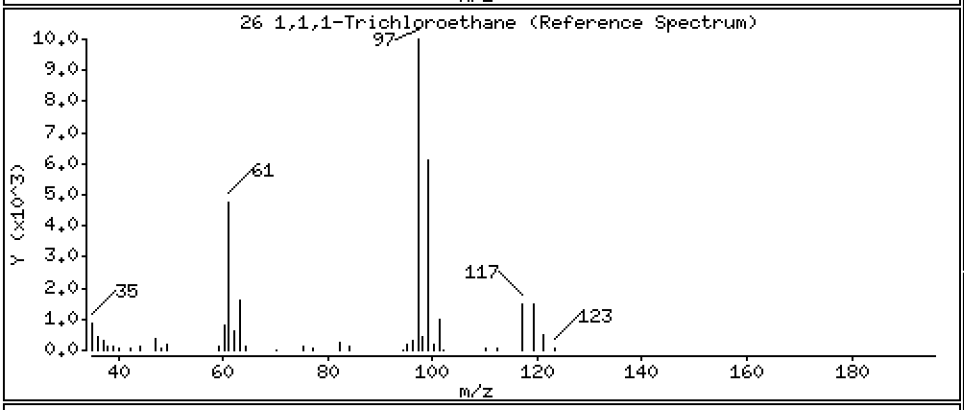
Column diameter: 0.18

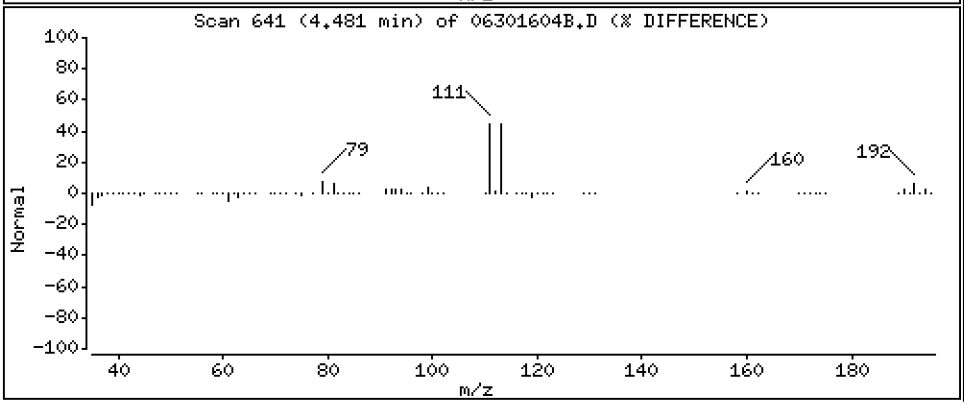
26 1,1,1-Trichloroethane

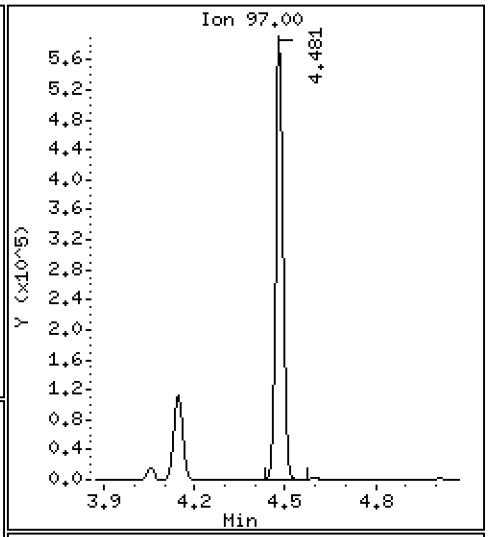
Concentration: 43.119 ug/Kg

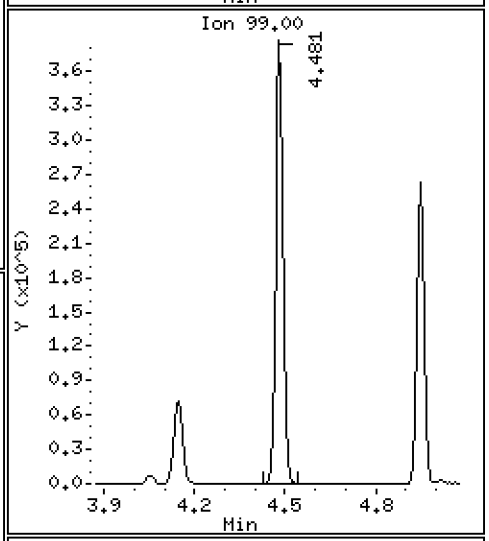


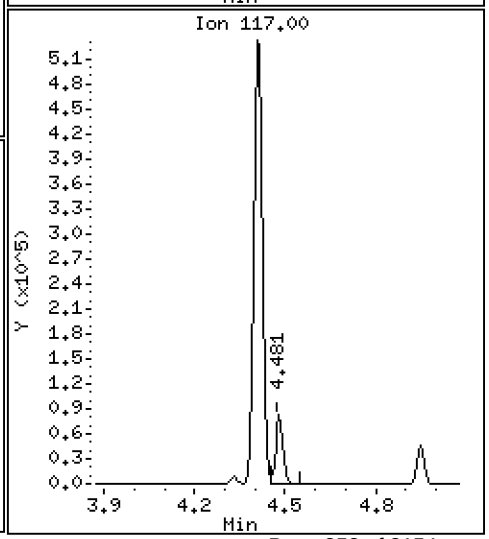












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

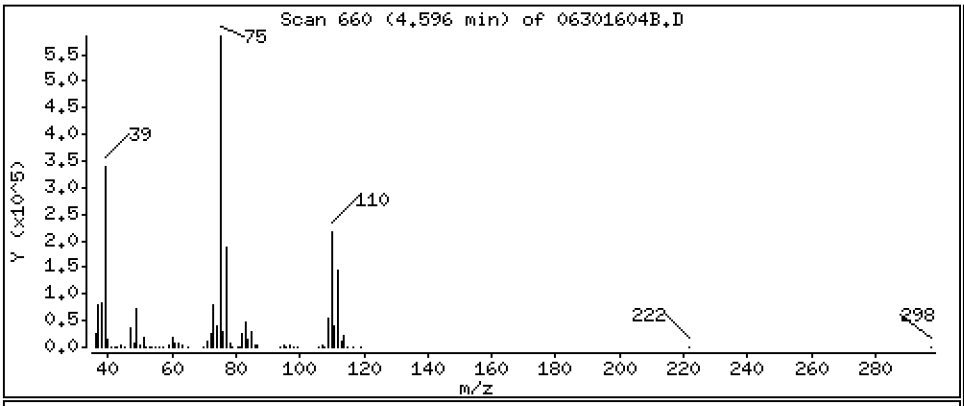
Operator: PB

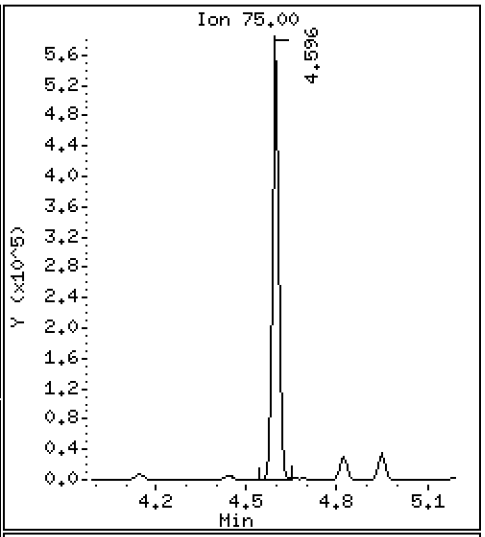
Column phase: RTXVMS

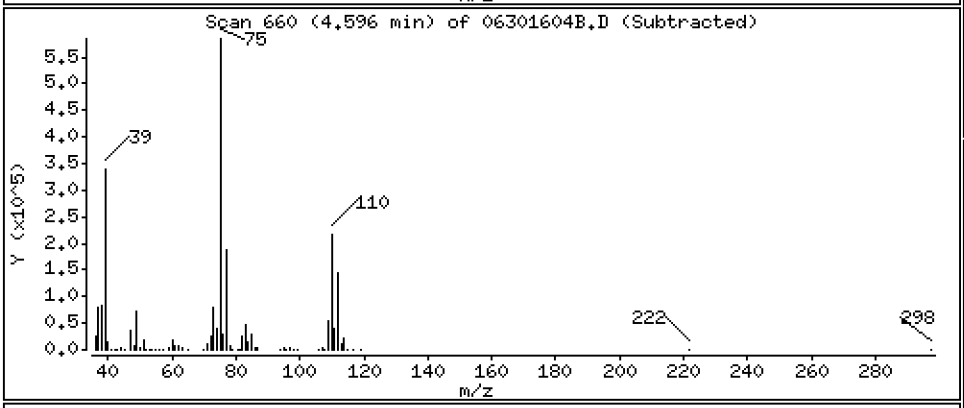
Column diameter: 0.18

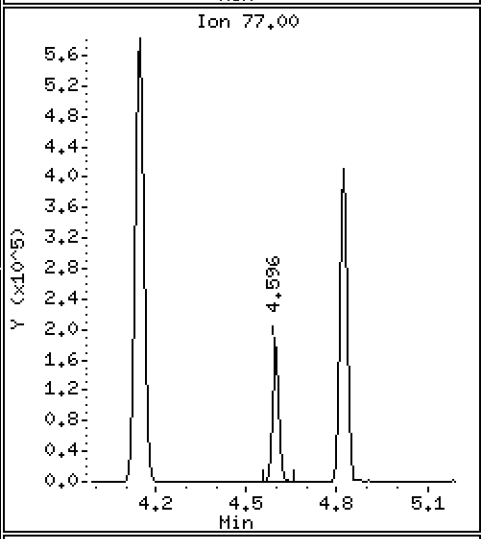
28 1,1-Dichloropropene

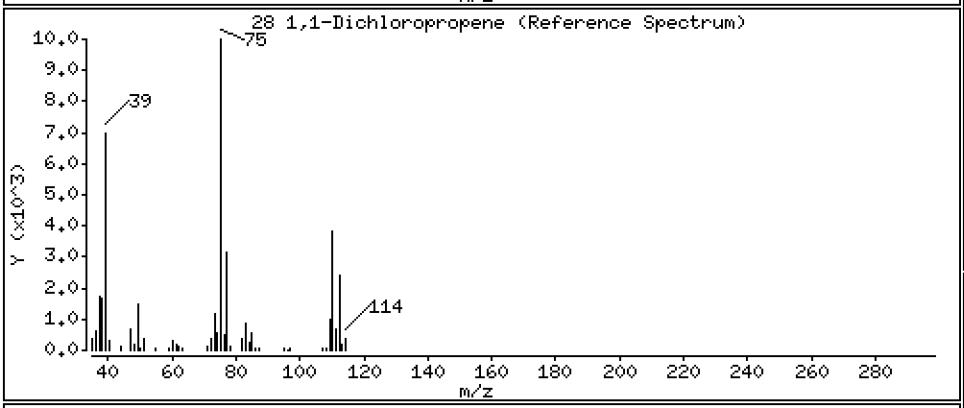
Concentration: 44.103 ug/Kg

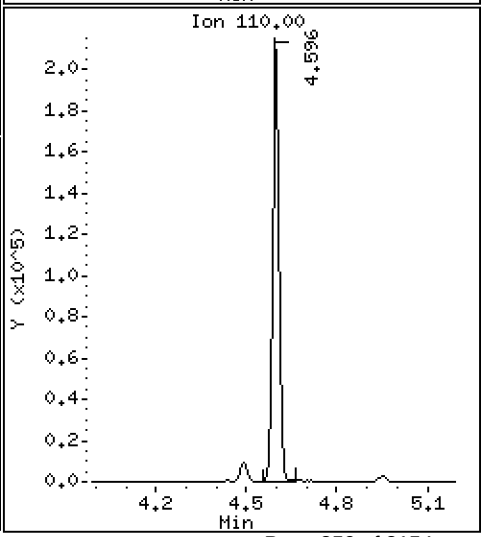


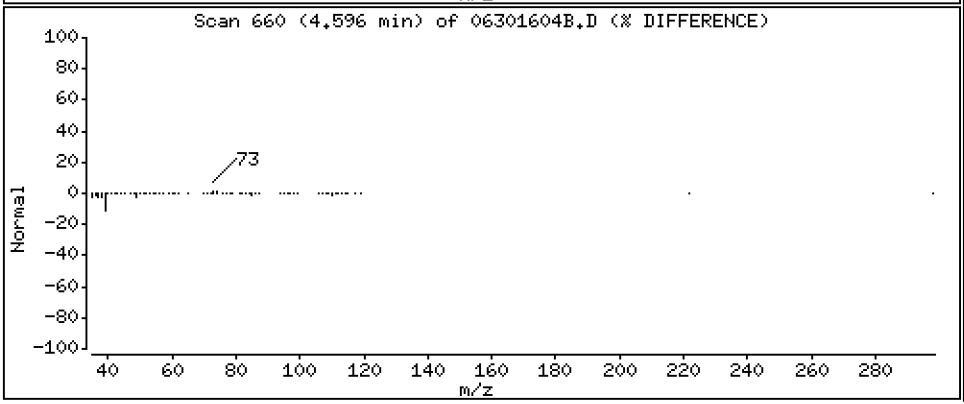












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

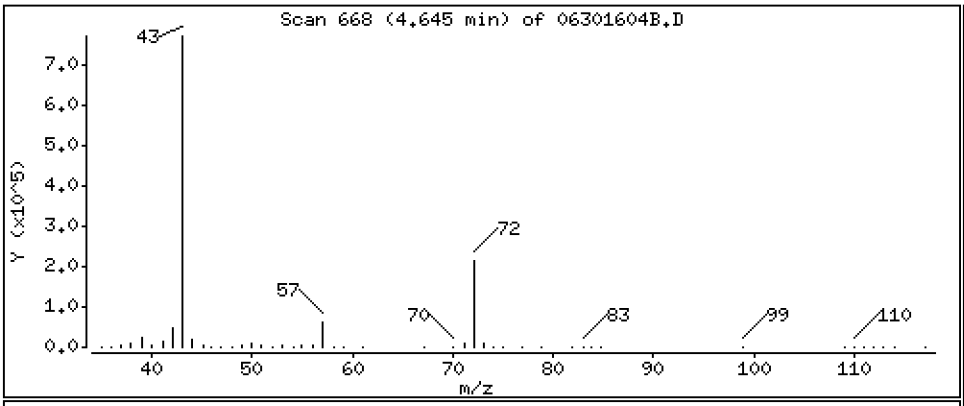
Operator: PB

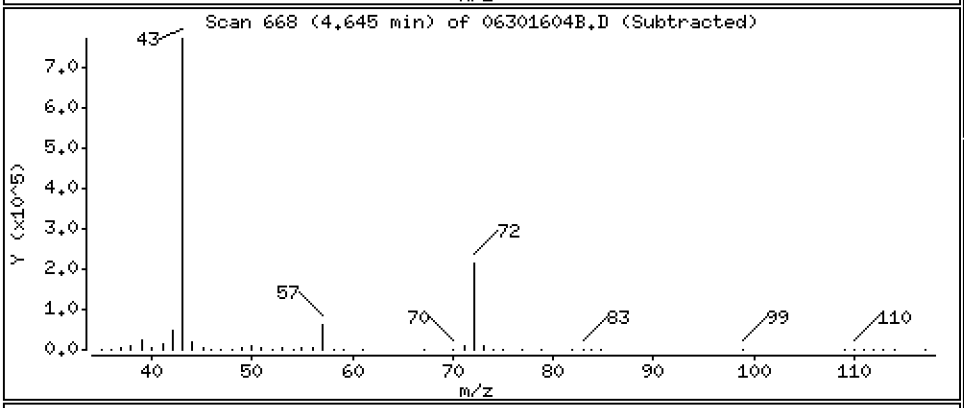
Column phase: RTXVMS

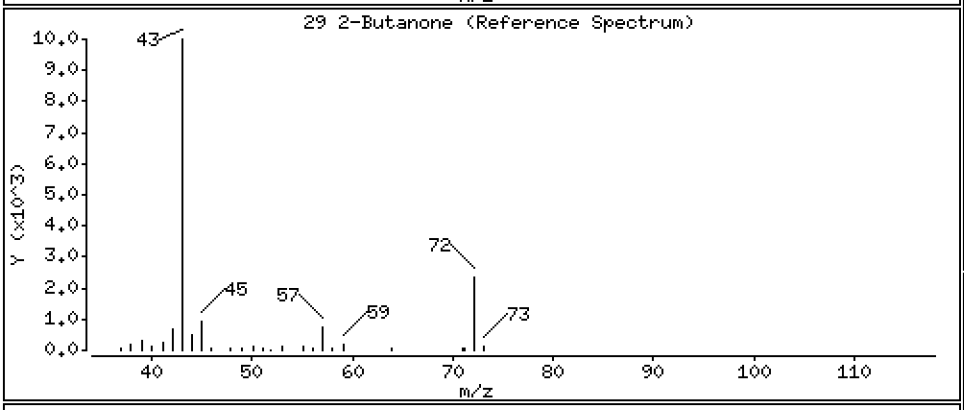
Column diameter: 0.18

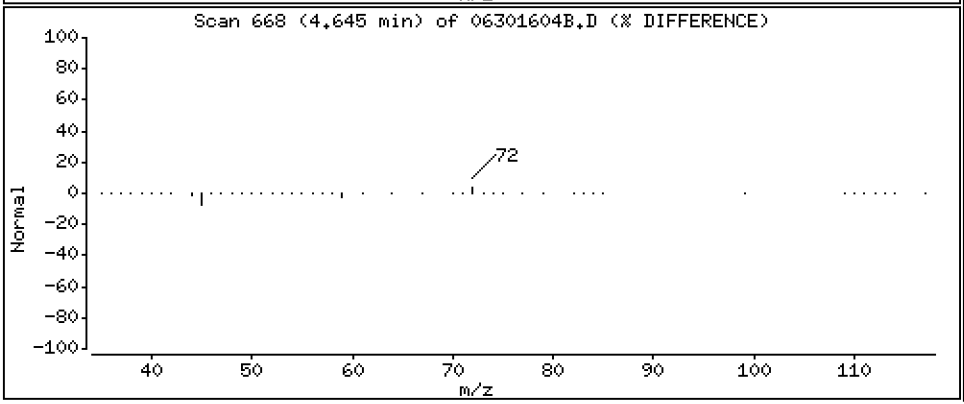
29 2-Butanone

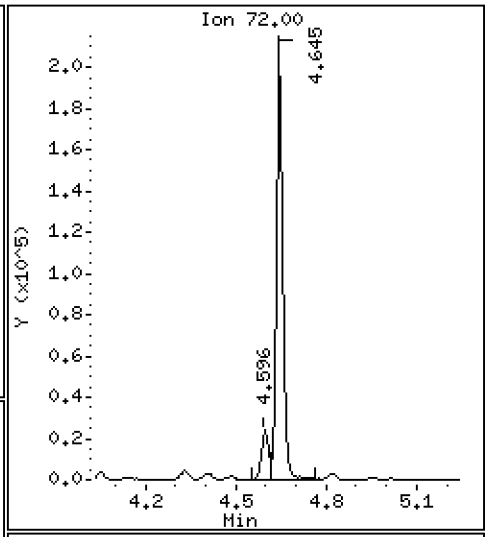
Concentration: 192.17 ug/Kg

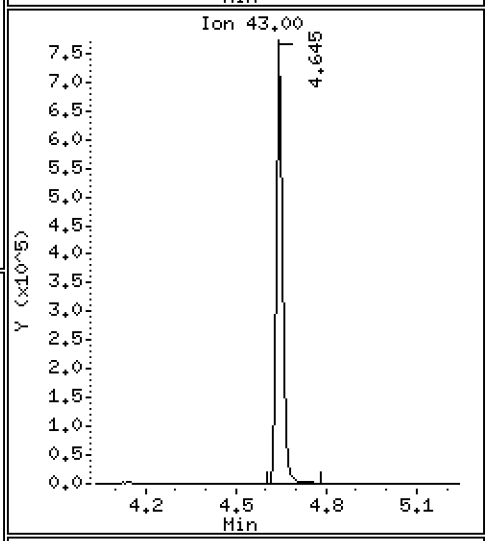


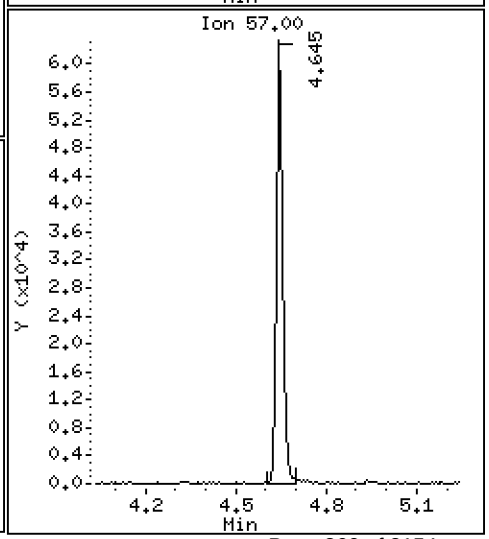












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

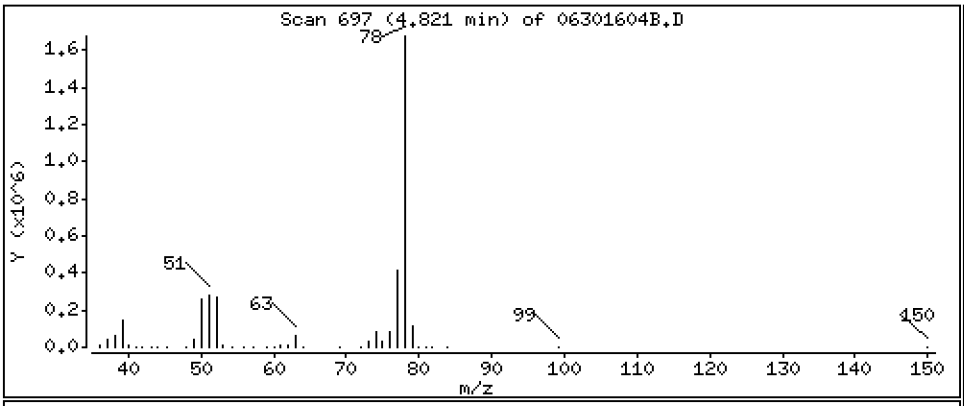
Operator: PB

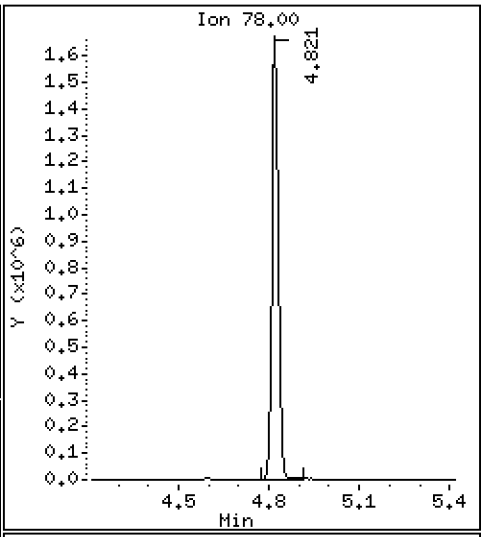
Column phase: RTXVMS

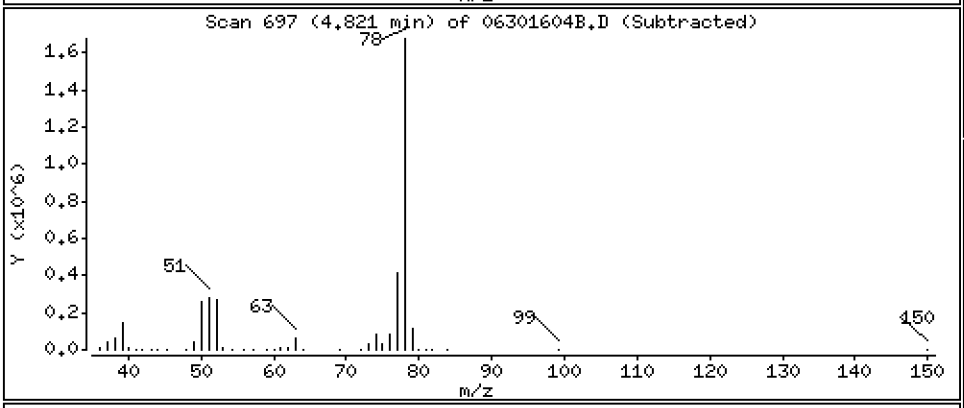
Column diameter: 0.18

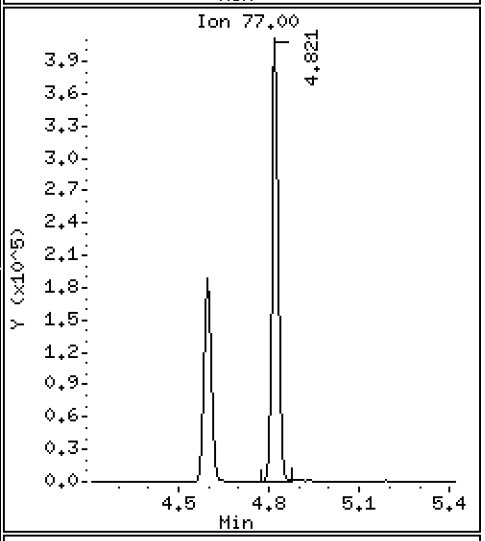
30 Benzene

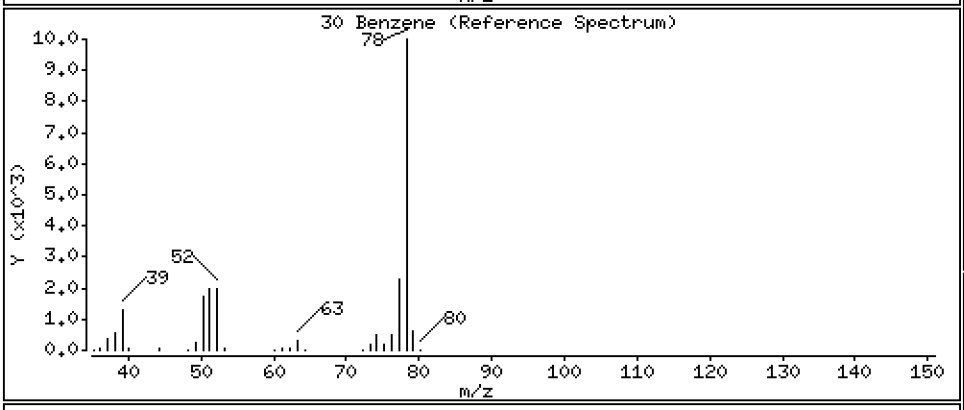
Concentration: 44.450 ug/Kg

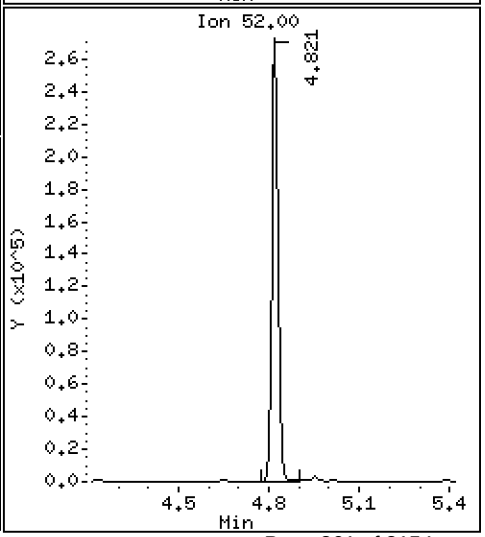


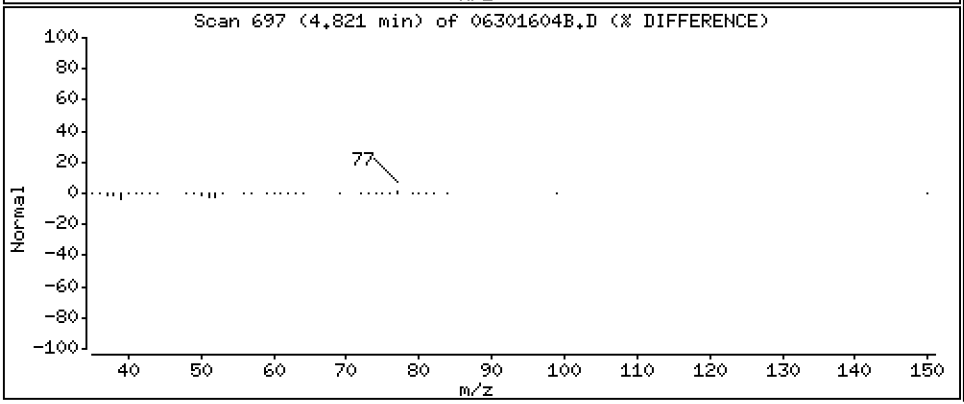












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

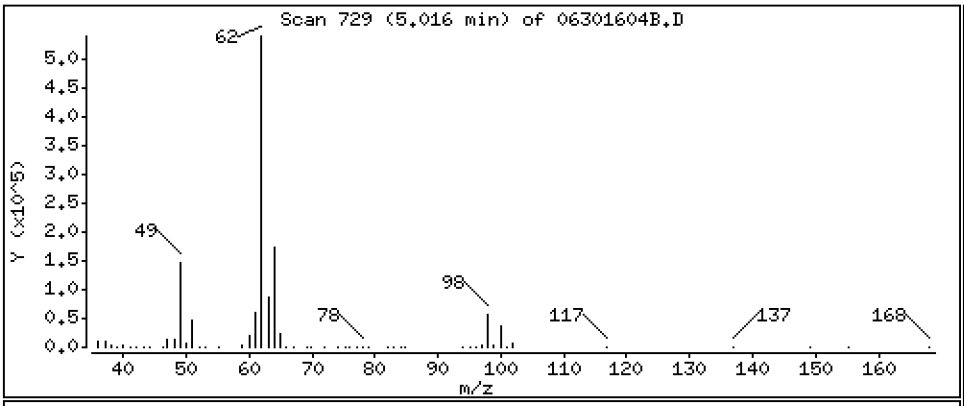
Operator: PB

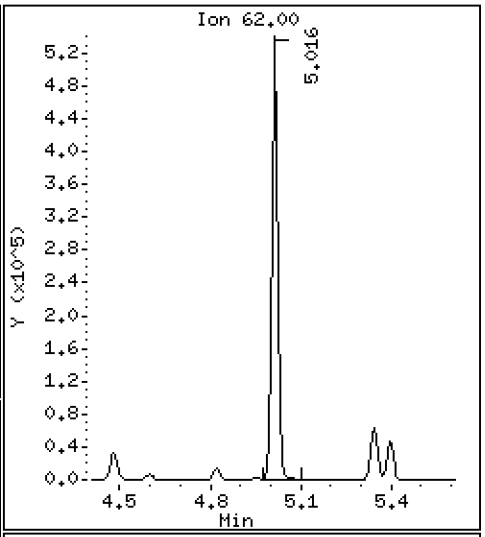
Column phase: RTXVMS

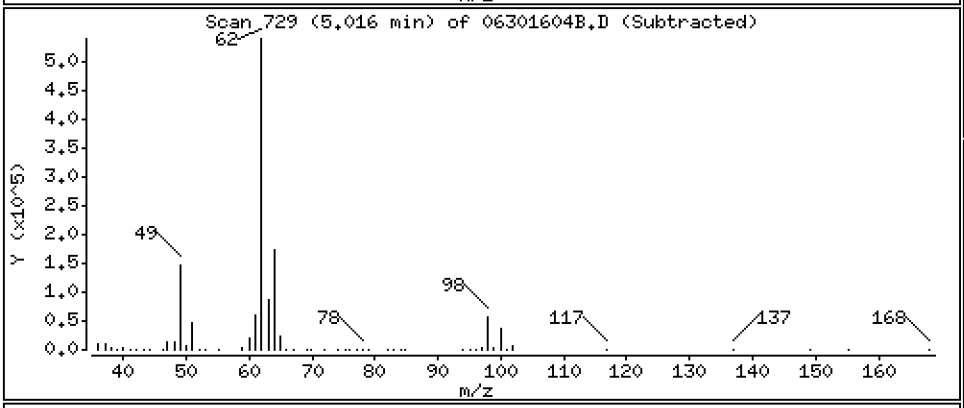
Column diameter: 0.18

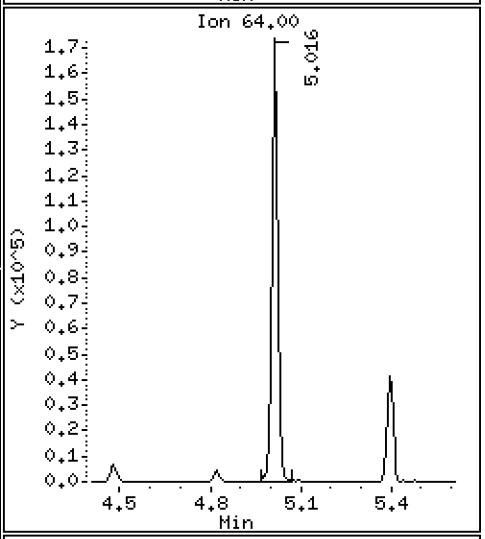
33 1,2-Dichloroethane

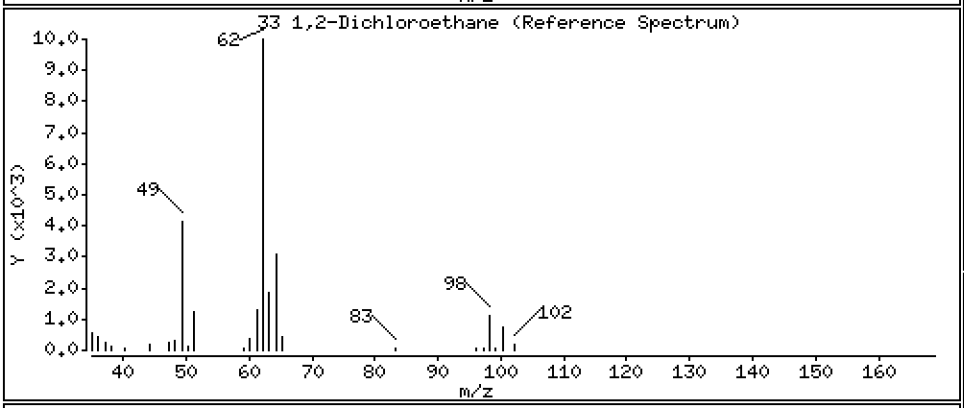
Concentration: 41.563 ug/Kg

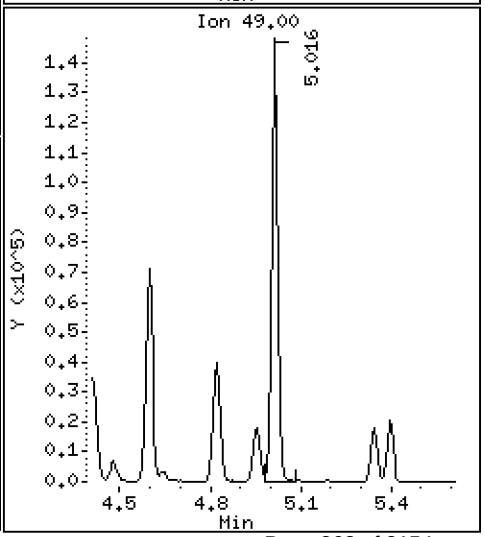


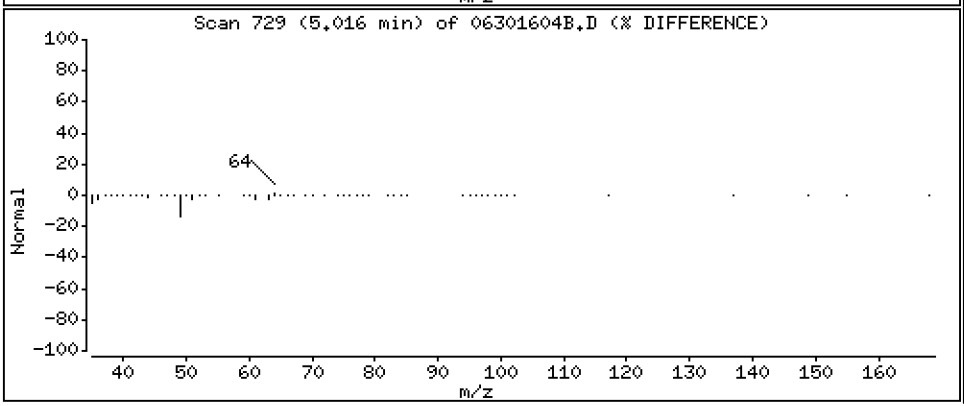












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

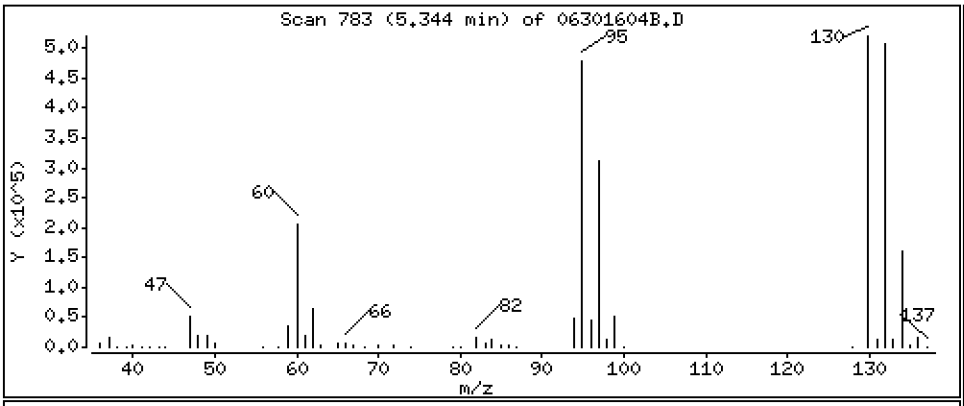
Operator: PB

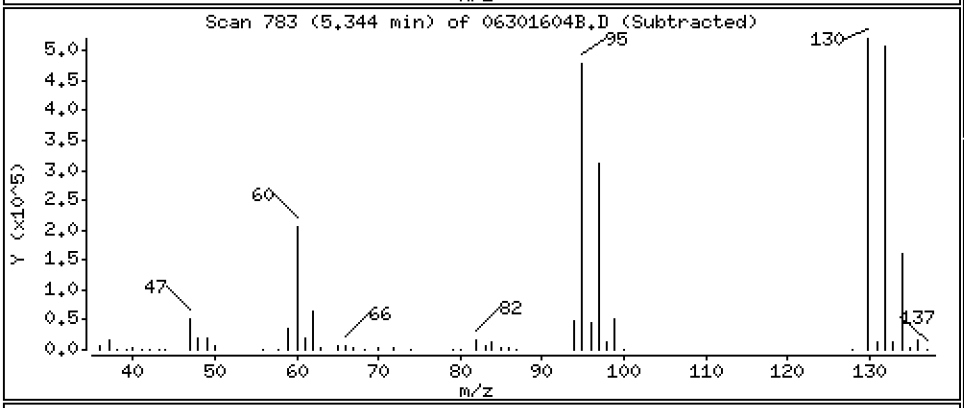
Column phase: RTXVMS

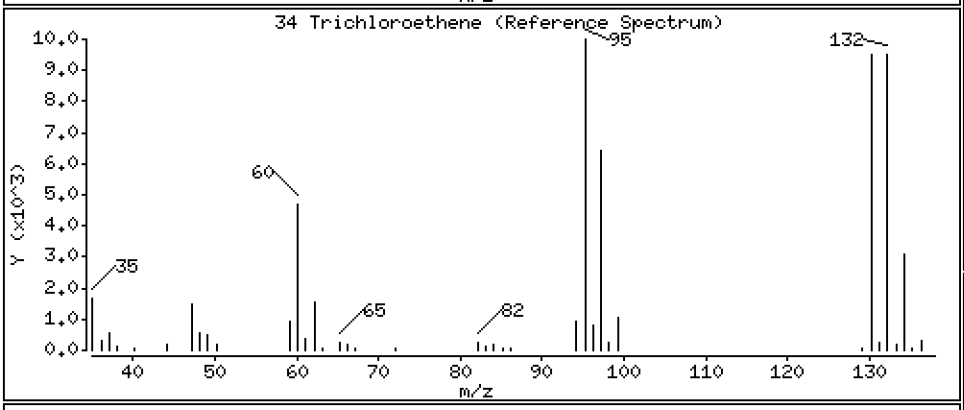
Column diameter: 0.18

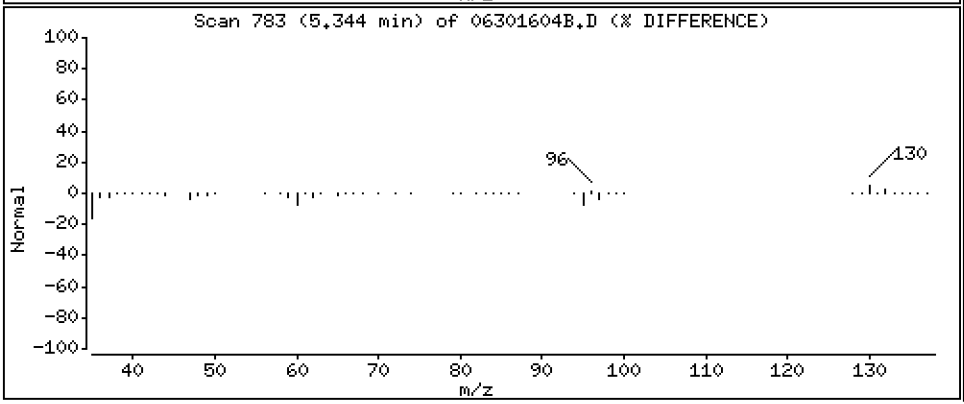
34 Trichloroethene

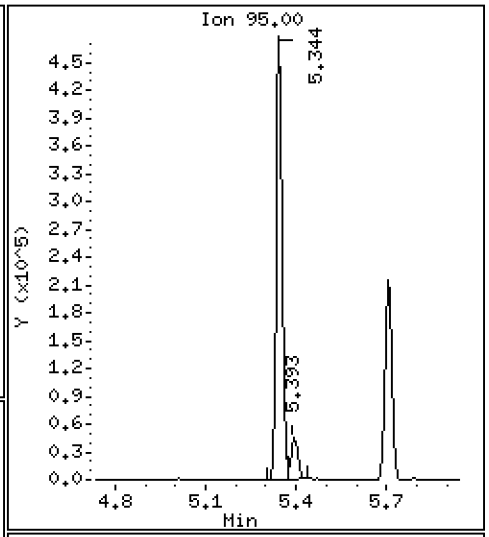
Concentration: 45.491 ug/Kg

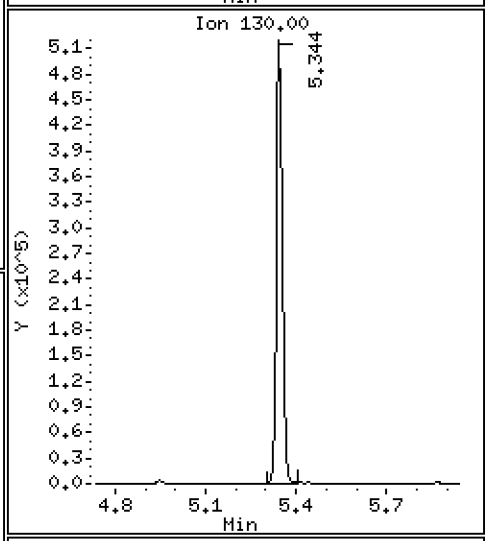


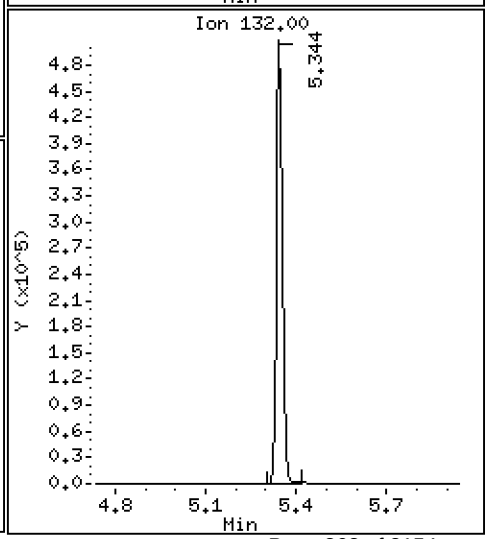












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

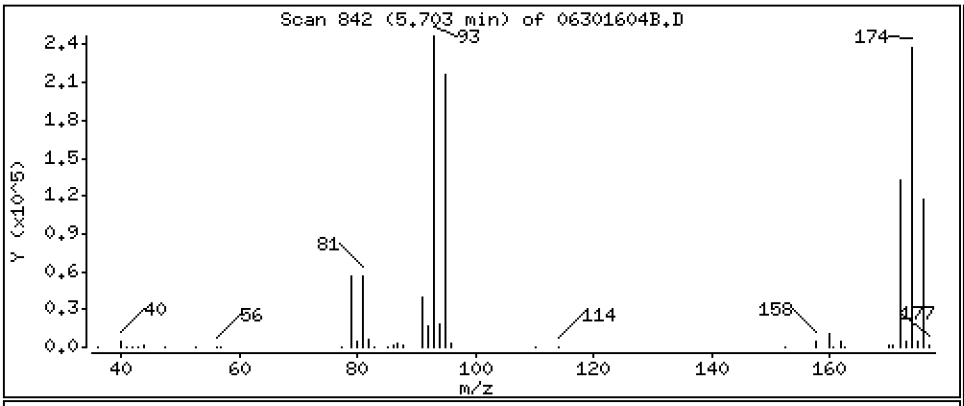
Operator: PB

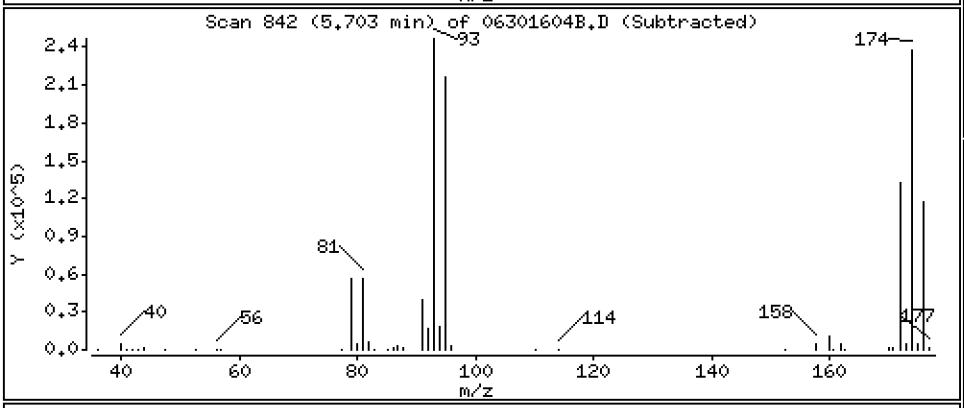
Column phase: RTXVMS

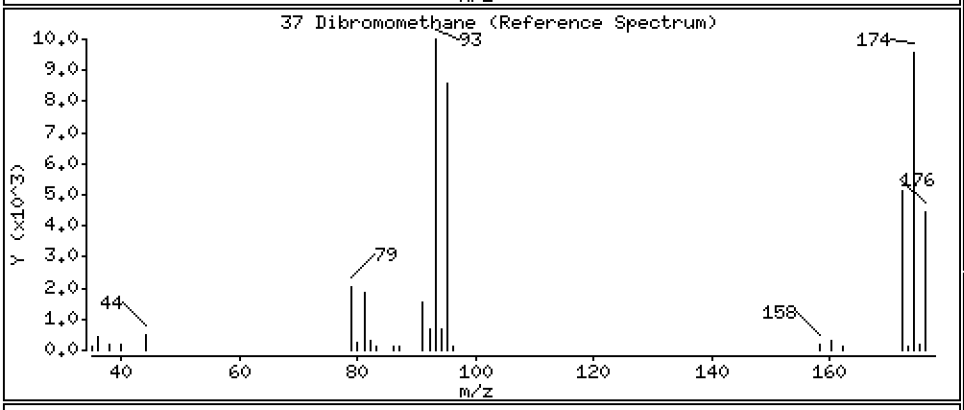
Column diameter: 0.18

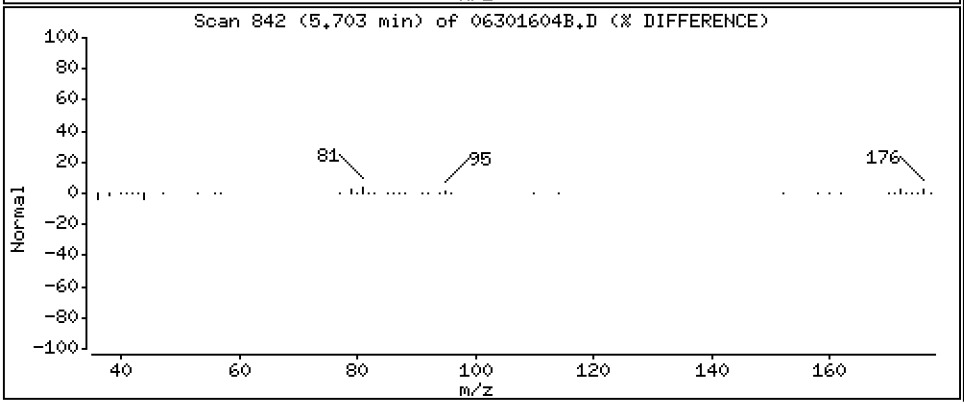
37 Dibromomethane

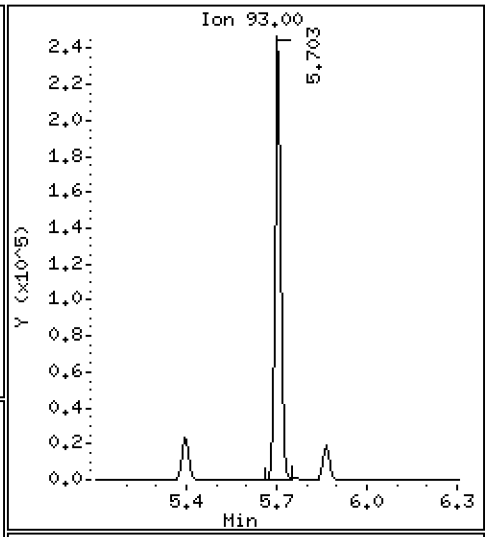
Concentration: 44.049 ug/Kg

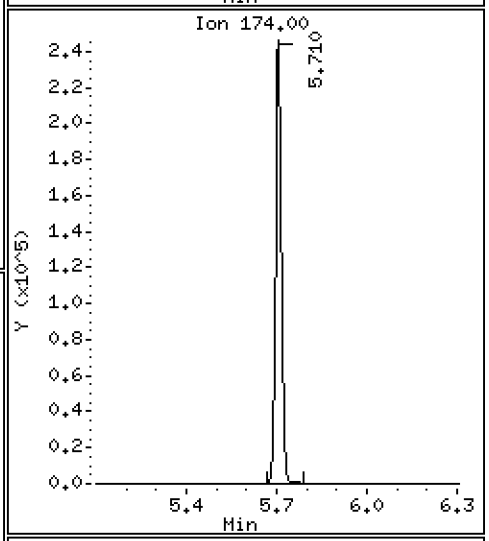


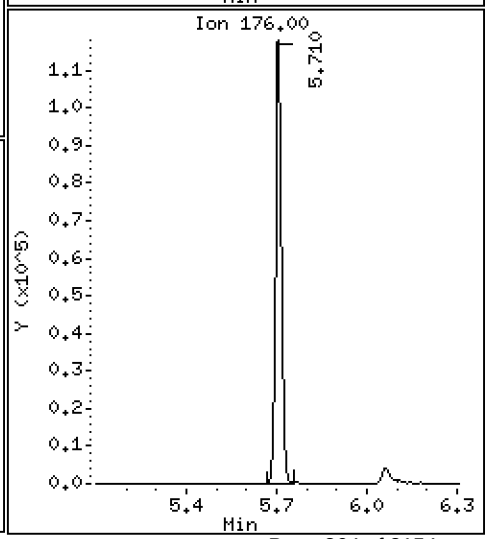












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

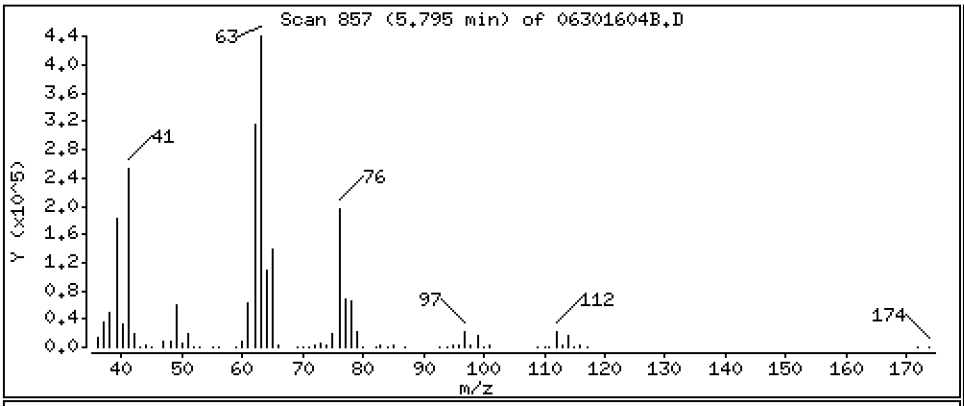
Operator: PB

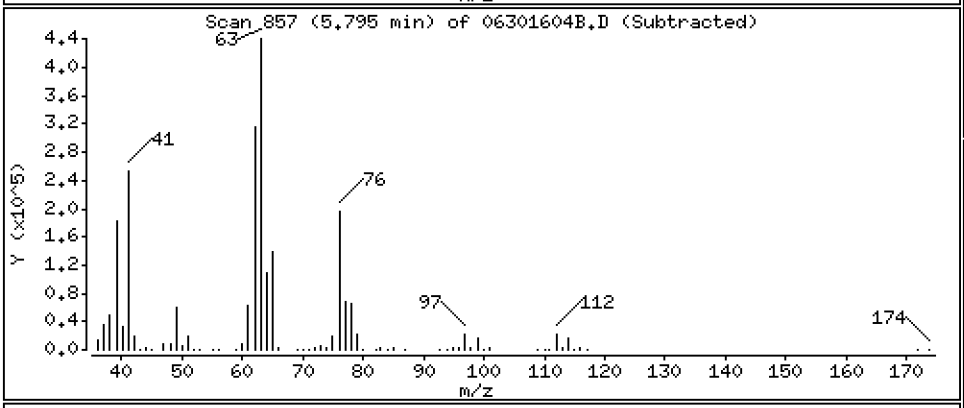
Column phase: RTXVMS

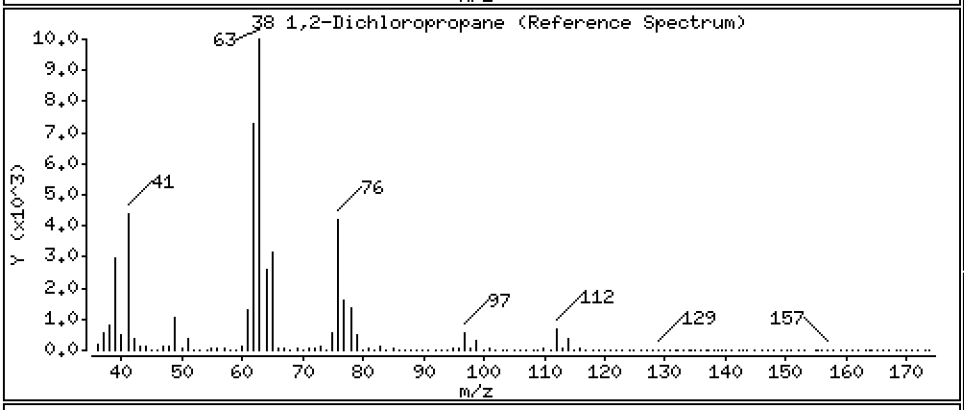
Column diameter: 0.18

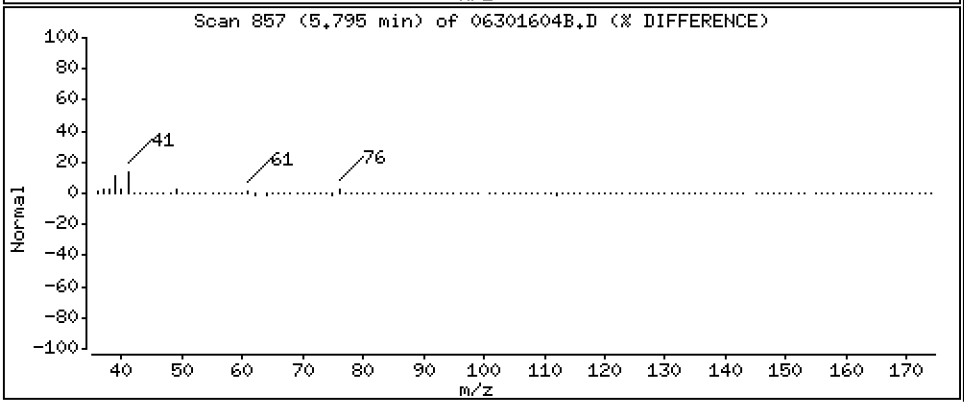
38 1,2-Dichloropropane

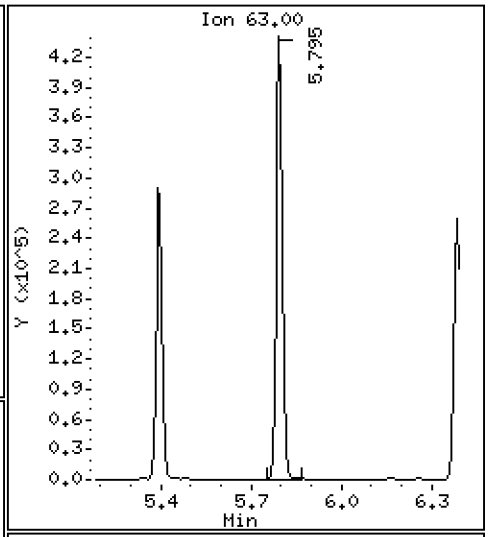
Concentration: 42.474 ug/Kg

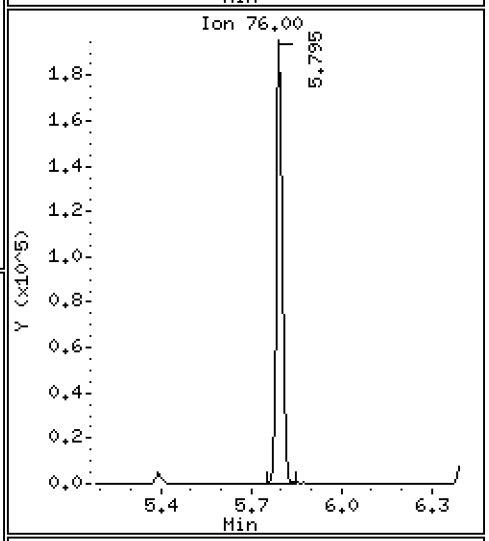


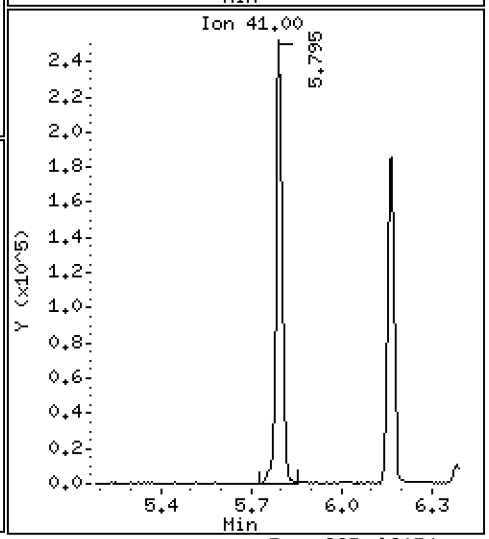












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

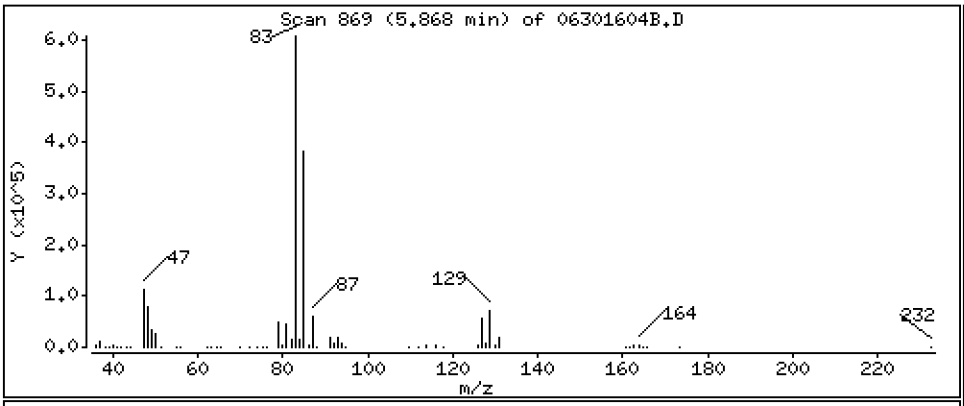
Operator: PB

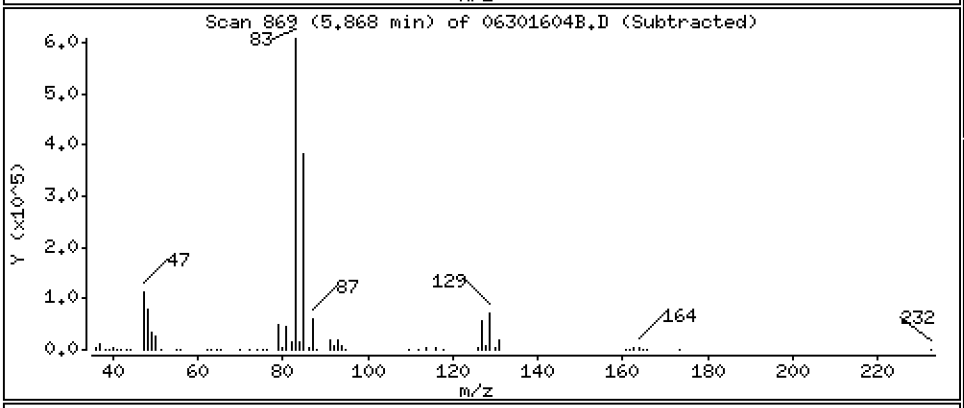
Column phase: RTXVMS

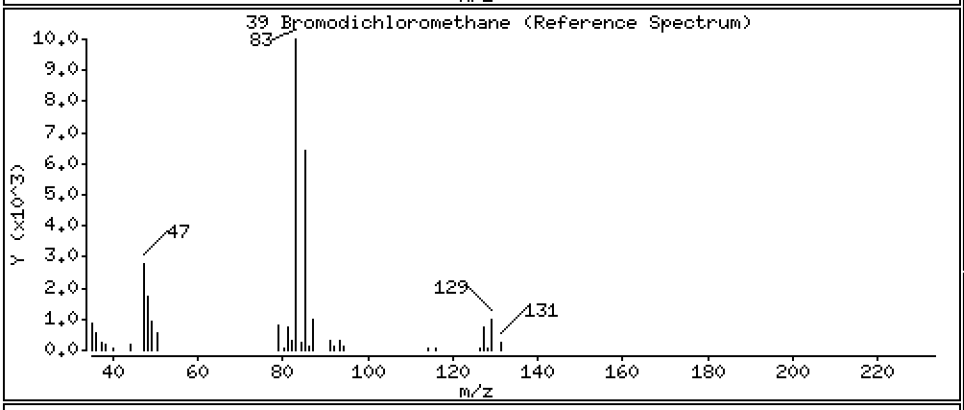
Column diameter: 0.18

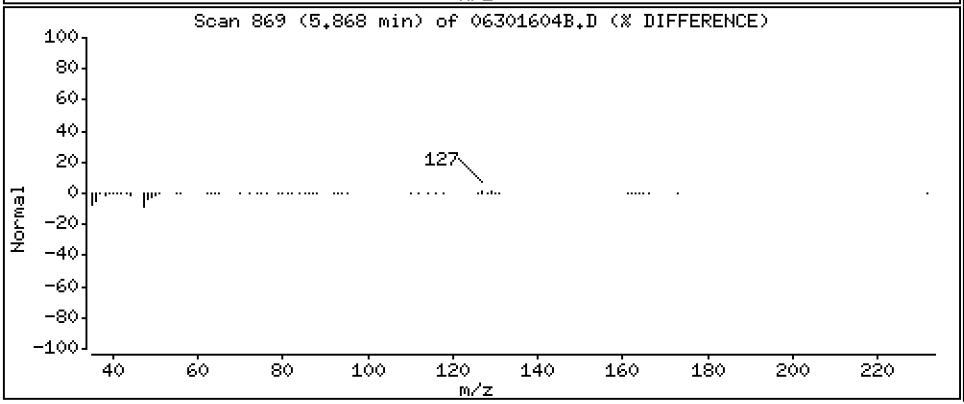
39 Bromodichloromethane

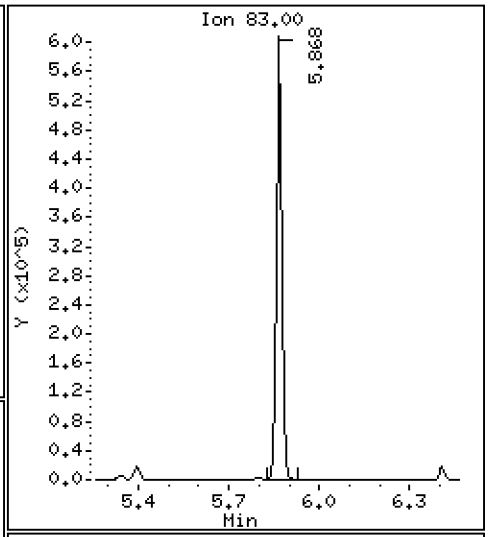
Concentration: 46.258 ug/Kg

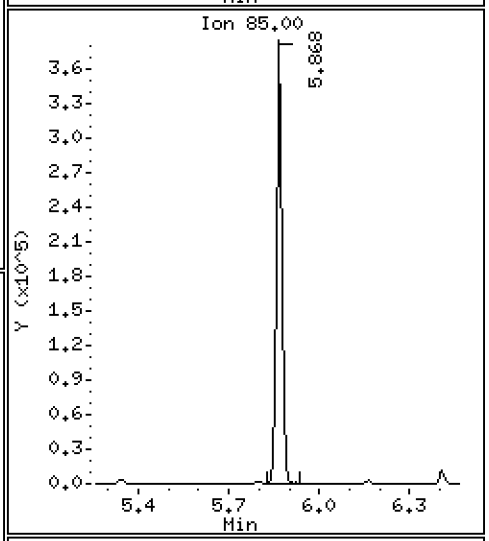


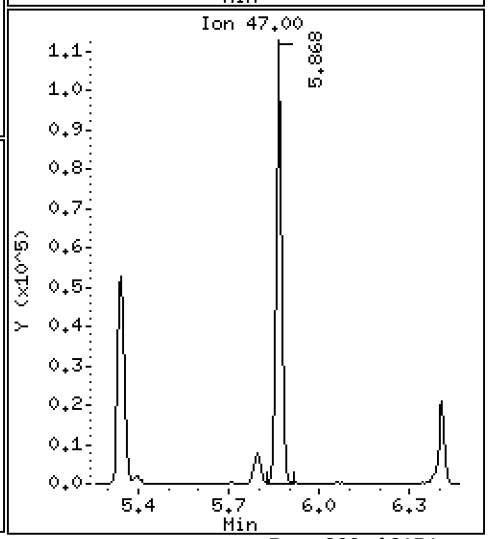












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

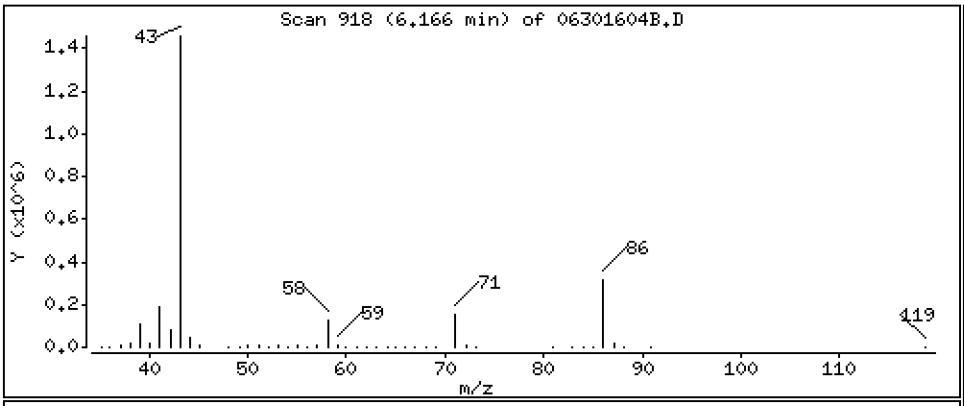
Operator: PB

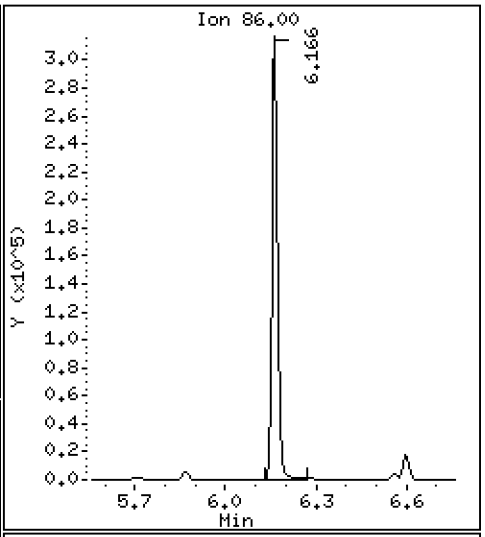
Column phase: RTXVMS

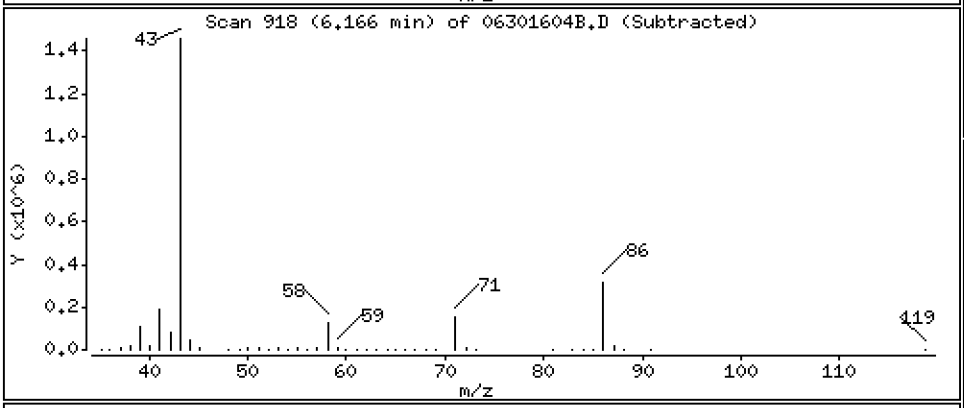
Column diameter: 0.18

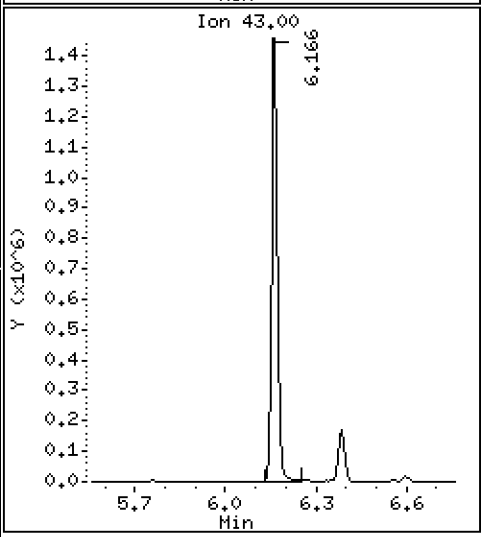
172 2-Pentanone

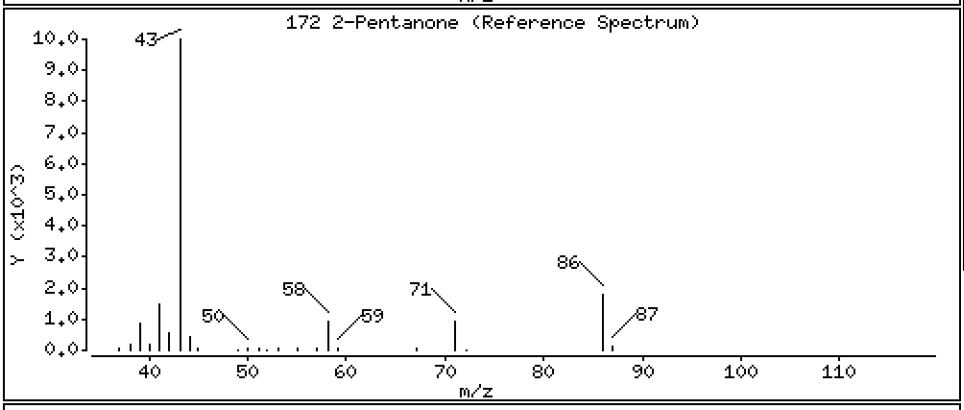
Concentration: 201.87 ug/Kg

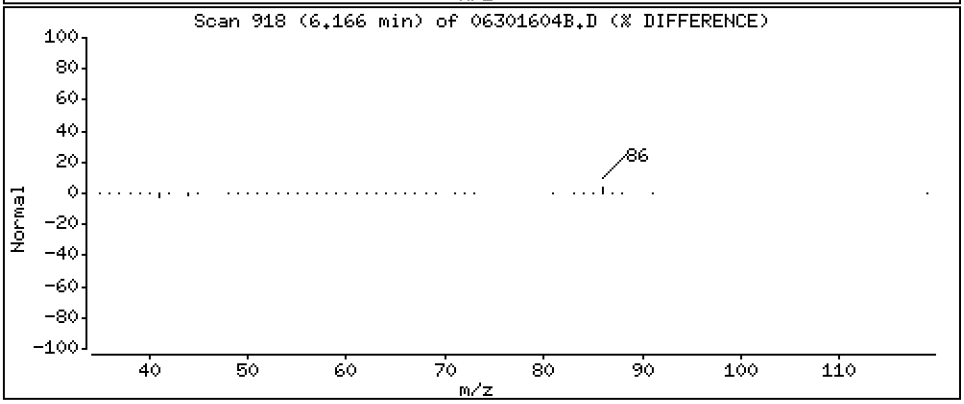












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

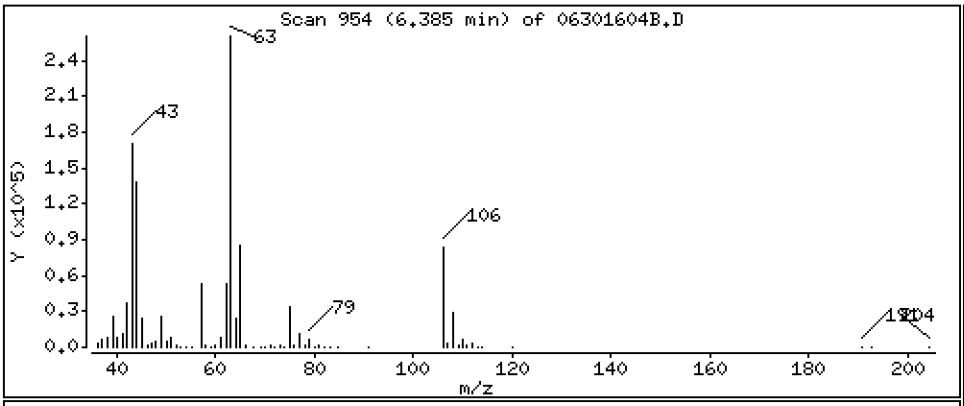
Operator: PB

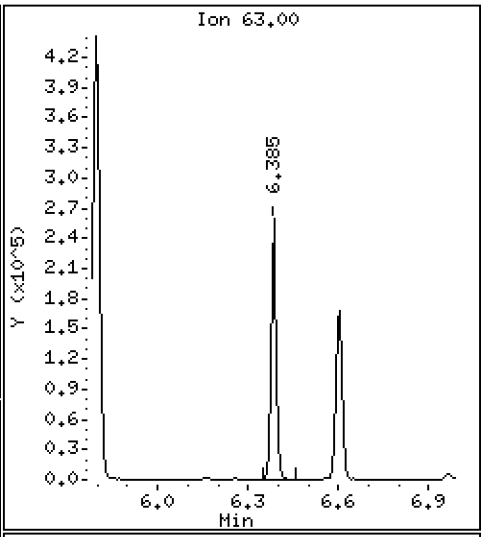
Column phase: RTXVMS

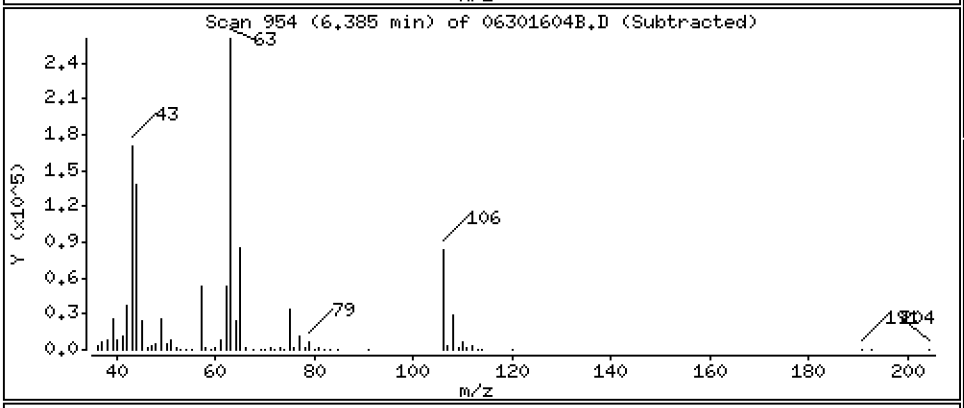
Column diameter: 0.18

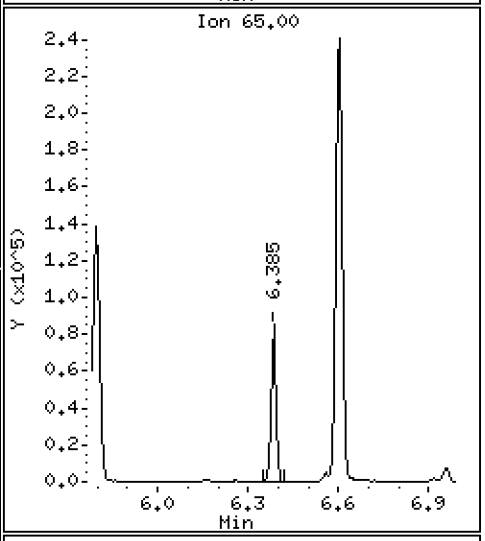
40 2-Chloroethyl Vinyl Ether

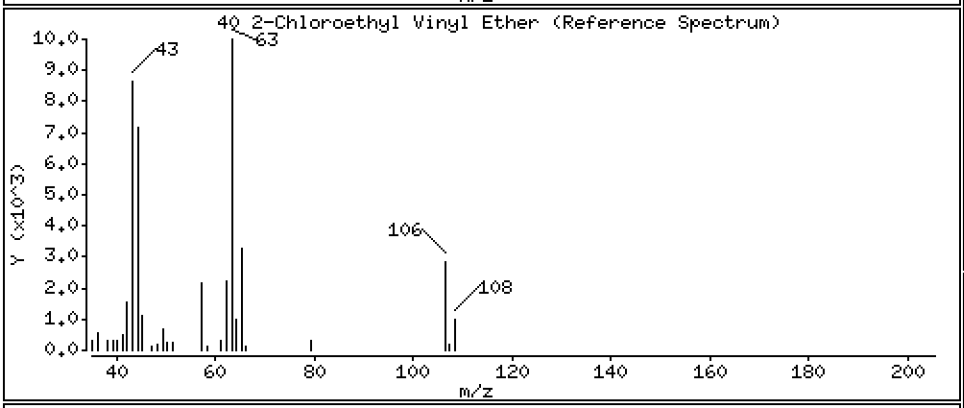
Concentration: 53.138 ug/Kg

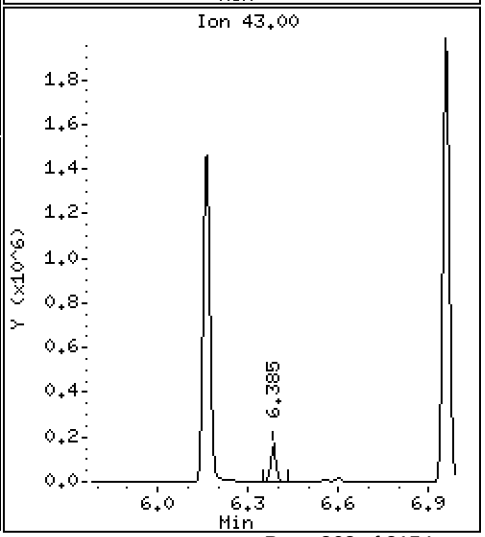


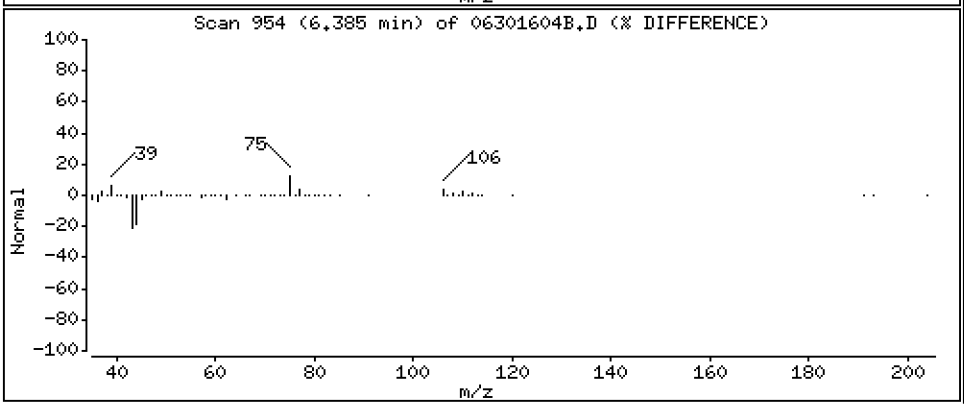












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

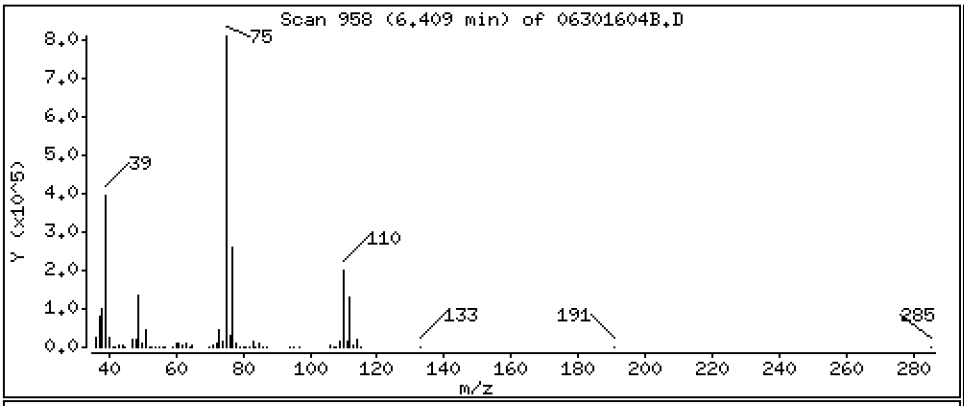
Operator: PB

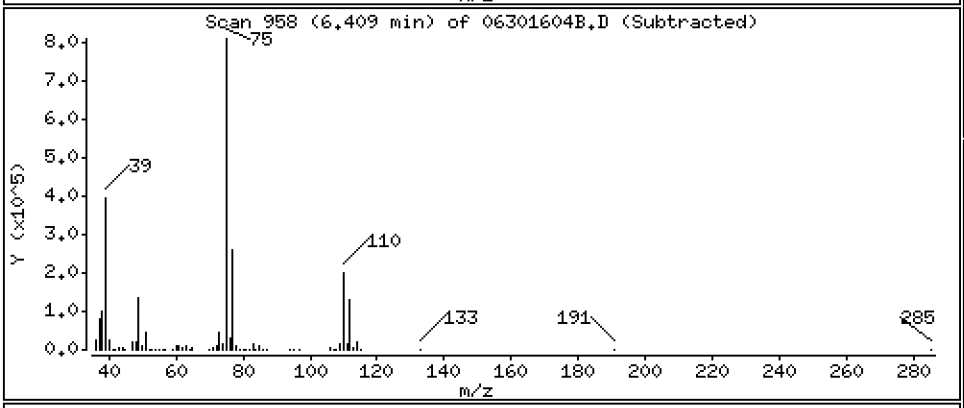
Column phase: RTXVMS

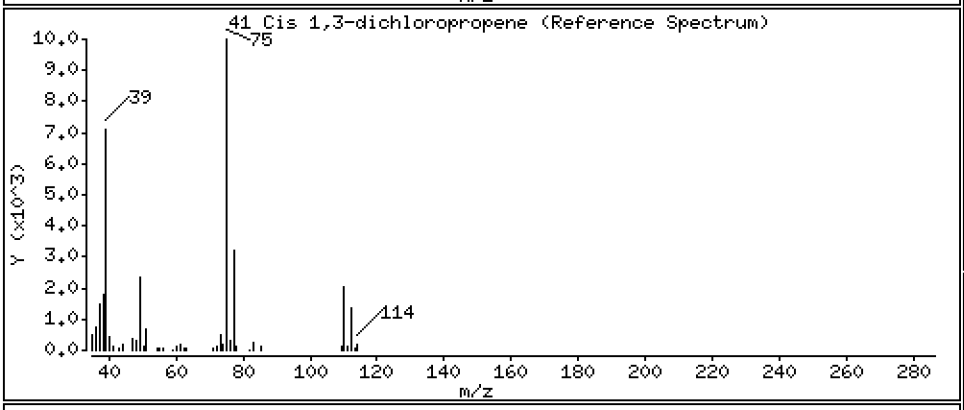
Column diameter: 0.18

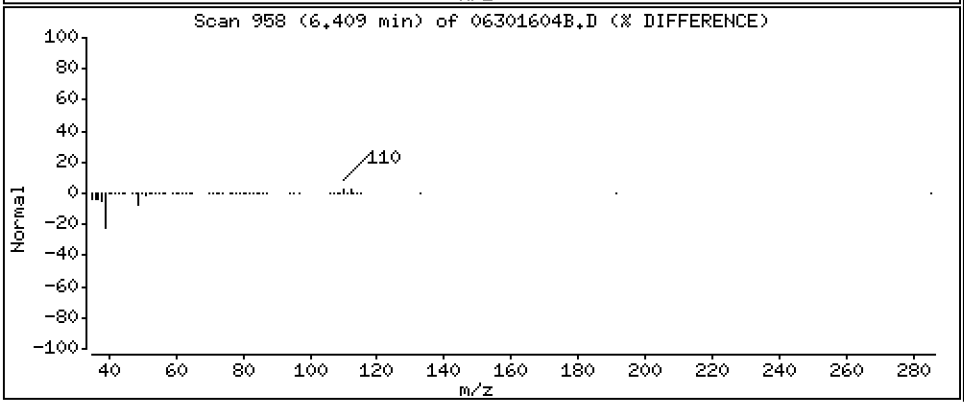
41 Cis 1,3-dichloropropene

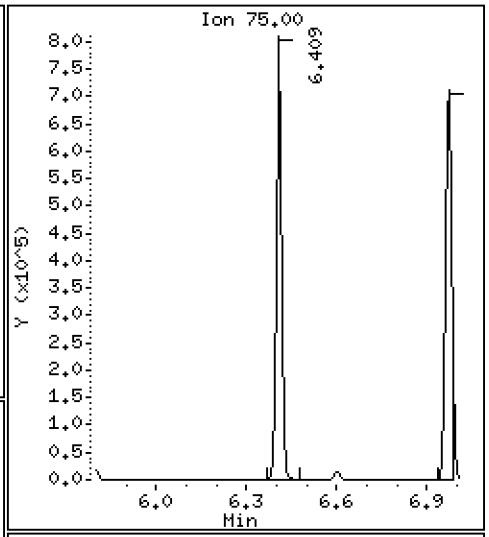
Concentration: 45.105 ug/Kg

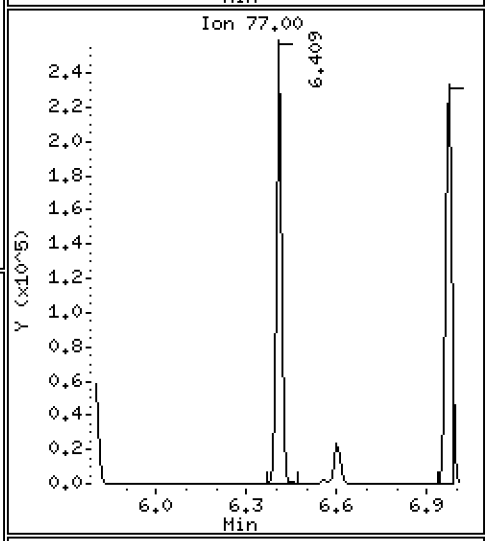


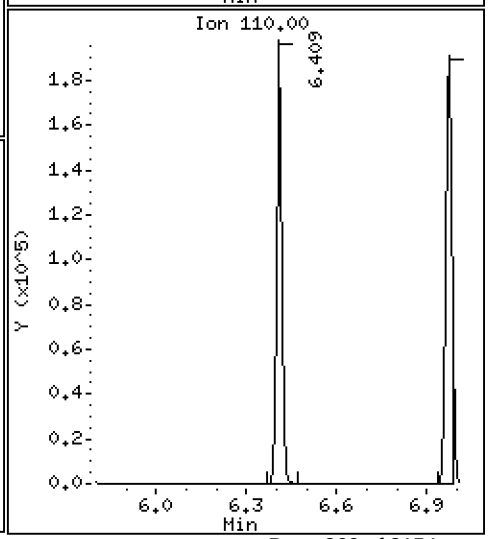












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

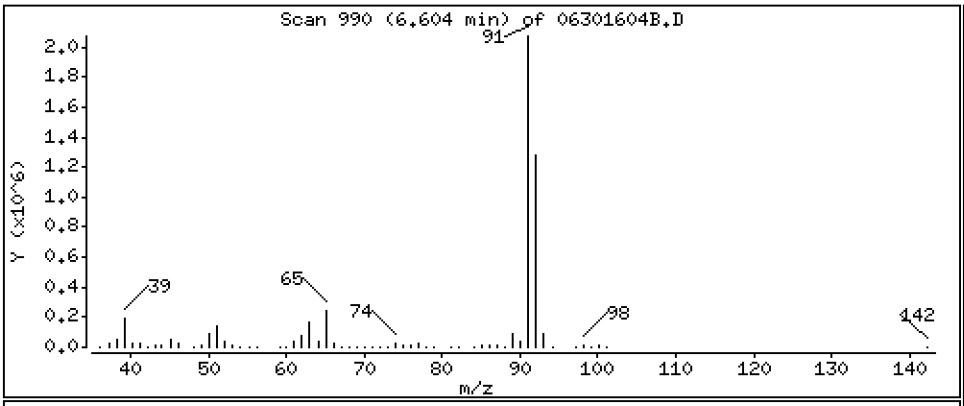
Operator: PB

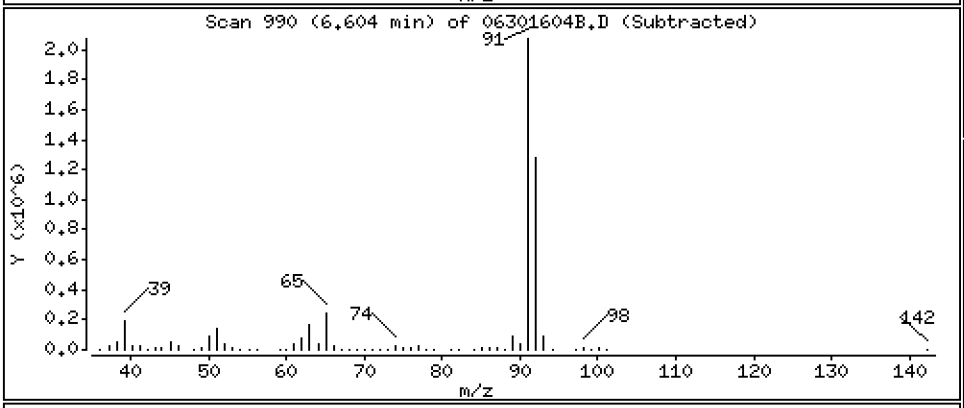
Column phase: RTXVMS

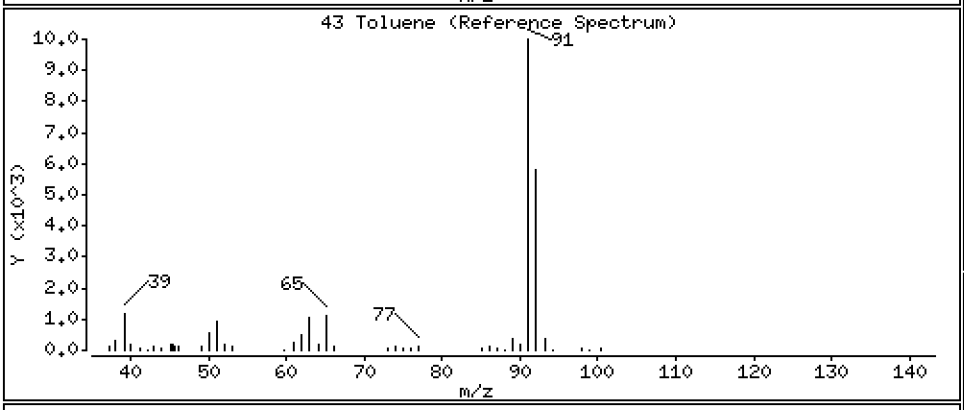
Column diameter: 0.18

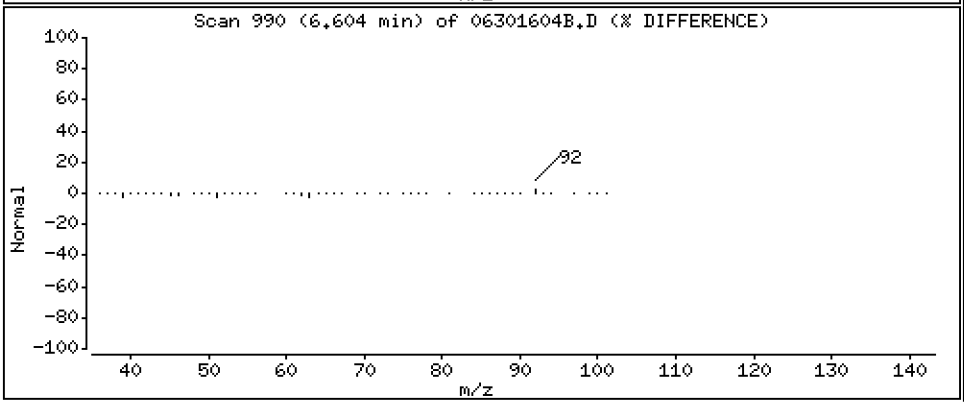
43 Toluene

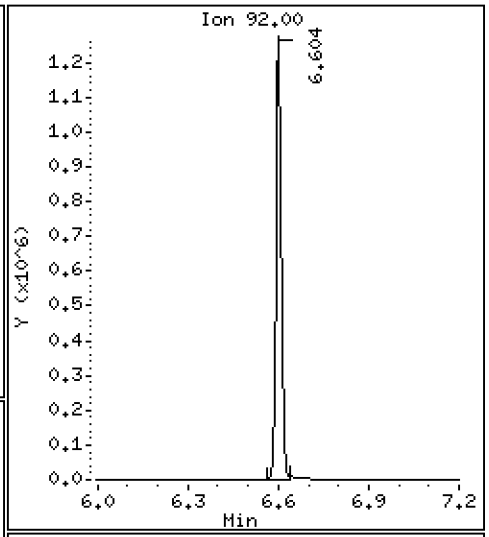
Concentration: 44.022 ug/Kg

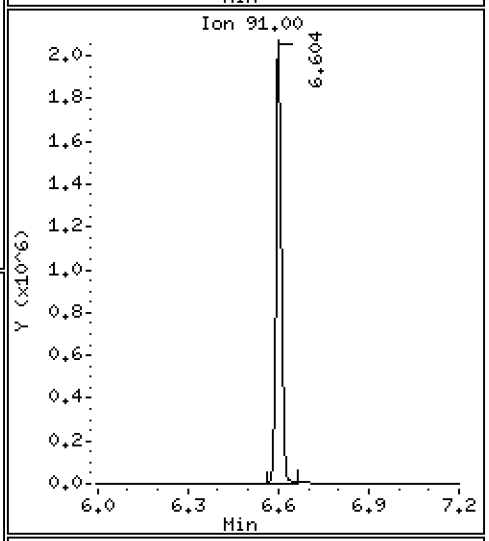


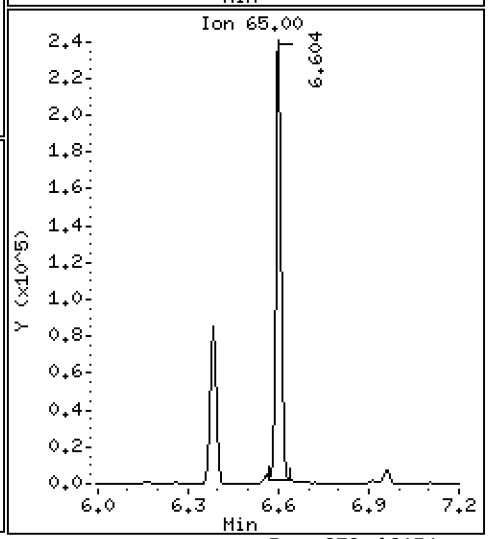












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

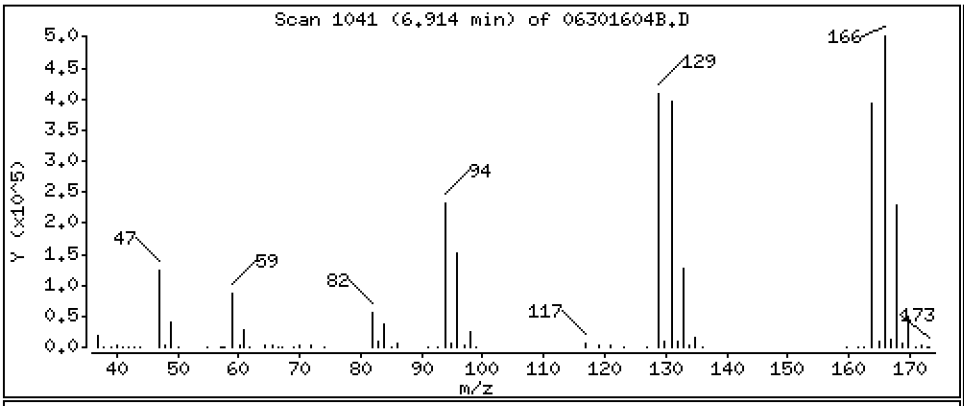
Operator: PB

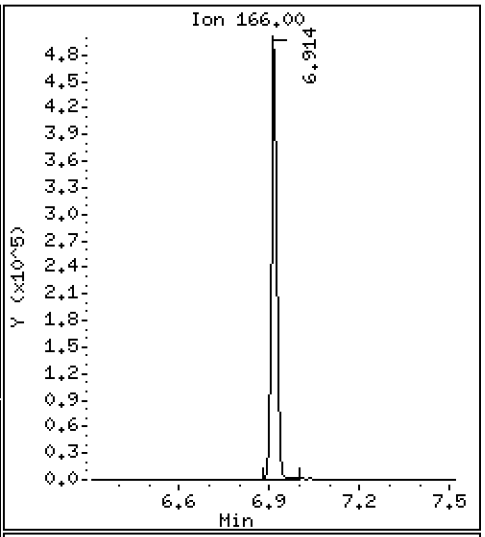
Column phase: RTXVMS

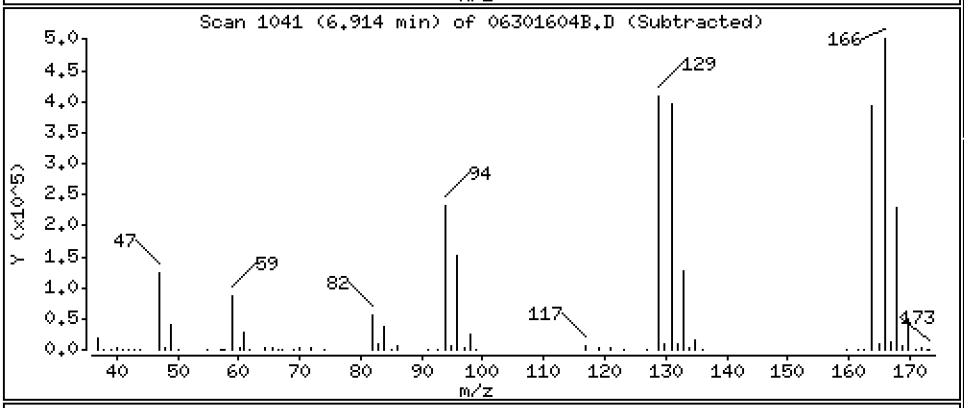
Column diameter: 0.18

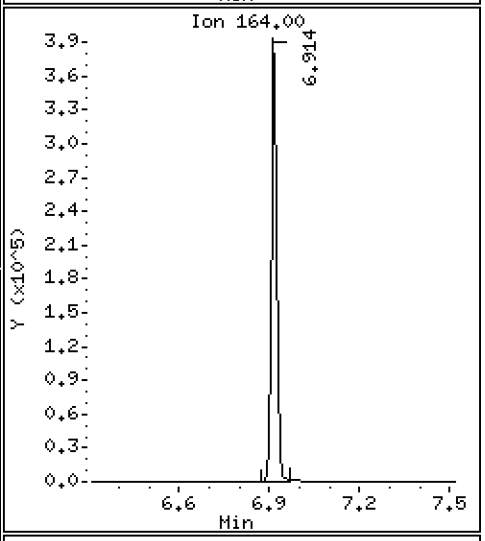
44 Tetrachloroethene

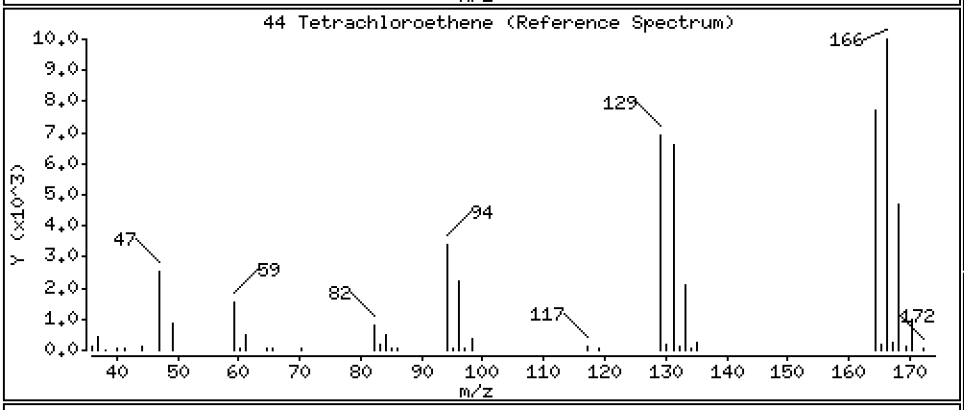
Concentration: 49.037 ug/Kg

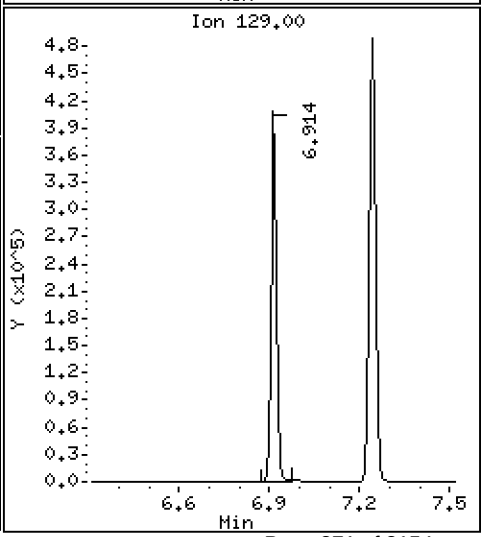


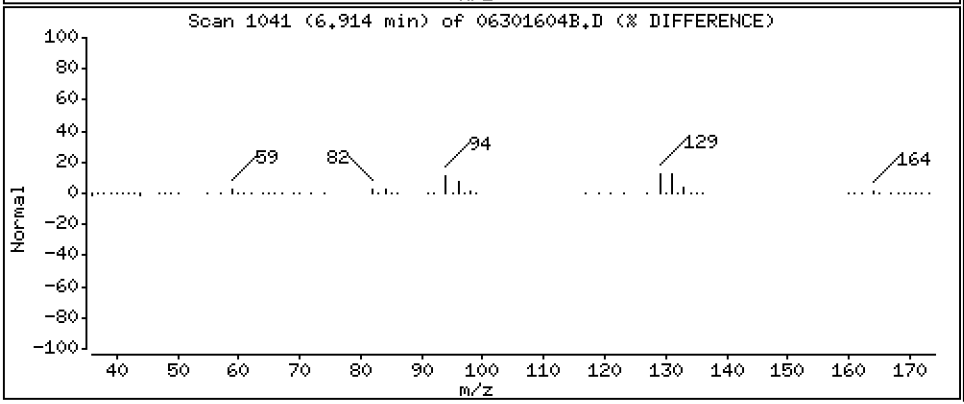












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

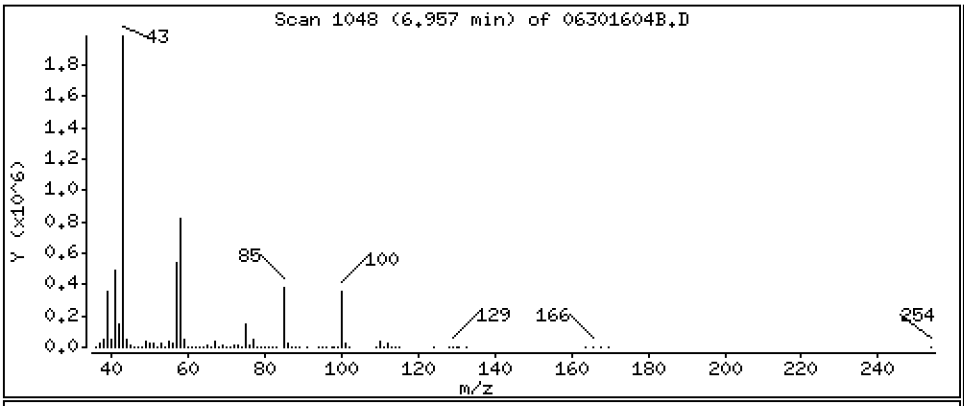
Operator: PB

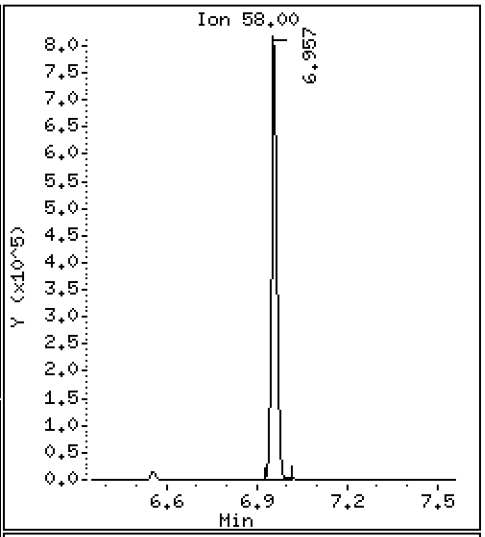
Column phase: RTXVMS

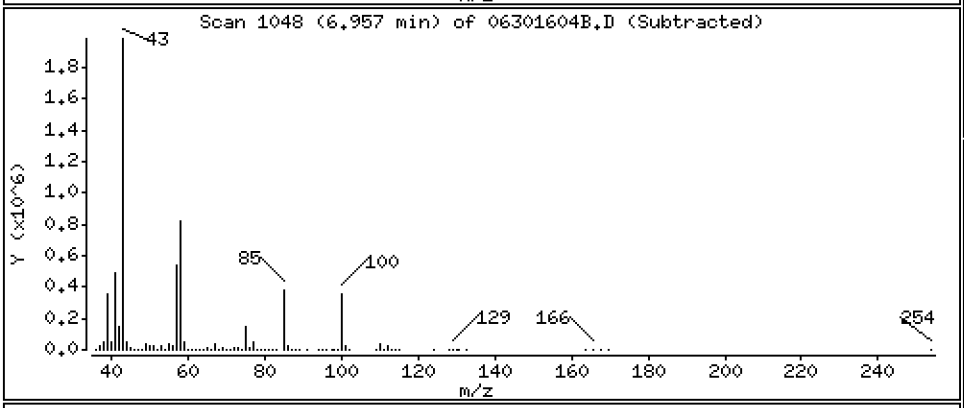
Column diameter: 0.18

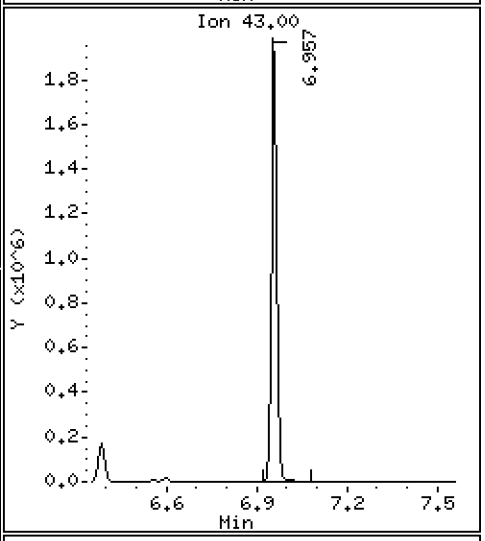
45 4-Methyl-2-Pentanone

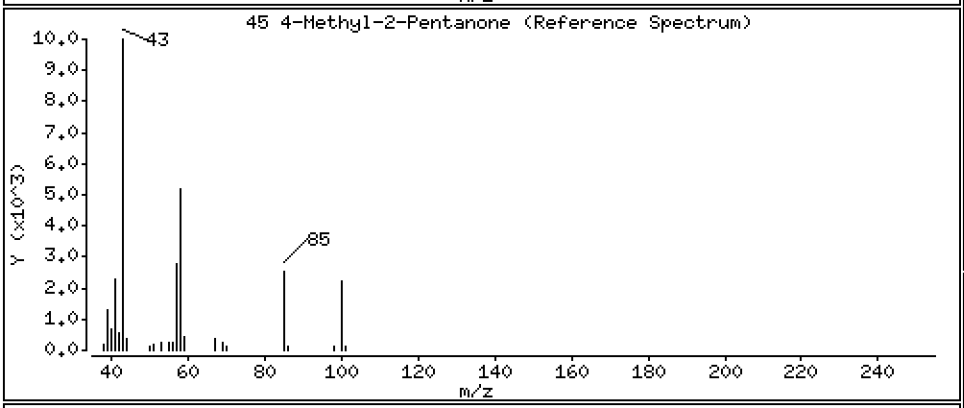
Concentration: 192.56 ug/Kg

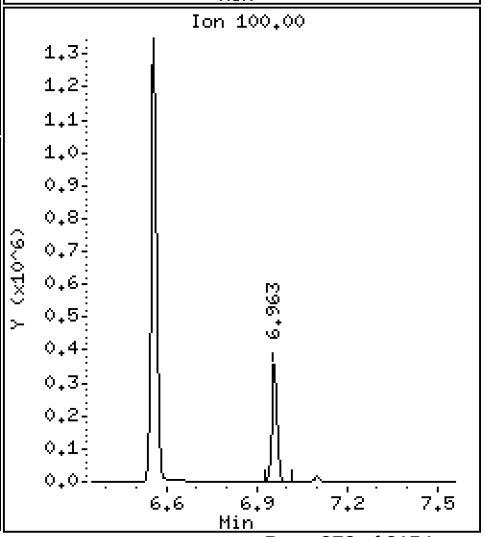


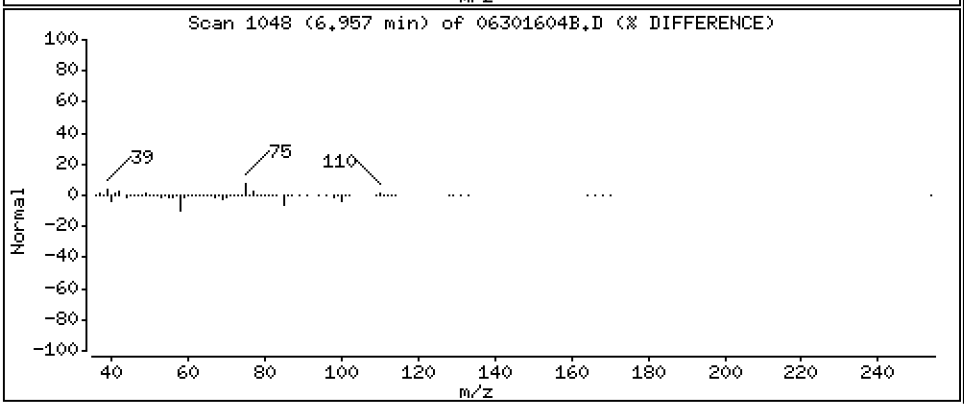












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

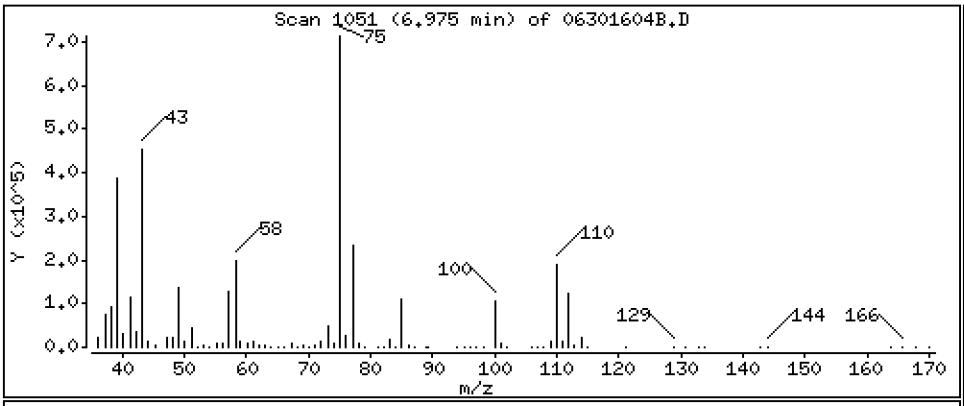
Operator: PB

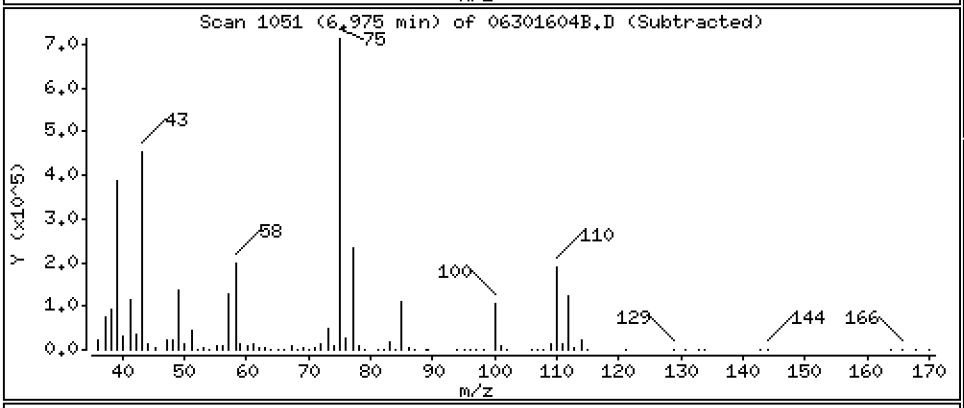
Column phase: RTXVMS

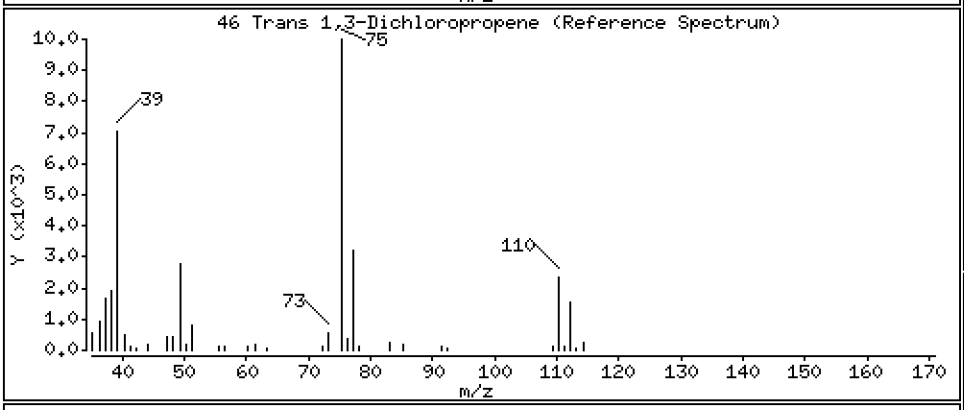
Column diameter: 0.18

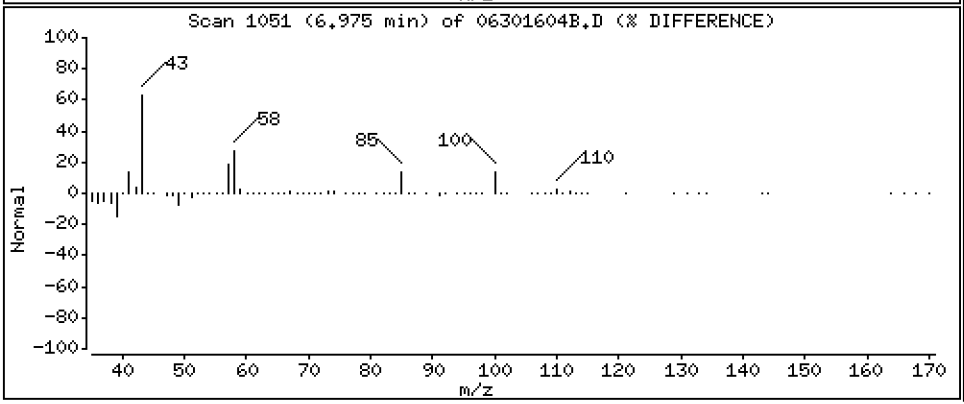
46 Trans 1,3-Dichloropropene

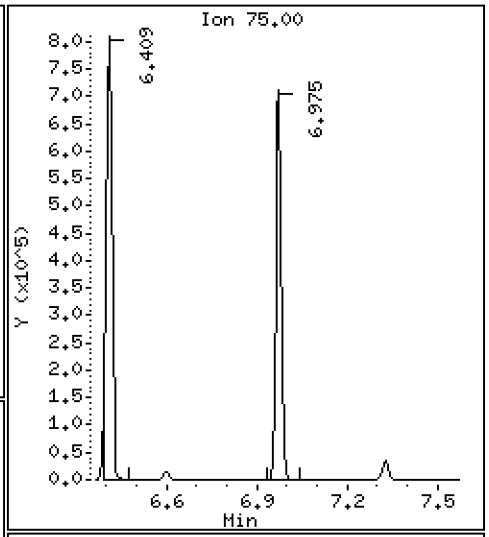
Concentration: 45.733 ug/Kg

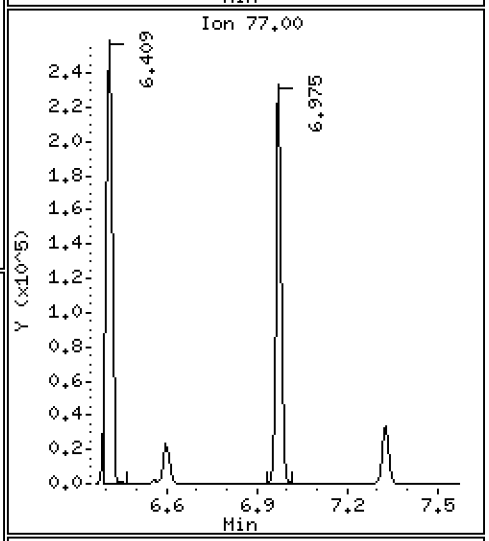


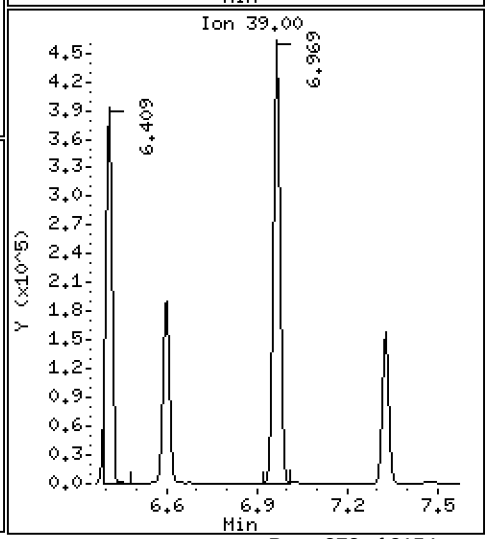












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

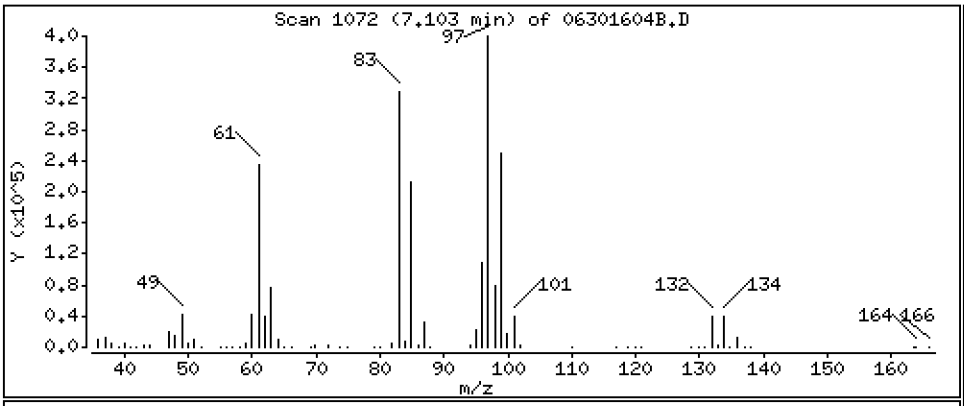
Operator: PB

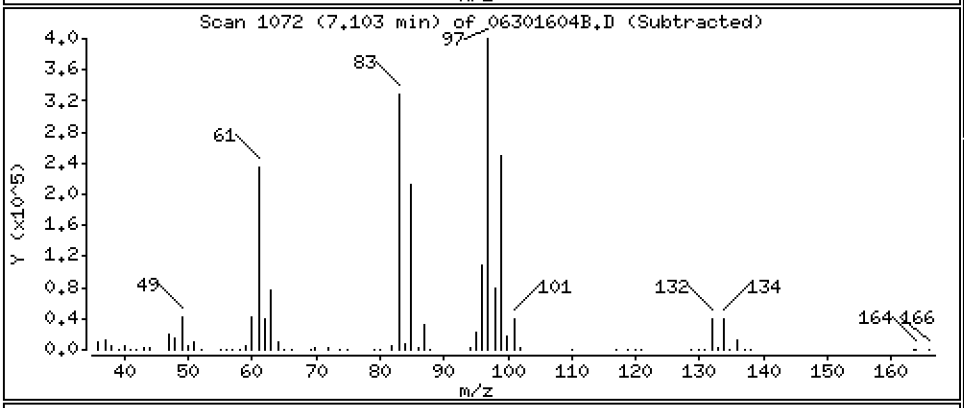
Column phase: RTXVMS

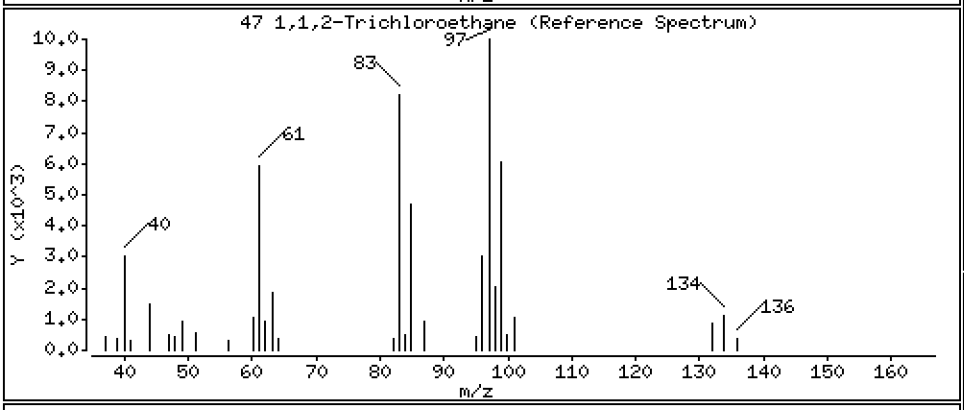
Column diameter: 0.18

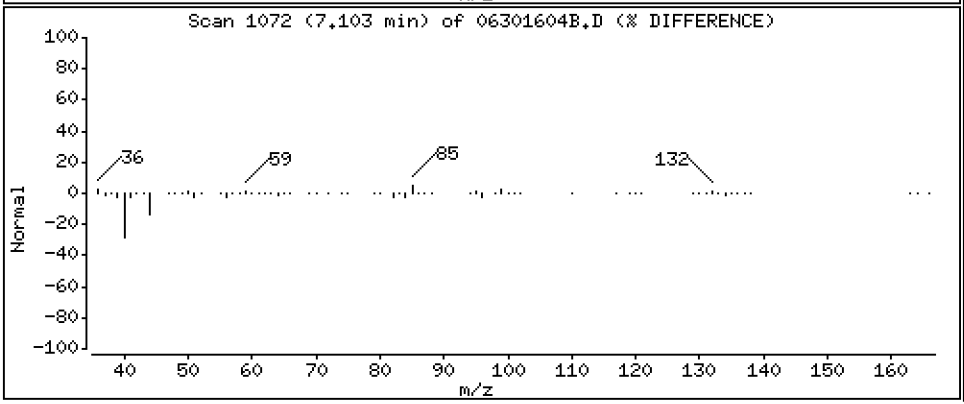
47 1,1,2-Trichloroethane

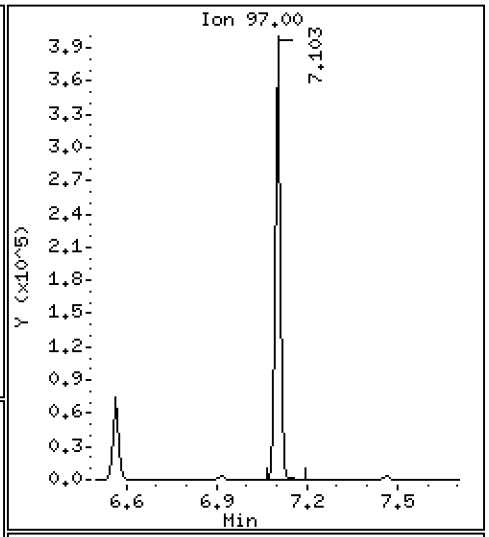
Concentration: 44.937 ug/Kg

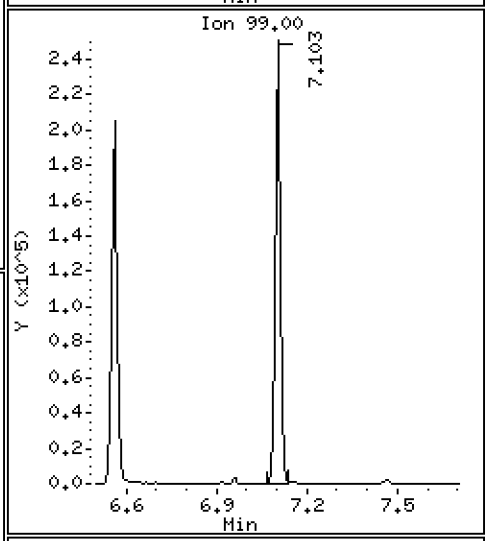


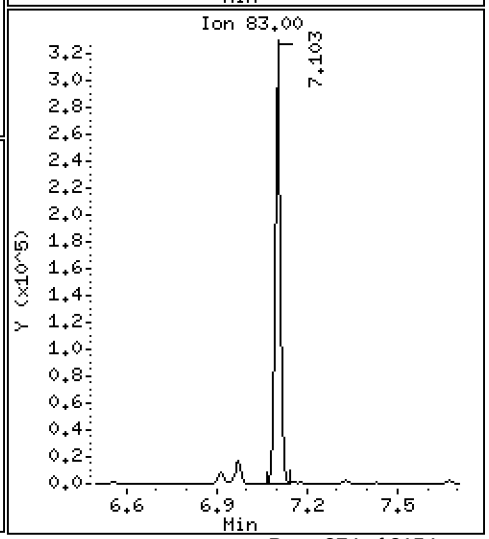












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

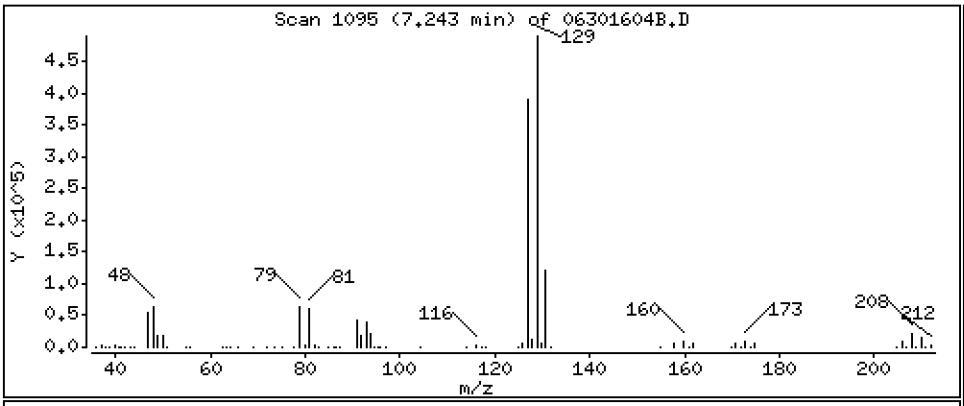
Operator: PB

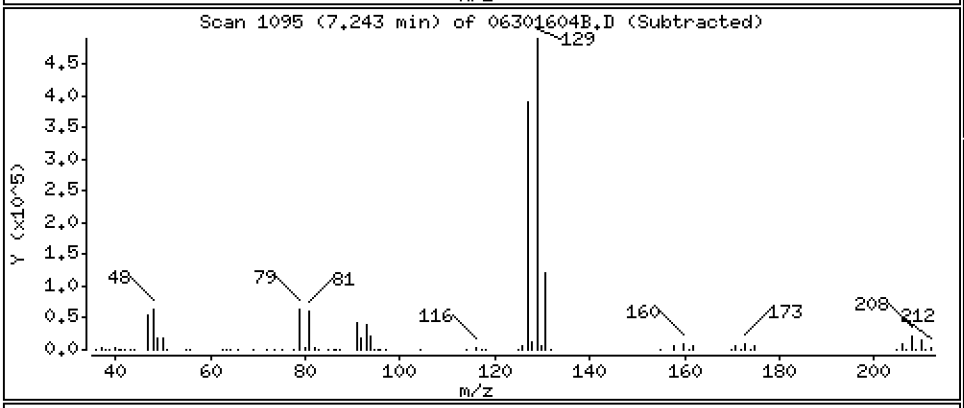
Column phase: RTXVMS

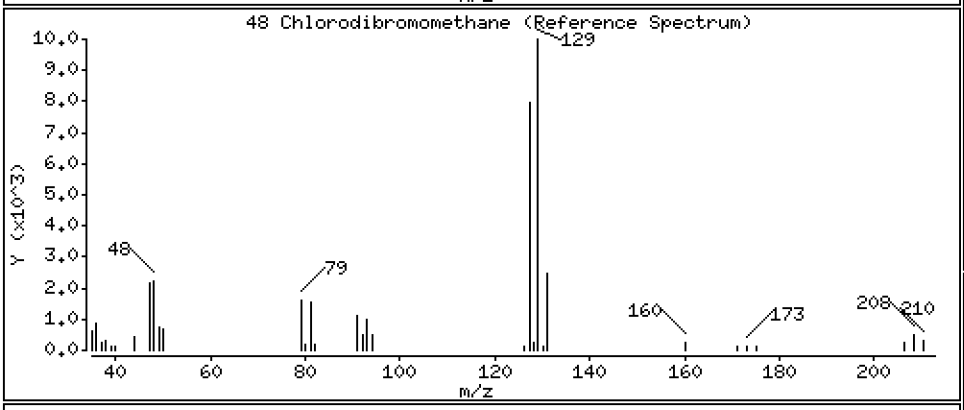
Column diameter: 0.18

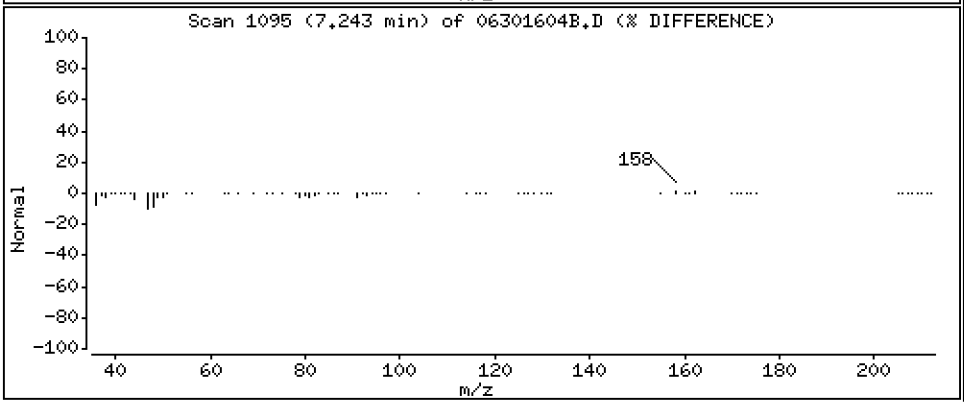
48 Chlorodibromomethane

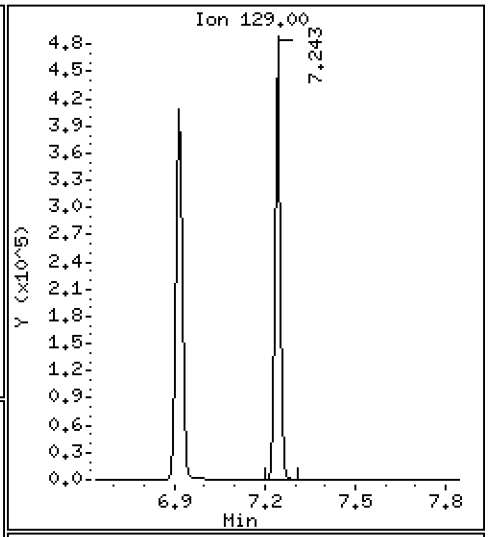
Concentration: 48.504 ug/Kg

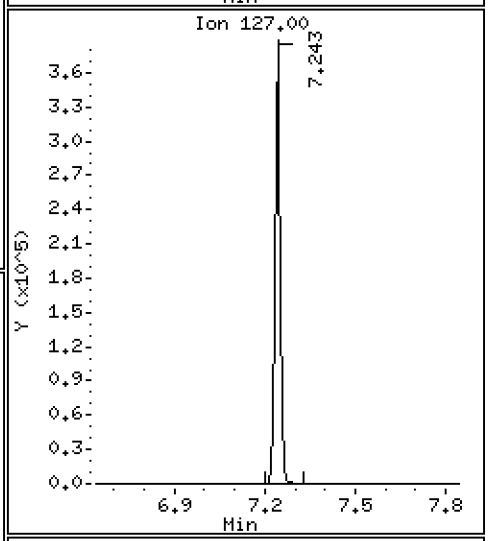


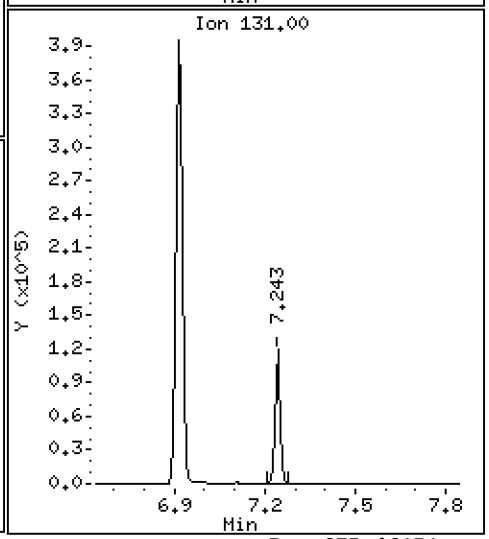












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

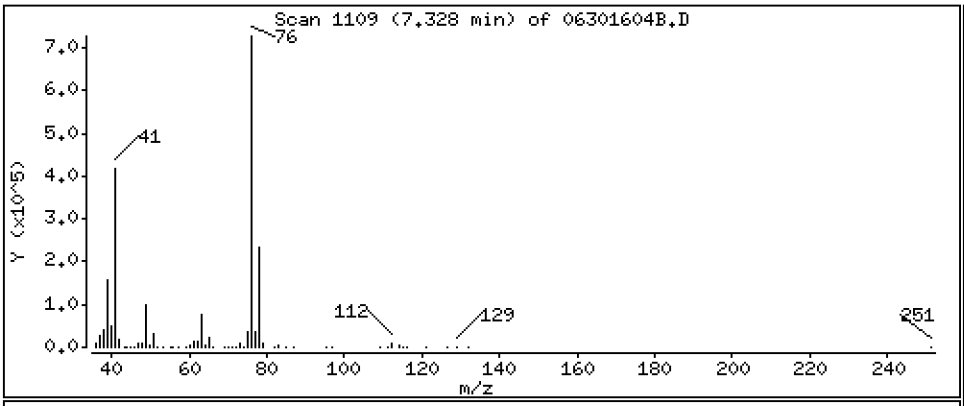
Operator: PB

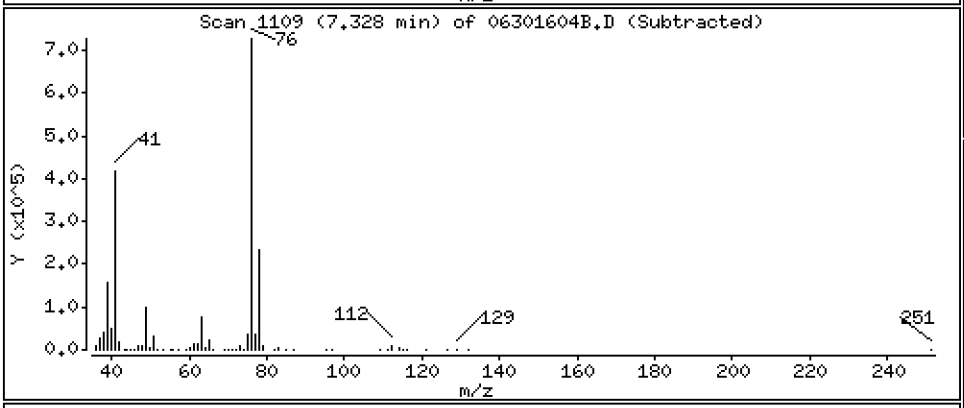
Column phase: RTXVMS

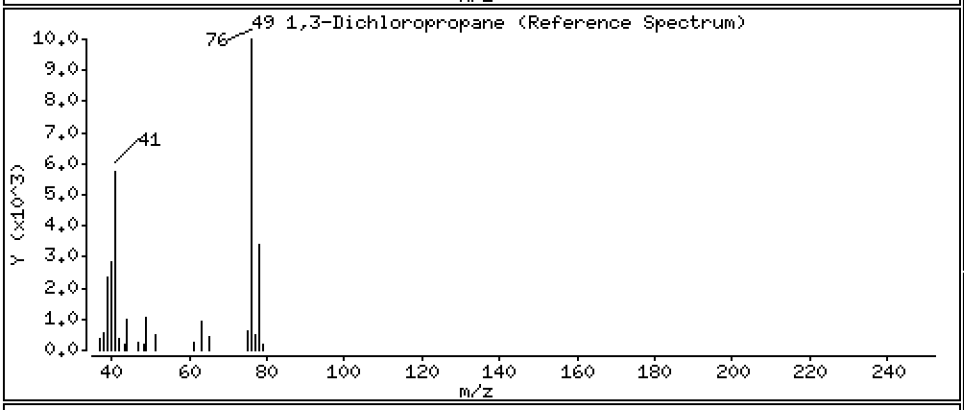
Column diameter: 0.18

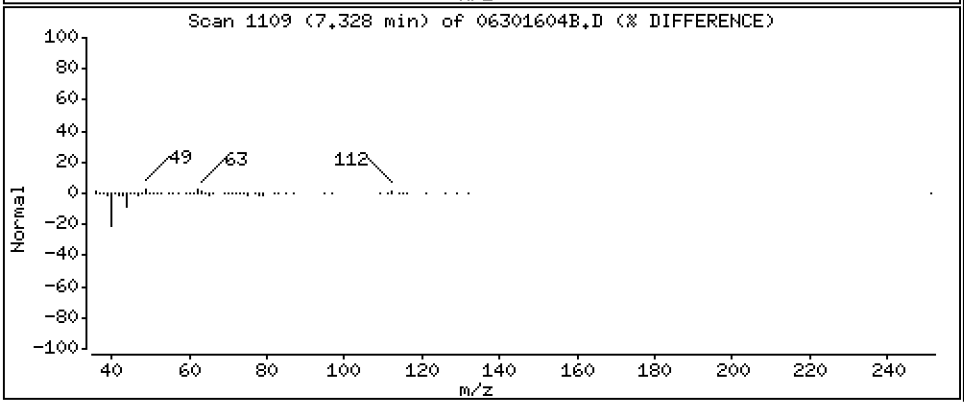
49 1,3-Dichloropropane

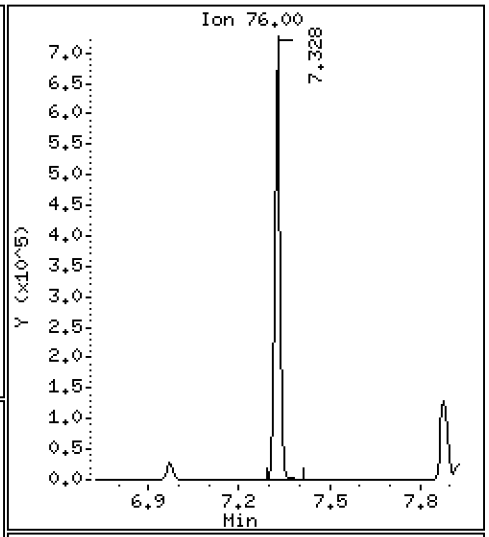
Concentration: 44.287 ug/Kg

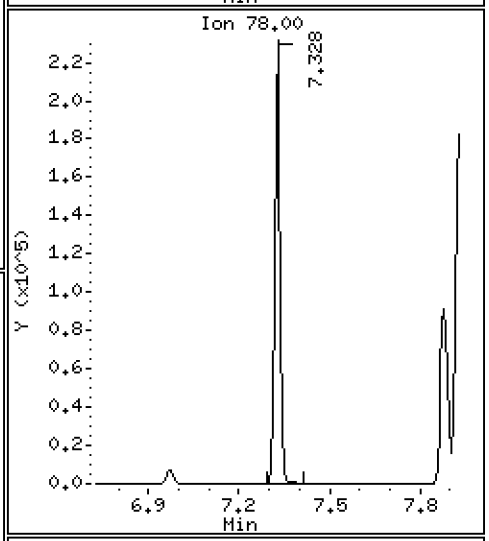


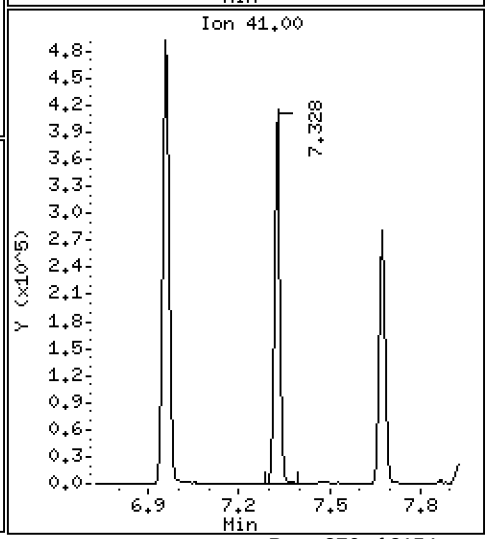












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

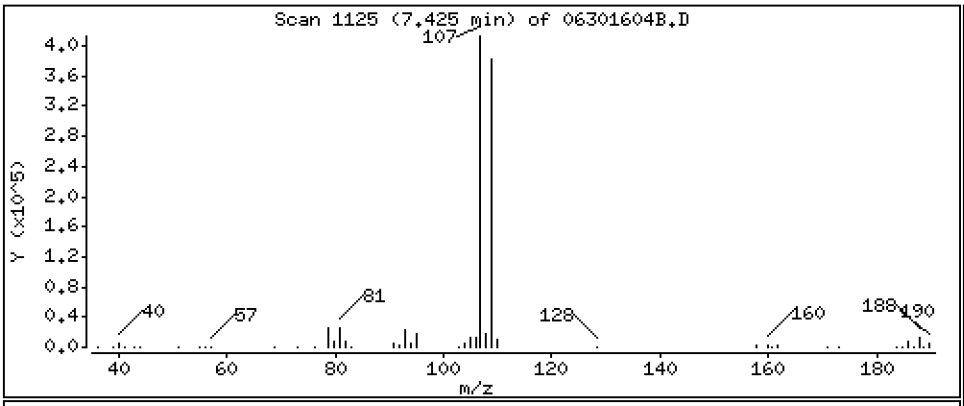
Operator: PB

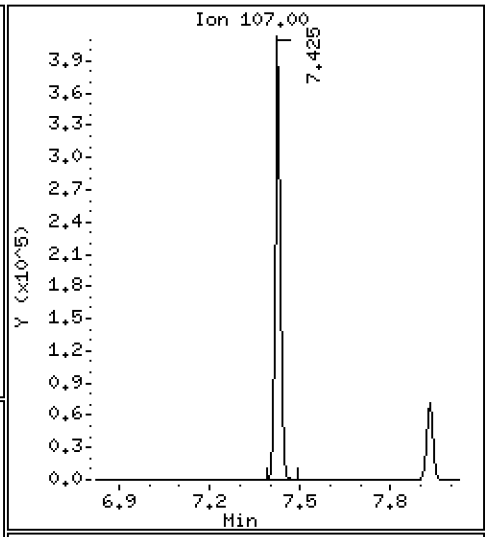
Column phase: RTXVMS

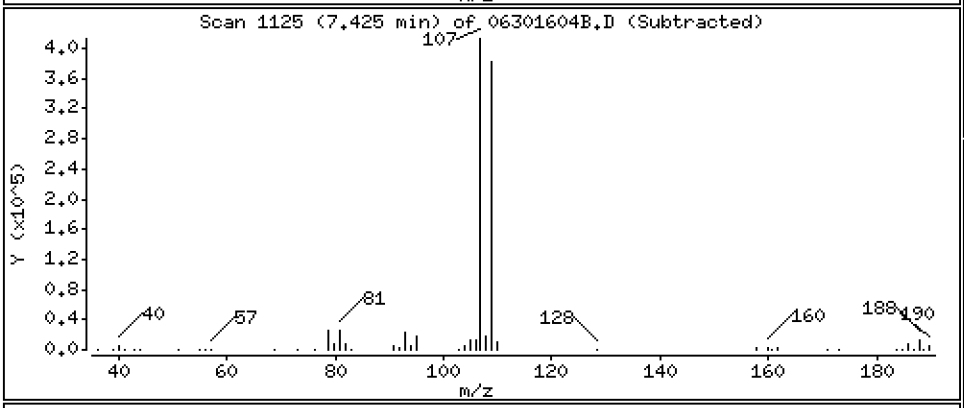
Column diameter: 0.18

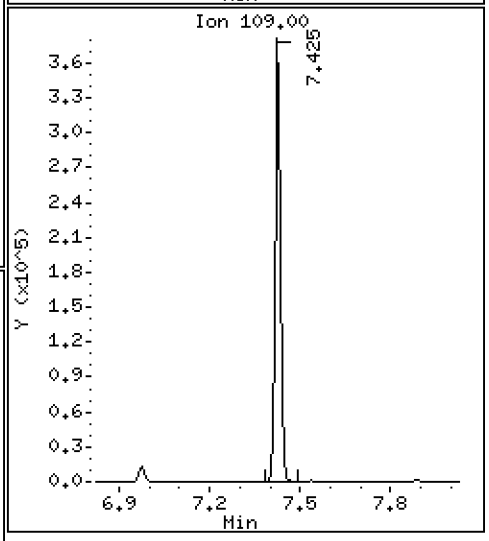
50 1,2-Dibromoethane

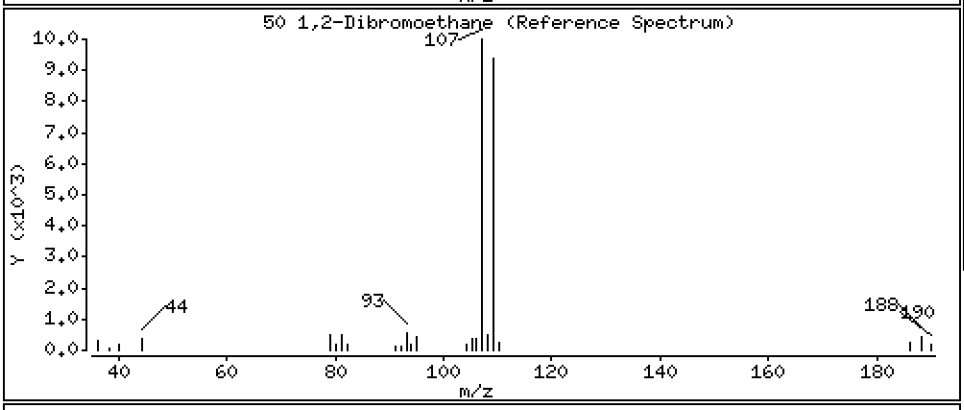
Concentration: 45.299 ug/Kg

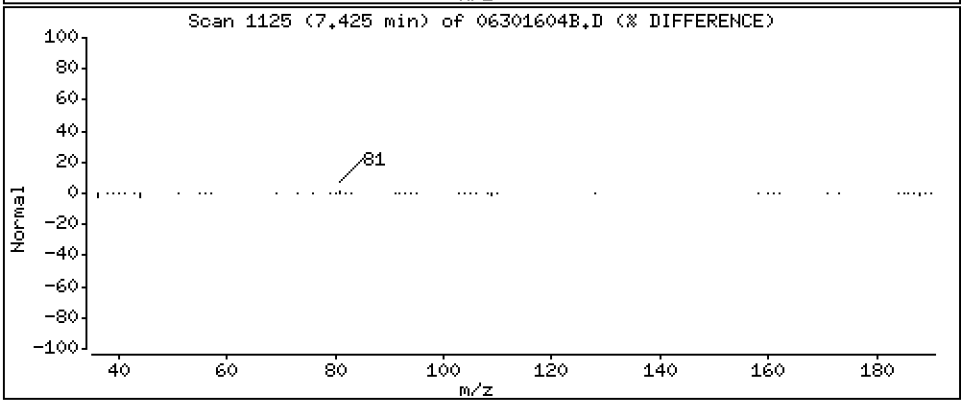












Date : 30-JUN-2016 12:46

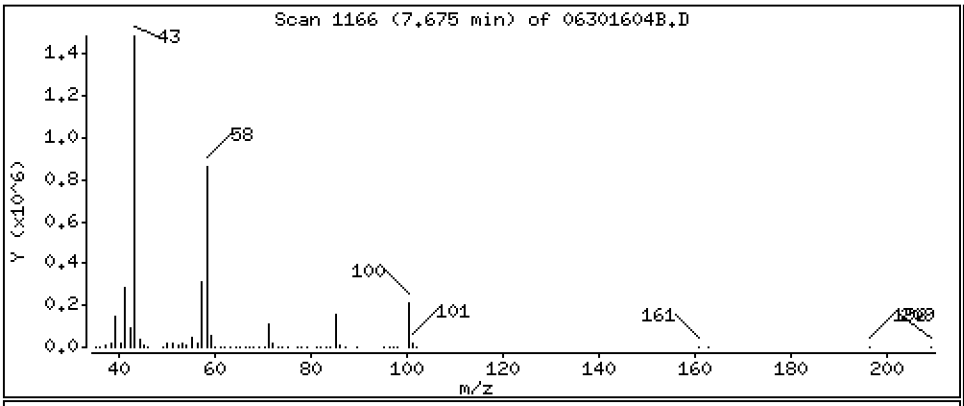
Client ID: LCS0630 Instrument: nt5.i

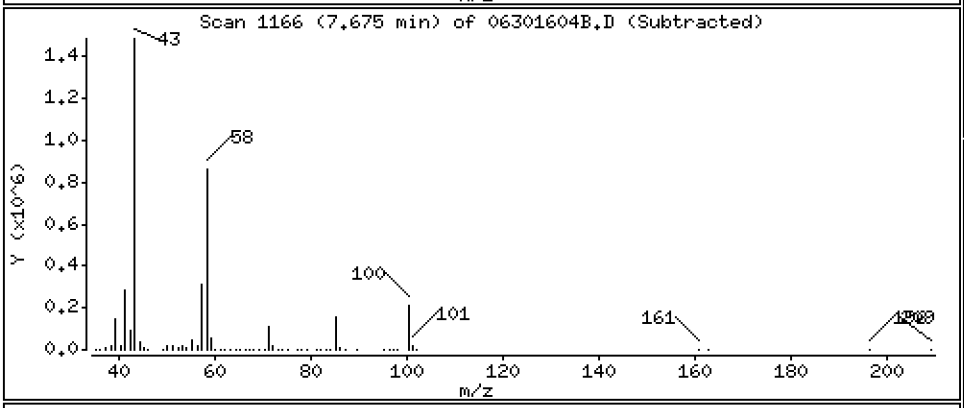
Sample Info: LCS0630,5,5,0

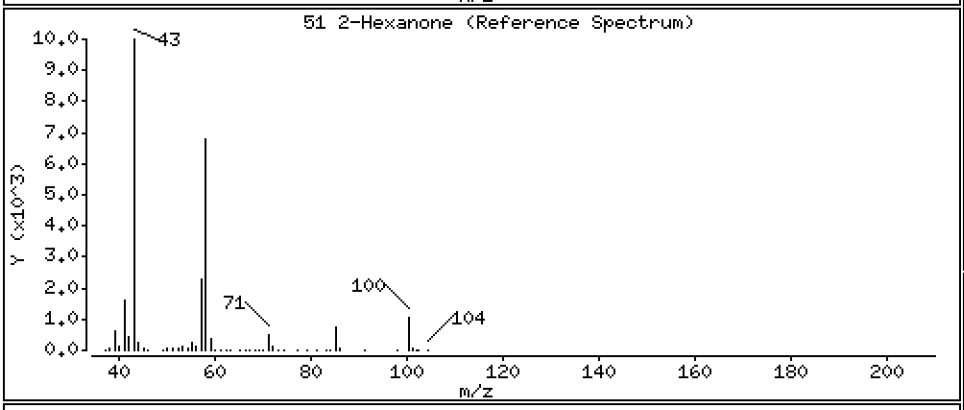
Operator: PB

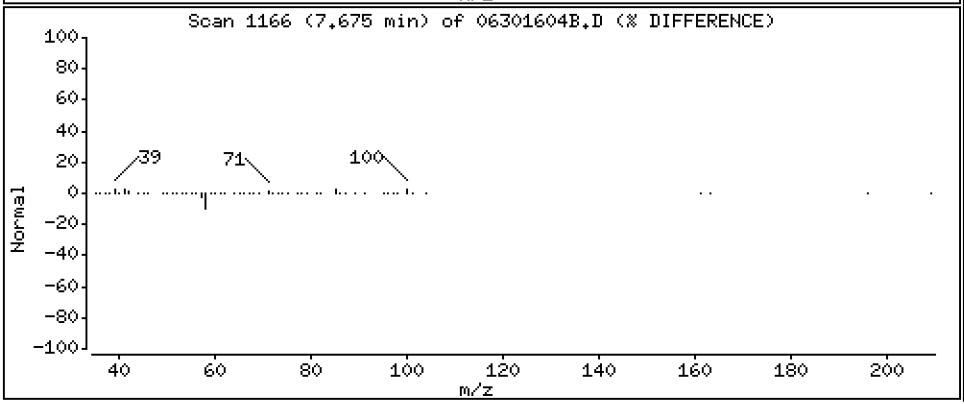
Column phase: RTXVMS Column diameter: 0.18

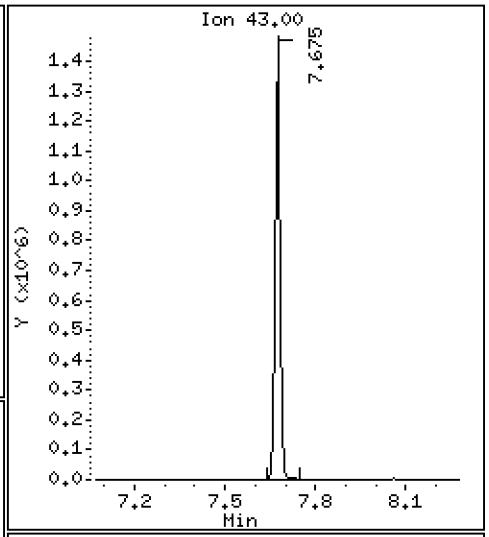
51 2-Hexanone Concentration: 183.94 ug/Kg

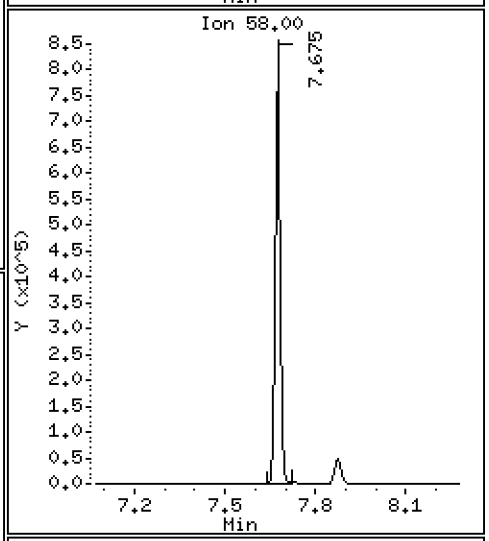


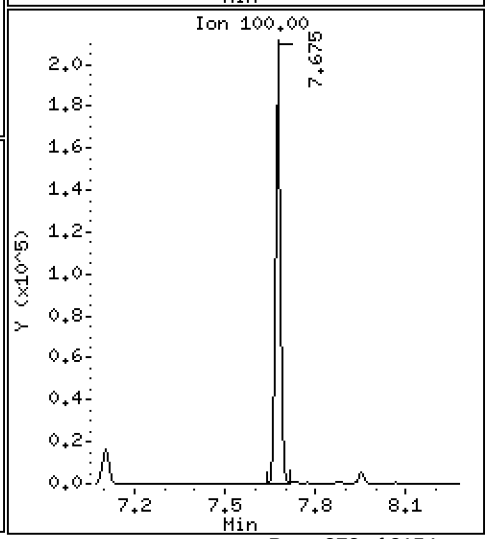












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

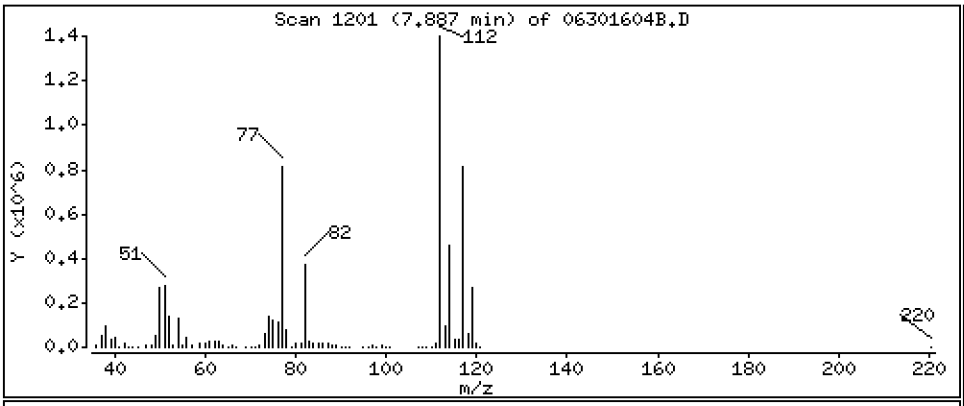
Operator: PB

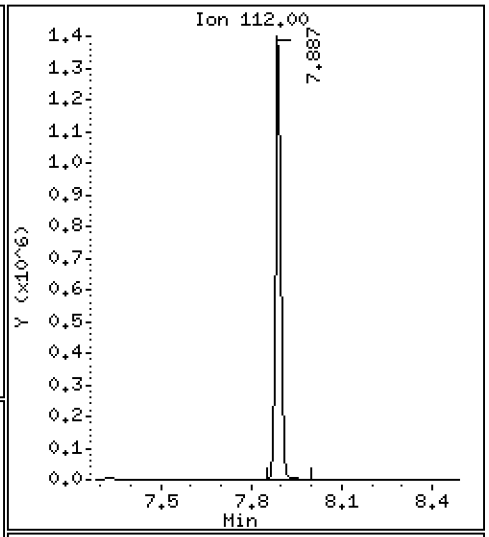
Column phase: RTXVMS

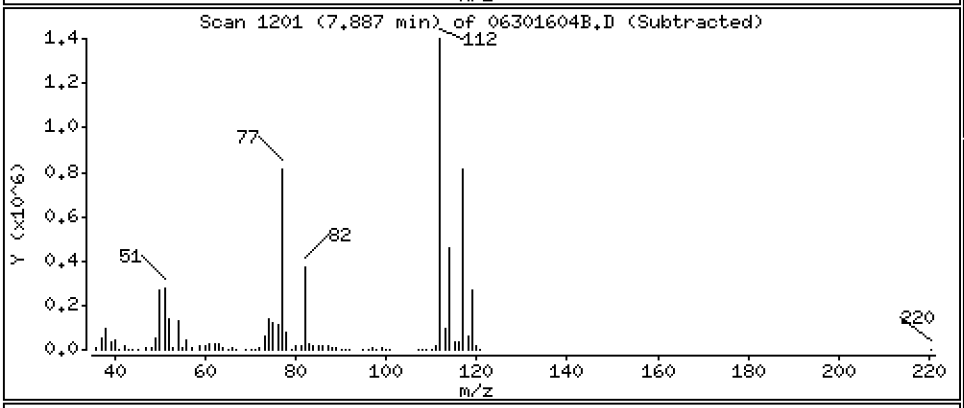
Column diameter: 0.18

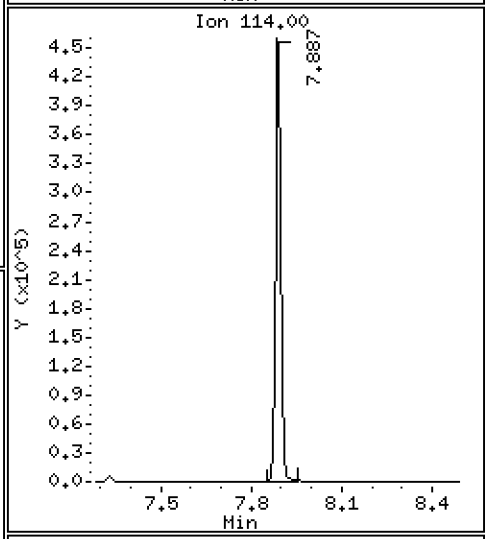
53 Chlorobenzene

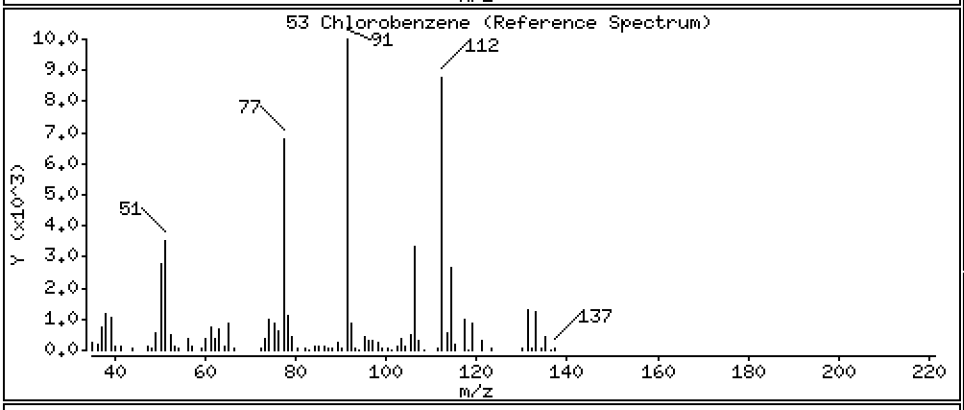
Concentration: 46.195 ug/Kg

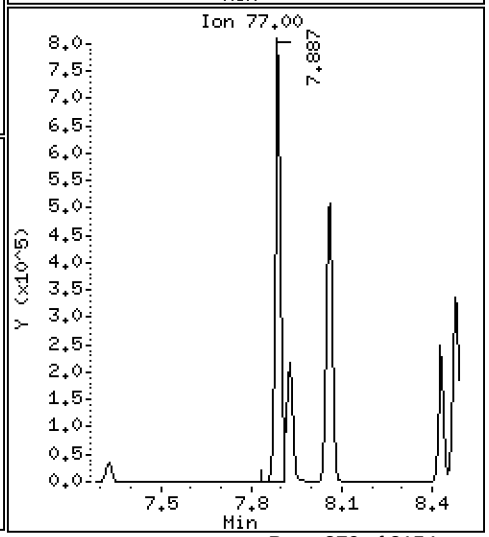


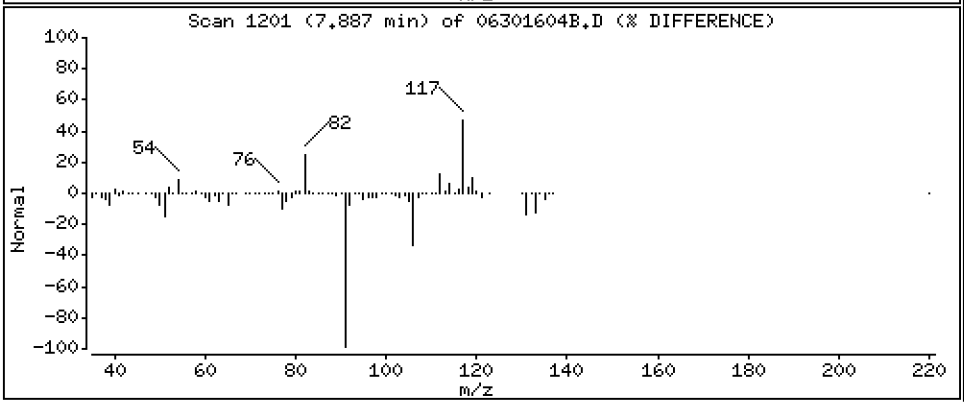












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

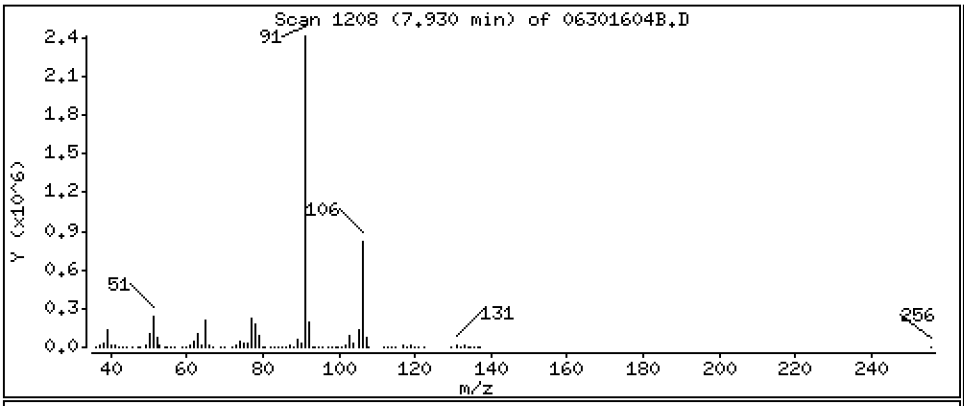
Operator: PB

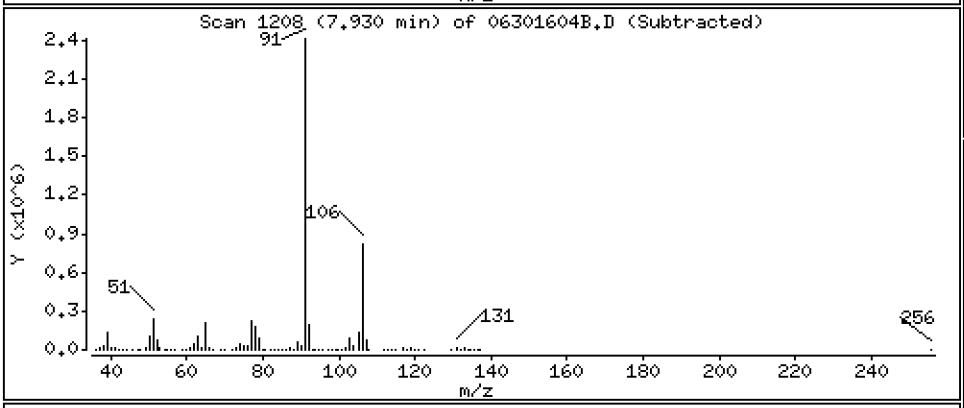
Column phase: RTXVMS

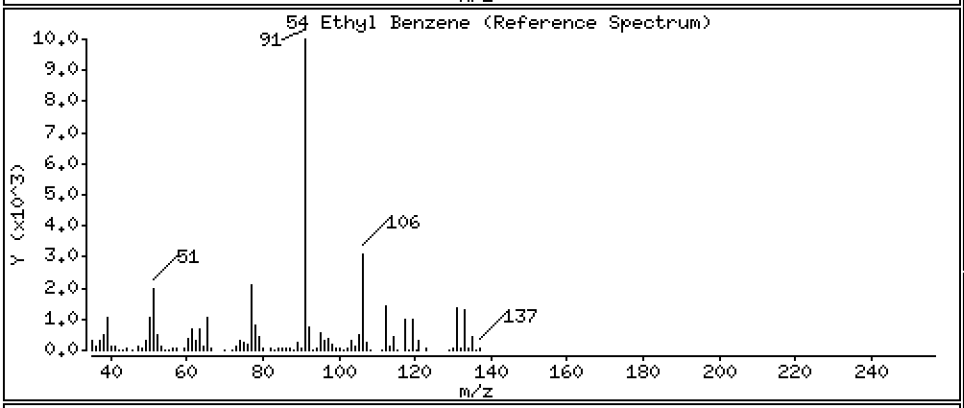
Column diameter: 0.18

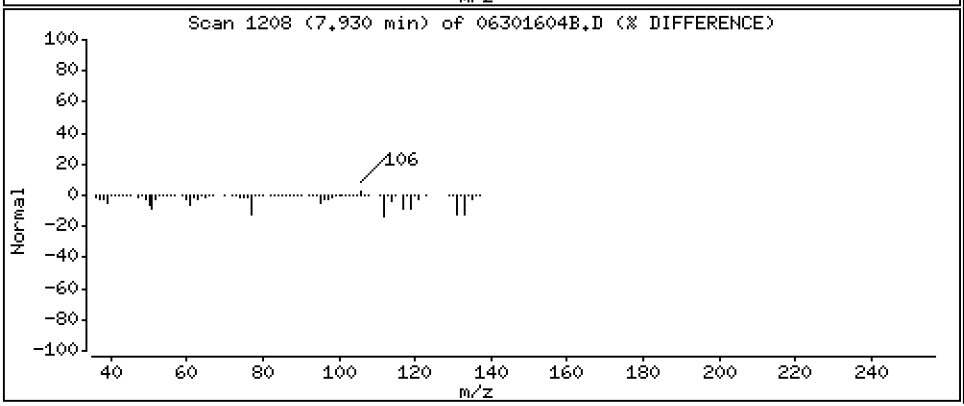
54 Ethyl Benzene

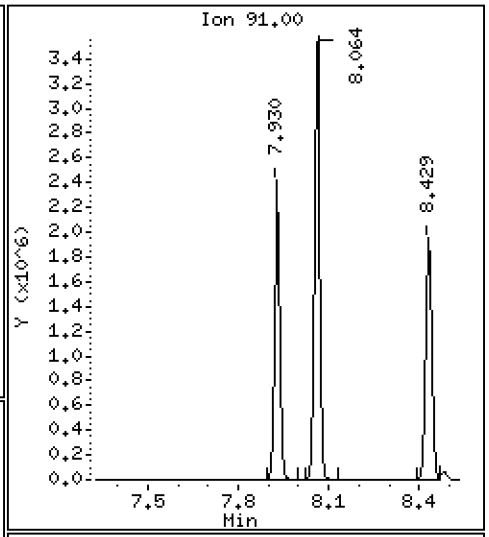
Concentration: 45.808 ug/Kg

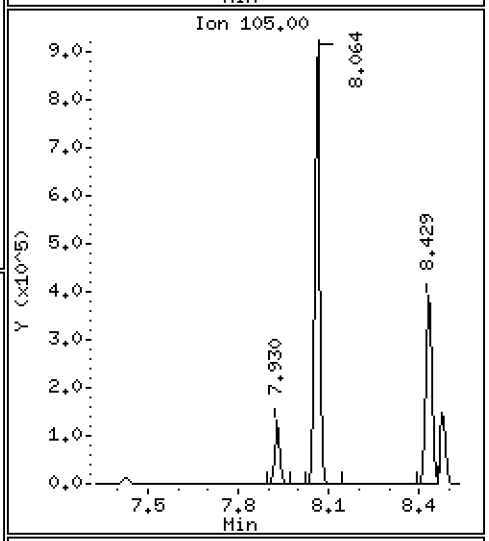


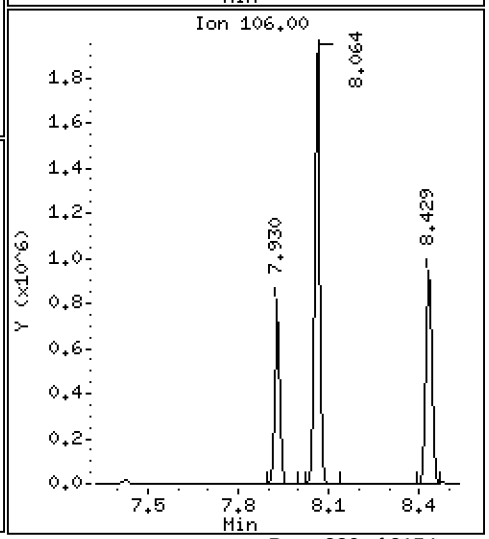












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

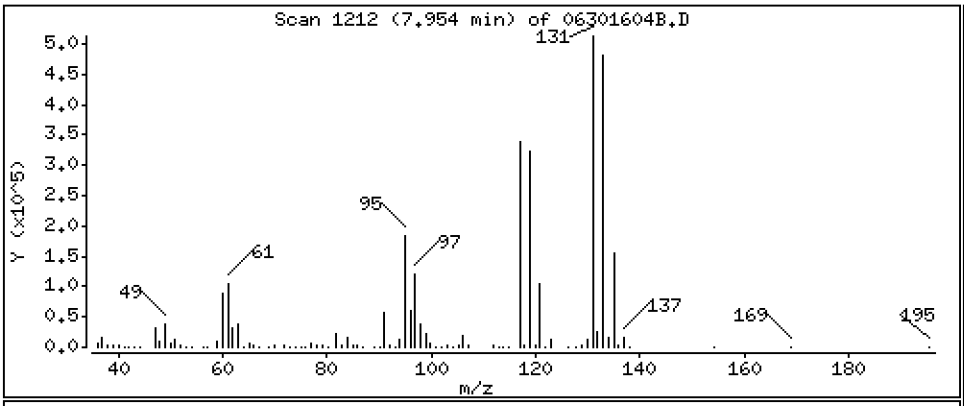
Operator: PB

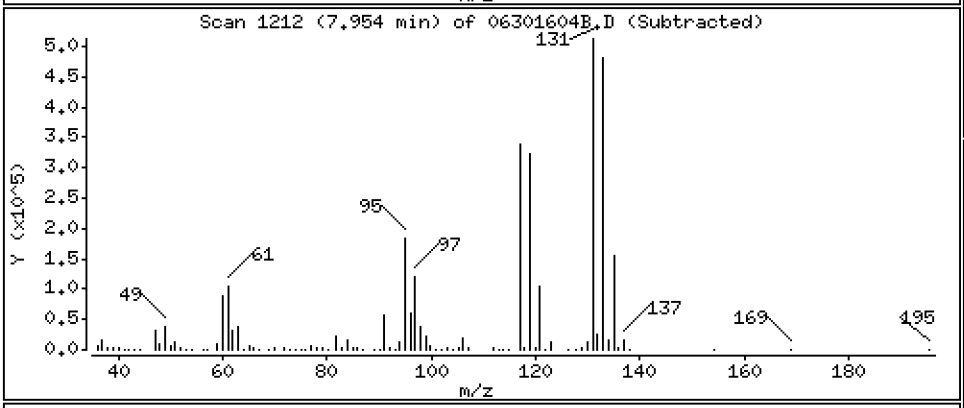
Column phase: RTXVMS

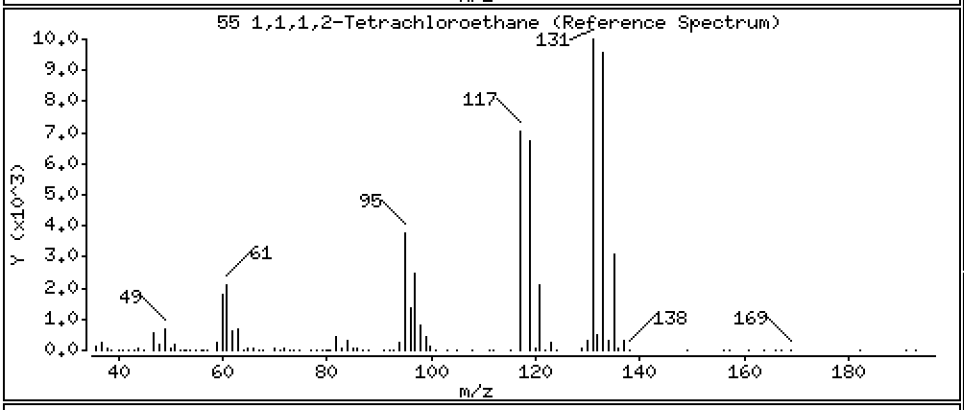
Column diameter: 0.18

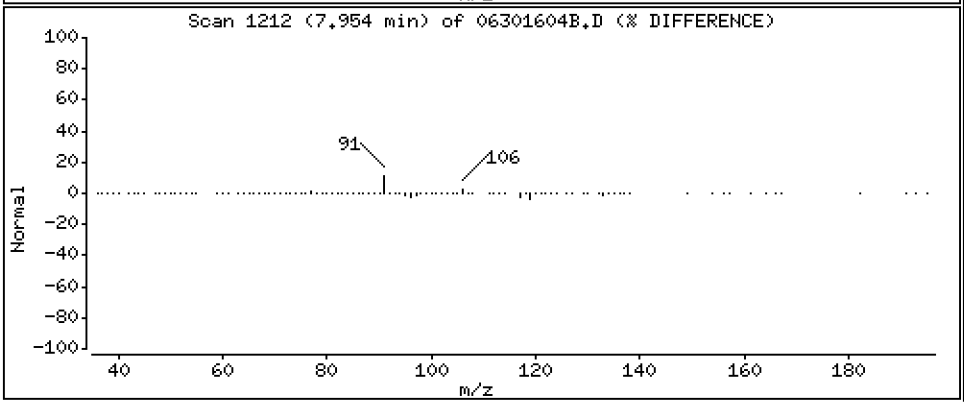
55 1,1,1,2-Tetrachloroethane

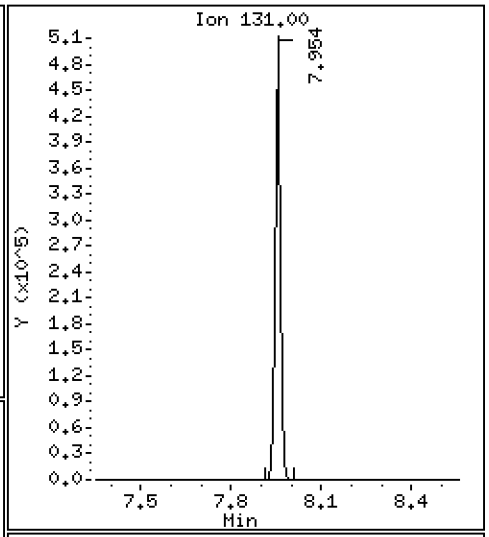
Concentration: 47.289 ug/Kg

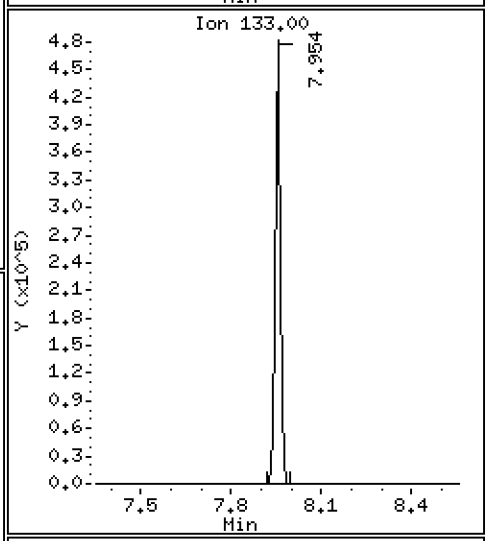


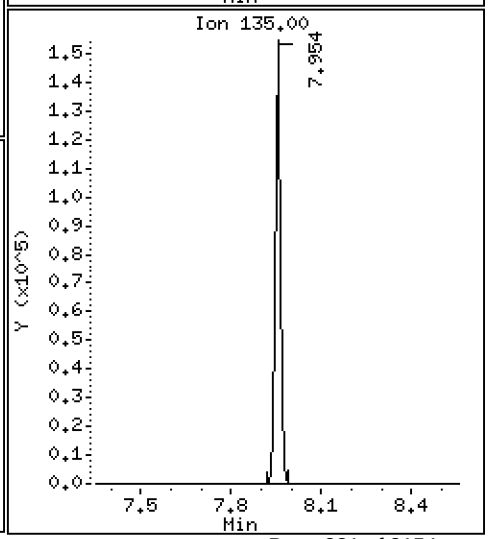












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

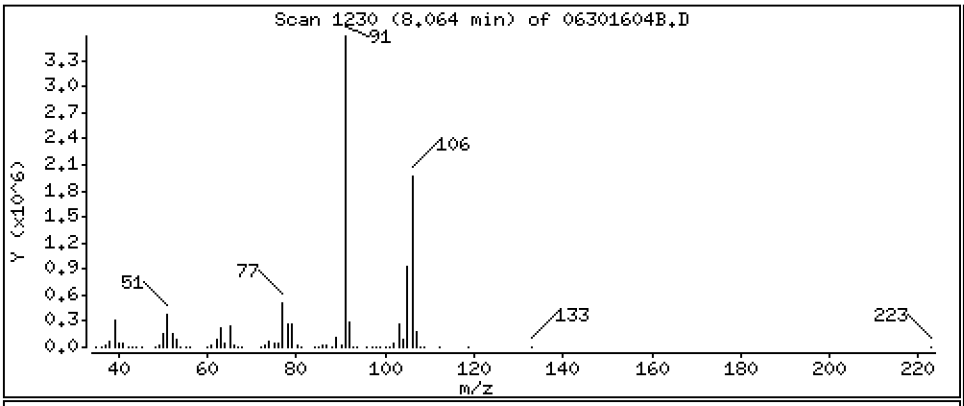
Operator: PB

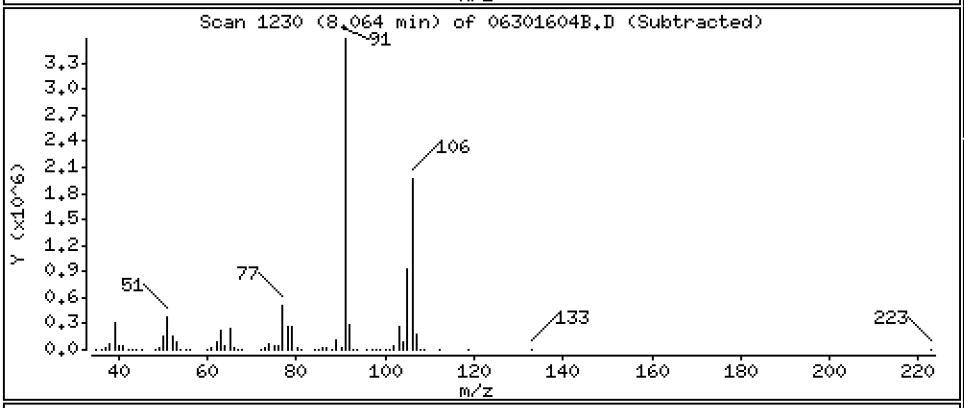
Column phase: RTXVMS

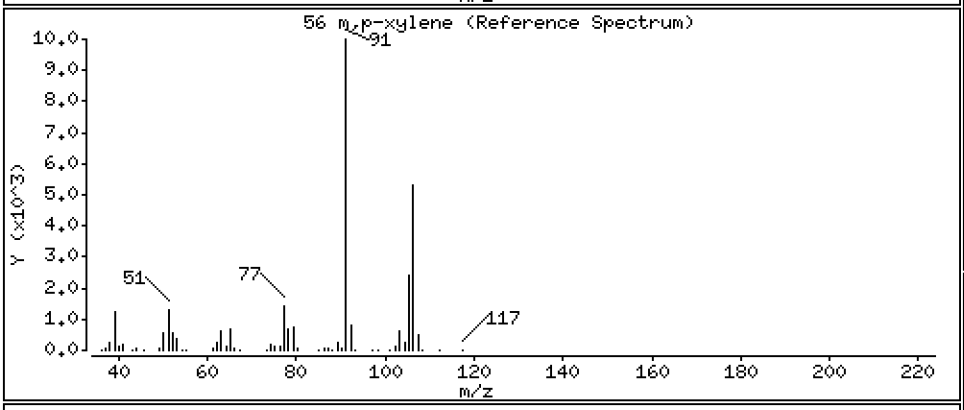
Column diameter: 0.18

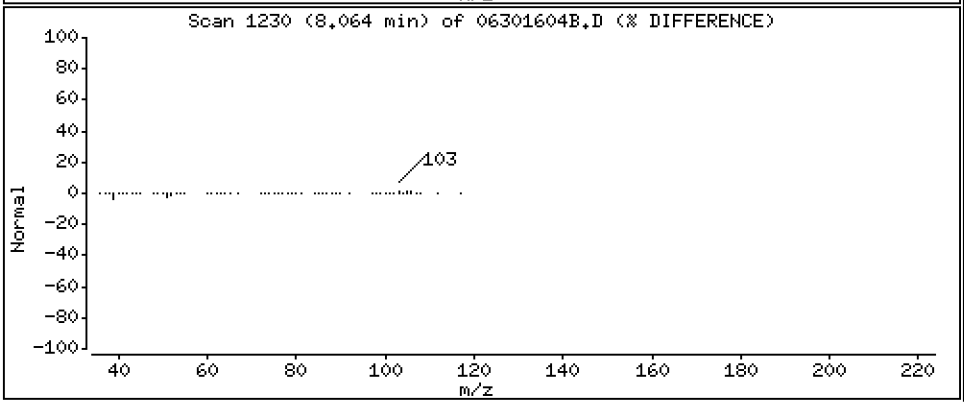
56 m,p-xylene

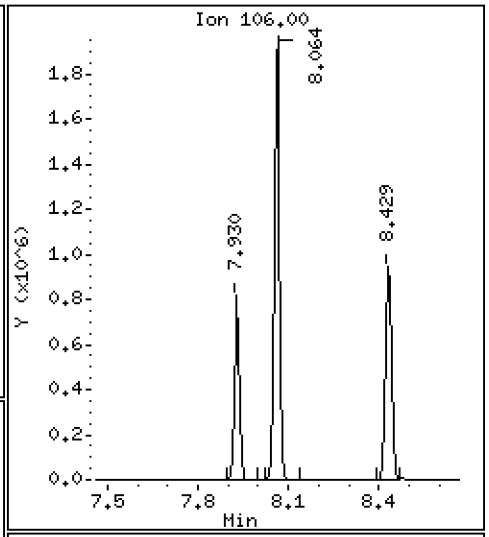
Concentration: 94.214 ug/Kg

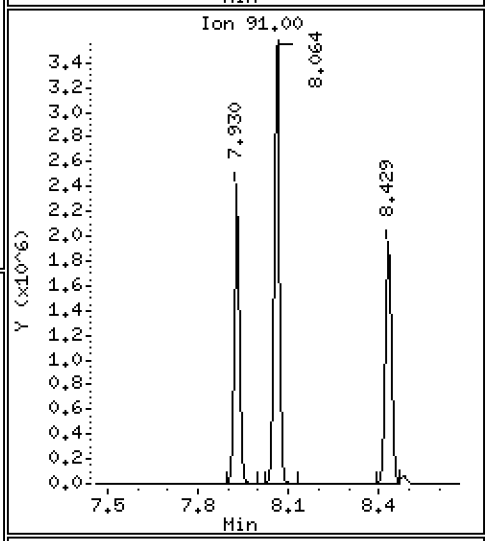


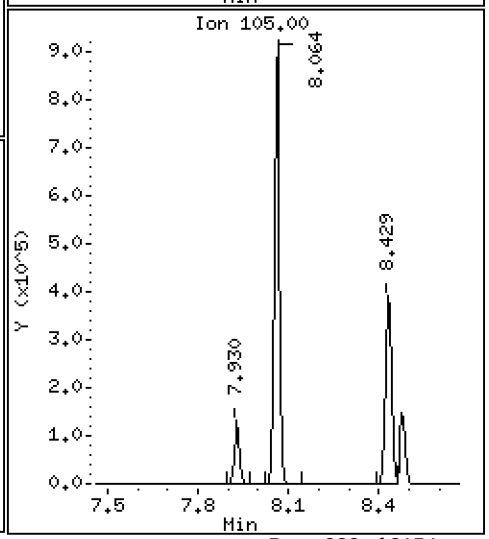












Date : 30-JUN-2016 12:46

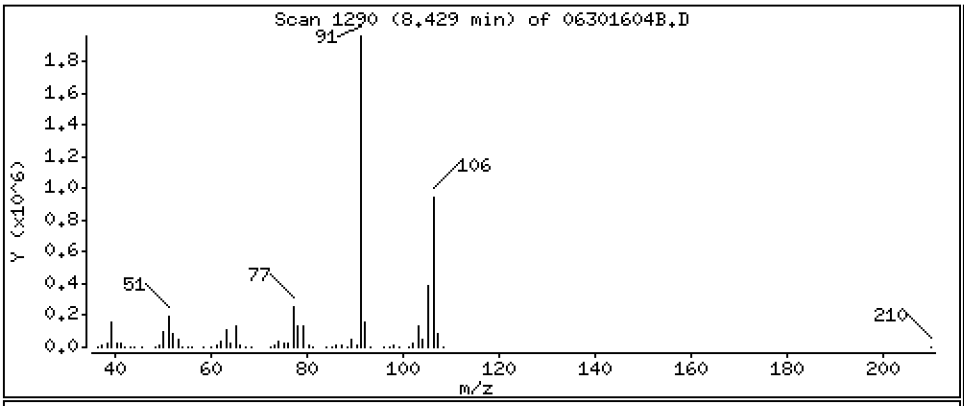
Client ID: LCS0630 Instrument: nt5.i

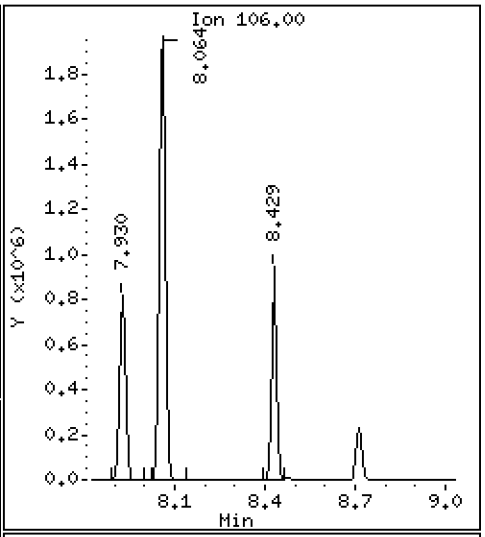
Sample Info: LCS0630,5,5,0

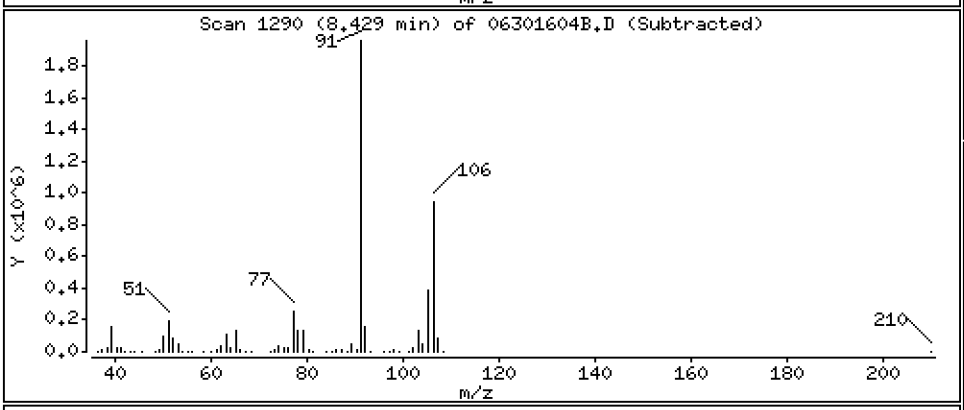
Operator: PB

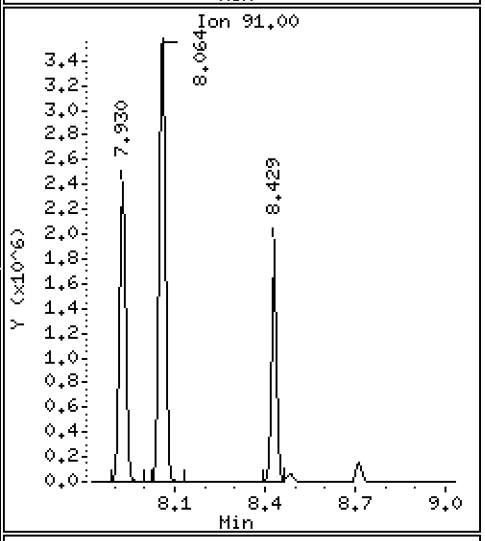
Column phase: RTXVMS Column diameter: 0.18

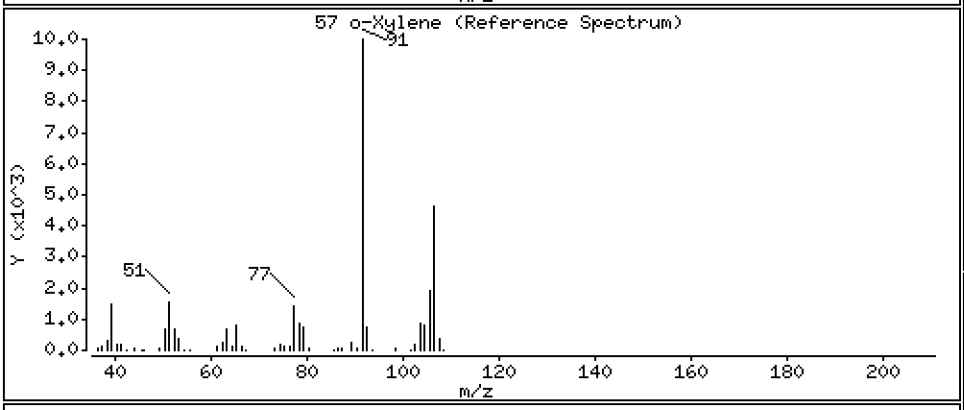
57 o-Xylene Concentration: 46.218 ug/Kg

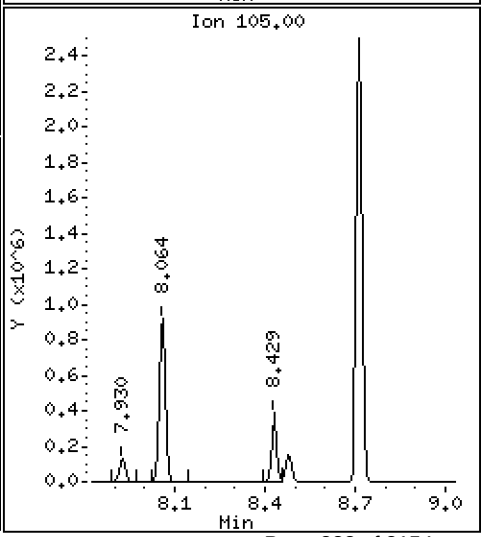


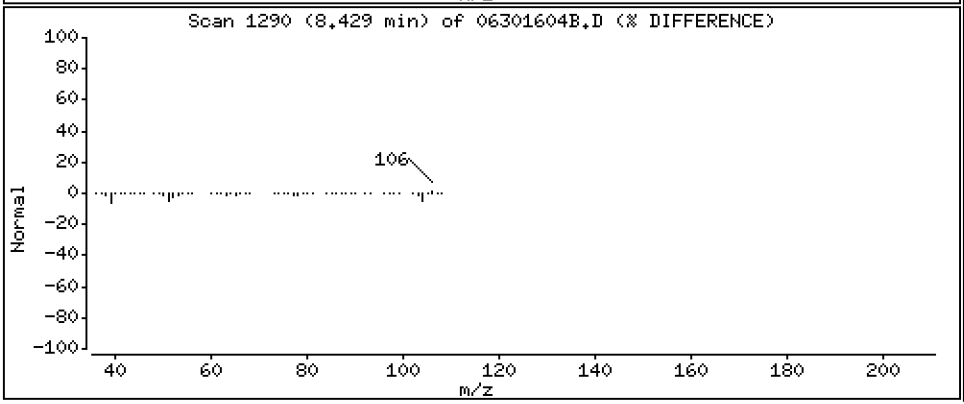












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

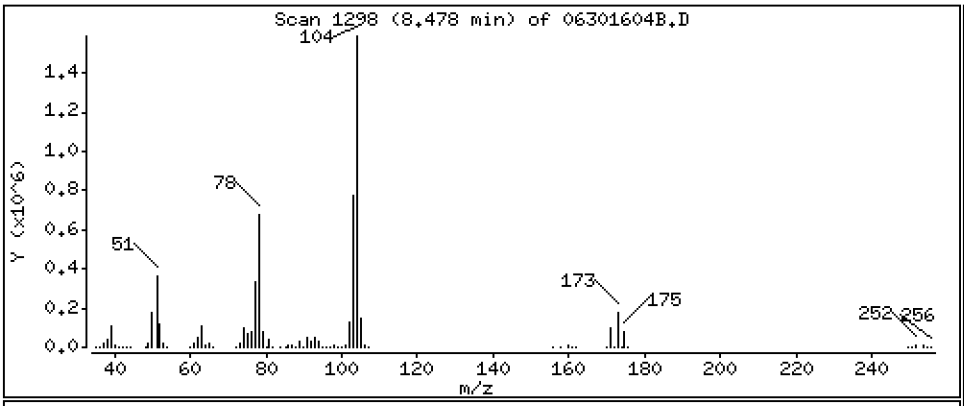
Operator: PB

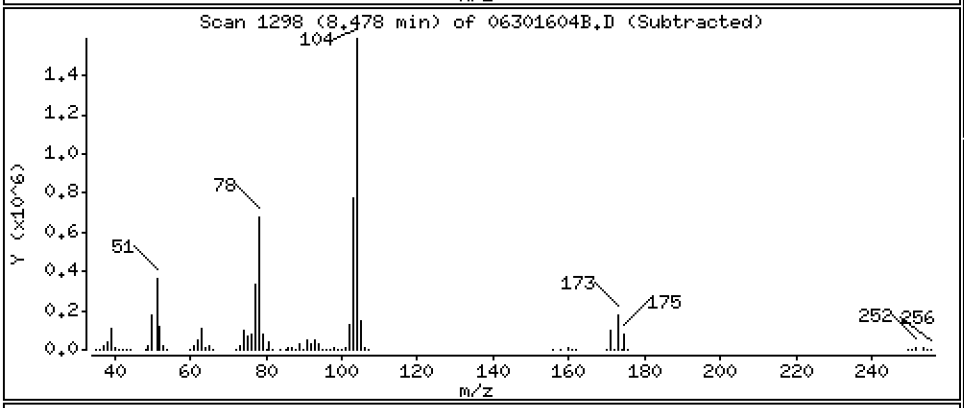
Column phase: RTXVMS

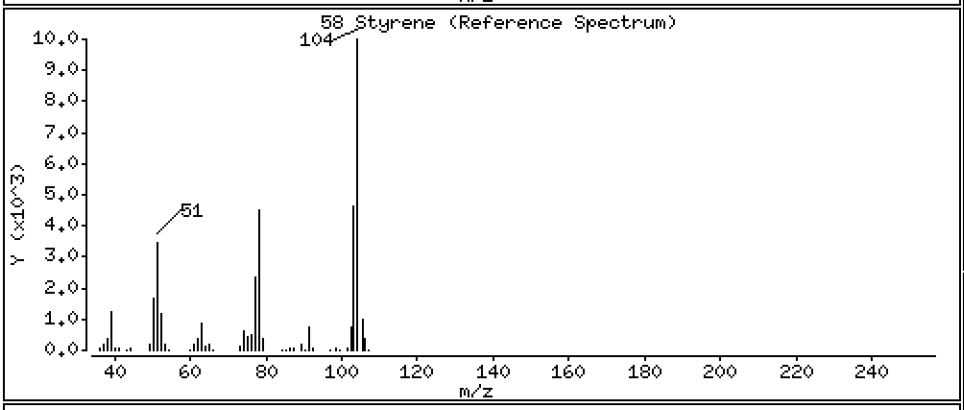
Column diameter: 0.18

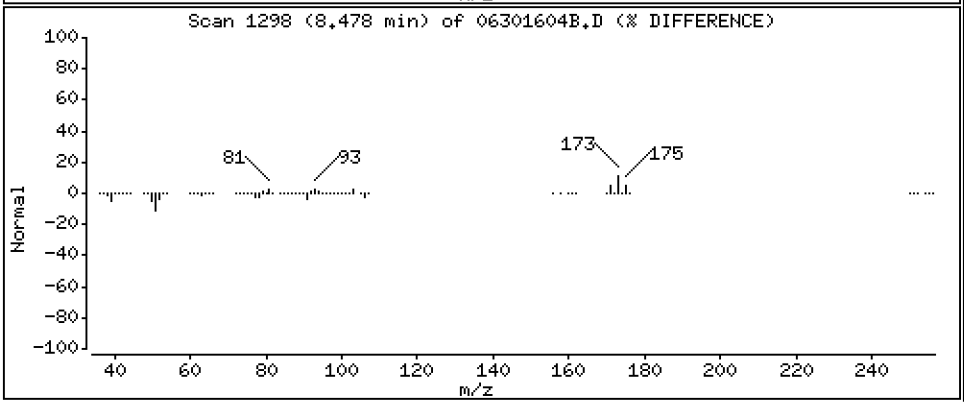
58 Styrene

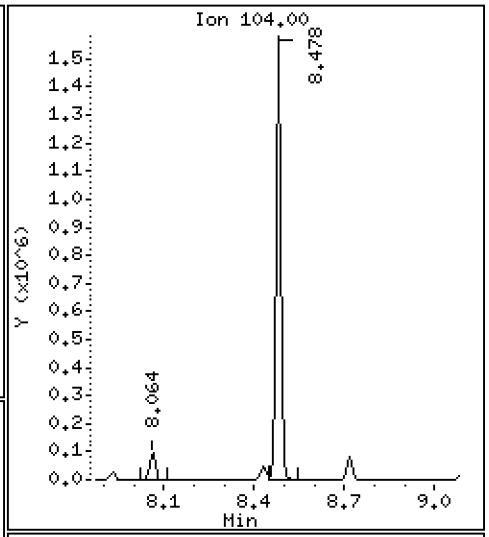
Concentration: 47.176 ug/Kg

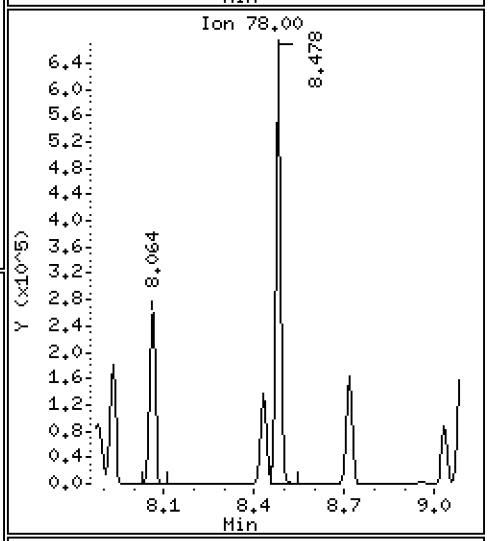


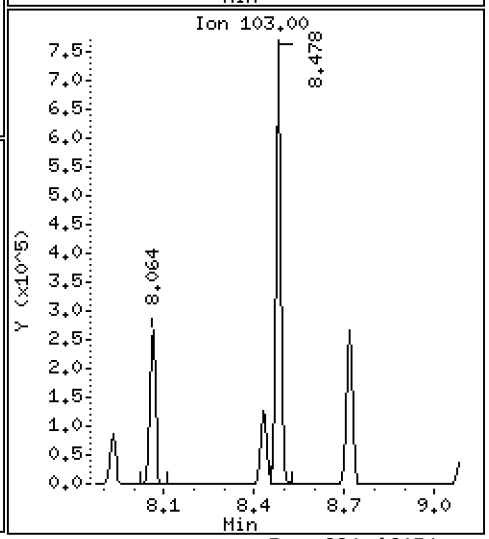












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

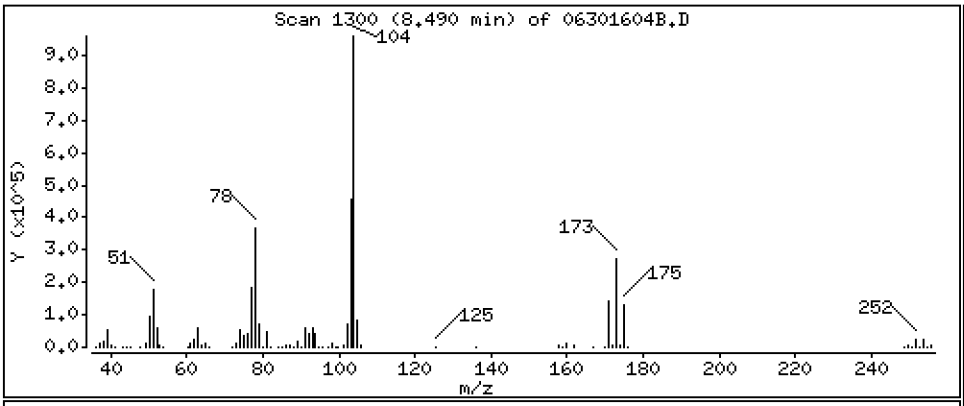
Operator: PB

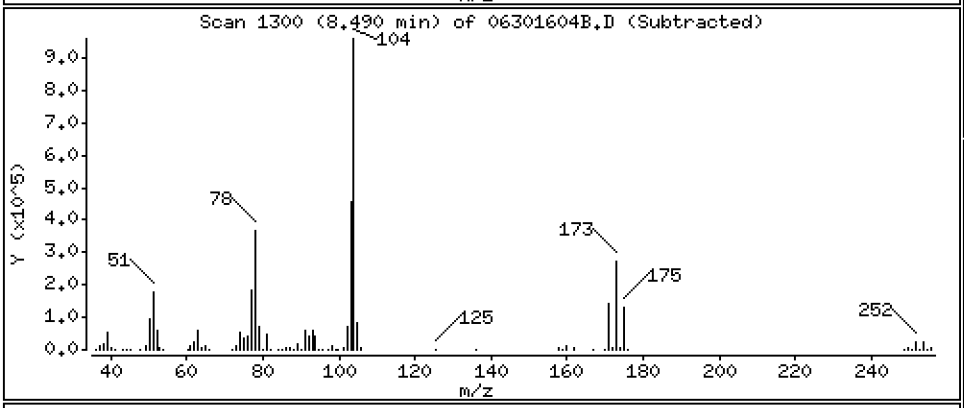
Column phase: RTXVMS

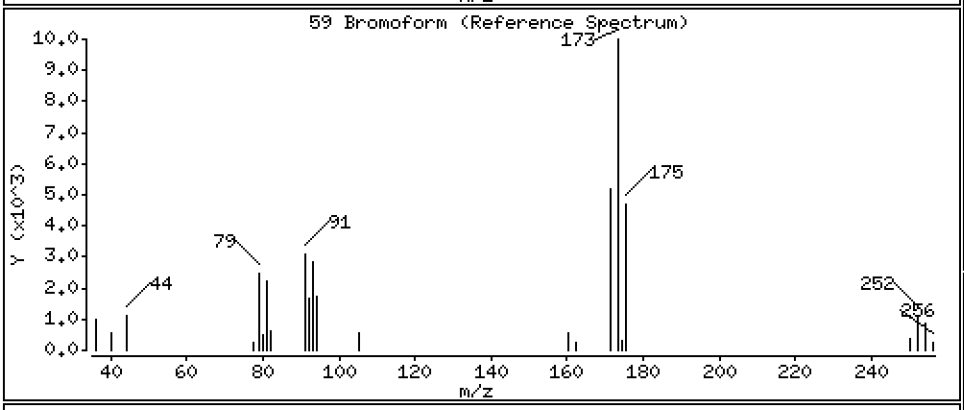
Column diameter: 0.18

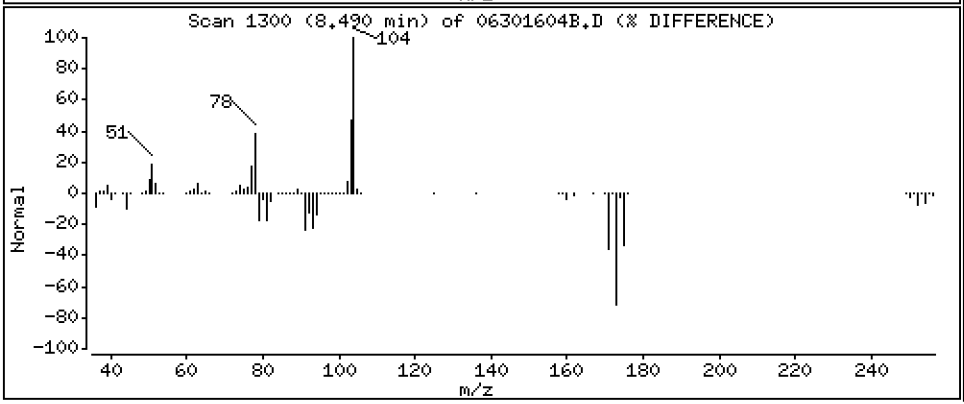
59 Bromoform

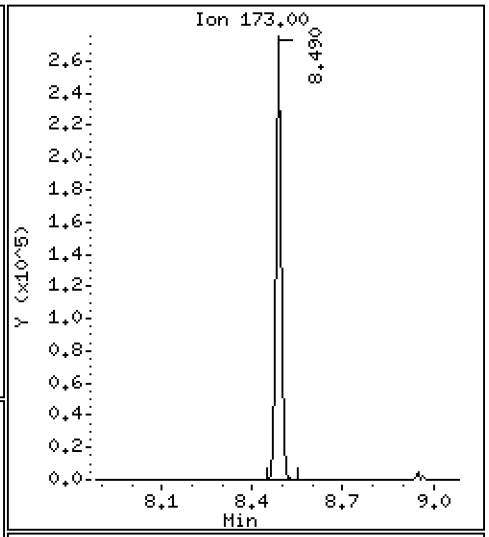
Concentration: 46.833 ug/Kg

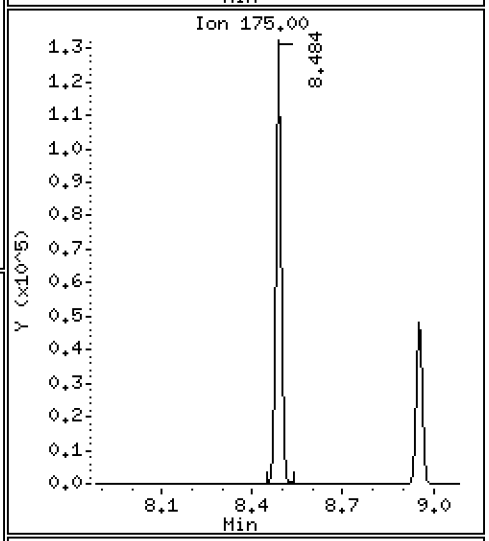


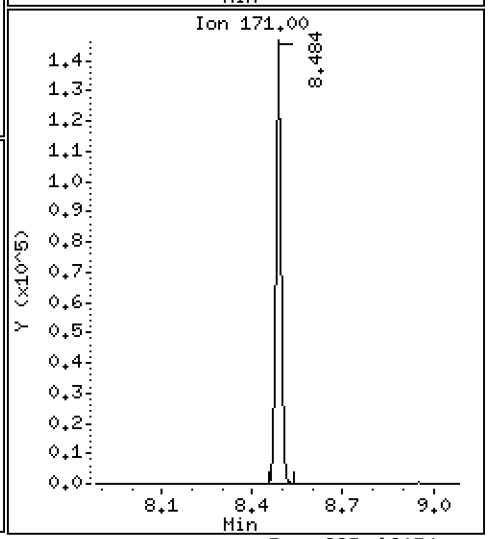












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

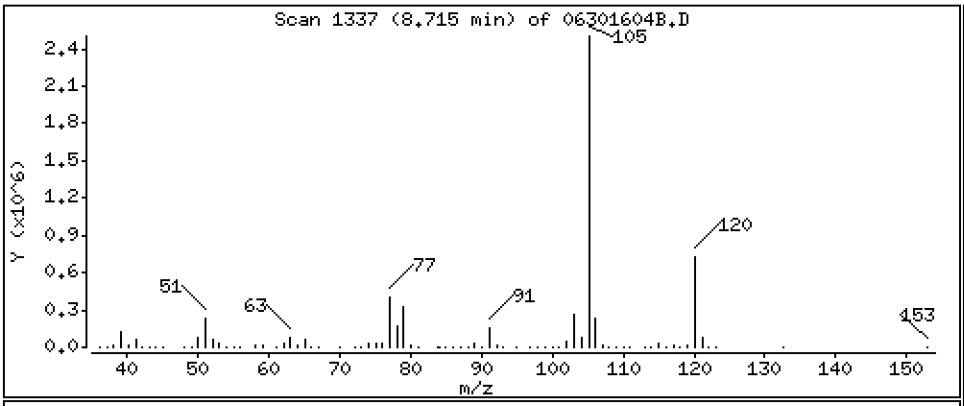
Operator: PB

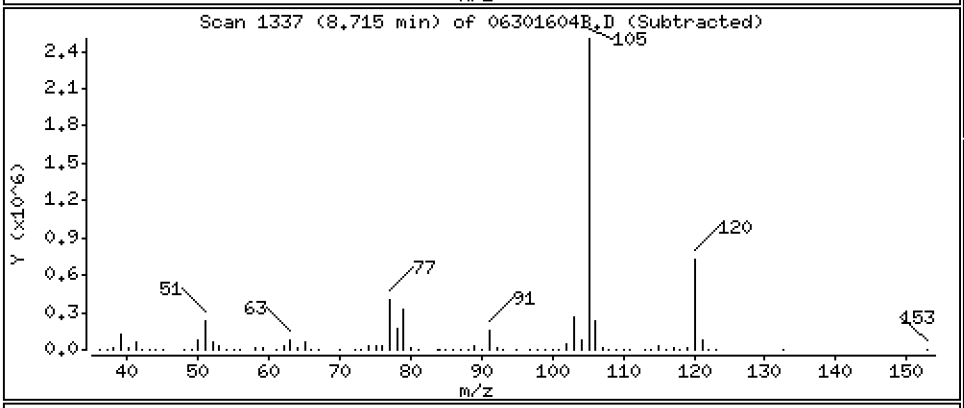
Column phase: RTXVMS

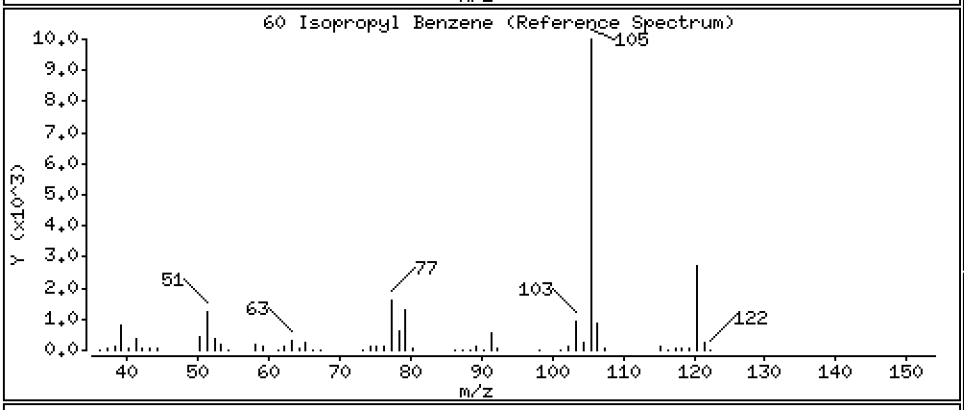
Column diameter: 0.18

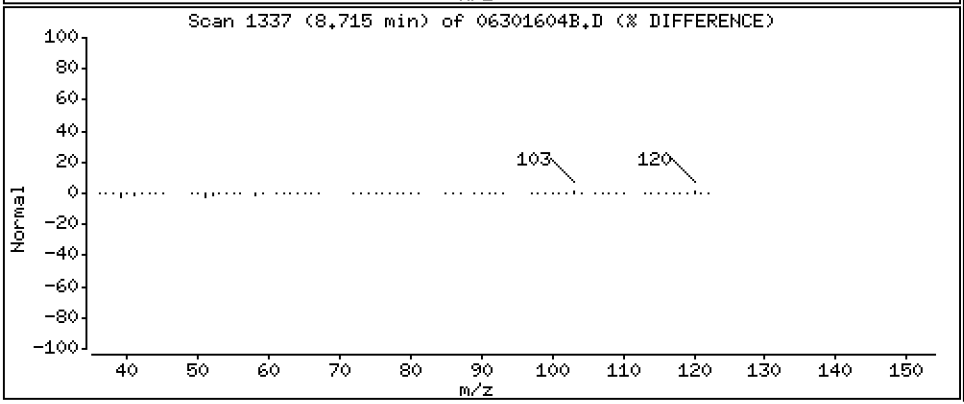
60 Isopropyl Benzene

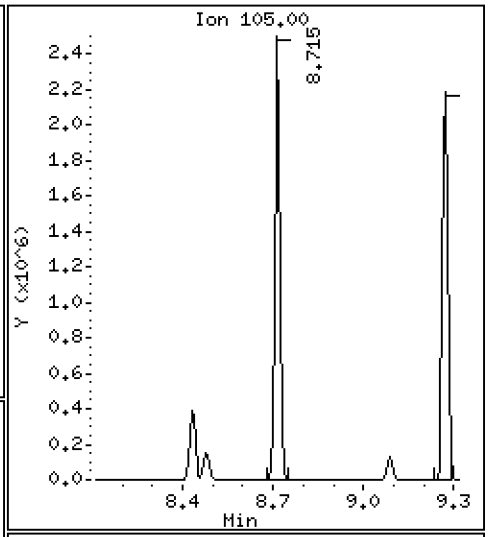
Concentration: 45.784 ug/Kg

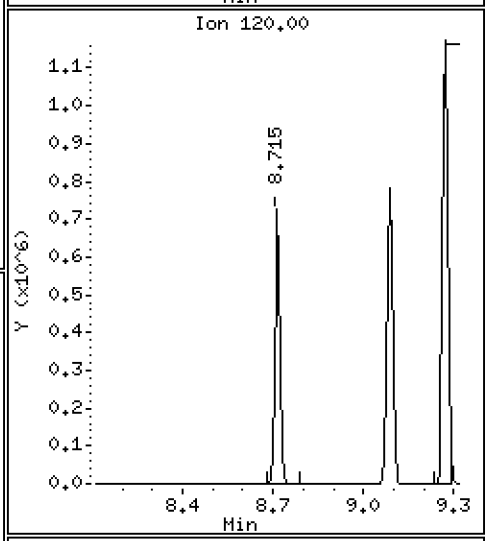


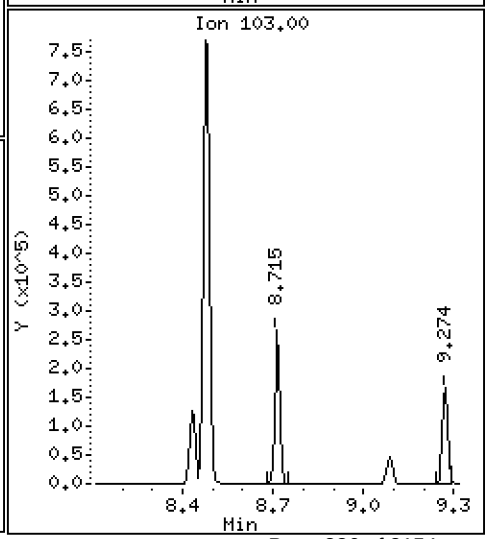












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

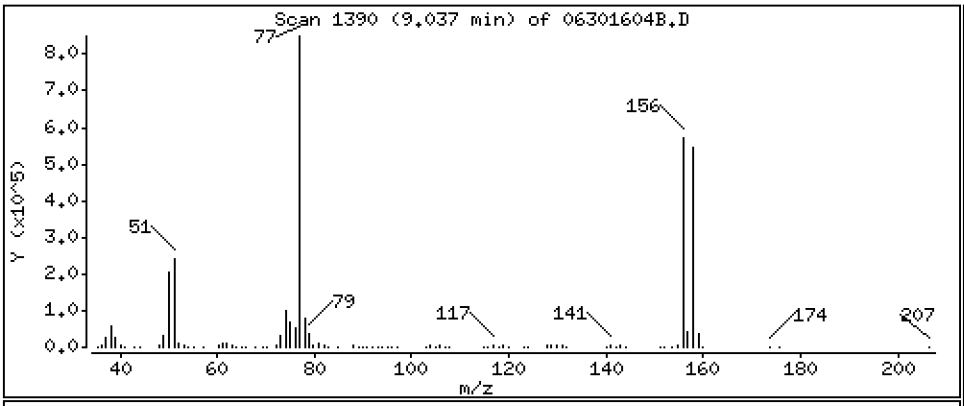
Operator: PB

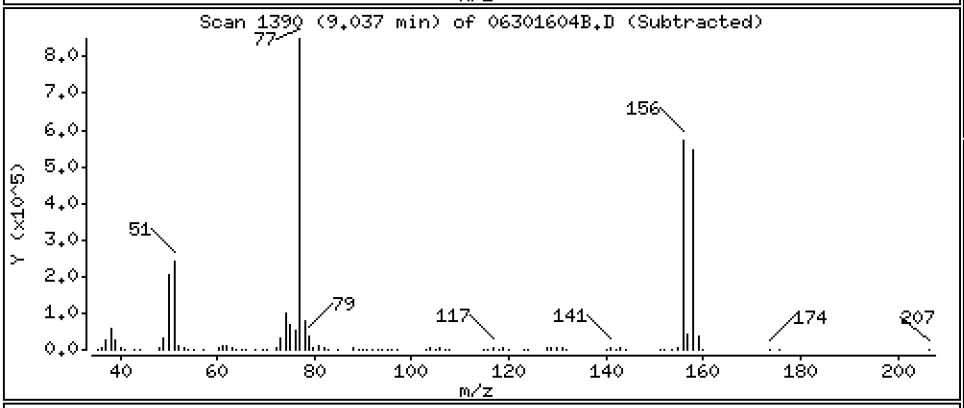
Column phase: RTXVMS

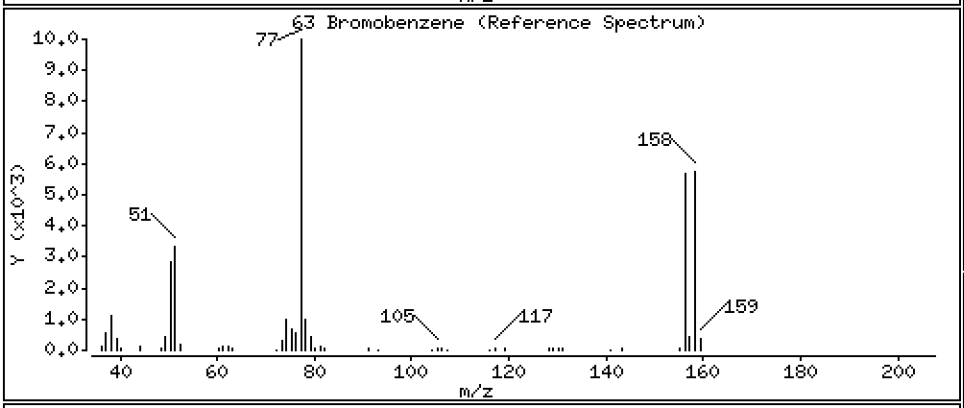
Column diameter: 0.18

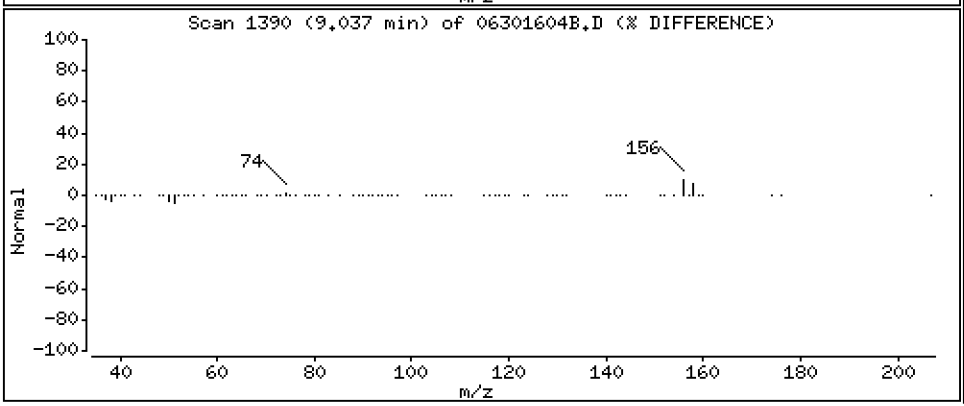
63 Bromobenzene

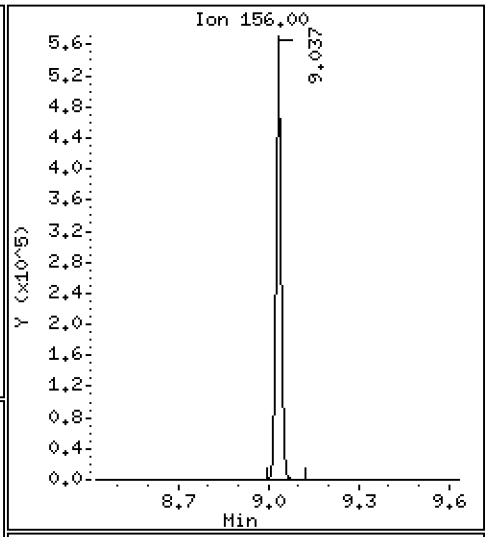
Concentration: 46.810 ug/Kg

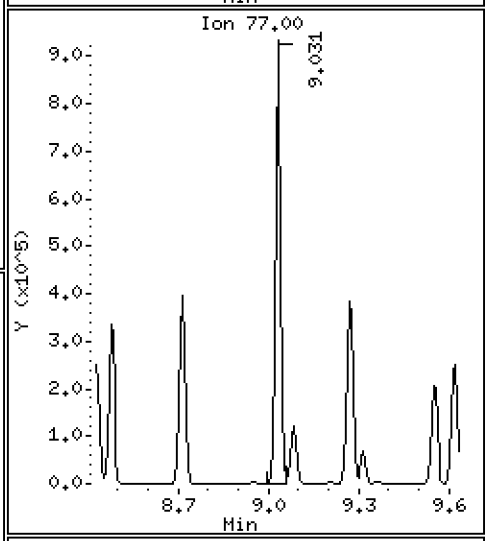


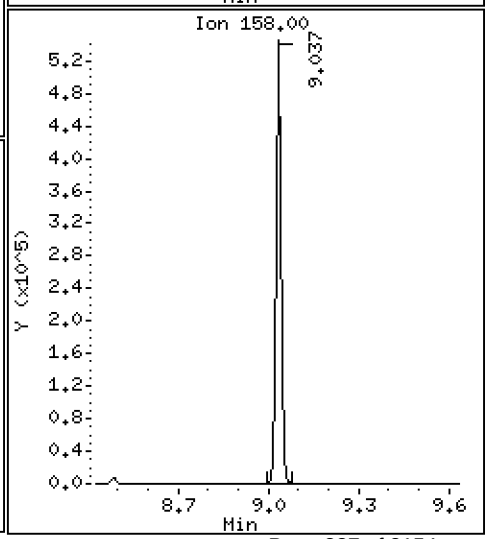












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

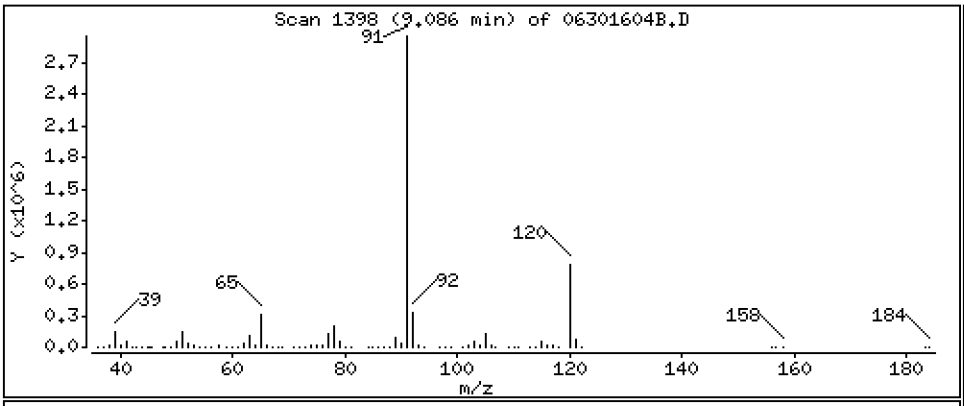
Operator: PB

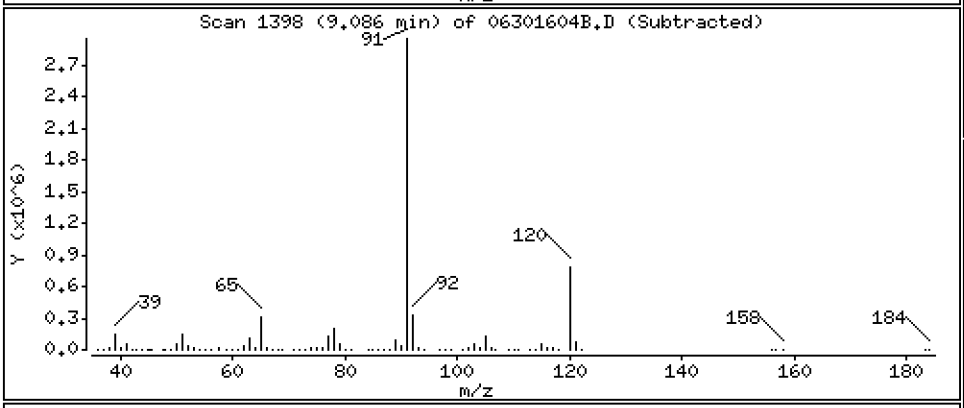
Column phase: RTXVMS

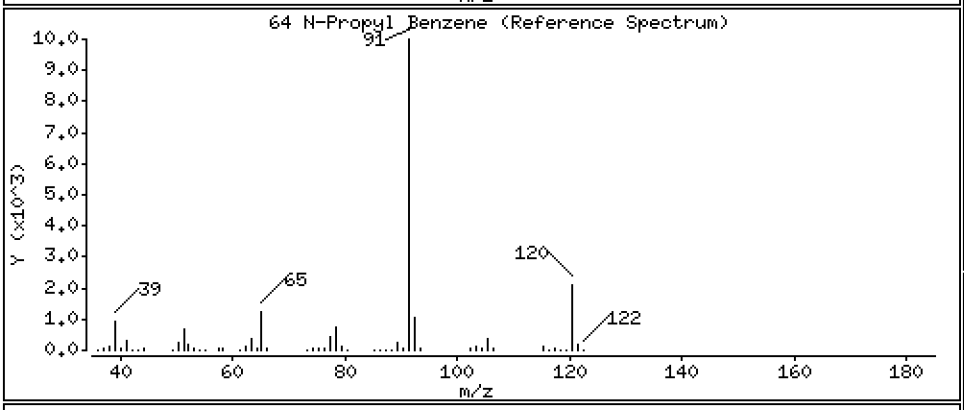
Column diameter: 0.18

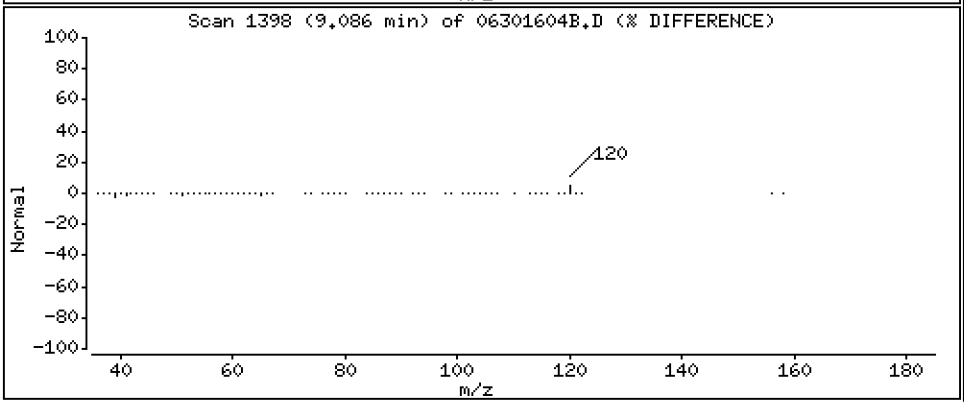
64 N-Propyl Benzene

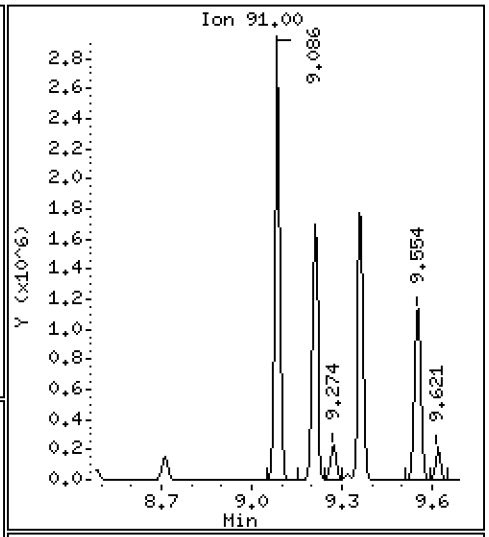
Concentration: 44.226 ug/Kg

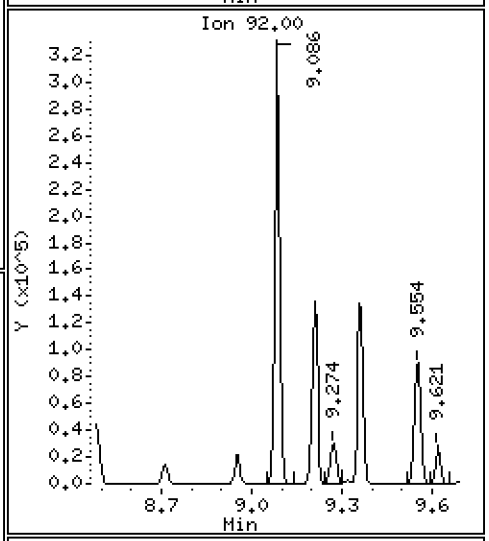


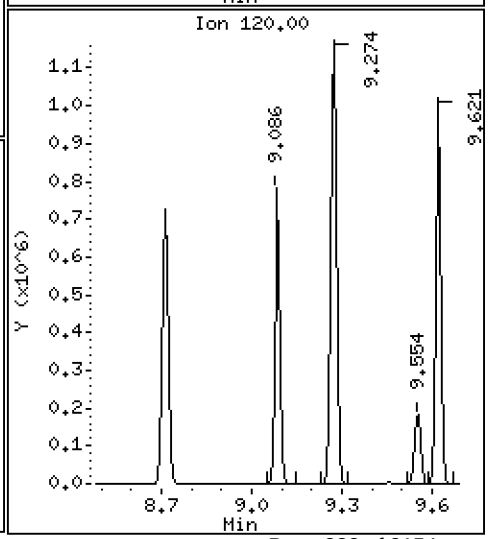












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

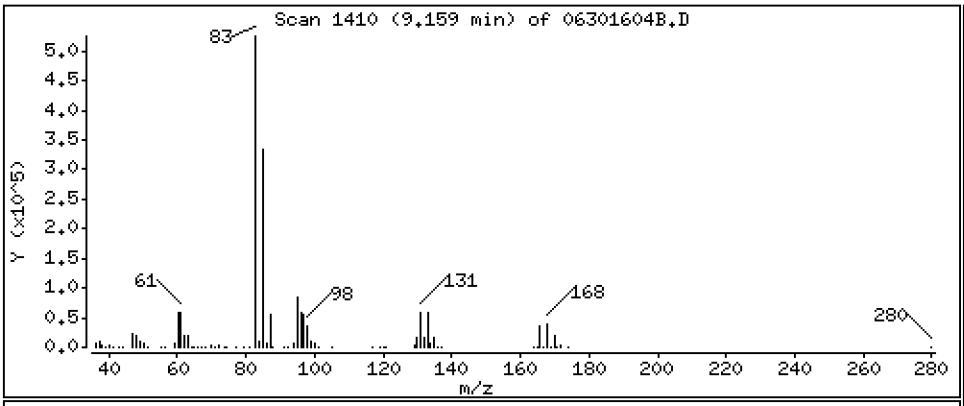
Operator: PB

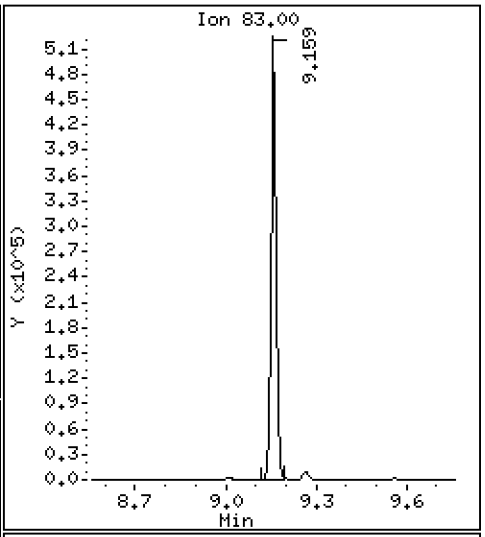
Column phase: RTXVMS

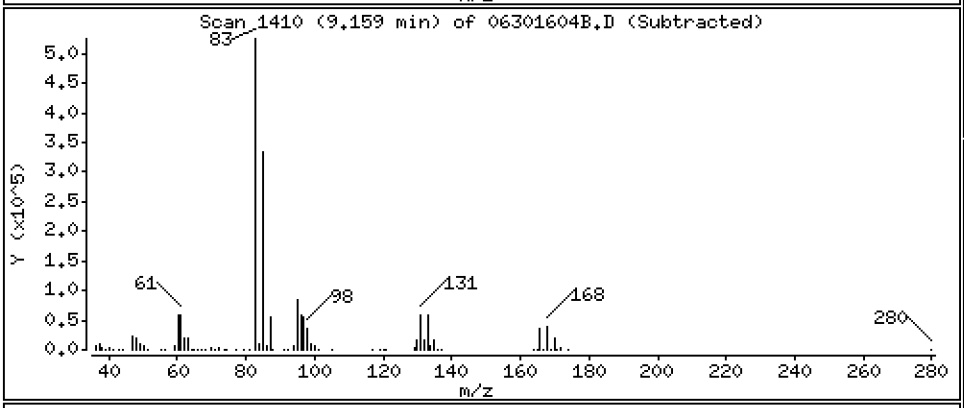
Column diameter: 0.18

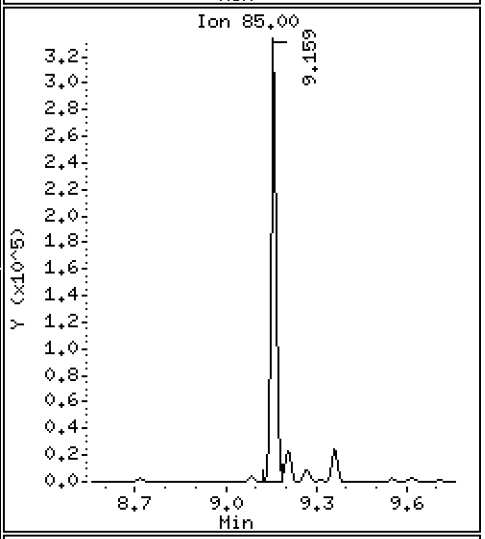
65 1,1,2,2-Tetrachloroethane

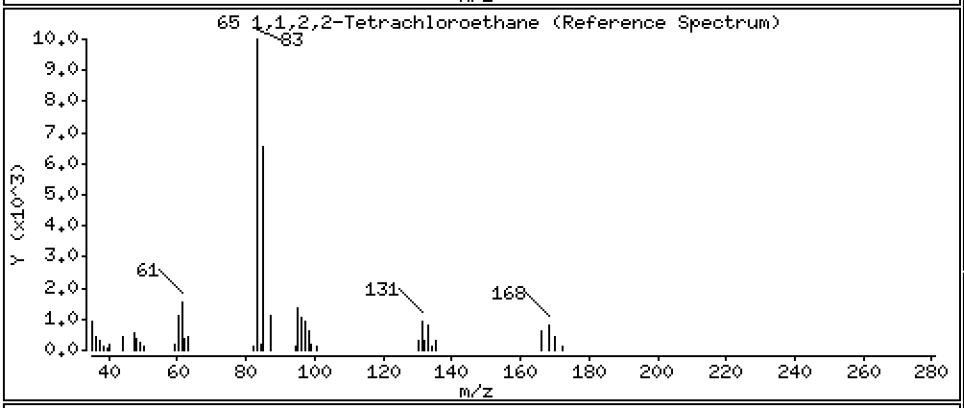
Concentration: 41.142 ug/Kg

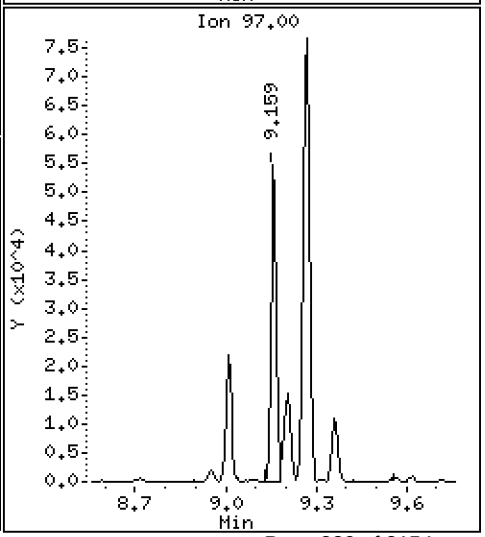


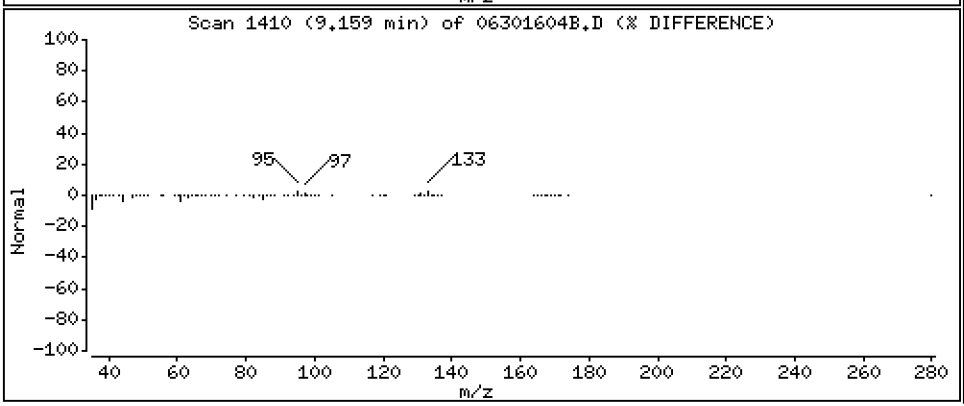












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

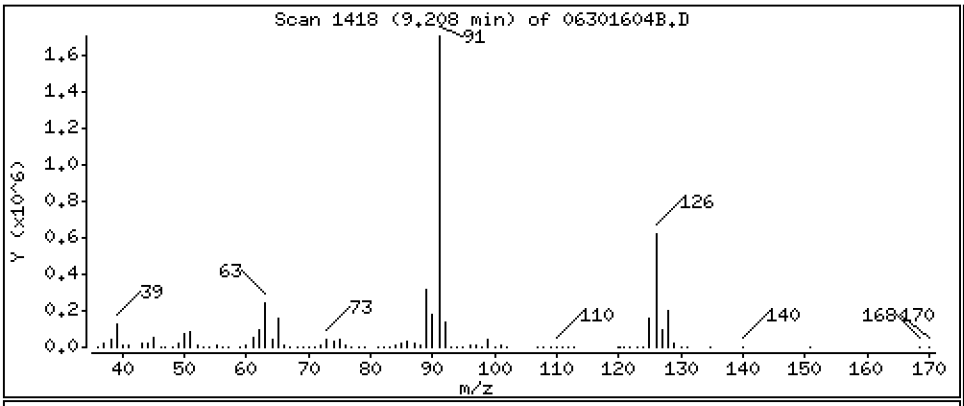
Operator: PB

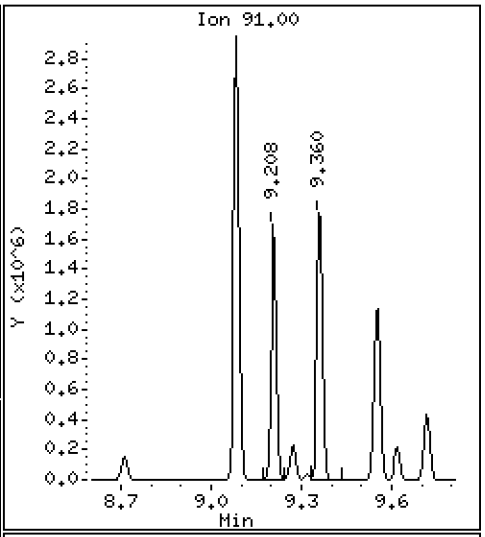
Column phase: RTXVMS

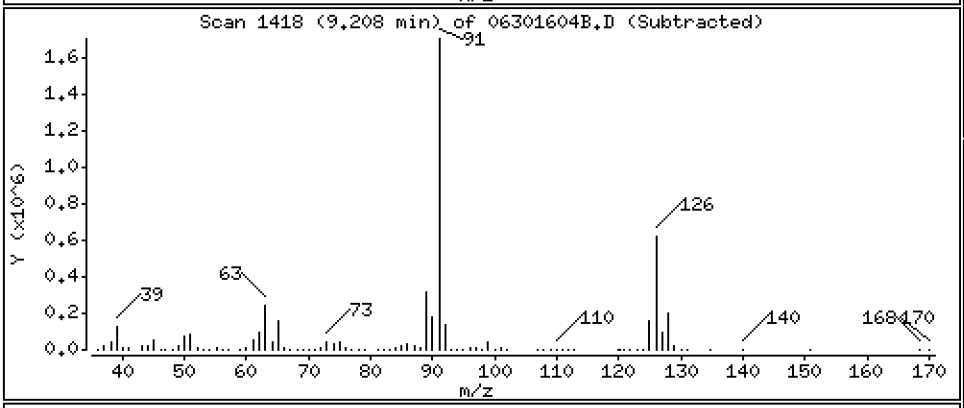
Column diameter: 0.18

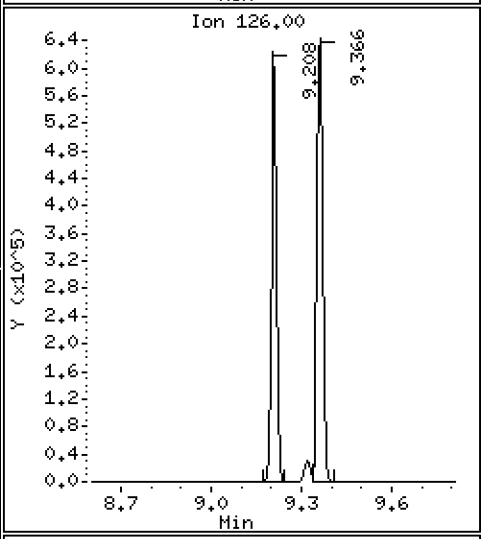
66 2-Chloro Toluene

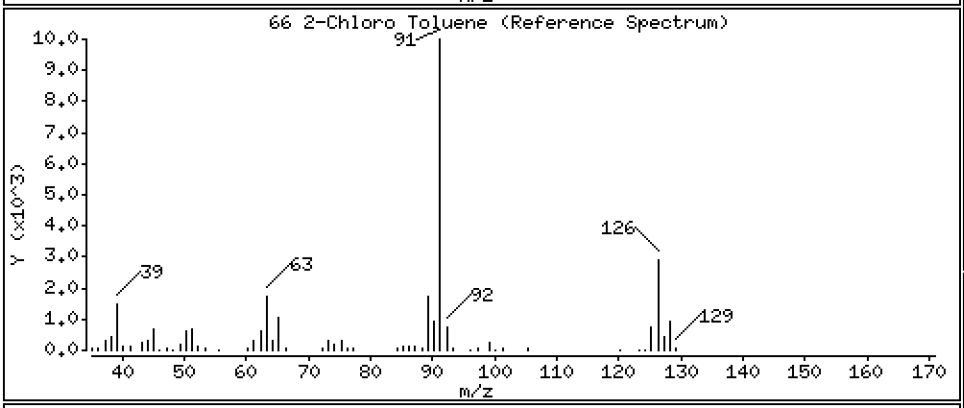
Concentration: 44.543 ug/Kg

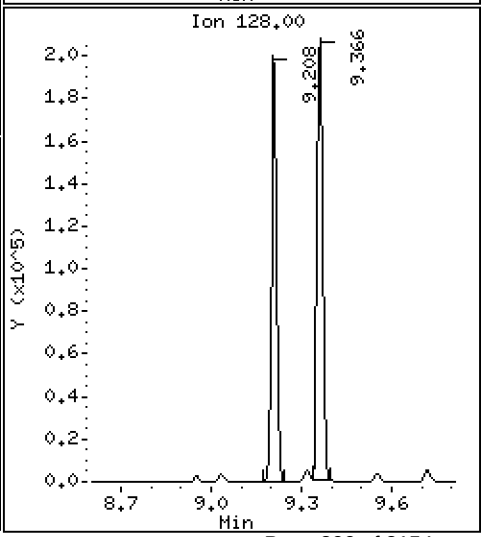


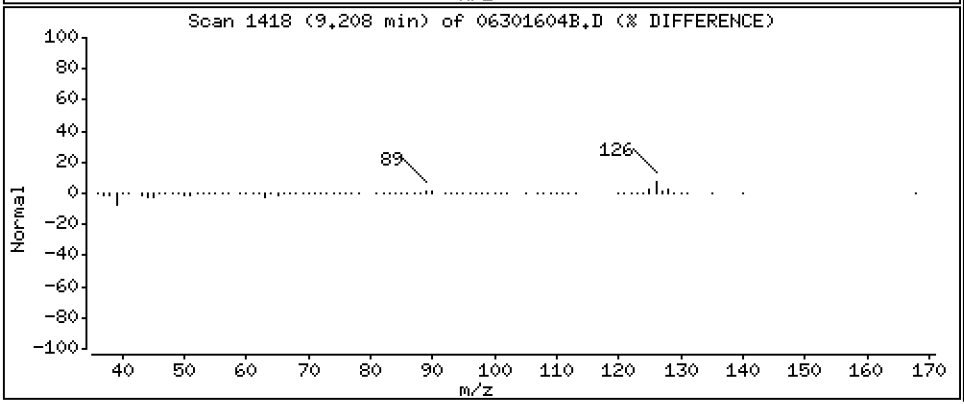












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

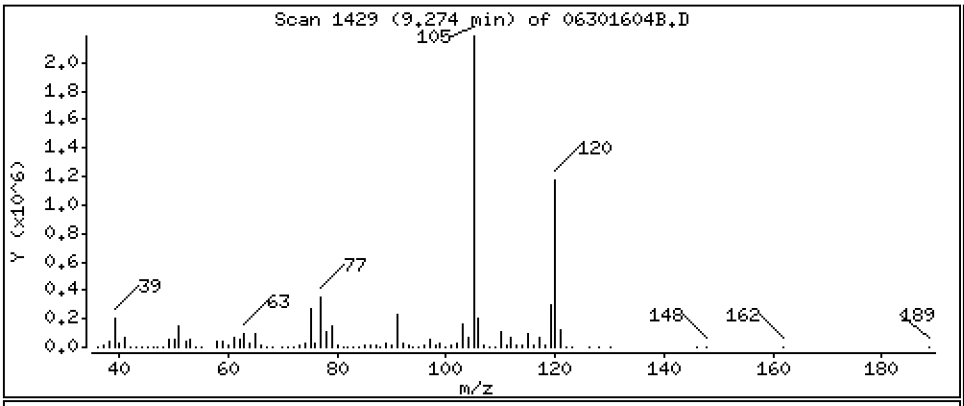
Operator: PB

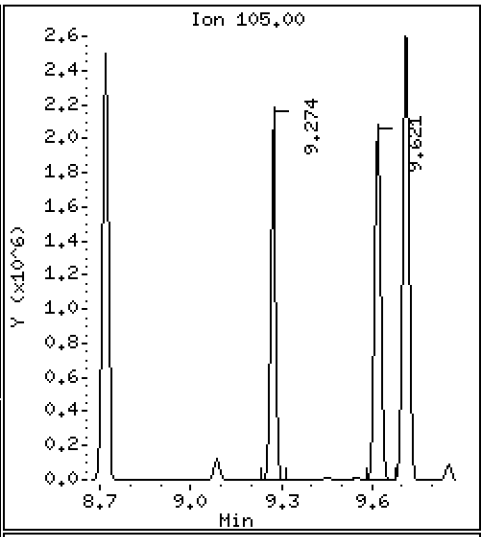
Column phase: RTXVMS

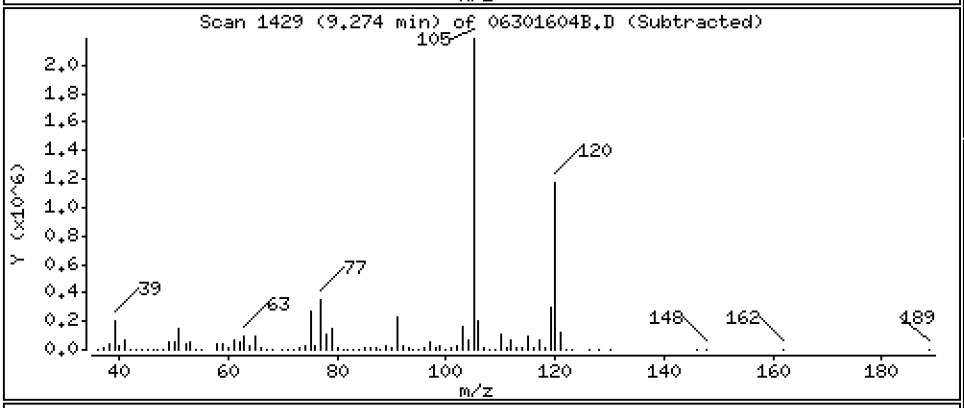
Column diameter: 0.18

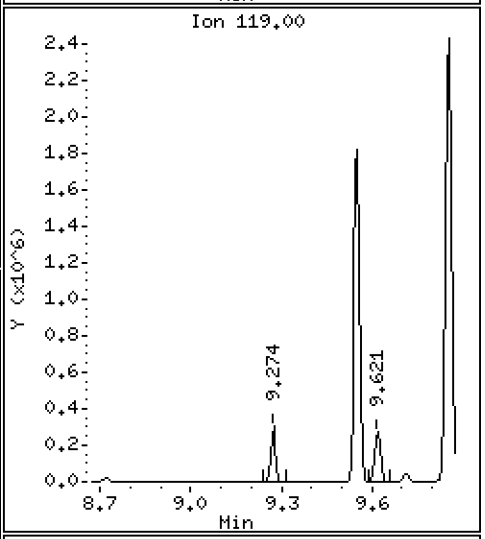
67 1,3,5-Trimethyl Benzene

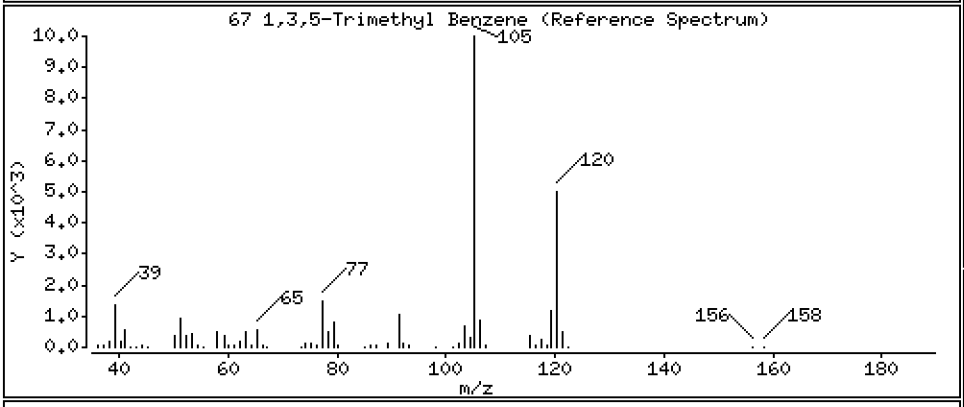
Concentration: 46.117 ug/Kg

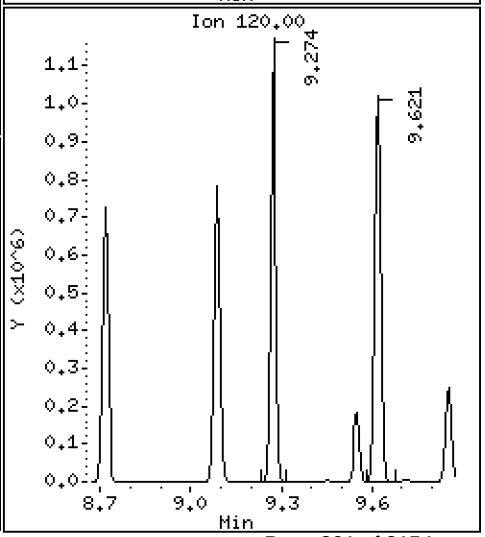


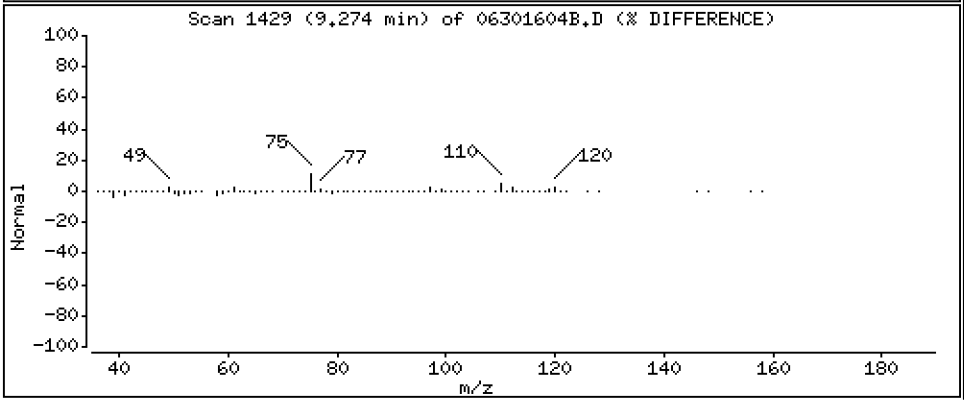












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

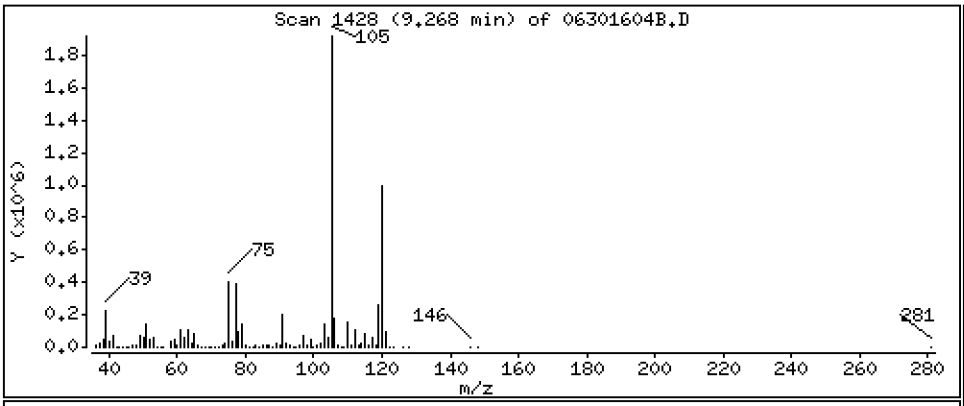
Operator: PB

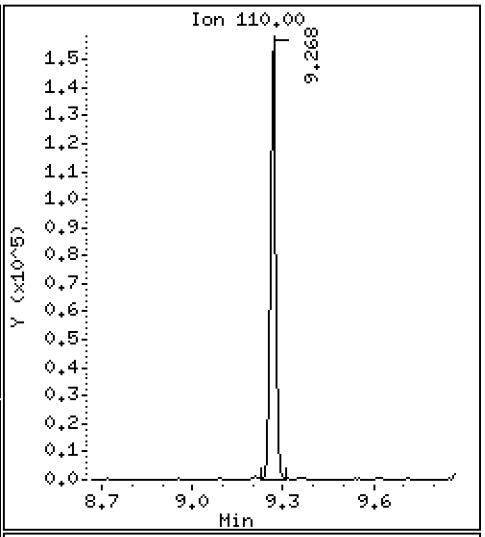
Column phase: RTXVMS

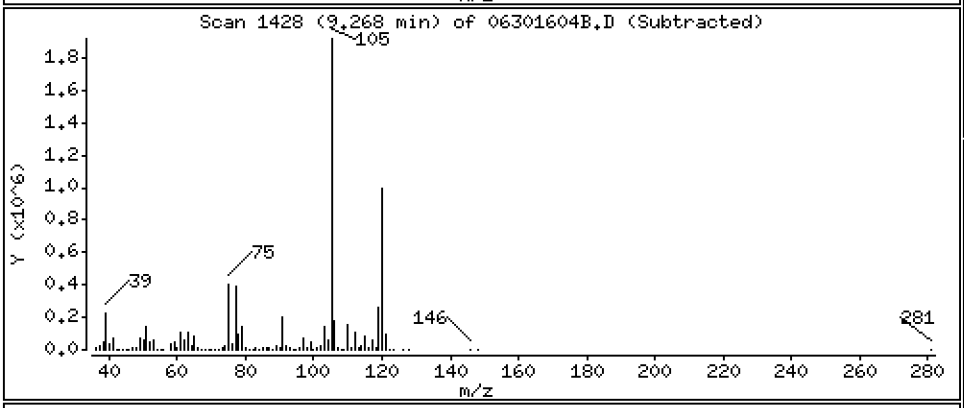
Column diameter: 0.18

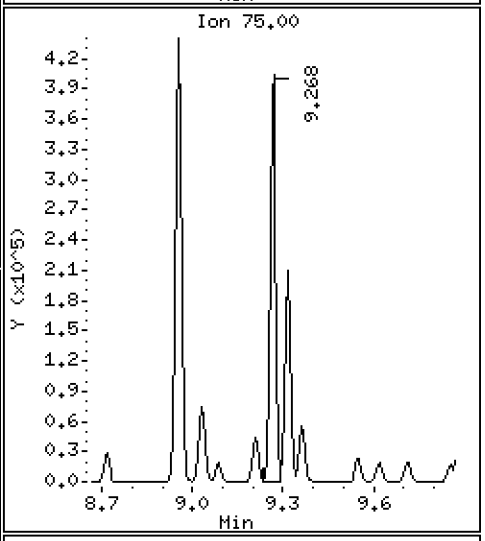
68 1,2,3-Trichloropropane

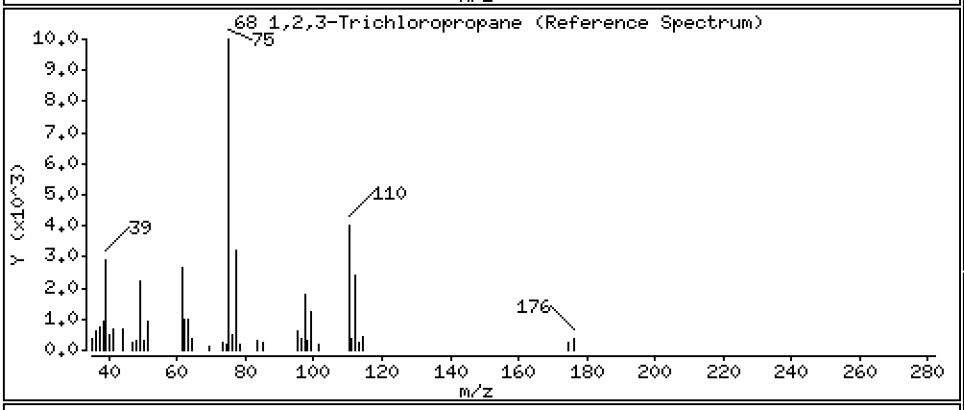
Concentration: 43.841 ug/Kg

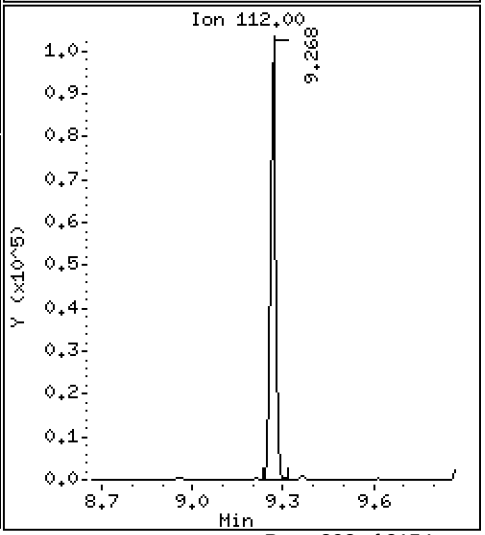


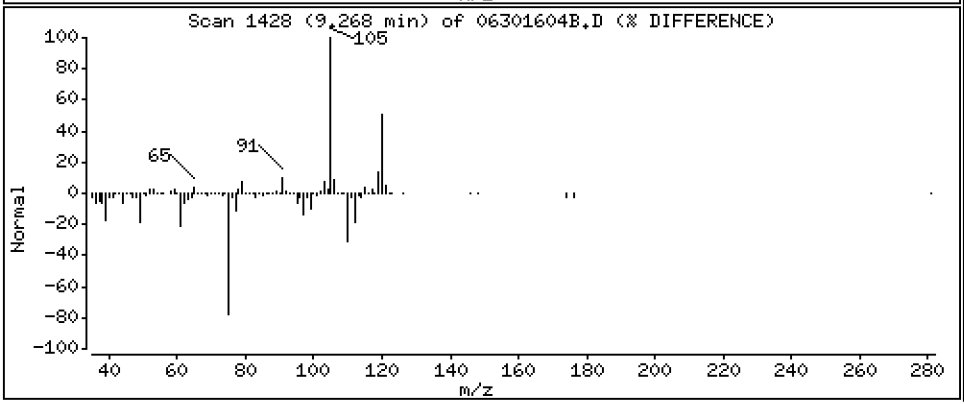












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

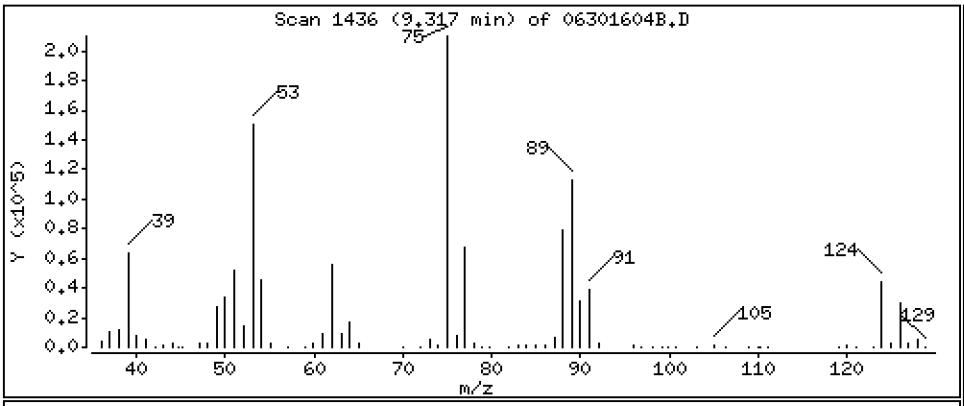
Operator: PB

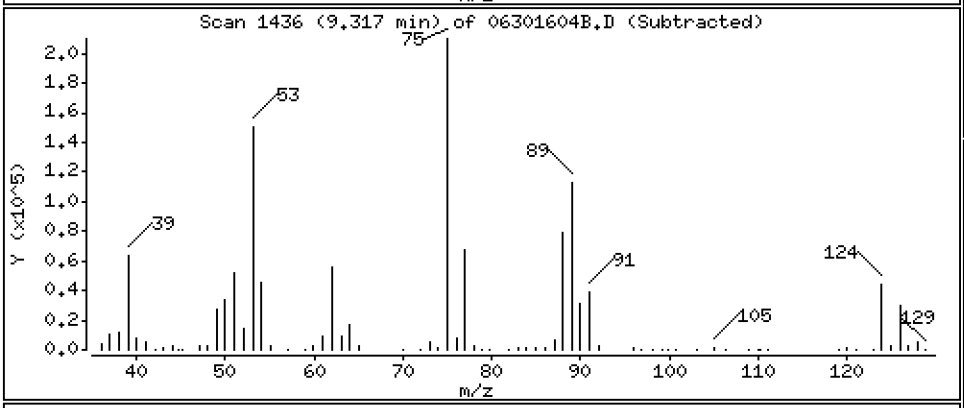
Column phase: RTXVMS

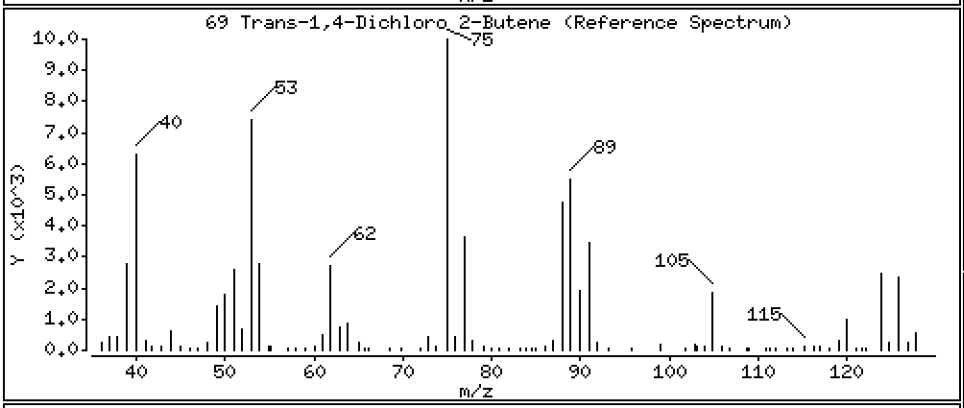
Column diameter: 0.18

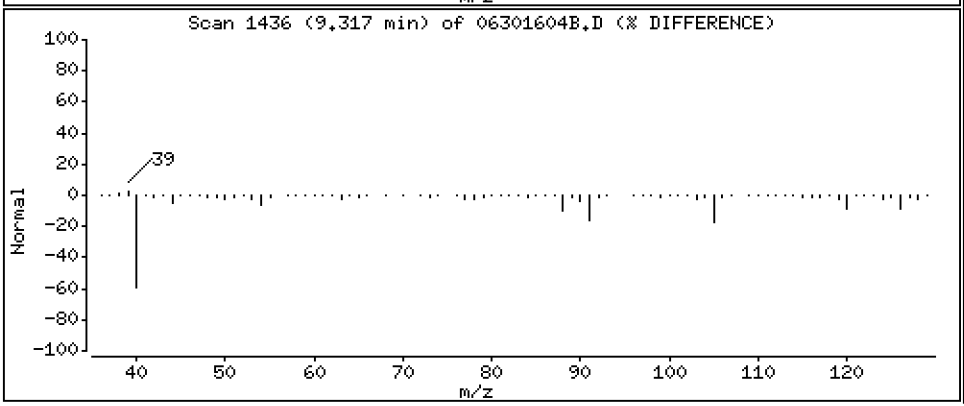
69 Trans-1,4-Dichloro 2-Butene

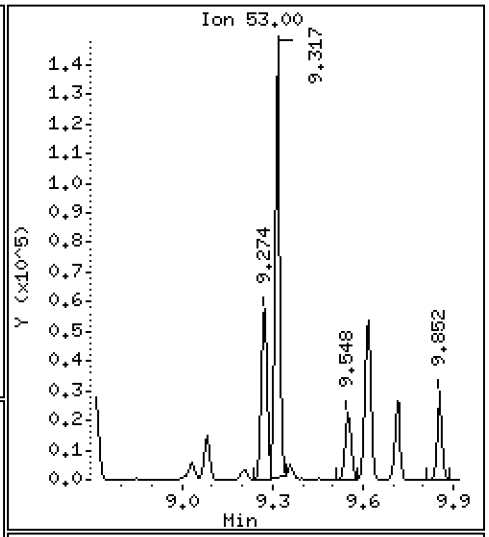
Concentration: 40.423 ug/Kg

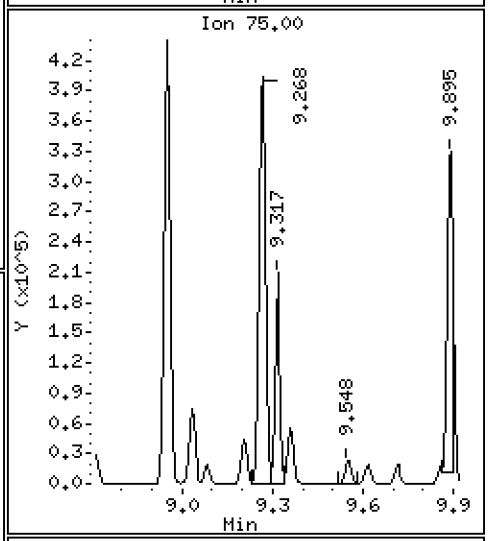


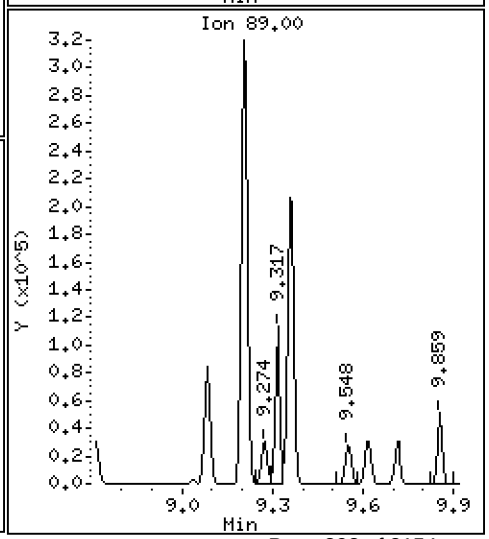












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

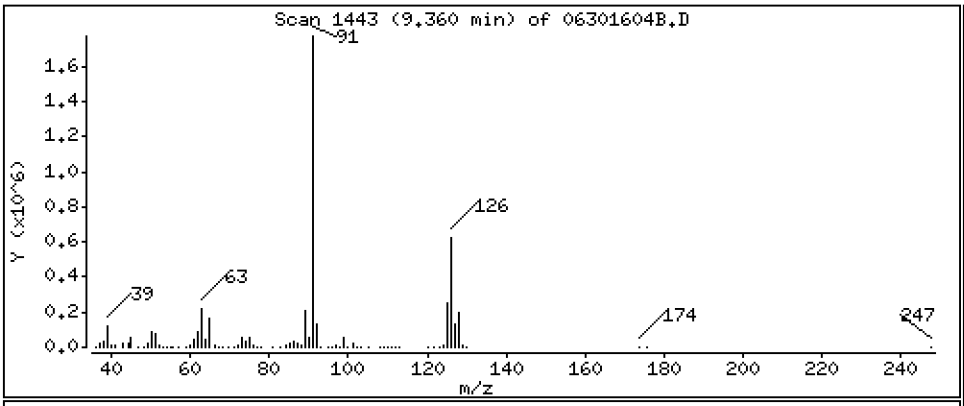
Operator: PB

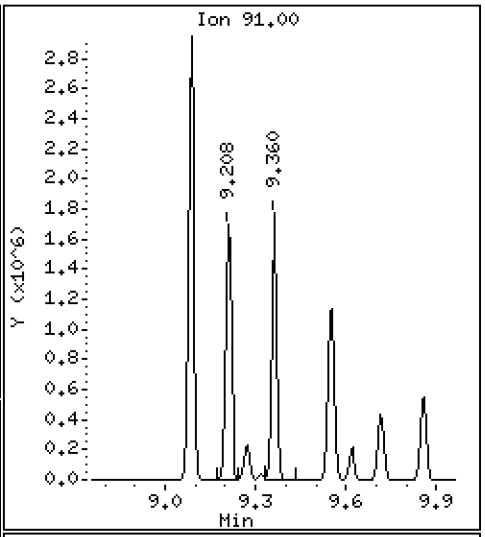
Column phase: RTXVMS

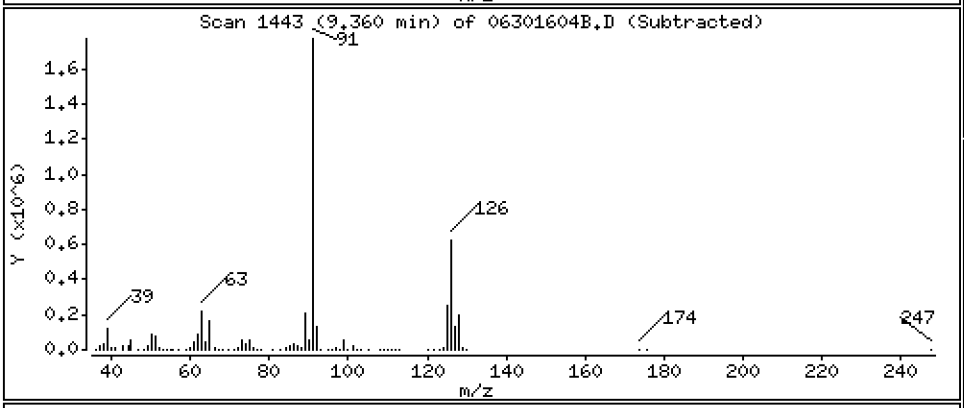
Column diameter: 0.18

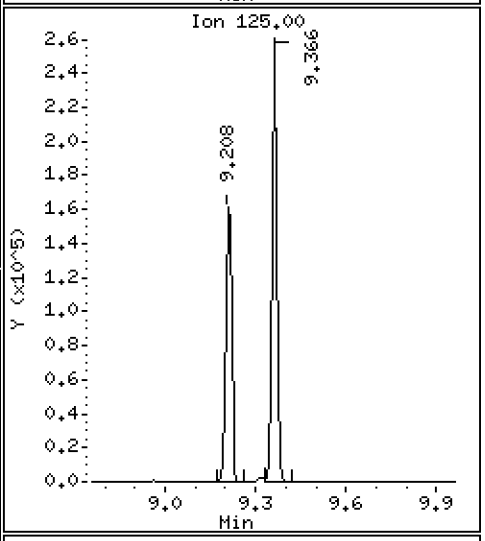
70 4-Chloro Toluene

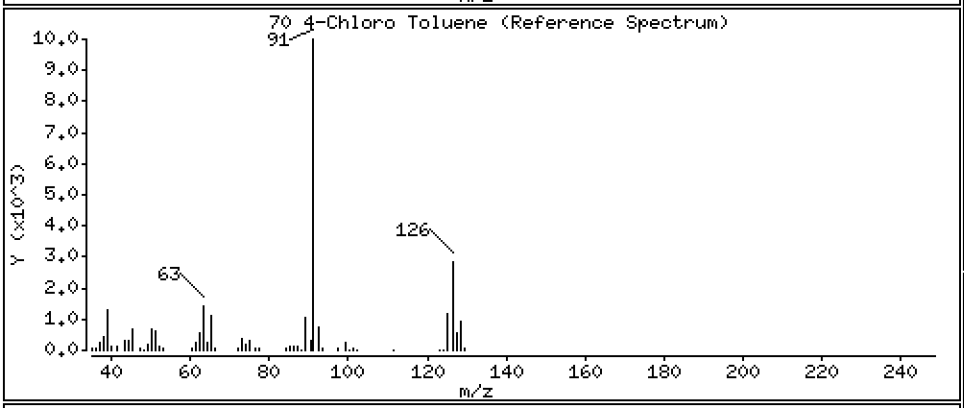
Concentration: 45.495 ug/Kg

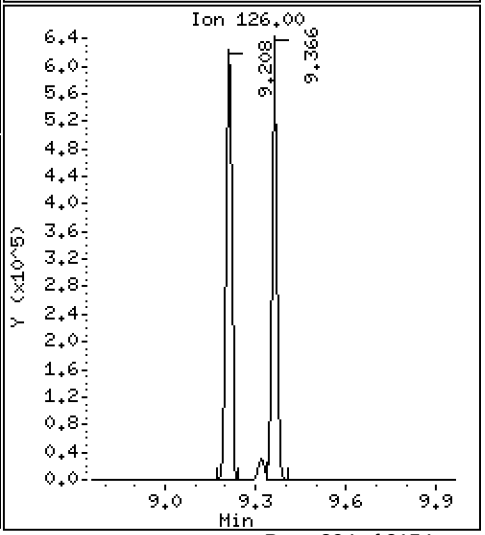


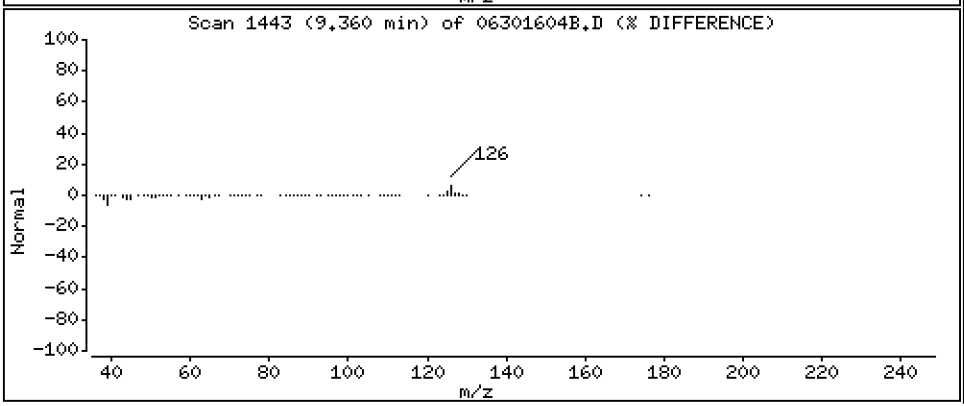












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

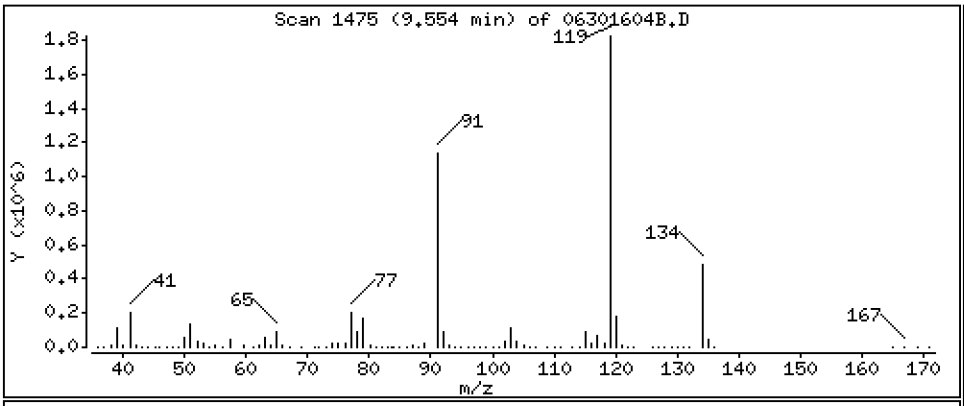
Operator: PB

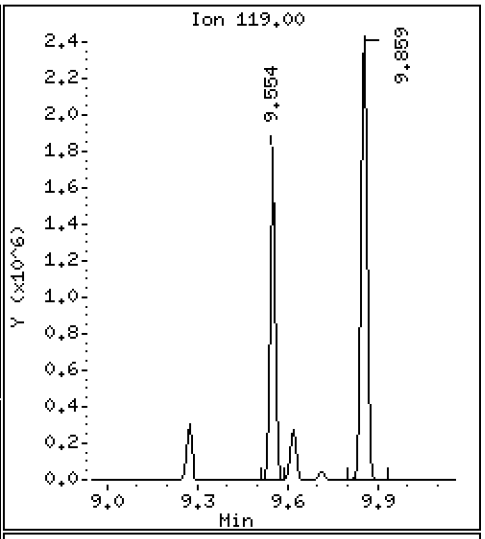
Column phase: RTXVMS

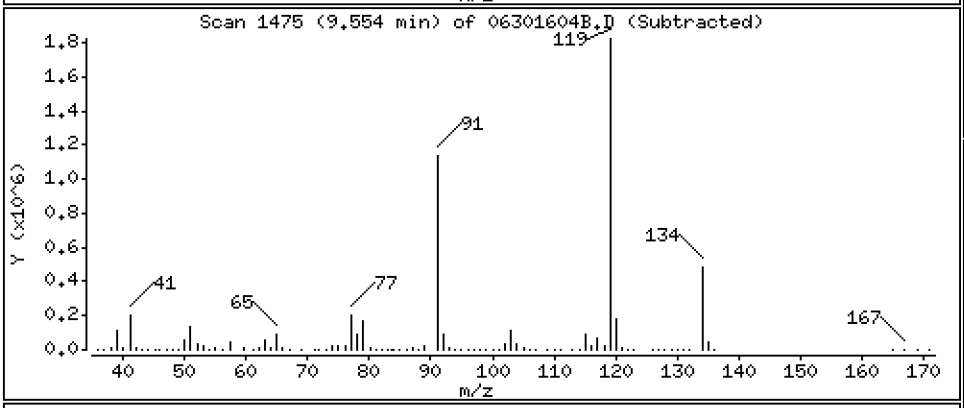
Column diameter: 0.18

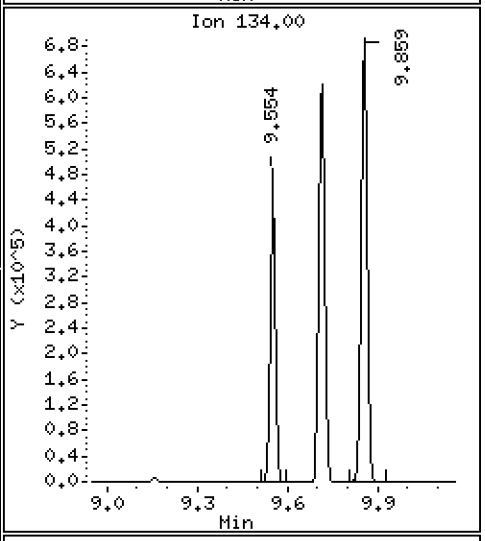
71 T-Butyl Benzene

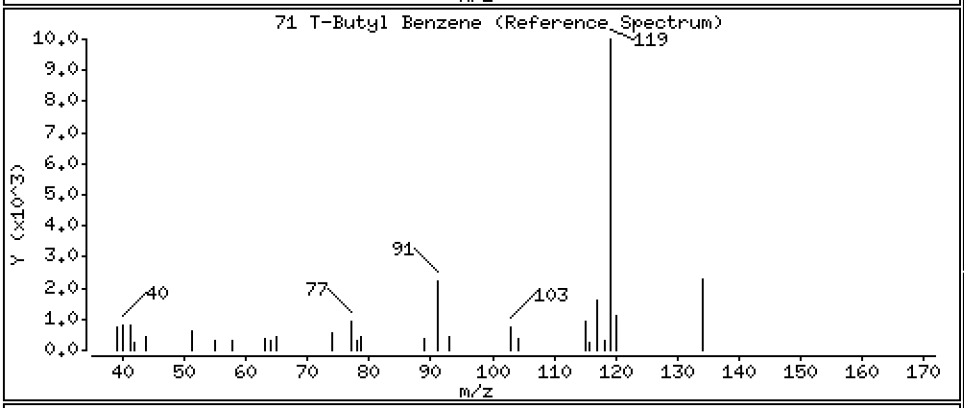
Concentration: 45.515 ug/Kg

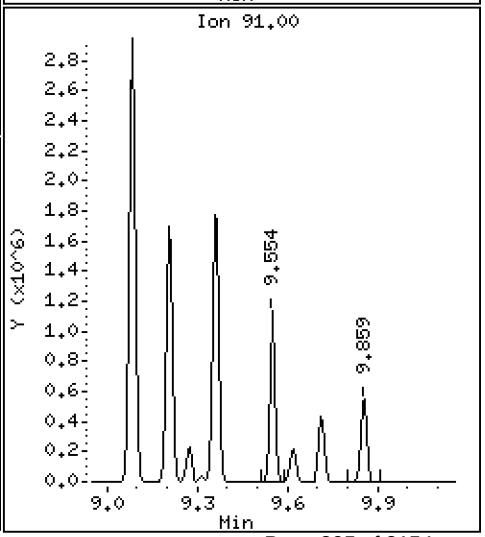


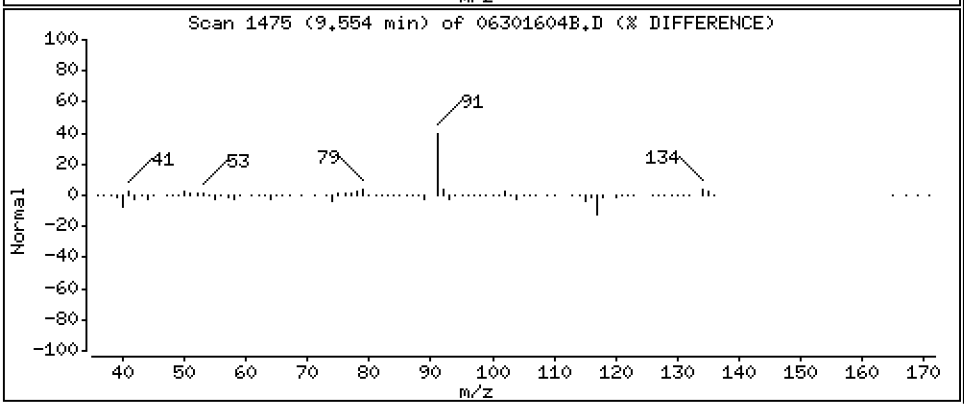












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

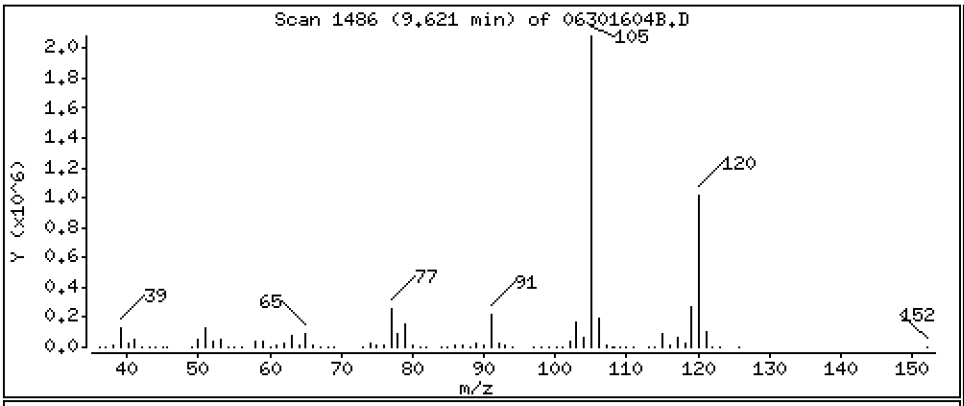
Operator: PB

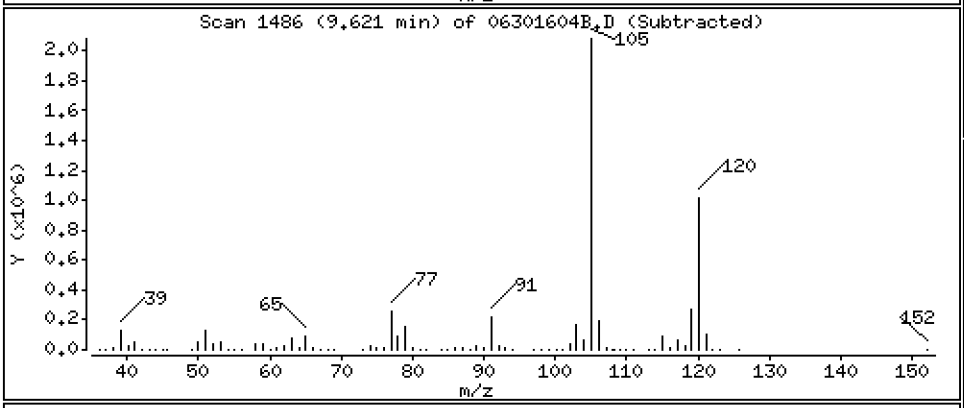
Column phase: RTXVMS

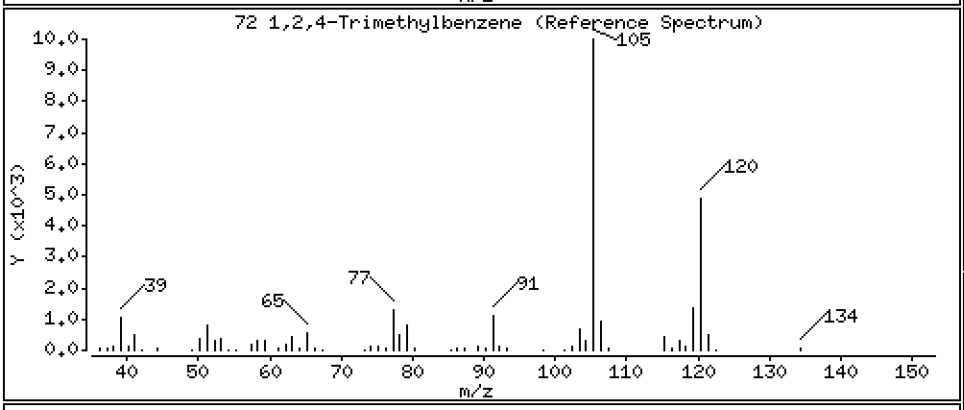
Column diameter: 0.18

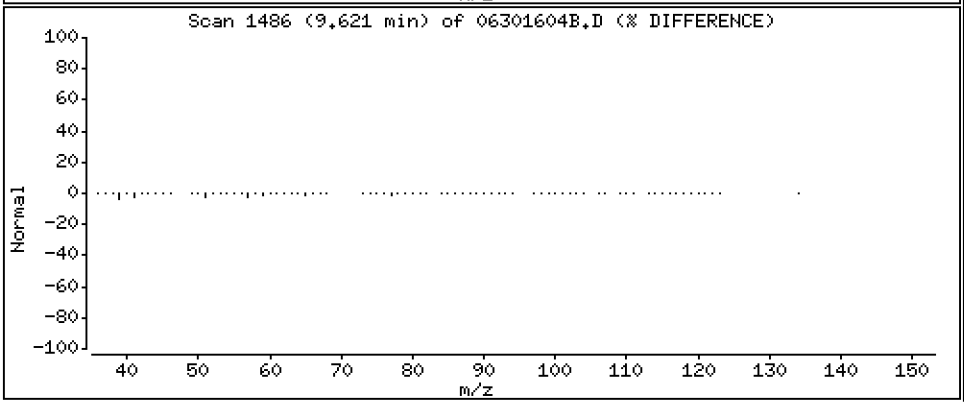
72 1,2,4-Trimethylbenzene

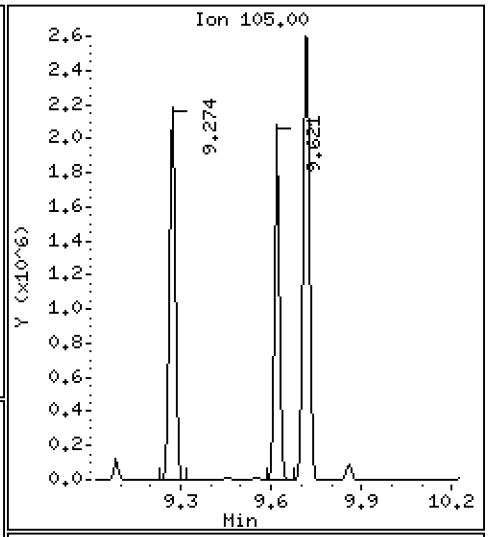
Concentration: 46.384 ug/Kg

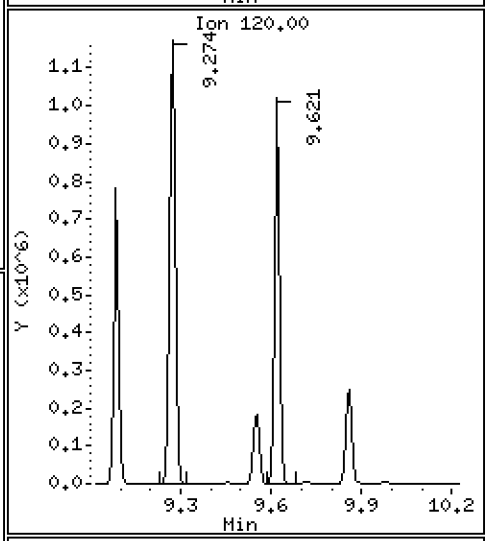


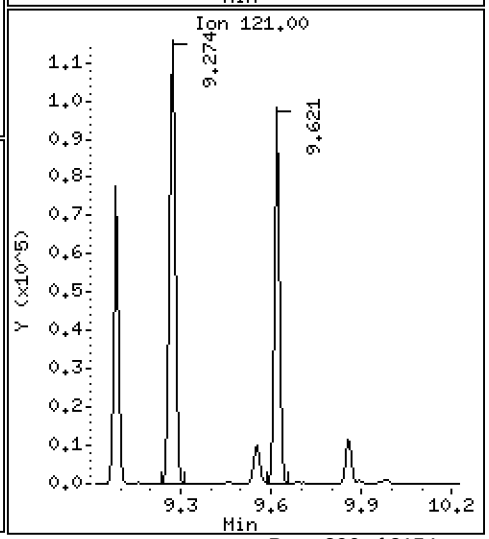












Date : 30-JUN-2016 12:46

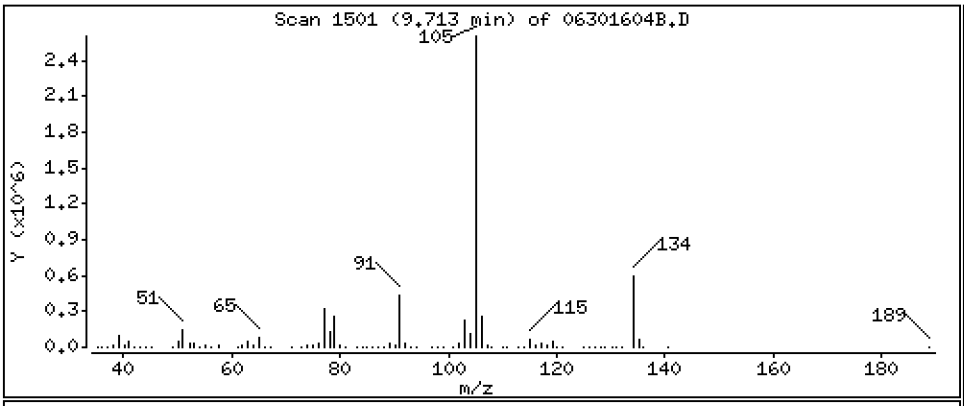
Client ID: LCS0630 Instrument: nt5.i

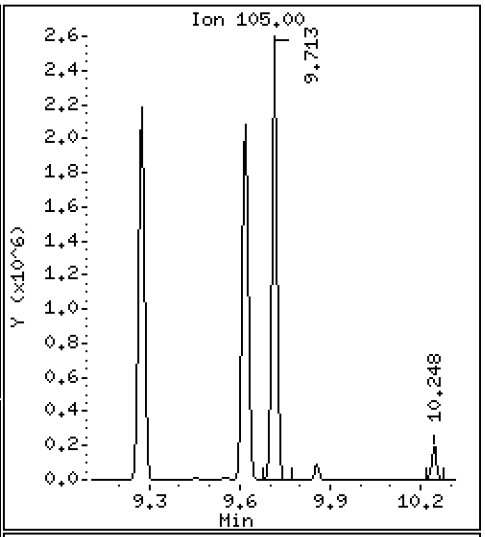
Sample Info: LCS0630,5,5,0

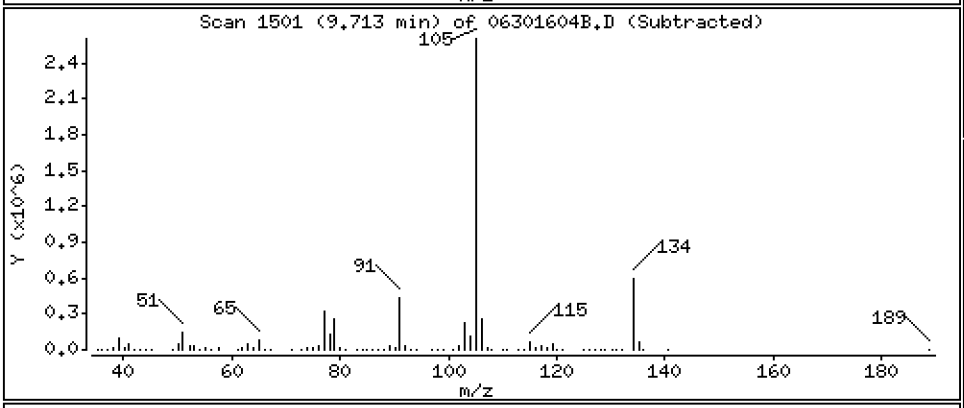
Operator: PB

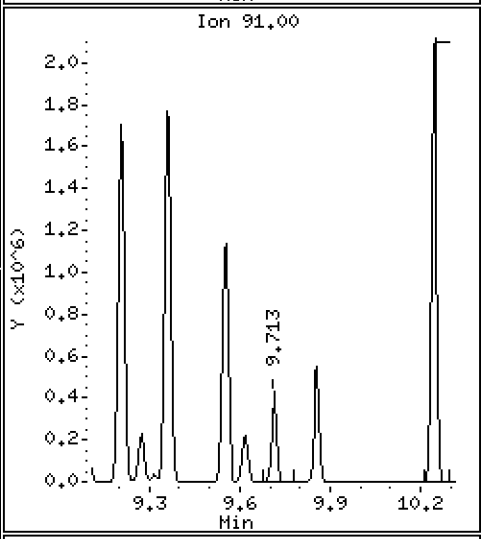
Column phase: RTXVMS Column diameter: 0.18

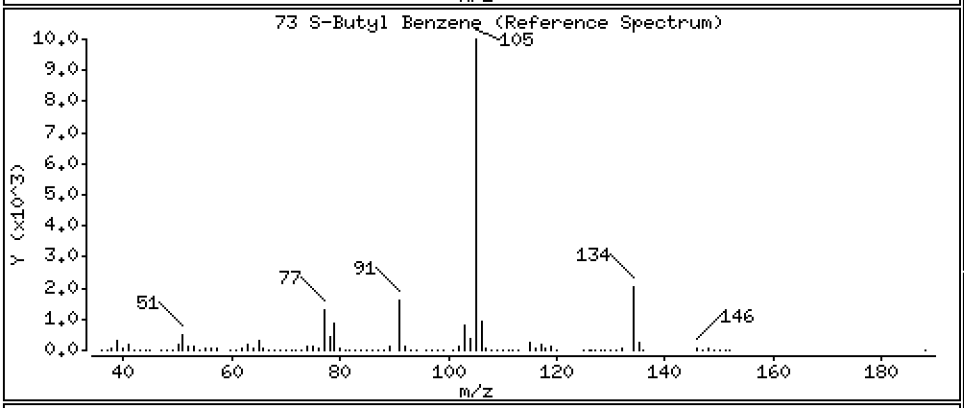
73 S-Butyl Benzene Concentration: 44.656 ug/Kg

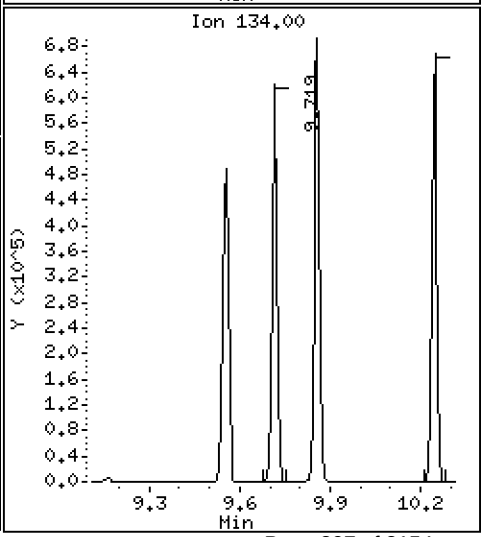


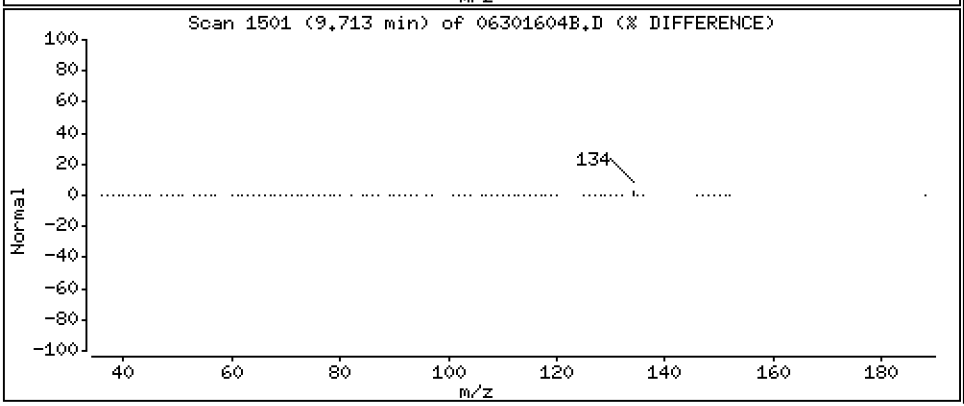












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

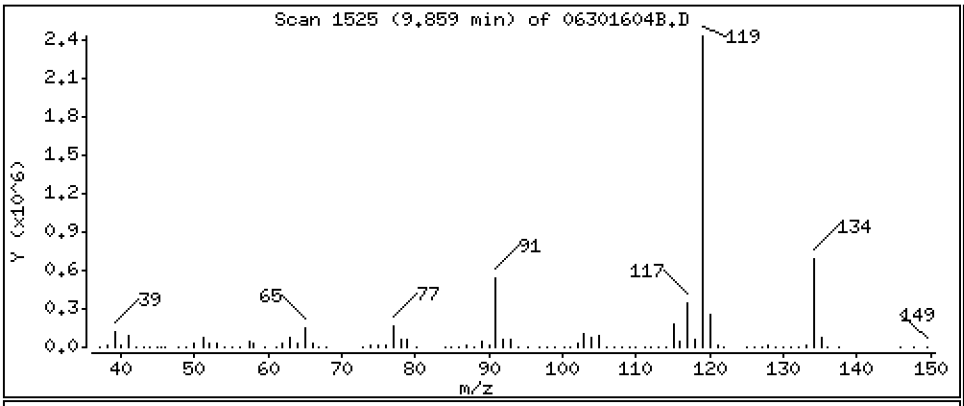
Operator: PB

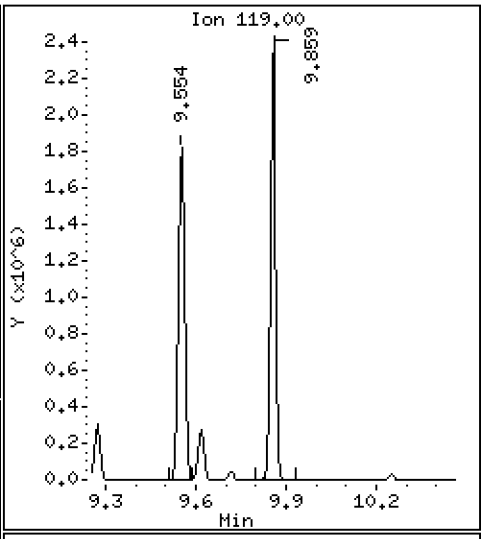
Column phase: RTXVMS

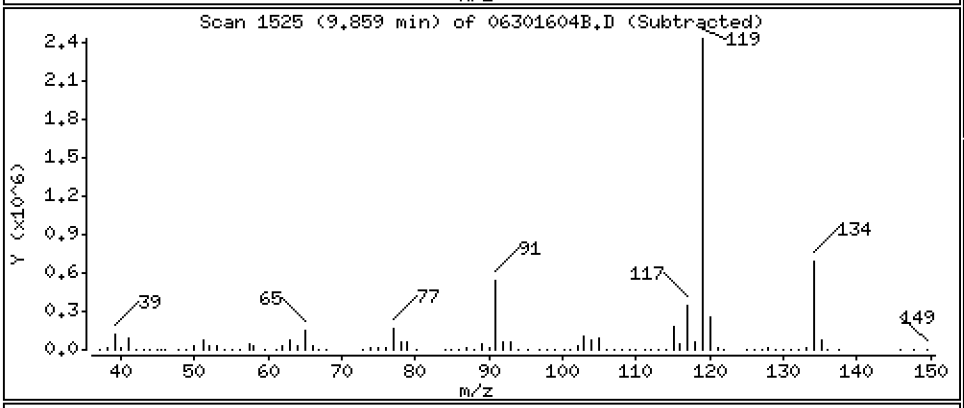
Column diameter: 0.18

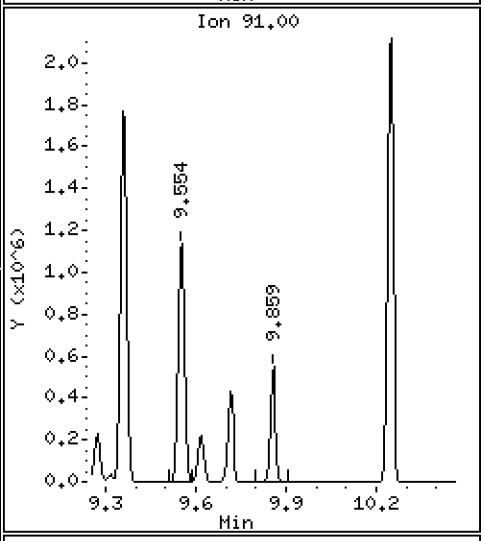
74 4-Isopropyl Toluene

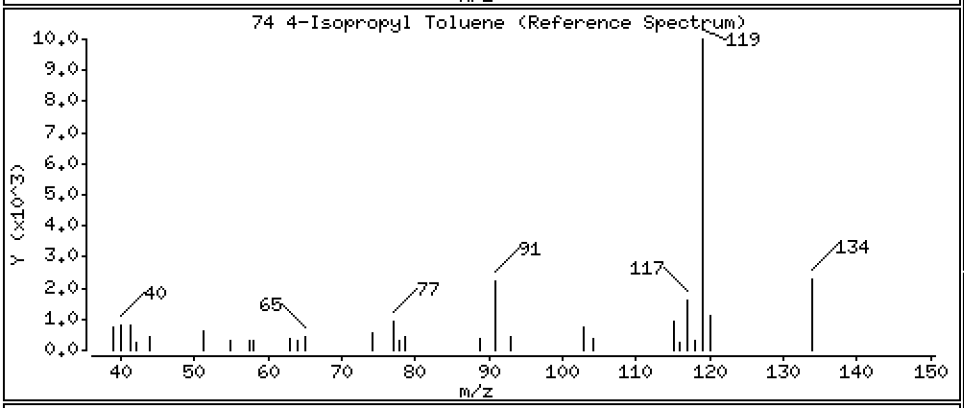
Concentration: 47.450 ug/Kg

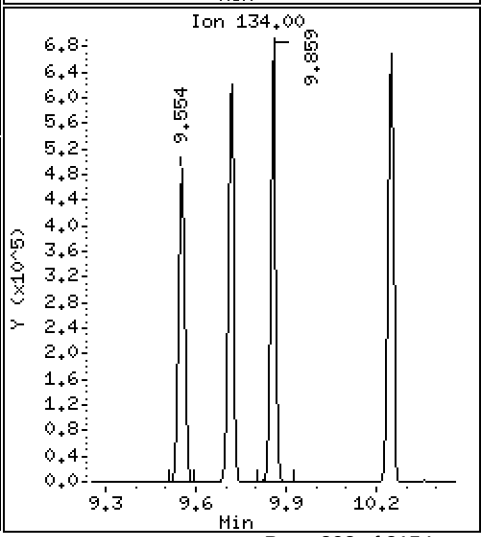


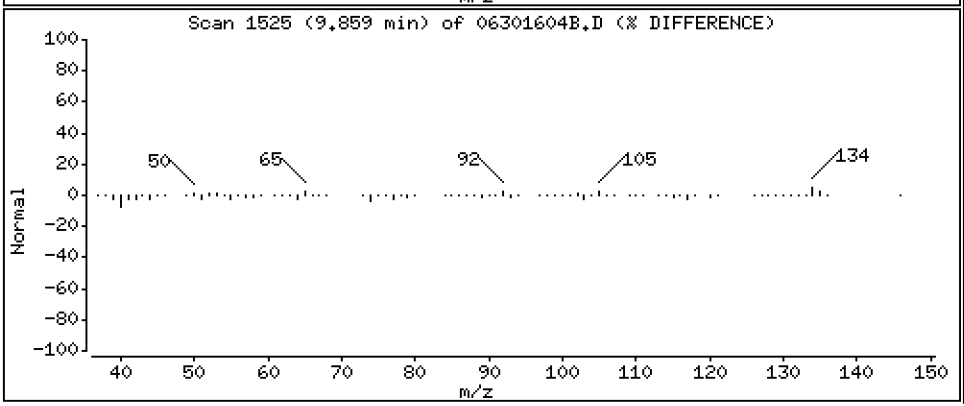












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

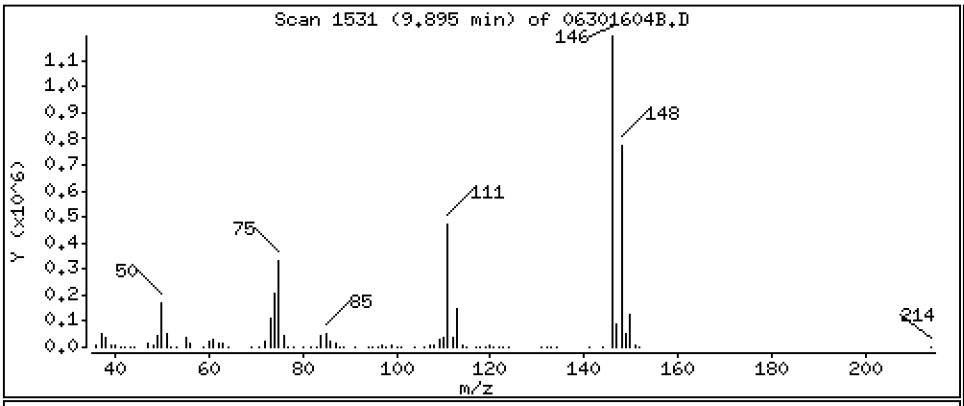
Operator: PB

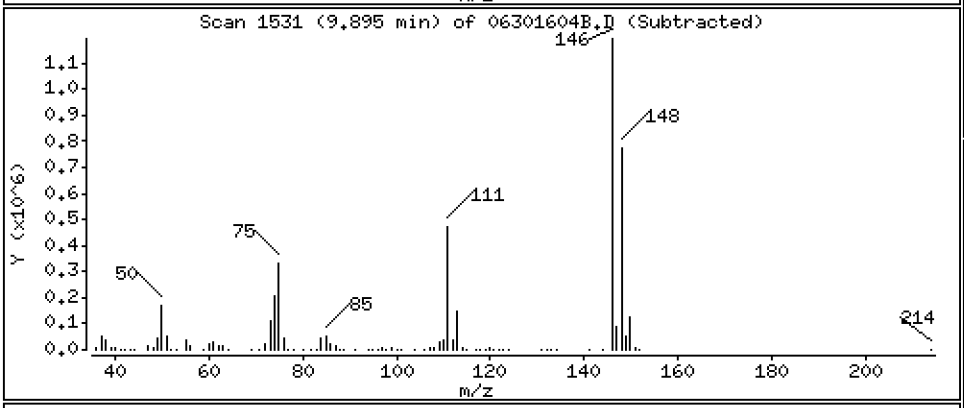
Column phase: RTXVMS

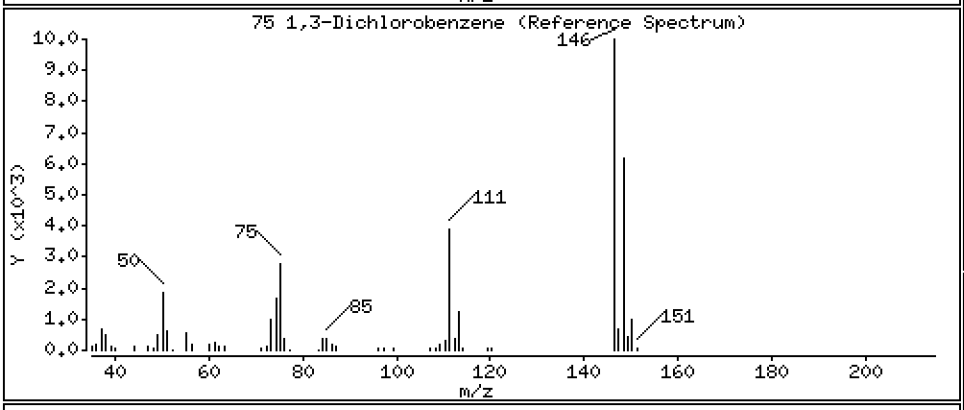
Column diameter: 0.18

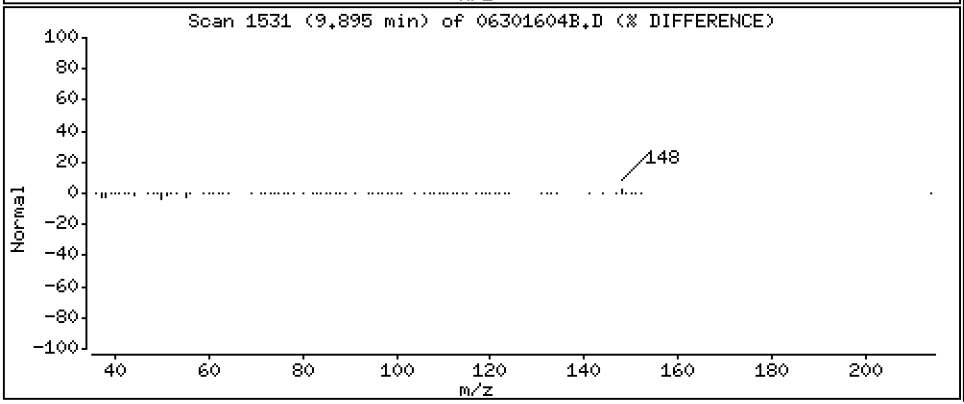
75 1,3-Dichlorobenzene

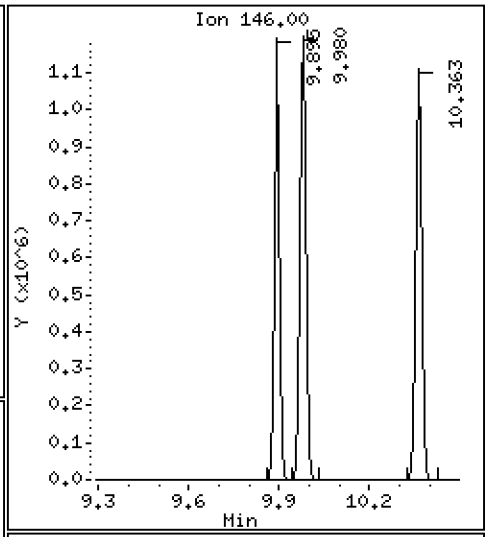
Concentration: 48.351 ug/Kg

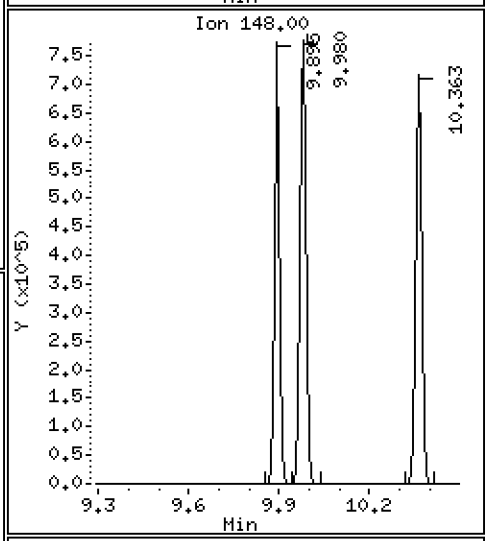


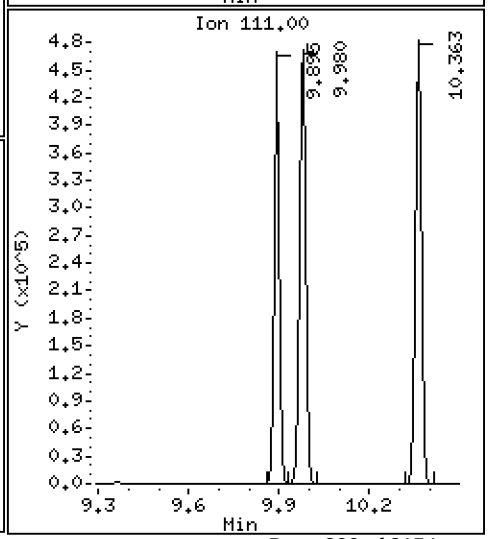












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

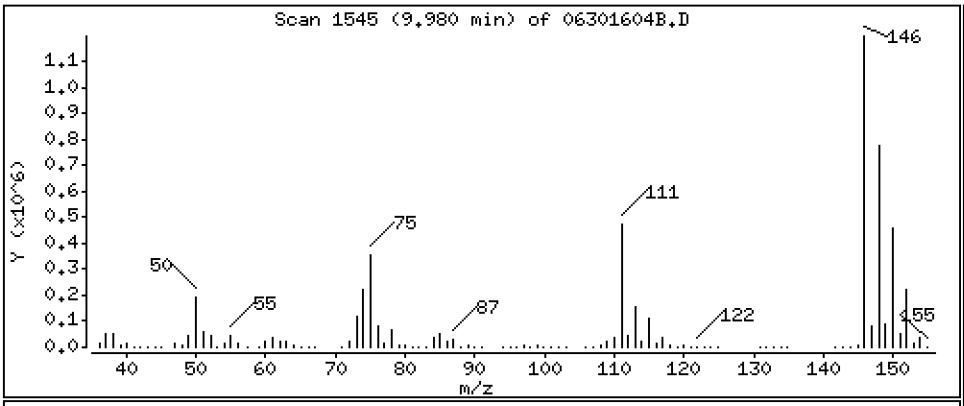
Operator: PB

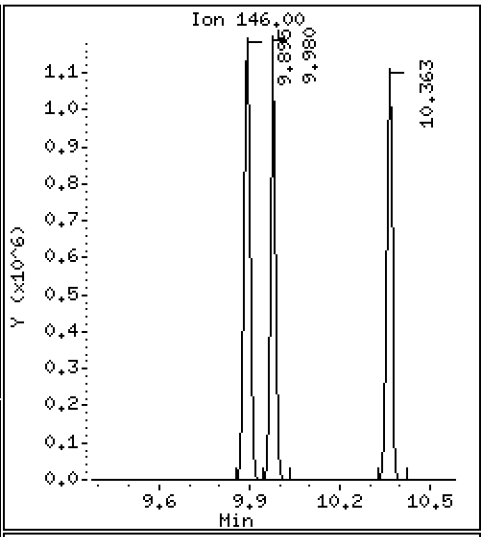
Column phase: RTXVMS

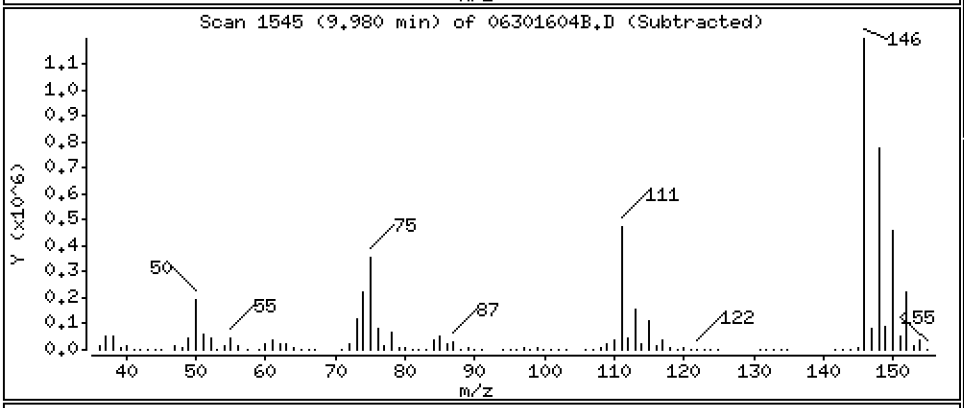
Column diameter: 0.18

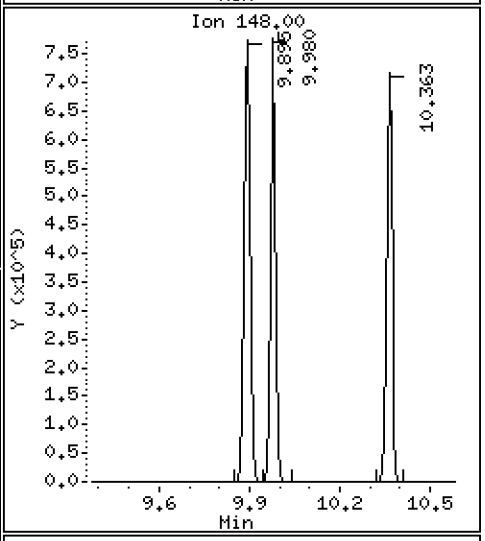
77 1,4-Dichlorobenzene

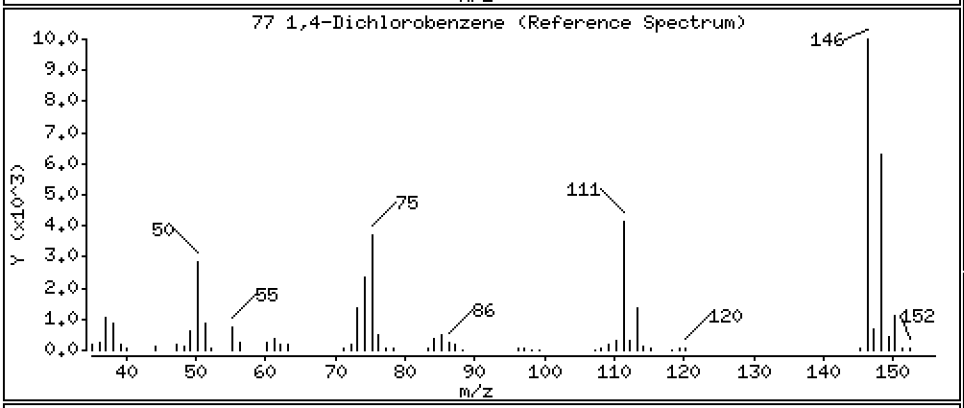
Concentration: 47.553 ug/Kg

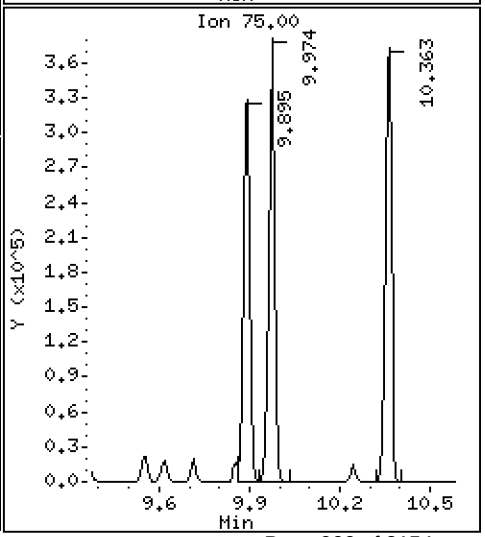


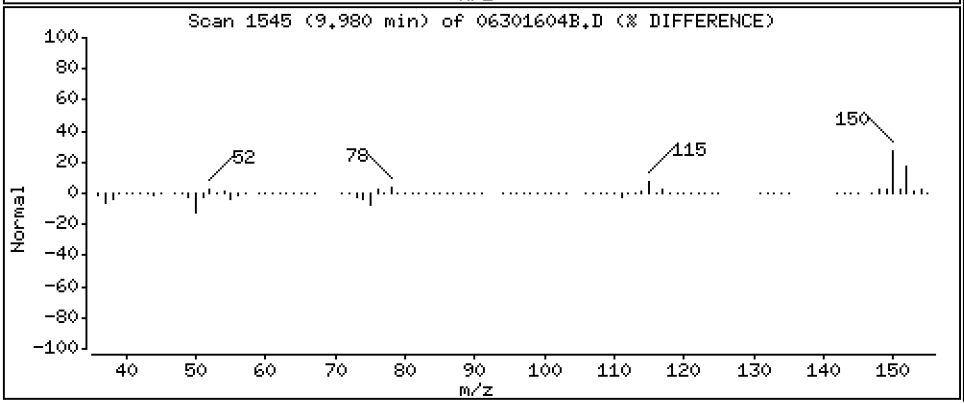












Date : 30-JUN-2016 12:46

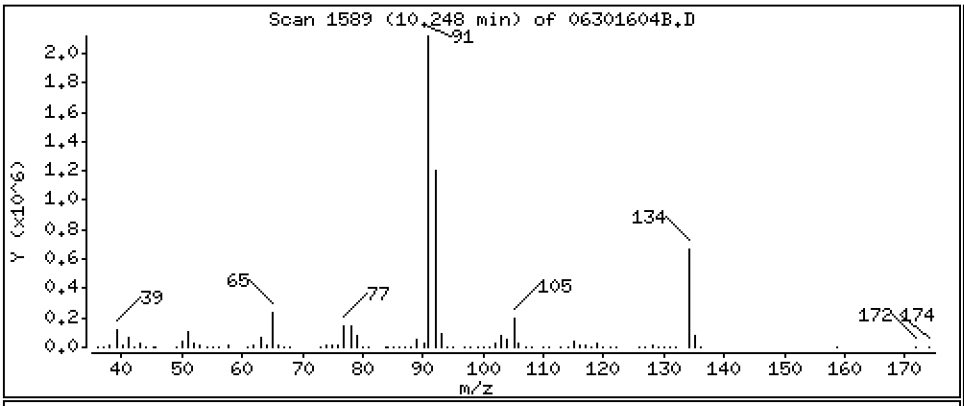
Client ID: LCS0630 Instrument: nt5.i

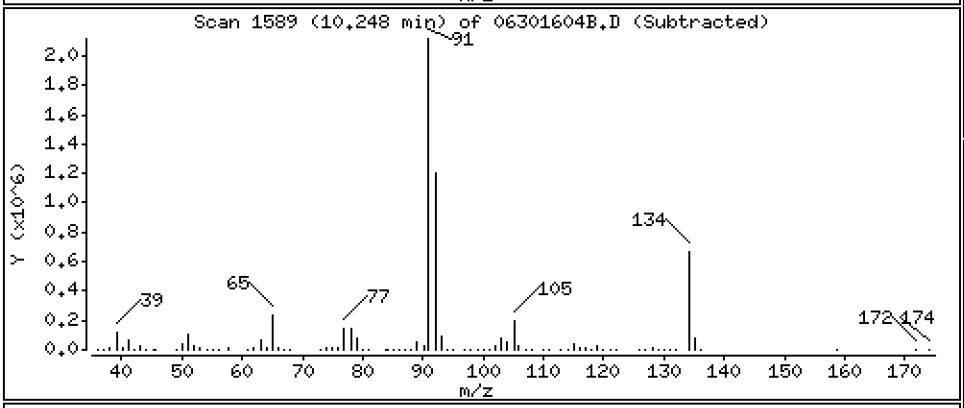
Sample Info: LCS0630,5,5,0

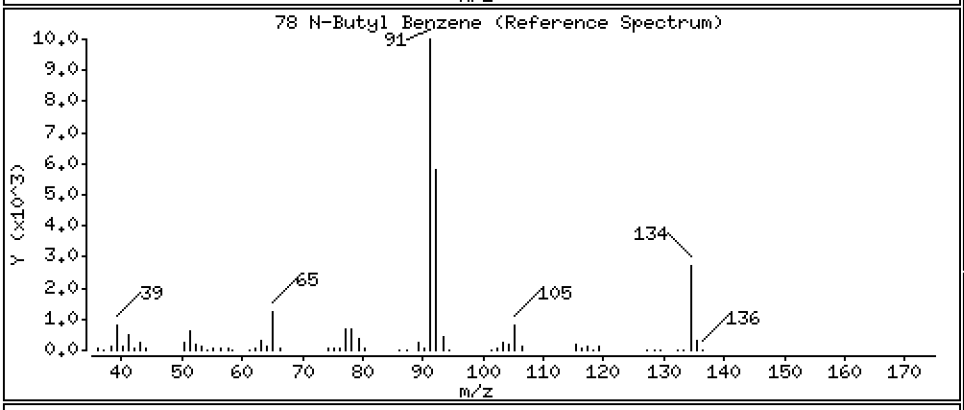
Operator: PB

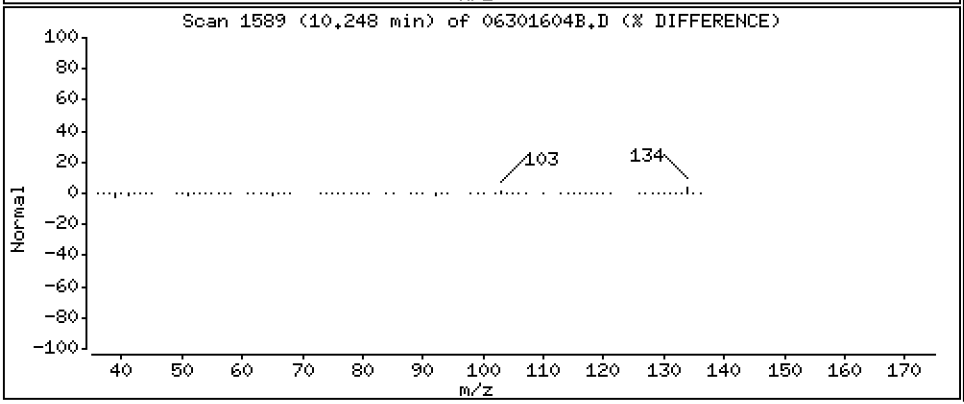
Column phase: RTXVMS Column diameter: 0.18

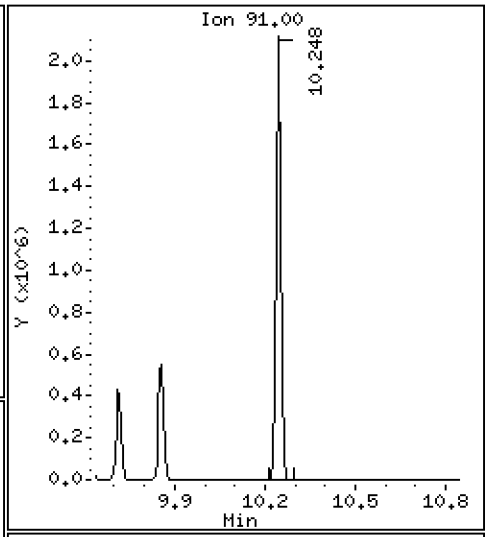
78 N-Butyl Benzene Concentration: 47.328 ug/Kg

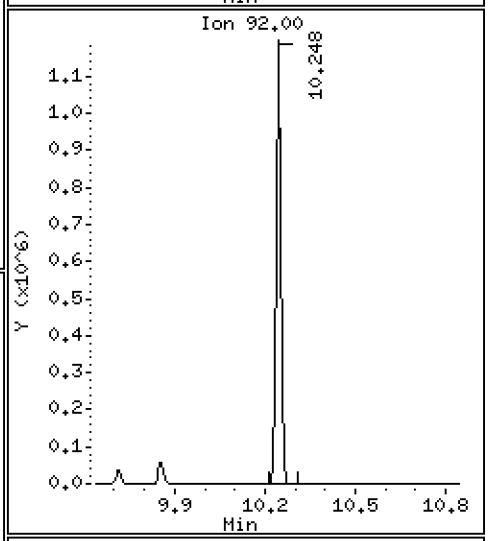


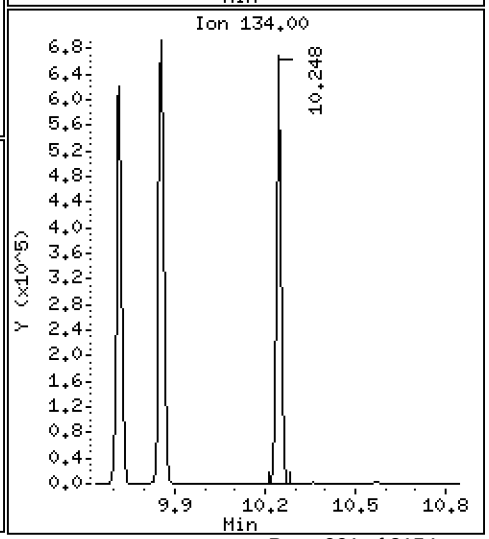












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

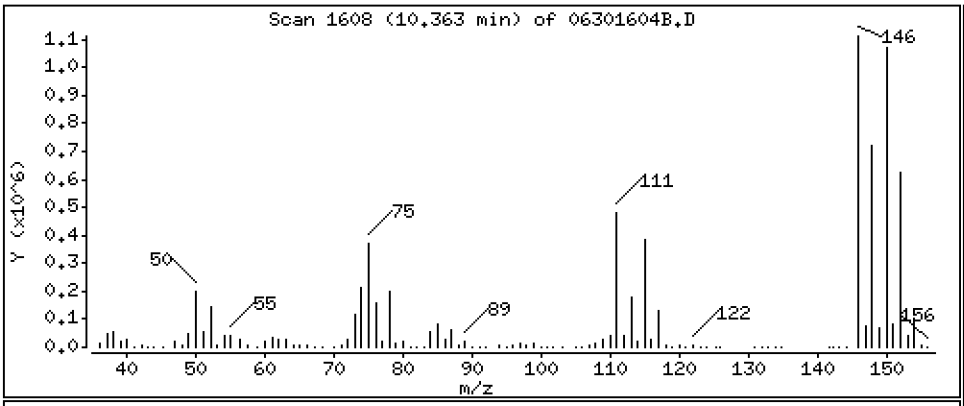
Operator: PB

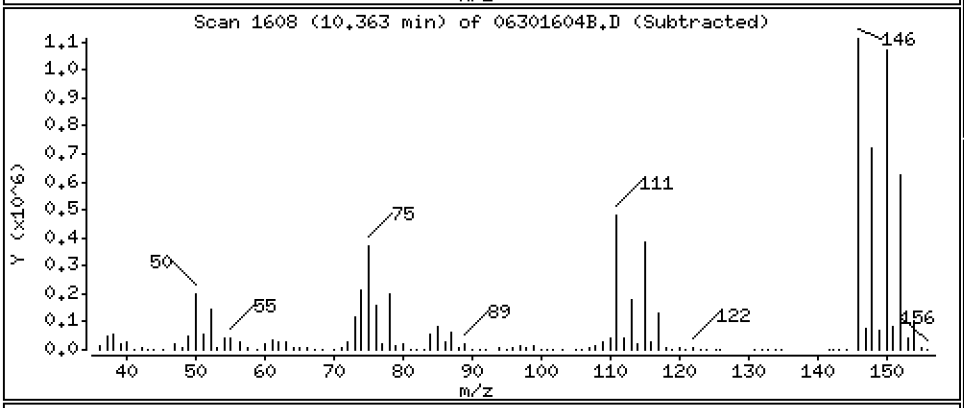
Column phase: RTXVMS

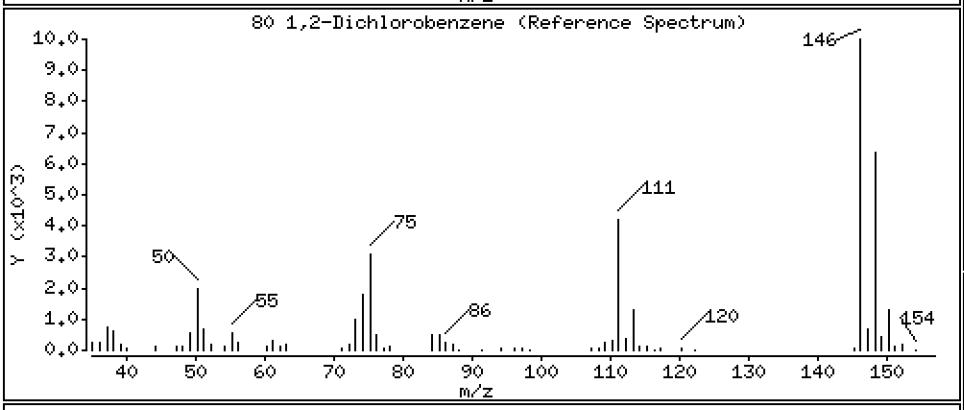
Column diameter: 0.18

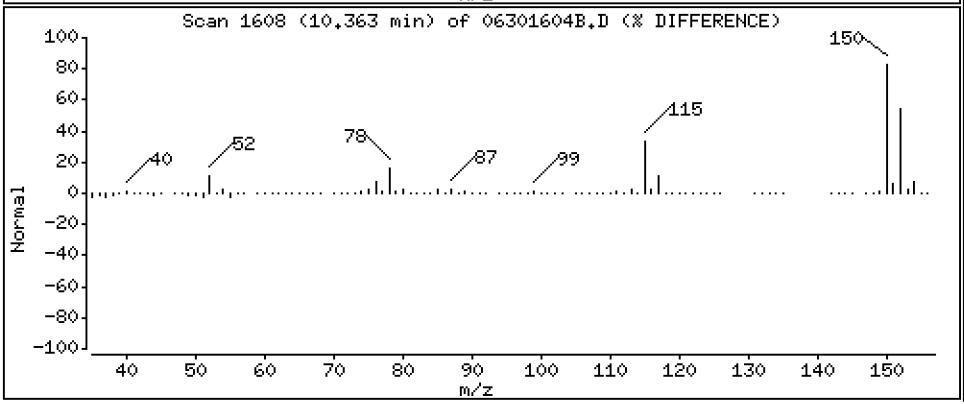
80 1,2-Dichlorobenzene

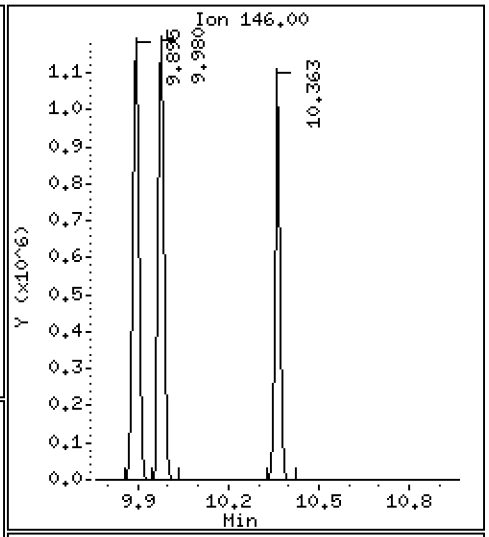
Concentration: 46.666 ug/Kg

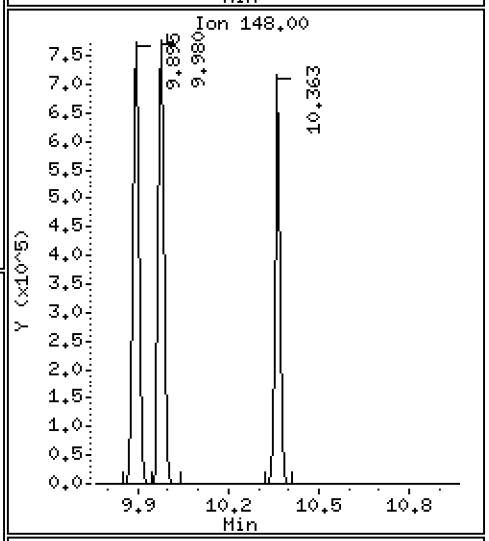


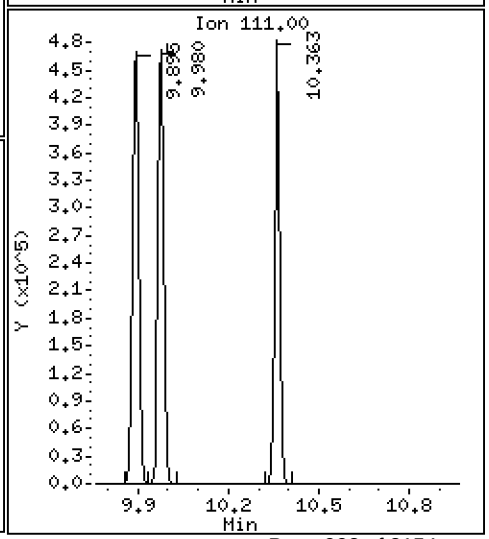












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

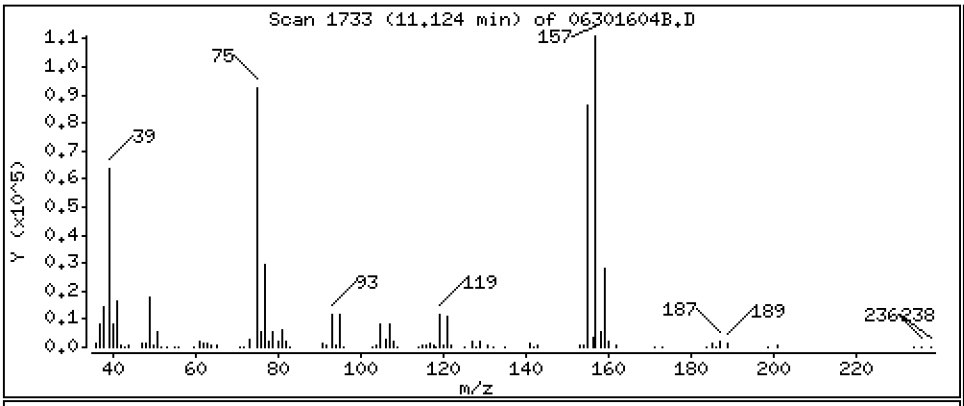
Operator: PB

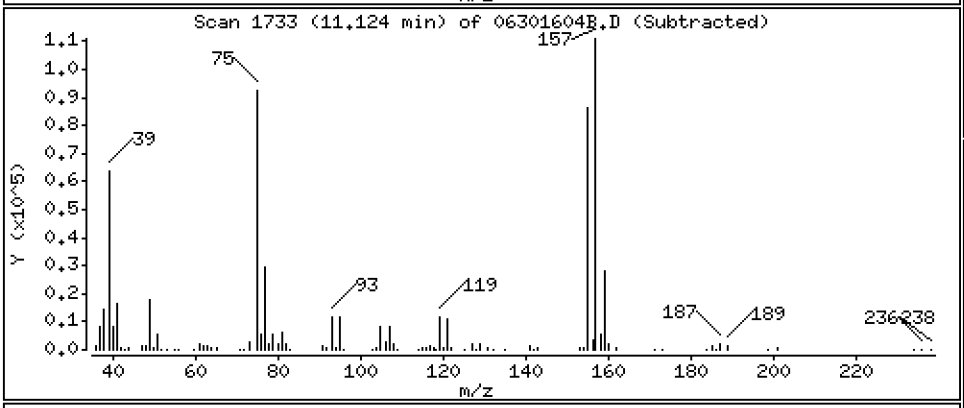
Column phase: RTXVMS

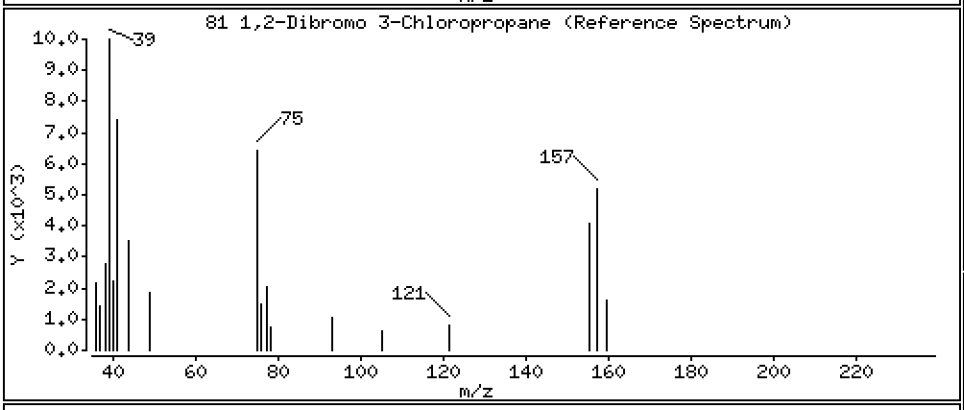
Column diameter: 0.18

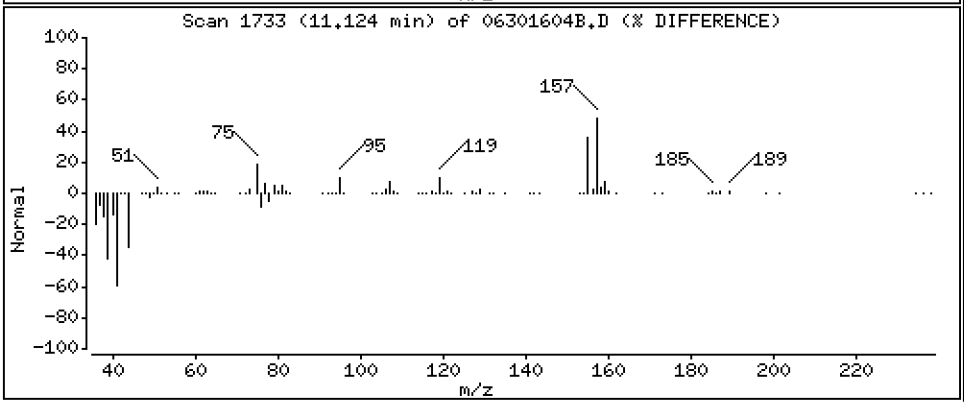
81 1,2-Dibromo 3-Chloropropane

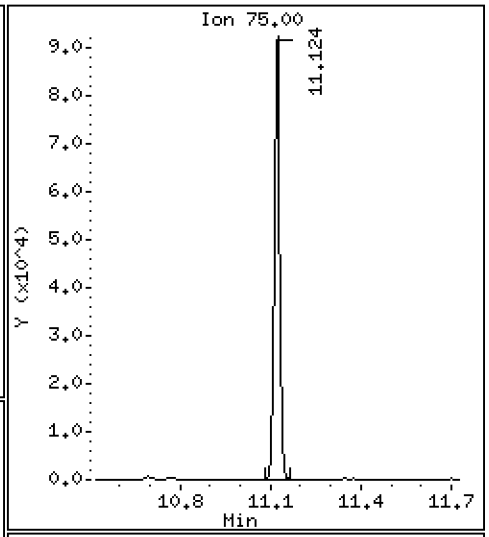
Concentration: 40.815 ug/Kg

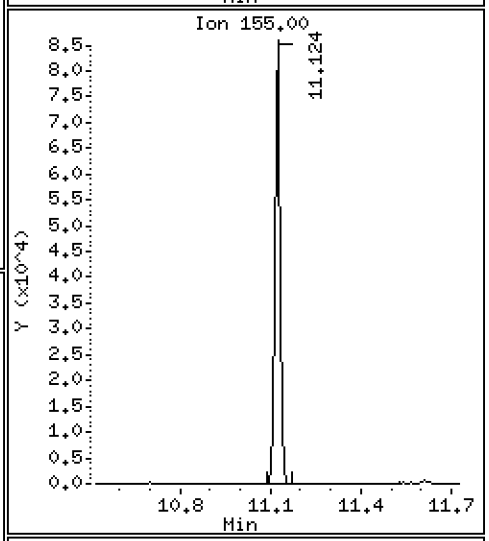


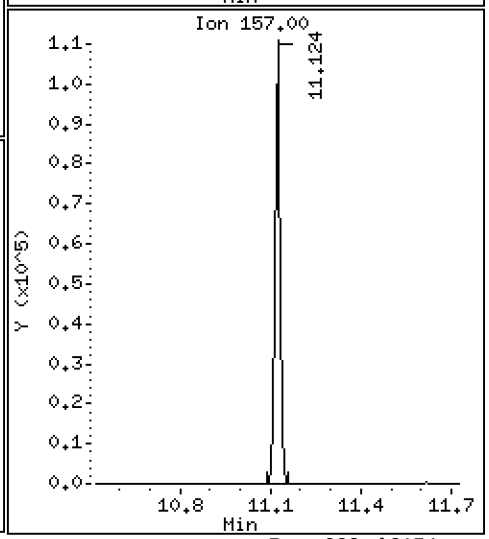












Data File: \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D

Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

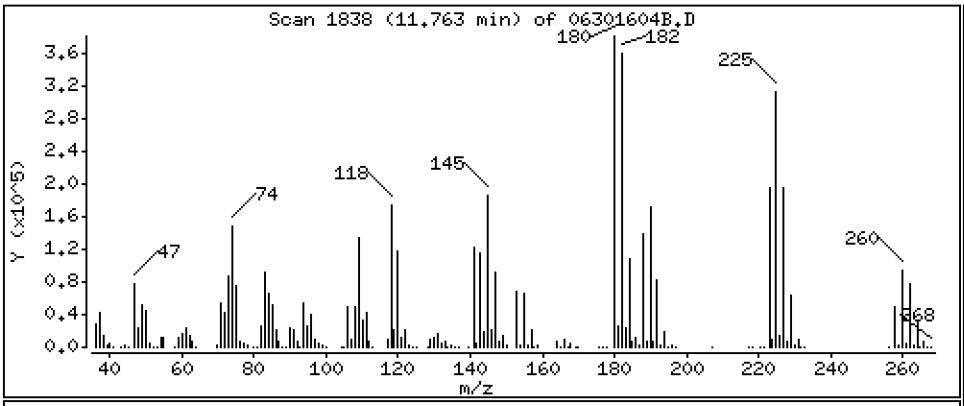
Operator: PB

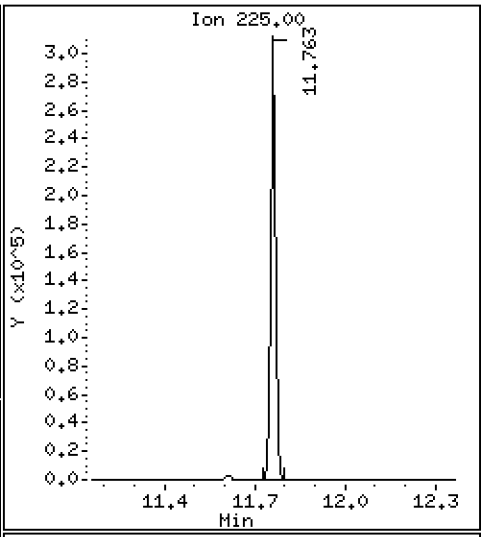
Column phase: RTXVMS

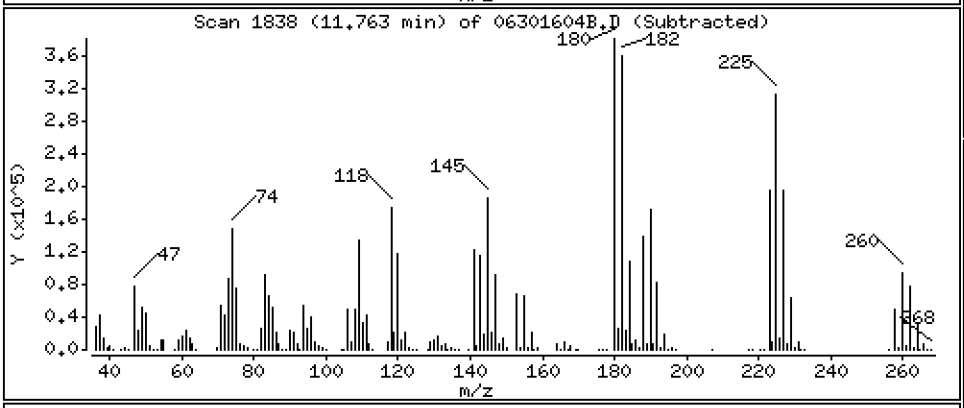
Column diameter: 0.18

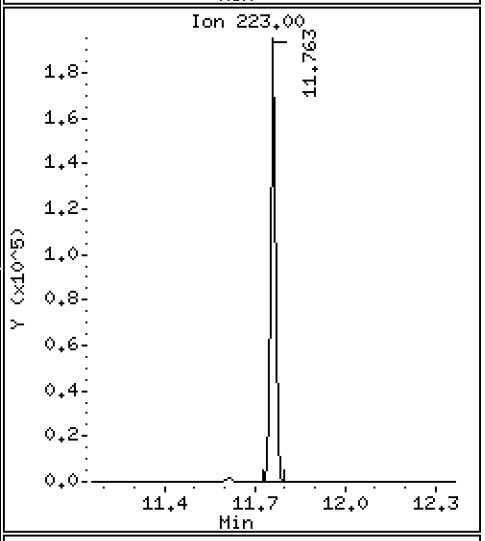
82 Hexachloro 1,3-Butadiene

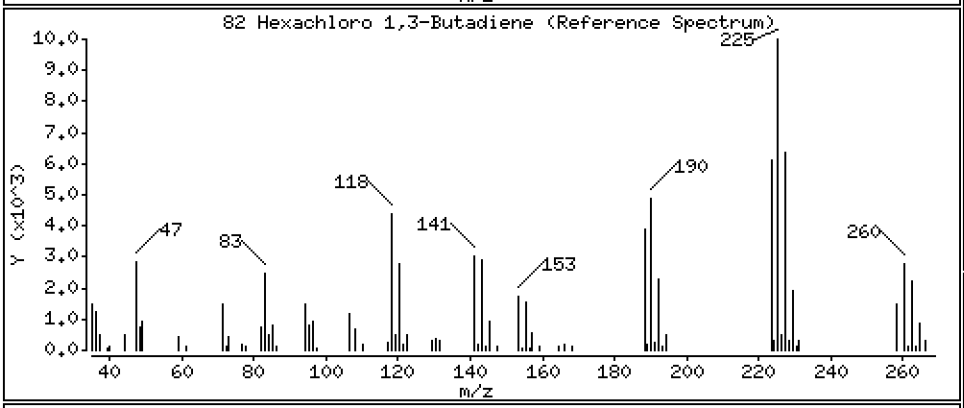
Concentration: 49.939 ug/Kg

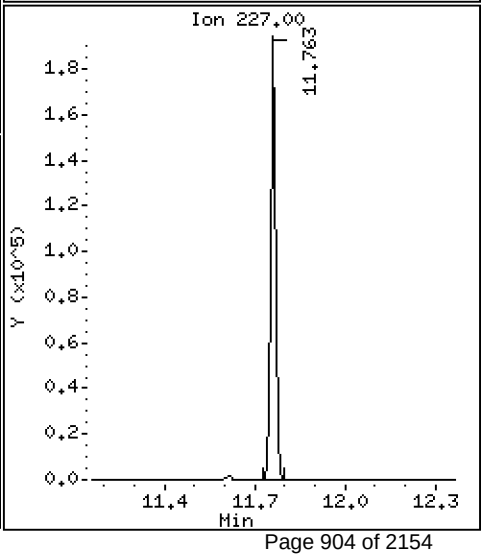


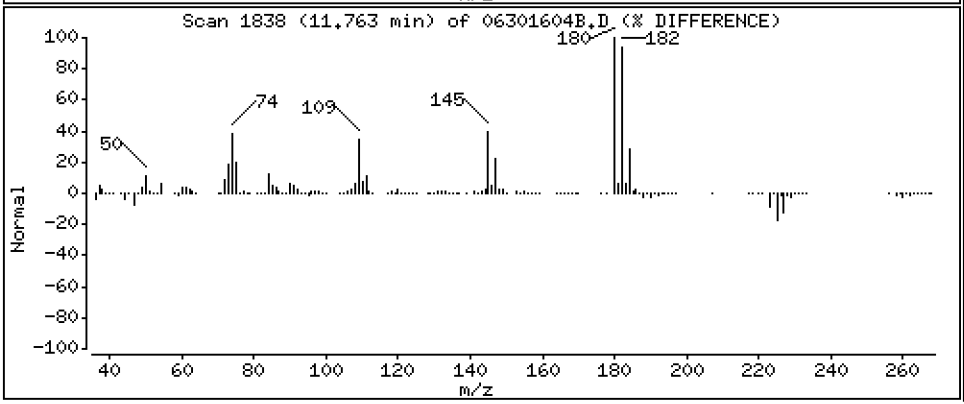












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

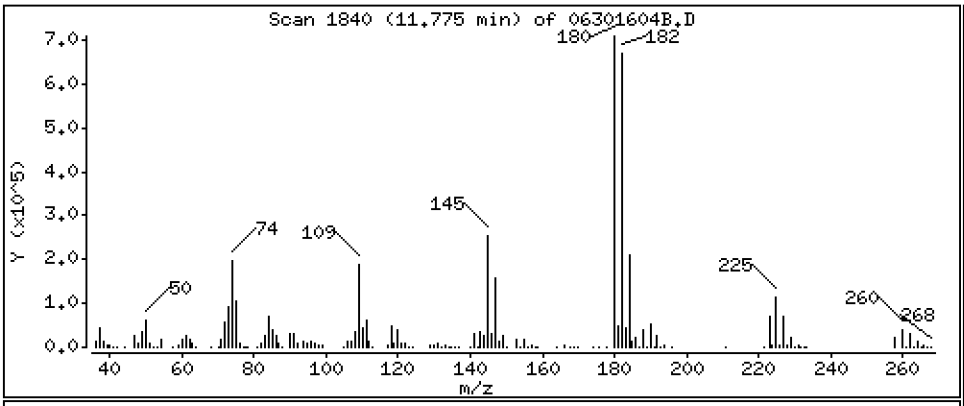
Operator: PB

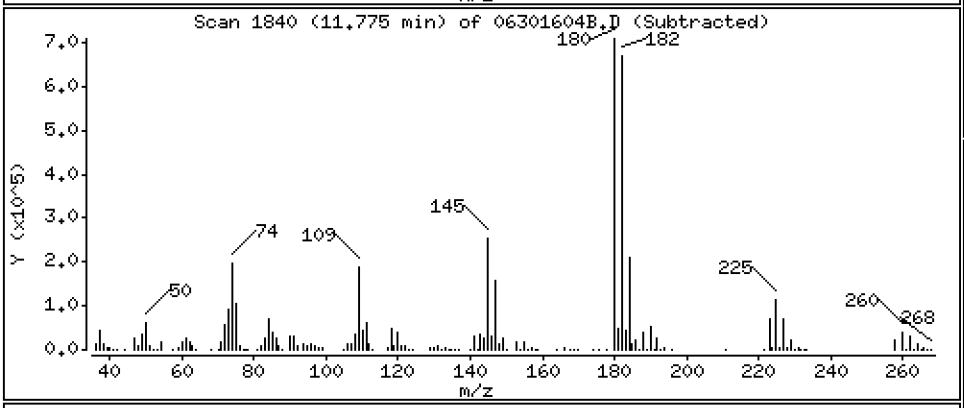
Column phase: RTXVMS

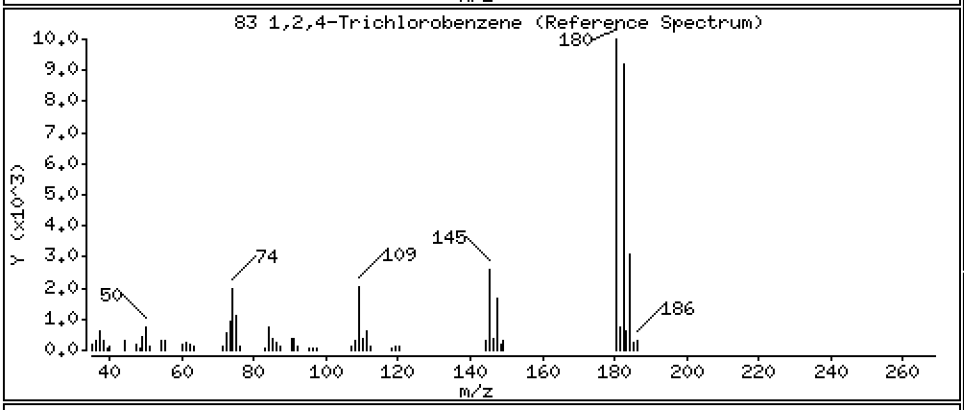
Column diameter: 0.18

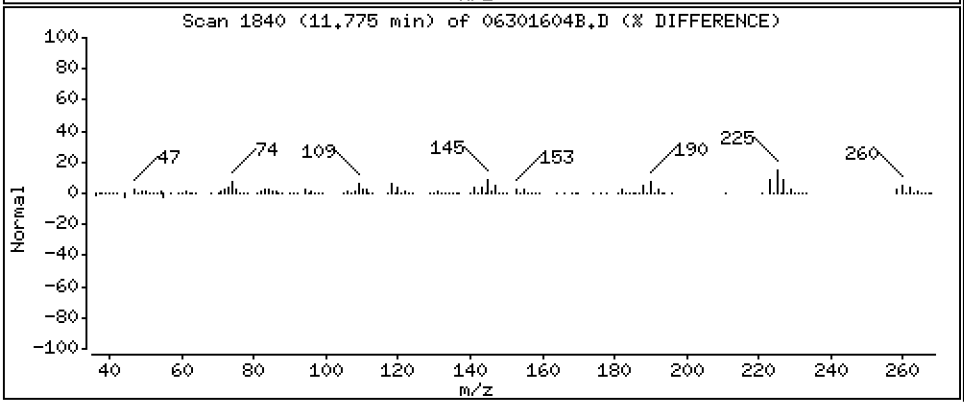
83 1,2,4-Trichlorobenzene

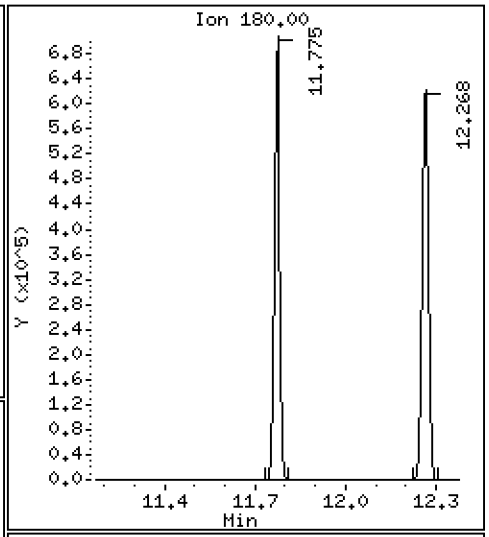
Concentration: 53.635 ug/Kg

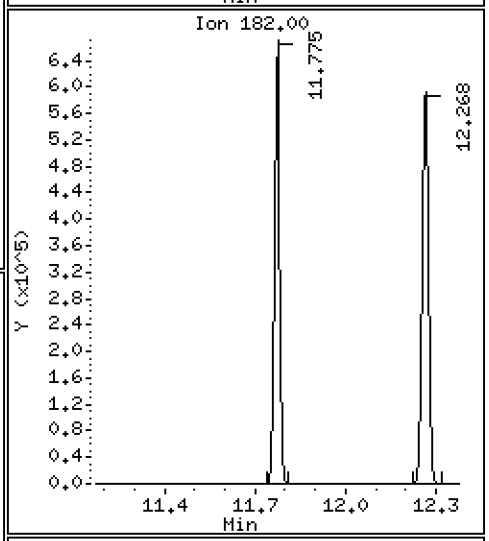


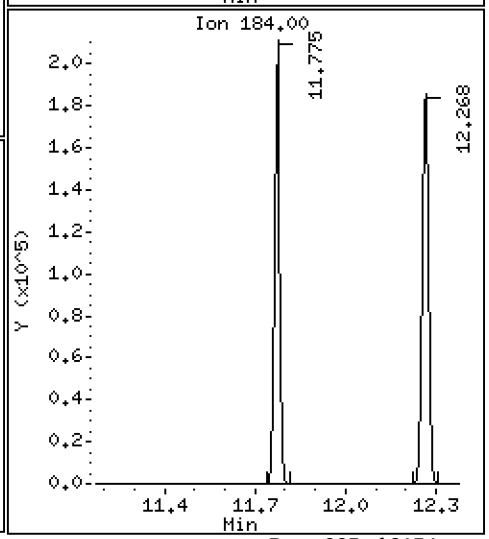












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

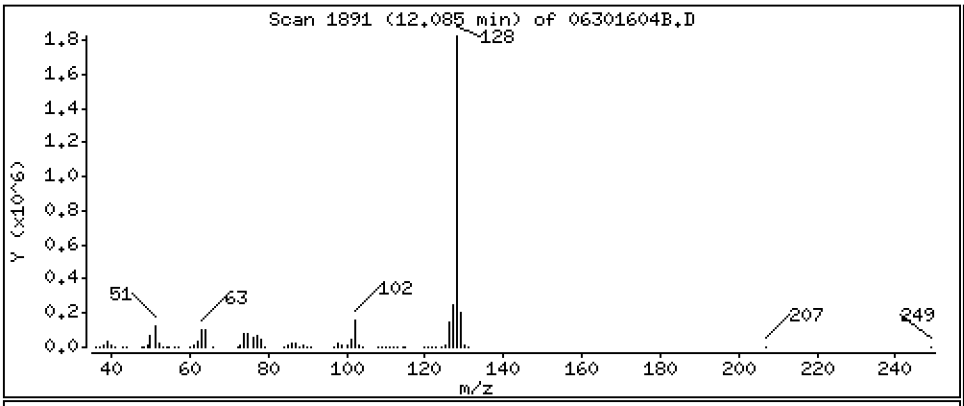
Operator: PB

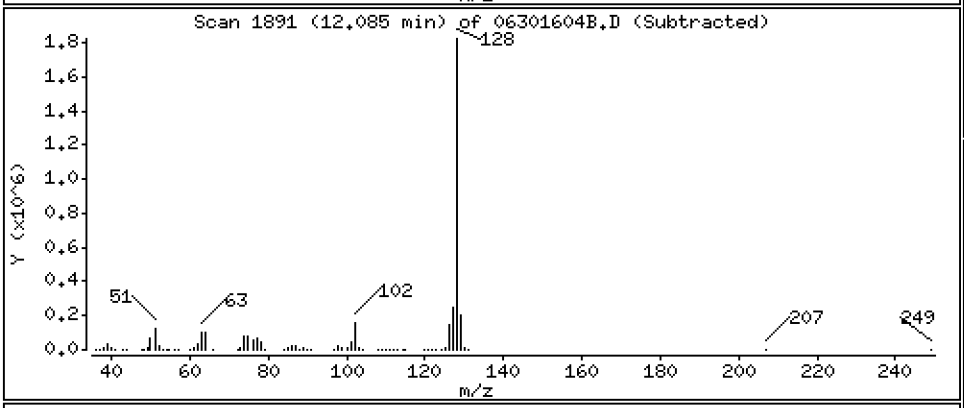
Column phase: RTXVMS

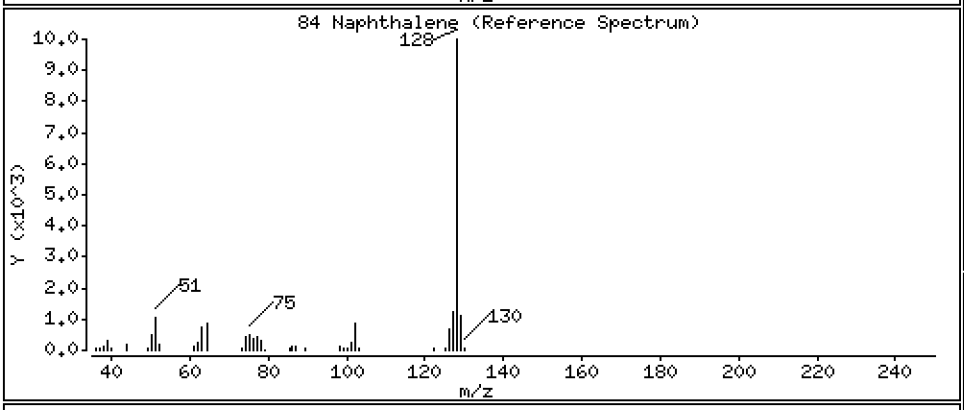
Column diameter: 0.18

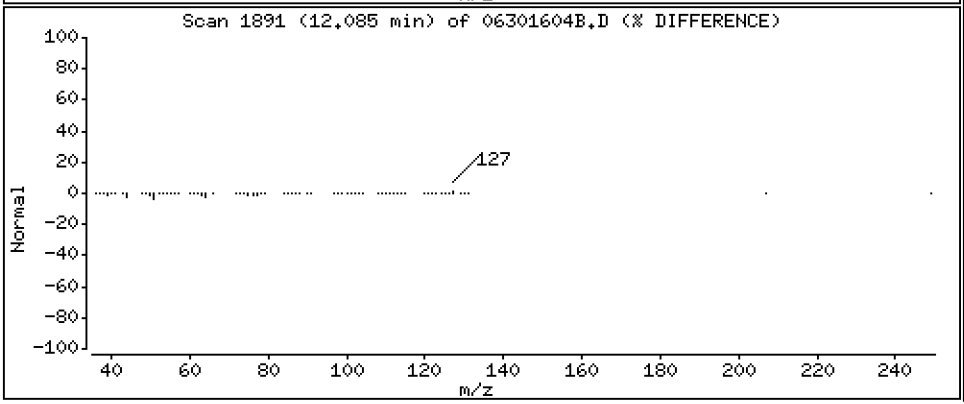
84 Naphthalene

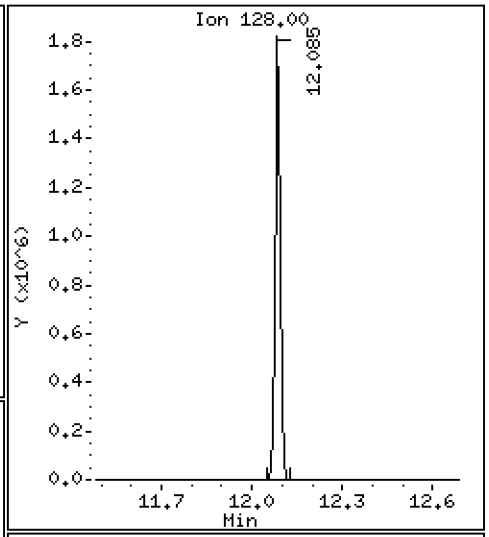
Concentration: 47.797 ug/Kg

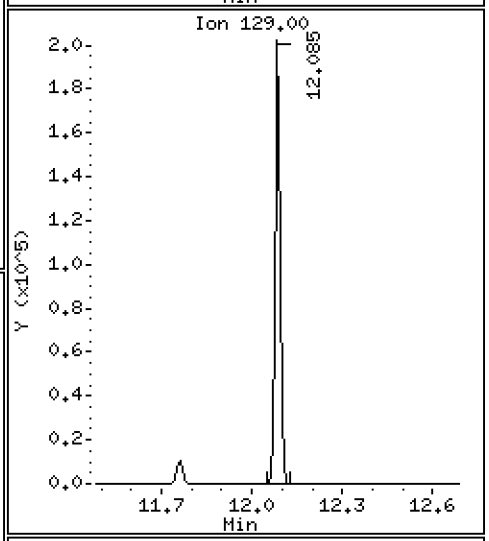


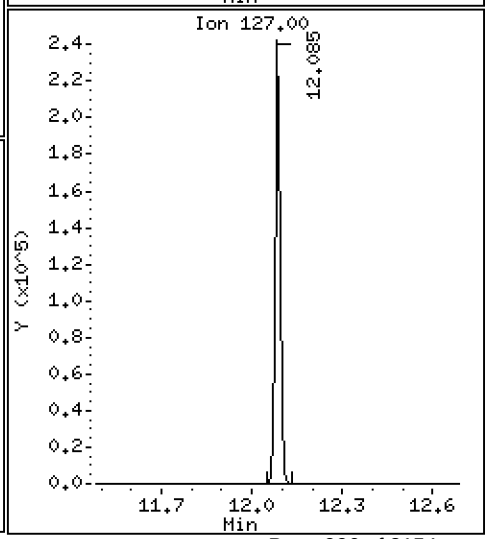












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Date : 30-JUN-2016 12:46

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

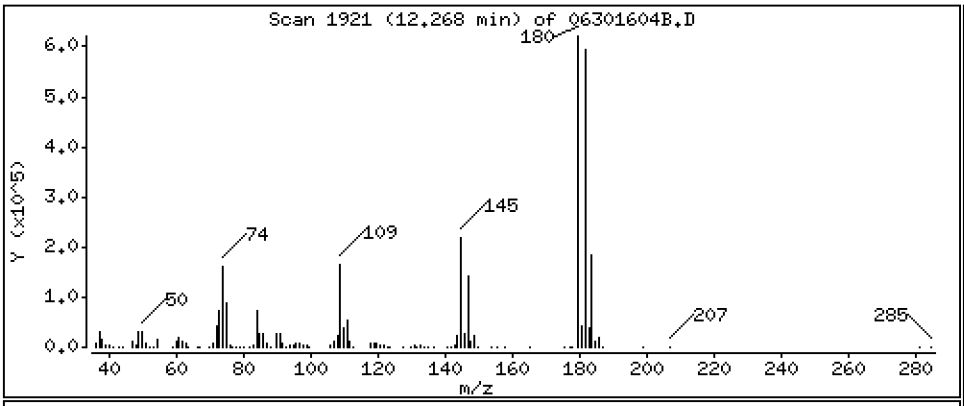
Operator: PB

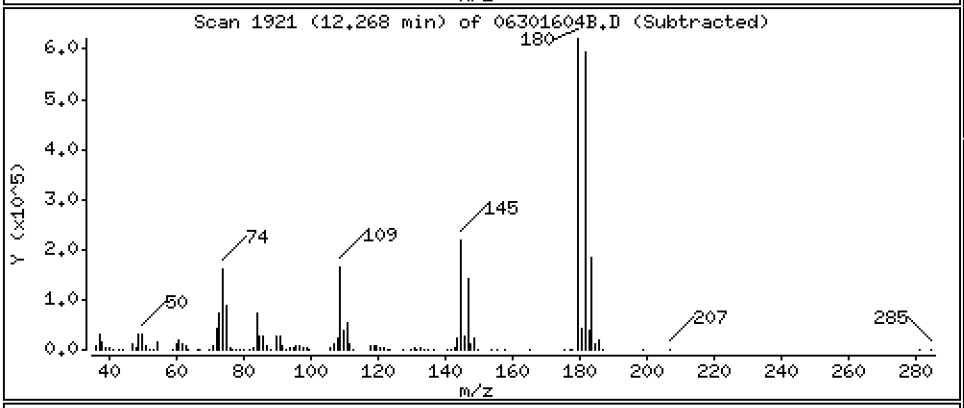
Column phase: RTXVMS

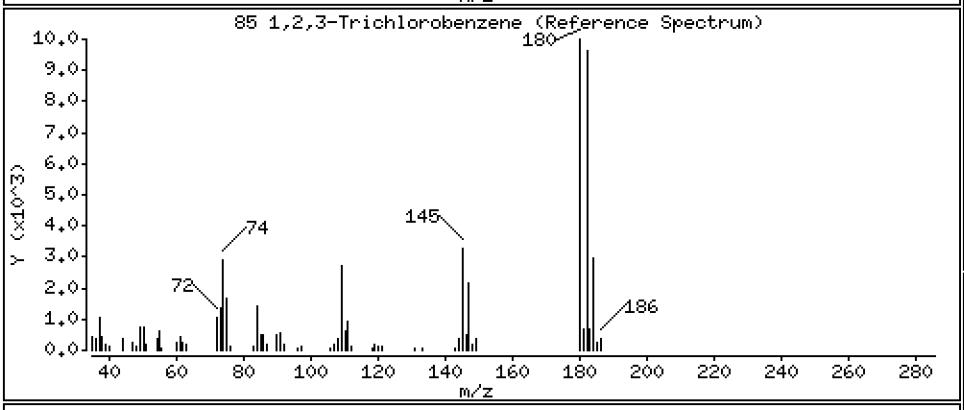
Column diameter: 0.18

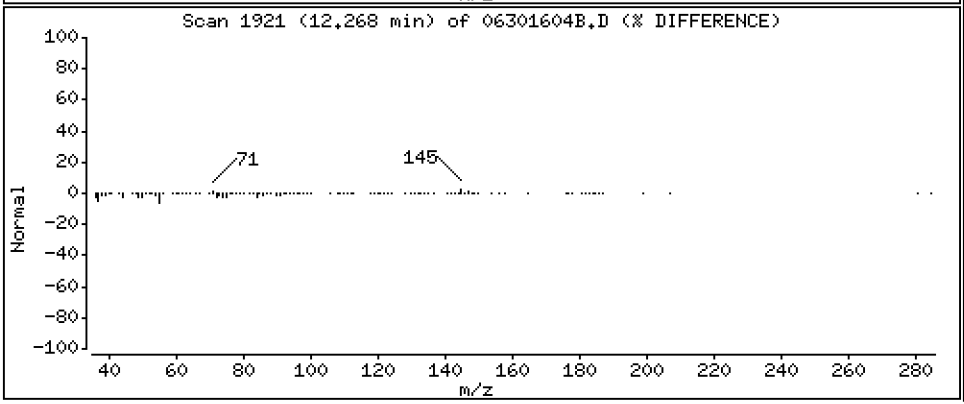
85 1,2,3-Trichlorobenzene

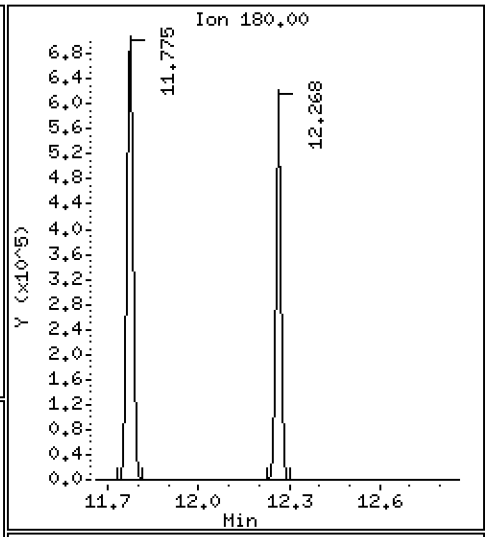
Concentration: 51.416 ug/Kg

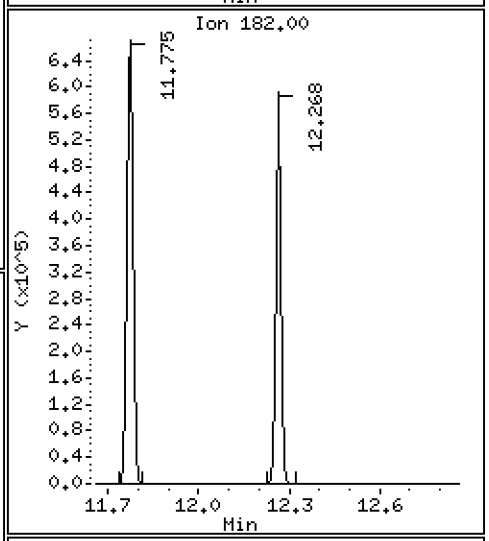


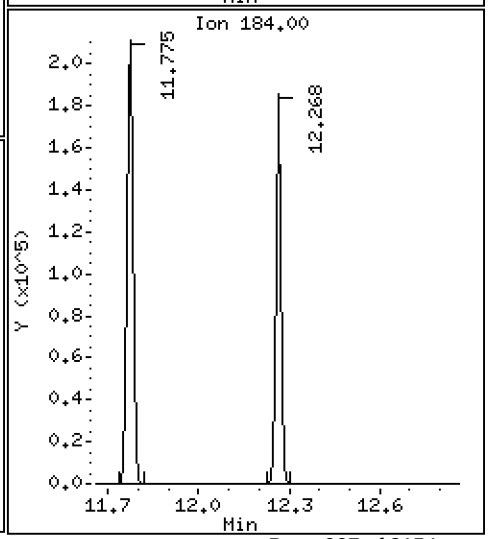












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\MED\06301604B.D
Lab Smp Id: BEG0006-BS1 Client Smp ID: LCS0630
Inj Date : 30-JUN-2016 12:46
Operator : PB Inst ID: nt5.i
Smp Info : LCS0630,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\MED\VO051314S.m
Meth Date : 01-Jul-2016 15:50 patrickb Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.159	1.146	(0.234)	833534	41.8882	41.888
2	Chloromethane	50	1.292	1.280	(0.261)	795860	33.9700	33.970
3	Vinyl Chloride	62	1.353	1.341	(0.274)	852374	41.9571	41.957
4	Bromomethane	94	1.590	1.578	(0.321)	390472	27.3120	27.312
5	Chloroethane	64	1.682	1.670	(0.340)	417916	41.5656	41.566
6	Trichlorofluoromethane	101	1.779	1.767	(0.360)	721143	61.8201	61.820
7	1,1-Dichloroethene	96	2.205	2.193	(0.446)	623610	46.1828	46.183
8	Carbon Disulfide	76	2.205	2.199	(0.446)	1977103	45.5432	45.543
9	112Trichloro122Trifluoroethane	101	2.247	2.235	(0.454)	626656	47.2932	47.293
10	Iodomethane	142	2.314	2.302	(0.468)	268064	31.6818	31.682
11	Bromoethane	108	2.430	2.418	(0.491)	366790	47.4566	47.457
12	Acrolein	56	2.527	2.515	(0.511)	530936	201.278	201.28
13	Methylene Chloride	84	2.740	2.728	(0.554)	628310	46.3883	46.388
14	Acetone	43	2.838	2.825	(0.573)	792517	180.779	180.78
15	Trans-1,2-Dichloroethene	96	2.892	2.880	(0.585)	682513	45.5014	45.501
16	Methyl tert butyl ether	73	3.063	3.051	(0.619)	1897081	42.5500	42.550
17	1,1-Dichloroethane	63	3.525	3.513	(0.712)	1221944	41.4976	41.498
18	Acrylonitrile	53	3.610	3.604	(0.730)	205372	39.1647	39.165
19	Vinyl Acetate	43	3.835	3.829	(0.775)	1350076	38.6463	38.646
20	Cis-1,2-Dichloroethene	96	4.054	4.042	(0.819)	770296	43.5059	43.506
22	2,2-Dichloropropane	77	4.146	4.140	(0.838)	1129721	44.7653	44.765

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
	23 Bromochloromethane	128	4.237	4.231	(0.856)	349326	45.1671	45.167
	24 Chloroform	83	4.328	4.322	(0.875)	1186674	43.3532	43.353
	25 Carbon Tetrachloride	117	4.407	4.401	(0.816)	998380	47.2688	47.269
$	27 Dibromofluoromethane	111	4.492	4.486	(0.908)	802424	48.0270	48.027
	26 1,1,1-Trichloroethane	97	4.480	4.474	(0.905)	1096613	43.1194	43.119
	28 1,1-Dichloropropene	75	4.596	4.590	(0.851)	969026	44.1030	44.103
	29 2-Butanone	72	4.644	4.638	(0.939)	356850	192.170	192.17
	30 Benzene	78	4.821	4.815	(0.893)	2764538	44.4496	44.450
*	31 Pentafluorobenzene	168	4.949	4.943	(1.000)	700998	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.001)	742692	44.4664	44.466
	33 1,2-Dichloroethane	62	5.015	5.009	(0.929)	853919	41.5625	41.563
	34 Trichloroethene	95	5.344	5.338	(0.990)	733163	45.4908	45.491
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2302955	50.0000	
	37 Dibromomethane	93	5.703	5.703	(1.056)	378779	44.0492	44.049
	38 1,2-Dichloropropane	63	5.794	5.788	(1.073)	682626	42.4739	42.474
	39 Bromodichloromethane	83	5.867	5.861	(1.087)	897565	46.2585	46.258
	172 2-Pentanone	86	6.165	6.159	(1.142)	463016	201.872	201.87
	40 2-Chloroethyl Vinyl Ether	63	6.384	6.384	(1.183)	359551	53.1384	53.138
	41 Cis 1,3-dichloropropene	75	6.409	6.403	(1.187)	1137190	45.1051	45.105
$	42 d8-Toluene	98	6.561	6.555	(1.215)	2831730	47.9890	47.989
	43 Toluene	92	6.603	6.597	(1.223)	1761432	44.0220	44.022
	44 Tetrachloroethene	166	6.914	6.914	(0.878)	727025	49.0365	49.037
	45 4-Methyl-2-Pentanone	58	6.956	6.956	(1.288)	1159448	192.565	192.56
	46 Trans 1,3-Dichloropropene	75	6.974	6.968	(1.292)	1003609	45.7333	45.733
	47 1,1,2-Trichloroethane	97	7.102	7.102	(1.315)	564687	44.9369	44.937
	48 Chlorodibromomethane	129	7.242	7.242	(0.920)	692384	48.5041	48.504
	49 1,3-Dichloropropane	76	7.327	7.327	(0.930)	1010462	44.2867	44.287
	50 1,2-Dibromoethane	107	7.425	7.425	(1.375)	572401	45.2990	45.299
	51 2-Hexanone	43	7.674	7.674	(0.975)	1969016	183.938	183.94
*	52 d5-Chlorobenzene	117	7.875	7.875	(1.000)	2391523	50.0000	
	53 Chlorobenzene	112	7.887	7.887	(1.002)	1994538	46.1948	46.195
	54 Ethyl Benzene	91	7.930	7.930	(1.007)	3343624	45.8082	45.808
	55 1,1,1,2-Tetrachloroethane	131	7.954	7.954	(1.010)	722923	47.2889	47.289
	56 m,p-xylene	106	8.063	8.063	(1.024)	2669715	94.2136	94.214
	57 o-Xylene	106	8.428	8.428	(1.070)	1293629	46.2181	46.218
	58 Styrene	104	8.477	8.477	(1.076)	2180687	47.1755	47.176
	59 Bromoform	173	8.489	8.483	(0.852)	407390	46.8325	46.833
	60 Isopropyl Benzene	105	8.714	8.714	(0.874)	3374020	45.7839	45.784
$	62 4-Bromofluorobenzene	95	8.952	8.952	(1.137)	1238538	48.1564	48.156
	63 Bromobenzene	156	9.037	9.031	(0.907)	799445	46.8099	46.810
	64 N-Propyl Benzene	91	9.085	9.085	(0.912)	3919012	44.2264	44.226
	65 1,1,2,2-Tetrachloroethane	83	9.158	9.158	(0.919)	714981	41.1415	41.142
	66 2-Chloro Toluene	91	9.207	9.207	(0.924)	2305833	44.5432	44.543
	67 1,3,5-Trimethyl Benzene	105	9.274	9.274	(0.930)	2851360	46.1173	46.117
	68 1,2,3-Trichloropropane	110	9.268	9.268	(0.930)	225152	43.8415	43.841
	69 Trans-1,4-Dichloro 2-Butene	53	9.317	9.317	(0.935)	187487	40.4228	40.423
	70 4-Chloro Toluene	91	9.359	9.359	(0.939)	2439176	45.4950	45.495
	71 T-Butyl Benzene	119	9.554	9.554	(0.958)	2562089	45.5152	45.515
	72 1,2,4-Trimethylbenzene	105	9.621	9.621	(0.965)	2872931	46.3835	46.384
	73 S-Butyl Benzene	105	9.712	9.712	(0.974)	3700755	44.6556	44.656
	74 4-Isopropyl Toluene	119	9.858	9.858	(0.989)	3267201	47.4502	47.450
	75 1,3-Dichlorobenzene	146	9.895	9.895	(0.993)	1619071	48.3509	48.351
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1234567	50.0000	
	77 1,4-Dichlorobenzene	146	9.980	9.980	(1.001)	1610685	47.5528	47.553

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	10.247	10.241	(1.028)	2884986	47.3283	47.328
$	79 d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1217204	48.9623	48.962
	80 1,2-Dichlorobenzene	146	10.363	10.363	(1.040)	1478840	46.6661	46.666
	81 1,2-Dibromo 3-Chloropropane	75	11.123	11.123	(1.116)	133803	40.8150	40.815
	82 Hexachloro 1,3-Butadiene	225	11.762	11.762	(1.180)	423257	49.9389	49.939
	83 1,2,4-Trichlorobenzene	180	11.774	11.774	(1.181)	971636	53.6350	53.635
	84 Naphthalene	128	12.085	12.085	(1.212)	2540496	47.7965	47.797
	85 1,2,3-Trichlorobenzene	180	12.267	12.261	(1.231)	873687	51.4160	51.416

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301604B.D
Lab Smp Id: BEG0006-BS1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\MED\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Client Smp ID: LCS0630
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	700998	16.84
35 1,4-Difluorobenze	2041239	1020620	4082478	2302955	12.82
52 d5-Chlorobenzene	2118314	1059157	4236628	2391523	12.90
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1234567	17.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.95	0.12
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.11
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	-0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEG0006-BS1 Client Smp ID: LCS0630
Level: LOW Operator: PB
Data Type: MS DATA SampleType: LCS
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\MED\VO051314S.m
Misc Info: 1

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	41.888	83.78	67-142
2	Chloromethane	50.000	33.970	67.94	65-129
3	Vinyl Chloride	50.000	41.957	83.91	74-134
4	Bromomethane	50.000	27.312	54.62	40-172
5	Chloroethane	50.000	41.566	83.13	53-154
6	Trichlorofluoromet	50.000	61.820	123.64	57-161
12	Acrolein	250.00	201.28	80.51	60-130
9	112Trichloro122Tri	50.000	47.293	94.59	72-142
14	Acetone	250.00	180.78	72.31	48-132
7	1,1-Dichloroethene	50.000	46.183	92.37	73-138
11	Bromoethane	50.000	47.457	94.91	74-132
10	Iodomethane	50.000	31.682	63.36	34-181
13	Methylene Chloride	50.000	46.388	92.78	61-128
8	Carbon Disulfide	50.000	45.543	91.09	72-146
18	Acrylonitrile	50.000	39.165	78.33	59-124
15	Trans-1,2-Dichloro	50.000	45.501	91.00	73-131
19	Vinyl Acetate	50.000	38.646	77.29	54-138
17	1,1-Dichloroethane	50.000	41.498	83.00	65-139
29	2-Butanone	250.00	192.17	76.87	64-120
22	2,2-Dichloropropan	50.000	44.765	89.53	77-137
20	Cis-1,2-Dichloroet	50.000	43.506	87.01	74-124
24	Chloroform	50.000	43.353	86.71	75-126
23	Bromochloromethane	50.000	45.167	90.33	69-133
26	1,1,1-Trichloroeth	50.000	43.119	86.24	78-133
28	1,1-Dichloropropen	50.000	44.103	88.21	80-123
25	Carbon Tetrachlori	50.000	47.269	94.54	76-136
33	1,2-Dichloroethane	50.000	41.563	83.13	77-120
30	Benzene	50.000	44.450	88.90	80-120
34	Trichloroethene	50.000	45.491	90.98	80-120
38	1,2-Dichloropropan	50.000	42.474	84.95	74-120
39	Bromodichlorometha	50.000	46.258	92.52	80-122
172	2-Pentanone	250.00	201.87	80.75	70-130
37	Dibromomethane	50.000	44.049	88.10	80-120
40	2-Chloroethyl Viny	50.000	53.138	106.28	20-157
45	4-Methyl-2-Pentano	250.00	192.56	77.03	70-124
41	Cis 1,3-dichloropr	50.000	45.105	90.21	80-124
43	Toluene	50.000	44.022	88.04	78-120
46	Trans 1,3-Dichloro	50.000	45.733	91.47	80-126
51	2-Hexanone	250.00	183.94	73.58	62-128
47	1,1,2-Trichloroeth	50.000	44.937	89.87	77-120

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
49	1,3-Dichloropropan	50.000	44.287	88.57	77-120
44	Tetrachloroethene	50.000	49.037	98.07	76-131
48	Chlorodibromometha	50.000	48.504	97.01	77-123
50	1,2-Dibromoethane	50.000	45.299	90.60	79-120
53	Chlorobenzene	50.000	46.195	92.39	80-120
55	1,1,1,2-Tetrachlor	50.000	47.289	94.58	80-120
54	Ethyl Benzene	50.000	45.808	91.62	80-120
56	m,p-xylene	100.00	94.214	94.21	80-123
57	o-Xylene	50.000	46.218	92.44	80-120
58	Styrene	50.000	47.176	94.35	80-122
60	Isopropyl Benzene	50.000	45.784	91.57	77-127
59	Bromoform	50.000	46.833	93.67	63-120
65	1,1,2,2-Tetrachlor	50.000	41.142	82.28	71-120
68	1,2,3-Trichloropro	50.000	43.841	87.68	75-120
69	Trans-1,4-Dichloro	50.000	40.423	80.85	62-127
64	N-Propyl Benzene	50.000	44.226	88.45	76-126
63	Bromobenzene	50.000	46.810	93.62	75-120
67	1,3,5-Trimethyl Be	50.000	46.117	92.23	77-126
66	2-Chloro Toluene	50.000	44.543	89.09	76-120
70	4-Chloro Toluene	50.000	45.495	90.99	75-121
71	T-Butyl Benzene	50.000	45.515	91.03	77-125
72	1,2,4-Trimethylben	50.000	46.384	92.77	77-125
73	S-Butyl Benzene	50.000	44.656	89.31	77-127
74	4-Isopropyl Toluen	50.000	47.450	94.90	78-131
75	1,3-Dichlorobenzen	50.000	48.351	96.70	76-120
77	1,4-Dichlorobenzen	50.000	47.553	95.11	75-120
78	N-Butyl Benzene	50.000	47.328	94.66	75-134
80	1,2-Dichlorobenzen	50.000	46.666	93.33	77-120
81	1,2-Dibromo 3-Chlo	50.000	40.815	81.63	61-128
83	1,2,4-Trichloroben	50.000	53.635	107.27	75-130
82	Hexachloro 1,3-But	50.000	49.939	99.88	72-135
84	Naphthalene	50.000	47.797	95.59	71-122
85	1,2,3-Trichloroben	50.000	51.416	102.83	76-122

	SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27	Dibromofluorometha	50.000	48.027	96.05	70-130
$ 32	d4-1,2-Dichloroeth	50.000	44.466	88.93	80-149
$ 42	d8-Toluene	50.000	47.989	95.98	77-120
$ 62	4-Bromofluorobenze	50.000	48.156	96.31	80-120
$ 79	d4-1,2-Dichloroben	50.000	48.962	97.92	80-120

REVIEW SUMMARY FOR FILE - 06301604B.D

Lab ID: BEG0006-BS1
nt5.i, 20160630.b\MED\VO051314S.m,   30-JUN-2016 12:46

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,MED\VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301605.D
Lab Smp Id: BEG0004-BSD1 Client Smp ID: LCS0630
Inj Date : 30-JUN-2016 13:09
Operator : PB Inst ID: nt5.i
Smp Info : LCS0630,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA19

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndV

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	1.153	1.146	(0.233)	835451	40.3998	40.400
2 Chloromethane	50	1.286	1.280	(0.260)	787306	32.3364	32.336(R)
3 Vinyl Chloride	62	1.347	1.341	(0.272)	849687	40.2461	40.246
4 Bromomethane	94	1.585	1.578	(0.320)	402813	27.1117	27.112
5 Chloroethane	64	1.676	1.670	(0.338)	418609	40.0630	40.063
6 Trichlorofluoromethane	101	1.773	1.767	(0.358)	730004	60.2176	60.218
7 1,1-Dichloroethene	96	2.199	2.193	(0.444)	632434	45.0684	45.068
8 Carbon Disulfide	76	2.205	2.199	(0.445)	1971423	43.6982	43.698
9 112Trichloro122Trifluoroethane	101	2.248	2.235	(0.454)	634340	46.0660	46.066
10 Iodomethane	142	2.315	2.302	(0.467)	273700	31.1268	31.127
11 Bromoethane	108	2.430	2.418	(0.491)	383573	47.7548	47.755
12 Acrolein	56	2.528	2.515	(0.510)	533541	194.631	194.63
13 Methylene Chloride	84	2.740	2.728	(0.553)	625144	44.4124	44.412
14 Acetone	43	2.832	2.825	(0.572)	788546	173.084	173.08
15 Trans-1,2-Dichloroethene	96	2.893	2.880	(0.584)	696421	44.6761	44.676
16 Methyl tert butyl ether	73	3.063	3.051	(0.618)	1939903	41.8681	41.868
17 1,1-Dichloroethane	63	3.525	3.513	(0.711)	1252561	40.9317	40.932
18 Acrylonitrile	53	3.617	3.604	(0.730)	205049	37.6271	37.627
19 Vinyl Acetate	43	3.836	3.829	(0.774)	1338856	36.8785	36.878
20 Cis-1,2-Dichloroethene	96	4.055	4.042	(0.818)	794667	43.1882	43.188
22 2,2-Dichloropropane	77	4.146	4.140	(0.837)	1146761	43.7253	43.725

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	4.237	4.231	(0.855)	352725	43.8851	43.885
	24 Chloroform	83	4.328	4.322	(0.874)	1212070	42.6096	42.610
	25 Carbon Tetrachloride	117	4.413	4.401	(0.817)	1035262	47.9373	47.937
$	27 Dibromofluoromethane	111	4.493	4.486	(0.907)	816448	47.0218	47.022
	26 1,1,1-Trichloroethane	97	4.486	4.474	(0.905)	1136344	42.9950	42.995
	28 1,1-Dichloropropene	75	4.602	4.590	(0.852)	996490	44.3558	44.356
	29 2-Butanone	72	4.651	4.638	(0.939)	360840	186.984	186.98
	30 Benzene	78	4.827	4.815	(0.894)	2836558	44.6048	44.605
*	31 Pentafluorobenzene	168	4.955	4.943	(1.000)	728496	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.955	4.949	(1.000)	752117	43.3310	43.331
	33 1,2-Dichloroethane	62	5.016	5.009	(0.929)	872693	41.5423	41.542
	34 Trichloroethene	95	5.350	5.338	(0.991)	757651	45.9765	45.977
*	35 1,4-Difluorobenzene	114	5.399	5.393	(1.000)	2354732	50.0000	
	37 Dibromomethane	93	5.709	5.703	(1.057)	391038	44.4749	44.475
	38 1,2-Dichloropropane	63	5.801	5.788	(1.074)	699517	42.5678	42.568
	39 Bromodichloromethane	83	5.867	5.861	(1.087)	924890	46.6186	46.619
	172 2-Pentanone	86	6.166	6.159	(1.142)	472926	201.659	201.66
	40 2-Chloroethyl Vinyl Ether	63	6.385	6.384	(1.183)	349282	50.4857	50.486
	41 Cis 1,3-dichloropropene	75	6.409	6.403	(1.187)	1170259	45.3961	45.396
$	42 d8-Toluene	98	6.561	6.555	(1.215)	2921809	48.4268	48.427
	43 Toluene	92	6.604	6.597	(1.223)	1837745	44.9193	44.919
	44 Tetrachloroethene	166	6.920	6.914	(0.879)	753272	49.5741	49.574
	45 4-Methyl-2-Pentanone	58	6.962	6.956	(1.290)	1194335	193.997	194.00
	46 Trans 1,3-Dichloropropene	75	6.975	6.968	(1.292)	1033732	46.0701	46.070
	47 1,1,2-Trichloroethane	97	7.102	7.102	(1.315)	581119	45.2277	45.228
	48 Chlorodibromomethane	129	7.242	7.242	(0.920)	723496	49.4538	49.454
	49 1,3-Dichloropropane	76	7.327	7.327	(0.930)	1032047	44.1352	44.135
	50 1,2-Dibromoethane	107	7.431	7.425	(1.376)	594920	46.0458	46.046
	51 2-Hexanone	43	7.674	7.674	(0.975)	2024528	184.535	184.53
*	52 d5-Chlorobenzene	117	7.875	7.875	(1.000)	2450991	50.0000	
	53 Chlorobenzene	112	7.893	7.887	(1.002)	2078290	46.9666	46.967
	54 Ethyl Benzene	91	7.930	7.930	(1.007)	3474369	46.4446	46.445
	55 1,1,1,2-Tetrachloroethane	131	7.960	7.954	(1.011)	759942	48.5043	48.504
	56 m,p-xylene	106	8.064	8.063	(1.024)	2757364	94.9458	94.946
	57 o-Xylene	106	8.435	8.428	(1.071)	1340530	46.7317	46.732
	58 Styrene	104	8.483	8.477	(1.077)	2247178	47.4344	47.434
	59 Bromoform	173	8.489	8.483	(0.852)	416542	46.4551	46.455
	60 Isopropyl Benzene	105	8.715	8.714	(0.874)	3523244	46.3815	46.381
$	62 4-Bromofluorobenzene	95	8.952	8.952	(1.137)	1279466	48.5408	48.541
	63 Bromobenzene	156	9.037	9.031	(0.907)	839248	47.6734	47.673
	64 N-Propyl Benzene	91	9.086	9.085	(0.912)	4062002	44.4716	44.472
	65 1,1,2,2-Tetrachloroethane	83	9.159	9.158	(0.919)	738237	41.2116	41.212
	66 2-Chloro Toluene	91	9.213	9.207	(0.924)	2394331	44.8719	44.872
	67 1,3,5-Trimethyl Benzene	105	9.274	9.274	(0.930)	2960685	46.4559	46.456
	68 1,2,3-Trichloropropane	110	9.268	9.268	(0.930)	231983	43.8230	43.823
	69 Trans-1,4-Dichloro 2-Butene	53	9.317	9.317	(0.935)	188206	39.3664	39.366
	70 4-Chloro Toluene	91	9.365	9.359	(0.940)	2510705	45.4311	45.431
	71 T-Butyl Benzene	119	9.554	9.554	(0.958)	2663804	45.9094	45.909
	72 1,2,4-Trimethylbenzene	105	9.621	9.621	(0.965)	2949662	46.2006	46.201
	73 S-Butyl Benzene	105	9.718	9.712	(0.975)	3812139	44.6263	44.626
	74 4-Isopropyl Toluene	119	9.858	9.858	(0.989)	3351780	47.2253	47.225
	75 1,3-Dichlorobenzene	146	9.895	9.895	(0.993)	1669972	48.3821	48.382
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1272558	50.0000	
	77 1,4-Dichlorobenzene	146	9.980	9.980	(1.001)	1674238	47.9534	47.953

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78 N-Butyl Benzene	91	10.248	10.241	(1.028)	2929402	46.6222	46.622
$ 79 d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1251665	48.8454	48.845
80 1,2-Dichlorobenzene	146	10.363	10.363	(1.040)	1530458	46.8531	46.853
81 1,2-Dibromo 3-Chloropropane	75	11.124	11.123	(1.116)	140633	41.6177	41.618
82 Hexachloro 1,3-Butadiene	225	11.762	11.762	(1.180)	430835	49.3154	49.315
83 1,2,4-Trichlorobenzene	180	11.775	11.774	(1.181)	975743	52.2537	52.254
84 Naphthalene	128	12.085	12.085	(1.212)	2550008	46.5432	46.543
85 1,2,3-Trichlorobenzene	180	12.267	12.261	(1.231)	876747	50.0557	50.056

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301605.D
Lab Smp Id: BEG0004-BSD1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 12:05
Client Smp ID: LCS0630
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	728496	21.42
35 1,4-Difluorobenze	2041239	1020620	4082478	2354732	15.36
52 d5-Chlorobenzene	2118314	1059157	4236628	2450991	15.70
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1272558	20.62

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.94	4.44	5.44	4.96	0.25
35 1,4-Difluorobenze	5.39	4.89	5.89	5.40	0.12
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: BEG0004-BSD1
Level: LOW
Data Type: MS DATA
SpikeList File: voasoil.spk
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Client SDG: 20151013
Fraction: VOA
Client Smp ID: LCS0630
Operator: PB
SampleType: LCSD
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	40.400	80.80	67-142
2	Chloromethane	50.000	32.336	64.67*	65-129
3	Vinyl Chloride	50.000	40.246	80.49	74-134
4	Bromomethane	50.000	27.112	54.22	40-172
5	Chloroethane	50.000	40.063	80.13	53-154
6	Trichlorofluoromet	50.000	60.218	120.44	57-161
12	Acrolein	250.00	194.63	77.85	60-130
9	112Trichloro122Tri	50.000	46.066	92.13	72-142
14	Acetone	250.00	173.08	69.23	48-132
7	1,1-Dichloroethene	50.000	45.068	90.14	73-138
11	Bromoethane	50.000	47.755	95.51	74-132
10	Iodomethane	50.000	31.127	62.25	34-181
13	Methylene Chloride	50.000	44.412	88.82	61-128
8	Carbon Disulfide	50.000	43.698	87.40	72-146
18	Acrylonitrile	50.000	37.627	75.25	59-124
15	Trans-1,2-Dichloro	50.000	44.676	89.35	73-131
19	Vinyl Acetate	50.000	36.878	73.76	54-138
17	1,1-Dichloroethane	50.000	40.932	81.86	65-139
29	2-Butanone	250.00	186.98	74.79	64-120
22	2,2-Dichloropropan	50.000	43.725	87.45	77-137
20	Cis-1,2-Dichloroet	50.000	43.188	86.38	74-124
24	Chloroform	50.000	42.610	85.22	75-126
23	Bromochloromethane	50.000	43.885	87.77	69-133
26	1,1,1-Trichloroeth	50.000	42.995	85.99	78-133
28	1,1-Dichloropropen	50.000	44.356	88.71	80-123
25	Carbon Tetrachlori	50.000	47.937	95.87	76-136
33	1,2-Dichloroethane	50.000	41.542	83.08	77-120
30	Benzene	50.000	44.605	89.21	80-120
34	Trichloroethene	50.000	45.977	91.95	80-120
38	1,2-Dichloropropan	50.000	42.568	85.14	74-120
39	Bromodichlorometha	50.000	46.619	93.24	80-122
172	2-Pentanone	250.00	201.66	80.66	70-130
37	Dibromomethane	50.000	44.475	88.95	80-120
40	2-Chloroethyl Viny	50.000	50.486	100.97	20-157
45	4-Methyl-2-Pentano	250.00	194.00	77.60	70-124
41	Cis 1,3-dichloropr	50.000	45.396	90.79	80-124
43	Toluene	50.000	44.919	89.84	78-120
46	Trans 1,3-Dichloro	50.000	46.070	92.14	80-126
51	2-Hexanone	250.00	184.53	73.81	62-128
47	1,1,2-Trichloroeth	50.000	45.228	90.46	77-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
49 1,3-Dichloropropan	50.000	44.135	88.27	77-120
44 Tetrachloroethene	50.000	49.574	99.15	76-131
48 Chlorodibromometha	50.000	49.454	98.91	77-123
50 1,2-Dibromoethane	50.000	46.046	92.09	79-120
53 Chlorobenzene	50.000	46.967	93.93	80-120
55 1,1,1,2-Tetrachlor	50.000	48.504	97.01	80-120
54 Ethyl Benzene	50.000	46.445	92.89	80-120
56 m,p-xylene	100.00	94.946	94.95	80-123
57 o-Xylene	50.000	46.732	93.46	80-120
58 Styrene	50.000	47.434	94.87	80-122
60 Isopropyl Benzene	50.000	46.381	92.76	77-127
59 Bromoform	50.000	46.455	92.91	63-120
65 1,1,2,2-Tetrachlor	50.000	41.212	82.42	71-120
68 1,2,3-Trichloropro	50.000	43.823	87.65	75-120
69 Trans-1,4-Dichloro	50.000	39.366	78.73	62-127
64 N-Propyl Benzene	50.000	44.472	88.94	76-126
63 Bromobenzene	50.000	47.673	95.35	75-120
67 1,3,5-Trimethyl Be	50.000	46.456	92.91	77-126
66 2-Chloro Toluene	50.000	44.872	89.74	76-120
70 4-Chloro Toluene	50.000	45.431	90.86	75-121
71 T-Butyl Benzene	50.000	45.909	91.82	77-125
72 1,2,4-Trimethylben	50.000	46.201	92.40	77-125
73 S-Butyl Benzene	50.000	44.626	89.25	77-127
74 4-Isopropyl Toluen	50.000	47.225	94.45	78-131
75 1,3-Dichlorobenzen	50.000	48.382	96.76	76-120
77 1,4-Dichlorobenzen	50.000	47.953	95.91	75-120
78 N-Butyl Benzene	50.000	46.622	93.24	75-134
80 1,2-Dichlorobenzen	50.000	46.853	93.71	77-120
81 1,2-Dibromo 3-Chlo	50.000	41.618	83.24	61-128
83 1,2,4-Trichloroben	50.000	52.254	104.51	75-130
82 Hexachloro 1,3-But	50.000	49.315	98.63	72-135
84 Naphthalene	50.000	46.543	93.09	71-122
85 1,2,3-Trichloroben	50.000	50.056	100.11	76-122

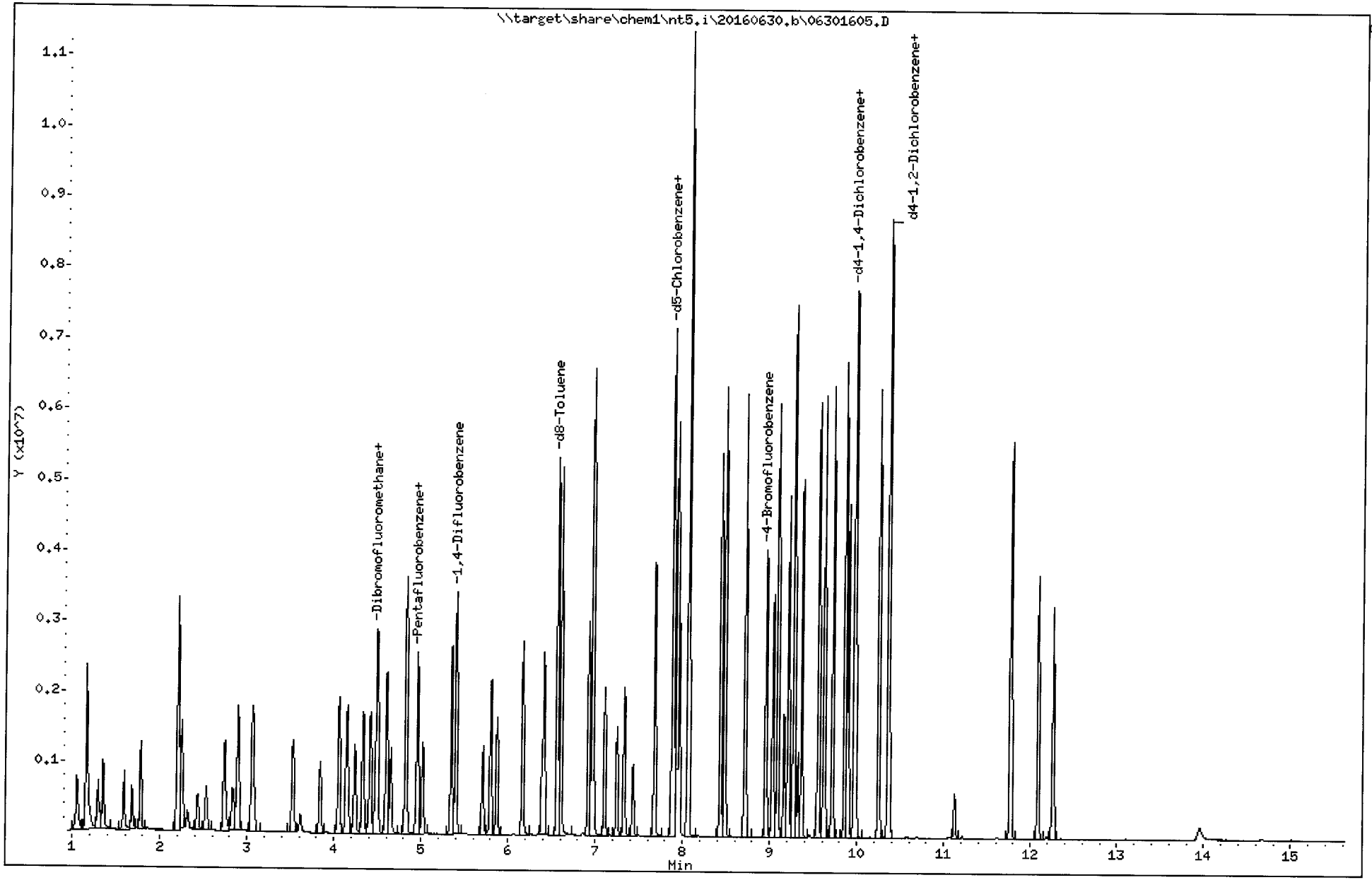
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	47.022	94.04	70-130
$ 32 d4-1,2-Dichloroeth	50.000	43.331	86.66	80-149
$ 42 d8-Toluene	50.000	48.427	96.85	77-120
$ 62 4-Bromofluorobenze	50.000	48.541	97.08	80-120
$ 79 d4-1,2-Dichloroben	50.000	48.845	97.69	80-120

Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D
Date : 30-JUN-2016 13:09
Client ID: LCS0630
Sample Info: LCS0630,5,5,0

Column phase: RTXVMS

Instrument: nt5.i

Operator: PB
Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

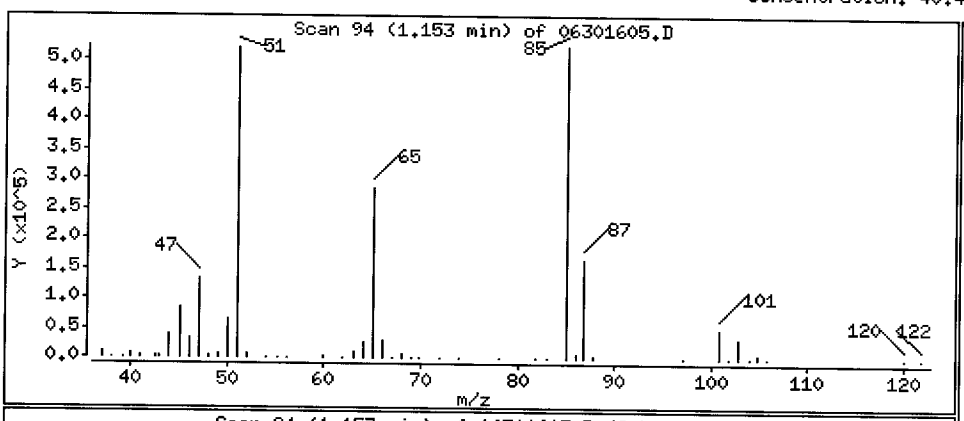
Operator: PB

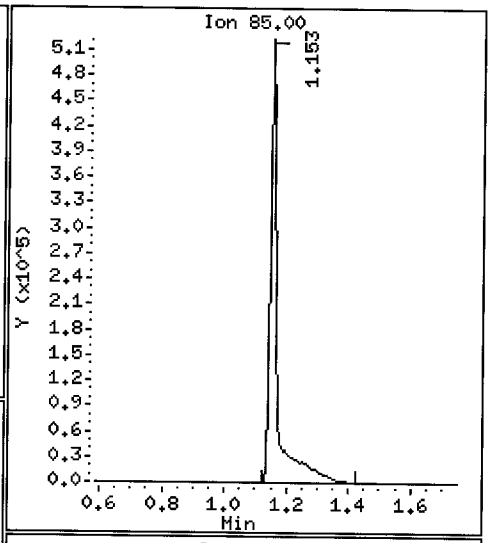
Column phase: RTXVMS

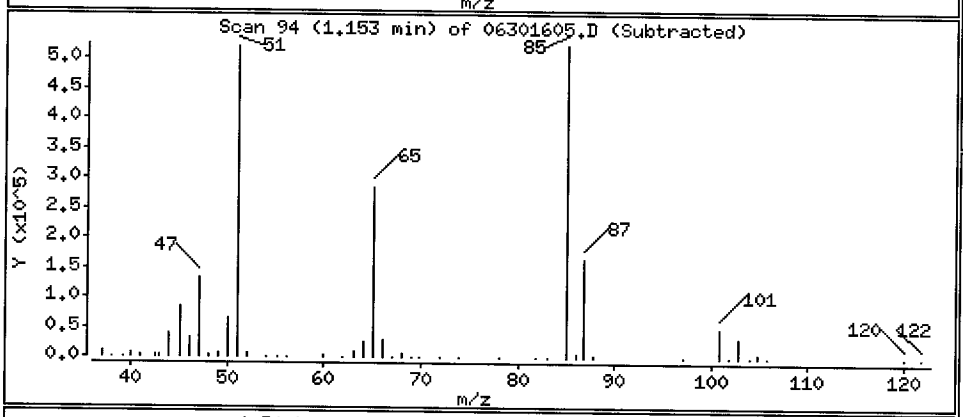
Column diameter: 0.18

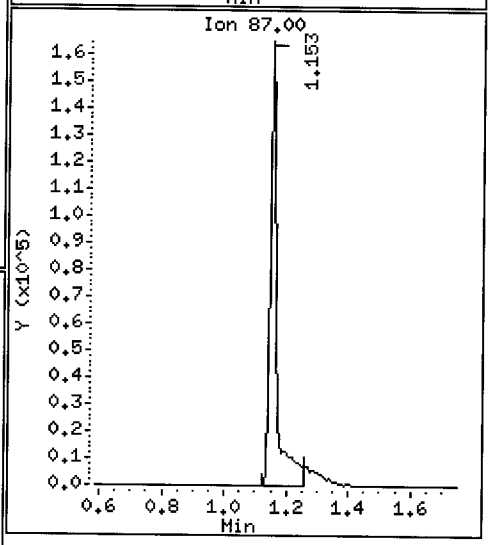
1 Dichlorodifluoromethane

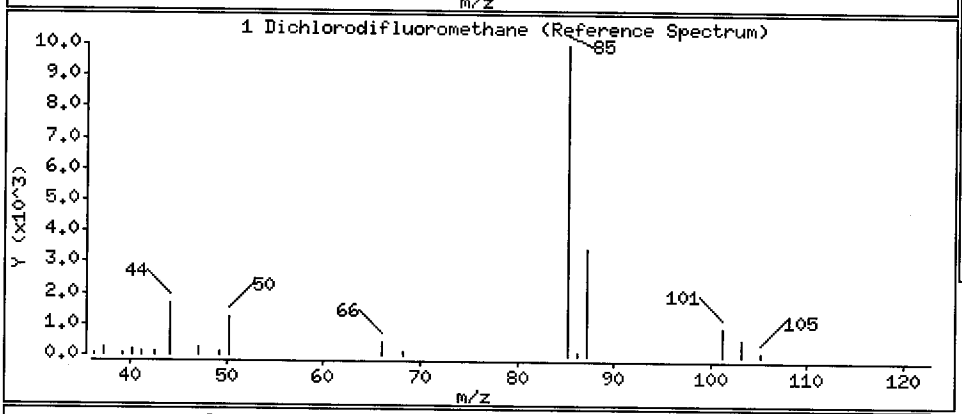
Concentration: 40.400 ug/Kg

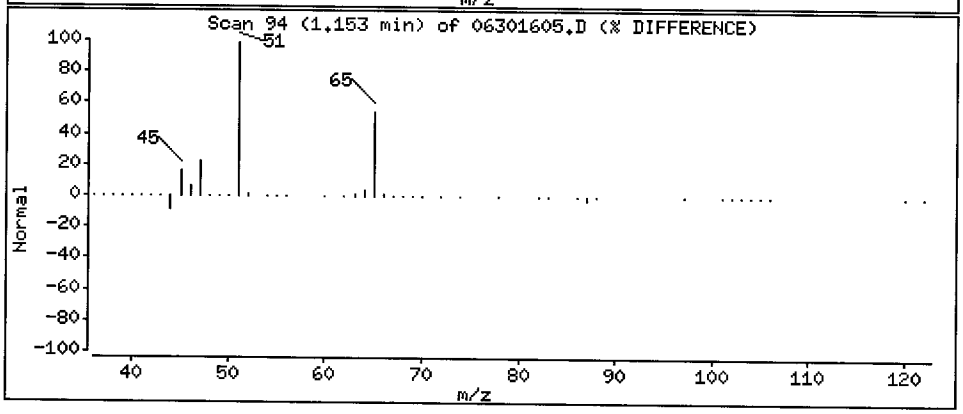












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

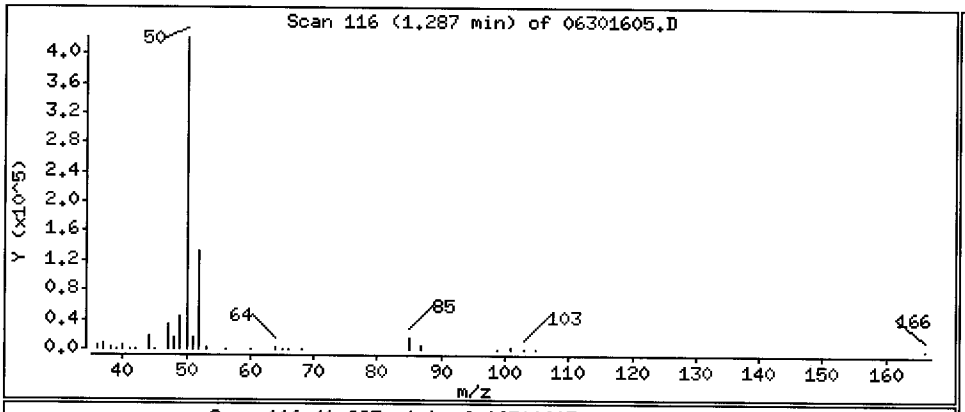
Operator: PB

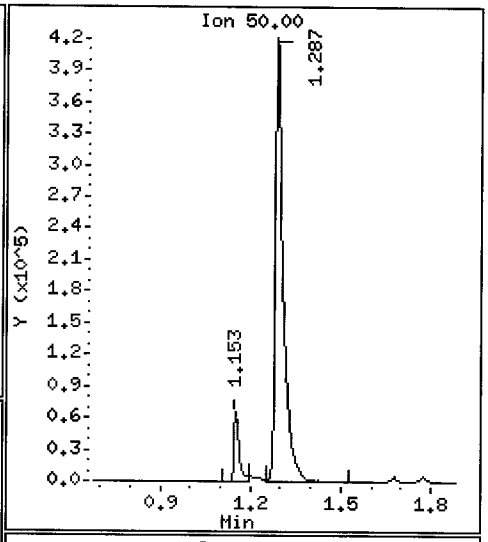
Column phase: RTXVMS

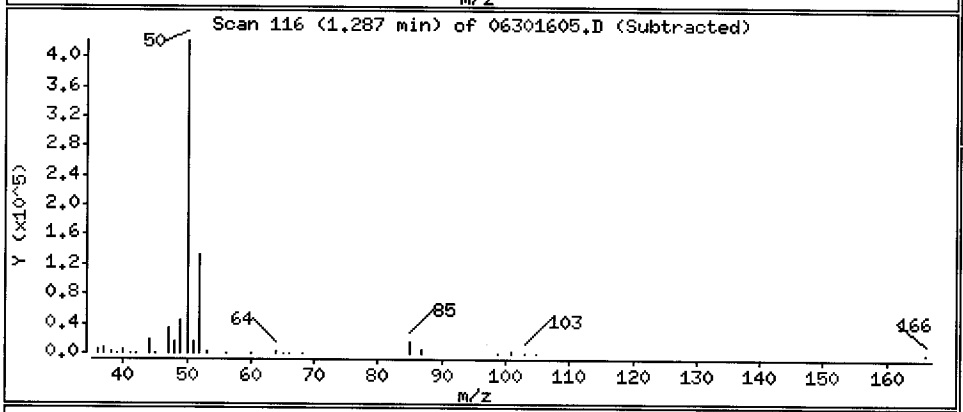
Column diameter: 0.18

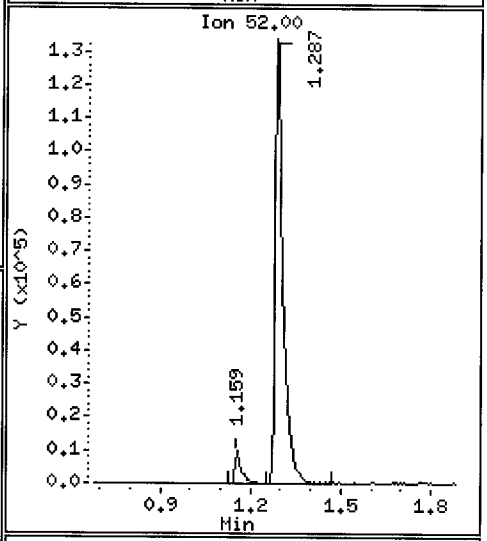
2 Chloromethane

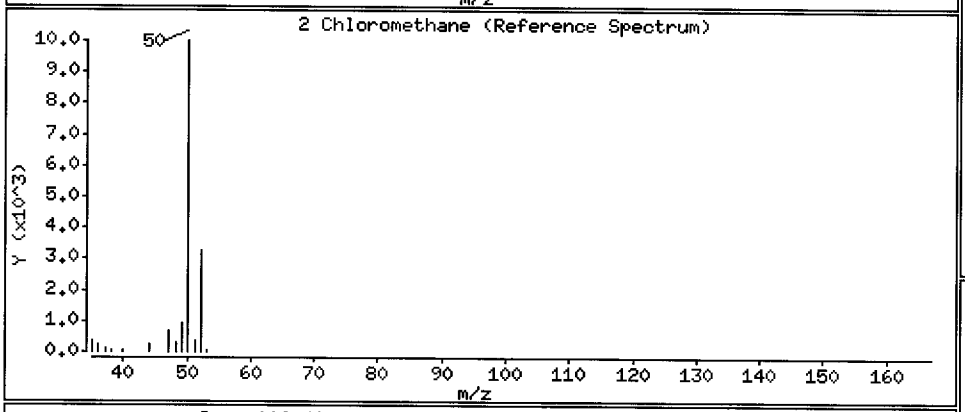
Concentration: 32.336 ug/Kg

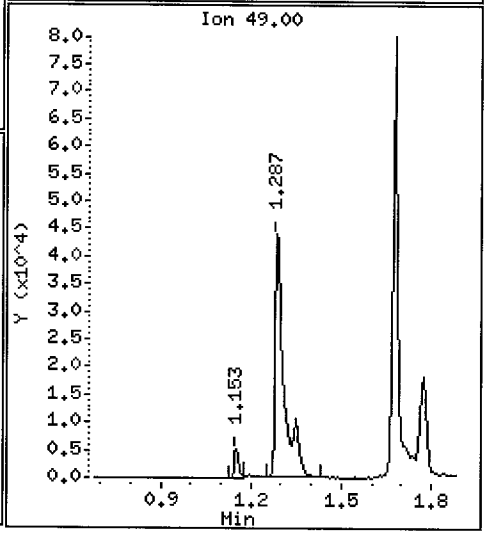


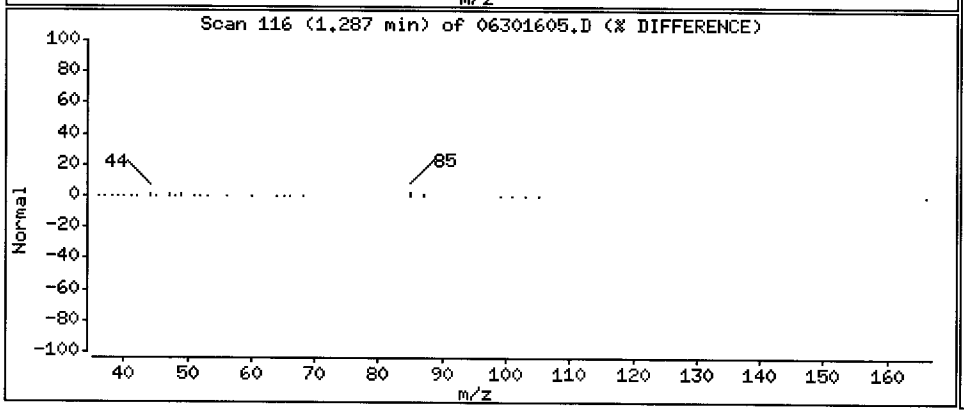












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

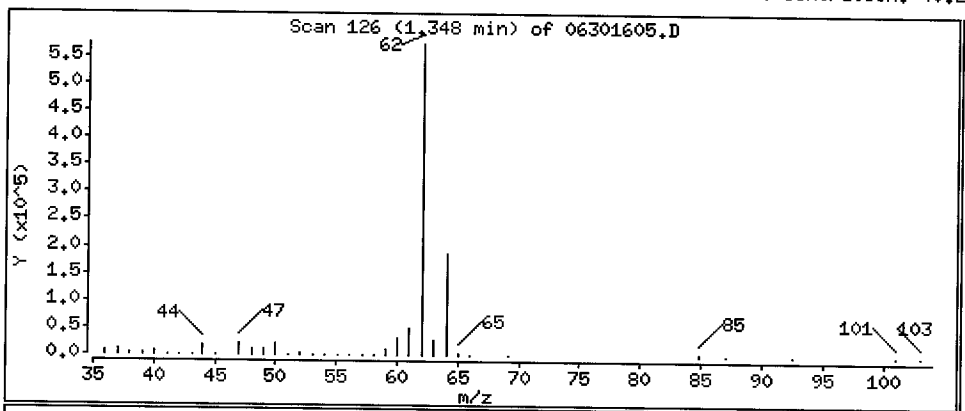
Operator: PB

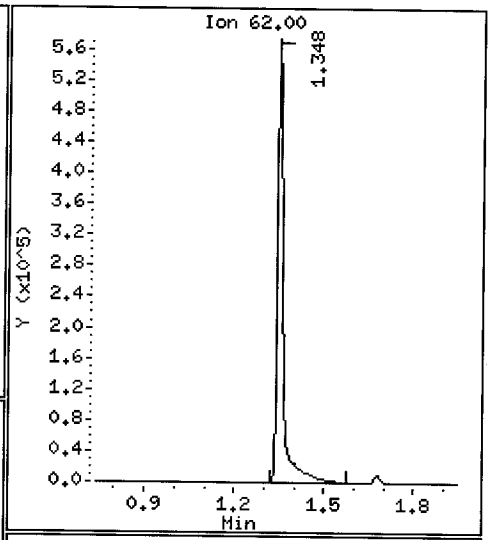
Column phase: RTXVMS

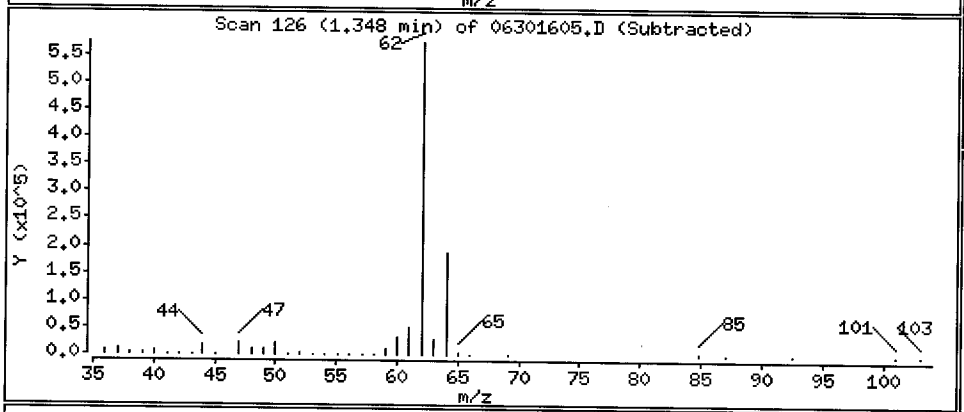
Column diameter: 0.18

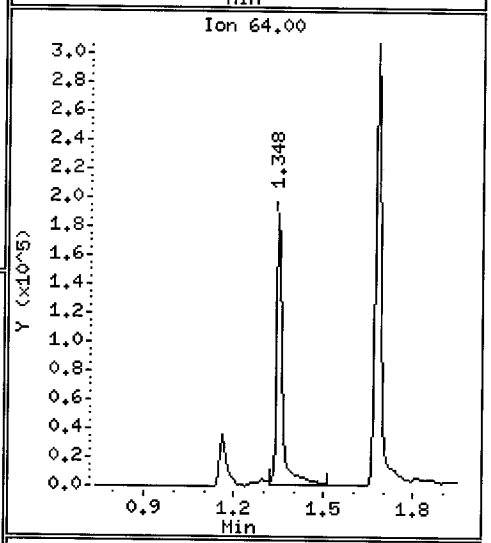
3 Vinyl Chloride

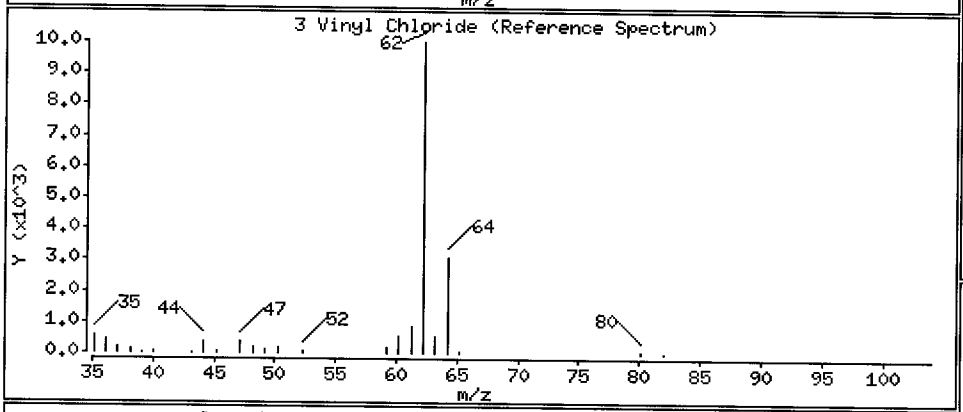
Concentration: 40.246 ug/Kg

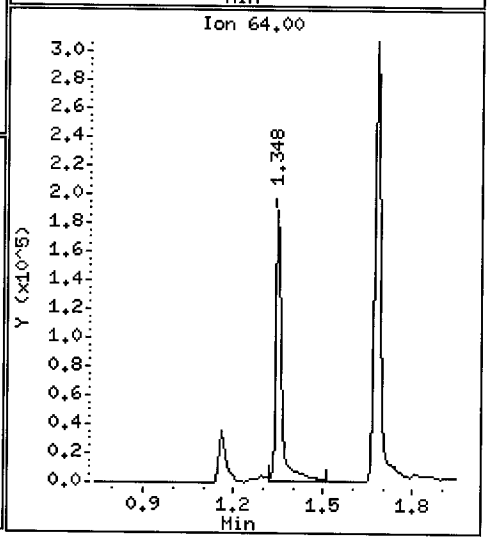


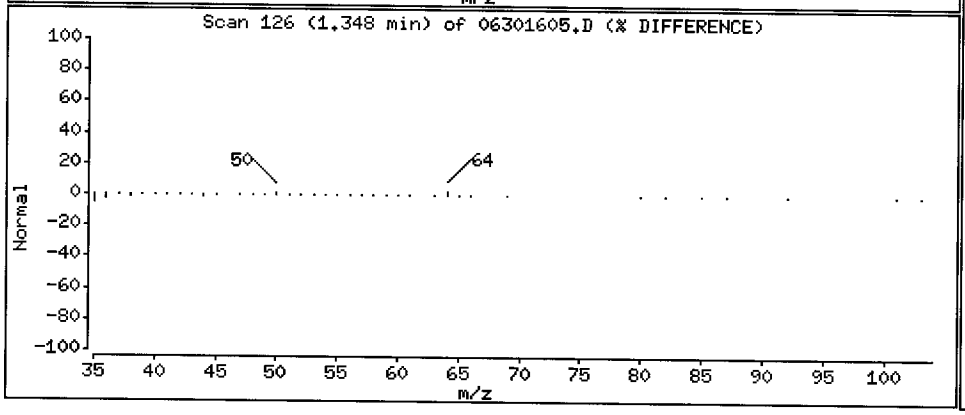












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

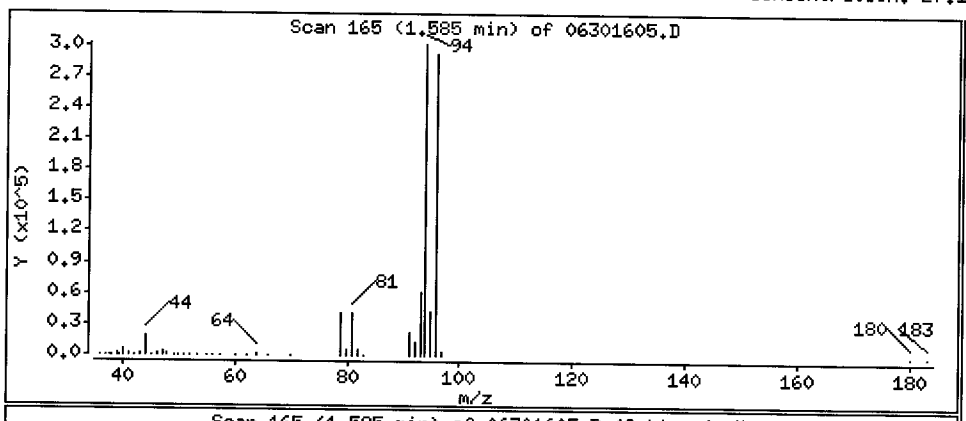
Operator: PB

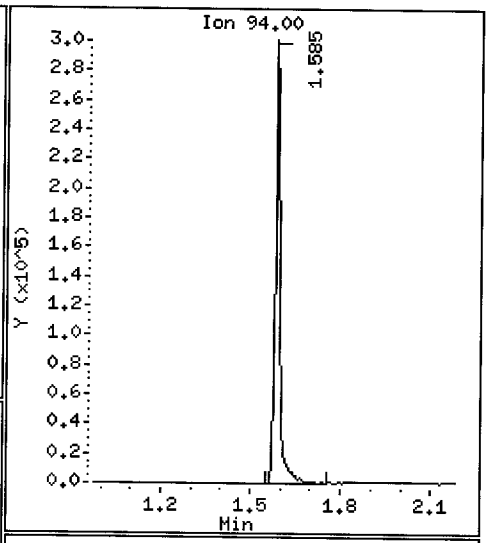
Column phase: RTXVMS

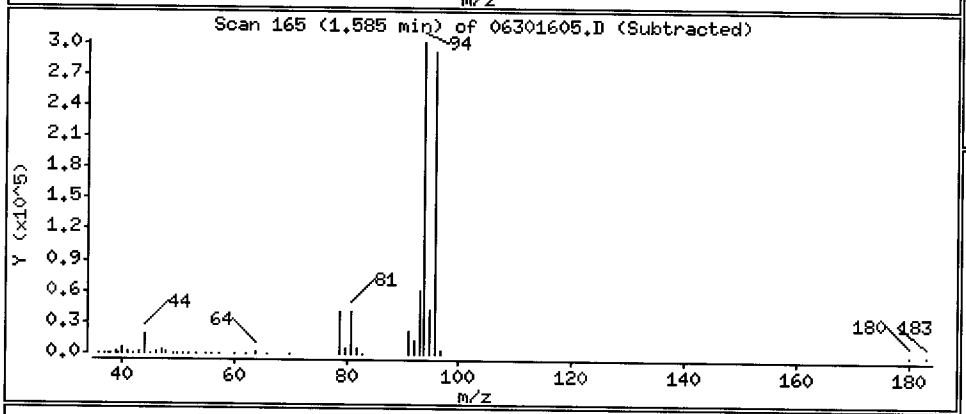
Column diameter: 0.18

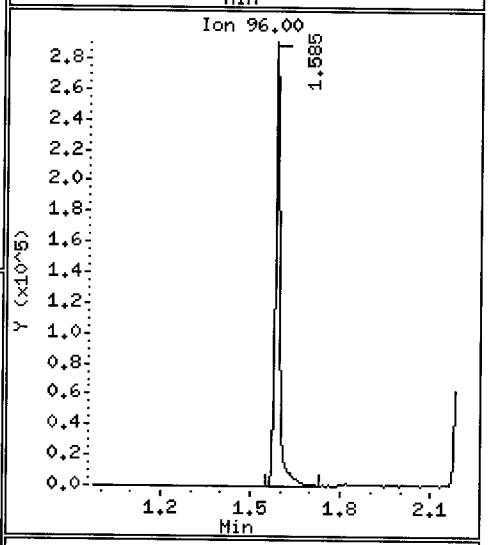
4 Bromomethane

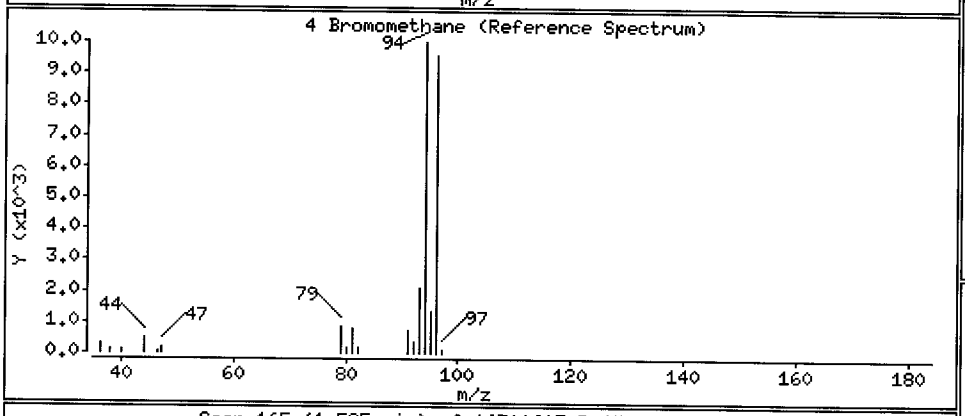
Concentration: 27.112 ug/Kg

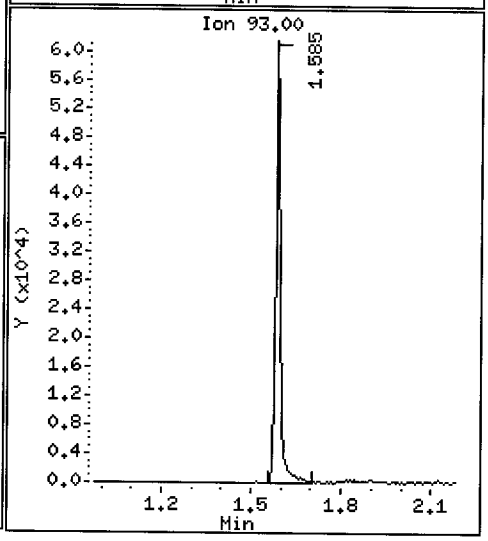


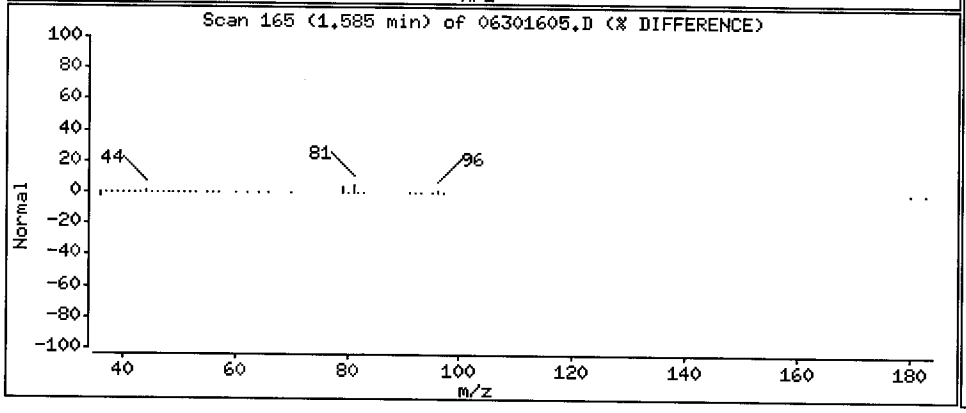












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

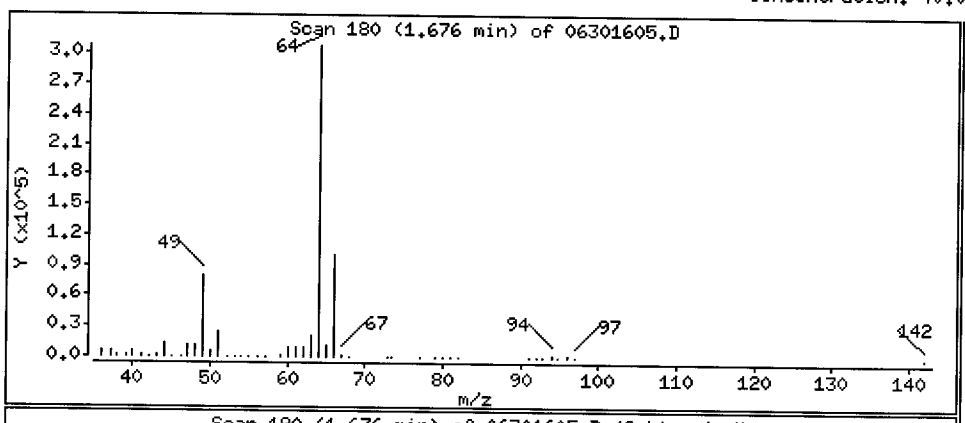
Operator: PB

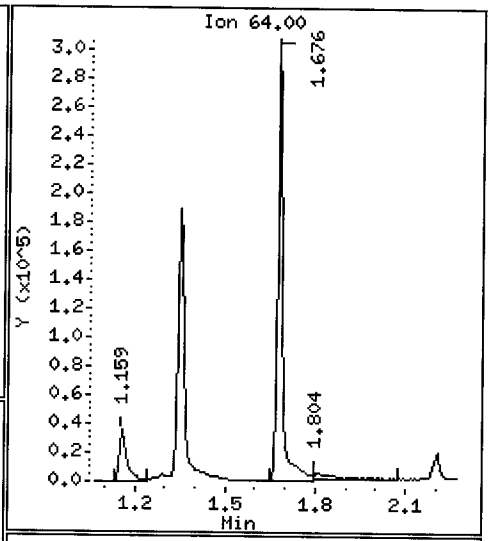
Column phase: RTXVMS

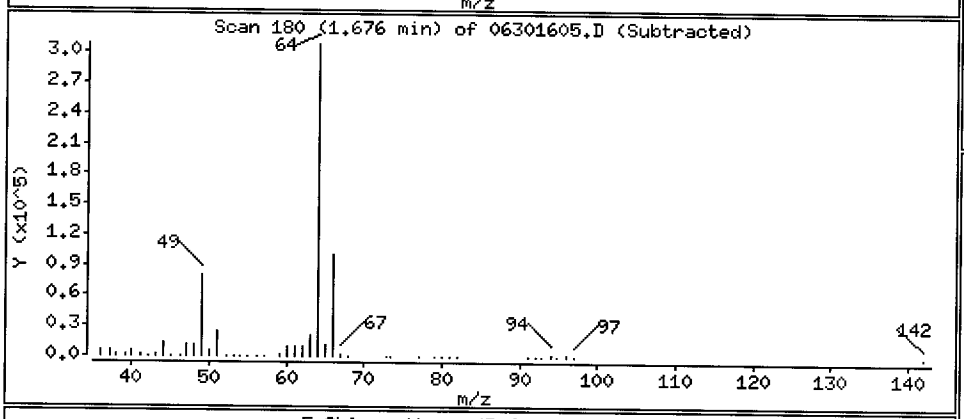
Column diameter: 0.18

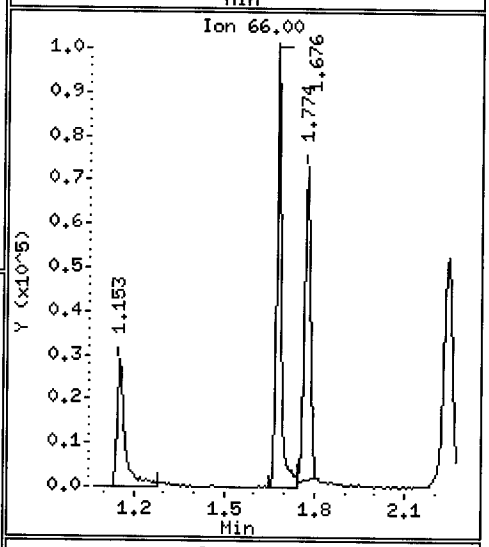
5 Chloroethane

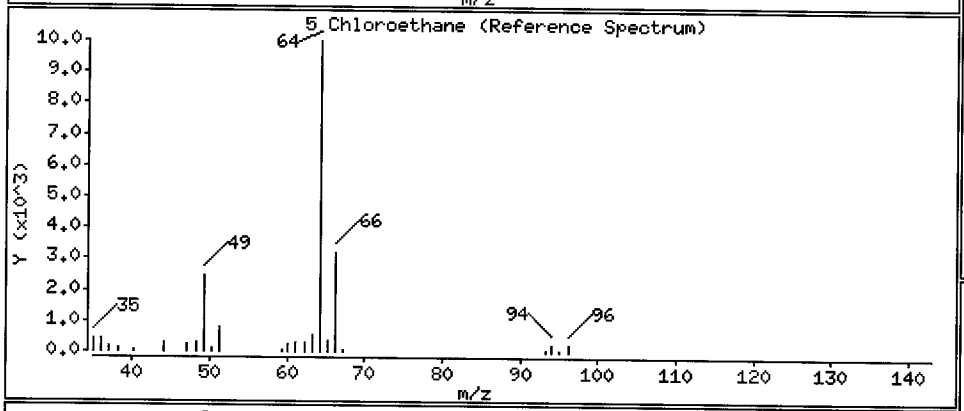
Concentration: 40.063 ug/Kg

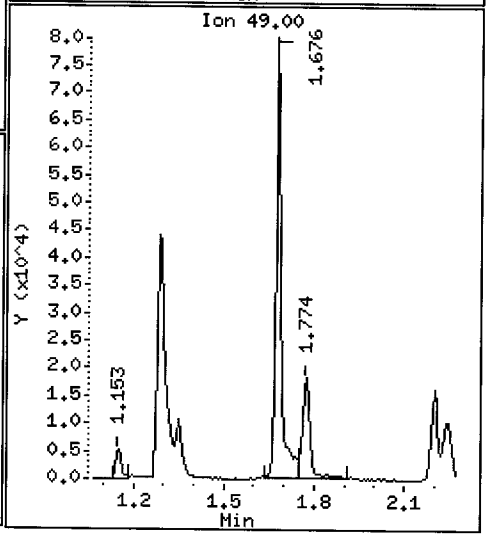


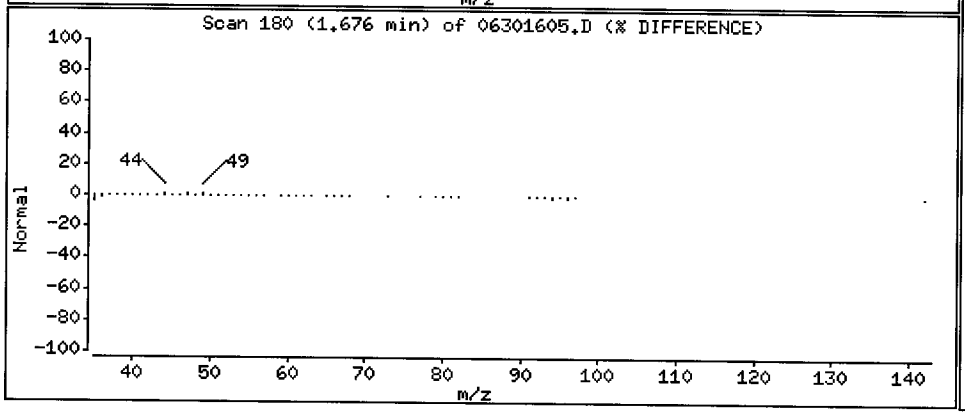












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

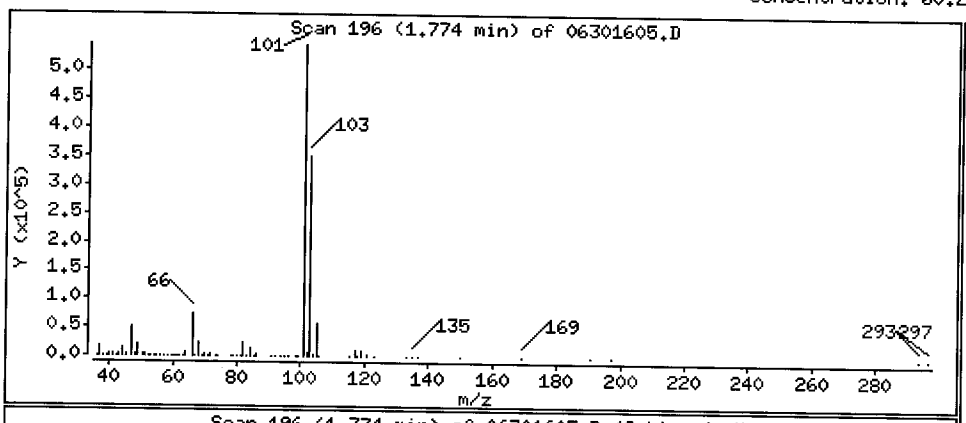
Operator: PB

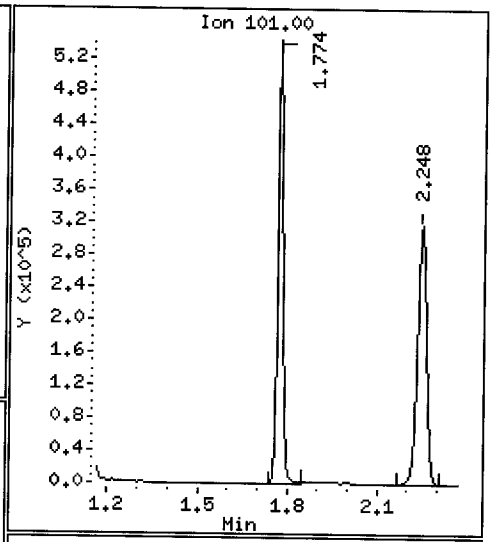
Column phase: RTXVMS

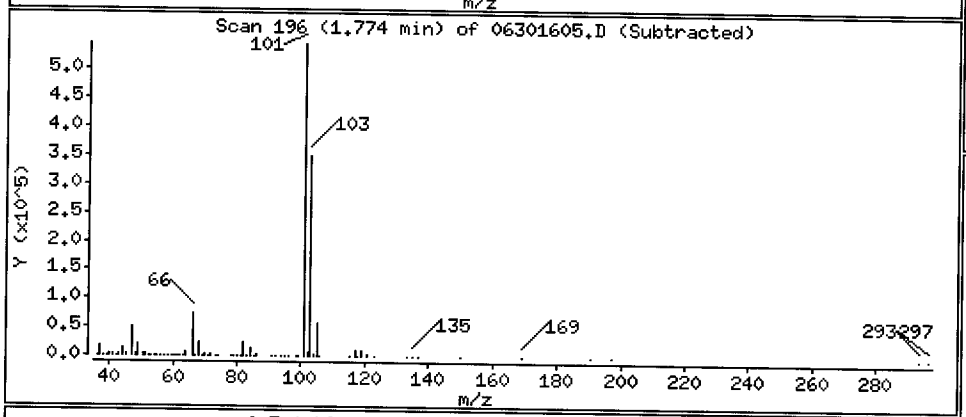
Column diameter: 0.18

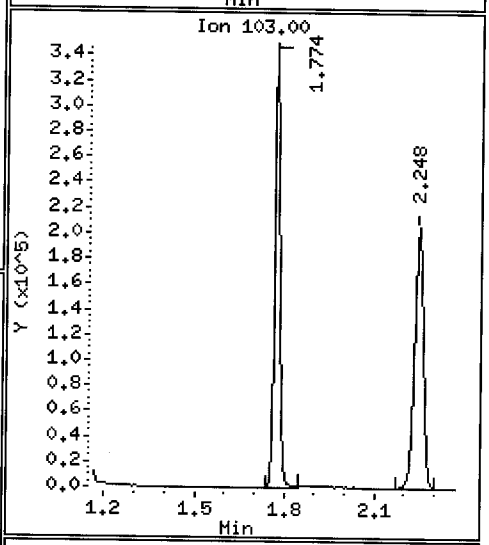
6 Trichlorofluoromethane

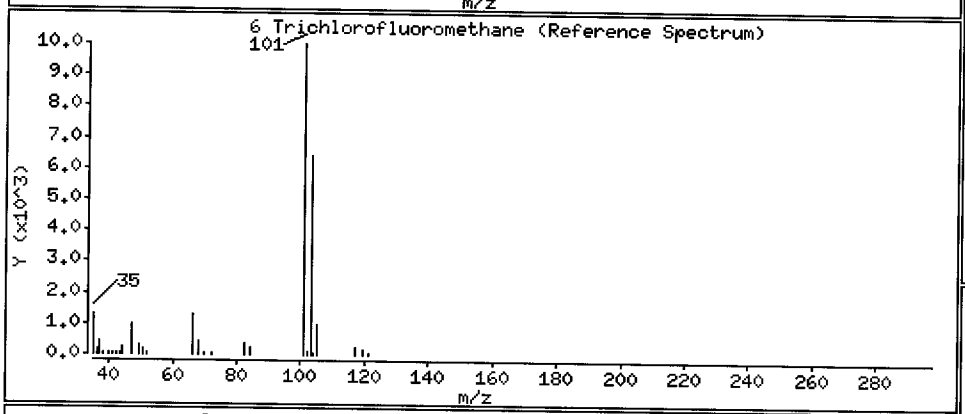
Concentration: 60.218 ug/Kg

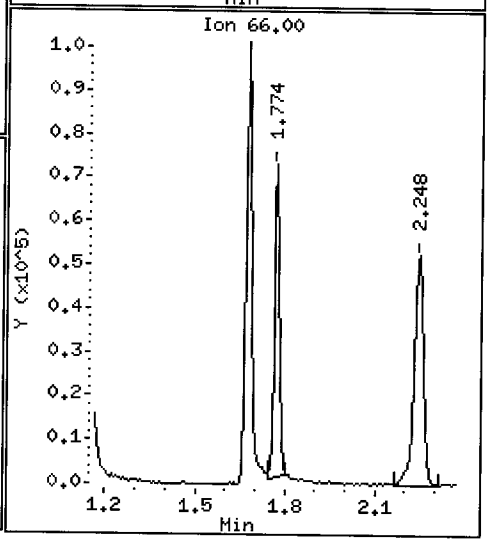


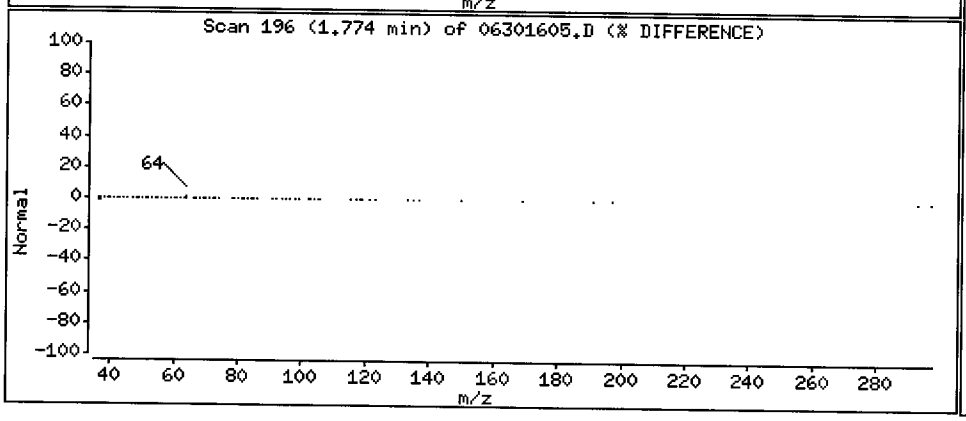












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

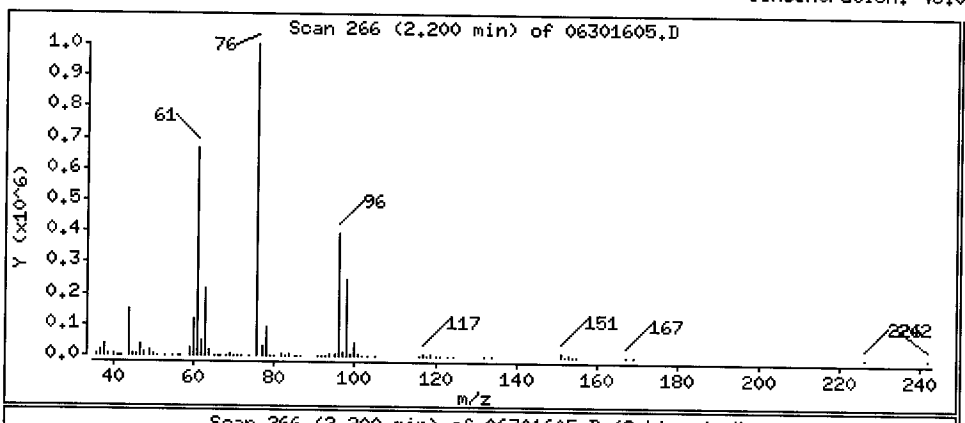
Operator: PB

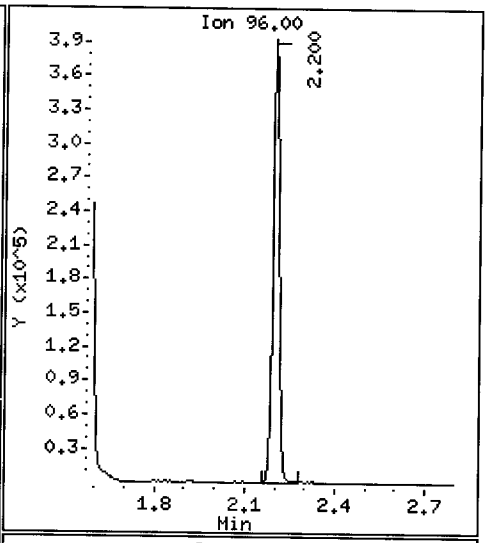
Column phase: RTXVMS

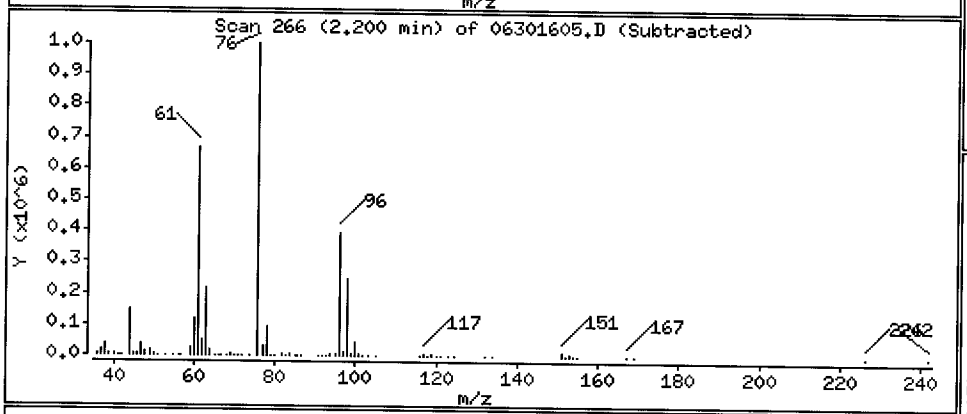
Column diameter: 0.18

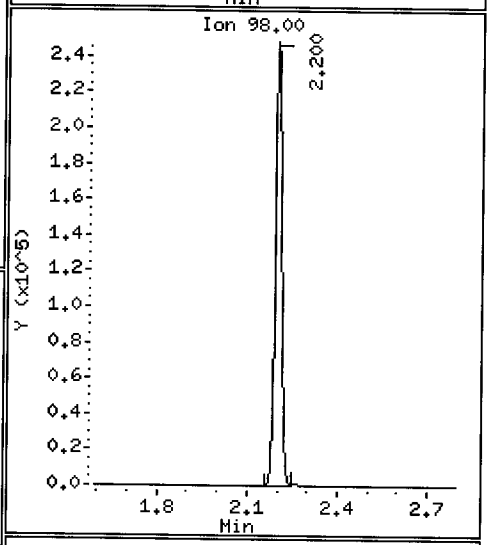
7 1,1-Dichloroethene

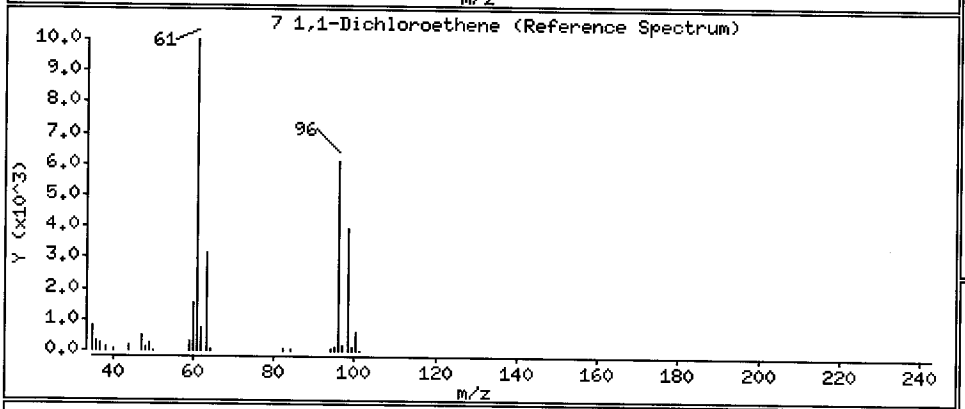
Concentration: 45.068 ug/Kg

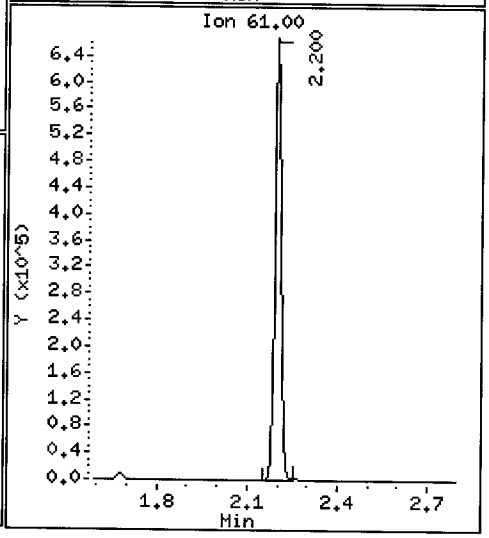


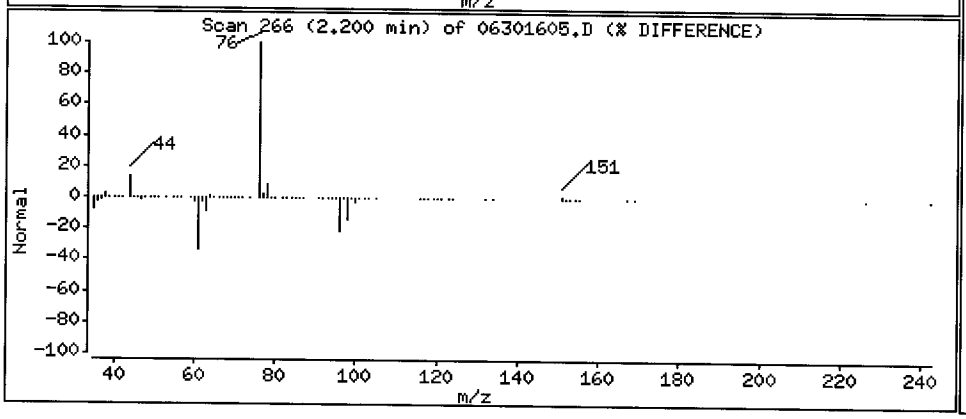












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

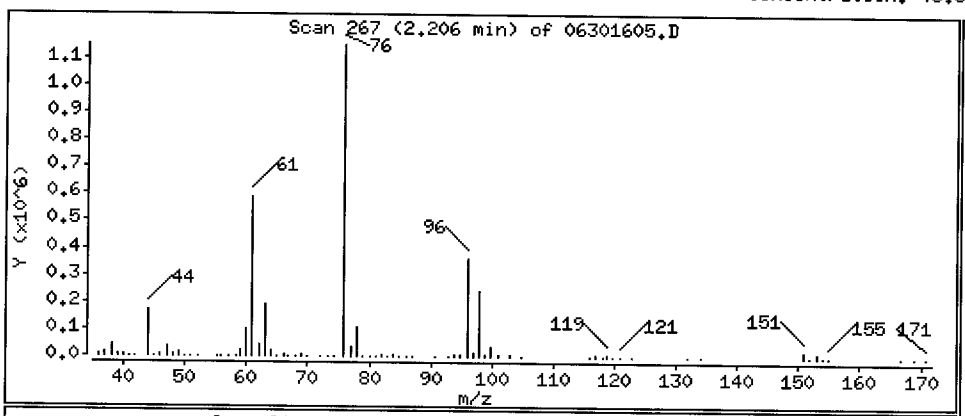
Operator: PB

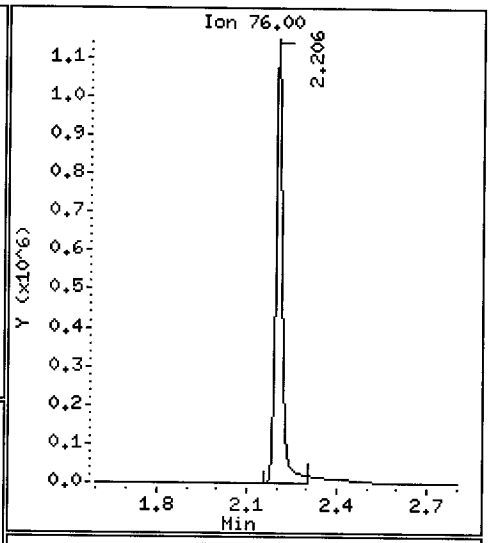
Column phase: RTXVMS

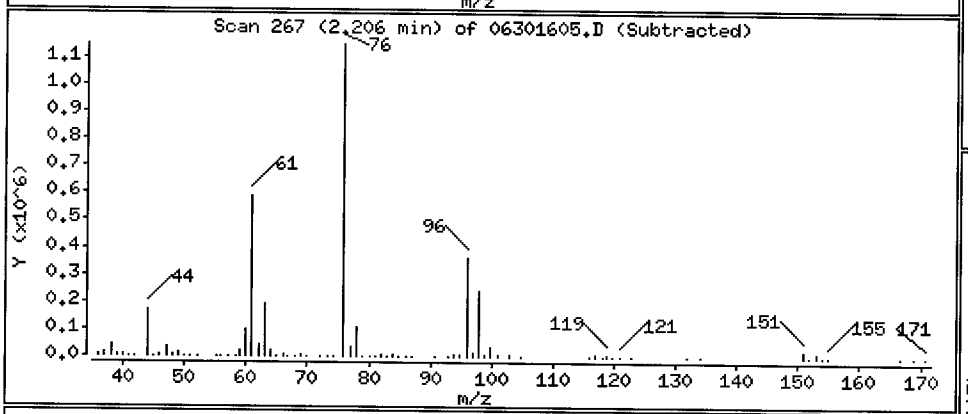
Column diameter: 0.18

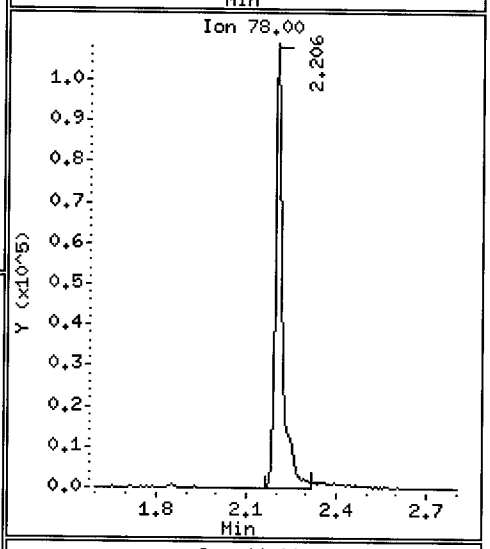
8 Carbon Disulfide

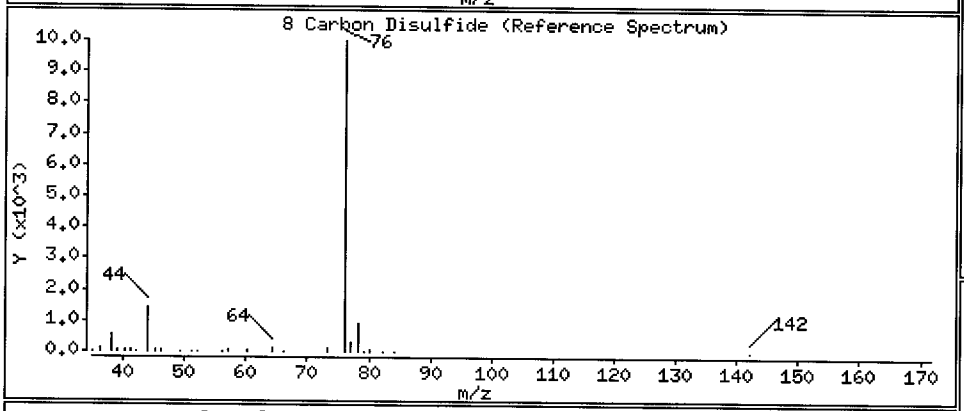
Concentration: 43.698 ug/Kg

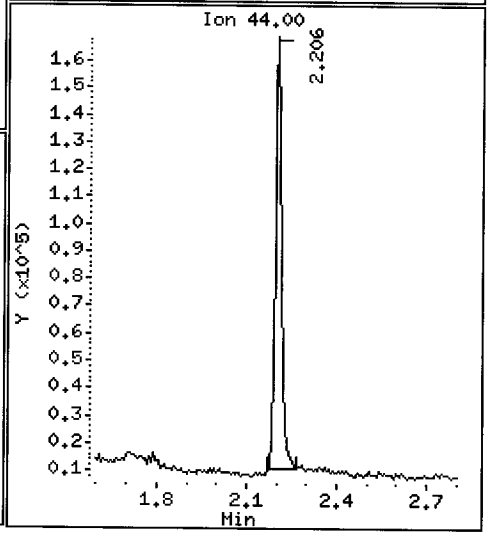


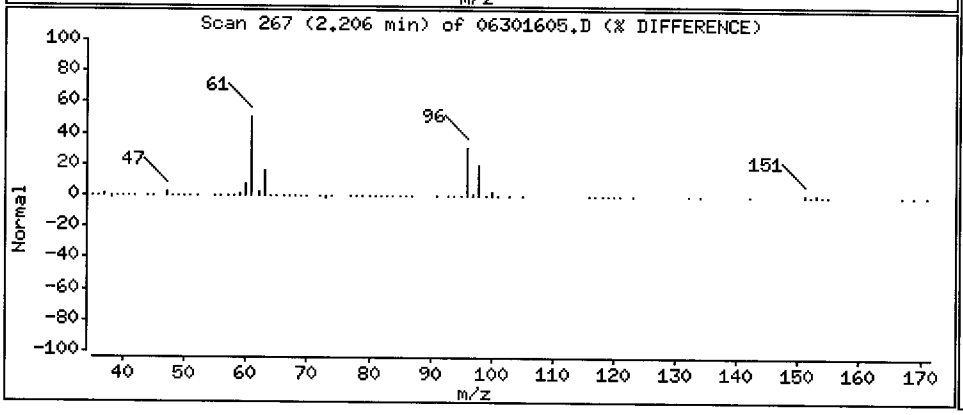












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

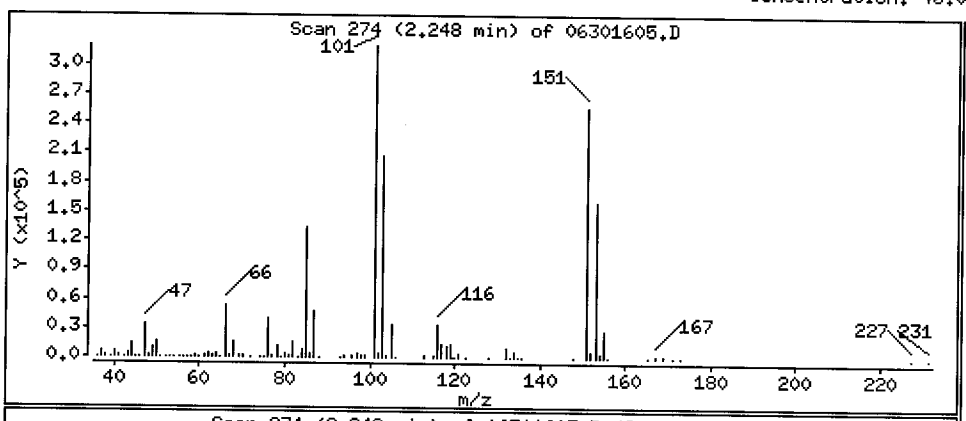
Operator: PB

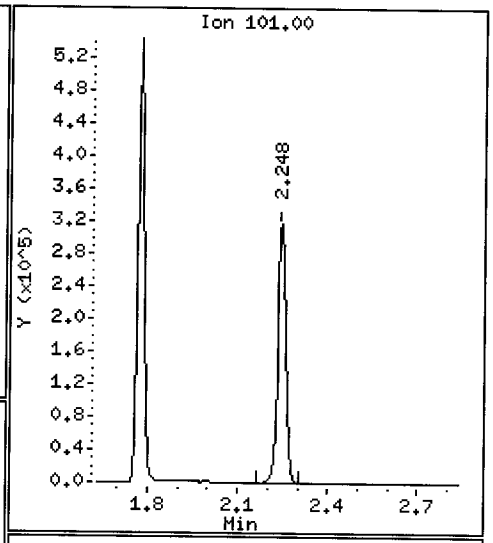
Column phase: RTXVMS

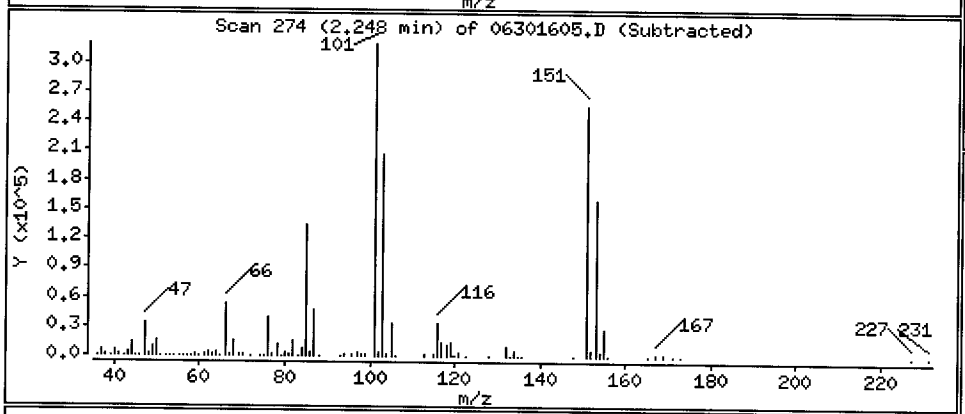
Column diameter: 0.18

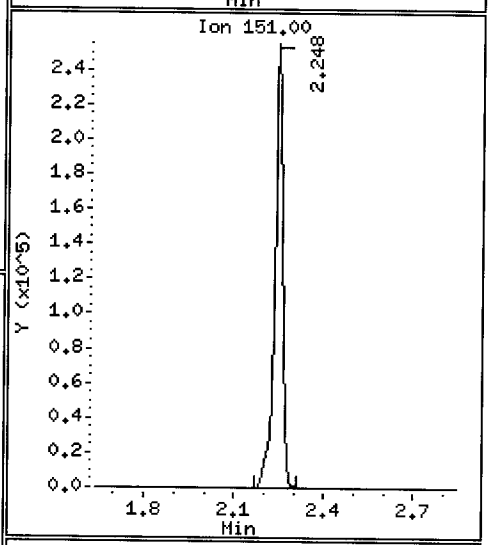
9 112Trichloro122Trifluoroethane

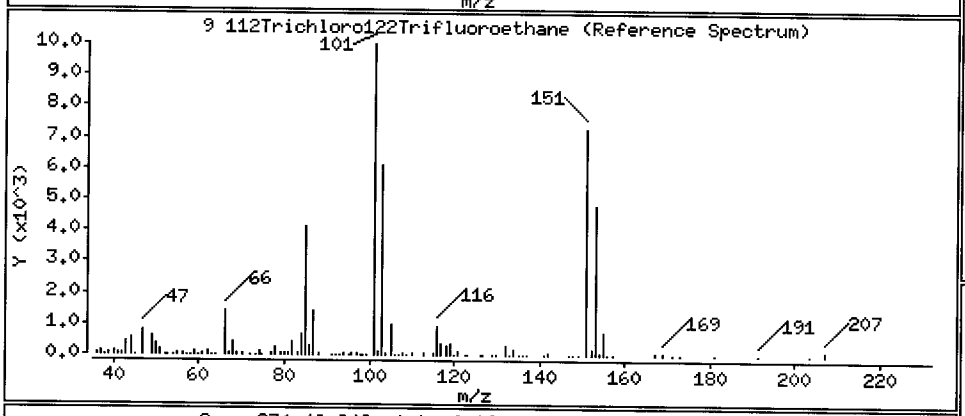
Concentration: 46.066 ug/Kg

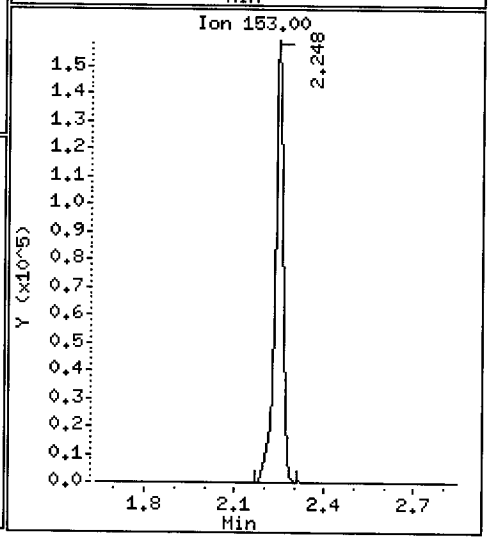


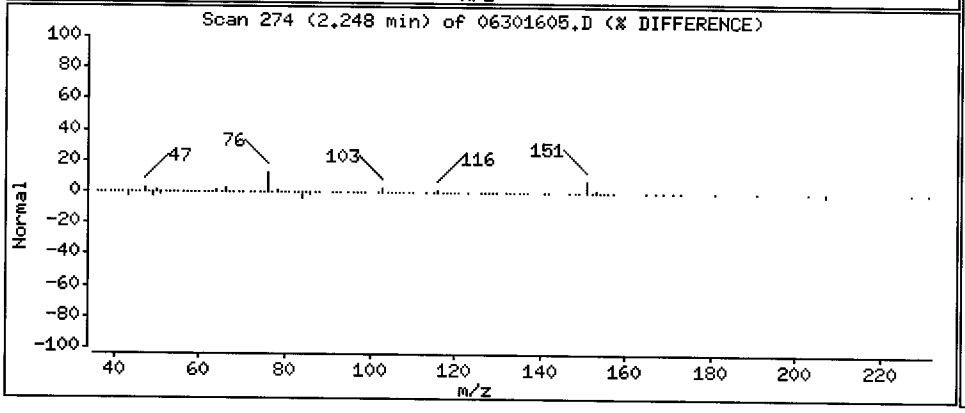












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

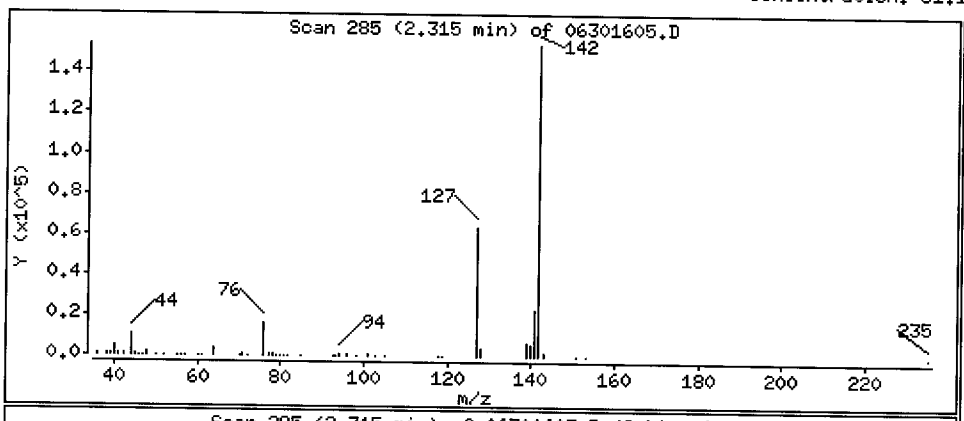
Operator: PB

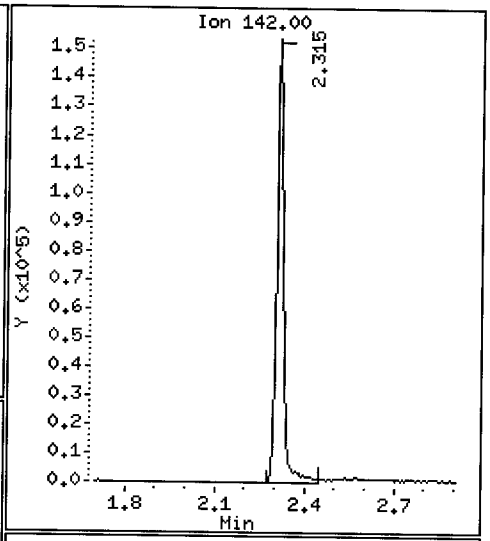
Column phase: RTXVMS

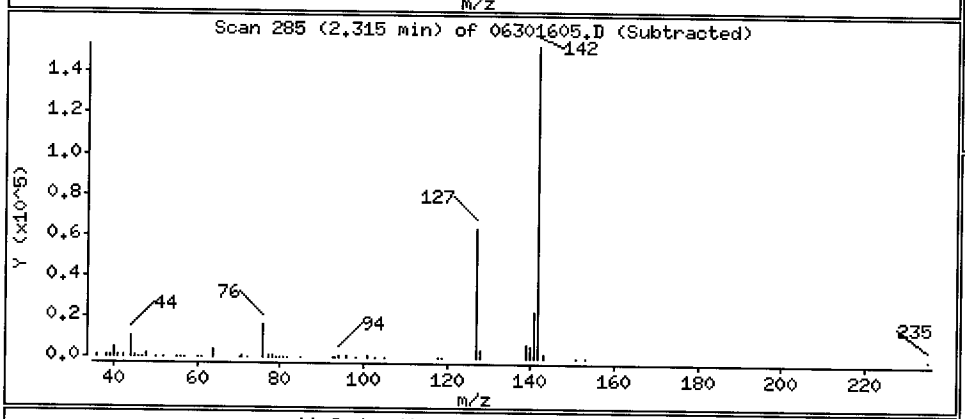
Column diameter: 0.18

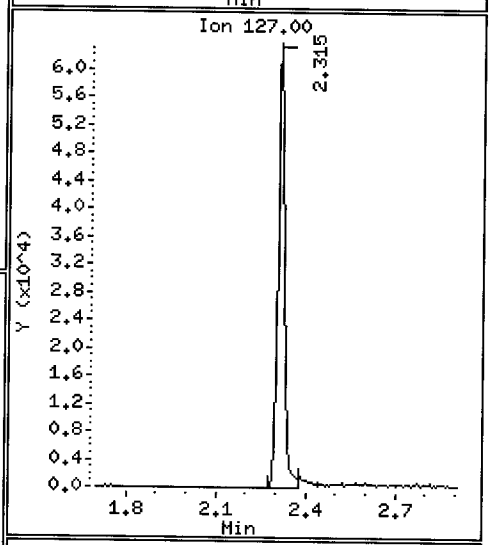
10 Iodomethane

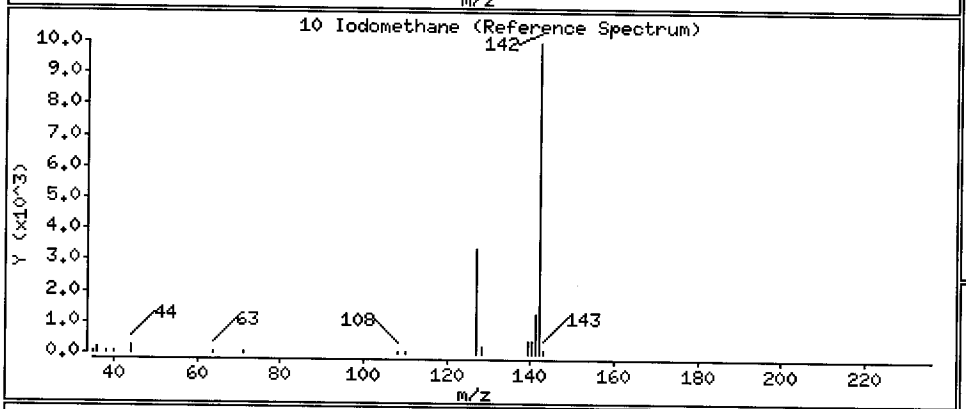
Concentration: 31.127 ug/Kg

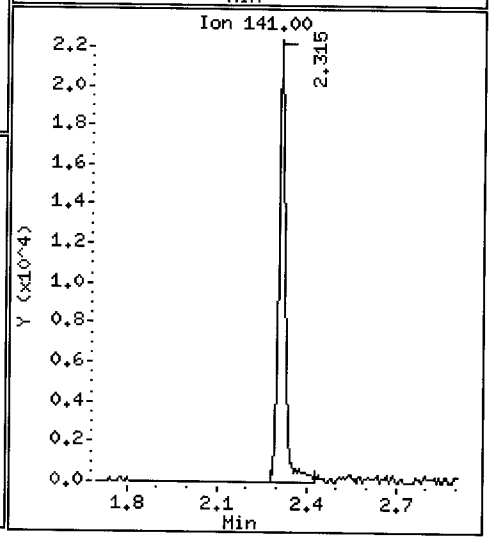


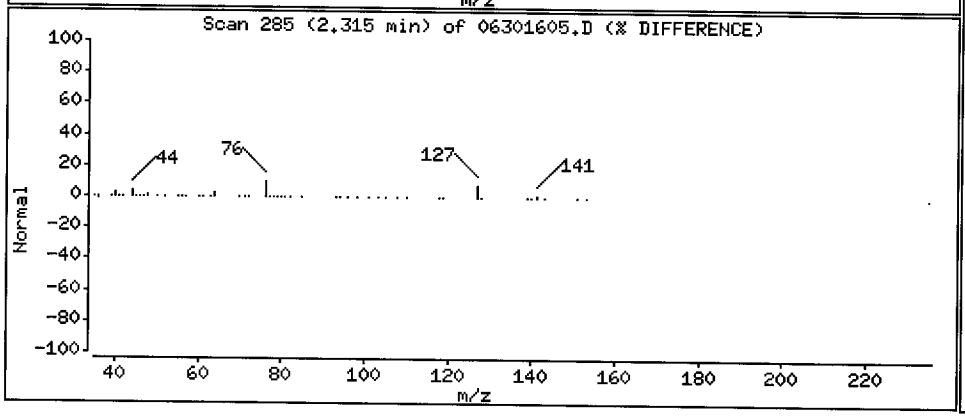












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

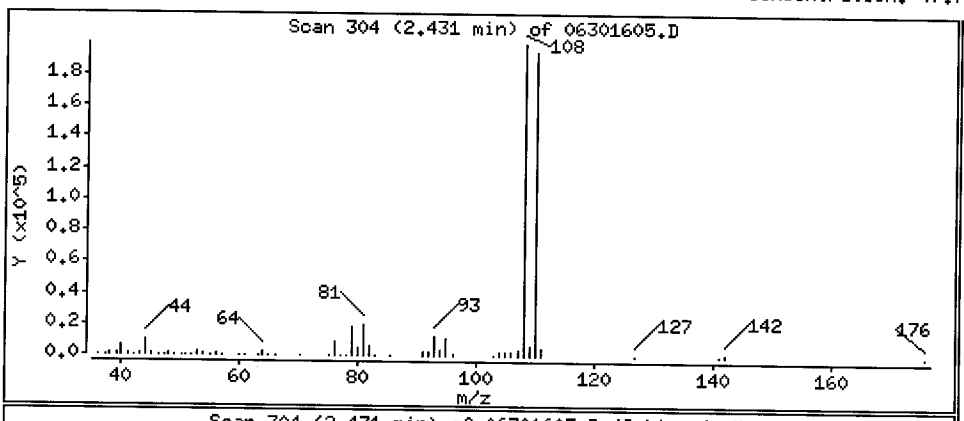
Operator: PB

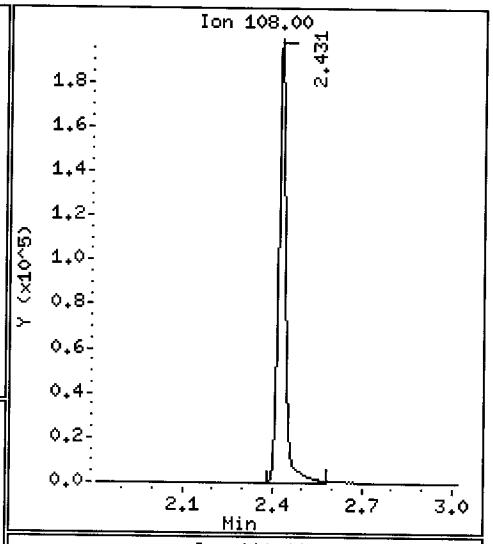
Column phase: RTXVMS

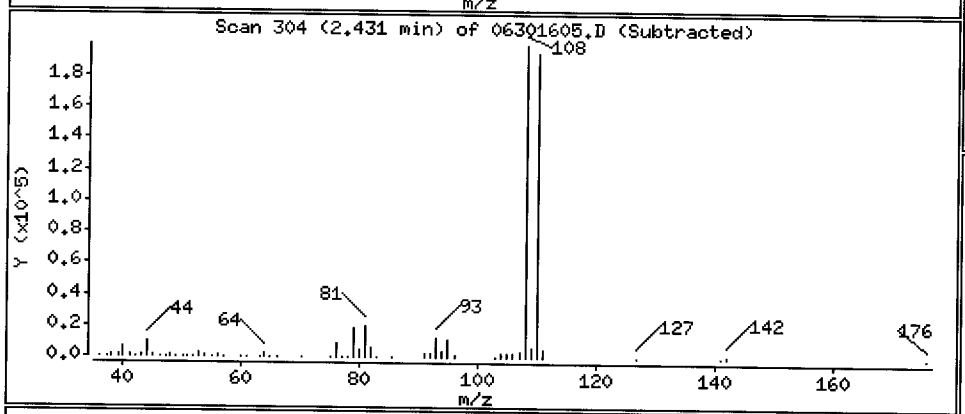
Column diameter: 0.18

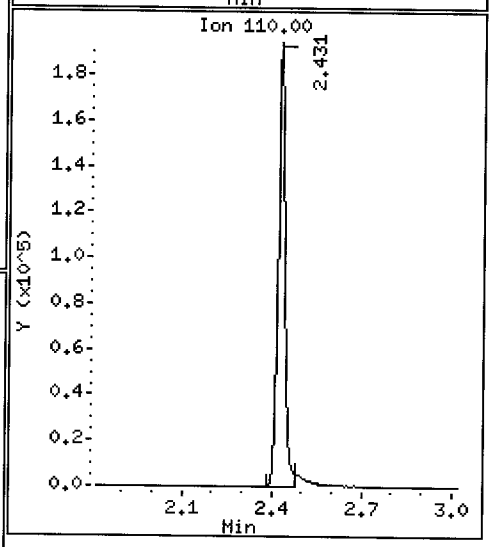
11 Bromoethane

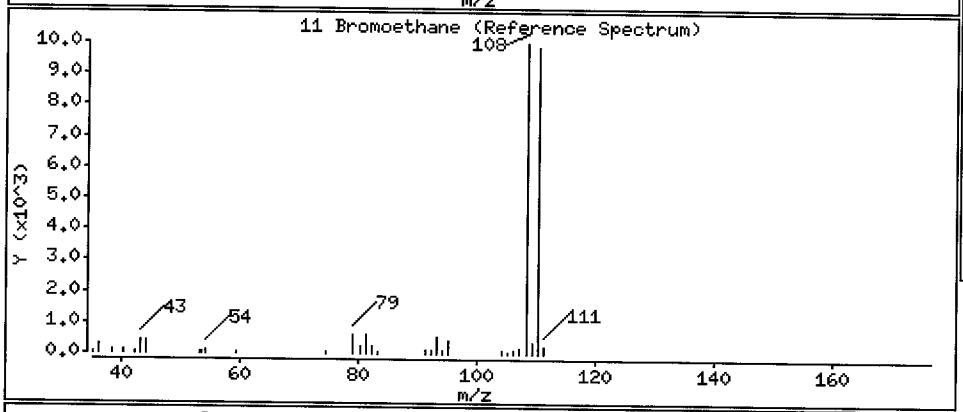
Concentration: 47.755 ug/Kg

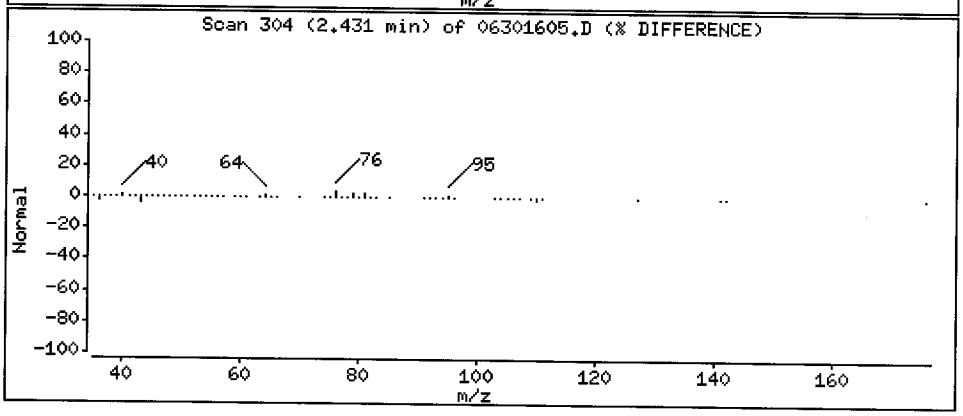












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

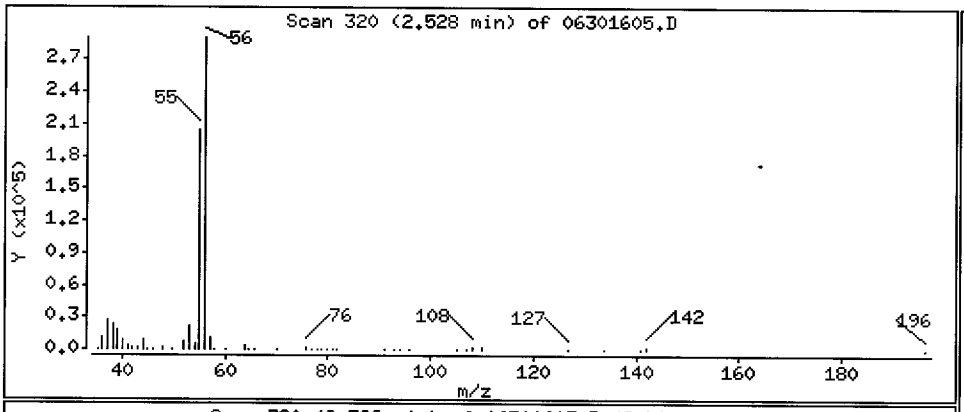
Operator: PB

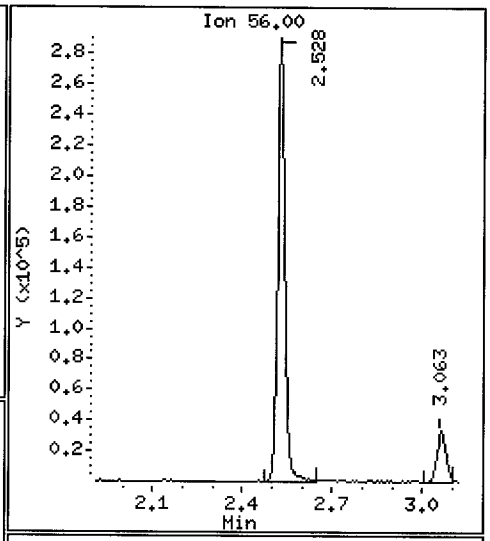
Column phase: RTXVMS

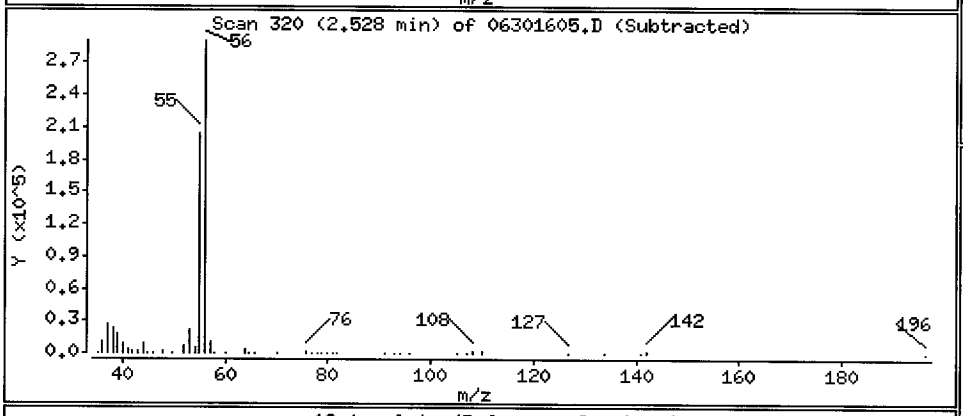
Column diameter: 0.18

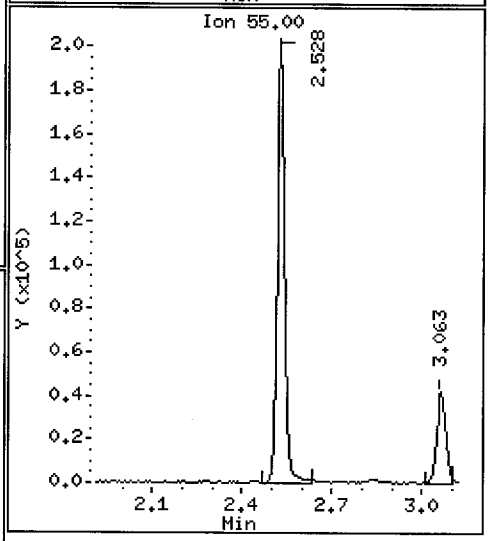
12 Acrolein

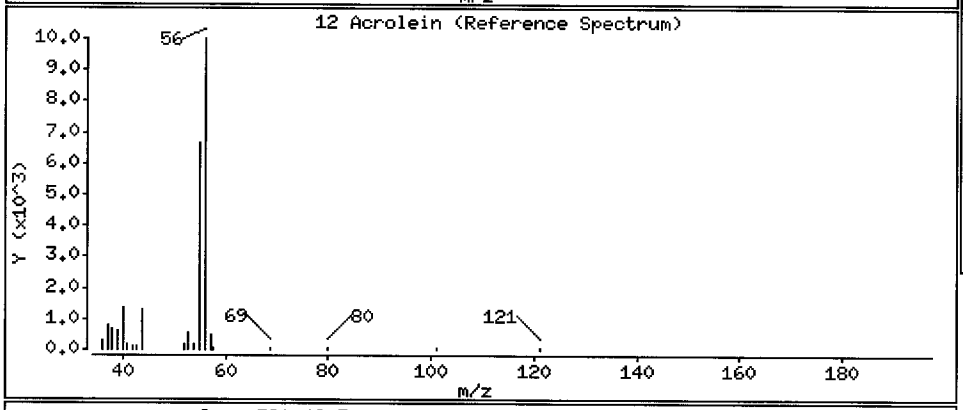
Concentration: 194.63 ug/Kg

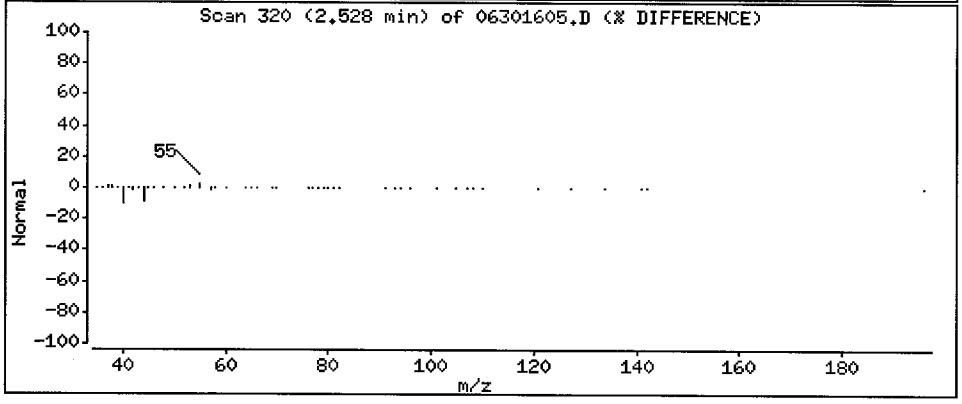












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

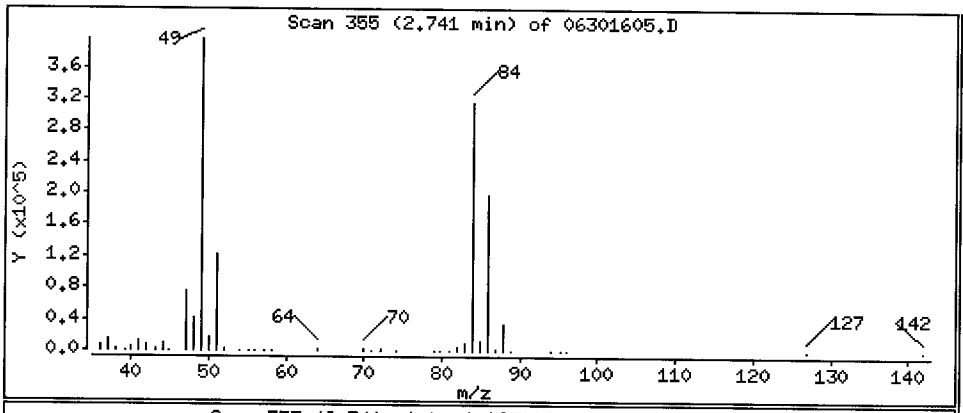
Operator: PB

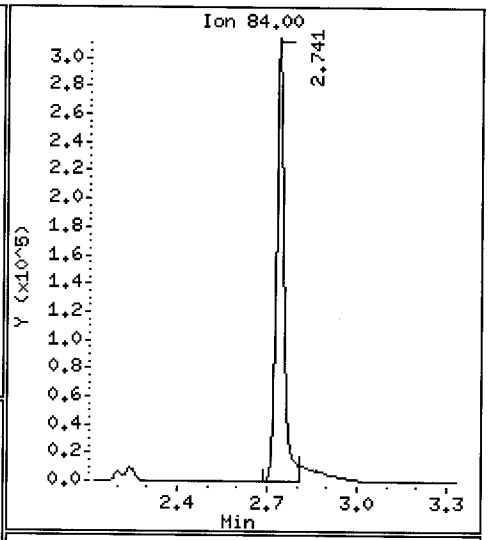
Column phase: RTXVMS

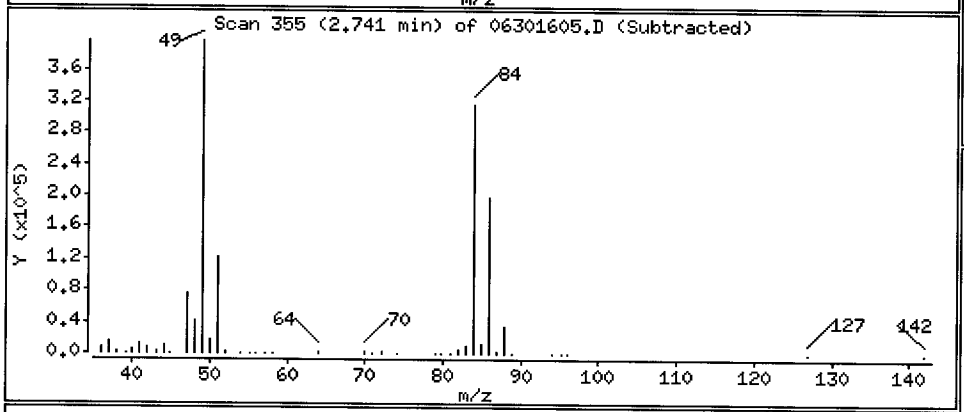
Column diameter: 0.18

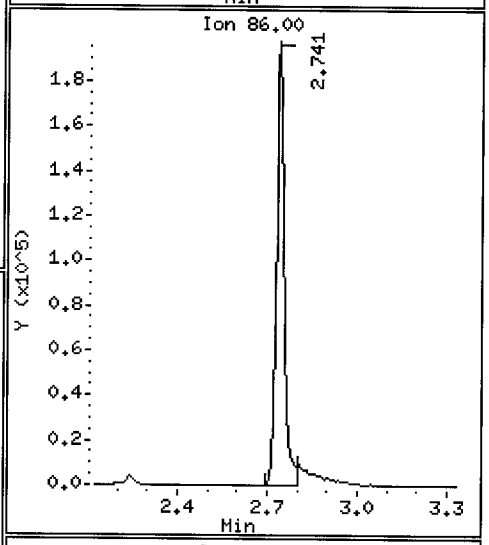
13 Methylene Chloride

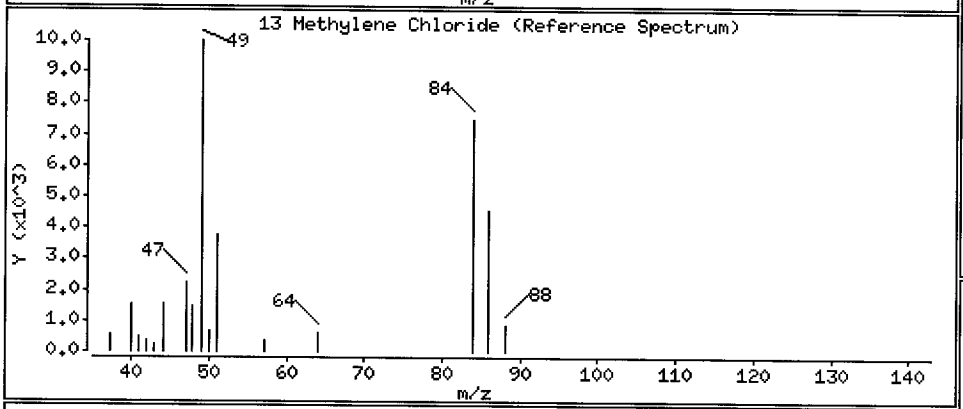
Concentration: 44.412 ug/Kg

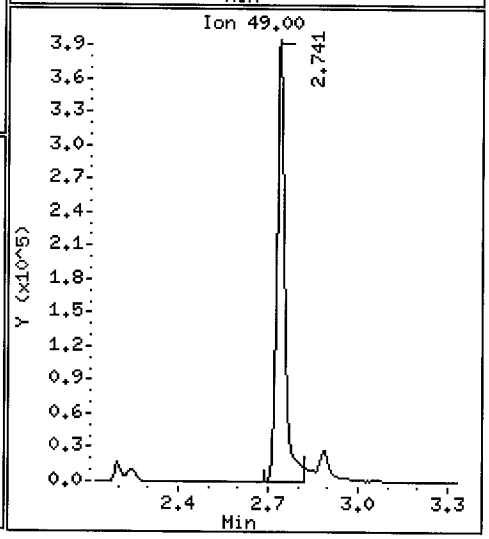


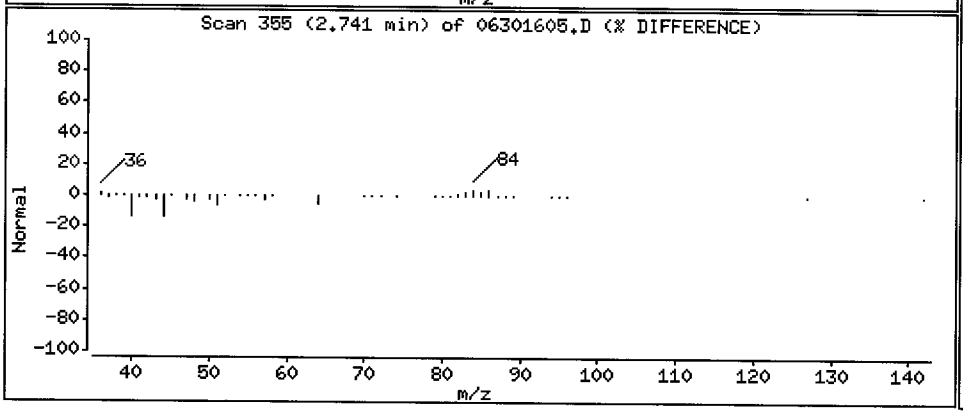












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

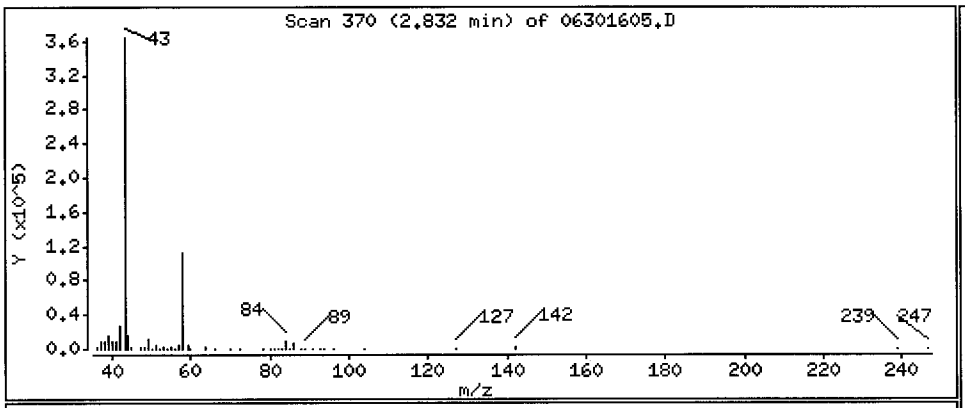
Operator: PB

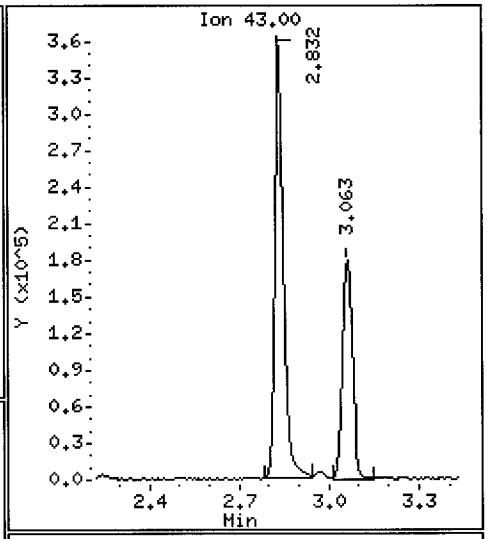
Column phase: RTXVMS

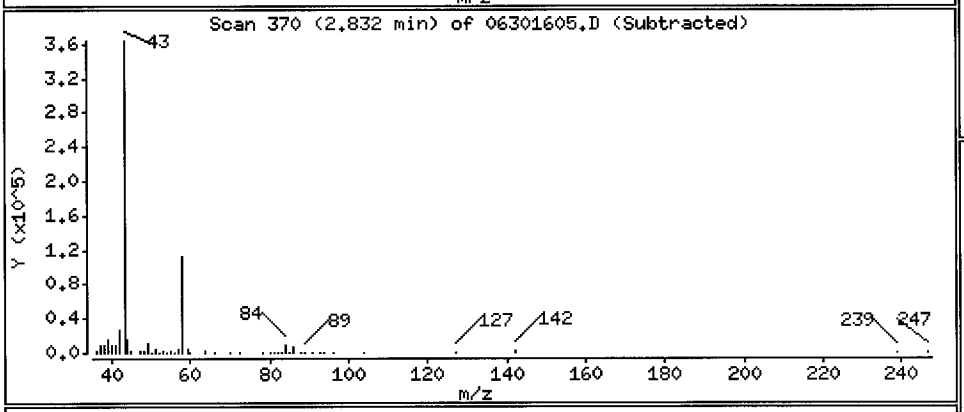
Column diameter: 0.18

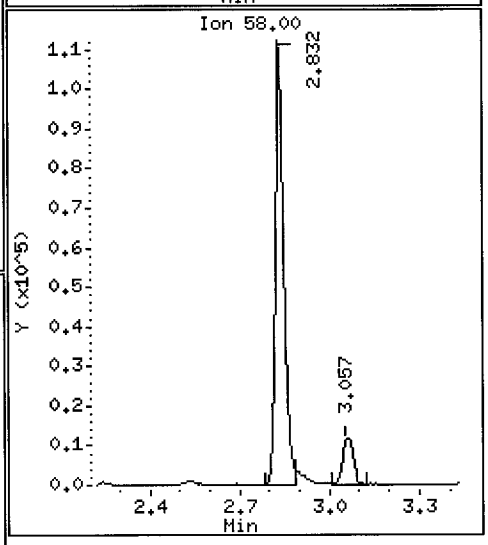
14 Acetone

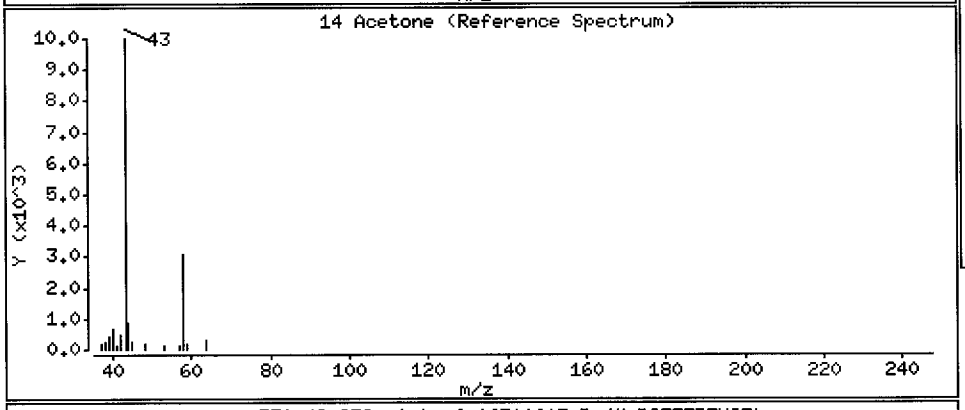
Concentration: 173.08 ug/Kg

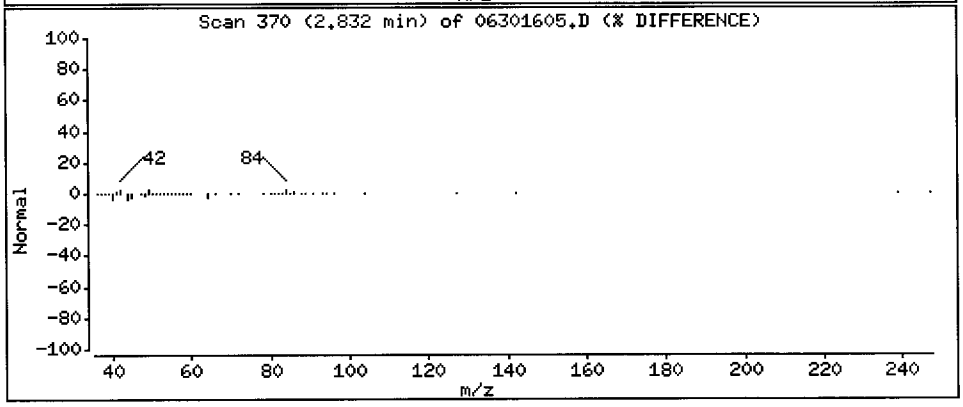












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

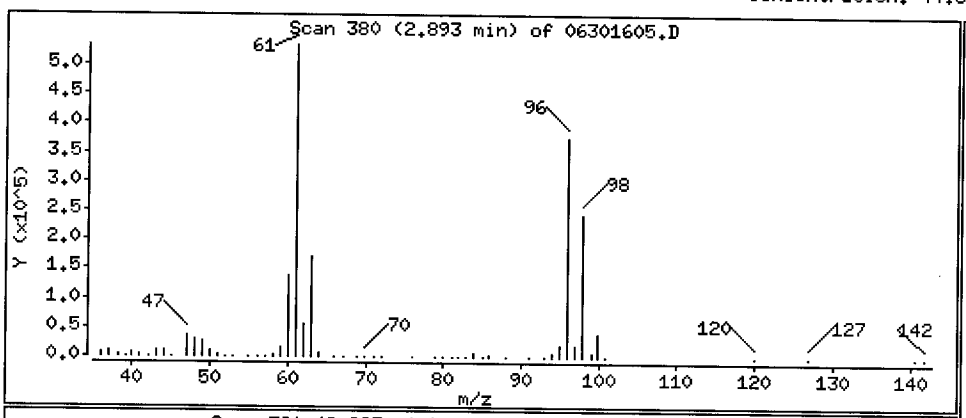
Operator: PB

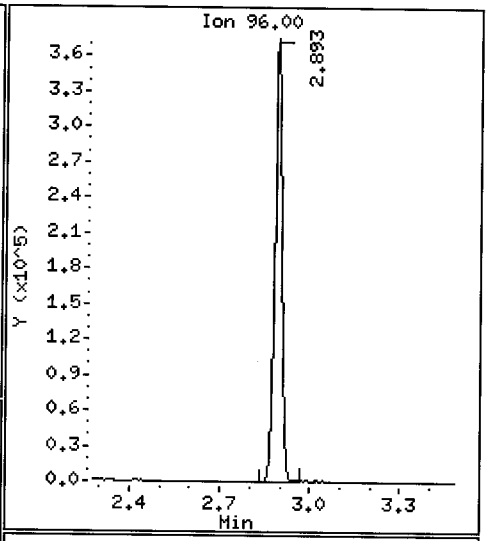
Column phase: RTXVMS

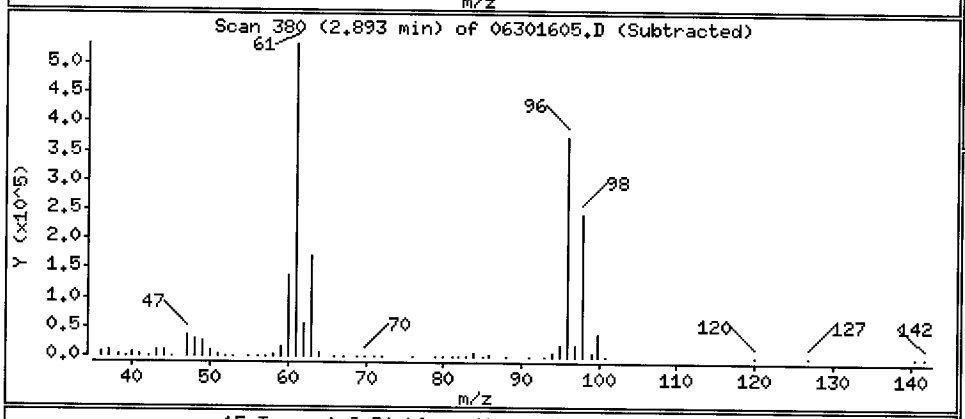
Column diameter: 0.18

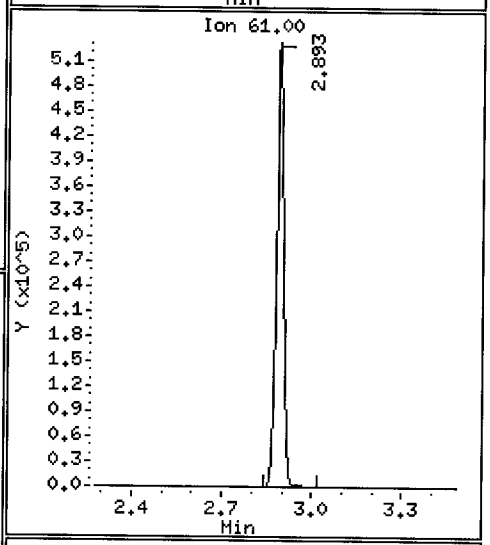
15 Trans-1,2-Dichloroethene

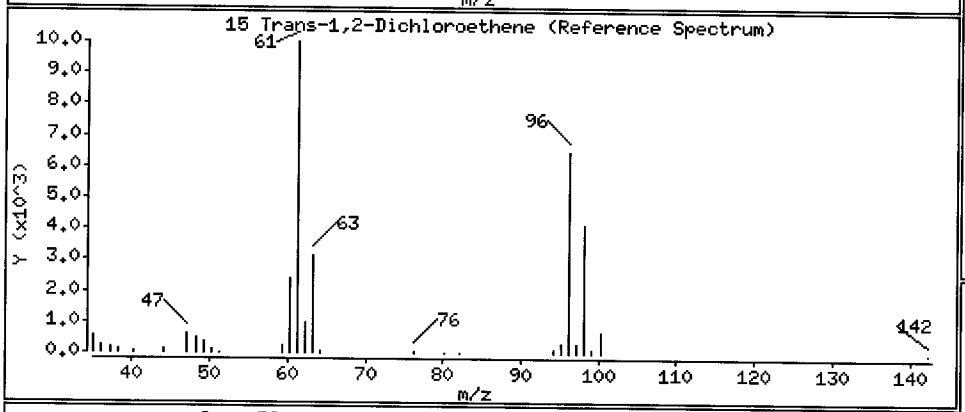
Concentration: 44.676 ug/Kg

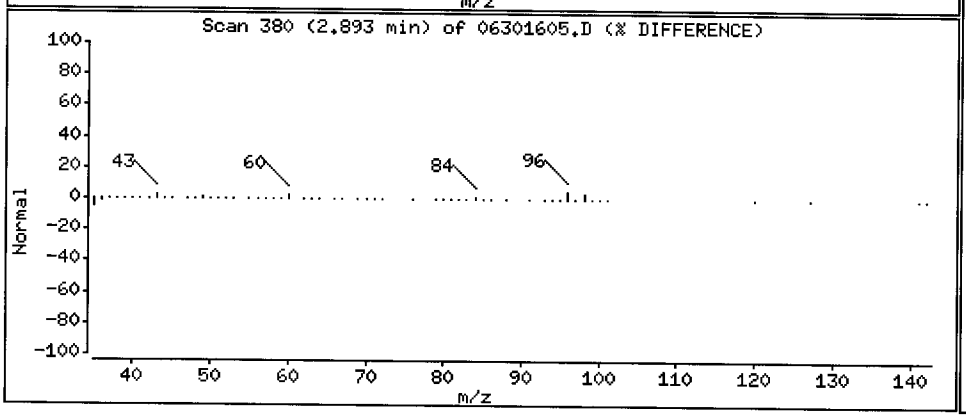


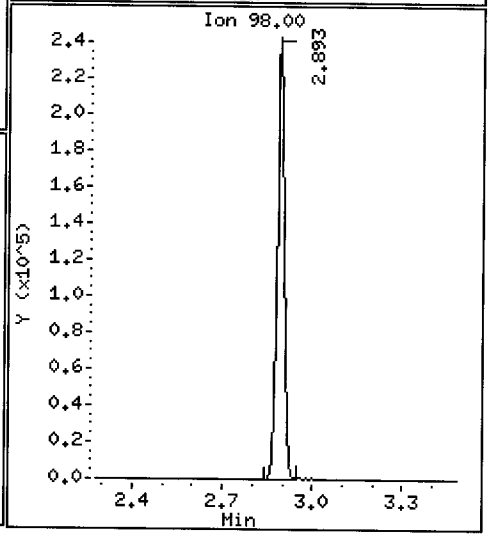












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

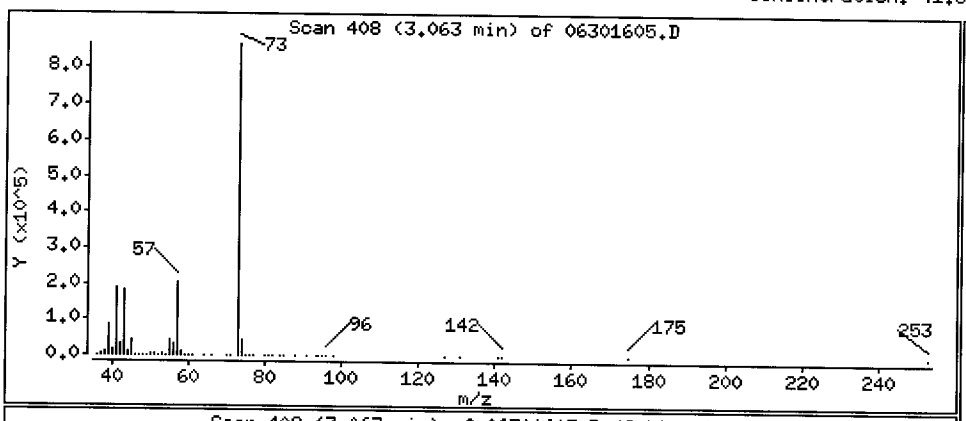
Operator: PB

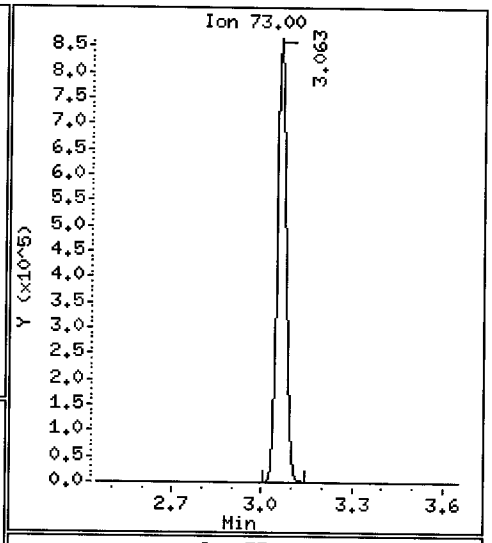
Column phase: RTXVMS

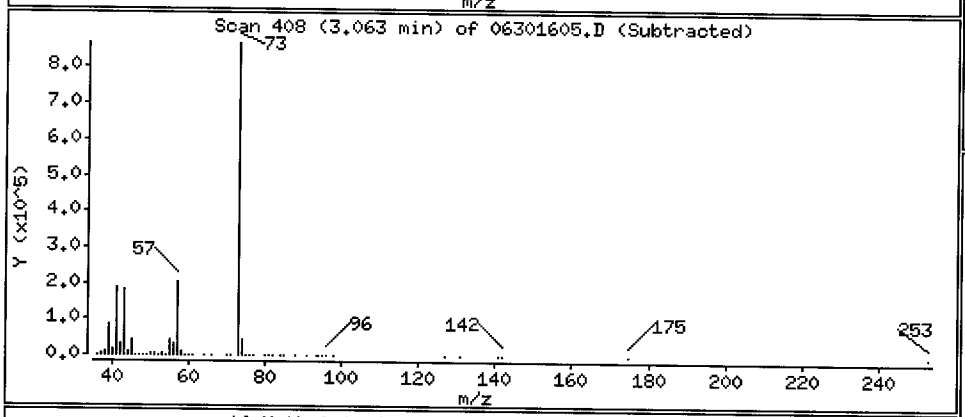
Column diameter: 0.18

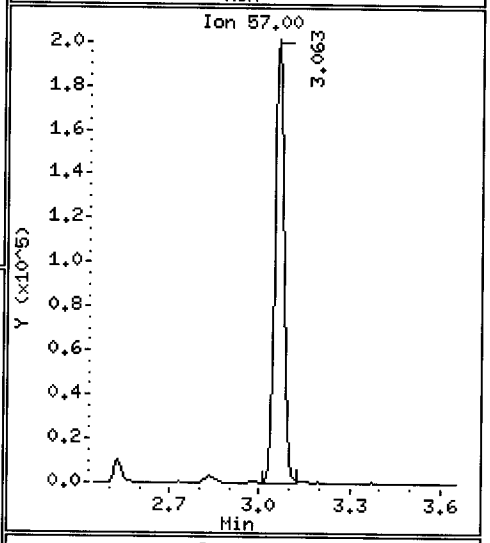
16 Methyl tert butyl ether

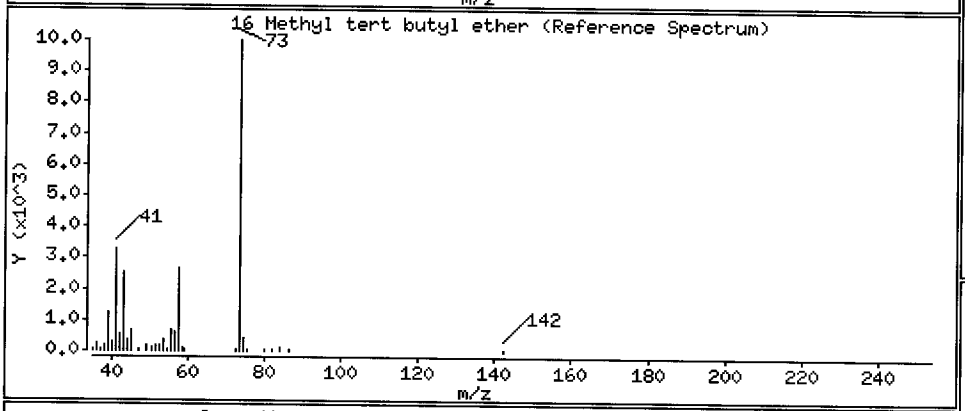
Concentration: 41.868 ug/Kg

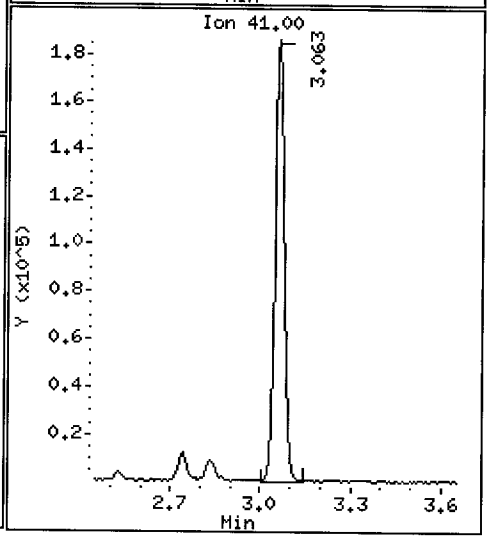


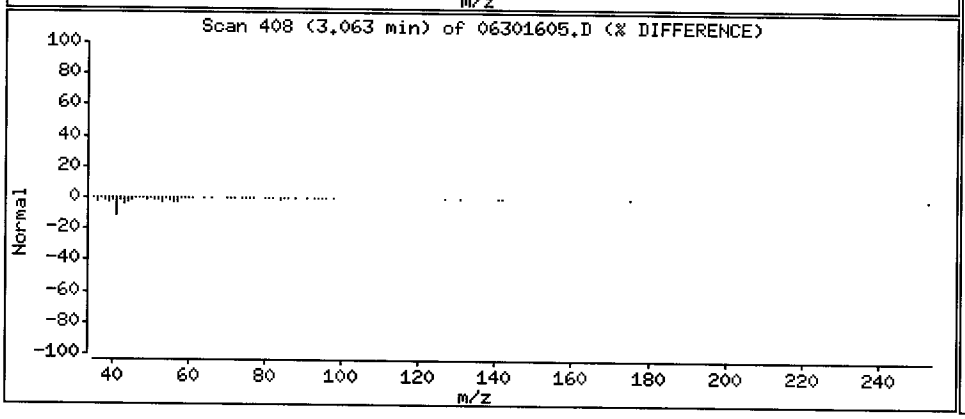












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

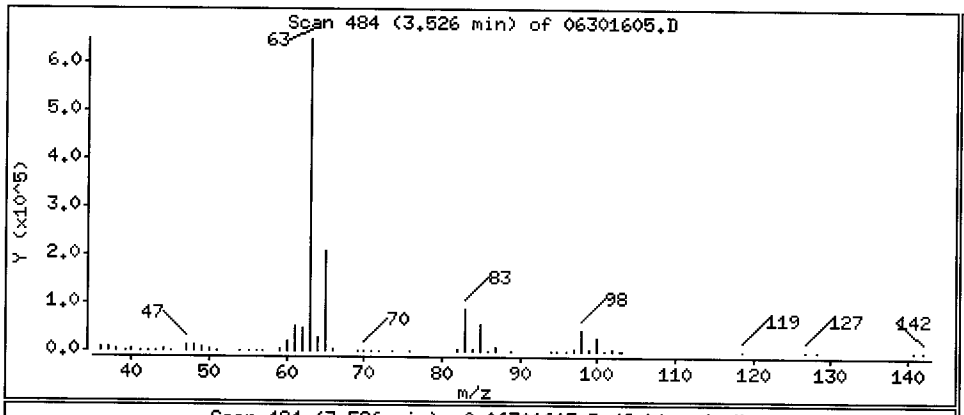
Operator: PB

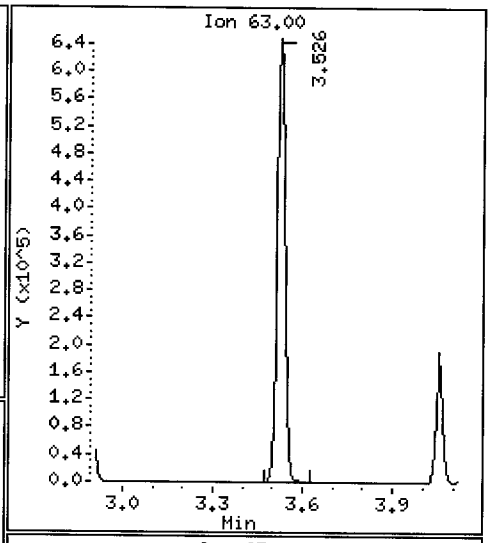
Column phase: RTXVMS

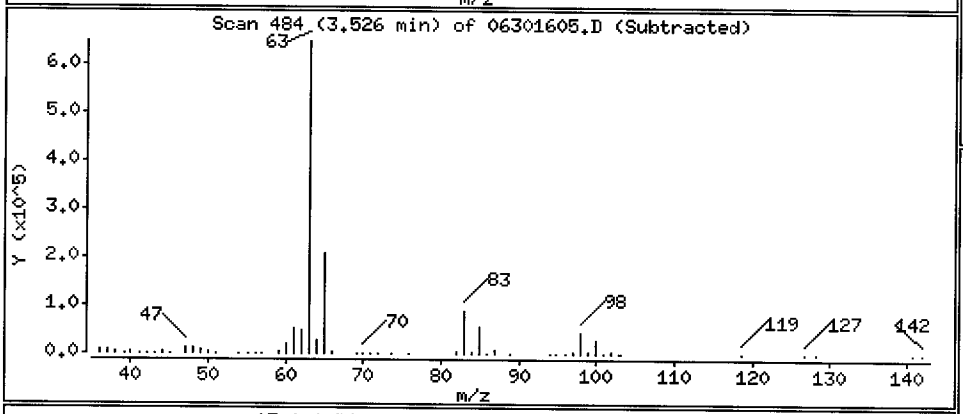
Column diameter: 0.18

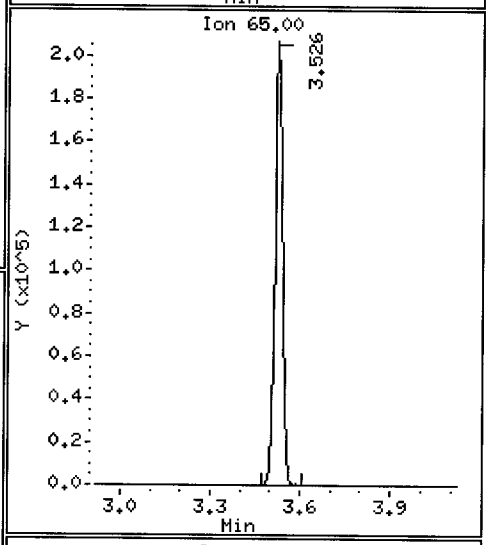
17 1,1-Dichloroethane

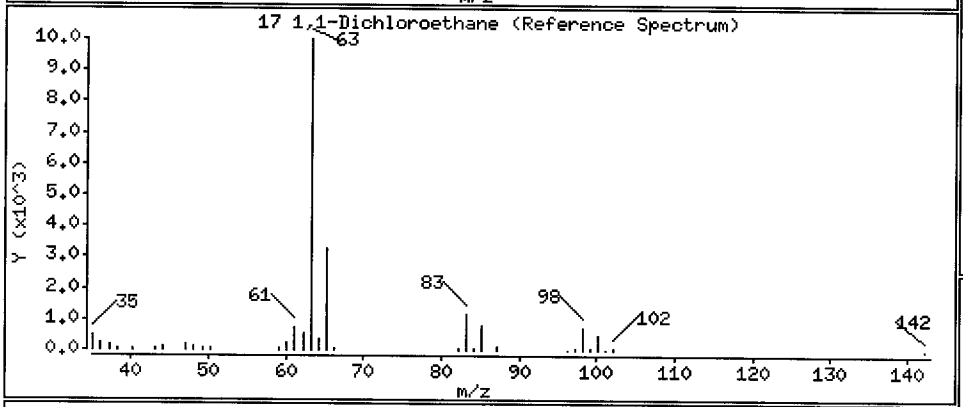
Concentration: 40.932 ug/Kg

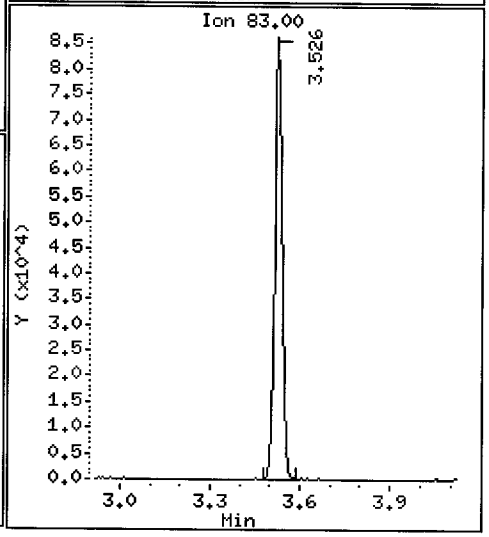


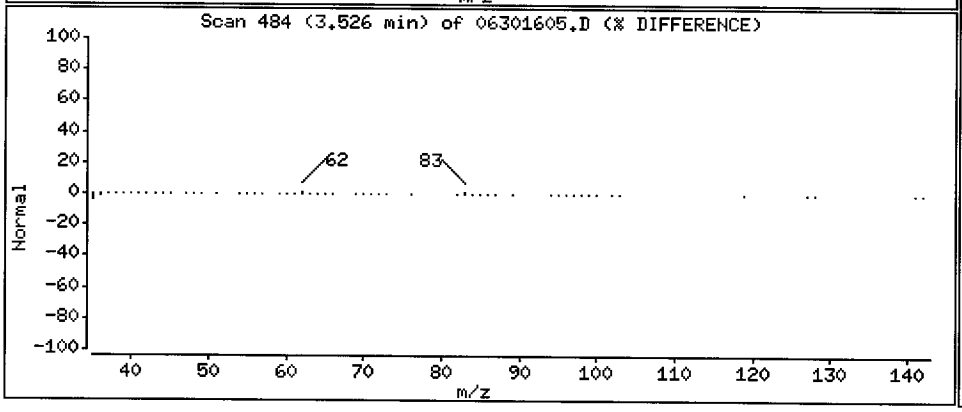












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

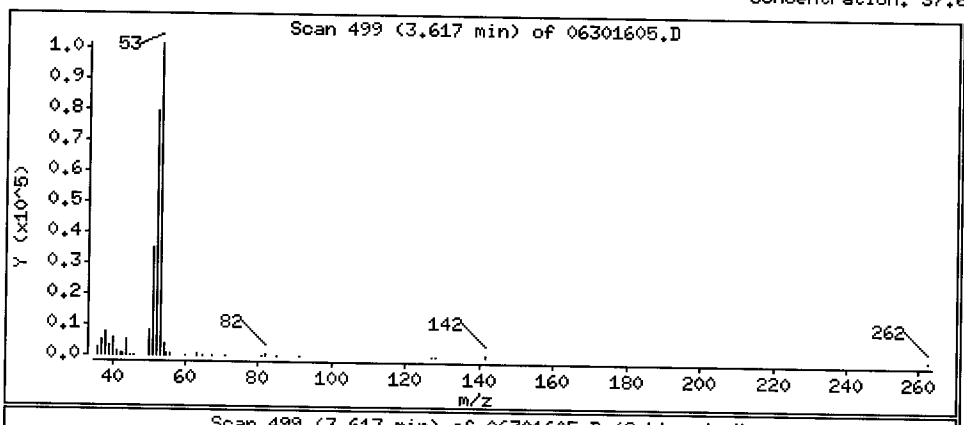
Operator: PB

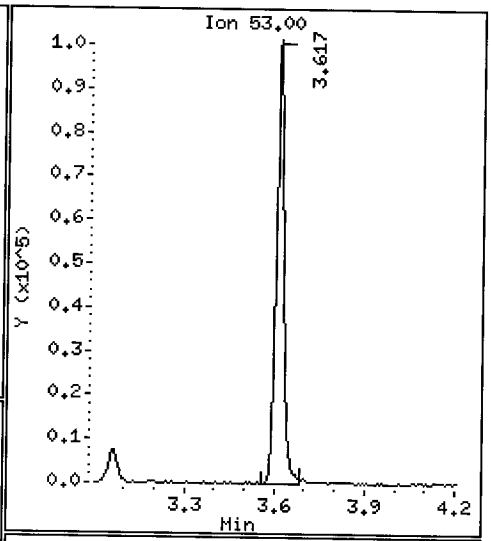
Column phase: RTXVMS

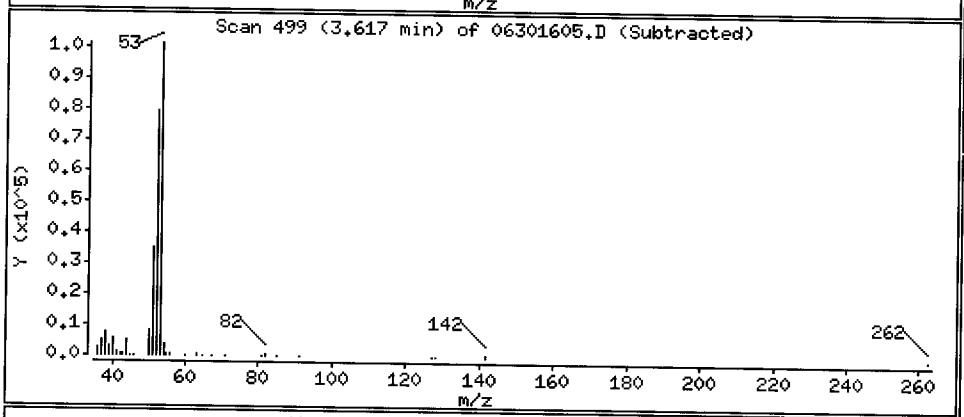
Column diameter: 0.18

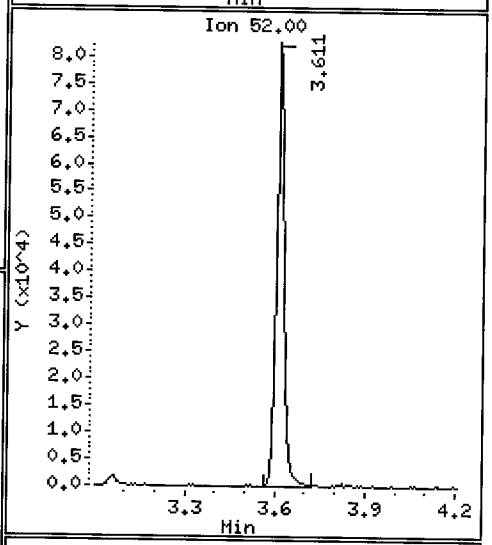
18 Acrylonitrile

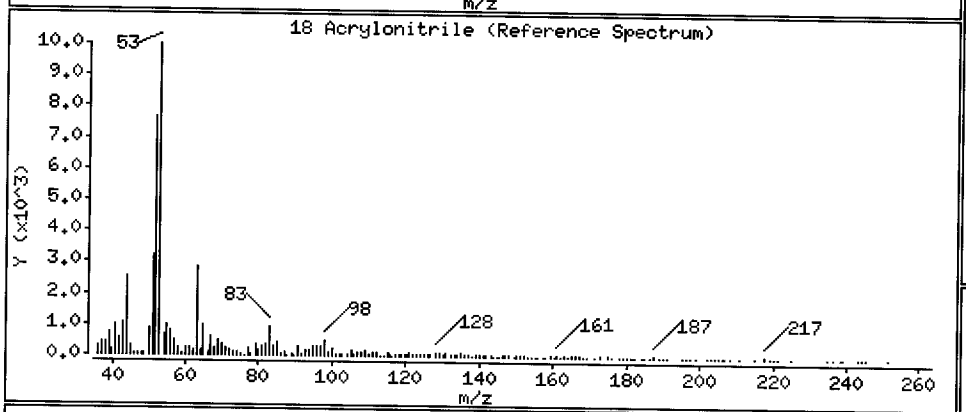
Concentration: 37.627 ug/Kg

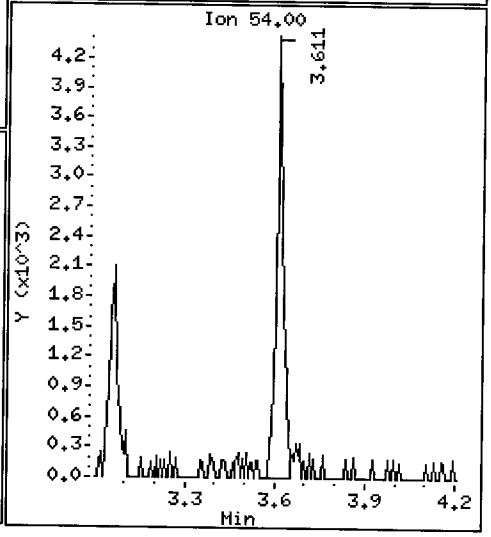


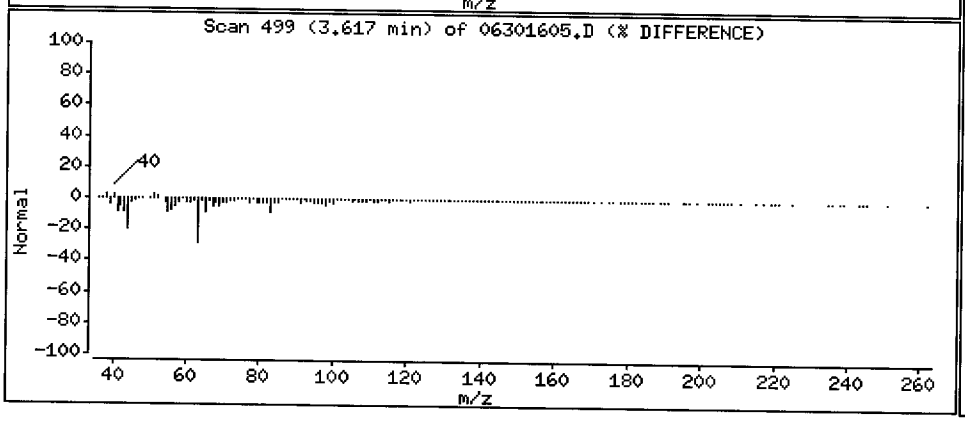












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

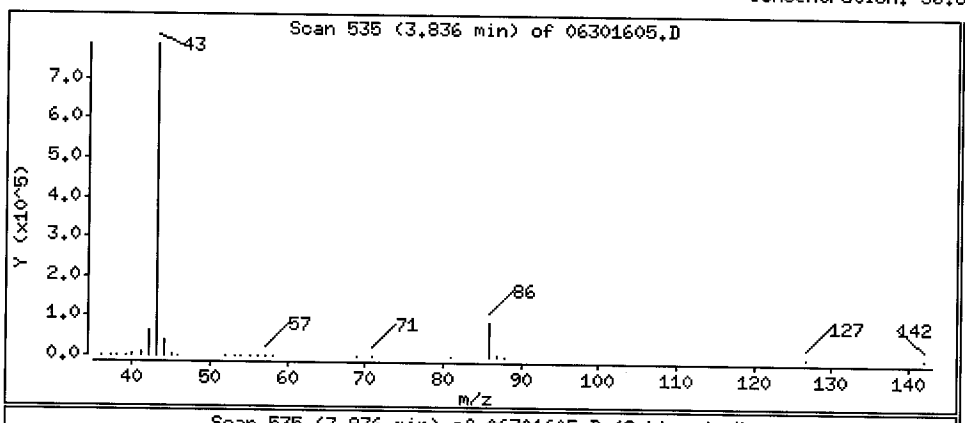
Operator: PB

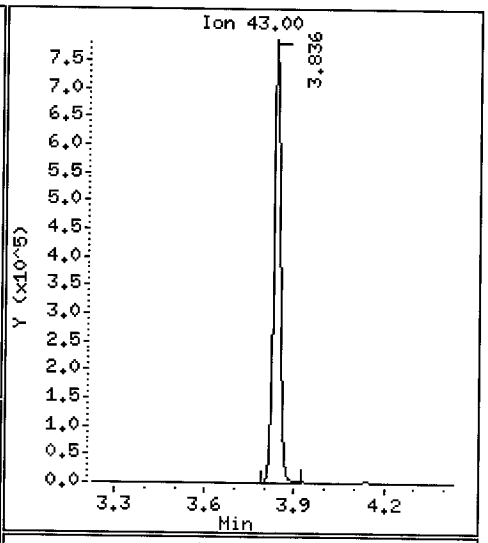
Column phase: RTXVMS

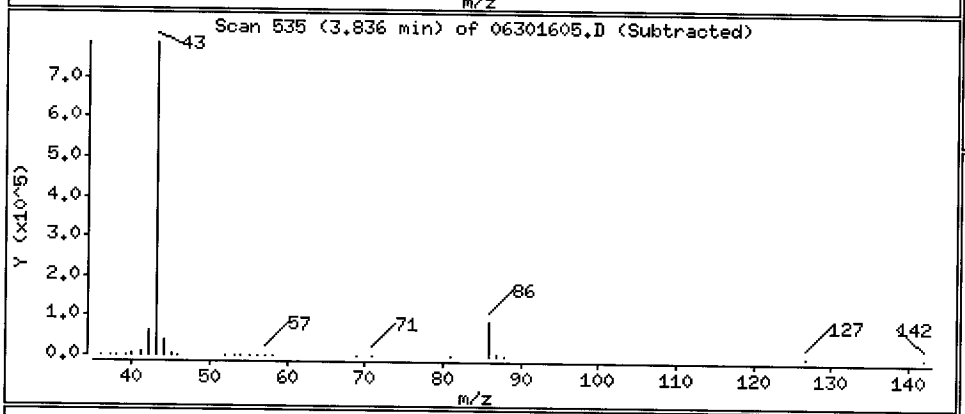
Column diameter: 0.18

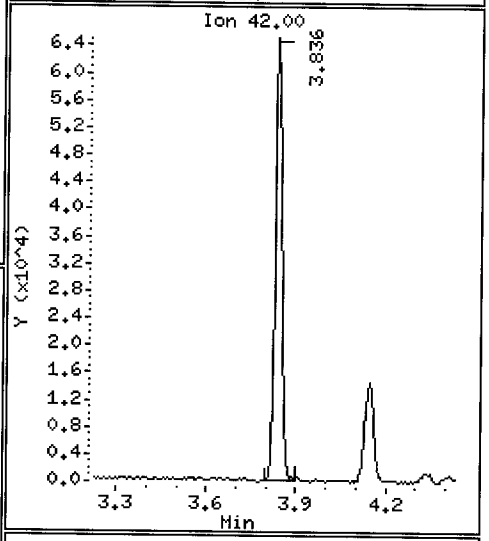
19 Vinyl Acetate

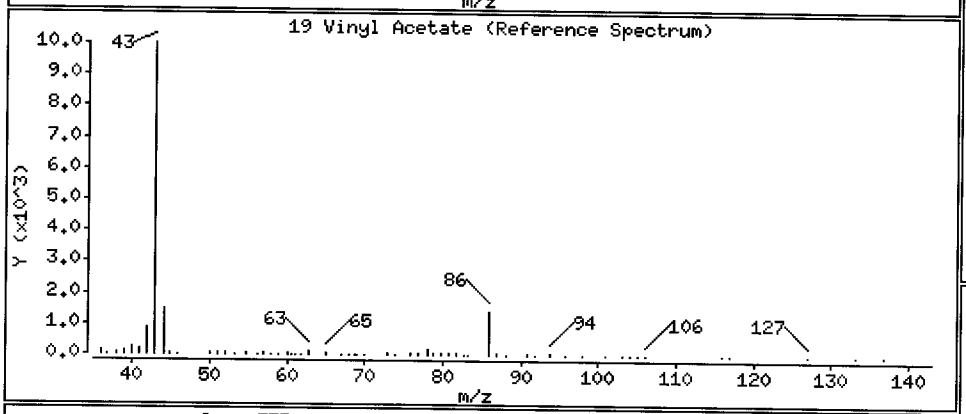
Concentration: 36.878 ug/Kg

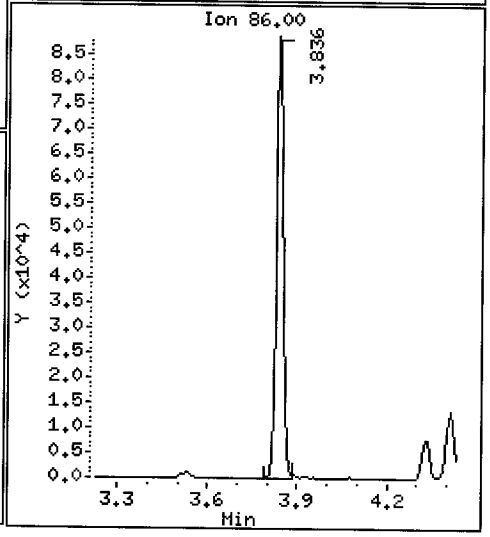


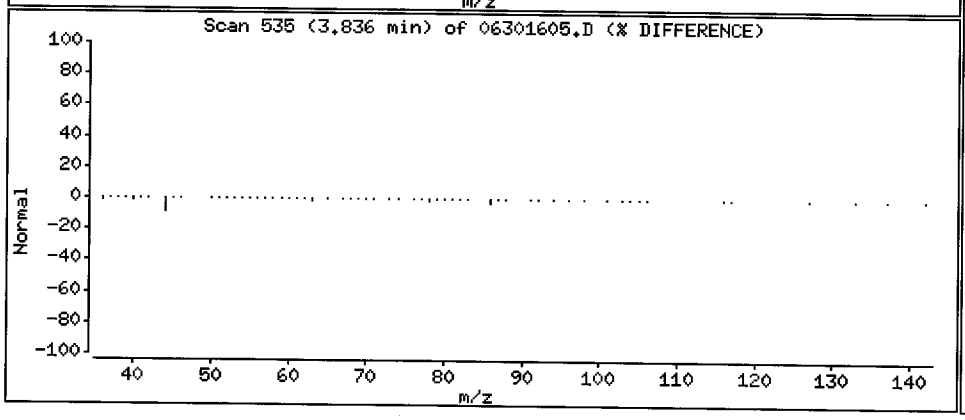












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

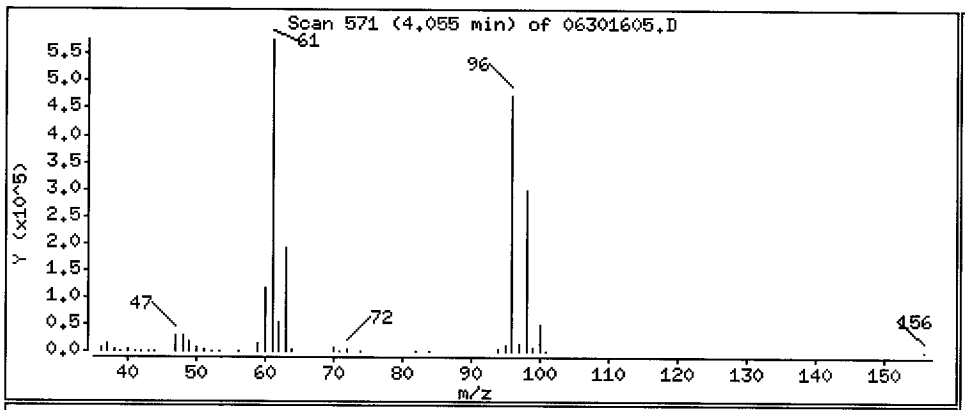
Operator: PB

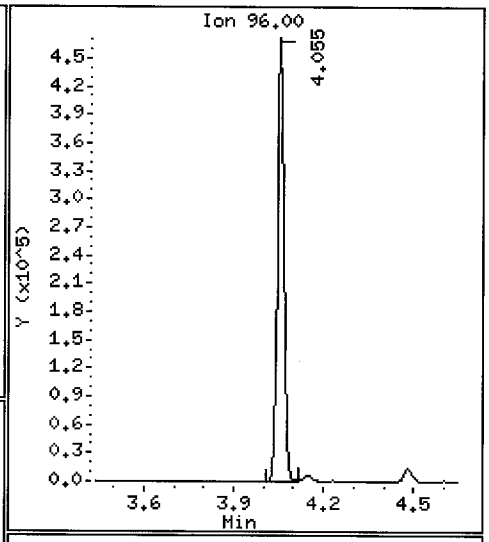
Column phase: RTXVMS

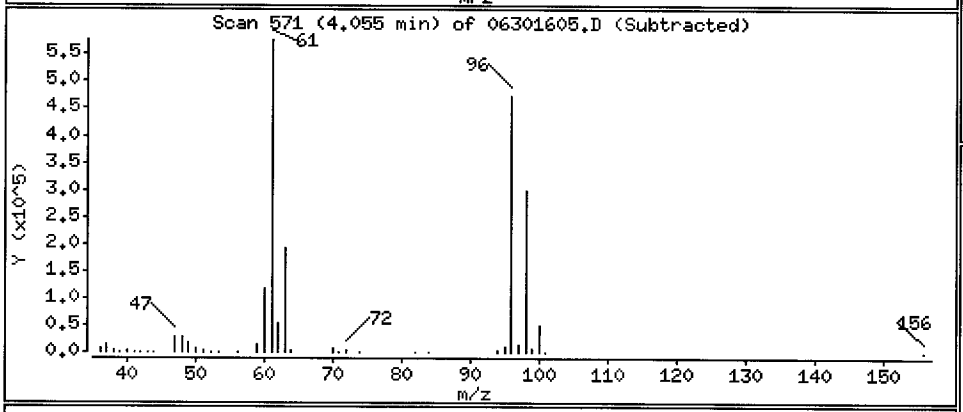
Column diameter: 0.18

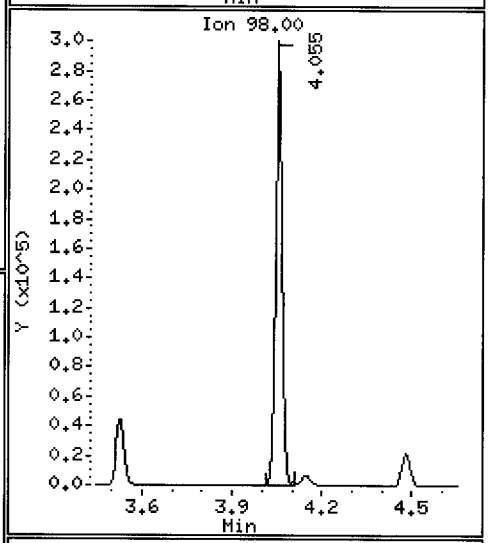
20 Cis-1,2-Dichloroethene

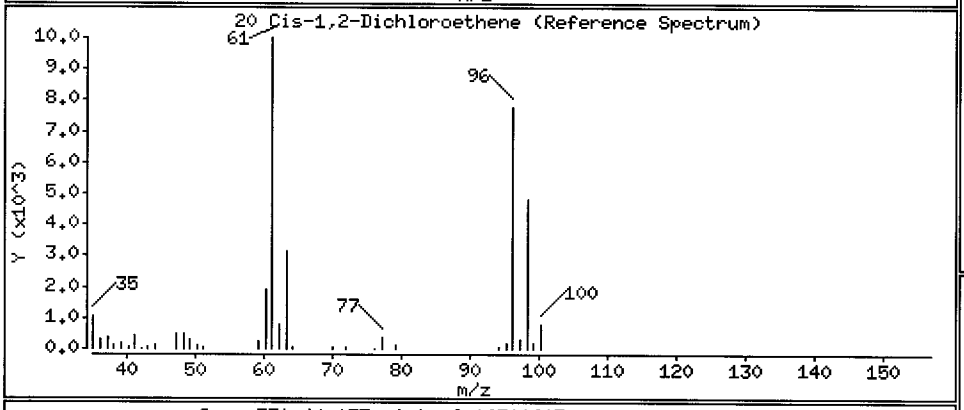
Concentration: 43.188 ug/Kg

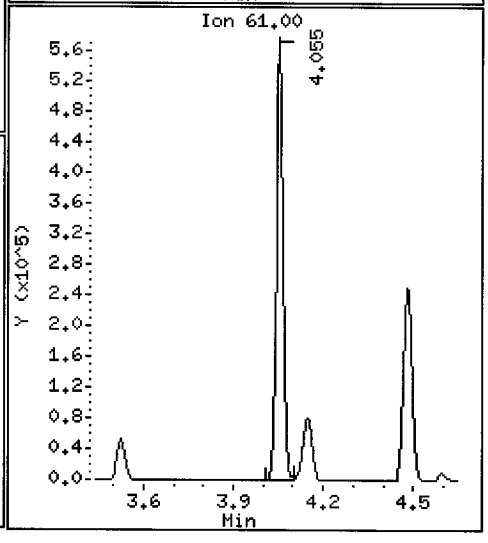


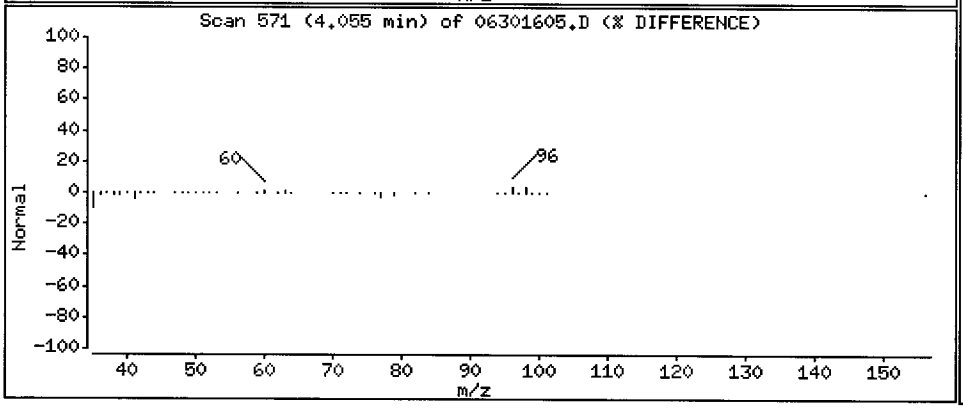












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

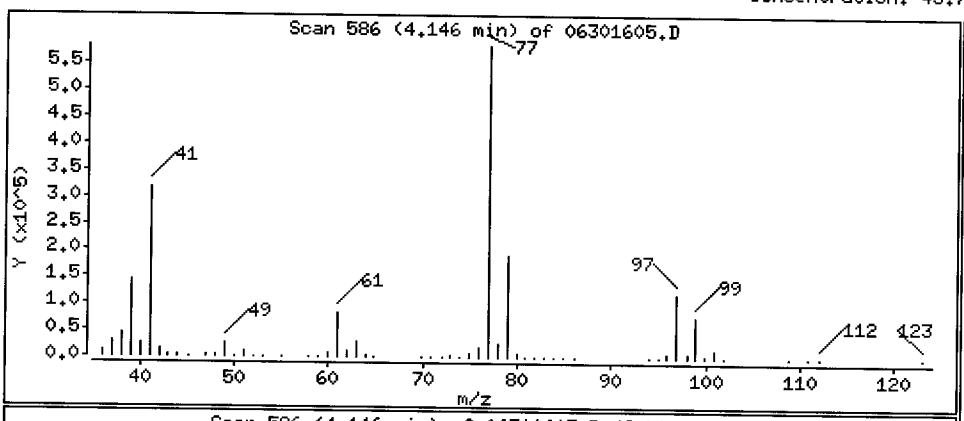
Operator: PB

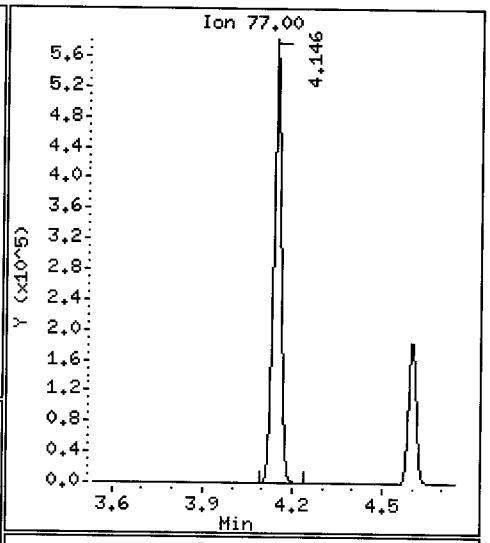
Column phase: RTXVMS

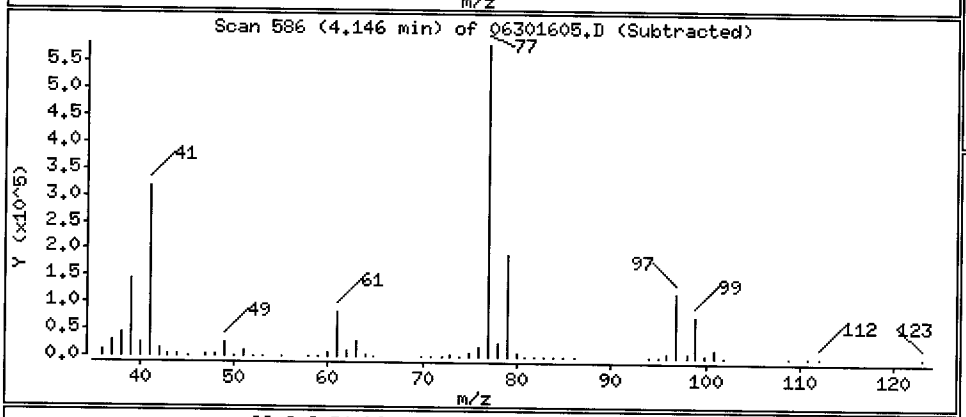
Column diameter: 0.18

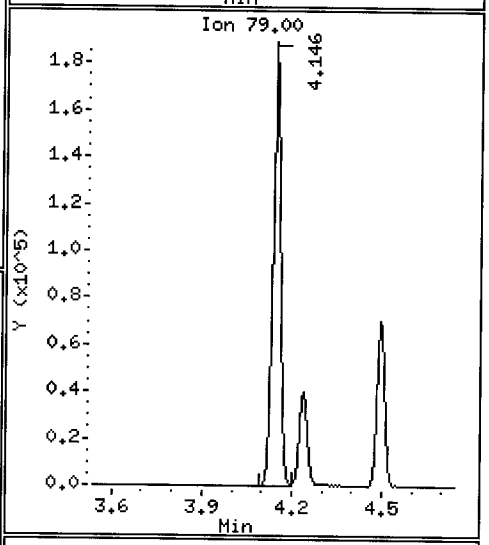
22 2,2-Dichloropropane

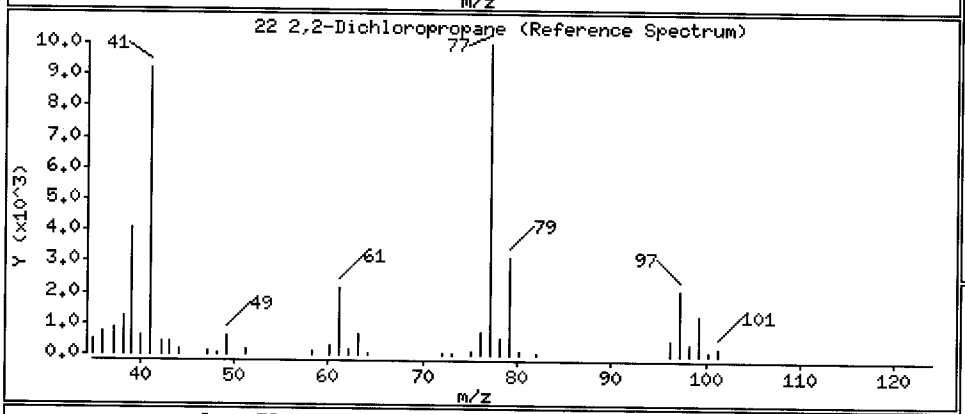
Concentration: 43.725 ug/Kg

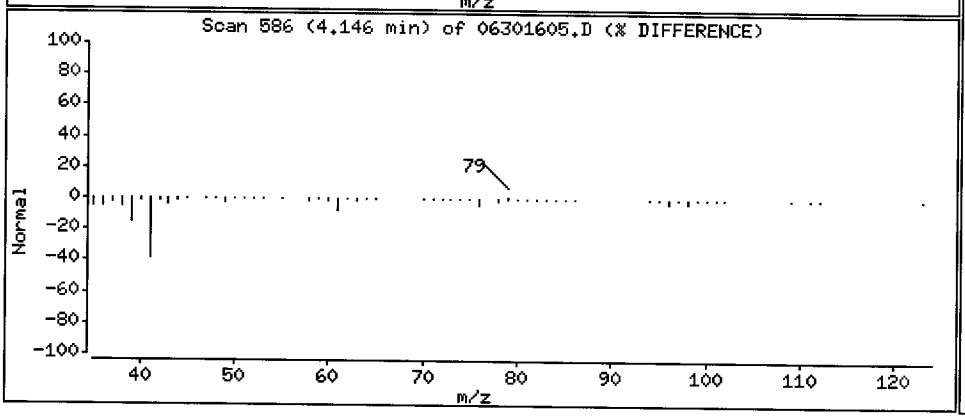


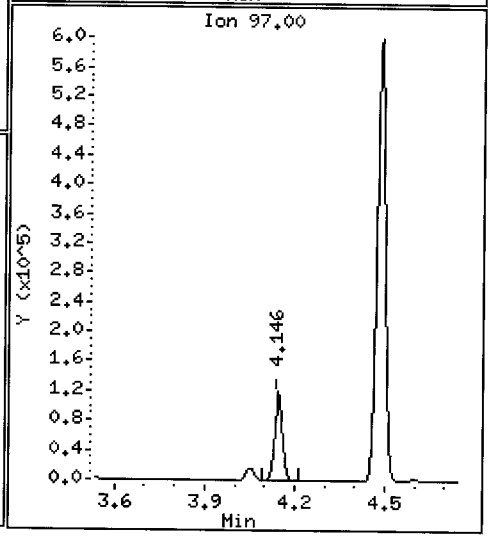












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

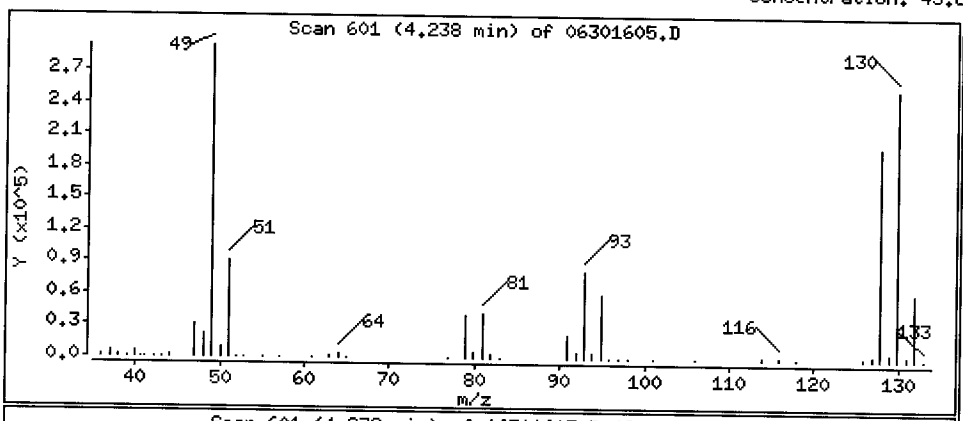
Operator: PB

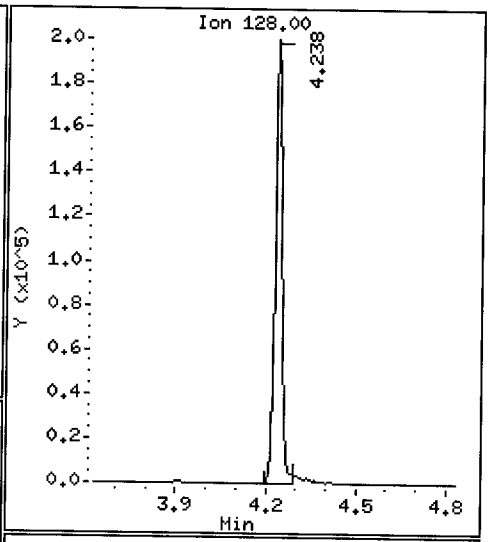
Column phase: RTXVMS

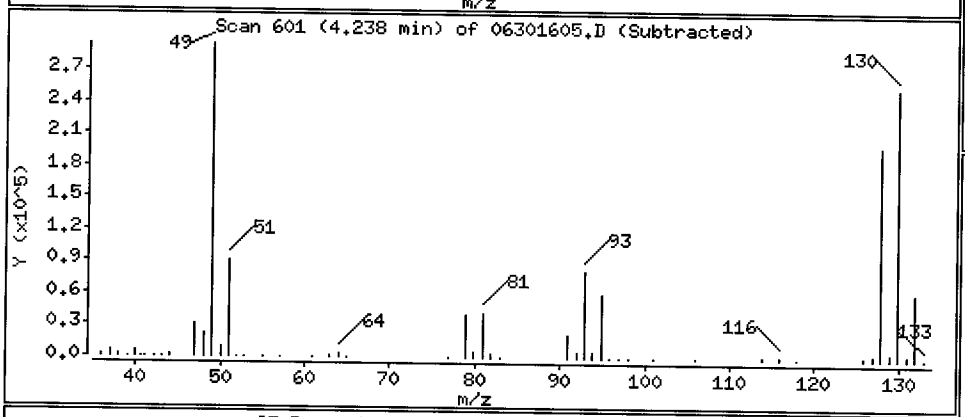
Column diameter: 0.18

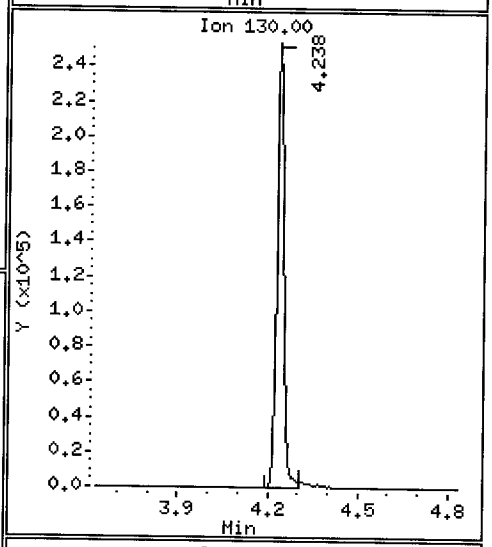
23 Bromochloromethane

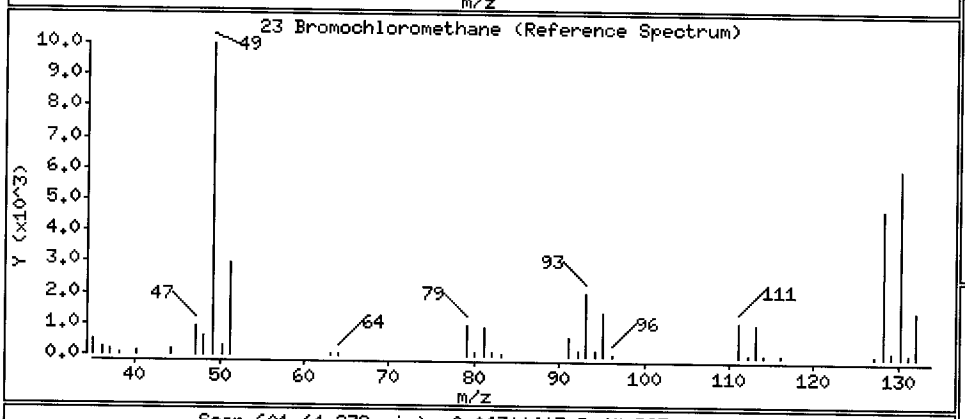
Concentration: 43.885 ug/Kg

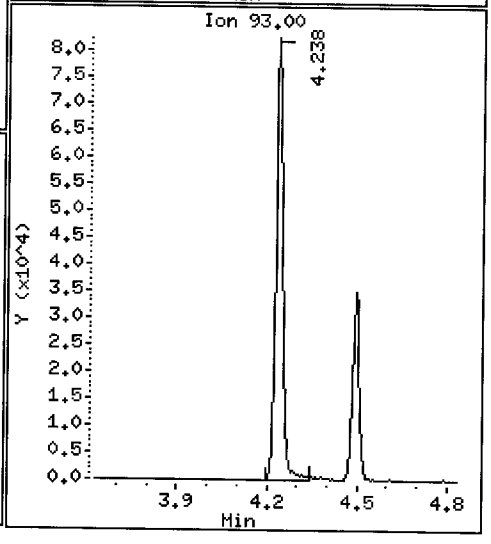


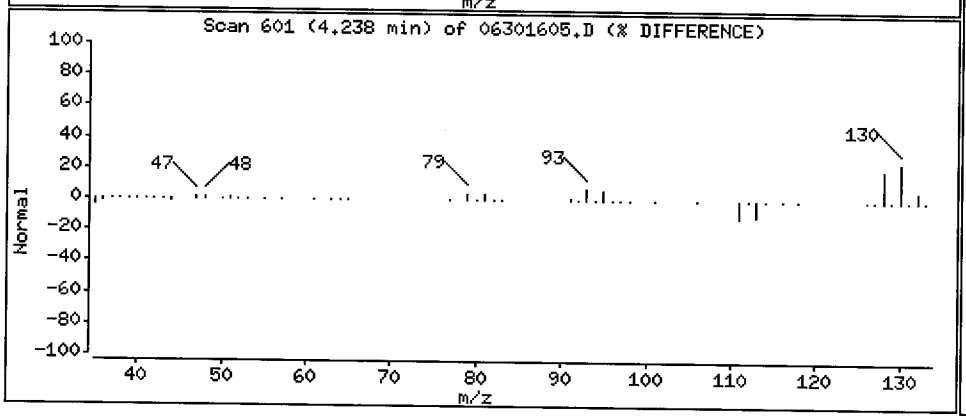












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

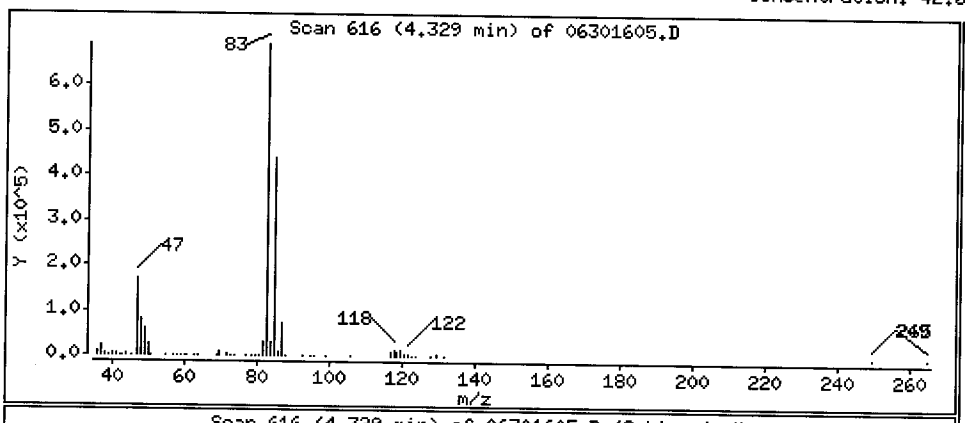
Operator: PB

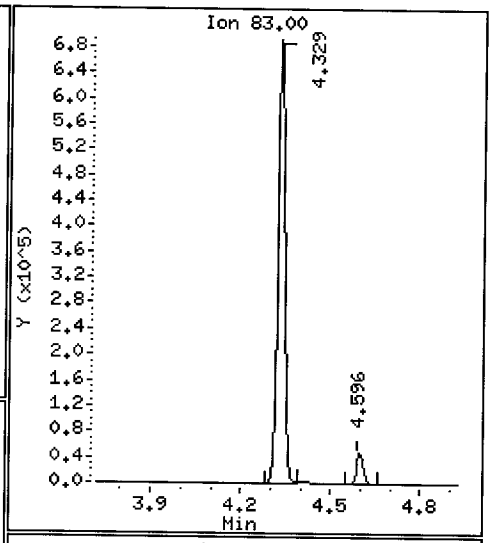
Column phase: RTXVMS

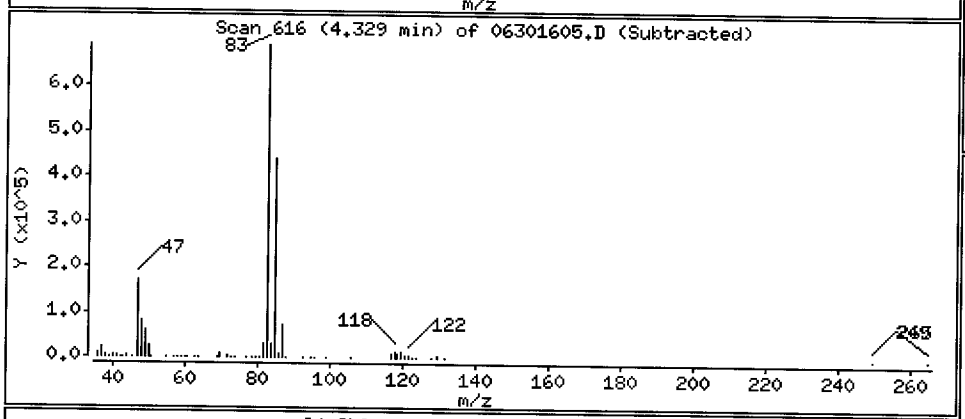
Column diameter: 0.18

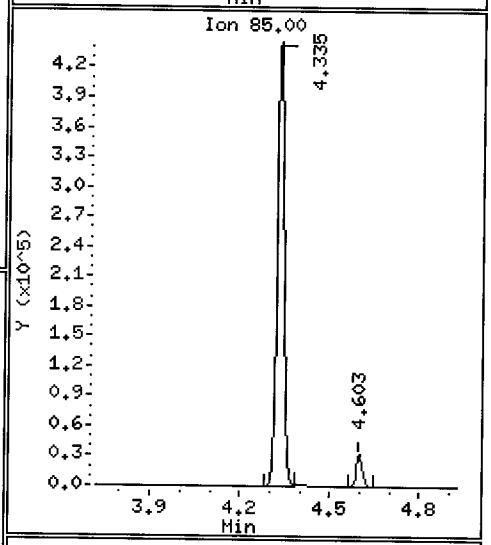
24 Chloroform

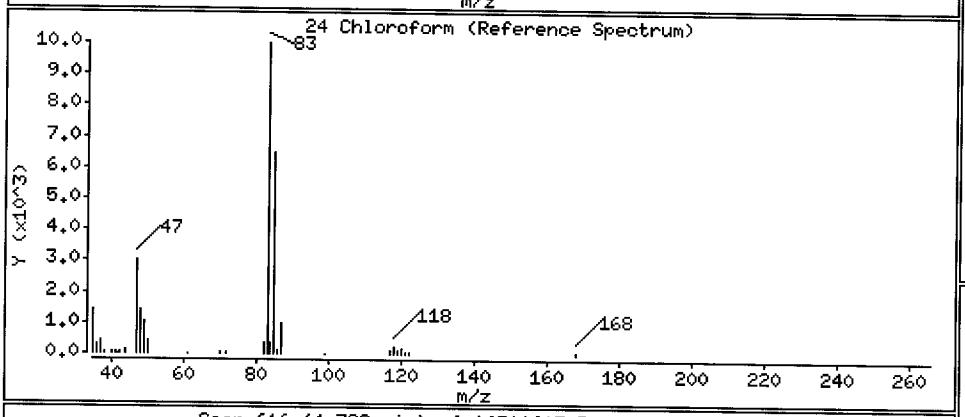
Concentration: 42.610 ug/Kg

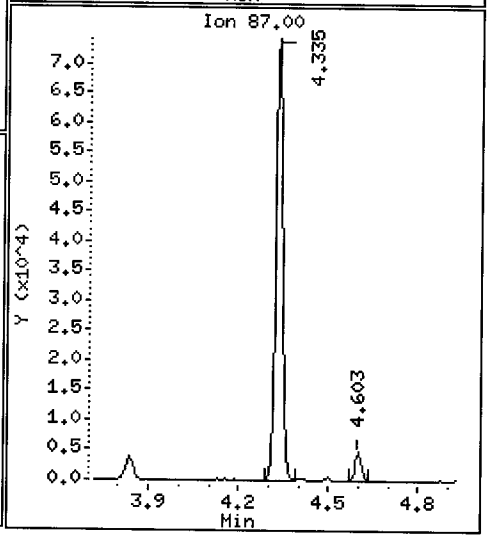


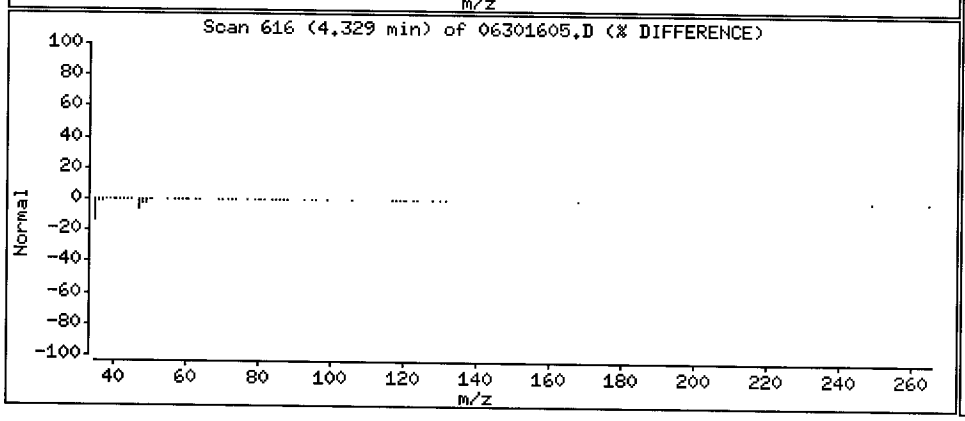












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

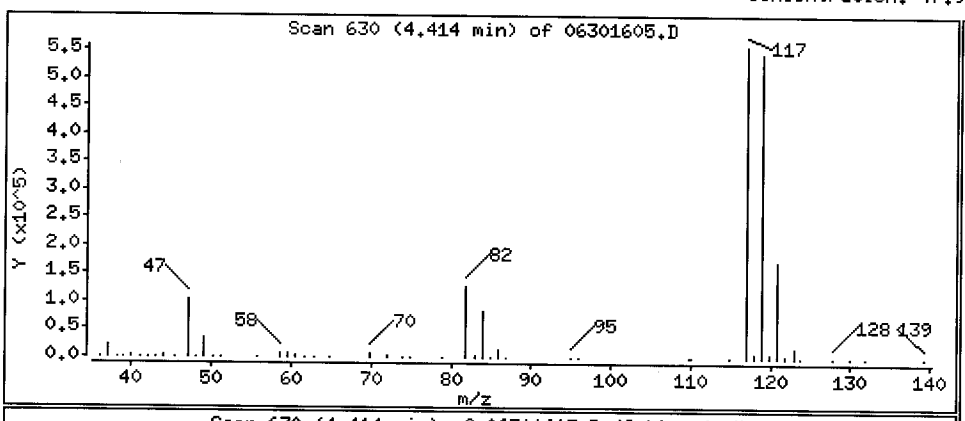
Operator: PB

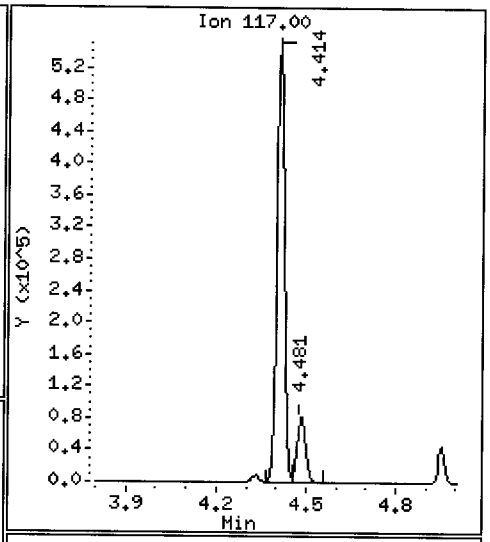
Column phase: RTXVMS

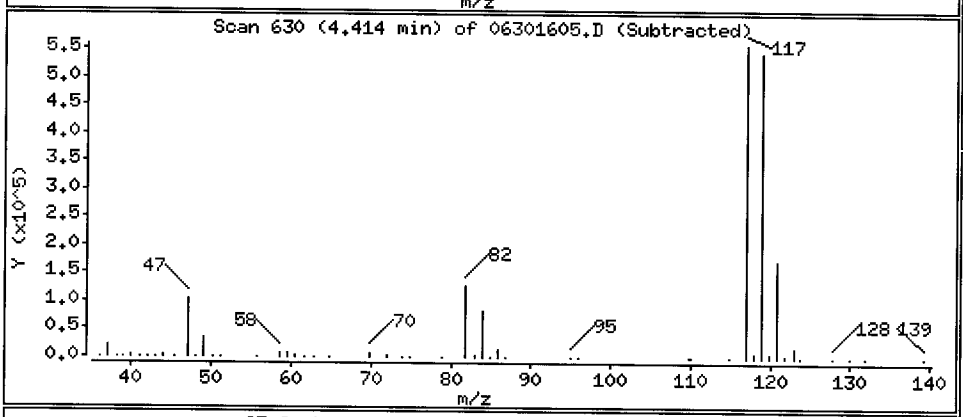
Column diameter: 0.18

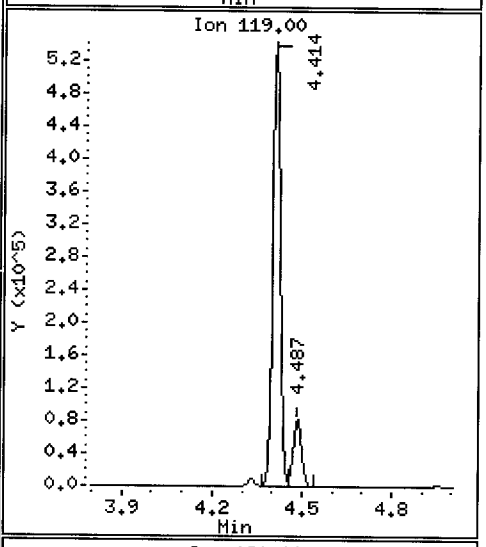
25 Carbon Tetrachloride

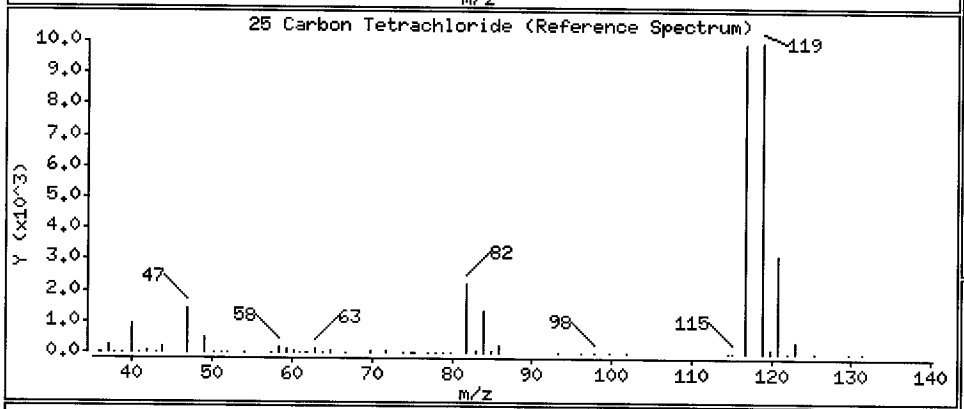
Concentration: 47.937 ug/Kg

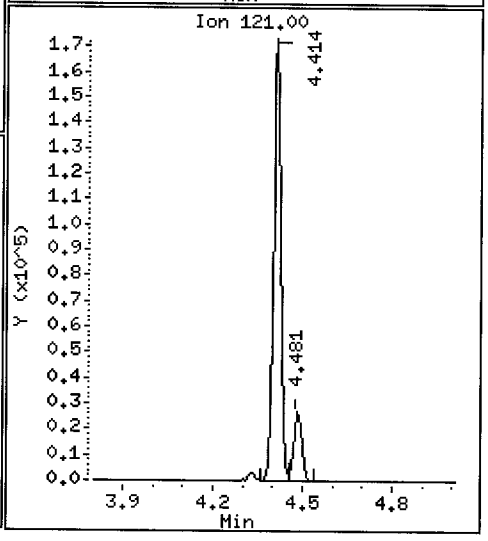


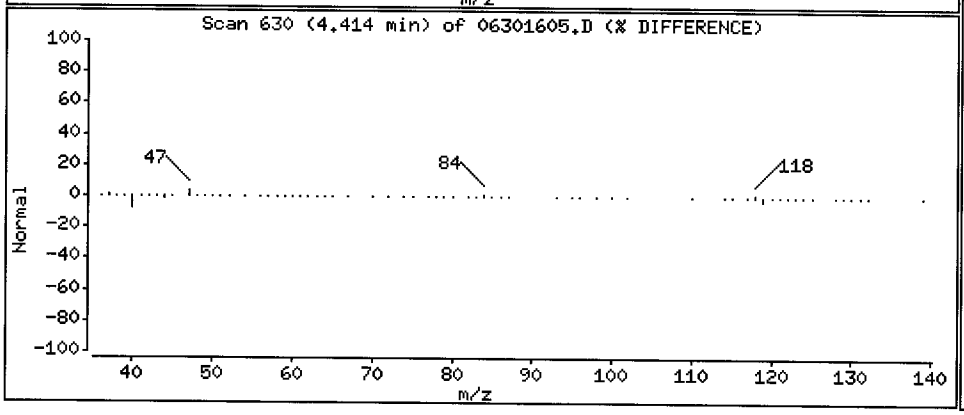












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

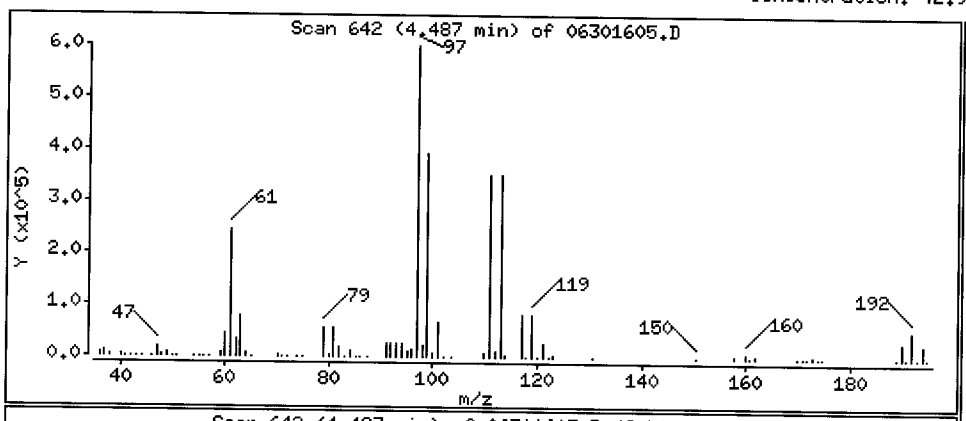
Operator: PB

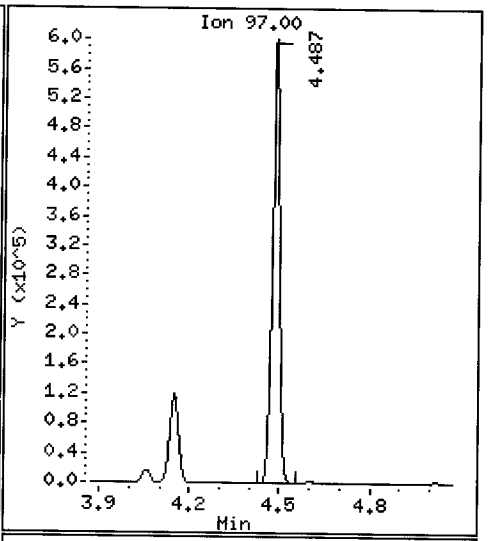
Column phase: RTXVMS

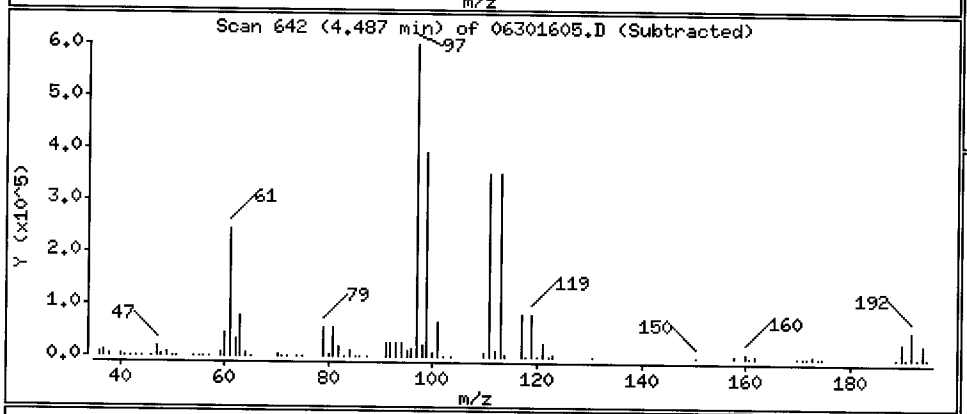
Column diameter: 0.18

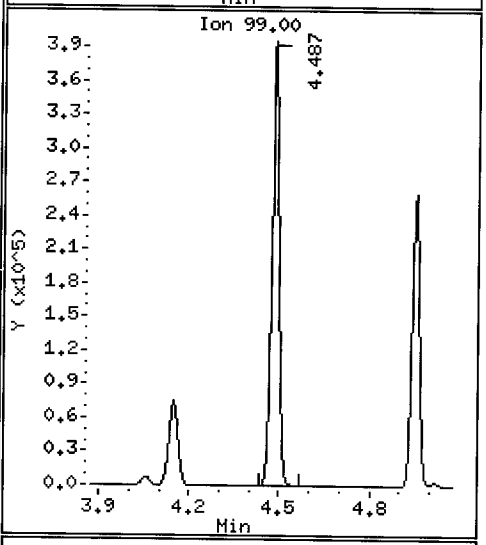
26 1,1,1-Trichloroethane

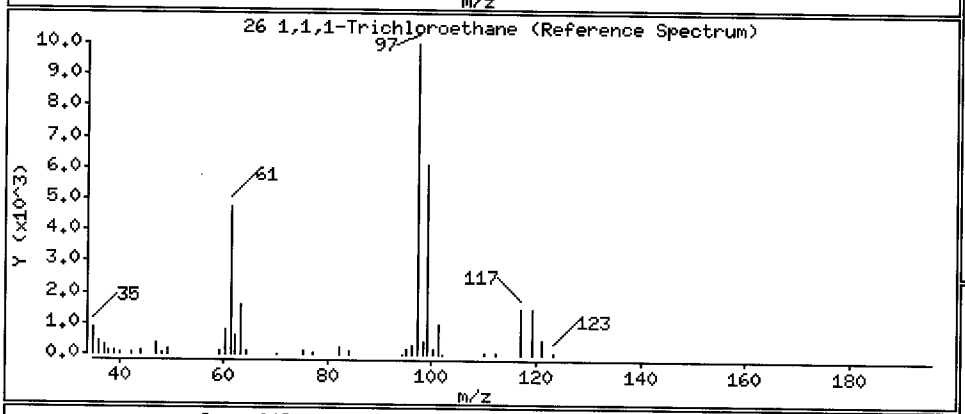
Concentration: 42.995 ug/Kg

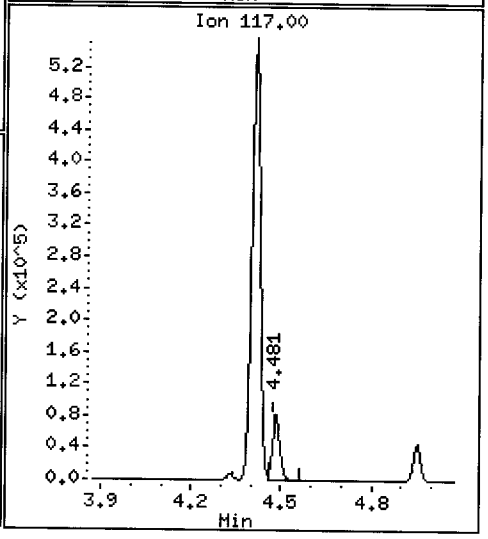


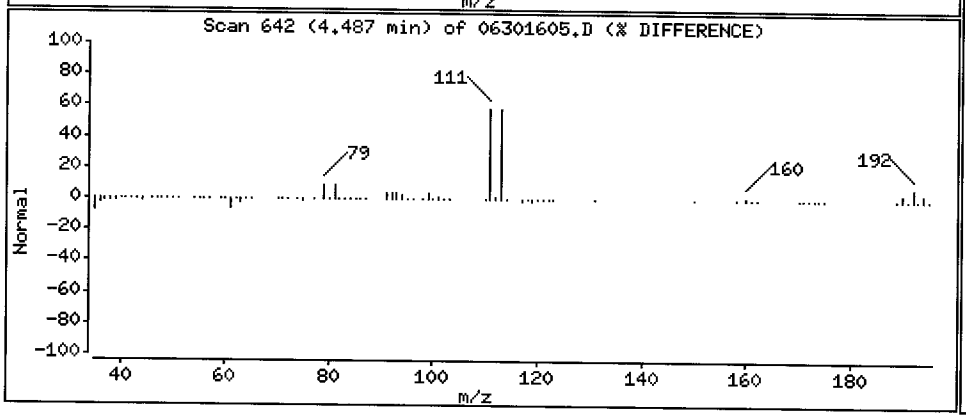












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

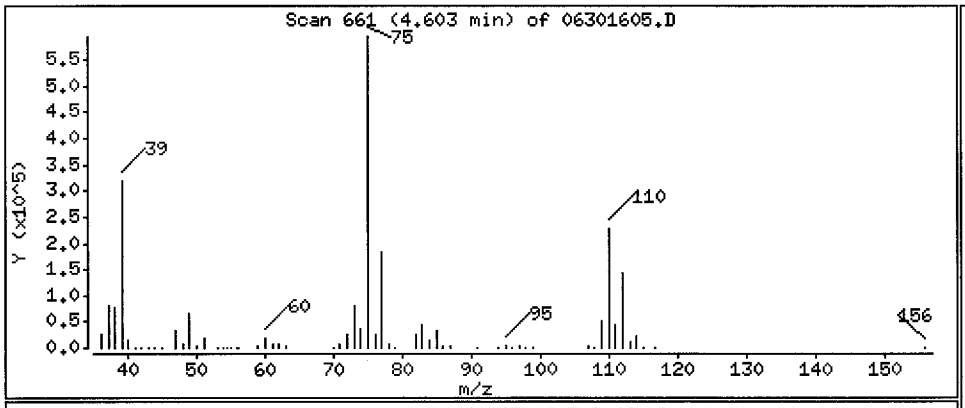
Operator: PB

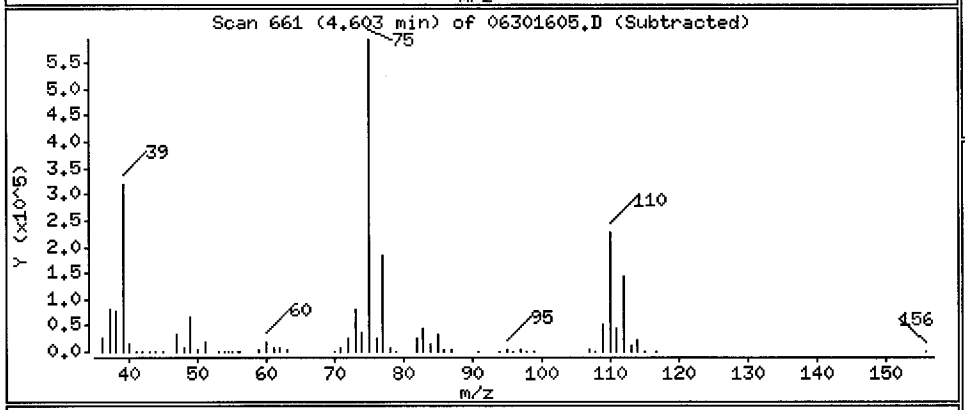
Column phase: RTXVMS

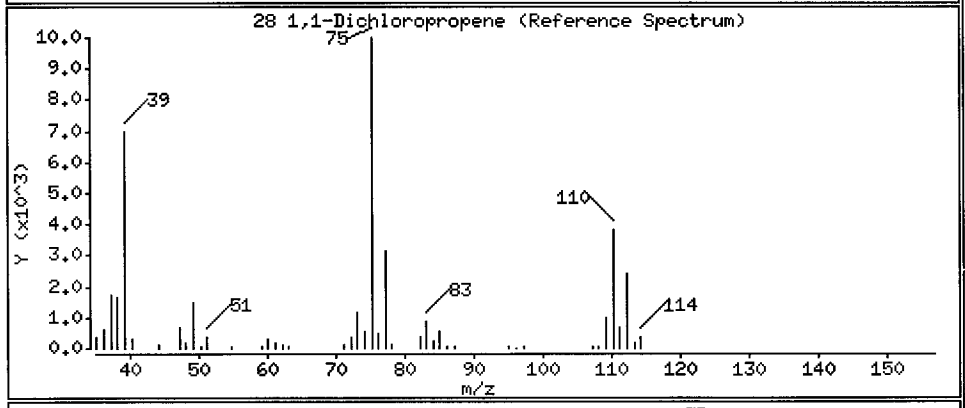
Column diameter: 0.18

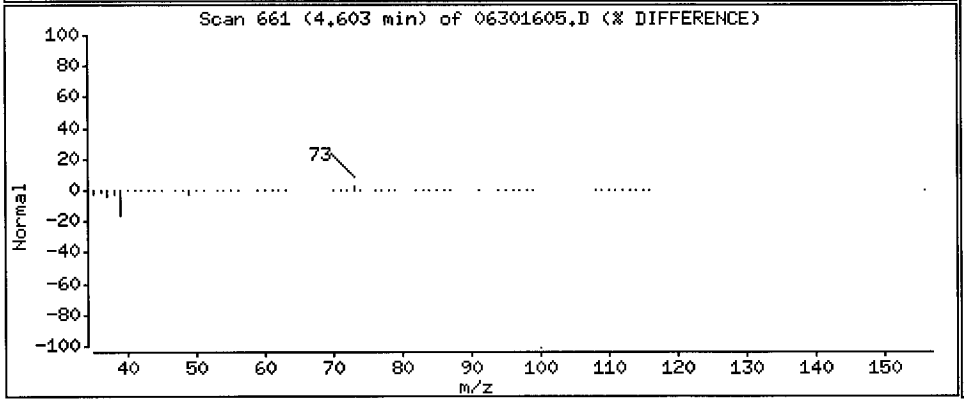
28 1,1-Dichloropropene

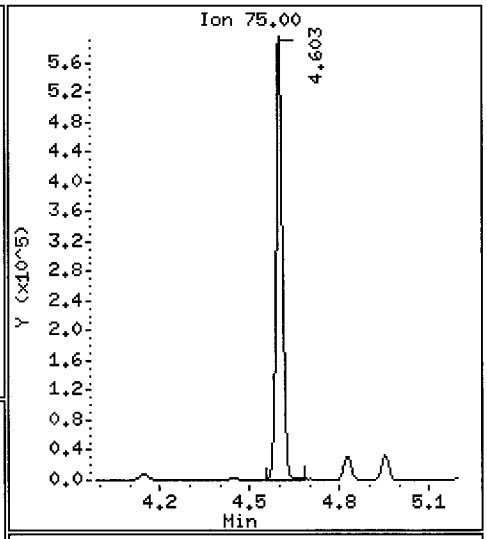
Concentration: 44.356 ug/Kg

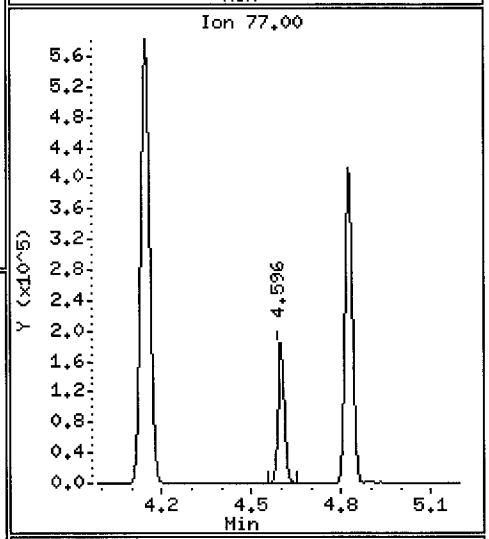


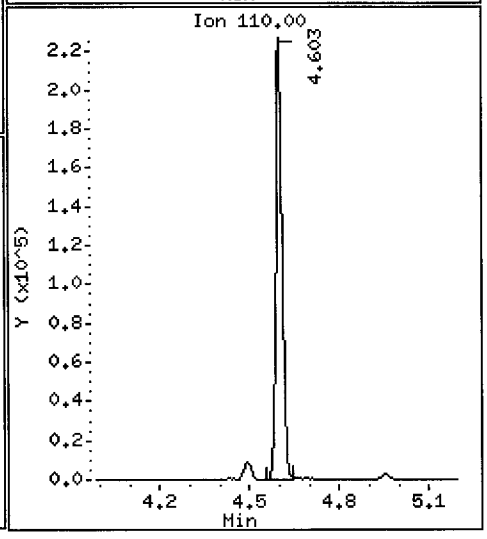












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

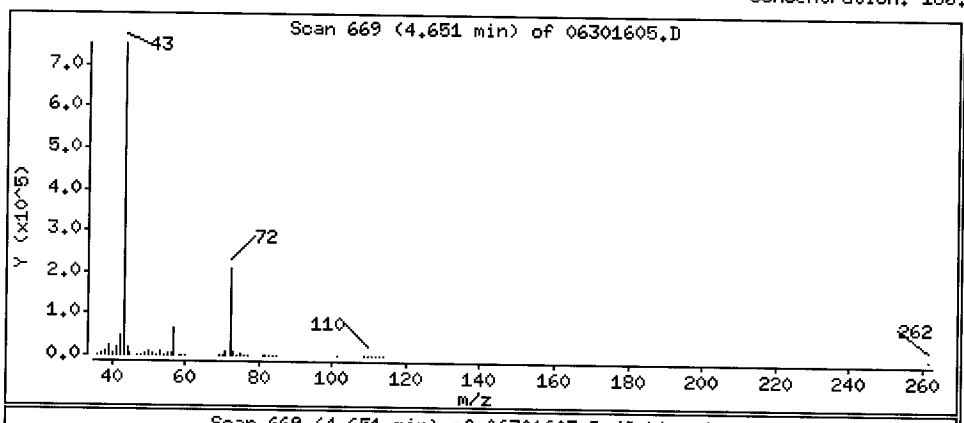
Operator: PB

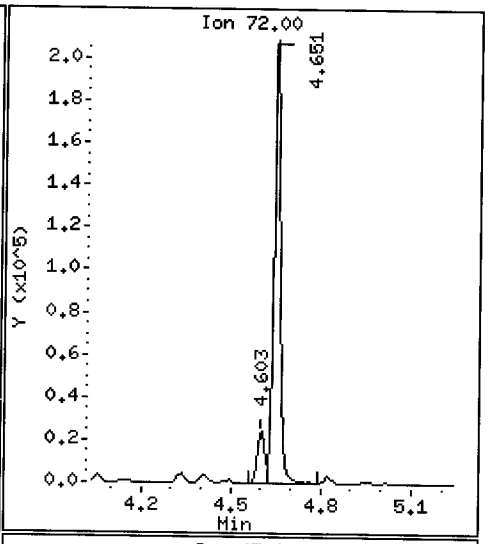
Column phase: RTXVMS

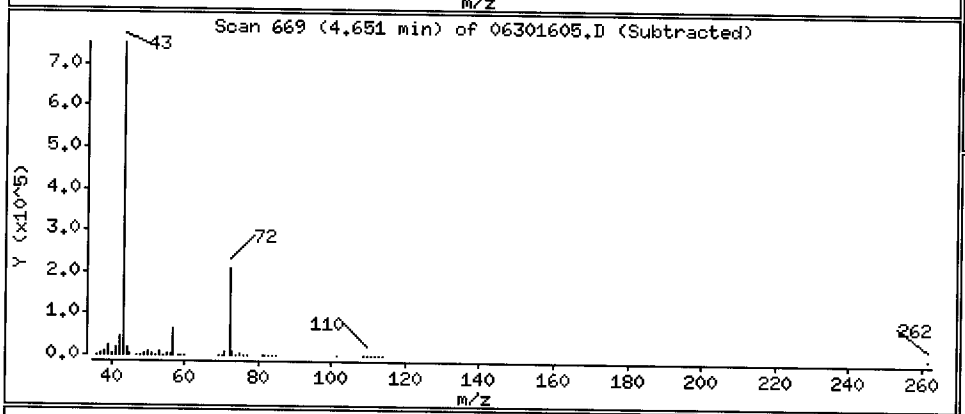
Column diameter: 0.18

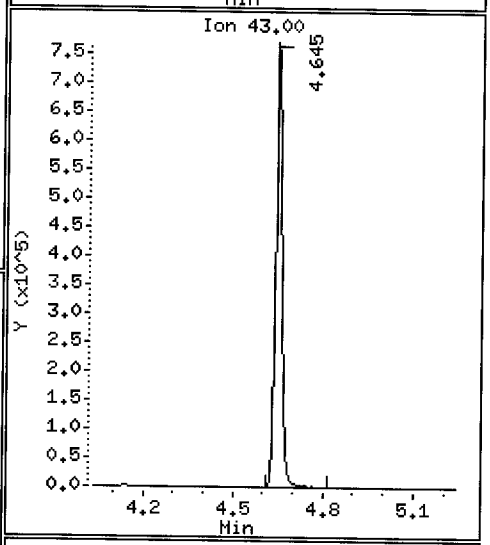
29 2-Butanone

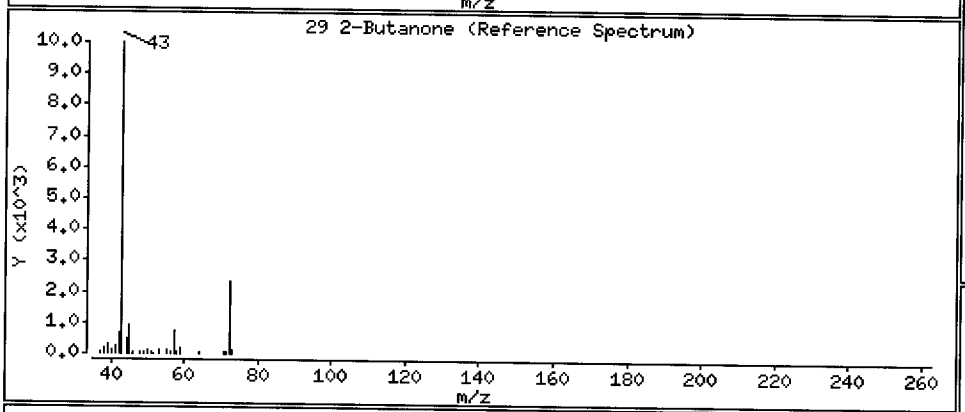
Concentration: 186.98 ug/Kg

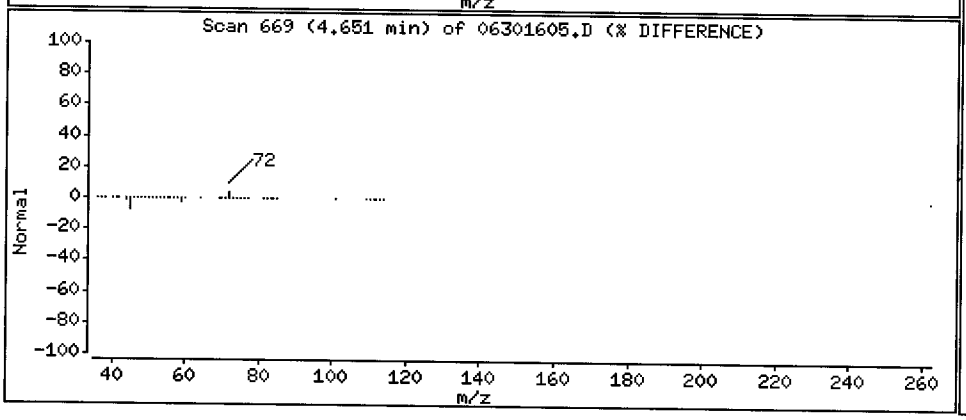


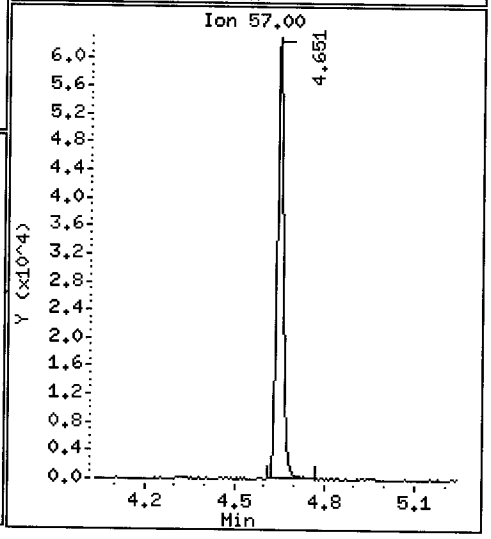












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

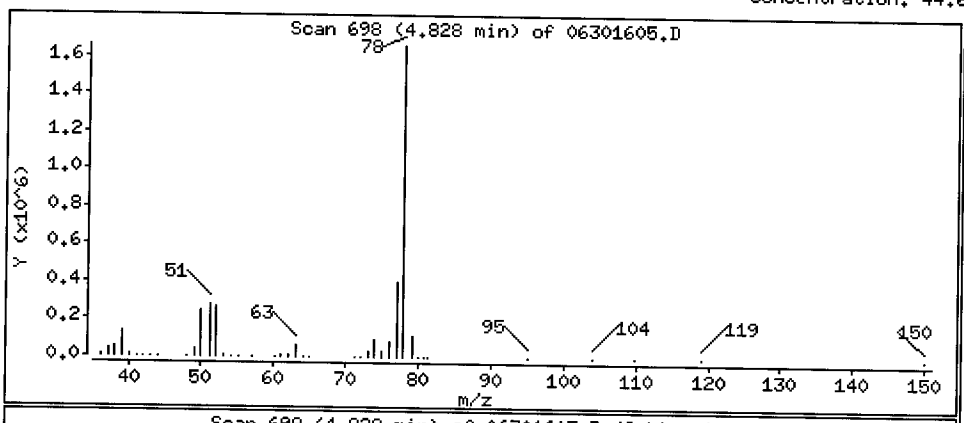
Operator: PB

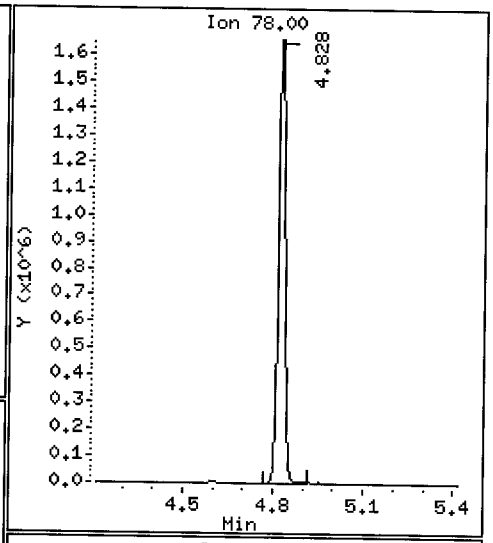
Column phase: RTXVMS

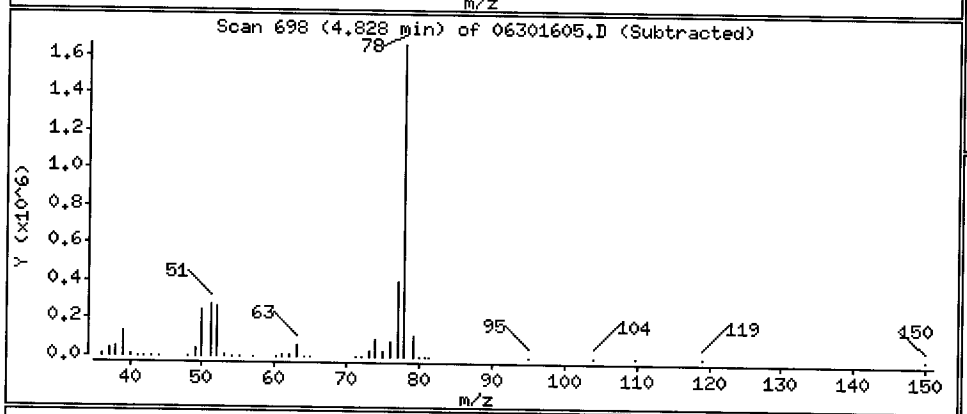
Column diameter: 0.18

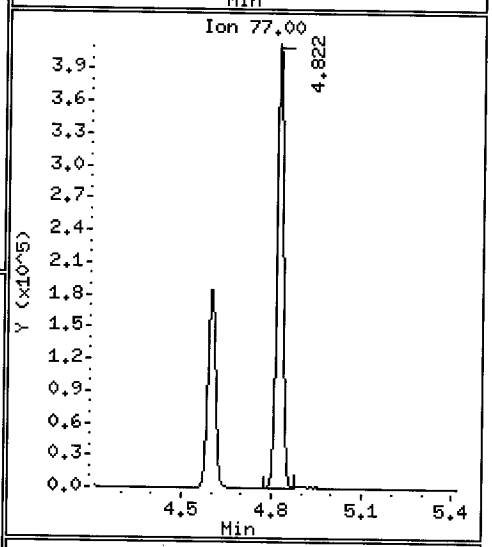
30 Benzene

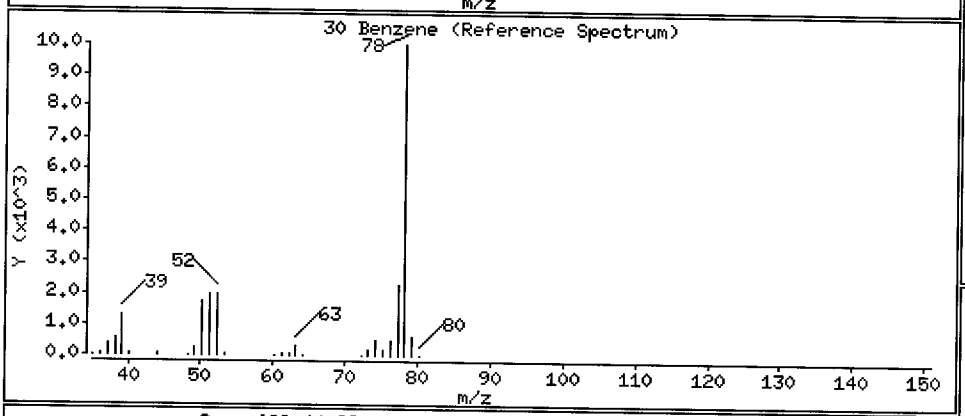
Concentration: 44.605 ug/Kg

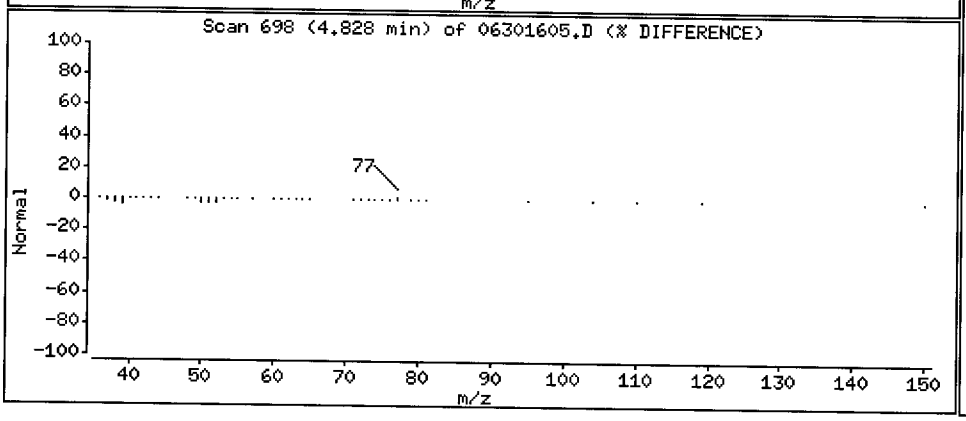


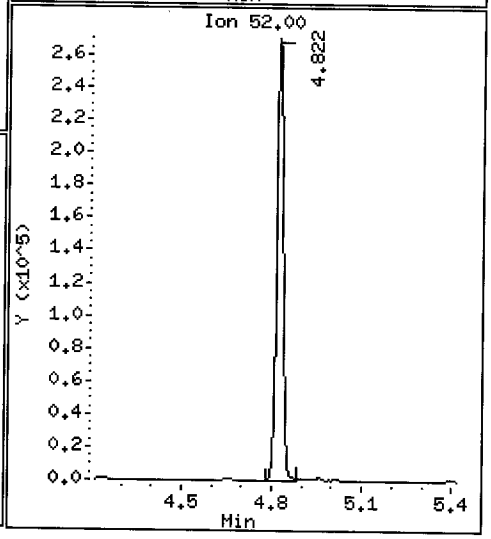












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

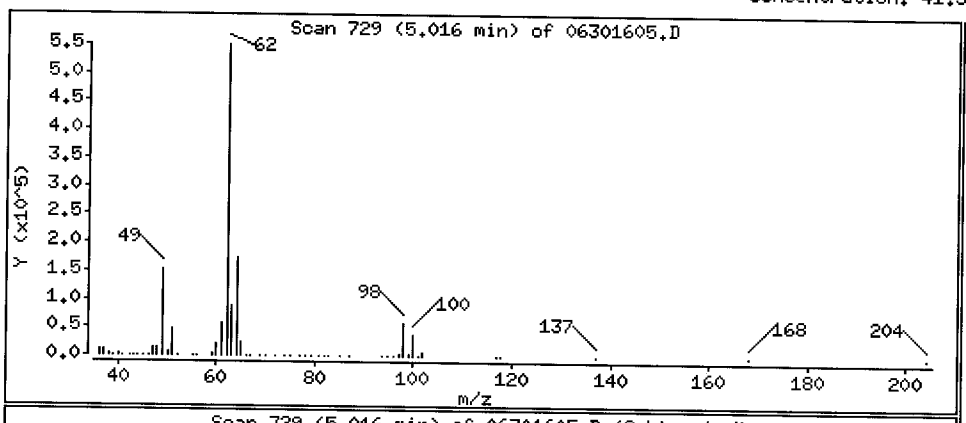
Operator: PB

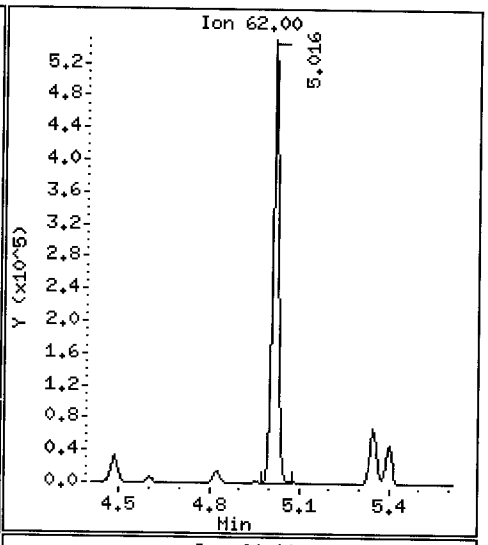
Column phase: RTXVMS

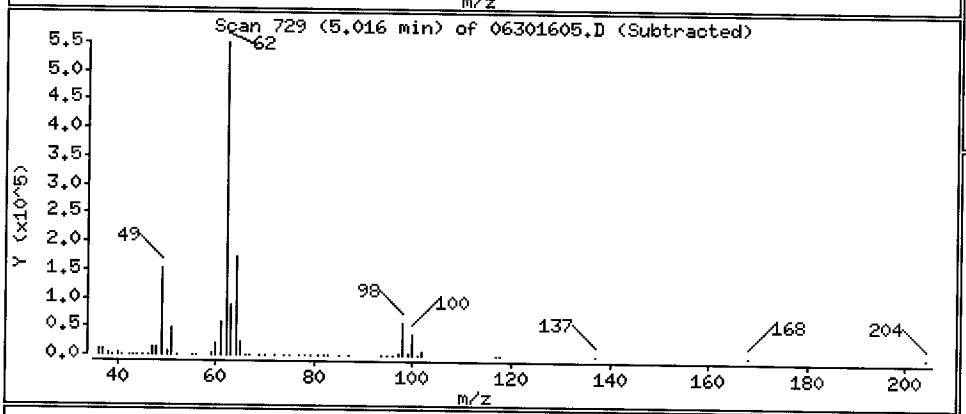
Column diameter: 0.18

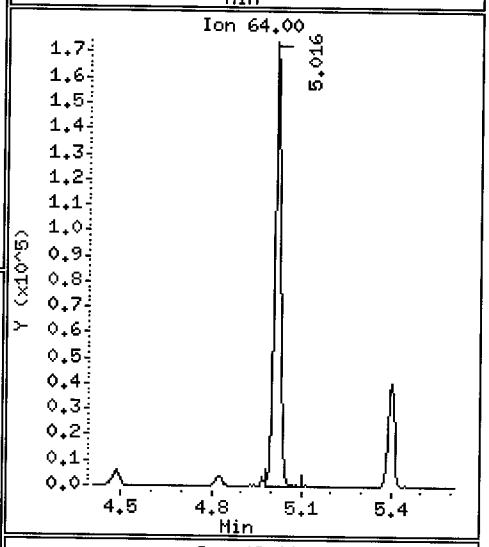
33 1,2-Dichloroethane

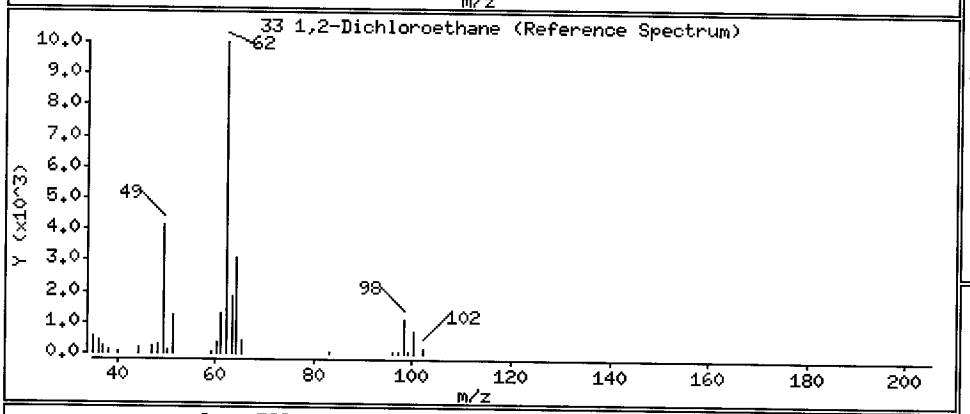
Concentration: 41.542 ug/Kg

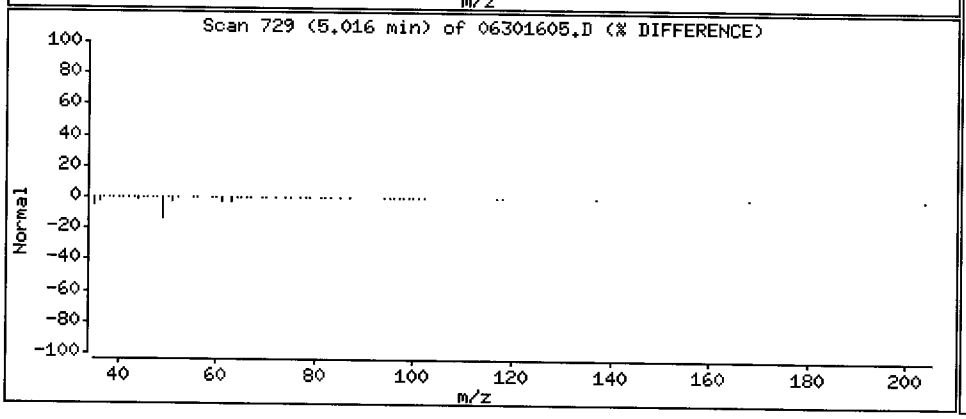


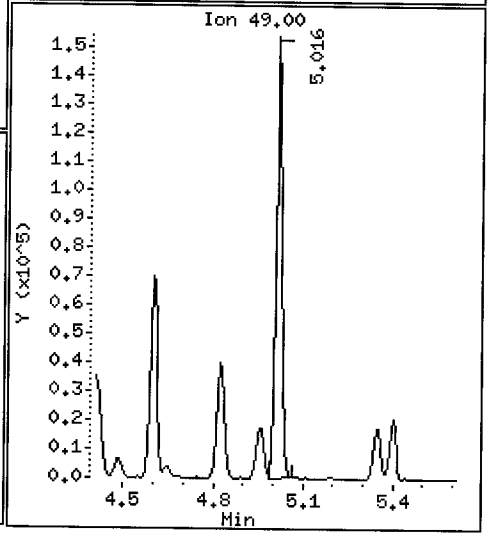












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

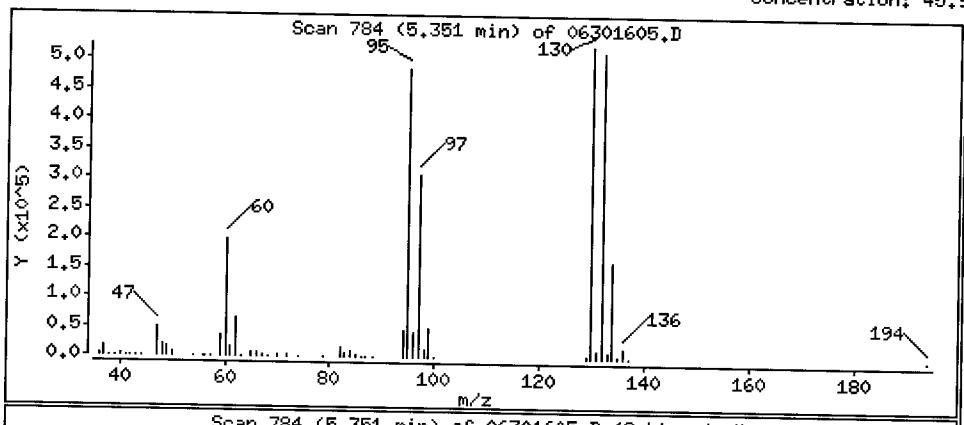
Operator: PB

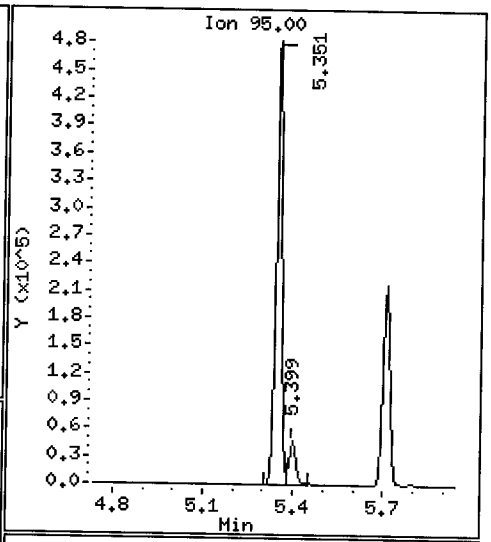
Column phase: RTXVMS

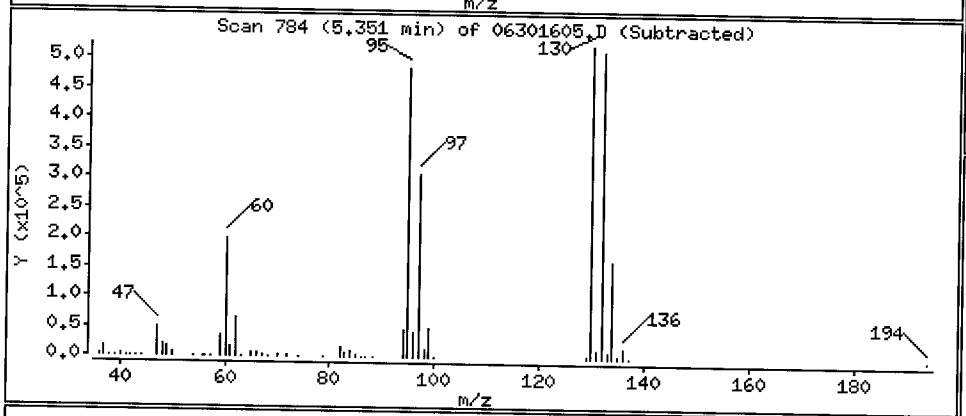
Column diameter: 0.18

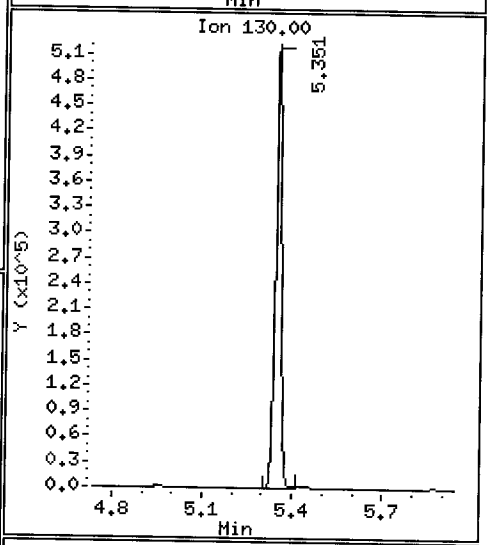
34 Trichloroethene

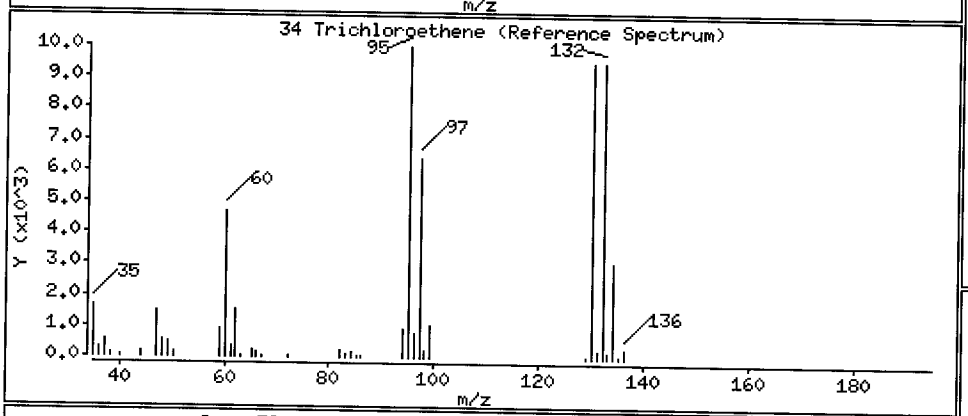
Concentration: 45.977 ug/Kg

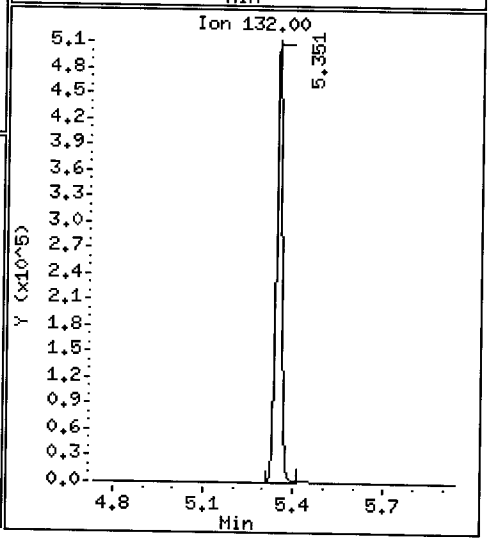


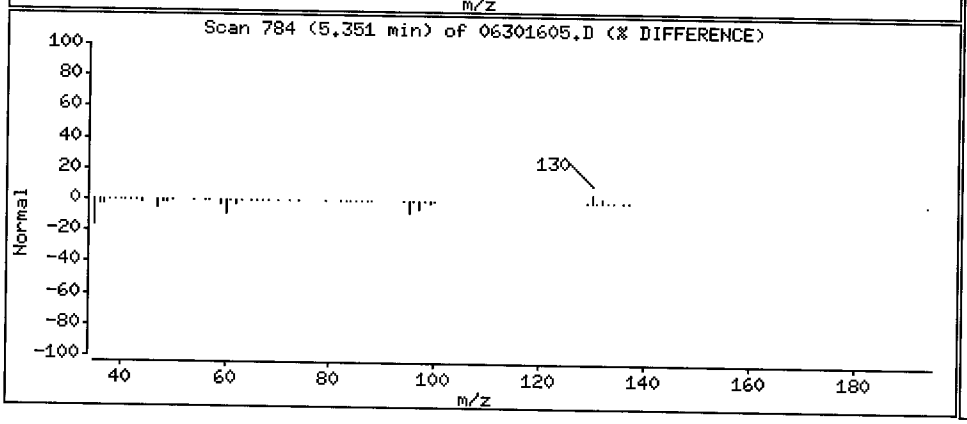












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

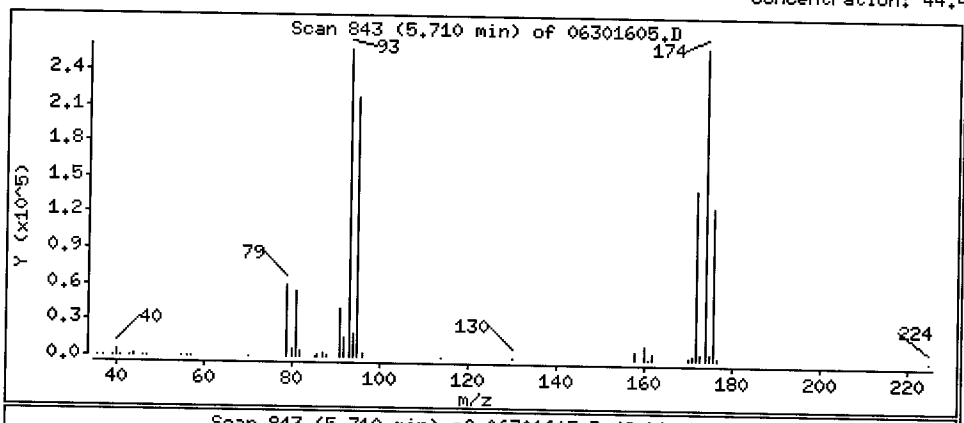
Operator: PB

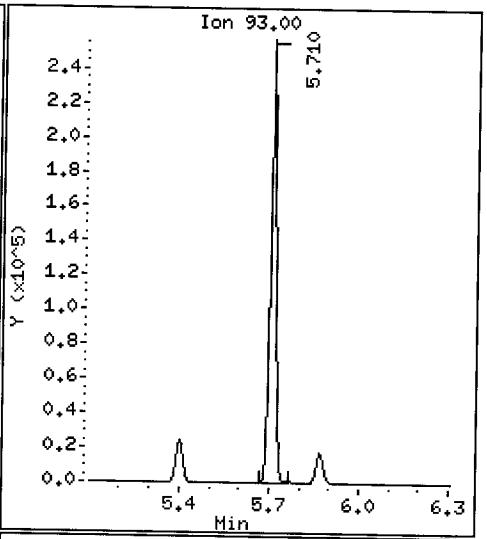
Column phase: RTXVMS

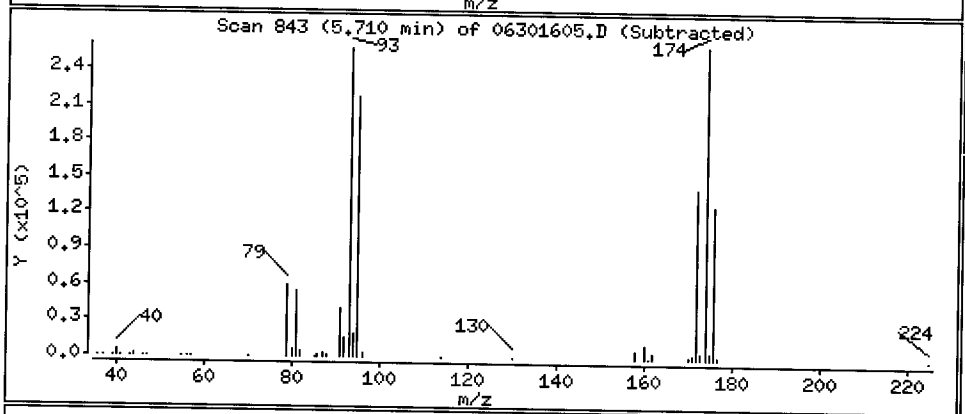
Column diameter: 0.18

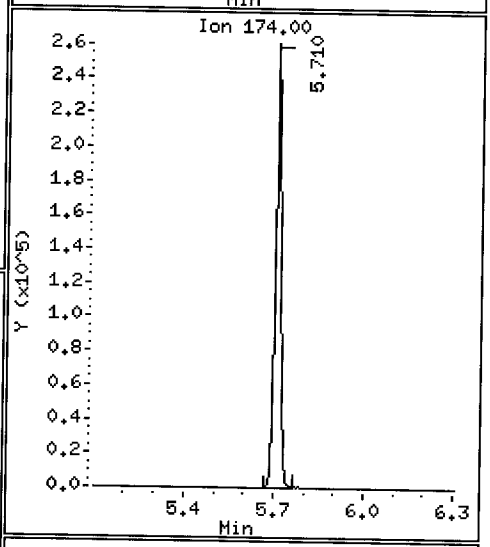
37 Dibromomethane

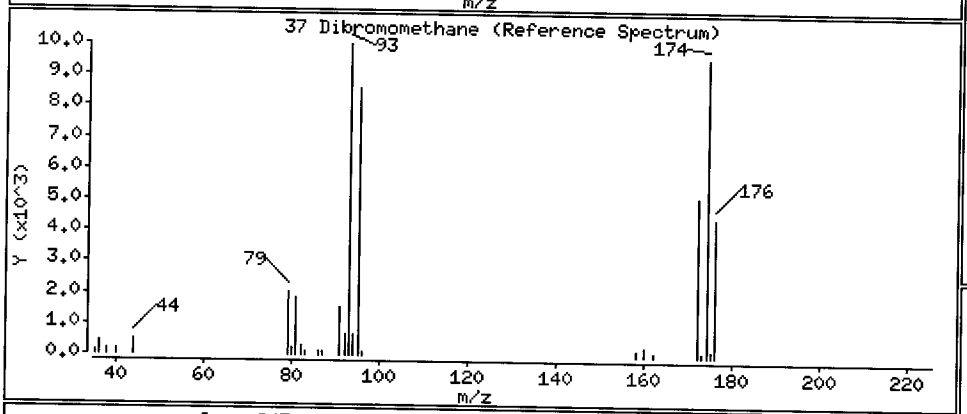
Concentration: 44.475 ug/Kg

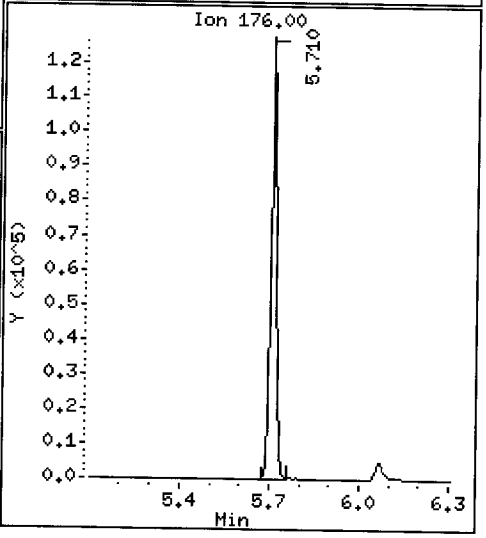


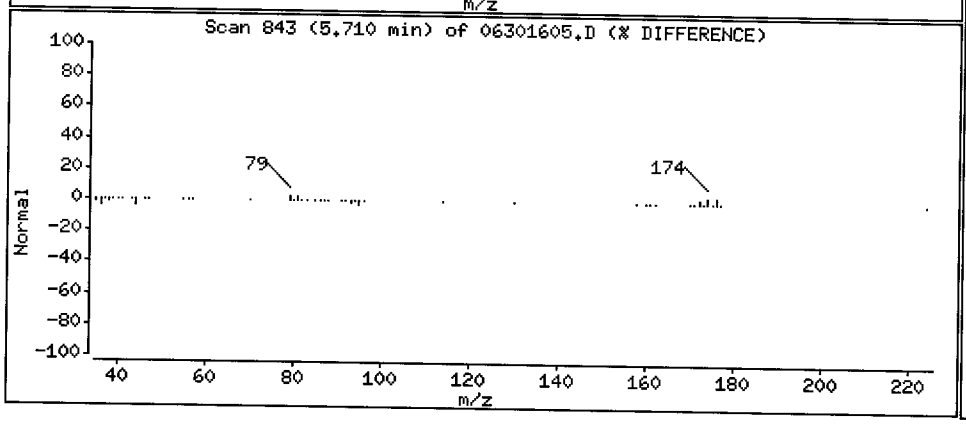












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

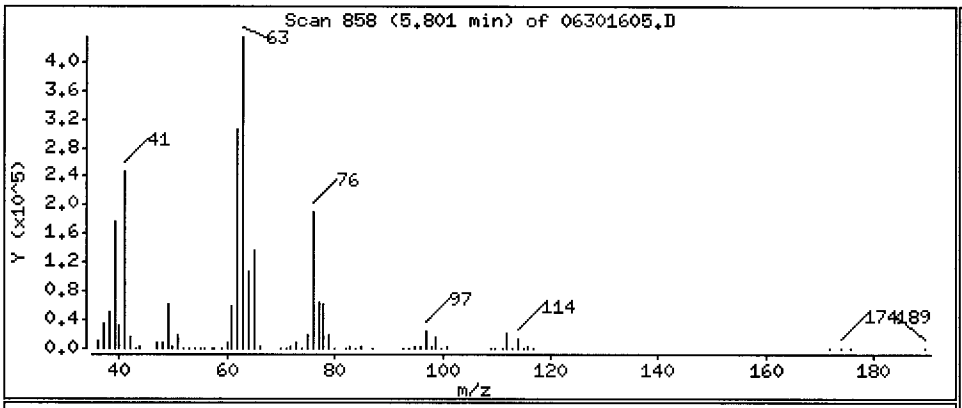
Operator: PB

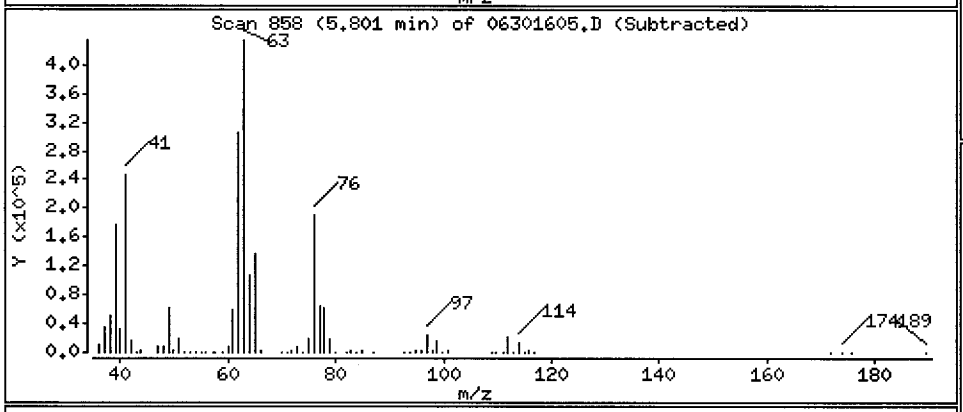
Column phase: RTXVMS

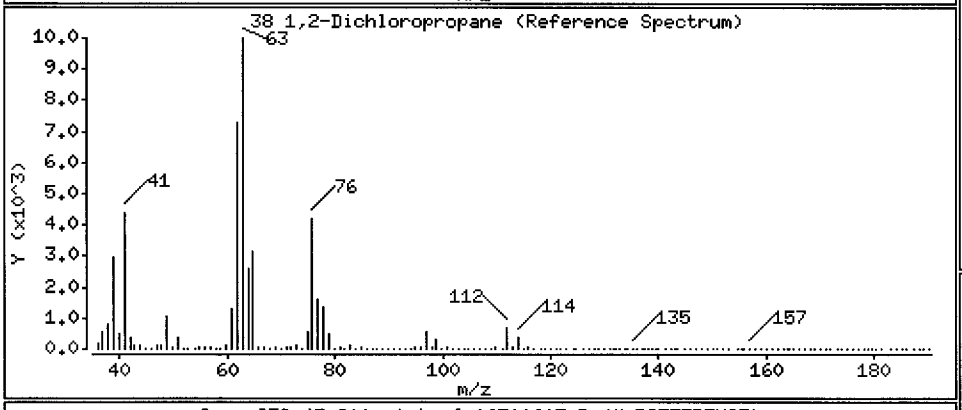
Column diameter: 0.18

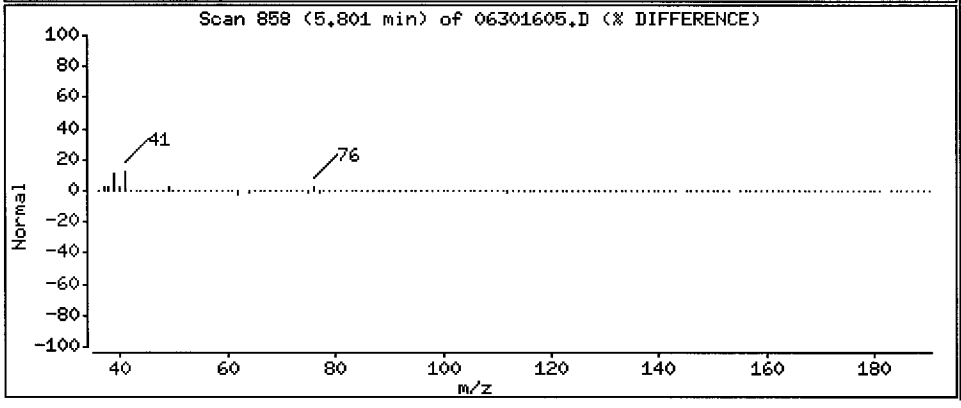
38 1,2-Dichloropropane

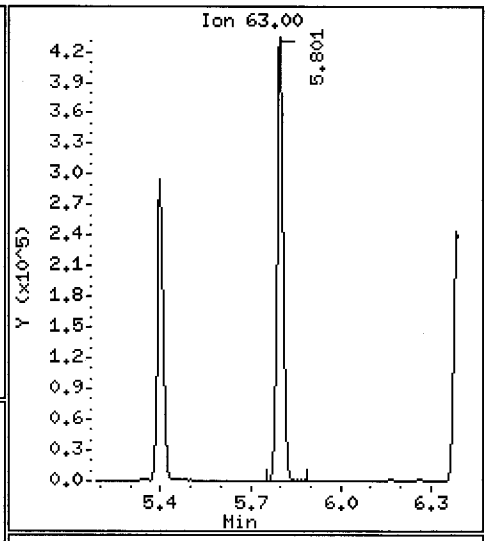
Concentration: 42.568 ug/Kg

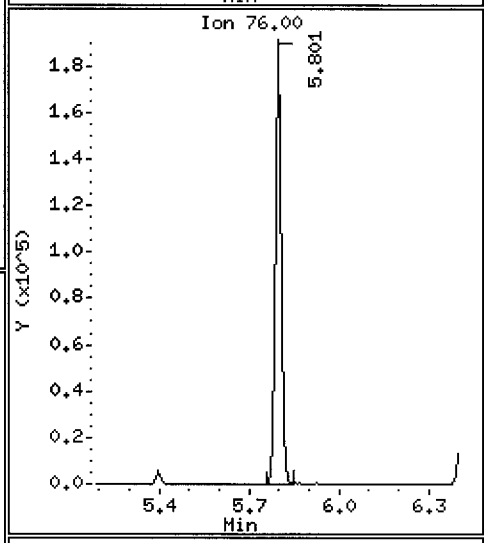


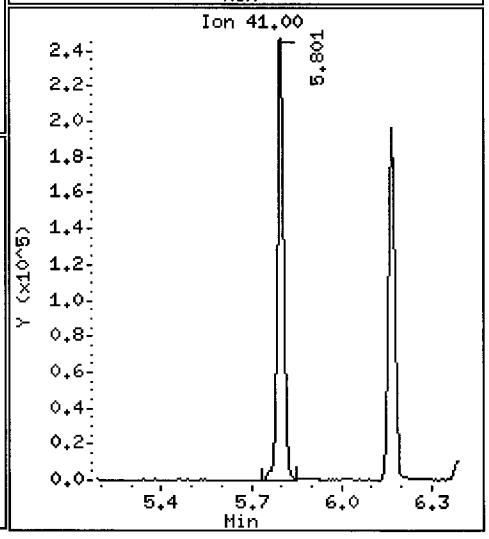












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

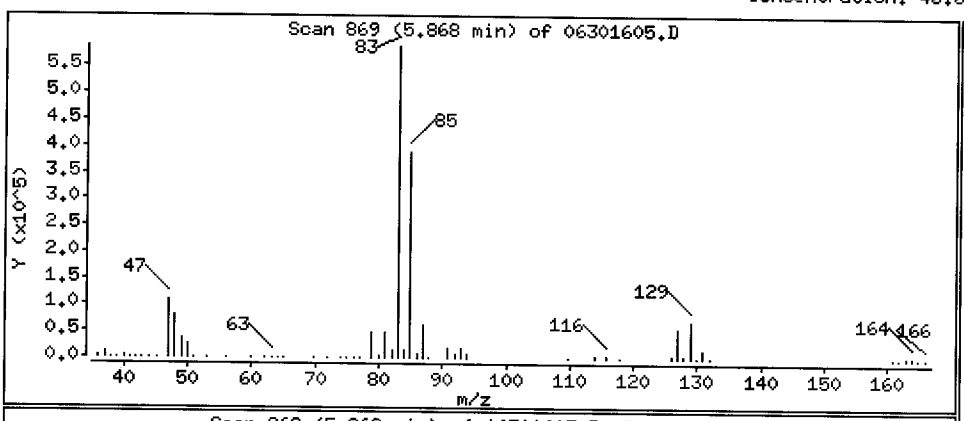
Operator: PB

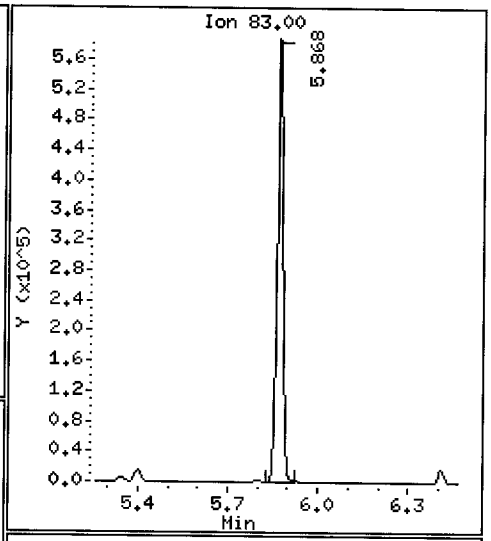
Column phase: RTXVMS

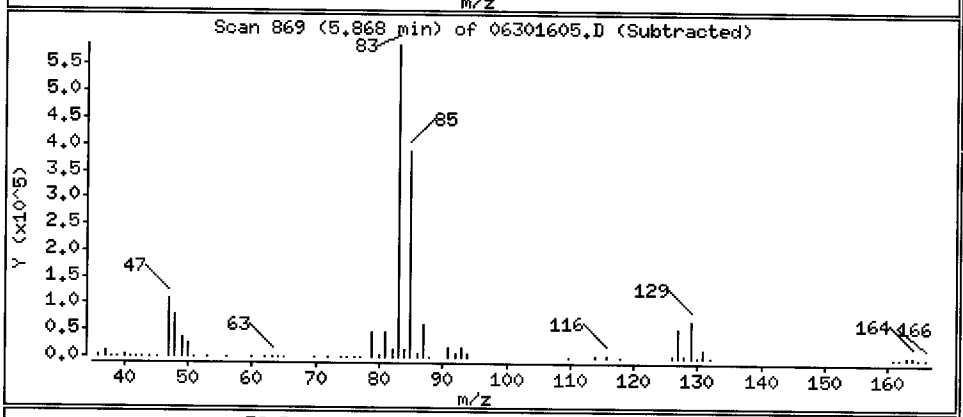
Column diameter: 0.18

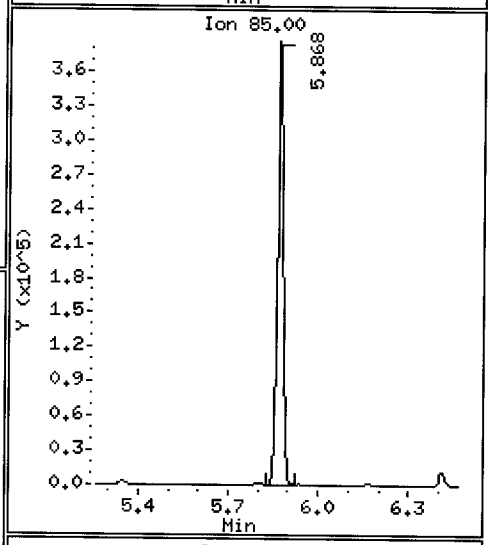
39 Bromodichloromethane

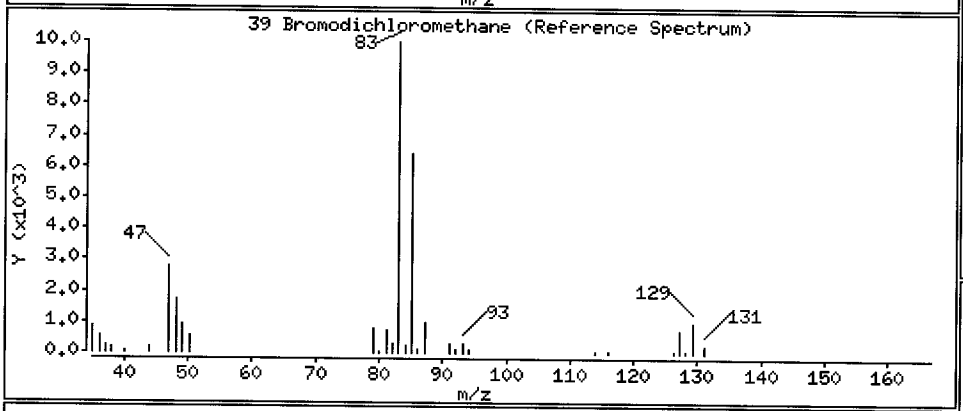
Concentration: 46.619 ug/Kg

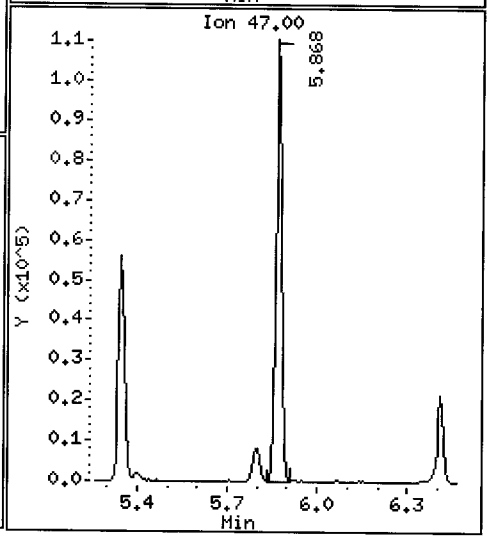


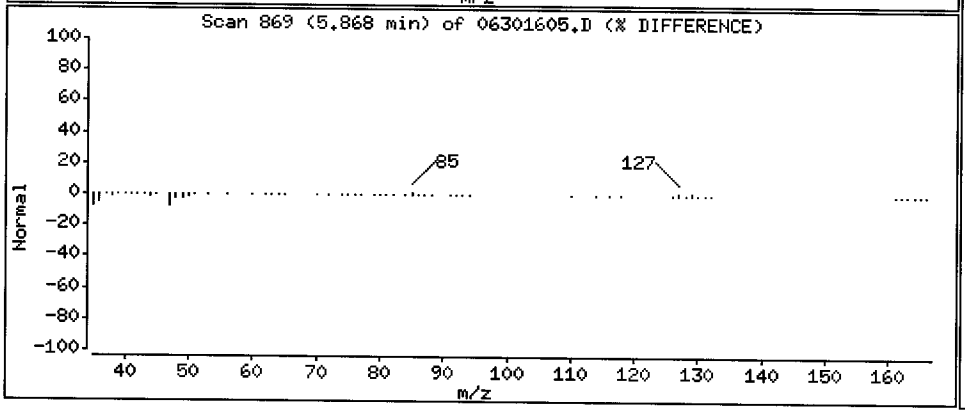












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

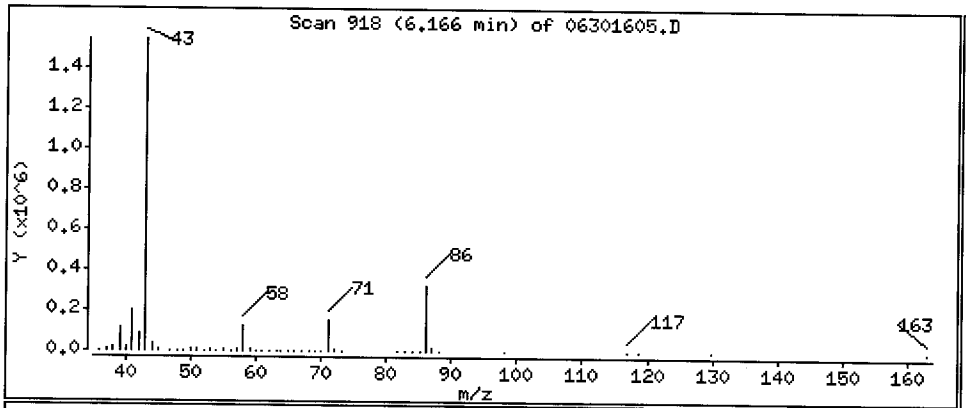
Operator: PB

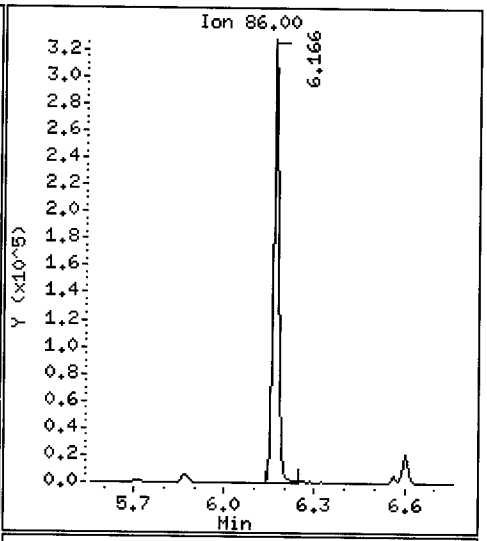
Column phase: RTXVMS

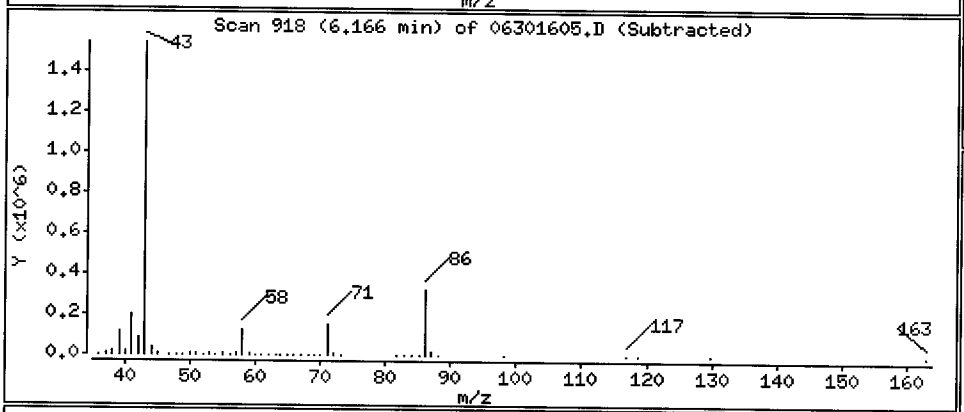
Column diameter: 0.18

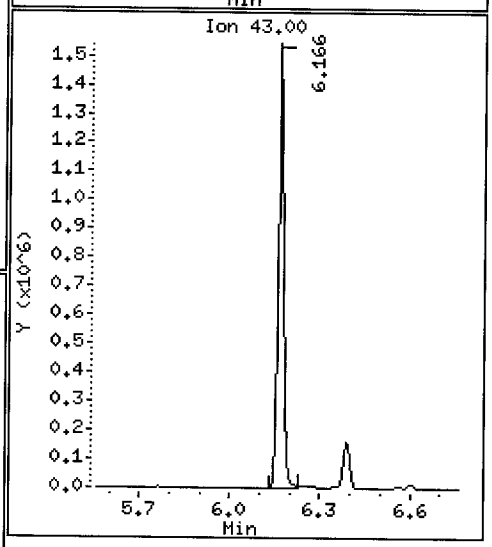
172 2-Pentanone

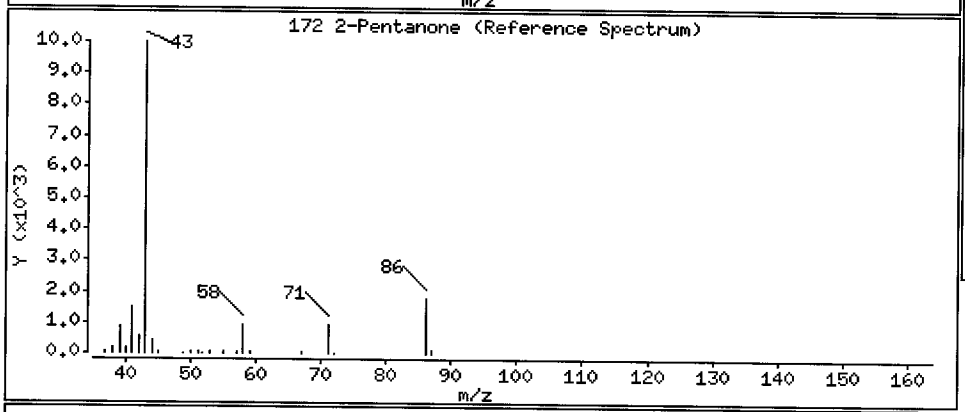
Concentration: 201.66 ug/Kg

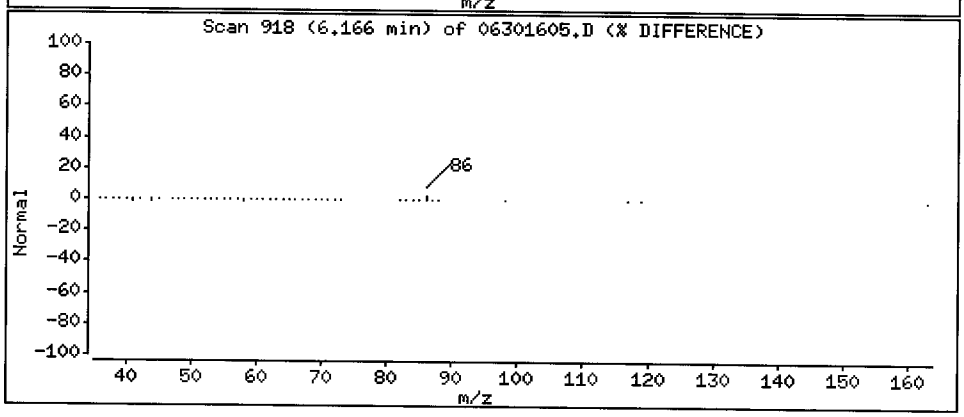












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

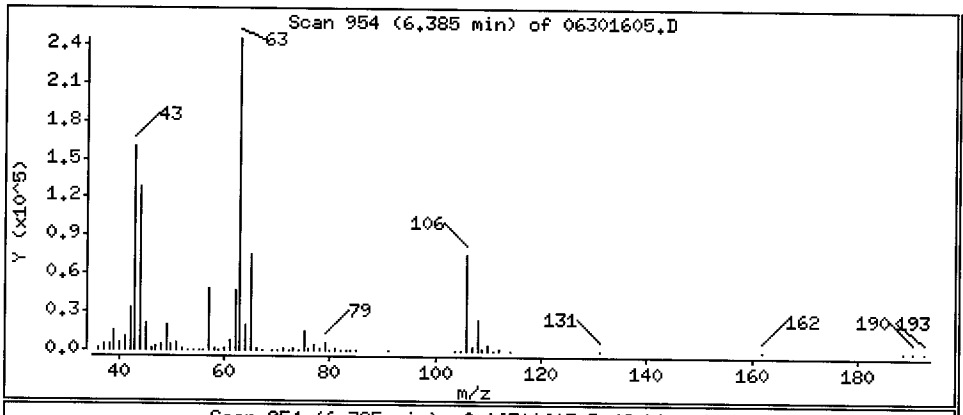
Operator: PB

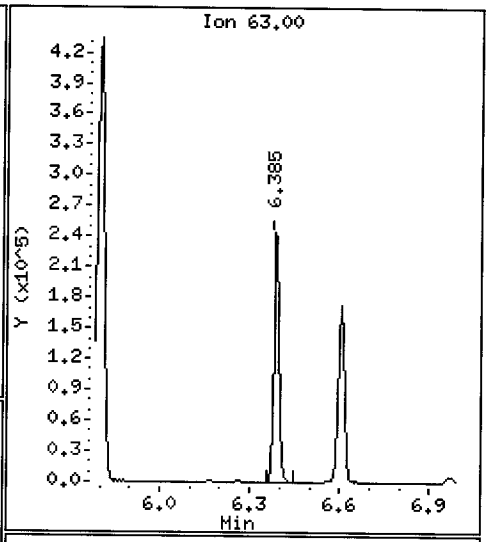
Column phase: RTXVMS

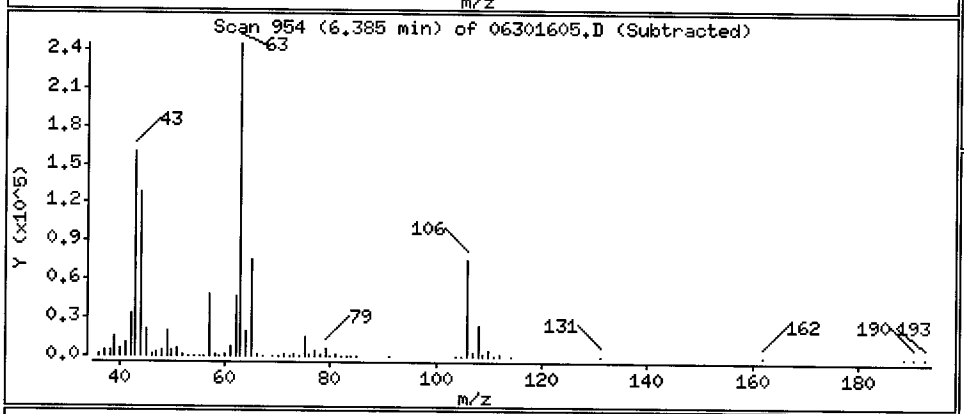
Column diameter: 0.18

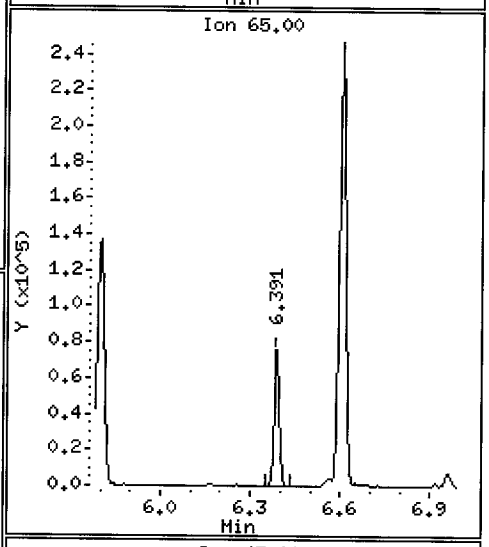
40 2-Chloroethyl Vinyl Ether

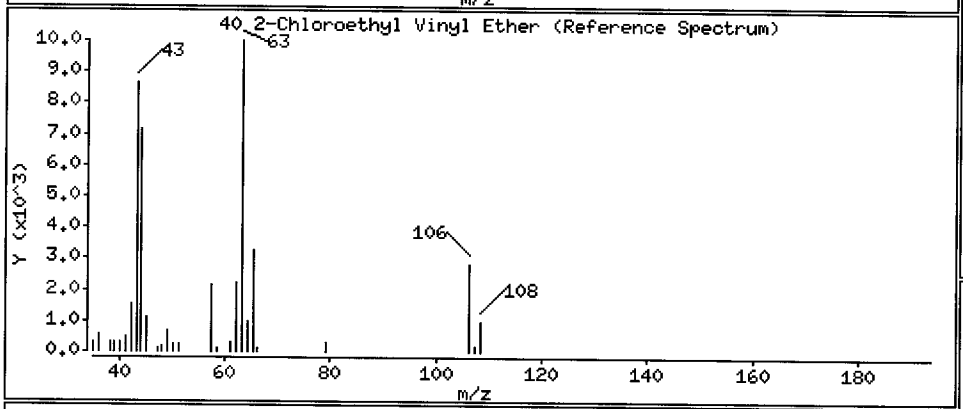
Concentration: 50.486 ug/Kg

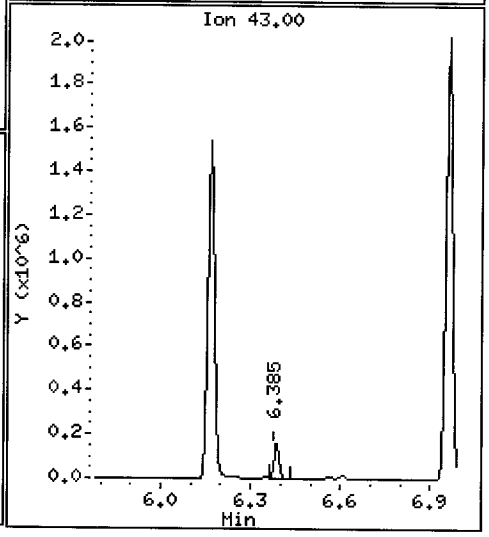


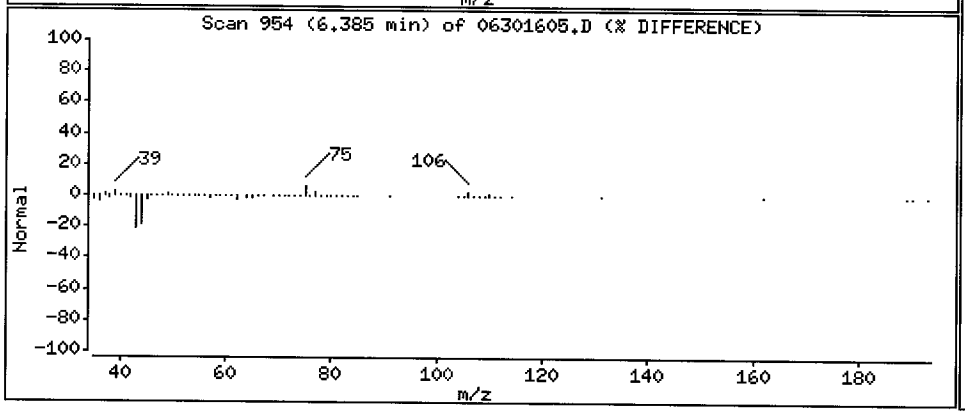












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

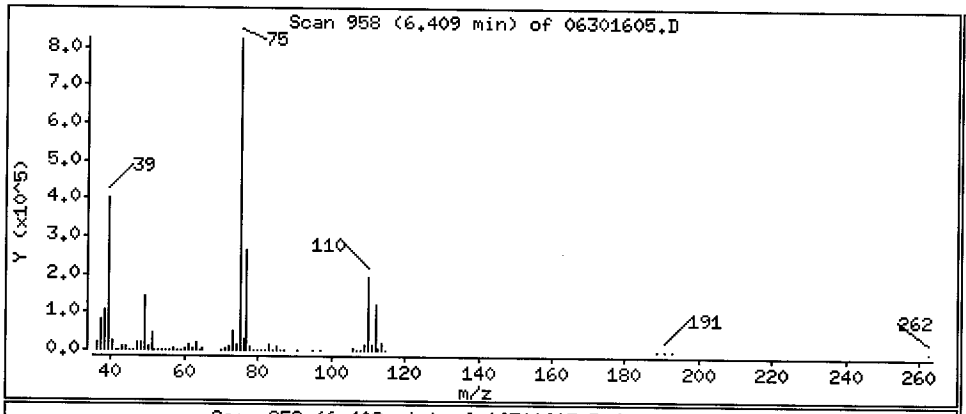
Operator: PB

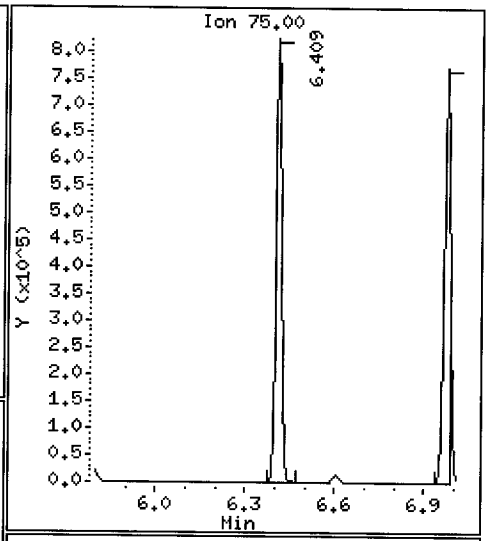
Column phase: RTXVMS

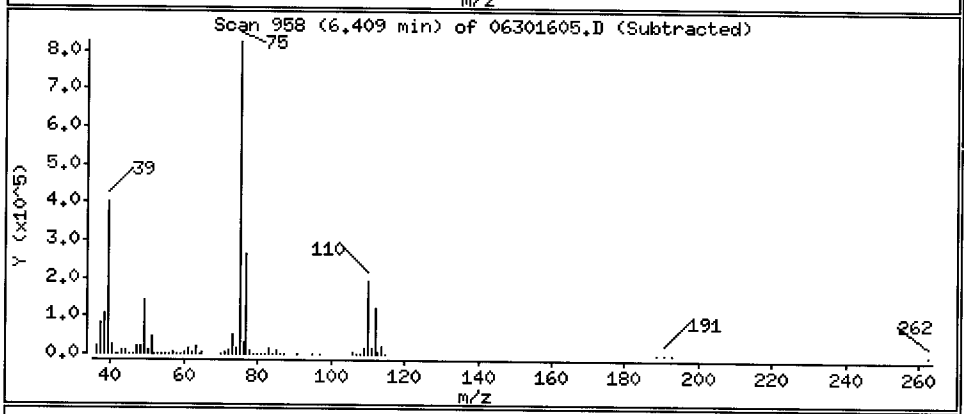
Column diameter: 0.18

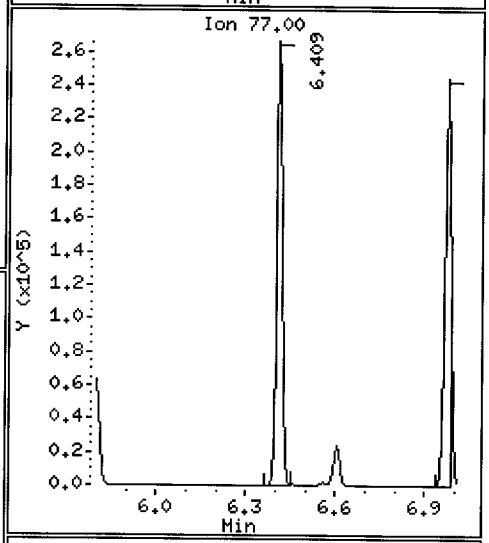
41 Cis 1,3-dichloropropene

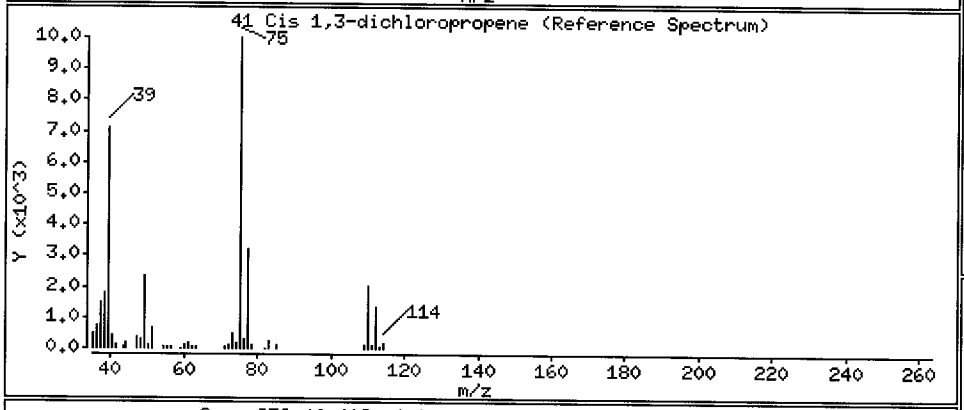
Concentration: 45.396 ug/Kg

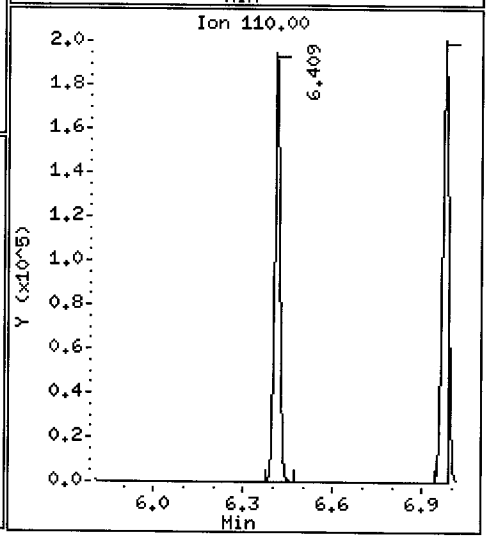


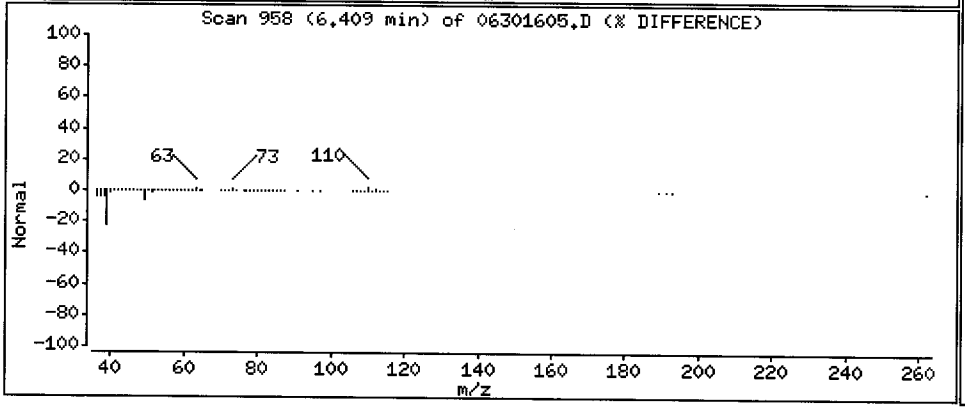












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

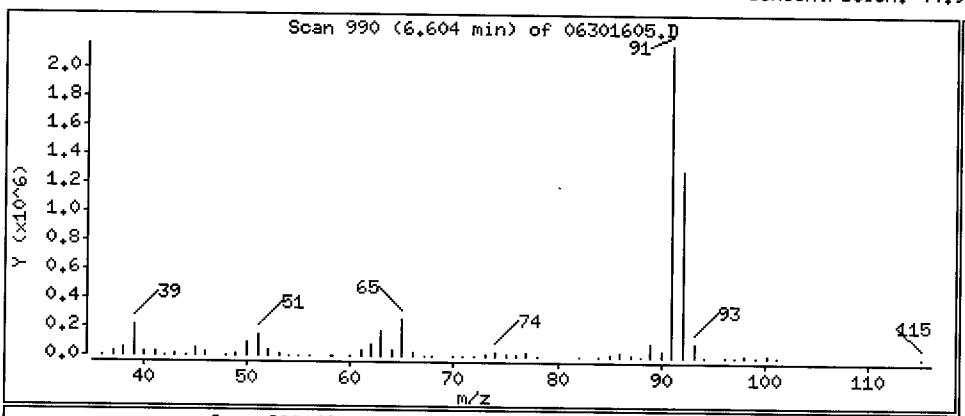
Operator: PB

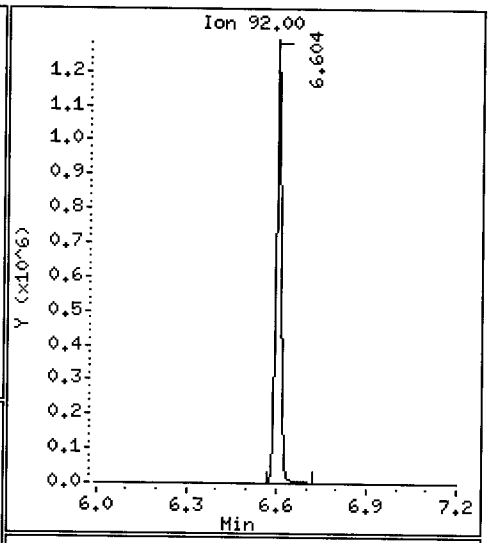
Column phase: RTXVMS

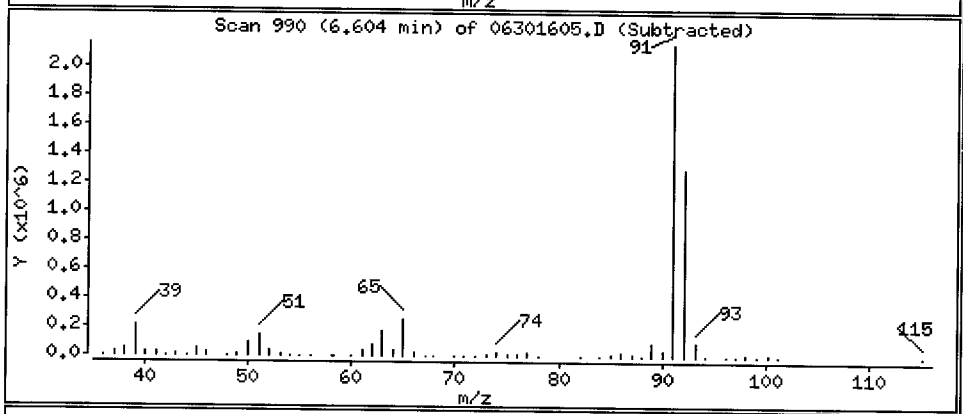
Column diameter: 0.18

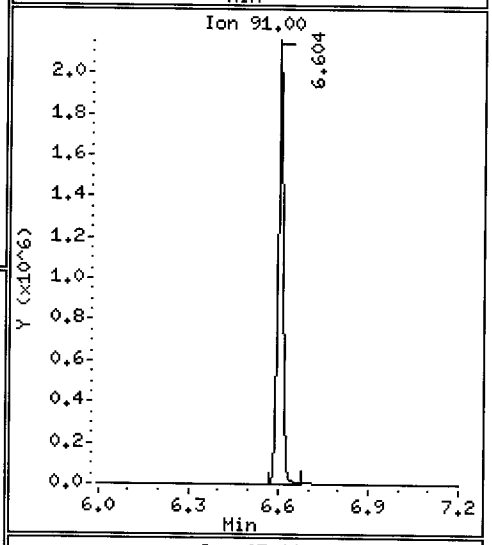
43 Toluene

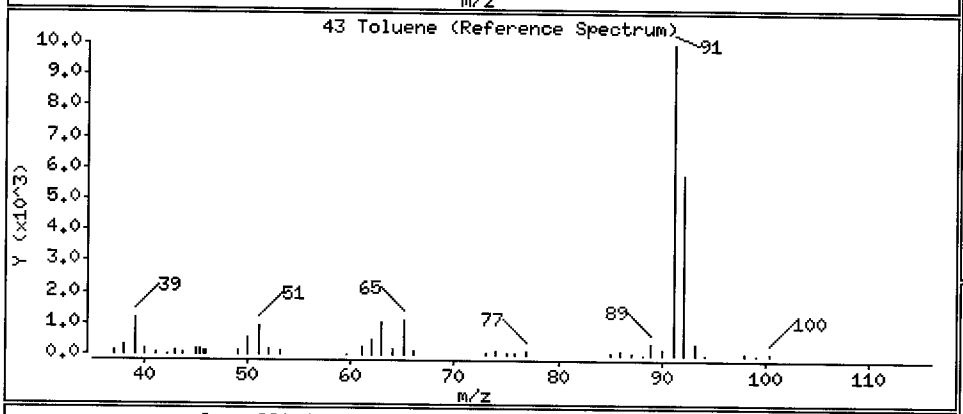
Concentration: 44.919 ug/Kg

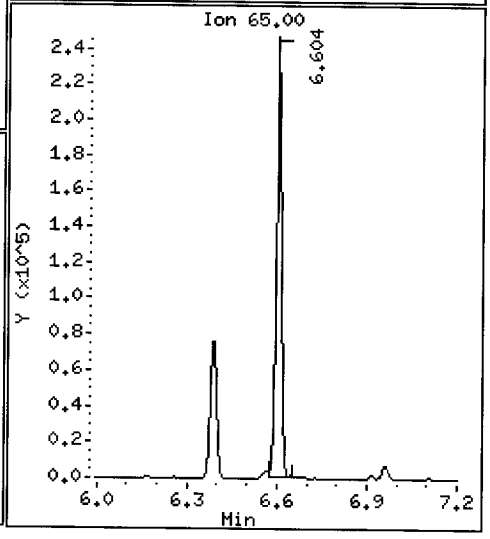


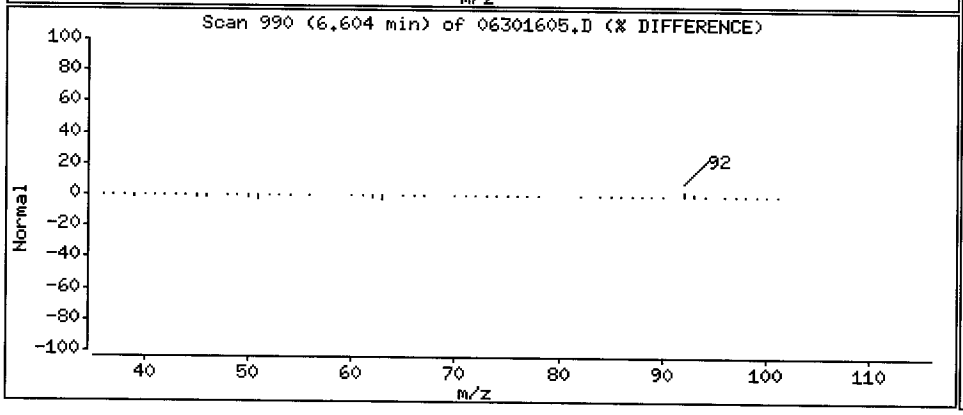












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

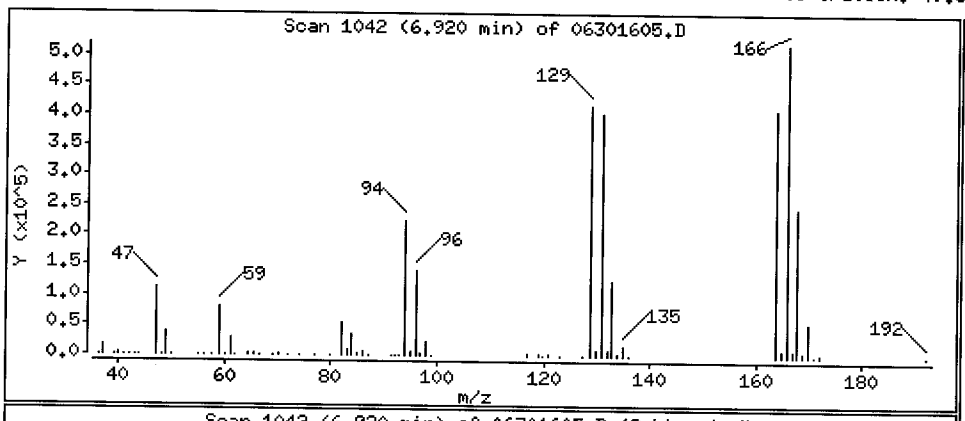
Operator: PB

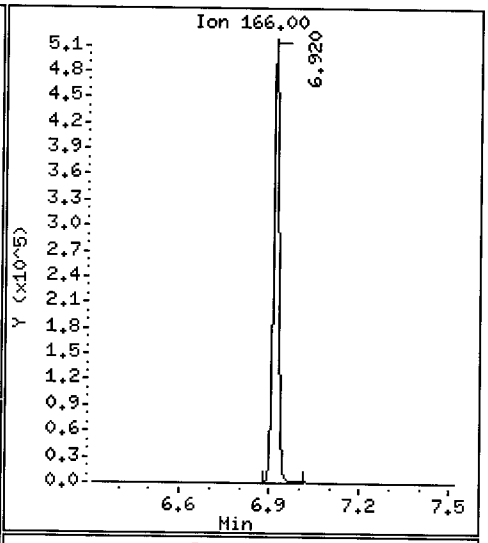
Column phase: RTXVMS

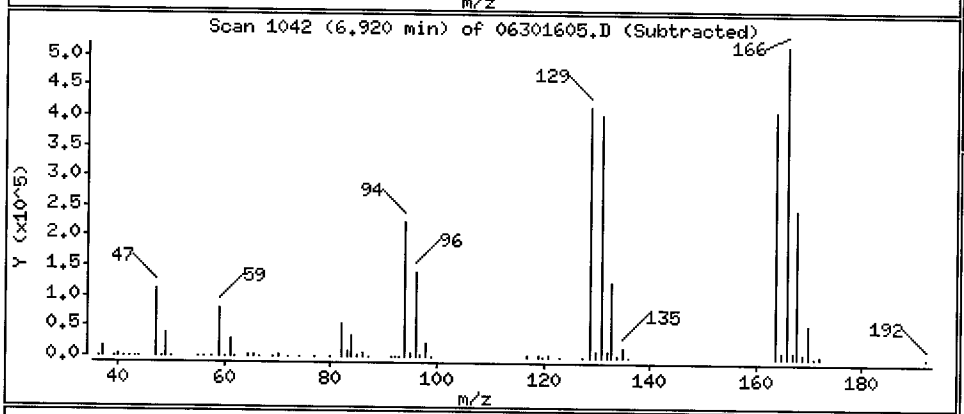
Column diameter: 0.18

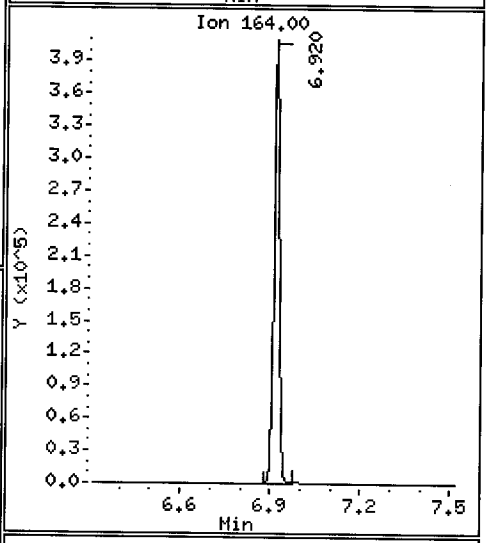
44 Tetrachloroethene

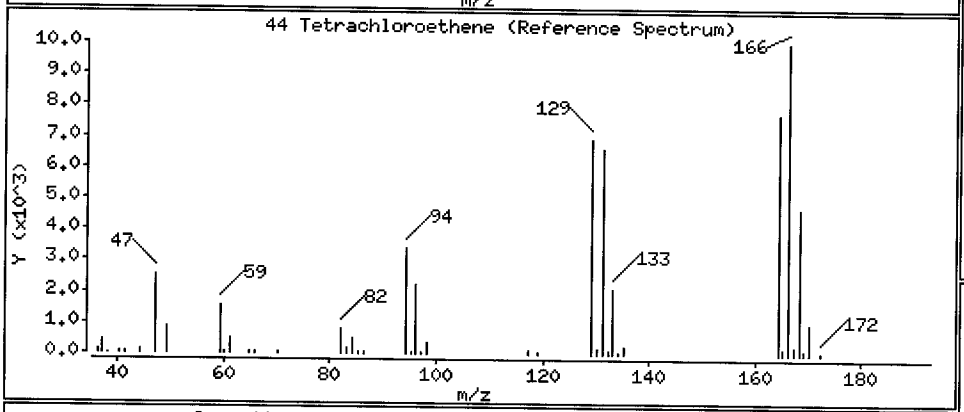
Concentration: 49.574 ug/Kg

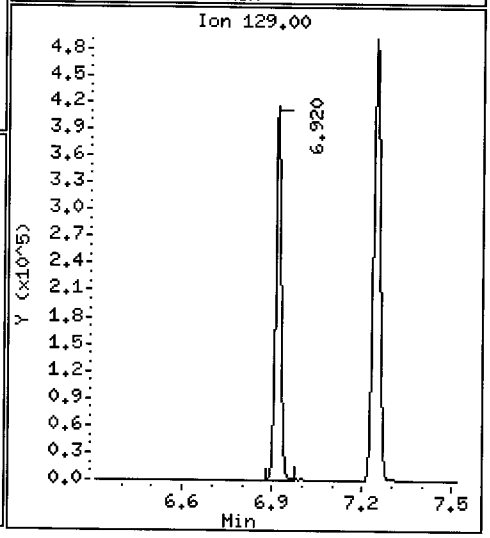


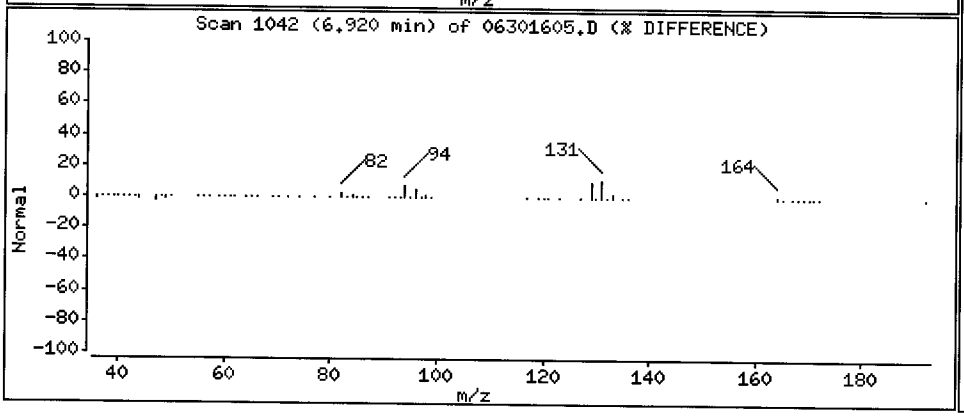












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

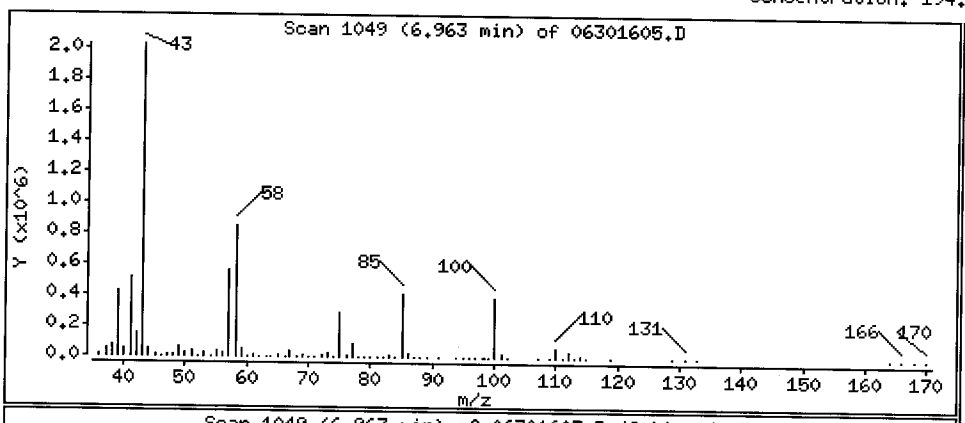
Operator: PB

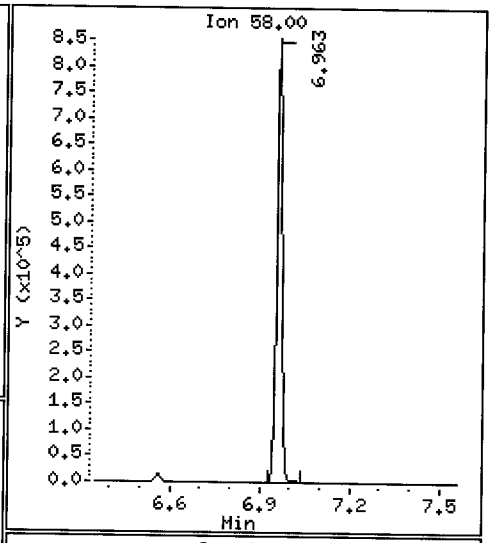
Column phase: RTXVMS

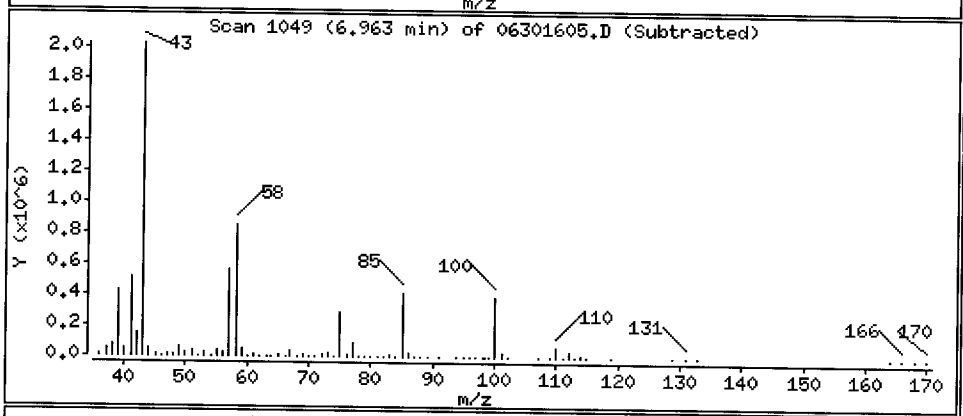
Column diameter: 0.18

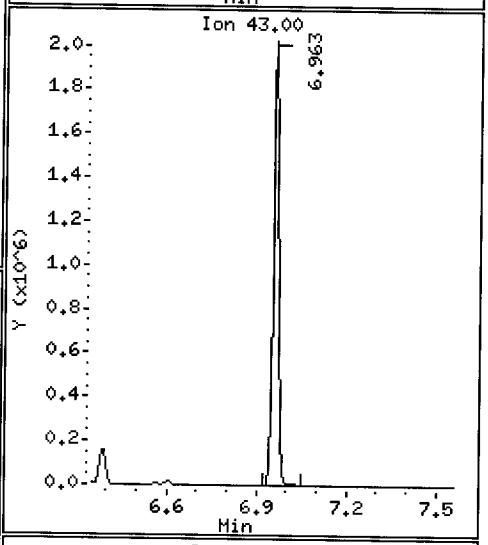
45 4-Methyl-2-Pentanone

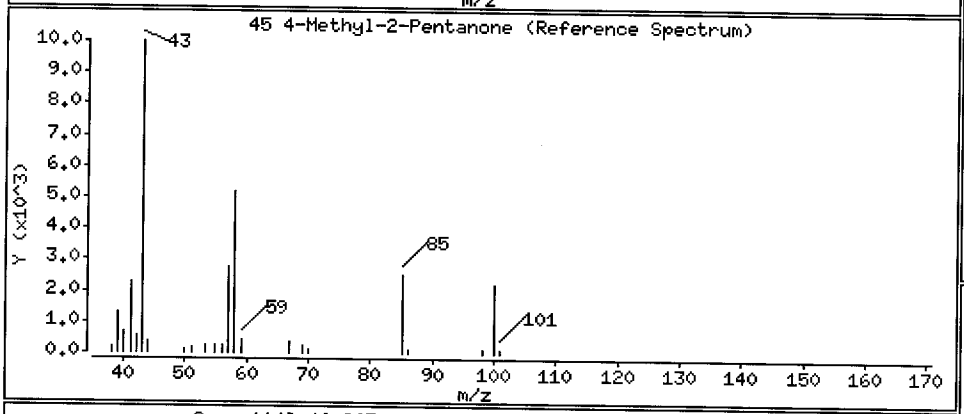
Concentration: 194.00 ug/Kg

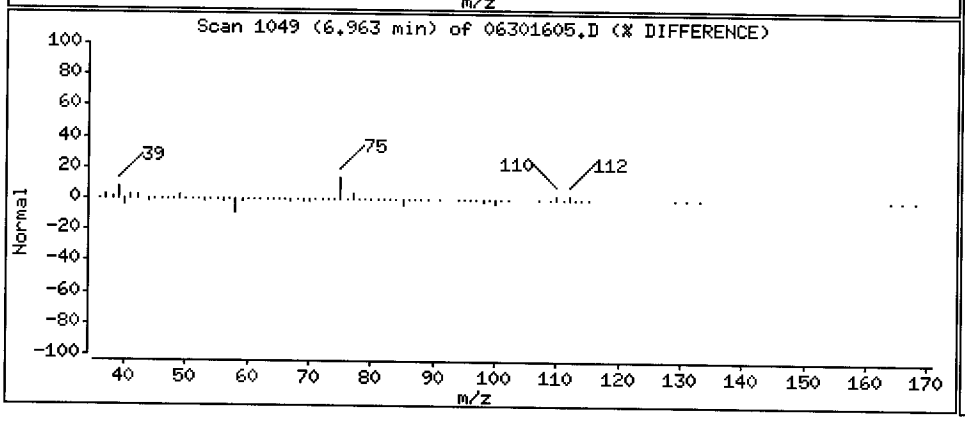


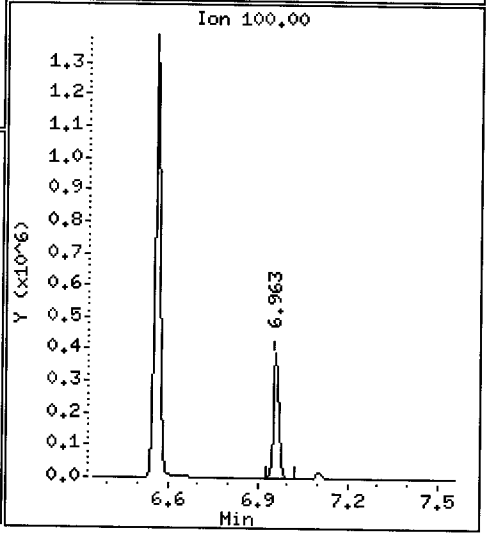












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

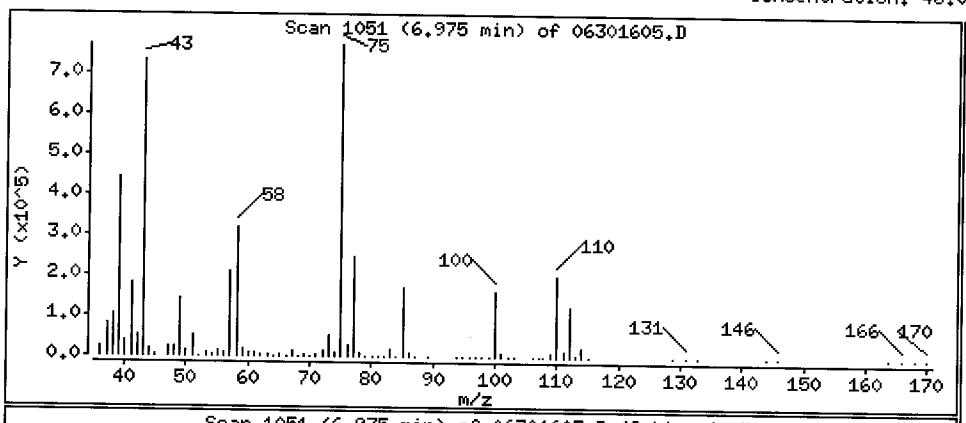
Operator: PB

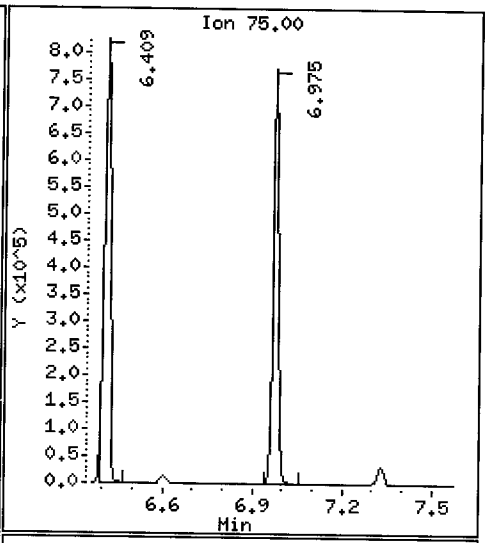
Column phase: RTXVMS

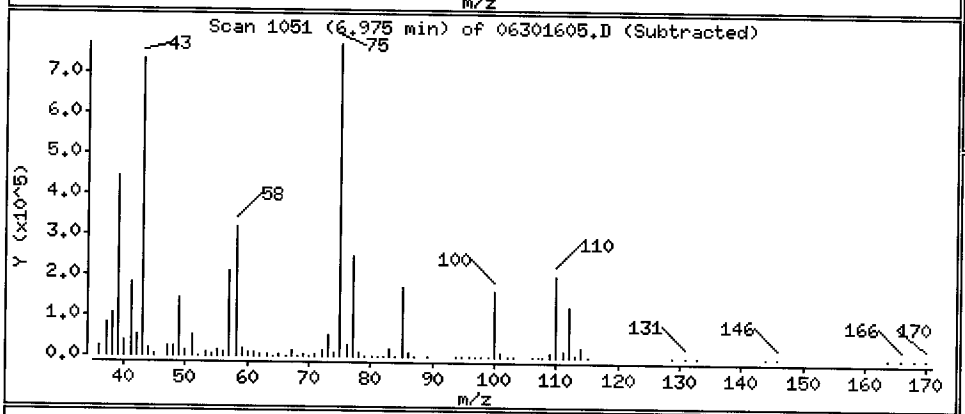
Column diameter: 0.18

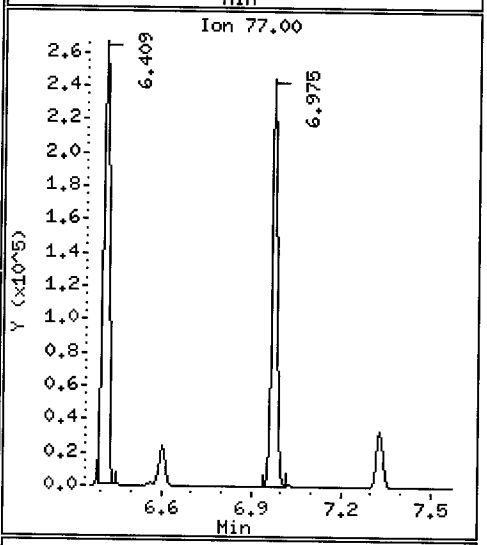
46 Trans 1,3-Dichloropropene

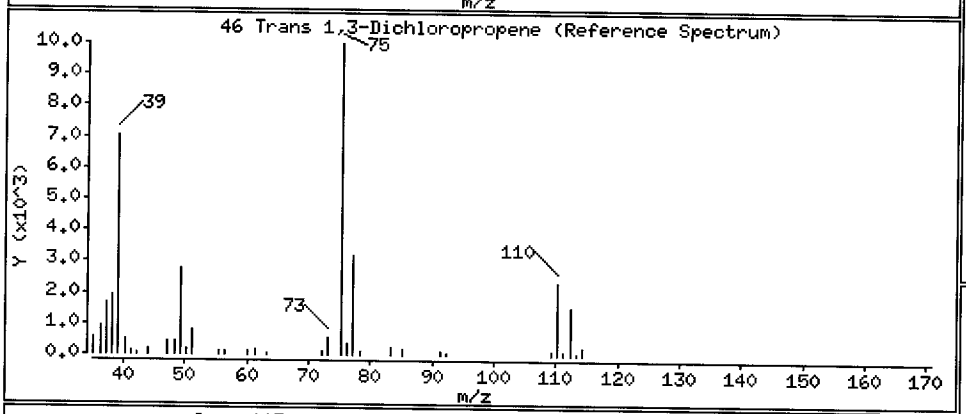
Concentration: 46.070 ug/Kg

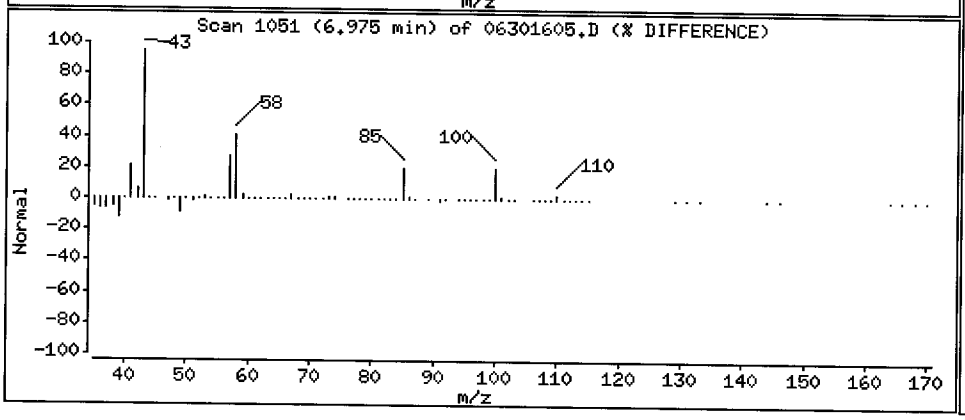


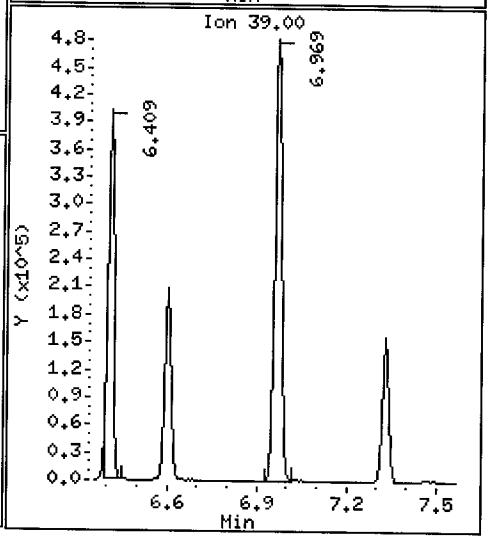












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

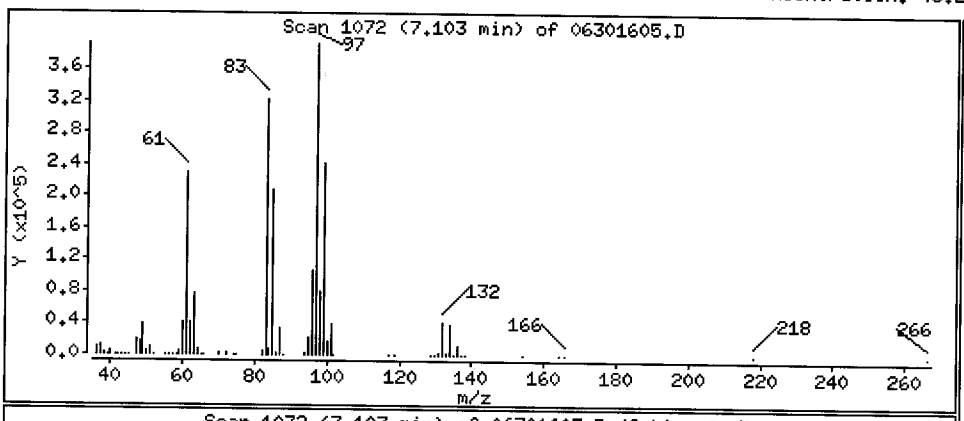
Operator: PB

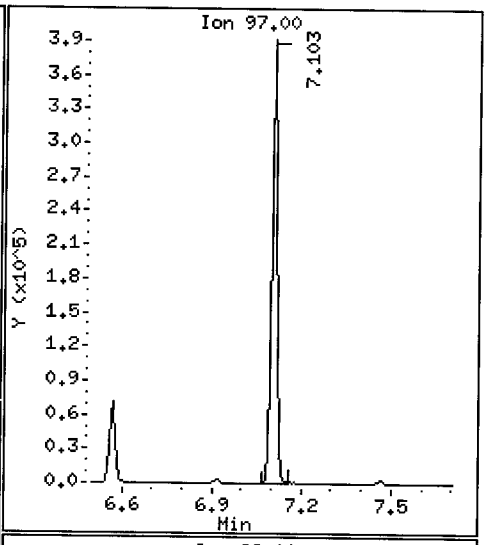
Column phase: RTXVMS

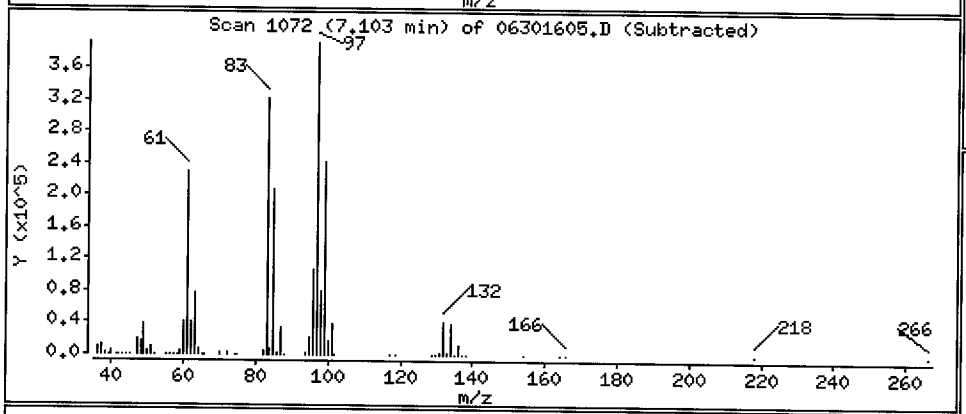
Column diameter: 0.18

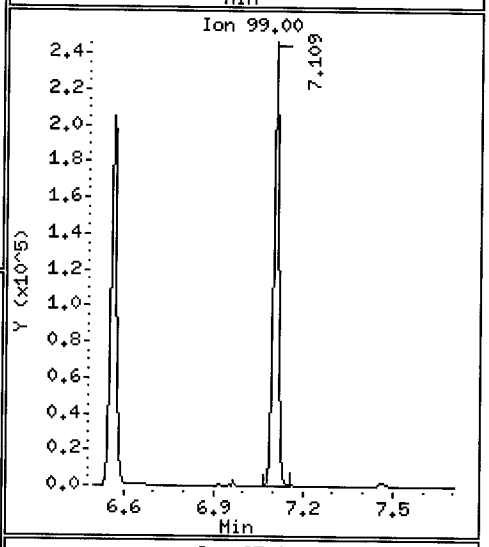
47 1,1,2-Trichloroethane

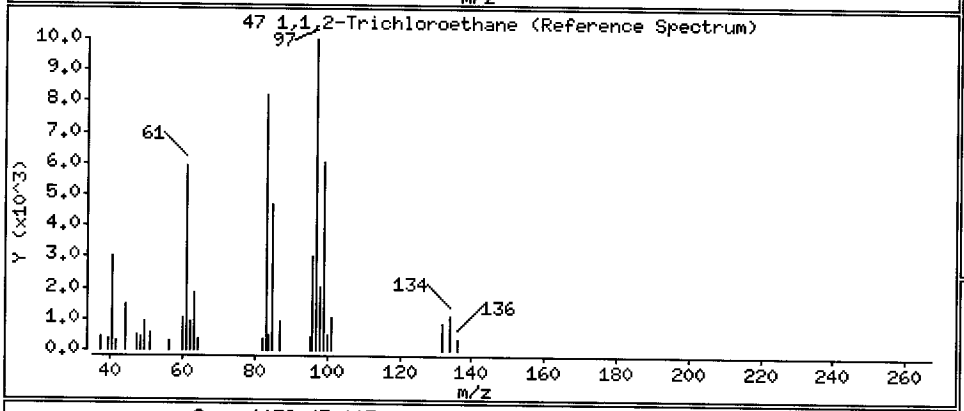
Concentration: 45.228 ug/Kg

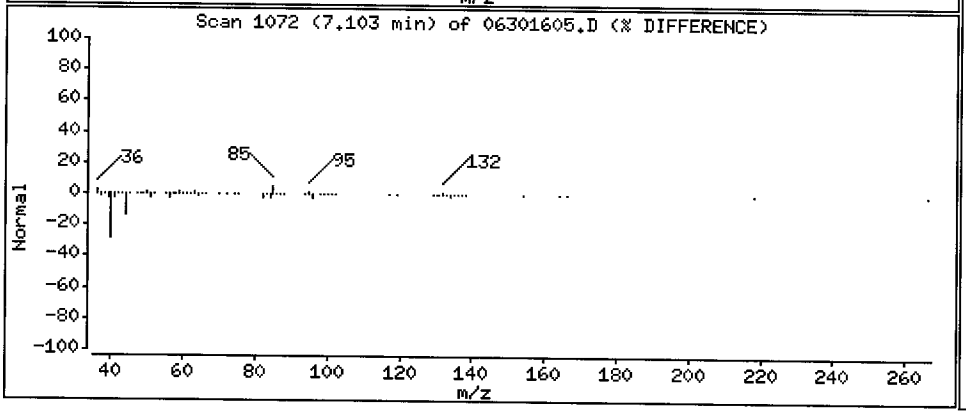


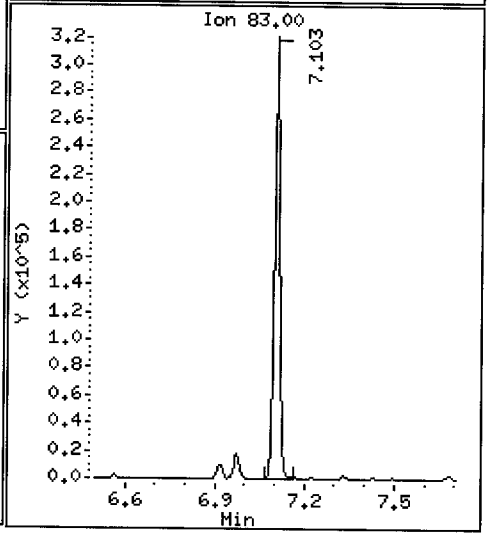












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

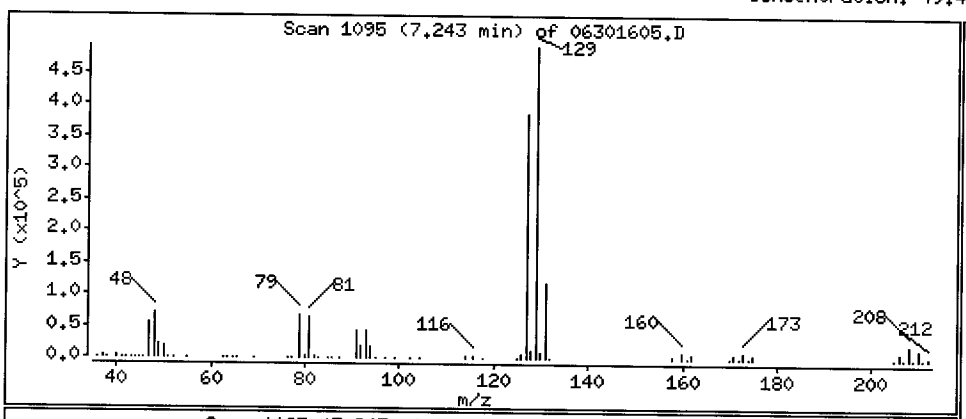
Operator: PB

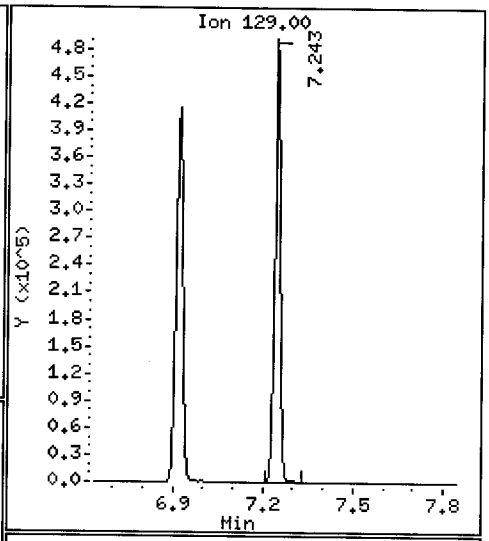
Column phase: RTXVMS

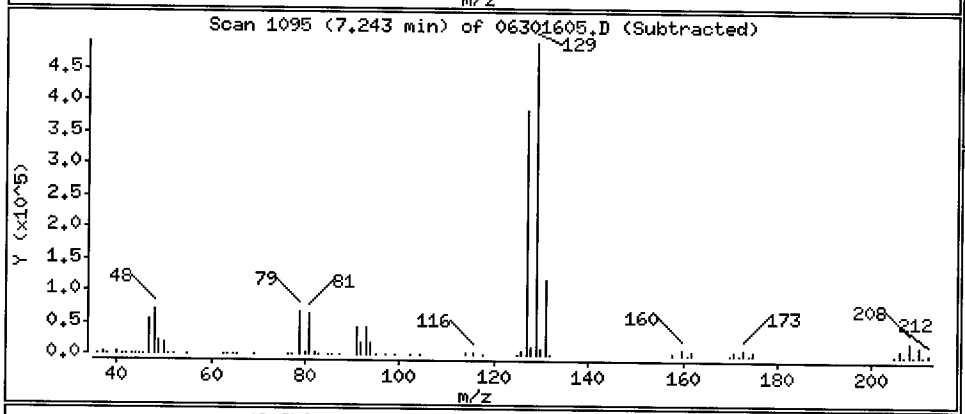
Column diameter: 0.18

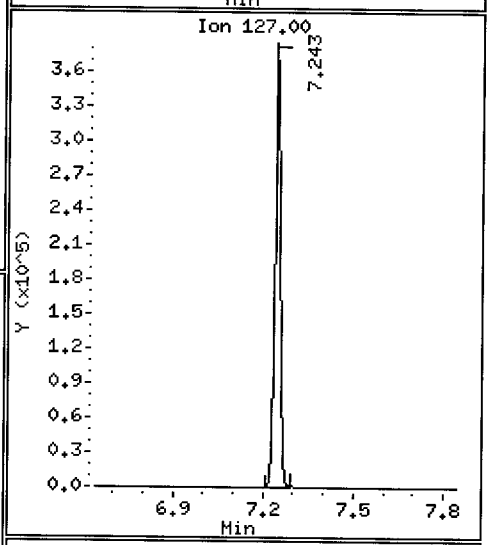
48 Chlorodibromomethane

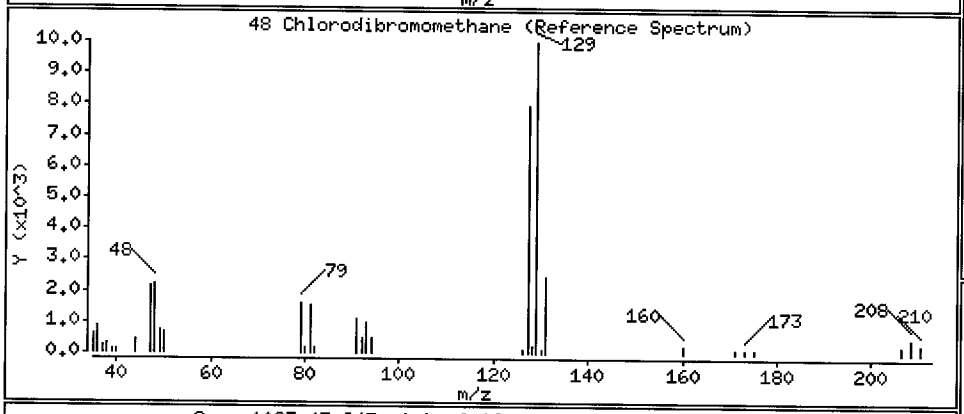
Concentration: 49.454 ug/Kg

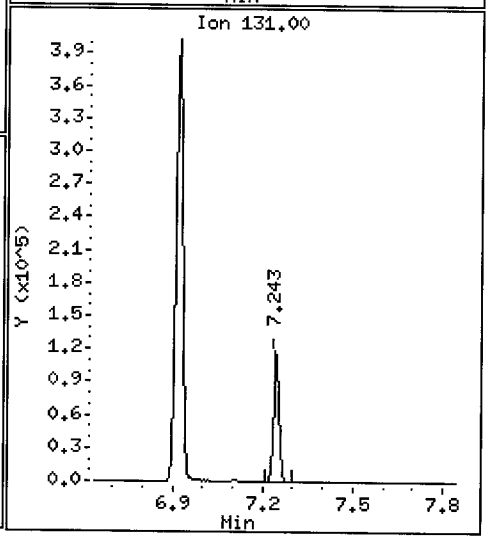


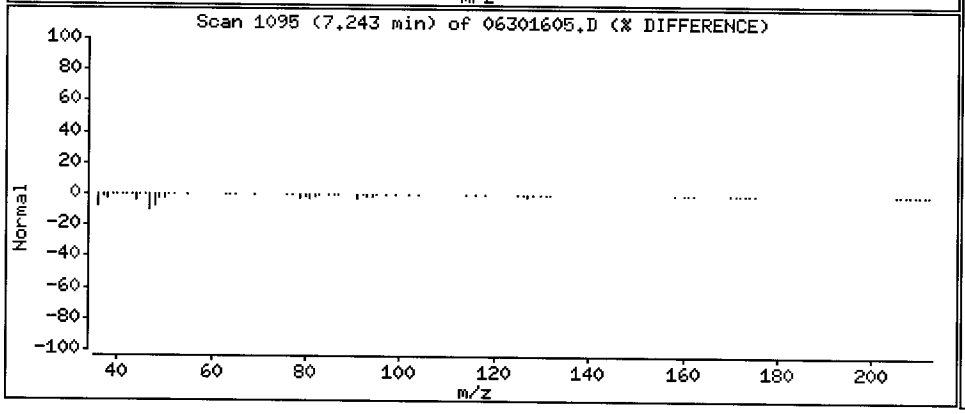












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

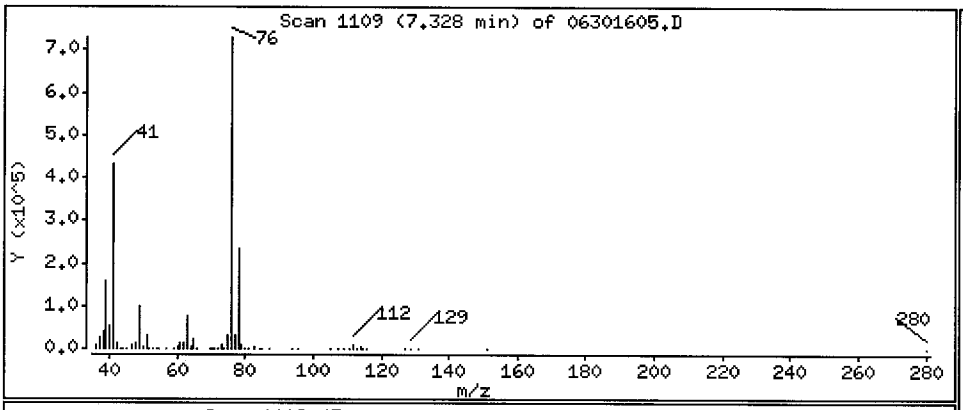
Operator: PB

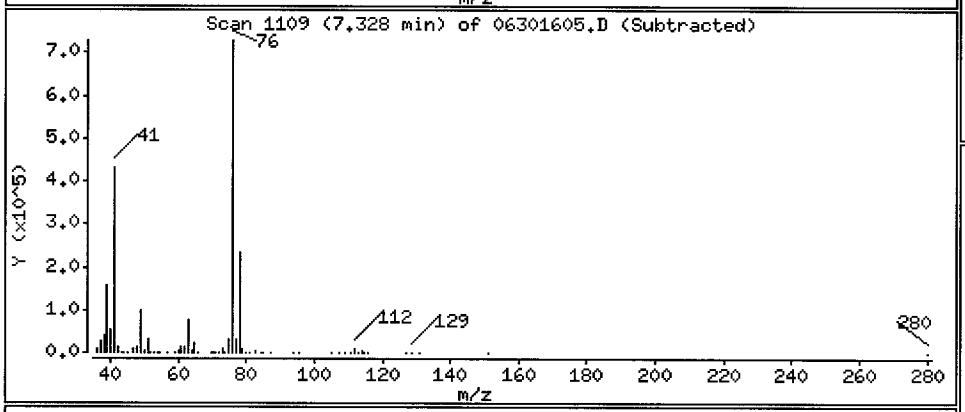
Column phase: RTXVMS

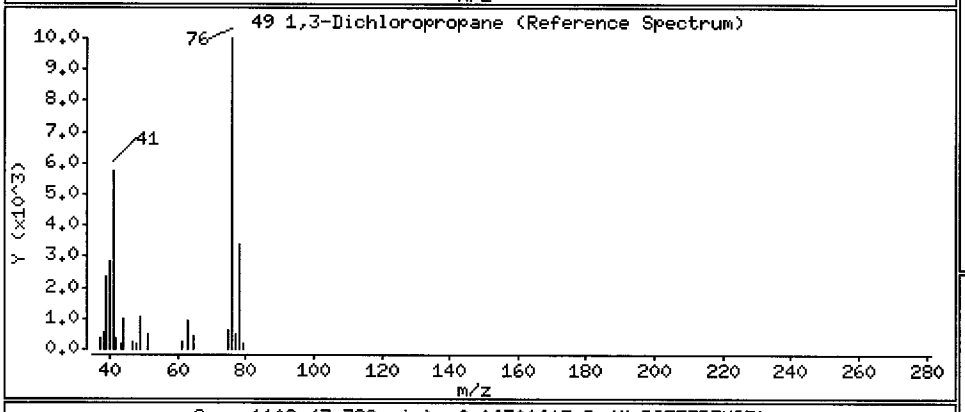
Column diameter: 0.18

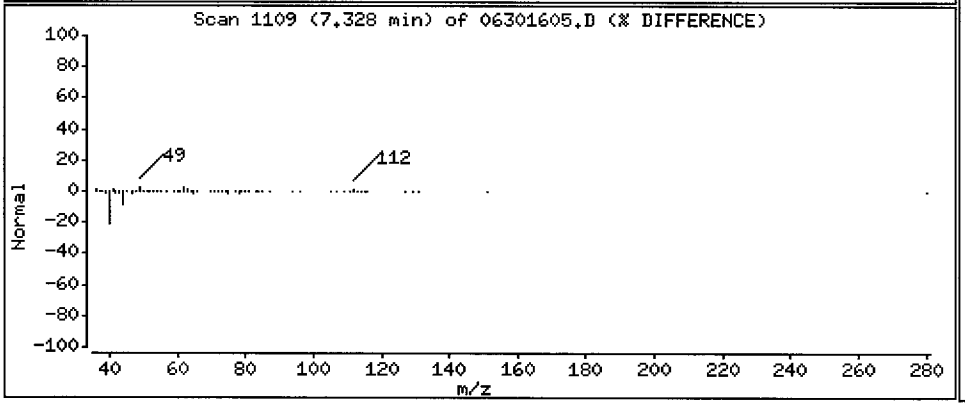
49 1,3-Dichloropropane

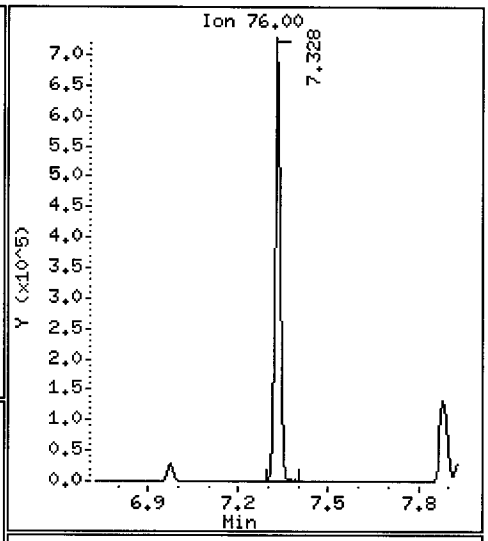
Concentration: 44.135 ug/Kg

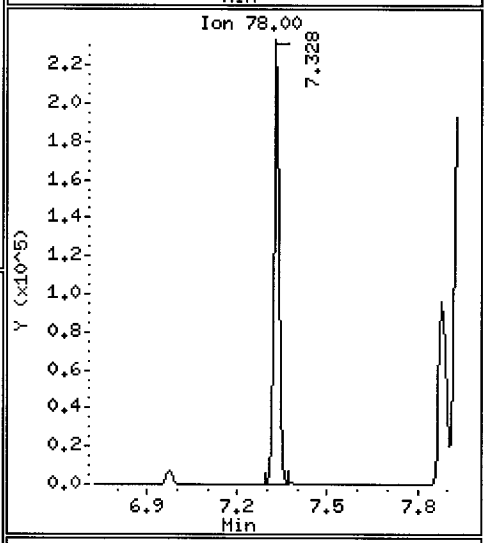


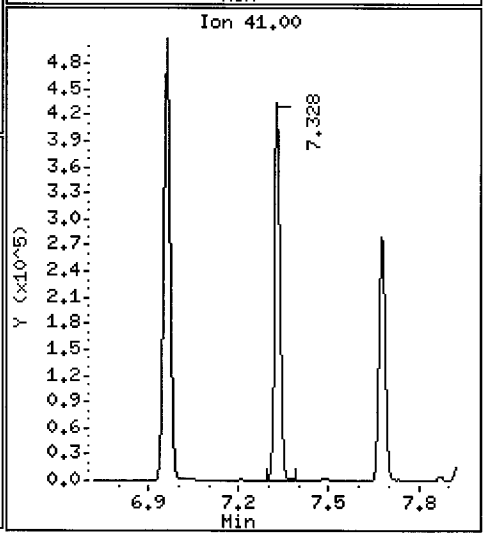












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

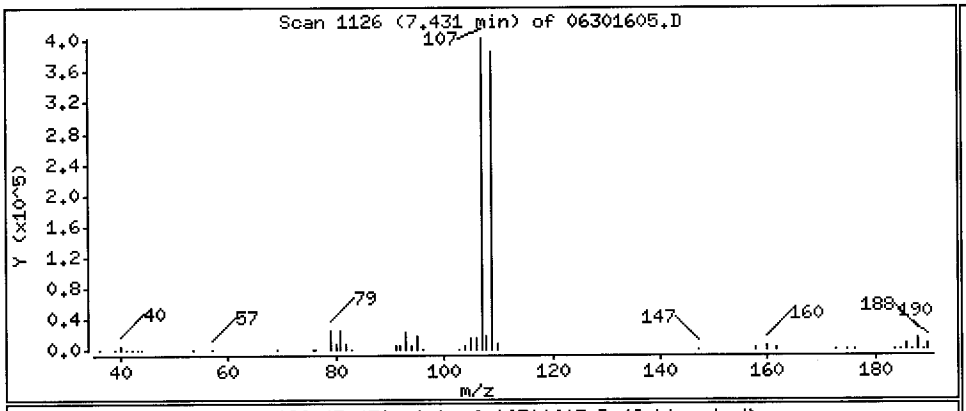
Operator: PB

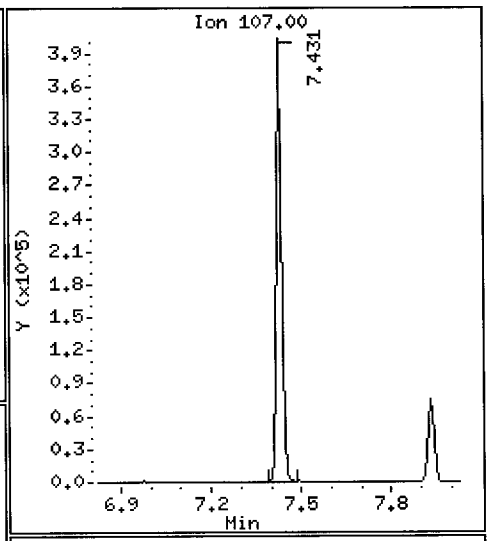
Column phase: RTXVMS

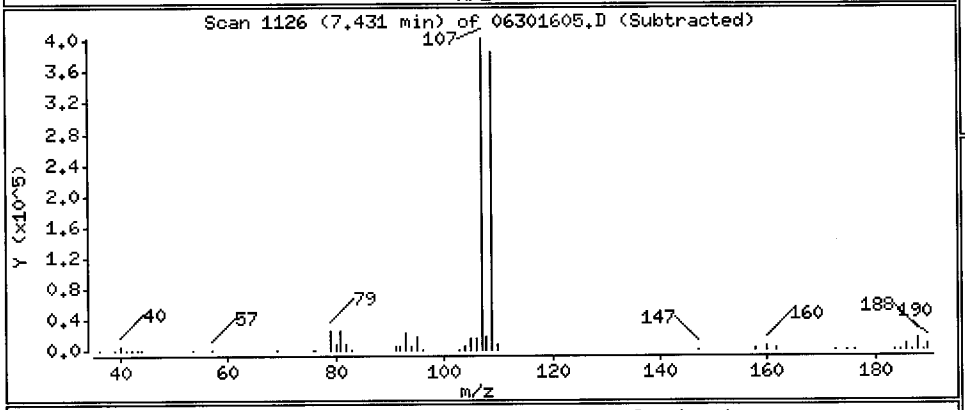
Column diameter: 0.18

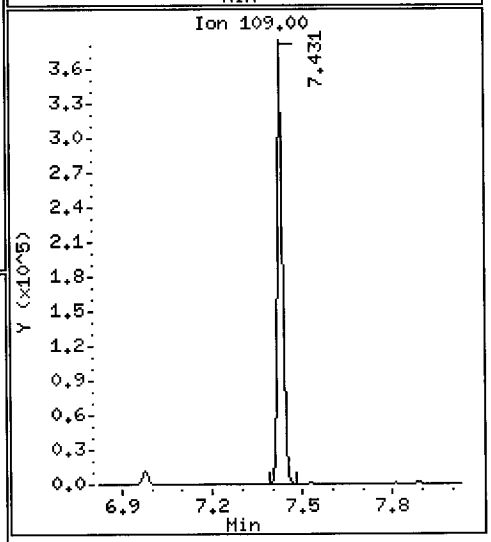
50 1,2-Dibromoethane

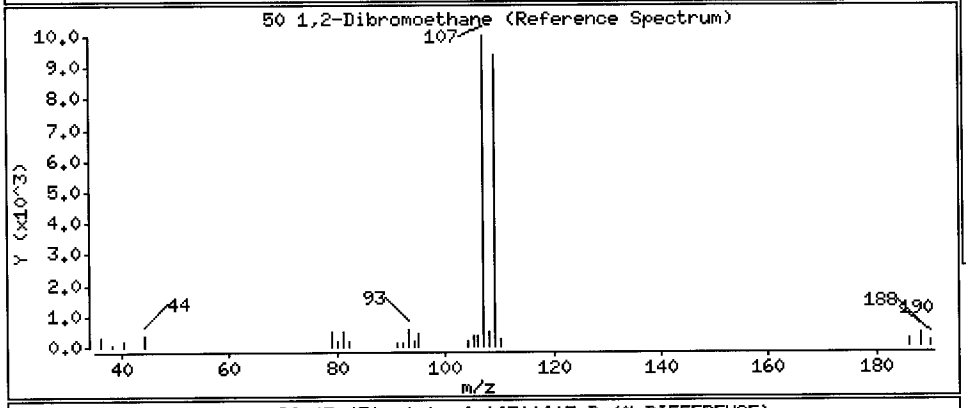
Concentration: 46.046 ug/Kg

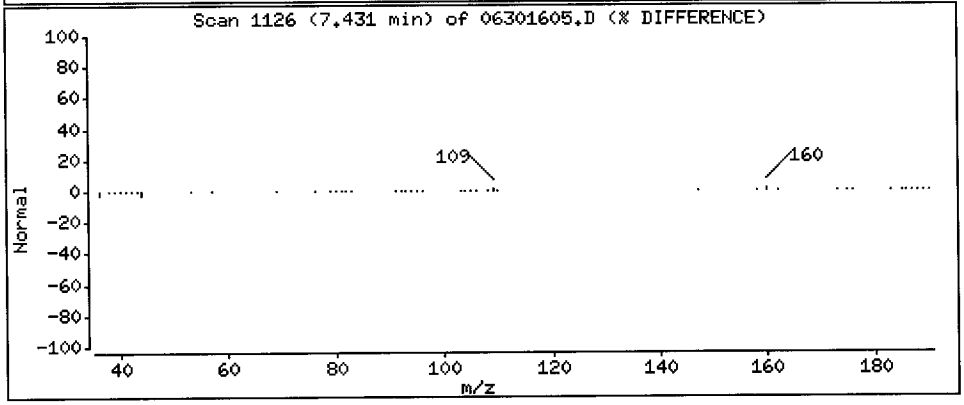












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

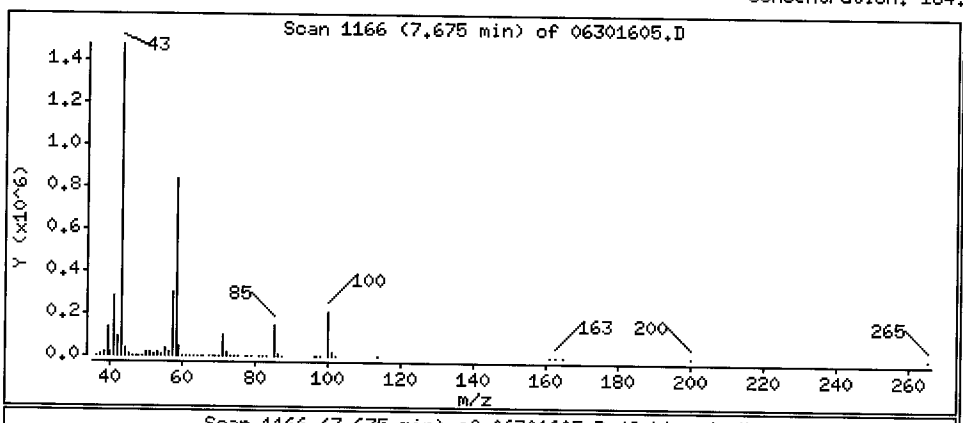
Operator: PB

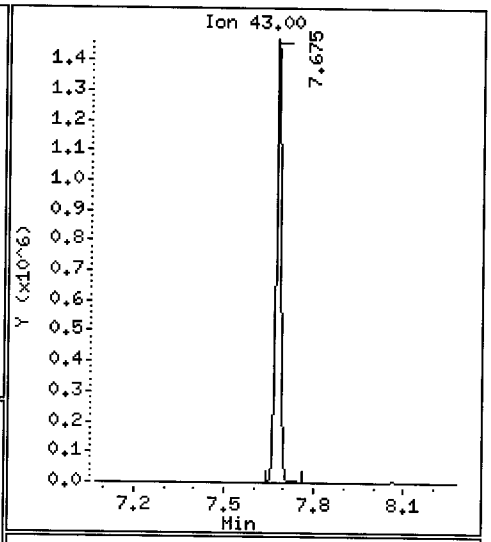
Column phase: RTXVMS

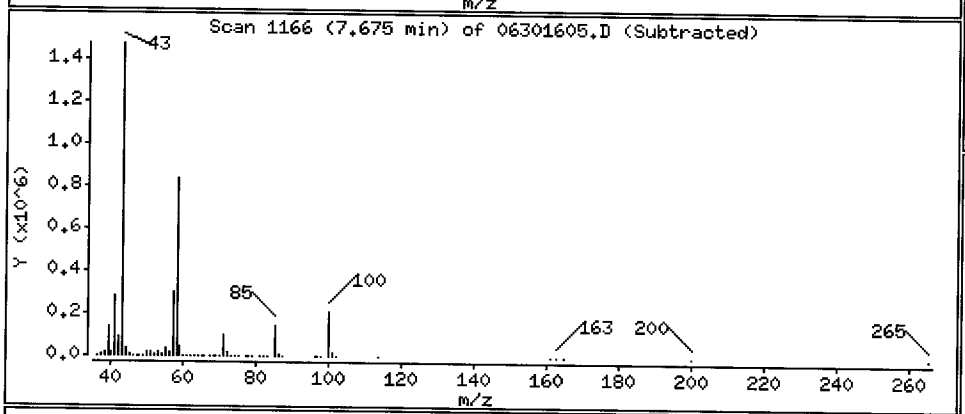
Column diameter: 0.18

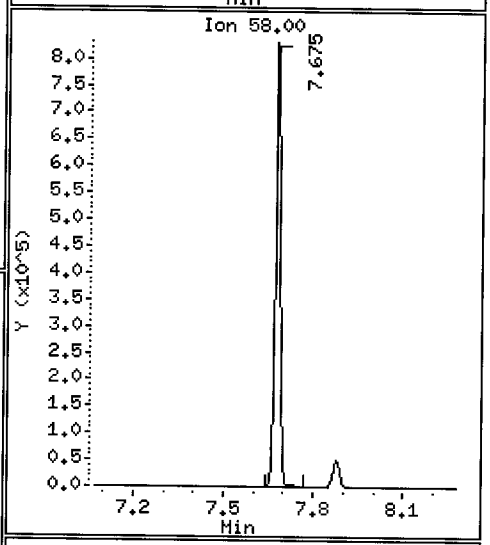
51 2-Hexanone

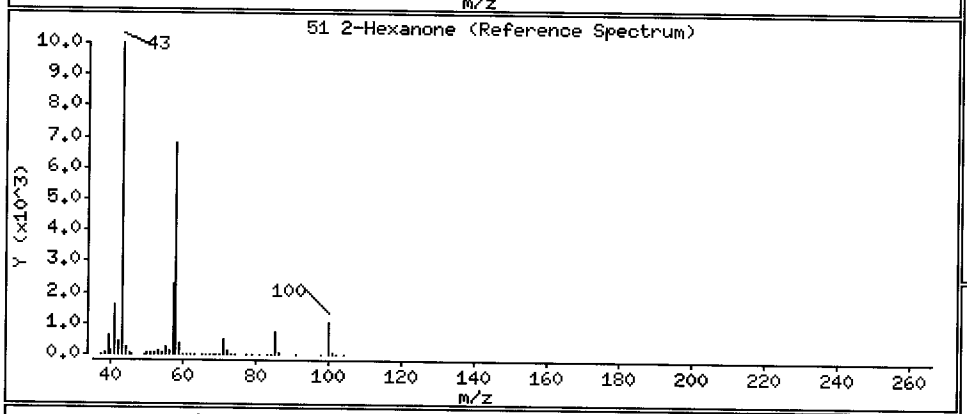
Concentration: 184.53 ug/Kg

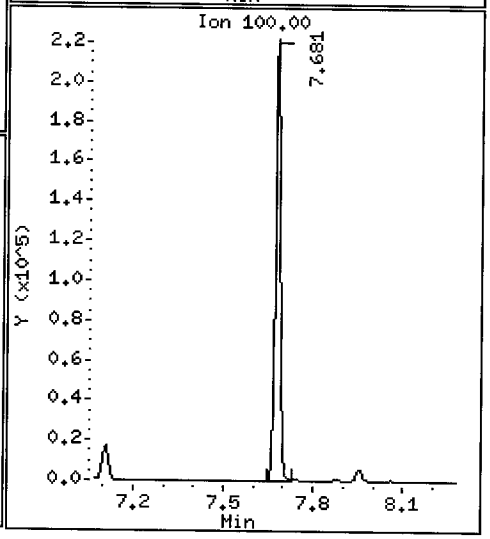


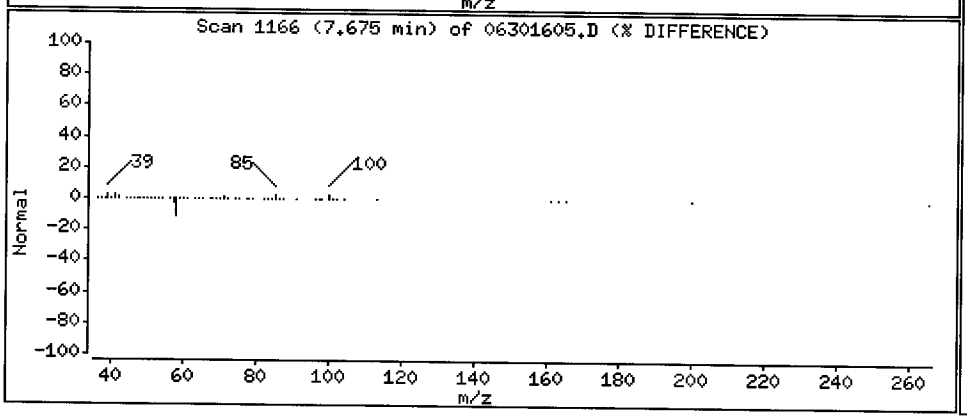












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

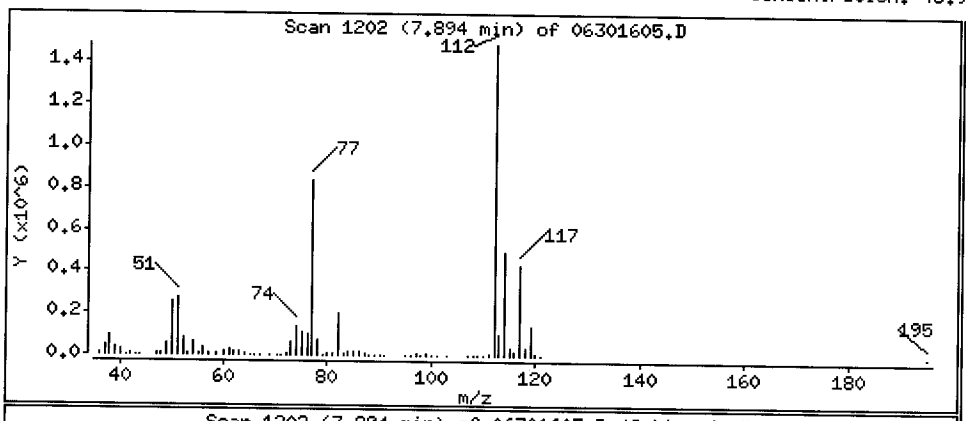
Operator: PB

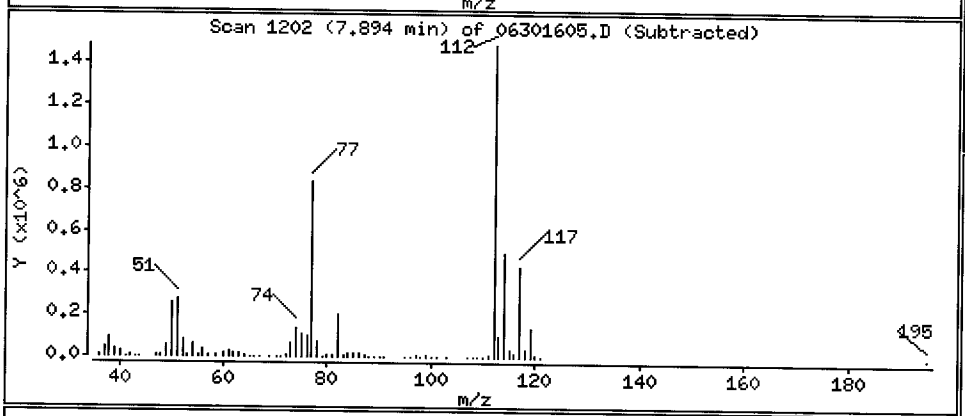
Column phase: RTXVMS

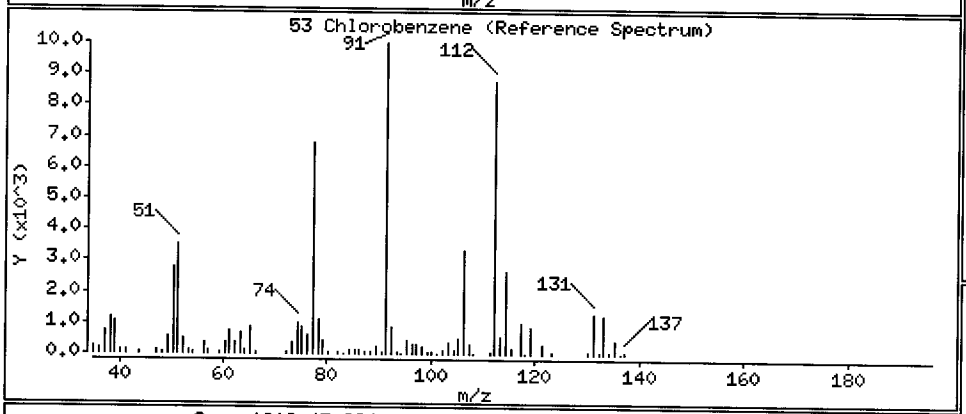
Column diameter: 0.18

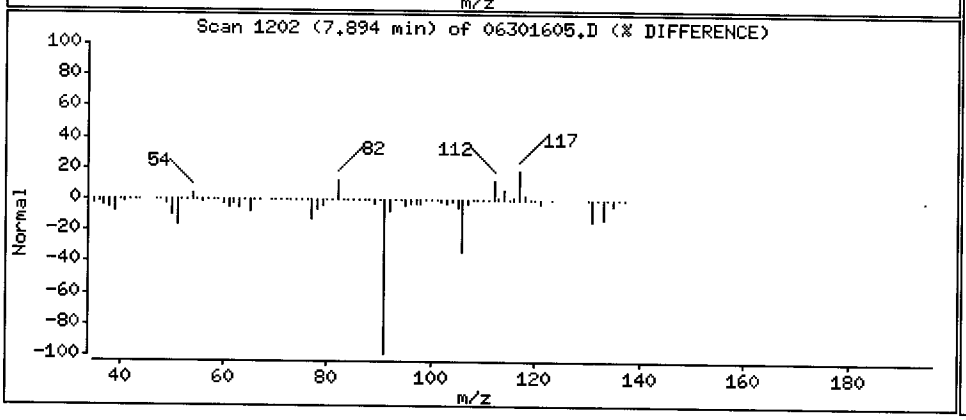
53 Chlorobenzene

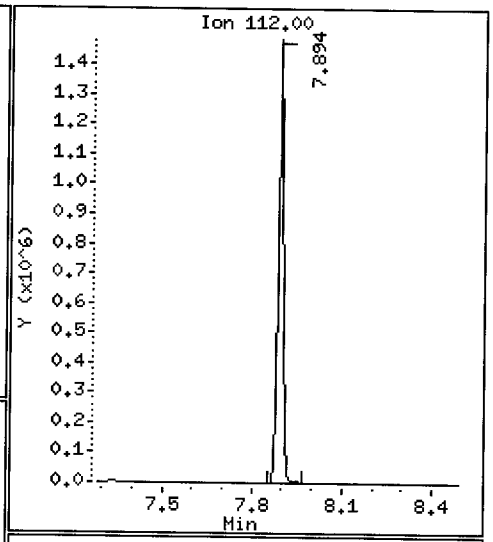
Concentration: 46.967 ug/Kg

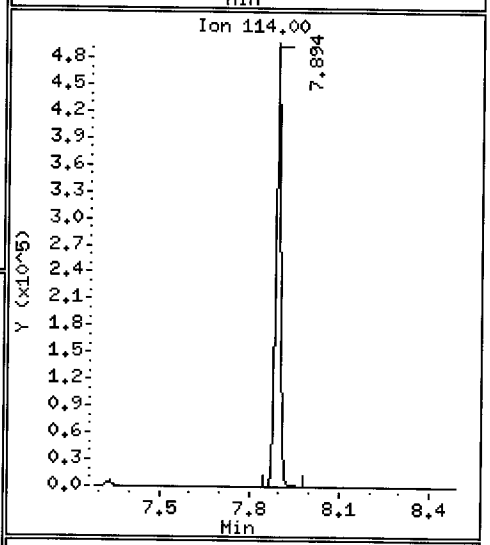


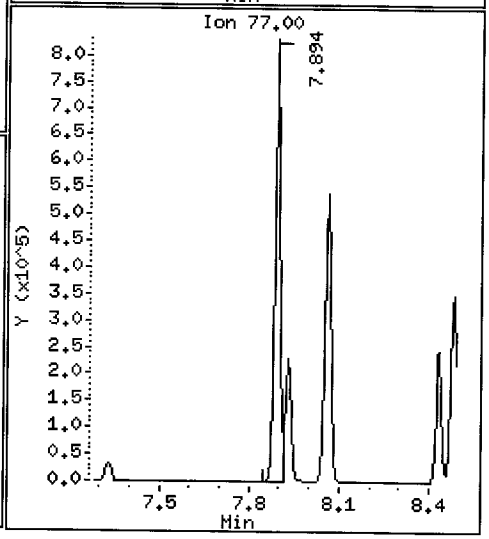












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

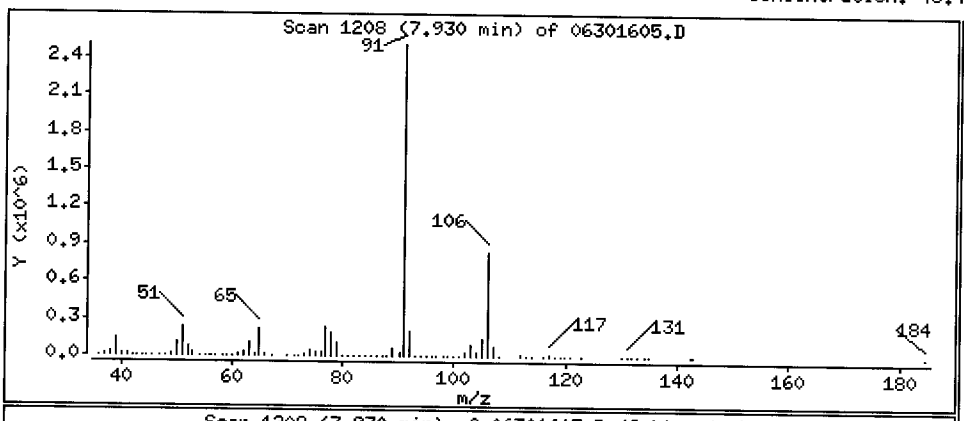
Operator: PB

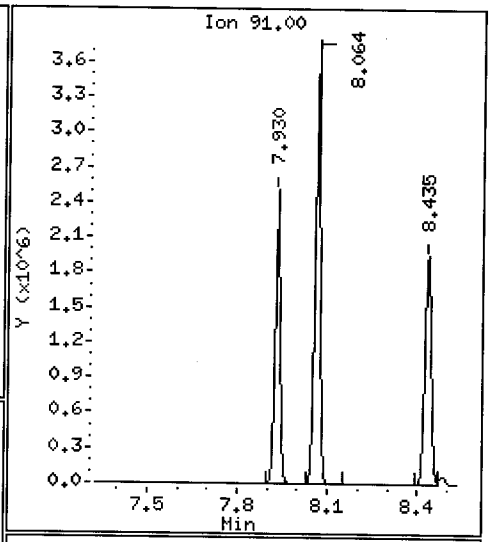
Column phase: RTXVMS

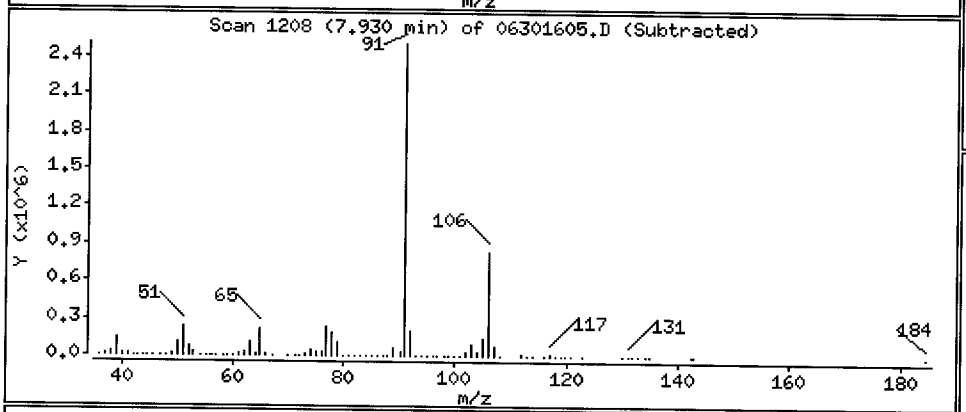
Column diameter: 0.18

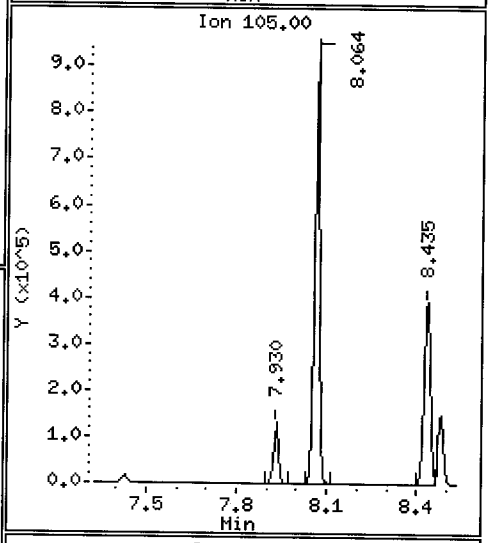
54 Ethyl Benzene

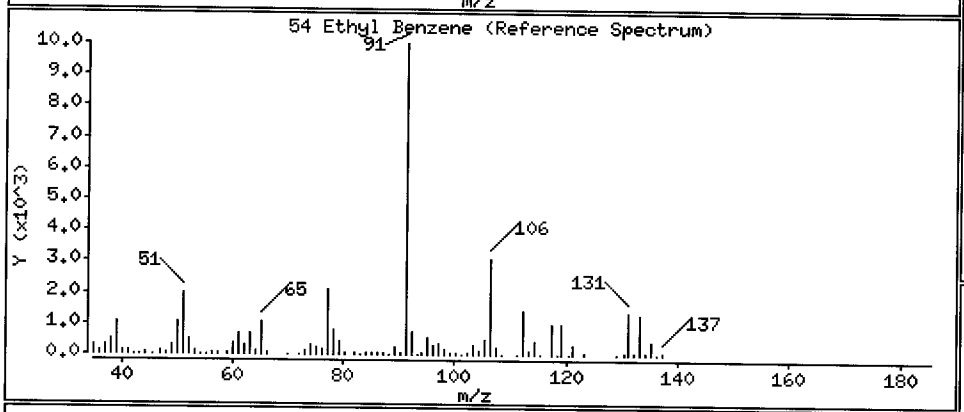
Concentration: 46.445 ug/Kg

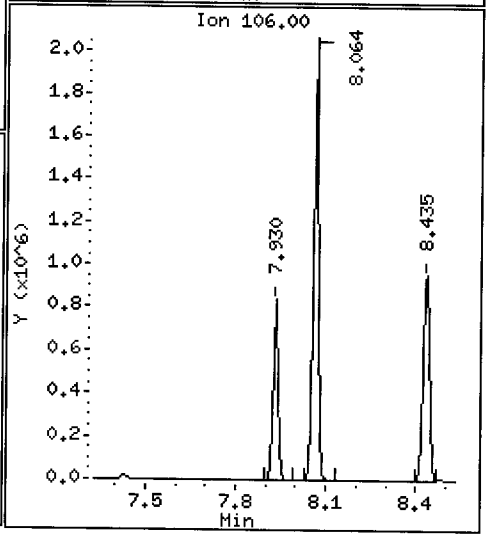


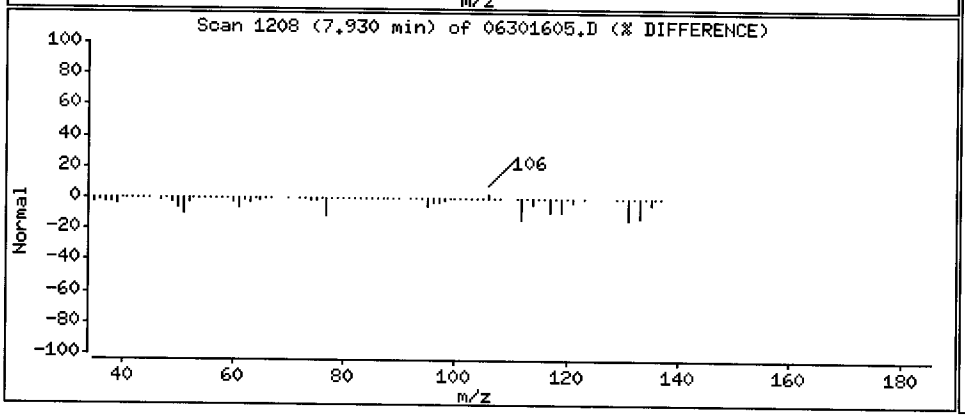












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

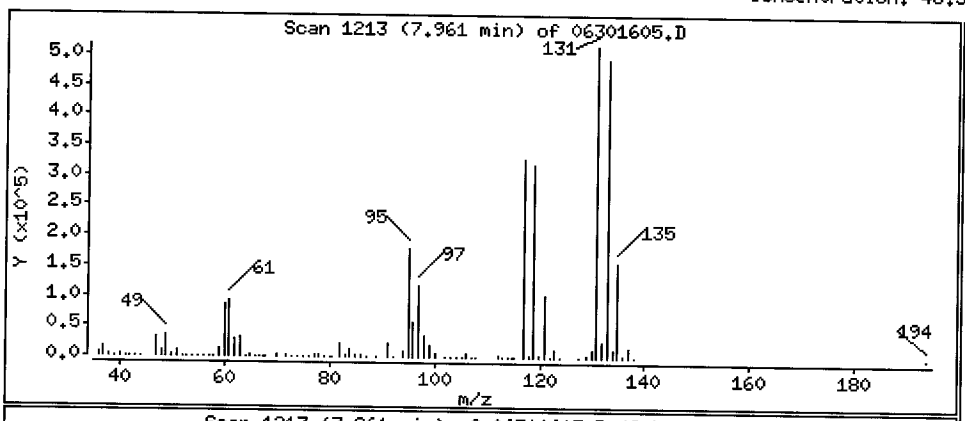
Operator: PB

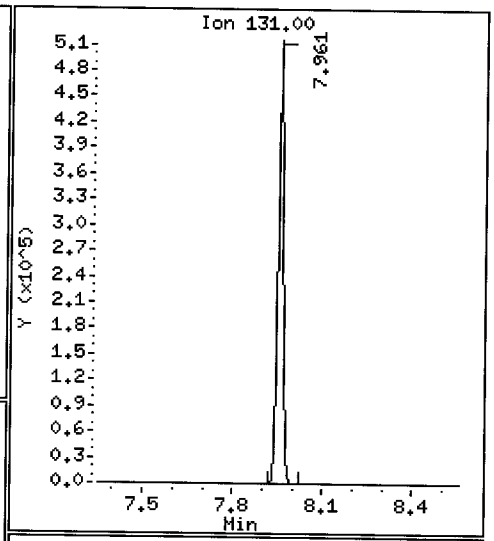
Column phase: RTXVMS

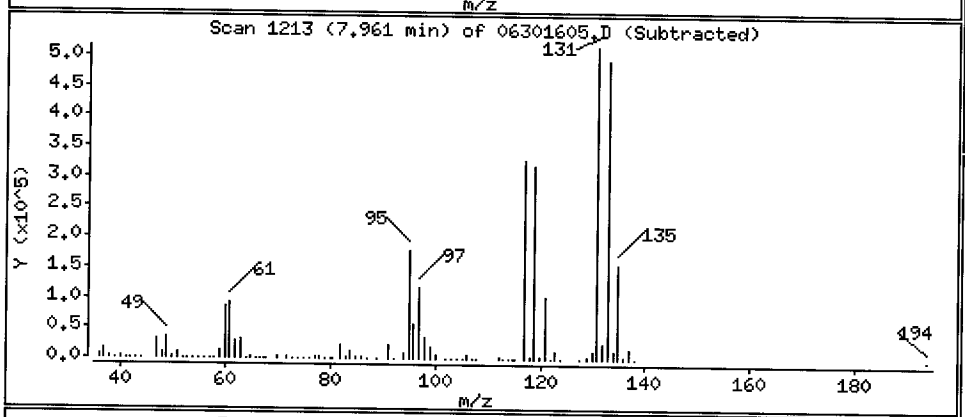
Column diameter: 0.18

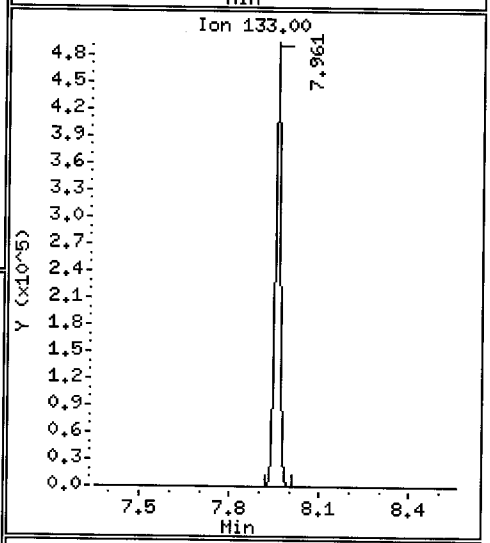
55 1,1,1,2-Tetrachloroethane

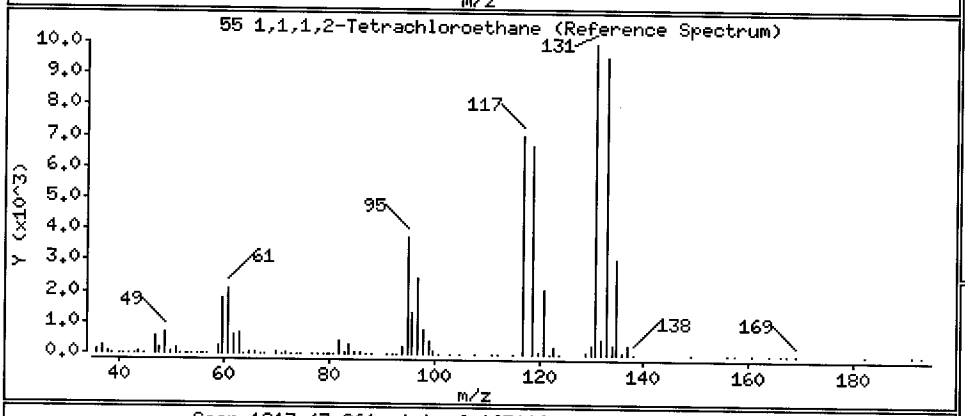
Concentration: 48.504 ug/Kg

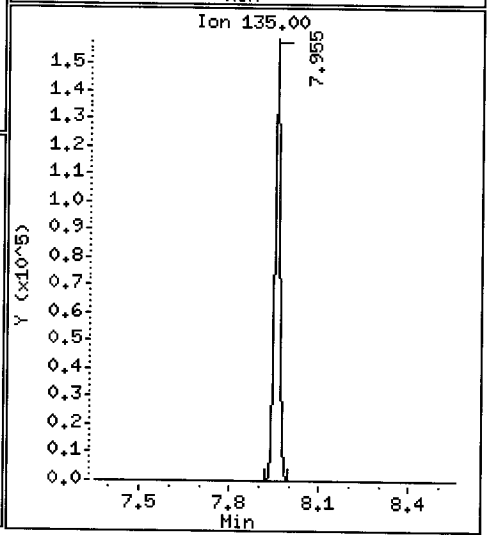


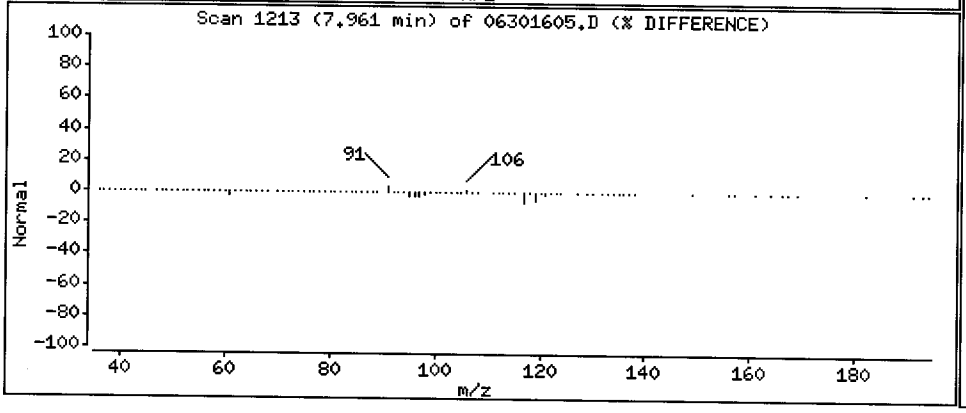












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

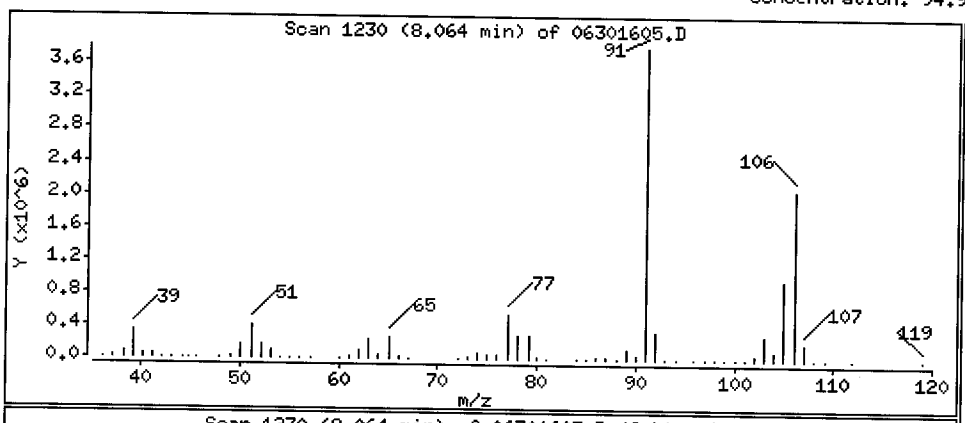
Operator: PB

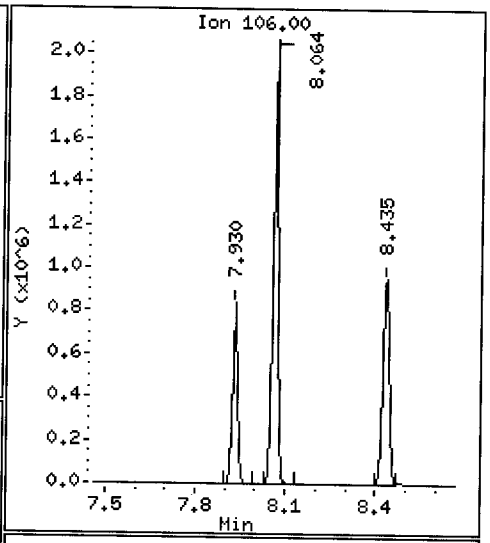
Column phase: RTXVMS

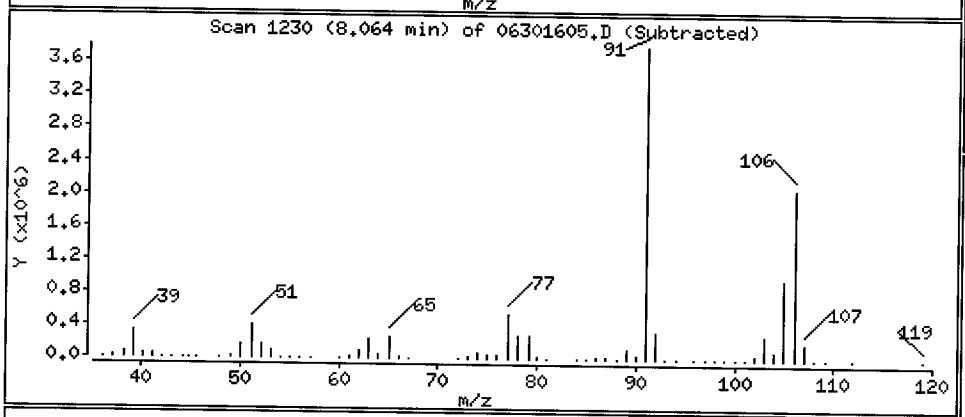
Column diameter: 0.18

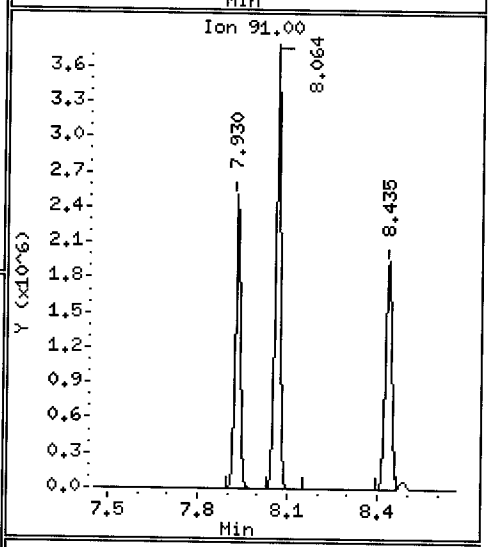
56 m,p-xylene

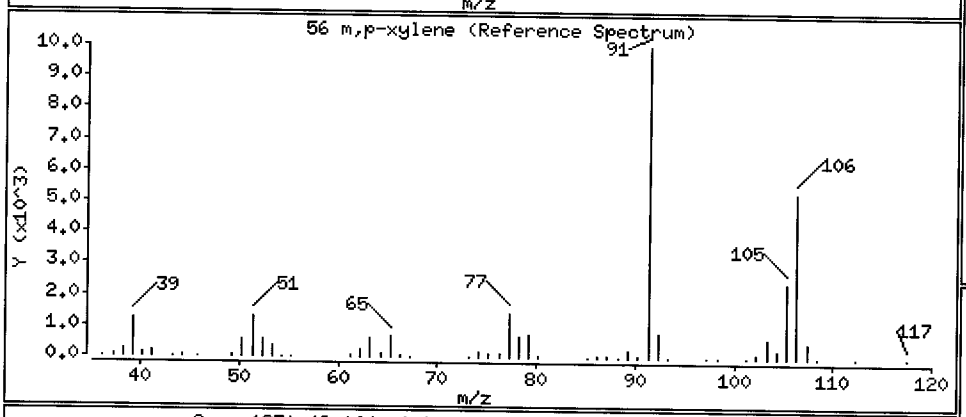
Concentration: 94.946 ug/Kg

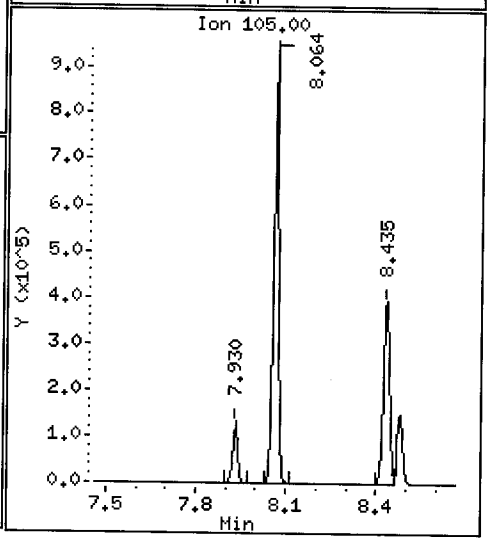


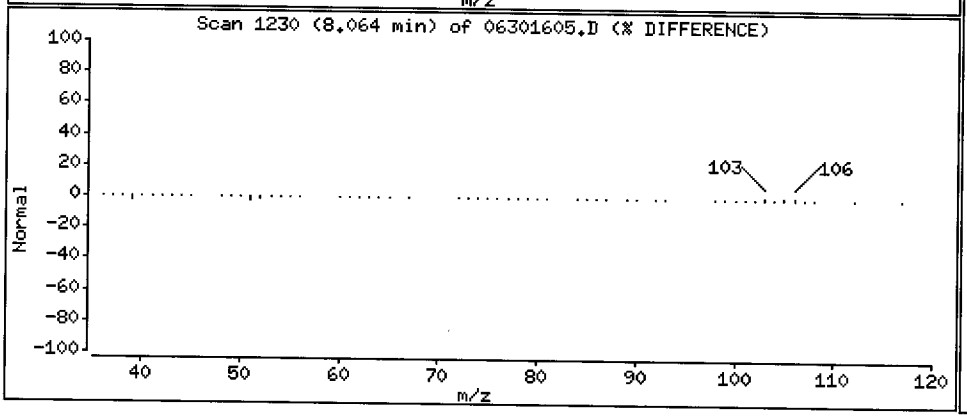












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

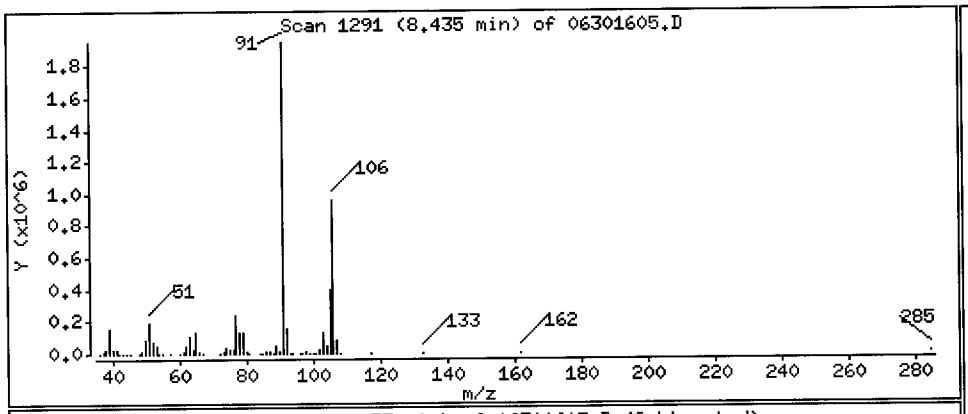
Operator: PB

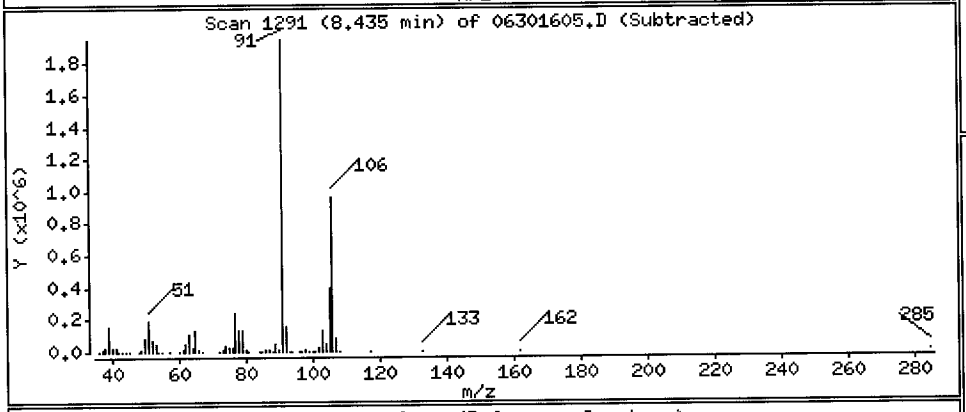
Column phase: RTXVMS

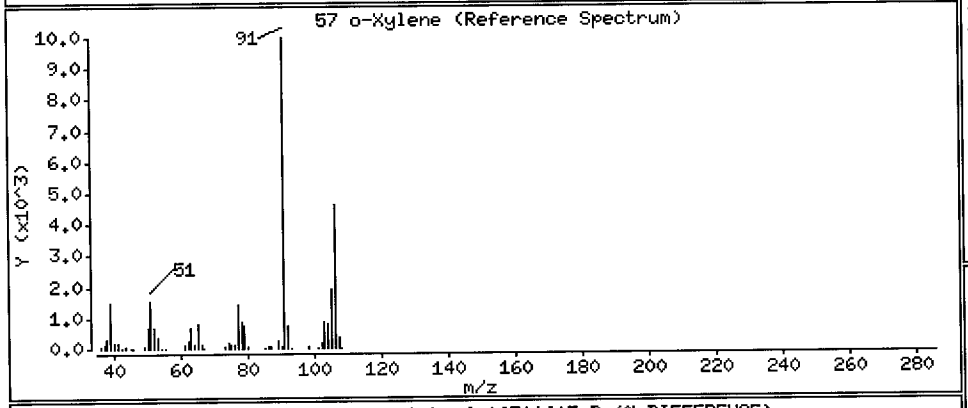
Column diameter: 0.18

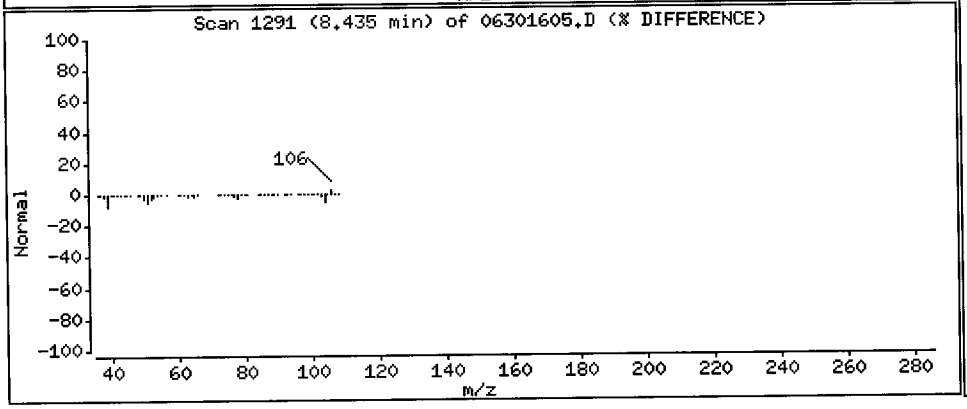
57 o-Xylene

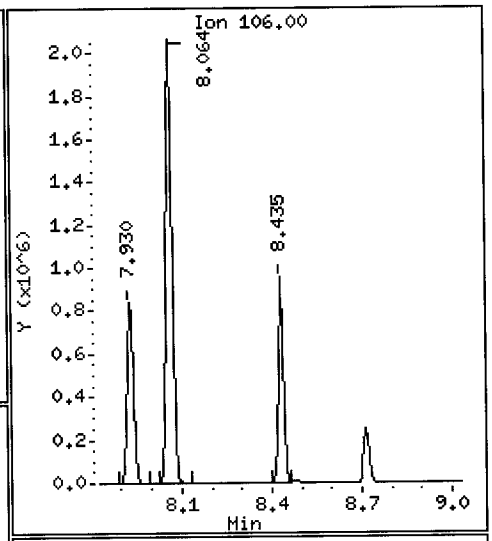
Concentration: 46.732 ug/Kg

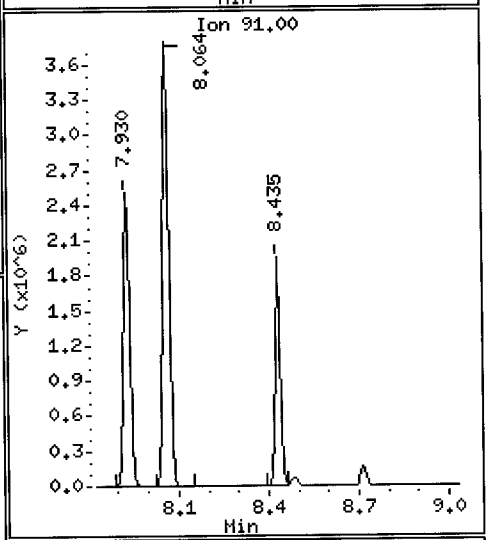


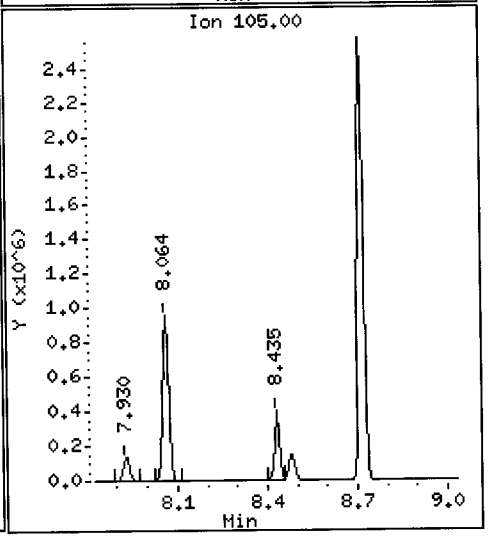












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

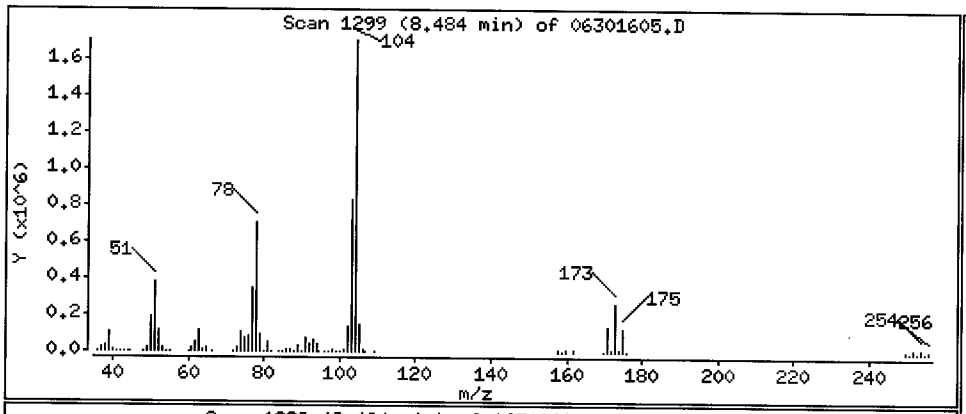
Operator: PB

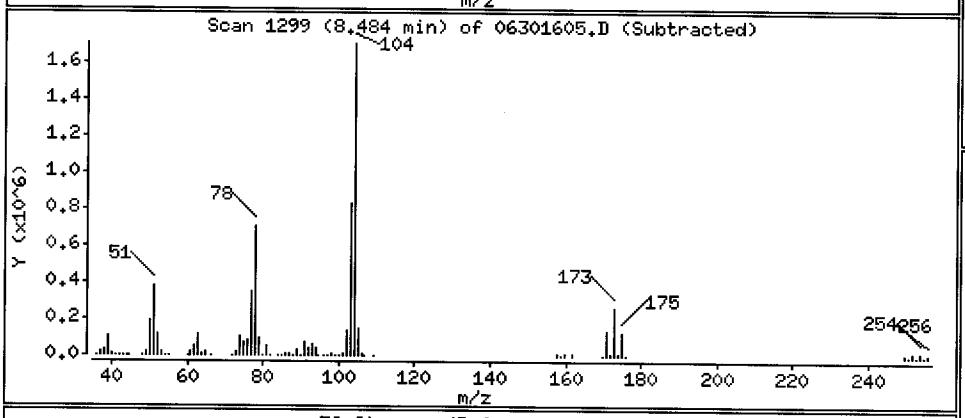
Column phase: RTXVMS

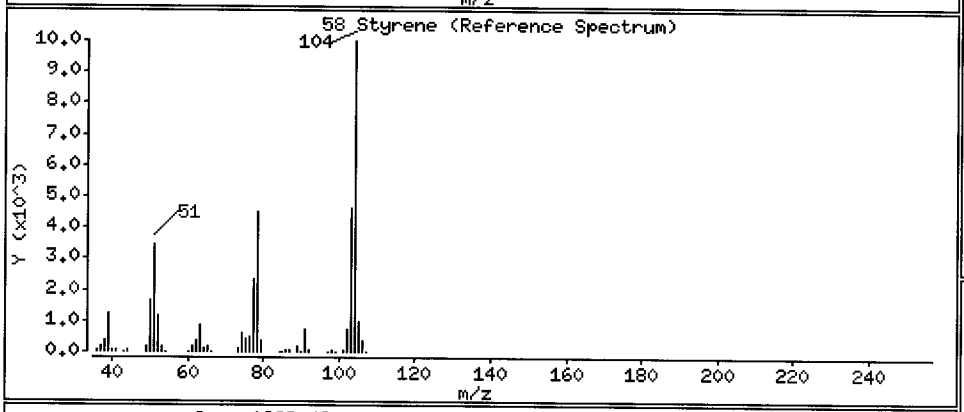
Column diameter: 0.18

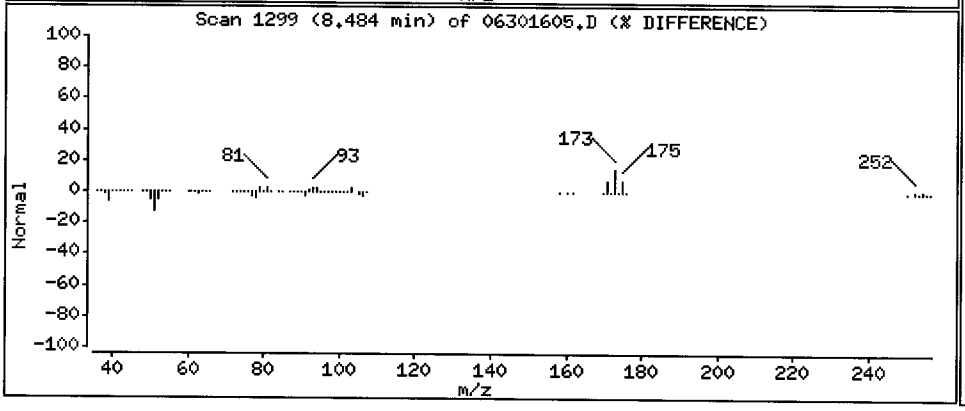
58 Styrene

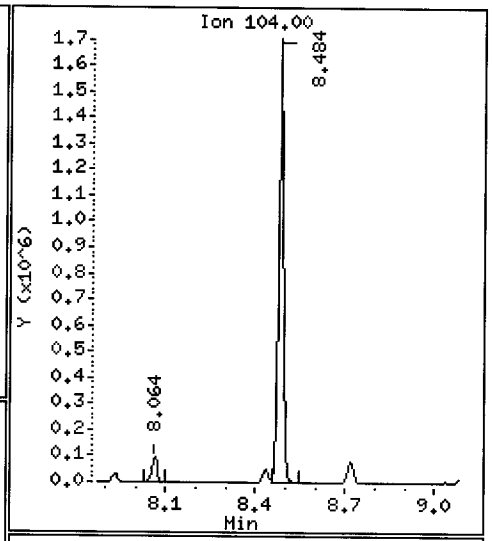
Concentration: 47.434 ug/Kg

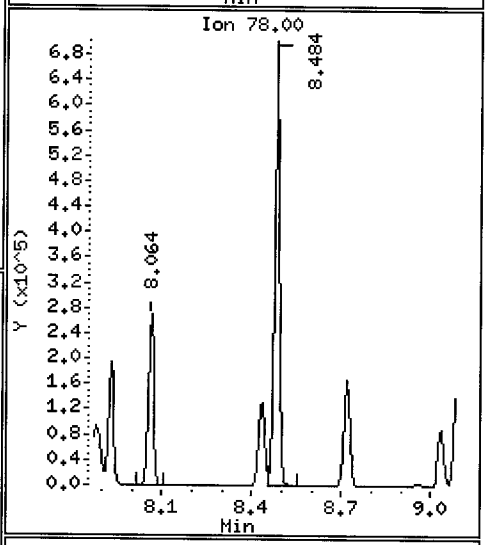


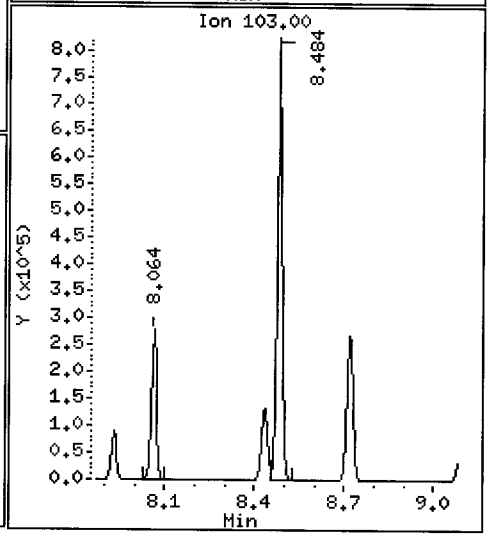












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

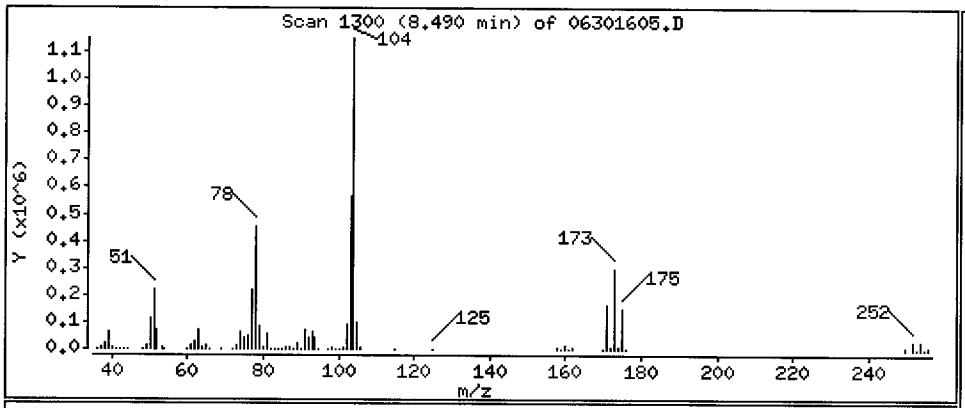
Operator: PB

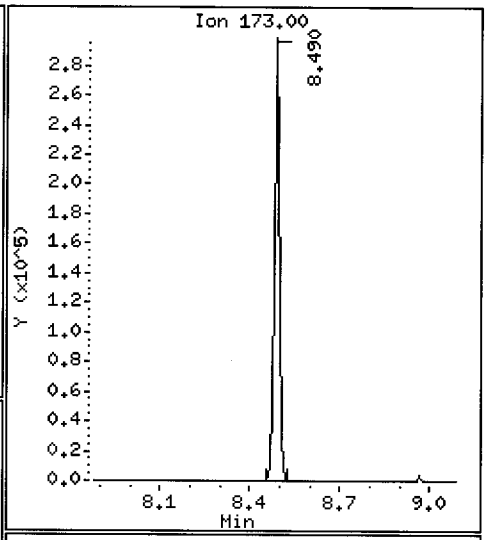
Column phase: RTXVMS

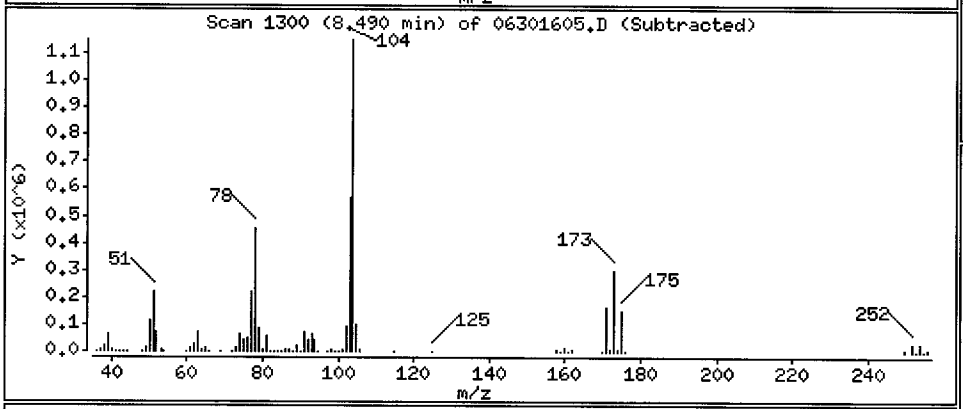
Column diameter: 0.18

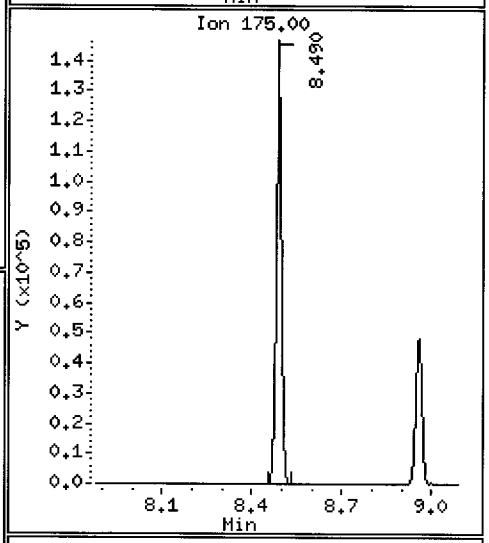
59 Bromoform

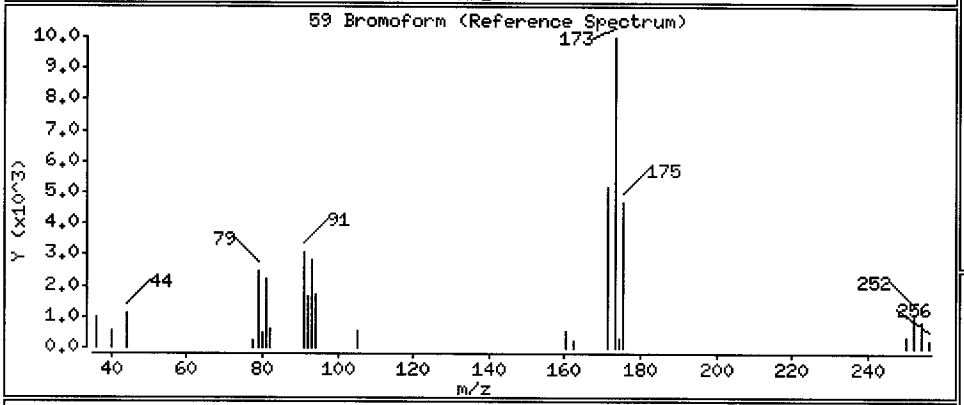
Concentration: 46.455 ug/Kg

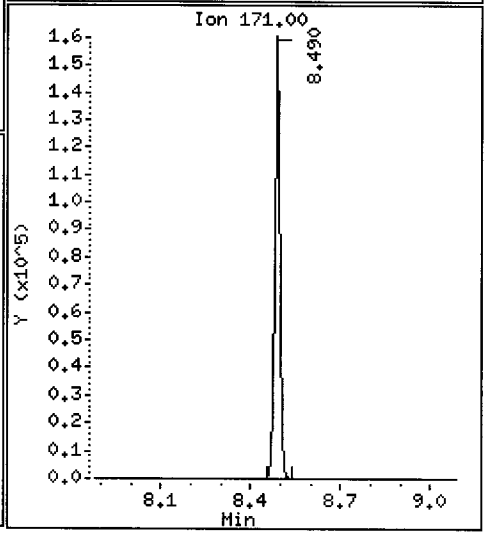


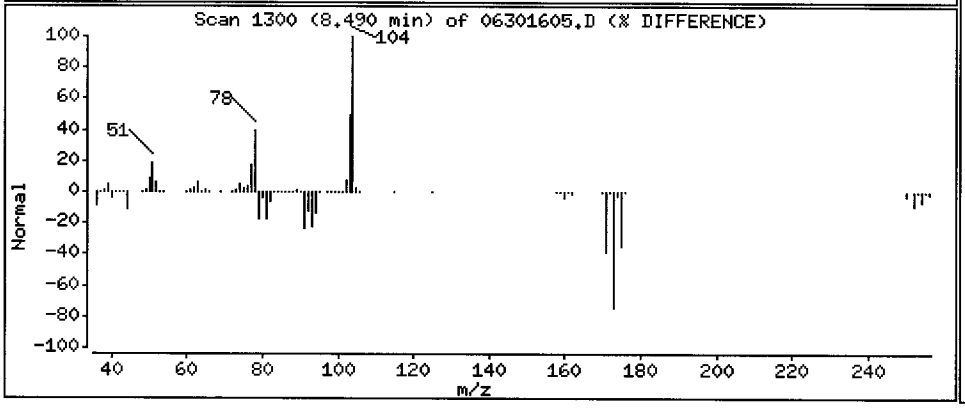












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

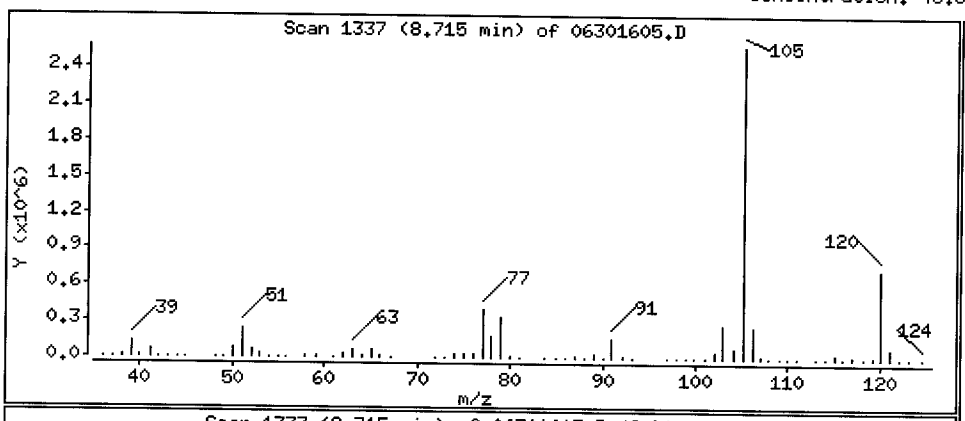
Operator: PB

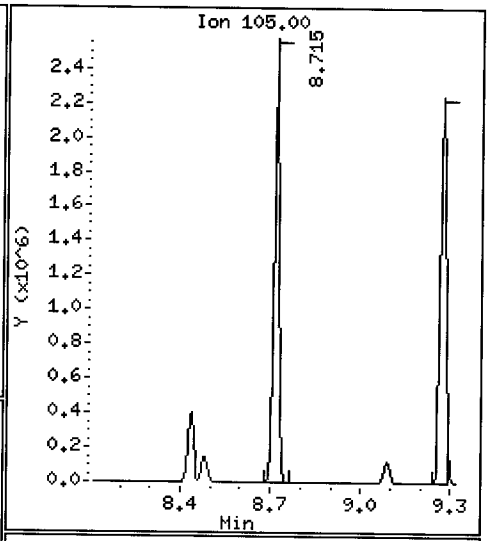
Column phase: RTXVMS

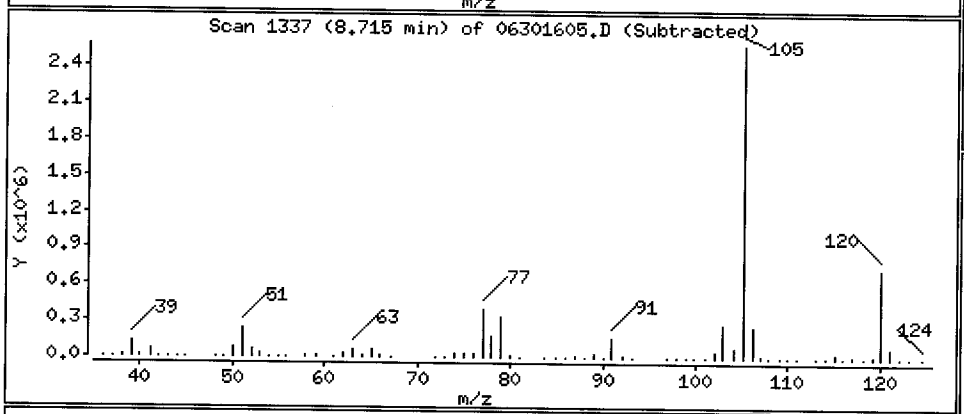
Column diameter: 0.18

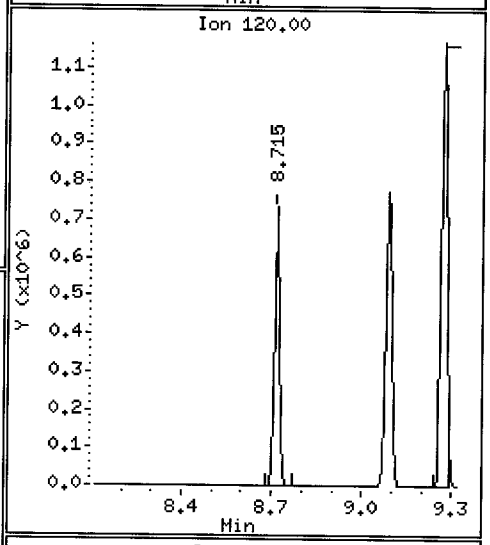
60 Isopropyl Benzene

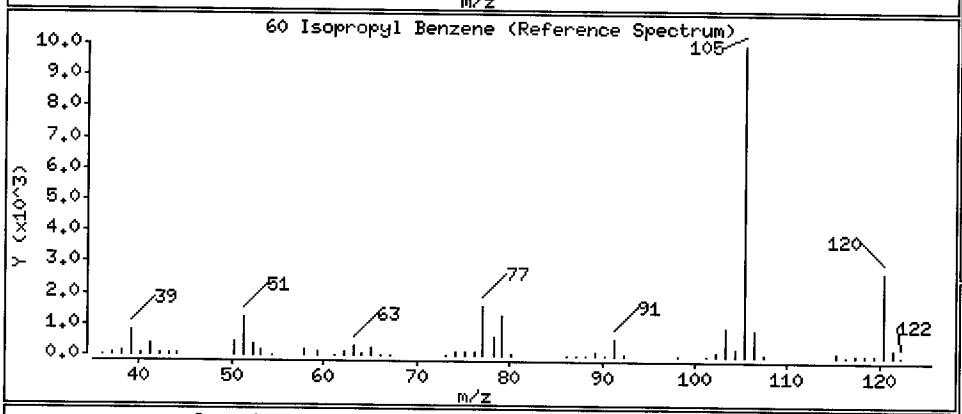
Concentration: 46.381 ug/Kg

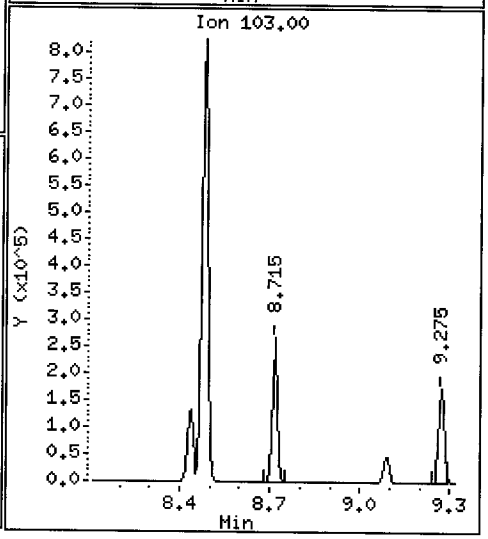


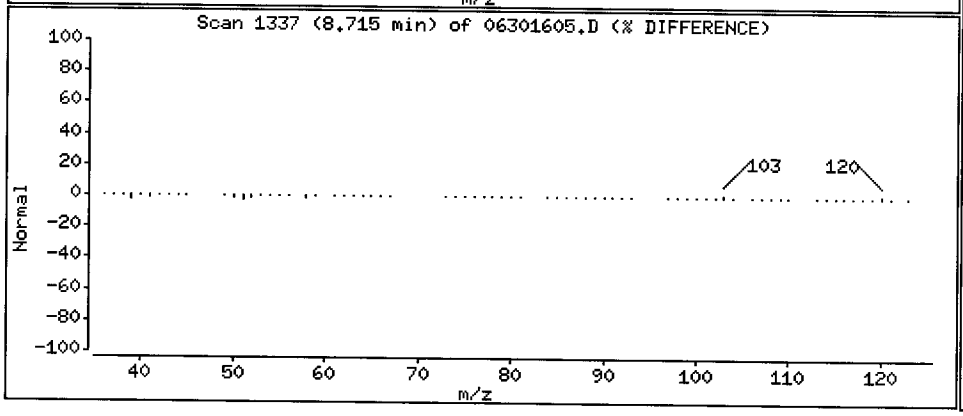












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

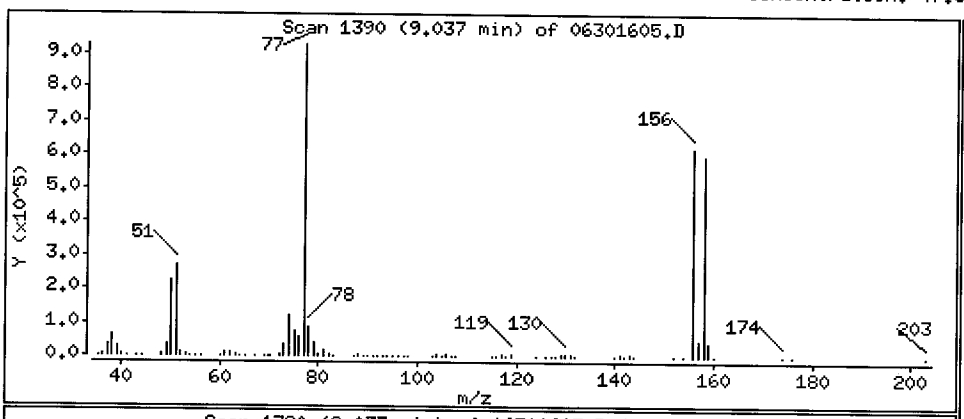
Operator: PB

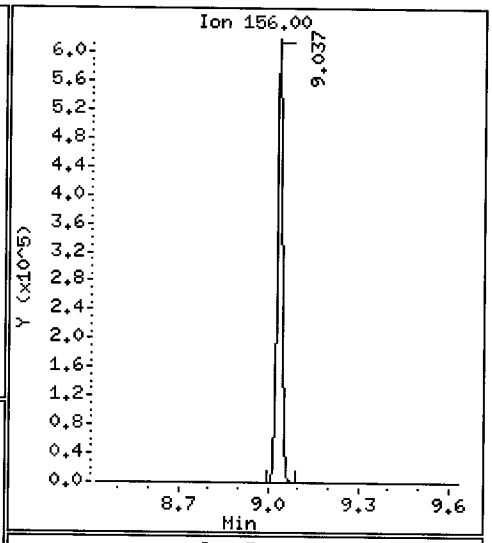
Column phase: RTXVMS

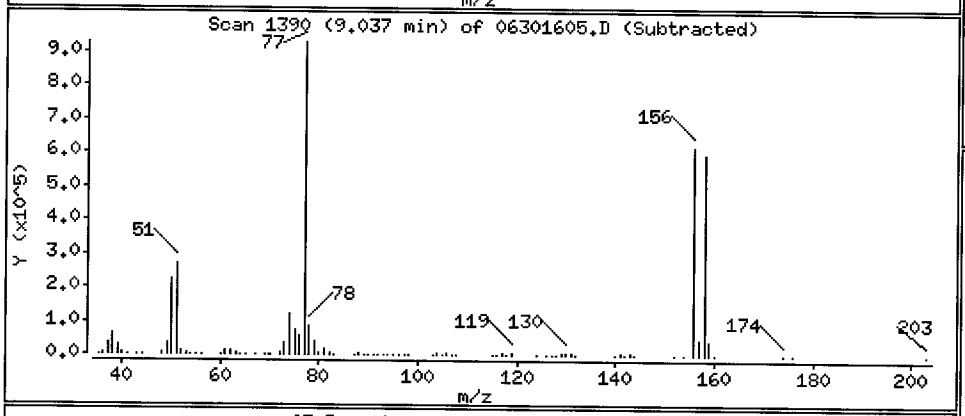
Column diameter: 0.18

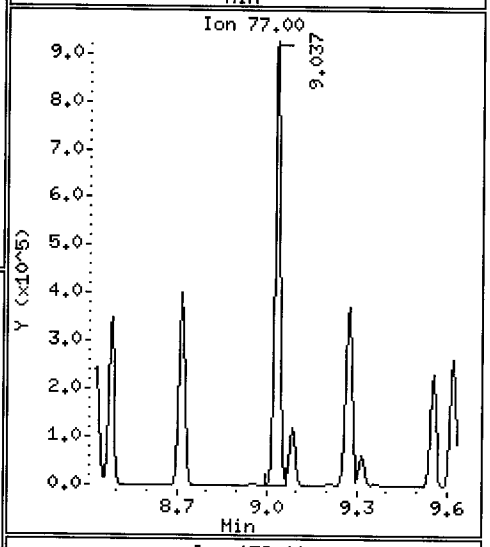
63 Bromobenzene

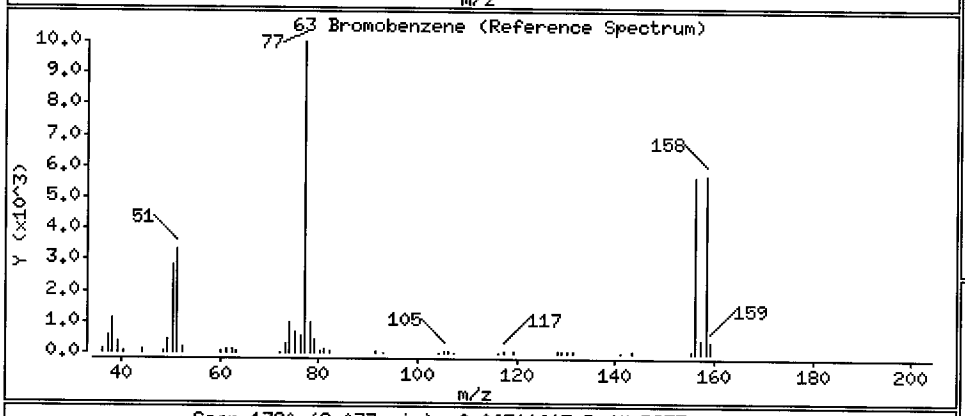
Concentration: 47.673 ug/Kg

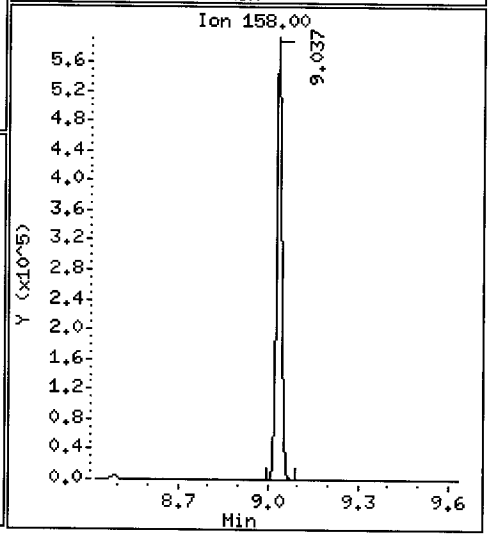


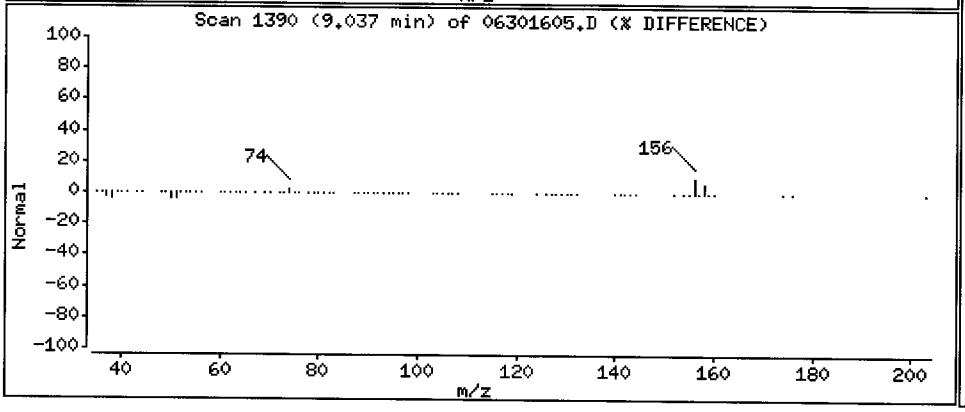












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Sample Info: LCS0630,5,5,0

Instrument: nt5.i

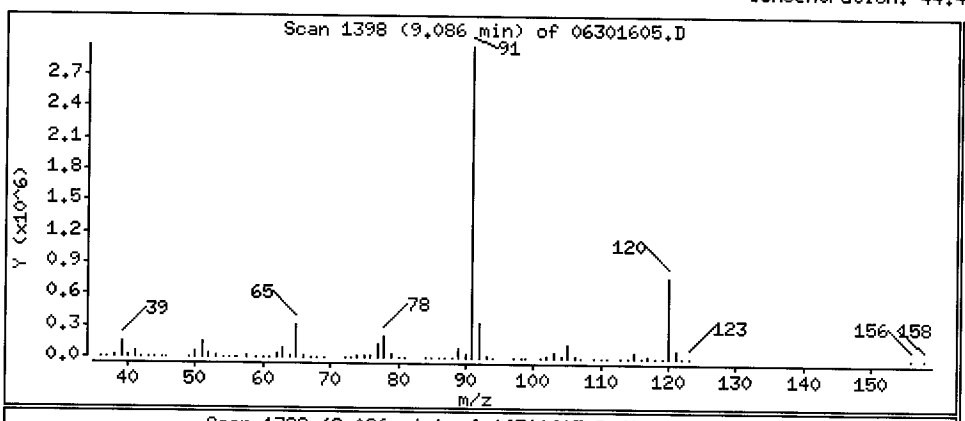
Operator: PB

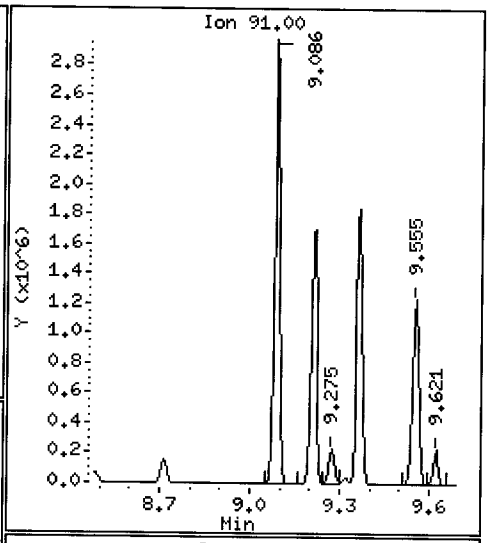
Column phase: RTXVMS

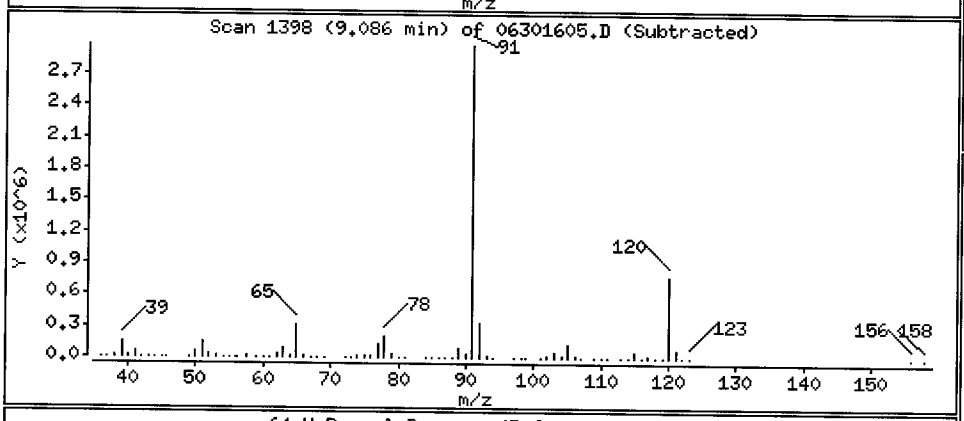
Column diameter: 0.18

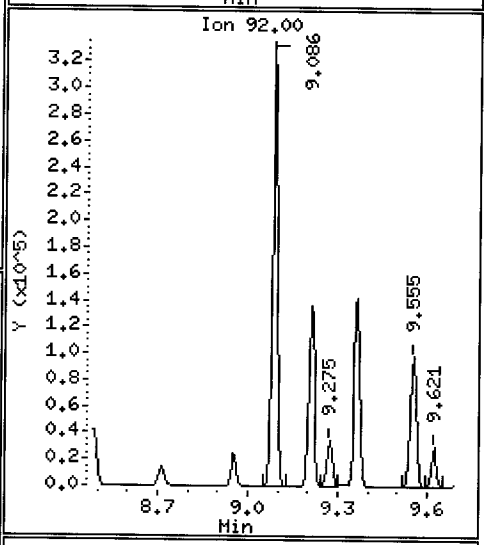
64 N-Propyl Benzene

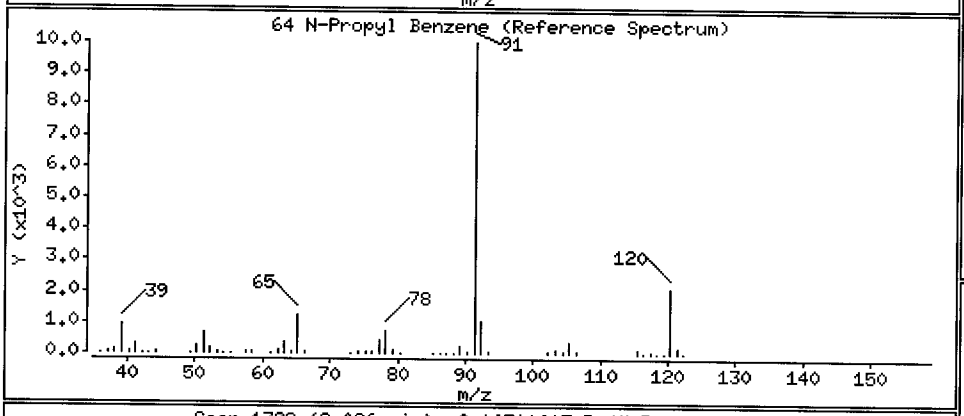
Concentration: 44.472 ug/Kg

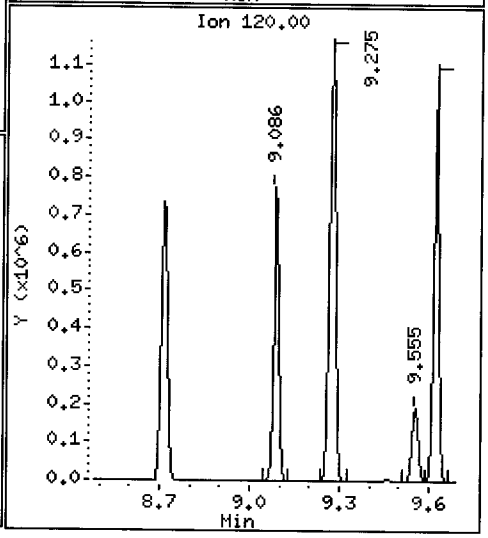


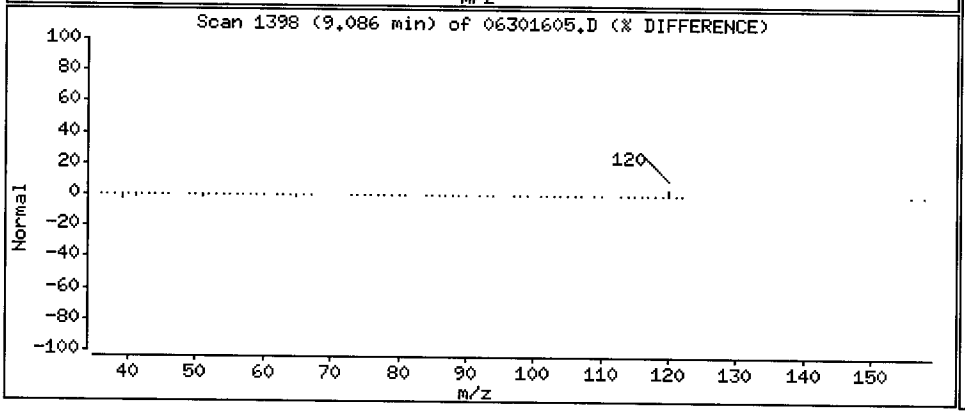












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

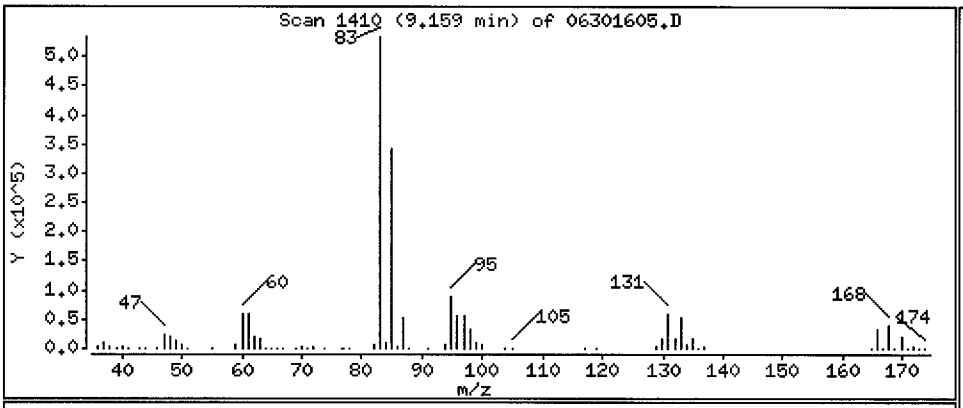
Operator: PB

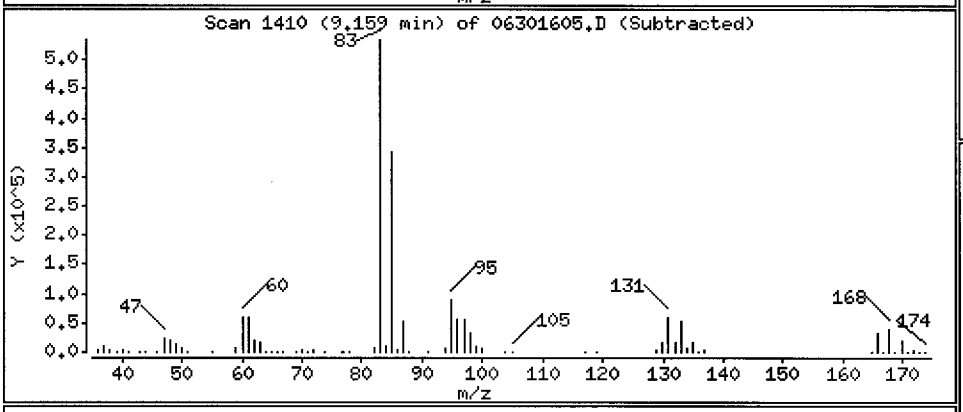
Column phase: RTXVMS

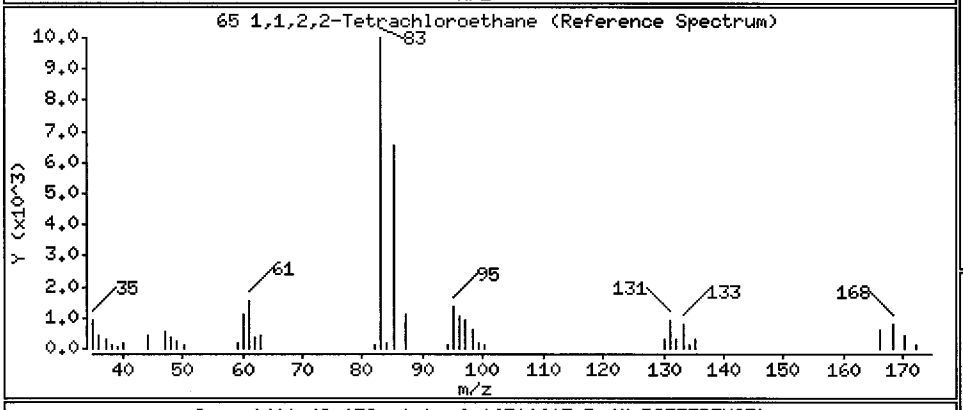
Column diameter: 0.18

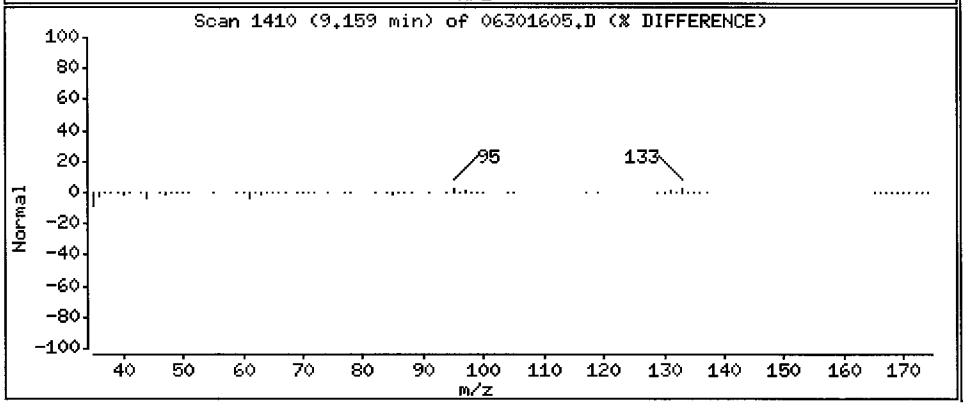
65 1,1,2,2-Tetrachloroethane

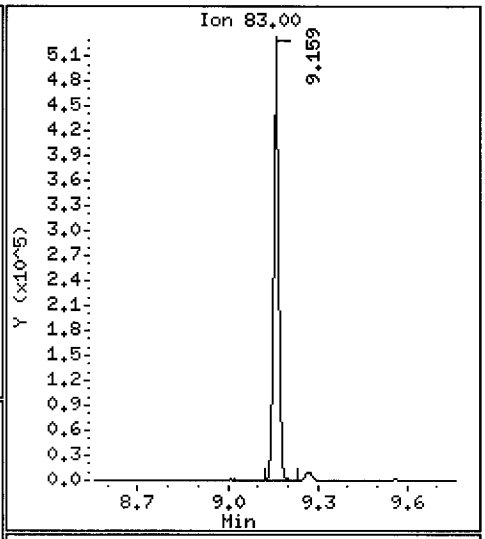
Concentration: 41.212 ug/Kg

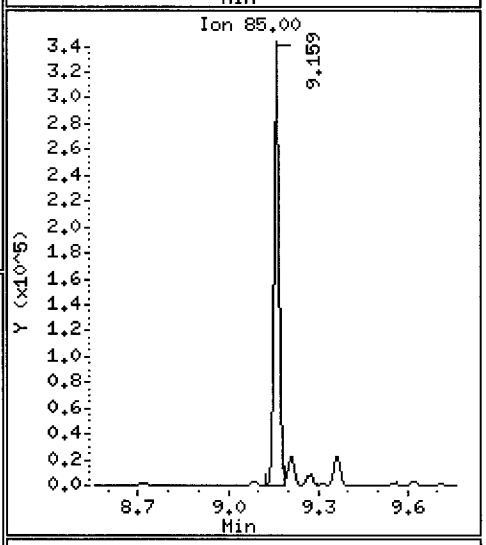


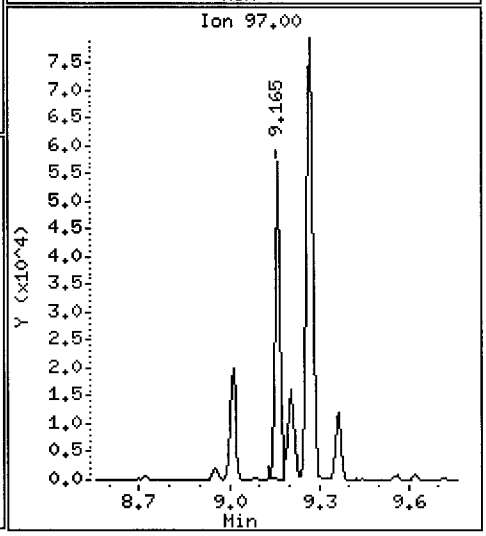












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

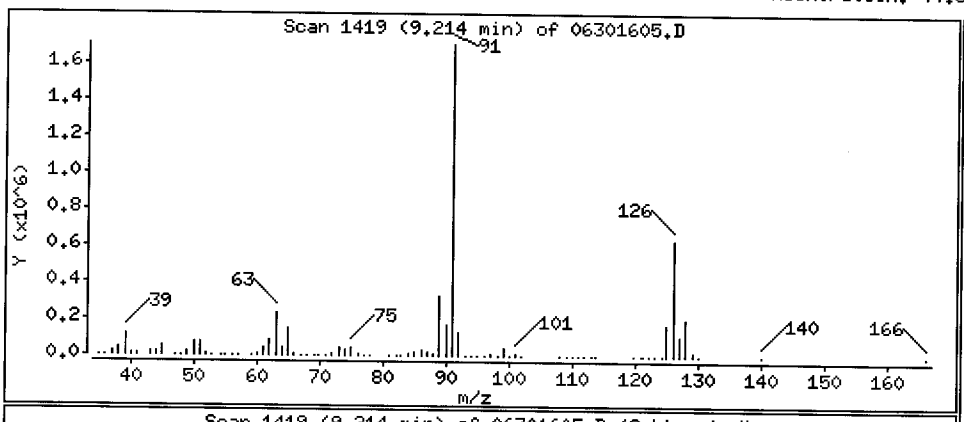
Operator: PB

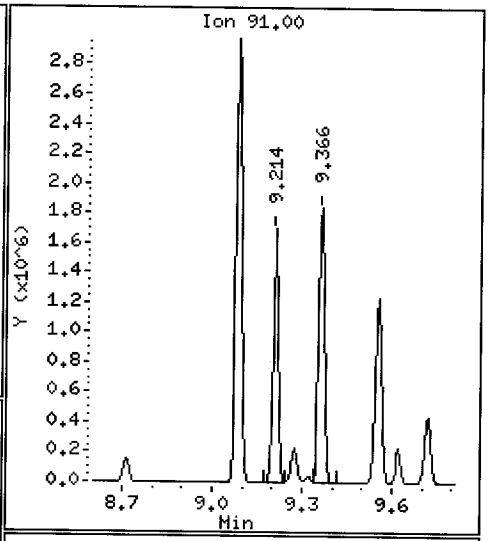
Column phase: RTXVMS

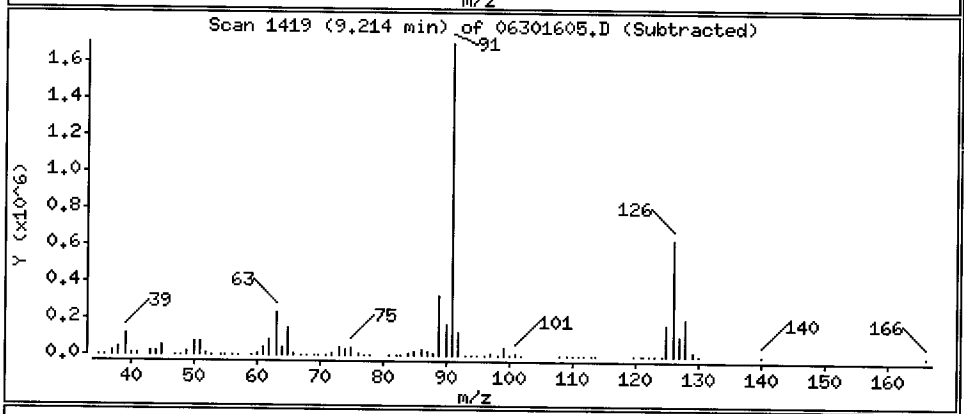
Column diameter: 0.18

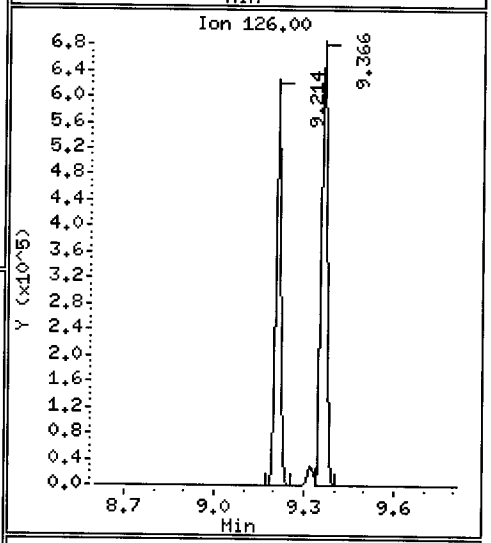
66 2-Chloro Toluene

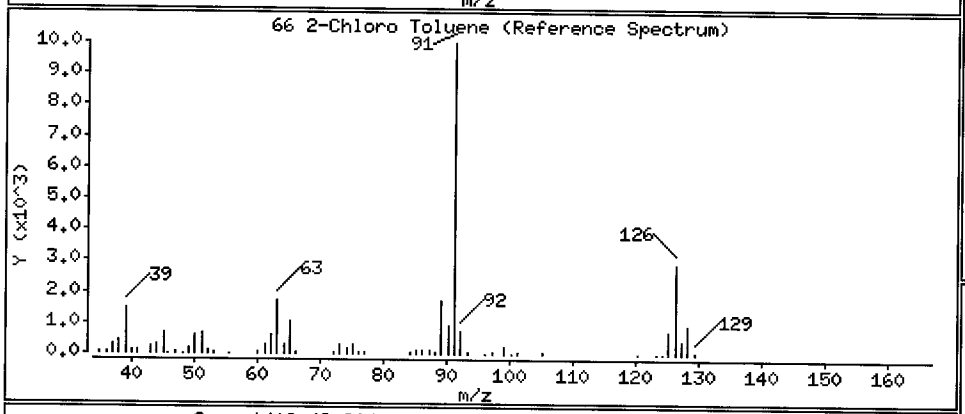
Concentration: 44.872 ug/Kg

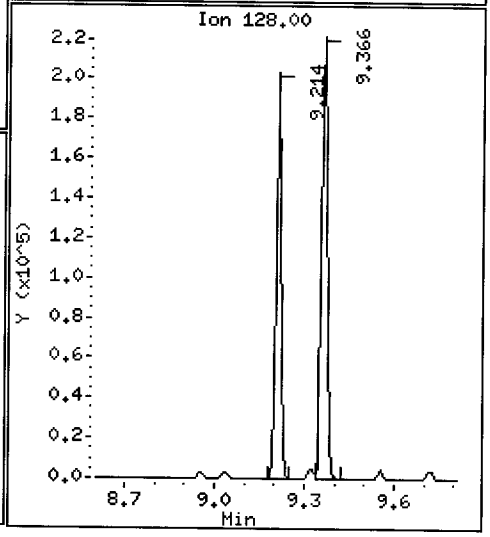


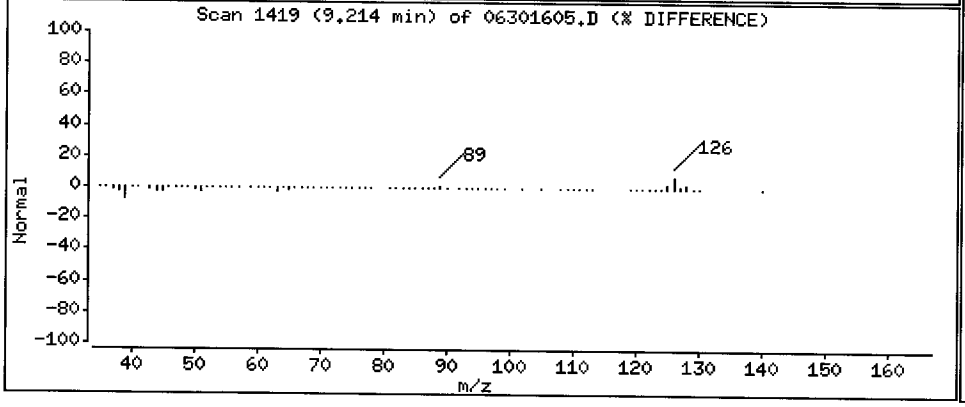












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

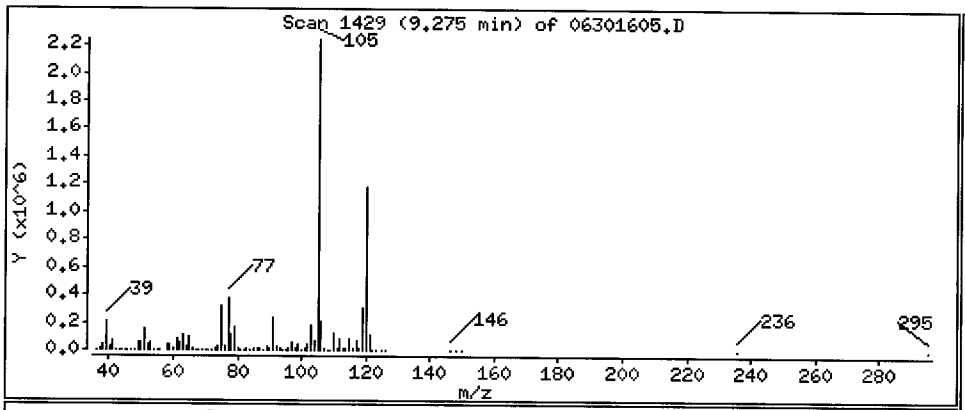
Operator: PB

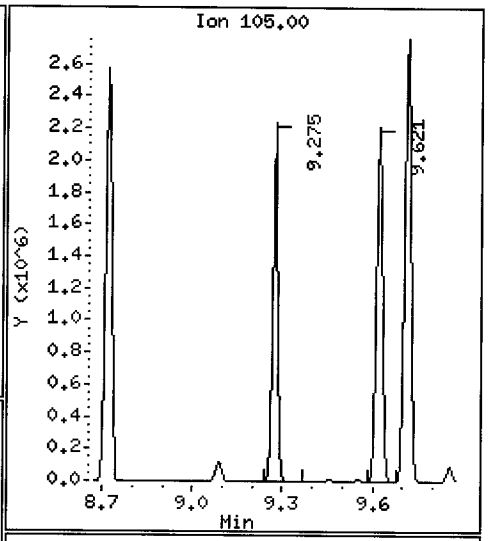
Column phase: RTXVMS

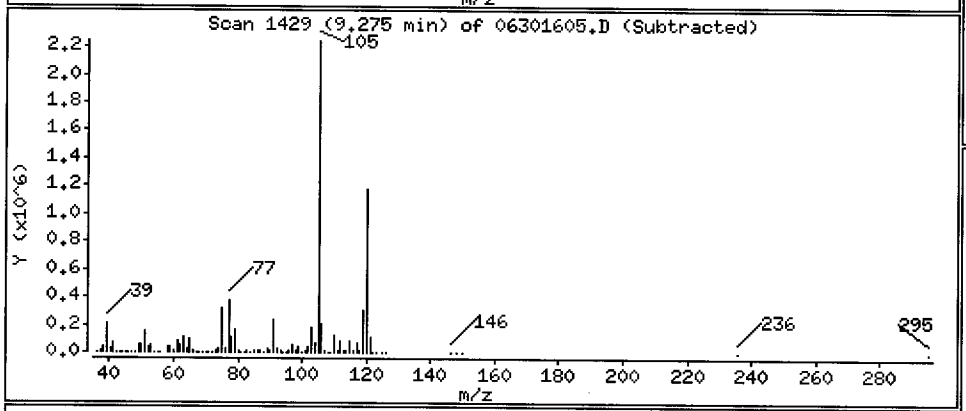
Column diameter: 0.18

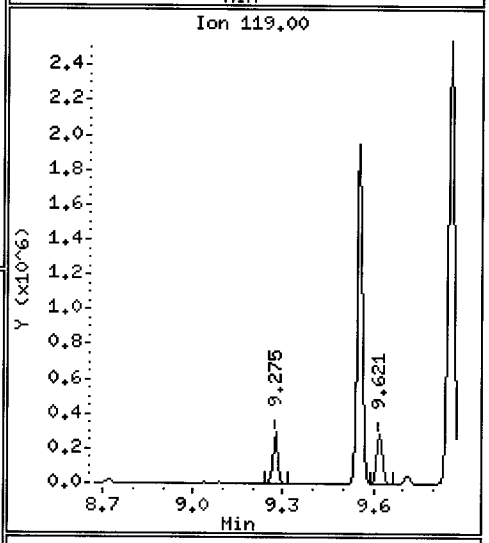
67 1,3,5-Trimethyl Benzene

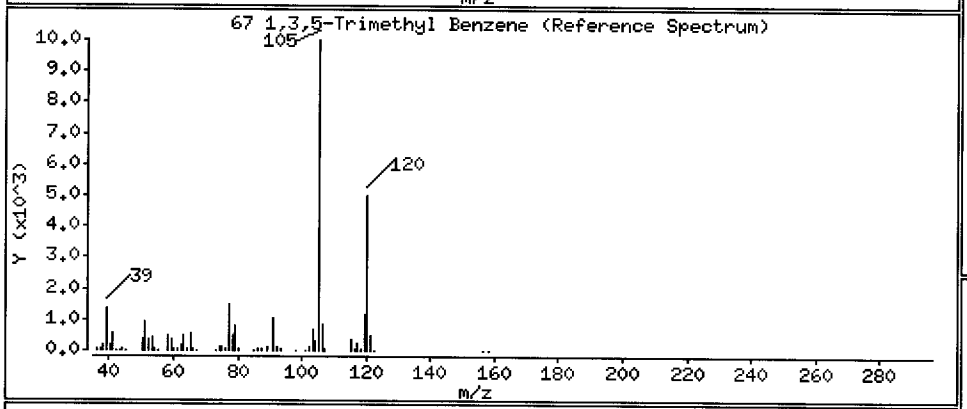
Concentration: 46.456 ug/Kg

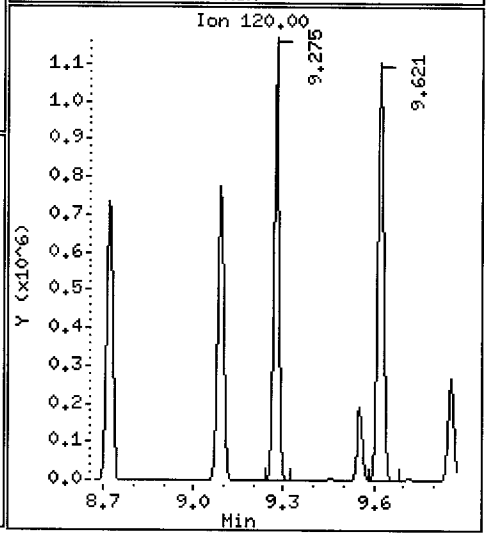


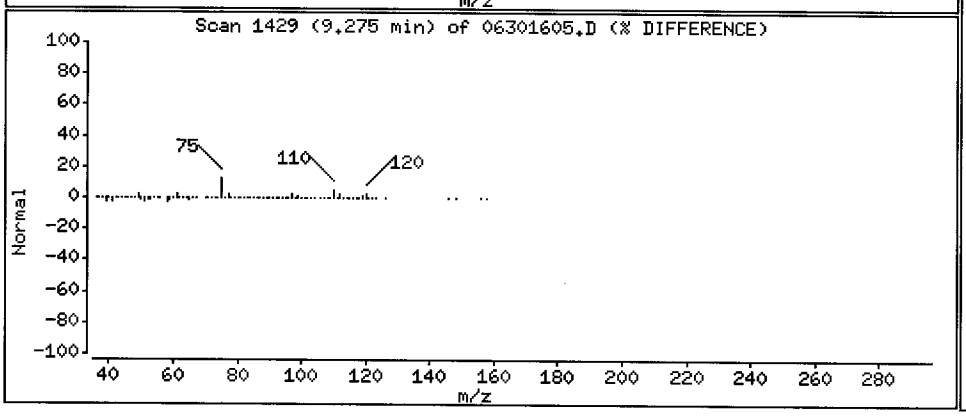












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

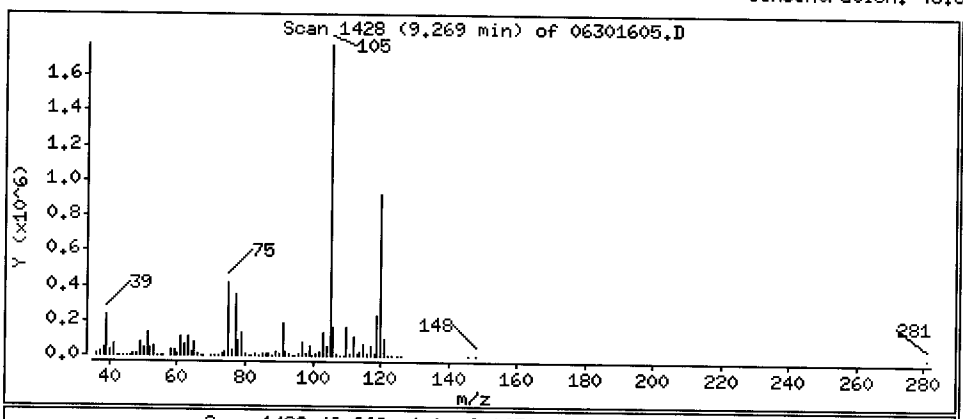
Operator: PB

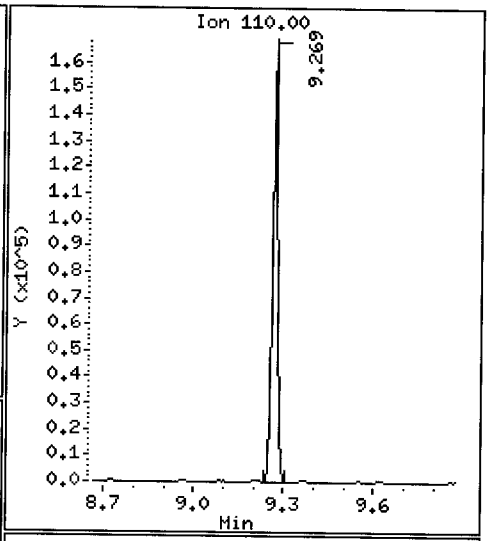
Column phase: RTXVMS

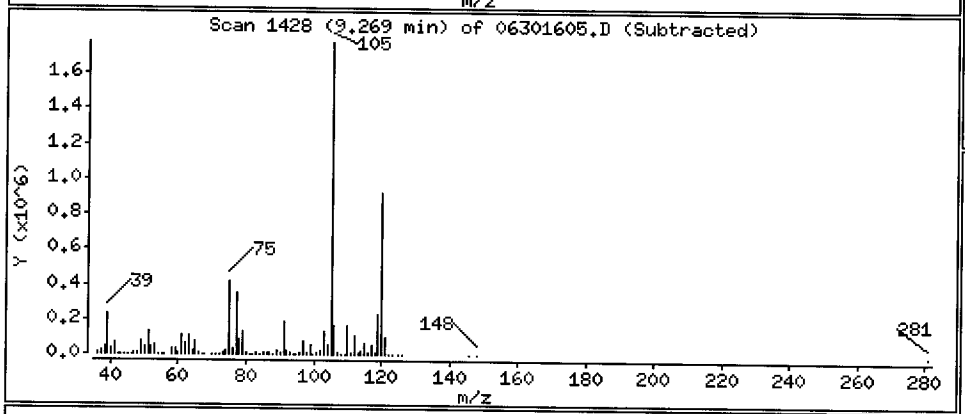
Column diameter: 0.18

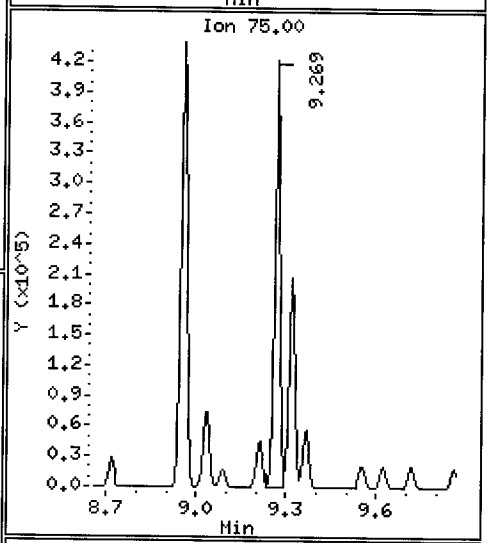
68 1,2,3-Trichloropropane

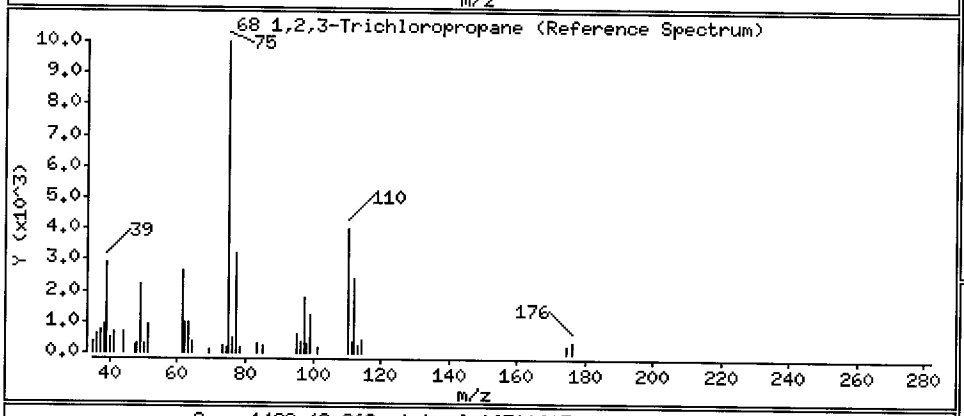
Concentration: 43.823 ug/Kg

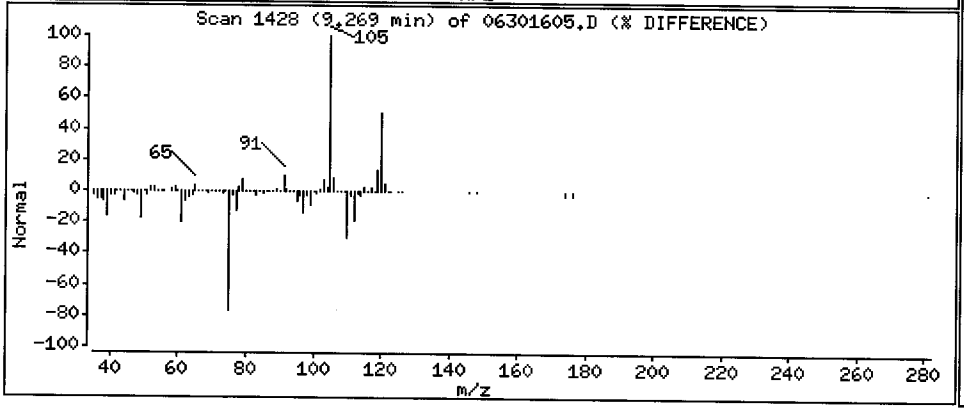


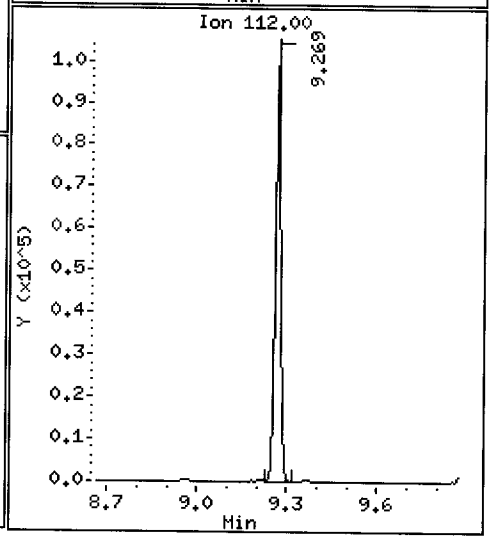












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

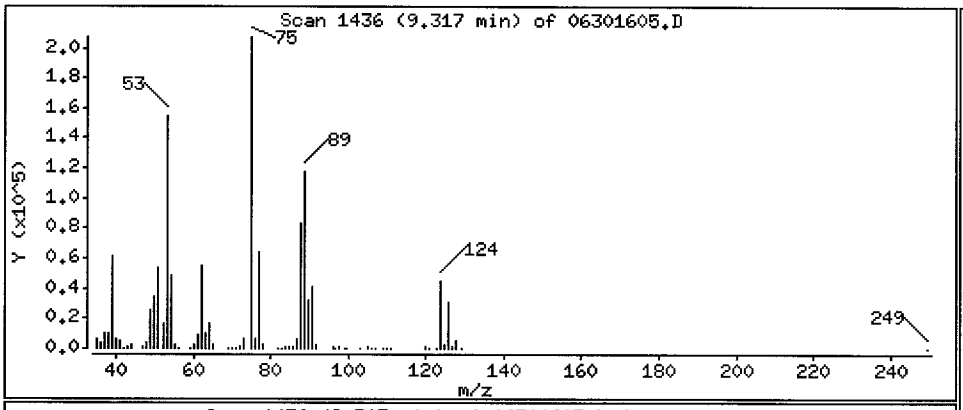
Operator: PB

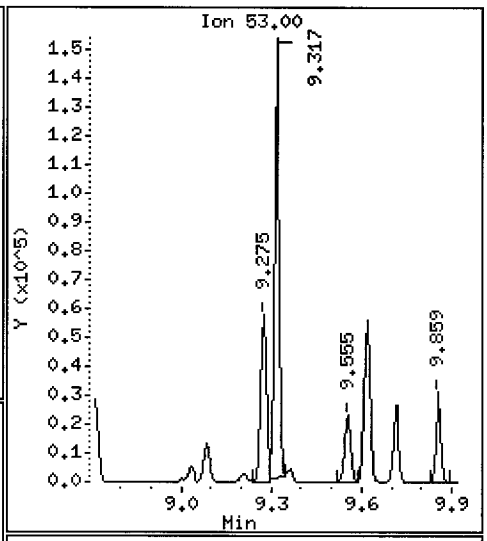
Column phase: RTXVMS

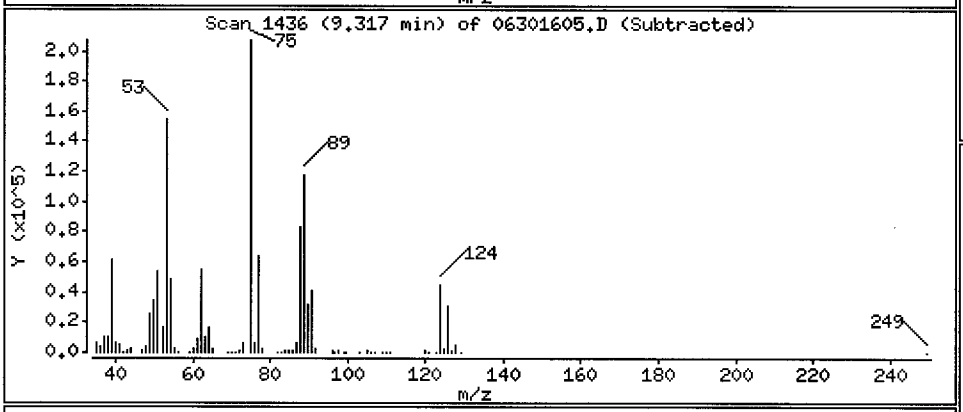
Column diameter: 0.18

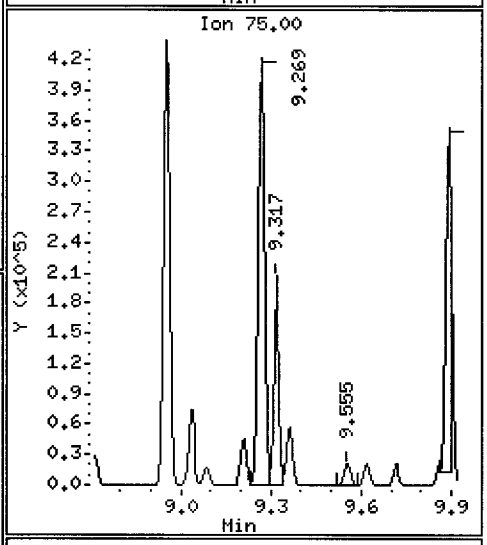
69 Trans-1,4-Dichloro 2-Butene

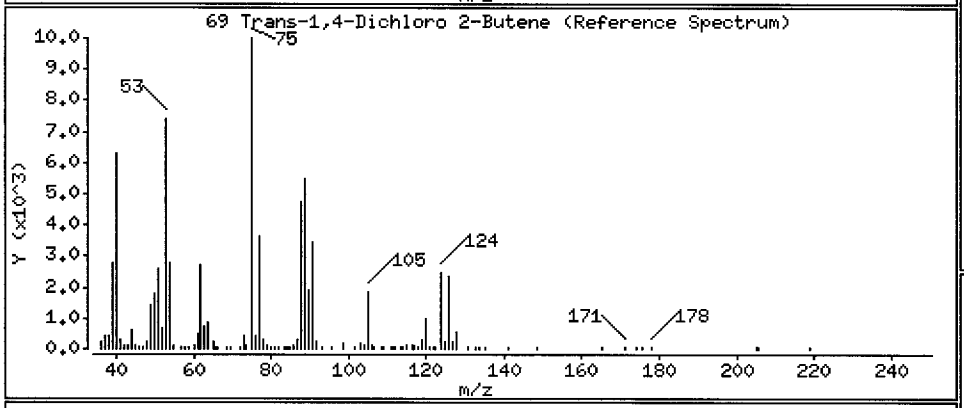
Concentration: 39.366 ug/Kg

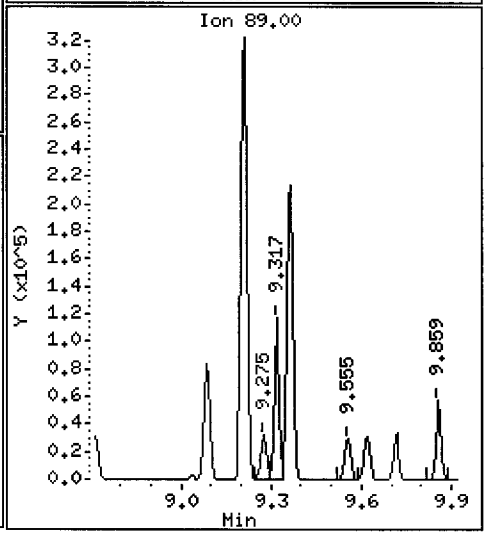


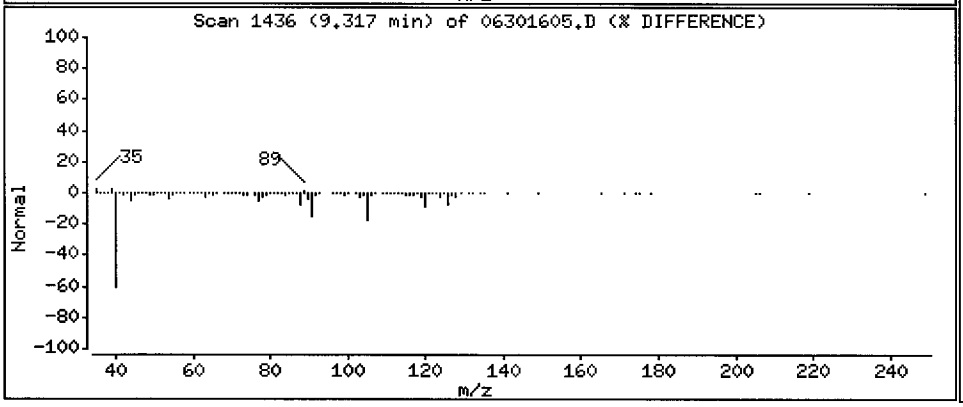












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

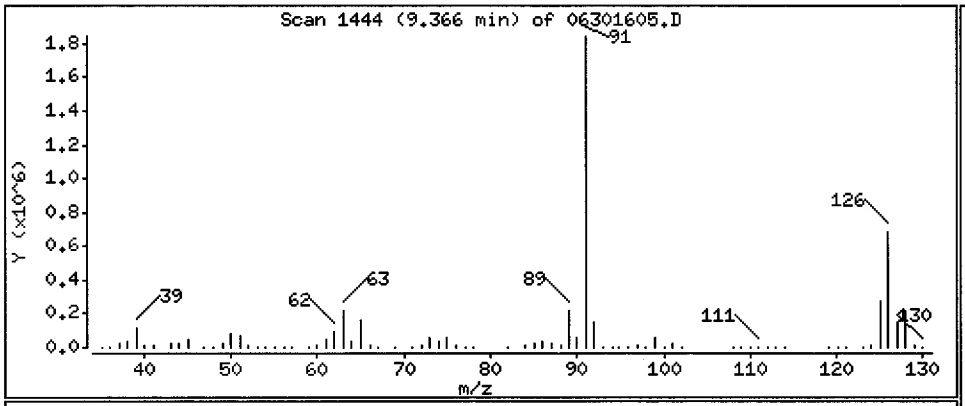
Operator: PB

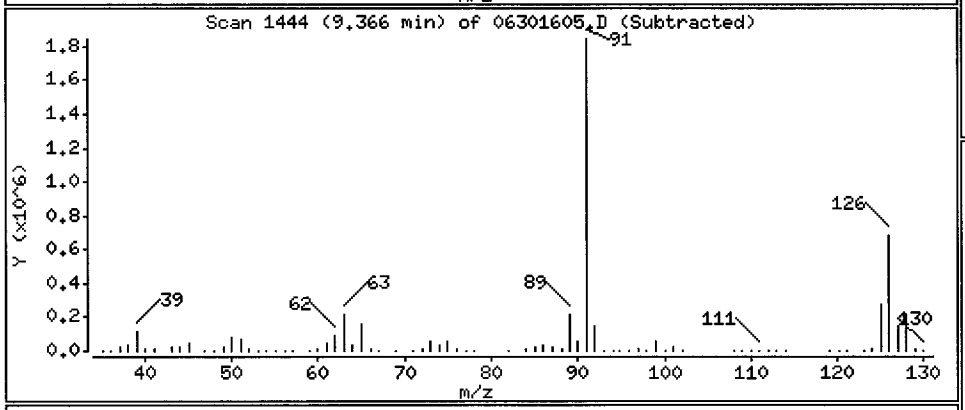
Column phase: RTXVMS

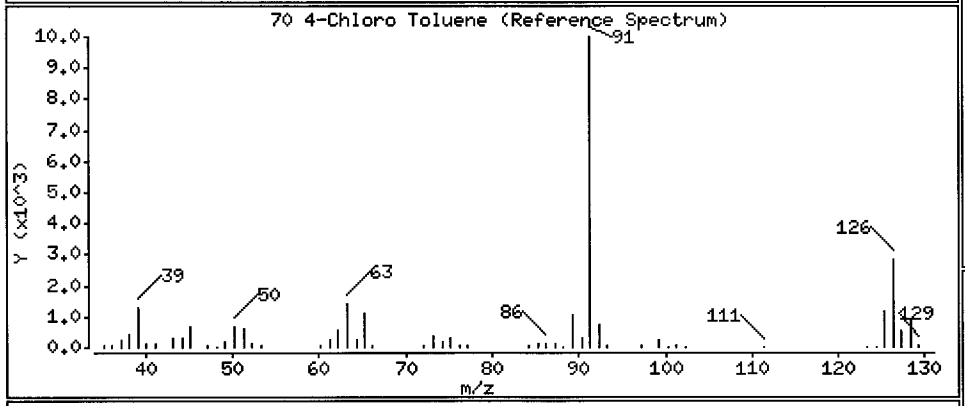
Column diameter: 0.18

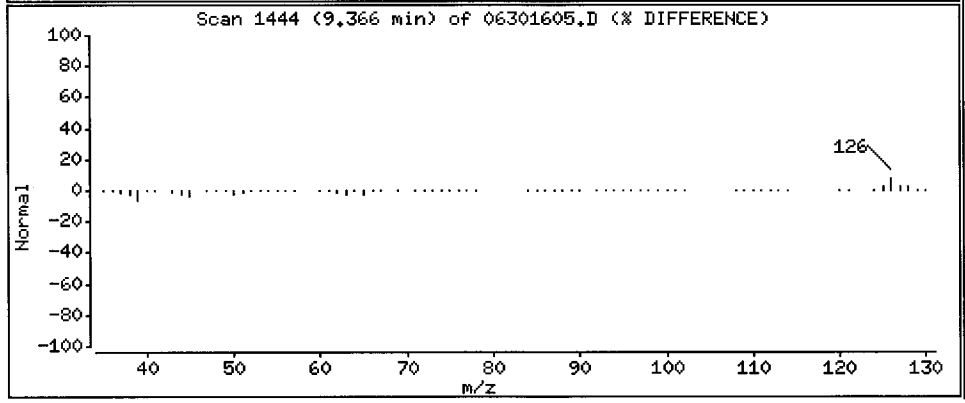
70 4-Chloro Toluene

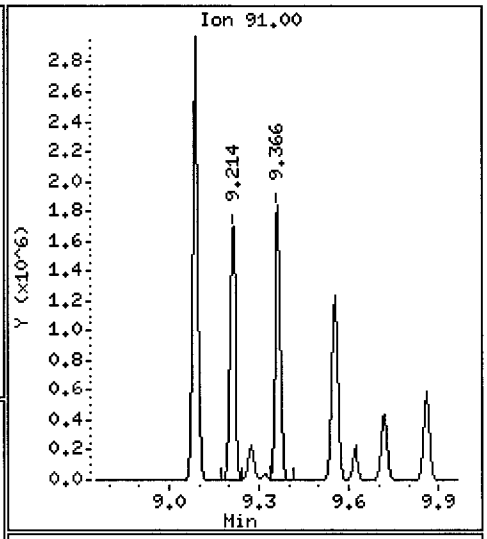
Concentration: 45.431 ug/Kg

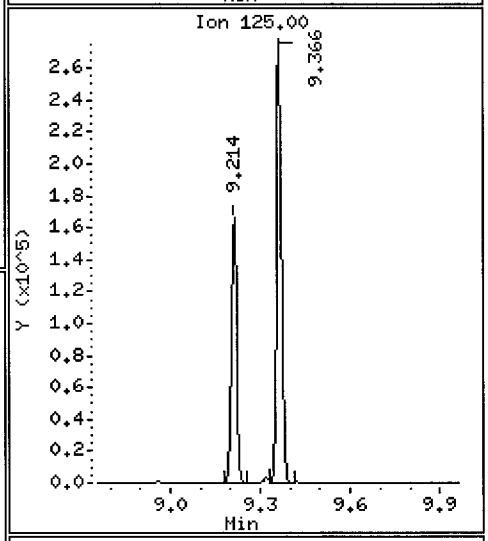


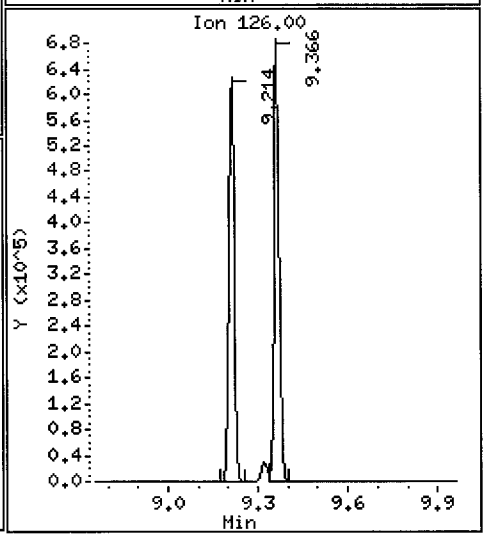












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

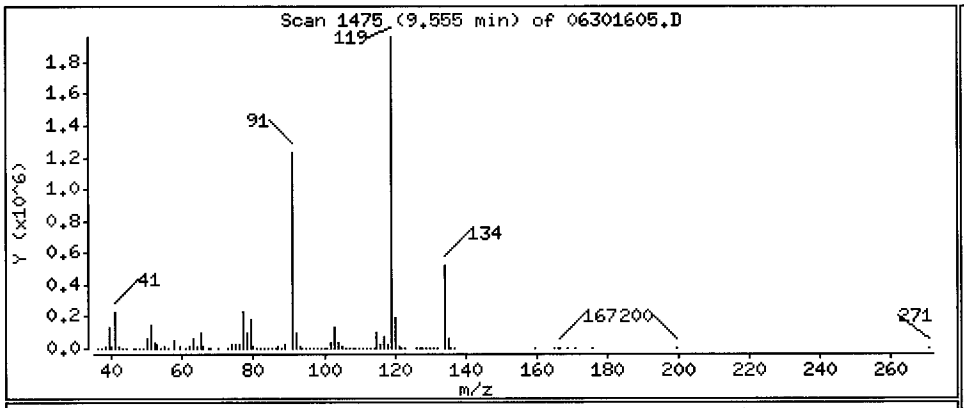
Operator: PB

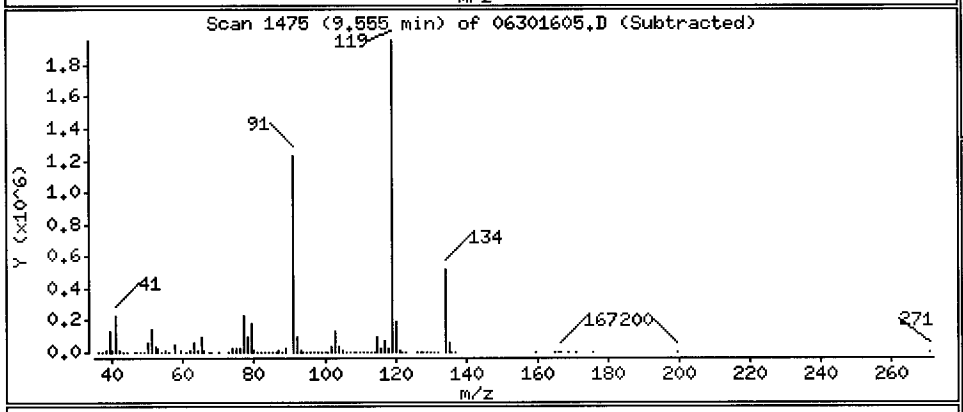
Column phase: RTXVMS

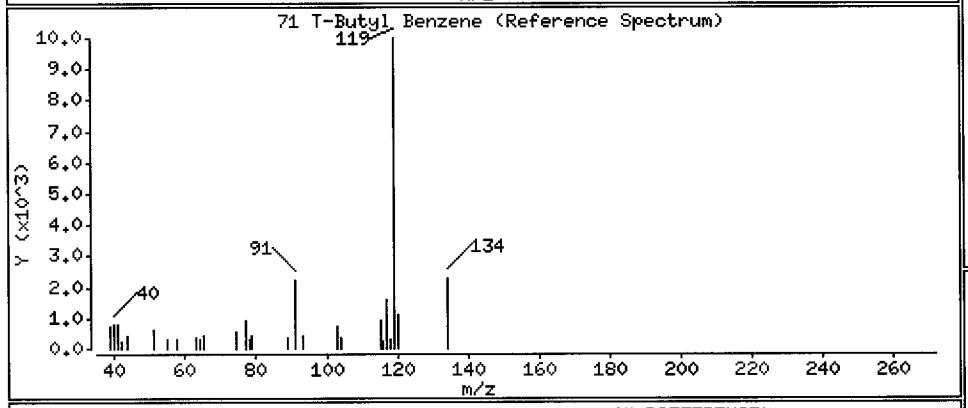
Column diameter: 0.18

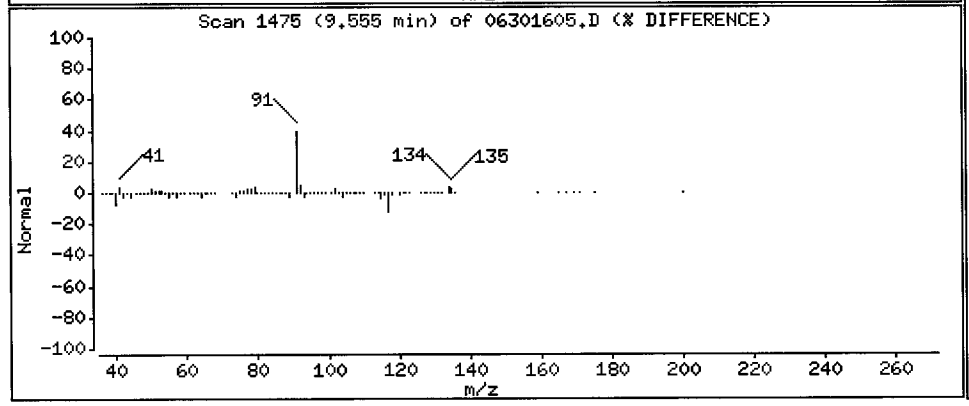
71 T-Butyl Benzene

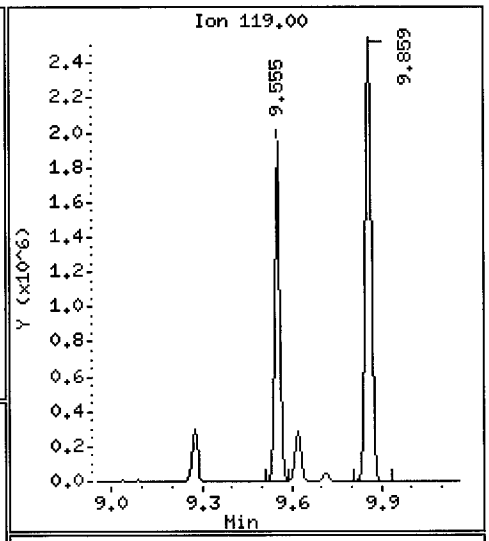
Concentration: 45.909 ug/Kg

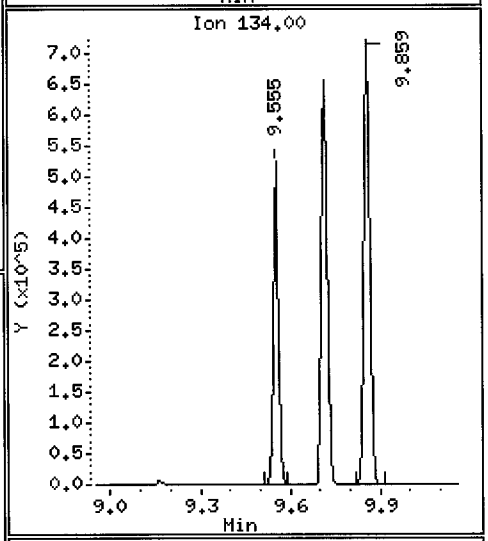


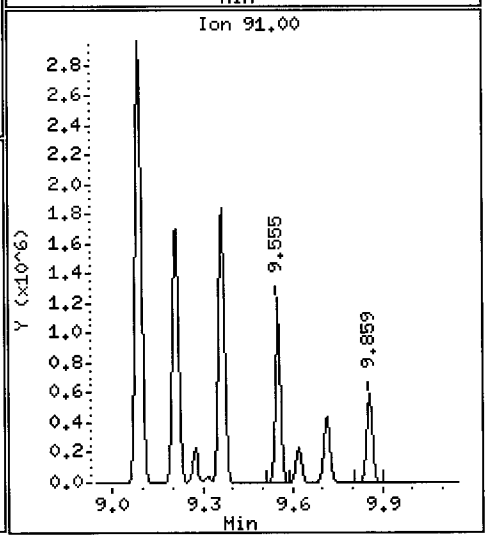












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

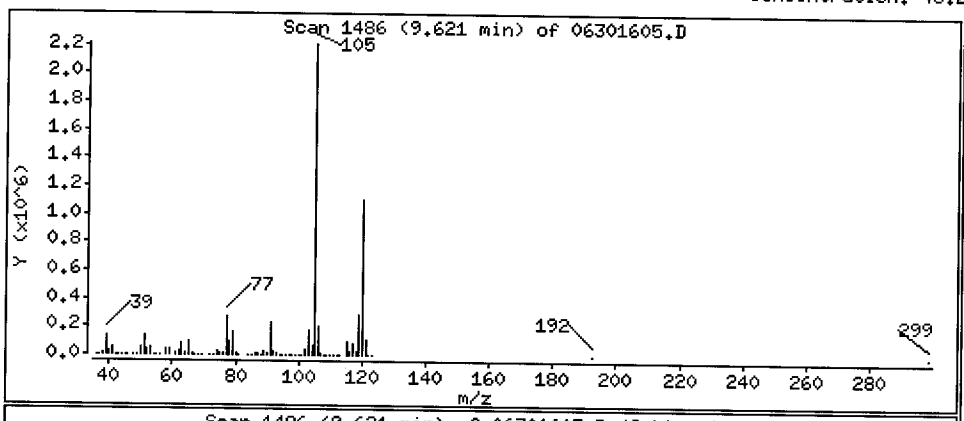
Operator: PB

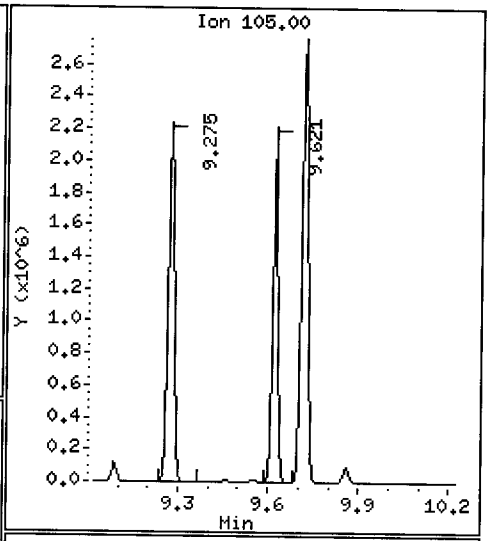
Column phase: RTXVMS

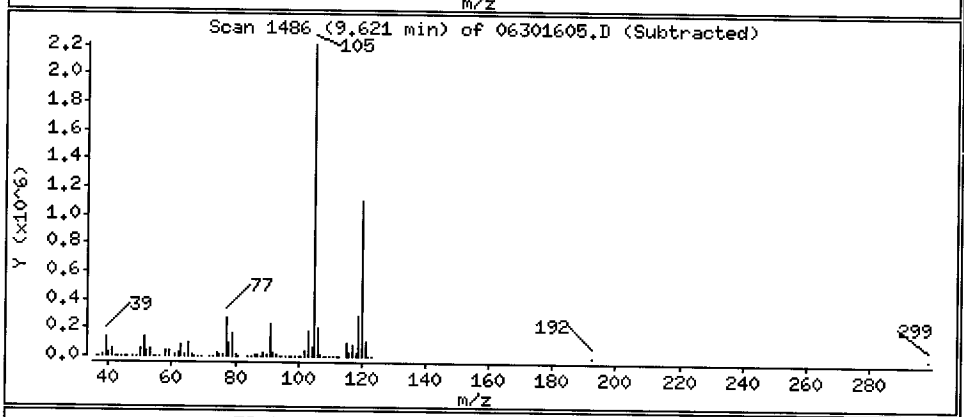
Column diameter: 0.18

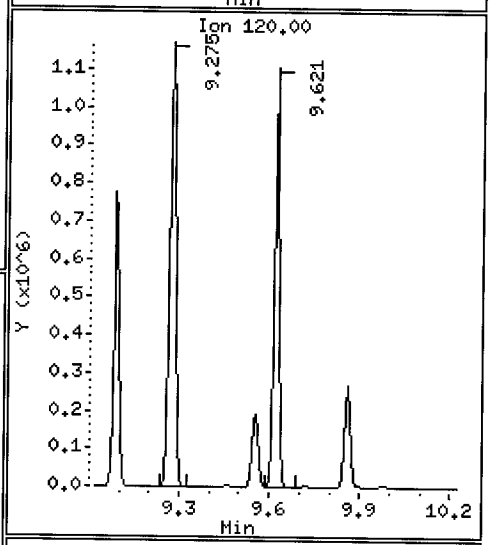
72 1,2,4-Trimethylbenzene

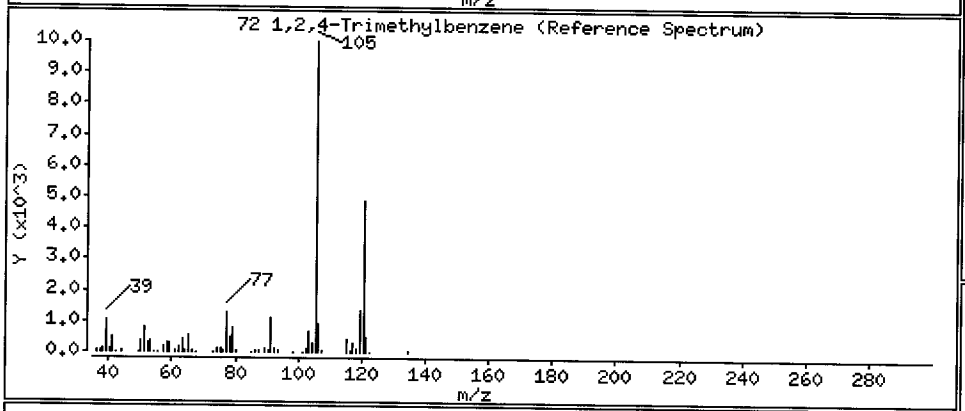
Concentration: 46.201 ug/Kg

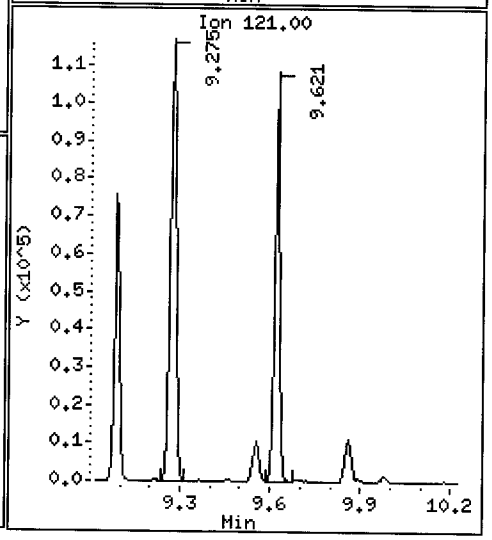


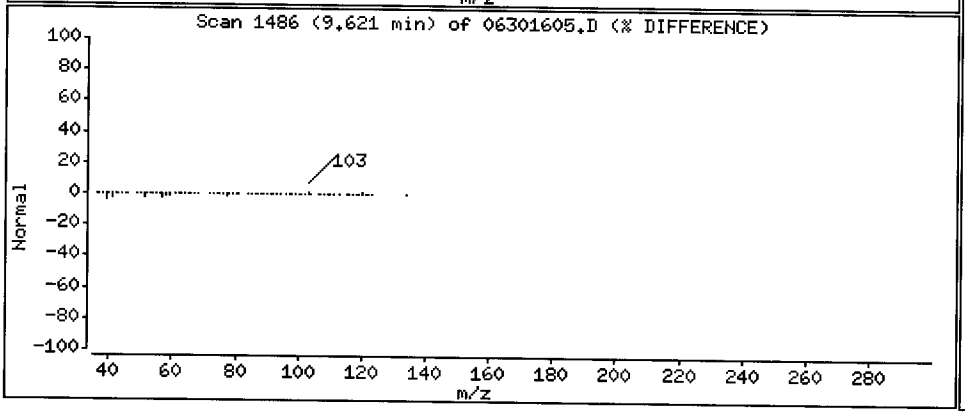












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

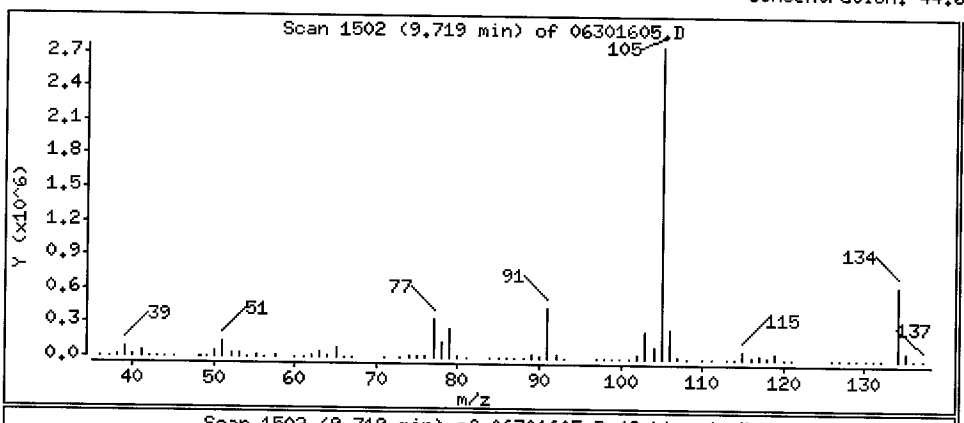
Operator: PB

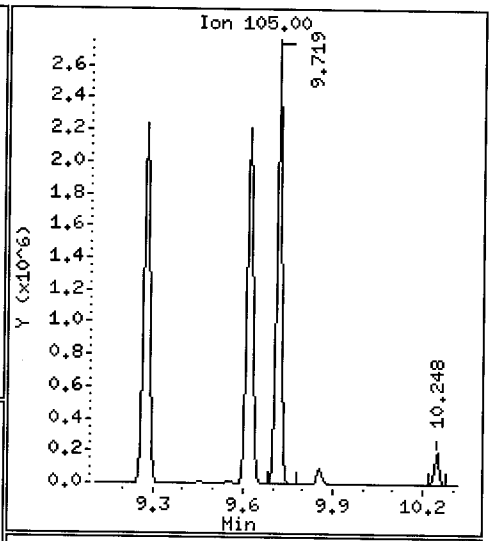
Column phase: RTXVMS

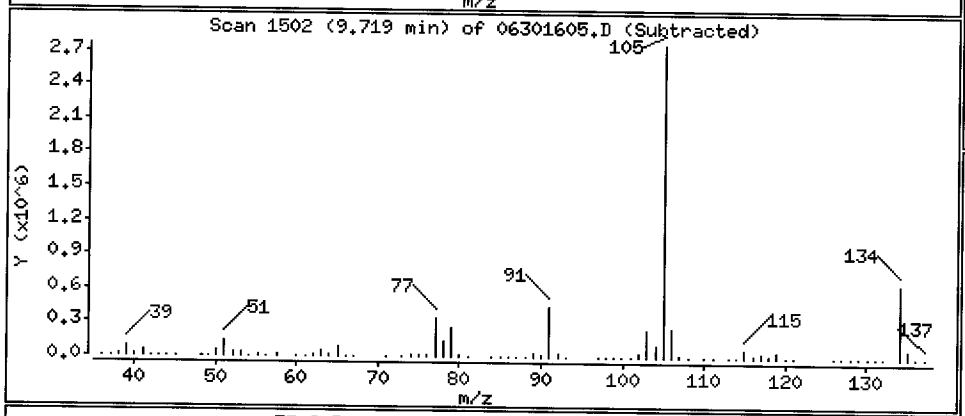
Column diameter: 0.18

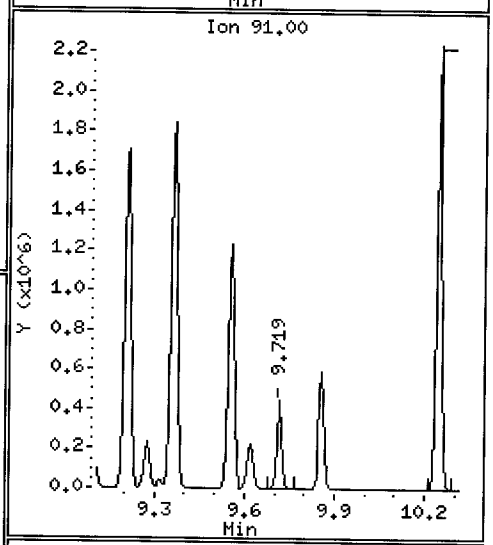
73 S-Butyl Benzene

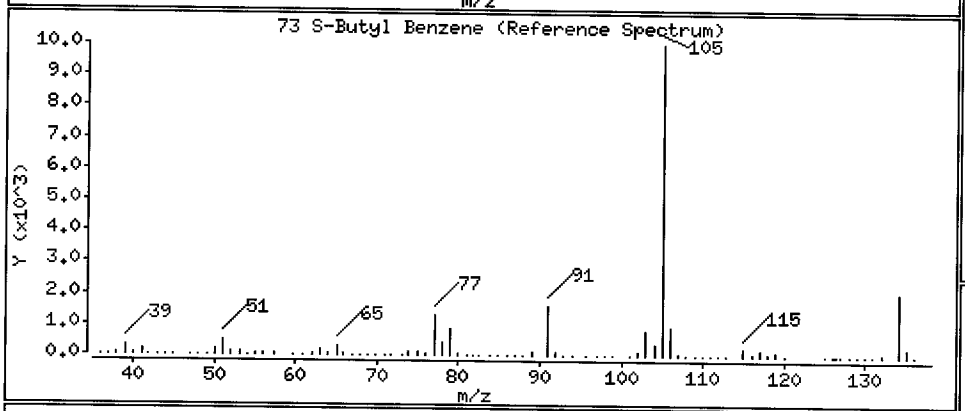
Concentration: 44.626 ug/Kg

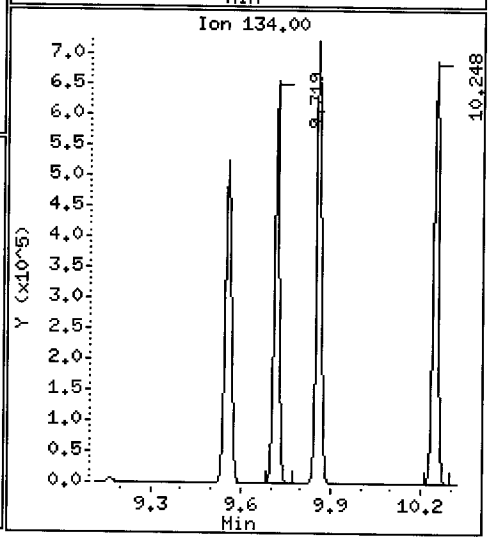


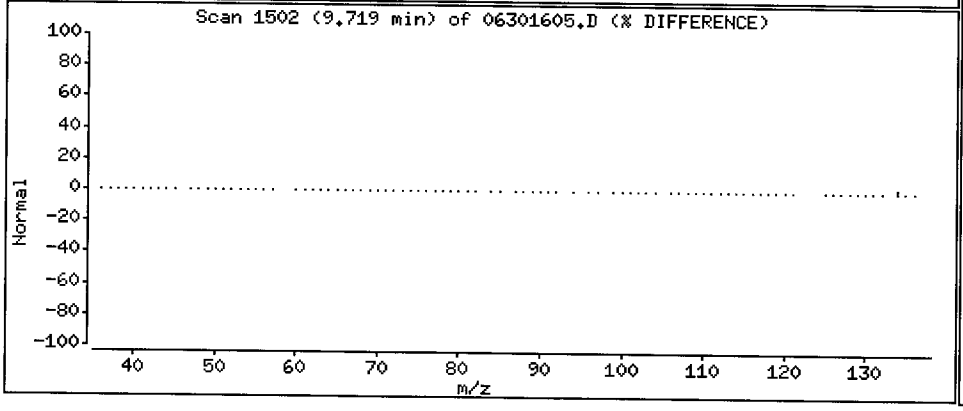












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

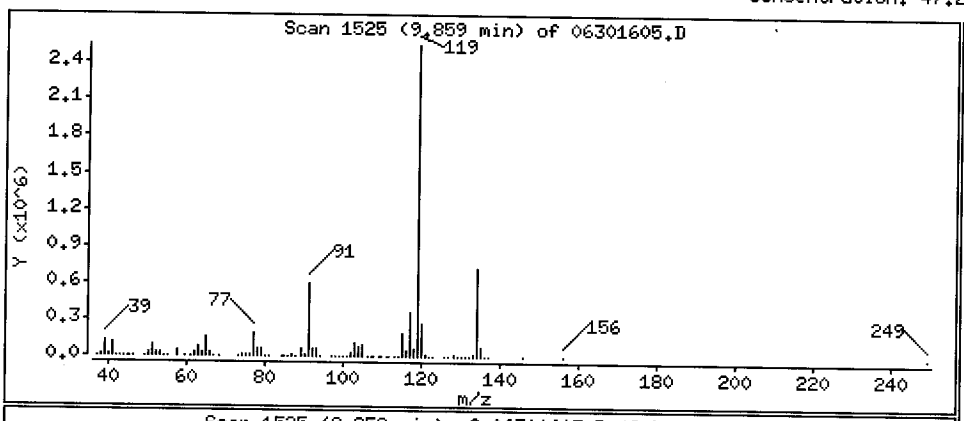
Operator: PB

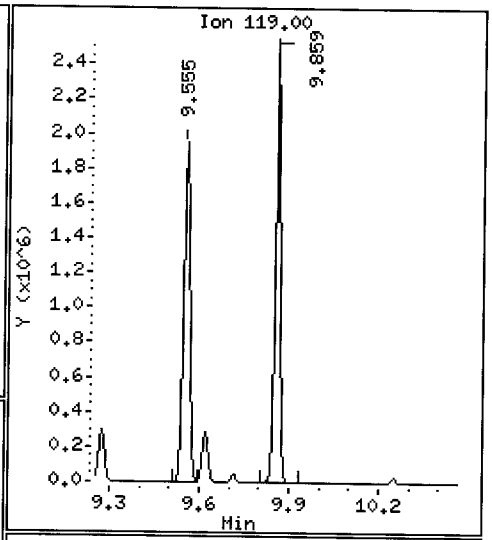
Column phase: RTXVMS

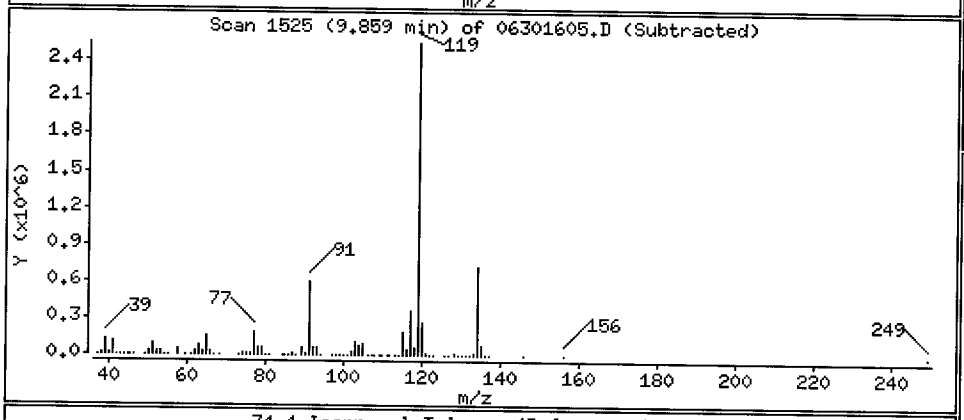
Column diameter: 0.18

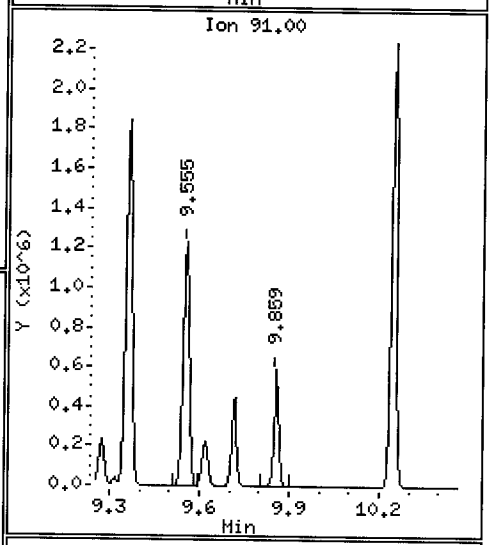
74 4-Isopropyl Toluene

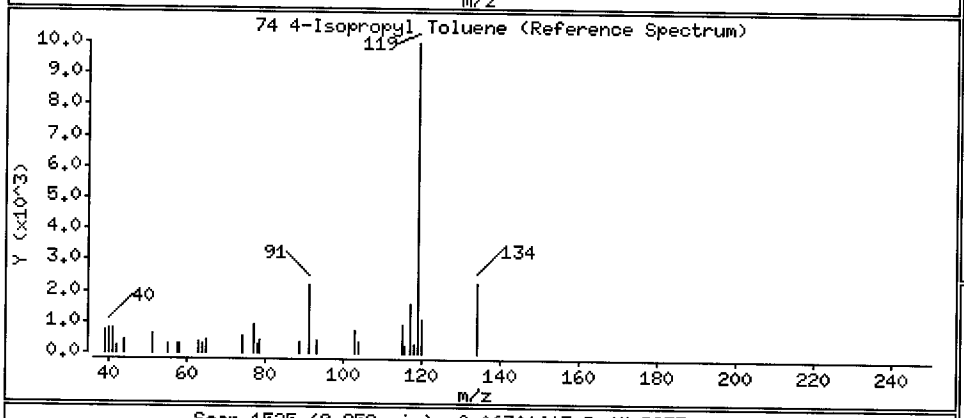
Concentration: 47.225 ug/Kg

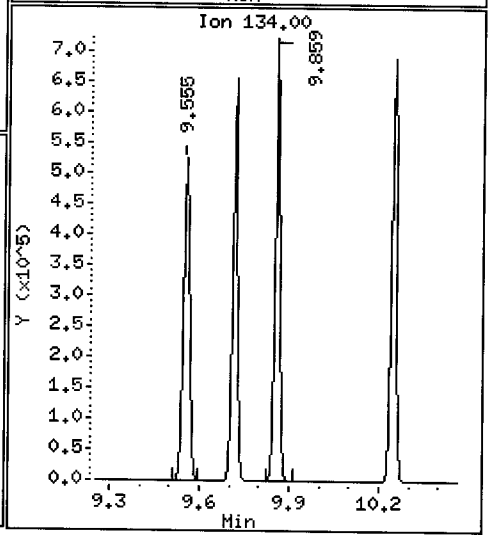


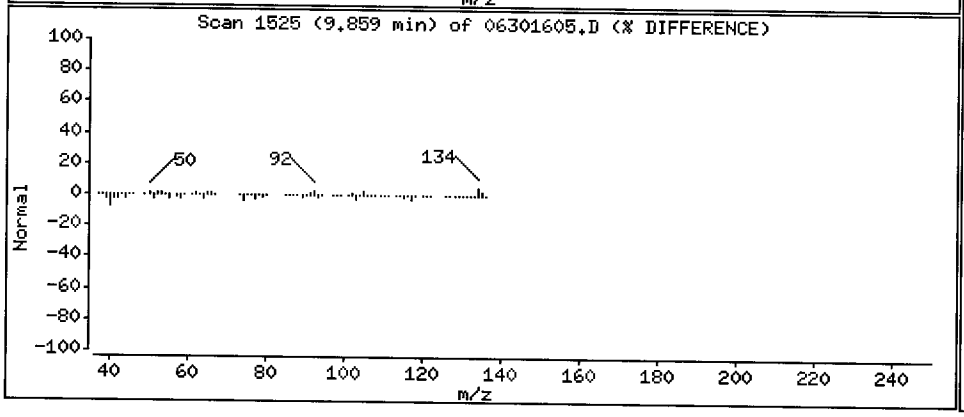












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

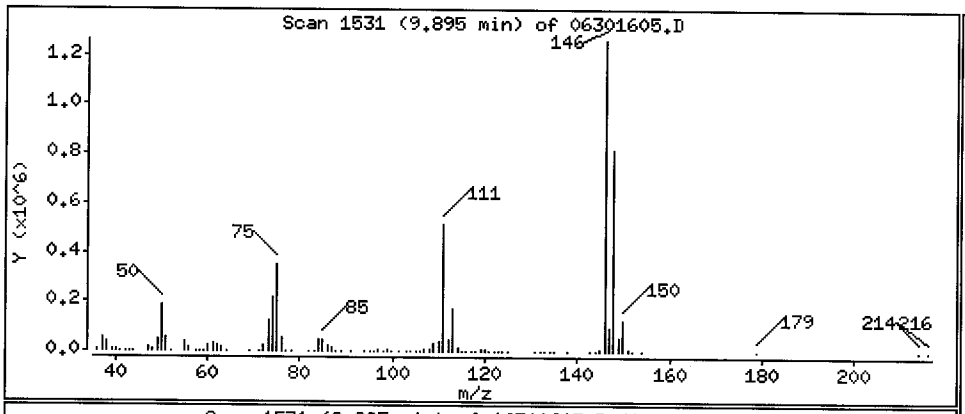
Operator: PB

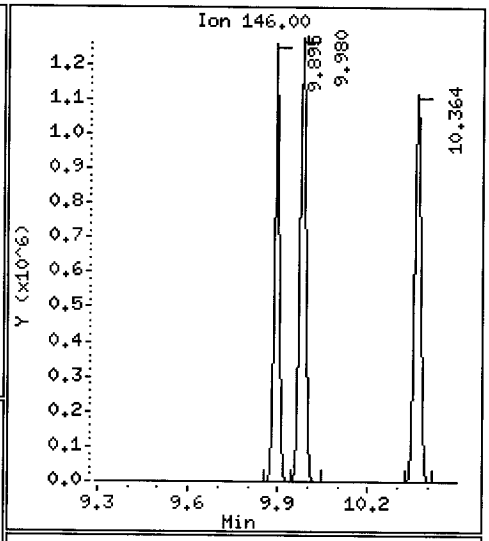
Column phase: RTXVMS

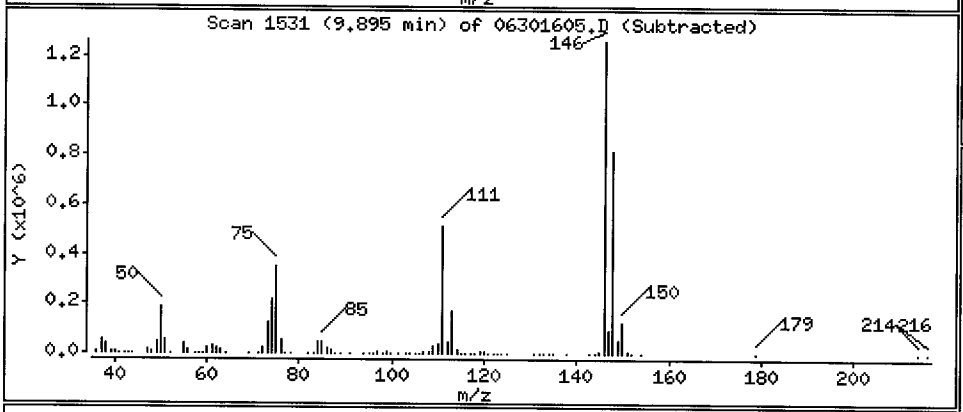
Column diameter: 0.18

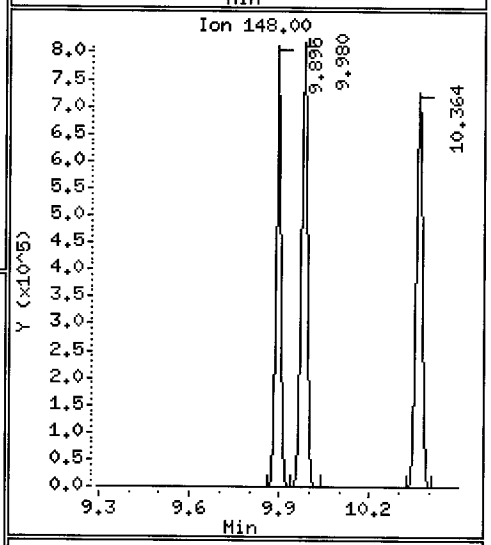
75 1,3-Dichlorobenzene

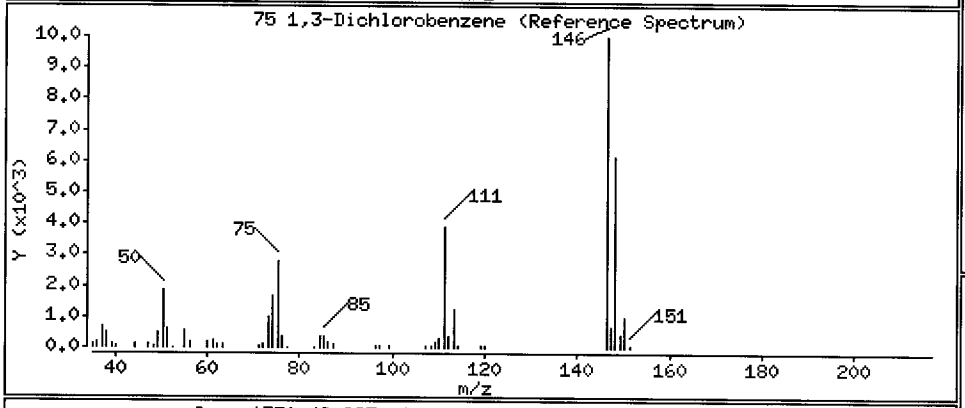
Concentration: 48.382 ug/Kg

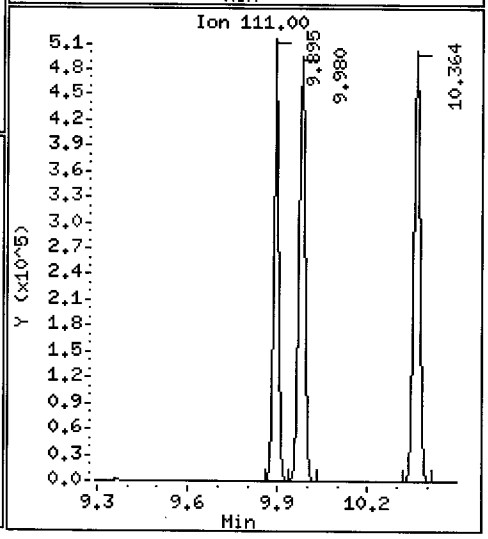


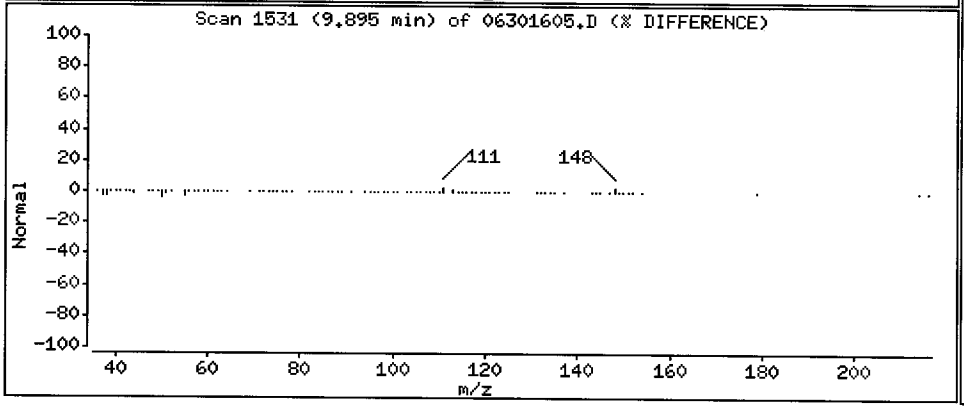












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

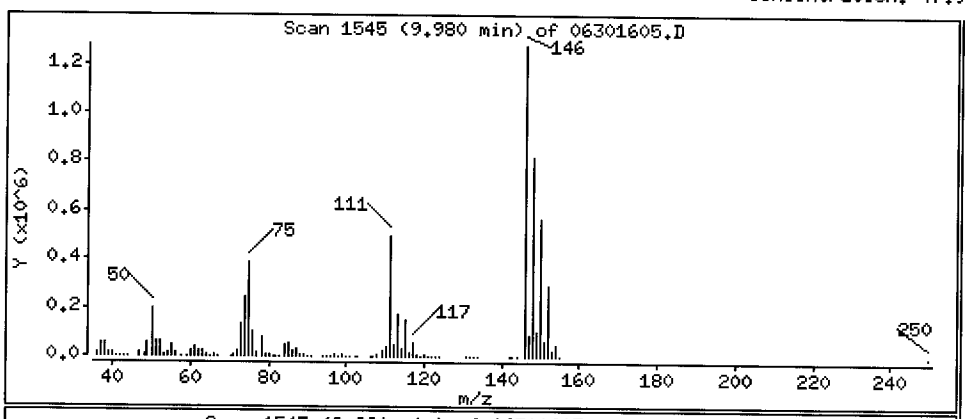
Operator: PB

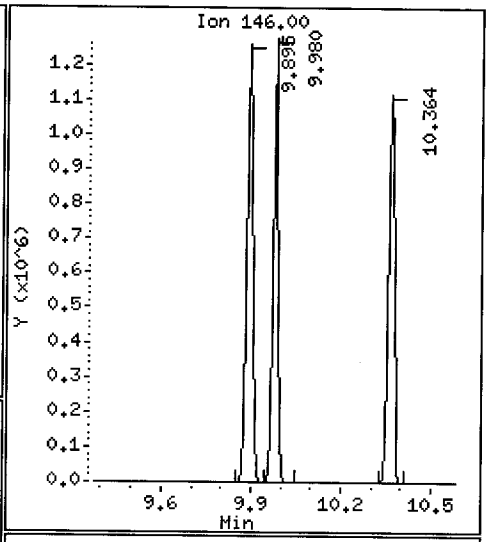
Column phase: RTXVMS

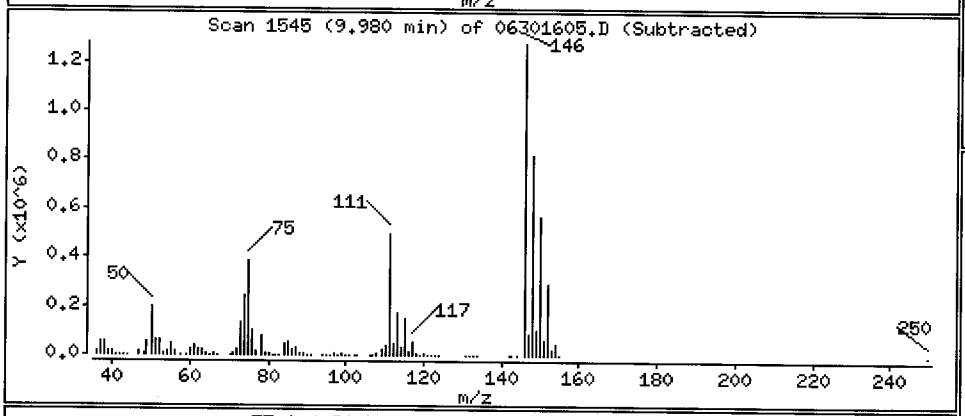
Column diameter: 0.18

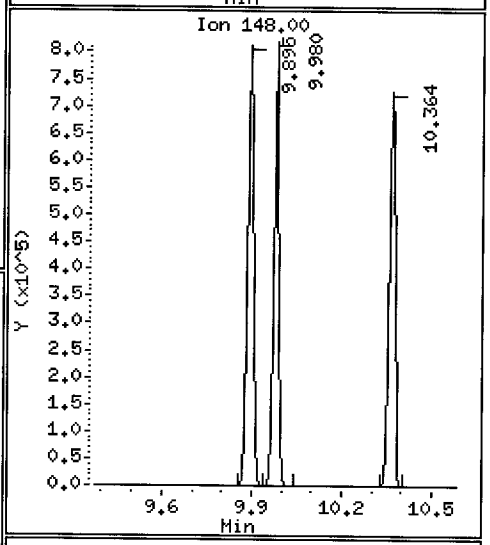
77 1,4-Dichlorobenzene

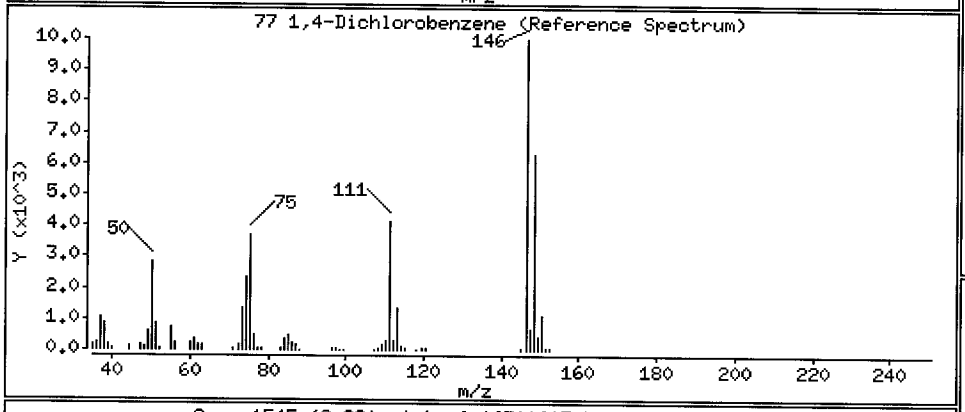
Concentration: 47.953 ug/Kg

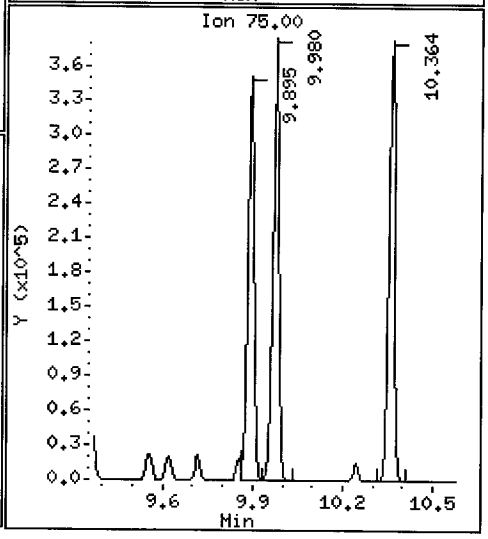


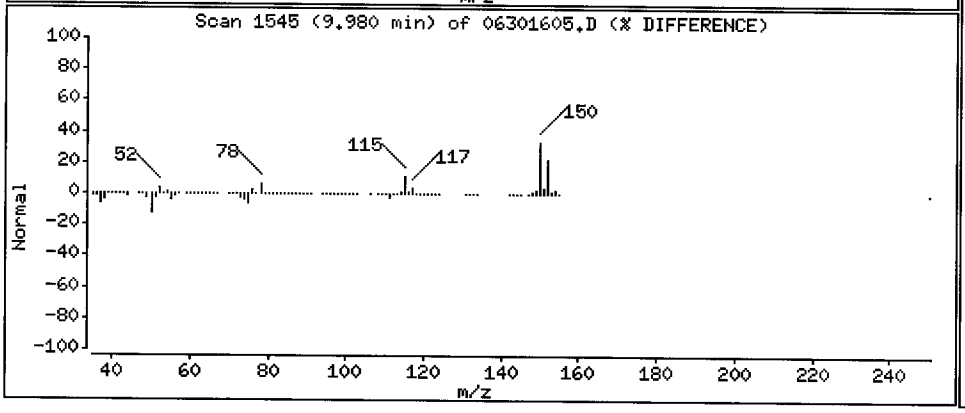












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

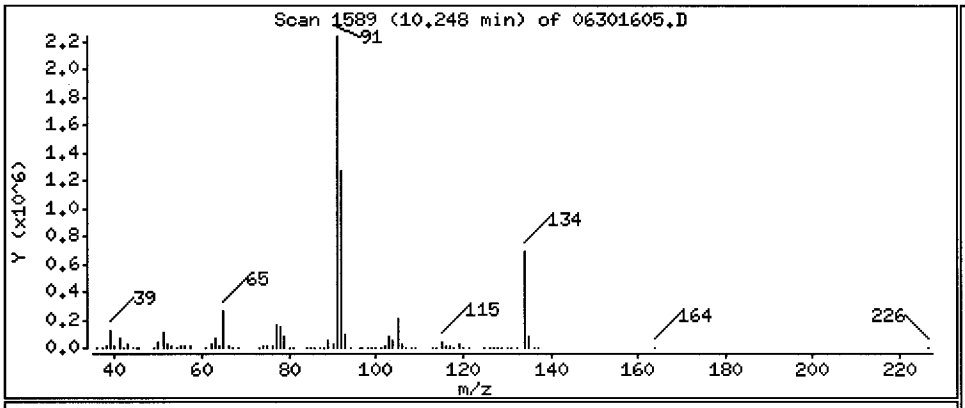
Operator: PB

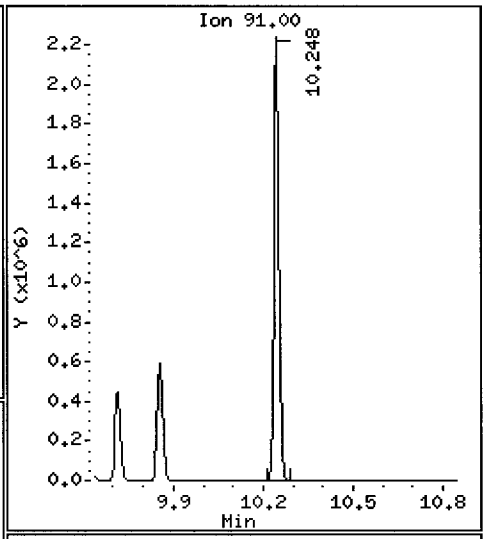
Column phase: RTXVMS

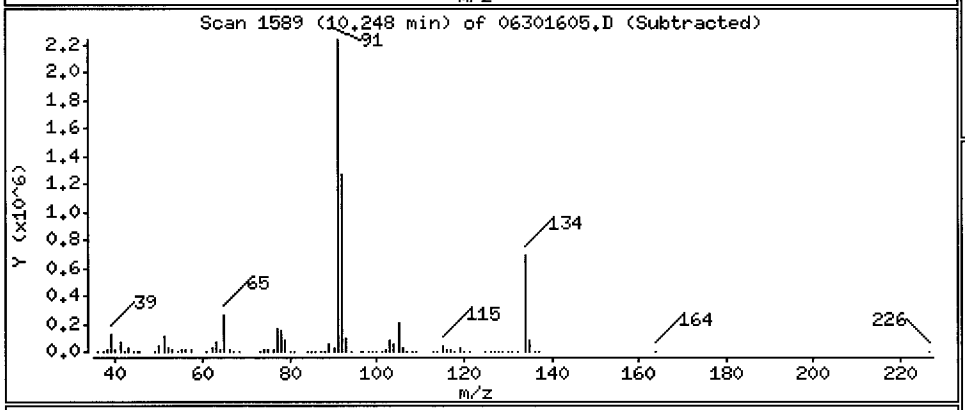
Column diameter: 0.18

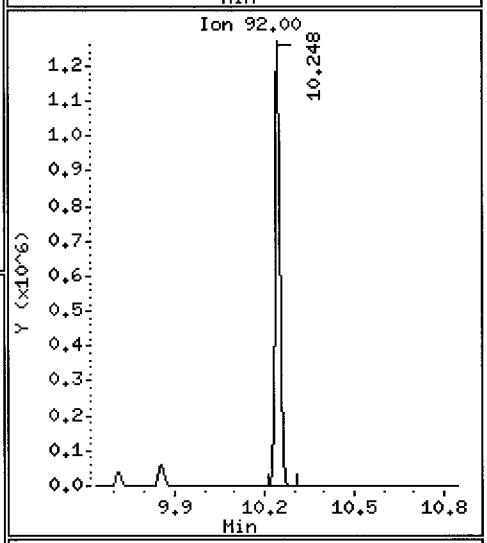
78 N-Butyl Benzene

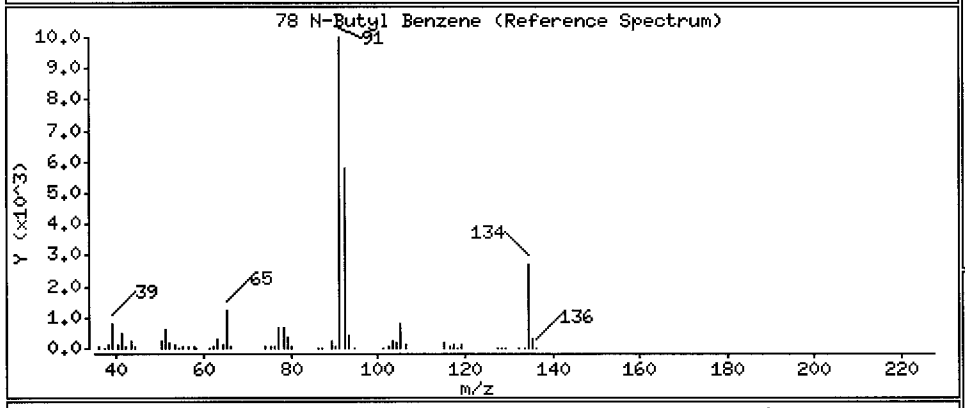
Concentration: 46.622 ug/Kg

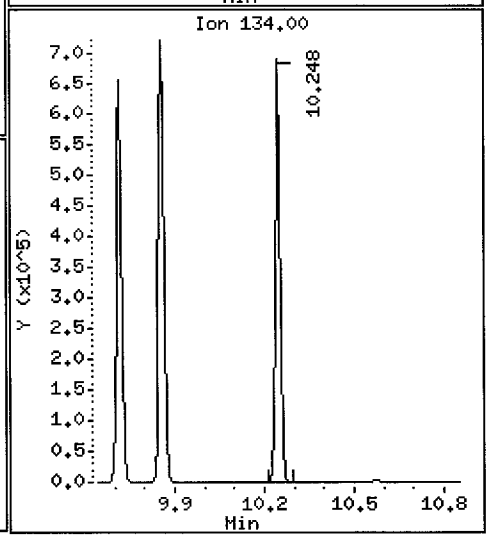


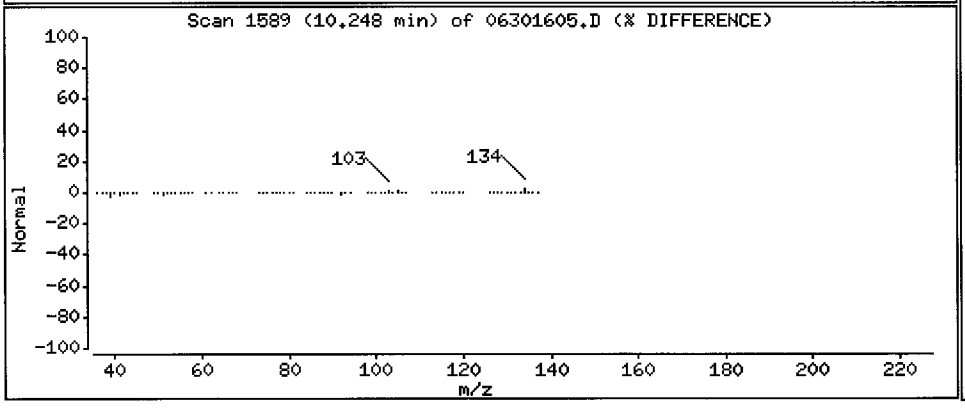












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

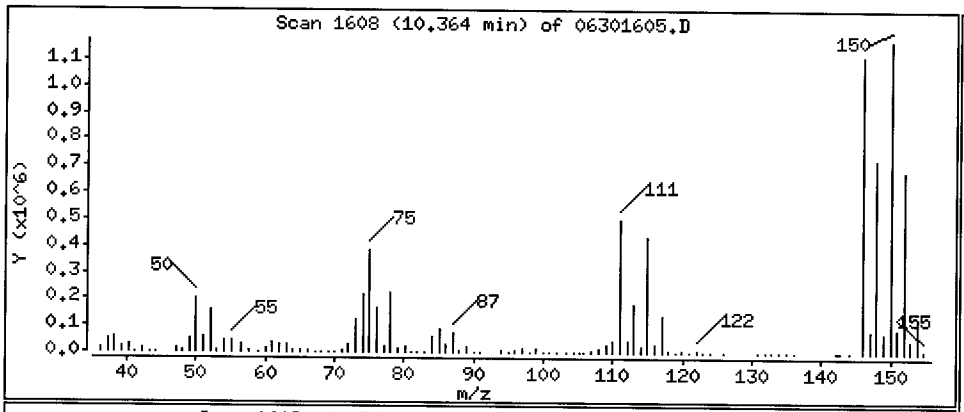
Operator: PB

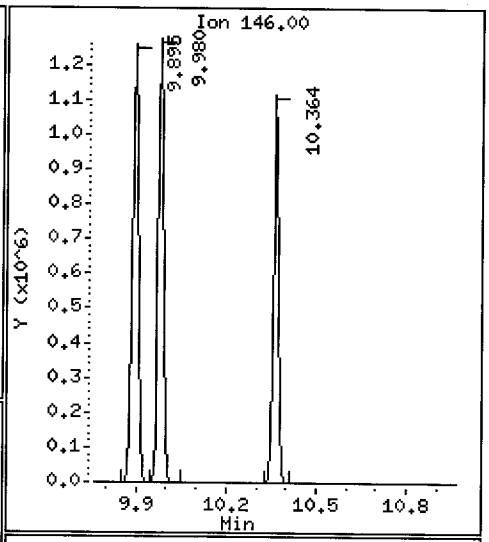
Column phase: RTXVMS

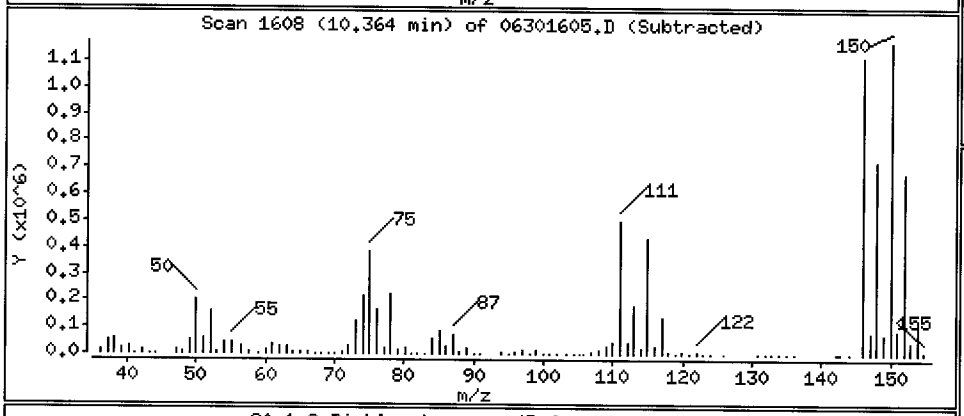
Column diameter: 0.18

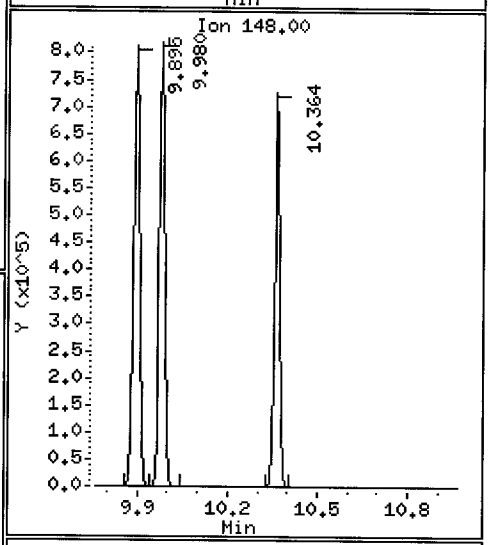
80 1,2-Dichlorobenzene

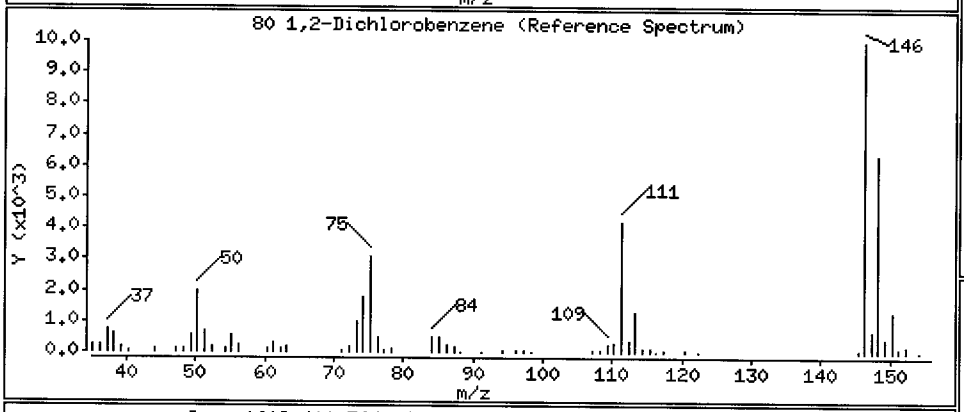
Concentration: 46.853 ug/Kg

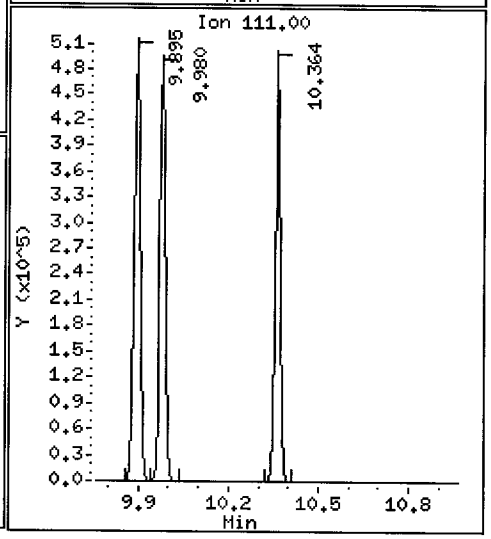


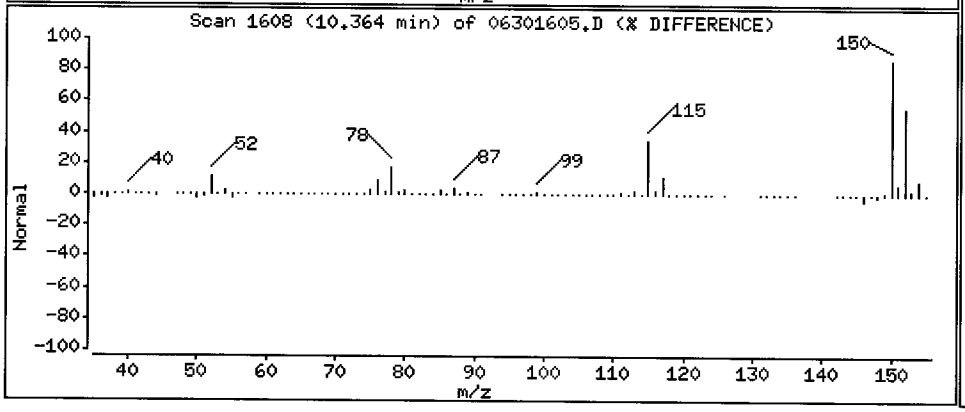












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

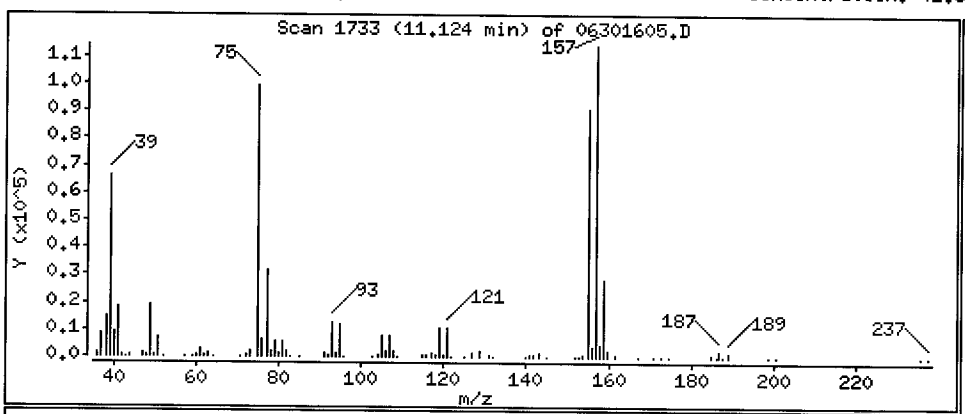
Operator: PB

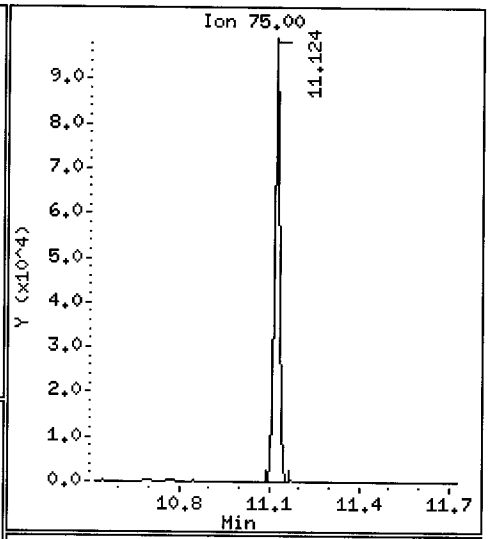
Column phase: RTXVMS

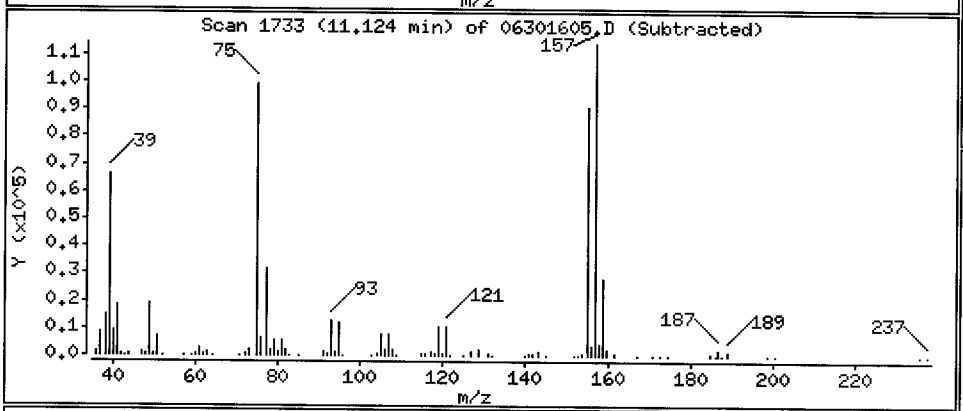
Column diameter: 0.18

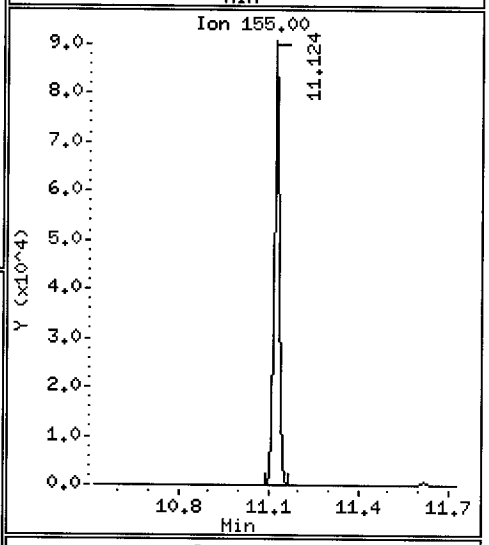
81 1,2-Dibromo 3-Chloropropane

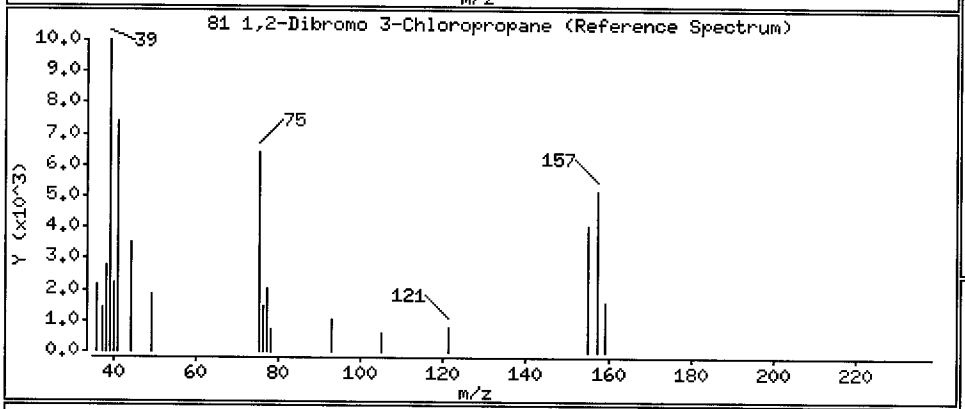
Concentration: 41.618 ug/Kg

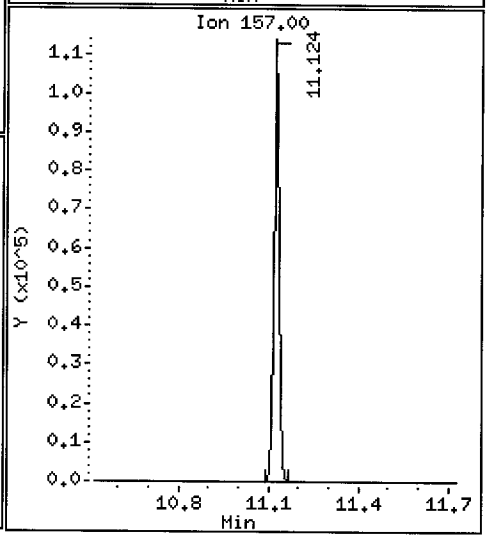


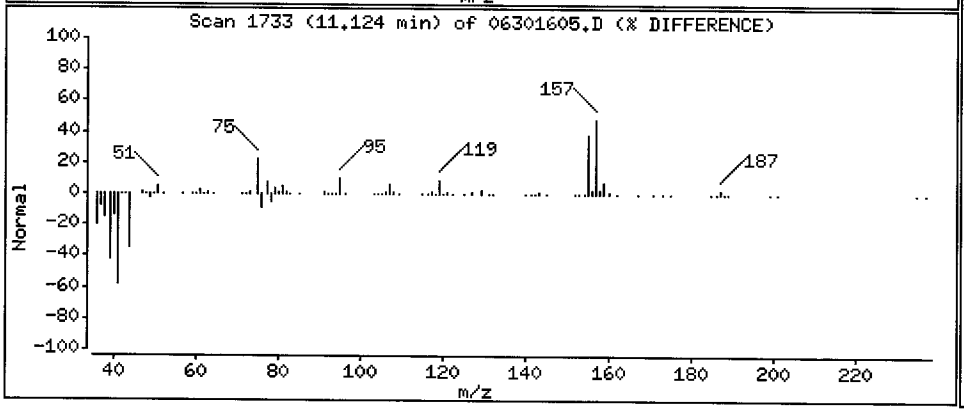












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

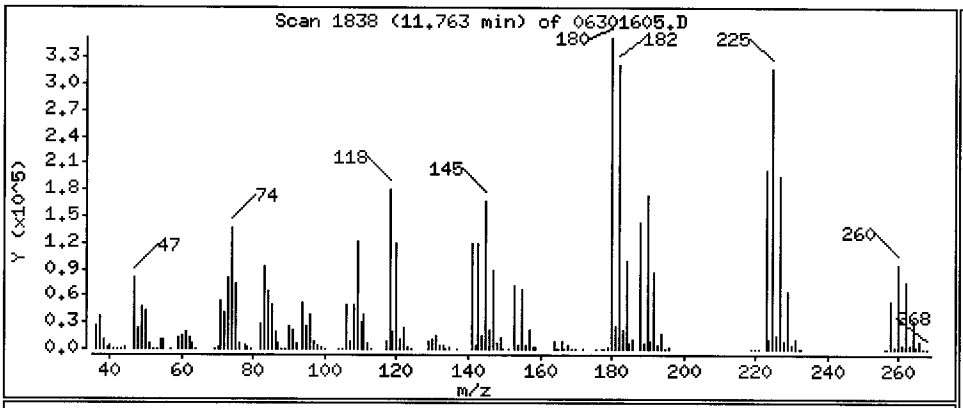
Operator: PB

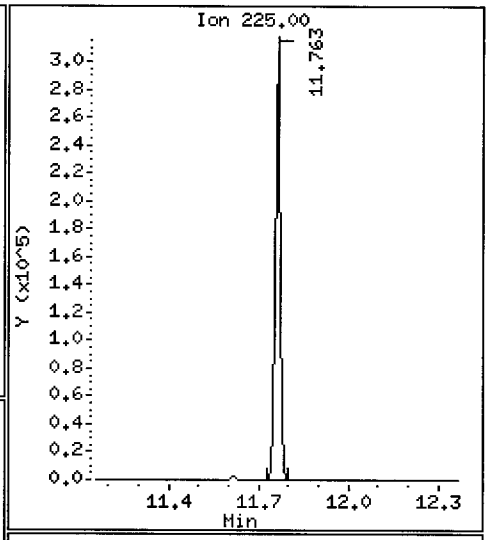
Column phase: RTXVMS

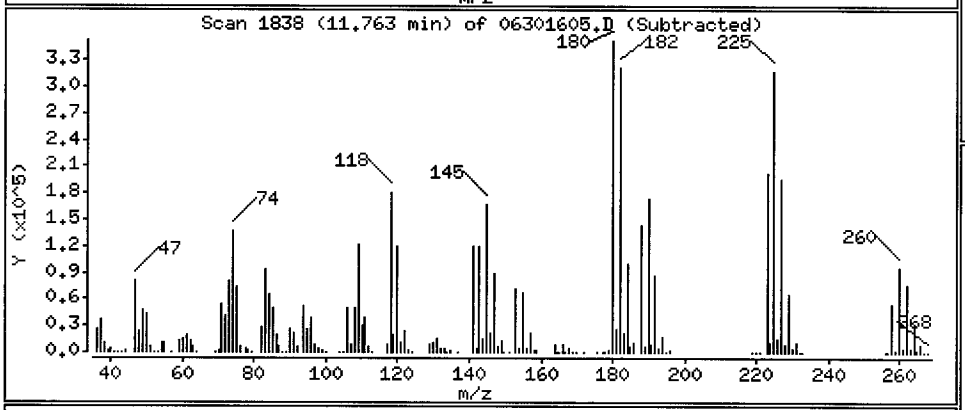
Column diameter: 0.18

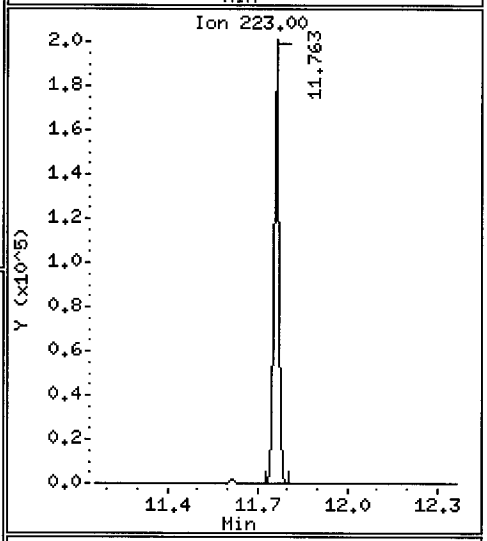
82 Hexachloro 1,3-Butadiene

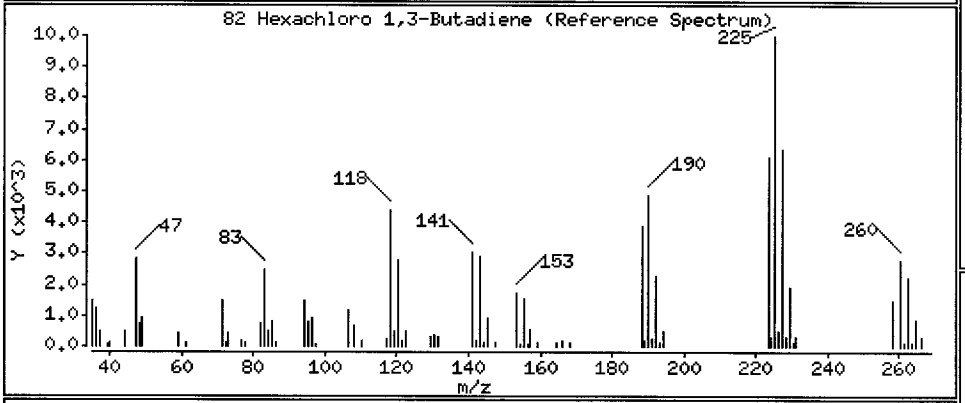
Concentration: 49.315 ug/Kg

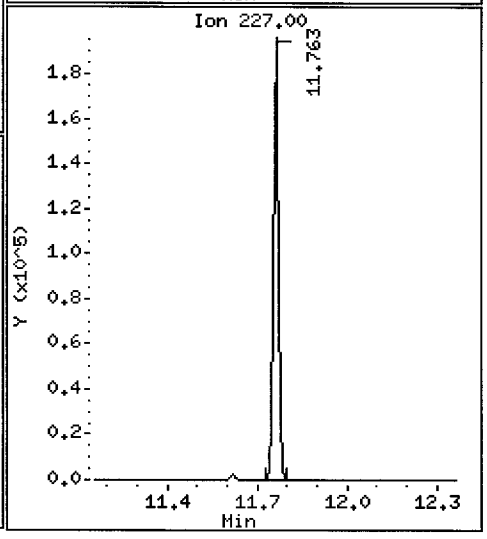


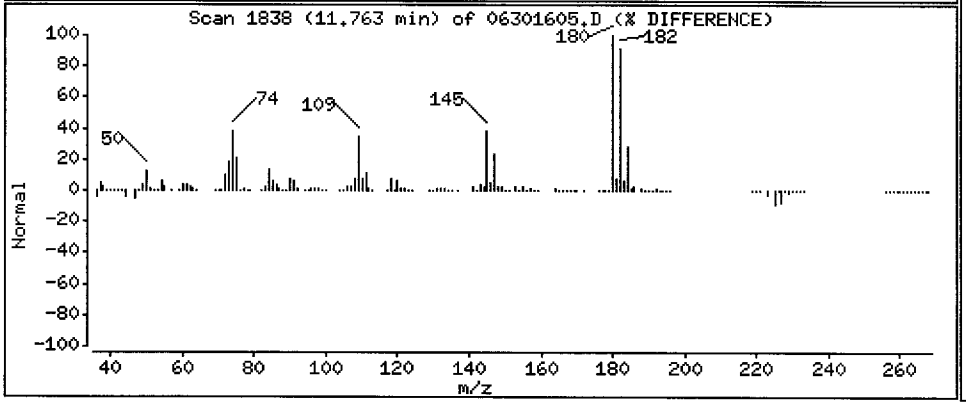












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

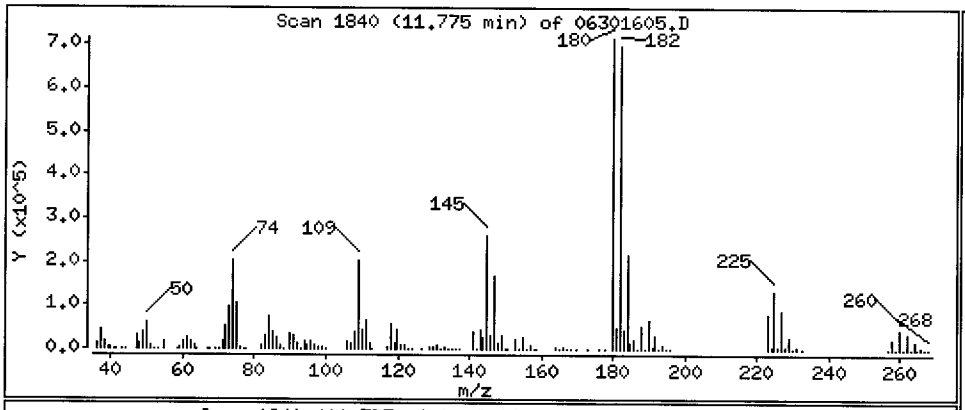
Operator: PB

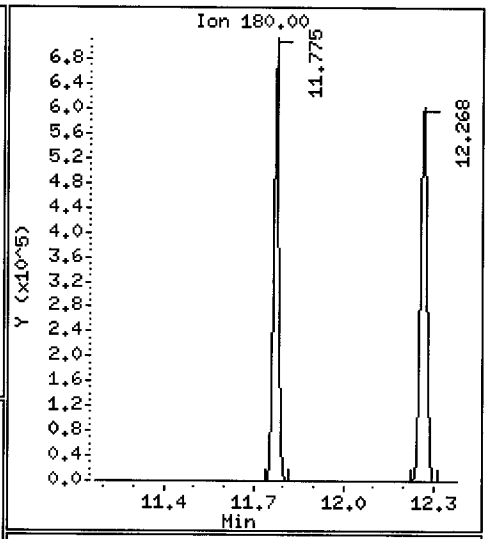
Column phase: RTXVMS

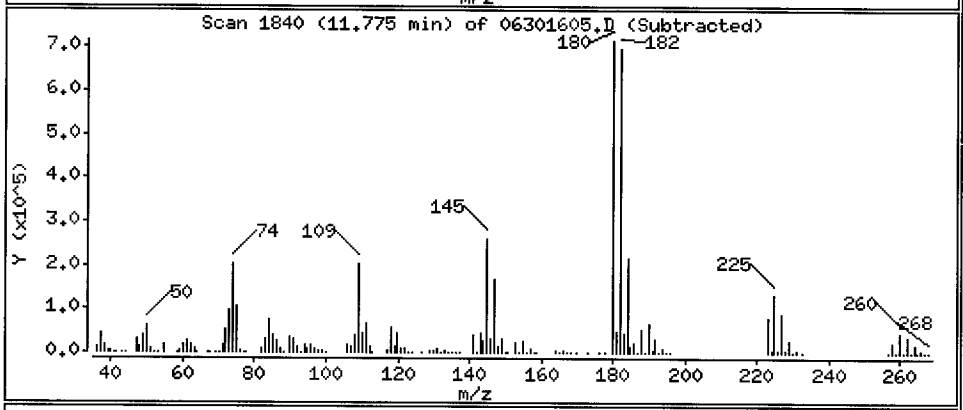
Column diameter: 0.18

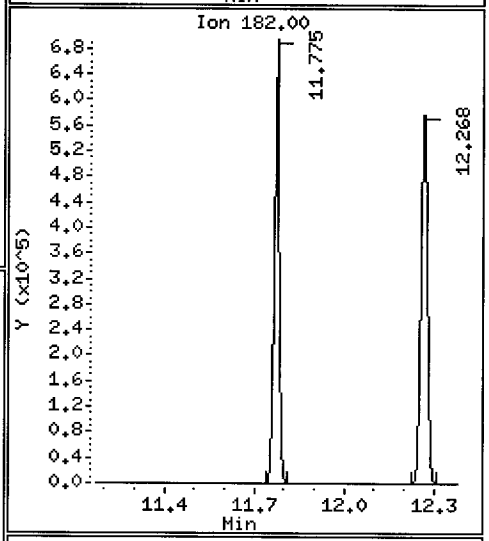
83 1,2,4-Trichlorobenzene

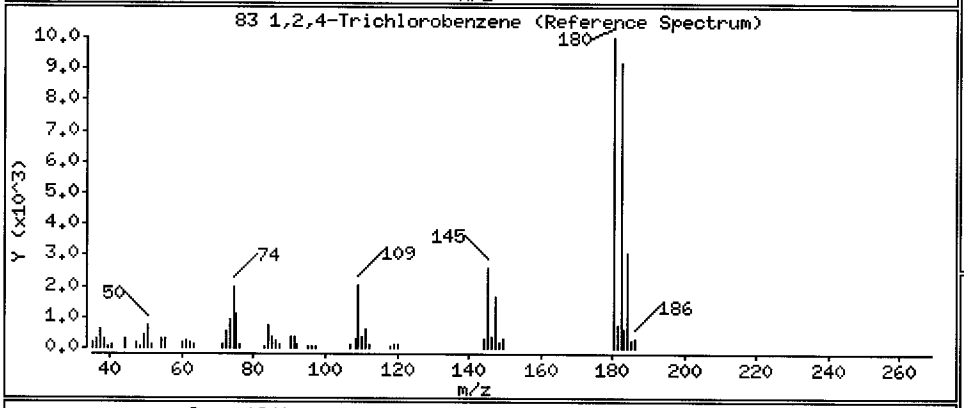
Concentration: 52.254 ug/Kg

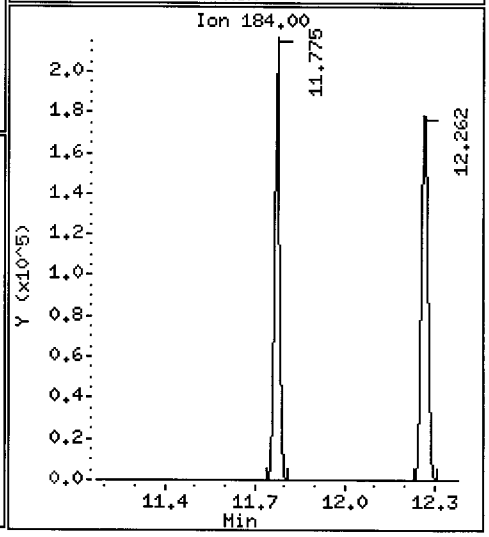


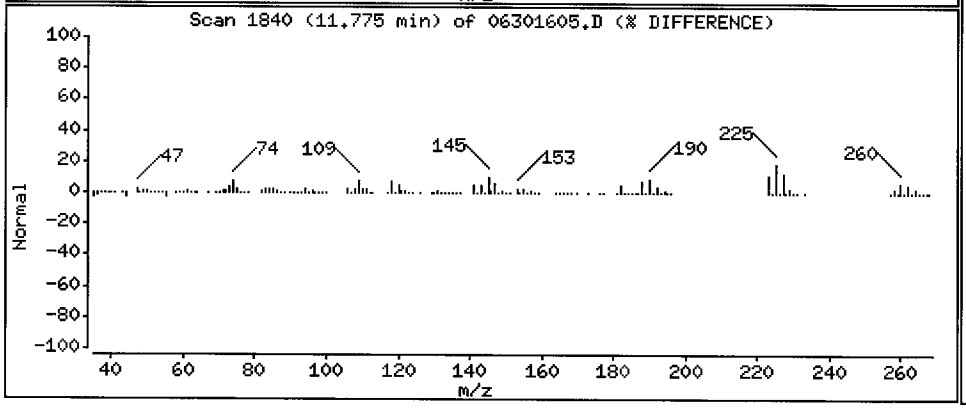












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

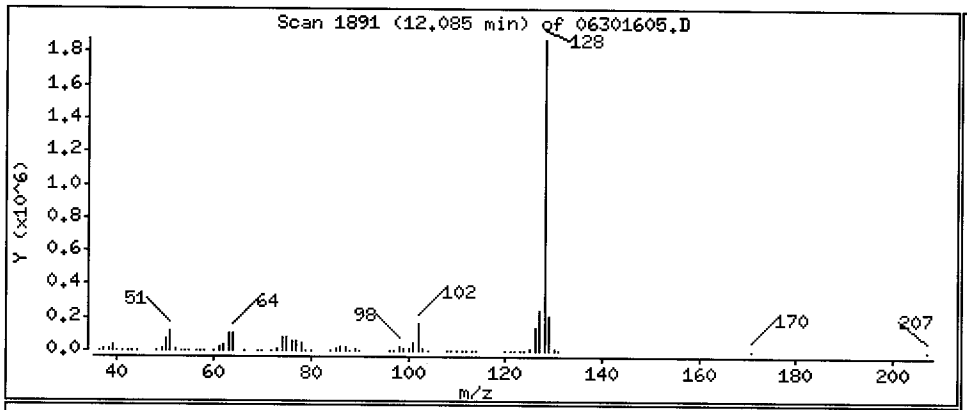
Operator: PB

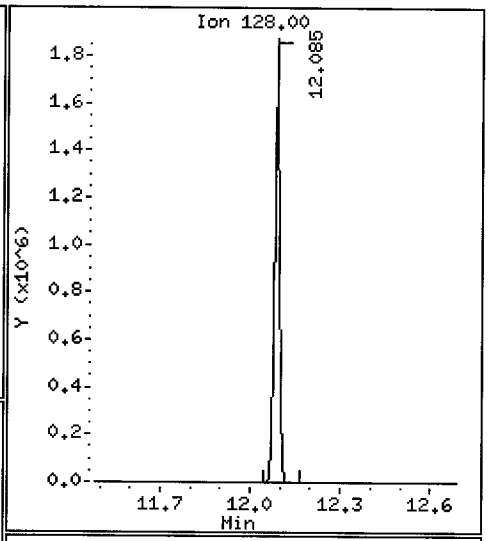
Column phase: RTXVMS

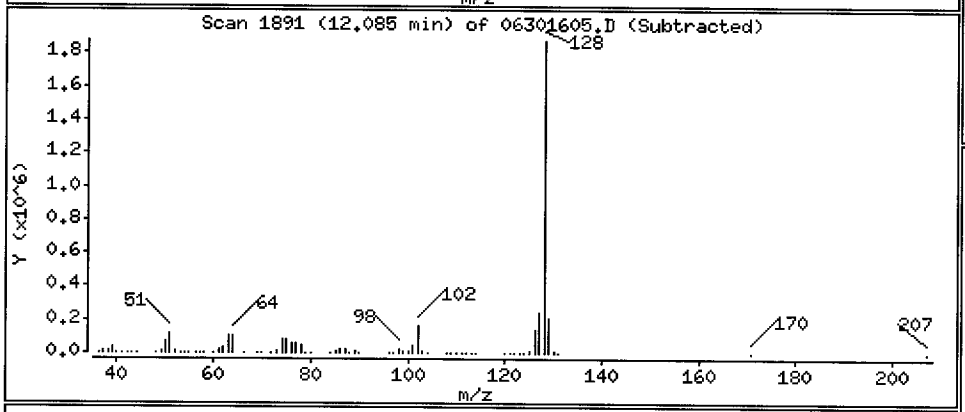
Column diameter: 0.18

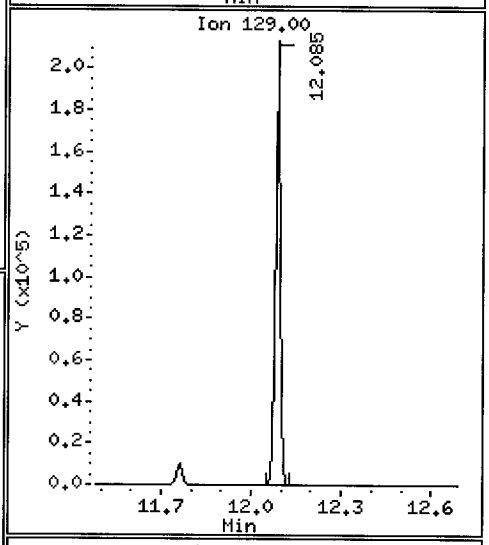
84 Naphthalene

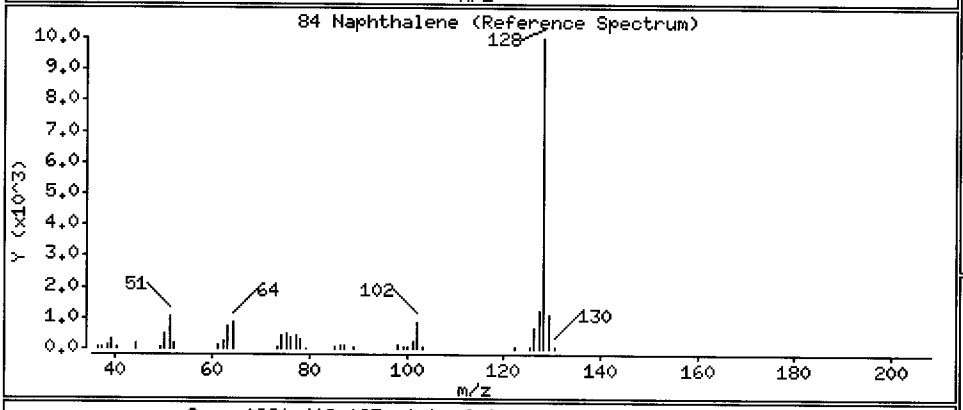
Concentration: 46.543 ug/Kg

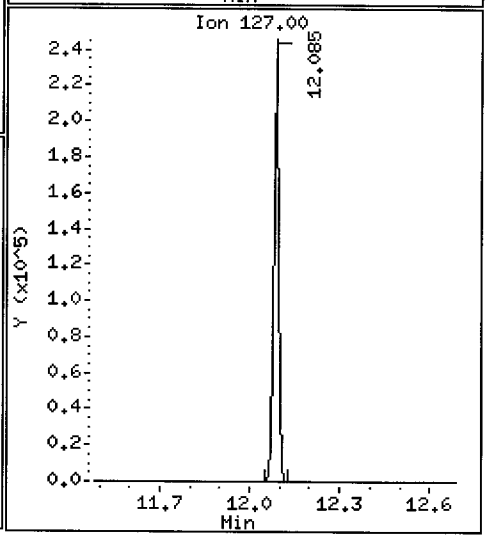


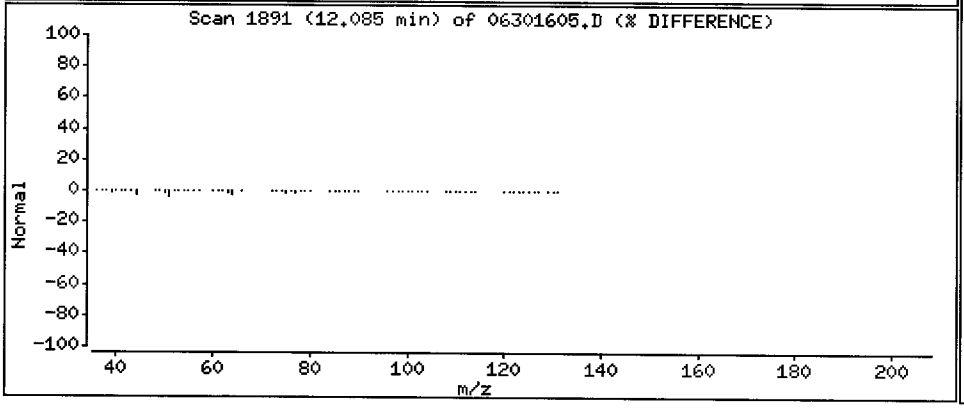












Data File: \\target\share\chem1\nt5.i\20160630.b\06301605.D

Date : 30-JUN-2016 13:09

Client ID: LCS0630

Instrument: nt5.i

Sample Info: LCS0630,5,5,0

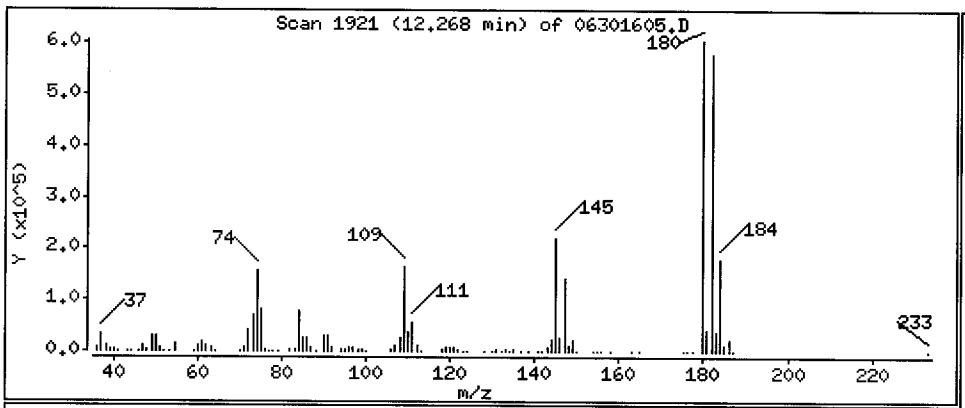
Operator: PB

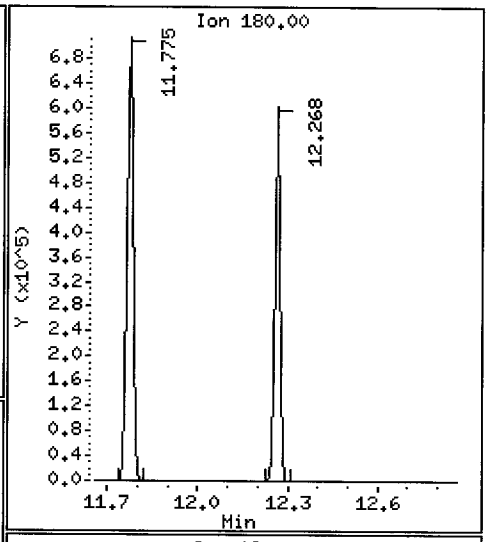
Column phase: RTXVMS

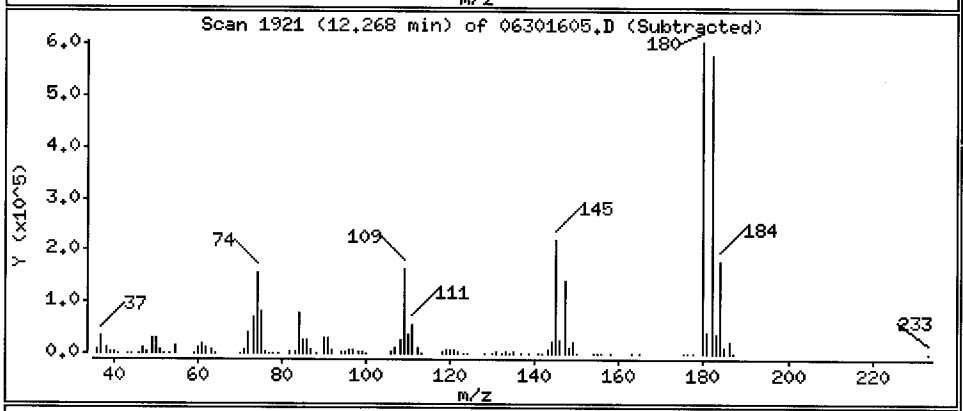
Column diameter: 0.18

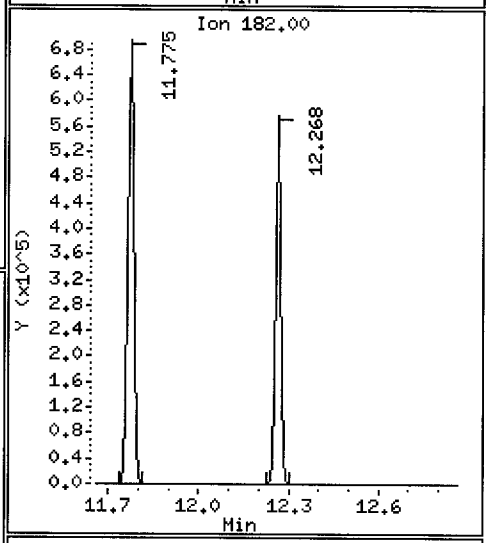
85 1,2,3-Trichlorobenzene

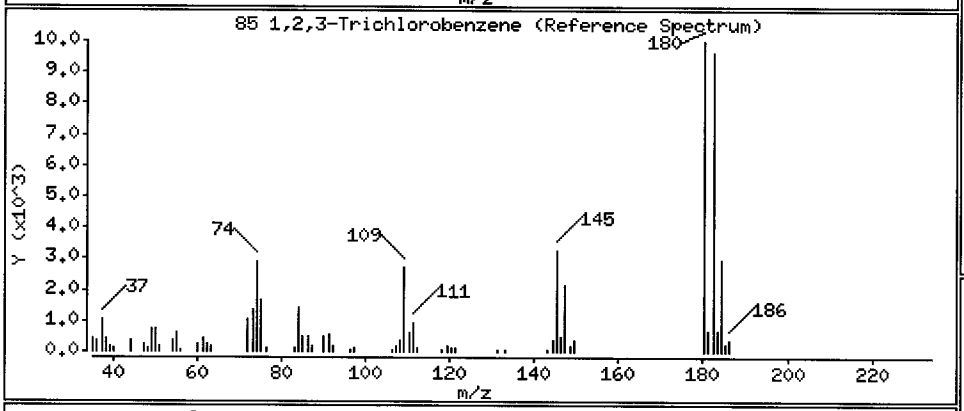
Concentration: 50.056 ug/Kg

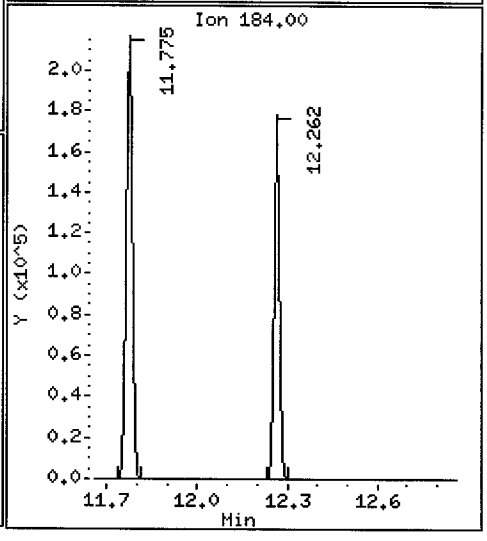


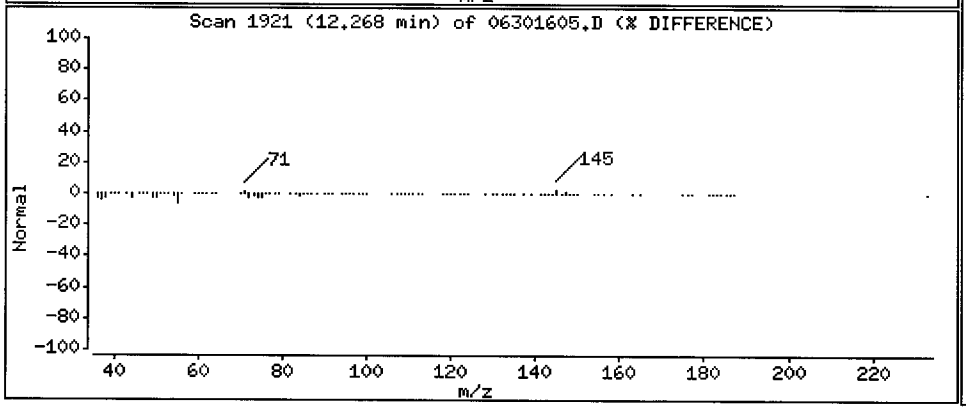












REVIEW SUMMARY FOR FILE - 06301605.D

Lab ID: BEG0004-BSD1
nt5.i, 20160630.b\VO051314S.m, 30-JUN-2016 13:09

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Solid	Analyzed:	06/29/16 15:15
Batch:	BEF0232	Laboratory ID:	BEF0232-BS1
Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Vinyl Chloride	50.0	40.6	81.1	74 - 135
Bromomethane	50.0	25.7	51.4 *	53 - 144
cis-1,2-Dichloroethene	50.0	41.3	82.6	80 - 125
Benzene	50.0	40.8	81.6	80 - 120
Trichloroethene	50.0	40.8	81.5	80 - 120
Toluene	50.0	40.4	80.7	75 - 120
Tetrachloroethene	50.0	41.1	82.2	74 - 124
Ethylbenzene	50.0	41.0	82.0	80 - 125
m,p-Xylene	100	82.6	82.6	76 - 121
o-Xylene	50.0	40.6	81.2	67 - 132

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Solid	Analyzed:	06/29/16 15:38
Batch:	BEF0232	Laboratory ID:	BEF0232-BSD1
Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Vinyl Chloride	50.0	41.4	82.8	2.03	30	74 - 135
Bromomethane	50.0	26.6	53.1	3.24	30	53 - 144
cis-1,2-Dichloroethene	50.0	43.7	87.5	5.67	30	80 - 125
Benzene	50.0	42.0	83.9	2.85	30	80 - 120
Trichloroethene	50.0	42.1	84.1	3.10	30	80 - 120
Toluene	50.0	41.6	83.2	3.05	30	75 - 120
Tetrachloroethene	50.0	42.3	84.6	2.89	30	74 - 124
Ethylbenzene	50.0	42.1	84.2	2.60	30	80 - 125
m,p-Xylene	100	84.9	84.9	2.74	30	76 - 121
o-Xylene	50.0	42.1	84.3	3.79	30	67 - 132

* Values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

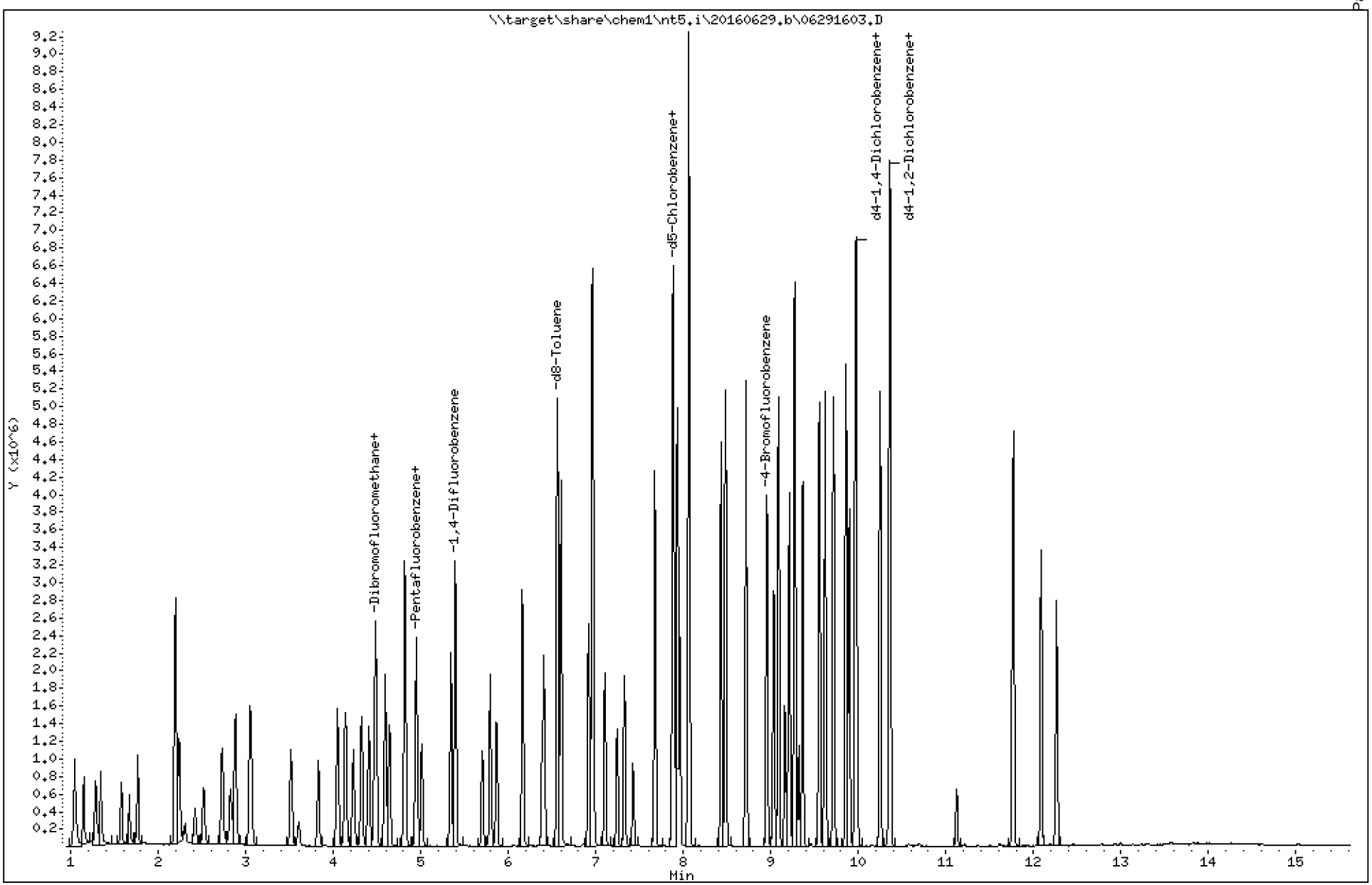
Sample Info: LCS0629,5,5,0

Instrument: nt5.i

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

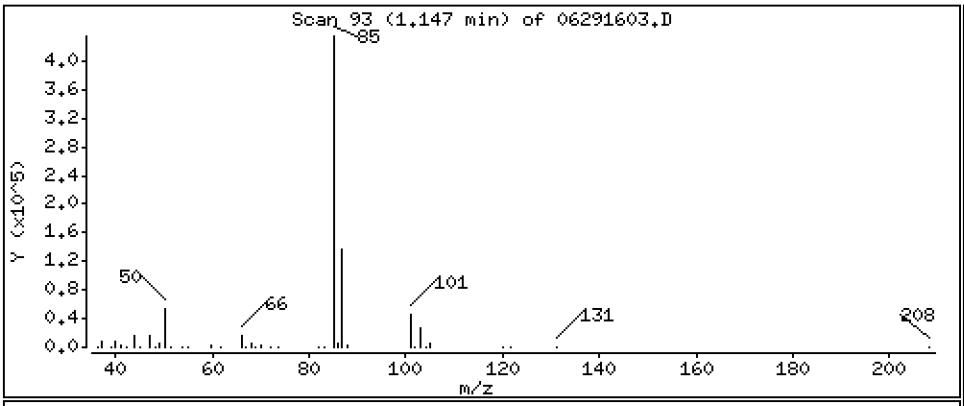
Operator: PB

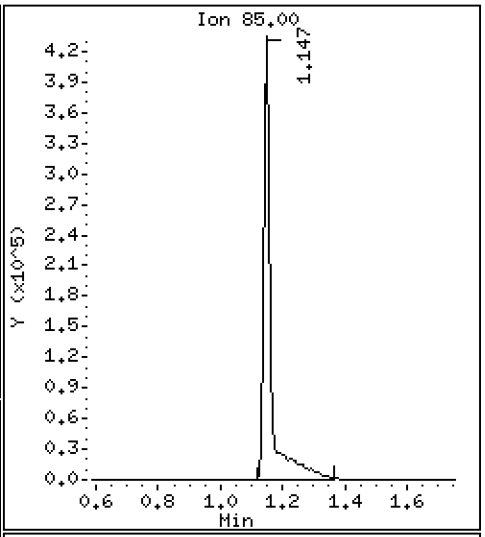
Column phase: RTXVMS

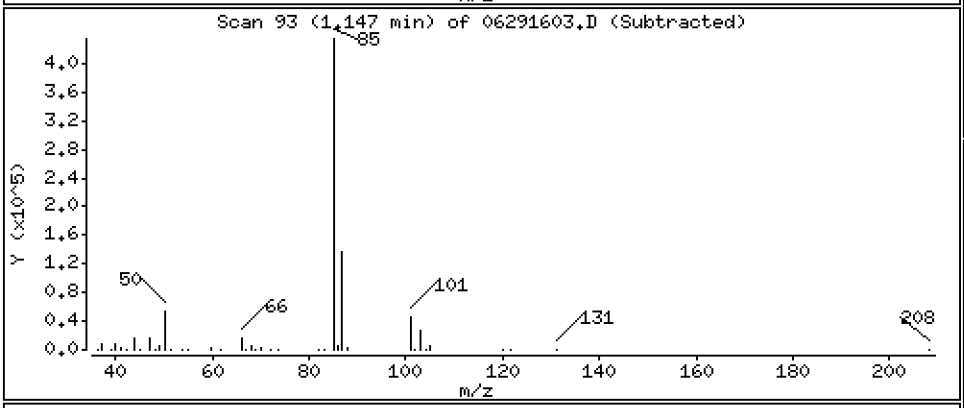
Column diameter: 0.18

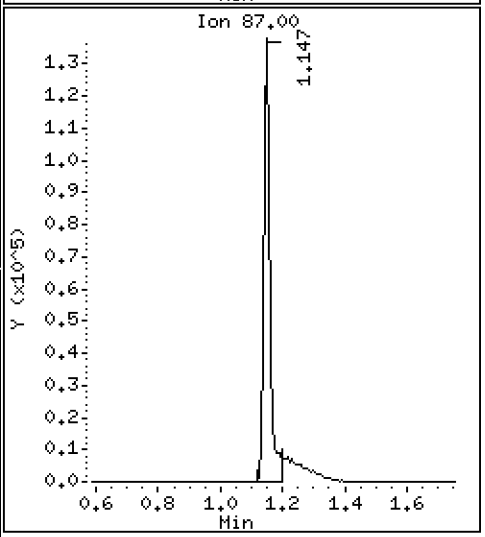
1 Dichlorodifluoromethane

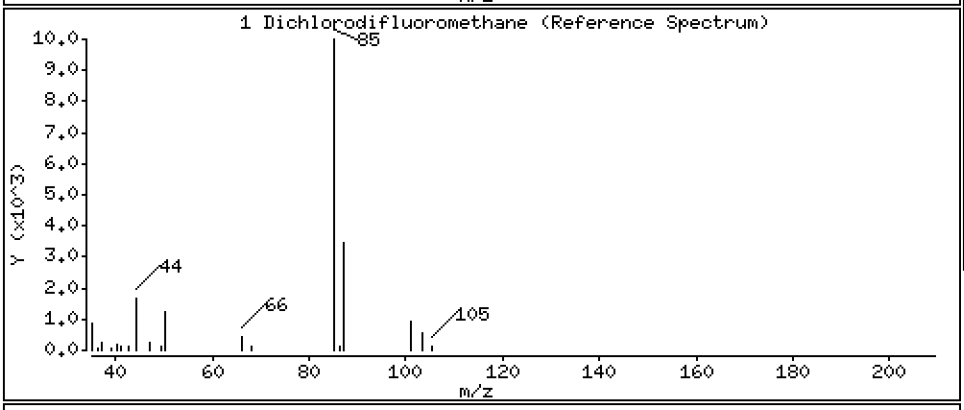
Concentration: 39.042 ug/Kg

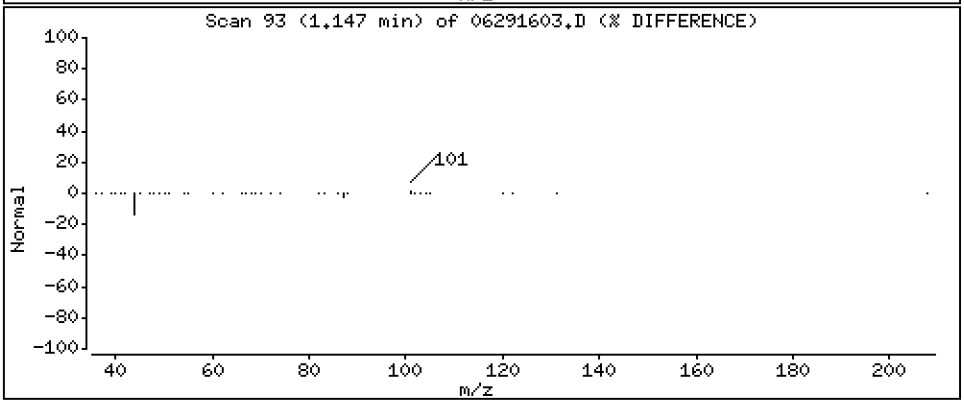












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

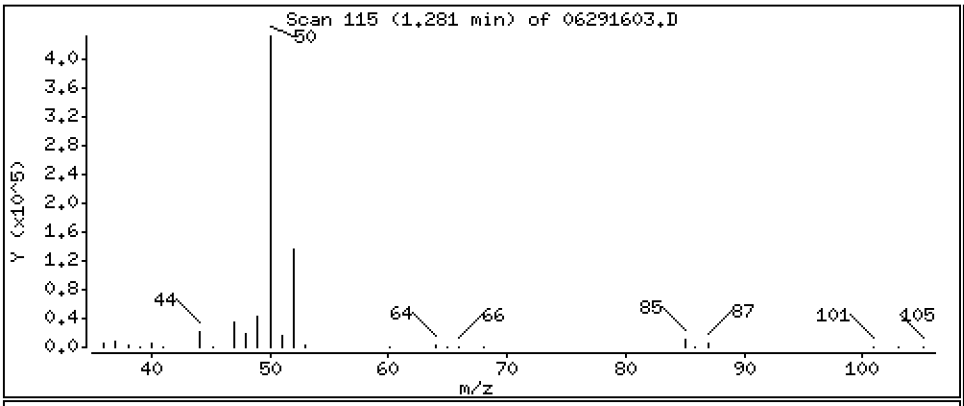
Operator: PB

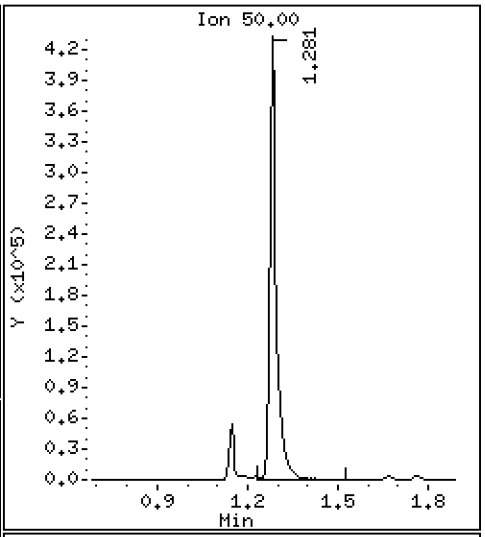
Column phase: RTXVMS

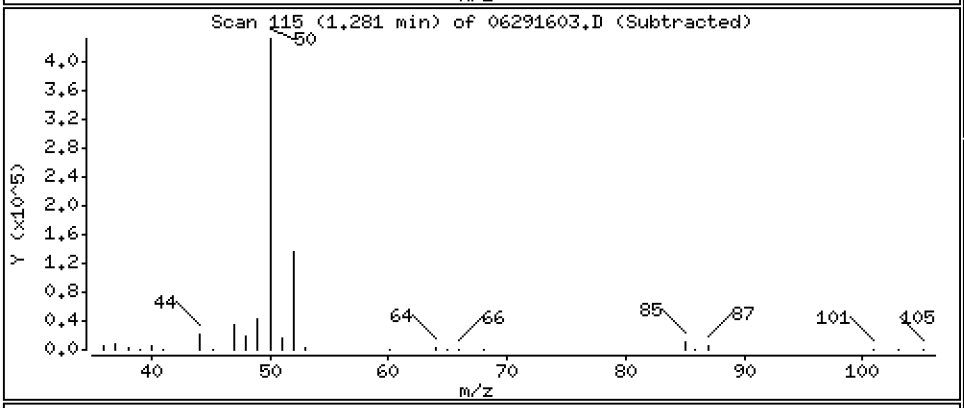
Column diameter: 0.18

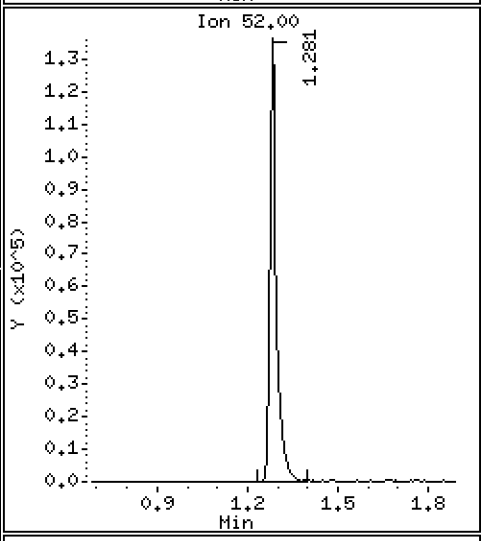
2 Chloromethane

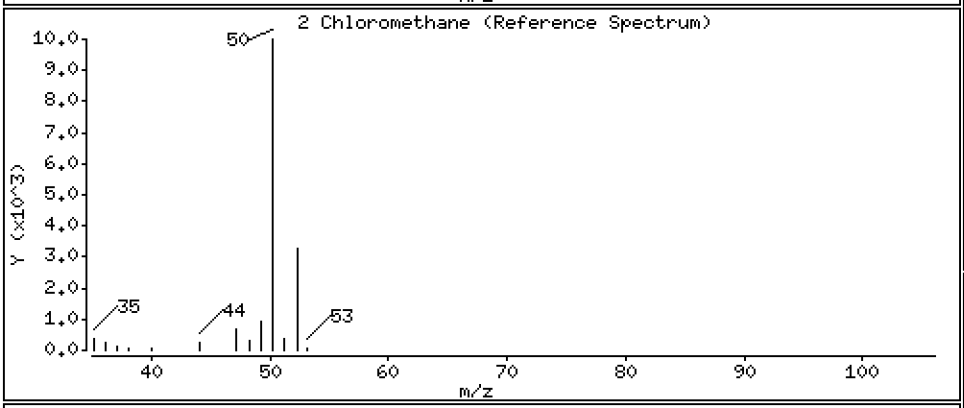
Concentration: 34.479 ug/Kg

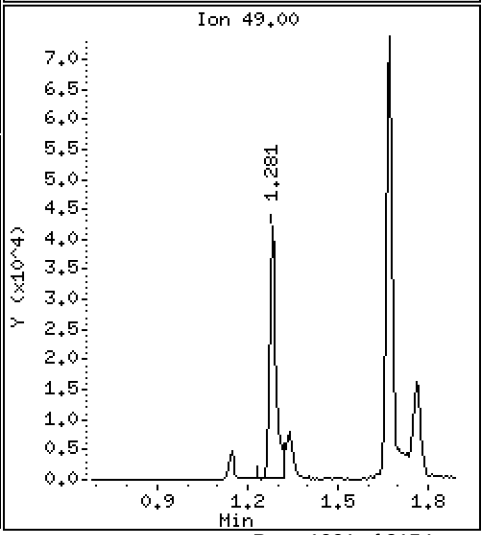


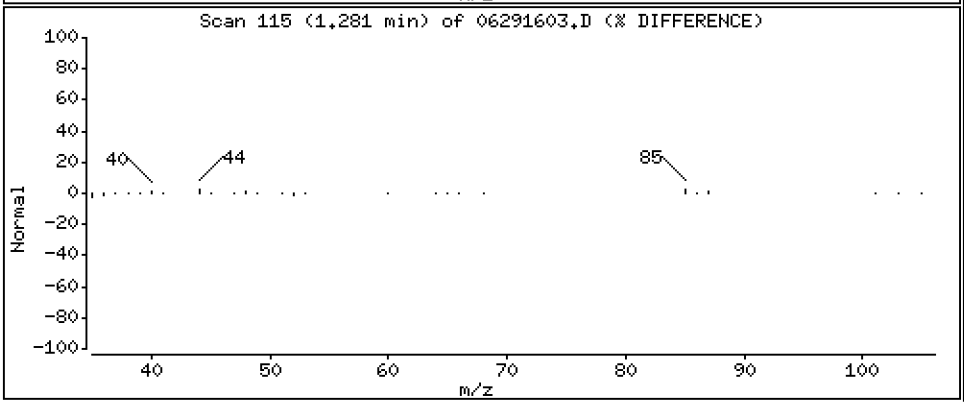












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

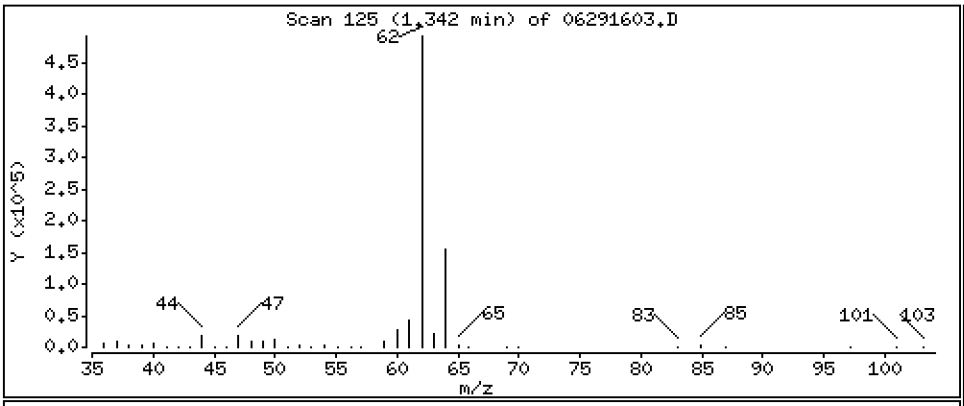
Operator: PB

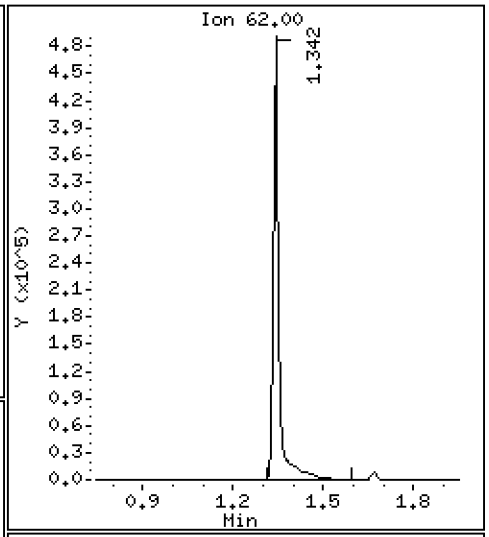
Column phase: RTXVMS

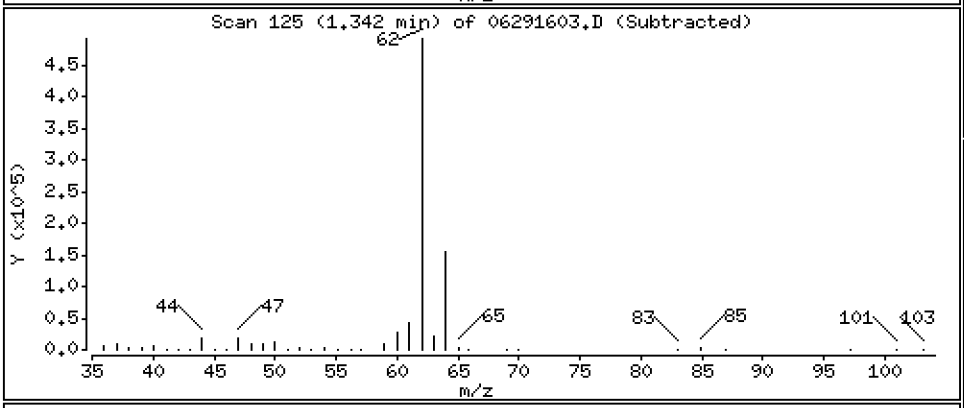
Column diameter: 0.18

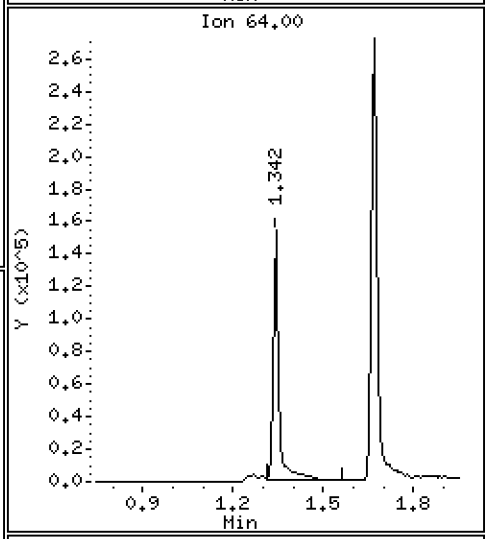
3 Vinyl Chloride

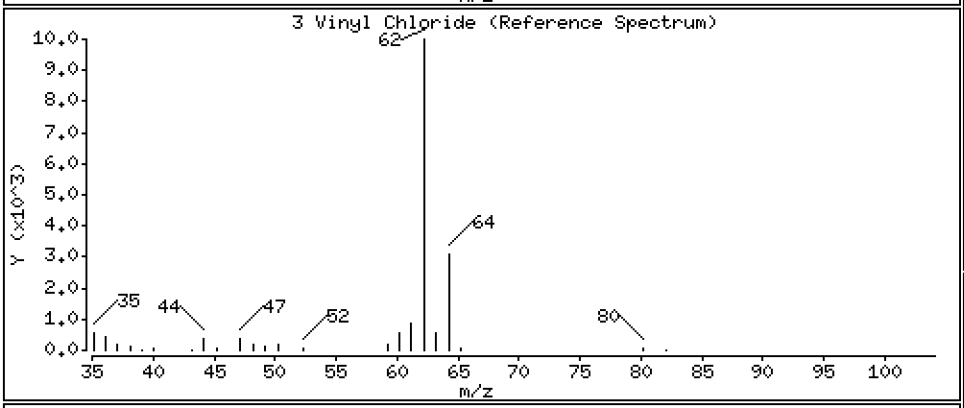
Concentration: 40.572 ug/Kg

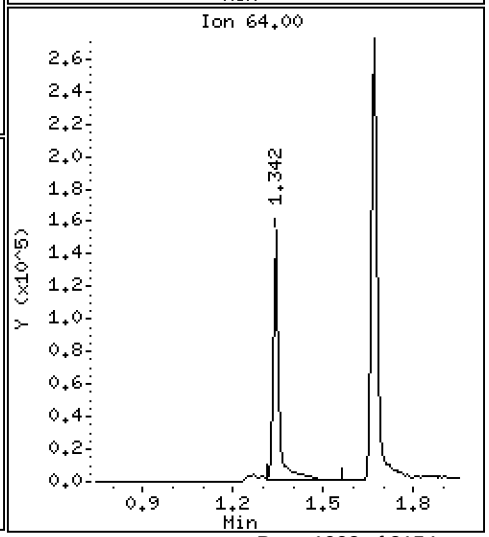


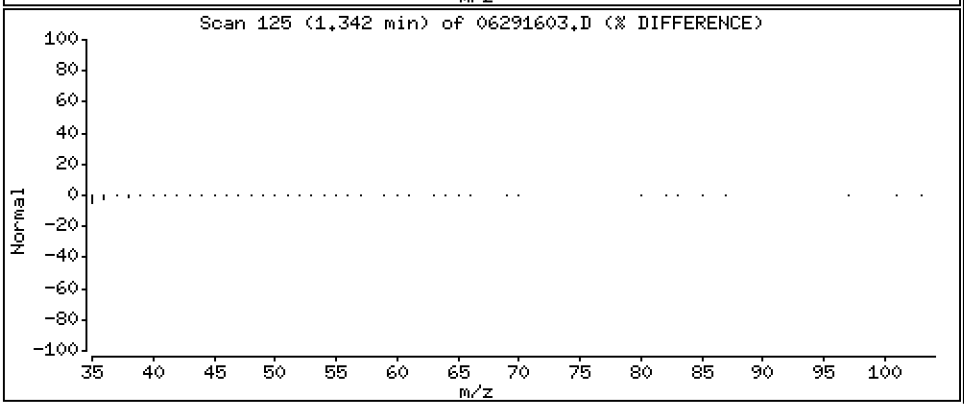












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

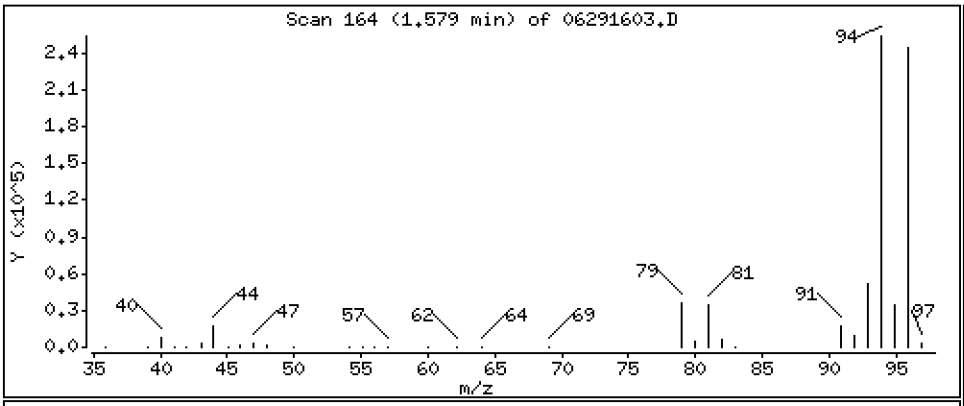
Operator: PB

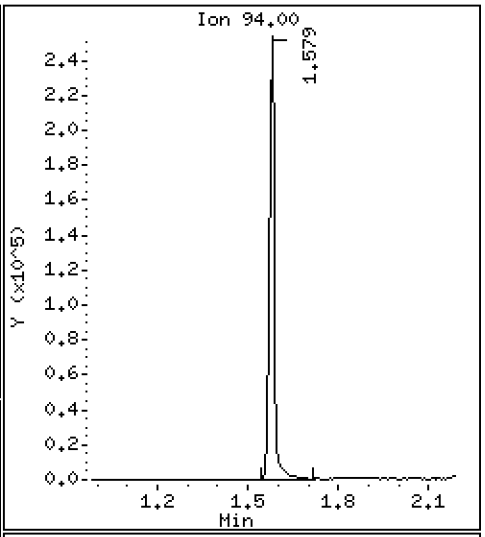
Column phase: RTXVMS

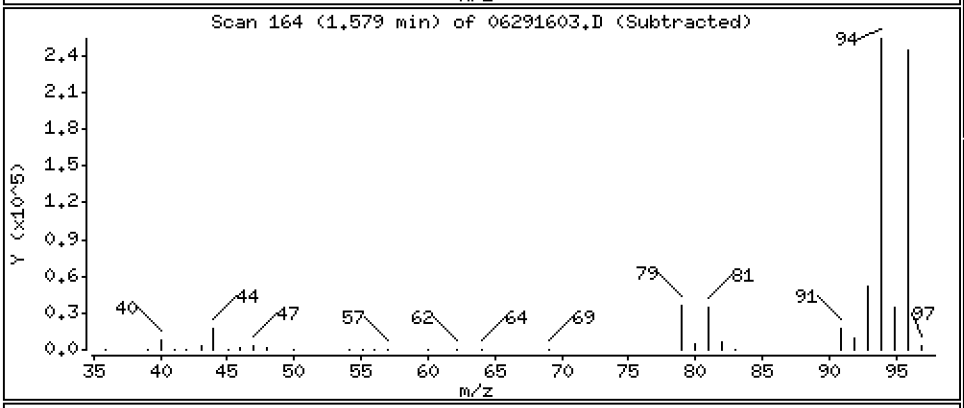
Column diameter: 0.18

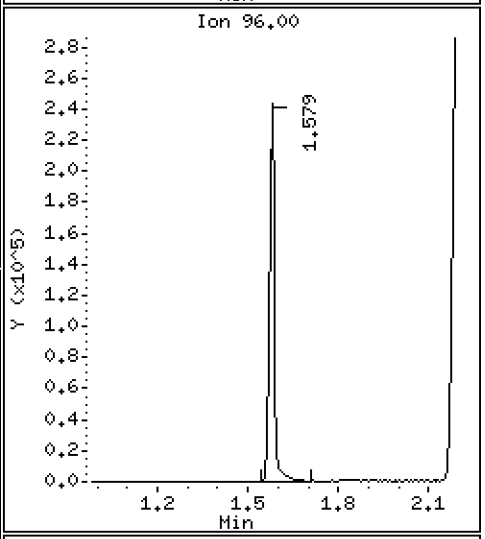
4 Bromomethane

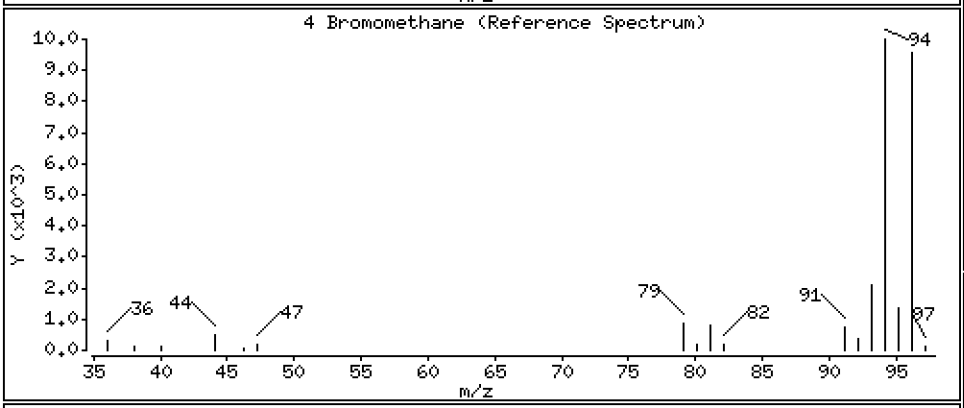
Concentration: 25.722 ug/Kg

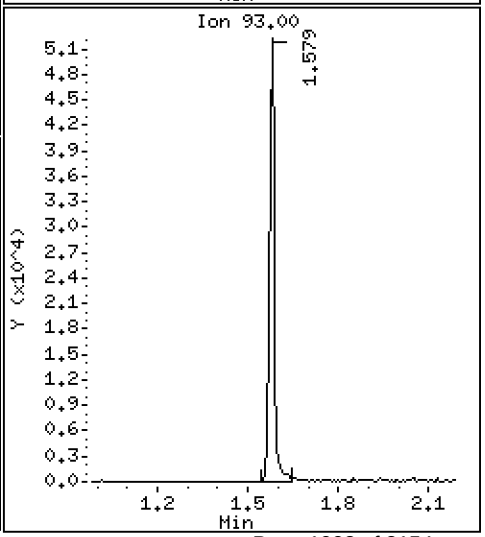


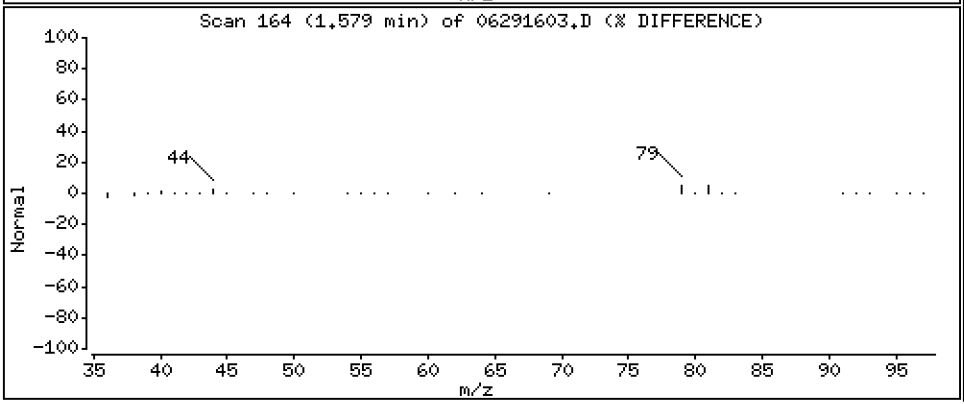












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

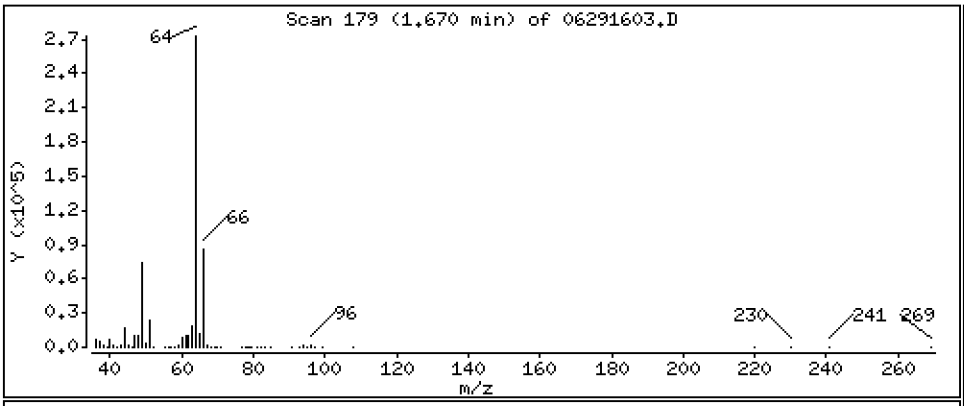
Operator: PB

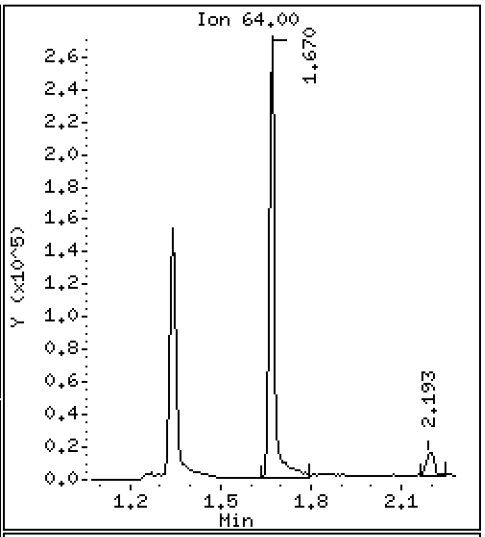
Column phase: RTXVMS

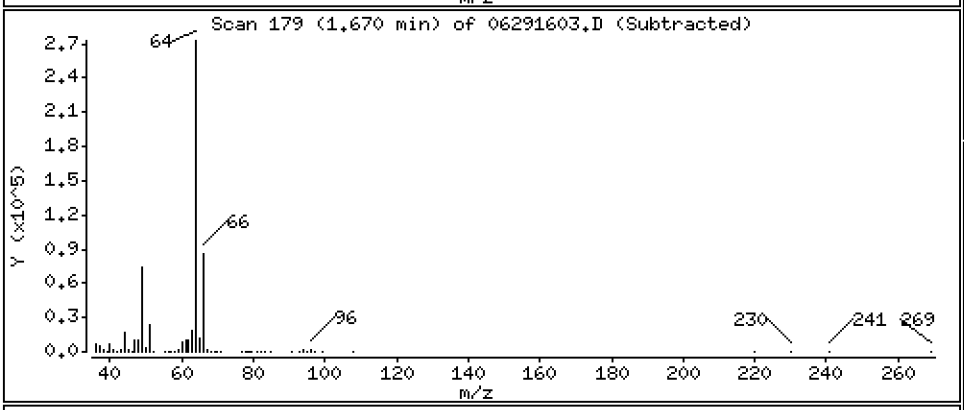
Column diameter: 0.18

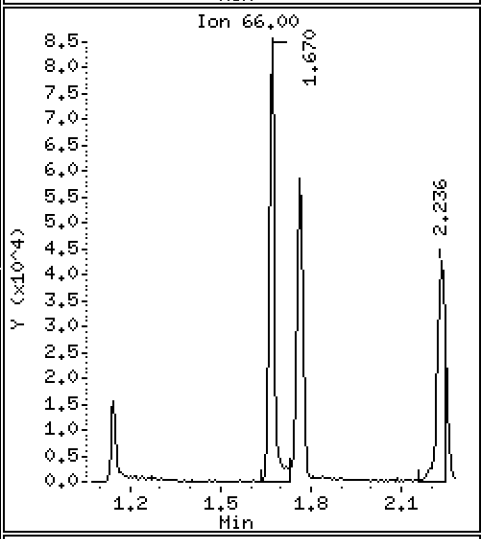
5 Chloroethane

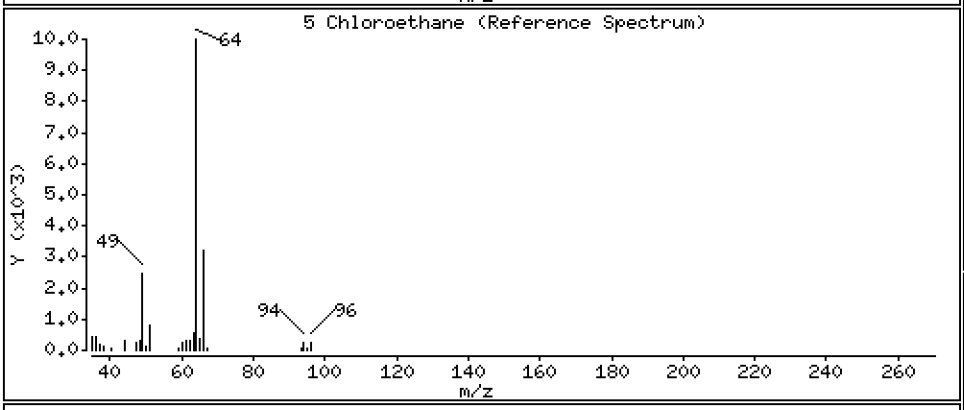
Concentration: 41.534 ug/Kg

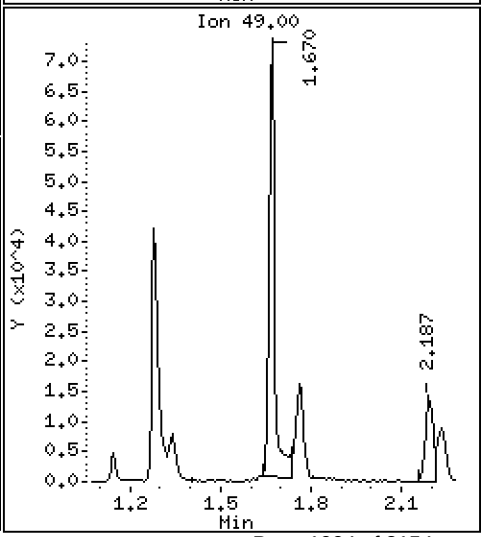


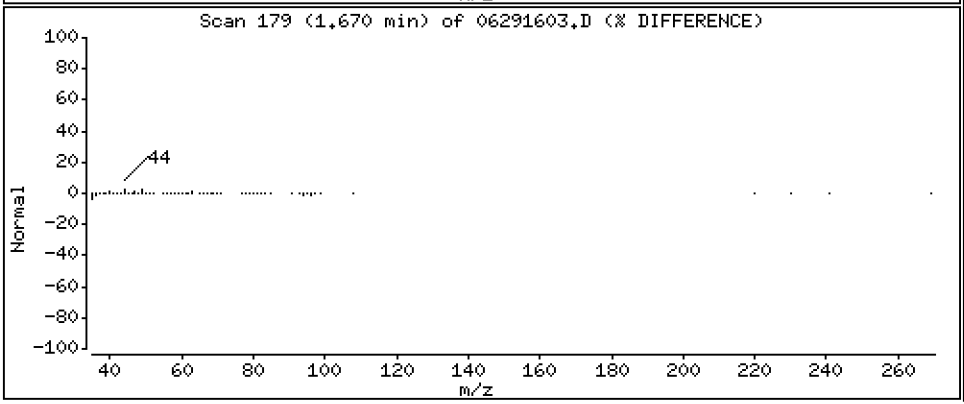












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

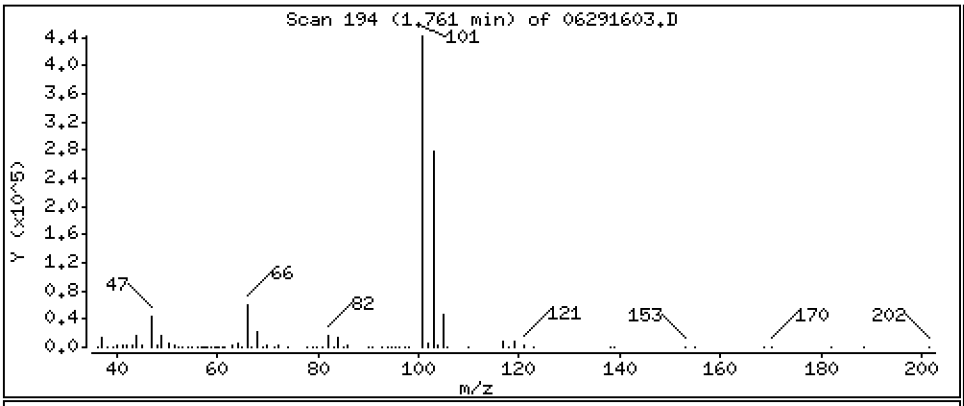
Operator: PB

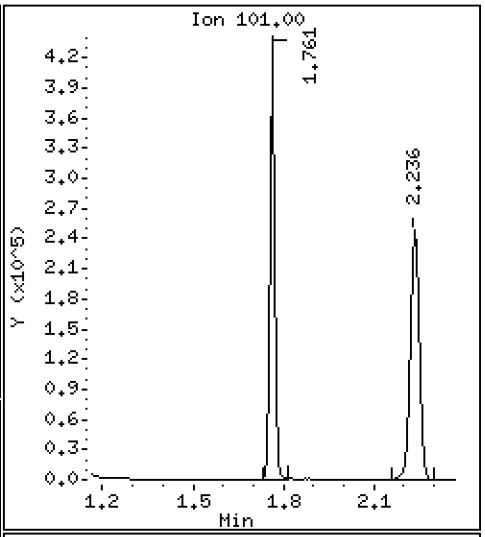
Column phase: RTXVMS

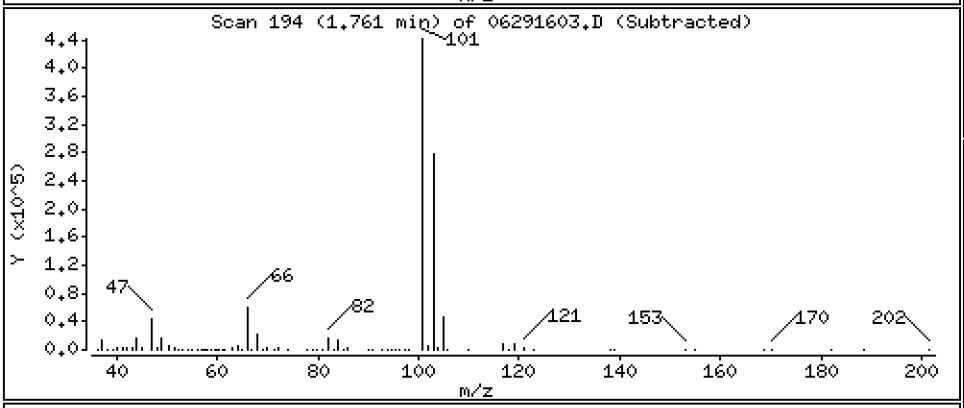
Column diameter: 0.18

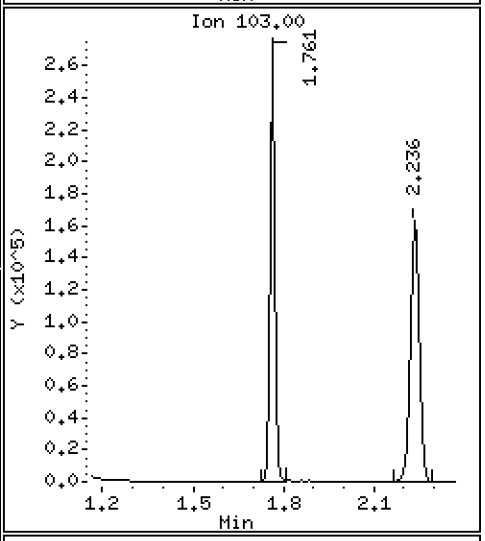
6 Trichlorofluoromethane

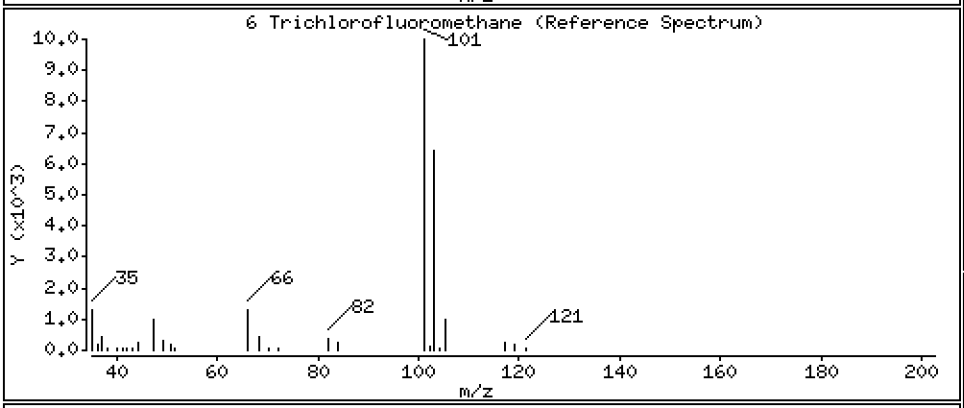
Concentration: 56.773 ug/Kg

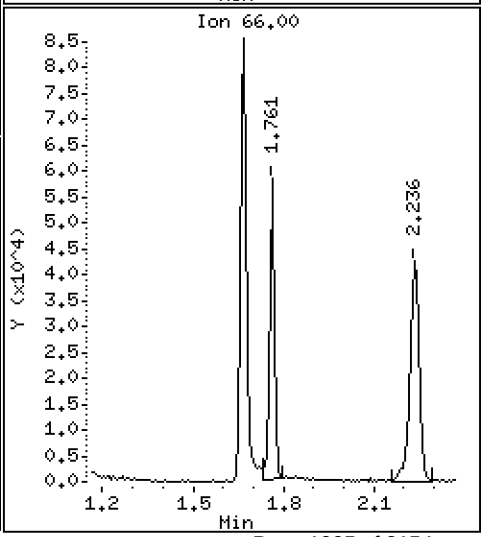


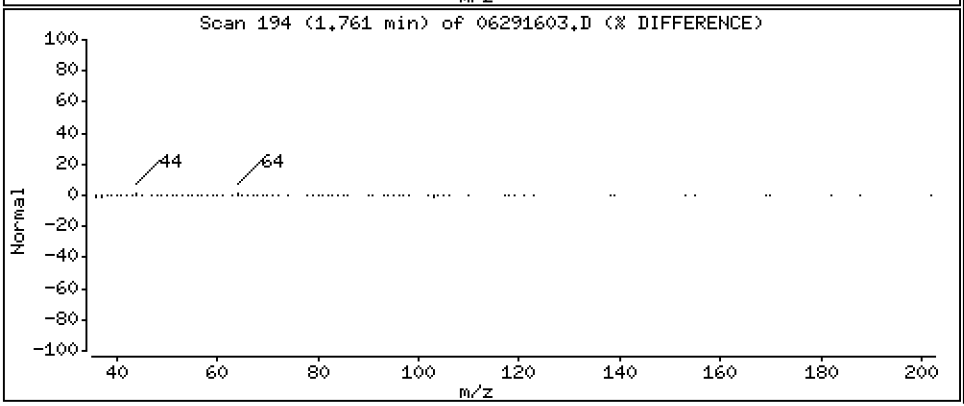












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

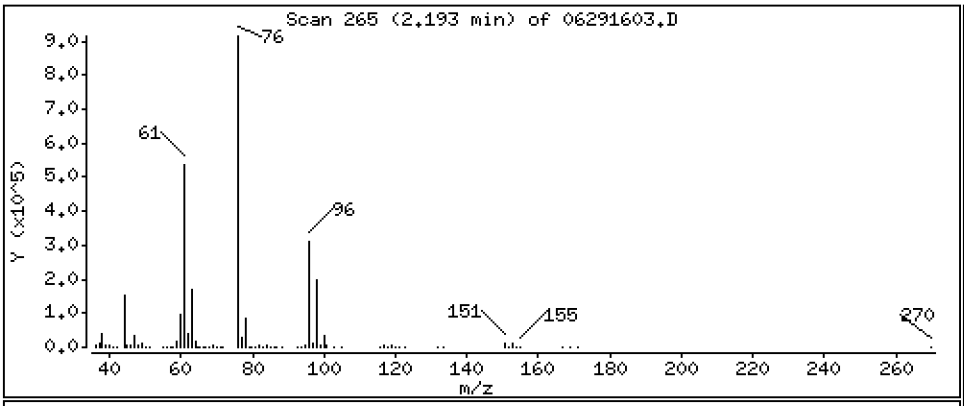
Operator: PB

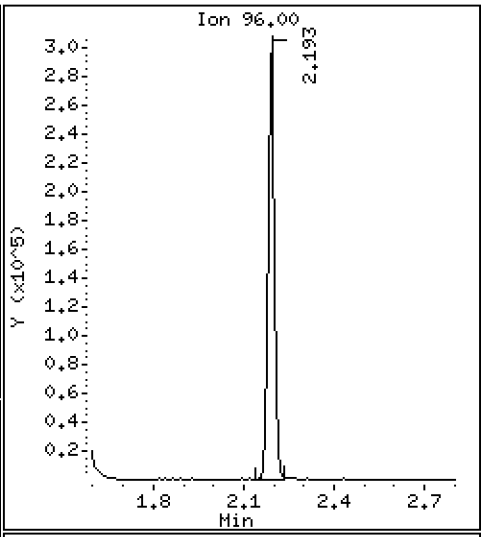
Column phase: RTXVMS

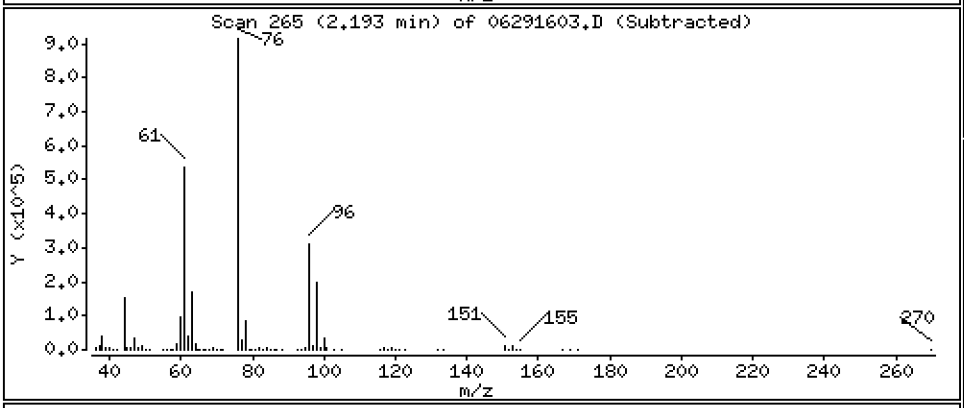
Column diameter: 0.18

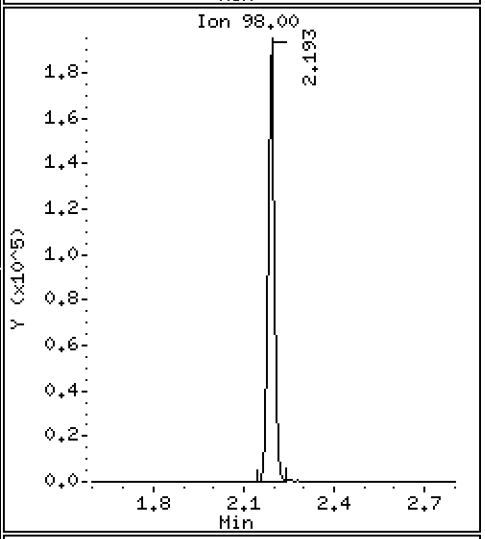
7 1,1-Dichloroethene

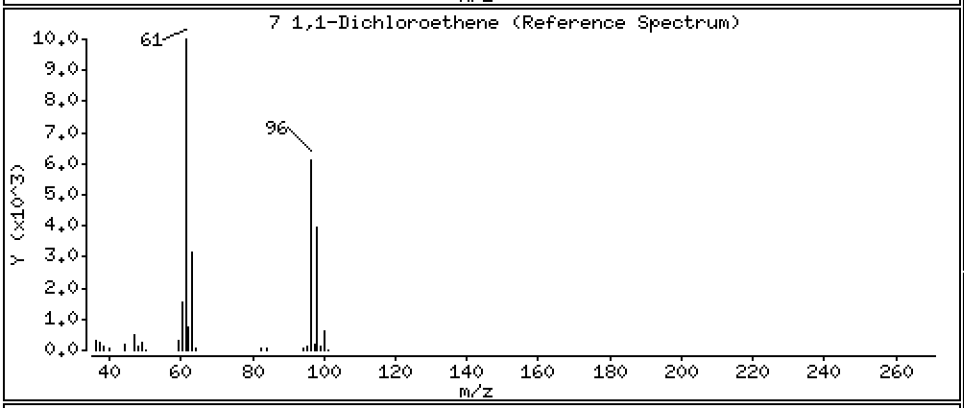
Concentration: 42.432 ug/Kg

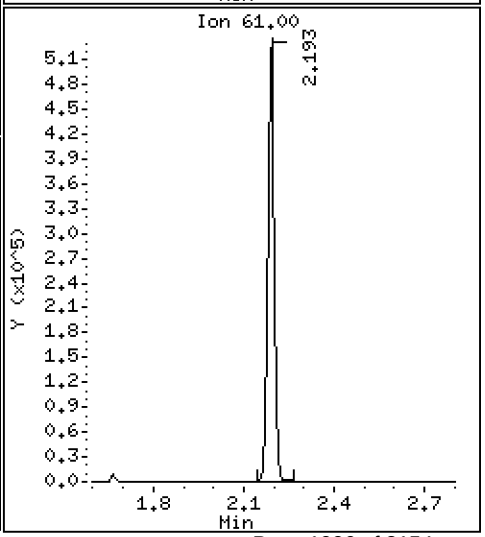


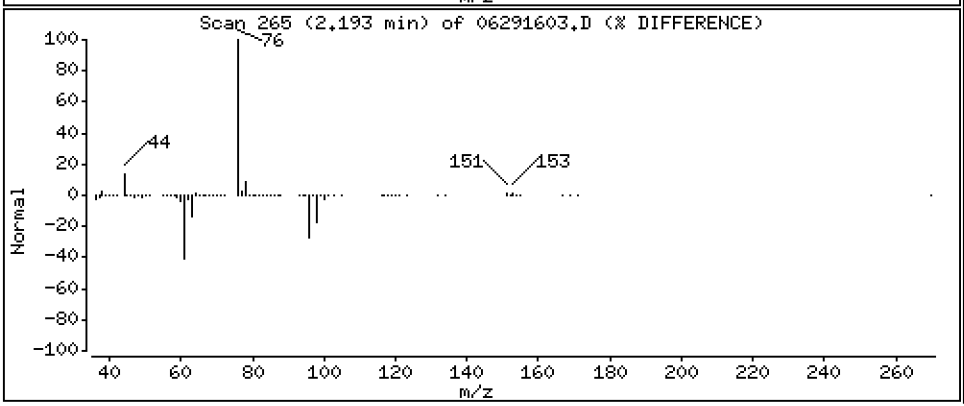












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

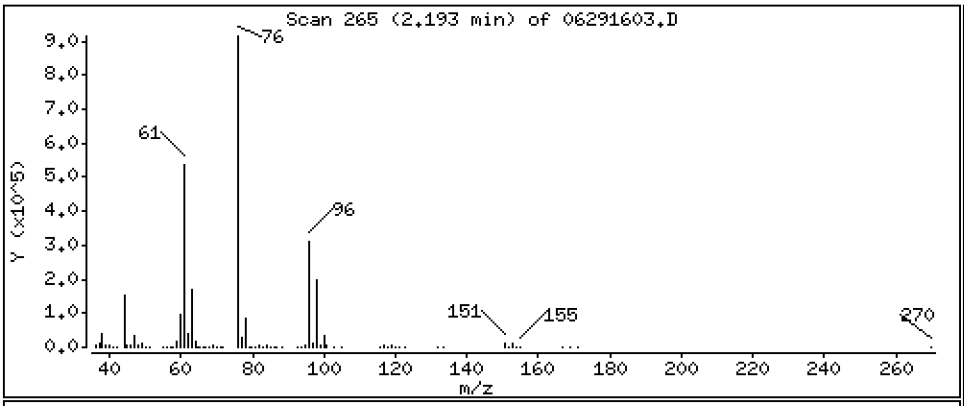
Operator: PB

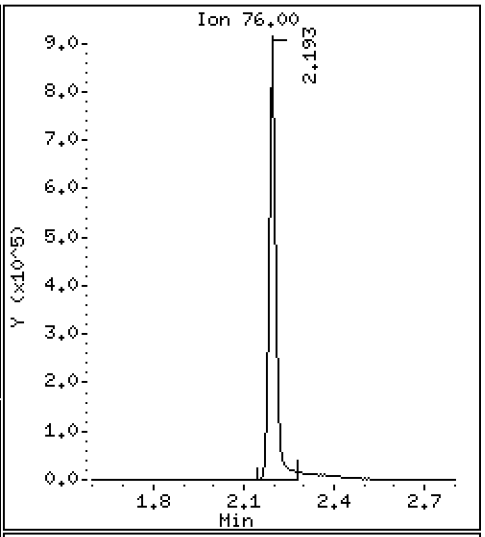
Column phase: RTXVMS

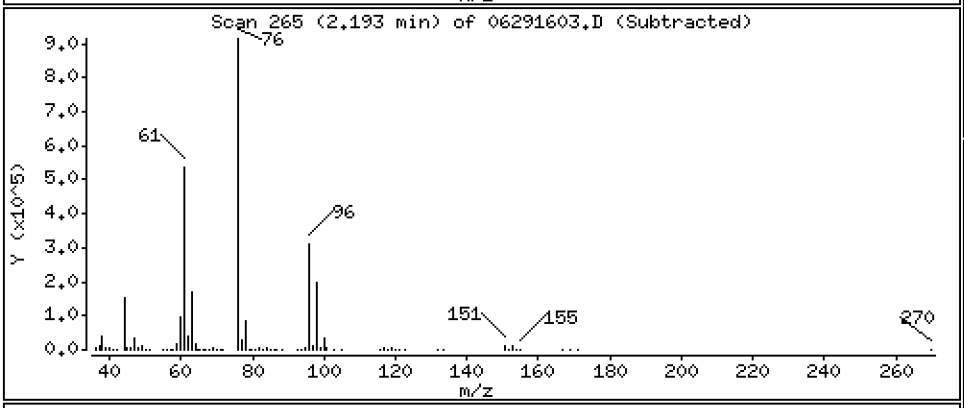
Column diameter: 0.18

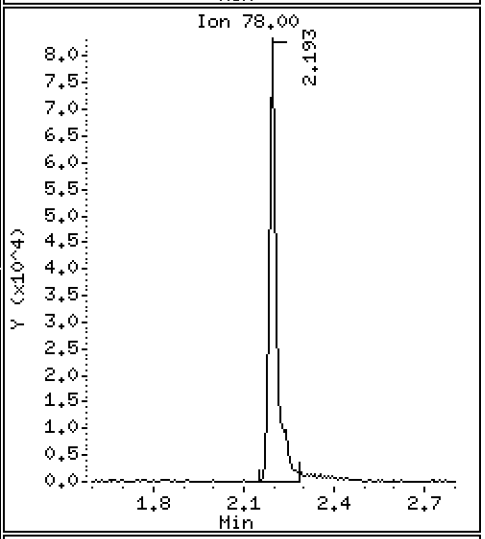
8 Carbon Disulfide

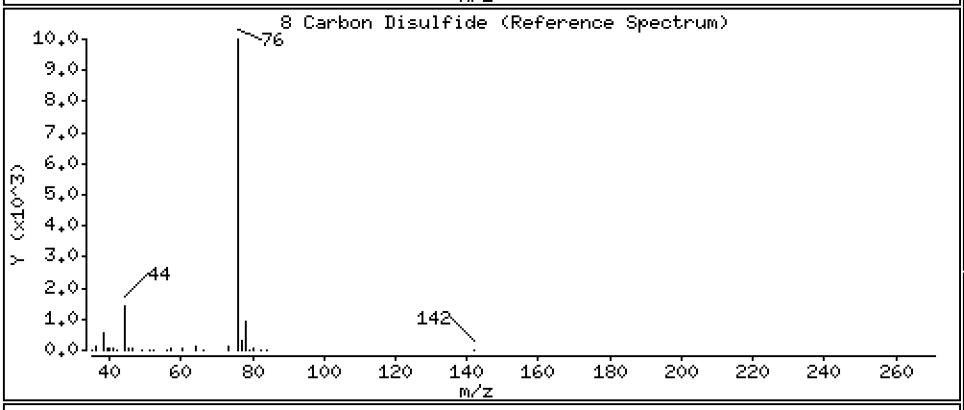
Concentration: 42.152 ug/Kg

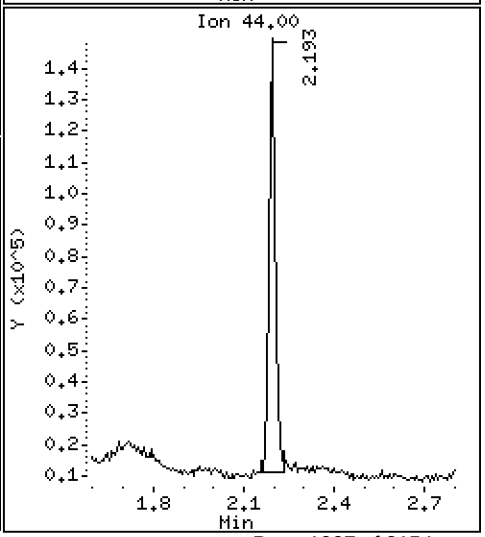


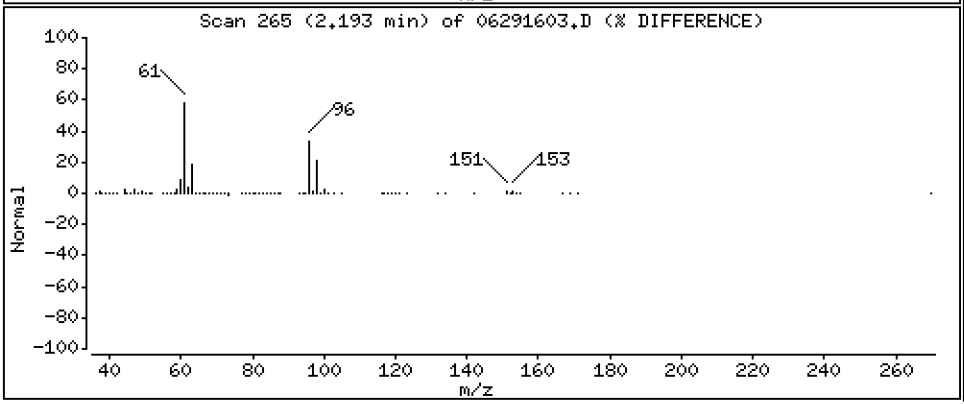












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

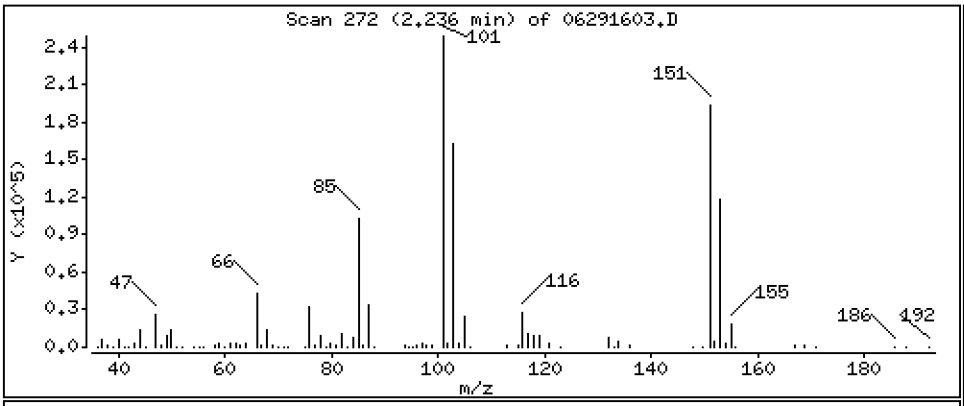
Operator: PB

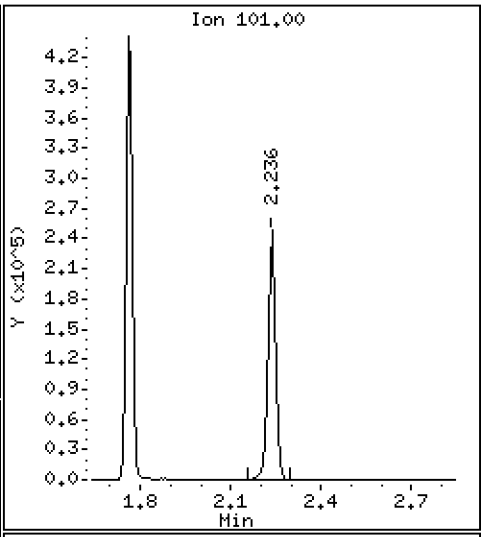
Column phase: RTXVMS

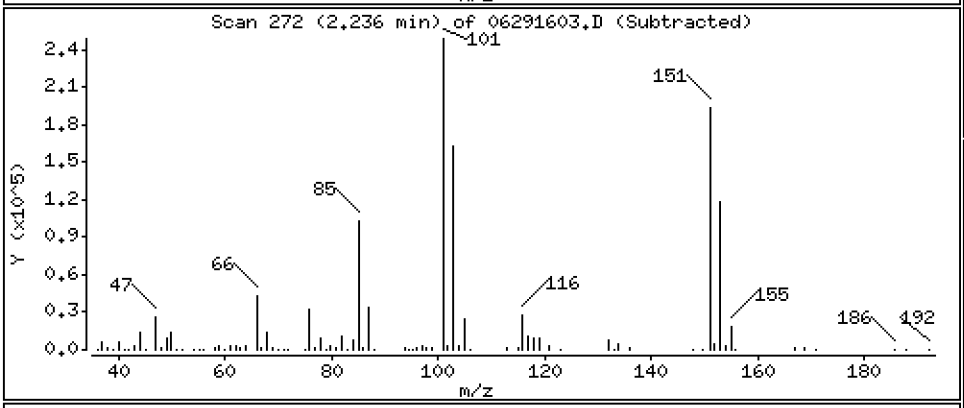
Column diameter: 0.18

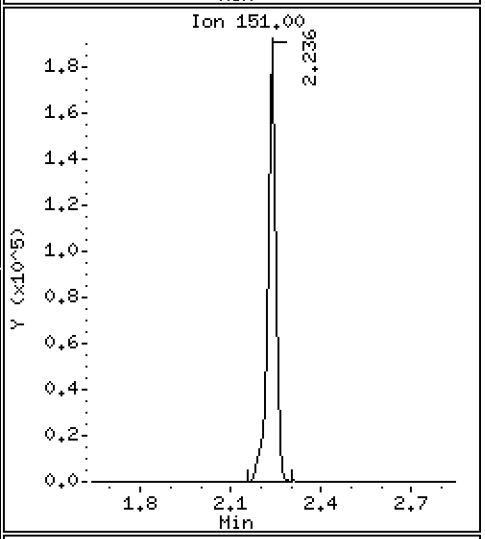
9 112Trichloro122Trifluoroethane

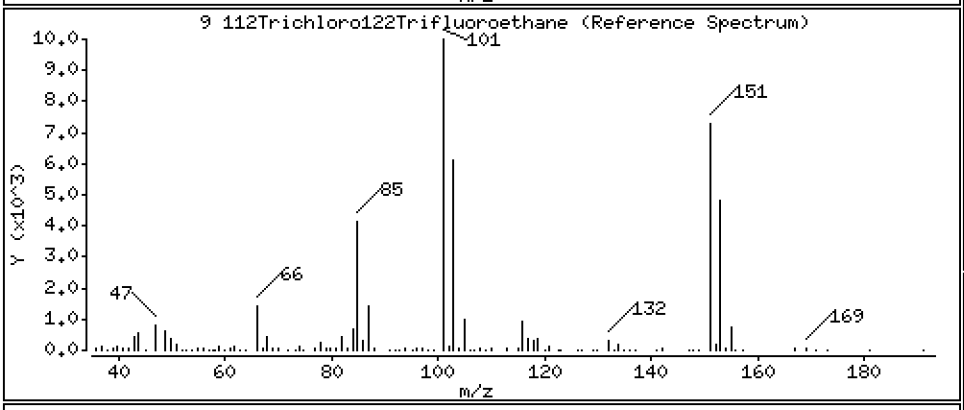
Concentration: 42.047 ug/Kg

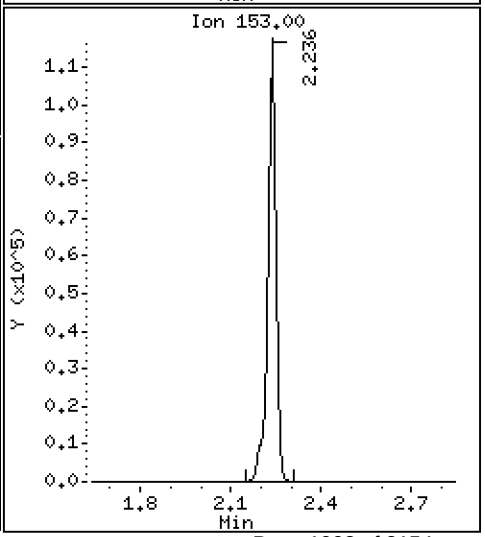


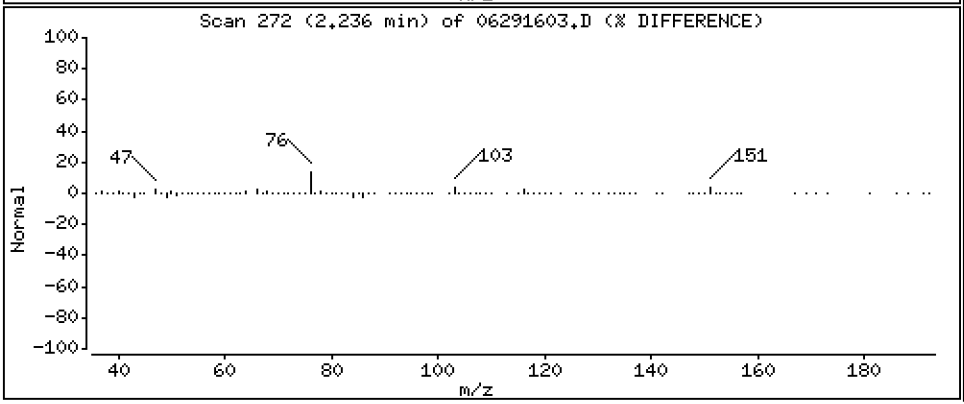












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

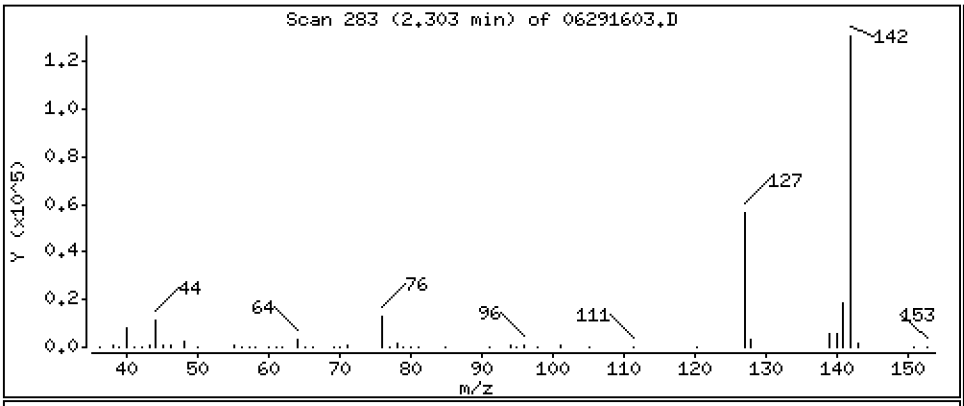
Operator: PB

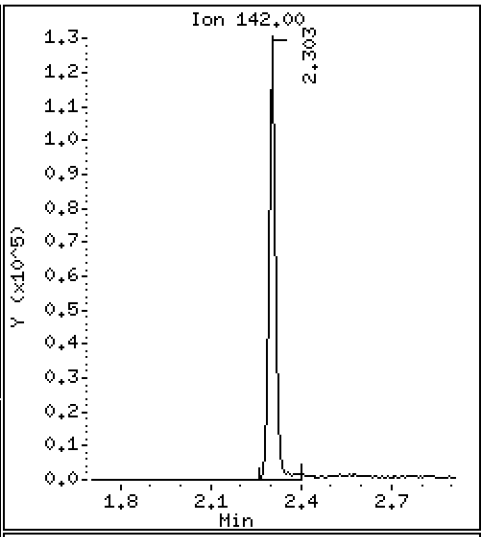
Column phase: RTXVMS

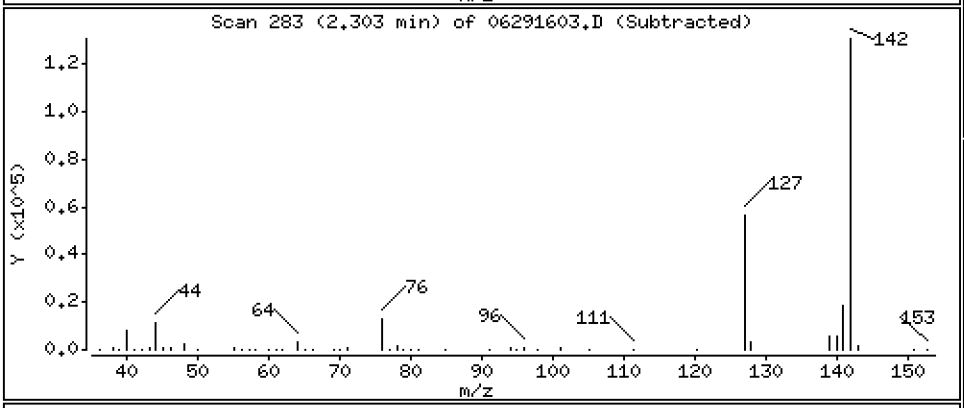
Column diameter: 0.18

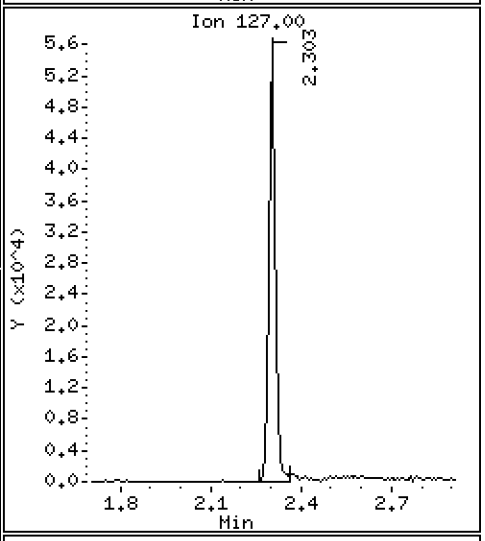
10 Iodomethane

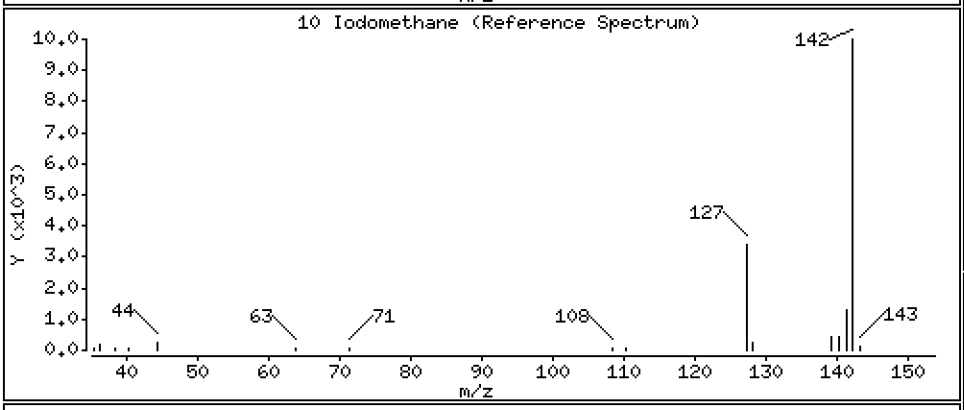
Concentration: 30.270 ug/Kg

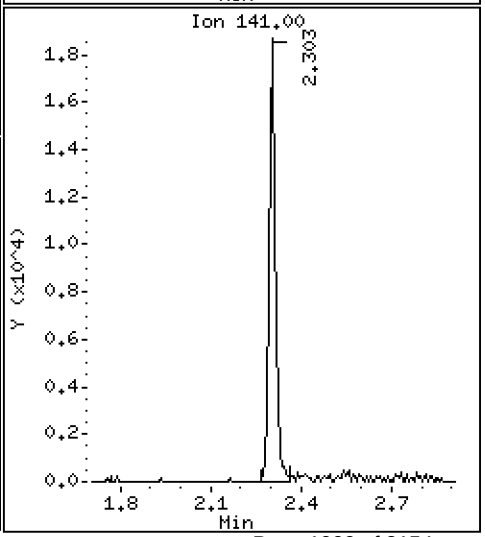


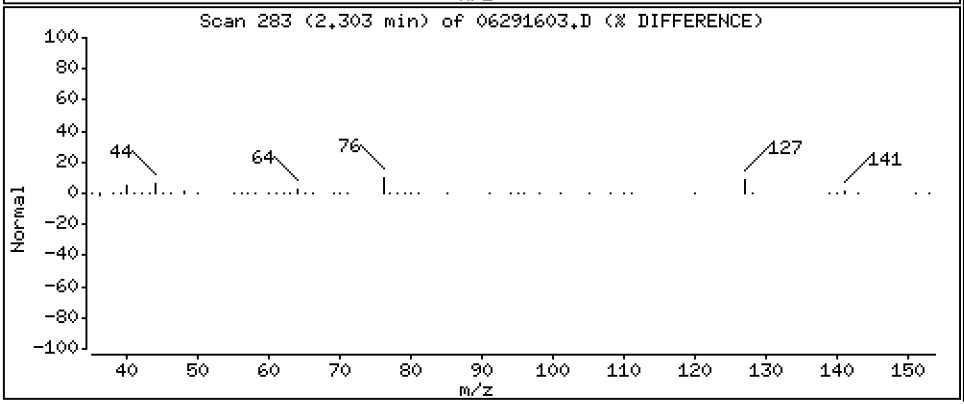












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

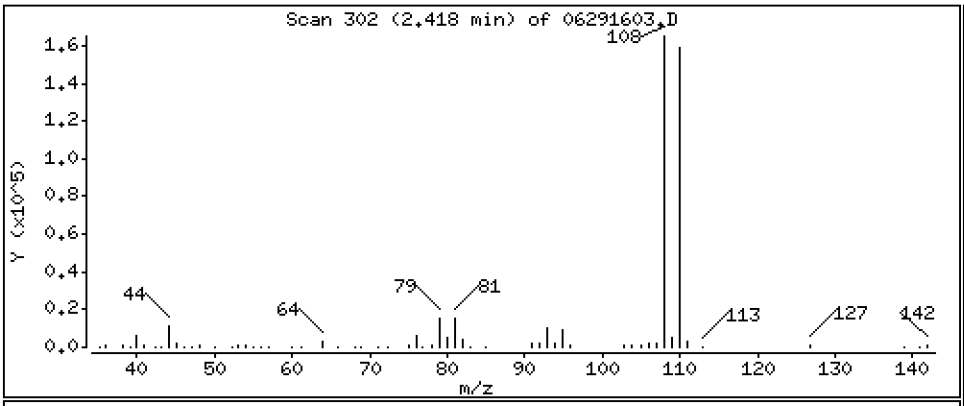
Operator: PB

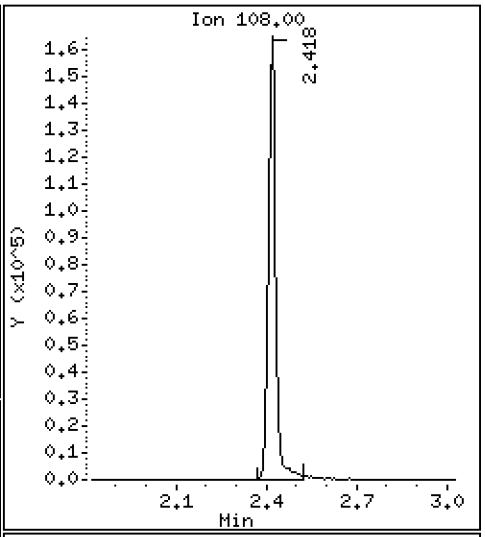
Column phase: RTXVMS

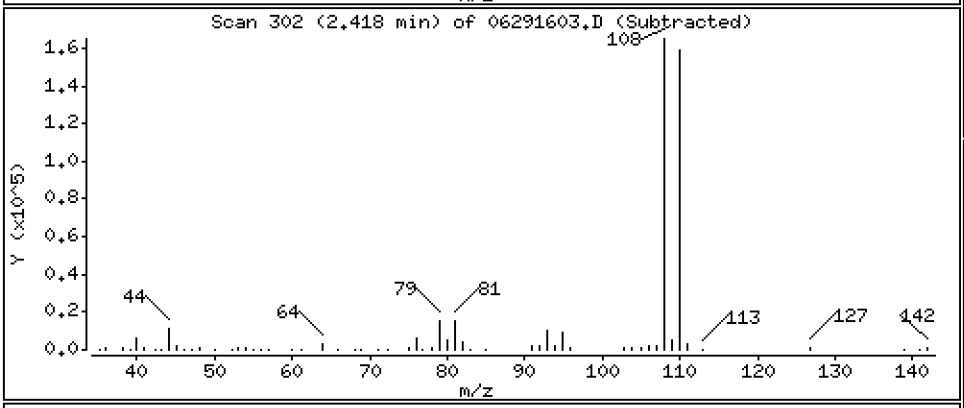
Column diameter: 0.18

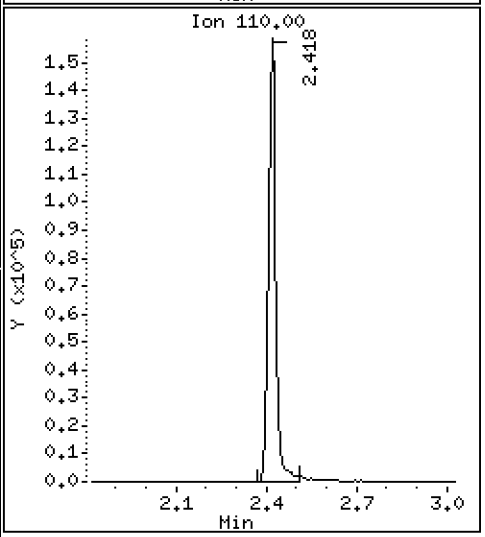
11 Bromoethane

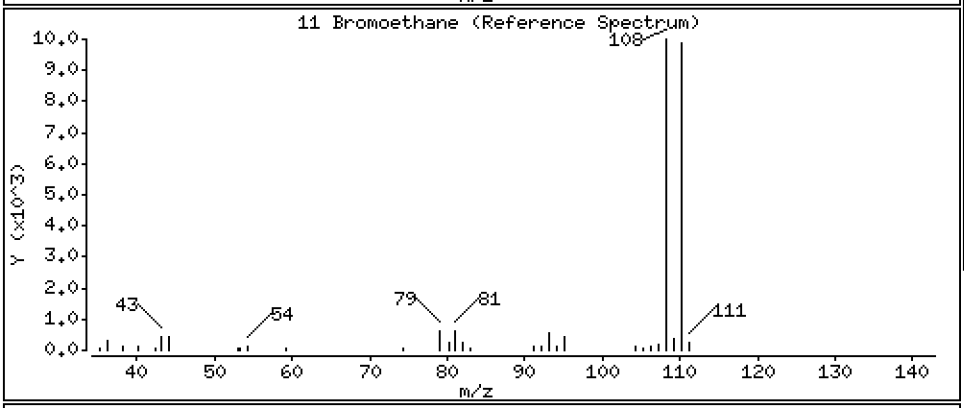
Concentration: 44.561 ug/Kg

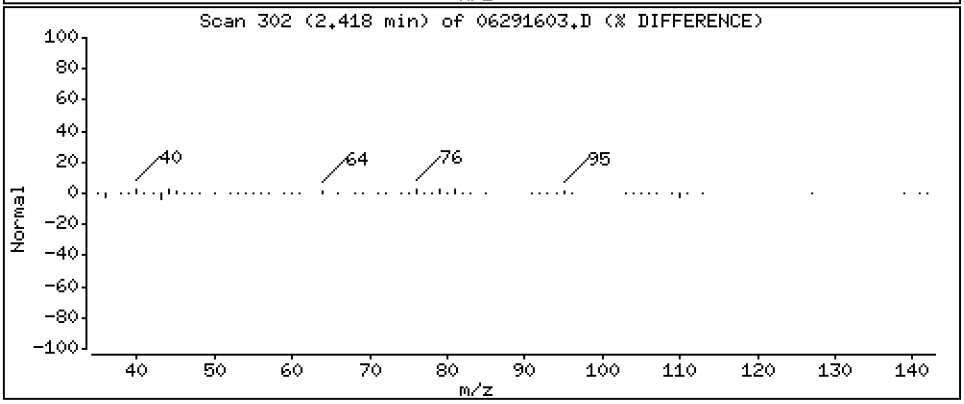












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

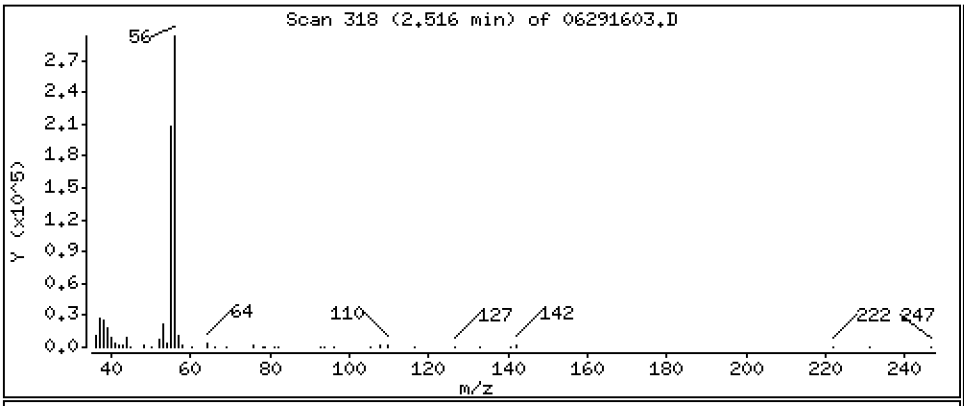
Operator: PB

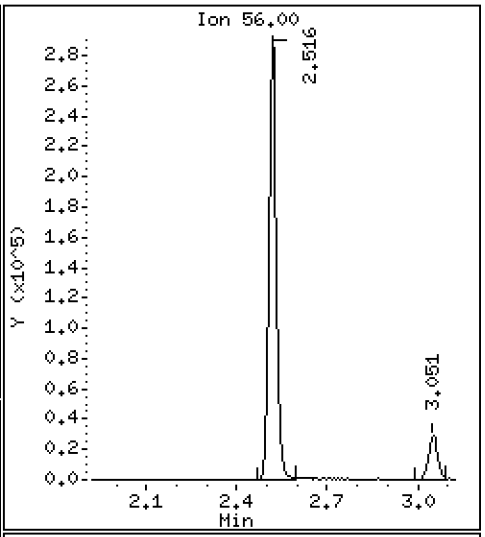
Column phase: RTXVMS

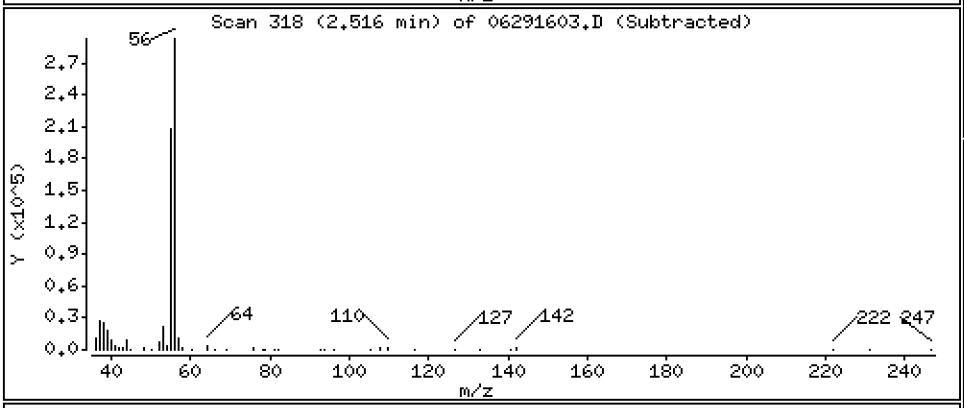
Column diameter: 0.18

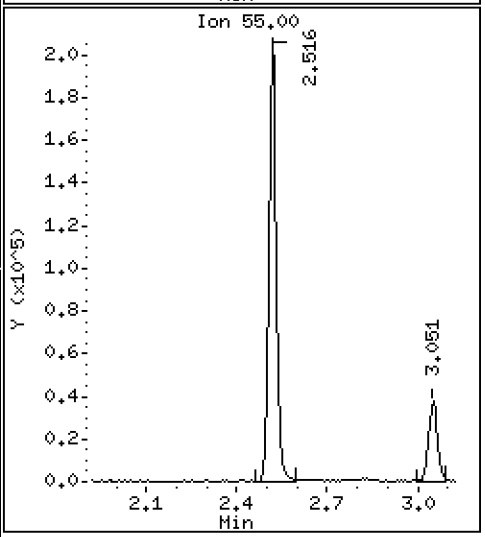
12 Acrolein

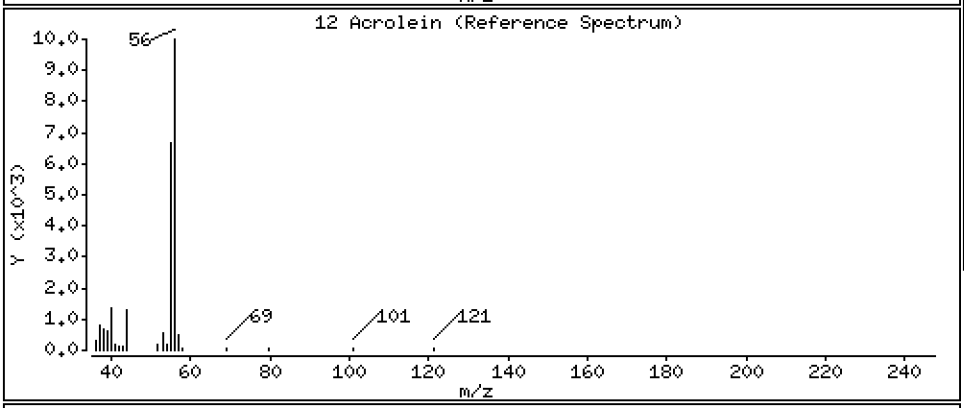
Concentration: 235.13 ug/Kg

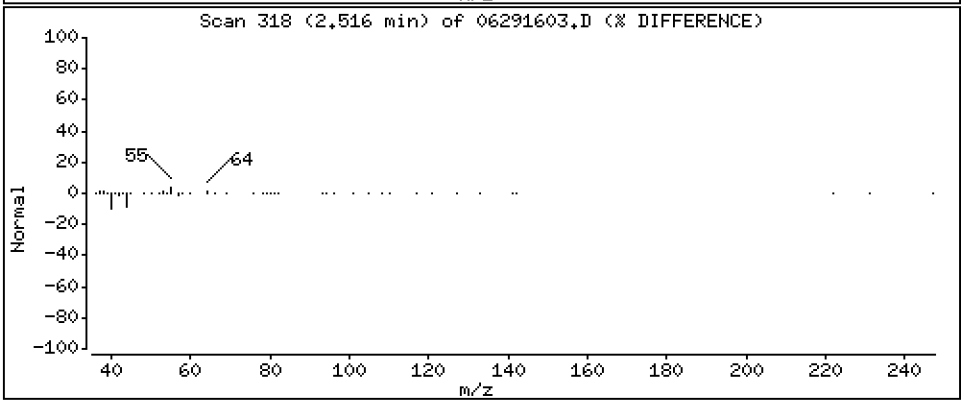












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

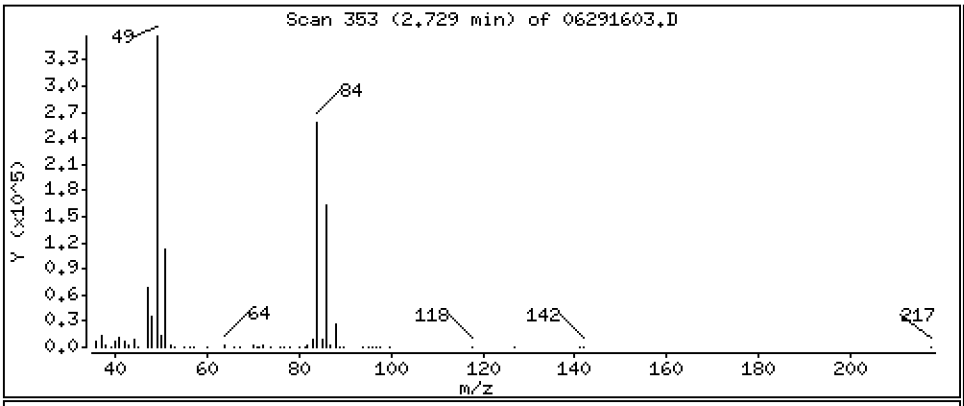
Operator: PB

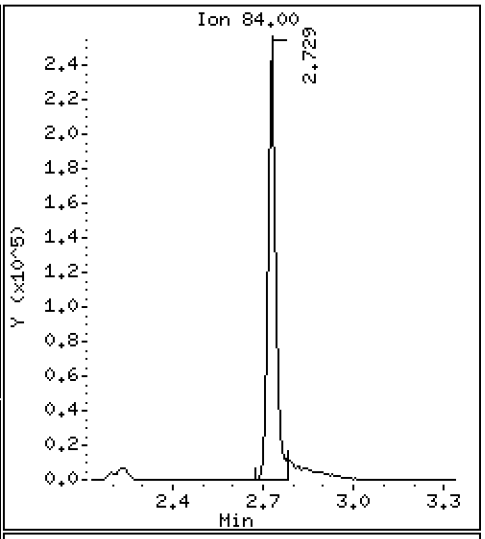
Column phase: RTXVMS

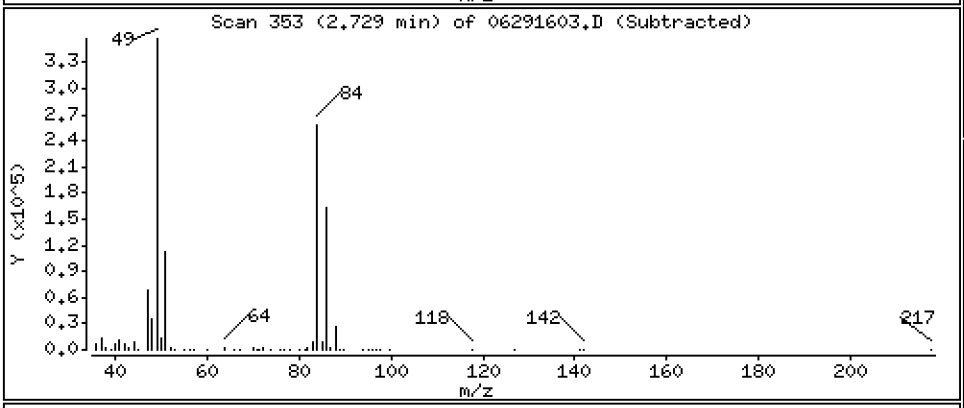
Column diameter: 0.18

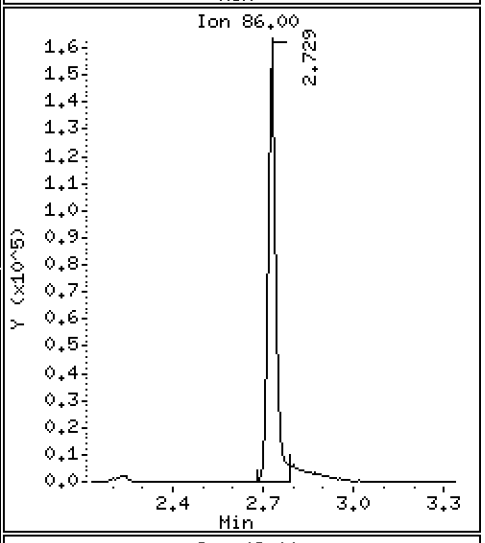
13 Methylene Chloride

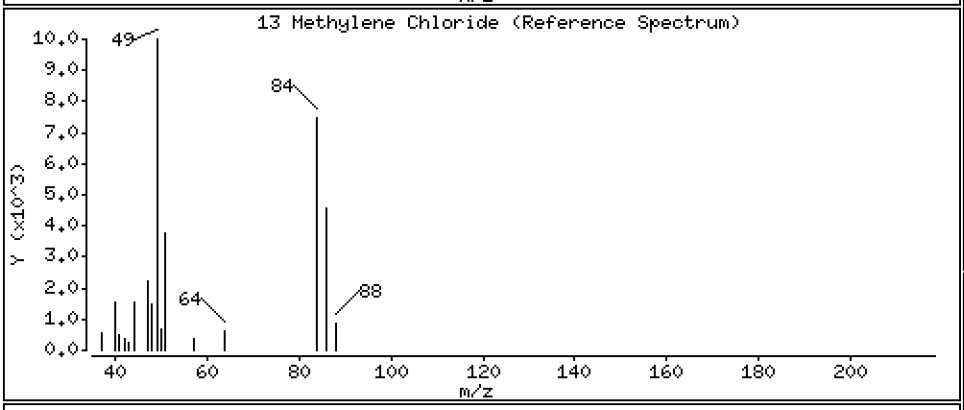
Concentration: 42.194 ug/Kg

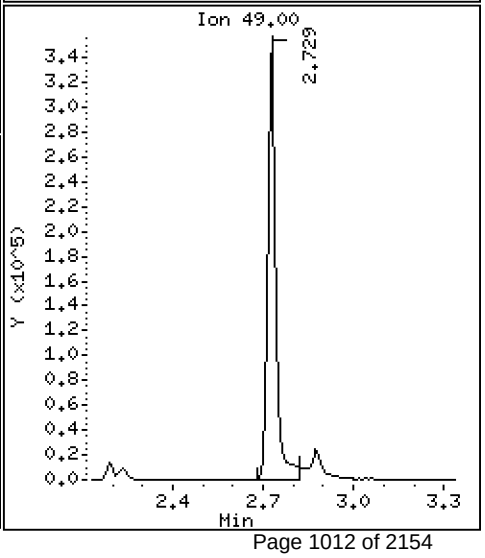


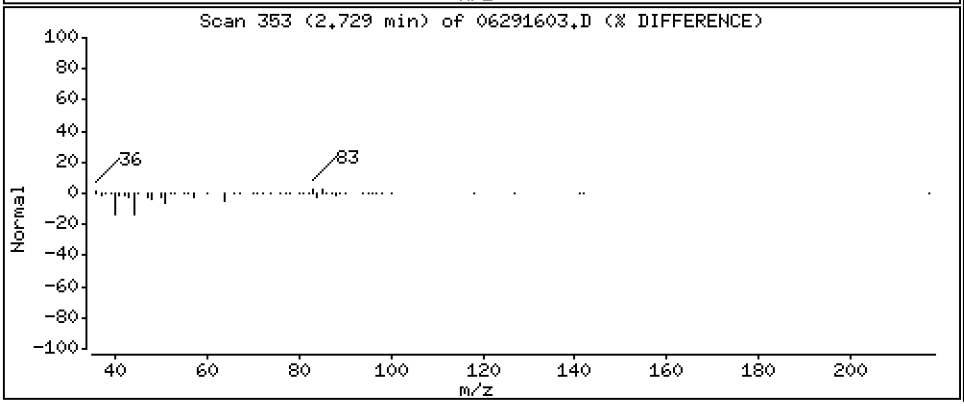












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

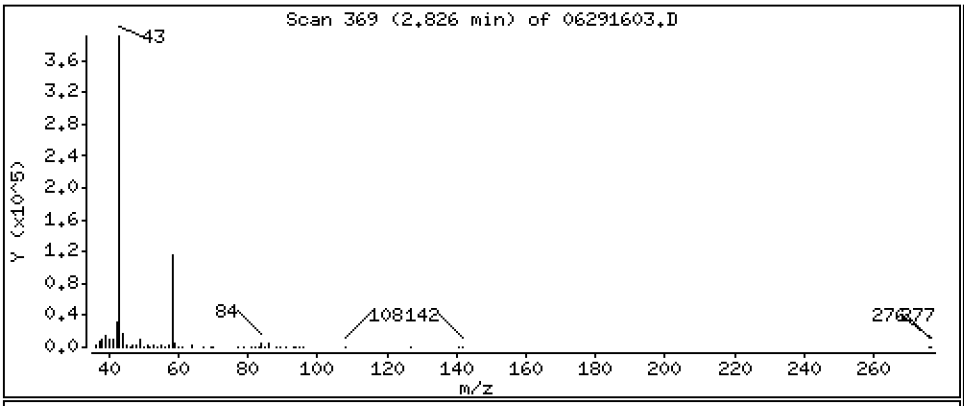
Operator: PB

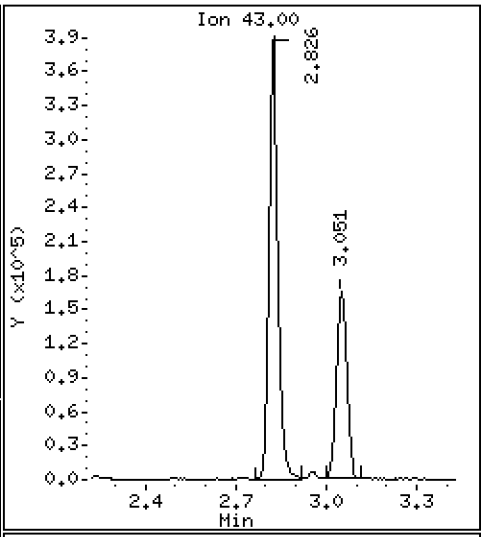
Column phase: RTXVMS

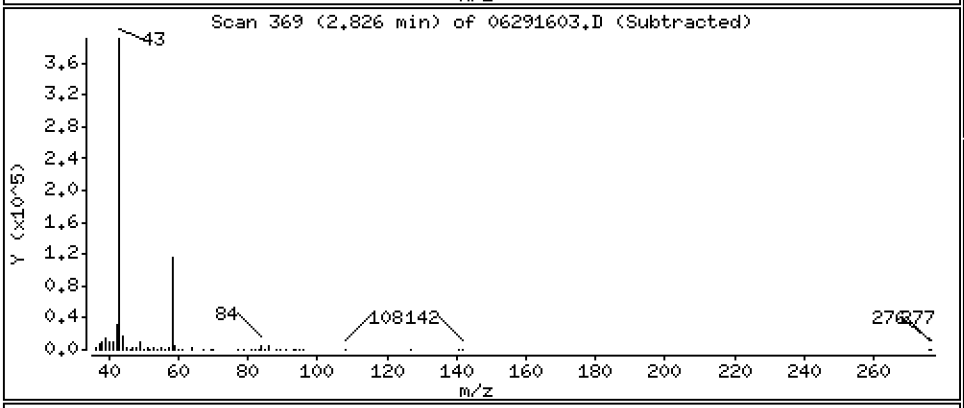
Column diameter: 0.18

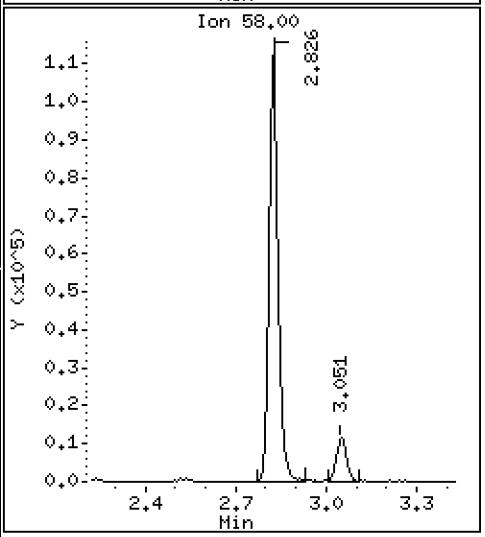
14 Acetone

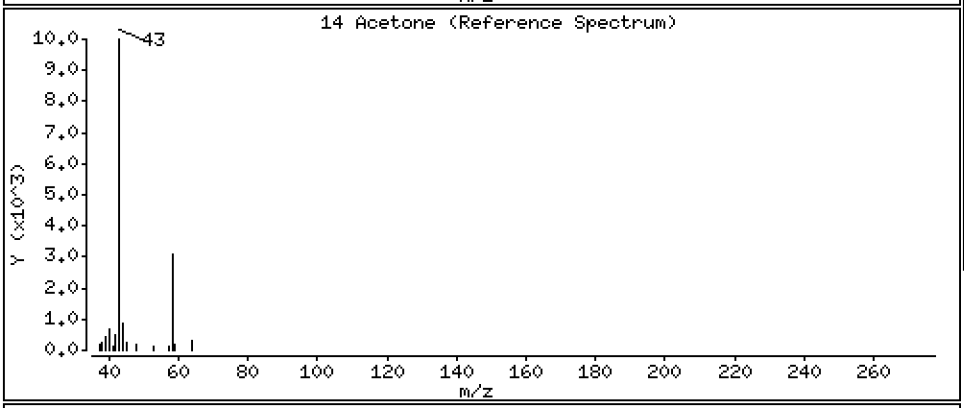
Concentration: 223.89 ug/Kg

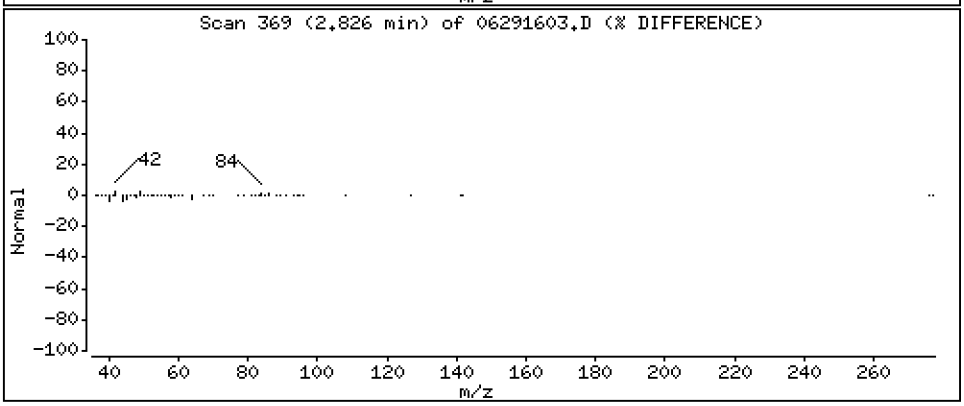












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

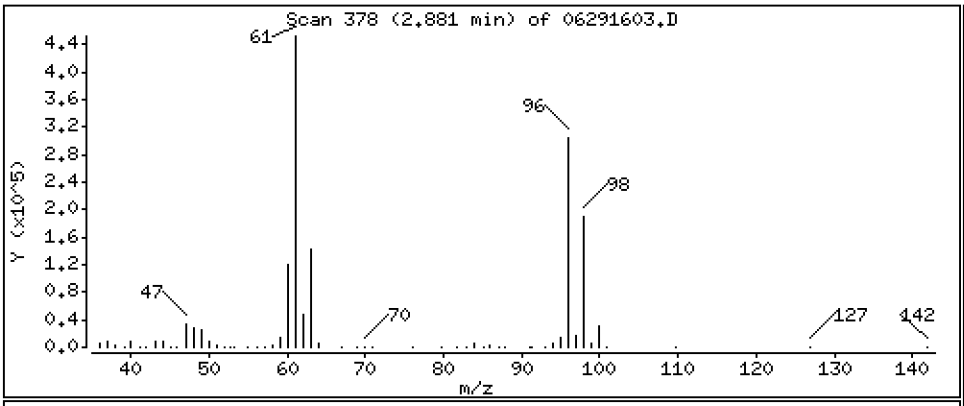
Operator: PB

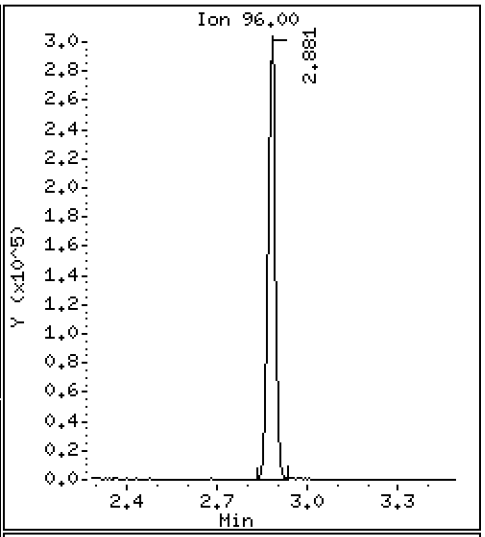
Column phase: RTXVMS

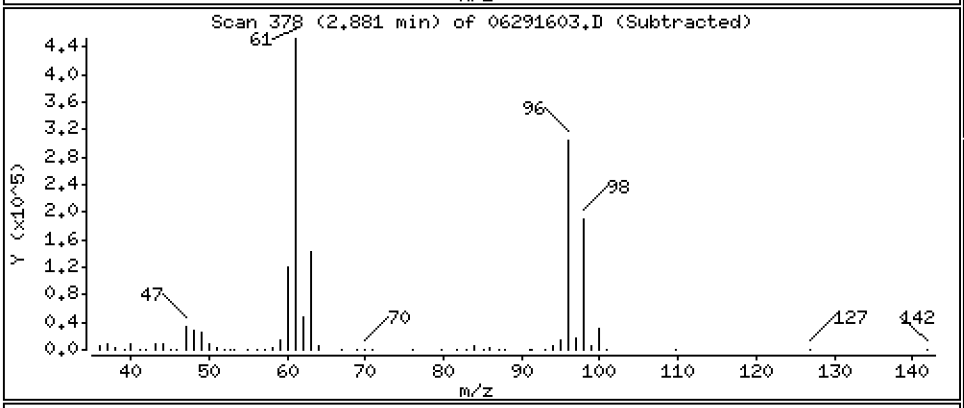
Column diameter: 0.18

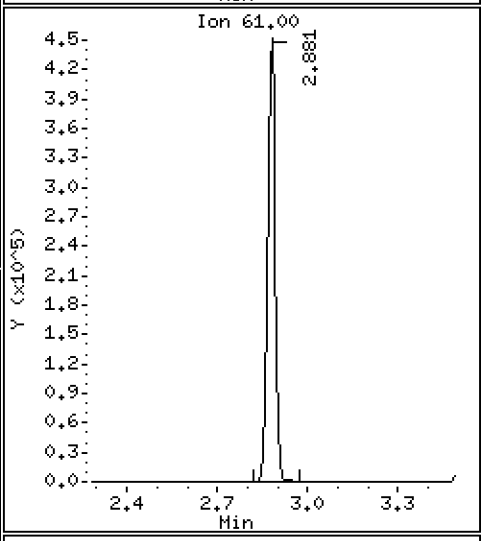
15 Trans-1,2-Dichloroethene

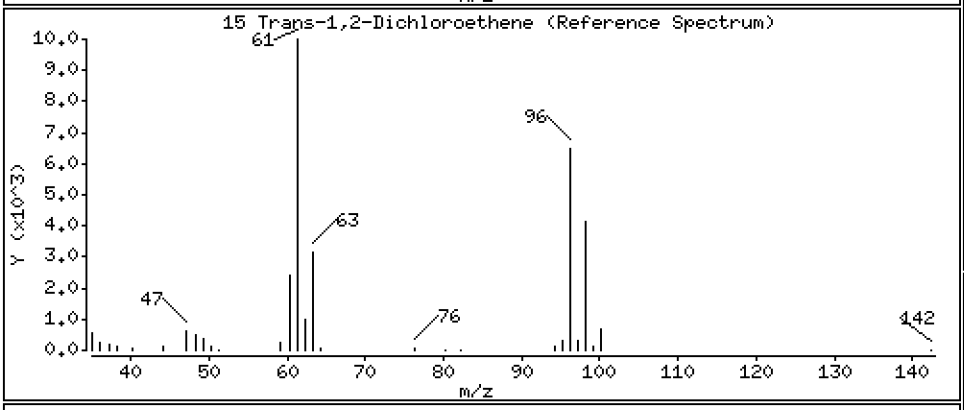
Concentration: 41.996 ug/Kg

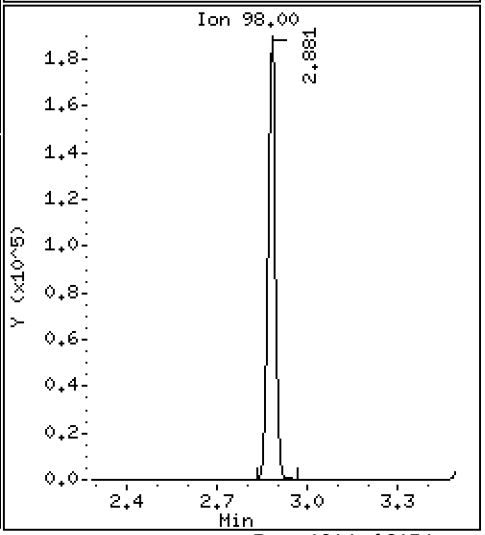


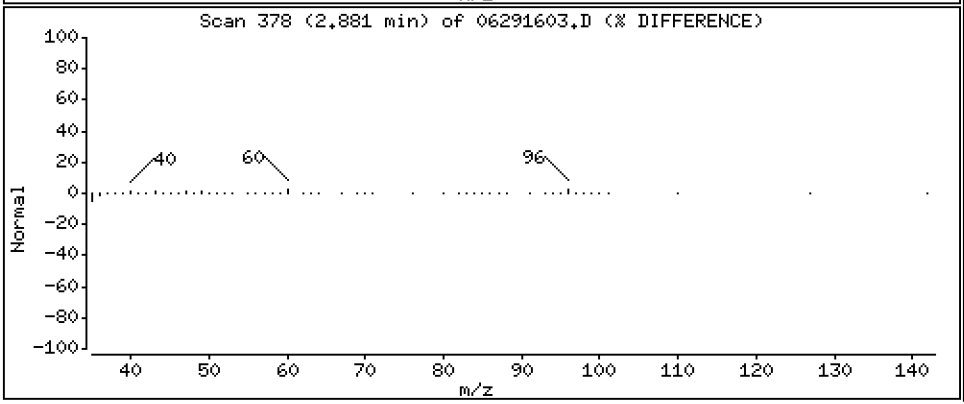












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

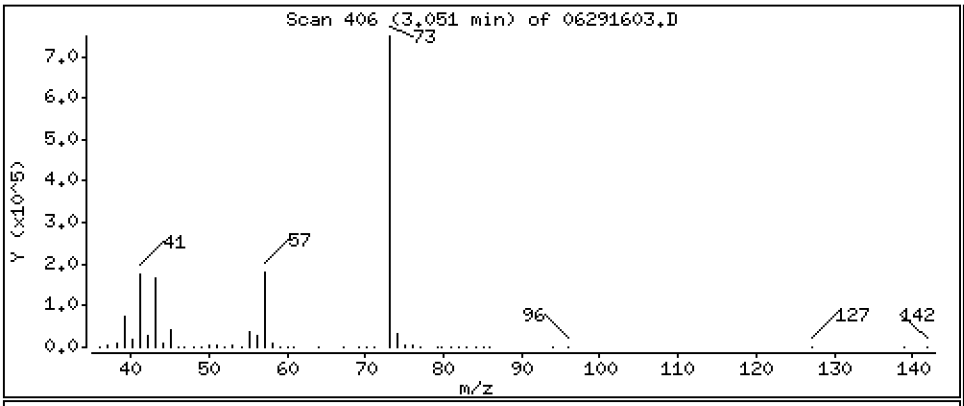
Operator: PB

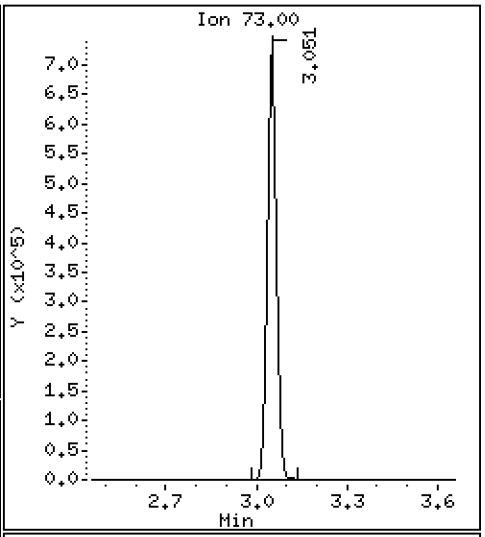
Column phase: RTXVMS

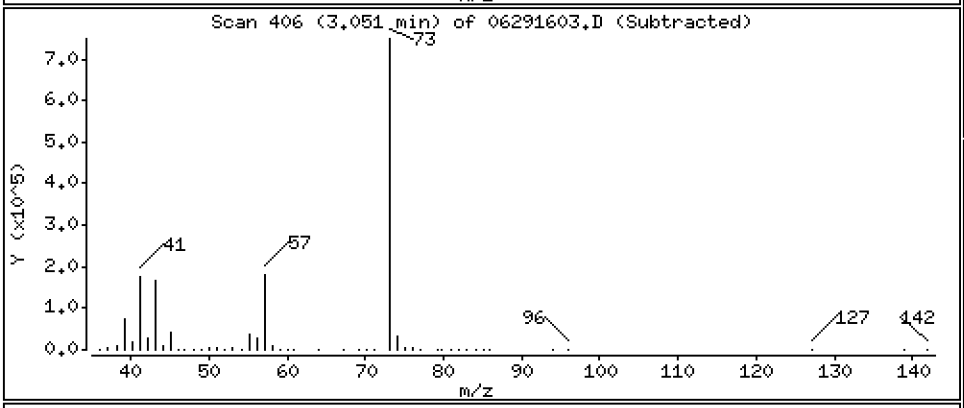
Column diameter: 0.18

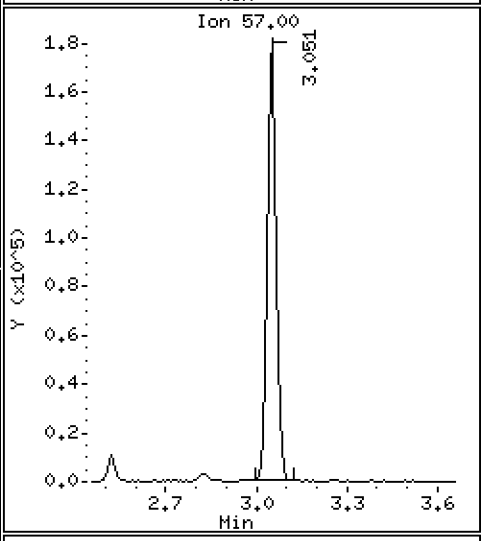
16 Methyl tert butyl ether

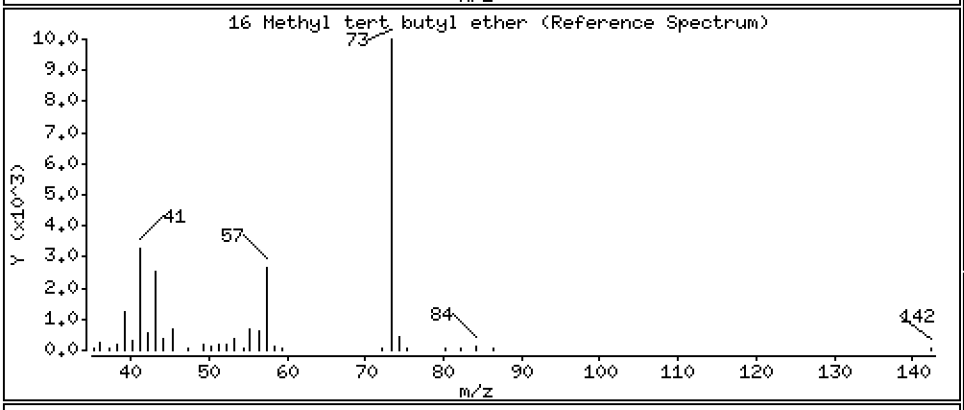
Concentration: 43.108 ug/Kg

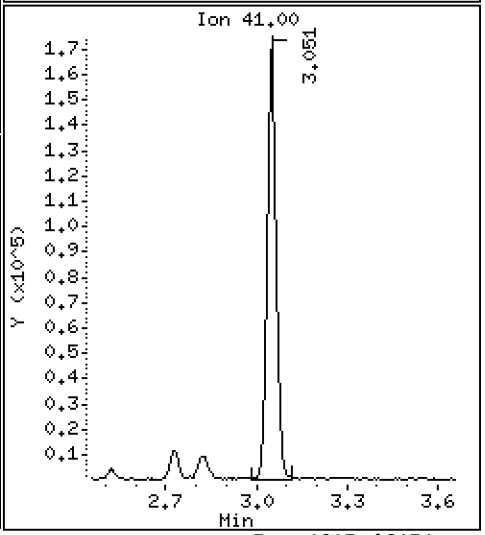


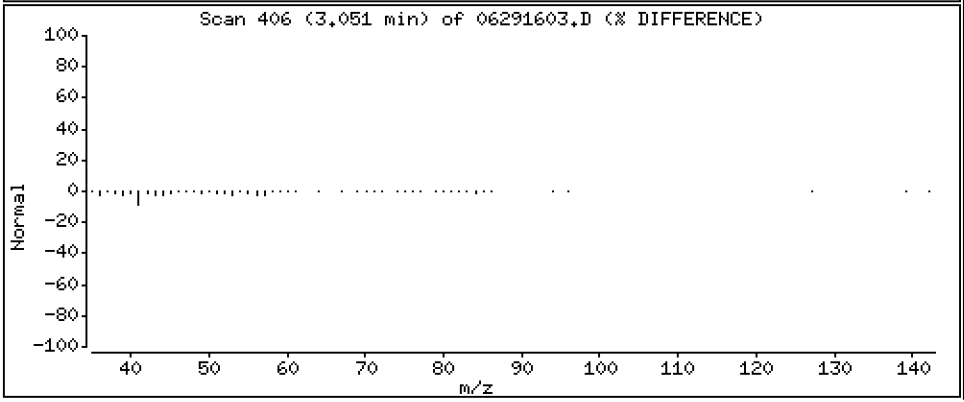












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

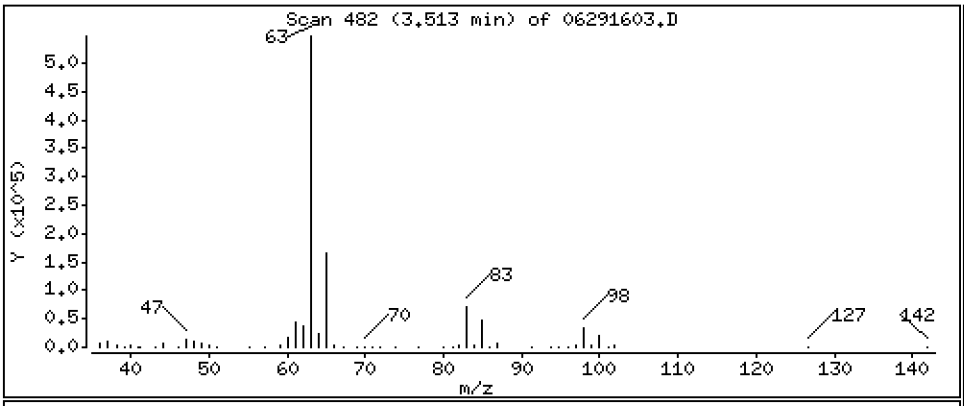
Client ID: LCS0629 Instrument: nt5.i

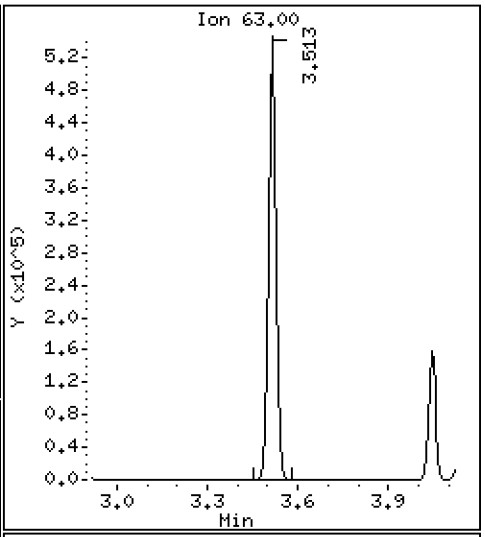
Sample Info: LCS0629,5,5,0

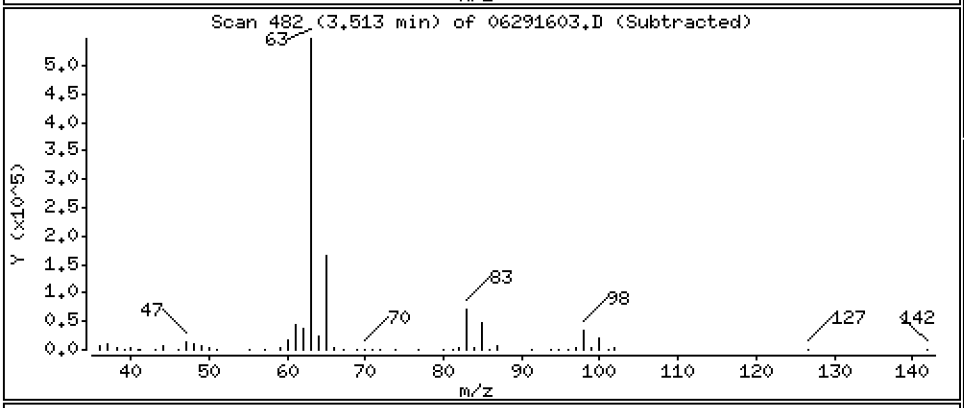
Operator: PB

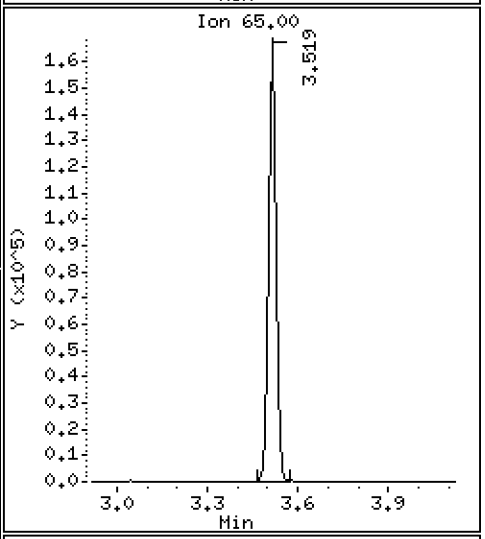
Column phase: RTXVMS Column diameter: 0.18

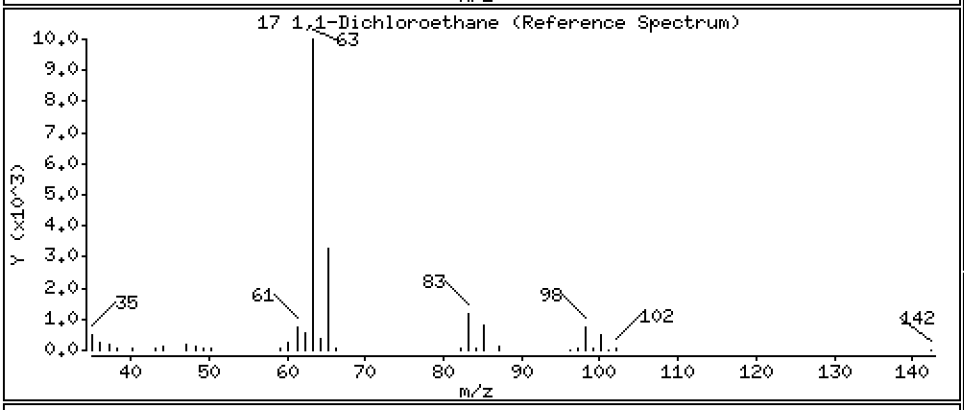
17 1,1-Dichloroethane Concentration: 40.803 ug/Kg

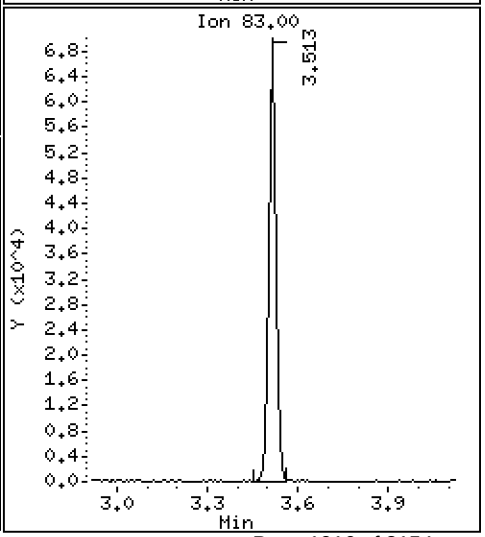


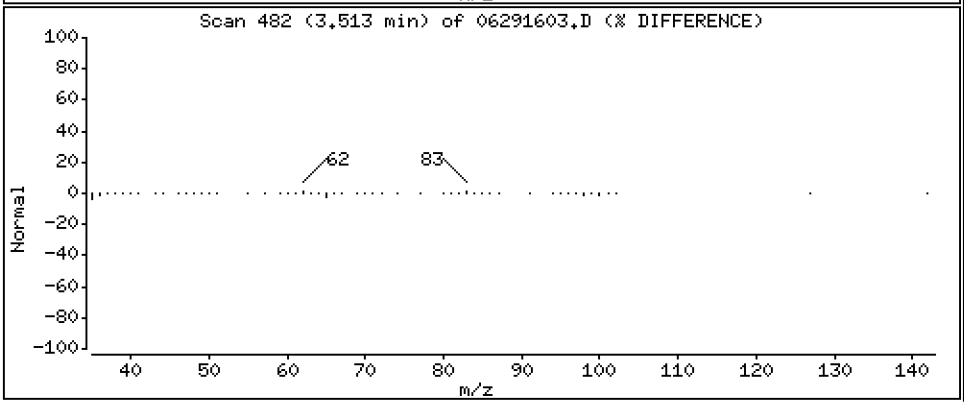












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

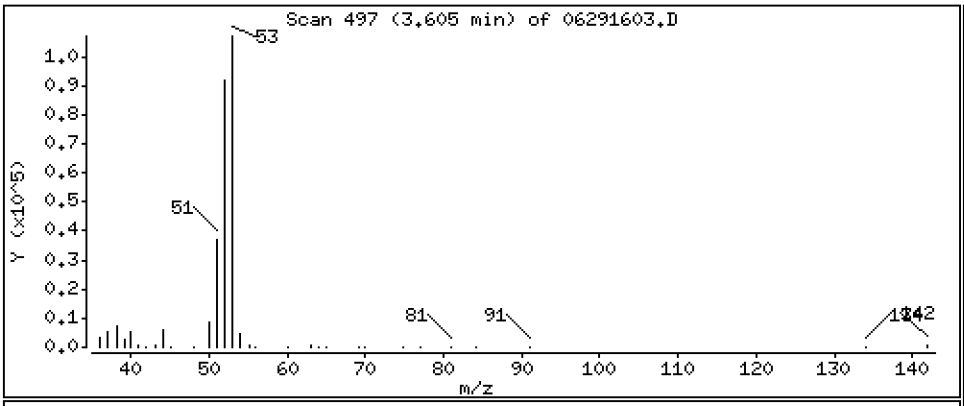
Operator: PB

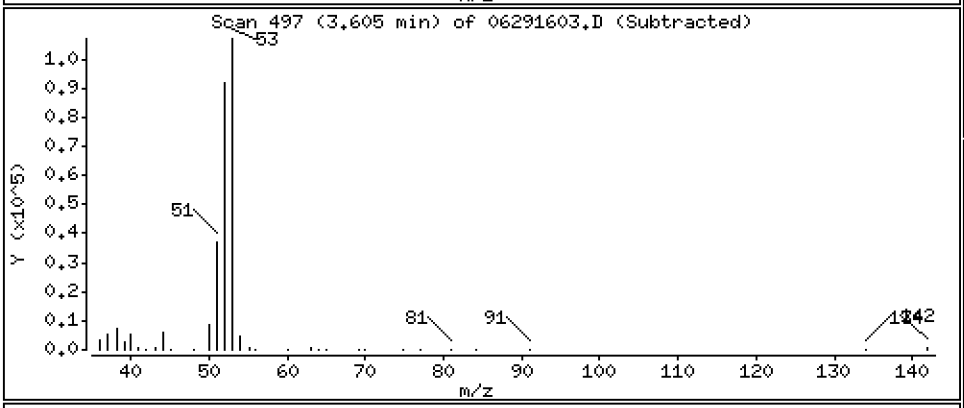
Column phase: RTXVMS

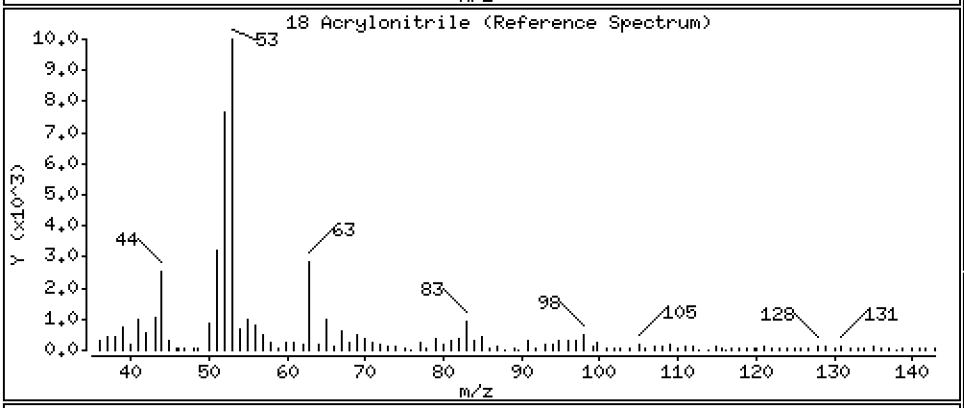
Column diameter: 0.18

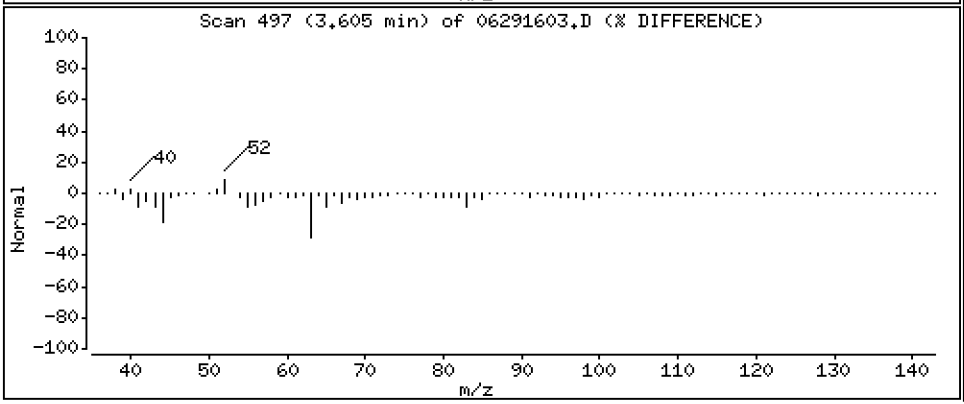
18 Acrylonitrile

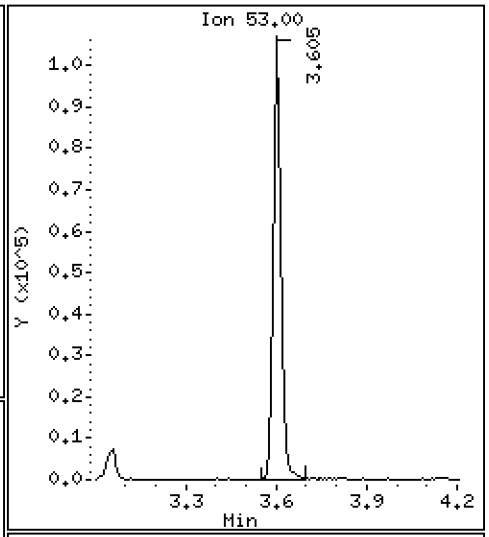
Concentration: 46.220 ug/Kg

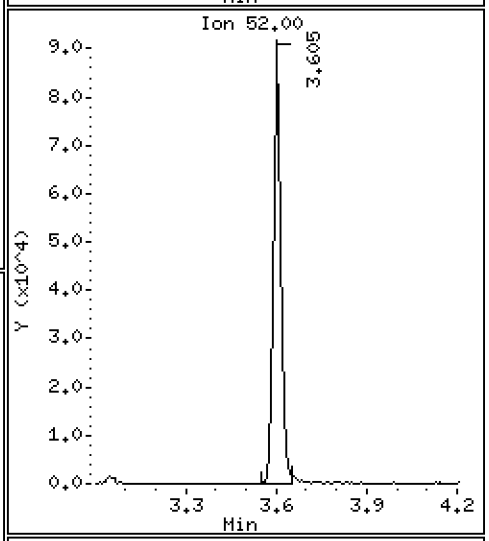


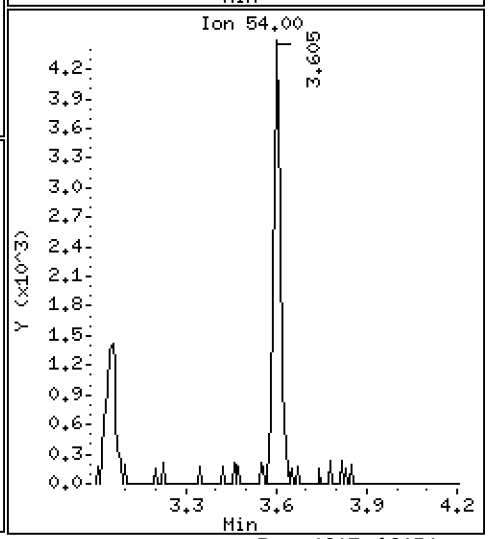












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

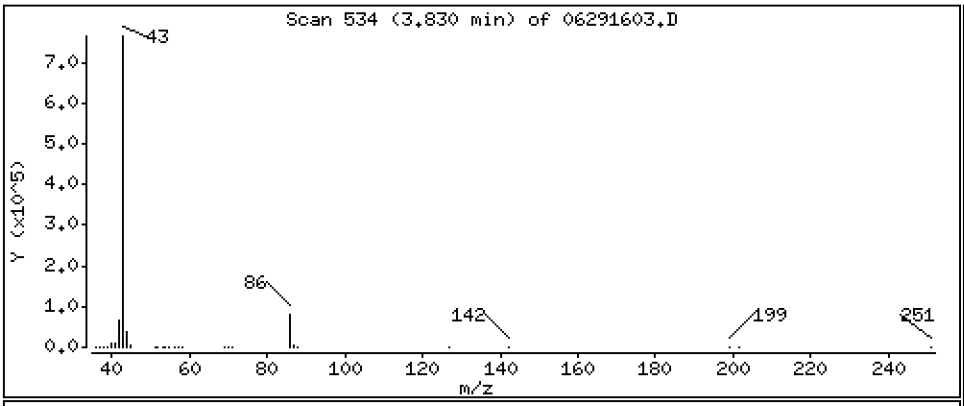
Operator: PB

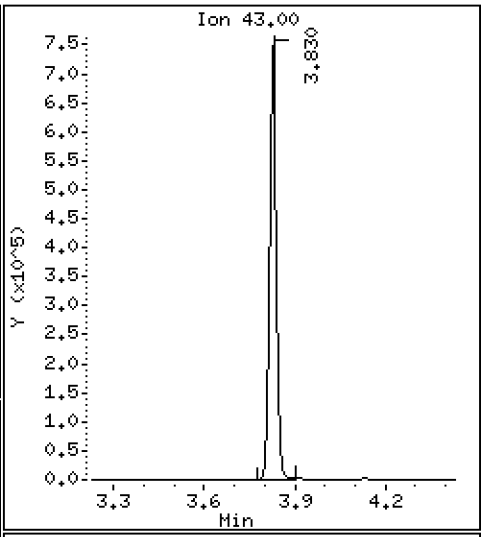
Column phase: RTXVMS

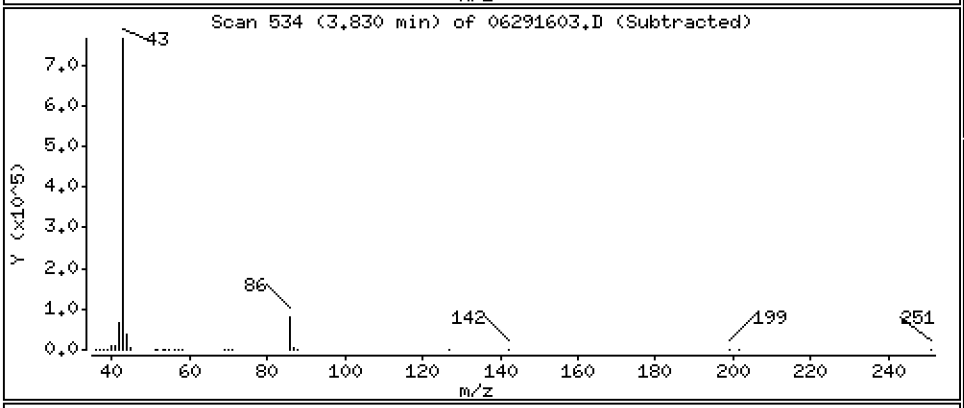
Column diameter: 0.18

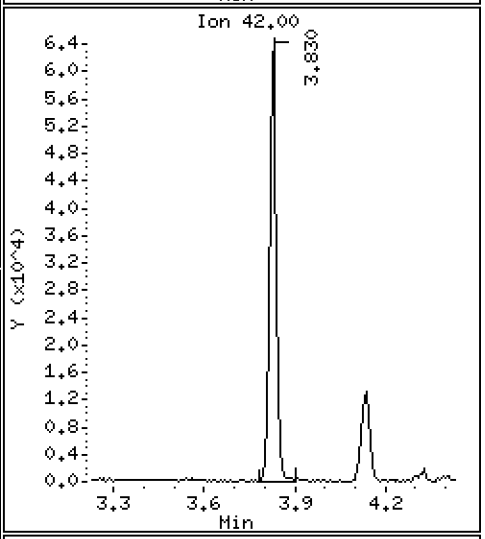
19 Vinyl Acetate

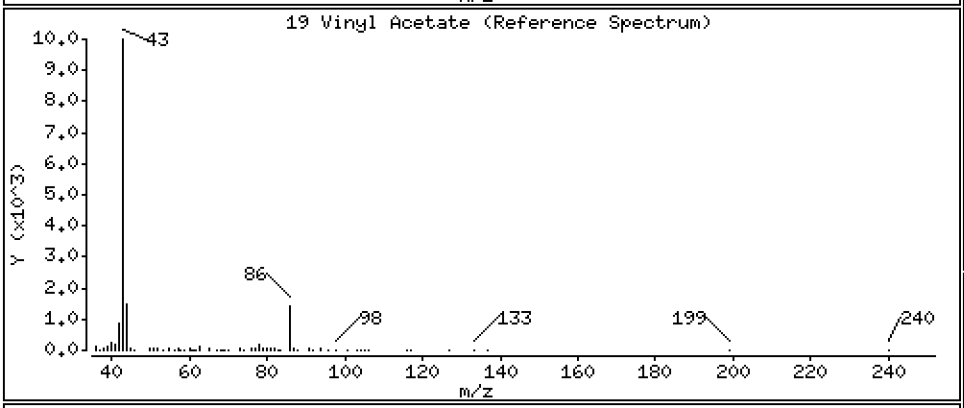
Concentration: 42.642 ug/Kg

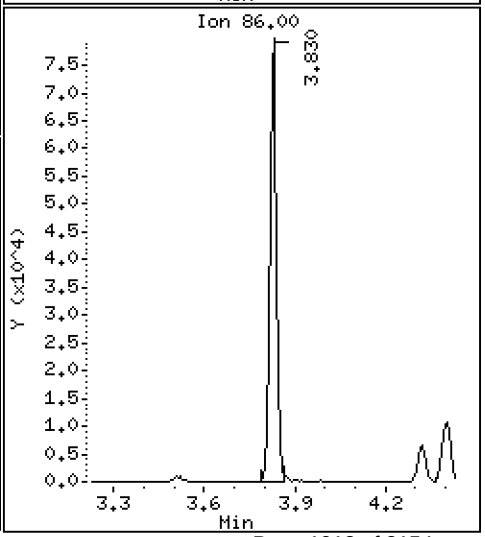


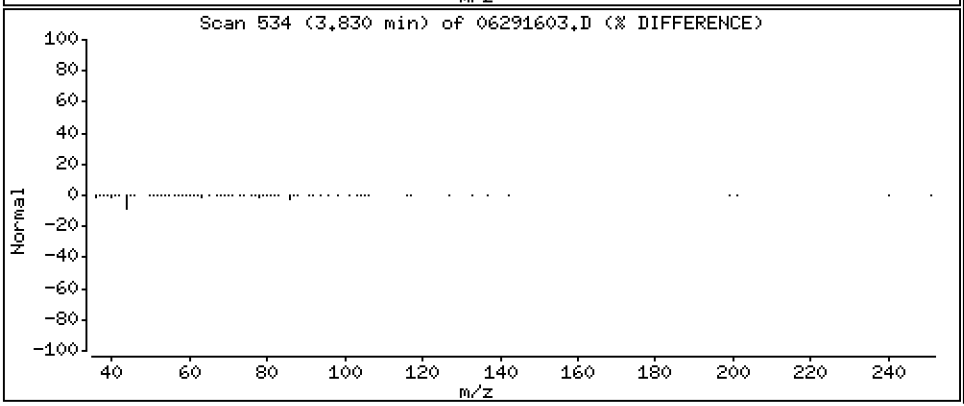












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

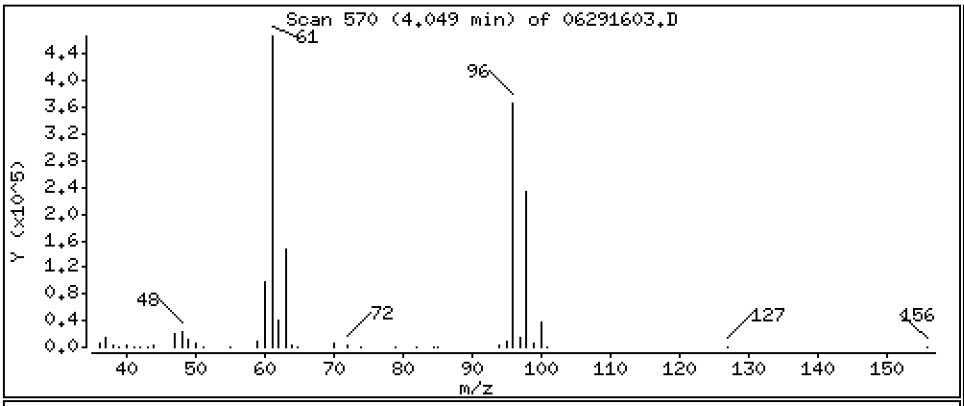
Operator: PB

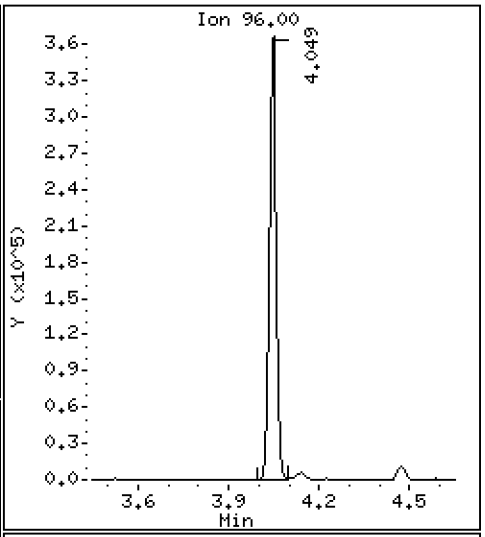
Column phase: RTXVMS

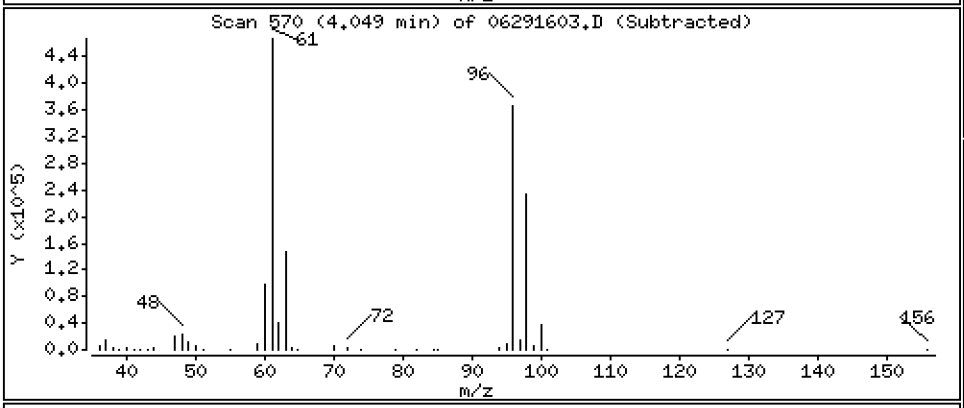
Column diameter: 0.18

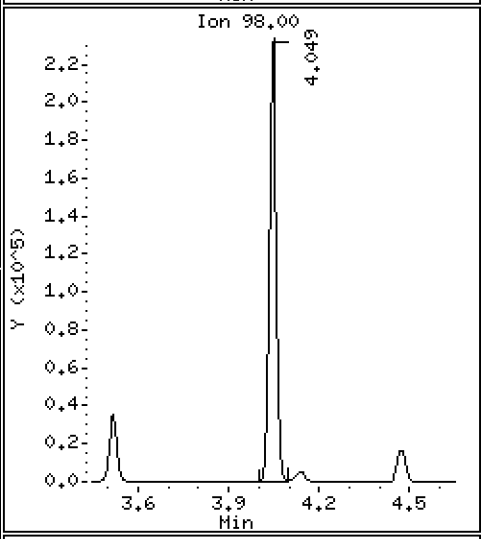
20 Cis-1,2-Dichloroethene

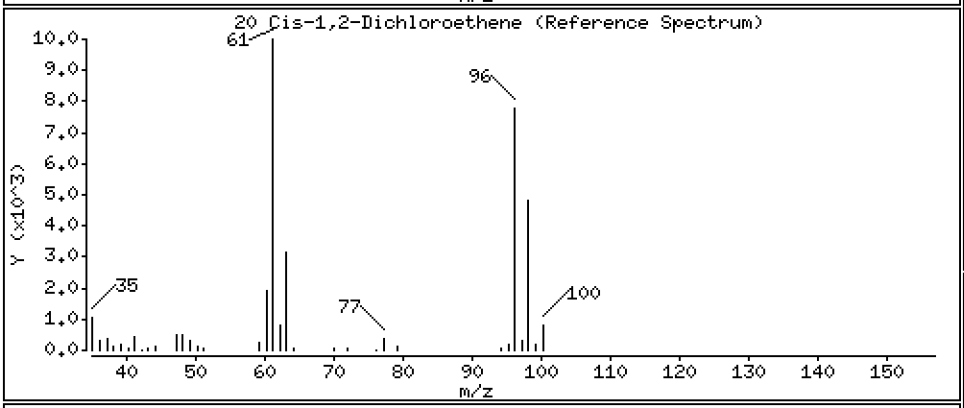
Concentration: 41.320 ug/Kg

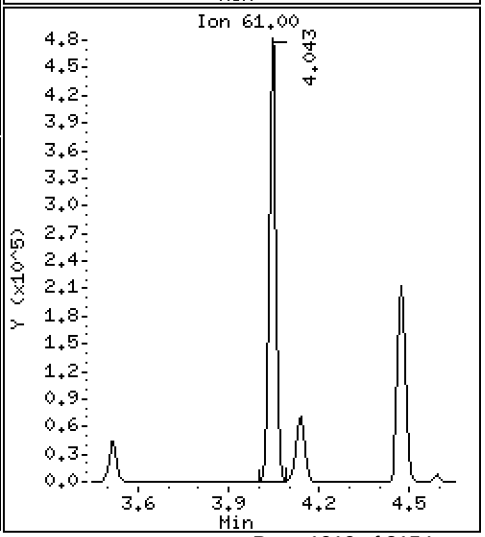


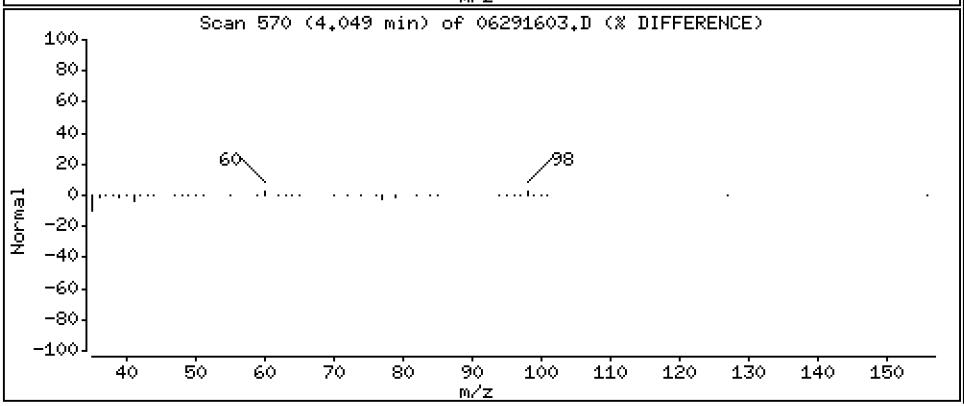












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

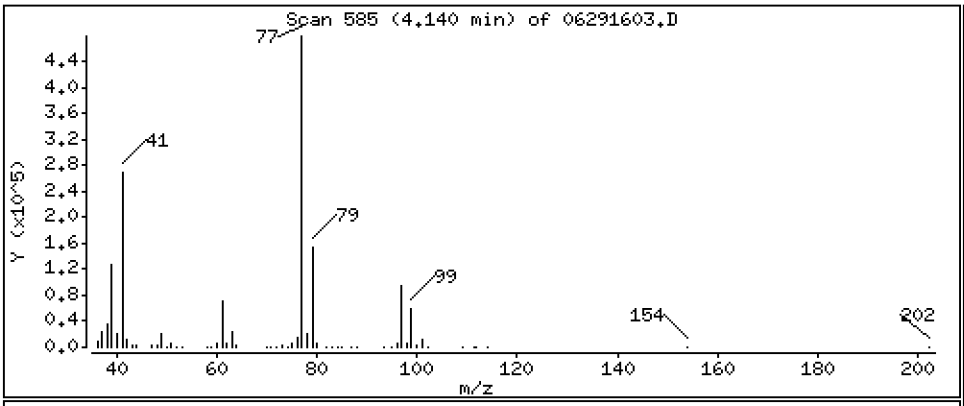
Operator: PB

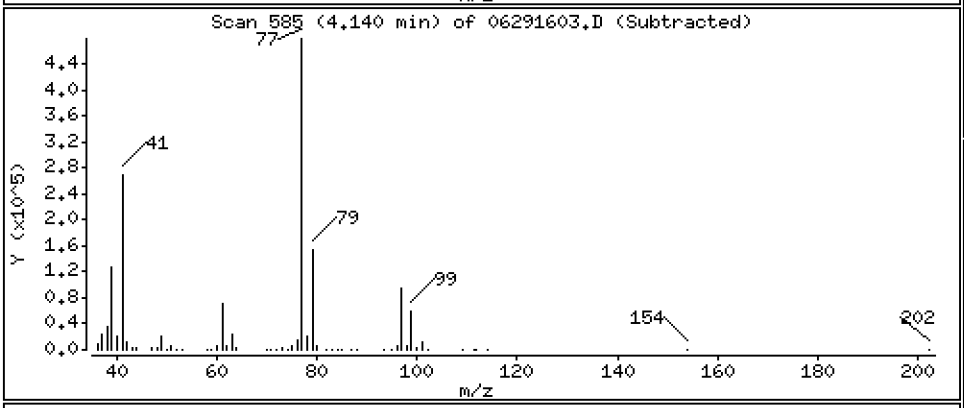
Column phase: RTXVMS

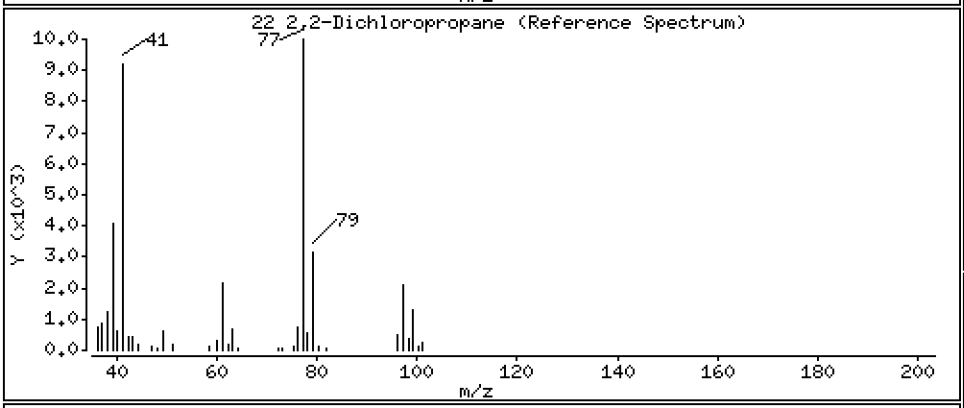
Column diameter: 0.18

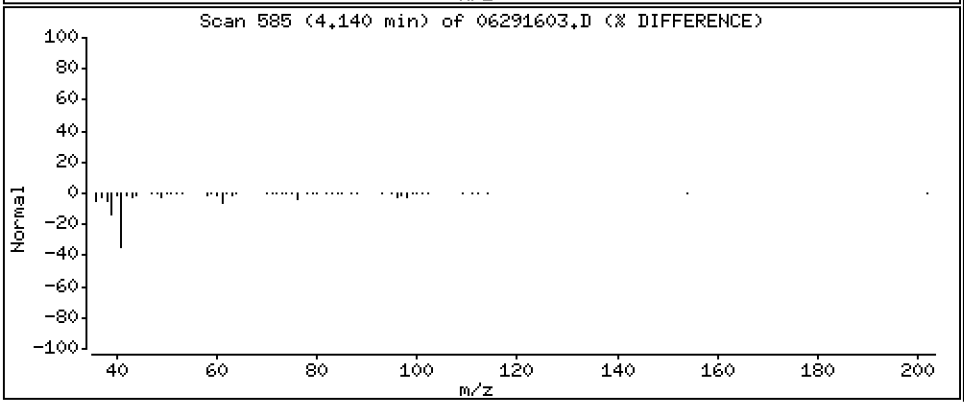
22 2,2-Dichloropropane

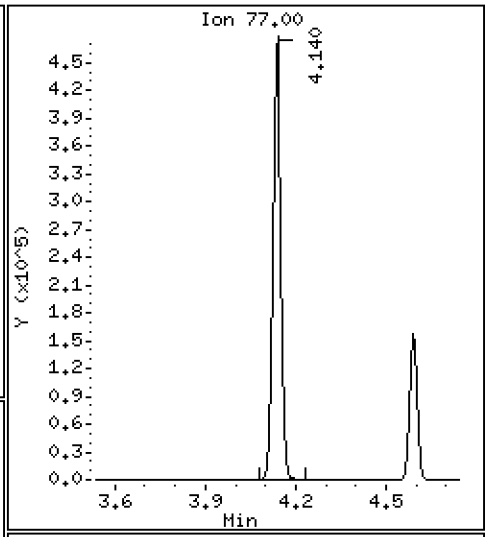
Concentration: 42.199 ug/Kg

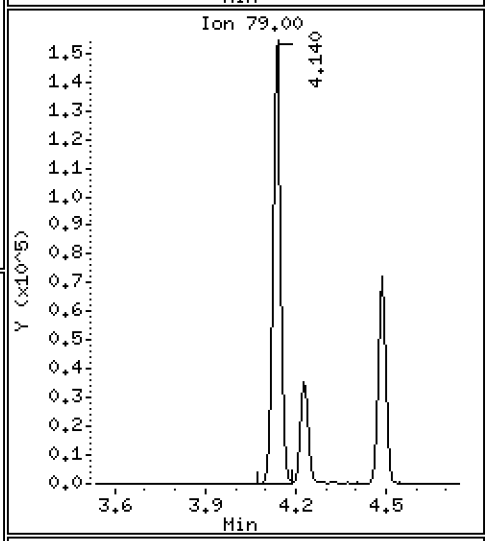


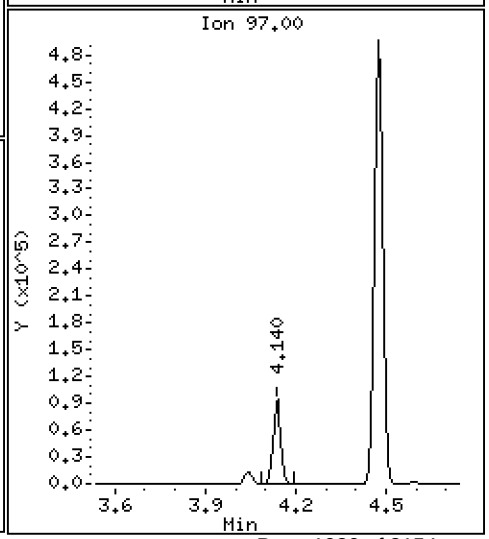












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

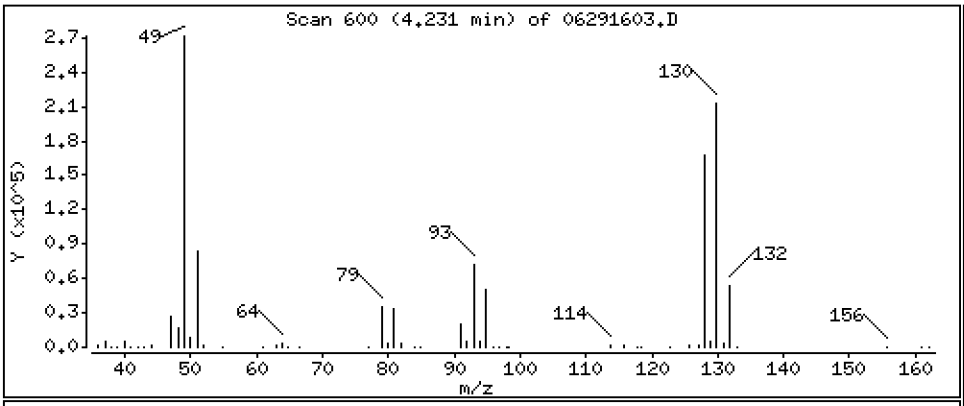
Operator: PB

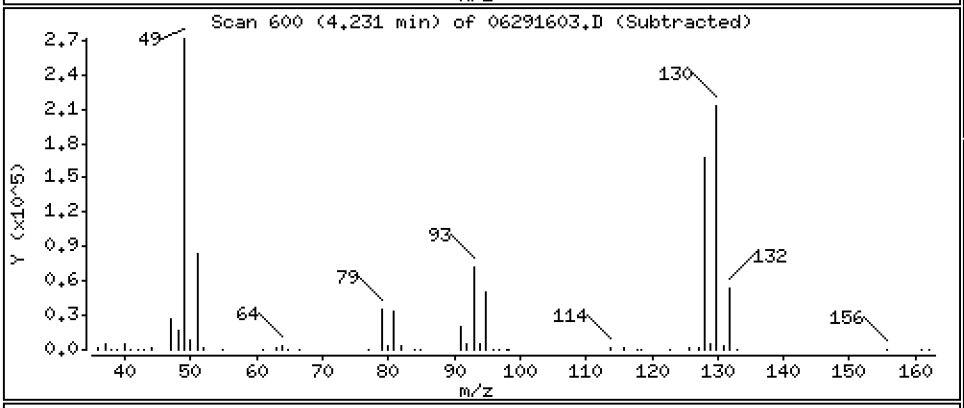
Column phase: RTXVMS

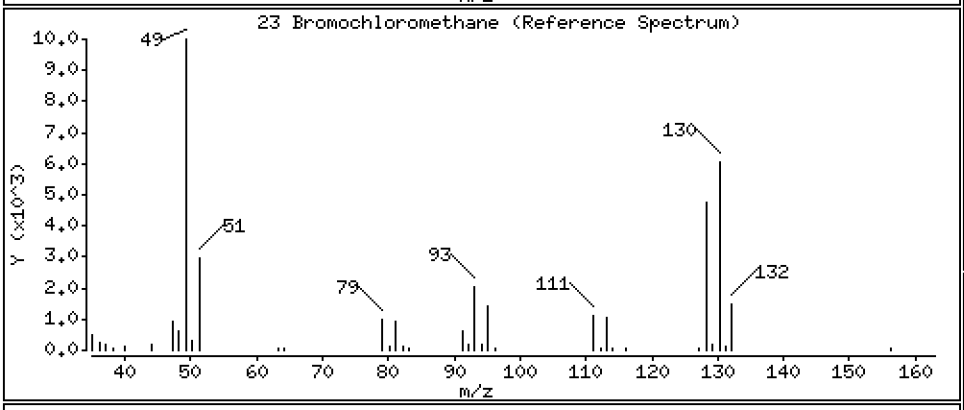
Column diameter: 0.18

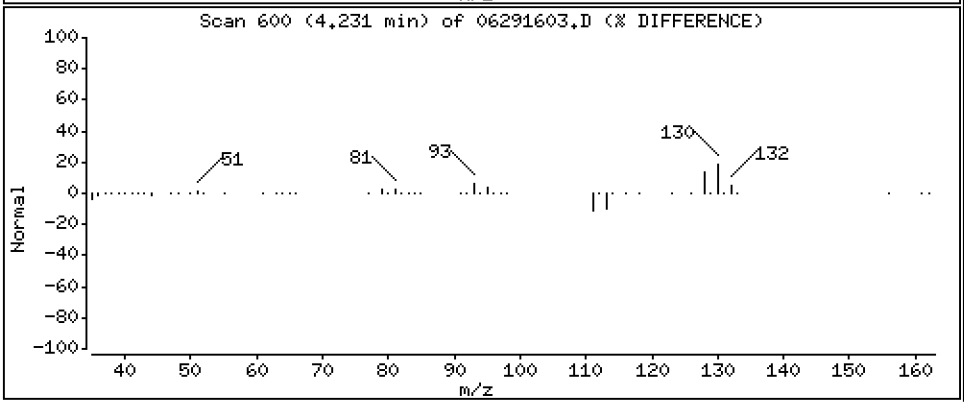
23 Bromochloromethane

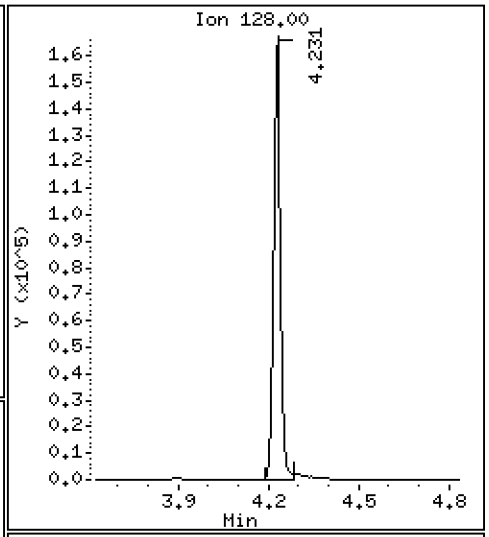
Concentration: 42.644 ug/Kg

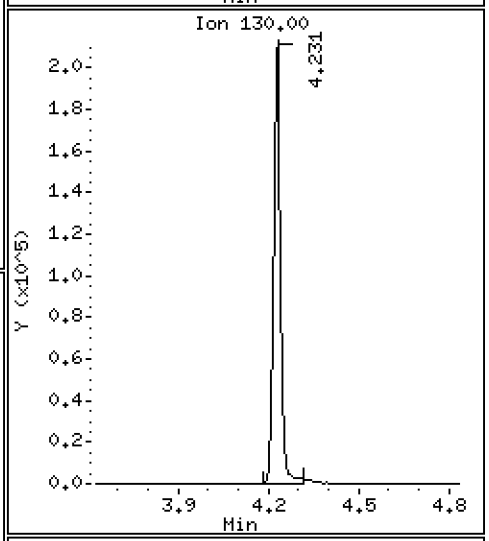


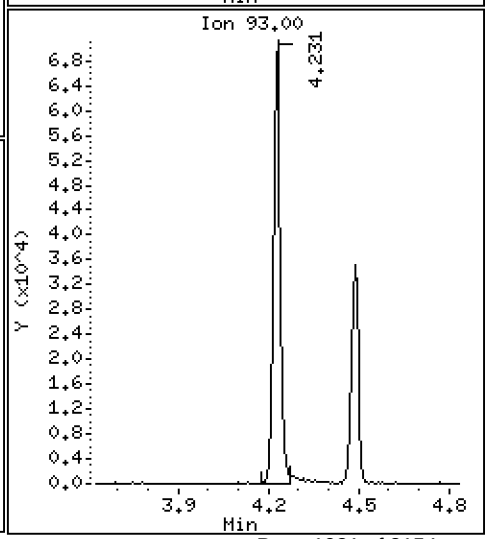












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

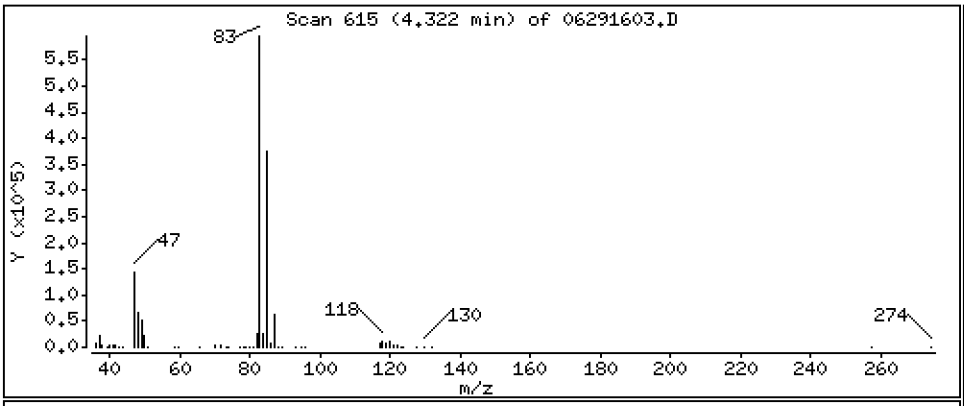
Operator: PB

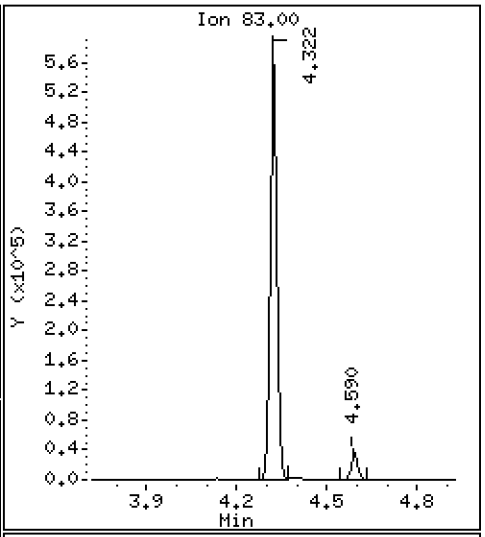
Column phase: RTXVMS

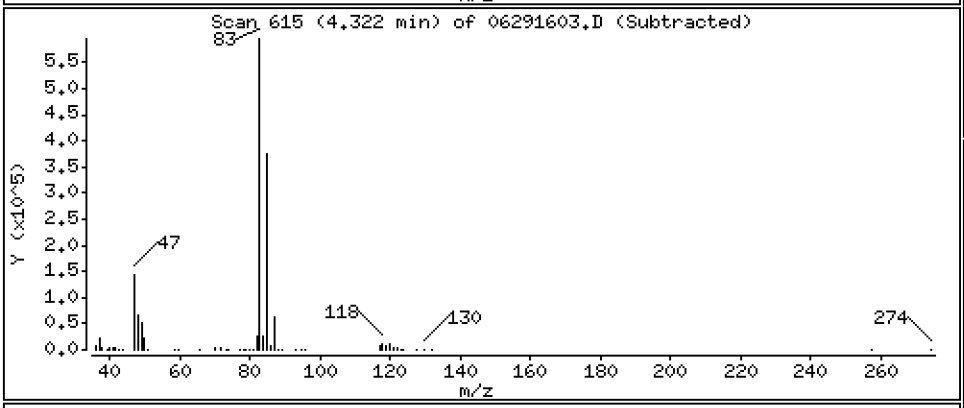
Column diameter: 0.18

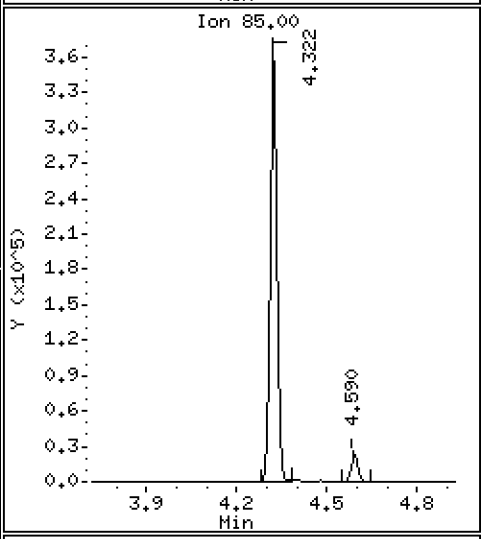
24 Chloroform

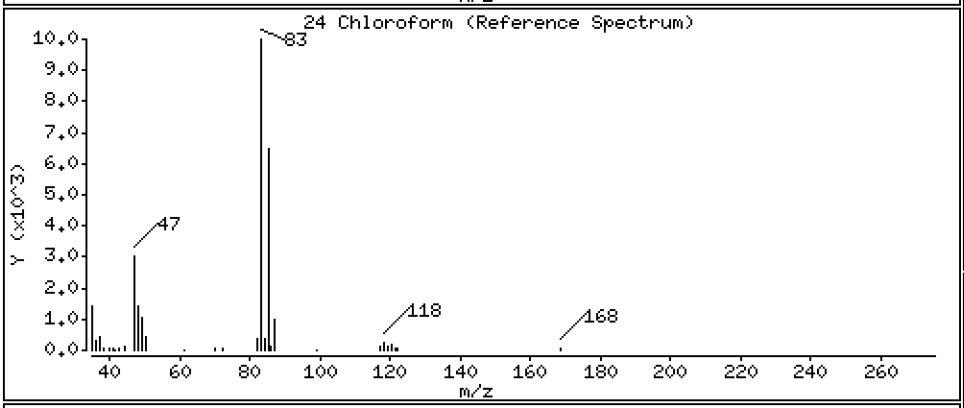
Concentration: 41.484 ug/Kg

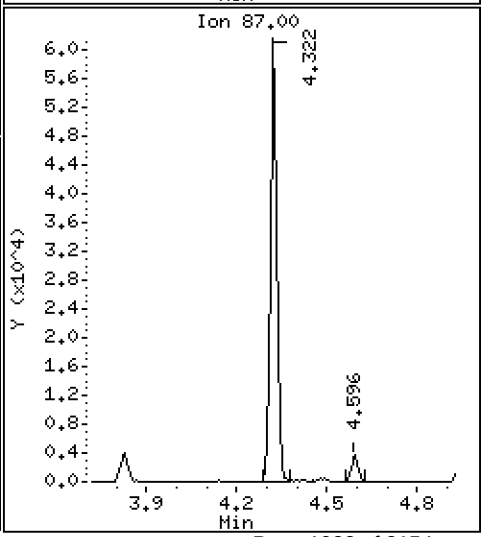


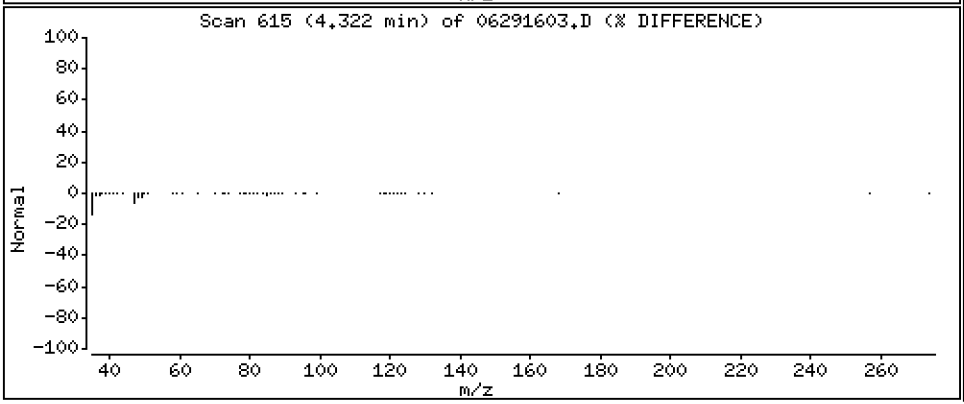












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

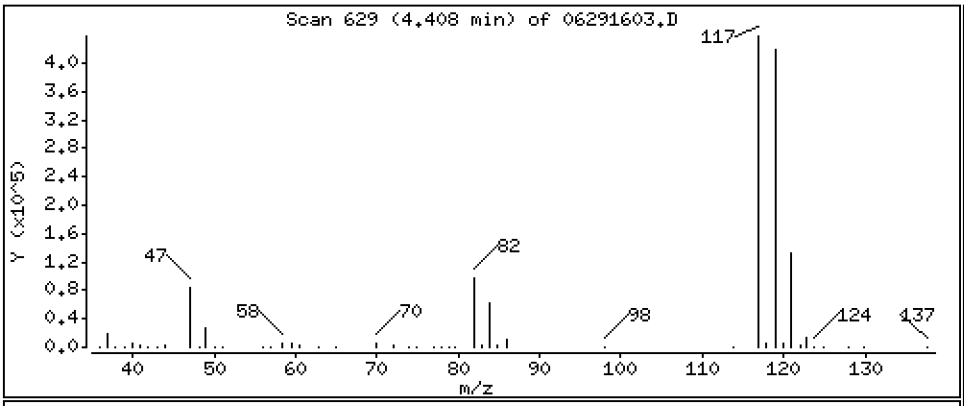
Operator: PB

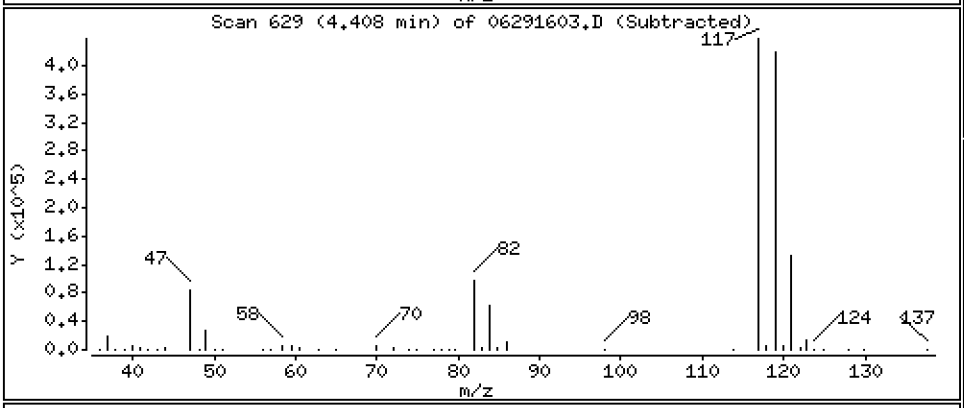
Column phase: RTXVMS

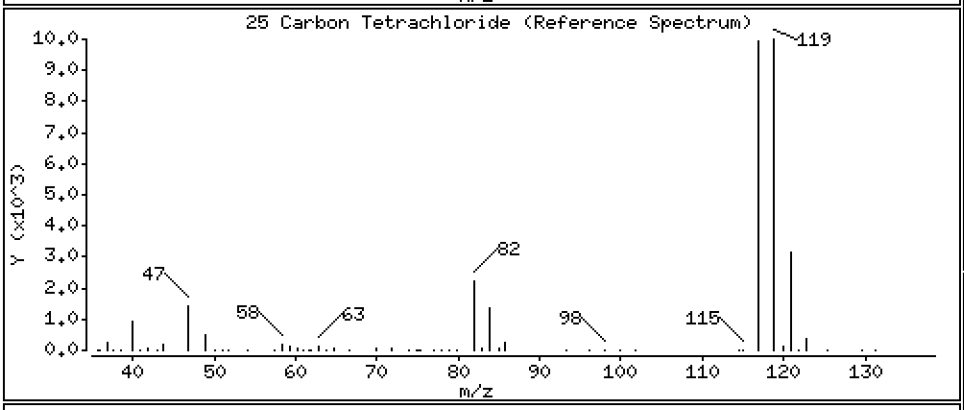
Column diameter: 0.18

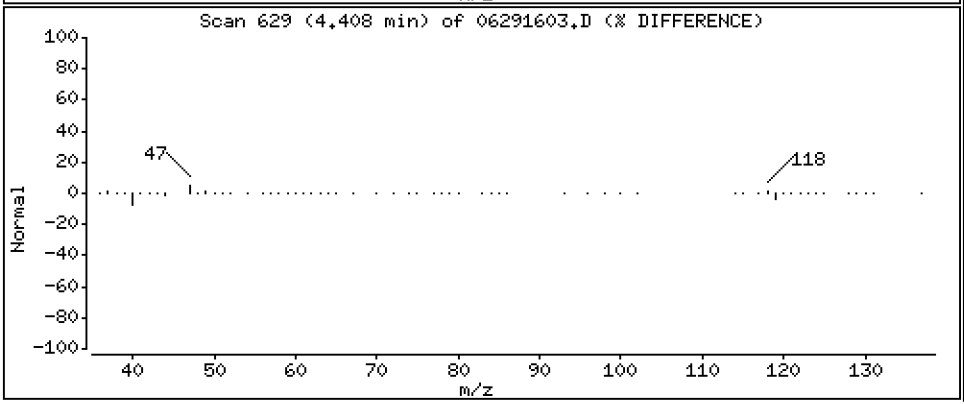
25 Carbon Tetrachloride

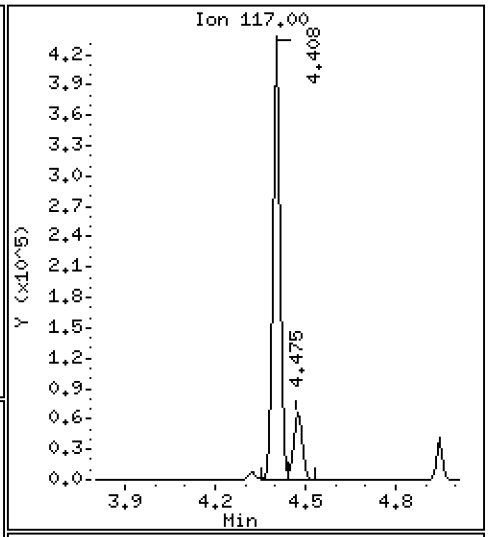
Concentration: 41.680 ug/Kg

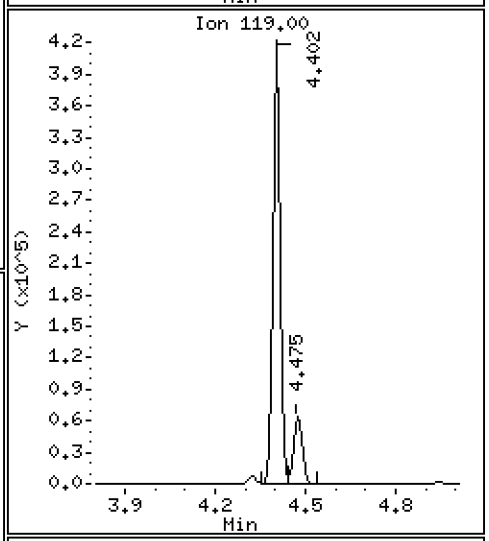


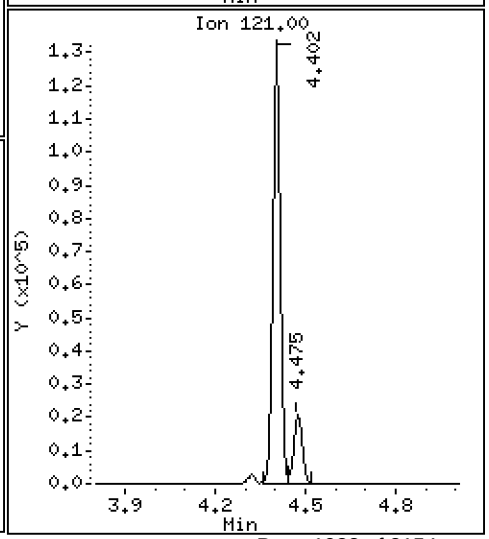












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

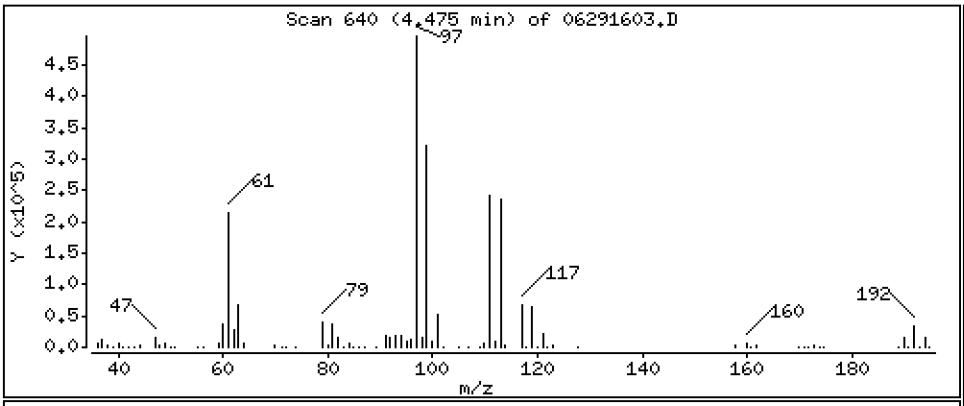
Operator: PB

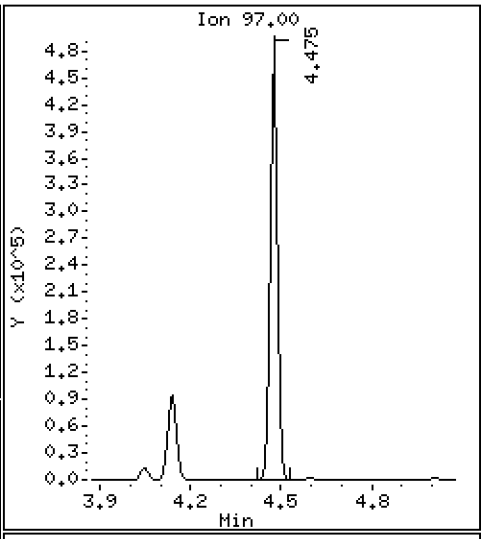
Column phase: RTXVMS

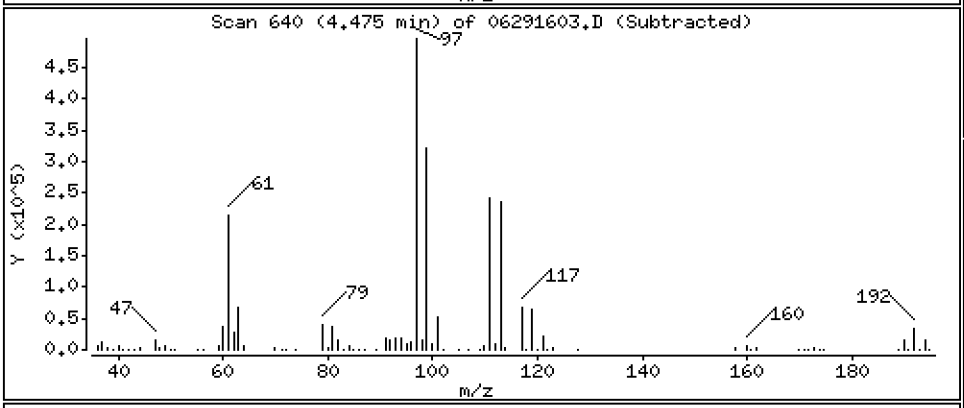
Column diameter: 0.18

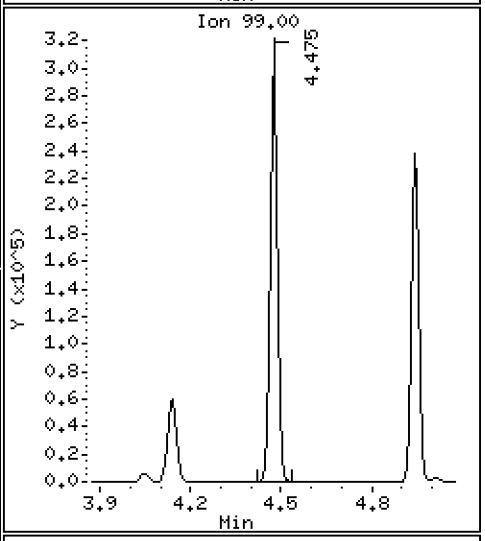
26 1,1,1-Trichloroethane

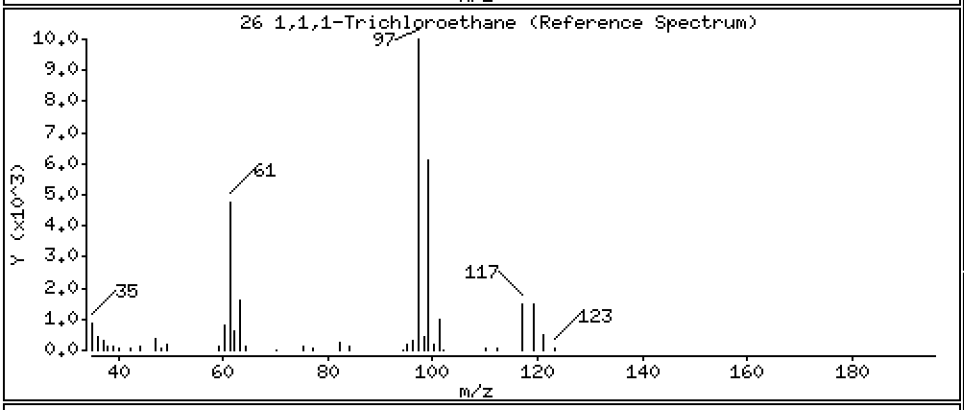
Concentration: 40.857 ug/Kg

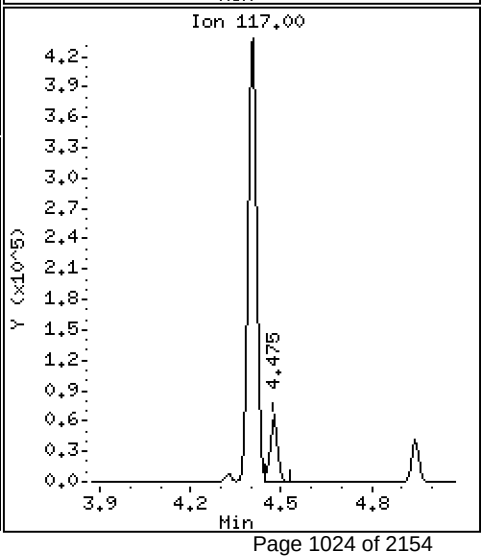


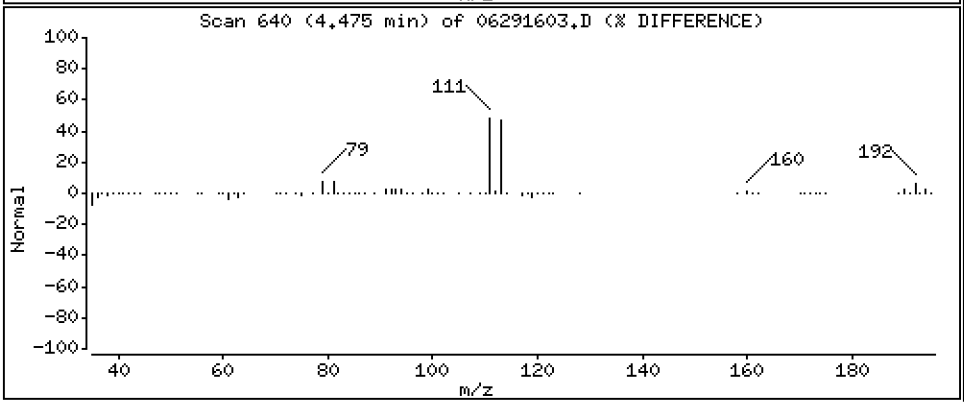












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

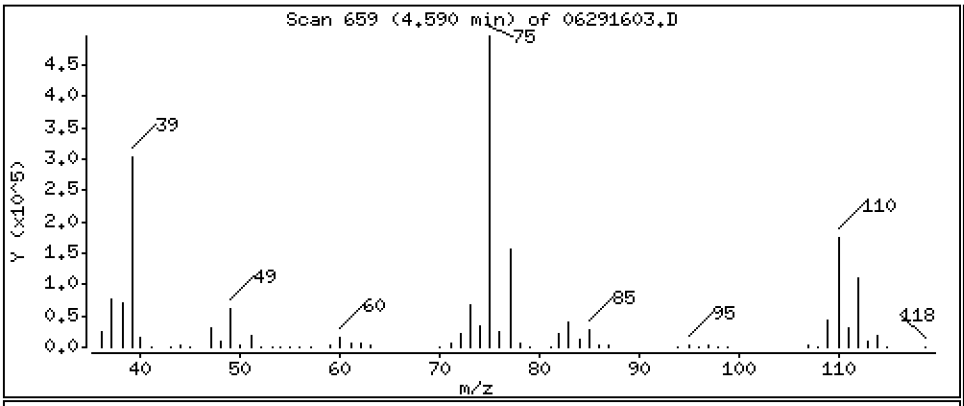
Operator: PB

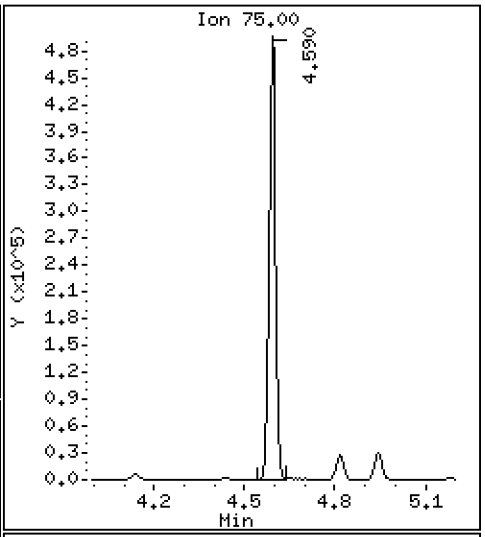
Column phase: RTXVMS

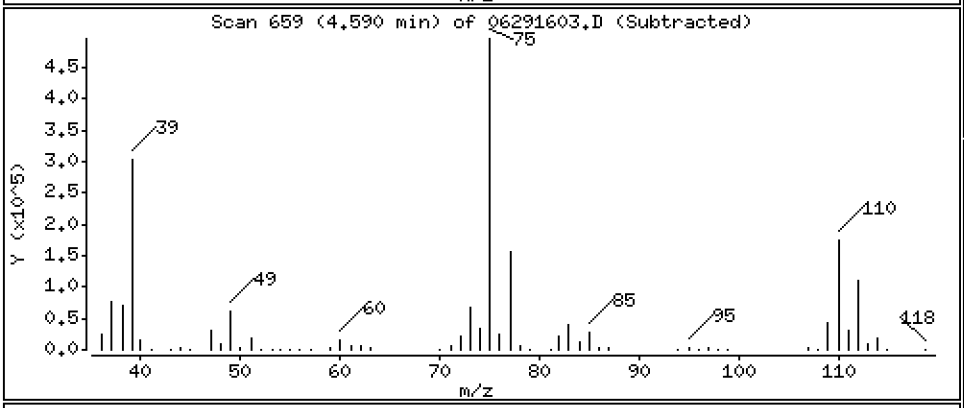
Column diameter: 0.18

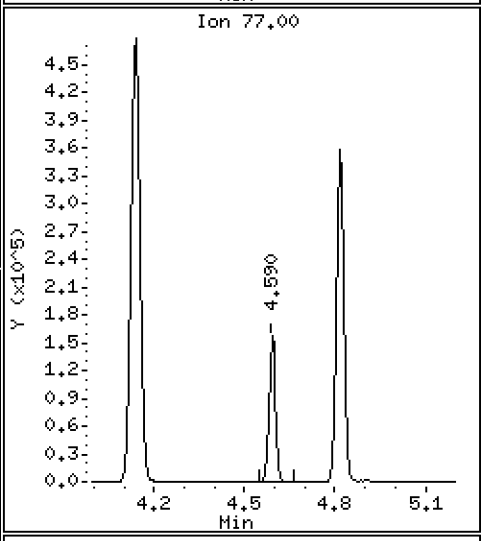
28 1,1-Dichloropropene

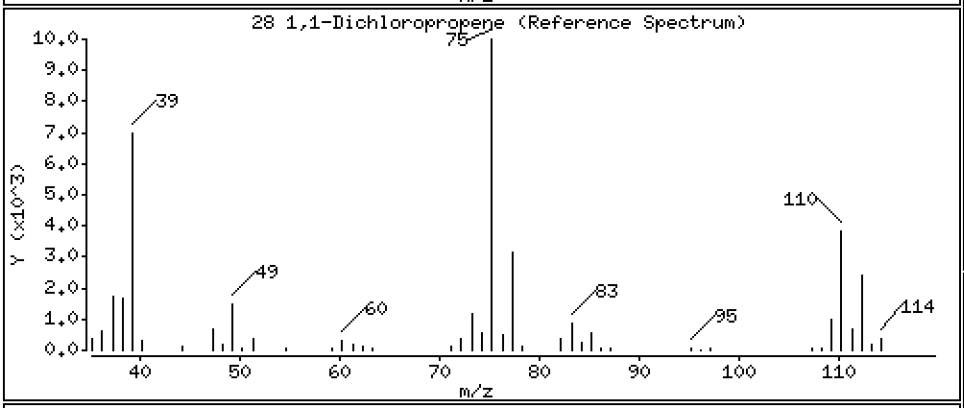
Concentration: 40.054 ug/Kg

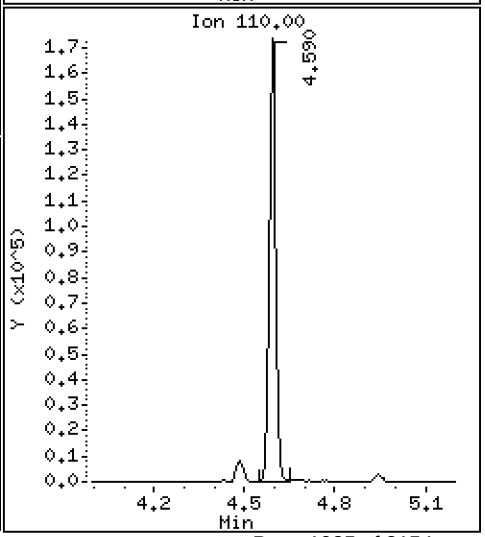


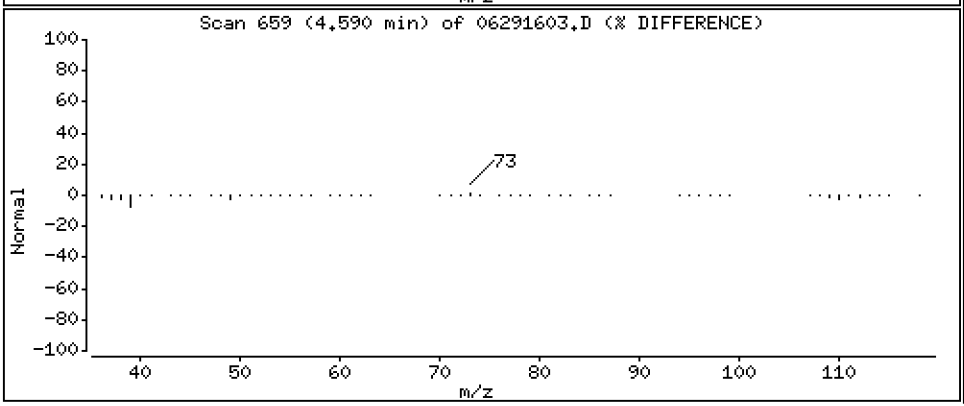












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

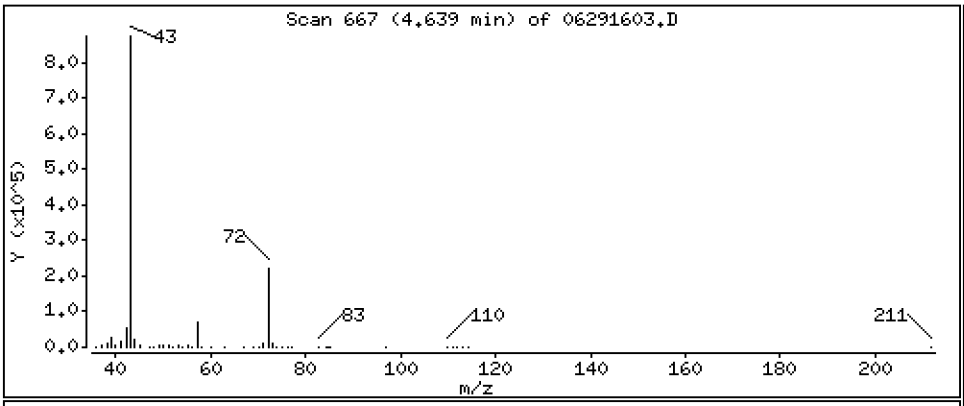
Operator: PB

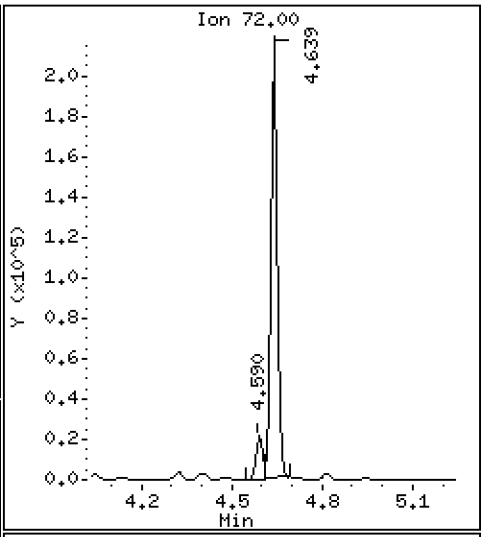
Column phase: RTXVMS

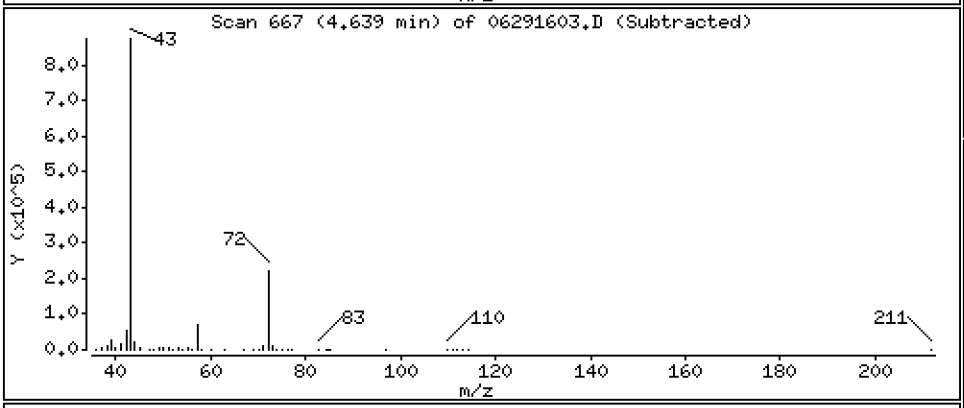
Column diameter: 0.18

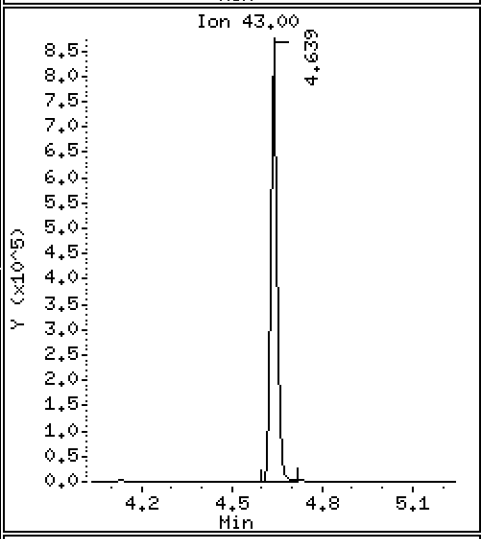
29 2-Butanone

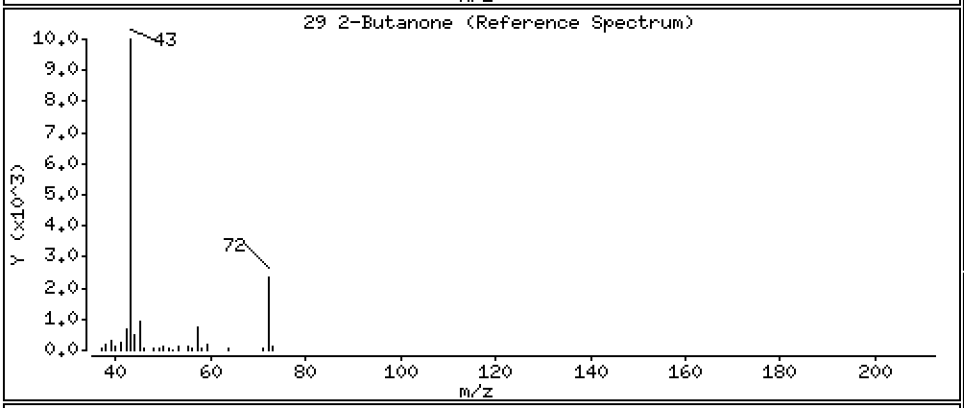
Concentration: 223.02 ug/Kg

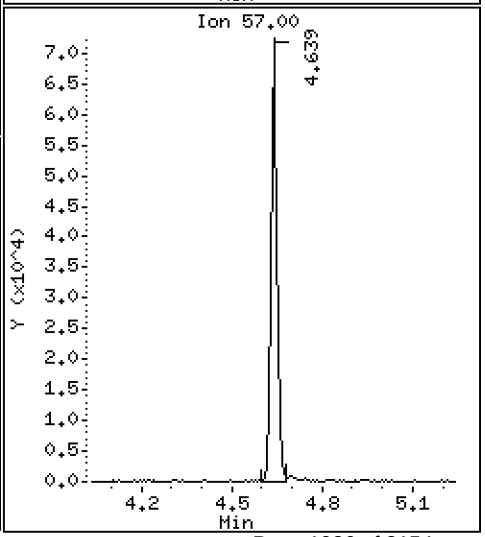


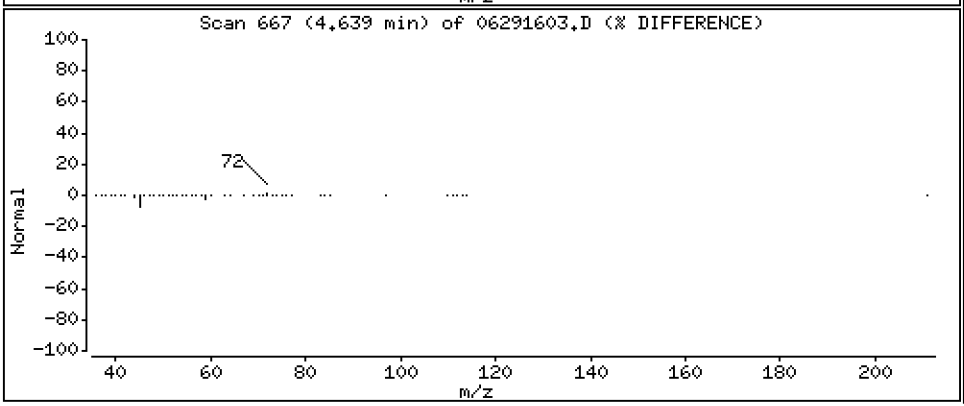












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

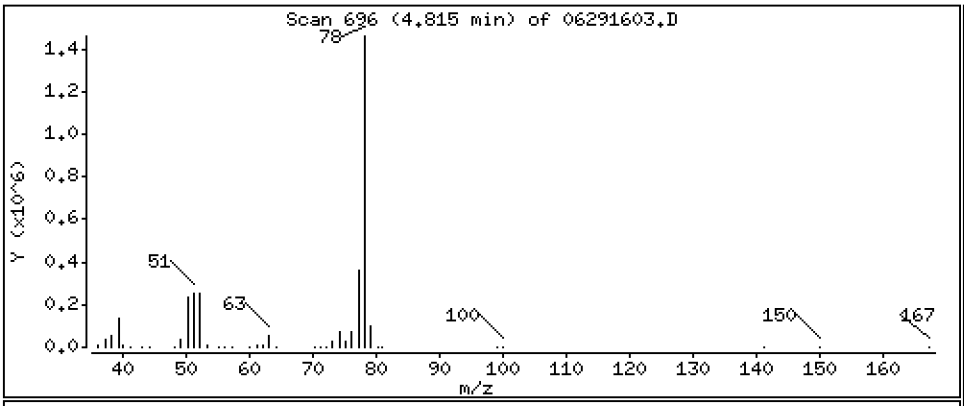
Operator: PB

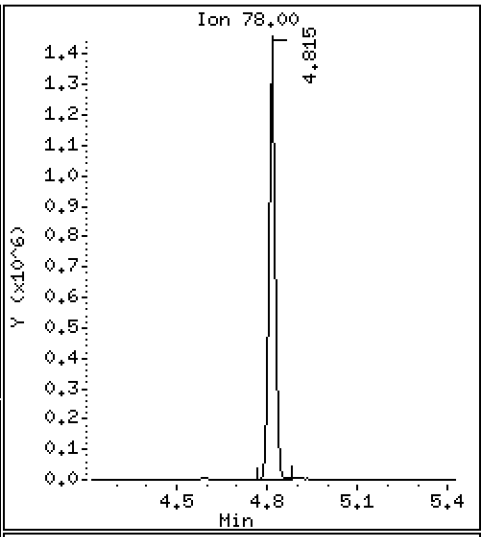
Column phase: RTXVMS

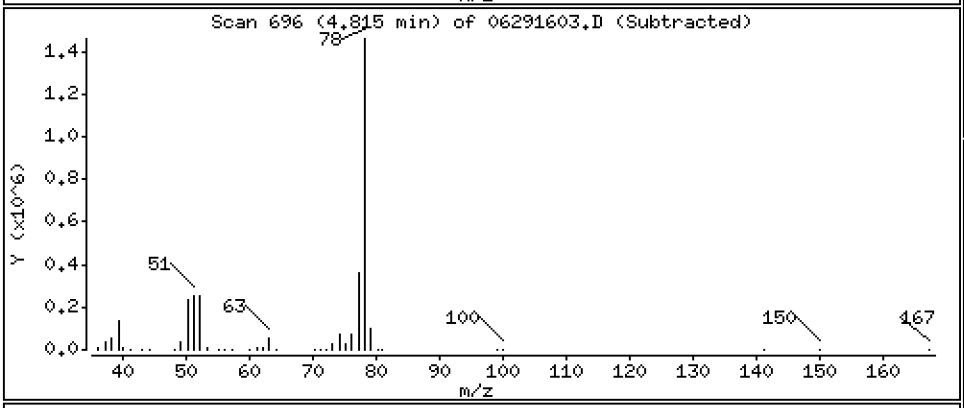
Column diameter: 0.18

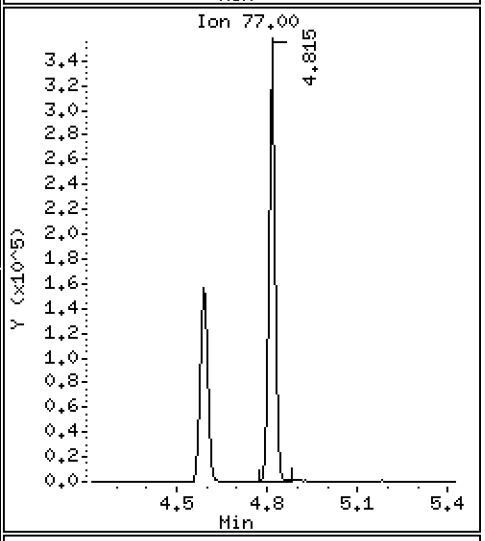
30 Benzene

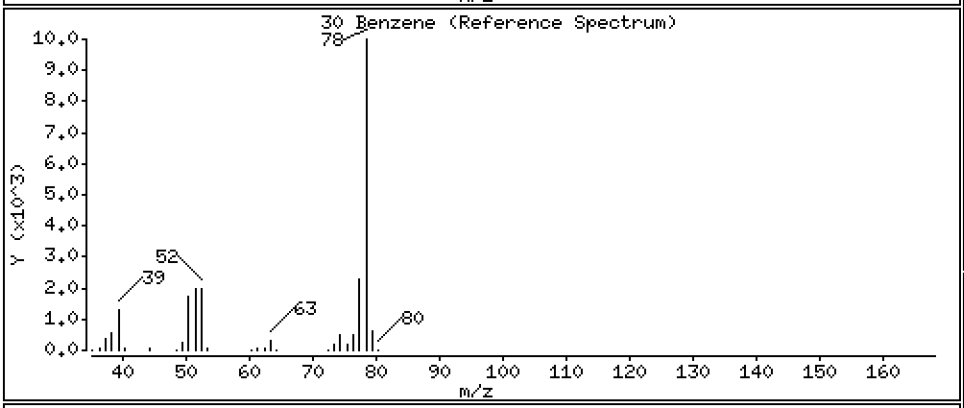
Concentration: 40.795 ug/Kg

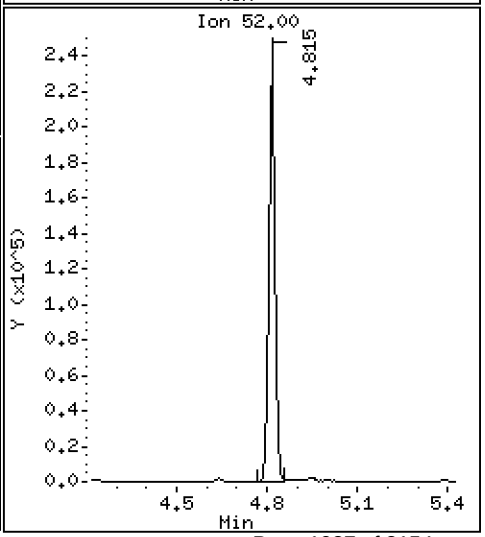


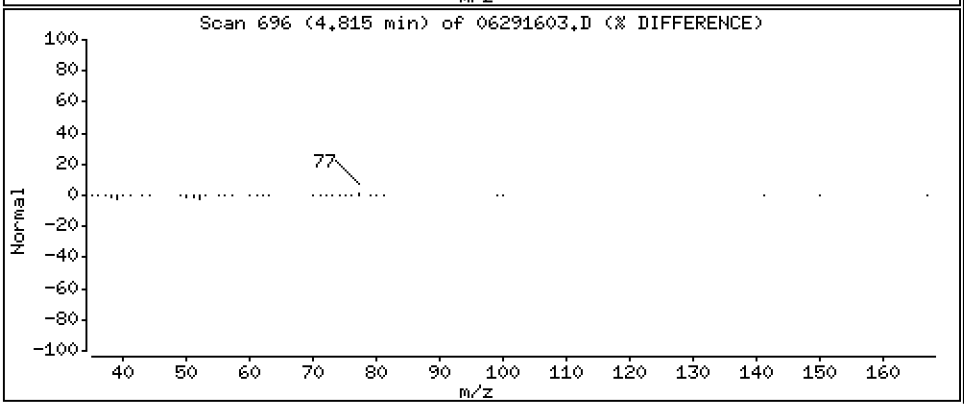












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

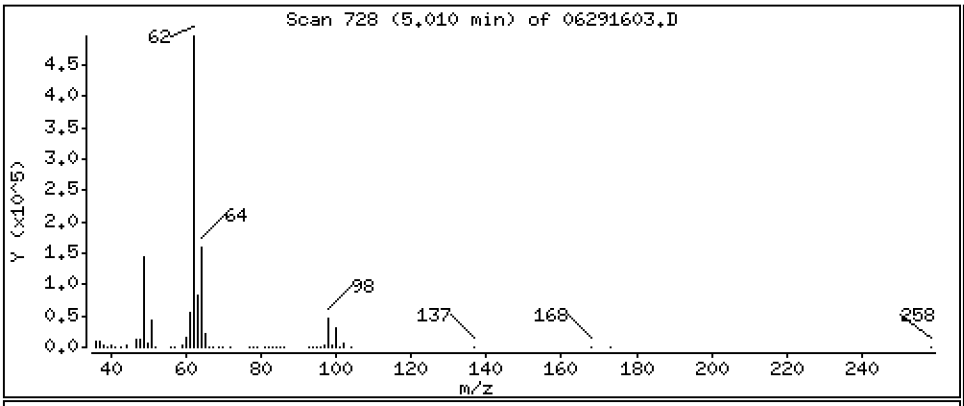
Operator: PB

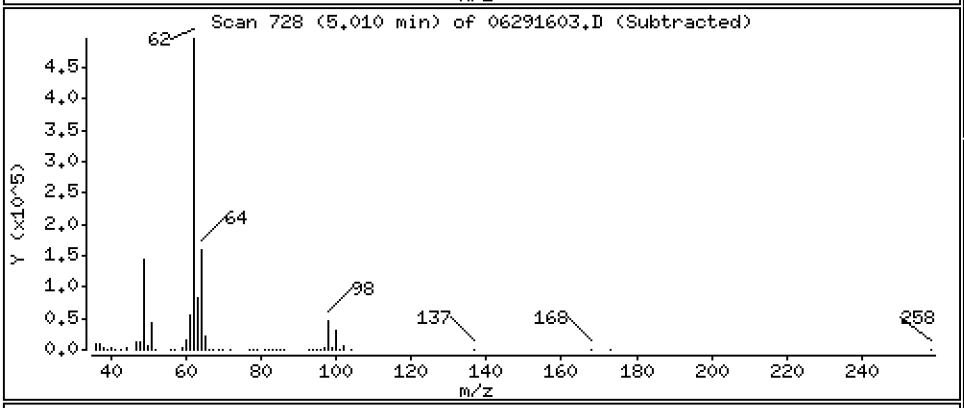
Column phase: RTXVMS

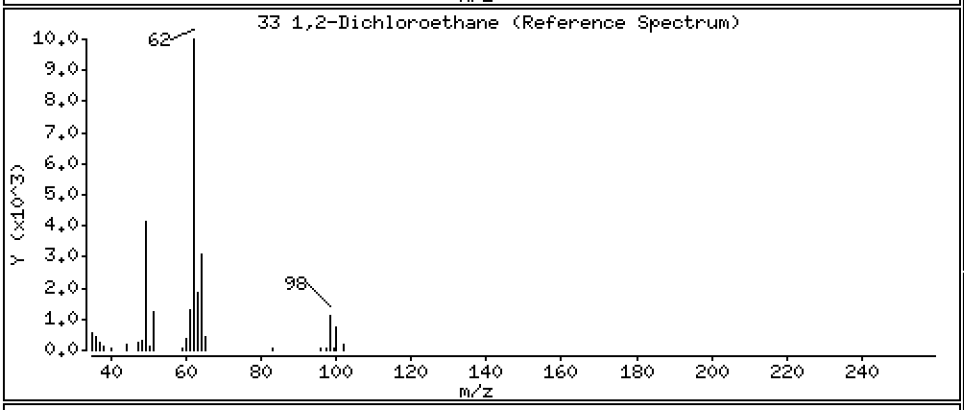
Column diameter: 0.18

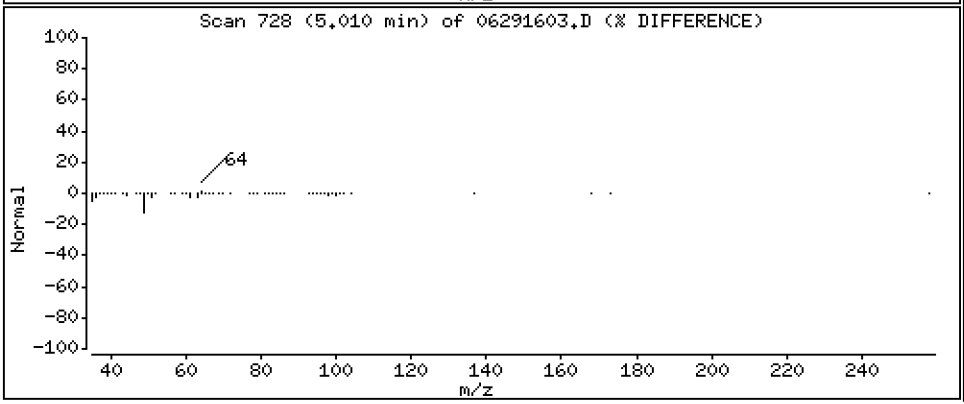
33 1,2-Dichloroethane

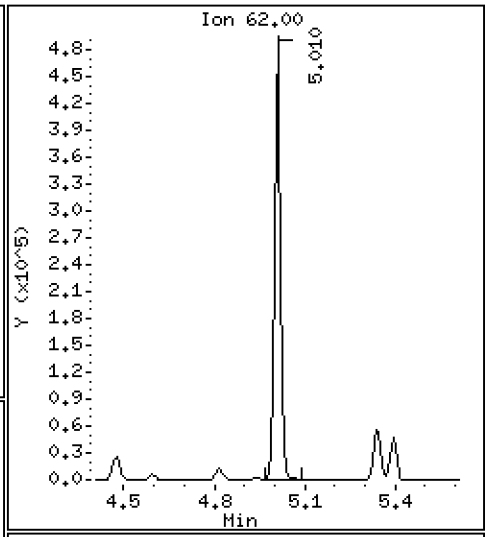
Concentration: 39.640 ug/Kg

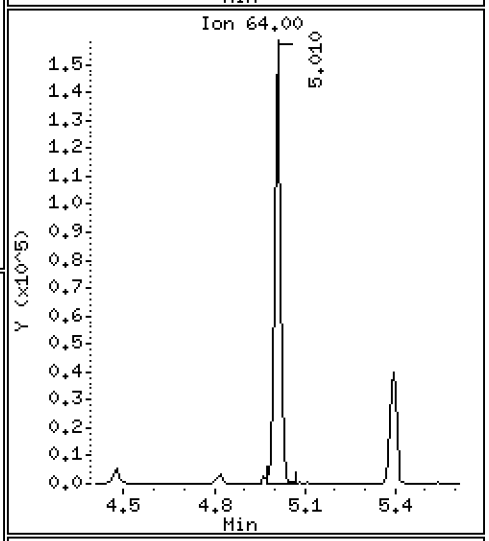


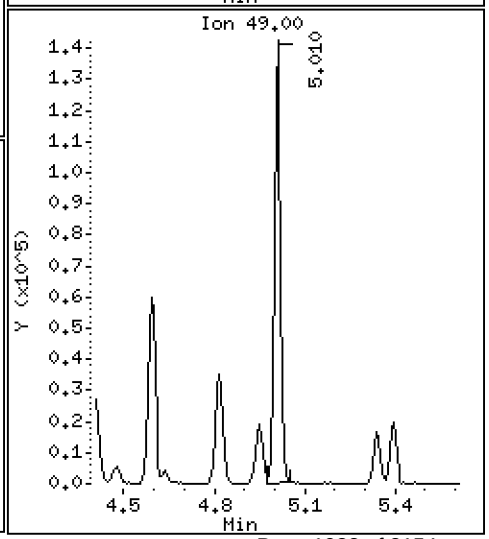












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

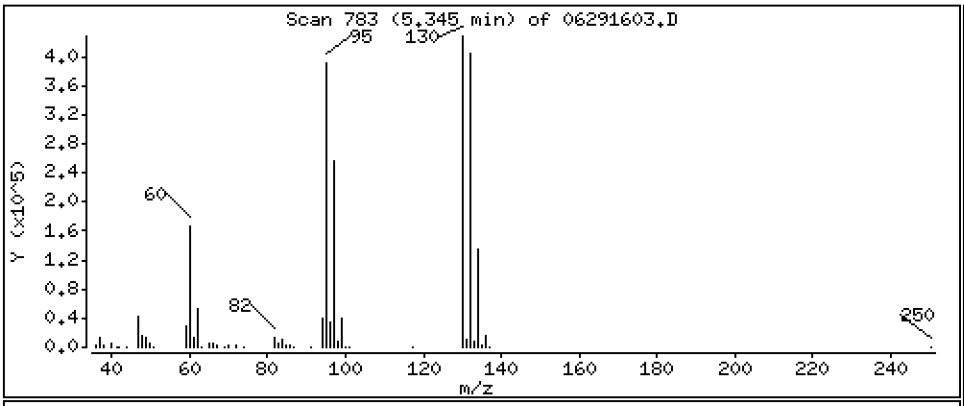
Operator: PB

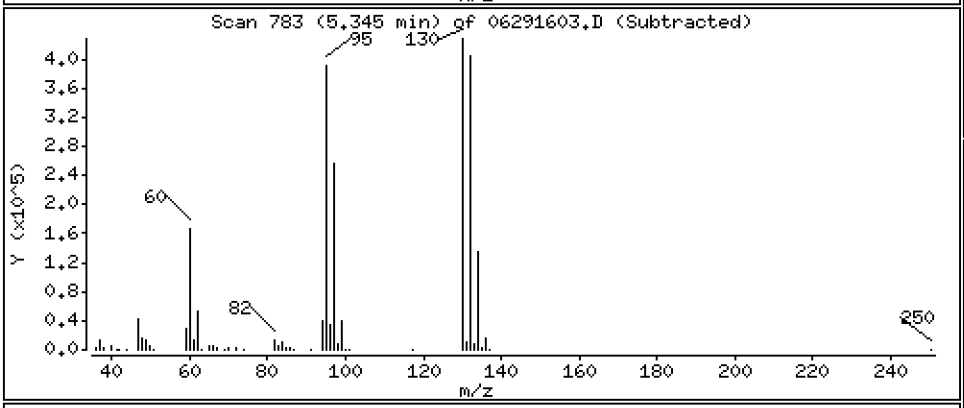
Column phase: RTXVMS

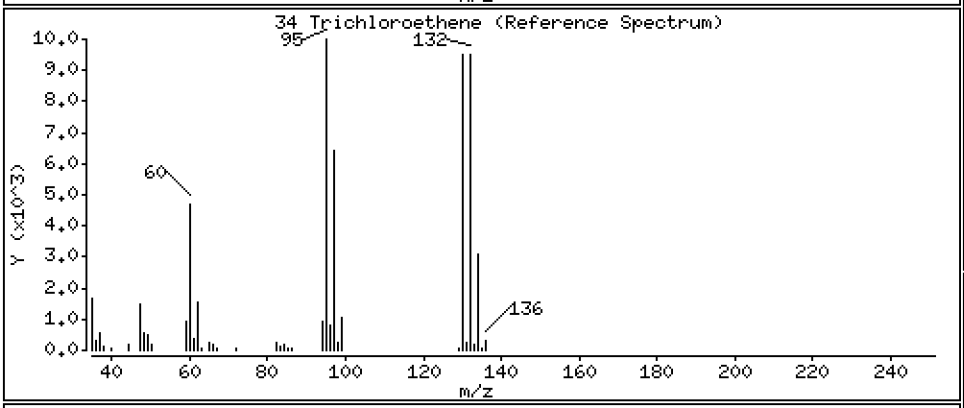
Column diameter: 0.18

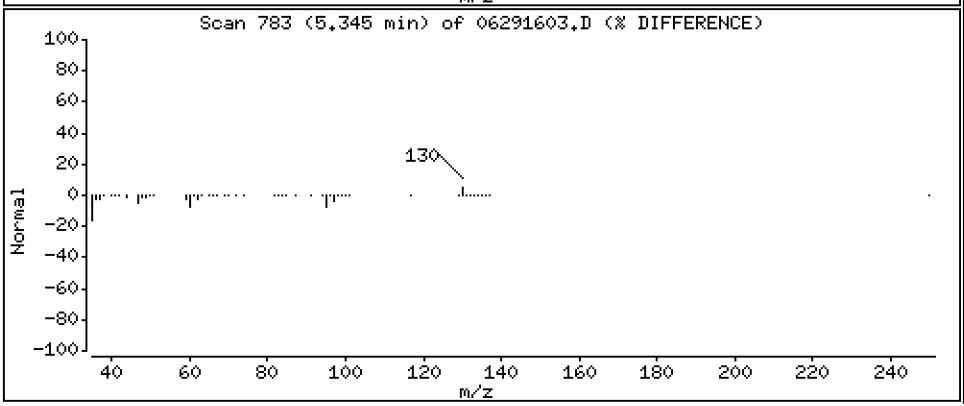
34 Trichloroethene

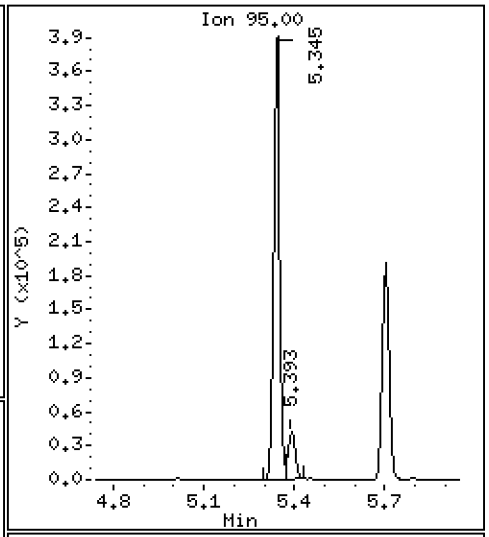
Concentration: 40.768 ug/Kg

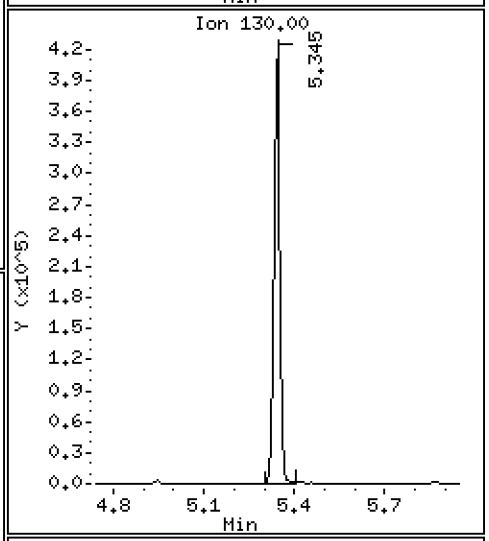


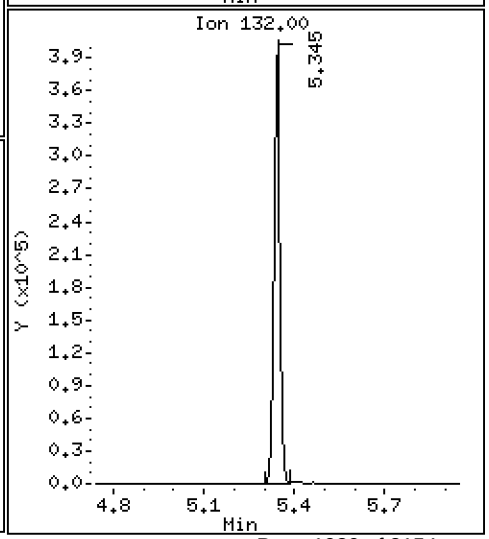












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

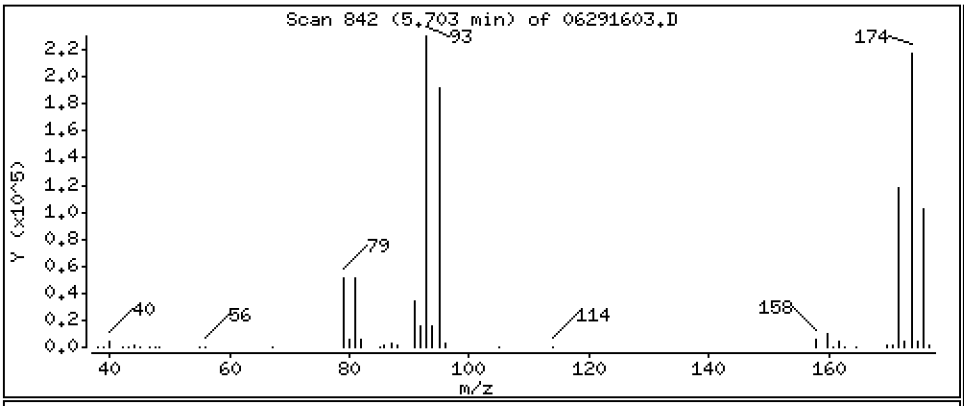
Operator: PB

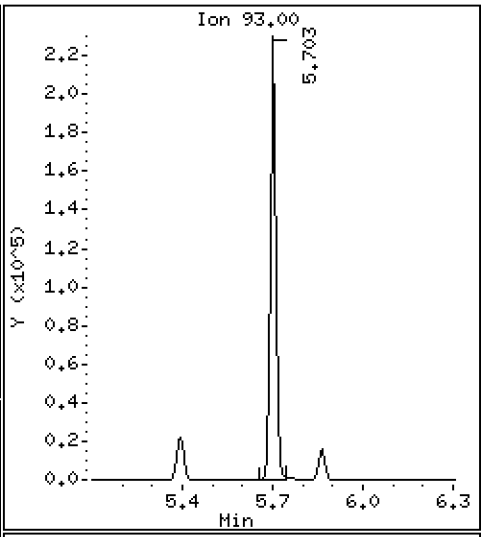
Column phase: RTXVMS

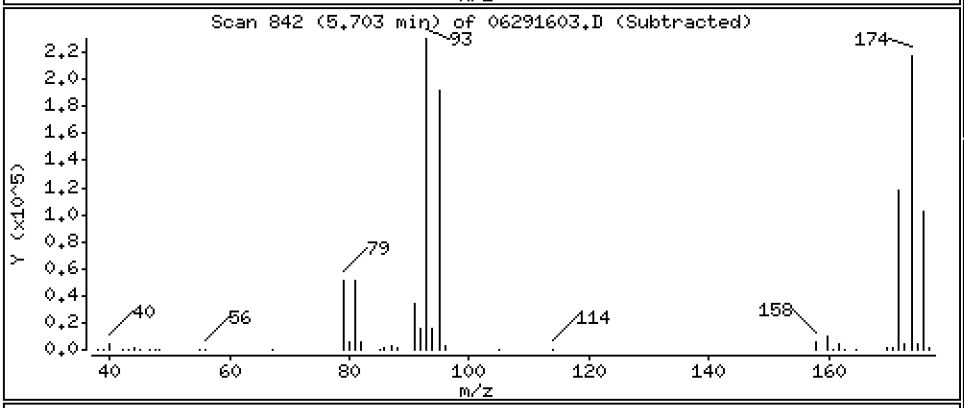
Column diameter: 0.18

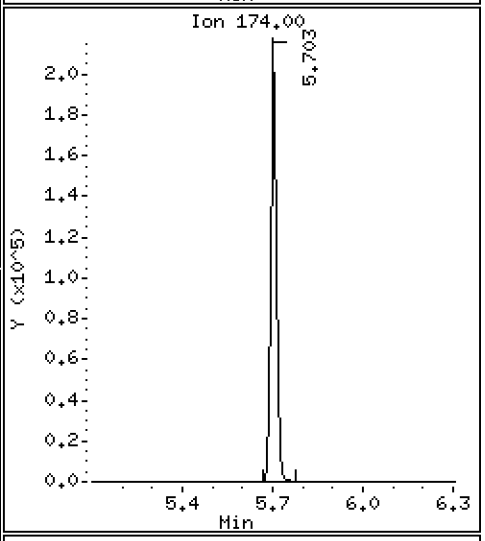
37 Dibromomethane

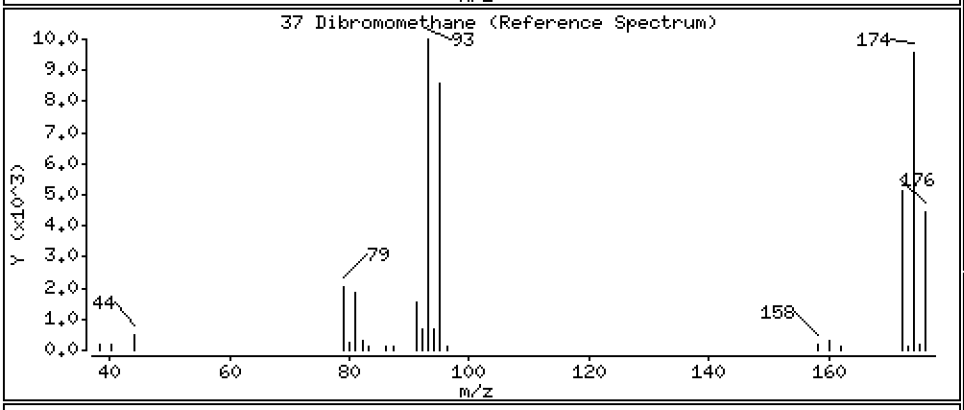
Concentration: 42.319 ug/Kg

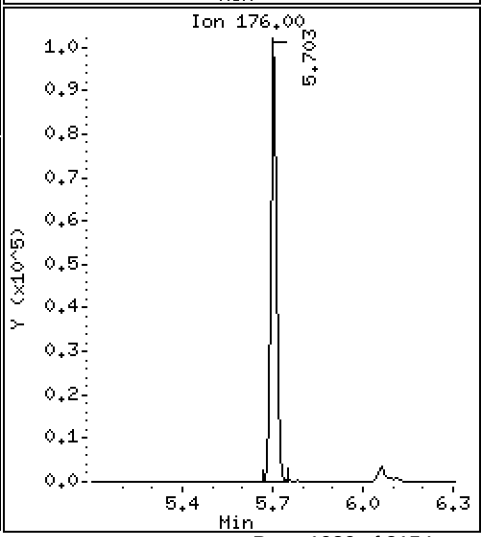


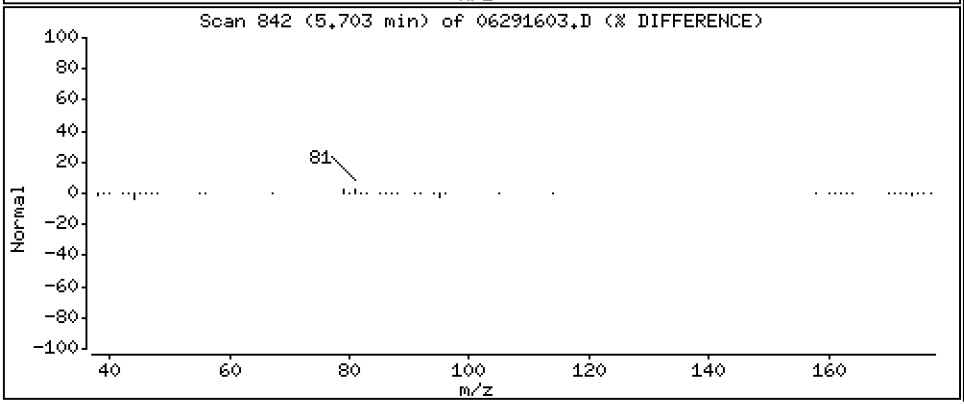












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

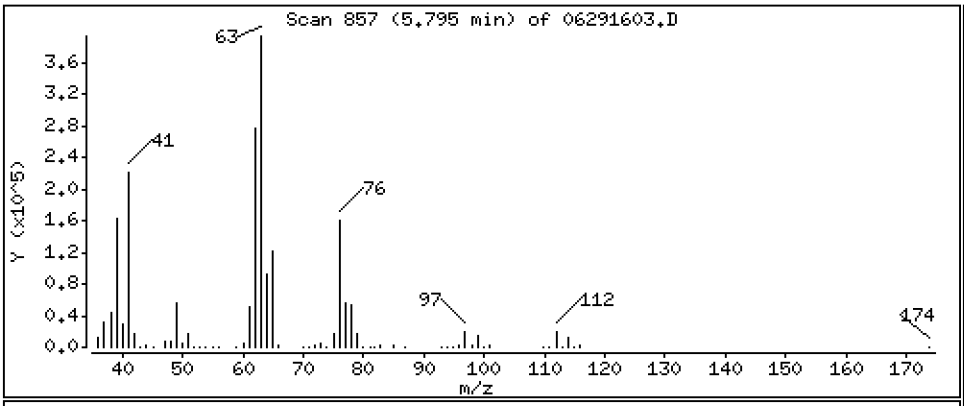
Operator: PB

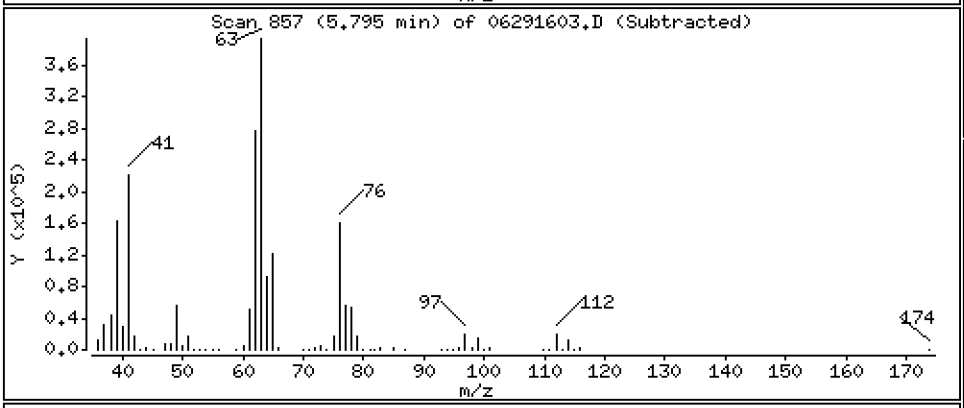
Column phase: RTXVMS

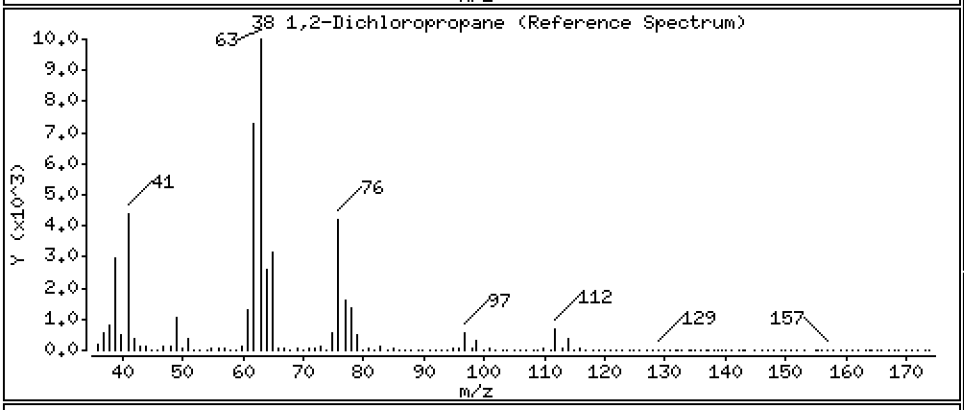
Column diameter: 0.18

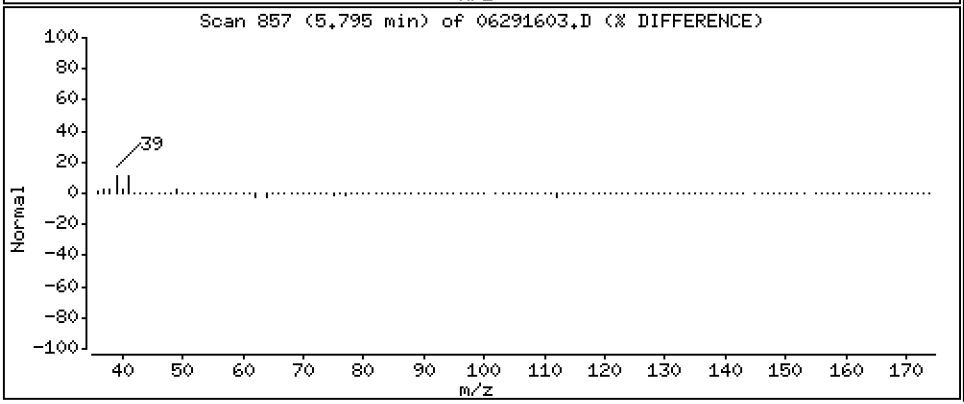
38 1,2-Dichloropropane

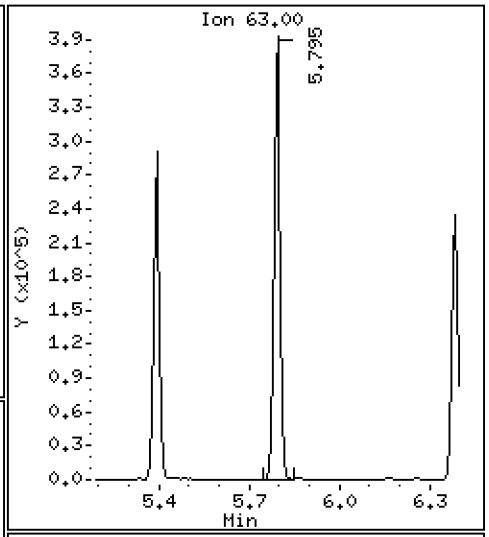
Concentration: 40.497 ug/Kg

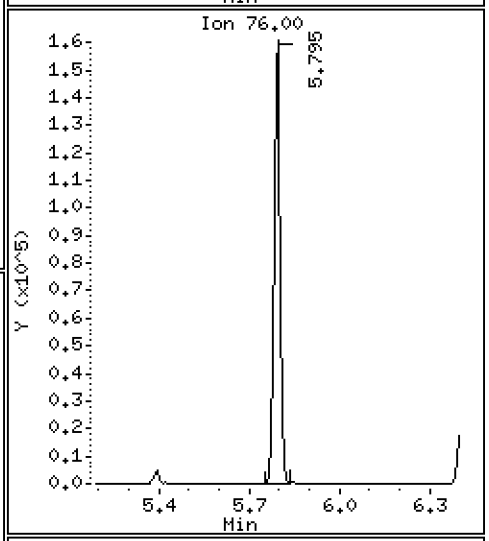


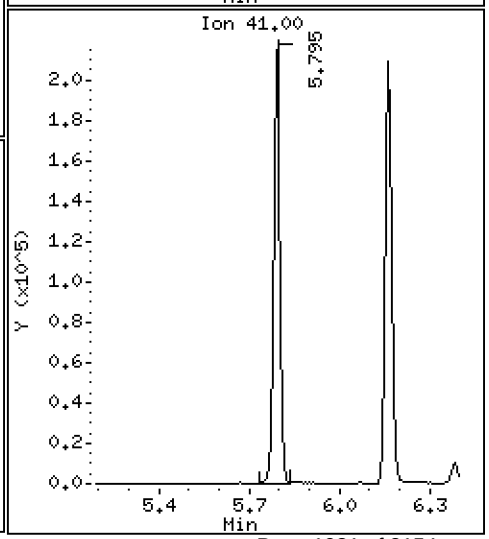












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

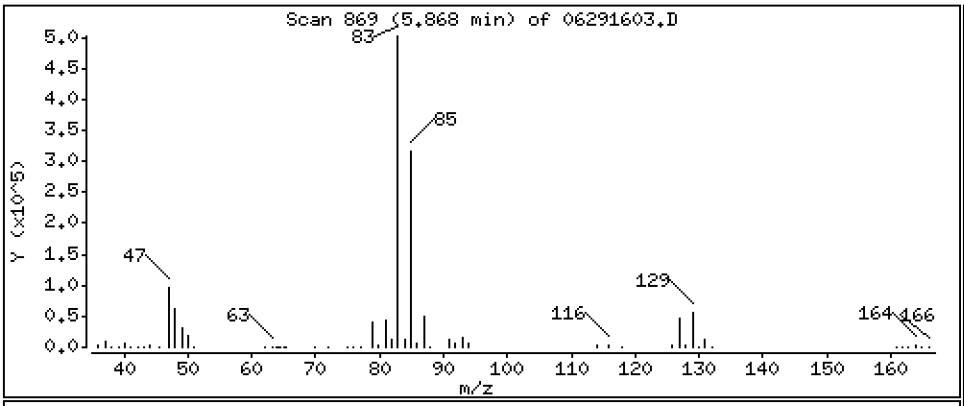
Operator: PB

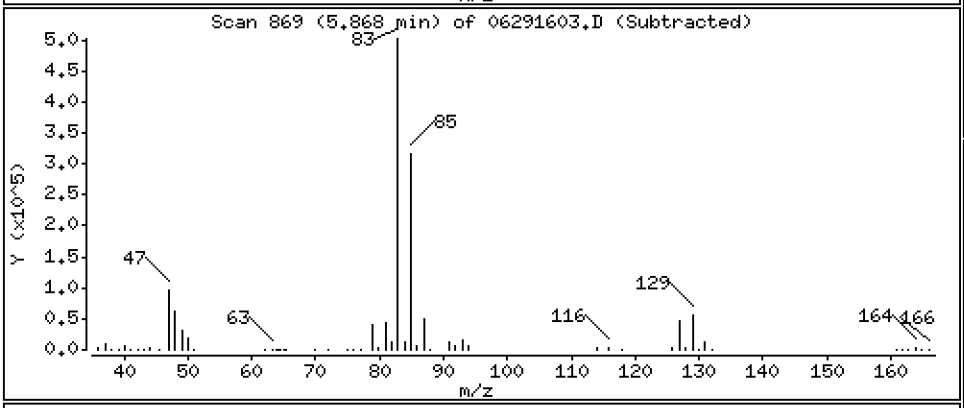
Column phase: RTXVMS

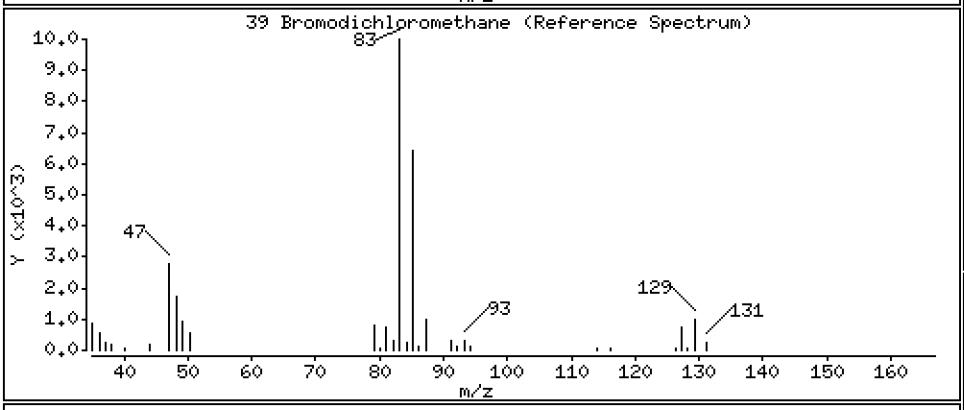
Column diameter: 0.18

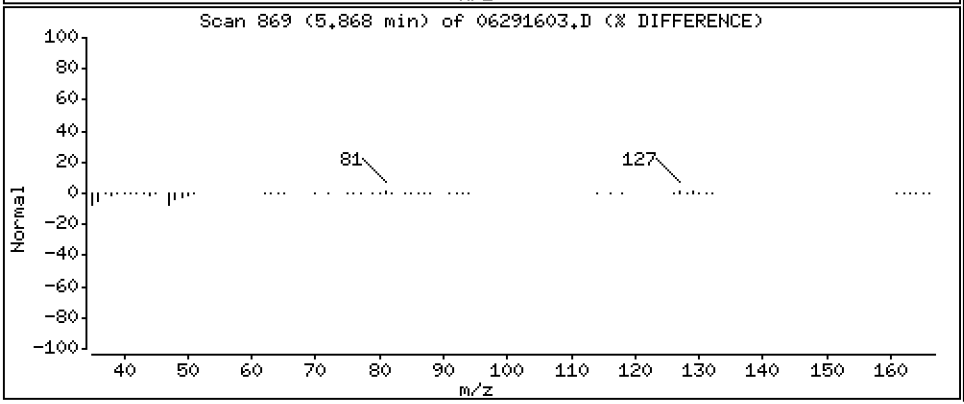
39 Bromodichloromethane

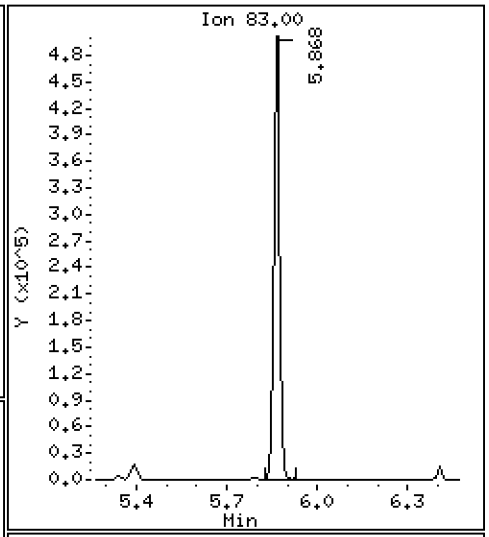
Concentration: 42.571 ug/Kg

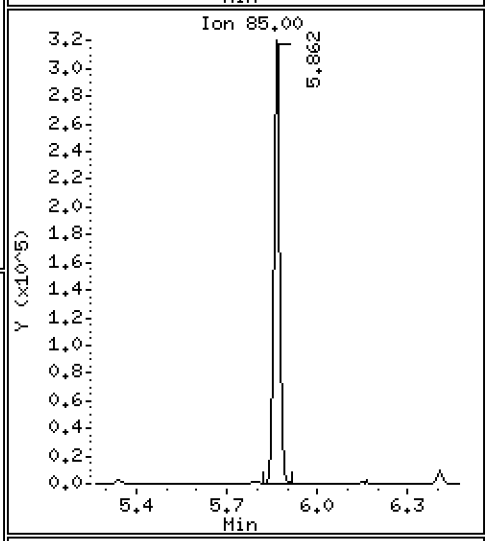


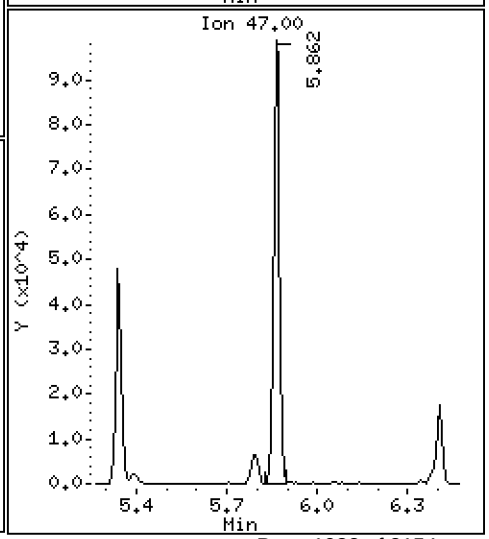












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

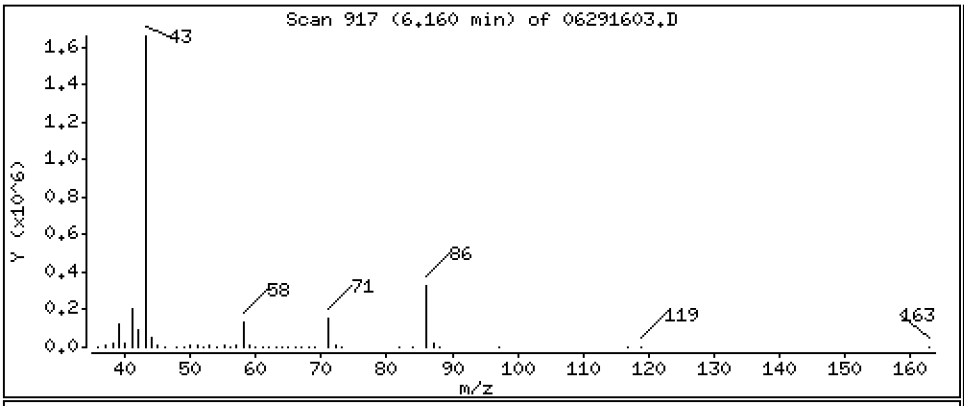
Operator: PB

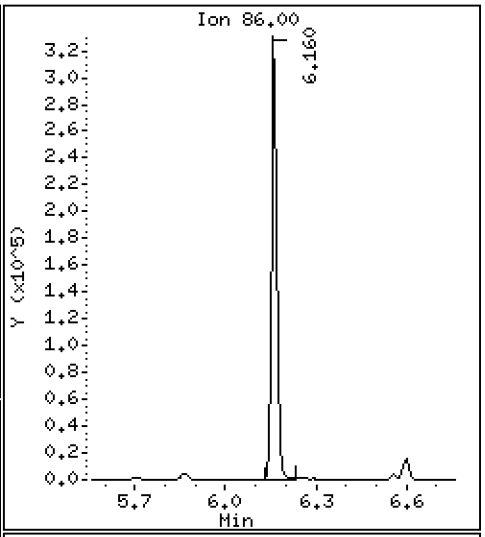
Column phase: RTXVMS

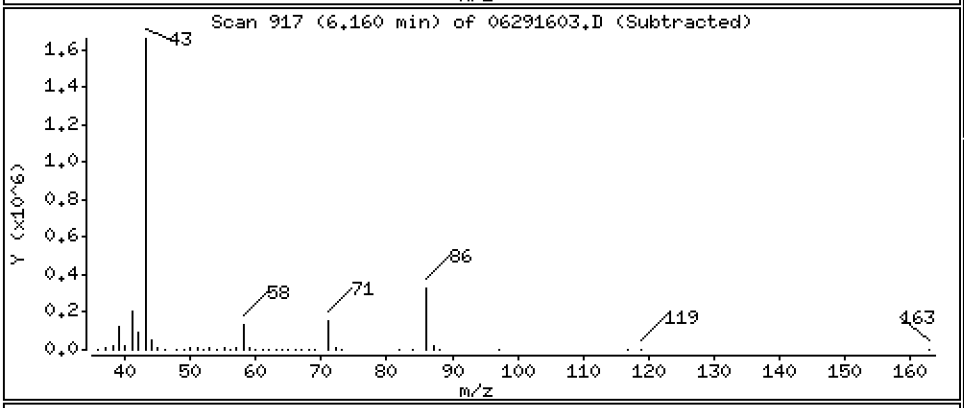
Column diameter: 0.18

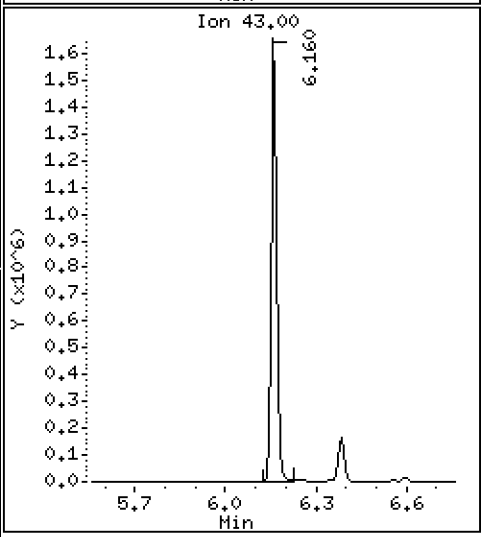
172 2-Pentanone

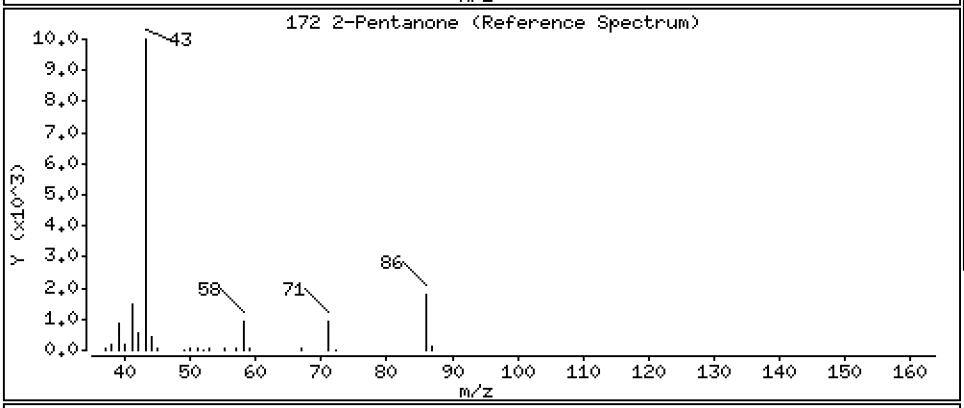
Concentration: 218.17 ug/Kg

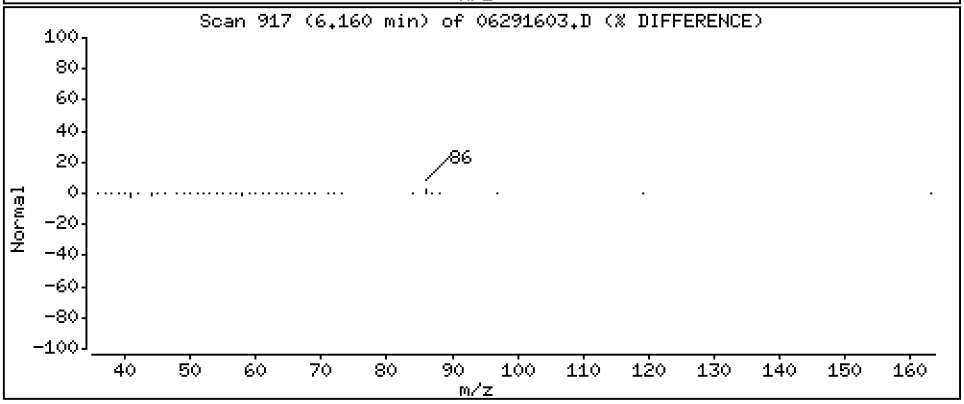












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

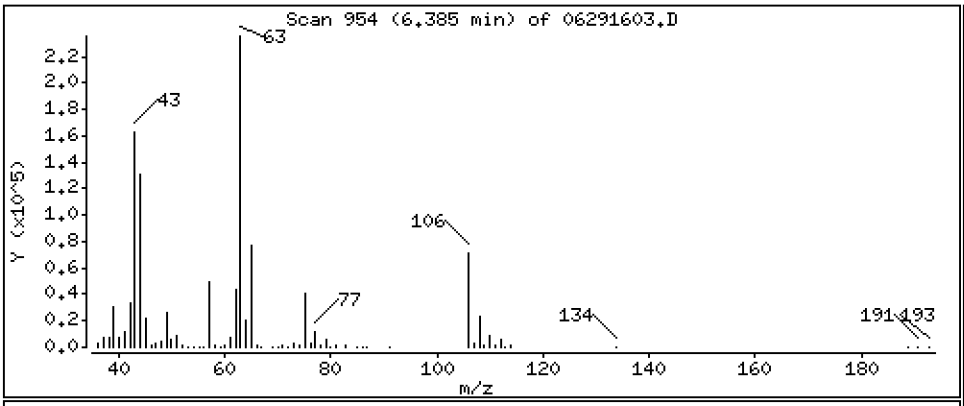
Operator: PB

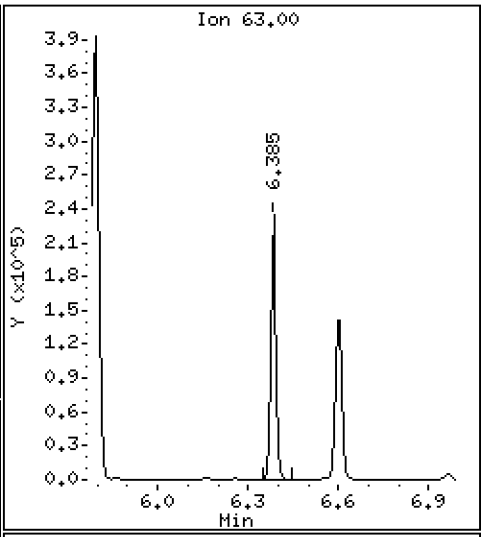
Column phase: RTXVMS

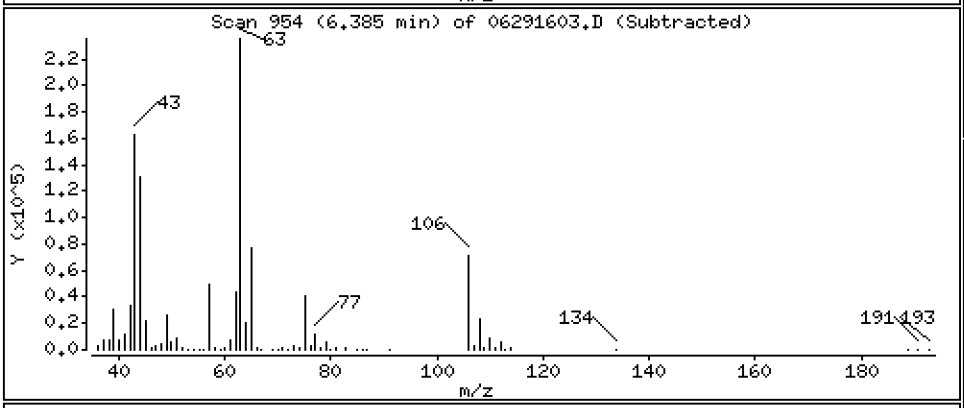
Column diameter: 0.18

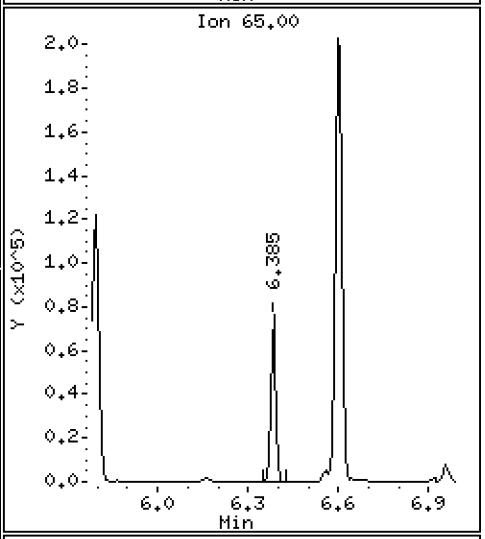
40 2-Chloroethyl Vinyl Ether

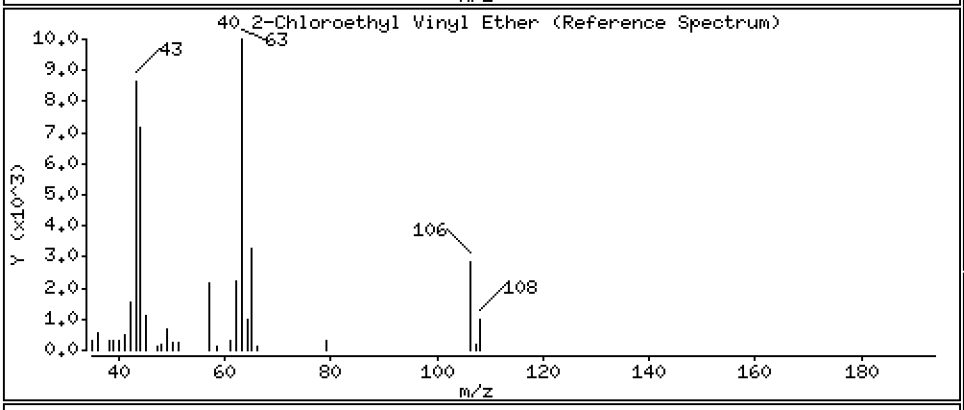
Concentration: 50.044 ug/Kg

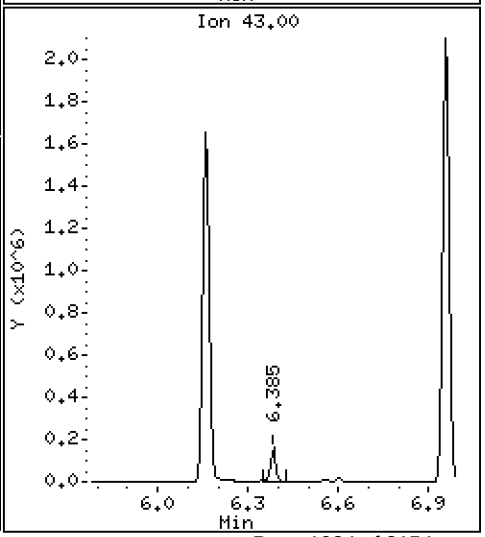


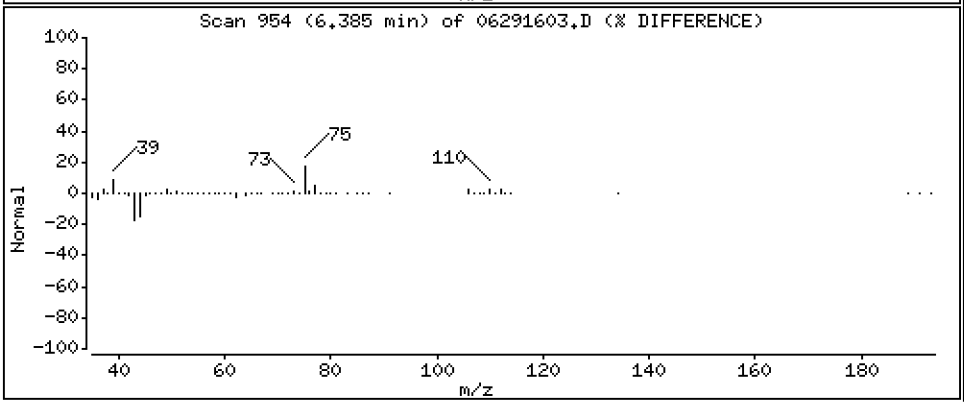












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

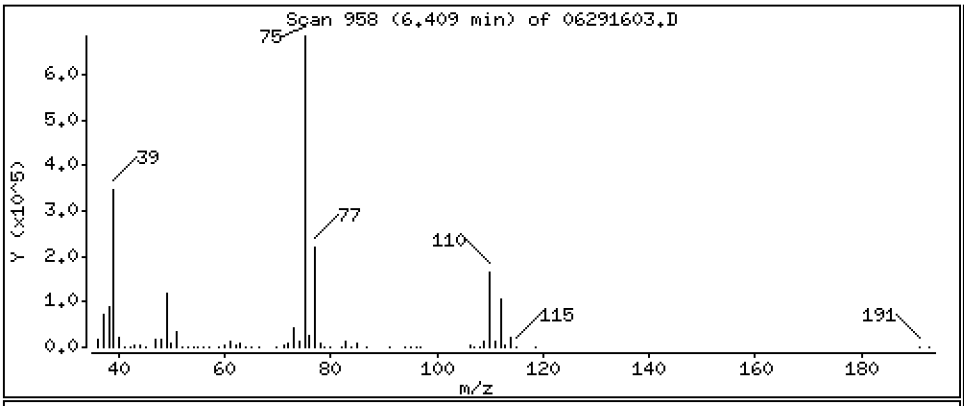
Operator: PB

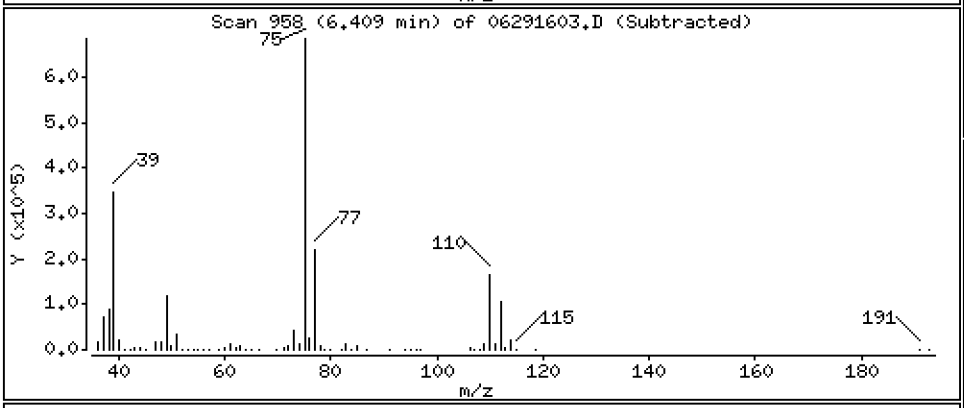
Column phase: RTXVMS

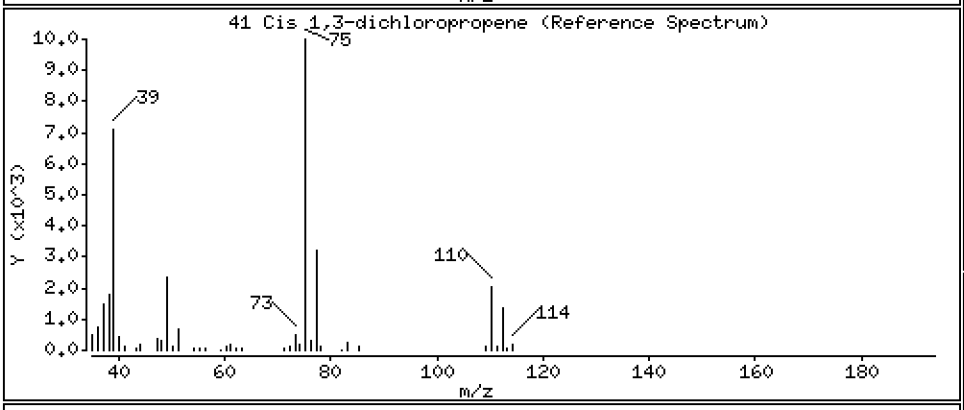
Column diameter: 0.18

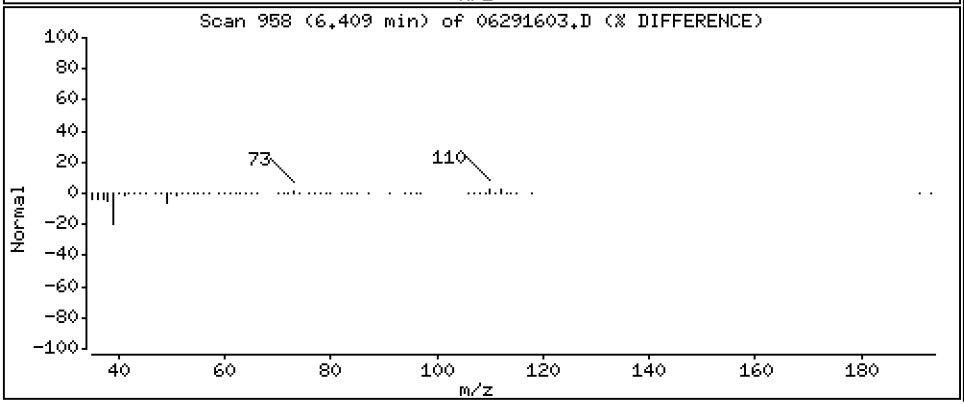
41 Cis 1,3-dichloropropene

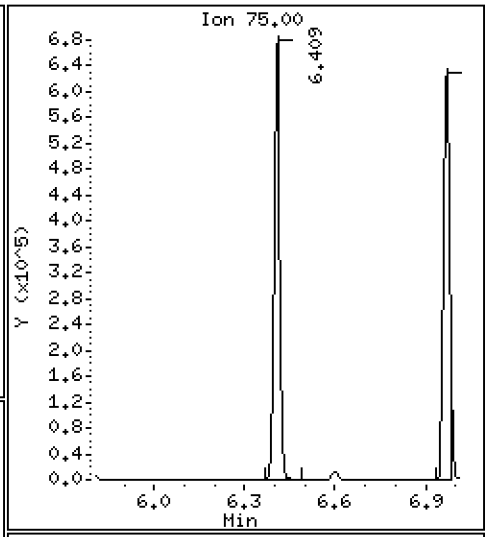
Concentration: 42.174 ug/Kg

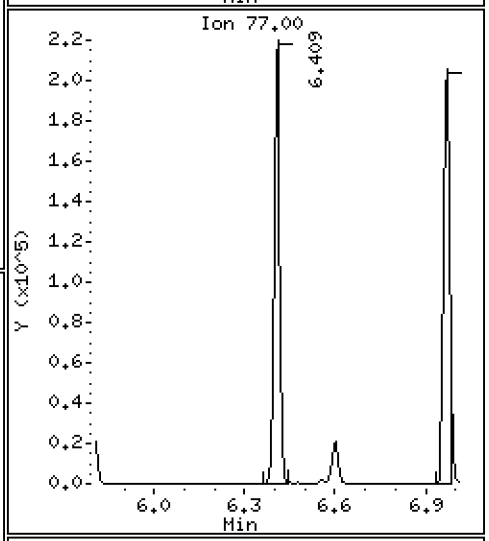


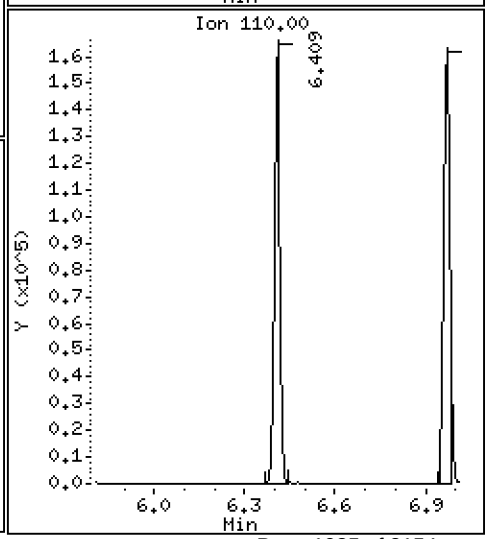












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

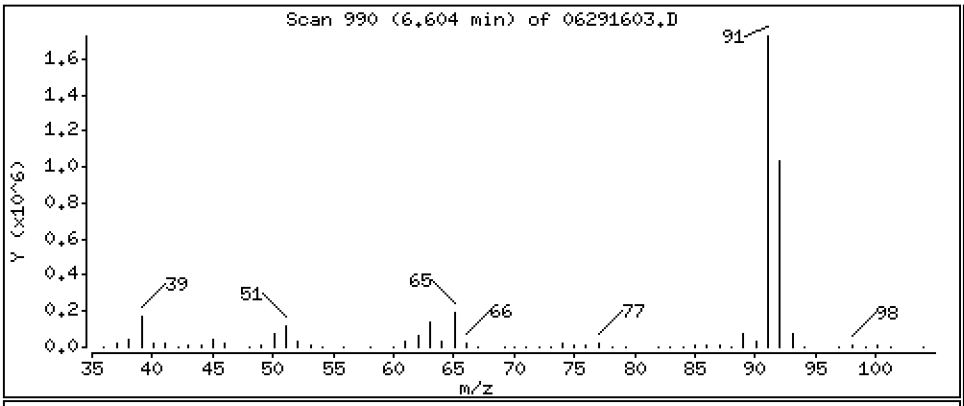
Operator: PB

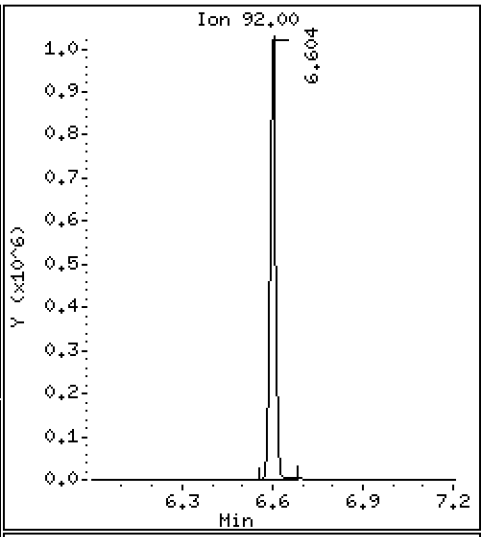
Column phase: RTXVMS

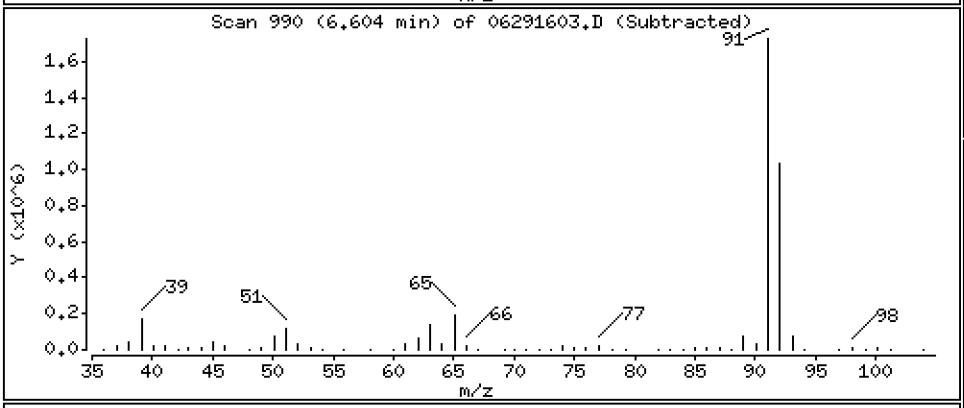
Column diameter: 0.18

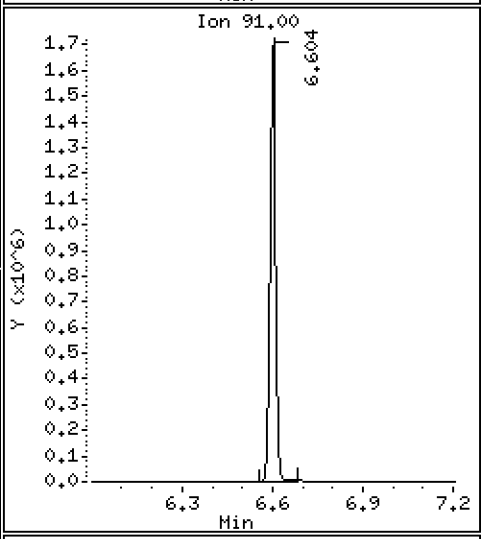
43 Toluene

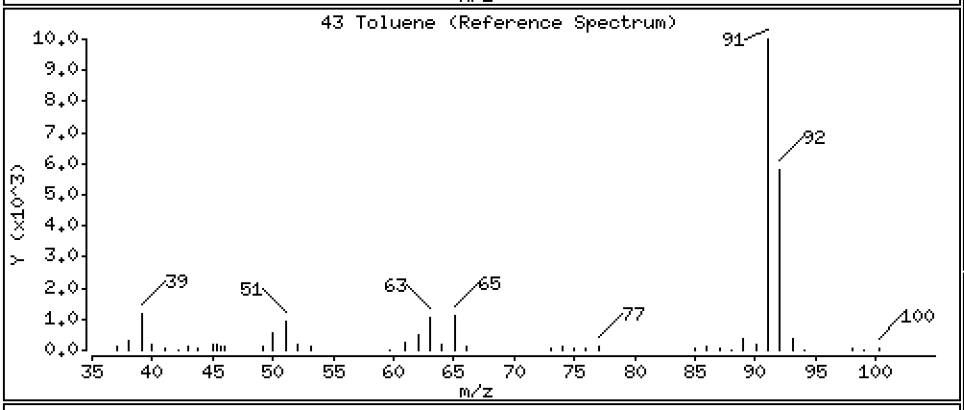
Concentration: 40.371 ug/Kg

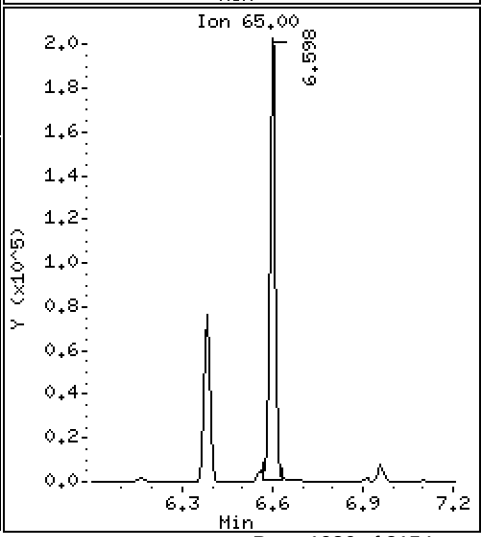


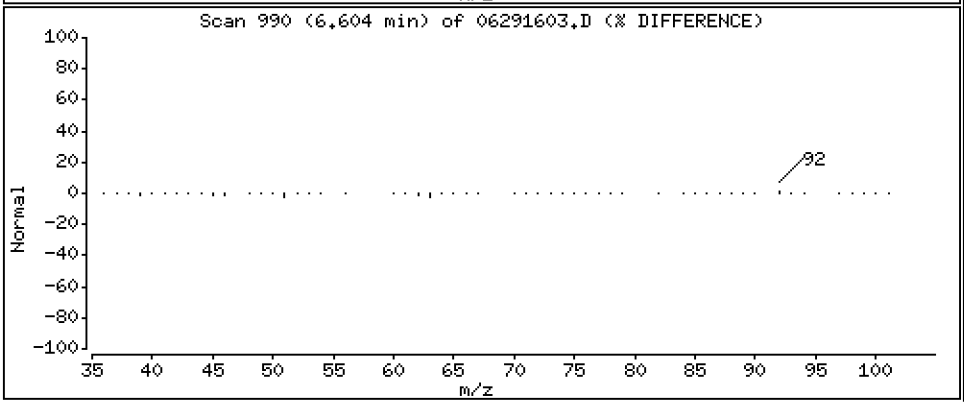












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

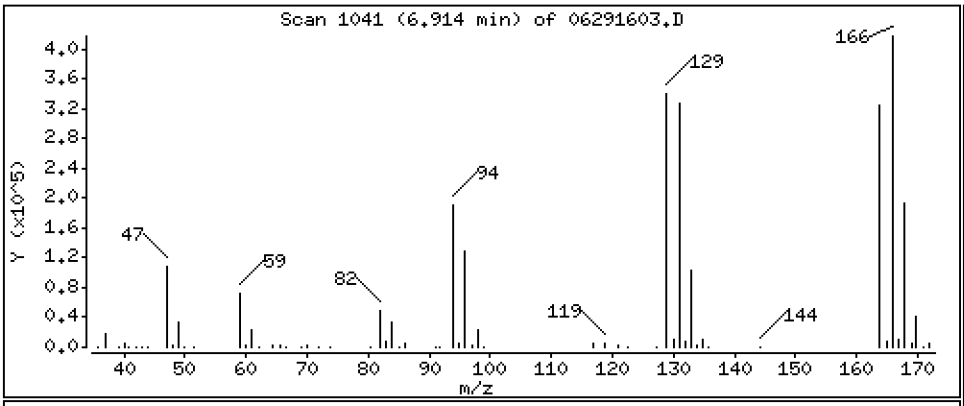
Operator: PB

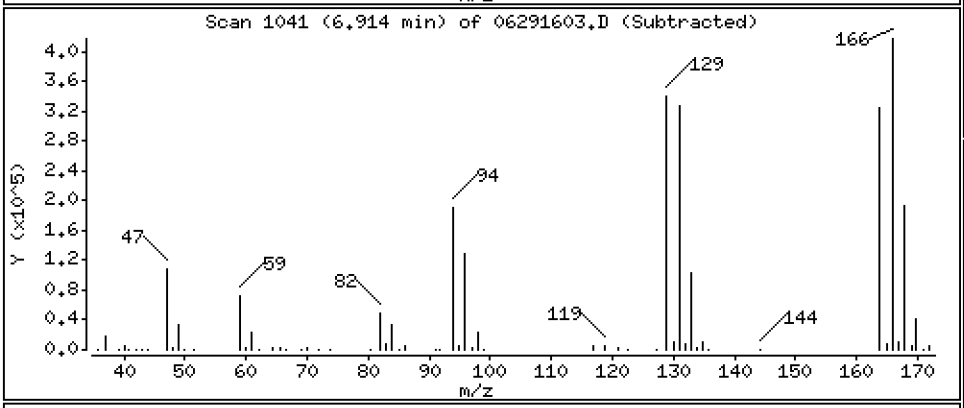
Column phase: RTXVMS

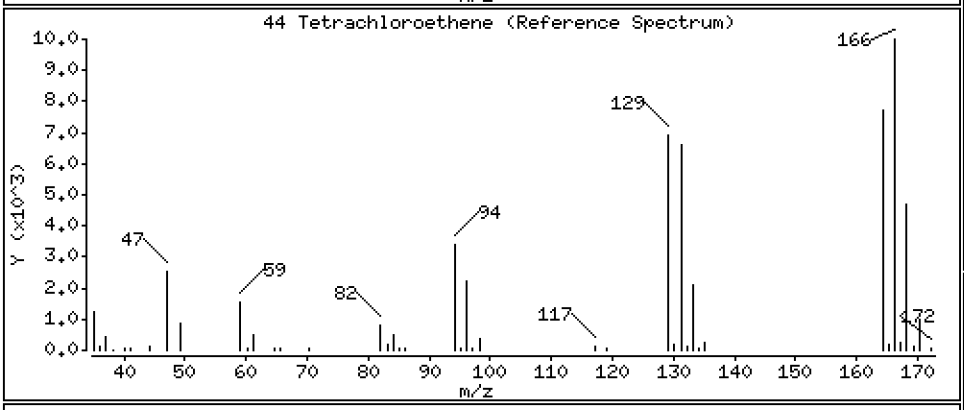
Column diameter: 0.18

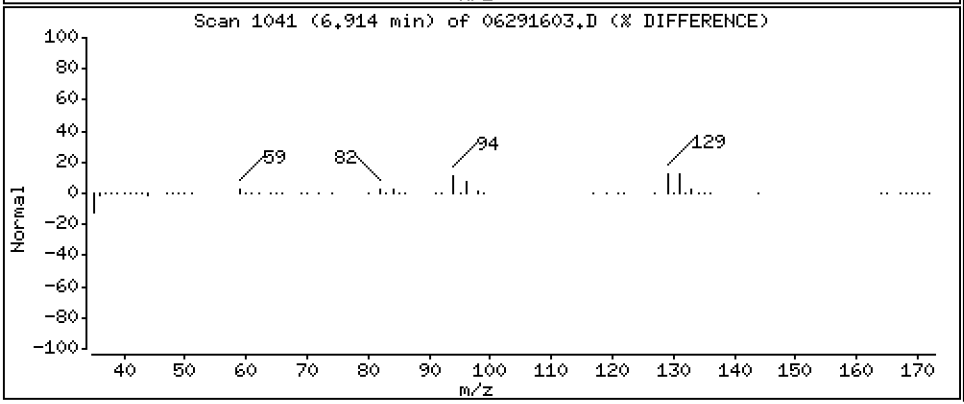
44 Tetrachloroethene

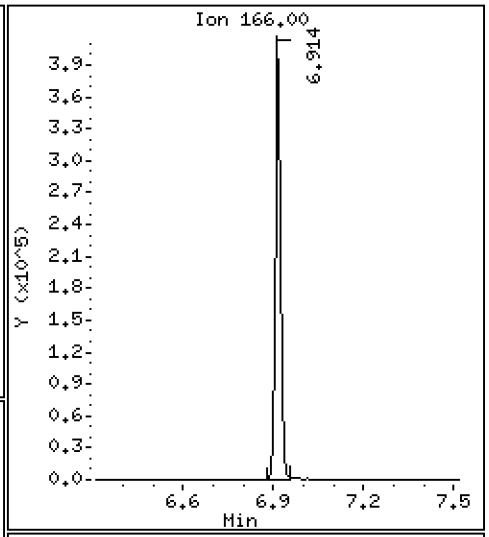
Concentration: 41.099 ug/Kg

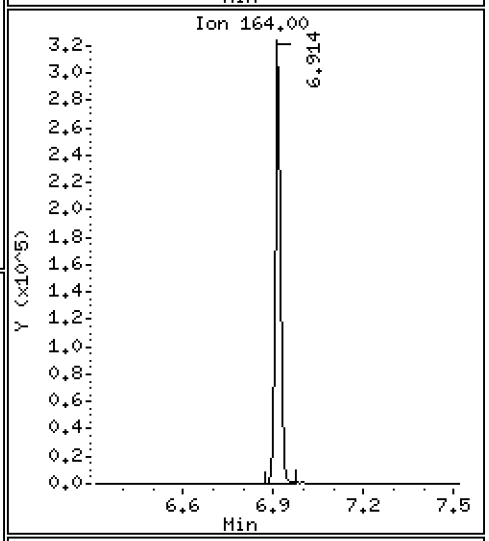


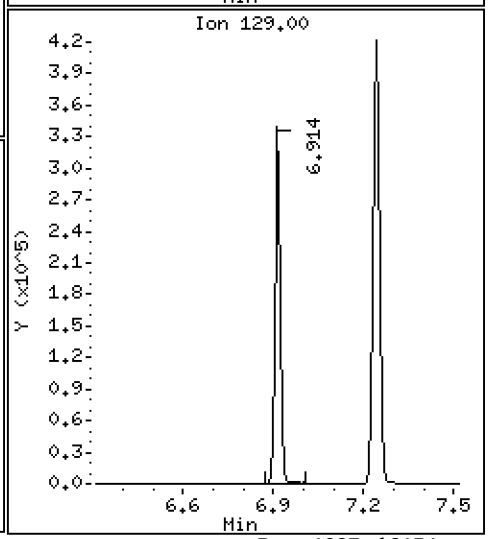












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

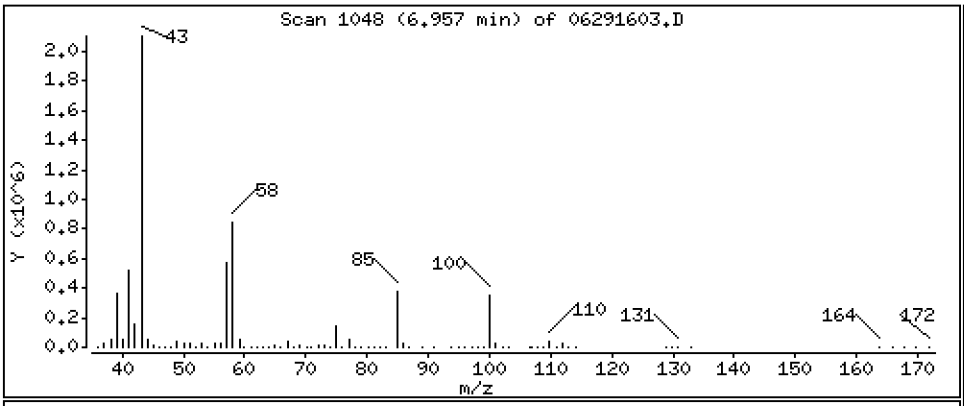
Operator: PB

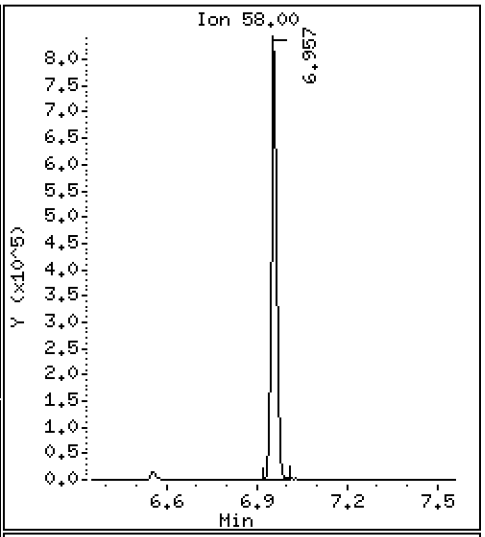
Column phase: RTXVMS

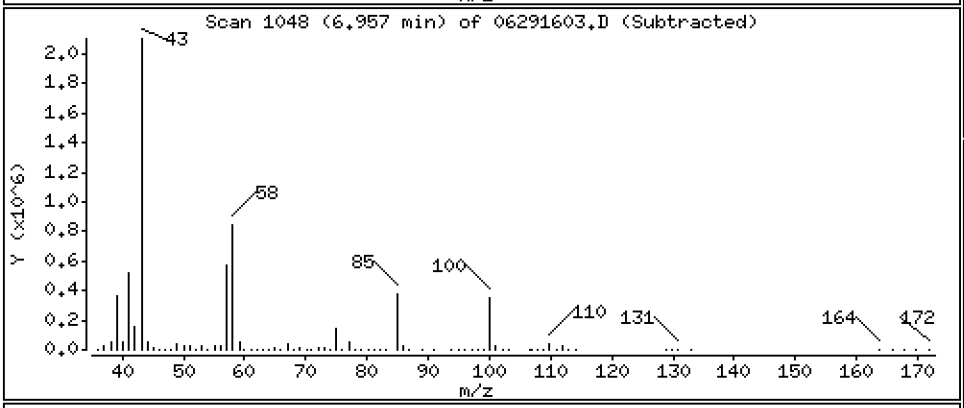
Column diameter: 0.18

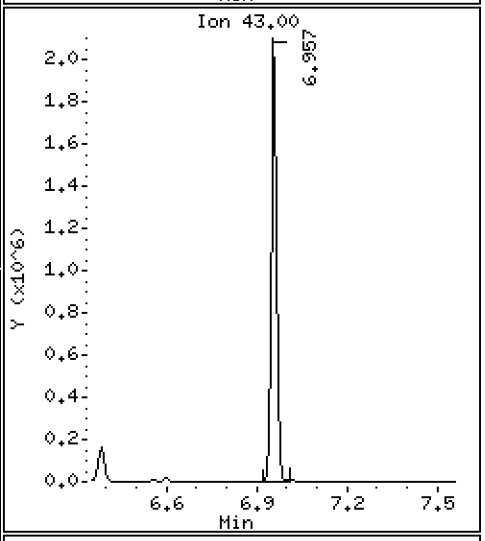
45 4-Methyl-2-Pentanone

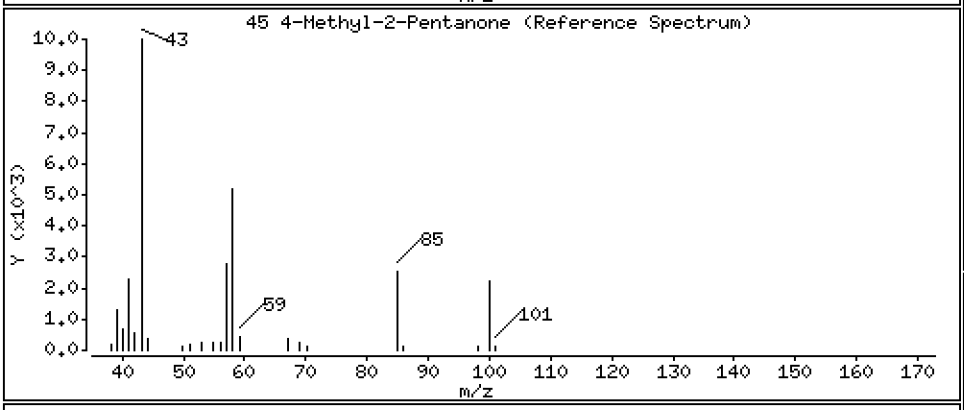
Concentration: 211.42 ug/Kg

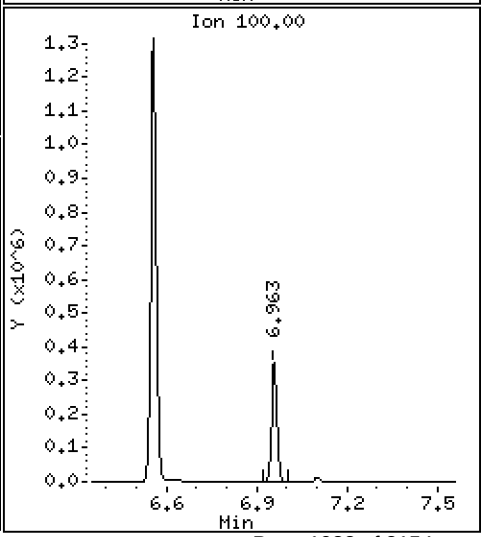


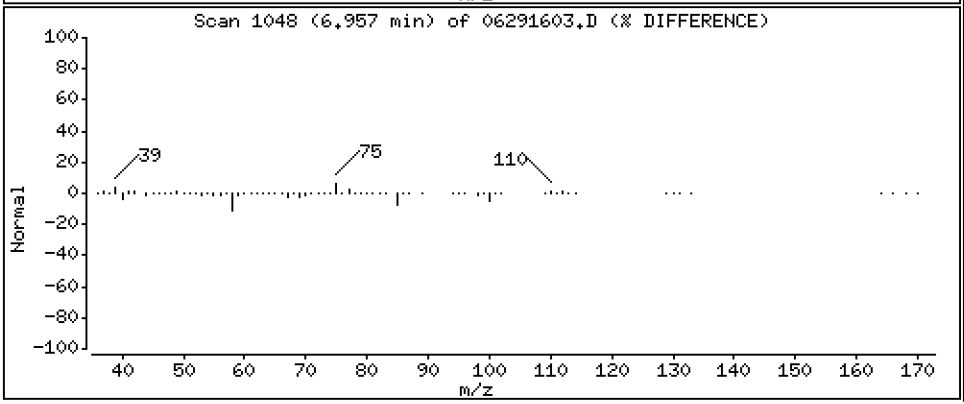












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

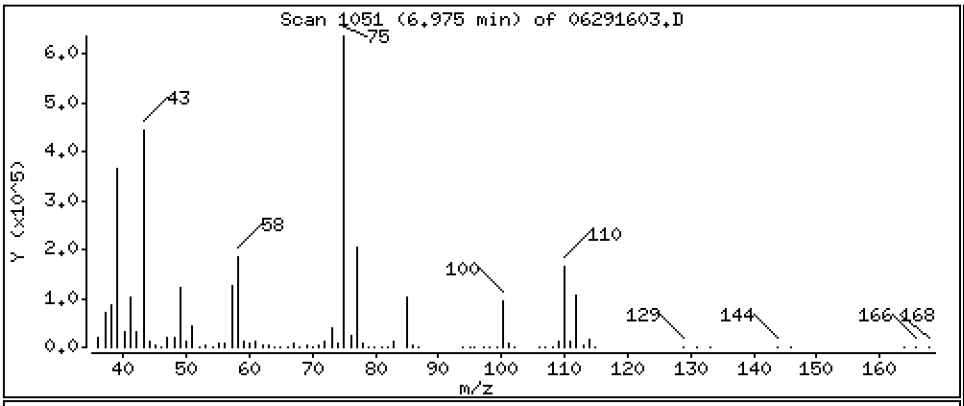
Operator: PB

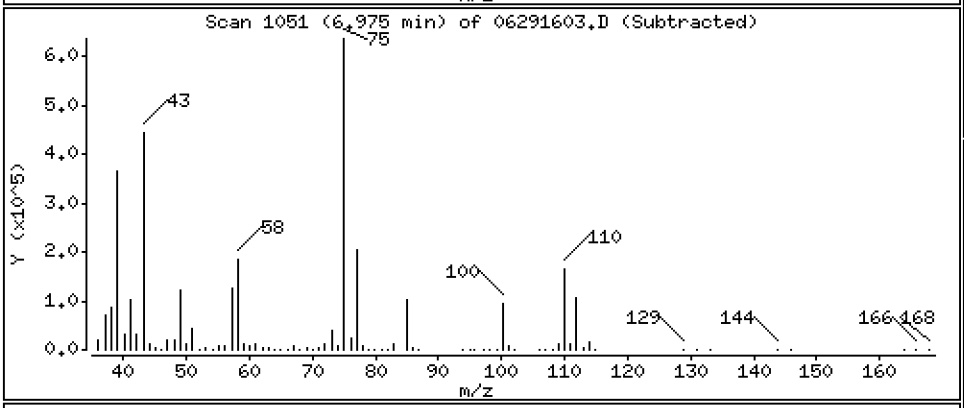
Column phase: RTXVMS

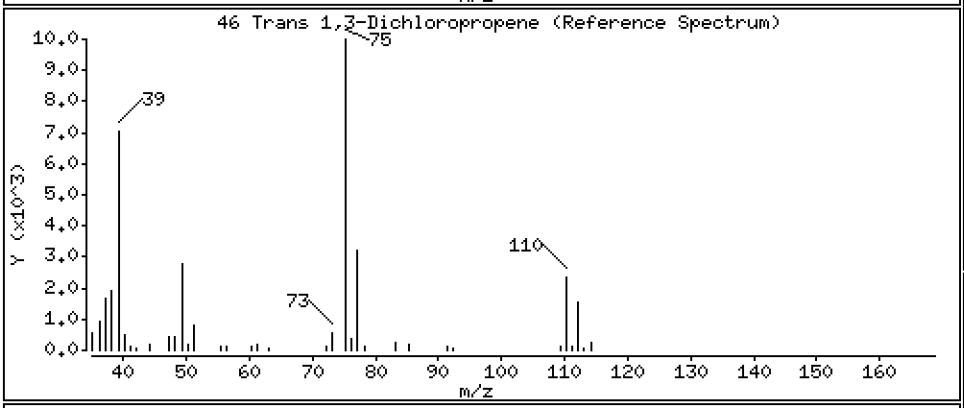
Column diameter: 0.18

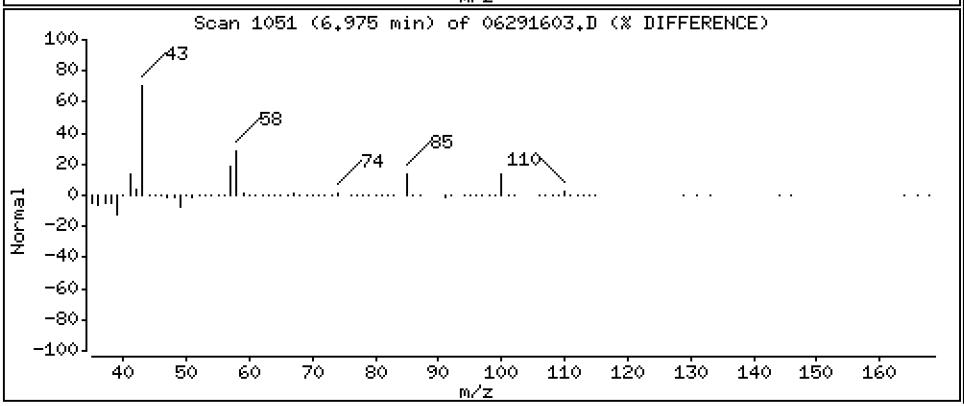
46 Trans 1,3-Dichloropropene

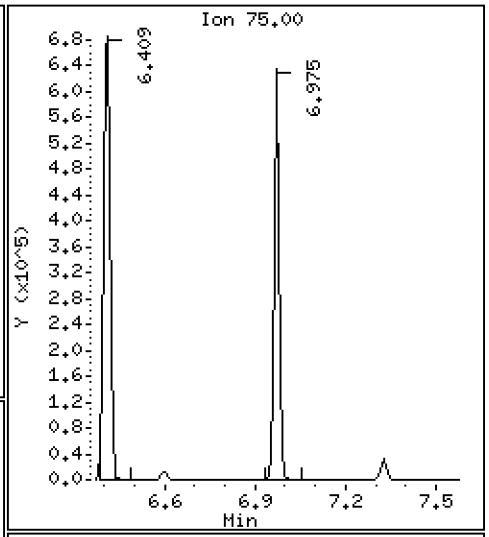
Concentration: 43.373 ug/Kg

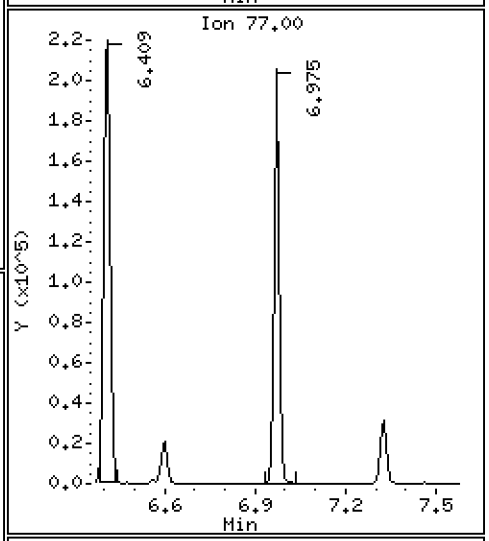


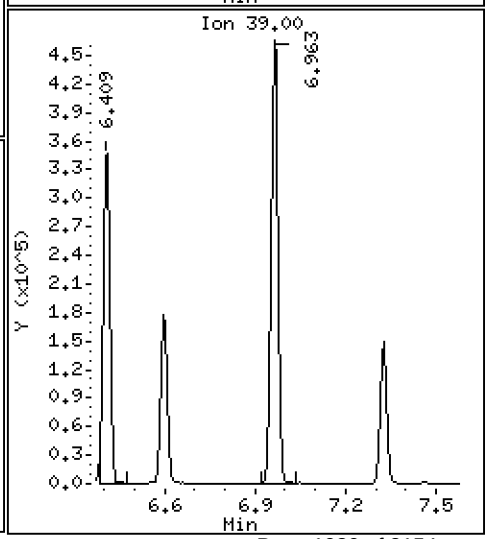












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

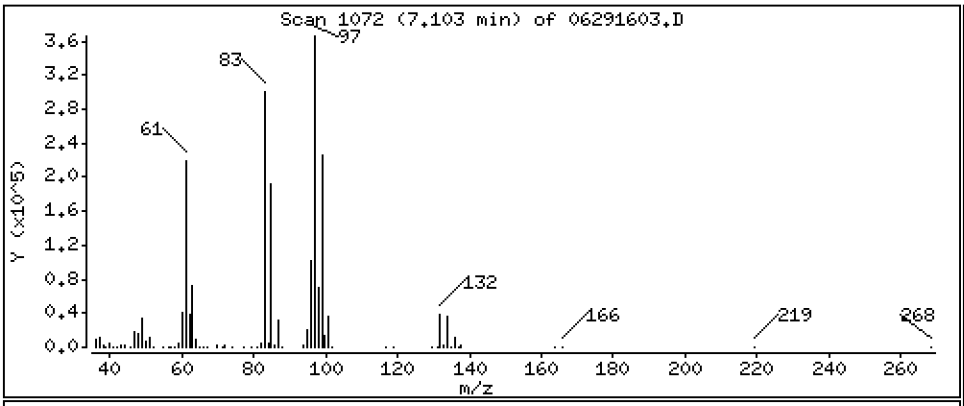
Operator: PB

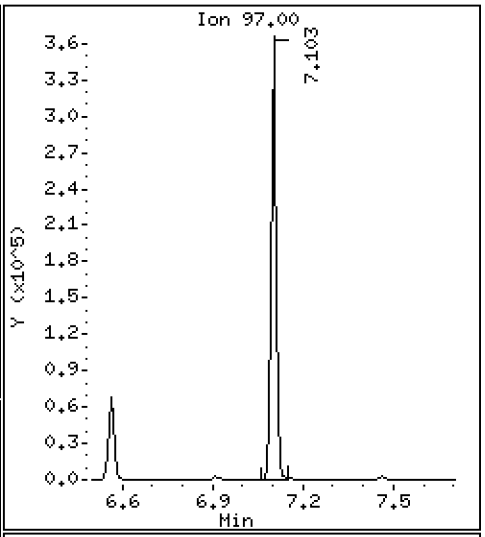
Column phase: RTXVMS

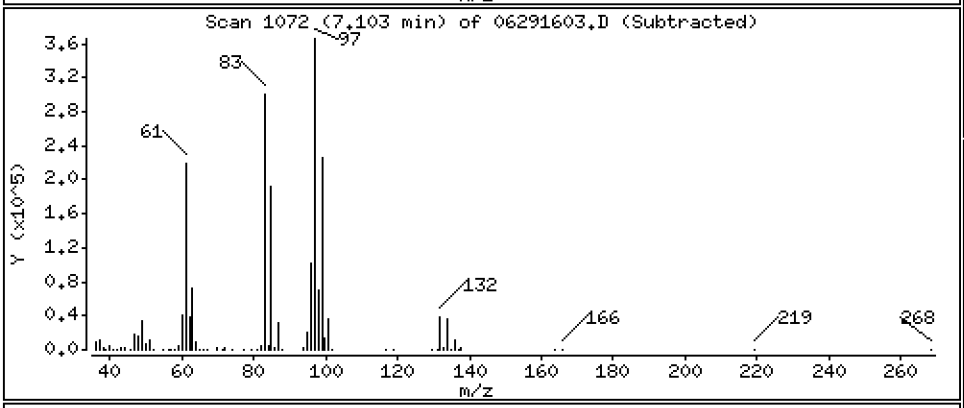
Column diameter: 0.18

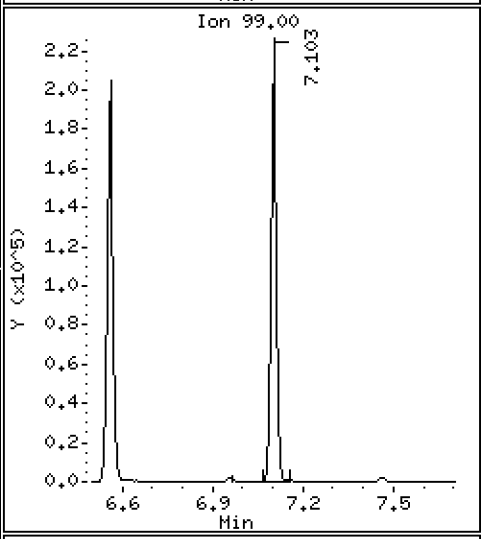
47 1,1,2-Trichloroethane

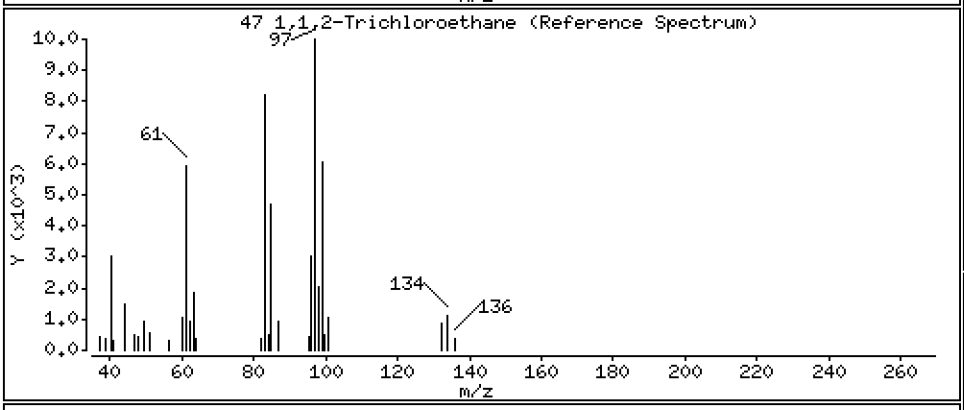
Concentration: 42.587 ug/Kg

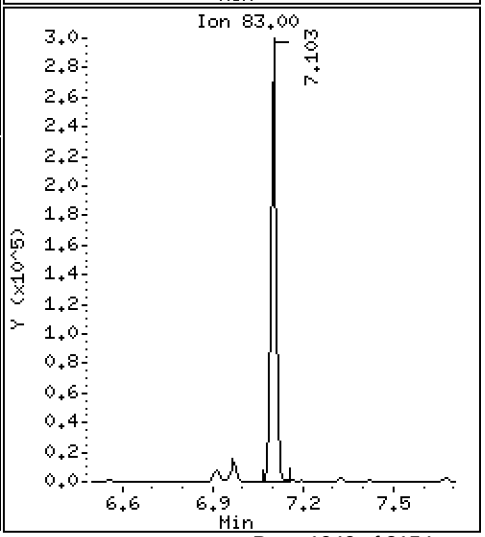


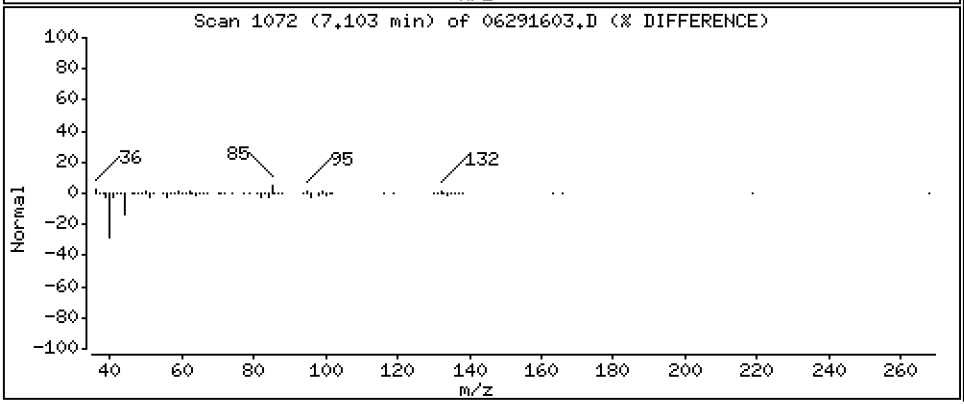












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

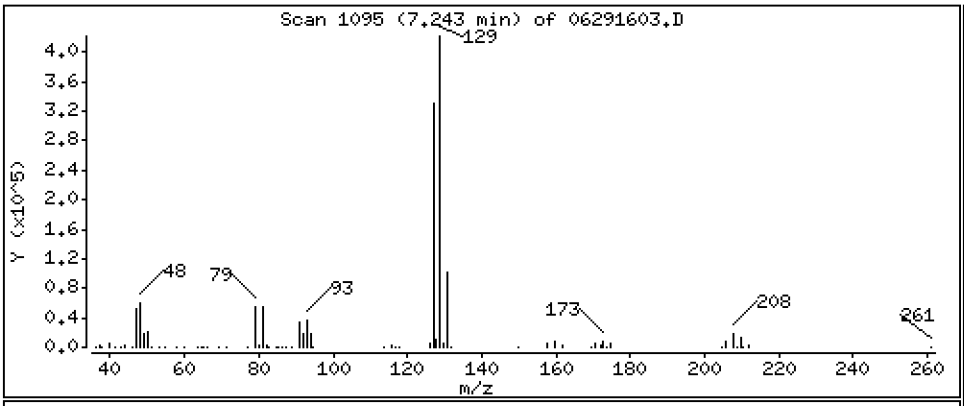
Operator: PB

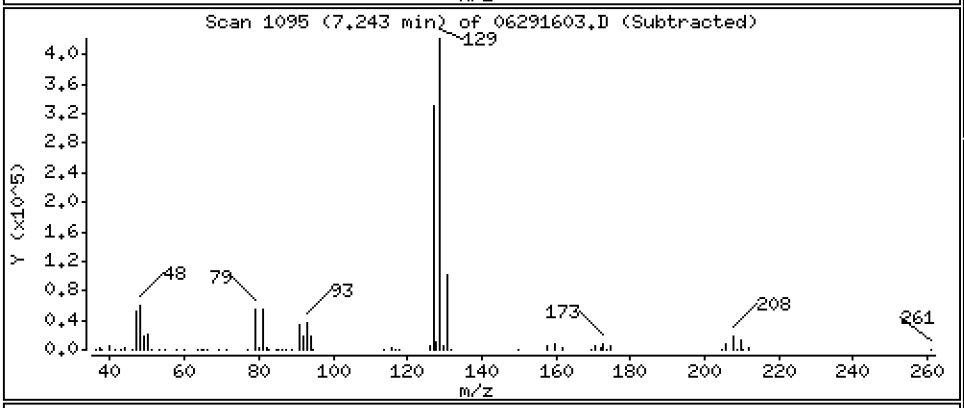
Column phase: RTXVMS

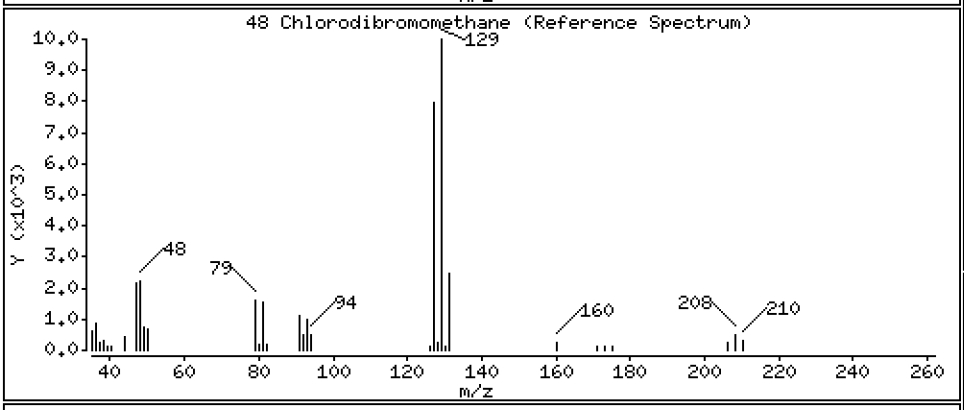
Column diameter: 0.18

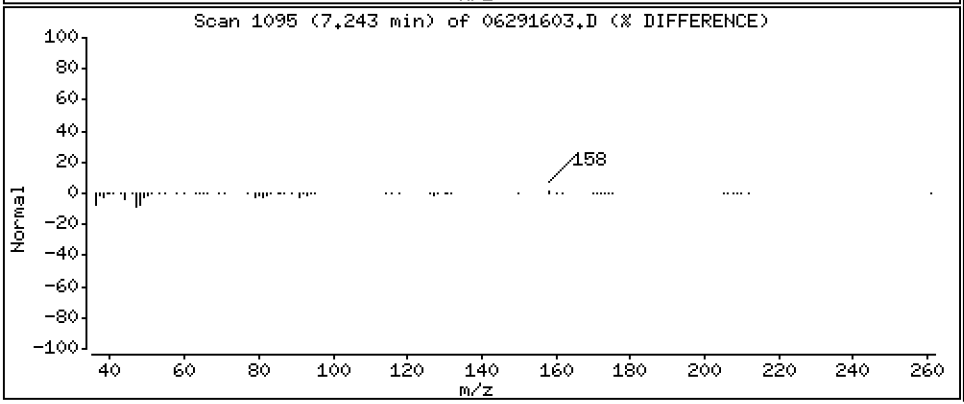
48 Chlorodibromomethane

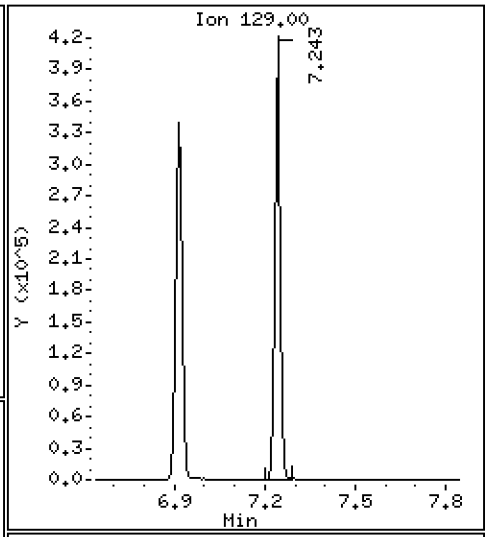
Concentration: 43.556 ug/Kg

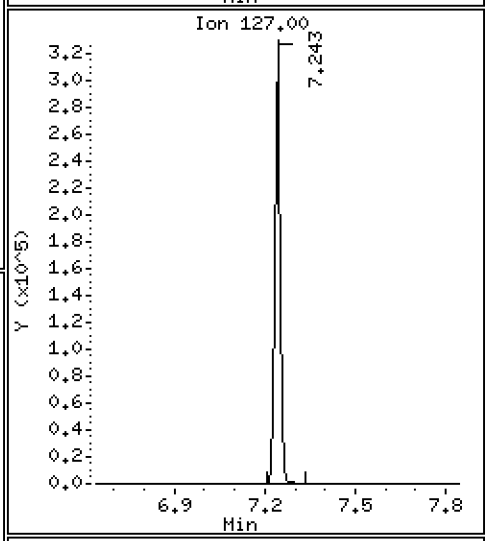


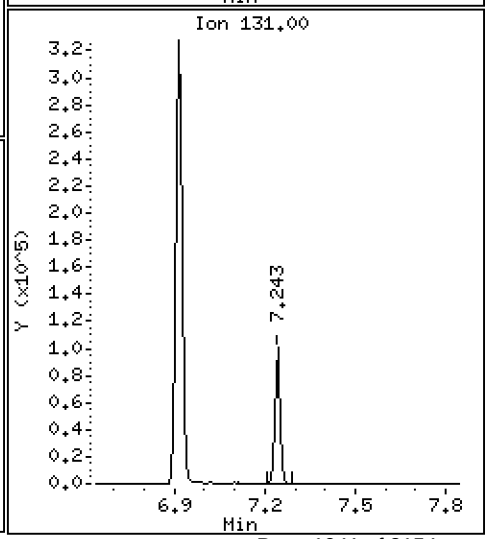












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

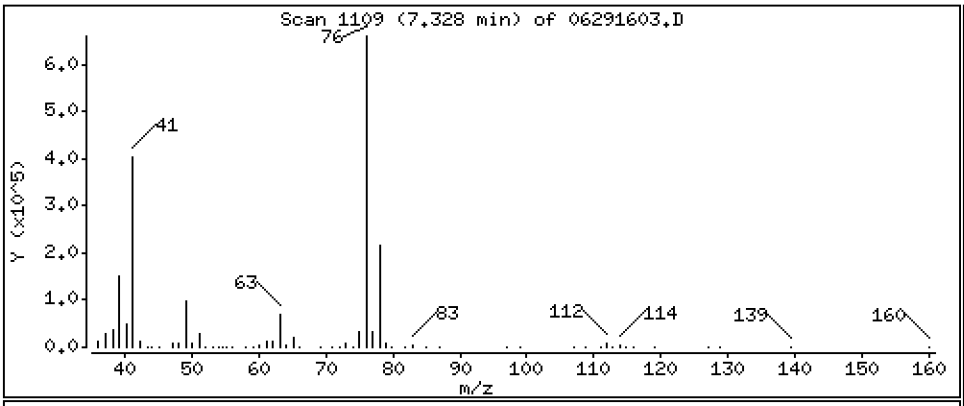
Operator: PB

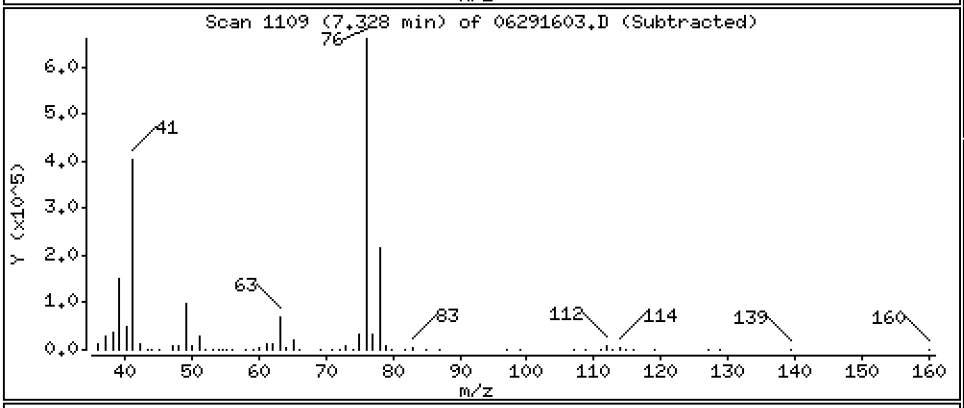
Column phase: RTXVMS

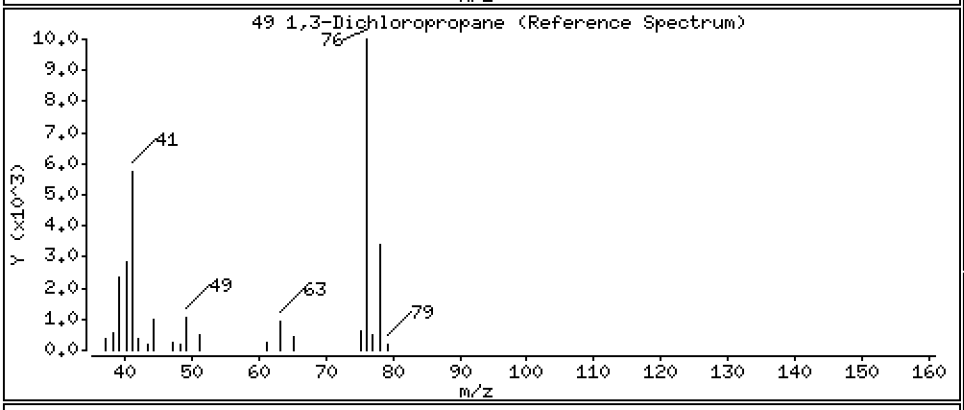
Column diameter: 0.18

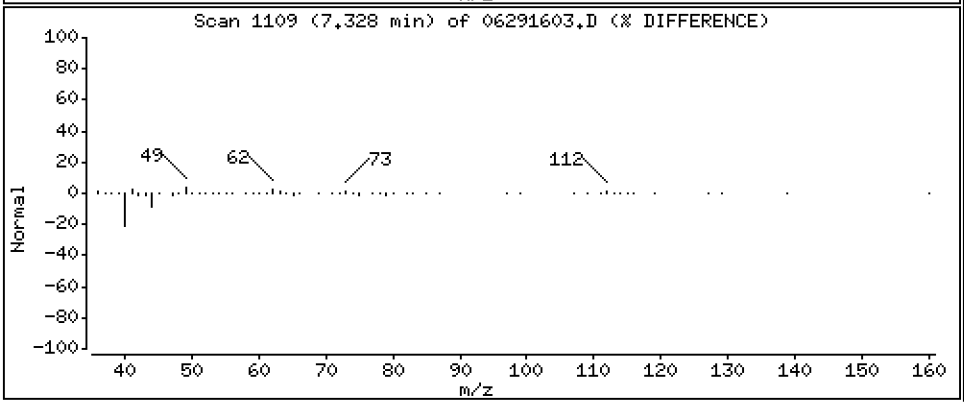
49 1,3-Dichloropropane

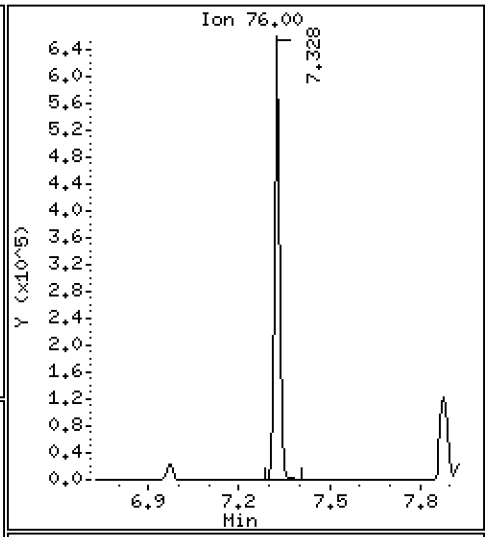
Concentration: 41.625 ug/Kg

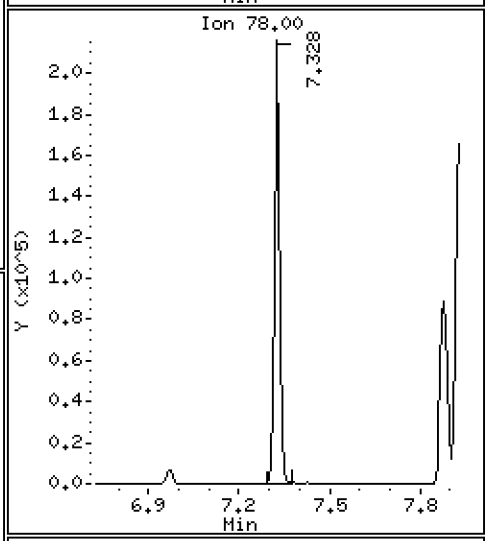


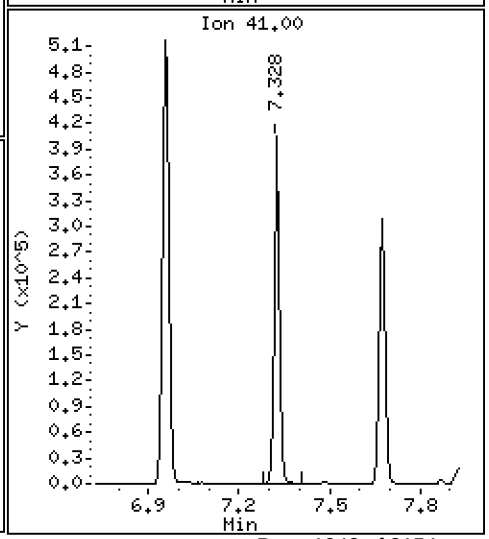












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

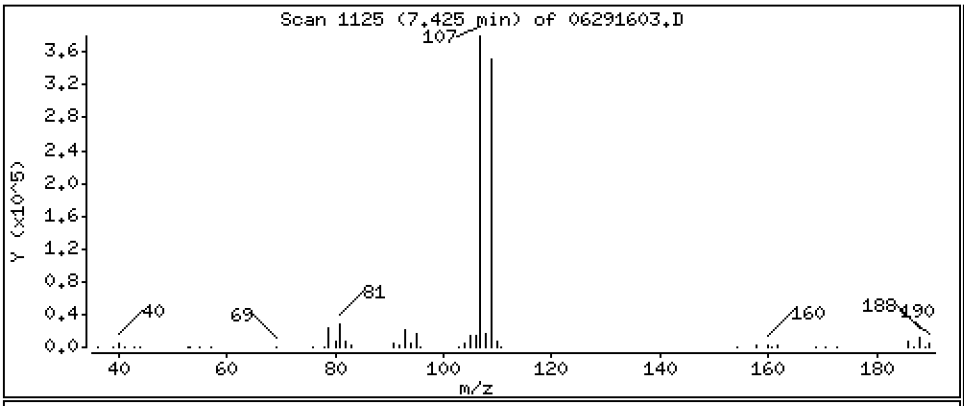
Operator: PB

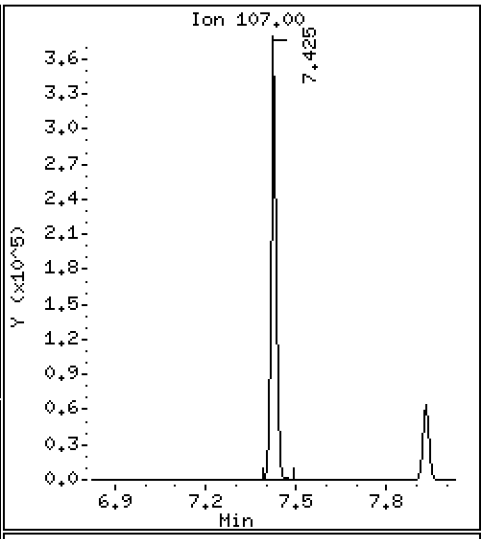
Column phase: RTXVMS

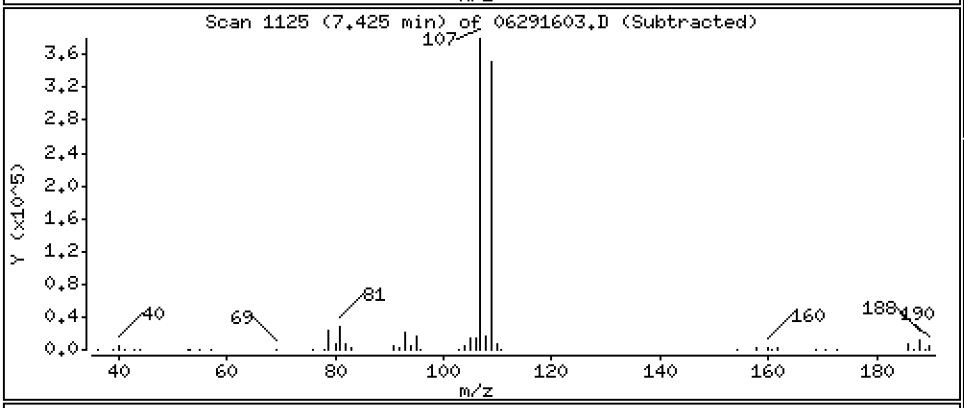
Column diameter: 0.18

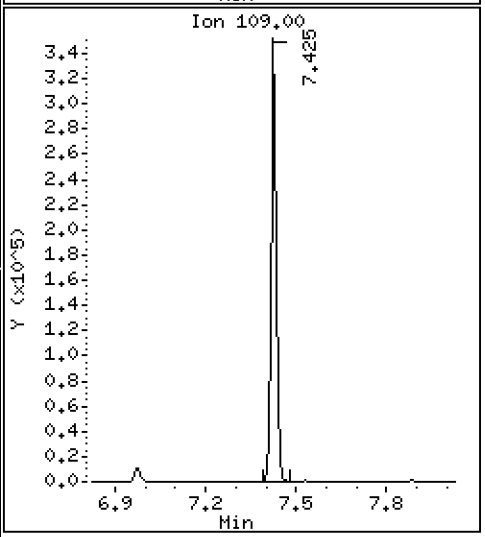
50 1,2-Dibromoethane

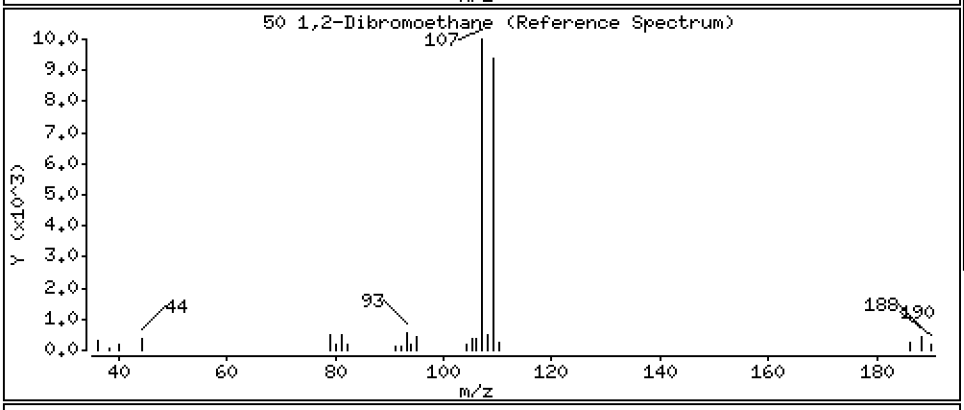
Concentration: 43.275 ug/Kg

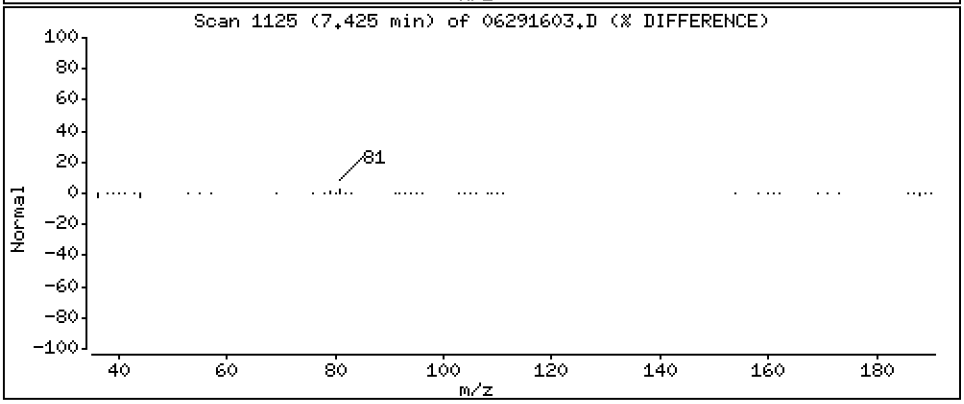












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

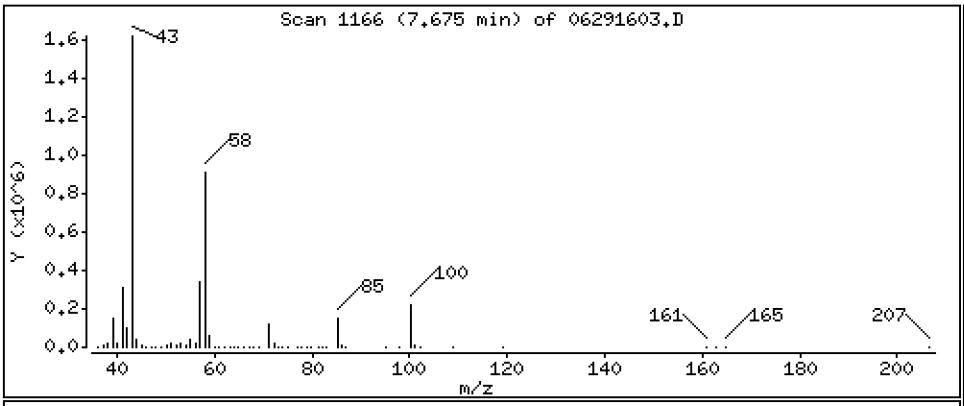
Operator: PB

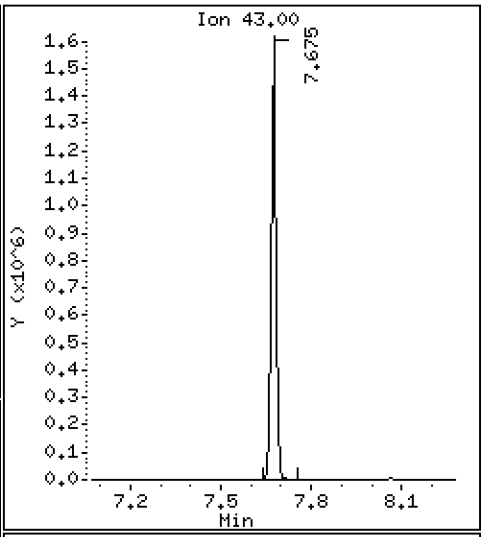
Column phase: RTXVMS

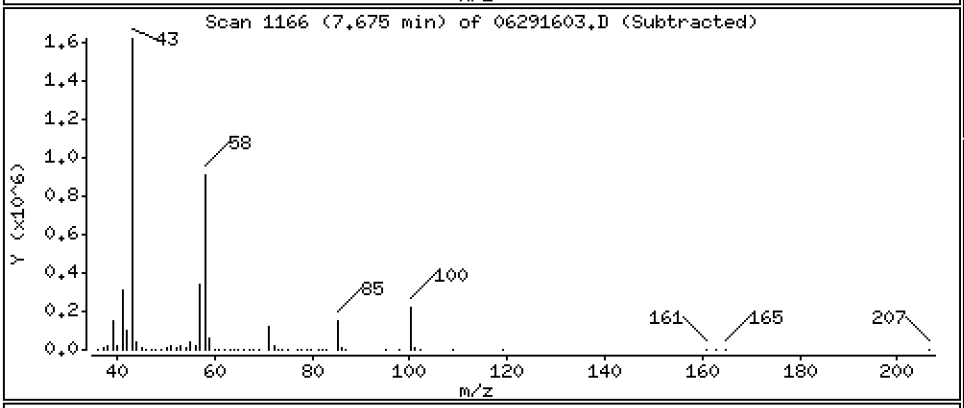
Column diameter: 0.18

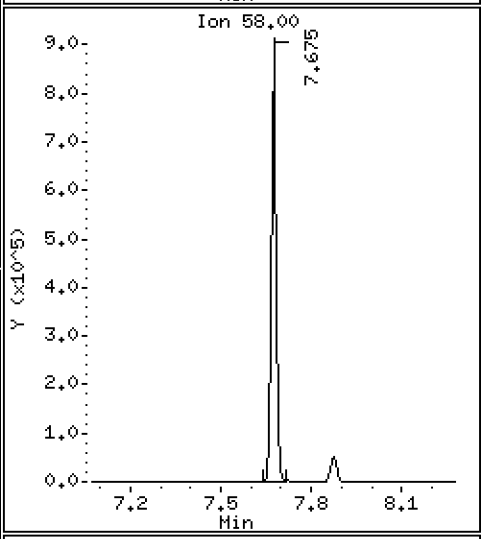
51 2-Hexanone

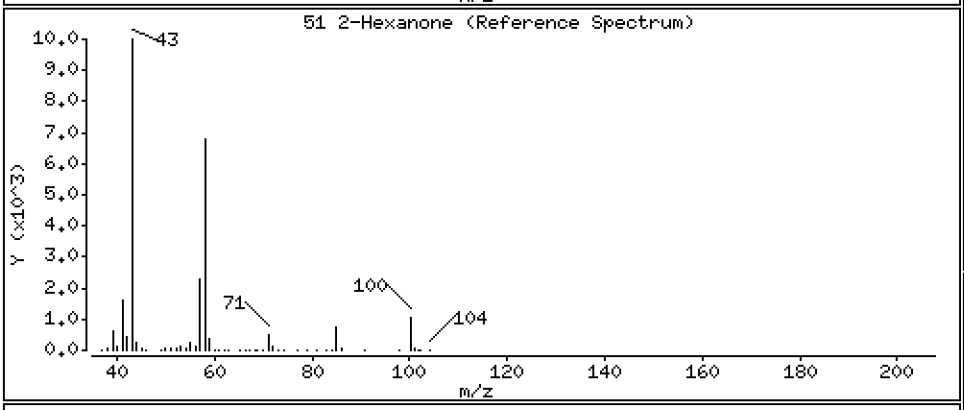
Concentration: 207.86 ug/Kg

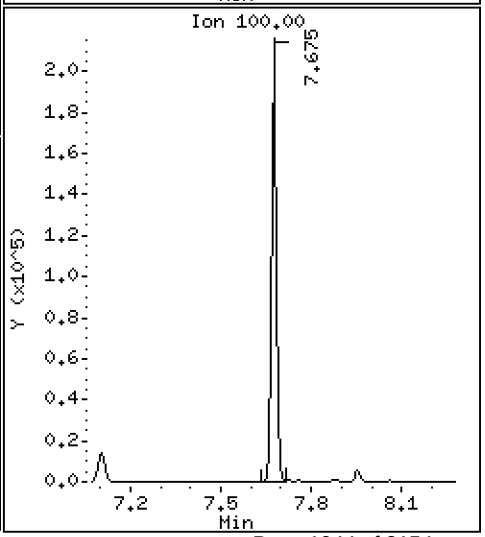


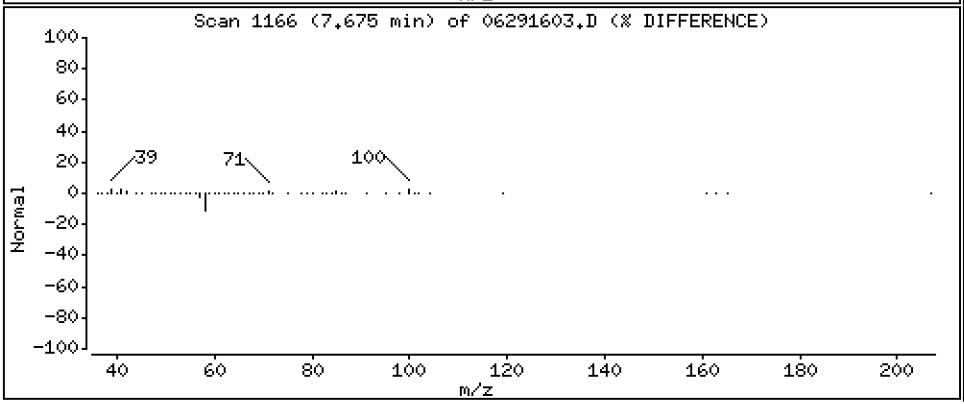












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

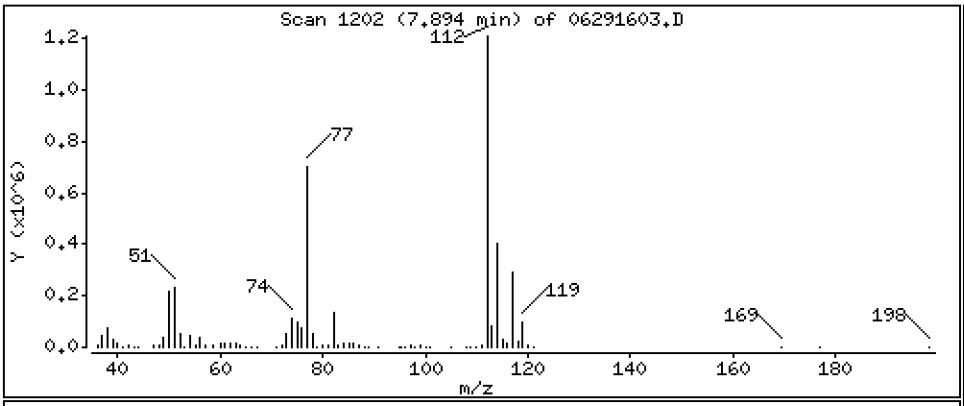
Operator: PB

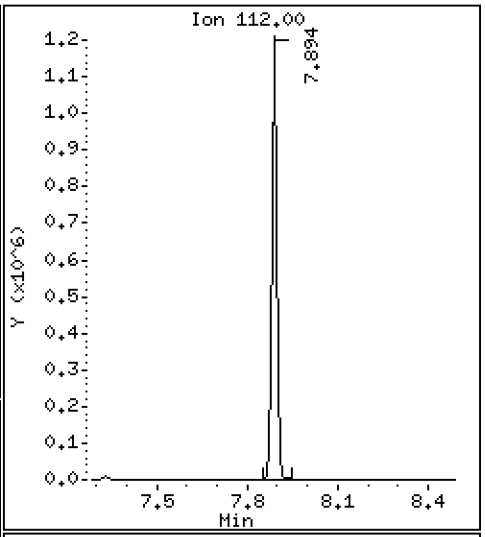
Column phase: RTXVMS

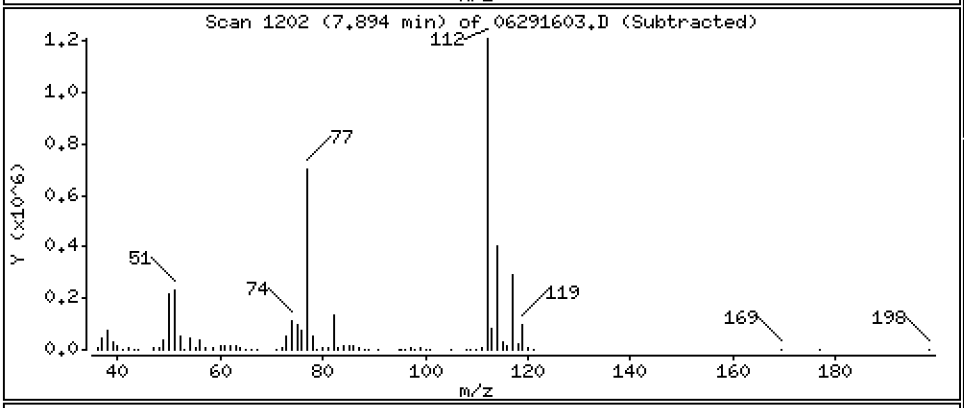
Column diameter: 0.18

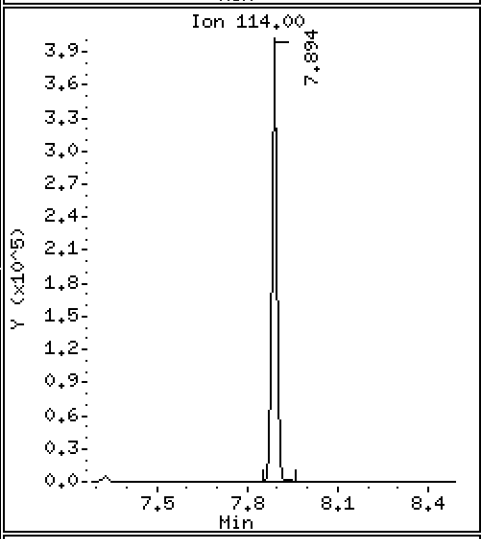
53 Chlorobenzene

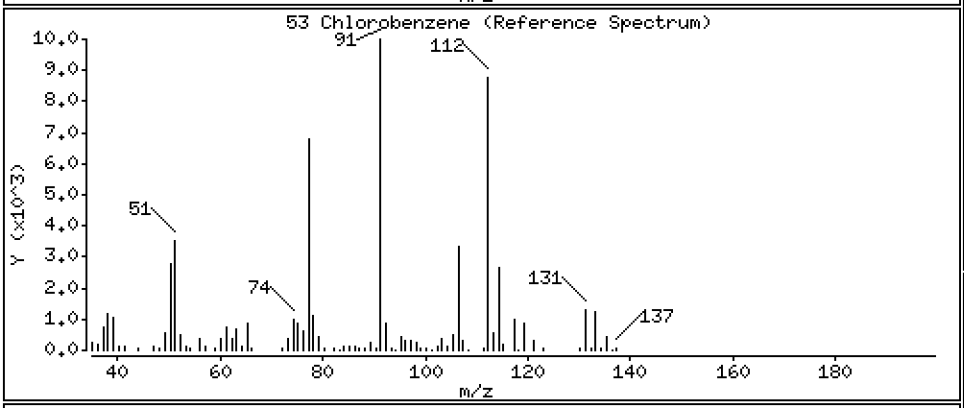
Concentration: 40.903 ug/Kg

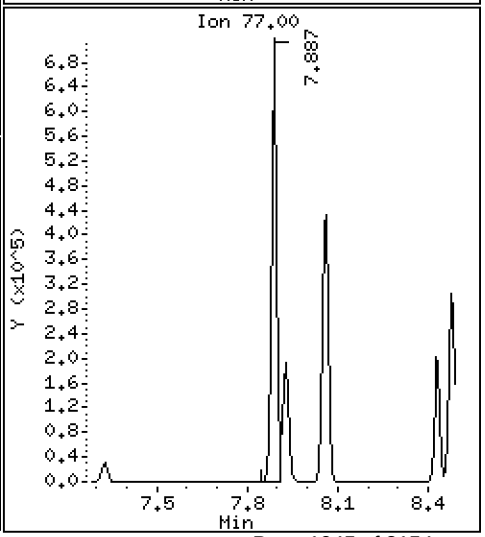


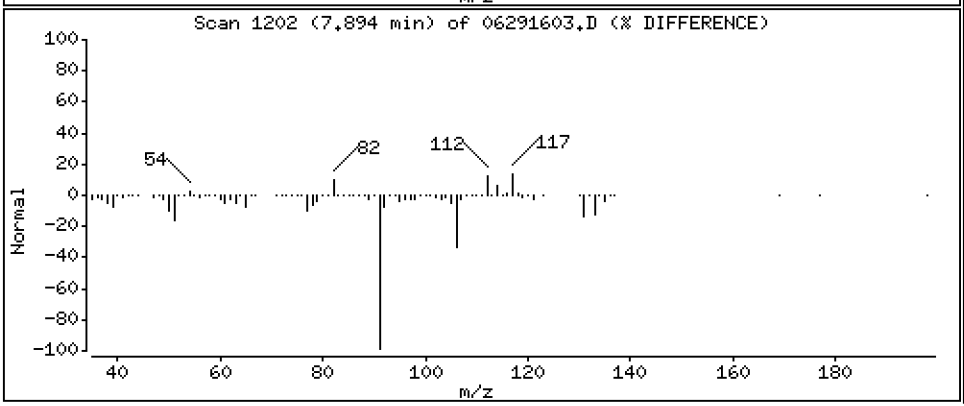












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

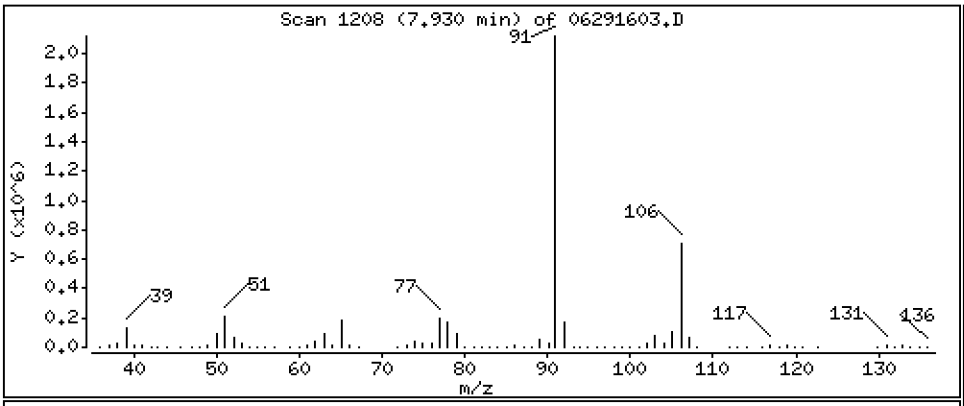
Operator: PB

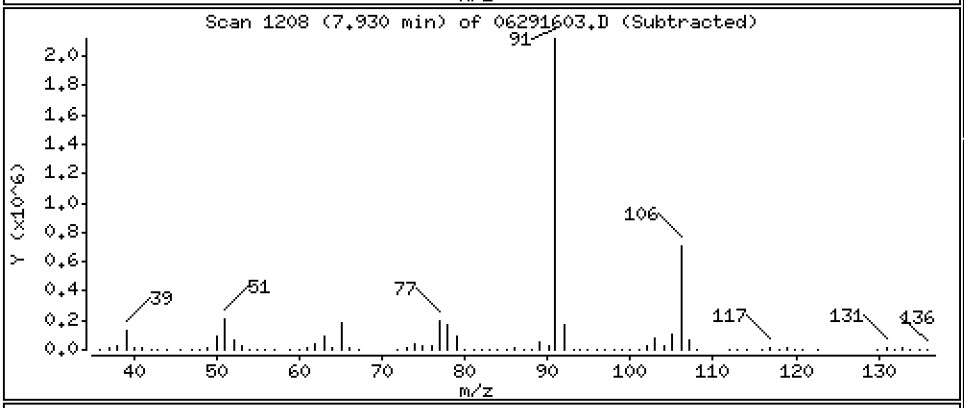
Column phase: RTXVMS

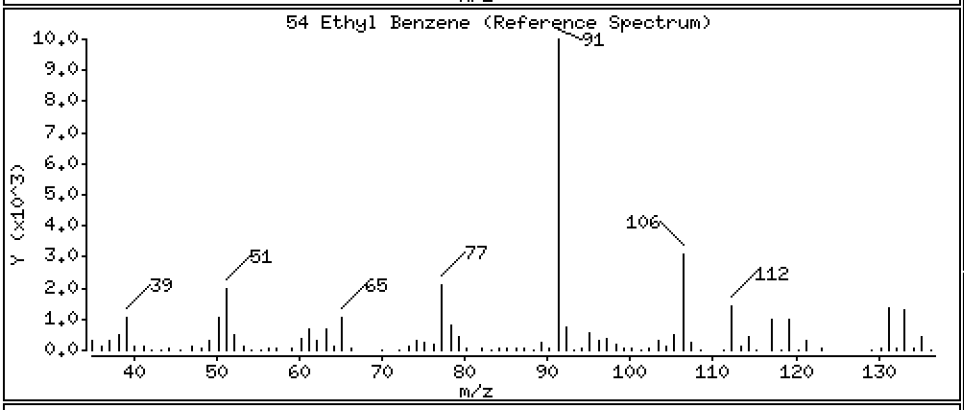
Column diameter: 0.18

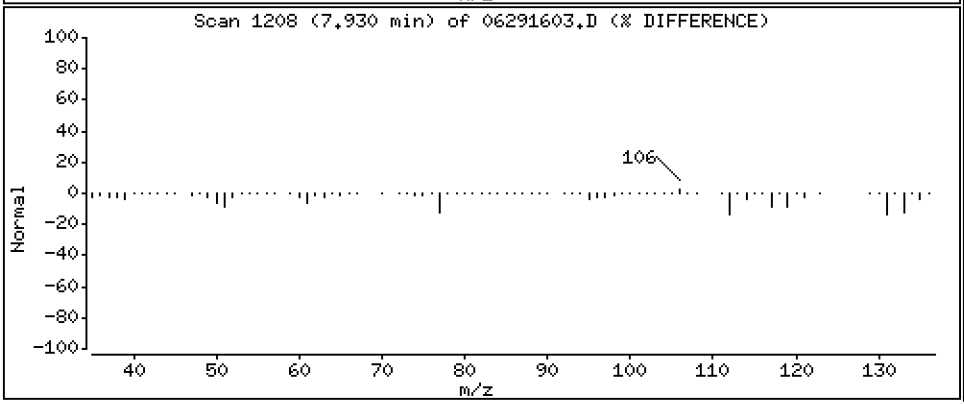
54 Ethyl Benzene

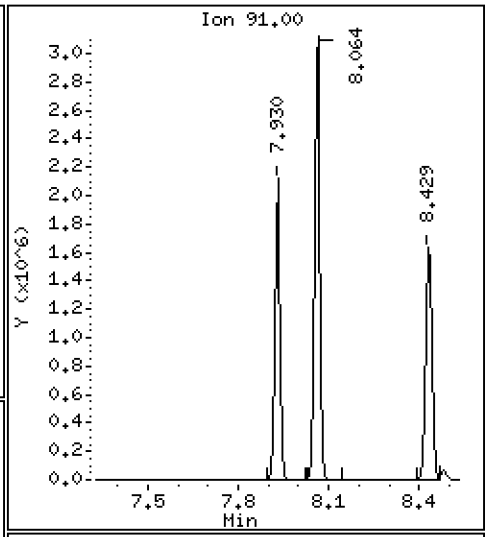
Concentration: 41.024 ug/Kg

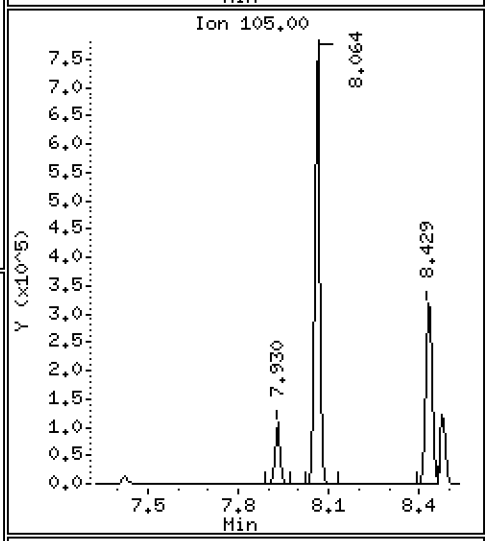


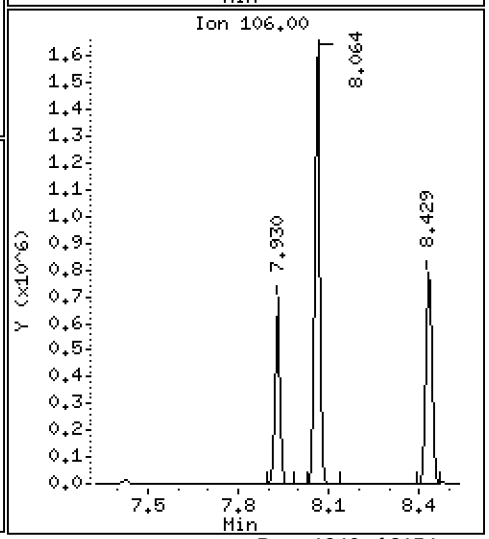












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

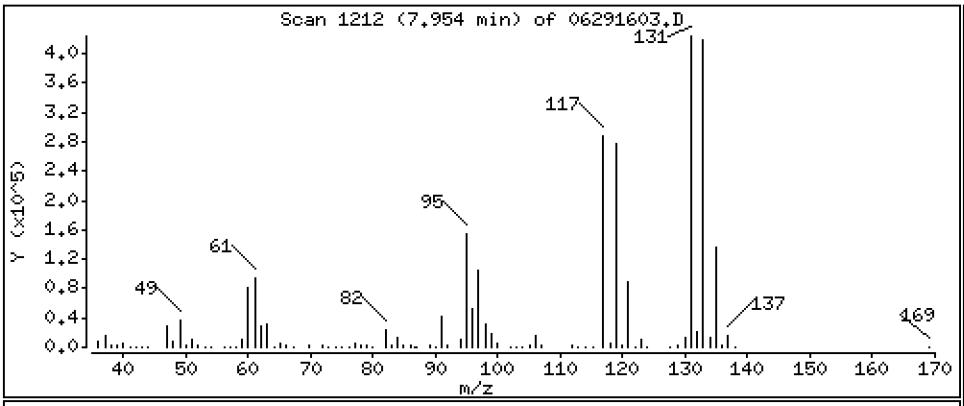
Operator: PB

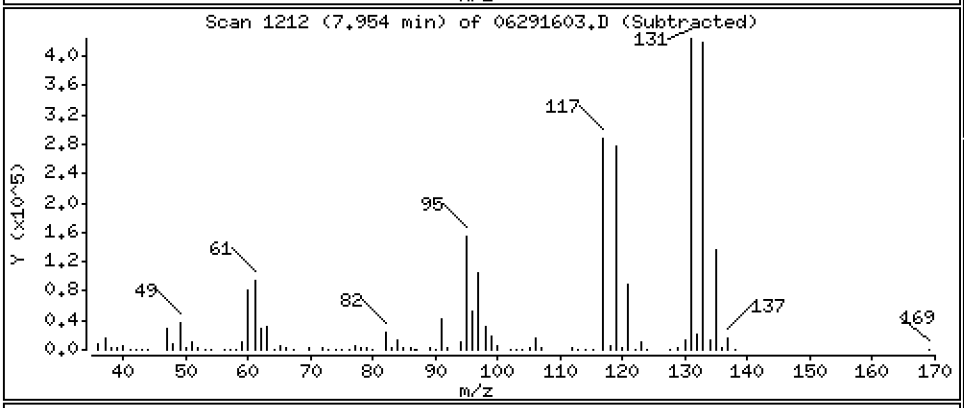
Column phase: RTXVMS

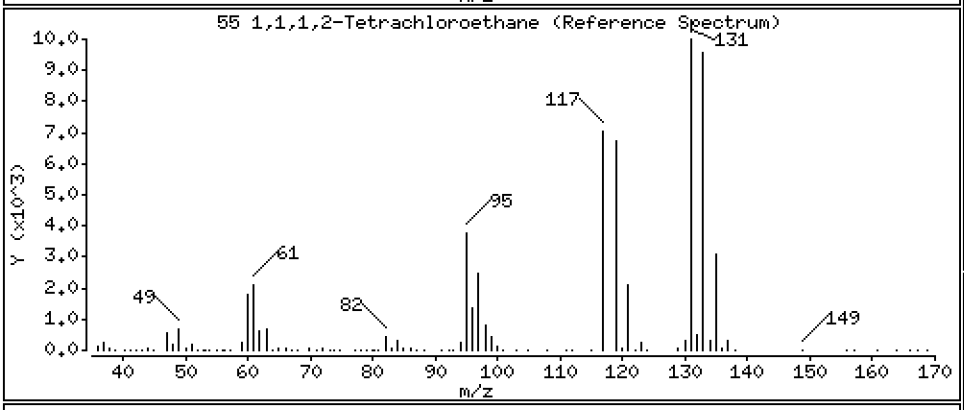
Column diameter: 0.18

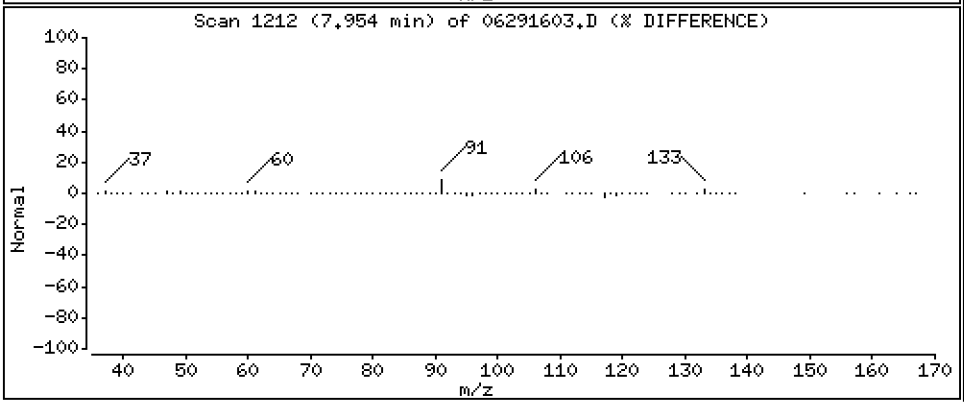
55 1,1,1,2-Tetrachloroethane

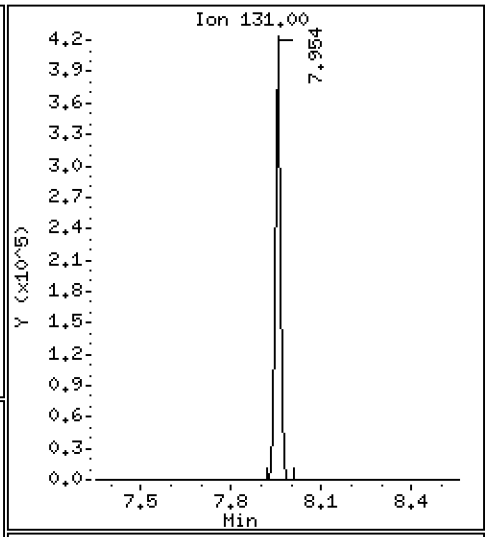
Concentration: 41.227 ug/Kg

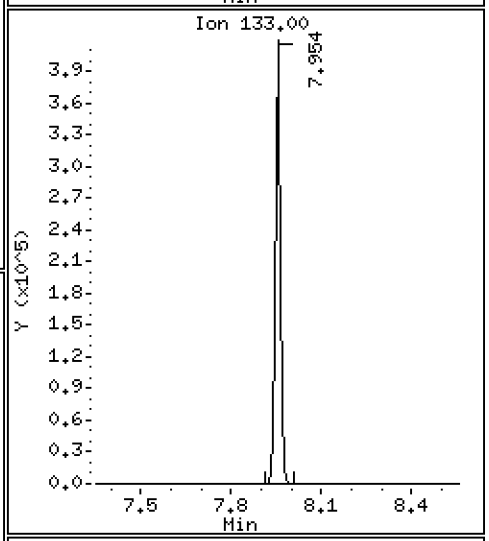


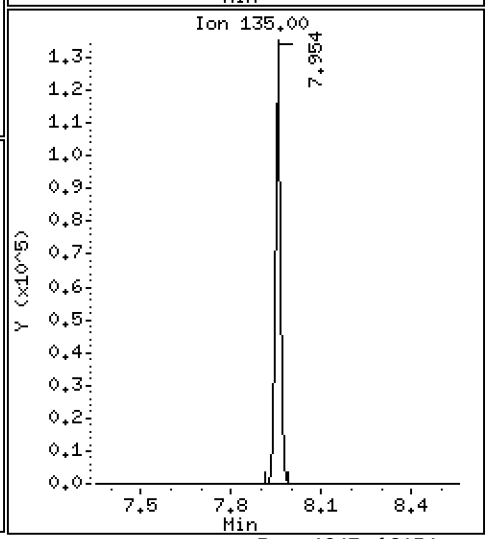












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

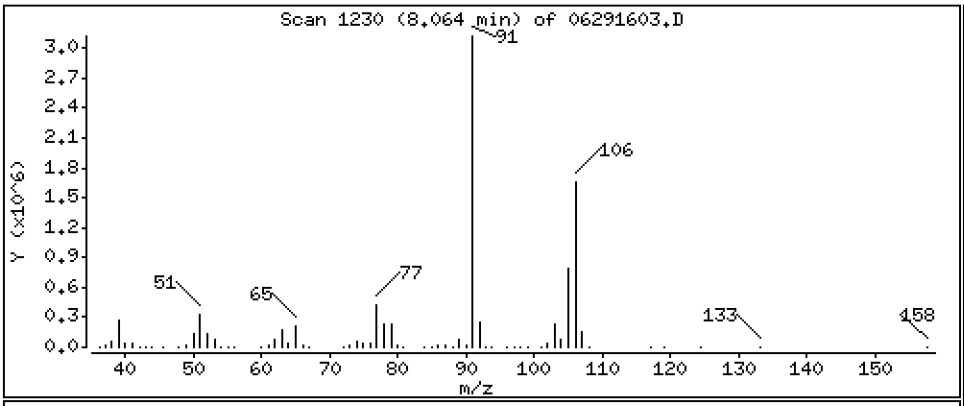
Operator: PB

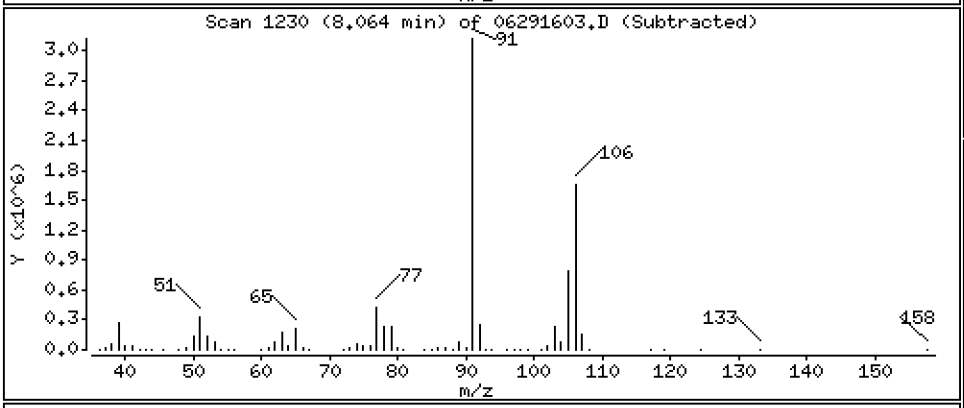
Column phase: RTXVMS

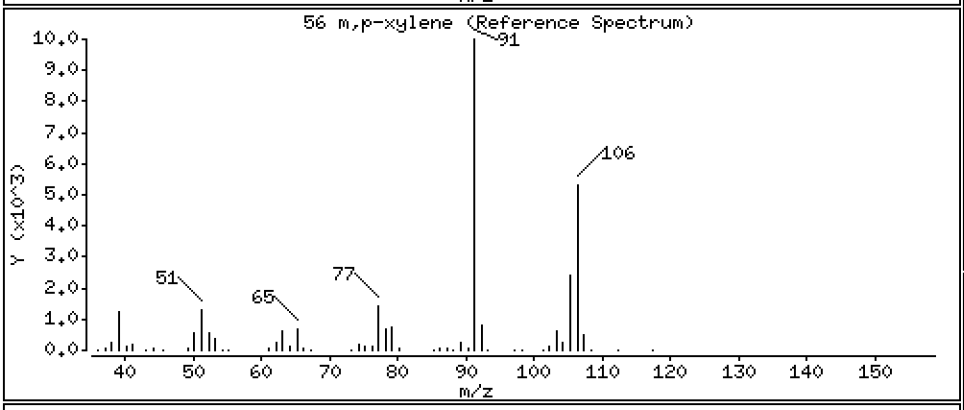
Column diameter: 0.18

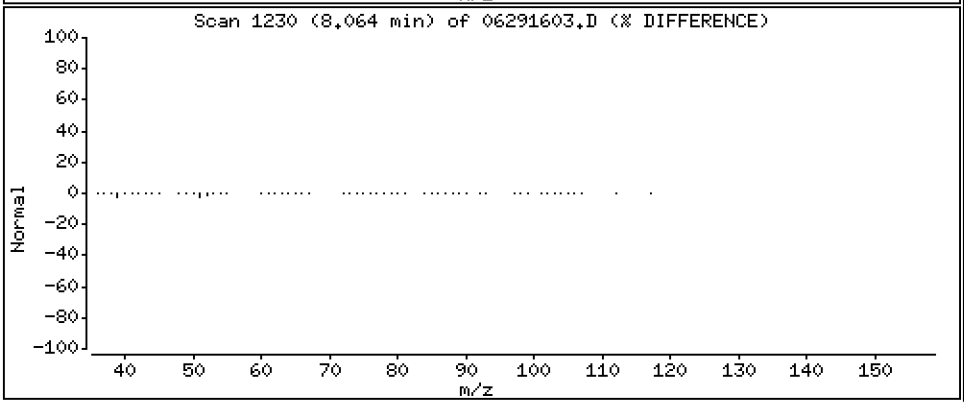
56 m,p-xylene

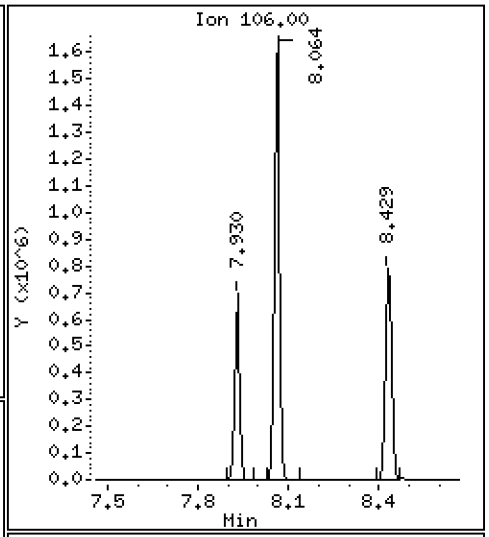
Concentration: 82.595 ug/Kg

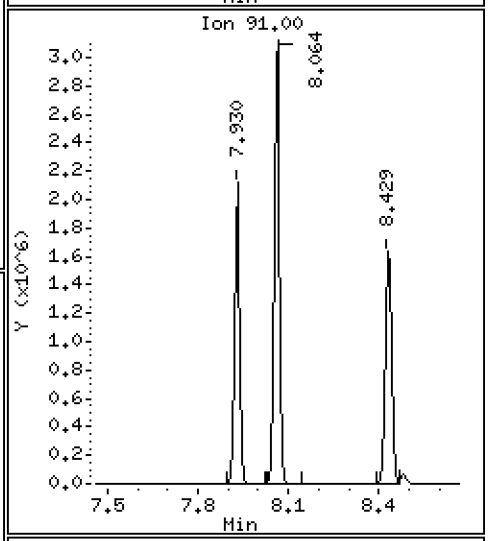


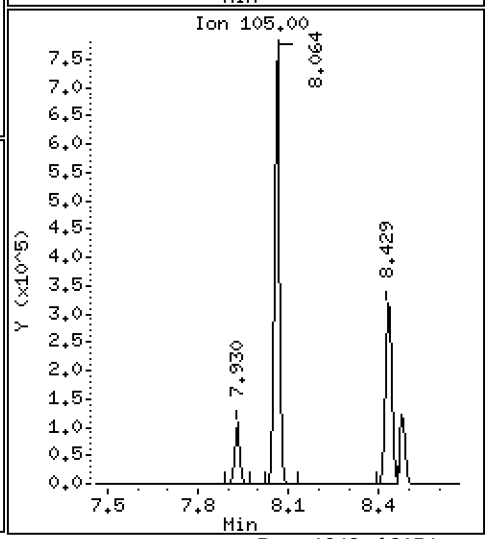












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

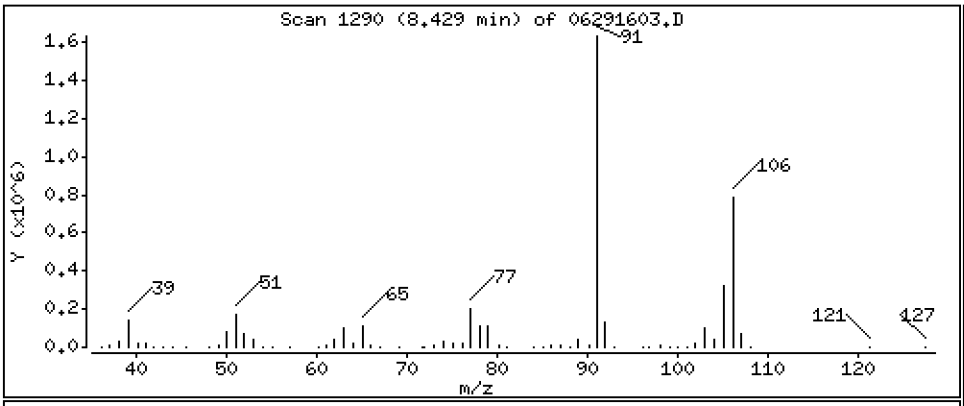
Operator: PB

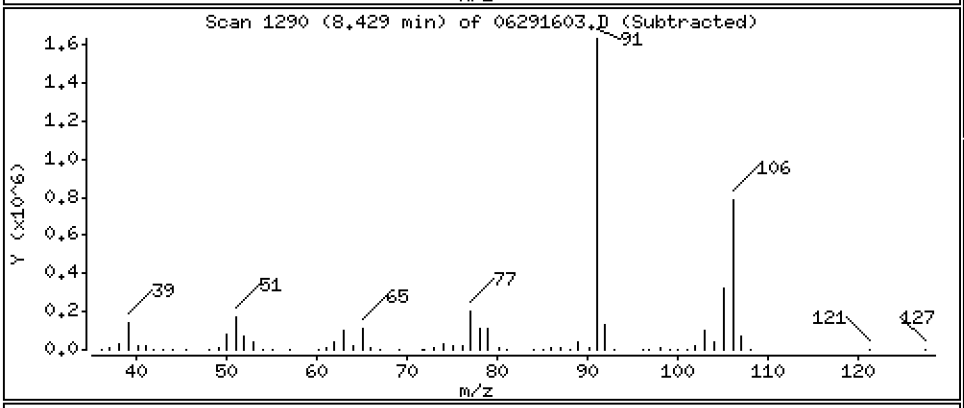
Column phase: RTXVMS

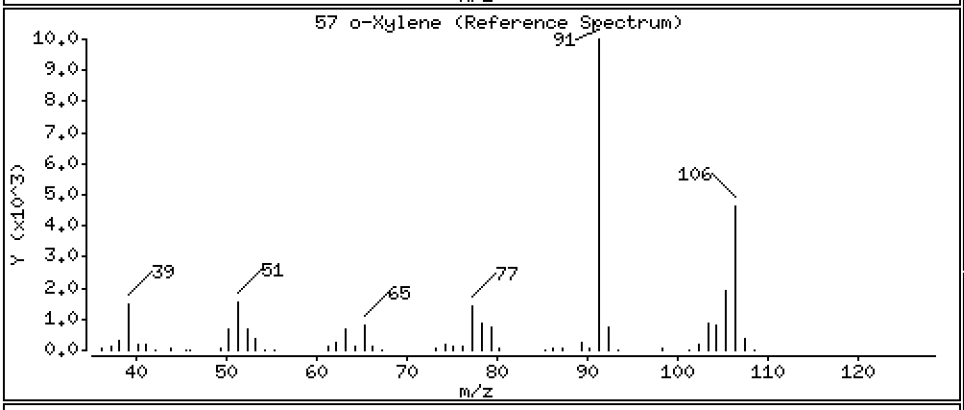
Column diameter: 0.18

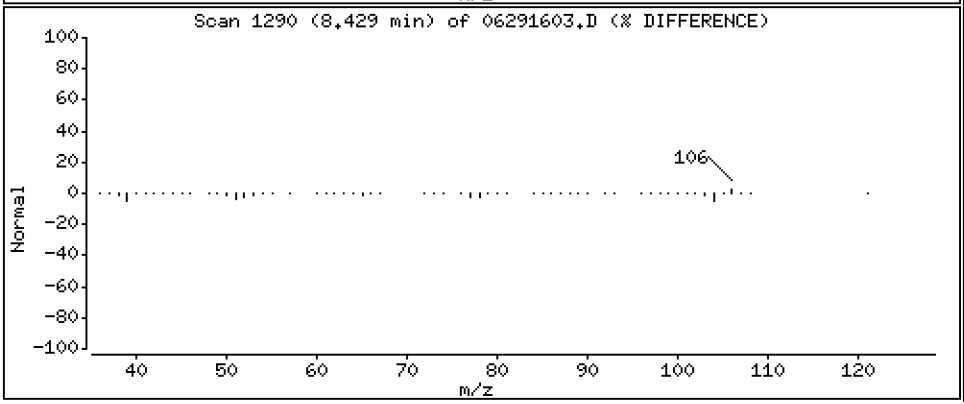
57 o-Xylene

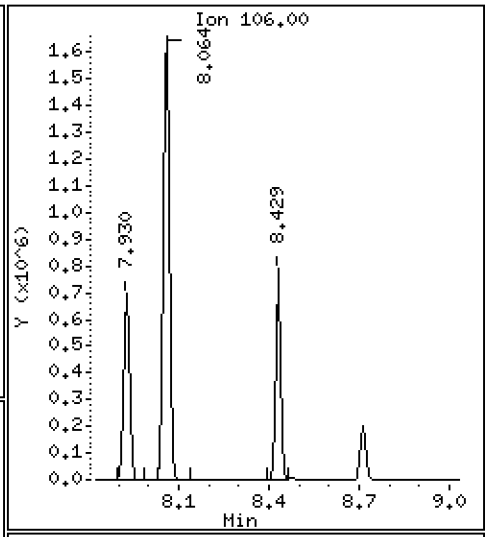
Concentration: 40.581 ug/Kg

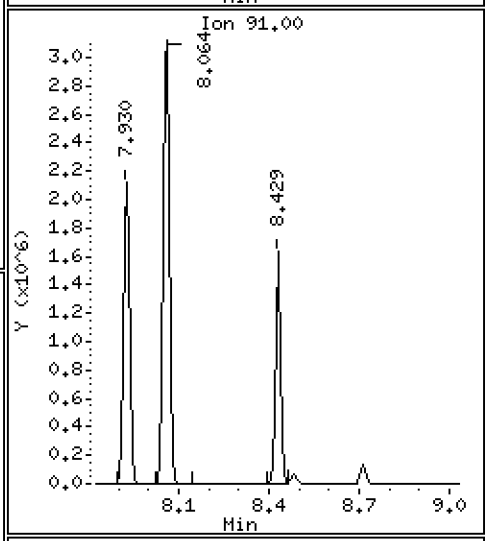


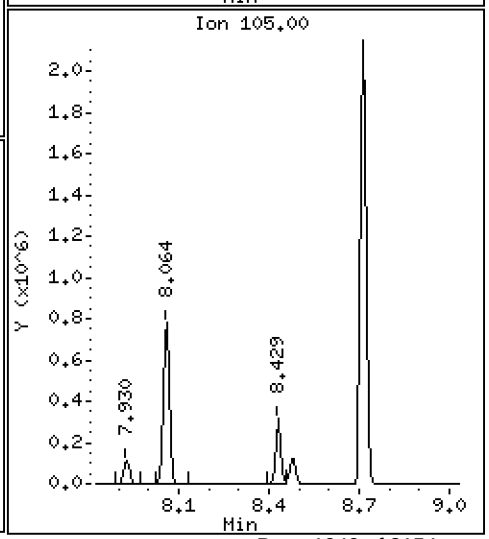












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

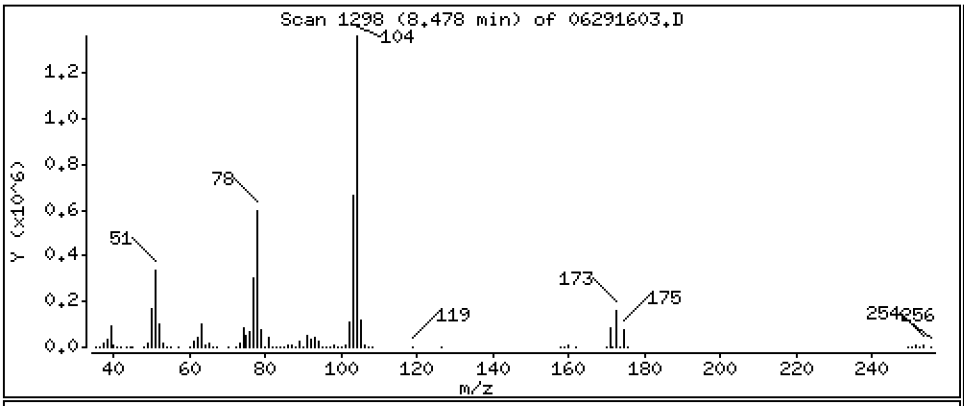
Operator: PB

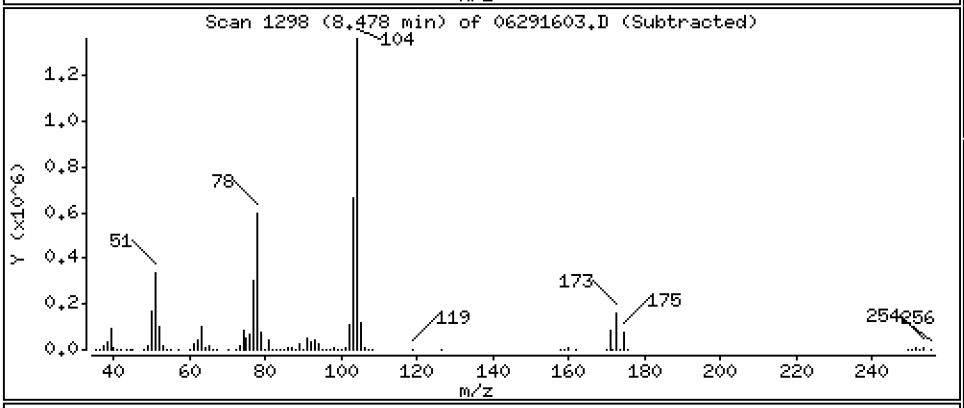
Column phase: RTXVMS

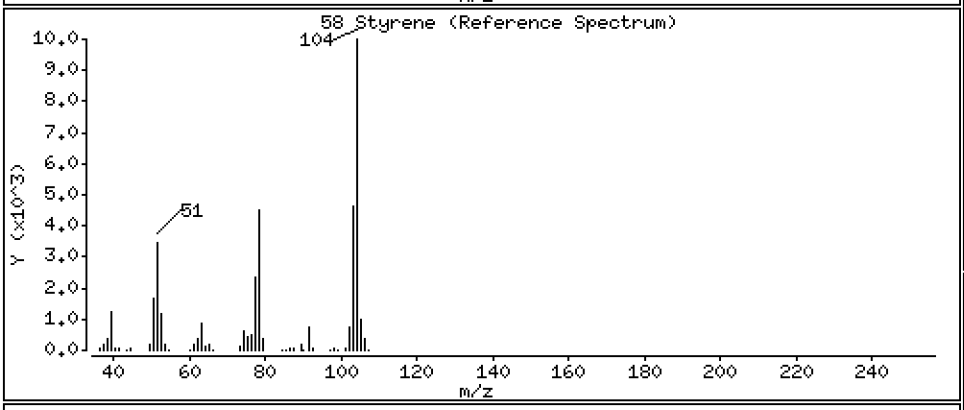
Column diameter: 0.18

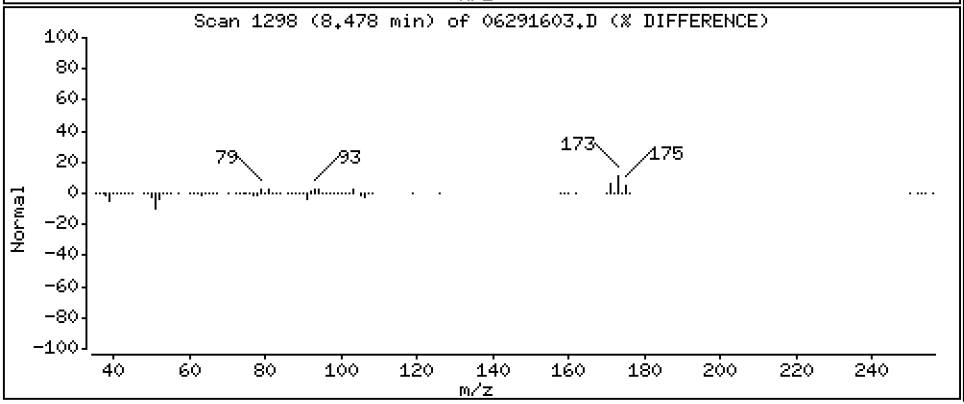
58 Styrene

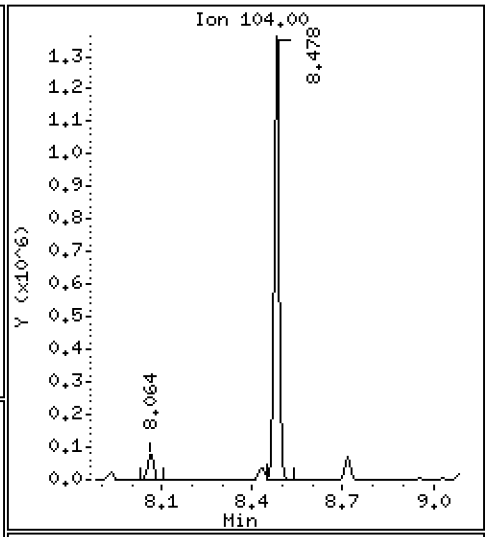
Concentration: 41.810 ug/Kg

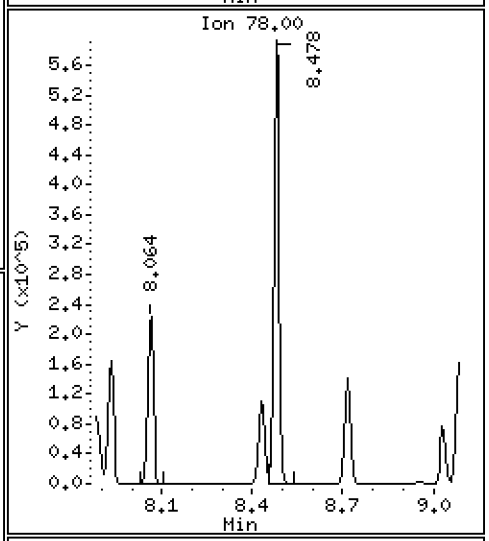


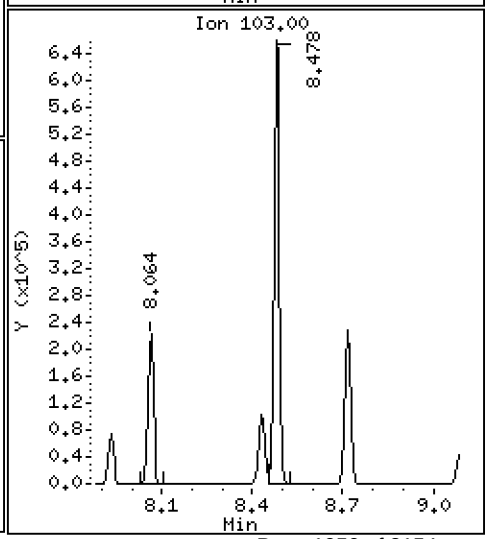












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

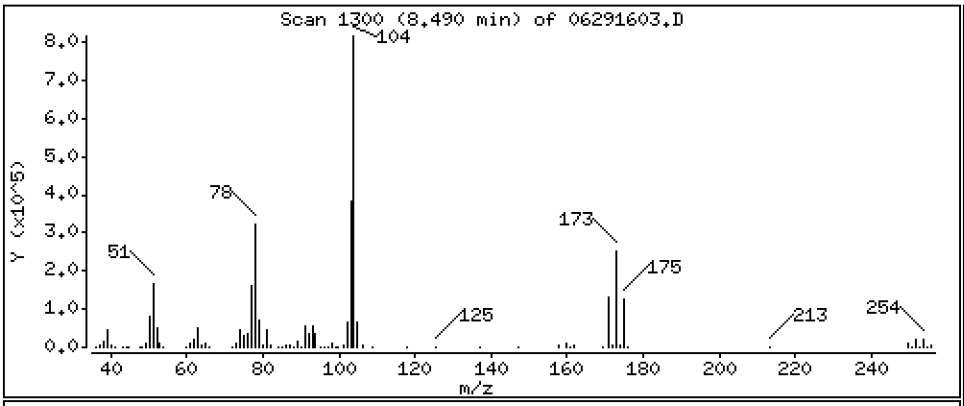
Operator: PB

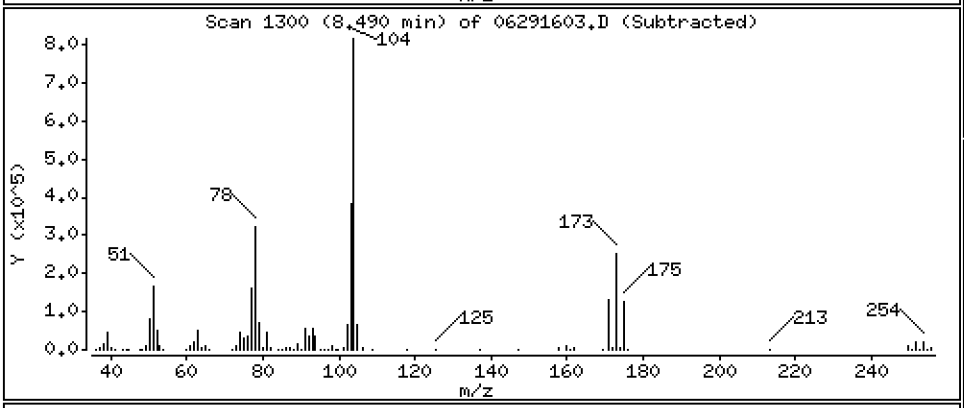
Column phase: RTXVMS

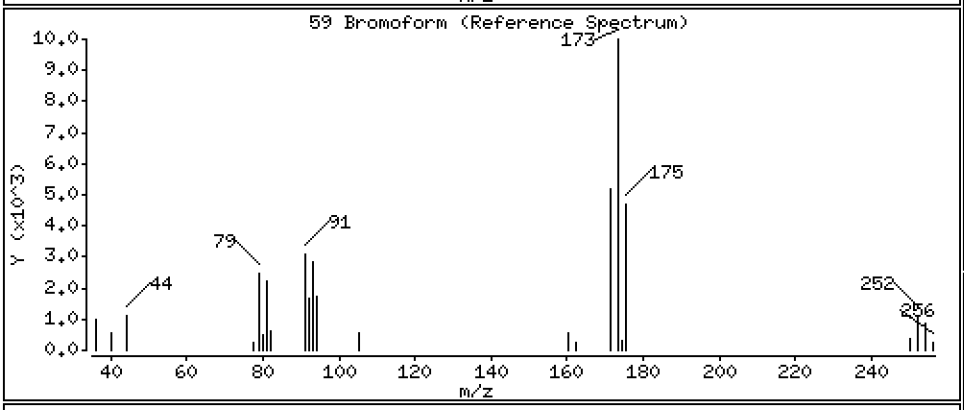
Column diameter: 0.18

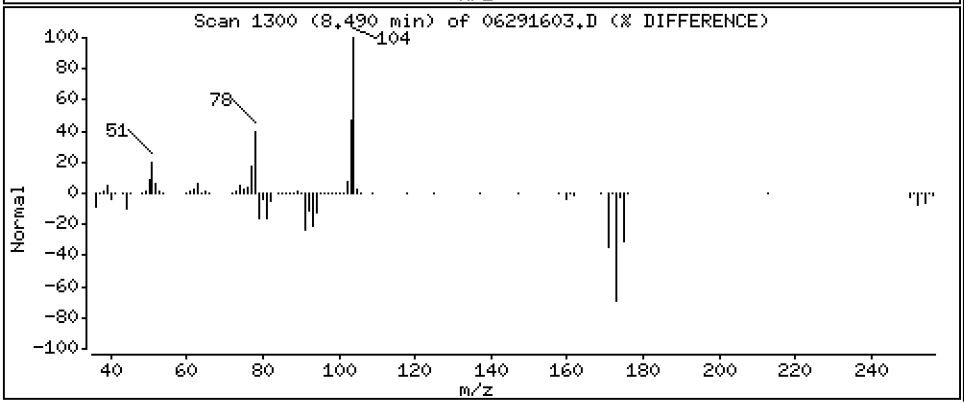
59 Bromoform

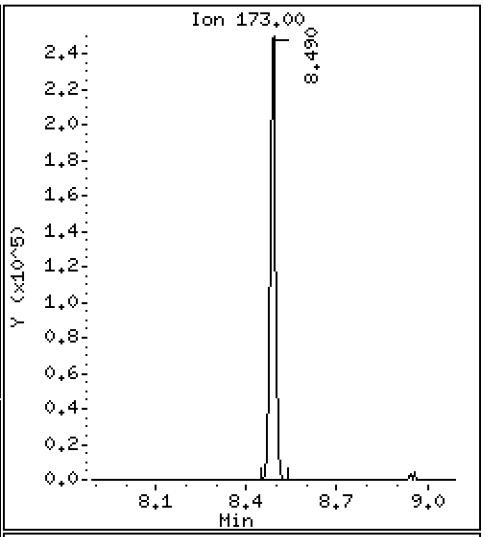
Concentration: 44.617 ug/Kg

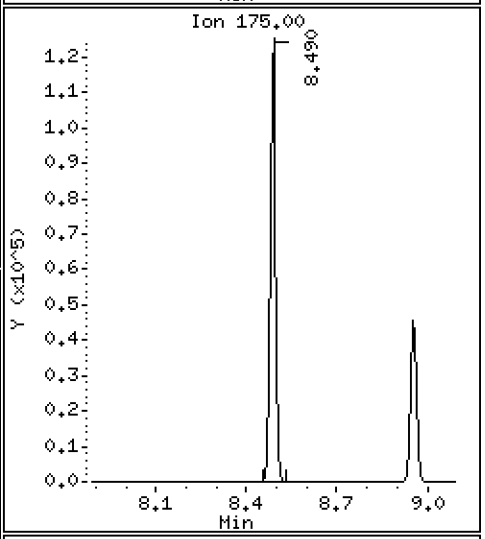


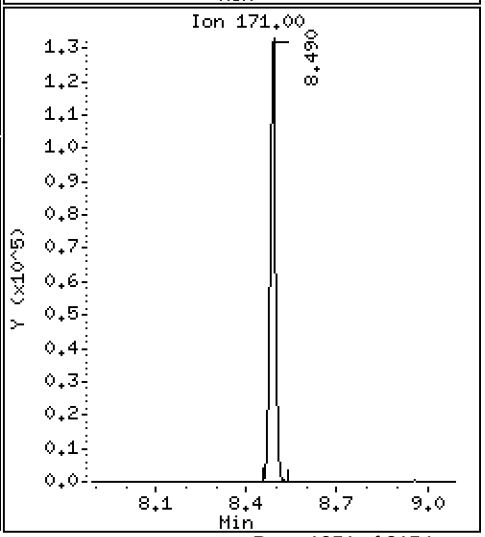












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

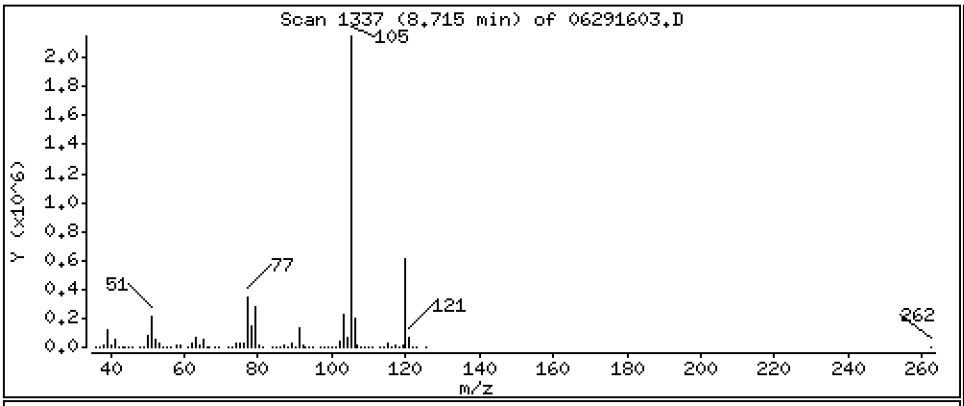
Operator: PB

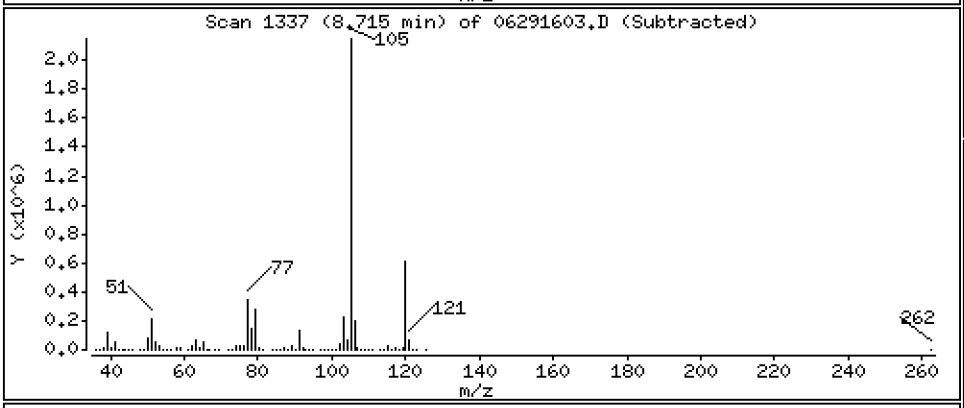
Column phase: RTXVMS

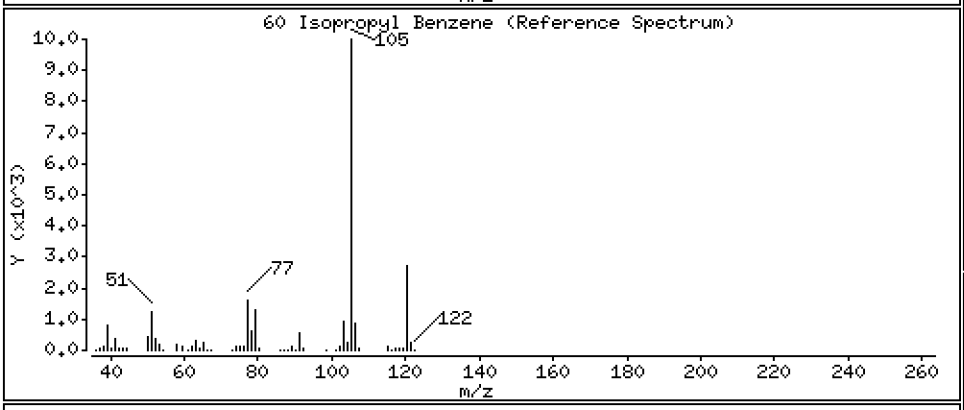
Column diameter: 0.18

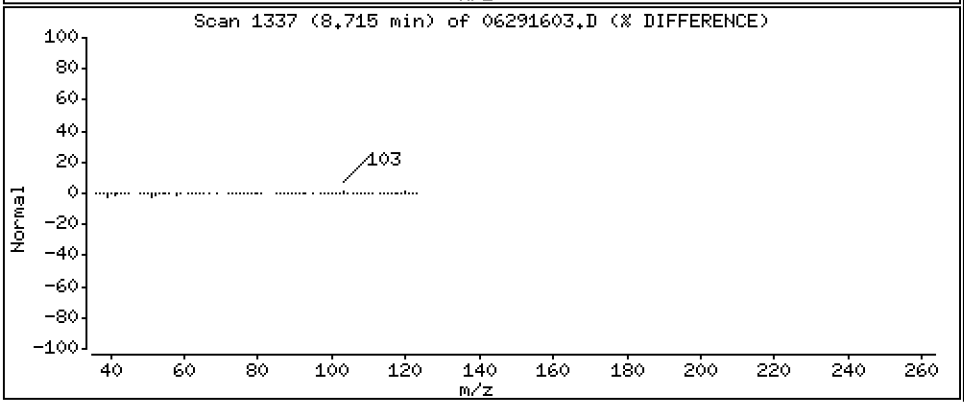
60 Isopropyl Benzene

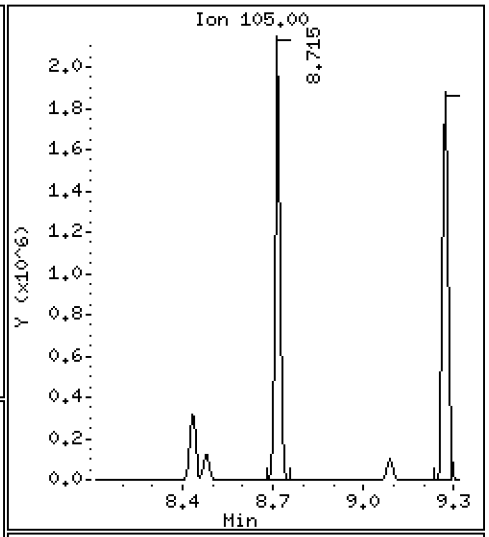
Concentration: 41.453 ug/Kg

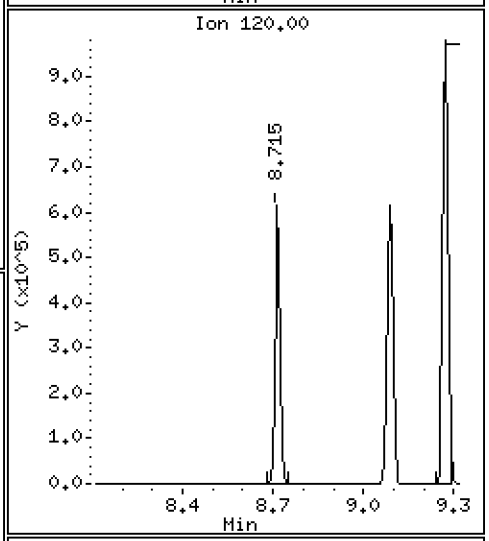


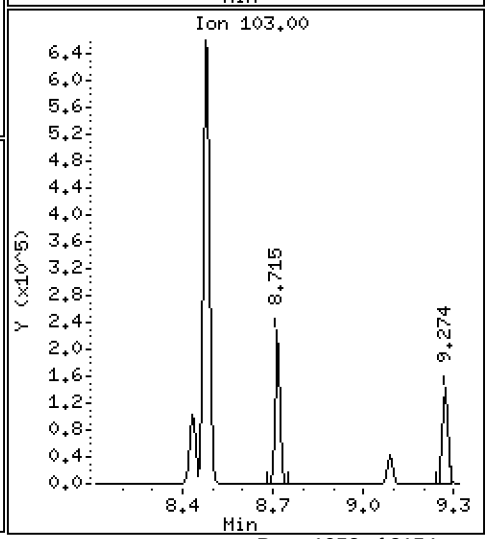












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

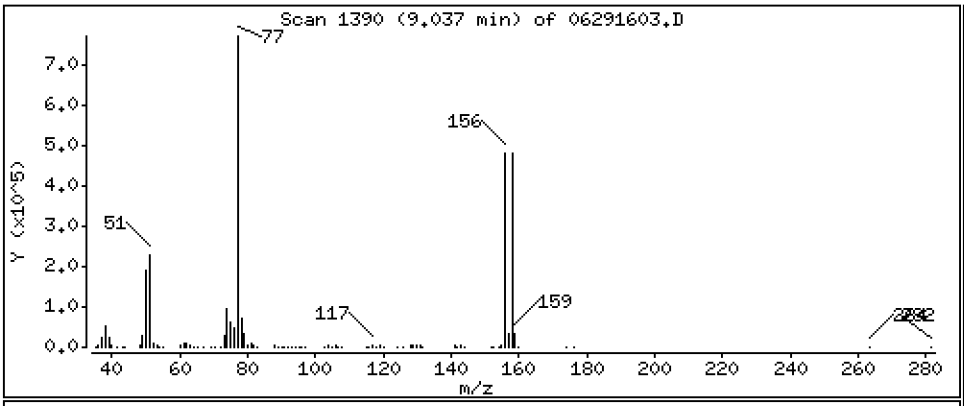
Operator: PB

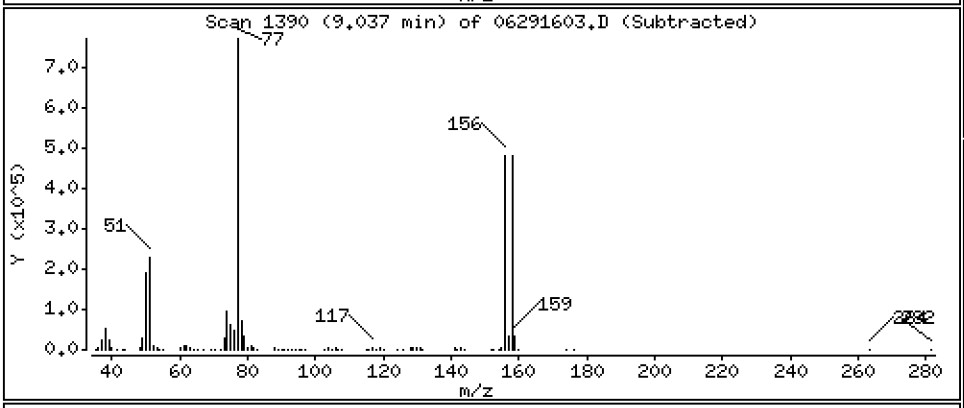
Column phase: RTXVMS

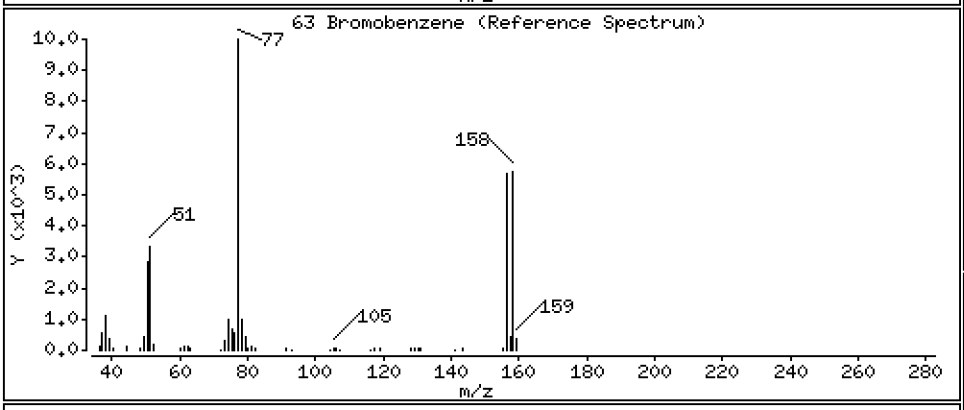
Column diameter: 0.18

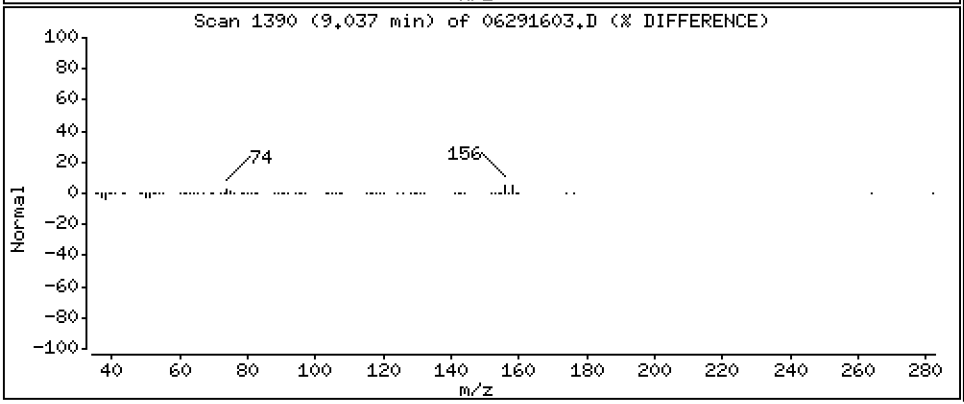
63 Bromobenzene

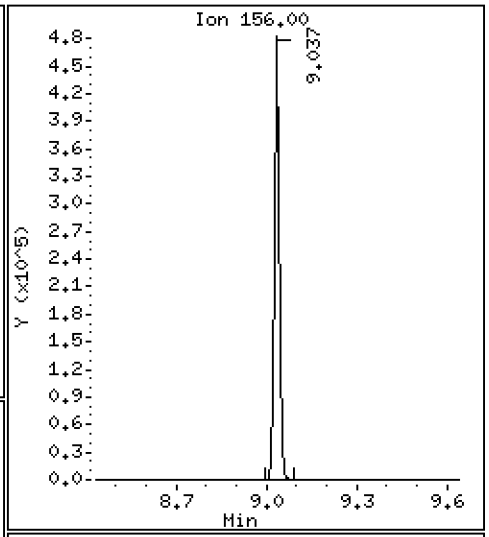
Concentration: 41.910 ug/Kg

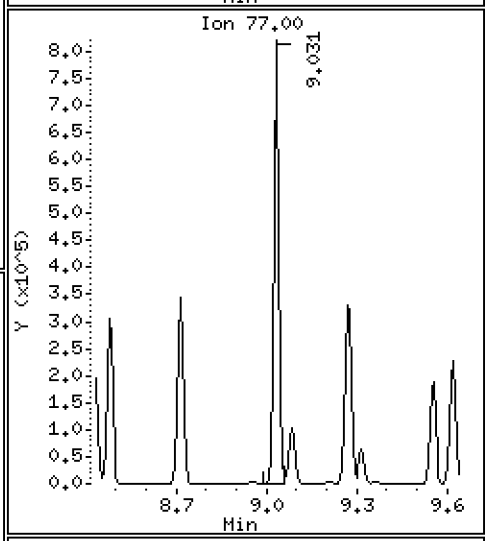


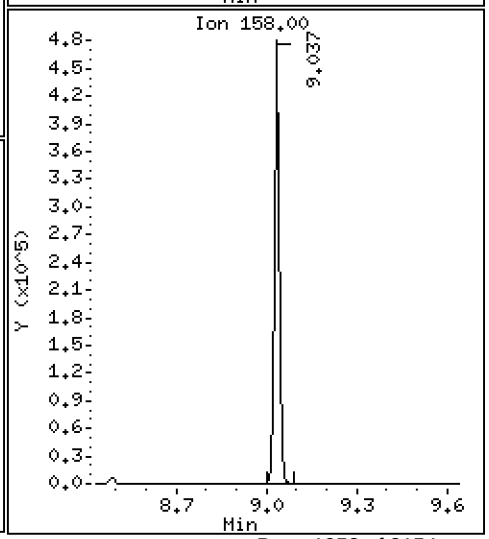












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

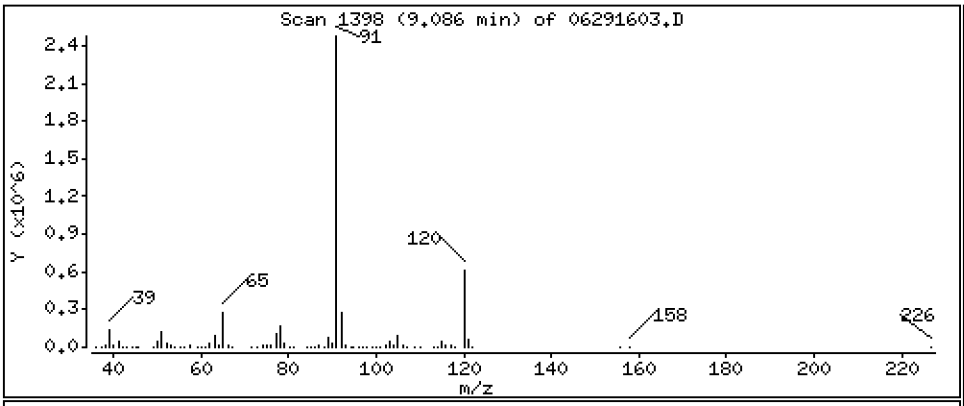
Operator: PB

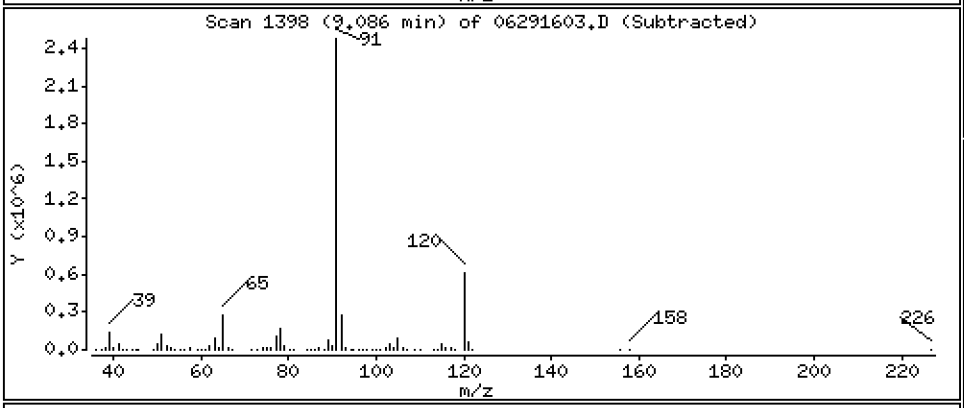
Column phase: RTXVMS

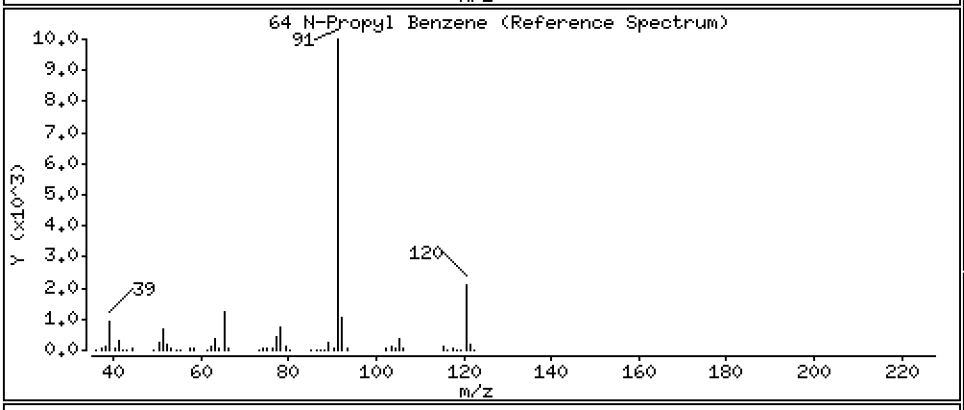
Column diameter: 0.18

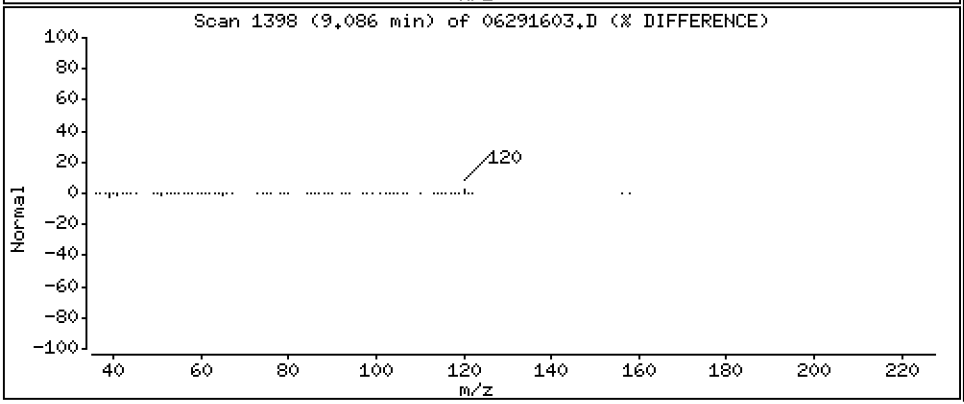
64 N-Propyl Benzene

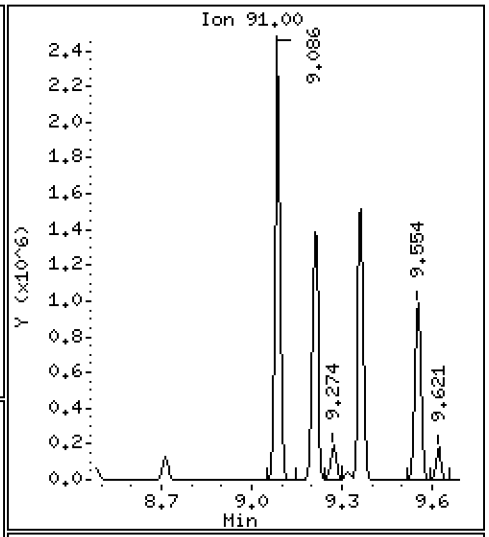
Concentration: 40.462 ug/Kg

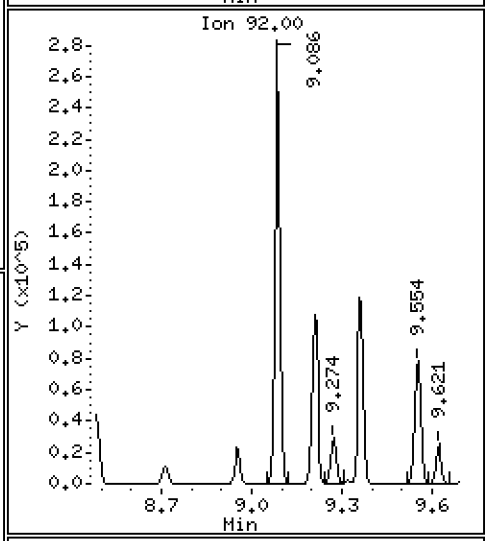


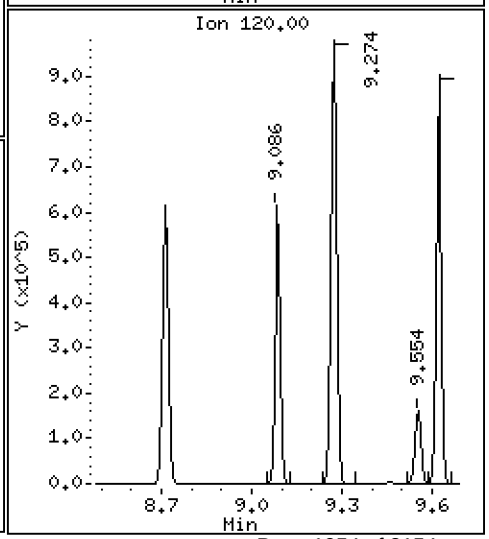












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

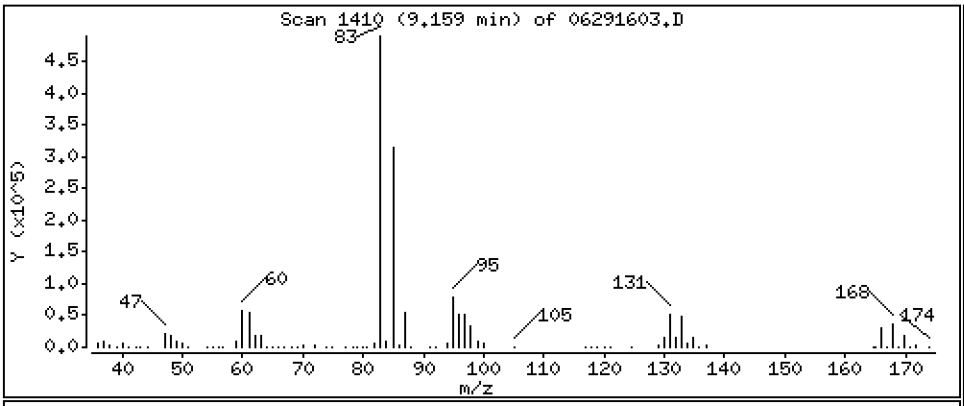
Operator: PB

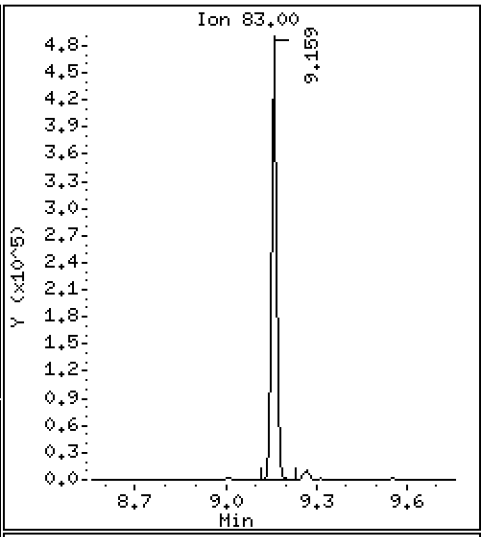
Column phase: RTXVMS

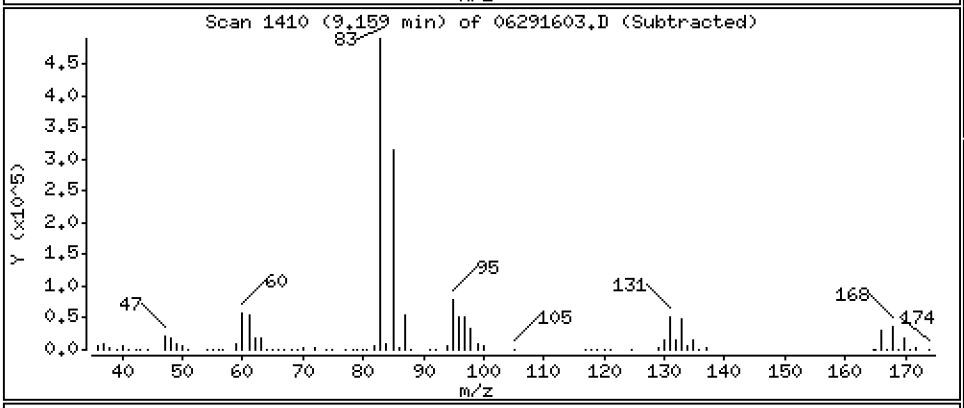
Column diameter: 0.18

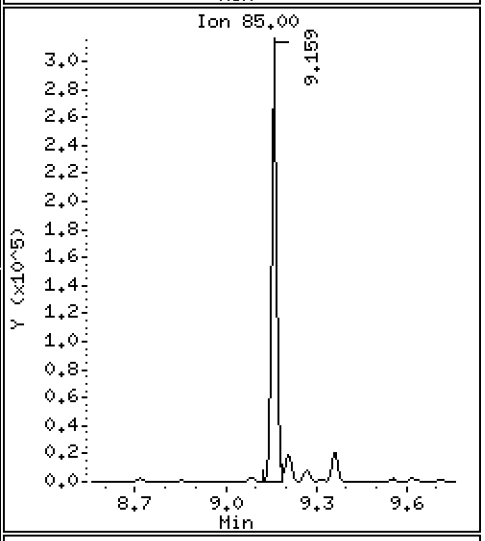
65 1,1,2,2-Tetrachloroethane

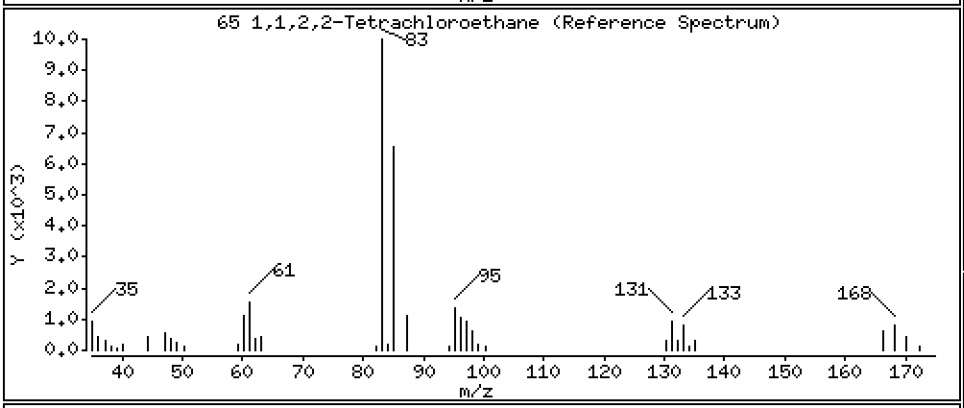
Concentration: 42.190 ug/Kg

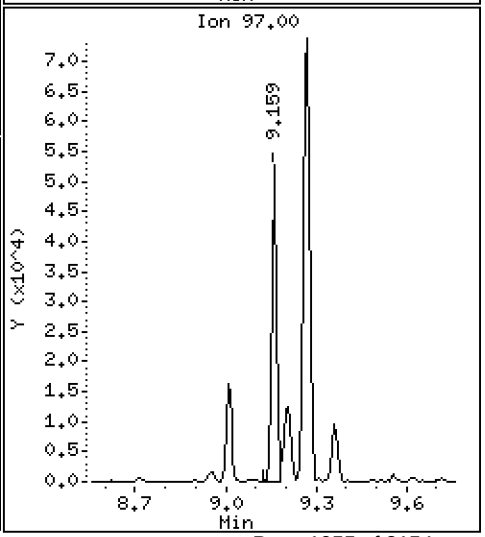


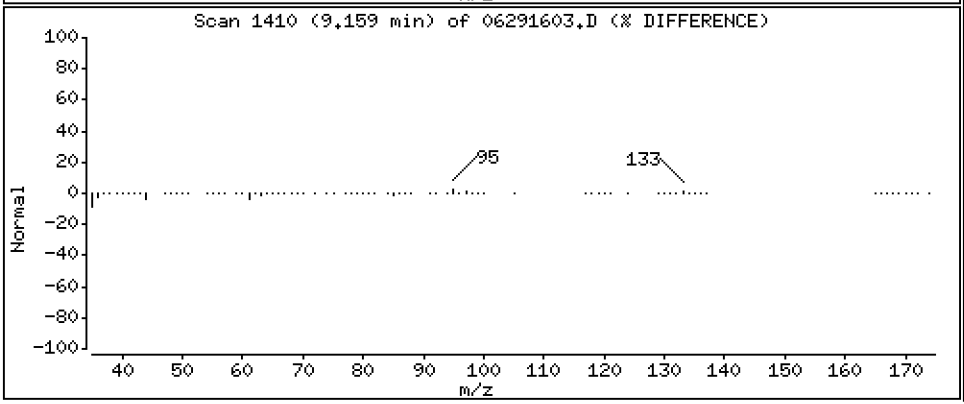












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

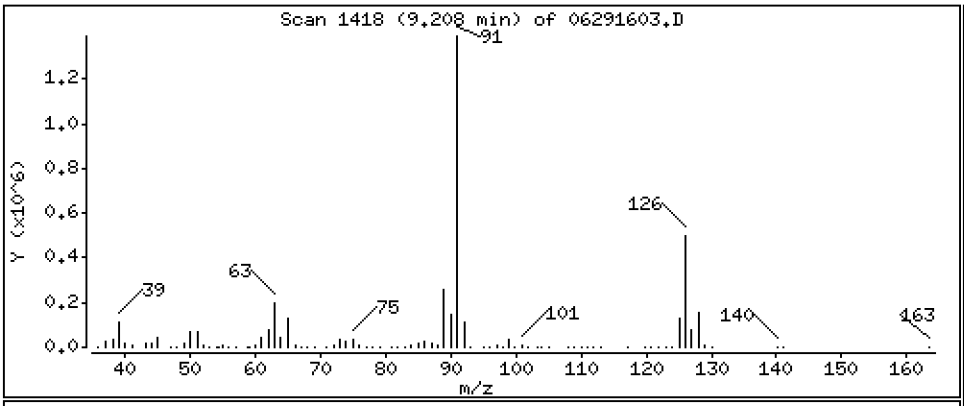
Operator: PB

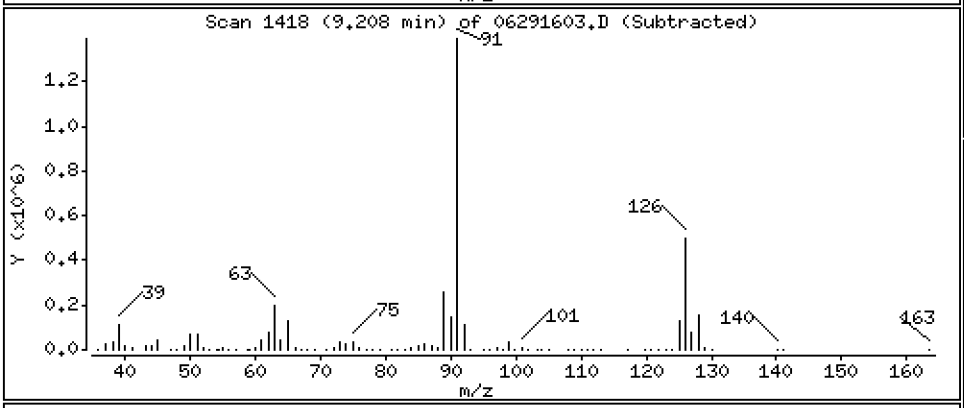
Column phase: RTXVMS

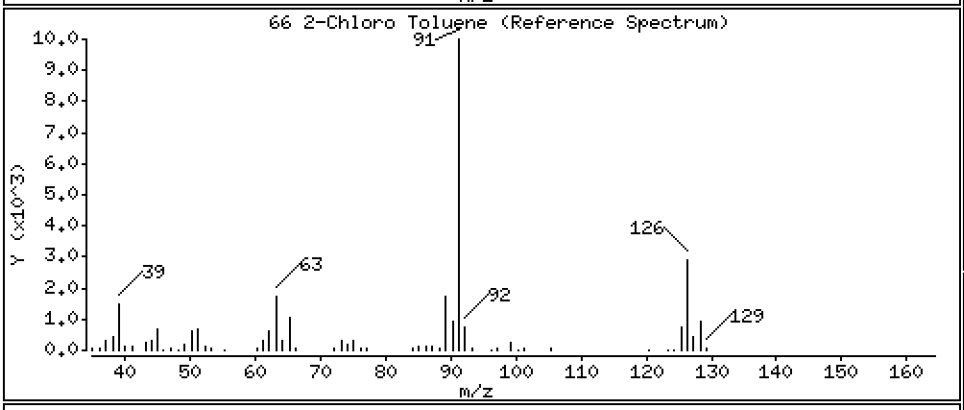
Column diameter: 0.18

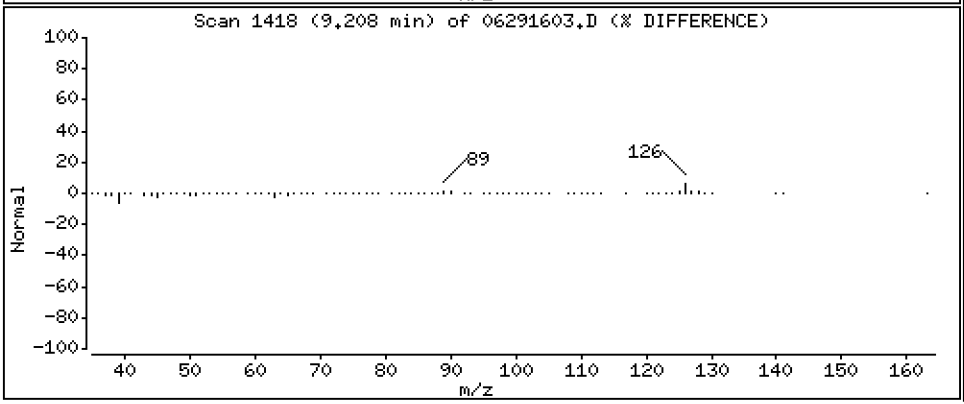
66 2-Chloro Toluene

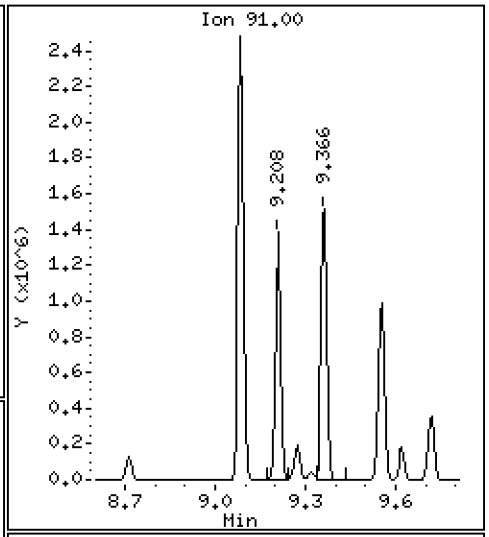
Concentration: 40.932 ug/Kg

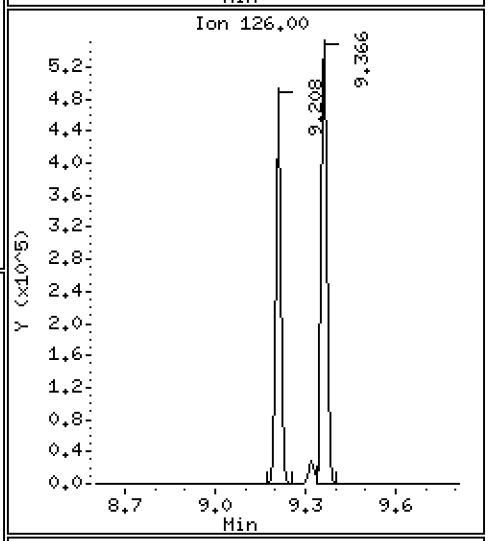


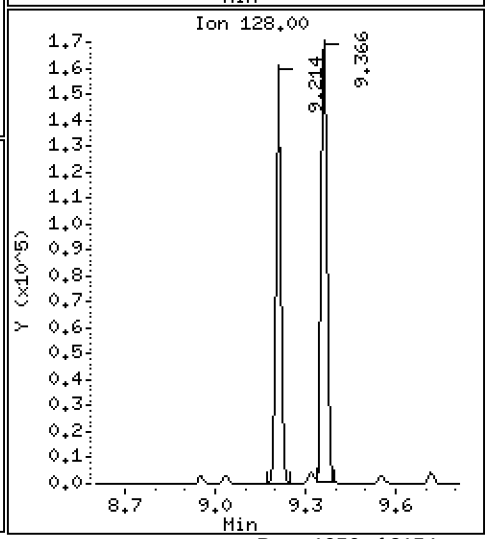












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

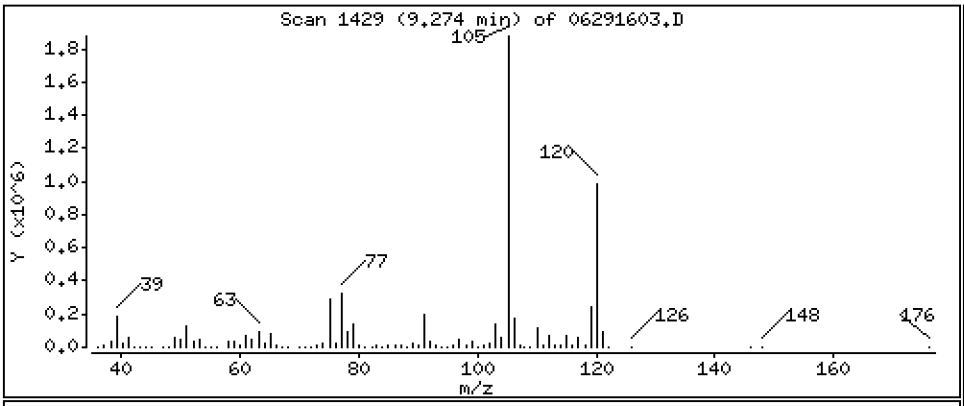
Operator: PB

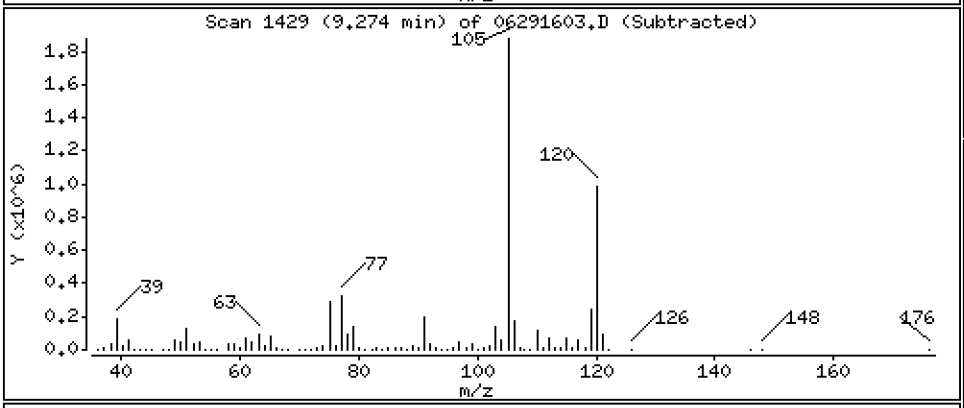
Column phase: RTXVMS

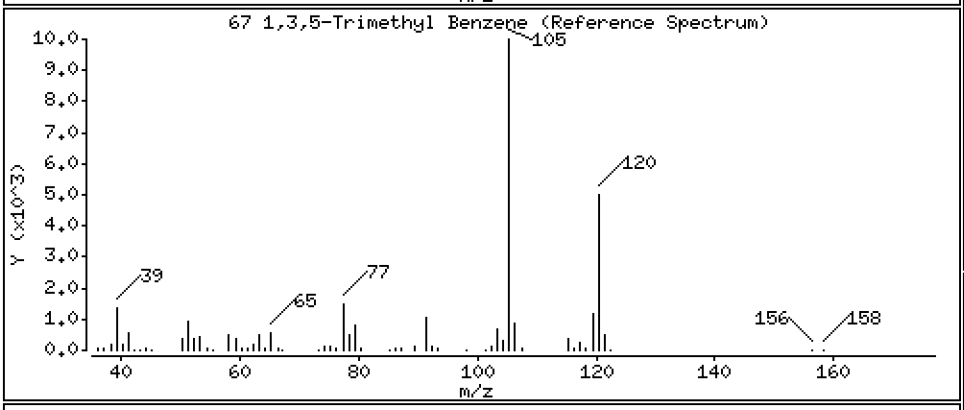
Column diameter: 0.18

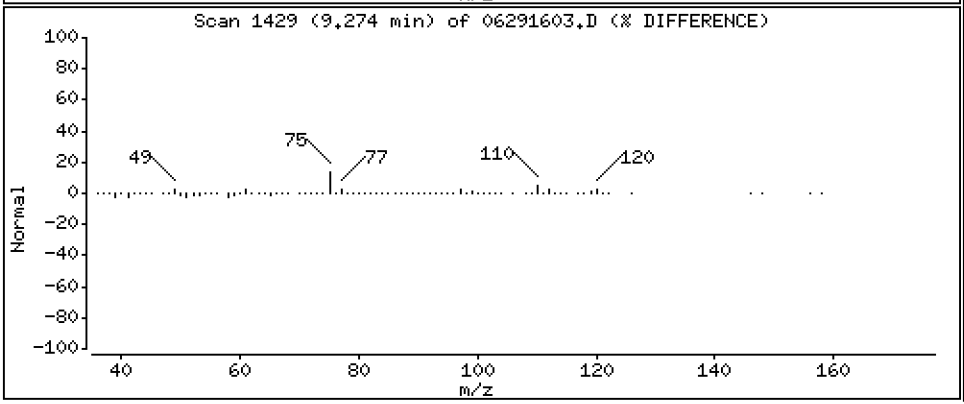
67 1,3,5-Trimethyl Benzene

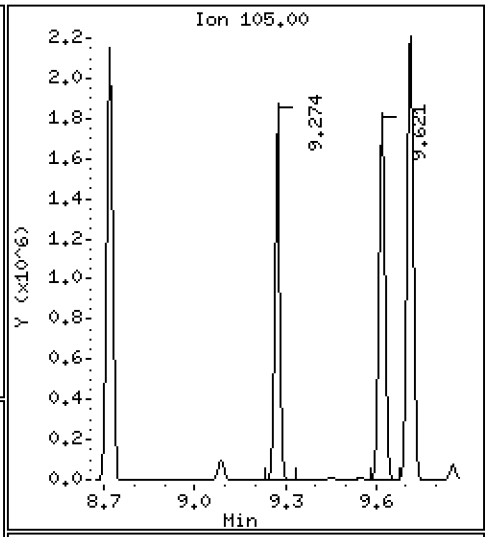
Concentration: 41.868 ug/Kg

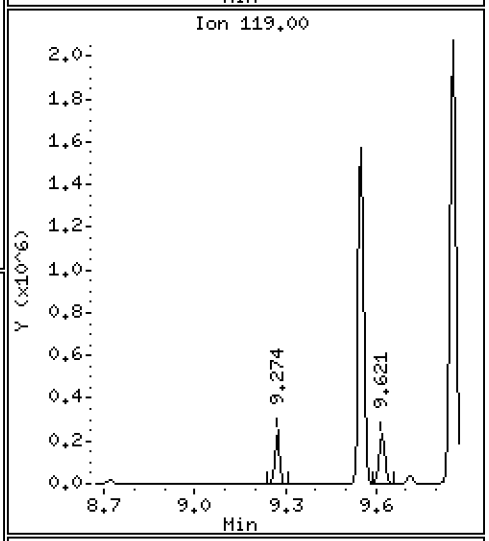


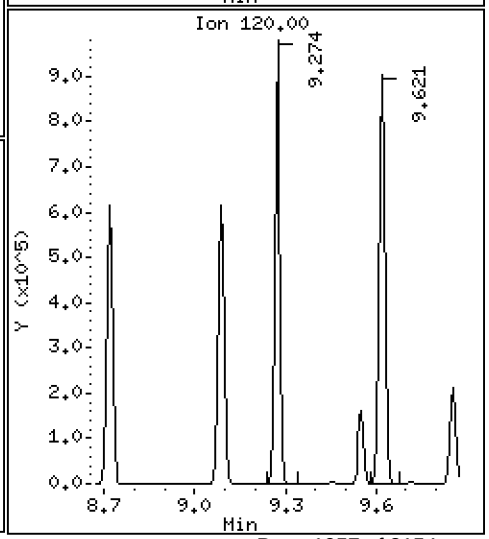












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

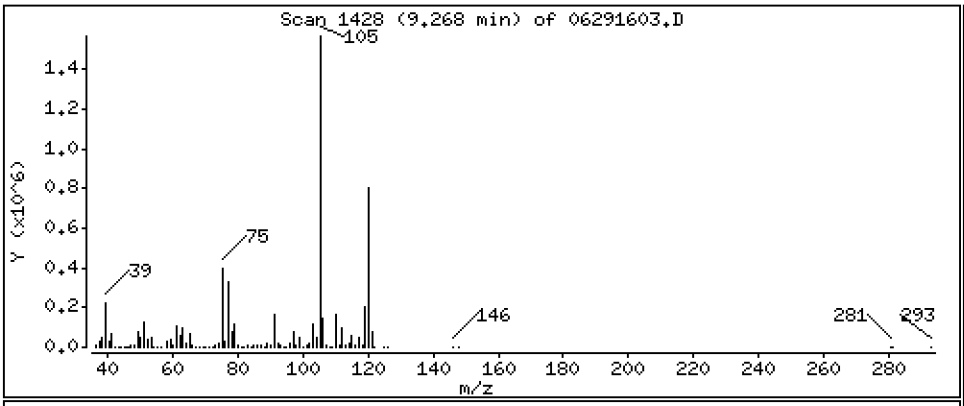
Operator: PB

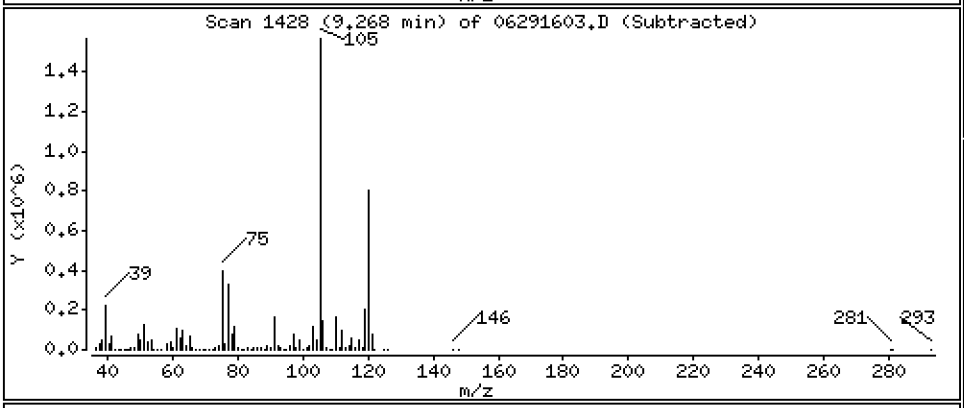
Column phase: RTXVMS

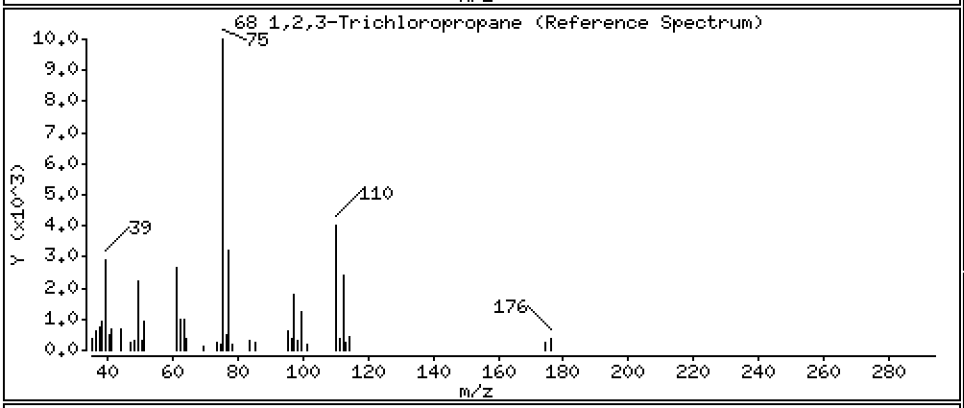
Column diameter: 0.18

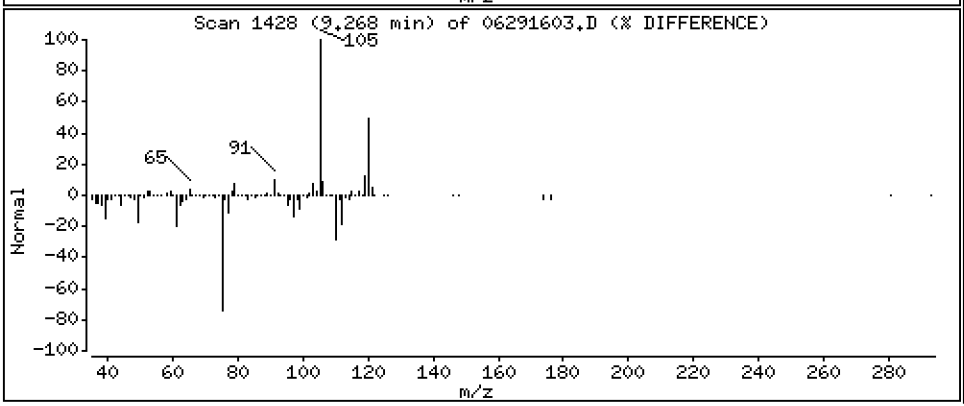
68 1,2,3-Trichloropropane

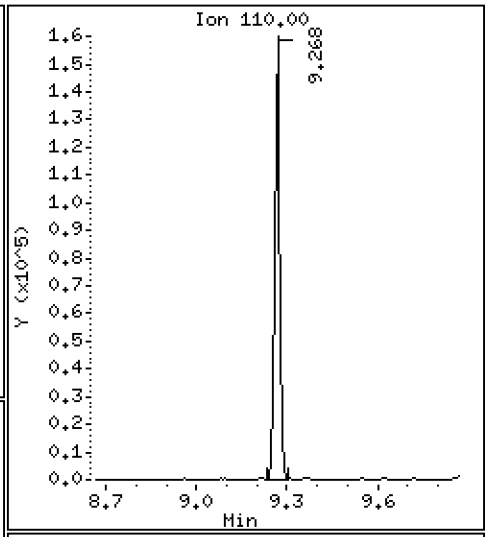
Concentration: 45.069 ug/Kg

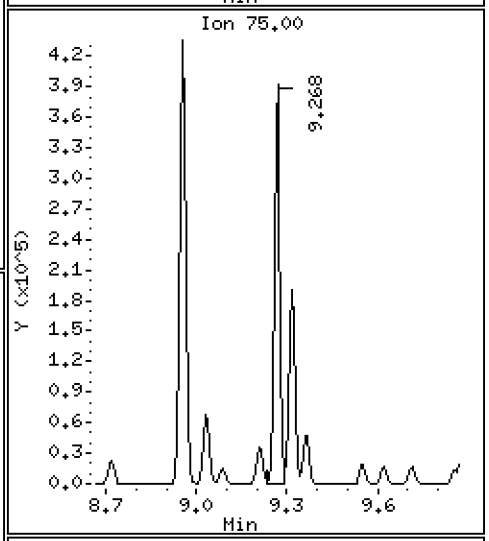


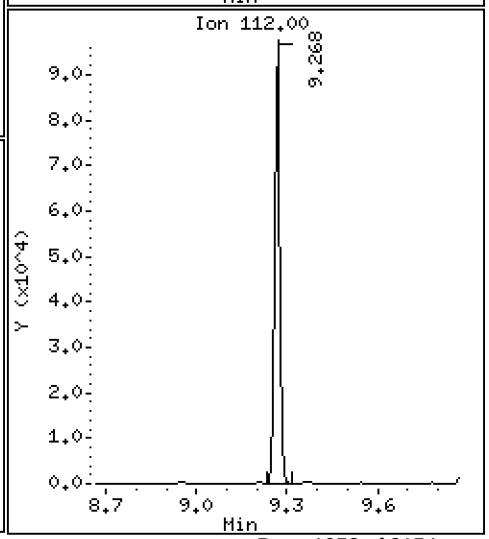












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

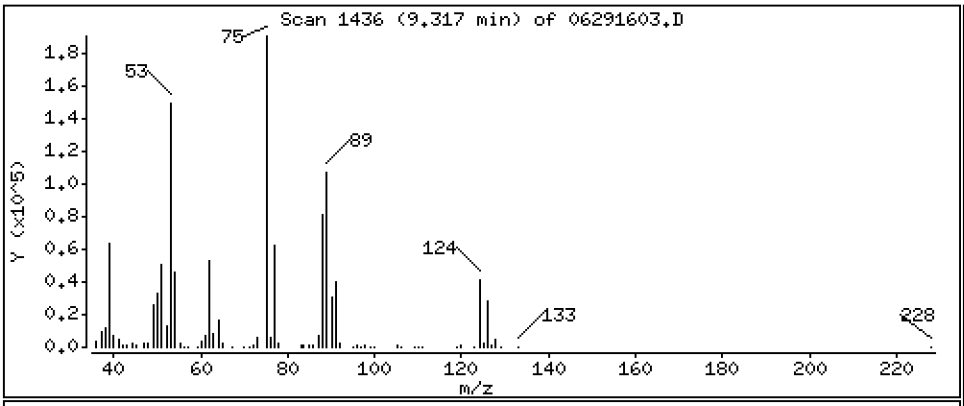
Operator: PB

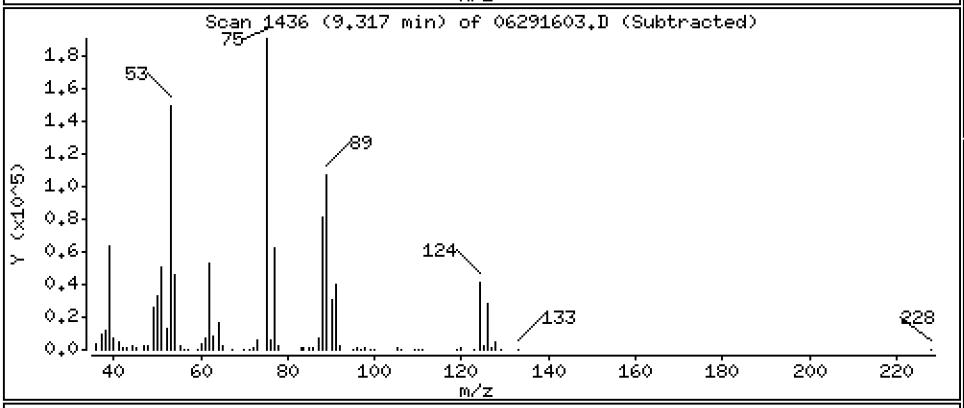
Column phase: RTXVMS

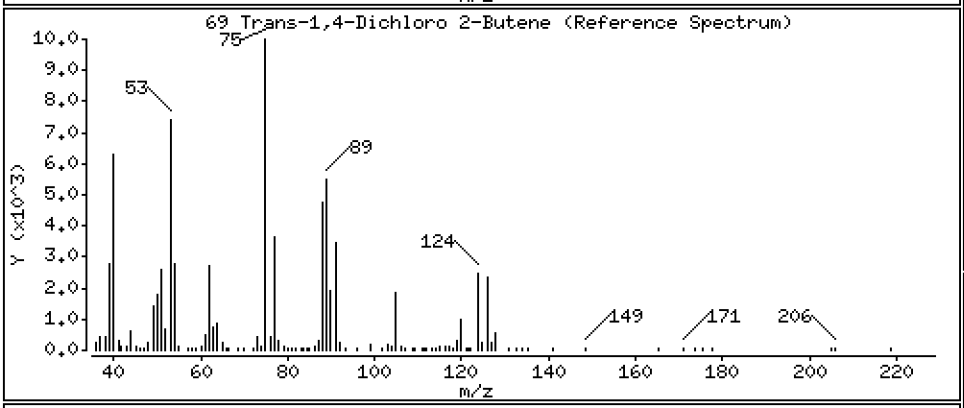
Column diameter: 0.18

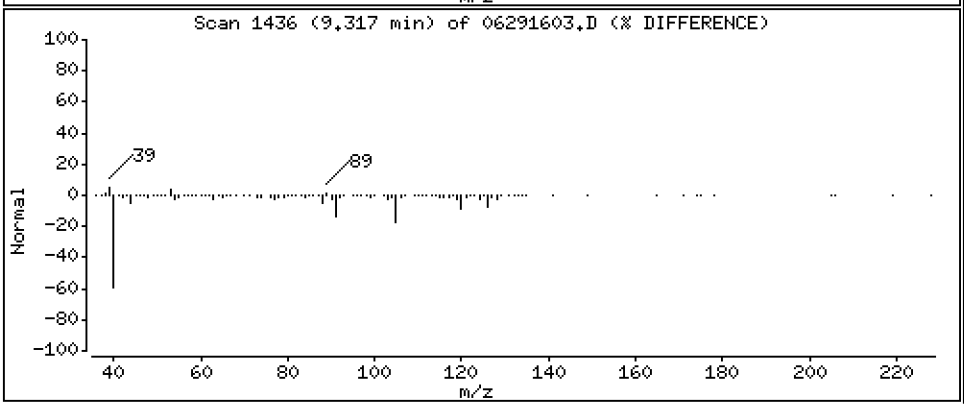
69 Trans-1,4-Dichloro 2-Butene

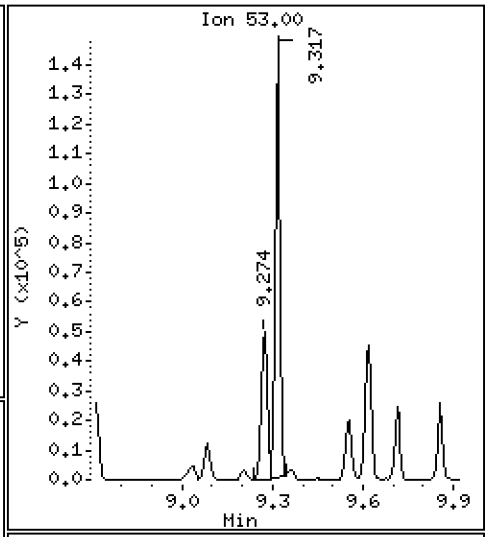
Concentration: 43.943 ug/Kg

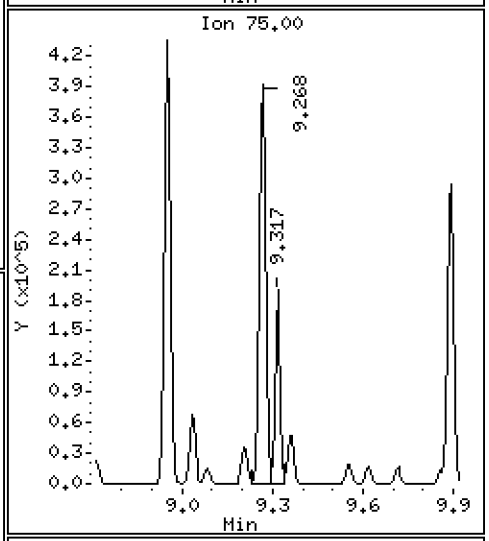


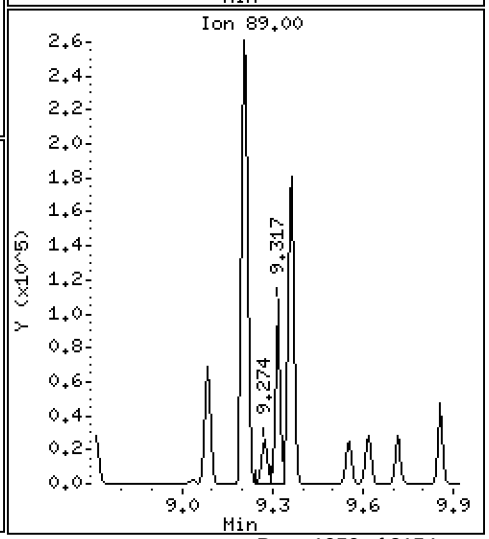












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

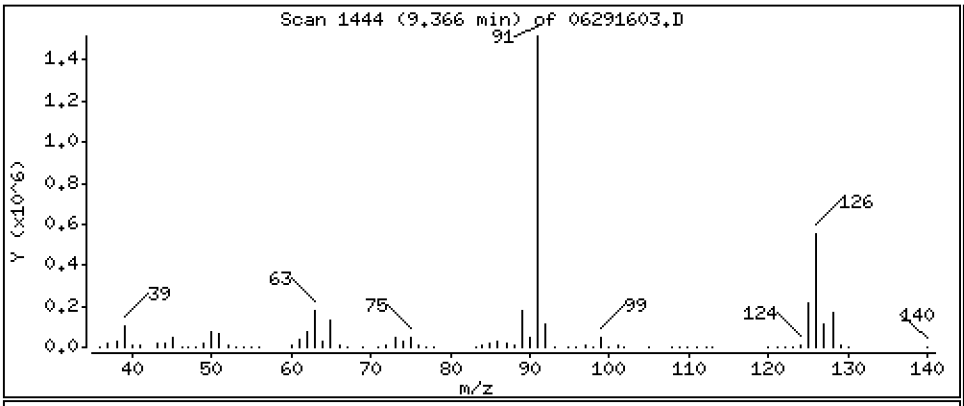
Operator: PB

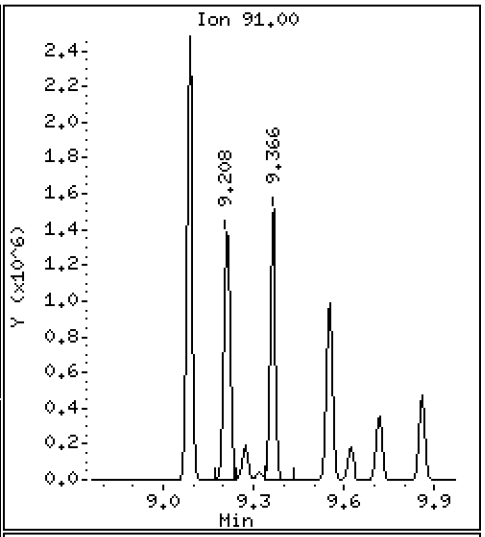
Column phase: RTXVMS

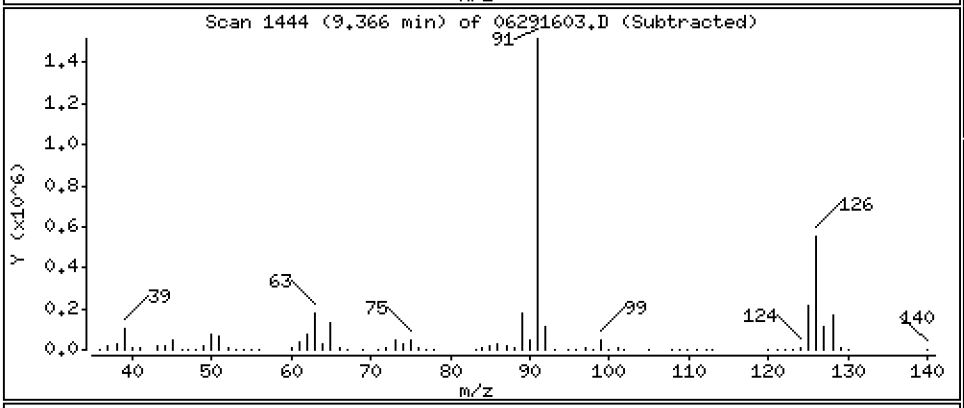
Column diameter: 0.18

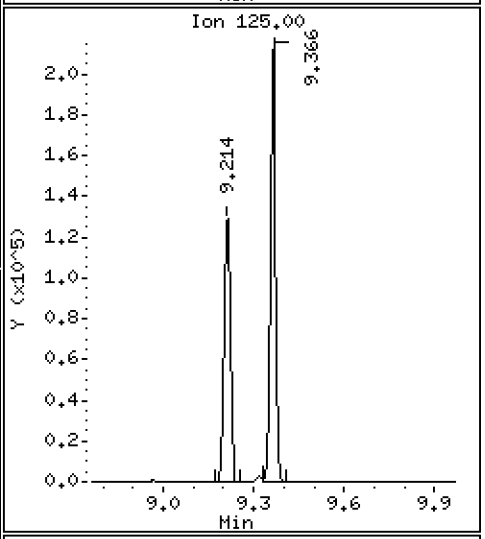
70 4-Chloro Toluene

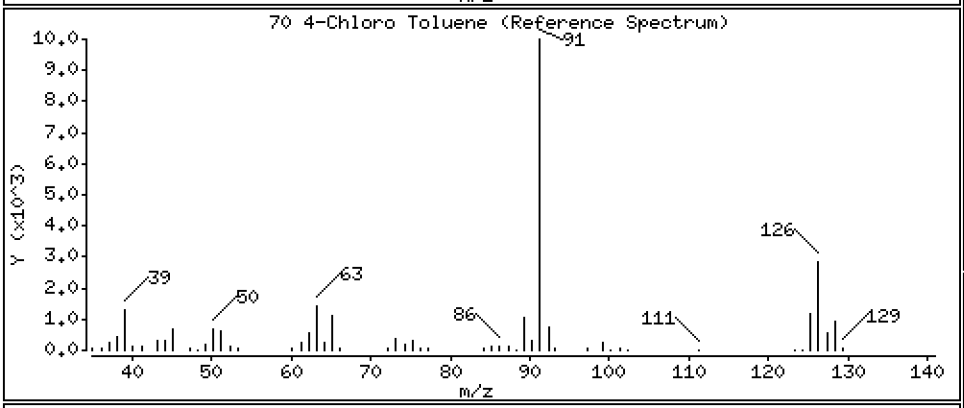
Concentration: 41.820 ug/Kg

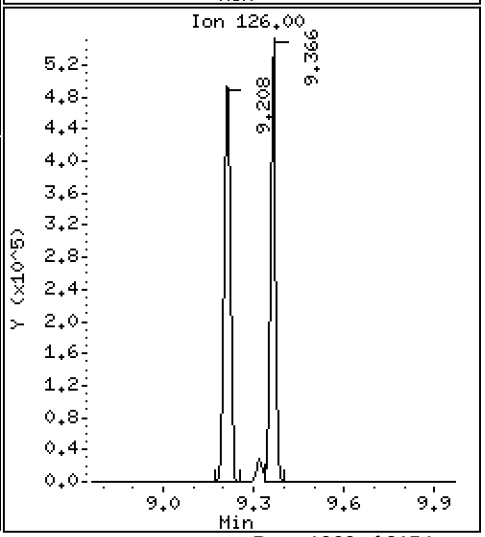


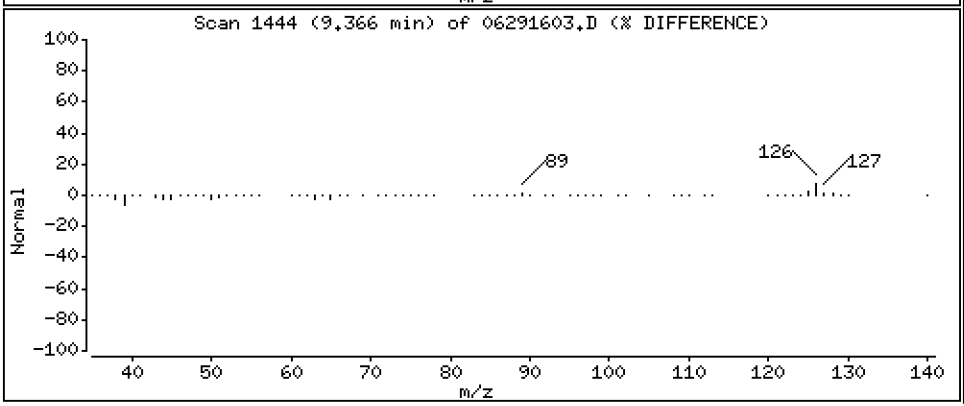












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Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

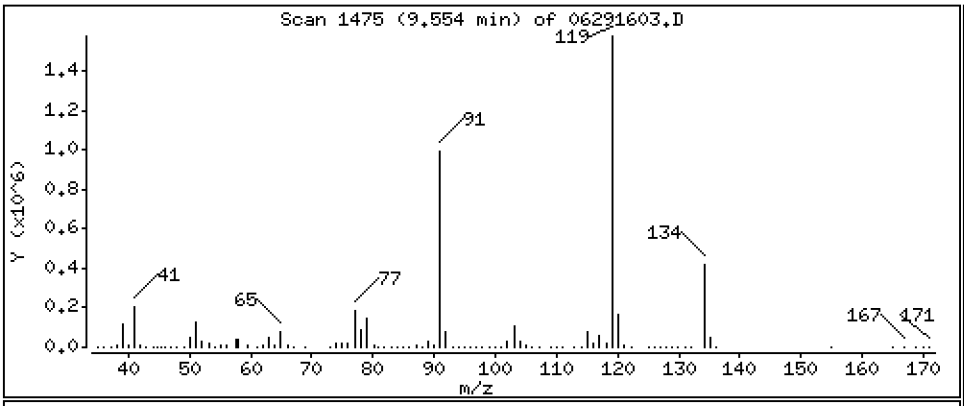
Operator: PB

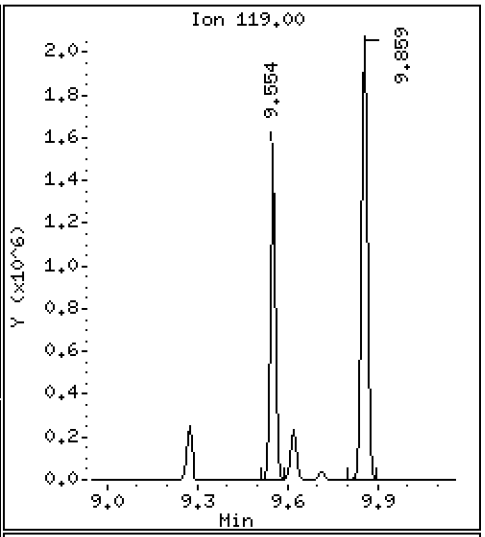
Column phase: RTXVMS

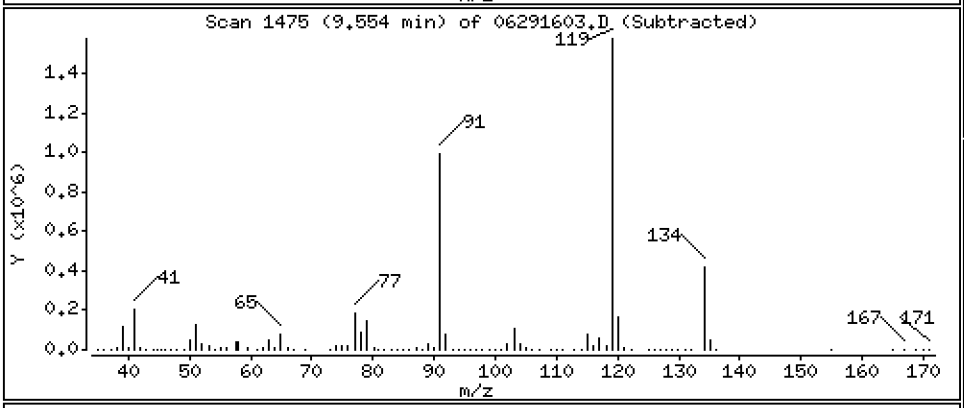
Column diameter: 0.18

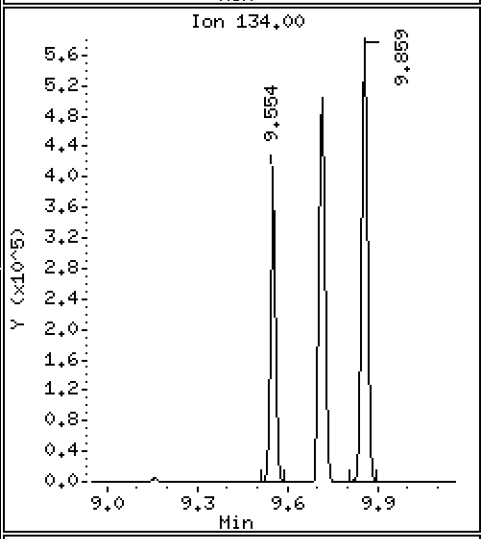
71 T-Butyl Benzene

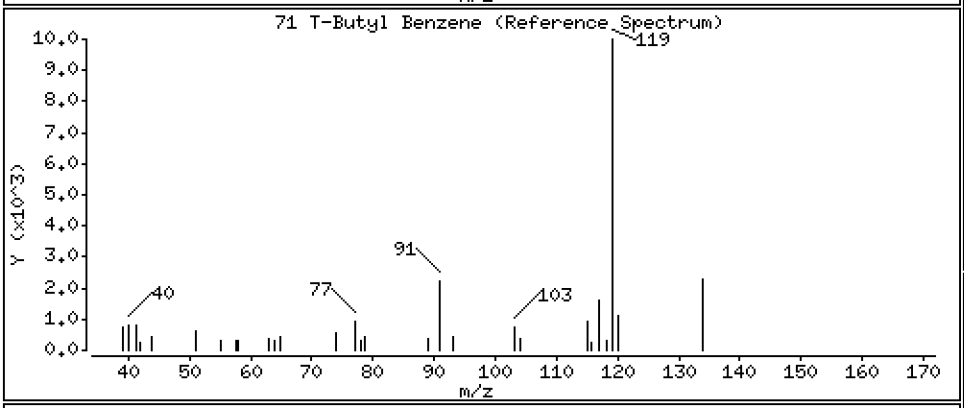
Concentration: 40.908 ug/Kg

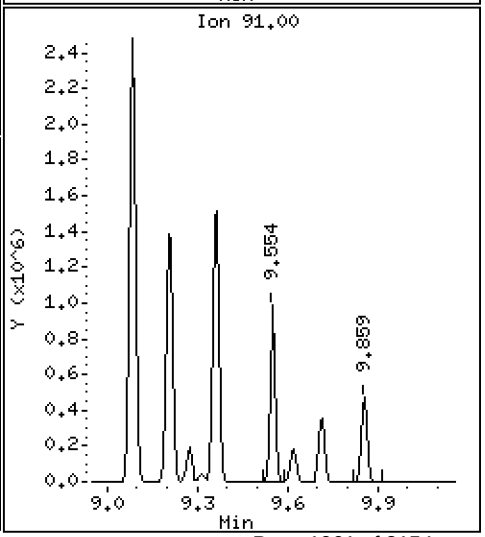


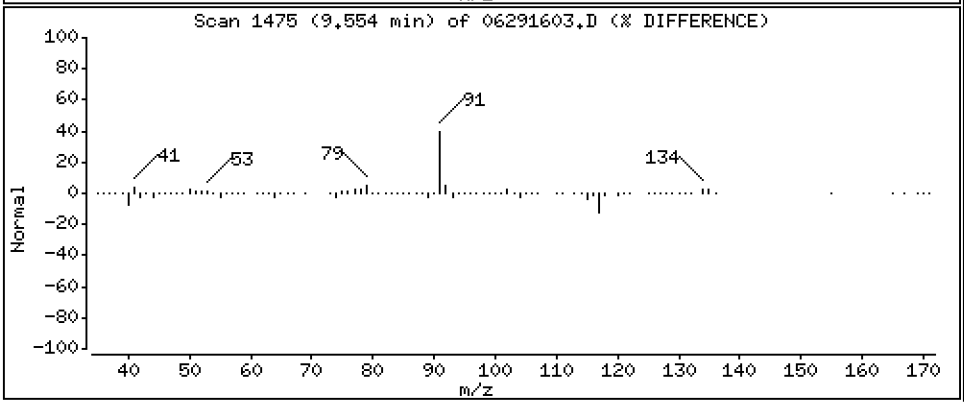












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

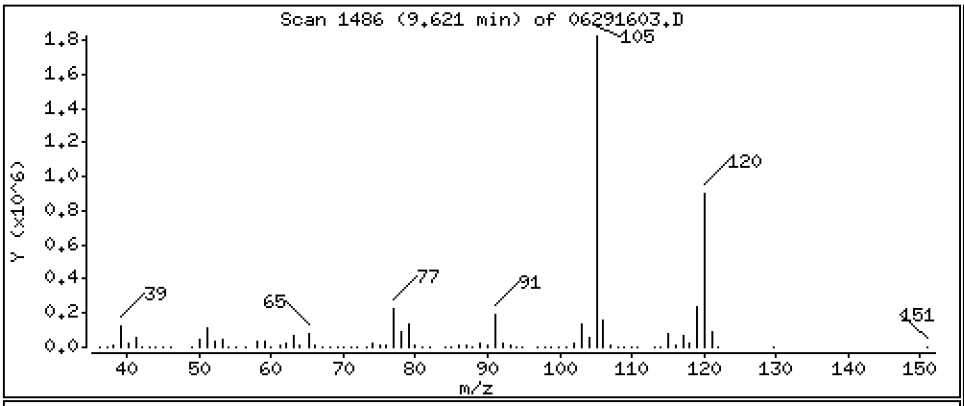
Operator: PB

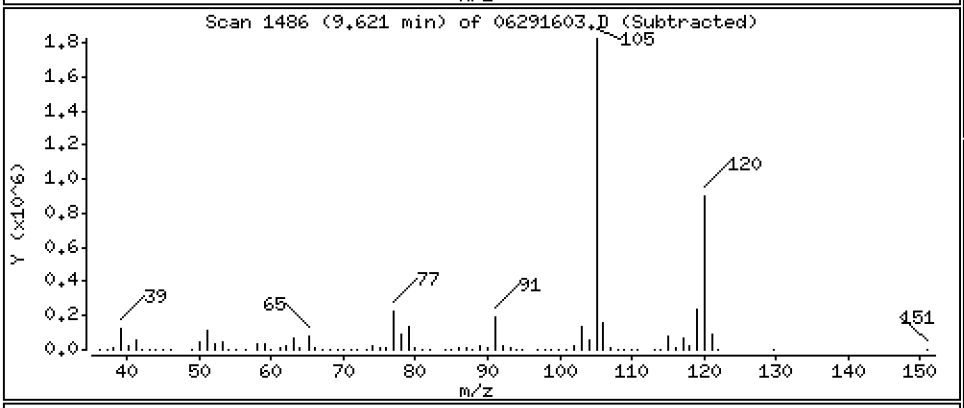
Column phase: RTXVMS

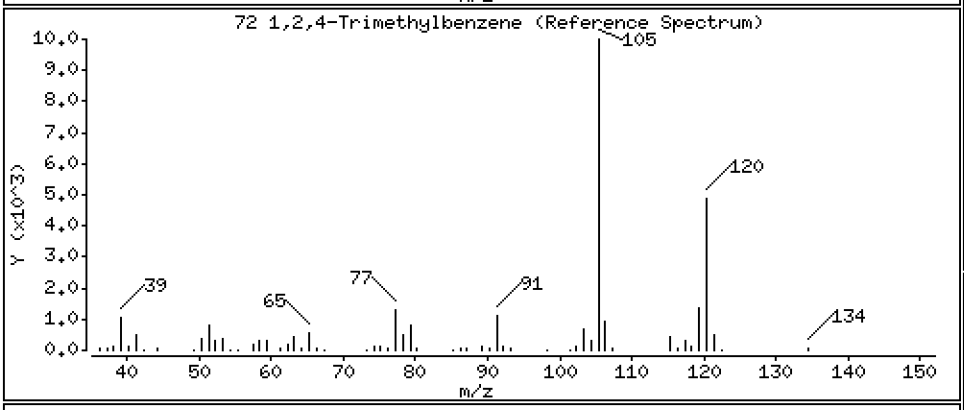
Column diameter: 0.18

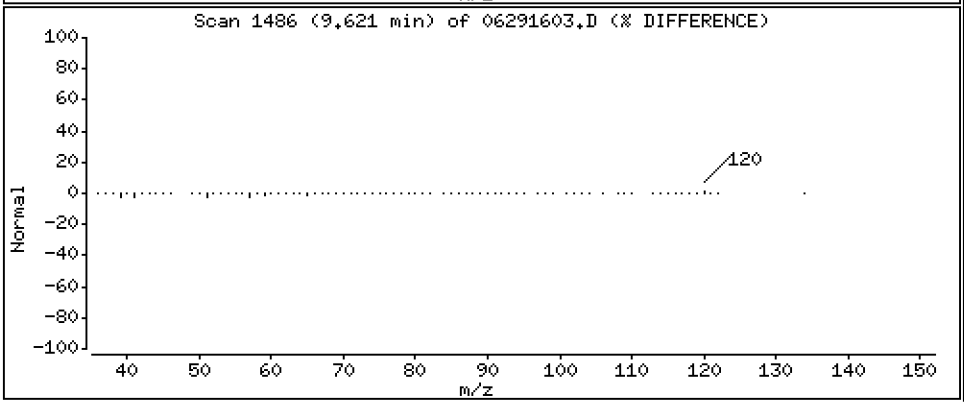
72 1,2,4-Trimethylbenzene

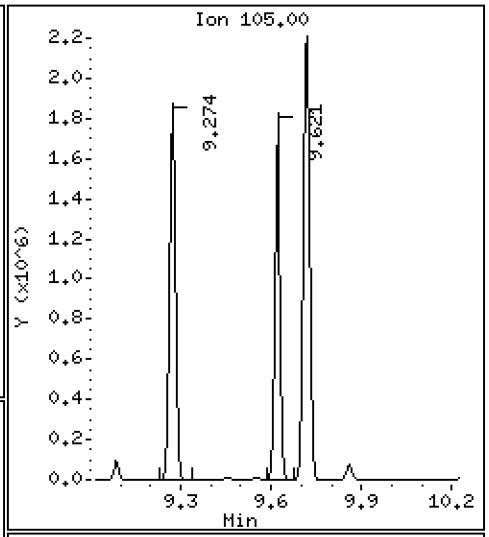
Concentration: 42.038 ug/Kg

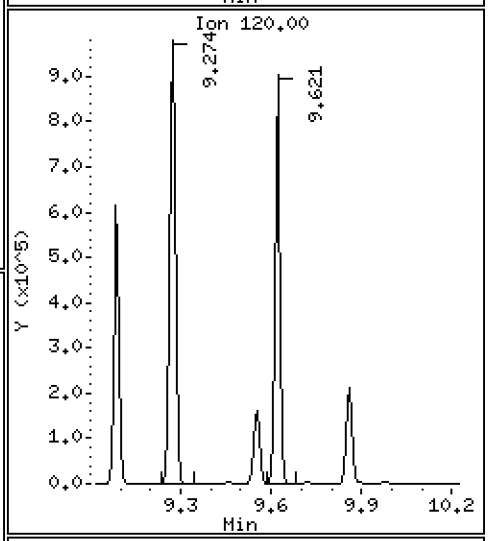


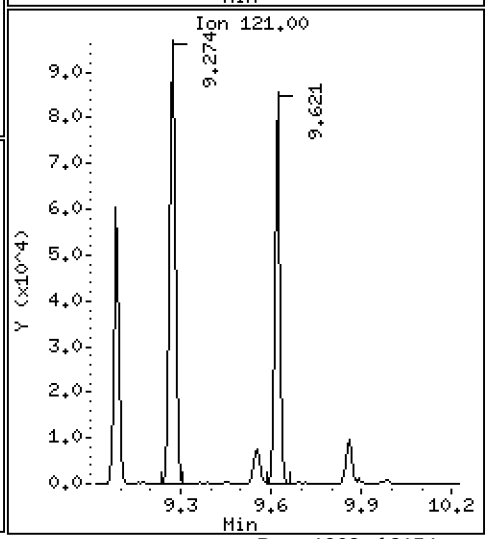












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

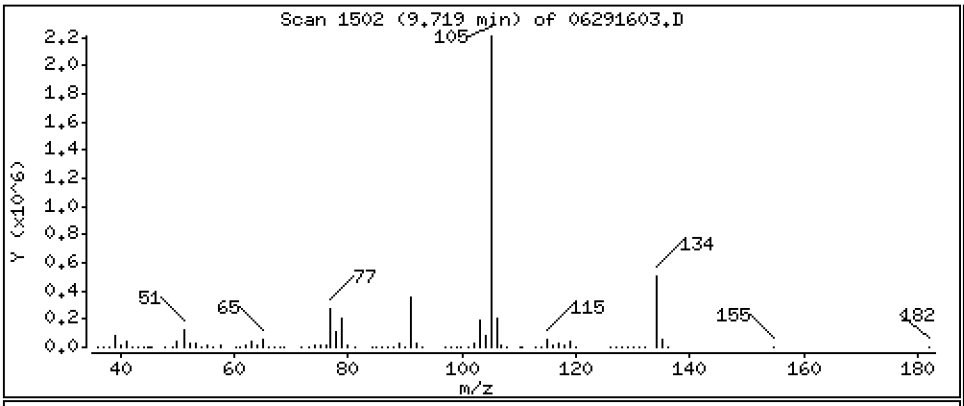
Operator: PB

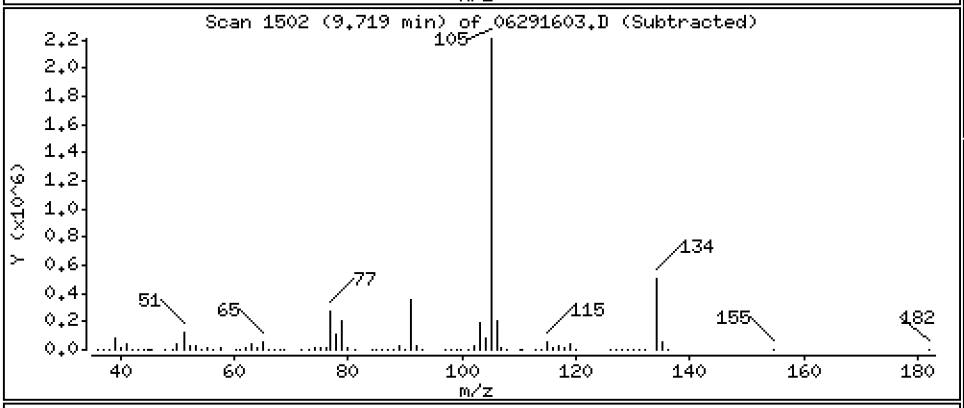
Column phase: RTXVMS

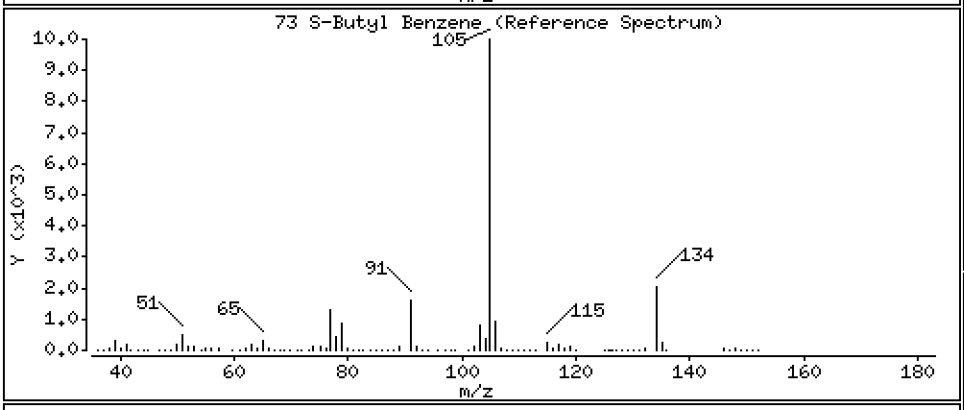
Column diameter: 0.18

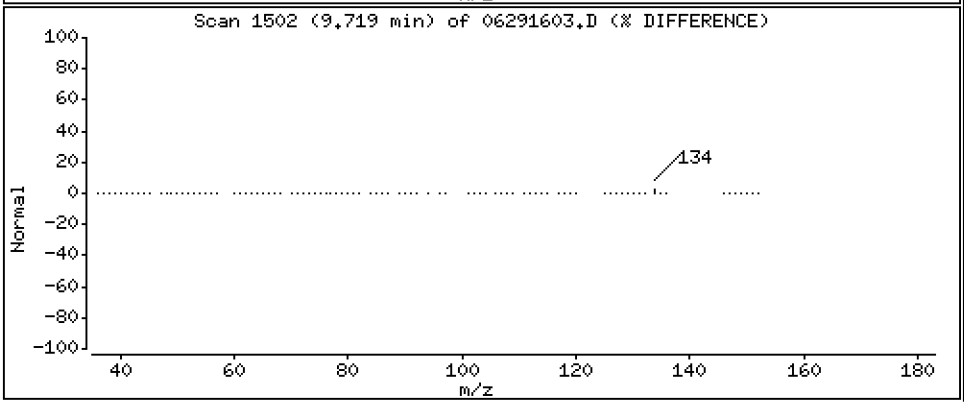
73 S-Butyl Benzene

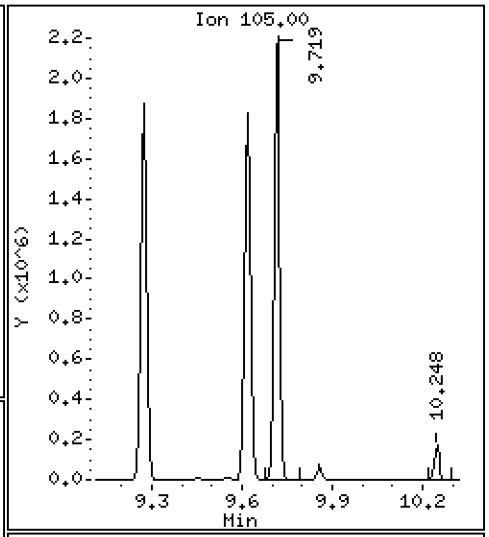
Concentration: 40.399 ug/Kg

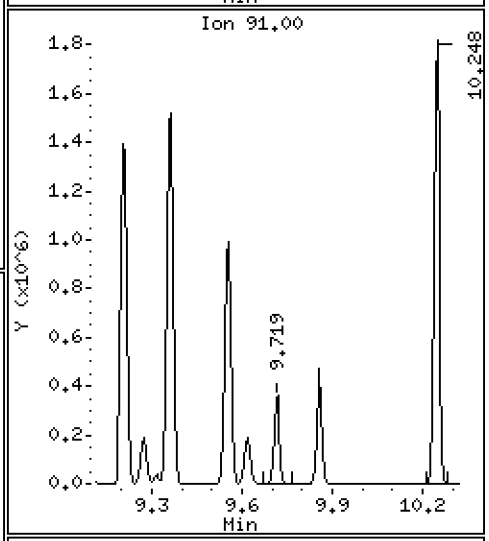


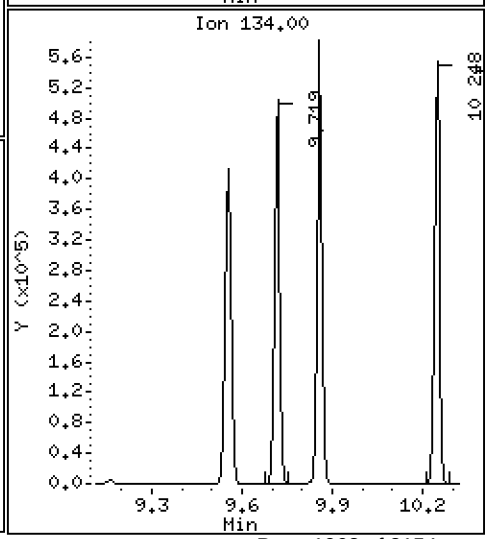












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

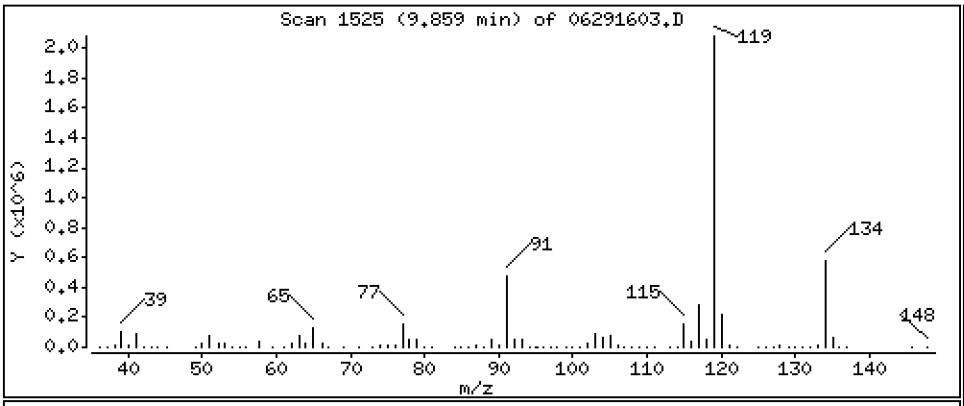
Operator: PB

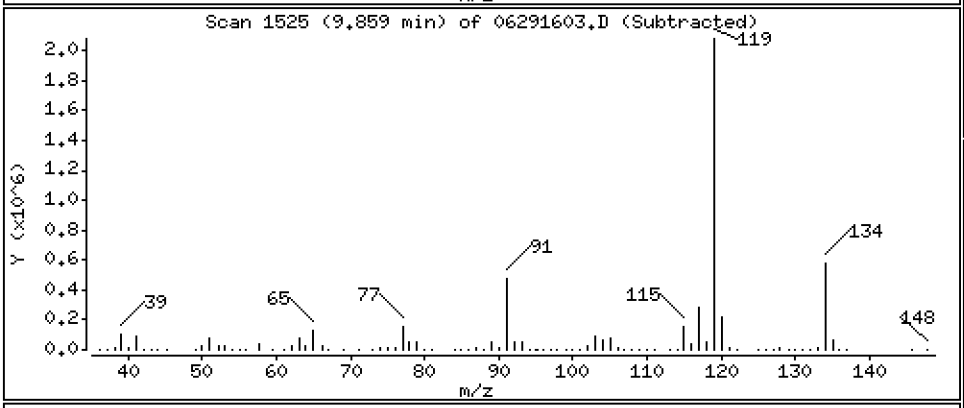
Column phase: RTXVMS

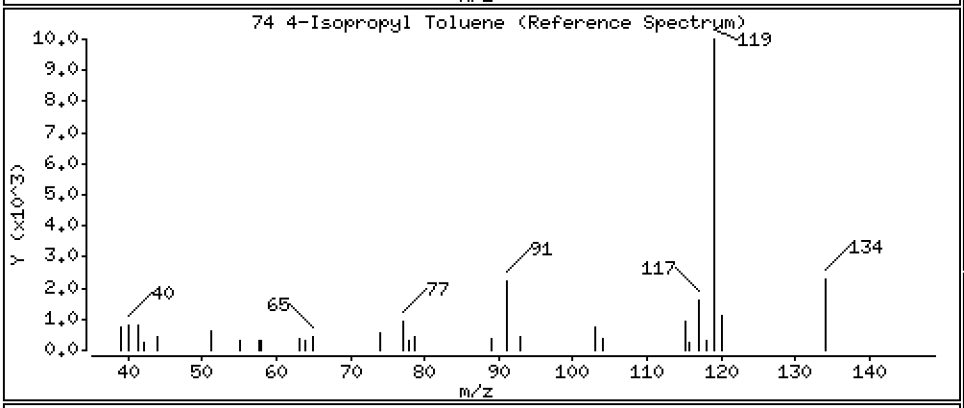
Column diameter: 0.18

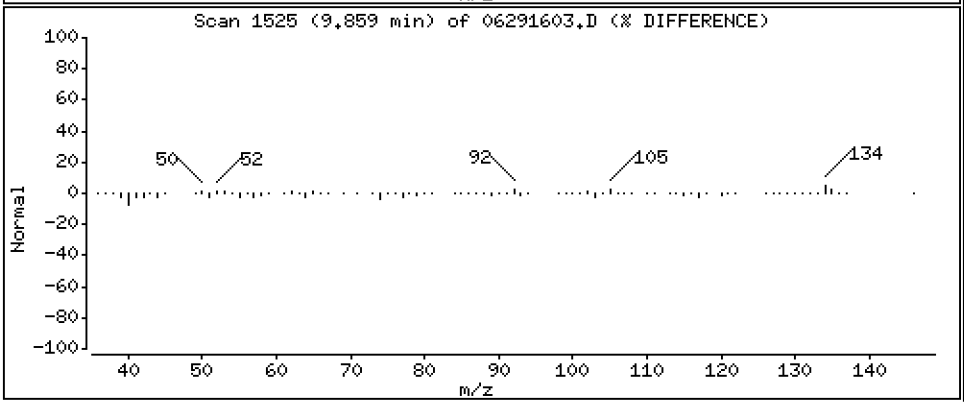
74 4-Isopropyl Toluene

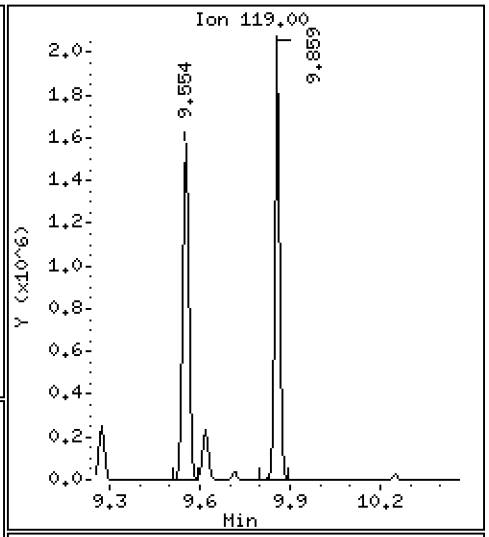
Concentration: 42.261 ug/Kg

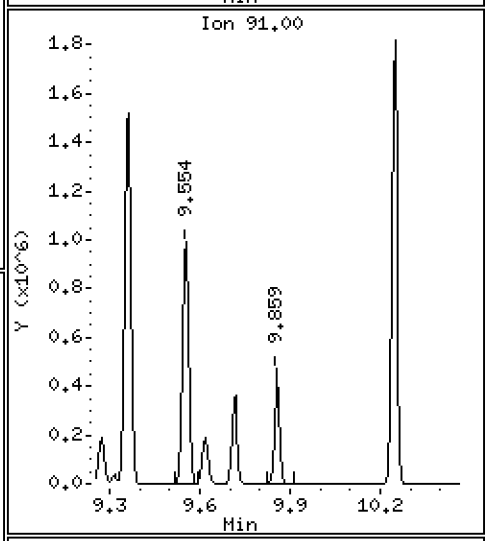


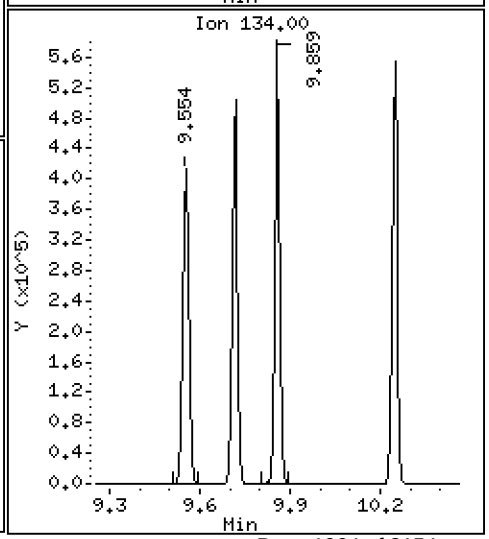












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

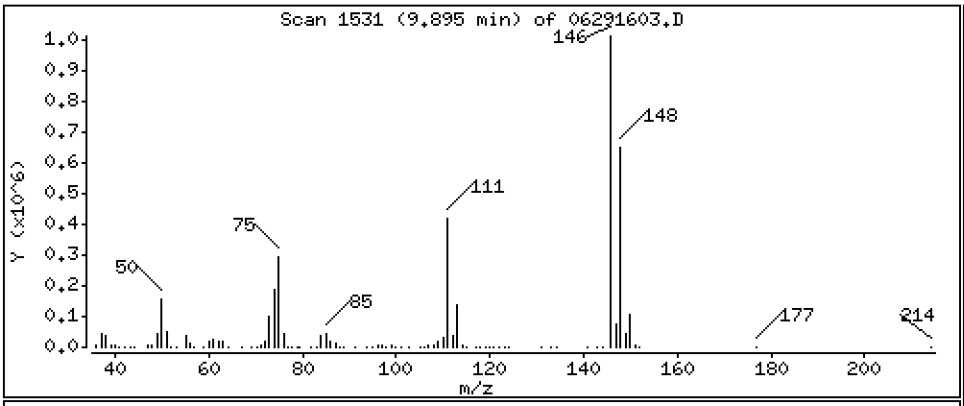
Operator: PB

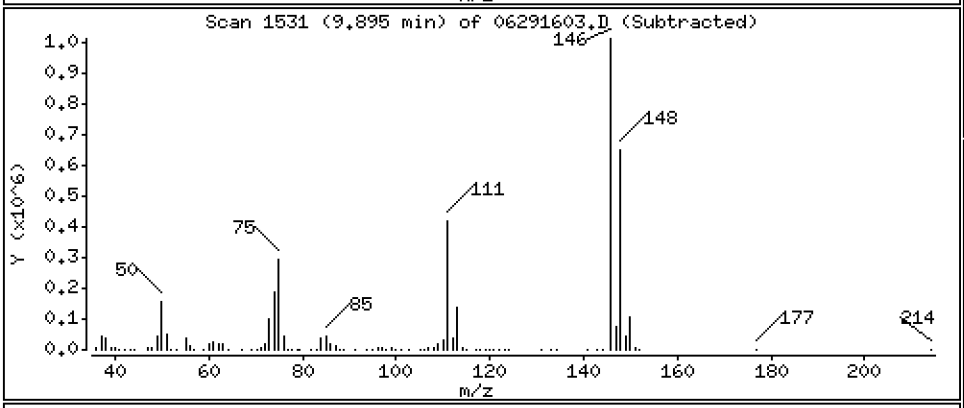
Column phase: RTXVMS

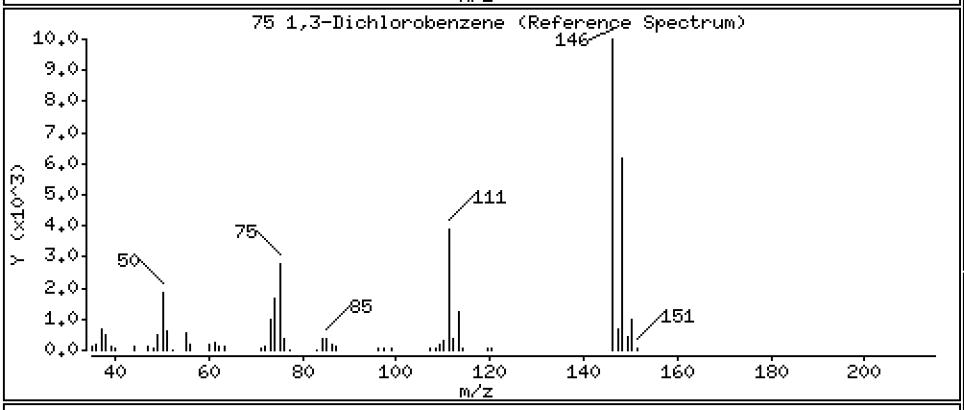
Column diameter: 0.18

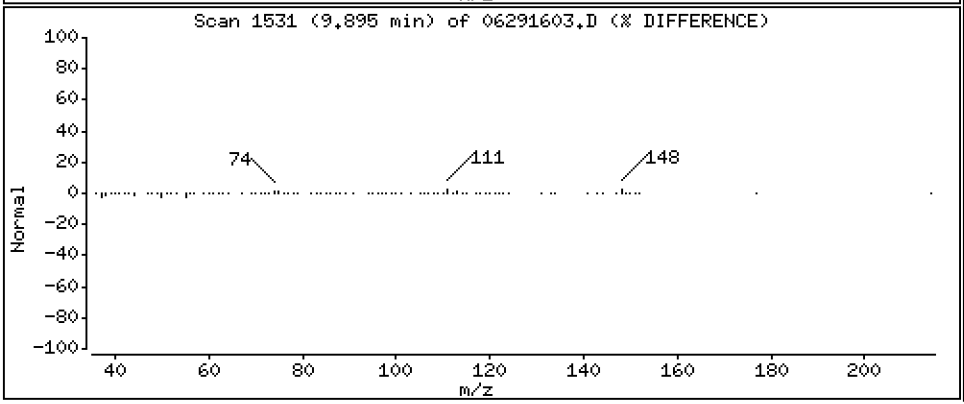
75 1,3-Dichlorobenzene

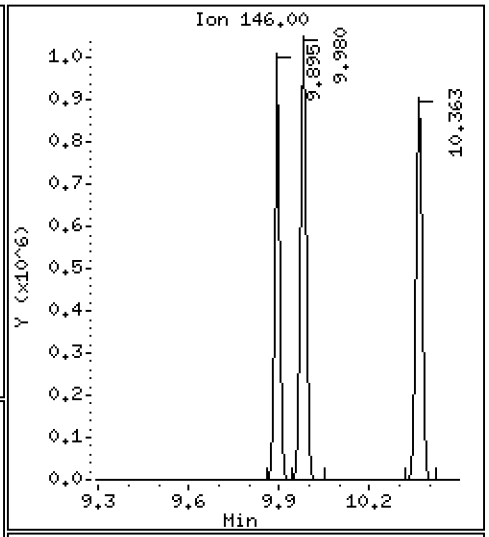
Concentration: 43.562 ug/Kg

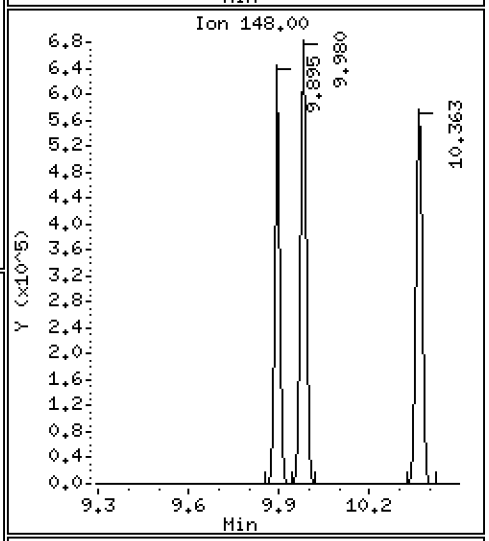


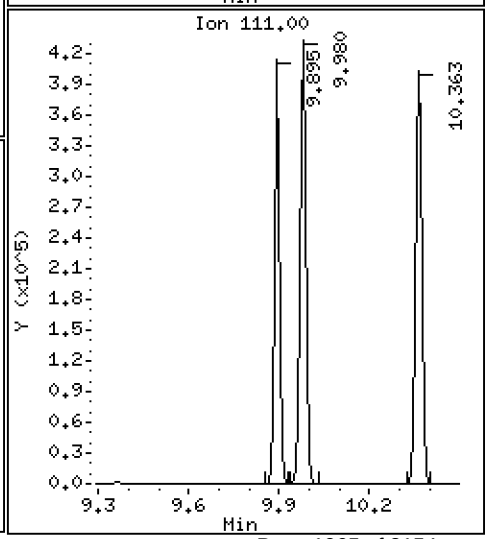












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

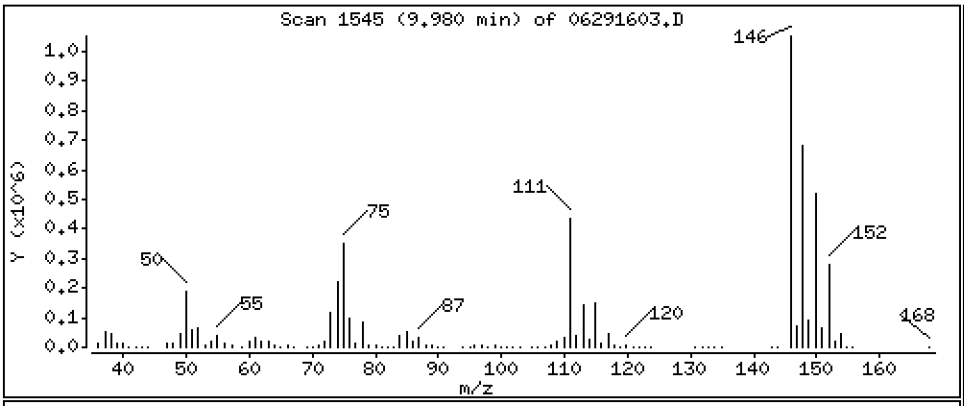
Operator: PB

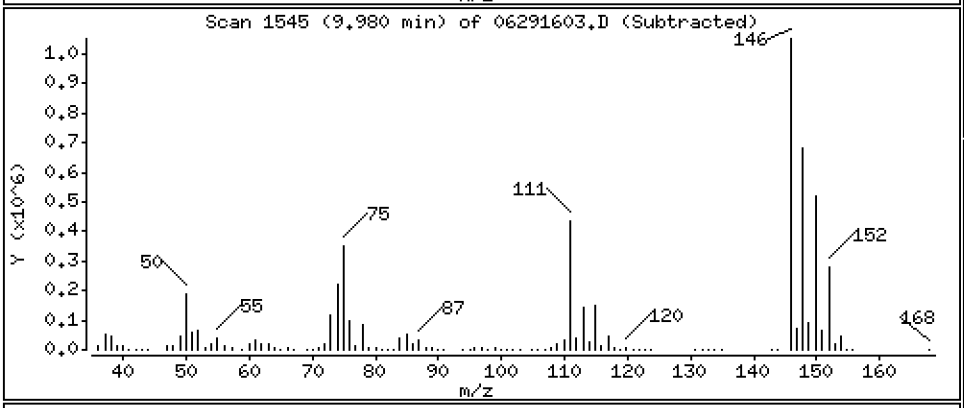
Column phase: RTXVMS

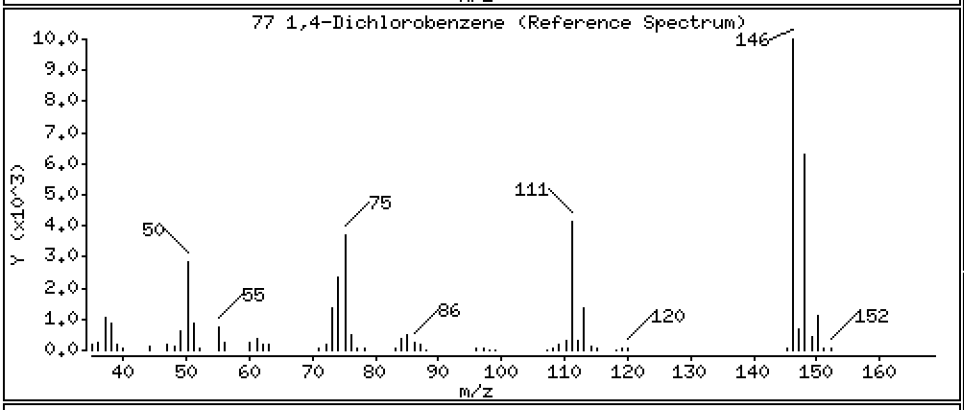
Column diameter: 0.18

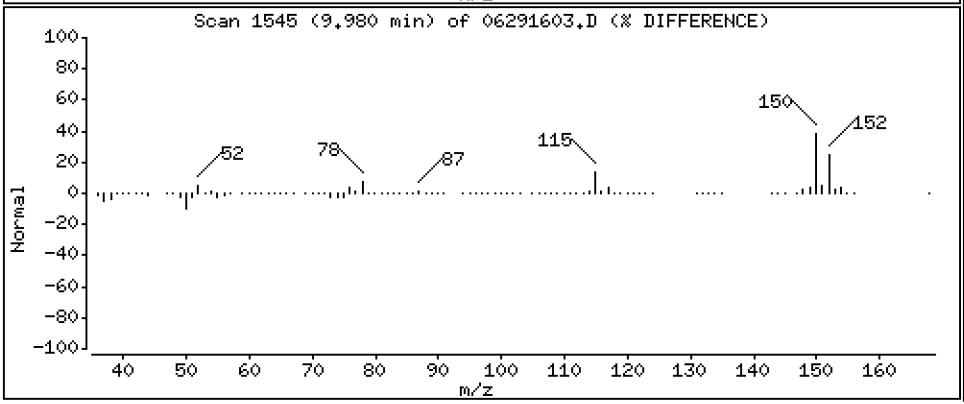
77 1,4-Dichlorobenzene

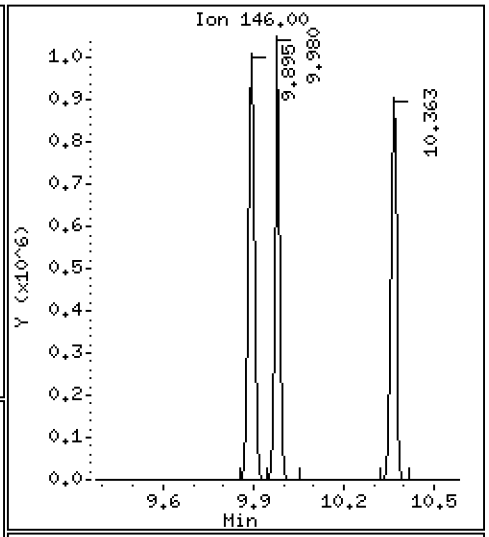
Concentration: 42.549 ug/Kg

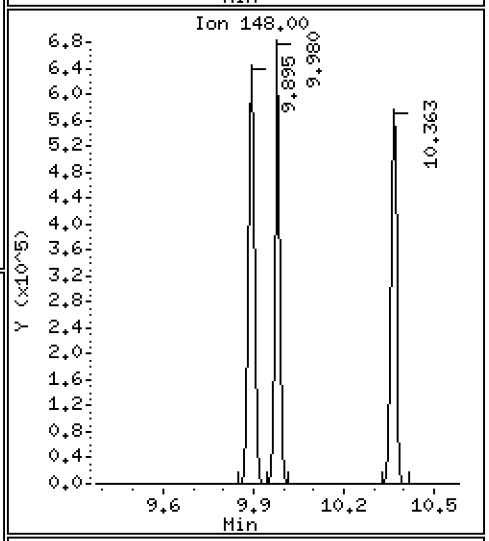


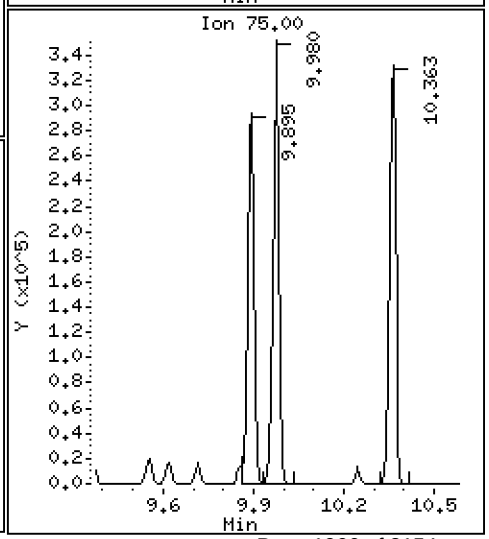












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

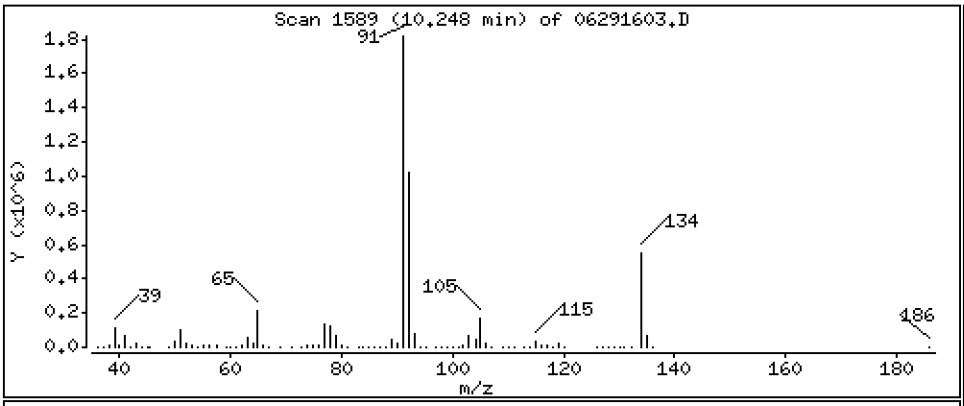
Operator: PB

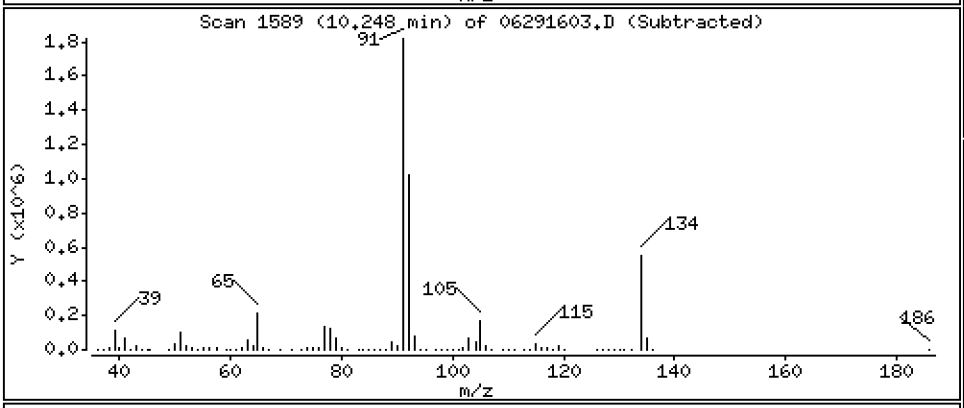
Column phase: RTXVMS

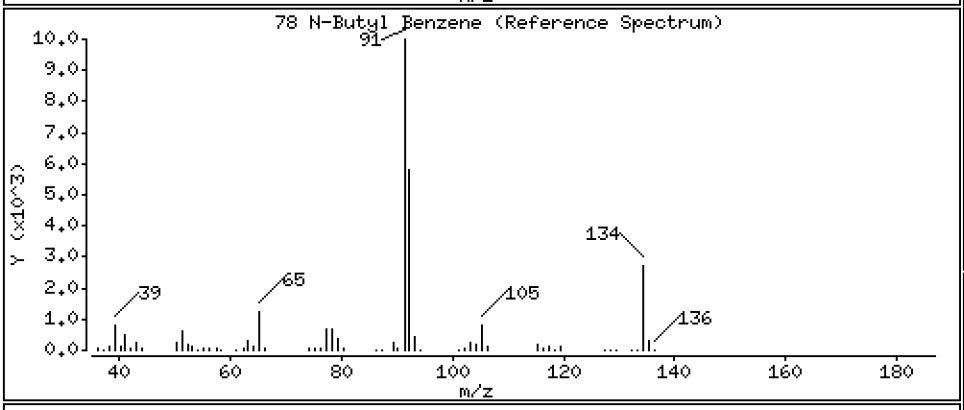
Column diameter: 0.18

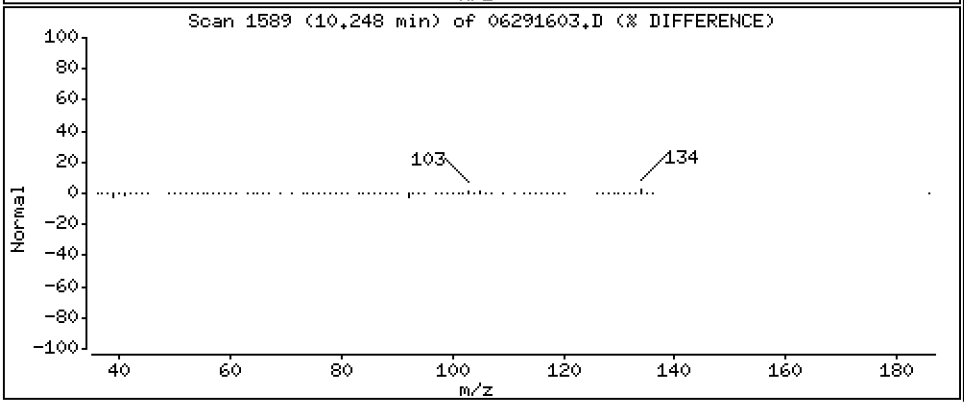
78 N-Butyl Benzene

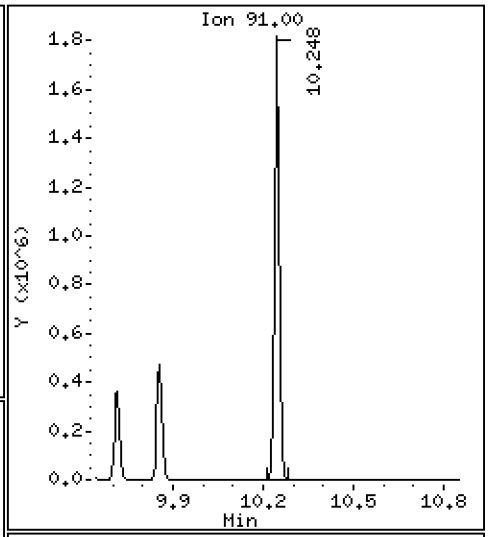
Concentration: 42.470 ug/Kg

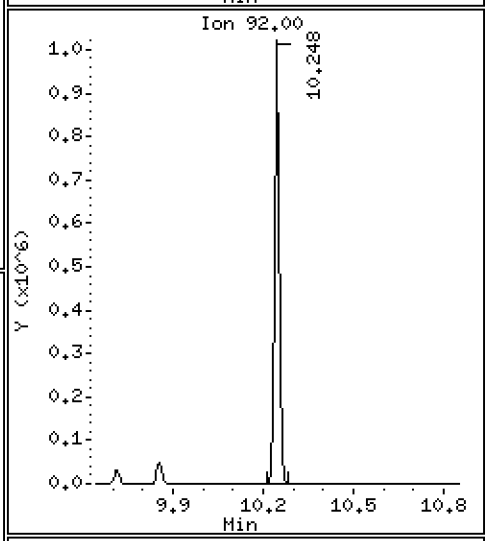


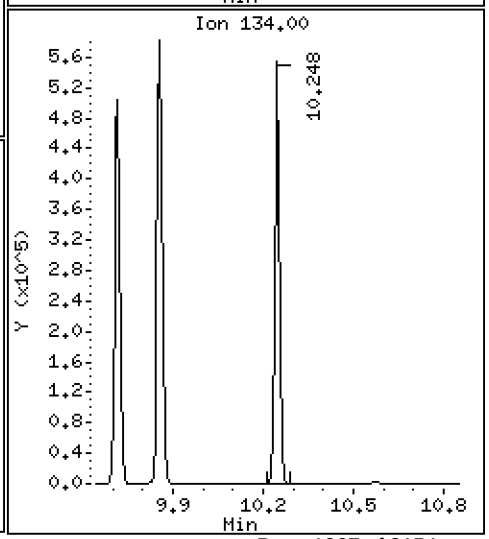












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

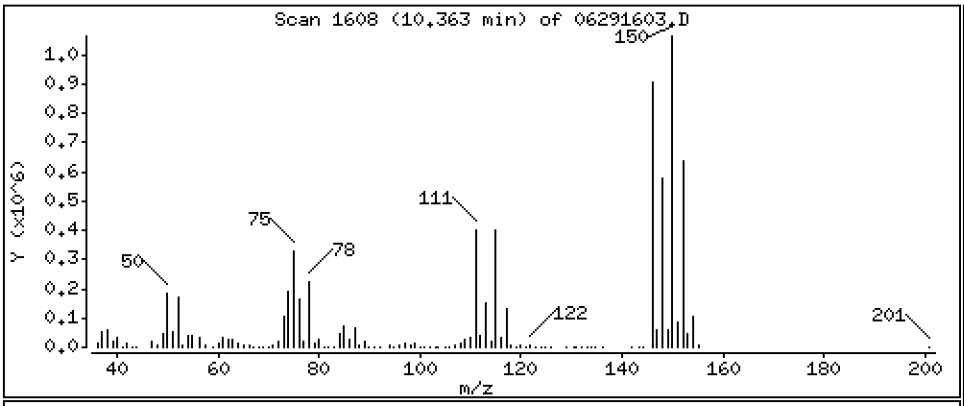
Operator: PB

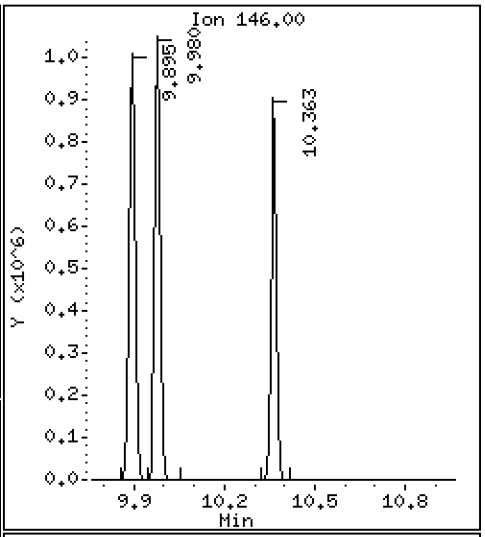
Column phase: RTXVMS

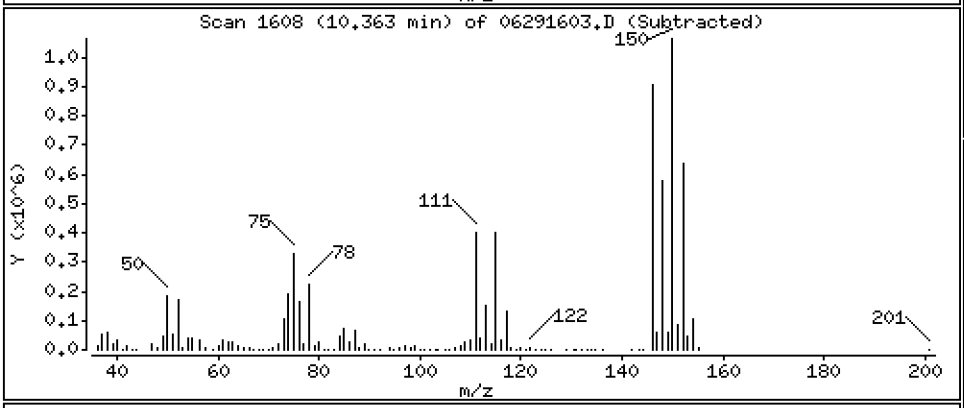
Column diameter: 0.18

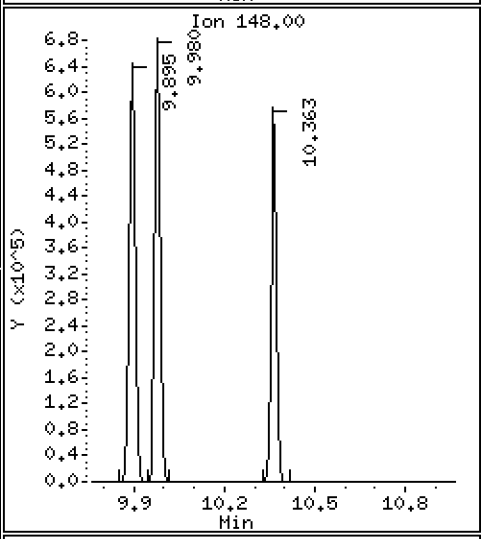
80 1,2-Dichlorobenzene

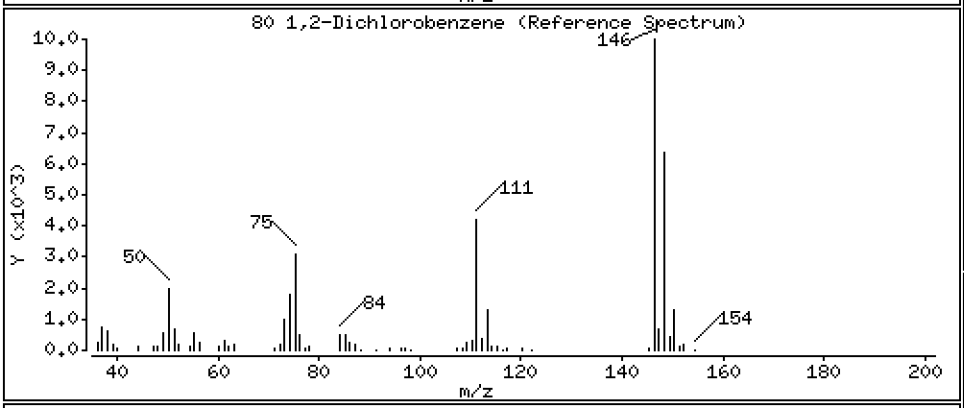
Concentration: 42.341 ug/Kg

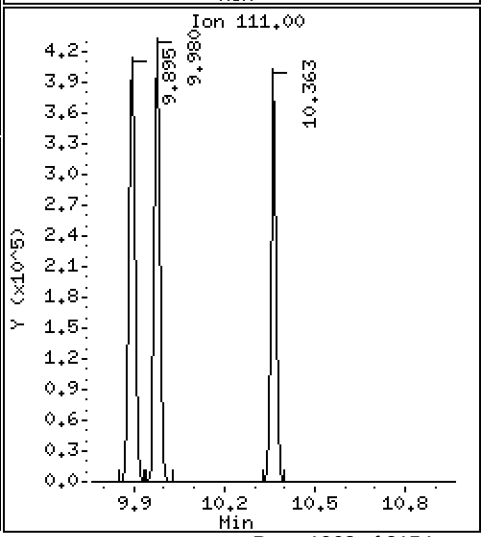


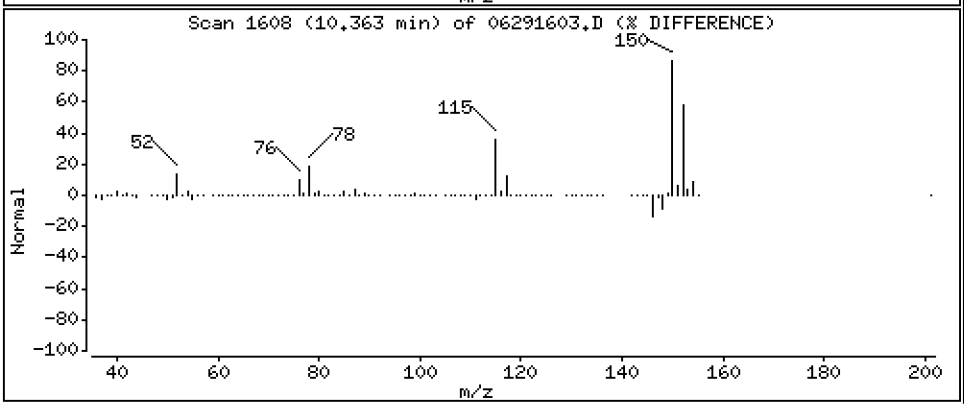












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

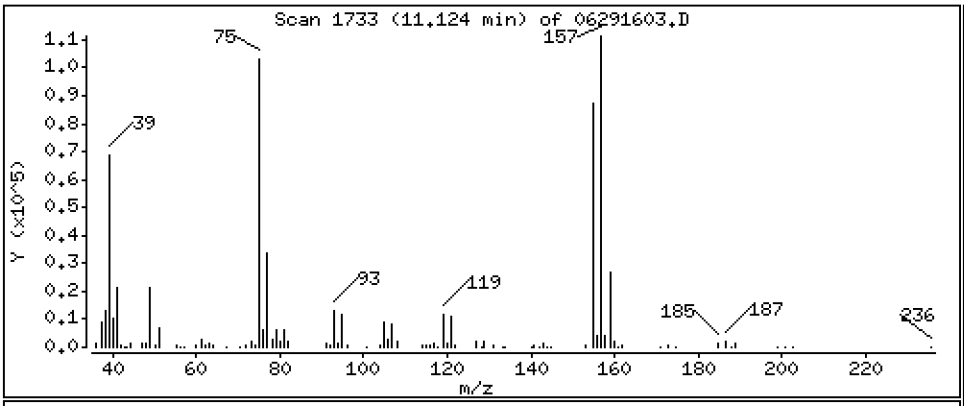
Operator: PB

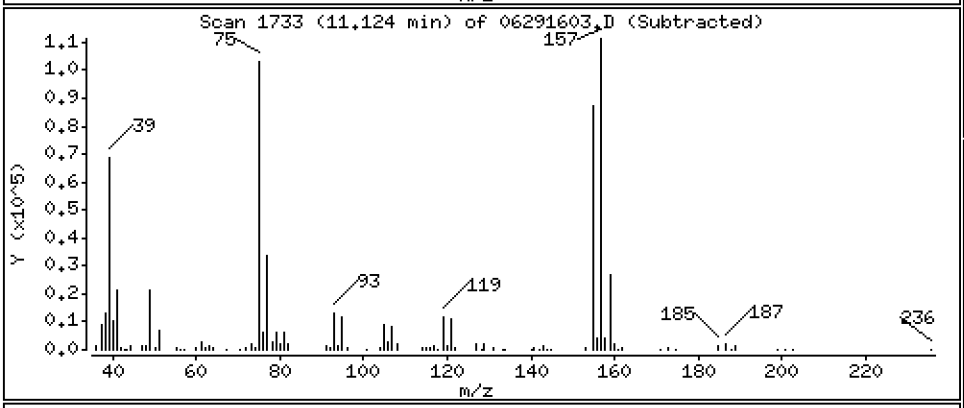
Column phase: RTXVMS

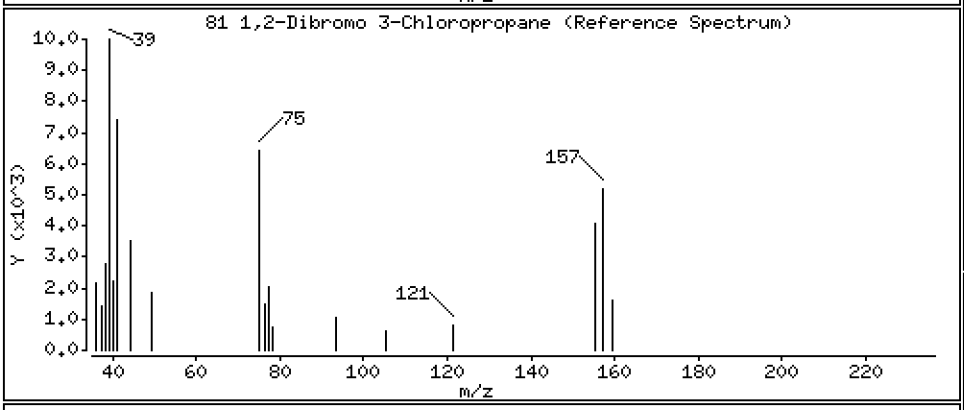
Column diameter: 0.18

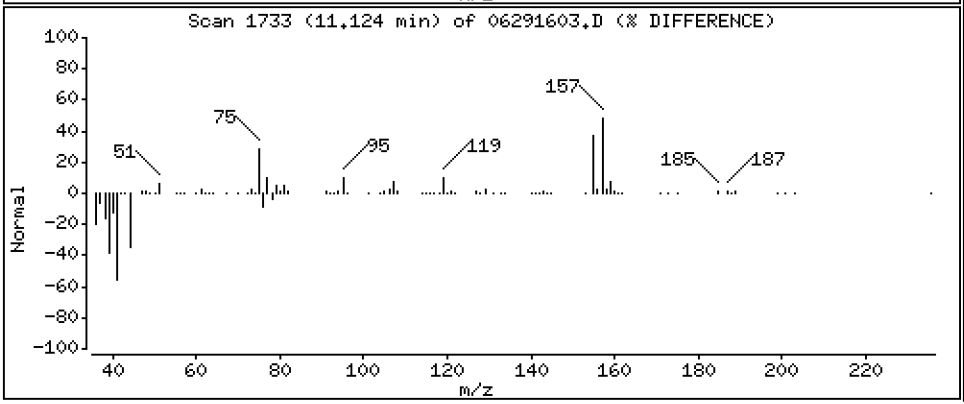
81 1,2-Dibromo 3-Chloropropane

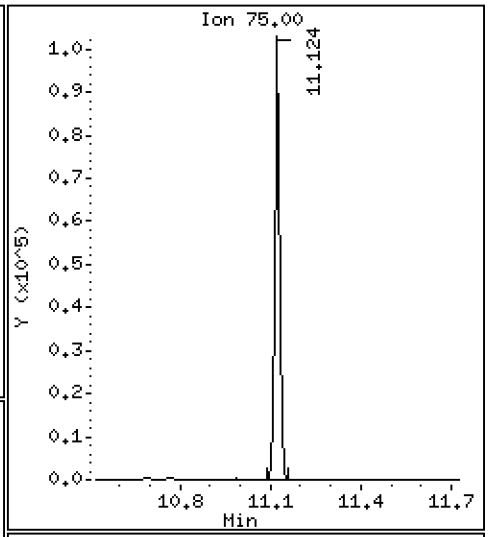
Concentration: 44.634 ug/Kg

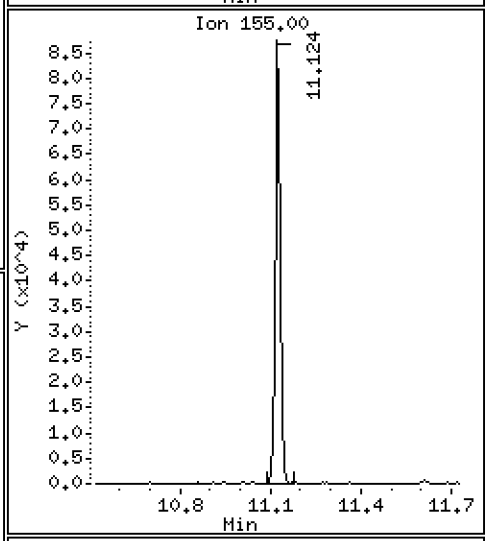


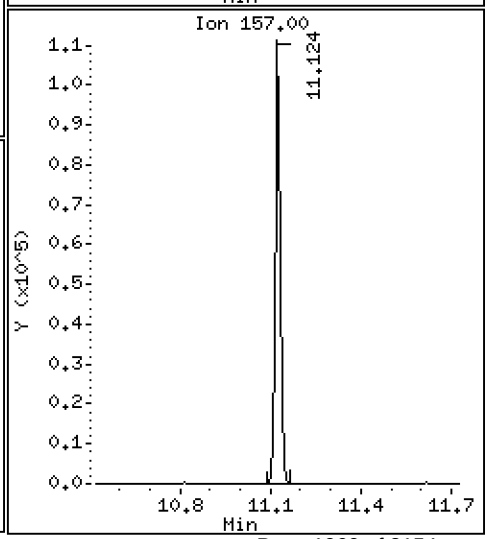












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

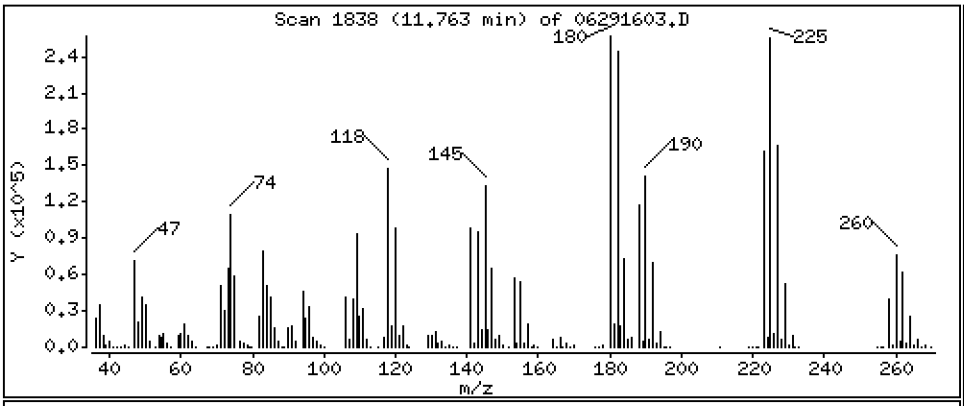
Operator: PB

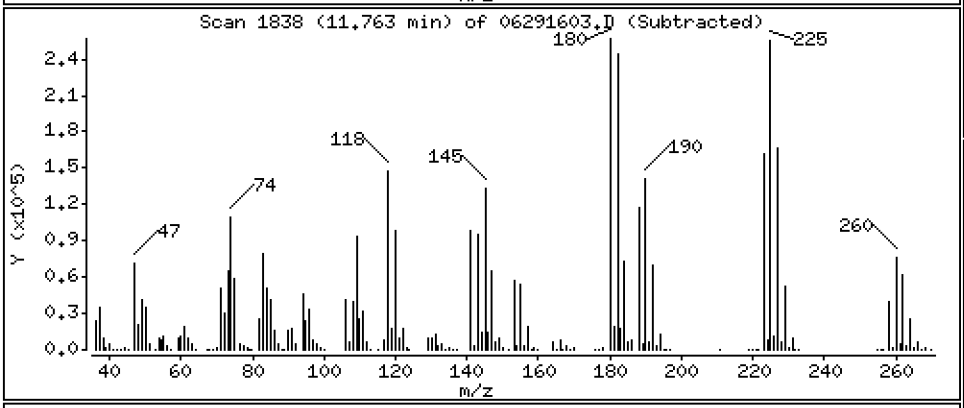
Column phase: RTXVMS

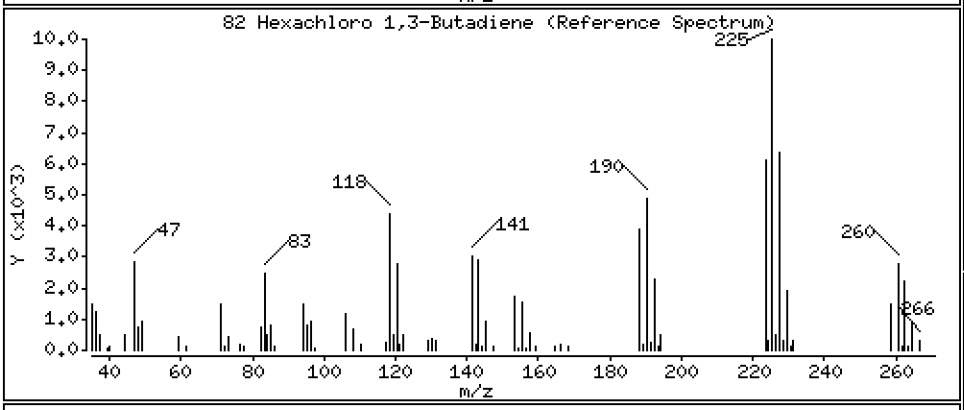
Column diameter: 0.18

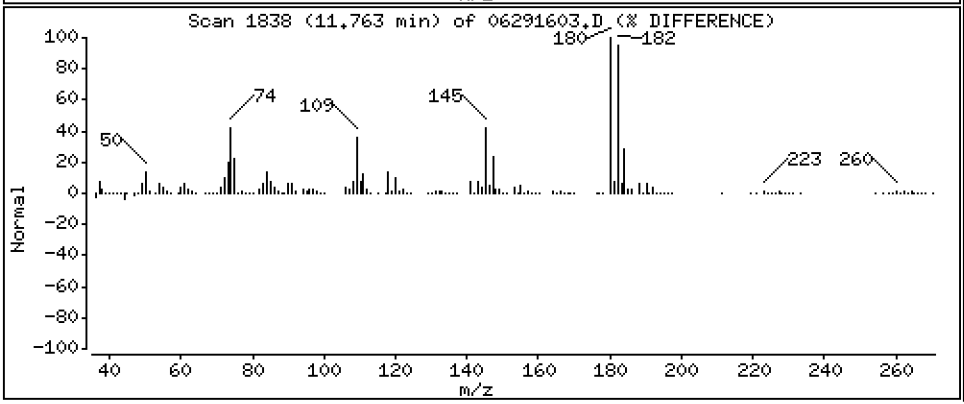
82 Hexachloro 1,3-Butadiene

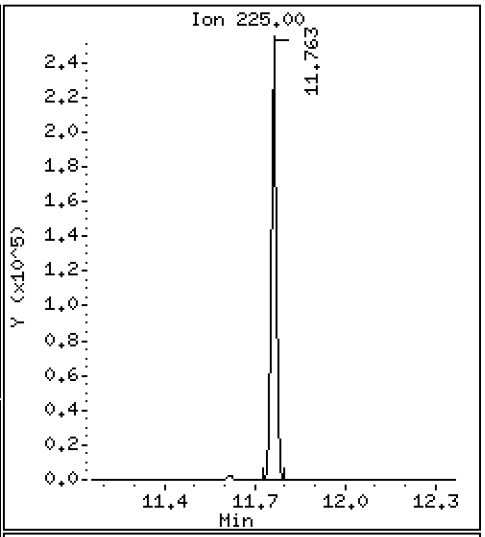
Concentration: 44.457 ug/Kg

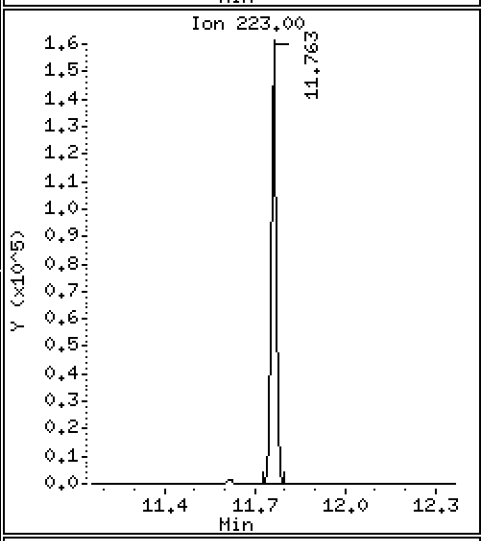


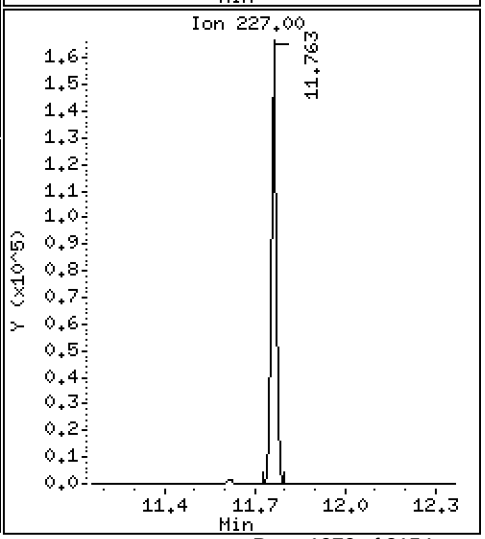












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

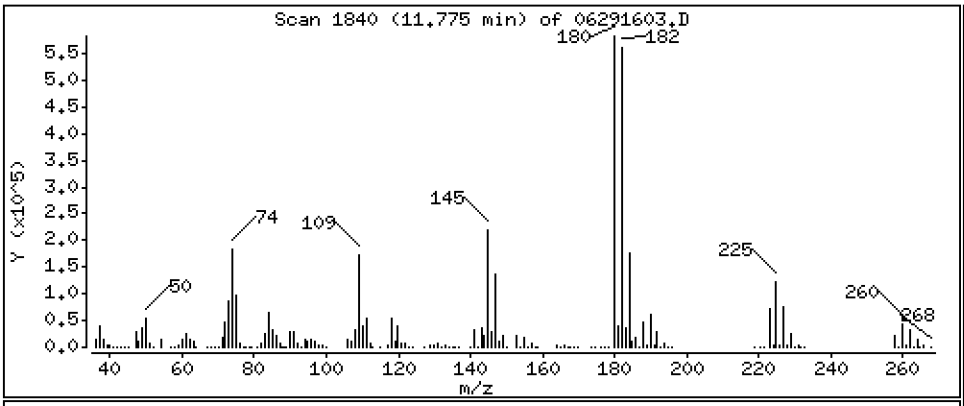
Operator: PB

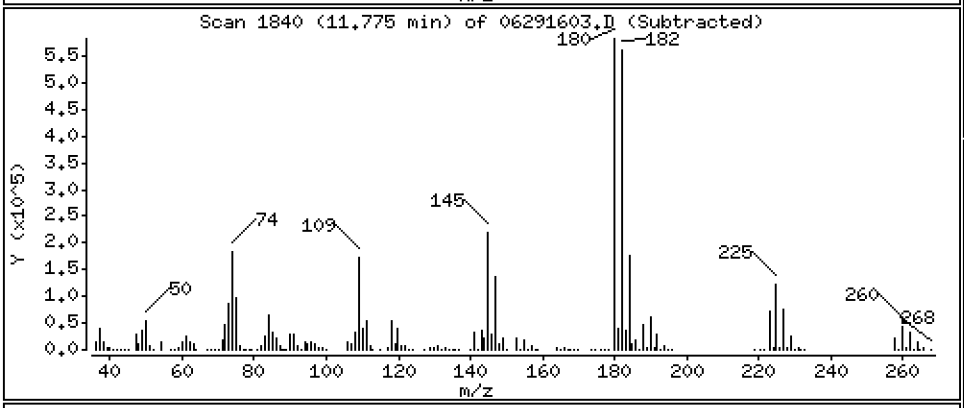
Column phase: RTXVMS

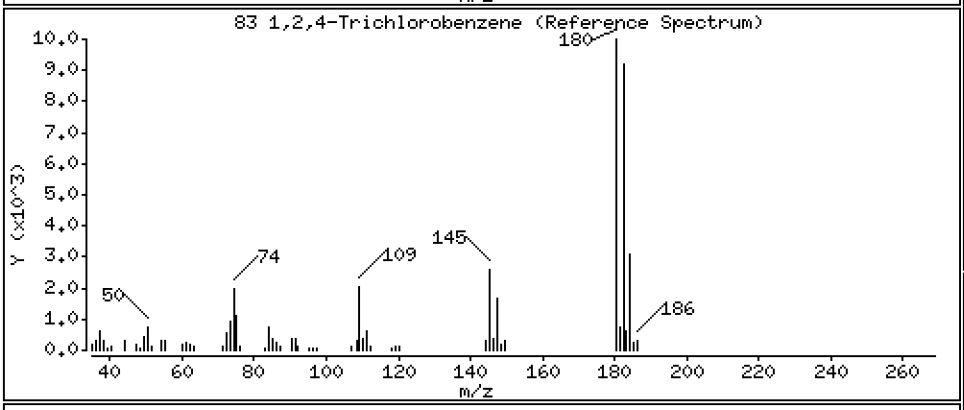
Column diameter: 0.18

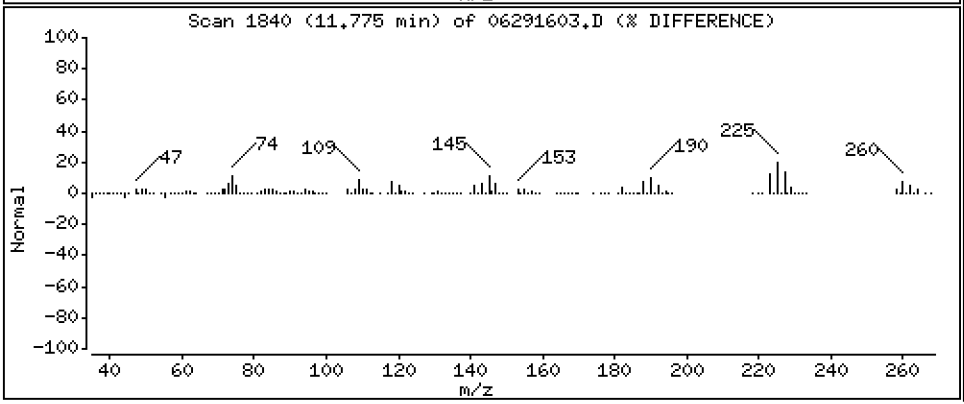
83 1,2,4-Trichlorobenzene

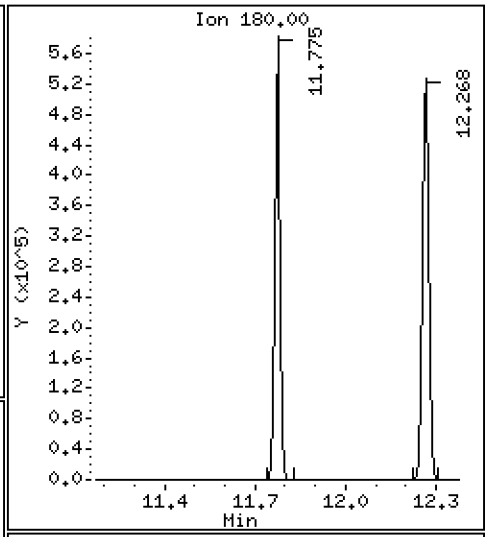
Concentration: 47.443 ug/Kg

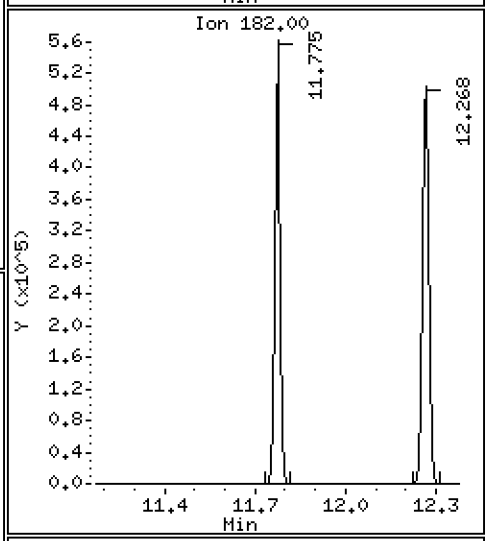


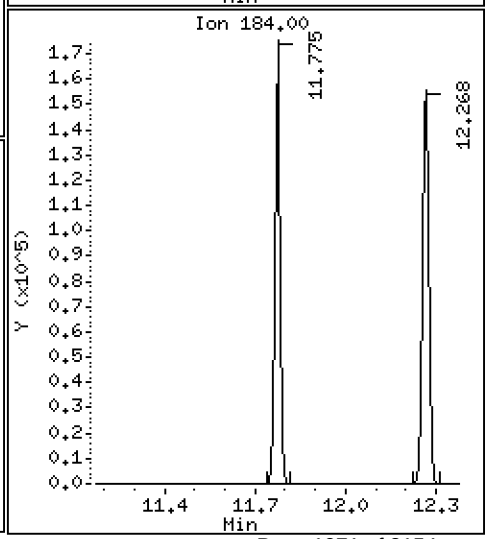












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

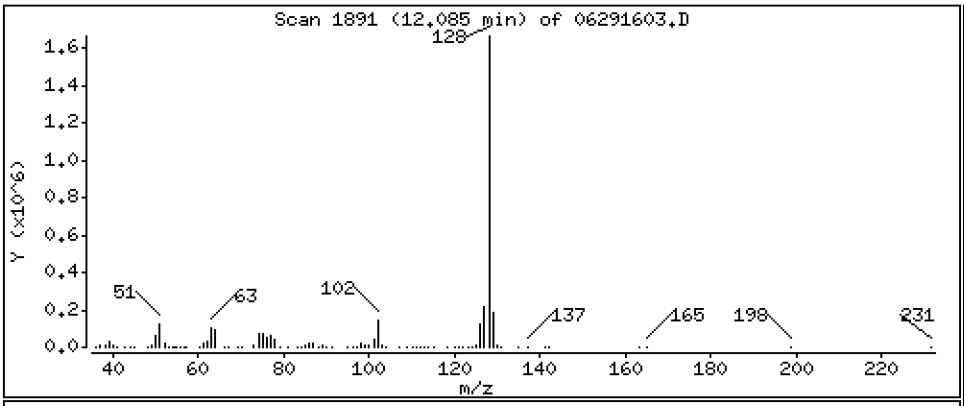
Operator: PB

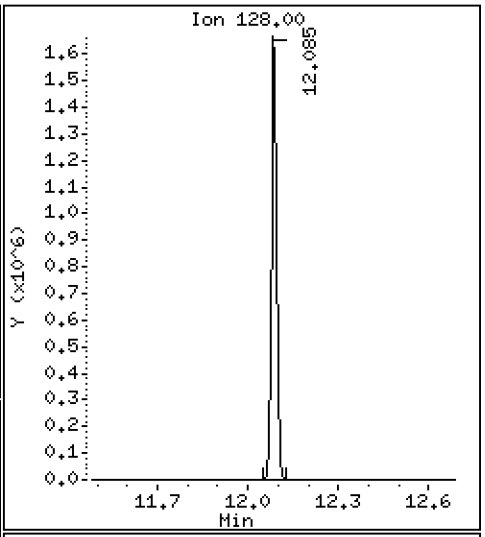
Column phase: RTXVMS

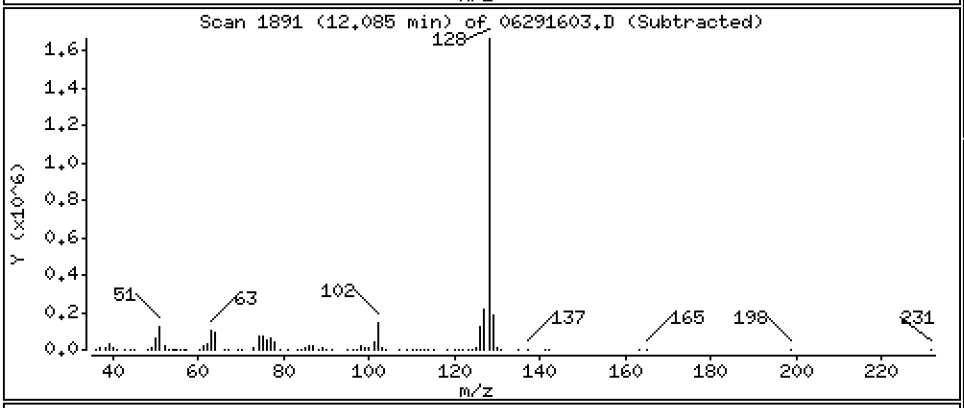
Column diameter: 0.18

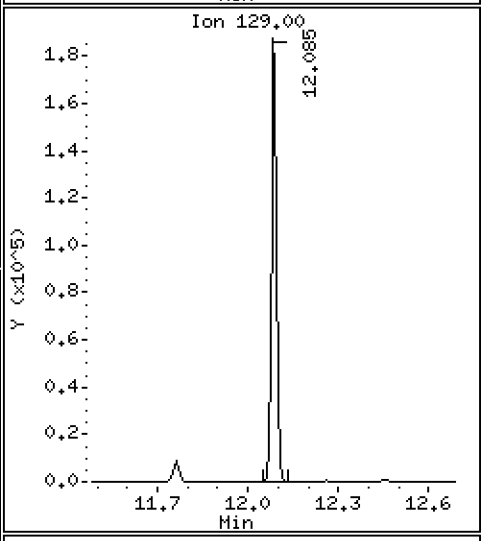
84 Naphthalene

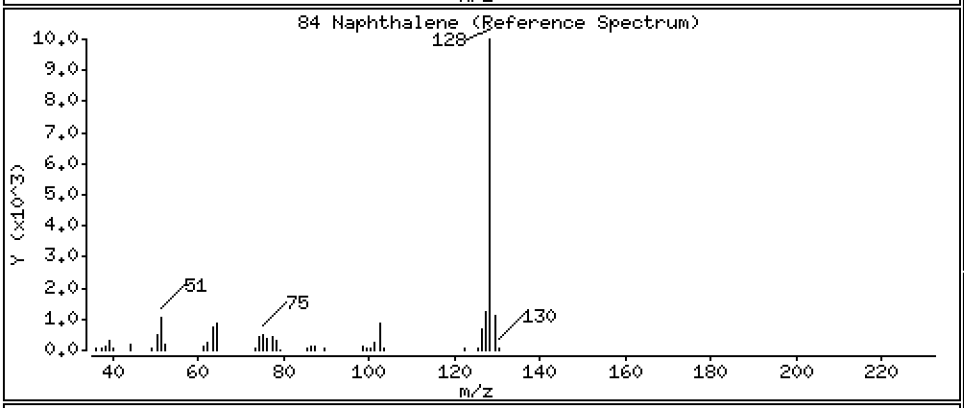
Concentration: 47.128 ug/Kg

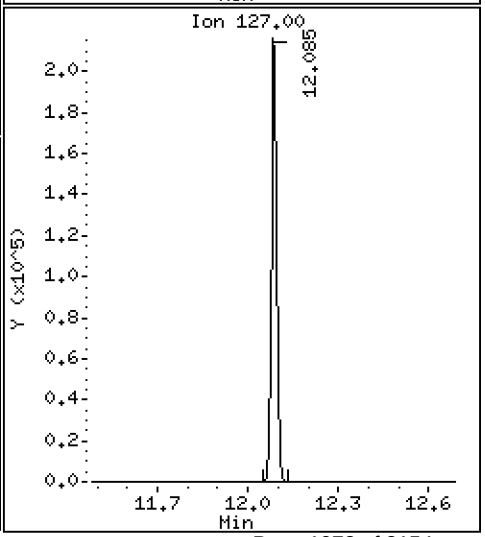


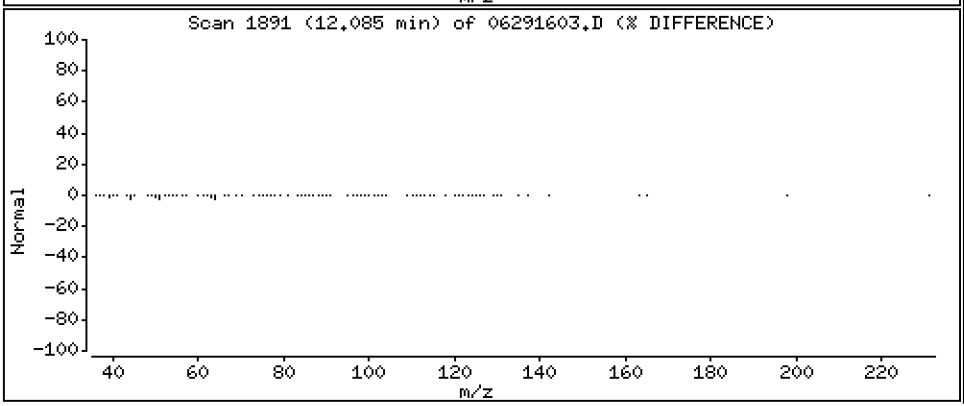












Data File: \\target\share\chem1\nt5.i\20160629.b\06291603.D

Date : 29-JUN-2016 15:15

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

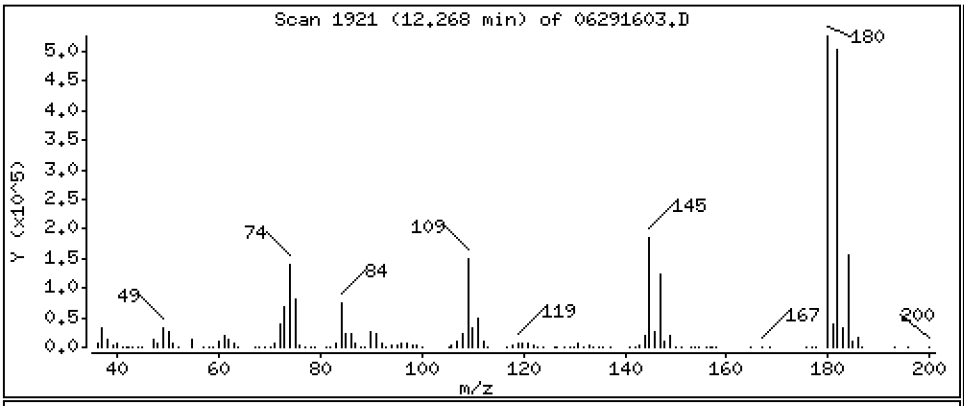
Operator: PB

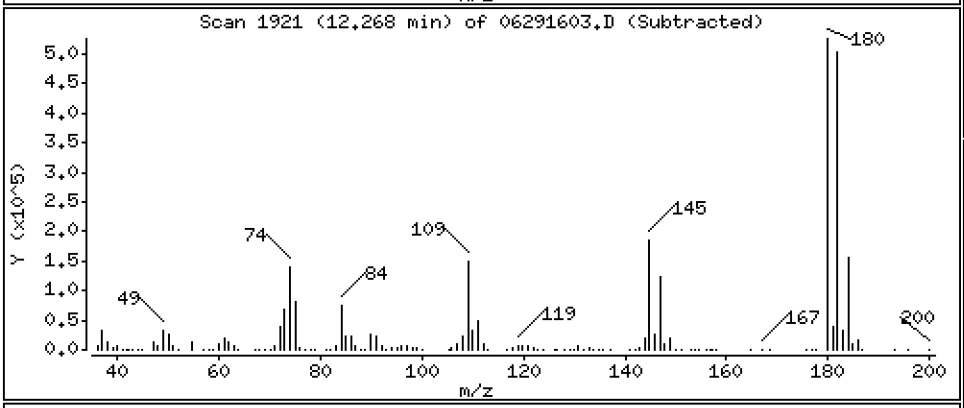
Column phase: RTXVMS

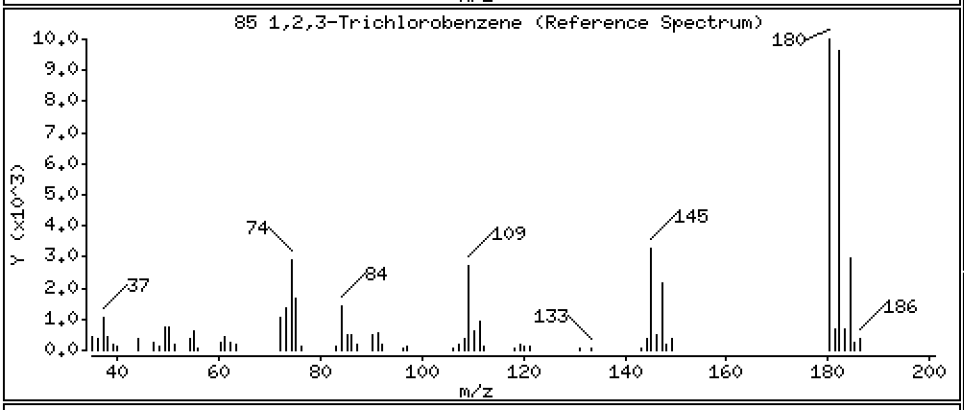
Column diameter: 0.18

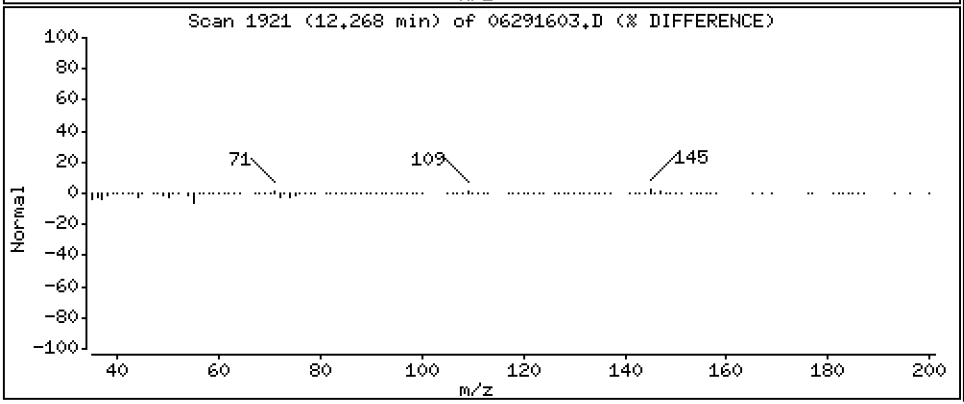
85 1,2,3-Trichlorobenzene

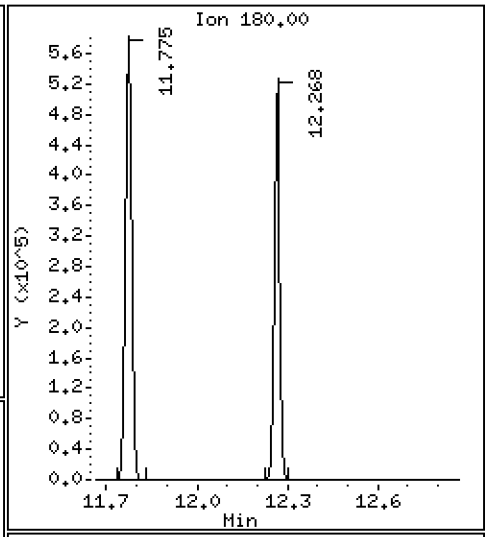
Concentration: 46.788 ug/Kg

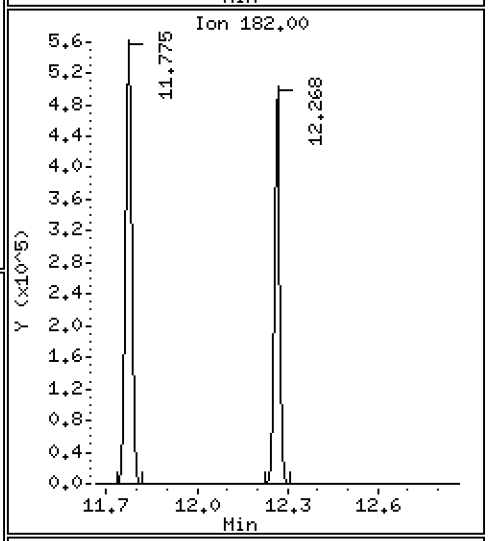


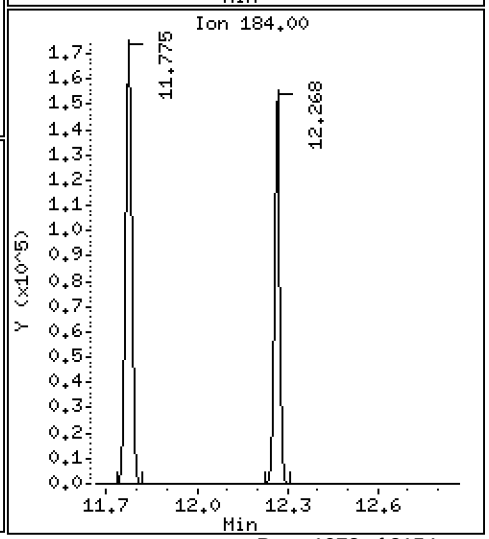












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291603.D
Lab Smp Id: BEF0232-BS1 Client Smp ID: LCS0629
Inj Date : 29-JUN-2016 15:15
Operator : PB Inst ID: nt5.i
Smp Info : LCS0629,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.146	1.152	(0.232)	694904	39.0420	39.042
2	Chloromethane	50	1.280	1.286	(0.259)	722532	34.4790	34.479
3	Vinyl Chloride	62	1.341	1.347	(0.271)	737240	40.5717	40.572
4	Bromomethane	94	1.578	1.584	(0.319)	328924	25.7216	25.722
5	Chloroethane	64	1.670	1.676	(0.338)	373529	41.5344	41.534
6	Trichlorofluoromethane	101	1.761	1.767	(0.356)	592368	56.7726	56.773
7	1,1-Dichloroethene	96	2.193	2.199	(0.444)	512491	42.4319	42.432
8	Carbon Disulfide	76	2.193	2.199	(0.444)	1636749	42.1517	42.152
9	112Trichloro122Trifluoroethane	101	2.235	2.241	(0.452)	498340	42.0469	42.047
10	Iodomethane	142	2.302	2.308	(0.466)	229086	30.2697	30.270
11	Bromoethane	108	2.418	2.424	(0.489)	308063	44.5613	44.561
12	Acrolein	56	2.515	2.521	(0.509)	554767	235.128	235.13
13	Methylene Chloride	84	2.728	2.734	(0.552)	511179	42.1936	42.194
14	Acetone	43	2.825	2.825	(0.572)	877939	223.894	223.89
15	Trans-1,2-Dichloroethene	96	2.880	2.886	(0.583)	563446	41.9957	41.996
16	Methyl tert butyl ether	73	3.051	3.057	(0.617)	1719122	43.1081	43.108
17	1,1-Dichloroethane	63	3.513	3.519	(0.711)	1074691	40.8032	40.803
18	Acrylonitrile	53	3.604	3.604	(0.729)	216787	46.2195	46.220
19	Vinyl Acetate	43	3.829	3.829	(0.775)	1332443	42.6419	42.642
20	Cis-1,2-Dichloroethene	96	4.048	4.048	(0.819)	654385	41.3202	41.320
22	2,2-Dichloropropane	77	4.139	4.139	(0.838)	952570	42.1994	42.199

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/Kg)	(ug/Kg)
	23	Bromochloromethane	128	4.231	4.231	(0.856)	295007	42.6444	42.644
	24	Chloroform	83	4.322	4.322	(0.874)	1015669	41.4841	41.484
	25	Carbon Tetrachloride	117	4.407	4.407	(0.817)	830832	41.6800	41.680
$	27	Dibromofluoromethane	111	4.486	4.486	(0.908)	780528	52.2287	52.229
	26	1,1,1-Trichloroethane	97	4.474	4.474	(0.905)	929404	40.8566	40.857
	28	1,1-Dichloropropene	75	4.590	4.596	(0.851)	830571	40.0539	40.054
	29	2-Butanone	72	4.638	4.638	(0.938)	370428	223.019	223.02
	30	Benzene	78	4.815	4.821	(0.893)	2394562	40.7950	40.795
*	31	Pentafluorobenzene	168	4.943	4.949	(1.000)	627015	50.0000	
$	32	d4-1,2-Dichloroethane	65	4.949	4.949	(1.001)	745011	49.8683	49.868
	33	1,2-Dichloroethane	62	5.009	5.009	(0.929)	768618	39.6397	39.640
	34	Trichloroethene	95	5.344	5.344	(0.991)	620100	40.7680	40.768
*	35	1,4-Difluorobenzene	114	5.393	5.393	(1.000)	2173453	50.0000	
	37	Dibromomethane	93	5.703	5.703	(1.058)	343441	42.3194	42.319
	38	1,2-Dichloropropane	63	5.794	5.794	(1.074)	614258	40.4972	40.497
	39	Bromodichloromethane	83	5.867	5.867	(1.088)	779558	42.5705	42.571
	172	2-Pentanone	86	6.159	6.159	(1.142)	472259	218.170	218.17
	40	2-Chloroethyl Vinyl Ether	63	6.384	6.384	(1.184)	319571	50.0438	50.044
	41	Cis 1,3-dichloropropene	75	6.409	6.409	(1.188)	1003508	42.1744	42.174
$	42	d8-Toluene	98	6.561	6.561	(1.217)	2797052	50.2256	50.226
	43	Toluene	92	6.603	6.603	(1.224)	1524526	40.3714	40.371
	44	Tetrachloroethene	166	6.914	6.914	(0.878)	586955	41.0987	41.099
	45	4-Methyl-2-Pentanone	58	6.956	6.956	(1.290)	1201419	211.424	211.42
	46	Trans 1,3-Dichloropropene	75	6.974	6.974	(1.293)	898288	43.3729	43.373
	47	1,1,2-Trichloroethane	97	7.102	7.102	(1.317)	505063	42.5869	42.587
	48	Chlorodibromomethane	129	7.242	7.242	(0.920)	598914	43.5560	43.556
	49	1,3-Dichloropropane	76	7.327	7.327	(0.930)	914851	41.6252	41.625
	50	1,2-Dibromoethane	107	7.425	7.425	(1.377)	516077	43.2750	43.275
	51	2-Hexanone	43	7.674	7.674	(0.975)	2143374	207.861	207.86
*	52	d5-Chlorobenzene	117	7.875	7.875	(1.000)	2303679	50.0000	
	53	Chlorobenzene	112	7.893	7.887	(1.002)	1701171	40.9026	40.903
	54	Ethyl Benzene	91	7.930	7.930	(1.007)	2884392	41.0235	41.024
	55	1,1,1,2-Tetrachloroethane	131	7.954	7.954	(1.010)	607109	41.2274	41.227
	56	m,p-xylene	106	8.063	8.063	(1.024)	2254506	82.5948	82.595
	57	o-Xylene	106	8.428	8.428	(1.070)	1094134	40.5813	40.581
	58	Styrene	104	8.477	8.483	(1.076)	1861697	41.8104	41.810
	59	Bromoform	173	8.489	8.489	(0.852)	362354	44.6166	44.617
	60	Isopropyl Benzene	105	8.714	8.714	(0.874)	2852120	41.4533	41.453
$	62	4-Bromofluorobenzene	95	8.952	8.952	(1.137)	1211591	48.9050	48.905
	63	Bromobenzene	156	9.037	9.037	(0.907)	668263	41.9105	41.910
	64	N-Propyl Benzene	91	9.085	9.085	(0.912)	3347444	40.4618	40.462
	65	1,1,2,2-Tetrachloroethane	83	9.158	9.158	(0.919)	684545	42.1905	42.190
	66	2-Chloro Toluene	91	9.207	9.207	(0.924)	1978241	40.9316	40.932
	67	1,3,5-Trimethyl Benzene	105	9.274	9.274	(0.930)	2416839	41.8683	41.868
	68	1,2,3-Trichloropropane	110	9.268	9.268	(0.930)	216093	45.0688	45.069
	69	Trans-1,4-Dichloro 2-Butene	53	9.317	9.317	(0.935)	190286	43.9429	43.943
	70	4-Chloro Toluene	91	9.365	9.365	(0.940)	2093345	41.8204	41.820
	71	T-Butyl Benzene	119	9.554	9.554	(0.958)	2149884	40.9075	40.908
	72	1,2,4-Trimethylbenzene	105	9.621	9.621	(0.965)	2430969	42.0382	42.038
	73	S-Butyl Benzene	105	9.718	9.718	(0.975)	3125754	40.3986	40.399
	74	4-Isopropyl Toluene	119	9.858	9.858	(0.989)	2716748	42.2608	42.261
	75	1,3-Dichlorobenzene	146	9.895	9.895	(0.993)	1361879	43.5615	43.562
*	76	d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1152626	50.0000	
	77	1,4-Dichlorobenzene	146	9.980	9.980	(1.001)	1345541	42.5489	42.549

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	10.247	10.247	(1.028)	2416986	42.4695	42.470
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1168201	50.3318	50.332
80	1,2-Dichlorobenzene	146	10.363	10.363	(1.040)	1252721	42.3410	42.341
81	1,2-Dibromo 3-Chloropropane	75	11.123	11.123	(1.116)	136612	44.6343	44.634
82	Hexachloro 1,3-Butadiene	225	11.762	11.762	(1.180)	351785	44.4568	44.457
83	1,2,4-Trichlorobenzene	180	11.774	11.774	(1.181)	802422	47.4431	47.443
84	Naphthalene	128	12.085	12.085	(1.212)	2338696	47.1279	47.128
85	1,2,3-Trichlorobenzene	180	12.267	12.267	(1.231)	742280	46.7882	46.788

Report Date: 01-Jul-2016 13:10

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291603.D
Lab Smp Id: BEF0232-BS1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Client Smp ID: LCS0629
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	627015	4.51
35 1,4-Difluorobenze	2041239	1020620	4082478	2173453	6.48
52 d5-Chlorobenzene	2118314	1059157	4236628	2303679	8.75
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1152626	9.25

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.94	-0.12
35 1,4-Difluorobenze	5.39	4.89	5.89	5.39	0.00
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEF0232-BS1 Client Smp ID: LCS0629
Level: LOW Operator: PB
Data Type: MS DATA SampleType: LCS
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	39.042	78.08	67-142
2	Chloromethane	50.000	34.479	68.96	65-129
3	Vinyl Chloride	50.000	40.572	81.14	74-134
4	Bromomethane	50.000	25.722	51.44	40-172
5	Chloroethane	50.000	41.534	83.07	53-154
6	Trichlorofluoromet	50.000	56.773	113.55	57-161
12	Acrolein	250.00	235.13	94.05	60-130
9	112Trichloro122Tri	50.000	42.047	84.09	72-142
14	Acetone	250.00	223.89	89.56	48-132
7	1,1-Dichloroethene	50.000	42.432	84.86	73-138
11	Bromoethane	50.000	44.561	89.12	74-132
10	Iodomethane	50.000	30.270	60.54	34-181
13	Methylene Chloride	50.000	42.194	84.39	61-128
8	Carbon Disulfide	50.000	42.152	84.30	72-146
18	Acrylonitrile	50.000	46.220	92.44	59-124
15	Trans-1,2-Dichloro	50.000	41.996	83.99	73-131
19	Vinyl Acetate	50.000	42.642	85.28	54-138
17	1,1-Dichloroethane	50.000	40.803	81.61	65-139
29	2-Butanone	250.00	223.02	89.21	64-120
22	2,2-Dichloropropan	50.000	42.199	84.40	77-137
20	Cis-1,2-Dichloroet	50.000	41.320	82.64	74-124
24	Chloroform	50.000	41.484	82.97	75-126
23	Bromochloromethane	50.000	42.644	85.29	69-133
26	1,1,1-Trichloroeth	50.000	40.857	81.71	78-133
28	1,1-Dichloropropen	50.000	40.054	80.11	80-123
25	Carbon Tetrachlori	50.000	41.680	83.36	76-136
33	1,2-Dichloroethane	50.000	39.640	79.28	77-120
30	Benzene	50.000	40.795	81.59	80-120
34	Trichloroethene	50.000	40.768	81.54	80-120
38	1,2-Dichloropropan	50.000	40.497	80.99	74-120
39	Bromodichlorometha	50.000	42.571	85.14	80-122
172	2-Pentanone	250.00	218.17	87.27	70-130
37	Dibromomethane	50.000	42.319	84.64	80-120
40	2-Chloroethyl Viny	50.000	50.044	100.09	20-157
45	4-Methyl-2-Pentano	250.00	211.42	84.57	70-124
41	Cis 1,3-dichloropr	50.000	42.174	84.35	80-124
43	Toluene	50.000	40.371	80.74	78-120
46	Trans 1,3-Dichloro	50.000	43.373	86.75	80-126
51	2-Hexanone	250.00	207.86	83.14	62-128
47	1,1,2-Trichloroeth	50.000	42.587	85.17	77-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
49 1,3-Dichloropropan	50.000	41.625	83.25	77-120
44 Tetrachloroethene	50.000	41.099	82.20	76-131
48 Chlorodibromometha	50.000	43.556	87.11	77-123
50 1,2-Dibromoethane	50.000	43.275	86.55	79-120
53 Chlorobenzene	50.000	40.903	81.81	80-120
55 1,1,1,2-Tetrachlor	50.000	41.227	82.45	80-120
54 Ethyl Benzene	50.000	41.024	82.05	80-120
56 m,p-xylene	100.00	82.595	82.59	80-123
57 o-Xylene	50.000	40.581	81.16	80-120
58 Styrene	50.000	41.810	83.62	80-122
60 Isopropyl Benzene	50.000	41.453	82.91	77-127
59 Bromoform	50.000	44.617	89.23	63-120
65 1,1,2,2-Tetrachlor	50.000	42.190	84.38	71-120
68 1,2,3-Trichloropro	50.000	45.069	90.14	75-120
69 Trans-1,4-Dichloro	50.000	43.943	87.89	62-127
64 N-Propyl Benzene	50.000	40.462	80.92	76-126
63 Bromobenzene	50.000	41.910	83.82	75-120
67 1,3,5-Trimethyl Be	50.000	41.868	83.74	77-126
66 2-Chloro Toluene	50.000	40.932	81.86	76-120
70 4-Chloro Toluene	50.000	41.820	83.64	75-121
71 T-Butyl Benzene	50.000	40.908	81.82	77-125
72 1,2,4-Trimethylben	50.000	42.038	84.08	77-125
73 S-Butyl Benzene	50.000	40.399	80.80	77-127
74 4-Isopropyl Toluen	50.000	42.261	84.52	78-131
75 1,3-Dichlorobenzen	50.000	43.562	87.12	76-120
77 1,4-Dichlorobenzen	50.000	42.549	85.10	75-120
78 N-Butyl Benzene	50.000	42.470	84.94	75-134
80 1,2-Dichlorobenzen	50.000	42.341	84.68	77-120
81 1,2-Dibromo 3-Chlo	50.000	44.634	89.27	61-128
83 1,2,4-Trichloroben	50.000	47.443	94.89	75-130
82 Hexachloro 1,3-But	50.000	44.457	88.91	72-135
84 Naphthalene	50.000	47.128	94.26	71-122
85 1,2,3-Trichloroben	50.000	46.788	93.58	76-122

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	52.229	104.46	70-130
$ 32 d4-1,2-Dichloroeth	50.000	49.868	99.74	80-149
$ 42 d8-Toluene	50.000	50.226	100.45	77-120
$ 62 4-Bromofluorobenze	50.000	48.905	97.81	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.332	100.66	80-120

REVIEW SUMMARY FOR FILE - 06291603.D

Lab ID: BEF0232-BS1
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 15:15

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

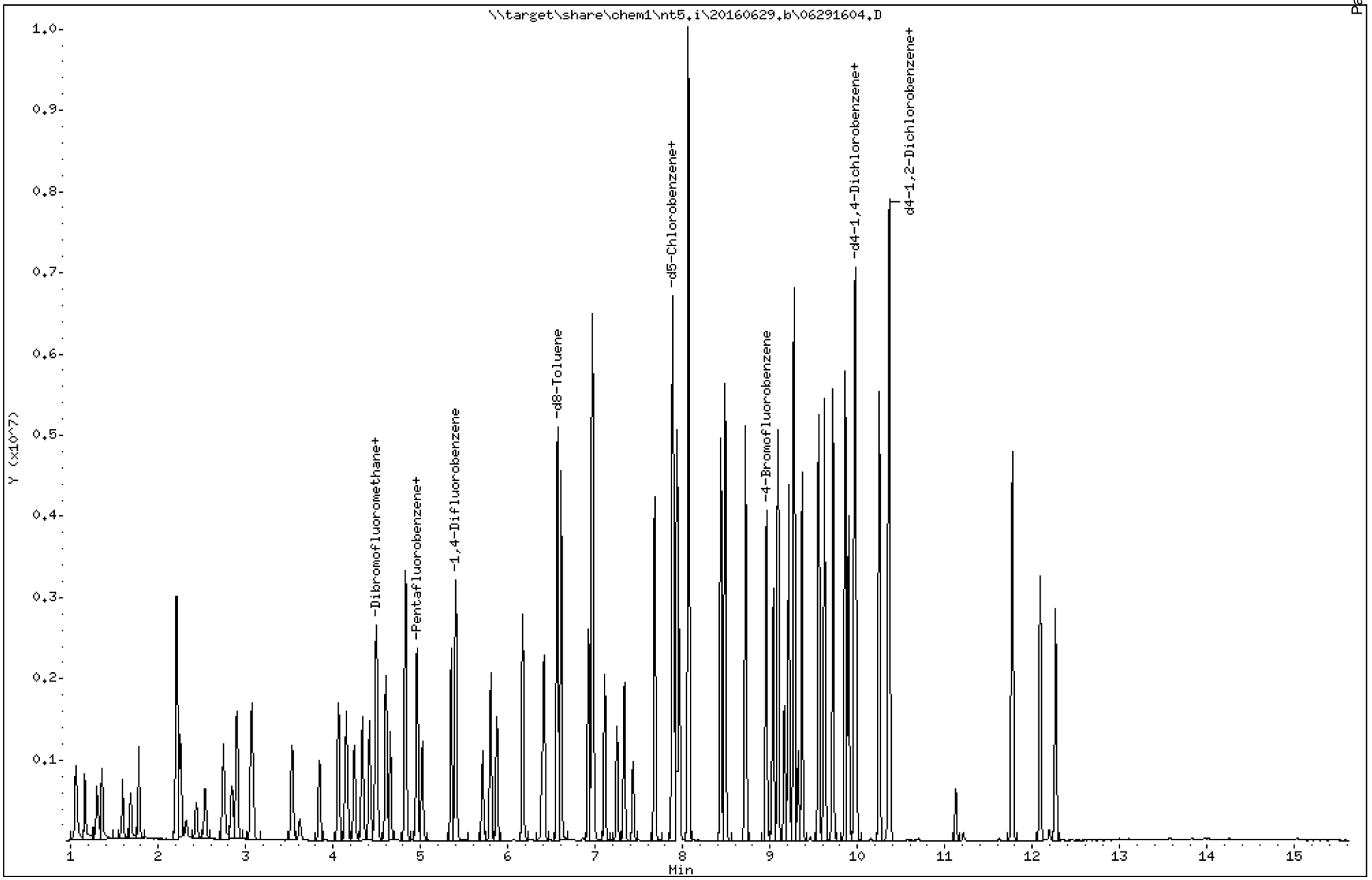
Sample Info: LCS0629,5,5,0

Instrument: nt5.i

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



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Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

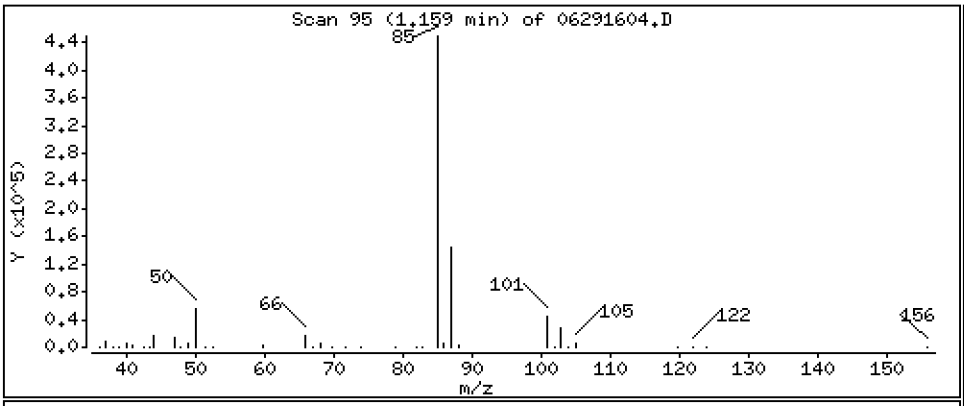
Operator: PB

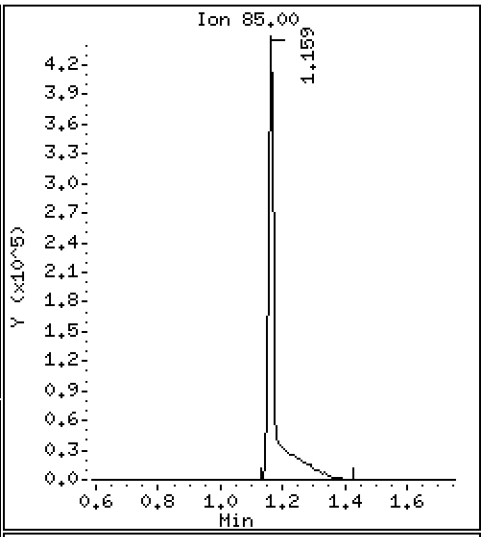
Column phase: RTXVMS

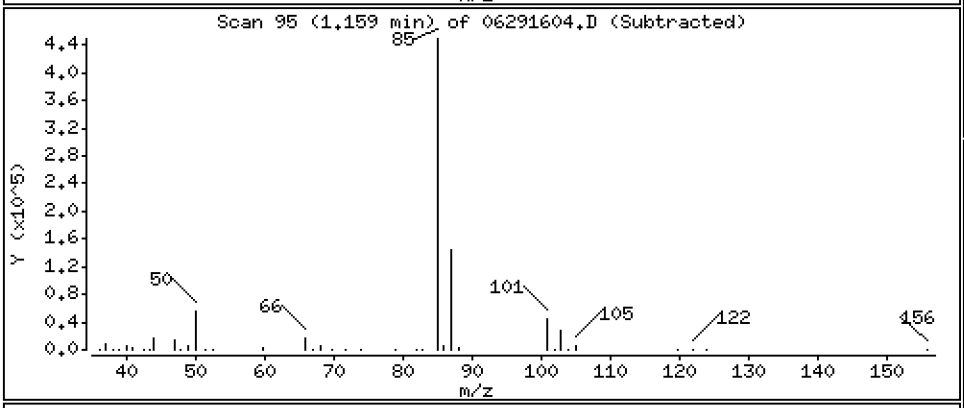
Column diameter: 0.18

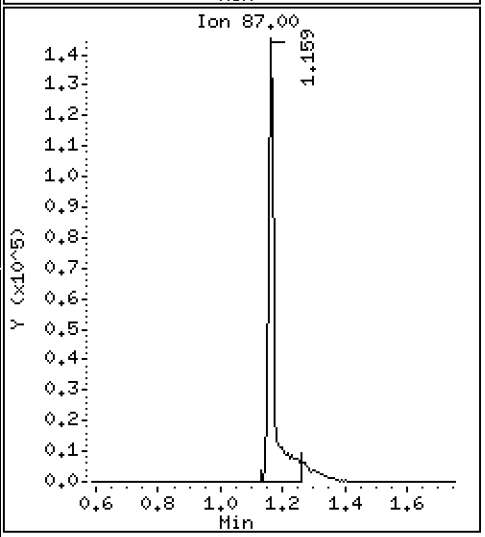
1 Dichlorodifluoromethane

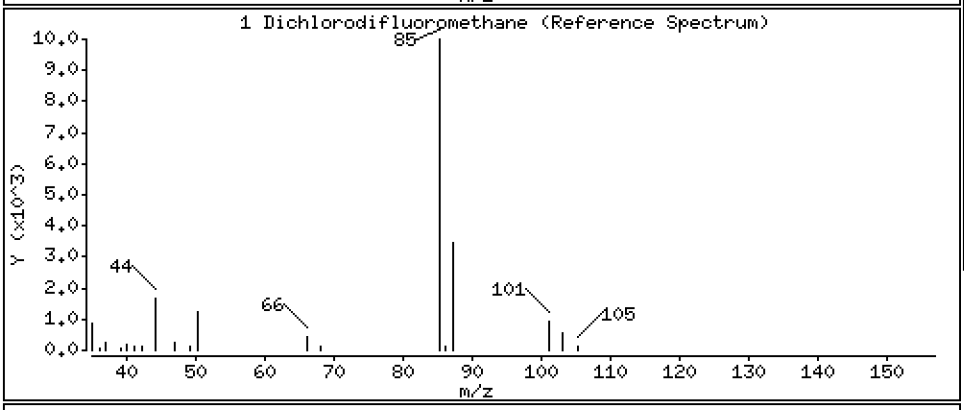
Concentration: 40.221 ug/Kg

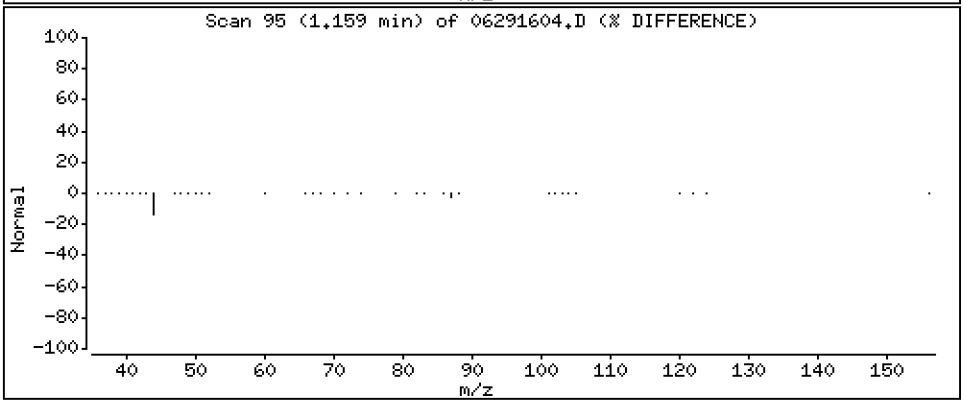












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

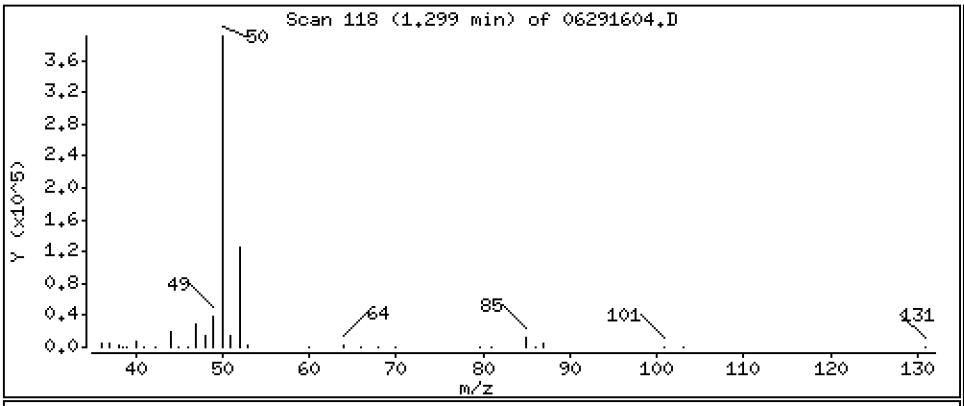
Operator: PB

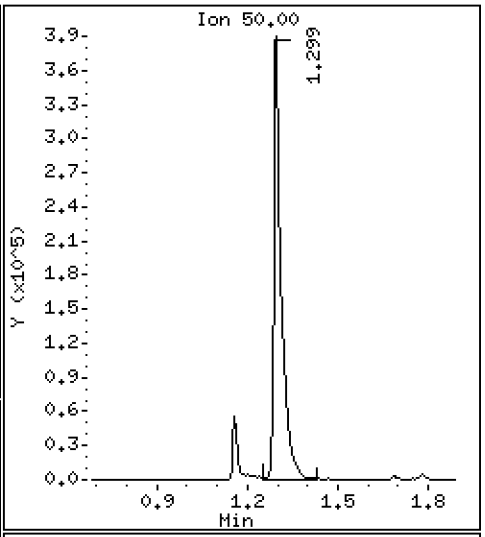
Column phase: RTXVMS

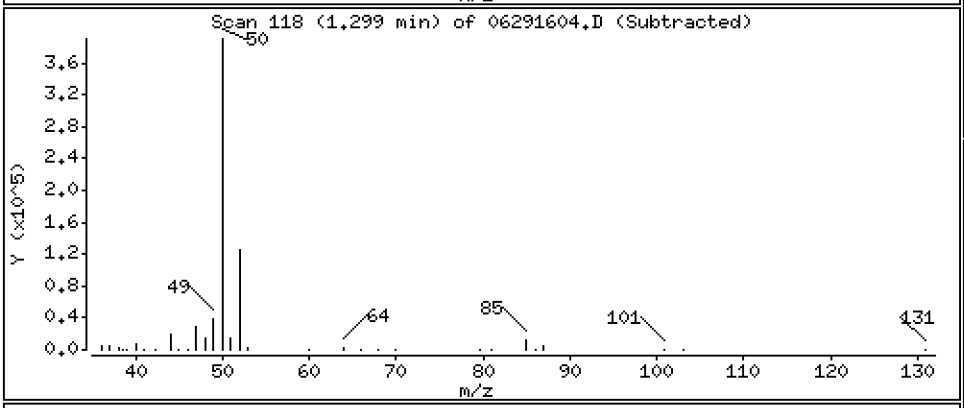
Column diameter: 0.18

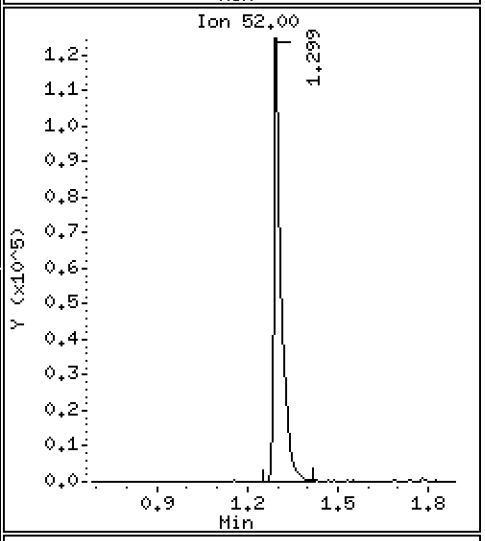
2 Chloromethane

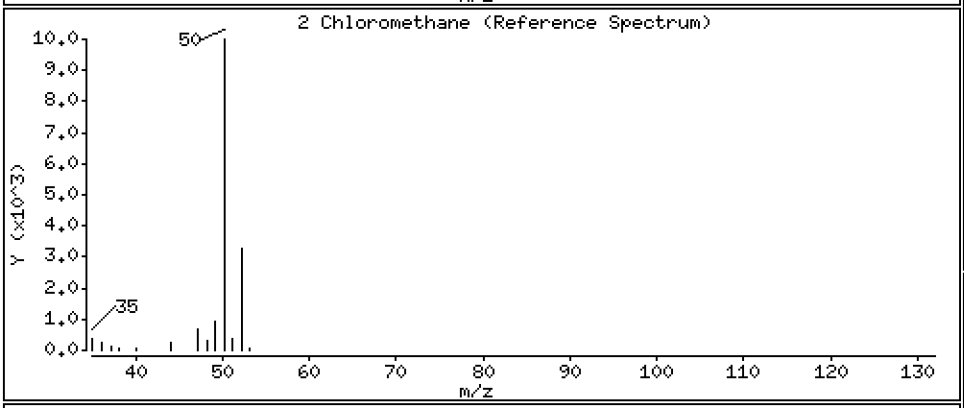
Concentration: 34.575 ug/Kg

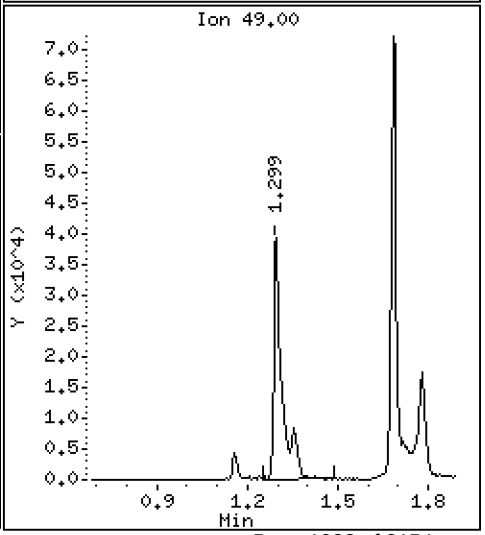


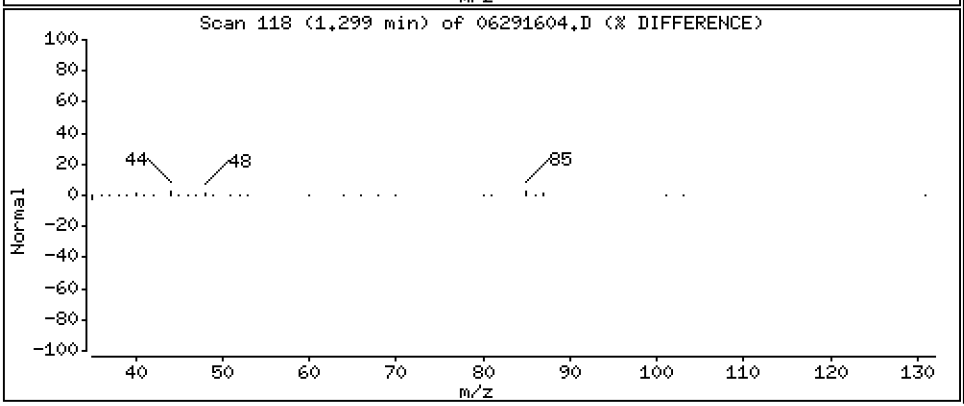












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

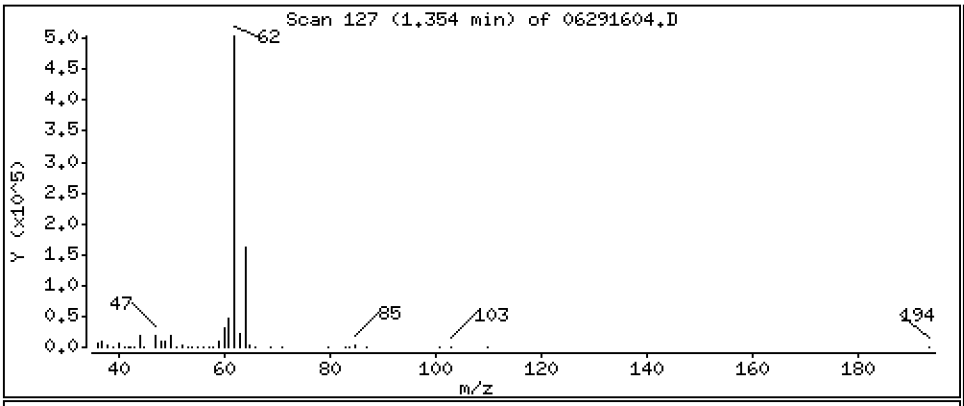
Operator: PB

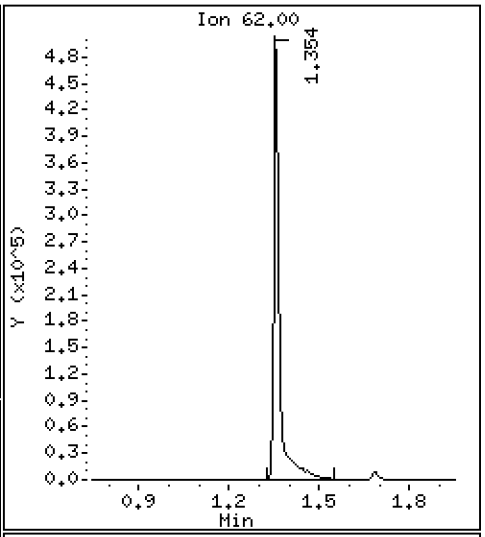
Column phase: RTXVMS

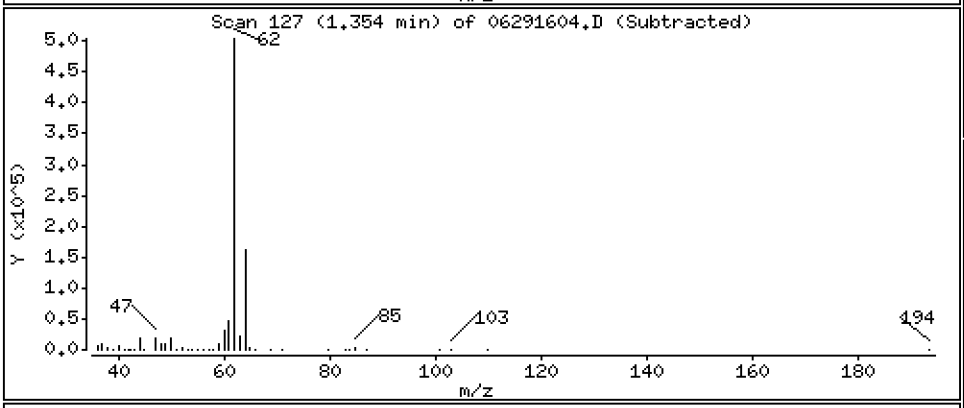
Column diameter: 0.18

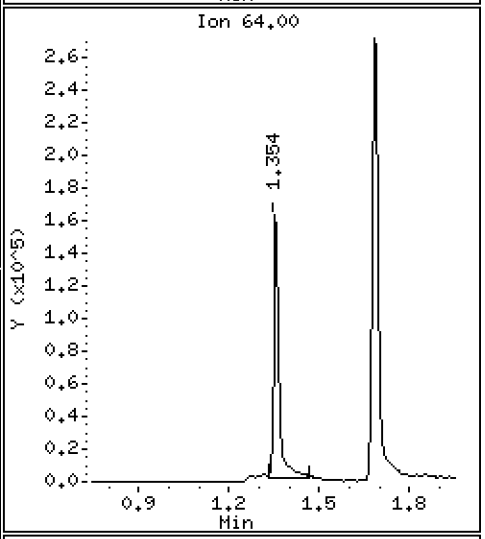
3 Vinyl Chloride

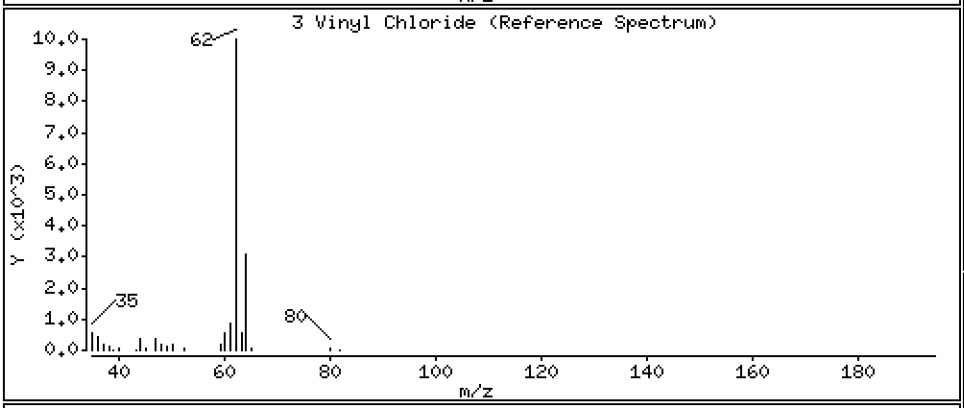
Concentration: 41.402 ug/Kg

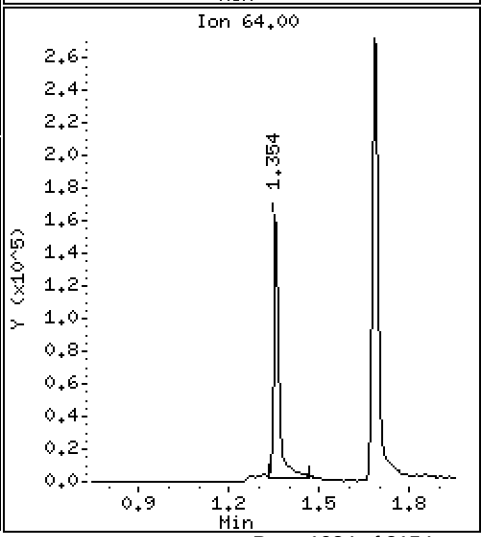


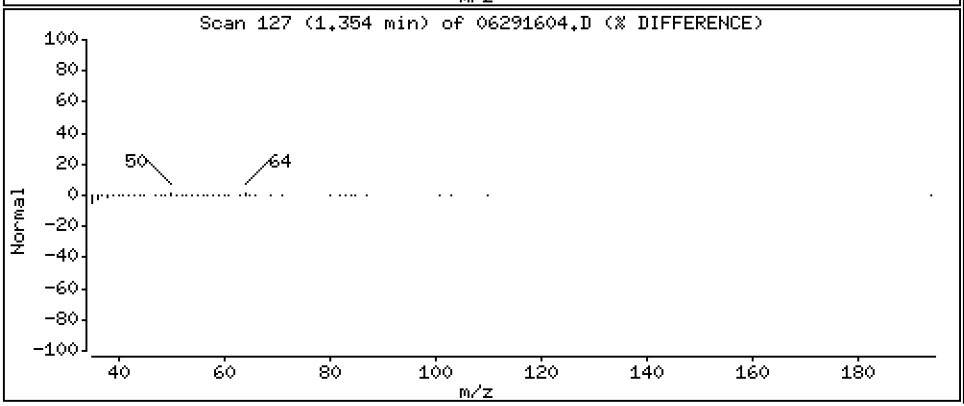












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

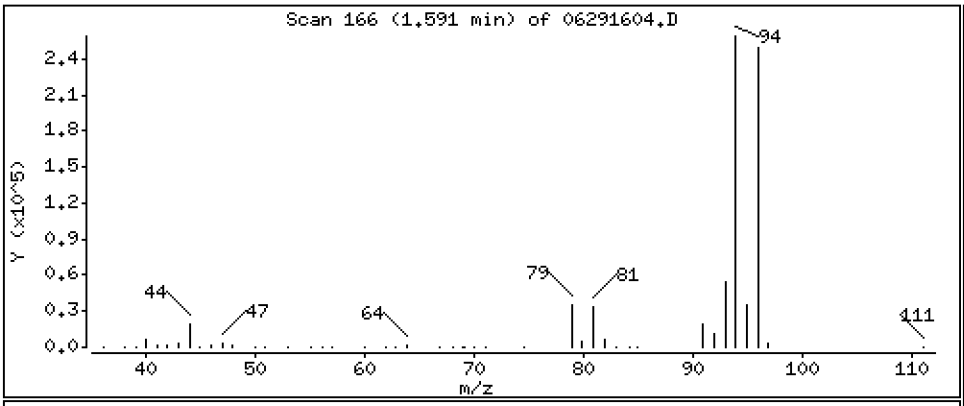
Operator: PB

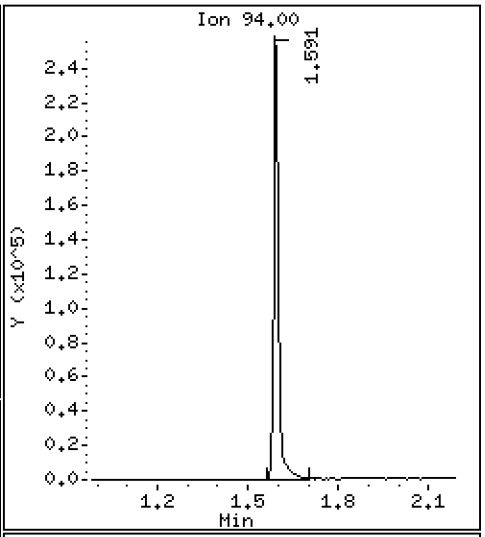
Column phase: RTXVMS

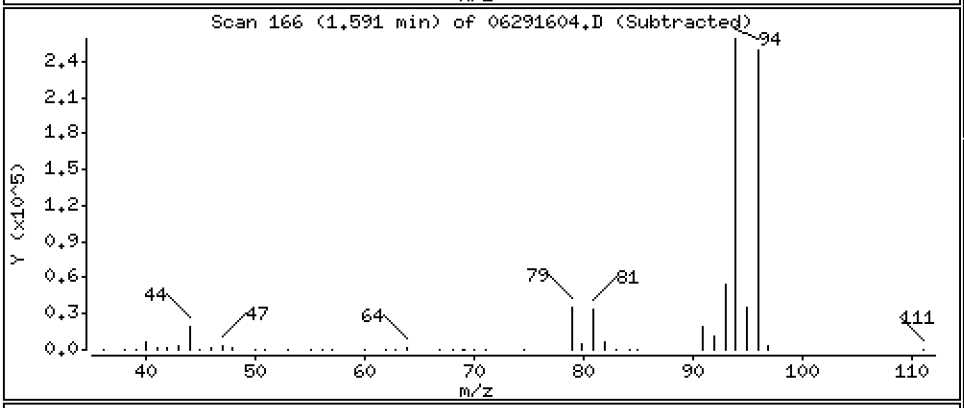
Column diameter: 0.18

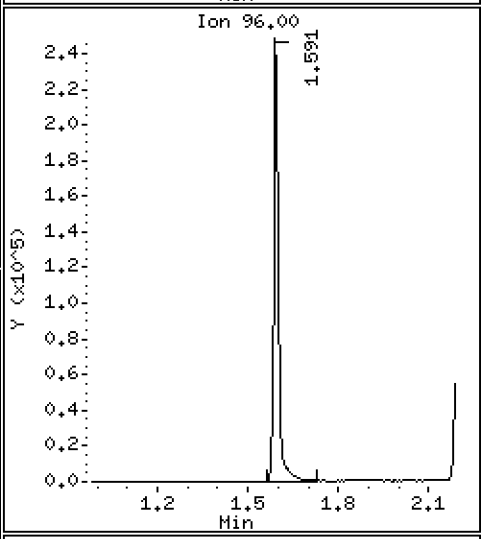
4 Bromomethane

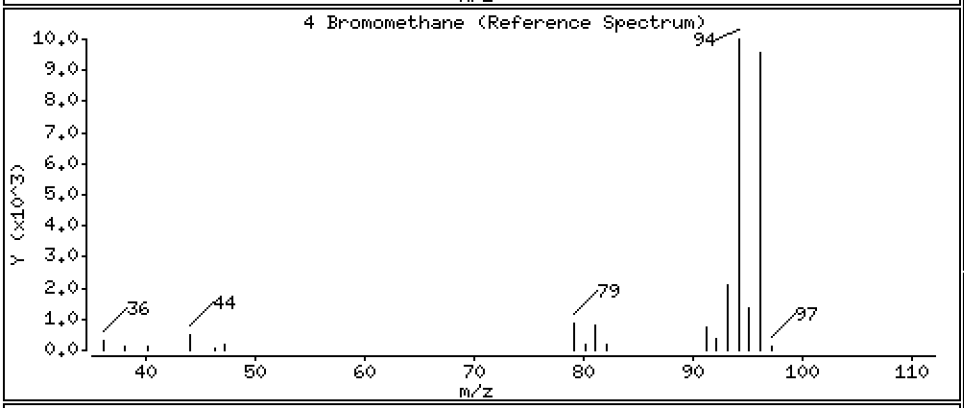
Concentration: 26.569 ug/Kg

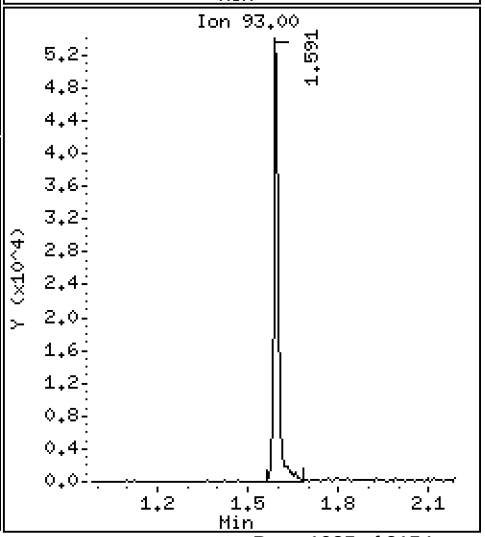


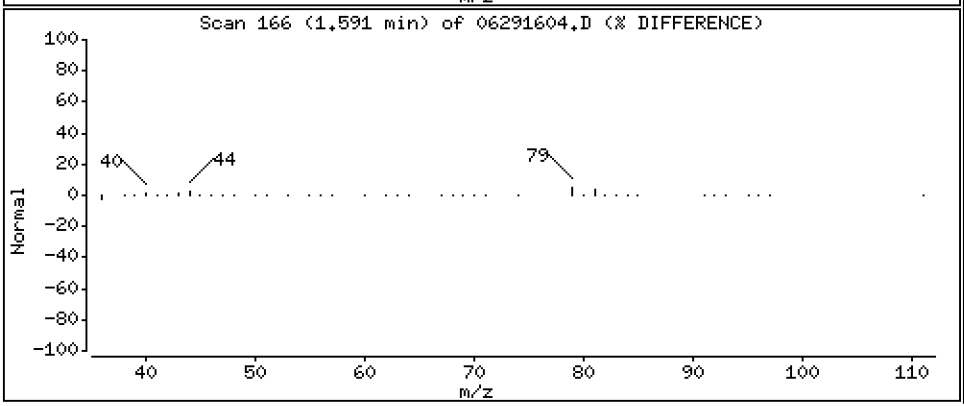












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

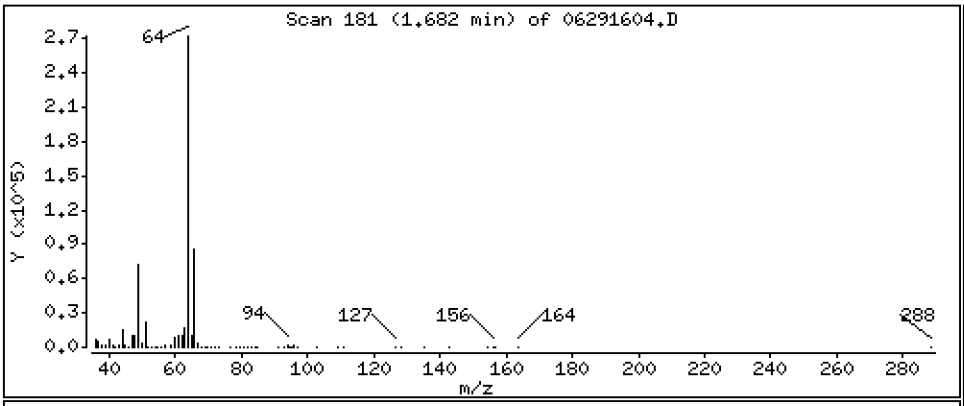
Operator: PB

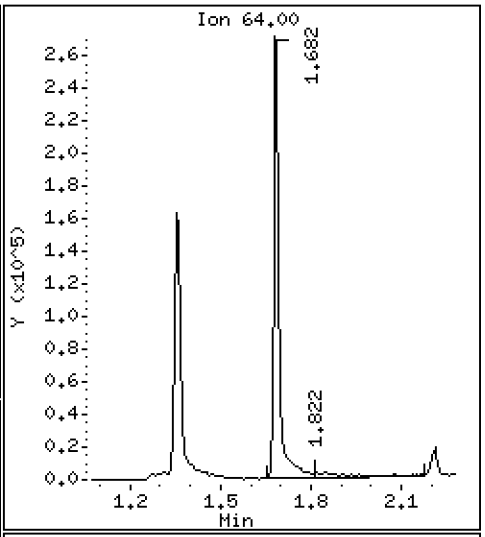
Column phase: RTXVMS

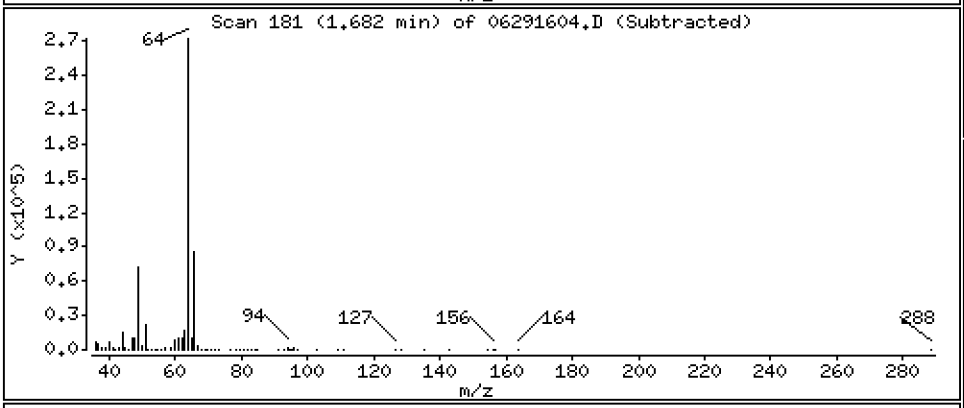
Column diameter: 0.18

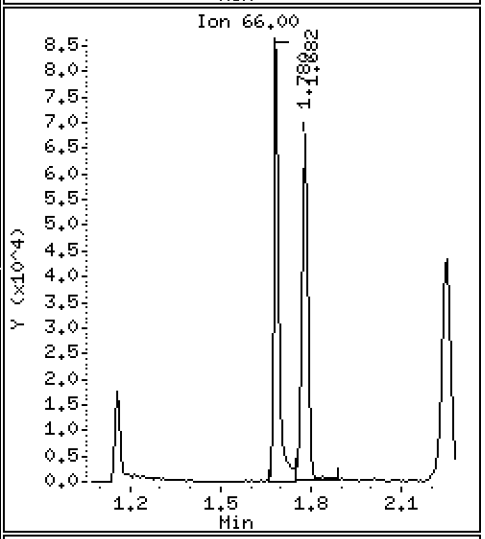
5 Chloroethane

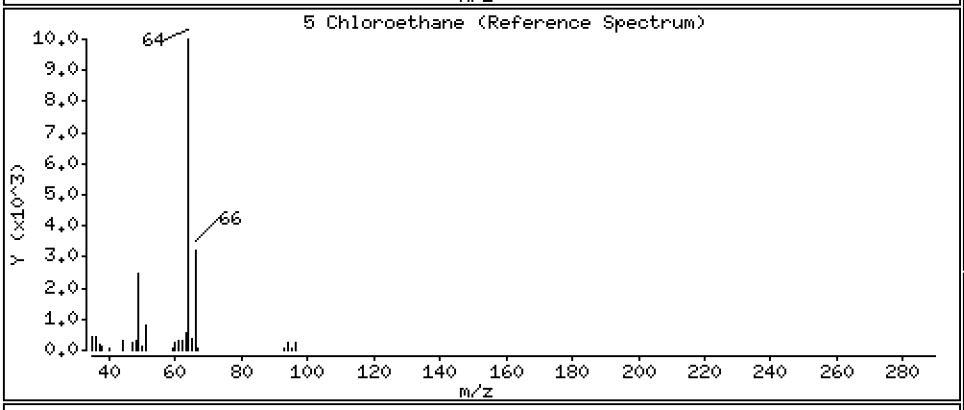
Concentration: 42.883 ug/Kg

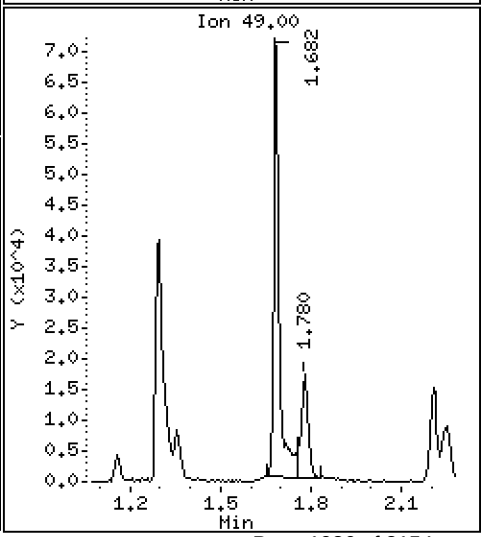


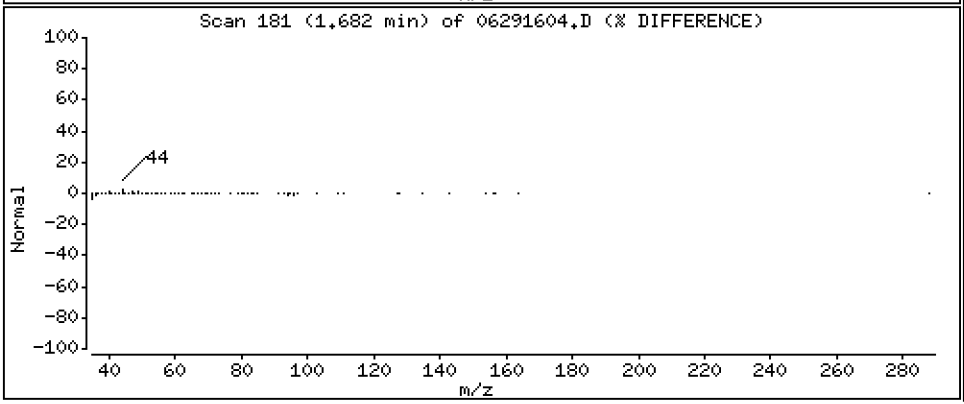












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

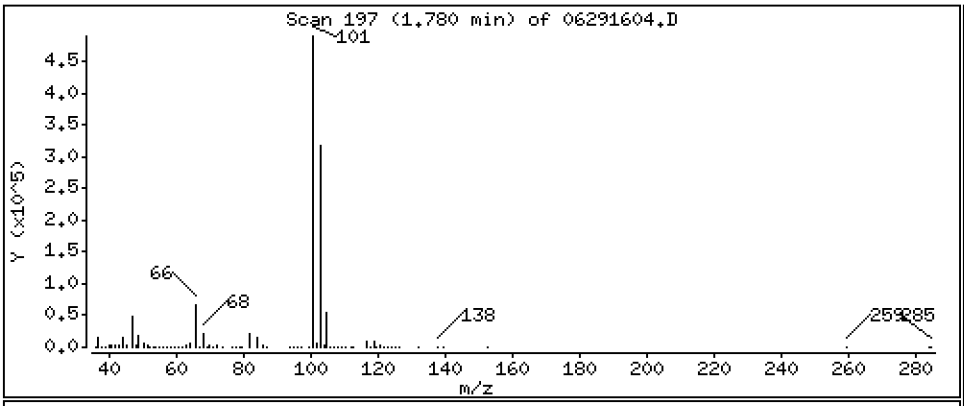
Operator: PB

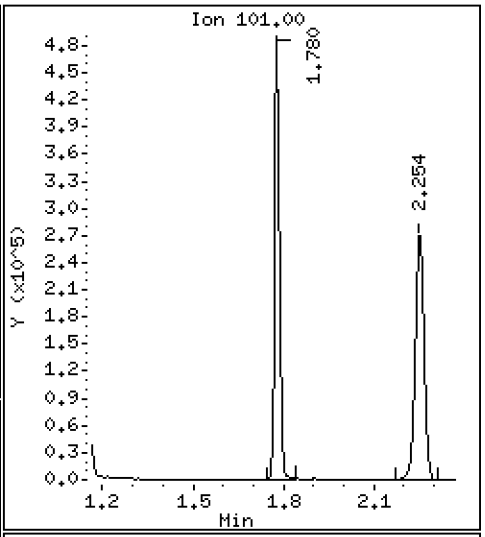
Column phase: RTXVMS

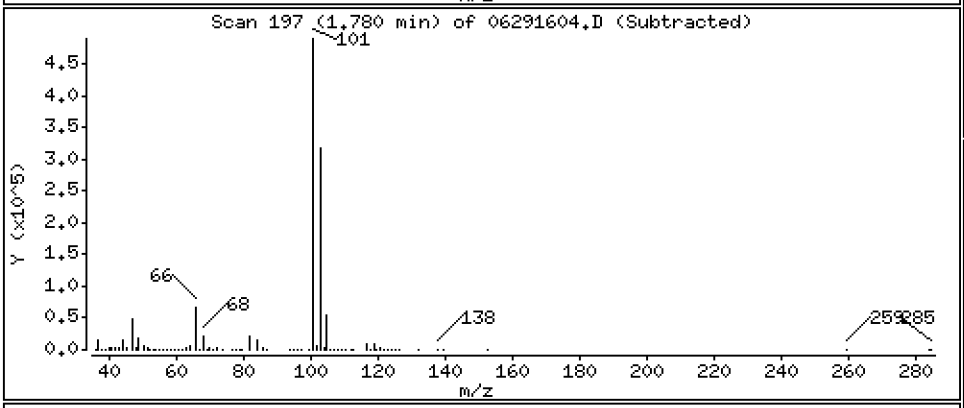
Column diameter: 0.18

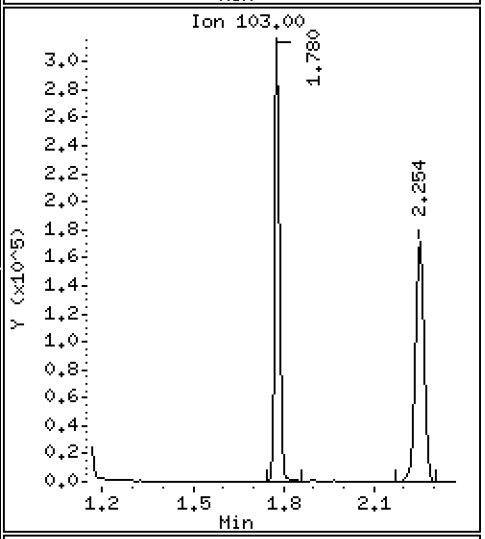
6 Trichlorofluoromethane

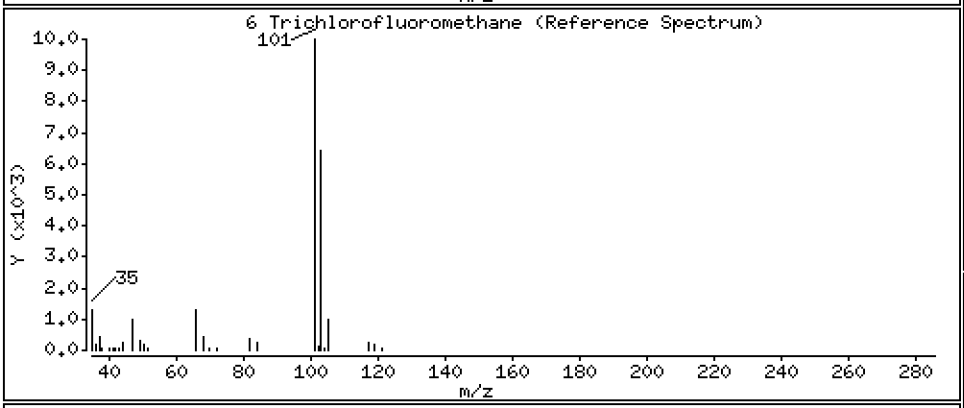
Concentration: 58.850 ug/Kg

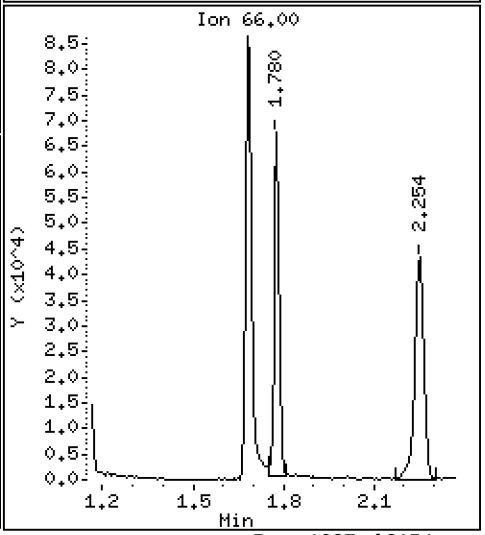


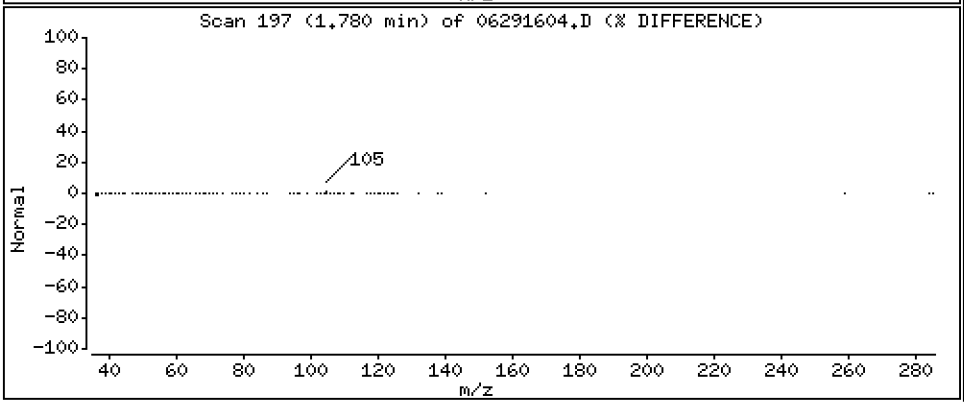












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

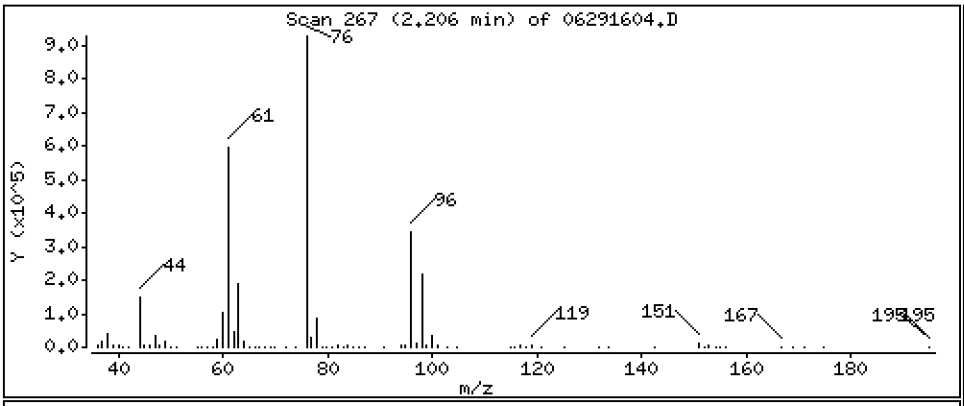
Operator: PB

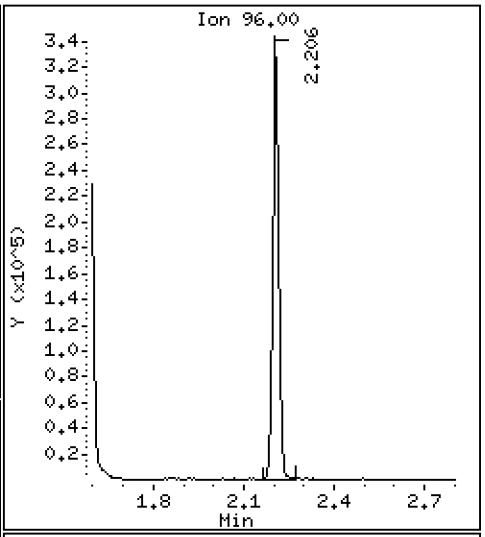
Column phase: RTXVMS

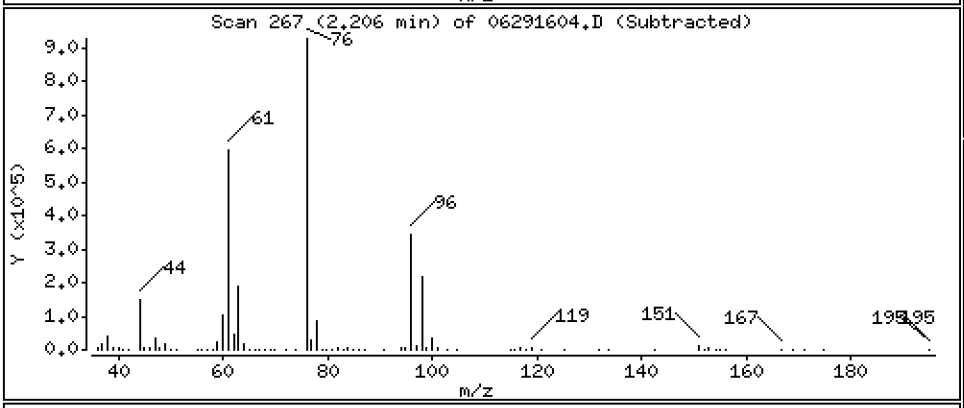
Column diameter: 0.18

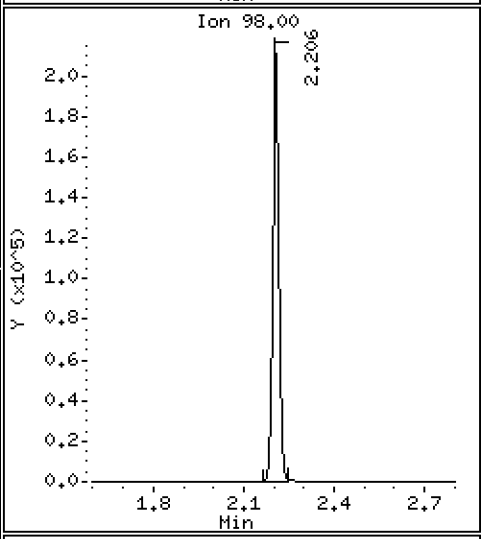
7 1,1-Dichloroethene

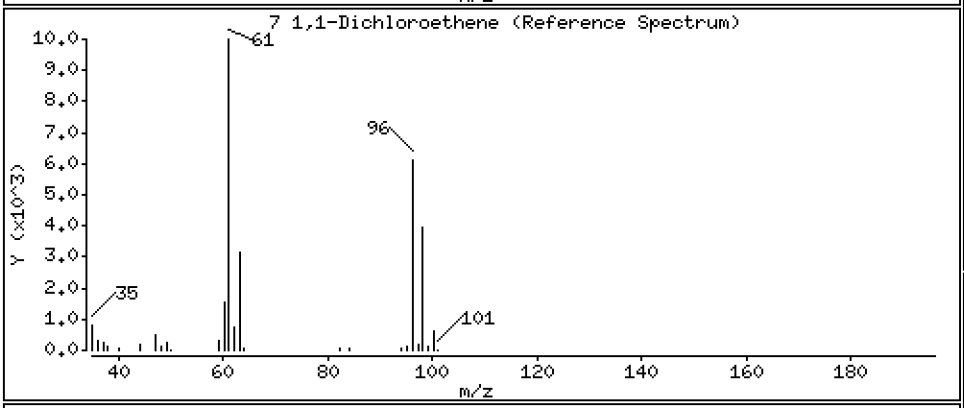
Concentration: 44.580 ug/Kg

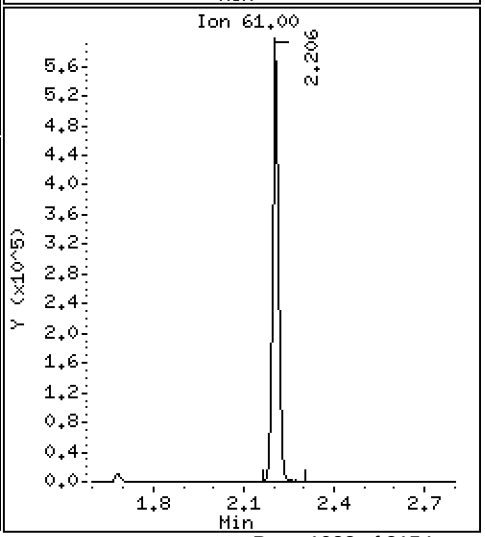


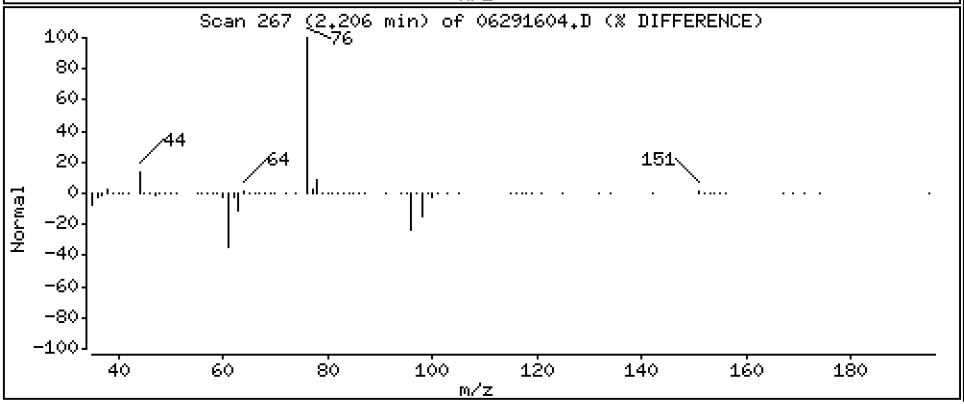












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

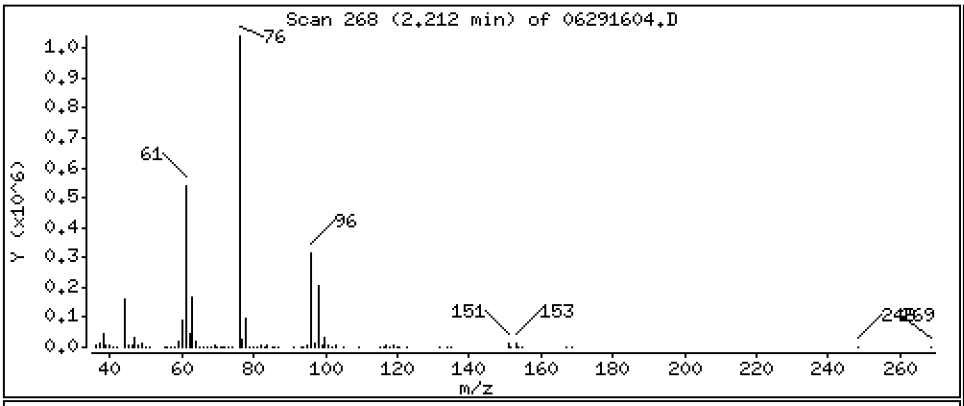
Operator: PB

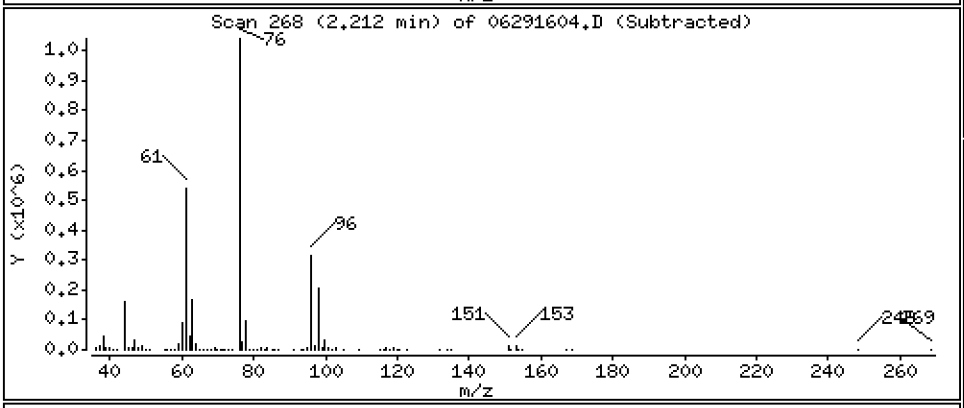
Column phase: RTXVMS

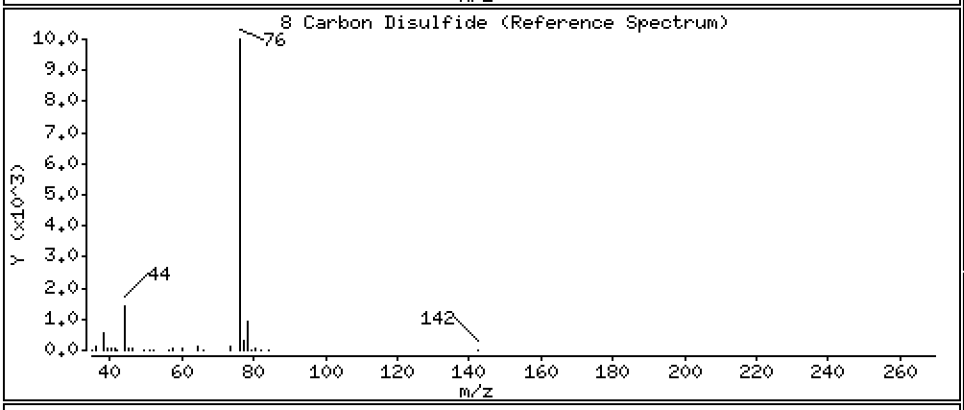
Column diameter: 0.18

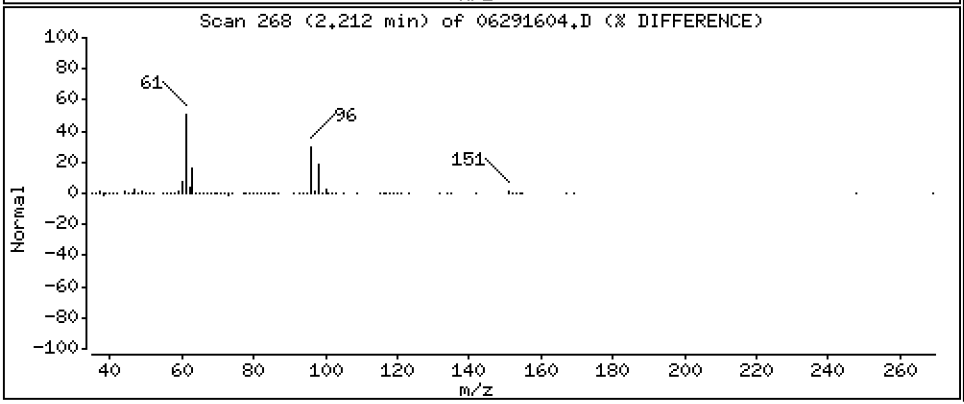
8 Carbon Disulfide

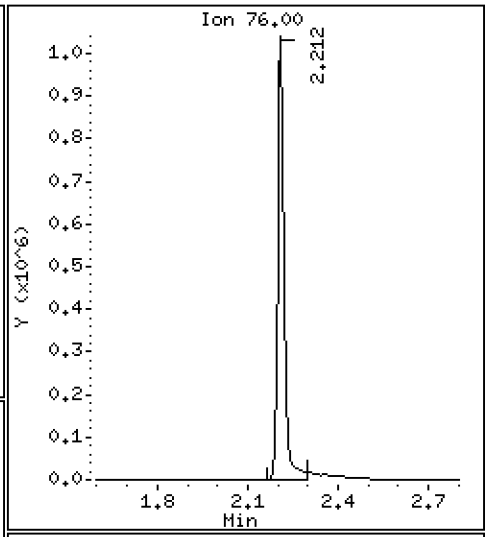
Concentration: 44.026 ug/Kg

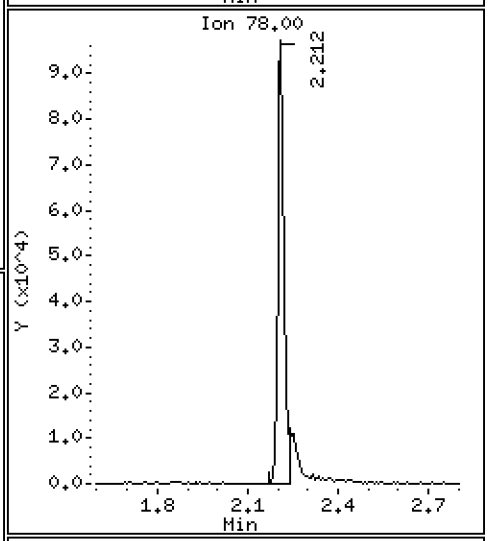


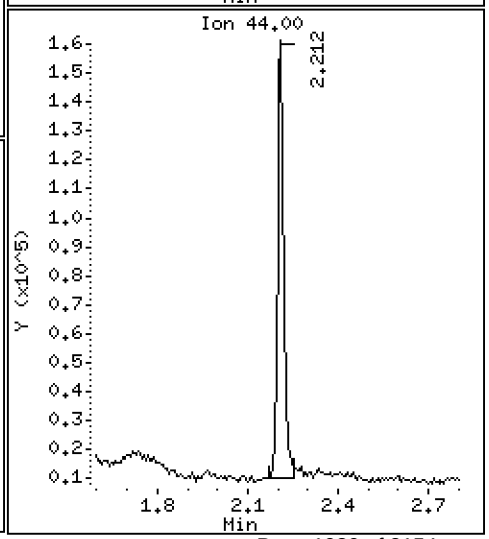












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

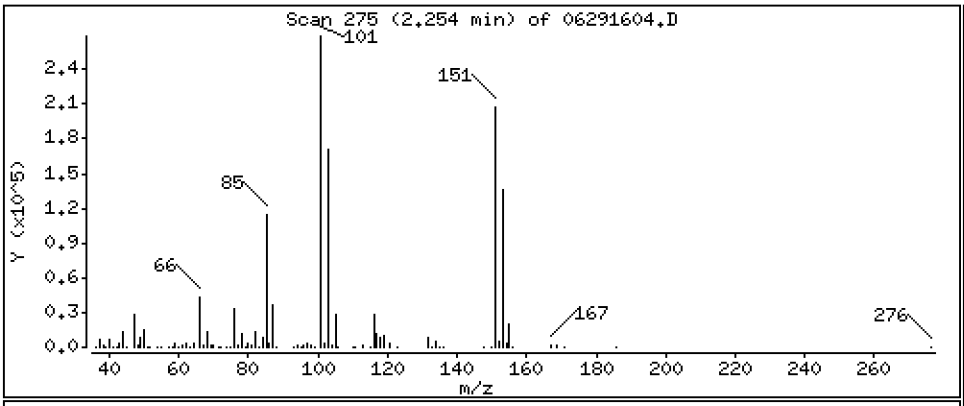
Operator: PB

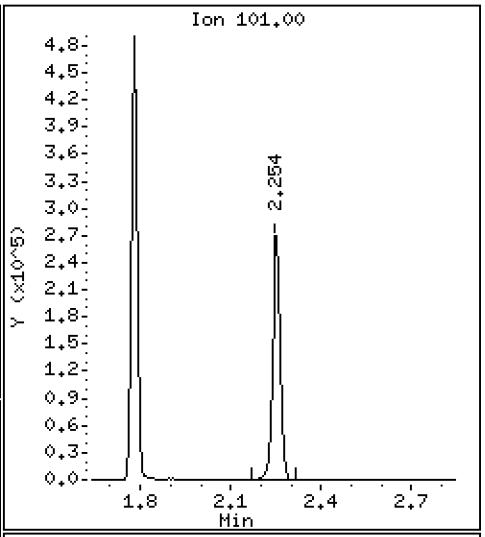
Column phase: RTXVMS

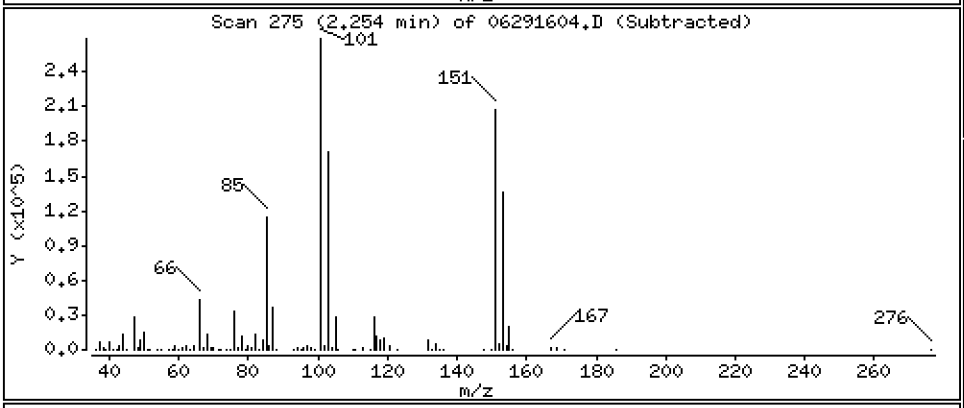
Column diameter: 0.18

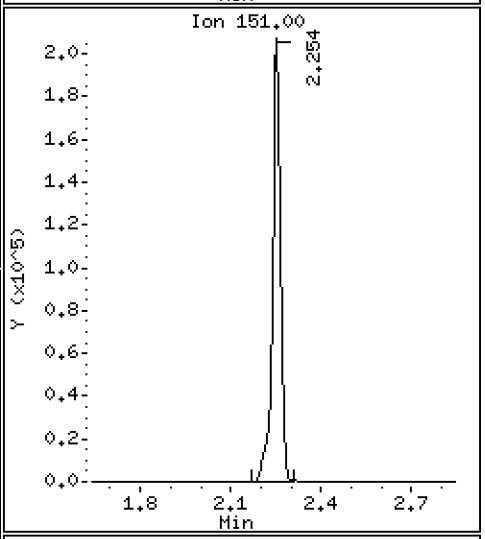
9 112Trichloro122Trifluoroethane

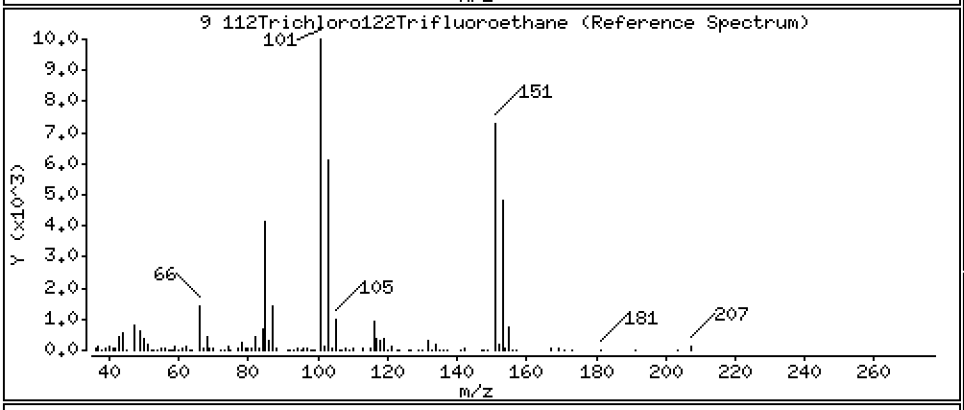
Concentration: 44.016 ug/Kg

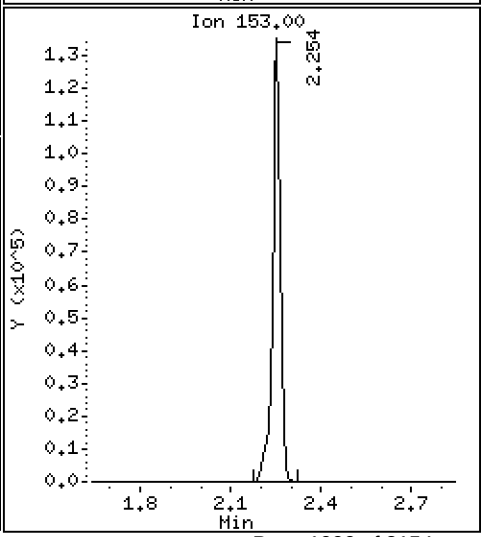


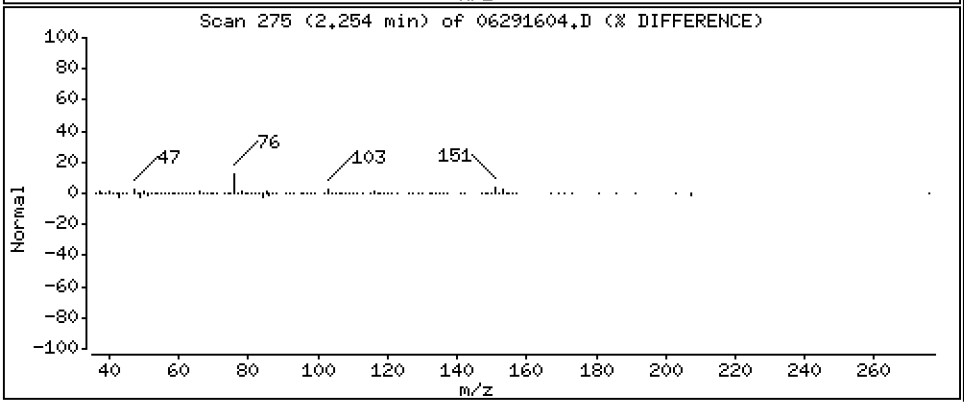












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

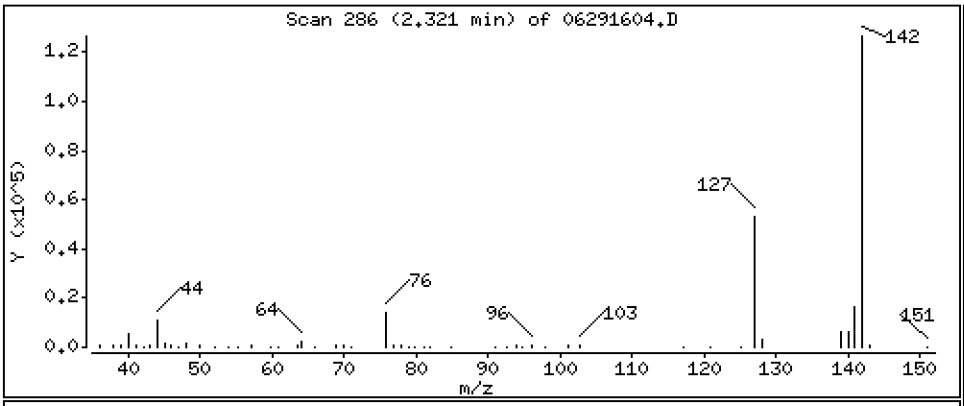
Operator: PB

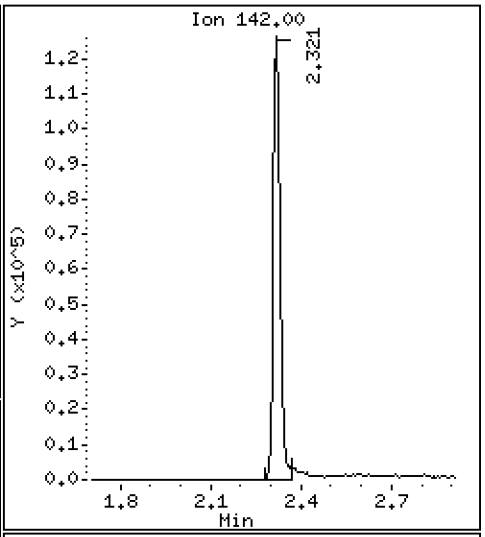
Column phase: RTXVMS

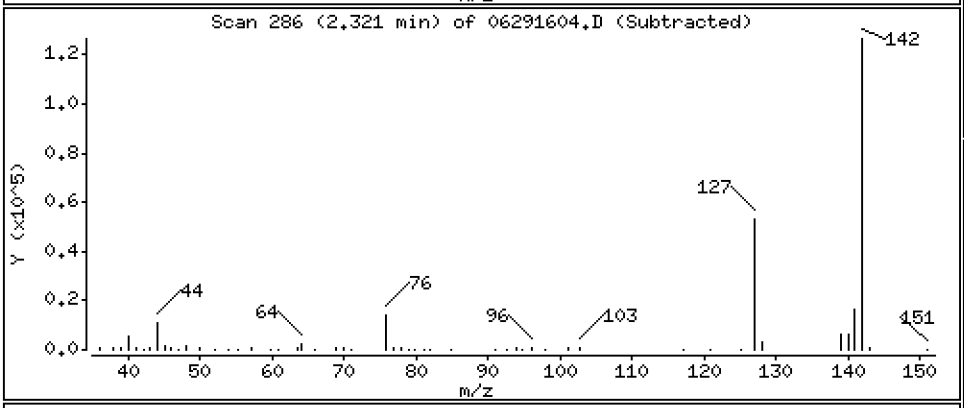
Column diameter: 0.18

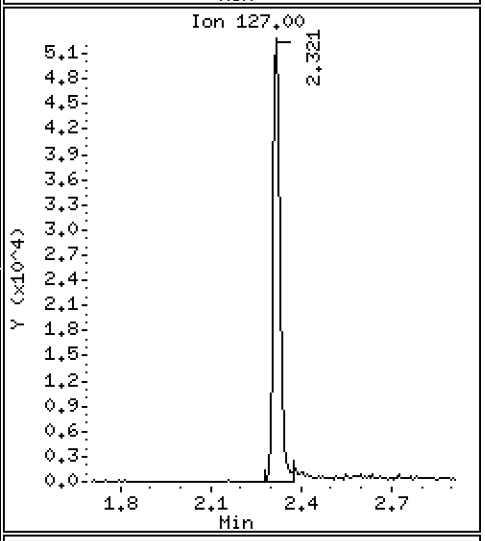
10 Iodomethane

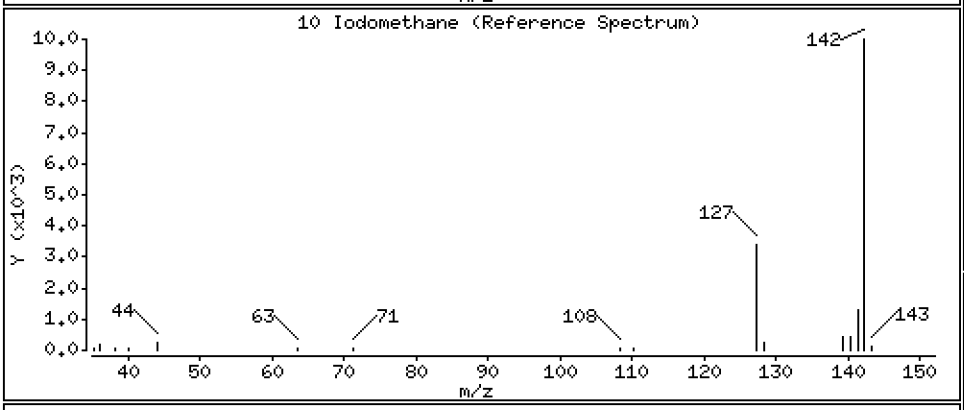
Concentration: 28.089 ug/Kg

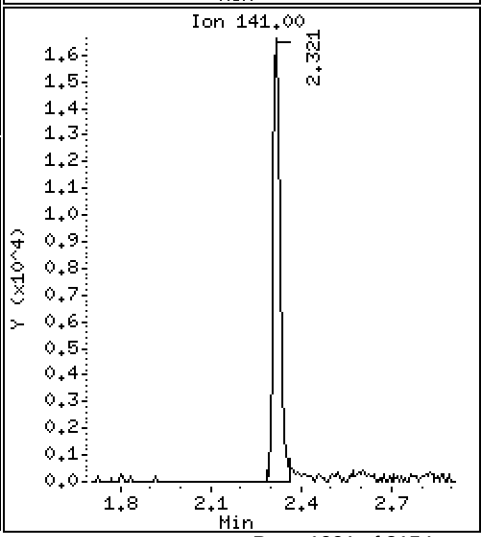


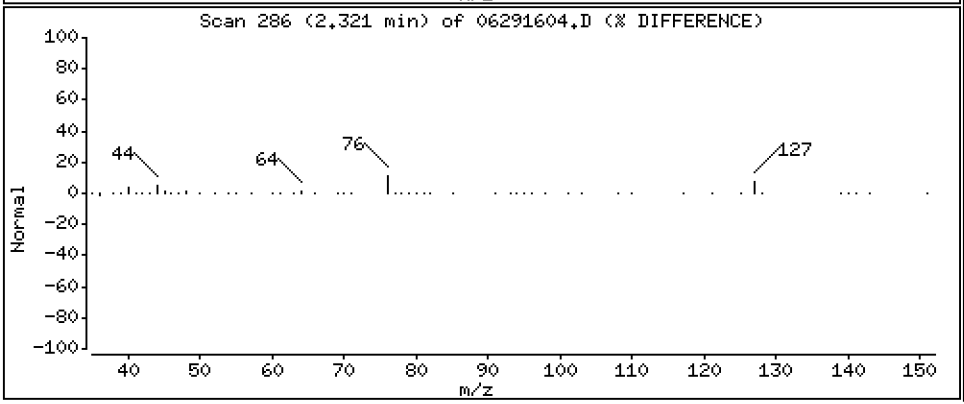












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

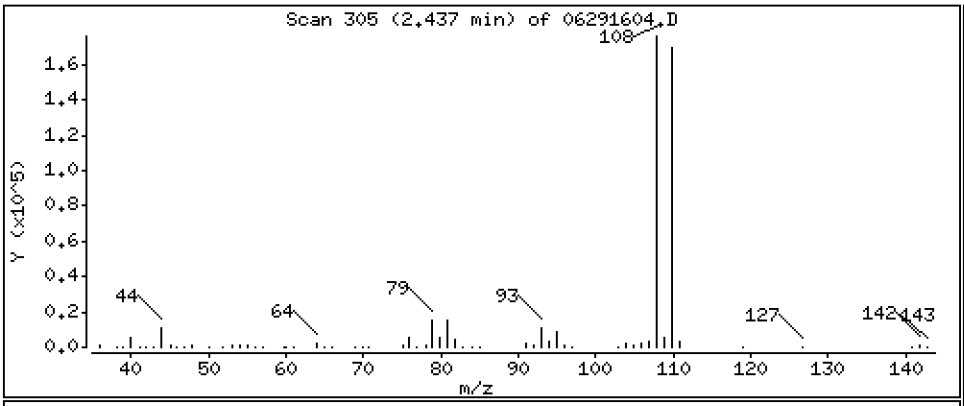
Operator: PB

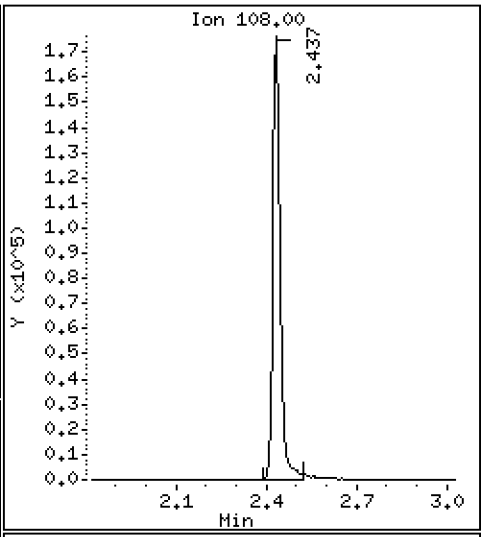
Column phase: RTXVMS

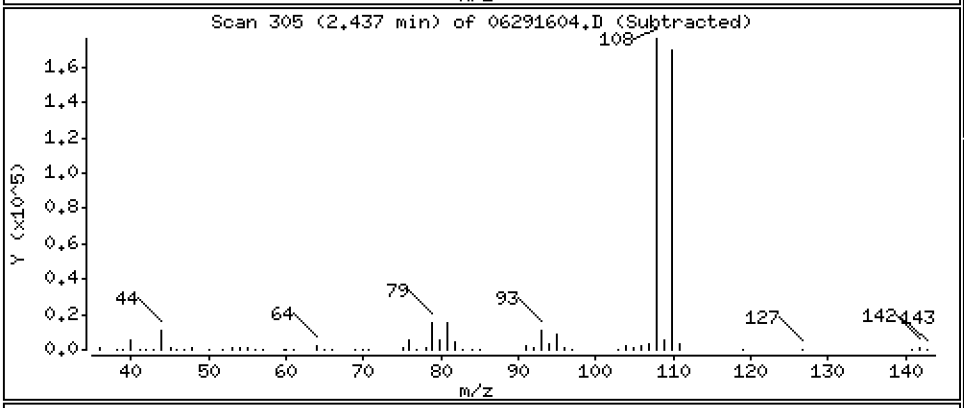
Column diameter: 0.18

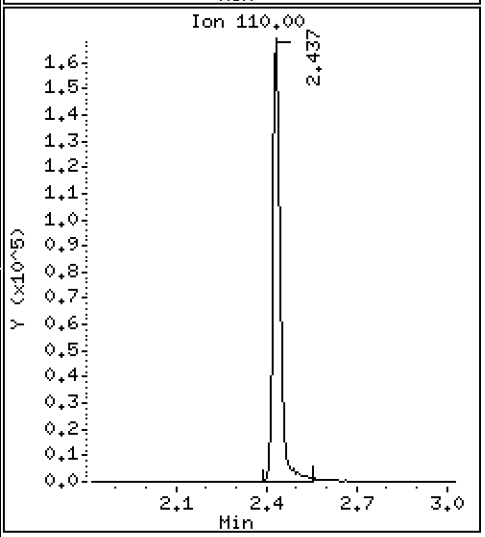
11 Bromoethane

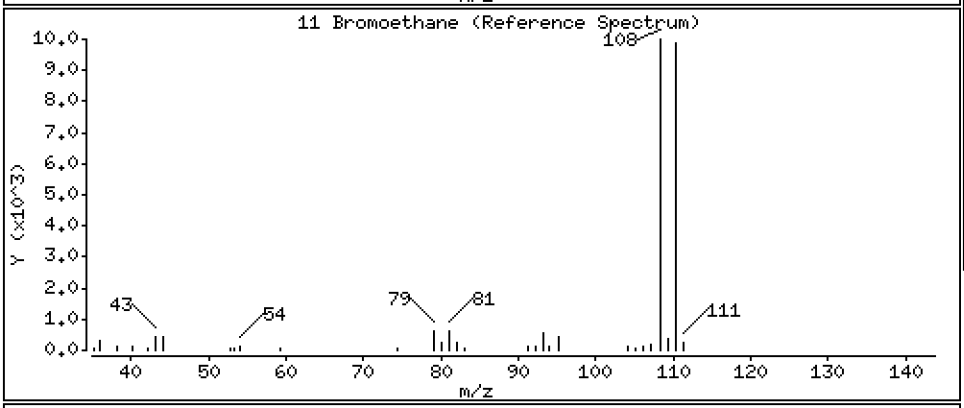
Concentration: 46.007 ug/Kg

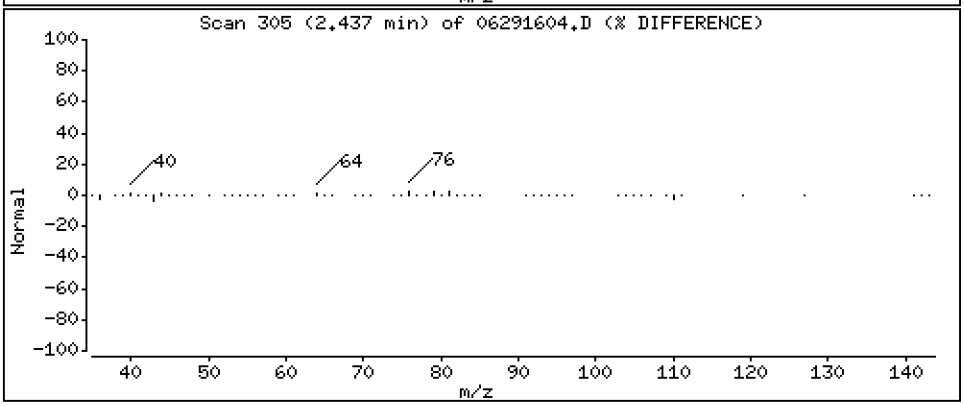












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

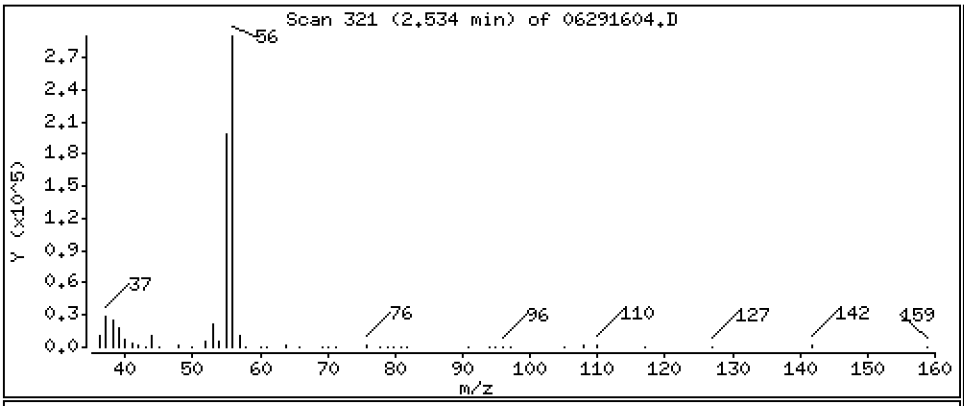
Operator: PB

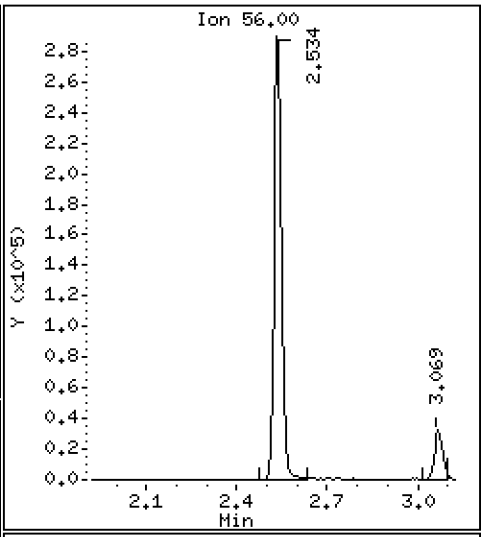
Column phase: RTXVMS

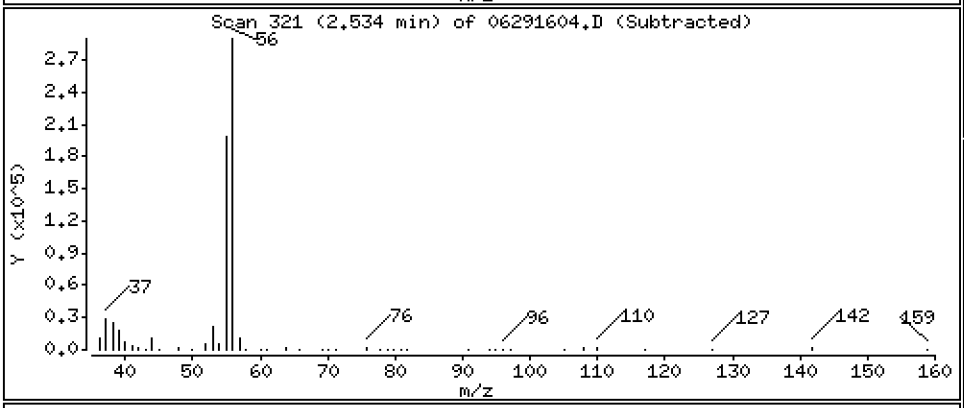
Column diameter: 0.18

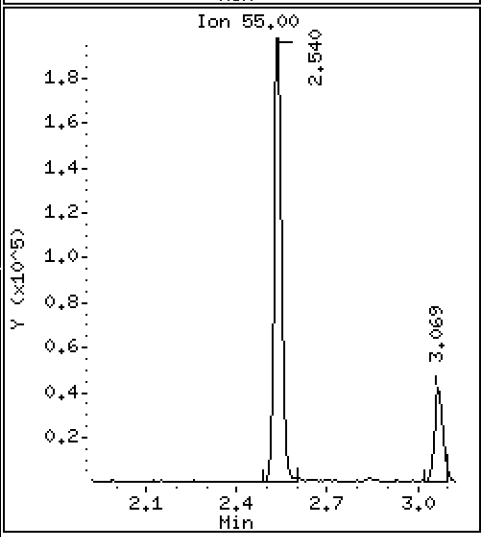
12 Acrolein

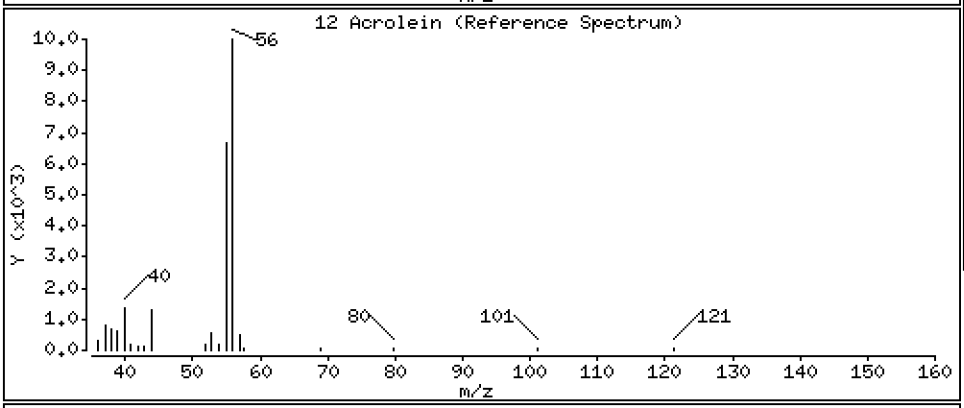
Concentration: 226.04 ug/Kg

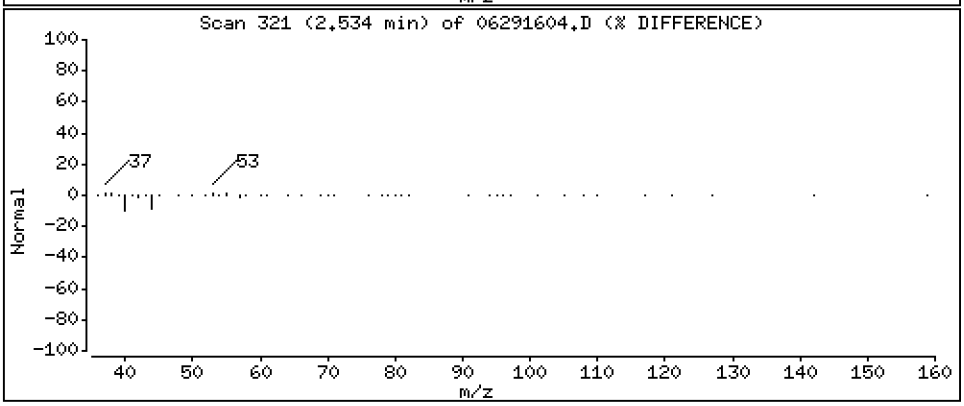












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

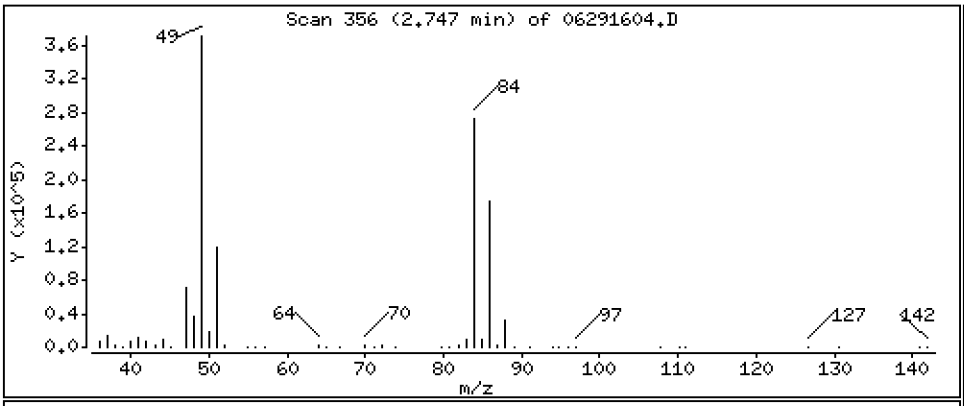
Operator: PB

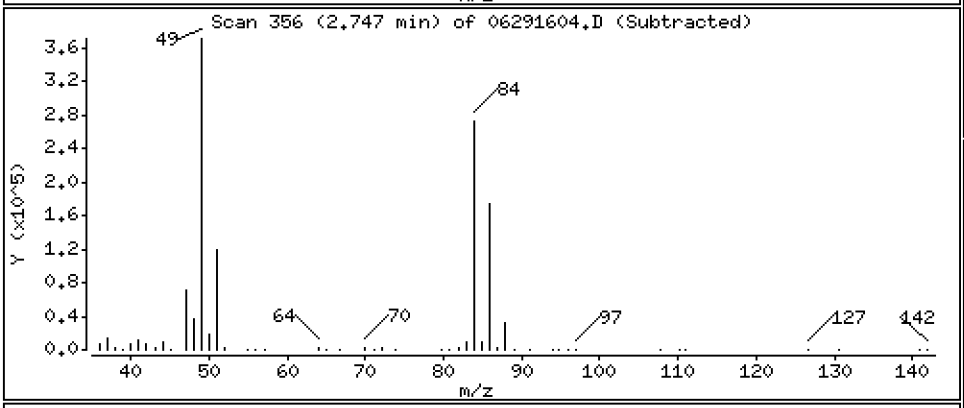
Column phase: RTXVMS

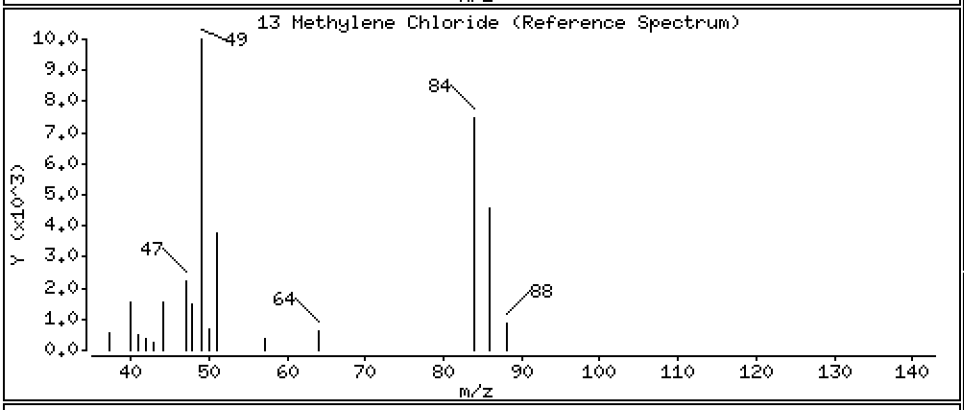
Column diameter: 0.18

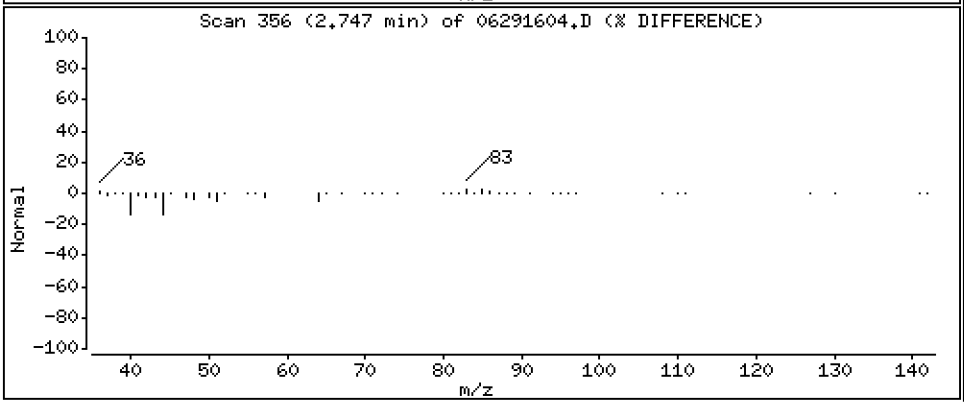
13 Methylene Chloride

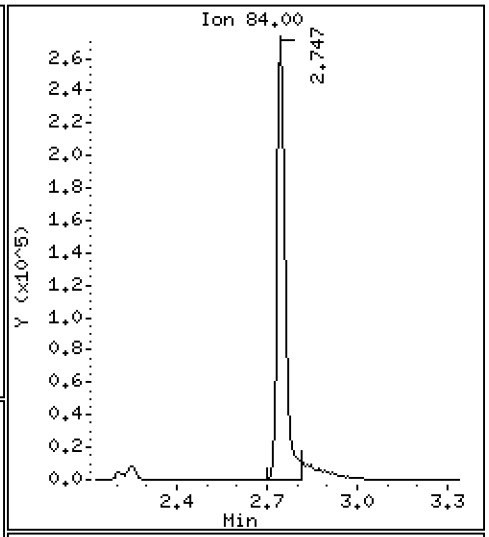
Concentration: 44.736 ug/Kg

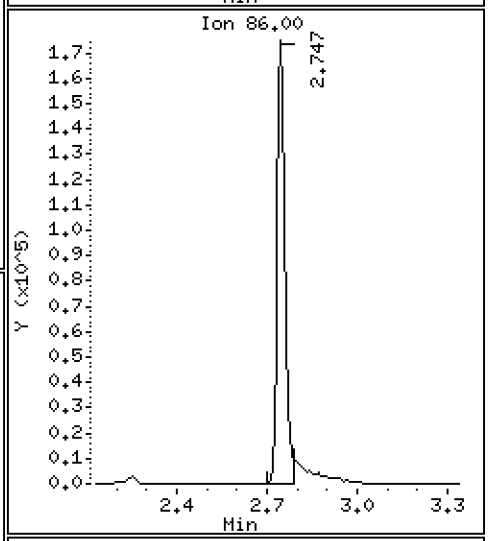


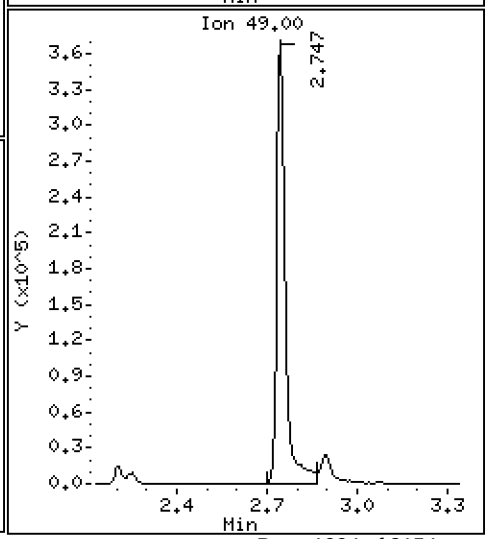












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

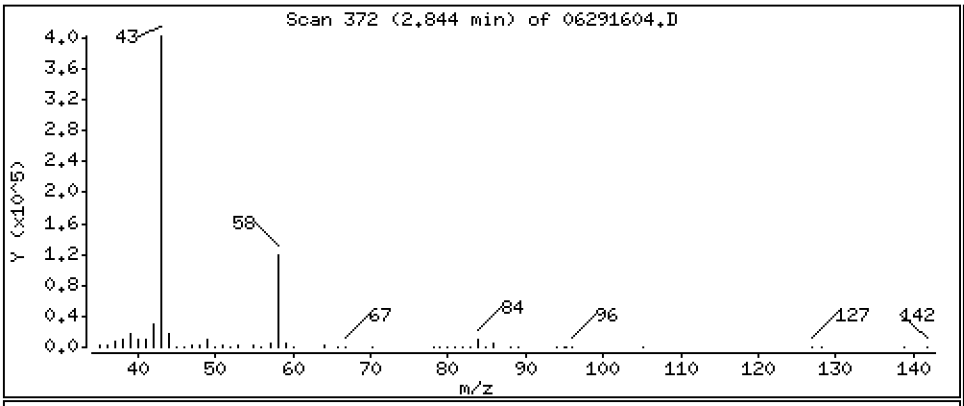
Operator: PB

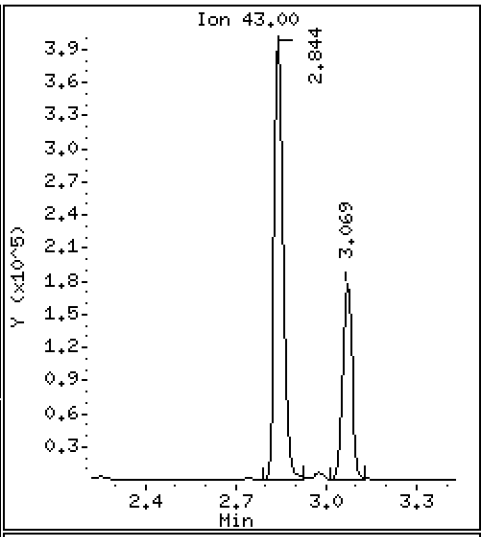
Column phase: RTXVMS

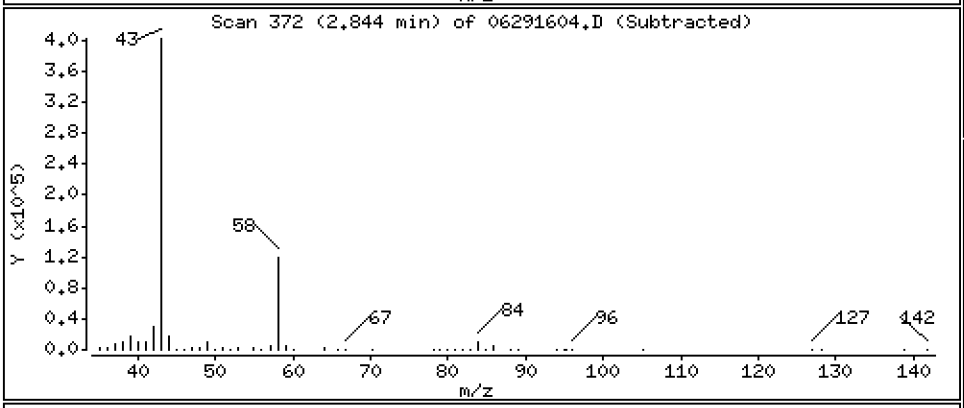
Column diameter: 0.18

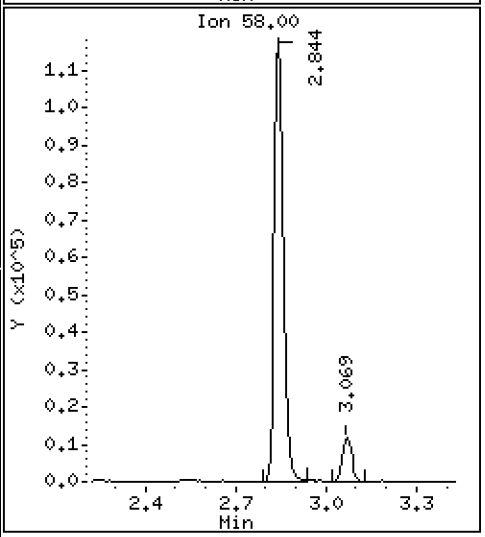
14 Acetone

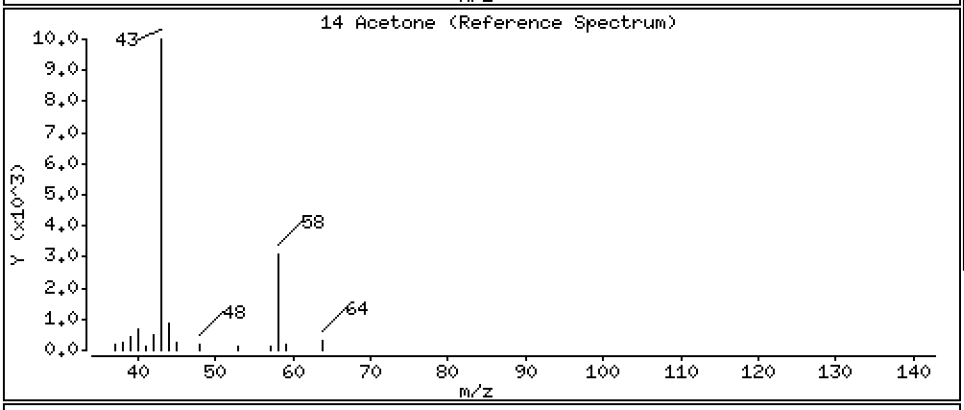
Concentration: 213.54 ug/Kg

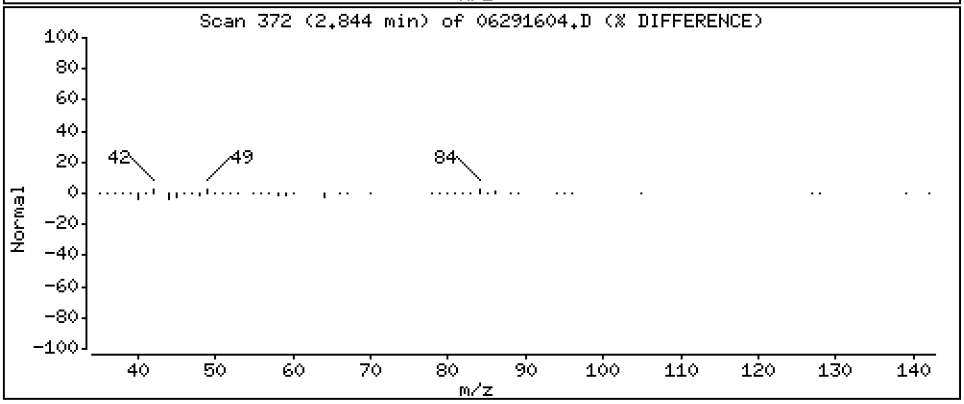












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

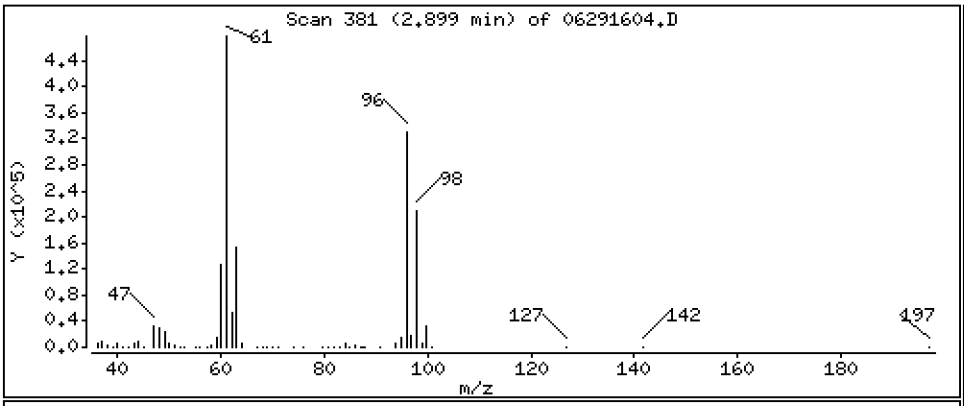
Operator: PB

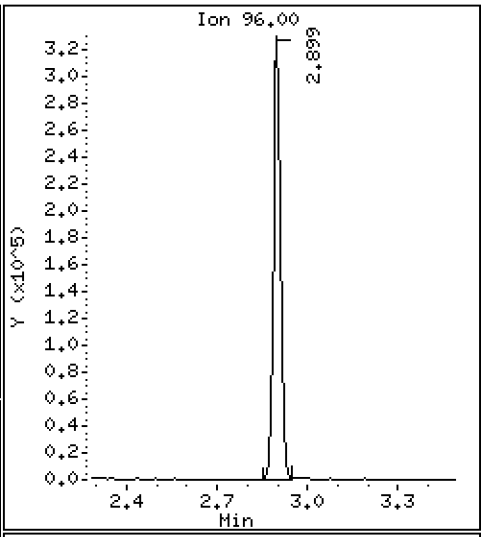
Column phase: RTXVMS

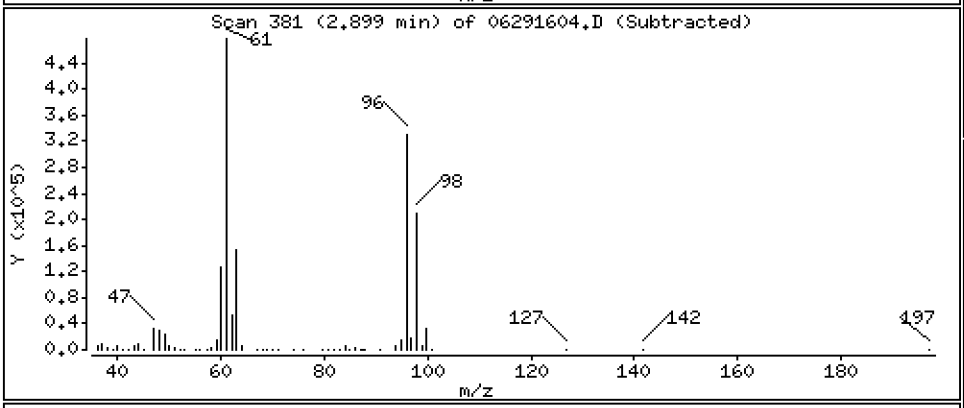
Column diameter: 0.18

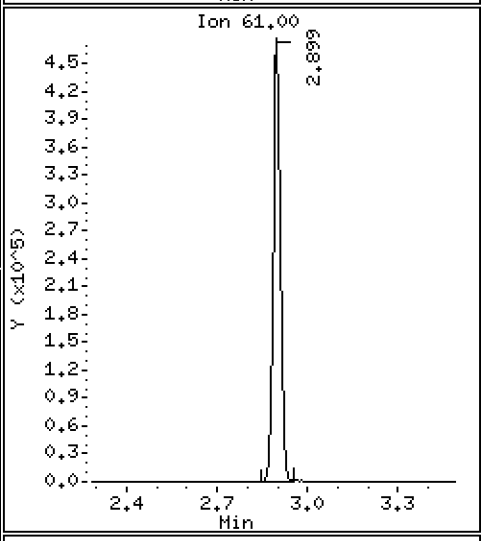
15 Trans-1,2-Dichloroethene

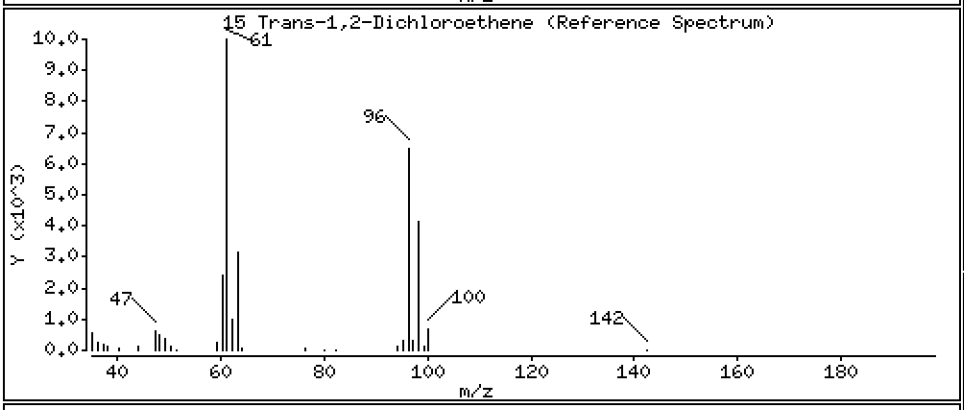
Concentration: 44.439 ug/Kg

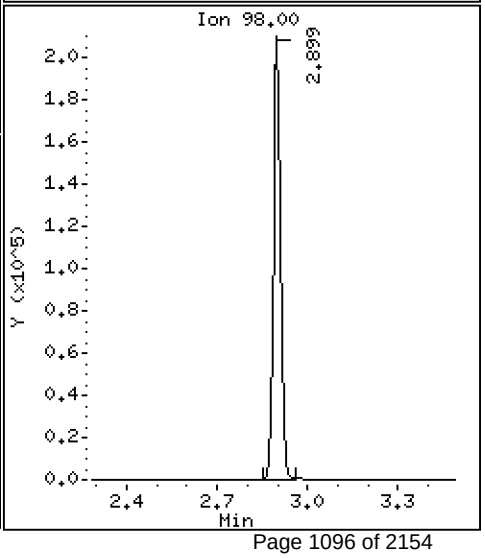


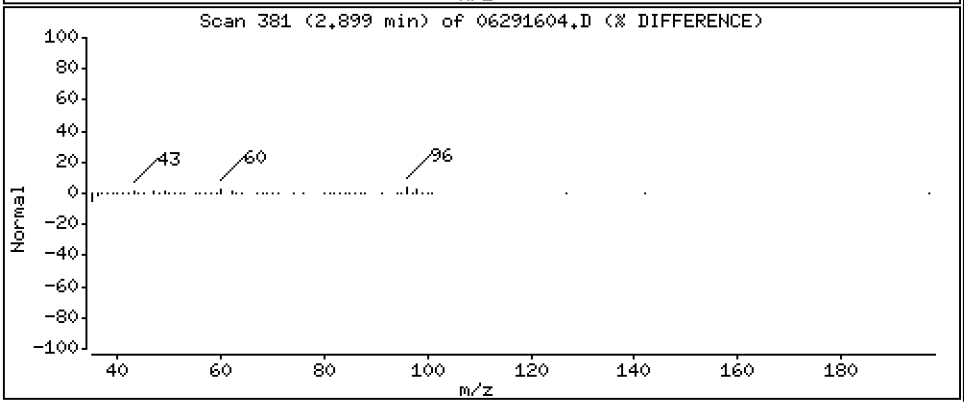












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

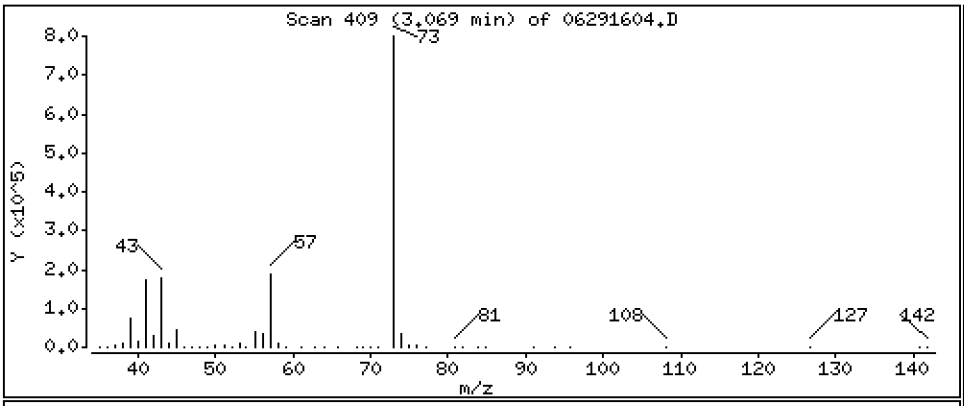
Operator: PB

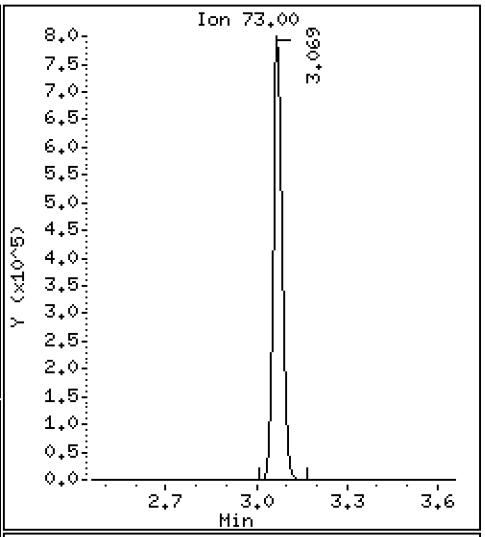
Column phase: RTXVMS

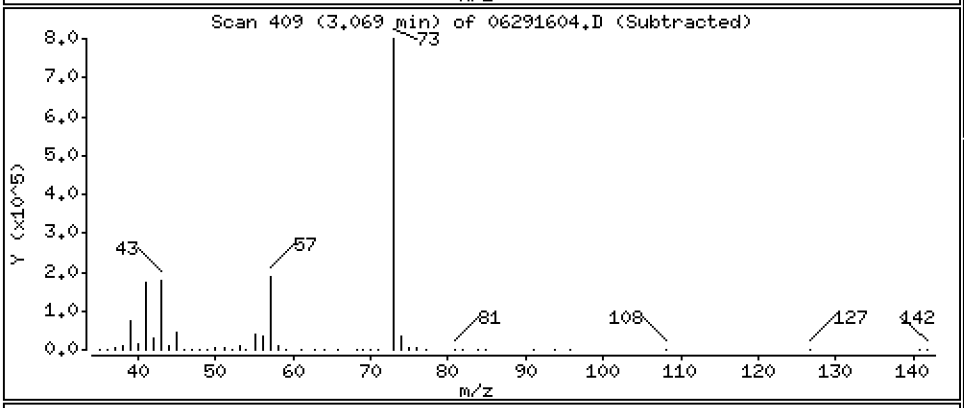
Column diameter: 0.18

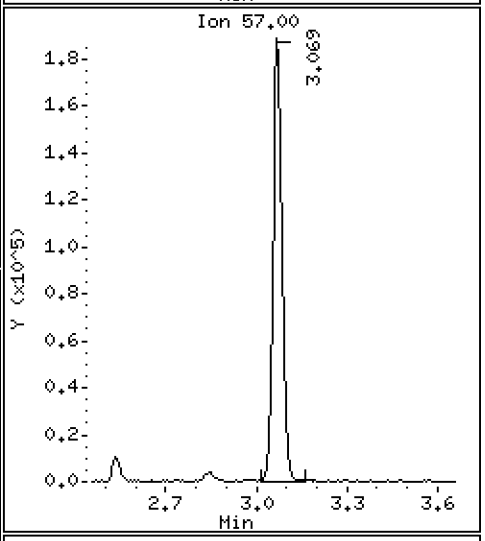
16 Methyl tert butyl ether

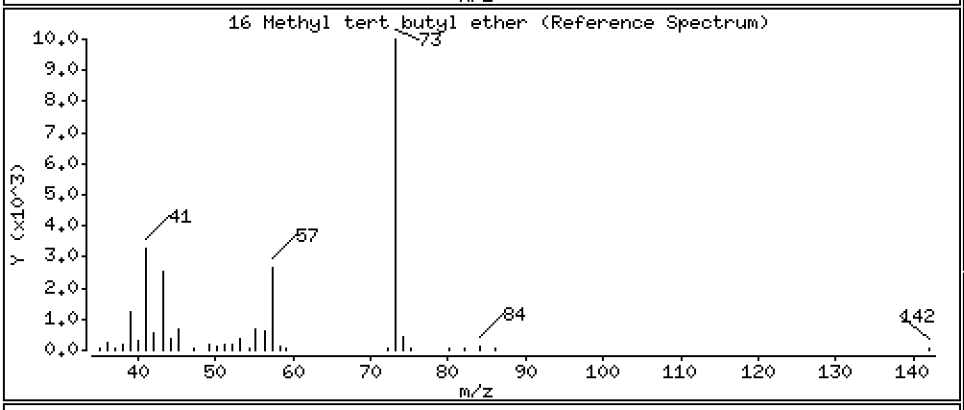
Concentration: 44.416 ug/Kg

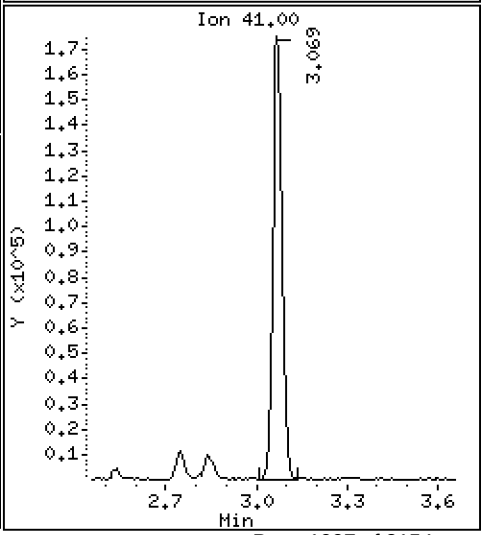


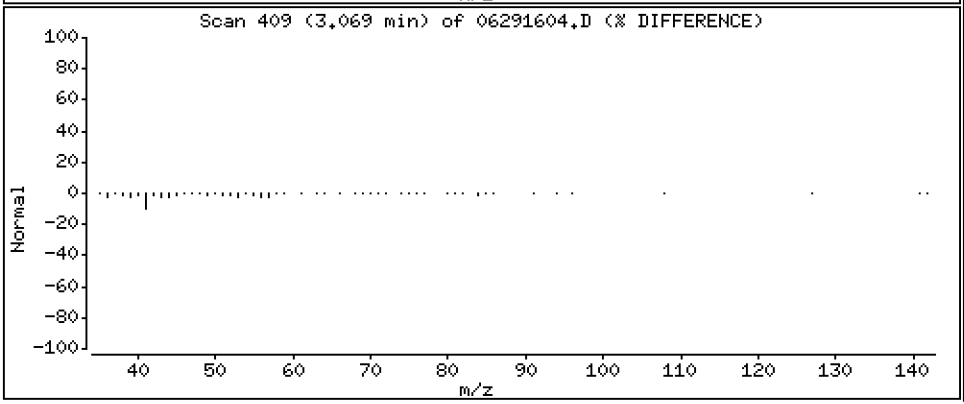












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

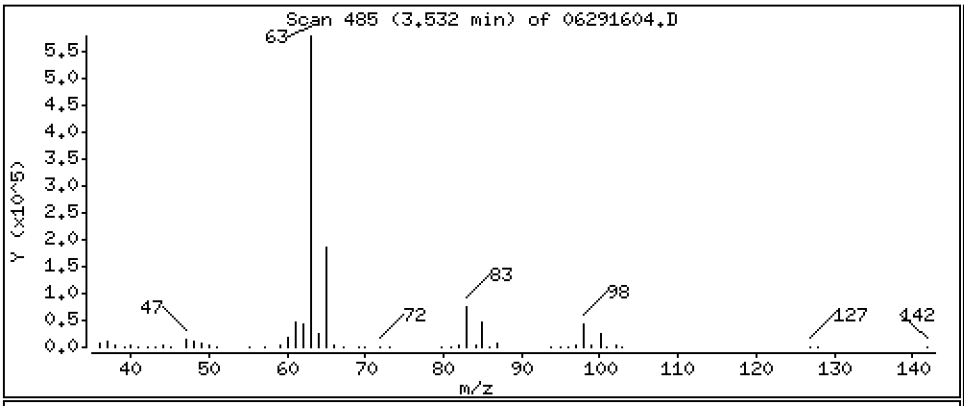
Operator: PB

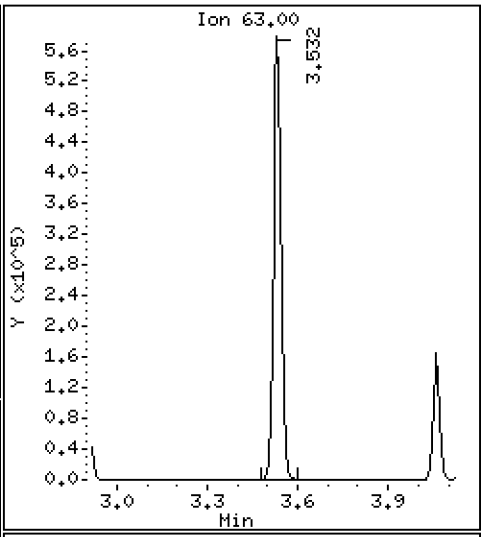
Column phase: RTXVMS

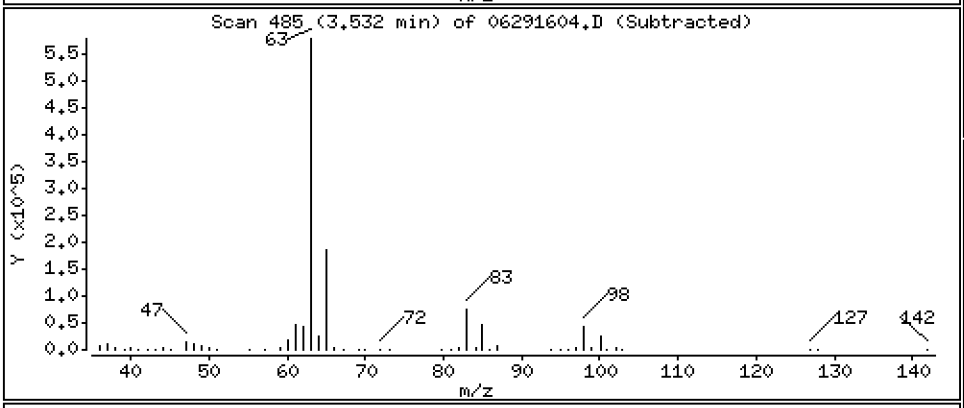
Column diameter: 0.18

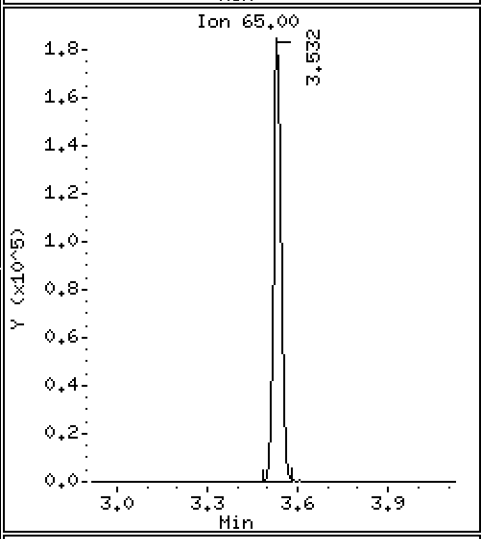
17 1,1-Dichloroethane

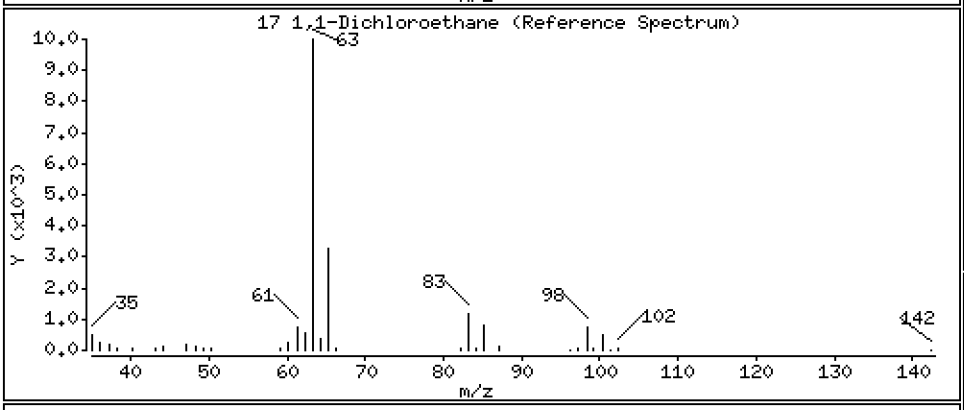
Concentration: 41.741 ug/Kg

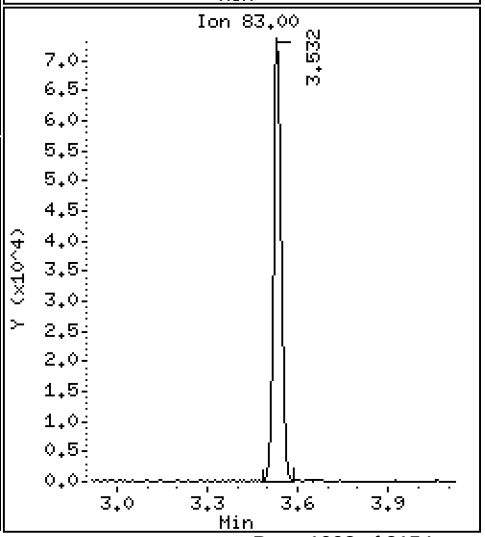


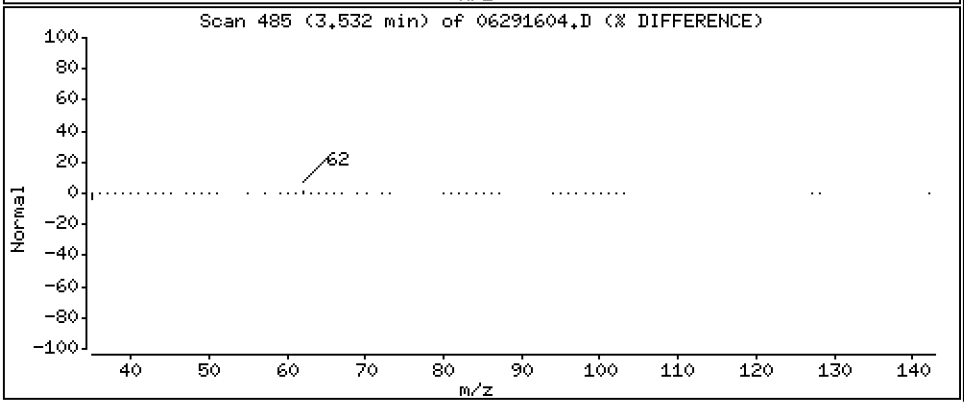












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

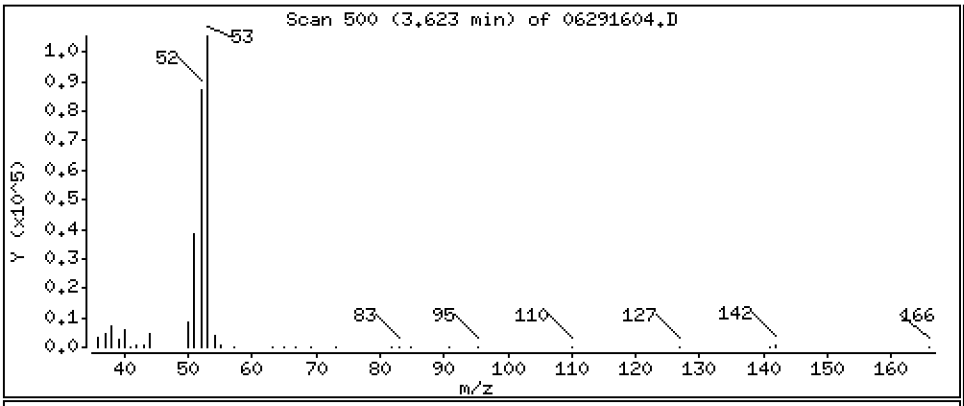
Operator: PB

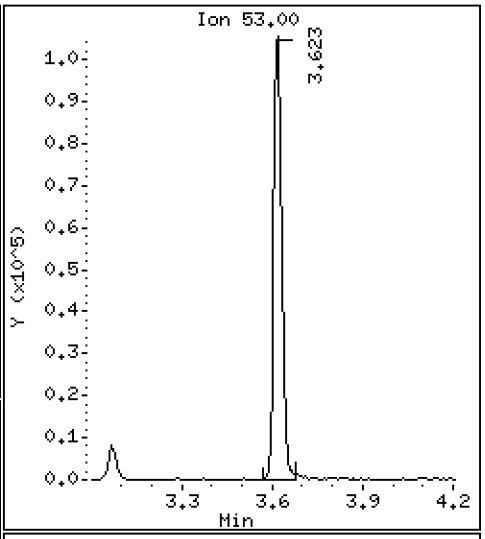
Column phase: RTXVMS

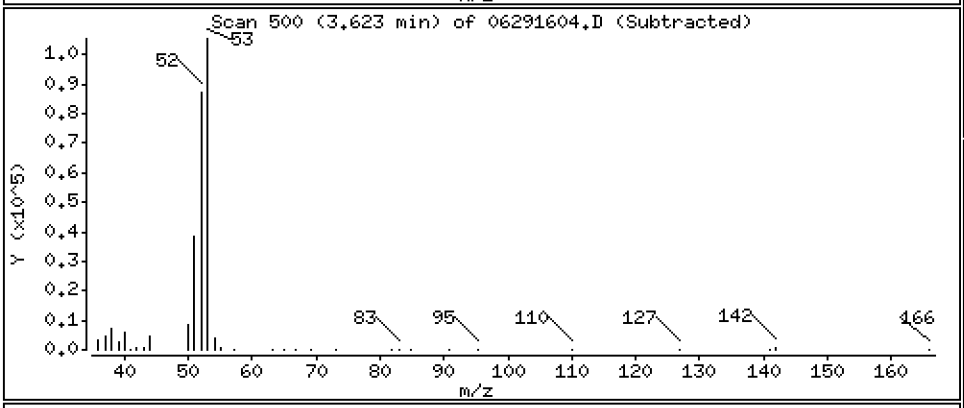
Column diameter: 0.18

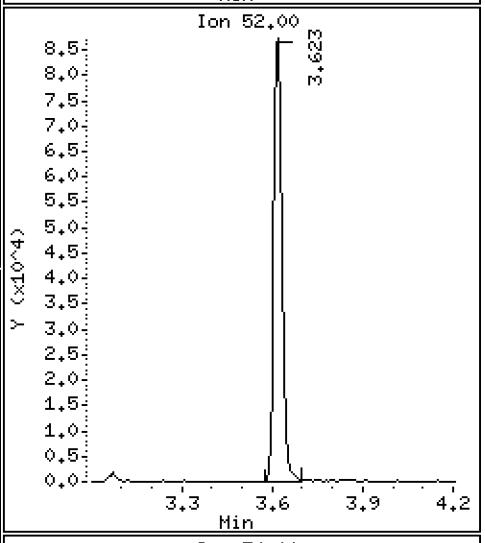
18 Acrylonitrile

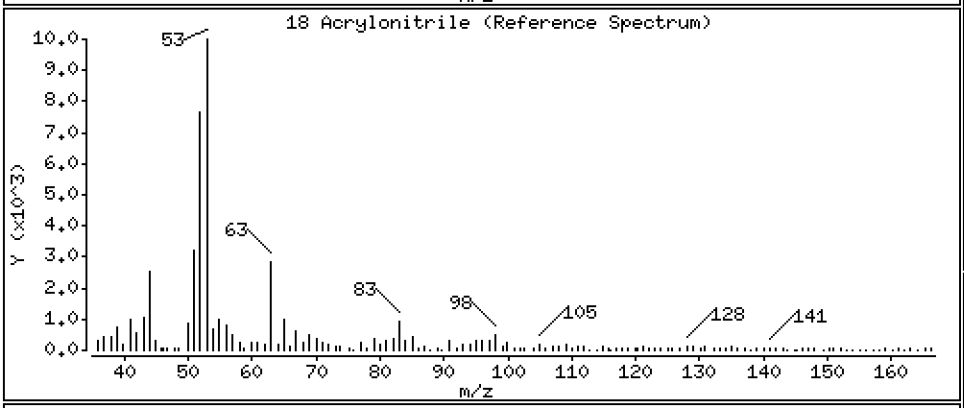
Concentration: 43.771 ug/Kg

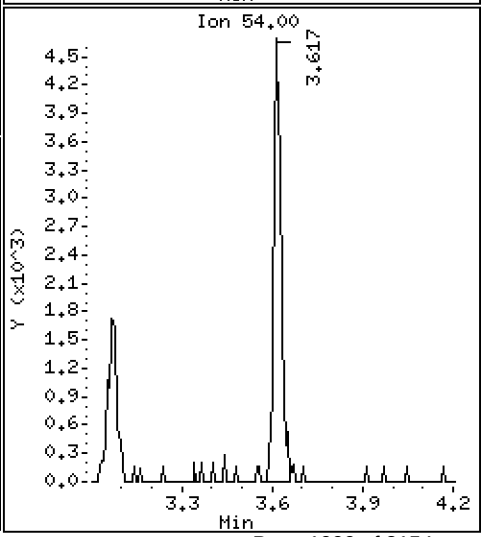


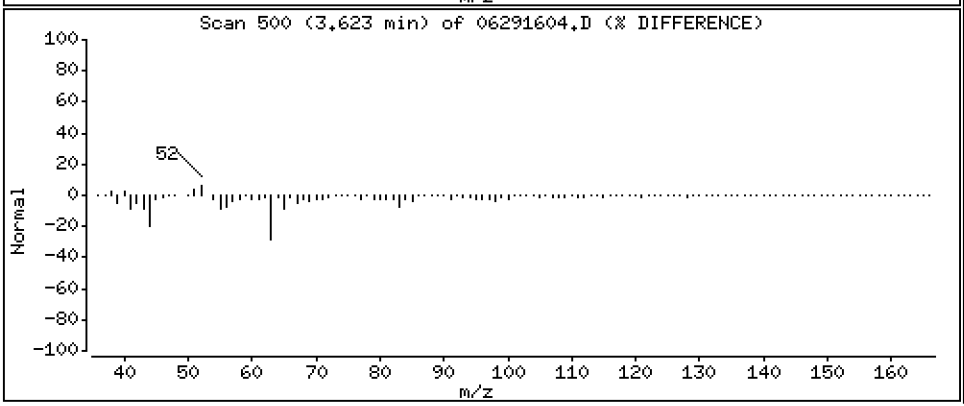












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

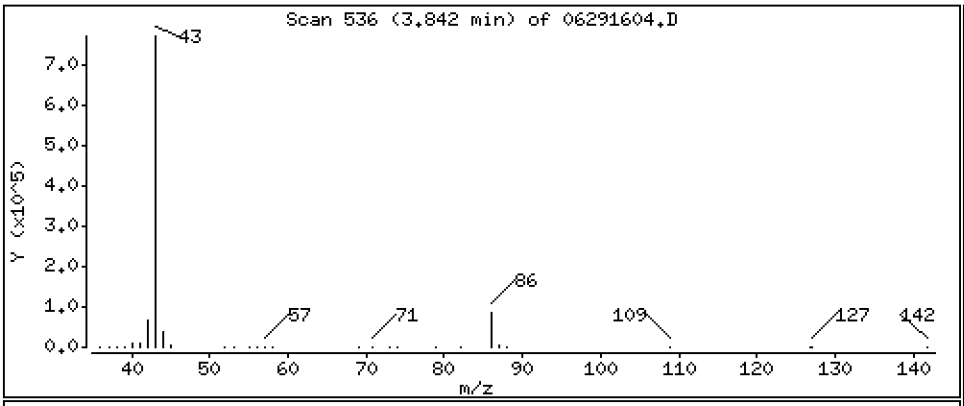
Operator: PB

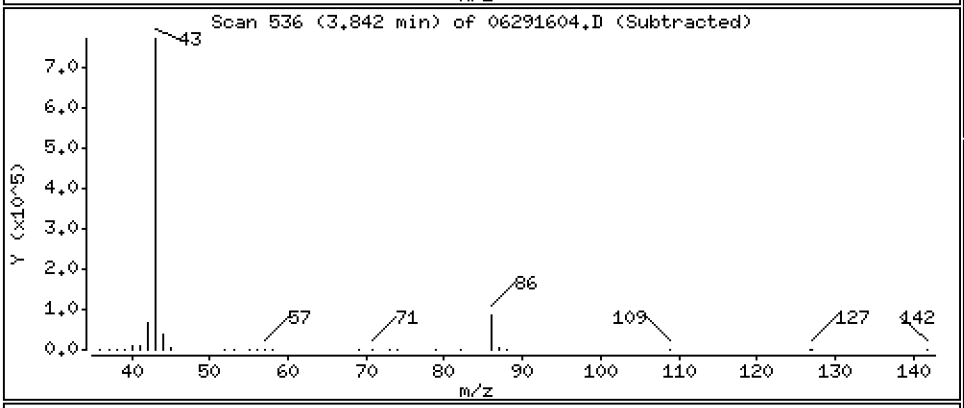
Column phase: RTXVMS

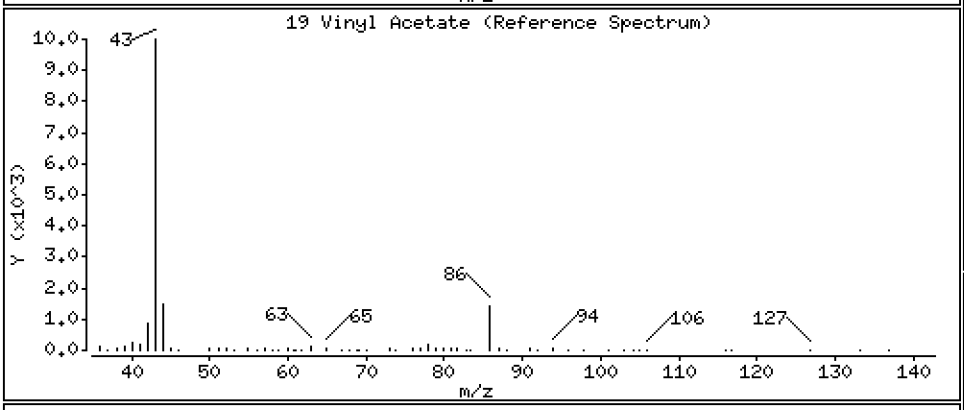
Column diameter: 0.18

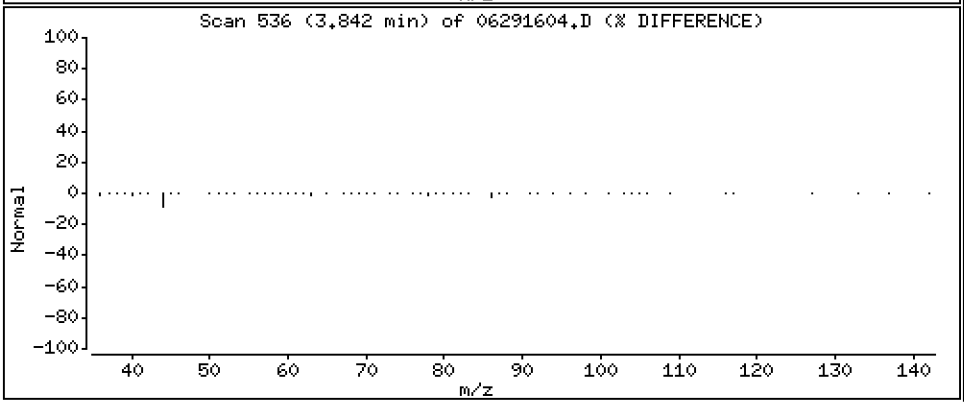
19 Vinyl Acetate

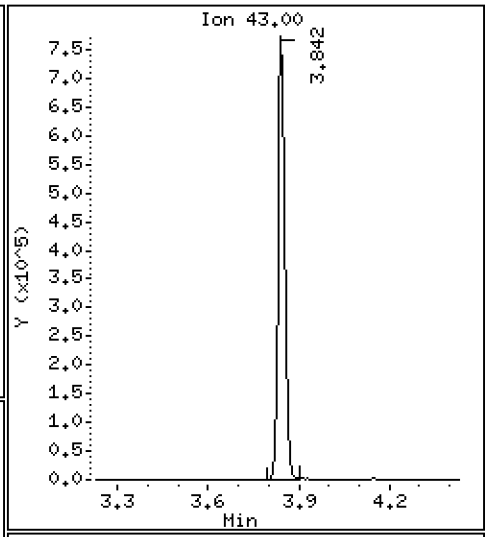
Concentration: 42.108 ug/Kg

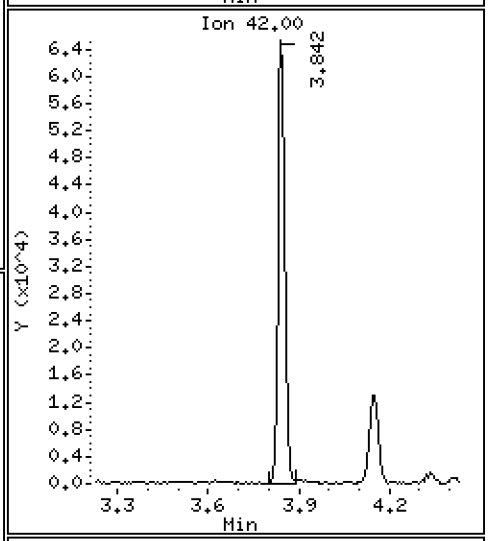


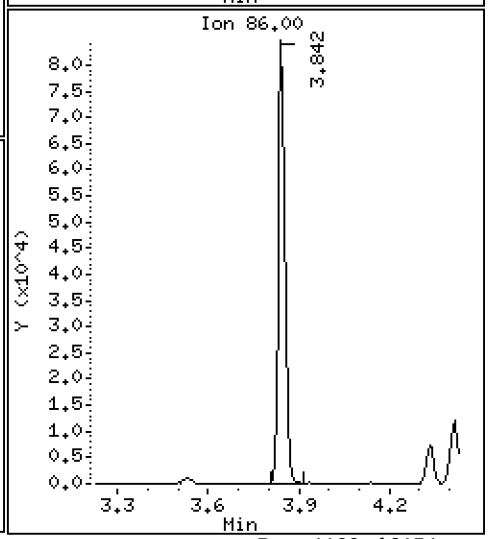












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

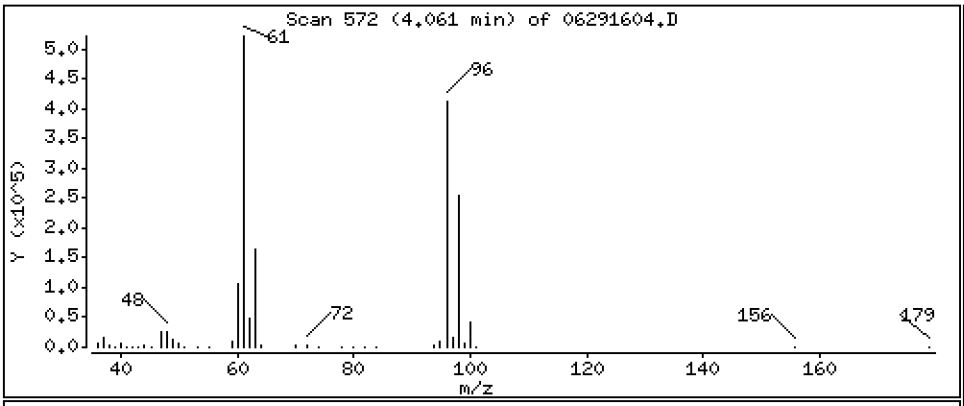
Operator: PB

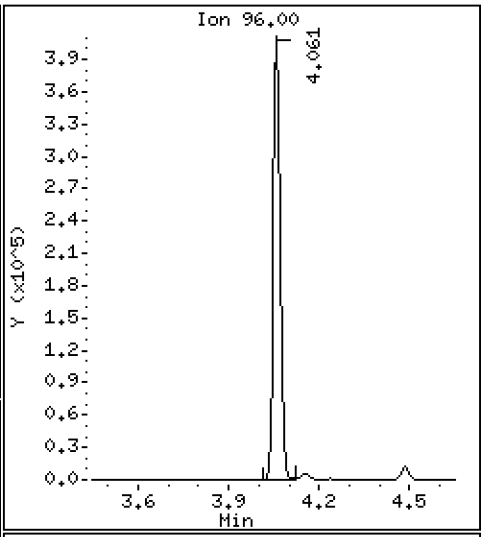
Column phase: RTXVMS

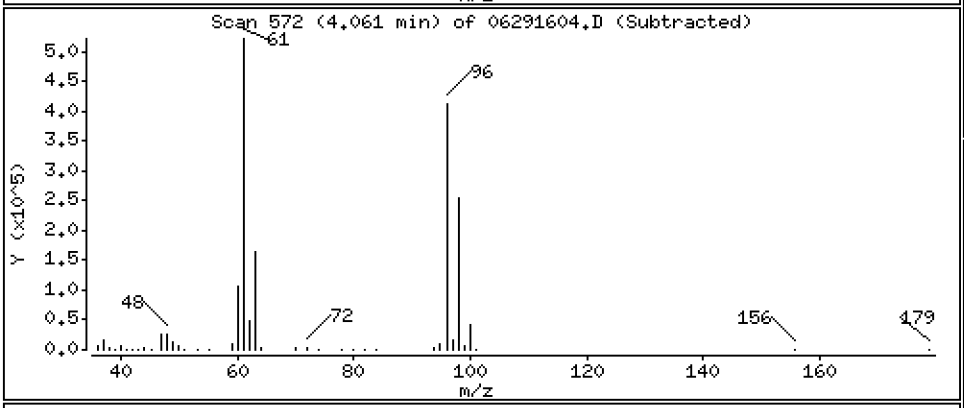
Column diameter: 0.18

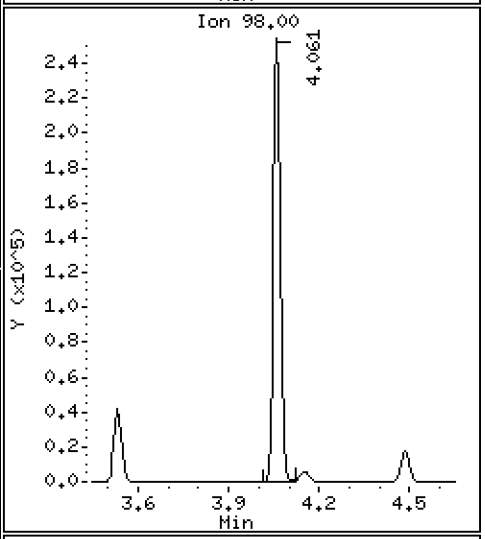
20 Cis-1,2-Dichloroethene

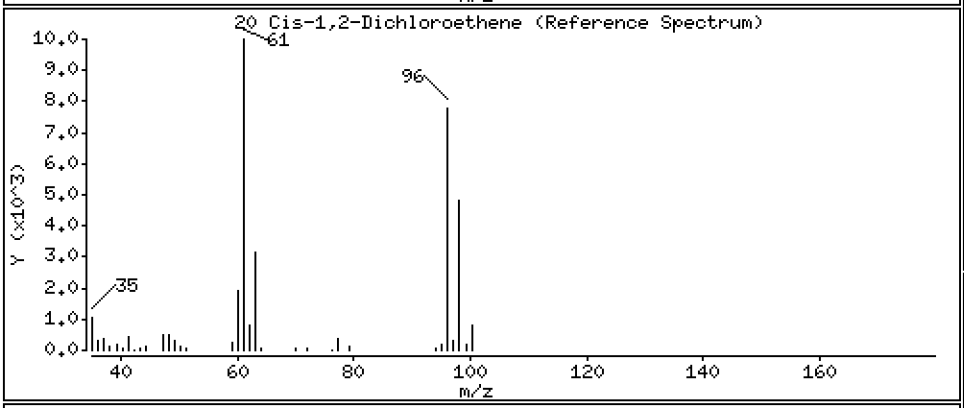
Concentration: 43.733 ug/Kg

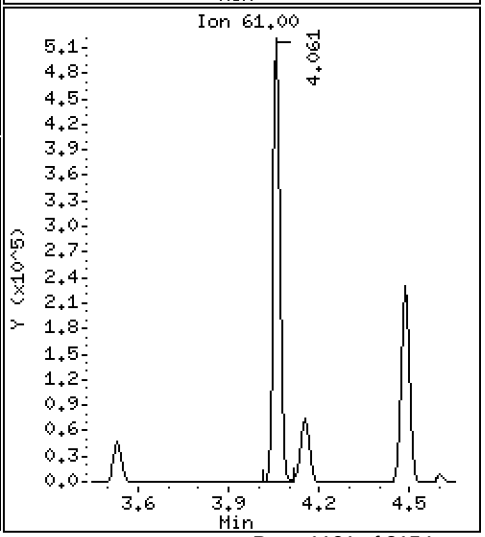


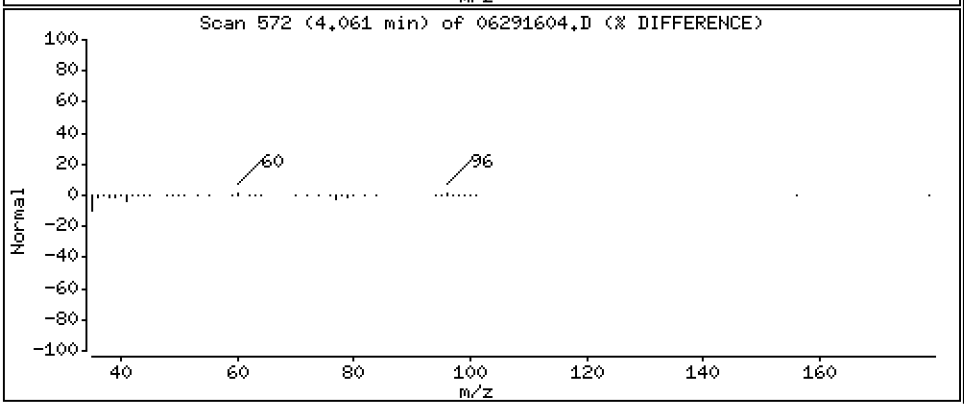












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

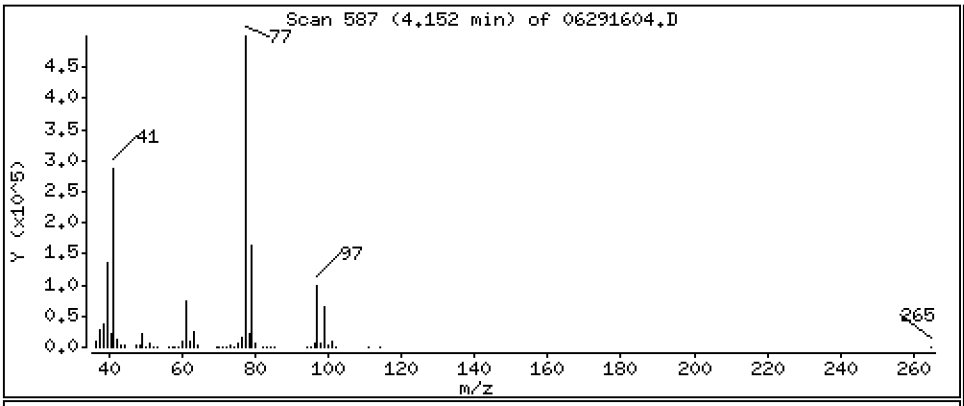
Operator: PB

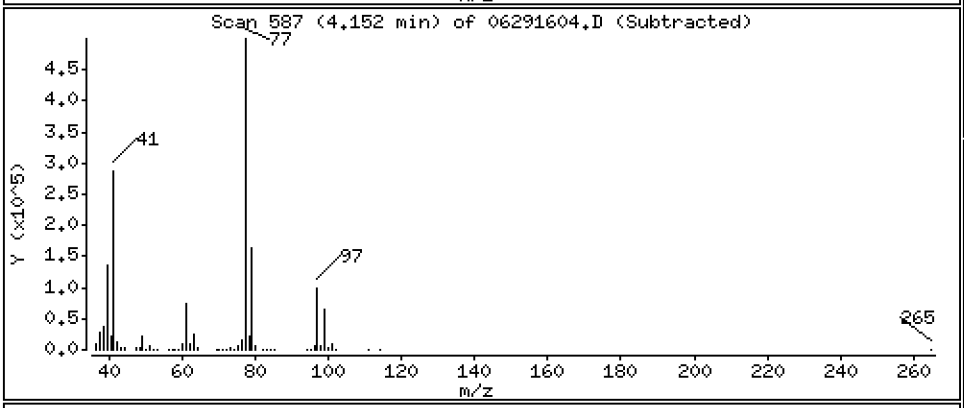
Column phase: RTXVMS

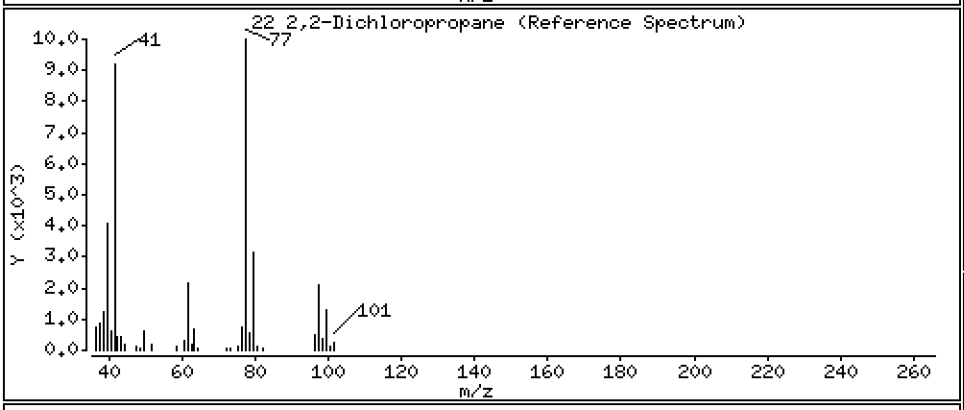
Column diameter: 0.18

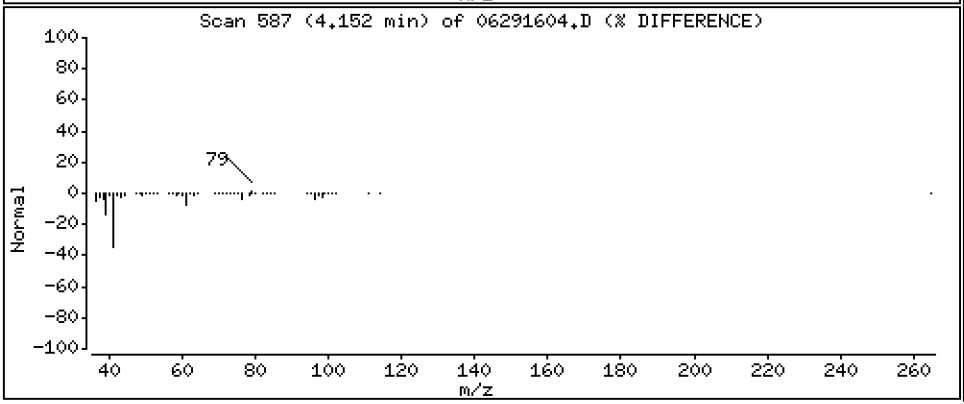
22 2,2-Dichloropropane

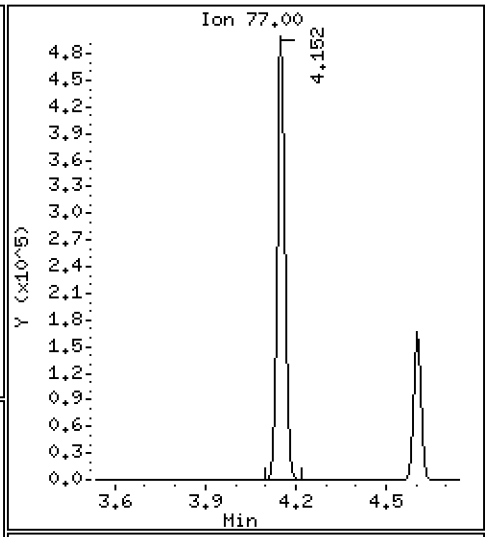
Concentration: 43.472 ug/Kg

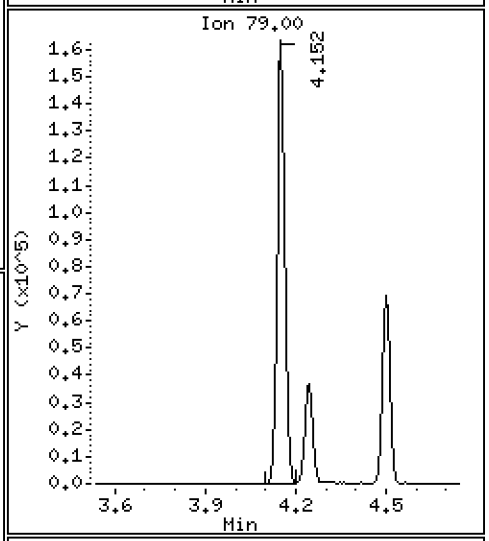


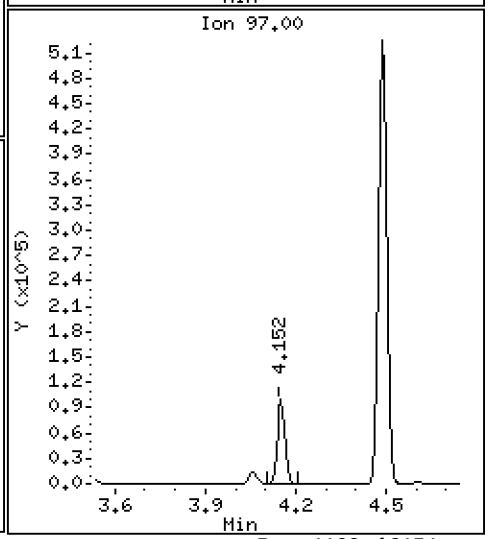












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

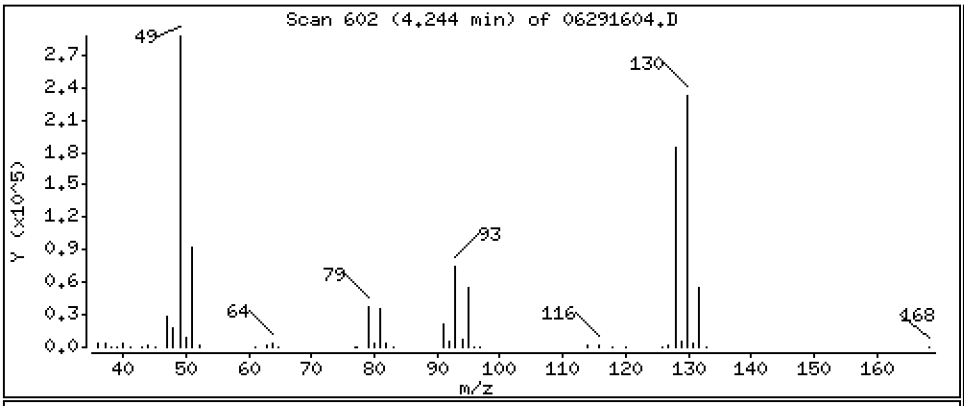
Operator: PB

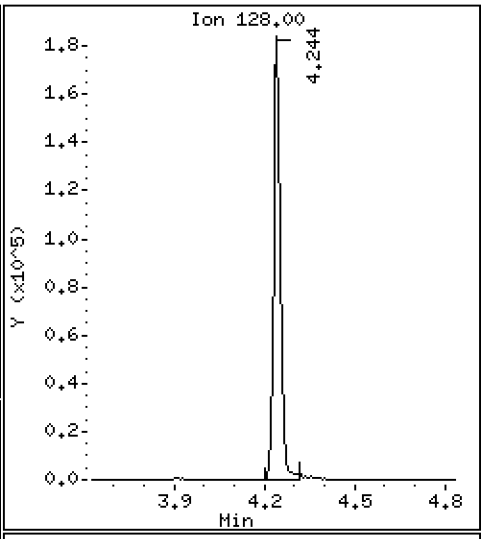
Column phase: RTXVMS

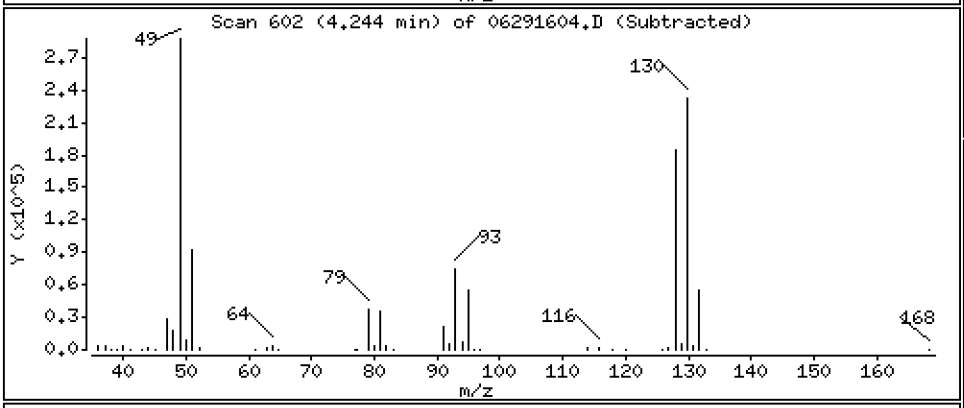
Column diameter: 0.18

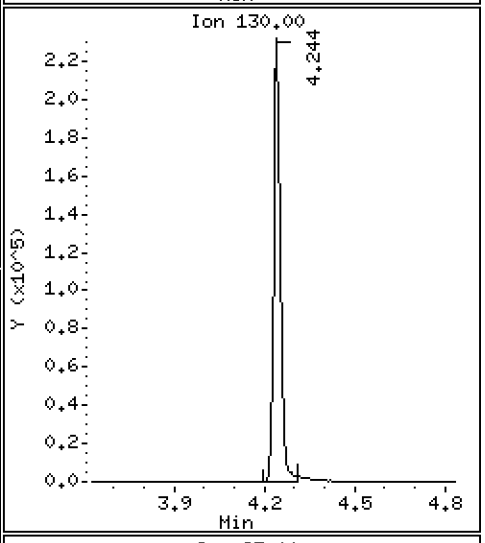
23 Bromochloromethane

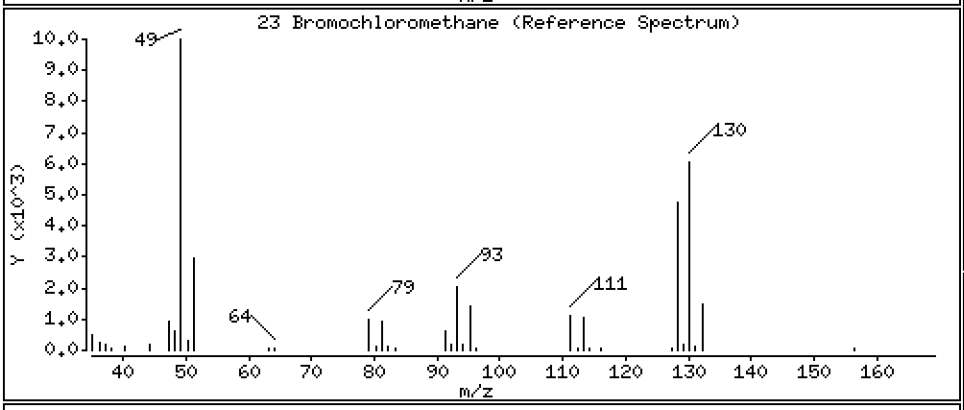
Concentration: 45.496 ug/Kg

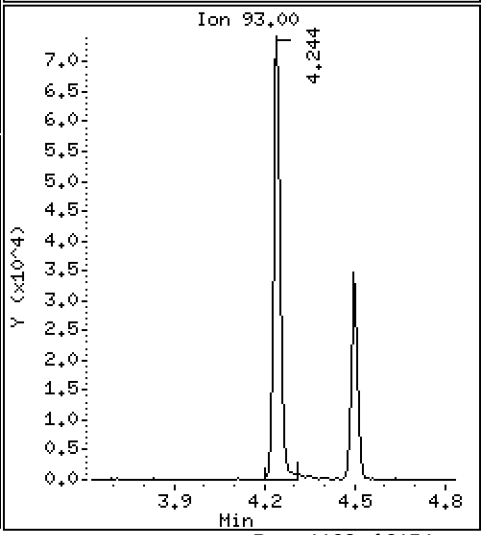


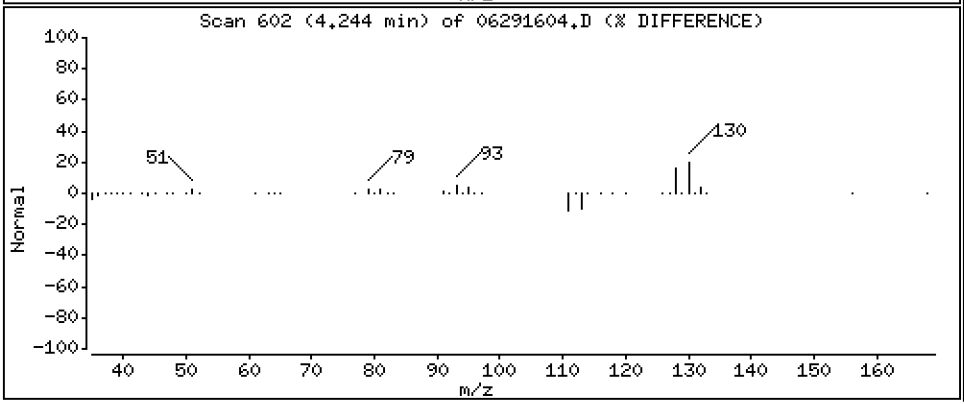












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

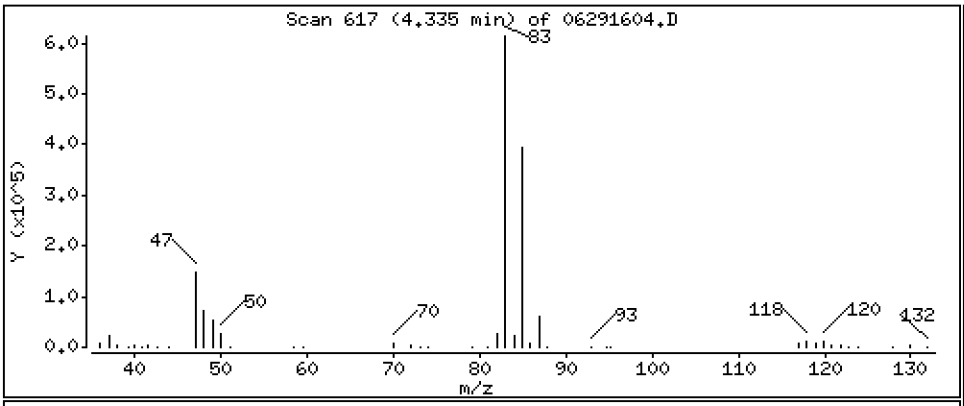
Operator: PB

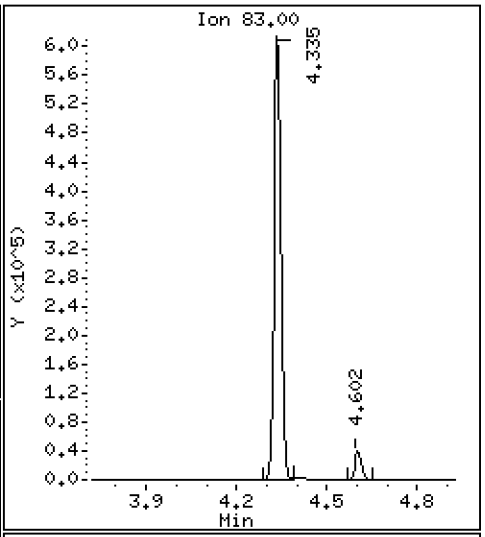
Column phase: RTXVMS

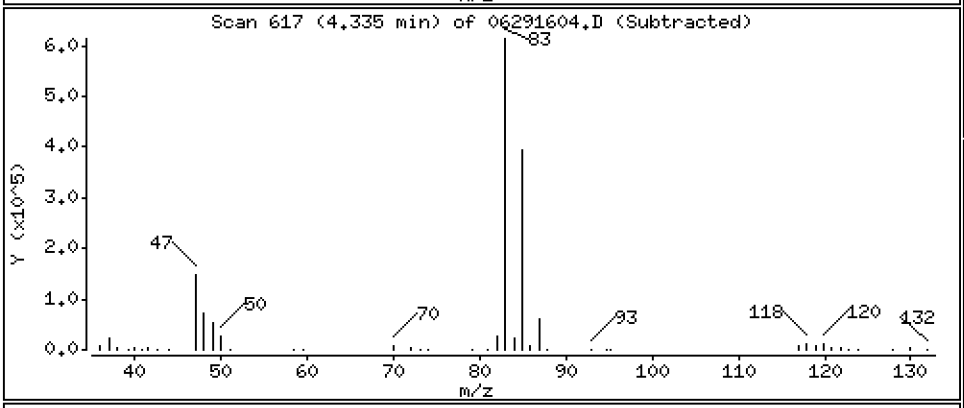
Column diameter: 0.18

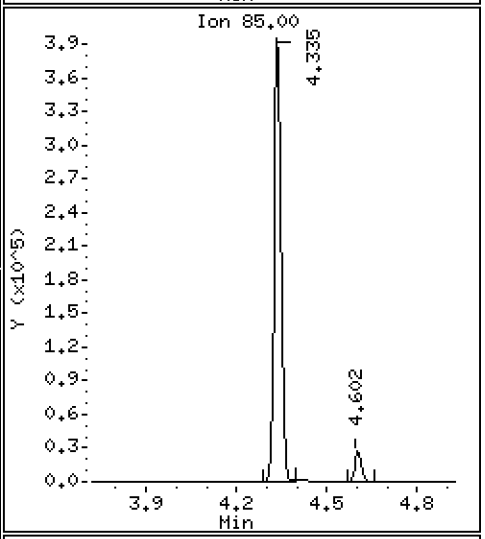
24 Chloroform

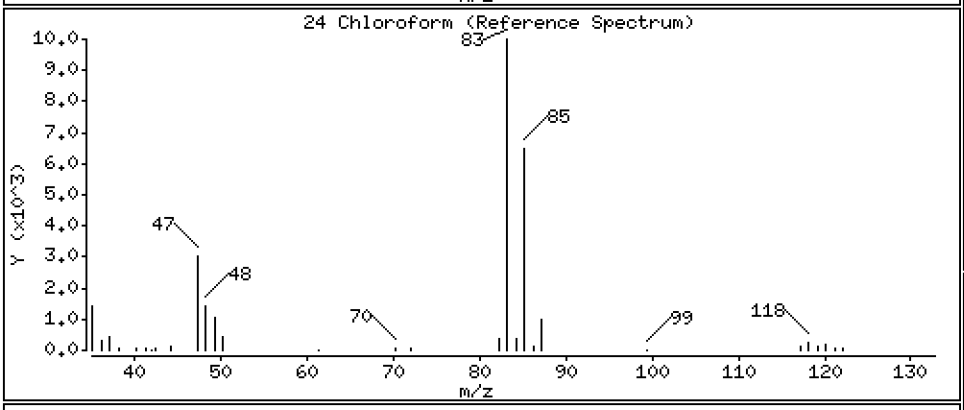
Concentration: 43.099 ug/Kg

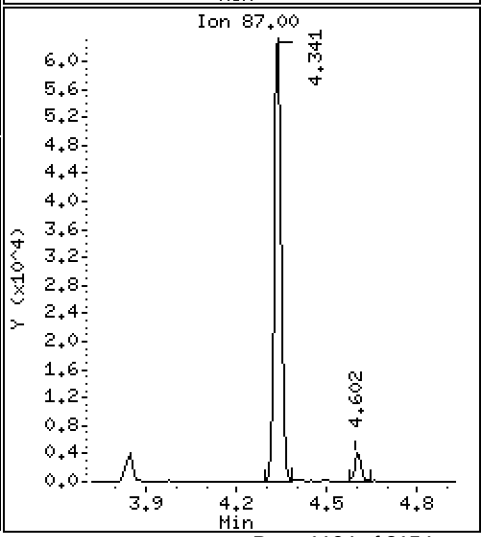


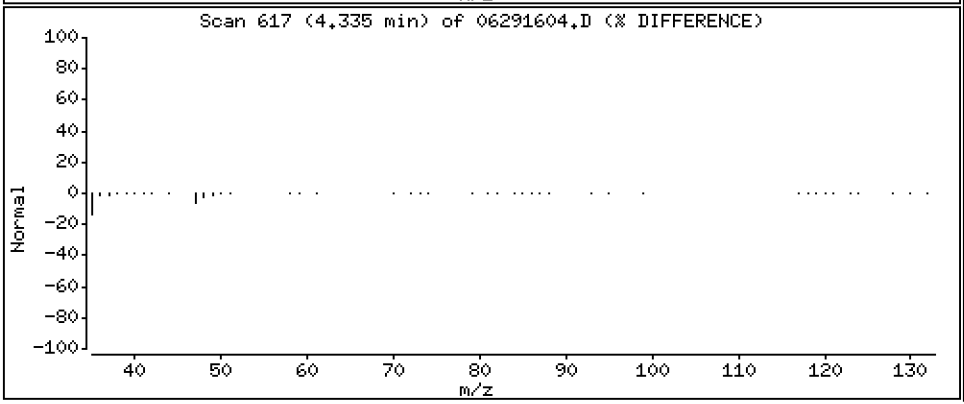












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

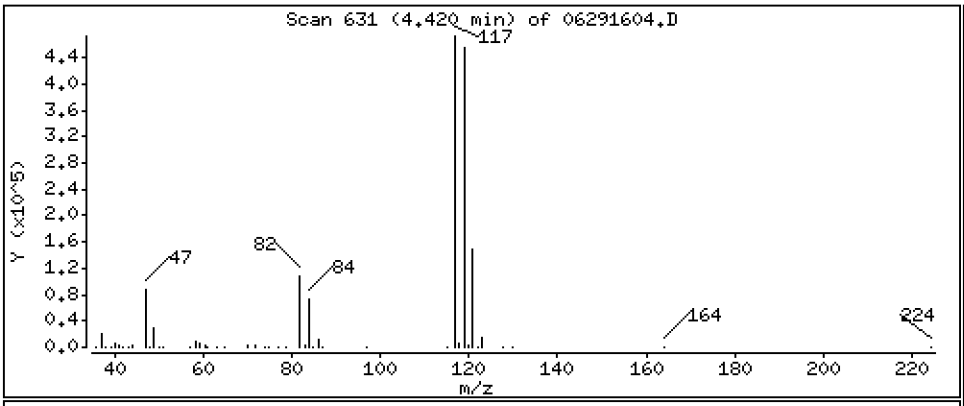
Operator: PB

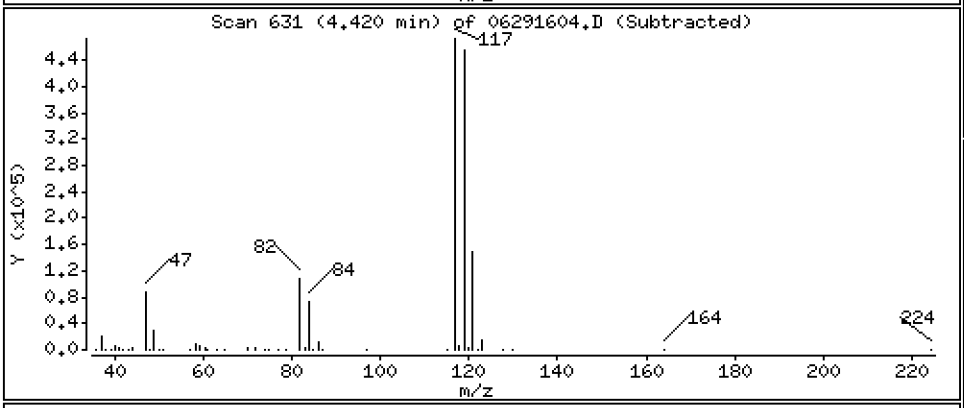
Column phase: RTXVMS

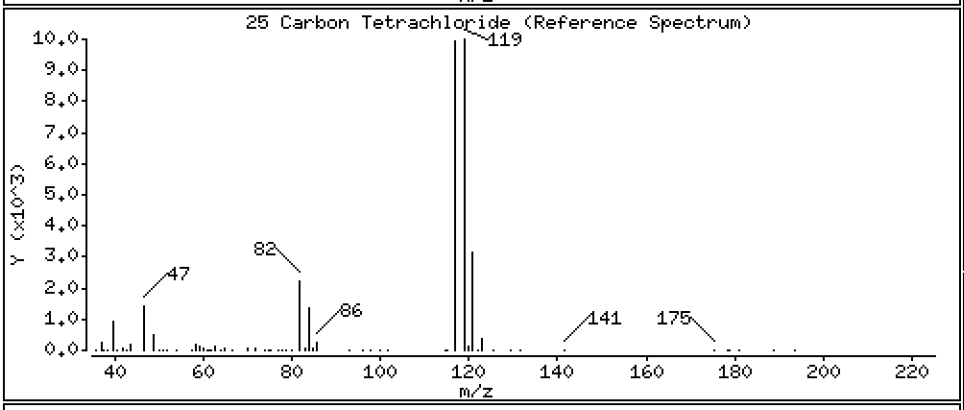
Column diameter: 0.18

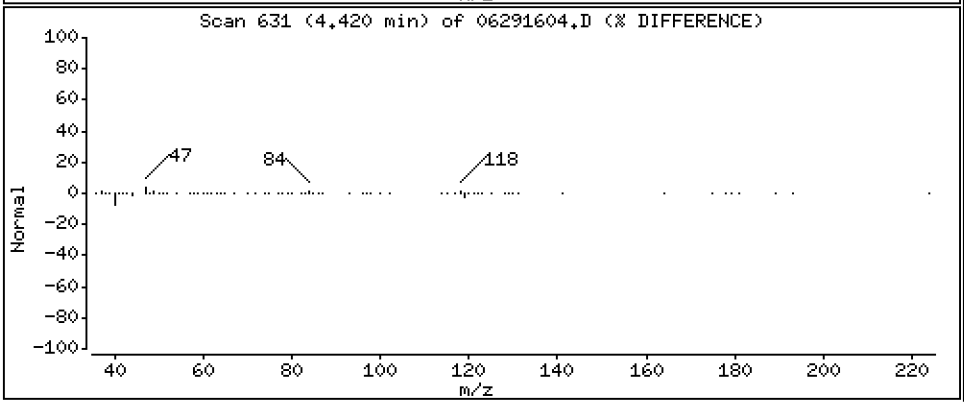
25 Carbon Tetrachloride

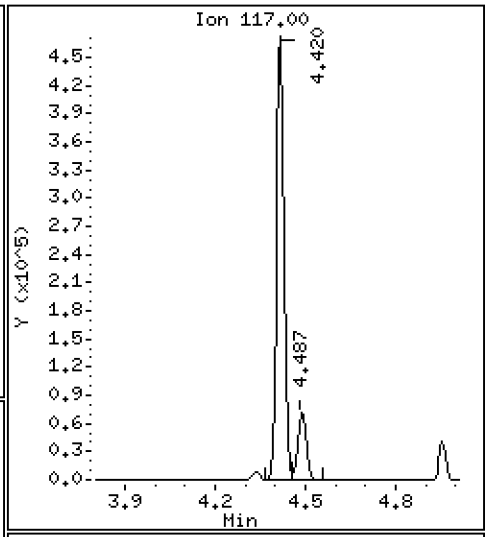
Concentration: 43.028 ug/Kg

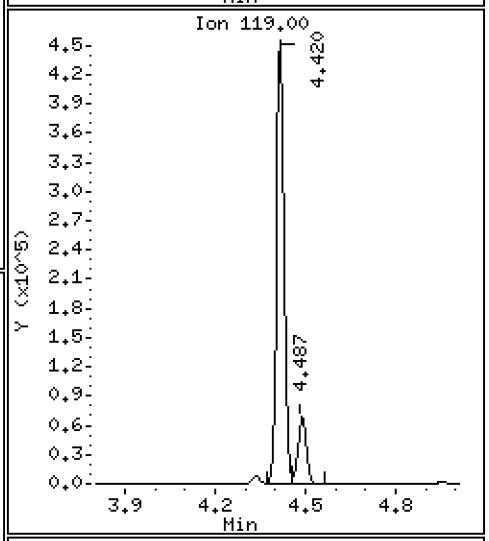


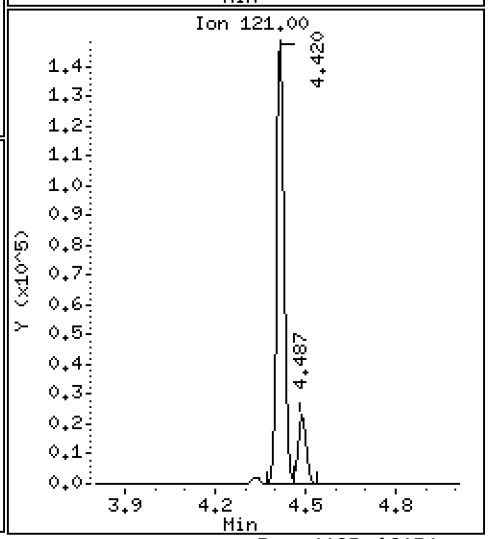












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

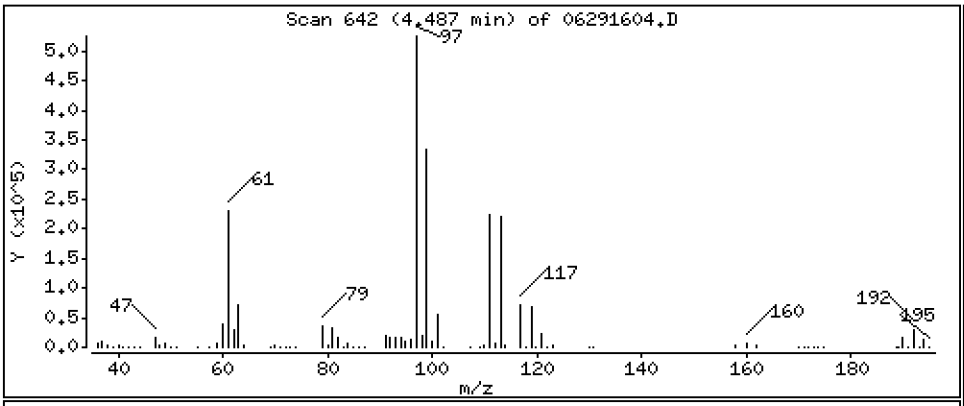
Operator: PB

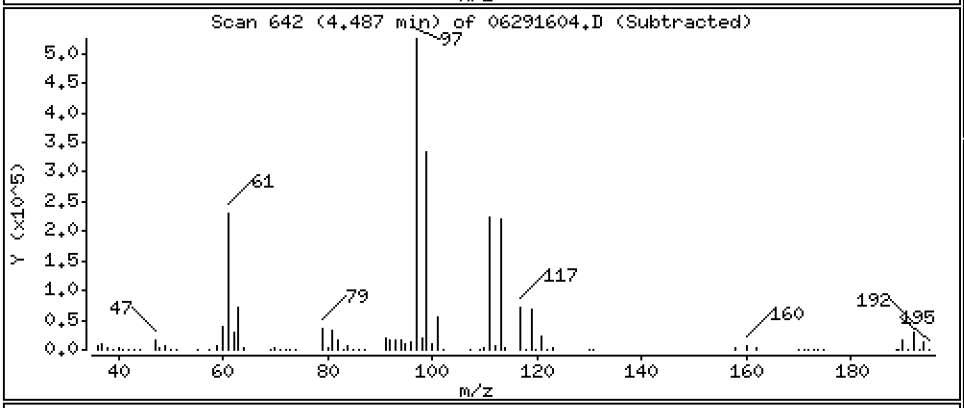
Column phase: RTXVMS

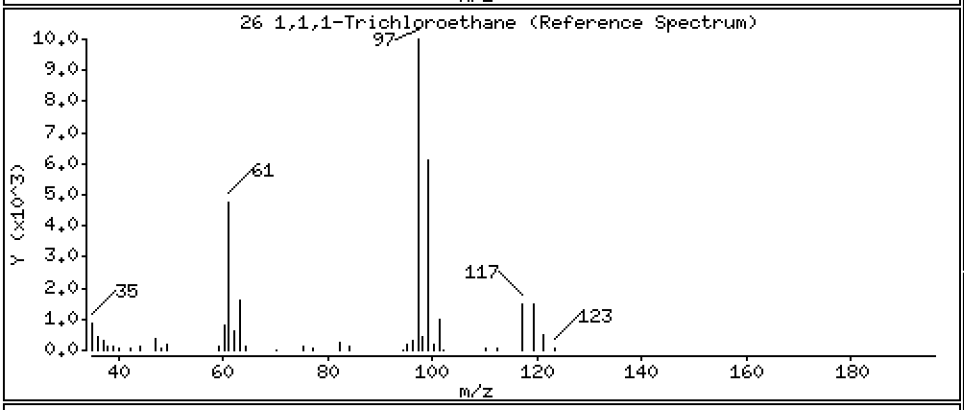
Column diameter: 0.18

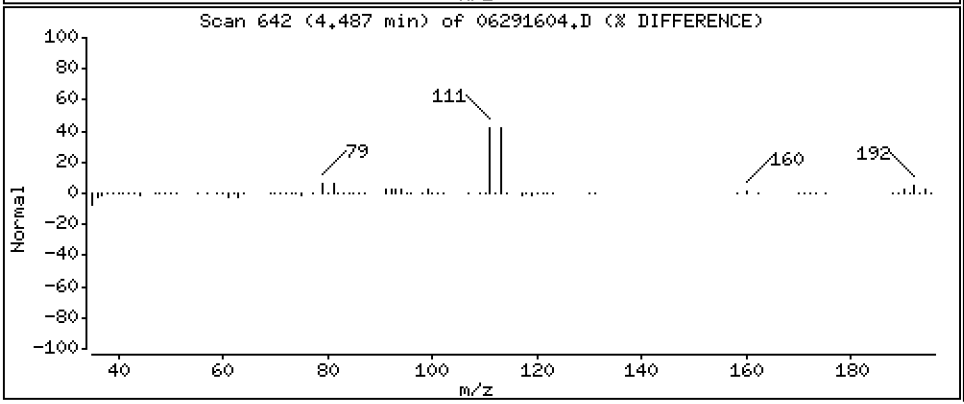
26 1,1,1-Trichloroethane

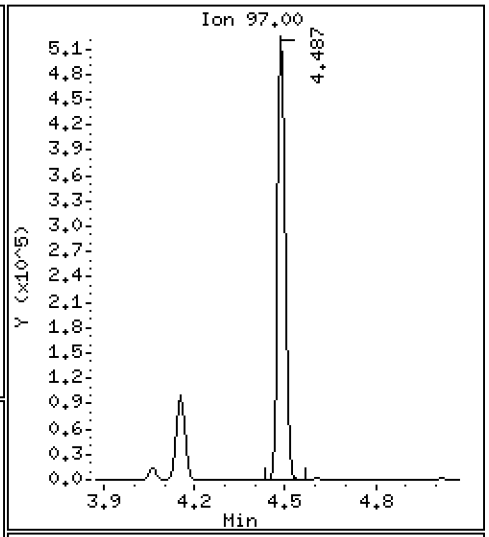
Concentration: 42.315 ug/Kg

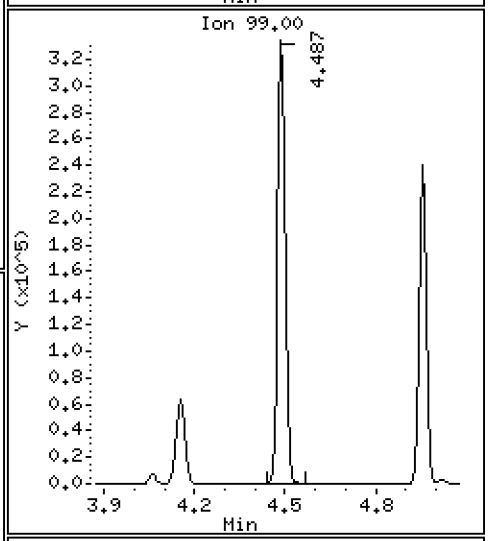


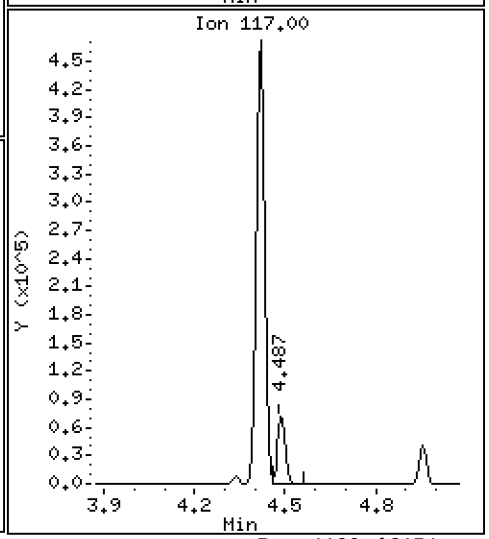












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

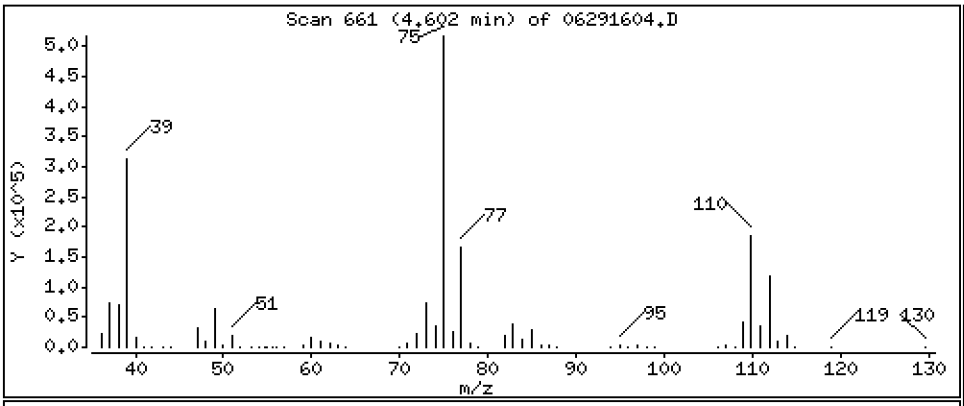
Operator: PB

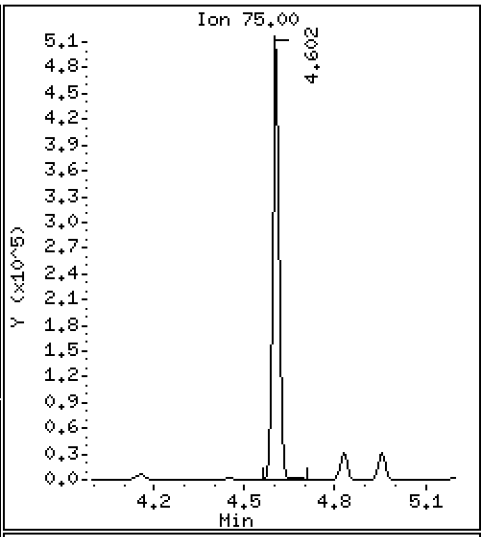
Column phase: RTXVMS

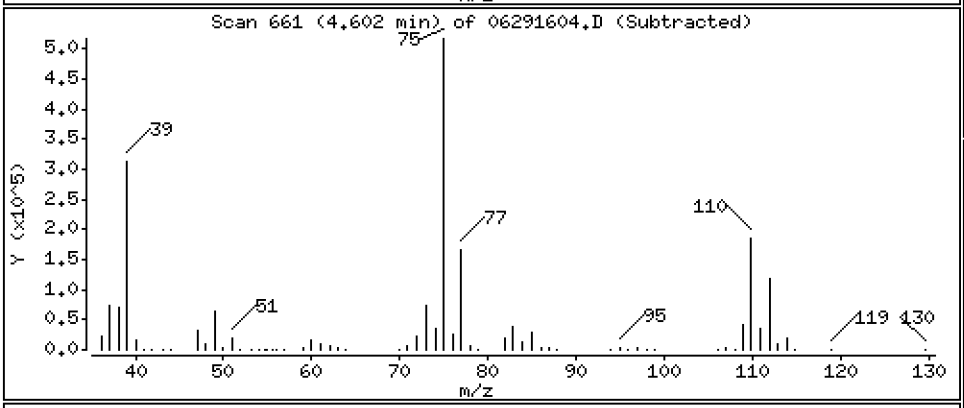
Column diameter: 0.18

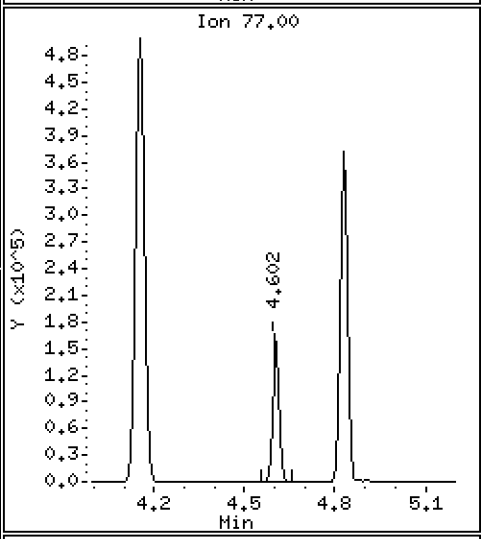
28 1,1-Dichloropropene

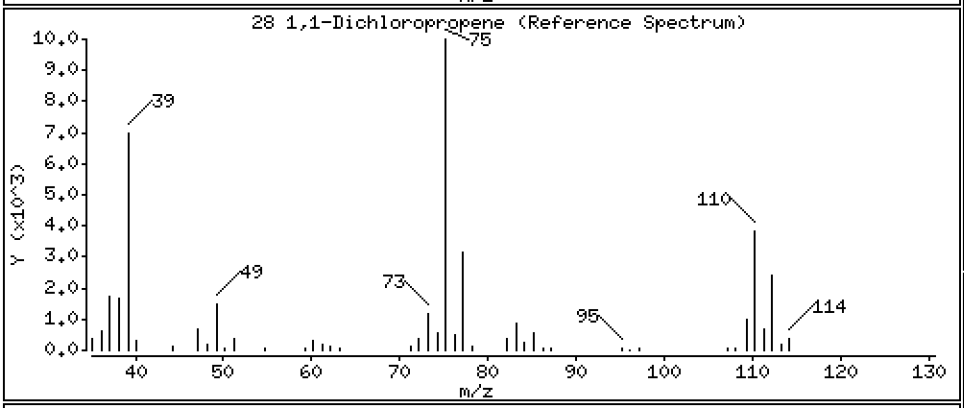
Concentration: 41.254 ug/Kg

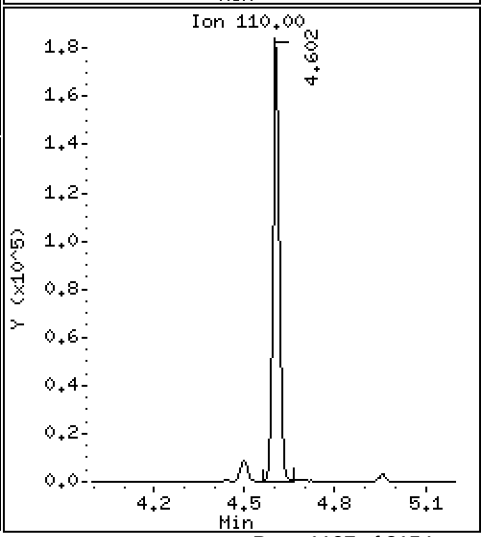


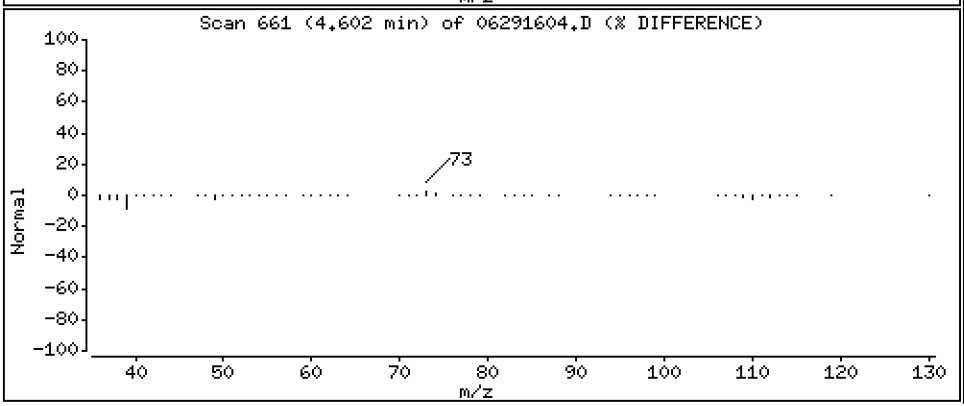












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

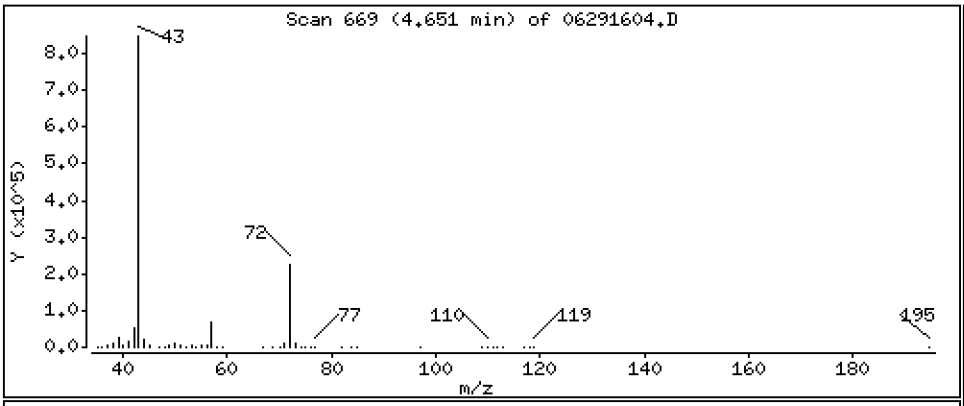
Operator: PB

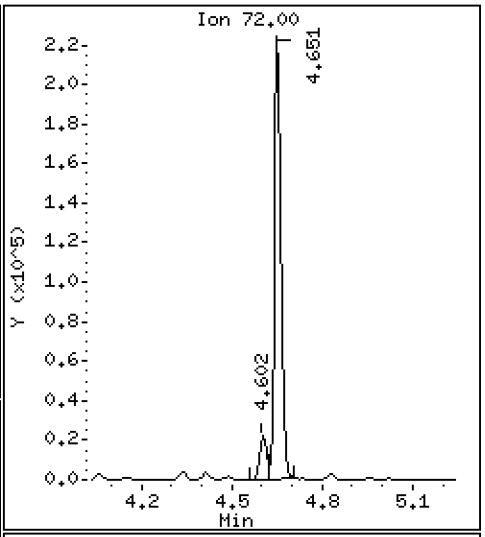
Column phase: RTXVMS

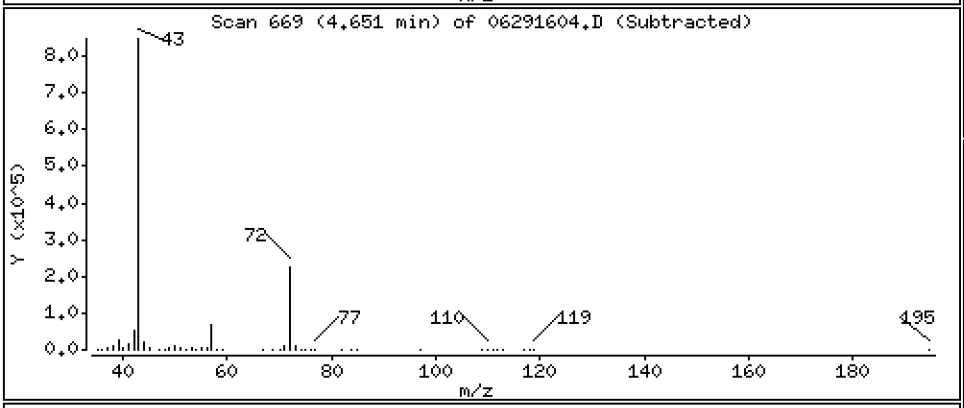
Column diameter: 0.18

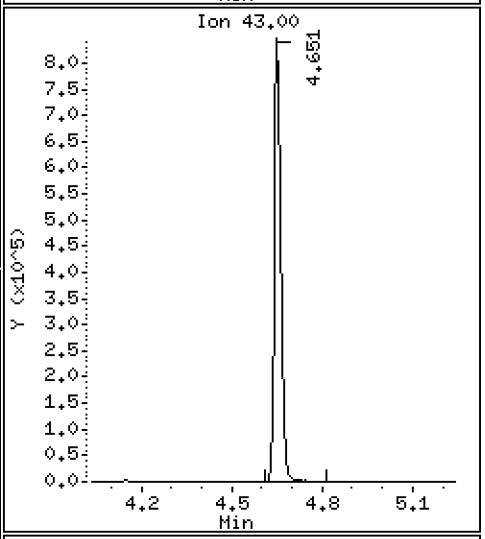
29 2-Butanone

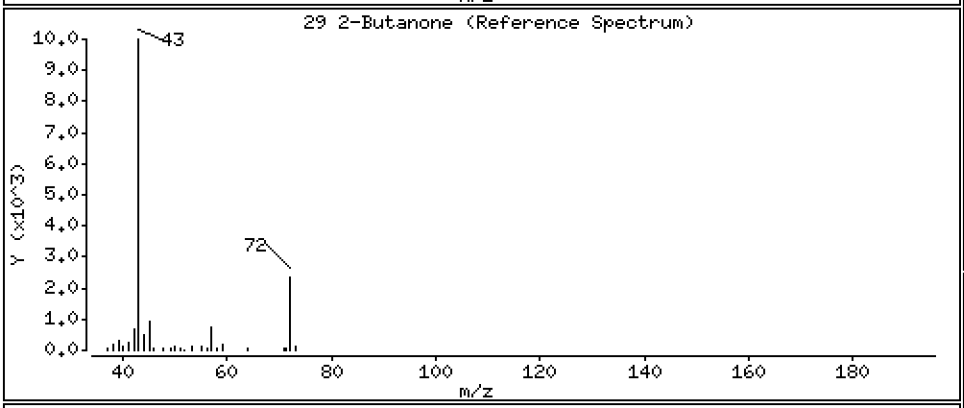
Concentration: 217.15 ug/Kg

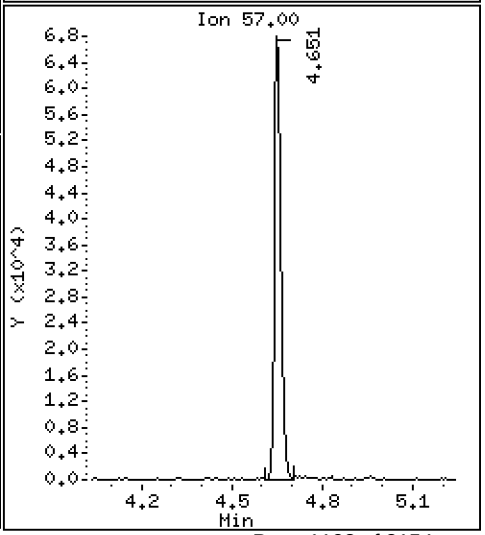


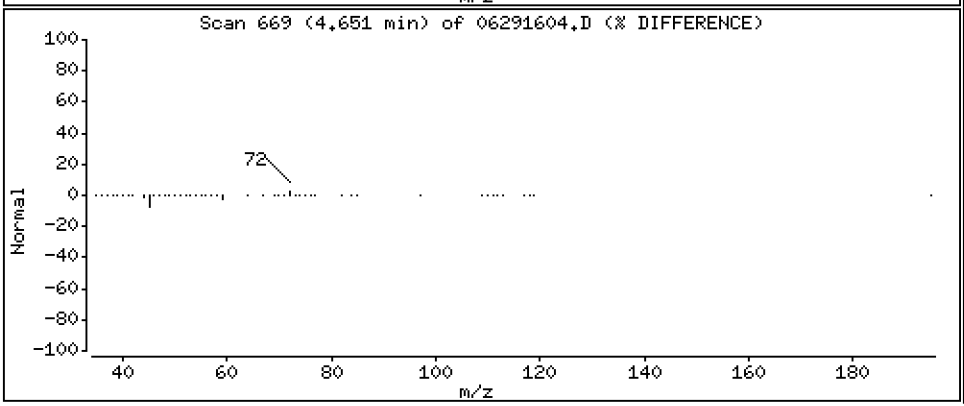












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

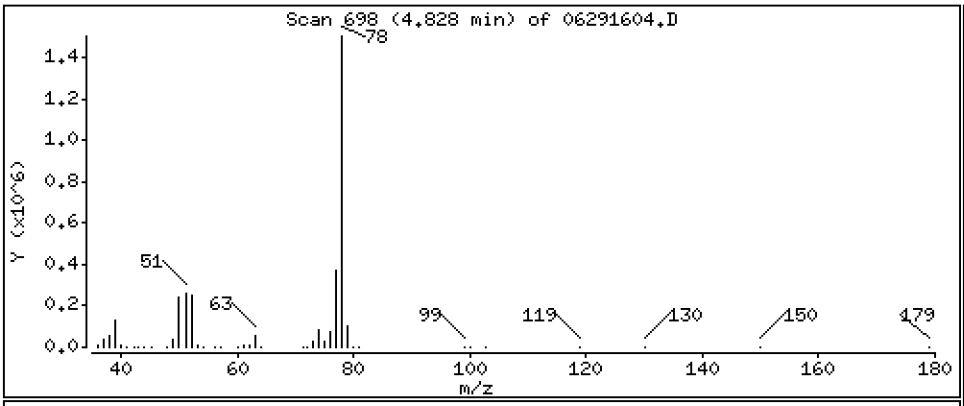
Operator: PB

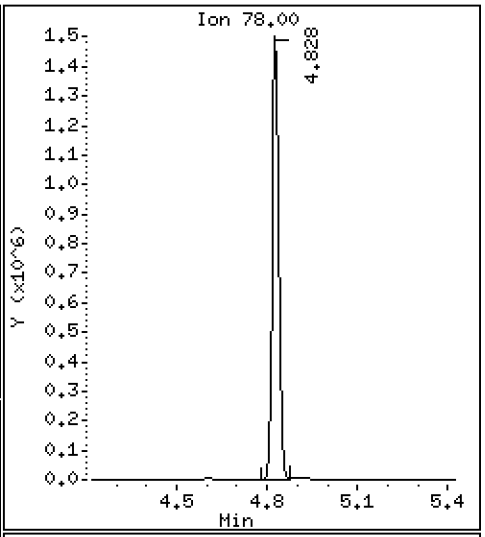
Column phase: RTXVMS

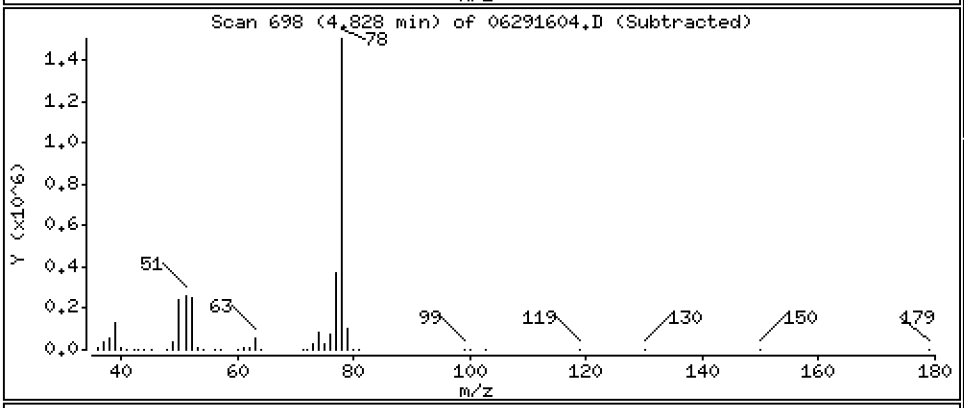
Column diameter: 0.18

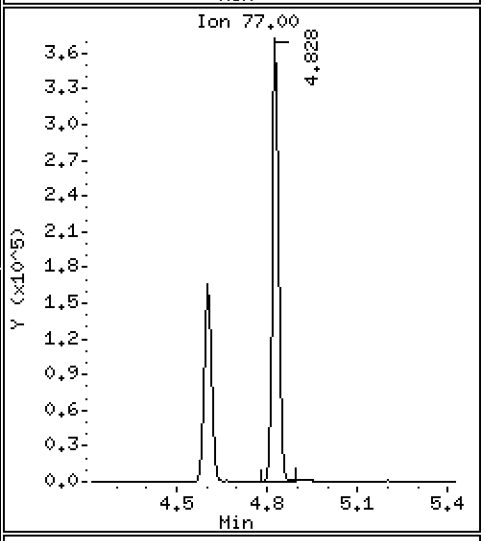
30 Benzene

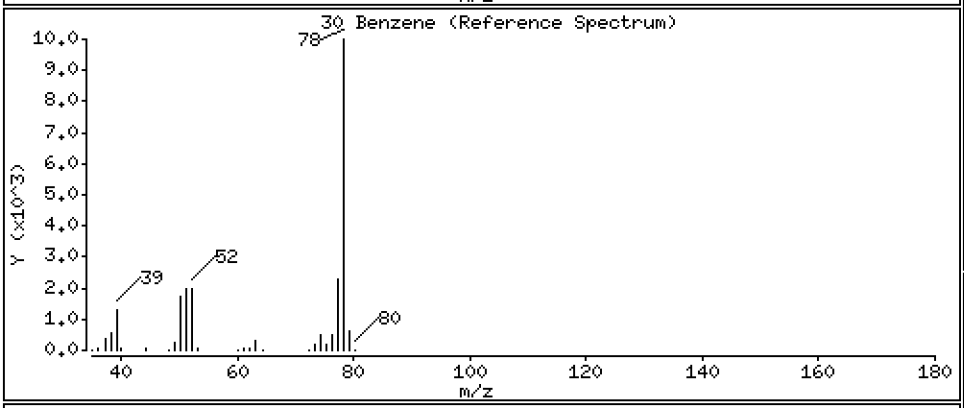
Concentration: 41.975 ug/Kg

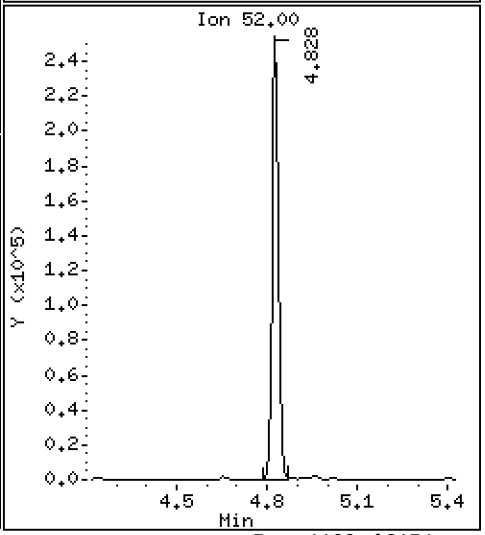


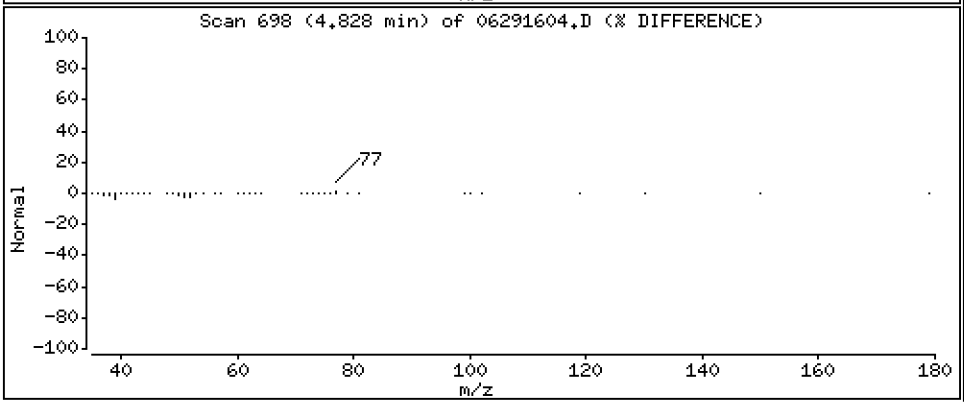












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

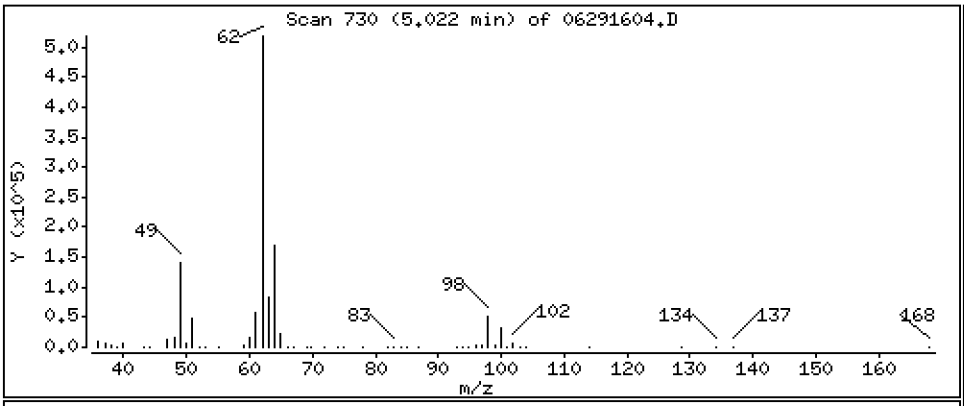
Operator: PB

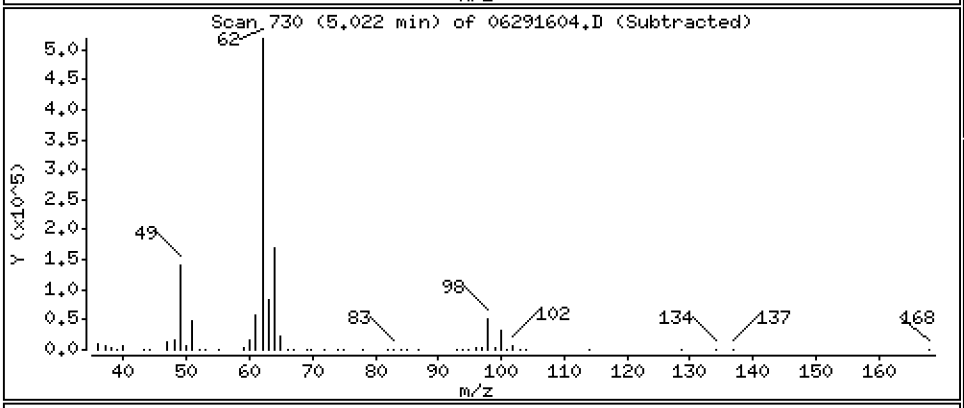
Column phase: RTXVMS

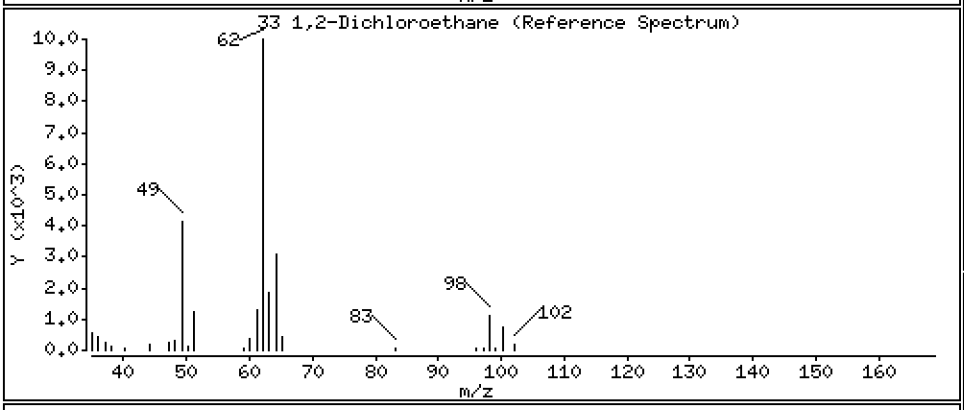
Column diameter: 0.18

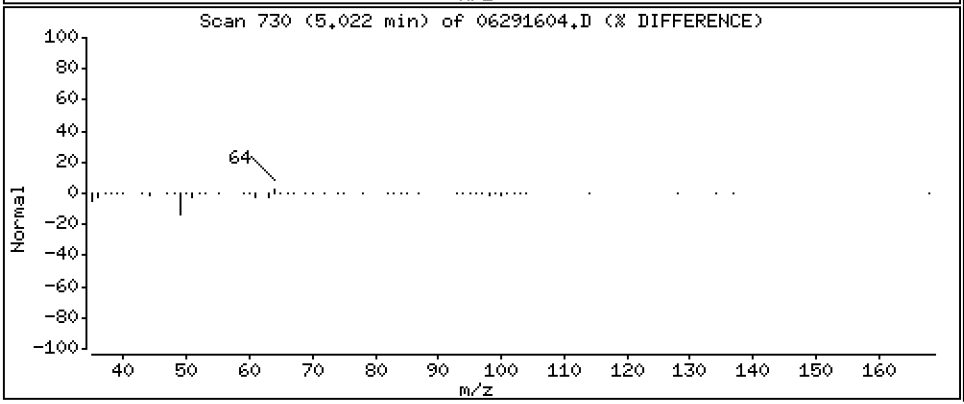
33 1,2-Dichloroethane

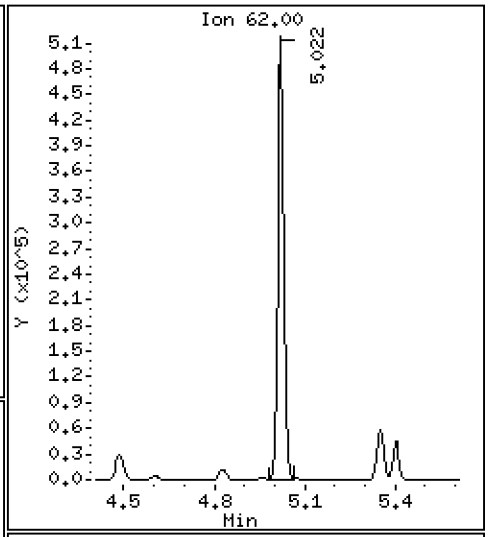
Concentration: 40.209 ug/Kg

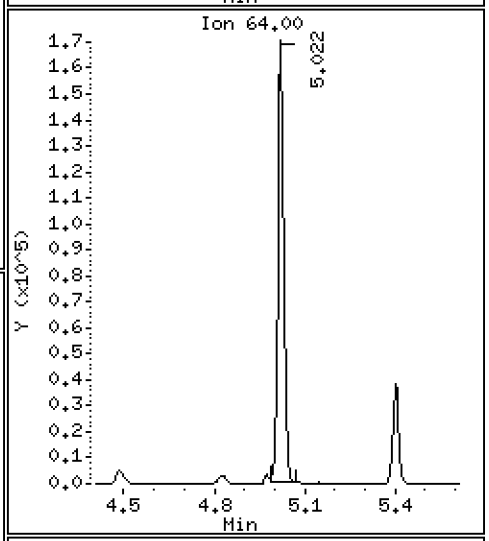


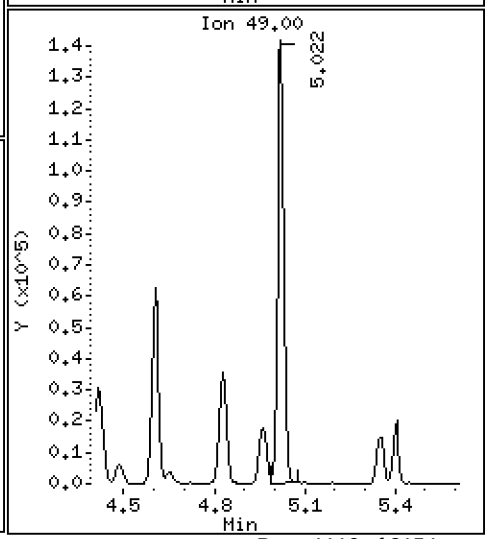












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

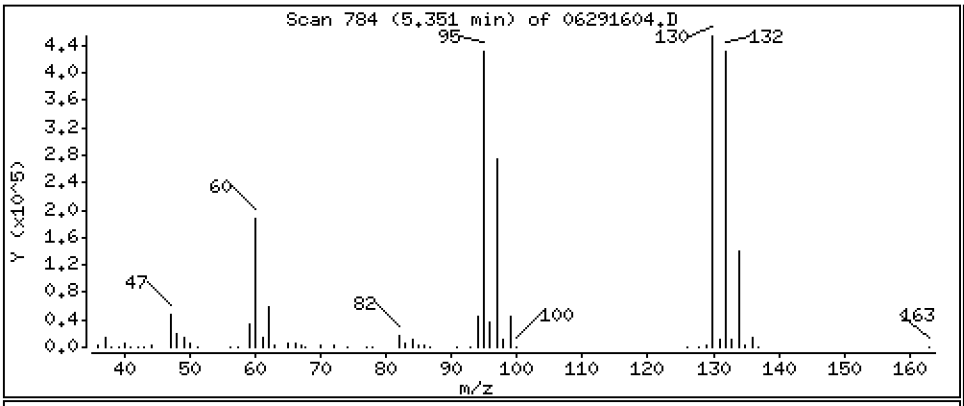
Operator: PB

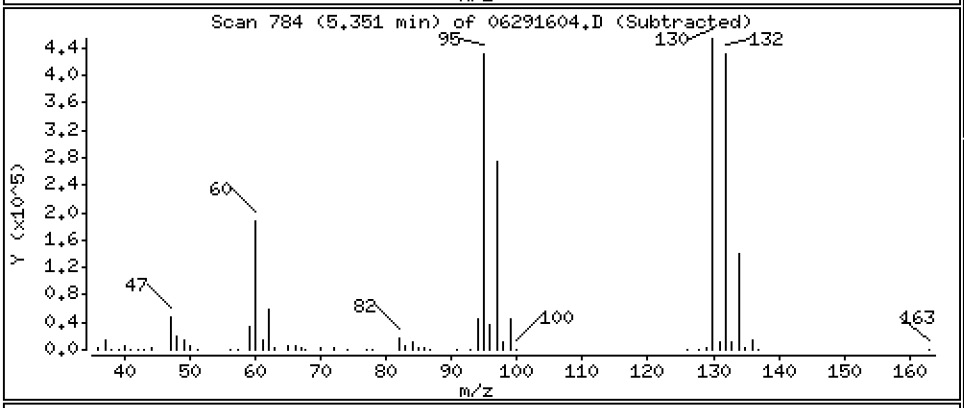
Column phase: RTXVMS

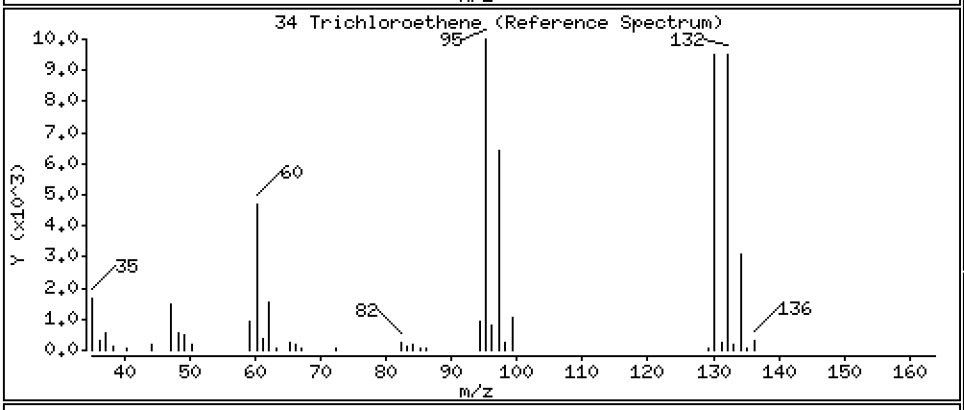
Column diameter: 0.18

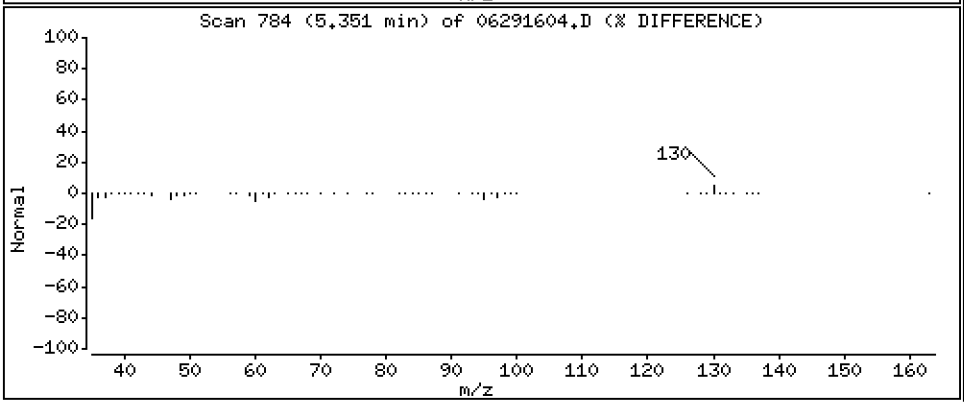
34 Trichloroethene

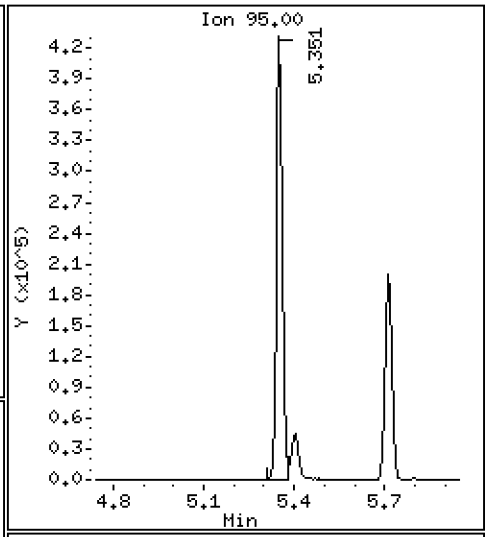
Concentration: 42.053 ug/Kg

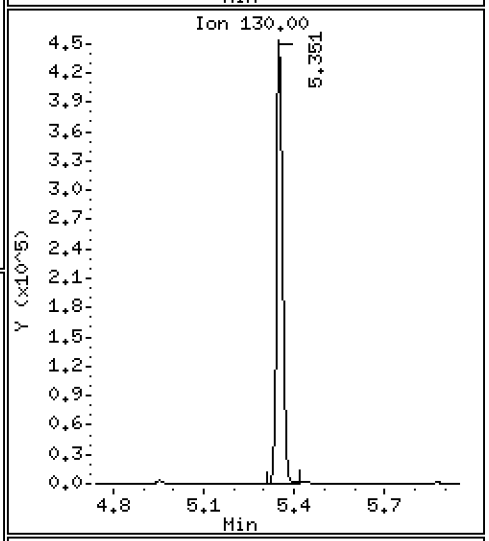


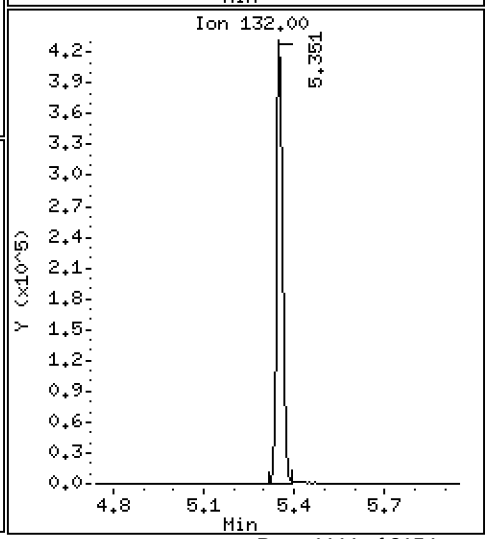












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

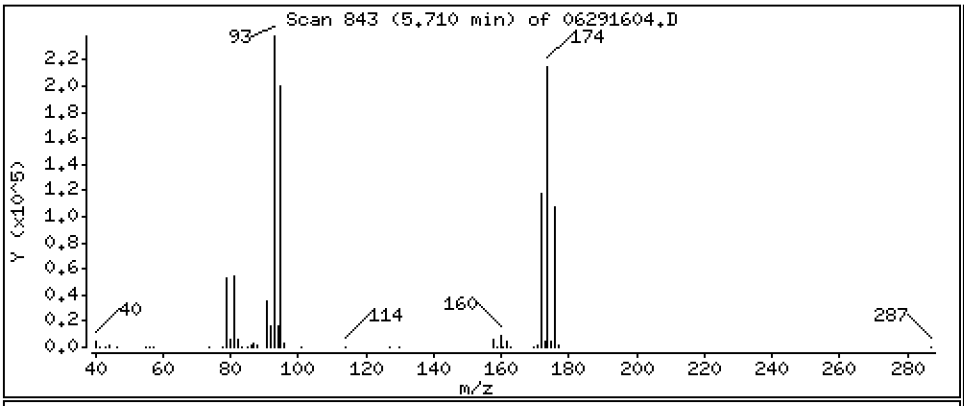
Operator: PB

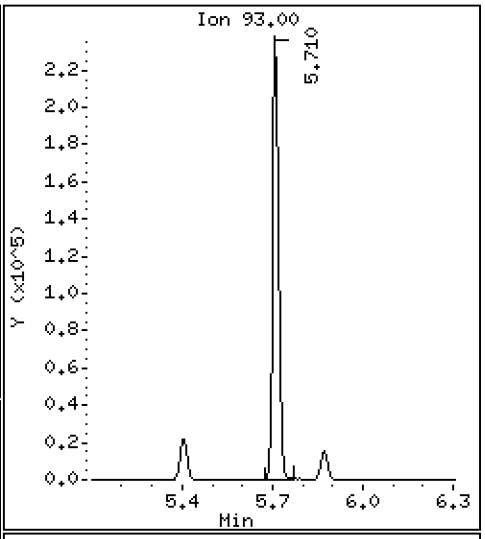
Column phase: RTXVMS

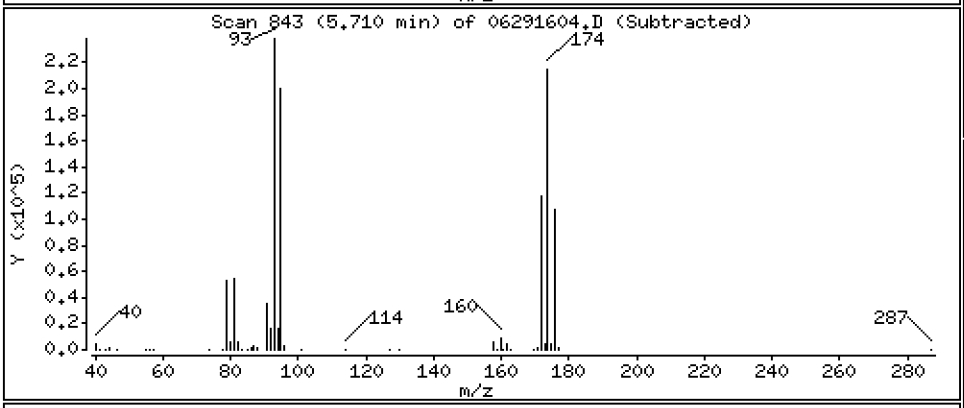
Column diameter: 0.18

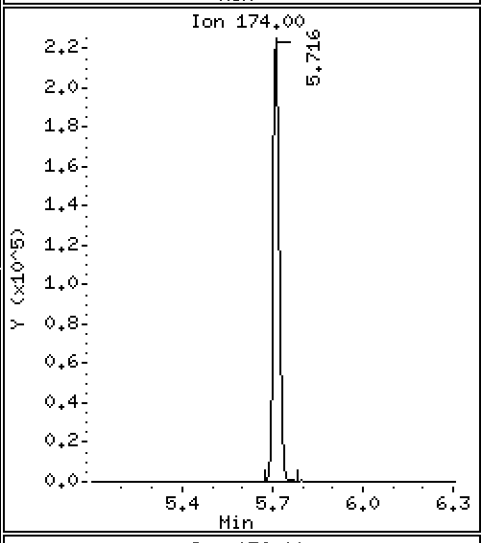
37 Dibromomethane

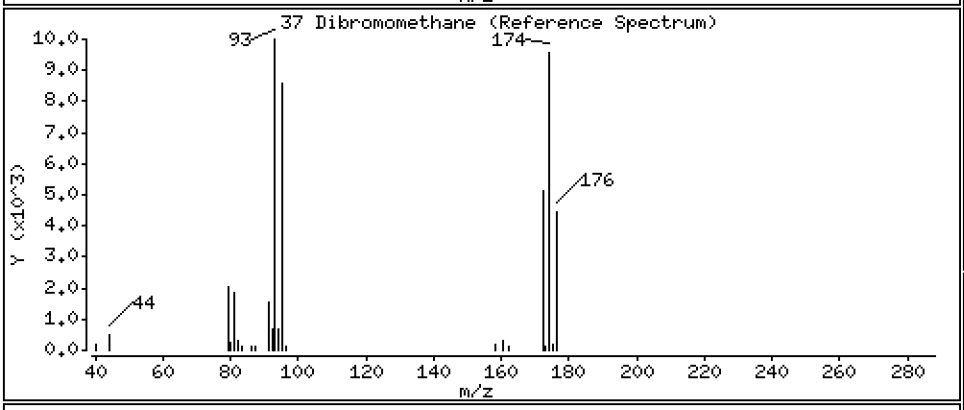
Concentration: 43.760 ug/Kg

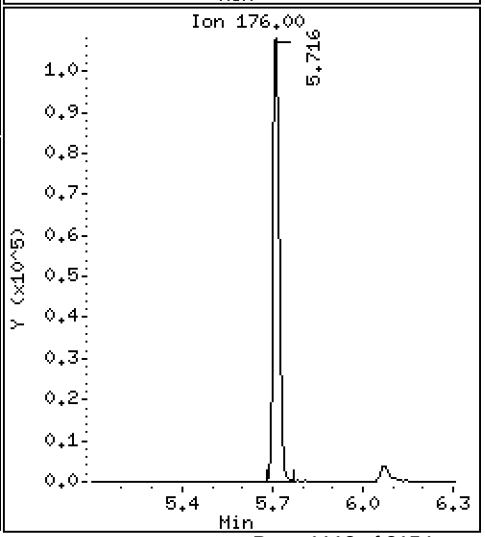


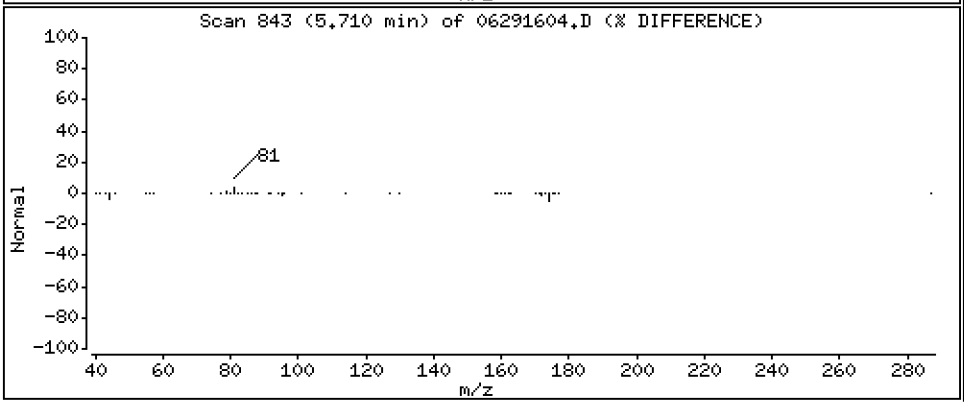












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

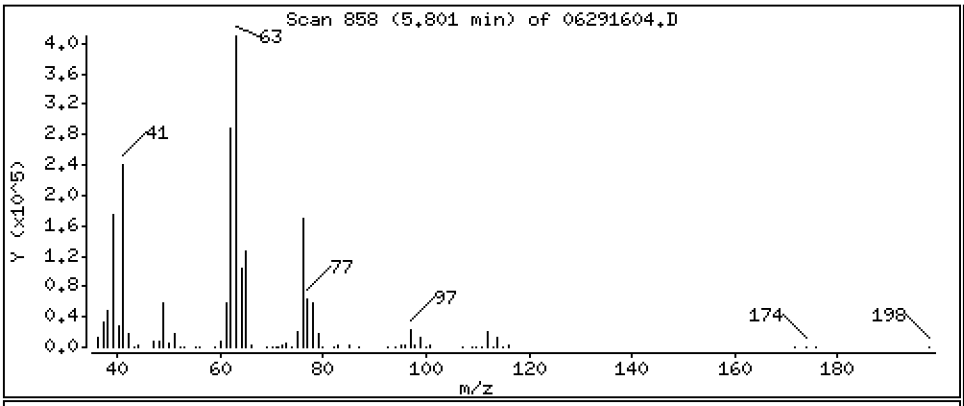
Operator: PB

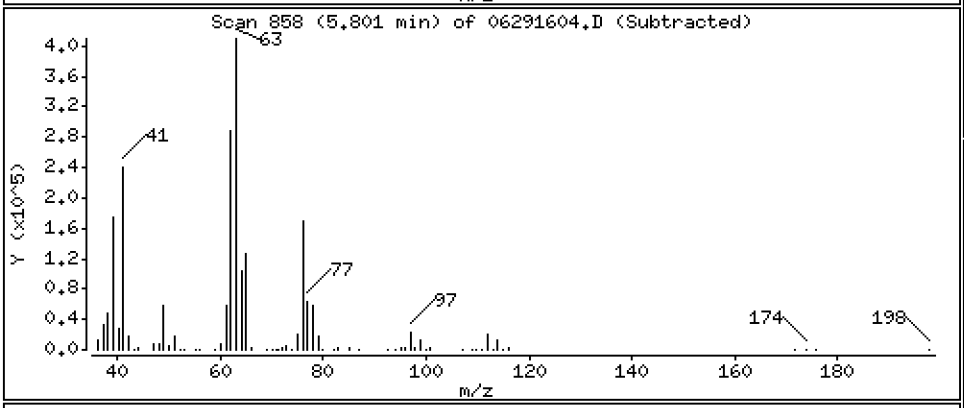
Column phase: RTXVMS

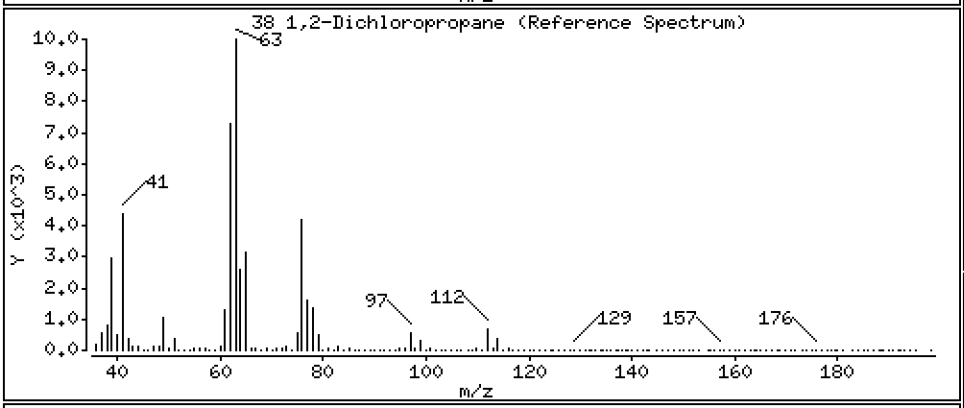
Column diameter: 0.18

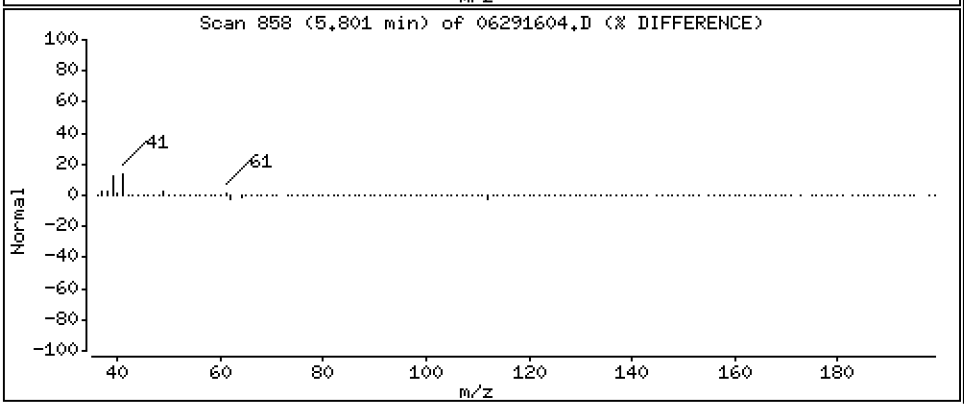
38 1,2-Dichloropropane

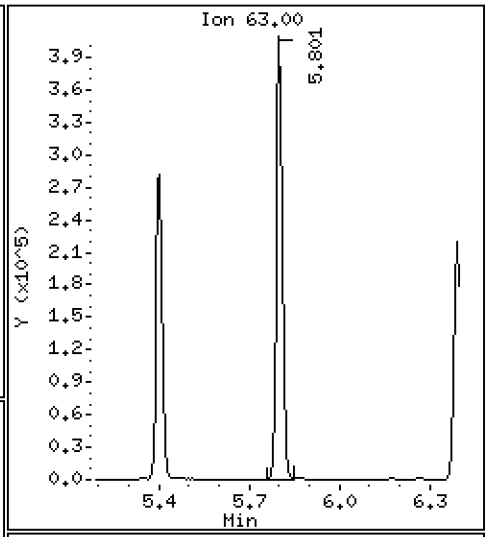
Concentration: 41.032 ug/Kg

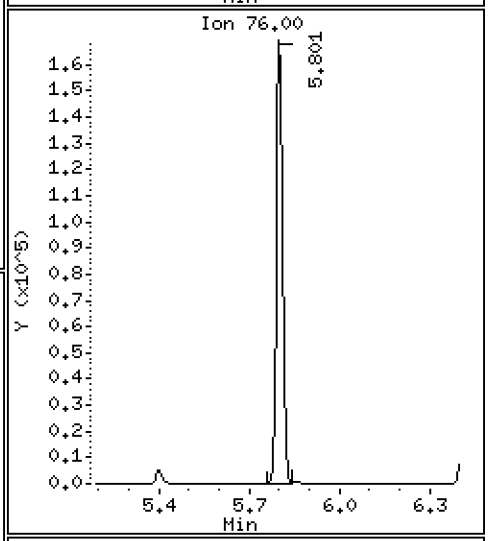


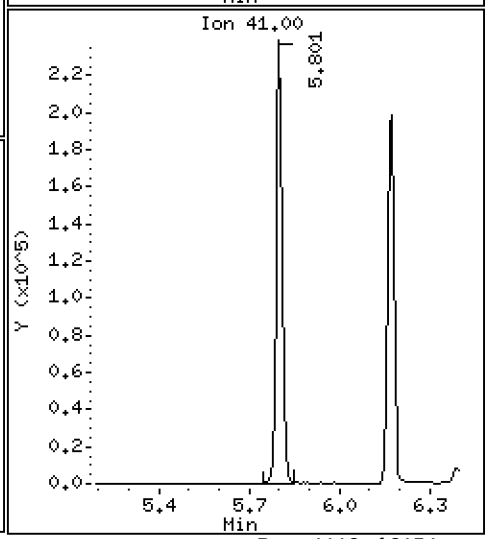












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

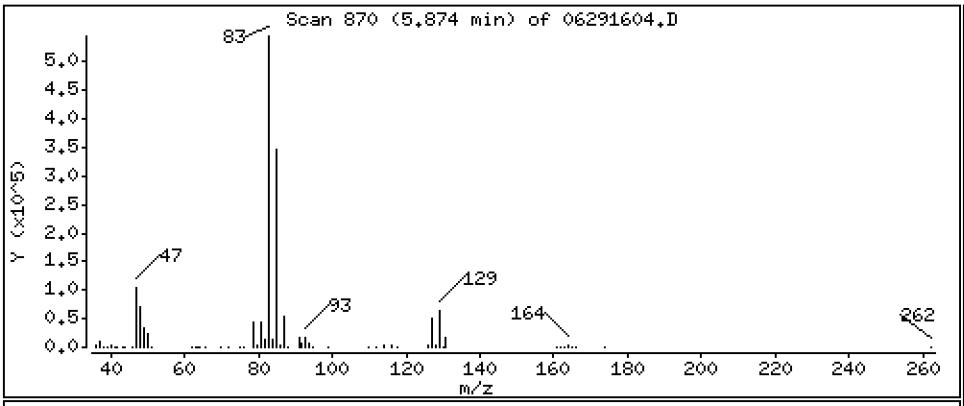
Operator: PB

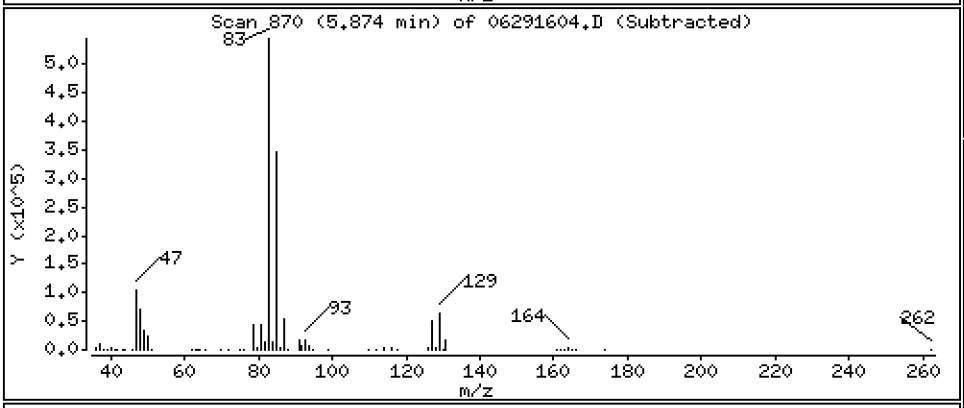
Column phase: RTXVMS

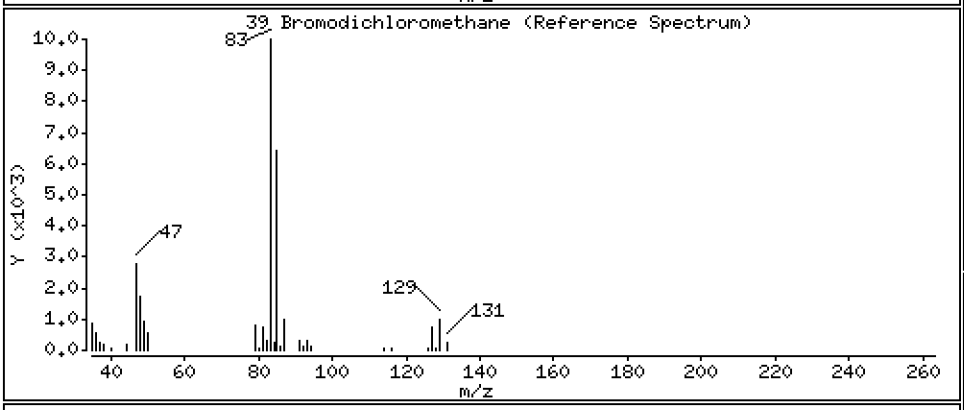
Column diameter: 0.18

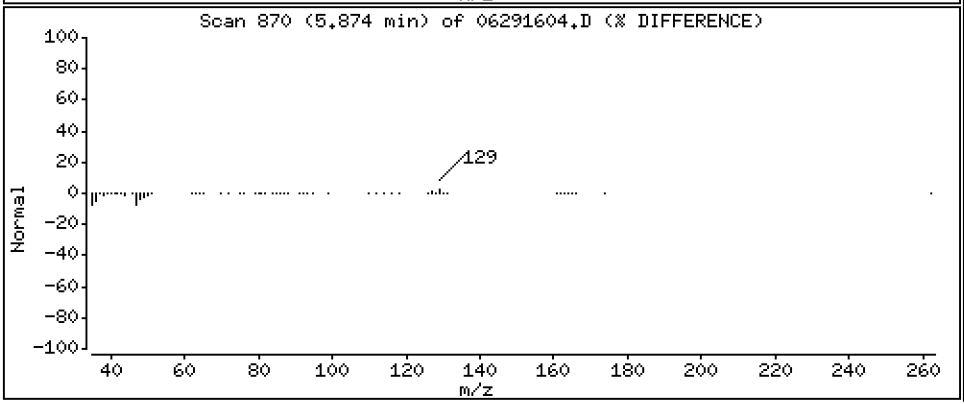
39 Bromodichloromethane

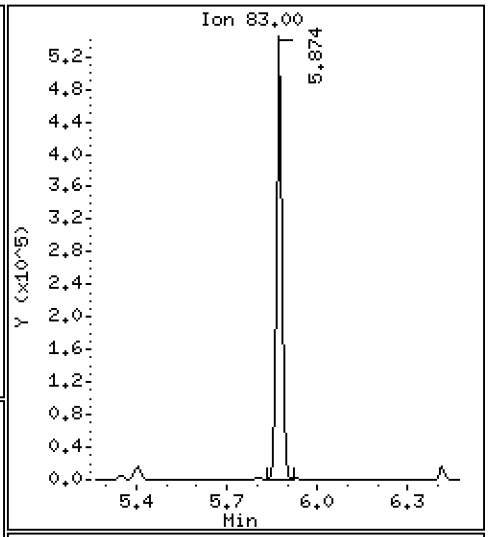
Concentration: 43.899 ug/Kg

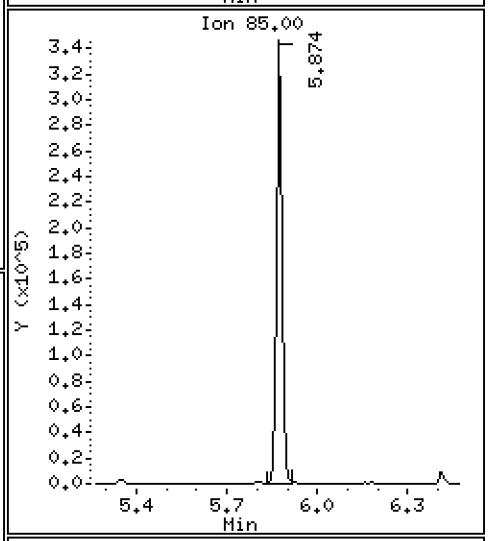


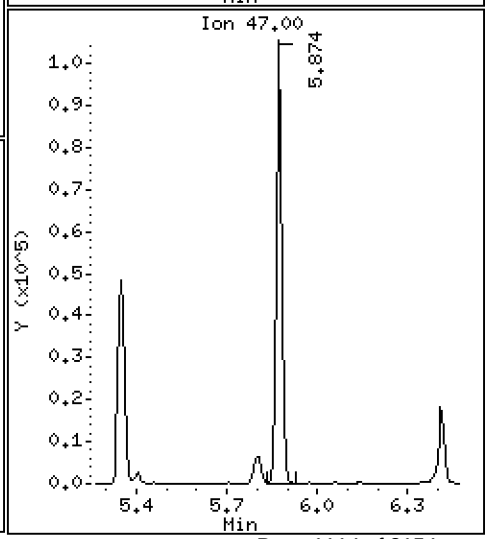












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

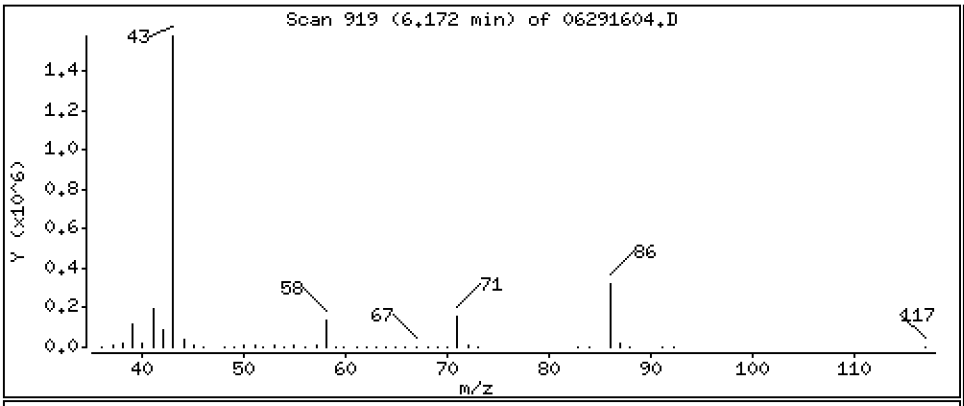
Operator: PB

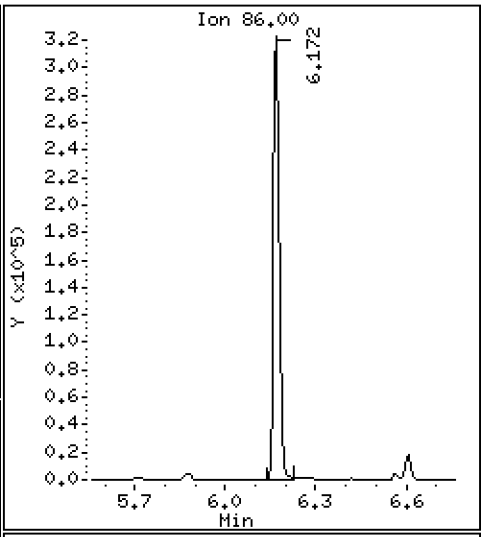
Column phase: RTXVMS

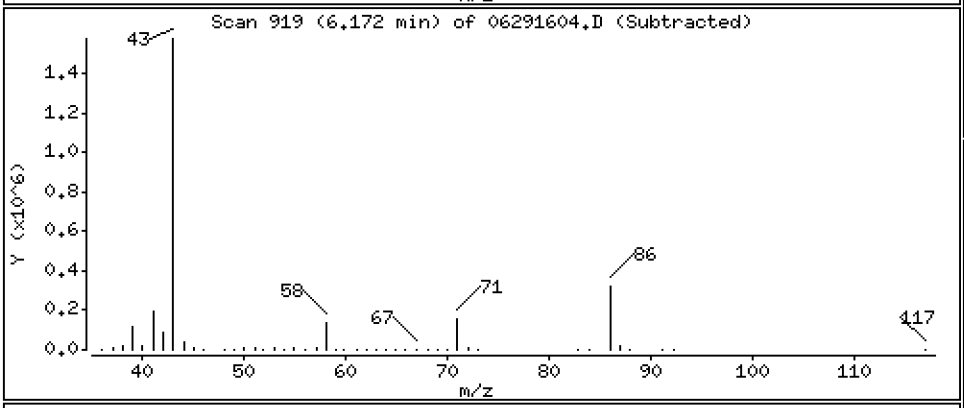
Column diameter: 0.18

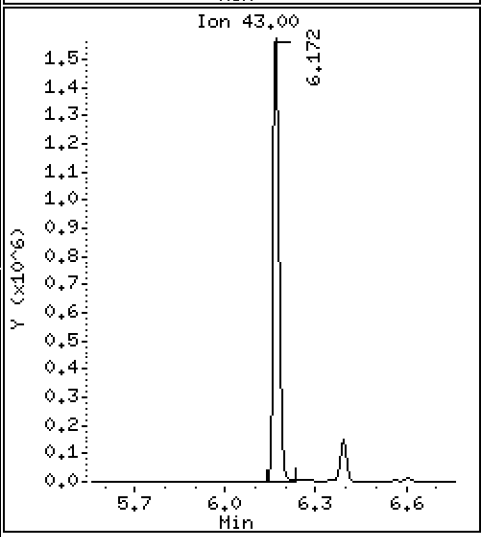
172 2-Pentanone

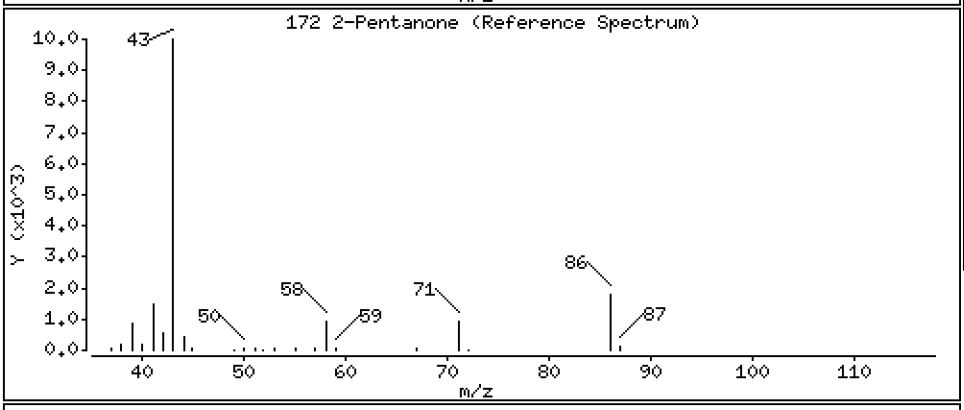
Concentration: 213.27 ug/Kg

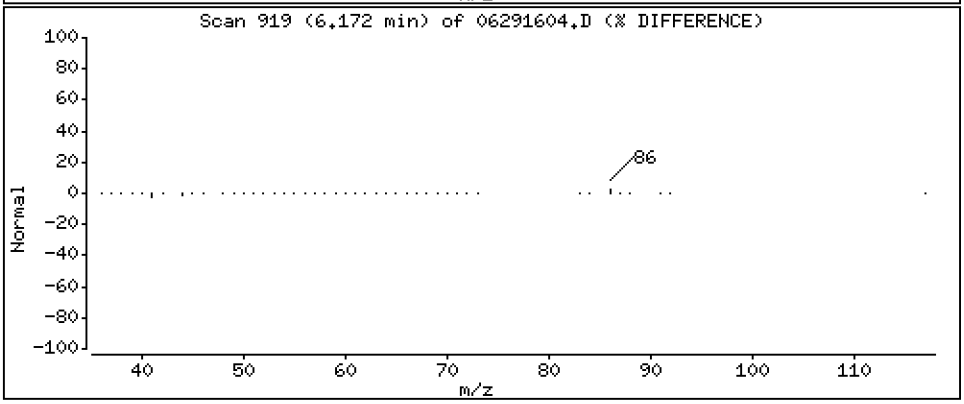












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

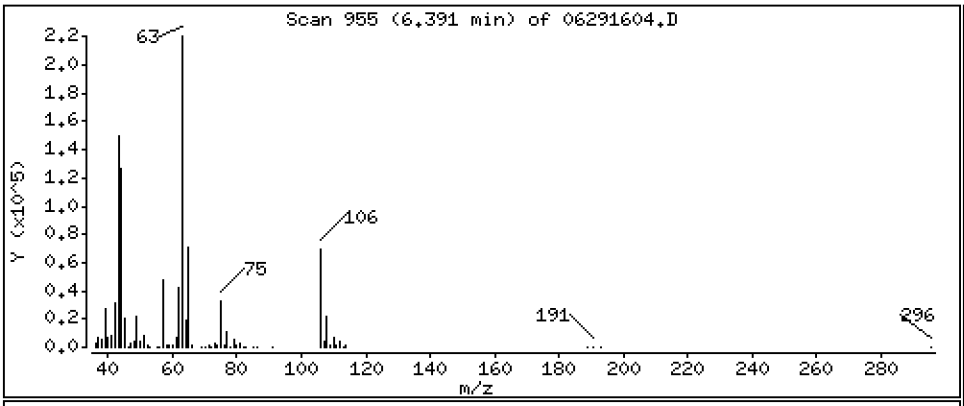
Operator: PB

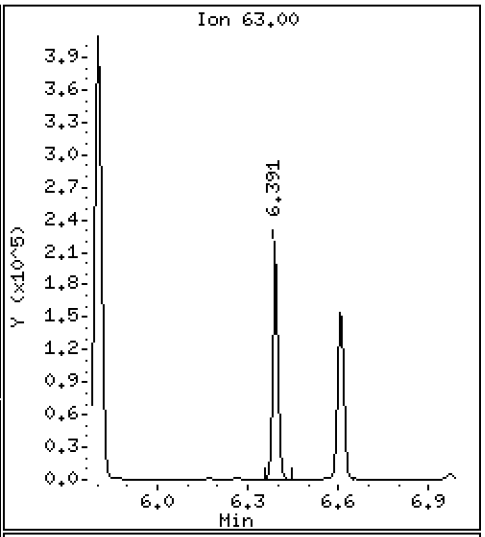
Column phase: RTXVMS

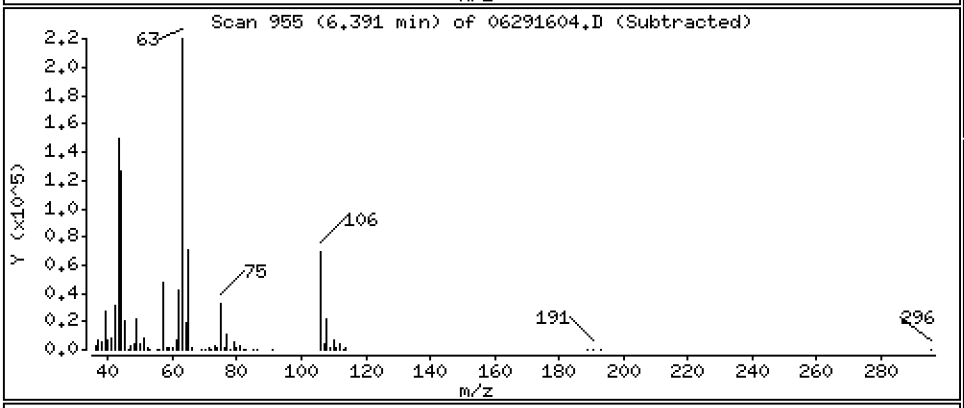
Column diameter: 0.18

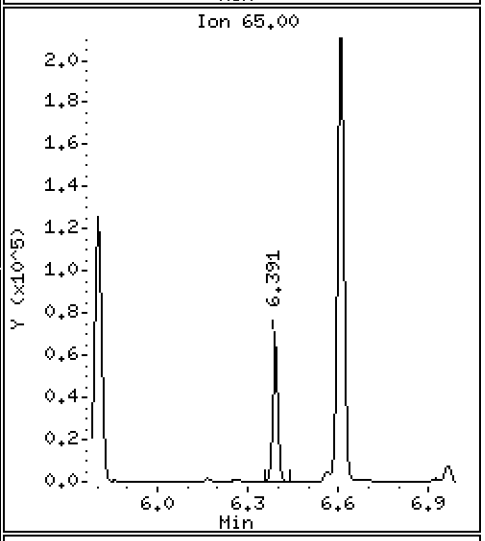
40 2-Chloroethyl Vinyl Ether

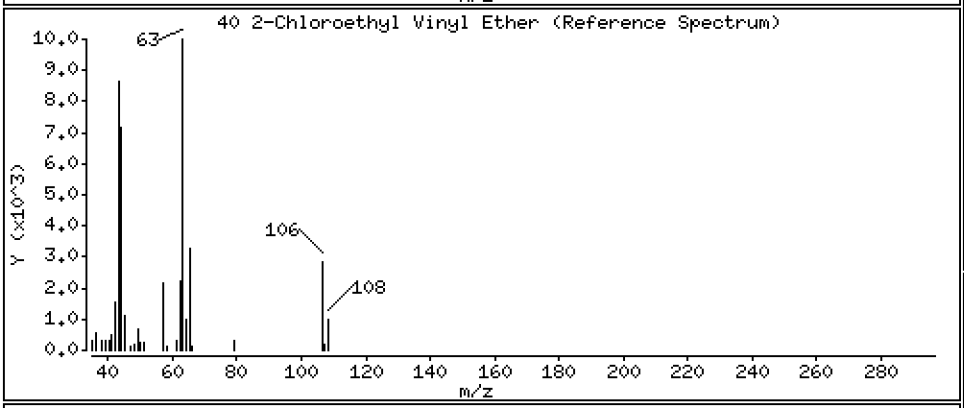
Concentration: 47.120 ug/Kg

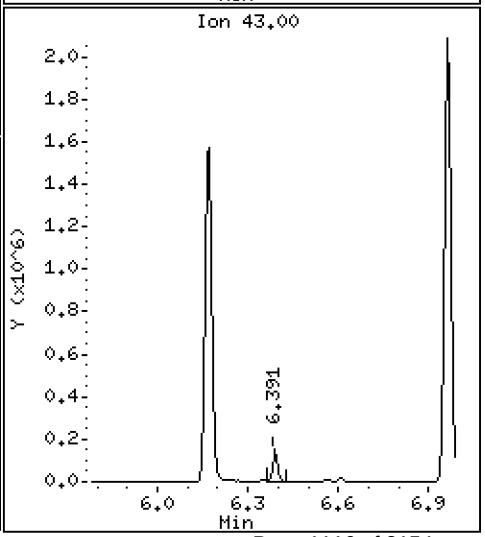


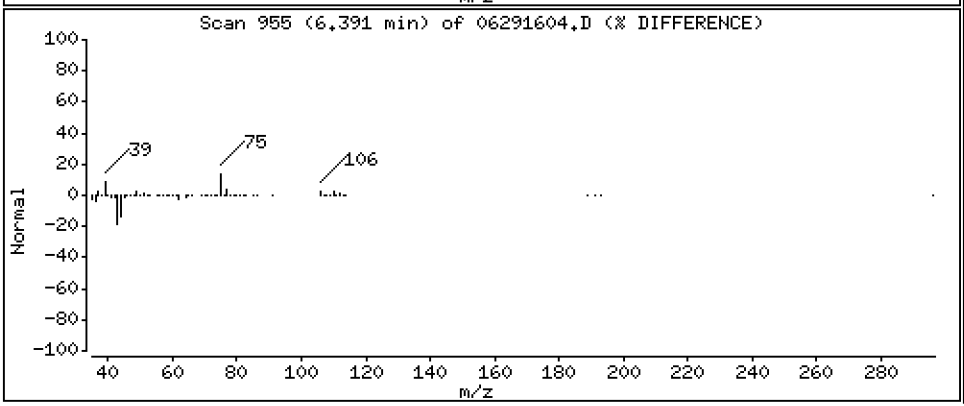












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

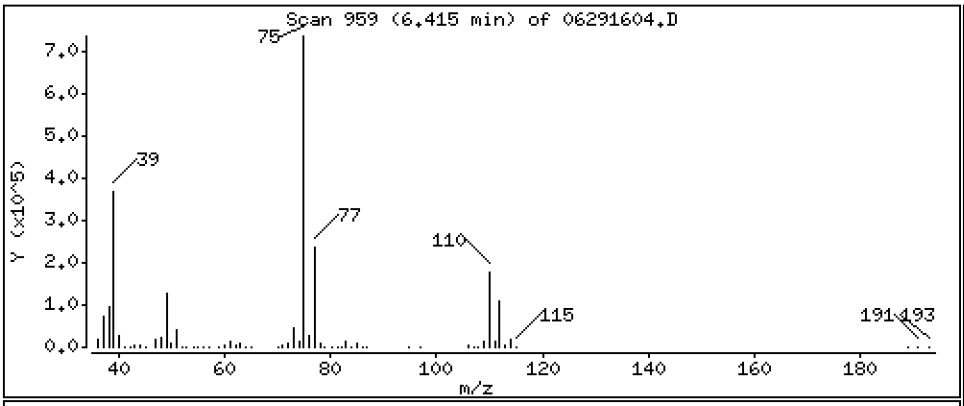
Operator: PB

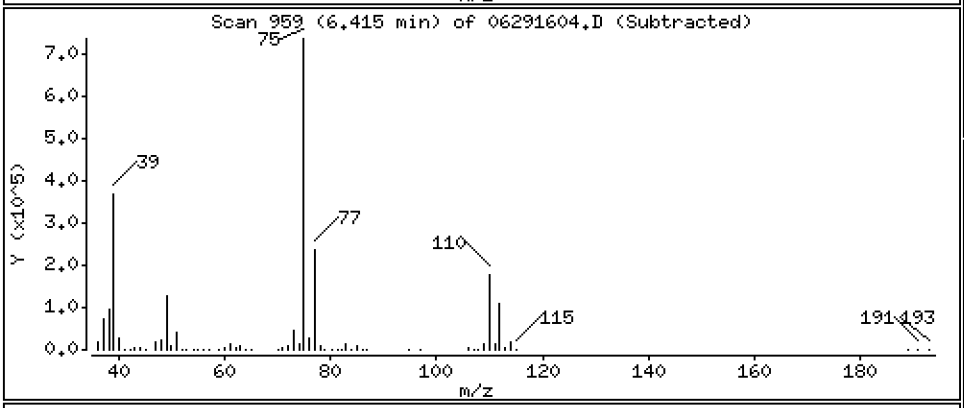
Column phase: RTXVMS

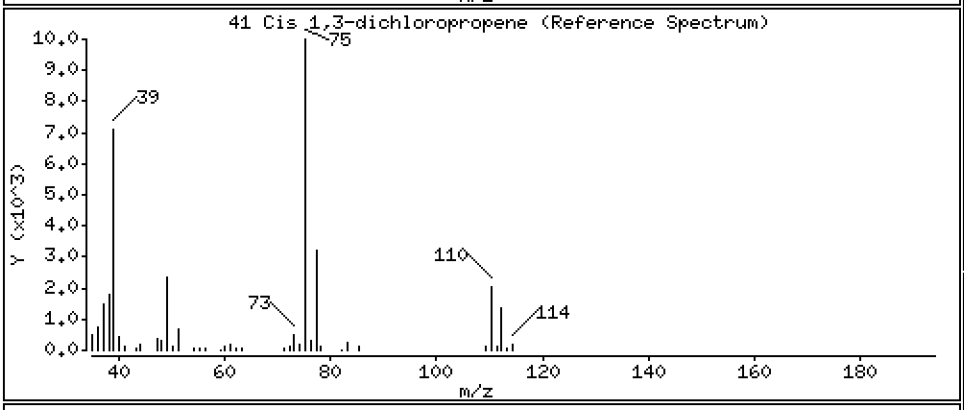
Column diameter: 0.18

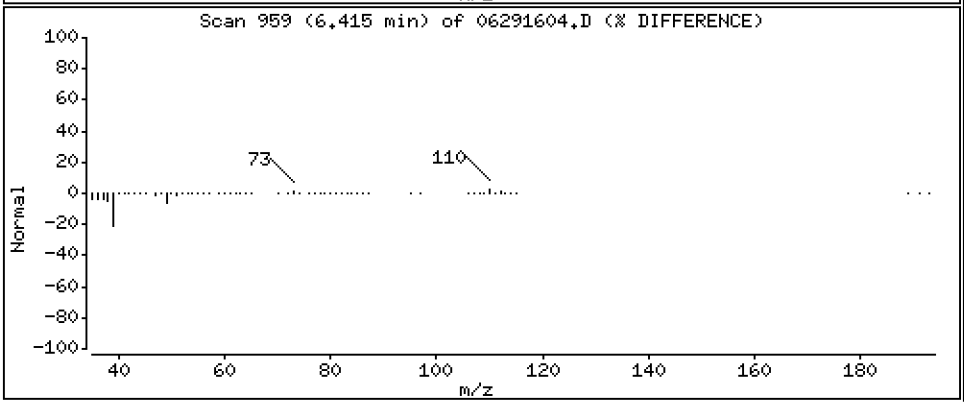
41 Cis 1,3-dichloropropene

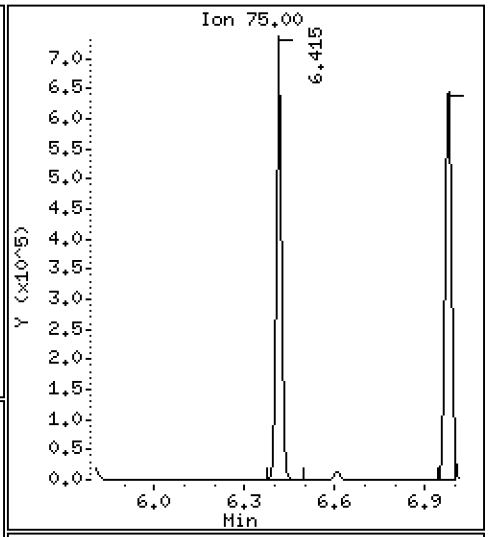
Concentration: 43.113 ug/Kg

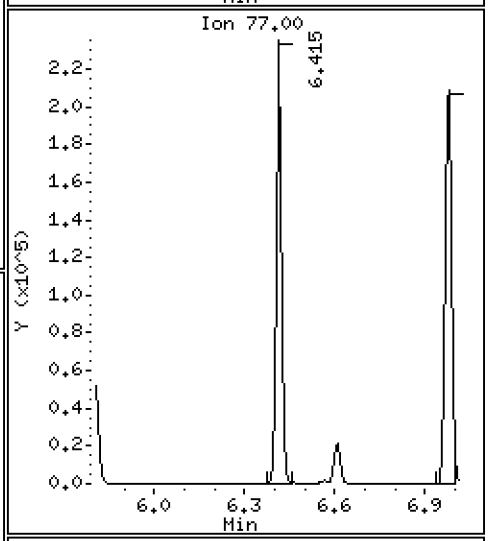


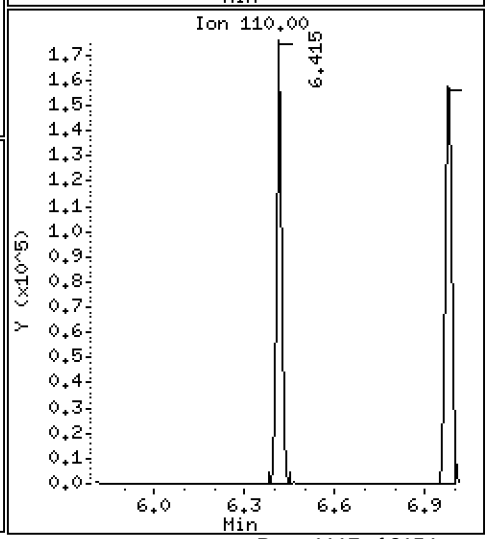












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

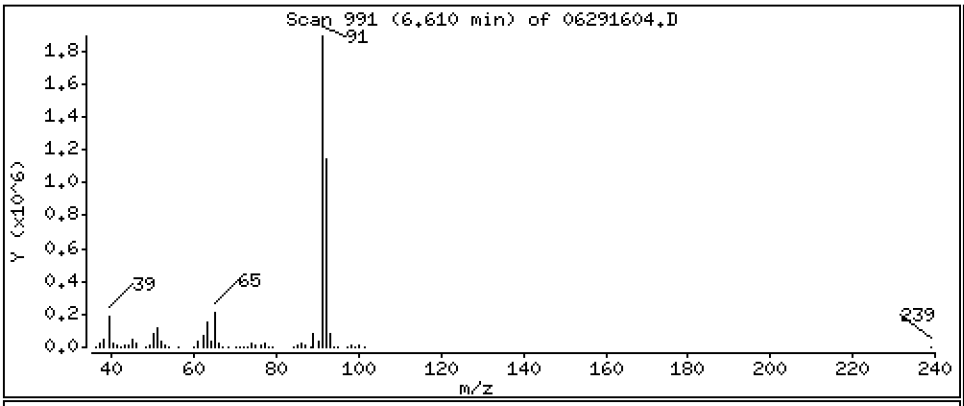
Operator: PB

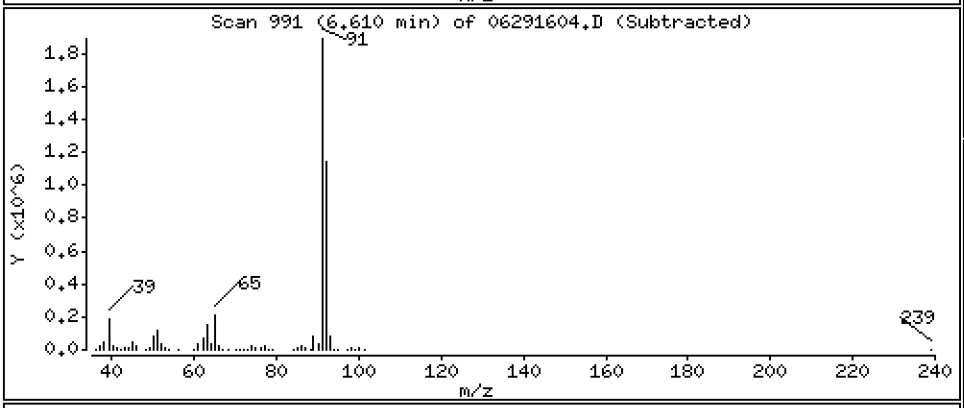
Column phase: RTXVMS

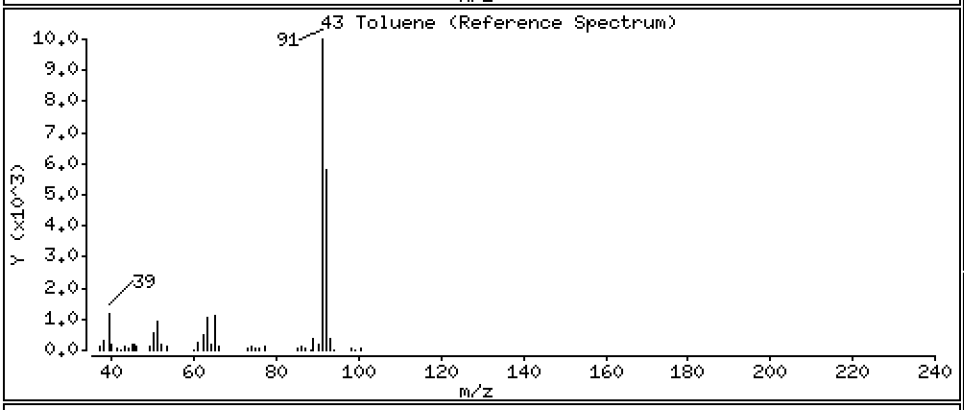
Column diameter: 0.18

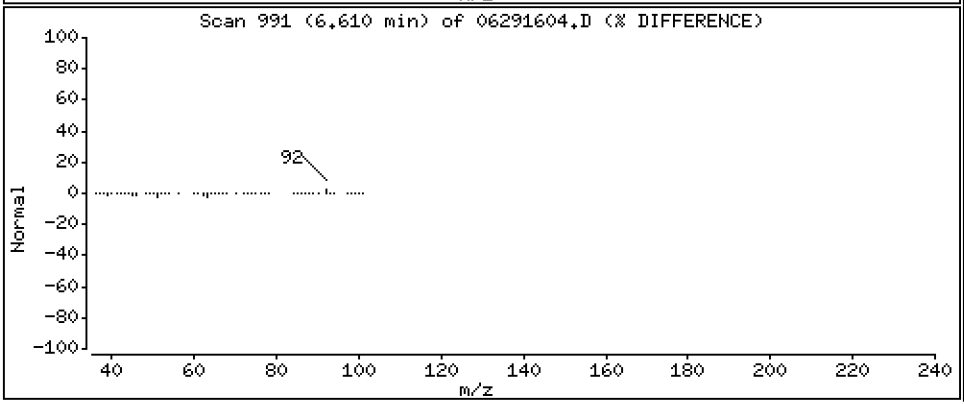
43 Toluene

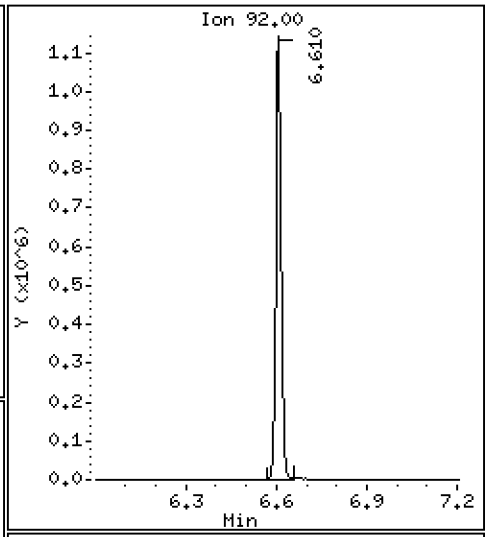
Concentration: 41.623 ug/Kg

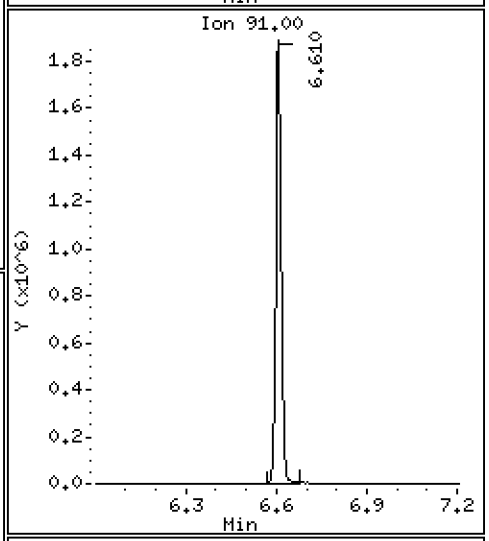


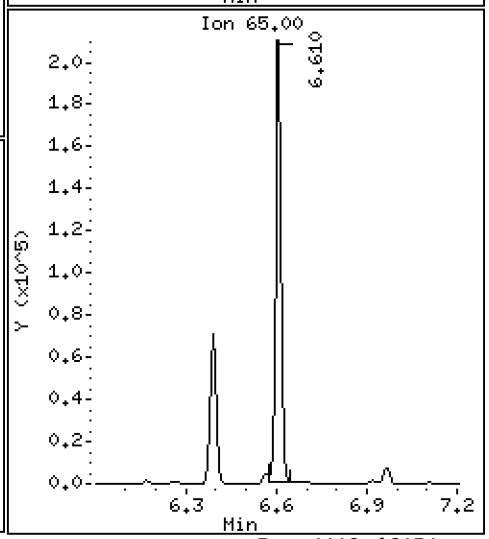












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

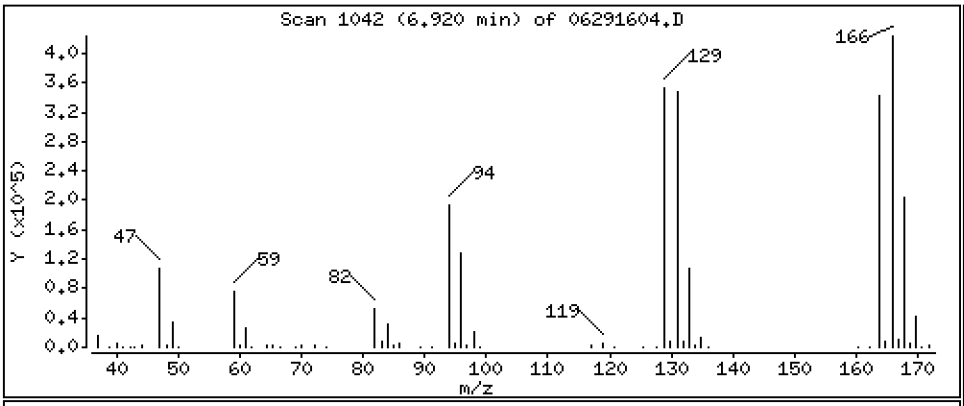
Operator: PB

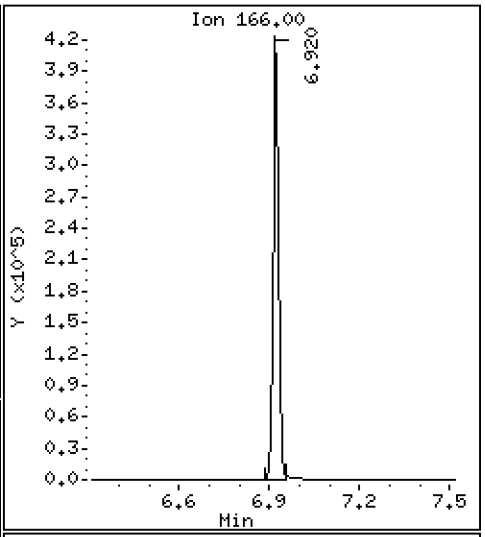
Column phase: RTXVMS

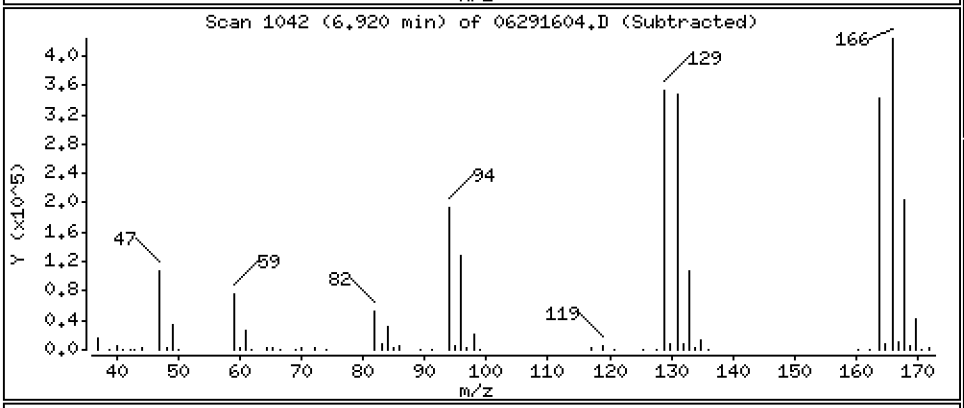
Column diameter: 0.18

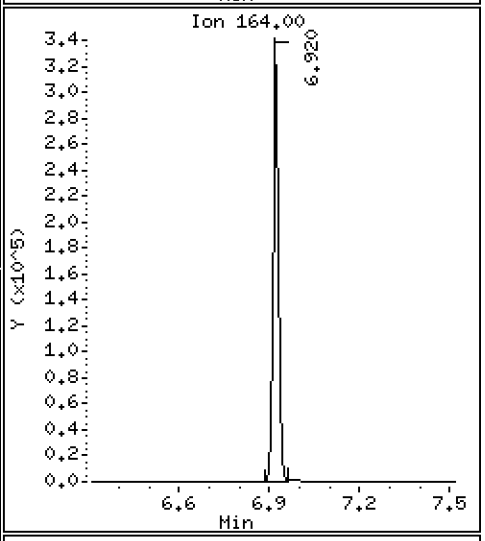
44 Tetrachloroethene

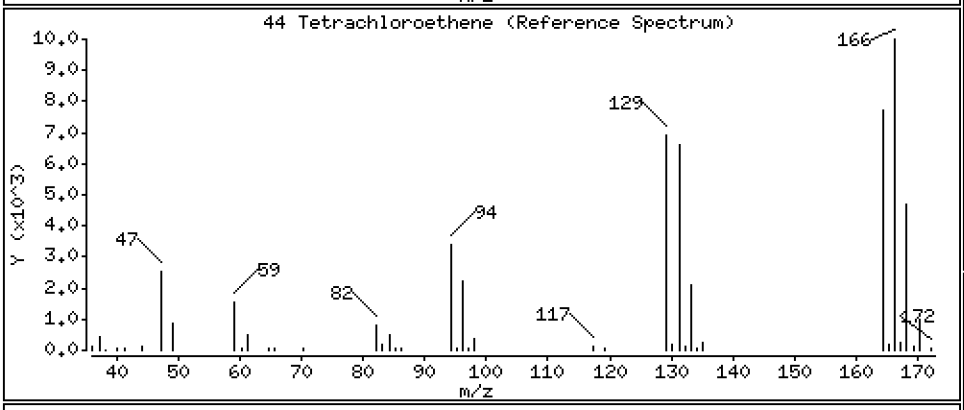
Concentration: 42.302 ug/Kg

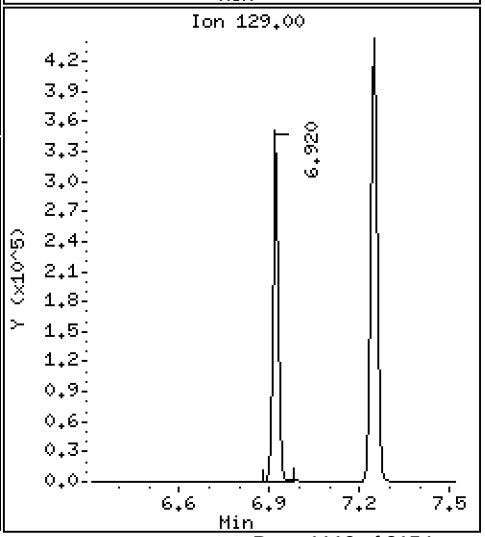


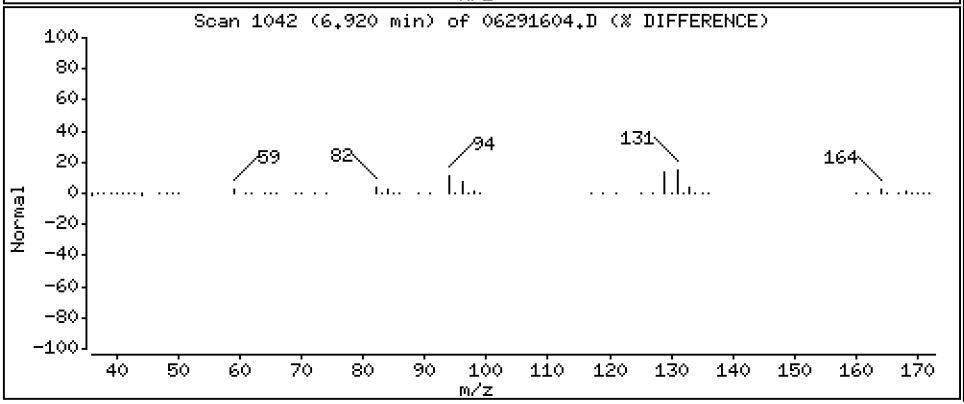












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

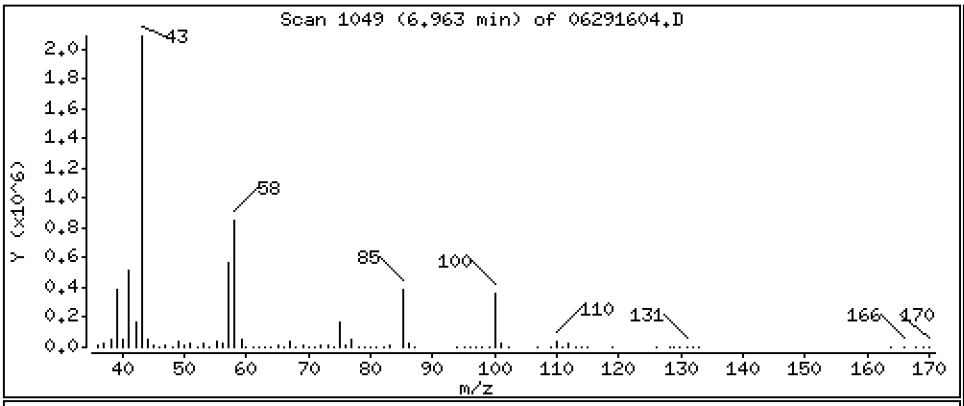
Operator: PB

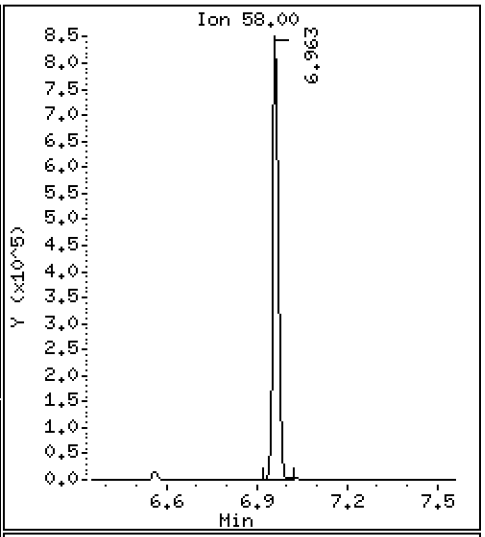
Column phase: RTXVMS

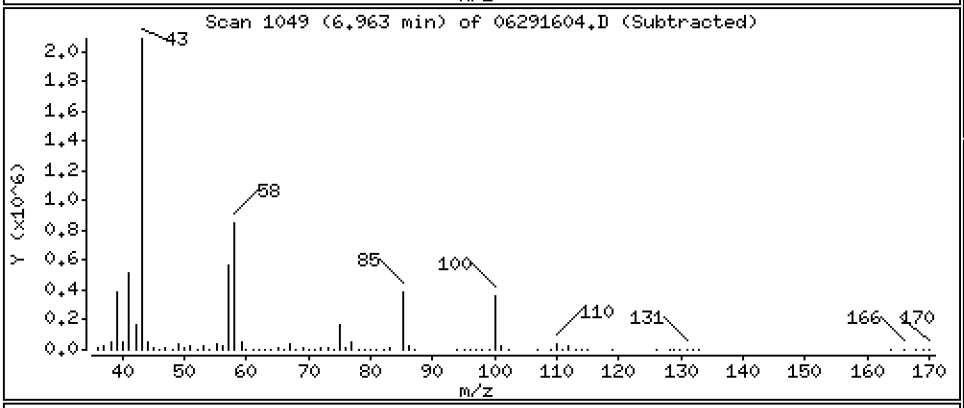
Column diameter: 0.18

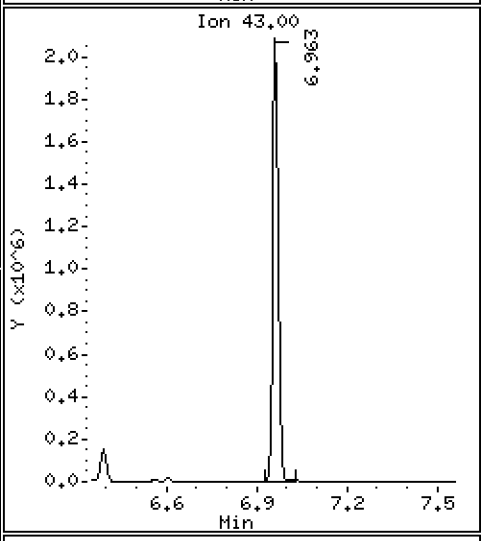
45 4-Methyl-2-Pentanone

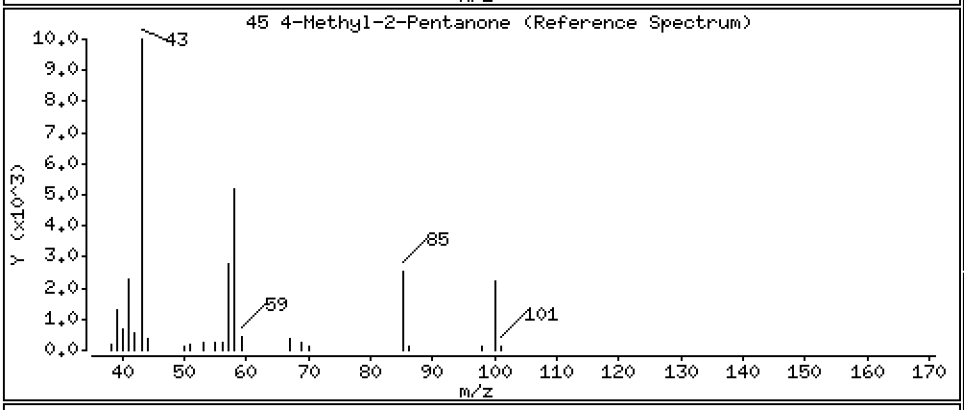
Concentration: 207.34 ug/Kg

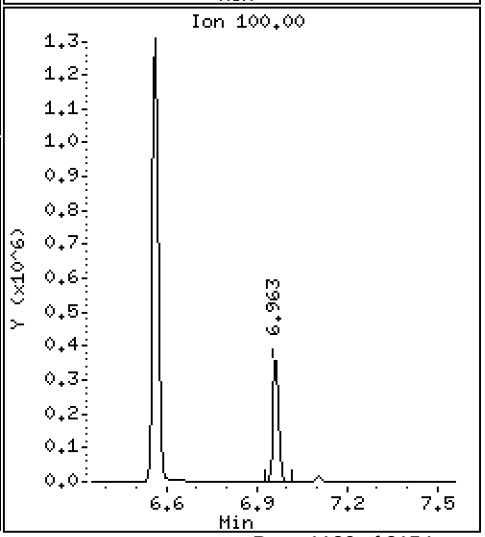


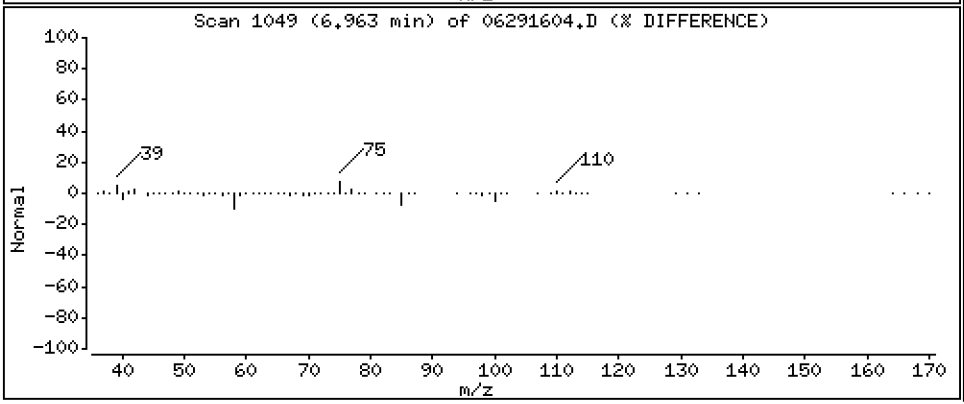












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

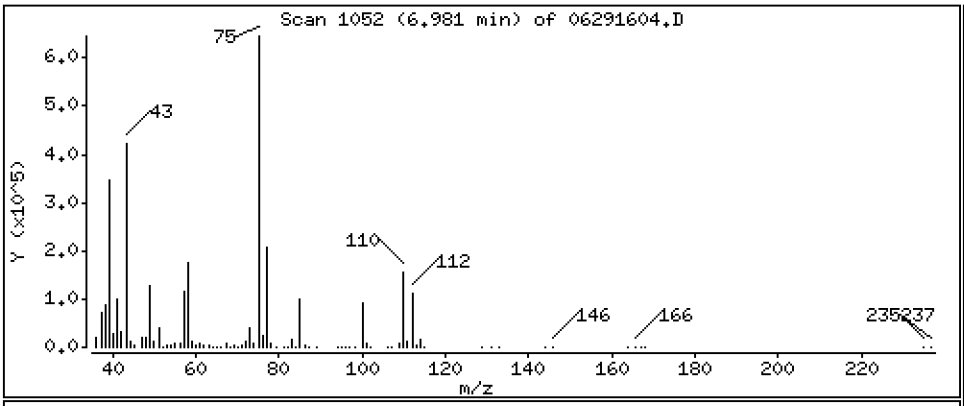
Operator: PB

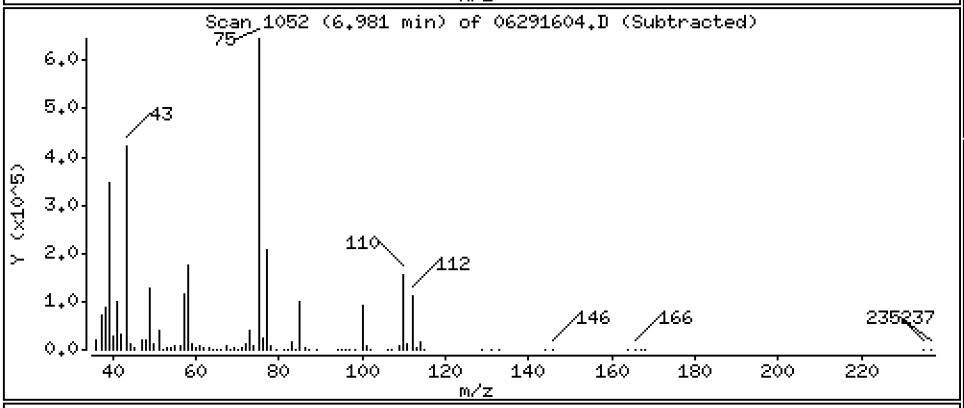
Column phase: RTXVMS

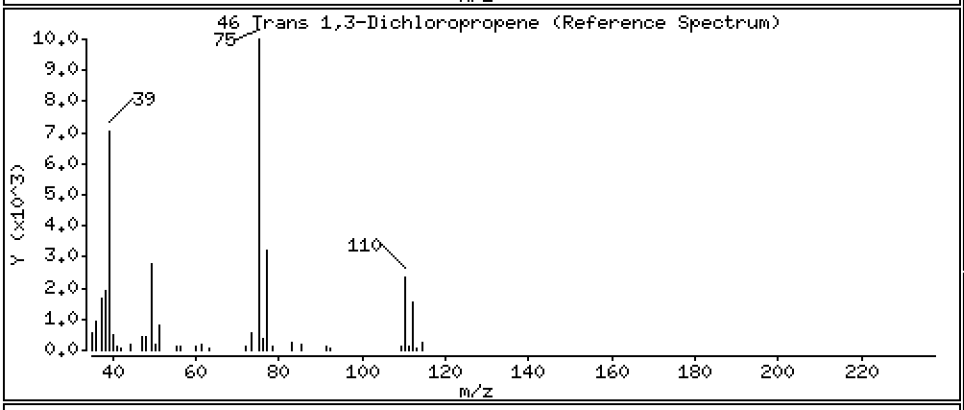
Column diameter: 0.18

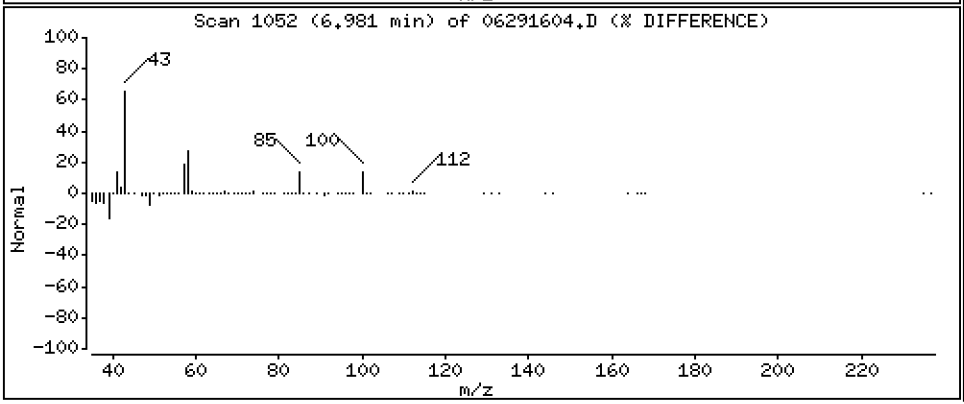
46 Trans 1,3-Dichloropropene

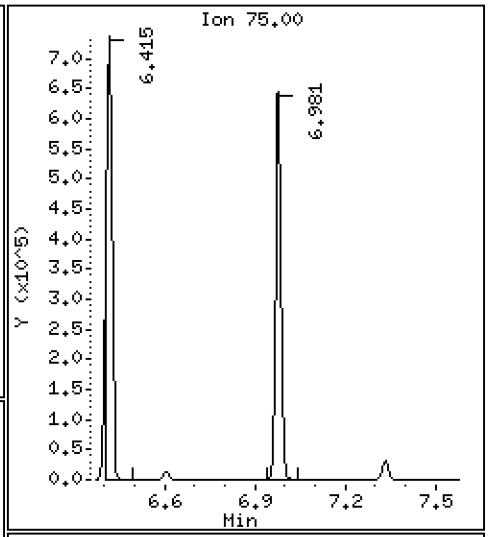
Concentration: 44.458 ug/Kg

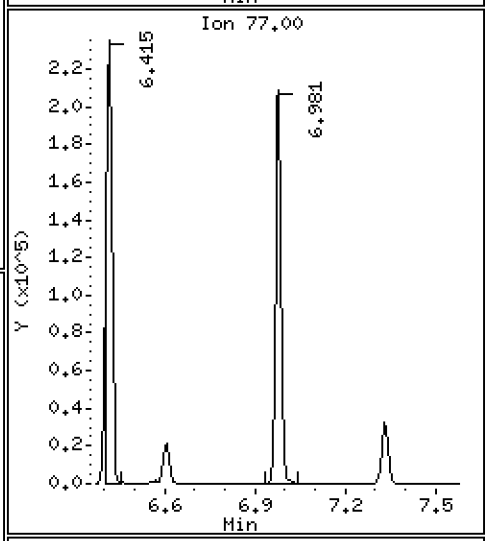


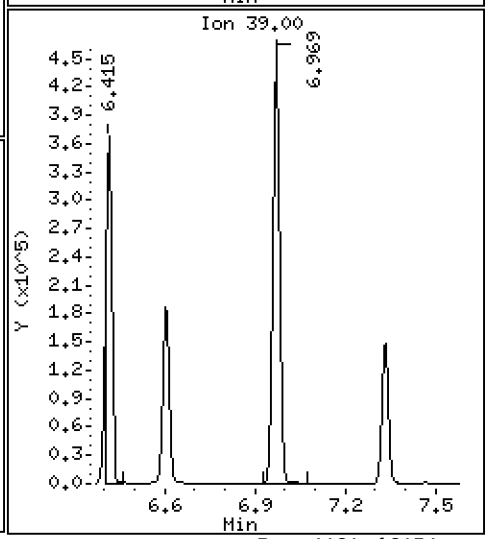












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

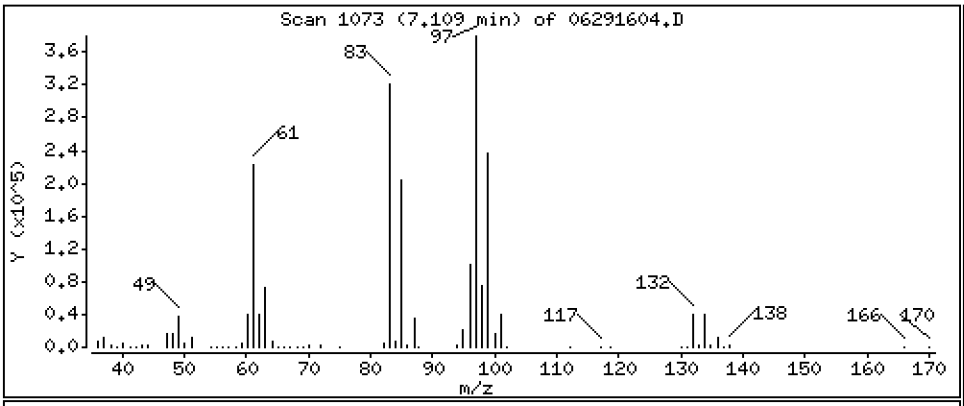
Operator: PB

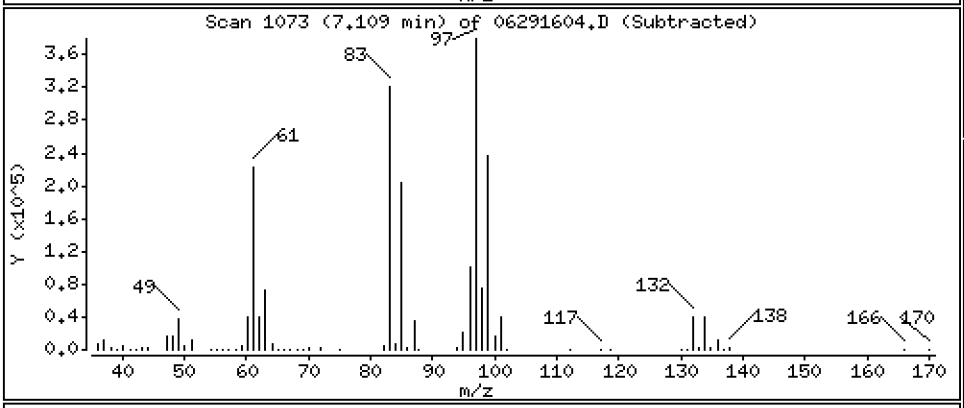
Column phase: RTXVMS

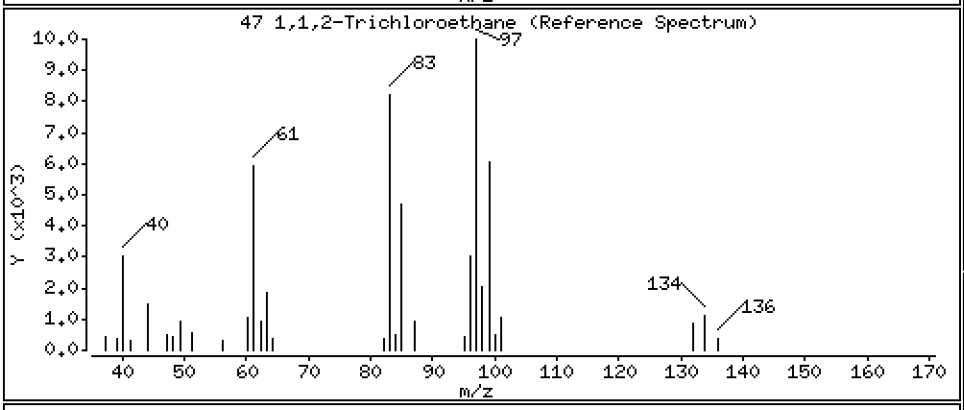
Column diameter: 0.18

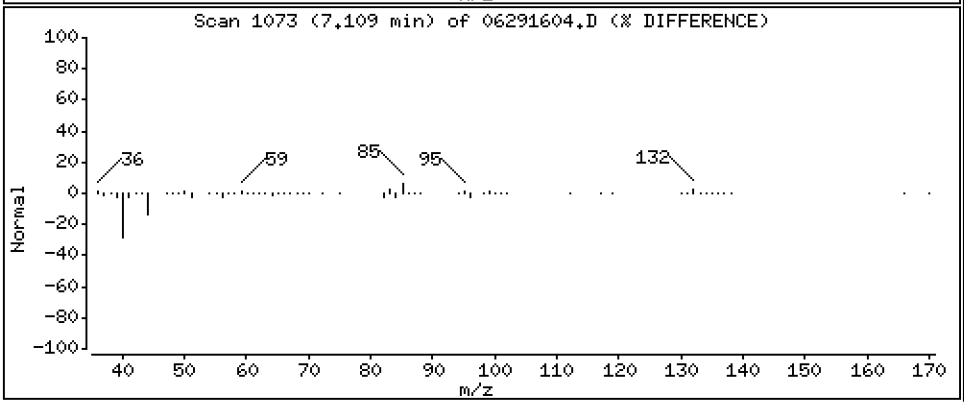
47 1,1,2-Trichloroethane

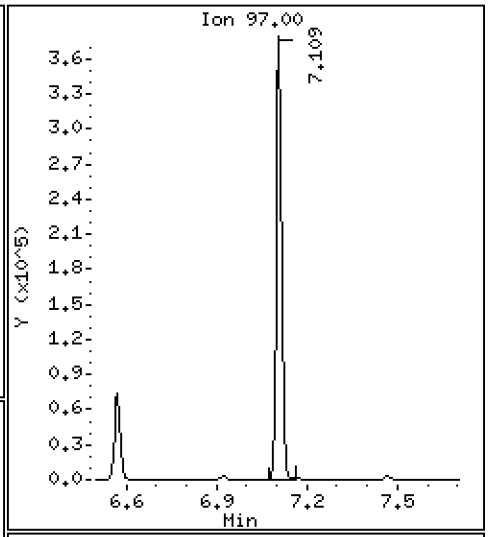
Concentration: 44.026 ug/Kg

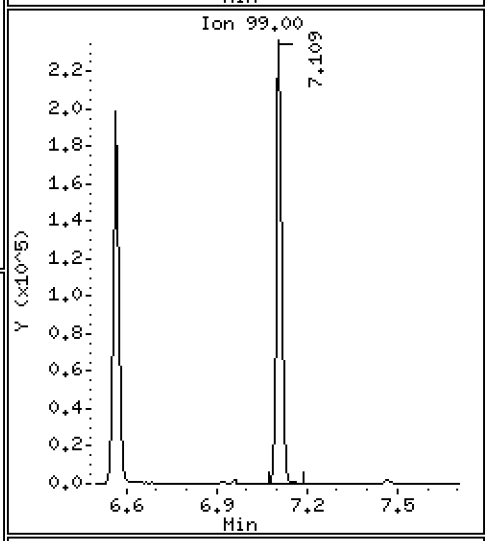


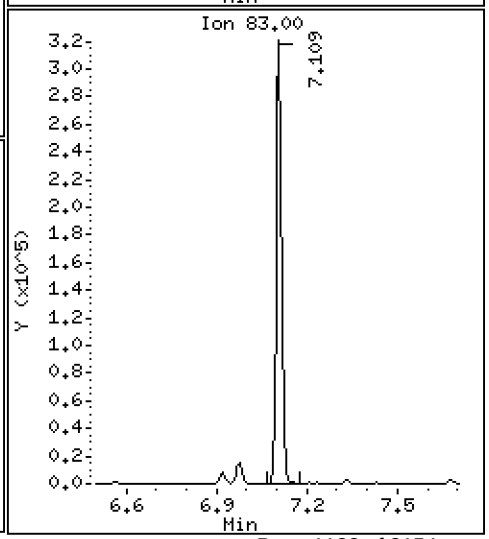












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

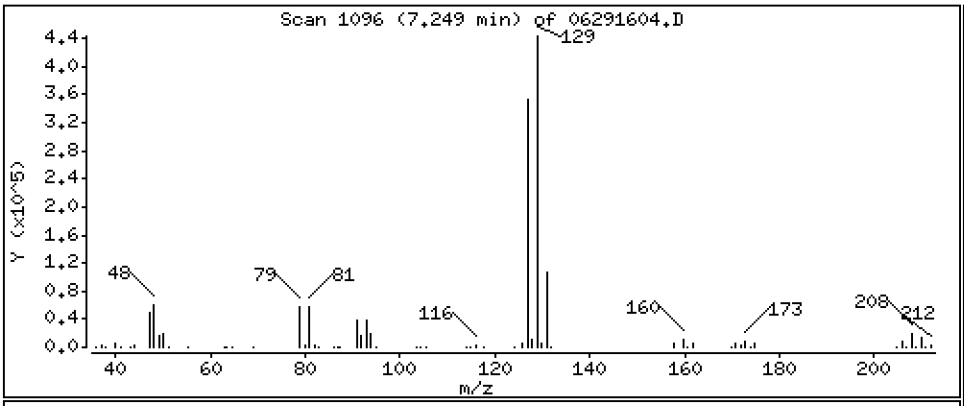
Operator: PB

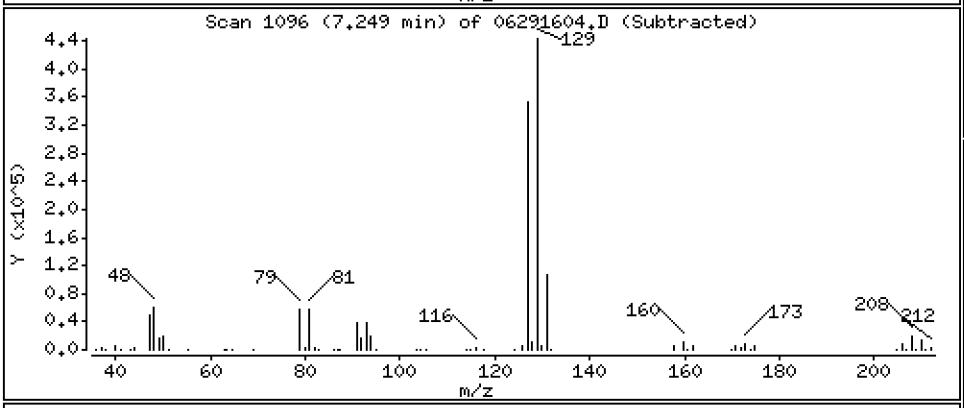
Column phase: RTXVMS

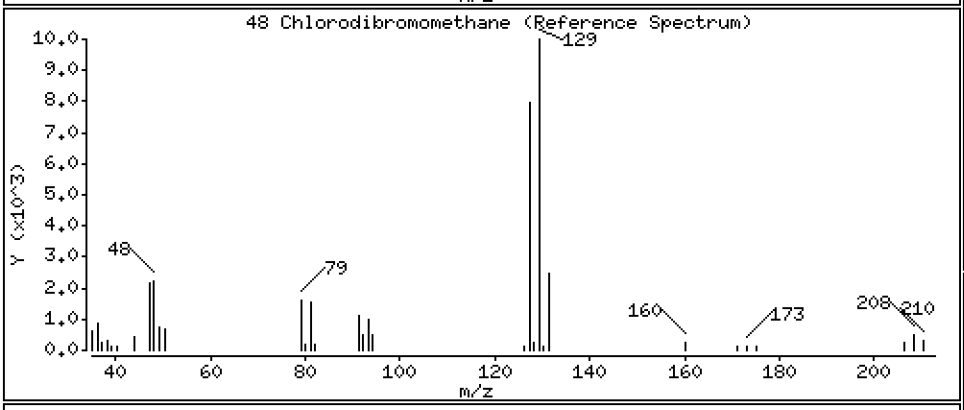
Column diameter: 0.18

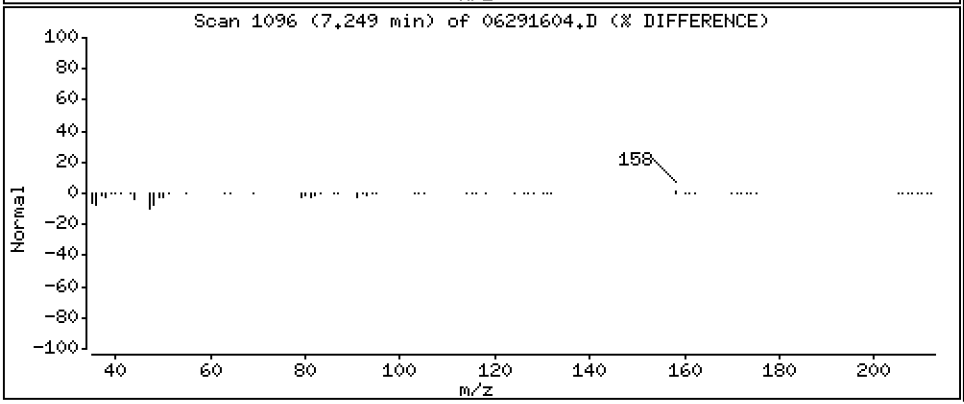
48 Chlorodibromomethane

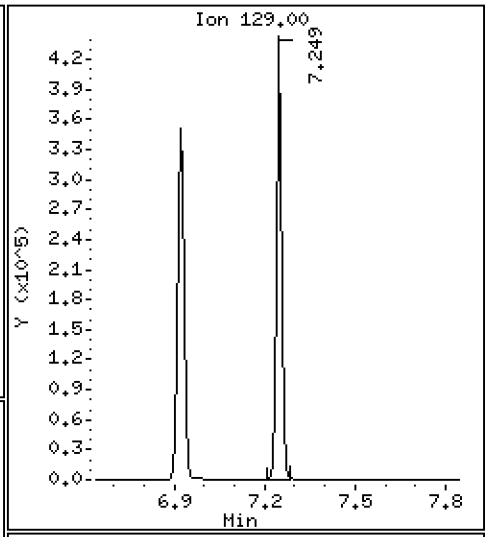
Concentration: 44.746 ug/Kg

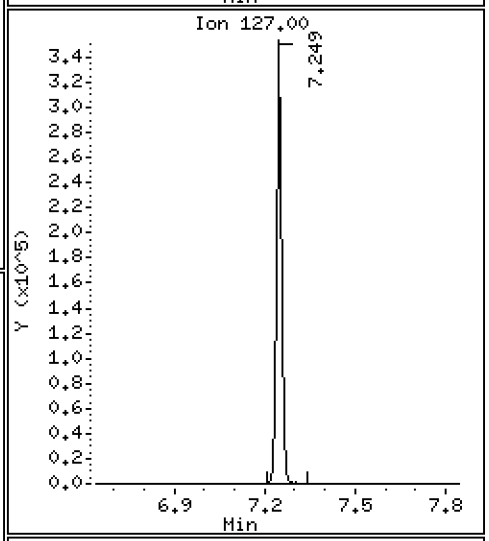


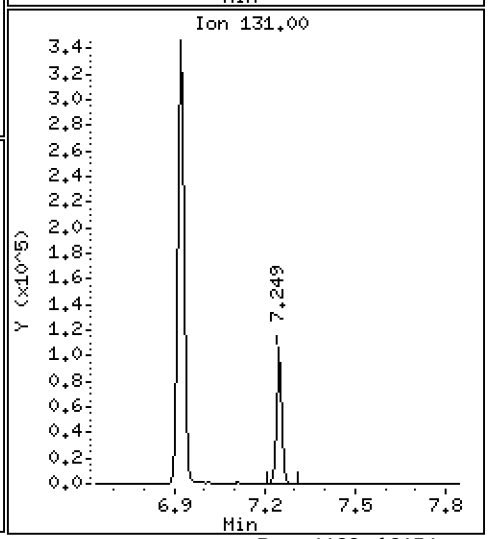












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

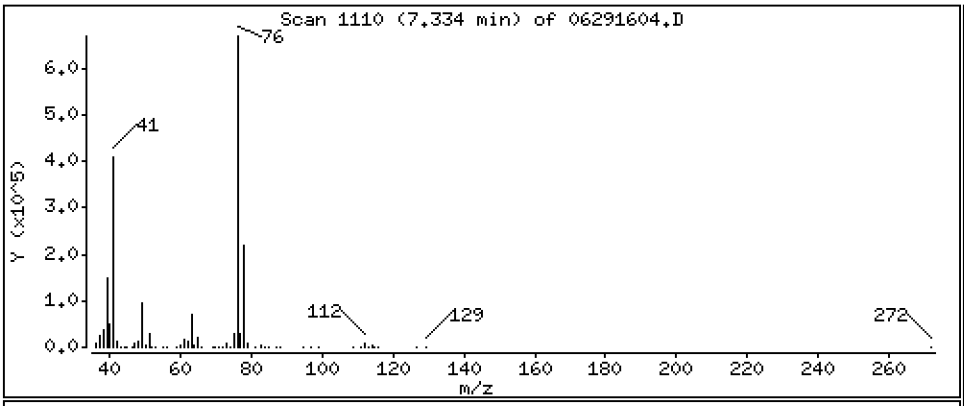
Operator: PB

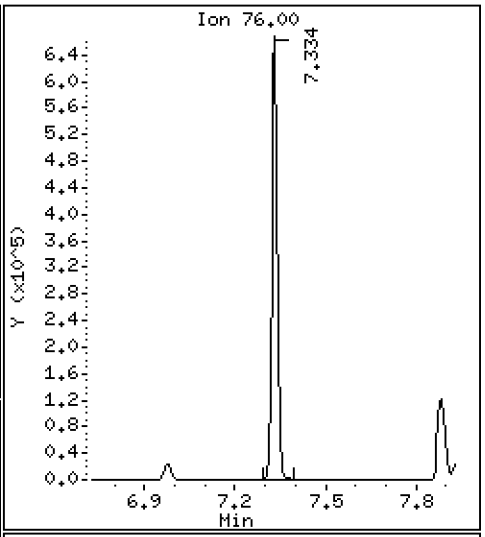
Column phase: RTXVMS

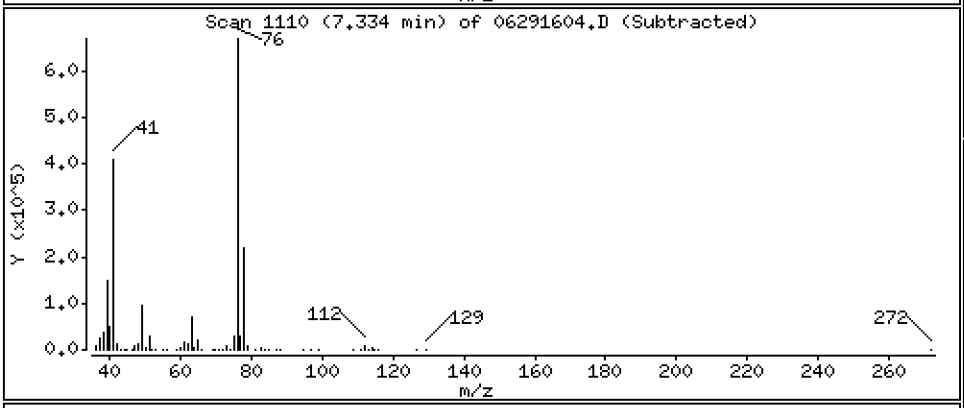
Column diameter: 0.18

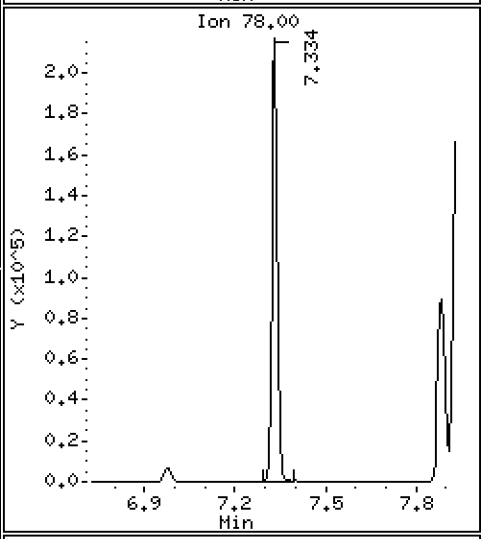
49 1,3-Dichloropropane

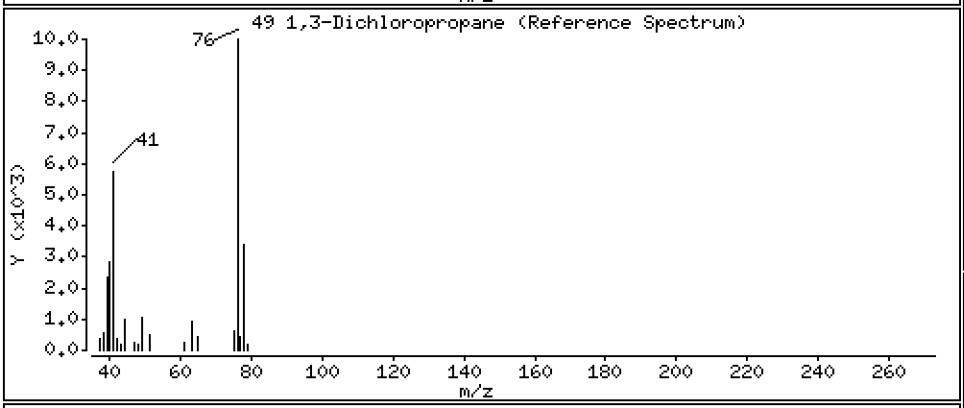
Concentration: 42.492 ug/Kg

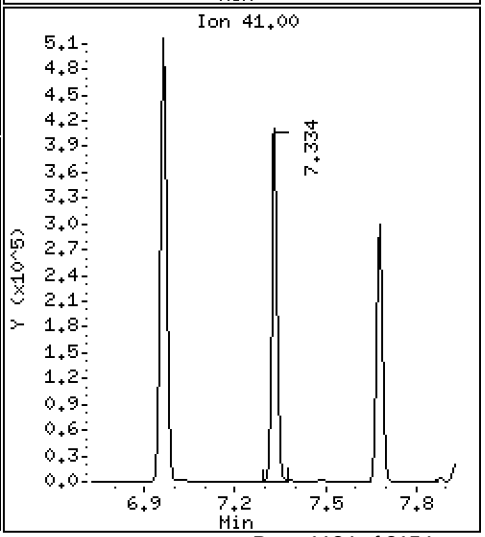


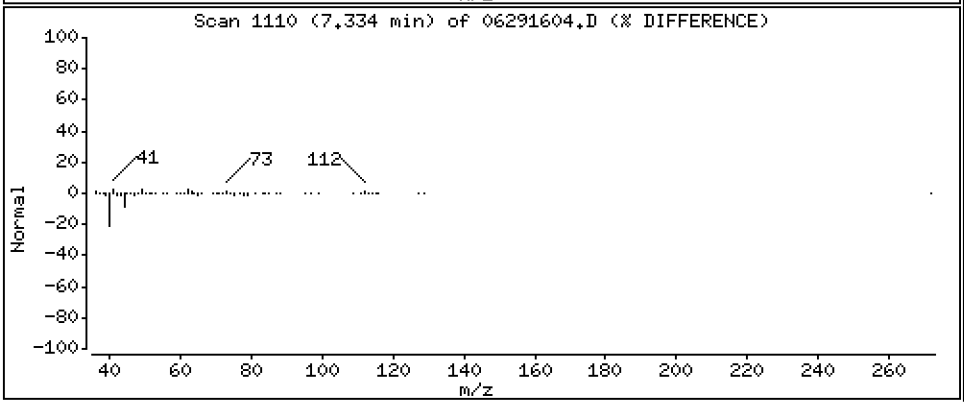












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

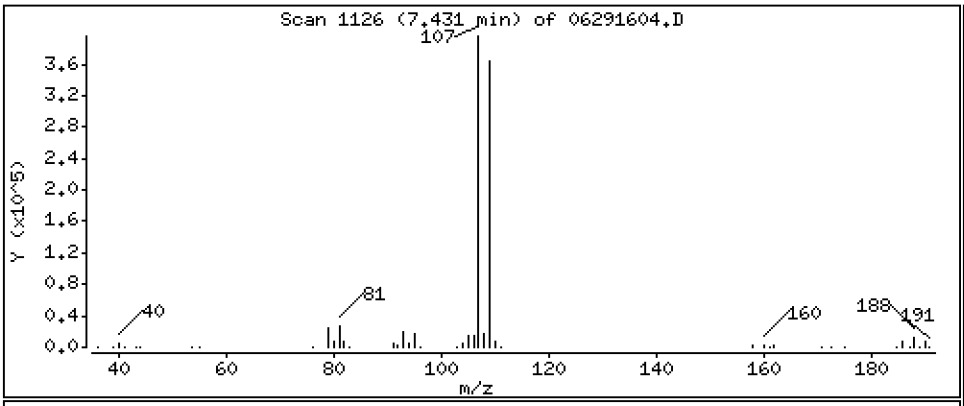
Operator: PB

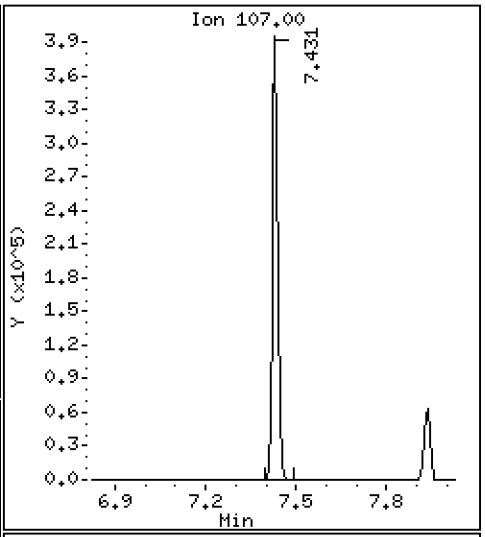
Column phase: RTXVMS

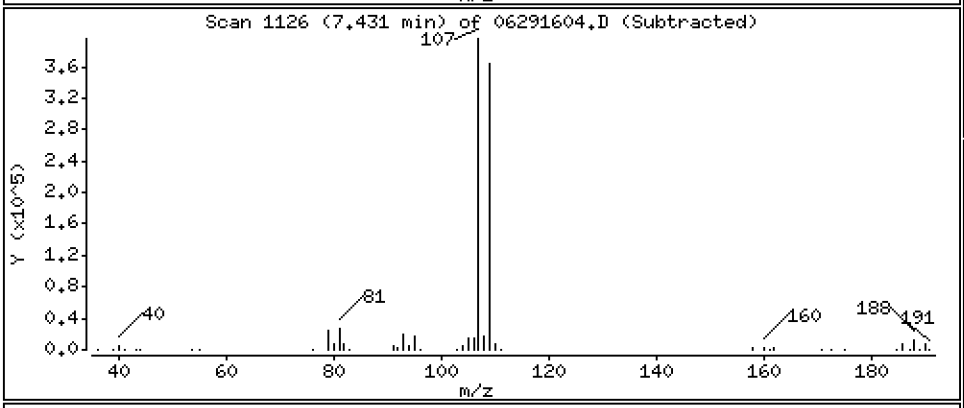
Column diameter: 0.18

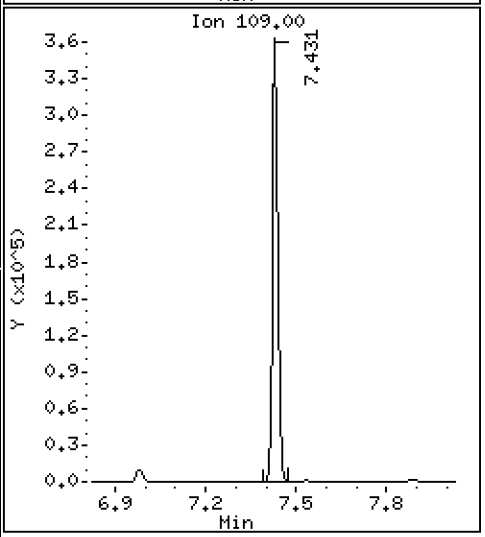
50 1,2-Dibromoethane

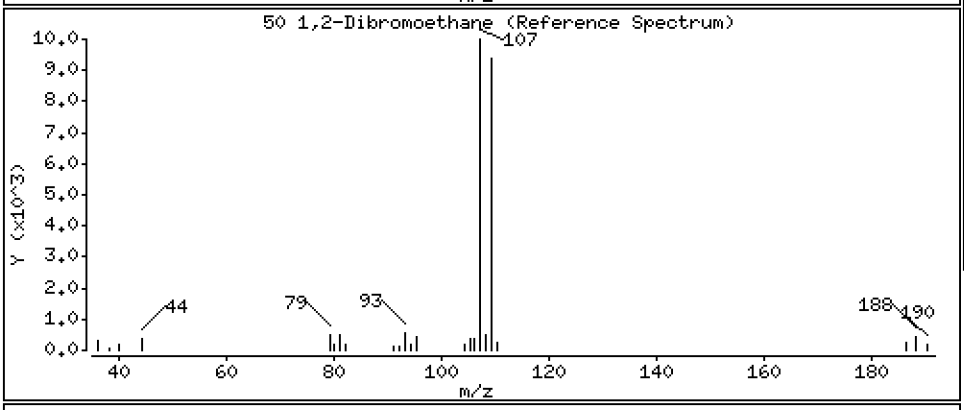
Concentration: 44.335 ug/Kg

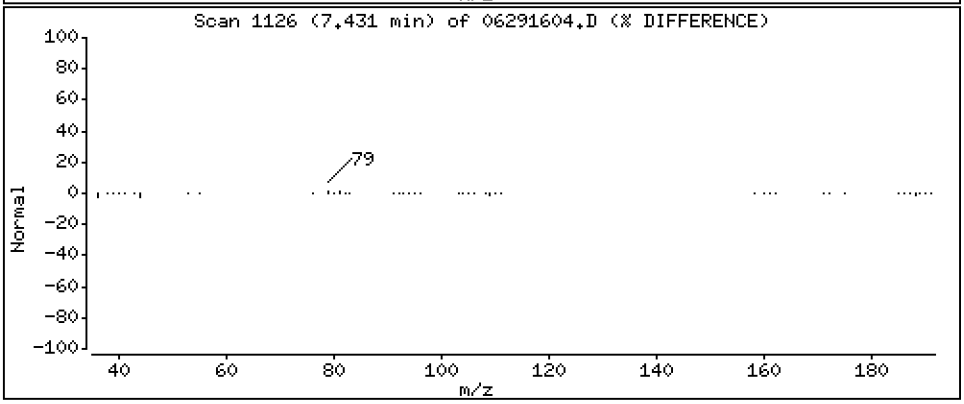












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

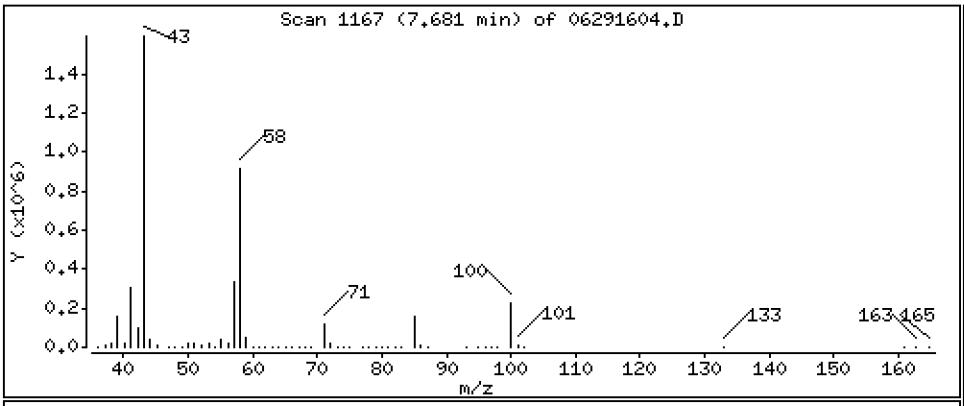
Operator: PB

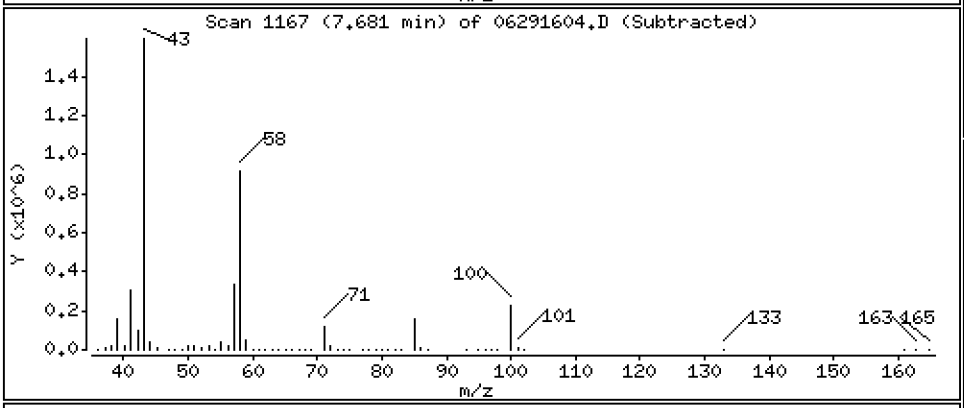
Column phase: RTXVMS

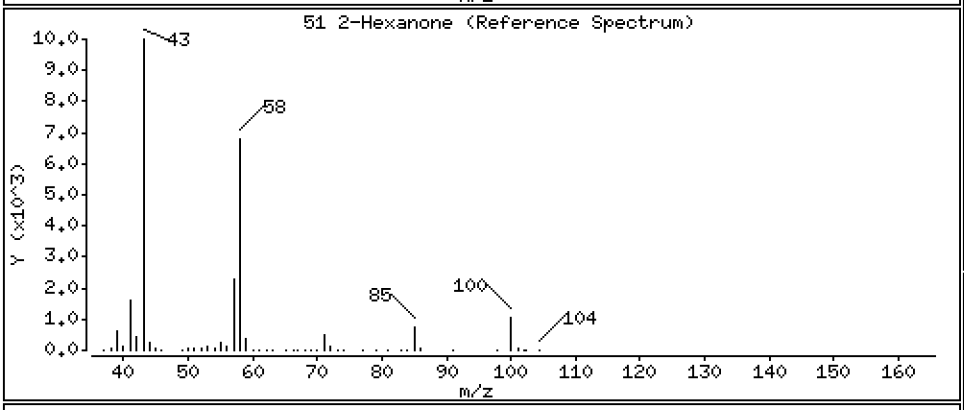
Column diameter: 0.18

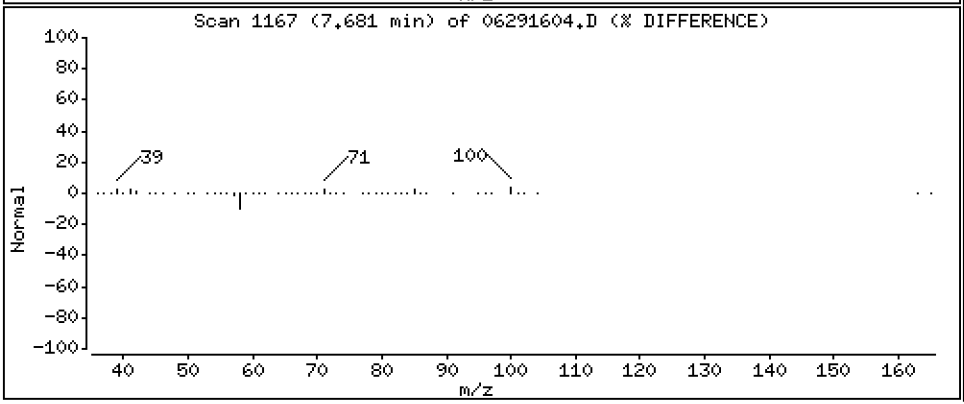
51 2-Hexanone

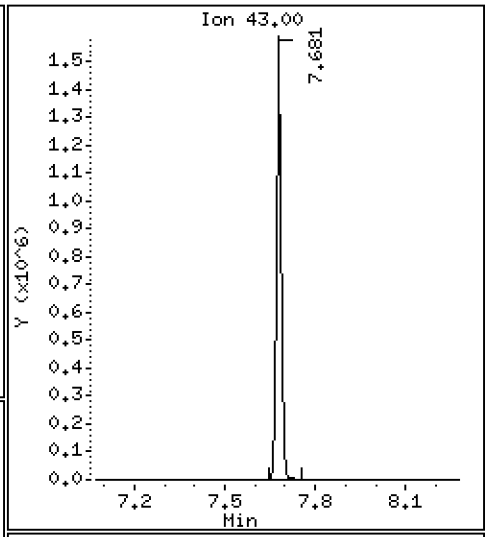
Concentration: 199.99 ug/Kg

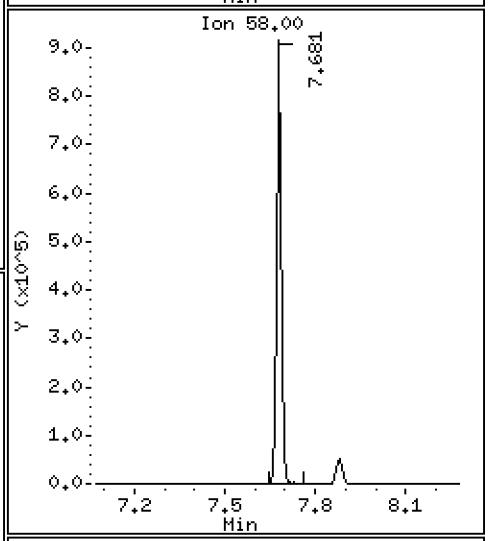


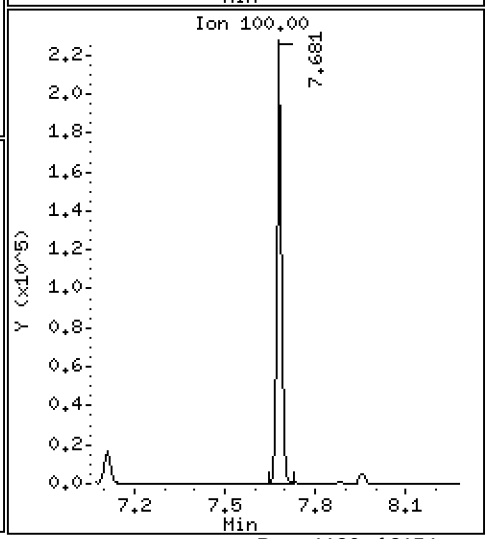












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

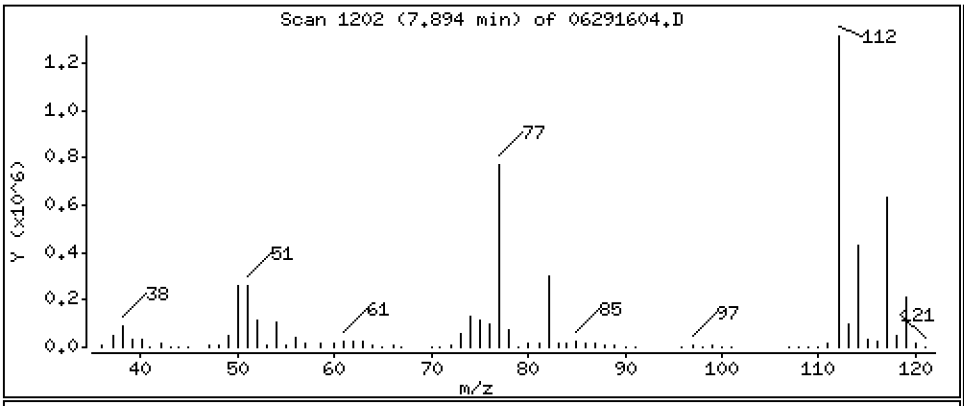
Operator: PB

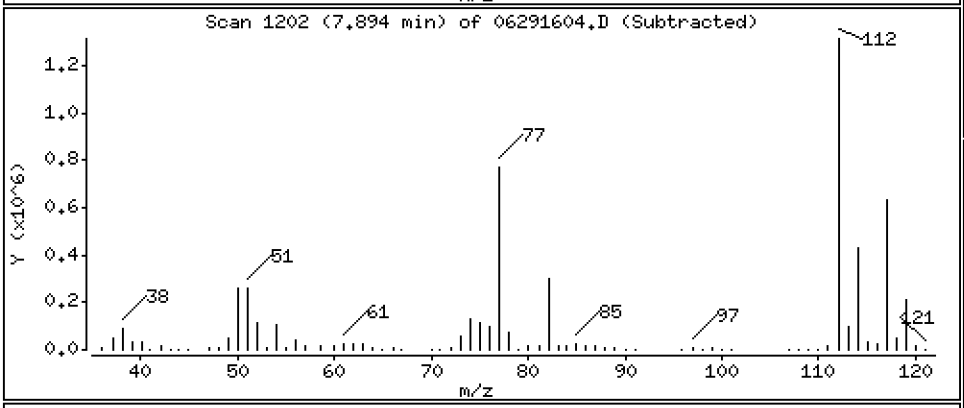
Column phase: RTXVMS

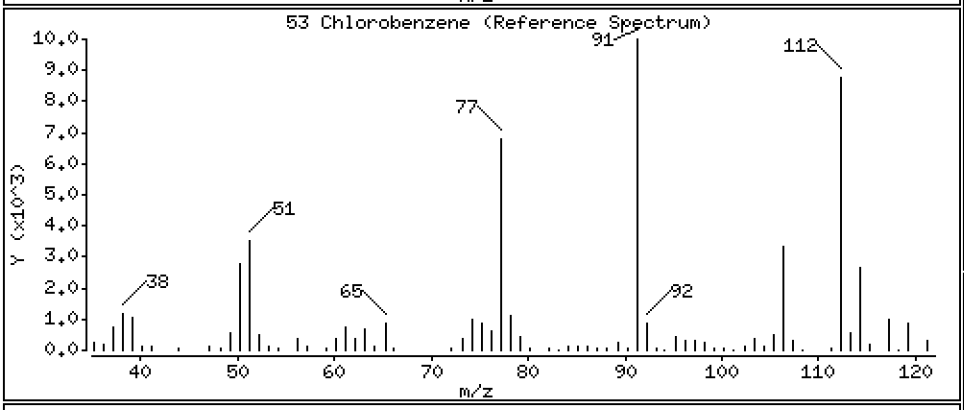
Column diameter: 0.18

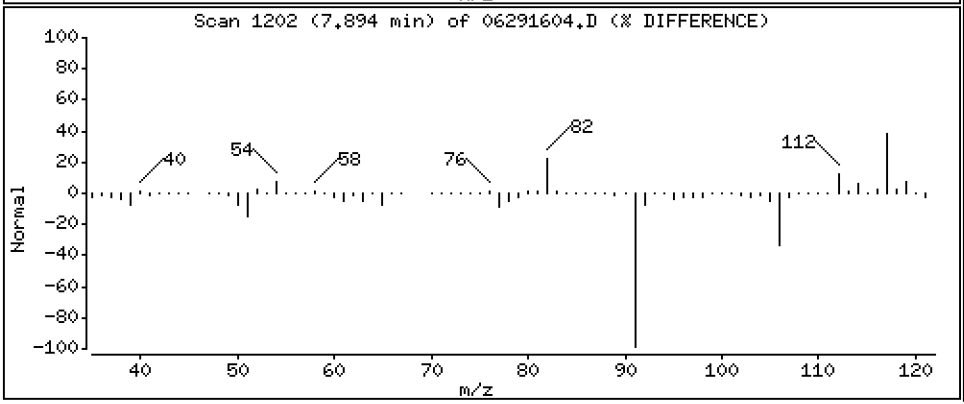
53 Chlorobenzene

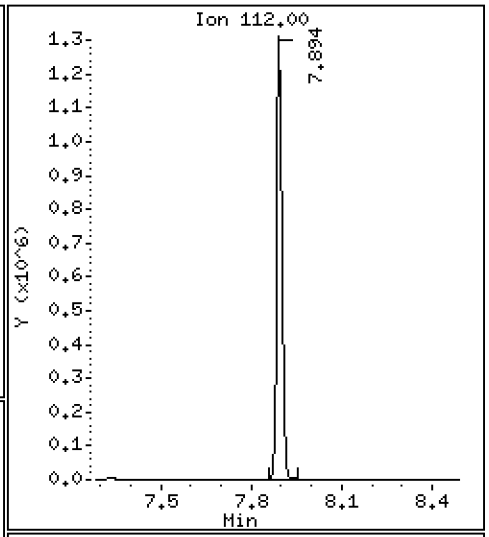
Concentration: 41.987 ug/Kg

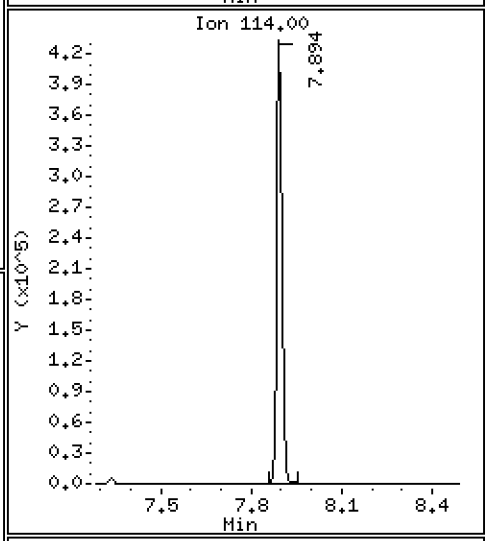


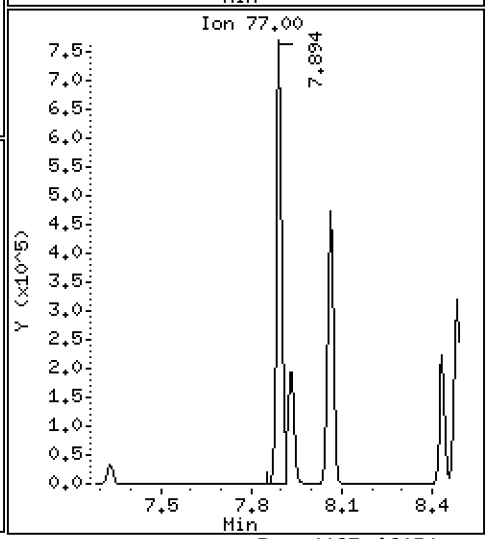












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

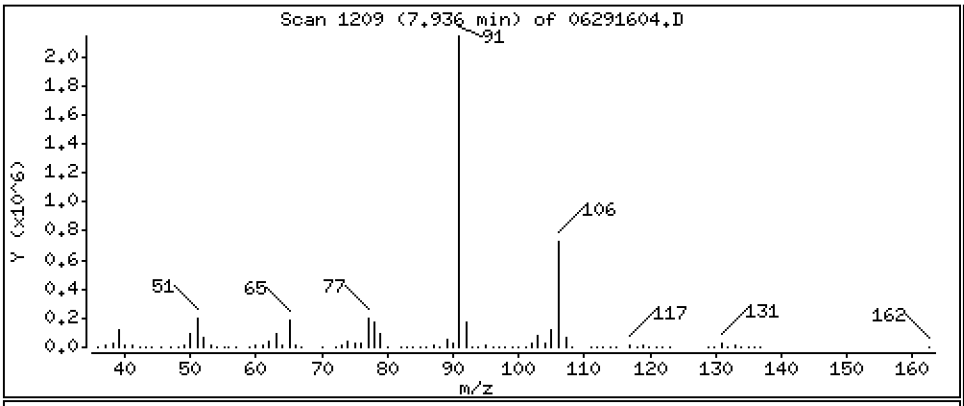
Operator: PB

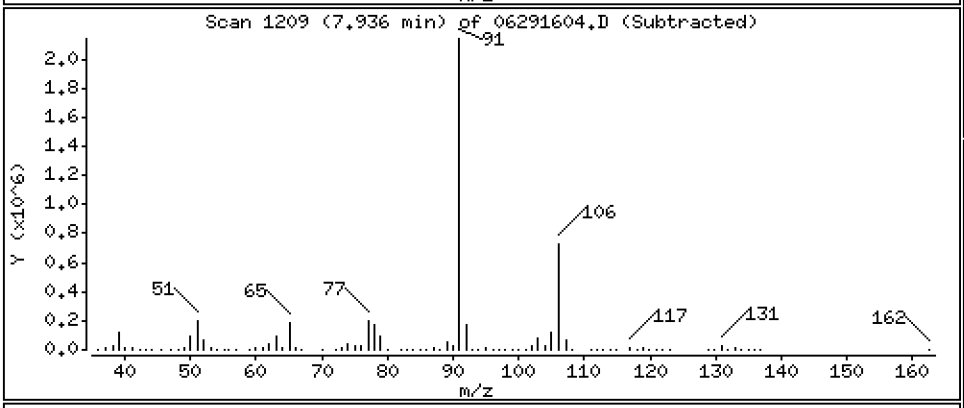
Column phase: RTXVMS

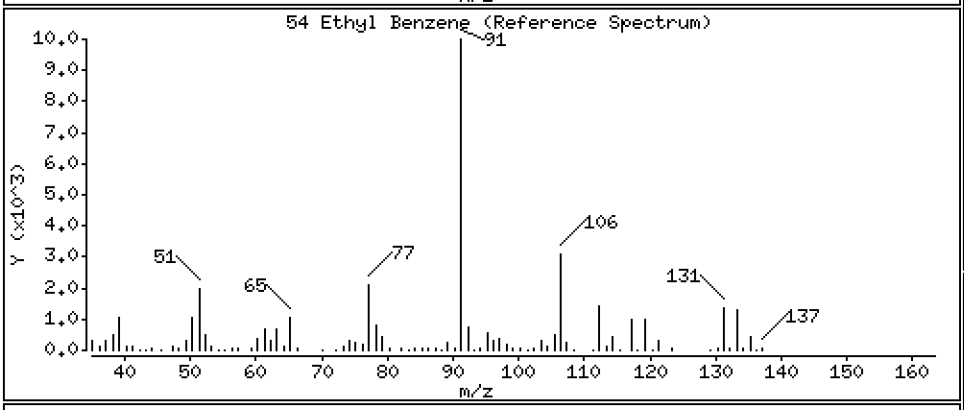
Column diameter: 0.18

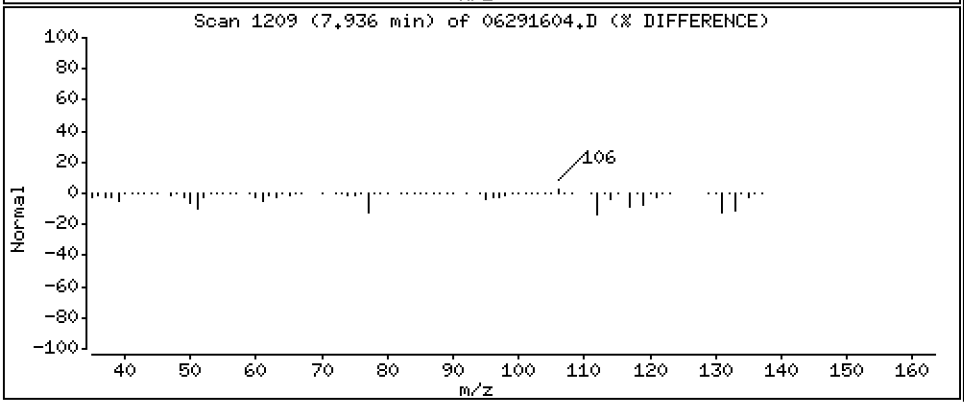
54 Ethyl Benzene

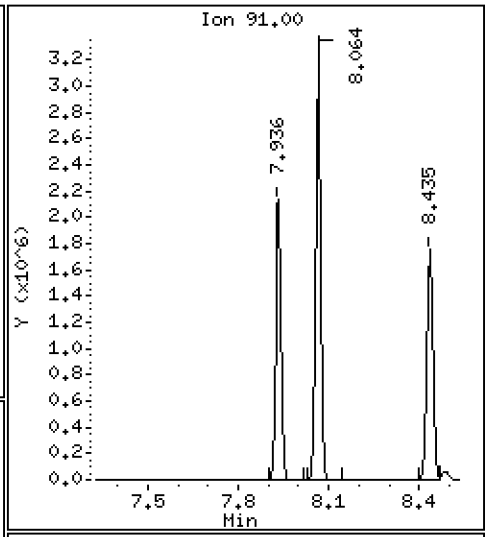
Concentration: 42.106 ug/Kg

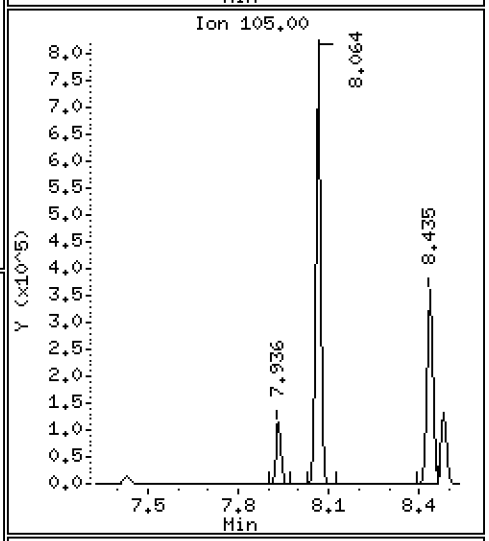


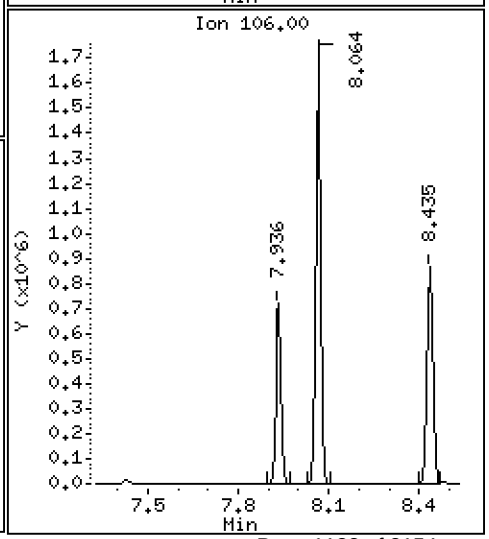












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

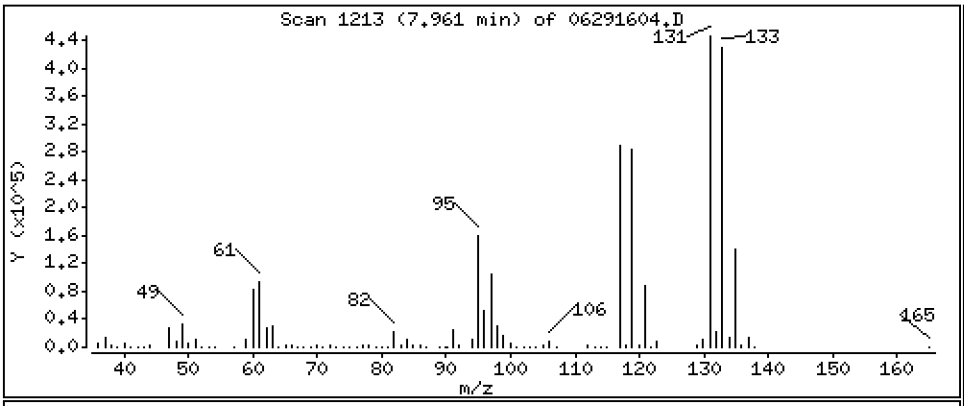
Operator: PB

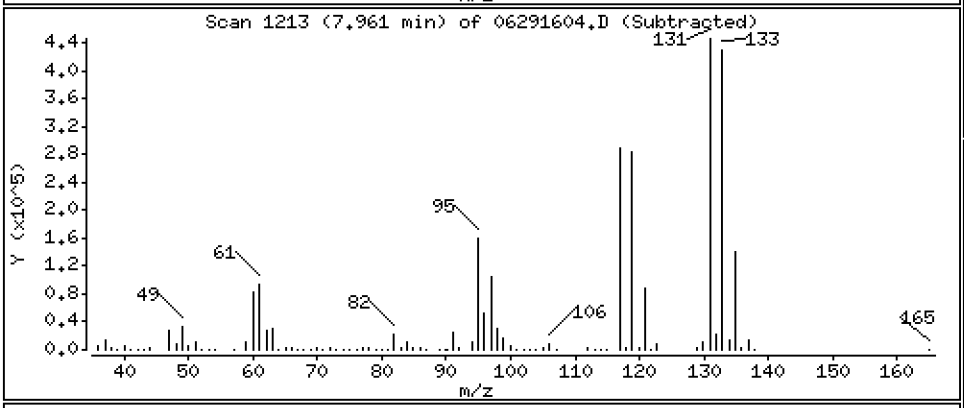
Column phase: RTXVMS

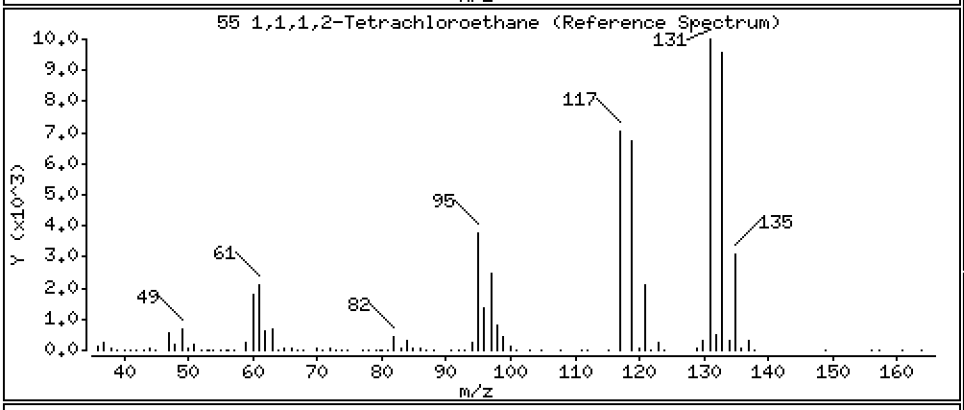
Column diameter: 0.18

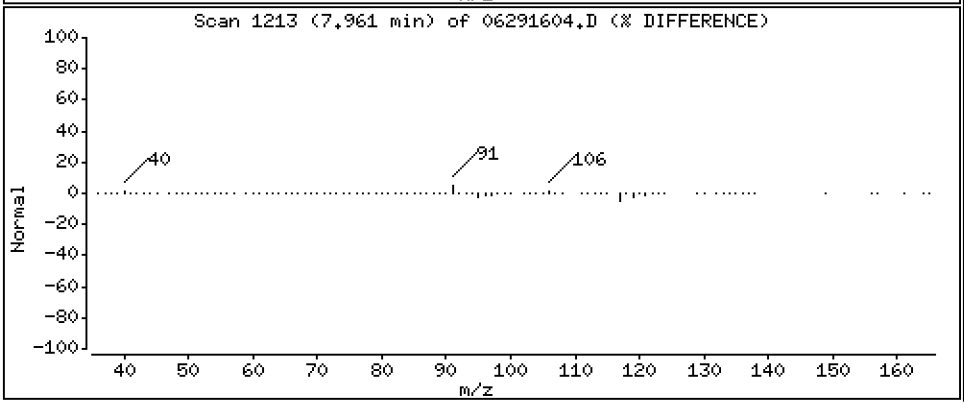
55 1,1,1,2-Tetrachloroethane

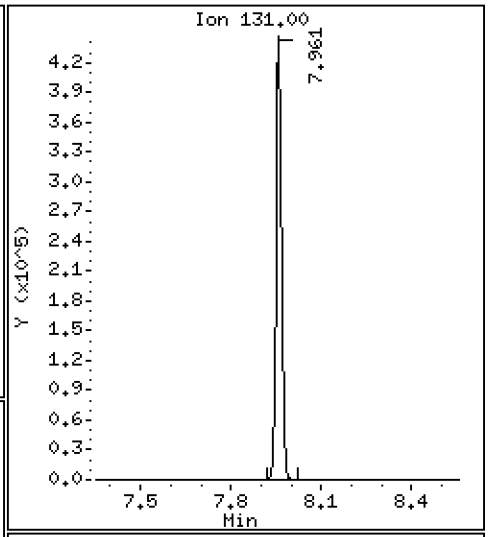
Concentration: 42.700 ug/Kg

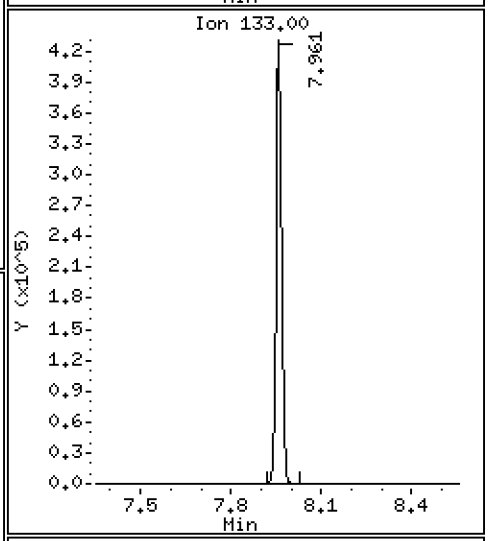


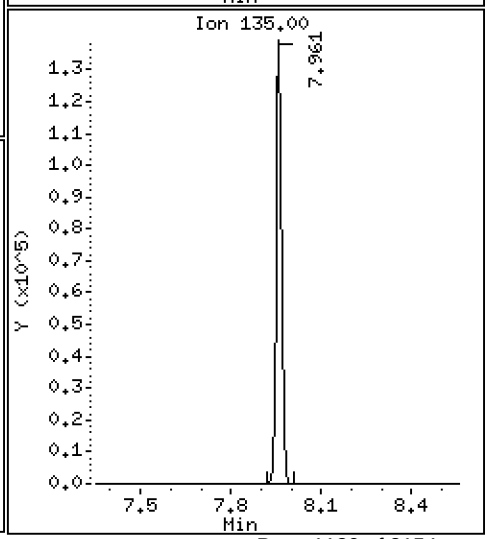












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

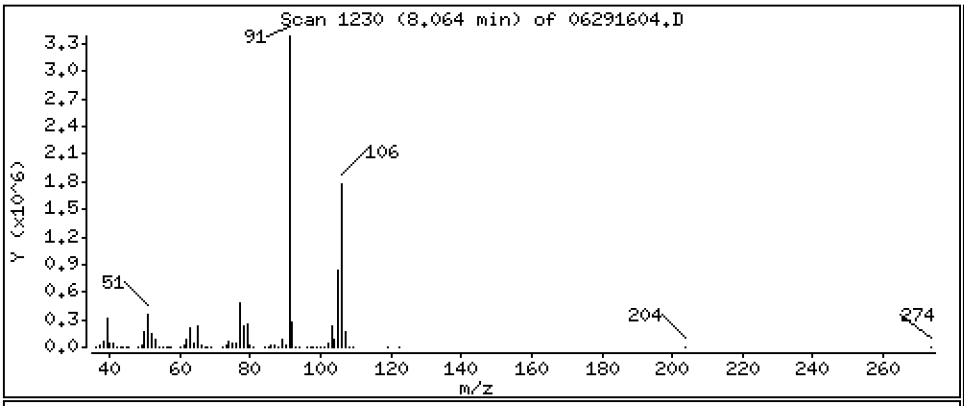
Operator: PB

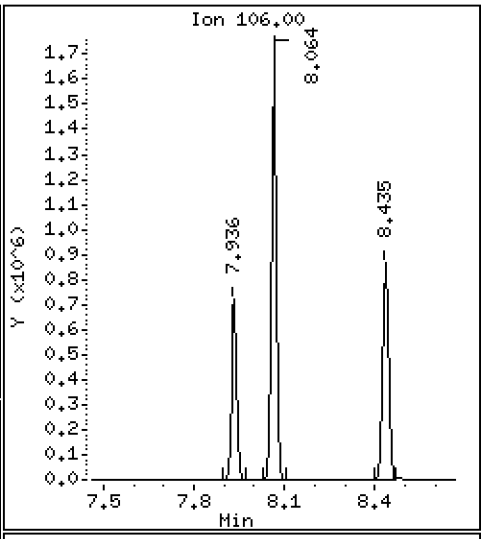
Column phase: RTXVMS

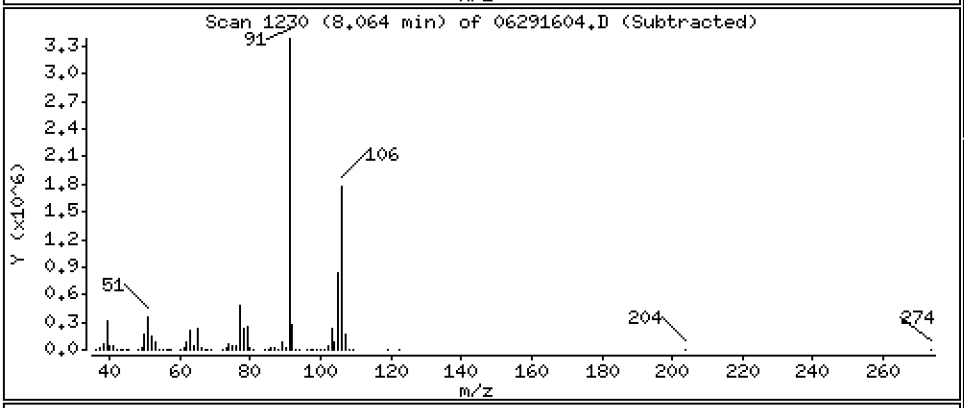
Column diameter: 0.18

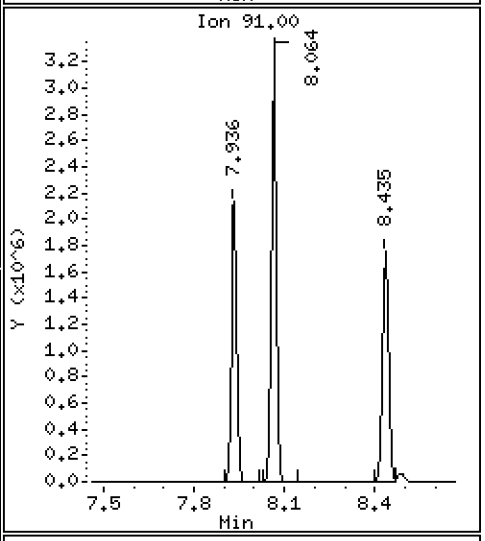
56 m,p-xylene

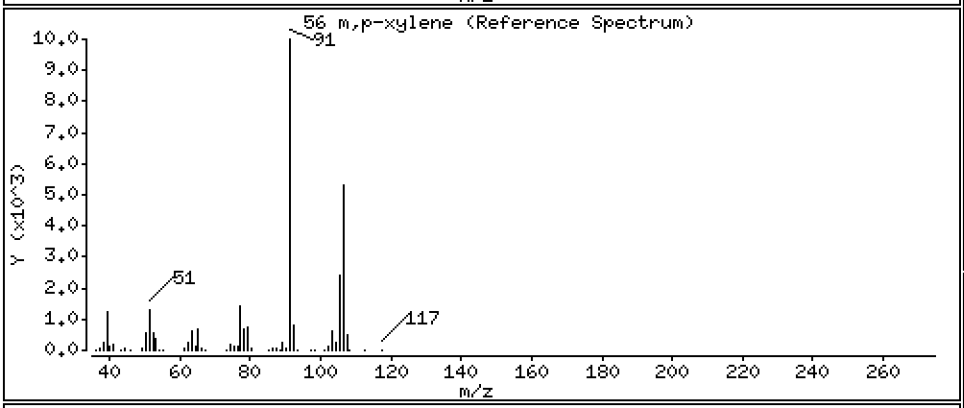
Concentration: 84.892 ug/Kg

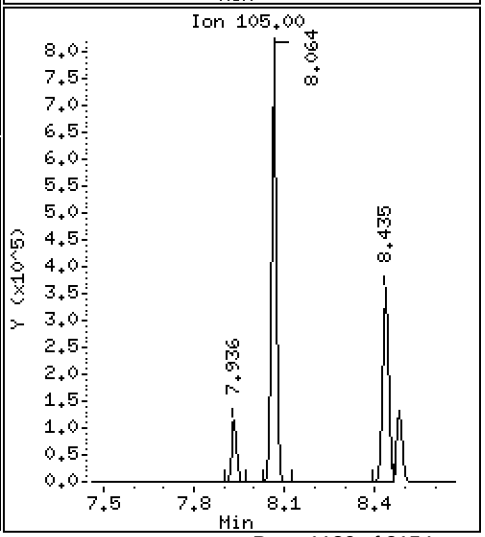


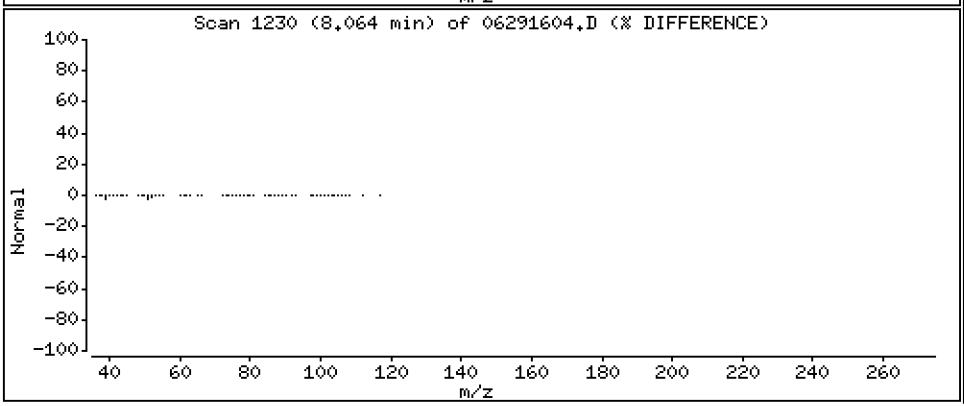












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

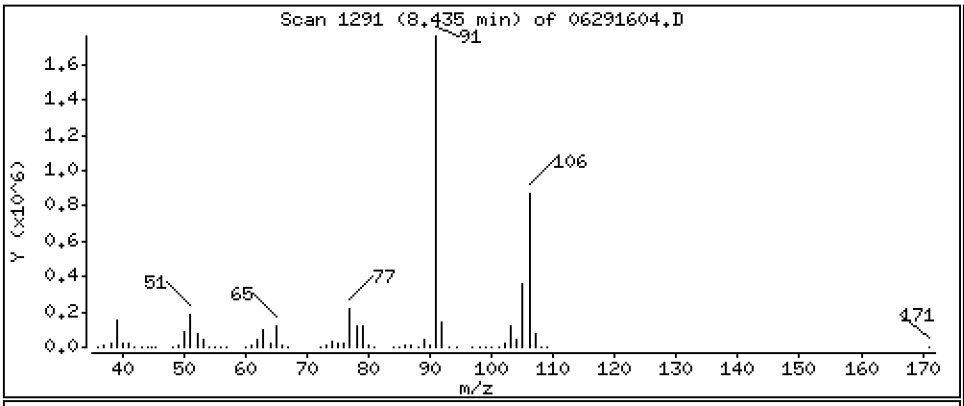
Operator: PB

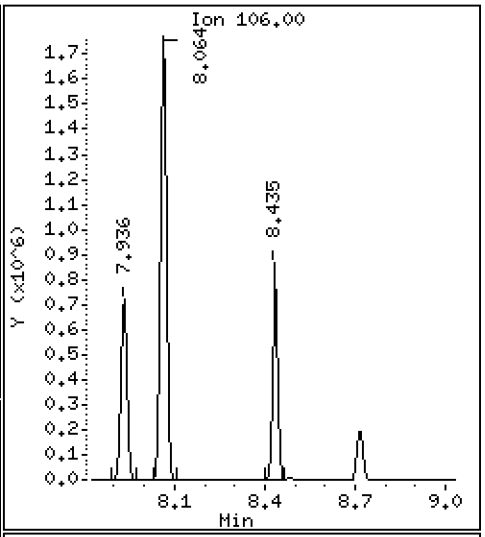
Column phase: RTXVMS

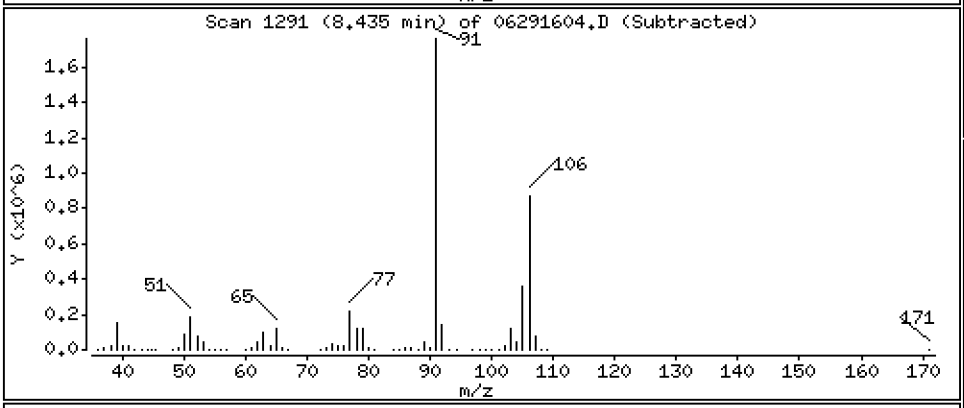
Column diameter: 0.18

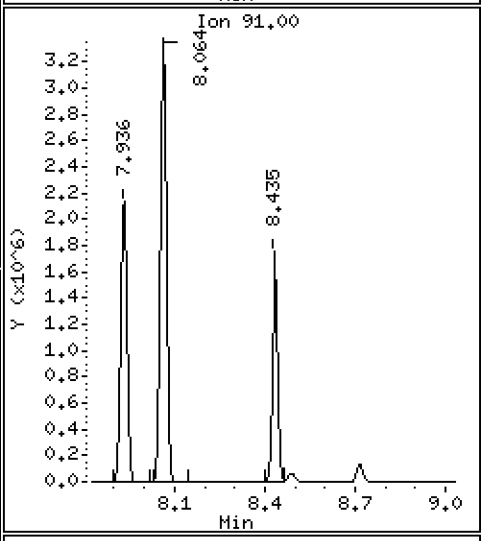
57 o-Xylene

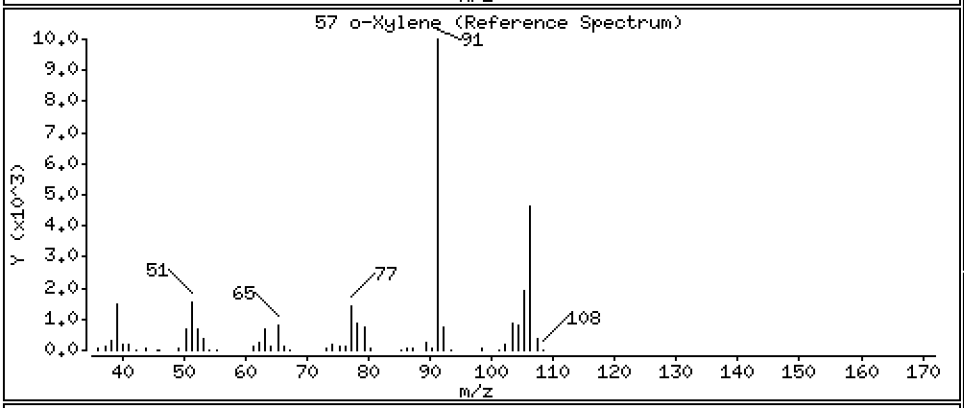
Concentration: 42.150 ug/Kg

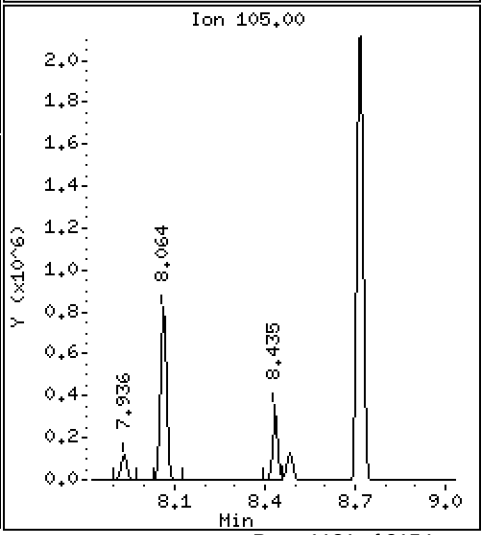


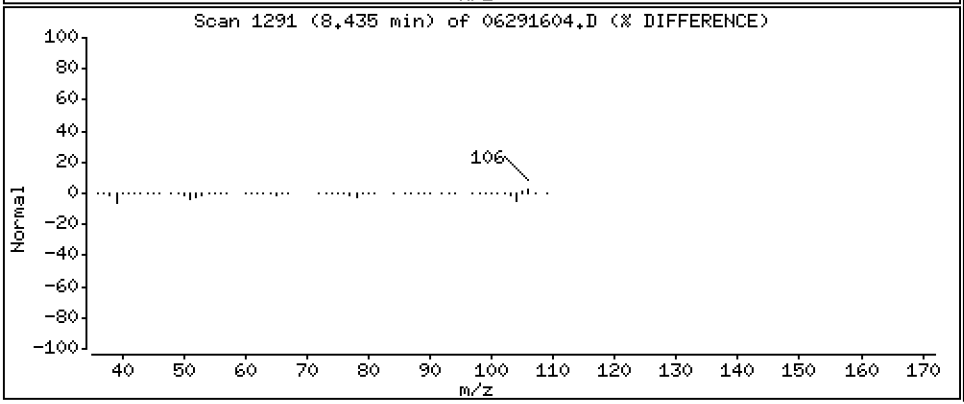












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

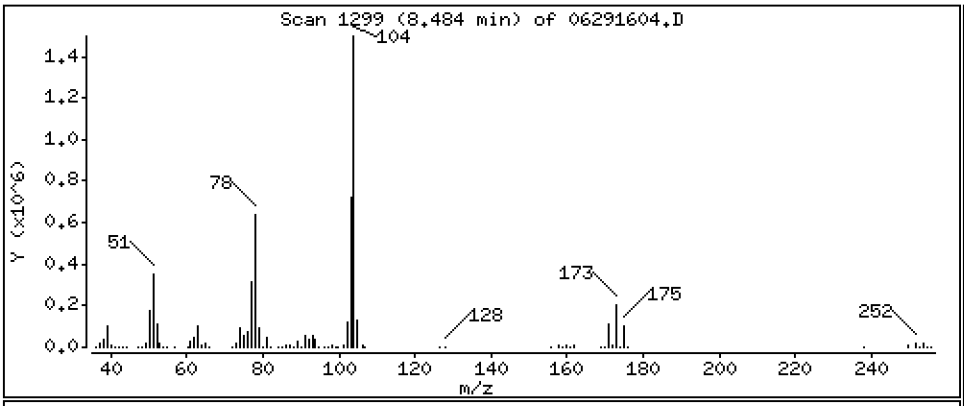
Operator: PB

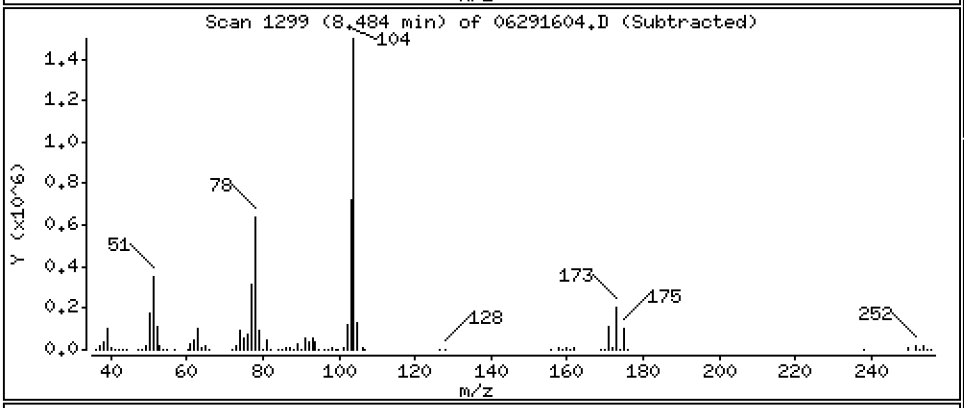
Column phase: RTXVMS

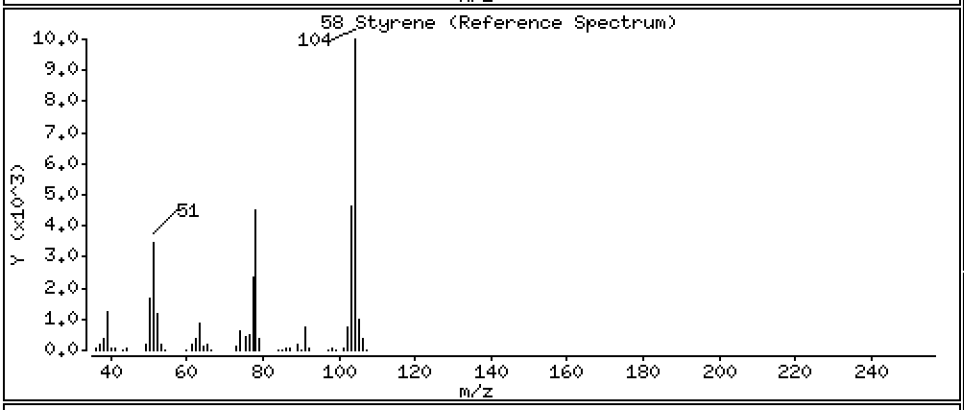
Column diameter: 0.18

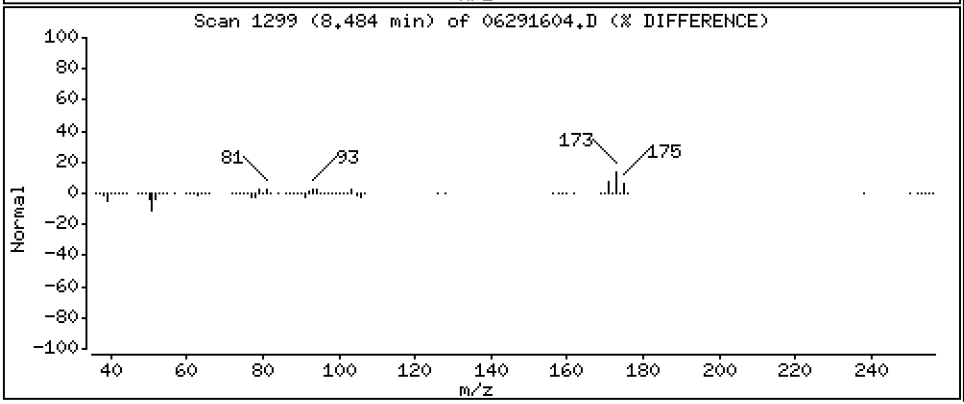
58 Styrene

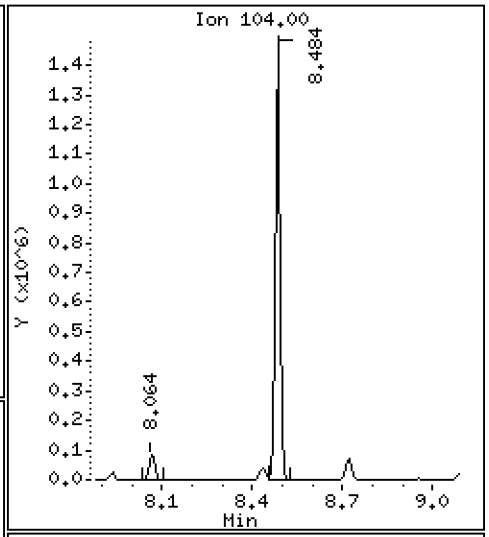
Concentration: 42.971 ug/Kg

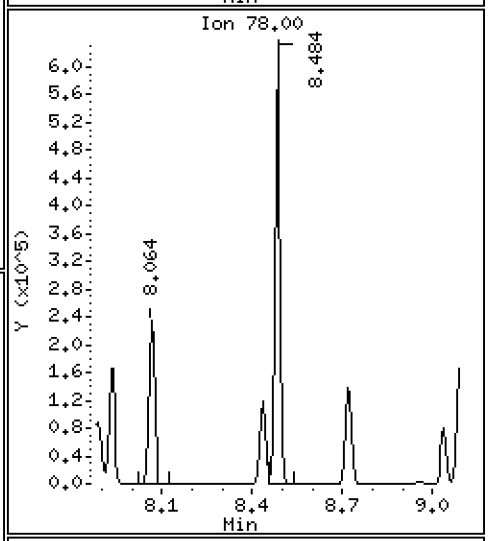


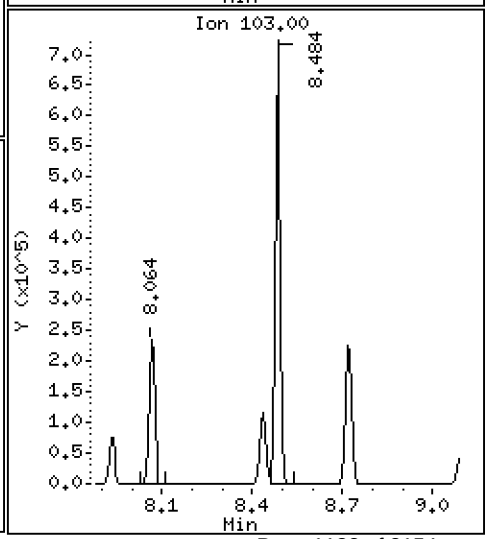












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

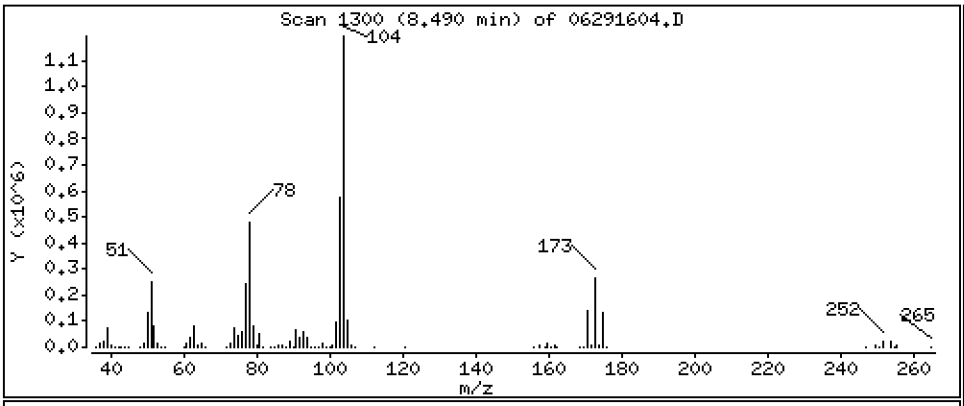
Operator: PB

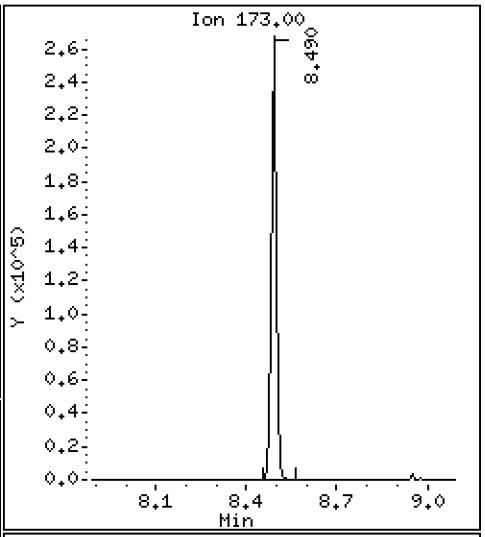
Column phase: RTXVMS

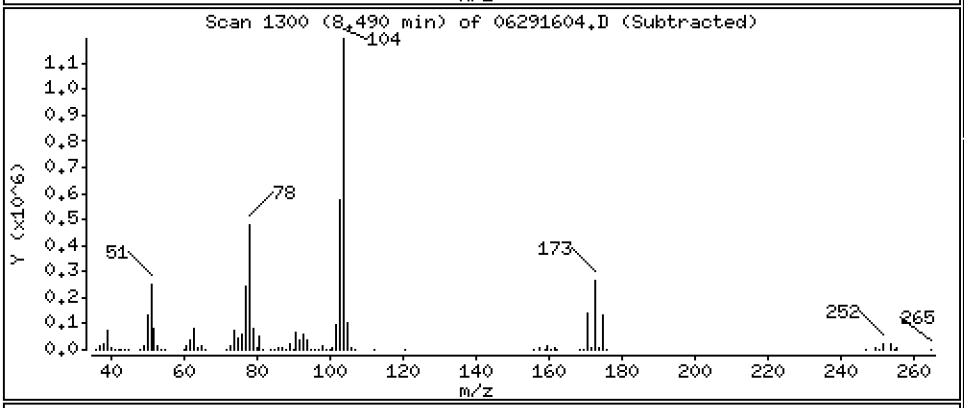
Column diameter: 0.18

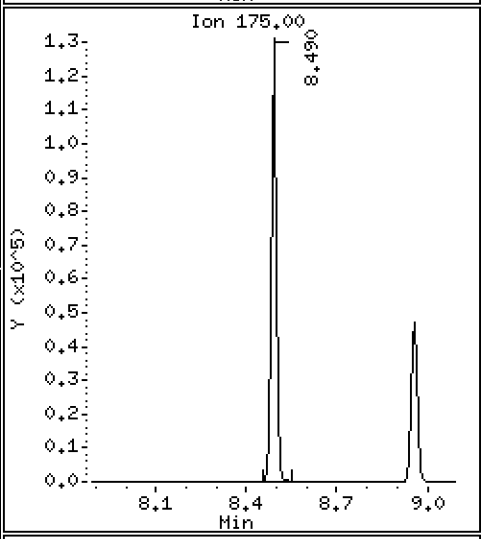
59 Bromoform

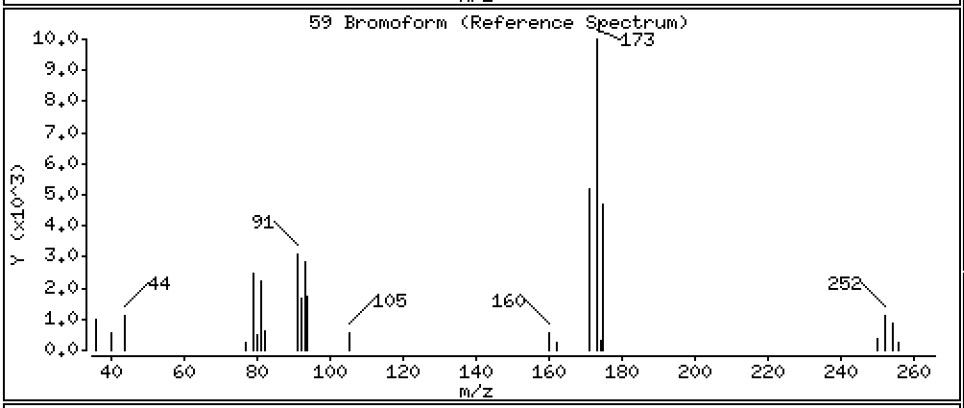
Concentration: 45.023 ug/Kg

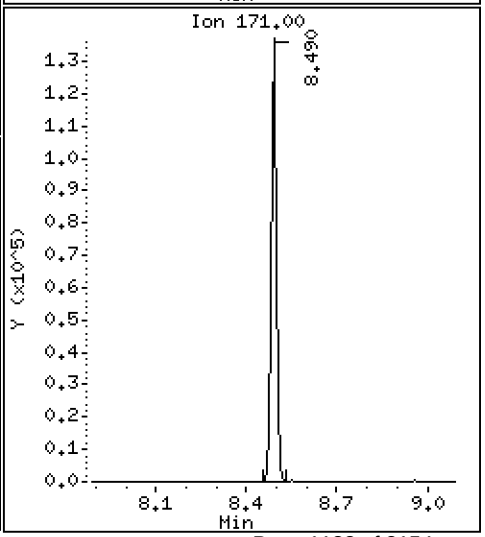


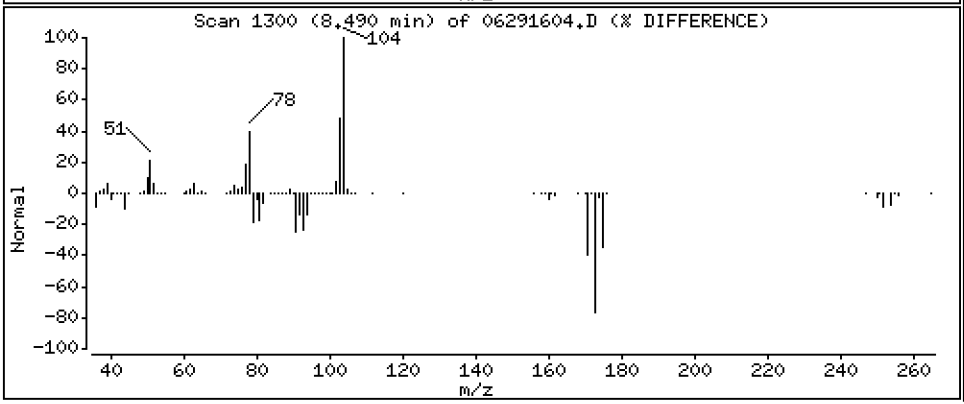












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

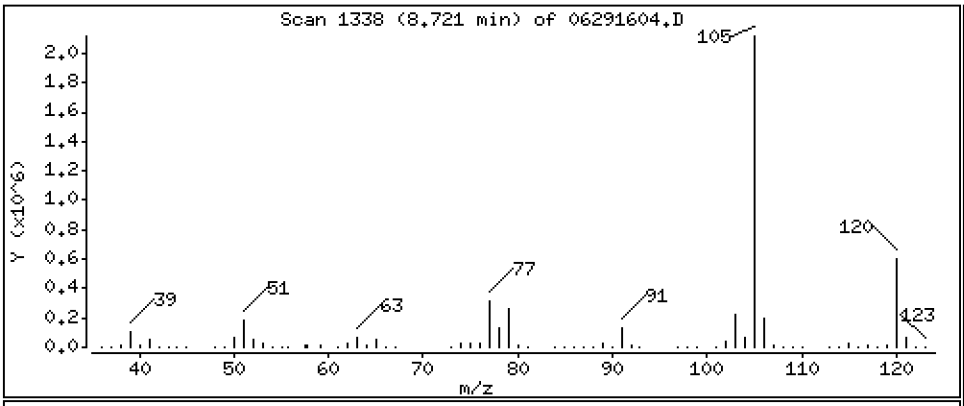
Operator: PB

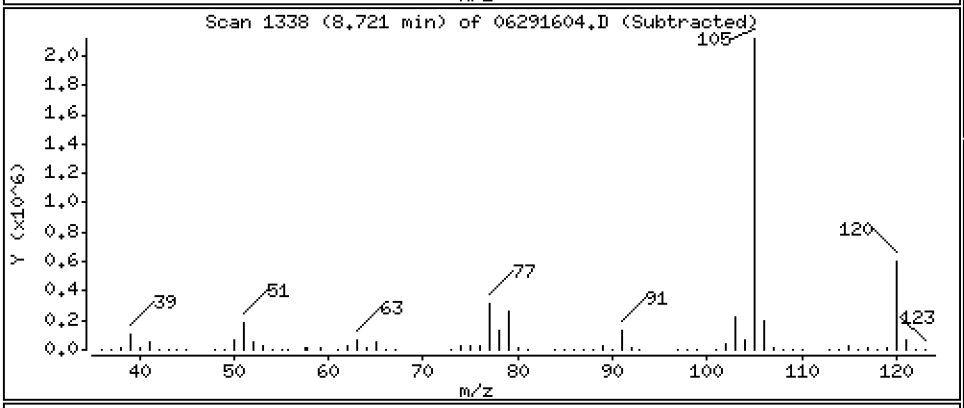
Column phase: RTXVMS

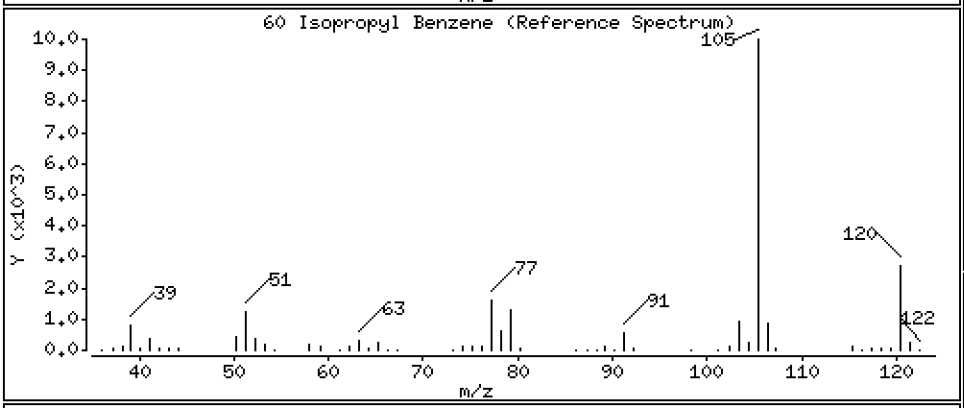
Column diameter: 0.18

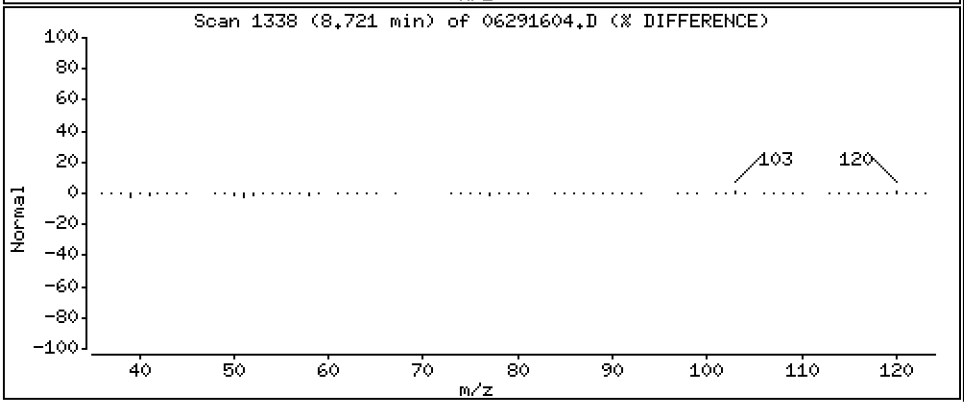
60 Isopropyl Benzene

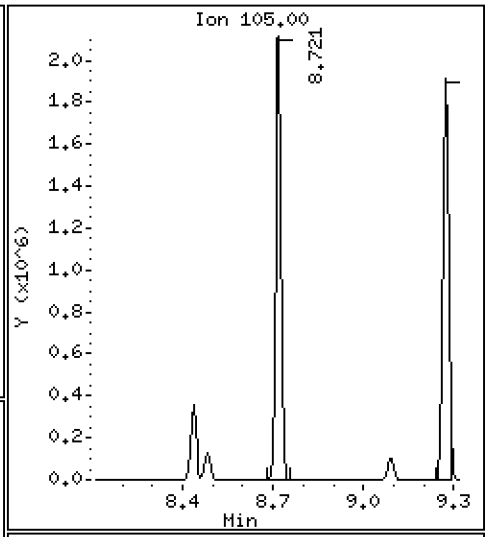
Concentration: 42.074 ug/Kg

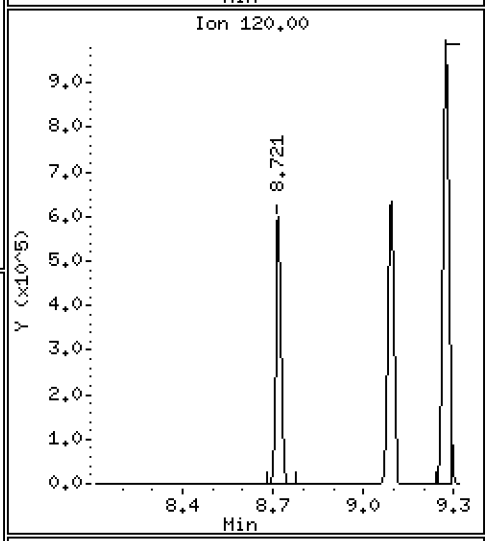


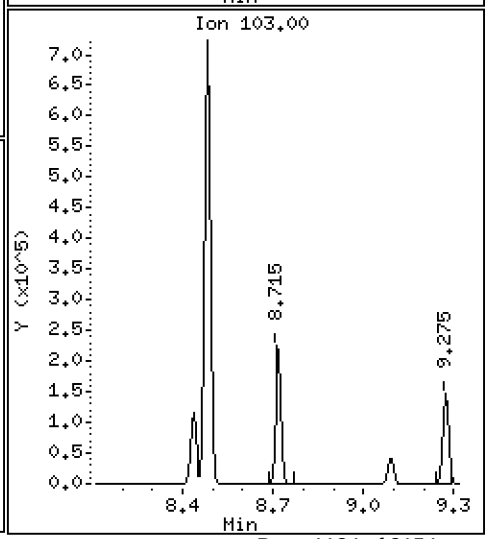












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

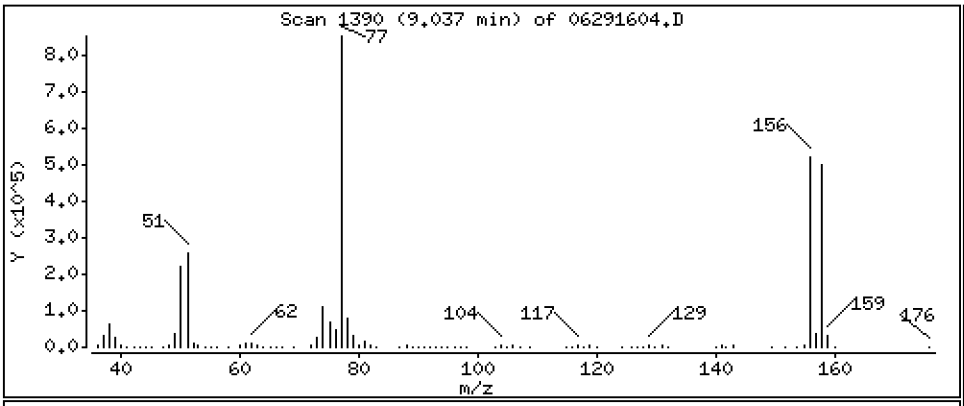
Operator: PB

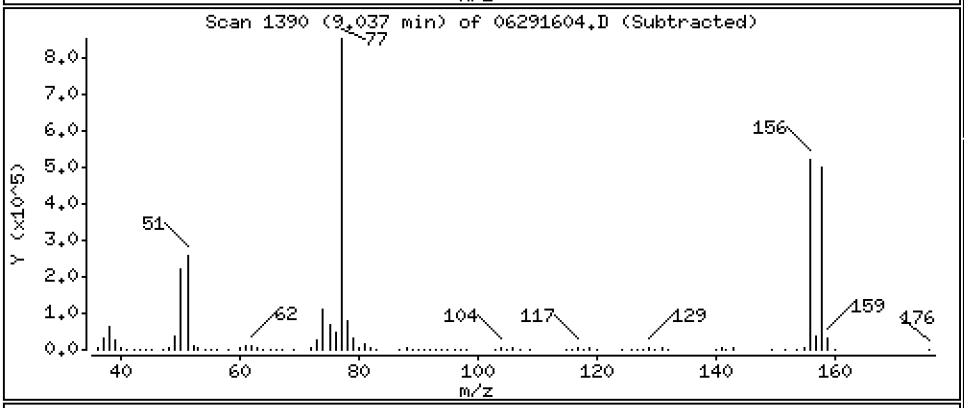
Column phase: RTXVMS

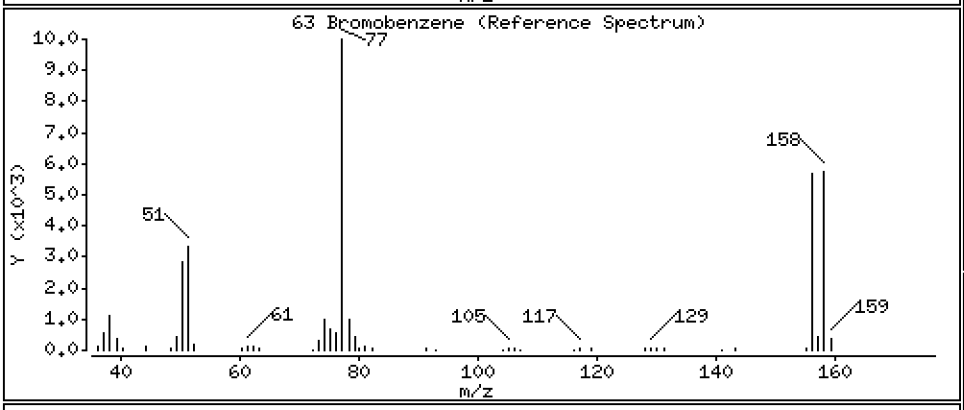
Column diameter: 0.18

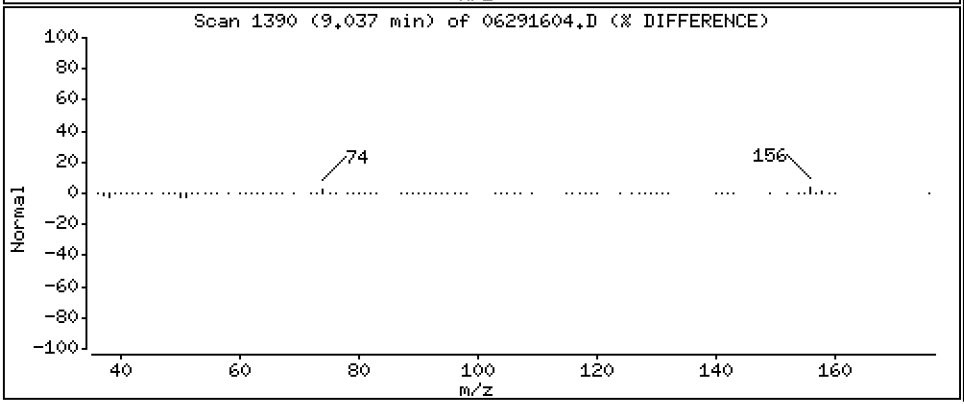
63 Bromobenzene

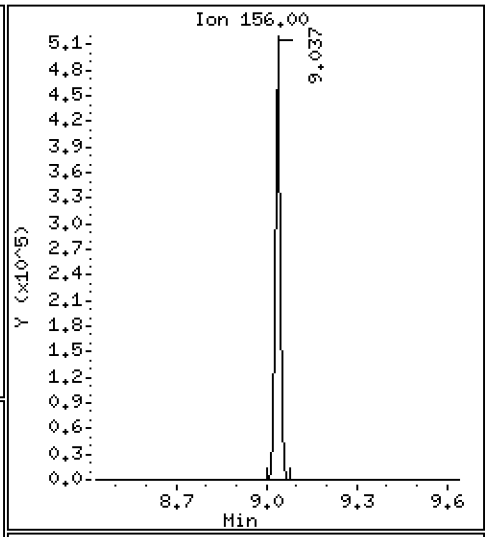
Concentration: 42.846 ug/Kg

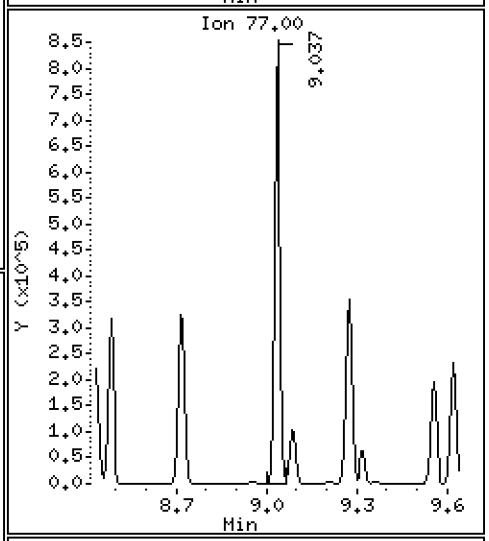


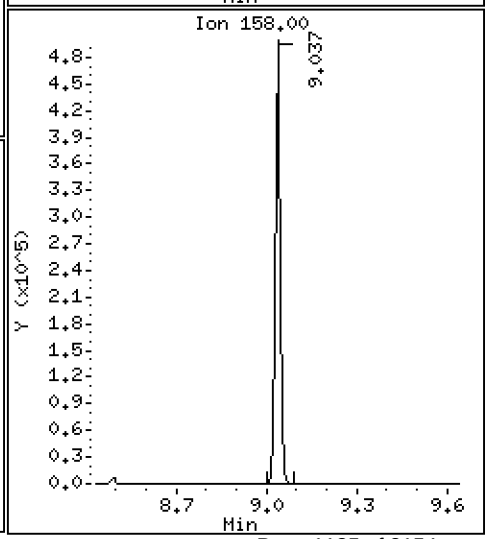












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

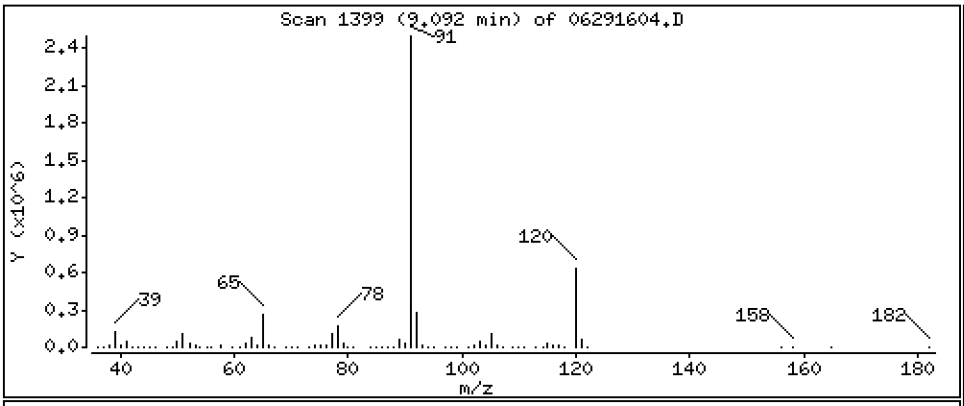
Operator: PB

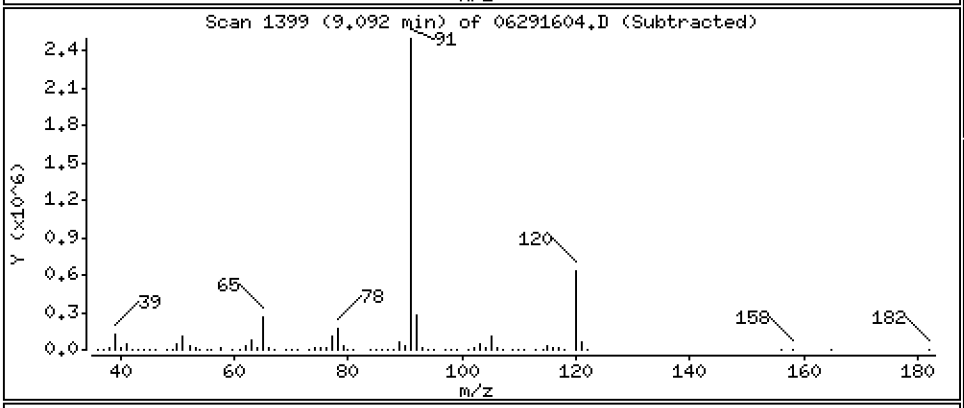
Column phase: RTXVMS

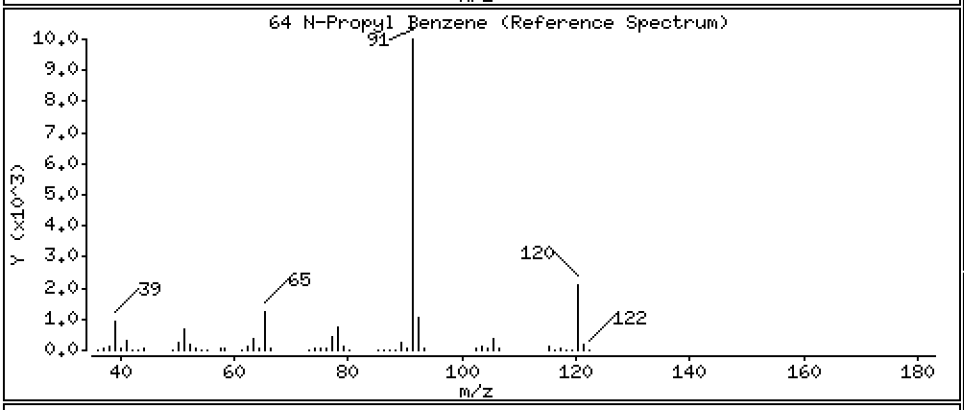
Column diameter: 0.18

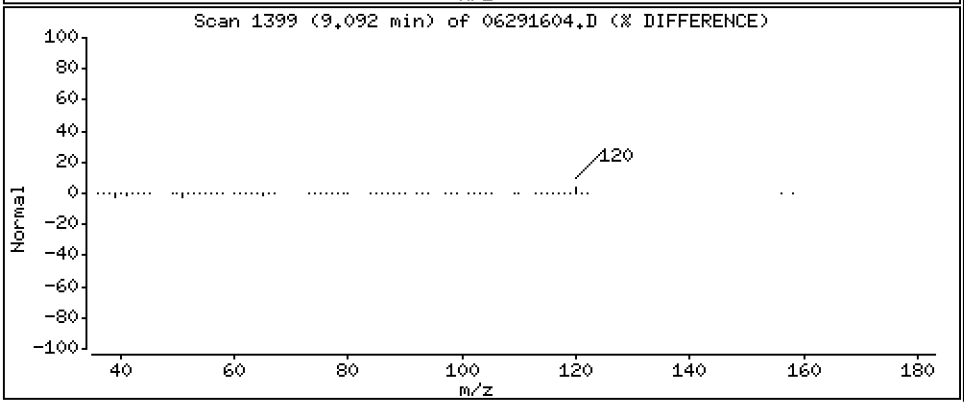
64 N-Propyl Benzene

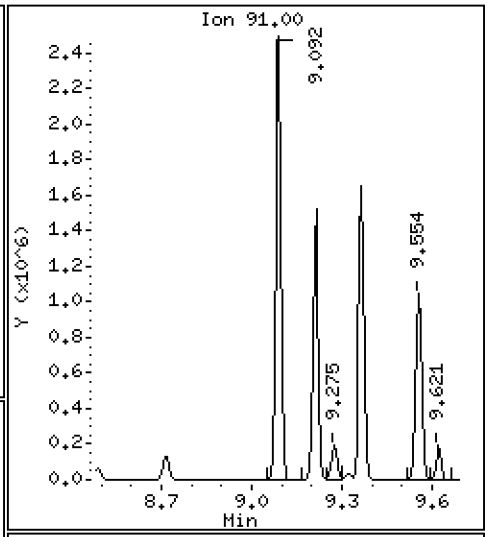
Concentration: 40.662 ug/Kg

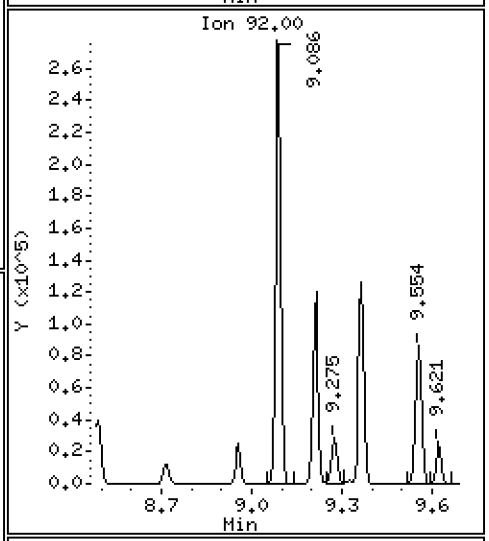


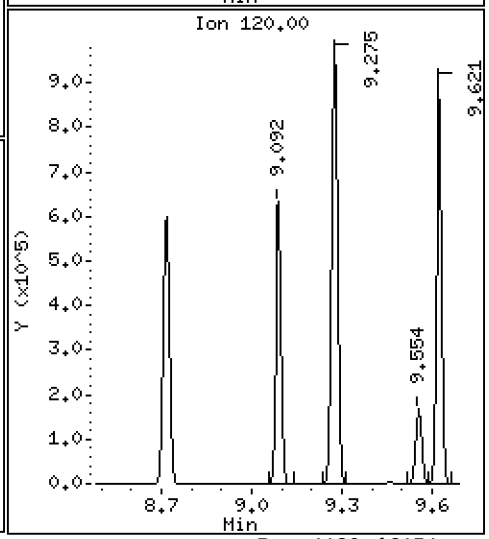












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

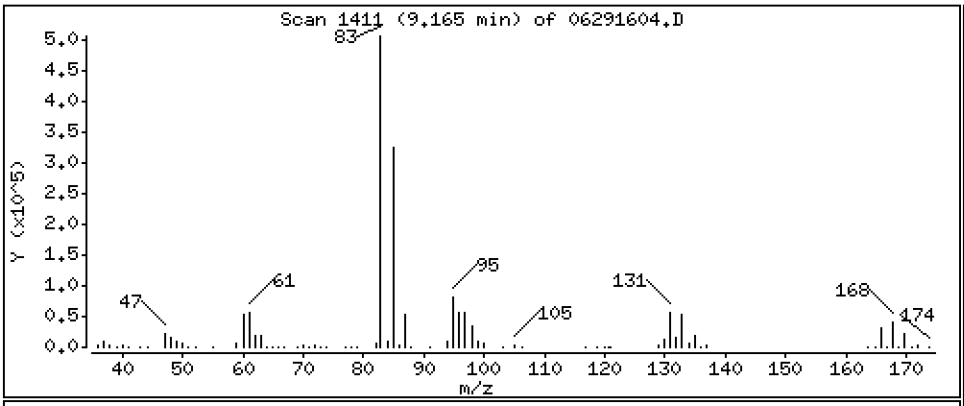
Operator: PB

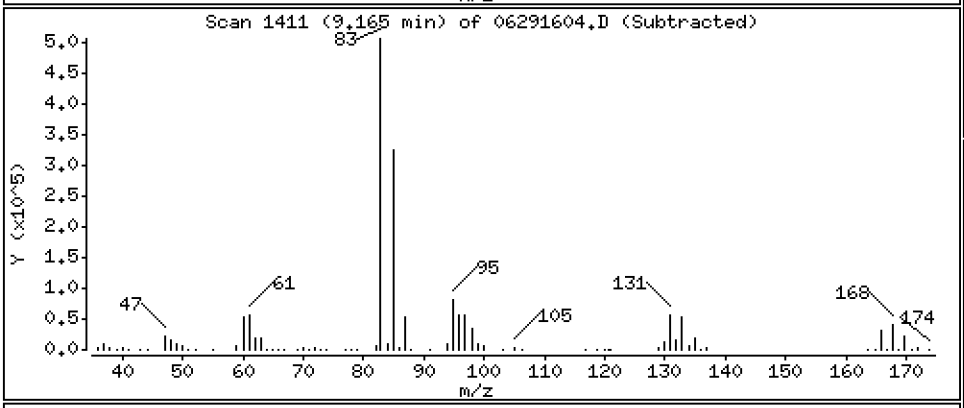
Column phase: RTXVMS

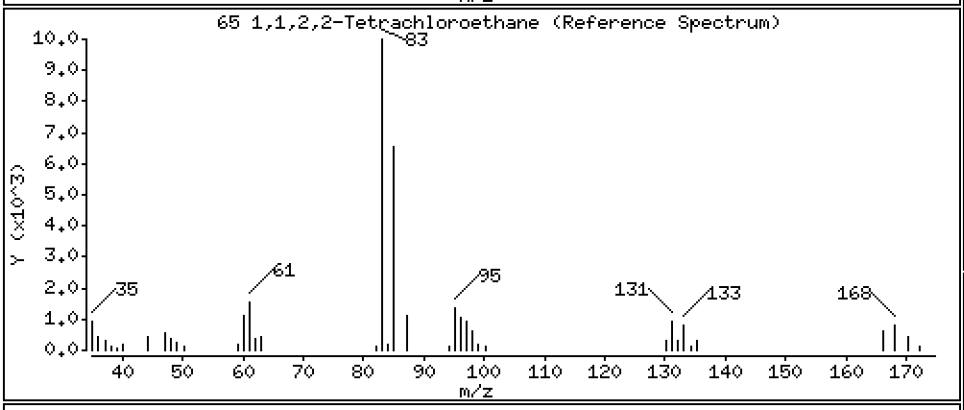
Column diameter: 0.18

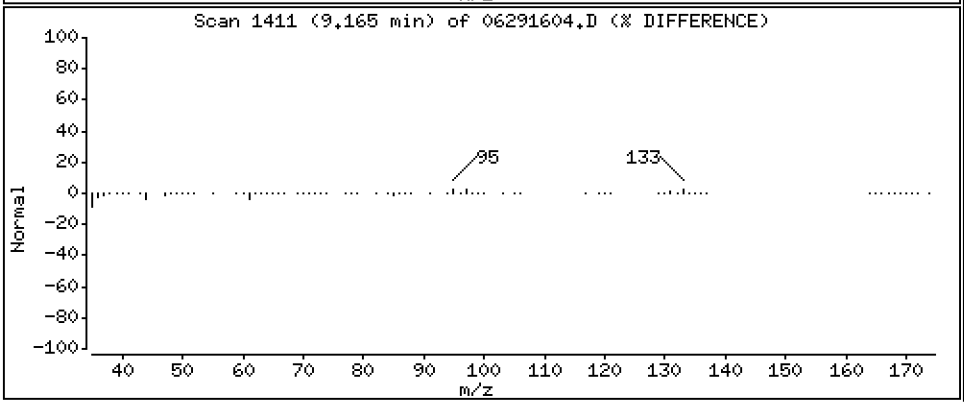
65 1,1,2,2-Tetrachloroethane

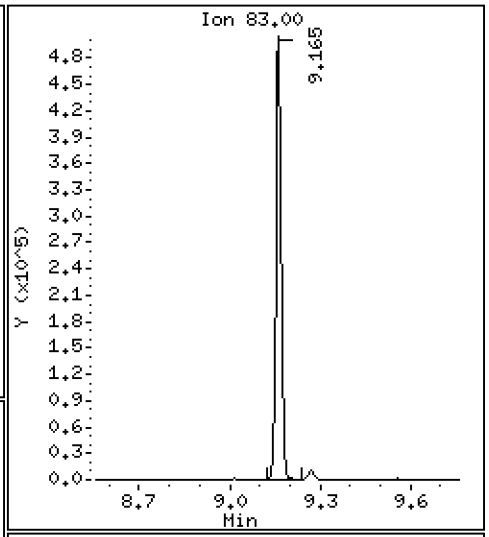
Concentration: 41.710 ug/Kg

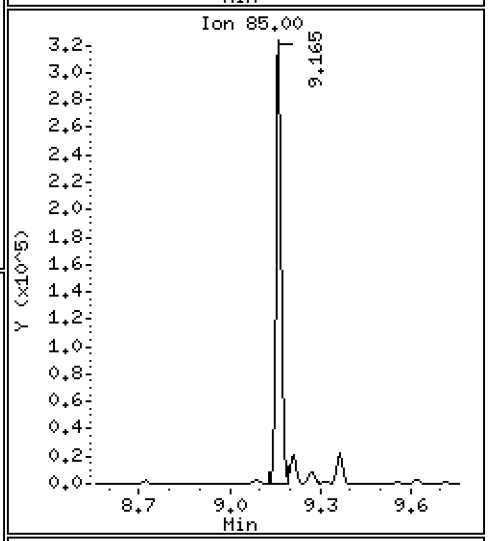


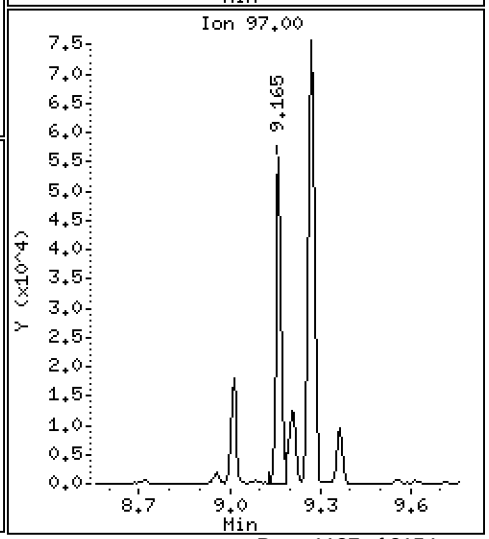












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

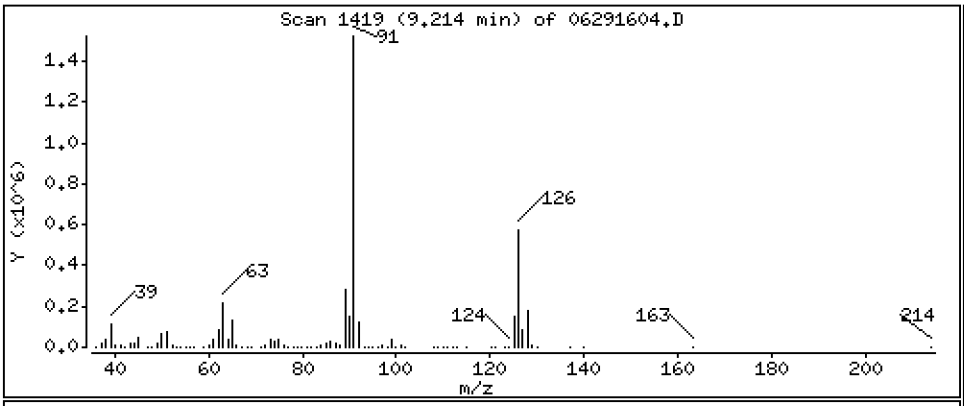
Operator: PB

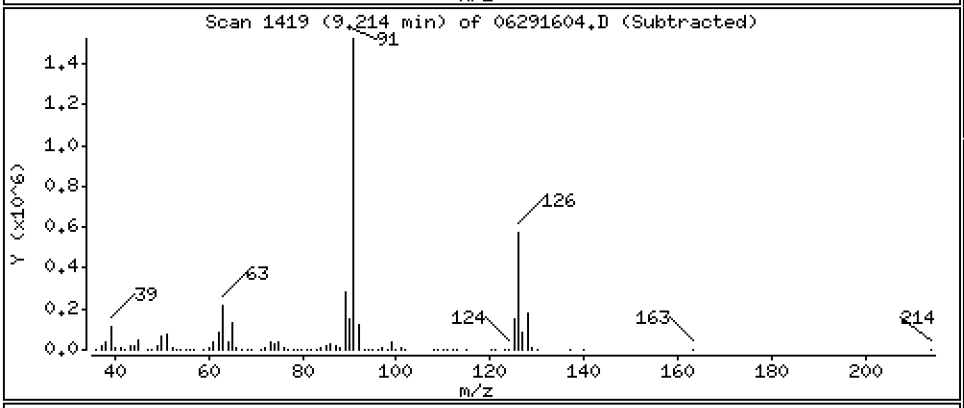
Column phase: RTXVMS

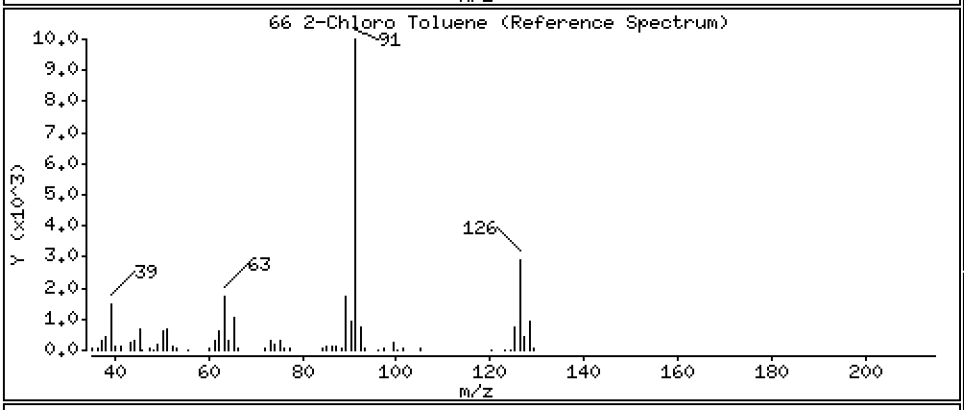
Column diameter: 0.18

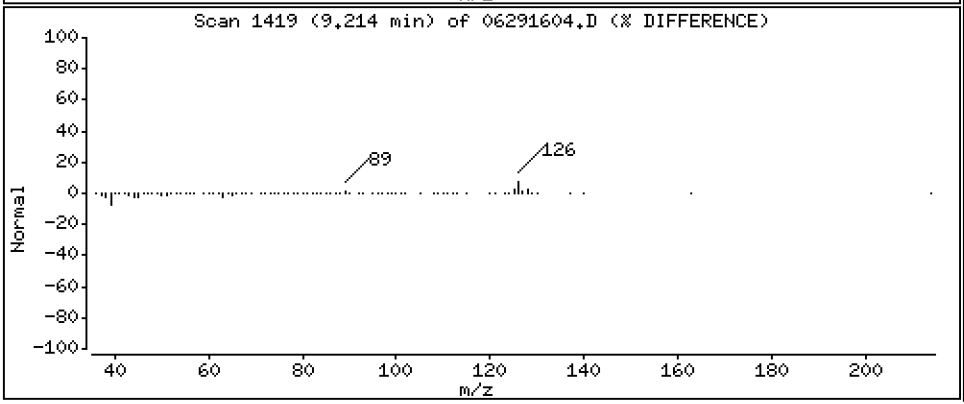
66 2-Chloro Toluene

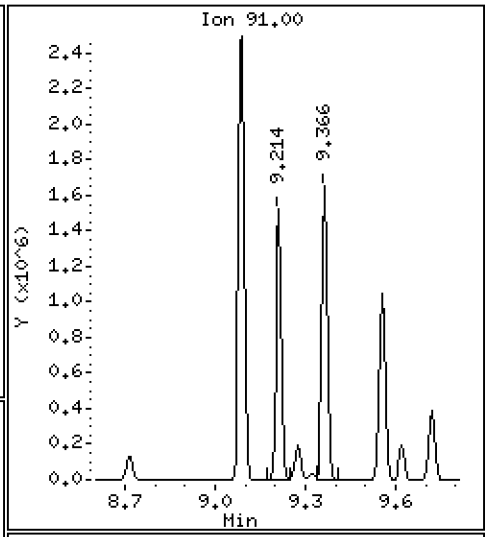
Concentration: 41.233 ug/Kg

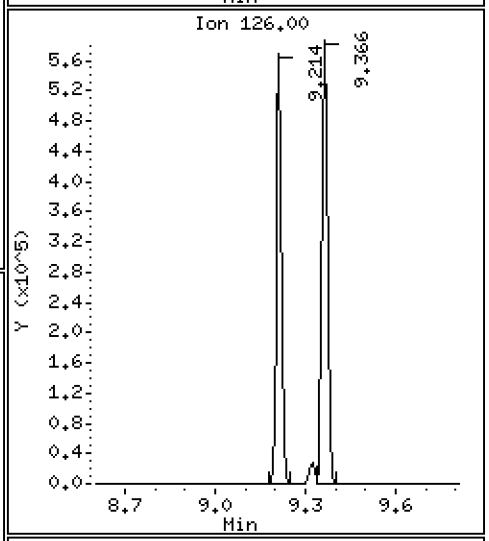


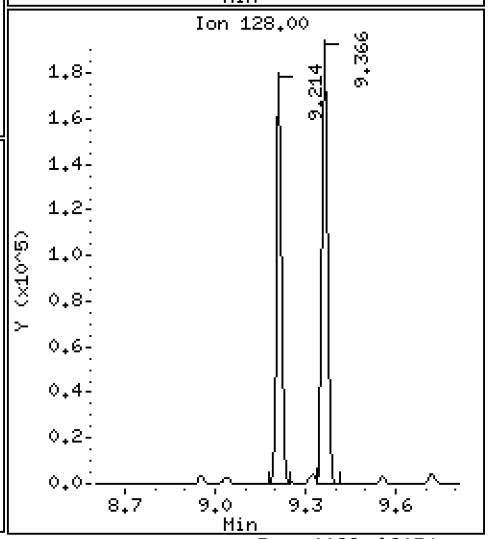












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

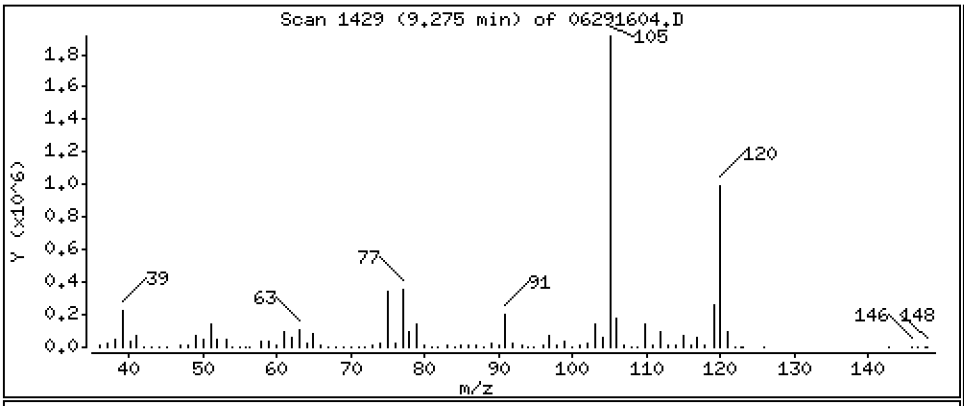
Operator: PB

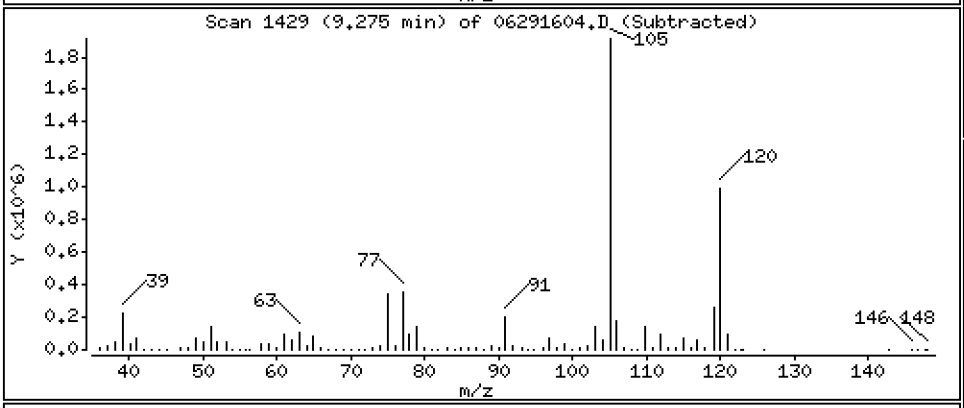
Column phase: RTXVMS

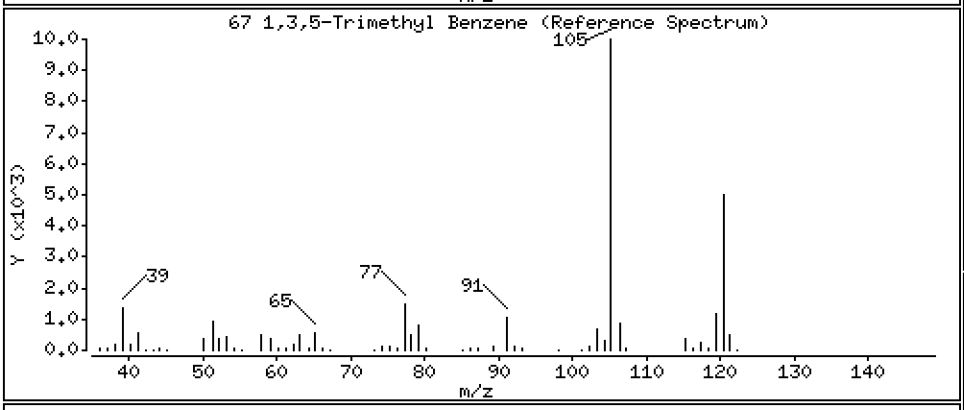
Column diameter: 0.18

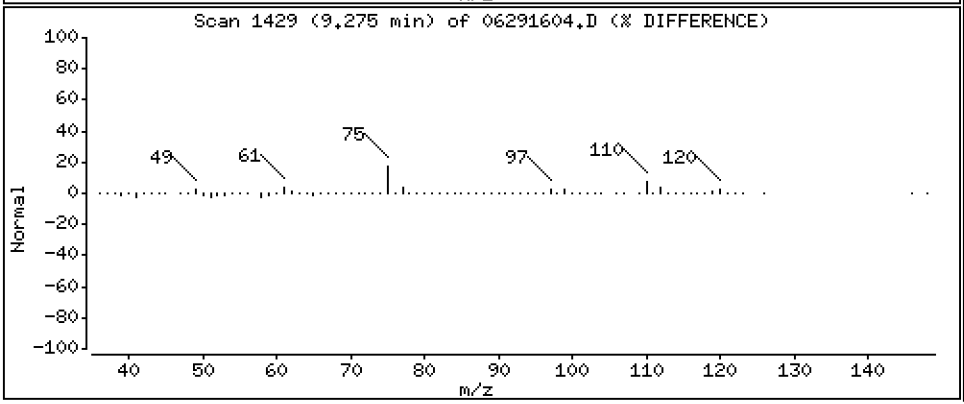
67 1,3,5-Trimethyl Benzene

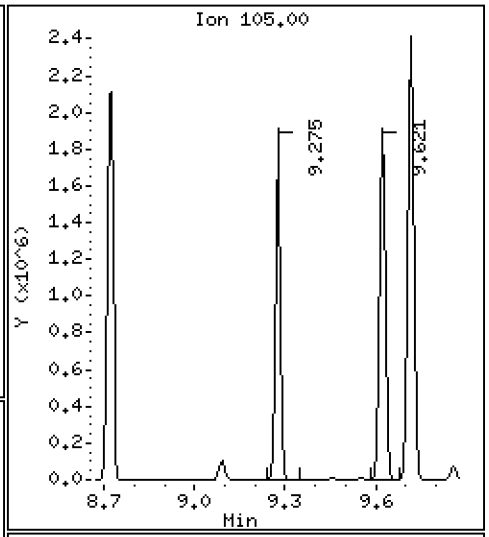
Concentration: 42.008 ug/Kg

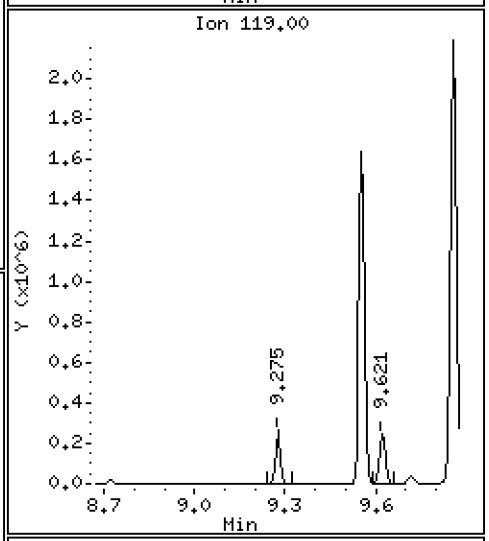


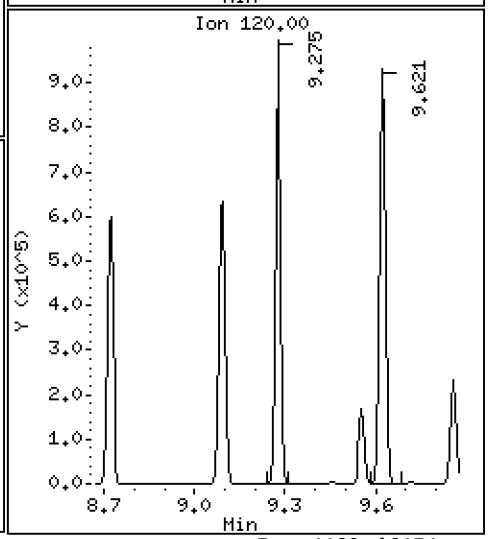












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

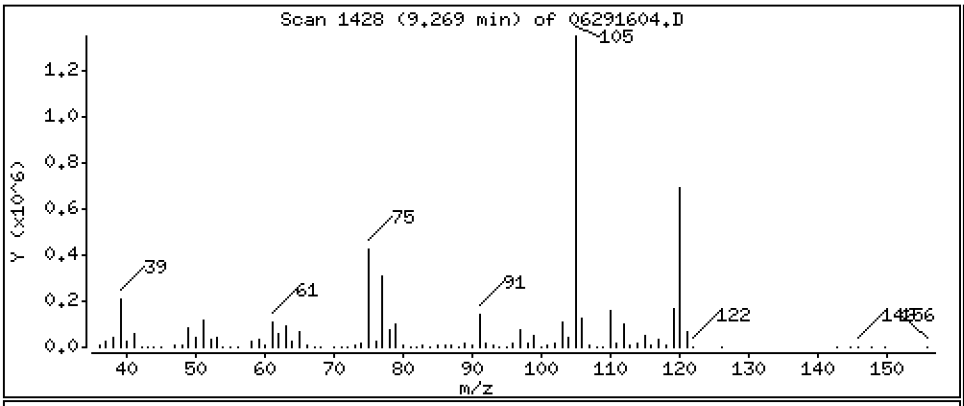
Operator: PB

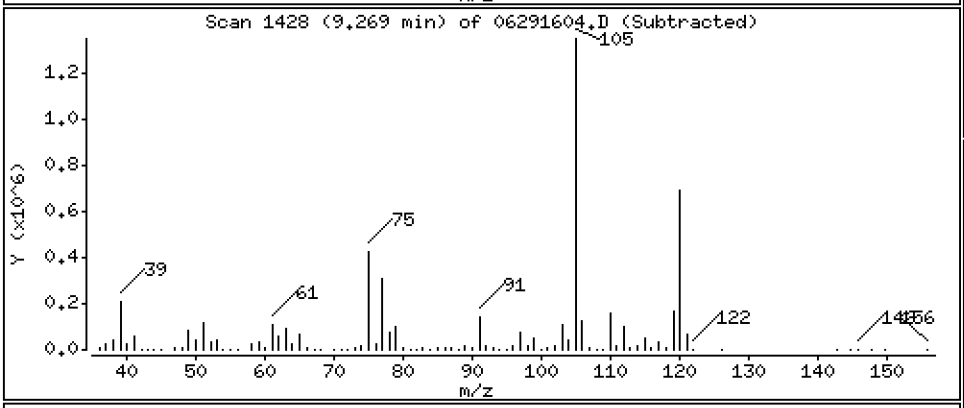
Column phase: RTXVMS

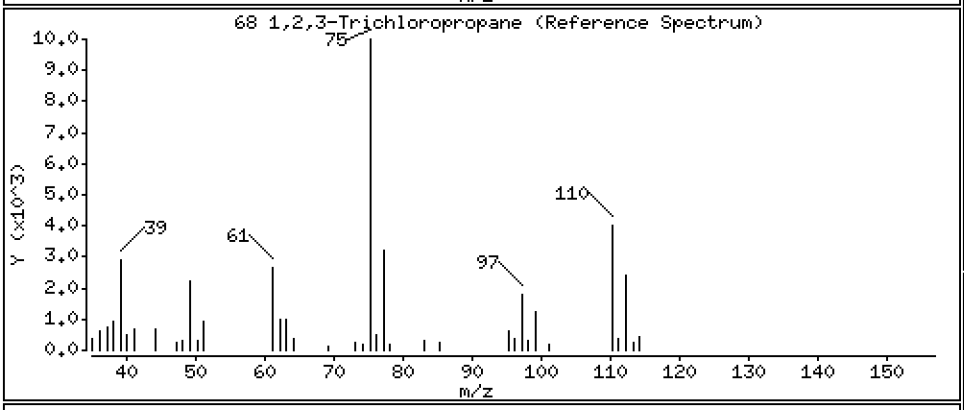
Column diameter: 0.18

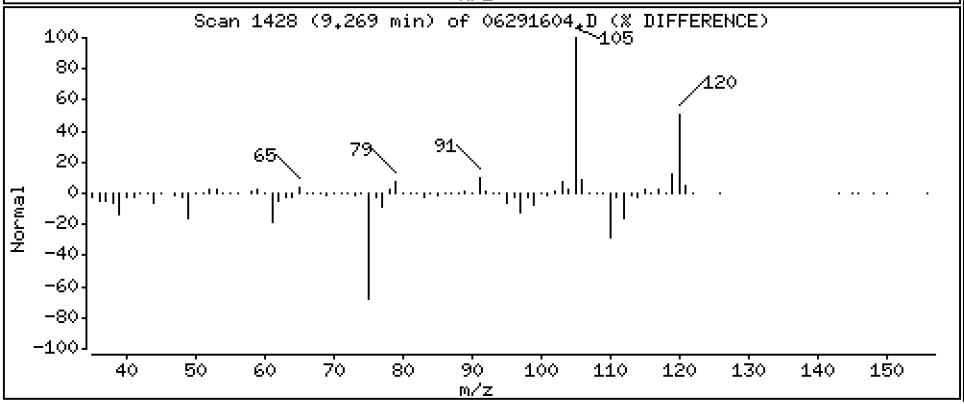
68 1,2,3-Trichloropropane

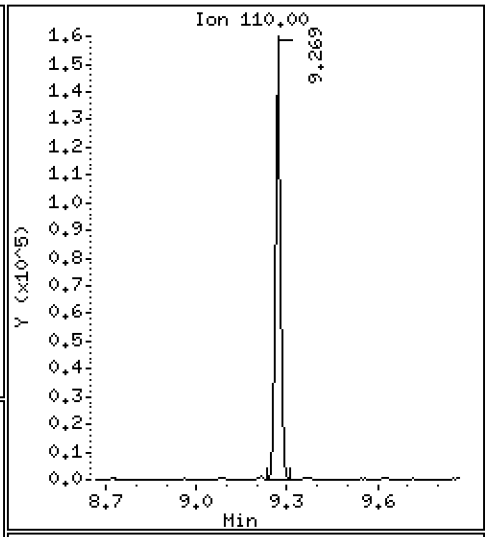
Concentration: 44.689 ug/Kg

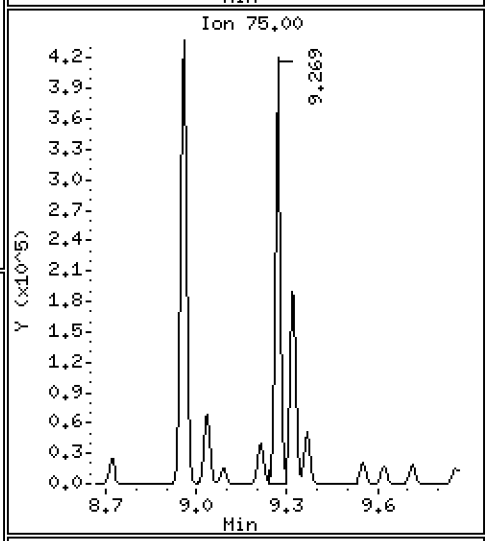


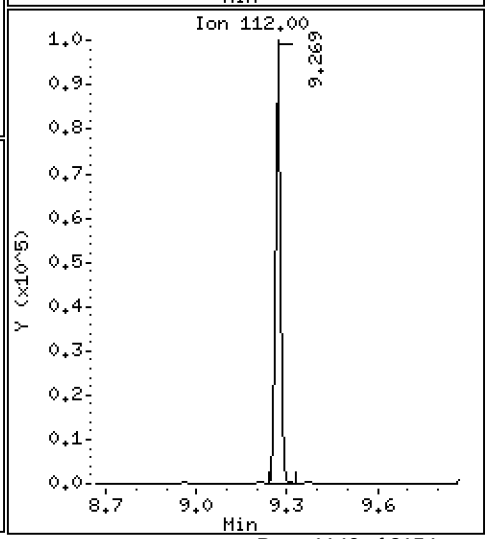












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

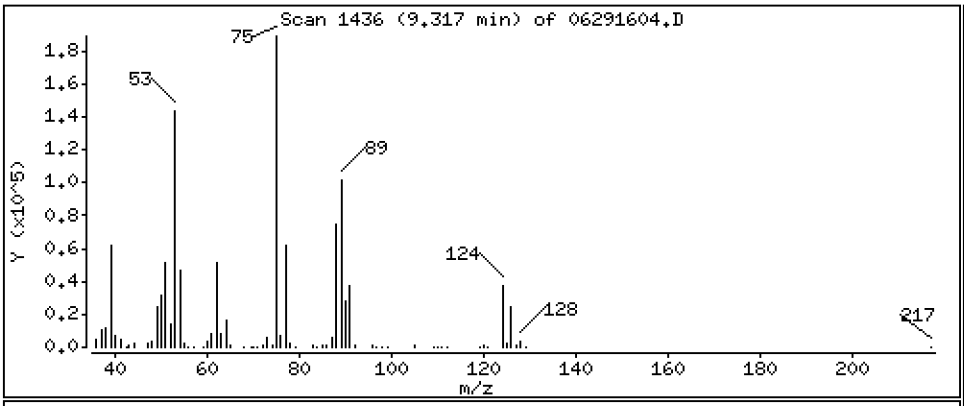
Operator: PB

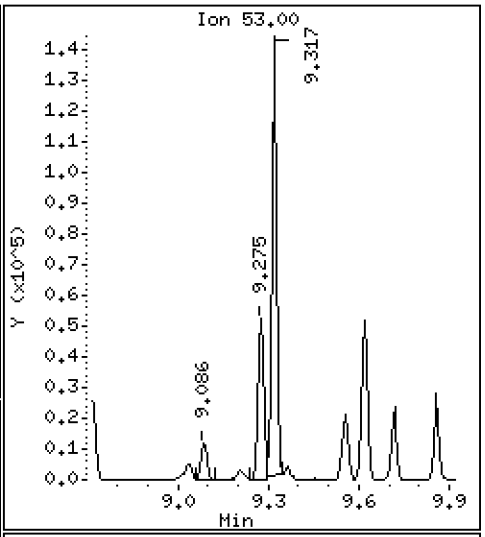
Column phase: RTXVMS

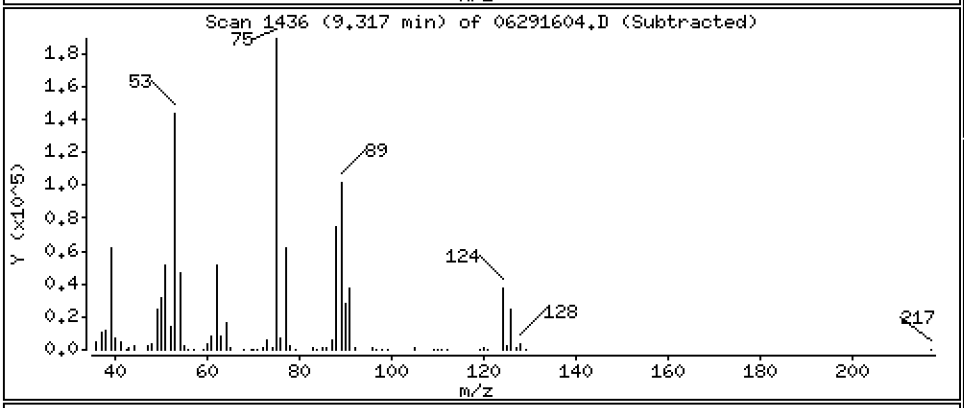
Column diameter: 0.18

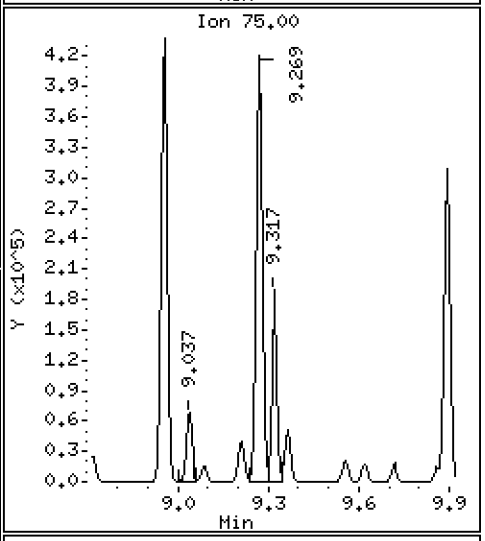
69 Trans-1,4-Dichloro 2-Butene

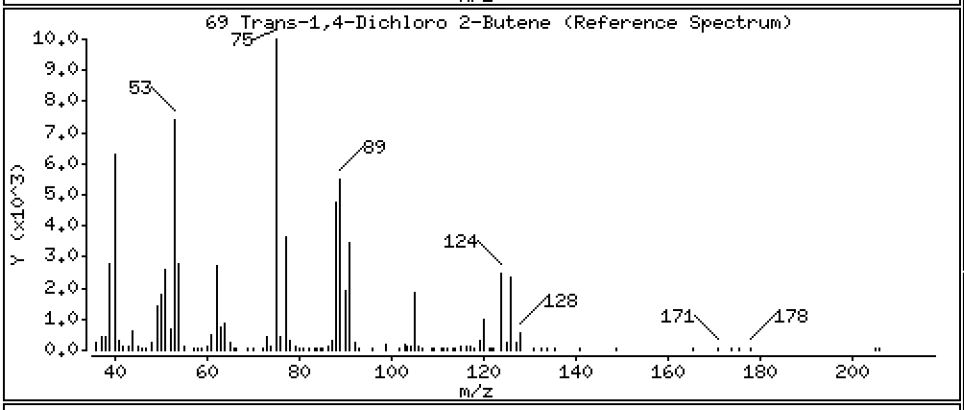
Concentration: 42.417 ug/Kg

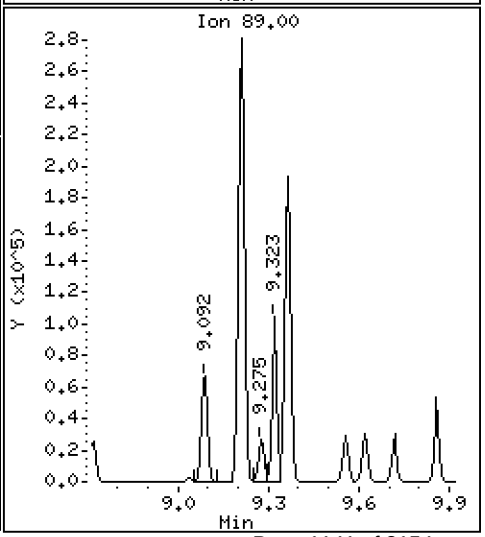


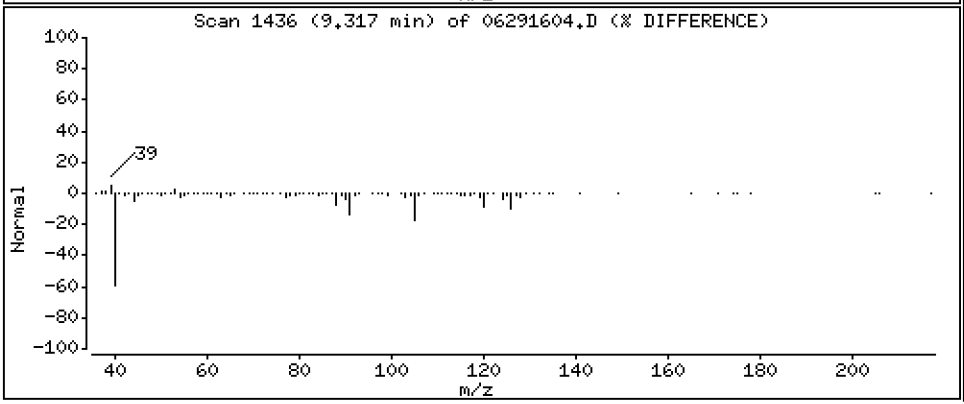












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

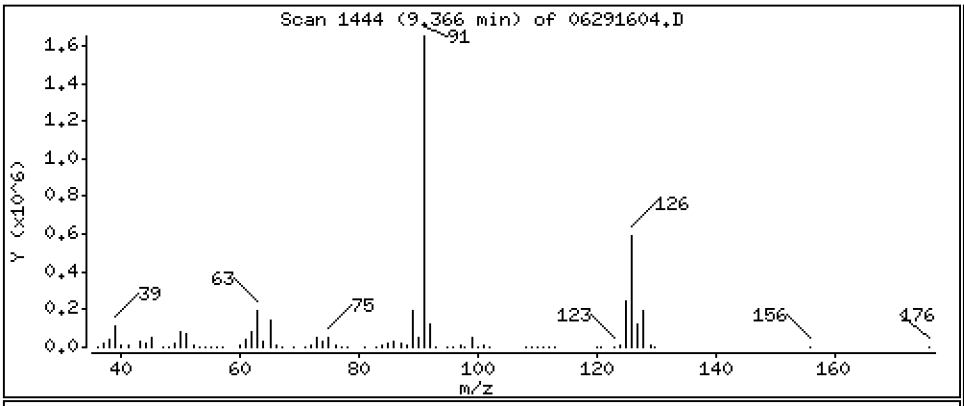
Operator: PB

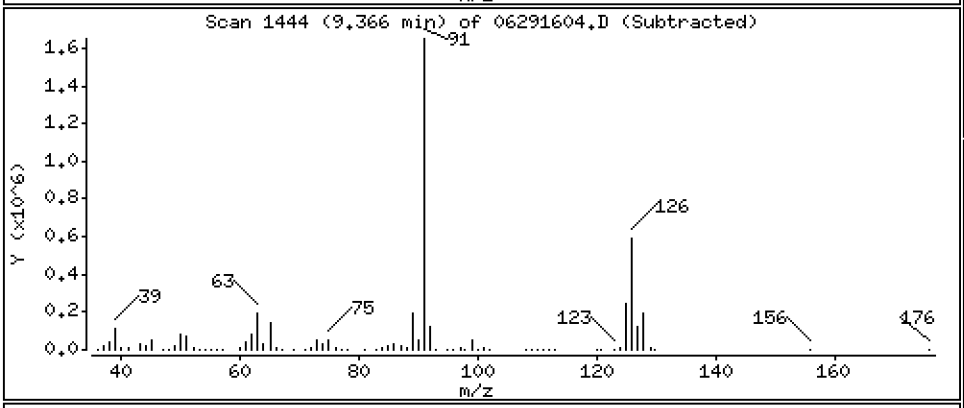
Column phase: RTXVMS

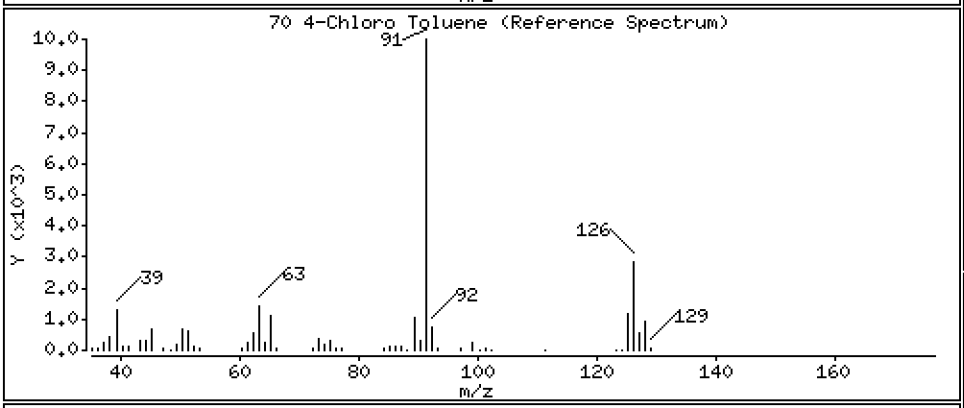
Column diameter: 0.18

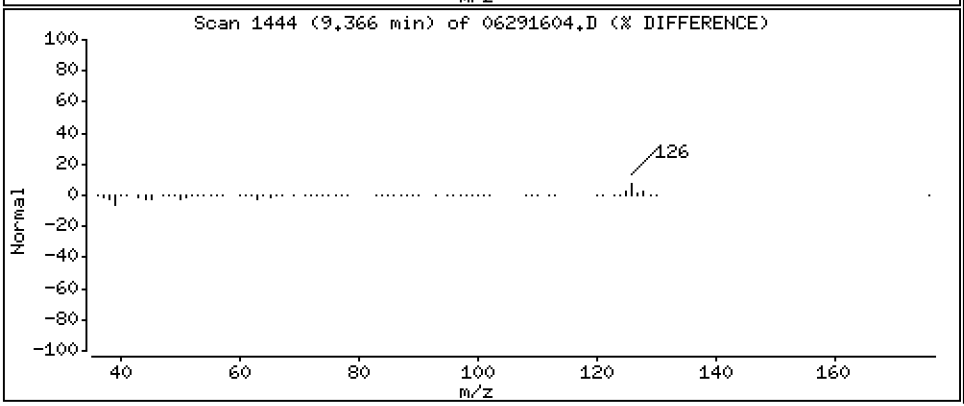
70 4-Chloro Toluene

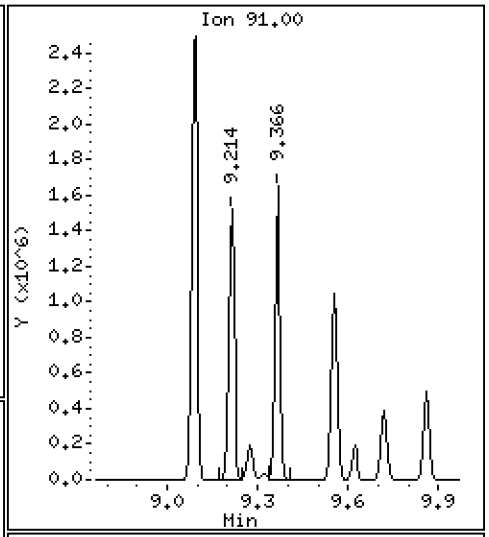
Concentration: 41.686 ug/Kg

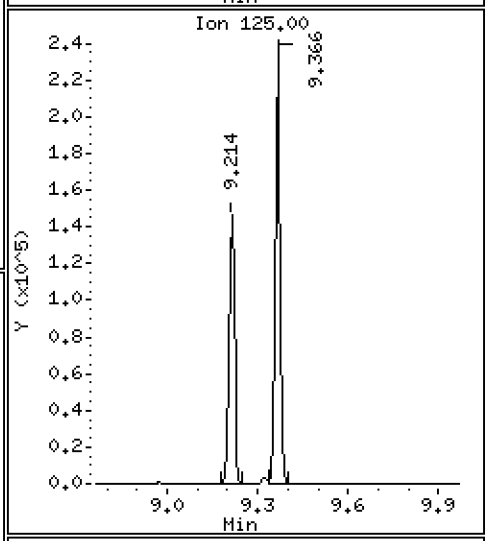


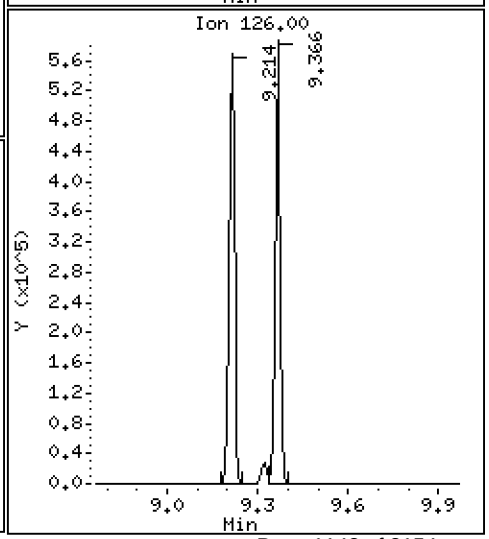












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

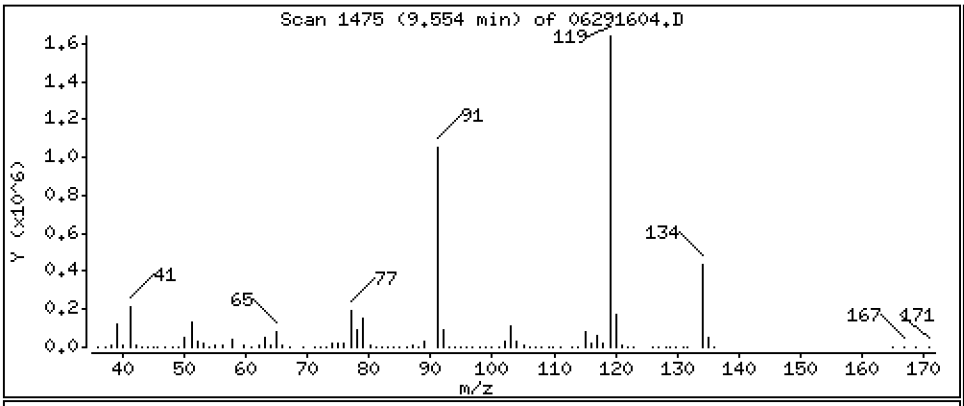
Operator: PB

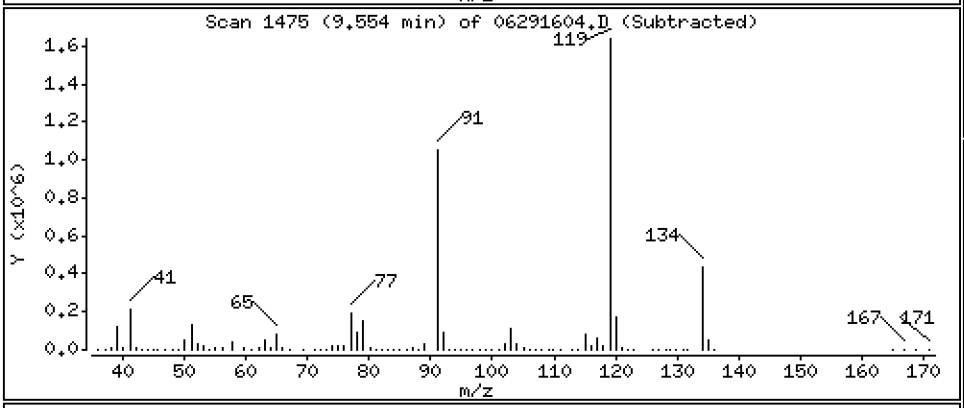
Column phase: RTXVMS

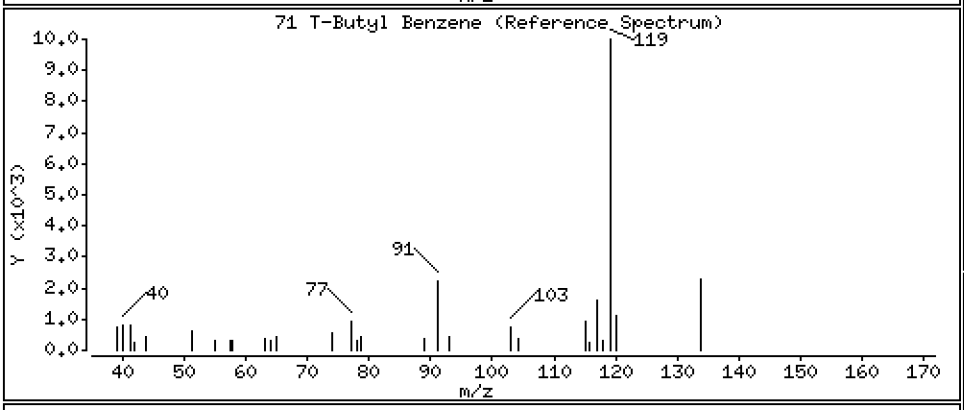
Column diameter: 0.18

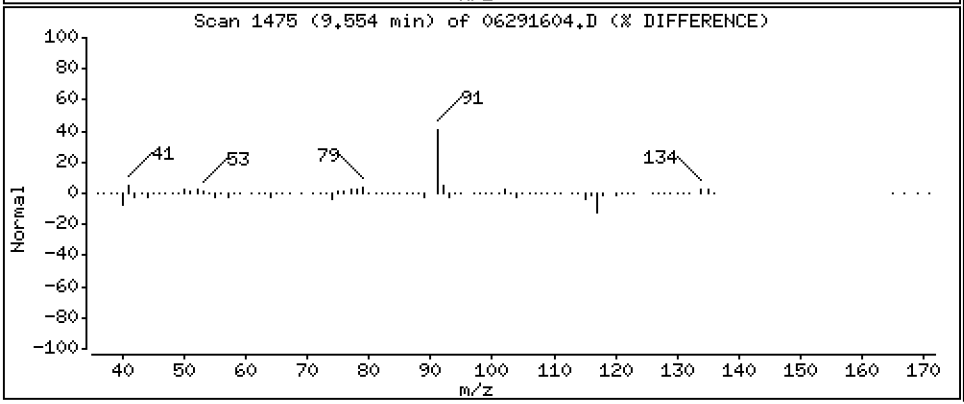
71 T-Butyl Benzene

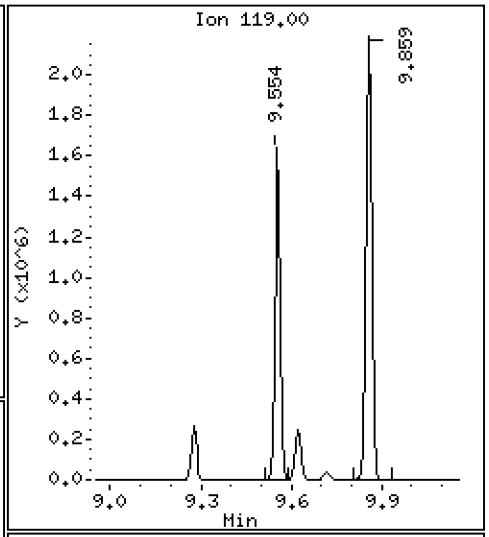
Concentration: 41.423 ug/Kg

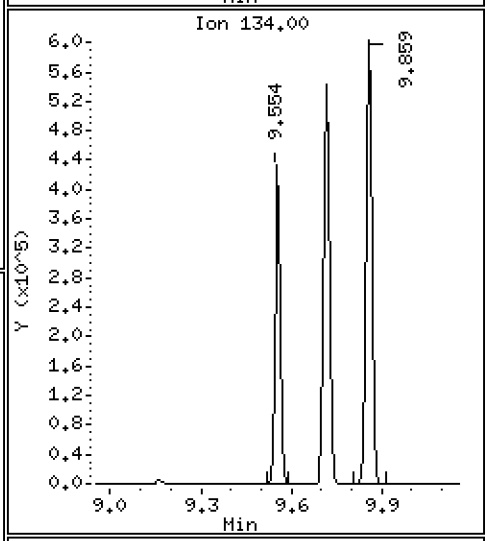


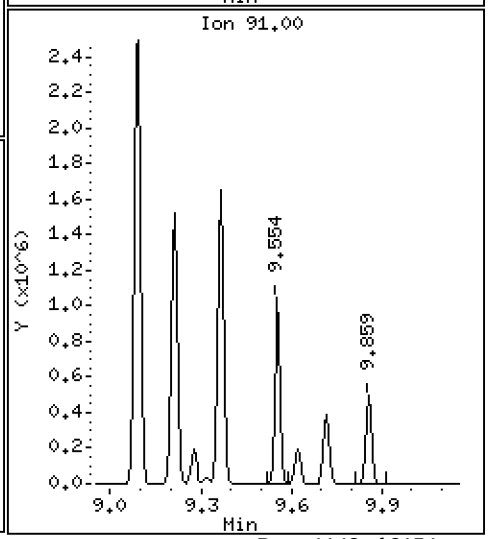












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

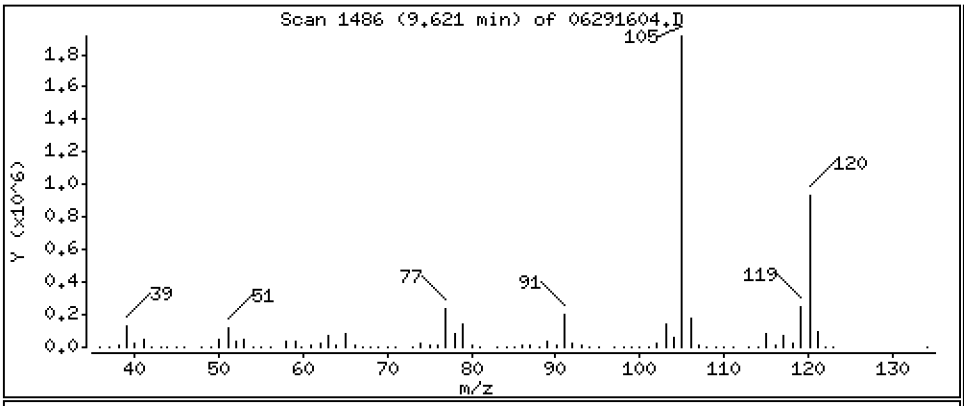
Operator: PB

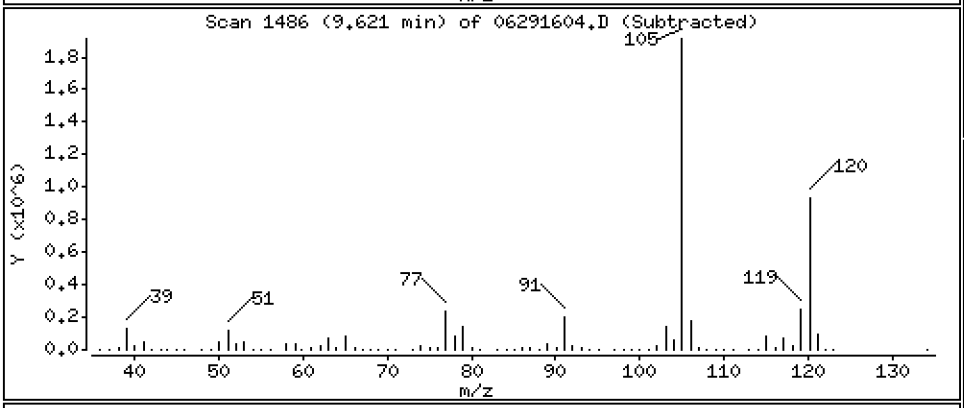
Column phase: RTXVMS

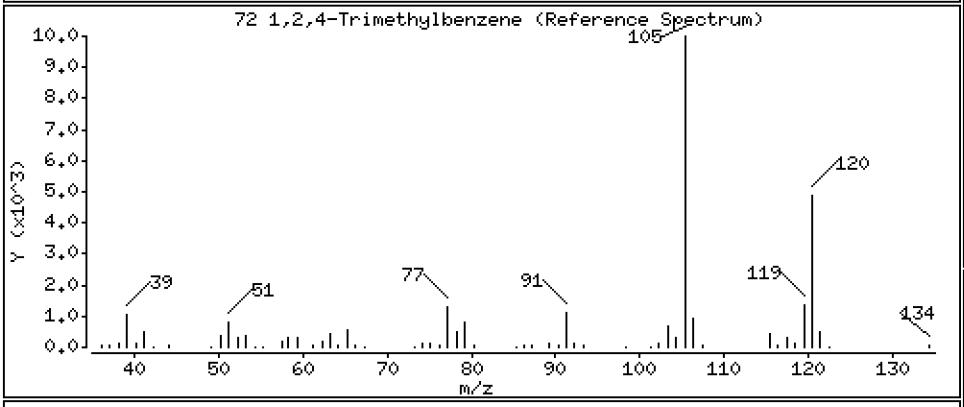
Column diameter: 0.18

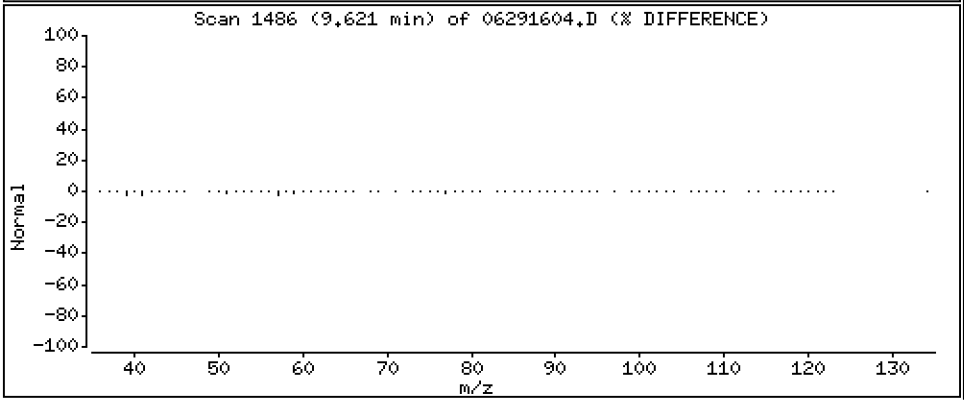
72 1,2,4-Trimethylbenzene

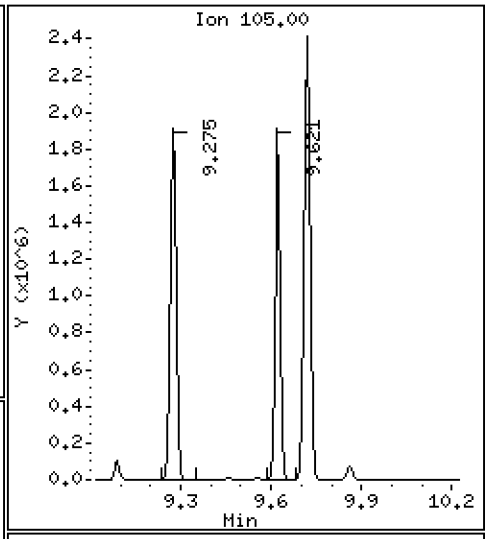
Concentration: 42.196 ug/Kg

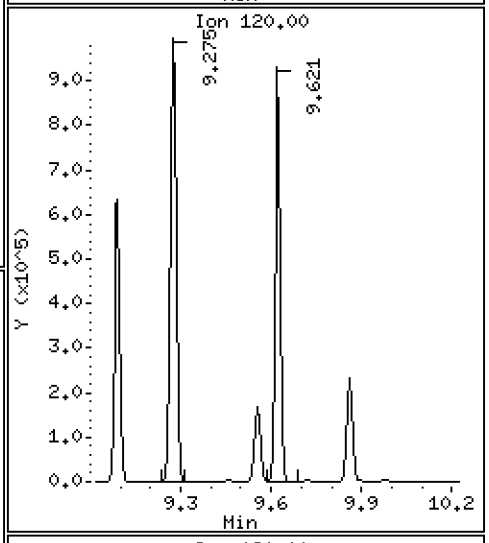


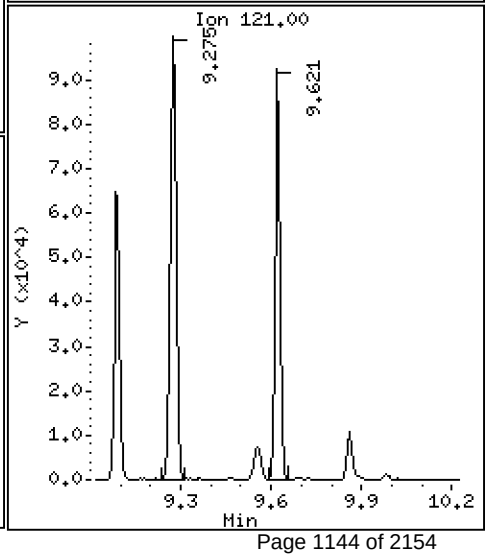












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

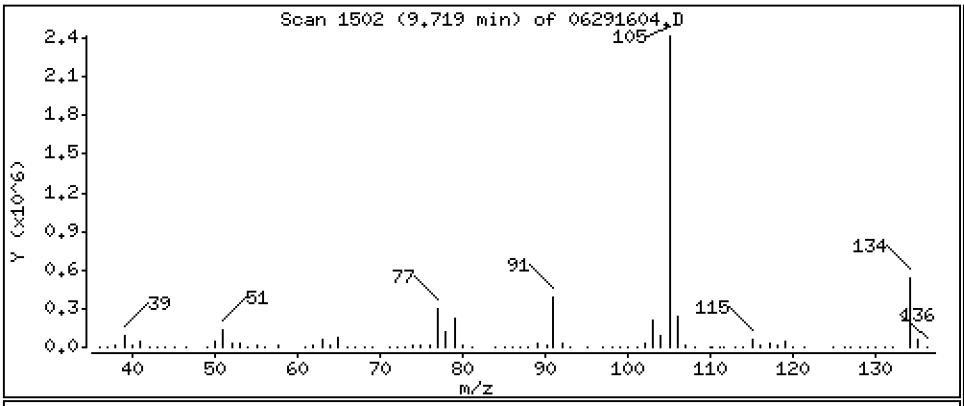
Operator: PB

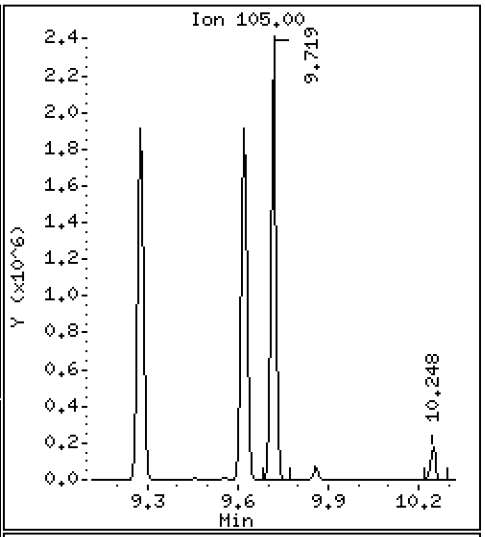
Column phase: RTXVMS

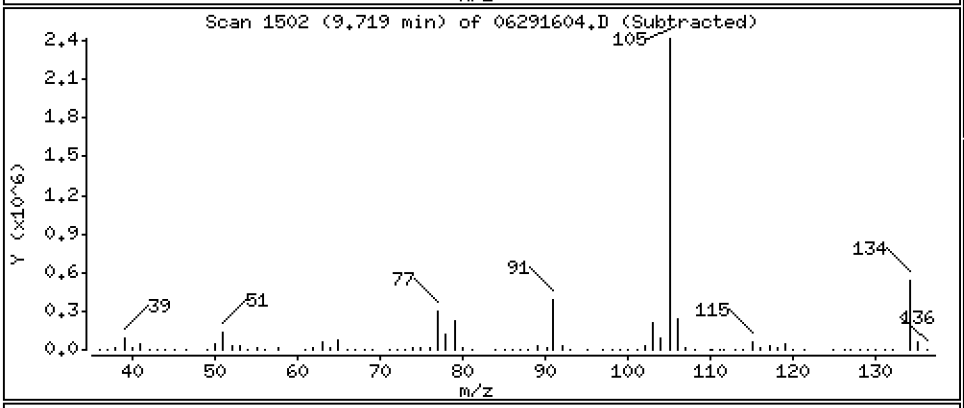
Column diameter: 0.18

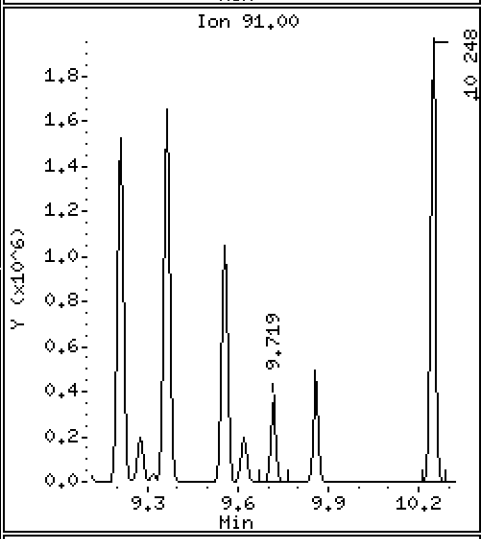
73 S-Butyl Benzene

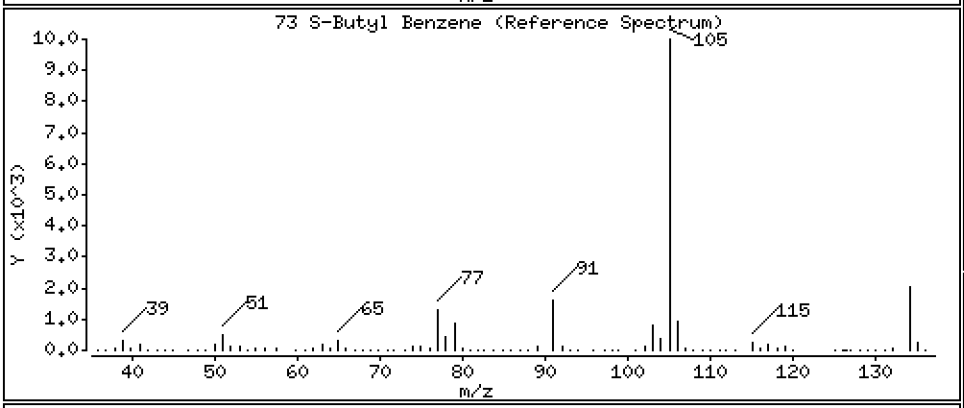
Concentration: 40.426 ug/Kg

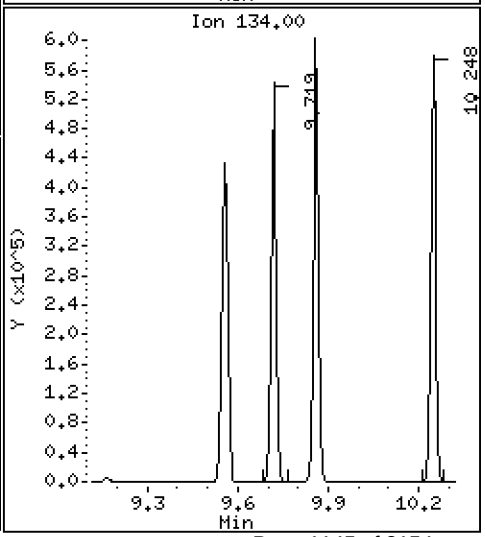


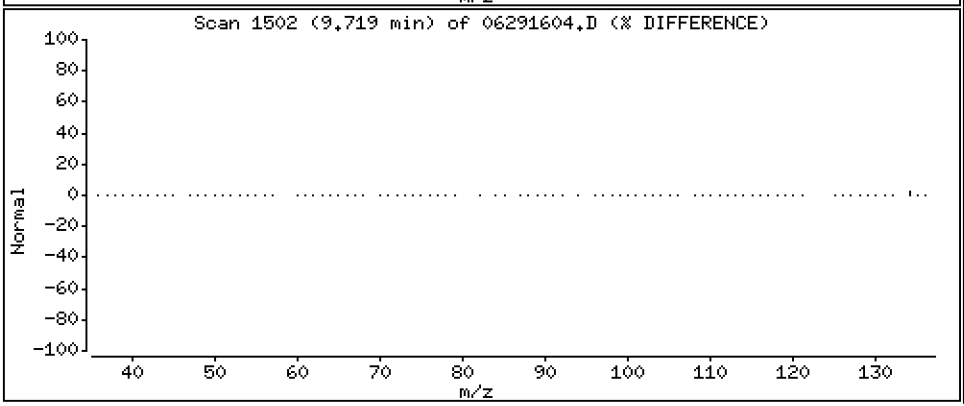












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

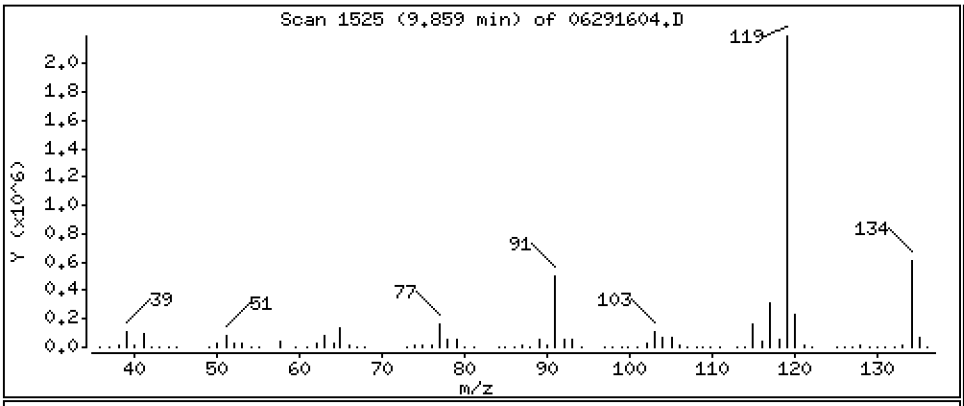
Operator: PB

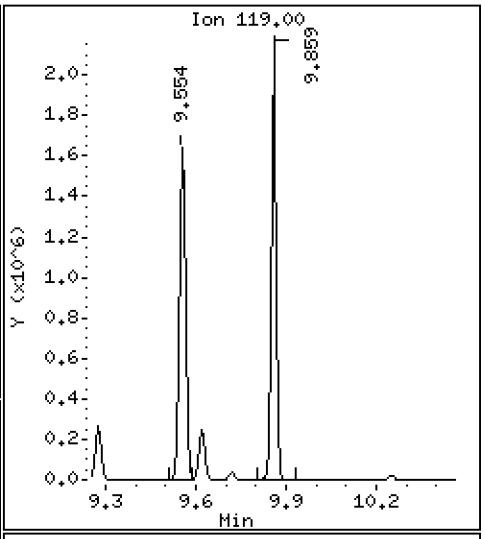
Column phase: RTXVMS

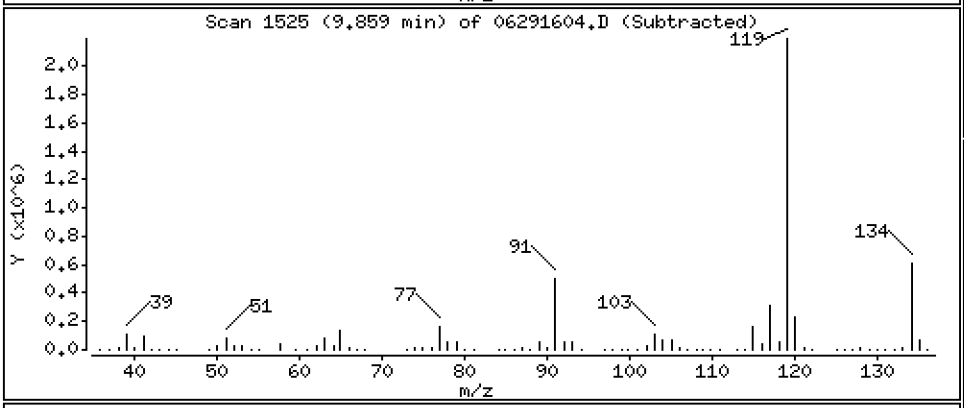
Column diameter: 0.18

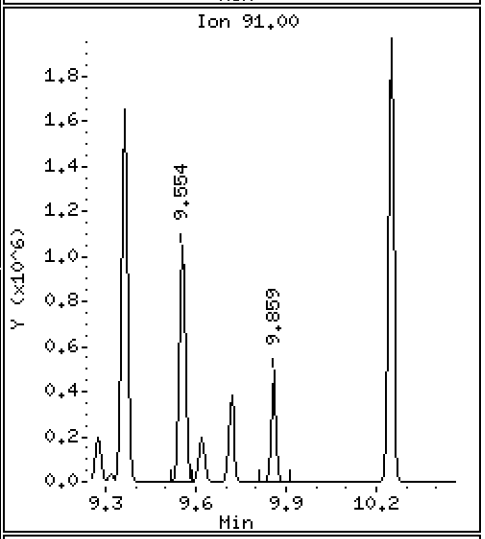
74 4-Isopropyl Toluene

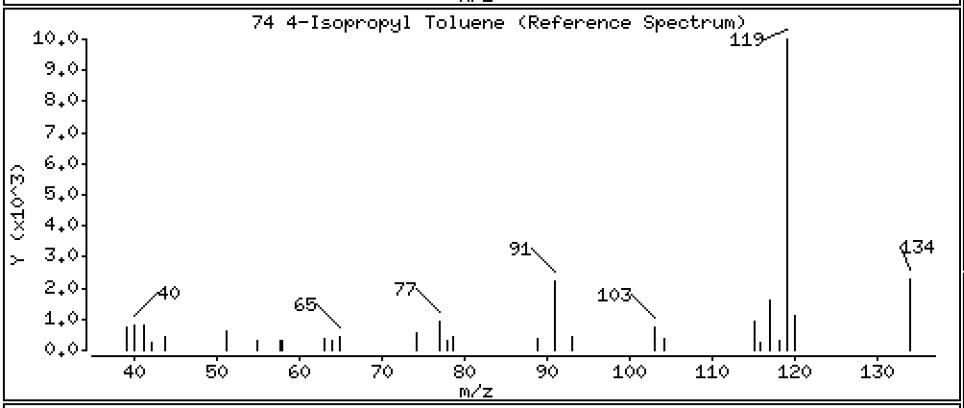
Concentration: 42.685 ug/Kg

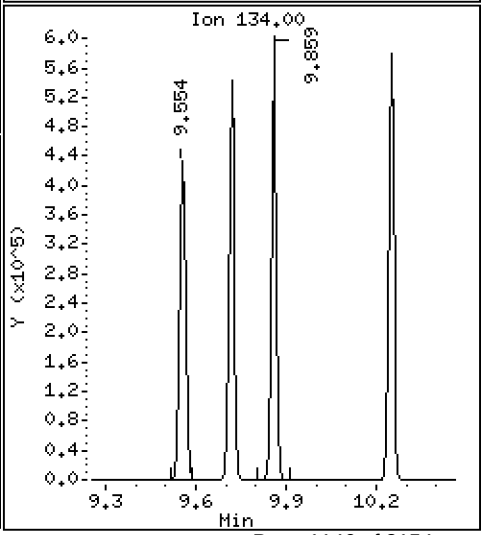


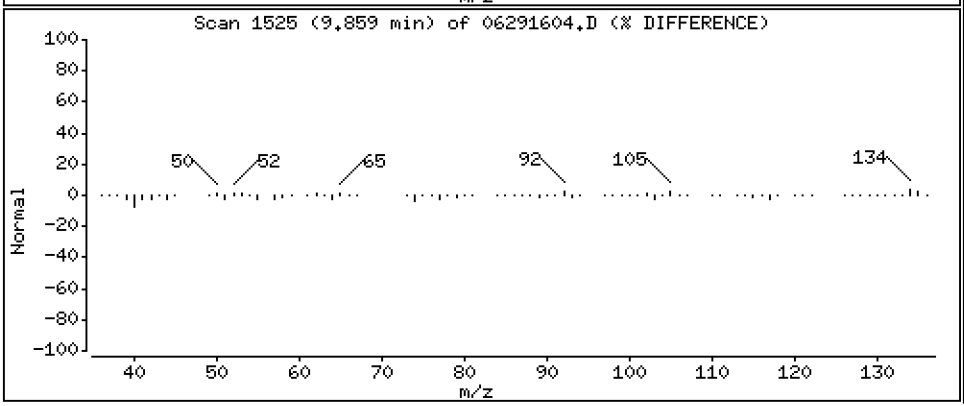












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

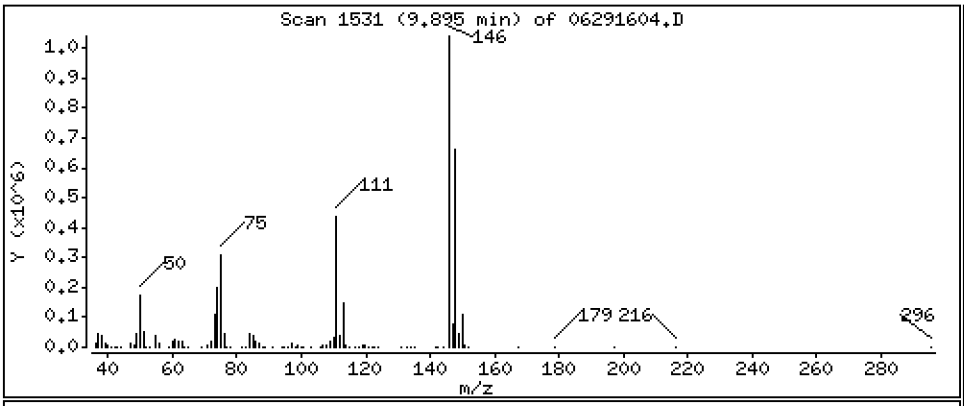
Operator: PB

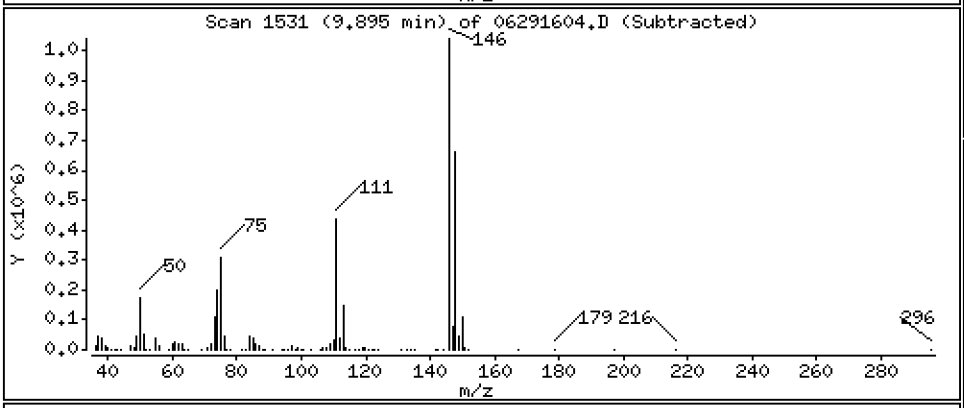
Column phase: RTXVMS

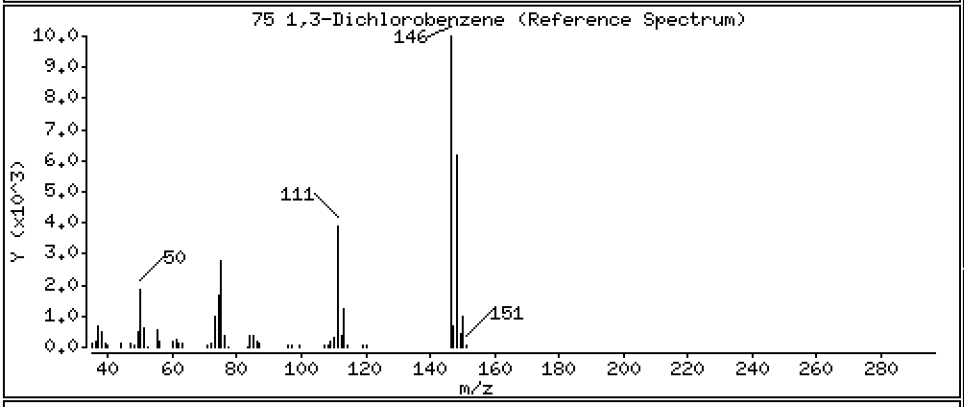
Column diameter: 0.18

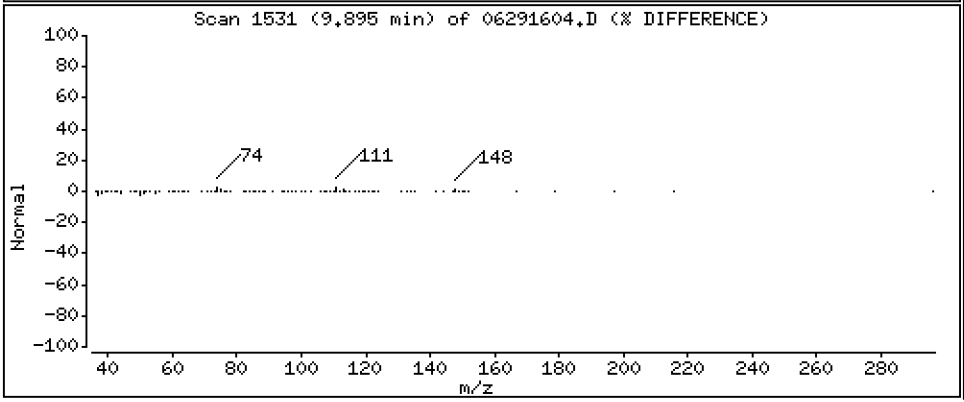
75 1,3-Dichlorobenzene

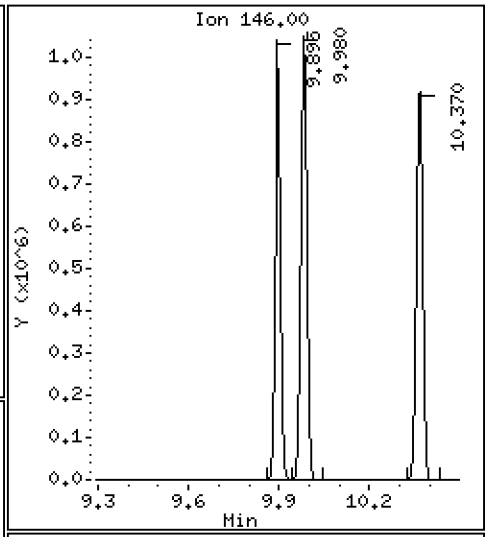
Concentration: 43.506 ug/Kg

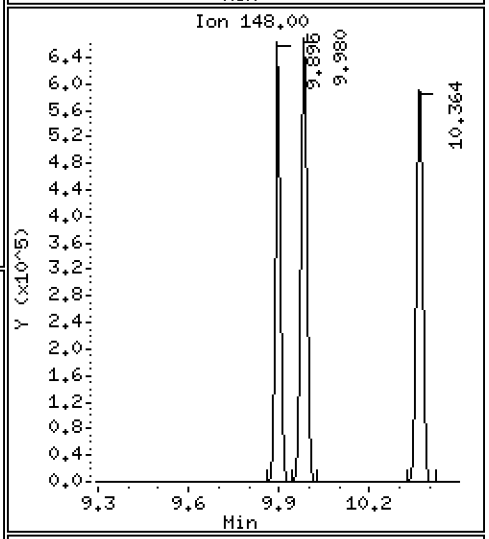


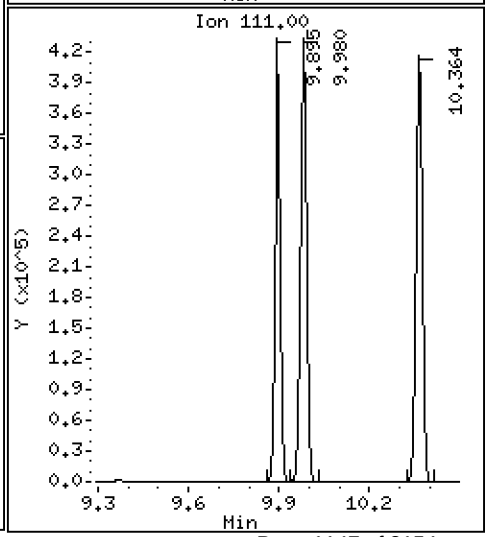












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Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

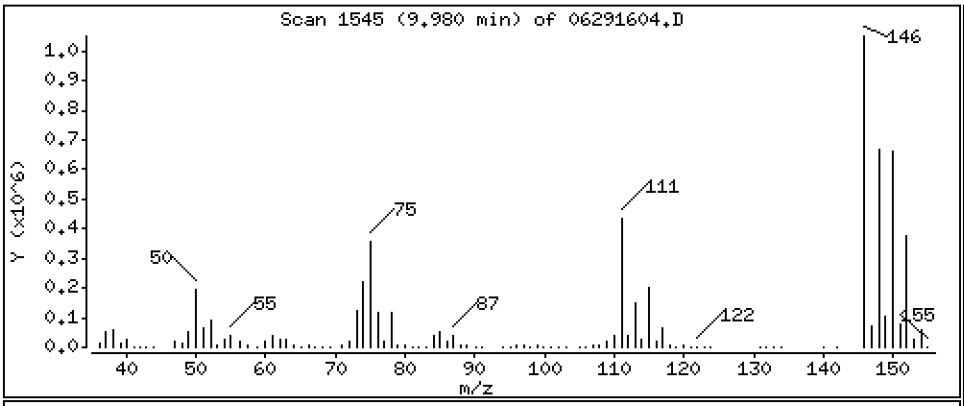
Operator: PB

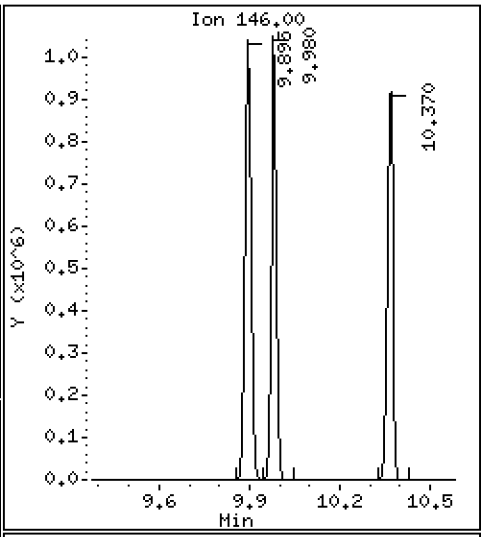
Column phase: RTXVMS

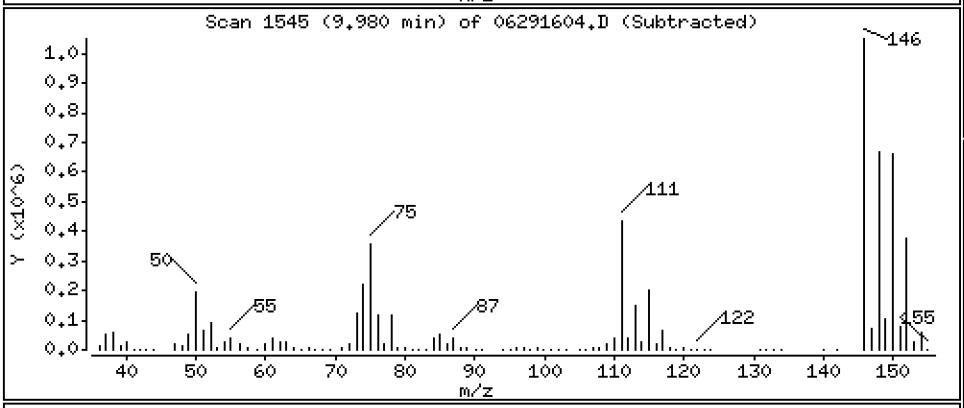
Column diameter: 0.18

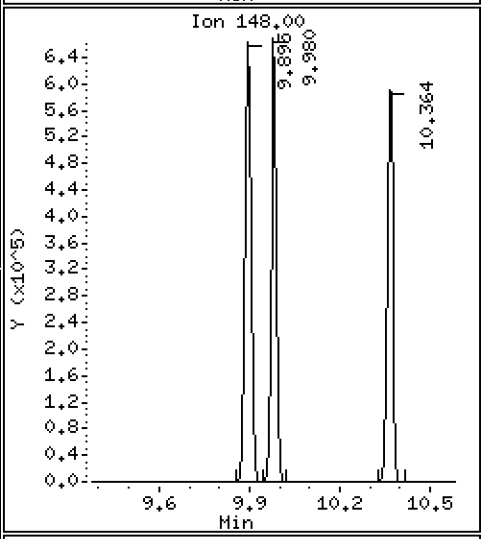
77 1,4-Dichlorobenzene

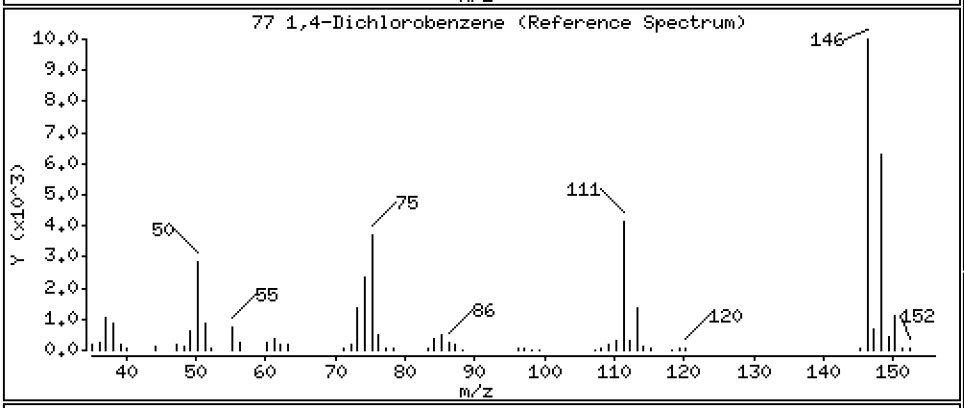
Concentration: 42.792 ug/Kg

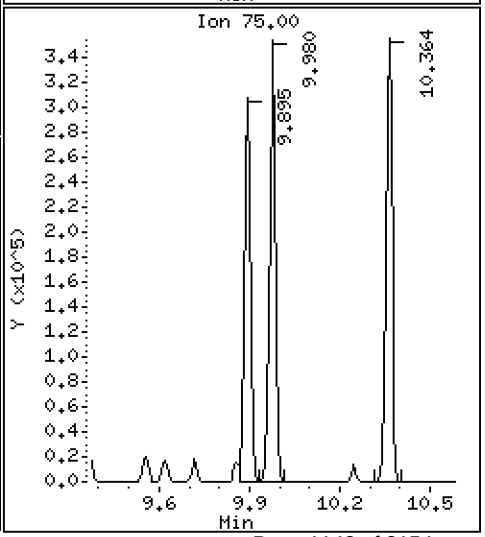


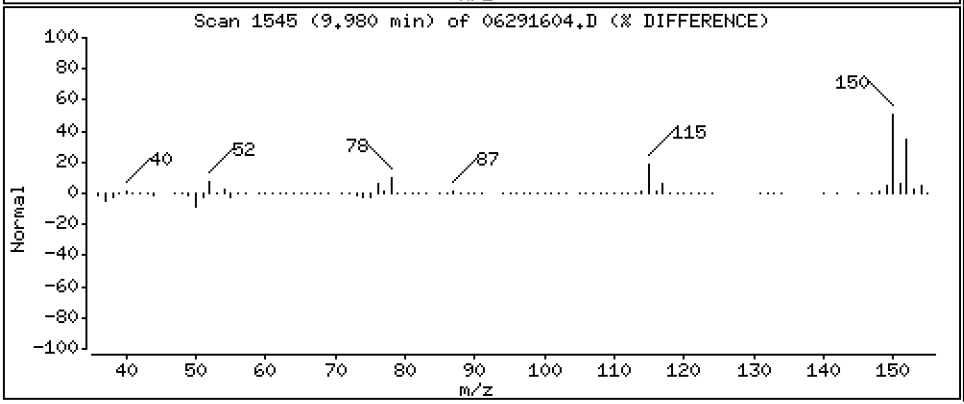












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

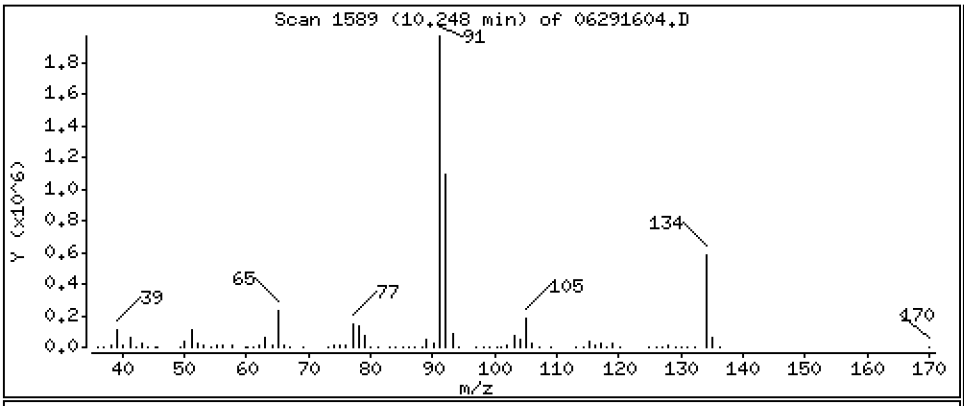
Operator: PB

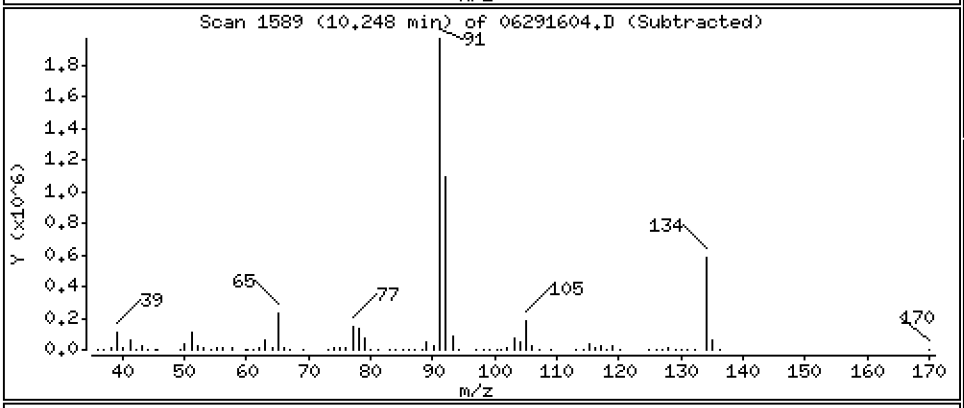
Column phase: RTXVMS

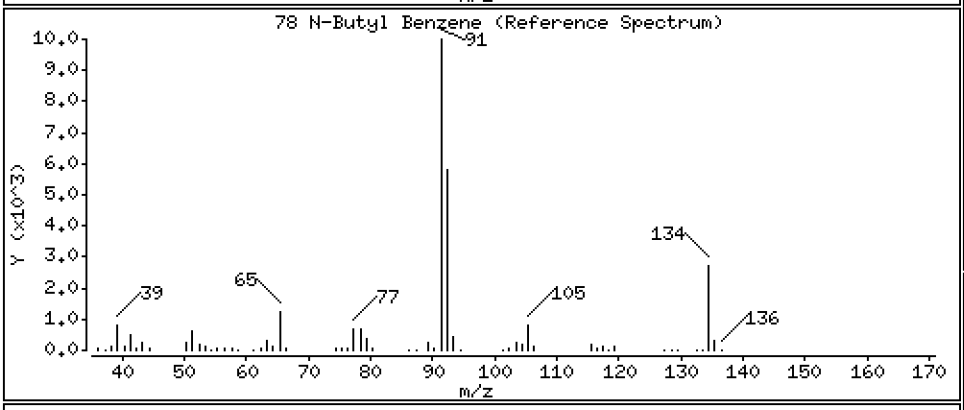
Column diameter: 0.18

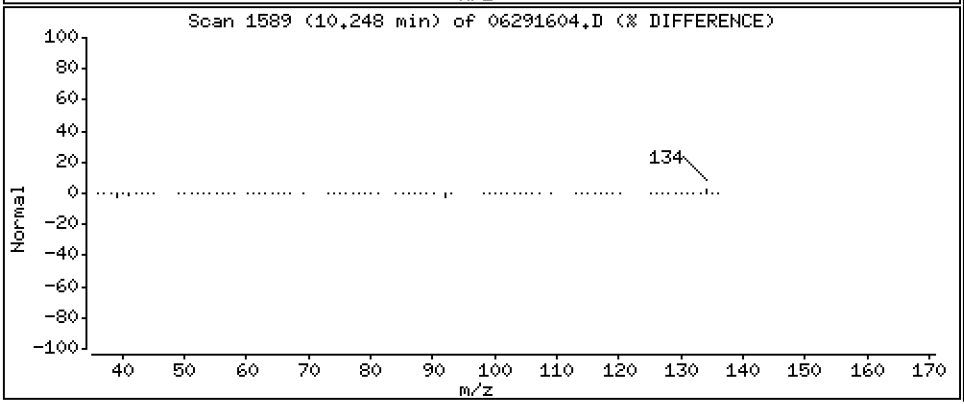
78 N-Butyl Benzene

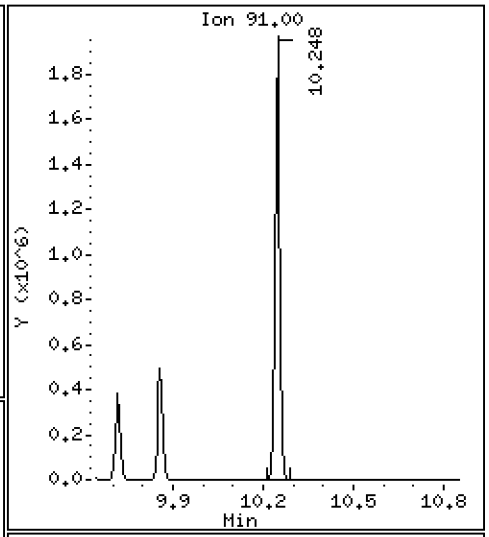
Concentration: 42.494 ug/Kg

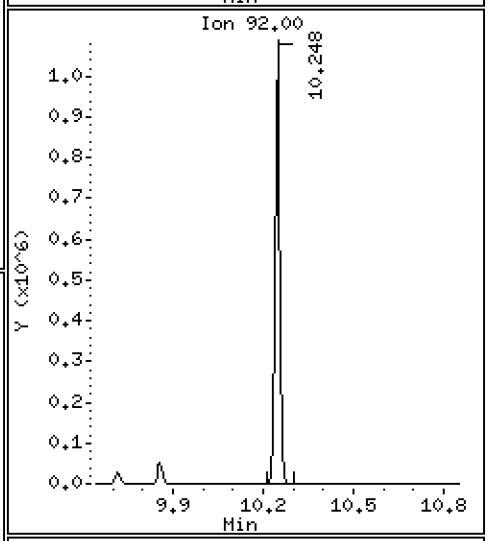


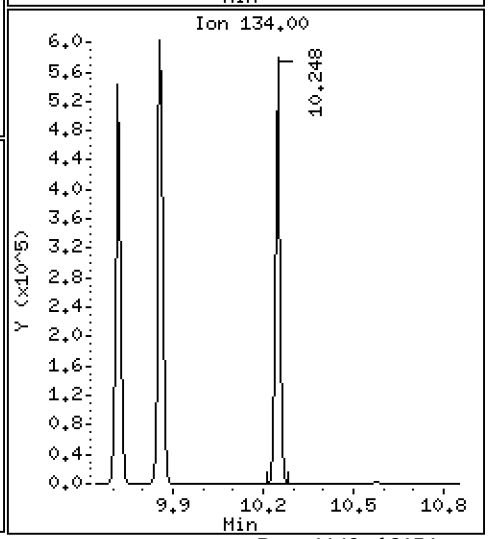












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

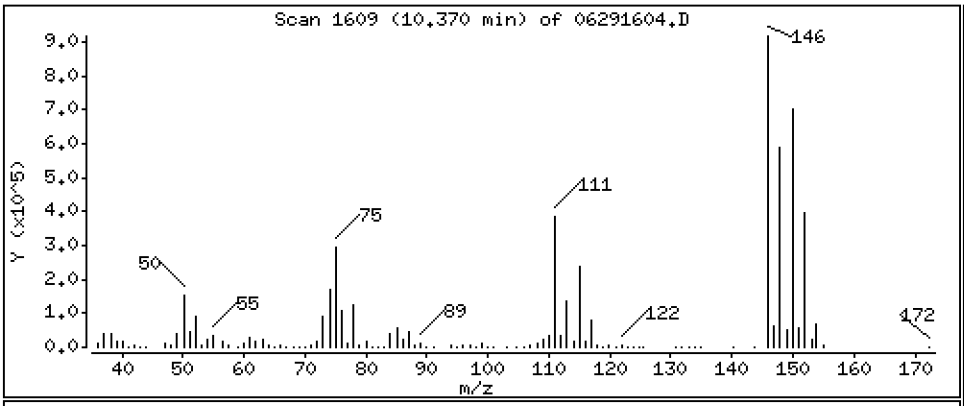
Operator: PB

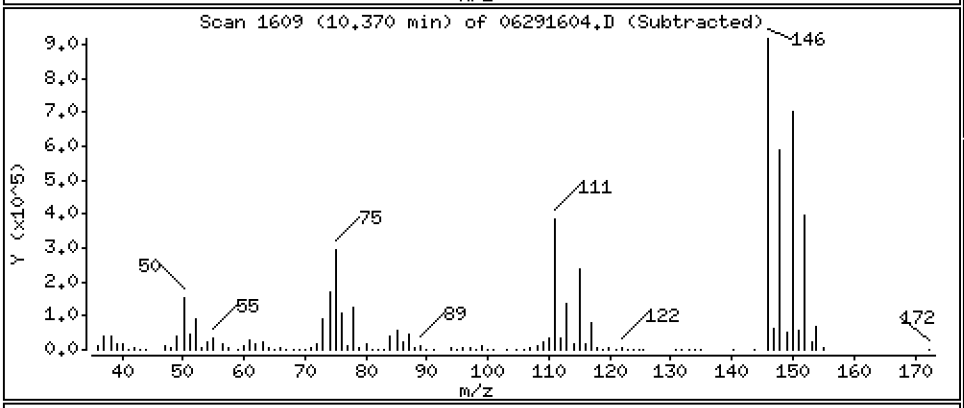
Column phase: RTXVMS

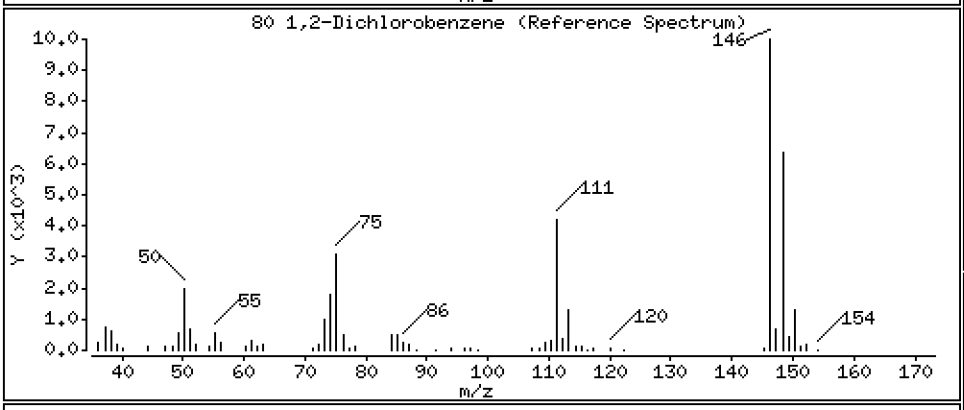
Column diameter: 0.18

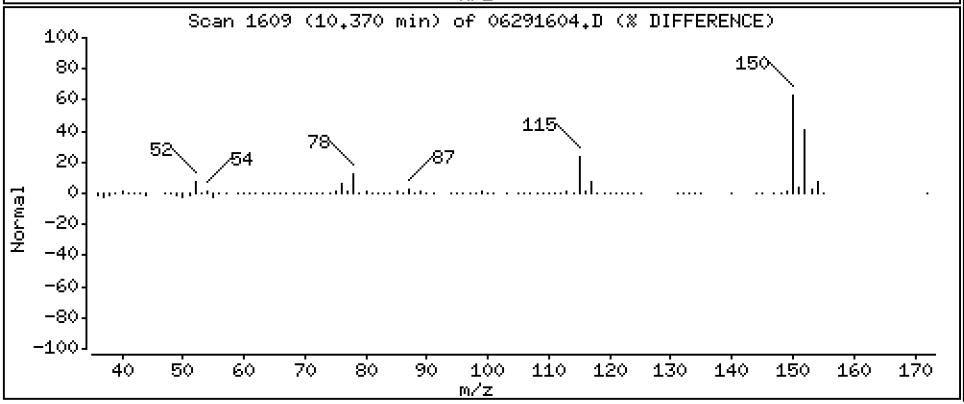
80 1,2-Dichlorobenzene

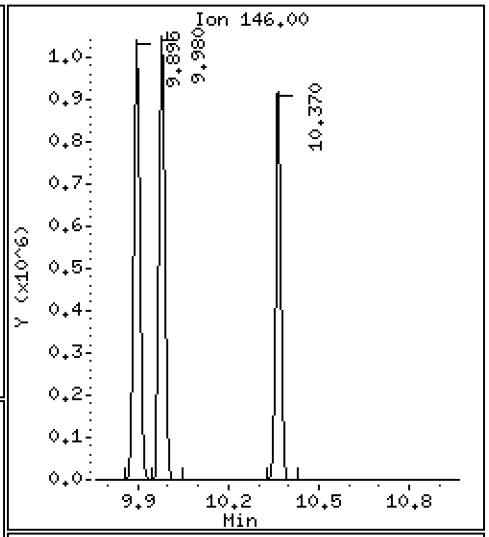
Concentration: 42.767 ug/Kg

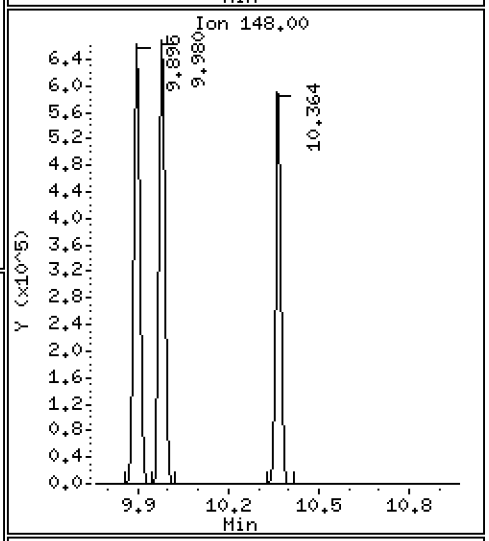


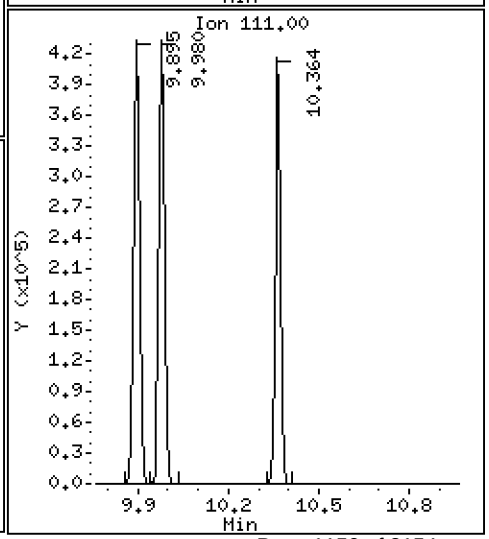












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

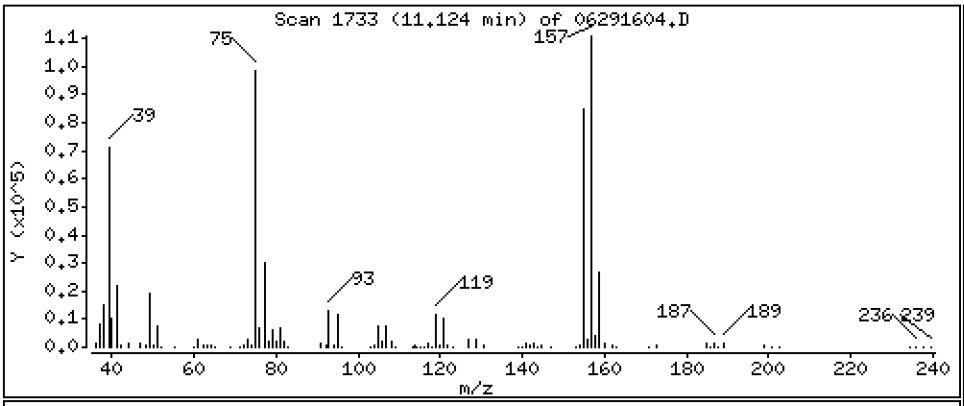
Operator: PB

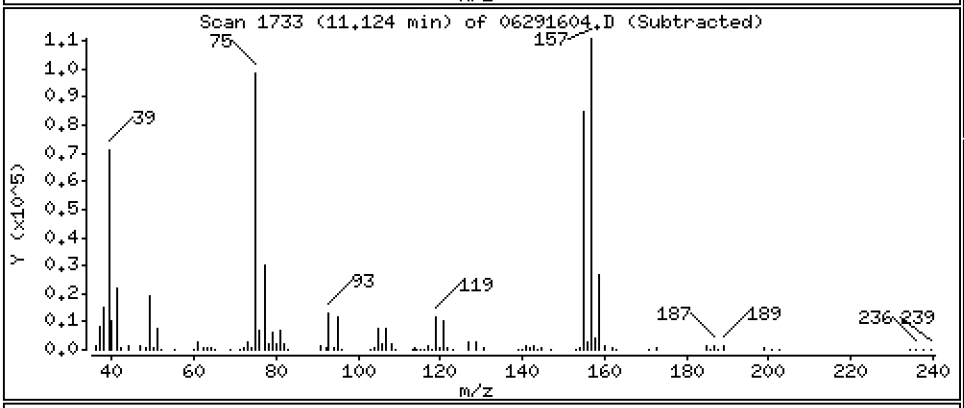
Column phase: RTXVMS

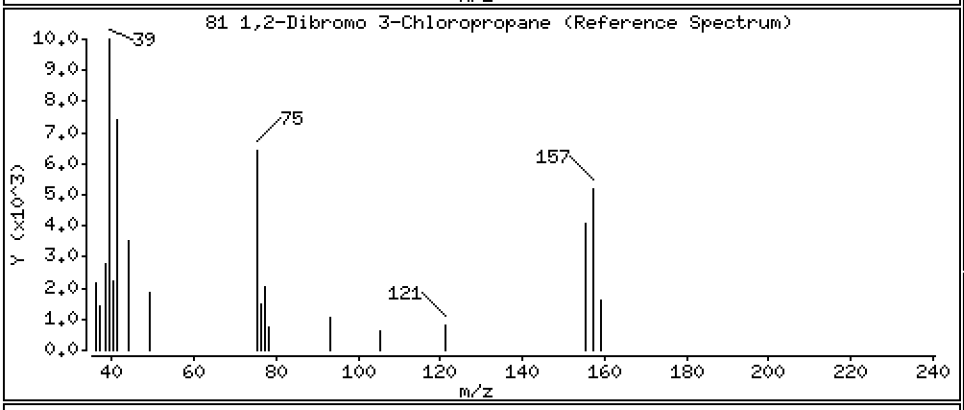
Column diameter: 0.18

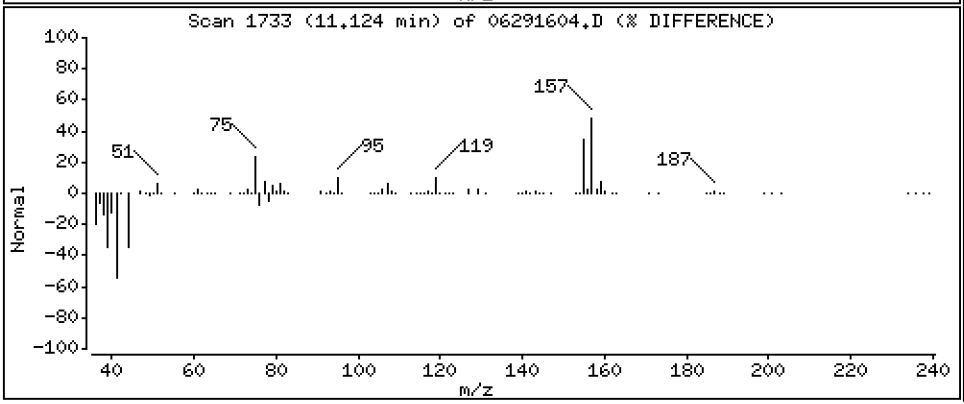
81 1,2-Dibromo 3-Chloropropane

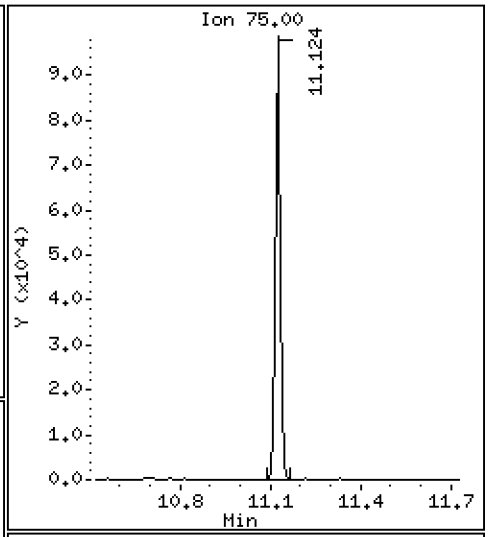
Concentration: 42.467 ug/Kg

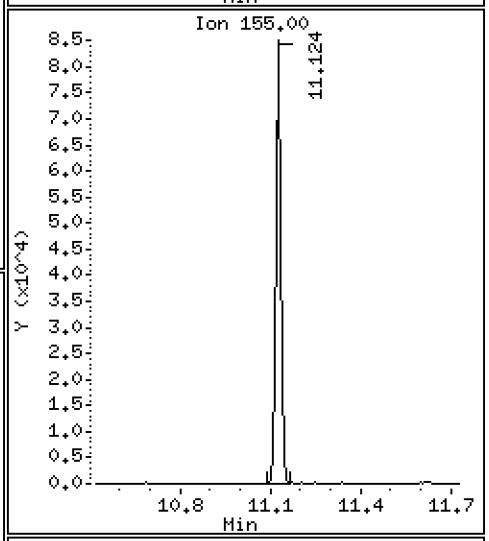


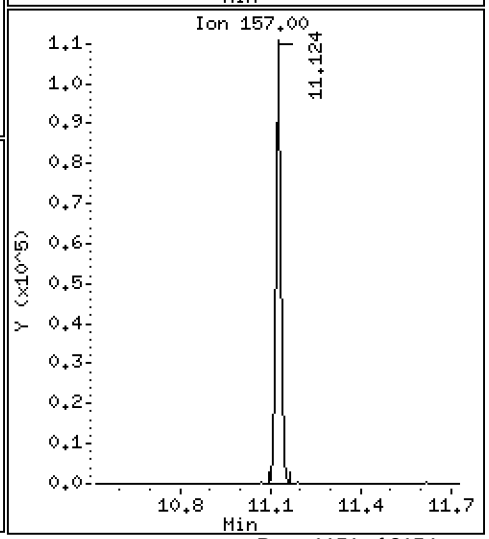












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

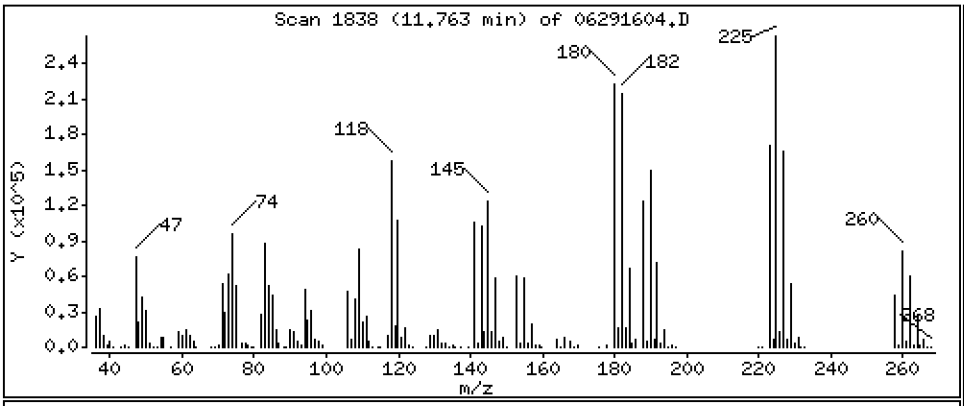
Operator: PB

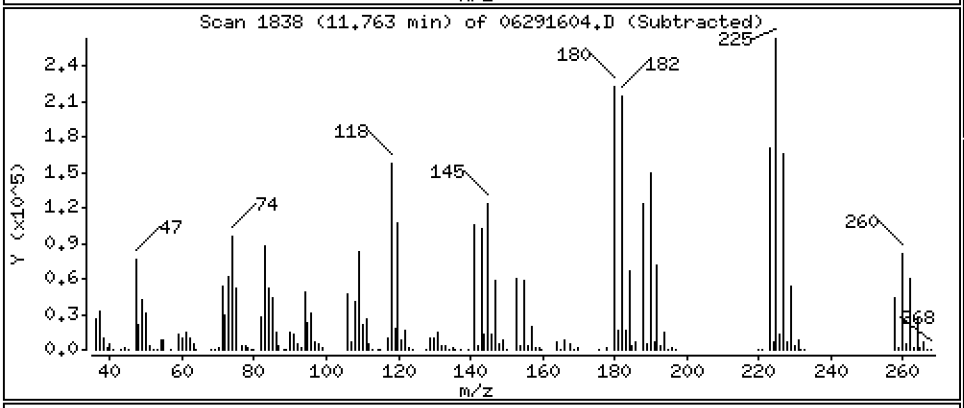
Column phase: RTXVMS

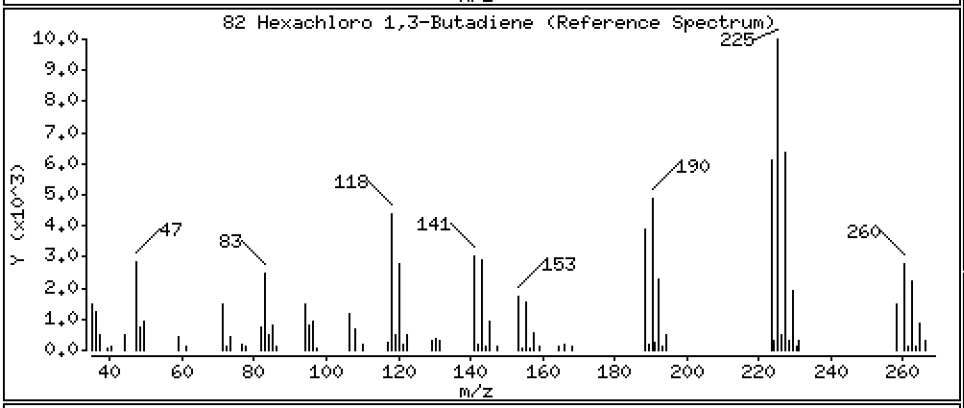
Column diameter: 0.18

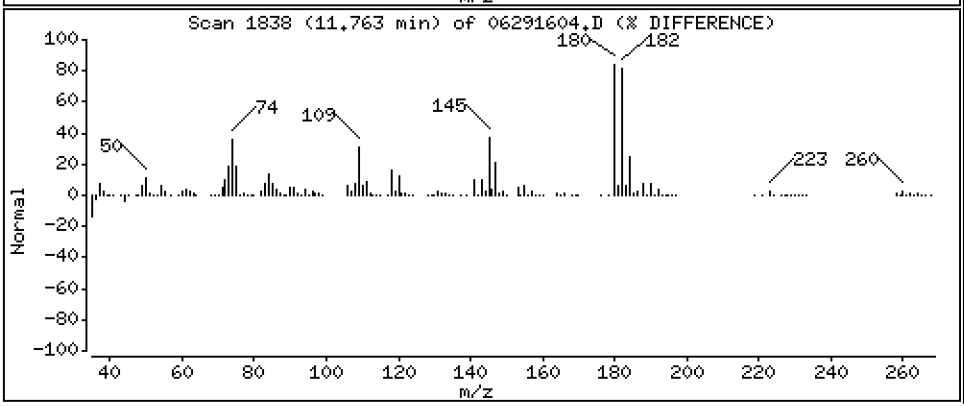
82 Hexachloro 1,3-Butadiene

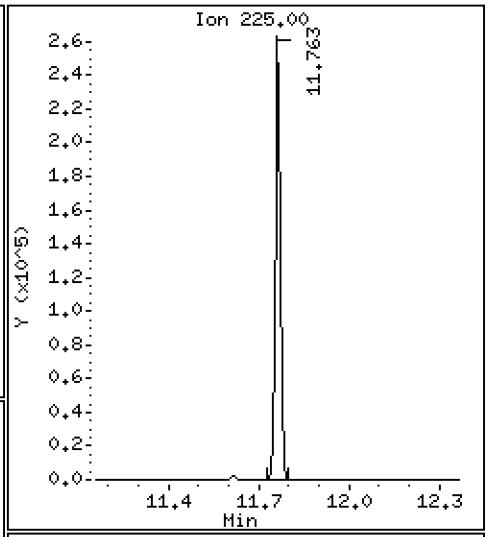
Concentration: 43.643 ug/Kg

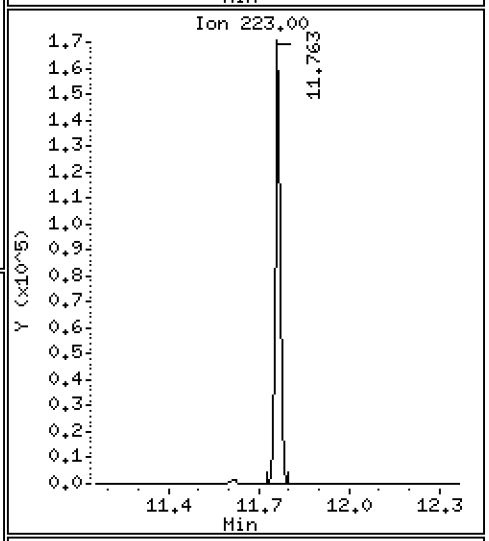


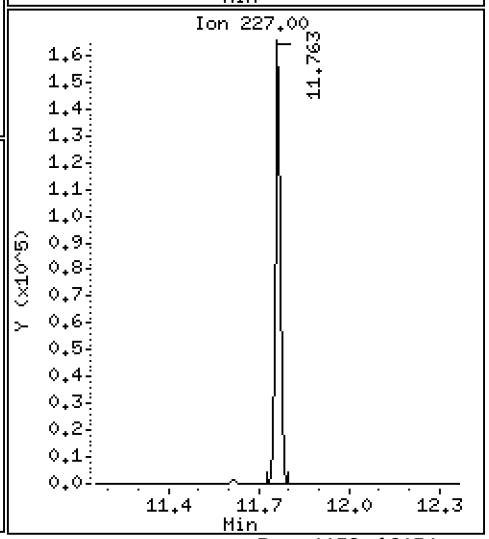












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

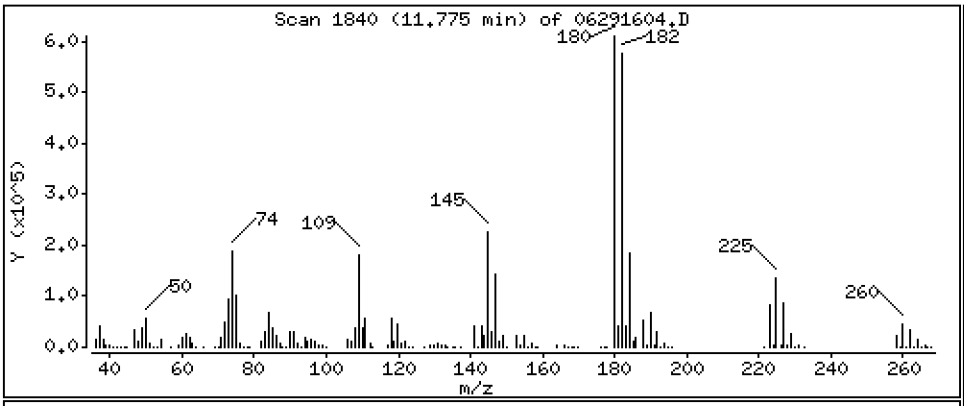
Operator: PB

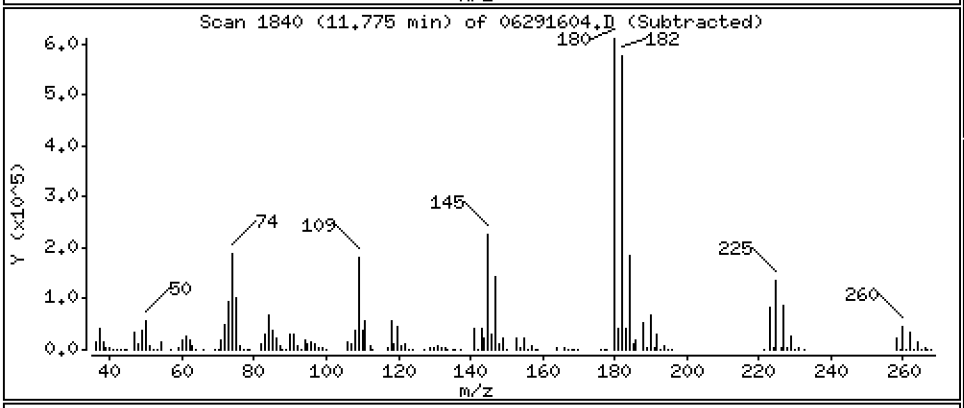
Column phase: RTXVMS

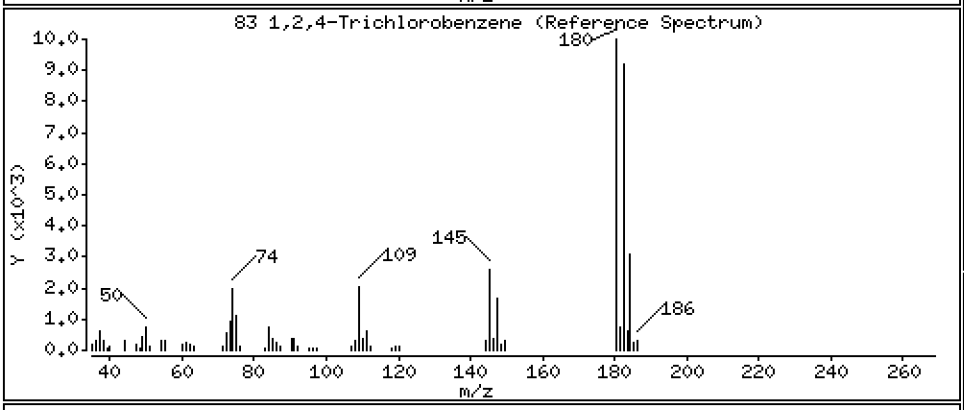
Column diameter: 0.18

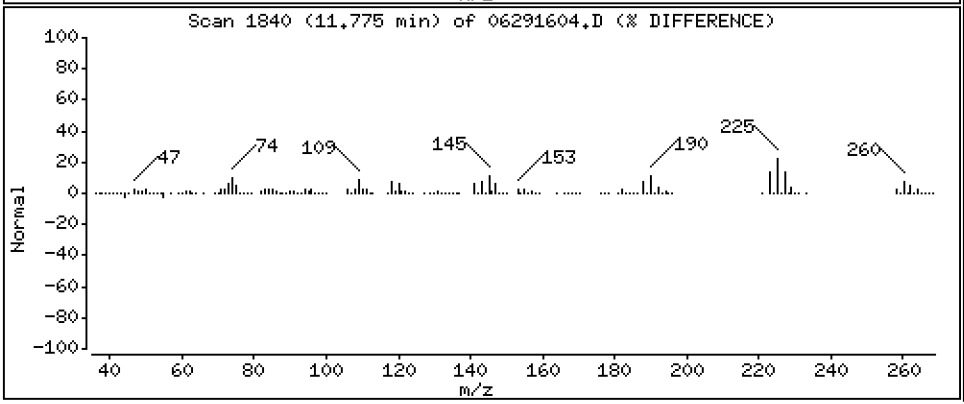
83 1,2,4-Trichlorobenzene

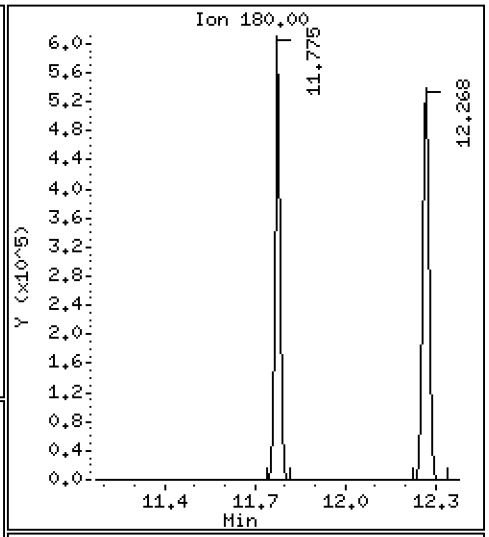
Concentration: 47.161 ug/Kg

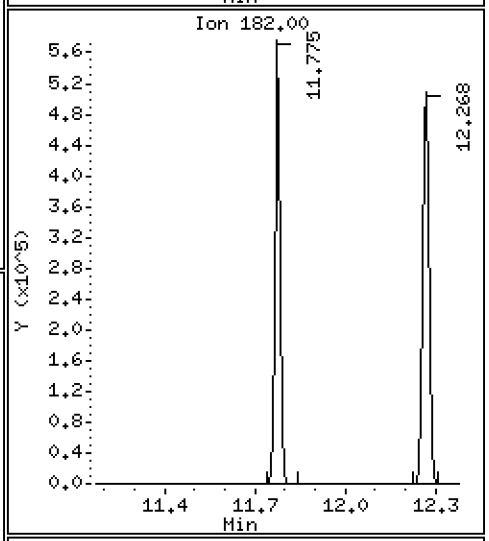


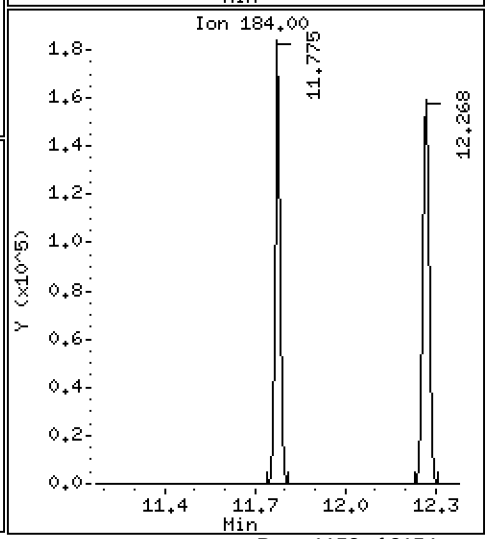












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

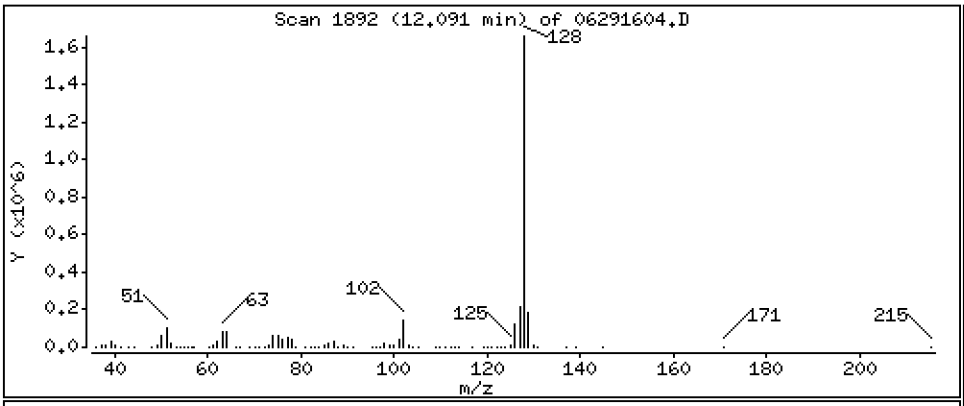
Operator: PB

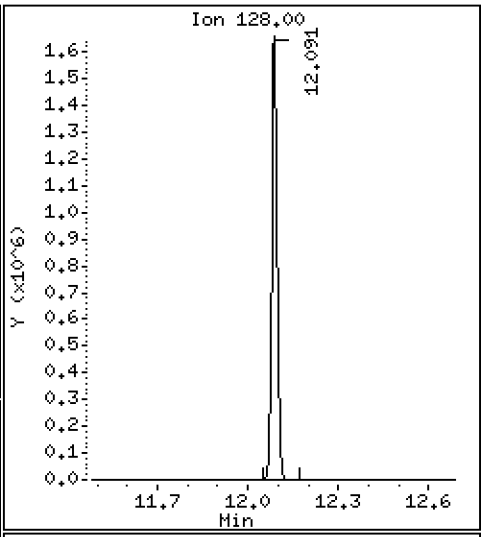
Column phase: RTXVMS

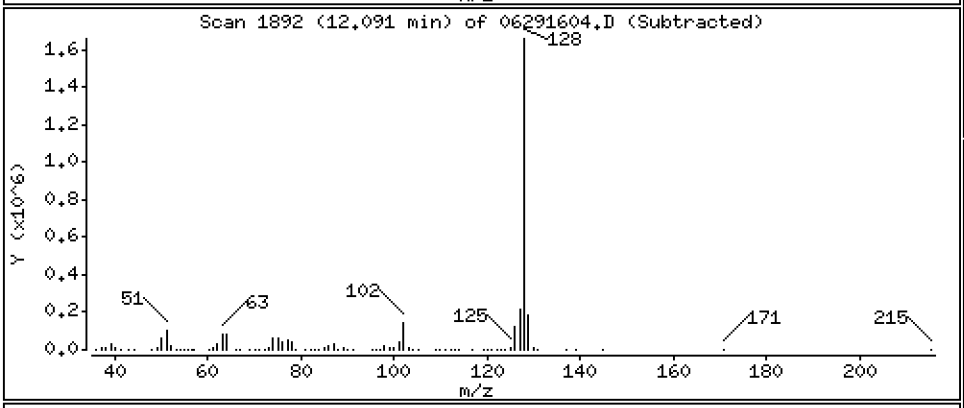
Column diameter: 0.18

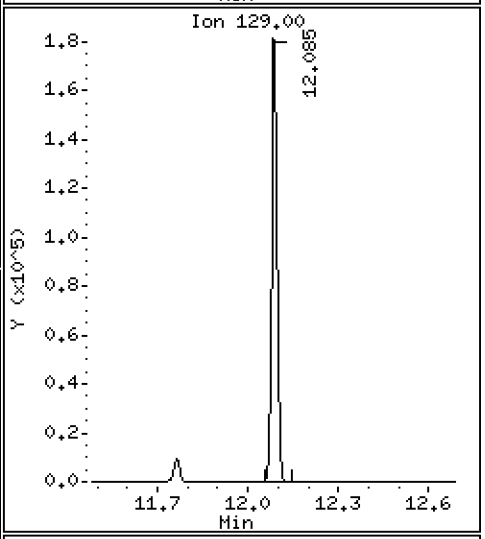
84 Naphthalene

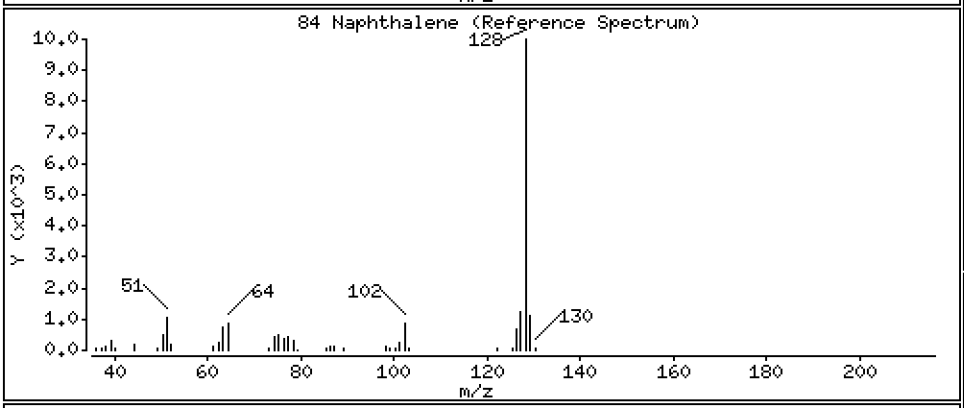
Concentration: 46.456 ug/Kg

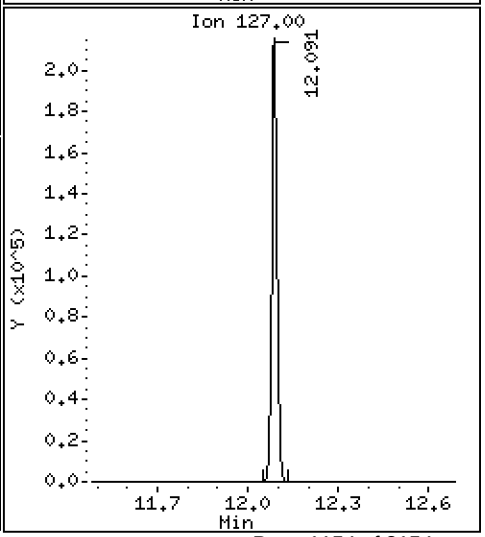


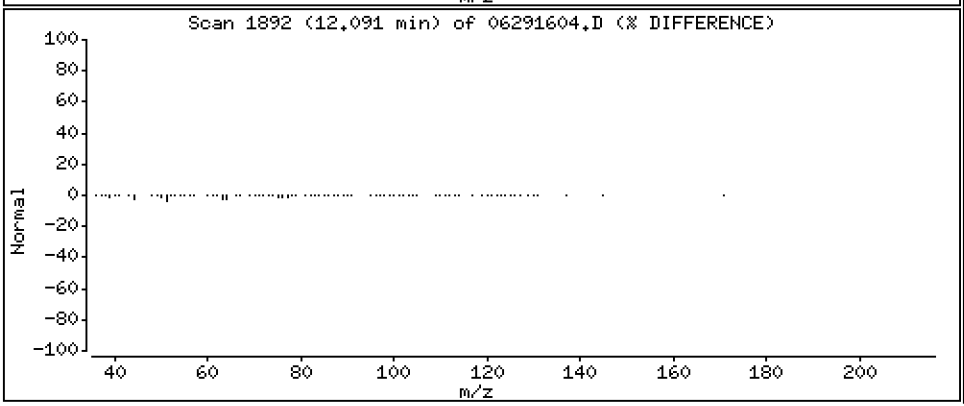












Data File: \\target\share\chem1\nt5.i\20160629.b\06291604.D

Date : 29-JUN-2016 15:38

Client ID: LCS0629

Instrument: nt5.i

Sample Info: LCS0629,5,5,0

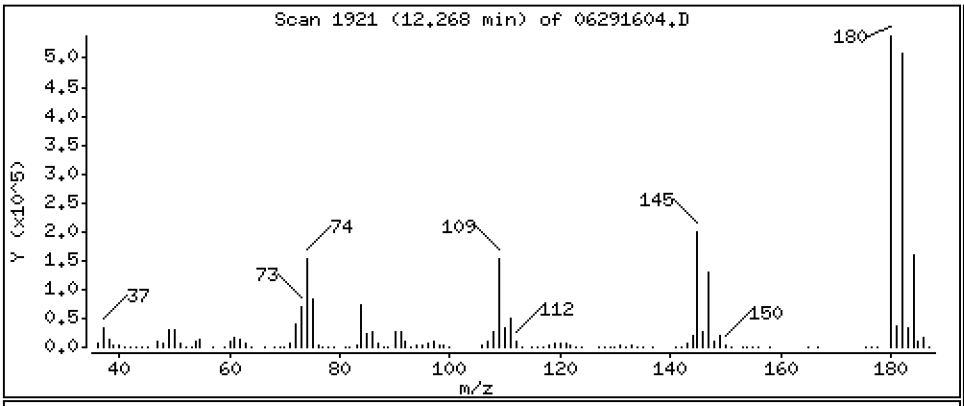
Operator: PB

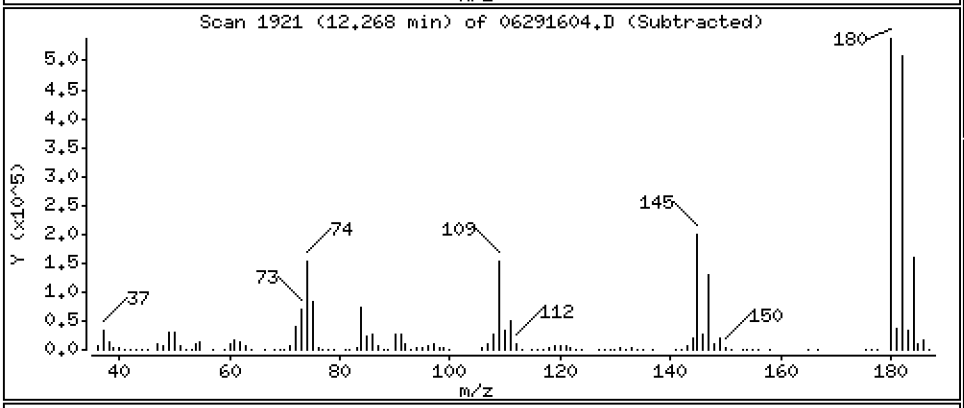
Column phase: RTXVMS

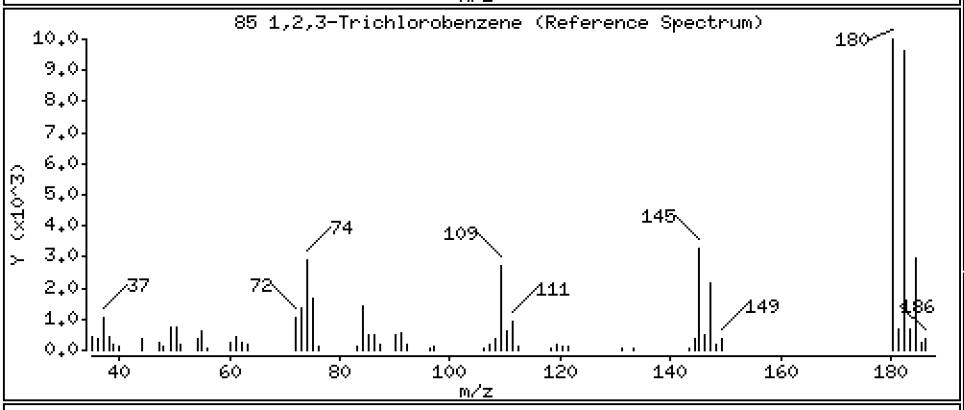
Column diameter: 0.18

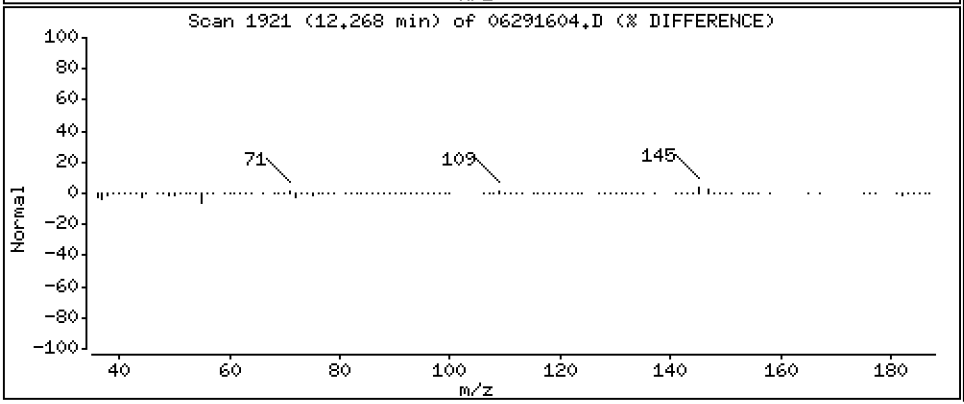
85 1,2,3-Trichlorobenzene

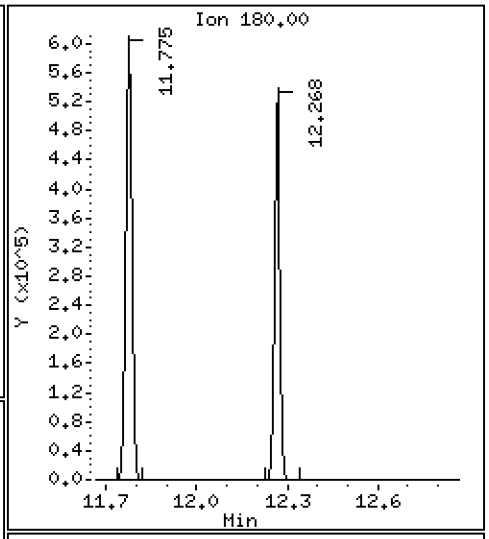
Concentration: 46.367 ug/Kg

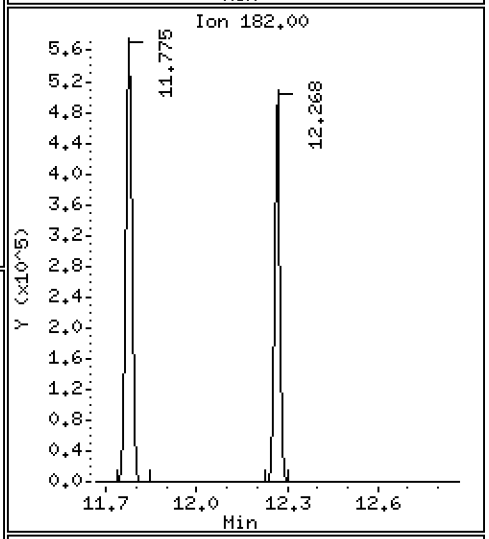


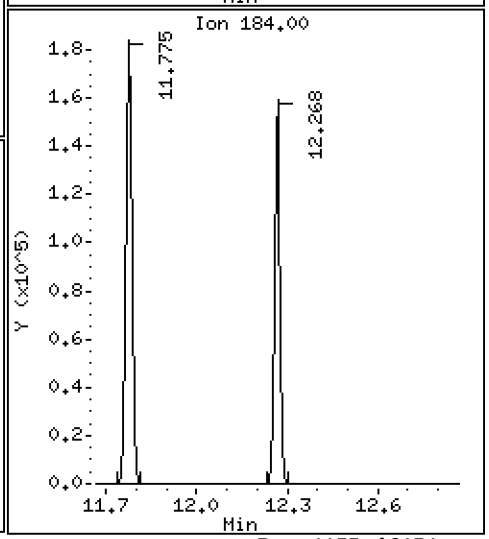












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291604.D
Lab Smp Id: BEF0232-BSD1 Client Smp ID: LCS0629
Inj Date : 29-JUN-2016 15:38
Operator : PB Inst ID: nt5.i
Smp Info : LCS0629,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.159	1.152	(0.234)	720495	40.2211	40.221
2	Chloromethane	50	1.299	1.286	(0.262)	729211	34.5754	34.575
3	Vinyl Chloride	62	1.353	1.347	(0.273)	757161	41.4017	41.402
4	Bromomethane	94	1.591	1.584	(0.321)	341941	26.5686	26.569
5	Chloroethane	64	1.682	1.676	(0.340)	388135	42.8827	42.883
6	Trichlorofluoromethane	101	1.779	1.767	(0.359)	617990	58.8497	58.850
7	1,1-Dichloroethene	96	2.205	2.199	(0.445)	541895	44.5796	44.580
8	Carbon Disulfide	76	2.211	2.199	(0.446)	1720532	44.0262	44.026
9	112Trichloro122Trifluoroethane	101	2.254	2.241	(0.455)	525038	44.0164	44.016
10	Iodomethane	142	2.321	2.308	(0.468)	213948	28.0888	28.089
11	Bromoethane	108	2.436	2.424	(0.492)	320102	46.0068	46.007
12	Acrolein	56	2.534	2.521	(0.511)	536766	226.044	226.04
13	Methylene Chloride	84	2.746	2.734	(0.554)	545465	44.7359	44.736
14	Acetone	43	2.844	2.825	(0.574)	842710	213.537	213.54
15	Trans-1,2-Dichloroethene	96	2.899	2.886	(0.585)	600060	44.4388	44.439
16	Methyl tert butyl ether	73	3.069	3.057	(0.619)	1782662	44.4157	44.416
17	1,1-Dichloroethane	63	3.531	3.519	(0.713)	1106463	41.7410	41.741
18	Acrylonitrile	53	3.623	3.604	(0.731)	206624	43.7712	43.771
19	Vinyl Acetate	43	3.842	3.829	(0.775)	1324230	42.1083	42.108
20	Cis-1,2-Dichloroethene	96	4.061	4.048	(0.820)	697054	43.7332	43.733
22	2,2-Dichloropropane	77	4.152	4.139	(0.838)	987615	43.4723	43.472

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
23	Bromochloromethane	128	4.243	4.231	(0.856)	316761	45.4964	45.496
24	Chloroform	83	4.334	4.322	(0.875)	1061994	43.0989	43.099
25	Carbon Tetrachloride	117	4.419	4.407	(0.818)	869956	43.0282	43.028
$ 27	Dibromofluoromethane	111	4.499	4.486	(0.908)	784649	52.1689	52.169
26	1,1,1-Trichloroethane	97	4.486	4.474	(0.905)	968764	42.3147	42.315
28	1,1-Dichloropropene	75	4.602	4.596	(0.851)	867664	41.2536	41.254
29	2-Butanone	72	4.651	4.638	(0.939)	362997	217.149	217.15
30	Benzene	78	4.827	4.821	(0.893)	2498983	41.9745	41.975
* 31	Pentafluorobenzene	168	4.955	4.949	(1.000)	631048	50.0000	
$ 32	d4-1,2-Dichloroethane	65	4.961	4.949	(1.001)	732804	48.7378	48.738
33	1,2-Dichloroethane	62	5.022	5.009	(0.929)	790791	40.2090	40.209
34	Trichloroethene	95	5.350	5.344	(0.990)	648773	42.0526	42.053
* 35	1,4-Difluorobenzene	114	5.405	5.393	(1.000)	2204492	50.0000	
37	Dibromomethane	93	5.709	5.703	(1.056)	360201	43.7596	43.760
38	1,2-Dichloropropane	63	5.800	5.794	(1.073)	631255	41.0319	41.032
39	Bromodichloromethane	83	5.873	5.867	(1.087)	815365	43.8990	43.899
172	2-Pentanone	86	6.172	6.159	(1.142)	468234	213.265	213.27
40	2-Chloroethyl Vinyl Ether	63	6.391	6.384	(1.182)	305194	47.1195	47.120
41	Cis 1,3-dichloropropene	75	6.415	6.409	(1.187)	1040490	43.1129	43.113
$ 42	d8-Toluene	98	6.567	6.561	(1.215)	2801221	49.5923	49.592
43	Toluene	92	6.610	6.603	(1.223)	1594245	41.6232	41.623
44	Tetrachloroethene	166	6.920	6.914	(0.878)	613159	42.3019	42.302
45	4-Methyl-2-Pentanone	58	6.962	6.956	(1.288)	1195036	207.340	207.34
46	Trans 1,3-Dichloropropene	75	6.981	6.974	(1.291)	933903	44.4576	44.458
47	1,1,2-Trichloroethane	97	7.108	7.102	(1.315)	529583	44.0257	44.026
48	Chlorodibromomethane	129	7.248	7.242	(0.920)	624456	44.7455	44.746
49	1,3-Dichloropropane	76	7.333	7.327	(0.931)	947845	42.4920	42.492
50	1,2-Dibromoethane	107	7.431	7.425	(1.375)	536263	44.3346	44.335
51	2-Hexanone	43	7.680	7.674	(0.975)	2093012	199.991	199.99
* 52	d5-Chlorobenzene	117	7.881	7.875	(1.000)	2338072	50.0000	
53	Chlorobenzene	112	7.893	7.887	(1.002)	1772325	41.9866	41.987
54	Ethyl Benzene	91	7.936	7.930	(1.007)	3004680	42.1057	42.106
55	1,1,1,2-Tetrachloroethane	131	7.960	7.954	(1.010)	638185	42.7002	42.700
56	m,p-xylene	106	8.064	8.063	(1.023)	2351799	84.8918	84.892
57	o-Xylene	106	8.435	8.428	(1.070)	1153394	42.1499	42.150
58	Styrene	104	8.483	8.483	(1.076)	1941922	42.9706	42.971
59	Bromoform	173	8.489	8.489	(0.852)	378509	45.0233	45.023
60	Isopropyl Benzene	105	8.721	8.714	(0.875)	2996593	42.0742	42.074
$ 62	4-Bromofluorobenzene	95	8.958	8.952	(1.137)	1243747	49.4645	49.465
63	Bromobenzene	156	9.037	9.037	(0.907)	707185	42.8456	42.846
64	N-Propyl Benzene	91	9.092	9.085	(0.912)	3482209	40.6615	40.662
65	1,1,2,2-Tetrachloroethane	83	9.165	9.158	(0.919)	700534	41.7099	41.710
66	2-Chloro Toluene	91	9.213	9.207	(0.924)	2062869	41.2334	41.233
67	1,3,5-Trimethyl Benzene	105	9.274	9.274	(0.930)	2510106	42.0075	42.008
68	1,2,3-Trichloropropane	110	9.268	9.268	(0.930)	221802	44.6888	44.689
69	Trans-1,4-Dichloro 2-Butene	53	9.317	9.317	(0.935)	190133	42.4167	42.417
70	4-Chloro Toluene	91	9.365	9.365	(0.940)	2159943	41.6857	41.686
71	T-Butyl Benzene	119	9.554	9.554	(0.958)	2253502	41.4232	41.423
72	1,2,4-Trimethylbenzene	105	9.621	9.621	(0.965)	2525840	42.1957	42.196
73	S-Butyl Benzene	105	9.718	9.718	(0.975)	3237807	40.4259	40.426
74	4-Isopropyl Toluene	119	9.858	9.858	(0.989)	2840456	42.6849	42.685
75	1,3-Dichlorobenzene	146	9.895	9.895	(0.993)	1407953	43.5061	43.506
* 76	d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1193139	50.0000	
77	1,4-Dichlorobenzene	146	9.980	9.980	(1.001)	1400787	42.7919	42.792

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	10.248	10.247	(1.028)	2503383	42.4940	42.494
$	79 d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1200399	49.9629	49.963
	80 1,2-Dichlorobenzene	146	10.369	10.363	(1.040)	1309812	42.7674	42.767
	81 1,2-Dibromo 3-Chloropropane	75	11.124	11.123	(1.116)	134546	42.4667	42.467
	82 Hexachloro 1,3-Butadiene	225	11.762	11.762	(1.180)	357485	43.6431	43.643
	83 1,2,4-Trichlorobenzene	180	11.774	11.774	(1.181)	825686	47.1610	47.161
	84 Naphthalene	128	12.091	12.085	(1.213)	2386408	46.4564	46.456
	85 1,2,3-Trichlorobenzene	180	12.267	12.267	(1.231)	761459	46.3674	46.367

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291604.D
Lab Smp Id: BEF0232-BSD1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 29-JUN-2016
Calibration Time: 14:20
Client Smp ID: LCS0629
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	631048	5.18
35 1,4-Difluorobenze	2041239	1020620	4082478	2204492	8.00
52 d5-Chlorobenzene	2118314	1059157	4236628	2338072	10.37
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1193139	13.09

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.95	4.45	5.45	4.96	0.13
35 1,4-Difluorobenze	5.39	4.89	5.89	5.41	0.23
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEF0232-BSD1 Client Smp ID: LCS0629
Level: LOW Operator: PB
Data Type: MS DATA SampleType: LCSD
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	40.221	80.44	67-142
2	Chloromethane	50.000	34.575	69.15	65-129
3	Vinyl Chloride	50.000	41.402	82.80	74-134
4	Bromomethane	50.000	26.569	53.14	40-172
5	Chloroethane	50.000	42.883	85.77	53-154
6	Trichlorofluoromet	50.000	58.850	117.70	57-161
12	Acrolein	250.00	226.04	90.42	60-130
9	112Trichloro122Tri	50.000	44.016	88.03	72-142
14	Acetone	250.00	213.54	85.41	48-132
7	1,1-Dichloroethene	50.000	44.580	89.16	73-138
11	Bromoethane	50.000	46.007	92.01	74-132
10	Iodomethane	50.000	28.089	56.18	34-181
13	Methylene Chloride	50.000	44.736	89.47	61-128
8	Carbon Disulfide	50.000	44.026	88.05	72-146
18	Acrylonitrile	50.000	43.771	87.54	59-124
15	Trans-1,2-Dichloro	50.000	44.439	88.88	73-131
19	Vinyl Acetate	50.000	42.108	84.22	54-138
17	1,1-Dichloroethane	50.000	41.741	83.48	65-139
29	2-Butanone	250.00	217.15	86.86	64-120
22	2,2-Dichloropropan	50.000	43.472	86.94	77-137
20	Cis-1,2-Dichloroet	50.000	43.733	87.47	74-124
24	Chloroform	50.000	43.099	86.20	75-126
23	Bromochloromethane	50.000	45.496	90.99	69-133
26	1,1,1-Trichloroeth	50.000	42.315	84.63	78-133
28	1,1-Dichloropropen	50.000	41.254	82.51	80-123
25	Carbon Tetrachlori	50.000	43.028	86.06	76-136
33	1,2-Dichloroethane	50.000	40.209	80.42	77-120
30	Benzene	50.000	41.975	83.95	80-120
34	Trichloroethene	50.000	42.053	84.11	80-120
38	1,2-Dichloropropan	50.000	41.032	82.06	74-120
39	Bromodichlorometha	50.000	43.899	87.80	80-122
172	2-Pentanone	250.00	213.27	85.31	70-130
37	Dibromomethane	50.000	43.760	87.52	80-120
40	2-Chloroethyl Viny	50.000	47.120	94.24	20-157
45	4-Methyl-2-Pentano	250.00	207.34	82.94	70-124
41	Cis 1,3-dichloropr	50.000	43.113	86.23	80-124
43	Toluene	50.000	41.623	83.25	78-120
46	Trans 1,3-Dichloro	50.000	44.458	88.92	80-126
51	2-Hexanone	250.00	199.99	80.00	62-128
47	1,1,2-Trichloroeth	50.000	44.026	88.05	77-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
49 1,3-Dichloropropan	50.000	42.492	84.98	77-120
44 Tetrachloroethene	50.000	42.302	84.60	76-131
48 Chlorodibromometha	50.000	44.746	89.49	77-123
50 1,2-Dibromoethane	50.000	44.335	88.67	79-120
53 Chlorobenzene	50.000	41.987	83.97	80-120
55 1,1,1,2-Tetrachlor	50.000	42.700	85.40	80-120
54 Ethyl Benzene	50.000	42.106	84.21	80-120
56 m,p-xylene	100.00	84.892	84.89	80-123
57 o-Xylene	50.000	42.150	84.30	80-120
58 Styrene	50.000	42.971	85.94	80-122
60 Isopropyl Benzene	50.000	42.074	84.15	77-127
59 Bromoform	50.000	45.023	90.05	63-120
65 1,1,2,2-Tetrachlor	50.000	41.710	83.42	71-120
68 1,2,3-Trichloropro	50.000	44.689	89.38	75-120
69 Trans-1,4-Dichloro	50.000	42.417	84.83	62-127
64 N-Propyl Benzene	50.000	40.662	81.32	76-126
63 Bromobenzene	50.000	42.846	85.69	75-120
67 1,3,5-Trimethyl Be	50.000	42.008	84.02	77-126
66 2-Chloro Toluene	50.000	41.233	82.47	76-120
70 4-Chloro Toluene	50.000	41.686	83.37	75-121
71 T-Butyl Benzene	50.000	41.423	82.85	77-125
72 1,2,4-Trimethylben	50.000	42.196	84.39	77-125
73 S-Butyl Benzene	50.000	40.426	80.85	77-127
74 4-Isopropyl Toluen	50.000	42.685	85.37	78-131
75 1,3-Dichlorobenzen	50.000	43.506	87.01	76-120
77 1,4-Dichlorobenzen	50.000	42.792	85.58	75-120
78 N-Butyl Benzene	50.000	42.494	84.99	75-134
80 1,2-Dichlorobenzen	50.000	42.767	85.53	77-120
81 1,2-Dibromo 3-Chlo	50.000	42.467	84.93	61-128
83 1,2,4-Trichloroben	50.000	47.161	94.32	75-130
82 Hexachloro 1,3-But	50.000	43.643	87.29	72-135
84 Naphthalene	50.000	46.456	92.91	71-122
85 1,2,3-Trichloroben	50.000	46.367	92.73	76-122

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	52.169	104.34	70-130
$ 32 d4-1,2-Dichloroeth	50.000	48.738	97.48	80-149
$ 42 d8-Toluene	50.000	49.592	99.18	77-120
$ 62 4-Bromofluorobenze	50.000	49.465	98.93	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.963	99.93	80-120

REVIEW SUMMARY FOR FILE - 06291604.D

Lab ID: BEF0232-BSD1
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 15:38

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

PREPARATION BATCH SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc. SDG: 16F0096

Client: Anchor QEA, LLC Project: CHRL SSWA

Batch: BEF0232 Batch Matrix: Solid Preparation: No Prep - Volatiles

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
CHRL-M-02-160629	16F0096-01	06291606.D	06/29/16 13:43	
CHRL-M-03-160629	16F0096-02	06291607.D	06/29/16 13:43	
CHRL-M-53-160629	16F0096-03	06291608.D	06/29/16 13:43	
CHRL-M-04-160629	16F0096-04	06291609.D	06/29/16 13:43	
CHRL-M-05-160629	16F0096-05	06291610.D	06/29/16 13:43	
CHRL-O-01-160629	16F0096-06	06291611.D	06/29/16 13:43	
CHRL-O-02-160629	16F0096-07	06291612.D	06/29/16 13:43	
CHRL-O-03-160629	16F0096-08	06291613.D	06/29/16 13:43	
CHRL-O-04-160629	16F0096-09	06291614.D	06/29/16 13:43	
CHRL-O-05-160629	16F0096-10	06291615.D	06/29/16 13:43	
CHRL-N-01-160629	16F0096-11	06291616.D	06/29/16 13:43	
CHRL-N-02-160629	16F0096-12	06291617.D	06/29/16 13:43	
CHRL-N-03-160629	16F0096-13	06291618.D	06/29/16 13:43	
CHRL-N-04-160629	16F0096-14	06291619.D	06/29/16 13:43	
CHRL-N-05-160629	16F0096-15	06291620.D	06/29/16 13:43	
CHRL-Q-01-160629	16F0096-16	06291621.D	06/29/16 13:43	
CHRL-Q-02-160629	16F0096-17	06291622.D	06/29/16 13:43	
CHRL-Q-03-160629	16F0096-18	06291623.D	06/29/16 13:43	
CHRL-Q-04-160629	16F0096-19	06291624.D	06/29/16 13:43	
Blank	BEF0232-BLK1	06291605.D	06/29/16 13:43	
LCS	BEF0232-BS1	06291603.D	06/29/16 13:43	
LCS Dup	BEF0232-BSD1	06291604.D	06/29/16 13:43	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Method 5035 Extraction Bench Sheet

(8260C, 8260C-SIM, NWTPH-Gx, AK-101, TPH-G, VPH, TCLP-ZHE)

Work order: 16F0096/BCR2 | Element Batch: BEF0232, SEG0001 | Prep/Extraction Date: 6/24/16 | Analyst: B

	Lab ID	Vial No.	Method 5035 Sample Weight						Extract Split Basis		
			$NaHSO_3$ Lot#	CH_3OH Lot#	Vial Weight (g)	Tare (from vial) (g)	Initial Weight (g)	Final Volume (mL)	MeOH Spilt Volume (µL)	Diluent Volume (mL)	Dilution
1	16F0096-01	C	E1715		40.67	35.25	5.42				
2	02	C			40.71	36.01	4.70				
3	03	C			40.97	35.82	5.15				
4	04	C			39.08	35.58	3.50				
5	05	C			40.16	35.50	4.66				
6	06	C			39.94	35.68	4.26				
7	07	C			41.61	36.03	5.58				
8	08	C			40.04	34.68	5.68				
9	09	C			40.03	34.97	5.06				
10	10	C			41.29	36.06	5.23				
11	11	C			41.07	35.52	5.65				
12	12	C			39.14	34.78	4.46				
13	13	C			40.65	35.97	4.68				
14	14	C			42.16	35.81	6.35				
15	15	C			41.90	36.46	5.44				
16	16	C			40.79	35.25	5.54				
17	17	C			41.69	35.78	5.91				
18	18	C			41.07	35.96	5.11				
19	19	C			40.95	35.72	5.23				
20	BCR2	A					1.12	5mL	10mL	5mL	2500
21		B					1.18				
22		C					1.14				
23		D					1.02				

Balance ID: SLF302

PREPARATION BATCH SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc. SDG: 16F0096

Client: Anchor QEA, LLC Project: CHRL SSWA

Batch: BEG0004 Batch Matrix: Solid Preparation: No Prep - Volatiles

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
CHRL-Q-05-160629	16F0096-20	06301607.D	06/30/16 10:04	
CHRL-P-01-160629	16F0096-21	06301608.D	06/30/16 10:04	
CHRL-P-02-160629	16F0096-22	06301609.D	06/30/16 10:04	
CHRL-P-52-160629	16F0096-23	06301610.D	06/30/16 10:04	
CHRL-P-04-160629	16F0096-25	06301612.D	06/30/16 10:04	
CHRL-P-05-160629	16F0096-26	06301613.D	06/30/16 10:04	
CHRL-R-02-160629	16F0096-27	06301614.D	06/30/16 10:04	
CHRL-R-03-160629	16F0096-28	06301615.D	06/30/16 10:04	
CHRL-R-04-160629	16F0096-29	06301616.D	06/30/16 10:04	
Blank	BEG0004-BLK1	06301606.D	06/30/16 10:04	
LCS	BEG0004-BS1	06301604.D	06/30/16 10:04	
LCS Dup	BEG0004-BSD1	06301605.D	06/30/16 10:04	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Method 5035 Extraction Bench Sheet

(8260C, 8260C-SIM, NWTPH-Gx, AK-101, TPH-G, VPH, TCLP-ZHE)

Work order: 16F0096 / 16F0094

Element Batch: BEG0004 / BEG0005 / BEG0006 / BEG0003

Prep/Extraction Date: 6/30/16

Analyst: B

	Lab ID	Vial No.	Method 5035 Sample Weight						Extract Split Basis		
			$NaHSO_3$ Lot#	CH_3OH Lot#	Vial Weight (g)	Tare (from vial) (g)	Initial Weight (g)	Final Volume (mL)	MeOH Spilt Volume (µL)	Diluent Volume (mL)	Dilution
1	16F0096-20	C	E1785		41.23	36.07	5.16				
2	21	↓	↓		41.09	35.86	5.17				
3	22				40.58	35.09	5.49				
4	23				40.72	35.48	5.24				
5	~~24~~				~~40.44~~	~~35.42~~	~~4.99~~			not used	
6	25				42.25	36.69	5.56				
7	26				40.98	35.29	5.69				
8	27				41.80	35.34	6.46				
9	28	↓			41.26	36.29	5.00				
10	29	C	↓		40.56	35.07	~~5mL~~ 5.49				
11	30	C					5mL				
12	24	B		DM497	34.89	29.555	5.335	5mL	100µL	5mL	50
13	17	B		↓	35.49	29.628	5.862	↓	↓	↓	↓
14	18	B		↓	34.67	29.427	5.243	↓	↓	↓	↓
15	23	B		↓	34.77	29.742	5.028	↓	↓	↓	↓
16	16F0094-08						0.51		4µL		1250
17	09						0.52		↓		↓
18	10						0.53				
19	11						0.41				
20	12						0.50				
21	13						0.54				
22	14						0.51	↓			
23											

Balance ID: SLF302

PREPARATION BENCH SHEET

BEG0004

Printed: 7/1/2016 4:24:06PM

Matrix: Solid

Prepared using: Volatiles - No Prep - Volatiles

Surrogate used: E001645

Surrogate ID: E001645

Lab Number	Analysis	Prepared	Initial (g)	Final (g)	Spike ID	Source ID	uL Spike	Surrogate	Client	Extraction Comments
16F0096-20	8260C VOA Solid	30-Jun-2016 10:04	5.16	5				1	Anchor QEA, LLC	
16F0096-21	8260C VOA Solid	30-Jun-2016 10:04	5.17	5				1	Anchor QEA, LLC	
16F0096-22	8260C VOA Solid	30-Jun-2016 10:04	5.49	5				1	Anchor QEA, LLC	
16F0096-23	8260C VOA Solid	30-Jun-2016 10:04	5.24	5				1	Anchor QEA, LLC	
16F0096-25	8260C VOA Solid	30-Jun-2016 10:04	5.56	5				1	Anchor QEA, LLC	
16F0096-26	8260C VOA Solid	30-Jun-2016 10:04	5.69	5				1	Anchor QEA, LLC	
16F0096-27	8260C VOA Solid	30-Jun-2016 10:04	6.46	5				1	Anchor QEA, LLC	
16F0096-28	8260C VOA Solid	30-Jun-2016 10:04	5	5				1	Anchor QEA, LLC	
16F0096-29	8260C VOA Solid	30-Jun-2016 10:04	5.49	5				1	Anchor QEA, LLC	
BEG0004-BLK1	QC	30-Jun-2016 10:04	5	5				1		
BEG0004-BS1	QC	30-Jun-2016 10:04	5	5	E002628		12.5	1		
BEG0004-BSD1	QC	30-Jun-2016 10:04	5	5	E002628		12.5	1		

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

PREPARATION BATCH SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc. SDG: 16F0096

Client: Anchor QEA, LLC Project: CHRL SSWA

Batch: BEG0005 Batch Matrix: Water Preparation: No Prep - Volatiles

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
CHRL-TB-160629	16F0096-30	06301617.D	06/30/16 10:04	
Blank	BEG0005-BLK1	06301606A.D	06/30/16 10:04	
LCS	BEG0005-BS1	06301604A.D	06/30/16 10:04	
LCS Dup	BEG0005-BSD1	06301605A.D	06/30/16 10:04	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Method 5035 Extraction Bench Sheet

(8260C, 8260C-SIM, NWTPH-Gx, AK-101, TPH-G, VPH, TCLP-ZHE)

Work order: 16F0096 / 16F0094

Element Batch: BEG0004 / BEG0005 / BEG0006 / BEG0003

Prep/Extraction Date: 6/30/16

Analyst: B

	Lab ID	Vial No.	Method 5035 Sample Weight						Extract Split Basis		
			$NaHSO_3$ Lot#	CH_3OH Lot#	Vial Weight (g)	Tare (from vial) (g)	Initial Weight (g)	Final Volume (mL)	MeOH Spilt Volume (µL)	Diluent Volume (mL)	Dilution
1	16F0096-20	C	E1785		41.23	36.07	5.16				
2	21	↓	↓		41.09	35.86	5.17				
3	22				40.58	35.09	5.49				
4	23				40.72	35.48	5.24				
5	~~24~~				~~40.44~~	~~35.42~~	~~4.96~~			not used	
6	25				42.25	36.69	5.56				
7	26				40.98	35.29	5.69				
8	27				41.80	35.34	6.46				
9	28	↓			41.26	36.26	5.00				
10	29	C	↓		40.56	35.07	~~5mL~~ 5.49				
11	30	C					5mL				
12	24	B		DM497	34.89	29.555	5.335	5mL	100µL	5mL	50
13	17	B		↓	35.49	29.628	5.862	↓	↓	↓	↓
14	18	B		↓	34.67	29.427	5.243	↓	↓	↓	↓
15	23	B		↓	34.77	29.742	5.028	↓	↓	↓	↓
16	16F0094-08						0.51		4µL		1250
17	09						0.52		↓		↓
18	10						0.53				
19	11						0.41				
20	12						0.50				
21	13						0.54				
22	14						0.51	↓			
23											

Balance ID: SLF302

Analytical Resources, Incorporated
Analytical Chemists and Consultants

PREPARATION BENCH SHEET

BEG0005

Printed: 7/1/2016 4:23:36PM

Matrix: Water

Prepared using: Volatiles - No Prep - Volatiles

Surrogate used: E001645

Surrogate ID: E001645

Lab Number	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	uL Spike	Surrogate	Client	Extraction Comments
16F0096-30	8260C VOA	30-Jun-2016 10:04	5	5				1	Anchor QEA, LLC	
BEG0005-BLK1	QC	30-Jun-2016 10:04	5	5				1		
BEG0005-BS1	QC	30-Jun-2016 10:04	5	5	E002628		12.5	1		
BEG0005-BSD1	QC	30-Jun-2016 10:04	5	5	E002628		12.5	1		

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

PREPARATION BATCH SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Batch: BEG0006 Batch Matrix: Solid
Preparation: No Prep - Volatiles

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
CHRL-Q-02-160629	16F0096-17RE1	06301618.D	06/30/16 10:04	Added 7/1/2016 by PAB
CHRL-Q-03-160629	16F0096-18RE1	06301619.D	06/30/16 10:04	Added 7/1/2016 by PAB
CHRL-P-52-160629	16F0096-23RE1	06301620.D	06/30/16 10:04	Added 7/1/2016 by PAB
CHRL-P-03-160629	16F0096-24	06301611.D	06/30/16 10:04	
Blank	BEG0006-BLK1	06301606B.D	06/30/16 10:04	
LCS	BEG0006-BS1	06301604B.D	06/30/16 10:04	
LCS Dup	BEG0006-BSD1	06301605B.D	06/30/16 10:04	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Method 5035 Extraction Bench Sheet

(8260C, 8260C-SIM, NWTPH-Gx, AK-101, TPH-G, VPH, TCLP-ZHE)

Work order: 16F0096 / 16F0094

Element Batch: BEG0004 / BEG0005 / BEG0006 / BEG0003

Prep/Extraction Date: 6/30/16

Analyst: B

	Lab ID	Vial No.	Method 5035 Sample Weight						Extract Split Basis		
			$NaHSO_3$ Lot#	CH_3OH Lot#	Vial Weight (g)	Tare (from vial) (g)	Initial Weight (g)	Final Volume (mL)	MeOH Spilt Volume (µL)	Diluent Volume (mL)	Dilution
1	16F0096-20	C	E1785		41.23	36.07	5.16				
2	21	↓	↓		41.09	35.86	5.17				
3	22				40.58	35.09	5.49				
4	23				40.72	35.48	5.24				
5	~~24~~				~~40.44~~	~~35.42~~	~~4.96~~			not used	
6	25				42.25	36.69	5.56				
7	26				40.98	35.29	5.69				
8	27				41.80	35.34	6.46				
9	28	↓			41.26	36.29	5.00				
10	29	C	↓		40.56	35.07	~~5mL~~ 5.49				
11	30	C					5mL				
12	24	B		DM497	34.89	29.555	5.335	5mL	100µL	5mL	50
13	17	B		↓	35.49	29.628	5.862	↓	↓	↓	↓
14	18	B		↓	34.67	29.427	5.243	↓	↓	↓	↓
15	23	B		↓	34.77	29.742	5.028	↓	↓	↓	↓
16	16F0094-08						0.51		4µL		1250
17	09						0.52		↓		↓
18	10						0.53				
19	11						0.51				
20	12						0.50				
21	13						0.54				
22	14						0.51	↓			
23											

Balance ID: SLF302

PREPARATION BENCH SHEET

BEG0006

Printed: 7/1/2016 4:24:21PM

Matrix: Solid

Prepared using: Volatiles - No Prep - Volatiles

Surrogate used: E001645

Surrogate ID: E001645

Lab Number	Analysis	Prepared	Initial (g)	Final (g)	Spike ID	Source ID	uL Spike	Surrogate	Client	Extraction Comments
16F0096-17RE1	8260C VOA Solid (Me	30-Jun-2016 10:04	5.862	5				1	Anchor QEA, LLC	Added 7/1/2016 by PAB
16F0096-18RE1	8260C VOA Solid (Me	30-Jun-2016 10:04	5.243	5				1	Anchor QEA, LLC	Added 7/1/2016 by PAB
16F0096-23RE1	8260C VOA Solid (Me	30-Jun-2016 10:04	5.028	5				1	Anchor QEA, LLC	Added 7/1/2016 by PAB
16F0096-24	8260C VOA Solid (Me	30-Jun-2016 10:04	5.335	5				1	Anchor QEA, LLC	
BEG0006-BLK1	QC	30-Jun-2016 10:04	5	5				1		
BEG0006-BS1	QC	30-Jun-2016 10:04	5	5	E002628		625	1		
BEG0006-BSD1	QC	30-Jun-2016 10:04	5	5	E002628		625	1		

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8260C

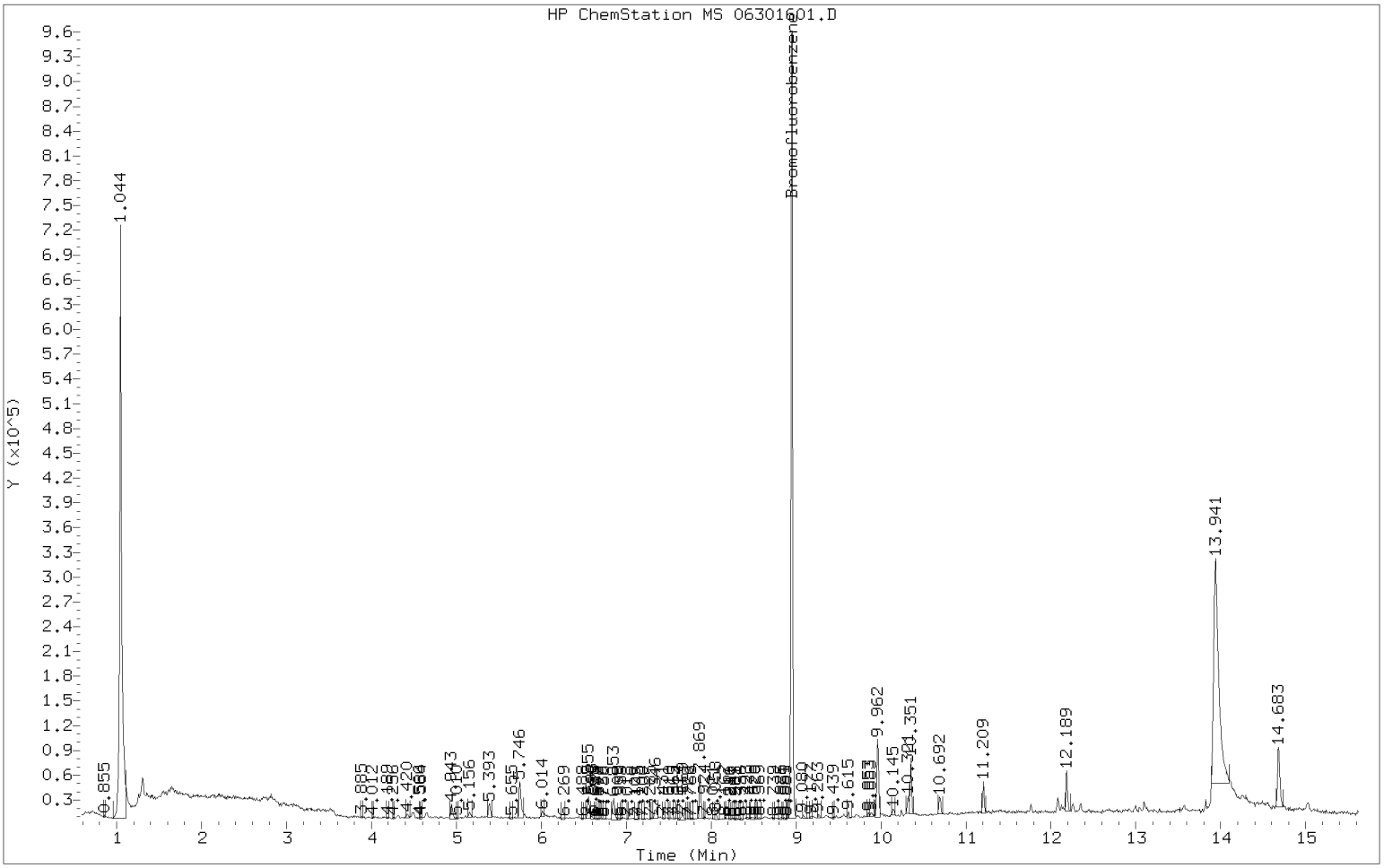
Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Lab File ID:	06301601.D	Injection Date:	06/30/16
Instrument ID:	NT5	Injection Time:	10:04
Sequence:	SEG0003	Lab Sample ID:	SEG0003-TUN1

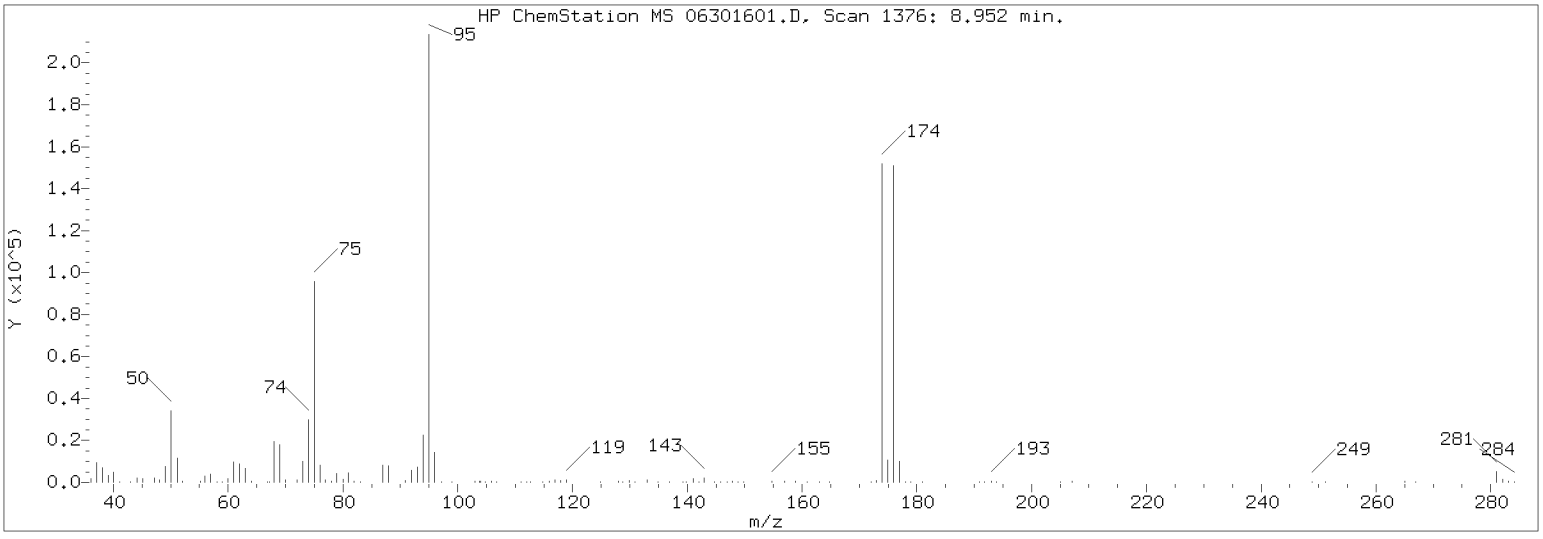
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	17.1	PASS
75	30 - 80% of 95	46.6	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.68	PASS
173	Less than 2% of 174	0.407	PASS
174	50 - 120% of 95	72.7	PASS
175	5 - 9% of 174	7.23	PASS
176	95 - 101% of 174	97.1	PASS
177	5 - 9% of 176	6.7	PASS

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Cal Check	SEG0003-ICV1	06301603.D	06/30/2016	12:05
LCS	BEG0005-BS1	06301604A.D	06/30/2016	12:46
LCS	BEG0004-BS1	06301604.D	06/30/2016	12:46
LCS	BEG0006-BS1	06301604B.D	06/30/2016	12:46
LCS Dup	BEG0004-BSD1	06301605.D	06/30/2016	13:09
LCS Dup	BEG0005-BSD1	06301605A.D	06/30/2016	13:09
LCS Dup	BEG0006-BSD1	06301605B.D	06/30/2016	13:09
Blank	BEG0004-BLK1	06301606.D	06/30/2016	13:31
Blank	BEG0005-BLK1	06301606A.D	06/30/2016	13:31
Blank	BEG0006-BLK1	06301606B.D	06/30/2016	13:31
CHRL-Q-05-160629	16F0096-20	06301607.D	06/30/2016	14:29
CHRL-P-01-160629	16F0096-21	06301608.D	06/30/2016	14:52
CHRL-P-02-160629	16F0096-22	06301609.D	06/30/2016	15:14
CHRL-P-52-160629	16F0096-23	06301610.D	06/30/2016	15:37
CHRL-P-03-160629	16F0096-24	06301611.D	06/30/2016	15:59
CHRL-P-04-160629	16F0096-25	06301612.D	06/30/2016	16:22
CHRL-P-05-160629	16F0096-26	06301613.D	06/30/2016	16:45
CHRL-R-02-160629	16F0096-27	06301614.D	06/30/2016	17:07
CHRL-R-03-160629	16F0096-28	06301615.D	06/30/2016	17:30
CHRL-R-04-160629	16F0096-29	06301616.D	06/30/2016	17:52
CHRL-TB-160629	16F0096-30	06301617.D	06/30/2016	18:15
CHRL-Q-02-160629	16F0096-17RE1	06301618.D	06/30/2016	18:37
CHRL-Q-03-160629	16F0096-18RE1	06301619.D	06/30/2016	19:00
CHRL-P-52-160629	16F0096-23RE1	06301620.D	06/30/2016	19:23
Calibration Check	SEG0003-CCV1	06301627.D	06/30/2016	22:01
Low Cal Check	SEG0003-LCV1	06301628.D	06/30/2016	22:24

BFB TUNE GRAPHIC REPORT

Datafile Analyzed: /20160630.b/06301601.D
Method Used: \20160630.b\bfb8260.m Inst: nt5
Injection Date: 30-JUN-2016 10:04 Operator: PB
Sample Info: BFB0630 BFB0630
Report Date: 07/01/2016 15:48





m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.06
75	30.00 - 60.00% of mass 95	46.59
96	5.00 - 9.00% of mass 95	6.68
173	Less than 2.00% of mass 174	0.30 (0.41)
174	50.00 - 100.00% of mass 95	72.67
175	5.00 - 9.00% of mass 174	5.25 (7.23)
176	95.00 - 101.00% of mass 174	70.57 (97.11)
177	5.00 - 9.00% of mass 176	4.73 (6.70)

Data File: 06301601.D
Spectrum: Avg. Scans 1375-1377 (8.95), Background Scan 1368
Location of Maximum: 95.00
Number of points: 127

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1649	74.00	28224	115.00	83	161.00	302
37.00	8049	75.00	86200	116.00	618	163.00	58
38.00	6630	76.00	7221	117.00	1031	165.00	140
39.00	2819	77.00	986	118.00	809	172.00	179
41.00	53	78.00	441	119.00	1107	173.00	547
43.00	92	79.00	3781	124.00	133	174.00	134464
44.00	791	80.00	1301	125.00	321	175.00	9717
45.00	1498	81.00	3787	128.00	524	176.00	130576
46.00	50	82.00	785	129.00	301	177.00	8755
47.00	1877	83.00	55	130.00	689	178.00	245
48.00	1112	85.00	59	131.00	314	179.00	296
49.00	6822	86.00	54	133.00	837	181.00	60
50.00	31568	87.00	7274	134.00	90	190.00	72
51.00	10390	88.00	6995	135.00	140	191.00	621
52.00	545	91.00	692	137.00	292	192.00	170
55.00	501	92.00	4588	139.00	127	193.00	932
56.00	2090	93.00	6874	140.00	174	194.00	143
57.00	4342	94.00	19928	141.00	1587	205.00	224
58.00	312	95.00	185024	142.00	152	207.00	350
59.00	282	96.00	12352	143.00	1882	209.00	77
60.00	1633	97.00	295	144.00	56	249.00	414
61.00	7619	99.00	10	145.00	284	250.00	55
62.00	7496	103.00	335	146.00	336	251.00	194
63.00	5757	104.00	799	147.00	188	265.00	577
64.00	519	105.00	364	148.00	436	266.00	52
67.00	489	106.00	828	149.00	130	267.00	61
68.00	17536	107.00	249	150.00	258	281.00	5065
69.00	16864	109.00	64	153.00	88	282.00	1476
70.00	1204	110.00	149	155.00	600	283.00	872
71.00	51	111.00	224	157.00	403	284.00	189
72.00	838	112.00	137	158.00	62	285.00	50
73.00	8220	113.00	136	159.00	310		

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8260C

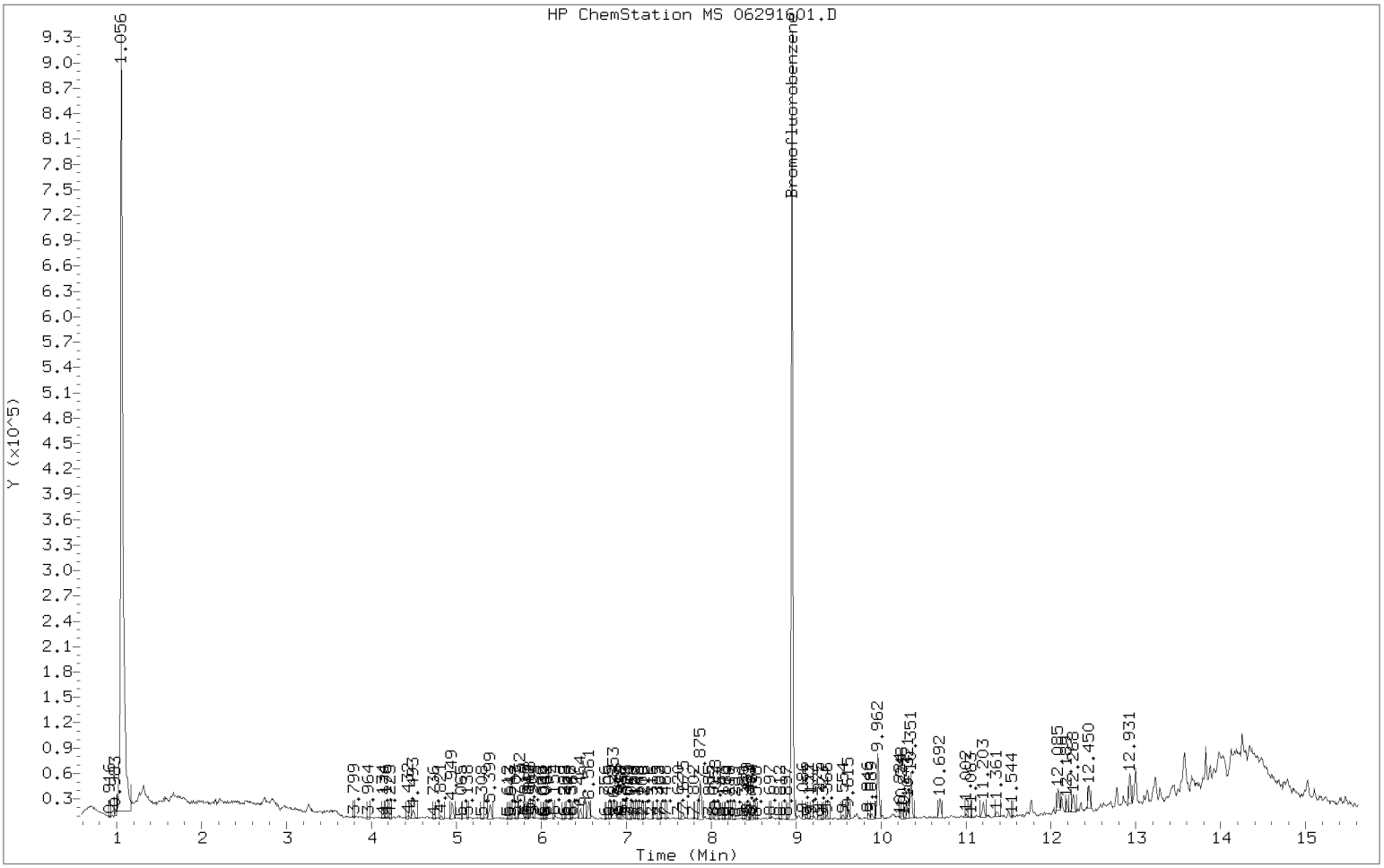
Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Lab File ID:	06291601.D	Injection Date:	06/29/16
Instrument ID:	NT5	Injection Time:	13:43
Sequence:	SEG0001	Lab Sample ID:	SEG0001-TUN1

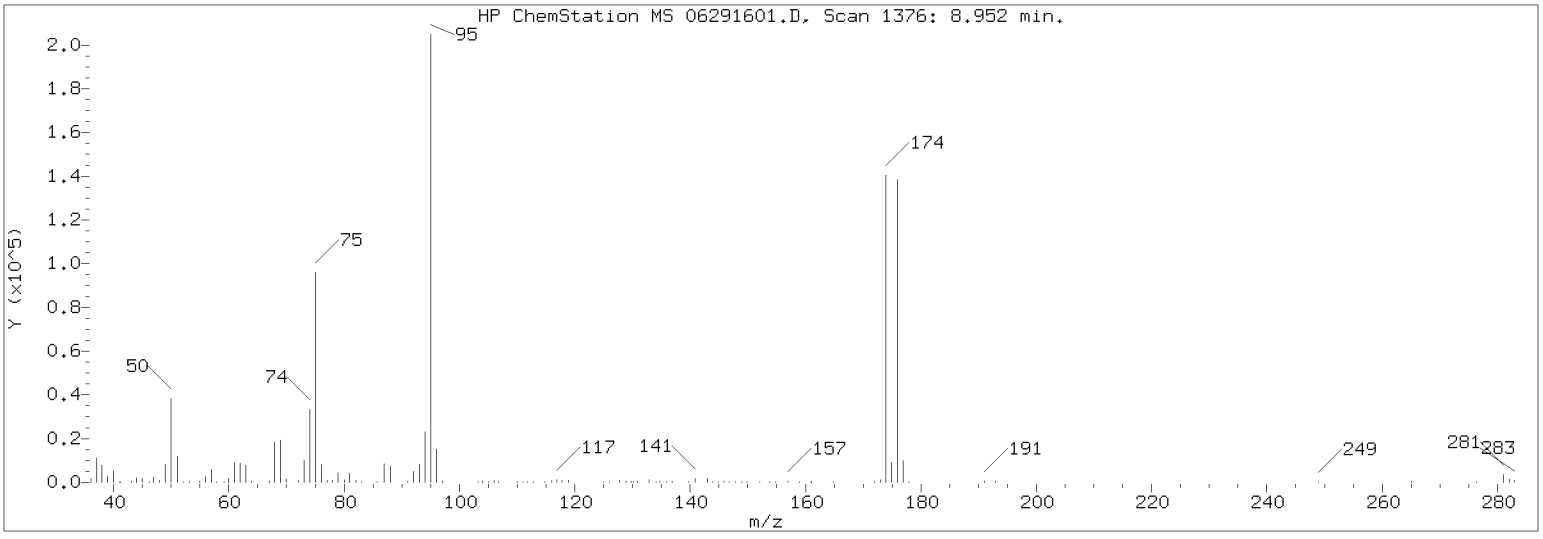
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	18.5	PASS
75	30 - 80% of 95	46.5	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.92	PASS
173	Less than 2% of 174	0.306	PASS
174	50 - 120% of 95	68.3	PASS
175	5 - 9% of 174	6.68	PASS
176	95 - 101% of 174	97.2	PASS
177	5 - 9% of 176	6.81	PASS

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Cal Check	SEG0001-ICV1	06291602.D	06/29/2016	14:20
LCS	BEF0232-BS1	06291603.D	06/29/2016	15:15
LCS Dup	BEF0232-BSD1	06291604.D	06/29/2016	15:38
Blank	BEF0232-BLK1	06291605.D	06/29/2016	16:00
CHRL-M-02-160629	16F0096-01	06291606.D	06/29/2016	17:09
CHRL-M-03-160629	16F0096-02	06291607.D	06/29/2016	17:32
CHRL-M-53-160629	16F0096-03	06291608.D	06/29/2016	17:54
CHRL-M-04-160629	16F0096-04	06291609.D	06/29/2016	18:17
CHRL-M-05-160629	16F0096-05	06291610.D	06/29/2016	18:39
CHRL-O-01-160629	16F0096-06	06291611.D	06/29/2016	19:02
CHRL-O-02-160629	16F0096-07	06291612.D	06/29/2016	19:25
CHRL-O-03-160629	16F0096-08	06291613.D	06/29/2016	19:47
CHRL-O-04-160629	16F0096-09	06291614.D	06/29/2016	20:10
CHRL-O-05-160629	16F0096-10	06291615.D	06/29/2016	20:32
CHRL-N-01-160629	16F0096-11	06291616.D	06/29/2016	20:55
CHRL-N-02-160629	16F0096-12	06291617.D	06/29/2016	21:17
CHRL-N-03-160629	16F0096-13	06291618.D	06/29/2016	21:40
CHRL-N-04-160629	16F0096-14	06291619.D	06/29/2016	22:03
CHRL-N-05-160629	16F0096-15	06291620.D	06/29/2016	22:25
CHRL-Q-01-160629	16F0096-16	06291621.D	06/29/2016	22:48
CHRL-Q-02-160629	16F0096-17	06291622.D	06/29/2016	23:10
CHRL-Q-03-160629	16F0096-18	06291623.D	06/29/2016	23:33
CHRL-Q-04-160629	16F0096-19	06291624.D	06/29/2016	23:56
Calibration Check	SEG0001-CCV1	06291629.D	06/30/2016	1:48

BFB TUNE GRAPHIC REPORT

Datafile Analyzed: /20160629.b/06291601.D
Method Used: \20160629.b\bfb8260.m Inst: nt5
Injection Date: 29-JUN-2016 13:43 Operator: PB
Sample Info: BFB0629 BFB0629
Report Date: 07/01/2016 13:18





m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.48
75	30.00 - 60.00% of mass 95	46.48
96	5.00 - 9.00% of mass 95	6.92
173	Less than 2.00% of mass 174	0.21 (0.31)
174	50.00 - 100.00% of mass 95	68.30
175	5.00 - 9.00% of mass 174	4.56 (6.68)
176	95.00 - 101.00% of mass 174	66.41 (97.24)
177	5.00 - 9.00% of mass 176	4.52 (6.81)

Data File: 06291601.D
Spectrum: Avg. Scans 1375-1377 (8.95), Background Scan 1367
Location of Maximum: 95.00
Number of points: 123

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1680	74.00	27392	116.00	509	159.00	168
37.00	9100	75.00	83256	117.00	1116	161.00	260
38.00	7133	76.00	7599	118.00	731	163.00	55
39.00	2647	77.00	1008	119.00	834	165.00	116
43.00	260	78.00	658	125.00	350	167.00	64
44.00	1137	79.00	3492	126.00	55	172.00	62
45.00	1605	80.00	1123	128.00	629	173.00	374
46.00	104	81.00	3864	129.00	361	174.00	122344
47.00	2172	82.00	855	130.00	752	175.00	8171
48.00	976	83.00	176	131.00	305	176.00	118968
49.00	6555	85.00	86	133.00	763	177.00	8097
50.00	33104	86.00	187	134.00	161	178.00	371
51.00	10542	87.00	7474	135.00	311	179.00	136
52.00	348	88.00	6422	136.00	58	191.00	418
53.00	62	91.00	539	137.00	306	193.00	691
55.00	555	92.00	4463	140.00	138	194.00	74
56.00	2520	93.00	6923	141.00	1640	203.00	69
57.00	4754	94.00	20216	142.00	2	206.00	61
58.00	255	95.00	179136	143.00	1696	207.00	278
59.00	195	96.00	12402	144.00	51	243.00	54
60.00	1449	97.00	336	145.00	90	249.00	250
61.00	7851	103.00	193	146.00	465	250.00	51
62.00	8331	104.00	585	147.00	253	265.00	349
63.00	6156	105.00	196	148.00	418	266.00	57
64.00	692	106.00	629	149.00	112	267.00	63
67.00	458	107.00	206	150.00	170	276.00	50
68.00	17024	110.00	130	152.00	60	281.00	4103
69.00	16624	111.00	54	153.00	67	282.00	1373
70.00	1317	112.00	232	154.00	61	283.00	957
72.00	881	113.00	159	155.00	314	284.00	166
73.00	8270	115.00	360	157.00	416		

INITIAL CALIBRATION CHECK

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Instrument ID:	NT5	Calibration:	ZF00019
Lab File ID:	06291602.D	Calibration Date:	06/20/16 00:02
Sequence:	SEG0001	Injection Date:	06/29/16
Lab Sample ID:	SEG0001-ICV1	Injection Time:	14:20

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
Vinyl Chloride	A	50.000	51.5	1.4490310	1.4928340		3.0	20	
Bromomethane	A	50.000	30.7	1.0197400	0.6265824		-38.6	20	*
cis-1,2-Dichloroethene	A	50.000	50.6	1.2628810	1.2785110		1.2	20	
Benzene	A	50.000	49.6	1.3503270	1.3397820		-0.8	20	
Trichloroethene	A	50.000	49.5	0.3499142	0.3466505		-0.9	20	
Toluene	A	50.000	48.7	0.8687220	0.8469904		-2.5	20	
Tetrachloroethene	A	50.000	50.5	0.3099738	0.3129257		1.0	20	
Ethylbenzene	A	50.000	50.0	1.5260520	1.5249970		-0.07	20	
m,p-Xylene	A	100.00	100	0.5924433	0.5934658		0.2	20	
o-Xylene	A	50.000	49.2	0.5851849	0.5755653		-1.6	20	
1,2-Dichloroethane-d4	A	50.000	51.2	1.1913240	1.2189260		2.3	20	
Toluene-d8	A	50.000	49.3	1.2811350	1.2640270		-1.3	20	
4-Bromofluorobenzene	A	50.000	48.9	0.5377129	0.5253766		-2.3	20	
1,2-Dichlorobenzene-d4	A	50.000	50.2	1.0068310	1.0108870		0.4	20	

* Values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160629.b\06291602.D

Date : 29-JUN-2016 14:20

Client ID: VSTD50

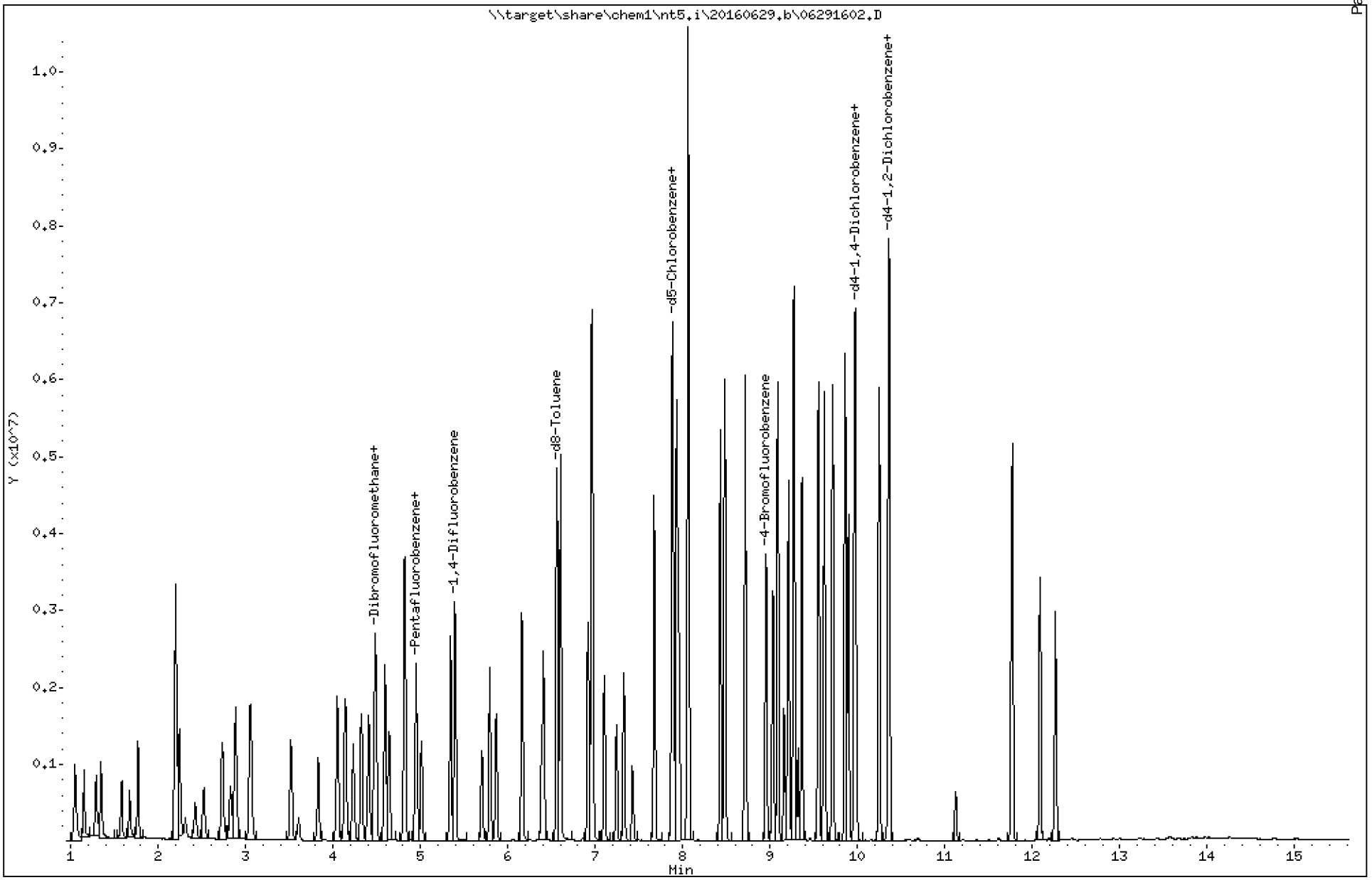
Instrument: nt5.i

Sample Info: ICV0629

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160629.b\06291602.D
Lab Smp Id: SEG0001-ICV1 Client Smp ID: VSTD50
Inj Date : 29-JUN-2016 14:20
Operator : PB Inst ID: nt5.i
Smp Info : ICV0629
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Meth Date : 01-Jul-2016 13:10 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
1	Dichlorodifluoromethane	85	1.152	1.152	(0.233)	843147	50.0000	50.601
2	Chloromethane	50	1.286	1.286	(0.260)	845506	50.0000	43.099
3	Vinyl Chloride	62	1.347	1.347	(0.272)	876277	50.0000	51.511
4	Bromomethane	94	1.584	1.584	(0.320)	367797	50.0000	30.723
5	Chloroethane	64	1.676	1.676	(0.339)	437242	50.0000	51.934
6	Trichlorofluoromethane	101	1.767	1.767	(0.357)	721472	50.0000	73.861
7	1,1-Dichloroethene	96	2.199	2.199	(0.444)	598972	50.0000	52.974
8	Carbon Disulfide	76	2.199	2.199	(0.444)	1931560	50.0000	53.136
9	112Trichloro122Trifluoroethane	101	2.241	2.241	(0.453)	584167	50.0000	52.649
10	Iodomethane	142	2.308	2.308	(0.467)	251405	50.0000	35.484
11	Bromoethane	108	2.424	2.424	(0.490)	338166	50.0000	52.251
12	Acrolein	56	2.521	2.521	(0.510)	559520	250.000	253.31
13	Methylene Chloride	84	2.734	2.734	(0.553)	590335	50.0000	52.050
14	Acetone	43	2.825	2.825	(0.571)	901010	250.000	245.45
15	Trans-1,2-Dichloroethene	96	2.886	2.886	(0.583)	655680	50.0000	52.203
16	Methyl tert butyl ether	73	3.057	3.057	(0.618)	1866721	50.0000	50.001
17	1,1-Dichloroethane	63	3.519	3.519	(0.711)	1248220	50.0000	50.623
18	Acrylonitrile	53	3.604	3.604	(0.728)	227488	50.0000	51.808
19	Vinyl Acetate	43	3.829	3.829	(0.774)	1456861	50.0000	49.803
20	Cis-1,2-Dichloroethene	96	4.048	4.048	(0.818)	750472	50.0000	50.619
22	2,2-Dichloropropane	77	4.139	4.139	(0.837)	1119060	50.0000	52.955

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/Kg)	(ug/Kg)
	23 Bromochloromethane	128	4.231	4.231	(0.855)	325311	50.0000	50.232
	24 Chloroform	83	4.322	4.322	(0.873)	1164848	50.0000	50.821
	25 Carbon Tetrachloride	117	4.407	4.407	(0.817)	975243	50.0000	51.095
$	27 Dibromofluoromethane	111	4.486	4.486	(0.907)	739482	50.0000	52.856
	26 1,1,1-Trichloroethane	97	4.474	4.474	(0.904)	1092367	50.0000	51.295
	28 1,1-Dichloropropene	75	4.596	4.596	(0.852)	979308	50.0000	49.322
	29 2-Butanone	72	4.638	4.638	(0.937)	375915	250.000	241.76
	30 Benzene	78	4.821	4.821	(0.894)	2788254	50.0000	49.610
*	31 Pentafluorobenzene	168	4.949	4.949	(1.000)	586989	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.949	4.949	(1.000)	715496	50.0000	51.158
	33 1,2-Dichloroethane	62	5.009	5.009	(0.929)	859525	50.0000	46.295
	34 Trichloroethene	95	5.344	5.344	(0.991)	721423	50.0000	49.534
*	35 1,4-Difluorobenzene	114	5.393	5.393	(1.000)	2081125	50.0000	
	37 Dibromomethane	93	5.703	5.703	(1.058)	373355	50.0000	48.046
	38 1,2-Dichloropropane	63	5.794	5.794	(1.074)	703759	50.0000	48.456
	39 Bromodichloromethane	83	5.867	5.867	(1.088)	888946	50.0000	50.698
	172 2-Pentanone	86	6.159	6.159	(1.142)	482798	250.000	232.93
	40 2-Chloroethyl Vinyl Ether	63	6.384	6.384	(1.184)	330645	50.0000	54.075
	41 Cis 1,3-dichloropropene	75	6.409	6.409	(1.188)	1135356	50.0000	49.832
$	42 d8-Toluene	98	6.561	6.561	(1.217)	2630599	50.0000	49.332
	43 Toluene	92	6.603	6.603	(1.224)	1762693	50.0000	48.749
	44 Tetrachloroethene	166	6.914	6.914	(0.878)	680094	50.0000	50.476
	45 4-Methyl-2-Pentanone	58	6.956	6.956	(1.290)	1259715	250.000	231.52
	46 Trans 1,3-Dichloropropene	75	6.974	6.974	(1.293)	995140	50.0000	50.181
	47 1,1,2-Trichloroethane	97	7.102	7.102	(1.317)	545866	50.0000	48.069
	48 Chlorodibromomethane	129	7.242	7.242	(0.920)	650423	50.0000	50.139
	49 1,3-Dichloropropane	76	7.327	7.327	(0.930)	1005388	50.0000	48.488
	50 1,2-Dibromoethane	107	7.425	7.425	(1.377)	553495	50.0000	48.472
	51 2-Hexanone	43	7.674	7.674	(0.975)	2237625	250.000	230.01
*	52 d5-Chlorobenzene	117	7.875	7.875	(1.000)	2173340	50.0000	
	53 Chlorobenzene	112	7.887	7.887	(1.002)	1926691	50.0000	49.103
	54 Ethyl Benzene	91	7.930	7.930	(1.007)	3314336	50.0000	49.965
	55 1,1,1,2-Tetrachloroethane	131	7.954	7.954	(1.010)	685686	50.0000	49.356
	56 m,p-xylene	106	8.063	8.063	(1.024)	2579606	100.000	100.17
	57 o-Xylene	106	8.428	8.428	(1.070)	1250899	50.0000	49.178
	58 Styrene	104	8.483	8.483	(1.077)	2109148	50.0000	50.208
	59 Bromoform	173	8.489	8.489	(0.852)	383061	50.0000	50.061
	60 Isopropyl Benzene	105	8.714	8.714	(0.874)	3294616	50.0000	50.823
$	62 4-Bromofluorobenzene	95	8.952	8.952	(1.137)	1141822	50.0000	48.853
	63 Bromobenzene	156	9.037	9.037	(0.907)	750465	50.0000	49.954
	64 N-Propyl Benzene	91	9.085	9.085	(0.912)	3827116	50.0000	49.098
	65 1,1,2,2-Tetrachloroethane	83	9.158	9.158	(0.919)	724193	50.0000	47.373
	66 2-Chloro Toluene	91	9.207	9.207	(0.924)	2257354	50.0000	49.573
	67 1,3,5-Trimethyl Benzene	105	9.274	9.274	(0.930)	2753602	50.0000	50.630
	68 1,2,3-Trichloropropane	110	9.268	9.268	(0.930)	222226	50.0000	49.192
	69 Trans-1,4-Dichloro 2-Butene	53	9.317	9.317	(0.935)	194109	50.0000	47.576
	70 4-Chloro Toluene	91	9.365	9.365	(0.940)	2352279	50.0000	49.877
	71 T-Butyl Benzene	119	9.554	9.554	(0.958)	2469154	50.0000	49.866
	72 1,2,4-Trimethylbenzene	105	9.621	9.621	(0.965)	2748895	50.0000	50.453
	73 S-Butyl Benzene	105	9.718	9.718	(0.975)	3563299	50.0000	48.880
	74 4-Isopropyl Toluene	119	9.858	9.858	(0.989)	3084375	50.0000	50.924
	75 1,3-Dichlorobenzene	146	9.895	9.895	(0.993)	1492519	50.0000	50.670
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1085984	50.0000	
	77 1,4-Dichlorobenzene	146	9.980	9.980	(1.001)	1489567	50.0000	49.994

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
78	N-Butyl Benzene	91	10.247	10.247	(1.028)	2756037	50.0000	51.399
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1097807	50.0000	50.201
80	1,2-Dichlorobenzene	146	10.363	10.363	(1.040)	1367897	50.0000	49.071
81	1,2-Dibromo 3-Chloropropane	75	11.123	11.123	(1.116)	135612	50.0000	47.027
82	Hexachloro 1,3-Butadiene	225	11.762	11.762	(1.180)	397910	50.0000	53.372
83	1,2,4-Trichlorobenzene	180	11.774	11.774	(1.181)	846898	50.0000	53.146
84	Naphthalene	128	12.085	12.085	(1.212)	2386263	50.0000	51.037
85	1,2,3-Trichlorobenzene	180	12.267	12.267	(1.231)	785490	50.0000	52.550

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06291602.D
Lab Smp Id: SEG0001-ICV1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160629.b\VO051314S.m
Misc Info: 1

Calibration Date: 28-JUN-2016
Calibration Time: 14:33
Client Smp ID: VSTD50
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	586989	-2.16
35 1,4-Difluorobenze	2041239	1020620	4082478	2081125	1.95
52 d5-Chlorobenzene	2118314	1059157	4236628	2173340	2.60
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1085984	2.93

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.96	4.46	5.46	4.95	-0.13
35 1,4-Difluorobenze	5.40	4.90	5.90	5.39	-0.12
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	-0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - 06291602.D

Lab ID: SEG0001-ICV1
nt5.i, 20160629.b\VO051314S.m,   29-JUN-2016 14:20

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

INITIAL CALIBRATION CHECK

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Instrument ID:	NT5	Calibration:	ZF00019
Lab File ID:	06301603.D	Calibration Date:	06/20/16 00:02
Sequence:	SEG0003	Injection Date:	06/30/16
Lab Sample ID:	SEG0003-ICV1	Injection Time:	12:05

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
Vinyl Chloride	A	50.000	46.3	1.4490310	1.3421920		-7.4	20	
Bromomethane	A	50.000	29.3	1.0197400	0.5966556		-41.5	20	*
cis-1,2-Dichloroethene	A	50.000	47.2	1.2628810	1.1923750		-5.6	20	
Benzene	A	50.000	48.0	1.3503270	1.2955290		-4.1	20	
Trichloroethene	A	50.000	49.9	0.3499142	0.3494556		-0.1	20	
Toluene	A	50.000	48.3	0.8687220	0.8395225		-3.4	20	
Tetrachloroethene	A	50.000	54.4	0.3099738	0.3374382		8.9	20	
Ethylbenzene	A	50.000	50.4	1.5260520	1.5386230		0.8	20	
m,p-Xylene	A	100.00	103	0.5924433	0.6112073		3.2	20	
o-Xylene	A	50.000	50.2	0.5851849	0.5879861		0.5	20	
1,2-Dichloroethane-d4	A	50.000	45.9	1.1913240	1.0925140		-8.3	20	
Toluene-d8	A	50.000	48.1	1.2811350	1.2326510		-3.8	20	
4-Bromofluorobenzene	A	50.000	48.7	0.5377129	0.5232396		-2.7	20	
1,2-Dichlorobenzene-d4	A	50.000	49.4	1.0068310	0.9946697		-1.2	20	

* Values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160630.b\06301603.D

Date : 30-JUN-2016 12:05

Client ID: VSTD50

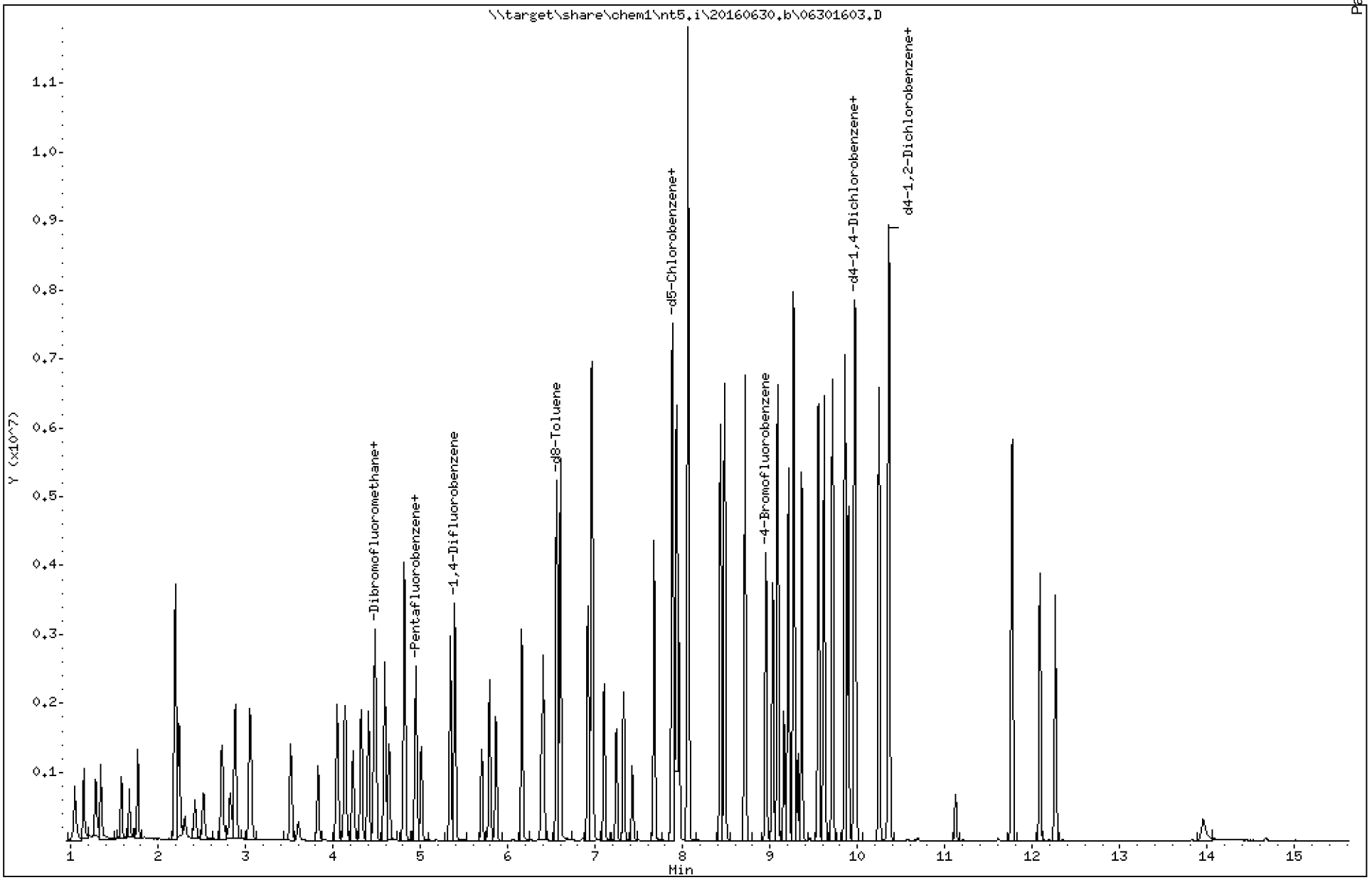
Instrument: nt5.i

Sample Info: ICV0630

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160630.b\06301603.D
Lab Smp Id: SEG0003-ICV1 Client Smp ID: VSTD50
Inj Date : 30-JUN-2016 12:05
Operator : PB Inst ID: nt5.i
Smp Info : ICV0630
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Meth Date : 01-Jul-2016 15:49 nt5.i Quant Type: ISTD
Cal Date : 20-JUN-2016 14:31 Cal File: 06201611.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
1	Dichlorodifluoromethane	85	1.146	1.146	(0.232)	957054	50.0000	47.277
2	Chloromethane	50	1.280	1.280	(0.259)	893804	50.0000	37.501
3	Vinyl Chloride	62	1.341	1.341	(0.271)	957164	50.0000	46.313
4	Bromomethane	94	1.578	1.578	(0.319)	425496	50.0000	29.255
5	Chloroethane	64	1.670	1.670	(0.338)	541147	50.0000	52.906
6	Trichlorofluoromethane	101	1.767	1.767	(0.358)	786045	50.0000	66.237
7	1,1-Dichloroethene	96	2.193	2.193	(0.444)	703458	50.0000	51.209
8	Carbon Disulfide	76	2.199	2.199	(0.445)	2202352	50.0000	49.868
9	112Trichloro122Trifluoroethane	101	2.235	2.235	(0.452)	690657	50.0000	51.236
10	Iodomethane	142	2.302	2.302	(0.466)	314034	50.0000	36.483
11	Bromoethane	108	2.418	2.418	(0.489)	413456	50.0000	52.584
12	Acrolein	56	2.515	2.515	(0.509)	586594	250.000	218.59
13	Methylene Chloride	84	2.728	2.728	(0.552)	686514	50.0000	49.823
14	Acetone	43	2.825	2.825	(0.572)	893518	250.000	200.35
15	Trans-1,2-Dichloroethene	96	2.880	2.880	(0.583)	769348	50.0000	50.418
16	Methyl tert butyl ether	73	3.051	3.051	(0.617)	2061364	50.0000	45.448
17	1,1-Dichloroethane	63	3.513	3.513	(0.711)	1369291	50.0000	45.710
18	Acrylonitrile	53	3.604	3.604	(0.729)	221640	50.0000	41.548
19	Vinyl Acetate	43	3.829	3.829	(0.775)	1463850	50.0000	41.190
20	Cis-1,2-Dichloroethene	96	4.042	4.042	(0.818)	850324	50.0000	47.208
22	2,2-Dichloropropane	77	4.140	4.140	(0.838)	1264275	50.0000	49.244

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/Kg)	(ug/Kg)
	23 Bromochloromethane	128	4.231	4.231	(0.856)	368372	50.0000	46.819
	24 Chloroform	83	4.322	4.322	(0.874)	1303181	50.0000	46.799
	25 Carbon Tetrachloride	117	4.401	4.401	(0.816)	1132137	50.0000	52.335
$	27 Dibromofluoromethane	111	4.486	4.486	(0.908)	829667	50.0000	48.812
	26 1,1,1-Trichloroethane	97	4.474	4.474	(0.905)	1236520	50.0000	47.793
	28 1,1-Dichloropropene	75	4.590	4.590	(0.851)	1106166	50.0000	49.155
	29 2-Butanone	72	4.638	4.638	(0.938)	397254	250.000	210.29
	30 Benzene	78	4.815	4.815	(0.893)	3055747	50.0000	47.971
*	31 Pentafluorobenzene	168	4.943	4.943	(1.000)	713135	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.949	4.949	(1.001)	779110	50.0000	45.853
	33 1,2-Dichloroethane	62	5.009	5.009	(0.929)	923546	50.0000	43.889
	34 Trichloroethene	95	5.338	5.338	(0.990)	824256	50.0000	49.934
*	35 1,4-Difluorobenzene	114	5.393	5.393	(1.000)	2358686	50.0000	
	37 Dibromomethane	93	5.703	5.703	(1.058)	413586	50.0000	46.961
	38 1,2-Dichloropropane	63	5.788	5.788	(1.073)	751936	50.0000	45.681
	39 Bromodichloromethane	83	5.861	5.861	(1.087)	977392	50.0000	49.182
	172 2-Pentanone	86	6.159	6.159	(1.142)	516108	250.000	219.70
	40 2-Chloroethyl Vinyl Ether	63	6.384	6.384	(1.184)	397982	50.0000	57.428
	41 Cis 1,3-dichloropropene	75	6.403	6.403	(1.187)	1235555	50.0000	47.849
$	42 d8-Toluene	98	6.555	6.555	(1.215)	2907437	50.0000	48.108
	43 Toluene	92	6.597	6.597	(1.223)	1980170	50.0000	48.319
	44 Tetrachloroethene	166	6.914	6.914	(0.878)	817052	50.0000	54.430
	45 4-Methyl-2-Pentanone	58	6.956	6.956	(1.290)	1286877	250.000	208.68
	46 Trans 1,3-Dichloropropene	75	6.968	6.968	(1.292)	1093221	50.0000	48.640
	47 1,1,2-Trichloroethane	97	7.102	7.102	(1.317)	608477	50.0000	47.278
	48 Chlorodibromomethane	129	7.242	7.242	(0.920)	750821	50.0000	51.950
	49 1,3-Dichloropropane	76	7.327	7.327	(0.930)	1080890	50.0000	46.790
	50 1,2-Dibromoethane	107	7.425	7.425	(1.377)	615517	50.0000	47.560
	51 2-Hexanone	43	7.674	7.674	(0.975)	2195520	250.000	202.57
*	52 d5-Chlorobenzene	117	7.875	7.875	(1.000)	2421338	50.0000	
	53 Chlorobenzene	112	7.887	7.887	(1.002)	2192437	50.0000	50.153
	54 Ethyl Benzene	91	7.930	7.930	(1.007)	3725526	50.0000	50.412
	55 1,1,1,2-Tetrachloroethane	131	7.954	7.954	(1.010)	784268	50.0000	50.670
	56 m,p-xylene	106	8.063	8.063	(1.024)	2959879	100.000	103.17
	57 o-Xylene	106	8.428	8.428	(1.070)	1423713	50.0000	50.239
	58 Styrene	104	8.477	8.477	(1.076)	2369230	50.0000	50.623
	59 Bromoform	173	8.483	8.483	(0.851)	438486	50.0000	49.896
	60 Isopropyl Benzene	105	8.714	8.714	(0.874)	3746638	50.0000	50.324
$	62 4-Bromofluorobenzene	95	8.952	8.952	(1.137)	1266940	50.0000	48.654
	63 Bromobenzene	156	9.031	9.031	(0.906)	867980	50.0000	50.307
	64 N-Propyl Benzene	91	9.085	9.085	(0.912)	4326385	50.0000	48.328
	65 1,1,2,2-Tetrachloroethane	83	9.158	9.158	(0.919)	778941	50.0000	44.367
	66 2-Chloro Toluene	91	9.207	9.207	(0.924)	2548968	50.0000	48.740
	67 1,3,5-Trimethyl Benzene	105	9.274	9.274	(0.930)	3151318	50.0000	50.452
	68 1,2,3-Trichloropropane	110	9.268	9.268	(0.930)	245689	50.0000	47.355
	69 Trans-1,4-Dichloro 2-Butene	53	9.317	9.317	(0.935)	203558	50.0000	43.443
	70 4-Chloro Toluene	91	9.359	9.359	(0.939)	2671343	50.0000	49.320
	71 T-Butyl Benzene	119	9.554	9.554	(0.958)	2840943	50.0000	49.957
	72 1,2,4-Trimethylbenzene	105	9.621	9.621	(0.965)	3144908	50.0000	50.259
	73 S-Butyl Benzene	105	9.712	9.712	(0.974)	4085208	50.0000	48.795
	74 4-Isopropyl Toluene	119	9.858	9.858	(0.989)	3593245	50.0000	51.656
	75 1,3-Dichlorobenzene	146	9.895	9.895	(0.993)	1763755	50.0000	52.137
*	76 d4-1,4-Dichlorobenzene	152	9.968	9.968	(1.000)	1247220	50.0000	
	77 1,4-Dichlorobenzene	146	9.980	9.980	(1.001)	1748684	50.0000	51.103

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
78	N-Butyl Benzene	91	10.241	10.241	(1.027)	3181181	50.0000	51.658
$ 79	d4-1,2-Dichlorobenzene	152	10.357	10.357	(1.039)	1240572	50.0000	49.396
80	1,2-Dichlorobenzene	146	10.363	10.363	(1.040)	1591973	50.0000	49.726
81	1,2-Dibromo 3-Chloropropane	75	11.123	11.123	(1.116)	146953	50.0000	44.371
82	Hexachloro 1,3-Butadiene	225	11.762	11.762	(1.180)	454212	50.0000	53.047
83	1,2,4-Trichlorobenzene	180	11.774	11.774	(1.181)	1006918	50.0000	55.019
84	Naphthalene	128	12.085	12.085	(1.212)	2658209	50.0000	49.504
85	1,2,3-Trichlorobenzene	180	12.261	12.261	(1.230)	908121	50.0000	52.900

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 06301603.D
Lab Smp Id: SEG0003-ICV1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160630.b\VO051314S.m
Misc Info: 1

Calibration Date: 30-JUN-2016
Calibration Time: 11:20
Client Smp ID: VSTD50
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	599967	299984	1199934	713135	18.86
35 1,4-Difluorobenze	2041239	1020620	4082478	2358686	15.55
52 d5-Chlorobenzene	2118314	1059157	4236628	2421338	14.30
76 d4-1,4-Dichlorobe	1055047	527524	2110094	1247220	18.21

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.96	4.46	5.46	4.94	-0.25
35 1,4-Difluorobenze	5.40	4.90	5.90	5.39	-0.12
52 d5-Chlorobenzene	7.88	7.38	8.38	7.88	-0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - 06301603.D

Lab ID: SEG0003-ICV1
nt5.i, 20160630.b\VO051314S.m,   30-JUN-2016 12:05

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

Analytical Resources, Incorporated

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEF0101	Instrument:	NT5
		Calibration:	UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SEF0101-CAL1	06201604.D	Solid	06/20/16 11:52
Cal Standard	SEF0101-CAL2	06201605.D	Solid	06/20/16 12:15
Cal Standard	SEF0101-CAL3	06201606.D	Solid	06/20/16 12:37
Cal Standard	SEF0101-CAL4	06201607.D	Solid	06/20/16 13:00
Cal Standard	SEF0101-CAL5	06201608.D	Solid	06/20/16 13:23
Cal Standard	SEF0101-CAL6	06201609.D	Solid	06/20/16 13:45
Cal Standard	SEF0101-CAL7	06201610.D	Solid	06/20/16 14:08
Cal Standard	SEF0101-CAL8	06201611.D	Solid	06/20/16 14:31
Secondary Cal Check	SEF0101-SCV1	06201612.D	Solid	06/20/16 15:45

Analytical Resources, Incorporated

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEG0001	Instrument:	NT5
		Calibration:	ZF00019

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SEG0001-ICV1	06291602.D	Solid	06/29/16 14:20
LCS	BEF0232-BS1	06291603.D	Solid	06/29/16 15:15
LCS Dup	BEF0232-BSD1	06291604.D	Solid	06/29/16 15:38
Blank	BEF0232-BLK1	06291605.D	Solid	06/29/16 16:00
CHRL-M-02-160629	16F0096-01	06291606.D	Solid	06/29/16 17:09
CHRL-M-03-160629	16F0096-02	06291607.D	Solid	06/29/16 17:32
CHRL-M-53-160629	16F0096-03	06291608.D	Solid	06/29/16 17:54
CHRL-M-04-160629	16F0096-04	06291609.D	Solid	06/29/16 18:17
CHRL-M-05-160629	16F0096-05	06291610.D	Solid	06/29/16 18:39
CHRL-O-01-160629	16F0096-06	06291611.D	Solid	06/29/16 19:02
CHRL-O-02-160629	16F0096-07	06291612.D	Solid	06/29/16 19:25
CHRL-O-03-160629	16F0096-08	06291613.D	Solid	06/29/16 19:47
CHRL-O-04-160629	16F0096-09	06291614.D	Solid	06/29/16 20:10
CHRL-O-05-160629	16F0096-10	06291615.D	Solid	06/29/16 20:32
CHRL-N-01-160629	16F0096-11	06291616.D	Solid	06/29/16 20:55
CHRL-N-02-160629	16F0096-12	06291617.D	Solid	06/29/16 21:17
CHRL-N-03-160629	16F0096-13	06291618.D	Solid	06/29/16 21:40
CHRL-N-04-160629	16F0096-14	06291619.D	Solid	06/29/16 22:03
CHRL-N-05-160629	16F0096-15	06291620.D	Solid	06/29/16 22:25
CHRL-Q-01-160629	16F0096-16	06291621.D	Solid	06/29/16 22:48
CHRL-Q-02-160629	16F0096-17	06291622.D	Solid	06/29/16 23:10
CHRL-Q-03-160629	16F0096-18	06291623.D	Solid	06/29/16 23:33
CHRL-Q-04-160629	16F0096-19	06291624.D	Solid	06/29/16 23:56
Calibration Check	SEG0001-CCV1	06291629.D	Solid	06/30/16 01:48

ANALYSIS SEQUENCE

SEG0001

Printed: 7/1/2016 1:26:46PM

Instrument: NT5
Calibration ID: ZF00019

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
SEG0001-TUN1	MS Tune	QC		1	E002063	E001646	
SEG0001-ICV1	8260	QC		2	E002459	E001646	
BEF0232-BS1	LCS	QC		3		E001646	
BEF0232-BSD1	LCS Dup	QC		4		E001646	
BEF0232-BLK1	Blank	QC		5		E001646	
16F0096-01	CHRL-M-02-160629	8260C VOA Solid	A	6		E001646	
16F0096-02	CHRL-M-03-160629	8260C VOA Solid	A	7		E001646	
16F0096-03	CHRL-M-53-160629	8260C VOA Solid	A	8		E001646	
16F0096-04	CHRL-M-04-160629	8260C VOA Solid	A	9		E001646	
16F0096-05	CHRL-M-05-160629	8260C VOA Solid	A	10		E001646	
16F0096-06	CHRL-O-01-160629	8260C VOA Solid	A	11		E001646	
16F0096-07	CHRL-O-02-160629	8260C VOA Solid	A	12		E001646	
16F0096-08	CHRL-O-03-160629	8260C VOA Solid	A	13		E001646	
16F0096-09	CHRL-O-04-160629	8260C VOA Solid	A	14		E001646	
16F0096-10	CHRL-O-05-160629	8260C VOA Solid	A	15		E001646	
16F0096-11	CHRL-N-01-160629	8260C VOA Solid	A	16		E001646	
16F0096-12	CHRL-N-02-160629	8260C VOA Solid	A	17		E001646	
16F0096-13	CHRL-N-03-160629	8260C VOA Solid	A	18		E001646	
16F0096-14	CHRL-N-04-160629	8260C VOA Solid	A	19		E001646	
16F0096-15	CHRL-N-05-160629	8260C VOA Solid	A	20		E001646	
16F0096-16	CHRL-Q-01-160629	8260C VOA Solid	A	21		E001646	

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____

ANALYSIS SEQUENCE

SEG0001

Instrument: NT5
Calibration ID: ZF00019

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
16F0096-17	CHRL-Q-02-160629	8260C VOA Solid	A	22		E001646	
16F0096-18	CHRL-Q-03-160629	8260C VOA Solid	A	23		E001646	
16F0096-19	CHRL-Q-04-160629	8260C VOA Solid	A	24		E001646	
SEG0001-CCV1	8260	QC		25	E002459	E001646	

Samples Loaded By Date

Data Processed By Date

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt5.i\20160629.b

ARI Job No.: BFB0 Method: bfb8260.m Instrument: nt5.i Date: 29-JUN-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1343	06291601.D	BFB0629		1	NO MANUAL INTEGRATION
1420	06291602.D	SEG0001-ICV1	VSTD50	1	NO MANUAL INTEGRATION
1515	06291603.D	BEF0232-BS1	LCS0629	1	NO MANUAL INTEGRATION
1538	06291604.D	BEF0232-BSD1	LCS0629	1	NO MANUAL INTEGRATION
1600	06291605.D	BEF0232-BLK1	MB0629	1	NO MANUAL INTEGRATION
1709	06291606.D	16F0096-01		1	NO MANUAL INTEGRATION
1732	06291607.D	16F0096-02		1	NO MANUAL INTEGRATION
1754	06291608.D	16F0096-03		1	NO MANUAL INTEGRATION
1817	06291609.D	16F0096-04		1	NO MANUAL INTEGRATION
1839	06291610.D	16F0096-05		1	NO MANUAL INTEGRATION
1902	06291611.D	16F0096-06		1	NO MANUAL INTEGRATION
1925	06291612.D	16F0096-07		1	NO MANUAL INTEGRATION
1947	06291613.D	16F0096-08		1	NO MANUAL INTEGRATION
2010	06291614.D	16F0096-09		1	NO MANUAL INTEGRATION
2032	06291615.D	16F0096-10		1	NO MANUAL INTEGRATION
2054	06291616.D	16F0096-11		1	NO MANUAL INTEGRATION
2117	06291617.D	16F0096-12		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt5.i\20160629.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2140	06291618.D	16F0096-13		1	NO MANUAL INTEGRATION
2203	06291619.D	16F0096-14		1	NO MANUAL INTEGRATION
2225	06291620.D	16F0096-15		1	NO MANUAL INTEGRATION
2248	06291621.D	16F0096-16		1	NO MANUAL INTEGRATION
2310	06291622.D	16F0096-17		1	NO MANUAL INTEGRATION
2333	06291623.D	16F0096-18		1	NO MANUAL INTEGRATION
2356	06291624.D	16F0096-19		1	NO MANUAL INTEGRATION
0148	06291629.D	CCV0629		1	NO MANUAL INTEGRATION

Analytical Resources, Incorporated

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEG0003	Instrument:	NT5
		Calibration:	ZF00019

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SEG0003-ICV1	06301603.D	Solid	06/30/16 12:05
LCS	BEG0004-BS1	06301604.D	Solid	06/30/16 12:46
LCS	BEG0005-BS1	06301604A.D	Water	06/30/16 12:46
LCS	BEG0006-BS1	06301604B.D	Solid	06/30/16 12:46
LCS Dup	BEG0004-BSD1	06301605.D	Solid	06/30/16 13:09
LCS Dup	BEG0005-BSD1	06301605A.D	Water	06/30/16 13:09
LCS Dup	BEG0006-BSD1	06301605B.D	Solid	06/30/16 13:09
Blank	BEG0004-BLK1	06301606.D	Solid	06/30/16 13:31
Blank	BEG0005-BLK1	06301606A.D	Water	06/30/16 13:31
Blank	BEG0006-BLK1	06301606B.D	Solid	06/30/16 13:31
CHRL-Q-05-160629	16F0096-20	06301607.D	Solid	06/30/16 14:29
CHRL-P-01-160629	16F0096-21	06301608.D	Solid	06/30/16 14:52
CHRL-P-02-160629	16F0096-22	06301609.D	Solid	06/30/16 15:14
CHRL-P-52-160629	16F0096-23	06301610.D	Solid	06/30/16 15:37
CHRL-P-03-160629	16F0096-24	06301611.D	Solid	06/30/16 15:59
CHRL-P-04-160629	16F0096-25	06301612.D	Solid	06/30/16 16:22
CHRL-P-05-160629	16F0096-26	06301613.D	Solid	06/30/16 16:45
CHRL-R-02-160629	16F0096-27	06301614.D	Solid	06/30/16 17:07
CHRL-R-03-160629	16F0096-28	06301615.D	Solid	06/30/16 17:30
CHRL-R-04-160629	16F0096-29	06301616.D	Solid	06/30/16 17:52
CHRL-TB-160629	16F0096-30	06301617.D	Water	06/30/16 18:15
CHRL-Q-02-160629	16F0096-17RE1	06301618.D	Solid	06/30/16 18:37
CHRL-Q-03-160629	16F0096-18RE1	06301619.D	Solid	06/30/16 19:00
CHRL-P-52-160629	16F0096-23RE1	06301620.D	Solid	06/30/16 19:23
Calibration Check	SEG0003-CCV1	06301627.D	Solid	06/30/16 22:01
Low Cal Check	SEG0003-LCV1	06301628.D	Solid	06/30/16 22:24

ANALYSIS SEQUENCE

SEG0003

Printed: 7/1/2016 3:52:34PM

Instrument: NT5
Calibration ID: ZF00019

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
SEG0003-TUN1	MS Tune	QC		1	E002063	E001646	
SEG0003-ICV1	Initial Cal Check	QC		2	E002459	E001646	
BEG0004-BS1	LCS	QC		3		E001646	
BEG0004-BSD1	LCS Dup	QC		4		E001646	
BEG0004-BLK1	Blank	QC		5		E001646	
16F0096-20	CHRL-Q-05-160629	8260C VOA Solid	A	6		E001646	
16F0096-21	CHRL-P-01-160629	8260C VOA Solid	A	7		E001646	
16F0096-22	CHRL-P-02-160629	8260C VOA Solid	A	8		E001646	
16F0096-23	CHRL-P-52-160629	8260C VOA Solid	A	9		E001646	
16F0096-25	CHRL-P-04-160629	8260C VOA Solid	A	10		E001646	
16F0096-26	CHRL-P-05-160629	8260C VOA Solid	A	11		E001646	
16F0096-27	CHRL-R-02-160629	8260C VOA Solid	A	12		E001646	
16F0096-28	CHRL-R-03-160629	8260C VOA Solid	A	13		E001646	
16F0096-29	CHRL-R-04-160629	8260C VOA Solid	A	14		E001646	
BEG0005-BS1	LCS	QC		15		E001646	
BEG0005-BSD1	LCS Dup	QC		16		E001646	
BEG0005-BLK1	Blank	QC		17		E001646	
16F0096-30	CHRL-TB-160629	8260C VOA	A	18		E001646	
BEG0006-BS1	LCS	QC		19		E001646	
BEG0006-BSD1	LCS Dup	QC		20		E001646	
BEG0006-BLK1	Blank	QC		21		E001646	

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SEG0003

Printed: 7/1/2016 3:52:34PM

Instrument: NT5
Calibration ID: ZF00019

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
16F0096-17RE1	CHRL-Q-02-160629	8260C VOA Solid (MeOH)	A	22		E001646	Added 7/1/2016 by PAB
16F0096-18RE1	CHRL-Q-03-160629	8260C VOA Solid (MeOH)	A	23		E001646	Added 7/1/2016 by PAB
16F0096-23RE1	CHRL-P-52-160629	8260C VOA Solid (MeOH)	E	24		E001646	Added 7/1/2016 by PAB
16F0096-24	CHRL-P-03-160629	8260C VOA Solid (MeOH)	A	25		E001646	
SEG0003-CCV1	8260	QC		26	E002459	E001646	
SEG0003-LCV1	0.2	QC		27	E002455	E001646	

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt5.i\20160630.b

ARI Job No.: BFB0 Method: bfb8260.m Instrument: nt5.i Date: 30-JUN-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1004	06301601.D	BFB0630		1	NO MANUAL INTEGRATION
1205	06301603.D	SEG0003-ICV1	VSTD50	1	NO MANUAL INTEGRATION
1246	06301604.D	BEG0004-BS1	LCS0630	1	NO MANUAL INTEGRATION
1309	06301605.D	BEG0004-BSD1	LCS0630	1	NO MANUAL INTEGRATION
1331	06301606.D	BEG0004-BLK1	MB0630	1	NO MANUAL INTEGRATION
1429	06301607.D	16F0096-20		1	NO MANUAL INTEGRATION
1452	06301608.D	16F0096-21		1	NO MANUAL INTEGRATION
1514	06301609.D	16F0096-22		1	NO MANUAL INTEGRATION
1537	06301610.D	16F0096-23		1	NO MANUAL INTEGRATION
1559	06301611.D	16F0096-24		1	NO MANUAL INTEGRATION
1622	06301612.D	16F0096-25		1	NO MANUAL INTEGRATION
1645	06301613.D	16F0096-26		1	NO MANUAL INTEGRATION
1707	06301614.D	16F0096-27		1	NO MANUAL INTEGRATION
1730	06301615.D	16F0096-28		1	NO MANUAL INTEGRATION
1752	06301616.D	16F0096-29		1	NO MANUAL INTEGRATION
1815	06301617.D	16F0096-30		1	NO MANUAL INTEGRATION
1837	06301618.D	16F0096-17RE1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt5.i\20160630.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1900	06301619.D	16F0096-18RE1		1	NO MANUAL INTEGRATION
1923	06301620.D	16F0096-23RE1		1	NO MANUAL INTEGRATION
2201	06301627.D	SEG0003-CCV1	VSTD50	1	NO MANUAL INTEGRATION
2224	06301628.D	SEG0003-LCV1	VSTD1	1	NO MANUAL INTEGRATION

ANALYSIS SEQUENCE

SEG0003

Printed: 7/1/2016 3:52:34PM

Instrument: NT5
Calibration ID: ZF00019

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
SEG0003-TUN1	MS Tune	QC		1	E002063	E001646	
SEG0003-ICV1	Initial Cal Check	QC		2	E002459	E001646	
BEG0004-BS1	LCS	QC		3		E001646	
BEG0004-BSD1	LCS Dup	QC		4		E001646	
BEG0004-BLK1	Blank	QC		5		E001646	
16F0096-20	CHRL-Q-05-160629	8260C VOA Solid	A	6		E001646	
16F0096-21	CHRL-P-01-160629	8260C VOA Solid	A	7		E001646	
16F0096-22	CHRL-P-02-160629	8260C VOA Solid	A	8		E001646	
16F0096-23	CHRL-P-52-160629	8260C VOA Solid	A	9		E001646	
16F0096-25	CHRL-P-04-160629	8260C VOA Solid	A	10		E001646	
16F0096-26	CHRL-P-05-160629	8260C VOA Solid	A	11		E001646	
16F0096-27	CHRL-R-02-160629	8260C VOA Solid	A	12		E001646	
16F0096-28	CHRL-R-03-160629	8260C VOA Solid	A	13		E001646	
16F0096-29	CHRL-R-04-160629	8260C VOA Solid	A	14		E001646	
BEG0005-BS1	LCS	QC		15		E001646	
BEG0005-BSD1	LCS Dup	QC		16		E001646	
BEG0005-BLK1	Blank	QC		17		E001646	
16F0096-30	CHRL-TB-160629	8260C VOA	A	18		E001646	
BEG0006-BS1	LCS	QC		19		E001646	
BEG0006-BSD1	LCS Dup	QC		20		E001646	
BEG0006-BLK1	Blank	QC		21		E001646	

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SEG0003

Instrument: NT5
Calibration ID: ZF00019

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
16F0096-17RE1	CHRL-Q-02-160629	8260C VOA Solid (MeOH)	A	22		E001646	Added 7/1/2016 by PAB
16F0096-18RE1	CHRL-Q-03-160629	8260C VOA Solid (MeOH)	A	23		E001646	Added 7/1/2016 by PAB
16F0096-23RE1	CHRL-P-52-160629	8260C VOA Solid (MeOH)	E	24		E001646	Added 7/1/2016 by PAB
16F0096-24	CHRL-P-03-160629	8260C VOA Solid (MeOH)	A	25		E001646	
SEG0003-CCV1	8260	QC		26	E002459	E001646	
SEG0003-LCV1	0.2	QC		27	E002455	E001646	

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt5.i\20160630.b

ARI Job No.: BFB0 Method: bfb8260.m Instrument: nt5.i Date: 30-JUN-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1004	06301601.D	BFB0630		1	NO MANUAL INTEGRATION
1205	06301603.D	SEG0003-ICV1	VSTD50	1	NO MANUAL INTEGRATION
1246	06301604.D	BEG0004-BS1	LCS0630	1	NO MANUAL INTEGRATION
1309	06301605.D	BEG0004-BSD1	LCS0630	1	NO MANUAL INTEGRATION
1331	06301606.D	BEG0004-BLK1	MB0630	1	NO MANUAL INTEGRATION
1429	06301607.D	16F0096-20		1	NO MANUAL INTEGRATION
1452	06301608.D	16F0096-21		1	NO MANUAL INTEGRATION
1514	06301609.D	16F0096-22		1	NO MANUAL INTEGRATION
1537	06301610.D	16F0096-23		1	NO MANUAL INTEGRATION
1559	06301611.D	16F0096-24		1	NO MANUAL INTEGRATION
1622	06301612.D	16F0096-25		1	NO MANUAL INTEGRATION
1645	06301613.D	16F0096-26		1	NO MANUAL INTEGRATION
1707	06301614.D	16F0096-27		1	NO MANUAL INTEGRATION
1730	06301615.D	16F0096-28		1	NO MANUAL INTEGRATION
1752	06301616.D	16F0096-29		1	NO MANUAL INTEGRATION
1815	06301617.D	16F0096-30		1	NO MANUAL INTEGRATION
1837	06301618.D	16F0096-17RE1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt5.i\20160630.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1900	06301619.D	16F0096-18RE1		1	NO MANUAL INTEGRATION
1923	06301620.D	16F0096-23RE1		1	NO MANUAL INTEGRATION
2201	06301627.D	SEG0003-CCV1	VSTD50	1	NO MANUAL INTEGRATION
2224	06301628.D	SEG0003-LCV1	VSTD1	1	NO MANUAL INTEGRATION

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem1\nt5.i\20160630.b

Instrument: nt5.i Date: 30-JUN-2016 Method: VO051314S.m

INITIAL CAL: 20-JUN-2016

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 30-JUN-2016

Compound	%D
Chloromethane	-25.0
Bromomethane	-41.5
Trichlorofluoromethane	32.5
Iodomethane	-27.0

SURROGATE RECOVERY SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG/WO: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0001
Instrument: NT5
Calibration: ZF00019
Calibration Date: 06/20/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
SEG0001-ICV1 (Solid)	Lab File ID: 06291602.D		Analyzed: 06/29/16 14:20	
1,2-Dichloroethane-d4	50.000	102	80 - 120	
1,2-Dichlorobenzene-d4	50.000	100	80 - 120	
Toluene-d8	50.000	98.7	80 - 120	
4-Bromofluorobenzene	50.000	97.7	80 - 120	
BEF0232-BS1 (Solid)	Lab File ID: 06291603.D		Analyzed: 06/29/16 15:15	
1,2-Dichloroethane-d4	50.000	99.7	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	100	77 - 120	
4-Bromofluorobenzene	50.000	97.8	80 - 120	
BEF0232-BSD1 (Solid)	Lab File ID: 06291604.D		Analyzed: 06/29/16 15:38	
1,2-Dichloroethane-d4	50.000	97.5	80 - 149	
1,2-Dichlorobenzene-d4	50.000	99.9	80 - 120	
Toluene-d8	50.000	99.2	77 - 120	
4-Bromofluorobenzene	50.000	98.9	80 - 120	
BEF0232-BLK1 (Solid)	Lab File ID: 06291605.D		Analyzed: 06/29/16 16:00	
1,2-Dichloroethane-d4	50.000	99.1	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.9	77 - 120	
4-Bromofluorobenzene	50.000	97.6	80 - 120	
16F0096-01 (Solid)	Lab File ID: 06291606.D		Analyzed: 06/29/16 17:09	
1,2-Dichloroethane-d4	50.000	107	80 - 149	
1,2-Dichlorobenzene-d4	50.000	102	80 - 120	
Toluene-d8	50.000	98.7	77 - 120	
4-Bromofluorobenzene	50.000	92.0	80 - 120	
16F0096-02 (Solid)	Lab File ID: 06291607.D		Analyzed: 06/29/16 17:32	
1,2-Dichloroethane-d4	50.000	105	80 - 149	
1,2-Dichlorobenzene-d4	50.000	99.7	80 - 120	
Toluene-d8	50.000	98.9	77 - 120	
4-Bromofluorobenzene	50.000	95.7	80 - 120	

SURROGATE RECOVERY SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG/WO: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0001
Instrument: NT5
Calibration: ZF00019
Calibration Date: 06/20/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
16F0096-03 (Solid)	Lab File ID: 06291608.D		Analyzed: 06/29/16 17:54	
1,2-Dichloroethane-d4	50.000	106	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.5	77 - 120	
4-Bromofluorobenzene	50.000	95.5	80 - 120	
16F0096-04 (Solid)	Lab File ID: 06291609.D		Analyzed: 06/29/16 18:17	
1,2-Dichloroethane-d4	50.000	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	100	80 - 120	
Toluene-d8	50.000	98.8	77 - 120	
4-Bromofluorobenzene	50.000	100	80 - 120	
16F0096-05 (Solid)	Lab File ID: 06291610.D		Analyzed: 06/29/16 18:39	
1,2-Dichloroethane-d4	50.000	104	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.4	77 - 120	
4-Bromofluorobenzene	50.000	98.1	80 - 120	
16F0096-06 (Solid)	Lab File ID: 06291611.D		Analyzed: 06/29/16 19:02	
1,2-Dichloroethane-d4	50.000	102	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.4	77 - 120	
4-Bromofluorobenzene	50.000	98.8	80 - 120	
16F0096-07 (Solid)	Lab File ID: 06291612.D		Analyzed: 06/29/16 19:25	
1,2-Dichloroethane-d4	50.000	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.9	77 - 120	
4-Bromofluorobenzene	50.000	99.8	80 - 120	
16F0096-08 (Solid)	Lab File ID: 06291613.D		Analyzed: 06/29/16 19:47	
1,2-Dichloroethane-d4	50.000	105	80 - 149	
1,2-Dichlorobenzene-d4	50.000	102	80 - 120	
Toluene-d8	50.000	98.0	77 - 120	
4-Bromofluorobenzene	50.000	98.0	80 - 120	

SURROGATE RECOVERY SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG/WO: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0001
Instrument: NT5
Calibration: ZF00019
Calibration Date: 06/20/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
16F0096-09 (Solid)	Lab File ID: 06291614.D		Analyzed: 06/29/16 20:10	
1,2-Dichloroethane-d4	50.000	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	102	80 - 120	
Toluene-d8	50.000	98.7	77 - 120	
4-Bromofluorobenzene	50.000	99.1	80 - 120	
16F0096-10 (Solid)	Lab File ID: 06291615.D		Analyzed: 06/29/16 20:32	
1,2-Dichloroethane-d4	50.000	105	80 - 149	
1,2-Dichlorobenzene-d4	50.000	102	80 - 120	
Toluene-d8	50.000	99.0	77 - 120	
4-Bromofluorobenzene	50.000	99.6	80 - 120	
16F0096-11 (Solid)	Lab File ID: 06291616.D		Analyzed: 06/29/16 20:55	
1,2-Dichloroethane-d4	50.000	104	80 - 149	
1,2-Dichlorobenzene-d4	50.000	102	80 - 120	
Toluene-d8	50.000	98.5	77 - 120	
4-Bromofluorobenzene	50.000	98.8	80 - 120	
16F0096-12 (Solid)	Lab File ID: 06291617.D		Analyzed: 06/29/16 21:17	
1,2-Dichloroethane-d4	50.000	102	80 - 149	
1,2-Dichlorobenzene-d4	50.000	102	80 - 120	
Toluene-d8	50.000	98.6	77 - 120	
4-Bromofluorobenzene	50.000	98.7	80 - 120	
16F0096-13 (Solid)	Lab File ID: 06291618.D		Analyzed: 06/29/16 21:40	
1,2-Dichloroethane-d4	50.000	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	99.8	80 - 120	
Toluene-d8	50.000	98.2	77 - 120	
4-Bromofluorobenzene	50.000	96.0	80 - 120	
16F0096-14 (Solid)	Lab File ID: 06291619.D		Analyzed: 06/29/16 22:03	
1,2-Dichloroethane-d4	50.000	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.1	77 - 120	
4-Bromofluorobenzene	50.000	100	80 - 120	

SURROGATE RECOVERY SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG/WO: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0001
Instrument: NT5
Calibration: ZF00019
Calibration Date: 06/20/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
16F0096-15 (Solid)	Lab File ID: 06291620.D		Analyzed: 06/29/16 22:25	
1,2-Dichloroethane-d4	50.000	104	80 - 149	
1,2-Dichlorobenzene-d4	50.000	102	80 - 120	
Toluene-d8	50.000	97.3	77 - 120	
4-Bromofluorobenzene	50.000	97.9	80 - 120	
16F0096-16 (Solid)	Lab File ID: 06291621.D		Analyzed: 06/29/16 22:48	
1,2-Dichloroethane-d4	50.000	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	97.9	77 - 120	
4-Bromofluorobenzene	50.000	98.6	80 - 120	
16F0096-17 (Solid)	Lab File ID: 06291622.D		Analyzed: 06/29/16 23:10	
1,2-Dichloroethane-d4	50.000	101	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.3	77 - 120	
4-Bromofluorobenzene	50.000	101	80 - 120	
16F0096-18 (Solid)	Lab File ID: 06291623.D		Analyzed: 06/29/16 23:33	
1,2-Dichloroethane-d4	50.000	102	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.1	77 - 120	
4-Bromofluorobenzene	50.000	98.6	80 - 120	
16F0096-19 (Solid)	Lab File ID: 06291624.D		Analyzed: 06/29/16 23:56	
1,2-Dichloroethane-d4	50.000	99.7	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.4	77 - 120	
4-Bromofluorobenzene	50.000	100	80 - 120	

SURROGATE RECOVERY SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG/WO: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0001
Instrument: NT5
Calibration: ZF00019
Calibration Date: 06/20/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
SEG0001-ICV1 (Solid)	Lab File ID: 06291602.D		Analyzed: 06/29/16 14:20	
1,2-Dichloroethane-d4	50.000	102	80 - 120	
1,2-Dichlorobenzene-d4	50.000	100	80 - 120	
Toluene-d8	50.000	98.7	80 - 120	
4-Bromofluorobenzene	50.000	97.7	80 - 120	
BEF0232-BS1 (Solid)	Lab File ID: 06291603.D		Analyzed: 06/29/16 15:15	
1,2-Dichloroethane-d4	50.000	99.7	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	100	77 - 120	
4-Bromofluorobenzene	50.000	97.8	80 - 120	
BEF0232-BSD1 (Solid)	Lab File ID: 06291604.D		Analyzed: 06/29/16 15:38	
1,2-Dichloroethane-d4	50.000	97.5	80 - 149	
1,2-Dichlorobenzene-d4	50.000	99.9	80 - 120	
Toluene-d8	50.000	99.2	77 - 120	
4-Bromofluorobenzene	50.000	98.9	80 - 120	
BEF0232-BLK1 (Solid)	Lab File ID: 06291605.D		Analyzed: 06/29/16 16:00	
1,2-Dichloroethane-d4	50.000	99.1	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.9	77 - 120	
4-Bromofluorobenzene	50.000	97.6	80 - 120	
16F0096-01 (Solid)	Lab File ID: 06291606.D		Analyzed: 06/29/16 17:09	
1,2-Dichloroethane-d4	50.000	107	80 - 149	
1,2-Dichlorobenzene-d4	50.000	102	80 - 120	
Toluene-d8	50.000	98.7	77 - 120	
4-Bromofluorobenzene	50.000	92.0	80 - 120	
16F0096-02 (Solid)	Lab File ID: 06291607.D		Analyzed: 06/29/16 17:32	
1,2-Dichloroethane-d4	50.000	105	80 - 149	
1,2-Dichlorobenzene-d4	50.000	99.7	80 - 120	
Toluene-d8	50.000	98.9	77 - 120	
4-Bromofluorobenzene	50.000	95.7	80 - 120	

SURROGATE RECOVERY SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG/WO: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0001
Instrument: NT5
Calibration: ZF00019
Calibration Date: 06/20/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
16F0096-03 (Solid)	Lab File ID: 06291608.D		Analyzed: 06/29/16 17:54	
1,2-Dichloroethane-d4	50.000	106	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.5	77 - 120	
4-Bromofluorobenzene	50.000	95.5	80 - 120	
16F0096-04 (Solid)	Lab File ID: 06291609.D		Analyzed: 06/29/16 18:17	
1,2-Dichloroethane-d4	50.000	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	100	80 - 120	
Toluene-d8	50.000	98.8	77 - 120	
4-Bromofluorobenzene	50.000	100	80 - 120	
16F0096-05 (Solid)	Lab File ID: 06291610.D		Analyzed: 06/29/16 18:39	
1,2-Dichloroethane-d4	50.000	104	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.4	77 - 120	
4-Bromofluorobenzene	50.000	98.1	80 - 120	
16F0096-06 (Solid)	Lab File ID: 06291611.D		Analyzed: 06/29/16 19:02	
1,2-Dichloroethane-d4	50.000	102	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.4	77 - 120	
4-Bromofluorobenzene	50.000	98.8	80 - 120	
16F0096-07 (Solid)	Lab File ID: 06291612.D		Analyzed: 06/29/16 19:25	
1,2-Dichloroethane-d4	50.000	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.9	77 - 120	
4-Bromofluorobenzene	50.000	99.8	80 - 120	
16F0096-08 (Solid)	Lab File ID: 06291613.D		Analyzed: 06/29/16 19:47	
1,2-Dichloroethane-d4	50.000	105	80 - 149	
1,2-Dichlorobenzene-d4	50.000	102	80 - 120	
Toluene-d8	50.000	98.0	77 - 120	
4-Bromofluorobenzene	50.000	98.0	80 - 120	

SURROGATE RECOVERY SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG/WO: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0001
Instrument: NT5
Calibration: ZF00019
Calibration Date: 06/20/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
16F0096-09 (Solid)	Lab File ID: 06291614.D		Analyzed: 06/29/16 20:10	
1,2-Dichloroethane-d4	50.000	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	102	80 - 120	
Toluene-d8	50.000	98.7	77 - 120	
4-Bromofluorobenzene	50.000	99.1	80 - 120	
16F0096-10 (Solid)	Lab File ID: 06291615.D		Analyzed: 06/29/16 20:32	
1,2-Dichloroethane-d4	50.000	105	80 - 149	
1,2-Dichlorobenzene-d4	50.000	102	80 - 120	
Toluene-d8	50.000	99.0	77 - 120	
4-Bromofluorobenzene	50.000	99.6	80 - 120	
16F0096-11 (Solid)	Lab File ID: 06291616.D		Analyzed: 06/29/16 20:55	
1,2-Dichloroethane-d4	50.000	104	80 - 149	
1,2-Dichlorobenzene-d4	50.000	102	80 - 120	
Toluene-d8	50.000	98.5	77 - 120	
4-Bromofluorobenzene	50.000	98.8	80 - 120	
16F0096-12 (Solid)	Lab File ID: 06291617.D		Analyzed: 06/29/16 21:17	
1,2-Dichloroethane-d4	50.000	102	80 - 149	
1,2-Dichlorobenzene-d4	50.000	102	80 - 120	
Toluene-d8	50.000	98.6	77 - 120	
4-Bromofluorobenzene	50.000	98.7	80 - 120	
16F0096-13 (Solid)	Lab File ID: 06291618.D		Analyzed: 06/29/16 21:40	
1,2-Dichloroethane-d4	50.000	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	99.8	80 - 120	
Toluene-d8	50.000	98.2	77 - 120	
4-Bromofluorobenzene	50.000	96.0	80 - 120	
16F0096-14 (Solid)	Lab File ID: 06291619.D		Analyzed: 06/29/16 22:03	
1,2-Dichloroethane-d4	50.000	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.1	77 - 120	
4-Bromofluorobenzene	50.000	100	80 - 120	

SURROGATE RECOVERY SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG/WO: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0001
Instrument: NT5
Calibration: ZF00019
Calibration Date: 06/20/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
16F0096-15 (Solid)	Lab File ID: 06291620.D		Analyzed: 06/29/16 22:25	
1,2-Dichloroethane-d4	50.000	104	80 - 149	
1,2-Dichlorobenzene-d4	50.000	102	80 - 120	
Toluene-d8	50.000	97.3	77 - 120	
4-Bromofluorobenzene	50.000	97.9	80 - 120	
16F0096-16 (Solid)	Lab File ID: 06291621.D		Analyzed: 06/29/16 22:48	
1,2-Dichloroethane-d4	50.000	103	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	97.9	77 - 120	
4-Bromofluorobenzene	50.000	98.6	80 - 120	
16F0096-17 (Solid)	Lab File ID: 06291622.D		Analyzed: 06/29/16 23:10	
1,2-Dichloroethane-d4	50.000	101	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.3	77 - 120	
4-Bromofluorobenzene	50.000	101	80 - 120	
16F0096-18 (Solid)	Lab File ID: 06291623.D		Analyzed: 06/29/16 23:33	
1,2-Dichloroethane-d4	50.000	102	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.1	77 - 120	
4-Bromofluorobenzene	50.000	98.6	80 - 120	
16F0096-19 (Solid)	Lab File ID: 06291624.D		Analyzed: 06/29/16 23:56	
1,2-Dichloroethane-d4	50.000	99.7	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	98.4	77 - 120	
4-Bromofluorobenzene	50.000	100	80 - 120	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0001
Instrument: NT5
Calibration: ZF00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SEG0001-ICV1)		(Solid)		Lab File ID: 06291602.D				Analyzed: 06/29/16 14:20	
Pentafluorobenzene	586989	4.949				50 - 200		+/-0.50	
Chlorobenzene-d5	2173340	7.875				50 - 200		+/-0.50	
1,4-Difluorobenzene	2081125	5.393				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1085984	9.968				50 - 200		+/-0.50	
LCS (BEF0232-BS1)		(Solid)		Lab File ID: 06291603.D				Analyzed: 06/29/16 15:15	
Pentafluorobenzene	627015	4.943	586989	4.949	107	50 - 200	-0.0060	+/-0.50	
Chlorobenzene-d5	2303679	7.875	2173340	7.875	106	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	2173453	5.393	2081125	5.393	104	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	1152626	9.968	1085984	9.968	106	50 - 200	0.0000	+/-0.50	
LCS Dup (BEF0232-BSD1)		(Solid)		Lab File ID: 06291604.D				Analyzed: 06/29/16 15:38	
Pentafluorobenzene	631048	4.955	586989	4.949	108	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2338072	7.881	2173340	7.875	108	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2204492	5.405	2081125	5.393	106	50 - 200	0.0120	+/-0.50	
1,4-Dichlorobenzene-d4	1193139	9.968	1085984	9.968	110	50 - 200	0.0000	+/-0.50	
Blank (BEF0232-BLK1)		(Solid)		Lab File ID: 06291605.D				Analyzed: 06/29/16 16:00	
Pentafluorobenzene	614674	4.961	586989	4.949	105	50 - 200	0.0120	+/-0.50	
Chlorobenzene-d5	2259040	7.881	2173340	7.875	104	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2134498	5.405	2081125	5.393	103	50 - 200	0.0120	+/-0.50	
1,4-Dichlorobenzene-d4	1137277	9.968	1085984	9.968	105	50 - 200	0.0000	+/-0.50	
CHRL-M-02-160629 (16F0096-01)		(Solid)		Lab File ID: 06291606.D				Analyzed: 06/29/16 17:09	
Pentafluorobenzene	606592	4.955	586989	4.949	103	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2182634	7.875	2173340	7.875	100	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	2142710	5.399	2081125	5.393	103	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	941146	9.968	1085984	9.968	87	50 - 200	0.0000	+/-0.50	
CHRL-M-03-160629 (16F0096-02)		(Solid)		Lab File ID: 06291607.D				Analyzed: 06/29/16 17:32	
Pentafluorobenzene	623681	4.955	586989	4.949	106	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2302693	7.881	2173340	7.875	106	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2188143	5.399	2081125	5.393	105	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	1069438	9.968	1085984	9.968	98	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0001
Instrument: NT5
Calibration: ZF00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
CHRL-M-53-160629 (16F0096-03)		(Solid)		Lab File ID: 06291608.D				Analyzed: 06/29/16 17:54	
Pentafluorobenzene	634782	4.955	586989	4.949	108	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2301366	7.881	2173340	7.875	106	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2199968	5.399	2081125	5.393	106	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	1024654	9.968	1085984	9.968	94	50 - 200	0.0000	+/-0.50	
CHRL-M-04-160629 (16F0096-04)		(Solid)		Lab File ID: 06291609.D				Analyzed: 06/29/16 18:17	
Pentafluorobenzene	639854	4.961	586989	4.949	109	50 - 200	0.0120	+/-0.50	
Chlorobenzene-d5	2389933	7.881	2173340	7.875	110	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2230987	5.405	2081125	5.393	107	50 - 200	0.0120	+/-0.50	
1,4-Dichlorobenzene-d4	1253499	9.968	1085984	9.968	115	50 - 200	0.0000	+/-0.50	
CHRL-M-05-160629 (16F0096-05)		(Solid)		Lab File ID: 06291610.D				Analyzed: 06/29/16 18:39	
Pentafluorobenzene	622924	4.955	586989	4.949	106	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2299978	7.881	2173340	7.875	106	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2162743	5.405	2081125	5.393	104	50 - 200	0.0120	+/-0.50	
1,4-Dichlorobenzene-d4	1136184	9.968	1085984	9.968	105	50 - 200	0.0000	+/-0.50	
CHRL-O-01-160629 (16F0096-06)		(Solid)		Lab File ID: 06291611.D				Analyzed: 06/29/16 19:02	
Pentafluorobenzene	647335	4.961	586989	4.949	110	50 - 200	0.0120	+/-0.50	
Chlorobenzene-d5	2381750	7.881	2173340	7.875	110	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2229911	5.405	2081125	5.393	107	50 - 200	0.0120	+/-0.50	
1,4-Dichlorobenzene-d4	1222376	9.968	1085984	9.968	113	50 - 200	0.0000	+/-0.50	
CHRL-O-02-160629 (16F0096-07)		(Solid)		Lab File ID: 06291612.D				Analyzed: 06/29/16 19:25	
Pentafluorobenzene	660259	4.955	586989	4.949	112	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2447782	7.881	2173340	7.875	113	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2266562	5.405	2081125	5.393	109	50 - 200	0.0120	+/-0.50	
1,4-Dichlorobenzene-d4	1268189	9.968	1085984	9.968	117	50 - 200	0.0000	+/-0.50	
CHRL-O-03-160629 (16F0096-08)		(Solid)		Lab File ID: 06291613.D				Analyzed: 06/29/16 19:47	
Pentafluorobenzene	626507	4.955	586989	4.949	107	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2306101	7.881	2173340	7.875	106	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2169856	5.399	2081125	5.393	104	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	1145801	9.968	1085984	9.968	106	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0001
Instrument: NT5
Calibration: ZF00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
CHRL-O-04-160629 (16F0096-09)		(Solid)		Lab File ID: 06291614.D				Analyzed: 06/29/16 20:10	
Pentafluorobenzene	636716	4.955	586989	4.949	108	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2329189	7.881	2173340	7.875	107	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2176356	5.399	2081125	5.393	105	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	1182555	9.968	1085984	9.968	109	50 - 200	0.0000	+/-0.50	
CHRL-O-05-160629 (16F0096-10)		(Solid)		Lab File ID: 06291615.D				Analyzed: 06/29/16 20:32	
Pentafluorobenzene	623077	4.955	586989	4.949	106	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2292021	7.881	2173340	7.875	105	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2127619	5.405	2081125	5.393	102	50 - 200	0.0120	+/-0.50	
1,4-Dichlorobenzene-d4	1180880	9.968	1085984	9.968	109	50 - 200	0.0000	+/-0.50	
CHRL-N-01-160629 (16F0096-11)		(Solid)		Lab File ID: 06291616.D				Analyzed: 06/29/16 20:55	
Pentafluorobenzene	641020	4.955	586989	4.949	109	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2356023	7.881	2173340	7.875	108	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2214275	5.399	2081125	5.393	106	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	1205255	9.968	1085984	9.968	111	50 - 200	0.0000	+/-0.50	
CHRL-N-02-160629 (16F0096-12)		(Solid)		Lab File ID: 06291617.D				Analyzed: 06/29/16 21:17	
Pentafluorobenzene	647857	4.955	586989	4.949	110	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2384186	7.881	2173340	7.875	110	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2216803	5.399	2081125	5.393	107	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	1231154	9.968	1085984	9.968	113	50 - 200	0.0000	+/-0.50	
CHRL-N-03-160629 (16F0096-13)		(Solid)		Lab File ID: 06291618.D				Analyzed: 06/29/16 21:40	
Pentafluorobenzene	636303	4.961	586989	4.949	108	50 - 200	0.0120	+/-0.50	
Chlorobenzene-d5	2280334	7.881	2173340	7.875	105	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2152226	5.405	2081125	5.393	103	50 - 200	0.0120	+/-0.50	
1,4-Dichlorobenzene-d4	1101330	9.968	1085984	9.968	101	50 - 200	0.0000	+/-0.50	
CHRL-N-04-160629 (16F0096-14)		(Solid)		Lab File ID: 06291619.D				Analyzed: 06/29/16 22:03	
Pentafluorobenzene	667713	4.961	586989	4.949	114	50 - 200	0.0120	+/-0.50	
Chlorobenzene-d5	2434527	7.881	2173340	7.875	112	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2277273	5.405	2081125	5.393	109	50 - 200	0.0120	+/-0.50	
1,4-Dichlorobenzene-d4	1267395	9.968	1085984	9.968	117	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0001
Instrument: NT5
Calibration: ZF00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
CHRL-N-05-160629 (16F0096-15)		(Solid)		Lab File ID: 06291620.D				Analyzed: 06/29/16 22:25	
Pentafluorobenzene	636181	4.955	586989	4.949	108	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2346476	7.881	2173340	7.875	108	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2195672	5.399	2081125	5.393	106	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	1208347	9.968	1085984	9.968	111	50 - 200	0.0000	+/-0.50	
CHRL-Q-01-160629 (16F0096-16)		(Solid)		Lab File ID: 06291621.D				Analyzed: 06/29/16 22:48	
Pentafluorobenzene	653842	4.955	586989	4.949	111	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2418115	7.881	2173340	7.875	111	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2247360	5.399	2081125	5.393	108	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	1257017	9.968	1085984	9.968	116	50 - 200	0.0000	+/-0.50	
CHRL-Q-02-160629 (16F0096-17)		(Solid)		Lab File ID: 06291622.D				Analyzed: 06/29/16 23:10	
Pentafluorobenzene	663859	4.961	586989	4.949	113	50 - 200	0.0120	+/-0.50	
Chlorobenzene-d5	2458070	7.881	2173340	7.875	113	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2258871	5.405	2081125	5.393	109	50 - 200	0.0120	+/-0.50	
1,4-Dichlorobenzene-d4	1282405	9.968	1085984	9.968	118	50 - 200	0.0000	+/-0.50	
CHRL-Q-03-160629 (16F0096-18)		(Solid)		Lab File ID: 06291623.D				Analyzed: 06/29/16 23:33	
Pentafluorobenzene	668249	4.955	586989	4.949	114	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2458692	7.881	2173340	7.875	113	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2277286	5.399	2081125	5.393	109	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	1255813	9.968	1085984	9.968	116	50 - 200	0.0000	+/-0.50	
CHRL-Q-04-160629 (16F0096-19)		(Solid)		Lab File ID: 06291624.D				Analyzed: 06/29/16 23:56	
Pentafluorobenzene	693890	4.955	586989	4.949	118	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2514764	7.881	2173340	7.875	116	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2332638	5.399	2081125	5.393	112	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	1299629	9.968	1085984	9.968	120	50 - 200	0.0000	+/-0.50	
Calibration Check (SEG0001-CCV1)		(Solid)		Lab File ID: 06291629.D				Analyzed: 06/30/16 01:48	
Pentafluorobenzene	674111	4.955	586989	4.949	115	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2346012	7.881	2173340	7.875	108	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2232581	5.399	2081125	5.393	107	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	1223396	9.968	1085984	9.968	113	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0003
Instrument: NT5
Calibration: ZF00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SEG0003-ICV1)		(Solid)		Lab File ID: 06301603.D				Analyzed: 06/30/16 12:05	
Pentafluorobenzene	713135	4.943				50 - 200		+/-0.50	
Chlorobenzene-d5	2421338	7.875				50 - 200		+/-0.50	
1,4-Difluorobenzene	2358686	5.393				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1247220	9.968				50 - 200		+/-0.50	
LCS (BEG0004-BS1)		(Solid)		Lab File ID: 06301604.D				Analyzed: 06/30/16 12:46	
Pentafluorobenzene	700998	4.949				50 - 200		+/-0.50	
Chlorobenzene-d5	2391523	7.875				50 - 200		+/-0.50	
1,4-Difluorobenzene	2302955	5.399				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1234567	9.968				50 - 200		+/-0.50	
LCS (BEG0005-BS1)		(Water)		Lab File ID: 06301604A.D				Analyzed: 06/30/16 12:46	
Pentafluorobenzene	700998	4.949	713135	4.943	98	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5	2391523	7.875	2421338	7.875	99	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	2302955	5.399	2358686	5.393	98	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	1234567	9.968	1247220	9.968	99	50 - 200	0.0000	+/-0.50	
LCS (BEG0006-BS1)		(Solid)		Lab File ID: 06301604B.D				Analyzed: 06/30/16 12:46	
Pentafluorobenzene	700998	4.949				50 - 200		+/-0.50	
Chlorobenzene-d5	2391523	7.875				50 - 200		+/-0.50	
1,4-Difluorobenzene	2302955	5.399				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1234567	9.968				50 - 200		+/-0.50	
LCS Dup (BEG0004-BSD1)		(Solid)		Lab File ID: 06301605.D				Analyzed: 06/30/16 13:09	
Pentafluorobenzene	728496	4.955				50 - 200		+/-0.50	
Chlorobenzene-d5	2450991	7.875				50 - 200		+/-0.50	
1,4-Difluorobenzene	2354732	5.399				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1272558	9.968				50 - 200		+/-0.50	
LCS Dup (BEG0005-BSD1)		(Water)		Lab File ID: 06301605A.D				Analyzed: 06/30/16 13:09	
Pentafluorobenzene	728496	4.955	713135	4.943	102	50 - 200	0.0120	+/-0.50	
Chlorobenzene-d5	2450991	7.875	2421338	7.875	101	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	2354732	5.399	2358686	5.393	100	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	1272558	9.968	1247220	9.968	102	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0003
Instrument: NT5
Calibration: ZF00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (BEG0006-BSD1)		(Solid)		Lab File ID: 06301605B.D				Analyzed: 06/30/16 13:09	
Pentafluorobenzene	728496	4.955				50 - 200		+/-0.50	
Chlorobenzene-d5	2450991	7.875				50 - 200		+/-0.50	
1,4-Difluorobenzene	2354732	5.399				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1272558	9.968				50 - 200		+/-0.50	
Blank (BEG0004-BLK1)		(Solid)		Lab File ID: 06301606.D				Analyzed: 06/30/16 13:31	
Pentafluorobenzene	705329	4.955				50 - 200		+/-0.50	
Chlorobenzene-d5	2382638	7.881				50 - 200		+/-0.50	
1,4-Difluorobenzene	2280984	5.405				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1192894	9.968				50 - 200		+/-0.50	
Blank (BEG0005-BLK1)		(Water)		Lab File ID: 06301606A.D				Analyzed: 06/30/16 13:31	
Pentafluorobenzene	705329	4.955	713135	4.943	99	50 - 200	0.0120	+/-0.50	
Chlorobenzene-d5	2382638	7.881	2421338	7.875	98	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2280984	5.405	2358686	5.393	97	50 - 200	0.0120	+/-0.50	
1,4-Dichlorobenzene-d4	1192894	9.968	1247220	9.968	96	50 - 200	0.0000	+/-0.50	
Blank (BEG0006-BLK1)		(Solid)		Lab File ID: 06301606B.D				Analyzed: 06/30/16 13:31	
Pentafluorobenzene	705329	4.955				50 - 200		+/-0.50	
Chlorobenzene-d5	2382638	7.881				50 - 200		+/-0.50	
1,4-Difluorobenzene	2280984	5.405				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1192894	9.968				50 - 200		+/-0.50	
CHRL-Q-05-160629 (16F0096-20)		(Solid)		Lab File ID: 06301607.D				Analyzed: 06/30/16 14:29	
Pentafluorobenzene	712704	4.949				50 - 200		+/-0.50	
Chlorobenzene-d5	2400892	7.875				50 - 200		+/-0.50	
1,4-Difluorobenzene	2317548	5.399				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1227562	9.962				50 - 200		+/-0.50	
CHRL-P-01-160629 (16F0096-21)		(Solid)		Lab File ID: 06301608.D				Analyzed: 06/30/16 14:52	
Pentafluorobenzene	701540	4.949				50 - 200		+/-0.50	
Chlorobenzene-d5	2436838	7.875				50 - 200		+/-0.50	
1,4-Difluorobenzene	2292101	5.399				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1267726	9.968				50 - 200		+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0003
Instrument: NT5
Calibration: ZF00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
CHRL-P-02-160629 (16F0096-22)		(Solid)		Lab File ID: 06301609.D				Analyzed: 06/30/16 15:14	
Pentafluorobenzene	713562	4.955				50 - 200		+/-0.50	
Chlorobenzene-d5	2495166	7.881				50 - 200		+/-0.50	
1,4-Difluorobenzene	2327777	5.405				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1296872	9.968				50 - 200		+/-0.50	
CHRL-P-52-160629 (16F0096-23)		(Solid)		Lab File ID: 06301610.D				Analyzed: 06/30/16 15:37	
Pentafluorobenzene	738741	4.961				50 - 200		+/-0.50	
Chlorobenzene-d5	2528887	7.881				50 - 200		+/-0.50	
1,4-Difluorobenzene	2368263	5.405				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1288898	9.968				50 - 200		+/-0.50	
CHRL-P-03-160629 (16F0096-24)		(Solid)		Lab File ID: 06301611.D				Analyzed: 06/30/16 15:59	
Pentafluorobenzene	739184	4.955				50 - 200		+/-0.50	
Chlorobenzene-d5	2524333	7.881				50 - 200		+/-0.50	
1,4-Difluorobenzene	2381261	5.405				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1322616	9.968				50 - 200		+/-0.50	
CHRL-P-04-160629 (16F0096-25)		(Solid)		Lab File ID: 06301612.D				Analyzed: 06/30/16 16:22	
Pentafluorobenzene	715350	4.961				50 - 200		+/-0.50	
Chlorobenzene-d5	2385574	7.881				50 - 200		+/-0.50	
1,4-Difluorobenzene	2293043	5.405				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1204128	9.968				50 - 200		+/-0.50	
CHRL-P-05-160629 (16F0096-26)		(Solid)		Lab File ID: 06301613.D				Analyzed: 06/30/16 16:45	
Pentafluorobenzene	701083	4.961				50 - 200		+/-0.50	
Chlorobenzene-d5	2387522	7.881				50 - 200		+/-0.50	
1,4-Difluorobenzene	2245006	5.405				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1244524	9.968				50 - 200		+/-0.50	
CHRL-R-02-160629 (16F0096-27)		(Solid)		Lab File ID: 06301614.D				Analyzed: 06/30/16 17:07	
Pentafluorobenzene	691830	4.955				50 - 200		+/-0.50	
Chlorobenzene-d5	2327858	7.881				50 - 200		+/-0.50	
1,4-Difluorobenzene	2200756	5.399				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1224573	9.968				50 - 200		+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0003
Instrument: NT5
Calibration: ZF00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
CHRL-R-03-160629 (16F0096-28)		(Solid)		Lab File ID: 06301615.D				Analyzed: 06/30/16 17:30	
Pentafluorobenzene	712113	4.961				50 - 200		+/-0.50	
Chlorobenzene-d5	2426808	7.881				50 - 200		+/-0.50	
1,4-Difluorobenzene	2274788	5.405				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1264047	9.968				50 - 200		+/-0.50	
CHRL-R-04-160629 (16F0096-29)		(Solid)		Lab File ID: 06301616.D				Analyzed: 06/30/16 17:52	
Pentafluorobenzene	733992	4.955				50 - 200		+/-0.50	
Chlorobenzene-d5	2455591	7.881				50 - 200		+/-0.50	
1,4-Difluorobenzene	2327119	5.405				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1270183	9.968				50 - 200		+/-0.50	
CHRL-TB-160629 (16F0096-30)		(Water)		Lab File ID: 06301617.D				Analyzed: 06/30/16 18:15	
Pentafluorobenzene	725390	4.955	713135	4.943	102	50 - 200	0.0120	+/-0.50	
Chlorobenzene-d5	2378880	7.881	2421338	7.875	98	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2289660	5.399	2358686	5.393	97	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	1214301	9.968	1247220	9.968	97	50 - 200	0.0000	+/-0.50	
CHRL-Q-02-160629 (16F0096-17RE1)		(Solid)		Lab File ID: 06301618.D				Analyzed: 06/30/16 18:37	
Pentafluorobenzene	738686	4.955				50 - 200		+/-0.50	
Chlorobenzene-d5	2447909	7.881				50 - 200		+/-0.50	
1,4-Difluorobenzene	2308607	5.405				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1235610	9.968				50 - 200		+/-0.50	
CHRL-Q-03-160629 (16F0096-18RE1)		(Solid)		Lab File ID: 06301619.D				Analyzed: 06/30/16 19:00	
Pentafluorobenzene	756222	4.961				50 - 200		+/-0.50	
Chlorobenzene-d5	2492167	7.881				50 - 200		+/-0.50	
1,4-Difluorobenzene	2352717	5.405				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1296480	9.974				50 - 200		+/-0.50	
CHRL-P-52-160629 (16F0096-23RE1)		(Solid)		Lab File ID: 06301620.D				Analyzed: 06/30/16 19:23	
Pentafluorobenzene	764997	4.961				50 - 200		+/-0.50	
Chlorobenzene-d5	2492982	7.881				50 - 200		+/-0.50	
1,4-Difluorobenzene	2380932	5.405				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1284763	9.974				50 - 200		+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0003
Instrument: NT5
Calibration: ZF00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (SEG0003-CCV1)		(Solid)		Lab File ID: 06301627.D				Analyzed: 06/30/16 22:01	
Pentafluorobenzene	777391	4.961				50 - 200		+/-0.50	
Pentafluorobenzene	777391	4.961	713135	4.943	109	50 - 200	0.0180	+/-0.50	
Chlorobenzene-d5	2352127	7.881				50 - 200		+/-0.50	
Chlorobenzene-d5	2352127	7.881	2421338	7.875	97	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	2302117	5.405	2358686	5.393	98	50 - 200	0.0120	+/-0.50	
1,4-Difluorobenzene	2302117	5.405				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	1202177	9.968	1247220	9.968	96	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	1202177	9.968				50 - 200		+/-0.50	
Low Cal Check (SEG0003-LCV1)		(Solid)		Lab File ID: 06301628.D				Analyzed: 06/30/16 22:24	
Pentafluorobenzene	747046	4.955	777391	4.961	96	50 - 200	-0.0060	+/-0.50	
Chlorobenzene-d5	2267935	7.881	2352127	7.881	96	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	2215103	5.405	2302117	5.405	96	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	1167944	9.968	1202177	9.968	97	50 - 200	0.0000	+/-0.50	

Analytical Resources, Incorporated

HOLDING TIME SUMMARY

Analysis: EPA 8260C

Laboratory: Analytical Resources, Inc. SDG: 16F0096

Client: Anchor QEA, LLC Project: CHRL SSWA

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
CHRL-M-02-160629 16F0096-01	06/29/16 11:00	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 17:09	0	14	
CHRL-M-03-160629 16F0096-02	06/29/16 11:00	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 17:32	0	14	
CHRL-M-53-160629 16F0096-03	06/29/16 11:00	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 17:54	0	14	
CHRL-M-04-160629 16F0096-04	06/29/16 11:15	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 18:17	0	14	
CHRL-M-05-160629 16F0096-05	06/29/16 11:15	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 18:39	0	14	
CHRL-O-01-160629 16F0096-06	06/29/16 12:15	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 19:02	0	14	
CHRL-O-02-160629 16F0096-07	06/29/16 12:05	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 19:25	0	14	
CHRL-O-03-160629 16F0096-08	06/29/16 11:55	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 19:47	0	14	
CHRL-O-04-160629 16F0096-09	06/29/16 11:45	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 20:10	0	14	
CHRL-O-05-160629 16F0096-10	06/29/16 11:35	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 20:32	0	14	
CHRL-N-01-160629 16F0096-11	06/29/16 11:25	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 20:55	0	14	
CHRL-N-02-160629 16F0096-12	06/29/16 11:35	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 21:17	0	14	
CHRL-N-03-160629 16F0096-13	06/29/16 11:45	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 21:40	0	14	
CHRL-N-04-160629 16F0096-14	06/29/16 11:55	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 22:03	0	14	
CHRL-N-05-160629 16F0096-15	06/29/16 11:20	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 22:25	0	14	
CHRL-Q-01-160629 16F0096-16	06/29/16 13:05	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 22:48	0	14	
CHRL-Q-02-160629 16F0096-17	06/29/16 12:55	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 23:10	0	14	
CHRL-Q-02-160629 16F0096-17RE1	06/29/16 12:55	06/29/16 14:45	06/30/16 10:04	1	14	06/30/16 18:37	1	14	
CHRL-Q-03-160629 16F0096-18	06/29/16 12:45	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 23:33	0	14	
CHRL-Q-03-160629 16F0096-18RE1	06/29/16 12:45	06/29/16 14:45	06/30/16 10:04	1	14	06/30/16 19:00	1	14	
CHRL-Q-04-160629 16F0096-19	06/29/16 12:35	06/29/16 14:45	06/29/16 13:43	0	14	06/29/16 23:56	0	14	
CHRL-Q-05-160629 16F0096-20	06/29/16 12:25	06/29/16 14:45	06/30/16 10:04	1	14	06/30/16 14:29	1	14	
CHRL-P-01-160629 16F0096-21	06/29/16 13:00	06/29/16 14:45	06/30/16 10:04	1	14	06/30/16 14:52	1	14	
CHRL-P-02-160629 16F0096-22	06/29/16 13:10	06/29/16 14:45	06/30/16 10:04	1	14	06/30/16 15:14	1	14	

Analytical Resources, Incorporated

HOLDING TIME SUMMARY

Analysis: EPA 8260C

Laboratory: Analytical Resources, Inc. SDG: 16F0096

Client: Anchor QEA, LLC Project: CHRL SSWA

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
CHRL-P-52-160629 16F0096-23	06/29/16 13:15	06/29/16 14:45	06/30/16 10:04	1	14	06/30/16 15:37	1	14	
CHRL-P-52-160629 16F0096-23RE1	06/29/16 13:15	06/29/16 14:45	06/30/16 10:04	1	14	06/30/16 19:23	1	14	
CHRL-P-03-160629 16F0096-24	06/29/16 13:25	06/29/16 14:45	06/30/16 10:04	1	14	06/30/16 15:59	1	14	
CHRL-P-04-160629 16F0096-25	06/29/16 12:25	06/29/16 14:45	06/30/16 10:04	1	14	06/30/16 16:22	1	14	
CHRL-P-05-160629 16F0096-26	06/29/16 12:20	06/29/16 14:45	06/30/16 10:04	1	14	06/30/16 16:45	1	14	
CHRL-R-02-160629 16F0096-27	06/29/16 13:45	06/29/16 14:45	06/30/16 10:04	1	14	06/30/16 17:07	1	14	
CHRL-R-03-160629 16F0096-28	06/29/16 13:50	06/29/16 14:45	06/30/16 10:04	1	14	06/30/16 17:30	1	14	
CHRL-R-04-160629 16F0096-29	06/29/16 13:30	06/29/16 14:45	06/30/16 10:04	1	14	06/30/16 17:52	1	14	
CHRL-TB-160629 16F0096-30	06/29/16 00:00	06/29/16 14:45	06/30/16 10:04	1	14	06/30/16 18:15	2	14	

* Indicates hold time exceedance.

Analytical Resources, Incorporated

METHOD DETECTION AND REPORTING LIMITS

EPA 8260C

Laboratory: Analytical Resources, Inc. SDG: 16F0096

Client: Anchor QEA, LLC Project: CHRL SSWA

Matrix: Solid Instrument: NT5

Analyte	MDL	RL	Units
Vinyl Chloride	7.80	50.0	ug/kg
Vinyl Chloride	0.24	1.00	ug/kg
Bromomethane	10.2	50.0	ug/kg
Bromomethane	0.19	1.00	ug/kg
Vinyl Chloride	0.24	1.00	ug/L
Bromomethane	0.19	1.00	ug/L
cis-1,2-Dichloroethene	9.00	50.0	ug/kg
cis-1,2-Dichloroethene	0.24	1.00	ug/kg
cis-1,2-Dichloroethene	0.24	1.00	ug/L
Benzene	8.20	50.0	ug/kg
Benzene	0.30	1.00	ug/kg
Trichloroethene	0.21	1.00	ug/kg
Trichloroethene	9.00	50.0	ug/kg
Benzene	0.30	1.00	ug/L
Trichloroethene	0.21	1.00	ug/L
Toluene	0.15	1.00	ug/kg
Toluene	8.60	50.0	ug/kg
Toluene	0.15	1.00	ug/L
Tetrachloroethene	13.8	50.0	ug/kg
Tetrachloroethene	0.26	1.00	ug/kg
Tetrachloroethene	0.26	1.00	ug/L
Ethylbenzene	13.6	50.0	ug/kg
Ethylbenzene	0.20	1.00	ug/kg
m,p-Xylene	27.9	50.0	ug/kg
m,p-Xylene	0.39	1.00	ug/kg
o-Xylene	0.22	1.00	ug/kg
o-Xylene	11.4	50.0	ug/kg
Ethylbenzene	0.20	1.00	ug/L
m,p-Xylene	0.39	1.00	ug/L
o-Xylene	0.22	1.00	ug/L

Analytical Resources, Incorporated

METHOD DETECTION AND REPORTING LIMITS

EPA 8260C

Laboratory: Analytical Resources, Inc. SDG: 16F0096

Client: Anchor QEA, LLC Project: CHRL SSWA

Matrix: Water Instrument: NT5

Analyte	MDL	RL	Units
Vinyl Chloride	0.06	0.20	ug/L
Bromomethane	0.25	1.00	ug/L
cis-1,2-Dichloroethene	0.04	0.20	ug/L
Benzene	0.03	0.20	ug/L
Trichloroethene	0.05	0.20	ug/L
Toluene	0.04	0.20	ug/L
Tetrachloroethene	0.05	0.20	ug/L
Ethylbenzene	0.04	0.20	ug/L
m,p-Xylene	0.05	0.40	ug/L
o-Xylene	0.03	0.20	ug/L

CHRL-M-02-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-01	File ID:	06301607G.D
Sampled:	06/29/16 11:00	Prepared:	06/29/16 17:30	Analyzed:	06/30/16 09:33
Solids:	91.99	Preparation:	No Prep - Volatiles	Initial/Final:	4.967 g / 5 g
Batch:	BEF0233	Sequence:	SEF0147	Calibration:	ZF00014
Instrument:	NT3	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5910	U	2950	5910

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.67	93.4	80 - 120	
4-Bromofluorobenzene	5.0000	4.32	86.4	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt3.i\20160630.b\06301607.D

Date : 30-JUN-2016 09:33

Client ID:

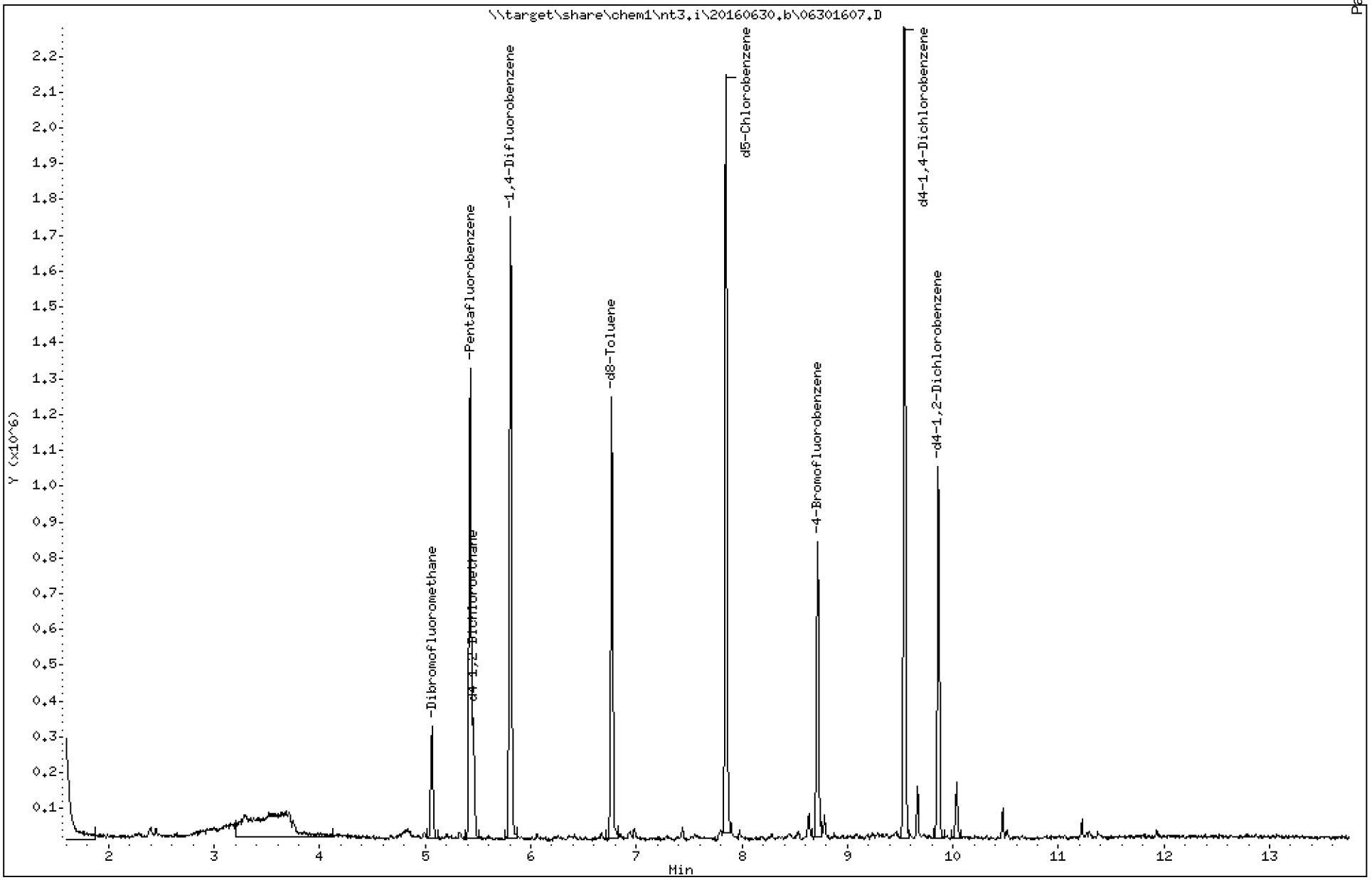
Sample Info: 16F0096-01,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160630.b\06301607.D
Lab Smp Id: 16F0096-01
Inj Date : 30-JUN-2016 09:33
Operator : LH Inst ID: nt3.i
Smp Info : 16F0096-01,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Meth Date : 01-Jul-2016 13:57 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 10:35 Cal File: 06151609.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 27 Dibromofluoromethane	111	5.063	5.067	(0.933)	149282	4.62614	4.626
31 Benzene	78	5.344	5.354	(0.920)	1571	0.01119	0.01119
* 32 Pentafluorobenzene	168	5.424	5.428	(1.000)	672324	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.456	5.460	(1.006)	173952	4.67244	4.672
* 37 1,4-Difluorobenzene	114	5.806	5.811	(1.000)	1057498	10.0000	
$ 43 d8-Toluene	98	6.768	6.767	(1.166)	621495	4.66773	4.668
44 Toluene	92	6.800	6.804	(1.171)	4044	0.04358	0.04358
* 53 d5-Chlorobenzene	117	7.847	7.851	(1.000)	971688	10.0000	
55 Ethyl Benzene	106	7.873	7.878	(1.003)	1766	0.02992	0.02992
57 m,p-xylene	106	7.980	7.979	(1.017)	5184	0.07487	0.07487
58 o-Xylene	106	8.283	8.287	(1.056)	1555	0.02235	0.02235
$ 62 4-Bromofluorobenzene	174	8.718	8.717	(1.111)	194924	4.31902	4.319
* 76 d4-1,4-Dichlorobenzene	152	9.542	9.541	(1.000)	523073	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.861	9.860	(1.033)	238753	4.76846	4.768

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 06301607.D
Lab Smp Id: 16F0096-01
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

Calibration Date: 30-JUN-2016
Calibration Time: 08:15
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	584309	292155	1168618	672324	15.06
37 1,4-Difluorobenze	921067	460534	1842134	1057498	14.81
53 d5-Chlorobenzene	840715	420358	1681430	971688	15.58
76 d4-1,4-Dichlorobe	460394	230197	920788	523073	13.61

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.42	-0.08
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	-0.07
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	-0.06
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20150930a
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-01
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.626	92.52	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.672	93.45	80-128
$ 43 d8-Toluene	5.000	4.668	93.35	80-120
$ 62 4-Bromofluorobenze	5.000	4.319	86.38	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.768	95.37	80-120

REVIEW SUMMARY FOR FILE - 06301607.D

Lab ID: 16F0096-01
nt3.i, 20160630.b\AK8260061516.m,   30-JUN-2016 09:33

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,AK8260061516.m,Sublist: betx.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt3.i\20160630gELM.b\06301607G.D

Date : 30-JUN-2016 09:33

Client ID:

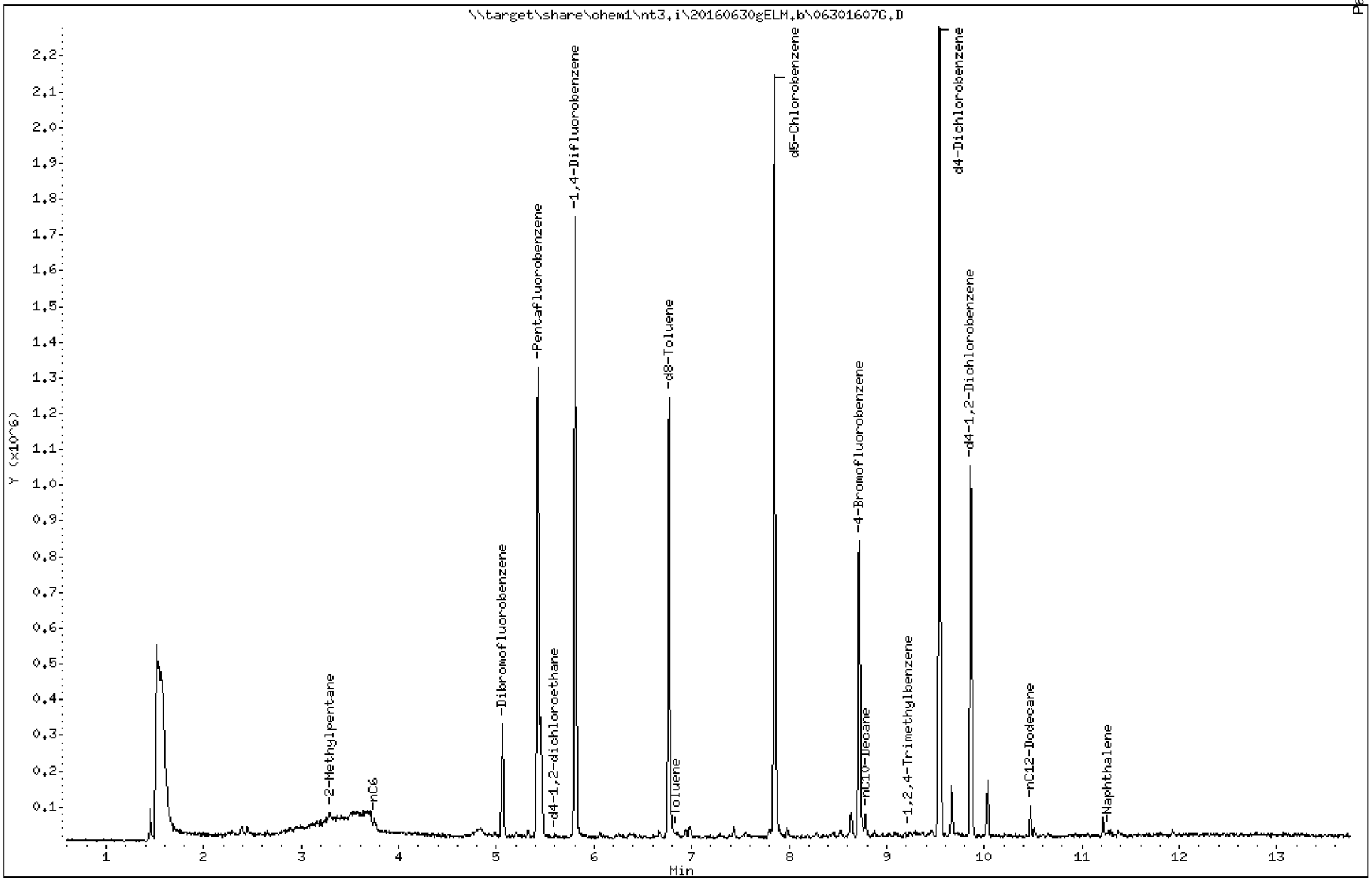
Sample Info: 16F0096-01,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630gELM.b/06301607G.D
Method: \20160630gELM.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 30-JUN-2016 09:33

ARI ID: 16F0096-01
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	1691565	0.017
8015C 2MP-TMB	(3.21 to 9.34)	176207359	3763567	0.021
AK101 nC6-nC10	(3.68 to 8.68)	125823356	2202643	0.018
NWTPHG Tol-Nap	(6.71 to 11.36)	103441757	1930141	0.019
mod8015 nC6-nC12	(3.68 to 10.57)	111111111	3277132	0.029

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.769	1776509	d8-Toluene
8.719	1213550	4-Bromofluorobenzene
9.537	3359500	d4-Dichlorobenzene
7.847	3095359	d5-Chlorobenzene
9.861	1539584	d4-1,2-Dichlorobenzene

CHRL-M-03-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-02	File ID:	06301613G.D
Sampled:	06/29/16 11:00	Prepared:	06/29/16 17:30	Analyzed:	06/30/16 12:09
Solids:	89.22	Preparation:	No Prep - Volatiles	Initial/Final:	5.053 g / 5 g
Batch:	BEF0233	Sequence:	SEF0147	Calibration:	ZF00014
Instrument:	NT3	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	6150	U	3070	6150

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.52	90.5	80 - 120	
4-Bromofluorobenzene	5.0000	4.71	94.2	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt3.i\20160630.b\06301613.D

Date : 30-JUN-2016 12:09

Client ID:

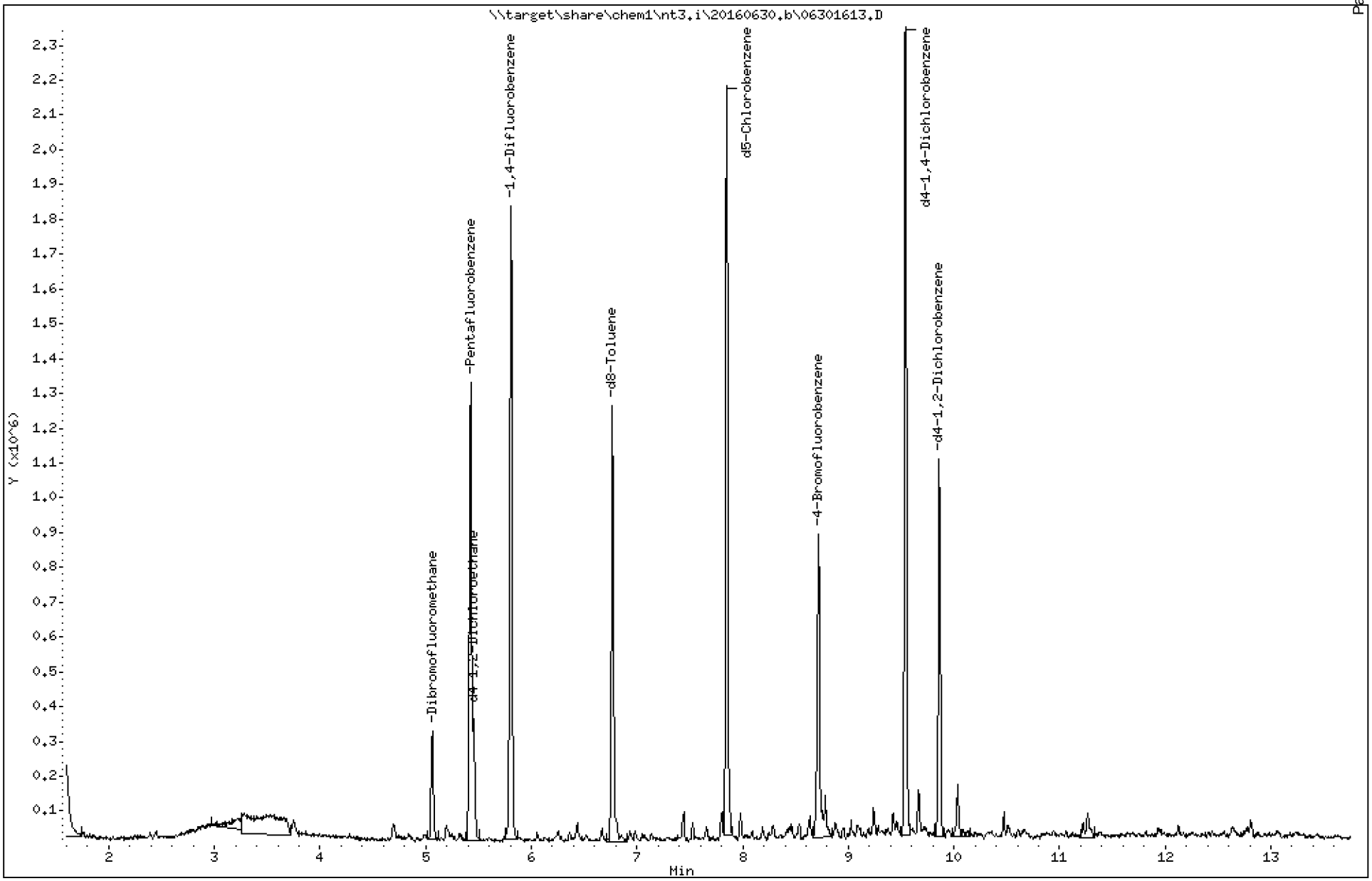
Sample Info: 16F0096-02,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160630.b\06301613.D
Lab Smp Id: 16F0096-02
Inj Date : 30-JUN-2016 12:09
Operator : LH Inst ID: nt3.i
Smp Info : 16F0096-02,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Meth Date : 01-Jul-2016 13:57 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 10:35 Cal File: 06151609.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.062	5.067	(0.933)	153073	4.63687	4.637
	31 Benzene	78	5.344	5.354	(0.920)	2699	0.01810	0.01810
*	32 Pentafluorobenzene	168	5.424	5.428	(1.000)	687801	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.456	5.460	(1.006)	177264	4.65426	4.654
*	37 1,4-Difluorobenzene	114	5.806	5.811	(1.000)	1123724	10.0000	
$	43 d8-Toluene	98	6.768	6.767	(1.166)	639905	4.52276	4.523
	44 Toluene	92	6.800	6.804	(1.171)	15771	0.15992	0.1599
*	53 d5-Chlorobenzene	117	7.847	7.851	(1.000)	988448	10.0000	
	55 Ethyl Benzene	106	7.879	7.878	(1.004)	7770	0.12942	0.1294
	57 m,p-xylene	106	7.979	7.979	(1.017)	18531	0.26308	0.2631
	58 o-Xylene	106	8.288	8.287	(1.056)	5626	0.07949	0.07949
$	62 4-Bromofluorobenzene	174	8.718	8.717	(1.111)	216181	4.70880	4.709
*	76 d4-1,4-Dichlorobenzene	152	9.542	9.541	(1.000)	551720	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.860	9.860	(1.033)	250180	4.73724	4.737

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 06301613.D
Lab Smp Id: 16F0096-02
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

Calibration Date: 30-JUN-2016
Calibration Time: 08:15
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	584309	292155	1168618	687801	17.71
37 1,4-Difluorobenze	921067	460534	1842134	1123724	22.00
53 d5-Chlorobenzene	840715	420358	1681430	988448	17.57
76 d4-1,4-Dichlorobe	460394	230197	920788	551720	19.84

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.42	-0.08
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	-0.08
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	-0.06
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 13:58

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20150930a
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-02
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.637	92.74	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.654	93.09	80-128
$ 43 d8-Toluene	5.000	4.523	90.46	80-120
$ 62 4-Bromofluorobenze	5.000	4.709	94.18	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.737	94.74	80-120

REVIEW SUMMARY FOR FILE - 06301613.D

Lab ID: 16F0096-02
nt3.i, 20160630.b\AK8260061516.m,   30-JUN-2016 12:09

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,AK8260061516.m,Sublist: betx.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt3.i\20160630gELM.b\06301613G.D

Date : 30-JUN-2016 12:09

Client ID:

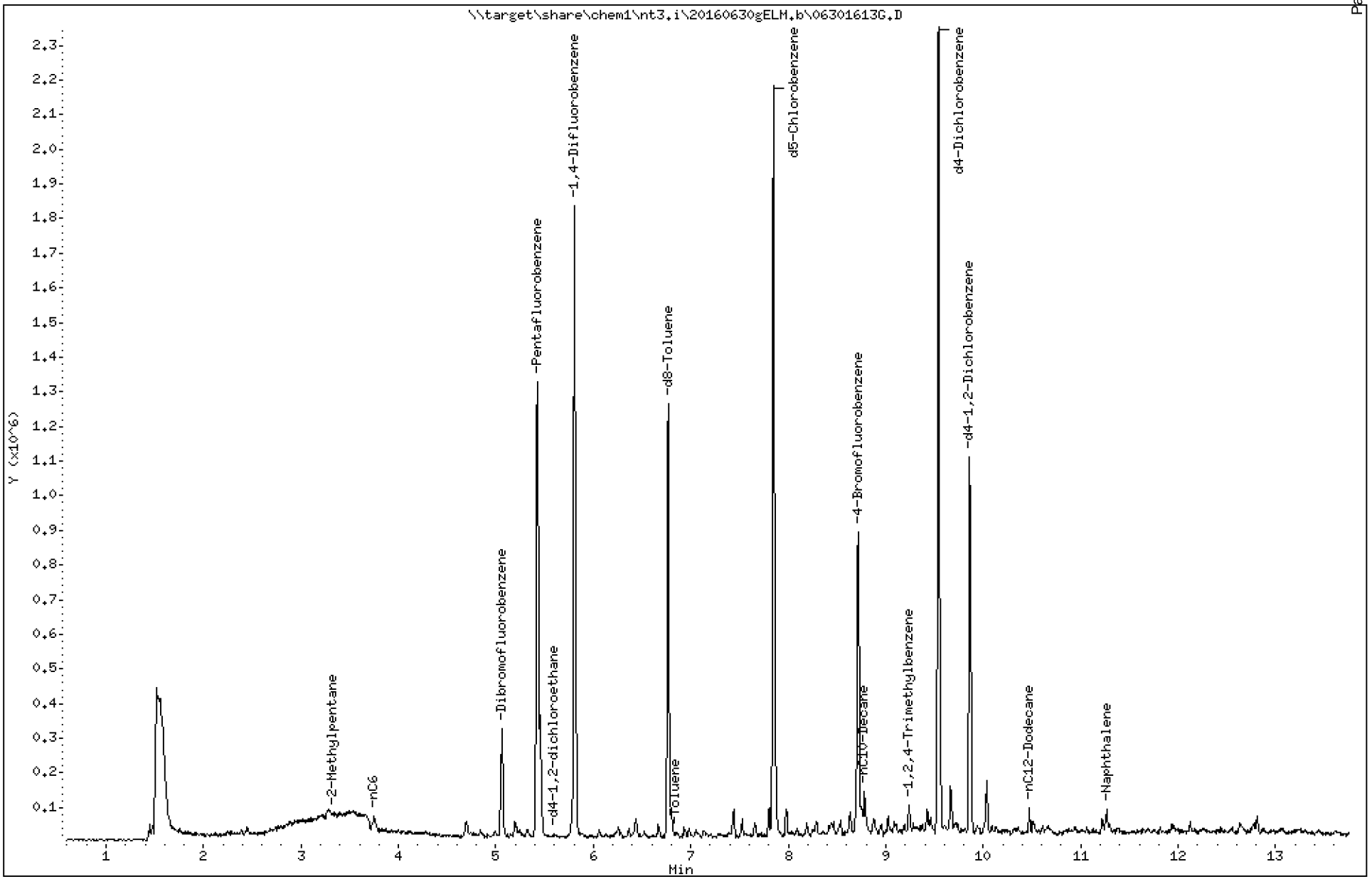
Sample Info: 16F0096-02,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630gELM.b/06301613G.D
Method: \20160630gELM.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 30-JUN-2016 12:09

ARI ID: 16F0096-02
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	3277545	0.033
8015C 2MP-TMB	(3.21 to 9.34)	176207359	5443981	0.031
AK101 nC6-nC10	(3.68 to 8.68)	125823356	2884226	0.023
NWTPHG Tol-Nap	(6.71 to 11.36)	103441757	3819376	0.037
mod8015 nC6-nC12	(3.68 to 10.57)	111111111	4993407	0.045

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.769	1883931	d8-Toluene
8.719	1456423	4-Bromofluorobenzene
9.542	3515493	d4-Dichlorobenzene
7.847	3216695	d5-Chlorobenzene
9.861	1586855	d4-1,2-Dichlorobenzene

CHRL-M-53-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-03	File ID:	06301614G.D
Sampled:	06/29/16 11:00	Prepared:	06/29/16 17:30	Analyzed:	06/30/16 12:35
Solids:	89.88	Preparation:	No Prep - Volatiles	Initial/Final:	4.957 g / 5 g
Batch:	BEF0233	Sequence:	SEF0147	Calibration:	ZF00014
Instrument:	NT3	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	6170	U	3090	6170

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.58	91.6	80 - 120	
4-Bromofluorobenzene	5.0000	4.27	85.3	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt3.i\20160630.b\06301614.D

Date : 30-JUN-2016 12:35

Client ID:

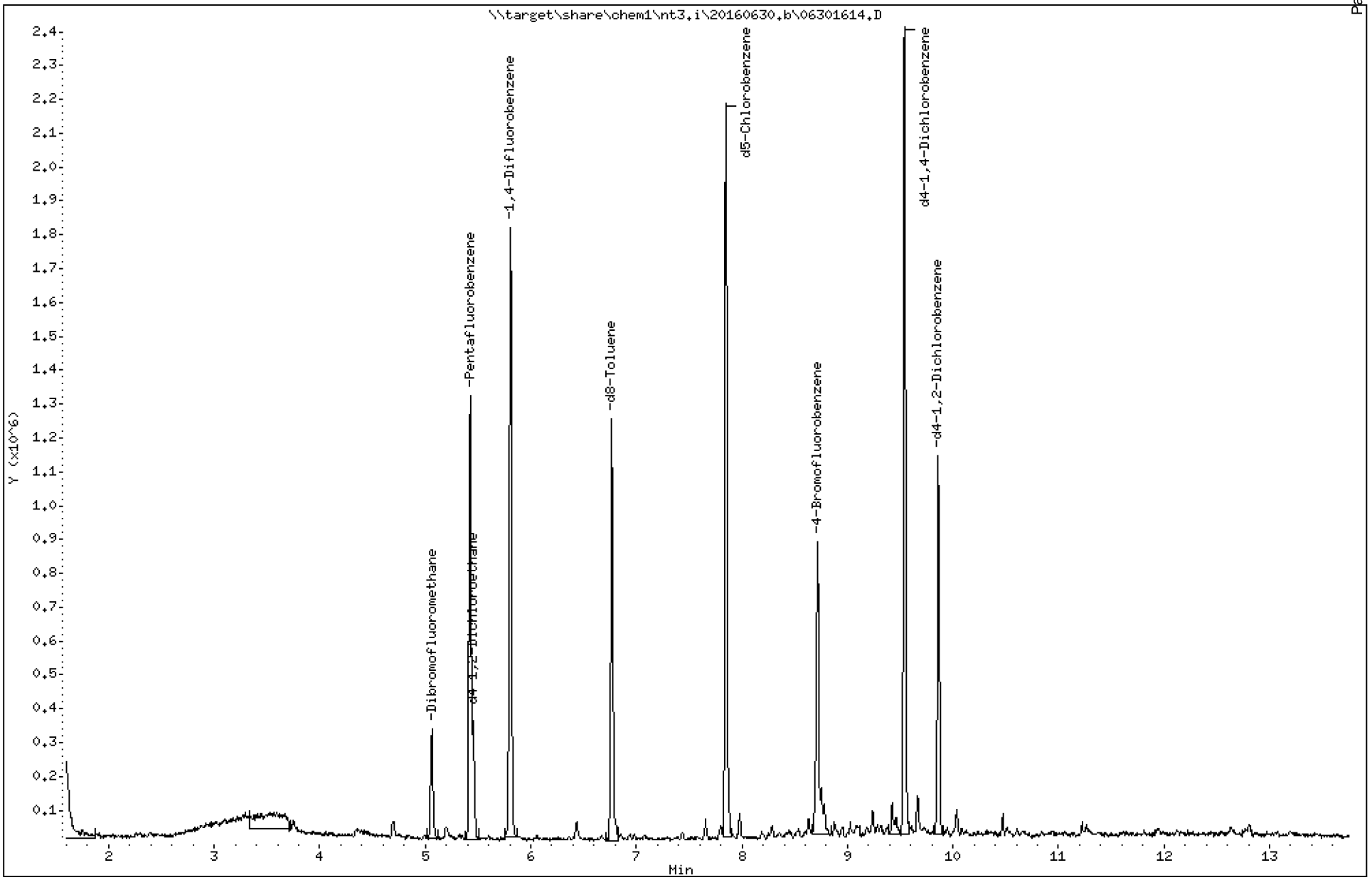
Instrument: nt3.i

Sample Info: 16F0096-03,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160630.b\06301614.D
Lab Smp Id: 16F0096-03
Inj Date : 30-JUN-2016 12:35
Operator : LH Inst ID: nt3.i
Smp Info : 16F0096-03,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Meth Date : 01-Jul-2016 13:57 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 10:35 Cal File: 06151609.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.063	5.067	(0.933)	160293	4.79807	4.798
	31 Benzene	78	5.339	5.354	(0.919)	3866	0.02609	0.02609
*	32 Pentafluorobenzene	168	5.424	5.428	(1.000)	696045	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.456	5.460	(1.006)	182024	4.72263	4.723
*	37 1,4-Difluorobenzene	114	5.806	5.811	(1.000)	1116675	10.0000	
$	43 d8-Toluene	98	6.768	6.767	(1.166)	644247	4.58219	4.582
	44 Toluene	92	6.805	6.804	(1.172)	14338	0.14631	0.1463
*	53 d5-Chlorobenzene	117	7.847	7.851	(1.000)	1019177	10.0000	
	55 Ethyl Benzene	106	7.879	7.878	(1.004)	6855	0.11074	0.1107
	57 m,p-xylene	106	7.985	7.979	(1.018)	18723	0.25779	0.2578
	58 o-Xylene	106	8.277	8.287	(1.055)	2917	0.03997	0.03997
$	62 4-Bromofluorobenzene	174	8.718	8.717	(1.111)	201982	4.26687	4.267
*	76 d4-1,4-Dichlorobenzene	152	9.542	9.541	(1.000)	562739	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.861	9.860	(1.033)	252984	4.69653	4.697

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 06301614.D
Lab Smp Id: 16F0096-03
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

Calibration Date: 30-JUN-2016
Calibration Time: 08:15
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	584309	292155	1168618	696045	19.12
37 1,4-Difluorobenze	921067	460534	1842134	1116675	21.24
53 d5-Chlorobenzene	840715	420358	1681430	1019177	21.23
76 d4-1,4-Dichlorobe	460394	230197	920788	562739	22.23

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.42	-0.08
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	-0.07
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	-0.06
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 13:59

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20150930a
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-03
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.798	95.96	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.723	94.45	80-128
$ 43 d8-Toluene	5.000	4.582	91.64	80-120
$ 62 4-Bromofluorobenze	5.000	4.267	85.34	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.697	93.93	80-120

REVIEW SUMMARY FOR FILE - 06301614.D

Lab ID: 16F0096-03
nt3.i, 20160630.b\AK8260061516.m,   30-JUN-2016 12:35

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,AK8260061516.m,Sublist: betx.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt3.i\20160630gELM.b\06301614G.D

Date : 30-JUN-2016 12:35

Client ID:

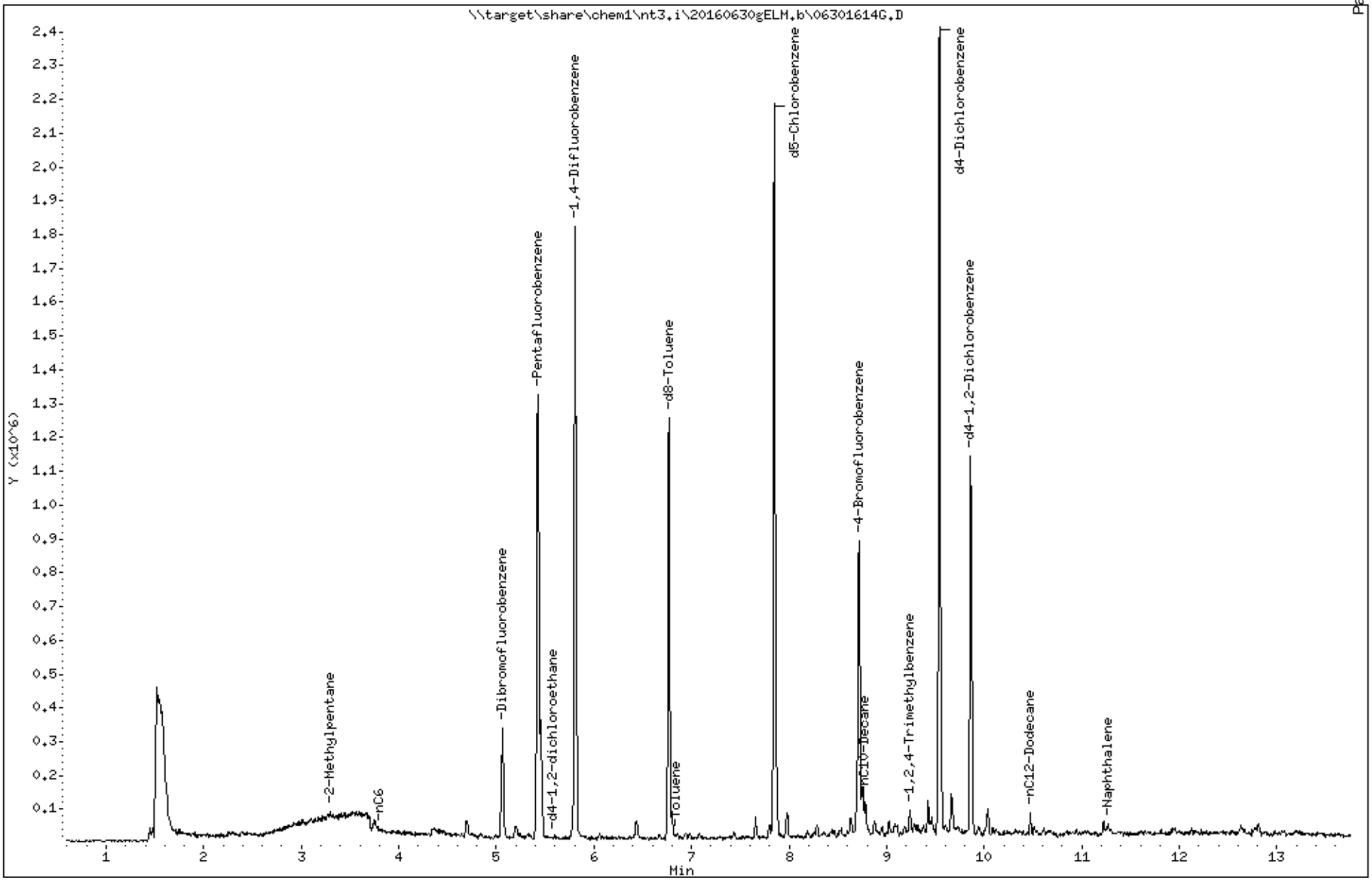
Sample Info: 16F0096-03,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630gELM.b/06301614G.D
Method: \20160630gELM.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 30-JUN-2016 12:35

ARI ID: 16F0096-03
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	3245851	0.032
8015C 2MP-TMB	(3.21 to 9.34)	176207359	5785038	0.033
AK101 nC6-nC10	(3.68 to 8.68)	125823356	2867681	0.023
NWTPHG Tol-Nap	(6.71 to 11.36)	103441757	3659097	0.035
mod8015 nC6-nC12	(3.68 to 10.57)	111111111	5191145	0.047

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.769	1877622	d8-Toluene
8.719	1392745	4-Bromofluorobenzene
9.542	3548374	d4-Dichlorobenzene
7.847	3219135	d5-Chlorobenzene
9.861	1609292	d4-1,2-Dichlorobenzene

CHRL-M-04-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-04	File ID:	06301615G.D
Sampled:	06/29/16 11:15	Prepared:	06/29/16 17:30	Analyzed:	06/30/16 13:01
Solids:	91.22	Preparation:	No Prep - Volatiles	Initial/Final:	4.738 g / 5 g
Batch:	BEF0233	Sequence:	SEF0147	Calibration:	ZF00014
Instrument:	NT3	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	6270	U	3130	6270

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.54	90.8	80 - 120	
4-Bromofluorobenzene	5.0000	4.29	85.8	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt3.i\20160630.b\06301615.D

Date : 30-JUN-2016 13:01

Client ID:

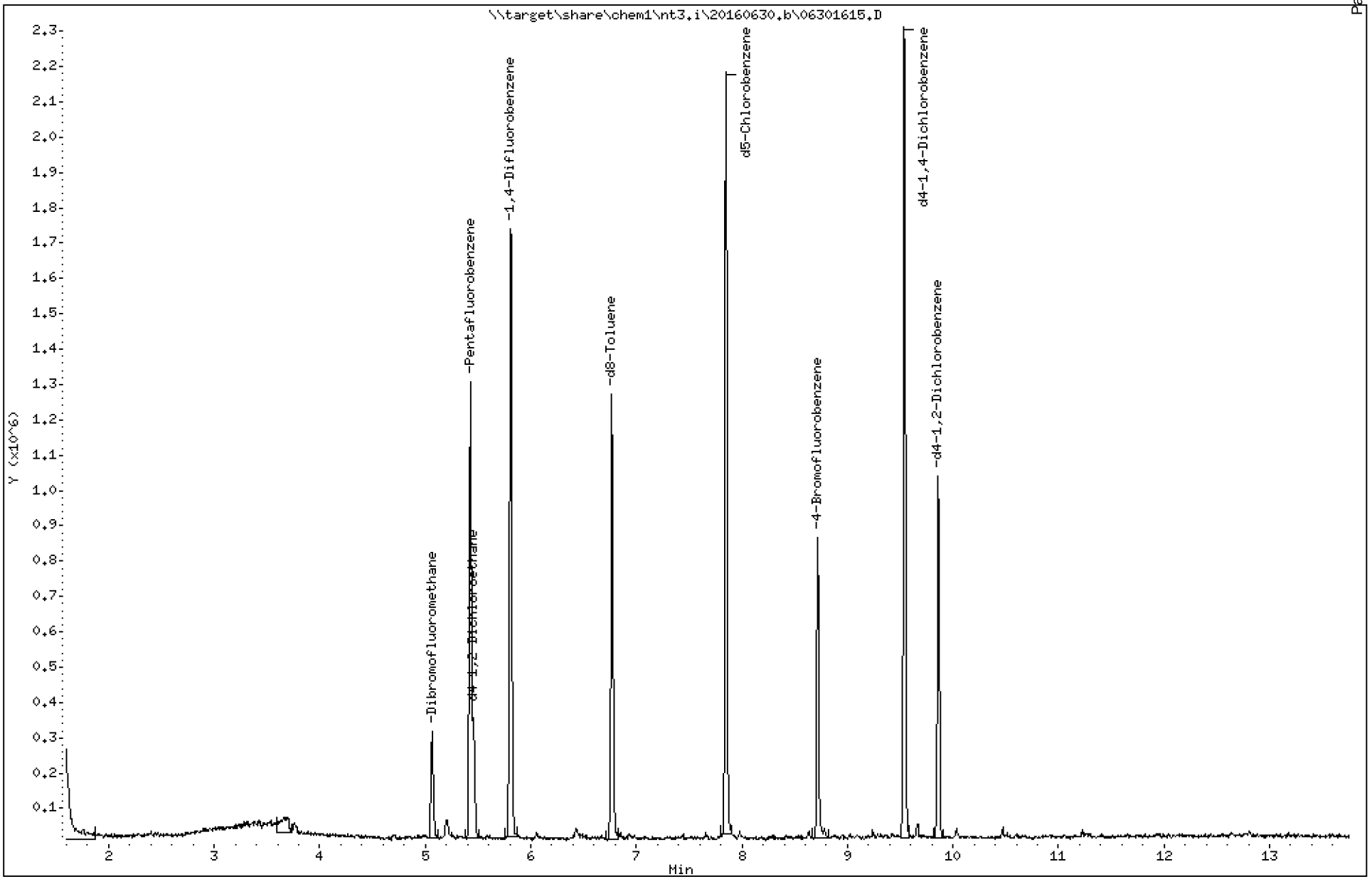
Sample Info: 16F0096-04,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160630.b\06301615.D
Lab Smp Id: 16F0096-04
Inj Date : 30-JUN-2016 13:01
Operator : LH Inst ID: nt3.i
Smp Info : 16F0096-04,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Meth Date : 01-Jul-2016 13:57 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 10:35 Cal File: 06151609.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.063	5.067	(0.932)	154238	4.64708	4.647
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.429	5.428	(1.000)	691513	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.456	5.460	(1.005)	176532	4.61016	4.610
*	37 1,4-Difluorobenzene	114	5.812	5.811	(1.000)	1097301	10.0000	
$	43 d8-Toluene	98	6.768	6.767	(1.165)	627307	4.54048	4.540
	44 Toluene	92	6.800	6.804	(1.170)	4401	0.04570	0.04570
*	53 d5-Chlorobenzene	117	7.847	7.851	(1.000)	1000301	10.0000	
	55 Ethyl Benzene	106	7.874	7.878	(1.003)	1105	0.01819	0.01819
	57 m,p-xylene	106	7.980	7.979	(1.017)	4611	0.06469	0.06469
	58 o-Xylene	106	8.283	8.287	(1.056)	1604	0.02239	0.02239
$	62 4-Bromofluorobenzene	174	8.718	8.717	(1.111)	199209	4.28770	4.288
*	76 d4-1,4-Dichlorobenzene	152	9.537	9.541	(1.000)	521637	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.861	9.860	(1.034)	240586	4.81829	4.818

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 06301615.D
Lab Smp Id: 16F0096-04
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

Calibration Date: 30-JUN-2016
Calibration Time: 08:15
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	584309	292155	1168618	691513	18.35
37 1,4-Difluorobenze	921067	460534	1842134	1097301	19.13
53 d5-Chlorobenzene	840715	420358	1681430	1000301	18.98
76 d4-1,4-Dichlorobe	460394	230197	920788	521637	13.30

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.02
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.02
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	-0.05
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	-0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 13:59

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20150930a
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-04
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.647	92.94	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.610	92.20	80-128
$ 43 d8-Toluene	5.000	4.540	90.81	80-120
$ 62 4-Bromofluorobenze	5.000	4.288	85.75	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.818	96.37	80-120

REVIEW SUMMARY FOR FILE - 06301615.D

Lab ID: 16F0096-04
nt3.i, 20160630.b\AK8260061516.m,   30-JUN-2016 13:01

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,AK8260061516.m,Sublist: betx.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt3.i\20160630gELM.b\06301615G.D

Date : 30-JUN-2016 13:01

Client ID:

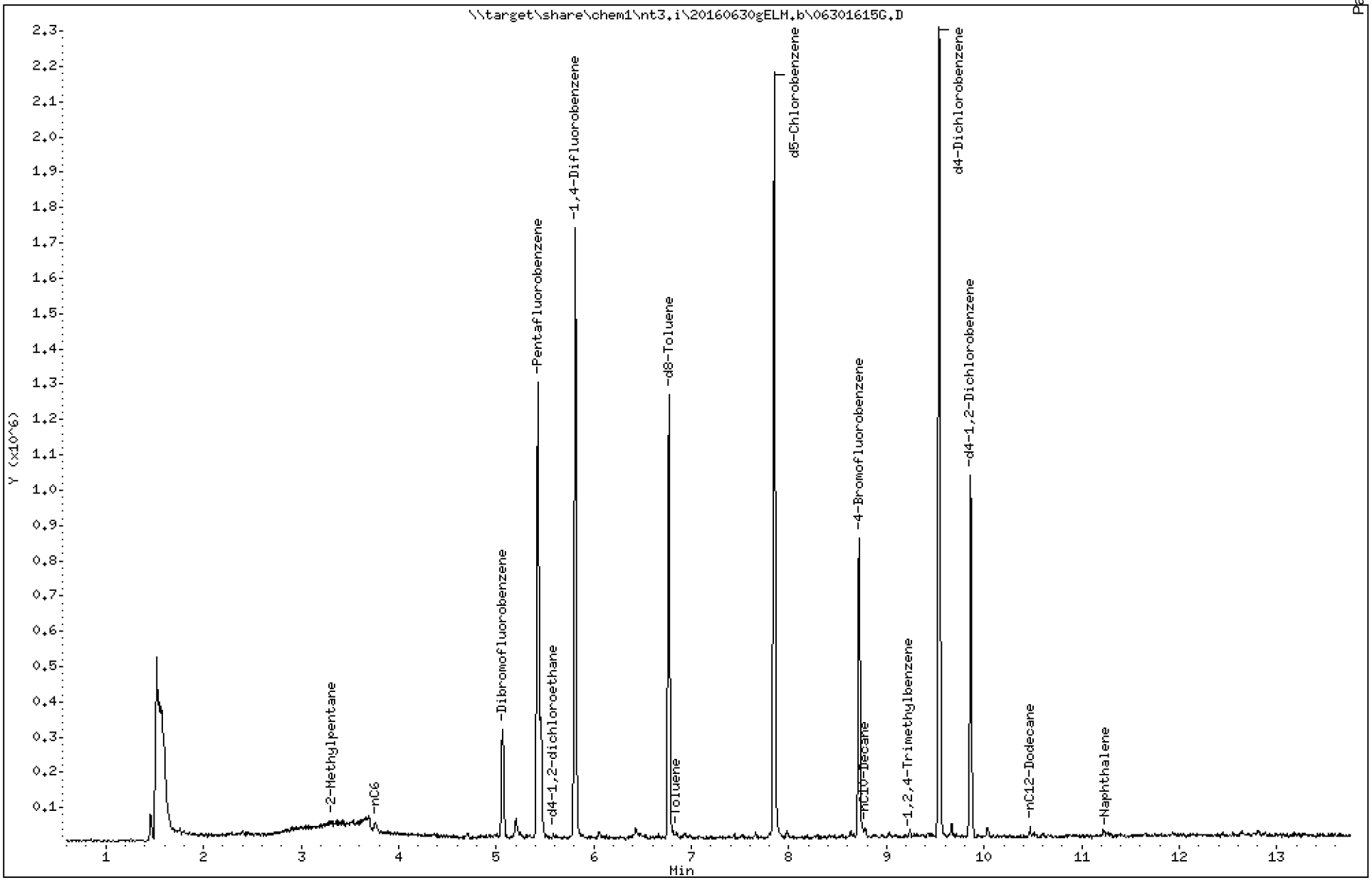
Instrument: nt3.i

Sample Info: 16F0096-04,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630gELM.b/06301615G.D
Method: \20160630gELM.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 30-JUN-2016 13:01

ARI ID: 16F0096-04
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	878239	0.009
8015C 2MP-TMB	(3.21 to 9.34)	176207359	2932762	0.017
AK101 nC6-nC10	(3.68 to 8.68)	125823356	1607421	0.013
NWTPHG Tol-Nap	(6.71 to 11.36)	103441757	1150916	0.011
mod8015 nC6-nC12	(3.68 to 10.57)	111111111	2129787	0.019

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.769	1797162	d8-Toluene
8.719	1199607	4-Bromofluorobenzene
9.537	3343441	d4-Dichlorobenzene
7.847	3130148	d5-Chlorobenzene
9.861	1464483	d4-1,2-Dichlorobenzene

CHRL-M-05-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-05	File ID:	06301616G.D
Sampled:	06/29/16 11:15	Prepared:	06/29/16 17:30	Analyzed:	06/30/16 13:27
Solids:	91.92	Preparation:	No Prep - Volatiles	Initial/Final:	4.316 g / 5 g
Batch:	BEF0233	Sequence:	SEF0147	Calibration:	ZF00014
Instrument:	NT3	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	6740	U	3370	6740

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.49	89.8	80 - 120	
4-Bromofluorobenzene	5.0000	4.21	84.2	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt3.i\20160630.b\06301616.D

Date : 30-JUN-2016 13:27

Client ID:

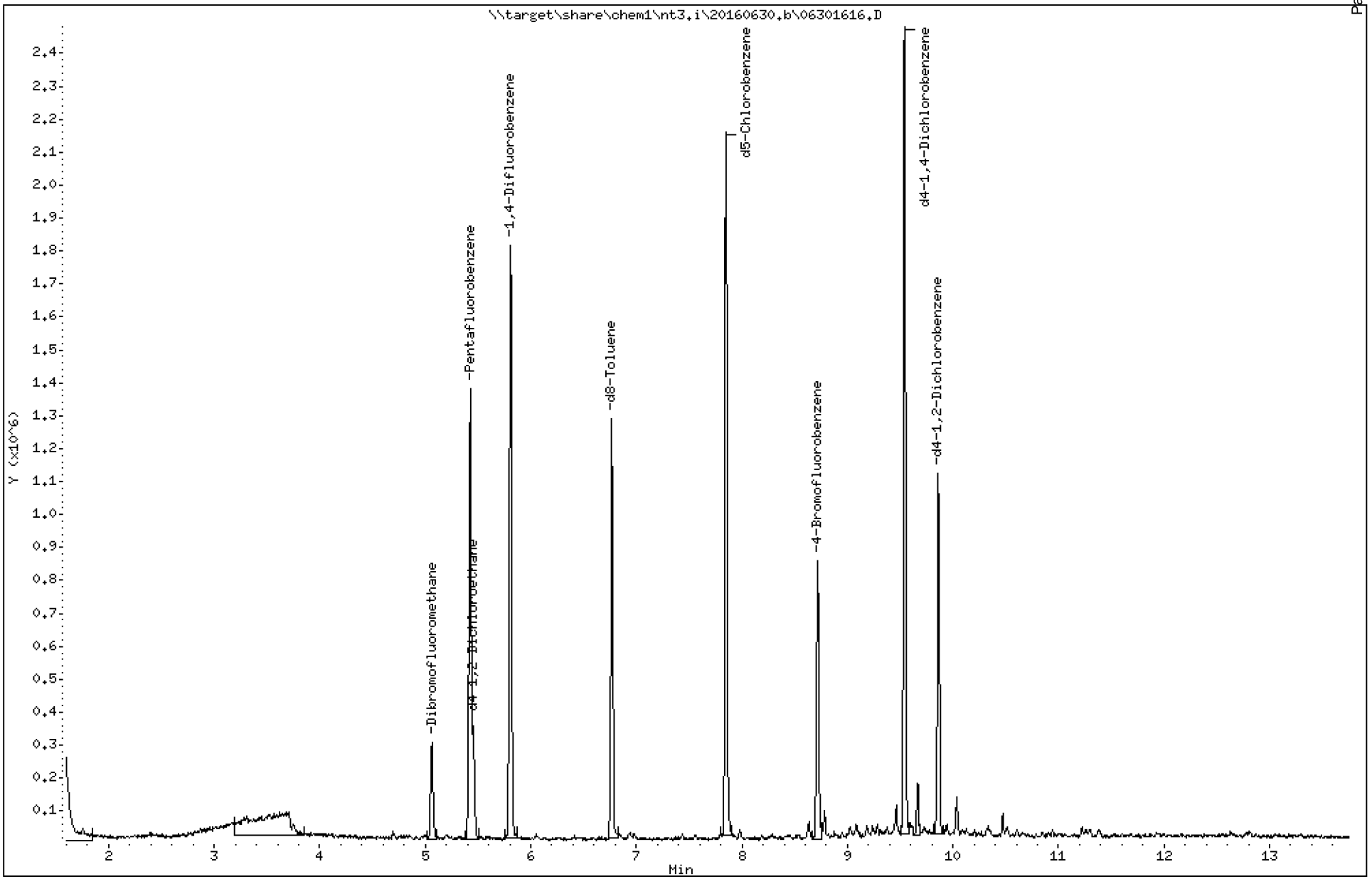
Sample Info: 16F0096-05,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160630.b\06301616.D
Lab Smp Id: 16F0096-05
Inj Date : 30-JUN-2016 13:27
Operator : LH Inst ID: nt3.i
Smp Info : 16F0096-05,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Meth Date : 01-Jul-2016 13:57 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 10:35 Cal File: 06151609.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.063	5.067	(0.933)	153014	4.60801	4.608
	31 Benzene	78	5.344	5.354	(0.920)	1548	0.01044	0.01044
*	32 Pentafluorobenzene	168	5.424	5.428	(1.000)	691842	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.456	5.460	(1.006)	174307	4.54989	4.550
*	37 1,4-Difluorobenzene	114	5.806	5.811	(1.000)	1117177	10.0000	
$	43 d8-Toluene	98	6.768	6.767	(1.166)	631314	4.48819	4.488
	44 Toluene	92	6.805	6.804	(1.172)	2834	0.02891	0.02891
*	53 d5-Chlorobenzene	117	7.847	7.851	(1.000)	1015417	10.0000	
	55 Ethyl Benzene	106	7.879	7.878	(1.004)	2118	0.03434	0.03434
	57 m,p-xylene	106	7.980	7.979	(1.017)	5932	0.08198	0.08198
	58 o-Xylene	106	8.282	8.287	(1.056)	2368	0.03257	0.03257
$	62 4-Bromofluorobenzene	174	8.718	8.717	(1.111)	198600	4.21096	4.211
*	76 d4-1,4-Dichlorobenzene	152	9.542	9.541	(1.000)	554433	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.860	9.860	(1.033)	258002	4.86144	4.861

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 06301616.D
Lab Smp Id: 16F0096-05
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

Calibration Date: 30-JUN-2016
Calibration Time: 08:15
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	584309	292155	1168618	691842	18.40
37 1,4-Difluorobenze	921067	460534	1842134	1117177	21.29
53 d5-Chlorobenzene	840715	420358	1681430	1015417	20.78
76 d4-1,4-Dichlorobe	460394	230197	920788	554433	20.43

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.42	-0.08
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	-0.08
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	-0.06
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 13:59

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20150930a
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-05
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.608	92.16	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.550	91.00	80-128
$ 43 d8-Toluene	5.000	4.488	89.76	80-120
$ 62 4-Bromofluorobenze	5.000	4.211	84.22	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.861	97.23	80-120

REVIEW SUMMARY FOR FILE - 06301616.D

Lab ID: 16F0096-05
nt3.i, 20160630.b\AK8260061516.m,   30-JUN-2016 13:27

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,AK8260061516.m,Sublist: betx.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt3.i\20160630gELM.b\06301616G.D

Date : 30-JUN-2016 13:27

Client ID:

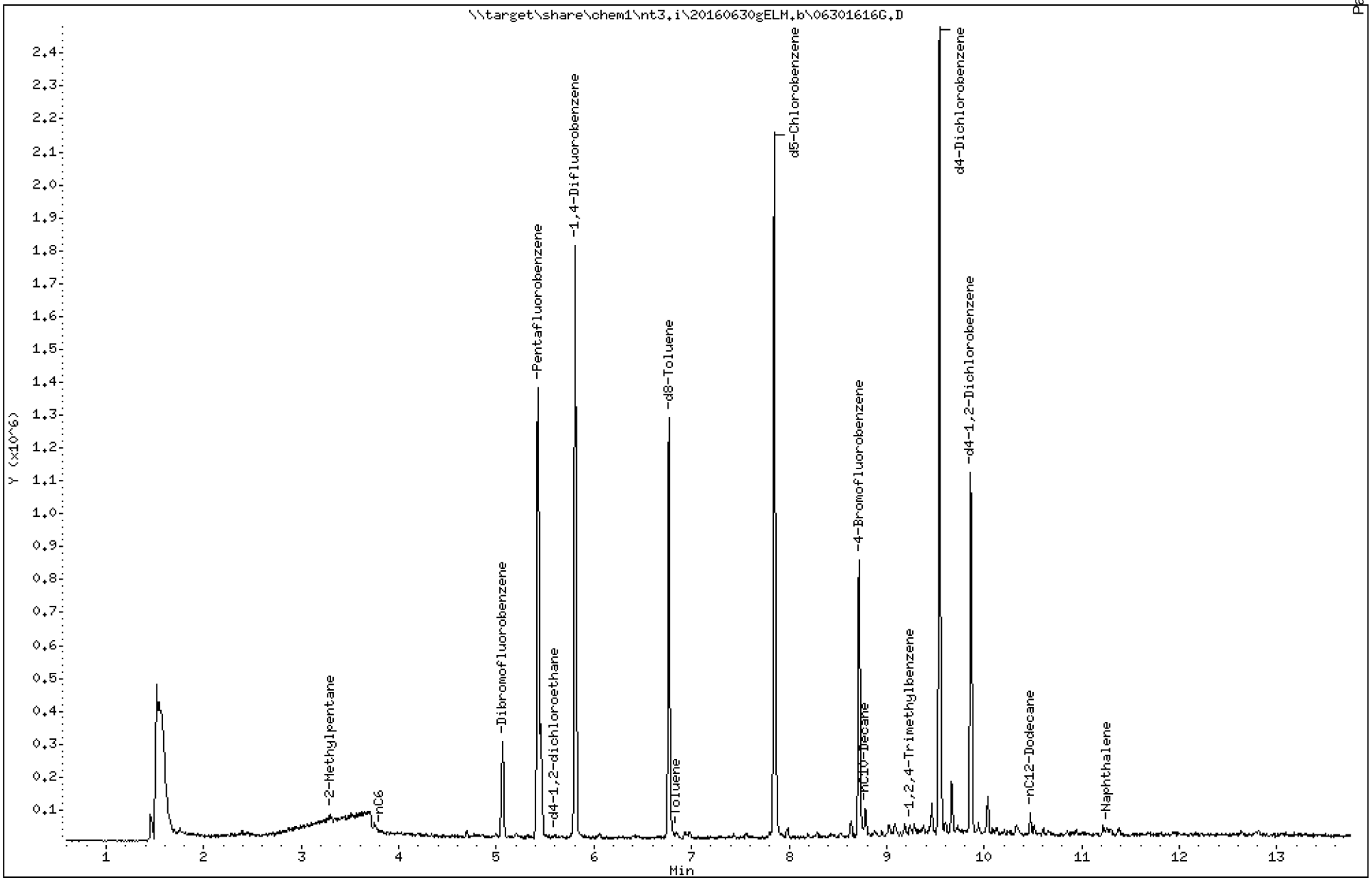
Sample Info: 16F0096-05,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630gELM.b/06301616G.D
Method: \20160630gELM.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 30-JUN-2016 13:27

ARI ID: 16F0096-05
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	2656870	0.027
8015C 2MP-TMB	(3.21 to 9.34)	176207359	3627527	0.021
AK101 nC6-nC10	(3.68 to 8.68)	125823356	1282789	0.010
NWTPHG Tol-Nap	(6.71 to 11.36)	103441757	3117352	0.030
mod8015 nC6-nC12	(3.68 to 10.57)	111111111	3423900	0.031

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.769	1819700	d8-Toluene
8.719	1213091	4-Bromofluorobenzene
9.542	3532775	d4-Dichlorobenzene
7.847	3189508	d5-Chlorobenzene
9.861	1639511	d4-1,2-Dichlorobenzene

CHRL-O-01-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-06	File ID:	06301617G.D
Sampled:	06/29/16 12:15	Prepared:	06/29/16 17:30	Analyzed:	06/30/16 13:53
Solids:	90.55	Preparation:	No Prep - Volatiles	Initial/Final:	5.441 g / 5 g
Batch:	BEF0233	Sequence:	SEF0147	Calibration:	ZF00014
Instrument:	NT3	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5600	U	2800	5600

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.39	87.7	80 - 120	
4-Bromofluorobenzene	5.0000	4.23	84.6	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt3.i\20160630.b\06301617.D

Date : 30-JUN-2016 13:53

Client ID:

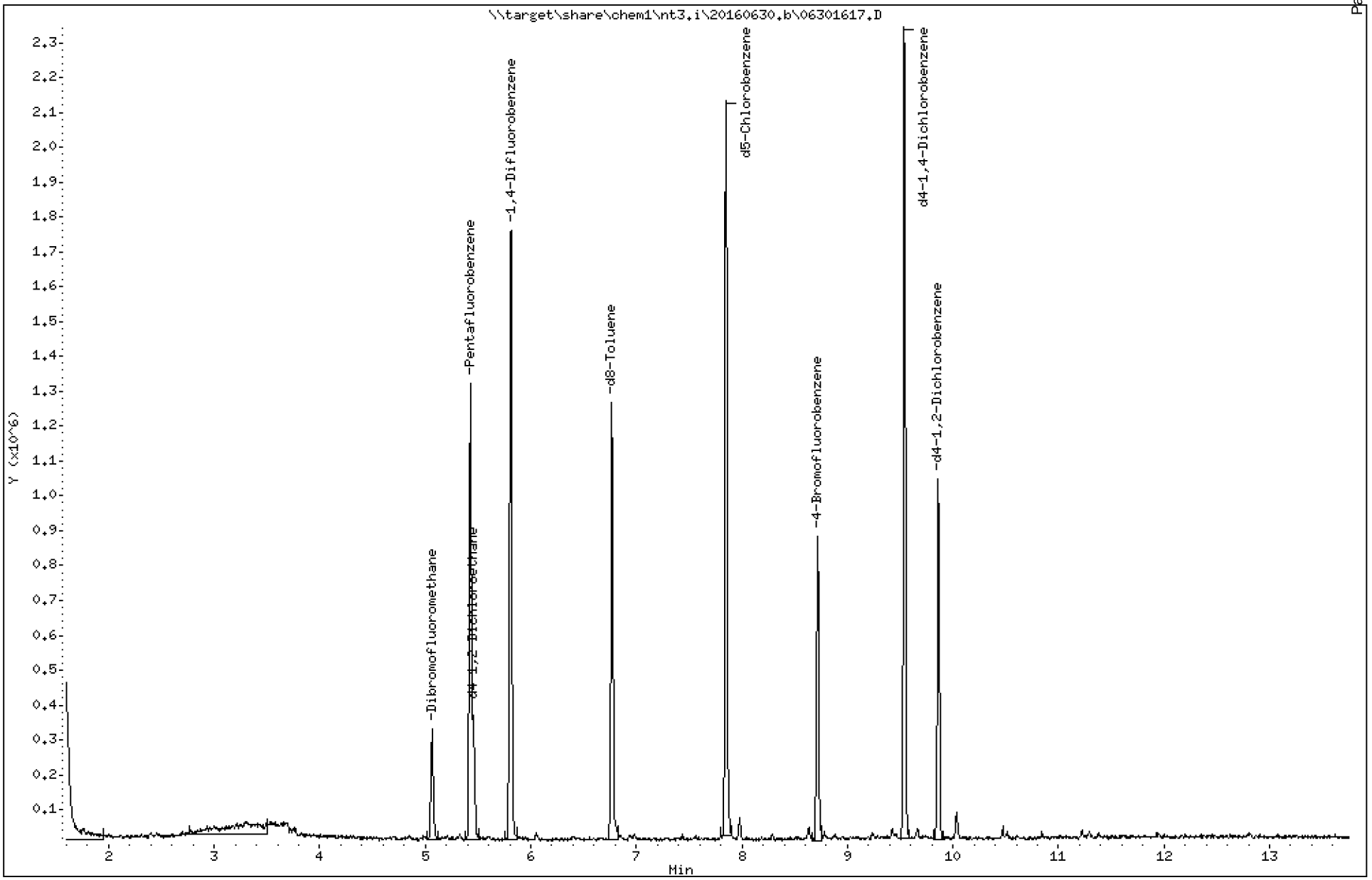
Sample Info: 16F0096-06,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160630.b\06301617.D
Lab Smp Id: 16F0096-06
Inj Date : 30-JUN-2016 13:53
Operator : LH Inst ID: nt3.i
Smp Info : 16F0096-06,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Meth Date : 01-Jul-2016 13:57 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 10:35 Cal File: 06151609.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.068	5.067	(0.933)	156869	4.68132	4.681
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.429	5.428	(1.000)	698166	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.456	5.460	(1.005)	181284	4.68914	4.689
*	37 1,4-Difluorobenzene	114	5.812	5.811	(1.000)	1127647	10.0000	
$	43 d8-Toluene	98	6.768	6.767	(1.165)	622727	4.38603	4.386
	44 Toluene	92	6.805	6.804	(1.171)	9534	0.09634	0.09634
*	53 d5-Chlorobenzene	117	7.847	7.851	(1.000)	1013684	10.0000	
	55 Ethyl Benzene	106	7.879	7.878	(1.004)	4881	0.07928	0.07928
	57 m,p-xylene	106	7.980	7.979	(1.017)	14342	0.19854	0.1985
	58 o-Xylene	106	8.288	8.287	(1.056)	1529	0.02106	0.02106
$	62 4-Bromofluorobenzene	174	8.718	8.717	(1.111)	199194	4.23078	4.231
*	76 d4-1,4-Dichlorobenzene	152	9.536	9.541	(1.000)	525265	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.861	9.860	(1.034)	232973	4.63360	4.634

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 06301617.D
Lab Smp Id: 16F0096-06
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

Calibration Date: 30-JUN-2016
Calibration Time: 08:15
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	584309	292155	1168618	698166	19.49
37 1,4-Difluorobenze	921067	460534	1842134	1127647	22.43
53 d5-Chlorobenzene	840715	420358	1681430	1013684	20.57
76 d4-1,4-Dichlorobe	460394	230197	920788	525265	14.09

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.02
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.02
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	-0.06
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20150930a
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-06
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.681	93.63	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.689	93.78	80-128
$ 43 d8-Toluene	5.000	4.386	87.72	80-120
$ 62 4-Bromofluorobenze	5.000	4.231	84.62	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.634	92.67	80-120

REVIEW SUMMARY FOR FILE - 06301617.D

Lab ID: 16F0096-06
nt3.i, 20160630.b\AK8260061516.m,   30-JUN-2016 13:53

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,AK8260061516.m,Sublist: betx.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt3.i\20160630gELM.b\06301617G.D

Date : 30-JUN-2016 13:53

Client ID:

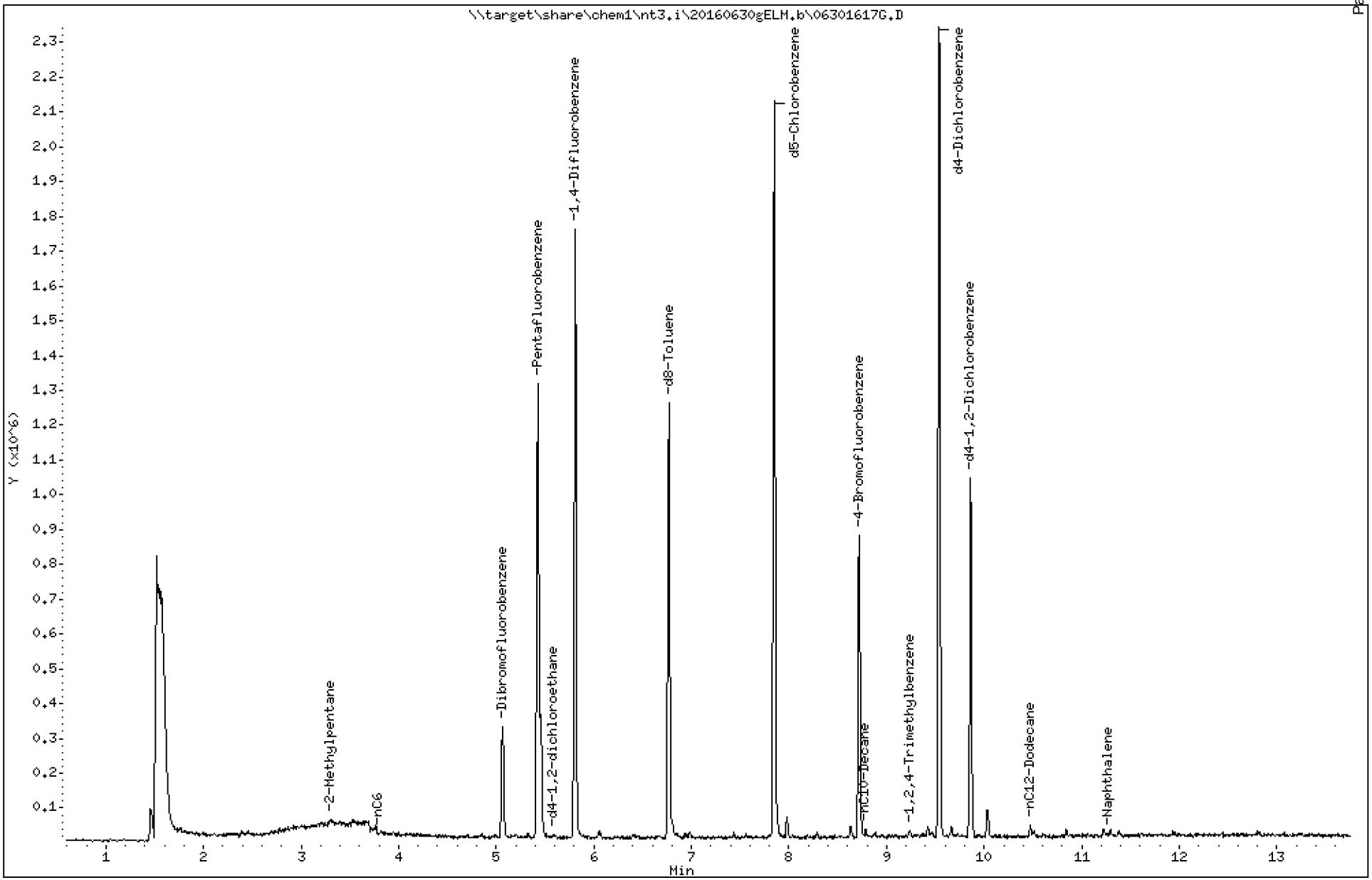
Sample Info: 16F0096-06,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630gELM.b/06301617G.D
Method: \20160630gELM.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 30-JUN-2016 13:53

ARI ID: 16F0096-06
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	1113157	0.011
8015C 2MP-TMB	(3.21 to 9.34)	176207359	2558508	0.015
AK101 nC6-nC10	(3.68 to 8.68)	125823356	1320113	0.010
NWTPHG Tol-Nap	(6.71 to 11.36)	103441757	1331943	0.013
mod8015 nC6-nC12	(3.68 to 10.57)	111111111	1939138	0.017

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.769	1873456	d8-Toluene
8.719	1220007	4-Bromofluorobenzene
9.537	3323566	d4-Dichlorobenzene
7.847	3195185	d5-Chlorobenzene
9.861	1476018	d4-1,2-Dichlorobenzene

CHRL-O-02-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-07	File ID:	06301618G.D
Sampled:	06/29/16 12:05	Prepared:	06/29/16 17:30	Analyzed:	06/30/16 14:19
Solids:	92.71	Preparation:	No Prep - Volatiles	Initial/Final:	5.013 g / 5 g
Batch:	BEF0233	Sequence:	SEF0147	Calibration:	ZF00014
Instrument:	NT3	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5770	U	2890	5770

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.63	92.6	80 - 120	
4-Bromofluorobenzene	5.0000	4.37	87.3	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt3.i\20160630.b\06301618.D

Date : 30-JUN-2016 14:19

Client ID:

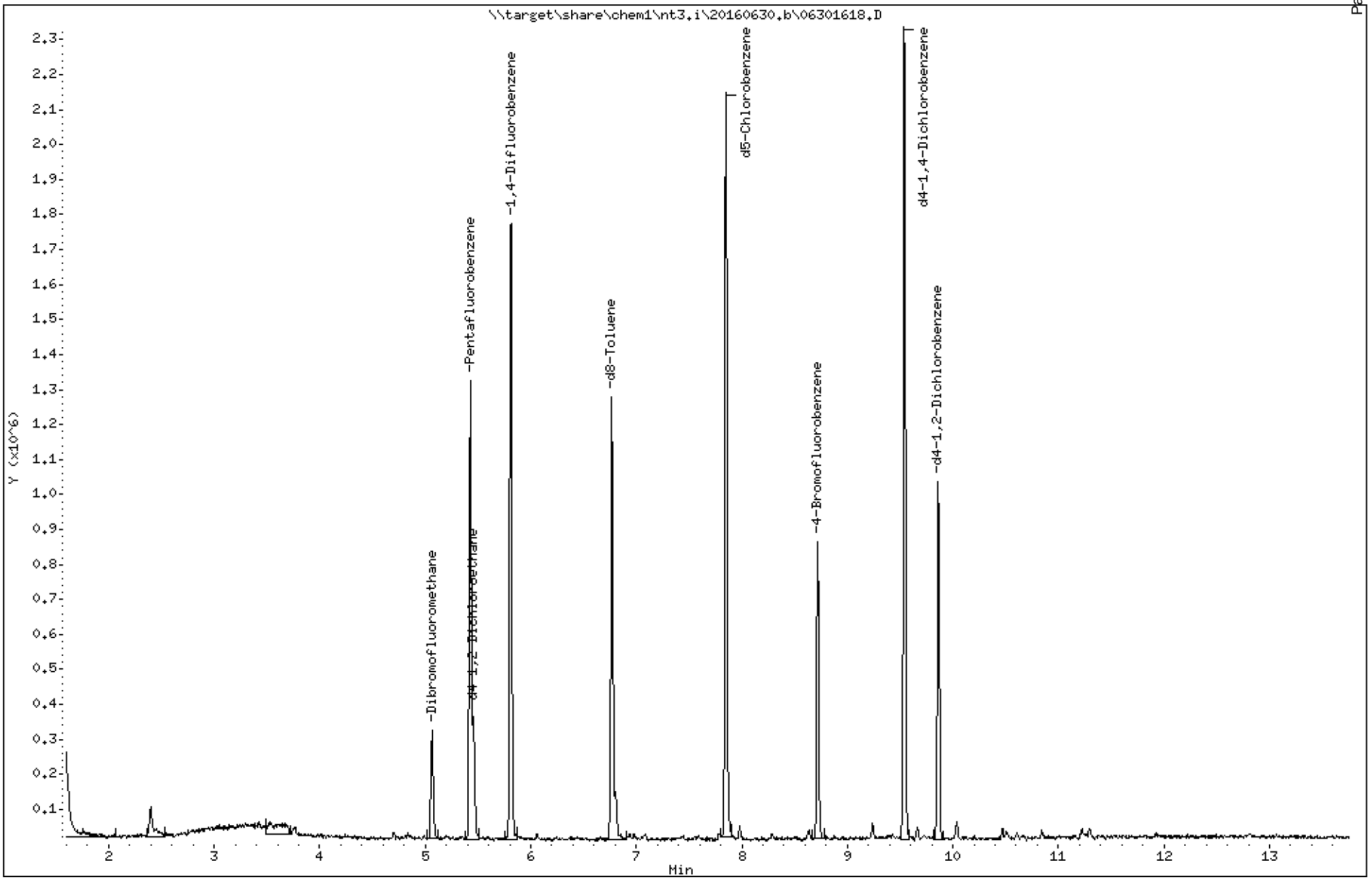
Sample Info: 16F0096-07,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160630.b\06301618.D
Lab Smp Id: 16F0096-07
Inj Date : 30-JUN-2016 14:19
Operator : LH Inst ID: nt3.i
Smp Info : 16F0096-07,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Meth Date : 01-Jul-2016 13:57 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 10:35 Cal File: 06151609.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 27 Dibromofluoromethane	111	5.063	5.067	(0.932)	162429	4.89698	4.897
31 Benzene	78	5.355	5.354	(0.921)	3661	0.02491	0.02491
* 32 Pentafluorobenzene	168	5.430	5.428	(1.000)	691075	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.456	5.460	(1.005)	177819	4.64671	4.647
* 37 1,4-Difluorobenzene	114	5.812	5.811	(1.000)	1107473	10.0000	
$ 43 d8-Toluene	98	6.769	6.767	(1.165)	645478	4.62909	4.629
44 Toluene	92	6.801	6.804	(1.170)	44425	0.45709	0.4571
* 53 d5-Chlorobenzene	117	7.847	7.851	(1.000)	1016996	10.0000	
55 Ethyl Benzene	106	7.885	7.878	(1.005)	4176	0.06761	0.06761
57 m,p-xylene	106	7.980	7.979	(1.017)	7752	0.10696	0.1070
58 o-Xylene	106	8.278	8.287	(1.055)	1849	0.02539	0.02539
$ 62 4-Bromofluorobenzene	174	8.719	8.717	(1.111)	206214	4.36562	4.366
* 76 d4-1,4-Dichlorobenzene	152	9.542	9.541	(1.000)	528296	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.861	9.860	(1.033)	243153	4.80832	4.808

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 06301618.D
Lab Smp Id: 16F0096-07
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

Calibration Date: 30-JUN-2016
Calibration Time: 08:15
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	584309	292155	1168618	691075	18.27
37 1,4-Difluorobenze	921067	460534	1842134	1107473	20.24
53 d5-Chlorobenzene	840715	420358	1681430	1016996	20.97
76 d4-1,4-Dichlorobe	460394	230197	920788	528296	14.75

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.03
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.03
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	-0.05
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20150930a
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-07
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.897	97.94	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.647	92.93	80-128
$ 43 d8-Toluene	5.000	4.629	92.58	80-120
$ 62 4-Bromofluorobenze	5.000	4.366	87.31	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.808	96.17	80-120

REVIEW SUMMARY FOR FILE - 06301618.D

Lab ID: 16F0096-07
nt3.i, 20160630.b\AK8260061516.m,   30-JUN-2016 14:19

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,AK8260061516.m,Sublist: betx.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt3.i\20160630gELM.b\06301618G.D

Date : 30-JUN-2016 14:19

Client ID:

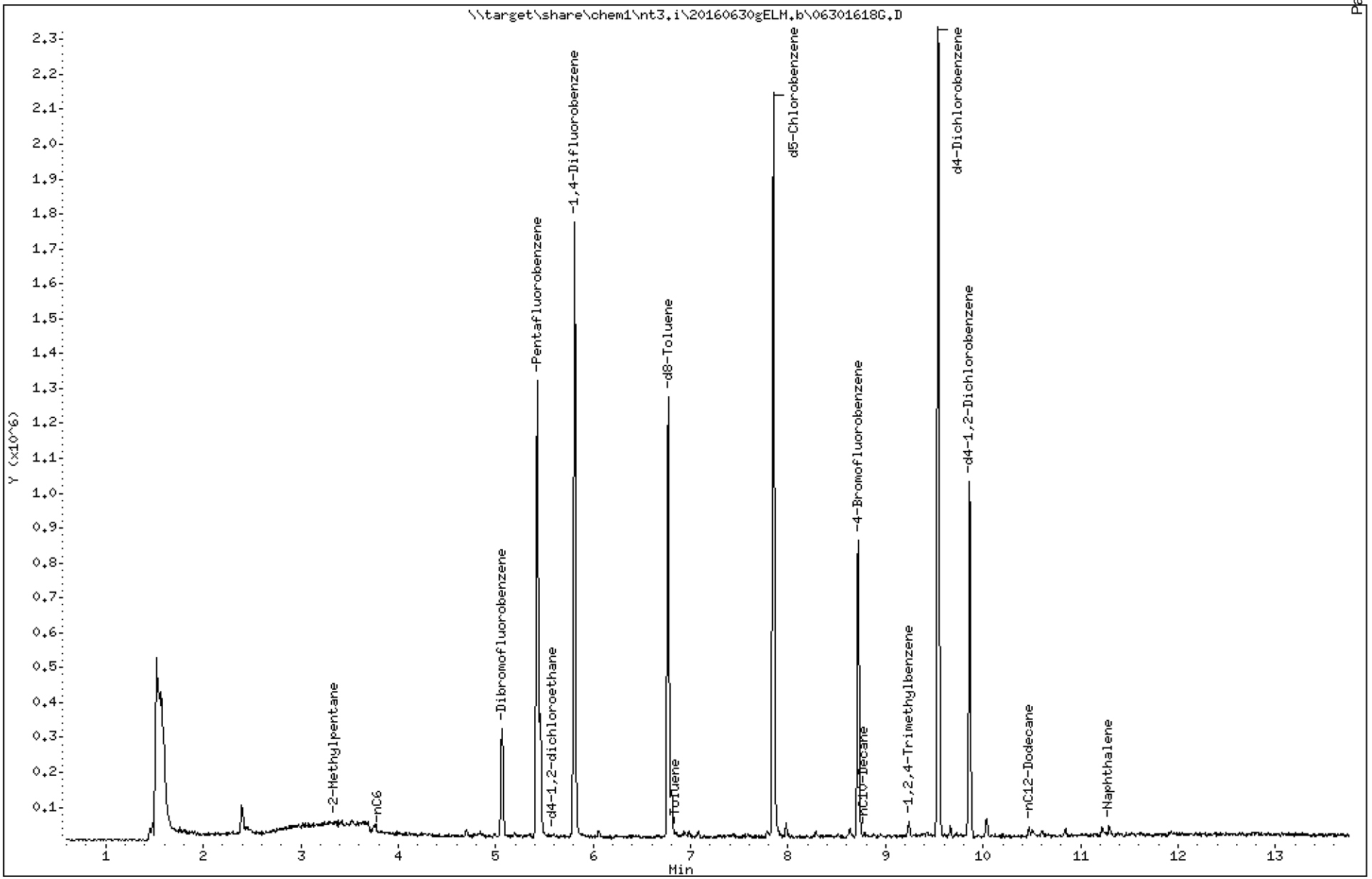
Sample Info: 16F0096-07,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630gELM.b/06301618G.D
Method: \20160630gELM.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 30-JUN-2016 14:19

ARI ID: 16F0096-07
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	1177909	0.012
8015C 2MP-TMB	(3.21 to 9.34)	176207359	2431831	0.014
AK101 nC6-nC10	(3.68 to 8.68)	125823356	1322210	0.011
NWTPHG Tol-Nap	(6.71 to 11.36)	103441757	1490764	0.014
mod8015 nC6-nC12	(3.68 to 10.57)	111111111	1919215	0.017

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.769	1993675	d8-Toluene
8.719	1221058	4-Bromofluorobenzene
9.538	3366379	d4-Dichlorobenzene
7.848	3211593	d5-Chlorobenzene
9.862	1509963	d4-1,2-Dichlorobenzene

CHRL-O-03-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-08	File ID:	06301619G.D
Sampled:	06/29/16 11:55	Prepared:	06/29/16 17:30	Analyzed:	06/30/16 14:45
Solids:	94.01	Preparation:	No Prep - Volatiles	Initial/Final:	5.304 g / 5 g
Batch:	BEF0233	Sequence:	SEF0147	Calibration:	ZF00014
Instrument:	NT3	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5330	U	2670	5330

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.65	93.0	80 - 120	
4-Bromofluorobenzene	5.0000	4.27	85.4	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt3.i\20160630.b\06301619.D

Date : 30-JUN-2016 14:45

Client ID:

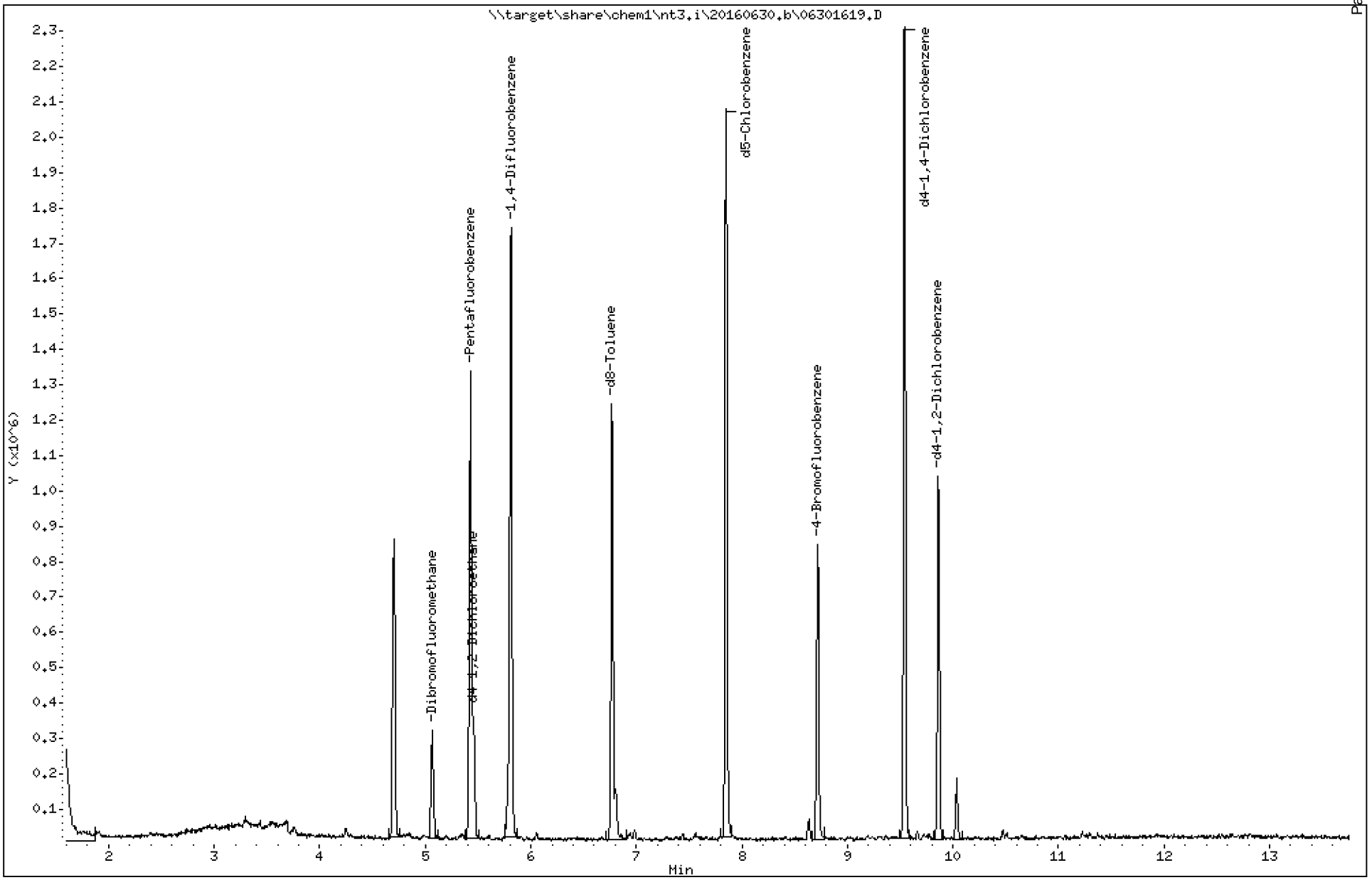
Sample Info: 16F0096-08,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160630.b\06301619.D
Lab Smp Id: 16F0096-08
Inj Date : 30-JUN-2016 14:45
Operator : LH Inst ID: nt3.i
Smp Info : 16F0096-08,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Meth Date : 01-Jul-2016 13:57 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 10:35 Cal File: 06151609.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.062	5.067	(0.932)	156361	4.61666	4.617
	31 Benzene	78	5.349	5.354	(0.920)	9402	0.06450	0.06450
*	32 Pentafluorobenzene	168	5.429	5.428	(1.000)	705651	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.461	5.460	(1.006)	171087	4.37844	4.378
*	37 1,4-Difluorobenzene	114	5.812	5.811	(1.000)	1098279	10.0000	
$	43 d8-Toluene	98	6.768	6.767	(1.165)	642695	4.64772	4.648
	44 Toluene	92	6.800	6.804	(1.170)	44806	0.46487	0.4649
*	53 d5-Chlorobenzene	117	7.847	7.851	(1.000)	1001861	10.0000	
	55 Ethyl Benzene	106	7.873	7.878	(1.003)	769	0.01264	0.01264
	57 m,p-xylene	106	7.985	7.979	(1.018)	1460	0.02045	0.02045
	58 o-Xylene	106	7.985	8.287	(1.018)	1460	0.02035	0.02035
$	62 4-Bromofluorobenzene	174	8.718	8.717	(1.111)	198591	4.26775	4.268
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	522108	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.866	9.860	(1.034)	242661	4.85547	4.855

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 06301619.D
Lab Smp Id: 16F0096-08
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

Calibration Date: 30-JUN-2016
Calibration Time: 08:15
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	584309	292155	1168618	705651	20.77
37 1,4-Difluorobenze	921067	460534	1842134	1098279	19.24
53 d5-Chlorobenzene	840715	420358	1681430	1001861	19.17
76 d4-1,4-Dichlorobe	460394	230197	920788	522108	13.40

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.01
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.01
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	-0.06
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20150930a
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-08
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.617	92.33	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.378	87.57	80-128
$ 43 d8-Toluene	5.000	4.648	92.95	80-120
$ 62 4-Bromofluorobenze	5.000	4.268	85.35	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.855	97.11	80-120

REVIEW SUMMARY FOR FILE - 06301619.D

Lab ID: 16F0096-08
nt3.i, 20160630.b\AK8260061516.m,   30-JUN-2016 14:45

RT	CO-ELUTION COMPOUNDS
7.985	o-Xylene and m,p-xylene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

On Column LOD for nt3.i,AK8260061516.m,Sublist: betx.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt3.i\20160630gELM.b\06301619G.D

Date : 30-JUN-2016 14:45

Client ID:

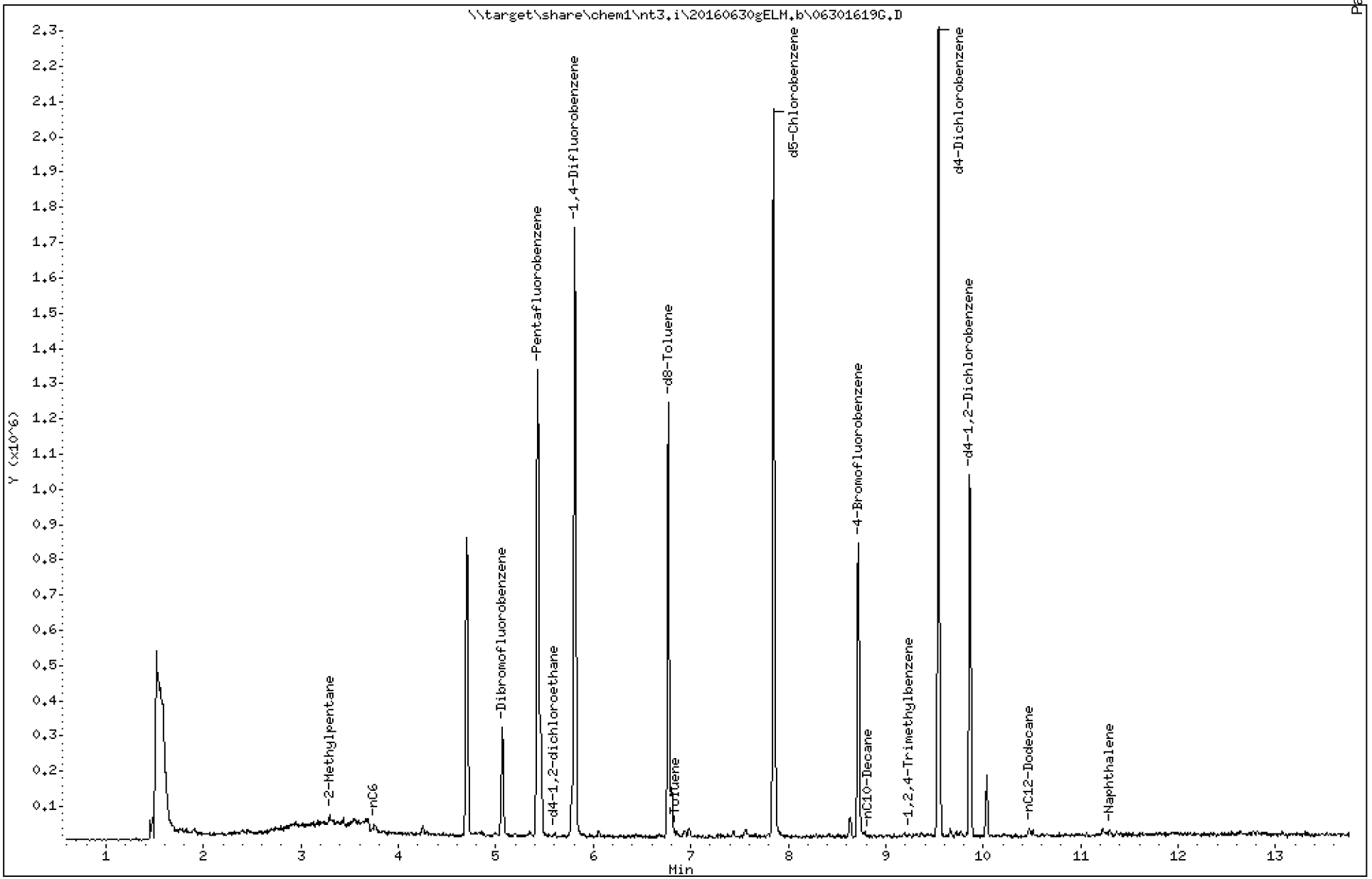
Instrument: nt3.i

Sample Info: 16F0096-08,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630gELM.b/06301619G.D
Method: \20160630gELM.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 30-JUN-2016 14:45

ARI ID: 16F0096-08
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	1153721	0.012
8015C 2MP-TMB	(3.21 to 9.34)	176207359	3622802	0.021
AK101 nC6-nC10	(3.68 to 8.68)	125823356	2536346	0.020
NWTPHG Tol-Nap	(6.71 to 11.36)	103441757	1342107	0.013
mod8015 nC6-nC12	(3.68 to 10.57)	111111111	3168945	0.029

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.768	2003226	d8-Toluene
8.718	1239977	4-Bromofluorobenzene
9.542	3361998	d4-Dichlorobenzene
7.852	3128226	d5-Chlorobenzene
9.861	1498959	d4-1,2-Dichlorobenzene

Analytical Resources, Incorporated
Analytical Chemists and Consultants

CHRL-O-04-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-09	File ID:	06301620G.D
Sampled:	06/29/16 11:45	Prepared:	06/29/16 17:30	Analyzed:	06/30/16 15:11
Solids:	91.76	Preparation:	No Prep - Volatiles	Initial/Final:	5.613 g / 5 g
Batch:	BEF0233	Sequence:	SEF0147	Calibration:	ZF00014
Instrument:	NT3	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5300	U	2650	5300

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.55	91.0	80 - 120	
4-Bromofluorobenzene	5.0000	4.35	86.9	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt3.i\20160630.b\06301620.D

Date : 30-JUN-2016 15:11

Client ID:

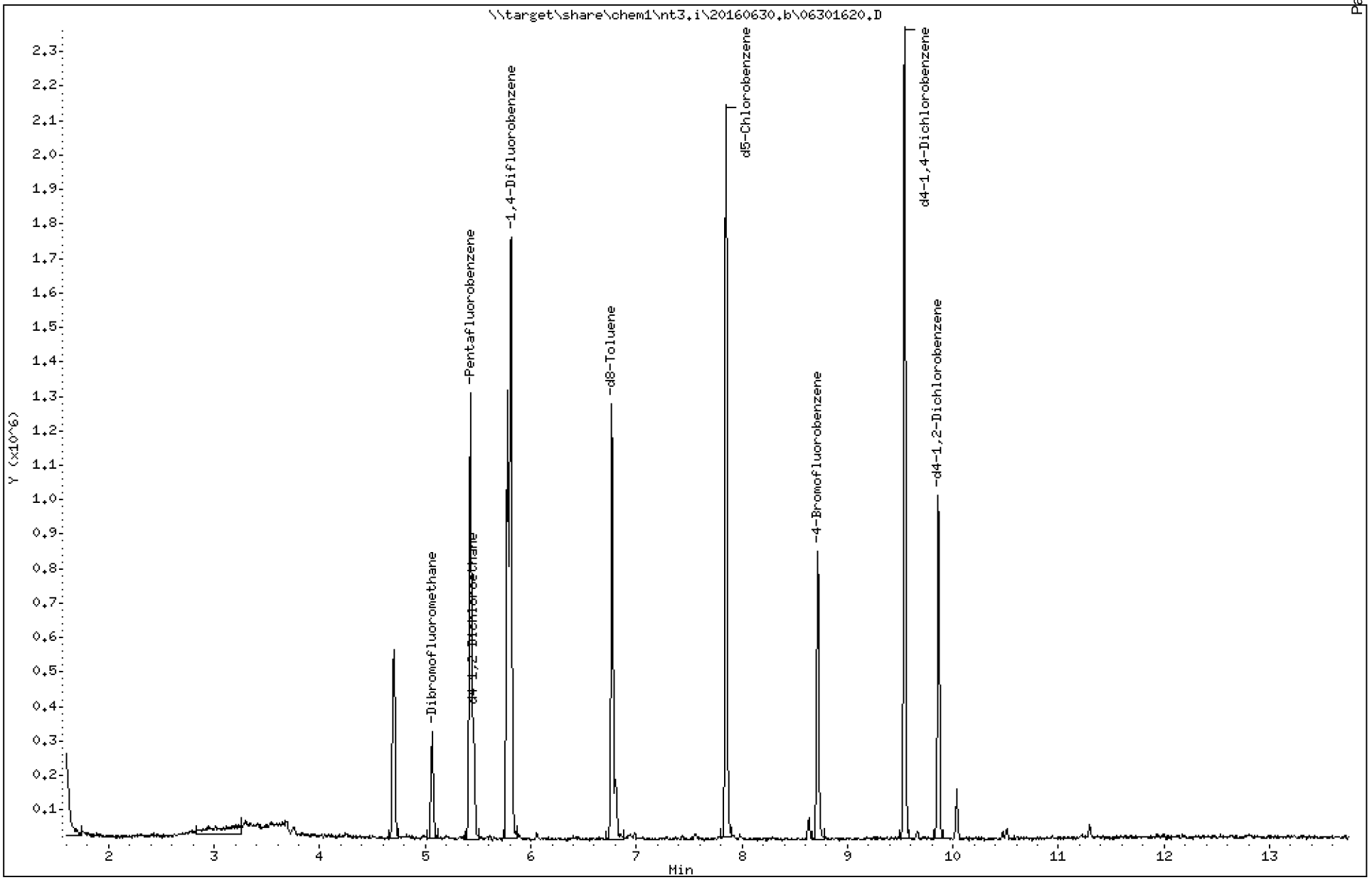
Instrument: nt3.i

Sample Info: 16F0096-09,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160630.b\06301620.D
Lab Smp Id: 16F0096-09
Inj Date : 30-JUN-2016 15:11
Operator : LH Inst ID: nt3.i
Smp Info : 16F0096-09,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Meth Date : 01-Jul-2016 13:57 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 10:35 Cal File: 06151609.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.068	5.067	(0.934)	158348	4.71480	4.715
	31 Benzene	78	5.349	5.354	(0.920)	3884	0.02640	0.02640
*	32 Pentafluorobenzene	168	5.424	5.428	(1.000)	699744	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.455	5.460	(1.006)	173311	4.47280	4.473
*	37 1,4-Difluorobenzene	114	5.811	5.811	(1.000)	1108321	10.0000	
$	43 d8-Toluene	98	6.768	6.767	(1.165)	634772	4.54883	4.549
	44 Toluene	92	6.805	6.804	(1.171)	54555	0.56089	0.5609
*	53 d5-Chlorobenzene	117	7.846	7.851	(1.000)	993437	10.0000	
	55 Ethyl Benzene	106	7.878	7.878	(1.004)	842	0.01395	0.01395
	57 m,p-xylene	106	7.974	7.979	(1.016)	3466	0.04896	0.04896
	58 o-Xylene	106	8.287	8.287	(1.056)	1128	0.01586	0.01586
$	62 4-Bromofluorobenzene	174	8.718	8.717	(1.111)	200486	4.34500	4.345
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	531852	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.866	9.860	(1.034)	236109	4.63781	4.638

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 06301620.D
Lab Smp Id: 16F0096-09
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

Calibration Date: 30-JUN-2016
Calibration Time: 08:15
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	584309	292155	1168618	699744	19.76
37 1,4-Difluorobenze	921067	460534	1842134	1108321	20.33
53 d5-Chlorobenzene	840715	420358	1681430	993437	18.17
76 d4-1,4-Dichlorobe	460394	230197	920788	531852	15.52

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.42	-0.09
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.01
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	-0.06
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 13:59

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20150930a
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-09
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.715	94.30	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.473	89.46	80-128
$ 43 d8-Toluene	5.000	4.549	90.98	80-120
$ 62 4-Bromofluorobenze	5.000	4.345	86.90	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.638	92.76	80-120

REVIEW SUMMARY FOR FILE - 06301620.D

Lab ID: 16F0096-09
nt3.i, 20160630.b\AK8260061516.m,   30-JUN-2016 15:11

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,AK8260061516.m,Sublist: betx.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt3.i\20160630gELM.b\06301620G.D

Date : 30-JUN-2016 15:11

Client ID:

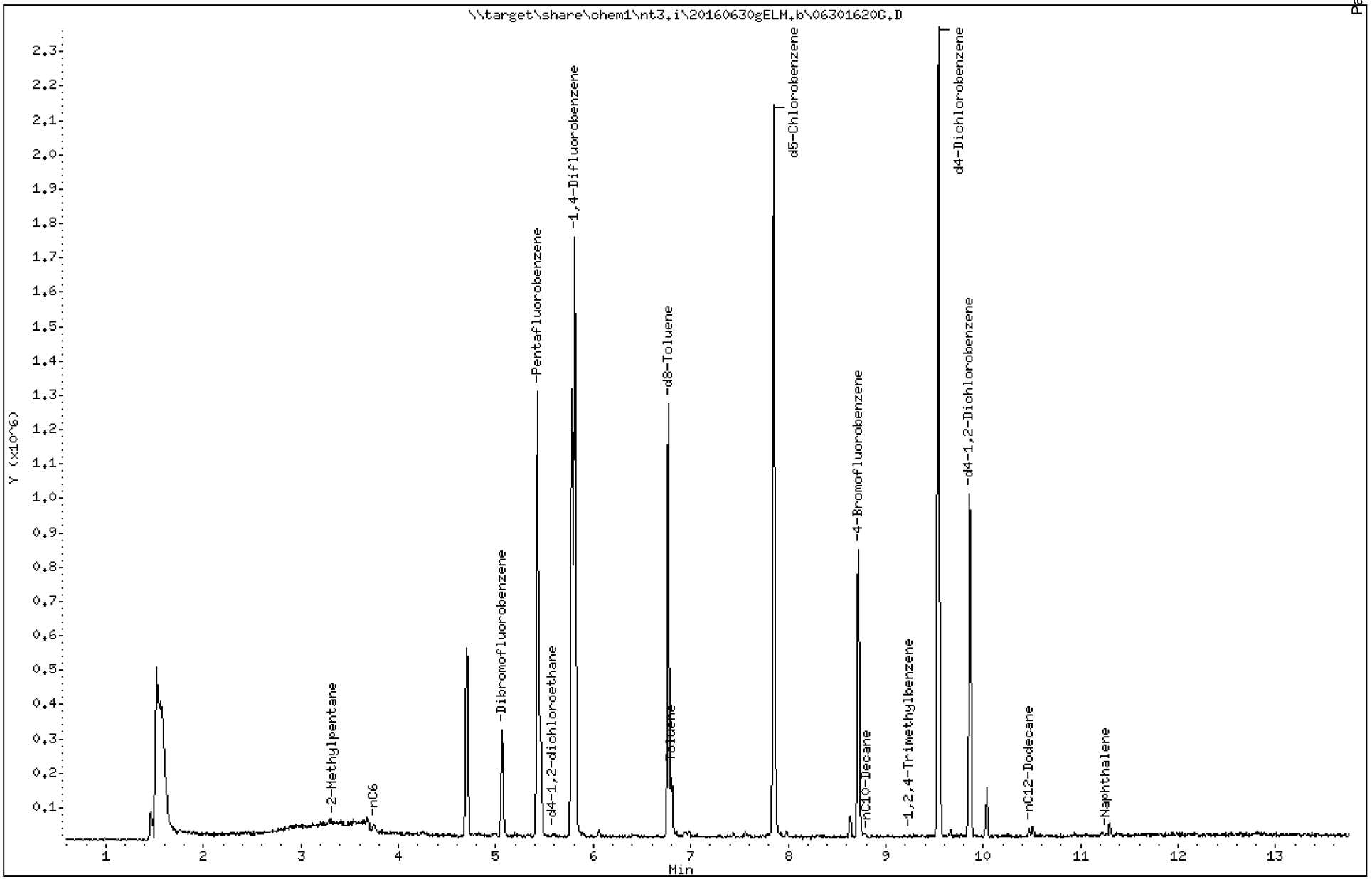
Sample Info: 16F0096-09,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630gELM.b/06301620G.D
Method: \20160630gELM.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 30-JUN-2016 15:11

ARI ID: 16F0096-09
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	1236751	0.012
8015C 2MP-TMB	(3.21 to 9.34)	176207359	5452553	0.031
AK101 nC6-nC10	(3.68 to 8.68)	125823356	4288392	0.034
NWTPHG Tol-Nap	(6.71 to 11.36)	103441757	1453969	0.014
mod8015 nC6-nC12	(3.68 to 10.57)	111111111	4839227	0.044

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.768	1799684	d8-Toluene
8.718	1229426	4-Bromofluorobenzene
9.542	3340900	d4-Dichlorobenzene
7.847	3149383	d5-Chlorobenzene
9.861	1453274	d4-1,2-Dichlorobenzene

CHRL-O-05-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-10	File ID:	06301621G.D
Sampled:	06/29/16 11:35	Prepared:	06/29/16 17:30	Analyzed:	06/30/16 15:37
Solids:	91.50	Preparation:	No Prep - Volatiles	Initial/Final:	5.689 g / 5 g
Batch:	BEF0233	Sequence:	SEF0147	Calibration:	ZF00014
Instrument:	NT3	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5270	U	2630	5270

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.52	90.4	80 - 120	
4-Bromofluorobenzene	5.0000	4.46	89.1	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt3.i\20160630.b\06301621.D

Date : 30-JUN-2016 15:37

Client ID:

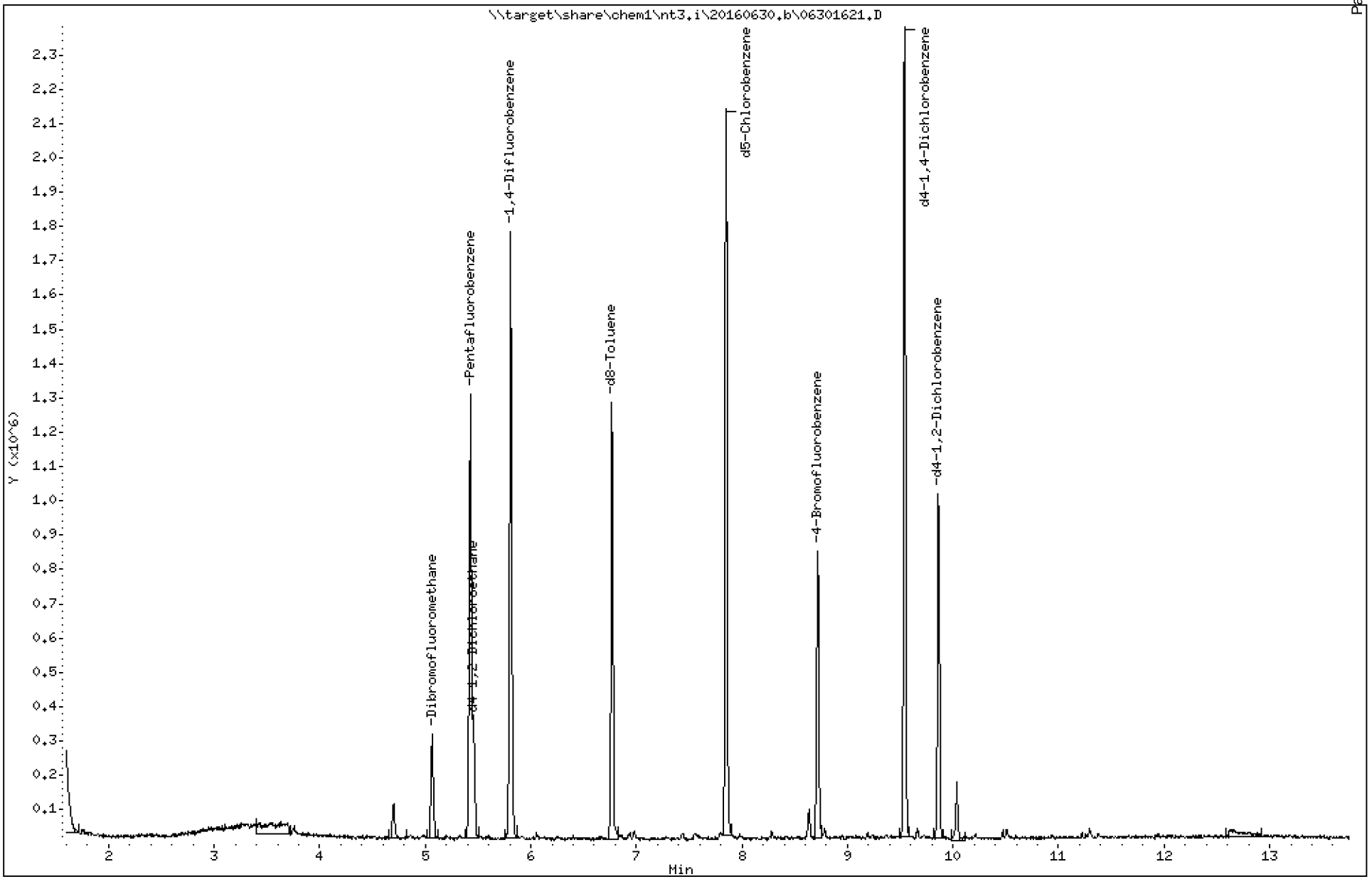
Sample Info: 16F0096-10,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160630.b\06301621.D
Lab Smp Id: 16F0096-10
Inj Date : 30-JUN-2016 15:37
Operator : LH Inst ID: nt3.i
Smp Info : 16F0096-10,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Meth Date : 01-Jul-2016 13:57 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 10:35 Cal File: 06151609.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.062	5.067	(0.932)	148340	4.49835	4.498
	31 Benzene	78	5.338	5.354	(0.919)	1608	0.01100	0.01100
*	32 Pentafluorobenzene	168	5.428	5.428	(1.000)	687060	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.460	5.460	(1.006)	180323	4.73968	4.740
*	37 1,4-Difluorobenzene	114	5.811	5.811	(1.000)	1100963	10.0000	
$	43 d8-Toluene	98	6.767	6.767	(1.165)	626468	4.51933	4.519
	44 Toluene	92	6.810	6.804	(1.172)	4569	0.04729	0.04729
*	53 d5-Chlorobenzene	117	7.851	7.851	(1.000)	1003568	10.0000	
	55 Ethyl Benzene	106	7.883	7.878	(1.004)	752	0.01234	0.01234
	57 m,p-xylene	106	7.979	7.979	(1.016)	2449	0.03424	0.03424
	58 o-Xylene	106	8.287	8.287	(1.055)	4351	0.06055	0.06055
$	62 4-Bromofluorobenzene	174	8.717	8.717	(1.110)	207669	4.45524	4.455
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	537709	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.865	9.860	(1.034)	238865	4.64084	4.641

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 06301621.D
Lab Smp Id: 16F0096-10
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

Calibration Date: 30-JUN-2016
Calibration Time: 08:15
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	584309	292155	1168618	687060	17.59
37 1,4-Difluorobenze	921067	460534	1842134	1100963	19.53
53 d5-Chlorobenzene	840715	420358	1681430	1003568	19.37
76 d4-1,4-Dichlorobe	460394	230197	920788	537709	16.79

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.00
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.00
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.00
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 13:59

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20150930a
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-10
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.498	89.97	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.740	94.79	80-128
$ 43 d8-Toluene	5.000	4.519	90.39	80-120
$ 62 4-Bromofluorobenze	5.000	4.455	89.10	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.641	92.82	80-120

REVIEW SUMMARY FOR FILE - 06301621.D

Lab ID: 16F0096-10
nt3.i, 20160630.b\AK8260061516.m,   30-JUN-2016 15:37

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,AK8260061516.m,Sublist: betx.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt3.i\20160630gELM.b\06301621G.D

Date : 30-JUN-2016 15:37

Client ID:

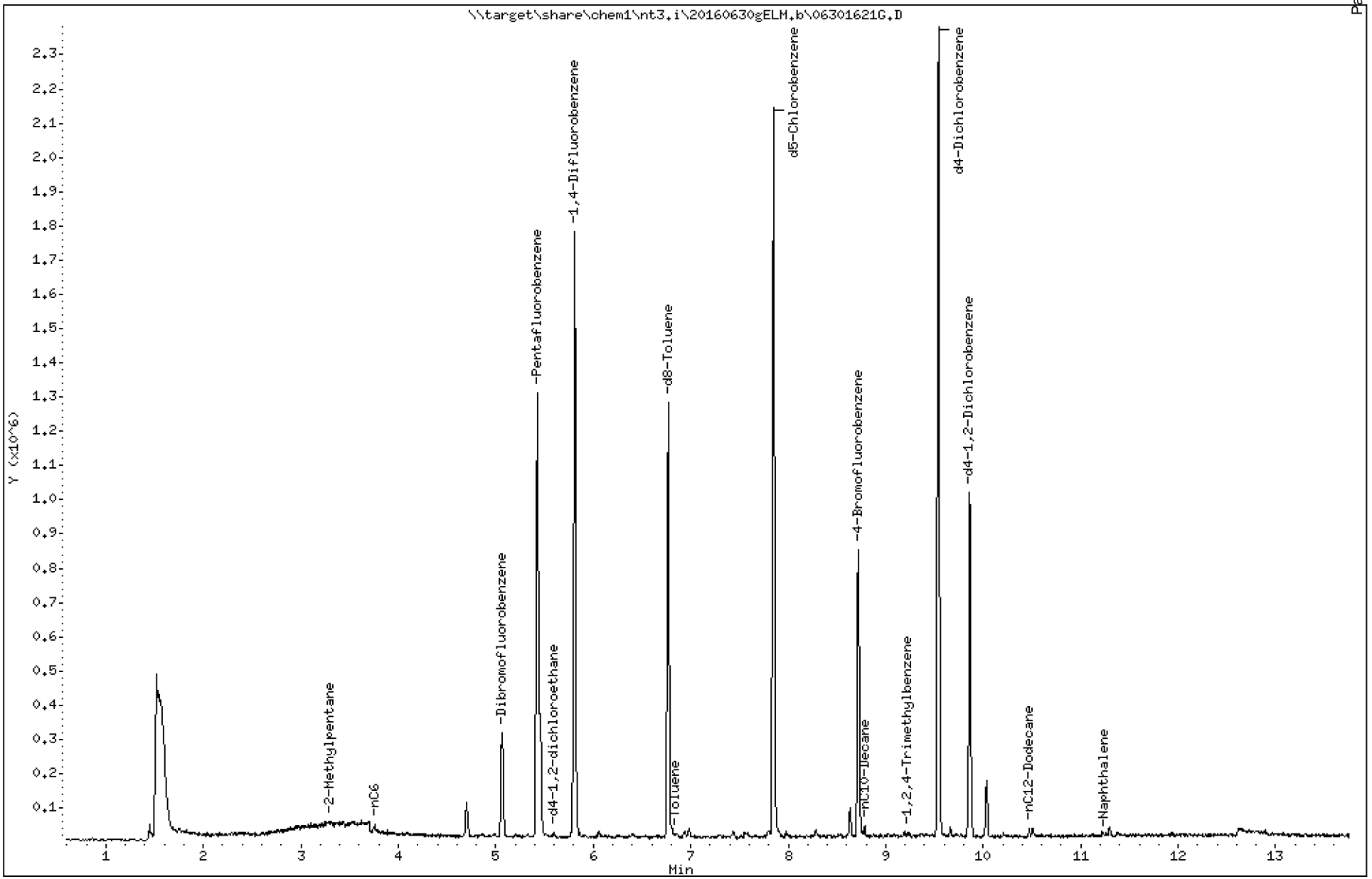
Sample Info: 16F0096-10,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630gELM.b/06301621G.D
Method: \20160630gELM.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 30-JUN-2016 15:37

ARI ID: 16F0096-10
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	1286839	0.013
8015C 2MP-TMB	(3.21 to 9.34)	176207359	2607685	0.015
AK101 nC6-nC10	(3.68 to 8.68)	125823356	1514591	0.012
NWTPHG Tol-Nap	(6.71 to 11.36)	103441757	1451320	0.014
mod8015 nC6-nC12	(3.68 to 10.57)	111111111	2180421	0.020

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.768	1801199	d8-Toluene
8.718	1206239	4-Bromofluorobenzene
9.542	3378976	d4-Dichlorobenzene
7.852	3133584	d5-Chlorobenzene
9.860	1498335	d4-1,2-Dichlorobenzene

CHRL-N-01-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-11	File ID:	06301606G.D
Sampled:	06/29/16 11:25	Prepared:	06/30/16 09:02	Analyzed:	06/30/16 09:02
Solids:	92.40	Preparation:	No Prep - Volatiles	Initial/Final:	5.059 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5760	U	2880	5760

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.76	95.3	80 - 120	
4-Bromofluorobenzene	5.0000	5.06	101	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301606.D

Date : 30-JUN-2016 09:02

Client ID:

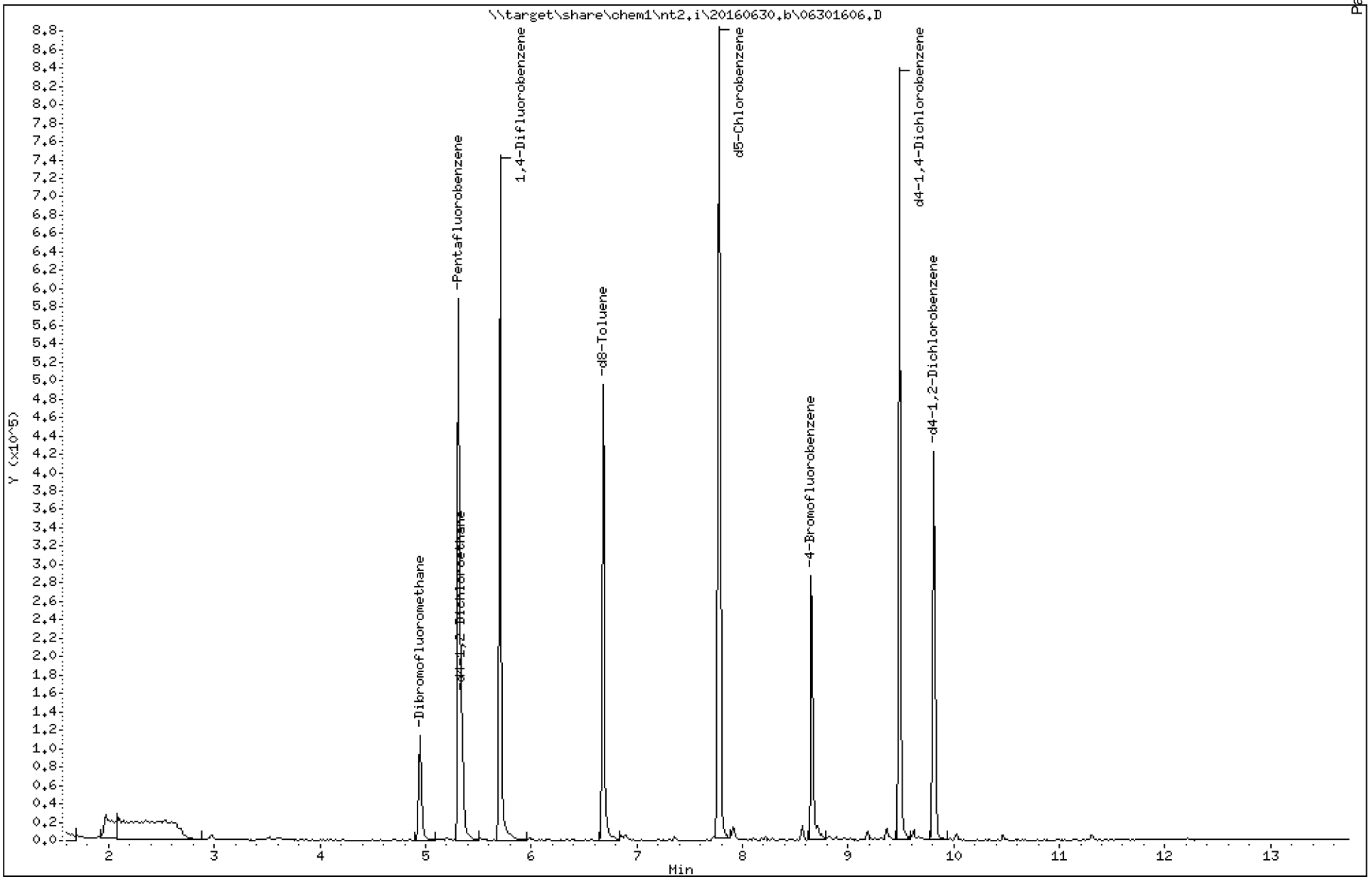
Sample Info: 16F0096-11,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301606.D
Lab Smp Id: 16F0096-11
Inj Date : 30-JUN-2016 09:02
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-11,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.948	4.950	(0.931)	64791	4.41385	4.414
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.315	5.328	(1.000)	323402	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.339	5.352	(1.004)	77960	4.87570	4.876
*	37 1,4-Difluorobenzene	114	5.705	5.707	(1.000)	521539	10.0000	
$	43 d8-Toluene	98	6.676	6.689	(1.170)	294353	4.76491	4.765
	44 Toluene	92	6.711	6.725	(1.176)	3988	0.08062	0.08062
*	53 d5-Chlorobenzene	117	7.776	7.778	(1.000)	465786	10.0000	
	55 Ethyl Benzene	106	7.800	7.801	(1.003)	1530	0.05302	0.05302
	57 m,p-xylene	106	7.906	7.908	(1.017)	3842	0.11010	0.1101
	58 o-Xylene	106	8.214	8.216	(1.056)	975	0.03013	0.03013
$	62 4-Bromofluorobenzene	174	8.664	8.653	(1.114)	86770	5.06310	5.063
*	76 d4-1,4-Dichlorobenzene	152	9.492	9.482	(1.000)	224134	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.813	(1.034)	99438	4.77721	4.777

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301606.D
Lab Smp Id: 16F0096-11
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	323402	30.47
37 1,4-Difluorobenze	400954	200477	801908	521539	30.07
53 d5-Chlorobenzene	354752	177376	709504	465786	31.30
76 d4-1,4-Dichlorobe	191489	95745	382978	224134	17.05

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.25
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	-0.03
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.49	0.11

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-11
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.414	88.28	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.876	97.51	80-128
$ 43 d8-Toluene	5.000	4.765	95.30	80-120
$ 62 4-Bromofluorobenze	5.000	5.063	101.26	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.777	95.54	80-120

REVIEW SUMMARY FOR FILE - 06301606.D

Lab ID: 16F0096-11
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 09:02

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301606.D

Date : 30-JUN-2016 09:02

Client ID:

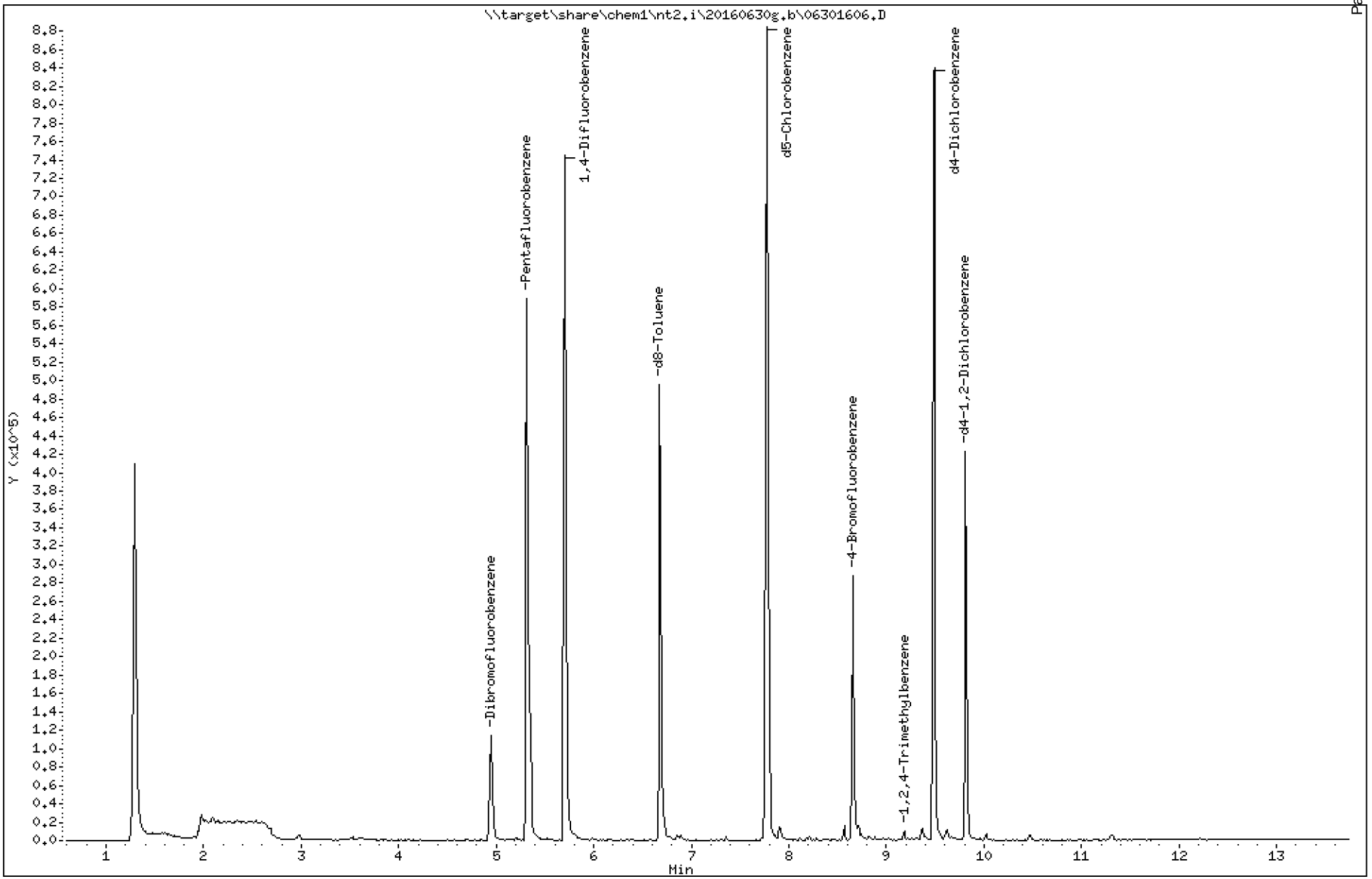
Instrument: nt2.i

Sample Info: 16F0096-11,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301606.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 09:02

ARI ID: 16F0096-11
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	69056	0.001
8015C 2MP-TMB	(2.98 to 9.26)	83224207	35001	0.000
AK101 nC6-nC10	(3.49 to 8.61)	58706304	22718	0.000
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	69056	0.001
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	69058	0.001

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.676	792217	d8-Toluene
8.652	528155	4-Bromofluorobenzene
9.492	1446937	d4-Dichlorobenzene
7.777	1456962	d5-Chlorobenzene
9.812	616965	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301606G.D

Date : 30-JUN-2016 09:02

Client ID:

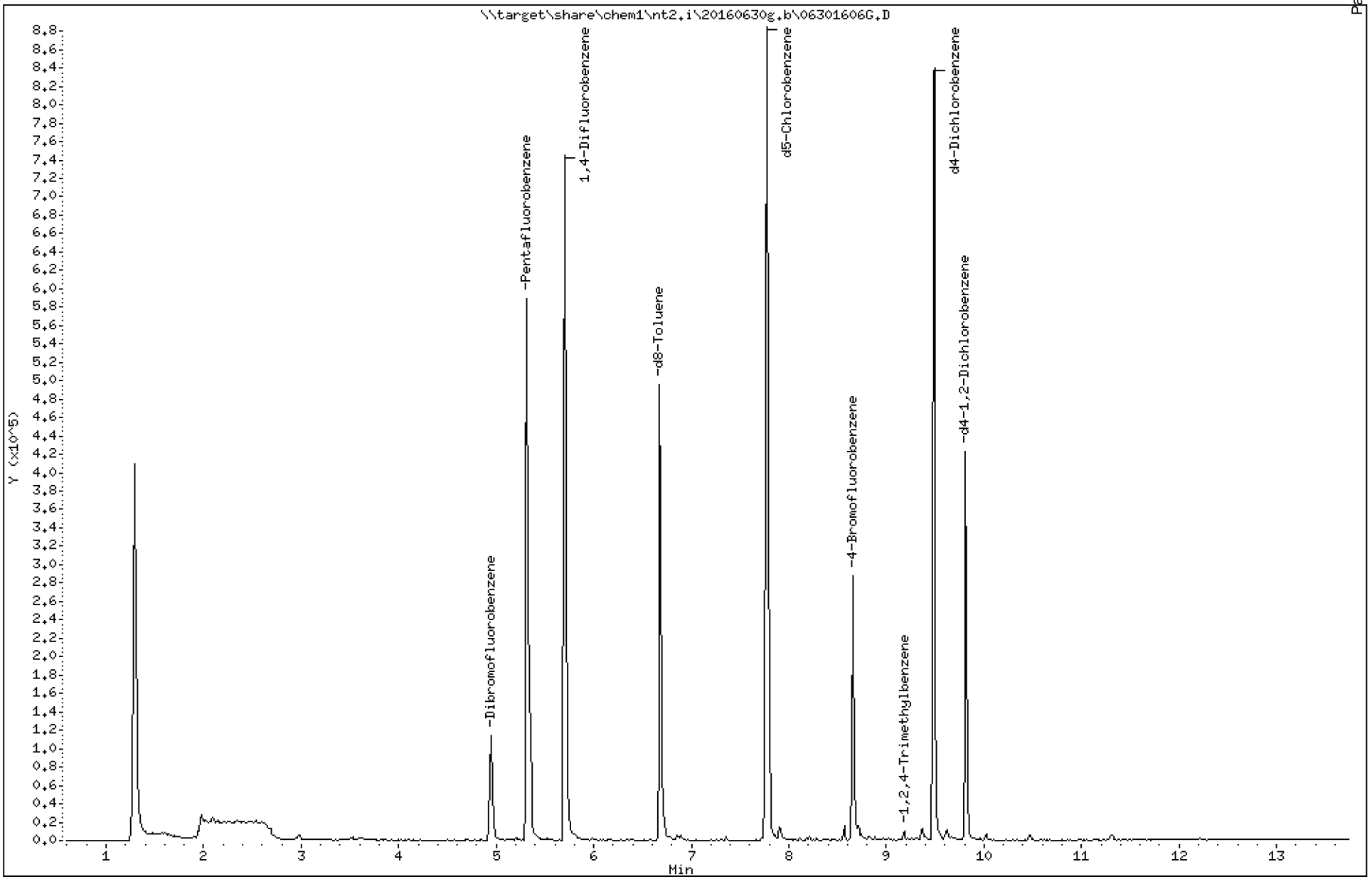
Instrument: nt2.i

Sample Info: 16F0096-11,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301606G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 09:02

ARI ID: 16F0096-11
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	69056	0.001
8015C 2MP-TMB	(2.98 to 9.26)	83224207	35001	0.000
AK101 nC6-nC10	(3.49 to 8.61)	58706304	22718	0.000
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	69056	0.001
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	69058	0.001

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.676	792217	d8-Toluene
8.652	528155	4-Bromofluorobenzene
9.492	1446937	d4-Dichlorobenzene
7.777	1456962	d5-Chlorobenzene
9.812	616965	d4-1,2-Dichlorobenzene

CHRL-N-02-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-12	File ID:	06301607G.D
Sampled:	06/29/16 11:35	Prepared:	06/30/16 09:22	Analyzed:	06/30/16 09:22
Solids:	91.18	Preparation:	No Prep - Volatiles	Initial/Final:	3.904 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	7510	U	3750	7510

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.65	93.0	80 - 120	
4-Bromofluorobenzene	5.0000	5.23	105	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301607.D

Date : 30-JUN-2016 09:22

Client ID:

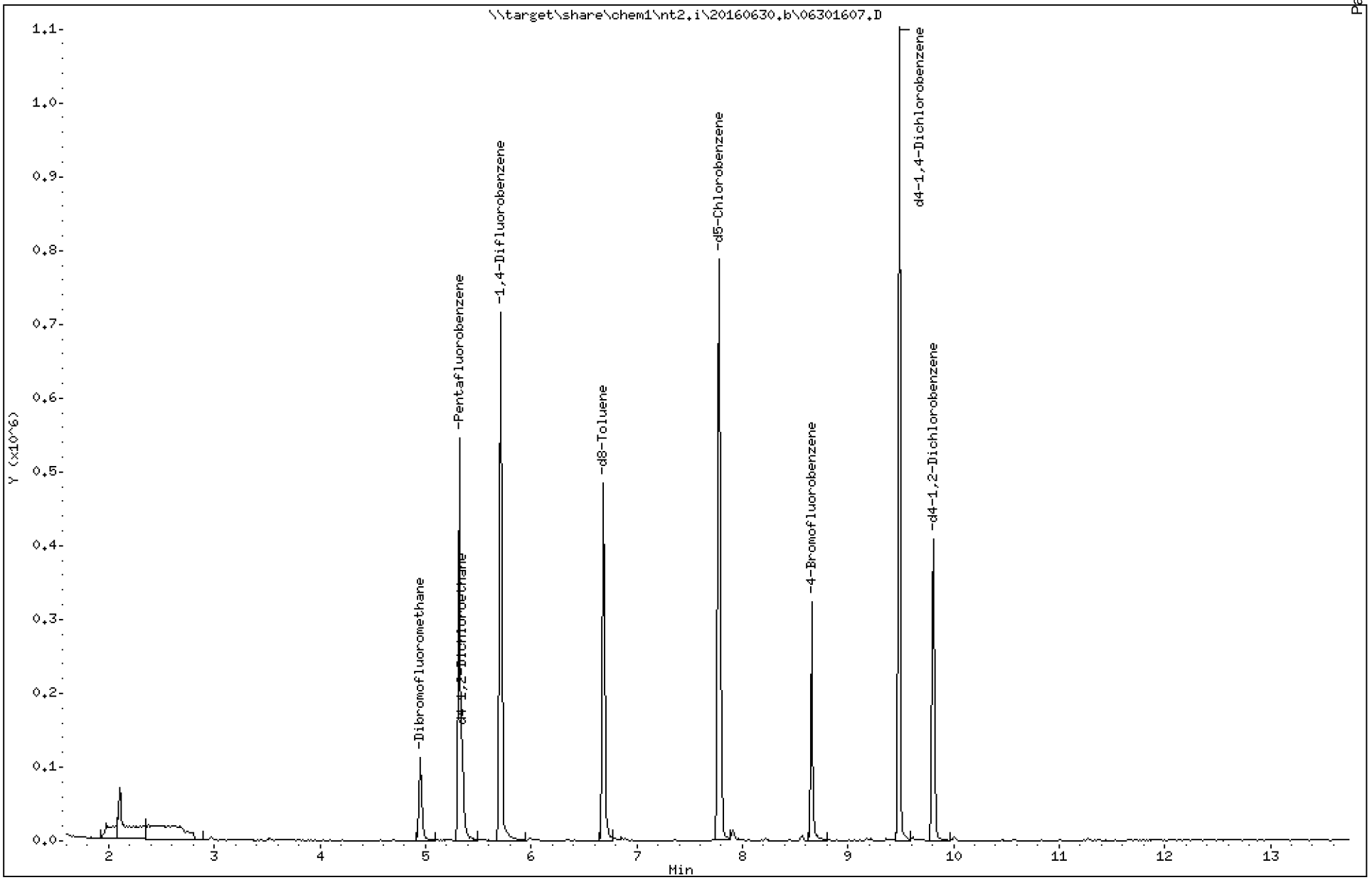
Instrument: nt2.i

Sample Info: 16F0096-12,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301607.D
Lab Smp Id: 16F0096-12
Inj Date : 30-JUN-2016 09:22
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-12,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.951	4.950	(0.931)	62120	4.43289	4.433
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.317	5.328	(1.000)	308738	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.353	5.352	(1.007)	76276	4.99696	4.997
*	37 1,4-Difluorobenzene	114	5.708	5.707	(1.000)	505907	10.0000	
$	43 d8-Toluene	98	6.678	6.689	(1.170)	278565	4.64867	4.649
	44 Toluene	92	6.714	6.725	(1.176)	6570	0.13692	0.1369
*	53 d5-Chlorobenzene	117	7.779	7.778	(1.000)	438701	10.0000	
	55 Ethyl Benzene	106	Compound Not Detected.					
	57 m,p-xylene	106	7.909	7.908	(1.017)	3465	0.10543	0.1054
	58 o-Xylene	106	8.228	8.216	(1.058)	1276	0.04187	0.04187
$	62 4-Bromofluorobenzene	174	8.654	8.653	(1.113)	84458	5.23246	5.232
*	76 d4-1,4-Dichlorobenzene	152	9.483	9.482	(1.000)	234577	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.814	9.813	(1.035)	105057	4.82246	4.822

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301607.D
Lab Smp Id: 16F0096-12
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	308738	24.55
37 1,4-Difluorobenze	400954	200477	801908	505907	26.18
53 d5-Chlorobenzene	354752	177376	709504	438701	23.66
76 d4-1,4-Dichlorobe	191489	95745	382978	234577	22.50

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.20
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-12
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.433	88.66	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.997	99.94	80-128
$ 43 d8-Toluene	5.000	4.649	92.97	80-120
$ 62 4-Bromofluorobenze	5.000	5.232	104.65	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.822	96.45	80-120

REVIEW SUMMARY FOR FILE - 06301607.D

Lab ID: 16F0096-12
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 09:22

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301607.D

Date : 30-JUN-2016 09:22

Client ID:

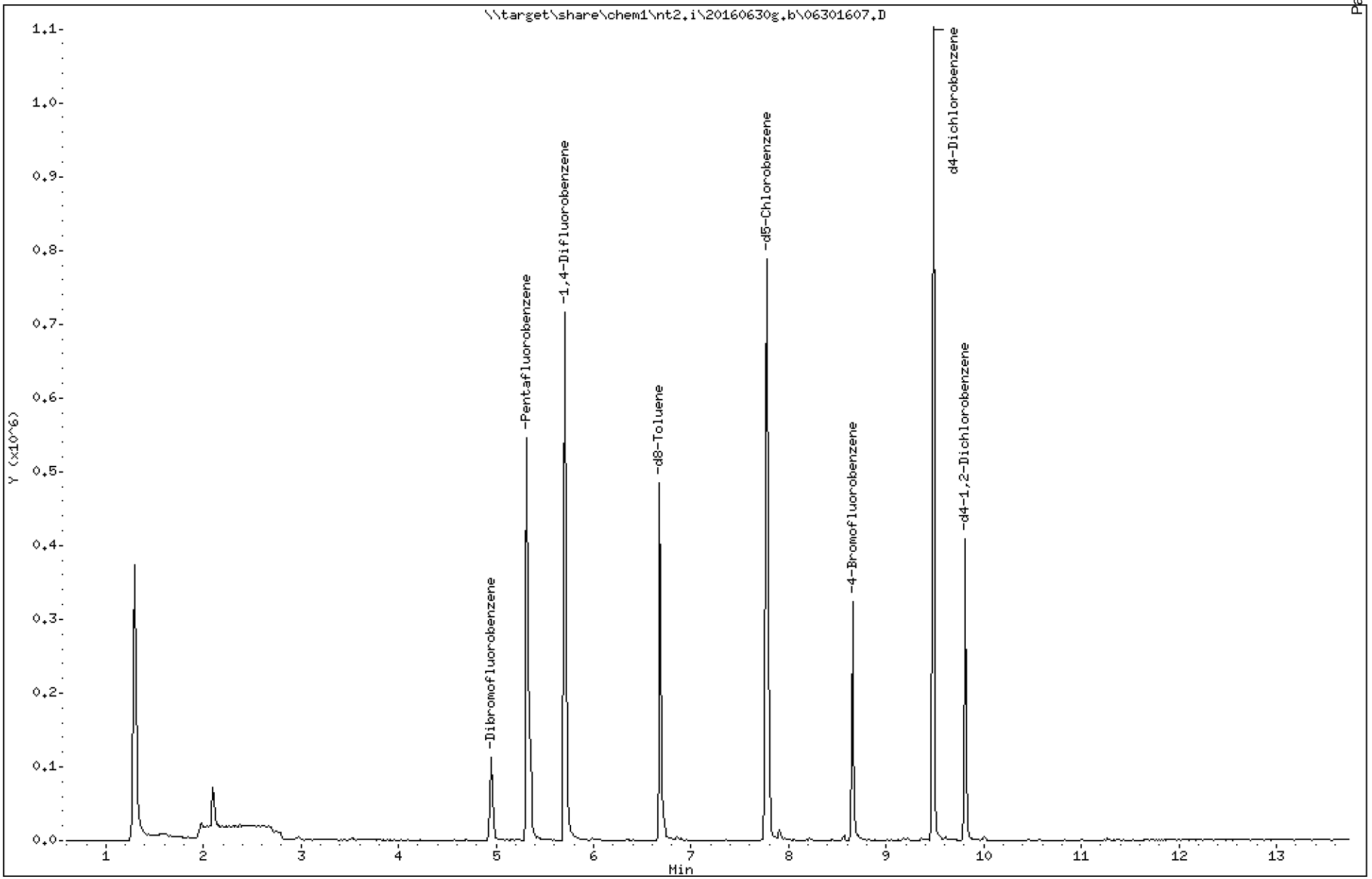
Sample Info: 16F0096-12,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301607.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 09:22

ARI ID: 16F0096-12
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	28453	0.001
8015C 2MP-TMB	(2.98 to 9.26)	83224207	28454	0.000
AK101 nC6-nC10	(3.49 to 8.61)	58706304	28454	0.000
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	28453	0.001
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	28455	0.000

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.679	764722	d8-Toluene
8.655	495884	4-Bromofluorobenzene
9.483	1504146	d4-Dichlorobenzene
7.779	1340965	d5-Chlorobenzene
9.814	649521	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301607G.D

Date : 30-JUN-2016 09:22

Client ID:

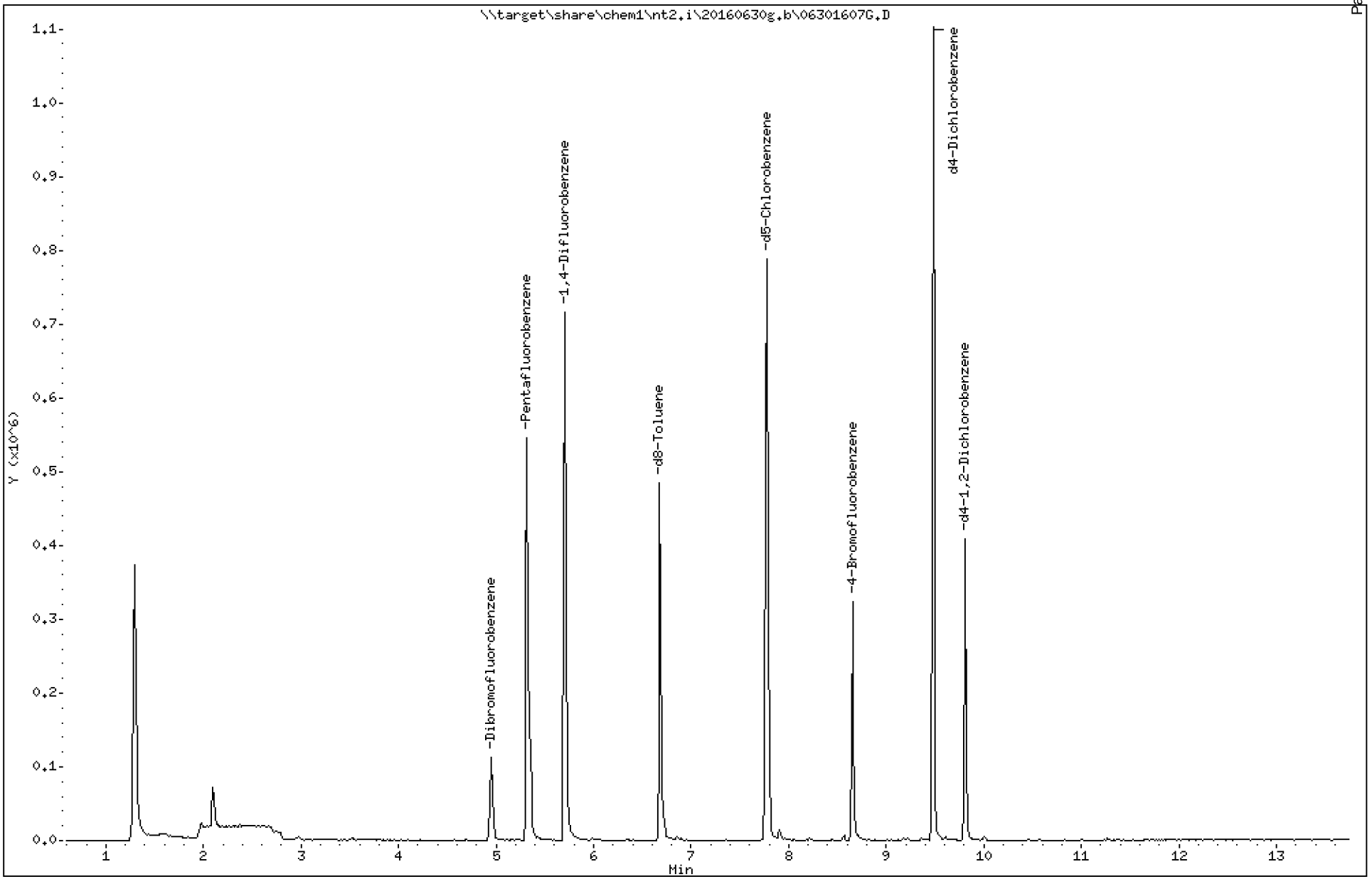
Sample Info: 16F0096-12,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301607G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 09:22

ARI ID: 16F0096-12
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	28453	0.001
8015C 2MP-TMB	(2.98 to 9.26)	83224207	28454	0.000
AK101 nC6-nC10	(3.49 to 8.61)	58706304	28454	0.000
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	28453	0.001
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	28455	0.000

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.679	764722	d8-Toluene
8.655	495884	4-Bromofluorobenzene
9.483	1504146	d4-Dichlorobenzene
7.779	1340965	d5-Chlorobenzene
9.814	649521	d4-1,2-Dichlorobenzene

CHRL-N-03-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-13	File ID:	06301608G.D
Sampled:	06/29/16 11:45	Prepared:	06/30/16 09:43	Analyzed:	06/30/16 09:43
Solids:	91.34	Preparation:	No Prep - Volatiles	Initial/Final:	5.975 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5060	U	2530	5060

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.95	99.1	80 - 120	
4-Bromofluorobenzene	5.0000	5.05	101	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301608.D

Date : 30-JUN-2016 09:43

Client ID:

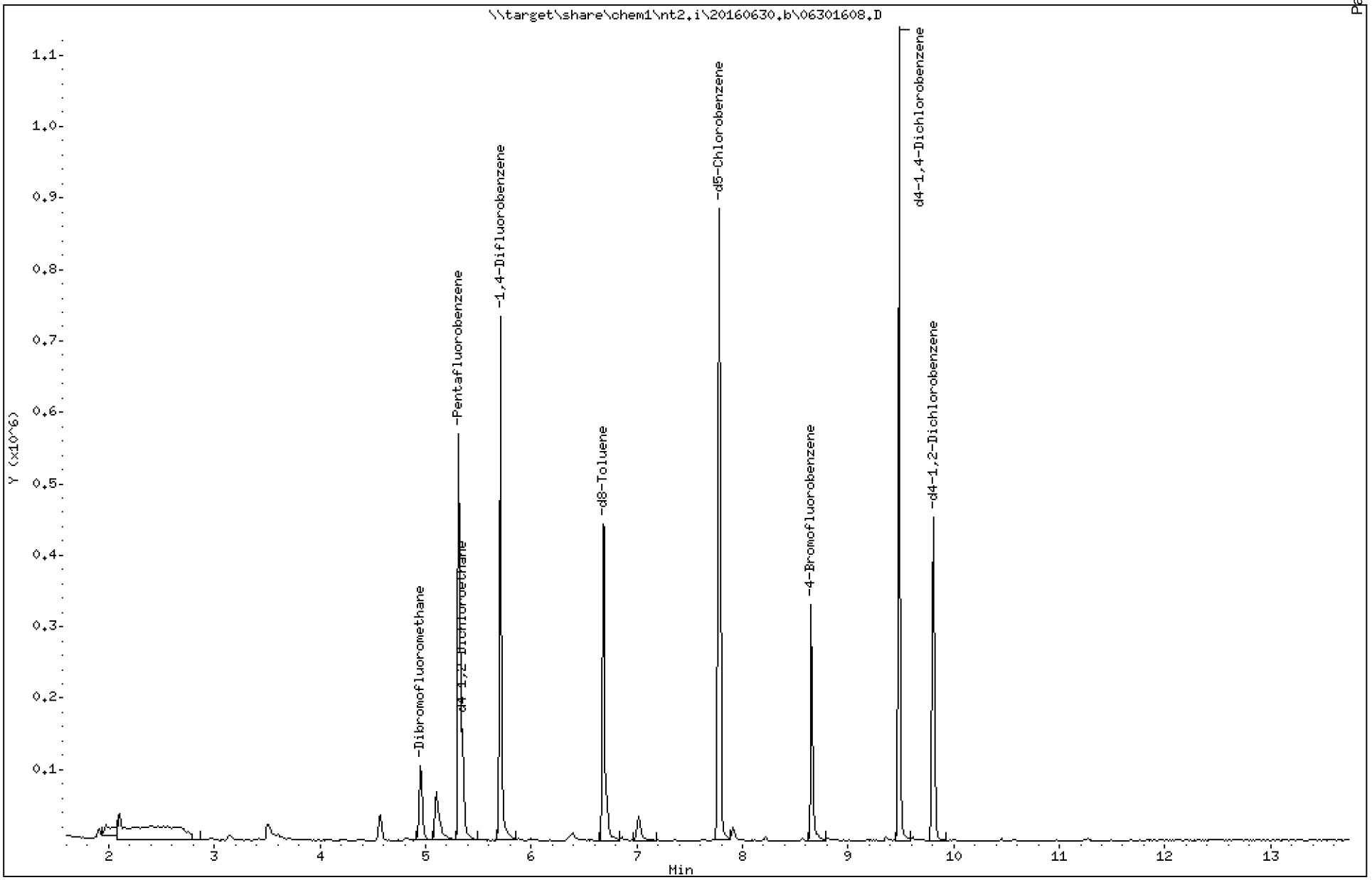
Instrument: nt2.i

Sample Info: 16F0096-13,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301608.D
Lab Smp Id: 16F0096-13
Inj Date : 30-JUN-2016 09:43
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-13,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.948	4.950	(0.931)	63667	4.43825	4.438
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.315	5.328	(1.000)	316045	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.352	(1.007)	77725	4.97416	4.974
*	37 1,4-Difluorobenzene	114	5.705	5.707	(1.000)	517264	10.0000	
$	43 d8-Toluene	98	6.687	6.689	(1.172)	303520	4.95391	4.954
	44 Toluene	92	6.723	6.725	(1.178)	19913	0.40587	0.4059
*	53 d5-Chlorobenzene	117	7.776	7.778	(1.000)	477237	10.0000	
	55 Ethyl Benzene	106	7.800	7.801	(1.003)	1919	0.06490	0.06490
	57 m,p-xylene	106	7.918	7.908	(1.018)	5312	0.14858	0.1486
	58 o-Xylene	106	8.214	8.216	(1.056)	1664	0.05019	0.05019
$	62 4-Bromofluorobenzene	174	8.652	8.653	(1.113)	88758	5.05483	5.055
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.482	(1.000)	251906	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.813	(1.035)	110752	4.73416	4.734

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301608.D
Lab Smp Id: 16F0096-13
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	316045	27.50
37 1,4-Difluorobenze	400954	200477	801908	517264	29.01
53 d5-Chlorobenzene	354752	177376	709504	477237	34.53
76 d4-1,4-Dichlorobe	191489	95745	382978	251906	31.55

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.25
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	-0.03
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-13
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.438	88.76	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.974	99.48	80-128
$ 43 d8-Toluene	5.000	4.954	99.08	80-120
$ 62 4-Bromofluorobenze	5.000	5.055	101.10	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.734	94.68	80-120

REVIEW SUMMARY FOR FILE - 06301608.D

Lab ID: 16F0096-13
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 09:43

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301608.D

Date : 30-JUN-2016 09:43

Client ID:

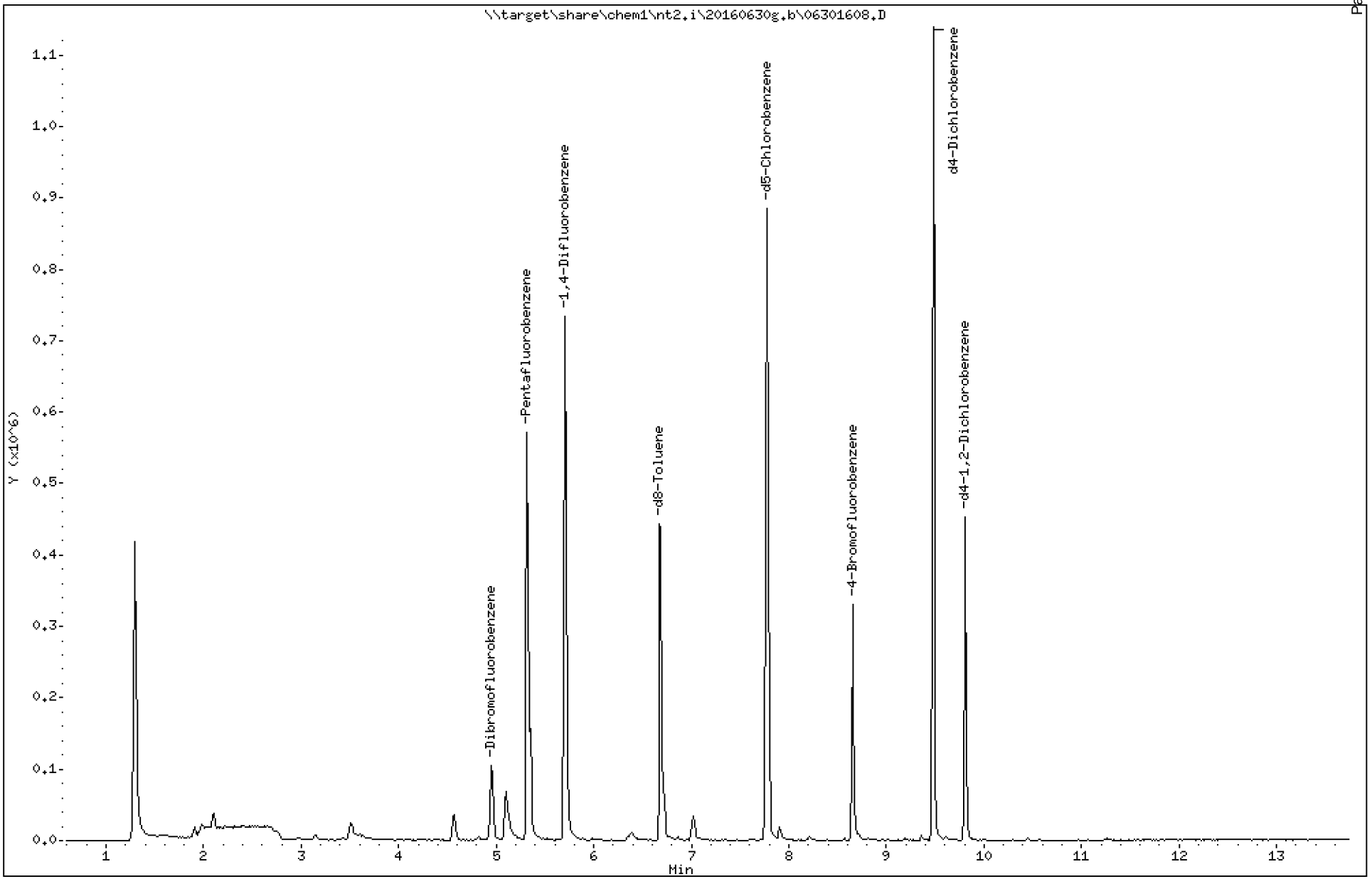
Sample Info: 16F0096-13,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301608.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 09:43

ARI ID: 16F0096-13
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	115515	0.002
8015C 2MP-TMB	(2.98 to 9.26)	83224207	446273	0.005
AK101 nC6-nC10	(3.49 to 8.61)	58706304	446272	0.008
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	115515	0.002
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	446274	0.006

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.676	879903	d8-Toluene
8.652	533801	4-Bromofluorobenzene
9.481	1583436	d4-Dichlorobenzene
7.777	1441412	d5-Chlorobenzene
9.812	695848	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301608G.D

Date : 30-JUN-2016 09:43

Client ID:

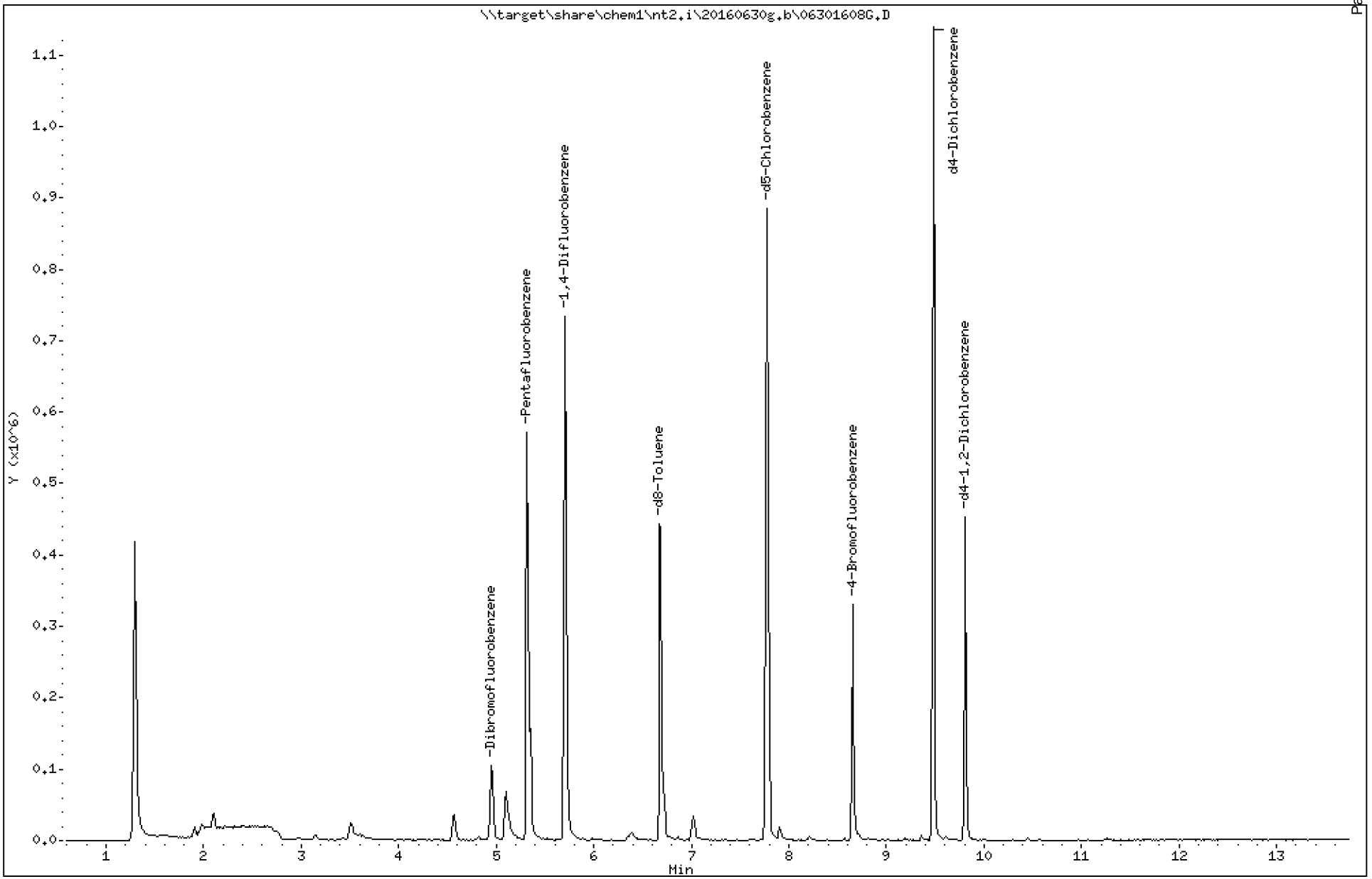
Sample Info: 16F0096-13,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301608G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 09:43

ARI ID: 16F0096-13
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	115515	0.002
8015C 2MP-TMB	(2.98 to 9.26)	83224207	446273	0.005
AK101 nC6-nC10	(3.49 to 8.61)	58706304	446272	0.008
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	115515	0.002
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	446274	0.006

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.676	879903	d8-Toluene
8.652	533801	4-Bromofluorobenzene
9.481	1583436	d4-Dichlorobenzene
7.777	1441412	d5-Chlorobenzene
9.812	695848	d4-1,2-Dichlorobenzene

CHRL-N-04-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-14	File ID:	06301609G.D
Sampled:	06/29/16 11:55	Prepared:	06/30/16 10:03	Analyzed:	06/30/16 10:03
Solids:	93.48	Preparation:	No Prep - Volatiles	Initial/Final:	5.58 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5140	U	2570	5140

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.82	96.4	80 - 120	
4-Bromofluorobenzene	5.0000	5.09	102	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301609.D

Date : 30-JUN-2016 10:03

Client ID:

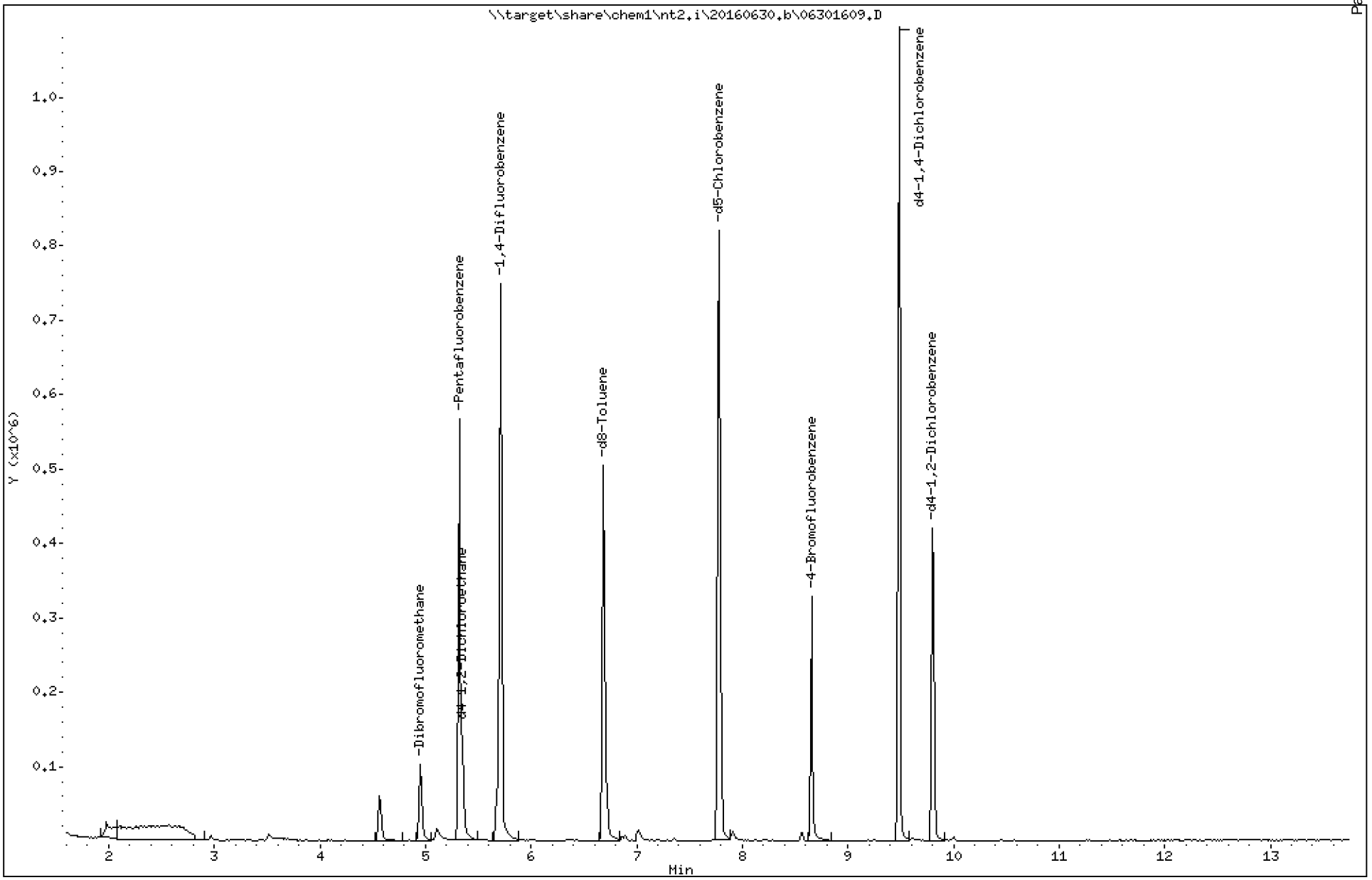
Sample Info: 16F0096-14,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301609.D
Lab Smp Id: 16F0096-14
Inj Date : 30-JUN-2016 10:03
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-14,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.951	4.950	(0.931)	60605	4.21487	4.215
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.318	5.328	(1.000)	316789	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.353	5.352	(1.007)	79685	5.08762	5.088
*	37 1,4-Difluorobenzene	114	5.708	5.707	(1.000)	517985	10.0000	
$	43 d8-Toluene	98	6.678	6.689	(1.170)	295698	4.81953	4.820
	44 Toluene	92	6.714	6.725	(1.176)	27815	0.56614	0.5661
*	53 d5-Chlorobenzene	117	7.779	7.778	(1.000)	464986	10.0000	
	55 Ethyl Benzene	106	7.803	7.801	(1.003)	1161	0.04030	0.04030
	57 m,p-xylene	106	7.909	7.908	(1.017)	3319	0.09528	0.09528
	58 o-Xylene	106	8.217	8.216	(1.056)	926	0.02867	0.02867
$	62 4-Bromofluorobenzene	174	8.655	8.653	(1.113)	87068	5.08923	5.089
*	76 d4-1,4-Dichlorobenzene	152	9.483	9.482	(1.000)	252095	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.814	9.813	(1.035)	110408	4.71591	4.716

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301609.D
Lab Smp Id: 16F0096-14
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	316789	27.80
37 1,4-Difluorobenze	400954	200477	801908	517985	29.19
53 d5-Chlorobenzene	354752	177376	709504	464986	31.07
76 d4-1,4-Dichlorobe	191489	95745	382978	252095	31.65

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.20
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-14
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.215	84.30	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.088	101.75	80-128
$ 43 d8-Toluene	5.000	4.820	96.39	80-120
$ 62 4-Bromofluorobenze	5.000	5.089	101.78	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.716	94.32	80-120

REVIEW SUMMARY FOR FILE - 06301609.D

Lab ID: 16F0096-14
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 10:03

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301609.D

Date : 30-JUN-2016 10:03

Client ID:

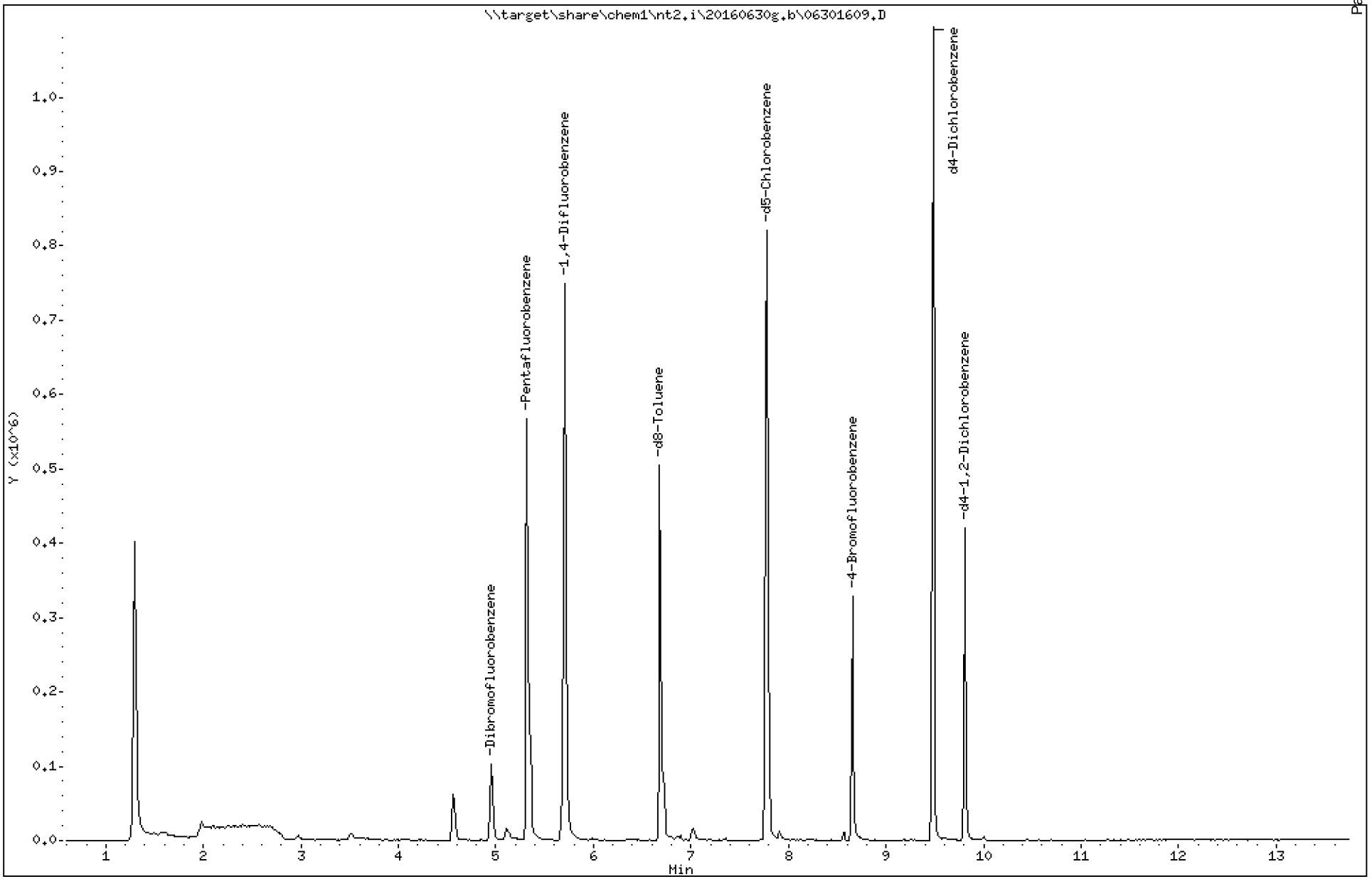
Sample Info: 16F0096-14,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301609.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 10:03

ARI ID: 16F0096-14
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	58790	0.001
8015C 2MP-TMB	(2.98 to 9.26)	83224207	242149	0.003
AK101 nC6-nC10	(3.49 to 8.61)	58706304	242149	0.004
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	58790	0.001
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	242150	0.003

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.679	891031	d8-Toluene
8.655	511361	4-Bromofluorobenzene
9.483	1553054	d4-Dichlorobenzene
7.779	1415225	d5-Chlorobenzene
9.803	679023	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301609G.D

Date : 30-JUN-2016 10:03

Client ID:

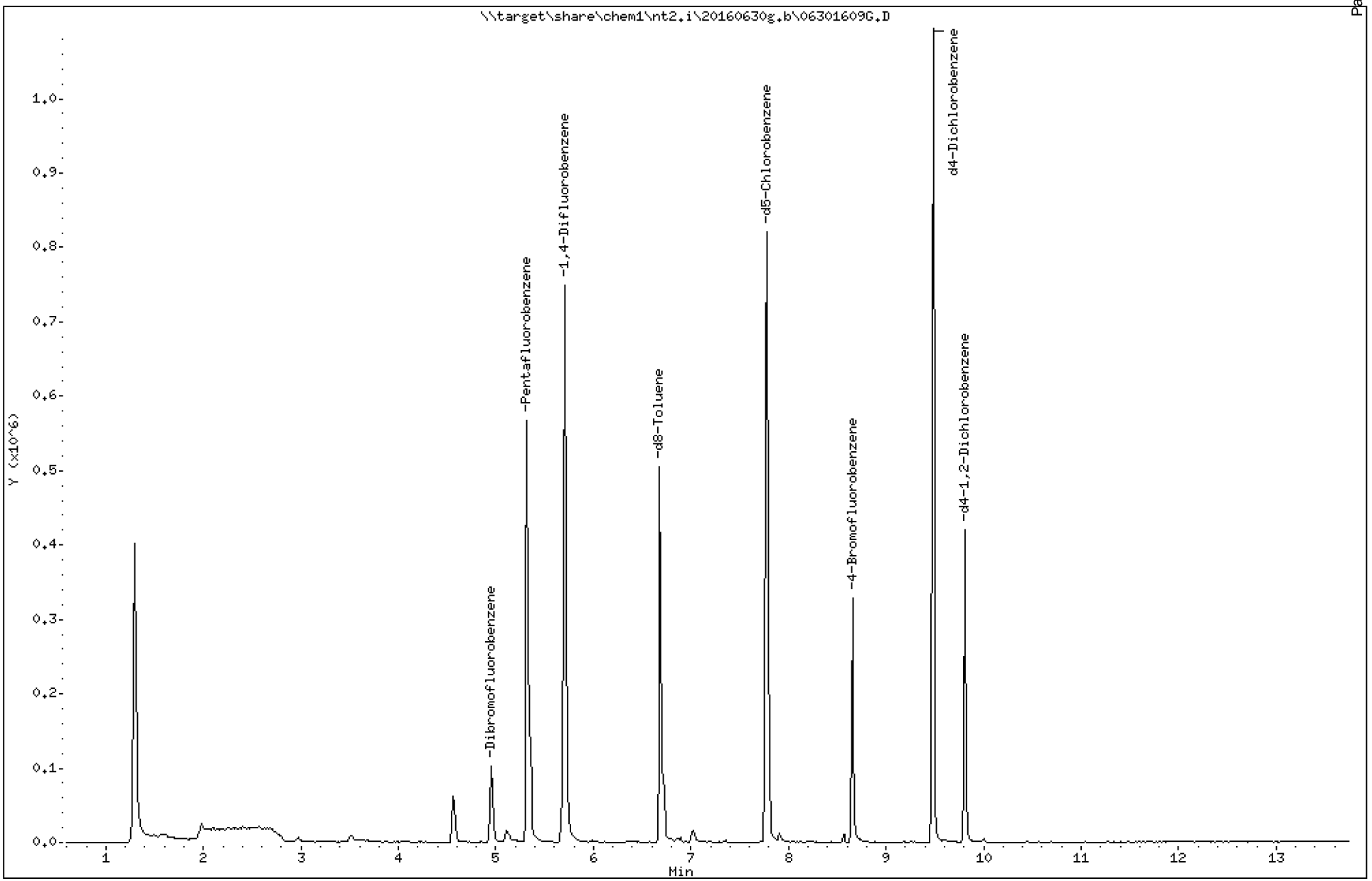
Sample Info: 16F0096-14,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301609G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 10:03

ARI ID: 16F0096-14
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	58790	0.001
8015C 2MP-TMB	(2.98 to 9.26)	83224207	242149	0.003
AK101 nC6-nC10	(3.49 to 8.61)	58706304	242149	0.004
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	58790	0.001
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	242150	0.003

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.679	891031	d8-Toluene
8.655	511361	4-Bromofluorobenzene
9.483	1553054	d4-Dichlorobenzene
7.779	1415225	d5-Chlorobenzene
9.803	679023	d4-1,2-Dichlorobenzene

CHRL-N-05-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-15	File ID:	06301610G.D
Sampled:	06/29/16 11:20	Prepared:	06/30/16 10:24	Analyzed:	06/30/16 10:24
Solids:	91.43	Preparation:	No Prep - Volatiles	Initial/Final:	5.723 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5250	U	2620	5250

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.72	94.4	80 - 120	
4-Bromofluorobenzene	5.0000	5.04	101	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301610.D

Date : 30-JUN-2016 10:24

Client ID:

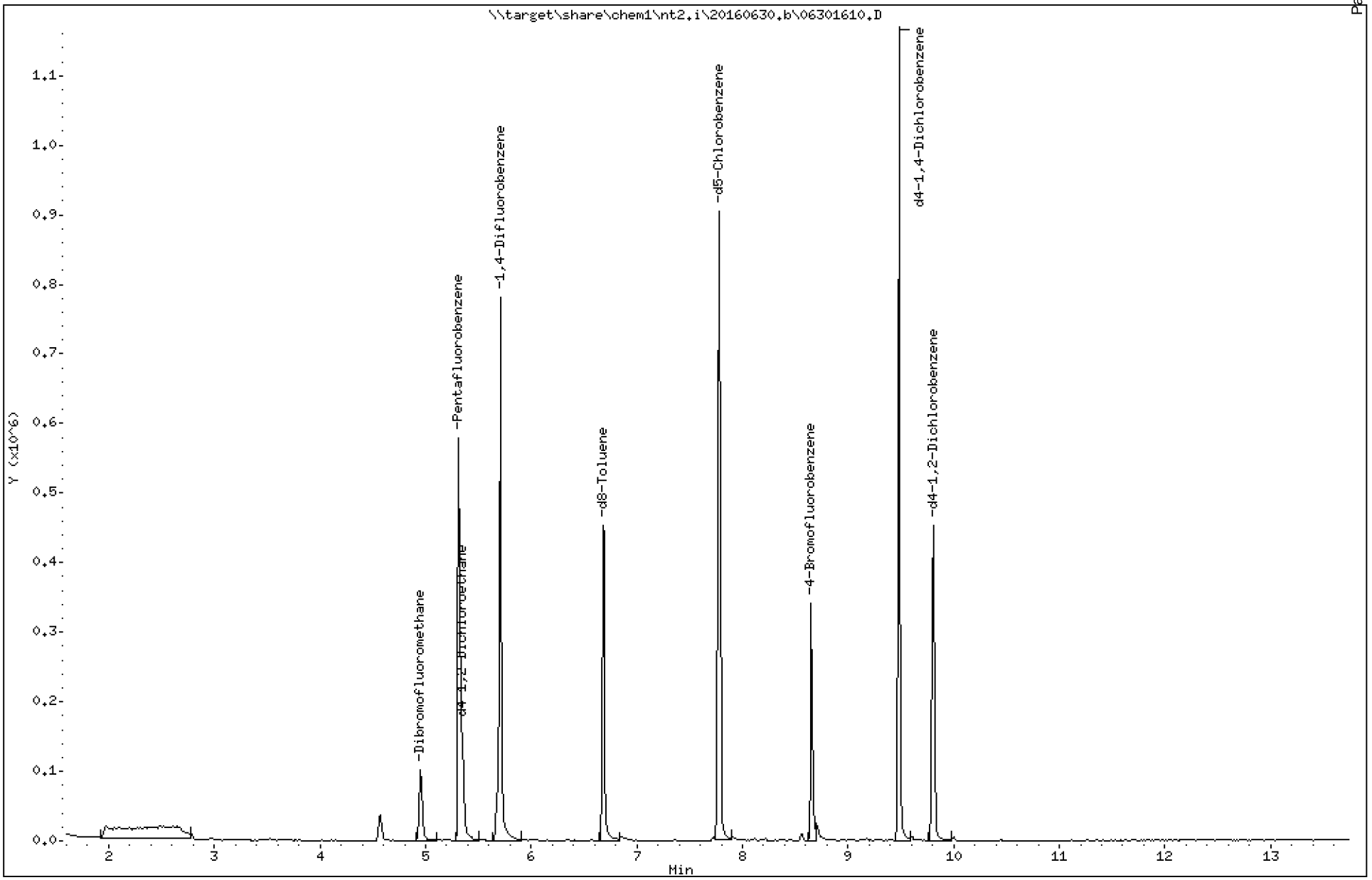
Sample Info: 16F0096-15,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301610.D
Lab Smp Id: 16F0096-15
Inj Date : 30-JUN-2016 10:24
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-15,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.948	4.950	(0.931)	62215	4.23337	4.233
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.315	5.328	(1.000)	323784	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.352	(1.007)	80578	5.03349	5.033
*	37 1,4-Difluorobenzene	114	5.705	5.707	(1.000)	547211	10.0000	
$	43 d8-Toluene	98	6.687	6.689	(1.172)	305963	4.72049	4.720
	44 Toluene	92	6.723	6.725	(1.178)	1203	0.02318	0.02318
*	53 d5-Chlorobenzene	117	7.776	7.778	(1.000)	481143	10.0000	
	55 Ethyl Benzene	106	Compound Not Detected.					
	57 m,p-xylene	106	7.906	7.908	(1.017)	857	0.02378	0.02378
	58 o-Xylene	106	8.214	8.216	(1.056)	435	0.01302	0.01302
$	62 4-Bromofluorobenzene	174	8.651	8.653	(1.113)	89279	5.04323	5.043
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.482	(1.000)	257235	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.813	(1.035)	115526	4.83592	4.836

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301610.D
Lab Smp Id: 16F0096-15
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	323784	30.62
37 1,4-Difluorobenze	400954	200477	801908	547211	36.48
53 d5-Chlorobenzene	354752	177376	709504	481143	35.63
76 d4-1,4-Dichlorobe	191489	95745	382978	257235	34.33

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.26
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	-0.03
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-15
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.233	84.67	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.033	100.67	80-128
$ 43 d8-Toluene	5.000	4.720	94.41	80-120
$ 62 4-Bromofluorobenze	5.000	5.043	100.86	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.836	96.72	80-120

REVIEW SUMMARY FOR FILE - 06301610.D

Lab ID: 16F0096-15
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 10:24

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301610.D

Date : 30-JUN-2016 10:24

Client ID:

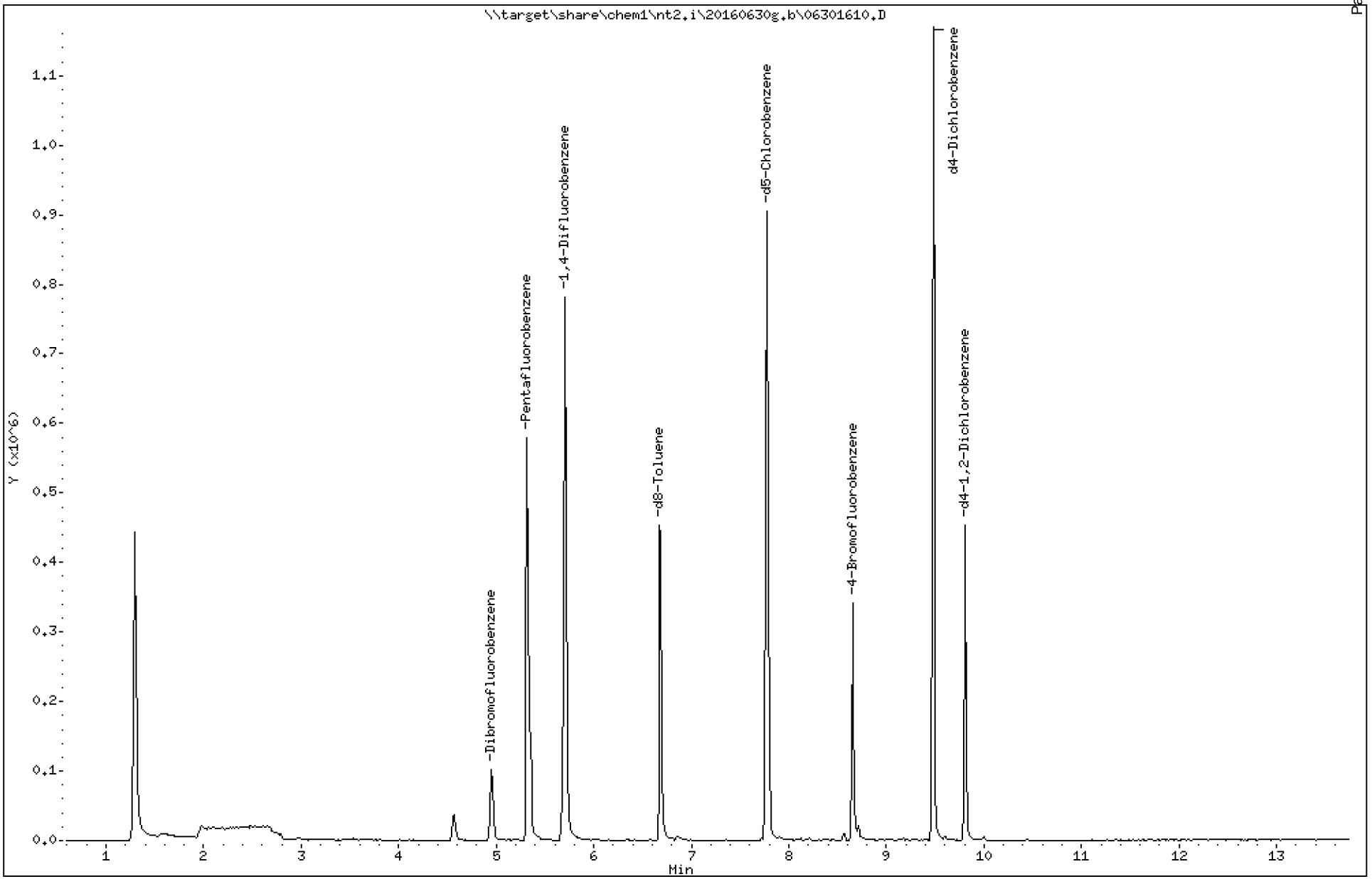
Sample Info: 16F0096-15,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301610.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 10:24

ARI ID: 16F0096-15
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	14775	0.000
8015C 2MP-TMB	(2.98 to 9.26)	83224207	87920	0.001
AK101 nC6-nC10	(3.49 to 8.61)	58706304	87920	0.001
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	14775	0.000
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	87921	0.001

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.676	819948	d8-Toluene
8.652	565119	4-Bromofluorobenzene
9.480	1637394	d4-Dichlorobenzene
7.776	1462914	d5-Chlorobenzene
9.812	716838	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301610G.D

Date : 30-JUN-2016 10:24

Client ID:

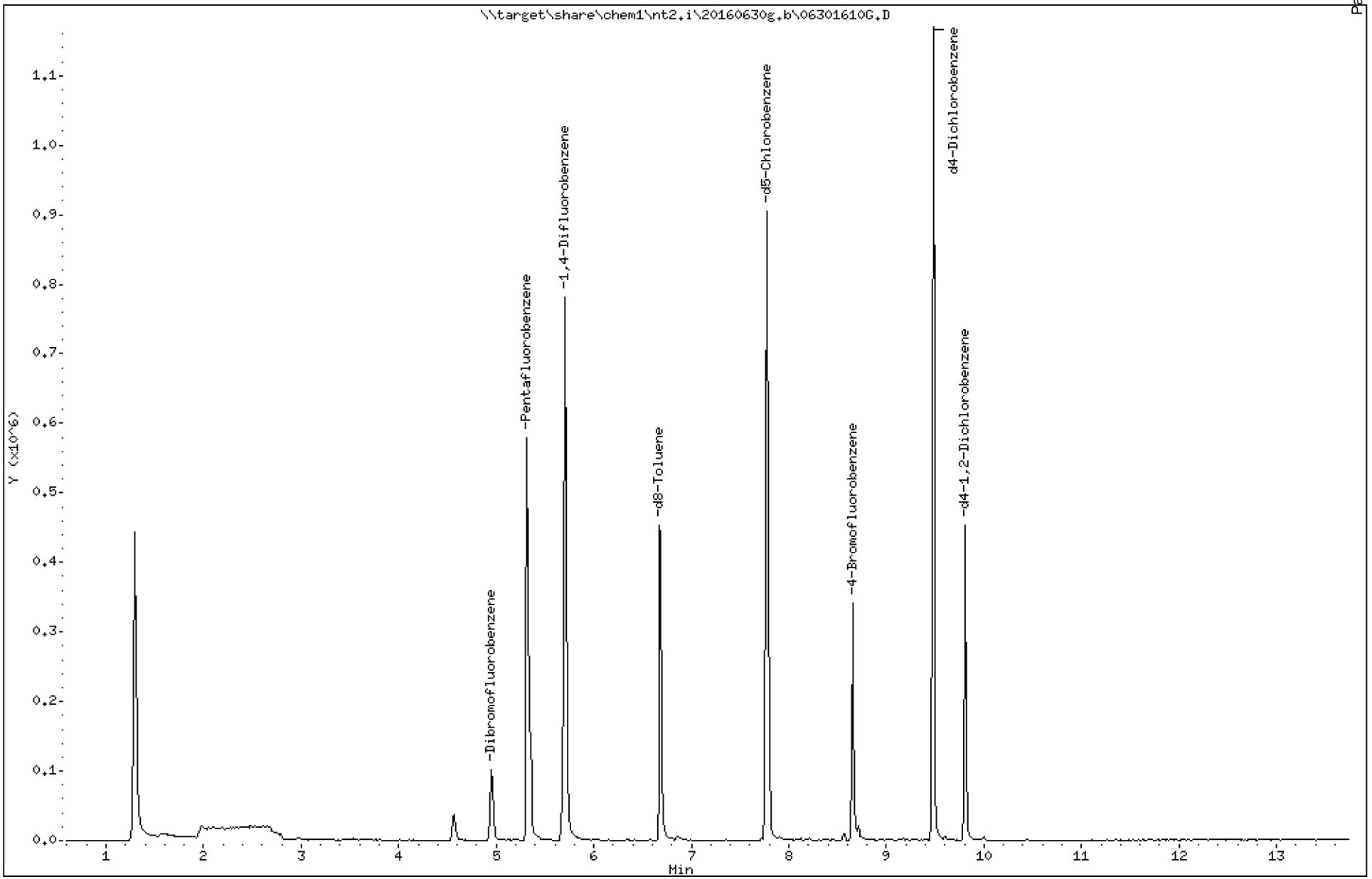
Sample Info: 16F0096-15,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301610G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 10:24

ARI ID: 16F0096-15
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	14775	0.000
8015C 2MP-TMB	(2.98 to 9.26)	83224207	87920	0.001
AK101 nC6-nC10	(3.49 to 8.61)	58706304	87920	0.001
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	14775	0.000
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	87921	0.001

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.676	819948	d8-Toluene
8.652	565119	4-Bromofluorobenzene
9.480	1637394	d4-Dichlorobenzene
7.776	1462914	d5-Chlorobenzene
9.812	716838	d4-1,2-Dichlorobenzene

CHRL-Q-01-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-16	File ID:	06301611G.D
Sampled:	06/29/16 13:05	Prepared:	06/30/16 10:44	Analyzed:	06/30/16 10:44
Solids:	90.75	Preparation:	No Prep - Volatiles	Initial/Final:	4.846 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	6190	U	3100	6190

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.71	94.1	80 - 120	
4-Bromofluorobenzene	5.0000	5.16	103	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301611.D

Date : 30-JUN-2016 10:44

Client ID:

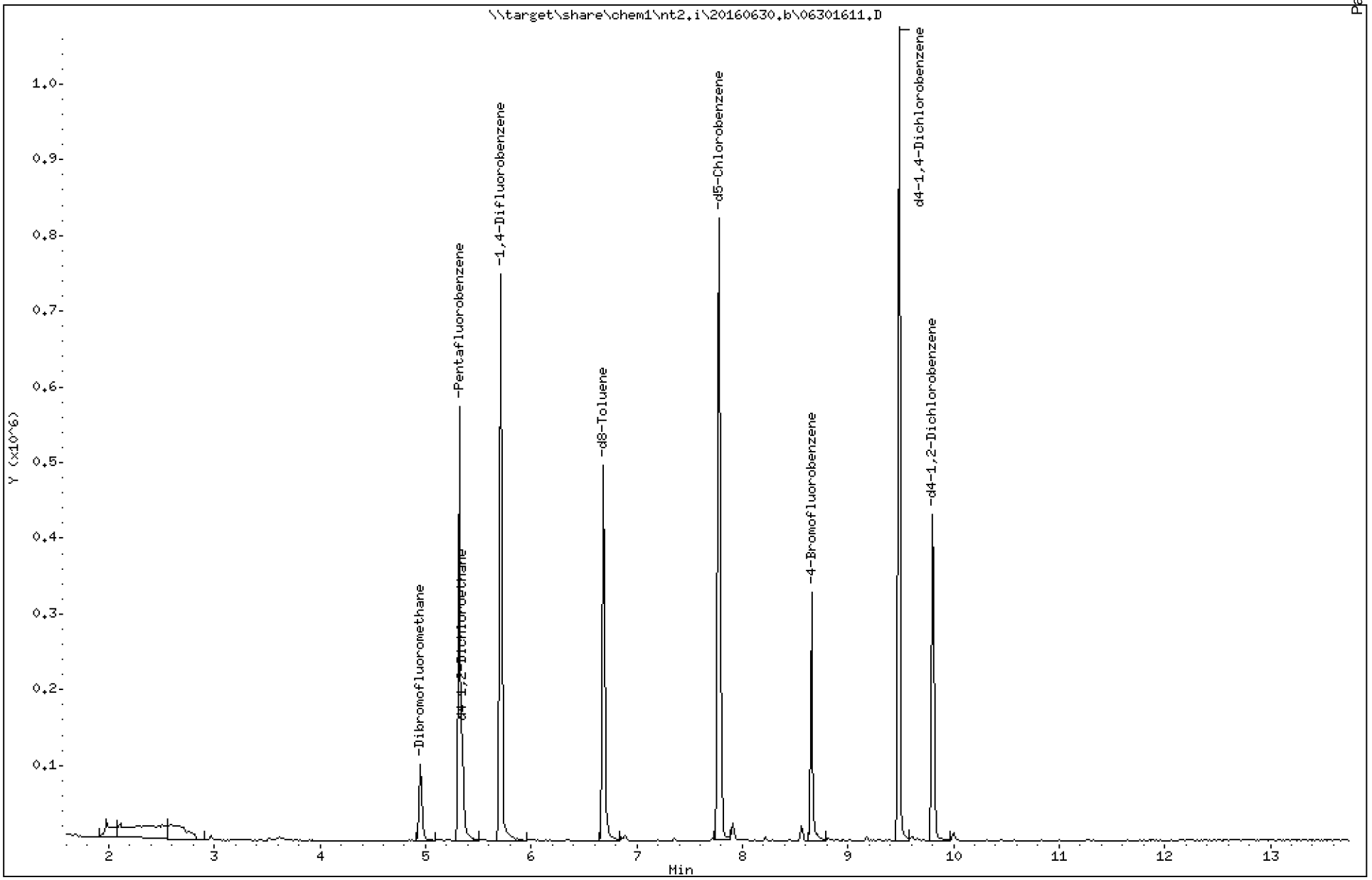
Sample Info: 16F0096-16,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301611.D
Lab Smp Id: 16F0096-16
Inj Date : 30-JUN-2016 10:44
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-16,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.951	4.950	(0.931)	58492	4.00955	4.010
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.318	5.328	(1.000)	321401	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.353	5.352	(1.007)	76958	4.84300	4.843
*	37 1,4-Difluorobenzene	114	5.708	5.707	(1.000)	518782	10.0000	
$	43 d8-Toluene	98	6.678	6.689	(1.170)	289122	4.70511	4.705
	44 Toluene	92	6.714	6.725	(1.176)	10757	0.21861	0.2186
*	53 d5-Chlorobenzene	117	7.779	7.778	(1.000)	464377	10.0000	
	55 Ethyl Benzene	106	Compound Not Detected.					
	57 m,p-xylene	106	7.909	7.908	(1.017)	6275	0.18038	0.1804
	58 o-Xylene	106	8.217	8.216	(1.056)	1384	0.04290	0.04290
$	62 4-Bromofluorobenzene	174	8.655	8.653	(1.113)	88235	5.16421	5.164
*	76 d4-1,4-Dichlorobenzene	152	9.483	9.482	(1.000)	244745	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.814	9.813	(1.035)	114439	5.03489	5.035

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301611.D
Lab Smp Id: 16F0096-16
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	321401	29.66
37 1,4-Difluorobenze	400954	200477	801908	518782	29.39
53 d5-Chlorobenzene	354752	177376	709504	464377	30.90
76 d4-1,4-Dichlorobe	191489	95745	382978	244745	27.81

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.20
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-16
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.010	80.19	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.843	96.86	80-128
$ 43 d8-Toluene	5.000	4.705	94.10	80-120
$ 62 4-Bromofluorobenze	5.000	5.164	103.28	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.035	100.70	80-120

REVIEW SUMMARY FOR FILE - 06301611.D

Lab ID: 16F0096-16
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 10:44

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301611.D

Date : 30-JUN-2016 10:44

Client ID:

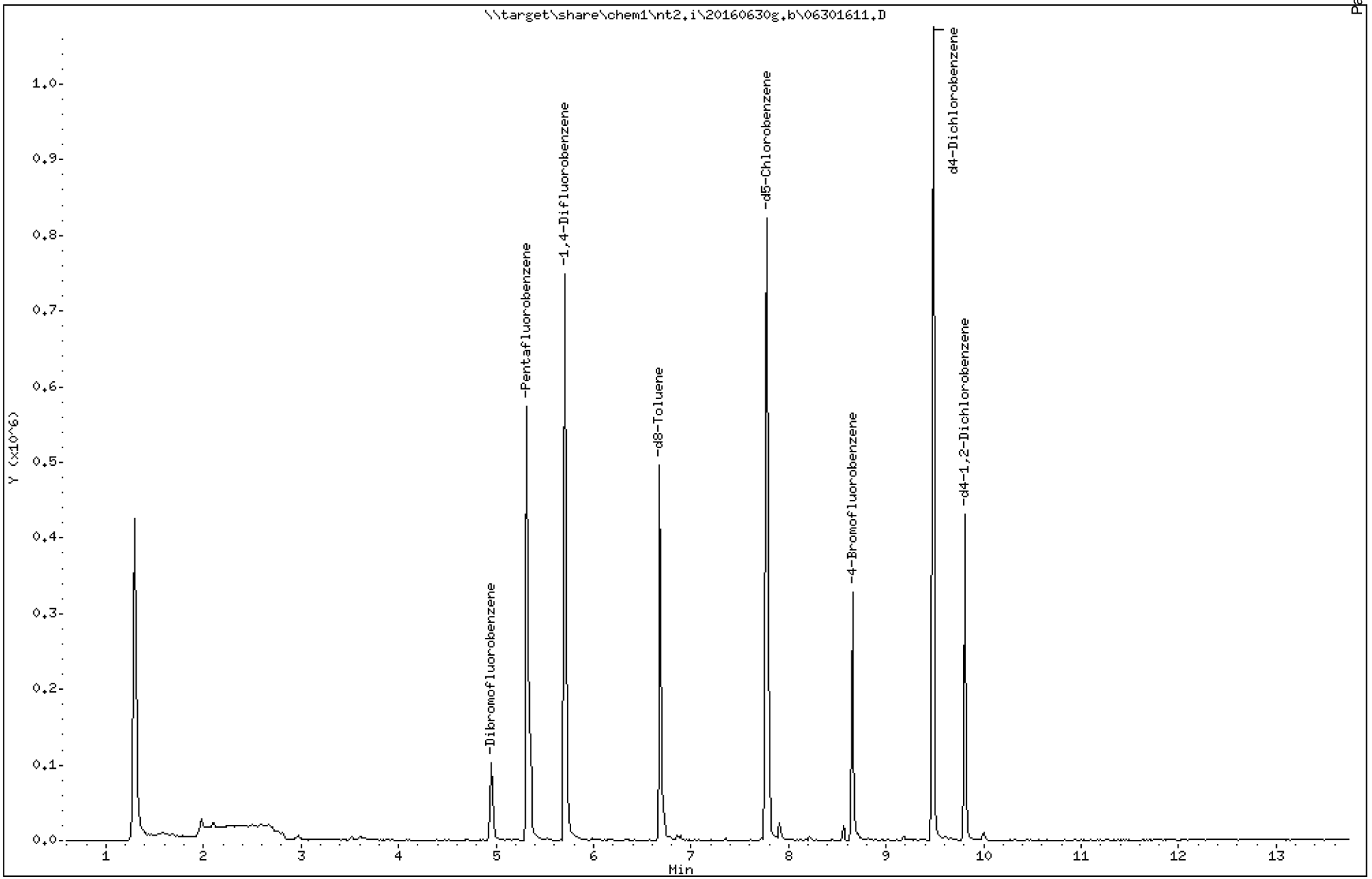
Sample Info: 16F0096-16,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301611.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 10:44

ARI ID: 16F0096-16
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	96278	0.002
8015C 2MP-TMB	(2.98 to 9.26)	83224207	77384	0.001
AK101 nC6-nC10	(3.49 to 8.61)	58706304	77383	0.001
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	96278	0.002
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	96279	0.001

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.679	804627	d8-Toluene
8.655	519849	4-Bromofluorobenzene
9.483	1547486	d4-Dichlorobenzene
7.779	1413412	d5-Chlorobenzene
9.803	681860	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301611G.D

Date : 30-JUN-2016 10:44

Client ID:

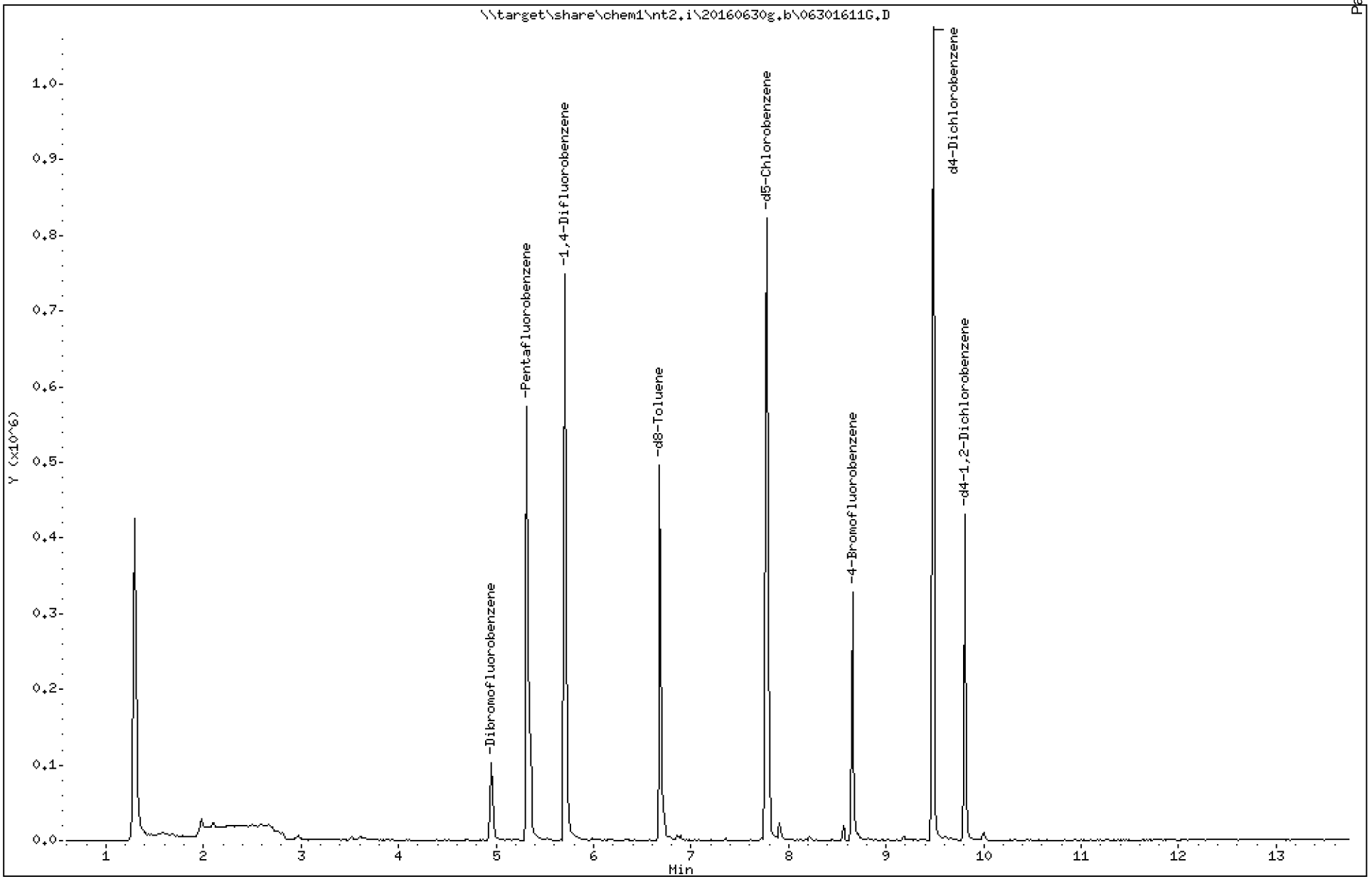
Sample Info: 16F0096-16,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301611G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 10:44

ARI ID: 16F0096-16
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	96278	0.002
8015C 2MP-TMB	(2.98 to 9.26)	83224207	77384	0.001
AK101 nC6-nC10	(3.49 to 8.61)	58706304	77383	0.001
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	96278	0.002
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	96279	0.001

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.679	804627	d8-Toluene
8.655	519849	4-Bromofluorobenzene
9.483	1547486	d4-Dichlorobenzene
7.779	1413412	d5-Chlorobenzene
9.803	681860	d4-1,2-Dichlorobenzene

CHRL-Q-02-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-17	File ID:	06301612G.D
Sampled:	06/29/16 12:55	Prepared:	06/30/16 11:05	Analyzed:	06/30/16 11:05
Solids:	90.03	Preparation:	No Prep - Volatiles	Initial/Final:	5.906 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5260	U	2630	5260

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.79	95.8	80 - 120	
4-Bromofluorobenzene	5.0000	5.17	103	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301612.D

Date : 30-JUN-2016 11:05

Client ID:

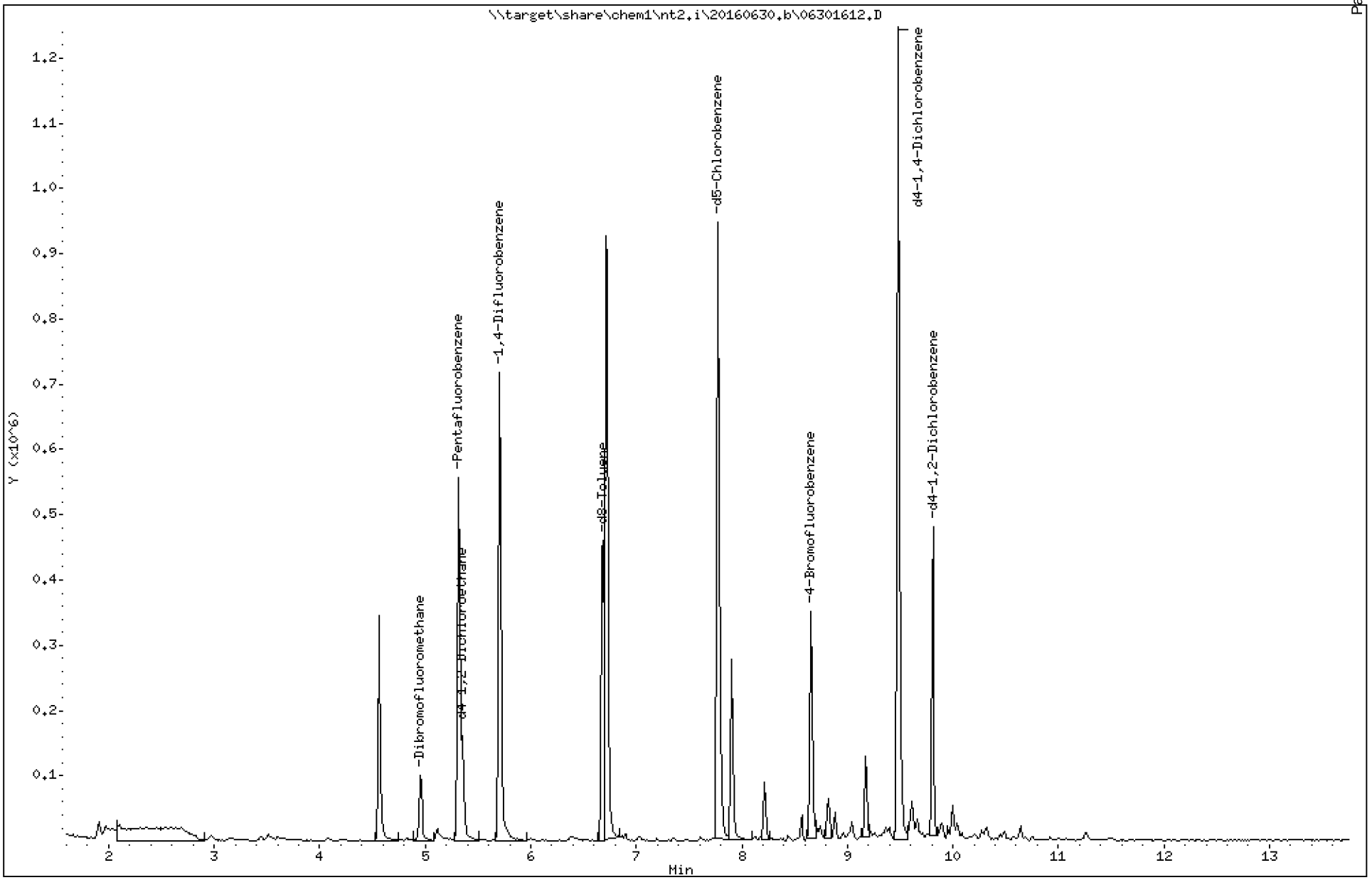
Sample Info: 16F0096-17,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301612.D
Lab Smp Id: 16F0096-17
Inj Date : 30-JUN-2016 11:05
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-17,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.948	4.950	(0.931)	61084	4.23856	4.239
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.314	5.328	(1.000)	317508	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.352	(1.007)	79767	5.08132	5.081
*	37 1,4-Difluorobenzene	114	5.705	5.707	(1.000)	535185	10.0000	
$	43 d8-Toluene	98	6.687	6.689	(1.172)	303638	4.78989	4.790
	44 Toluene	92	6.722	6.725	(1.178)	395144	7.78423	7.784
*	53 d5-Chlorobenzene	117	7.776	7.778	(1.000)	489763	10.0000	
	55 Ethyl Benzene	106	7.799	7.801	(1.003)	13469	0.44386	0.4439
	57 m,p-xylene	106	7.906	7.908	(1.017)	76670	2.08966	2.090
	58 o-Xylene	106	8.213	8.216	(1.056)	24487	0.71975	0.7198
$	62 4-Bromofluorobenzene	174	8.651	8.653	(1.113)	93122	5.16773	5.168
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.482	(1.000)	272265	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.813	(1.035)	121092	4.78909	4.789

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301612.D
Lab Smp Id: 16F0096-17
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	317508	28.09
37 1,4-Difluorobenze	400954	200477	801908	535185	33.48
53 d5-Chlorobenzene	354752	177376	709504	489763	38.06
76 d4-1,4-Dichlorobe	191489	95745	382978	272265	42.18

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.31	-0.26
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	-0.04
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.03
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 08:07

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-17
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.239	84.77	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.081	101.63	80-128
$ 43 d8-Toluene	5.000	4.790	95.80	80-120
$ 62 4-Bromofluorobenze	5.000	5.168	103.35	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.789	95.78	80-120

REVIEW SUMMARY FOR FILE - 06301612.D

Lab ID: 16F0096-17
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 11:05

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301612.D

Date : 30-JUN-2016 11:05

Client ID:

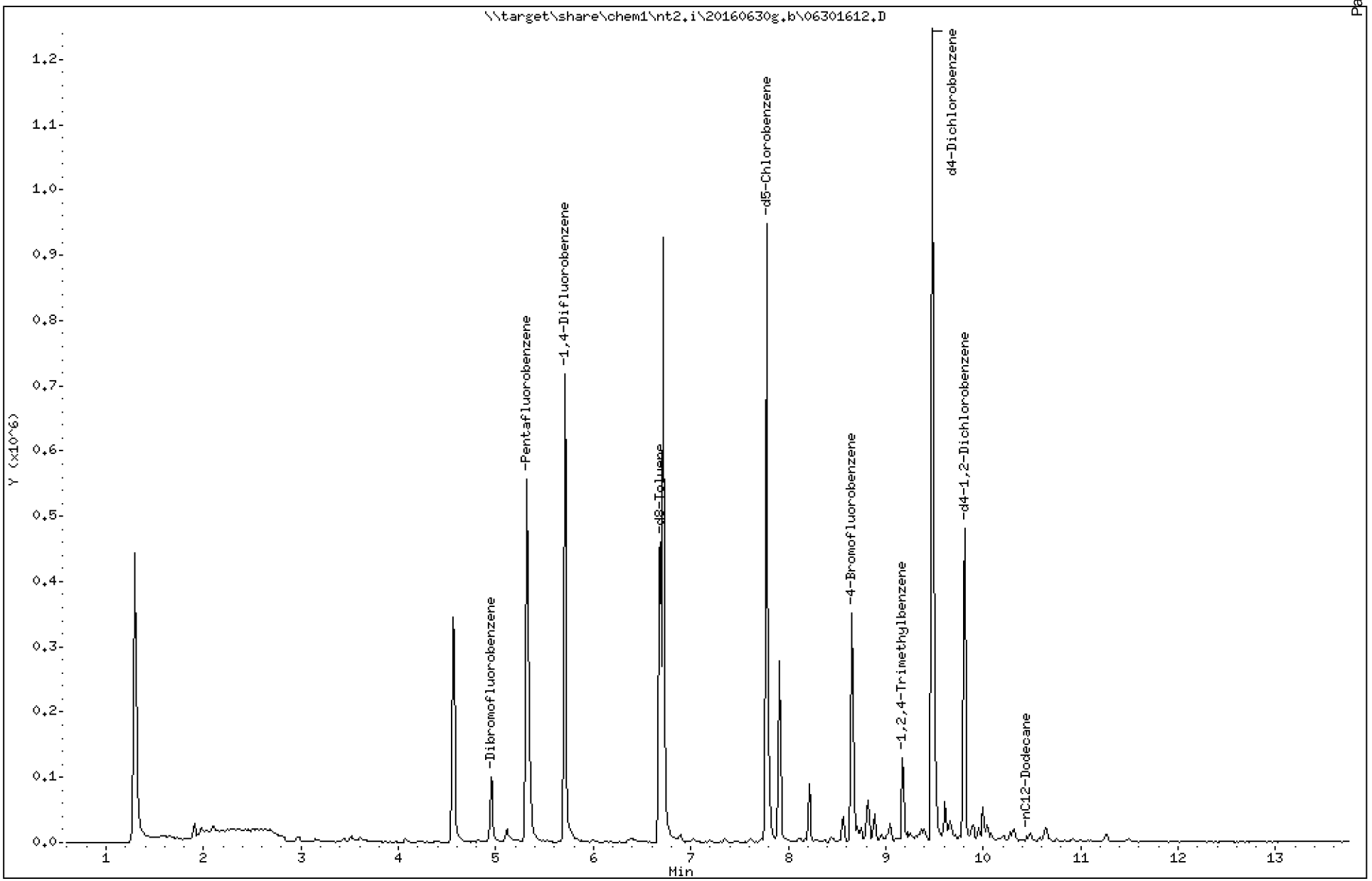
Sample Info: 16F0096-17,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301612.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 11:05

ARI ID: 16F0096-17
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	1538756	0.032
8015C 2MP-TMB	(2.98 to 9.26)	83224207	1825260	0.022
AK101 nC6-nC10	(3.49 to 8.61)	58706304	1390626	0.024
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	1586863	0.032
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	2266377	0.031

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.687	2375509	d8-Toluene
8.652	627213	4-Bromofluorobenzene
9.480	1843922	d4-Dichlorobenzene
7.776	1587854	d5-Chlorobenzene
9.811	822657	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301612G.D

Date : 30-JUN-2016 11:05

Client ID:

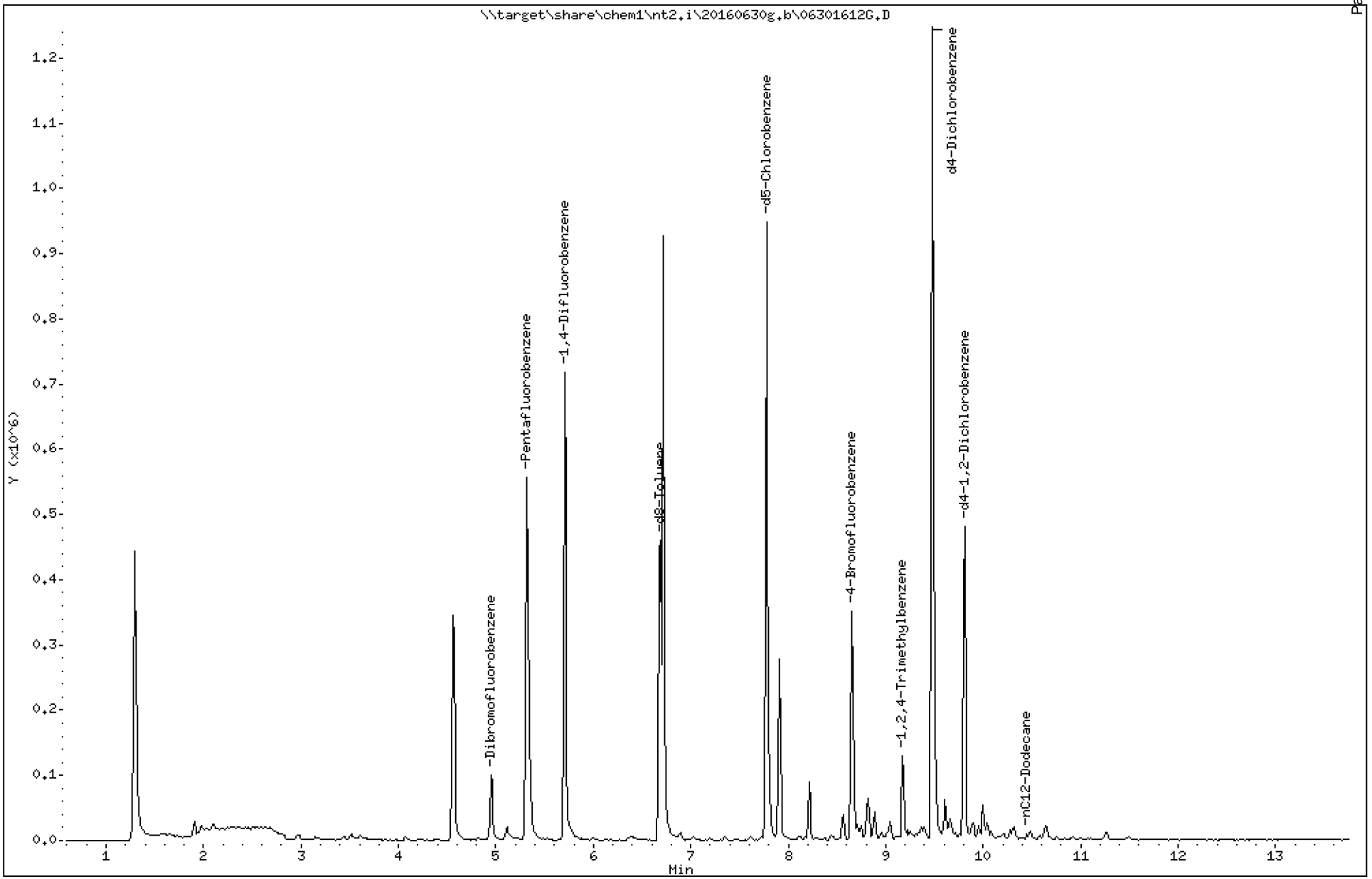
Sample Info: 16F0096-17,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301612G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 11:05

ARI ID: 16F0096-17
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	1538756	0.032
8015C 2MP-TMB	(2.98 to 9.26)	83224207	1825260	0.022
AK101 nC6-nC10	(3.49 to 8.61)	58706304	1390626	0.024
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	1586863	0.032
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	2266377	0.031

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.687	2375509	d8-Toluene
8.652	627213	4-Bromofluorobenzene
9.480	1843922	d4-Dichlorobenzene
7.776	1587854	d5-Chlorobenzene
9.811	822657	d4-1,2-Dichlorobenzene

CHRL-Q-03-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-18	File ID:	06301613G.D
Sampled:	06/29/16 12:45	Prepared:	06/30/16 11:25	Analyzed:	06/30/16 11:25
Solids:	93.23	Preparation:	No Prep - Volatiles	Initial/Final:	4.518 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	6880		3150	6300

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.80	96.1	80 - 120	
4-Bromofluorobenzene	5.0000	5.35	107	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301613.D

Date : 30-JUN-2016 11:25

Client ID:

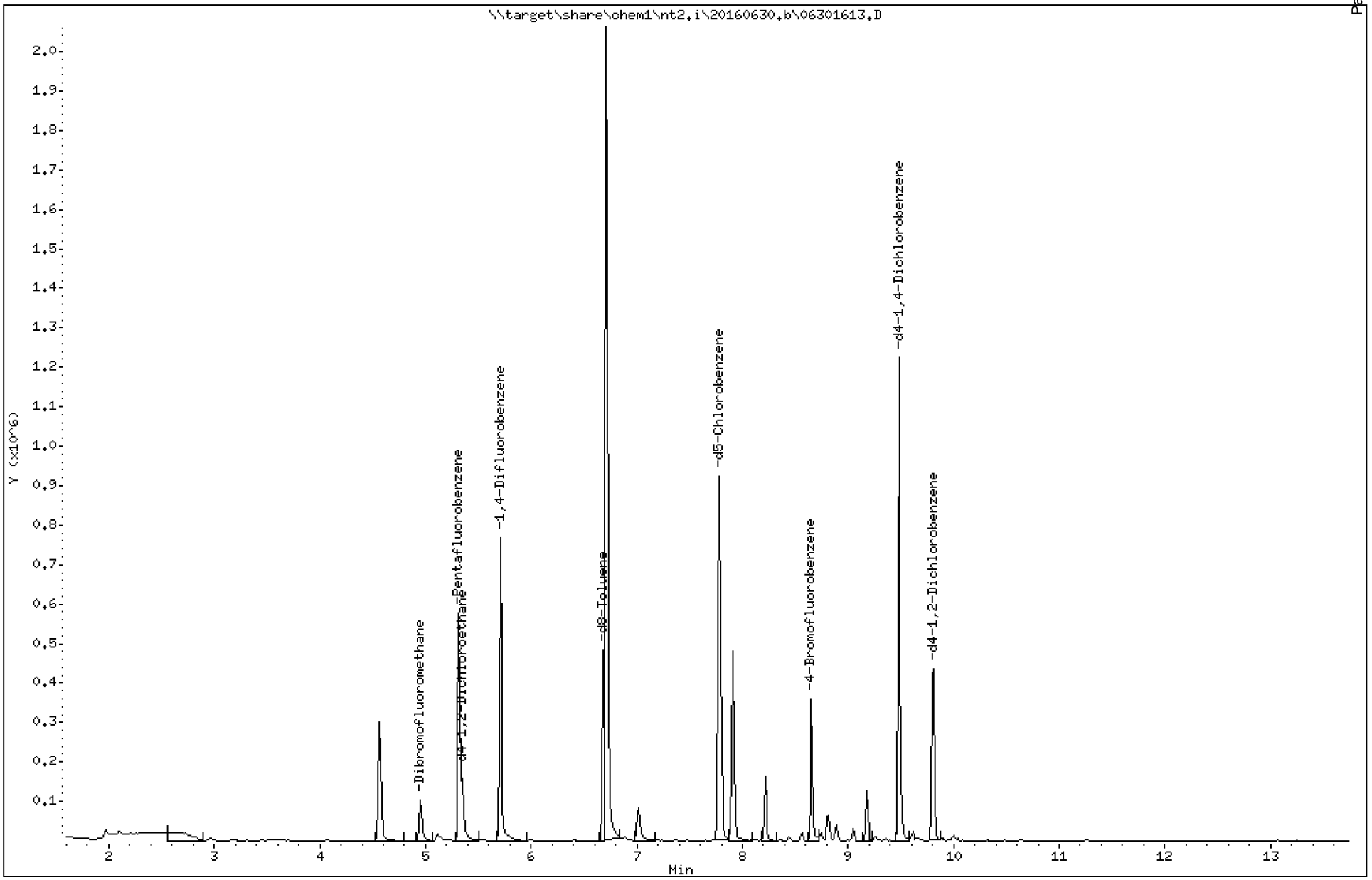
Sample Info: 16F0096-18,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301613.D
Lab Smp Id: 16F0096-18
Inj Date : 30-JUN-2016 11:25
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-18,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.949	4.950	(0.931)	59285	3.94784	3.948(R)
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.316	5.328	(1.000)	330850	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.351	5.352	(1.007)	82986	5.07320	5.073
*	37 1,4-Difluorobenzene	114	5.706	5.707	(1.000)	545130	10.0000	
$	43 d8-Toluene	98	6.676	6.689	(1.170)	310142	4.80323	4.803
	44 Toluene	92	6.712	6.725	(1.176)	809259	15.6513	15.651
*	53 d5-Chlorobenzene	117	7.777	7.778	(1.000)	496275	10.0000	
	55 Ethyl Benzene	106	7.800	7.801	(1.003)	23268	0.75672	0.7567
	57 m,p-xylene	106	7.907	7.908	(1.017)	128252	3.44967	3.450
	58 o-Xylene	106	8.215	8.216	(1.056)	43999	1.27630	1.276
$	62 4-Bromofluorobenzene	174	8.652	8.653	(1.113)	97655	5.34818	5.348
*	76 d4-1,4-Dichlorobenzene	152	9.481	9.482	(1.000)	268984	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.812	9.813	(1.035)	118700	4.75175	4.752

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301613.D
Lab Smp Id: 16F0096-18
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	330850	33.47
37 1,4-Difluorobenze	400954	200477	801908	545130	35.96
53 d5-Chlorobenzene	354752	177376	709504	496275	39.89
76 d4-1,4-Dichlorobe	191489	95745	382978	268984	40.47

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.24
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	-0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-18
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	3.948	78.96*	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.073	101.46	80-128
$ 43 d8-Toluene	5.000	4.803	96.06	80-120
$ 62 4-Bromofluorobenze	5.000	5.348	106.96	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.752	95.04	80-120

REVIEW SUMMARY FOR FILE - 06301613.D

Lab ID: 16F0096-18
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 11:25

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301613.D

Date : 30-JUN-2016 11:25

Client ID:

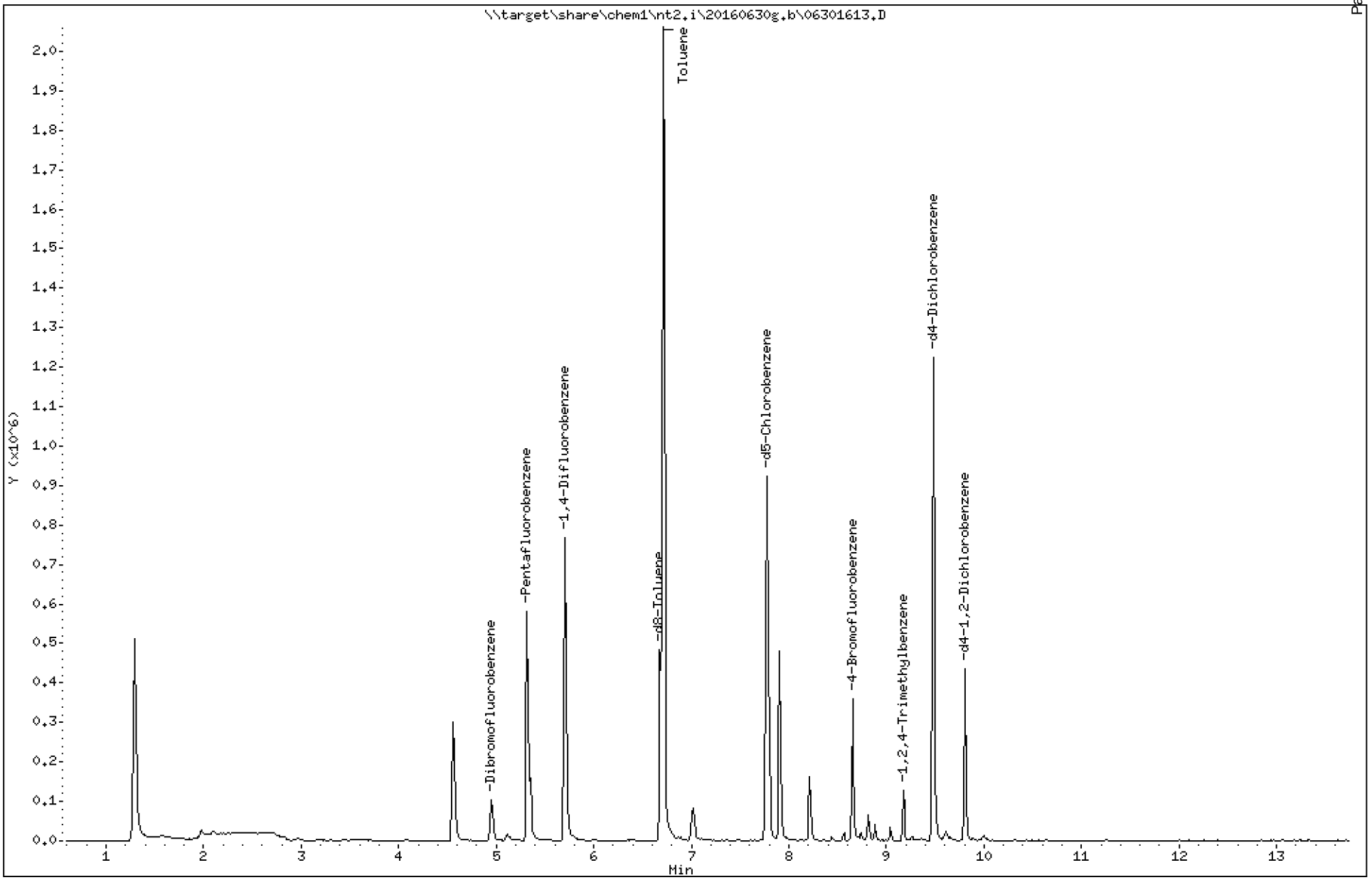
Sample Info: 16F0096-18,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301613.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 11:25

ARI ID: 16F0096-18
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	5376286	0.112
8015C 2MP-TMB	(2.98 to 9.26)	83224207	5870299	0.071
AK101 nC6-nC10	(3.49 to 8.61)	58706304	5419763	0.092
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	5376286	0.109
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	5961327	0.081

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.677	558278	d8-Toluene
8.653	605596	4-Bromofluorobenzene
9.481	1825218	d4-Dichlorobenzene
7.777	1682728	d5-Chlorobenzene
9.813	745025	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301613G.D

Date : 30-JUN-2016 11:25

Client ID:

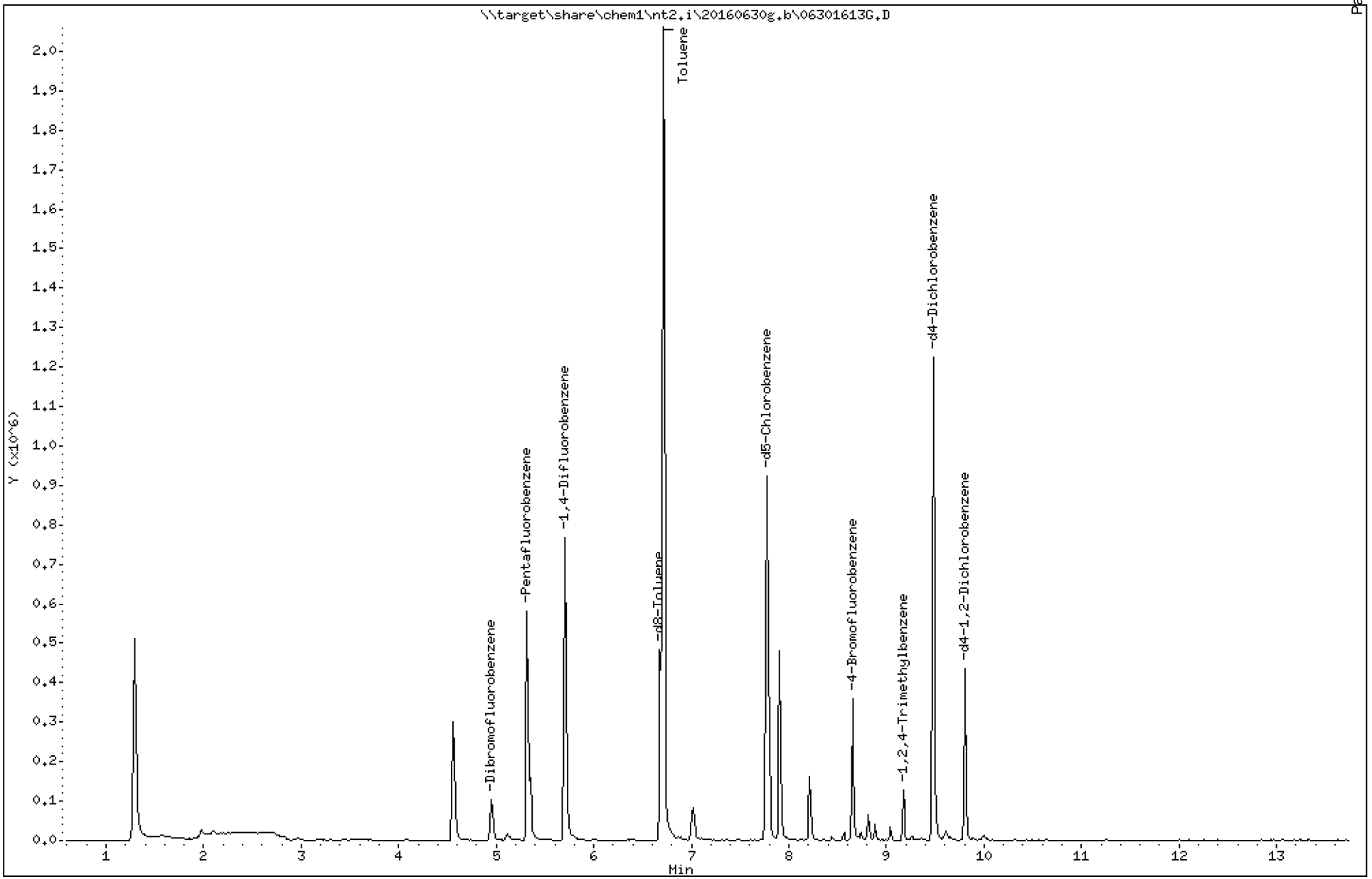
Sample Info: 16F0096-18,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301613G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 11:25

ARI ID: 16F0096-18
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	5376286	0.112
8015C 2MP-TMB	(2.98 to 9.26)	83224207	5870299	0.071
AK101 nC6-nC10	(3.49 to 8.61)	58706304	5419763	0.092
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	5376286	0.109
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	5961327	0.081

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.677	558278	d8-Toluene
8.653	605596	4-Bromofluorobenzene
9.481	1825218	d4-Dichlorobenzene
7.777	1682728	d5-Chlorobenzene
9.813	745025	d4-1,2-Dichlorobenzene

CHRL-Q-04-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-19	File ID:	06301614G.D
Sampled:	06/29/16 12:35	Prepared:	06/30/16 11:46	Analyzed:	06/30/16 11:46
Solids:	92.14	Preparation:	No Prep - Volatiles	Initial/Final:	5.523 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5340	U	2670	5340

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.82	96.3	80 - 120	
4-Bromofluorobenzene	5.0000	5.18	104	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301614.D

Date : 30-JUN-2016 11:46

Client ID:

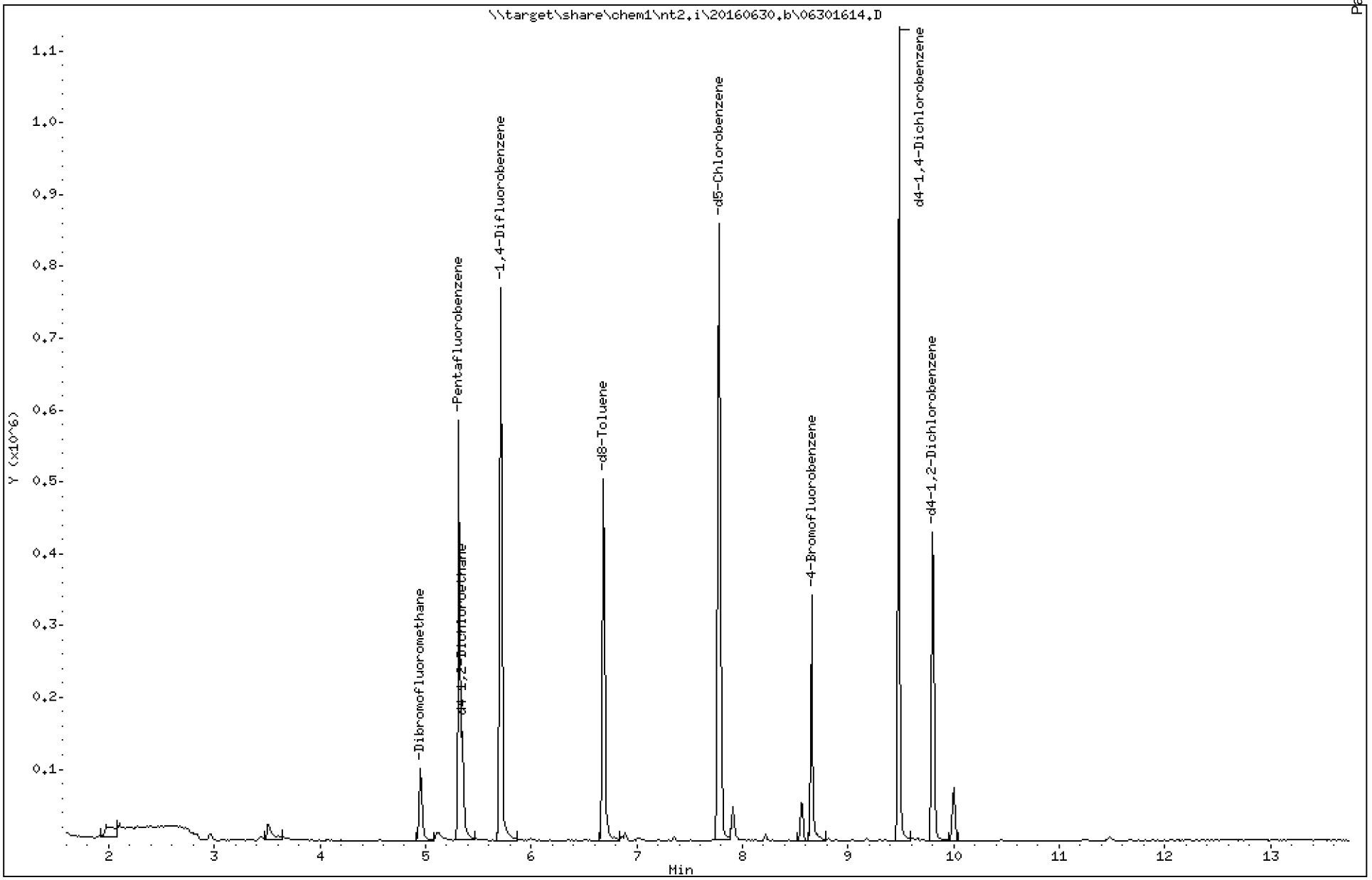
Sample Info: 16F0096-19,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301614.D
Lab Smp Id: 16F0096-19
Inj Date : 30-JUN-2016 11:46
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-19,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.950	4.950	(0.931)	57976	4.00796	4.008
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.317	5.328	(1.000)	318692	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.352	5.352	(1.007)	82872	5.25950	5.260
*	37 1,4-Difluorobenzene	114	5.707	5.707	(1.000)	535329	10.0000	
$	43 d8-Toluene	98	6.678	6.689	(1.170)	305324	4.81519	4.815
	44 Toluene	92	6.713	6.725	(1.176)	8213	0.16175	0.1618
*	53 d5-Chlorobenzene	117	7.778	7.778	(1.000)	479624	10.0000	
	55 Ethyl Benzene	106	7.802	7.801	(1.003)	3621	0.12185	0.1218
	57 m,p-xylene	106	7.908	7.908	(1.017)	13226	0.36810	0.3681
	58 o-Xylene	106	8.216	8.216	(1.056)	2821	0.08467	0.08467
$	62 4-Bromofluorobenzene	174	8.654	8.653	(1.113)	91464	5.18302	5.183
*	76 d4-1,4-Dichlorobenzene	152	9.482	9.482	(1.000)	251810	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.813	9.813	(1.035)	113992	4.87451	4.875

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301614.D
Lab Smp Id: 16F0096-19
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	318692	28.57
37 1,4-Difluorobenze	400954	200477	801908	535329	33.51
53 d5-Chlorobenzene	354752	177376	709504	479624	35.20
76 d4-1,4-Dichlorobe	191489	95745	382978	251810	31.50

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.21
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 08:07

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-19
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.008	80.16	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.260	105.19	80-128
$ 43 d8-Toluene	5.000	4.815	96.30	80-120
$ 62 4-Bromofluorobenze	5.000	5.183	103.66	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.875	97.49	80-120

REVIEW SUMMARY FOR FILE - 06301614.D

Lab ID: 16F0096-19
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 11:46

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301614.D

Date : 30-JUN-2016 11:46

Client ID:

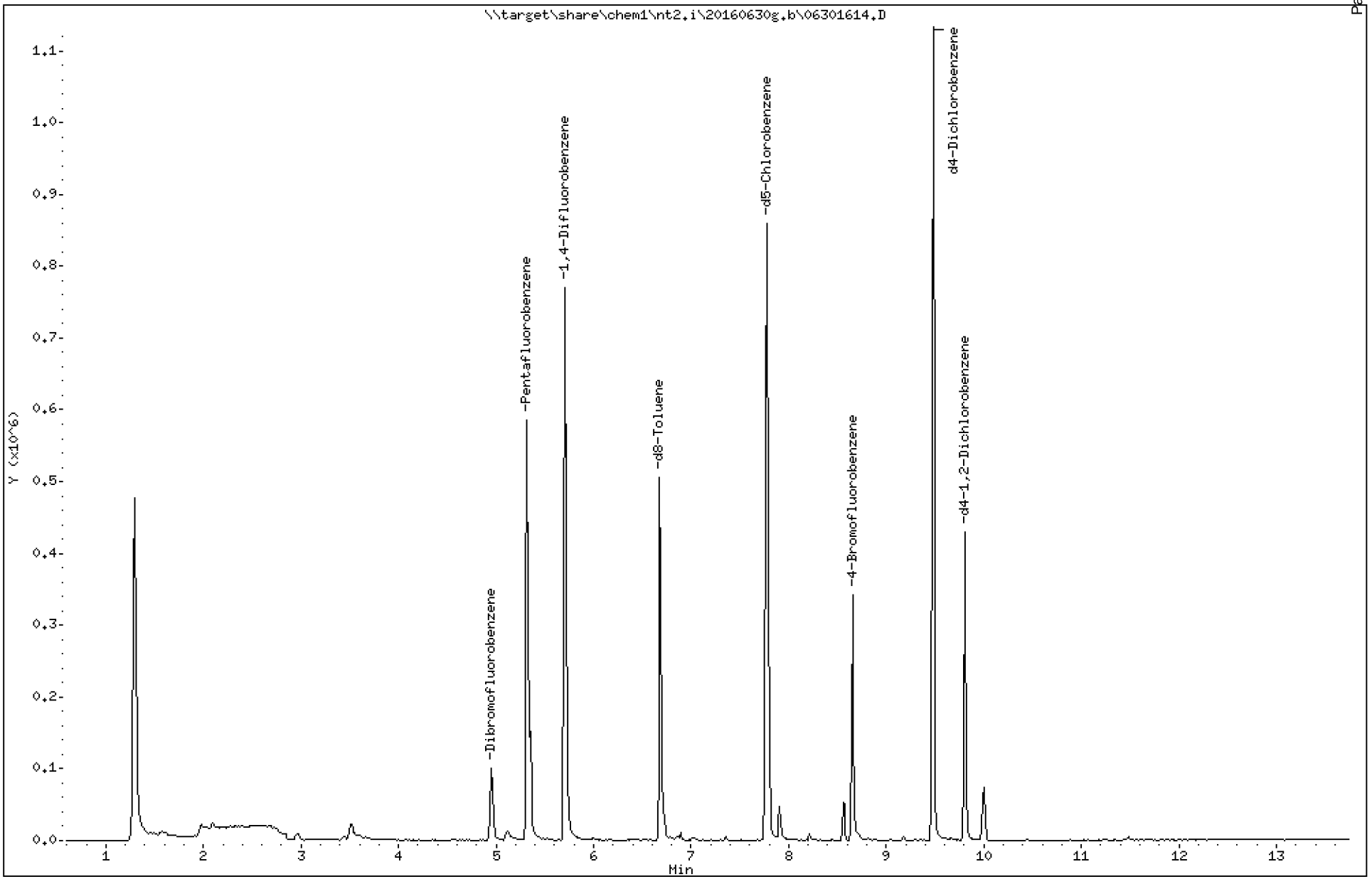
Sample Info: 16F0096-19,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301614.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 11:46

ARI ID: 16F0096-19
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	297144	0.006
8015C 2MP-TMB	(2.98 to 9.26)	83224207	270055	0.003
AK101 nC6-nC10	(3.49 to 8.61)	58706304	270054	0.005
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	297144	0.006
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	395604	0.005

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.678	833713	d8-Toluene
8.654	537215	4-Bromofluorobenzene
9.483	1597302	d4-Dichlorobenzene
7.779	1468161	d5-Chlorobenzene
9.802	698854	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301614G.D

Date : 30-JUN-2016 11:46

Client ID:

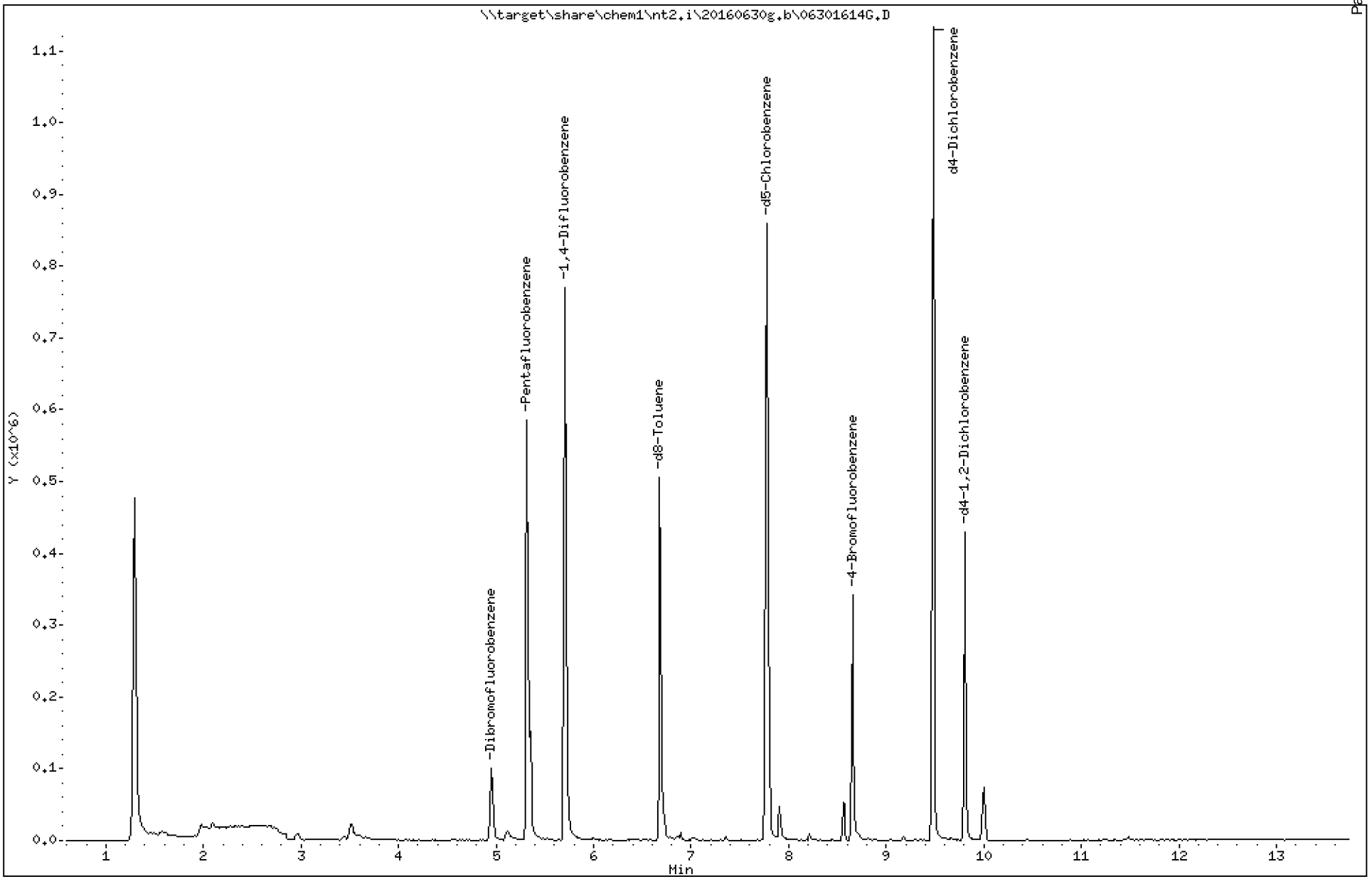
Sample Info: 16F0096-19,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301614G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 11:46

ARI ID: 16F0096-19
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	297144	0.006
8015C 2MP-TMB	(2.98 to 9.26)	83224207	270055	0.003
AK101 nC6-nC10	(3.49 to 8.61)	58706304	270054	0.005
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	297144	0.006
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	395604	0.005

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.678	833713	d8-Toluene
8.654	537215	4-Bromofluorobenzene
9.483	1597302	d4-Dichlorobenzene
7.779	1468161	d5-Chlorobenzene
9.802	698854	d4-1,2-Dichlorobenzene

CHRL-Q-05-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-20	File ID:	06301615G.D
Sampled:	06/29/16 12:25	Prepared:	06/30/16 12:07	Analyzed:	06/30/16 12:07
Solids:	92.63	Preparation:	No Prep - Volatiles	Initial/Final:	5.302 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5490	U	2740	5490

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.77	95.4	80 - 120	
4-Bromofluorobenzene	5.0000	4.91	98.2	78 - 123	

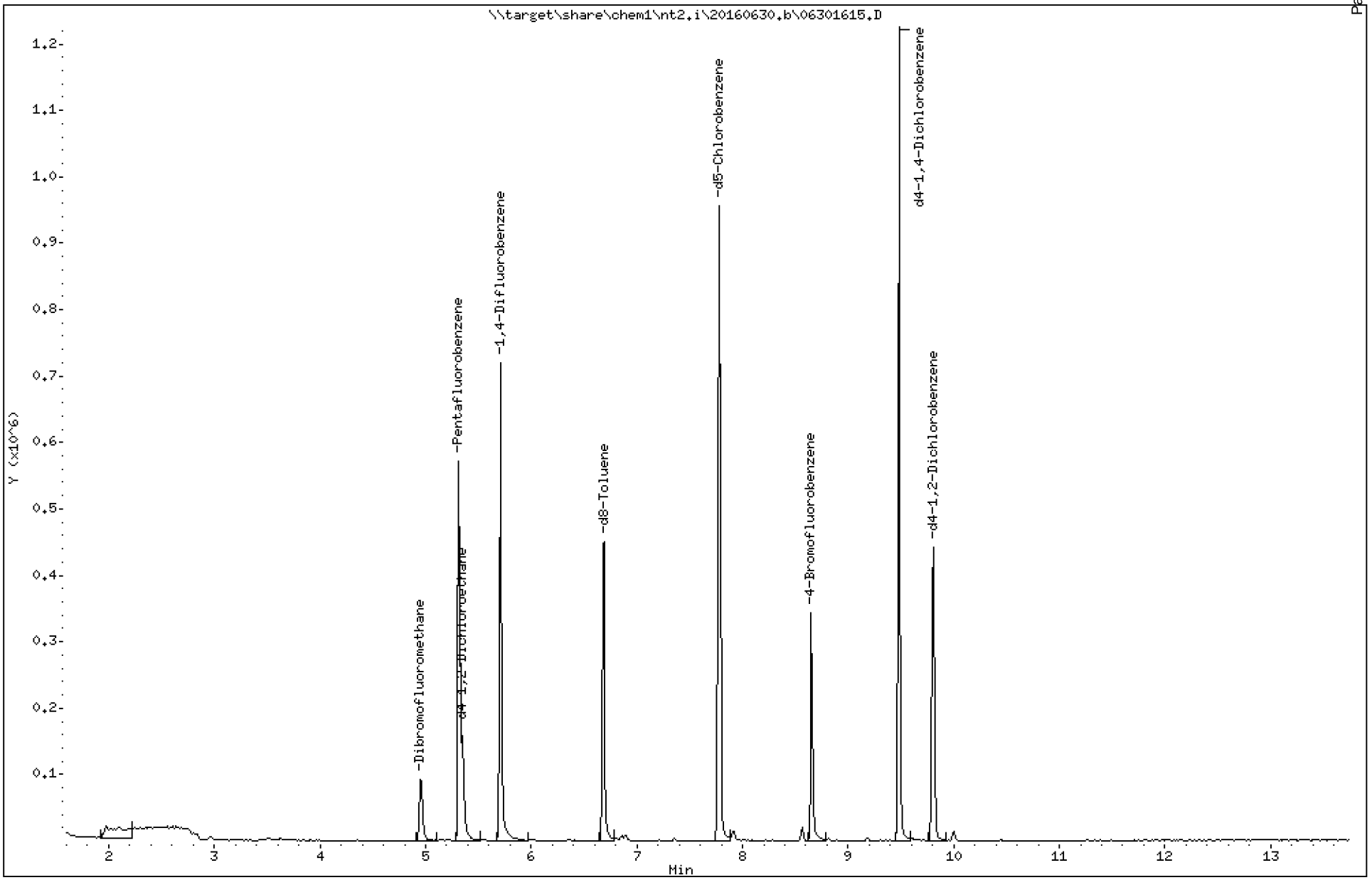
* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301615.D
Date : 30-JUN-2016 12:07
Client ID:
Sample Info: 16F0096-20,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH
Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301615.D
Lab Smp Id: 16F0096-20
Inj Date : 30-JUN-2016 12:07
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-20,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.948	4.950	(0.931)	58953	3.90117	3.901(R)
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.314	5.328	(1.000)	332933	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.352	(1.007)	83414	5.06746	5.067
*	37 1,4-Difluorobenzene	114	5.705	5.707	(1.000)	550484	10.0000	
$	43 d8-Toluene	98	6.687	6.689	(1.172)	311097	4.77116	4.771
	44 Toluene	92	6.722	6.725	(1.178)	1406	0.02693	0.02693
*	53 d5-Chlorobenzene	117	7.776	7.778	(1.000)	505290	10.0000	
	55 Ethyl Benzene	106	Compound Not Detected.					
	57 m,p-xylene	106	7.906	7.908	(1.017)	4291	0.11336	0.1134
	58 o-Xylene	106	8.225	8.216	(1.058)	694	0.01977	0.01977
$	62 4-Bromofluorobenzene	174	8.651	8.653	(1.113)	91307	4.91131	4.911
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.482	(1.000)	270368	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.813	(1.035)	119642	4.76494	4.765

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301615.D
Lab Smp Id: 16F0096-20
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	332933	34.31
37 1,4-Difluorobenze	400954	200477	801908	550484	37.29
53 d5-Chlorobenzene	354752	177376	709504	505290	42.43
76 d4-1,4-Dichlorobe	191489	95745	382978	270368	41.19

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.31	-0.26
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	-0.04
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.03
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 08:07

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-20
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	3.901	78.02*	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.067	101.35	80-128
$ 43 d8-Toluene	5.000	4.771	95.42	80-120
$ 62 4-Bromofluorobenze	5.000	4.911	98.23	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.765	95.30	80-120

REVIEW SUMMARY FOR FILE - 06301615.D

Lab ID: 16F0096-20
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 12:07

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301615.D

Date : 30-JUN-2016 12:07

Client ID:

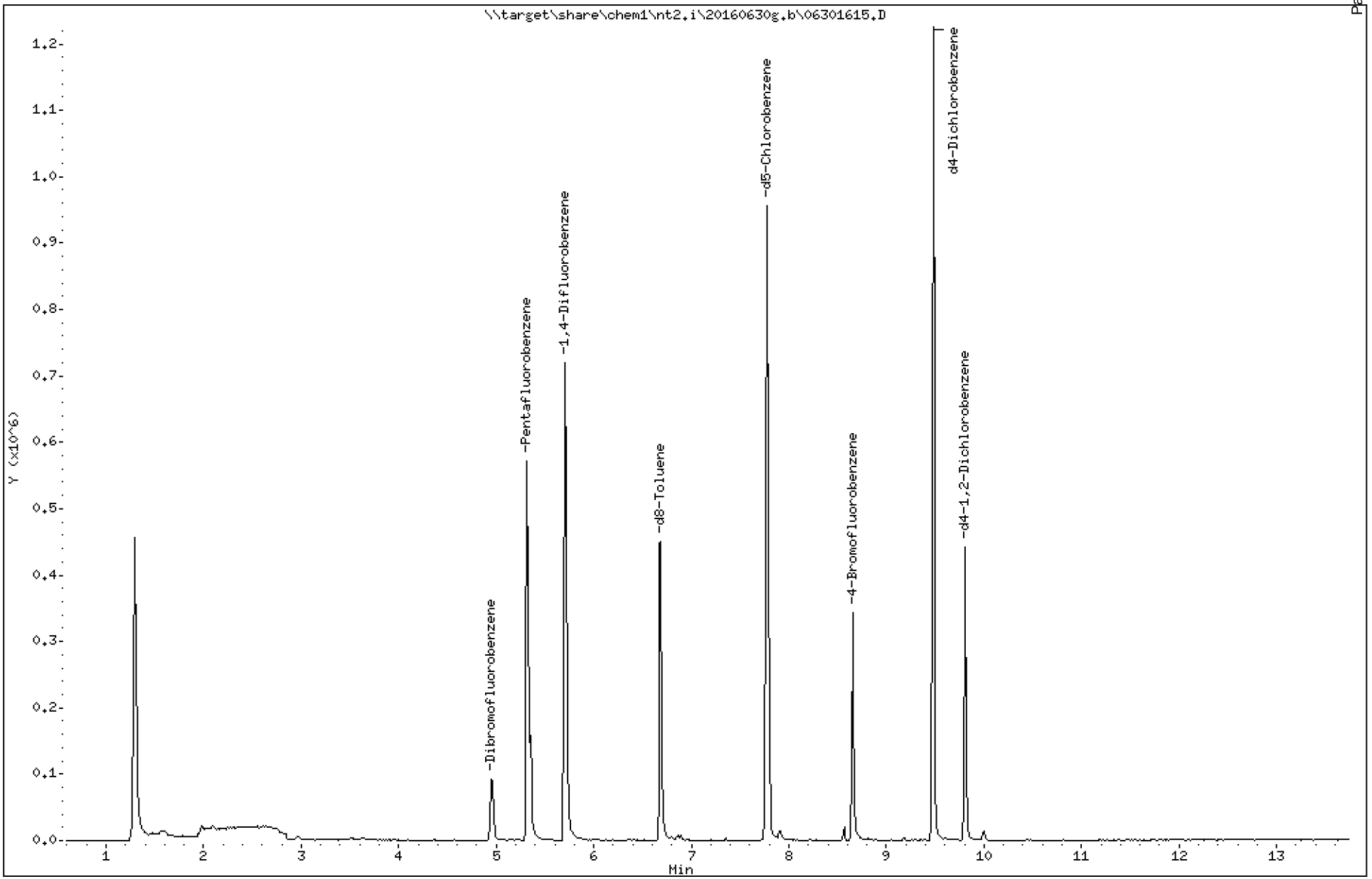
Sample Info: 16F0096-20,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301615.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 12:07

ARI ID: 16F0096-20
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	83871	0.002
8015C 2MP-TMB	(2.98 to 9.26)	83224207	59906	0.001
AK101 nC6-nC10	(3.49 to 8.61)	58706304	59905	0.001
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	83871	0.002
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	83873	0.001

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.687	818975	d8-Toluene
8.652	545635	4-Bromofluorobenzene
9.480	1681833	d4-Dichlorobenzene
7.776	1510969	d5-Chlorobenzene
9.811	727332	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301615G.D

Date : 30-JUN-2016 12:07

Client ID:

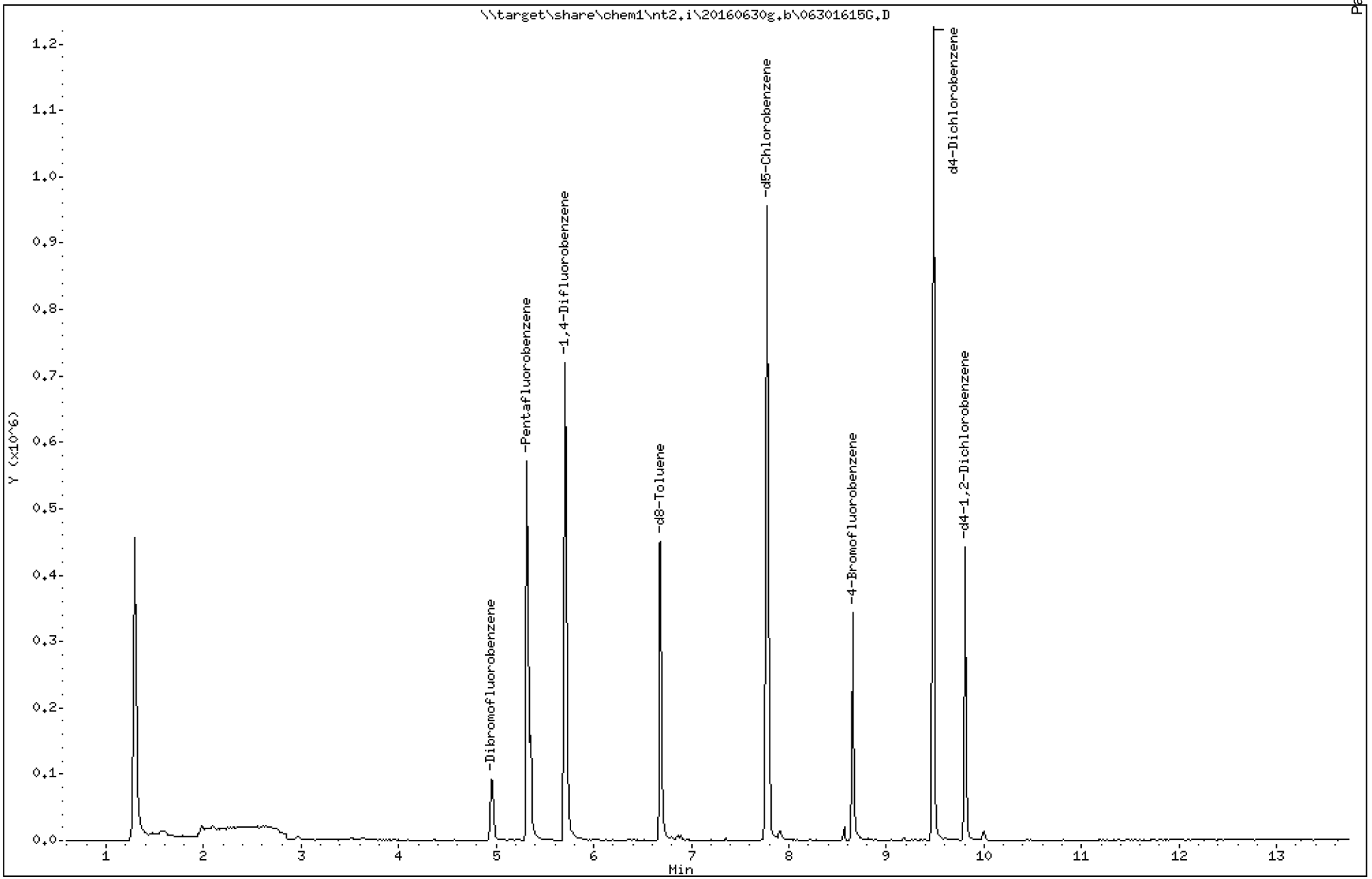
Sample Info: 16F0096-20,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301615G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 12:07

ARI ID: 16F0096-20
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	83871	0.002
8015C 2MP-TMB	(2.98 to 9.26)	83224207	59906	0.001
AK101 nC6-nC10	(3.49 to 8.61)	58706304	59905	0.001
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	83871	0.002
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	83873	0.001

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.687	818975	d8-Toluene
8.652	545635	4-Bromofluorobenzene
9.480	1681833	d4-Dichlorobenzene
7.776	1510969	d5-Chlorobenzene
9.811	727332	d4-1,2-Dichlorobenzene

CHRL-P-01-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-21	File ID:	06301616G.D
Sampled:	06/29/16 13:00	Prepared:	06/30/16 12:27	Analyzed:	06/30/16 12:27
Solids:	93.15	Preparation:	No Prep - Volatiles	Initial/Final:	4.837 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5920	U	2960	5920

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.75	95.0	80 - 120	
4-Bromofluorobenzene	5.0000	5.26	105	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301616.D

Page 1

Date : 30-JUN-2016 12:27

Client ID:

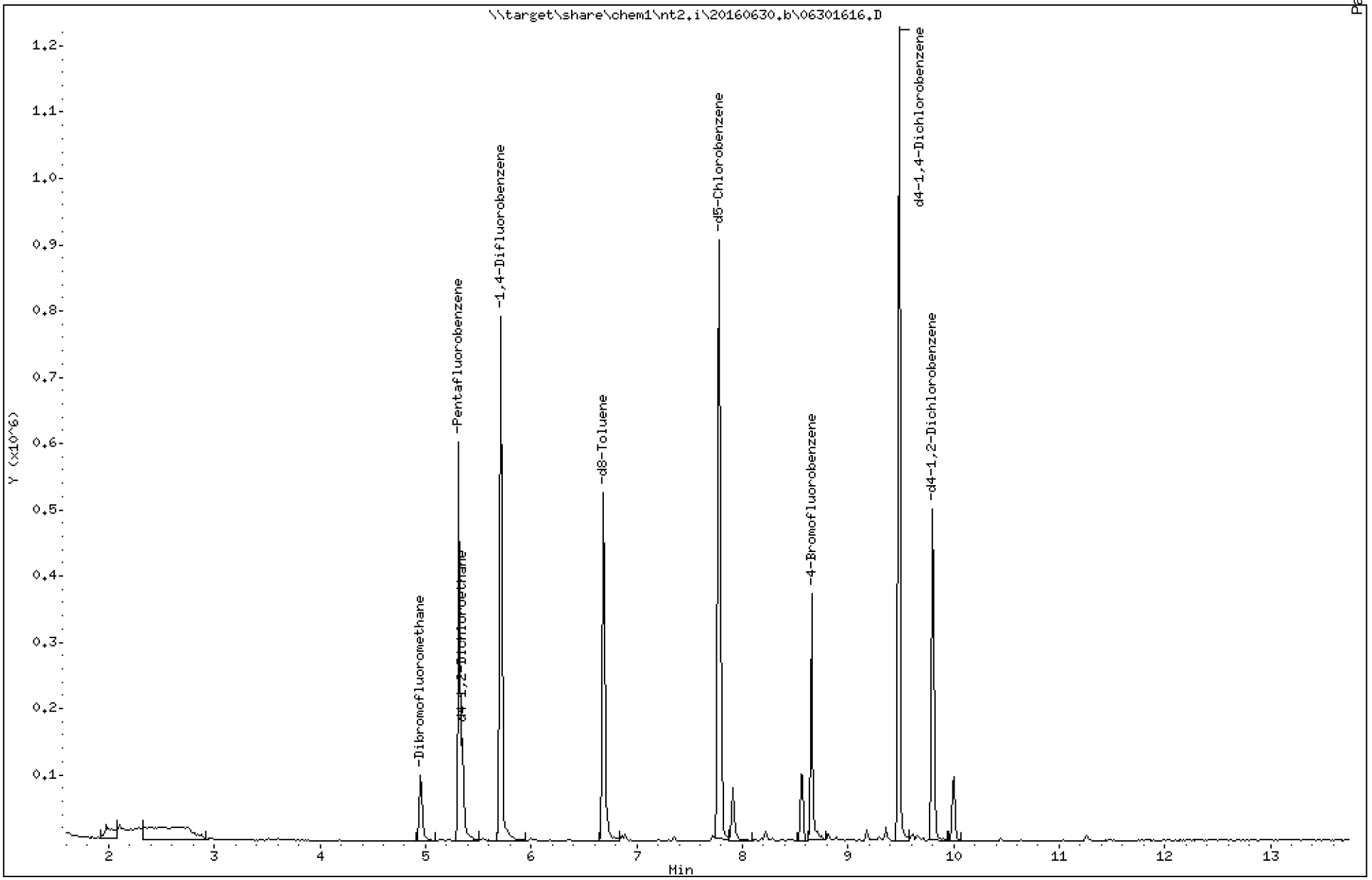
Instrument: nt2.i

Sample Info: 16F0096-21,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301616.D
Lab Smp Id: 16F0096-21
Inj Date : 30-JUN-2016 12:27
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-21,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.950	4.950	(0.931)	58289	3.88970	3.890(R)
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.317	5.328	(1.000)	330154	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.353	5.352	(1.007)	82223	5.03715	5.037
*	37 1,4-Difluorobenzene	114	5.708	5.707	(1.000)	565072	10.0000	
$	43 d8-Toluene	98	6.678	6.689	(1.170)	317996	4.75107	4.751
	44 Toluene	92	6.714	6.725	(1.176)	14282	0.26647	0.2665
*	53 d5-Chlorobenzene	117	7.778	7.778	(1.000)	508432	10.0000	
	55 Ethyl Benzene	106	7.802	7.801	(1.003)	6213	0.19723	0.1972
	57 m,p-xylene	106	7.909	7.908	(1.017)	23077	0.60587	0.6059
	58 o-Xylene	106	8.216	8.216	(1.056)	3316	0.09389	0.09389
$	62 4-Bromofluorobenzene	174	8.654	8.653	(1.113)	98344	5.25713	5.257
*	76 d4-1,4-Dichlorobenzene	152	9.482	9.482	(1.000)	272993	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.802	9.813	(1.034)	127396	5.02497	5.025

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301616.D
Lab Smp Id: 16F0096-21
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	330154	33.19
37 1,4-Difluorobenze	400954	200477	801908	565072	40.93
53 d5-Chlorobenzene	354752	177376	709504	508432	43.32
76 d4-1,4-Dichlorobe	191489	95745	382978	272993	42.56

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.21
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 08:07

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-21
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	3.890	77.79*	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.037	100.74	80-128
$ 43 d8-Toluene	5.000	4.751	95.02	80-120
$ 62 4-Bromofluorobenze	5.000	5.257	105.14	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.025	100.50	80-120

REVIEW SUMMARY FOR FILE - 06301616.D

Lab ID: 16F0096-21
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 12:27

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301616.D

Date : 30-JUN-2016 12:27

Client ID:

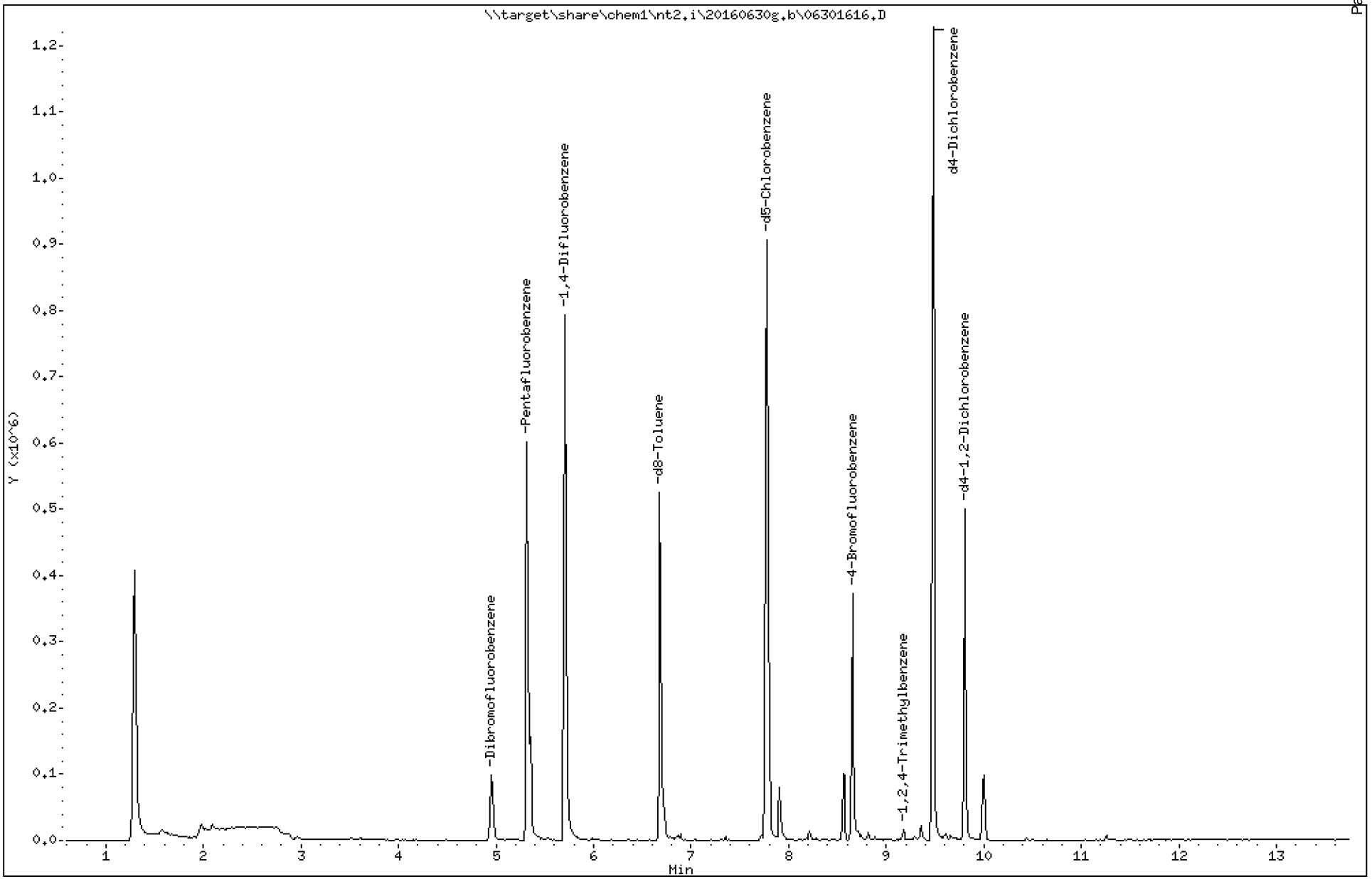
Sample Info: 16F0096-21,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301616.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 12:27

ARI ID: 16F0096-21
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	619073	0.013
8015C 2MP-TMB	(2.98 to 9.26)	83224207	411336	0.005
AK101 nC6-nC10	(3.49 to 8.61)	58706304	355147	0.006
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	619073	0.013
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	619074	0.008

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.679	899431	d8-Toluene
8.655	608442	4-Bromofluorobenzene
9.483	1792280	d4-Dichlorobenzene
7.779	1614076	d5-Chlorobenzene
9.802	779557	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301616G.D

Date : 30-JUN-2016 12:27

Client ID:

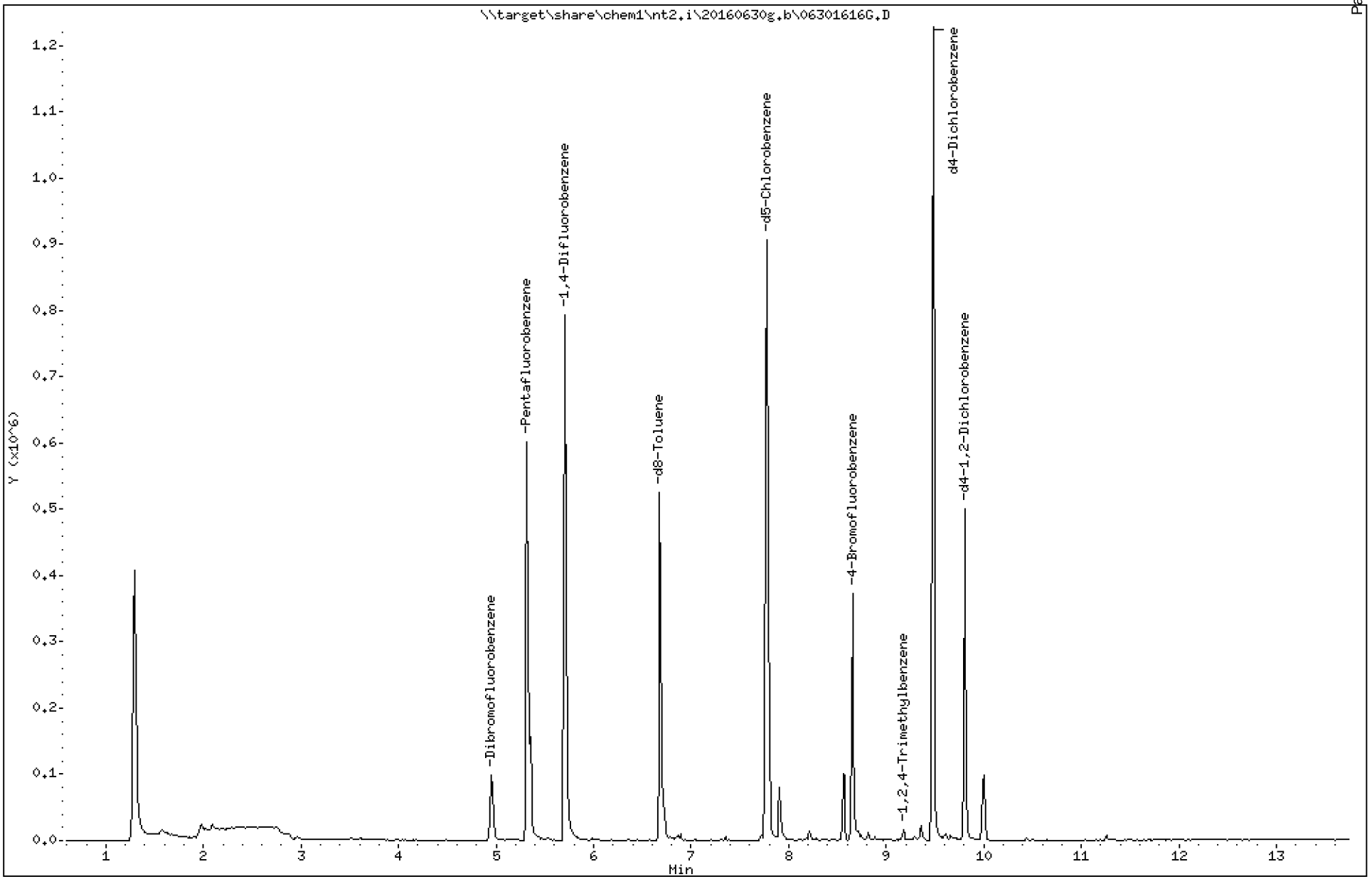
Sample Info: 16F0096-21,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301616G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 12:27

ARI ID: 16F0096-21
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	619073	0.013
8015C 2MP-TMB	(2.98 to 9.26)	83224207	411336	0.005
AK101 nC6-nC10	(3.49 to 8.61)	58706304	355147	0.006
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	619073	0.013
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	619074	0.008

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.679	899431	d8-Toluene
8.655	608442	4-Bromofluorobenzene
9.483	1792280	d4-Dichlorobenzene
7.779	1614076	d5-Chlorobenzene
9.802	779557	d4-1,2-Dichlorobenzene

CHRL-P-02-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-22	File ID:	06301617G.D
Sampled:	06/29/16 13:10	Prepared:	06/30/16 12:48	Analyzed:	06/30/16 12:48
Solids:	92.91	Preparation:	No Prep - Volatiles	Initial/Final:	5.639 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5150	U	2580	5150

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.79	95.8	80 - 120	
4-Bromofluorobenzene	5.0000	5.15	103	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301617.D

Date : 30-JUN-2016 12:48

Client ID:

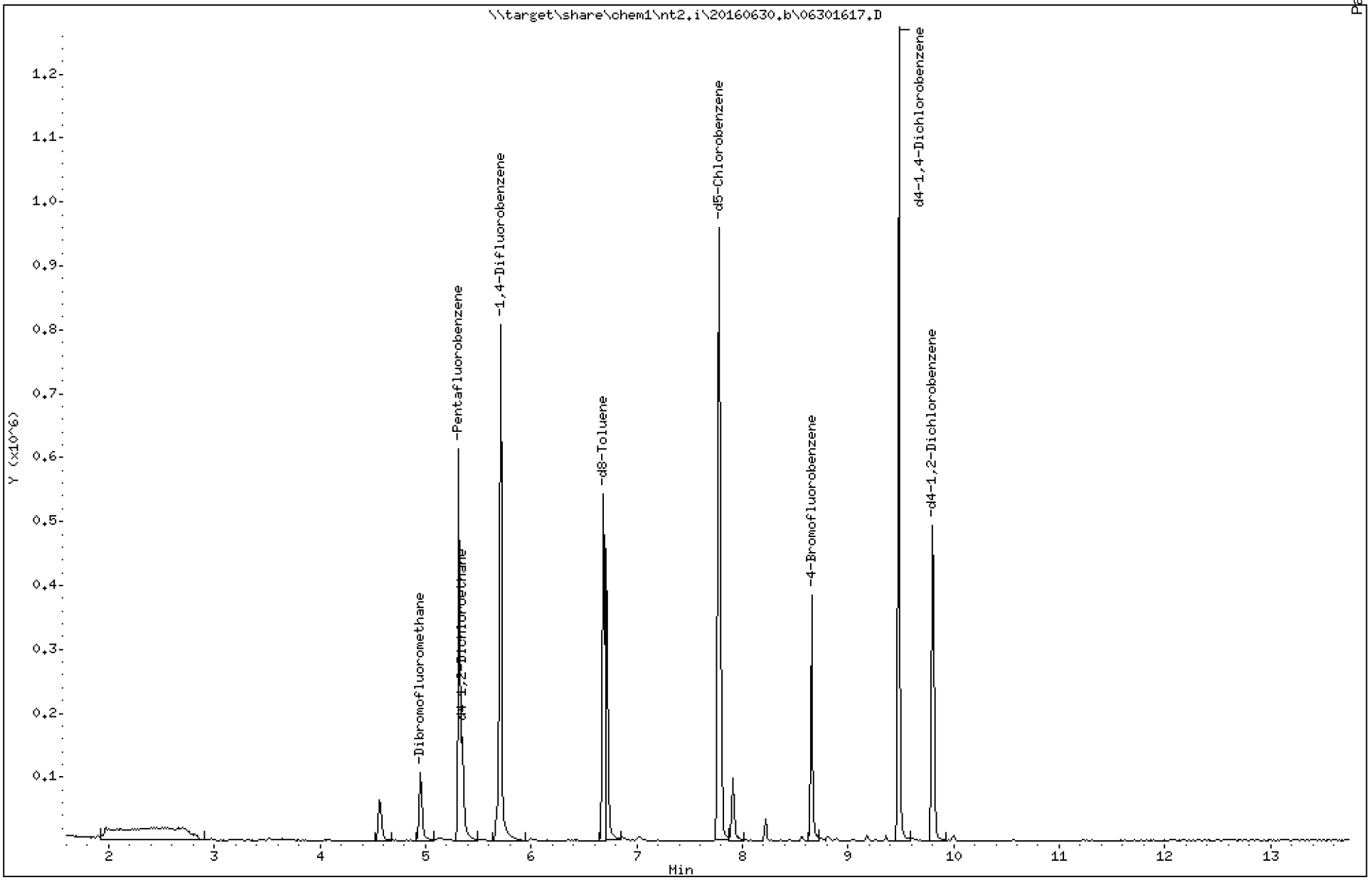
Sample Info: 16F0096-22,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301617.D
Lab Smp Id: 16F0096-22
Inj Date : 30-JUN-2016 12:48
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-22,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.950	4.950	(0.931)	61780	3.89112	3.891(R)
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.317	5.328	(1.000)	349800	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.352	5.352	(1.007)	87732	5.07278	5.073
*	37 1,4-Difluorobenzene	114	5.707	5.707	(1.000)	571307	10.0000	
$	43 d8-Toluene	98	6.677	6.689	(1.170)	324053	4.78872	4.789
	44 Toluene	92	6.713	6.725	(1.176)	169094	3.12049	3.120
*	53 d5-Chlorobenzene	117	7.778	7.778	(1.000)	523712	10.0000	
	55 Ethyl Benzene	106	7.802	7.801	(1.003)	4953	0.15264	0.1526
	57 m,p-xylene	106	7.908	7.908	(1.017)	26338	0.67131	0.6713
	58 o-Xylene	106	8.216	8.216	(1.056)	9805	0.26952	0.2695
$	62 4-Bromofluorobenzene	174	8.654	8.653	(1.113)	99232	5.14983	5.150
*	76 d4-1,4-Dichlorobenzene	152	9.482	9.482	(1.000)	282386	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.813	9.813	(1.035)	128314	4.89283	4.893

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301617.D
Lab Smp Id: 16F0096-22
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	349800	41.12
37 1,4-Difluorobenze	400954	200477	801908	571307	42.49
53 d5-Chlorobenzene	354752	177376	709504	523712	47.63
76 d4-1,4-Dichlorobe	191489	95745	382978	282386	47.47

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.22
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-22
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	3.891	77.82*	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.073	101.46	80-128
$ 43 d8-Toluene	5.000	4.789	95.77	80-120
$ 62 4-Bromofluorobenze	5.000	5.150	103.00	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.893	97.86	80-120

REVIEW SUMMARY FOR FILE - 06301617.D

Lab ID: 16F0096-22
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 12:48

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301617.D

Date : 30-JUN-2016 12:48

Client ID:

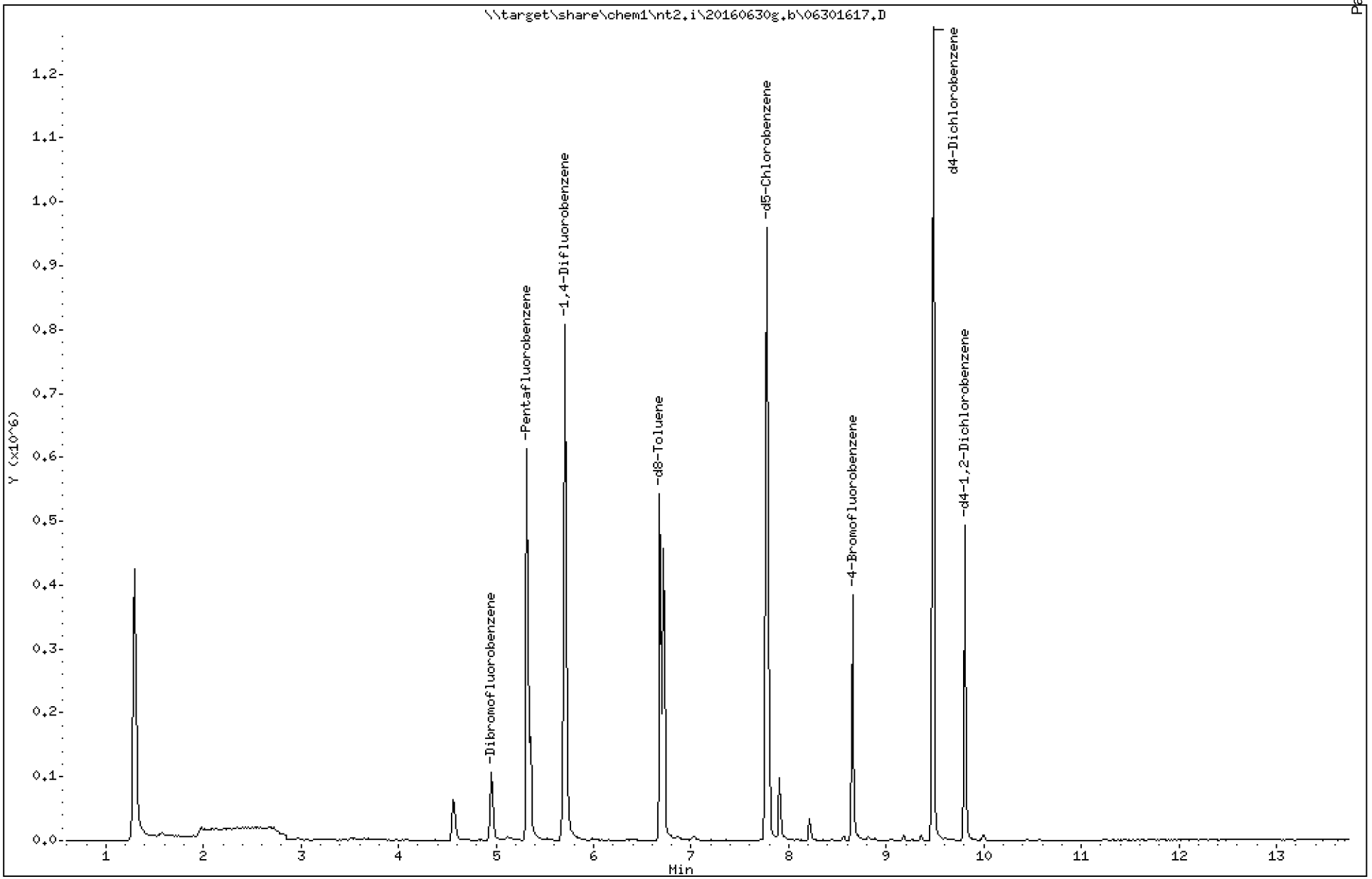
Sample Info: 16F0096-22,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301617.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 12:48

ARI ID: 16F0096-22
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	255449	0.005
8015C 2MP-TMB	(2.98 to 9.26)	83224207	369371	0.004
AK101 nC6-nC10	(3.49 to 8.61)	58706304	345611	0.006
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	255449	0.005
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	382516	0.005

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.678	1538716	d8-Toluene
8.654	594198	4-Bromofluorobenzene
9.482	1791025	d4-Dichlorobenzene
7.778	1625170	d5-Chlorobenzene
9.802	784543	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301617G.D

Date : 30-JUN-2016 12:48

Client ID:

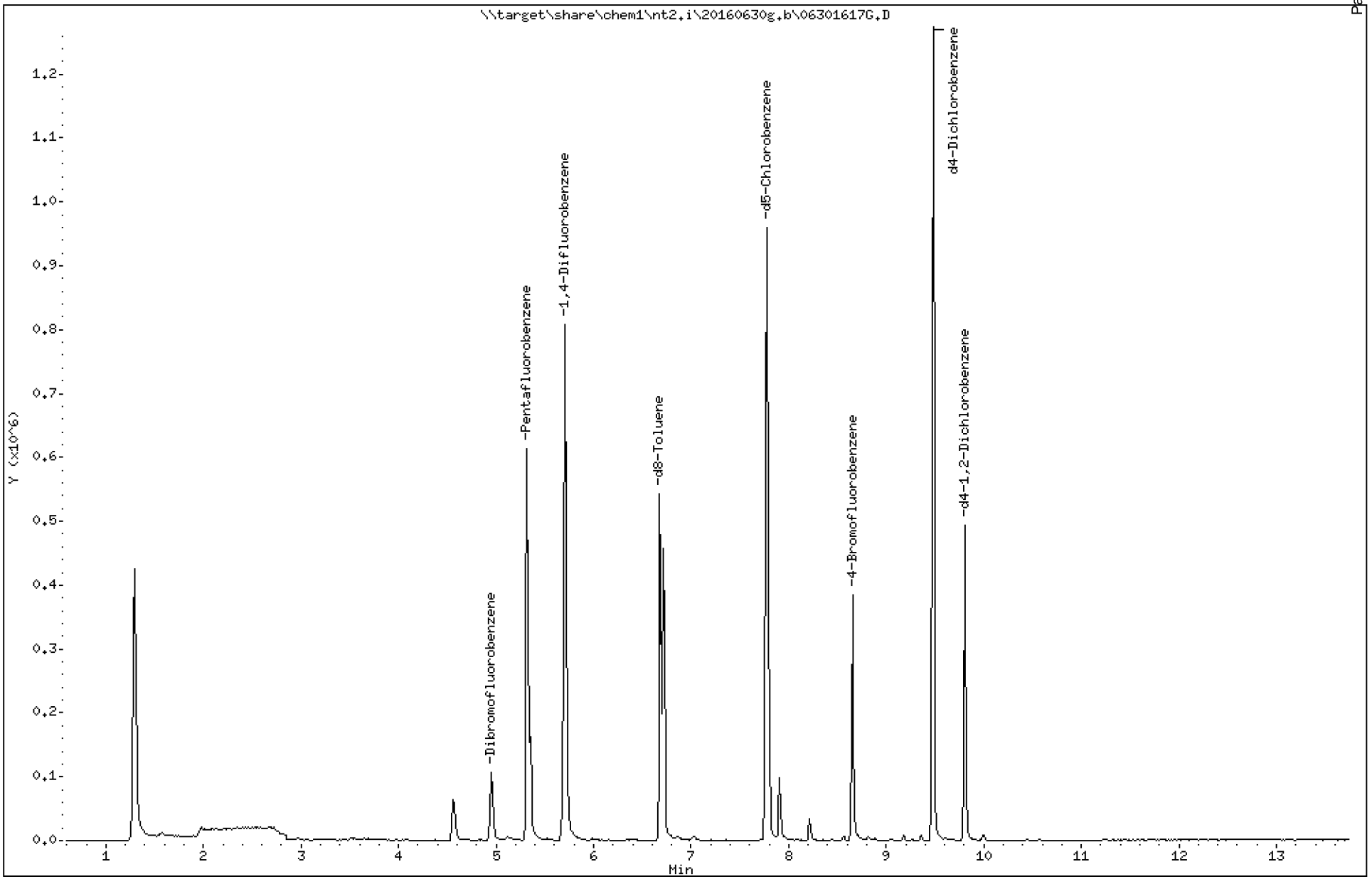
Sample Info: 16F0096-22,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301617G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 12:48

ARI ID: 16F0096-22
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	255449	0.005
8015C 2MP-TMB	(2.98 to 9.26)	83224207	369371	0.004
AK101 nC6-nC10	(3.49 to 8.61)	58706304	345611	0.006
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	255449	0.005
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	382516	0.005

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.678	1538716	d8-Toluene
8.654	594198	4-Bromofluorobenzene
9.482	1791025	d4-Dichlorobenzene
7.778	1625170	d5-Chlorobenzene
9.802	784543	d4-1,2-Dichlorobenzene

CHRL-P-52-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-23	File ID:	06301618G.D
Sampled:	06/29/16 13:15	Prepared:	06/30/16 13:09	Analyzed:	06/30/16 13:09
Solids:	92.75	Preparation:	No Prep - Volatiles	Initial/Final:	5.488 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5300	U	2650	5300

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.79	95.9	80 - 120	
4-Bromofluorobenzene	5.0000	5.08	102	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301618.D

Date : 30-JUN-2016 13:09

Client ID:

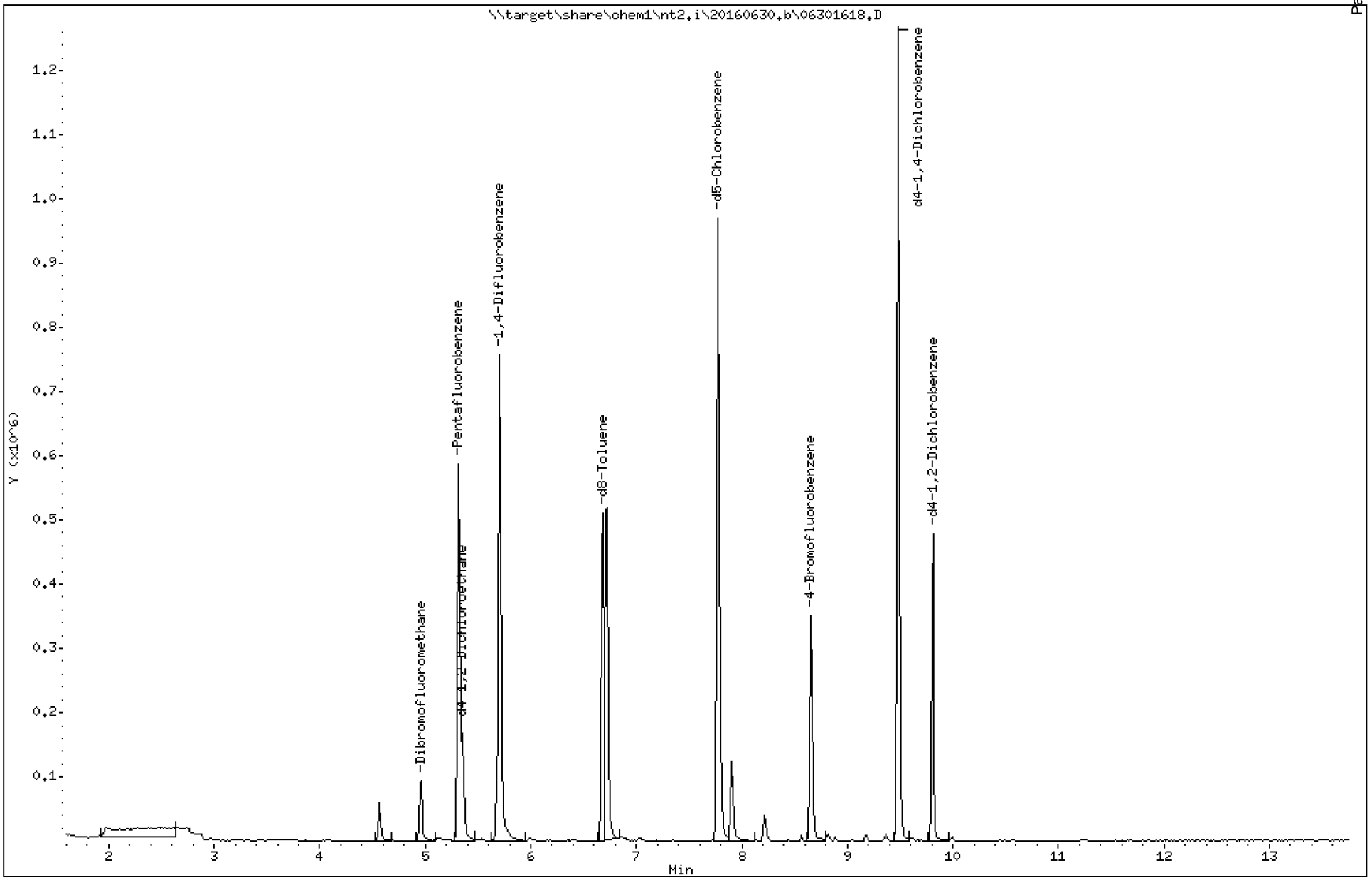
Sample Info: 16F0096-23,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301618.D
Lab Smp Id: 16F0096-23
Inj Date : 30-JUN-2016 13:09
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-23,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.959	4.950	(0.933)	63115	4.09412	4.094
	31 Benzene	78	5.231	5.246	(0.917)	1139	0.01322	0.01322
*	32 Pentafluorobenzene	168	5.314	5.328	(1.000)	339639	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.352	(1.007)	87773	5.22699	5.227
*	37 1,4-Difluorobenzene	114	5.705	5.707	(1.000)	574215	10.0000	
$	43 d8-Toluene	98	6.687	6.689	(1.172)	325972	4.79269	4.793
	44 Toluene	92	6.722	6.725	(1.178)	222237	4.08043	4.080
*	53 d5-Chlorobenzene	117	7.775	7.778	(1.000)	515856	10.0000	
	55 Ethyl Benzene	106	7.799	7.801	(1.003)	6514	0.20381	0.2038
	57 m,p-xylene	106	7.905	7.908	(1.017)	35083	0.90783	0.9078
	58 o-Xylene	106	8.213	8.216	(1.056)	12631	0.35249	0.3525
$	62 4-Bromofluorobenzene	174	8.651	8.653	(1.113)	96391	5.07857	5.079
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.482	(1.000)	276341	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.810	9.813	(1.035)	124743	4.86072	4.861

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301618.D
Lab Smp Id: 16F0096-23
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	339639	37.02
37 1,4-Difluorobenze	400954	200477	801908	574215	43.21
53 d5-Chlorobenzene	354752	177376	709504	515856	45.41
76 d4-1,4-Dichlorobe	191489	95745	382978	276341	44.31

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.31	-0.27
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	-0.04
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.03
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-23
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.094	81.88	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.227	104.54	80-128
$ 43 d8-Toluene	5.000	4.793	95.85	80-120
$ 62 4-Bromofluorobenze	5.000	5.079	101.57	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.861	97.21	80-120

REVIEW SUMMARY FOR FILE - 06301618.D

Lab ID: 16F0096-23
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 13:09

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301618.D

Date : 30-JUN-2016 13:09

Client ID:

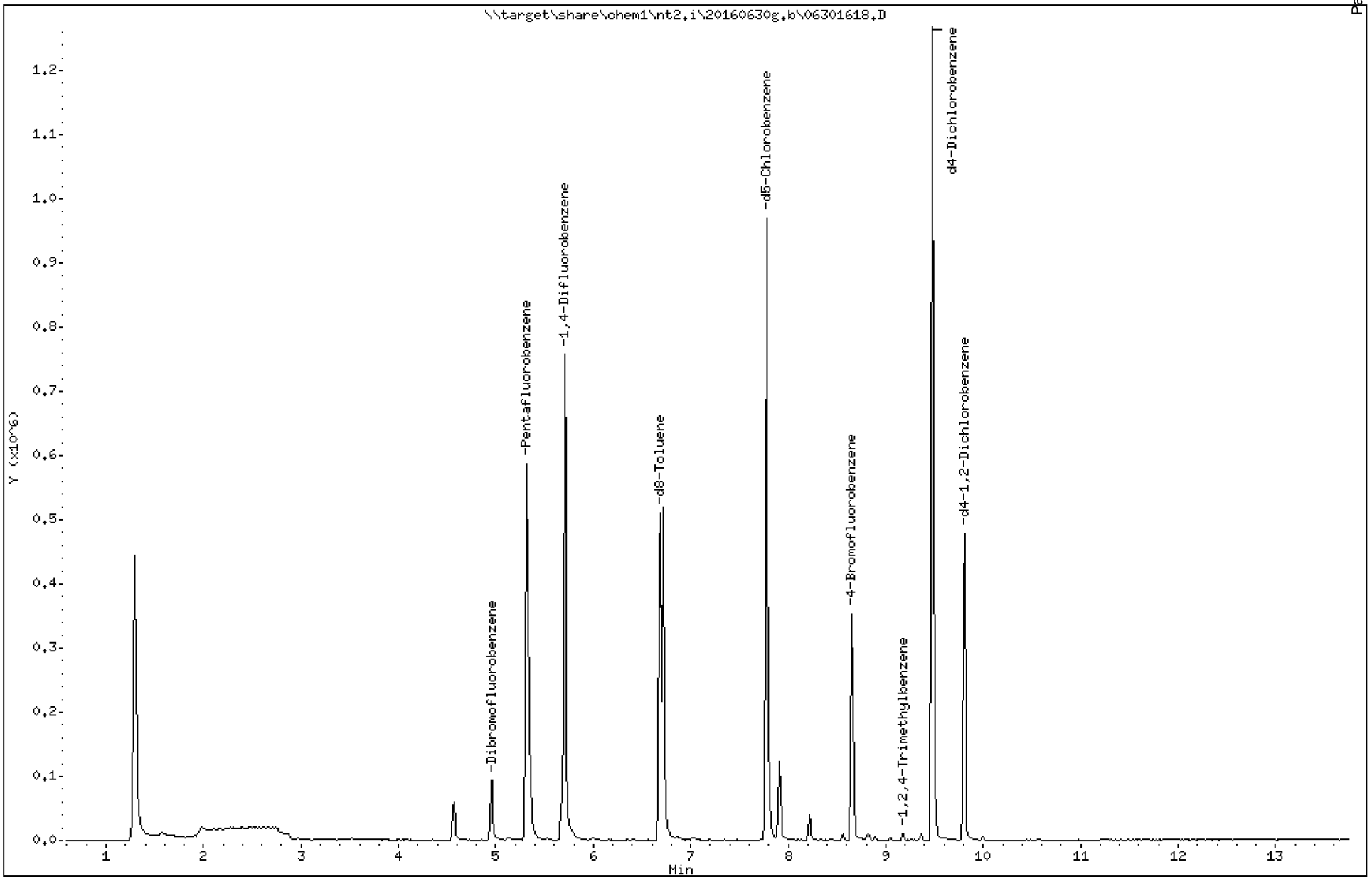
Sample Info: 16F0096-23,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301618.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 13:09

ARI ID: 16F0096-23
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)	
WAGas Tol-C12	(6.63 to 10.52)	48008849	1361928	0.028	M
8015C 2MP-TMB	(2.98 to 9.26)	83224207	1469935	0.018	M
AK101 nC6-nC10	(3.49 to 8.61)	58706304	1436337	0.024	M
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	1361928	0.028	M
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	1481338	0.020	M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

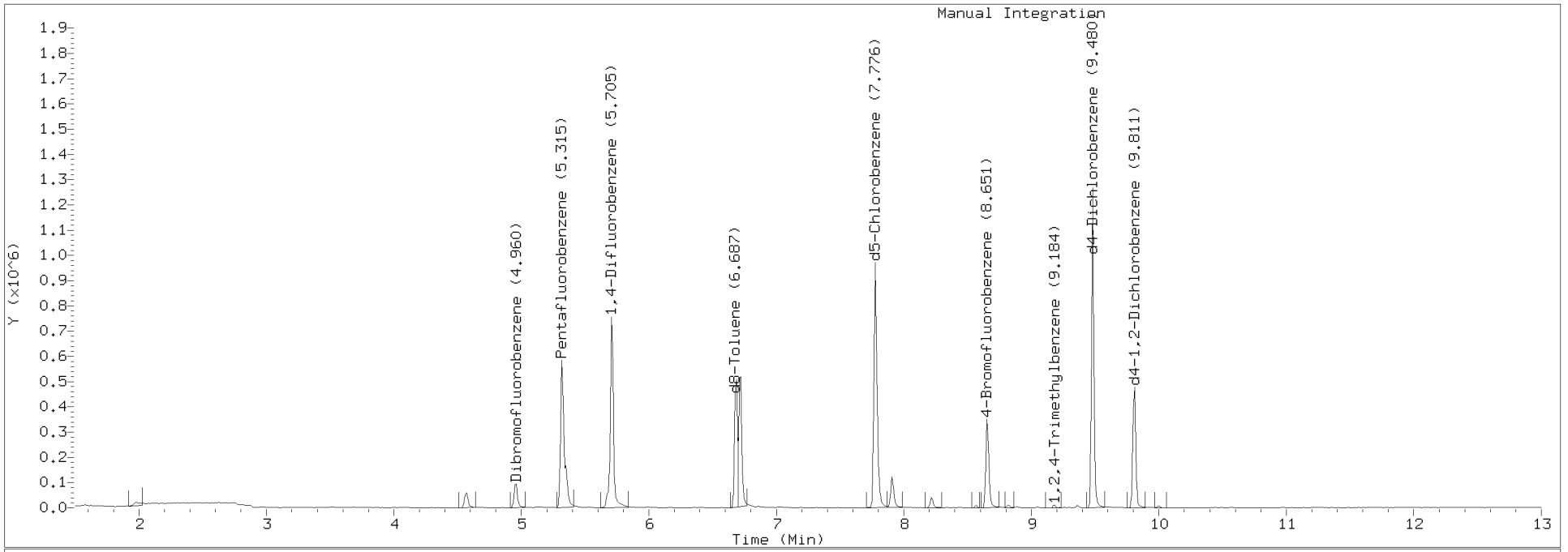
NW Gas Range Subtracted Peaks

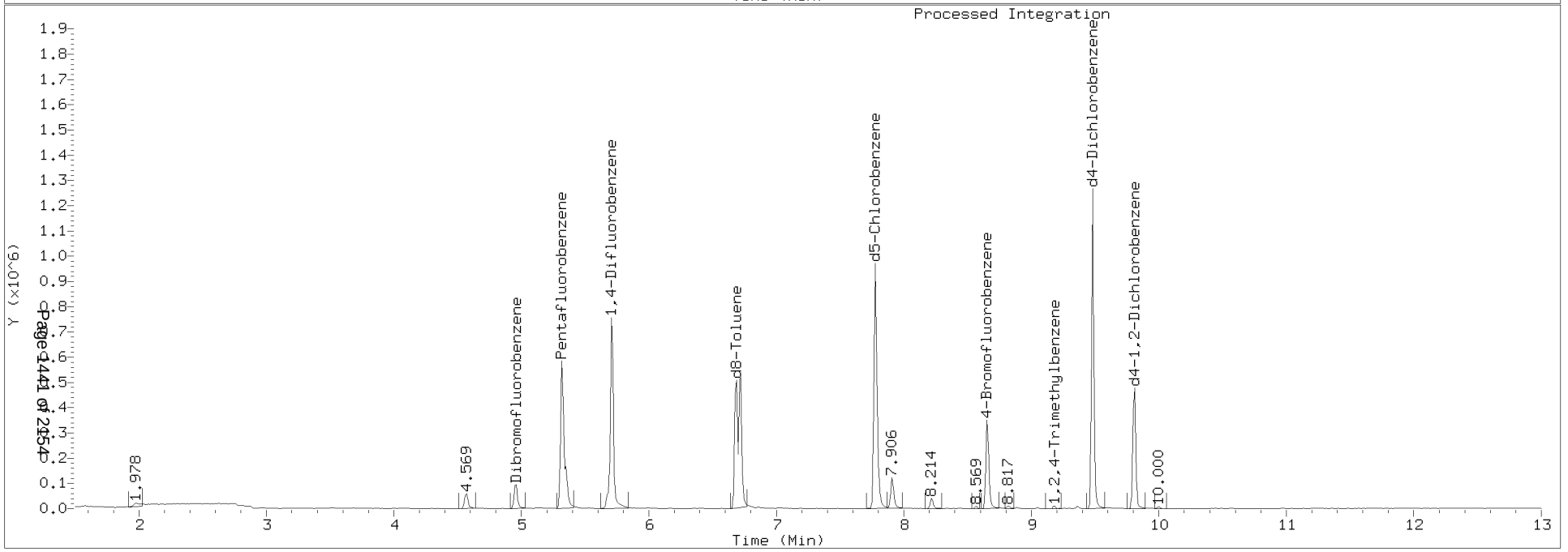
6.687	868843	d8-Toluene
8.651	571656	4-Bromofluorobenzene
9.480	1742857	d4-Dichlorobenzene
7.776	1597808	d5-Chlorobenzene
9.811	762356	d4-1,2-Dichlorobenzene

TPHG Manual Integrations Report

Datafile: NT2, 20160630g.b/06301618.D Injection: 30-JUN-2016 13:09

Lab ID:16F0096-23





Data File: \\target\share\chem1\nt2.i\20160630g.b\06301618G.D

Date : 30-JUN-2016 13:09

Client ID:

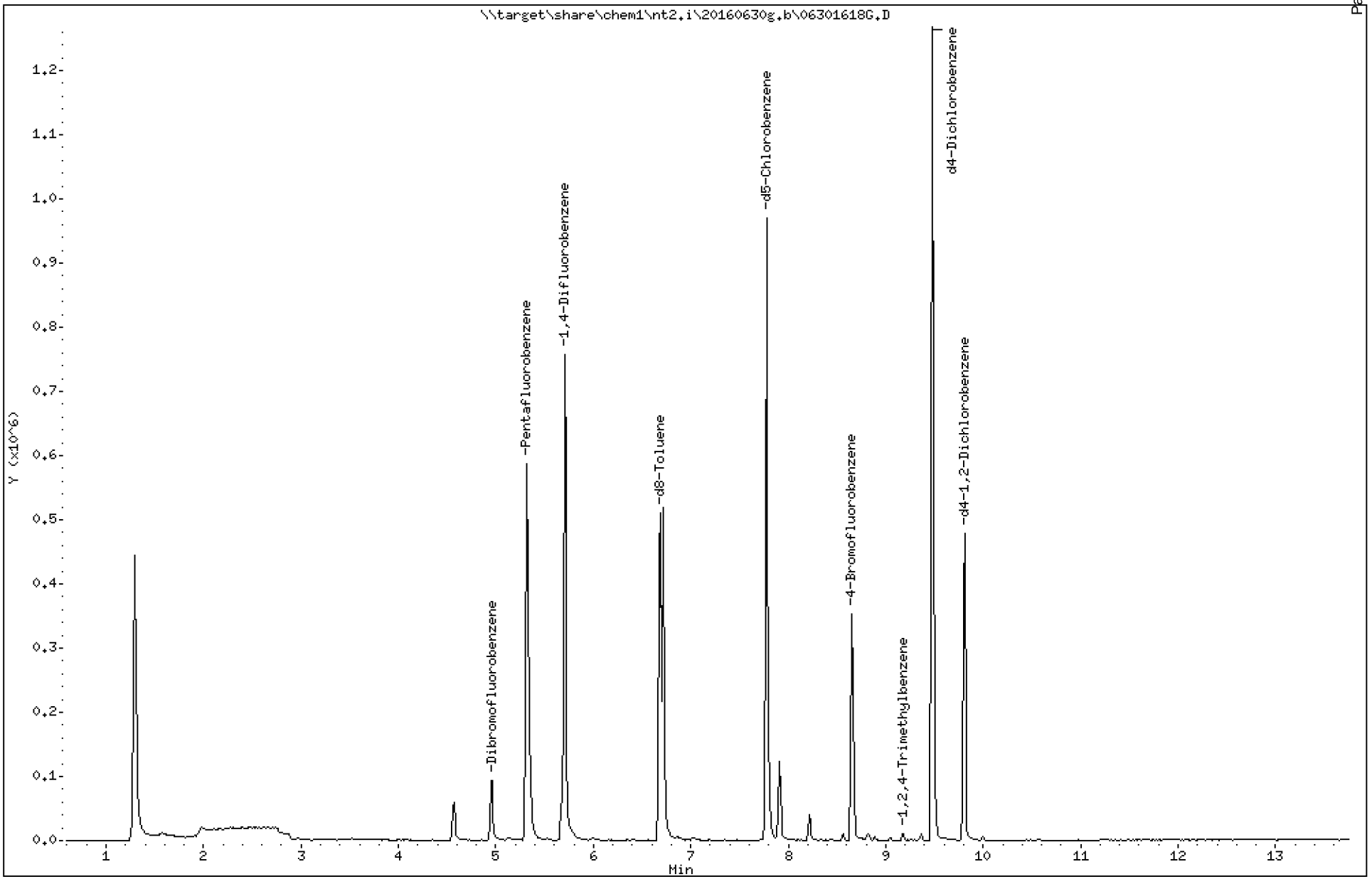
Sample Info: 16F0096-23,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301618G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 13:09

ARI ID: 16F0096-23
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)	
WAGas Tol-C12	(6.63 to 10.52)	48008849	1361928	0.028	M
8015C 2MP-TMB	(2.98 to 9.26)	83224207	1469935	0.018	M
AK101 nC6-nC10	(3.49 to 8.61)	58706304	1436337	0.024	M
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	1361928	0.028	M
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	1481338	0.020	M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

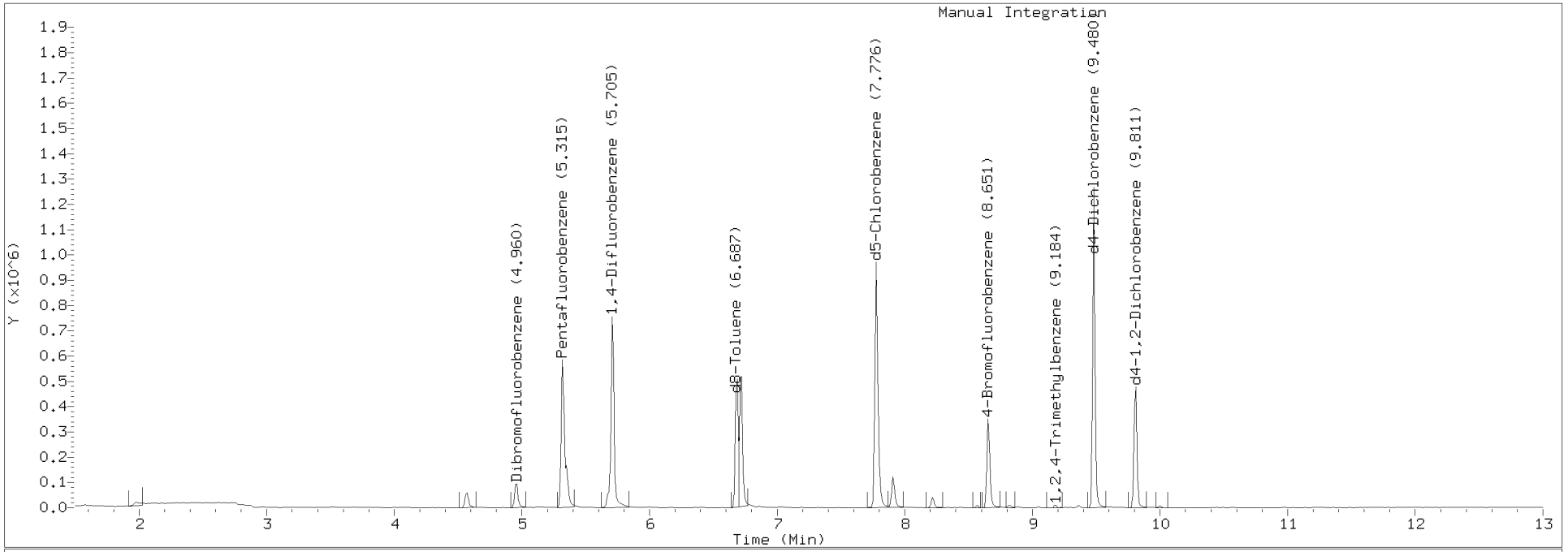
NW Gas Range Subtracted Peaks

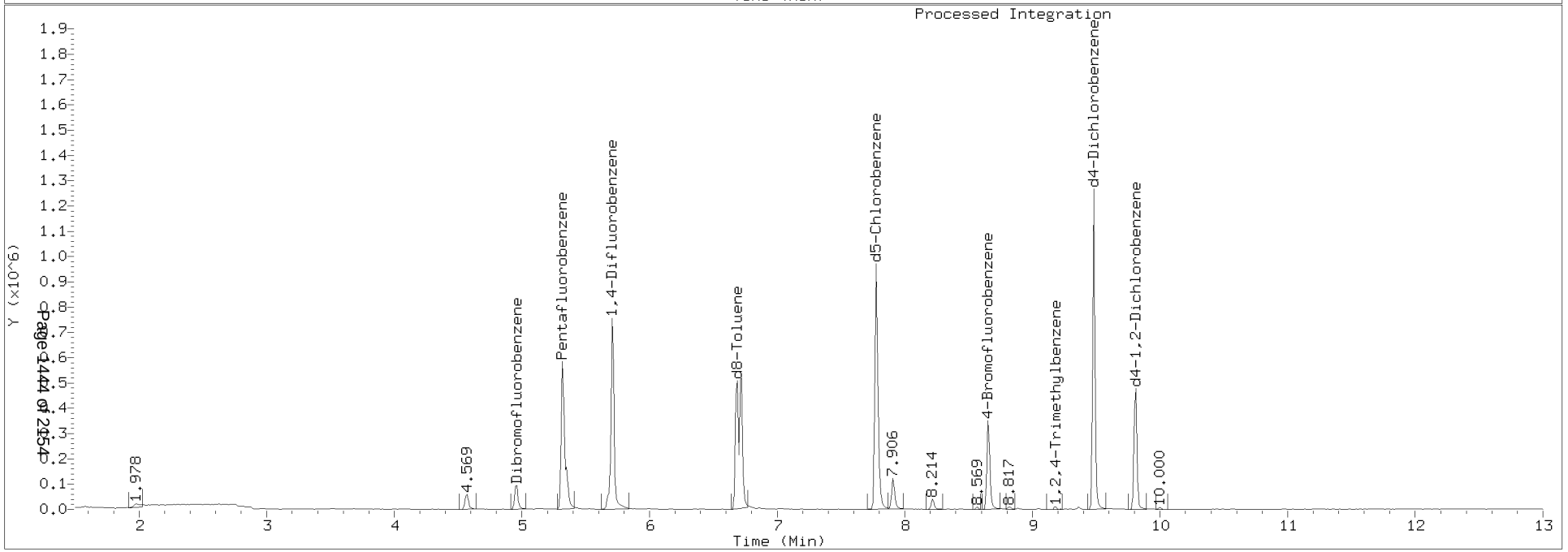
6.687	868843	d8-Toluene
8.651	571656	4-Bromofluorobenzene
9.480	1742857	d4-Dichlorobenzene
7.776	1597808	d5-Chlorobenzene
9.811	762356	d4-1,2-Dichlorobenzene

TPHG Manual Integrations Report

Datafile: NT2, 20160630g.b/06301618G.D Injection: 30-JUN-2016 13:09

Lab ID:16F0096-23





CHRL-P-03-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-24	File ID:	06301619G.D
Sampled:	06/29/16 13:25	Prepared:	06/30/16 13:29	Analyzed:	06/30/16 13:29
Solids:	91.20	Preparation:	No Prep - Volatiles	Initial/Final:	4.936 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	14300		3020	6040

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.85	97.0	80 - 120	
4-Bromofluorobenzene	5.0000	5.29	106	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301619.D

Date : 30-JUN-2016 13:29

Client ID:

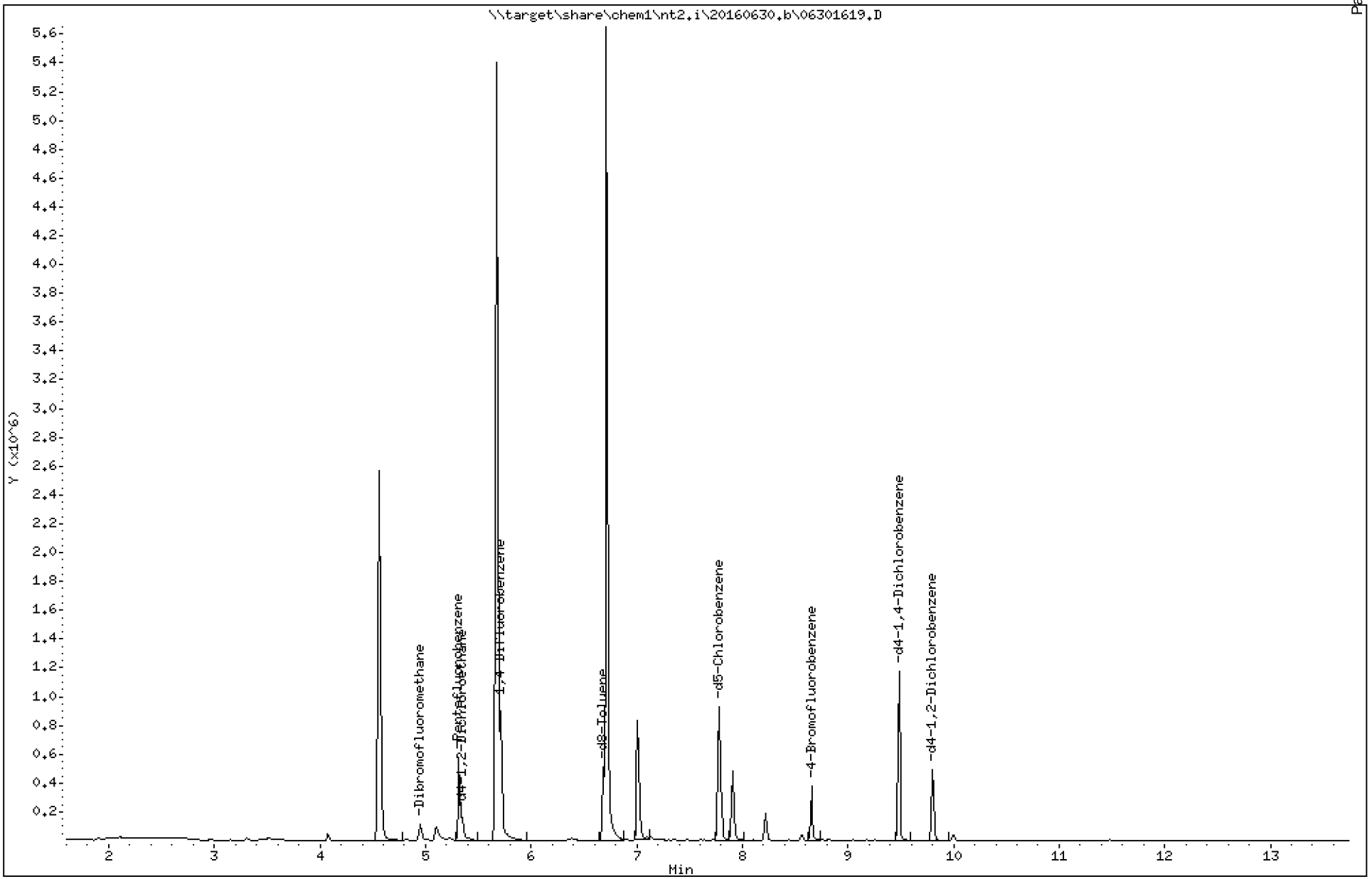
Instrument: nt2.i

Sample Info: 16F0096-24,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301619.D
Lab Smp Id: 16F0096-24
Inj Date : 30-JUN-2016 13:29
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-24,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.950	4.950	(0.931)	62483	4.29249	4.292
	31 Benzene	78	5.234	5.246	(0.917)	13306	0.15946	0.1595
*	32 Pentafluorobenzene	168	5.317	5.328	(1.000)	320700	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.353	5.352	(1.007)	84578	5.33416	5.334
*	37 1,4-Difluorobenzene	114	5.708	5.707	(1.000)	556237	10.0000	
$	43 d8-Toluene	98	6.678	6.689	(1.170)	319659	4.85177	4.852
	44 Toluene	92	6.714	6.725	(1.176)	2100386	39.8110	39.811
*	53 d5-Chlorobenzene	117	7.779	7.778	(1.000)	501632	10.0000	
	55 Ethyl Benzene	106	7.802	7.801	(1.003)	24573	0.79062	0.7906
	57 m,p-xylene	106	7.909	7.908	(1.017)	130799	3.48061	3.481
	58 o-Xylene	106	8.216	8.216	(1.056)	50733	1.45592	1.456
$	62 4-Bromofluorobenzene	174	8.654	8.653	(1.113)	97629	5.28965	5.290
*	76 d4-1,4-Dichlorobenzene	152	9.482	9.482	(1.000)	263914	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.802	9.813	(1.034)	118249	4.82464	4.825

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301619.D
Lab Smp Id: 16F0096-24
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	320700	29.38
37 1,4-Difluorobenze	400954	200477	801908	556237	38.73
53 d5-Chlorobenzene	354752	177376	709504	501632	41.40
76 d4-1,4-Dichlorobe	191489	95745	382978	263914	37.82

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.21
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 08:07

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-24
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.292	85.85	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.334	106.68	80-128
$ 43 d8-Toluene	5.000	4.852	97.04	80-120
$ 62 4-Bromofluorobenze	5.000	5.290	105.79	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.825	96.49	80-120

REVIEW SUMMARY FOR FILE - 06301619.D

Lab ID: 16F0096-24
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 13:29

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301619.D

Date : 30-JUN-2016 13:29

Client ID:

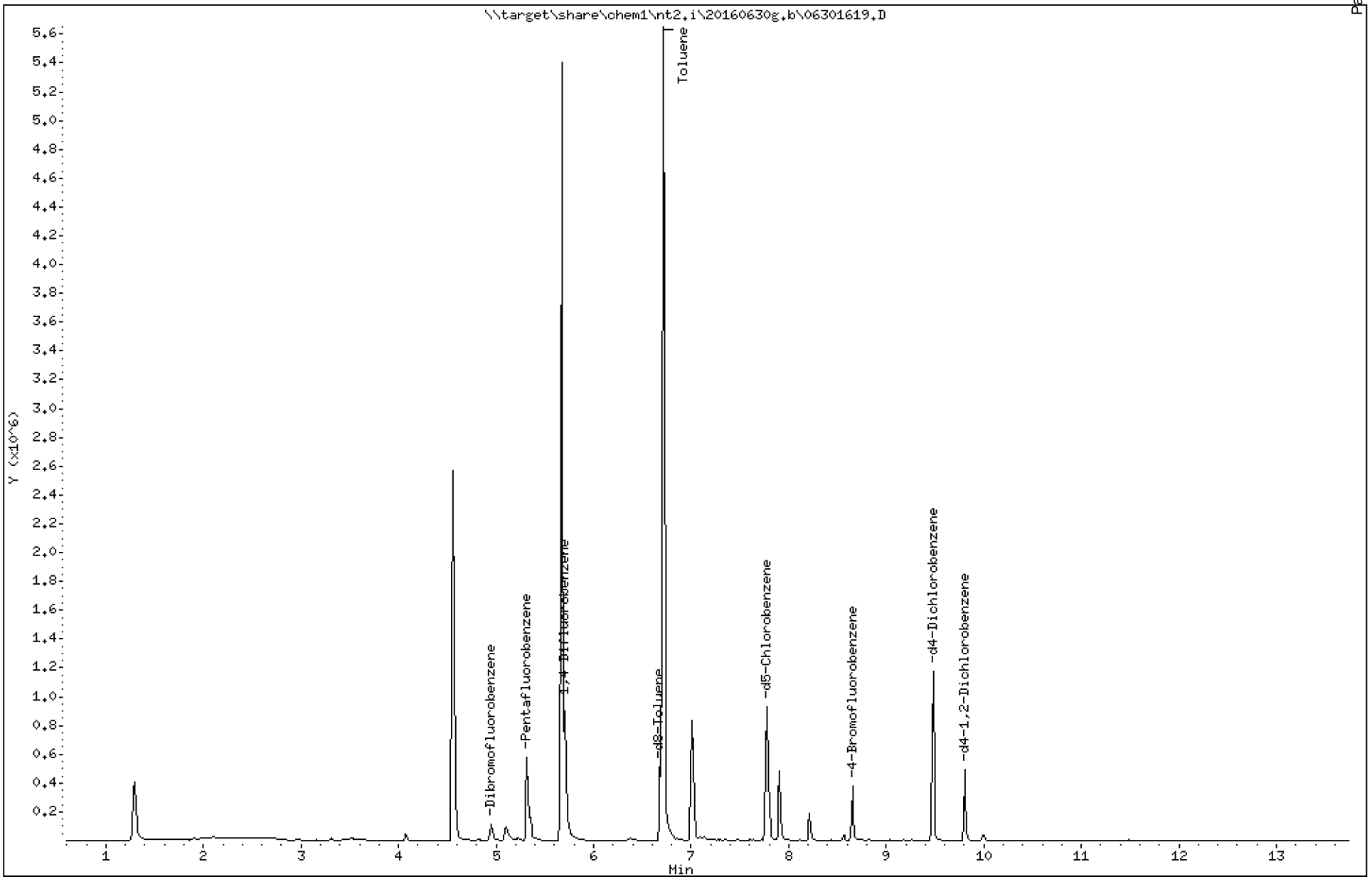
Sample Info: 16F0096-24,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301619.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 13:29

ARI ID: 16F0096-24
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)	
WAGas Tol-C12	(6.63 to 10.52)	48008849	11686465	0.243	
8015C 2MP-TMB	(2.98 to 9.26)	83224207	24150368	0.290	M
AK101 nC6-nC10	(3.49 to 8.61)	58706304	24089138	0.410	M
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	11686465	0.238	
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	24193331	0.330	M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

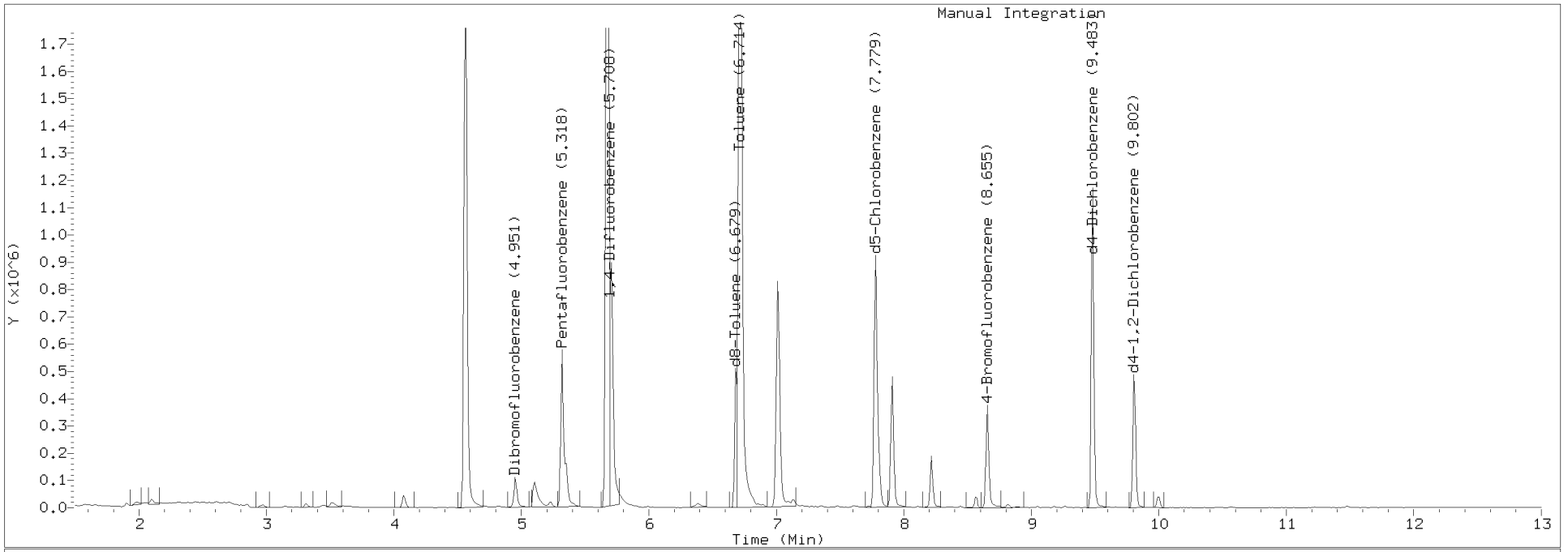
NW Gas Range Subtracted Peaks

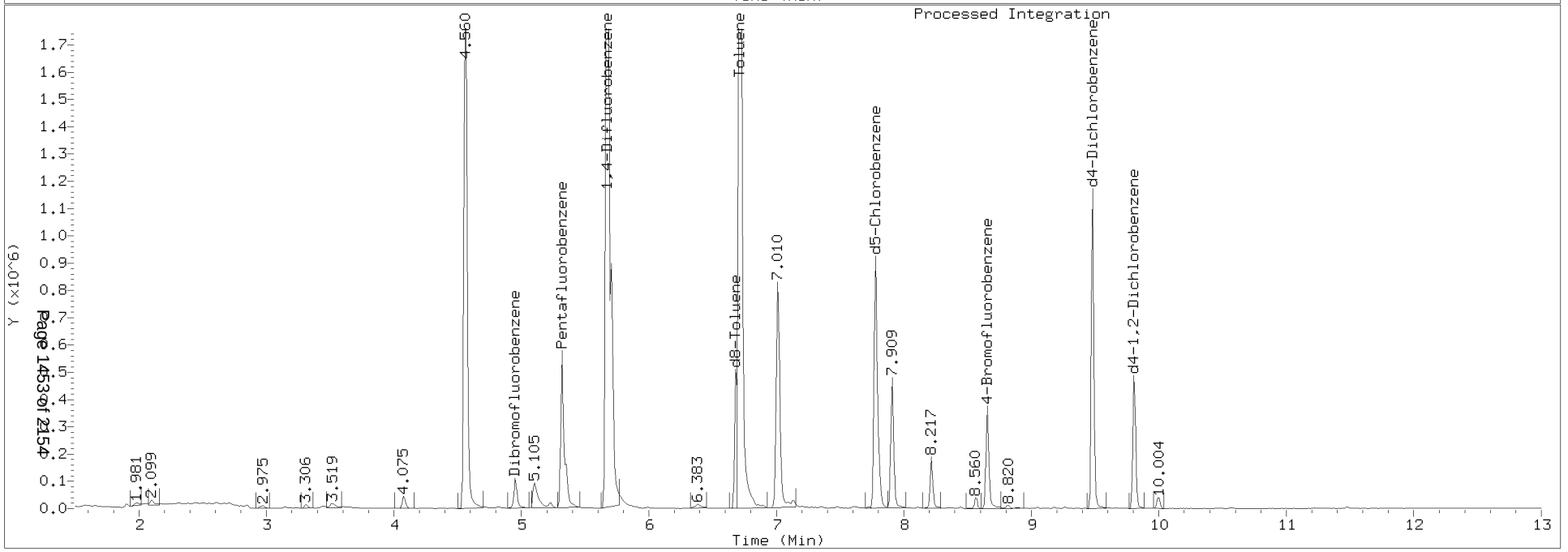
6.679	600686	d8-Toluene
8.655	592613	4-Bromofluorobenzene
9.483	1698917	d4-Dichlorobenzene
7.779	1711859	d5-Chlorobenzene
9.802	744820	d4-1,2-Dichlorobenzene

TPHG Manual Integrations Report

Datafile: NT2, 20160630g.b/06301619.D Injection: 30-JUN-2016 13:29

Lab ID:16F0096-24





Data File: \\target\share\chem1\nt2.i\20160630g.b\06301619G.D

Date : 30-JUN-2016 13:29

Client ID:

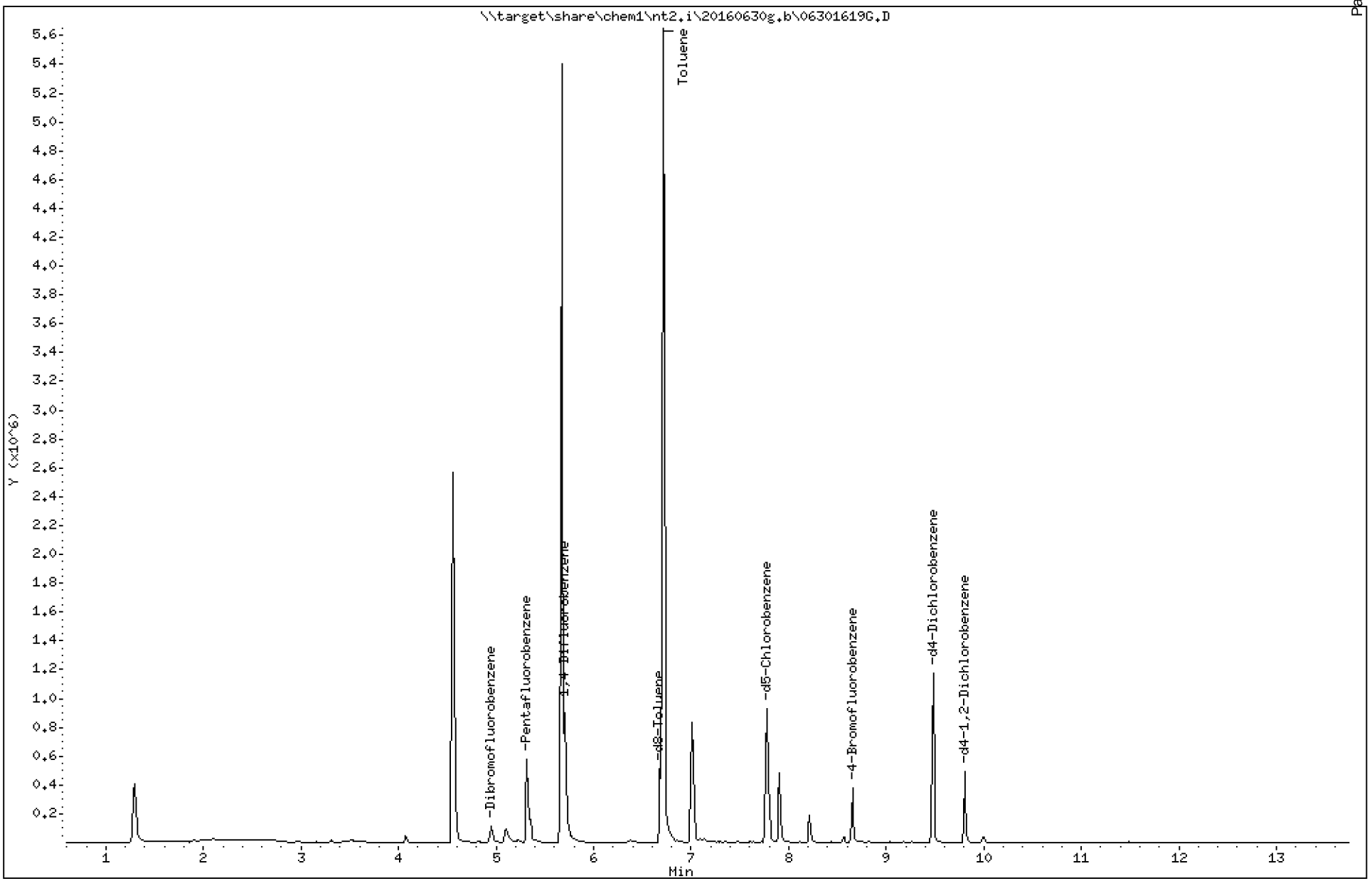
Sample Info: 16F0096-24,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301619G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 13:29

ARI ID: 16F0096-24
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)	
WAGas Tol-C12	(6.63 to 10.52)	48008849	11686465	0.243	
8015C 2MP-TMB	(2.98 to 9.26)	83224207	24150368	0.290	M
AK101 nC6-nC10	(3.49 to 8.61)	58706304	24089138	0.410	M
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	11686465	0.238	
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	24193331	0.330	M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

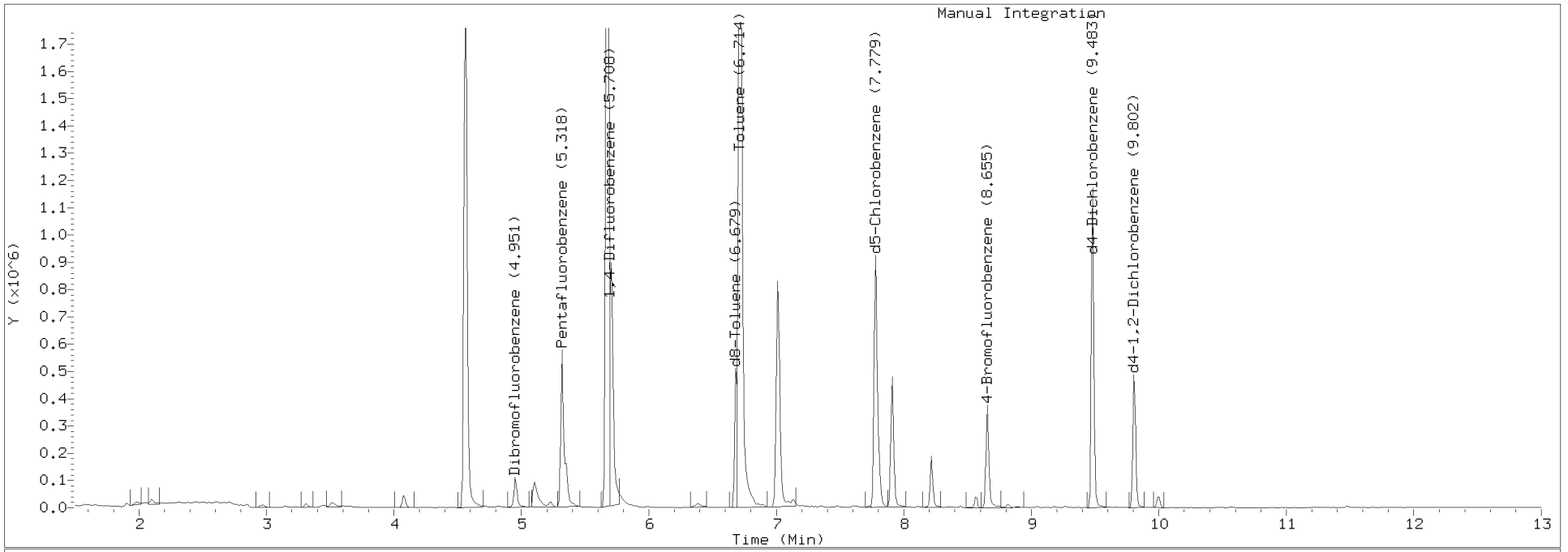
NW Gas Range Subtracted Peaks

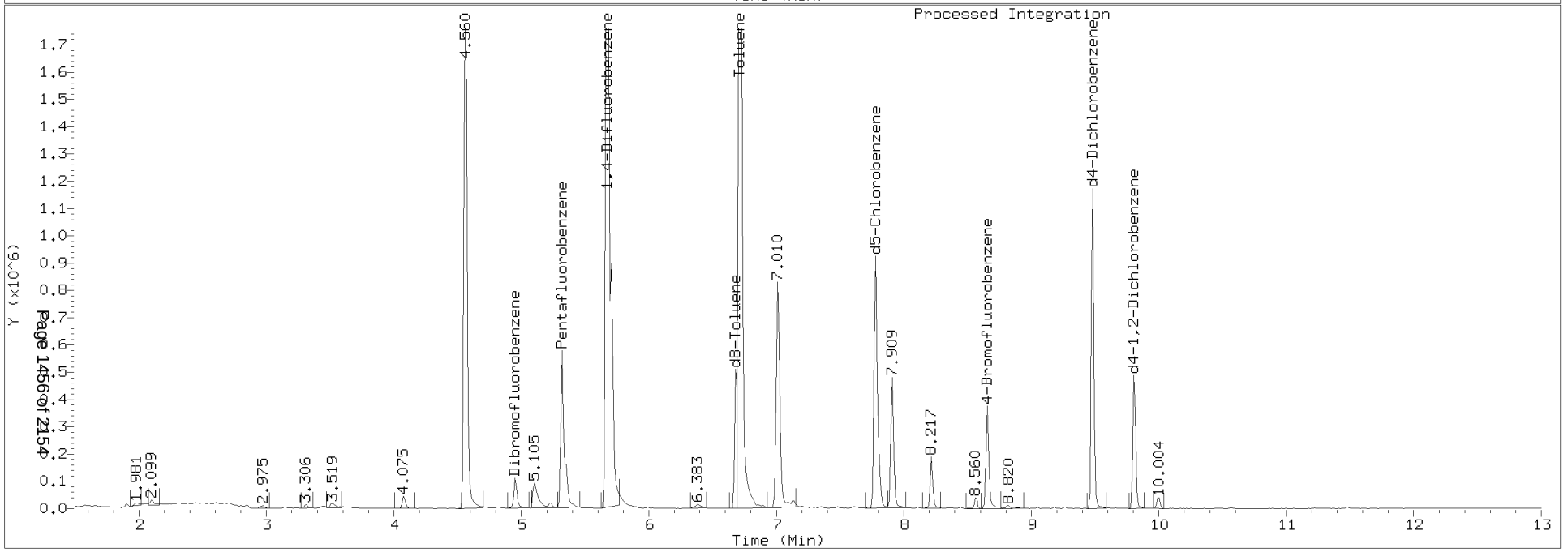
6.679	600686	d8-Toluene
8.655	592613	4-Bromofluorobenzene
9.483	1698917	d4-Dichlorobenzene
7.779	1711859	d5-Chlorobenzene
9.802	744820	d4-1,2-Dichlorobenzene

TPHG Manual Integrations Report

Datafile: NT2, 20160630g.b/06301619G.D Injection: 30-JUN-2016 13:29

Lab ID:16F0096-24





CHRL-P-04-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-25	File ID:	06301620G.D
Sampled:	06/29/16 12:25	Prepared:	06/30/16 13:50	Analyzed:	06/30/16 13:50
Solids:	94.03	Preparation:	No Prep - Volatiles	Initial/Final:	4.884 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5760	U	2880	5760

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.73	94.6	80 - 120	
4-Bromofluorobenzene	5.0000	5.09	102	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301620.D

Date : 30-JUN-2016 13:50

Client ID:

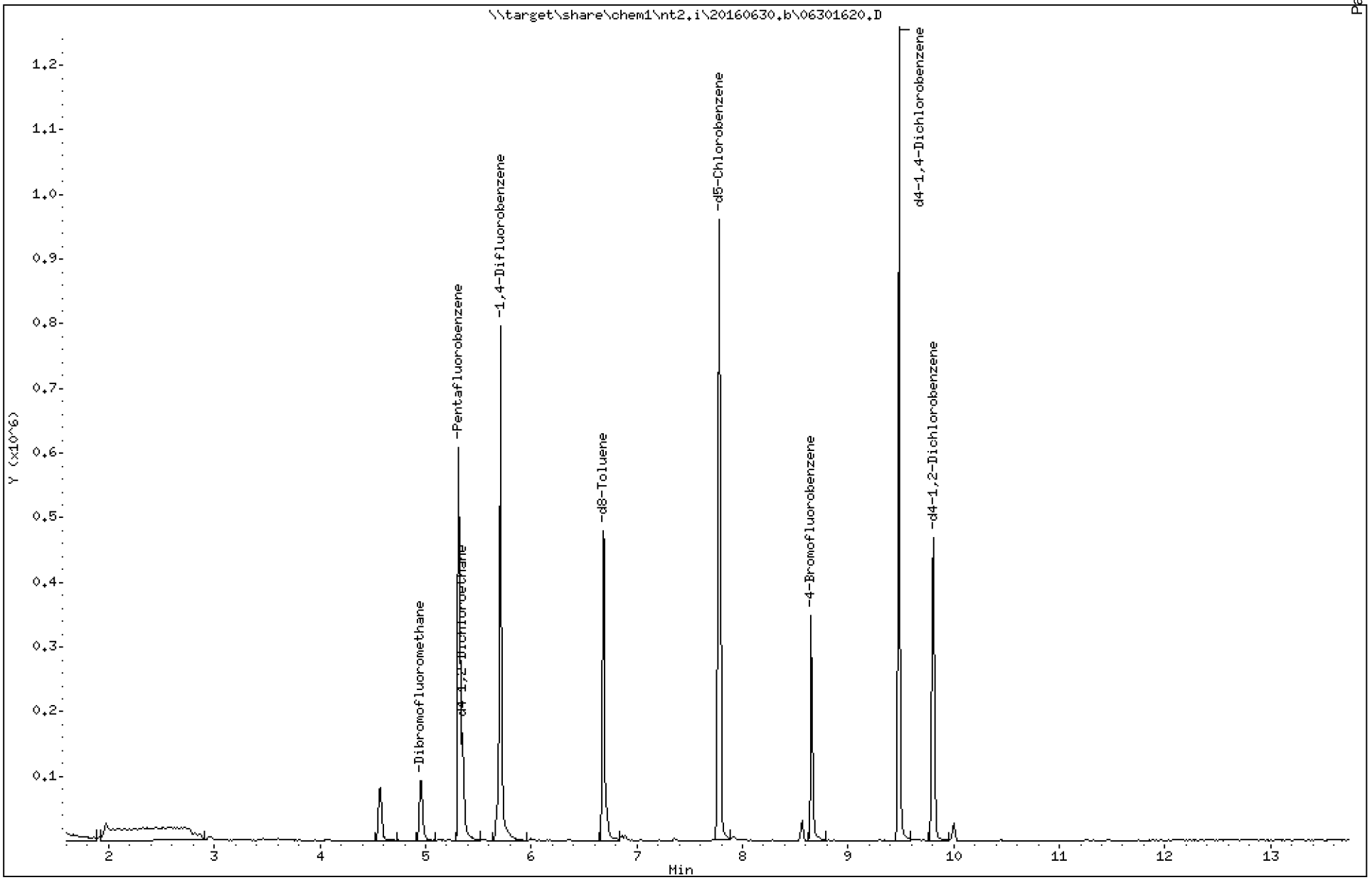
Sample Info: 16F0096-25,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301620.D
Lab Smp Id: 16F0096-25
Inj Date : 30-JUN-2016 13:50
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-25,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.948	4.950	(0.931)	62729	4.02562	4.026
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.315	5.328	(1.000)	343306	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.351	5.352	(1.007)	87223	5.13875	5.139
*	37 1,4-Difluorobenzene	114	5.706	5.707	(1.000)	579135	10.0000	
$	43 d8-Toluene	98	6.688	6.689	(1.172)	324515	4.73073	4.731
	44 Toluene	92	6.723	6.725	(1.178)	13949	0.25394	0.2539
*	53 d5-Chlorobenzene	117	7.776	7.778	(1.000)	513545	10.0000	
	55 Ethyl Benzene	106	Compound Not Detected.					
	57 m,p-xylene	106	7.906	7.908	(1.017)	793	0.02061	0.02061
	58 o-Xylene	106	Compound Not Detected.					
$	62 4-Bromofluorobenzene	174	8.652	8.653	(1.113)	96127	5.08745	5.087
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.482	(1.000)	280171	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.812	9.813	(1.035)	122108	4.69300	4.693

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301620.D
Lab Smp Id: 16F0096-25
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	343306	38.50
37 1,4-Difluorobenze	400954	200477	801908	579135	44.44
53 d5-Chlorobenzene	354752	177376	709504	513545	44.76
76 d4-1,4-Dichlorobe	191489	95745	382978	280171	46.31

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.25
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	-0.03
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 08:07

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-25
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.026	80.51	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.139	102.78	80-128
$ 43 d8-Toluene	5.000	4.731	94.61	80-120
$ 62 4-Bromofluorobenze	5.000	5.087	101.75	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.693	93.86	80-120

REVIEW SUMMARY FOR FILE - 06301620.D

Lab ID: 16F0096-25
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 13:50

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301620.D

Date : 30-JUN-2016 13:50

Client ID:

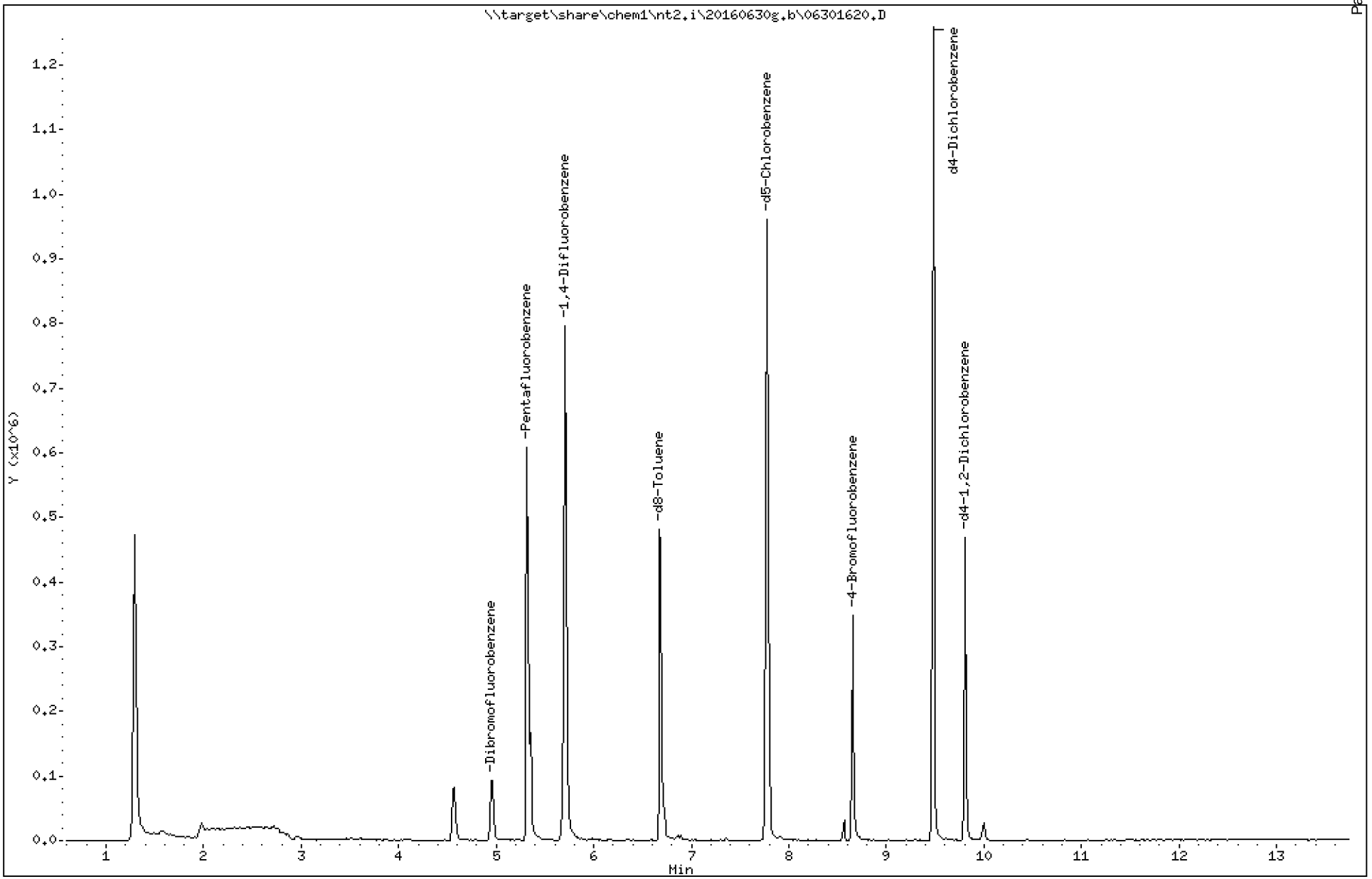
Sample Info: 16F0096-25,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301620.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 13:50

ARI ID: 16F0096-25
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	89961	0.002
8015C 2MP-TMB	(2.98 to 9.26)	83224207	221923	0.003
AK101 nC6-nC10	(3.49 to 8.61)	58706304	221923	0.004
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	89961	0.002
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	264964	0.004

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.676	906555	d8-Toluene
8.652	556921	4-Bromofluorobenzene
9.481	1727537	d4-Dichlorobenzene
7.777	1548437	d5-Chlorobenzene
9.812	760311	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301620G.D

Date : 30-JUN-2016 13:50

Client ID:

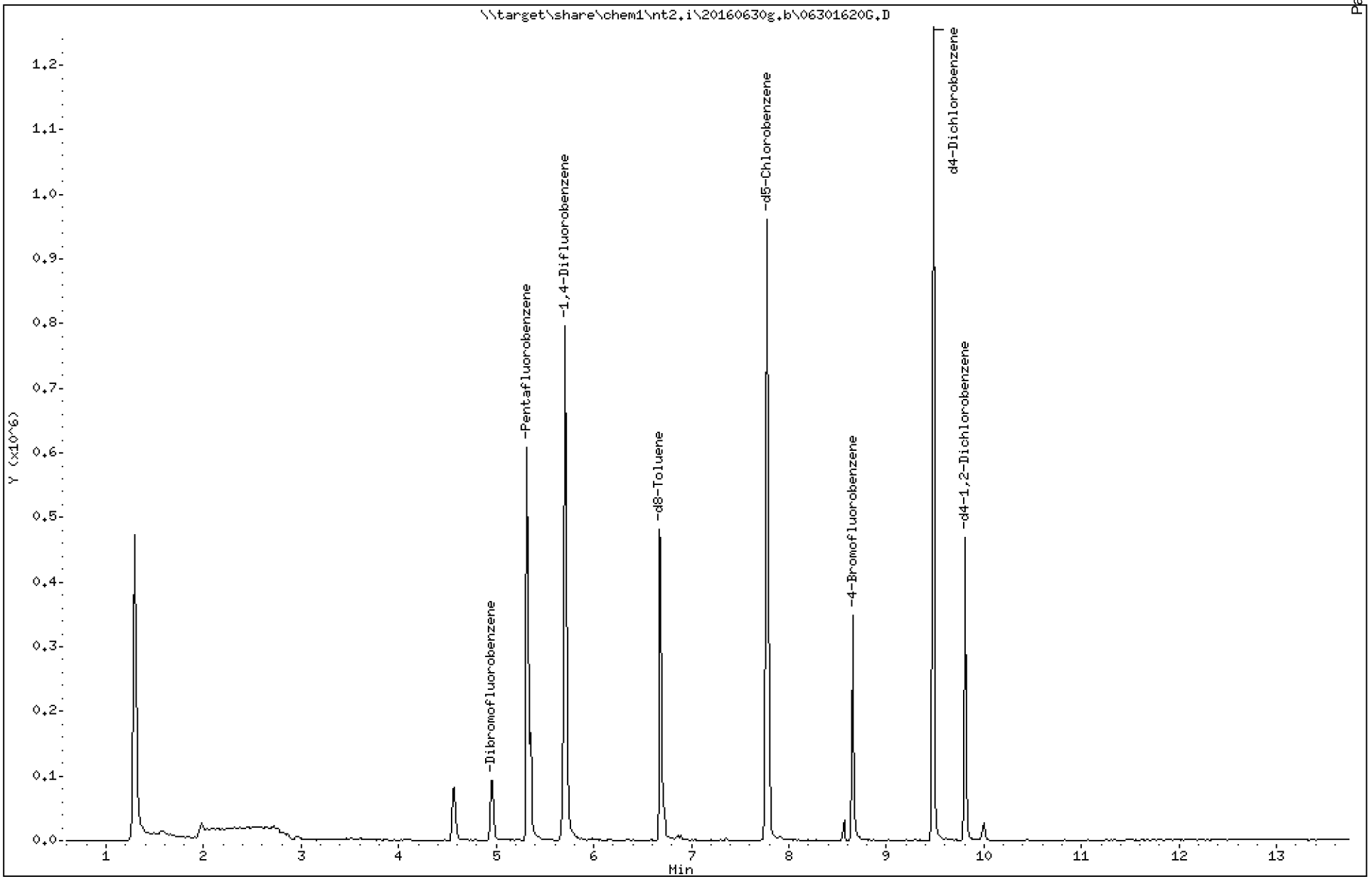
Sample Info: 16F0096-25,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301620G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 13:50

ARI ID: 16F0096-25
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	89961	0.002
8015C 2MP-TMB	(2.98 to 9.26)	83224207	221923	0.003
AK101 nC6-nC10	(3.49 to 8.61)	58706304	221923	0.004
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	89961	0.002
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	264964	0.004

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.676	906555	d8-Toluene
8.652	556921	4-Bromofluorobenzene
9.481	1727537	d4-Dichlorobenzene
7.777	1548437	d5-Chlorobenzene
9.812	760311	d4-1,2-Dichlorobenzene

CHRL-P-05-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-26	File ID:	06301621G.D
Sampled:	06/29/16 12:20	Prepared:	06/30/16 14:10	Analyzed:	06/30/16 14:10
Solids:	91.24	Preparation:	No Prep - Volatiles	Initial/Final:	6.145 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	4940	U	2470	4940

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.79	95.9	80 - 120	
4-Bromofluorobenzene	5.0000	5.01	100	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301621.D

Date : 30-JUN-2016 14:10

Client ID:

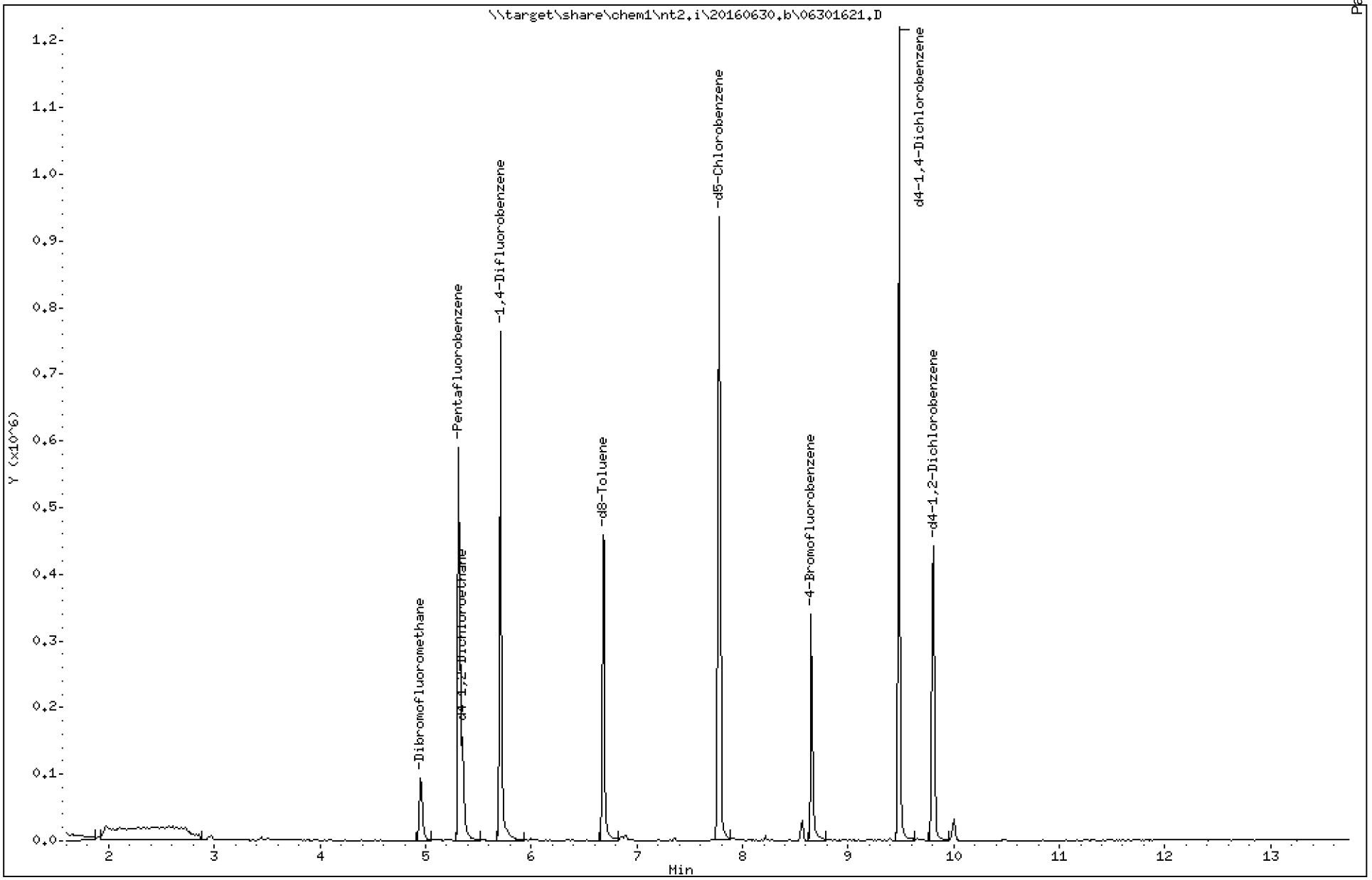
Sample Info: 16F0096-26,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301621.D
Lab Smp Id: 16F0096-26
Inj Date : 30-JUN-2016 14:10
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-26,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.948	4.950	(0.931)	58070	3.76184	3.762(R)
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.314	5.328	(1.000)	340093	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.352	(1.007)	83796	4.98349	4.983
*	37 1,4-Difluorobenzene	114	5.705	5.707	(1.000)	550013	10.0000	
$	43 d8-Toluene	98	6.687	6.689	(1.172)	312331	4.79419	4.794
	44 Toluene	92	6.722	6.725	(1.178)	1436	0.02753	0.02753
*	53 d5-Chlorobenzene	117	7.776	7.778	(1.000)	491425	10.0000	
	55 Ethyl Benzene	106	Compound Not Detected.					
	57 m,p-xylene	106	7.918	7.908	(1.018)	541	0.01470	0.01470
	58 o-Xylene	106	8.225	8.216	(1.058)	2564	0.07511	0.07511
$	62 4-Bromofluorobenzene	174	8.651	8.653	(1.113)	90534	5.00712	5.007
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.482	(1.000)	265791	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.813	(1.035)	121274	4.91311	4.913

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301621.D
Lab Smp Id: 16F0096-26
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	340093	37.20
37 1,4-Difluorobenze	400954	200477	801908	550013	37.18
53 d5-Chlorobenzene	354752	177376	709504	491425	38.53
76 d4-1,4-Dichlorobe	191489	95745	382978	265791	38.80

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.31	-0.26
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	-0.04
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.03
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 08:07

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-26
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	3.762	75.24*	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.983	99.67	80-128
$ 43 d8-Toluene	5.000	4.794	95.88	80-120
$ 62 4-Bromofluorobenze	5.000	5.007	100.14	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.913	98.26	80-120

REVIEW SUMMARY FOR FILE - 06301621.D

Lab ID: 16F0096-26
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 14:10

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301621G.D

Date : 30-JUN-2016 14:10

Client ID:

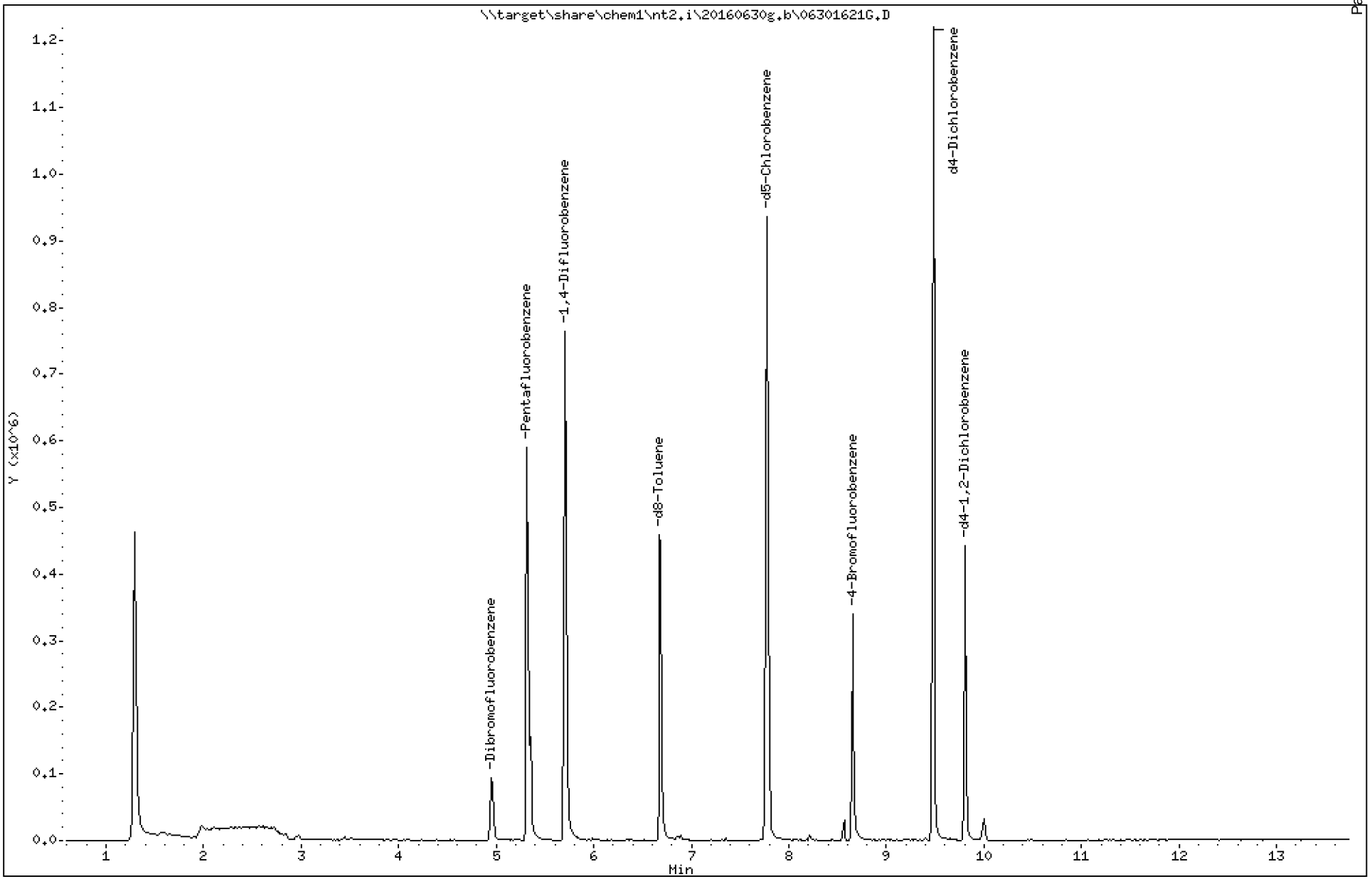
Sample Info: 16F0096-26,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301621G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 14:10

ARI ID: 16F0096-26
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	101368	0.002
8015C 2MP-TMB	(2.98 to 9.26)	83224207	46986	0.001
AK101 nC6-nC10	(3.49 to 8.61)	58706304	46985	0.001
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	101368	0.002
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	101370	0.001

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.676	830356	d8-Toluene
8.652	552827	4-Bromofluorobenzene
9.480	1680329	d4-Dichlorobenzene
7.776	1484707	d5-Chlorobenzene
9.811	736956	d4-1,2-Dichlorobenzene

CHRL-R-02-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-27	File ID:	06301622G.D
Sampled:	06/29/16 13:45	Prepared:	06/30/16 14:31	Analyzed:	06/30/16 14:31
Solids:	91.92	Preparation:	No Prep - Volatiles	Initial/Final:	5.054 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5820	U	2910	5820

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.75	95.0	80 - 120	
4-Bromofluorobenzene	5.0000	5.26	105	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301622.D

Date : 30-JUN-2016 14:31

Client ID:

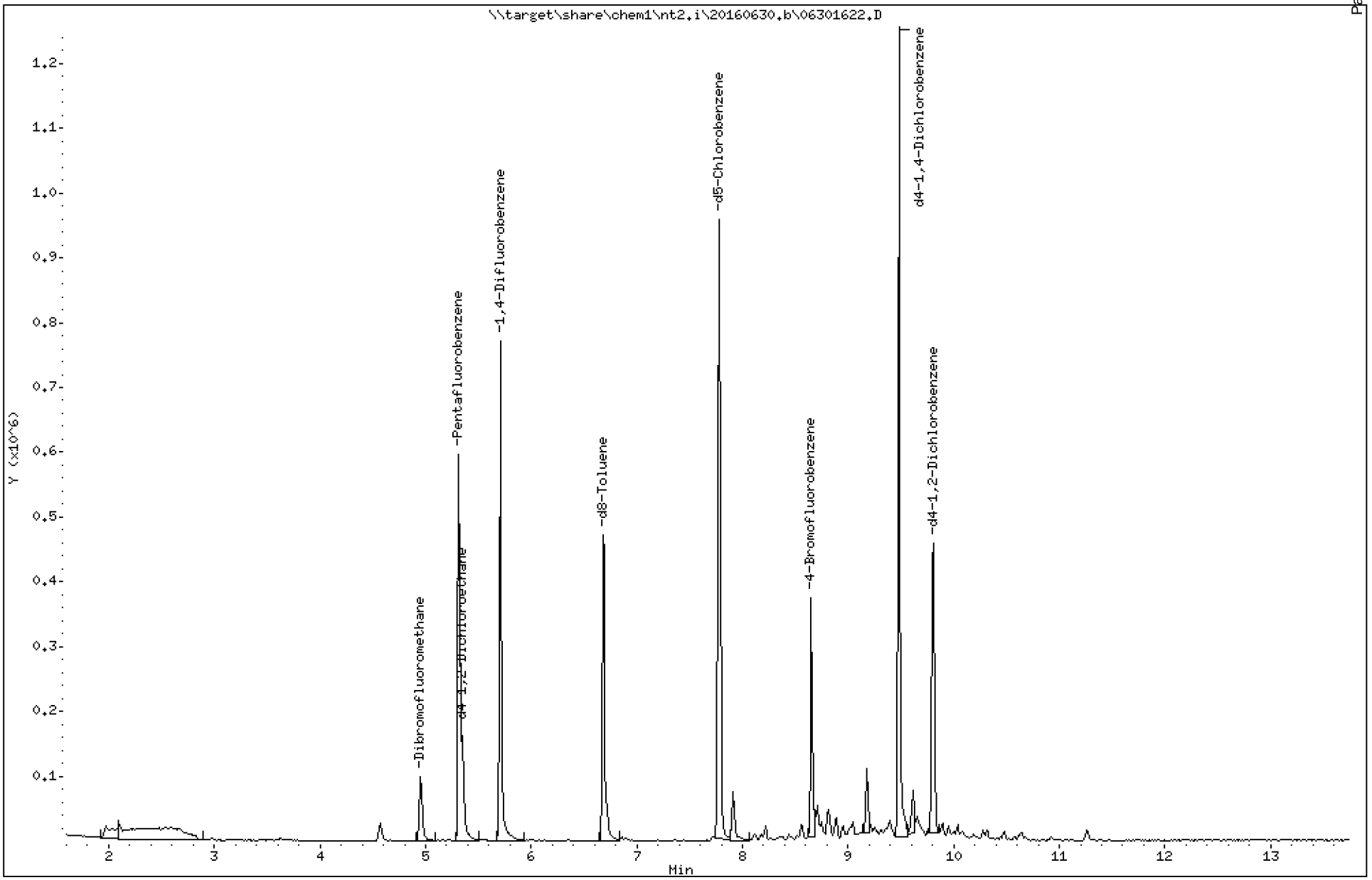
Sample Info: 16F0096-27,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301622.D
Lab Smp Id: 16F0096-27
Inj Date : 30-JUN-2016 14:31
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-27,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.948	4.950	(0.931)	59258	3.90601	3.906(R)
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.315	5.328	(1.000)	334241	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.352	(1.007)	82527	4.99395	4.994
*	37 1,4-Difluorobenzene	114	5.705	5.707	(1.000)	560863	10.0000	
$	43 d8-Toluene	98	6.687	6.689	(1.172)	315683	4.75190	4.752
	44 Toluene	92	6.723	6.725	(1.178)	15788	0.29678	0.2968
*	53 d5-Chlorobenzene	117	7.776	7.778	(1.000)	507420	10.0000	
	55 Ethyl Benzene	106	7.800	7.801	(1.003)	5327	0.16944	0.1694
	57 m,p-xylene	106	7.906	7.908	(1.017)	21468	0.56475	0.5648
	58 o-Xylene	106	8.214	8.216	(1.056)	4384	0.12438	0.1244
$	62 4-Bromofluorobenzene	174	8.652	8.653	(1.113)	98172	5.25840	5.258
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.482	(1.000)	277292	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.813	(1.035)	120369	4.67419	4.674

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301622.D
Lab Smp Id: 16F0096-27
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	334241	34.84
37 1,4-Difluorobenze	400954	200477	801908	560863	39.88
53 d5-Chlorobenzene	354752	177376	709504	507420	43.04
76 d4-1,4-Dichlorobe	191489	95745	382978	277292	44.81

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.25
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	-0.03
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-27
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	3.906	78.12*	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.994	99.88	80-128
$ 43 d8-Toluene	5.000	4.752	95.04	80-120
$ 62 4-Bromofluorobenze	5.000	5.258	105.17	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.674	93.48	80-120

REVIEW SUMMARY FOR FILE - 06301622.D

Lab ID: 16F0096-27
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 14:31

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301622G.D

Date : 30-JUN-2016 14:31

Client ID:

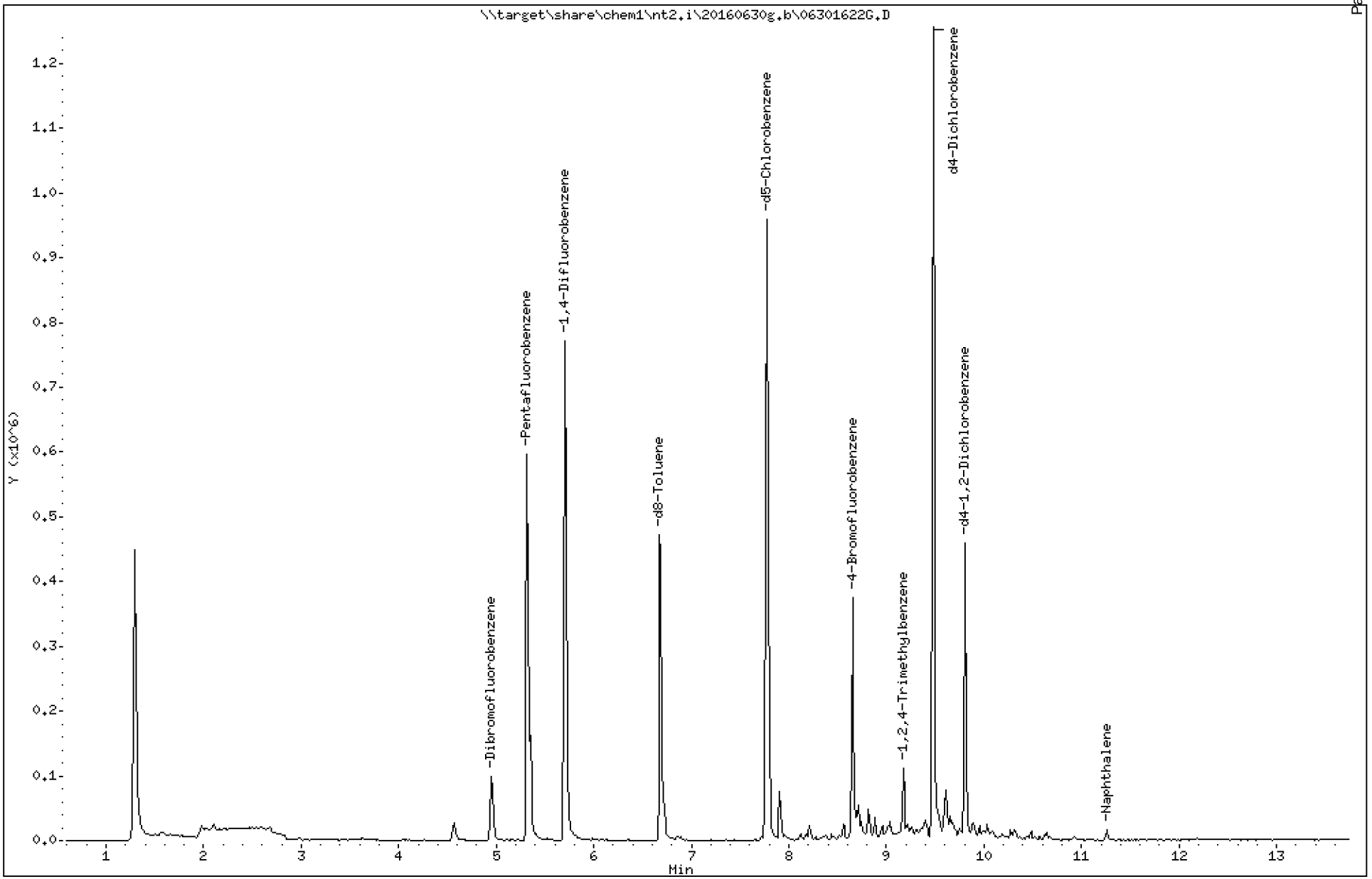
Sample Info: 16F0096-27,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301622G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 14:31

ARI ID: 16F0096-27
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	1153916	0.024
8015C 2MP-TMB	(2.98 to 9.26)	83224207	728029	0.009
AK101 nC6-nC10	(3.49 to 8.61)	58706304	288618	0.005
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	1210439	0.025
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	1205449	0.016

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.676	901061	d8-Toluene
8.652	691031	4-Bromofluorobenzene
9.480	1836056	d4-Dichlorobenzene
7.777	1563566	d5-Chlorobenzene
9.812	851840	d4-1,2-Dichlorobenzene

CHRL-R-03-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-28	File ID:	06301623G.D
Sampled:	06/29/16 13:50	Prepared:	06/30/16 14:52	Analyzed:	06/30/16 14:52
Solids:	94.04	Preparation:	No Prep - Volatiles	Initial/Final:	5.21 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5420	U	2710	5420

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.76	95.2	80 - 120	
4-Bromofluorobenzene	5.0000	5.19	104	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301623.D

Date : 30-JUN-2016 14:52

Client ID:

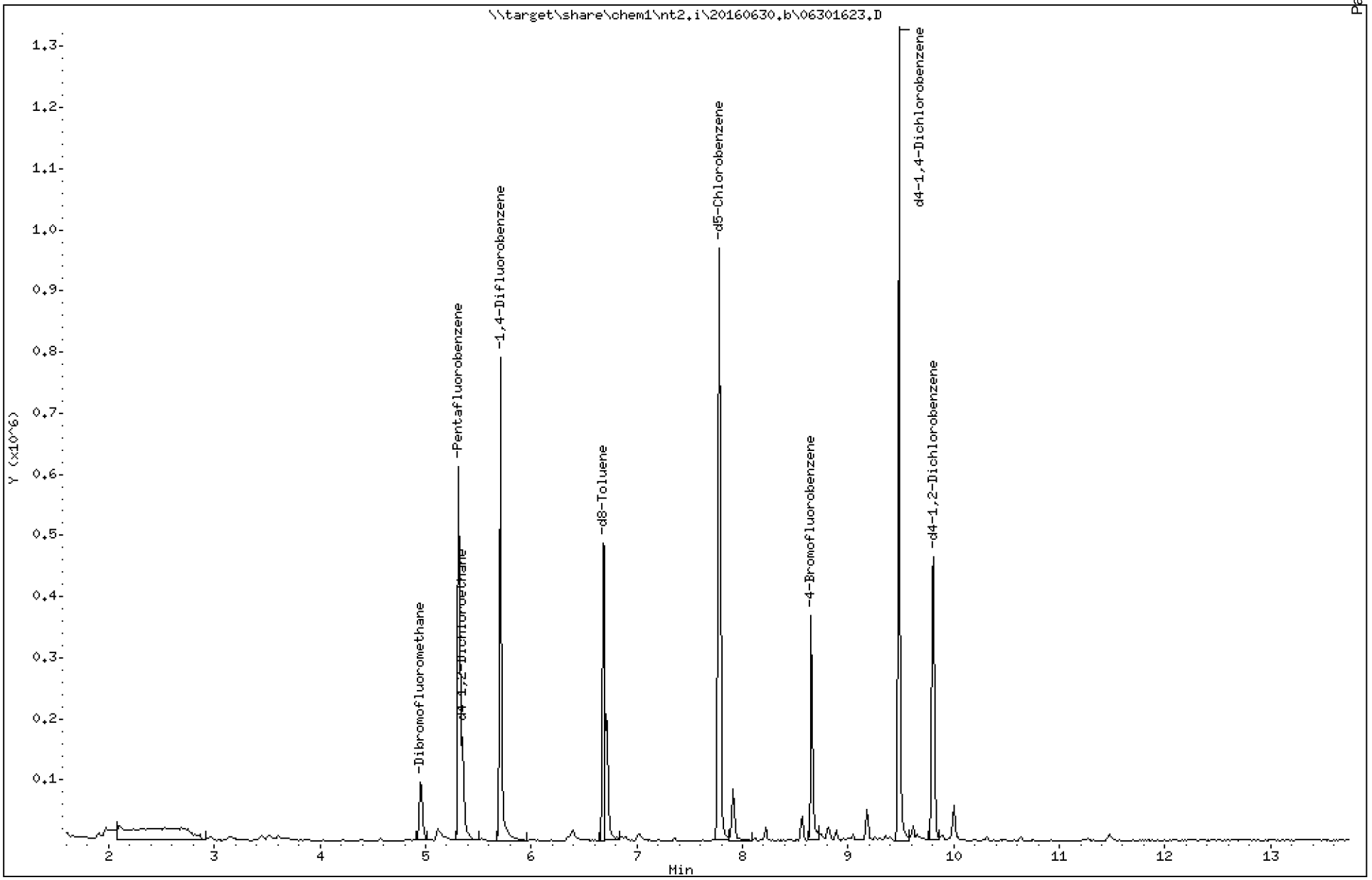
Sample Info: 16F0096-28,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301623.D
Lab Smp Id: 16F0096-28
Inj Date : 30-JUN-2016 14:52
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-28,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.948	4.950	(0.931)	61219	3.94122	3.941(R)
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.315	5.328	(1.000)	342217	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.352	(1.007)	88530	5.23235	5.232
*	37 1,4-Difluorobenzene	114	5.705	5.707	(1.000)	582596	10.0000	
$	43 d8-Toluene	98	6.687	6.689	(1.172)	328553	4.76114	4.761
	44 Toluene	92	6.723	6.725	(1.178)	78338	1.41765	1.418
*	53 d5-Chlorobenzene	117	7.776	7.778	(1.000)	526450	10.0000	
	55 Ethyl Benzene	106	7.800	7.801	(1.003)	5220	0.16003	0.1600
	57 m,p-xylene	106	7.906	7.908	(1.017)	24793	0.62865	0.6286
	58 o-Xylene	106	8.226	8.216	(1.058)	5717	0.15633	0.1563
$	62 4-Bromofluorobenzene	174	8.652	8.653	(1.113)	100577	5.19248	5.192
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.482	(1.000)	283884	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.813	(1.035)	127046	4.81892	4.819

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301623.D
Lab Smp Id: 16F0096-28
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	342217	38.06
37 1,4-Difluorobenze	400954	200477	801908	582596	45.30
53 d5-Chlorobenzene	354752	177376	709504	526450	48.40
76 d4-1,4-Dichlorobe	191489	95745	382978	283884	48.25

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.25
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	-0.03
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-28
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	3.941	78.82*	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.232	104.65	80-128
$ 43 d8-Toluene	5.000	4.761	95.22	80-120
$ 62 4-Bromofluorobenze	5.000	5.192	103.85	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.819	96.38	80-120

REVIEW SUMMARY FOR FILE - 06301623.D

Lab ID: 16F0096-28
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 14:52

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301623.D

Date : 30-JUN-2016 14:52

Client ID:

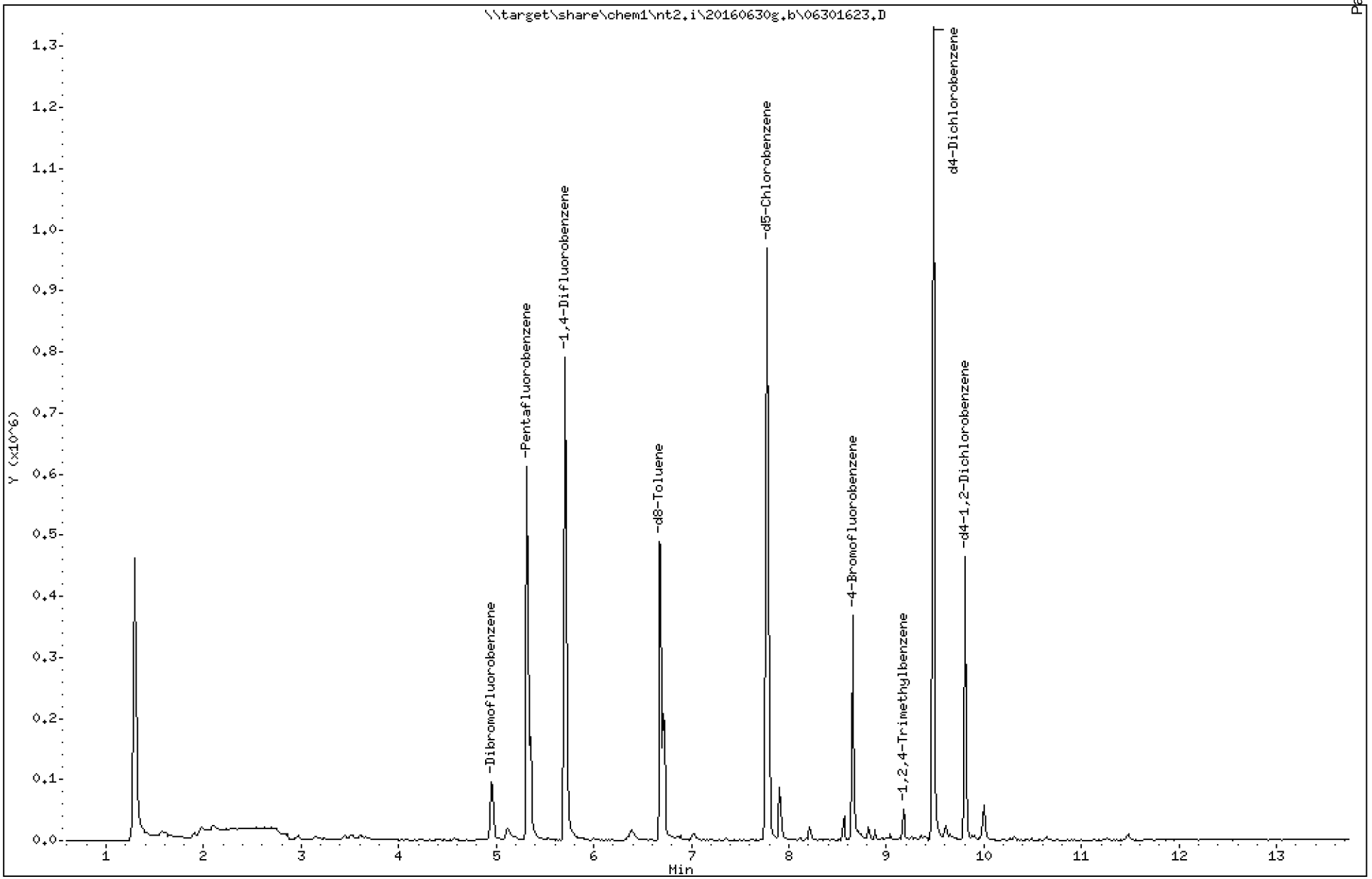
Sample Info: 16F0096-28,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301623.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 14:52

ARI ID: 16F0096-28
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	551992	0.011
8015C 2MP-TMB	(2.98 to 9.26)	83224207	499228	0.006
AK101 nC6-nC10	(3.49 to 8.61)	58706304	397010	0.007
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	551992	0.011
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	664011	0.009

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.676	1192105	d8-Toluene
8.652	675949	4-Bromofluorobenzene
9.480	1860533	d4-Dichlorobenzene
7.777	1622088	d5-Chlorobenzene
9.812	782235	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301623G.D

Date : 30-JUN-2016 14:52

Client ID:

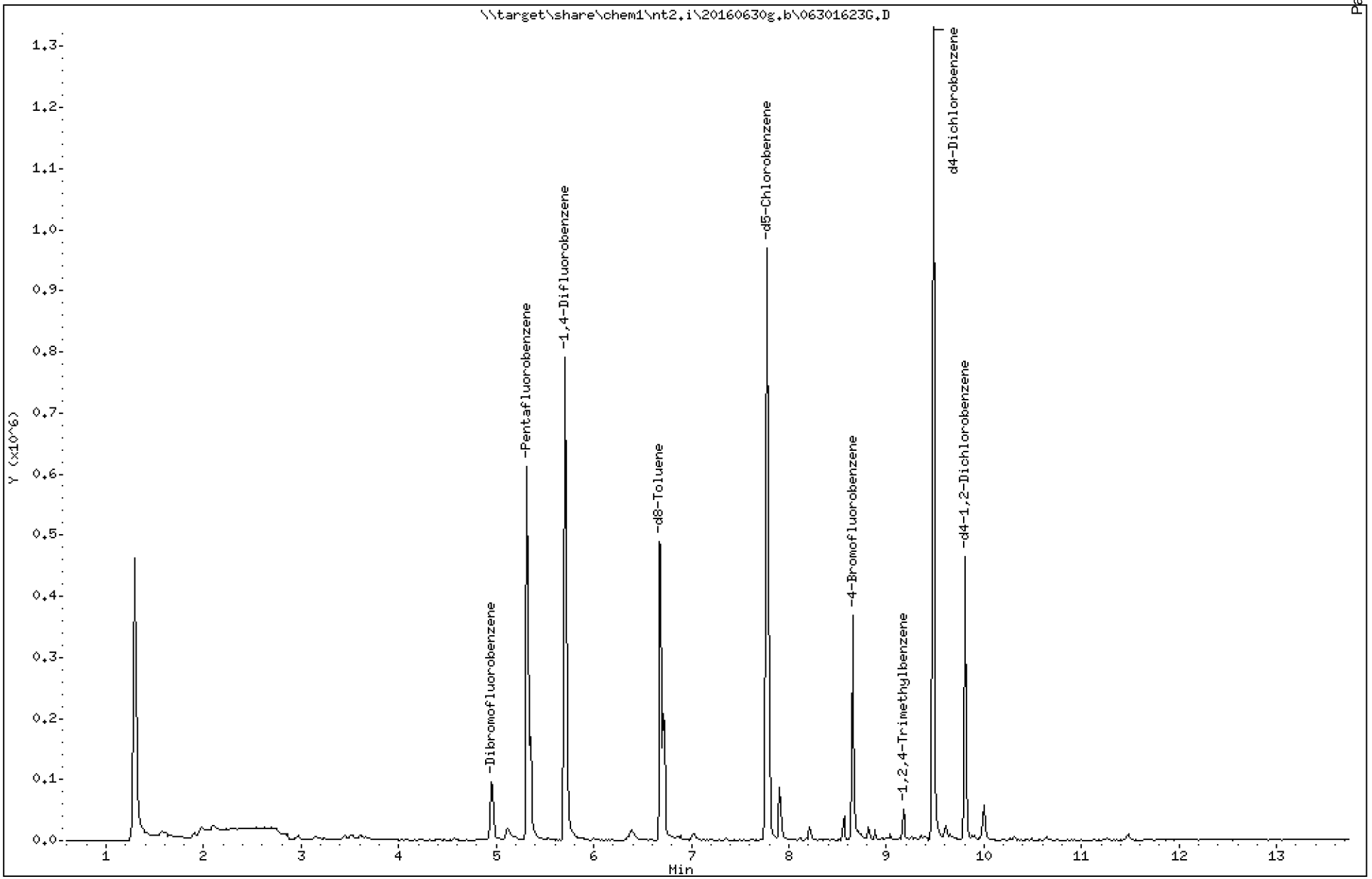
Instrument: nt2.i

Sample Info: 16F0096-28,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301623G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 14:52

ARI ID: 16F0096-28
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	551992	0.011
8015C 2MP-TMB	(2.98 to 9.26)	83224207	499228	0.006
AK101 nC6-nC10	(3.49 to 8.61)	58706304	397010	0.007
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	551992	0.011
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	664011	0.009

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.676	1192105	d8-Toluene
8.652	675949	4-Bromofluorobenzene
9.480	1860533	d4-Dichlorobenzene
7.777	1622088	d5-Chlorobenzene
9.812	782235	d4-1,2-Dichlorobenzene

CHRL-R-04-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16F0096-29	File ID:	06301624G.D
Sampled:	06/29/16 13:30	Prepared:	06/30/16 15:12	Analyzed:	06/30/16 15:12
Solids:	90.00	Preparation:	No Prep - Volatiles	Initial/Final:	5.127 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5970	U	2990	5970

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.78	95.6	80 - 120	
4-Bromofluorobenzene	5.0000	4.91	98.2	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301624.D

Date : 30-JUN-2016 15:12

Client ID:

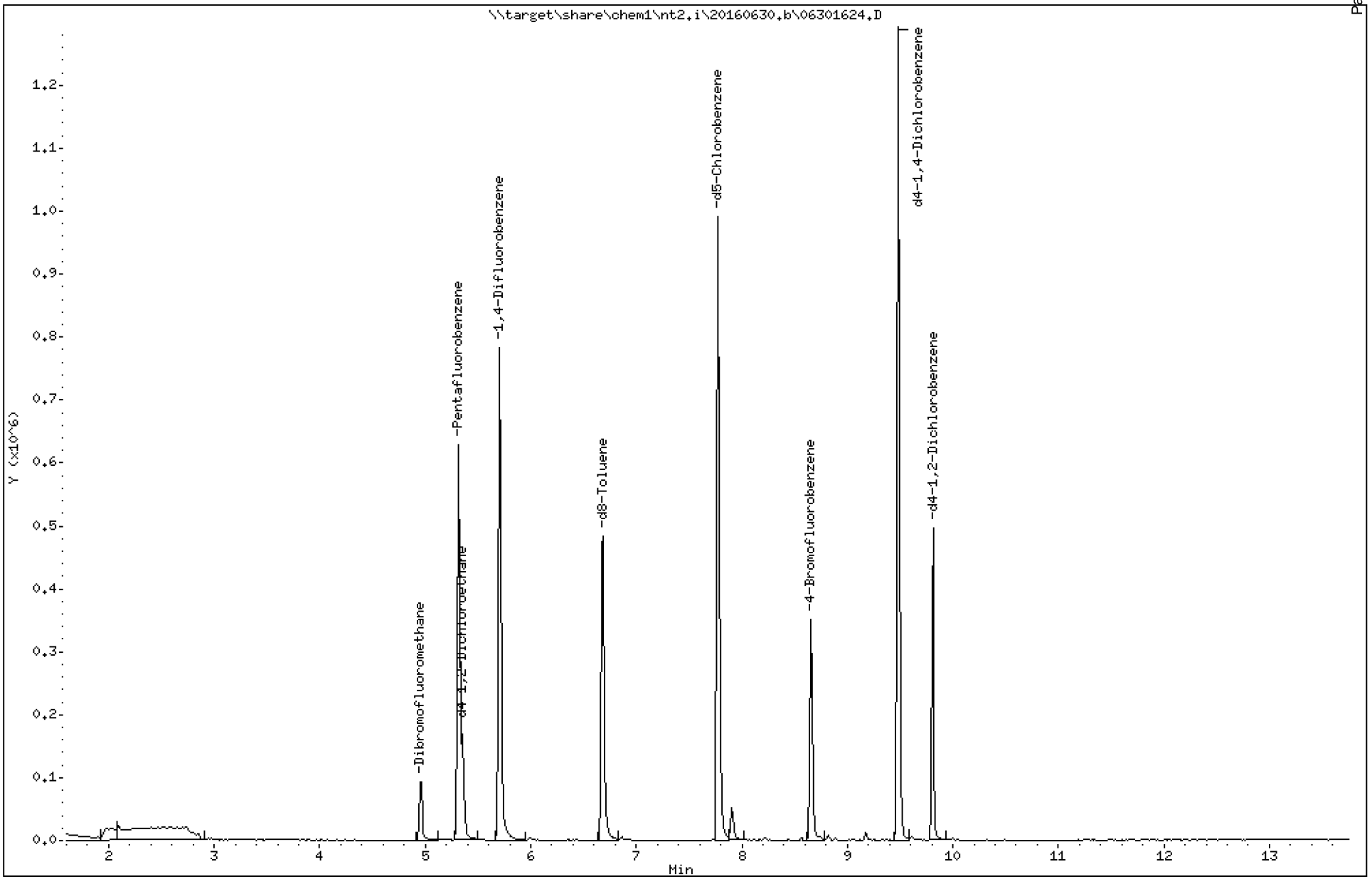
Sample Info: 16F0096-29,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301624.D
Lab Smp Id: 16F0096-29
Inj Date : 30-JUN-2016 15:12
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-29,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.948	4.950	(0.931)	63779	4.06068	4.061
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.314	5.328	(1.000)	346039	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.352	(1.007)	85814	5.01581	5.016
*	37 1,4-Difluorobenzene	114	5.705	5.707	(1.000)	583123	10.0000	
$	43 d8-Toluene	98	6.687	6.689	(1.172)	330157	4.78006	4.780
	44 Toluene	92	6.722	6.725	(1.178)	5930	0.10722	0.1072
*	53 d5-Chlorobenzene	117	7.776	7.778	(1.000)	535253	10.0000	
	55 Ethyl Benzene	106	7.799	7.801	(1.003)	3316	0.09999	0.09999
	57 m,p-xylene	106	7.906	7.908	(1.017)	15419	0.38453	0.3845
	58 o-Xylene	106	8.225	8.216	(1.058)	1473	0.03962	0.03962
$	62 4-Bromofluorobenzene	174	8.651	8.653	(1.113)	96721	4.91129	4.911
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.482	(1.000)	282916	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.813	(1.035)	122930	4.67875	4.679

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301624.D
Lab Smp Id: 16F0096-29
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	346039	39.60
37 1,4-Difluorobenze	400954	200477	801908	583123	45.43
53 d5-Chlorobenzene	354752	177376	709504	535253	50.88
76 d4-1,4-Dichlorobe	191489	95745	382978	282916	47.75

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.31	-0.26
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	-0.04
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.03
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 08:07

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-29
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.061	81.21	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.016	100.32	80-128
$ 43 d8-Toluene	5.000	4.780	95.60	80-120
$ 62 4-Bromofluorobenze	5.000	4.911	98.23	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.679	93.57	80-120

REVIEW SUMMARY FOR FILE - 06301624.D

Lab ID: 16F0096-29
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 15:12

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301624.D

Date : 30-JUN-2016 15:12

Client ID:

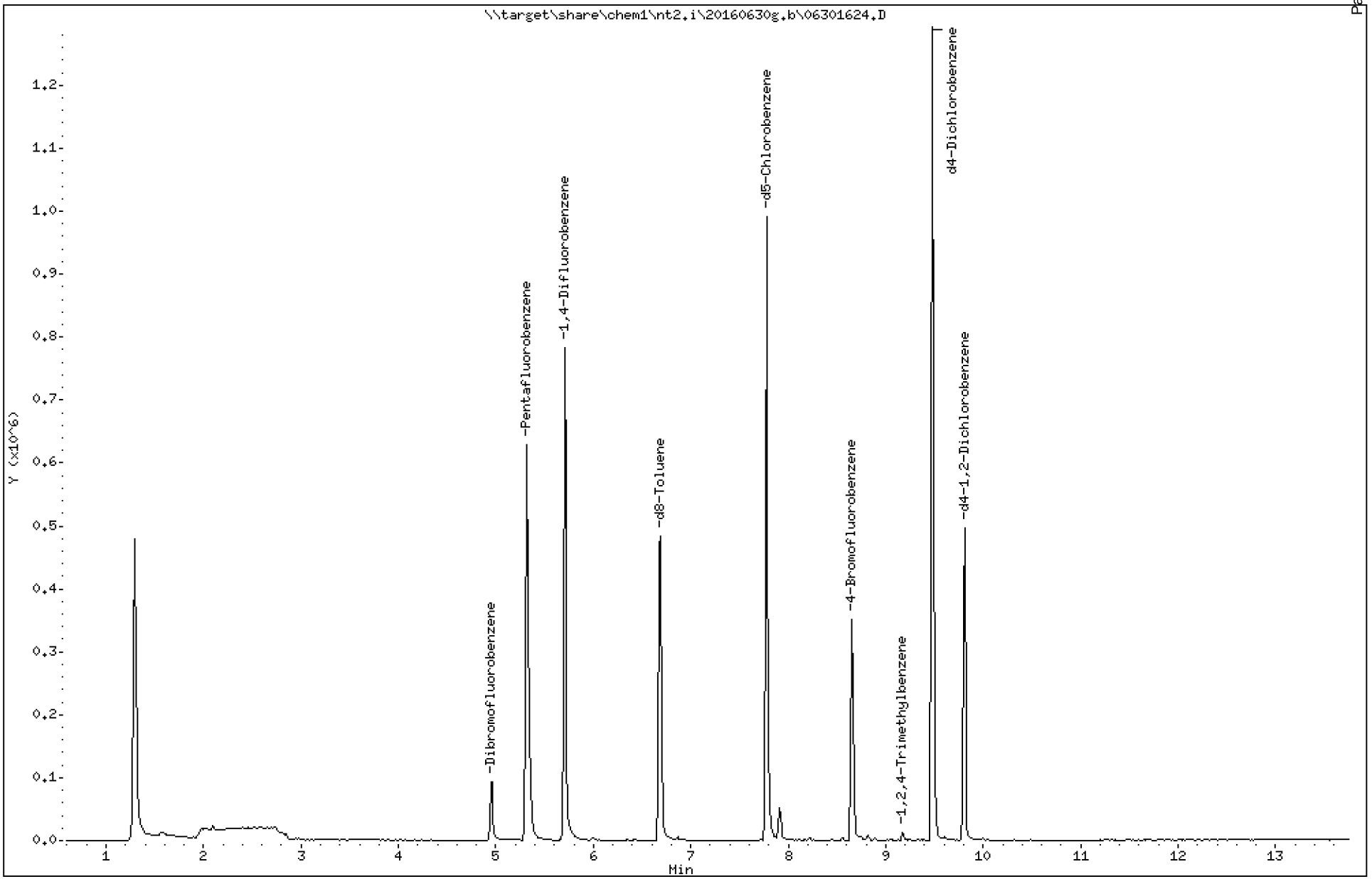
Sample Info: 16F0096-29,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301624.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 15:12

ARI ID: 16F0096-29
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	114447	0.002
8015C 2MP-TMB	(2.98 to 9.26)	83224207	114448	0.001
AK101 nC6-nC10	(3.49 to 8.61)	58706304	95037	0.002
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	114447	0.002
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	114450	0.002

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.687	888532	d8-Toluene
8.652	569347	4-Bromofluorobenzene
9.480	1787215	d4-Dichlorobenzene
7.776	1615821	d5-Chlorobenzene
9.811	777118	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301624G.D

Date : 30-JUN-2016 15:12

Client ID:

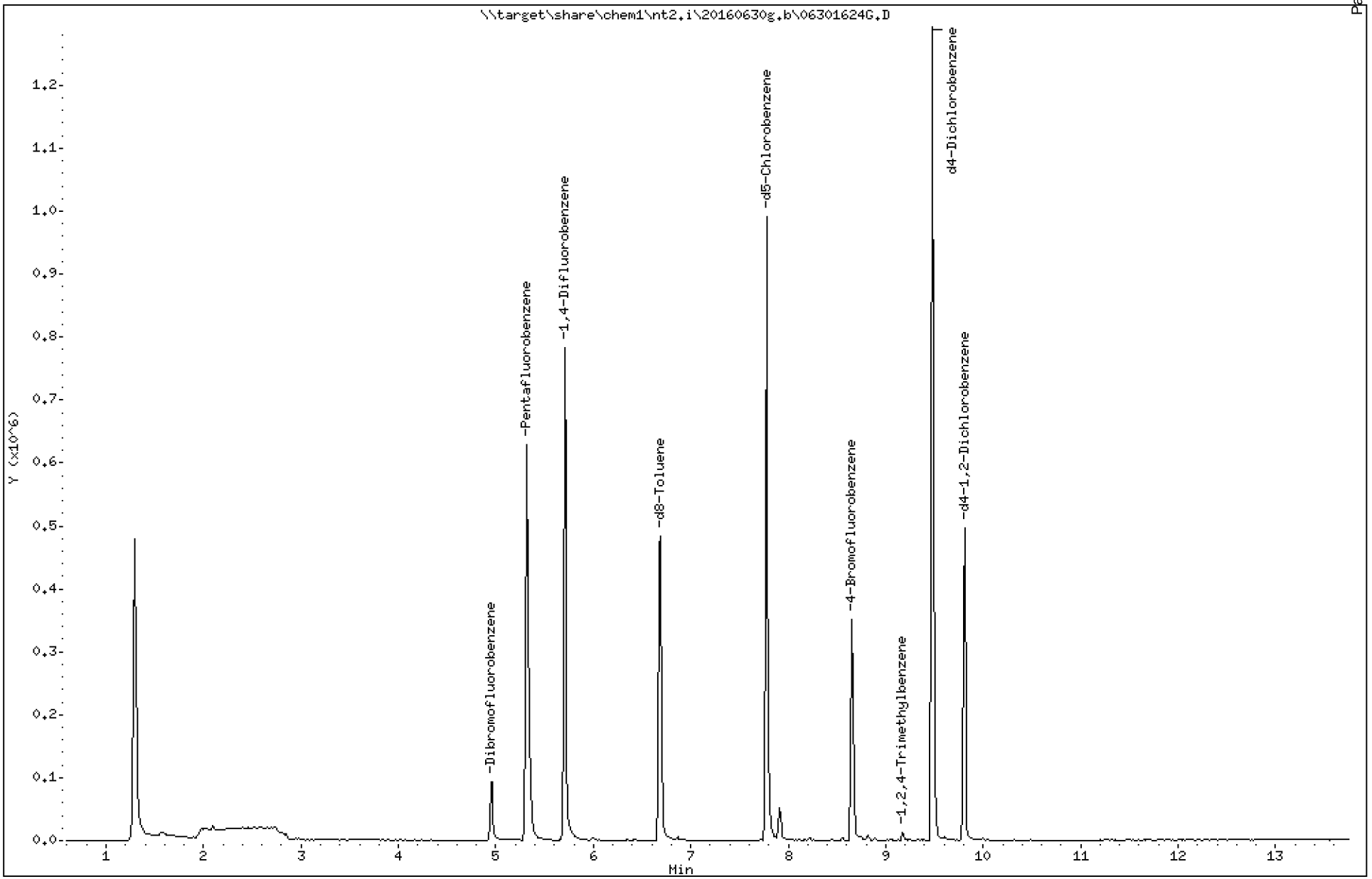
Sample Info: 16F0096-29,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301624G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 15:12

ARI ID: 16F0096-29
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	114447	0.002
8015C 2MP-TMB	(2.98 to 9.26)	83224207	114448	0.001
AK101 nC6-nC10	(3.49 to 8.61)	58706304	95037	0.002
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	114447	0.002
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	114450	0.002

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.687	888532	d8-Toluene
8.652	569347	4-Bromofluorobenzene
9.480	1787215	d4-Dichlorobenzene
7.776	1615821	d5-Chlorobenzene
9.811	777118	d4-1,2-Dichlorobenzene

CHRL-TB-160629

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Water	Laboratory ID:	16F0096-30	File ID:	06301625G.D
Sampled:	06/29/16 00:00	Prepared:	06/30/16 15:33	Analyzed:	06/30/16 15:33
Solids:		Preparation:	No Prep - Volatiles	Initial/Final:	10 mL / 10 mL
Batch:	BEF0240	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	100	U	9.06	100

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.83	96.6	80 - 120	
4-Bromofluorobenzene	5.0000	4.59	91.8	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301625.D

Date : 30-JUN-2016 15:33

Client ID:

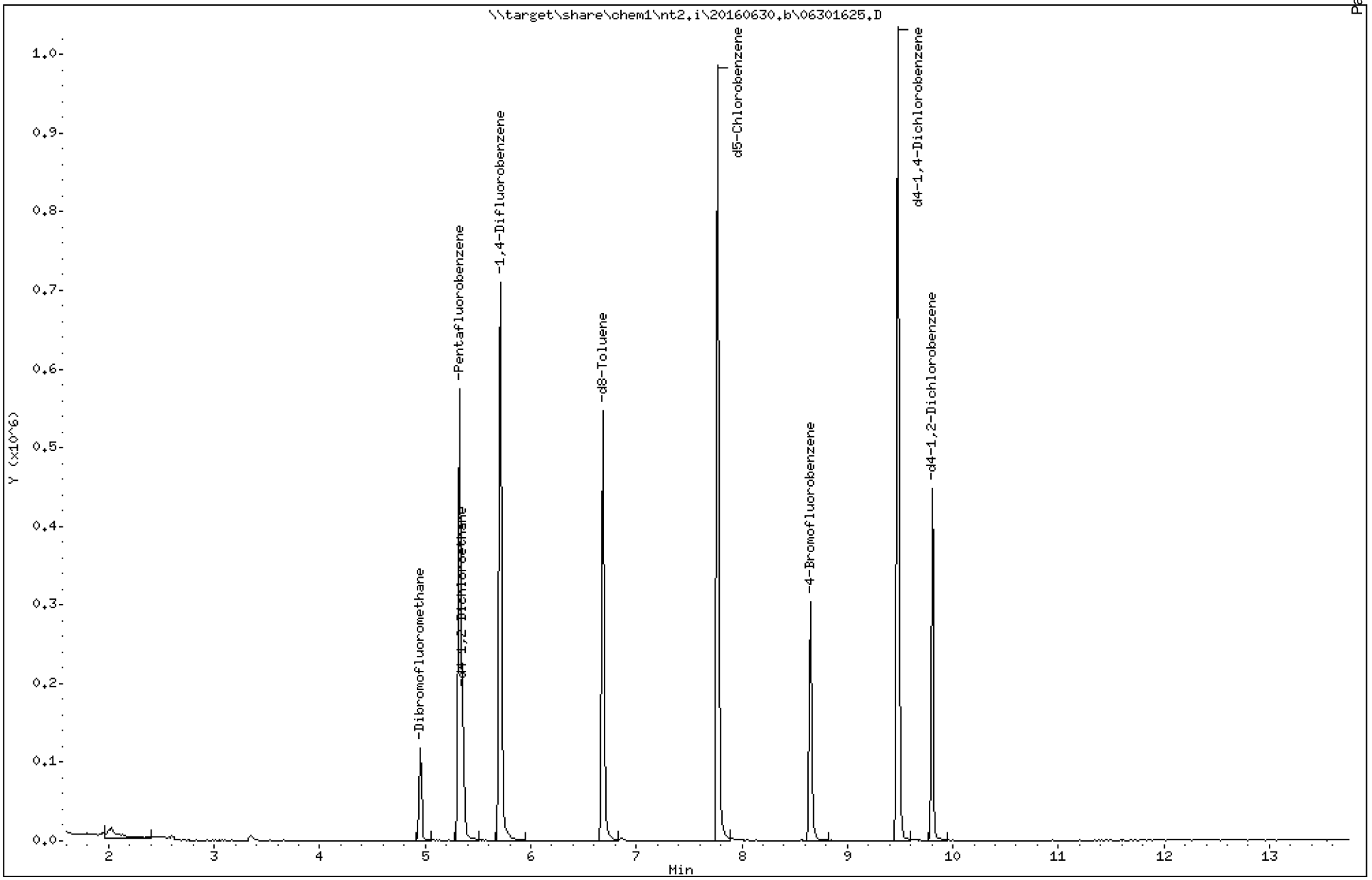
Sample Info: 16F0096-30,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301625.D
Lab Smp Id: 16F0096-30
Inj Date : 30-JUN-2016 15:33
Operator : LH Inst ID: nt2.i
Smp Info : 16F0096-30,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.948	4.950	(0.929)	64469	4.49477	4.495
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.326	5.328	(1.000)	316002	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.352	(1.004)	86012	5.50525	5.505
*	37 1,4-Difluorobenzene	114	5.717	5.707	(1.000)	533290	10.0000	
$	43 d8-Toluene	98	6.687	6.689	(1.170)	304951	4.82770	4.828
	44 Toluene	92	6.722	6.725	(1.176)	1550	0.03064	0.03064
*	53 d5-Chlorobenzene	117	7.776	7.778	(1.000)	485865	10.0000	
	55 Ethyl Benzene	106	Compound Not Detected.					
	57 m,p-xylene	106	Compound Not Detected.					
	58 o-Xylene	106	Compound Not Detected.					
$	62 4-Bromofluorobenzene	174	8.651	8.653	(1.113)	82032	4.58882	4.589
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.482	(1.000)	240396	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.799	9.813	(1.034)	115478	5.17251	5.173

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301625.D
Lab Smp Id: 16F0096-30
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	316002	27.48
37 1,4-Difluorobenze	400954	200477	801908	533290	33.01
53 d5-Chlorobenzene	354752	177376	709504	485865	36.96
76 d4-1,4-Dichlorobe	191489	95745	382978	240396	25.54

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.04
37 1,4-Difluorobenze	5.71	5.21	6.21	5.72	0.17
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.03
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16F0096-30
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.495	89.90	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.505	110.11	80-128
$ 43 d8-Toluene	5.000	4.828	96.55	80-120
$ 62 4-Bromofluorobenze	5.000	4.589	91.78	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.173	103.45	80-120

REVIEW SUMMARY FOR FILE - 06301625.D

Lab ID: 16F0096-30
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 15:33

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301625.D

Date : 30-JUN-2016 15:33

Client ID:

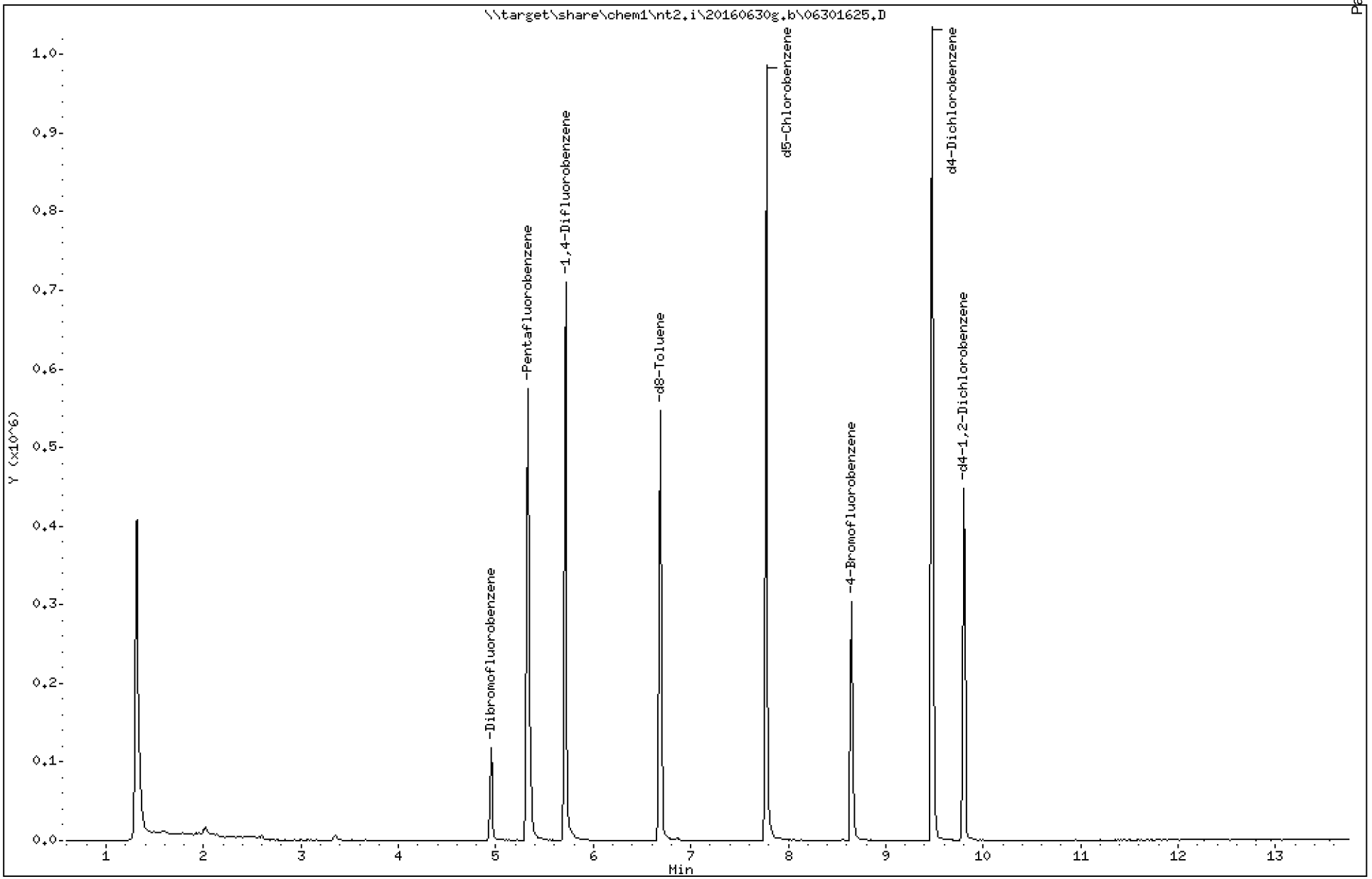
Sample Info: 16F0096-30,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301625.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 15:33

ARI ID: 16F0096-30
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	2	0.000
8015C 2MP-TMB	(2.98 to 9.26)	83224207	15449	0.000
AK101 nC6-nC10	(3.49 to 8.61)	58706304	2	0.000
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	2	0.000
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	4	0.000

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.687	813841	d8-Toluene
8.652	479578	4-Bromofluorobenzene
9.480	1500369	d4-Dichlorobenzene
7.776	1455687	d5-Chlorobenzene
9.799	693855	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301625G.D

Date : 30-JUN-2016 15:33

Client ID:

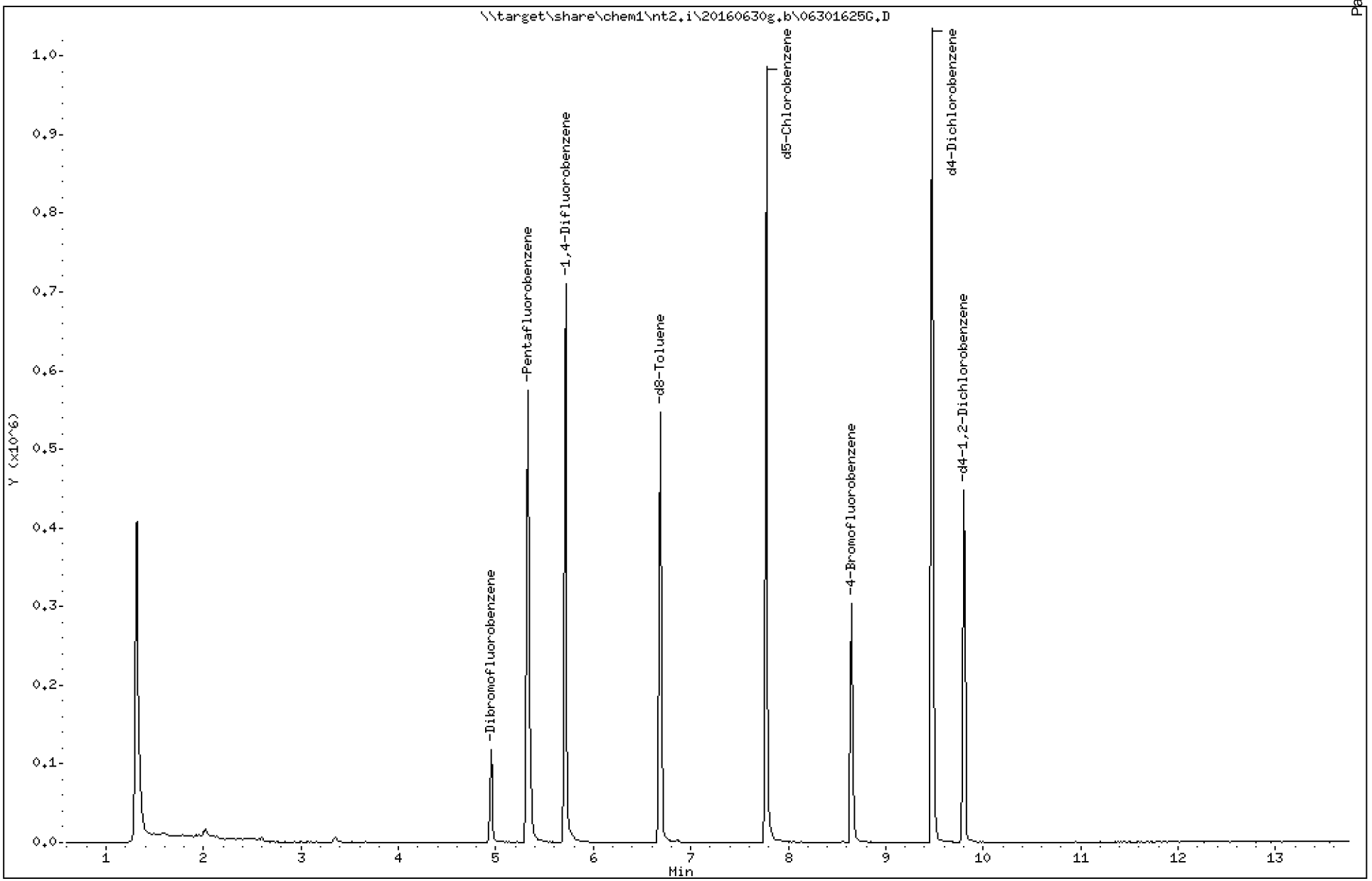
Sample Info: 16F0096-30,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301625G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 15:33

ARI ID: 16F0096-30
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	2	0.000
8015C 2MP-TMB	(2.98 to 9.26)	83224207	15449	0.000
AK101 nC6-nC10	(3.49 to 8.61)	58706304	2	0.000
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	2	0.000
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	4	0.000

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.687	813841	d8-Toluene
8.652	479578	4-Bromofluorobenzene
9.480	1500369	d4-Dichlorobenzene
7.776	1455687	d5-Chlorobenzene
9.799	693855	d4-1,2-Dichlorobenzene

Analytical Resources, Incorporated

Form I

METHOD BLANK DATA SHEET

NWTPHg

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Solid	Laboratory ID:	BEF0233-BLK1	File ID:	06301606G.D
Sampled:	N/A	Prepared:	06/29/16 17:30	Analyzed:	06/30/16 09:07
Solids:		Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g
Batch:	BEF0233	Sequence:	SEF0147	Calibration:	ZF00014
Instrument:	NT3	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg wet)	Q	DL	RL	LOQ
	Gasoline Range Organics (Tol-Nap)	50	5000	U	2500	5000	5000

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.47	89.5	80 - 120	
4-Bromofluorobenzene	5.0000	4.54	90.7	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt3.i\20160630.b\06301606.D

Date : 30-JUN-2016 09:07

Client ID: MB0630

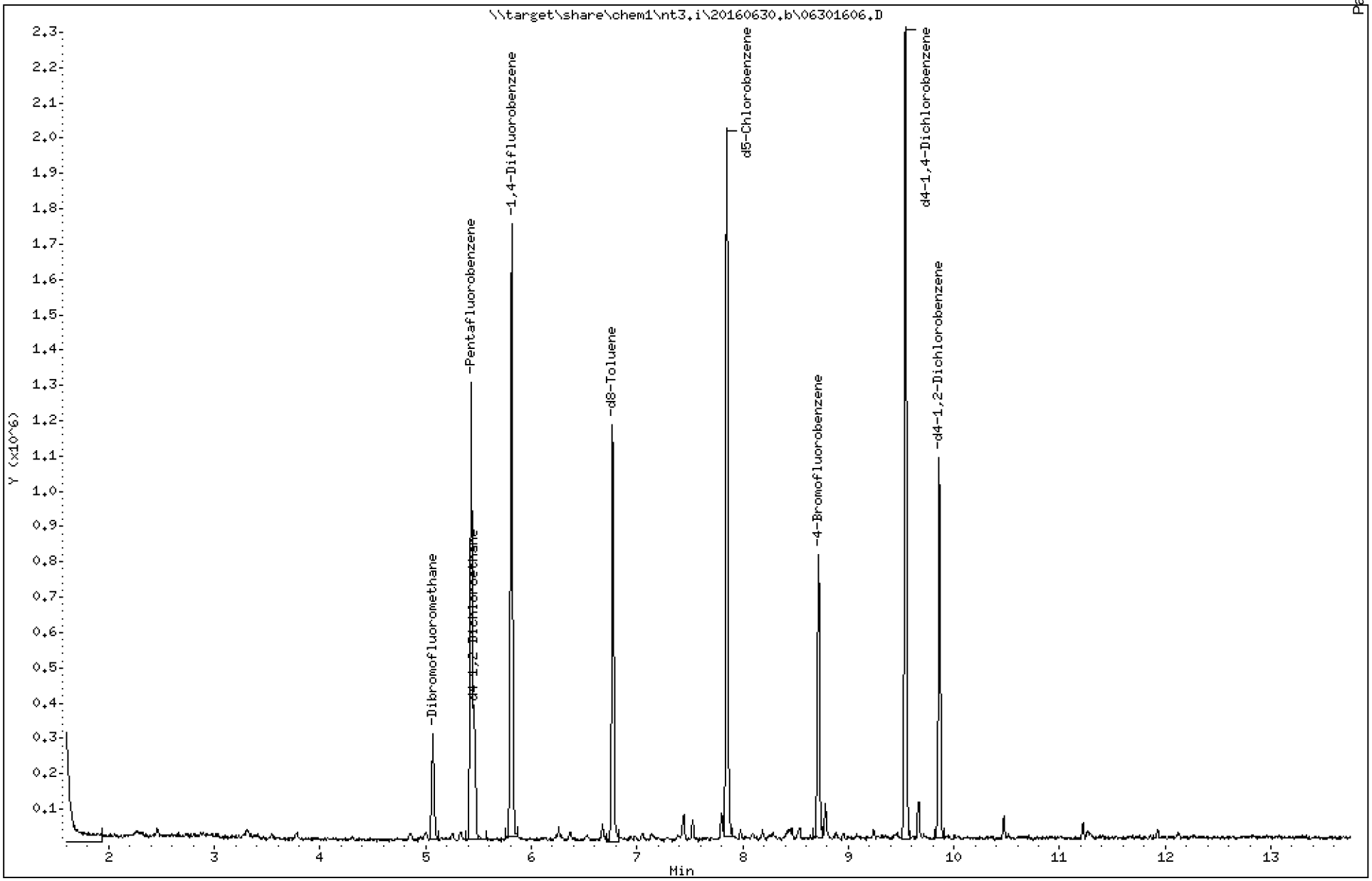
Instrument: nt3.i

Sample Info: MB,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160630.b\06301606.D
Lab Smp Id: BEF0233-BLK1 Client Smp ID: MB0630
Inj Date : 30-JUN-2016 09:07
Operator : LH Inst ID: nt3.i
Smp Info : MB,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Meth Date : 01-Jul-2016 13:57 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 10:35 Cal File: 06151609.D
Als bottle: 13 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.068	5.067	(0.933)	151443	4.78484	4.785
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.429	5.428	(1.000)	659434	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.461	5.460	(1.006)	175970	4.81903	4.819
*	37 1,4-Difluorobenzene	114	5.812	5.811	(1.000)	1052477	10.0000	
$	43 d8-Toluene	98	6.768	6.767	(1.165)	592854	4.47386	4.474
	44 Toluene	92	6.805	6.804	(1.171)	4351	0.04711	0.04711
*	53 d5-Chlorobenzene	117	7.852	7.851	(1.000)	944926	10.0000	
	55 Ethyl Benzene	106	7.873	7.878	(1.003)	911	0.01587	0.01587
	57 m,p-xylene	106	7.985	7.979	(1.017)	4945	0.07344	0.07344
	58 o-Xylene	106	8.288	8.287	(1.055)	2181	0.03223	0.03223
$	62 4-Bromofluorobenzene	174	8.718	8.717	(1.110)	199108	4.53667	4.537
*	76 d4-1,4-Dichlorobenzene	152	9.542	9.541	(1.000)	529936	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.861	9.860	(1.033)	248654	4.90189	4.902

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 06301606.D
Lab Smp Id: BEF0233-BLK1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

Calibration Date: 30-JUN-2016
Calibration Time: 08:15
Client Smp ID: MB0630
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	584309	292155	1168618	659434	12.86
37 1,4-Difluorobenze	921067	460534	1842134	1052477	14.27
53 d5-Chlorobenzene	840715	420358	1681430	944926	12.40
76 d4-1,4-Dichlorobe	460394	230197	920788	529936	15.10

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.02
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.02
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.01
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20150930a
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: BEF0233-BLK1 Client Smp ID: MB0630
Level: LOW Operator: LH
Data Type: MS DATA SampleType: BLANK
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.785	95.70	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.819	96.38	80-128
$ 43 d8-Toluene	5.000	4.474	89.48	80-120
$ 62 4-Bromofluorobenze	5.000	4.537	90.73	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.902	98.04	80-120

REVIEW SUMMARY FOR FILE - 06301606.D

Lab ID: BEF0233-BLK1
nt3.i, 20160630.b\AK8260061516.m,   30-JUN-2016 09:07

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,AK8260061516.m,Sublist: betx.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Analytical Resources, Incorporated

Form I
METHOD BLANK DATA SHEET
NWTPHg

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Solid	Laboratory ID:	BEF0239-BLK1	File ID:	06301605G.D
Sampled:	N/A	Prepared:	06/30/16 08:22	Analyzed:	06/30/16 08:22
Solids:		Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g
Batch:	BEF0239	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg wet)	Q	DL	RL	LOQ
	Gasoline Range Organics (Tol-Nap)	50	5000	U	2500	5000	5000

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.62	92.3	80 - 120	
4-Bromofluorobenzene	5.0000	4.75	95.0	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301605.D

Date : 30-JUN-2016 08:22

Client ID: MB0630

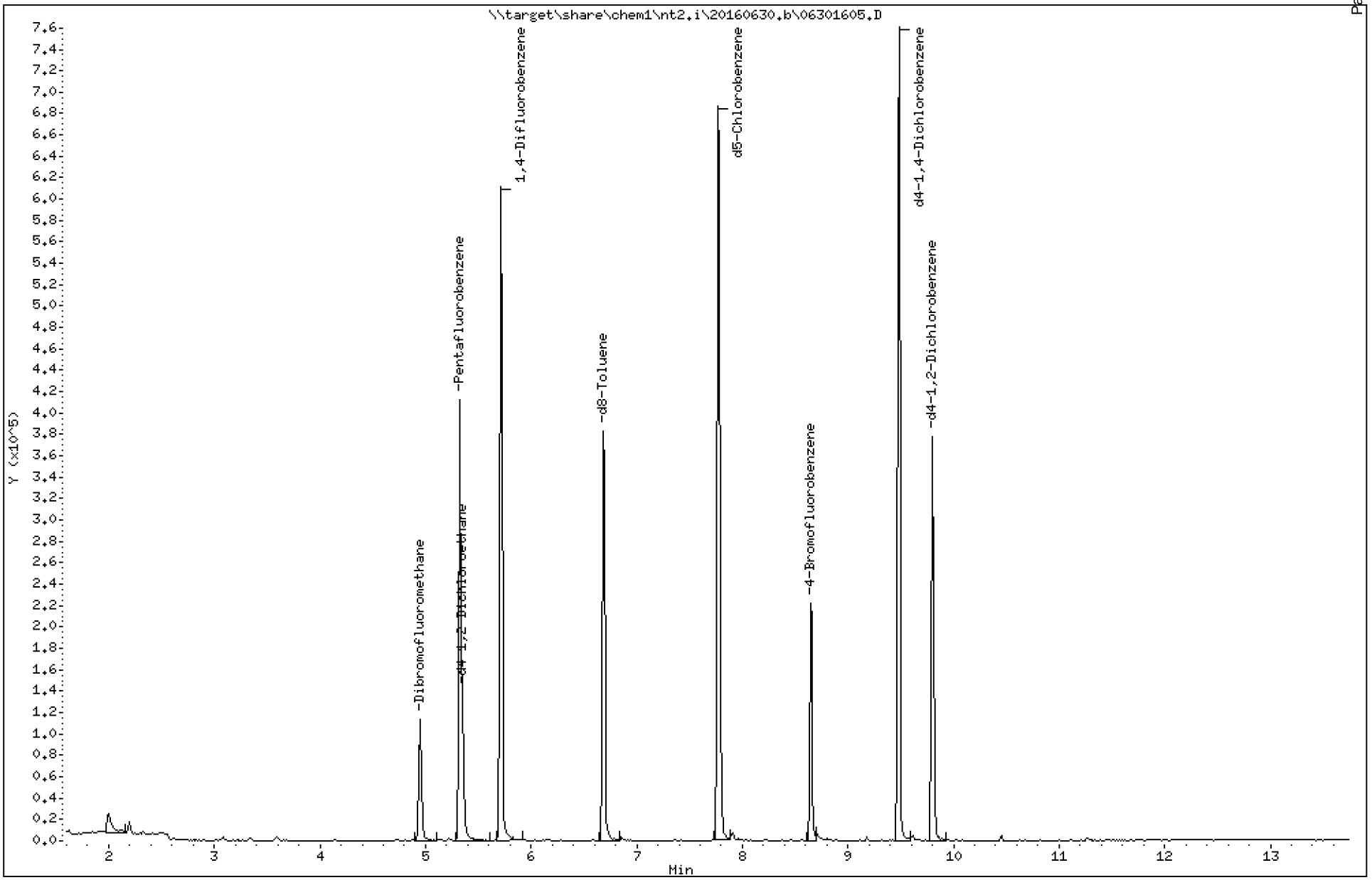
Instrument: nt2.i

Sample Info: MB,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301605.D
Lab Smp Id: BEF0239-BLK1 Client Smp ID: MB0630
Inj Date : 30-JUN-2016 08:22
Operator : LH Inst ID: nt2.i
Smp Info : MB,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.951	4.950	(0.929)	60389	5.17830	5.178
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.329	5.328	(1.000)	256931	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.353	5.352	(1.004)	69543	5.47450	5.475
*	37 1,4-Difluorobenzene	114	5.708	5.707	(1.000)	436001	10.0000	
$	43 d8-Toluene	98	6.678	6.689	(1.170)	238345	4.61521	4.615
	44 Toluene	92	6.726	6.725	(1.178)	2431	0.05878	0.05878
*	53 d5-Chlorobenzene	117	7.779	7.778	(1.000)	373996	10.0000	
	55 Ethyl Benzene	106	7.909	7.801	(1.017)	1296	0.05593	0.05593
	57 m,p-xylene	106	7.909	7.908	(1.017)	1296	0.04626	0.04626
	58 o-Xylene	106	8.216	8.216	(1.056)	594	0.02286	0.02286
$	62 4-Bromofluorobenzene	174	8.654	8.653	(1.113)	65332	4.74780	4.748
*	76 d4-1,4-Dichlorobenzene	152	9.483	9.482	(1.000)	187295	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.802	9.813	(1.034)	89900	5.16848	5.168

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301605.D
Lab Smp Id: BEF0239-BLK1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Client Smp ID: MB0630
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	256931	3.65
37 1,4-Difluorobenze	400954	200477	801908	436001	8.74
53 d5-Chlorobenzene	354752	177376	709504	373996	5.42
76 d4-1,4-Dichlorobe	191489	95745	382978	187295	-2.19

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: BEF0239-BLK1 Client Smp ID: MB0630
Level: LOW Operator: LH
Data Type: MS DATA SampleType: BLANK
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	5.178	103.57	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.475	109.49	80-128
$ 43 d8-Toluene	5.000	4.615	92.30	80-120
$ 62 4-Bromofluorobenze	5.000	4.748	94.96	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.168	103.37	80-120

REVIEW SUMMARY FOR FILE - 06301605.D

Lab ID: BEF0239-BLK1
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 08:22

RT	CO-ELUTION COMPOUNDS
7.909	Ethyl Benzene and m,p-xylene
7.909	m,p-xylene and Ethyl Benzene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301605.D

Date : 30-JUN-2016 08:22

Client ID:

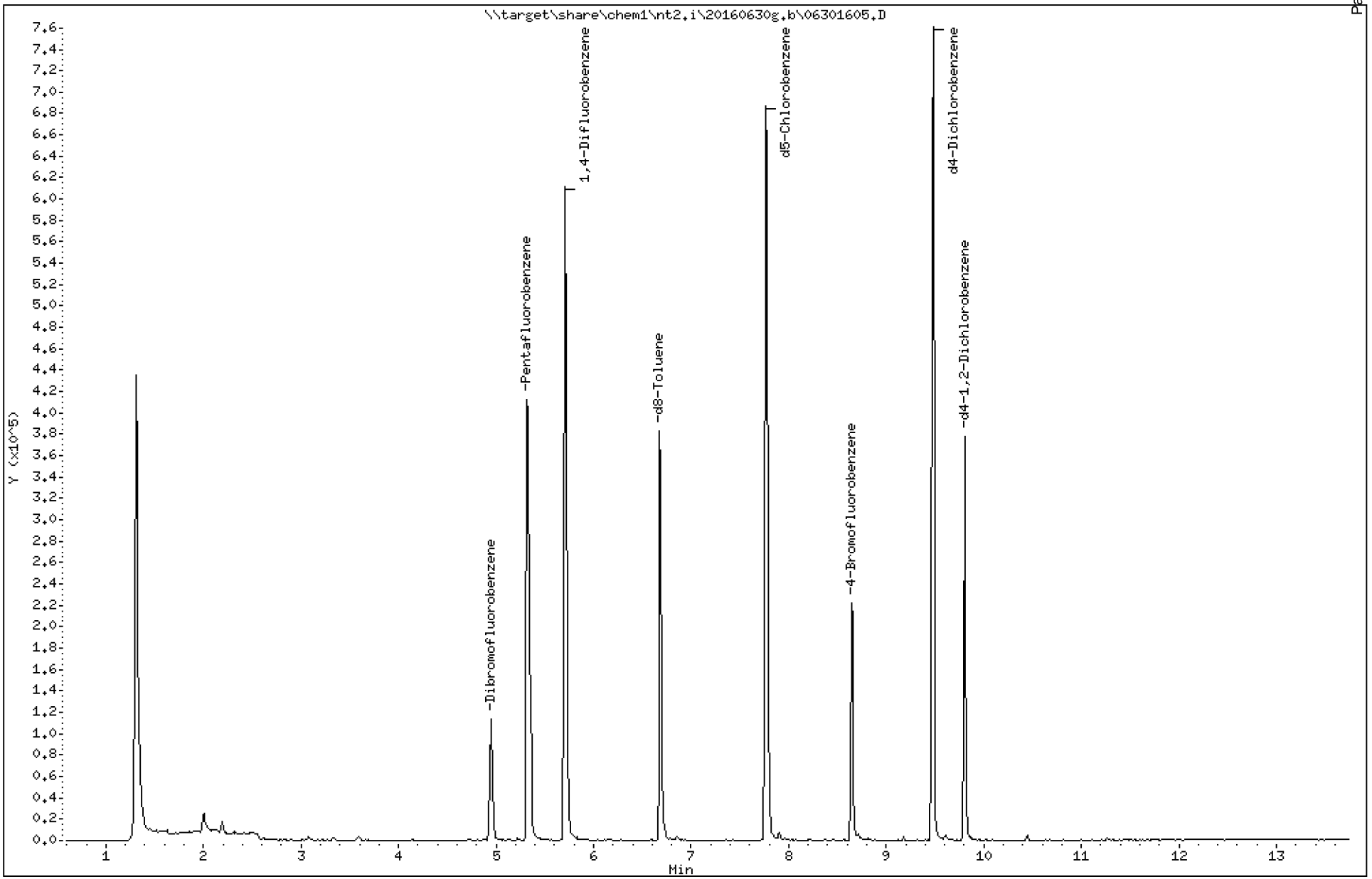
Instrument: nt2.i

Sample Info: MB,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301605.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 08:22

ARI ID: BEF0239-BLK1
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	2	0.000
8015C 2MP-TMB	(2.98 to 9.26)	83224207	2	0.000
AK101 nC6-nC10	(3.49 to 8.61)	58706304	2	0.000
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	2	0.000
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	3	0.000

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.679	649868	d8-Toluene
8.643	393975	4-Bromofluorobenzene
9.483	1191037	d4-Dichlorobenzene
7.767	1156666	d5-Chlorobenzene
9.803	549655	d4-1,2-Dichlorobenzene

Analytical Resources, Incorporated

Form I

METHOD BLANK DATA SHEET

NWTPHg

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	16F0096
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Water	Laboratory ID:	BEF0240-BLK1	File ID:	06301605WG.D
Sampled:	N/A	Prepared:	06/30/16 08:22	Analyzed:	06/30/16 08:22
Solids:		Preparation:	No Prep - Volatiles	Initial/Final:	10 mL / 10 mL
Batch:	BEF0240	Sequence:	SEF0152	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q	DL	RL	LOQ
	Gasoline Range Organics (Tol-Nap)	1	100	U	9.06	100	100

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.62	92.3	80 - 120	
4-Bromofluorobenzene	5.0000	4.75	95.0	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301605W.D

Date : 30-JUN-2016 08:22

Client ID:

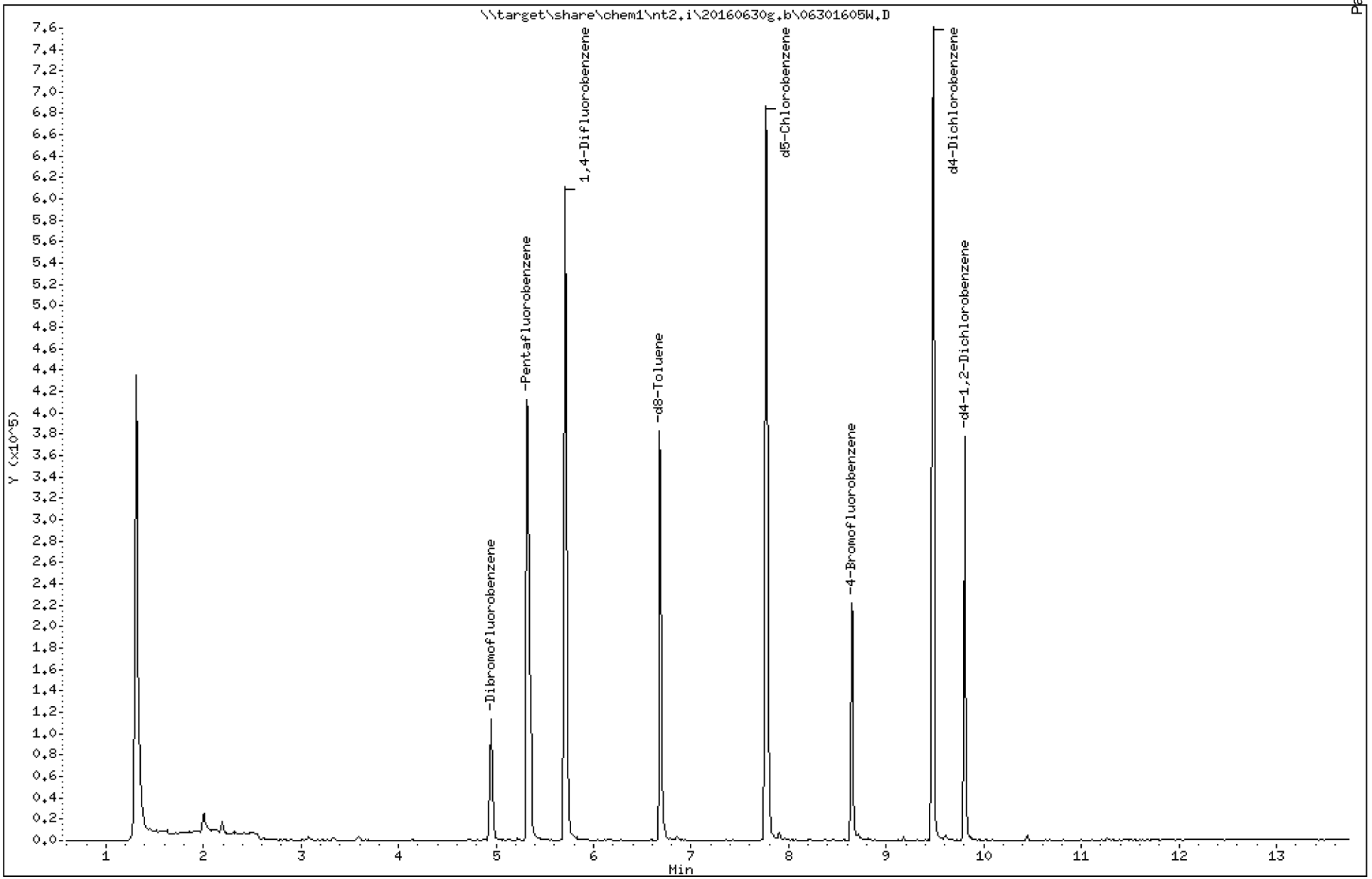
Sample Info: MB,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301605W.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 08:22

ARI ID: BEF0240-BLK1
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	2	0.000
8015C 2MP-TMB	(2.98 to 9.26)	83224207	2	0.000
AK101 nC6-nC10	(3.49 to 8.61)	58706304	2	0.000
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	2	0.000
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	3	0.000

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.679	649868	d8-Toluene
8.643	393975	4-Bromofluorobenzene
9.483	1191037	d4-Dichlorobenzene
7.767	1156666	d5-Chlorobenzene
9.803	549655	d4-1,2-Dichlorobenzene

LCS / LCS DUPLICATE RECOVERY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Solid	Analyzed:	06/30/16 08:15
Batch:	BEF0233	Laboratory ID:	BEF0233-BS1
Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Gasoline Range Organics (Tol-Nap)	50000	57000	114	70 - 121

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Solid	Analyzed:	06/30/16 08:41
Batch:	BEF0233	Laboratory ID:	BEF0233-BSD1
Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Gasoline Range Organics (Tol-Nap)	50000	54800	110	3.93	30	70 - 121

* Values outside of QC limits

Data File: \\target\share\chem1\nt3.i\20160630gELM.b\06301604G.D

Date : 30-JUN-2016 08:15

Client ID: GLCS

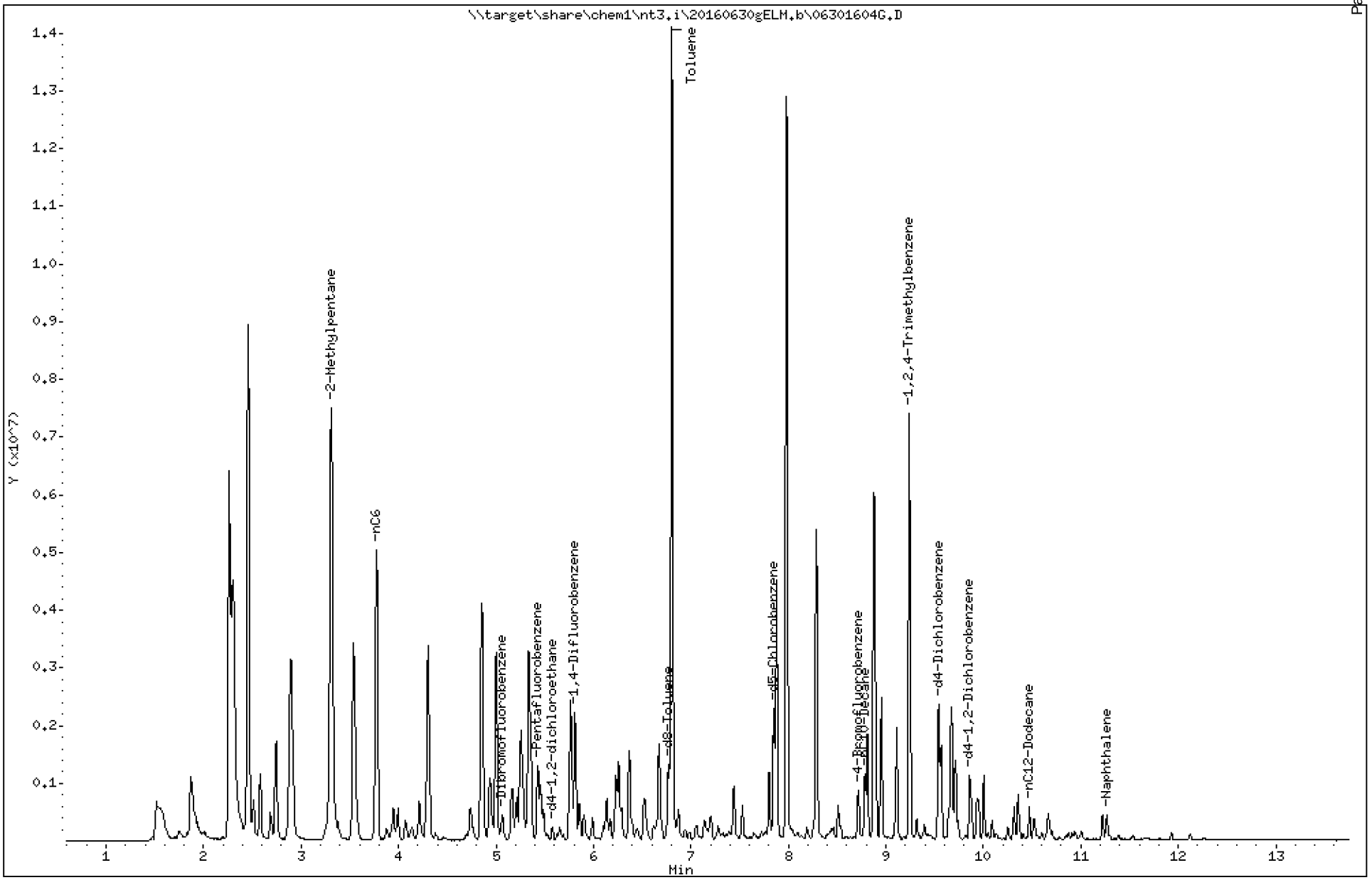
Instrument: nt3.i

Sample Info: GICV/LCS,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630gELM.b/06301604G.D
Method: \20160630gELM.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 30-JUN-2016 08:15

ARI ID: BEF0233-BS1
Client ID: GLCS
Matrix: SOIL
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	114348802	1.144
8015C 2MP-TMB	(3.21 to 9.34)	176207359	195518499	1.110
AK101 nC6-nC10	(3.68 to 8.68)	125823356	141723885	1.126
NWTPHG Tol-Nap	(6.71 to 11.36)	103441757	117892251	1.140 M
mod8015 nC6-nC12	(3.68 to 10.57)	111111111	190354844	1.713

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

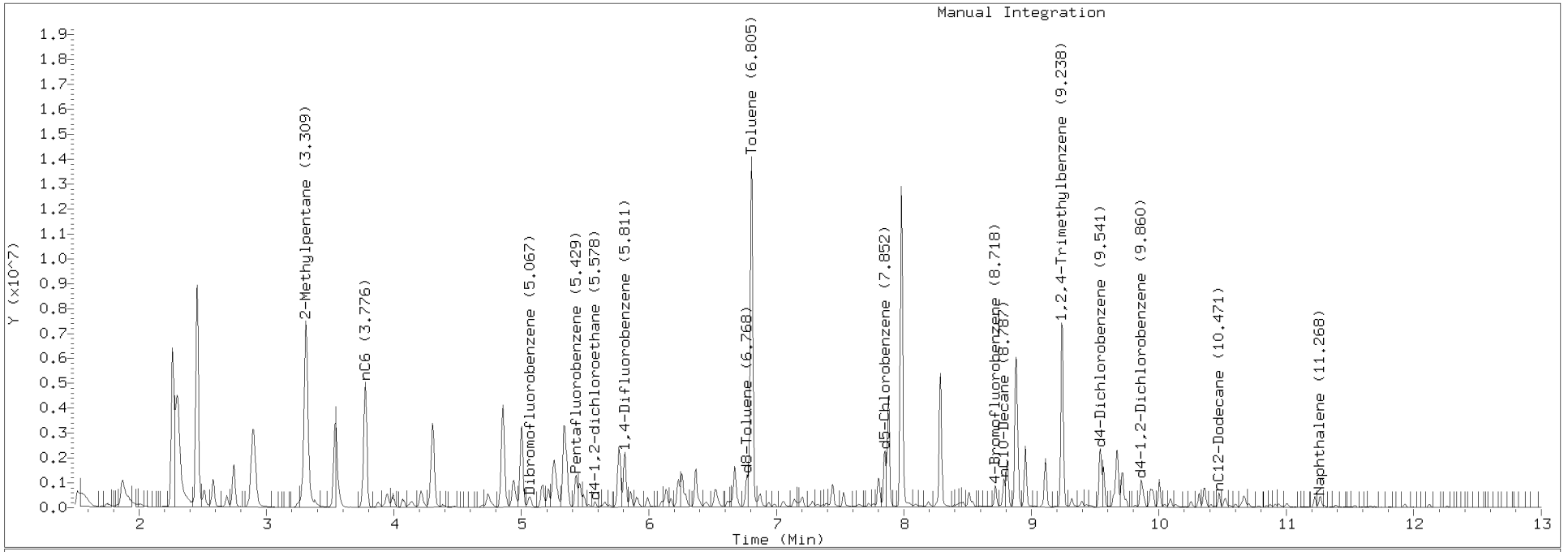
NW Gas Range Subtracted Peaks

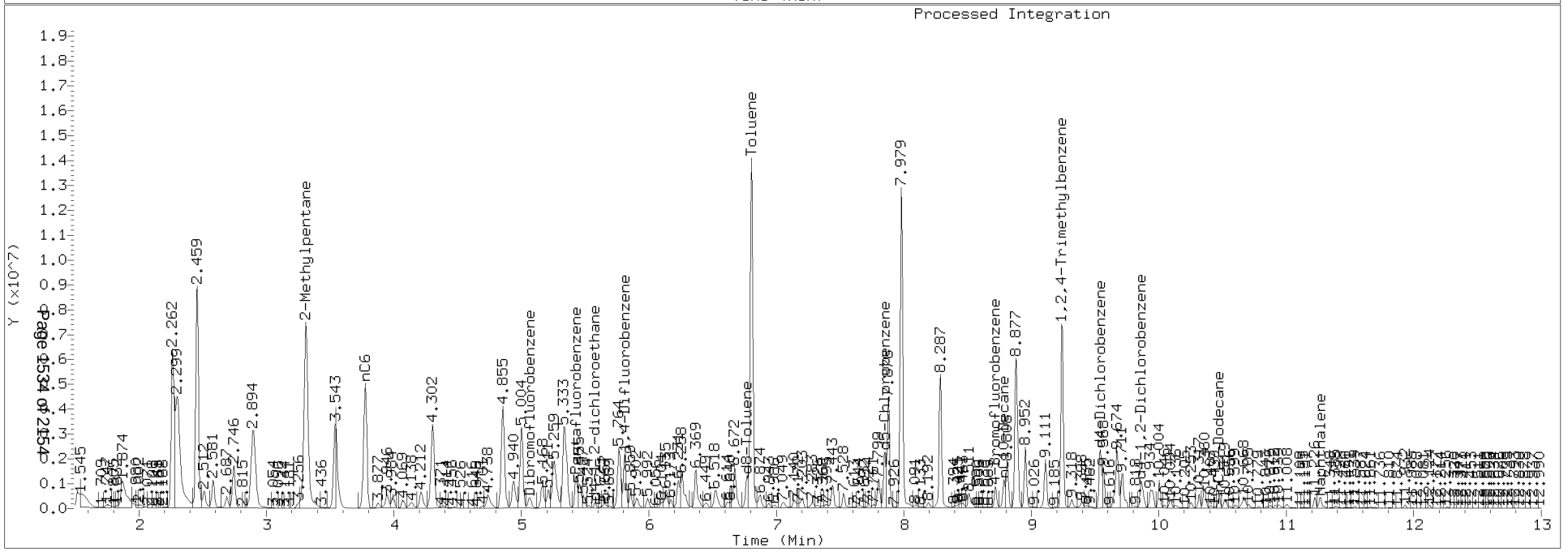
6.768	1743396	d8-Toluene
8.718	1199571	4-Bromofluorobenzene
9.541	3513617	d4-Dichlorobenzene
7.852	3120676	d5-Chlorobenzene
9.860	2037444	d4-1,2-Dichlorobenzene

TPHG Manual Integrations Report

Datafile: NT3, 20160630gELM.b/06301604G.D Injection: 30-JUN-2016 08:15

Lab ID:BEF0233-BS1





Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630gELM.b/06301605G.D
Method: \20160630gELM.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 30-JUN-2016 08:41

ARI ID: BEF0233-BSD1
Client ID: GLCSD
Matrix: SOIL
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	110233751	1.102
8015C 2MP-TMB	(3.21 to 9.34)	176207359	193322388	1.097
AK101 nC6-nC10	(3.68 to 8.68)	125823356	137403599	1.092
NWTPHG Tol-Nap	(6.71 to 11.36)	103441757	113349702	1.096
mod8015 nC6-nC12	(3.68 to 10.57)	111111111	183723858	1.654

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.769	1723626	d8-Toluene
8.719	1238489	4-Bromofluorobenzene
9.537	3211926	d4-Dichlorobenzene
7.848	3243572	d5-Chlorobenzene
9.862	2011351	d4-1,2-Dichlorobenzene

LCS / LCS DUPLICATE RECOVERY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Solid	Analyzed:	06/30/16 07:42
Batch:	BEF0239	Laboratory ID:	BEF0239-BS1
Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC. #	QC LIMITS REC.
Gasoline Range Organics (Tol-Nap)	50000	49300	98.6	70 - 121

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Solid	Analyzed:	06/30/16 08:02
Batch:	BEF0239	Laboratory ID:	BEF0239-BSD1
Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Gasoline Range Organics (Tol-Nap)	50000	49000	97.9	0.699	30	70 - 121

* Values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301603G.D

Date : 30-JUN-2016 07:42

Client ID:

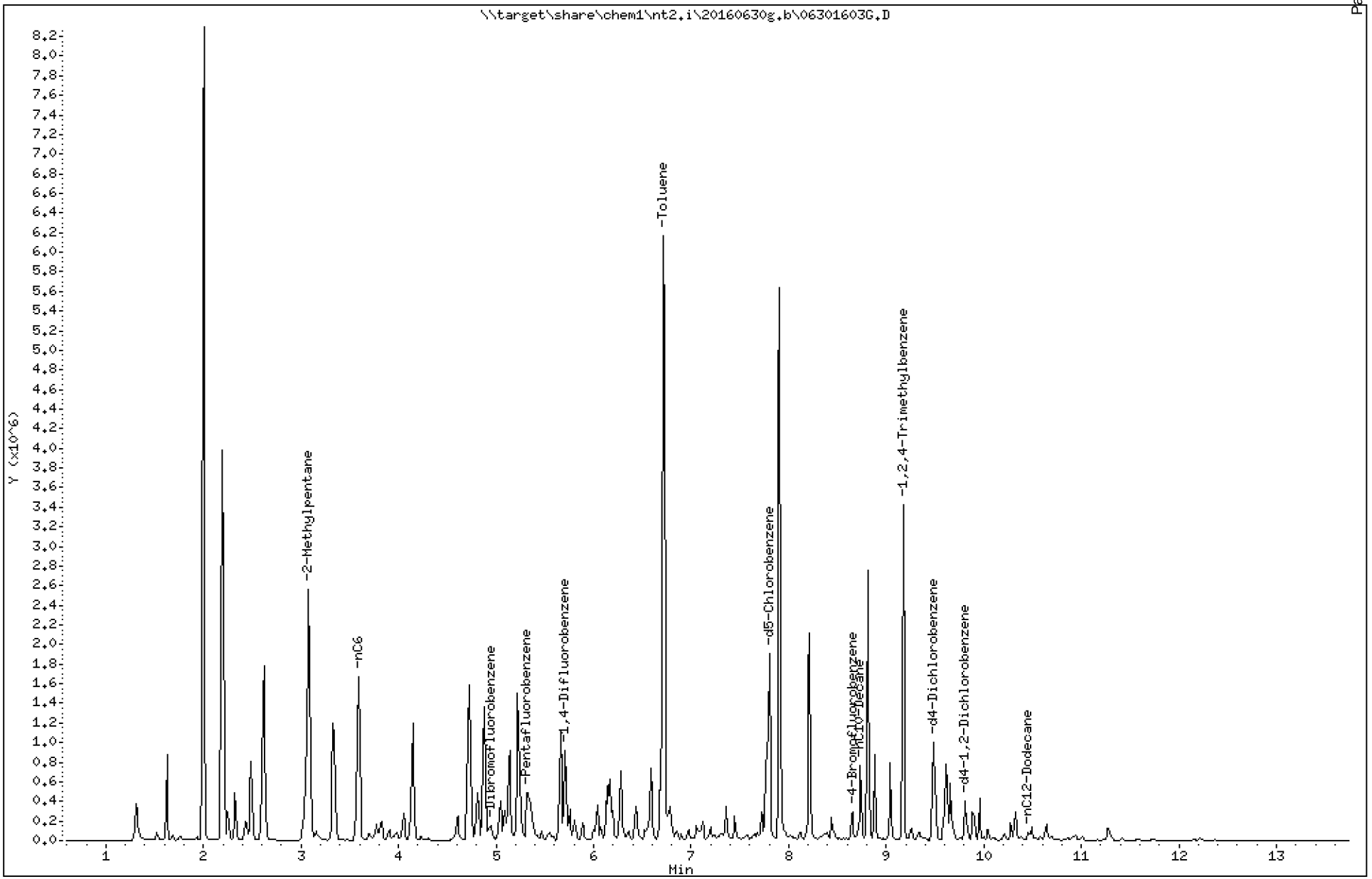
Instrument: nt2.i

Sample Info: GICV/LCS,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301603G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 07:42

ARI ID: BEF0239-BS1
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	47326272	0.986 M
8015C 2MP-TMB	(2.98 to 9.26)	83224207	81619750	0.981
AK101 nC6-nC10	(3.49 to 8.61)	58706304	59548326	1.014
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	48528861	0.986 M
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	78612233	1.073 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

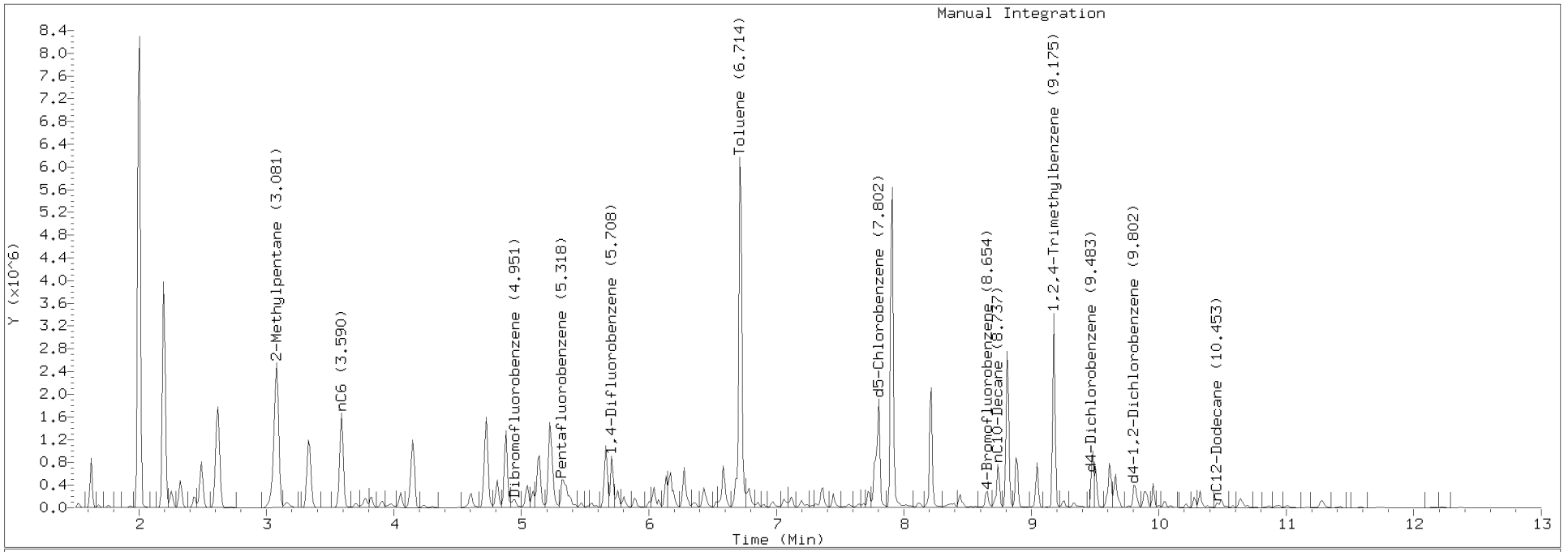
NW Gas Range Subtracted Peaks

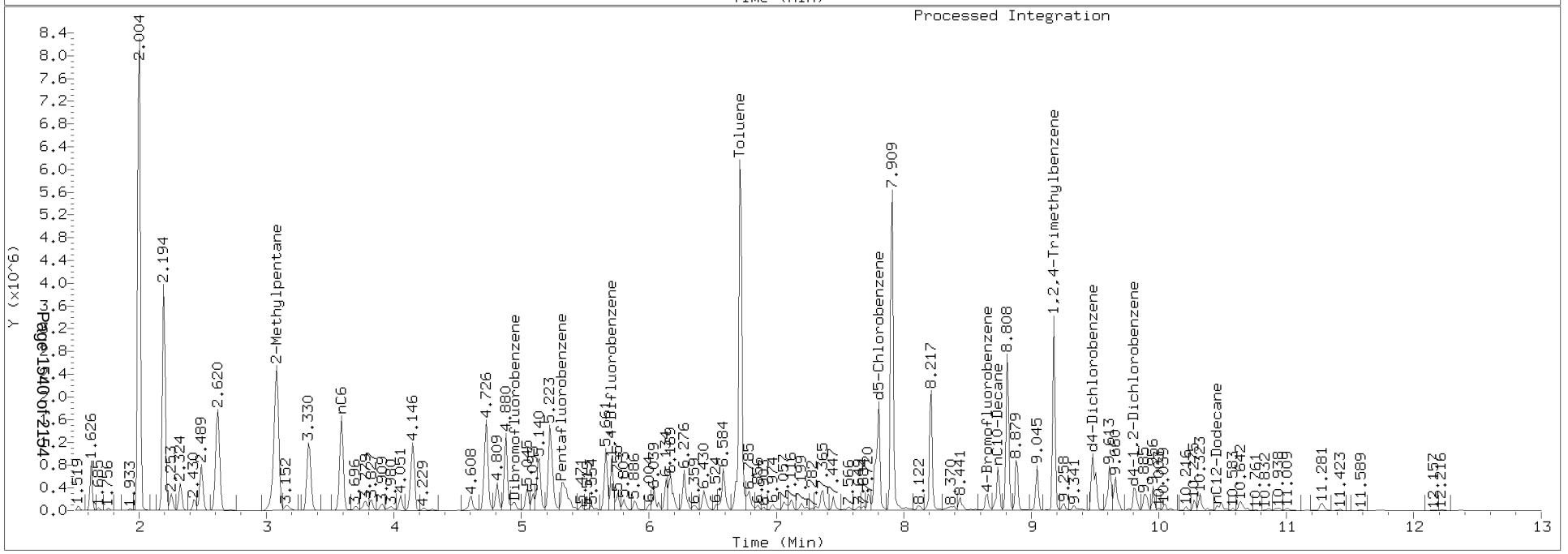
8.654	514832	4-Bromofluorobenzene
9.483	1542981	d4-Dichlorobenzene
7.802	4068960	d5-Chlorobenzene
9.802	870364	d4-1,2-Dichlorobenzene

TPHG Manual Integrations Report

Datafile: NT2, 20160630g.b/06301603G.D Injection: 30-JUN-2016 07:42

Lab ID:BEF0239-BS1





Data File: \\target\share\chem1\nt2.i\20160630g.b\06301604G.D

Date : 30-JUN-2016 08:02

Client ID:

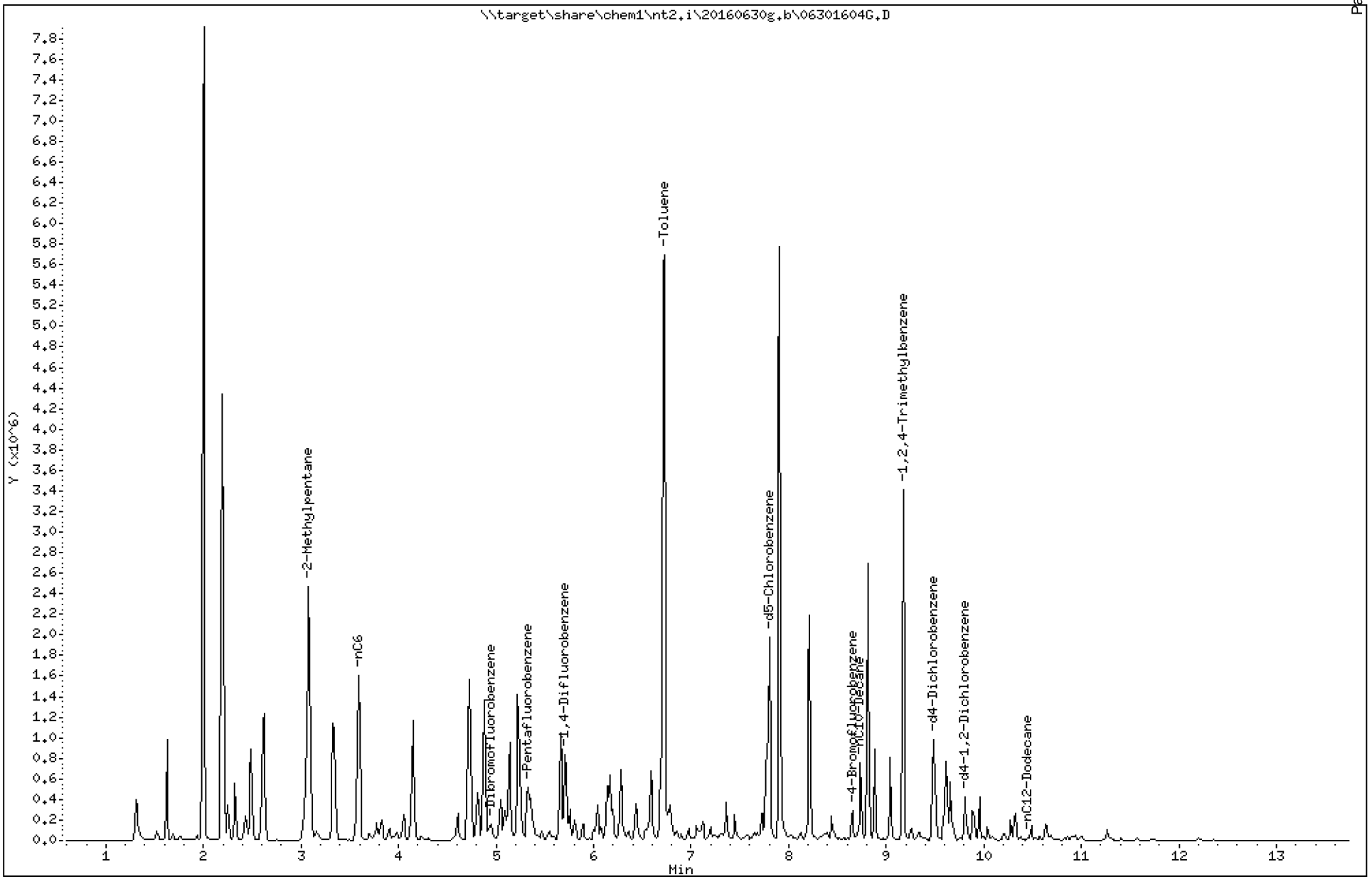
Sample Info: LCSD,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301604G.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 08:02

ARI ID: BEF0239-BS1
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	47121898	0.982 M
8015C 2MP-TMB	(2.98 to 9.26)	83224207	79389073	0.954
AK101 nC6-nC10	(3.49 to 8.61)	58706304	57537058	0.980
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	48190525	0.979 M
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	76585989	1.046 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

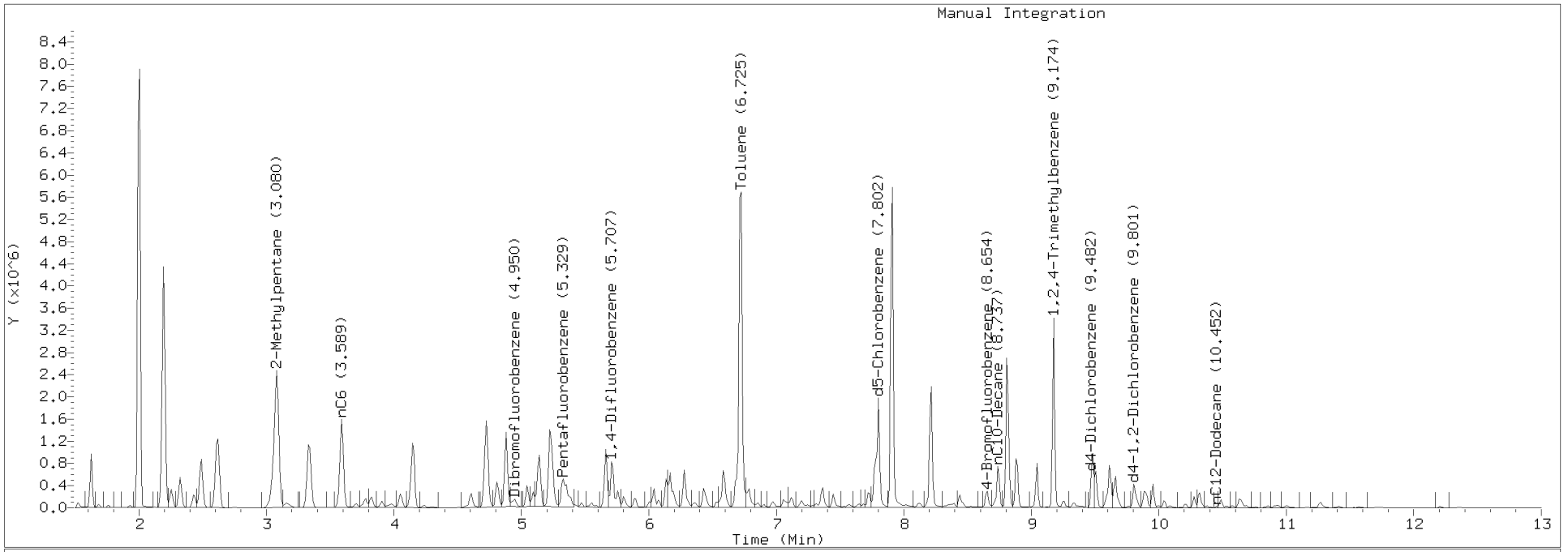
NW Gas Range Subtracted Peaks

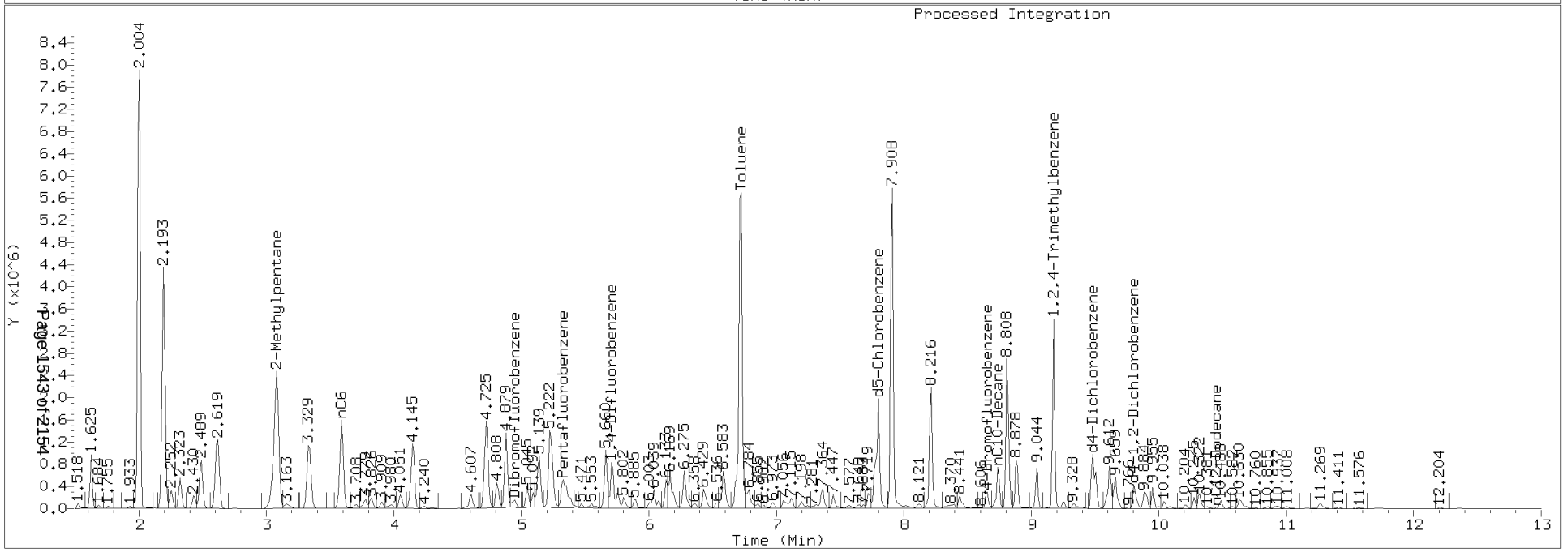
8.654	495308	4-Bromofluorobenzene
9.482	1561678	d4-Dichlorobenzene
7.802	4053235	d5-Chlorobenzene
9.801	832835	d4-1,2-Dichlorobenzene

TPHG Manual Integrations Report

Datafile: NT2, 20160630g.b/06301604G.D Injection: 30-JUN-2016 08:02

Lab ID:BEF0239-BS1





LCS / LCS DUPLICATE RECOVERY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Water	Analyzed:	06/30/16 07:42
Batch:	BEF0240	Laboratory ID:	BEF0240-BS1
Preparation:	No Prep - Volatiles	Initial/Final:	10 mL / 10 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Gasoline Range Organics (Tol-Nap)	1000	986	98.6	80 - 120

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Water	Analyzed:	06/30/16 08:02
Batch:	BEF0240	Laboratory ID:	BEF0240-BSD1
Preparation:	No Prep - Volatiles	Initial/Final:	10 mL / 10 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Gasoline Range Organics (Tol-Nap)	1000	979	97.9	0.699	30	80 - 120

* Values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301603WG.D

Date : 30-JUN-2016 07:42

Client ID:

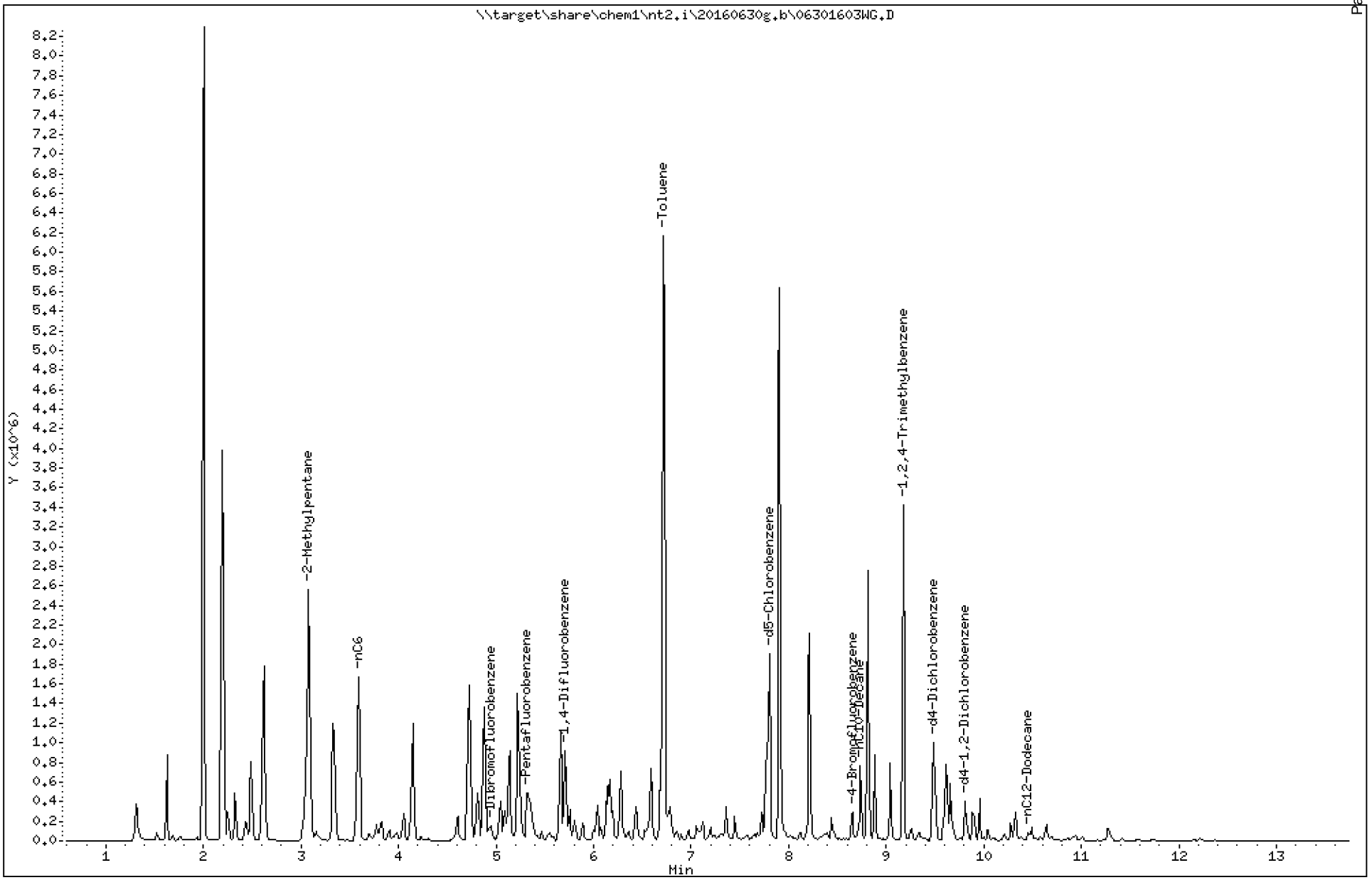
Instrument: nt2.i

Sample Info: GICV/LCS,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301603WG.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 07:42

ARI ID: BEF0240-BS1
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)	
WAGas Tol-C12	(6.63 to 10.52)	48008849	47326272	0.986	M
8015C 2MP-TMB	(2.98 to 9.26)	83224207	81619750	0.981	
AK101 nC6-nC10	(3.49 to 8.61)	58706304	59548326	1.014	
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	48528861	0.986	M
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	78612233	1.073	M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

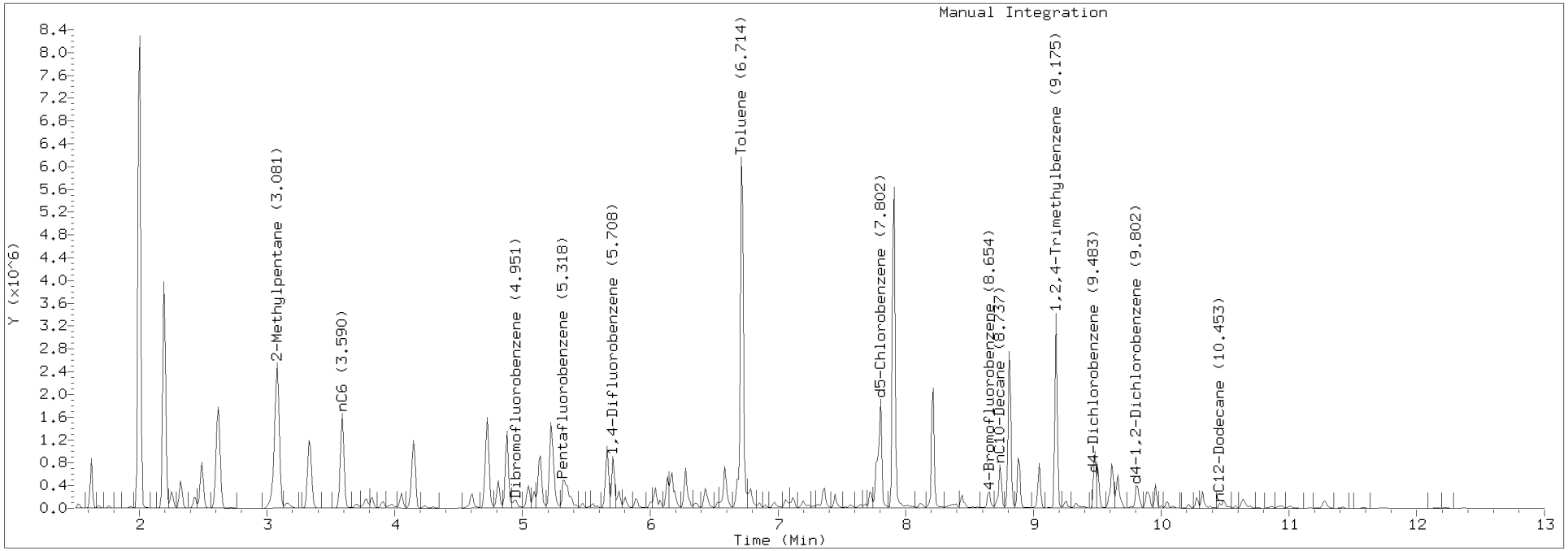
NW Gas Range Subtracted Peaks

8.654	514832	4-Bromofluorobenzene
9.483	1542981	d4-Dichlorobenzene
7.802	4068960	d5-Chlorobenzene
9.802	870364	d4-1,2-Dichlorobenzene

TPHG Manual Integrations Report

Datafile: NT2, 20160630g.b/06301603WG.D Injection: 30-JUN-2016 07:42

Lab ID:BEF0240-BS1



Data File: \\target\share\chem1\nt2.i\20160630g.b\06301604WG.D

Date : 30-JUN-2016 08:02

Client ID:

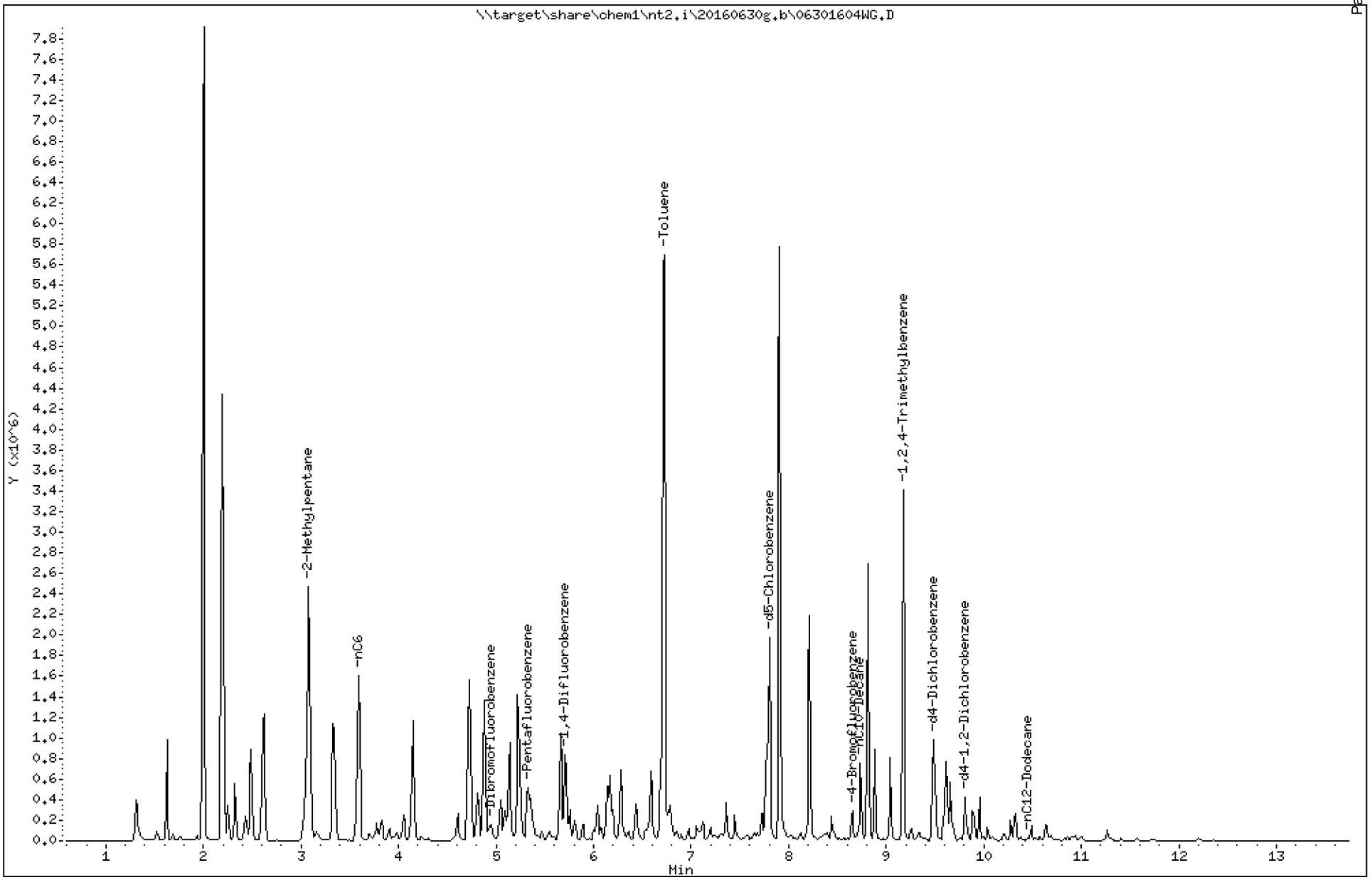
Instrument: nt2.i

Sample Info: LCSD,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301604WG.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 08:02

ARI ID: BEF0240-BSD1
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)	
WAGas Tol-C12	(6.63 to 10.52)	48008849	47121898	0.982	M
8015C 2MP-TMB	(2.98 to 9.26)	83224207	79389073	0.954	
AK101 nC6-nC10	(3.49 to 8.61)	58706304	57537058	0.980	
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	48190525	0.979	M
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	76585989	1.046	M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

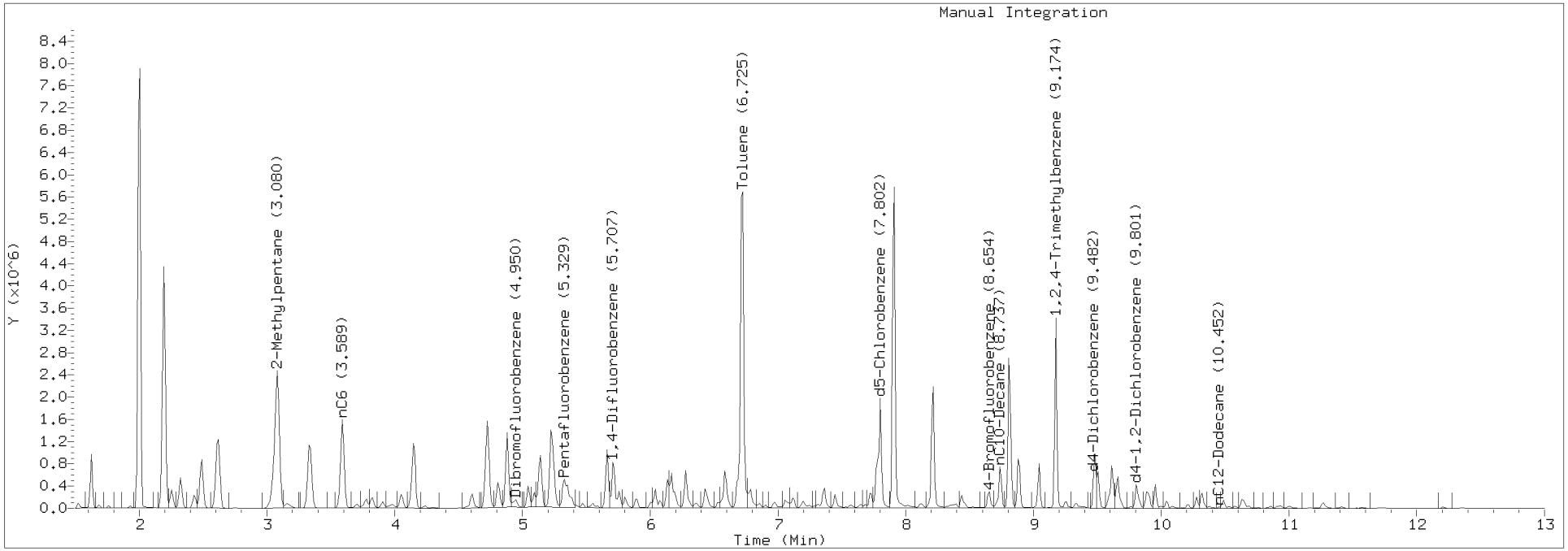
NW Gas Range Subtracted Peaks

8.654	495308	4-Bromofluorobenzene
9.482	1561678	d4-Dichlorobenzene
7.802	4053235	d5-Chlorobenzene
9.801	832835	d4-1,2-Dichlorobenzene

TPHG Manual Integrations Report

Datafile: NT2, 20160630g.b/06301604WG.D Injection: 30-JUN-2016 08:02

Lab ID:BEF0240-BSD1



PREPARATION BATCH SUMMARY

NWTPHg

Laboratory: Analytical Resources, Inc. SDG: 16F0096

Client: Anchor QEA, LLC Project: CHRL SSWA

Batch: BEF0233 Batch Matrix: Solid Preparation: No Prep - Volatiles

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
CHRL-M-02-160629	16F0096-01	06301607G.D	06/29/16 17:30	
CHRL-M-03-160629	16F0096-02	06301613G.D	06/29/16 17:30	
CHRL-M-53-160629	16F0096-03	06301614G.D	06/29/16 17:30	
CHRL-M-04-160629	16F0096-04	06301615G.D	06/29/16 17:30	
CHRL-M-05-160629	16F0096-05	06301616G.D	06/29/16 17:30	
CHRL-O-01-160629	16F0096-06	06301617G.D	06/29/16 17:30	
CHRL-O-02-160629	16F0096-07	06301618G.D	06/29/16 17:30	
CHRL-O-03-160629	16F0096-08	06301619G.D	06/29/16 17:30	
CHRL-O-04-160629	16F0096-09	06301620G.D	06/29/16 17:30	
CHRL-O-05-160629	16F0096-10	06301621G.D	06/29/16 17:30	
Blank	BEF0233-BLK1	06301606G.D	06/29/16 17:30	
LCS	BEF0233-BS1	06301604G.D	06/29/16 17:30	
LCS Dup	BEF0233-BSD1	06301605G.D	06/29/16 17:30	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

PREPARATION BENCH SHEET

BEF0233

Printed: 7/1/2016 10:40:23AM

Matrix: Solid **Prepared using: Volatiles - No Prep - Volatiles** **Surrogate used: E001314**

Lab Number	Analysis	Prepared	Initial (g)	Final (g)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids	Client	Extraction Comments
16F0096-01	8260C Gas (NWTPH)	29-Jun-2016 17:30	4.967	5				100	91.991	Anchor QEA, LLC	
16F0096-02	8260C Gas (NWTPH)	29-Jun-2016 17:30	5.053	5				100	89.223	Anchor QEA, LLC	
16F0096-03	8260C Gas (NWTPH)	29-Jun-2016 17:30	4.957	5				100	89.88	Anchor QEA, LLC	
16F0096-04	8260C Gas (NWTPH)	29-Jun-2016 17:30	4.738	5				100	91.223	Anchor QEA, LLC	
16F0096-05	8260C Gas (NWTPH)	29-Jun-2016 17:30	4.316	5				100	91.92	Anchor QEA, LLC	
16F0096-06	8260C Gas (NWTPH)	29-Jun-2016 17:30	5.441	5				100	90.553	Anchor QEA, LLC	
16F0096-07	8260C Gas (NWTPH)	29-Jun-2016 17:30	5.013	5				100	92.71	Anchor QEA, LLC	
16F0096-08	8260C Gas (NWTPH)	29-Jun-2016 17:30	5.304	5				100	94.01	Anchor QEA, LLC	
16F0096-09	8260C Gas (NWTPH)	29-Jun-2016 17:30	5.613	5				100	91.761	Anchor QEA, LLC	
16F0096-10	8260C Gas (NWTPH)	29-Jun-2016 17:30	5.689	5				100	91.502	Anchor QEA, LLC	
BEF0233-BLK1	QC	29-Jun-2016 17:30	5	5				100			
BEF0233-BS1	QC	29-Jun-2016 17:30	5	5	E000912		50	100			
BEF0233-BSD1	QC	29-Jun-2016 17:30	5	5	E000912		50	100			

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Method 5035 Extraction Bench Sheet

(8260C, 8260C-SIM, NWTPH-Gx, AK-101, TPH-G, VPH, TCLP-ZHE)

Work order: BCR4, 16F0096 | Element Batch: BEF0033 | Prep/Extraction Date: 6/29/16 | Analyst: PL

	Lab ID	Vial No.	Method 5035 Sample Weight						Extract Split Basis		
			$NaHSO_3$ Lot#	CH_3OH Lot#	Vial Weight (g)	Tare (from vial) (g)	Initial Weight (g)	Final Volume (mL)	MeOH Spilt Volume (µL)	Diluent Volume (mL)	Dilution
1	BCR4A	2		DM417	38.59	27.823	10.767	5	900	45	50
2	B	2			38.66	27.896	10.764				
3	C	1			38.53	28.175	10.355				
4	D	1			39.10	27.882	11.218				
5											
6	16F0096-01	A		DP303	34.53	29.563	4.967	5	900	45	50
7	-02				34.56	29.507	5.053				
8	-03				34.44	29.483	4.957				
9	-04				34.13	29.392	4.738				
10	-05				34.16	29.844	4.316				
11	-06				34.95	29.509	5.441				
12	-07				34.57	29.557	5.013				
13	-08				34.60	29.296	5.304				
14	-09				35.26	29.647	5.613				
15	-10				35.28	29.561	5.689				
16											
17											
18											
19											
20											
21											
22											
23											

Balance ID: SLF302

PREPARATION BATCH SUMMARY

NWTPHg

Laboratory: Analytical Resources, Inc. SDG: 16F0096

Client: Anchor QEA, LLC Project: CHRL SSWA

Batch: BEF0239 Batch Matrix: Solid Preparation: No Prep - Volatiles

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
CHRL-N-01-160629	16F0096-11	06301606G.D	06/30/16 09:02	
CHRL-N-02-160629	16F0096-12	06301607G.D	06/30/16 09:22	
CHRL-N-03-160629	16F0096-13	06301608G.D	06/30/16 09:43	
CHRL-N-04-160629	16F0096-14	06301609G.D	06/30/16 10:03	
CHRL-N-05-160629	16F0096-15	06301610G.D	06/30/16 10:24	
CHRL-Q-01-160629	16F0096-16	06301611G.D	06/30/16 10:44	
CHRL-Q-02-160629	16F0096-17	06301612G.D	06/30/16 11:05	
CHRL-Q-03-160629	16F0096-18	06301613G.D	06/30/16 11:25	
CHRL-Q-04-160629	16F0096-19	06301614G.D	06/30/16 11:46	
CHRL-Q-05-160629	16F0096-20	06301615G.D	06/30/16 12:07	
CHRL-P-01-160629	16F0096-21	06301616G.D	06/30/16 12:27	
CHRL-P-02-160629	16F0096-22	06301617G.D	06/30/16 12:48	
CHRL-P-52-160629	16F0096-23	06301618G.D	06/30/16 13:09	
CHRL-P-03-160629	16F0096-24	06301619G.D	06/30/16 13:29	
CHRL-P-04-160629	16F0096-25	06301620G.D	06/30/16 13:50	
CHRL-P-05-160629	16F0096-26	06301621G.D	06/30/16 14:10	
CHRL-R-02-160629	16F0096-27	06301622G.D	06/30/16 14:31	
CHRL-R-03-160629	16F0096-28	06301623G.D	06/30/16 14:52	
CHRL-R-04-160629	16F0096-29	06301624G.D	06/30/16 15:12	
Blank	BEF0239-BLK1	06301605G.D	06/30/16 08:22	
LCS	BEF0239-BS1	06301603G.D	06/30/16 07:42	
LCS Dup	BEF0239-BSD1	06301604G.D	06/30/16 08:02	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Method 5035 Extraction Bench Sheet

(8260C, 8260C-SIM, NWTPH-Gx, AK-101, TPH-G, VPH, TCLP-ZHE)

Work order: 16F0096 | Element Batch: BEP0239 | Prep/Extraction Date: 6/30/16 | Analyst: RC

	Lab ID	Vial No.	Method 5035 Sample Weight						Extract Split Basis		
			$NaHSO_3$ Lot#	CH_3OH Lot#	Vial Weight (g)	Tare (from vial) (g)	Initial Weight (g)	Final Volume (mL)	MeOH Spilt Volume (µL)	Diluent Volume (mL)	Dilution
1	16F0096-11	A		DP303	34.81	29.751	5.059	5	900	45	50
2	-12				33.56	29.656	3.904				
3	-13				35.32	29.345	5.975				
4	-14				34.89	29.310	5.580				
5	-15				35.12	29.397	5.723				
6	-16				34.03	29.184	4.846				
7	-17				35.51	29.604	5.906				
8	-18				34.22	29.702	4.518				
9	~~-20~~ 19				35.31	29.787	5.523				
10	~~-21~~ 20				34.81	29.508	5.302				
11	~~-22~~ 21				34.15	29.313	4.837				
12	~~-23~~ 22				35.25	29.611	5.639				
13	~~-24~~ 23				35.09	29.602	5.488				
14	~~-25~~ 24				34.72	29.784	4.936				
15	~~-26~~ 25				34.30	29.416	4.884				
16	~~-27~~ 26				35.76	29.615	6.145				
17	~~-28~~ 27				34.52	29.466	5.054				
18	~~-29~~ 28			"	34.62	29.410	5.210				
19	-29	"		"	34.70	29.573	5.127	"	"	"	"
20											
21											
22											
23											

Balance ID: SLF302

Analytical Resources, Incorporated
Analytical Chemists and Consultants

PREPARATION BENCH SHEET

BEF0239

Printed: 7/1/2016 9:56:04AM

Matrix: Solid **Prepared using: Volatiles - No Prep - Volatiles** **Surrogate used: E001314**

Lab Number	Analysis	Prepared	Initial (g)	Final (g)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids	Client	Extraction Comments
16F0096-11	8260C Gas (NWTPH)	30-Jun-2016 09:02	5.059	5				100	92.4	Anchor QEA, LLC	
16F0096-12	8260C Gas (NWTPH)	30-Jun-2016 09:22	3.904	5				100	91.176	Anchor QEA, LLC	
16F0096-13	8260C Gas (NWTPH)	30-Jun-2016 09:43	5.975	5				100	91.337	Anchor QEA, LLC	
16F0096-14	8260C Gas (NWTPH)	30-Jun-2016 10:03	5.58	5				100	93.48	Anchor QEA, LLC	
16F0096-15	8260C Gas (NWTPH)	30-Jun-2016 10:24	5.723	5				100	91.426	Anchor QEA, LLC	
16F0096-16	8260C Gas (NWTPH)	30-Jun-2016 10:44	4.846	5				100	90.747	Anchor QEA, LLC	
16F0096-17	8260C Gas (NWTPH)	30-Jun-2016 11:05	5.906	5				100	90.029	Anchor QEA, LLC	
16F0096-18	8260C Gas (NWTPH)	30-Jun-2016 11:25	4.518	5				100	93.228	Anchor QEA, LLC	
16F0096-19	8260C Gas (NWTPH)	30-Jun-2016 11:46	5.523	5				100	92.142	Anchor QEA, LLC	
16F0096-20	8260C Gas (NWTPH)	30-Jun-2016 12:07	5.302	5				100	92.628	Anchor QEA, LLC	
16F0096-21	8260C Gas (NWTPH)	30-Jun-2016 12:27	4.837	5				100	93.148	Anchor QEA, LLC	
16F0096-22	8260C Gas (NWTPH)	30-Jun-2016 12:48	5.639	5				100	92.91	Anchor QEA, LLC	
16F0096-23	8260C Gas (NWTPH)	30-Jun-2016 13:09	5.488	5				100	92.747	Anchor QEA, LLC	
16F0096-24	8260C Gas (NWTPH)	30-Jun-2016 13:29	4.936	5				100	91.195	Anchor QEA, LLC	
16F0096-25	8260C Gas (NWTPH)	30-Jun-2016 13:50	4.884	5				100	94.031	Anchor QEA, LLC	
16F0096-26	8260C Gas (NWTPH)	30-Jun-2016 14:10	6.145	5				100	91.241	Anchor QEA, LLC	
16F0096-27	8260C Gas (NWTPH)	30-Jun-2016 14:31	5.054	5				100	91.924	Anchor QEA, LLC	
16F0096-28	8260C Gas (NWTPH)	30-Jun-2016 14:52	5.21	5				100	94.042	Anchor QEA, LLC	
16F0096-29	8260C Gas (NWTPH)	30-Jun-2016 15:12	5.127	5				100	90	Anchor QEA, LLC	
BEF0239-BLK1	QC	30-Jun-2016 08:22	5	5				100			
BEF0239-BS1	QC	30-Jun-2016 07:42	5	5	E000912		50	100			
BEF0239-BSD1	QC	30-Jun-2016 08:02	5	5	E000912		50	100			

Page 1554 of 2154

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

PREPARATION BENCH SHEET

BEF0239

Printed: 7/1/2016 9:56:04AM

Matrix: Solid **Prepared using: Volatiles - No Prep - Volatiles** **Surrogate used: E001314**

Lab Number	Analysis	Prepared	Initial (g)	Final (g)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids	Client	Extraction Comments

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

PREPARATION BATCH SUMMARY

NWTPHg

Laboratory: Analytical Resources, Inc. SDG: 16F0096

Client: Anchor QEA, LLC Project: CHRL SSWA

Batch: BEF0240 Batch Matrix: Water Preparation: No Prep - Volatiles

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
CHRL-TB-160629	16F0096-30	06301625G.D	06/30/16 15:33	
Blank	BEF0240-BLK1	06301605WG.D	06/30/16 08:22	
LCS	BEF0240-BS1	06301603WG.D	06/30/16 07:42	
LCS Dup	BEF0240-BSD1	06301604WG.D	06/30/16 08:02	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

PREPARATION BENCH SHEET

BEF0240

Printed: 6/30/2016 4:21:02PM

Matrix: Water **Prepared using: Volatiles - No Prep - Volatiles** **Surrogate used: E001116**

Lab Number	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	pH	Client	Extraction Comments
16F0096-30	8260C Gas (NWTPH)	30-Jun-2016 10:25	10	10				1	6	Anchor QEA, LLC	
BEF0240-BLK1	QC	30-Jun-2016 10:25	10	10				1			
BEF0240-BS1	QC	30-Jun-2016 10:25	10	10	E000912		2	1			
BEF0240-BSD1	QC	30-Jun-2016 10:25	10	10	E000912		2	1			

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Lab File ID:	06301602.D	Injection Date:	06/30/16
Instrument ID:	NT2	Injection Time:	07:08
Sequence:	SEF0152	Lab Sample ID:	SEF0152-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	22.6	PASS
75	30 - 80% of 95	56.4	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.93	PASS
173	Less than 2% of 174	0.255	PASS
174	50 - 120% of 95	86.6	PASS
175	5 - 9% of 174	6.55	PASS
176	95 - 101% of 174	95.8	PASS
177	5 - 9% of 176	6.58	PASS

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Cal Check	SEF0152-ICV1	06301603CC.D	06/30/2016	7:42
LCS	BEF0240-BS1	06301603WG.D	06/30/2016	7:42
LCS	BEF0240-BS1	06301603W.D	06/30/2016	7:42
LCS	BEF0239-BS1	06301603G.D	06/30/2016	7:42
LCS	BEF0239-BS1	06301603.D	06/30/2016	7:42
Initial Cal Check	SEF0152-ICV1	06301603CCG.D	06/30/2016	7:42
LCS Dup	BEF0240-BSD1	06301604WG.D	06/30/2016	8:02
LCS Dup	BEF0240-BSD1	06301604W.D	06/30/2016	8:02
LCS Dup	BEF0239-BSD1	06301604G.D	06/30/2016	8:02
LCS Dup	BEF0239-BSD1	06301604.D	06/30/2016	8:02
Blank	BEF0239-BLK1	06301605G.D	06/30/2016	8:22
Blank	BEF0239-BLK1	06301605.D	06/30/2016	8:22
Blank	BEF0240-BLK1	06301605WG.D	06/30/2016	8:22
Blank	BEF0240-BLK1	06301605W.D	06/30/2016	8:22
CHRL-N-01-160629	16F0096-11	06301606.D	06/30/2016	9:02
CHRL-N-01-160629	16F0096-11	06301606G.D	06/30/2016	9:02
CHRL-N-02-160629	16F0096-12	06301607G.D	06/30/2016	9:22
CHRL-N-02-160629	16F0096-12	06301607.D	06/30/2016	9:22
CHRL-N-03-160629	16F0096-13	06301608G.D	06/30/2016	9:43
CHRL-N-03-160629	16F0096-13	06301608.D	06/30/2016	9:43
CHRL-N-04-160629	16F0096-14	06301609G.D	06/30/2016	10:03
CHRL-N-04-160629	16F0096-14	06301609.D	06/30/2016	10:03
CHRL-N-05-160629	16F0096-15	06301610G.D	06/30/2016	10:24
CHRL-N-05-160629	16F0096-15	06301610.D	06/30/2016	10:24
CHRL-Q-01-160629	16F0096-16	06301611G.D	06/30/2016	10:44
CHRL-Q-01-160629	16F0096-16	06301611.D	06/30/2016	10:44
CHRL-Q-02-160629	16F0096-17	06301612G.D	06/30/2016	11:05
CHRL-Q-02-160629	16F0096-17	06301612.D	06/30/2016	11:05
CHRL-Q-03-160629	16F0096-18	06301613.D	06/30/2016	11:25

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
NWTPHg

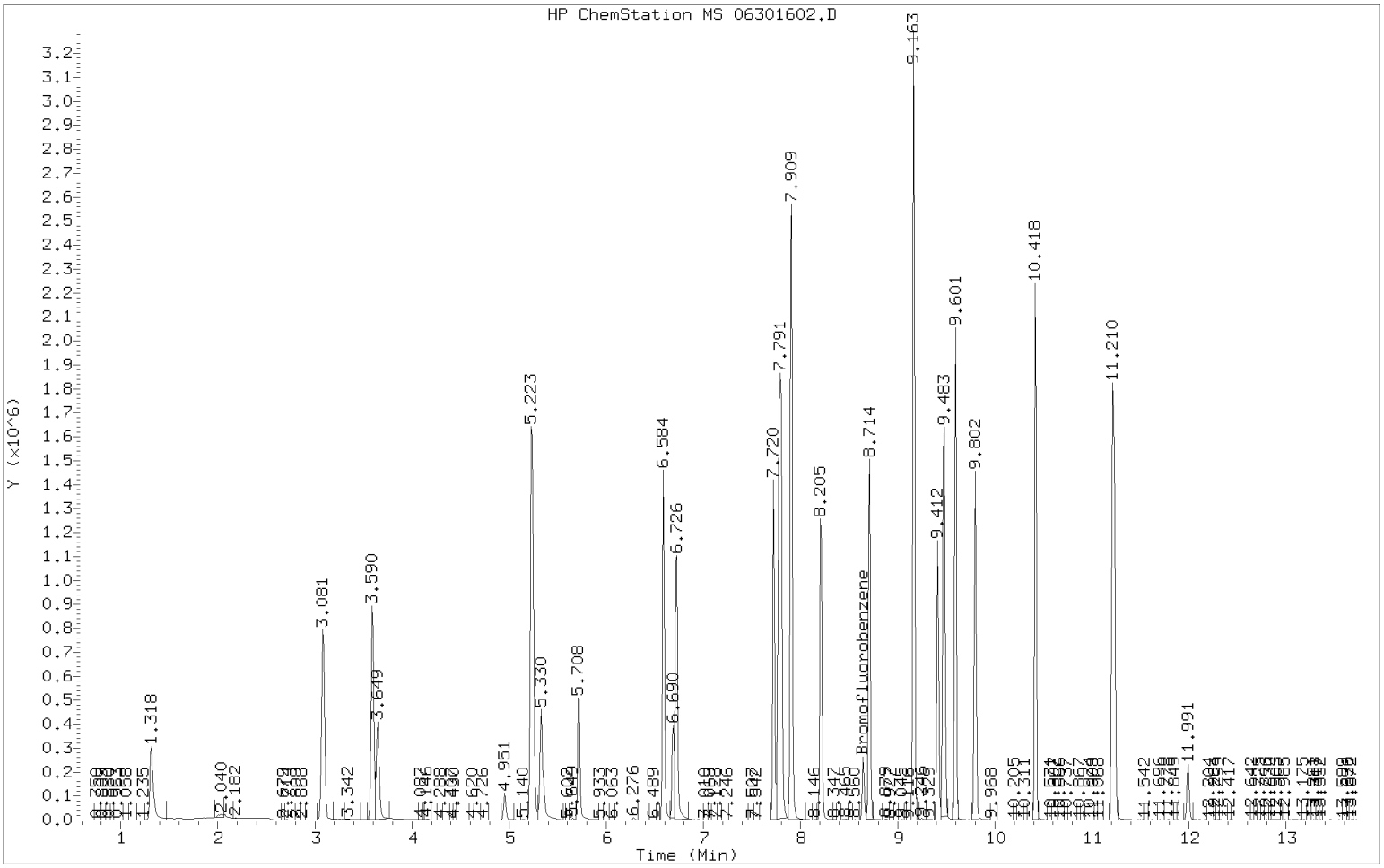
Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Lab File ID:	06301602.D	Injection Date:	06/30/16
Instrument ID:	NT2	Injection Time:	07:08
Sequence:	SEF0152	Lab Sample ID:	SEF0152-TUN1

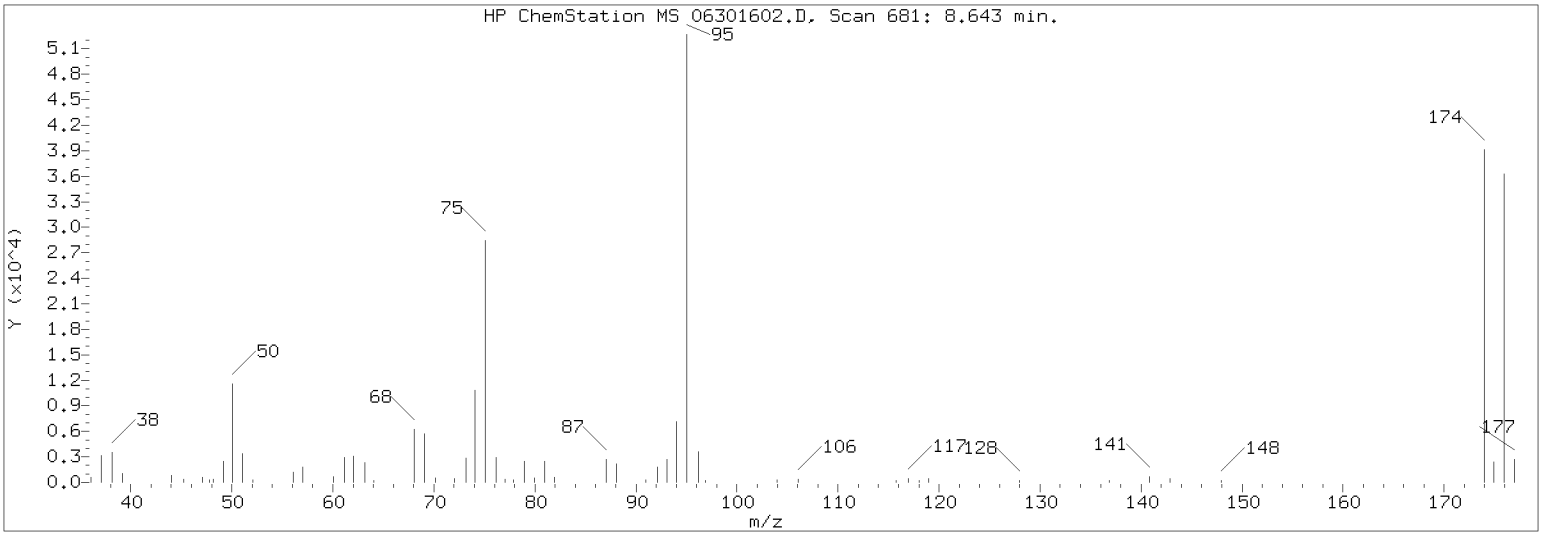
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	22.6	PASS
75	30 - 80% of 95	56.4	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.93	PASS
173	Less than 2% of 174	0.255	PASS
174	50 - 120% of 95	86.6	PASS
175	5 - 9% of 174	6.55	PASS
176	95 - 101% of 174	95.8	PASS
177	5 - 9% of 176	6.58	PASS

CHRL-Q-03-160629	16F0096-18	06301613G.D	06/30/2016	11:25
CHRL-Q-04-160629	16F0096-19	06301614G.D	06/30/2016	11:46
CHRL-Q-04-160629	16F0096-19	06301614.D	06/30/2016	11:46
CHRL-Q-05-160629	16F0096-20	06301615G.D	06/30/2016	12:07
CHRL-Q-05-160629	16F0096-20	06301615.D	06/30/2016	12:07
CHRL-P-01-160629	16F0096-21	06301616G.D	06/30/2016	12:27
CHRL-P-01-160629	16F0096-21	06301616.D	06/30/2016	12:27
CHRL-P-02-160629	16F0096-22	06301617G.D	06/30/2016	12:48
CHRL-P-02-160629	16F0096-22	06301617.D	06/30/2016	12:48
CHRL-P-52-160629	16F0096-23	06301618G.D	06/30/2016	13:09
CHRL-P-52-160629	16F0096-23	06301618.D	06/30/2016	13:09
CHRL-P-03-160629	16F0096-24	06301619G.D	06/30/2016	13:29
CHRL-P-03-160629	16F0096-24	06301619.D	06/30/2016	13:29
CHRL-P-04-160629	16F0096-25	06301620.D	06/30/2016	13:50
CHRL-P-04-160629	16F0096-25	06301620G.D	06/30/2016	13:50
CHRL-P-05-160629	16F0096-26	06301621G.D	06/30/2016	14:10
CHRL-P-05-160629	16F0096-26	06301621.D	06/30/2016	14:10
CHRL-R-02-160629	16F0096-27	06301622G.D	06/30/2016	14:31
CHRL-R-02-160629	16F0096-27	06301622.D	06/30/2016	14:31
CHRL-R-03-160629	16F0096-28	06301623G.D	06/30/2016	14:52
CHRL-R-03-160629	16F0096-28	06301623.D	06/30/2016	14:52
CHRL-R-04-160629	16F0096-29	06301624G.D	06/30/2016	15:12
CHRL-R-04-160629	16F0096-29	06301624.D	06/30/2016	15:12
CHRL-TB-160629	16F0096-30	06301625G.D	06/30/2016	15:33
CHRL-TB-160629	16F0096-30	06301625.D	06/30/2016	15:33
Calibration Check	SEF0152-CCV1	06301626.D	06/30/2016	15:54
Calibration Check	SEF0152-CCV1	06301626G.D	06/30/2016	15:54

BFB TUNE GRAPHIC REPORT

Datafile Analyzed: /20160630.b/06301602.D
Method Used: \20160630.b\bfb8260.m Inst: nt2
Injection Date: 30-JUN-2016 07:08 Operator: LH
Sample Info: SEF0152-TUN1 RTBFB0630,10,10,0,
Report Date: 07/01/2016 11:15





m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.60
75	30.00 - 60.00% of mass 95	56.39
96	5.00 - 9.00% of mass 95	6.93
173	Less than 2.00% of mass 174	0.22 (0.25)
174	50.00 - 100.00% of mass 95	86.58
175	5.00 - 9.00% of mass 174	5.67 (6.55)
176	95.00 - 101.00% of mass 174	82.95 (95.81)
177	5.00 - 9.00% of mass 176	5.45 (6.58)

Data File: 06301602.D
Spectrum: Avg. Scans 680-682 (8.64), Background Scan 677
Location of Maximum: 95.00
Number of points: 58

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	335	61.00	1702	80.00	416	117.00	246
37.00	1925	62.00	1930	81.00	1539	118.00	74
38.00	1964	63.00	1630	82.00	359	119.00	140
39.00	724	64.00	149	87.00	1512	128.00	150
44.00	317	68.00	3617	88.00	1384	137.00	63
45.00	309	69.00	3612	91.00	230	141.00	364
47.00	361	70.00	267	92.00	1117	143.00	335
48.00	310	72.00	281	93.00	1525	148.00	131
49.00	1444	73.00	1623	94.00	4245	173.00	69
50.00	7072	74.00	6336	95.00	31296	174.00	27096
51.00	2122	75.00	17648	96.00	2170	175.00	1775
52.00	159	76.00	1658	97.00	66	176.00	25960
56.00	730	77.00	178	104.00	182	177.00	1707
57.00	949	78.00	89	106.00	201		
60.00	307	79.00	1531	116.00	86		

Analytical Resources, Incorporated
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Lab File ID:	06301603.D	Injection Date:	06/30/16
Instrument ID:	NT3	Injection Time:	07:43
Sequence:	SEF0147	Lab Sample ID:	SEF0147-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	22.2	PASS
75	30 - 80% of 95	46.8	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.85	PASS
173	Less than 2% of 174	0.531	PASS
174	50 - 120% of 95	80.6	PASS
175	5 - 9% of 174	7.89	PASS
176	95 - 101% of 174	95.2	PASS
177	5 - 9% of 176	6.56	PASS

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Cal Check	SEF0147-ICV1	06301604cc.D	06/30/2016	8:15
LCS	BEF0233-BS1	06301604G.D	06/30/2016	8:15
LCS	BEF0233-BS1	06301604.D	06/30/2016	8:15
Initial Cal Check	SEF0147-ICV1	06301604ccG.D	06/30/2016	8:15
LCS Dup	BEF0233-BSD1	06301605G.D	06/30/2016	8:41
LCS Dup	BEF0233-BSD1	06301605.D	06/30/2016	8:41
Blank	BEF0233-BLK1	06301606G.D	06/30/2016	9:07
Blank	BEF0233-BLK1	06301606.D	06/30/2016	9:07
CHRL-M-02-160629	16F0096-01	06301607.D	06/30/2016	9:33
CHRL-M-02-160629	16F0096-01	06301607G.D	06/30/2016	9:33
Calibration Check	SEF0147-CCV1	06301612G.D	06/30/2016	11:43
Calibration Check	SEF0147-CCV1	06301612.D	06/30/2016	11:43
CHRL-M-03-160629	16F0096-02	06301613G.D	06/30/2016	12:09
CHRL-M-03-160629	16F0096-02	06301613.D	06/30/2016	12:09
CHRL-M-53-160629	16F0096-03	06301614G.D	06/30/2016	12:35
CHRL-M-53-160629	16F0096-03	06301614.D	06/30/2016	12:35
CHRL-M-04-160629	16F0096-04	06301615.D	06/30/2016	13:01
CHRL-M-04-160629	16F0096-04	06301615G.D	06/30/2016	13:01
CHRL-M-05-160629	16F0096-05	06301616G.D	06/30/2016	13:27
CHRL-M-05-160629	16F0096-05	06301616.D	06/30/2016	13:27
CHRL-O-01-160629	16F0096-06	06301617G.D	06/30/2016	13:53
CHRL-O-01-160629	16F0096-06	06301617.D	06/30/2016	13:53
CHRL-O-02-160629	16F0096-07	06301618G.D	06/30/2016	14:19
CHRL-O-02-160629	16F0096-07	06301618.D	06/30/2016	14:19
CHRL-O-03-160629	16F0096-08	06301619.D	06/30/2016	14:45
CHRL-O-03-160629	16F0096-08	06301619G.D	06/30/2016	14:45
CHRL-O-04-160629	16F0096-09	06301620G.D	06/30/2016	15:11
CHRL-O-04-160629	16F0096-09	06301620.D	06/30/2016	15:11
CHRL-O-05-160629	16F0096-10	06301621G.D	06/30/2016	15:37

Analytical Resources, Incorporated
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
NWTPHg

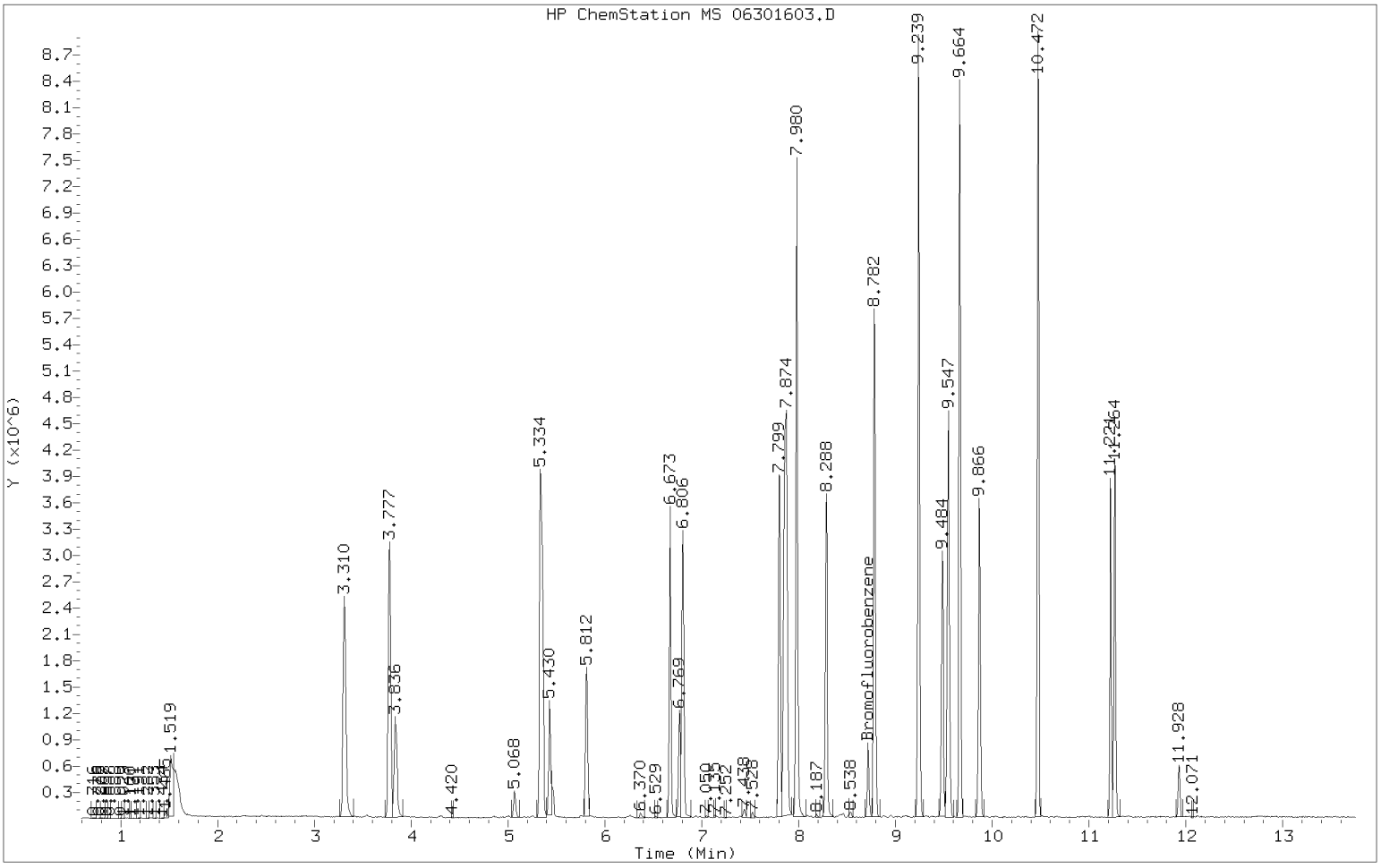
Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Lab File ID:	06301603.D	Injection Date:	06/30/16
Instrument ID:	NT3	Injection Time:	07:43
Sequence:	SEF0147	Lab Sample ID:	SEF0147-TUN1

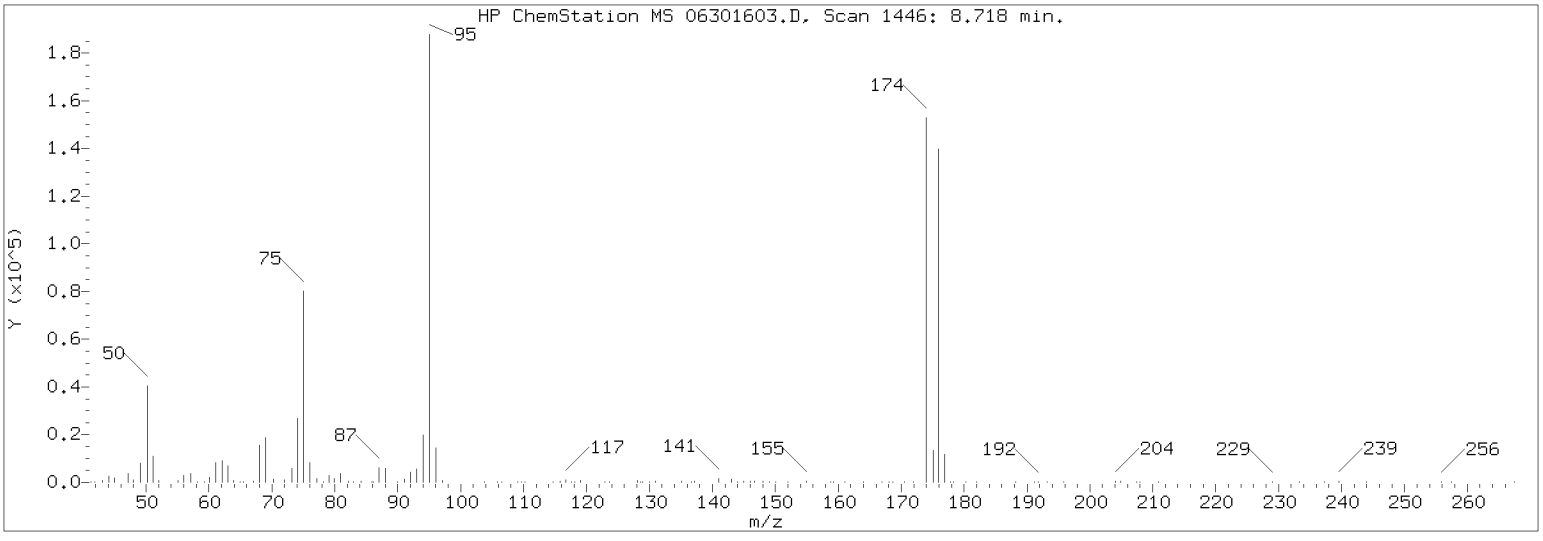
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	22.2	PASS
75	30 - 80% of 95	46.8	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.85	PASS
173	Less than 2% of 174	0.531	PASS
174	50 - 120% of 95	80.6	PASS
175	5 - 9% of 174	7.89	PASS
176	95 - 101% of 174	95.2	PASS
177	5 - 9% of 176	6.56	PASS

CHRL-O-05-160629	16F0096-10	06301621.D	06/30/2016	15:37
Calibration Check	SEF0147-CCV2	06301628.D	06/30/2016	18:39
Calibration Check	SEF0147-CCV2	06301628G.D	06/30/2016	18:39

BFB TUNE GRAPHIC REPORT

Datafile Analyzed: /20160630.b/06301603.D
Method Used: \20160630.b\bfb8260.m Inst: nt3
Injection Date: 30-JUN-2016 07:43 Operator: LH
Sample Info: SEF0147-TUN1 RTBFB0630,10,10,0,
Report Date: 07/01/2016 13:57





m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.22
75	30.00 - 60.00% of mass 95	46.81
96	5.00 - 9.00% of mass 95	6.85
173	Less than 2.00% of mass 174	0.43 (0.53)
174	50.00 - 100.00% of mass 95	80.58
175	5.00 - 9.00% of mass 174	6.36 (7.89)
176	95.00 - 101.00% of mass 174	76.73 (95.22)
177	5.00 - 9.00% of mass 176	5.03 (6.56)

Data File: 06301603.D
Spectrum: Avg. Scans 1445-1447 (8.72), Background Scan 1439
Location of Maximum: 95.00
Number of points: 149

m/z	Y	m/z	Y	m/z	Y	m/z	Y
41.00	81	84.00	263	133.00	97	182.00	57
42.00	198	85.00	283	134.00	121	185.00	69
43.00	655	86.00	216	135.00	290	187.00	50
44.00	970	87.00	6608	136.00	71	188.00	51
45.00	1112	88.00	6203	137.00	426	191.00	141
47.00	2641	89.00	191	141.00	1424	192.00	283
48.00	1115	91.00	1038	142.00	236	193.00	158
49.00	7918	92.00	4092	143.00	1144	196.00	50
50.00	36464	93.00	6072	144.00	127	198.00	157
51.00	10650	94.00	16178	145.00	16	201.00	128
52.00	425	95.00	164096	146.00	343	204.00	202
55.00	316	96.00	11239	147.00	375	205.00	143
56.00	2289	97.00	200	148.00	358	207.00	245
57.00	2307	99.00	65	149.00	19	214.00	89
58.00	451	101.00	89	150.00	123	217.00	79
59.00	209	103.00	55	153.00	97	218.00	79
60.00	1530	104.00	402	155.00	431	219.00	54
61.00	8679	105.00	161	156.00	178	220.00	55
62.00	8343	106.00	388	157.00	258	227.00	85
63.00	5764	107.00	51	158.00	86	228.00	80
64.00	550	108.00	72	159.00	361	229.00	192
65.00	169	109.00	115	161.00	102	232.00	57
66.00	168	110.00	216	162.00	121	233.00	106
67.00	10	112.00	66	163.00	71	237.00	146
68.00	13400	114.00	59	164.00	197	239.00	193
69.00	14947	115.00	42	165.00	82	242.00	63
70.00	1111	116.00	164	166.00	270	243.00	60
72.00	716	117.00	1495	167.00	60	245.00	78
73.00	5421	118.00	631	170.00	276	251.00	139
74.00	22272	119.00	1015	172.00	156	256.00	95
75.00	76816	120.00	163	173.00	702	257.00	82
76.00	6544	123.00	228	174.00	132224	258.00	252
77.00	603	124.00	62	175.00	10435	262.00	99
78.00	482	125.00	106	176.00	125904	265.00	99
79.00	2719	126.00	113	177.00	8261	267.00	68
80.00	1069	128.00	996	178.00	291		
81.00	2889	130.00	359	179.00	58		
82.00	743	132.00	220	180.00	101		

INITIAL CALIBRATION DATA

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZE00032	Instrument:	NT3
Calibration Date:	05/25/2016 8:25	Column (1):	RTX-VMS

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
Gasoline Range Organics (Tol-Nap)					100	102496.4	250	105563.6	500	103349.2	1000	110679.6

INITIAL CALIBRATION DATA

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZE00032	Instrument:	NT3
Calibration Date:	05/25/2016 8:25	Column (1):	RTX-VMS

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
		RF		RF		RF		RF		RF		RF
Gasoline Range Organics (Tol-Nap)	2500	102833.6	5000	95728.14								

INITIAL CALIBRATION DATA

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZE00032	Instrument:	NT3
Calibration Date:	05/25/2016 8:25	Column (1):	RTX-VMS

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	RSD Limit	Q
Gasoline Range Organics (Tol-Nap)	103441.8	4.7			20	

Analysis	Matrix	Method
8260C Gas (8015C)	Water	EPA 8015C
8260C Gas (AK101)	Water	AK101
8260C Gas (NWTPH)	Water	NWTPHg
8260C VOA	Water	EPA 8260C
8260C VOA Solid (MeOH)	Water	EPA 8260C

Checklist: Initial Calibration Checklist-VOA

#	Checklist Item	Response	Analyst Initials	Date
1	Element Calibration Code	YES	LH	05/26/2016
	Comments: *ZE00032*			
2	BFB Tune met Criteria	YES	LH	05/26/2016
3	ICal meets 20% RSD, LR COD, and QR COD limits	YES	LH	05/26/2016
4	NO ICAL Q Flag applied	YES	LH	05/26/2016
5	Manual integrations include before/after pictures	YES	LH	05/26/2016
6	Internal Standard areas within 50-200% from reference	YES	LH	05/26/2016
7	Spectral Library updated	YES	LH	05/26/2016
8	Minimum response factors met	YES	LH	05/26/2016
9	All SCV within +/- 20% (DOD)	NO	LH	05/26/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Vinyl chloride 122.76%, 2-chloroethyl vinyl ether 76.85%, t-butylbenzene 126.43%*			
10	All SCV within +/- 30%	NO	LH	05/26/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Acetone 60.48%*			
11	NO Linear or Quadratic Fits Used	NO	LH	05/26/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Linear: 2,2-dichloropropane*			
12	NO Calibration points dropped	NO	LH	05/26/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Some low points were dropped, but all RLs were met.*			
13	Additional Notes	YES	LH	05/26/2016
	Comments: *This calibration is for Gas and 8260.*			
14	Reviewer Approval (Reviewer)	YES	BB	05/26/2016

* = Indicates Automated Response from Element DataSyst

Analytical Resources Inc.: Organics Instrument Log

03844I No.: US81221575

Date: 5/25/16 Analysis: 8260C + gas Analyst: [illegible]

GC Program: VOA2 Column No: 130725 Column Type: RTXVMS

Instrument Tune (.U or .CT.): bfb.u EM Voltage: 2271

Calibration File: 05251604.d Curve Date: 5/25/16 Injection Vol.: 10mL

ZE00032

IS/SS	Ical/Ccal	LCS/ICV
E11116	E001814	E001834
E11117	E001815	E001857
	E000912	
	E001835	

Document All Maintenance Tasks In Element

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem1\nt3.i\20160525.b

	Time	Filename	LabID	ClientID	Vial#	pH	DF							
1	0706	05251601.D	RINSE				1							
2	0730	05251602.D	RINSE				1							
3	0755	05251603.D	LOW				1							
4	0850	05251604.D	RTBFB0525	10			1							
5	0920	05251605.D	SEE0142-CAL1	VSTD0.2			1	5.42	602045	5.81	1034901	7.85	1015055	9.54	550237
6	0946	05251606.D	SEE0142-CAL2	VSTD0.5			1	5.43	592948	5.81	1025758	7.85	1008791	9.54	554076
7	1012	05251607.D	SEE0142-CAL8	VSTD80			1	5.81	1049338	7.85	1044147	9.54	586613		
8	1038	05251608.D	SEE0142-CAL7	VSTD40			1	5.43	605568	5.81	1044373	7.85	1022444	9.54	585693
9	1104	05251609.D	SEE0142-CAL6	VSTD20			1	5.43	579151	5.81	990448	7.85	1001872	9.54	568291
10	1130	05251610.D	SEE0142-CAL5	VSTD10			1	5.43	578118	5.81	994783	7.85	985810	9.54	556120
11	1157	05251611.D	SEE0142-CAL4	VSTD02			1	5.43	572545	5.81	982229	7.85	983075	9.54	548573
12	1223	05251612.D	SEE0142-CAL3	VSTD01			1	5.43	589813	5.81	985687	7.85	972977	9.54	547882
13	1248	05251613.D	SEE0142-SCV1	8260 SCV			1	5.43	586330	5.81	1003636	7.85	989223	9.54	550009
14	1315	05251614.D	SEE0142-CALE	GAS5			1	5.43	574571	5.81	1029825	7.85	995159	9.54	572275
15	1341	05251615.D	SEE0142-CALD	GAS2.5			1	5.43	584933	5.81	1036153	7.85	997252	9.54	547478
16	1407	05251616.D	SEE0142-CALC	GAS1			1	5.43	576474	5.81	984897	7.85	971845	9.54	543467
17	1433	05251617.D	SEE0142-CALB	GAS0.5			1	5.43	555474	5.81	973225	7.85	954446	9.54	533750
18	1459	05251618.D	SEE0142-CALA	GAS0.25			1	5.43	562050	5.81	960175	7.85	980814	9.54	537547
19	1525	05251619.D	SEE0142-CAL9	GAS0.1			1	5.43	571696	5.81	964062	7.85	942338	9.54	520629
20	1551	05251620.D	SEE0142-SCV2	GAS SCV			1	5.43	550071	5.81	977232	7.85	948324	9.54	539702

Every line must contain information or be lined out. Make all entries legible.
Start a new 03899ch QC period. Document All Maintenance Tasks In Element

ZE00032

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-MAY-2016 09:20
End Cal Date : 25-MAY-2016 12:23
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Last Edit : 26-May-2016 07:52 lanih
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem1\nt3.i\20160525.b\05251605.D
Level 2: \\target\share\chem1\nt3.i\20160525.b\05251606.D
Level 3: \\target\share\chem1\nt3.i\20160525.b\05251612.D
Level 4: \\target\share\chem1\nt3.i\20160525.b\05251611.D
Level 5: \\target\share\chem1\nt3.i\20160525.b\05251610.D
Level 6: \\target\share\chem1\nt3.i\20160525.b\05251609.D
Level 7: \\target\share\chem1\nt3.i\20160525.b\05251608.D
Level 8: \\target\share\chem1\nt3.i\20160525.b\05251607.D

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD
	40.000 Level 7	80.000 Level 8						
1 Dichlorodifluoromethane	0.83615	0.90365	0.79452	0.82070	0.83539	0.90588		
	0.84308	0.83563					0.84688	4.578
2 Chloromethane	+++++	1.58307	1.38612	1.30811	1.30789	1.28425		
	1.22787	1.21684					1.33059	9.381
3 Vinyl Chloride	1.23562	1.12553	1.04933	1.05493	1.12749	1.10089		
	1.07956	1.08815					1.10769	5.339
4 Bromomethane	0.52189	0.46139	0.49104	0.44862	0.44626	0.46200		
	0.45484	0.44960					0.46696	5.646
5 Chloroethane	0.67071	0.59128	0.56431	0.53319	0.54316	0.55006		
	0.53236	0.53671					0.56522	8.310
6 Trichlorofluoromethane	1.05781	0.95904	0.82018	0.87632	0.90535	0.92471		
	0.91625	0.92157					0.92265	7.395
7 1,1-Dichloroethene	1.35604	1.35810	1.22217	1.16703	1.23431	1.20996		
	1.18558	1.15707					1.23628	6.392
8 Carbon Disulfide	2.48304	2.23571	2.06655	2.08935	2.06135	2.02828		
	1.97367	1.80015					2.09226	9.532

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-MAY-2016 09:20
End Cal Date : 25-MAY-2016 12:23
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Last Edit : 26-May-2016 07:52 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD
	40.000 Level 7	80.000 Level 8						
9 112Trichloro122Trifluoroethan	0.69737	0.67254	0.56920	0.57224	0.61413	0.61291		
	0.60127	0.59731					0.61712	7.373
10 Iodomethane	1.11561	0.98808	1.02504	0.93848	0.95061	0.94747		
	0.94645	0.92102					0.97910	6.543
11 Bromoethane	0.57271	0.55168	0.46240	0.45664	0.47474	0.45748		
	0.45663	0.45286					0.48564	9.892
12 Acrolein	+++++	+++++	0.11234	0.10625	0.10065	0.10050		
	0.09777	0.09596					0.10225	5.919
13 Methylene Chloride	+++++	+++++	0.67932	0.67065	0.60854	0.63618		
	0.61363	0.58947					0.63297	5.670
14 Acetone	+++++	+++++	0.16998	0.15776	0.13094	0.13286		
	0.12766	0.12245					0.14027	13.553
15 Trans-1,2-Dichloroethene	0.81672	0.75504	0.72499	0.66294	0.64325	0.66063		
	0.66202	0.63394					0.69494	9.266
16 n-hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
17 Methyl tert butyl ether	1.61533	1.46583	1.72055	1.64341	1.58016	1.55525		
	1.51038	1.45676					1.56846	5.785
18 1,1-Dichloroethane	1.43037	1.43588	1.30726	1.38654	1.41676	1.36555		
	1.35403	1.29704					1.37418	3.874
19 Acrylonitrile	+++++	+++++	0.27504	0.27837	0.25213	0.23738		
	0.22804	0.23032					0.25021	8.873

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-MAY-2016 09:20
End Cal Date : 25-MAY-2016 12:23
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Last Edit : 26-May-2016 07:52 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	40.000 Level 7	80.000 Level 8	RRF	% RSD	
21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
20 Vinyl Acetate	1.37124	1.54341	1.40331	1.43048	1.46700	1.44645	1.40102	1.34460	1.42594	4.328	
22 Cis-1,2-Dichloroethene	0.78366	0.81430	0.77450	0.74554	0.71560	0.71921	0.70209	0.69116	0.74326	5.890	
23 2,2-Dichloropropane	1.20655	0.94066	0.79025	0.71695	0.76573	0.73671	0.72493	0.67977	0.82019	21.321	<-
24 Bromochloromethane	0.40919	0.31321	0.34577	0.29535	0.31703	0.31014	0.30525	0.30241	0.32479	11.474	
25 Chloroform	1.12591	1.21053	1.10337	1.14009	1.10213	1.08695	1.05443	1.02704	1.10631	5.040	
26 Carbon Tetrachloride	0.64359	0.49166	0.49110	0.51246	0.51682	0.50711	0.49591	0.48546	0.51801	10.028	
28 1,1,1-Trichloroethane	1.01022	1.18027	0.92997	0.94442	0.94357	0.93867	0.92016	0.88570	0.96913	9.501	
30 1,1-Dichloropropene	0.66900	0.54568	0.54658	0.56336	0.52812	0.53573	0.52496	0.51530	0.55359	8.844	
29 2-Butanone	+++++	+++++	0.28918	0.28555	0.28759	0.27886	0.26826	0.26068	0.27835	4.154	
31 Benzene	1.63533	1.64780	1.61254	1.53081	1.53313	1.50841	1.41817	1.25791	1.51801	8.540	

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Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	40.000 Level 7	80.000 Level 8	RRF	% RSD
35 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 1,2-Dichloroethane	0.50377	0.55729	0.51427	0.50559	0.50096	0.48267	0.47027	0.46278	0.49970	5.908
36 Trichloroethene	0.38685	0.43392	0.42765	0.39254	0.40371	0.41031	0.39705	0.39758	0.40620	4.131
38 Dibromomethane	0.21640	0.21958	0.20578	0.17968	0.18692	0.18714	0.18221	0.18099	0.19484	8.456
39 1,2-Dichloropropane	0.53305	0.47516	0.47175	0.43999	0.45154	0.45065	0.43973	0.43279	0.46183	7.034
40 Bromodichloromethane	0.50440	0.45728	0.47615	0.47611	0.47106	0.46825	0.46990	0.45645	0.47245	3.159
173 2-Pentanone	+++++	0.03717	0.04552	0.04519	0.04143	0.04196	0.04107	0.03975	0.04173	7.029
42 Cis 1,3-dichloropropene	0.63711	0.67909	0.63189	0.60110	0.63060	0.60832	0.60235	0.58750	0.62225	4.649
41 2-Chloroethyl Vinyl Ether	+++++	0.24651	0.24123	0.22886	0.23872	0.24084	0.23513	0.22969	0.23728	2.714
44 Toluene	1.06817	1.00776	1.07238	0.98102	0.99443	0.97996	0.95088	0.89304	0.99346	5.924
45 4-Methyl-2-Pentanone	+++++	+++++	0.14562	0.14033	0.14073	0.13645	0.12988	0.12379	0.13613	5.879

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Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	40.000 Level 7	80.000 Level 8	RRF	% RSD
46 Tetrachloroethene	0.40589	0.42903	0.41710	0.38049	0.39445	0.38238	0.39664	0.38967	0.39946	4.239
47 Trans 1,3-Dichloropropene	0.49845	0.57212	0.55074	0.52050	0.51662	0.51621	0.50733	0.49931	0.52266	4.949
48 1,1,2-Trichloroethane	0.28998	0.30120	0.28478	0.26826	0.27748	0.27062	0.26388	0.26451	0.27759	4.828
49 Chlorodibromomethane	0.41451	0.28983	0.34494	0.31494	0.34321	0.33904	0.34612	0.33276	0.34067	10.419
50 1,3-Dichloropropane	0.50815	0.51357	0.55397	0.49852	0.50674	0.48069	0.50127	0.47533	0.50478	4.742
51 1,2-Dibromoethane	0.29800	0.29758	0.29821	0.25439	0.27744	0.26763	0.26708	0.26193	0.27778	6.432
52 2-Hexanone	+++++	+++++	0.26249	0.25156	0.25017	0.23264	0.22684	0.19793	0.23694	9.779
54 Chlorobenzene	1.31761	1.17515	1.19373	1.08666	1.10730	1.07765	1.06613	0.96902	1.12416	9.278
55 Ethyl Benzene	0.61179	0.65042	0.61715	0.58568	0.60154	0.60766	0.61026	0.58882	0.60916	3.283
56 1,1,1,2-Tetrachloroethane	0.42574	0.41051	0.37281	0.38209	0.38788	0.38013	0.38447	0.37548	0.38989	4.748
57 m,p-xylene	0.86222	0.77224	0.78506	0.73520	0.73831	0.72618	0.70779	0.60904	0.74201	9.716

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	40.000 Level 7	80.000 Level 8						
58 o-Xylene	0.73370	0.80524	0.77758	0.67929	0.76257	0.72960		
	0.73708	0.70188					0.74087	5.463
59 Styrene	1.32870	1.28770	1.25777	1.17650	1.22909	1.20531		
	1.18523	1.06332					1.21670	6.640
60 Bromoform	0.31414	0.37800	0.38423	0.32614	0.36708	0.36131		
	0.36071	0.35978					0.35642	6.799
61 Isopropyl Benzene	3.84771	3.51760	3.50433	3.45930	3.47077	3.26716		
	3.06385	2.51241					3.33039	11.975
63 Bromobenzene	0.94359	0.89739	0.86864	0.82043	0.79145	0.77021		
	0.77180	0.77047					0.82925	8.027
64 N-Propyl Benzene	4.68525	4.22484	4.23686	3.95613	4.03599	3.76990		
	3.42323	2.68431					3.87706	15.644
82 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
65 1,1,2,2-Tetrachloroethane	0.54213	0.72329	0.70685	0.58888	0.61425	0.59008		
	0.59094	0.58163					0.61726	10.324
66 2-Chloro Toluene	3.21825	3.01020	2.80212	2.73593	2.69233	2.61087		
	2.53110	2.29215					2.73662	10.415
67 1,3,5-Trimethyl Benzene	3.38381	3.21425	3.24924	2.93508	2.99904	2.85884		
	2.68174	2.25365					2.94696	12.270
68 1,2,3-Trichloropropane	+++++	0.21365	0.25182	0.17911	0.18649	0.17923		
	0.17730	0.17909					0.19524	14.360

ARI Labs, Inc.

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Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	40.000 Level 7	80.000 Level 8	___ RRF	% RSD
69 Trans-1,4-Dichloro 2-Butene	+++++	+++++	0.23719	0.25880	0.23247	0.22864	0.22342	0.22750	0.23467	5.416
70 4-Chloro Toluene	3.05559	2.75276	2.66864	2.54468	2.56399	2.43165	2.35656	2.05359	2.55343	11.549
71 T-Butyl Benzene	2.59979	2.53990	2.60385	2.51216	2.52938	2.41929	2.33017	2.08266	2.45215	7.140
72 1,2,4-Trimethylbenzene	4.34386	3.30428	3.08152	2.94778	3.00396	2.90473	2.72985	2.28287	3.07486	19.277
73 S-Butyl Benzene	3.99855	4.03526	3.91135	3.74526	3.69820	3.53180	3.26478	2.58569	3.59636	13.384
74 4-Isopropyl Toluene	3.47214	3.36261	3.18791	3.19052	3.14756	3.03938	2.84584	2.34971	3.07446	11.345
75 1,3-Dichlorobenzene	2.24921	1.93656	1.76169	1.64455	1.62142	1.58659	1.55013	1.47824	1.72855	14.646
77 1,4-Dichlorobenzene	2.23649	1.85029	1.66950	1.62167	1.60610	1.56017	1.55092	1.45854	1.69421	14.563
78 N-Butyl Benzene	3.64797	3.21833	2.91826	2.77733	2.78249	2.70309	2.57173	2.18015	2.84992	15.322
80 1,2-Dichlorobenzene	2.06475	1.69100	1.54719	1.50763	1.46612	1.42307	1.40384	1.34202	1.55570	14.861
81 1,2-Dibromo 3-Chloropropane	+++++	0.14182	0.11725	0.12388	0.11424	0.10250	0.10512	0.10657	0.11591	11.803

ARI Labs, Inc.

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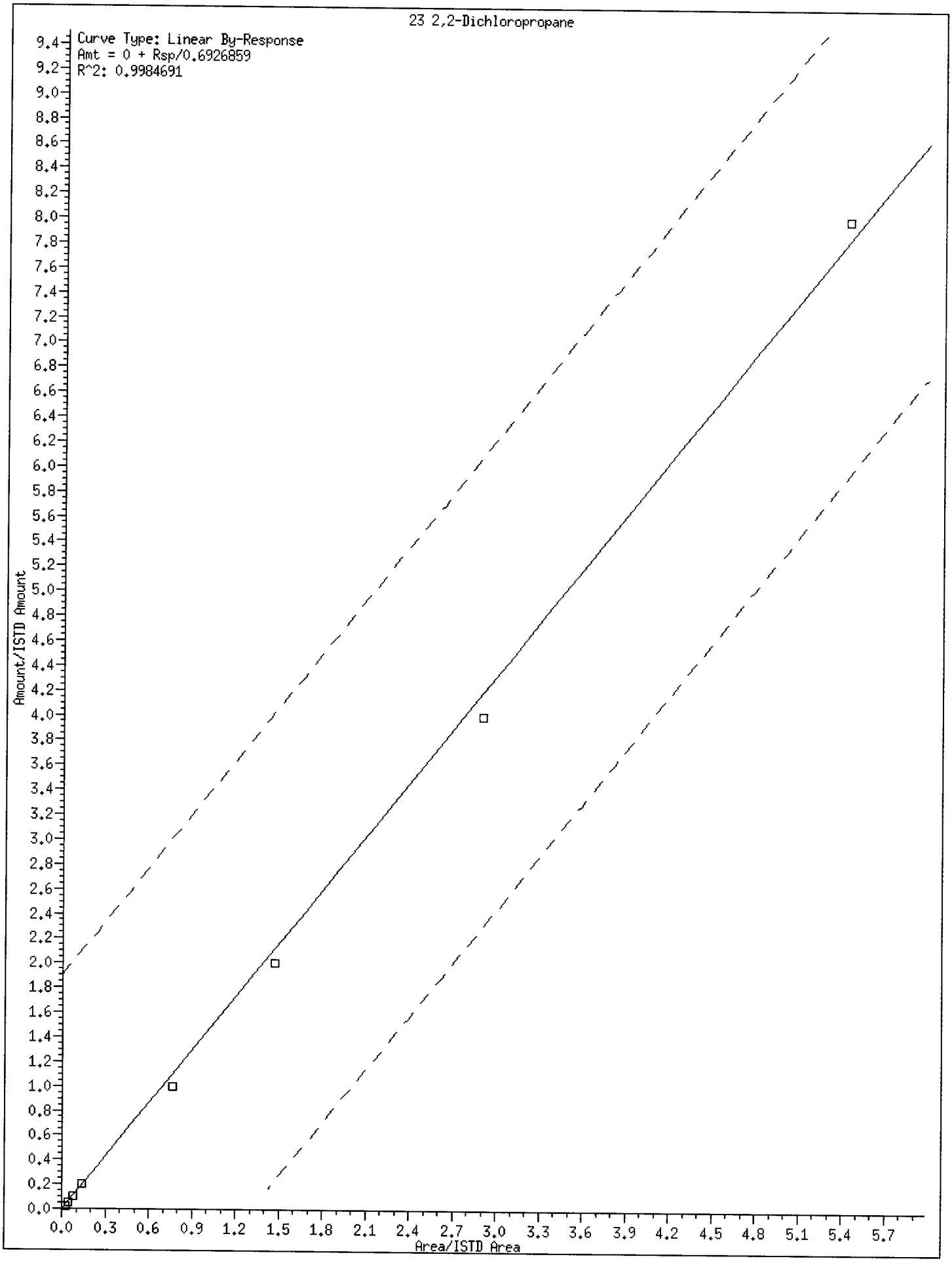
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD
	40.000 Level 7	80.000 Level 8						
83 Hexachloro 1,3-Butadiene	+++++	0.37796	0.43440	0.45000	0.40684	0.40855		
	0.41289	0.41810					0.41553	5.465
84 1,2,4-Trichlorobenzene	+++++	0.97821	1.06554	1.08418	1.01518	0.99615		
	0.98208	0.95647					1.01111	4.683
85 Naphthalene	+++++	2.34802	2.25249	2.23491	1.96854	1.86989		
	1.80100	1.57742					2.00747	14.027
86 1,2,3-Trichlorobenzene	+++++	0.80848	1.00410	0.93891	0.85720	0.81601		
	0.81653	0.75762					0.85698	9.981
$ 27 Dibromofluoromethane	0.50134	0.52747	0.51280	0.53633	0.52301	0.51418		
	0.52385	0.51001					0.51863	2.143
$ 33 d4-1,2-Dichloroethane	0.53624	0.55558	0.55078	0.54579	0.54665	0.54985		
	0.54941	0.54340					0.54721	1.052
$ 43 d8-Toluene	1.18519	1.23090	1.18112	1.21516	1.23132	1.25069		
	1.18863	1.24711					1.21627	2.314
$ 62 4-Bromofluorobenzene	0.41151	0.39859	0.42122	0.40300	0.40247	0.41099		
	0.42318	0.40861					0.40994	2.144
$ 79 d4-1,2-Dichlorobenzene	0.93781	0.92123	0.90567	0.91354	0.92764	0.91578		
	0.92125	0.92019					0.92039	1.041


23 2,2-Dichloropropane
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.6926859
R^2: 0.9984691
Amount/ISTD Amount
Area/ISTD Area
0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6 5.8 6.0 6.2 6.4 6.6 6.8 7.0 7.2 7.4 7.6 7.8 8.0 8.2 8.4 8.6 8.8 9.0 9.2 9.4
0.0 0.3 0.6 0.9 1.2 1.5 1.8 2.1 2.4 2.7 3.0 3.3 3.6 3.9 4.2 4.5 4.8 5.1 5.4 5.7

ARI Labs, Inc.

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Calibration File Names:
Level 1: \\target\share\chem1\nt3.i\20160525.b\05251605.D
Level 2: \\target\share\chem1\nt3.i\20160525.b\05251606.D
Level 3: \\target\share\chem1\nt3.i\20160525.b\05251612.D
Level 4: \\target\share\chem1\nt3.i\20160525.b\05251611.D
Level 5: \\target\share\chem1\nt3.i\20160525.b\05251610.D
Level 6: \\target\share\chem1\nt3.i\20160525.b\05251609.D
Level 7: \\target\share\chem1\nt3.i\20160525.b\05251608.D
Level 8: \\target\share\chem1\nt3.i\20160525.b\05251607.D

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
1 Dichlorodifluoromethane	0.83615	0.90365	0.79452	0.82070	0.83539	0.90588					
	0.84308	0.83563					AVRG		0.84688		4.57756
2 Chloromethane	+++++	1.58307	1.38612	1.30811	1.30789	1.28425					
	1.22787	1.21684					AVRG		1.33059		9.38135
3 Vinyl Chloride	1.23562	1.12553	1.04933	1.05493	1.12749	1.10089					
	1.07956	1.08815					AVRG		1.10769		5.33938

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	40.0000 Level 7	80.0000 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
4 Bromomethane	0.52189	0.46139	0.49104	0.44862	0.44626	0.46200							
	0.45484	0.44960							AVRG		0.46696		5.64595
5 Chloroethane	0.67071	0.59128	0.56431	0.53319	0.54316	0.55006							
	0.53236	0.53671							AVRG		0.56522		8.31016
6 Trichlorofluoromethane	1.05781	0.95904	0.82018	0.87632	0.90535	0.92471							
	0.91625	0.92157							AVRG		0.92265		7.39479
7 1,1-Dichloroethene	1.35604	1.35810	1.22217	1.16703	1.23431	1.20996							
	1.18558	1.15707							AVRG		1.23628		6.39231
8 Carbon Disulfide	2.48304	2.23571	2.06655	2.08935	2.06135	2.02828							
	1.97367	1.80015							AVRG		2.09226		9.53156
9 112Trichloro122Trifluoroethan	0.69737	0.67254	0.56920	0.57224	0.61413	0.61291							
	0.60127	0.59731							AVRG		0.61712		7.37306
10 Iodomethane	1.11561	0.98808	1.02504	0.93848	0.95061	0.94747							
	0.94645	0.92102							AVRG		0.97910		6.54306

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
11 Bromoethane	0.57271	0.55168	0.46240	0.45664	0.47474	0.45748					
	0.45663	0.45286					AVRG		0.48564		9.89153
12 Acrolein	+++++	+++++	0.11234	0.10625	0.10065	0.10050					
	0.09777	0.09596					AVRG		0.10225		5.91949
13 Methylene Chloride	+++++	+++++	0.67932	0.67065	0.60854	0.63618					
	0.61363	0.58947					AVRG		0.63297		5.67018
14 Acetone	+++++	+++++	0.16998	0.15776	0.13094	0.13286					
	0.12766	0.12245					AVRG		0.14027		13.55269
15 Trans-1,2-Dichloroethene	0.81672	0.75504	0.72499	0.66294	0.64325	0.66063					
	0.66202	0.63394					AVRG		0.69494		9.26551
16 n-hexane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
17 Methyl tert butyl ether	1.61533	1.46583	1.72055	1.64341	1.58016	1.55525					
	1.51038	1.45676					AVRG		1.56846		5.78539

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
18 1,1-Dichloroethane	1.43037	1.43588	1.30726	1.38654	1.41676	1.36555					
	1.35403	1.29704					AVRG		1.37418		3.87406
19 Acrylonitrile	+++++	+++++	0.27504	0.27837	0.25213	0.23738					
	0.22804	0.23032					AVRG		0.25021		8.87337
21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
20 Vinyl Acetate	1.37124	1.54341	1.40331	1.43048	1.46700	1.44645					
	1.40102	1.34460					AVRG		1.42594		4.32849
22 Cis-1,2-Dichloroethene	0.78366	0.81430	0.77450	0.74554	0.71560	0.71921					
	0.70209	0.69116					AVRG		0.74326		5.88957
23 2,2-Dichloropropane	14528	27888	46610	82097	442681	853333					
	1755988	3319817					LINR	0.000e+000	0.69269		0.99847
24 Bromochloromethane	0.40919	0.31321	0.34577	0.29535	0.31703	0.31014					
	0.30525	0.30241					AVRG		0.32479		11.47400

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-MAY-2016 09:20
End Cal Date : 25-MAY-2016 12:23
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Last Edit : 26-May-2016 07:52 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
25 Chloroform	1.12591	1.21053	1.10337	1.14009	1.10213	1.08695					
	1.05443	1.02704					AVRG		1.10631		5.03992
26 Carbon Tetrachloride	0.64359	0.49166	0.49110	0.51246	0.51682	0.50711					
	0.49591	0.48546					AVRG		0.51801		10.02757
28 1,1,1-Trichloroethane	1.01022	1.18027	0.92997	0.94442	0.94357	0.93867					
	0.92016	0.88570					AVRG		0.96913		9.50147
30 1,1-Dichloropropene	0.66900	0.54568	0.54658	0.56336	0.52812	0.53573					
	0.52496	0.51530					AVRG		0.55359		8.84423
29 2-Butanone	+++++	+++++	0.28918	0.28555	0.28759	0.27886					
	0.26826	0.26068					AVRG		0.27835		4.15441
31 Benzene	1.63533	1.64780	1.61254	1.53081	1.53313	1.50841					
	1.41817	1.25791					AVRG		1.51801		8.54013
35 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

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Method file : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Last Edit : 26-May-2016 07:52 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
34 1,2-Dichloroethane	0.50377	0.55729	0.51427	0.50559	0.50096	0.48267					
	0.47027	0.46278					AVRG		0.49970		5.90791
36 Trichloroethene	0.38685	0.43392	0.42765	0.39254	0.40371	0.41031					
	0.39705	0.39758					AVRG		0.40620		4.13073
38 Dibromomethane	0.21640	0.21958	0.20578	0.17968	0.18692	0.18714					
	0.18221	0.18099					AVRG		0.19484		8.45552
39 1,2-Dichloropropane	0.53305	0.47516	0.47175	0.43999	0.45154	0.45065					
	0.43973	0.43279					AVRG		0.46183		7.03413
40 Bromodichloromethane	0.50440	0.45728	0.47615	0.47611	0.47106	0.46825					
	0.46990	0.45645					AVRG		0.47245		3.15947
173 2-Pentanone	+++++	0.03717	0.04552	0.04519	0.04143	0.04196					
	0.04107	0.03975					AVRG		0.04173		7.02852
42 Cis 1,3-dichloropropene	0.63711	0.67909	0.63189	0.60110	0.63060	0.60832					
	0.60235	0.58750					AVRG		0.62225		4.64940

ARI Labs, Inc.

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Integrator : HP RTE
Method file : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Last Edit : 26-May-2016 07:52 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
41 2-Chloroethyl Vinyl Ether	+++++	0.24651	0.24123	0.22886	0.23872	0.24084					
	0.23513	0.22969					AVRG		0.23728		2.71353
44 Toluene	1.06817	1.00776	1.07238	0.98102	0.99443	0.97996					
	0.95088	0.89304					AVRG		0.99346		5.92441
45 4-Methyl-2-Pentanone	+++++	+++++	0.14562	0.14033	0.14073	0.13645					
	0.12988	0.12379					AVRG		0.13613		5.87930
46 Tetrachloroethene	0.40589	0.42903	0.41710	0.38049	0.39445	0.38238					
	0.39664	0.38967					AVRG		0.39946		4.23915
47 Trans 1,3-Dichloropropene	0.49845	0.57212	0.55074	0.52050	0.51662	0.51621					
	0.50733	0.49931					AVRG		0.52266		4.94930
48 1,1,2-Trichloroethane	0.28998	0.30120	0.28478	0.26826	0.27748	0.27062					
	0.26388	0.26451					AVRG		0.27759		4.82798
49 Chlorodibromomethane	0.41451	0.28983	0.34494	0.31494	0.34321	0.33904					
	0.34612	0.33276					AVRG		0.34067		10.41884

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Last Edit : 26-May-2016 07:52 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
50 1,3-Dichloropropane	0.50815	0.51357	0.55397	0.49852	0.50674	0.48069					
	0.50127	0.47533					AVRG		0.50478		4.74224
51 1,2-Dibromoethane	0.29800	0.29758	0.29821	0.25439	0.27744	0.26763					
	0.26708	0.26193					AVRG		0.27778		6.43161
52 2-Hexanone	+++++	+++++	0.26249	0.25156	0.25017	0.23264					
	0.22684	0.19793					AVRG		0.23694		9.77861
54 Chlorobenzene	1.31761	1.17515	1.19373	1.08666	1.10730	1.07765					
	1.06613	0.96902					AVRG		1.12416		9.27831
55 Ethyl Benzene	0.61179	0.65042	0.61715	0.58568	0.60154	0.60766					
	0.61026	0.58882					AVRG		0.60916		3.28307
56 1,1,1,2-Tetrachloroethane	0.42574	0.41051	0.37281	0.38209	0.38788	0.38013					
	0.38447	0.37548					AVRG		0.38989		4.74847
57 m,p-xylene	0.86222	0.77224	0.78506	0.73520	0.73831	0.72618					
	0.70779	0.60904					AVRG		0.74201		9.71571

ARI Labs, Inc.

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Last Edit : 26-May-2016 07:52 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
58 o-Xylene	0.73370	0.80524	0.77758	0.67929	0.76257	0.72960					
	0.73708	0.70188					AVRG		0.74087		5.46298
59 Styrene	1.32870	1.28770	1.25777	1.17650	1.22909	1.20531					
	1.18523	1.06332					AVRG		1.21670		6.63983
60 Bromoform	0.31414	0.37800	0.38423	0.32614	0.36708	0.36131					
	0.36071	0.35978					AVRG		0.35642		6.79909
61 Isopropyl Benzene	3.84771	3.51760	3.50433	3.45930	3.47077	3.26716					
	3.06385	2.51241					AVRG		3.33039		11.97508
63 Bromobenzene	0.94359	0.89739	0.86864	0.82043	0.79145	0.77021					
	0.77180	0.77047					AVRG		0.82925		8.02707
64 N-Propyl Benzene	4.68525	4.22484	4.23686	3.95613	4.03599	3.76990					
	3.42323	2.68431					AVRG		3.87706		15.64421
82 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

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Last Edit : 26-May-2016 07:52 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
65 1,1,2,2-Tetrachloroethane	0.54213	0.72329	0.70685	0.58888	0.61425	0.59008					
	0.59094	0.58163					AVRG		0.61726		10.32441
66 2-Chloro Toluene	3.21825	3.01020	2.80212	2.73593	2.69233	2.61087					
	2.53110	2.29215					AVRG		2.73662		10.41520
67 1,3,5-Trimethyl Benzene	3.38381	3.21425	3.24924	2.93508	2.99904	2.85884					
	2.68174	2.25365					AVRG		2.94696		12.27039
68 1,2,3-Trichloropropane	+++++	0.21365	0.25182	0.17911	0.18649	0.17923					
	0.17730	0.17909					AVRG		0.19524		14.36029
69 Trans-1,4-Dichloro 2-Butene	+++++	+++++	0.23719	0.25880	0.23247	0.22864					
	0.22342	0.22750					AVRG		0.23467		5.41601
70 4-Chloro Toluene	3.05559	2.75276	2.66864	2.54468	2.56399	2.43165					
	2.35656	2.05359					AVRG		2.55343		11.54944
71 T-Butyl Benzene	2.59979	2.53990	2.60385	2.51216	2.52938	2.41929					
	2.33017	2.08266					AVRG		2.45215		7.13964

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Last Edit : 26-May-2016 07:52 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
72 1,2,4-Trimethylbenzene	4.34386	3.30428	3.08152	2.94778	3.00396	2.90473					
	2.72985	2.28287					AVRG		3.07486		19.27714
73 S-Butyl Benzene	3.99855	4.03526	3.91135	3.74526	3.69820	3.53180					
	3.26478	2.58569					AVRG		3.59636		13.38370
74 4-Isopropyl Toluene	3.47214	3.36261	3.18791	3.19052	3.14756	3.03938					
	2.84584	2.34971					AVRG		3.07446		11.34507
75 1,3-Dichlorobenzene	2.24921	1.93656	1.76169	1.64455	1.62142	1.58659					
	1.55013	1.47824					AVRG		1.72855		14.64586
77 1,4-Dichlorobenzene	2.23649	1.85029	1.66950	1.62167	1.60610	1.56017					
	1.55092	1.45854					AVRG		1.69421		14.56266
78 N-Butyl Benzene	3.64797	3.21833	2.91826	2.77733	2.78249	2.70309					
	2.57173	2.18015					AVRG		2.84992		15.32150
80 1,2-Dichlorobenzene	2.06475	1.69100	1.54719	1.50763	1.46612	1.42307					
	1.40384	1.34202					AVRG		1.55570		14.86102

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Last Edit : 26-May-2016 07:52 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
81 1,2-Dibromo 3-Chloropropane	+++++	0.14182	0.11725	0.12388	0.11424	0.10250					
	0.10512	0.10657					AVRG		0.11591		11.80262
83 Hexachloro 1,3-Butadiene	+++++	0.37796	0.43440	0.45000	0.40684	0.40855					
	0.41289	0.41810					AVRG		0.41553		5.46450
84 1,2,4-Trichlorobenzene	+++++	0.97821	1.06554	1.08418	1.01518	0.99615					
	0.98208	0.95647					AVRG		1.01111		4.68308
85 Naphthalene	+++++	2.34802	2.25249	2.23491	1.96854	1.86989					
	1.80100	1.57742					AVRG		2.00747		14.02713
86 1,2,3-Trichlorobenzene	+++++	0.80848	1.00410	0.93891	0.85720	0.81601					
	0.81653	0.75762					AVRG		0.85698		9.98082
$ 27 Dibromofluoromethane	0.50134	0.52747	0.51280	0.53633	0.52301	0.51418					
	0.52385	0.51001					AVRG		0.51863		2.14319
$ 33 d4-1,2-Dichloroethane	0.53624	0.55558	0.55078	0.54579	0.54665	0.54985					
	0.54941	0.54340					AVRG		0.54721		1.05197

ARI Labs, Inc.

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Integrator : HP RTE
Method file : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Last Edit : 26-May-2016 07:52 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
$ 43 d8-Toluene	1.18519	1.23090	1.18112	1.21516	1.23132	1.25069					
	1.18863	1.24711					AVRG		1.21627		2.31369
$ 62 4-Bromofluorobenzene	0.41151	0.39859	0.42122	0.40300	0.40247	0.41099					
	0.42318	0.40861					AVRG		0.40994		2.14352
$ 79 d4-1,2-Dichlorobenzene	0.93781	0.92123	0.90567	0.91354	0.92764	0.91578					
	0.92125	0.92019					AVRG		0.92039		1.04088

ARI Labs, Inc.

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Last Edit : 26-May-2016 07:52 lanih

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Batch File: \\target\share\chem1\nt3.i\20160525.b
Inst ID: nt3.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	RT09
FILENAME:	05251605	05251606	05251607	05251608	05251609	05251610	05251611	05251612	05251613
INJ.DATE:	25-MAY-2016	25-MAY-2016	25-MAY-2016	25-MAY-2016	25-MAY-2016	25-MAY-2016	25-MAY-2016	25-MAY-2016	25-MAY-2016
INJ.TIME:	09:20	09:46	10:12	10:38	11:04	11:30	11:57	12:23	12:48

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	RT09	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Dichlorodifluoromethan	1.636	1.657	1.646	1.647	1.647	1.646	1.642	1.647	1.640	1.662	1.554-1.771	1.645	0.006
2 Chloromethane	1.795	1.800	1.806	1.806	1.806	1.805	1.807	1.806	1.805	1.832	1.724-1.941	1.804	0.004
3 Vinyl Chloride	1.891	1.891	1.912	1.902	1.896	1.896	1.897	1.891	1.895	1.923	1.814-2.031	1.897	0.007
4 Bromomethane	2.210	2.215	2.225	2.226	2.226	2.225	2.226	2.220	2.225	2.247	2.138-2.356	2.222	0.006
5 Chloroethane	2.348	2.342	2.348	2.348	2.353	2.347	2.359	2.348	2.347	2.375	2.266-2.483	2.349	0.005
6 Trichlorofluoromethane	2.454	2.448	2.454	2.454	2.454	2.453	2.460	2.454	2.453	2.476	2.367-2.584	2.454	0.003
7 1,1-Dichloroethene	2.932	2.943	2.943	2.943	2.943	2.942	2.938	2.938	2.937	2.959	2.851-3.068	2.940	0.004
8 Carbon Disulfide	2.943	2.948	2.948	2.948	2.948	2.942	2.949	2.948	2.947	2.965	2.856-3.073	2.947	0.003
9 112Trichloro122Trifluo	3.017	3.017	3.022	3.017	3.023	3.022	3.018	3.028	3.022	3.044	2.936-3.153	3.021	0.004
10 Iodomethane	3.070	3.081	3.081	3.081	3.081	3.075	3.077	3.076	3.075	3.097	2.989-3.206	3.077	0.004
11 Bromoethane	3.203	3.208	3.214	3.209	3.214	3.213	3.209	3.209	3.213	3.230	3.122-3.339	3.210	0.004
12 Acrolein	+++++	+++++	3.352	3.352	3.358	3.357	3.363	3.342	3.341	3.385	3.276-3.493	3.352	0.008
13 Methylene Chloride	3.543	3.548	3.543	3.543	3.544	3.548	3.544	3.543	3.548	3.560	3.451-3.669	3.545	0.002
14 Acetone	+++++	+++++	3.734	3.740	3.729	3.761	3.757	3.729	3.723	3.783	3.675-3.892	3.739	0.014
15 Trans-1,2-Dichloroethe	3.692	3.697	3.697	3.692	3.698	3.697	3.698	3.698	3.691	3.703	3.595-3.812	3.696	0.003
16 n-hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.763	3.654-3.871	+++++	+++++
17 Methyl tert butyl ethe	3.841	3.841	3.835	3.836	3.841	3.840	3.847	3.841	3.835	3.858	3.749-3.966	3.840	0.004

Reviewer 1 _____ Date: 5/26/16
Reviewer 2 _____ Date: 5/26/16

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Batch File: \\target\share\chem1\nt3.i\20160525.b
Inst ID: nt3.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	RT09	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 1,1-Dichloroethane	4.255	4.250	4.255	4.255	4.255	4.255	4.256	4.255	4.255	4.262	4.153-4.370	4.255	0.002
	19 Acrylonitrile	+++++	+++++	4.345	4.346	4.346	4.350	4.352	4.340	4.350	4.357	4.249-4.466	4.347	0.004
	21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.560	4.451-4.668	+++++	+++++
	20 Vinyl Acetate	4.500	4.499	4.505	4.500	4.505	4.504	4.506	4.505	4.499	4.511	4.403-4.620	4.503	0.003
	22 Cis-1,2-Dichloroethene	4.702	4.701	4.707	4.702	4.707	4.706	4.708	4.702	4.701	4.713	4.605-4.822	4.704	0.003
	23 2,2-Dichloropropane	4.787	4.792	4.786	4.787	4.787	4.786	4.782	4.781	4.786	4.793	4.684-4.902	4.786	0.003
	24 Bromochloromethane	4.866	4.855	4.861	4.861	4.861	4.860	4.862	4.861	4.860	4.873	4.764-4.981	4.861	0.003
	25 Chloroform	4.925	4.930	4.930	4.925	4.925	4.930	4.926	4.930	4.924	4.931	4.823-5.040	4.927	0.003
	26 Carbon Tetrachloride	5.004	5.015	5.015	5.015	5.015	5.015	5.011	5.015	5.014	5.022	4.905-5.138	5.013	0.004
$	27 Dibromofluoromethane	5.063	5.063	5.068	5.068	5.063	5.068	5.064	5.063	5.067	5.070	4.961-5.178	5.065	0.003
	28 1,1,1-Trichloroethane	5.063	5.063	5.073	5.068	5.074	5.073	5.074	5.074	5.067	5.075	4.966-5.183	5.070	0.005
	30 1,1-Dichloropropene	5.164	5.164	5.164	5.164	5.164	5.163	5.165	5.164	5.163	5.171	5.054-5.287	5.164	0.000
	29 2-Butanone	5.217	5.222	5.212	5.212	5.212	5.216	5.213	5.212	5.206	5.224	5.115-5.332	5.213	0.005
	31 Benzene	5.350	5.355	5.355	5.355	5.355	5.355	5.356	5.350	5.354	5.357	5.240-5.473	5.354	0.002
*	32 Pentafluorobenzene	5.424	5.429	5.429	5.430	5.430	5.429	5.430	5.430	5.429	5.431	5.322-5.540	5.429	0.002
$	33 d4-1,2-Dichloroethane	5.456	5.456	5.461	5.462	5.462	5.461	5.462	5.462	5.455	5.468	5.359-5.577	5.460	0.003
	35 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.693	5.577-5.809	+++++	+++++
	34 1,2-Dichloroethane	5.509	5.509	5.509	5.509	5.509	5.514	5.510	5.509	5.508	5.516	5.400-5.632	5.510	0.002
	36 Trichloroethene	5.780	5.780	5.780	5.780	5.780	5.780	5.781	5.780	5.779	5.782	5.665-5.898	5.780	0.000
*	37 1,4-Difluorobenzene	5.807	5.812	5.812	5.812	5.812	5.812	5.813	5.812	5.811	5.814	5.697-5.930	5.811	0.002
	38 Dibromomethane	6.088	6.083	6.083	6.083	6.083	6.082	6.084	6.083	6.082	6.085	5.968-6.201	6.084	0.002
	39 1,2-Dichloropropane	6.152	6.152	6.157	6.158	6.158	6.157	6.153	6.158	6.157	6.159	6.043-6.275	6.156	0.003

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Batch File: \\target\share\chem1\nt3.i\20160525.b
Inst ID: nt3.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	RT09	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	40 Bromodichloromethane	6.195	6.200	6.200	6.200	6.200	6.205	6.201	6.200	6.199	6.202	6.085-6.318	6.200	0.003
	173 2-Pentanone	6.444	6.439	6.439	6.439	6.439	6.438	6.440	6.439	6.438	6.452	6.335-6.568	6.440	0.002
	42 Cis 1,3-dichloropropen	6.646	6.641	6.641	6.641	6.641	6.646	6.642	6.641	6.640	6.643	6.527-6.759	6.642	0.002
$	43 d8-Toluene	6.768	6.768	6.768	6.769	6.774	6.768	6.769	6.769	6.768	6.770	6.654-6.887	6.769	0.002
	41 2-Chloroethyl Vinyl Et	6.604	6.609	6.609	6.604	6.604	6.609	6.610	6.604	6.603	6.611	6.495-6.727	6.606	0.003
	44 Toluene	6.806	6.805	6.806	6.806	6.806	6.805	6.807	6.806	6.805	6.808	6.691-6.924	6.806	0.000
	45 4-Methyl-2-Pentanone	7.082	7.076	7.082	7.082	7.077	7.081	7.083	7.082	7.081	7.084	6.968-7.200	7.081	0.002
	46 Tetrachloroethene	7.071	7.071	7.071	7.071	7.066	7.071	7.067	7.066	7.071	7.068	6.911-7.225	7.070	0.002
	47 Trans 1,3-Dichloroprop	7.093	7.098	7.098	7.098	7.098	7.097	7.099	7.098	7.097	7.100	6.984-7.216	7.097	0.002
	48 1,1,2-Trichloroethane	7.209	7.204	7.209	7.210	7.210	7.209	7.210	7.204	7.209	7.212	7.095-7.328	7.208	0.002
	49 Chlorodibromomethane	7.321	7.331	7.332	7.332	7.332	7.331	7.327	7.327	7.331	7.329	7.172-7.486	7.329	0.004
	50 1,3-Dichloropropane	7.395	7.400	7.401	7.396	7.396	7.400	7.396	7.396	7.400	7.398	7.241-7.555	7.398	0.002
	51 1,2-Dibromoethane	7.491	7.496	7.496	7.497	7.497	7.496	7.497	7.497	7.496	7.499	7.382-7.615	7.496	0.002
	52 2-Hexanone	7.656	7.655	7.656	7.656	7.656	7.661	7.657	7.656	7.655	7.658	7.501-7.815	7.656	0.002
*	53 d5-Chlorobenzene	7.852	7.847	7.852	7.853	7.853	7.852	7.848	7.853	7.852	7.850	7.693-8.007	7.851	0.002
	54 Chlorobenzene	7.858	7.863	7.863	7.863	7.863	7.862	7.864	7.863	7.862	7.860	7.703-8.017	7.862	0.002
	55 Ethyl Benzene	7.879	7.879	7.879	7.879	7.879	7.878	7.880	7.879	7.878	7.881	7.724-8.038	7.879	0.000
	56 1,1,1,2-Tetrachloroeth	7.900	7.905	7.911	7.906	7.906	7.905	7.912	7.906	7.910	7.908	7.751-8.065	7.907	0.004
	57 m,p-xylene	7.985	7.980	7.985	7.985	7.980	7.979	7.981	7.980	7.985	7.982	7.825-8.139	7.982	0.003
	58 o-Xylene	8.288	8.288	8.288	8.288	8.288	8.288	8.289	8.283	8.287	8.285	8.128-8.442	8.287	0.002
	59 Styrene	8.325	8.325	8.325	8.325	8.325	8.325	8.326	8.325	8.325	8.323	8.166-8.480	8.325	0.000
	60 Bromoform	8.352	8.346	8.346	8.347	8.347	8.346	8.347	8.347	8.346	8.344	8.153-8.535	8.347	0.002
	61 Isopropyl Benzene	8.511	8.511	8.511	8.511	8.511	8.511	8.512	8.511	8.511	8.509	8.318-8.699	8.511	0.000
$	62 4-Bromofluorobenzene	8.718	8.718	8.718	8.719	8.719	8.718	8.719	8.719	8.718	8.721	8.564-8.878	8.718	0.000

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Batch File: \\target\share\chem1\nt3.i\20160525.b
Inst ID: nt3.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	RT09	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	63 Bromobenzene	8.798	8.798	8.798	8.798	8.798	8.798	8.799	8.798	8.797	8.796	8.605-8.986	8.798	0.000
	64 N-Propyl Benzene	8.809	8.808	8.814	8.814	8.814	8.814	8.810	8.809	8.813	8.812	8.621-9.003	8.812	0.003
	82 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.074	8.917-9.231	+++++	+++++
	65 1,1,2,2-Tetrachloroeth	8.862	8.862	8.867	8.867	8.867	8.867	8.863	8.862	8.867	8.865	8.674-9.056	8.865	0.003
	66 2-Chloro Toluene	8.931	8.925	8.931	8.931	8.931	8.930	8.927	8.926	8.930	8.929	8.738-9.119	8.929	0.002
	67 1,3,5-Trimethyl Benzen	8.952	8.952	8.957	8.958	8.952	8.952	8.953	8.952	8.952	8.955	8.764-9.146	8.953	0.002
	68 1,2,3-Trichloropropane	+++++	8.963	8.968	8.968	8.968	8.968	8.969	8.968	8.967	8.966	8.775-9.157	8.967	0.002
	69 Trans-1,4-Dichloro 2-B	+++++	+++++	8.995	8.995	8.995	8.994	8.996	9.000	8.994	8.992	8.801-9.183	8.995	0.002
	70 4-Chloro Toluene	9.048	9.053	9.053	9.053	9.048	9.053	9.049	9.048	9.052	9.051	8.860-9.242	9.051	0.003
	71 T-Butyl Benzene	9.191	9.186	9.191	9.191	9.192	9.191	9.192	9.186	9.191	9.189	8.998-9.380	9.190	0.002
	72 1,2,4-Trimethylbenzene	9.244	9.239	9.244	9.239	9.239	9.239	9.240	9.239	9.244	9.242	9.051-9.433	9.241	0.002
	73 S-Butyl Benzene	9.324	9.319	9.324	9.319	9.319	9.324	9.320	9.319	9.323	9.317	9.126-9.507	9.321	0.003
	74 4-Isopropyl Toluene	9.425	9.425	9.430	9.425	9.425	9.425	9.426	9.425	9.424	9.428	9.237-9.619	9.426	0.002
	75 1,3-Dichlorobenzene	9.489	9.483	9.489	9.489	9.489	9.488	9.490	9.484	9.488	9.487	9.296-9.678	9.488	0.002
*	76 d4-1,4-Dichlorobenzene	9.542	9.542	9.542	9.542	9.542	9.541	9.543	9.542	9.541	9.545	9.354-9.736	9.542	0.000
	77 1,4-Dichlorobenzene	9.558	9.552	9.553	9.553	9.553	9.552	9.553	9.553	9.552	9.550	9.359-9.741	9.553	0.002
	78 N-Butyl Benzene	9.744	9.744	9.744	9.744	9.744	9.743	9.745	9.744	9.743	9.742	9.551-9.933	9.744	0.000
$	79 d4-1,2-Dichlorobenzene	9.866	9.866	9.866	9.861	9.866	9.866	9.862	9.861	9.865	9.864	9.673-10.055	9.864	0.002
	80 1,2-Dichlorobenzene	9.871	9.866	9.871	9.872	9.872	9.871	9.872	9.872	9.871	9.869	9.678-10.060	9.871	0.002
	81 1,2-Dibromo 3-Chloropr	+++++	10.487	10.482	10.483	10.483	10.487	10.483	10.488	10.482	10.481	10.290-10.671	10.484	0.003
	83 Hexachloro 1,3-Butadie	10.977	10.982	10.982	10.982	10.982	10.981	10.983	10.982	10.981	10.980	10.789-11.171	10.981	0.002
	84 1,2,4-Trichlorobenzene	11.008	11.003	11.008	11.009	11.009	11.008	11.009	11.009	11.008	11.007	10.816-11.198	11.008	0.002
	85 Naphthalene	11.263	11.263	11.269	11.269	11.269	11.268	11.270	11.264	11.268	11.267	11.076-11.458	11.267	0.003

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Batch File: \\target\share\chem1\nt3.i\20160525.b
Inst ID: nt3.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	RT09	EXPEC RT	RT WINDOW	AVG RT	STD DEV
86 1,2,3-Trichlorobenzene	11.418	11.407	11.412	11.412	11.413	11.412	11.413	11.412	11.412	11.411	11.220-11.602	11.412	0.003

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt3.i\20160525.b

ARI Job No.: SEE0 Method: 8260052516.m Instrument: nt3.i Date: 25-MAY-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0920	05251605.D	SEE0142-CAL1	VSTD0.2	1	Chloroethane, Trichlorofluoromethane, Methylene Chloride, Trans-1,2-Dichloroethene, Vinyl Acetate, 2-Butanone, Cis-1,2-Dichloroethene, Bromochloromethane, 1,1,1-Trichloroethane, 2-Chloroethyl Vinyl Ether, Toluene, Styrene, Dichlorodifluoromethane, Methyl tert butyl ether,
0946	05251606.D	SEE0142-CAL2	VSTD0.5	1	Chloromethane, Chloroethane, Trichlorofluoromethane, 112Trichloro122Trifluoroethane, 2-Butanone, Cis-1,2-Dichloroethene, Cis 1,3-dichloropropene, 1,1,2,2-Tetrachloroethane, 1,2,3-Trichlorobenzene, Dichlorodifluoromethane,
1012	05251607.D	SEE0142-CAL8	VSTD80	1	Pentafluorobenzene,
1038	05251608.D	SEE0142-CAL7	VSTD40	1	NO MANUAL INTEGRATION
1104	05251609.D	SEE0142-CAL6	VSTD20	1	NO MANUAL INTEGRATION
1130	05251610.D	SEE0142-CAL5	VSTD10	1	Acrolein,
1157	05251611.D	SEE0142-CAL4	VSTD02	1	Acetone, Acrylonitrile, Bromoform, 1,1,2,2-Tetrachloroethane, Dichlorodifluoromethane,
1223	05251612.D	SEE0142-CAL3	VSTD01	1	Chloroethane, Acrolein, Acetone, Iodomethane, Acrylonitrile, Dichlorodifluoromethane,
1248	05251613.D	SEE0142-SCV1	8260 SCV	1	NO MANUAL INTEGRATION

Data File: \\target\share\chem1\nt3.i\20160525.b\05251604.D

Date : 25-MAY-2016 08:50

Client ID: 10

Instrument: nt3.i

Sample Info: RTBFB0525,10,10,0,

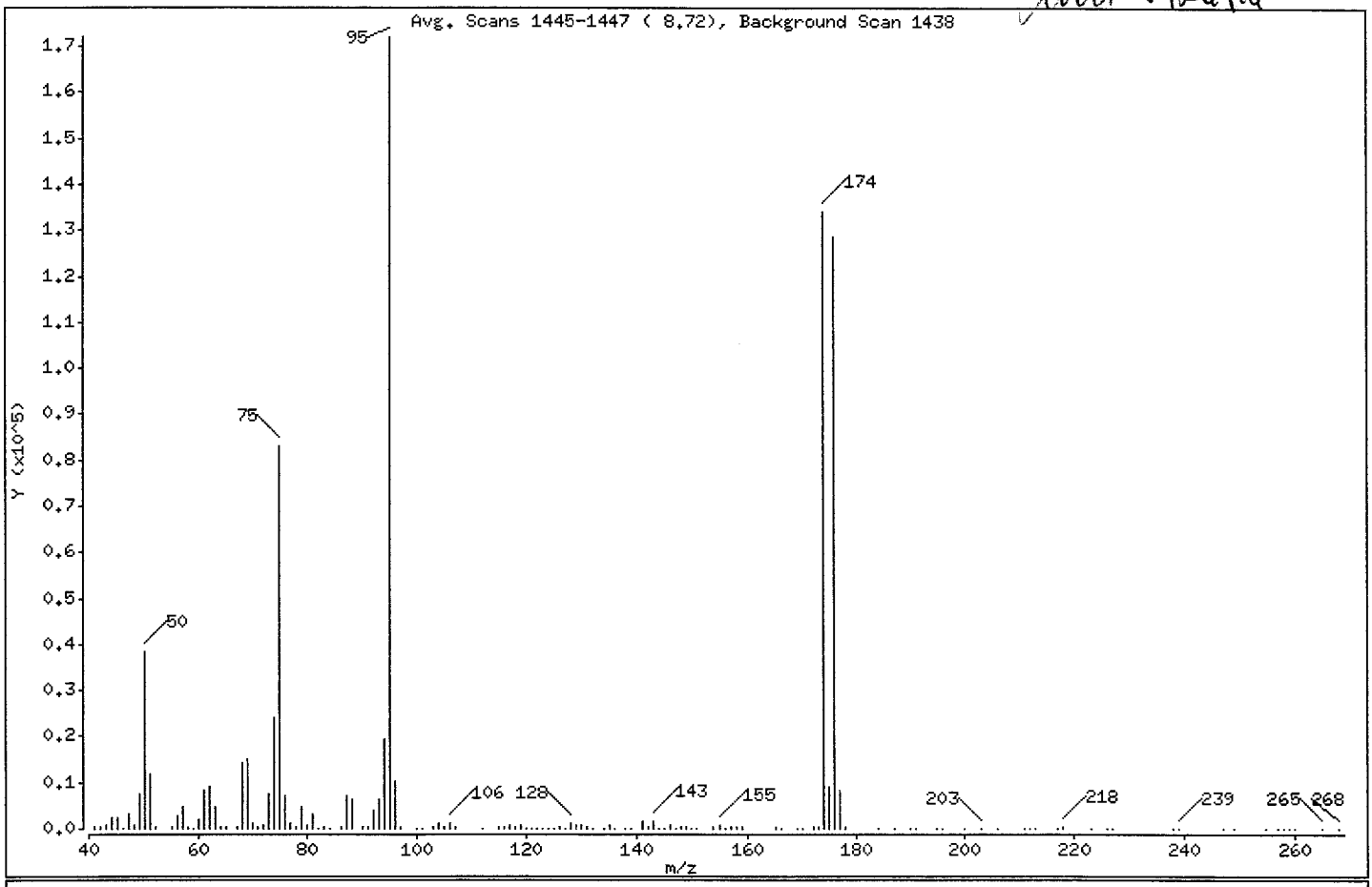
Operator: LH

Column phase: RTXVMS

Column diameter: 0.18

1 Bromofluorobenzene

5/26/16



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.25
75	30.00 - 60.00% of mass 95	48.27
96	5.00 - 9.00% of mass 95	5.92
173	Less than 2.00% of mass 174	0.31 (0.40)
174	50.00 - 100.00% of mass 95	77.94
175	5.00 - 9.00% of mass 174	5.32 (6.82)
176	95.00 - 101.00% of mass 174	74.72 (95.87)
177	5.00 - 9.00% of mass 176	4.88 (6.53)

Data File: \\target\share\chem1\nt3.i\20160525.b\05251604.D

Date : 25-MAY-2016 08:50

Client ID: 10

Instrument: nt3.i

Sample Info: RTBFB0525,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18

Data File: 05251604.D

Spectrum: Avg. Scans 1445-1447 (8.72), Background Scan 1438

Location of Maximum: 95.00

Number of points: 139

m/z	Y	m/z	Y	m/z	Y	m/z	Y
41.00	444	79.00	4592	125.00	126	173.00	533
42.00	336	80.00	930	126.00	295	174.00	134080
43.00	754	81.00	3176	127.00	70	175.00	9145
44.00	2199	82.00	189	128.00	1143	176.00	128544
45.00	2266	83.00	389	129.00	638	177.00	8396
46.00	108	84.00	58	130.00	639	178.00	324
47.00	3221	86.00	218	131.00	360	184.00	107
48.00	888	87.00	7197	132.00	158	187.00	59
49.00	7695	88.00	6308	134.00	87	190.00	112
50.00	38280	90.00	332	135.00	603	191.00	87
51.00	12060	91.00	206	136.00	60	195.00	122
52.00	492	92.00	3845	138.00	63	196.00	65
55.00	573	93.00	6139	139.00	69	200.00	84
56.00	2919	94.00	19184	141.00	1677	203.00	173
57.00	4668	95.00	172032	142.00	560	206.00	127
58.00	506	96.00	10176	143.00	1721	211.00	74
59.00	49	97.00	520	144.00	172	212.00	50
60.00	1941	100.00	70	145.00	165	213.00	70
61.00	8288	101.00	7	146.00	783	217.00	88
62.00	8972	103.00	456	147.00	150	218.00	281
63.00	4898	104.00	1033	148.00	518	223.00	95
64.00	413	105.00	410	149.00	387	226.00	174
65.00	233	106.00	1176	150.00	166	227.00	73
67.00	218	107.00	239	151.00	99	238.00	59
68.00	14297	112.00	65	154.00	323	239.00	186
69.00	15055	115.00	406	155.00	829	247.00	62
70.00	1326	116.00	331	156.00	71	249.00	81
71.00	337	117.00	832	157.00	489	255.00	58
72.00	761	118.00	474	158.00	227	257.00	102
73.00	7501	119.00	685	159.00	288	258.00	97
74.00	24128	120.00	156	165.00	397	259.00	133
75.00	83040	121.00	179	166.00	84	260.00	119
76.00	7080	122.00	175	169.00	158	265.00	149
77.00	1195	123.00	189	170.00	137	268.00	60
78.00	238	124.00	136	172.00	215		

Data File: \\target\share\chem1\nt3.i\20160525.b\05251604.D

Date : 25-MAY-2016 08:50

Client ID: 10

Instrument: nt3.i

Sample Info: RTBFB0525,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18

Data File: 05251604.D

Spectrum: Avg. Scans 1445-1447 (8.72), Background Scan 1438

Location of Maximum: 95.00

Number of points: 139

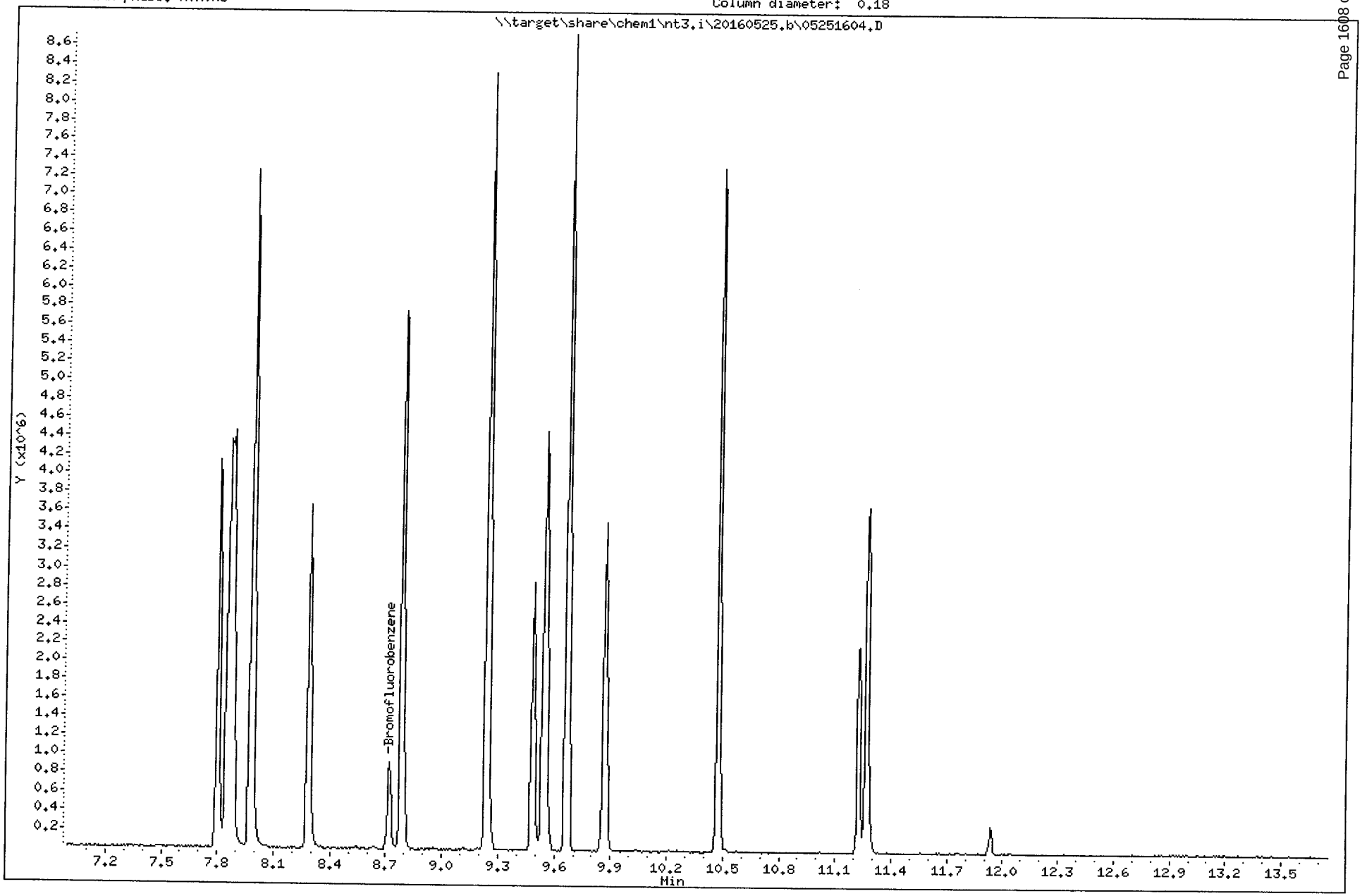
m/z	Y	m/z	Y	m/z	Y	m/z	Y

Data File: \\target\share\chem1\nt3.i\20160525.b\05251604.D
Date : 25-MAY-2016 08:50
Client ID: 10
Sample Info: RTBFB0525,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251605.D
Lab Smp Id: SEE0142-CAL1 Client Smp ID: VSTD0.2
Inj Date : 25-MAY-2016 09:20
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-CAL1,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.635	1.646	(0.302)	10068	0.20000	0.1975(M)
173 2-Pentanone	86	6.444	6.438	(1.110)	5308	1.00000	1.229(Q)
2 Chloromethane	50	1.795	1.805	(0.331)	24723	0.20000	0.3086
3 Vinyl Chloride	62	1.890	1.896	(0.349)	14878	0.20000	0.2231
4 Bromomethane	94	2.209	2.225	(0.407)	6284	0.20000	0.2235(QH)
5 Chloroethane	64	2.347	2.347	(0.433)	8076	0.20000	0.2373(M)
6 Trichlorofluoromethane	101	2.453	2.453	(0.452)	12737	0.20000	0.2293(M)
7 1,1-Dichloroethene	61	2.932	2.942	(0.541)	16328	0.20000	0.2194
8 Carbon Disulfide	76	2.942	2.942	(0.543)	29898	0.20000	0.2374(TQ)
9 112Trichloro122Trifluoroethane	101	3.017	3.022	(0.556)	8397	0.20000	0.2260
10 Iodomethane	142	3.070	3.075	(0.566)	13433	0.20000	0.2279
11 Bromoethane	108	3.203	3.213	(0.591)	6896	0.20000	0.2359(H)
12 Acrolein	56	Compound Not Detected.					
13 Methylene Chloride	84	3.543	3.548	(0.653)	11386	0.20000	0.2988(M)
14 Acetone	43	Compound Not Detected.					
15 Trans-1,2-Dichloroethene	96	3.691	3.697	(0.681)	9834	0.20000	0.2350(M)
17 Methyl tert butyl ether	73	3.840	3.840	(0.708)	19450	0.20000	0.2060(M)
18 1,1-Dichloroethane	63	4.255	4.255	(0.784)	17223	0.20000	0.2082
19 Acrylonitrile	53	Compound Not Detected.					
20 Vinyl Acetate	43	4.499	4.504	(0.830)	16511	0.20000	0.1923(M)
22 Cis-1,2-Dichloroethene	96	4.701	4.706	(0.867)	9436	0.20000	0.2109(M)
23 2,2-Dichloropropane	77	4.786	4.786	(0.882)	14528	0.20000	0.3484

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.866	4.860	(0.897)	4927	0.20000	0.2520(QM)
	25 Chloroform	83	4.924	4.930	(0.908)	13557	0.20000	0.2035
	26 Carbon Tetrachloride	117	5.004	5.015	(0.862)	13321	0.20000	0.2485
$	27 Dibromofluoromethane	111	5.062	5.068	(0.933)	150916	5.00000	4.833
	28 1,1,1-Trichloroethane	97	5.062	5.073	(0.933)	12164	0.20000	0.2085(QM)
	29 2-Butanone	43	5.216	5.216	(0.962)	19159	1.00000	1.143(M)
	30 1,1-Dichloropropene	75	5.163	5.163	(0.889)	13847	0.20000	0.2417
	31 Benzene	78	5.349	5.355	(0.921)	33848	0.20000	0.2155
*	32 Pentafluorobenzene	168	5.424	5.429	(1.000)	602045	10.0000	(Q)
$	33 d4-1,2-Dichloroethane	65	5.455	5.461	(1.006)	161419	5.00000	4.900
	34 1,2-Dichloroethane	62	5.509	5.514	(0.949)	10427	0.20000	0.2016
	36 Trichloroethene	130	5.780	5.780	(0.995)	8007	0.20000	0.1905(Q)
*	37 1,4-Difluorobenzene	114	5.806	5.812	(1.000)	1034901	10.0000	
	38 Dibromomethane	93	6.088	6.082	(1.048)	4479	0.20000	0.2221
	39 1,2-Dichloropropane	63	6.152	6.157	(1.059)	11033	0.20000	0.2308
	40 Bromodichloromethane	83	6.194	6.205	(1.067)	10440	0.20000	0.2135
	41 2-Chloroethyl Vinyl Ether	63	6.603	6.609	(1.137)	4293	0.20000	0.1748(QM)
	42 Cis 1,3-dichloropropene	75	6.646	6.646	(1.145)	13187	0.20000	0.2048
$	43 d8-Toluene	98	6.768	6.768	(1.166)	613278	5.00000	4.872
	44 Toluene	92	6.805	6.805	(1.172)	22109	0.20000	0.2150(M)
	45 4-Methyl-2-Pentanone	58	7.081	7.081	(1.220)	14526	1.00000	1.031(TQ)
	46 Tetrachloroethene	166	7.071	7.071	(0.901)	8240	0.20000	0.2032
	47 Trans 1,3-Dichloropropene	75	7.092	7.097	(1.221)	10317	0.20000	0.1907(T)
	48 1,1,2-Trichloroethane	97	7.209	7.209	(1.242)	6002	0.20000	0.2089
	49 Chlorodibromomethane	129	7.320	7.331	(0.932)	8415	0.20000	0.2434
	50 1,3-Dichloropropane	76	7.395	7.400	(0.942)	10316	0.20000	0.2013(Q)
	51 1,2-Dibromoethane	107	7.491	7.496	(1.290)	6168	0.20000	0.2146
	52 2-Hexanone	43	7.655	7.661	(0.975)	27054	1.00000	1.125
*	53 d5-Chlorobenzene	117	7.852	7.852	(1.000)	1015055	10.0000	
	54 Chlorobenzene	112	7.857	7.862	(1.001)	26749	0.20000	0.2344(Q)
	55 Ethyl Benzene	106	7.878	7.878	(1.003)	12420	0.20000	0.2009(Q)
	56 1,1,1,2-Tetrachloroethane	131	7.900	7.905	(1.006)	8643	0.20000	0.2184
	57 m,p-xylene	106	7.985	7.979	(1.017)	35008	0.40000	0.4648(Q)
	58 o-Xylene	106	8.288	8.288	(1.055)	14895	0.20000	0.1981(Q)
	59 Styrene	104	8.325	8.324	(1.060)	26974	0.20000	0.2184(M)
	60 Bromoform	173	8.351	8.346	(0.875)	3457	0.20000	0.1763(Q)
	61 Isopropyl Benzene	105	8.511	8.510	(0.892)	42343	0.20000	0.2311
$	62 4-Bromofluorobenzene	174	8.718	8.718	(1.110)	208852	5.00000	5.019
	63 Bromobenzene	156	8.798	8.798	(0.922)	10384	0.20000	0.2276
	64 N-Propyl Benzene	91	8.808	8.814	(0.923)	51560	0.20000	0.2417
	65 1,1,2,2-Tetrachloroethane	83	8.861	8.867	(0.929)	5966	0.20000	0.1757
	66 2-Chloro Toluene	91	8.930	8.930	(0.936)	35416	0.20000	0.2352
	67 1,3,5-Trimethyl Benzene	105	8.952	8.952	(0.938)	37238	0.20000	0.2296
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	9.047	9.053	(0.948)	33626	0.20000	0.2393
	71 T-Butyl Benzene	119	9.191	9.191	(0.963)	28610	0.20000	0.2120
	72 1,2,4-Trimethylbenzene	105	9.244	9.239	(0.969)	47803	0.20000	0.2825
	73 S-Butyl Benzene	105	9.324	9.324	(0.977)	44003	0.20000	0.2224
	74 4-Isopropyl Toluene	119	9.425	9.425	(0.988)	38210	0.20000	0.2259
	75 1,3-Dichlorobenzene	146	9.488	9.488	(0.994)	24752	0.20000	0.2602
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	550237	10.0000	(Q)
	77 1,4-Dichlorobenzene	146	9.557	9.552	(1.002)	24612	0.20000	0.2640(Q)
	78 N-Butyl Benzene	91	9.743	9.743	(1.021)	40145	0.20000	0.2560

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.866	9.866	(1.034)	258010	5.00000	5.095(Q)
80 1,2-Dichlorobenzene	146	9.871	9.871	(1.035)	22722	0.20000	0.2654
81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
83 Hexachloro 1,3-Butadiene	225	10.976	10.981	(1.150)	5872	0.20000	0.2568
84 1,2,4-Trichlorobenzene	180	11.008	11.008	(1.154)	12289	0.20000	0.2209
85 Naphthalene	128	11.263	11.268	(1.180)	106167	0.20000	0.9612
86 1,2,3-Trichlorobenzene	180	11.417	11.411	(1.197)	10921	0.20000	0.2316

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251605.D
Lab Smp Id: SEE0142-CAL1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: VSTD0.2
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	602045	4.14
37 1,4-Difluorobenze	994783	497392	1989566	1034901	4.03
53 d5-Chlorobenzene	985810	492905	1971620	1015055	2.97
76 d4-1,4-Dichlorobe	556120	278060	1112240	550237	-1.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.42	-0.09
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	-0.08
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.01
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.01

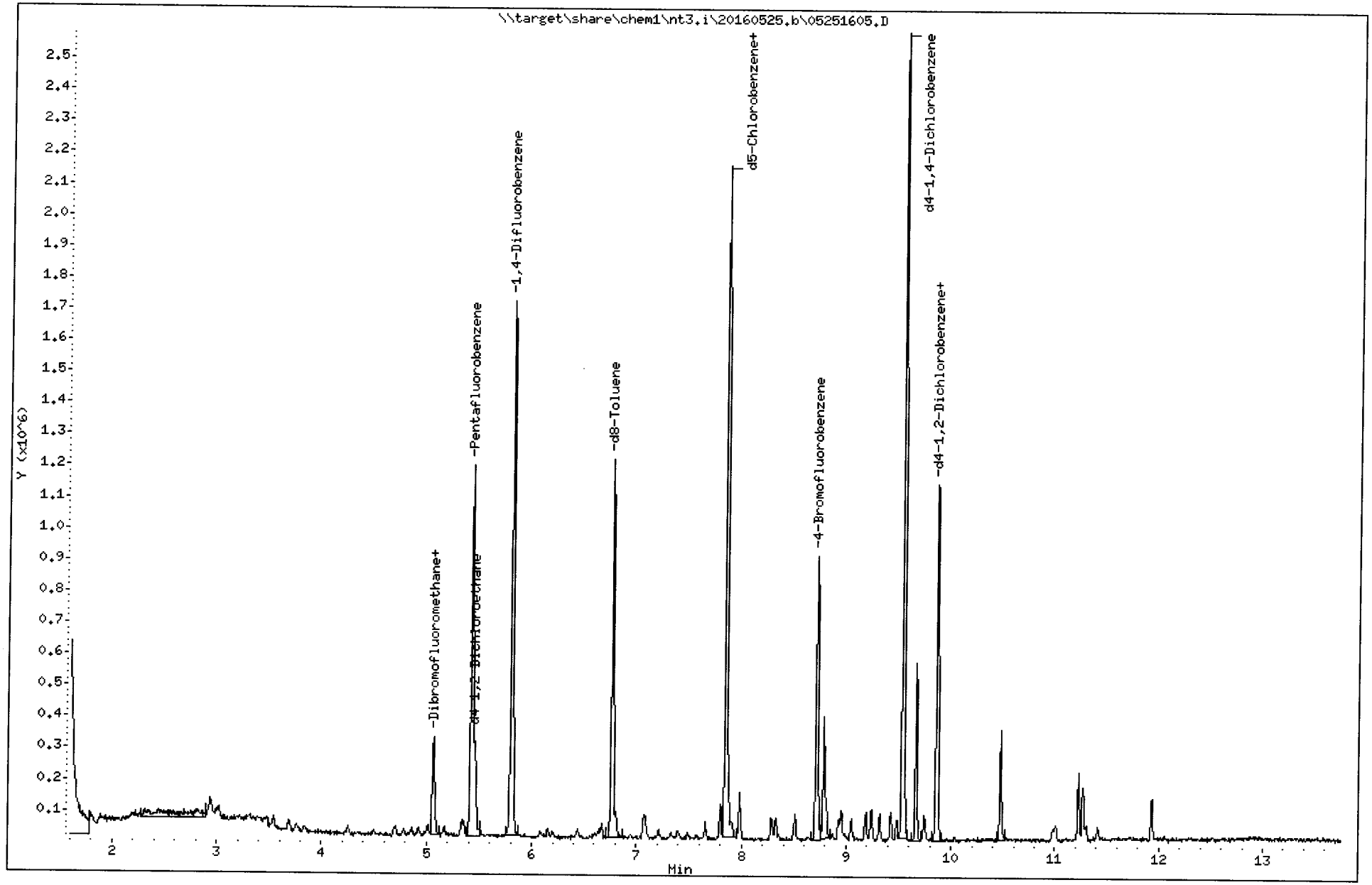
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt3.i\20160525.b\05251605.D
Date : 25-MAY-2016 09:20
Client ID: VSTD0.2
Sample Info: SEE0142-CAL1,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



Quant Ion Manual Peak Adjustment Report

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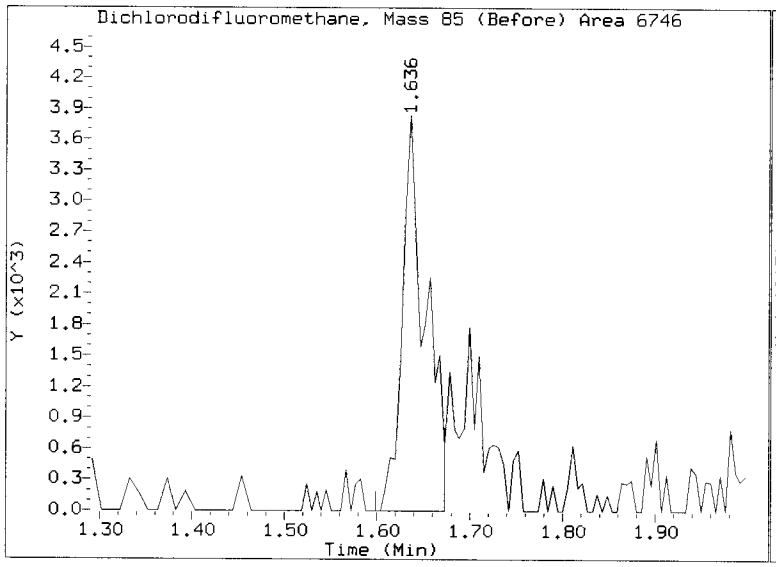
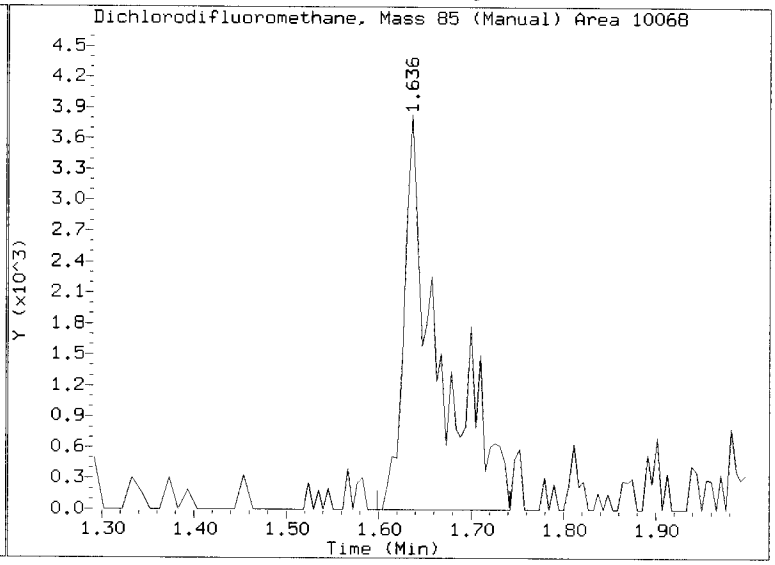
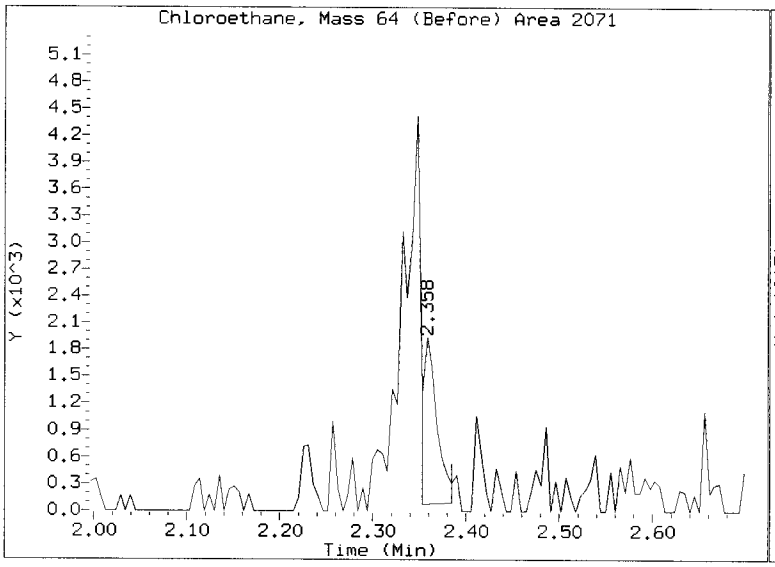
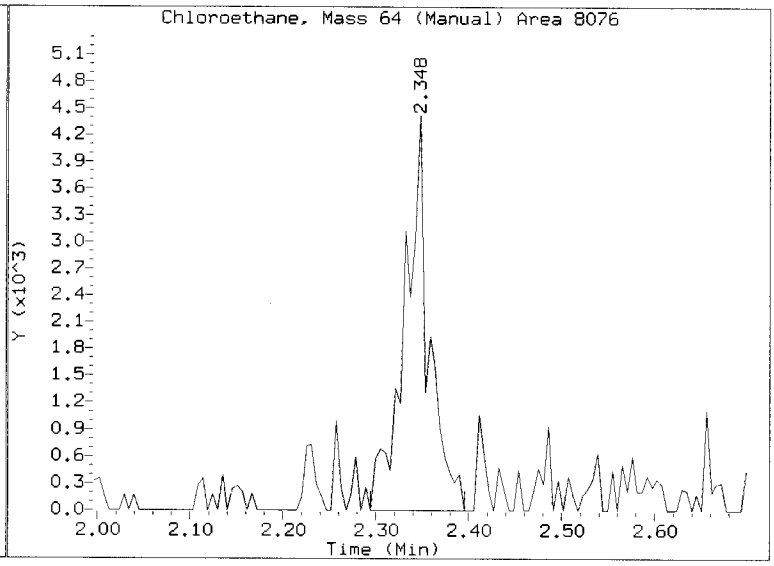
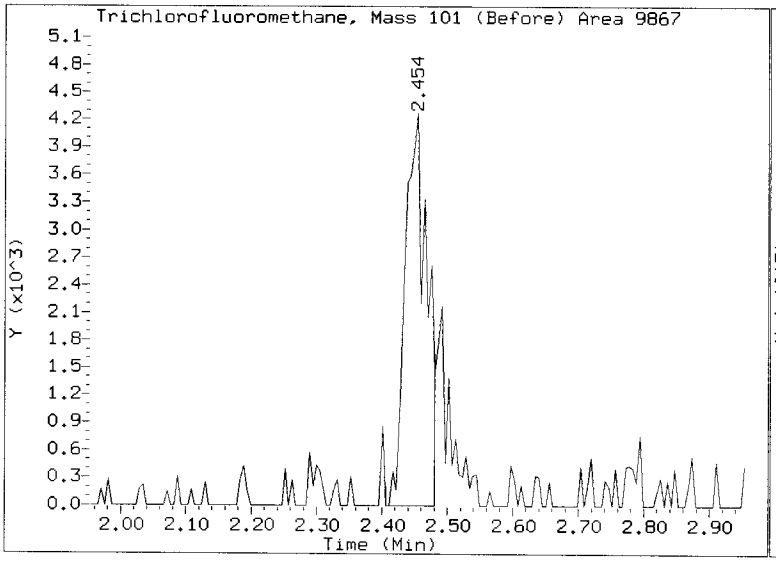
Injection Date: 25-MAY-2016 09:20
Lab ID:SEE0142-CAL1 Client ID:VSTD0.2
Report Date: 05/26/2016 08:01

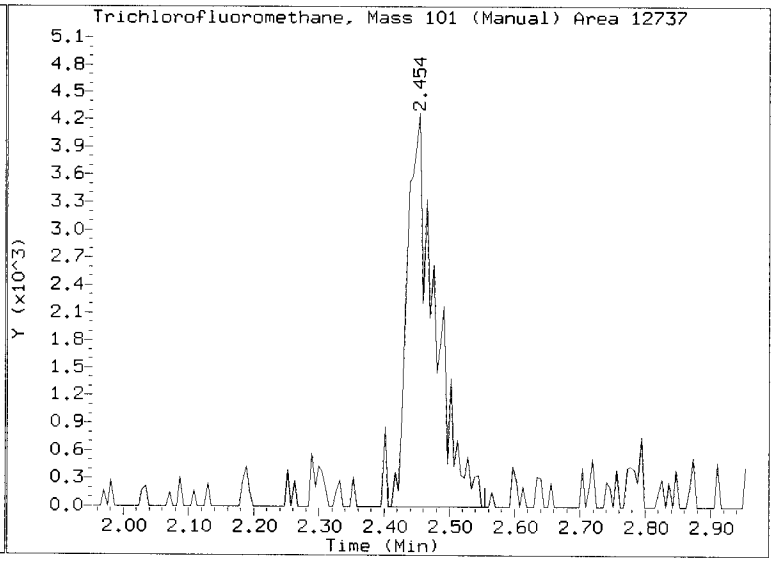








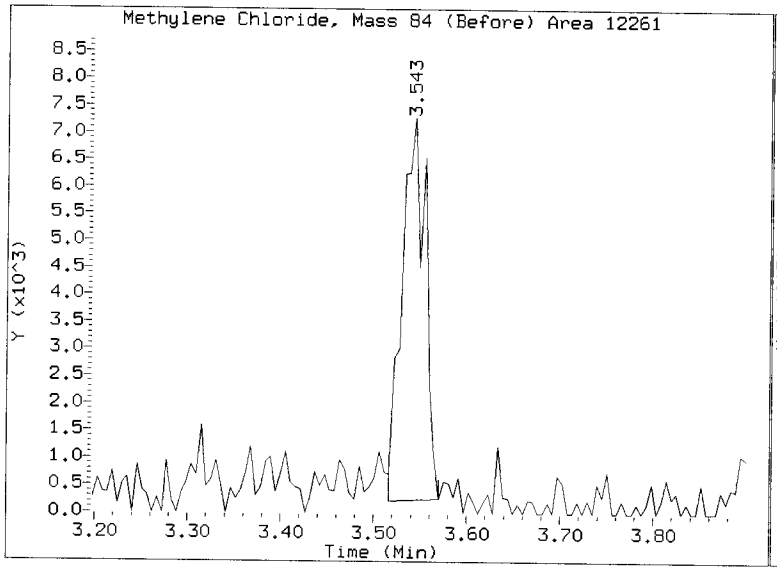


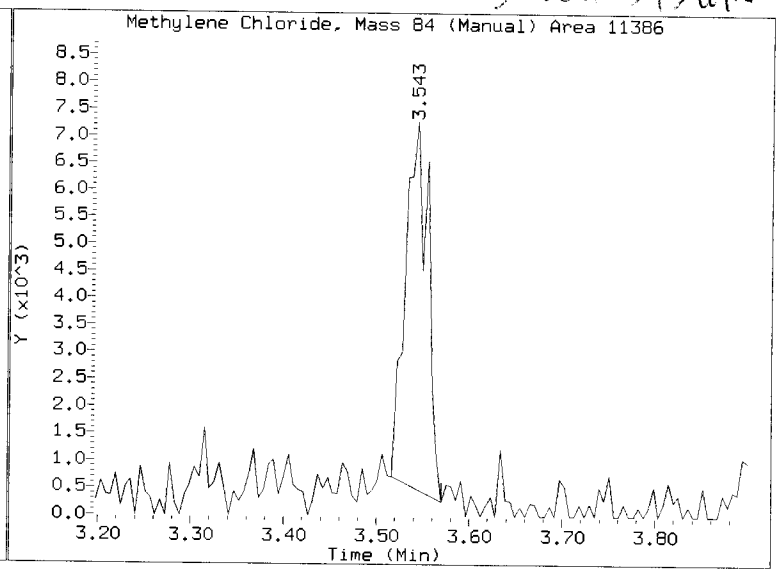


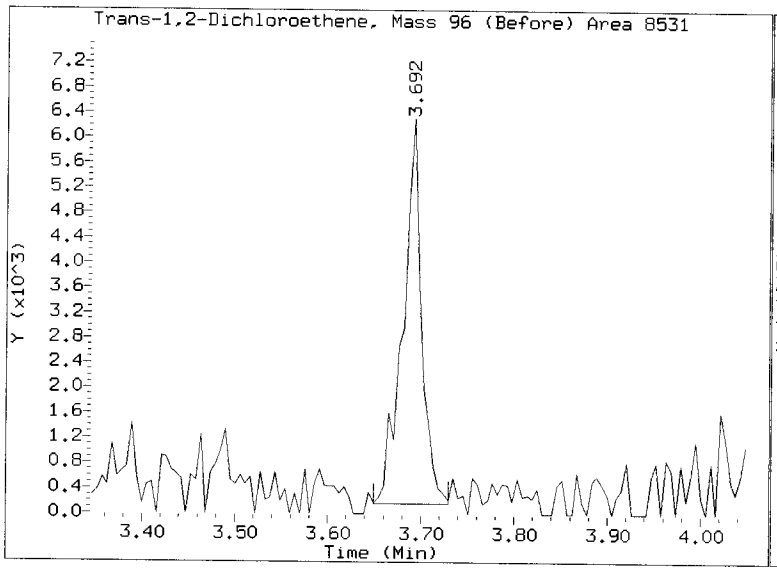
Quant Ion Manual Peak Adjustment Report

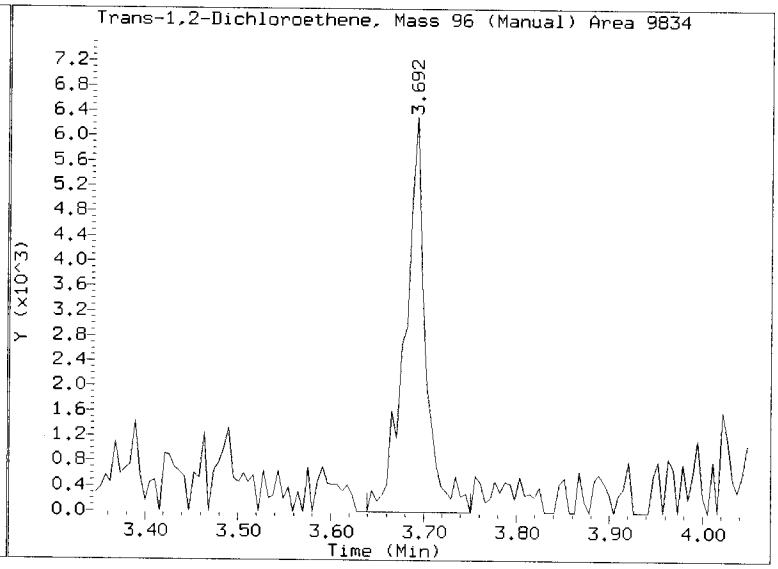
Datafile: //target/share/chem1/nt3.i/20160525.b/05251605.D
Injection Date: 25-MAY-2016 09:20
Lab ID:SEE0142-CAL1 Client ID:VSTD0.2
Report Date: 05/26/2016 08:01

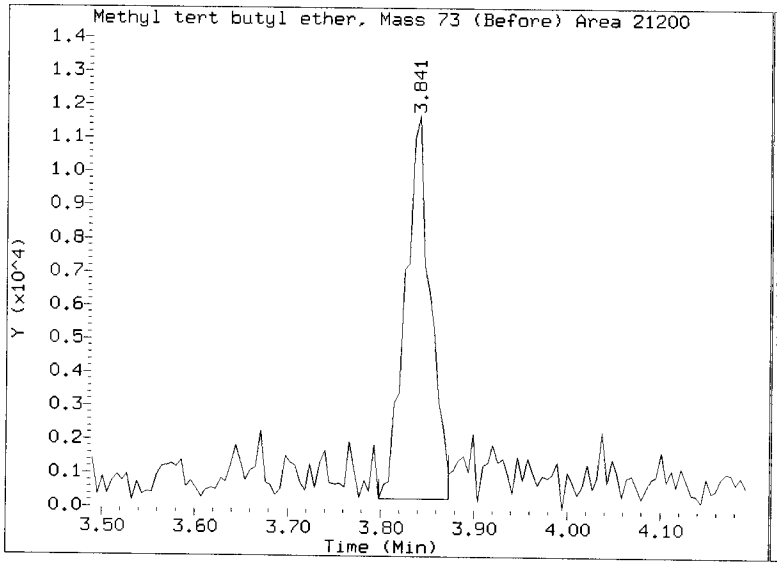
JLH 5/26/16

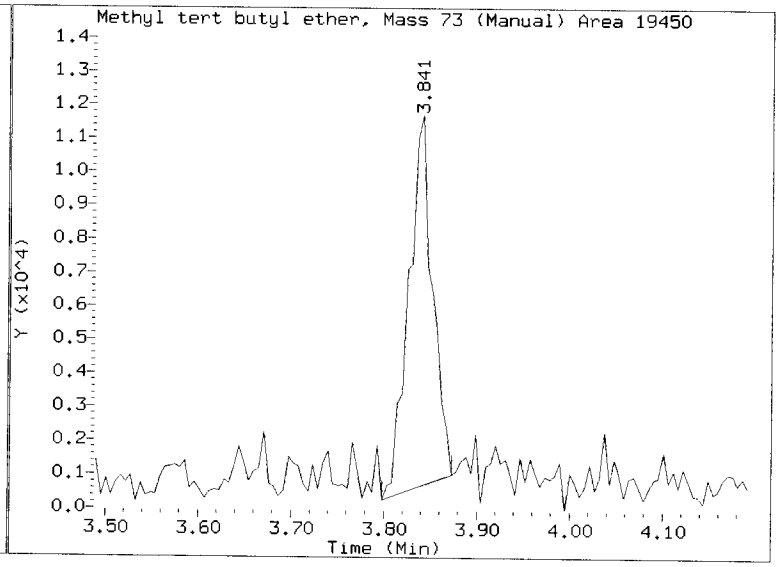






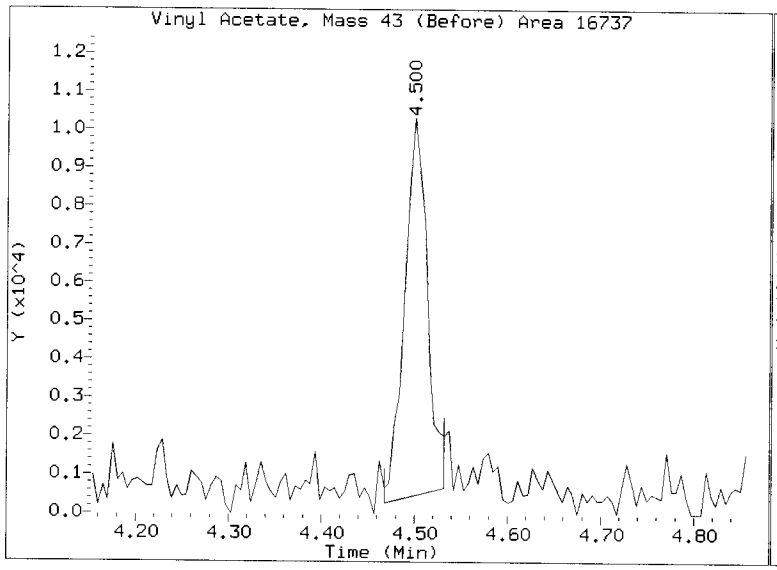


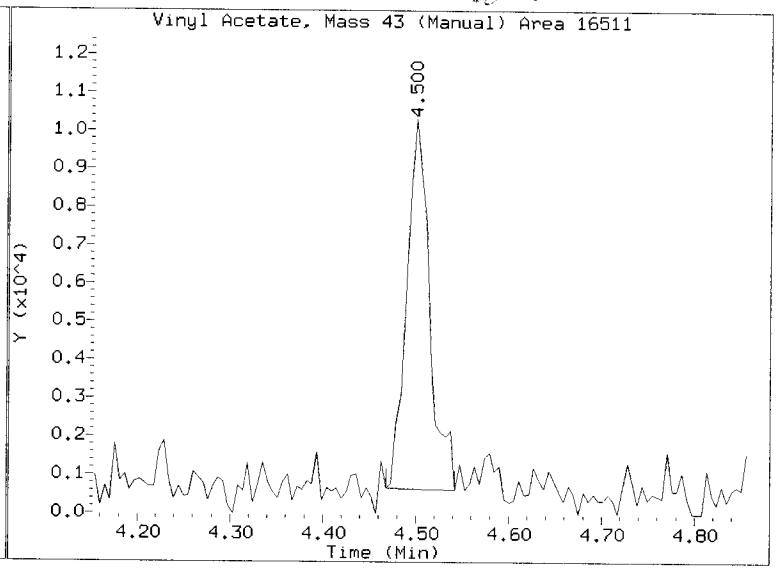


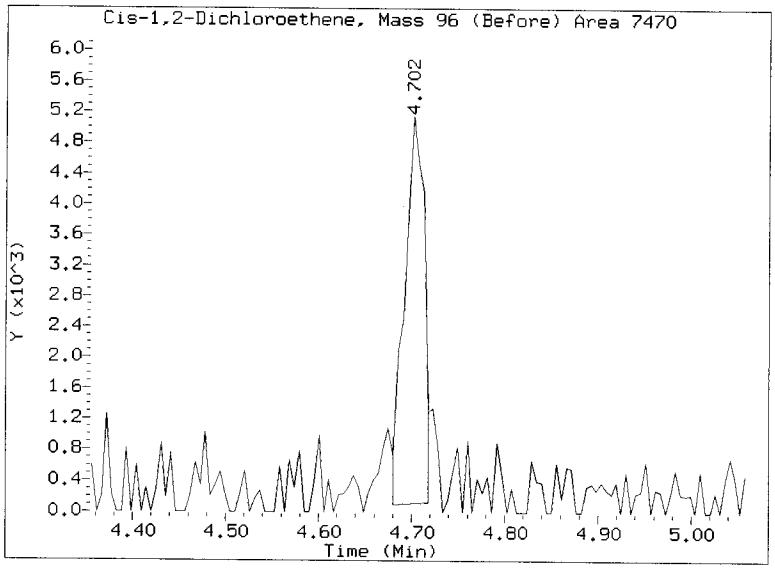


Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem1/nt3.i/20160525.b/05251605.D
Injection Date: 25-MAY-2016 09:20
Lab ID:SEE0142-CAL1 Client ID:VSTD0.2
Report Date: 05/26/2016 08:01







REVIEW SUMMARY FOR FILE - 05251605.D

Lab ID: SEE0142-CAL1
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 09:20

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251606.D
Lab Smp Id: SEE0142-CAL2 Client Smp ID: VSTD0.5
Inj Date : 25-MAY-2016 09:46
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-CAL2,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.656	1.646	(0.305)	26791	0.50000	0.5335(M)
173	2-Pentanone	86	6.438	6.438	(1.108)	9533	2.50000	2.227(Q)
2	Chloromethane	50	1.800	1.805	(0.332)	46934	0.50000	0.5949(M)
3	Vinyl Chloride	62	1.890	1.896	(0.348)	33369	0.50000	0.5081
4	Bromomethane	94	2.214	2.225	(0.408)	13679	0.50000	0.4940(Q)
5	Chloroethane	64	2.342	2.347	(0.431)	17530	0.50000	0.5231(M)
6	Trichlorofluoromethane	101	2.448	2.453	(0.451)	28433	0.50000	0.5197(M)
7	1,1-Dichloroethene	61	2.942	2.942	(0.542)	40264	0.50000	0.5493
8	Carbon Disulfide	76	2.947	2.942	(0.543)	66283	0.50000	0.5343
9	112Trichloro122Trifluoroethane	101	3.016	3.022	(0.556)	19939	0.50000	0.5449(M)
10	Iodomethane	142	3.080	3.075	(0.567)	29294	0.50000	0.5046
11	Bromoethane	108	3.208	3.213	(0.591)	16356	0.50000	0.5680
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	3.548	3.548	(0.654)	23403	0.50000	0.6236
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	3.697	3.697	(0.681)	22385	0.50000	0.5432(Q)
17	Methyl tert butyl ether	73	3.840	3.840	(0.707)	43458	0.50000	0.4673
18	1,1-Dichloroethane	63	4.249	4.255	(0.783)	42570	0.50000	0.5224
19	Acrylonitrile	53	Compound Not Detected.					
20	Vinyl Acetate	43	4.499	4.504	(0.829)	45758	0.50000	0.5412
22	Cis-1,2-Dichloroethene	96	4.701	4.706	(0.866)	24142	0.50000	0.5478(M)
23	2,2-Dichloropropane	77	4.791	4.786	(0.883)	27888	0.50000	0.6790

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.855	4.860	(0.894)	9286	0.50000	0.4822
	25 Chloroform	83	4.929	4.930	(0.908)	35889	0.50000	0.5471
	26 Carbon Tetrachloride	117	5.014	5.015	(0.863)	25216	0.50000	0.4746
$	27 Dibromofluoromethane	111	5.062	5.068	(0.932)	156382	5.00000	5.085
	28 1,1,1-Trichloroethane	97	5.062	5.073	(0.932)	34992	0.50000	0.6089
	29 2-Butanone	43	5.221	5.216	(0.962)	37117	2.50000	2.249(M)
	30 1,1-Dichloropropene	75	5.163	5.163	(0.888)	27987	0.50000	0.4929
	31 Benzene	78	5.354	5.355	(0.921)	84512	0.50000	0.5427
*	32 Pentafluorobenzene	168	5.429	5.429	(1.000)	592948	10.0000	(Q)
$	33 d4-1,2-Dichloroethane	65	5.455	5.461	(1.005)	164716	5.00000	5.076
	34 1,2-Dichloroethane	62	5.508	5.514	(0.948)	28582	0.50000	0.5576
	36 Trichloroethene	130	5.779	5.780	(0.995)	22255	0.50000	0.5341
*	37 1,4-Difluorobenzene	114	5.811	5.812	(1.000)	1025758	10.0000	
	38 Dibromomethane	93	6.082	6.082	(1.047)	11262	0.50000	0.5635
	39 1,2-Dichloropropane	63	6.151	6.157	(1.059)	24370	0.50000	0.5144(Q)
	40 Bromodichloromethane	83	6.199	6.205	(1.067)	23453	0.50000	0.4839
	41 2-Chloroethyl Vinyl Ether	63	6.608	6.609	(1.137)	12643	0.50000	0.5194
	42 Cis 1,3-dichloropropene	75	6.640	6.646	(1.143)	34829	0.50000	0.5457(M)
$	43 d8-Toluene	98	6.768	6.768	(1.165)	631301	5.00000	5.060
	44 Toluene	92	6.805	6.805	(1.171)	51686	0.50000	0.5072(Q)
	45 4-Methyl-2-Pentanone	58	7.076	7.081	(1.218)	37260	2.50000	2.668(TQ)
	46 Tetrachloroethene	166	7.071	7.071	(0.901)	21640	0.50000	0.5370
	47 Trans 1,3-Dichloropropene	75	7.097	7.097	(1.221)	29343	0.50000	0.5473(T)
	48 1,1,2-Trichloroethane	97	7.203	7.209	(1.240)	15448	0.50000	0.5425
	49 Chlorodibromomethane	129	7.331	7.331	(0.934)	14619	0.50000	0.4254
	50 1,3-Dichloropropane	76	7.400	7.400	(0.943)	25904	0.50000	0.5087(Q)
	51 1,2-Dibromoethane	107	7.496	7.496	(1.290)	15262	0.50000	0.5356
	52 2-Hexanone	43	7.655	7.661	(0.976)	66092	2.50000	2.765
*	53 d5-Chlorobenzene	117	7.846	7.852	(1.000)	1008791	10.0000	
	54 Chlorobenzene	112	7.862	7.862	(1.002)	59274	0.50000	0.5227
	55 Ethyl Benzene	106	7.878	7.878	(1.004)	32807	0.50000	0.5339(Q)
	56 1,1,1,2-Tetrachloroethane	131	7.905	7.905	(1.007)	20706	0.50000	0.5264
	57 m,p-xylene	106	7.979	7.979	(1.017)	77903	1.00000	1.041(Q)
	58 o-Xylene	106	8.287	8.288	(1.056)	40616	0.50000	0.5434(Q)
	59 Styrene	104	8.324	8.324	(1.061)	64951	0.50000	0.5292
	60 Bromoform	173	8.346	8.346	(0.875)	10472	0.50000	0.5303
	61 Isopropyl Benzene	105	8.510	8.510	(0.892)	97451	0.50000	0.5281
$	62 4-Bromofluorobenzene	174	8.718	8.718	(1.111)	201046	5.00000	4.861
	63 Bromobenzene	156	8.797	8.798	(0.922)	24861	0.50000	0.5411
	64 N-Propyl Benzene	91	8.808	8.814	(0.923)	117044	0.50000	0.5449
	65 1,1,2,2-Tetrachloroethane	83	8.861	8.867	(0.929)	20038	0.50000	0.5859(M)
	66 2-Chloro Toluene	91	8.925	8.930	(0.935)	83394	0.50000	0.5500
	67 1,3,5-Trimethyl Benzene	105	8.951	8.952	(0.938)	89047	0.50000	0.5454
	68 1,2,3-Trichloropropane	110	8.962	8.968	(0.939)	5919	0.50000	0.5471
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	9.052	9.053	(0.949)	76262	0.50000	0.5390
	71 T-Butyl Benzene	119	9.185	9.191	(0.963)	70365	0.50000	0.5179
	72 1,2,4-Trimethylbenzene	105	9.238	9.239	(0.968)	91541	0.50000	0.5373
	73 S-Butyl Benzene	105	9.318	9.324	(0.977)	111792	0.50000	0.5610
	74 4-Isopropyl Toluene	119	9.424	9.425	(0.988)	93157	0.50000	0.5469
	75 1,3-Dichlorobenzene	146	9.483	9.488	(0.994)	53650	0.50000	0.5602
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	554076	10.0000	(Q)
	77 1,4-Dichlorobenzene	146	9.552	9.552	(1.001)	51260	0.50000	0.5461(Q)
	78 N-Butyl Benzene	91	9.743	9.743	(1.021)	89160	0.50000	0.5646

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.865	9.866	(1.034)	255216	5.00000	5.005(Q)
80 1,2-Dichlorobenzene	146	9.865	9.871	(1.034)	46847	0.50000	0.5435
81 1,2-Dibromo 3-Chloropropane	75	10.487	10.487	(1.099)	3929	0.50000	0.6118(Q)
83 Hexachloro 1,3-Butadiene	225	10.981	10.981	(1.151)	10471	0.50000	0.4548
84 1,2,4-Trichlorobenzene	180	11.002	11.008	(1.153)	27100	0.50000	0.4837
85 Naphthalene	128	11.263	11.268	(1.180)	65049	0.50000	0.5848
86 1,2,3-Trichlorobenzene	180	11.406	11.411	(1.195)	22398	0.50000	0.4717(M)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251606.D
Lab Smp Id: SEE0142-CAL2
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: VSTD0.5
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	592948	2.57
37 1,4-Difluorobenze	994783	497392	1989566	1025758	3.11
53 d5-Chlorobenzene	985810	492905	1971620	1008791	2.33
76 d4-1,4-Dichlorobe	556120	278060	1112240	554076	-0.37

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.00
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.00
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	-0.06
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.00

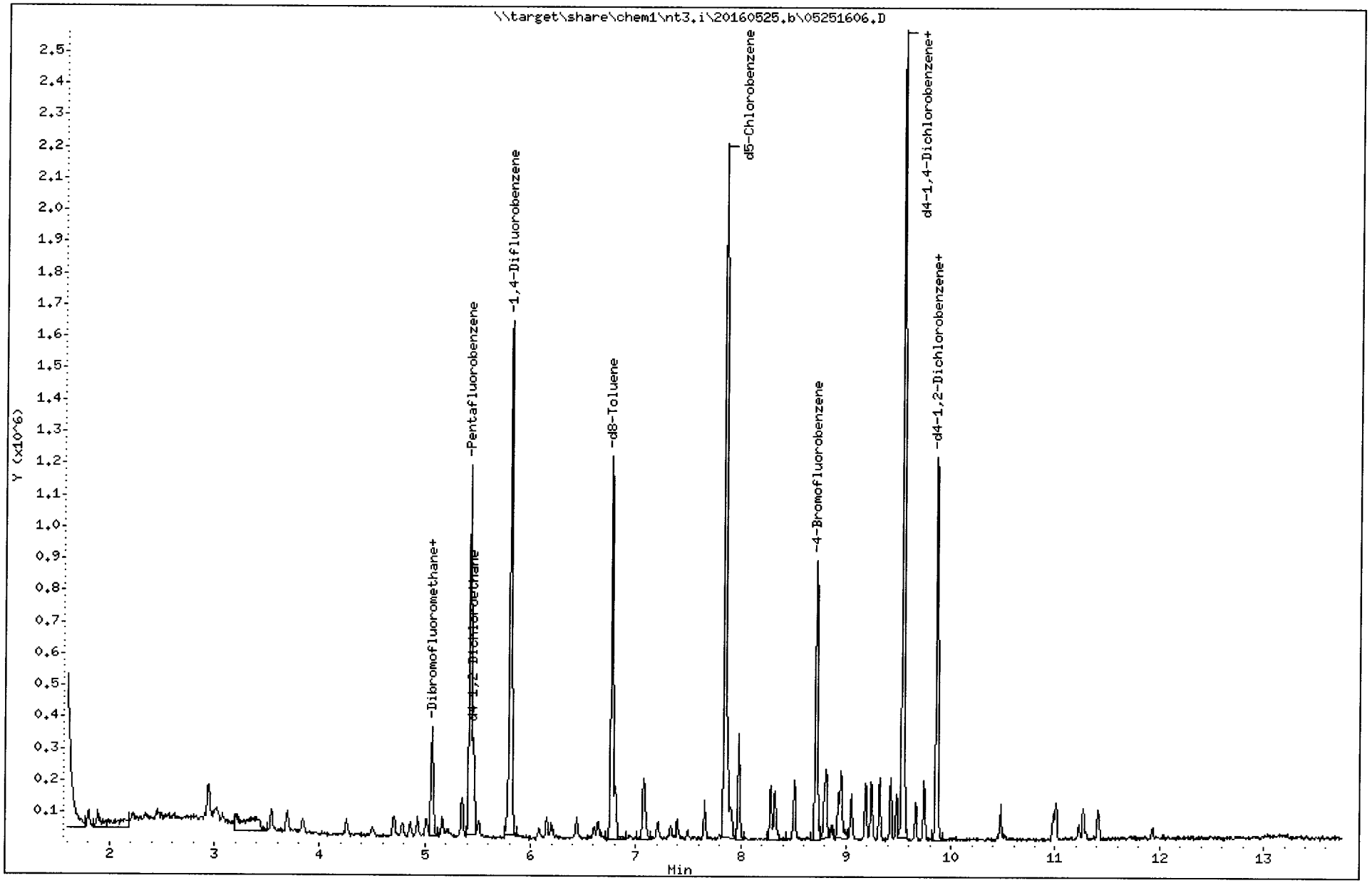
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt3.i\20160525.b\05251606.D
Date : 25-MAY-2016 09:46
Client ID: VSTD0.5
Sample Info: SEE0142-CAL2,10,10,0,

Instrument: nt3.i

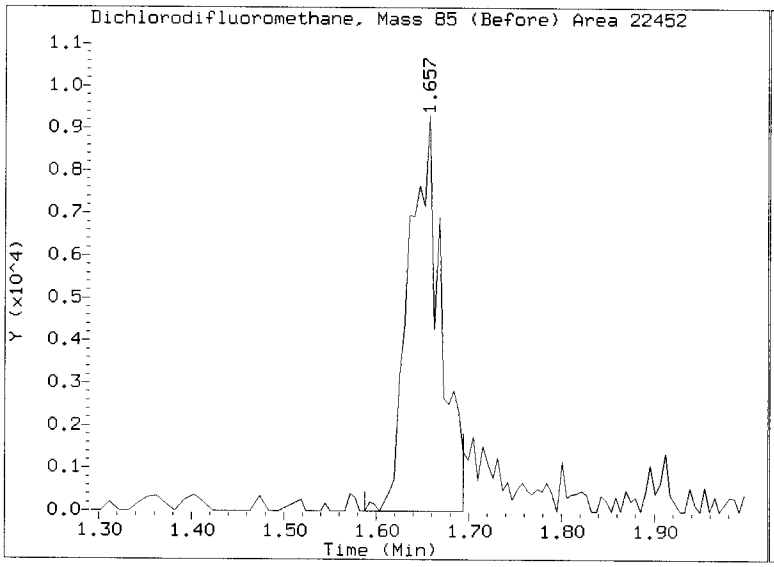
Operator: LH
Column diameter: 0.18

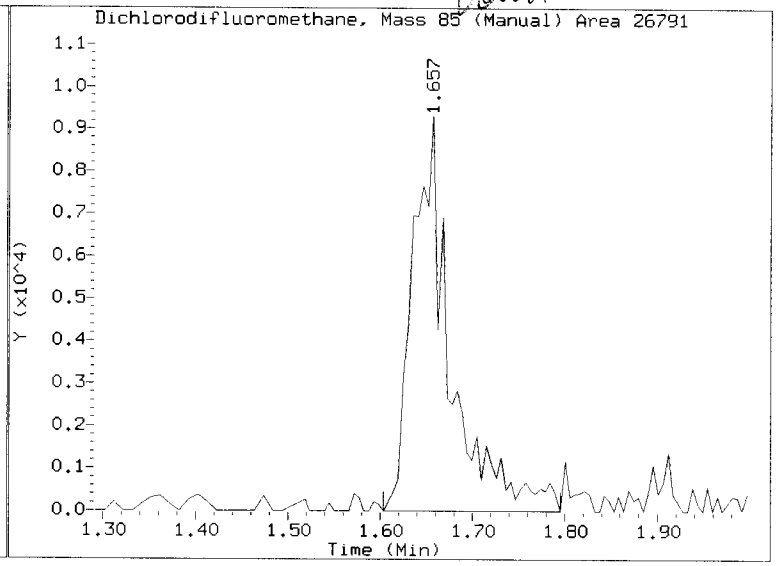
Column phase: RTXVMS

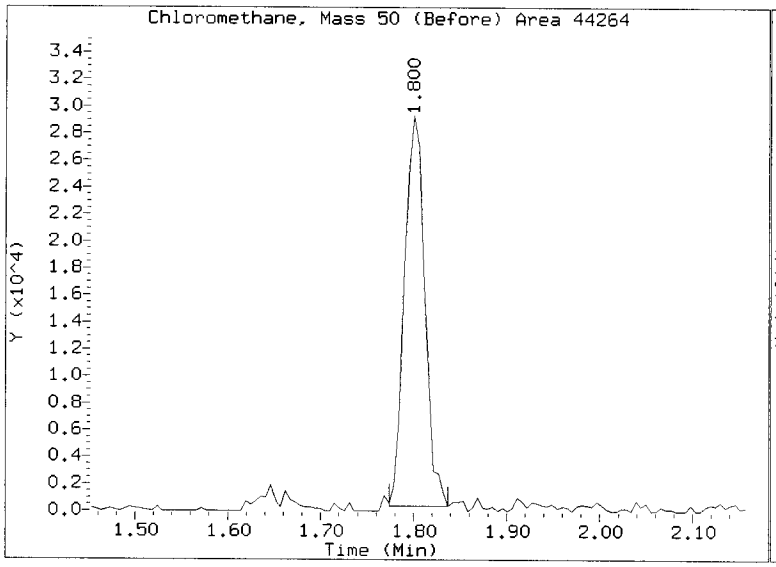


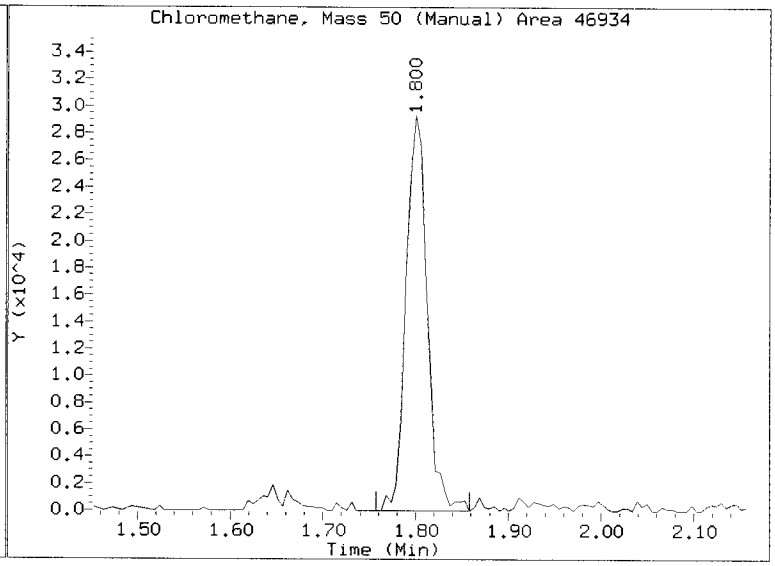
Quant Ion Manual Peak Adjustment Report

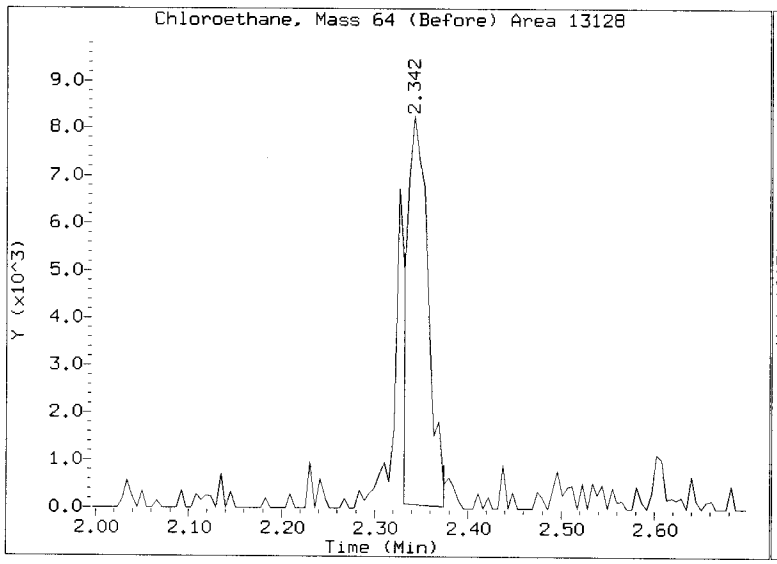
Datafile: //target/share/chem1/nt3.i/20160525.b/05251606.D
Injection Date: 25-MAY-2016 09:46
Lab ID:SEE0142-CAL2 Client ID:VSTD0.5
Report Date: 05/26/2016 08:01

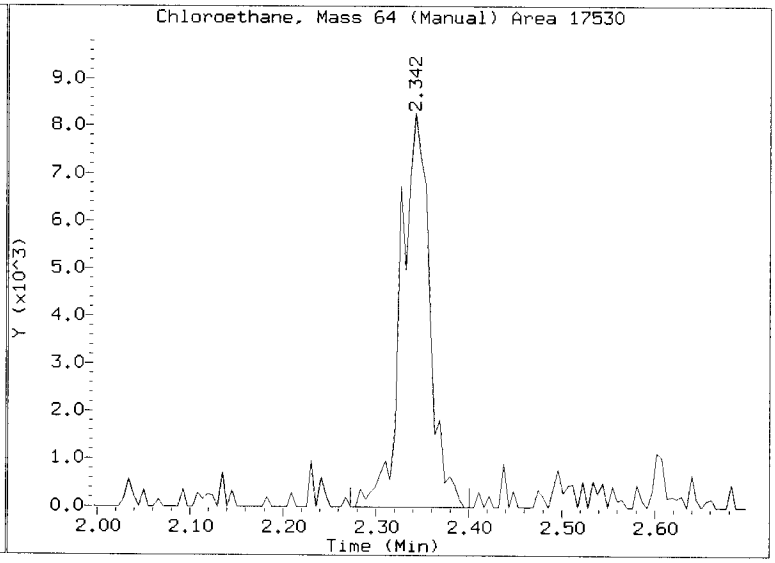












Quant Ion Manual Peak Adjustment Report

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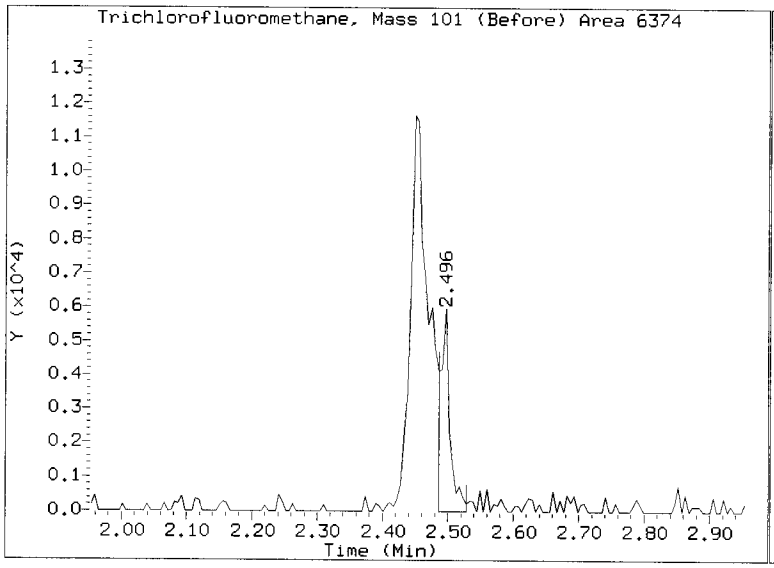
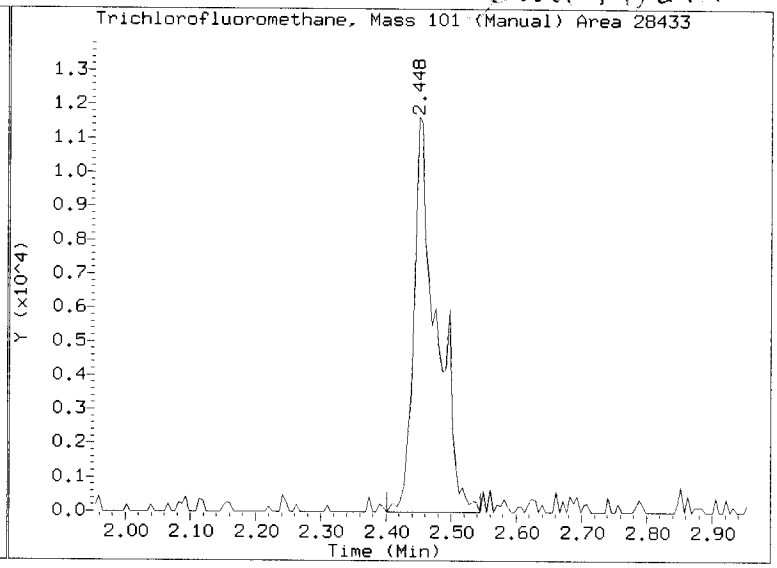
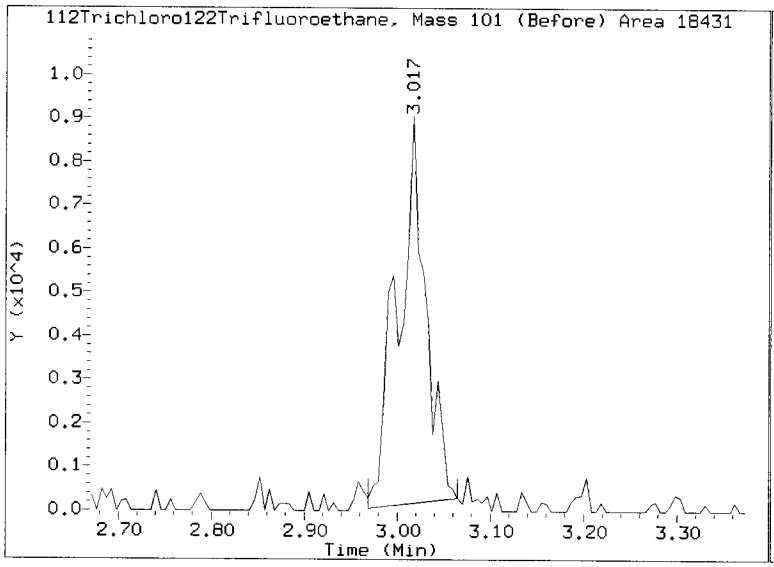
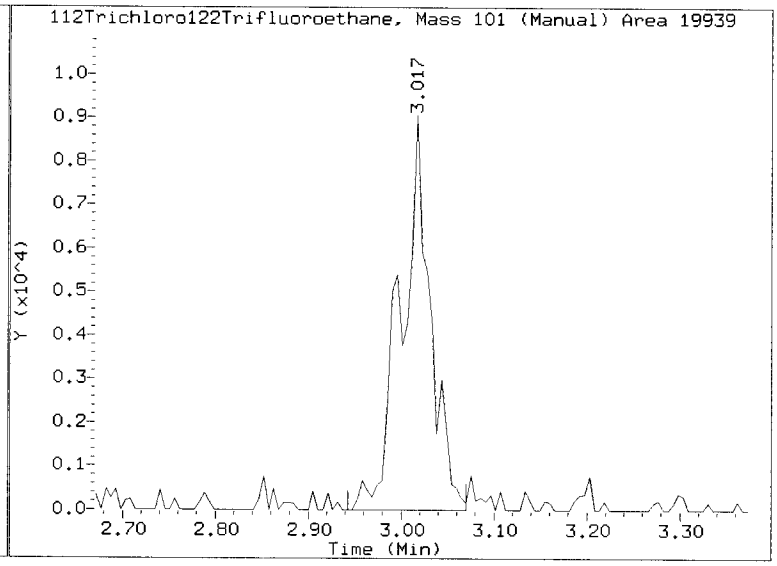
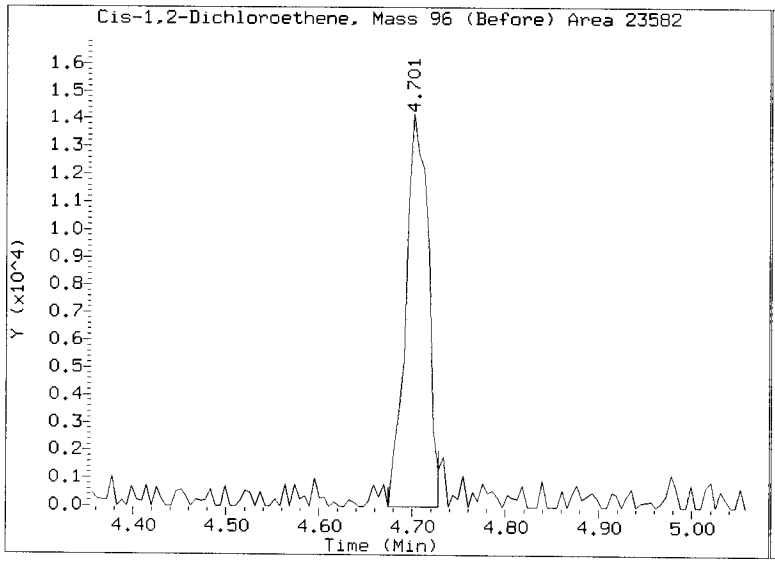
Injection Date: 25-MAY-2016 09:46
Lab ID:SEE0142-CAL2 Client ID:VSTD0.5
Report Date: 05/26/2016 08:01

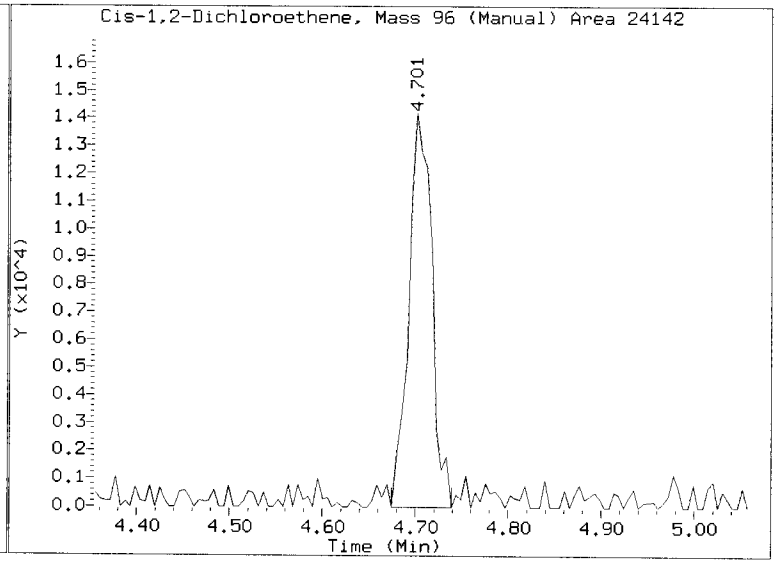












Quant Ion Manual Peak Adjustment Report

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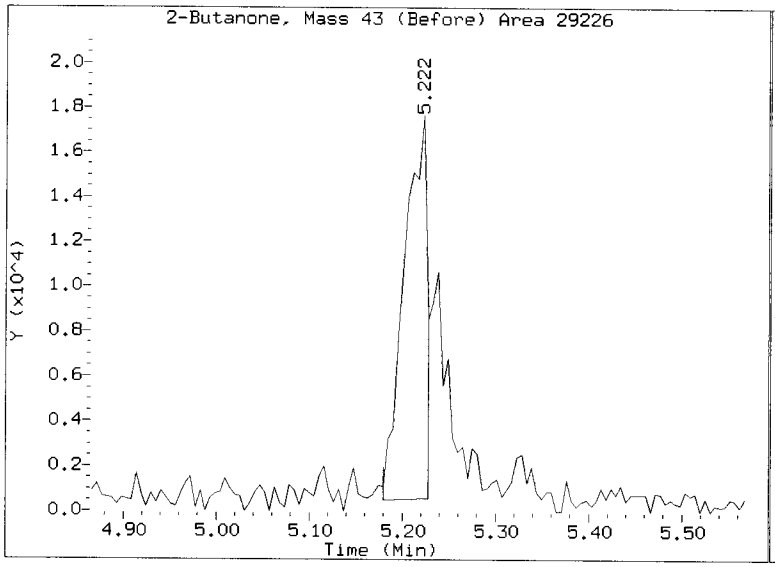
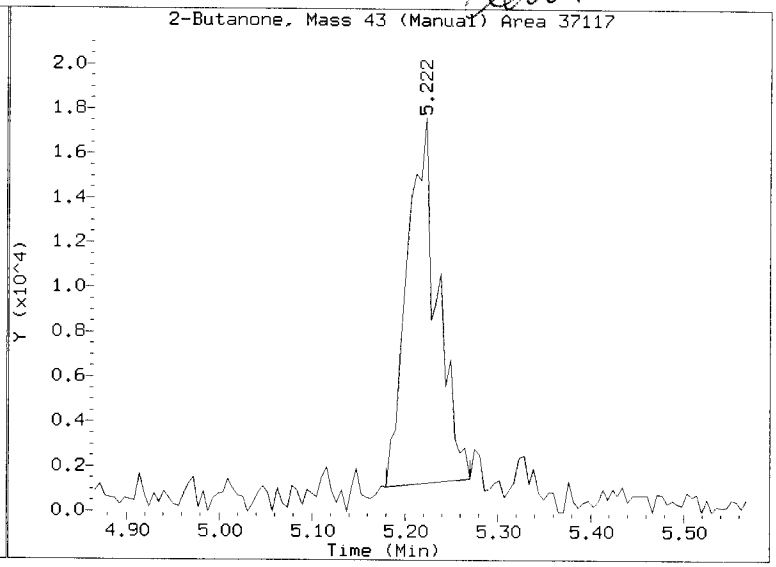
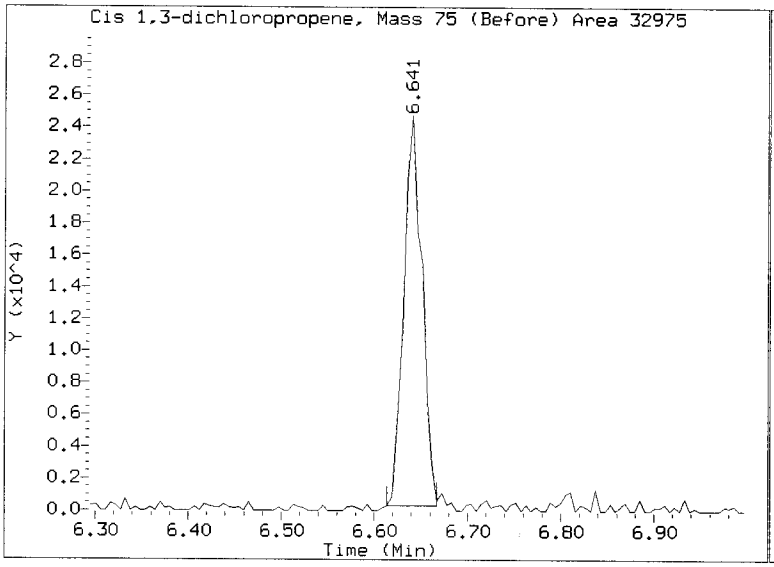
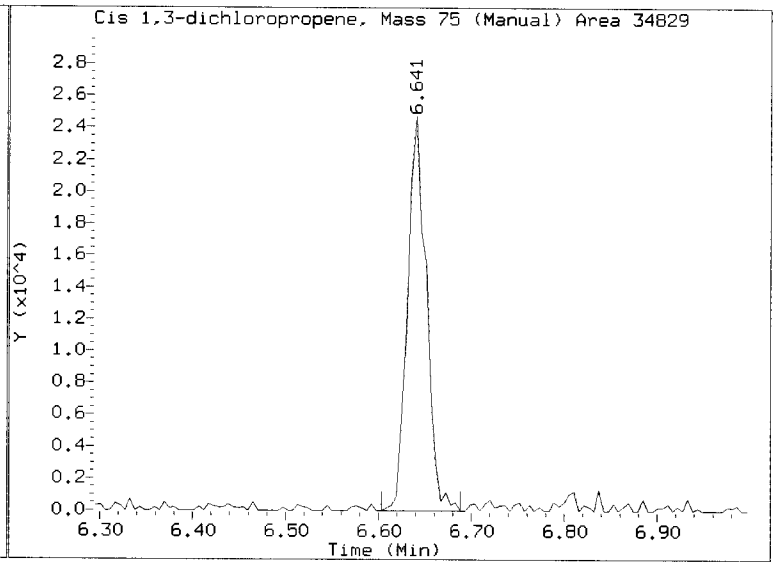
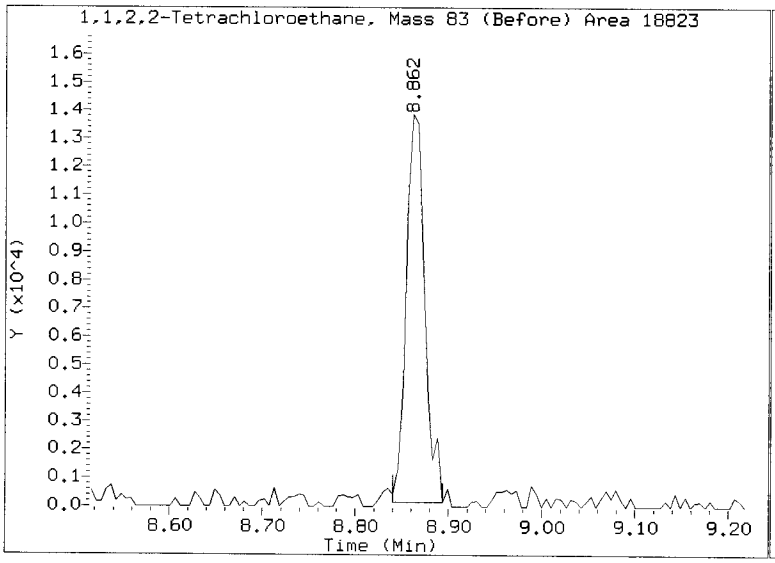
Injection Date: 25-MAY-2016 09:46
Lab ID:SEE0142-CAL2 Client ID:VSTD0.5
Report Date: 05/26/2016 08:01

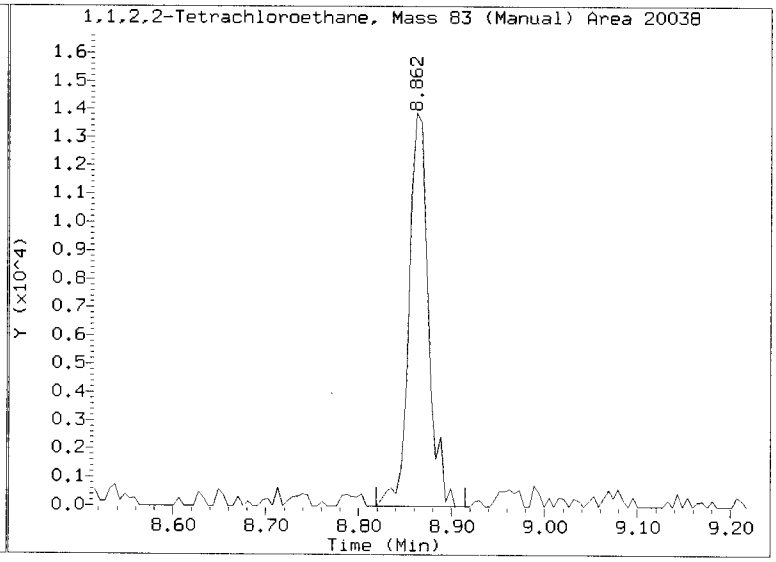








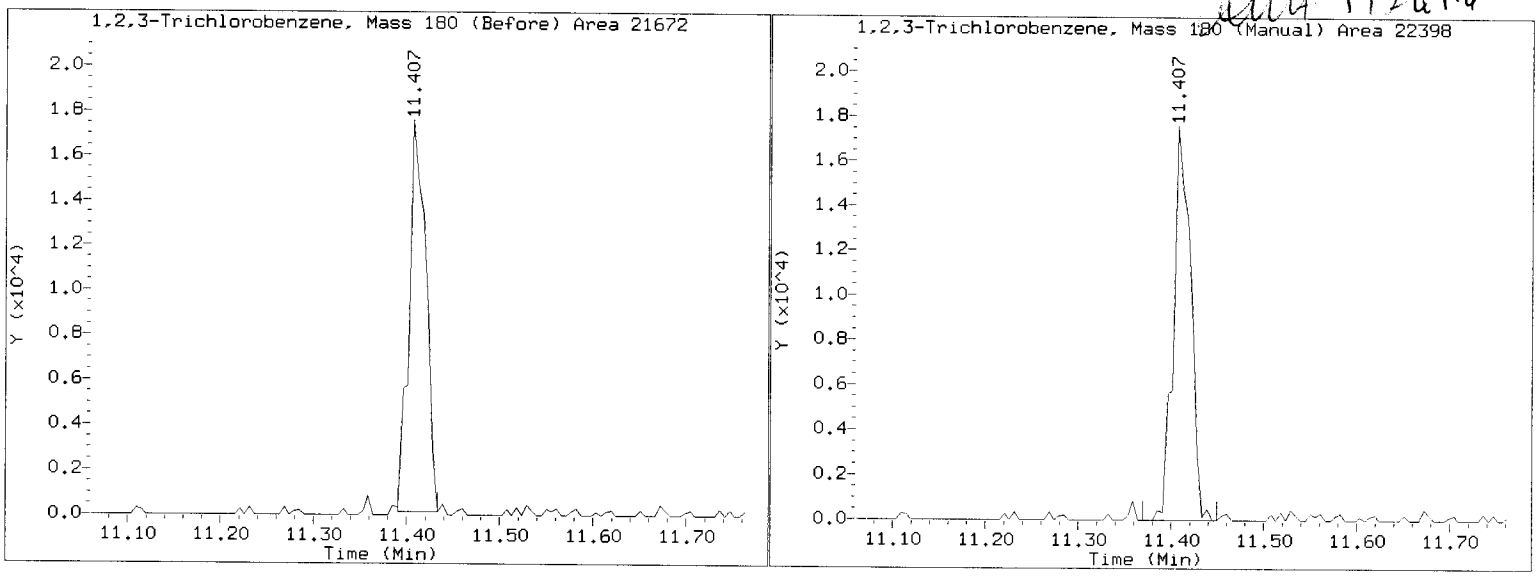




Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem1/nt3.i/20160525.b/05251606.D
Injection Date: 25-MAY-2016 09:46
Lab ID:SEE0142-CAL2 Client ID:VSTD0.5
Report Date: 05/26/2016 08:01

2144 5/26/16



REVIEW SUMMARY FOR FILE - 05251606.D

Lab ID: SEE0142-CAL2
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 09:46

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251607.D
Lab Smp Id: SEE0142-CAL8 Client Smp ID: VSTD80
Inj Date : 25-MAY-2016 10:12
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-CAL8,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 13 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.646	1.646	(1.000)	4081027	80.0000	78.938
173	2-Pentanone	86	6.438	6.438	(1.108)	1668317	400.000	381.02
2	Chloromethane	50	1.805	1.805	(1.000)	5942722	80.0000	73.161
3	Vinyl Chloride	62	1.911	1.896	(1.000)	5314251	80.0000	78.589
4	Bromomethane	94	2.225	2.225	(1.000)	2195745	80.0000	77.027
5	Chloroethane	64	2.347	2.347	(1.000)	2621175	80.0000	75.965
6	Trichlorofluoromethane	101	2.453	2.453	(1.000)	4500704	80.0000	79.906
7	1,1-Dichloroethene	61	2.942	2.942	(1.000)	5650867	80.0000	74.874
8	Carbon Disulfide	76	2.948	2.942	(1.000)	8791501	80.0000	68.831
9	112Trichloro122Trifluoroethane	101	3.022	3.022	(1.000)	2917137	80.0000	77.432
10	Iodomethane	142	3.080	3.075	(1.000)	4498039	80.0000	75.255
11	Bromoethane	108	3.213	3.213	(1.000)	2211639	80.0000	74.599
12	Acrolein	56	3.351	3.357	(1.000)	2343199	400.000	375.40
13	Methylene Chloride	84	3.543	3.548	(1.000)	2878837	80.0000	74.503
14	Acetone	43	3.734	3.761	(1.000)	2989981	400.000	349.17
15	Trans-1,2-Dichloroethene	96	3.697	3.697	(1.000)	3096015	80.0000	72.978
17	Methyl tert butyl ether	73	3.835	3.840	(1.000)	7114476	80.0000	74.303
18	1,1-Dichloroethane	63	4.255	4.255	(1.000)	6334427	80.0000	75.509
19	Acrylonitrile	53	4.345	4.349	(1.000)	1124835	80.0000	73.640
20	Vinyl Acetate	43	4.504	4.504	(1.000)	6566694	80.0000	75.437
22	Cis-1,2-Dichloroethene	96	4.706	4.706	(1.000)	3375442	80.0000	74.392
23	2,2-Dichloropropane	77	4.786	4.786	(1.000)	3319817	80.0000	78.508

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	24 Bromochloromethane	128	4.860	4.860	(1.000)	1476878	80.0000	74.486	
	25 Chloroform	83	4.929	4.930	(1.000)	5015821	80.0000	74.268	
	26 Carbon Tetrachloride	117	5.014	5.015	(0.863)	4075321	80.0000	74.973	
$	27 Dibromofluoromethane	111	5.068	5.068	(1.000)	155672	5.00000	4.917	
	28 1,1,1-Trichloroethane	97	5.073	5.073	(1.000)	4325542	80.0000	73.113	
	29 2-Butanone	43	5.211	5.216	(1.000)	6365555	400.000	374.61	
	30 1,1-Dichloropropene	75	5.163	5.163	(0.888)	4325756	80.0000	74.466	
	31 Benzene	78	5.354	5.355	(0.921)	10559814	80.0000	66.293	
*	32 Pentafluorobenzene	168	5.429	5.429	(1.000)	610469	10.0000		(M)
$	33 d4-1,2-Dichloroethane	65	5.461	5.461	(1.000)	165864	5.00000	4.965	
	34 1,2-Dichloroethane	62	5.509	5.514	(0.948)	3884878	80.0000	74.089	
	36 Trichloroethene	130	5.780	5.780	(0.995)	3337567	80.0000	78.302	
*	37 1,4-Difluorobenzene	114	5.811	5.812	(1.000)	1049338	10.0000		
	38 Dibromomethane	93	6.082	6.082	(1.047)	1519339	80.0000	74.314	
	39 1,2-Dichloropropane	63	6.157	6.157	(1.059)	3633165	80.0000	74.970	
	40 Bromodichloromethane	83	6.199	6.205	(1.067)	3831787	80.0000	77.292	
	41 2-Chloroethyl Vinyl Ether	63	6.608	6.609	(1.137)	1928167	80.0000	77.440	
	42 Cis 1,3-dichloropropene	75	6.640	6.646	(1.143)	4931920	80.0000	75.533	
$	43 d8-Toluene	98	6.768	6.768	(1.165)	654322	5.00000	5.127	
	44 Toluene	92	6.805	6.805	(1.171)	7496829	80.0000	71.914	
	45 4-Methyl-2-Pentanone	58	7.081	7.081	(1.218)	5196034	400.000	363.74	
	46 Tetrachloroethene	166	7.071	7.071	(0.901)	3254951	80.0000	78.039	
	47 Trans 1,3-Dichloropropene	75	7.097	7.097	(1.221)	4191550	80.0000	76.426	(T)
	48 1,1,2-Trichloroethane	97	7.209	7.209	(1.240)	2220494	80.0000	76.231	
	49 Chlorodibromomethane	129	7.331	7.331	(0.934)	2779642	80.0000	78.144	
	50 1,3-Dichloropropane	76	7.400	7.400	(0.942)	3970551	80.0000	75.333	
	51 1,2-Dibromoethane	107	7.496	7.496	(1.290)	2198792	80.0000	75.434	
	52 2-Hexanone	43	7.655	7.661	(0.975)	8266659	400.000	334.14	
*	53 d5-Chlorobenzene	117	7.852	7.852	(1.000)	1044147	10.0000		
	54 Chlorobenzene	112	7.862	7.862	(1.001)	8094390	80.0000	68.960	
	55 Ethyl Benzene	106	7.878	7.878	(1.003)	4918511	80.0000	77.328	
	56 1,1,1,2-Tetrachloroethane	131	7.910	7.905	(1.007)	3136449	80.0000	77.043	
	57 m,p-xylene	106	7.985	7.979	(1.017)	10174874	160.000	131.33	
	58 o-Xylene	106	8.287	8.288	(1.055)	5862963	80.0000	75.790	
	59 Styrene	104	8.325	8.324	(1.060)	8882109	80.0000	69.915	
	60 Bromoform	173	8.346	8.346	(0.875)	1688392	80.0000	80.753	
	61 Isopropyl Benzene	105	8.511	8.510	(0.892)	11790480	80.0000	60.351	
$	62 4-Bromofluorobenzene	174	8.718	8.718	(1.110)	213322	5.00000	4.984	
	63 Bromobenzene	156	8.798	8.798	(0.922)	3615735	80.0000	74.329	
	64 N-Propyl Benzene	91	8.813	8.814	(0.924)	12597195	80.0000	55.388	
	65 1,1,2,2-Tetrachloroethane	83	8.867	8.867	(0.929)	2729553	80.0000	75.383	
	66 2-Chloro Toluene	91	8.930	8.930	(0.936)	10756834	80.0000	67.007	
	67 1,3,5-Trimethyl Benzene	105	8.957	8.952	(0.939)	10576175	80.0000	61.179	
	68 1,2,3-Trichloropropane	110	8.968	8.968	(0.940)	840459	80.0000	73.382	
	69 Trans-1,4-Dichloro 2-Butene	53	8.994	8.994	(0.943)	1067625	80.0000	77.555	
	70 4-Chloro Toluene	91	9.053	9.053	(0.949)	9637291	80.0000	64.340	
	71 T-Butyl Benzene	119	9.191	9.191	(0.963)	9773709	80.0000	67.946	
	72 1,2,4-Trimethylbenzene	105	9.244	9.239	(0.969)	10713305	80.0000	59.395	
	73 S-Butyl Benzene	105	9.324	9.324	(0.977)	12134377	80.0000	57.518	
	74 4-Isopropyl Toluene	119	9.430	9.425	(0.988)	11026958	80.0000	61.141	
	75 1,3-Dichlorobenzene	146	9.488	9.488	(0.994)	6937218	80.0000	68.415	
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	586613	10.0000		
	77 1,4-Dichlorobenzene	146	9.552	9.552	(1.001)	6844783	80.0000	68.872	
	78 N-Butyl Benzene	91	9.743	9.743	(1.021)	10231233	80.0000	61.199	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.866	9.866	(1.034)	269897	5.00000	4.999
80 1,2-Dichlorobenzene	146	9.871	9.871	(1.035)	6297984	80.0000	69.012
81 1,2-Dibromo 3-Chloropropane	75	10.482	10.487	(1.099)	500125	80.0000	73.553
83 Hexachloro 1,3-Butadiene	225	10.981	10.981	(1.151)	1962097	80.0000	80.494
84 1,2,4-Trichlorobenzene	180	11.008	11.008	(1.154)	4488607	80.0000	75.676
85 Naphthalene	128	11.268	11.268	(1.181)	7402662	80.0000	62.862
86 1,2,3-Trichlorobenzene	180	11.412	11.411	(1.196)	3555458	80.0000	70.725

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251607.D
Lab Smp Id: SEE0142-CAL8
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: VSTD80
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	610469	5.60
37 1,4-Difluorobenze	994783	497392	1989566	1049338	5.48
53 d5-Chlorobenzene	985810	492905	1971620	1044147	5.92
76 d4-1,4-Dichlorobe	556120	278060	1112240	586613	5.48

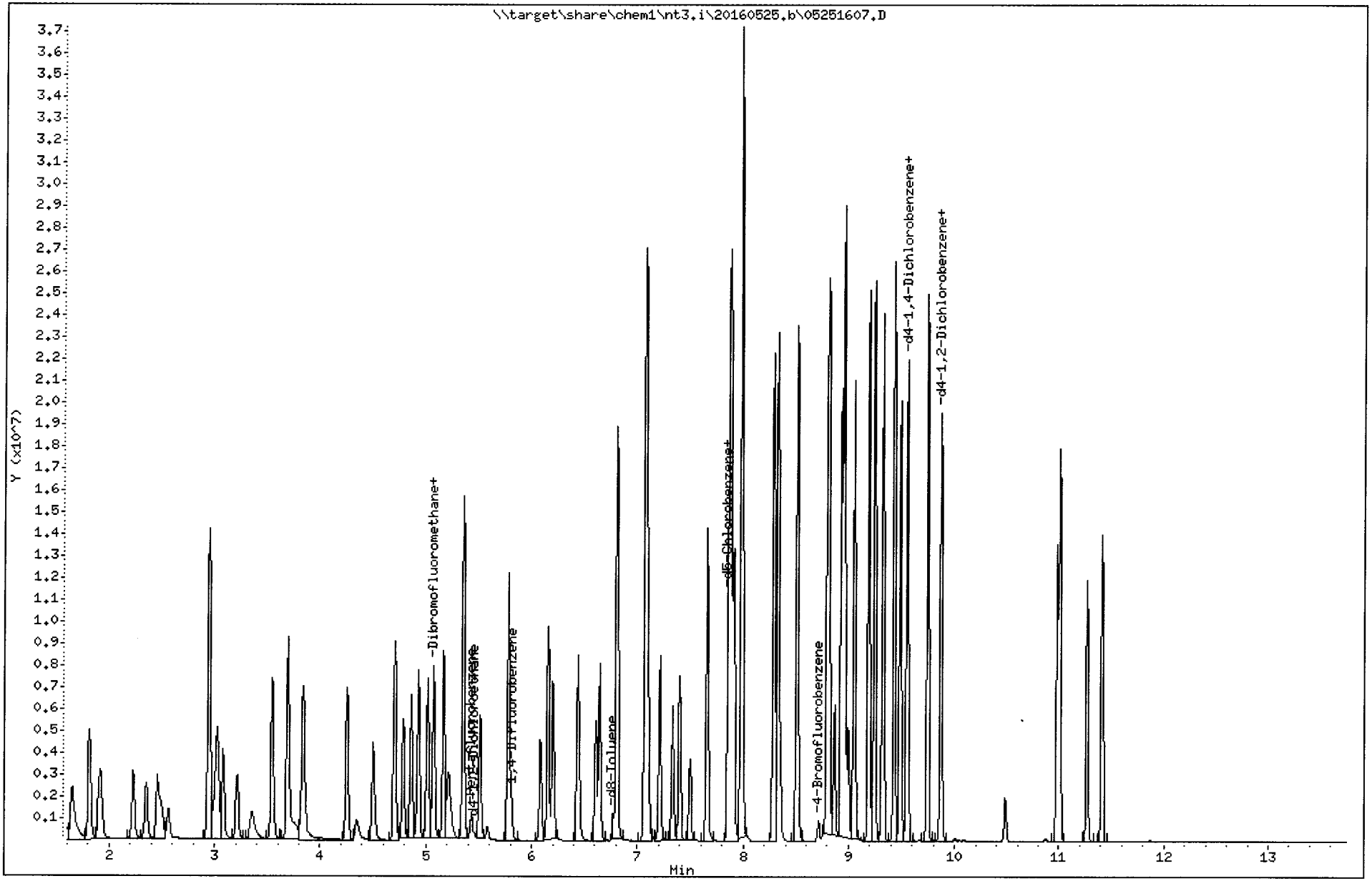
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.01
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.01
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.01
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt3.i\20160525.b\05251607.D
Date : 25-MAY-2016 10:12
Client ID: VSTD80
Sample Info: SEE0142-CAL8,10,10,0,

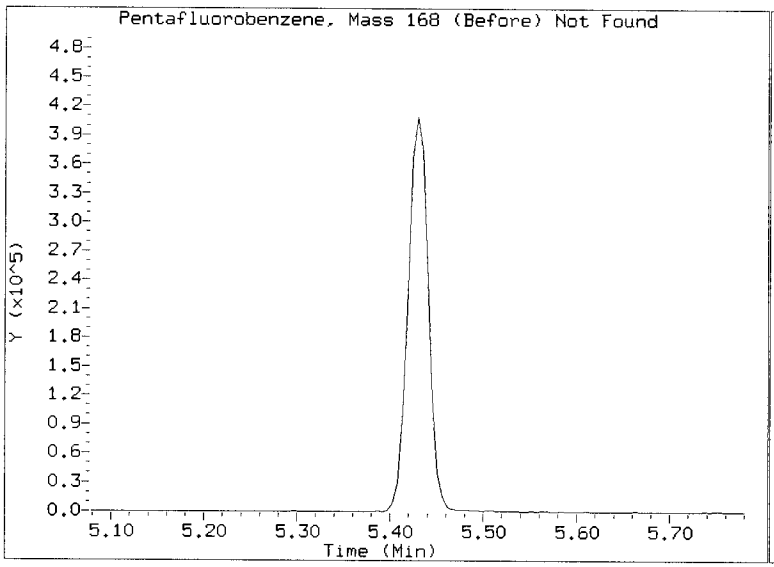
Instrument: nt3.i
Operator: LH
Column diameter: 0.18

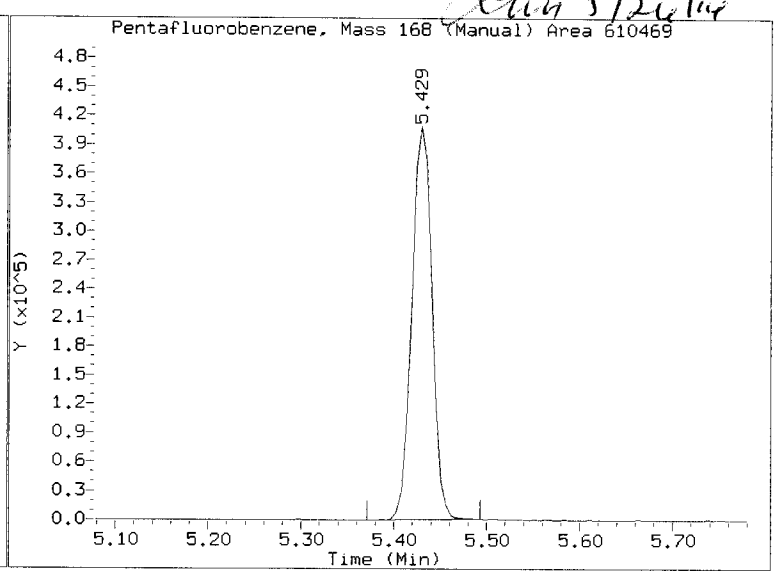
Column phase: RTXVMS



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem1/nt3.i/20160525.b/05251607.D
Injection Date: 25-MAY-2016 10:12
Lab ID:SEE0142-CAL8 Client ID:VSTD80
Report Date: 05/26/2016 08:01





REVIEW SUMMARY FOR FILE - 05251607.D

Lab ID: SEE0142-CAL8
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 10:12

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

5/26/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251608.D
Lab Smp Id: SEE0142-CAL7 Client Smp ID: VSTD40
Inj Date : 25-MAY-2016 10:38
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-CAL7,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 14 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.646	1.646	(0.303)	2042163	40.0000	39.821
173 2-Pentanone	86	6.439	6.438	(1.108)	857774	200.000	196.84(Q)
2 Chloromethane	50	1.805	1.805	(0.333)	2974227	40.0000	36.912
3 Vinyl Chloride	62	1.901	1.896	(0.350)	2614976	40.0000	38.984
4 Bromomethane	94	2.225	2.225	(0.410)	1101756	40.0000	38.963
5 Chloroethane	64	2.347	2.347	(0.432)	1289526	40.0000	37.674
6 Trichlorofluoromethane	101	2.454	2.453	(0.452)	2219404	40.0000	39.722
7 1,1-Dichloroethene	61	2.943	2.942	(0.542)	2871808	40.0000	38.360
8 Carbon Disulfide	76	2.948	2.942	(0.543)	4780769	40.0000	37.733
9 112Trichloro122Trifluoroethane	101	3.017	3.022	(0.556)	1456451	40.0000	38.973
10 Iodomethane	142	3.081	3.075	(0.567)	2292567	40.0000	38.666
11 Bromoethane	108	3.208	3.213	(0.591)	1106083	40.0000	37.610
12 Acrolein	56	3.352	3.357	(0.617)	1184163	200.000	191.25
13 Methylene Chloride	84	3.543	3.548	(0.653)	1486390	40.0000	38.778
14 Acetone	43	3.740	3.761	(0.689)	1546145	200.000	182.02
15 Trans-1,2-Dichloroethene	96	3.692	3.697	(0.680)	1603590	40.0000	38.105
17 Methyl tert butyl ether	73	3.835	3.840	(0.706)	3658542	40.0000	38.519
18 1,1-Dichloroethane	63	4.255	4.255	(0.784)	3279832	40.0000	39.414
19 Acrylonitrile	53	4.345	4.349	(0.800)	552369	40.0000	36.455
20 Vinyl Acetate	43	4.499	4.504	(0.829)	3393652	40.0000	39.301
22 Cis-1,2-Dichloroethene	96	4.701	4.706	(0.866)	1700658	40.0000	37.785
23 2,2-Dichloropropane	77	4.786	4.786	(0.882)	1755988	40.0000	41.862

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.861	4.860	(0.895)	739391	40.0000	37.593
	25 Chloroform	83	4.924	4.930	(0.907)	2554119	40.0000	38.124
	26 Carbon Tetrachloride	117	5.015	5.015	(0.863)	2071670	40.0000	38.293
$	27 Dibromofluoromethane	111	5.068	5.068	(0.933)	158614	5.00000	5.050
	28 1,1,1-Trichloroethane	97	5.068	5.073	(0.933)	2228880	40.0000	37.979
	29 2-Butanone	43	5.211	5.216	(0.960)	3248966	200.000	192.75
	30 1,1-Dichloropropene	75	5.163	5.163	(0.888)	2193034	40.0000	37.931
	31 Benzene	78	5.355	5.355	(0.921)	5924389	40.0000	37.369
*	32 Pentafluorobenzene	168	5.429	5.429	(1.000)	605568	10.0000	(Q)
$	33 d4-1,2-Dichloroethane	65	5.461	5.461	(1.006)	166352	5.00000	5.020
	34 1,2-Dichloroethane	62	5.509	5.514	(0.948)	1964539	40.0000	37.644
	36 Trichloroethene	130	5.780	5.780	(0.995)	1658688	40.0000	39.099
*	37 1,4-Difluorobenzene	114	5.812	5.812	(1.000)	1044373	10.0000	
	38 Dibromomethane	93	6.083	6.082	(1.047)	761186	40.0000	37.408
	39 1,2-Dichloropropane	63	6.157	6.157	(1.059)	1836954	40.0000	38.085
	40 Bromodichloromethane	83	6.200	6.205	(1.067)	1963004	40.0000	39.784
	41 2-Chloroethyl Vinyl Ether	63	6.603	6.609	(1.136)	982265	40.0000	39.638
	42 Cis 1,3-dichloropropene	75	6.641	6.646	(1.143)	2516332	40.0000	38.721
$	43 d8-Toluene	98	6.768	6.768	(1.165)	620689	5.00000	4.886
	44 Toluene	92	6.805	6.805	(1.171)	3972311	40.0000	38.286
	45 4-Methyl-2-Pentanone	58	7.082	7.081	(1.218)	2712787	200.000	190.81(Q)
	46 Tetrachloroethene	166	7.071	7.071	(0.901)	1622180	40.0000	39.718
	47 Trans 1,3-Dichloropropene	75	7.098	7.097	(1.221)	2119378	40.0000	38.827(T)
	48 1,1,2-Trichloroethane	97	7.209	7.209	(1.240)	1102358	40.0000	38.025
	49 Chlorodibromomethane	129	7.331	7.331	(0.934)	1415565	40.0000	40.640
	50 1,3-Dichloropropane	76	7.395	7.400	(0.942)	2050100	40.0000	39.722
	51 1,2-Dibromoethane	107	7.496	7.496	(1.290)	1115718	40.0000	38.459
	52 2-Hexanone	43	7.655	7.661	(0.975)	4638570	200.000	191.47
*	53 d5-Chlorobenzene	117	7.852	7.852	(1.000)	1022444	10.0000	
	54 Chlorobenzene	112	7.863	7.862	(1.001)	4360233	40.0000	37.935
	55 Ethyl Benzene	106	7.879	7.878	(1.003)	2495836	40.0000	40.072(Q)
	56 1,1,1,2-Tetrachloroethane	131	7.905	7.905	(1.007)	1572411	40.0000	39.444
	57 m,p-xylene	106	7.985	7.979	(1.017)	5789366	80.0000	76.311(Q)
	58 o-Xylene	106	8.288	8.288	(1.055)	3014497	40.0000	39.795(Q)
	59 Styrene	104	8.325	8.324	(1.060)	4847326	40.0000	38.965
	60 Bromoform	173	8.346	8.346	(0.875)	845056	40.0000	40.481
	61 Isopropyl Benzene	105	8.511	8.510	(0.892)	7177901	40.0000	36.799
$	62 4-Bromofluorobenzene	174	8.718	8.718	(1.110)	216337	5.00000	5.161
	63 Bromobenzene	156	8.798	8.798	(0.922)	1808162	40.0000	37.229
	64 N-Propyl Benzene	91	8.814	8.814	(0.924)	8019836	40.0000	35.318
	65 1,1,2,2-Tetrachloroethane	83	8.867	8.867	(0.929)	1384440	40.0000	38.295
	66 2-Chloro Toluene	91	8.931	8.930	(0.936)	5929782	40.0000	36.996
	67 1,3,5-Trimethyl Benzene	105	8.957	8.952	(0.939)	6282700	40.0000	36.400
	68 1,2,3-Trichloropropane	110	8.968	8.968	(0.940)	415362	40.0000	36.323
	69 Trans-1,4-Dichloro 2-Butene	53	8.994	8.994	(0.943)	523422	40.0000	38.082
	70 4-Chloro Toluene	91	9.053	9.053	(0.949)	5520879	40.0000	36.916
	71 T-Butyl Benzene	119	9.191	9.191	(0.963)	5459067	40.0000	38.010
	72 1,2,4-Trimethylbenzene	105	9.239	9.239	(0.968)	6395407	40.0000	35.512
	73 S-Butyl Benzene	105	9.319	9.324	(0.977)	7648645	40.0000	36.312
	74 4-Isopropyl Toluene	119	9.425	9.425	(0.988)	6667147	40.0000	37.026
	75 1,3-Dichlorobenzene	146	9.489	9.488	(0.994)	3631592	40.0000	35.871
*	76 d4-1,4-Dichlorobenzene	152	9.542	9.541	(1.000)	585693	10.0000	(Q)
	77 1,4-Dichlorobenzene	146	9.552	9.552	(1.001)	3633453	40.0000	36.617
	78 N-Butyl Benzene	91	9.744	9.743	(1.021)	6024973	40.0000	36.095

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.860	9.866	(1.033)	269784	5.00000	5.005(Q)
80 1,2-Dichlorobenzene	146	9.871	9.871	(1.035)	3288881	40.0000	36.095
81 1,2-Dibromo 3-Chloropropane	75	10.482	10.487	(1.099)	246272	40.0000	36.276
83 Hexachloro 1,3-Butadiene	225	10.982	10.981	(1.151)	967299	40.0000	39.745
84 1,2,4-Trichlorobenzene	180	11.008	11.008	(1.154)	2300791	40.0000	38.851
85 Naphthalene	128	11.269	11.268	(1.181)	4219331	40.0000	35.886
86 1,2,3-Trichlorobenzene	180	11.412	11.411	(1.196)	1912955	40.0000	38.112

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251608.D
Lab Smp Id: SEE0142-CAL7
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: VSTD40
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	605568	4.75
37 1,4-Difluorobenze	994783	497392	1989566	1044373	4.99
53 d5-Chlorobenzene	985810	492905	1971620	1022444	3.72
76 d4-1,4-Dichlorobe	556120	278060	1112240	585693	5.32

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.01
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.01
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.01
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.01

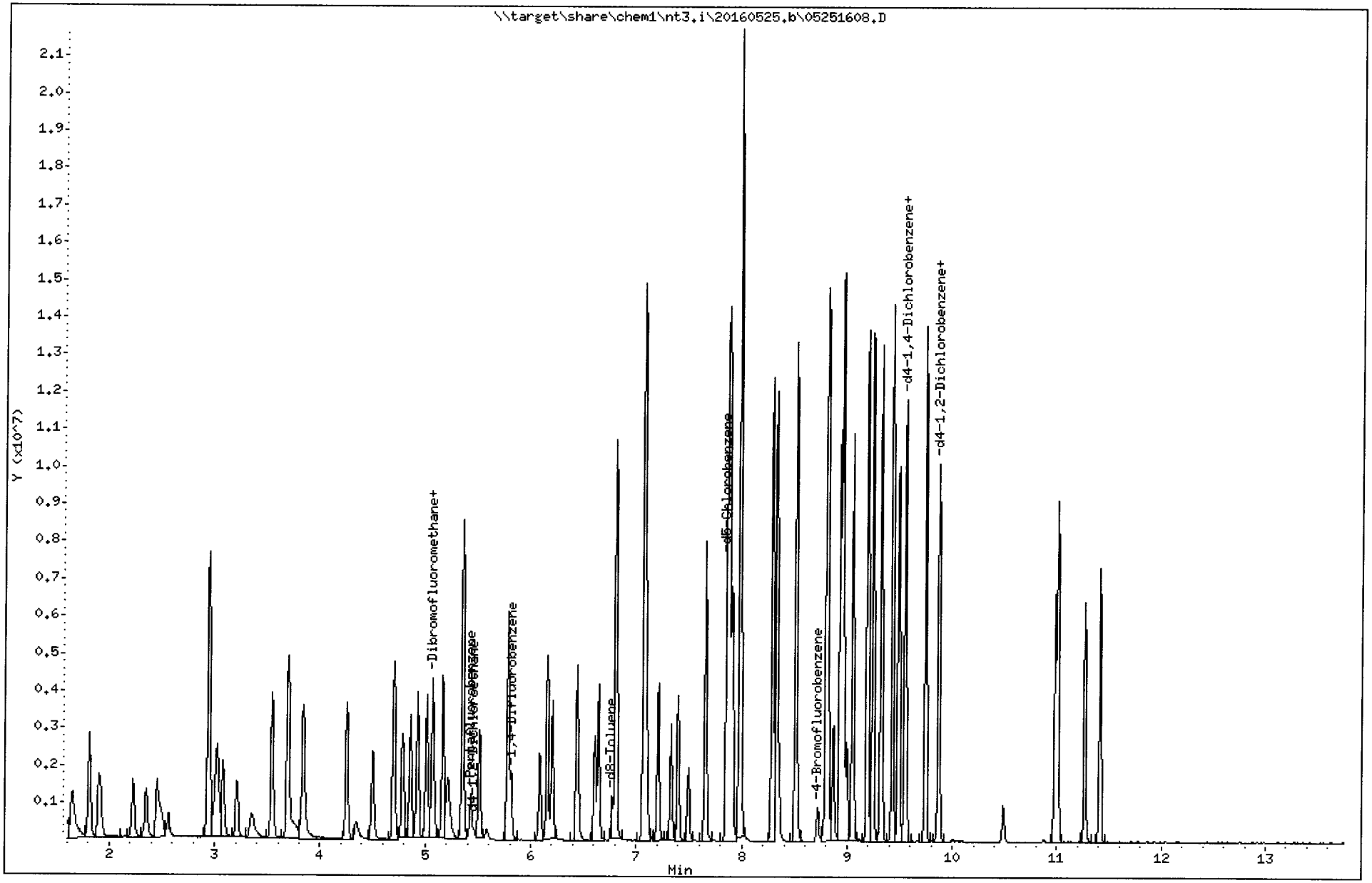
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt3.i\20160525.b\05251608.D
Date : 25-MAY-2016 10:38
Client ID: VSTD40
Sample Info: SEE0142-CAL7,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH
Column diameter: 0.18



REVIEW SUMMARY FOR FILE - 05251608.D

Lab ID: SEE0142-CAL7
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 10:38

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

5/26/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251609.D
Lab Smp Id: SEE0142-CAL6 Client Smp ID: VSTD20
Inj Date : 25-MAY-2016 11:04
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-CAL6,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 15 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.646	1.646	(0.303)	1049287	20.0000	21.394
173 2-Pentanone	86	6.439	6.438	(1.108)	415622	100.000	100.57(Q)
2 Chloromethane	50	1.806	1.805	(0.333)	1487551	20.0000	19.303
3 Vinyl Chloride	62	1.896	1.896	(0.349)	1275160	20.0000	19.877
4 Bromomethane	94	2.225	2.225	(0.410)	535141	20.0000	19.788
5 Chloroethane	64	2.353	2.347	(0.433)	637131	20.0000	19.463
6 Trichlorofluoromethane	101	2.454	2.453	(0.452)	1071099	20.0000	20.045
7 1,1-Dichloroethene	61	2.943	2.942	(0.542)	1401496	20.0000	19.574
8 Carbon Disulfide	76	2.948	2.942	(0.543)	2349359	20.0000	19.388
9 112Trichloro122Trifluoroethane	101	3.022	3.022	(0.557)	709932	20.0000	19.863
10 Iodomethane	142	3.081	3.075	(0.567)	1097461	20.0000	19.354
11 Bromoethane	108	3.214	3.213	(0.592)	529899	20.0000	18.840
12 Acrolein	56	3.357	3.357	(0.618)	582057	100.000	98.293
13 Methylene Chloride	84	3.543	3.548	(0.653)	736889	20.0000	20.102
14 Acetone	43	3.729	3.761	(0.687)	769445	100.000	94.714
15 Trans-1,2-Dichloroethene	96	3.697	3.697	(0.681)	765209	20.0000	19.013
17 Methyl tert butyl ether	73	3.841	3.840	(0.707)	1801451	20.0000	19.832
18 1,1-Dichloroethane	63	4.255	4.255	(0.784)	1581719	20.0000	19.874
19 Acrylonitrile	53	4.345	4.349	(0.800)	274963	20.0000	18.975
20 Vinyl Acetate	43	4.505	4.504	(0.830)	1675425	20.0000	20.288
22 Cis-1,2-Dichloroethene	96	4.707	4.706	(0.867)	833058	20.0000	19.353
23 2,2-Dichloropropane	77	4.786	4.786	(0.882)	853333	20.0000	21.271

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.861	4.860	(0.895)	359241	20.0000	19.098
	25 Chloroform	83	4.924	4.930	(0.907)	1259022	20.0000	19.650
	26 Carbon Tetrachloride	117	5.015	5.015	(0.863)	1004528	20.0000	19.579
$	27 Dibromofluoromethane	111	5.063	5.068	(0.932)	148895	5.00000	4.957
	28 1,1,1-Trichloroethane	97	5.073	5.073	(0.934)	1087268	20.0000	19.372
	29 2-Butanone	43	5.211	5.216	(0.960)	1615048	100.000	100.18
	30 1,1-Dichloropropene	75	5.164	5.163	(0.888)	1061218	20.0000	19.355
	31 Benzene	78	5.355	5.355	(0.921)	2988012	20.0000	19.874
*	32 Pentafluorobenzene	168	5.429	5.429	(1.000)	579151	10.0000	(Q)
$	33 d4-1,2-Dichloroethane	65	5.461	5.461	(1.006)	159222	5.00000	5.024
	34 1,2-Dichloroethane	62	5.509	5.514	(0.948)	956122	20.0000	19.319
	36 Trichloroethene	130	5.780	5.780	(0.995)	812773	20.0000	20.202
*	37 1,4-Difluorobenzene	114	5.812	5.812	(1.000)	990448	10.0000	
	38 Dibromomethane	93	6.083	6.082	(1.047)	370701	20.0000	19.210
	39 1,2-Dichloropropane	63	6.157	6.157	(1.059)	892693	20.0000	19.516
	40 Bromodichloromethane	83	6.200	6.205	(1.067)	927548	20.0000	19.822
	41 2-Chloroethyl Vinyl Ether	63	6.603	6.609	(1.136)	477073	20.0000	20.300
	42 Cis 1,3-dichloropropene	75	6.641	6.646	(1.143)	1205011	20.0000	19.552
$	43 d8-Toluene	98	6.774	6.768	(1.165)	619373	5.00000	5.142
	44 Toluene	92	6.805	6.805	(1.171)	1941194	20.0000	19.728(Q)
	45 4-Methyl-2-Pentanone	58	7.076	7.081	(1.218)	1351497	100.000	100.23(Q)
	46 Tetrachloroethene	166	7.066	7.071	(0.900)	766193	20.0000	19.145
	47 Trans 1,3-Dichloropropene	75	7.098	7.097	(1.221)	1022558	20.0000	19.753(T)
	48 1,1,2-Trichloroethane	97	7.209	7.209	(1.240)	536079	20.0000	19.498
	49 Chlorodibromomethane	129	7.331	7.331	(0.934)	679340	20.0000	19.904
	50 1,3-Dichloropropane	76	7.395	7.400	(0.942)	963170	20.0000	19.045
	51 1,2-Dibromoethane	107	7.496	7.496	(1.290)	530147	20.0000	19.269
	52 2-Hexanone	43	7.656	7.661	(0.975)	2330774	100.000	98.187
*	53 d5-Chlorobenzene	117	7.852	7.852	(1.000)	1001872	10.0000	
	54 Chlorobenzene	112	7.863	7.862	(1.001)	2159334	20.0000	19.173
	55 Ethyl Benzene	106	7.879	7.878	(1.003)	1217586	20.0000	19.950(Q)
	56 1,1,1,2-Tetrachloroethane	131	7.905	7.905	(1.007)	761676	20.0000	19.499
	57 m,p-xylene	106	7.980	7.979	(1.016)	2910160	40.0000	39.147(Q)
	58 o-Xylene	106	8.288	8.288	(1.055)	1461935	20.0000	19.696(Q)
	59 Styrene	104	8.325	8.324	(1.060)	2415138	20.0000	19.813
	60 Bromoform	173	8.346	8.346	(0.875)	410664	20.0000	20.275
	61 Isopropyl Benzene	105	8.511	8.510	(0.892)	3713390	20.0000	19.620
$	62 4-Bromofluorobenzene	174	8.718	8.718	(1.110)	205879	5.00000	5.013
	63 Bromobenzene	156	8.798	8.798	(0.922)	875410	20.0000	18.576
	64 N-Propyl Benzene	91	8.814	8.814	(0.924)	4284802	20.0000	19.447
	65 1,1,2,2-Tetrachloroethane	83	8.867	8.867	(0.929)	670675	20.0000	19.119
	66 2-Chloro Toluene	91	8.931	8.930	(0.936)	2967471	20.0000	19.081
	67 1,3,5-Trimethyl Benzene	105	8.952	8.952	(0.938)	3249305	20.0000	19.402
	68 1,2,3-Trichloropropane	110	8.968	8.968	(0.940)	203713	20.0000	18.360
	69 Trans-1,4-Dichloro 2-Butene	53	8.994	8.994	(0.943)	259872	20.0000	19.486
	70 4-Chloro Toluene	91	9.048	9.053	(0.948)	2763775	20.0000	19.046
	71 T-Butyl Benzene	119	9.191	9.191	(0.963)	2749720	20.0000	19.732
	72 1,2,4-Trimethylbenzene	105	9.239	9.239	(0.968)	3301469	20.0000	18.893
	73 S-Butyl Benzene	105	9.319	9.324	(0.977)	4014177	20.0000	19.641
	74 4-Isopropyl Toluene	119	9.425	9.425	(0.988)	3454501	20.0000	19.772
	75 1,3-Dichlorobenzene	146	9.489	9.488	(0.994)	1803291	20.0000	18.357
*	76 d4-1,4-Dichlorobenzene	152	9.542	9.541	(1.000)	568291	10.0000	(Q)
	77 1,4-Dichlorobenzene	146	9.552	9.552	(1.001)	1773263	20.0000	18.418
	78 N-Butyl Benzene	91	9.744	9.743	(1.021)	3072280	20.0000	18.970

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.866	9.866	(1.034)	260215	5.00000	4.975(Q)
80 1,2-Dichlorobenzene	146	9.871	9.871	(1.035)	1617433	20.0000	18.295
81 1,2-Dibromo 3-Chloropropane	75	10.482	10.487	(1.099)	116499	20.0000	17.686
83 Hexachloro 1,3-Butadiene	225	10.982	10.981	(1.151)	464351	20.0000	19.664
84 1,2,4-Trichlorobenzene	180	11.008	11.008	(1.154)	1132211	20.0000	19.704
85 Naphthalene	128	11.269	11.268	(1.181)	2125282	20.0000	18.629
86 1,2,3-Trichlorobenzene	180	11.412	11.411	(1.196)	927458	20.0000	19.044

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251609.D
Lab Smp Id: SEE0142-CAL6
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: VSTD20
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

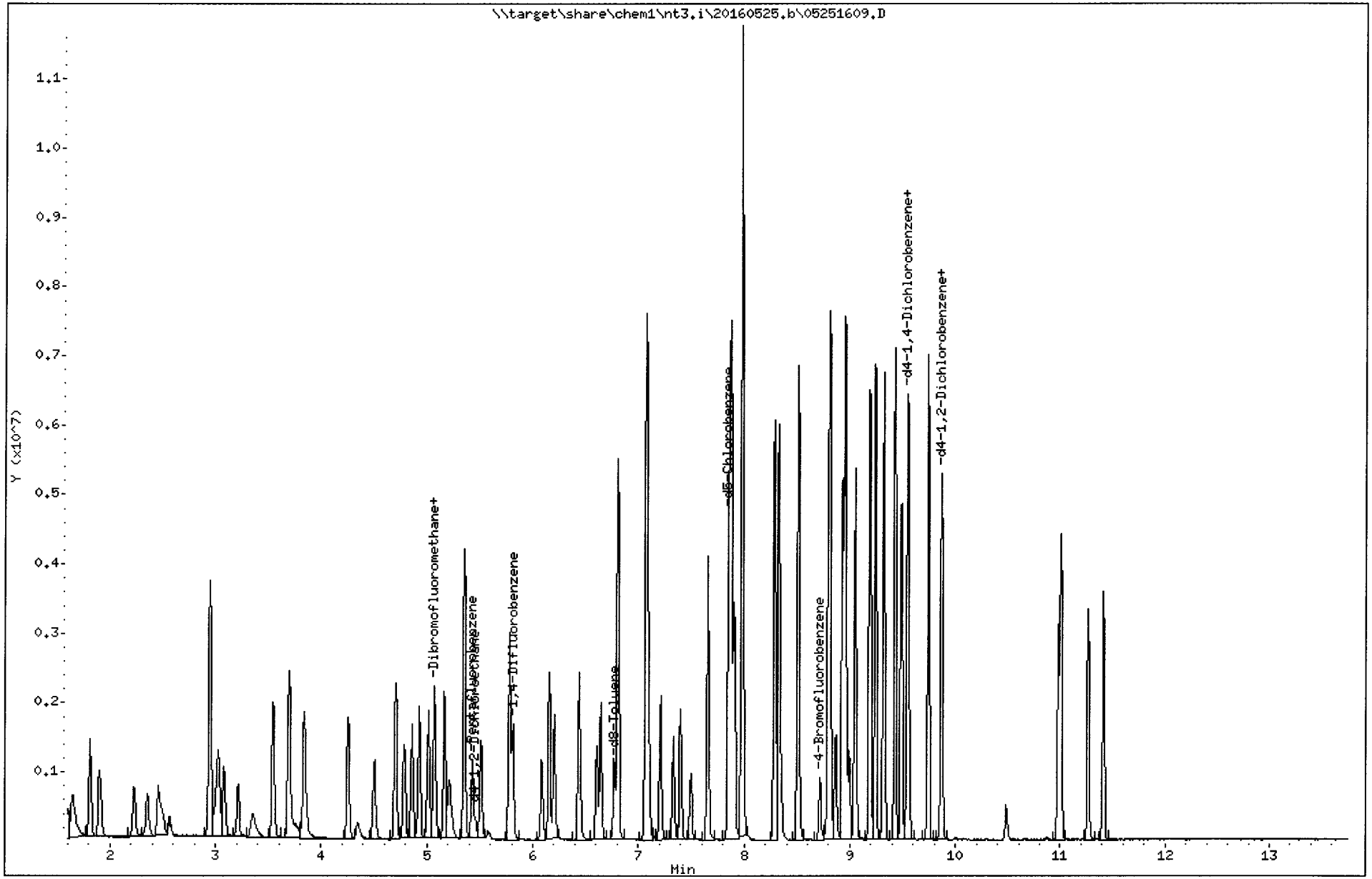
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	579151	0.18
37 1,4-Difluorobenze	994783	497392	1989566	990448	-0.44
53 d5-Chlorobenzene	985810	492905	1971620	1001872	1.63
76 d4-1,4-Dichlorobe	556120	278060	1112240	568291	2.19

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.01
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.01
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.01
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt3.i\20160525.b\05251609.D
Date : 25-MAY-2016 11:04
Client ID: VSTD20
Sample Info: SEE0142-CAL6,10,10,0,

Instrument: nt3.i
Operator: LH
Column phase: RTXVMS
Column diameter: 0.18



REVIEW SUMMARY FOR FILE - 05251609.D

Lab ID: SEE0142-CAL6
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 11:04

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251610.D
Lab Smp Id: SEE0142-CAL5 Client Smp ID: VSTD10
Inj Date : 25-MAY-2016 11:30
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-CAL5,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 16 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.645	1.646	(0.303)	482954	10.0000	9.864
173 2-Pentanone	86	6.438	6.438	(1.108)	206048	50.0000	49.639(Q)
2 Chloromethane	50	1.805	1.805	(0.333)	756113	10.0000	9.829
3 Vinyl Chloride	62	1.895	1.896	(0.349)	651823	10.0000	10.179
4 Bromomethane	94	2.225	2.225	(0.410)	257989	10.0000	9.557
5 Chloroethane	64	2.347	2.347	(0.432)	314010	10.0000	9.610
6 Trichlorofluoromethane	101	2.453	2.453	(0.452)	523397	10.0000	9.812
7 1,1-Dichloroethene	61	2.942	2.942	(0.542)	713575	10.0000	9.984
8 Carbon Disulfide	76	2.942	2.942	(0.542)	1191701	10.0000	9.852
9 112Trichloro122Trifluoroethane	101	3.022	3.022	(0.557)	355038	10.0000	9.951
10 Iodomethane	142	3.075	3.075	(0.566)	549563	10.0000	9.709
11 Bromoethane	108	3.213	3.213	(0.592)	274456	10.0000	9.776
12 Acrolein	56	3.356	3.357	(0.618)	290933	50.0000	49.218(M)
13 Methylene Chloride	84	3.548	3.548	(0.654)	351808	10.0000	9.614
14 Acetone	43	3.760	3.761	(0.693)	378485	50.0000	46.672
15 Trans-1,2-Dichloroethene	96	3.696	3.697	(0.681)	371873	10.0000	9.256
17 Methyl tert butyl ether	73	3.840	3.840	(0.707)	913520	10.0000	10.075
18 1,1-Dichloroethane	63	4.254	4.255	(0.784)	819054	10.0000	10.310
19 Acrylonitrile	53	4.350	4.349	(0.801)	145762	10.0000	10.077
20 Vinyl Acetate	43	4.504	4.504	(0.830)	848101	10.0000	10.288
22 Cis-1,2-Dichloroethene	96	4.706	4.706	(0.867)	413704	10.0000	9.628
23 2,2-Dichloropropane	77	4.786	4.786	(0.882)	442681	10.0000	11.054

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.860	4.860	(0.895)	183283	10.0000	9.761
	25 Chloroform	83	4.929	4.930	(0.908)	637160	10.0000	9.962
	26 Carbon Tetrachloride	117	5.014	5.015	(0.863)	514120	10.0000	9.977
$	27 Dibromofluoromethane	111	5.067	5.068	(0.933)	151180	5.00000	5.042
	28 1,1,1-Trichloroethane	97	5.072	5.073	(0.934)	545497	10.0000	9.736
	29 2-Butanone	43	5.216	5.216	(0.961)	831298	50.0000	51.659
	30 1,1-Dichloropropene	75	5.163	5.163	(0.888)	525369	10.0000	9.540
	31 Benzene	78	5.354	5.355	(0.921)	1525131	10.0000	10.100
*	32 Pentafluorobenzene	168	5.428	5.429	(1.000)	578118	10.0000	(Q)
$	33 d4-1,2-Dichloroethane	65	5.460	5.461	(1.006)	158014	5.00000	4.995
	34 1,2-Dichloroethane	62	5.513	5.514	(0.949)	498345	10.0000	10.025
	36 Trichloroethene	130	5.779	5.780	(0.995)	401606	10.0000	9.939
*	37 1,4-Difluorobenzene	114	5.811	5.812	(1.000)	994783	10.0000	
	38 Dibromomethane	93	6.082	6.082	(1.047)	185946	10.0000	9.594
	39 1,2-Dichloropropane	63	6.156	6.157	(1.059)	449182	10.0000	9.777(Q)
	40 Bromodichloromethane	83	6.204	6.205	(1.068)	468600	10.0000	9.971
	41 2-Chloroethyl Vinyl Ether	63	6.608	6.609	(1.137)	237477	10.0000	10.061
	42 Cis 1,3-dichloropropene	75	6.645	6.646	(1.144)	627306	10.0000	10.134
$	43 d8-Toluene	98	6.767	6.768	(1.165)	612446	5.00000	5.062
	44 Toluene	92	6.805	6.805	(1.171)	989242	10.0000	10.010(Q)
	45 4-Methyl-2-Pentanone	58	7.081	7.081	(1.219)	699970	50.0000	51.687(Q)
	46 Tetrachloroethene	166	7.070	7.071	(0.901)	388849	10.0000	9.875
	47 Trans 1,3-Dichloropropene	75	7.097	7.097	(1.221)	513929	10.0000	9.884(T)
	48 1,1,2-Trichloroethane	97	7.208	7.209	(1.240)	276034	10.0000	9.996
	49 Chlorodibromomethane	129	7.331	7.331	(0.934)	338344	10.0000	10.075
	50 1,3-Dichloropropane	76	7.400	7.400	(0.942)	499553	10.0000	10.039(Q)
	51 1,2-Dibromoethane	107	7.495	7.496	(1.290)	275992	10.0000	9.988
	52 2-Hexanone	43	7.660	7.661	(0.976)	1233086	50.0000	52.792
*	53 d5-Chlorobenzene	117	7.851	7.852	(1.000)	985810	10.0000	
	54 Chlorobenzene	112	7.862	7.862	(1.001)	1091588	10.0000	9.850
	55 Ethyl Benzene	106	7.878	7.878	(1.003)	593001	10.0000	9.875(Q)
	56 1,1,1,2-Tetrachloroethane	131	7.904	7.905	(1.007)	382375	10.0000	9.948
	57 m,p-xylene	106	7.979	7.979	(1.016)	1455674	20.0000	19.901(Q)
	58 o-Xylene	106	8.287	8.288	(1.055)	751749	10.0000	10.293(Q)
	59 Styrene	104	8.324	8.324	(1.060)	1211653	10.0000	10.102
	60 Bromoform	173	8.345	8.346	(0.875)	204139	10.0000	10.299
	61 Isopropyl Benzene	105	8.510	8.510	(0.892)	1930162	10.0000	10.421
$	62 4-Bromofluorobenzene	174	8.717	8.718	(1.110)	198378	5.00000	4.909
	63 Bromobenzene	156	8.797	8.798	(0.922)	440140	10.0000	9.544
	64 N-Propyl Benzene	91	8.813	8.814	(0.924)	2244495	10.0000	10.410
	65 1,1,2,2-Tetrachloroethane	83	8.866	8.867	(0.929)	341596	10.0000	9.951
	66 2-Chloro Toluene	91	8.930	8.930	(0.936)	1497261	10.0000	9.838
	67 1,3,5-Trimethyl Benzene	105	8.951	8.952	(0.938)	1667824	10.0000	10.177
	68 1,2,3-Trichloropropane	110	8.967	8.968	(0.940)	103711	10.0000	9.552
	69 Trans-1,4-Dichloro 2-Butene	53	8.994	8.994	(0.943)	129282	10.0000	9.906
	70 4-Chloro Toluene	91	9.052	9.053	(0.949)	1425887	10.0000	10.041
	71 T-Butyl Benzene	119	9.190	9.191	(0.963)	1406637	10.0000	10.315
	72 1,2,4-Trimethylbenzene	105	9.238	9.239	(0.968)	1670561	10.0000	9.769
	73 S-Butyl Benzene	105	9.323	9.324	(0.977)	2056645	10.0000	10.283
	74 4-Isopropyl Toluene	119	9.424	9.425	(0.988)	1750419	10.0000	10.238
	75 1,3-Dichlorobenzene	146	9.488	9.488	(0.994)	901705	10.0000	9.380
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	556120	10.0000	(Q)
	77 1,4-Dichlorobenzene	146	9.552	9.552	(1.001)	893187	10.0000	9.480
	78 N-Butyl Benzene	91	9.743	9.743	(1.021)	1547398	10.0000	9.763

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.865	9.866	(1.034)	257939	5.00000	5.039(Q)
80 1,2-Dichlorobenzene	146	9.870	9.871	(1.035)	815337	10.0000	9.424
81 1,2-Dibromo 3-Chloropropane	75	10.487	10.487	(1.099)	63532	10.0000	9.856
83 Hexachloro 1,3-Butadiene	225	10.981	10.981	(1.151)	226253	10.0000	9.791
84 1,2,4-Trichlorobenzene	180	11.007	11.008	(1.154)	564562	10.0000	10.040
85 Naphthalene	128	11.268	11.268	(1.181)	1094744	10.0000	9.806
86 1,2,3-Trichlorobenzene	180	11.411	11.411	(1.196)	476704	10.0000	10.003

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251610.D
Lab Smp Id: SEE0142-CAL5
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: VSTD10
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	578118	0.00
37 1,4-Difluorobenze	994783	497392	1989566	994783	0.00
53 d5-Chlorobenzene	985810	492905	1971620	985810	0.00
76 d4-1,4-Dichlorobe	556120	278060	1112240	556120	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.00
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.00
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.00
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.00

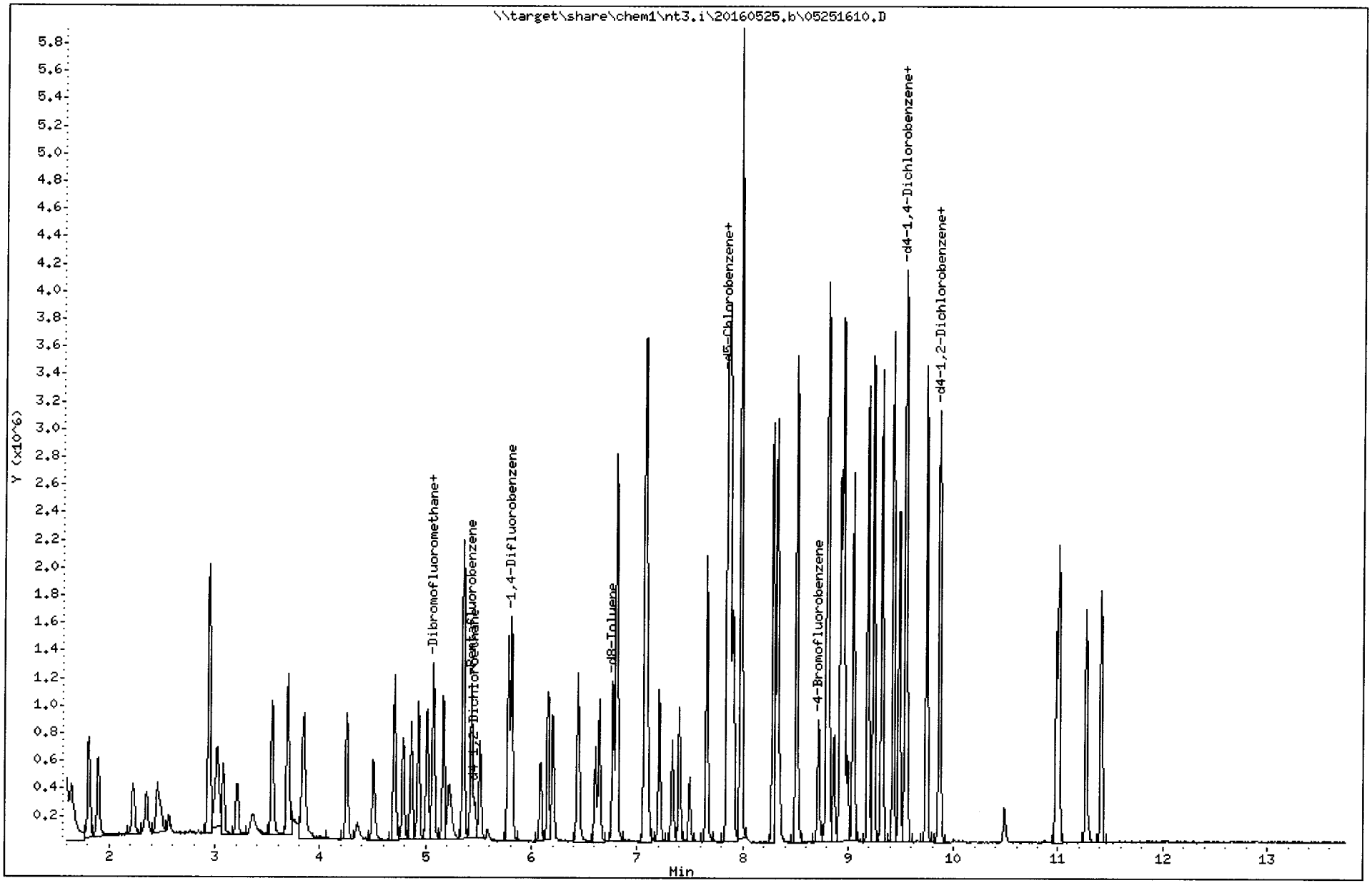
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt3.i\20160525.b\05251610.D
Date : 25-MAY-2016 11:30
Client ID: VSTD10
Sample Info: SEE0142-CAL5,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

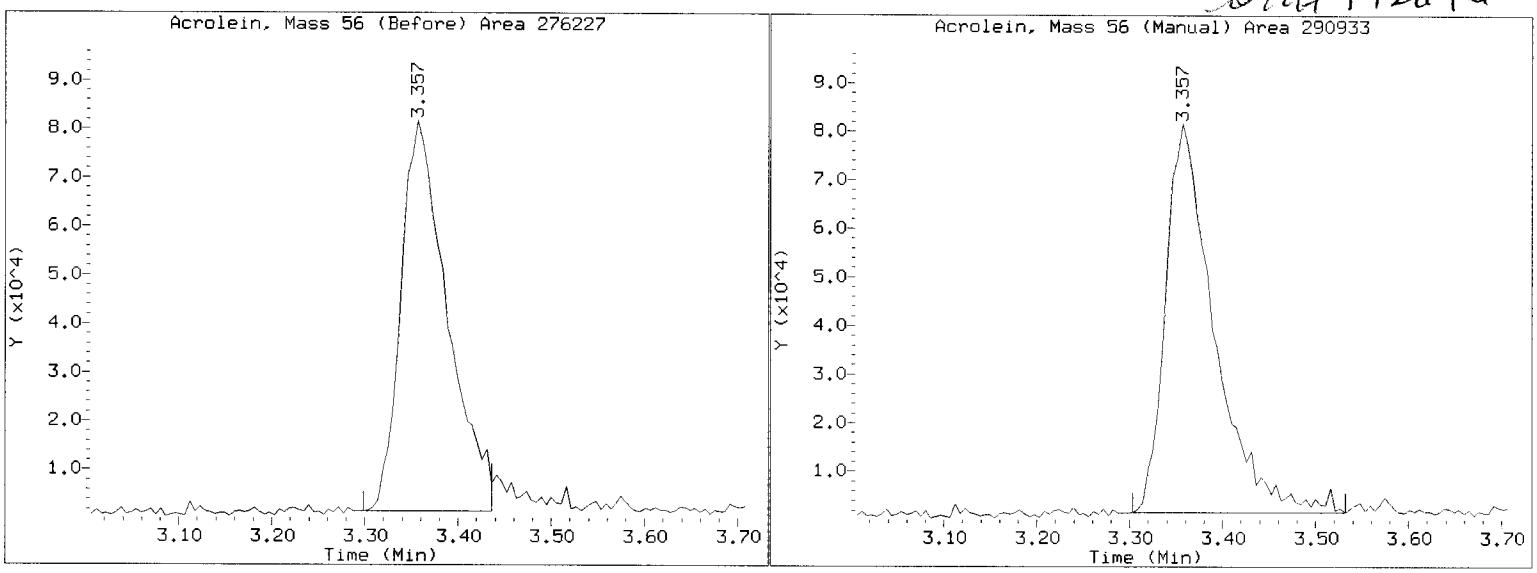
Column phase: RTXVMS



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem1/nt3.i/20160525.b/05251610.D
Injection Date: 25-MAY-2016 11:30
Lab ID:SEE0142-CAL5 Client ID:VSTD10
Report Date: 05/26/2016 08:01

DMH 5/26/16



REVIEW SUMMARY FOR FILE - 05251610.D

Lab ID: SEE0142-CAL5
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 11:30

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

5/26/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251611.D
Lab Smp Id: SEE0142-CAL4 Client Smp ID: VSTD02
Inj Date : 25-MAY-2016 11:57
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-CAL4,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 17 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.641	1.646	(0.302)	93977	2.00000	1.938(M)
173	2-Pentanone	86	6.439	6.438	(1.108)	44385	10.0000	10.830(Q)
2	Chloromethane	50	1.806	1.805	(0.333)	149790	2.00000	1.966
3	Vinyl Chloride	62	1.896	1.896	(0.349)	120799	2.00000	1.905
4	Bromomethane	94	2.226	2.225	(0.410)	51371	2.00000	1.921
5	Chloroethane	64	2.359	2.347	(0.434)	61055	2.00000	1.887
6	Trichlorofluoromethane	101	2.460	2.453	(0.453)	100347	2.00000	1.900
7	1,1-Dichloroethene	61	2.938	2.942	(0.541)	133636	2.00000	1.888
8	Carbon Disulfide	76	2.949	2.942	(0.543)	239249	2.00000	1.997
9	112Trichloro122Trifluoroethane	101	3.018	3.022	(0.556)	65527	2.00000	1.855
10	Iodomethane	142	3.076	3.075	(0.567)	107464	2.00000	1.917
11	Bromoethane	108	3.209	3.213	(0.591)	52289	2.00000	1.881
12	Acrolein	56	3.363	3.357	(0.619)	60835	10.0000	10.392
13	Methylene Chloride	84	3.544	3.548	(0.653)	76795	2.00000	2.119
14	Acetone	43	3.756	3.761	(0.692)	90324	10.0000	11.247(M)
15	Trans-1,2-Dichloroethene	96	3.698	3.697	(0.681)	75913	2.00000	1.908
17	Methyl tert butyl ether	73	3.846	3.840	(0.708)	188185	2.00000	2.096
18	1,1-Dichloroethane	63	4.256	4.255	(0.784)	158771	2.00000	2.018
19	Acrylonitrile	53	4.351	4.349	(0.801)	31876	2.00000	2.225(M)
20	Vinyl Acetate	43	4.505	4.504	(0.830)	163803	2.00000	2.006
22	Cis-1,2-Dichloroethene	96	4.707	4.706	(0.867)	85371	2.00000	2.006
23	2,2-Dichloropropane	77	4.782	4.786	(0.881)	82097	2.00000	2.070

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.861	4.860	(0.895)	33820	2.00000	1.819
	25 Chloroform	83	4.925	4.930	(0.907)	130550	2.00000	2.061
	26 Carbon Tetrachloride	117	5.010	5.015	(0.862)	100670	2.00000	1.979
$	27 Dibromofluoromethane	111	5.063	5.068	(0.932)	153537	5.00000	5.171
	28 1,1,1-Trichloroethane	97	5.074	5.073	(0.934)	108145	2.00000	1.949
	29 2-Butanone	43	5.212	5.216	(0.960)	163490	10.0000	10.259
	30 1,1-Dichloropropene	75	5.164	5.163	(0.888)	110669	2.00000	2.035
	31 Benzene	78	5.355	5.355	(0.921)	300721	2.00000	2.017
*	32 Pentafluorobenzene	168	5.430	5.429	(1.000)	572545	10.0000	(Q)
$	33 d4-1,2-Dichloroethane	65	5.462	5.461	(1.006)	156245	5.00000	4.987
	34 1,2-Dichloroethane	62	5.510	5.514	(0.948)	99321	2.00000	2.024
	36 Trichloroethene	130	5.781	5.780	(0.995)	77113	2.00000	1.933(Q)
*	37 1,4-Difluorobenzene	114	5.812	5.812	(1.000)	982229	10.0000	
	38 Dibromomethane	93	6.083	6.082	(1.047)	35297	2.00000	1.844
	39 1,2-Dichloropropane	63	6.152	6.157	(1.059)	86435	2.00000	1.905(Q)
	40 Bromodichloromethane	83	6.200	6.205	(1.067)	93529	2.00000	2.015
	41 2-Chloroethyl Vinyl Ether	63	6.609	6.609	(1.137)	44958	2.00000	1.929
	42 Cis 1,3-dichloropropene	75	6.641	6.646	(1.143)	118083	2.00000	1.932
$	43 d8-Toluene	98	6.769	6.768	(1.165)	596783	5.00000	4.995
	44 Toluene	92	6.806	6.805	(1.171)	192718	2.00000	1.975
	45 4-Methyl-2-Pentanone	58	7.082	7.081	(1.218)	137841	10.0000	10.309(Q)
	46 Tetrachloroethene	166	7.066	7.071	(0.900)	74811	2.00000	1.905
	47 Trans 1,3-Dichloropropene	75	7.098	7.097	(1.221)	102250	2.00000	1.992(T)
	48 1,1,2-Trichloroethane	97	7.210	7.209	(1.240)	52698	2.00000	1.933
	49 Chlorodibromomethane	129	7.327	7.331	(0.934)	61921	2.00000	1.849
	50 1,3-Dichloropropane	76	7.396	7.400	(0.942)	98016	2.00000	1.975
	51 1,2-Dibromoethane	107	7.497	7.496	(1.290)	49973	2.00000	1.832
	52 2-Hexanone	43	7.656	7.661	(0.976)	247301	10.0000	10.617
*	53 d5-Chlorobenzene	117	7.847	7.852	(1.000)	983075	10.0000	
	54 Chlorobenzene	112	7.863	7.862	(1.002)	213654	2.00000	1.933
	55 Ethyl Benzene	106	7.879	7.878	(1.004)	115154	2.00000	1.923(Q)
	56 1,1,1,2-Tetrachloroethane	131	7.911	7.905	(1.008)	75124	2.00000	1.960
	57 m,p-xylene	106	7.980	7.979	(1.017)	289102	4.00000	3.963(Q)
	58 o-Xylene	106	8.288	8.288	(1.056)	133559	2.00000	1.834(Q)
	59 Styrene	104	8.326	8.324	(1.061)	231317	2.00000	1.934
	60 Bromoform	173	8.347	8.346	(0.875)	35782	2.00000	1.830(M)
	61 Isopropyl Benzene	105	8.512	8.510	(0.892)	379536	2.00000	2.077
$	62 4-Bromofluorobenzene	174	8.719	8.718	(1.111)	198092	5.00000	4.915
	63 Bromobenzene	156	8.799	8.798	(0.922)	90013	2.00000	1.979
	64 N-Propyl Benzene	91	8.809	8.814	(0.923)	434045	2.00000	2.041
	65 1,1,2,2-Tetrachloroethane	83	8.862	8.867	(0.929)	64609	2.00000	1.908(M)
	66 2-Chloro Toluene	91	8.926	8.930	(0.935)	300171	2.00000	1.999
	67 1,3,5-Trimethyl Benzene	105	8.953	8.952	(0.938)	322021	2.00000	1.992
	68 1,2,3-Trichloropropane	110	8.969	8.968	(0.940)	19651	2.00000	1.835
	69 Trans-1,4-Dichloro 2-Butene	53	8.995	8.994	(0.943)	28394	2.00000	2.206(Q)
	70 4-Chloro Toluene	91	9.048	9.053	(0.948)	279188	2.00000	1.993
	71 T-Butyl Benzene	119	9.192	9.191	(0.963)	275621	2.00000	2.049
	72 1,2,4-Trimethylbenzene	105	9.240	9.239	(0.968)	323415	2.00000	1.917
	73 S-Butyl Benzene	105	9.319	9.324	(0.977)	410910	2.00000	2.083
	74 4-Isopropyl Toluene	119	9.425	9.425	(0.988)	350047	2.00000	2.076
	75 1,3-Dichlorobenzene	146	9.489	9.488	(0.994)	180431	2.00000	1.903
*	76 d4-1,4-Dichlorobenzene	152	9.542	9.541	(1.000)	548573	10.0000	(Q)
	77 1,4-Dichlorobenzene	146	9.553	9.552	(1.001)	177921	2.00000	1.914(Q)
	78 N-Butyl Benzene	91	9.744	9.743	(1.021)	304714	2.00000	1.949

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.861	9.866	(1.033)	250572	5.00000	4.963(Q)
80 1,2-Dichlorobenzene	146	9.872	9.871	(1.035)	165409	2.00000	1.938
81 1,2-Dibromo 3-Chloropropane	75	10.483	10.487	(1.099)	13591	2.00000	2.137
83 Hexachloro 1,3-Butadiene	225	10.982	10.981	(1.151)	49372	2.00000	2.166
84 1,2,4-Trichlorobenzene	180	11.009	11.008	(1.154)	118950	2.00000	2.145
85 Naphthalene	128	11.269	11.268	(1.181)	245202	2.00000	2.227
86 1,2,3-Trichlorobenzene	180	11.413	11.411	(1.196)	103012	2.00000	2.191

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251611.D
Lab Smp Id: SEE0142-CAL4
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: VSTD02
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	572545	-0.96
37 1,4-Difluorobenze	994783	497392	1989566	982229	-1.26
53 d5-Chlorobenzene	985810	492905	1971620	983075	-0.28
76 d4-1,4-Dichlorobe	556120	278060	1112240	548573	-1.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.03
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.02
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	-0.05
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.01

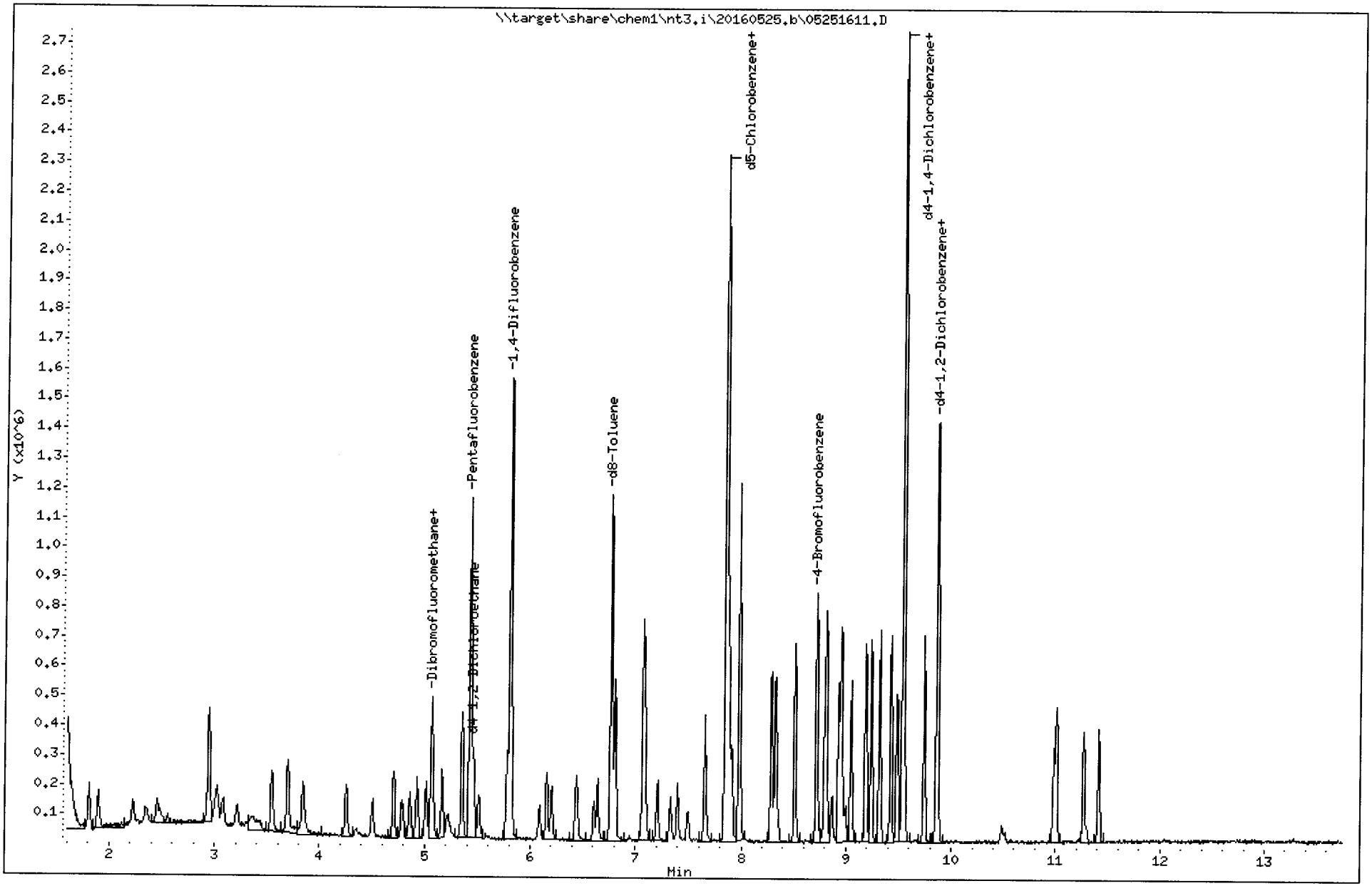
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt3.i\20160525.b\05251611.D
Date : 25-MAY-2016 11:57
Client ID: VSTD02
Sample Info: SEE0142-CAL4,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



Quant Ion Manual Peak Adjustment Report

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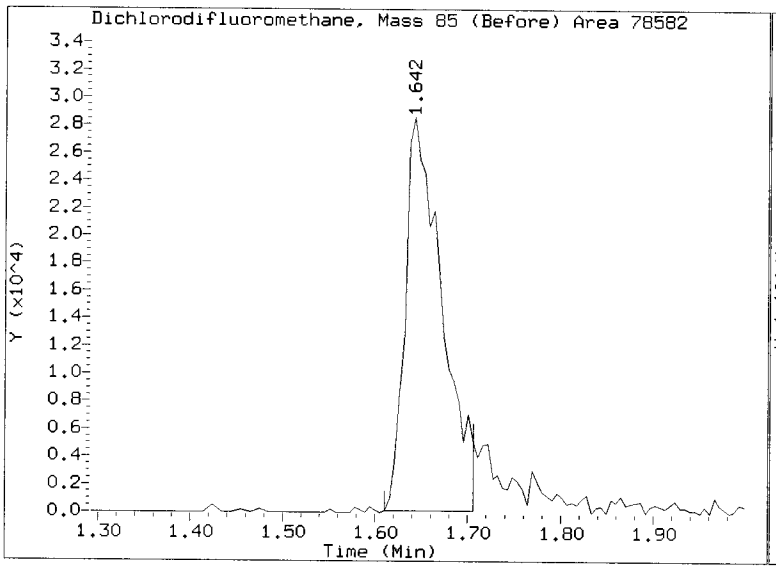
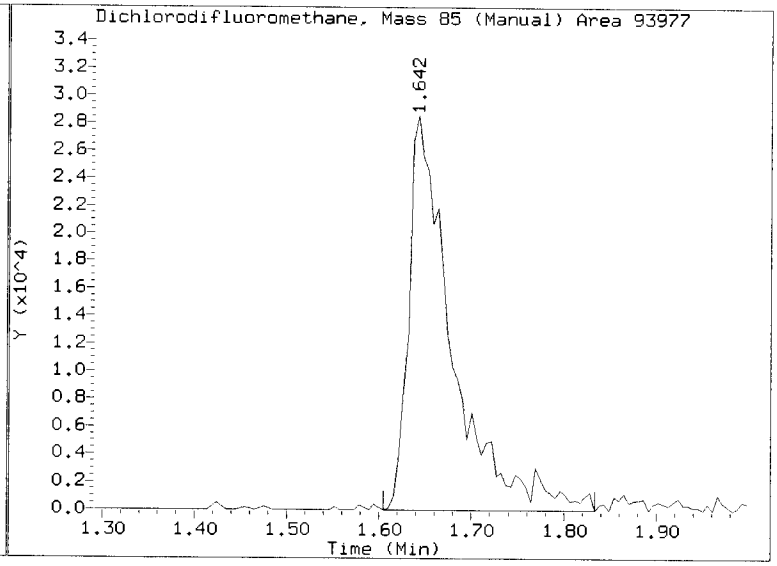
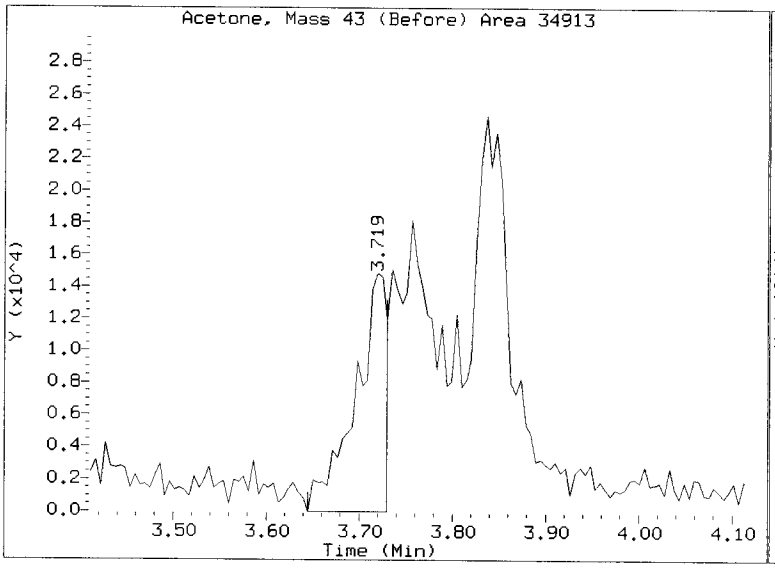
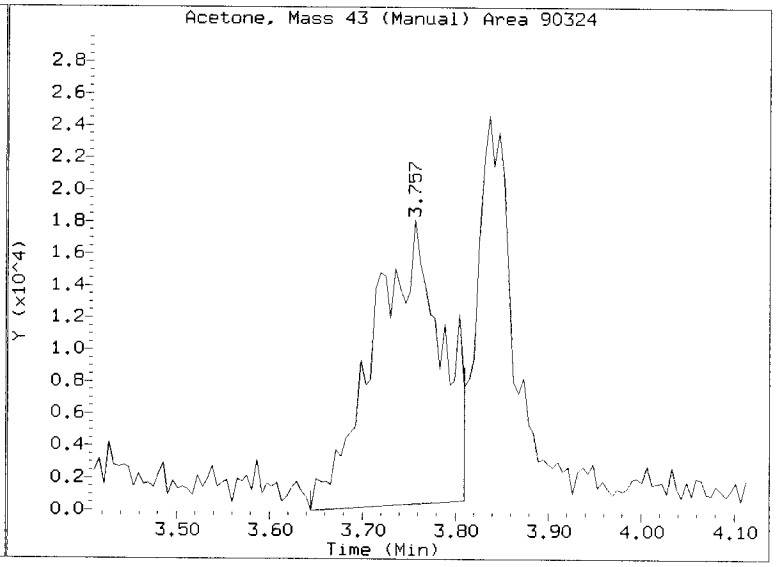
Injection Date: 25-MAY-2016 11:57
Lab ID:SEE0142-CAL4 Client ID:VSTD02
Report Date: 05/26/2016 08:01

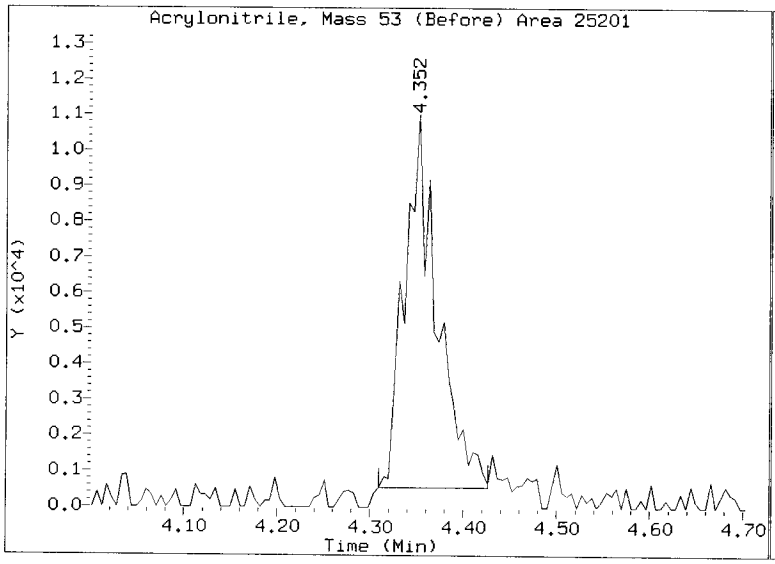
5/26/16

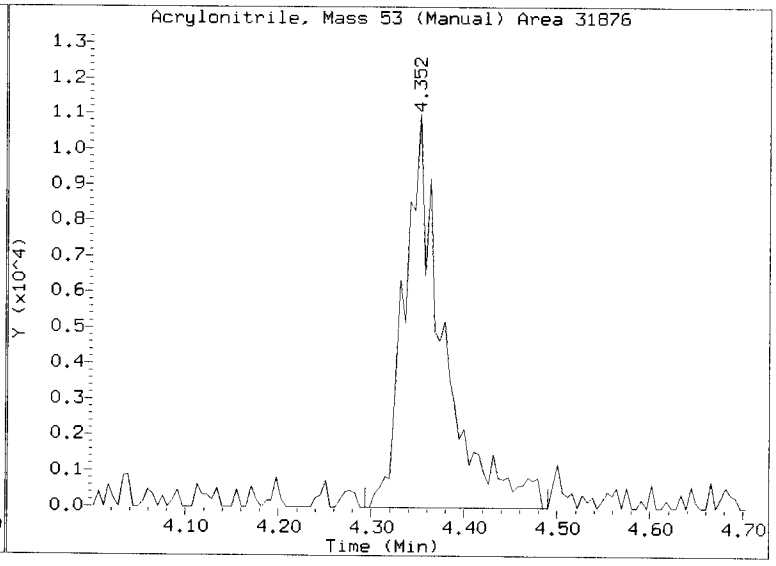








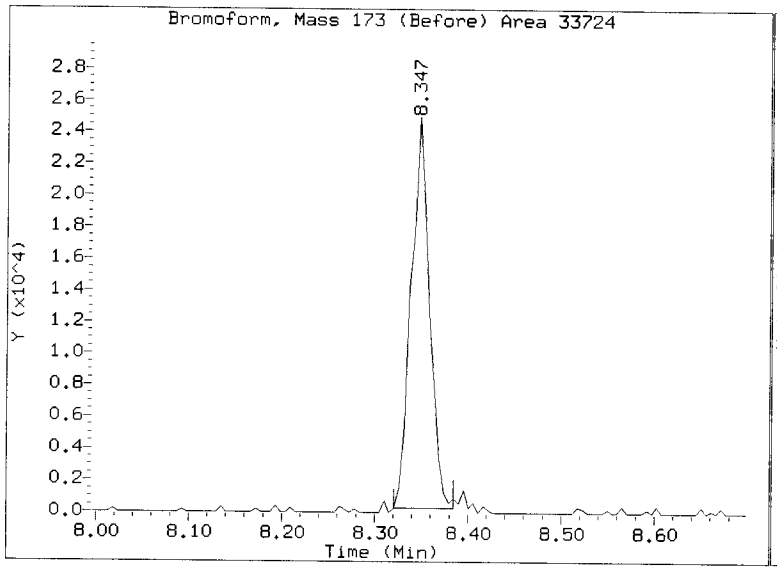


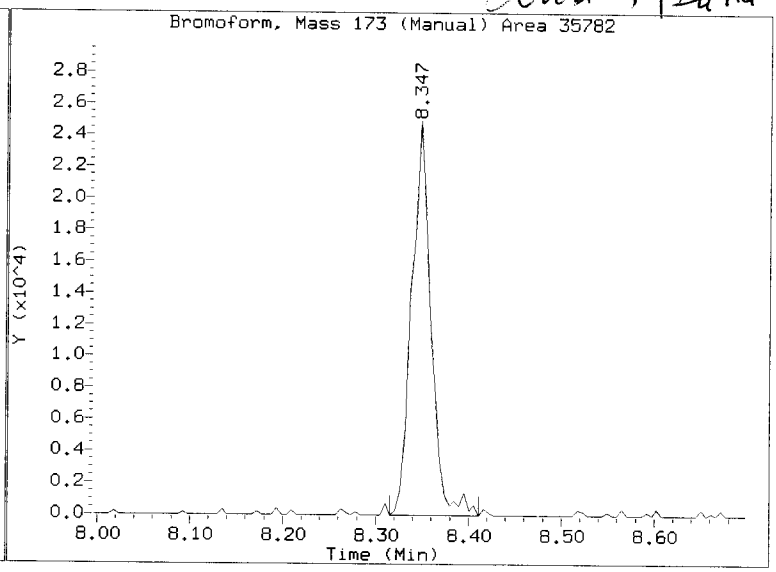


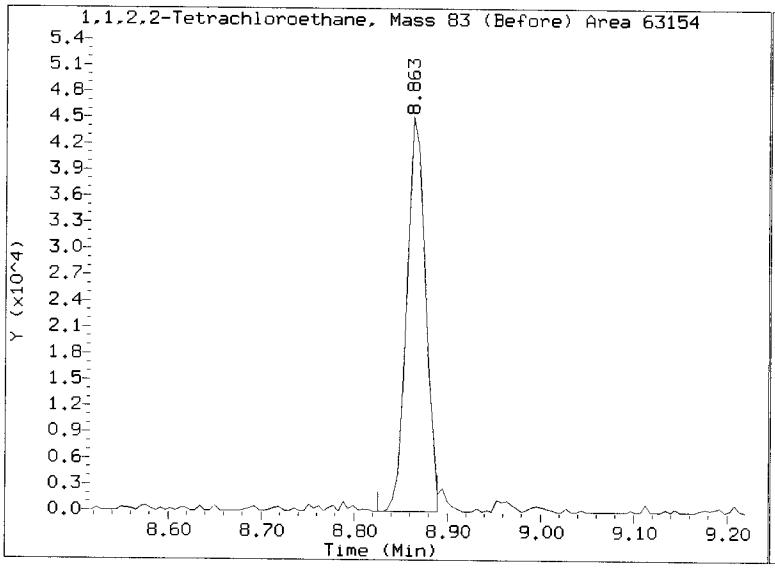
Quant Ion Manual Peak Adjustment Report

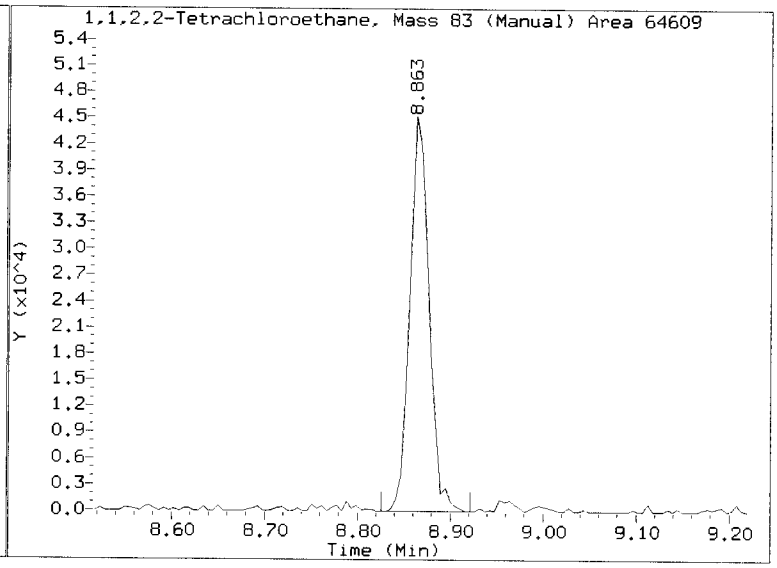
Datafile: //target/share/chem1/nt3.i/20160525.b/05251611.D
Injection Date: 25-MAY-2016 11:57
Lab ID:SEE0142-CAL4 Client ID:VSTD02
Report Date: 05/26/2016 08:01

DQH 5/26/16









REVIEW SUMMARY FOR FILE - 05251611.D

Lab ID: SEE0142-CAL4
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 11:57

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251612.D
Lab Smp Id: SEE0142-CAL3 Client Smp ID: VSTD01
Inj Date : 25-MAY-2016 12:23
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-CAL3,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 18 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.646	1.646	(0.303)	46862	1.00000	0.9382(M)
173 2-Pentanone	86	6.439	6.438	(1.108)	22435	5.00000	5.455(Q)
2 Chloromethane	50	1.805	1.805	(0.333)	81755	1.00000	1.042
3 Vinyl Chloride	62	1.890	1.896	(0.348)	61891	1.00000	0.9473
4 Bromomethane	94	2.220	2.225	(0.409)	28962	1.00000	1.052
5 Chloroethane	64	2.347	2.347	(0.432)	33284	1.00000	0.9984(M)
6 Trichlorofluoromethane	101	2.454	2.453	(0.452)	48375	1.00000	0.8889(Q)
7 1,1-Dichloroethene	61	2.937	2.942	(0.541)	72085	1.00000	0.9886
8 Carbon Disulfide	76	2.948	2.942	(0.543)	121888	1.00000	0.9877
9 112Trichloro122Trifluoroethane	101	3.028	3.022	(0.558)	33572	1.00000	0.9223
10 Iodomethane	142	3.075	3.075	(0.566)	60458	1.00000	1.047(M)
11 Bromoethane	108	3.208	3.213	(0.591)	27273	1.00000	0.9521
12 Acrolein	56	3.341	3.357	(0.615)	33131	5.00000	5.494(QM)
13 Methylene Chloride	84	3.543	3.548	(0.653)	40067	1.00000	1.073
14 Acetone	43	3.729	3.761	(0.687)	50127	5.00000	6.059(QM)
15 Trans-1,2-Dichloroethene	96	3.697	3.697	(0.681)	42761	1.00000	1.043
17 Methyl tert butyl ether	73	3.840	3.840	(0.707)	101480	1.00000	1.097
18 1,1-Dichloroethane	63	4.255	4.255	(0.784)	77104	1.00000	0.9513
19 Acrylonitrile	53	4.340	4.349	(0.799)	16222	1.00000	1.099(M)
20 Vinyl Acetate	43	4.505	4.504	(0.830)	82769	1.00000	0.9841
22 Cis-1,2-Dichloroethene	96	4.701	4.706	(0.866)	45681	1.00000	1.042
23 2,2-Dichloropropane	77	4.781	4.786	(0.881)	46610	1.00000	1.141

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	24 Bromochloromethane	128	4.861	4.860	(0.895)	20394	1.00000	1.065(Q)
	25 Chloroform	83	4.930	4.930	(0.908)	65078	1.00000	0.9973
	26 Carbon Tetrachloride	117	5.015	5.015	(0.863)	48407	1.00000	0.9480
$	27 Dibromofluoromethane	111	5.063	5.068	(0.932)	151229	5.00000	4.944
	28 1,1,1-Trichloroethane	97	5.073	5.073	(0.934)	54851	1.00000	0.9596
	29 2-Butanone	43	5.211	5.216	(0.960)	85280	5.00000	5.194
	30 1,1-Dichloropropene	75	5.163	5.163	(0.888)	53876	1.00000	0.9873
	31 Benzene	78	5.349	5.355	(0.920)	158946	1.00000	1.062
*	32 Pentafluorobenzene	168	5.429	5.429	(1.000)	589813	10.0000	(Q)
$	33 d4-1,2-Dichloroethane	65	5.461	5.461	(1.006)	162430	5.00000	5.033
	34 1,2-Dichloroethane	62	5.509	5.514	(0.948)	50691	1.00000	1.029
	36 Trichloroethene	130	5.780	5.780	(0.995)	42153	1.00000	1.053
*	37 1,4-Difluorobenzene	114	5.812	5.812	(1.000)	985687	10.0000	
	38 Dibromomethane	93	6.083	6.082	(1.047)	20283	1.00000	1.056
	39 1,2-Dichloropropane	63	6.157	6.157	(1.059)	46500	1.00000	1.021(Q)
	40 Bromodichloromethane	83	6.200	6.205	(1.067)	46933	1.00000	1.008
	41 2-Chloroethyl Vinyl Ether	63	6.603	6.609	(1.136)	23778	1.00000	1.017
	42 Cis 1,3-dichloropropene	75	6.641	6.646	(1.143)	62285	1.00000	1.016
$	43 d8-Toluene	98	6.768	6.768	(1.165)	582105	5.00000	4.856
	44 Toluene	92	6.805	6.805	(1.171)	105703	1.00000	1.079
	45 4-Methyl-2-Pentanone	58	7.082	7.081	(1.218)	71768	5.00000	5.348(Q)
	46 Tetrachloroethene	166	7.066	7.071	(0.900)	40583	1.00000	1.044
	47 Trans 1,3-Dichloropropene	75	7.098	7.097	(1.221)	54286	1.00000	1.054(T)
	48 1,1,2-Trichloroethane	97	7.204	7.209	(1.240)	28070	1.00000	1.026
	49 Chlorodibromomethane	129	7.326	7.331	(0.933)	33562	1.00000	1.013
	50 1,3-Dichloropropane	76	7.395	7.400	(0.942)	53900	1.00000	1.097
	51 1,2-Dibromoethane	107	7.496	7.496	(1.290)	29394	1.00000	1.074
	52 2-Hexanone	43	7.655	7.661	(0.975)	127700	5.00000	5.539
*	53 d5-Chlorobenzene	117	7.852	7.852	(1.000)	972977	10.0000	
	54 Chlorobenzene	112	7.863	7.862	(1.001)	116147	1.00000	1.062
	55 Ethyl Benzene	106	7.879	7.878	(1.003)	60047	1.00000	1.013(Q)
	56 1,1,1,2-Tetrachloroethane	131	7.905	7.905	(1.007)	36274	1.00000	0.9562
	57 m,p-xylene	106	7.980	7.979	(1.016)	152769	2.00000	2.116(Q)
	58 o-Xylene	106	8.282	8.288	(1.055)	75657	1.00000	1.050(Q)
	59 Styrene	104	8.325	8.324	(1.060)	122378	1.00000	1.034
	60 Bromoform	173	8.346	8.346	(0.875)	21051	1.00000	1.078
	61 Isopropyl Benzene	105	8.511	8.510	(0.892)	191996	1.00000	1.052
$	62 4-Bromofluorobenzene	174	8.718	8.718	(1.110)	204917	5.00000	5.137
	63 Bromobenzene	156	8.798	8.798	(0.922)	47591	1.00000	1.047
	64 N-Propyl Benzene	91	8.808	8.814	(0.923)	232130	1.00000	1.093
	65 1,1,2,2-Tetrachloroethane	83	8.862	8.867	(0.929)	38727	1.00000	1.145
	66 2-Chloro Toluene	91	8.925	8.930	(0.935)	153523	1.00000	1.024
	67 1,3,5-Trimethyl Benzene	105	8.952	8.952	(0.938)	178020	1.00000	1.103
	68 1,2,3-Trichloropropane	110	8.968	8.968	(0.940)	13797	1.00000	1.290(Q)
	69 Trans-1,4-Dichloro 2-Butene	53	9.000	8.994	(0.943)	12995	1.00000	1.011(Q)
	70 4-Chloro Toluene	91	9.048	9.053	(0.948)	146210	1.00000	1.045
	71 T-Butyl Benzene	119	9.186	9.191	(0.963)	142660	1.00000	1.062
	72 1,2,4-Trimethylbenzene	105	9.239	9.239	(0.968)	168831	1.00000	1.002
	73 S-Butyl Benzene	105	9.319	9.324	(0.977)	214296	1.00000	1.088
	74 4-Isopropyl Toluene	119	9.425	9.425	(0.988)	174660	1.00000	1.037
	75 1,3-Dichlorobenzene	146	9.483	9.488	(0.994)	96520	1.00000	1.019
*	76 d4-1,4-Dichlorobenzene	152	9.542	9.541	(1.000)	547882	10.0000	(Q)
	77 1,4-Dichlorobenzene	146	9.552	9.552	(1.001)	91469	1.00000	0.9854(Q)
	78 N-Butyl Benzene	91	9.744	9.743	(1.021)	159886	1.00000	1.024

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.860	9.866	(1.033)	248100	5.00000	4.920(Q)
80 1,2-Dichlorobenzene	146	9.871	9.871	(1.035)	84768	1.00000	0.9945
81 1,2-Dibromo 3-Chloropropane	75	10.487	10.487	(1.099)	6424	1.00000	1.012
83 Hexachloro 1,3-Butadiene	225	10.982	10.981	(1.151)	23800	1.00000	1.045
84 1,2,4-Trichlorobenzene	180	11.008	11.008	(1.154)	58379	1.00000	1.054
85 Naphthalene	128	11.263	11.268	(1.180)	123410	1.00000	1.122
86 1,2,3-Trichlorobenzene	180	11.412	11.411	(1.196)	55013	1.00000	1.172

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251612.D
Lab Smp Id: SEE0142-CAL3
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: VSTD01
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	589813	2.02
37 1,4-Difluorobenze	994783	497392	1989566	985687	-0.91
53 d5-Chlorobenzene	985810	492905	1971620	972977	-1.30
76 d4-1,4-Dichlorobe	556120	278060	1112240	547882	-1.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.01
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.01
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.01
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.01

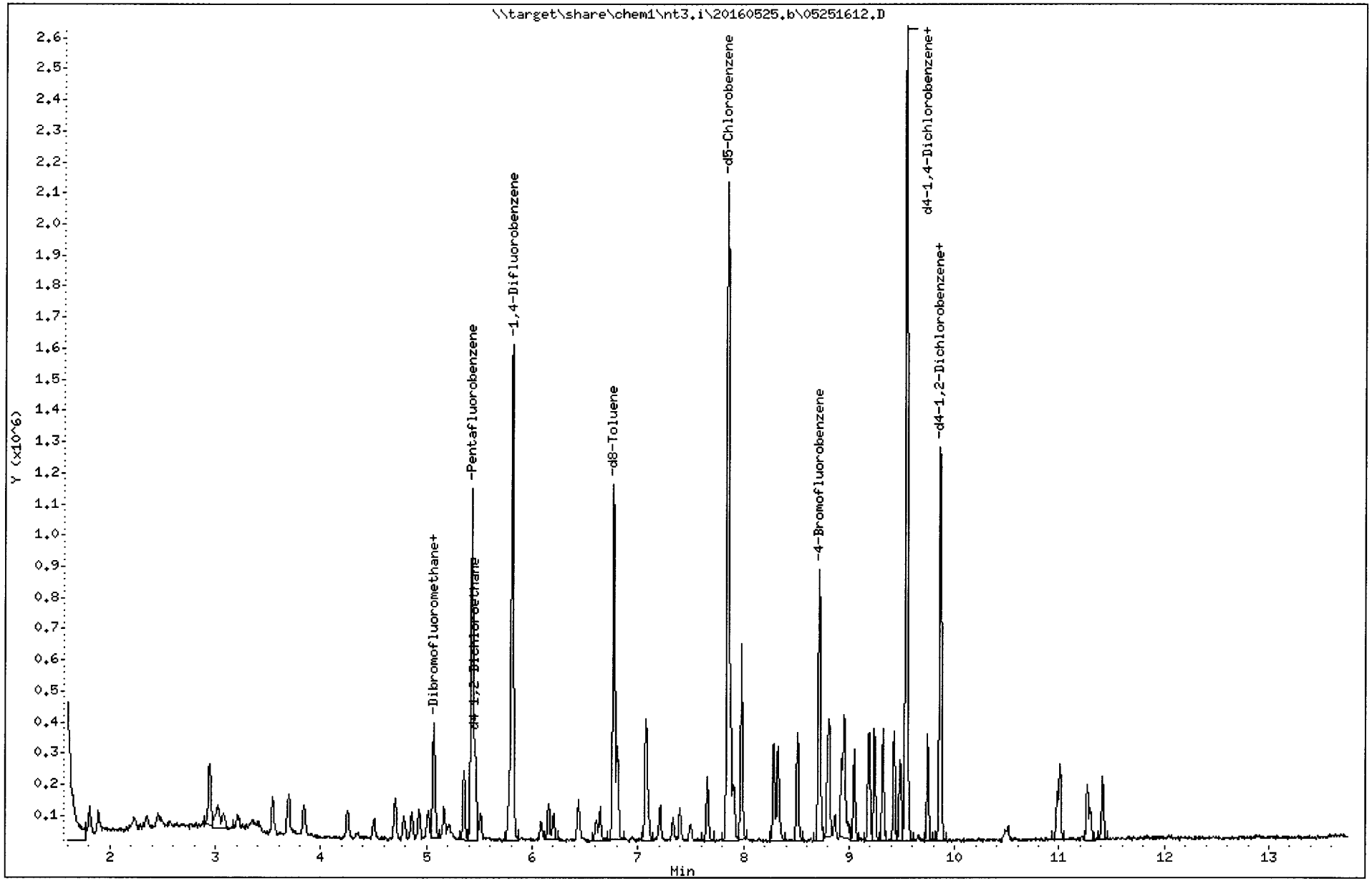
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt3.i\20160525.b\05251612.D
Date : 25-MAY-2016 12:23
Client ID: VSTD01
Sample Info: SEE0142-CAL3,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

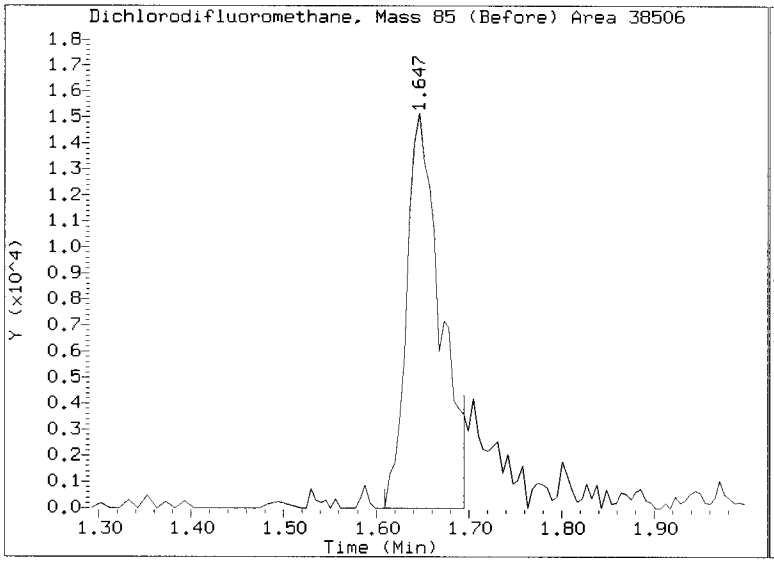
Column phase: RTXVMS

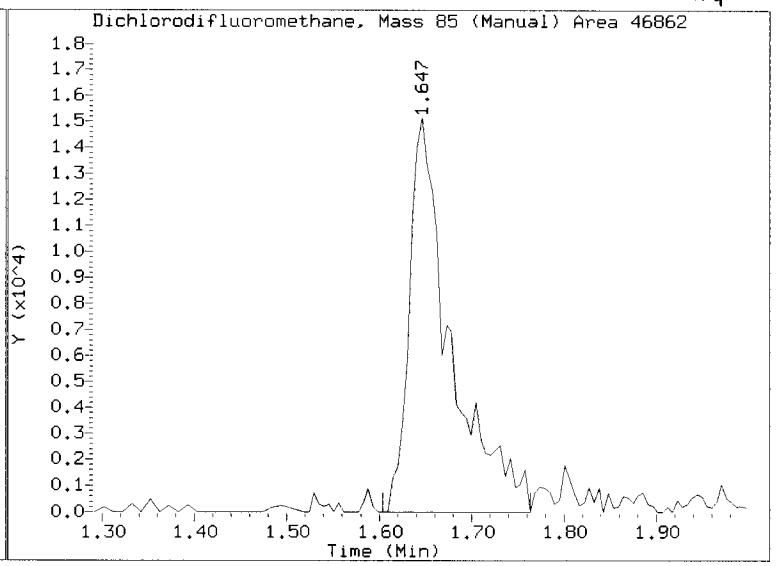


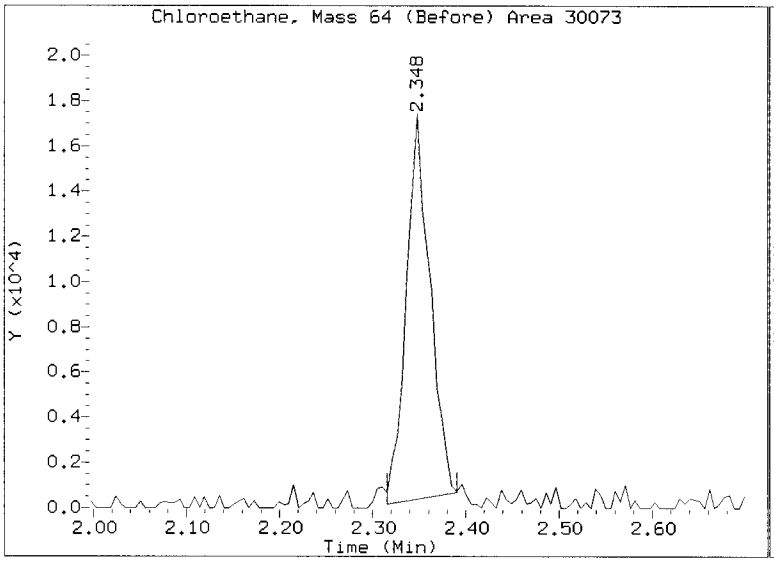
Quant Ion Manual Peak Adjustment Report

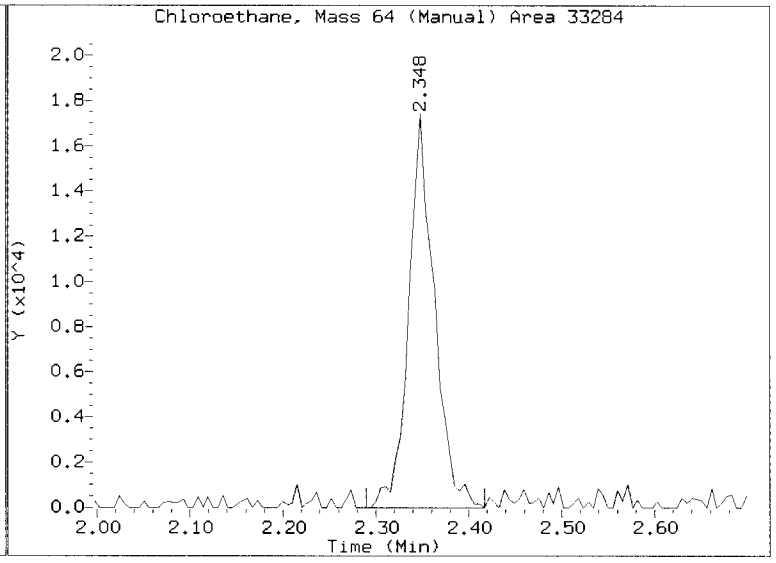
Datafile: //target/share/chem1/nt3.i/20160525.b/05251612.D
Injection Date: 25-MAY-2016 12:23
Lab ID:SEE0142-CAL3 Client ID:VSTD01
Report Date: 05/26/2016 08:01

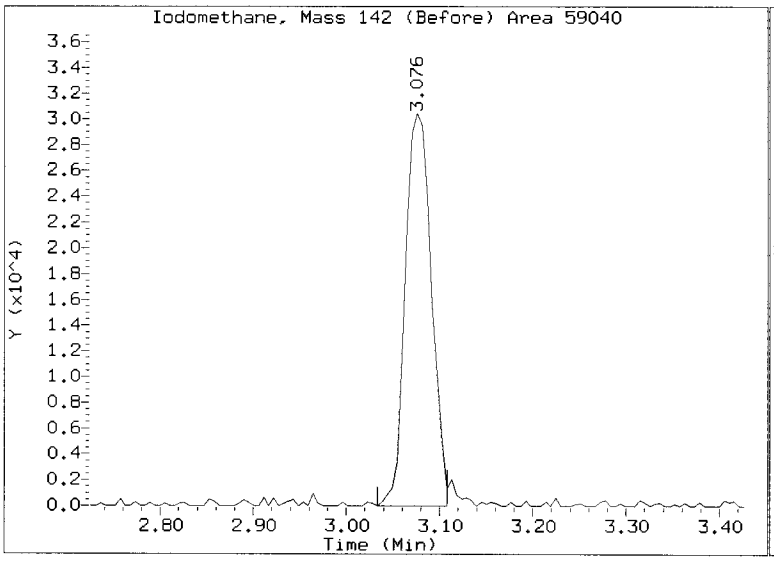
Quant 5/26/16

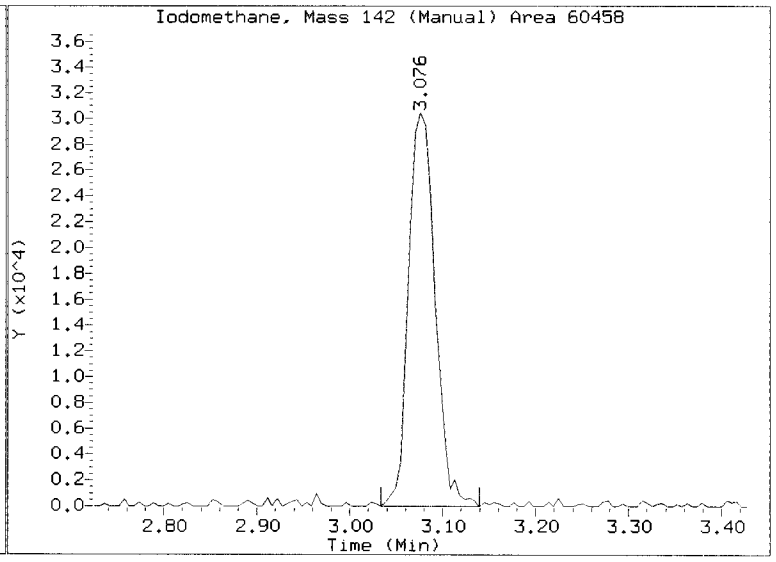






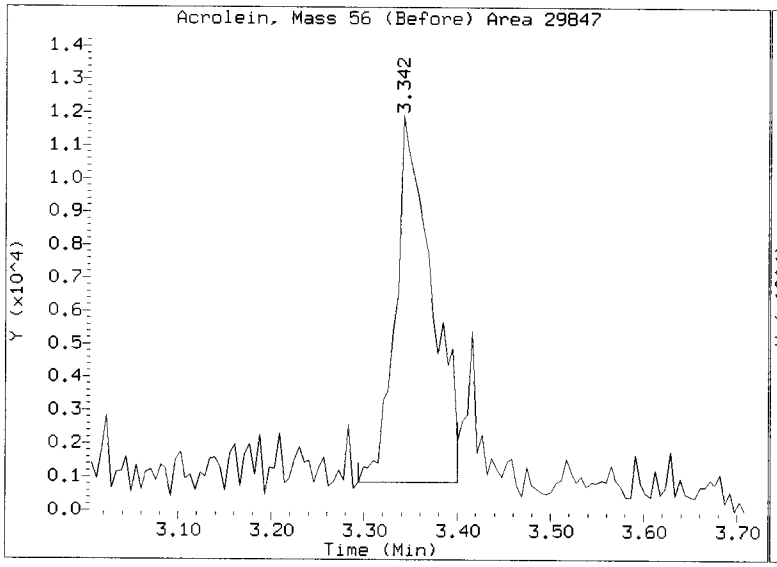


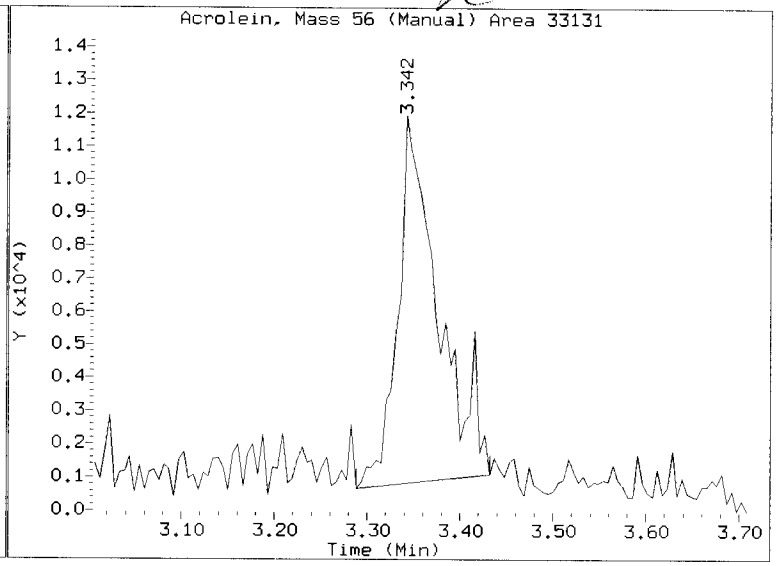


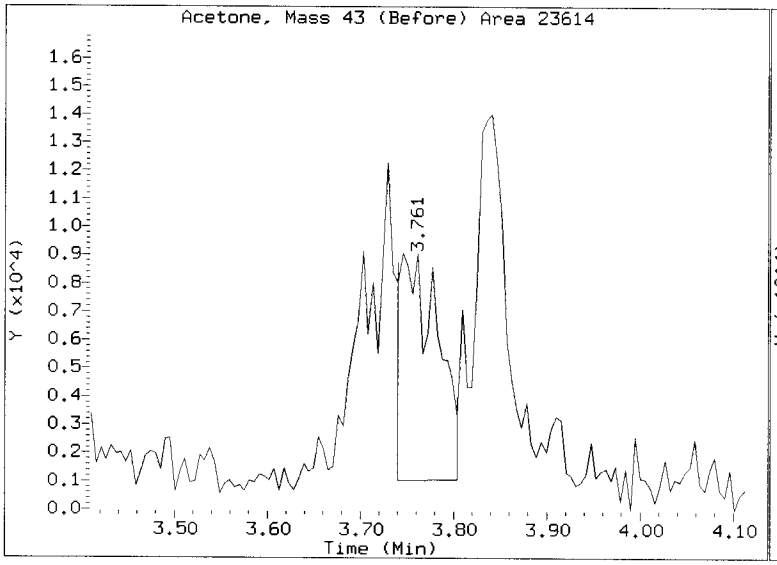


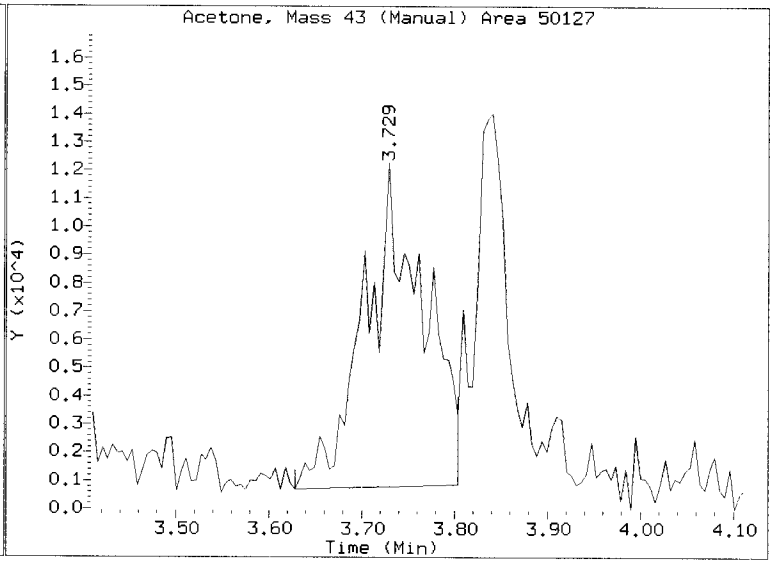
Quant Ion Manual Peak Adjustment Report

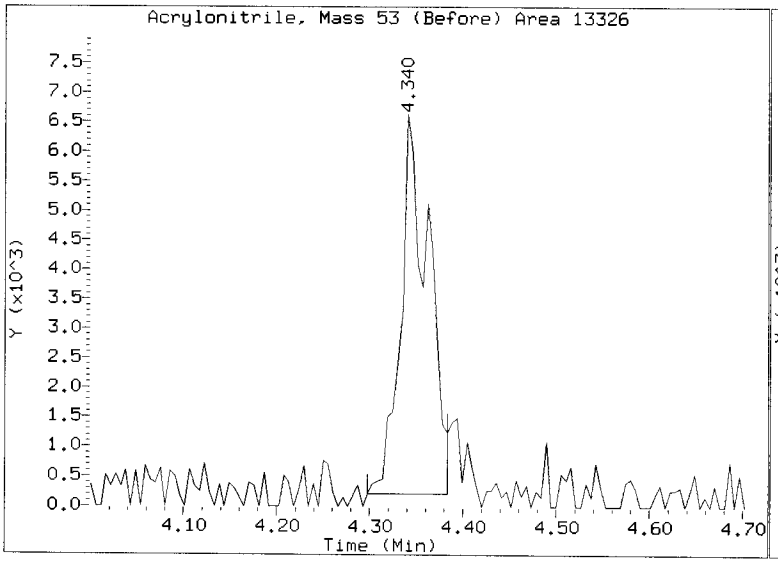
Datafile: //target/share/chem1/nt3.i/20160525.b/05251612.D
Injection Date: 25-MAY-2016 12:23
Lab ID:SEE0142-CAL3 Client ID:VSTD01
Report Date: 05/26/2016 08:01

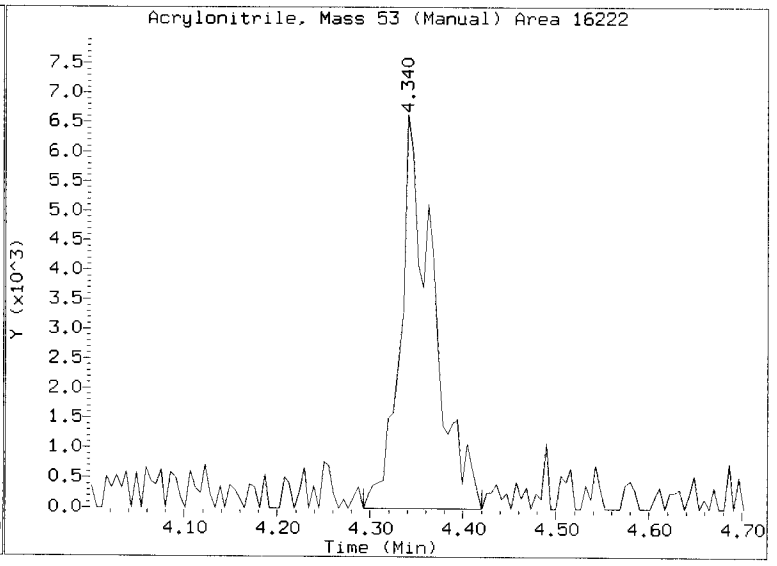












REVIEW SUMMARY FOR FILE - 05251612.D

Lab ID: SEE0142-CAL3
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 12:23

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

5/26/14

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251613.D
Lab Smp Id: SEE0142-SCV1 Client Smp ID: 8260 SCV
Inj Date : 25-MAY-2016 12:48
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-SCV1,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 19 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Dichlorodifluoromethane	85	1.640	1.646	(0.302)	506505	10.2005	10.201
173 2-Pentanone	86	6.438	6.438	(1.108)	88484	21.1288	21.129
2 Chloromethane	50	1.805	1.805	(0.333)	848516	10.8761	10.876
3 Vinyl Chloride	62	1.895	1.896	(0.349)	797286	12.2759	12.276(R)
4 Bromomethane	94	2.224	2.225	(0.410)	264171	9.64868	9.649
5 Chloroethane	64	2.347	2.347	(0.432)	362360	10.9340	10.934
6 Trichlorofluoromethane	101	2.453	2.453	(0.452)	521042	9.63146	9.631(Q)
7 1,1-Dichloroethene	61	2.936	2.942	(0.541)	685566	9.45778	9.458
8 Carbon Disulfide	76	2.947	2.942	(0.543)	6189183	50.4516	50.452
9 112Trichloro122Trifluoroethane	101	3.021	3.022	(0.557)	731460	20.2152	20.215
10 Iodomethane	142	3.074	3.075	(0.566)	3140761	54.7101	54.710
11 Bromoethane	108	3.213	3.213	(0.592)	573212	20.1306	20.131
12 Acrolein	56	3.340	3.357	(0.615)	70104	11.6937	11.694(Q)
13 Methylene Chloride	84	3.547	3.548	(0.654)	382958	10.3188	10.319
14 Acetone	43	3.723	3.761	(0.686)	248693	30.2377	30.238(QRH)
15 Trans-1,2-Dichloroethene	96	3.691	3.697	(0.680)	383345	9.40805	9.408
17 Methyl tert butyl ether	73	3.834	3.840	(0.706)	991079	10.7769	10.777
18 1,1-Dichloroethane	63	4.254	4.255	(0.784)	829613	10.2965	10.297
19 Acrylonitrile	53	4.350	4.349	(0.801)	133222	9.08076	9.081
20 Vinyl Acetate	43	4.498	4.504	(0.829)	4274429	51.1252	51.125
22 Cis-1,2-Dichloroethene	96	4.700	4.706	(0.866)	415621	9.53708	9.537
23 2,2-Dichloropropane	77	4.785	4.786	(0.882)	420845	10.3620	10.362

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	24 Bromochloromethane	128	4.860	4.860	(0.895)	191194	10.0398	10.040(Q)
	25 Chloroform	83	4.924	4.930	(0.907)	657922	10.1428	10.143
	26 Carbon Tetrachloride	117	5.014	5.015	(0.863)	516510	9.93487	9.935
$	27 Dibromofluoromethane	111	5.067	5.068	(0.933)	150293	4.94246	4.942
	28 1,1,1-Trichloroethane	97	5.067	5.073	(0.933)	555693	9.77942	9.779
	29 2-Butanone	43	5.205	5.216	(0.959)	801133	49.0870	49.087
	30 1,1-Dichloropropene	75	5.163	5.163	(0.888)	564509	10.1603	10.160
	31 Benzene	78	5.354	5.355	(0.921)	1573895	10.3306	10.331
*	32 Pentafluorobenzene	168	5.428	5.429	(1.000)	586330	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.455	5.461	(1.005)	161189	5.02386	5.024
	34 1,2-Dichloroethane	62	5.508	5.514	(0.948)	497405	9.91804	9.918
	36 Trichloroethene	130	5.779	5.780	(0.995)	411230	10.0871	10.087
*	37 1,4-Difluorobenzene	114	5.811	5.812	(1.000)	1003636	10.0000	
	38 Dibromomethane	93	6.082	6.082	(1.047)	189564	9.69413	9.694
	39 1,2-Dichloropropane	63	6.156	6.157	(1.059)	468338	10.1041	10.104(Q)
	40 Bromodichloromethane	83	6.199	6.205	(1.067)	484792	10.2241	10.224
	41 2-Chloroethyl Vinyl Ether	63	6.603	6.609	(1.136)	1098130	46.1117	46.112(R)
	42 Cis 1,3-dichloropropene	75	6.640	6.646	(1.143)	650453	10.4154	10.415
$	43 d8-Toluene	98	6.767	6.768	(1.165)	615966	5.04606	5.046
	44 Toluene	92	6.804	6.805	(1.171)	981369	9.84255	9.843
	45 4-Methyl-2-Pentanone	58	7.081	7.081	(1.219)	693248	50.7393	50.739
	46 Tetrachloroethene	166	7.070	7.071	(0.901)	398719	10.0903	10.090
	47 Trans 1,3-Dichloropropene	75	7.097	7.097	(1.221)	531111	10.1248	10.125
	48 1,1,2-Trichloroethane	97	7.208	7.209	(1.240)	280399	10.0646	10.065(Q)
	49 Chlorodibromomethane	129	7.330	7.331	(0.934)	345071	10.2396	10.240
	50 1,3-Dichloropropane	76	7.400	7.400	(0.942)	509724	10.2080	10.208
	51 1,2-Dibromoethane	107	7.495	7.496	(1.290)	271580	9.74137	9.741
	52 2-Hexanone	43	7.655	7.661	(0.975)	1208960	51.5802	51.580
*	53 d5-Chlorobenzene	117	7.851	7.852	(1.000)	989223	10.0000	
	54 Chlorobenzene	112	7.862	7.862	(1.001)	1080754	9.71865	9.719
	55 Ethyl Benzene	106	7.878	7.878	(1.003)	634898	10.5360	10.536
	56 1,1,1,2-Tetrachloroethane	131	7.910	7.905	(1.007)	391828	10.1592	10.159
	57 m,p-xylene	106	7.984	7.979	(1.017)	1535995	20.9261	20.926
	58 o-Xylene	106	8.287	8.288	(1.055)	772189	10.5363	10.536
	59 Styrene	104	8.324	8.324	(1.060)	1178577	9.79218	9.792
	60 Bromoform	173	8.345	8.346	(0.875)	204878	10.4511	10.451
	61 Isopropyl Benzene	105	8.510	8.510	(0.892)	1819764	9.93460	9.935
$	62 4-Bromofluorobenzene	174	8.717	8.718	(1.110)	196518	4.84600	4.846
	63 Bromobenzene	156	8.797	8.798	(0.922)	448048	9.82360	9.824(Q)
	64 N-Propyl Benzene	91	8.813	8.814	(0.924)	2318152	10.8710	10.871
	65 1,1,2,2-Tetrachloroethane	83	8.866	8.867	(0.929)	355081	10.4590	10.459
	66 2-Chloro Toluene	91	8.930	8.930	(0.936)	1527056	10.1454	10.145
	67 1,3,5-Trimethyl Benzene	105	8.951	8.952	(0.938)	1681828	10.3762	10.376
	68 1,2,3-Trichloropropane	110	8.967	8.968	(0.940)	109591	10.2054	10.205(Q)
	69 Trans-1,4-Dichloro 2-Butene	53	8.994	8.994	(0.943)	130989	10.1486	10.149(Q)
	70 4-Chloro Toluene	91	9.052	9.053	(0.949)	1453990	10.3530	10.353
	71 T-Butyl Benzene	119	9.190	9.191	(0.963)	1705147	12.6429	12.643(R)
	72 1,2,4-Trimethylbenzene	105	9.243	9.239	(0.969)	1727332	10.2137	10.214
	73 S-Butyl Benzene	105	9.323	9.324	(0.977)	2040338	10.3150	10.315
	74 4-Isopropyl Toluene	119	9.424	9.425	(0.988)	1810173	10.7049	10.705
	75 1,3-Dichlorobenzene	146	9.488	9.488	(0.994)	930441	9.78673	9.787
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	550009	10.0000	
	77 1,4-Dichlorobenzene	146	9.551	9.552	(1.001)	917445	9.84561	9.846(Q)
	78 N-Butyl Benzene	91	9.743	9.743	(1.021)	1584761	10.1102	10.110

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.865	9.866	(1.034)	254413	5.02572	5.026(Q)
80 1,2-Dichlorobenzene	146	9.870	9.871	(1.035)	833005	9.73535	9.735
81 1,2-Dibromo 3-Chloropropane	75	10.481	10.487	(1.099)	64063	10.0487	10.049
83 Hexachloro 1,3-Butadiene	225	10.981	10.981	(1.151)	216402	9.46856	9.469
84 1,2,4-Trichlorobenzene	180	11.007	11.008	(1.154)	555432	9.98759	9.988
85 Naphthalene	128	11.268	11.268	(1.181)	1071724	9.70655	9.707
86 1,2,3-Trichlorobenzene	180	11.411	11.411	(1.196)	463659	9.83691	9.837

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251613.D
Lab Smp Id: SEE0142-SCV1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: 8260 SCV
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	586330	1.42
37 1,4-Difluorobenze	994783	497392	1989566	1003636	0.89
53 d5-Chlorobenzene	985810	492905	1971620	989223	0.35
76 d4-1,4-Dichlorobe	556120	278060	1112240	550009	-1.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	-0.00
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	-0.00
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	-0.00
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: SEE0142-SCV1
Level: LOW
Data Type: MS DATA
SpikeList File: o2siicv.spk
Sublist File: mdl.sub
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Client SDG: 20150930a
Fraction: VOA
Client Smp ID: 8260 SCV
Operator: LH
SampleType: LCS
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1	Dichlorodifluorome	10.000	10.201	102.01	80-120
2	Chloromethane	10.000	10.876	108.76	80-120
3	Vinyl Chloride	10.000	12.276	122.76*	80-120
4	Bromomethane	10.000	9.649	96.49	80-120
5	Chloroethane	10.000	10.934	109.34	80-120
6	Trichlorofluoromet	10.000	9.631	96.31	80-120
7	1,1-Dichloroethene	10.000	9.458	94.58	80-120
8	Carbon Disulfide	60.000	50.452	84.09	80-120
9	112Trichloro122Tri	20.000	20.215	101.08	80-120
10	Iodomethane	60.000	54.710	91.18	80-120
11	Bromoethane	20.000	20.131	100.65	80-120
12	Acrolein	10.000	11.694	116.94	80-120
13	Methylene Chloride	10.000	10.319	103.19	80-120
14	Acetone	50.000	30.238	60.48*	80-120
15	Trans-1,2-Dichloro	10.000	9.408	94.08	80-120
16	n-hexane	10.000	0.0000	*	80-120
17	Methyl tert butyl	10.000	10.777	107.77	80-120
18	1,1-Dichloroethane	10.000	10.297	102.97	80-120
19	Acrylonitrile	10.000	9.081	90.81	80-120
20	Vinyl Acetate	50.000	51.125	102.25	80-120
22	Cis-1,2-Dichloroet	10.000	9.537	95.37	80-120
23	2,2-Dichloropropan	10.000	10.362	103.62	80-120
24	Bromochloromethane	10.000	10.040	100.40	80-120
25	Chloroform	10.000	10.143	101.43	80-120
26	Carbon Tetrachlori	10.000	9.935	99.35	80-120
28	1,1,1-Trichloroeth	10.000	9.779	97.79	80-120
30	1,1-Dichloropropen	10.000	10.160	101.60	80-120
29	2-Butanone	50.000	49.087	98.17	80-120
31	Benzene	10.000	10.331	103.31	80-120
34	1,2-Dichloroethane	10.000	9.918	99.18	80-120
36	Trichloroethene	10.000	10.087	100.87	80-120
38	Dibromomethane	10.000	9.694	96.94	80-120
39	1,2-Dichloropropan	10.000	10.104	101.04	80-120
40	Bromodichlorometha	10.000	10.224	102.24	80-120
173	2-Pentanone	20.000	21.129	105.64	80-120
42	Cis 1,3-dichloropr	10.000	10.415	104.15	80-120
41	2-Chloroethyl Viny	60.000	46.112	76.85*	80-120
44	Toluene	10.000	9.843	98.43	80-120
45	4-Methyl-2-Pentano	50.000	50.739	101.48	80-120
46	Tetrachloroethene	10.000	10.090	100.90	80-120

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 Trans 1,3-Dichloro	10.000	10.125	101.25	80-120
48 1,1,2-Trichloroeth	10.000	10.065	100.65	80-120
49 Chlorodibromometha	10.000	10.240	102.40	80-120
50 1,3-Dichloropropan	10.000	10.208	102.08	80-120
51 1,2-Dibromoethane	10.000	9.741	97.41	80-120
52 2-Hexanone	50.000	51.580	103.16	80-120
54 Chlorobenzene	10.000	9.719	97.19	80-120
55 Ethyl Benzene	10.000	10.536	105.36	80-120
56 1,1,1,2-Tetrachlor	10.000	10.159	101.59	80-120
57 m,p-xylene	20.000	20.926	104.63	80-120
58 o-Xylene	10.000	10.536	105.36	80-120
59 Styrene	10.000	9.792	97.92	80-120
60 Bromoform	10.000	10.451	104.51	80-120
61 Isopropyl Benzene	10.000	9.935	99.35	80-120
63 Bromobenzene	10.000	9.824	98.24	80-120
64 N-Propyl Benzene	10.000	10.871	108.71	80-120
65 1,1,2,2-Tetrachlor	10.000	10.459	104.59	80-120
66 2-Chloro Toluene	10.000	10.145	101.45	80-120
67 1,3,5-Trimethyl Be	10.000	10.376	103.76	80-120
68 1,2,3-Trichloropro	10.000	10.205	102.05	80-120
69 Trans-1,4-Dichloro	10.000	10.149	101.49	80-120
70 4-Chloro Toluene	10.000	10.353	103.53	80-120
71 T-Butyl Benzene	10.000	12.643	126.43*	80-120
72 1,2,4-Trimethylben	10.000	10.214	102.14	80-120
73 S-Butyl Benzene	10.000	10.315	103.15	80-120
74 4-Isopropyl Toluen	10.000	10.705	107.05	80-120
75 1,3-Dichlorobenzen	10.000	9.787	97.87	80-120
77 1,4-Dichlorobenzen	10.000	9.846	98.46	80-120
78 N-Butyl Benzene	10.000	10.110	101.10	80-120
80 1,2-Dichlorobenzen	10.000	9.735	97.35	80-120
81 1,2-Dibromo 3-Chlo	10.000	10.049	100.49	80-120
83 Hexachloro 1,3-But	10.000	9.469	94.69	80-120
84 1,2,4-Trichloroben	10.000	9.988	99.88	80-120
85 Naphthalene	10.000	9.707	97.07	80-120
86 1,2,3-Trichloroben	10.000	9.837	98.37	80-120

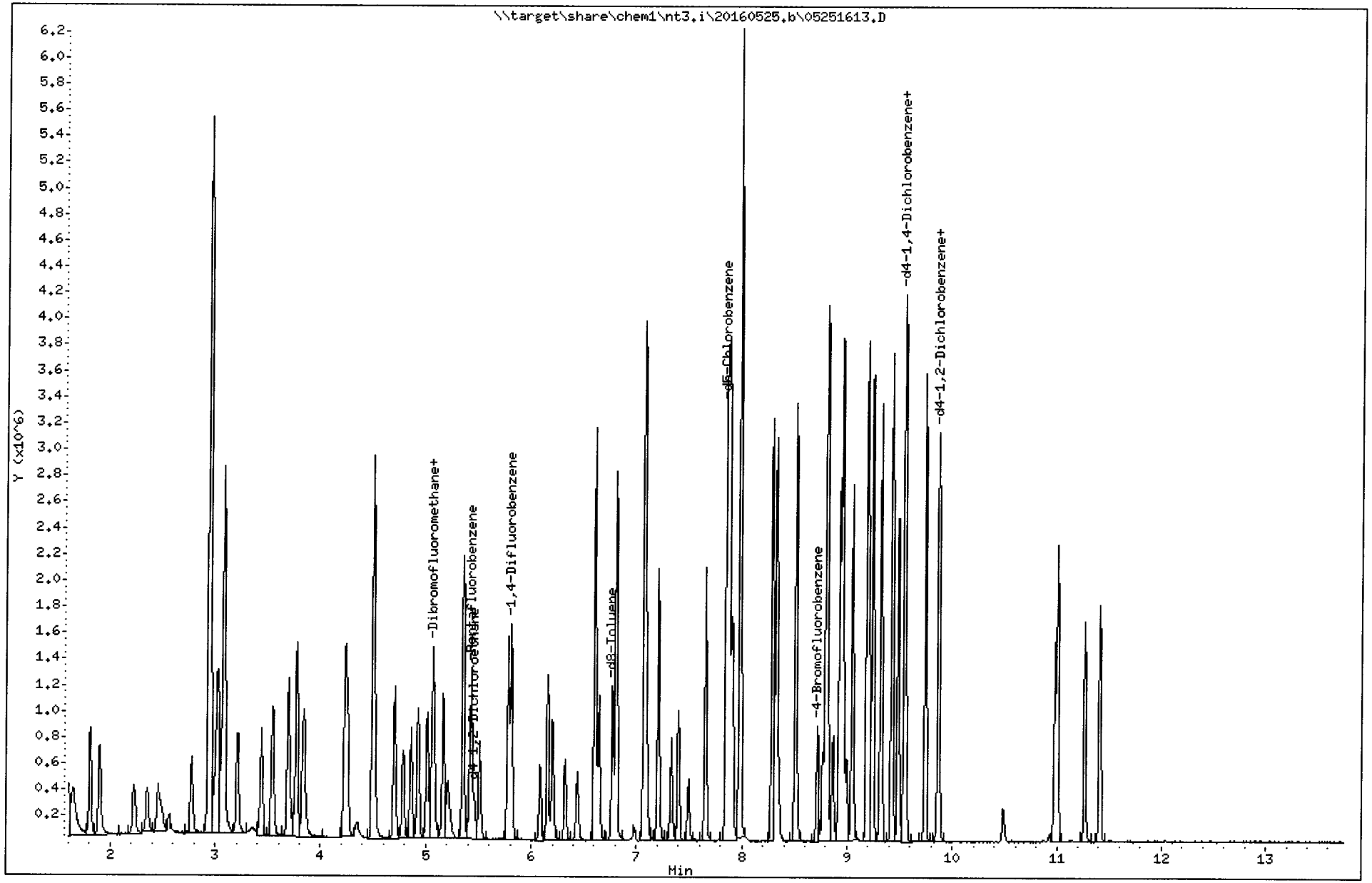
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.942	98.85	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.024	100.48	80-120
$ 43 d8-Toluene	5.000	5.046	100.92	80-120
$ 62 4-Bromofluorobenze	5.000	4.846	96.92	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.026	100.51	80-120

Data File: \\target\share\chem1\nt3.i\20160525.b\05251613.D
Date : 25-MAY-2016 12:48
Client ID: 8260 SCV
Sample Info: SEE0142-SCV1,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 05251613.D

Lab ID: SEE0142-SCV1
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 12:48

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

6a
8260 GAS INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC.
Client: 20151005

Instrument: NT3.I
Project:

Calibration Date: 25-MAY-2016
SDG No.: 20151005

Gas Range	RF1 0.1	RF2 0.25	RF3 0.5	RF4 1.0	RF5 2.5	RF6 5	Ave RF	%RSD
WA Gas	97402004	102360129	100349197	107455726	99633643	92788781	99998247	4.9
AK Gas	126765810	122685056	126855254	133230384	126006307	119397325	125823356	3.7
NW Gas	102496378	105563549	103349225	110679604	102833640	95728145	103441757	4.7
8015Gas	183346382	171906144	176136010	186208416	172820560	166826641	176207359	4.2

<- Indicates %RSD outside limits
Surrogate areas are not included in RF calculation.
Surrogate calibration is from BETX curve files.

Quant Ranges :
WA Gas Toluene - nC12
AK Gas nC6 - nC10
NW Gas Toluene - Naphthalene
Cal Gas nC6 - nC12
8015 Gas 2-Methylpentane - 1,2,4-Trimethylbenzene

Gas Cal. Files	Analysis Time
05251619.D	25-MAY-2016 15:25
05251618.D	25-MAY-2016 14:59
05251617.D	25-MAY-2016 14:33
05251616.D	25-MAY-2016 14:07
05251615.D	25-MAY-2016 13:41
05251614.D	25-MAY-2016 13:15

FORM VI-GAS

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt3.i\20160525g.b\NWTPHG.m
Batch File: \\target\share\chem1\nt3.i\20160525g.b
Inst ID: nt3.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	05251614	05251615	05251616	05251617	05251618	05251619	05251620
INJ.DATE:	25-MAY-2016	25-MAY-2016	25-MAY-2016	25-MAY-2016	25-MAY-2016	25-MAY-2016	25-MAY-2016
INJ.TIME:	13:15	13:41	14:07	14:33	14:59	15:25	15:51

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
5 2-Methylpentane	3.304	3.304	3.304	3.298	3.303	3.299	3.304	3.305	3.255-3.355	3.302	0.003
3 AK101	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.469	0.729-6.209	+++++	+++++
7 nC6	3.771	3.771	3.772	3.765	3.771	3.766	3.771	3.772	3.722-3.822	3.770	0.003
$ 10 Dibromofluorobenzene	5.063	5.062	5.068	5.067	5.067	5.068	5.062	5.068	5.018-5.118	5.065	0.003
37 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.334	5.284-5.384	+++++	+++++
$ 29 Pentafluorobenzene	5.429	5.429	5.429	5.429	5.429	5.429	5.429	5.435	5.385-5.485	5.429	0.000
$ 30 d4-1,2-dichloroethane	5.456	5.456	5.461	5.455	5.460	5.461	5.461	5.453	5.403-5.503	5.459	0.003
$ 31 1,4-Difluorobenzene	5.812	5.812	5.812	5.811	5.811	5.812	5.812	5.812	5.762-5.862	5.812	0.000
4 8015GAS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.021	2.681-9.361	+++++	+++++
45 8015mod	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.000	0.930-1.070	+++++	+++++
38 n-Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.673	6.623-6.723	+++++	+++++
$ 32 d8-Toluene	6.768	6.768	6.768	6.767	6.768	6.768	6.768	6.768	6.718-6.818	6.768	0.000
12 Toluene	6.805	6.805	6.805	6.805	6.805	6.805	6.805	6.806	6.756-6.856	6.805	0.000
39 n-Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.800	7.750-7.850	+++++	+++++
$ 33 d5-Chlorobenzene	7.847	7.852	7.852	7.851	7.851	7.852	7.852	7.852	7.802-7.902	7.851	0.002
40 Ethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.858	7.808-7.908	+++++	+++++
41 m,p-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.980	7.930-8.030	+++++	+++++

Reviewer 1 _____ Date: 5/26/16
Reviewer 2 _____ Date: _____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt3.i\20160525g.b\NWTPHG.m
Batch File: \\target\share\chem1\nt3.i\20160525g.b
Inst ID: nt3.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
42	o-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.289	8.239-8.339	+++++	+++++
2	WAGAS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.636	6.546-10.726	+++++	+++++
$ 34	4-Bromofluorobenzene	8.718	8.718	8.718	8.717	8.718	8.718	8.718	8.719	8.669-8.769	8.718	0.000
17	nC10-Decane	8.761	8.808	8.809	8.781	8.787	8.808	8.755	8.783	8.733-8.833	8.787	0.023
20	1,2,4-Trimethylbenzene	9.244	9.239	9.239	9.238	9.244	9.239	9.244	9.240	9.190-9.290	9.241	0.003
$ 35	d4-Dichlorobenzene	9.542	9.542	9.542	9.541	9.541	9.542	9.542	9.542	9.492-9.592	9.541	0.000
1	NWTPHG	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.672	7.142-12.202	+++++	+++++
43	n-Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.867	9.817-9.917	+++++	+++++
$ 36	d4-1,2-Dichlorobenzene	9.882	9.866	9.861	9.860	9.860	9.860	9.866	9.866	9.816-9.916	9.865	0.008
22	nC12-Dodecane	10.472	10.471	10.472	10.471	10.519	10.472	10.471	10.472	10.422-10.522	10.478	0.018
44	n-Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.227	11.177-11.277	+++++	+++++
24	Naphthalene	11.269	11.268	11.269	11.268	11.268	11.263	11.268	11.269	11.219-11.319	11.268	0.002

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt3.i\20160525.b

ARI Job No.: SEE0 Method: 8260052516.m Instrument: nt3.i Date: 25-MAY-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1315	05251614.D	SEE0142-CALE	GAS5	1	NO MANUAL INTEGRATION
1341	05251615.D	SEE0142-CALD	GAS2.5	1	NO MANUAL INTEGRATION
1407	05251616.D	SEE0142-CALC	GAS1	1	NO MANUAL INTEGRATION
1433	05251617.D	SEE0142-CALB	GAS0.5	1	NO MANUAL INTEGRATION
1459	05251618.D	SEE0142-CALA	GAS0.25	1	NO MANUAL INTEGRATION
1525	05251619.D	SEE0142-CAL9	GAS0.1	1	NO MANUAL INTEGRATION
1551	05251620.D	SEE0142-SCV2	GAS SCV	1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt3.i\20160525g.b

ARI Job No.: RTBF Method: NWTPHG.m Instrument: nt3.i Date: 25-MAY-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0850	05251604.D	RTBFB0525	10	1	NO MANUAL INTEGRATION
1315	05251614.D	SEE0142-CALE	GAS5	1	NO MANUAL INTEGRATION
1341	05251615.D	SEE0142-CALD		1	NO MANUAL INTEGRATION
1407	05251616.D	SEE0142-CALC		1	NO MANUAL INTEGRATION
1433	05251617.D	SEE0142-CALB		1	NO MANUAL INTEGRATION
1459	05251618.D	SEE0142-CALA		1	NO MANUAL INTEGRATION
1525	05251619.D	SEE0142-CAL9		1	NO MANUAL INTEGRATION
1551	05251620.D	SEE0142-SCV2		1	NO MANUAL INTEGRATION

Data File: \\target\share\chem1\nt3.i\20160525.b\05251604.D

Date : 25-MAY-2016 08:50

Client ID: 10

Instrument: nt3.i

Sample Info: RTBFB0525,10,10,0,

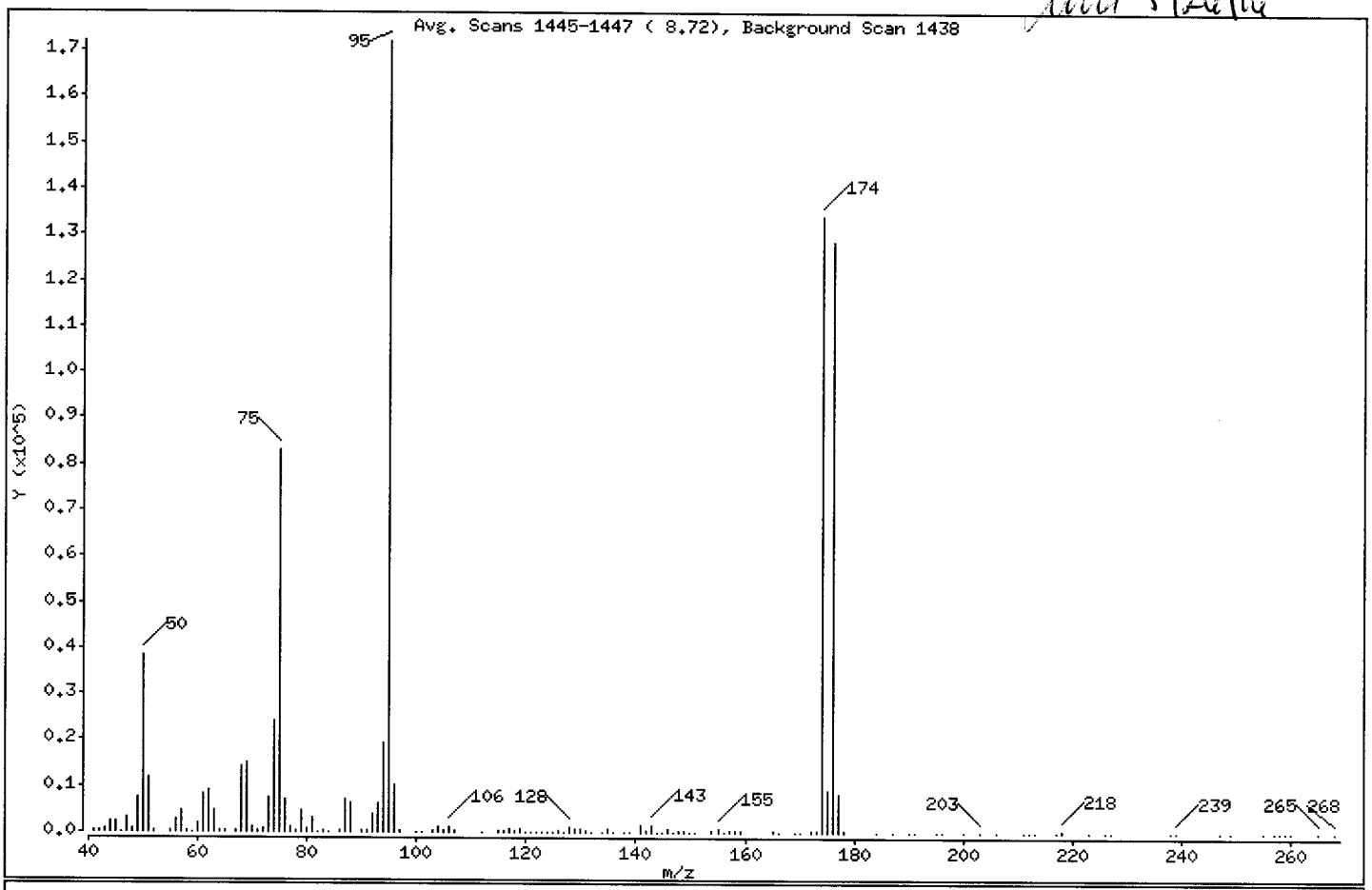
Operator: LH

Column phase: RTXVMS

Column diameter: 0.18

1 Bromofluorobenzene

5/26/16



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.25
75	30.00 - 60.00% of mass 95	48.27
96	5.00 - 9.00% of mass 95	5.92
173	Less than 2.00% of mass 174	0.31 (0.40)
174	50.00 - 100.00% of mass 95	77.94
175	5.00 - 9.00% of mass 174	5.32 (6.82)
176	95.00 - 101.00% of mass 174	74.72 (95.87)
177	5.00 - 9.00% of mass 176	4.88 (6.53)

Data File: \\target\share\chem1\nt3.i\20160525.b\05251604.D

Date : 25-MAY-2016 08:50

Client ID: 10

Instrument: nt3.i

Sample Info: RTBFB0525,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18

Data File: 05251604.D

Spectrum: Avg. Scans 1445-1447 (8.72), Background Scan 1438

Location of Maximum: 95.00

Number of points: 139

m/z	Y	m/z	Y	m/z	Y	m/z	Y
41.00	444	79.00	4592	125.00	126	173.00	533
42.00	336	80.00	930	126.00	295	174.00	134080
43.00	754	81.00	3176	127.00	70	175.00	9145
44.00	2199	82.00	189	128.00	1143	176.00	128544
45.00	2266	83.00	389	129.00	638	177.00	8396
46.00	108	84.00	58	130.00	639	178.00	324
47.00	3221	86.00	218	131.00	360	184.00	107
48.00	888	87.00	7197	132.00	158	187.00	59
49.00	7695	88.00	6308	134.00	87	190.00	112
50.00	38280	90.00	332	135.00	603	191.00	87
51.00	12060	91.00	206	136.00	60	195.00	122
52.00	492	92.00	3845	138.00	63	196.00	65
55.00	573	93.00	6139	139.00	69	200.00	84
56.00	2919	94.00	19184	141.00	1677	203.00	173
57.00	4668	95.00	172032	142.00	560	206.00	127
58.00	506	96.00	10176	143.00	1721	211.00	74
59.00	49	97.00	520	144.00	172	212.00	50
60.00	1941	100.00	70	145.00	165	213.00	70
61.00	8288	101.00	7	146.00	783	217.00	88
62.00	8972	103.00	456	147.00	150	218.00	281
63.00	4898	104.00	1033	148.00	518	223.00	95
64.00	413	105.00	410	149.00	387	226.00	174
65.00	233	106.00	1176	150.00	166	227.00	73
67.00	218	107.00	239	151.00	99	238.00	59
68.00	14297	112.00	65	154.00	323	239.00	186
69.00	15055	115.00	406	155.00	829	247.00	62
70.00	1326	116.00	331	156.00	71	249.00	81
71.00	337	117.00	832	157.00	489	255.00	58
72.00	761	118.00	474	158.00	227	257.00	102
73.00	7501	119.00	685	159.00	288	258.00	97
74.00	24128	120.00	156	165.00	397	259.00	133
75.00	83040	121.00	179	166.00	84	260.00	119
76.00	7080	122.00	175	169.00	158	265.00	149
77.00	1195	123.00	189	170.00	137	268.00	60
78.00	238	124.00	136	172.00	215		

Data File: \\target\share\chem1\nt3.i\20160525.b\05251604.D

Date : 25-MAY-2016 08:50

Client ID: 10

Instrument: nt3.i

Sample Info: RTBFB0525,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18

Data File: 05251604.D

Spectrum: Avg. Scans 1445-1447 (8.72), Background Scan 1438

Location of Maximum: 95.00

Number of points: 139

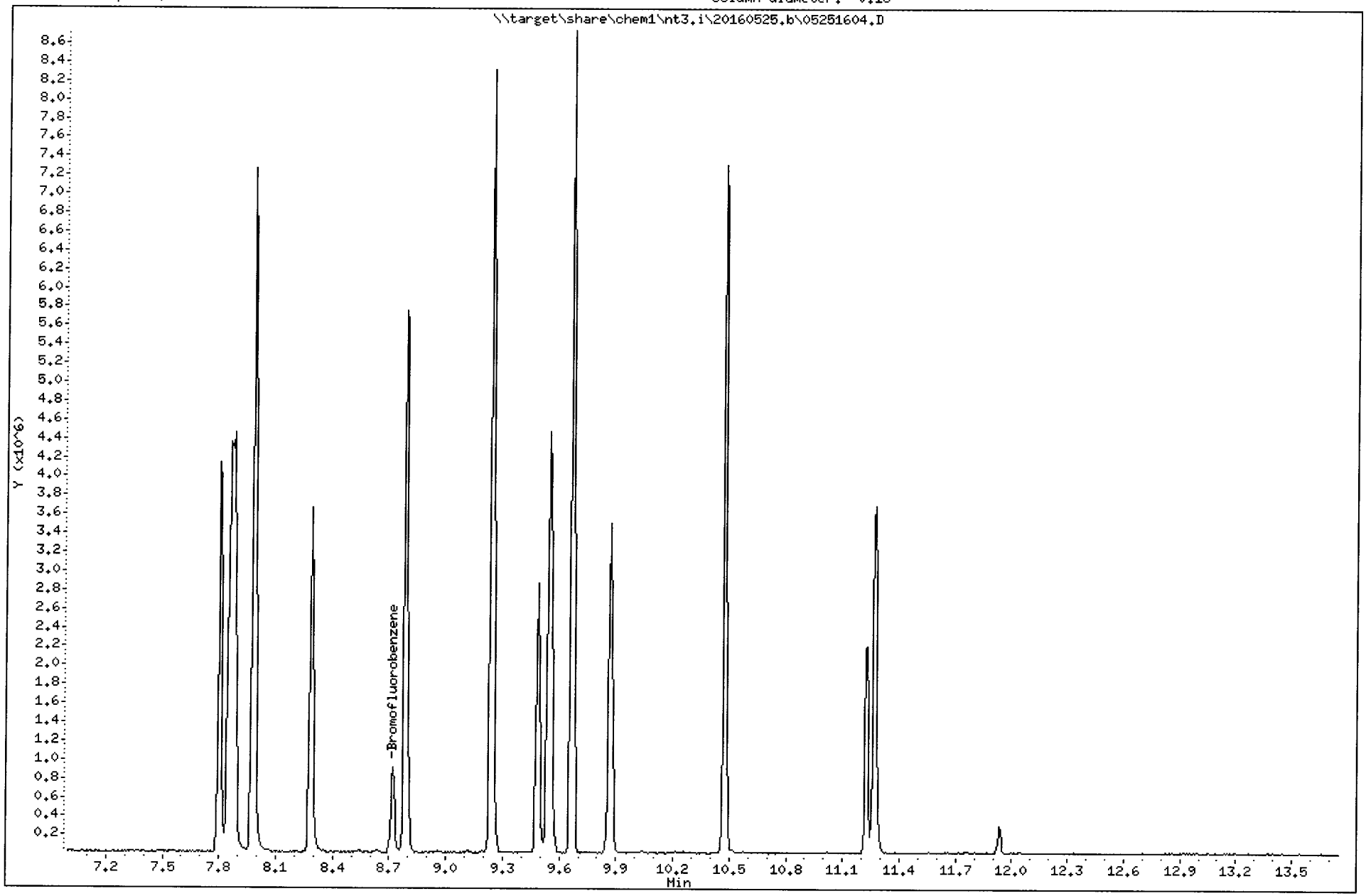
m/z	Y	m/z	Y	m/z	Y	m/z	Y

Data File: \\target\share\chem1\nt3.i\20160525.b\05251604.D
Date : 25-MAY-2016 08:50
Client ID: 10
Sample Info: RTBFB0525,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



ARI Labs, Inc.

Data file : \\target\share\chem1\nt3.i\20160525g.b\05251604.D
Lab Smp Id: RTBFB0525 Client Smp ID: 10
Inj Date : 25-MAY-2016 08:50
Operator : LH Inst ID: nt3.i
Smp Info : RTBFB0525,10,10,0,
Misc Info : 13-
Comment :
Method : \\target\share\chem1\nt3.i\20160525g.b\NWTPHG.m
Meth Date : 26-May-2016 07:15 lanih Quant Type: ESTD
Cal Date : 03-NOV-2015 11:00 Cal File: 11031503.D
Als bottle: 10 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RT.sub
Target Version: 4.14
Processing Host: ORGDATA13

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
5	2-Methylpentane	3.304	3.304	0.000	2736327	0.00000	
7	nC6	3.772	3.772	0.000	3172228	0.00000	
37	Benzene	5.334	5.334	0.000	4219558	0.00000	50.64
38	n-Octane	6.673	6.673	0.000	3847943	0.00000	
12	Toluene	6.806	6.806	0.000	4719548	0.00000	59.92
39	n-Nonane	7.799	7.799	0.000	4118628	0.00000	
40	Ethylbenzene	7.858	7.858	0.000	4322360	0.00000	
41	m,p-xylene	7.980	7.980	0.000	7239105	0.00000	76.72
42	o-xylene	8.288	8.288	0.000	3646657	0.00000	84.29
$ 34	4-Bromofluorobenzene	8.719	8.719	0.000	896457	0.00000	32.80
17	nC10-Decane	8.782	8.782	0.000	5740450	0.00000	
20	1,2,4-Trimethylbenzene	9.239	9.239	0.000	8303084	0.00000	
43	n-Undecane	9.866	9.866	0.000	3497411	0.00000	
22	nC12-Dodecane	10.472	10.472	0.000	7299451	0.00000	
44	n-Tridecane	11.226	11.226	0.000	2191596	0.00000	
24	Naphthalene	11.269	11.269	0.000	3677025	0.00000	

Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160525g.b/05251614.D
Method: \20160525g.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 25-MAY-2016 13:15

ARI ID: SEE0142-CALE
Client ID: GAS5
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	463943903	4.640
8015C 2MP-TMB	(3.20 to 9.34)	176207359	834133203	4.734
AK101 nC6-nC10	(3.67 to 8.68)	125823356	596986624	4.745
NWTPHG Tol-Nap	(6.71 to 11.37)	103441757	478640724	4.627
mod8015 nC6-nC12	(3.67 to 10.57)	111111111	811443281	7.303

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

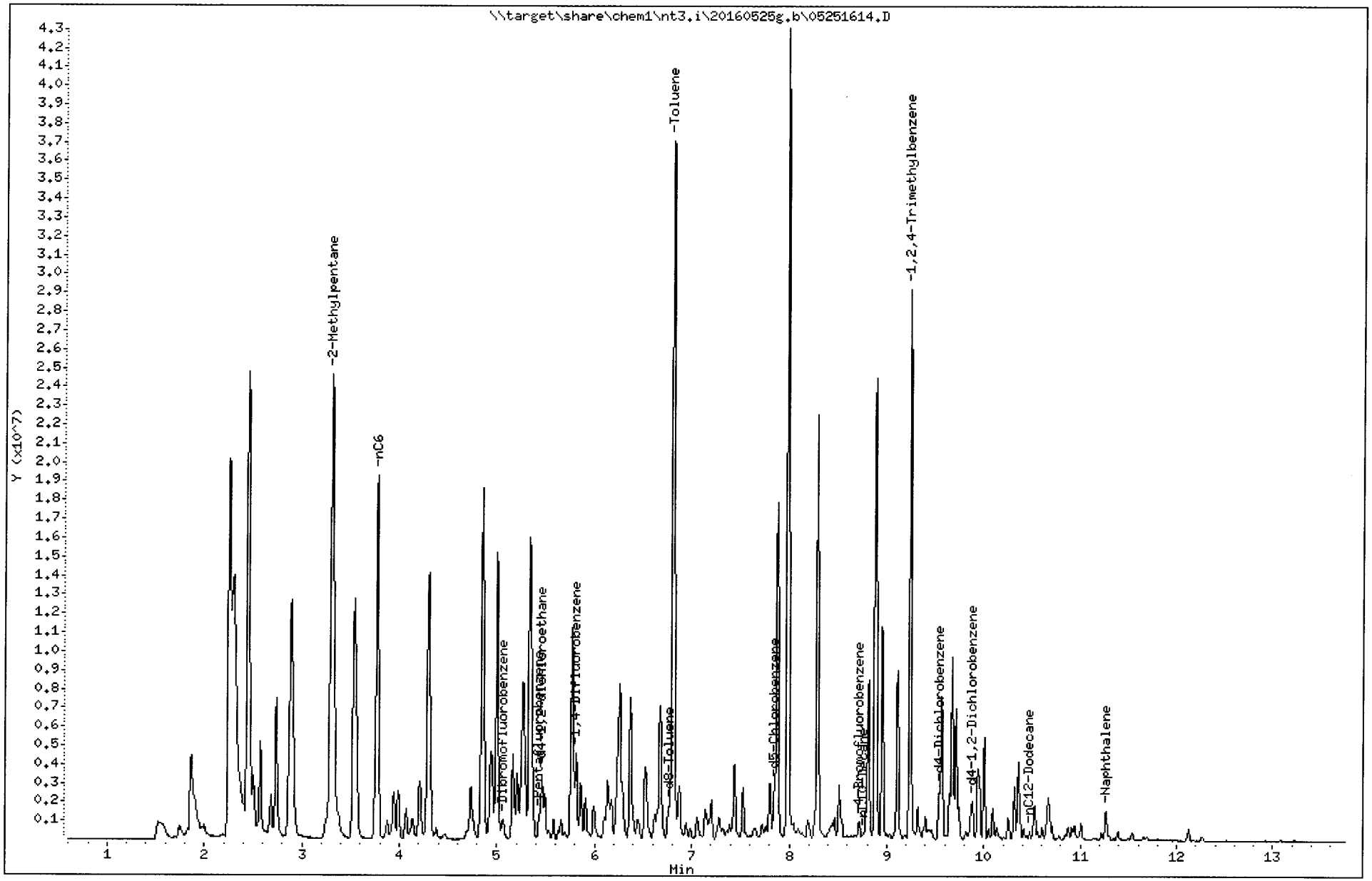
6.768	2315408	d8-Toluene
8.718	1270036	4-Bromofluorobenzene
9.542	2760047	d4-Dichlorobenzene
7.847	3608206	d5-Chlorobenzene
9.882	4192499	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt3.i\20160525g.b\05251614.D
Date : 25-MAY-2016 13:15
Client ID: GAS5
Sample Info: SEE0142-CALE,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251614.D
Lab Smp Id: SEE0142-CALE Client Smp ID: GAS5
Inj Date : 25-MAY-2016 13:15
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-CALE,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 27 Dibromofluoromethane	111	5.062	5.068	(0.932)	145427	4.88031	4.880
31 Benzene	78	5.354	5.355	(0.921)	5250836	33.5884	33.588
* 32 Pentafluorobenzene	168	5.429	5.429	(1.000)	574571	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.461	5.461	(1.006)	231896	7.37554	7.376(QR)
* 37 1,4-Difluorobenzene	114	5.811	5.812	(1.000)	1029825	10.0000	
$ 43 d8-Toluene	98	6.768	6.768	(1.165)	639946	5.10919	5.109
44 Toluene	92	6.810	6.805	(1.172)	15029157	146.900	146.90(Q)
* 53 d5-Chlorobenzene	117	7.852	7.852	(1.000)	995159	10.0000	
55 Ethyl Benzene	106	7.878	7.878	(1.003)	3865135	63.7584	63.758(Q)
57 m,p-xylene	106	7.984	7.979	(1.017)	11519363	156.002	156.00(Q)
58 o-Xylene	106	8.287	8.288	(1.055)	5678351	77.0172	77.017(Q)
$ 62 4-Bromofluorobenzene	174	8.718	8.718	(1.110)	201494	4.93906	4.939
* 76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	572275	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.865	9.866	(1.034)	256951	4.87836	4.878

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251614.D
Lab Smp Id: SEE0142-CALE
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: GAS5
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	574571	-0.61
37 1,4-Difluorobenze	994783	497392	1989566	1029825	3.52
53 d5-Chlorobenzene	985810	492905	1971620	995159	0.95
76 d4-1,4-Dichlorobe	556120	278060	1112240	572275	2.90

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.00
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.00
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.00
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: SEE0142-CALE
Level: LOW
Data Type: MS DATA
SpikeList File: allspike.spk
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Client SDG: 20150930a
Fraction: VOA
Client Smp ID: GAS5
Operator: LH
SampleType: SAMPLE
Quant Type: ISTD

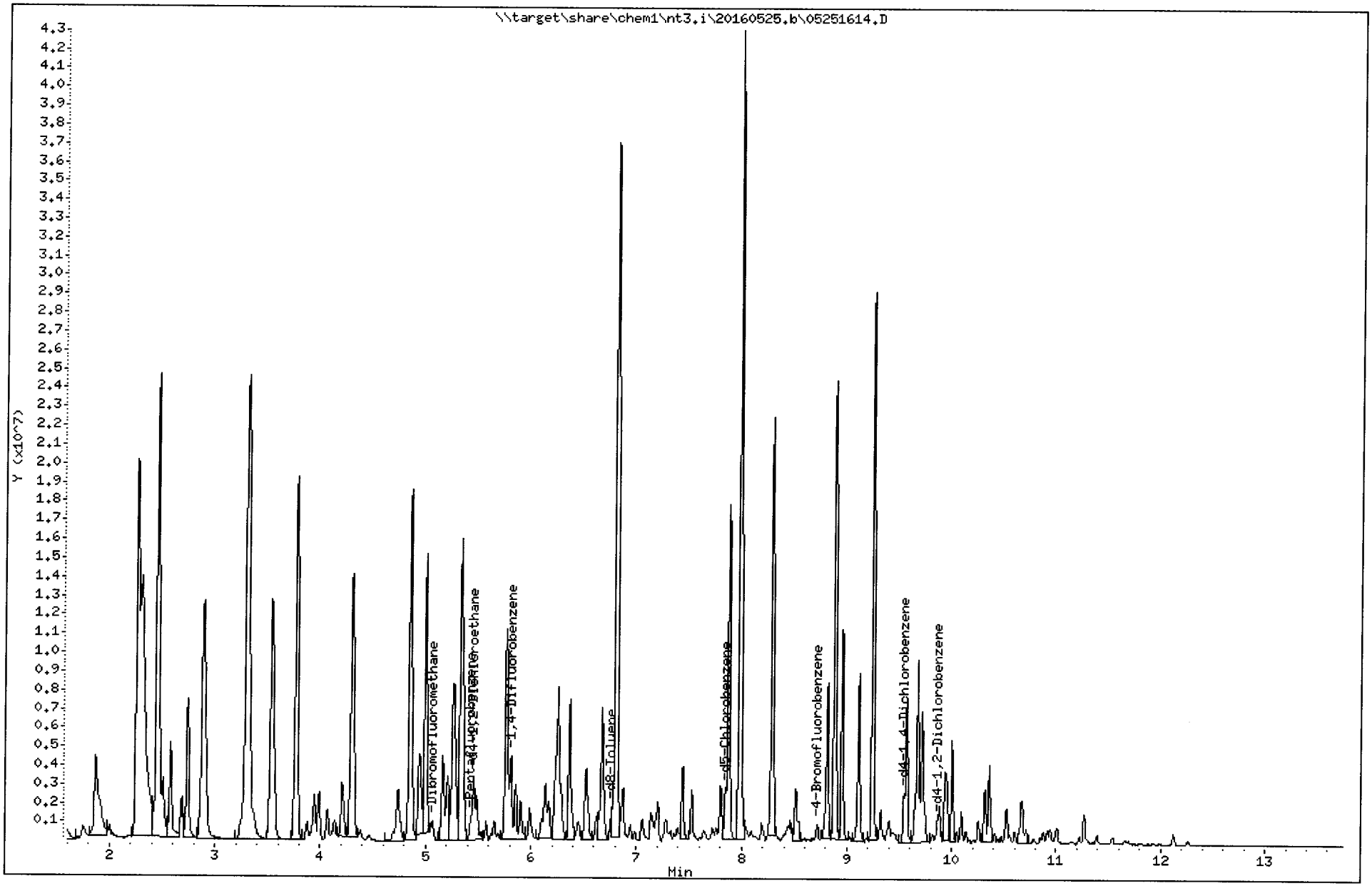
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.880	97.61	80-120
$ 33 d4-1,2-Dichloroeth	5.000	7.376	147.51*	80-128
$ 43 d8-Toluene	5.000	5.109	102.18	80-120
$ 62 4-Bromofluorobenze	5.000	4.939	98.78	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.878	97.57	80-120

Data File: \\target\share\chem1\nt3.i\20160525.b\05251614.D
Date : 25-MAY-2016 13:15
Client ID: GAS5
Sample Info: SEE0142-CALE,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 05251614.D

Lab ID: SEE0142-CALE
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 13:15

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

JHH 5/26/14

Data file: 20160525g.b/05251615.D
Method: \20160525g.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 25-MAY-2016 13:41

ARI ID: SEE0142-CALD
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	249084109	2.491
8015C 2MP-TMB	(3.20 to 9.34)	176207359	432051399	2.452
AK101 nC6-nC10	(3.67 to 8.68)	125823356	315015767	2.504
NWTPHG Tol-Nap	(6.71 to 11.37)	103441757	257084099	2.485
mod8015 nC6-nC12	(3.67 to 10.57)	111111111	424433973	3.820

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

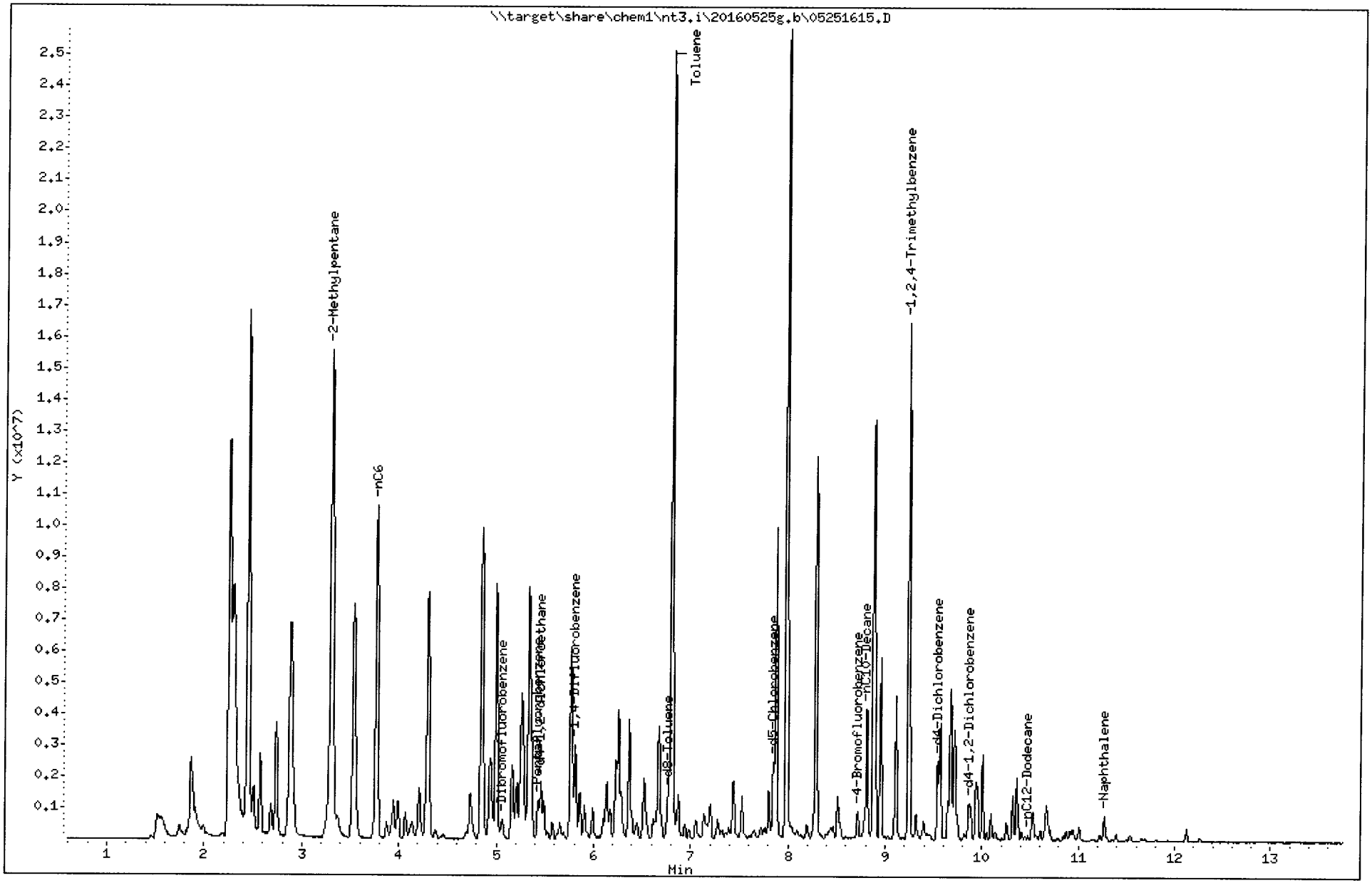
6.768	1751811	d8-Toluene
8.718	1262458	4-Bromofluorobenzene
9.542	3265699	d4-Dichlorobenzene
7.852	2999743	d5-Chlorobenzene
9.866	2831210	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt3.i\20160525g.b\05251615.D
Date : 25-MAY-2016 13:41
Client ID:
Sample Info: SEE0142-CALD,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251615.D
Lab Smp Id: SEE0142-CALD Client Smp ID: GAS2.5
Inj Date : 25-MAY-2016 13:41
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-CALD,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.067	5.068	(0.933)	139185	4.58810	4.588
	31 Benzene	78	5.354	5.355	(0.921)	2729616	17.3541	17.354
*	32 Pentafluorobenzene	168	5.428	5.429	(1.000)	584933	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.460	5.461	(1.006)	199732	6.24002	6.240(Q)
*	37 1,4-Difluorobenzene	114	5.811	5.812	(1.000)	1036153	10.0000	
$	43 d8-Toluene	98	6.767	6.768	(1.165)	620971	4.92742	4.927
	44 Toluene	92	6.805	6.805	(1.171)	10312759	100.185	100.18(Q)
*	53 d5-Chlorobenzene	117	7.851	7.852	(1.000)	997252	10.0000	
	55 Ethyl Benzene	106	7.878	7.878	(1.003)	1973952	32.4935	32.494(Q)
	57 m,p-xylene	106	7.984	7.979	(1.017)	7012000	94.7611	94.761(Q)
	58 o-Xylene	106	8.287	8.288	(1.055)	2987151	40.4306	40.431
$	62 4-Bromofluorobenzene	174	8.723	8.718	(1.111)	198435	4.85387	4.854
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	547478	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.865	9.866	(1.034)	256838	5.09708	5.097

QC Flag Legend

Q - Qualifier signal failed the ratio test.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251615.D
Lab Smp Id: SEE0142-CALD
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: GAS2.5
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	584933	1.18
37 1,4-Difluorobenze	994783	497392	1989566	1036153	4.16
53 d5-Chlorobenzene	985810	492905	1971620	997252	1.16
76 d4-1,4-Dichlorobe	556120	278060	1112240	547478	-1.55

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.00
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.00
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.00
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: SEE0142-CALD
Level: LOW
Data Type: MS DATA
SpikeList File: allspike.spk
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Client SDG: 20150930a
Fraction: VOA
Client Smp ID: GAS2.5
Operator: LH
SampleType: SAMPLE
Quant Type: ISTD

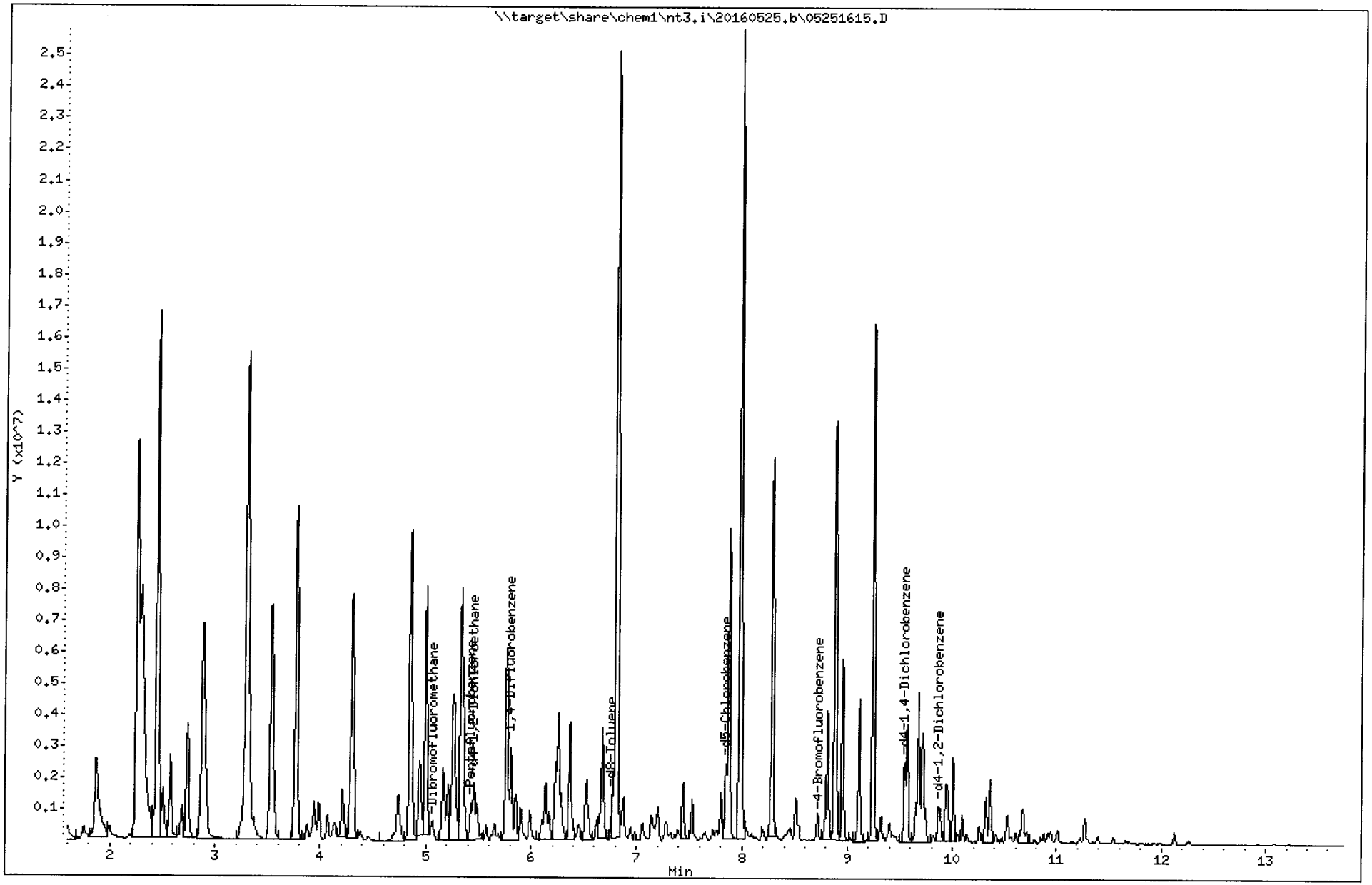
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.588	91.76	80-120
$ 33 d4-1,2-Dichloroeth	5.000	6.240	124.80	80-128
$ 43 d8-Toluene	5.000	4.927	98.55	80-120
$ 62 4-Bromofluorobenze	5.000	4.854	97.08	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.097	101.94	80-120

Data File: \\target\share\chem1\nt3.i\20160525.b\05251615.D
Date : 25-MAY-2016 13:41
Client ID: GAS2.5
Sample Info: SEE0142-CALD,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 05251615.D

Lab ID: SEE0142-CALD
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 13:41

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

5/26/14

Data file: 20160525g.b/05251616.D
Method: \20160525g.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 25-MAY-2016 14:07

ARI ID: SEE0142-CALC
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	107455726	1.075
8015C 2MP-TMB	(3.20 to 9.34)	176207359	186208416	1.057
AK101 nC6-nC10	(3.67 to 8.68)	125823356	133230384	1.059
NWTPHG Tol-Nap	(6.71 to 11.37)	103441757	110679604	1.070
mod8015 nC6-nC12	(3.67 to 10.57)	111111111	178205221	1.604

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

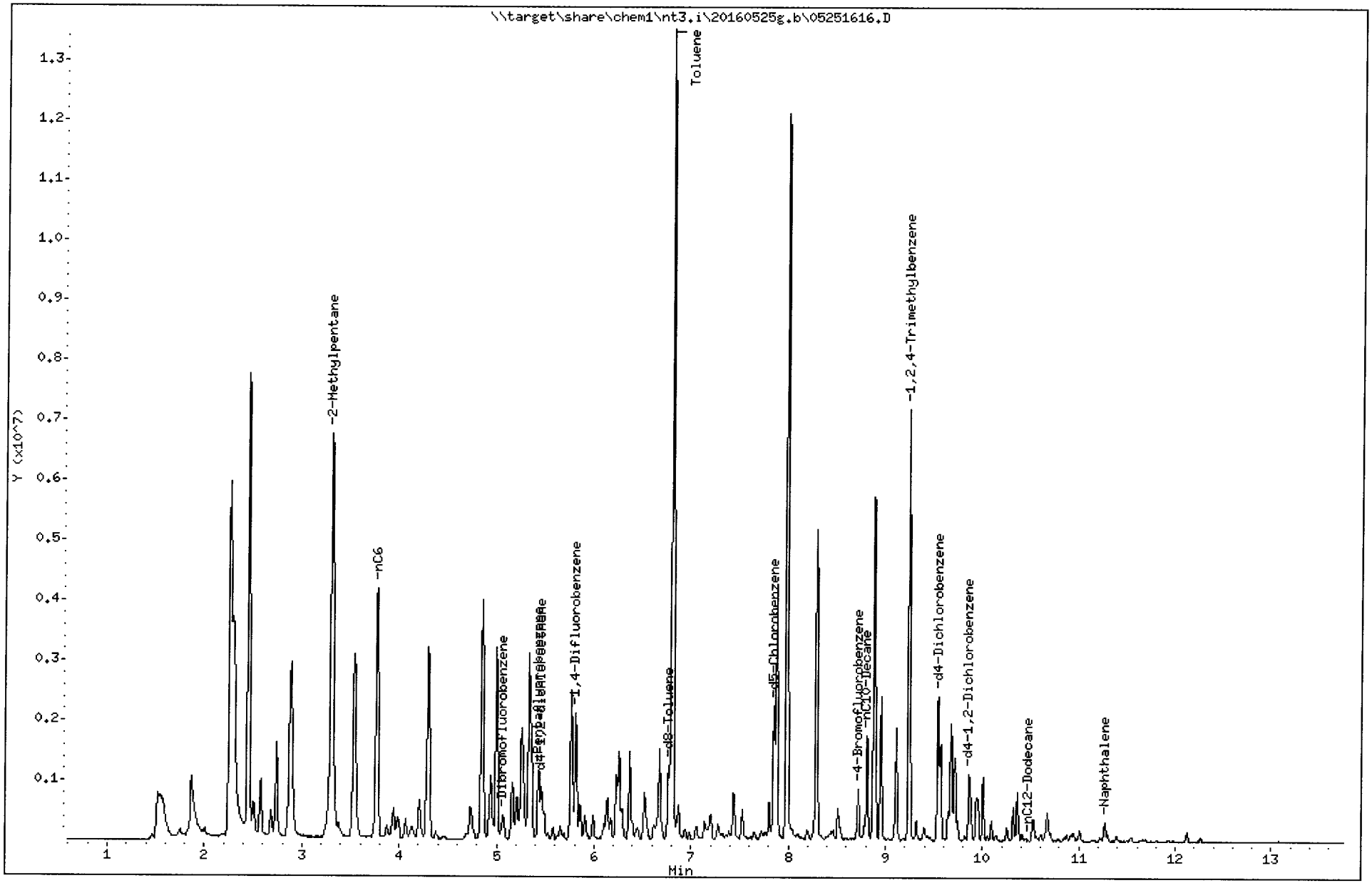
6.768	1671209	d8-Toluene
8.718	1364577	4-Bromofluorobenzene
9.542	3581337	d4-Dichlorobenzene
7.852	3140470	d5-Chlorobenzene
9.861	2054928	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt3.i\20160525g.b\05251616.D
Date : 25-MAY-2016 14:07
Client ID:
Sample Info: SEE0142-CALC,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251616.D
Lab Smp Id: SEE0142-CALC Client Smp ID: GAS1
Inj Date : 25-MAY-2016 14:07
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-CALC,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 27 Dibromofluoromethane	111	5.067	5.068	(0.933)	149012	4.98411	4.984
31 Benzene	78	5.354	5.355	(0.921)	1106750	7.40259	7.403
* 32 Pentafluorobenzene	168	5.429	5.429	(1.000)	576474	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.466	5.461	(1.007)	182992	5.80092	5.801
* 37 1,4-Difluorobenzene	114	5.811	5.812	(1.000)	984897	10.0000	
$ 43 d8-Toluene	98	6.768	6.768	(1.165)	595165	4.96842	4.968
44 Toluene	92	6.805	6.805	(1.171)	4933358	50.4200	50.420
* 53 d5-Chlorobenzene	117	7.852	7.852	(1.000)	971845	10.0000	
55 Ethyl Benzene	106	7.878	7.878	(1.003)	800930	13.5289	13.529
57 m,p-xylene	106	7.979	7.979	(1.016)	3075629	42.6511	42.651
58 o-Xylene	106	8.287	8.288	(1.055)	1216813	16.8999	16.900
$ 62 4-Bromofluorobenzene	174	8.718	8.718	(1.110)	196711	4.93749	4.937
* 76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	543467	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.860	9.866	(1.033)	248649	4.97098	4.971

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251616.D
Lab Smp Id: SEE0142-CALC
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: GAS1
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	576474	-0.28
37 1,4-Difluorobenze	994783	497392	1989566	984897	-0.99
53 d5-Chlorobenzene	985810	492905	1971620	971845	-1.42
76 d4-1,4-Dichlorobe	556120	278060	1112240	543467	-2.28

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.01
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.01
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.00
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: SEE0142-CALC
Level: LOW
Data Type: MS DATA
SpikeList File: allspike.spk
Sublist File: betx.sub
Client SDG: 20150930a
Fraction: VOA
Client Smp ID: GAS1
Operator: LH
SampleType: SAMPLE
Quant Type: ISTD
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

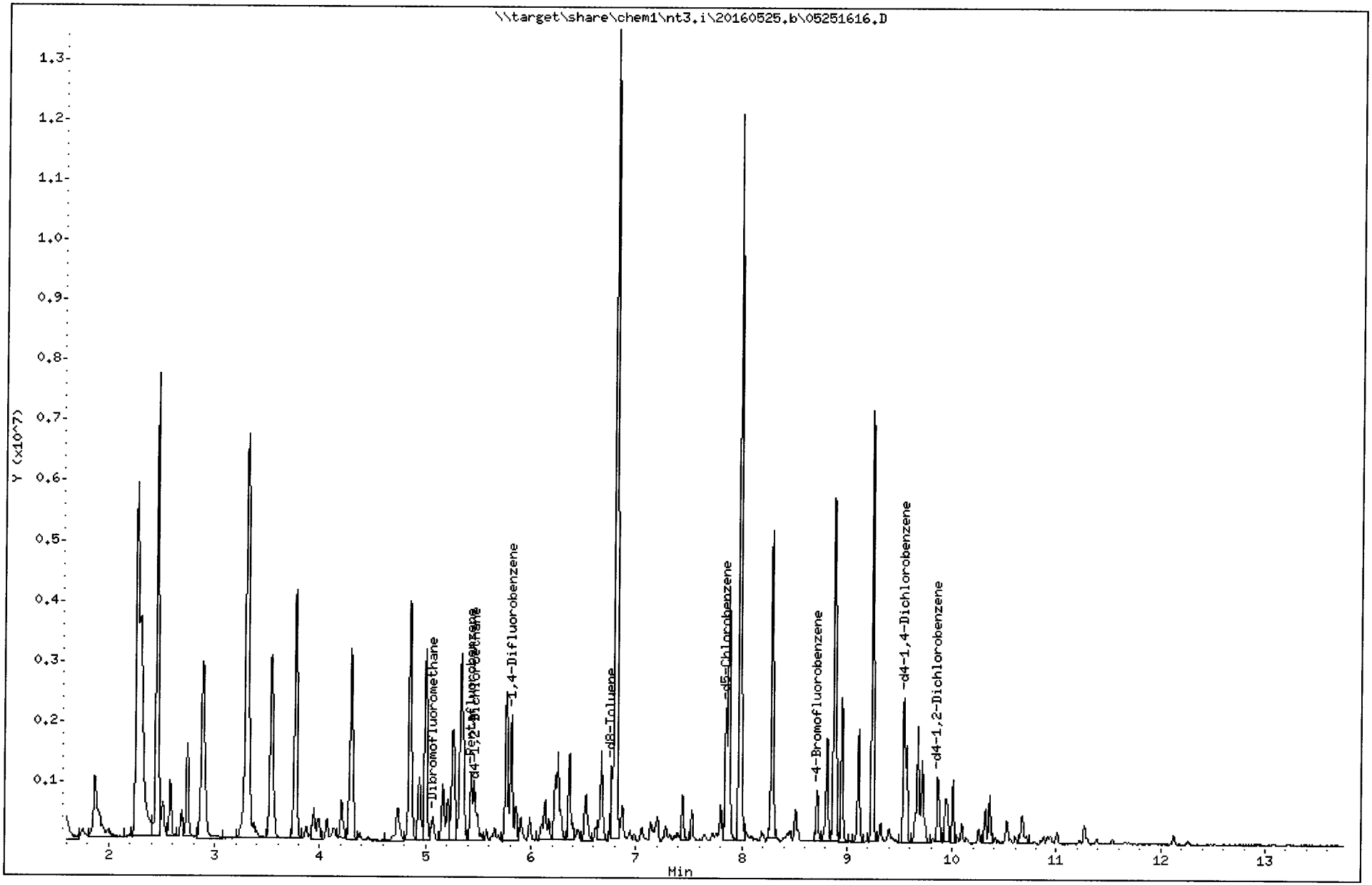
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.984	99.68	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.801	116.02	80-128
$ 43 d8-Toluene	5.000	4.968	99.37	80-120
$ 62 4-Bromofluorobenze	5.000	4.937	98.75	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.971	99.42	80-120

Data File: \\target\share\chem1\nt3.i\20160525.b\05251616.D
Date : 25-MAY-2016 14:07
Client ID: GAS1
Sample Info: SEE0142-CALC,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH
Column diameter: 0.18



REVIEW SUMMARY FOR FILE - 05251616.D

Lab ID: SEE0142-CALC
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 14:07

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160525g.b/05251617.D
Method: \20160525g.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 25-MAY-2016 14:33

ARI ID: SEE0142-CALB
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	50174598	0.502
8015C 2MP-TMB	(3.20 to 9.34)	176207359	88068005	0.500
AK101 nC6-nC10	(3.67 to 8.68)	125823356	63427627	0.504
NWTPHG Tol-Nap	(6.71 to 11.37)	103441757	51674613	0.500
mod8015 nC6-nC12	(3.67 to 10.57)	111111111	83645622	0.753

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

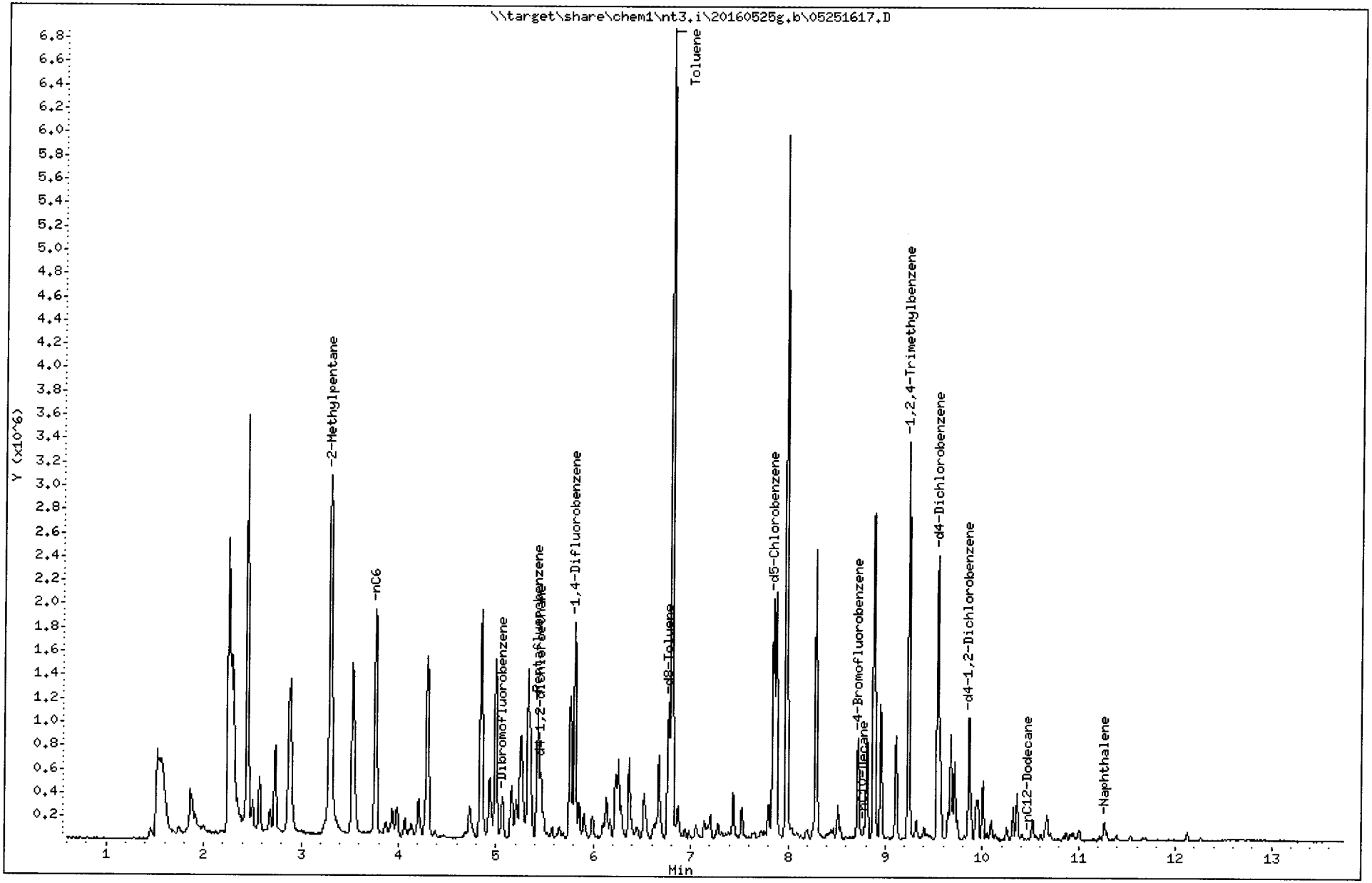
6.767	1727447	d8-Toluene
8.717	1240015	4-Bromofluorobenzene
9.541	4363603	d4-Dichlorobenzene
7.851	2777874	d5-Chlorobenzene
9.860	1762843	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt3.i\20160525g.b\05251617.D
Date : 25-MAY-2016 14:33
Client ID:
Sample Info: SEE0142-CALB,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251617.D
Lab Smp Id: SEE0142-CALB Client Smp ID: GAS0.5
Inj Date : 25-MAY-2016 14:33
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-CALB,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.067	5.068	(0.933)	142003	4.92924	4.929
	31 Benzene	78	5.354	5.355	(0.921)	520216	3.52124	3.521
*	32 Pentafluorobenzene	168	5.428	5.429	(1.000)	555474	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.460	5.461	(1.006)	165397	5.44137	5.441
*	37 1,4-Difluorobenzene	114	5.811	5.812	(1.000)	973225	10.0000	
$	43 d8-Toluene	98	6.767	6.768	(1.165)	574220	4.85106	4.851
	44 Toluene	92	6.804	6.805	(1.171)	2421622	25.0463	25.046
*	53 d5-Chlorobenzene	117	7.851	7.852	(1.000)	954446	10.0000	
	55 Ethyl Benzene	106	7.877	7.878	(1.003)	375479	6.45803	6.458
	57 m,p-xylene	106	7.978	7.979	(1.016)	1492551	21.0752	21.075
	58 o-Xylene	106	8.287	8.288	(1.055)	573329	8.10794	8.108
$	62 4-Bromofluorobenzene	174	8.717	8.718	(1.110)	188568	4.81939	4.819
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	533750	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.865	9.866	(1.034)	249905	5.08705	5.087

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251617.D
Lab Smp Id: SEE0142-CALB
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: GAS0.5
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	555474	-3.92
37 1,4-Difluorobenze	994783	497392	1989566	973225	-2.17
53 d5-Chlorobenzene	985810	492905	1971620	954446	-3.18
76 d4-1,4-Dichlorobe	556120	278060	1112240	533750	-4.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	-0.01
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	-0.01
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	-0.01
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: SEE0142-CALB
Level: LOW
Data Type: MS DATA
SpikeList File: allspike.spk
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Client SDG: 20150930a
Fraction: VOA
Client Smp ID: GAS0.5
Operator: LH
SampleType: SAMPLE
Quant Type: ISTD

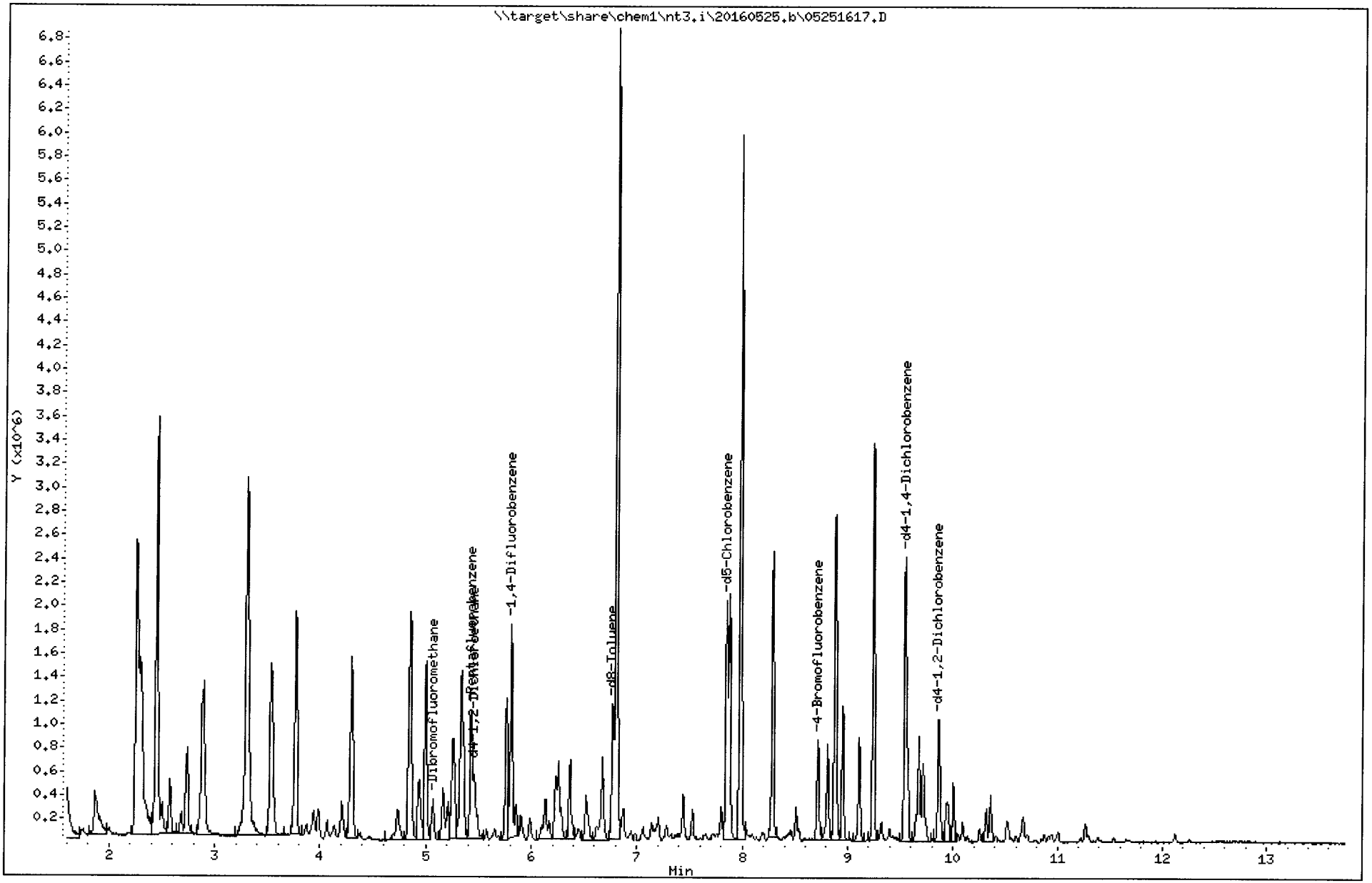
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.929	98.58	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.441	108.83	80-128
$ 43 d8-Toluene	5.000	4.851	97.02	80-120
$ 62 4-Bromofluorobenze	5.000	4.819	96.39	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.087	101.74	80-120

Data File: \\target\share\chem1\nt3.i\20160525.b\05251617.D
Date : 25-MAY-2016 14:33
Client ID: GAS0.5
Sample Info: SEE0142-CALB,10,10,0,

Column phase: RTXVMS

Instrument: nt3.i

Operator: LH
Column diameter: 0.18



REVIEW SUMMARY FOR FILE - 05251617.D

Lab ID: SEE0142-CALB
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 14:33

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160525g.b/05251618.D
Method: \20160525g.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 25-MAY-2016 14:59

ARI ID: SEE0142-CALA
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	25590032	0.256
8015C 2MP-TMB	(3.20 to 9.34)	176207359	42976536	0.244
AK101 nC6-nC10	(3.67 to 8.68)	125823356	30671264	0.244
NWTPHG Tol-Nap	(6.71 to 11.37)	103441757	26390887	0.255
mod8015 nC6-nC12	(3.67 to 10.57)	111111111	40853579	0.368

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

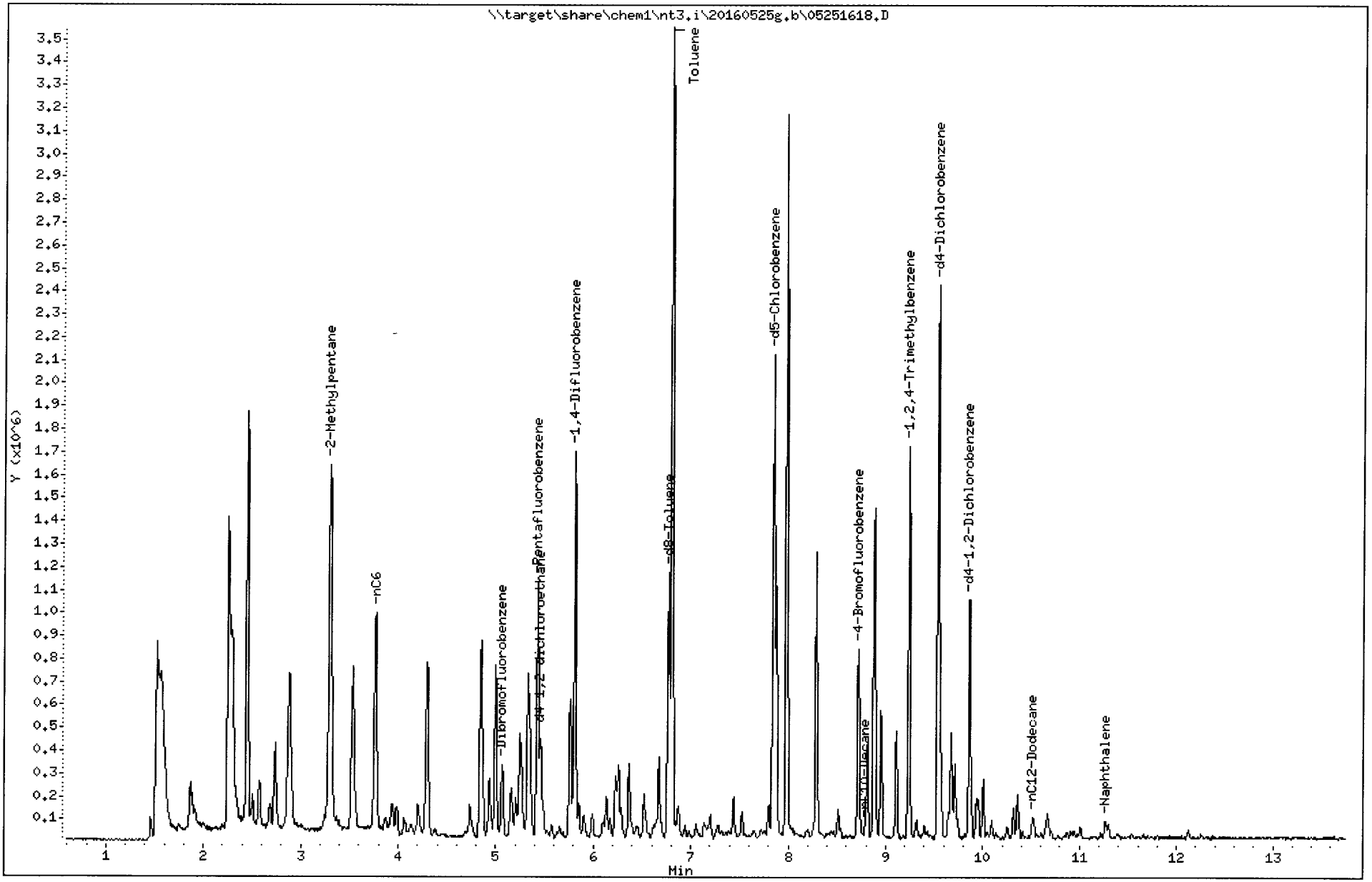
6.768	1646765	d8-Toluene
8.718	1248537	4-Bromofluorobenzene
9.541	3898395	d4-Dichlorobenzene
7.851	3089734	d5-Chlorobenzene
9.860	1651131	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt3.i\20160525g.b\05251618.D
Date : 25-MAY-2016 14:59
Client ID:
Sample Info: SEE0142-CALA,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251618.D
Lab Smp Id: SEE0142-CALA Client Smp ID: GAS0.25
Inj Date : 25-MAY-2016 14:59
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-CALA,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.067	5.068	(0.933)	143615	4.92687	4.927
	31 Benzene	78	5.354	5.355	(0.921)	264252	1.81298	1.813
*	32 Pentafluorobenzene	168	5.428	5.429	(1.000)	562050	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.460	5.461	(1.006)	161683	5.25695	5.257
*	37 1,4-Difluorobenzene	114	5.811	5.812	(1.000)	960175	10.0000	
$	43 d8-Toluene	98	6.767	6.768	(1.165)	587269	5.02873	5.029
	44 Toluene	92	6.804	6.805	(1.171)	1244875	13.0505	13.050
*	53 d5-Chlorobenzene	117	7.851	7.852	(1.000)	980814	10.0000	
	55 Ethyl Benzene	106	7.877	7.878	(1.003)	196114	3.28237	3.282
	57 m,p-xylene	106	7.978	7.979	(1.016)	744300	10.2271	10.227
	58 o-Xylene	106	8.287	8.288	(1.055)	293234	4.03539	4.035
$	62 4-Bromofluorobenzene	174	8.717	8.718	(1.110)	195933	4.87299	4.873
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	537547	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.865	9.866	(1.034)	248244	5.01754	5.018

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251618.D
Lab Smp Id: SEE0142-CALA
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: GAS0.25
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	562050	-2.78
37 1,4-Difluorobenze	994783	497392	1989566	960175	-3.48
53 d5-Chlorobenzene	985810	492905	1971620	980814	-0.51
76 d4-1,4-Dichlorobe	556120	278060	1112240	537547	-3.34

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	-0.01
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	-0.01
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	-0.01
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

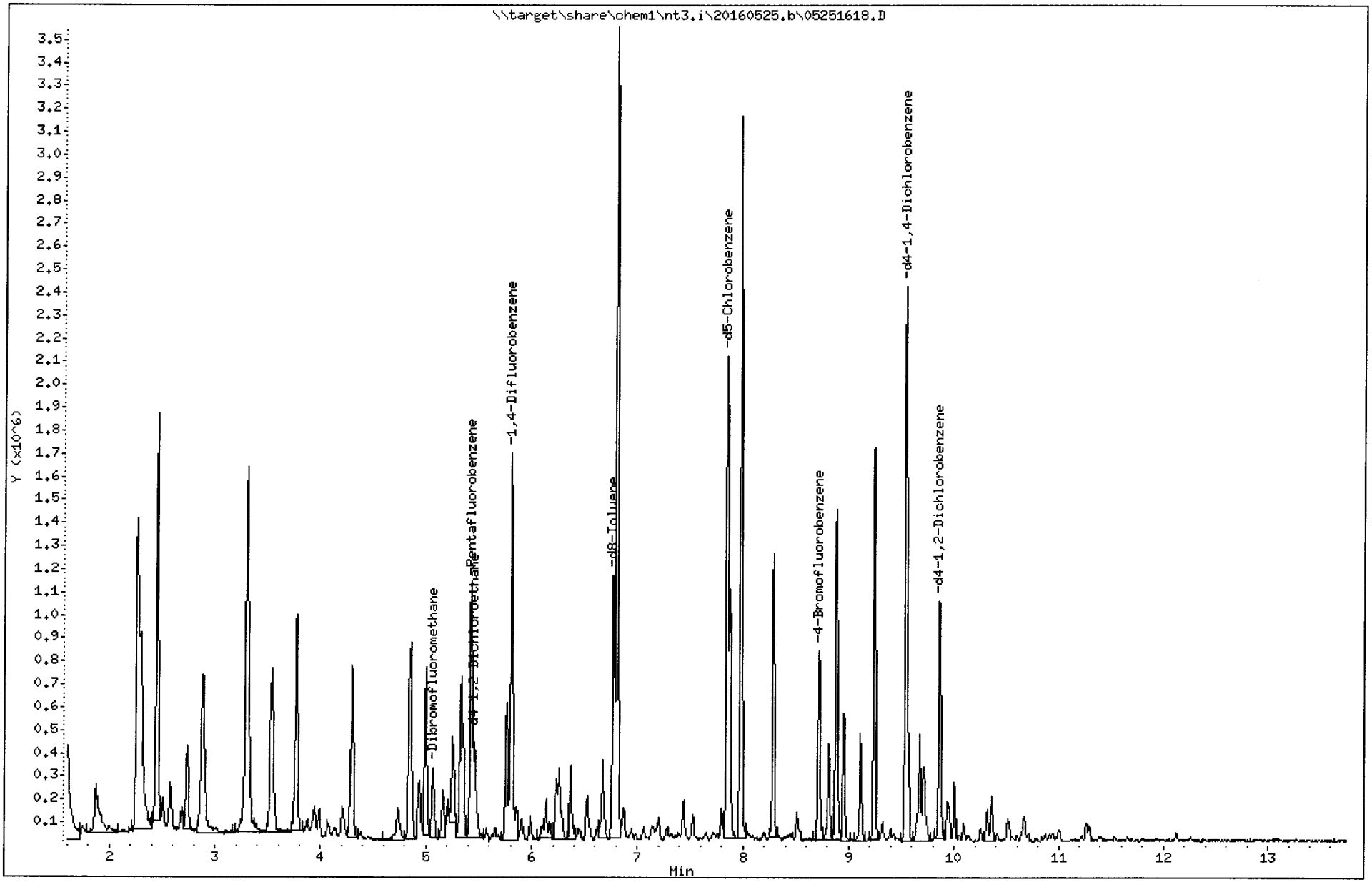
Client Name:
Sample Matrix: LIQUID
Lab Smp Id: SEE0142-CALA
Level: LOW
Data Type: MS DATA
SpikeList File: allspike.spk
Sublist File: betx.sub
Client SDG: 20150930a
Fraction: VOA
Client Smp ID: GAS0.25
Operator: LH
SampleType: SAMPLE
Quant Type: ISTD
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.927	98.54	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.257	105.14	80-128
$ 43 d8-Toluene	5.000	5.029	100.57	80-120
$ 62 4-Bromofluorobenze	5.000	4.873	97.46	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.018	100.35	80-120

Data File: \\target\share\chem1\nt3.i\20160525.b\05251618.D
Date : 25-MAY-2016 14:59
Client ID: GAS0.25
Sample Info: SEE0142-CALA,10,10,0,

Instrument: nt3.i
Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 05251618.D

Lab ID: SEE0142-CALA
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 14:59

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160525g.b/05251619.D
Method: \20160525g.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 25-MAY-2016 15:25

ARI ID: SEE0142-CAL9
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	9740200	0.097
8015C 2MP-TMB	(3.20 to 9.34)	176207359	18334638	0.104
AK101 nC6-nC10	(3.67 to 8.68)	125823356	12676581	0.101
NWTPHG Tol-Nap	(6.71 to 11.37)	103441757	10249638	0.099
mod8015 nC6-nC12	(3.67 to 10.57)	111111111	16829205	0.151

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.768	1568831	d8-Toluene
8.718	1244956	4-Bromofluorobenzene
9.542	3583074	d4-Dichlorobenzene
7.852	3580713	d5-Chlorobenzene
9.860	1587644	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt3.i\20160525g.b\05251619.D

Date : 25-MAY-2016 15:25

Client ID:

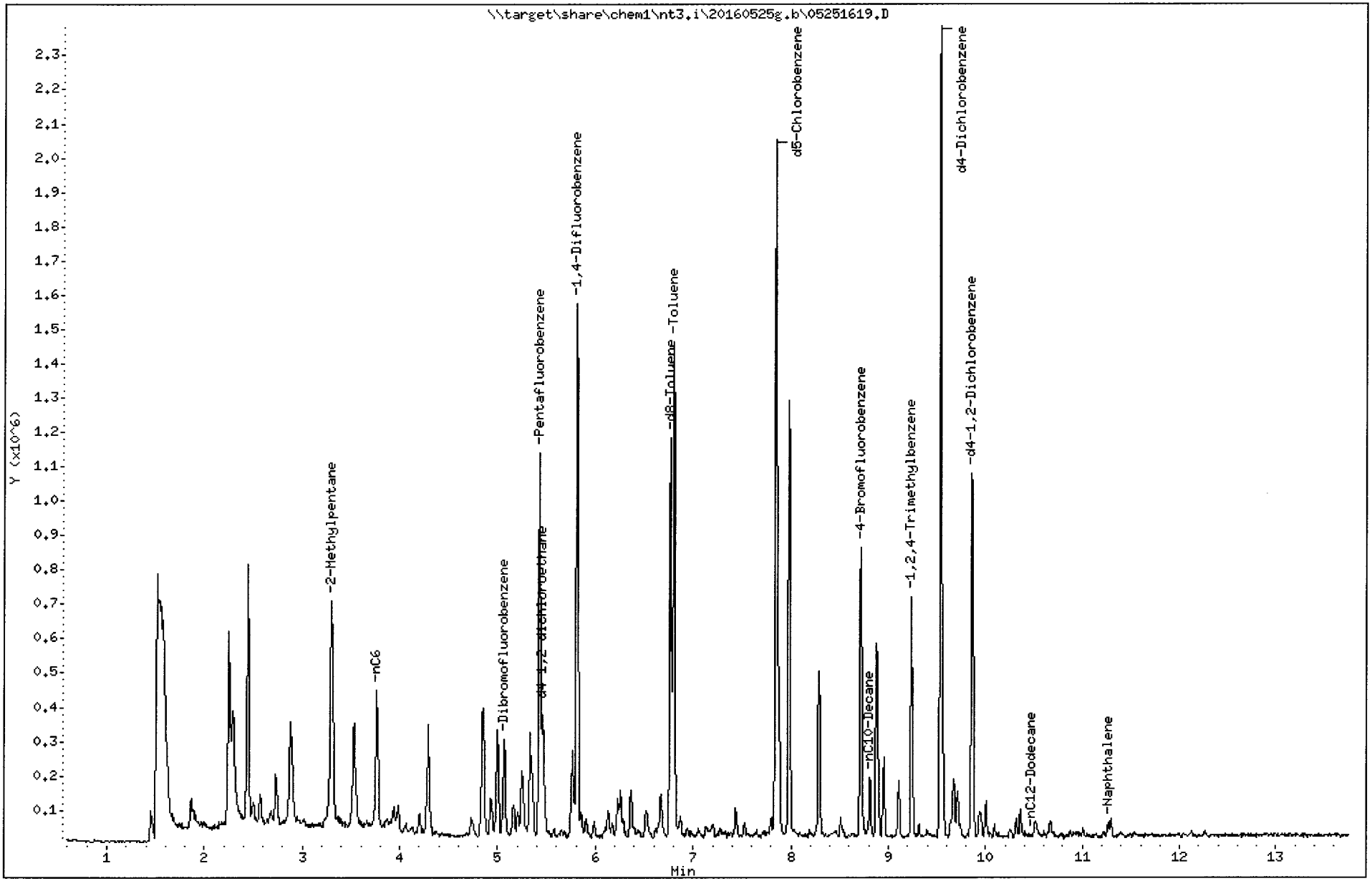
Instrument: nt3.i

Sample Info: SEE0142-CAL9,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251619.D
Lab Smp Id: SEE0142-CAL9 Client Smp ID: GAS0.1
Inj Date : 25-MAY-2016 15:25
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-CAL9,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.062	5.068	(0.932)	141127	4.75983	4.760
	31 Benzene	78	5.349	5.355	(0.920)	109816	0.75039	0.7504
*	32 Pentafluorobenzene	168	5.429	5.429	(1.000)	571696	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.461	5.461	(1.006)	154985	4.95415	4.954
*	37 1,4-Difluorobenzene	114	5.811	5.812	(1.000)	964062	10.0000	
$	43 d8-Toluene	98	6.768	6.768	(1.165)	588253	5.01685	5.017
	44 Toluene	92	6.805	6.805	(1.171)	479626	5.00782	5.008
*	53 d5-Chlorobenzene	117	7.852	7.852	(1.000)	942338	10.0000	
	55 Ethyl Benzene	106	7.878	7.878	(1.003)	75770	1.31995	1.320
	57 m,p-xylene	106	7.979	7.979	(1.016)	297605	4.25625	4.256
	58 o-Xylene	106	8.287	8.288	(1.055)	111460	1.59651	1.597
$	62 4-Bromofluorobenzene	174	8.718	8.718	(1.110)	186589	4.83008	4.830
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	520629	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.865	9.866	(1.034)	244292	5.09812	5.098

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251619.D
Lab Smp Id: SEE0142-CAL9
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: GAS0.1
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	571696	-1.11
37 1,4-Difluorobenze	994783	497392	1989566	964062	-3.09
53 d5-Chlorobenzene	985810	492905	1971620	942338	-4.41
76 d4-1,4-Dichlorobe	556120	278060	1112240	520629	-6.38

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.00
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.00
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.00
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: SEE0142-CAL9
Level: LOW
Data Type: MS DATA
SpikeList File: allspike.spk
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

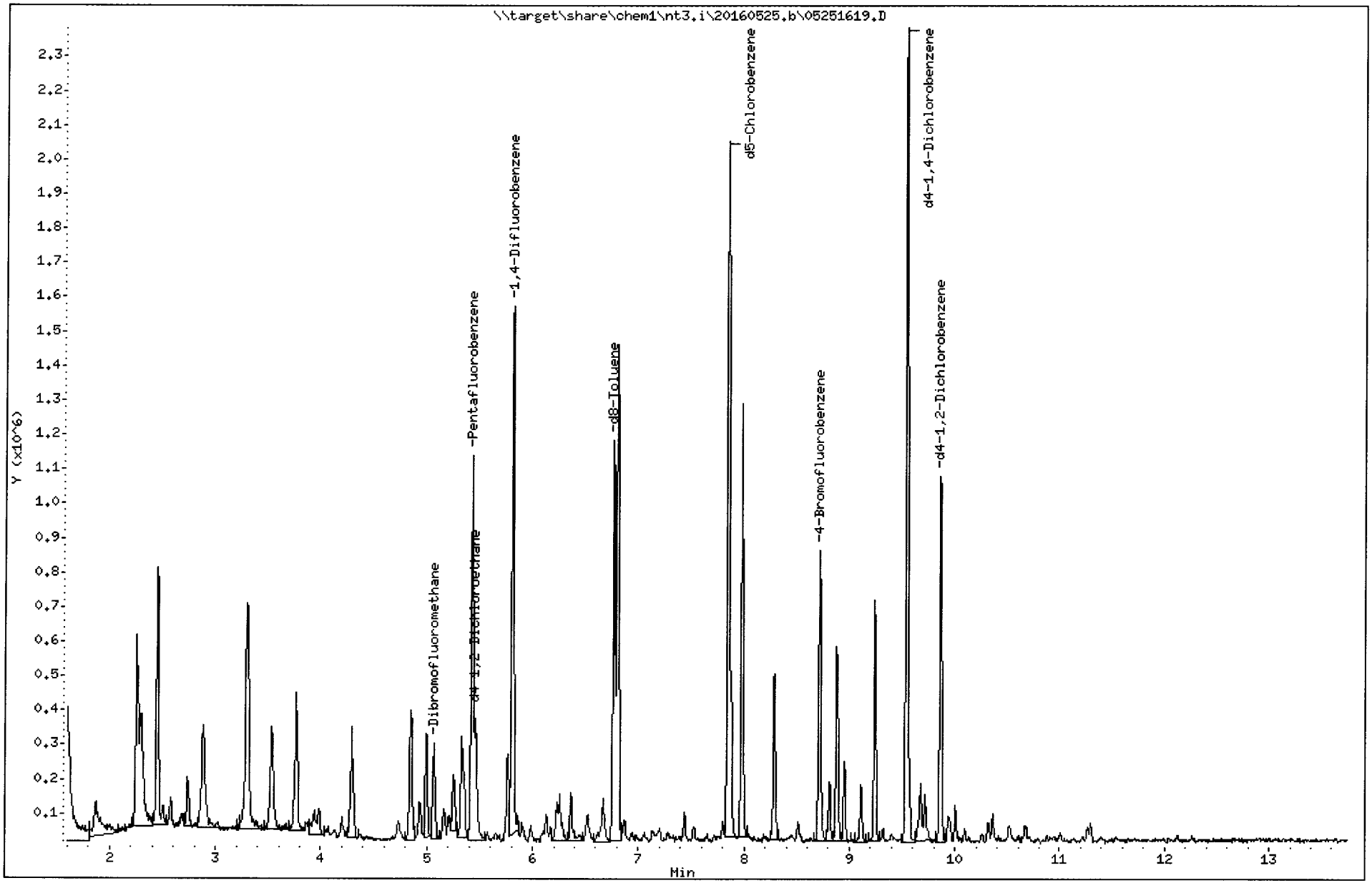
Client SDG: 20150930a
Fraction: VOA
Client Smp ID: GAS0.1
Operator: LH
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.760	95.20	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.954	99.08	80-128
$ 43 d8-Toluene	5.000	5.017	100.34	80-120
$ 62 4-Bromofluorobenze	5.000	4.830	96.60	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.098	101.96	80-120

Data File: \\target\share\chem1\nt3.i\20160525.b\05251619.D
Date : 25-MAY-2016 15:25
Client ID: GAS0.1
Sample Info: SEE0142-CAL9,10,10,0,

Instrument: nt3.i
Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 05251619.D

Lab ID: SEE0142-CAL9
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 15:25

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160525g.b/05251620.D
Method: \20160525g.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 25-MAY-2016 15:51

ARI ID: SEE0142-SCV2
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	250064099	2.501
8015C 2MP-TMB	(3.20 to 9.34)	176207359	461154113	2.617
AK101 nC6-nC10	(3.67 to 8.68)	125823356	328949776	2.614
NWTPHG Tol-Nap	(6.71 to 11.37)	103441757	259860041	2.512
mod8015 nC6-nC12	(3.67 to 10.57)	111111111	449827615	4.048

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

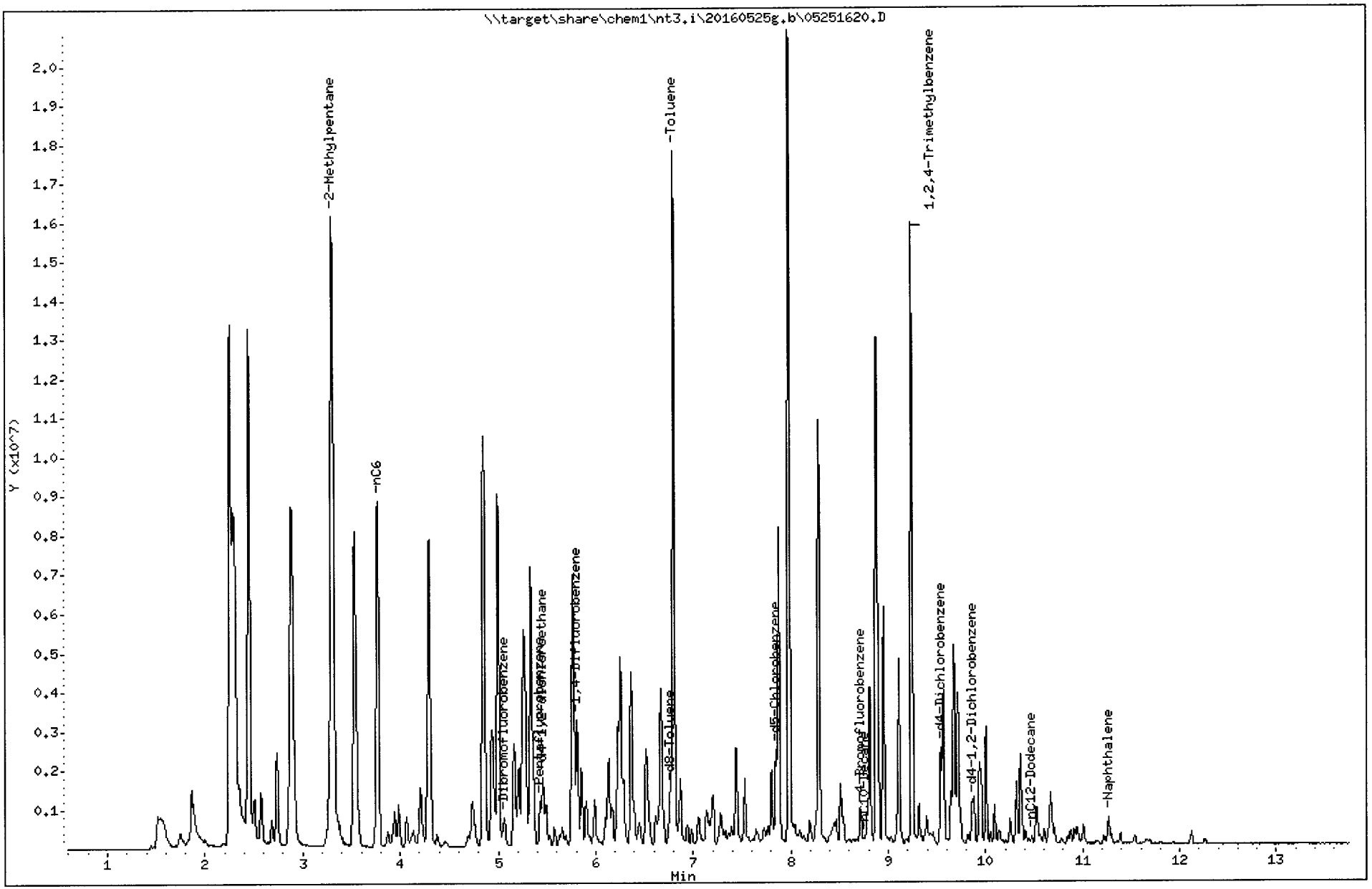
6.768	2015572	d8-Toluene
8.718	1488722	4-Bromofluorobenzene
9.542	3332535	d4-Dichlorobenzene
7.852	3181208	d5-Chlorobenzene
9.866	1469234	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt3.i\20160525g.b\05251620.D
Date : 25-MAY-2016 15:51
Client ID:
Sample Info: SEE0142-SCV2,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160525.b\05251620.D
Lab Smp Id: SEE0142-SCV2 Client Smp ID: GAS SCV
Inj Date : 25-MAY-2016 15:51
Operator : LH Inst ID: nt3.i
Smp Info : SEE0142-SCV2,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Meth Date : 26-May-2016 08:00 lanih Quant Type: ISTD
Cal Date : 25-MAY-2016 10:12 Cal File: 05251607.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.062	5.068	(0.932)	145466	5.09905	5.099
	31 Benzene	78	5.354	5.355	(0.921)	1212782	8.17542	8.175
*	32 Pentafluorobenzene	168	5.429	5.429	(1.000)	550071	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.460	5.461	(1.006)	188980	6.27829	6.278(Q)
*	37 1,4-Difluorobenzene	114	5.811	5.812	(1.000)	977232	10.0000	
$	43 d8-Toluene	98	6.768	6.768	(1.165)	605448	5.09391	5.094
	44 Toluene	92	6.805	6.805	(1.171)	6672928	68.7338	68.734
*	53 d5-Chlorobenzene	117	7.851	7.852	(1.000)	948324	10.0000	
	55 Ethyl Benzene	106	7.878	7.878	(1.003)	1573898	27.2449	27.245
	57 m,p-xylene	106	7.984	7.979	(1.017)	5472548	77.7725	77.772
	58 o-Xylene	106	8.287	8.288	(1.055)	2554187	36.3542	36.354
$	62 4-Bromofluorobenzene	174	8.718	8.718	(1.110)	196022	5.04224	5.042
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	539702	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.865	9.866	(1.034)	241760	4.86698	4.867

QC Flag Legend

Q - Qualifier signal failed the ratio test.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 05251620.D
Lab Smp Id: SEE0142-SCV2
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

Calibration Date: 25-MAY-2016
Calibration Time: 11:30
Client Smp ID: GAS SCV
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	578118	289059	1156236	550071	-4.85
37 1,4-Difluorobenze	994783	497392	1989566	977232	-1.76
53 d5-Chlorobenzene	985810	492905	1971620	948324	-3.80
76 d4-1,4-Dichlorobe	556120	278060	1112240	539702	-2.95

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.00
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.00
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.00
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20150930a
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: SEE0142-SCV2 Client Smp ID: GAS SCV
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160525.b\8260052516.m
Misc Info: 16-

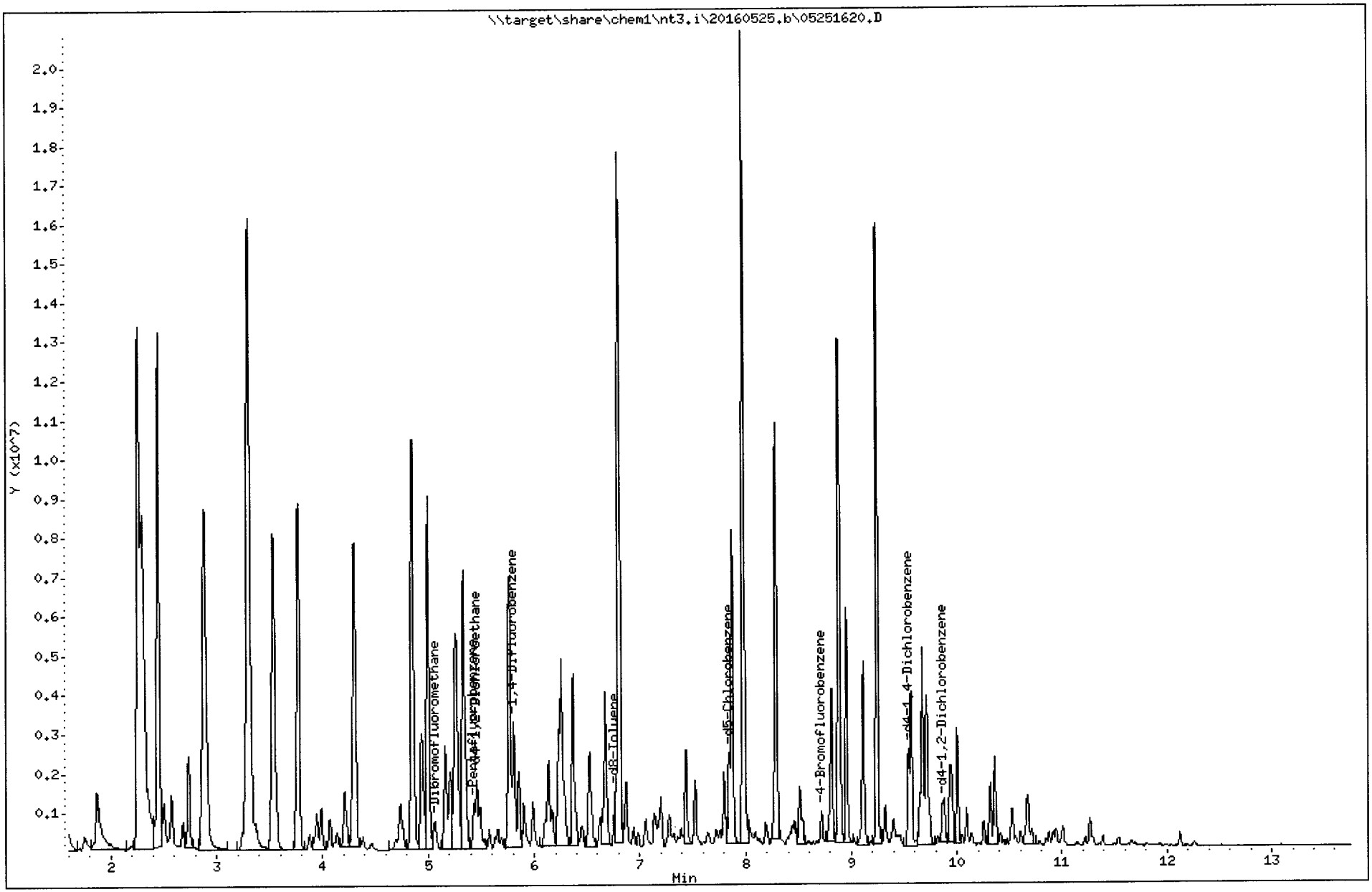
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	5.099	101.98	80-120
$ 33 d4-1,2-Dichloroeth	5.000	6.278	125.57	80-128
$ 43 d8-Toluene	5.000	5.094	101.88	80-120
$ 62 4-Bromofluorobenze	5.000	5.042	100.84	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.867	97.34	80-120

Data File: \\target\share\chem1\nt3.i\20160525.b\05251620.D
Date : 25-MAY-2016 15:51
Client ID: GAS SCV
Sample Info: SEE0142-SCV2,10,10,0,

Instrument: nt3.i

Operator: LH
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 05251620.D

Lab ID: SEE0142-SCV2
nt3.i, 20160525.b\8260052516.m, 25-MAY-2016 15:51

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,8260052516.m,Sublist: mdl.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

INITIAL CALIBRATION DATA

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZD00012	Instrument:	NT2
Calibration Date:	04/14/2016 13:36	Column (1):	RTX-VMS

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
Gasoline Range Organics (Tol-Nap)					100	39259.68	250	48930.84	500	50264.22	1000	52493.34

INITIAL CALIBRATION DATA

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZD00012	Instrument:	NT2
Calibration Date:	04/14/2016 13:36	Column (1):	RTX-VMS

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
		RF		RF		RF		RF		RF		RF
Gasoline Range Organics (Tol-Nap)	2500	52751.28	5000	51520.62								

INITIAL CALIBRATION DATA

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZD00012	Instrument:	NT2
Calibration Date:	04/14/2016 13:36	Column (1):	RTX-VMS

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	RSD Limit	Q
Gasoline Range Organics (Tol-Nap)	49203.33	10.3			20	

Analysis	Matrix	Method
8260C Gas (8015C)	Water	EPA 8015C
8260C Gas (AK101)	Water	AK101
8260C Gas (NWTPH)	Water	NWTPHg
8260C VOA	Water	EPA 8260C

Checklist: Initial Calibration Checklist-VOA

#	Checklist Item	Response	Analyst Initials	Date
1	Element Calibration Code	YES	LH	03/30/2016
	Comments: *ZC00032* *Calibration is for 8260C and gas.*			
2	BFB Tune met Criteria	YES	LH	03/30/2016
3	ICal meets 20% RSD, LR COD, and QR COD limits	YES	LH	03/30/2016
4	NO ICAL Q Flag applied	YES	LH	03/30/2016
5	Manual integrations include before/after pictures	YES	LH	03/30/2016
6	Internal Standard areas within 50-200% from reference	YES	LH	03/30/2016
7	Spectral Library updated	NA	LH	03/30/2016
8	Minimum response factors met	YES	LH	03/30/2016
9	All SCV within +/- 20% (DOD)	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Vinyl Chloride 120.12%, Chloroethane 120.72%, t-butylbenzene 124.45%.*			
10	All SCV within +/- 30%	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Bromomethane 141.13%, methylene chloride 130.90%*			
11	NO Linear or Quadratic Fits Used	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Quadratic: Chloroethane* *Linear: Iodomethane, methylene chloride, trans-1,3-dichloropropene, chlorodibromomethane, 1,1,1,2-tetrachloroethane, bromoform.*			
12	NO Calibration points dropped	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Some low points were dropped, but all RLs were met.* *Upper 2 points for trichlorofluoromethane were dropped. Range is 0.2ug/L- 20ug/L*			
13	Additional Notes	YES	LH	03/30/2016
	Comments: *Gas SCV standard was expired, but recovered well.*			
14	Reviewer Approval (Reviewer)	YES	BB	03/30/2016

Analytical Resources Inc.: Organics Instrument Log

NT-2 Serial No.: 82321977

Date: 3/29/16 Analysis: 8260C + gas Analyst: [illegible] for PC

GC Program: VOAW Column No: 1295415 Column Type: RTXVMS

Instrument Tune (.U or .CT.): bfb.u EM Voltage: 2071

Calibration File: 03291602.d Curve Date: 3/29/16 Injection Vol.: 10mL

ZC00032

IS/SS	Ical/Ccal	LCS/ICV
E000043	E000921 } 8260C	8260 SCV: E000942
E000044	E000922 }	Gas SCV: E000933
	E000912 } Gas	
	E000923 }	

Document All Maintenance Tasks In Element

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160329.b

	Time	Filename	LabID	ClientID	Vial#	pH	DF								
1	1110	03291601.D	RINSE	10			1								
2	1131	03291602.D	SEC0063-TUN1	RTBFB0329			1								
3	1226	03291603.D	GICV				1								
4	1248	03291604.D	VICV				1								
5	1309	03291605.D	VICV	ICV0329a			1								
6	1330	03291606.D	VLCSA	VLCS			1								
7	1352	03291607.D	GLCS				1								
8	1413	03291608.D	GLCSA	GLCSA			1	5.33	366954	5.72	575180	7.78	532674	9.48	286650
9	1435	03291609.D	MB0329	MB0329			1	5.33	353242	5.72	559046	7.78	510480	9.48	262386
10	1733	03291610.D	SEC0063-CAL8	VSTD80			1	5.33	419789	5.72	643017	7.78	591709	9.49	324865
11	1754	03291611.D	SEC0063-CAL7	VSTD40			1	5.33	372674	5.72	577427	7.78	536655	9.48	296811
12	1816	03291612.D	SEC0063-CAL6	VSTD20			1	5.33	356460	5.72	546852	7.78	512009	9.48	277409
13	1837	03291613.D	SEC0063-CAL5	VSTD10			1	5.33	350375	5.72	562526	7.78	502371	9.48	277950
14	1859	03291614.D	SEC0063-CAL4	VSTD02			1	5.33	351970	5.72	569384	7.78	501631	9.48	275297
15	1920	03291615.D	SEC0063-CAL3	VSTD01			1	5.33	322836	5.72	510764	7.78	467709	9.48	255215
16	1941	03291616.D	SEC0063-CAL2	VSTD0.5			1	5.33	318463	5.72	502550	7.78	459981	9.48	246454
17	2003	03291617.D	SEC0063-CAL1	VSTD0.2			1	5.33	311848	5.72	495060	7.78	453911	9.48	235351
18	2024	03291618.D	SEC0063-SCV1	SCV			1	5.33	333646	5.72	527779	7.78	486532	9.48	269269
19	2045	03291619.D	SEC0063-CALE				1	5.33	386746	5.72	615798	7.78	554896	9.48	296516
20	2107	03291620.D	SEC0063-CALD				1	5.33	366346	5.72	580475	7.78	530399	9.48	284779
21	2128	03291621.D	SEC0063-CALC				1	5.33	356093	5.72	560609	7.78	525882	9.48	278120
22	2150	03291622.D	SEC0063-CALB				1	5.33	335026	5.72	526989	7.78	495230	9.48	263670
23	2211	03291623.D	SEC0063-CALA				1	5.33	330180	5.72	523950	7.78	490395	9.48	259889
24	2232	03291624.D	SEC0063-CAL9				1	5.33	303542	5.72	482197	7.78	459677	9.48	241501
25	2254	03291625.D	SEC0063-SCV2				1	5.33	347854	5.72	555254	7.78	518670	9.48	276192

[illegible] 3/30/16

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
End Cal Date : 29-MAR-2016 20:03
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem1\nt2.i\20160329.b\03291617.D
Level 2: \\target\share\chem1\nt2.i\20160329.b\03291616.D
Level 3: \\target\share\chem1\nt2.i\20160329.b\03291615.D
Level 4: \\target\share\chem1\nt2.i\20160329.b\03291614.D
Level 5: \\target\share\chem1\nt2.i\20160329.b\03291613.D
Level 6: \\target\share\chem1\nt2.i\20160329.b\03291612.D
Level 7: \\target\share\chem1\nt2.i\20160329.b\03291611.D
Level 8: \\target\share\chem1\nt2.i\20160329.b\03291610.D

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
1 Dichlorodifluoromethane	0.53600	0.72103	0.75655	0.68389	0.66518	0.67125			
	0.63304	0.55180					0.65234	11.748	
2 Chloromethane	+++++	0.73271	0.78922	0.73091	0.68491	0.69009			
	0.65642	0.55073					0.69071	10.881	
3 Vinyl Chloride	0.55925	0.57778	0.65631	0.66895	0.66697	0.66768			
	0.62851	0.53183					0.61966	8.947	
4 Bromomethane	0.78227	0.71355	0.73867	0.64487	0.57653	0.55945			
	0.51690	0.42850					0.62009	19.528	
5 Chloroethane	0.47892	0.28970	0.29009	0.46966	0.26038	0.24378			
	0.20149	0.17328					0.30091	37.992	<-
6 Trichlorofluoromethane	1.11625	1.16095	1.20891	1.13829	1.09301	1.08840			
	+++++	+++++					1.13430	4.027	
7 1,1-Dichloroethene	1.06847	1.07717	1.09207	1.04134	1.01649	1.00377			
	0.95080	0.81045					1.00757	9.112	
8 Carbon Disulfide	2.31475	2.09086	2.11789	2.02050	1.98297	1.97893			
	1.85517	1.48891					1.98125	12.092	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
End Cal Date : 29-MAR-2016 20:03
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Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
9 112Trichloro122Trifluoroethan	0.69088	0.65358	0.69116	0.65344	0.62529	0.63097			
	0.60231	0.54688					0.63681	7.479	
10 Iodomethane	+++++	+++++	0.32075	0.33916	0.49975	0.57906			
	0.62050	0.59218					0.49190	26.797	<-
11 Bromoethane	0.47379	0.45921	0.47603	0.45343	0.43105	0.42449			
	0.39812	0.35182					0.43349	9.748	
12 Acrolein	+++++	+++++	0.09936	0.09563	0.09252	0.09096			
	0.08619	0.06461					0.08821	14.037	
13 Methylene Chloride	+++++	+++++	1.07959	0.83102	0.68108	0.65582			
	0.61413	0.53496					0.73277	26.724	<-
14 Acetone	+++++	+++++	0.18692	0.17264	0.16306	0.15577			
	0.14425	0.10448					0.15452	18.447	
15 Trans-1,2-Dichloroethene	0.72086	0.70771	0.69847	0.68699	0.65227	0.64907			
	0.62240	0.55163					0.66117	8.385	
16 n-hexane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
17 Methyl tert butyl ether	1.90958	1.93203	2.03850	1.98312	1.95086	1.91080			
	1.78604	1.35892					1.85873	11.540	
18 1,1-Dichloroethane	0.90525	0.99101	1.06292	1.00001	0.99854	0.99611			
	0.93712	0.80410					0.96188	8.218	
19 Acrylonitrile	0.12282	0.14294	0.16076	0.16453	0.17575	0.17124			
	0.16530	0.12564					0.15362	13.369	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD
	40.000 Level 7	80.000 Level 8						
21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
20 Vinyl Acetate	0.61825	0.70595	0.84981	0.84558	1.00279	1.01660		
	0.98059	0.75443					0.84675	17.384
22 Cis-1,2-Dichloroethene	0.53311	0.58550	0.64652	0.61909	0.60600	0.60718		
	0.58396	0.51736					0.58734	7.367
23 2,2-Dichloropropane	0.55861	0.59046	0.65485	0.67952	0.73980	0.77630		
	0.76319	0.67797					0.68009	11.546
24 Bromochloromethane	0.26407	0.25799	0.28439	0.29517	0.29203	0.29470		
	0.27095	0.24064					0.27499	7.245
25 Chloroform	0.86901	0.91942	0.96371	0.96613	0.95582	0.95677		
	0.90942	0.77982					0.91501	7.015
26 Carbon Tetrachloride	0.29087	0.25960	0.29824	0.31863	0.35736	0.40984		
	0.41616	0.38969					0.34255	17.262
28 1,1,1-Trichloroethane	0.66763	0.71186	0.78232	0.81064	0.83763	0.86079		
	0.83256	0.73624					0.77996	8.768
30 1,1-Dichloropropene	0.46257	0.43733	0.46477	0.45432	0.45917	0.48903		
	0.46665	0.40793					0.45522	5.246
29 2-Butanone	0.15325	0.18833	0.20808	0.21101	0.21179	0.20858		
	0.19373	0.13627					0.18888	15.282
31 Benzene	1.32055	1.36508	1.45165	1.40094	1.38163	1.43745		
	1.31385	1.06235					1.34169	9.179

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD
	40.000 Level 7	80.000 Level 8						
35 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
34 1,2-Dichloroethane	0.47176	0.46738	0.46928	0.45909	0.44857	0.46409		
	0.43485	0.36702					0.44775	7.785
36 Trichloroethene	0.39864	0.36183	0.40277	0.39100	0.38670	0.40504		
	0.38331	0.34017					0.38368	5.809
38 Dibromomethane	0.17614	0.18637	0.19060	0.19576	0.19491	0.20895		
	0.19328	0.16193					0.18849	7.509
39 1,2-Dichloropropane	0.29744	0.31129	0.35044	0.32310	0.33412	0.35795		
	0.33293	0.28701					0.32429	7.615
40 Bromodichloromethane	0.28926	0.31225	0.35870	0.36126	0.39714	0.42977		
	0.42192	0.37309					0.36792	13.409
173 2-Pentanone	+++++	+++++	0.03759	0.04108	0.04748	0.04941		
	0.04615	0.03337					0.04251	14.703
42 Cis 1,3-dichloropropene	0.33046	0.37342	0.41522	0.43652	0.49860	0.54426		
	0.51848	0.44837					0.44567	16.387
41 2-Chloroethyl Vinyl Ether	+++++	0.15003	0.15305	0.17629	0.20168	0.21859		
	0.21019	0.16805					0.18255	15.177
44 Toluene	0.88323	0.91171	0.95990	0.91884	0.88958	0.92455		
	0.86740	0.73905					0.88678	7.461
45 4-Methyl-2-Pentanone	+++++	+++++	0.10868	0.11148	0.11923	0.12248		
	0.11347	0.08280					0.10969	12.870

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
46 Tetrachloroethene	0.40658	0.43063	0.46749	0.44914	0.44114	0.43852			
	0.42327	0.39313					0.43124	5.481	
47 Trans 1,3-Dichloropropene	0.24128	0.26795	0.33236	0.34700	0.42566	0.46057			
	0.45296	0.39261					0.36505	22.548	<-
48 1,1,2-Trichloroethane	0.24462	0.25932	0.29094	0.28973	0.29299	0.30652			
	0.28646	0.23270					0.27541	9.583	
49 Chlorodibromomethane	0.19277	0.20318	0.22672	0.26945	0.32941	0.34835			
	0.35097	+++++					0.27441	25.068	<-
50 1,3-Dichloropropane	0.51431	0.53167	0.56170	0.57898	0.56813	0.57741			
	0.53934	0.43524					0.53835	8.843	
51 1,2-Dibromoethane	0.21240	0.25617	0.26762	0.27665	0.28969	0.30154			
	0.28534	0.22844					0.26473	11.671	
52 2-Hexanone	+++++	+++++	0.19017	0.20676	0.23629	0.23586			
	0.21093	0.14625					0.20438	16.431	
54 Chlorobenzene	1.07532	1.20248	1.21400	1.17337	1.15096	1.14082			
	1.05081	0.88935					1.11214	9.574	
55 Ethyl Benzene	0.54229	0.59224	0.61034	0.61537	0.62685	0.62510			
	0.59457	0.54286					0.59370	5.716	
56 1,1,1,2-Tetrachloroethane	0.19354	0.22627	0.27819	0.29599	0.34090	0.36448			
	0.35681	0.32866					0.29810	20.876	<-
57 m,p-xylene	0.67161	0.70427	0.78267	0.78402	0.77720	0.76947			
	0.71796	0.58191					0.72364	9.814	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
End Cal Date : 29-MAR-2016 20:03
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
58 o-Xylene	0.55066	0.64029	0.72776	0.73609	0.74060	0.73737			
	0.70493	0.62251					0.68253	10.297	
59 Styrene	0.80699	0.96378	1.09771	1.14658	1.23360	1.26288			
	1.11636	0.92376					1.06896	14.774	
60 Bromoform	0.14638	0.17813	0.21594	0.23429	0.32671	0.37748			
	0.38262	0.33399					0.27444	33.540	<-
61 Isopropyl Benzene	2.98915	3.17666	3.47241	3.52265	3.50917	3.53443			
	3.07478	2.37176					3.20638	12.542	
63 Bromobenzene	0.87104	0.84113	0.95825	0.92242	0.90158	0.92126			
	0.83514	0.75589					0.87584	7.344	
64 N-Propyl Benzene	3.44485	3.66981	3.94789	3.85809	3.96230	3.95703			
	3.40598	2.55951					3.60068	13.259	
82 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
65 1,1,2,2-Tetrachloroethane	0.57021	0.66698	0.68205	0.70110	0.73224	0.74994			
	0.67965	0.52089					0.66288	11.860	
66 2-Chloro Toluene	2.43530	2.56389	2.64812	2.64905	2.71380	2.74440			
	2.50403	2.12763					2.54828	7.819	
67 1,3,5-Trimethyl Benzene	2.33439	2.48371	2.81633	2.86681	2.96151	2.96960			
	2.64077	2.09947					2.64657	11.984	
68 1,2,3-Trichloropropane	0.15679	0.23420	0.24470	0.25596	0.25009	0.24859			
	0.23008	0.18528					0.22571	15.771	

ARI Labs, Inc.

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Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	___ RRF	% RSD
	40.000 Level 7	80.000 Level 8						
69 Trans-1,4-Dichloro 2-Butene	+++++	+++++	0.14533	0.16308	0.16059	0.16796		
	0.16664	0.14660					0.15837	6.290
70 4-Chloro Toluene	2.20543	2.41043	2.59052	2.48386	2.43654	2.47572		
	2.22956	1.86508					2.33714	9.863
71 T-Butyl Benzene	2.15274	2.30201	2.44927	2.52053	2.62912	2.63217		
	2.36280	1.92215					2.37135	10.296
72 1,2,4-Trimethylbenzene	2.28637	2.55115	2.78969	2.88715	2.98717	3.00685		
	2.69861	2.12329					2.66629	12.165
73 S-Butyl Benzene	3.14212	3.34918	3.63266	3.64579	3.73776	3.73505		
	3.30940	2.47561					3.37845	12.603
74 4-Isopropyl Toluene	2.26470	2.60974	2.98533	3.07072	3.20958	3.25810		
	2.87670	2.23789					2.81409	14.266
75 1,3-Dichlorobenzene	1.56681	1.73688	1.80746	1.78077	1.76264	1.77797		
	1.63509	1.40117					1.68360	8.356
77 1,4-Dichlorobenzene	1.79009	1.80383	1.94107	1.83424	1.75981	1.77822		
	1.60720	1.36061					1.73438	10.200
78 N-Butyl Benzene	2.26428	2.43932	2.59134	2.68141	2.77713	2.84695		
	2.59185	2.03827					2.52882	10.702
80 1,2-Dichlorobenzene	1.55172	1.68632	1.75914	1.66362	1.64186	1.65571		
	1.51993	1.28505					1.59542	9.158
81 1,2-Dibromo 3-Chloropropane	+++++	0.07417	0.07202	0.08120	0.10209	0.11141		
	0.10864	0.08242					0.09028	18.426

ARI Labs, Inc.

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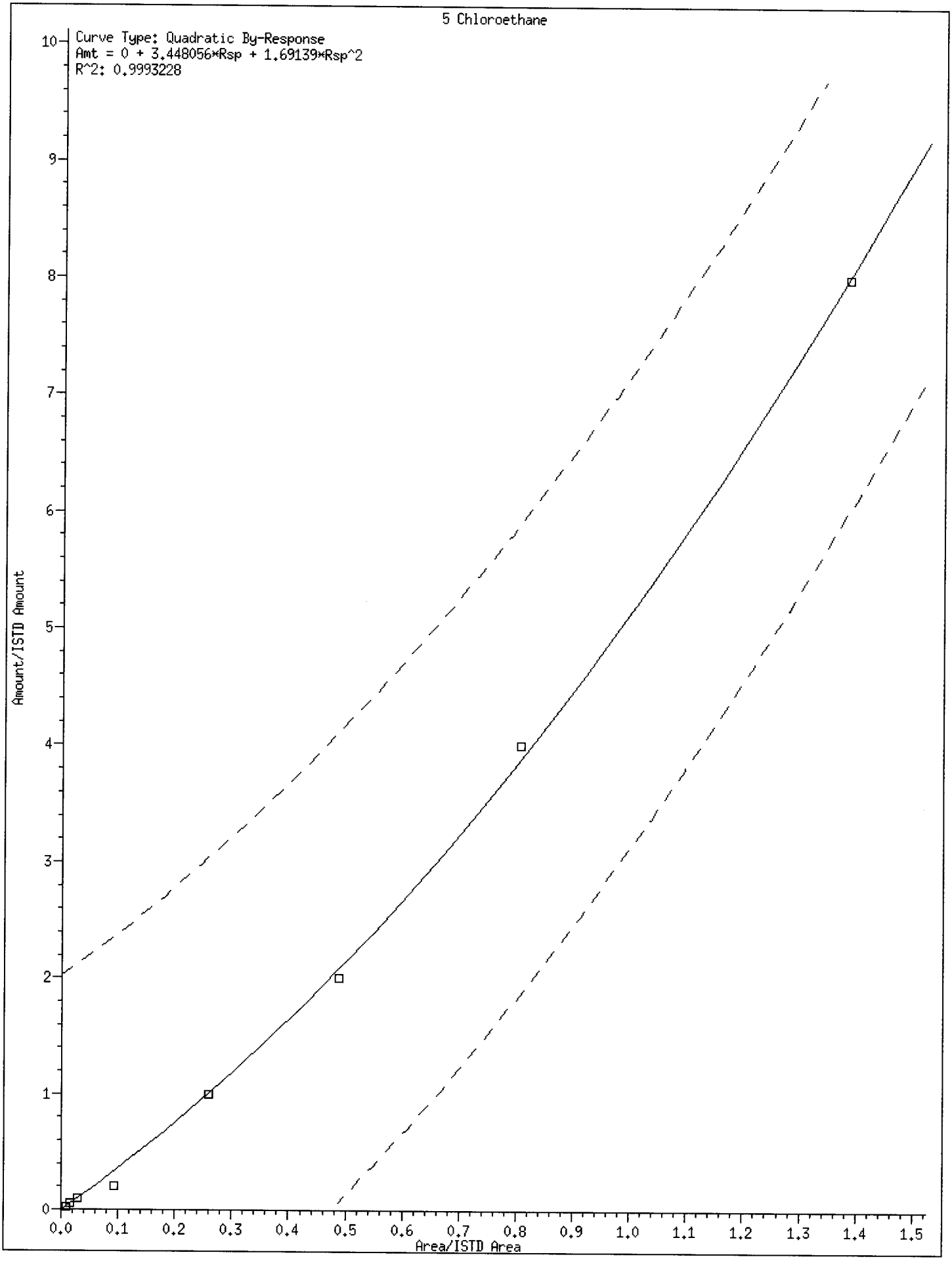
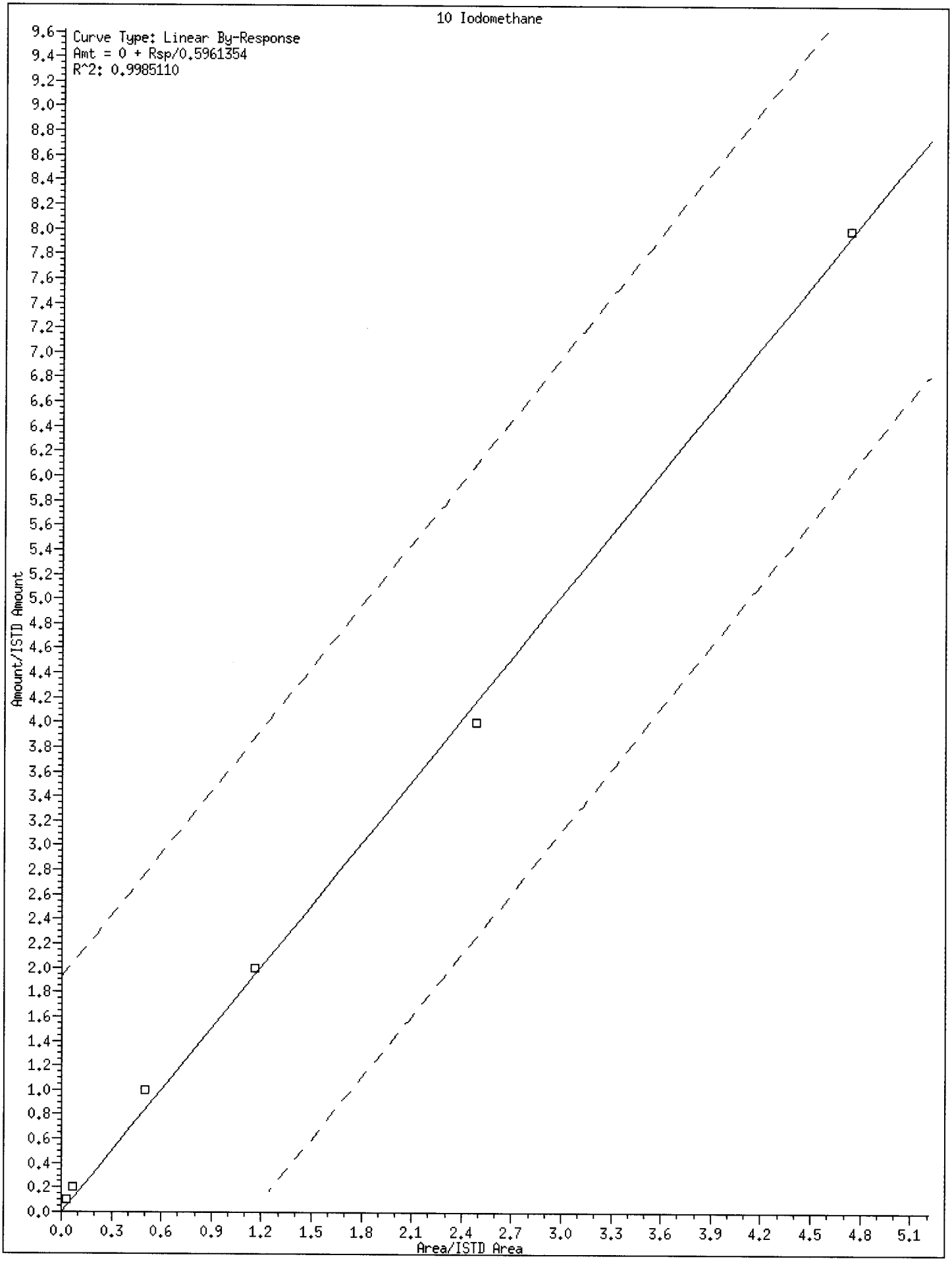
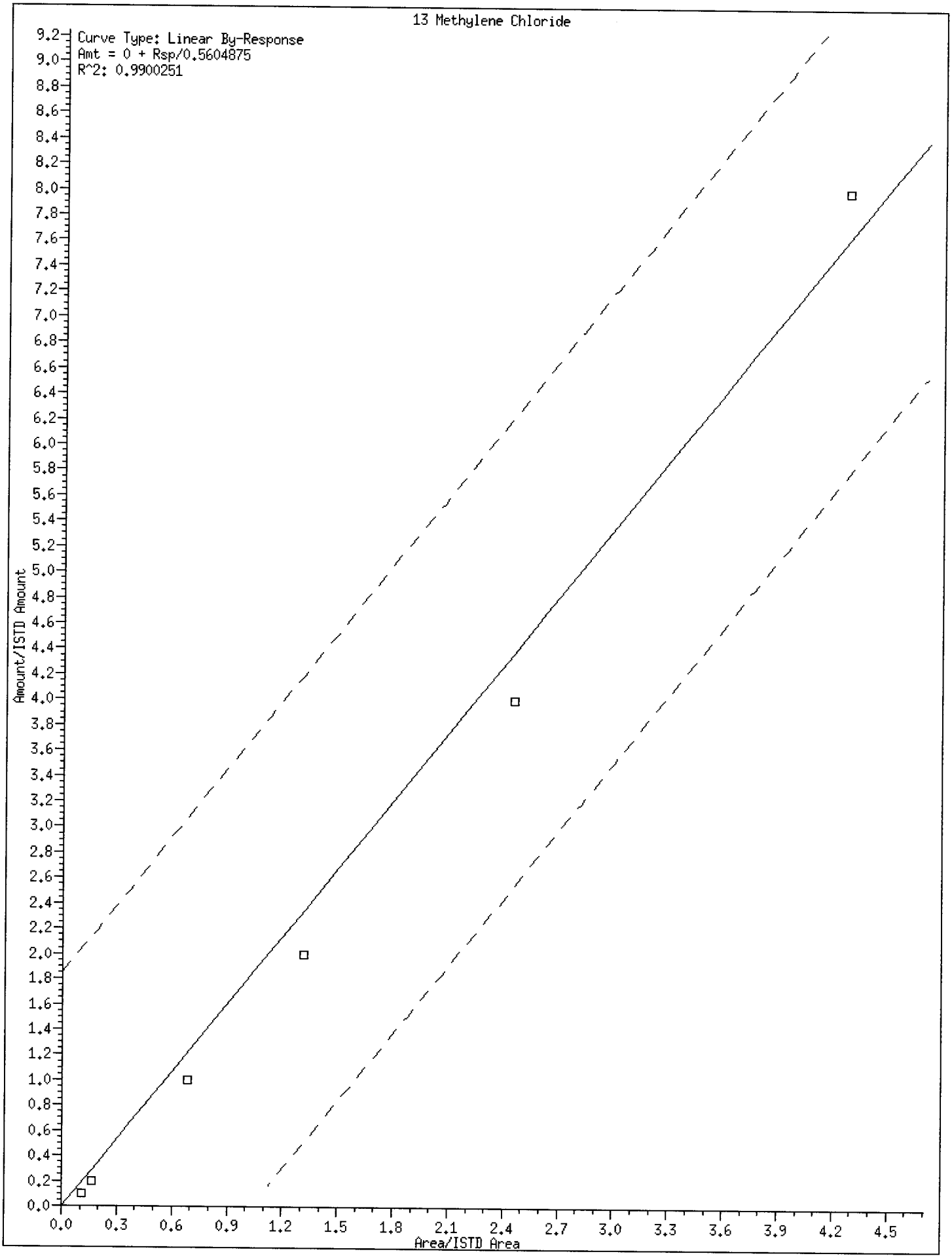
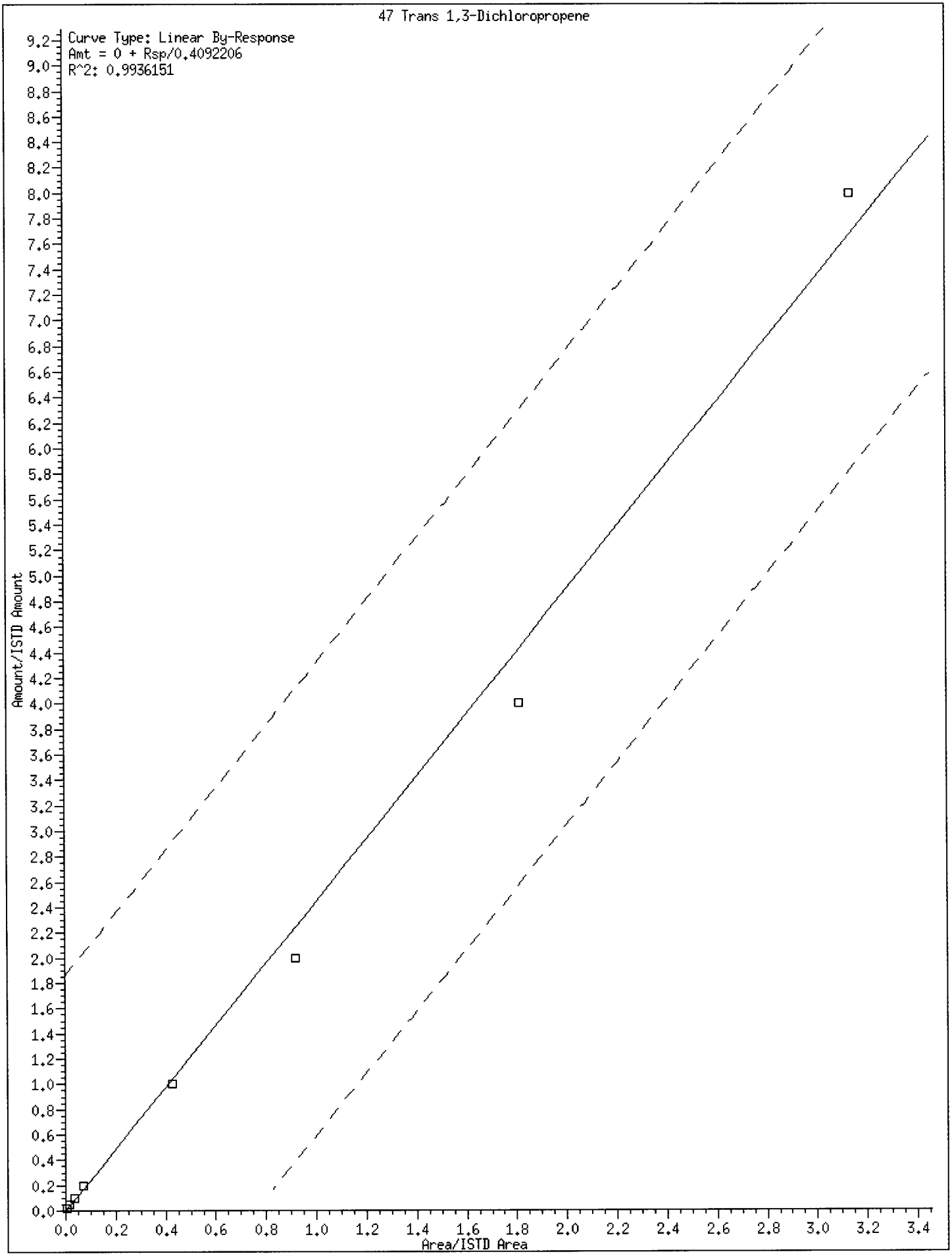
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

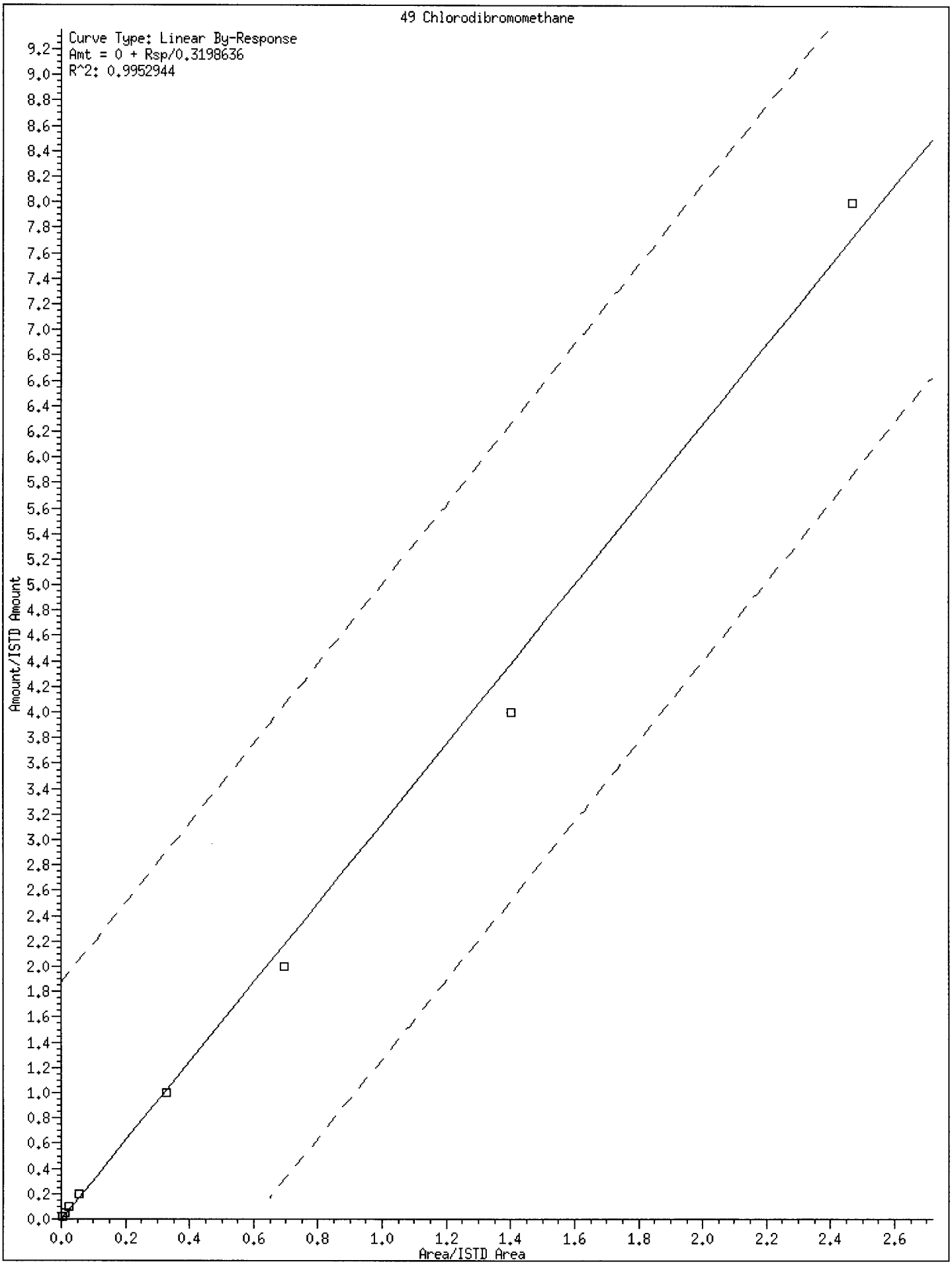
Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD
	40.000 Level 7	80.000 Level 8						
83 Hexachloro 1,3-Butadiene	+++++	0.41460	0.46608	0.46381	0.45746	0.46619		
	0.45805	0.41761					0.44911	5.084
84 1,2,4-Trichlorobenzene	+++++	1.00457	1.10707	1.12511	1.11797	1.13909		
	1.08669	0.94194					1.07463	6.827
85 Naphthalene	+++++	2.00549	2.22550	2.46801	2.58239	2.59273		
	2.39812	1.75994					2.29031	13.652
86 1,2,3-Trichlorobenzene	+++++	1.03054	1.07596	1.10007	1.08009	1.09935		
	1.03067	0.86060					1.03961	8.085
$ 27 Dibromofluoromethane	0.47598	0.47904	0.47333	0.48317	0.47943	0.48605		
	0.47996	0.46905					0.47825	1.128
$ 33 d4-1,2-Dichloroethane	0.61951	0.61264	0.55984	0.55504	0.55543	0.56237		
	0.55870	0.50169					0.56565	6.516
$ 43 d8-Toluene	1.17360	1.18154	1.19875	1.17298	1.14565	1.21168		
	1.19231	1.19510					1.18395	1.714
$ 62 4-Bromofluorobenzene	0.37326	0.40026	0.41569	0.40512	0.41074	0.41640		
	0.41962	0.42001					0.40764	3.812
$ 79 d4-1,2-Dichlorobenzene	0.95424	0.95645	0.96750	0.94079	0.95644	0.96268		
	0.96282	0.94836					0.95616	0.898

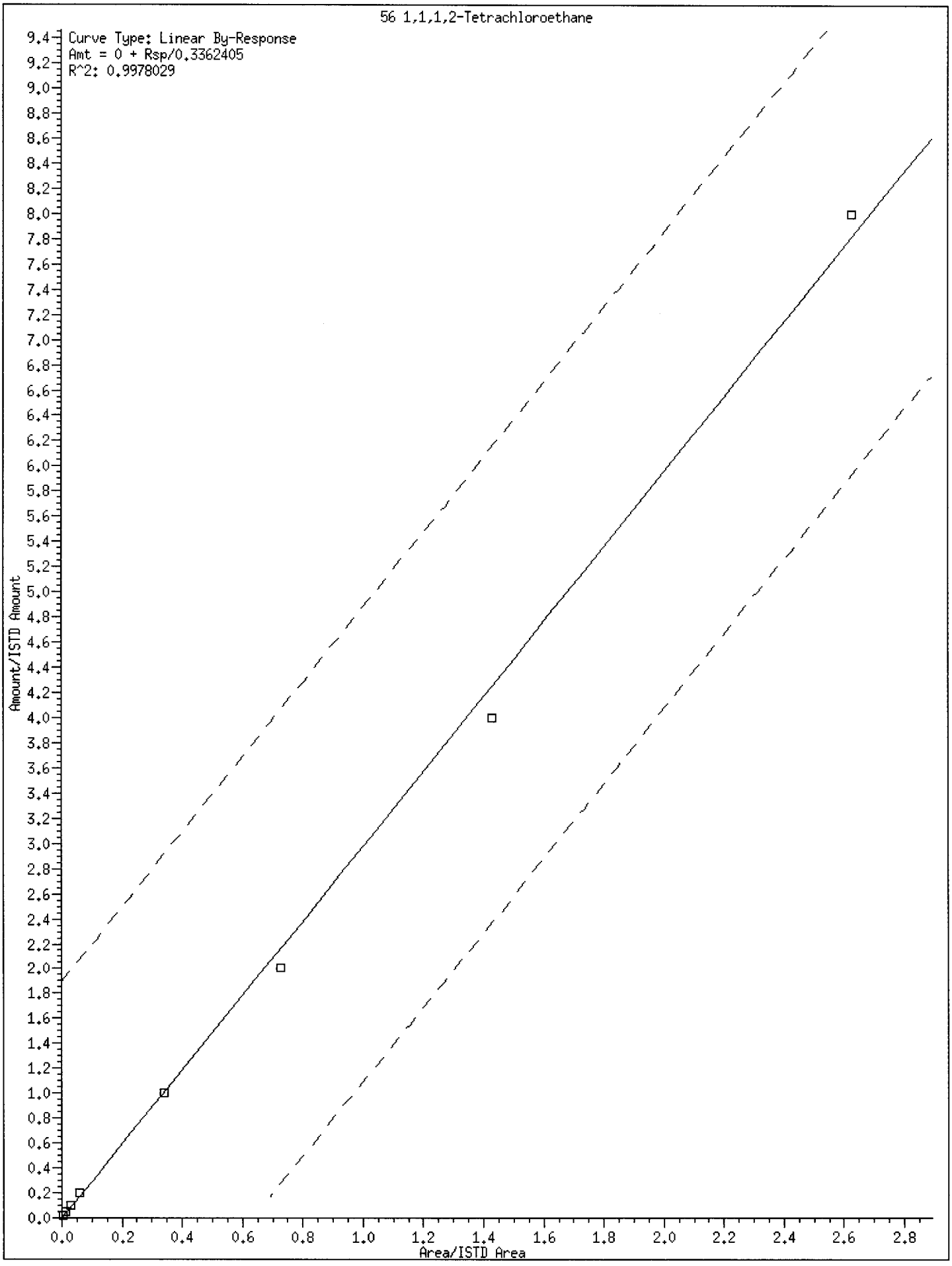

5 Chloroethane
Curve Type: Quadratic By-Response
Amt = 0 + 3.448056*Rsp + 1.69139*Rsp^2
R^2: 0.9993228
Amount/ISTD Amount
Area/ISTD Area
0
1
2
3
4
5
6
7
8
9
10
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5

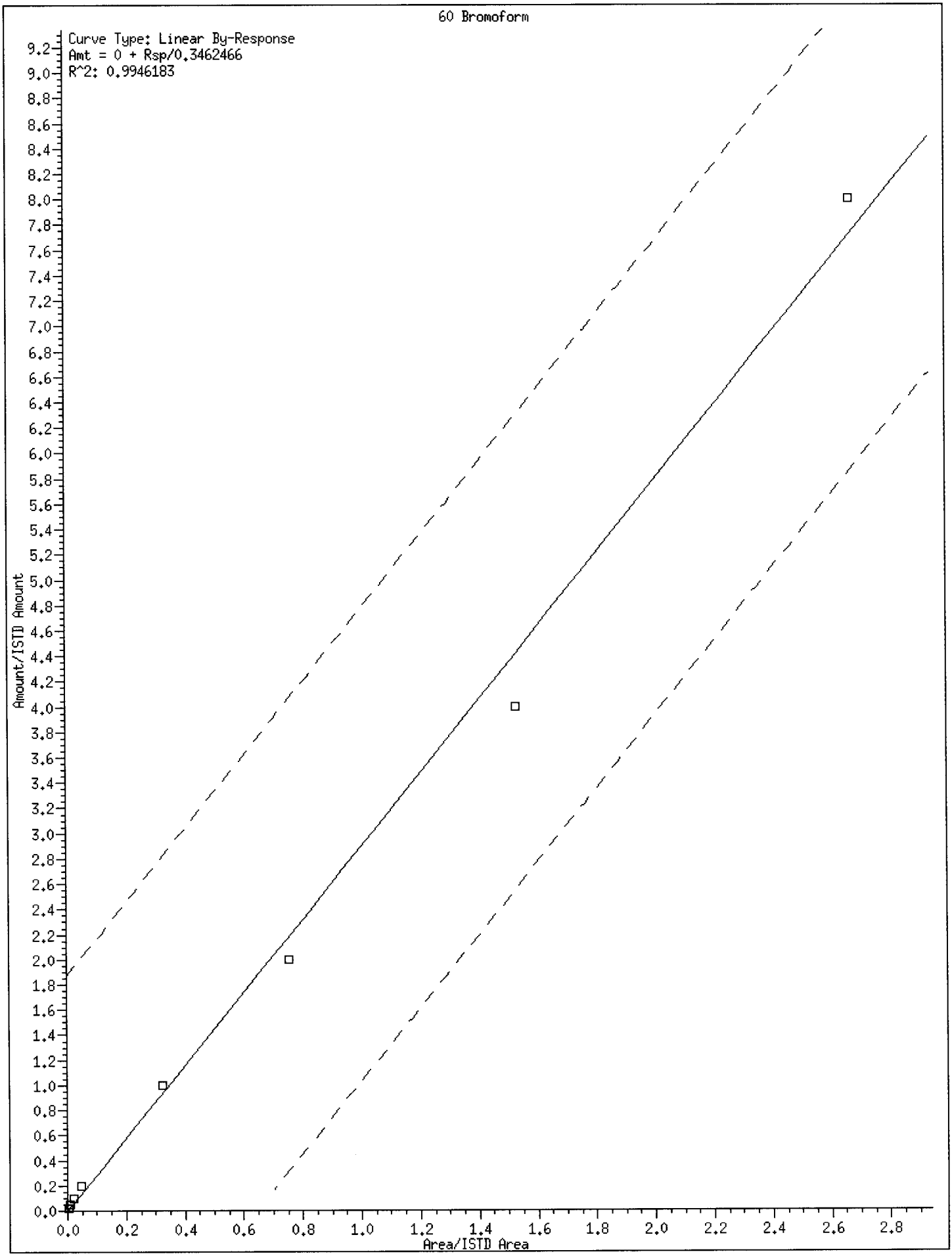

10 Iodomethane
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.5961354
R^2: 0.9985110
Amount/ISTD Amount
Area/ISTD Area
0.0
0.3
0.6
0.9
1.2
1.5
1.8
2.1
2.4
2.7
3.0
3.3
3.6
3.9
4.2
4.5
4.8
5.1


13 Methylene Chloride
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.5604875
R^2: 0.9900251
Amount/ISTD Amount
Area/ISTD Area
0.0
0.3
0.6
0.9
1.2
1.5
1.8
2.1
2.4
2.7
3.0
3.3
3.6
3.9
4.2
4.5


47 Trans 1,3-Dichloropropene
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.4092206
R^2: 0.9936151
Amount/ISTD Amount
Area/ISTD Area


49 Chlorodibromomethane
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.3198636
R^2: 0.9952944
Amount/ISTD Amount
Area/ISTD Area


56 1,1,1,2-Tetrachloroethane
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.3362405
R^2: 0.9978029
Amount/ISTD Amount
Area/ISTD Area
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
9.4
9.2
9.0
8.8
8.6
8.4
8.2
8.0
7.8
7.6
7.4
7.2
7.0
6.8
6.6
6.4
6.2
6.0
5.8
5.6
5.4
5.2
5.0
4.8
4.6
4.4
4.2
4.0
3.8
3.6
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0


60 Bromoform
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.3462466
R^2: 0.9946183
Amount/ISTD Amount
Area/ISTD Area
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
9.2
9.0
8.8
8.6
8.4
8.2
8.0
7.8
7.6
7.4
7.2
7.0
6.8
6.6
6.4
6.2
6.0
5.8
5.6
5.4
5.2
5.0
4.8
4.6
4.4
4.2
4.0
3.8
3.6
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
End Cal Date : 29-MAR-2016 20:03
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih

Calibration File Names:
Level 1: \\target\share\chem1\nt2.i\20160329.b\03291617.D
Level 2: \\target\share\chem1\nt2.i\20160329.b\03291616.D
Level 3: \\target\share\chem1\nt2.i\20160329.b\03291615.D
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Level 5: \\target\share\chem1\nt2.i\20160329.b\03291613.D
Level 6: \\target\share\chem1\nt2.i\20160329.b\03291612.D
Level 7: \\target\share\chem1\nt2.i\20160329.b\03291611.D
Level 8: \\target\share\chem1\nt2.i\20160329.b\03291610.D

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
1 Dichlorodifluoromethane	0.53600	0.72103	0.75655	0.68389	0.66518	0.67125					
	0.63304	0.55180					AVRG		0.65234		11.74770
2 Chloromethane	+++++	0.73271	0.78922	0.73091	0.68491	0.69009					
	0.65642	0.55073					AVRG		0.69071		10.88054
3 Vinyl Chloride	0.55925	0.57778	0.65631	0.66895	0.66697	0.66768					
	0.62851	0.53183					AVRG		0.61966		8.94660

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
4 Bromomethane	0.78227	0.71355	0.73867	0.64487	0.57653	0.55945					
	0.51690	0.42850					AVRG		0.62009		19.52827
5 Chloroethane	2987	4613	9365	33061	91229	173796					
	300362	581921					QUAD	0.000e+000	3.44806	1.69139	0.99932
6 Trichlorofluoromethane	1.11625	1.16095	1.20891	1.13829	1.09301	1.08840					
	+++++	+++++					AVRG		1.13430		4.02664
7 1,1-Dichloroethene	1.06847	1.07717	1.09207	1.04134	1.01649	1.00377					
	0.95080	0.81045					AVRG		1.00757		9.11220
8 Carbon Disulfide	2.31475	2.09086	2.11789	2.02050	1.98297	1.97893					
	1.85517	1.48891					AVRG		1.98125		12.09181
9 112Trichloro122Trifluoroethan	0.69088	0.65358	0.69116	0.65344	0.62529	0.63097					
	0.60231	0.54688					AVRG		0.63681		7.47907
10 Iodomethane	+++++	+++++	10355	23875	175099	412820					
	924984	1988731					LINR	0.000e+000	0.59614		0.99851

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
11 Bromoethane	0.47379	0.45921	0.47603	0.45343	0.43105	0.42449					
	0.39812	0.35182					AVRG		0.43349		9.74827
12 Acrolein	+++++	+++++	0.09936	0.09563	0.09252	0.09096					
	0.08619	0.06461					AVRG		0.08821		14.03670
13 Methylene Chloride	+++++	+++++	34853	58499	238633	467547					
	915481	1796572					LINR	0.000e+000	0.56049		0.99003
14 Acetone	+++++	+++++	0.18692	0.17264	0.16306	0.15577					
	0.14425	0.10448					AVRG		0.15452		18.44681
15 Trans-1,2-Dichloroethene	0.72086	0.70771	0.69847	0.68699	0.65227	0.64907					
	0.62240	0.55163					AVRG		0.66117		8.38527
16 n-hexane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
17 Methyl tert butyl ether	1.90958	1.93203	2.03850	1.98312	1.95086	1.91080					
	1.78604	1.35892					AVRG		1.85873		11.53955

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Compound	0.2000000 Level 1 / 40.0000 Level 7	0.5000000 Level 2 / 80.0000 Level 8	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
18 1,1-Dichloroethane	0.90525	0.99101	1.06292	1.00001	0.99854	0.99611					
	0.93712	0.80410					AVRG		0.96188		8.21822
19 Acrylonitrile	0.12282	0.14294	0.16076	0.16453	0.17575	0.17124					
	0.16530	0.12564					AVRG		0.15362		13.36885
21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
20 Vinyl Acetate	0.61825	0.70595	0.84981	0.84558	1.00279	1.01660					
	0.98059	0.75443					AVRG		0.84675		17.38432
22 Cis-1,2-Dichloroethene	0.53311	0.58550	0.64652	0.61909	0.60600	0.60718					
	0.58396	0.51736					AVRG		0.58734		7.36678
23 2,2-Dichloropropane	0.55861	0.59046	0.65485	0.67952	0.73980	0.77630					
	0.76319	0.67797					AVRG		0.68009		11.54589
24 Bromochloromethane	0.26407	0.25799	0.28439	0.29517	0.29203	0.29470					
	0.27095	0.24064					AVRG		0.27499		7.24496

ARI Labs, Inc.

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
25 Chloroform	0.86901	0.91942	0.96371	0.96613	0.95582	0.95677					
	0.90942	0.77982					AVRG		0.91501		7.01465
26 Carbon Tetrachloride	0.29087	0.25960	0.29824	0.31863	0.35736	0.40984					
	0.41616	0.38969					AVRG		0.34255		17.26231
28 1,1,1-Trichloroethane	0.66763	0.71186	0.78232	0.81064	0.83763	0.86079					
	0.83256	0.73624					AVRG		0.77996		8.76820
30 1,1-Dichloropropene	0.46257	0.43733	0.46477	0.45432	0.45917	0.48903					
	0.46665	0.40793					AVRG		0.45522		5.24594
29 2-Butanone	0.15325	0.18833	0.20808	0.21101	0.21179	0.20858					
	0.19373	0.13627					AVRG		0.18888		15.28242
31 Benzene	1.32055	1.36508	1.45165	1.40094	1.38163	1.43745					
	1.31385	1.06235					AVRG		1.34169		9.17888
35 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
End Cal Date : 29-MAR-2016 20:03
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
34 1,2-Dichloroethane	0.47176	0.46738	0.46928	0.45909	0.44857	0.46409					
	0.43485	0.36702					AVRG		0.44775		7.78515
36 Trichloroethene	0.39864	0.36183	0.40277	0.39100	0.38670	0.40504					
	0.38331	0.34017					AVRG		0.38368		5.80900
38 Dibromomethane	0.17614	0.18637	0.19060	0.19576	0.19491	0.20895					
	0.19328	0.16193					AVRG		0.18849		7.50903
39 1,2-Dichloropropane	0.29744	0.31129	0.35044	0.32310	0.33412	0.35795					
	0.33293	0.28701					AVRG		0.32429		7.61513
40 Bromodichloromethane	0.28926	0.31225	0.35870	0.36126	0.39714	0.42977					
	0.42192	0.37309					AVRG		0.36792		13.40949
173 2-Pentanone	+++++	+++++	0.03759	0.04108	0.04748	0.04941					
	0.04615	0.03337					AVRG		0.04251		14.70285
42 Cis 1,3-dichloropropene	0.33046	0.37342	0.41522	0.43652	0.49860	0.54426					
	0.51848	0.44837					AVRG		0.44567		16.38687

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
End Cal Date : 29-MAR-2016 20:03
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
41 2-Chloroethyl Vinyl Ether	+++++	0.15003	0.15305	0.17629	0.20168	0.21859					
	0.21019	0.16805					AVRG		0.18255		15.17699
44 Toluene	0.88323	0.91171	0.95990	0.91884	0.88958	0.92455					
	0.86740	0.73905					AVRG		0.88678		7.46106
45 4-Methyl-2-Pentanone	+++++	+++++	0.10868	0.11148	0.11923	0.12248					
	0.11347	0.08280					AVRG		0.10969		12.86980
46 Tetrachloroethene	0.40658	0.43063	0.46749	0.44914	0.44114	0.43852					
	0.42327	0.39313					AVRG		0.43124		5.48082
47 Trans 1,3-Dichloropropene	2389	6733	16976	39515	239443	503726					
	1046214	2019636					LINR	0.000e+000	0.40922		0.99362
48 1,1,2-Trichloroethane	0.24462	0.25932	0.29094	0.28973	0.29299	0.30652					
	0.28646	0.23270					AVRG		0.27541		9.58344
49 Chlorodibromomethane	1750	4673	10604	27033	165488	356719					
	753390	1462250					LINR	0.000e+000	0.31986		0.99529

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
End Cal Date : 29-MAR-2016 20:03
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
50 1,3-Dichloropropane	0.51431	0.53167	0.56170	0.57898	0.56813	0.57741					
	0.53934	0.43524					AVRG		0.53835		8.84302
51 1,2-Dibromoethane	0.21240	0.25617	0.26762	0.27665	0.28969	0.30154					
	0.28534	0.22844					AVRG		0.26473		11.67059
52 2-Hexanone	+++++	+++++	0.19017	0.20676	0.23629	0.23586					
	0.21093	0.14625					AVRG		0.20438		16.43148
54 Chlorobenzene	1.07532	1.20248	1.21400	1.17337	1.15096	1.14082					
	1.05081	0.88935					AVRG		1.11214		9.57448
55 Ethyl Benzene	0.54229	0.59224	0.61034	0.61537	0.62685	0.62510					
	0.59457	0.54286					AVRG		0.59370		5.71618
56 1,1,1,2-Tetrachloroethane	1757	5204	13011	29696	171258	373231					
	765925	1555770					LINR	0.000e+000	0.33624		0.99780
57 m,p-xylene	0.67161	0.70427	0.78267	0.78402	0.77720	0.76947					
	0.71796	0.58191					AVRG		0.72364		9.81359

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
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Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
58 o-Xylene	0.55066	0.64029	0.72776	0.73609	0.74060	0.73737					
	0.70493	0.62251					AVRG		0.68253		10.29686
59 Styrene	0.80699	0.96378	1.09771	1.14658	1.23360	1.26288					
	1.11636	0.92376					AVRG		1.06896		14.77390
60 Bromoform	689	2195	5511	12900	90808	209435					
	454259	868010					LINR	0.000e+000	0.34625		0.99462
61 Isopropyl Benzene	2.98915	3.17666	3.47241	3.52265	3.50917	3.53443					
	3.07478	2.37176					AVRG		3.20638		12.54218
63 Bromobenzene	0.87104	0.84113	0.95825	0.92242	0.90158	0.92126					
	0.83514	0.75589					AVRG		0.87584		7.34362
64 N-Propyl Benzene	3.44485	3.66981	3.94789	3.85809	3.96230	3.95703					
	3.40598	2.55951					AVRG		3.60068		13.25947
82 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
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Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
65 1,1,2,2-Tetrachloroethane	0.57021	0.66698	0.68205	0.70110	0.73224	0.74994					
	0.67965	0.52089					AVRG		0.66288		11.85992
66 2-Chloro Toluene	2.43530	2.56389	2.64812	2.64905	2.71380	2.74440					
	2.50403	2.12763					AVRG		2.54828		7.81886
67 1,3,5-Trimethyl Benzene	2.33439	2.48371	2.81633	2.86681	2.96151	2.96960					
	2.64077	2.09947					AVRG		2.64657		11.98431
68 1,2,3-Trichloropropane	0.15679	0.23420	0.24470	0.25596	0.25009	0.24859					
	0.23008	0.18528					AVRG		0.22571		15.77073
69 Trans-1,4-Dichloro 2-Butene	+++++	+++++	0.14533	0.16308	0.16059	0.16796					
	0.16664	0.14660					AVRG		0.15837		6.29019
70 4-Chloro Toluene	2.20543	2.41043	2.59052	2.48386	2.43654	2.47572					
	2.22956	1.86508					AVRG		2.33714		9.86300
71 T-Butyl Benzene	2.15274	2.30201	2.44927	2.52053	2.62912	2.63217					
	2.36280	1.92215					AVRG		2.37135		10.29559

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
End Cal Date : 29-MAR-2016 20:03
Quant Method : ISTD
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Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
72 1,2,4-Trimethylbenzene	2.28637	2.55115	2.78969	2.88715	2.98717	3.00685					
	2.69861	2.12329					AVRG		2.66629		12.16513
73 S-Butyl Benzene	3.14212	3.34918	3.63266	3.64579	3.73776	3.73505					
	3.30940	2.47561					AVRG		3.37845		12.60256
74 4-Isopropyl Toluene	2.26470	2.60974	2.98533	3.07072	3.20958	3.25810					
	2.87670	2.23789					AVRG		2.81409		14.26640
75 1,3-Dichlorobenzene	1.56681	1.73688	1.80746	1.78077	1.76264	1.77797					
	1.63509	1.40117					AVRG		1.68360		8.35577
77 1,4-Dichlorobenzene	1.79009	1.80383	1.94107	1.83424	1.75981	1.77822					
	1.60720	1.36061					AVRG		1.73438		10.19975
78 N-Butyl Benzene	2.26428	2.43932	2.59134	2.68141	2.77713	2.84695					
	2.59185	2.03827					AVRG		2.52882		10.70159
80 1,2-Dichlorobenzene	1.55172	1.68632	1.75914	1.66362	1.64186	1.65571					
	1.51993	1.28505					AVRG		1.59542		9.15839

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
End Cal Date : 29-MAR-2016 20:03
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih

Compound	0.2000000 Level 1 / 40.0000 Level 7	0.5000000 Level 2 / 80.0000 Level 8	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
81 1,2-Dibromo 3-Chloropropane	+++++	0.07417	0.07202	0.08120	0.10209	0.11141					
	0.10864	0.08242					AVRG		0.09028		18.42560
83 Hexachloro 1,3-Butadiene	+++++	0.41460	0.46608	0.46381	0.45746	0.46619					
	0.45805	0.41761					AVRG		0.44911		5.08410
84 1,2,4-Trichlorobenzene	+++++	1.00457	1.10707	1.12511	1.11797	1.13909					
	1.08669	0.94194					AVRG		1.07463		6.82695
85 Naphthalene	+++++	2.00549	2.22550	2.46801	2.58239	2.59273					
	2.39812	1.75994					AVRG		2.29031		13.65207
86 1,2,3-Trichlorobenzene	+++++	1.03054	1.07596	1.10007	1.08009	1.09935					
	1.03067	0.86060					AVRG		1.03961		8.08499
$ 27 Dibromofluoromethane	0.47598	0.47904	0.47333	0.48317	0.47943	0.48605					
	0.47996	0.46905					AVRG		0.47825		1.12818
$ 33 d4-1,2-Dichloroethane	0.61951	0.61264	0.55984	0.55504	0.55543	0.56237					
	0.55870	0.50169					AVRG		0.56565		6.51621

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
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Quant Method : ISTD
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Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
$ 43 d8-Toluene	1.17360	1.18154	1.19875	1.17298	1.14565	1.21168					
	1.19231	1.19510					AVRG		1.18395		1.71391
$ 62 4-Bromofluorobenzene	0.37326	0.40026	0.41569	0.40512	0.41074	0.41640					
	0.41962	0.42001					AVRG		0.40764		3.81199
$ 79 d4-1,2-Dichlorobenzene	0.95424	0.95645	0.96750	0.94079	0.95644	0.96268					
	0.96282	0.94836					AVRG		0.95616		0.89815

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Last Edit : 30-Mar-2016 08:05 lanih

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Batch File: \\target\share\chem1\nt2.i\20160329.b
Inst ID: nt2.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08
FILENAME:	03291610	03291611	03291612	03291613	03291614	03291615	03291616	03291617
INJ.DATE:	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016
INJ.TIME:	17:33	17:54	18:16	18:37	18:59	19:20	19:41	20:03

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Dichlorodifluoromethan	1.422	1.422	1.434	1.433	1.433	1.434	1.434	1.434	1.433	1.327-1.540	1.431	0.006
2 Chloromethane	1.587	1.588	1.588	1.599	1.599	1.600	1.600	1.600	1.599	1.492-1.705	1.595	0.006
3 Vinyl Chloride	1.658	1.659	1.671	1.670	1.670	1.671	1.671	1.671	1.670	1.563-1.776	1.667	0.006
4 Bromomethane	1.942	1.943	1.955	1.954	1.954	1.955	1.955	1.955	1.954	1.847-2.060	1.951	0.006
5 Chloroethane	2.049	2.049	2.061	2.060	2.072	2.061	2.061	2.061	2.060	1.954-2.167	2.059	0.008
6 Trichlorofluoromethane	2.155	2.168	2.179	2.190	2.202	2.180	2.191	2.191	2.190	2.084-2.297	2.182	0.015
7 1,1-Dichloroethene	2.664	2.676	2.688	2.699	2.699	2.688	2.700	2.700	2.699	2.593-2.806	2.689	0.013
8 Carbon Disulfide	2.676	2.688	2.700	2.699	2.711	2.700	2.700	2.712	2.699	2.593-2.806	2.698	0.012
9 112Trichloro122Trifluo	2.723	2.736	2.747	2.747	2.759	2.748	2.747	2.759	2.747	2.640-2.853	2.746	0.012
10 Iodomethane	2.818	2.830	2.842	2.841	2.841	2.842	2.842	2.842	2.841	2.735-2.948	2.837	0.009
11 Bromoethane	2.960	2.972	2.972	2.983	2.983	2.984	2.984	2.984	2.983	2.877-3.090	2.978	0.009
12 Acrolein	3.090	3.091	3.091	3.102	3.102	3.102	3.102	3.102	3.102	2.995-3.208	3.098	0.006
13 Methylene Chloride	3.327	3.339	3.339	3.350	3.350	3.339	3.351	3.351	3.350	3.243-3.456	3.343	0.009
14 Acetone	3.433	3.434	3.434	3.433	3.433	3.434	3.434	3.434	3.433	3.326-3.539	3.433	0.000
15 Trans-1,2-Dichloroethe	3.492	3.493	3.505	3.504	3.504	3.505	3.505	3.505	3.504	3.397-3.610	3.501	0.006
16 n-hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.954	3.847-4.061	+++++	+++++
17 Methyl tert butyl ethe	3.658	3.658	3.659	3.658	3.658	3.659	3.659	3.658	3.658	3.551-3.764	3.658	0.000

Reviewer 1 _____ Date: 3/30/16
Reviewer 2 _____ Date: 3/30/16

Report Date : 30-Mar-2016 08:59

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Batch File: \\target\share\chem1\nt2.i\20160329.b
Inst ID: nt2.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 1,1-Dichloroethane	4.084	4.096	4.096	4.095	4.096	4.096	4.096	4.108	4.095	3.989-4.202	4.096	0.006
	19 Acrylonitrile	4.167	4.179	4.179	4.178	4.179	4.179	4.179	4.179	4.178	4.072-4.285	4.177	0.004
	21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.560	4.453-4.667	+++++	+++++
	20 Vinyl Acetate	4.356	4.357	4.357	4.368	4.368	4.369	4.369	4.368	4.368	4.261-4.474	4.364	0.006
	22 Cis-1,2-Dichloroethene	4.569	4.570	4.570	4.569	4.581	4.570	4.582	4.581	4.569	4.462-4.675	4.574	0.006
	23 2,2-Dichloropropane	4.652	4.652	4.652	4.652	4.652	4.653	4.652	4.652	4.652	4.545-4.758	4.652	0.000
	24 Bromochloromethane	4.735	4.735	4.735	4.734	4.735	4.735	4.735	4.747	4.734	4.628-4.841	4.737	0.004
	25 Chloroform	4.806	4.806	4.806	4.805	4.806	4.806	4.806	4.806	4.805	4.699-4.912	4.806	0.000
	26 Carbon Tetrachloride	4.889	4.889	4.889	4.888	4.889	4.889	4.889	4.901	4.888	4.774-5.003	4.890	0.004
$	27 Dibromofluoromethane	4.948	4.948	4.948	4.947	4.948	4.948	4.948	4.948	4.947	4.841-5.054	4.948	0.000
	28 1,1,1-Trichloroethane	4.948	4.948	4.948	4.947	4.948	4.948	4.948	4.948	4.947	4.841-5.054	4.948	0.000
	30 1,1-Dichloropropene	5.042	5.043	5.043	5.054	5.054	5.055	5.055	5.055	5.054	4.940-5.168	5.050	0.006
	29 2-Butanone	5.066	5.067	5.067	5.078	5.078	5.079	5.078	5.078	5.078	4.971-5.184	5.074	0.006
	31 Benzene	5.244	5.244	5.244	5.243	5.244	5.244	5.244	5.244	5.243	5.129-5.358	5.244	0.000
*	32 Pentafluorobenzene	5.326	5.327	5.327	5.326	5.326	5.327	5.327	5.327	5.326	5.220-5.433	5.327	0.000
$	33 d4-1,2-Dichloroethane	5.350	5.351	5.351	5.350	5.350	5.351	5.351	5.351	5.350	5.243-5.456	5.350	0.000
	35 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.693	5.579-5.807	+++++	+++++
	34 1,2-Dichloroethane	5.397	5.398	5.410	5.409	5.409	5.410	5.410	5.410	5.409	5.294-5.523	5.407	0.006
	36 Trichloroethene	5.681	5.682	5.682	5.681	5.681	5.682	5.682	5.694	5.681	5.567-5.795	5.683	0.004
*	37 1,4-Difluorobenzene	5.717	5.717	5.717	5.717	5.717	5.718	5.717	5.717	5.717	5.602-5.831	5.717	0.000
	38 Dibromomethane	5.989	5.990	5.990	5.989	5.989	5.990	6.001	6.001	5.989	5.874-6.103	5.992	0.006
	39 1,2-Dichloropropane	6.060	6.061	6.061	6.060	6.060	6.061	6.061	6.061	6.060	5.945-6.174	6.060	0.000

Report Date : 30-Mar-2016 08:59

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Batch File: \\target\share\chem1\nt2.i\20160329.b
Inst ID: nt2.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	40 Bromodichloromethane	6.107	6.108	6.108	6.107	6.119	6.120	6.120	6.120	6.107	5.993-6.221	6.114	0.006
	173 2-Pentanone	6.344	6.345	6.345	6.344	6.344	6.357	6.356	6.356	6.344	6.229-6.458	6.349	0.006
	42 Cis 1,3-dichloropropen	6.557	6.558	6.558	6.557	6.557	6.558	6.558	6.569	6.557	6.442-6.671	6.559	0.004
$	43 d8-Toluene	6.687	6.688	6.688	6.687	6.687	6.688	6.688	6.688	6.687	6.572-6.801	6.687	0.000
	41 2-Chloroethyl Vinyl Et	6.522	6.522	6.522	6.521	6.521	6.522	6.522	6.534	6.521	6.407-6.635	6.523	0.004
	44 Toluene	6.723	6.723	6.723	6.722	6.723	6.723	6.723	6.723	6.722	6.608-6.837	6.723	0.000
	45 4-Methyl-2-Pentanone	6.995	6.995	6.995	6.995	6.995	6.995	6.995	7.007	6.995	6.880-7.109	6.997	0.004
	46 Tetrachloroethene	6.995	6.995	6.995	6.995	6.995	6.995	6.995	6.995	6.995	6.839-7.150	6.995	0.000
	47 Trans 1,3-Dichloroprop	7.019	7.019	7.019	7.018	7.018	7.019	7.019	7.031	7.018	6.904-7.132	7.020	0.004
	48 1,1,2-Trichloroethane	7.137	7.137	7.137	7.136	7.137	7.137	7.137	7.137	7.136	7.022-7.251	7.137	0.000
	49 Chlorodibromomethane	7.255	7.256	7.256	7.255	7.255	7.256	7.256	7.256	7.255	7.099-7.410	7.255	0.000
	50 1,3-Dichloropropane	7.326	7.327	7.327	7.326	7.326	7.327	7.327	7.327	7.326	7.170-7.481	7.326	0.000
	51 1,2-Dibromoethane	7.421	7.421	7.421	7.420	7.421	7.421	7.421	7.433	7.420	7.306-7.535	7.423	0.004
	52 2-Hexanone	7.587	7.575	7.575	7.574	7.586	7.587	7.587	7.587	7.574	7.419-7.730	7.582	0.006
*	53 d5-Chlorobenzene	7.776	7.776	7.776	7.775	7.776	7.776	7.776	7.776	7.775	7.620-7.931	7.776	0.000
	54 Chlorobenzene	7.788	7.788	7.788	7.787	7.788	7.788	7.788	7.788	7.787	7.632-7.943	7.788	0.000
	55 Ethyl Benzene	7.811	7.812	7.800	7.811	7.811	7.812	7.812	7.812	7.811	7.655-7.966	7.810	0.004
	56 1,1,1,2-Tetrachloroeth	7.835	7.835	7.835	7.835	7.835	7.836	7.836	7.835	7.835	7.679-7.990	7.835	0.000
	57 m,p-xylene	7.918	7.906	7.906	7.906	7.906	7.907	7.907	7.906	7.906	7.750-8.061	7.908	0.004
	58 o-Xylene	8.225	8.214	8.214	8.213	8.214	8.214	8.214	8.214	8.213	8.058-8.369	8.215	0.004
	59 Styrene	8.261	8.261	8.261	8.261	8.261	8.262	8.261	8.261	8.261	8.105-8.416	8.261	0.000
	60 Bromoform	8.285	8.285	8.285	8.284	8.285	8.285	8.285	8.285	8.284	8.095-8.474	8.285	0.000
	61 Isopropyl Benzene	8.450	8.439	8.439	8.438	8.438	8.439	8.439	8.439	8.438	8.248-8.628	8.440	0.004
$	62 4-Bromofluorobenzene	8.663	8.652	8.652	8.651	8.651	8.652	8.652	8.652	8.651	8.495-8.806	8.653	0.004

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Batch File: \\target\share\chem1\nt2.i\20160329.b
Inst ID: nt2.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	63 Bromobenzene	8.734	8.735	8.735	8.734	8.734	8.735	8.735	8.735	8.734	8.544-8.923	8.735	0.000
	64 N-Propyl Benzene	8.746	8.747	8.747	8.746	8.746	8.747	8.747	8.747	8.746	8.556-8.935	8.746	0.000
	82 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.074	8.918-9.229	+++++	+++++
	65 1,1,2,2-Tetrachloroeth	8.805	8.806	8.794	8.805	8.805	8.794	8.794	8.806	8.805	8.615-8.994	8.801	0.006
	66 2-Chloro Toluene	8.864	8.865	8.865	8.864	8.864	8.865	8.865	8.865	8.864	8.674-9.054	8.865	0.000
	67 1,3,5-Trimethyl Benzen	8.900	8.889	8.889	8.888	8.888	8.889	8.889	8.889	8.888	8.698-9.077	8.890	0.004
	68 1,2,3-Trichloropropane	8.912	8.900	8.900	8.900	8.900	8.901	8.900	8.900	8.900	8.710-9.089	8.902	0.004
	69 Trans-1,4-Dichloro 2-B	8.935	8.936	8.936	8.935	8.935	8.936	8.936	+++++	8.935	8.745-9.125	8.936	0.000
	70 4-Chloro Toluene	8.995	8.983	8.983	8.982	8.983	8.983	8.983	8.983	8.982	8.793-9.172	8.985	0.004
	71 T-Butyl Benzene	9.137	9.125	9.125	9.124	9.125	9.125	9.125	9.125	9.124	8.935-9.314	9.127	0.004
	72 1,2,4-Trimethylbenzene	9.184	9.184	9.173	9.172	9.172	9.173	9.173	9.184	9.172	8.982-9.361	9.177	0.006
	73 S-Butyl Benzene	9.267	9.255	9.255	9.255	9.255	9.256	9.255	9.255	9.255	9.065-9.444	9.257	0.004
	74 4-Isopropyl Toluene	9.373	9.374	9.362	9.361	9.361	9.362	9.362	9.362	9.361	9.171-9.551	9.365	0.005
	75 1,3-Dichlorobenzene	9.432	9.433	9.421	9.432	9.432	9.421	9.433	9.433	9.432	9.242-9.622	9.430	0.005
*	76 d4-1,4-Dichlorobenzene	9.492	9.480	9.480	9.479	9.480	9.480	9.480	9.480	9.479	9.290-9.669	9.481	0.004
	77 1,4-Dichlorobenzene	9.503	9.492	9.492	9.491	9.491	9.492	9.492	9.492	9.491	9.301-9.681	9.493	0.004
	78 N-Butyl Benzene	9.705	9.693	9.693	9.692	9.693	9.693	9.681	9.693	9.692	9.503-9.882	9.693	0.006
$	79 d4-1,2-Dichlorobenzene	9.823	9.812	9.812	9.811	9.811	9.812	9.812	9.812	9.811	9.621-10.000	9.813	0.004
	80 1,2-Dichlorobenzene	9.835	9.823	9.812	9.811	9.811	9.812	9.812	9.812	9.811	9.621-10.000	9.816	0.009
	81 1,2-Dibromo 3-Chloropr	10.462	10.451	10.451	10.450	10.450	10.451	10.451	+++++	10.450	10.260-10.639	10.452	0.004
	83 Hexachloro 1,3-Butadie	11.006	10.983	10.971	10.970	10.971	10.971	10.971	10.971	10.970	10.781-11.160	10.977	0.013
	84 1,2,4-Trichlorobenzene	11.030	10.995	10.995	10.994	10.994	10.995	10.995	10.995	10.994	10.804-11.183	10.999	0.012
	85 Naphthalene	11.302	11.267	11.267	11.266	11.266	11.255	11.255	11.267	11.266	11.077-11.456	11.268	0.015

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Batch File: \\target\share\chem1\nt2.i\20160329.b
Inst ID: nt2.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
86 1,2,3-Trichlorobenzene	11.456	11.433	11.421	11.420	11.420	11.409	11.409	11.421	11.420	11.230-11.609	11.424	0.015

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160329.b

ARI Job No.: 8000 Method: 8260032916.m Instrument: nt2.i Date: 29-MAR-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1733	03291610.D	8000329	VSTD80	1	Vinyl Chloride, Dichlorodifluoromethane,
1754	03291611.D	4000329	VSTD40	1	Bromomethane, Chloroethane, Dichlorodifluoromethane,
1816	03291612.D	2000329	VSTD20	1	Bromomethane, 1,4-Dichlorobenzene, Dichlorodifluoromethane,
1837	03291613.D	1000329	VSTD10	1	Vinyl Chloride, Bromomethane, Dichlorodifluoromethane,
1859	03291614.D	0200329	VSTD02	1	Dichlorodifluoromethane,
1920	03291615.D	0100329	VSTD01	1	Vinyl Chloride, Bromomethane, Bromoethane, Trans-1,4-Dichloro 2-Butene, Dichlorodifluoromethane,
1941	03291616.D	0050329	VSTD0.5	1	Chloroethane, Dichlorodifluoromethane,
2003	03291617.D	0020329	VSTD0.2	1	Bromomethane, Vinyl Acetate, 1,2-Dichloropropane, 2-Chloroethyl Vinyl Ether, Naphthalene, Dichlorodifluoromethane,
2024	03291618.D	SCV0329	SCV	1	Dichlorodifluoromethane,

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D

Date : 29-MAR-2016 11:31

Client ID: RTBFB0329

Instrument: nt2.i

Sample Info: BFB0329,RTBFB0329,,1,032916,

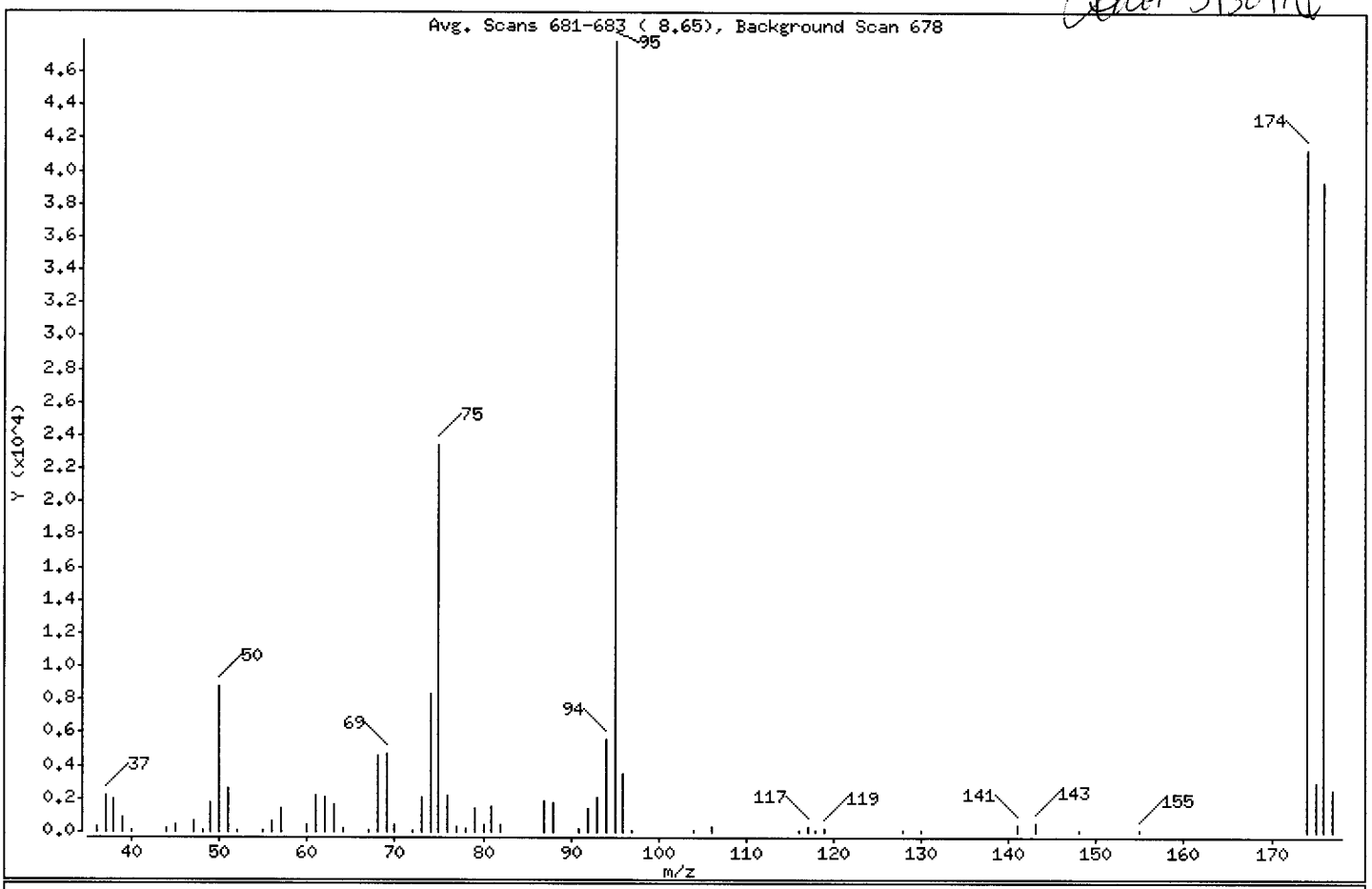
Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

1 Bromofluorobenzene

3/30/16



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.28
75	30.00 - 60.00% of mass 95	48.95
96	5.00 - 9.00% of mass 95	7.25
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	86.45
175	5.00 - 9.00% of mass 174	6.10 (7.05)
176	95.00 - 101.00% of mass 174	82.26 (95.15)
177	5.00 - 9.00% of mass 176	5.35 (6.50)

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D

Date : 29-MAR-2016 11:31

Client ID: RTBFB0329

Instrument: nt2.i

Sample Info: BFB0329,RTBFB0329,,1,032916,

Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

Data File: 03291602.D

Spectrum: Avg. Scans 681-683 (8.65), Background Scan 678

Location of Maximum: 95.00

Number of points: 61

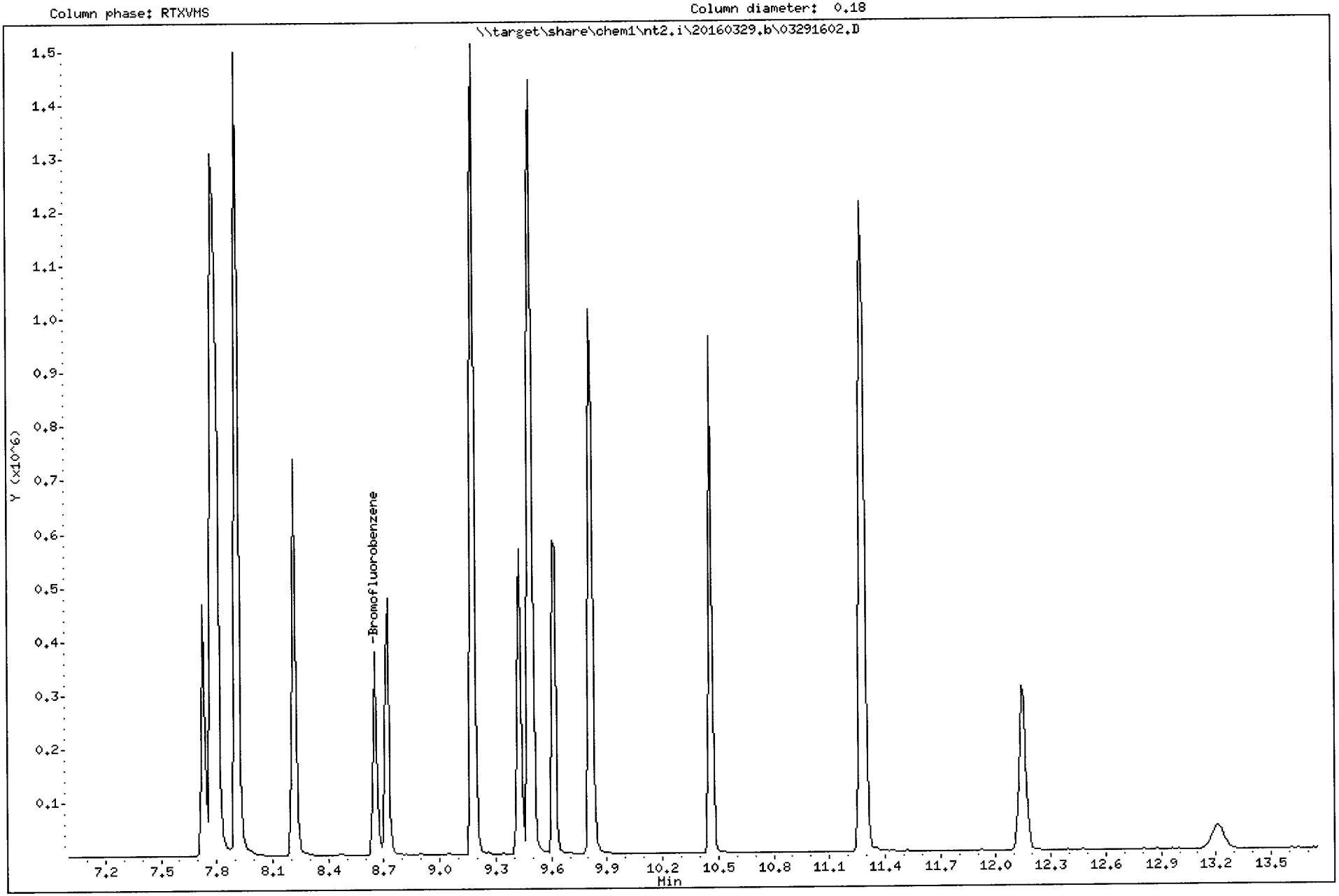
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	334	60.00	421	79.00	1486	117.00	325
37.00	2213	61.00	2183	80.00	387	118.00	128
38.00	1965	62.00	2104	81.00	1524	119.00	234
39.00	876	63.00	1615	82.00	406	128.00	133
40.00	77	64.00	233	87.00	1871	130.00	132
44.00	174	67.00	79	88.00	1722	141.00	480
45.00	431	68.00	4654	91.00	246	143.00	564
47.00	632	69.00	4719	92.00	1396	148.00	149
48.00	113	70.00	410	93.00	2037	155.00	84
49.00	1769	72.00	148	94.00	5584	174.00	41400
50.00	8753	73.00	2107	95.00	47888	175.00	2919
51.00	2685	74.00	8380	96.00	3473	176.00	39392
52.00	71	75.00	23440	97.00	78	177.00	2562
55.00	154	76.00	2154	104.00	122		
56.00	679	77.00	319	106.00	281		
57.00	1379	78.00	194	116.00	127		

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D
Date : 29-MAR-2016 11:31
Client ID: RTBFB0329
Sample Info: BFB0329,RTBFB0329,,1,032916,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291610.D
Lab Smp Id: 8000329 Client Smp ID: VSTD80
Inj Date : 29-MAR-2016 17:33
Operator : PC Inst ID: nt2.i
Smp Info : 8000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.421	1.433	(0.267)	1853120	80.0000	67.670(M)
173	2-Pentanone	86	6.344	6.344	(1.110)	858275	400.000	313.97
2	Chloromethane	50	1.587	1.599	(0.298)	1849539	80.0000	63.787
3	Vinyl Chloride	62	1.658	1.670	(0.311)	1786039	80.0000	68.661(M)
4	Bromomethane	94	1.942	1.954	(0.365)	1439020	80.0000	55.281
5	Chloroethane	64	2.048	2.060	(0.385)	581921	80.0000	80.300
6	Trichlorofluoromethane	101	2.155	2.190	(0.405)	844814	80.0000	17.742
7	1,1-Dichloroethene	61	2.664	2.699	(0.500)	2721758	80.0000	64.349
8	Carbon Disulfide	76	2.675	2.699	(0.502)	5000214	80.0000	60.120
9	112Trichloro122Trifluoroethane	101	2.723	2.747	(0.511)	1836598	80.0000	68.702
10	Iodomethane	142	2.817	2.841	(0.529)	1988731	80.0000	79.469
11	Bromoethane	108	2.959	2.983	(0.556)	1181526	80.0000	64.928
12	Acrolein	56	3.090	3.102	(0.580)	1084892	400.000	292.97
13	Methylene Chloride	84	3.326	3.350	(0.625)	1796572	80.0000	76.357
14	Acetone	43	3.433	3.433	(0.645)	1754385	400.000	270.46
15	Trans-1,2-Dichloroethene	96	3.492	3.504	(0.656)	1852533	80.0000	66.745
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	4563688	80.0000	58.488
18	1,1-Dichloroethane	63	4.083	4.094	(0.767)	2700428	80.0000	66.877
19	Acrylonitrile	53	4.166	4.178	(0.782)	421945	80.0000	65.429
20	Vinyl Acetate	43	4.356	4.368	(0.818)	2533625	80.0000	71.278
22	Cis-1,2-Dichloroethene	96	4.569	4.569	(0.858)	1737447	80.0000	70.468
23	2,2-Dichloropropane	77	4.651	4.652	(0.873)	2276836	80.0000	79.751
24	Bromochloromethane	128	4.734	4.734	(0.889)	808151	80.0000	70.007
25	Chloroform	83	4.805	4.805	(0.902)	2618864	80.0000	68.180
26	Carbon Tetrachloride	117	4.888	4.888	(0.855)	2004642	80.0000	91.010
$ 27	Dibromofluoromethane	111	4.947	4.947	(0.929)	98452	5.00000	4.904
28	1,1,1-Trichloroethane	97	4.947	4.947	(0.929)	2472538	80.0000	75.516
29	2-Butanone	43	5.066	5.078	(0.951)	2288220	400.000	288.59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	30 1,1-Dichloropropene	75	5.042	5.054	(0.882)	2098462	80.0000	71.689
	31 Benzene	78	5.243	5.243	(0.917)	5464889	80.0000	63.344
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	419789	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	105301	5.00000	4.435
	34 1,2-Dichloroethane	62	5.397	5.409	(0.944)	1887982	80.0000	65.575
	36 Trichloroethene	130	5.681	5.681	(0.994)	1749895	80.0000	70.928
*	37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	643017	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	833003	80.0000	68.728
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	1476437	80.0000	70.805
	40 Bromodichloromethane	83	6.107	6.107	(1.068)	1919215	80.0000	81.123
	41 2-Chloroethyl Vinyl Ether	63	6.521	6.521	(1.141)	864496	80.0000	73.646
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	2306456	80.0000	80.485
$	43 d8-Toluene	98	6.687	6.687	(1.170)	384234	5.00000	5.047
	44 Toluene	92	6.722	6.722	(1.176)	3801760	80.0000	66.672
	45 4-Methyl-2-Pentanone	58	6.994	6.995	(1.224)	2129567	400.000	301.93
	46 Tetrachloroethene	166	6.994	6.995	(0.900)	1860950	80.0000	72.931
	47 Trans 1,3-Dichloropropene	75	7.018	7.018	(1.228)	2019636	80.0000	76.753
	48 1,1,2-Trichloroethane	97	7.136	7.136	(1.248)	1197043	80.0000	67.594
	49 Chlorodibromomethane	129	7.255	7.255	(0.933)	1462250	80.0000	77.259
	50 1,3-Dichloropropane	76	7.326	7.326	(0.942)	2060264	80.0000	64.677
	51 1,2-Dibromoethane	107	7.420	7.420	(1.298)	1175121	80.0000	69.033
	52 2-Hexanone	43	7.586	7.574	(0.976)	3461552	400.000	286.24
*	53 d5-Chlorobenzene	117	7.775	7.775	(1.000)	591709	10.0000	
	54 Chlorobenzene	112	7.787	7.787	(1.002)	4209906	80.0000	63.974
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	2569720	80.0000	73.149
	56 1,1,1,2-Tetrachloroethane	131	7.834	7.835	(1.008)	1555770	80.0000	78.196
	57 m,p-xylene	106	7.917	7.906	(1.018)	5509128	160.000	128.66
	58 o-Xylene	106	8.225	8.212	(1.058)	2946741	80.0000	72.965
	59 Styrene	104	8.260	8.260	(1.062)	4372759	80.0000	69.133
	60 Bromoform	173	8.284	8.284	(0.873)	868010	80.0000	77.168
	61 Isopropyl Benzene	105	8.450	8.438	(0.890)	6164025	80.0000	59.176
$	62 4-Bromofluorobenzene	174	8.663	8.651	(1.114)	124261	5.00000	5.152
	63 Bromobenzene	156	8.734	8.734	(0.920)	1964510	80.0000	69.044
	64 N-Propyl Benzene	91	8.746	8.746	(0.921)	6651949	80.0000	56.867
	65 1,1,2,2-Tetrachloroethane	83	8.805	8.805	(0.928)	1353752	80.0000	62.864
	66 2-Chloro Toluene	91	8.864	8.864	(0.934)	5529548	80.0000	66.794
	67 1,3,5-Trimethyl Benzene	105	8.899	8.888	(0.938)	5456352	80.0000	63.462
	68 1,2,3-Trichloropropane	110	8.911	8.900	(0.939)	481531	80.0000	65.670
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.935	(0.941)	380989	80.0000	74.054
	70 4-Chloro Toluene	91	8.994	8.982	(0.948)	4847187	80.0000	63.841
	71 T-Butyl Benzene	119	9.136	9.124	(0.963)	4995518	80.0000	64.846
	72 1,2,4-Trimethylbenzene	105	9.183	9.172	(0.968)	5518249	80.0000	63.708
	73 S-Butyl Benzene	105	9.266	9.255	(0.976)	6433901	80.0000	58.621
	74 4-Isopropyl Toluene	119	9.373	9.361	(0.988)	5816107	80.0000	63.620
	75 1,3-Dichlorobenzene	146	9.432	9.432	(0.994)	3641535	80.0000	66.580
*	76 d4-1,4-Dichlorobenzene	152	9.491	9.479	(1.000)	324865	10.0000	
	77 1,4-Dichlorobenzene	146	9.503	9.491	(1.001)	3536126	80.0000	62.759
	78 N-Butyl Benzene	91	9.704	9.692	(1.022)	5297310	80.0000	64.481
$	79 d4-1,2-Dichlorobenzene	152	9.822	9.811	(1.035)	154044	5.00000	4.959
	80 1,2-Dichlorobenzene	146	9.834	9.811	(1.036)	3339751	80.0000	64.437
	81 1,2-Dibromo 3-Chloropropane	75	10.461	10.450	(1.102)	214199	80.0000	73.035
	83 Hexachloro 1,3-Butadiene	225	11.006	10.970	(1.160)	1085346	80.0000	74.389
	84 1,2,4-Trichlorobenzene	180	11.029	10.994	(1.162)	2448031	80.0000	70.122
	85 Naphthalene	128	11.301	11.266	(1.191)	4573935	80.0000	61.474

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
86 1,2,3-Trichlorobenzene	180	11.455	11.420	(1.207)	2236639	80.0000	66.225

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291610.D
Lab Smp Id: 8000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD80
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	419789	19.81
37 1,4-Difluorobenze	562526	281263	1125052	643017	14.31
53 d5-Chlorobenzene	502371	251186	1004742	591709	17.78
76 d4-1,4-Dichlorobe	277950	138975	555900	324865	16.88

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.01
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.49	0.13

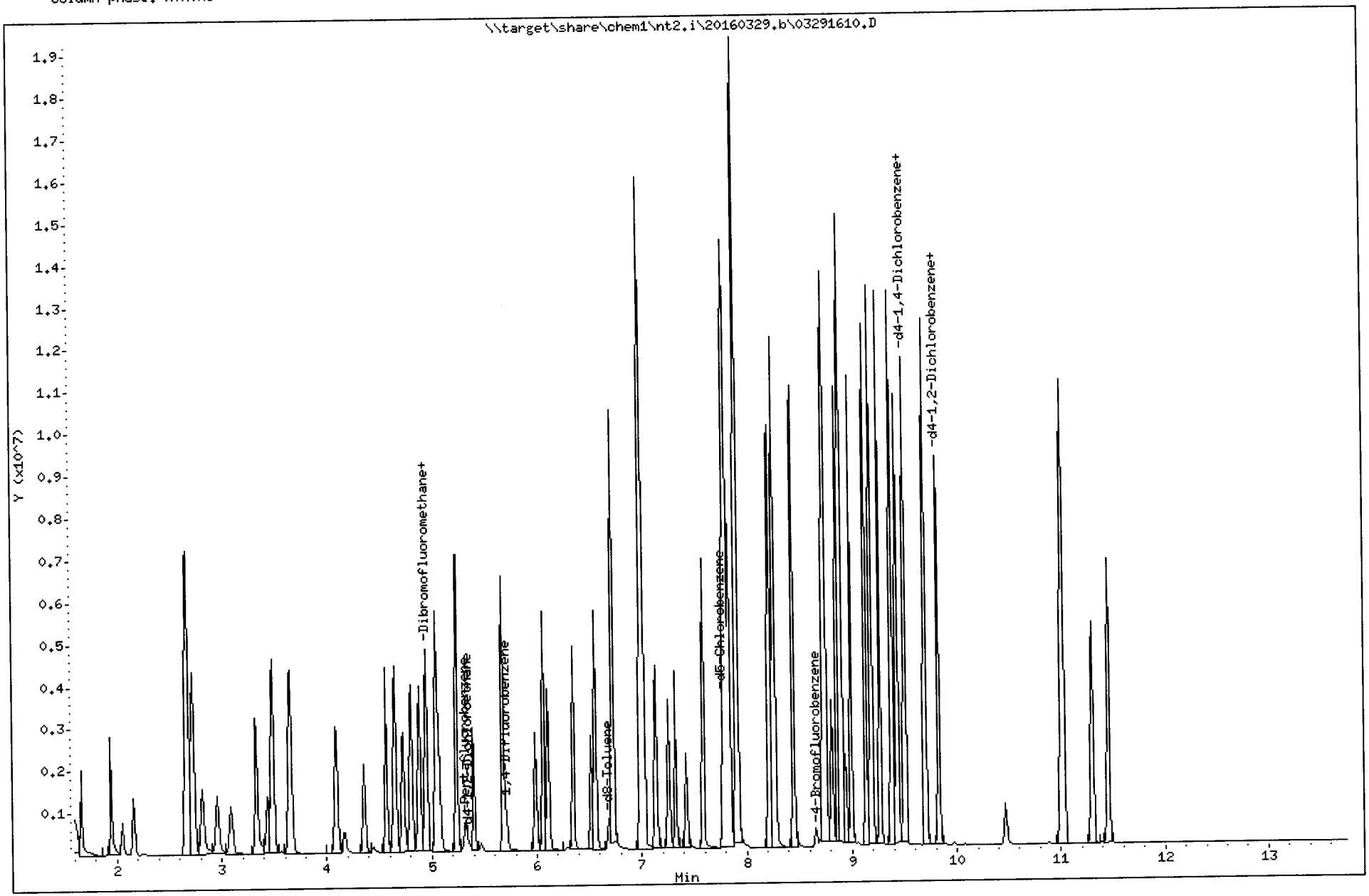
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291610.D
Date : 29-MAR-2016 17:33
Client ID: VSTD80
Sample Info: 8000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

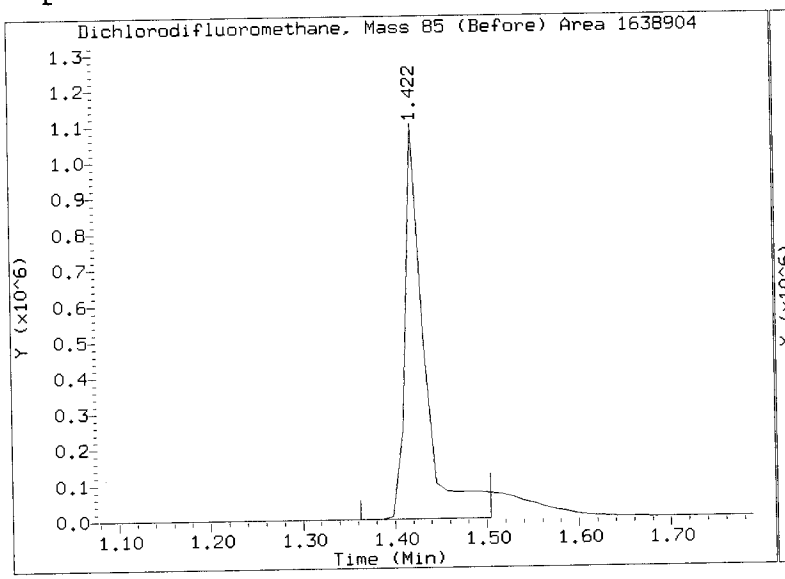
Column phase: RTXVMS

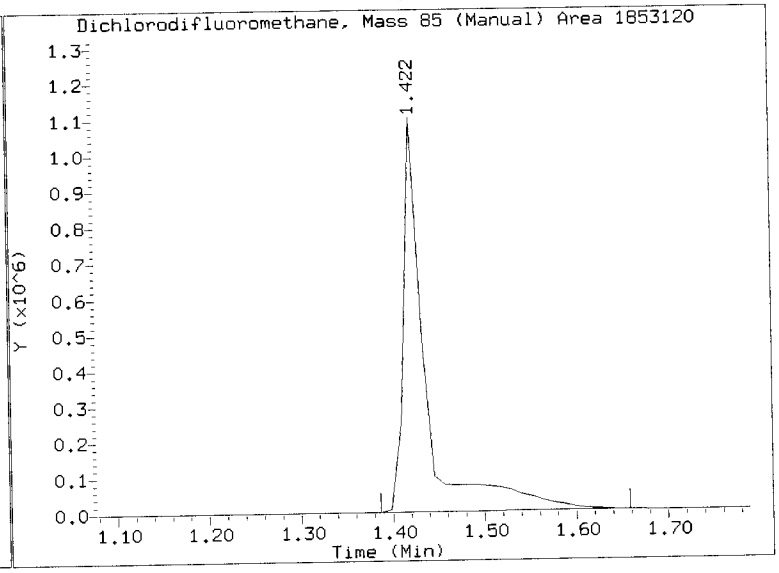


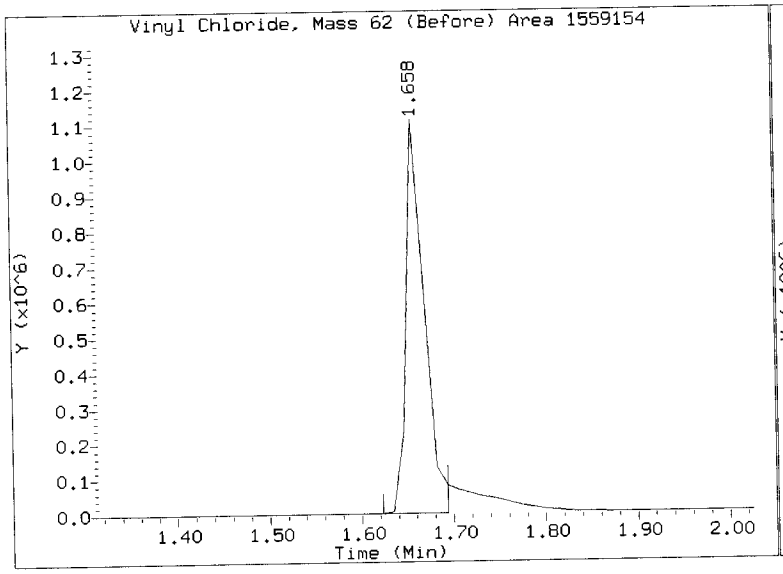
Quant Ion Manual Peak Adjustment Report

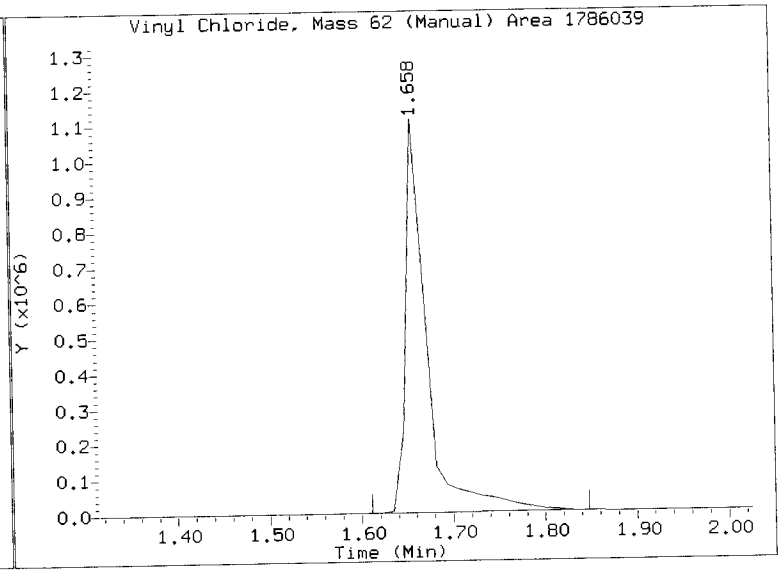
Datafile: //target/share/chem1/nt2.i/20160329.b/03291610.D
Injection Date: 29-MAR-2016 17:33
Lab ID:8000329 Client ID:VSTD80
Report Date: 03/30/2016 09:02

DLH 3/30/16









REVIEW SUMMARY FOR FILE - 03291610.D

Lab ID: 8000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 17:33

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291611.D
Lab Smp Id: 4000329 Client Smp ID: VSTD40
Inj Date : 29-MAR-2016 17:54
Operator : PC Inst ID: nt2.i
Smp Info : 4000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.422	1.433	(0.267)	943663	40.0000	38.816(M)
173	2-Pentanone	86	6.344	6.344	(1.110)	532974	200.000	217.12
2	Chloromethane	50	1.587	1.599	(0.298)	978518	40.0000	38.014
3	Vinyl Chloride	62	1.658	1.670	(0.311)	936916	40.0000	40.571
4	Bromomethane	94	1.942	1.954	(0.365)	770544	40.0000	33.344(M)
5	Chloroethane	64	2.049	2.060	(0.385)	300362	40.0000	38.777(M)
6	Trichlorofluoromethane	101	2.167	2.190	(0.407)	482820	40.0000	11.422
7	1,1-Dichloroethene	61	2.676	2.699	(0.502)	1417350	40.0000	37.746
8	Carbon Disulfide	76	2.688	2.699	(0.505)	2765495	40.0000	37.455
9	112Trichloro122Trifluoroethane	101	2.735	2.747	(0.514)	897865	40.0000	37.833
10	Iodomethane	142	2.830	2.841	(0.531)	924984	40.0000	41.635
11	Bromoethane	108	2.972	2.983	(0.558)	593482	40.0000	36.736
12	Acrolein	56	3.090	3.102	(0.580)	642402	200.000	195.41
13	Methylene Chloride	84	3.338	3.350	(0.627)	915481	40.0000	43.828
14	Acetone	43	3.433	3.433	(0.645)	1075158	200.000	186.70
15	Trans-1,2-Dichloroethene	96	3.492	3.504	(0.656)	927805	40.0000	37.654
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	2662440	40.0000	38.436
18	1,1-Dichloroethane	63	4.096	4.094	(0.769)	1396954	40.0000	38.970
19	Acrylonitrile	53	4.179	4.178	(0.785)	246411	40.0000	43.040
20	Vinyl Acetate	43	4.356	4.368	(0.818)	1461767	40.0000	46.323
22	Cis-1,2-Dichloroethene	96	4.569	4.569	(0.858)	870511	40.0000	39.770
23	2,2-Dichloropropane	77	4.652	4.652	(0.873)	1137679	40.0000	44.888
24	Bromochloromethane	128	4.735	4.734	(0.889)	403908	40.0000	39.412
25	Chloroform	83	4.806	4.805	(0.902)	1355676	40.0000	39.756
26	Carbon Tetrachloride	117	4.889	4.888	(0.855)	961210	40.0000	48.595
$ 27	Dibromofluoromethane	111	4.948	4.947	(0.929)	89434	5.00000	5.018
28	1,1,1-Trichloroethane	97	4.948	4.947	(0.929)	1241092	40.0000	42.698
29	2-Butanone	43	5.066	5.078	(0.951)	1443930	200.000	205.13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	30 1,1-Dichloropropene	75	5.042	5.054	(0.882)	1077836	40.0000	41.005
	31 Benzene	78	5.244	5.243	(0.917)	3034620	40.0000	39.170
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	372674	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	104107	5.00000	4.939
	34 1,2-Dichloroethane	62	5.397	5.409	(0.944)	1004387	40.0000	38.848
	36 Trichloroethene	130	5.681	5.681	(0.994)	885344	40.0000	39.961
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	577427	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	446416	40.0000	41.016
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	768978	40.0000	41.067
	40 Bromodichloromethane	83	6.107	6.107	(1.068)	974522	40.0000	45.871
	41 2-Chloroethyl Vinyl Ether	63	6.522	6.521	(1.141)	485471	40.0000	46.055
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	1197540	40.0000	46.535
$	43 d8-Toluene	98	6.687	6.687	(1.170)	344237	5.00000	5.035
	44 Toluene	92	6.723	6.722	(1.176)	2003446	40.0000	39.126
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	1310451	200.000	206.90
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	908591	40.0000	39.261
	47 Trans 1,3-Dichloropropene	75	7.018	7.018	(1.228)	1046214	40.0000	44.276
	48 1,1,2-Trichloroethane	97	7.137	7.136	(1.248)	661644	40.0000	41.605
	49 Chlorodibromomethane	129	7.255	7.255	(0.933)	753390	40.0000	43.889
	50 1,3-Dichloropropane	76	7.326	7.326	(0.942)	1157767	40.0000	40.074
	51 1,2-Dibromoethane	107	7.421	7.420	(1.298)	659043	40.0000	43.113
	52 2-Hexanone	43	7.575	7.574	(0.974)	2263927	200.000	206.41
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	536655	10.0000	
	54 Chlorobenzene	112	7.788	7.787	(1.002)	2255687	40.0000	37.794
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	1276322	40.0000	40.059
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	765925	40.0000	42.446
	57 m,p-xylene	106	7.906	7.906	(1.017)	3082360	80.0000	79.372
	58 o-Xylene	106	8.214	8.212	(1.056)	1513216	40.0000	41.313
	59 Styrene	104	8.261	8.260	(1.062)	2396397	40.0000	41.774
	60 Bromoform	173	8.285	8.284	(0.874)	454259	40.0000	44.202
	61 Isopropyl Benzene	105	8.438	8.438	(0.890)	3650517	40.0000	38.358
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	112596	5.00000	5.147
	63 Bromobenzene	156	8.734	8.734	(0.921)	991515	40.0000	38.141
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	4043724	40.0000	37.837
	65 1,1,2,2-Tetrachloroethane	83	8.805	8.805	(0.929)	806905	40.0000	41.012
	66 2-Chloro Toluene	91	8.864	8.864	(0.935)	2972894	40.0000	39.305
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	3135235	40.0000	39.912
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	273159	40.0000	40.774
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.935	(0.943)	197842	40.0000	42.090
	70 4-Chloro Toluene	91	8.983	8.982	(0.948)	2647026	40.0000	38.159
	71 T-Butyl Benzene	119	9.125	9.124	(0.963)	2805225	40.0000	39.856
	72 1,2,4-Trimethylbenzene	105	9.184	9.172	(0.969)	3203905	40.0000	40.485
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	3929065	40.0000	39.183
	74 4-Isopropyl Toluene	119	9.373	9.361	(0.989)	3415341	40.0000	40.890
	75 1,3-Dichlorobenzene	146	9.432	9.432	(0.995)	1941252	40.0000	38.848
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	296811	10.0000	
	77 1,4-Dichlorobenzene	146	9.492	9.491	(1.001)	1908143	40.0000	37.067
	78 N-Butyl Benzene	91	9.693	9.692	(1.022)	3077154	40.0000	40.997
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	142888	5.00000	5.035
	80 1,2-Dichlorobenzene	146	9.823	9.811	(1.036)	1804531	40.0000	38.107
	81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	128988	40.0000	48.138
	83 Hexachloro 1,3-Butadiene	225	10.982	10.970	(1.159)	543812	40.0000	40.795
	84 1,2,4-Trichlorobenzene	180	10.994	10.994	(1.160)	1290168	40.0000	40.449
	85 Naphthalene	128	11.266	11.266	(1.188)	2847158	40.0000	41.883

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
86 1,2,3-Trichlorobenzene	180	11.432	11.420	(1.206)	1223661	40.0000	39.656

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291611.D
Lab Smp Id: 4000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD40
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	372674	6.36
37 1,4-Difluorobenze	562526	281263	1125052	577427	2.65
53 d5-Chlorobenzene	502371	251186	1004742	536655	6.82
76 d4-1,4-Dichlorobe	277950	138975	555900	296811	6.79

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

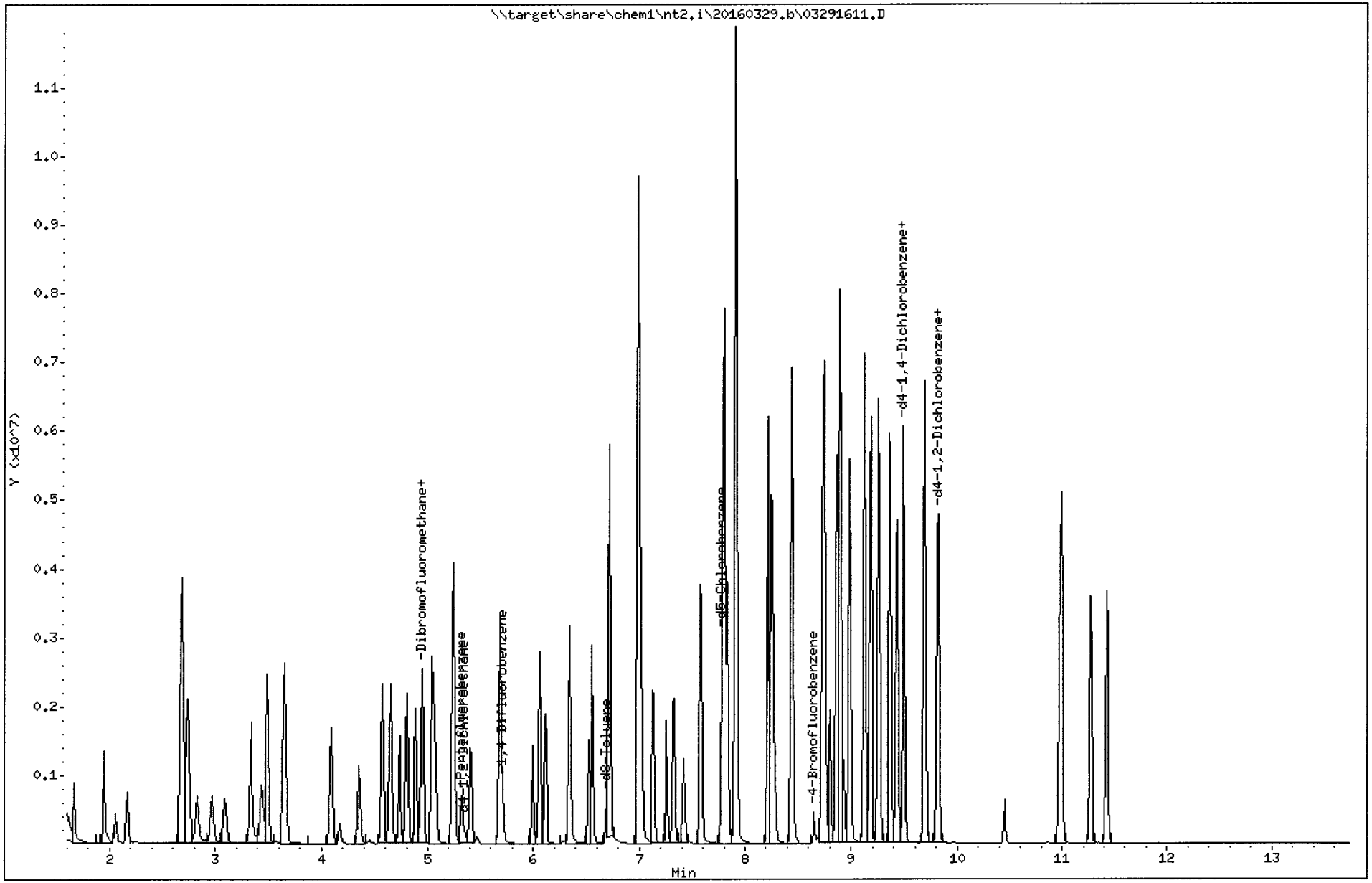
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291611.D
Date : 29-MAR-2016 17:54
Client ID: VSTD40
Sample Info: 4000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

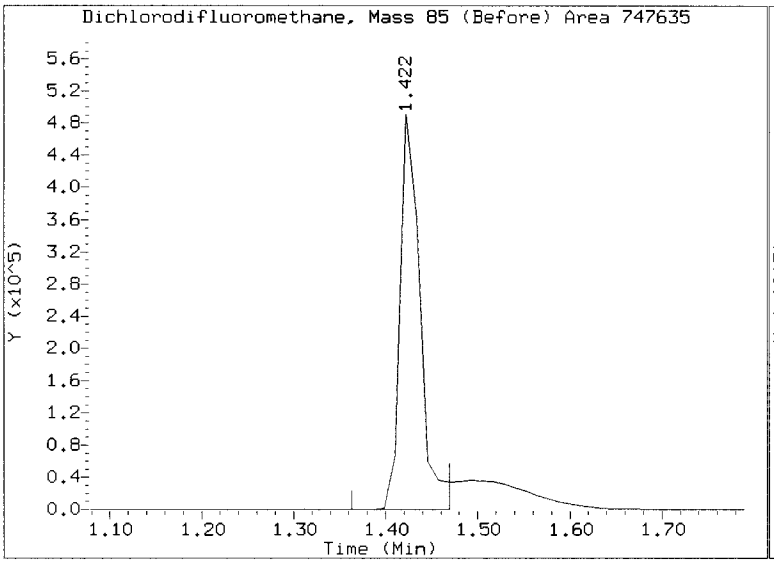
Column phase: RTXVMS

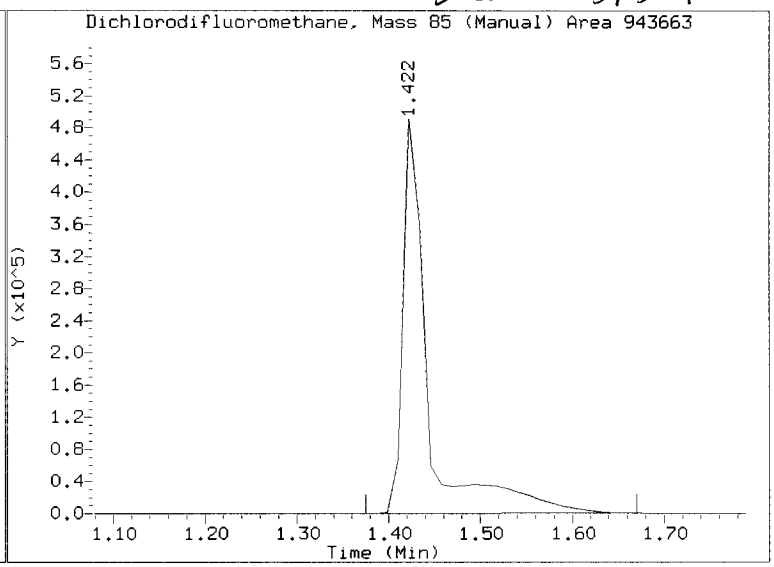


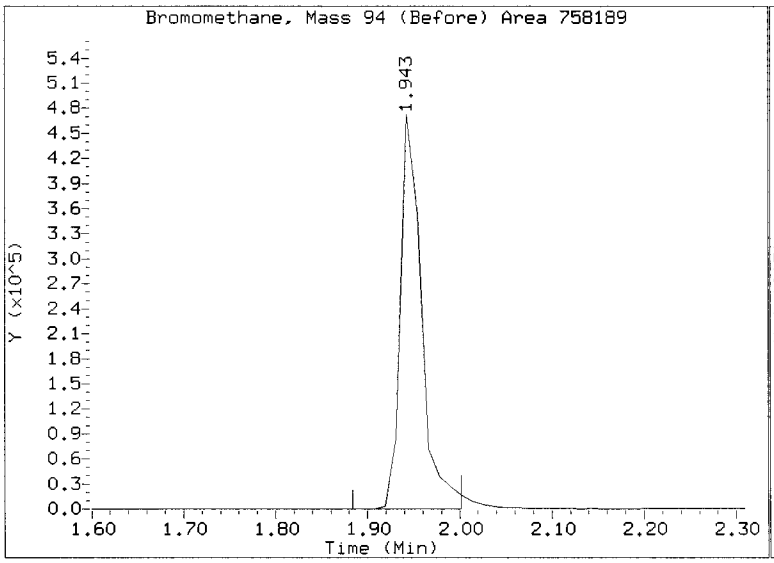
Quant Ion Manual Peak Adjustment Report

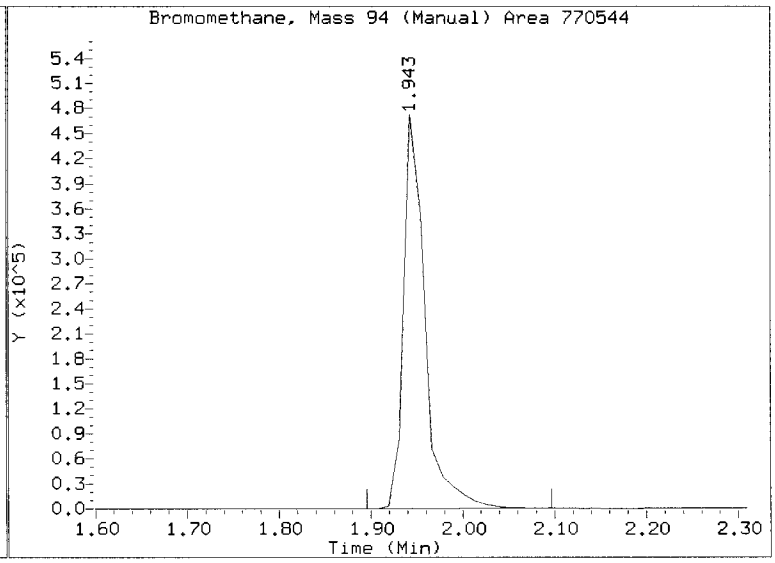
Datafile: //target/share/chem1/nt2.i/20160329.b/03291611.D
Injection Date: 29-MAR-2016 17:54
Lab ID:4000329 Client ID:VSTD40
Report Date: 03/30/2016 09:02

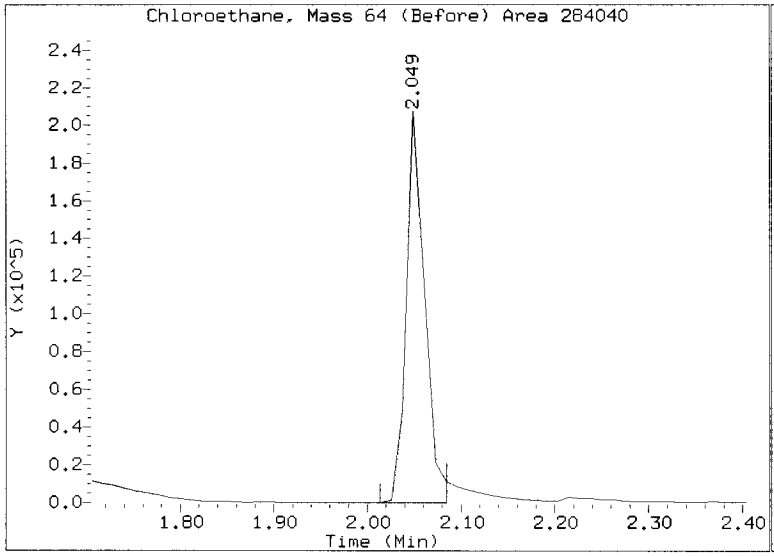
Quant 3/30/16

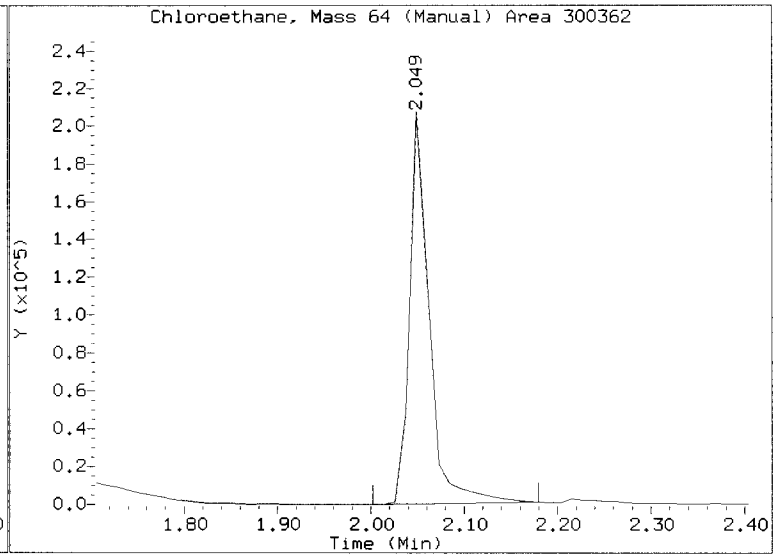












REVIEW SUMMARY FOR FILE - 03291611.D

Lab ID: 4000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 17:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

3/32/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291612.D
Lab Smp Id: 2000329 Client Smp ID: VSTD20
Inj Date : 29-MAR-2016 18:16
Operator : PC Inst ID: nt2.i
Smp Info : 2000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.433	1.433	(0.269)	478546	20.0000	20.580(M)
173	2-Pentanone	86	6.344	6.344	(1.110)	270174	100.000	116.21
2	Chloromethane	50	1.587	1.599	(0.298)	491978	20.0000	19.982
3	Vinyl Chloride	62	1.670	1.670	(0.314)	476002	20.0000	21.550
4	Bromomethane	94	1.954	1.954	(0.367)	398840	20.0000	18.044(M)
5	Chloroethane	64	2.061	2.060	(0.387)	173796	20.0000	20.832
6	Trichlorofluoromethane	101	2.179	2.190	(0.409)	775940	20.0000	19.191
7	1,1-Dichloroethene	61	2.688	2.699	(0.505)	715609	20.0000	19.925
8	Carbon Disulfide	76	2.700	2.699	(0.507)	1410817	20.0000	19.977
9	112Trichloro122Trifluoroethane	101	2.747	2.747	(0.516)	449832	20.0000	19.817
10	Iodomethane	142	2.842	2.841	(0.534)	412820	20.0000	19.427
11	Bromoethane	108	2.972	2.983	(0.558)	302628	20.0000	19.585
12	Acrolein	56	3.090	3.102	(0.580)	324243	100.000	103.12
13	Methylene Chloride	84	3.339	3.350	(0.627)	467547	20.0000	23.402
14	Acetone	43	3.433	3.433	(0.645)	555274	100.000	100.81
15	Trans-1,2-Dichloroethene	96	3.504	3.504	(0.658)	462733	20.0000	19.634
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	1362250	20.0000	20.560
18	1,1-Dichloroethane	63	4.096	4.094	(0.769)	710146	20.0000	20.712
19	Acrylonitrile	53	4.179	4.178	(0.785)	122078	20.0000	22.293
20	Vinyl Acetate	43	4.356	4.368	(0.818)	724754	20.0000	24.012
22	Cis-1,2-Dichloroethene	96	4.569	4.569	(0.858)	432870	20.0000	20.676
23	2,2-Dichloropropane	77	4.652	4.652	(0.873)	553438	20.0000	22.829
24	Bromochloromethane	128	4.735	4.734	(0.889)	210096	20.0000	21.433
25	Chloroform	83	4.806	4.805	(0.902)	682099	20.0000	20.913
26	Carbon Tetrachloride	117	4.889	4.888	(0.855)	448248	20.0000	23.929
$ 27	Dibromofluoromethane	111	4.948	4.947	(0.929)	86628	5.00000	5.082
28	1,1,1-Trichloroethane	97	4.948	4.947	(0.929)	613675	20.0000	22.073
29	2-Butanone	43	5.066	5.078	(0.951)	743519	100.000	110.43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	30 1,1-Dichloropropene	75	5.042	5.054	(0.882)	534859	20.0000	21.486
	31 Benzene	78	5.244	5.243	(0.917)	1572141	20.0000	21.427
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	356460	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	100232	5.00000	4.971
	34 1,2-Dichloroethane	62	5.409	5.409	(0.946)	507579	20.0000	20.730
	36 Trichloroethene	130	5.681	5.681	(0.994)	442993	20.0000	21.113
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	546852	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	228531	20.0000	22.171
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	391493	20.0000	22.076
	40 Bromodichloromethane	83	6.107	6.107	(1.068)	470039	20.0000	23.362
	41 2-Chloroethyl Vinyl Ether	63	6.522	6.521	(1.141)	239071	20.0000	23.948
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	595260	20.0000	24.425
$	43 d8-Toluene	98	6.687	6.687	(1.170)	331304	5.00000	5.117
	44 Toluene	92	6.723	6.722	(1.176)	1011187	20.0000	20.852
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	669784	100.000	111.66
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	449053	20.0000	20.338
	47 Trans 1,3-Dichloropropene	75	7.019	7.018	(1.228)	503726	20.0000	22.510
	48 1,1,2-Trichloroethane	97	7.137	7.136	(1.248)	335239	20.0000	22.259
	49 Chlorodibromomethane	129	7.255	7.255	(0.933)	356719	20.0000	21.781
	50 1,3-Dichloropropane	76	7.326	7.326	(0.942)	591275	20.0000	21.451
	51 1,2-Dibromoethane	107	7.421	7.420	(1.298)	329797	20.0000	22.781
	52 2-Hexanone	43	7.575	7.574	(0.974)	1207640	100.000	115.41
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	512009	10.0000	
	54 Chlorobenzene	112	7.788	7.787	(1.002)	1168222	20.0000	20.516
	55 Ethyl Benzene	106	7.799	7.811	(1.003)	640113	20.0000	21.058
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	373231	20.0000	21.680
	57 m,p-xylene	106	7.906	7.906	(1.017)	1575905	40.0000	42.534
	58 o-Xylene	106	8.214	8.212	(1.056)	755085	20.0000	21.607
	59 Styrene	104	8.261	8.260	(1.062)	1293208	20.0000	23.628
	60 Bromoform	173	8.285	8.284	(0.874)	209435	20.0000	21.804
	61 Isopropyl Benzene	105	8.438	8.438	(0.890)	1960967	20.0000	22.046
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	106600	5.00000	5.107
	63 Bromobenzene	156	8.734	8.734	(0.921)	511132	20.0000	21.037
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	2195434	20.0000	21.979
	65 1,1,2,2-Tetrachloroethane	83	8.793	8.805	(0.928)	416079	20.0000	22.627
	66 2-Chloro Toluene	91	8.864	8.864	(0.935)	1522643	20.0000	21.539
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	1647585	20.0000	22.441
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	137924	20.0000	22.028
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.935	(0.943)	93186	20.0000	21.211
	70 4-Chloro Toluene	91	8.983	8.982	(0.948)	1373575	20.0000	21.186
	71 T-Butyl Benzene	119	9.125	9.124	(0.963)	1460374	20.0000	22.200
	72 1,2,4-Trimethylbenzene	105	9.172	9.172	(0.968)	1668257	20.0000	22.555
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	2072271	20.0000	22.111
	74 4-Isopropyl Toluene	119	9.361	9.361	(0.988)	1807652	20.0000	23.156
	75 1,3-Dichlorobenzene	146	9.421	9.432	(0.994)	986449	20.0000	21.121
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	277409	10.0000	
	77 1,4-Dichlorobenzene	146	9.492	9.491	(1.001)	986590	20.0000	20.506(M)
	78 N-Butyl Benzene	91	9.693	9.692	(1.022)	1579539	20.0000	22.516
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	133528	5.00000	5.034
	80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	918619	20.0000	20.756
	81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	61811	20.0000	24.681
	83 Hexachloro 1,3-Butadiene	225	10.971	10.970	(1.157)	258651	20.0000	20.760
	84 1,2,4-Trichlorobenzene	180	10.994	10.994	(1.160)	631989	20.0000	21.200
	85 Naphthalene	128	11.267	11.266	(1.188)	1438495	20.0000	22.641

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	609937	20.0000	21.149

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291612.D
Lab Smp Id: 2000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	356460	1.74
37 1,4-Difluorobenze	562526	281263	1125052	546852	-2.79
53 d5-Chlorobenzene	502371	251186	1004742	512009	1.92
76 d4-1,4-Dichlorobe	277950	138975	555900	277409	-0.19

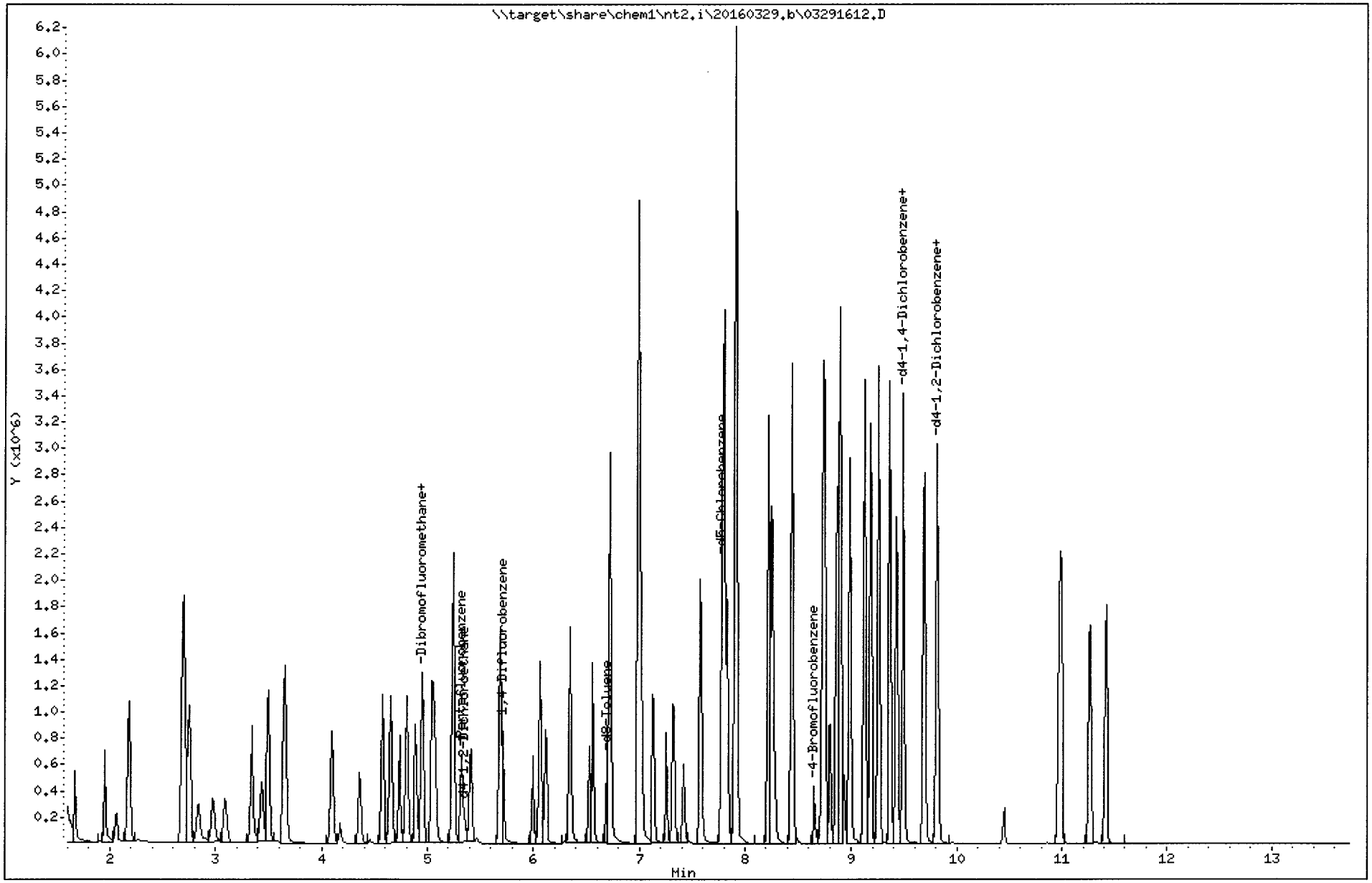
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291612.D
Date : 29-MAR-2016 18:16
Client ID: VSTD20
Sample Info: 2000329,10,10,0,

Instrument: nt2.i
Operator: PC
Column diameter: 0.18

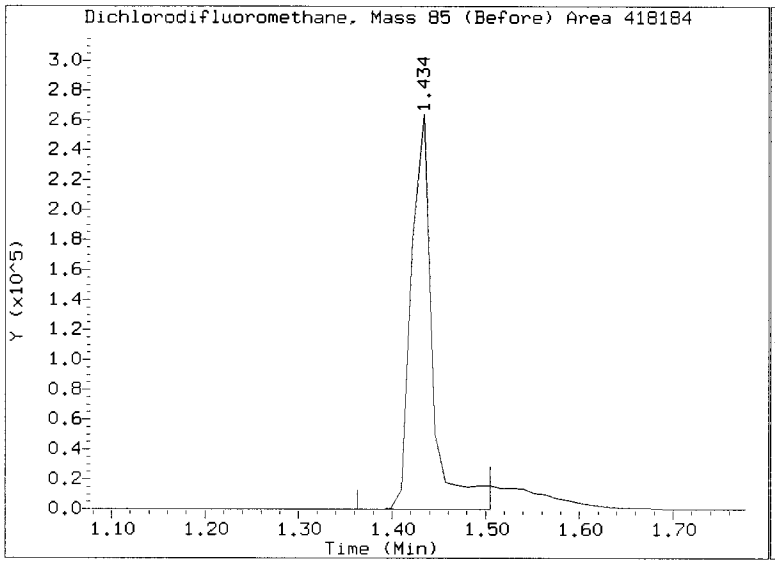
Column phase: RTXVMS

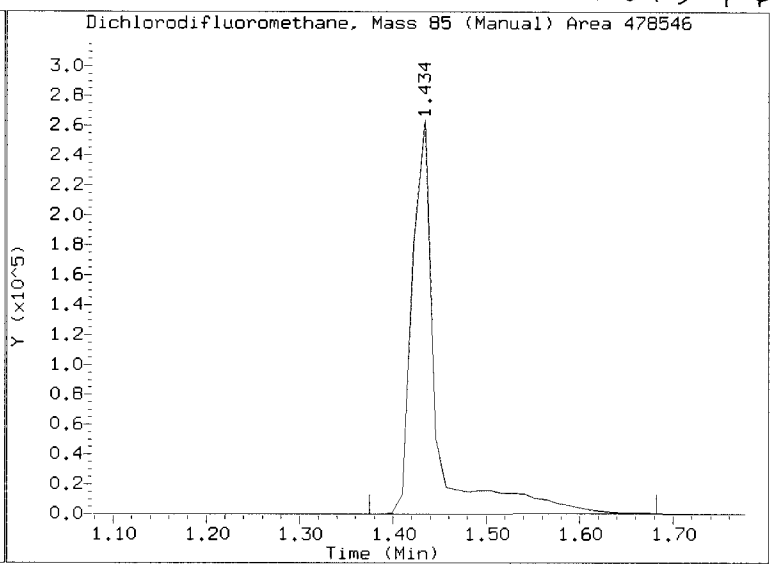


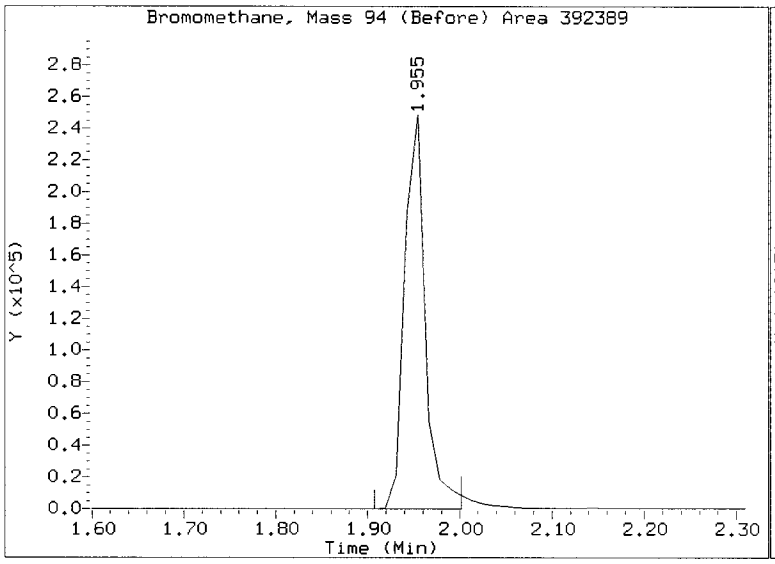
Quant Ion Manual Peak Adjustment Report

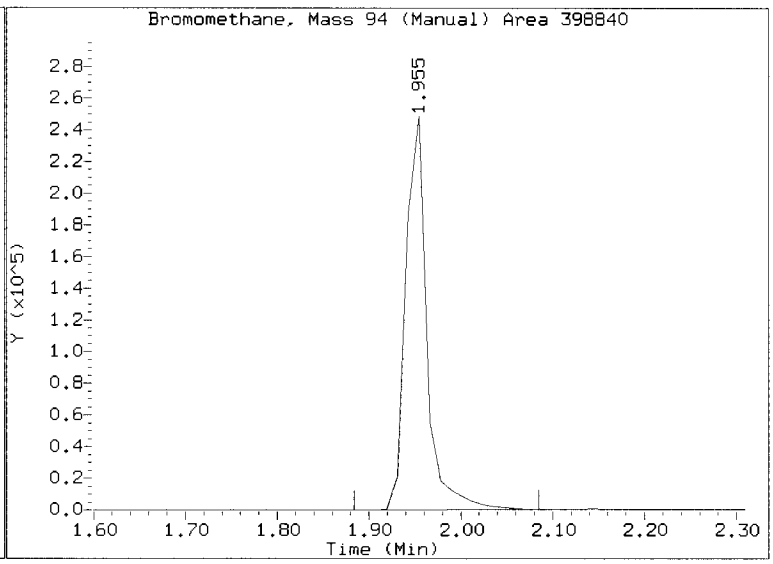
Datafile: //target/share/chem1/nt2.i/20160329.b/03291612.D
Injection Date: 29-MAR-2016 18:16
Lab ID:2000329 Client ID:VSTD20
Report Date: 03/30/2016 09:02

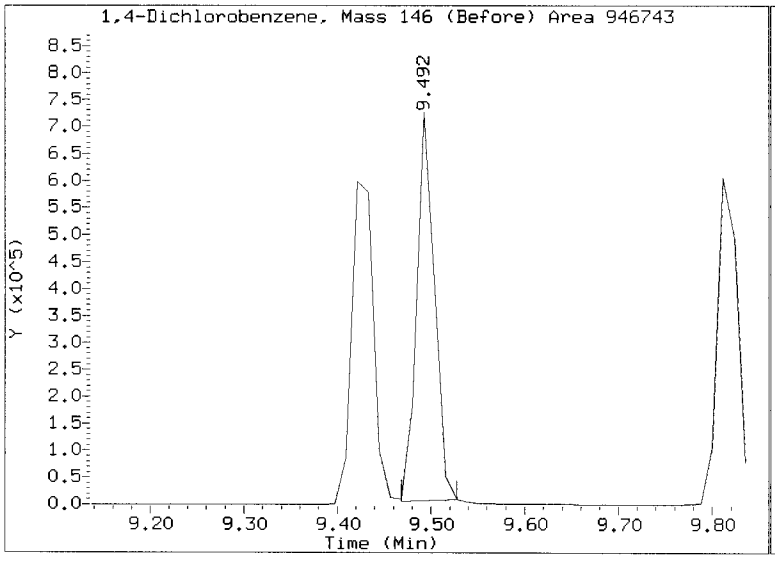
DH 3/30/16

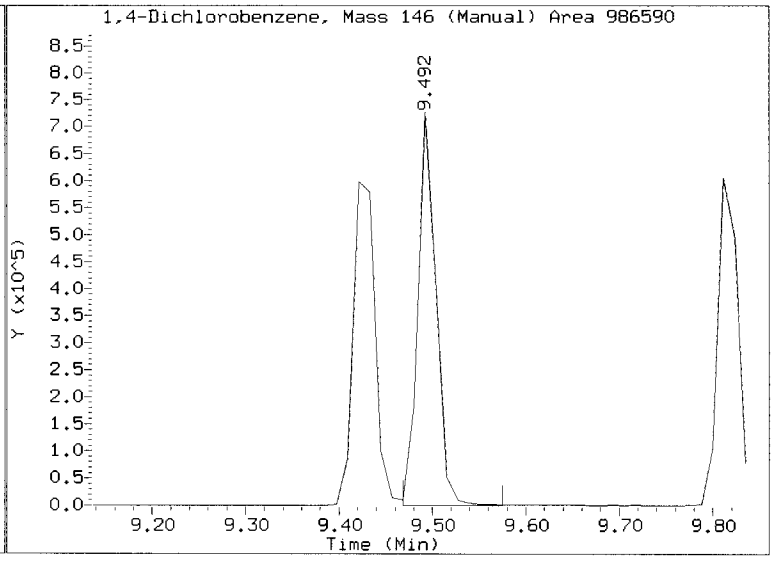












REVIEW SUMMARY FOR FILE - 03291612.D

Lab ID: 2000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 18:16

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

XLUH 3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291613.D
Lab Smp Id: 1000329 Client Smp ID: VSTD10
Inj Date : 29-MAR-2016 18:37
Operator : PC Inst ID: nt2.i
Smp Info : 1000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.433	1.433	(0.269)	233061	10.0000	10.197(M)
173	2-Pentanone	86	6.343	6.344	(1.110)	133546	50.0000	55.844
2	Chloromethane	50	1.598	1.599	(0.300)	239977	10.0000	9.916
3	Vinyl Chloride	62	1.669	1.670	(0.314)	233690	10.0000	10.764(M)
4	Bromomethane	94	1.953	1.954	(0.367)	202003	10.0000	9.298(M)
5	Chloroethane	64	2.060	2.060	(0.387)	91229	10.0000	10.125
6	Trichlorofluoromethane	101	2.190	2.190	(0.411)	382964	10.0000	9.636
7	1,1-Dichloroethene	61	2.699	2.699	(0.507)	356152	10.0000	10.089
8	Carbon Disulfide	76	2.699	2.699	(0.507)	694782	10.0000	10.009
9	112Trichloro122Trifluoroethane	101	2.746	2.747	(0.516)	219086	10.0000	9.819
10	Iodomethane	142	2.841	2.841	(0.533)	175099	10.0000	8.383
11	Bromoethane	108	2.983	2.983	(0.560)	151029	10.0000	9.944
12	Acrolein	56	3.101	3.102	(0.582)	162089	50.0000	52.444
13	Methylene Chloride	84	3.349	3.350	(0.629)	238633	10.0000	12.152
14	Acetone	43	3.432	3.433	(0.645)	285665	50.0000	52.763
15	Trans-1,2-Dichloroethene	96	3.503	3.504	(0.658)	228538	10.0000	9.865
17	Methyl tert butyl ether	73	3.657	3.658	(0.687)	683534	10.0000	10.496
18	1,1-Dichloroethane	63	4.095	4.094	(0.769)	349862	10.0000	10.381
19	Acrylonitrile	53	4.178	4.178	(0.784)	61580	10.0000	11.441
20	Vinyl Acetate	43	4.367	4.368	(0.820)	351351	10.0000	11.843
22	Cis-1,2-Dichloroethene	96	4.568	4.569	(0.858)	212326	10.0000	10.318
23	2,2-Dichloropropane	77	4.651	4.652	(0.873)	259208	10.0000	10.878
24	Bromochloromethane	128	4.734	4.734	(0.889)	102320	10.0000	10.620
25	Chloroform	83	4.805	4.805	(0.902)	334894	10.0000	10.446
26	Carbon Tetrachloride	117	4.888	4.888	(0.855)	201027	10.0000	10.432
$ 27	Dibromofluoromethane	111	4.947	4.947	(0.929)	83990	5.00000	5.012
28	1,1,1-Trichloroethane	97	4.947	4.947	(0.929)	293483	10.0000	10.739
29	2-Butanone	43	5.077	5.078	(0.953)	371027	50.0000	56.064

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	30 1,1-Dichloropropene	75	5.053	5.054	(0.884)	258293	10.0000	10.087
	31 Benzene	78	5.243	5.243	(0.917)	777205	10.0000	10.298
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	350375	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.349	5.350	(1.004)	97304	5.00000	4.910
	34 1,2-Dichloroethane	62	5.408	5.409	(0.946)	252332	10.0000	10.018
	36 Trichloroethene	130	5.681	5.681	(0.994)	217531	10.0000	10.079
*	37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	562526	10.0000	
	38 Dibromomethane	93	5.988	5.989	(1.048)	109641	10.0000	10.340
	39 1,2-Dichloropropane	63	6.059	6.060	(1.060)	187949	10.0000	10.303
	40 Bromodichloromethane	83	6.107	6.107	(1.068)	223401	10.0000	10.794
	41 2-Chloroethyl Vinyl Ether	63	6.521	6.521	(1.141)	113453	10.0000	11.048
	42 Cis 1,3-dichloropropene	75	6.556	6.557	(1.147)	280476	10.0000	11.188
$	43 d8-Toluene	98	6.686	6.687	(1.170)	322229	5.00000	4.838
	44 Toluene	92	6.722	6.722	(1.176)	500412	10.0000	10.032
	45 4-Methyl-2-Pentanone	58	6.994	6.995	(1.224)	335351	50.0000	54.349
	46 Tetrachloroethene	166	6.994	6.995	(0.900)	221618	10.0000	10.230
	47 Trans 1,3-Dichloropropene	75	7.018	7.018	(1.228)	239443	10.0000	10.402
	48 1,1,2-Trichloroethane	97	7.136	7.136	(1.248)	164814	10.0000	10.638
	49 Chlorodibromomethane	129	7.254	7.255	(0.933)	165488	10.0000	10.299
	50 1,3-Dichloropropane	76	7.325	7.326	(0.942)	285413	10.0000	10.553
	51 1,2-Dibromoethane	107	7.420	7.420	(1.298)	162956	10.0000	10.943
	52 2-Hexanone	43	7.574	7.574	(0.974)	593530	50.0000	57.808
*	53 d5-Chlorobenzene	117	7.775	7.775	(1.000)	502371	10.0000	
	54 Chlorobenzene	112	7.787	7.787	(1.002)	578209	10.0000	10.349
	55 Ethyl Benzene	106	7.810	7.811	(1.005)	314910	10.0000	10.558
	56 1,1,1,2-Tetrachloroethane	131	7.834	7.835	(1.008)	171258	10.0000	10.139
	57 m,p-xylene	106	7.905	7.906	(1.017)	780882	20.0000	21.480
	58 o-Xylene	106	8.213	8.212	(1.056)	372057	10.0000	10.851
	59 Styrene	104	8.260	8.260	(1.062)	619725	10.0000	11.540
	60 Bromoform	173	8.284	8.284	(0.874)	90808	10.0000	9.436
	61 Isopropyl Benzene	105	8.438	8.438	(0.890)	975374	10.0000	10.944
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	103172	5.00000	5.038
	63 Bromobenzene	156	8.733	8.734	(0.921)	250593	10.0000	10.294
	64 N-Propyl Benzene	91	8.745	8.746	(0.923)	1101321	10.0000	11.004
	65 1,1,2,2-Tetrachloroethane	83	8.804	8.805	(0.929)	203527	10.0000	11.046
	66 2-Chloro Toluene	91	8.864	8.864	(0.935)	754301	10.0000	10.650
	67 1,3,5-Trimethyl Benzene	105	8.887	8.888	(0.938)	823151	10.0000	11.190
	68 1,2,3-Trichloropropane	110	8.899	8.900	(0.939)	69513	10.0000	11.080
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.935	(0.943)	44637	10.0000	10.141
	70 4-Chloro Toluene	91	8.982	8.982	(0.948)	677236	10.0000	10.425
	71 T-Butyl Benzene	119	9.124	9.124	(0.963)	730763	10.0000	11.087
	72 1,2,4-Trimethylbenzene	105	9.171	9.172	(0.968)	830285	10.0000	11.204
	73 S-Butyl Benzene	105	9.254	9.255	(0.976)	1038910	10.0000	11.064
	74 4-Isopropyl Toluene	119	9.361	9.361	(0.988)	892103	10.0000	11.405
	75 1,3-Dichlorobenzene	146	9.432	9.432	(0.995)	489925	10.0000	10.469
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.479	(1.000)	277950	10.0000	
	77 1,4-Dichlorobenzene	146	9.491	9.491	(1.001)	489140	10.0000	10.147
	78 N-Butyl Benzene	91	9.692	9.692	(1.022)	771904	10.0000	10.982
$	79 d4-1,2-Dichlorobenzene	152	9.810	9.811	(1.035)	132921	5.00000	5.001
	80 1,2-Dichlorobenzene	146	9.810	9.811	(1.035)	456356	10.0000	10.291
	81 1,2-Dibromo 3-Chloropropane	75	10.449	10.450	(1.102)	28375	10.0000	11.308
	83 Hexachloro 1,3-Butadiene	225	10.970	10.970	(1.157)	127152	10.0000	10.186
	84 1,2,4-Trichlorobenzene	180	10.993	10.994	(1.160)	310739	10.0000	10.403
	85 Naphthalene	128	11.266	11.266	(1.188)	717776	10.0000	11.275

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
86 1,2,3-Trichlorobenzene	180	11.419	11.420	(1.205)	300212	10.0000	10.389

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291613.D
Lab Smp Id: 1000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD10
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	350375	0.00
37 1,4-Difluorobenze	562526	281263	1125052	562526	0.00
53 d5-Chlorobenzene	502371	251186	1004742	502371	0.00
76 d4-1,4-Dichlorobe	277950	138975	555900	277950	0.00

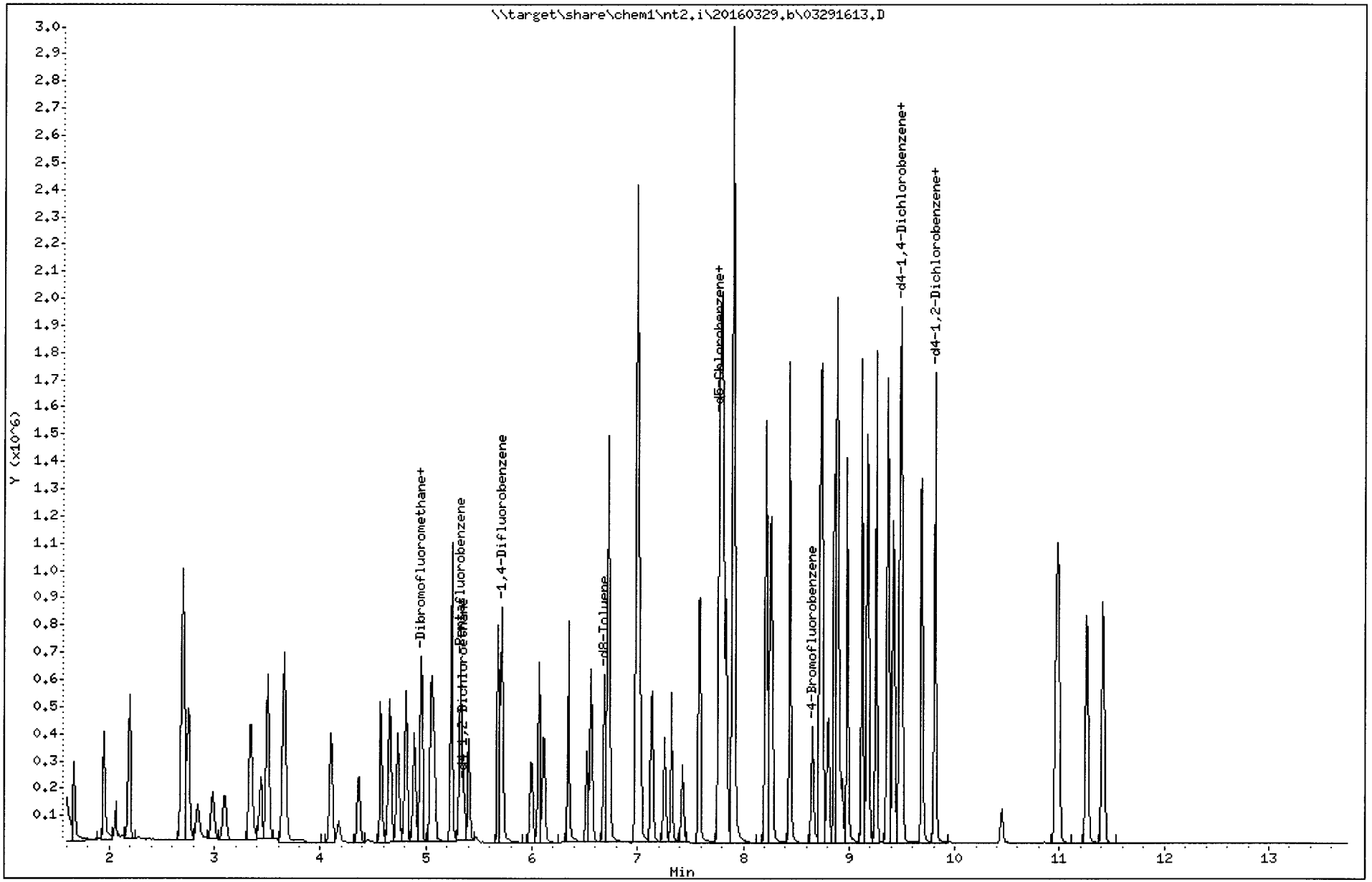
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291613.D
Date : 29-MAR-2016 18:37
Client ID: VSTD10
Sample Info: 1000329,10,10,0,

Instrument: nt2.i

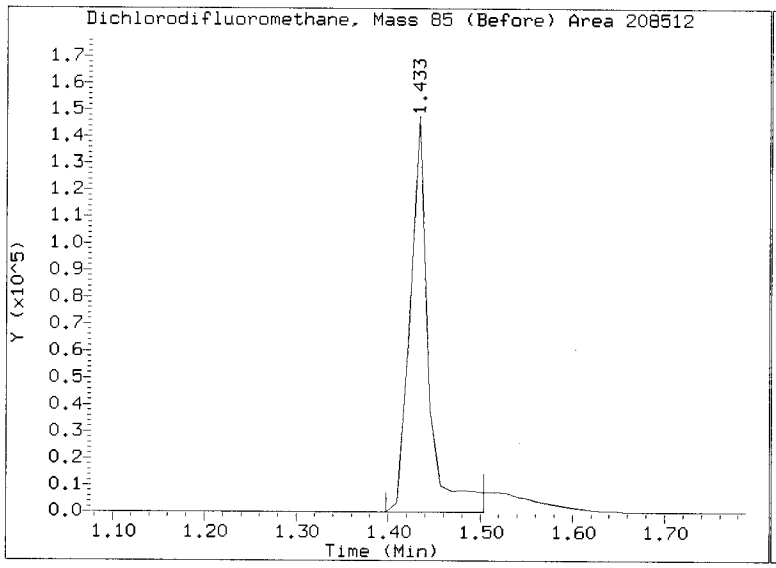
Operator: PC
Column phase: RTXVMS
Column diameter: 0.18

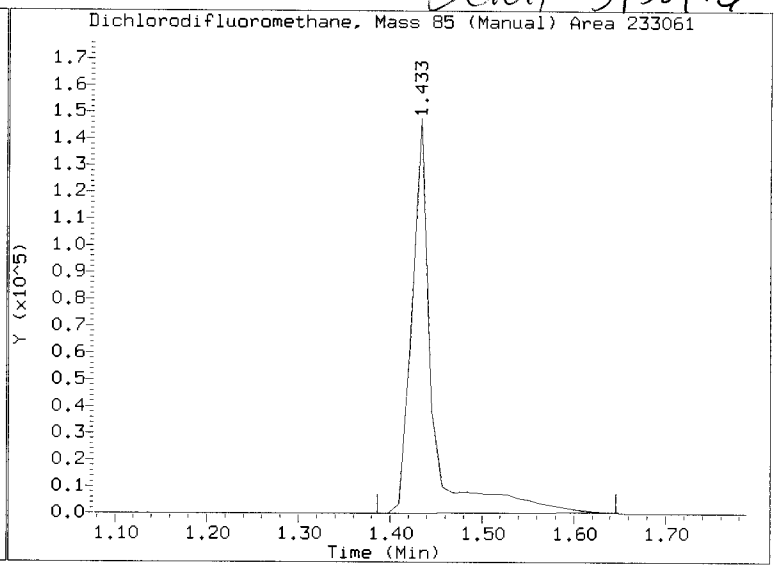


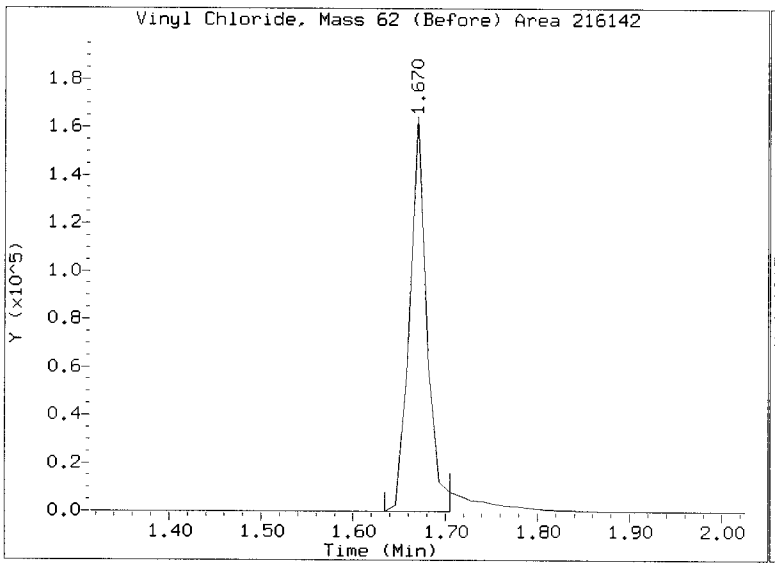
Quant Ion Manual Peak Adjustment Report

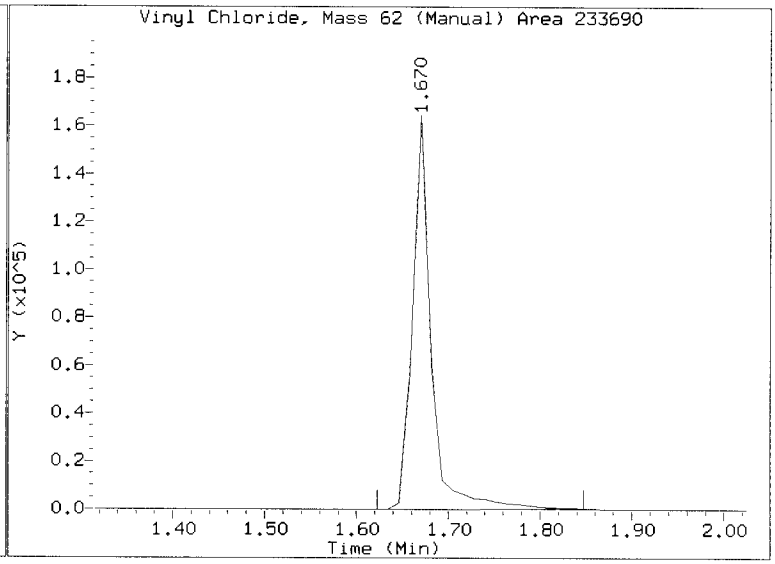
Datafile: //target/share/chem1/nt2.i/20160329.b/03291613.D
Injection Date: 29-MAR-2016 18:37
Lab ID:1000329 Client ID:VSTD10
Report Date: 03/30/2016 09:02

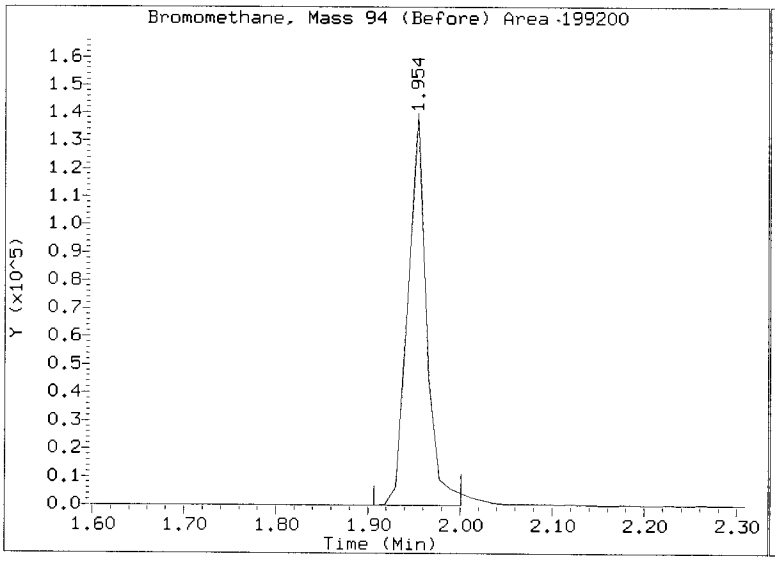
3/30/16

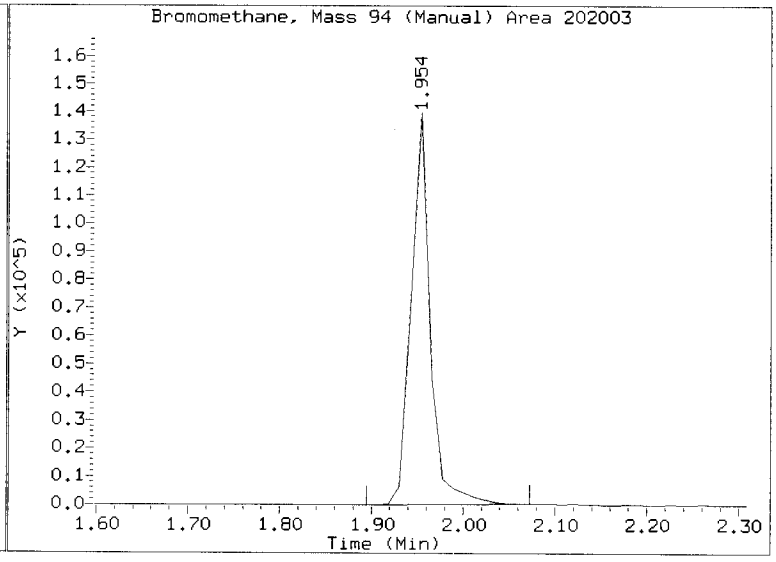












REVIEW SUMMARY FOR FILE - 03291613.D

Lab ID: 1000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 18:37

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

Qual 3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291614.D
Lab Smp Id: 0200329 Client Smp ID: VSTD02
Inj Date : 29-MAR-2016 18:59
Operator : PC Inst ID: nt2.i
Smp Info : 0200329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.433	1.433	(0.269)	48142	2.00000	2.097(M)
173	2-Pentanone	86	6.343	6.344	(1.110)	23391	10.0000	9.663
2	Chloromethane	50	1.599	1.599	(0.300)	51452	2.00000	2.116
3	Vinyl Chloride	62	1.669	1.670	(0.314)	47090	2.00000	2.159
4	Bromomethane	94	1.953	1.954	(0.367)	45395	2.00000	2.080
5	Chloroethane	64	2.072	2.060	(0.389)	33061	2.00000	3.388
6	Trichlorofluoromethane	101	2.202	2.190	(0.414)	80129	2.00000	2.007
7	1,1-Dichloroethene	61	2.699	2.699	(0.507)	73304	2.00000	2.067
8	Carbon Disulfide	76	2.711	2.699	(0.509)	142231	2.00000	2.040
9	112Trichloro122Trifluoroethane	101	2.758	2.747	(0.518)	45998	2.00000	2.052
10	Iodomethane	142	2.841	2.841	(0.533)	23875	2.00000	1.138
11	Bromoethane	108	2.983	2.983	(0.560)	31919	2.00000	2.092
12	Acrolein	56	3.101	3.102	(0.582)	33659	10.0000	10.841
13	Methylene Chloride	84	3.350	3.350	(0.629)	58499	2.00000	2.965
14	Acetone	43	3.433	3.433	(0.645)	60765	10.0000	11.173
15	Trans-1,2-Dichloroethene	96	3.504	3.504	(0.658)	48360	2.00000	2.078
17	Methyl tert butyl ether	73	3.657	3.658	(0.687)	139600	2.00000	2.134
18	1,1-Dichloroethane	63	4.095	4.094	(0.769)	70395	2.00000	2.079
19	Acrylonitrile	53	4.178	4.178	(0.785)	11582	2.00000	2.142(T)
20	Vinyl Acetate	43	4.367	4.368	(0.820)	59524	2.00000	1.997
22	Cis-1,2-Dichloroethene	96	4.580	4.569	(0.860)	43580	2.00000	2.108
23	2,2-Dichloropropane	77	4.651	4.652	(0.873)	47834	2.00000	1.998
24	Bromochloromethane	128	4.734	4.734	(0.889)	20778	2.00000	2.147
25	Chloroform	83	4.805	4.805	(0.902)	68010	2.00000	2.112
26	Carbon Tetrachloride	117	4.888	4.888	(0.855)	36285	2.00000	1.860
$ 27	Dibromofluoromethane	111	4.947	4.947	(0.929)	85030	5.00000	5.051
28	1,1,1-Trichloroethane	97	4.947	4.947	(0.929)	57064	2.00000	2.079
29	2-Butanone	43	5.077	5.078	(0.953)	74269	10.0000	11.172

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	30	1,1-Dichloropropene	75	5.054	5.054	(0.884)	51736	2.00000	1.996
	31	Benzene	78	5.243	5.243	(0.917)	159535	2.00000	2.088
*	32	Pentafluorobenzene	168	5.326	5.326	(1.000)	351970	10.0000	
$	33	d4-1,2-Dichloroethane	65	5.349	5.350	(1.004)	97679	5.00000	4.906
	34	1,2-Dichloroethane	62	5.409	5.409	(0.946)	52280	2.00000	2.051
	36	Trichloroethene	130	5.681	5.681	(0.994)	44526	2.00000	2.038
*	37	1,4-Difluorobenzene	114	5.716	5.717	(1.000)	569384	10.0000	
	38	Dibromomethane	93	5.988	5.989	(1.048)	22292	2.00000	2.077
	39	1,2-Dichloropropane	63	6.059	6.060	(1.060)	36794	2.00000	1.993
	40	Bromodichloromethane	83	6.119	6.107	(1.070)	41139	2.00000	1.964
	41	2-Chloroethyl Vinyl Ether	63	6.521	6.521	(1.141)	20075	2.00000	1.931
	42	Cis 1,3-dichloropropene	75	6.556	6.557	(1.147)	49709	2.00000	1.959
$	43	d8-Toluene	98	6.687	6.687	(1.170)	333939	5.00000	4.954
	44	Toluene	92	6.722	6.722	(1.176)	104635	2.00000	2.072
	45	4-Methyl-2-Pentanone	58	6.994	6.995	(1.224)	63475	10.0000	10.163
	46	Tetrachloroethene	166	6.994	6.995	(0.900)	45061	2.00000	2.083
	47	Trans 1,3-Dichloropropene	75	7.018	7.018	(1.228)	39515	2.00000	1.696
	48	1,1,2-Trichloroethane	97	7.136	7.136	(1.248)	32994	2.00000	2.104
	49	Chlorodibromomethane	129	7.255	7.255	(0.933)	27033	2.00000	1.685
	50	1,3-Dichloropropane	76	7.326	7.326	(0.942)	58087	2.00000	2.151
	51	1,2-Dibromoethane	107	7.420	7.420	(1.298)	31504	2.00000	2.090
	52	2-Hexanone	43	7.586	7.574	(0.976)	103718	10.0000	10.117
*	53	d5-Chlorobenzene	117	7.775	7.775	(1.000)	501631	10.0000	
	54	Chlorobenzene	112	7.787	7.787	(1.002)	117720	2.00000	2.110
	55	Ethyl Benzene	106	7.811	7.811	(1.005)	61738	2.00000	2.073
	56	1,1,1,2-Tetrachloroethane	131	7.834	7.835	(1.008)	29696	2.00000	1.761
	57	m,p-xylene	106	7.905	7.906	(1.017)	157316	4.00000	4.334
	58	o-Xylene	106	8.213	8.212	(1.056)	73849	2.00000	2.157
	59	Styrene	104	8.260	8.260	(1.062)	115032	2.00000	2.145
	60	Bromoform	173	8.284	8.284	(0.874)	12900	2.00000	1.353
	61	Isopropyl Benzene	105	8.438	8.438	(0.890)	193955	2.00000	2.197
$	62	4-Bromofluorobenzene	174	8.651	8.651	(1.113)	101611	5.00000	4.969
	63	Bromobenzene	156	8.734	8.734	(0.921)	50788	2.00000	2.106
	64	N-Propyl Benzene	91	8.746	8.746	(0.923)	212424	2.00000	2.143
	65	1,1,2,2-Tetrachloroethane	83	8.805	8.805	(0.929)	38602	2.00000	2.115
	66	2-Chloro Toluene	91	8.864	8.864	(0.935)	145855	2.00000	2.079
	67	1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	157845	2.00000	2.166
	68	1,2,3-Trichloropropane	110	8.899	8.900	(0.939)	14093	2.00000	2.268
	69	Trans-1,4-Dichloro 2-Butene	53	8.935	8.935	(0.943)	8979	2.00000	2.060
	70	4-Chloro Toluene	91	8.982	8.982	(0.948)	136760	2.00000	2.126
	71	T-Butyl Benzene	119	9.124	9.124	(0.963)	138779	2.00000	2.126
	72	1,2,4-Trimethylbenzene	105	9.171	9.172	(0.968)	158965	2.00000	2.166
	73	S-Butyl Benzene	105	9.254	9.255	(0.976)	200735	2.00000	2.158
	74	4-Isopropyl Toluene	119	9.361	9.361	(0.988)	169072	2.00000	2.182
	75	1,3-Dichlorobenzene	146	9.432	9.432	(0.995)	98048	2.00000	2.115
*	76	d4-1,4-Dichlorobenzene	152	9.479	9.479	(1.000)	275297	10.0000	
	77	1,4-Dichlorobenzene	146	9.491	9.491	(1.001)	100992	2.00000	2.115
	78	N-Butyl Benzene	91	9.692	9.692	(1.022)	147637	2.00000	2.121
$	79	d4-1,2-Dichlorobenzene	152	9.810	9.811	(1.035)	129499	5.00000	4.920
	80	1,2-Dichlorobenzene	146	9.810	9.811	(1.035)	91598	2.00000	2.085
	81	1,2-Dibromo 3-Chloropropane	75	10.449	10.450	(1.102)	4471	2.00000	1.799
	83	Hexachloro 1,3-Butadiene	225	10.970	10.970	(1.157)	25537	2.00000	2.065
	84	1,2,4-Trichlorobenzene	180	10.994	10.994	(1.160)	61948	2.00000	2.094
	85	Naphthalene	128	11.266	11.266	(1.188)	135887	2.00000	2.155

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	60569	2.00000	2.116

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291614.D
Lab Smp Id: 0200329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD02
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	351970	0.46
37 1,4-Difluorobenze	562526	281263	1125052	569384	1.22
53 d5-Chlorobenzene	502371	251186	1004742	501631	-0.15
76 d4-1,4-Dichlorobe	277950	138975	555900	275297	-0.95

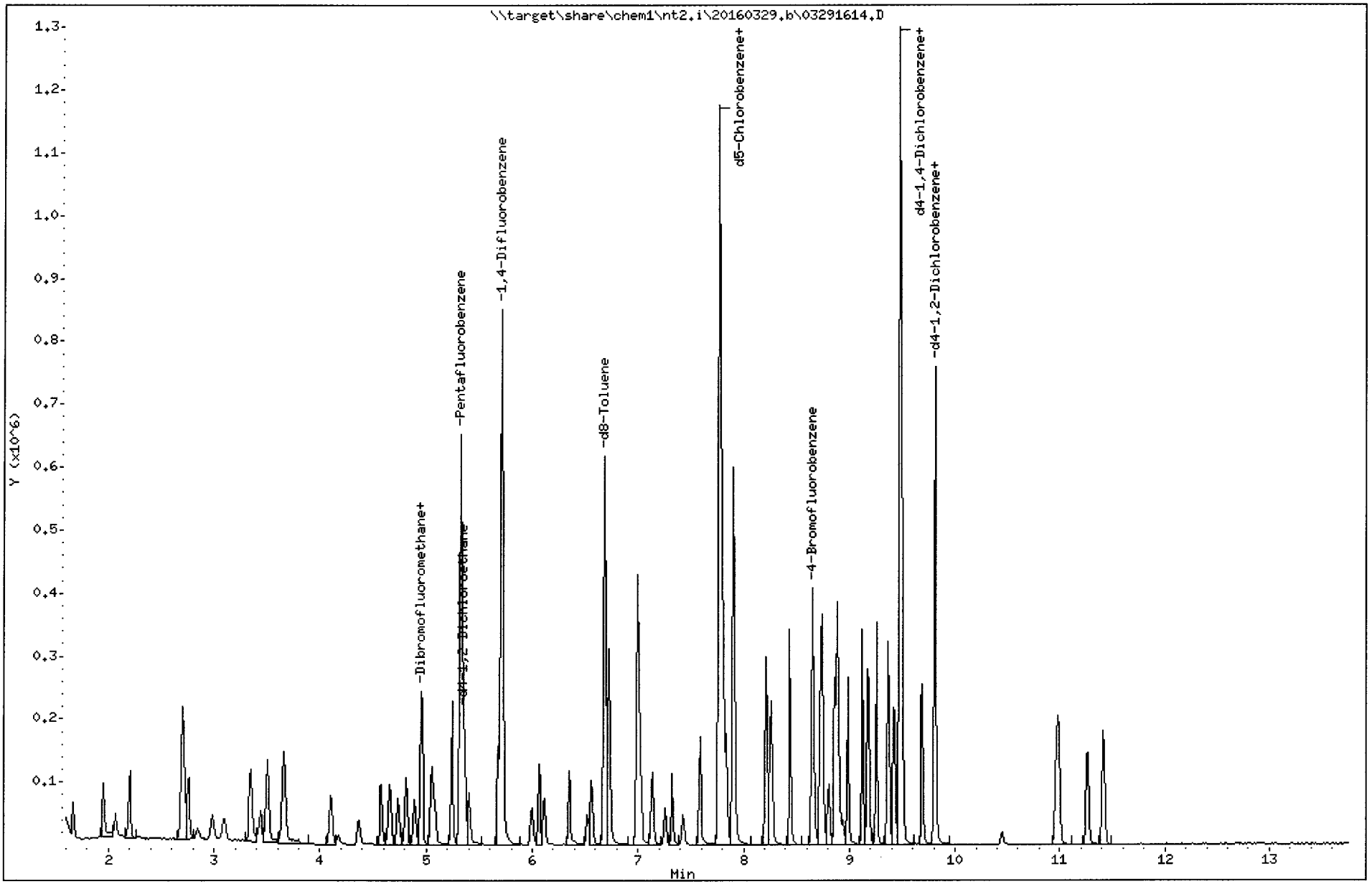
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.01
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291614.D
Date : 29-MAR-2016 18:59
Client ID: VSTD02
Sample Info: 0200329,10,10,0,

Instrument: nt2.i

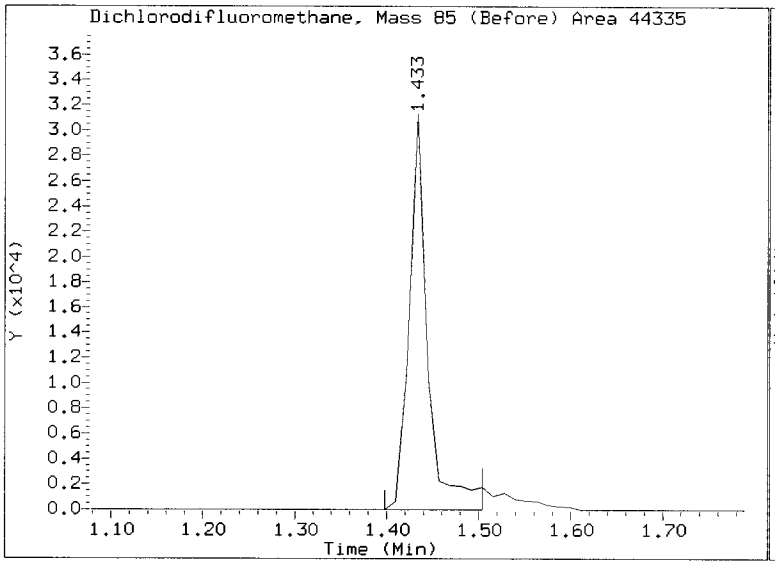
Operator: PC
Column phase: RTXVMS
Column diameter: 0.18

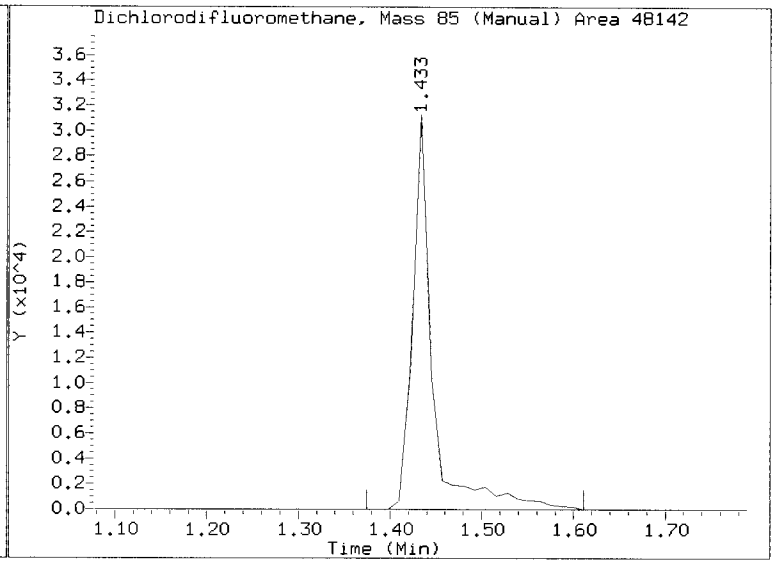


Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem1/nt2.i/20160329.b/03291614.D
Injection Date: 29-MAR-2016 18:59
Lab ID:0200329 Client ID:VSTD02
Report Date: 03/30/2016 09:02

3/30/16





REVIEW SUMMARY FOR FILE - 03291614.D

Lab ID: 0200329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 18:59

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291615.D
Lab Smp Id: 0100329 Client Smp ID: VSTD01
Inj Date : 29-MAR-2016 19:20
Operator : PC Inst ID: nt2.i
Smp Info : 0100329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.434	1.433	(0.269)	24424	1.00000	1.160(M)
173	2-Pentanone	86	6.356	6.344	(1.112)	9599	5.00000	4.421
2	Chloromethane	50	1.599	1.599	(0.300)	25479	1.00000	1.143
3	Vinyl Chloride	62	1.670	1.670	(0.314)	21188	1.00000	1.059(M)
4	Bromomethane	94	1.954	1.954	(0.367)	23847	1.00000	1.191(M)
5	Chloroethane	64	2.061	2.060	(0.387)	9365	1.00000	1.014
6	Trichlorofluoromethane	101	2.179	2.190	(0.409)	39028	1.00000	1.066
7	1,1-Dichloroethene	61	2.688	2.699	(0.505)	35256	1.00000	1.084
8	Carbon Disulfide	76	2.700	2.699	(0.507)	68373	1.00000	1.069
9	112Trichloro122Trifluoroethane	101	2.747	2.747	(0.516)	22313	1.00000	1.085
10	Iodomethane	142	2.842	2.841	(0.534)	10355	1.00000	0.5381
11	Bromoethane	108	2.984	2.983	(0.560)	15368	1.00000	1.098(M)
12	Acrolein	56	3.102	3.102	(0.582)	16038	5.00000	5.632
13	Methylene Chloride	84	3.339	3.350	(0.627)	34853	1.00000	1.926
14	Acetone	43	3.433	3.433	(0.645)	30173	5.00000	6.048
15	Trans-1,2-Dichloroethene	96	3.504	3.504	(0.658)	22549	1.00000	1.056
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	65810	1.00000	1.097
18	1,1-Dichloroethane	63	4.096	4.094	(0.769)	34315	1.00000	1.105
19	Acrylonitrile	53	4.179	4.178	(0.785)	5190	1.00000	1.046(T)
20	Vinyl Acetate	43	4.368	4.368	(0.820)	27435	1.00000	1.004
22	Cis-1,2-Dichloroethene	96	4.569	4.569	(0.858)	20872	1.00000	1.101
23	2,2-Dichloropropane	77	4.652	4.652	(0.873)	21141	1.00000	0.9629
24	Bromochloromethane	128	4.735	4.734	(0.889)	9181	1.00000	1.034
25	Chloroform	83	4.806	4.805	(0.902)	31112	1.00000	1.053
26	Carbon Tetrachloride	117	4.889	4.888	(0.855)	15233	1.00000	0.8706
$ 27	Dibromofluoromethane	111	4.948	4.947	(0.929)	76404	5.00000	4.949
28	1,1,1-Trichloroethane	97	4.948	4.947	(0.929)	25256	1.00000	1.003
29	2-Butanone	43	5.078	5.078	(0.953)	33588	5.00000	5.508

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	30 1,1-Dichloropropene	75	5.054	5.054	(0.884)	23739	1.00000	1.021
	31 Benzene	78	5.244	5.243	(0.917)	74145	1.00000	1.082
*	32 Pentafluorobenzene	168	5.327	5.326	(1.000)	322836	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	90369	5.00000	4.949
	34 1,2-Dichloroethane	62	5.409	5.409	(0.946)	23969	1.00000	1.048
	36 Trichloroethene	130	5.682	5.681	(0.994)	20572	1.00000	1.050
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	510764	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	9735	1.00000	1.011
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	17899	1.00000	1.081
	40 Bromodichloromethane	83	6.119	6.107	(1.070)	18321	1.00000	0.9749
	41 2-Chloroethyl Vinyl Ether	63	6.522	6.521	(1.141)	7817	1.00000	0.8384
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	21208	1.00000	0.9317
$	43 d8-Toluene	98	6.687	6.687	(1.170)	306140	5.00000	5.063
	44 Toluene	92	6.723	6.722	(1.176)	49028	1.00000	1.082
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	27755	5.00000	4.954
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	21865	1.00000	1.084
	47 Trans 1,3-Dichloropropene	75	7.019	7.018	(1.228)	16976	1.00000	0.8122
	48 1,1,2-Trichloroethane	97	7.137	7.136	(1.248)	14860	1.00000	1.056
	49 Chlorodibromomethane	129	7.255	7.255	(0.933)	10604	1.00000	0.7088
	50 1,3-Dichloropropane	76	7.326	7.326	(0.942)	26271	1.00000	1.043
	51 1,2-Dibromoethane	107	7.421	7.420	(1.298)	13669	1.00000	1.011
	52 2-Hexanone	43	7.587	7.574	(0.976)	44472	5.00000	4.652
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	467709	10.0000	
	54 Chlorobenzene	112	7.788	7.787	(1.002)	56780	1.00000	1.092
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	28546	1.00000	1.028
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	13011	1.00000	0.8273
	57 m,p-xylene	106	7.906	7.906	(1.017)	73212	2.00000	2.163
	58 o-Xylene	106	8.214	8.212	(1.056)	34038	1.00000	1.066
	59 Styrene	104	8.261	8.260	(1.062)	51341	1.00000	1.027
	60 Bromoform	173	8.285	8.284	(0.874)	5511	1.00000	0.6236
	61 Isopropyl Benzene	105	8.439	8.438	(0.890)	88621	1.00000	1.083
$	62 4-Bromofluorobenzene	174	8.652	8.651	(1.113)	97210	5.00000	5.099
	63 Bromobenzene	156	8.734	8.734	(0.921)	24456	1.00000	1.094
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	100756	1.00000	1.096
	65 1,1,2,2-Tetrachloroethane	83	8.794	8.805	(0.928)	17407	1.00000	1.029
	66 2-Chloro Toluene	91	8.865	8.864	(0.935)	67584	1.00000	1.039
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	71877	1.00000	1.064
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	6245	1.00000	1.084
	69 Trans-1,4-Dichloro 2-Butene	53	8.936	8.935	(0.943)	3709	1.00000	0.9177(M)
	70 4-Chloro Toluene	91	8.983	8.982	(0.948)	66114	1.00000	1.108
	71 T-Butyl Benzene	119	9.125	9.124	(0.963)	62509	1.00000	1.033
	72 1,2,4-Trimethylbenzene	105	9.172	9.172	(0.968)	71197	1.00000	1.046
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	92711	1.00000	1.075
	74 4-Isopropyl Toluene	119	9.362	9.361	(0.988)	76190	1.00000	1.061
	75 1,3-Dichlorobenzene	146	9.421	9.432	(0.994)	46129	1.00000	1.074
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	255215	10.0000	
	77 1,4-Dichlorobenzene	146	9.492	9.491	(1.001)	49539	1.00000	1.119
	78 N-Butyl Benzene	91	9.693	9.692	(1.022)	66135	1.00000	1.025
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	123460	5.00000	5.059
	80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	44896	1.00000	1.103
	81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	1838	1.00000	0.7977
	83 Hexachloro 1,3-Butadiene	225	10.971	10.970	(1.157)	11895	1.00000	1.038
	84 1,2,4-Trichlorobenzene	180	10.994	10.994	(1.160)	28254	1.00000	1.030
	85 Naphthalene	128	11.255	11.266	(1.187)	56798	1.00000	0.9717

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
86 1,2,3-Trichlorobenzene	180	11.409	11.420	(1.203)	27460	1.00000	1.035

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291615.D
Lab Smp Id: 0100329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD01
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	322836	-7.86
37 1,4-Difluorobenze	562526	281263	1125052	510764	-9.20
53 d5-Chlorobenzene	502371	251186	1004742	467709	-6.90
76 d4-1,4-Dichlorobe	277950	138975	555900	255215	-8.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

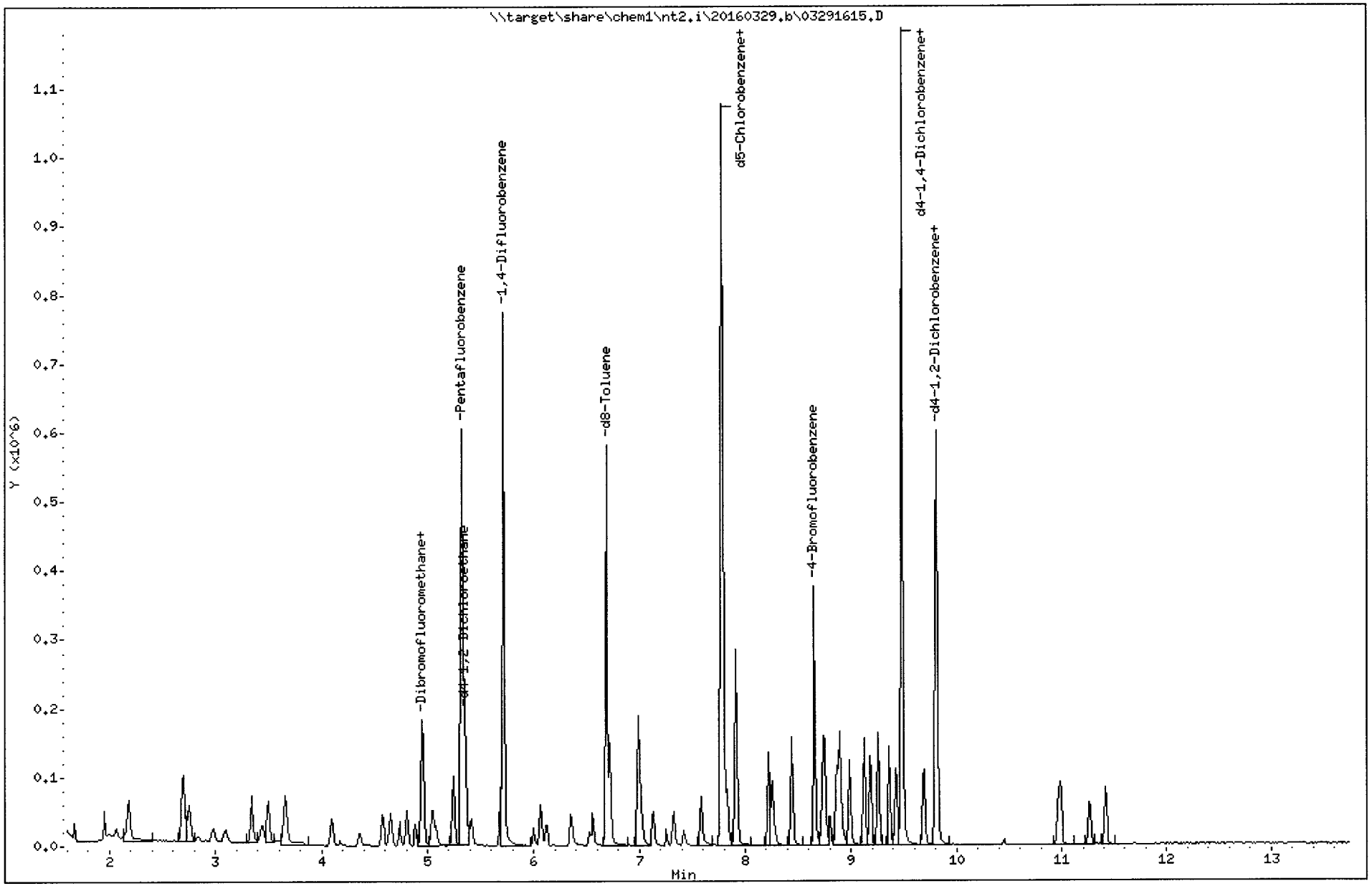
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291615.D
Date : 29-MAR-2016 19:20
Client ID: VSTD01
Sample Info: 0100329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

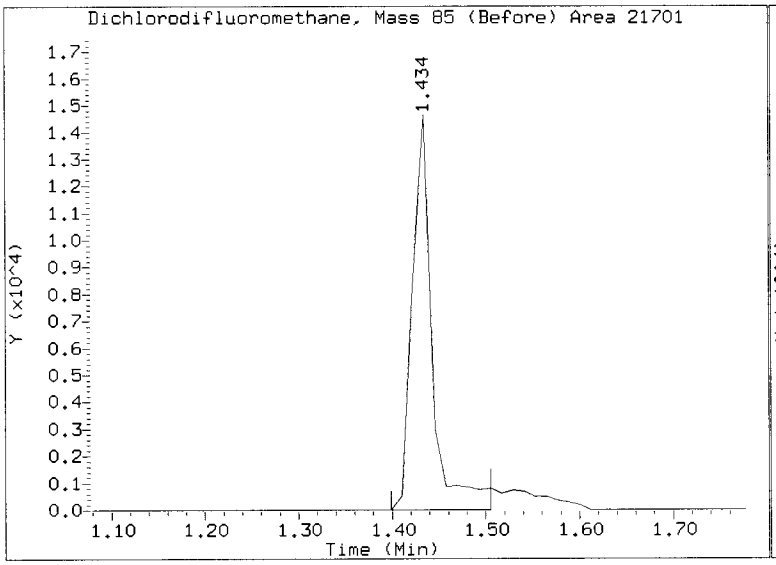
Column phase: RTXVMS

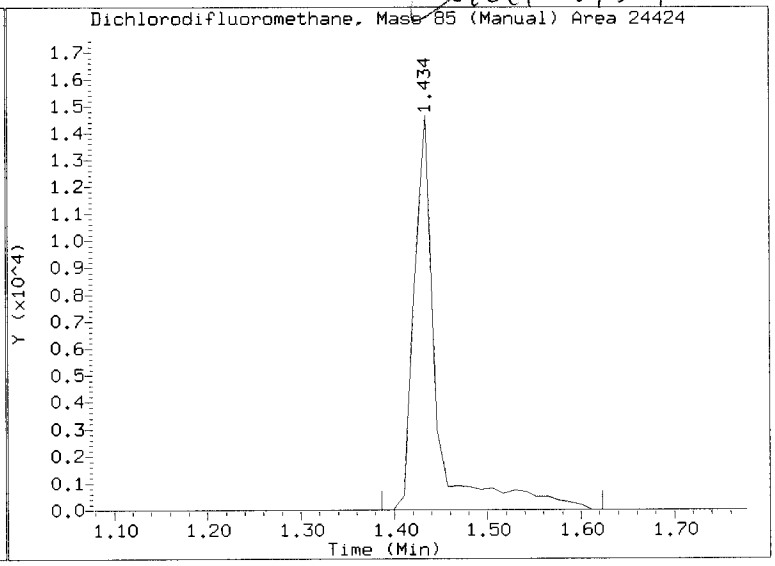


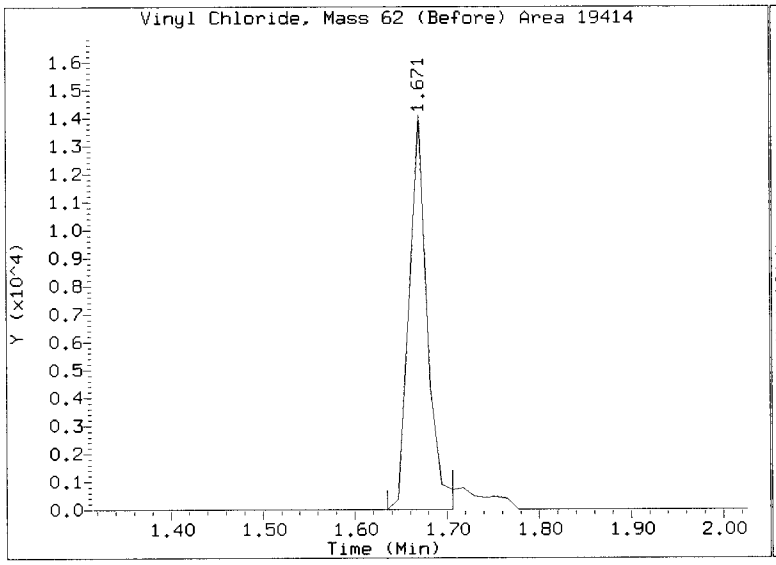
Quant Ion Manual Peak Adjustment Report

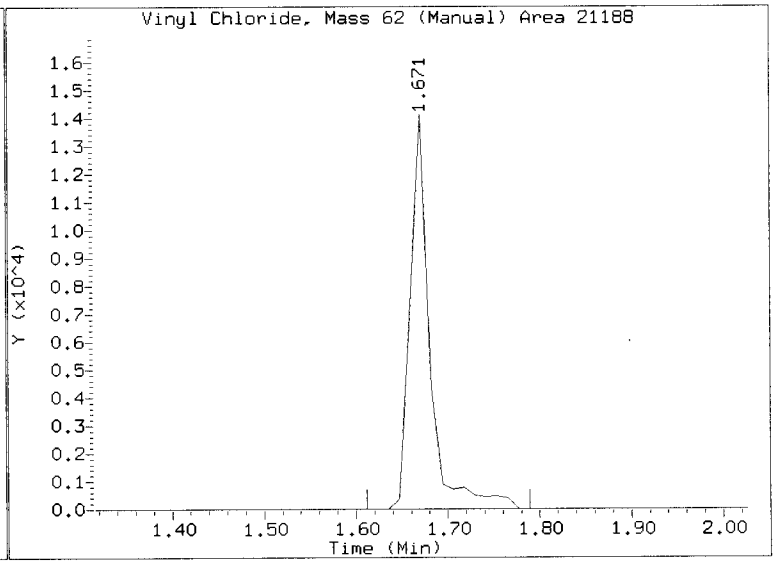
Datafile: //target/share/chem1/nt2.i/20160329.b/03291615.D
Injection Date: 29-MAR-2016 19:20
Lab ID:0100329 Client ID:VSTD01
Report Date: 03/30/2016 09:02

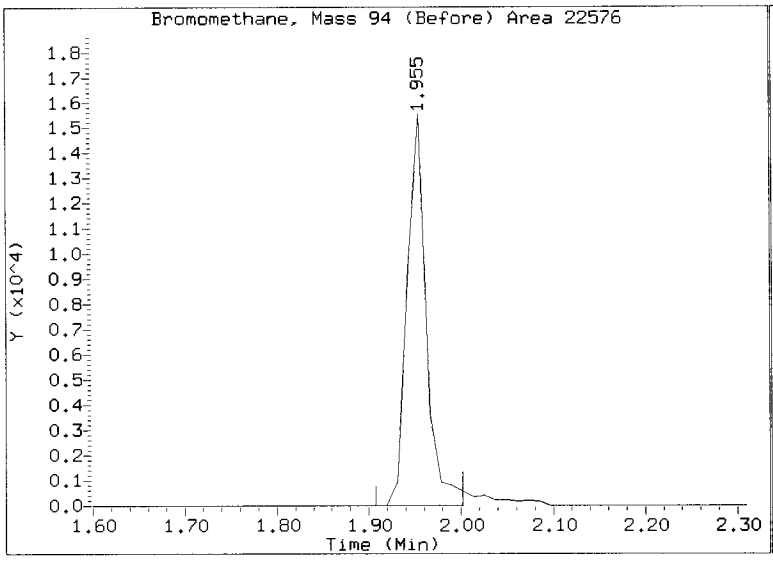
MLL 3/30/16

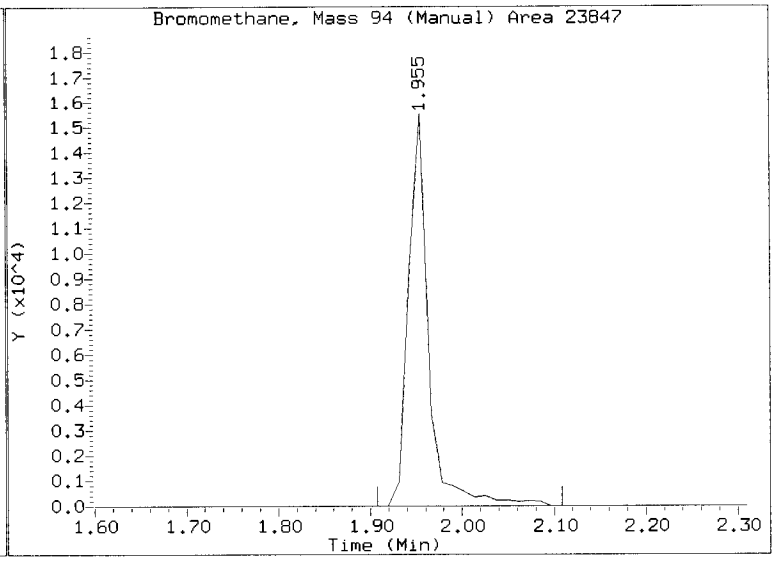








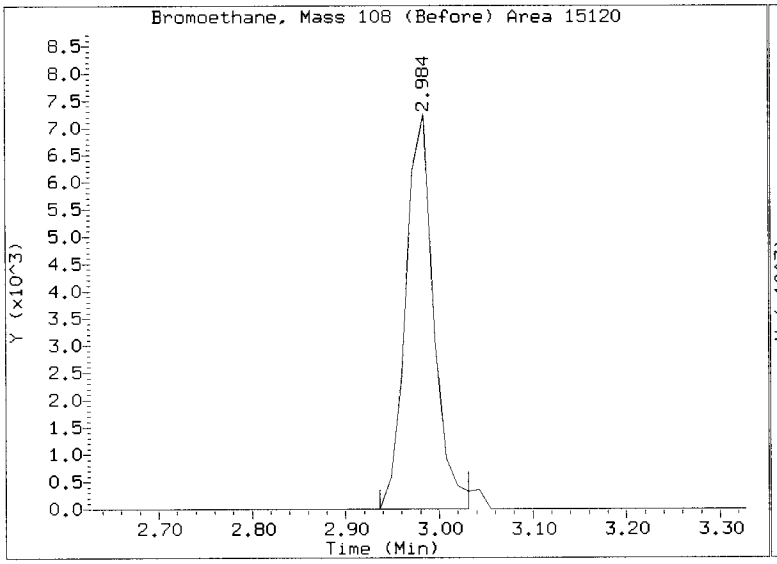


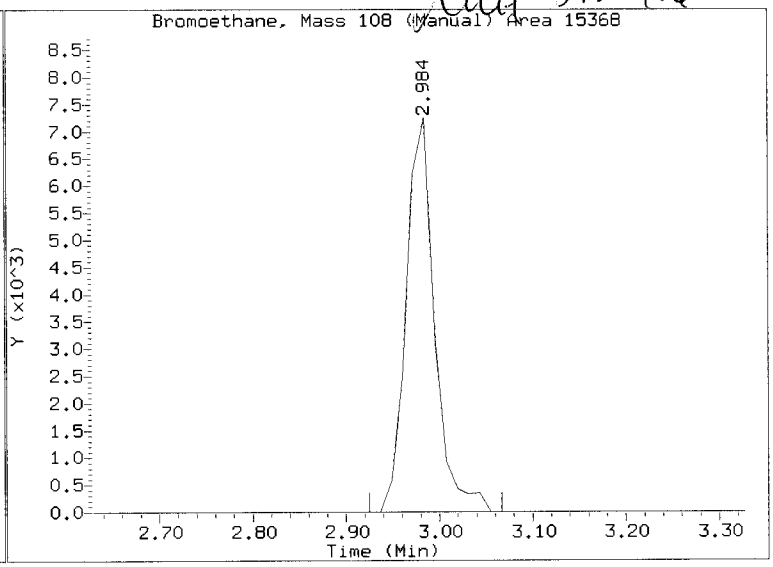


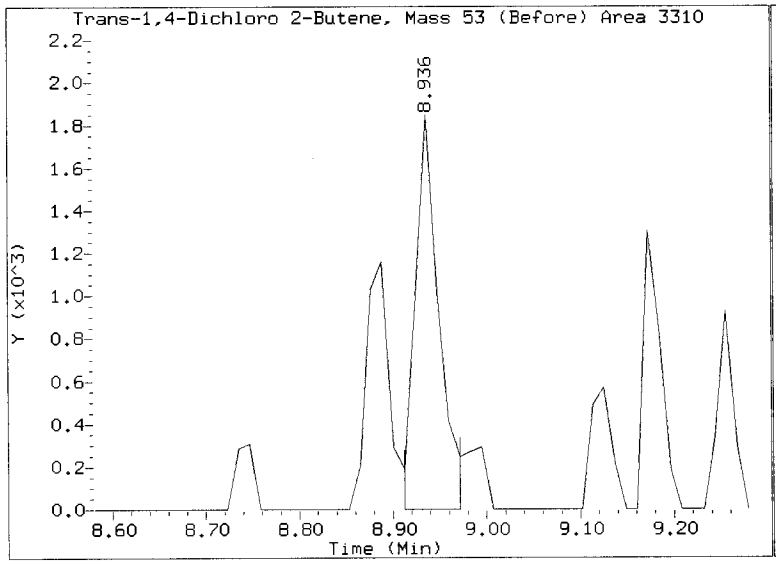
Quant Ion Manual Peak Adjustment Report

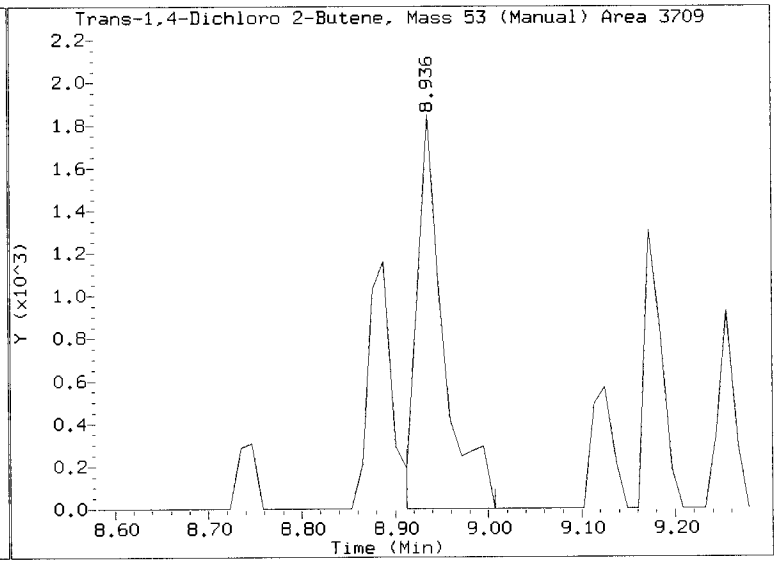
Datafile: //target/share/chem1/nt2.i/20160329.b/03291615.D
Injection Date: 29-MAR-2016 19:20
Lab ID:0100329 Client ID:VSTD01
Report Date: 03/30/2016 09:02

3/30/16









REVIEW SUMMARY FOR FILE - 03291615.D

Lab ID: 0100329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 19:20

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291616.D
Lab Smp Id: 0050329 Client Smp ID: VSTD0.5
Inj Date : 29-MAR-2016 19:41
Operator : PC Inst ID: nt2.i
Smp Info : 0050329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.433	1.433	(0.269)	11481	0.50000	0.5526(M)
173	2-Pentanone	86	6.356	6.344	(1.112)	3557	2.50000	1.665
2	Chloromethane	50	1.599	1.599	(0.300)	11667	0.50000	0.5304
3	Vinyl Chloride	62	1.670	1.670	(0.314)	9200	0.50000	0.4662
4	Bromomethane	94	1.954	1.954	(0.367)	11362	0.50000	0.5754(T)
5	Chloroethane	64	2.061	2.060	(0.387)	4613	0.50000	0.5030(M)
6	Trichlorofluoromethane	101	2.191	2.190	(0.411)	18486	0.50000	0.5117
7	1,1-Dichloroethene	61	2.700	2.699	(0.507)	17152	0.50000	0.5345
8	Carbon Disulfide	76	2.700	2.699	(0.507)	33293	0.50000	0.5277
9	112Trichloro122Trifluoroethane	101	2.747	2.747	(0.516)	10407	0.50000	0.5132
11	Bromoethane	108	2.984	2.983	(0.560)	7312	0.50000	0.5297
12	Acrolein	56	3.102	3.102	(0.582)	7610	2.50000	2.709
13	Methylene Chloride	84	3.350	3.350	(0.629)	22068	0.50000	1.236
14	Acetone	43	3.433	3.433	(0.645)	15348	2.50000	3.119
15	Trans-1,2-Dichloroethene	96	3.504	3.504	(0.658)	11269	0.50000	0.5352
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	30764	0.50000	0.5197
18	1,1-Dichloroethane	63	4.096	4.094	(0.769)	15780	0.50000	0.5151
19	Acrylonitrile	53	4.179	4.178	(0.785)	2276	0.50000	0.4652(T)
20	Vinyl Acetate	43	4.368	4.368	(0.820)	11241	0.50000	0.4169
22	Cis-1,2-Dichloroethene	96	4.581	4.569	(0.860)	9323	0.50000	0.4984
23	2,2-Dichloropropane	77	4.652	4.652	(0.873)	9402	0.50000	0.4341
24	Bromochloromethane	128	4.735	4.734	(0.889)	4108	0.50000	0.4691
25	Chloroform	83	4.806	4.805	(0.902)	14640	0.50000	0.5024
26	Carbon Tetrachloride	117	4.889	4.888	(0.855)	6523	0.50000	0.3789
$ 27	Dibromofluoromethane	111	4.948	4.947	(0.929)	76278	5.00000	5.008
28	1,1,1-Trichloroethane	97	4.948	4.947	(0.929)	11335	0.50000	0.4563
29	2-Butanone	43	5.078	5.078	(0.953)	14994	2.50000	2.493(T)
30	1,1-Dichloropropene	75	5.054	5.054	(0.884)	10989	0.50000	0.4803

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	31 Benzene	78	5.244	5.243	(0.917)	34301	0.50000	0.5087
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	318463	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	97551	5.00000	5.415
	34 1,2-Dichloroethane	62	5.409	5.409	(0.946)	11744	0.50000	0.5219
	36 Trichloroethene	130	5.681	5.681	(0.994)	9092	0.50000	0.4715
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	502550	10.0000	
	38 Dibromomethane	93	6.001	5.989	(1.050)	4683	0.50000	0.4944
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	7822	0.50000	0.4800
	40 Bromodichloromethane	83	6.119	6.107	(1.070)	7846	0.50000	0.4243
	41 2-Chloroethyl Vinyl Ether	63	6.522	6.521	(1.141)	3770	0.50000	0.4109
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	9383	0.50000	0.4189
$	43 d8-Toluene	98	6.687	6.687	(1.170)	296892	5.00000	4.990
	44 Toluene	92	6.723	6.722	(1.176)	22909	0.50000	0.5141
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	11684	2.50000	2.120(T)
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	9904	0.50000	0.4993
	47 Trans 1,3-Dichloropropene	75	7.019	7.018	(1.228)	6733	0.50000	0.3274
	48 1,1,2-Trichloroethane	97	7.137	7.136	(1.248)	6516	0.50000	0.4708
	49 Chlorodibromomethane	129	7.255	7.255	(0.933)	4673	0.50000	0.3176
	50 1,3-Dichloropropane	76	7.326	7.326	(0.942)	12228	0.50000	0.4938
	51 1,2-Dibromoethane	107	7.421	7.420	(1.298)	6437	0.50000	0.4838
	52 2-Hexanone	43	7.587	7.574	(0.976)	18785	2.50000	1.998
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	459981	10.0000	
	54 Chlorobenzene	112	7.788	7.787	(1.002)	27656	0.50000	0.5406
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	13621	0.50000	0.4988
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	5204	0.50000	0.3365
	57 m,p-xylene	106	7.906	7.906	(1.017)	32395	1.00000	0.9732
	58 o-Xylene	106	8.214	8.212	(1.056)	14726	0.50000	0.4691
	59 Styrene	104	8.261	8.260	(1.062)	22166	0.50000	0.4508
	60 Bromoform	173	8.285	8.284	(0.874)	2195	0.50000	0.2572
	61 Isopropyl Benzene	105	8.439	8.438	(0.890)	39145	0.50000	0.4954
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	92055	5.00000	4.909
	63 Bromobenzene	156	8.734	8.734	(0.921)	10365	0.50000	0.4802
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	45222	0.50000	0.5096
	65 1,1,2,2-Tetrachloroethane	83	8.793	8.805	(0.928)	8219	0.50000	0.5031
	66 2-Chloro Toluene	91	8.864	8.864	(0.935)	31594	0.50000	0.5031
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	30606	0.50000	0.4692
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	2886	0.50000	0.5188
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.935	(0.943)	1603	0.50000	0.4107
	70 4-Chloro Toluene	91	8.983	8.982	(0.948)	29703	0.50000	0.5157
	71 T-Butyl Benzene	119	9.125	9.124	(0.963)	28367	0.50000	0.4854
	72 1,2,4-Trimethylbenzene	105	9.172	9.172	(0.968)	31437	0.50000	0.4784
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	41271	0.50000	0.4957
	74 4-Isopropyl Toluene	119	9.361	9.361	(0.988)	32159	0.50000	0.4637
	75 1,3-Dichlorobenzene	146	9.432	9.432	(0.995)	21403	0.50000	0.5158
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	246454	10.0000	
	77 1,4-Dichlorobenzene	146	9.492	9.491	(1.001)	22228	0.50000	0.5200
	78 N-Butyl Benzene	91	9.681	9.692	(1.021)	30059	0.50000	0.4823
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	117860	5.00000	5.001
	80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	20780	0.50000	0.5285
	81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	914	0.50000	0.4108
	83 Hexachloro 1,3-Butadiene	225	10.971	10.970	(1.157)	5109	0.50000	0.4616
	84 1,2,4-Trichlorobenzene	180	10.994	10.994	(1.160)	12379	0.50000	0.4674
	85 Naphthalene	128	11.255	11.266	(1.187)	24713	0.50000	0.4378
	86 1,2,3-Trichlorobenzene	180	11.409	11.420	(1.203)	12699	0.50000	0.4956

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291616.D
Lab Smp Id: 0050329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD0.5
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	318463	-9.11
37 1,4-Difluorobenze	562526	281263	1125052	502550	-10.66
53 d5-Chlorobenzene	502371	251186	1004742	459981	-8.44
76 d4-1,4-Dichlorobe	277950	138975	555900	246454	-11.33

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

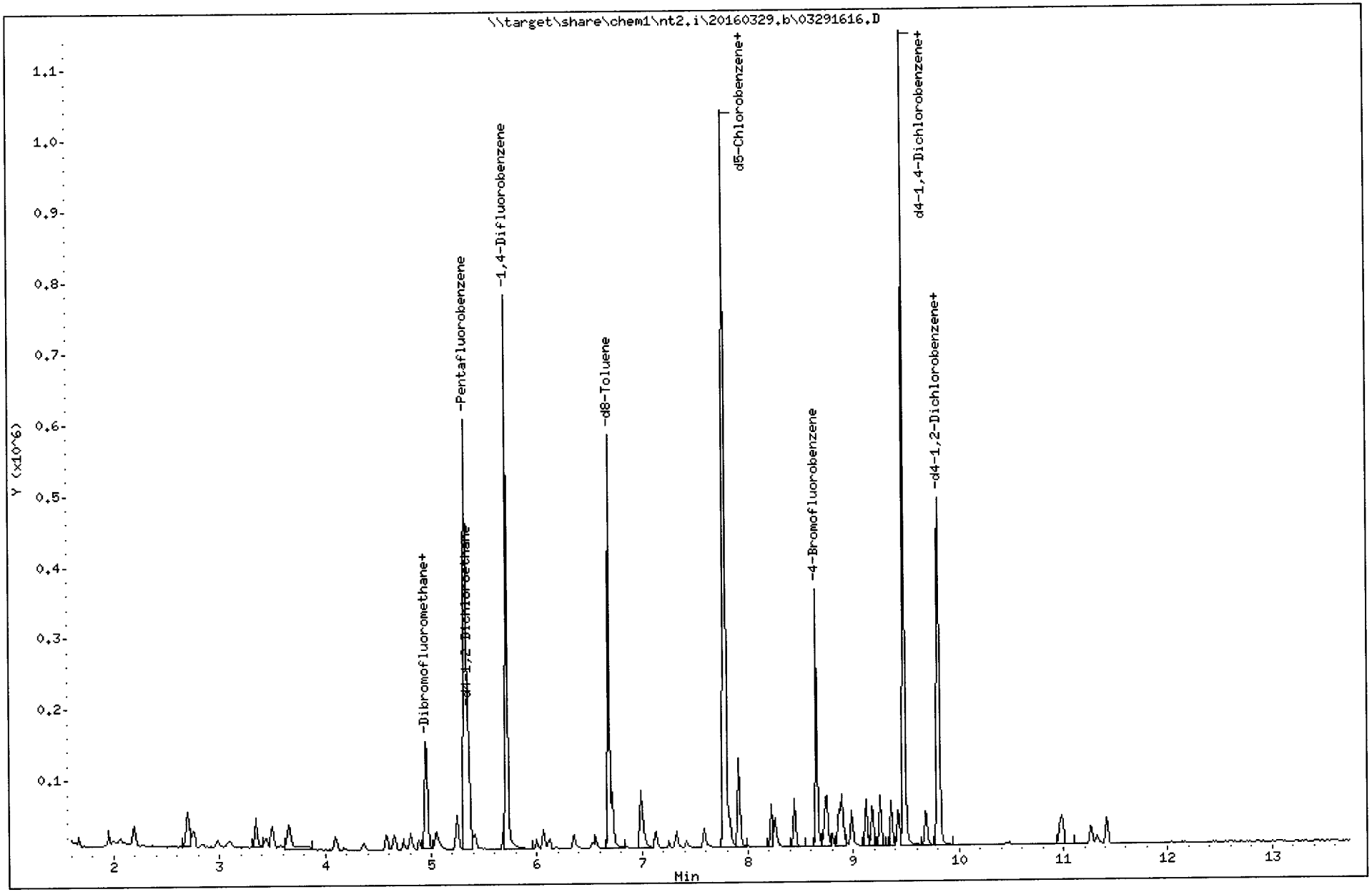
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291616.D
Date : 29-MAR-2016 19:41
Client ID: VSTD0.5
Sample Info: 0050329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

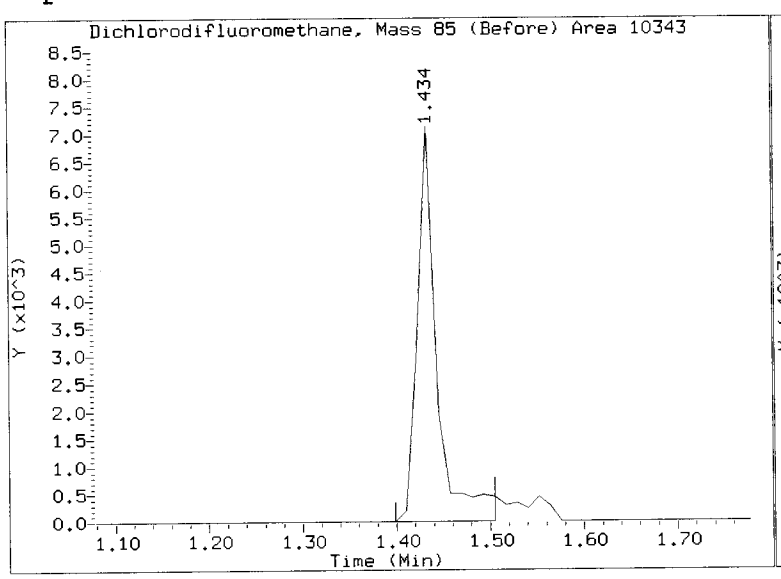
Column phase: RTXVMS

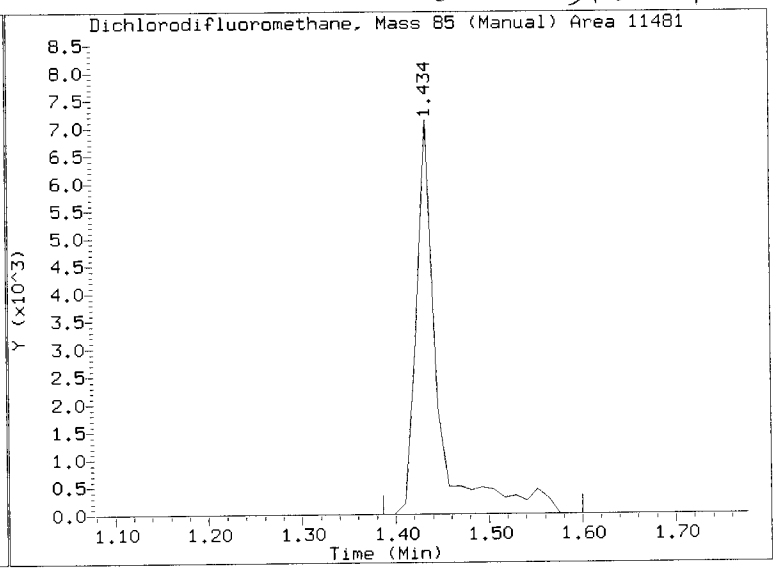


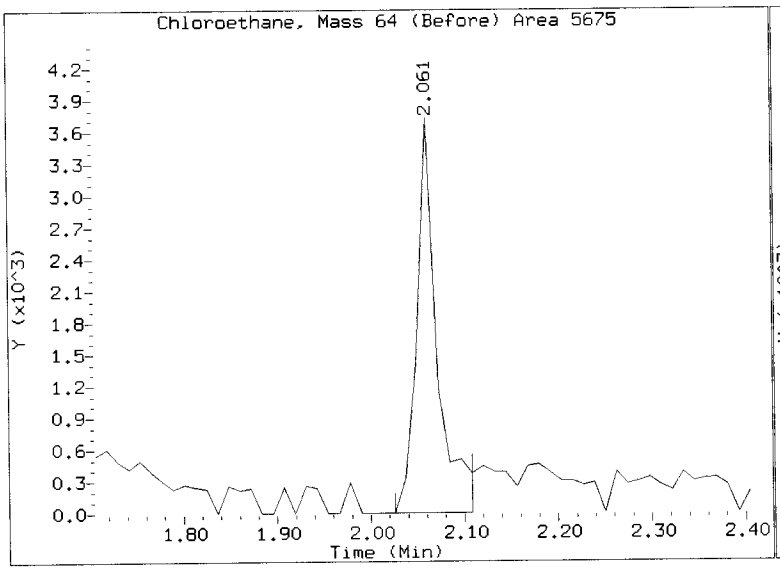
Quant Ion Manual Peak Adjustment Report

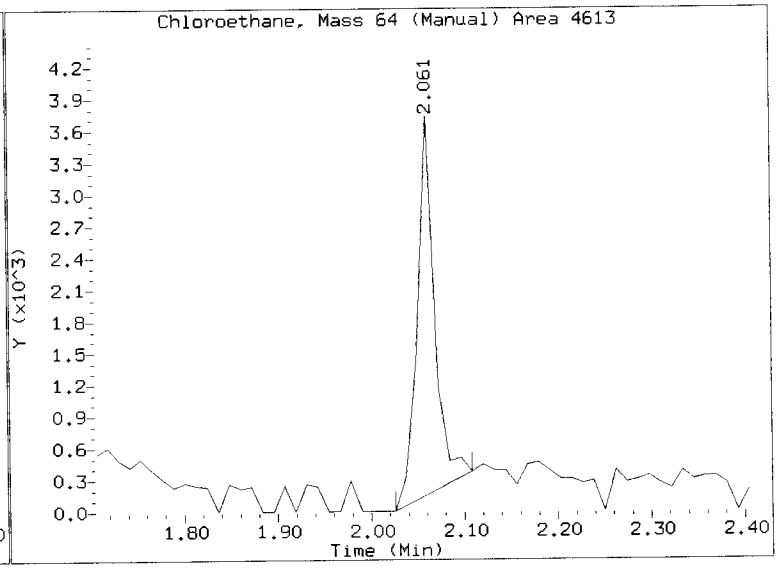
Datafile: //target/share/chem1/nt2.i/20160329.b/03291616.D
Injection Date: 29-MAR-2016 19:41
Lab ID:0050329 Client ID:VSTD0.5
Report Date: 03/30/2016 09:02

AM 3/30/16









REVIEW SUMMARY FOR FILE - 03291616.D

Lab ID: 0050329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 19:41

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291617.D
Lab Smp Id: SEC0063-CAL1 Client Smp ID: VSTD0.2
Inj Date : 29-MAR-2016 20:03
Operator : PC Inst ID: nt2.i
Smp Info : 0020329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 13:01 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	5.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.433	1.433	(0.269)	3343	0.20000	0.1643(M)
173 2-Pentanone	86	6.356	6.344	(1.112)	1328	1.00000	0.6310
2 Chloromethane	50	1.599	1.599	(0.300)	5142	0.20000	0.2387(T)
3 Vinyl Chloride	62	1.670	1.670	(0.314)	3488	0.20000	0.1805
4 Bromomethane	94	1.954	1.954	(0.367)	4879	0.20000	0.2523(TM)
5 Chloroethane	64	2.061	2.060	(0.387)	2987	0.20000	0.3318
6 Trichlorofluoromethane	101	2.191	2.190	(0.411)	6962	0.20000	0.1968
7 1,1-Dichloroethene	61	2.699	2.699	(0.507)	6664	0.20000	0.2121
8 Carbon Disulfide	76	2.711	2.699	(0.509)	14437	0.20000	0.2337(T)
9 112Trichloro122Trifluoroethane	101	2.759	2.747	(0.518)	4309	0.20000	0.2170
10 Iodomethane	142	2.841	2.841	(0.534)	1704	0.20000	0.09166(T)
11 Bromoethane	108	2.983	2.983	(0.560)	2955	0.20000	0.2186
12 Acrolein	56	3.102	3.102	(0.582)	2794	1.00000	1.016
13 Methylene Chloride	84	3.350	3.350	(0.629)	15999	0.20000	0.9153
14 Acetone	43	3.433	3.433	(0.645)	7163	1.00000	1.486
15 Trans-1,2-Dichloroethene	96	3.504	3.504	(0.658)	4496	0.20000	0.2181
17 Methyl tert butyl ether	73	3.658	3.658	(0.687)	11910	0.20000	0.2055
18 1,1-Dichloroethane	63	4.108	4.094	(0.771)	5646	0.20000	0.1882
19 Acrylonitrile	53	4.179	4.178	(0.785)	766	0.20000	0.1599(T)
20 Vinyl Acetate	43	4.368	4.368	(0.820)	3856	0.20000	0.1460(M)
22 Cis-1,2-Dichloroethene	96	4.581	4.569	(0.860)	3325	0.20000	0.1815
23 2,2-Dichloropropane	77	4.652	4.652	(0.873)	3484	0.20000	0.1643

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	24	Bromochloromethane	128	4.747	4.734	(0.891)	1647	0.20000	0.1921
	25	Chloroform	83	4.806	4.805	(0.902)	5420	0.20000	0.1899
	26	Carbon Tetrachloride	117	4.900	4.888	(0.857)	2880	0.20000	0.1698
$	27	Dibromofluoromethane	111	4.948	4.947	(0.929)	74217	5.00000	4.976
	28	1,1,1-Trichloroethane	97	4.948	4.947	(0.929)	4164	0.20000	0.1712
	29	2-Butanone	43	5.078	5.078	(0.953)	4779	1.00000	0.8114(T)
	30	1,1-Dichloropropene	75	5.054	5.054	(0.884)	4580	0.20000	0.2032
	31	Benzene	78	5.244	5.243	(0.917)	13075	0.20000	0.1968
*	32	Pentafluorobenzene	168	5.326	5.326	(1.000)	311848	10.0000	
$	33	d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	96597	5.00000	5.476
	34	1,2-Dichloroethane	62	5.409	5.409	(0.946)	4671	0.20000	0.2107
	36	Trichloroethene	130	5.693	5.681	(0.996)	3947	0.20000	0.2078
*	37	1,4-Difluorobenzene	114	5.717	5.717	(1.000)	495060	10.0000	
	38	Dibromomethane	93	6.001	5.989	(1.050)	1744	0.20000	0.1869
	39	1,2-Dichloropropane	63	6.060	6.060	(1.060)	2945	0.20000	0.1834(M)
	40	Bromodichloromethane	83	6.119	6.107	(1.070)	2864	0.20000	0.1572
	41	2-Chloroethyl Vinyl Ether	63	6.533	6.521	(1.143)	1096	0.20000	0.1213(TM)
	42	Cis 1,3-dichloropropene	75	6.569	6.557	(1.149)	3272	0.20000	0.1483
$	43	d8-Toluene	98	6.687	6.687	(1.170)	290500	5.00000	4.956
	44	Toluene	92	6.723	6.722	(1.176)	8745	0.20000	0.1992
	45	4-Methyl-2-Pentanone	58	7.007	6.995	(1.226)	4379	1.00000	0.8064(T)
	46	Tetrachloroethene	166	6.995	6.995	(0.900)	3691	0.20000	0.1886
	47	Trans 1,3-Dichloropropene	75	7.030	7.018	(1.230)	2389	0.20000	0.1179
	48	1,1,2-Trichloroethane	97	7.137	7.136	(1.248)	2422	0.20000	0.1776
	49	Chlorodibromomethane	129	7.255	7.255	(0.933)	1750	0.20000	0.1205(T)
	50	1,3-Dichloropropane	76	7.326	7.326	(0.942)	4669	0.20000	0.1911
	51	1,2-Dibromoethane	107	7.433	7.420	(1.300)	2103	0.20000	0.1605
	52	2-Hexanone	43	7.586	7.574	(0.976)	5853	1.00000	0.6309
*	53	d5-Chlorobenzene	117	7.776	7.775	(1.000)	453911	10.0000	
	54	Chlorobenzene	112	7.788	7.787	(1.002)	9762	0.20000	0.1934
	55	Ethyl Benzene	106	7.811	7.811	(1.005)	4923	0.20000	0.1827
	56	1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	1757	0.20000	0.1151
	57	m,p-xylene	106	7.906	7.906	(1.017)	12194	0.40000	0.3712
	58	o-Xylene	106	8.214	8.212	(1.056)	4999	0.20000	0.1614
	59	Styrene	104	8.261	8.260	(1.062)	7326	0.20000	0.1510
	60	Bromoform	173	8.285	8.284	(0.874)	689	0.20000	0.08455
	61	Isopropyl Benzene	105	8.438	8.438	(0.890)	14070	0.20000	0.1865
$	62	4-Bromofluorobenzene	174	8.651	8.651	(1.113)	84714	5.00000	4.578
	63	Bromobenzene	156	8.734	8.734	(0.921)	4100	0.20000	0.1989
	64	N-Propyl Benzene	91	8.746	8.746	(0.923)	16215	0.20000	0.1913
	65	1,1,2,2-Tetrachloroethane	83	8.805	8.805	(0.929)	2684	0.20000	0.1720
	66	2-Chloro Toluene	91	8.864	8.864	(0.935)	11463	0.20000	0.1911
	67	1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	10988	0.20000	0.1764
	68	1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	738	0.20000	0.1389
	69	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70	4-Chloro Toluene	91	8.983	8.982	(0.948)	10381	0.20000	0.1887
	71	T-Butyl Benzene	119	9.125	9.124	(0.963)	10133	0.20000	0.1816
	72	1,2,4-Trimethylbenzene	105	9.184	9.172	(0.969)	10762	0.20000	0.1715
	73	S-Butyl Benzene	105	9.255	9.255	(0.976)	14790	0.20000	0.1860
	74	4-Isopropyl Toluene	119	9.361	9.361	(0.988)	10660	0.20000	0.1610
	75	1,3-Dichlorobenzene	146	9.432	9.432	(0.995)	7375	0.20000	0.1861
*	76	d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	235351	10.0000	
	77	1,4-Dichlorobenzene	146	9.492	9.491	(1.001)	8426	0.20000	0.2064
	78	N-Butyl Benzene	91	9.693	9.692	(1.022)	10658	0.20000	0.1791

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	112291	5.00000	4.990
80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	7304	0.20000	0.1945
81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
83 Hexachloro 1,3-Butadiene	225	10.971	10.970	(1.157)	2248	0.20000	0.2127
84 1,2,4-Trichlorobenzene	180	10.994	10.994	(1.160)	4974	0.20000	0.1967
85 Naphthalene	128	11.266	11.266	(1.188)	9484	0.20000	0.1759(M)
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	4431	0.20000	0.1811

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291617.D
Lab Smp Id: 0020329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD0.2
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	311848	-11.00
37 1,4-Difluorobenze	562526	281263	1125052	495060	-11.99
53 d5-Chlorobenzene	502371	251186	1004742	453911	-9.65
76 d4-1,4-Dichlorobe	277950	138975	555900	235351	-15.33

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

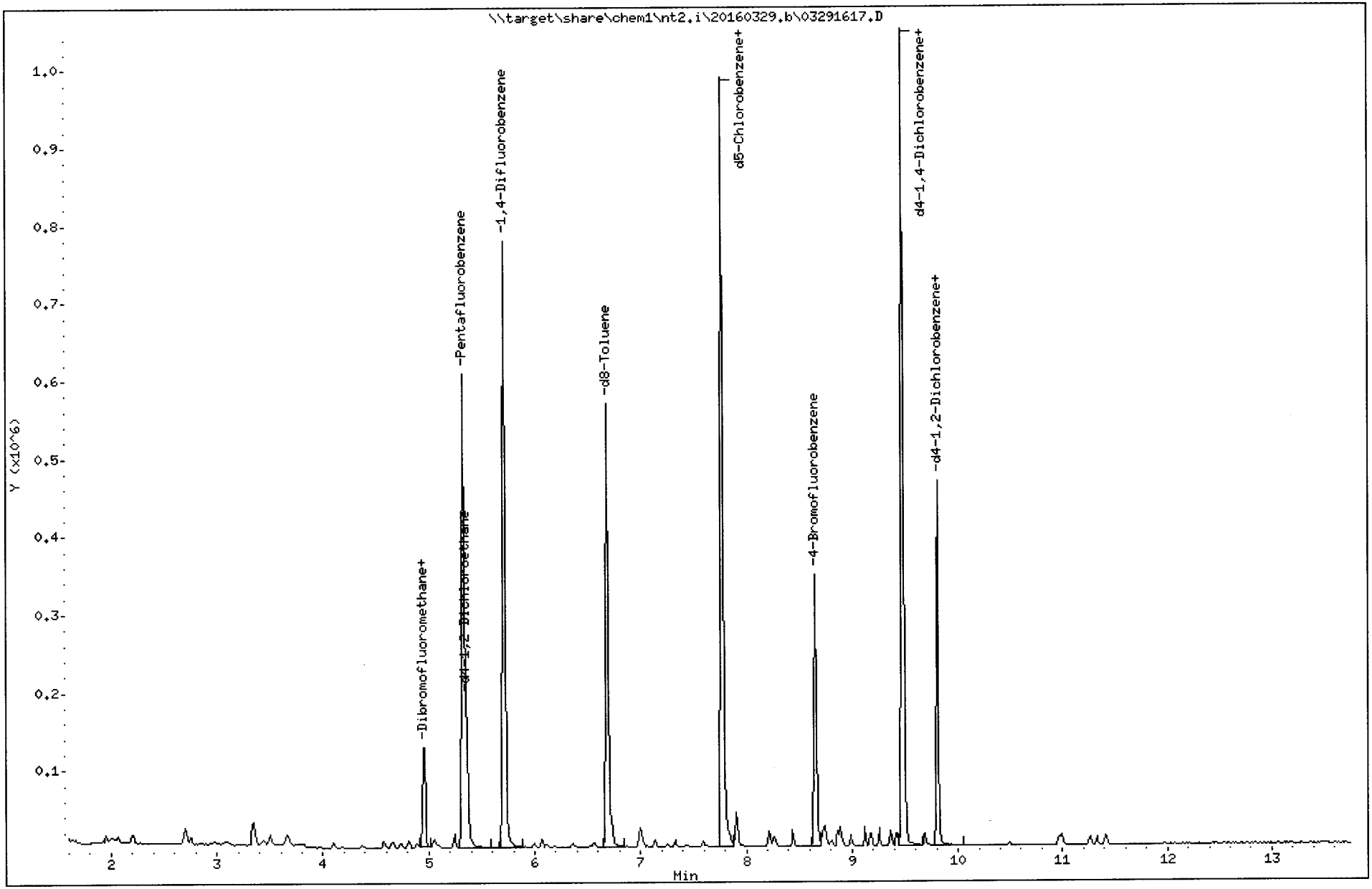
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291617.D
Date : 29-MAR-2016 20:03
Client ID: VSTD0.2
Sample Info: 0020329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

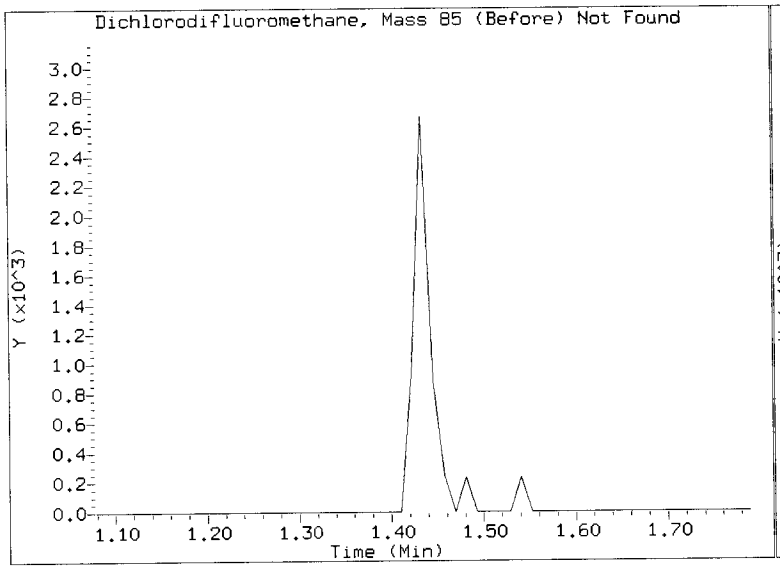
Column phase: RTXVMS

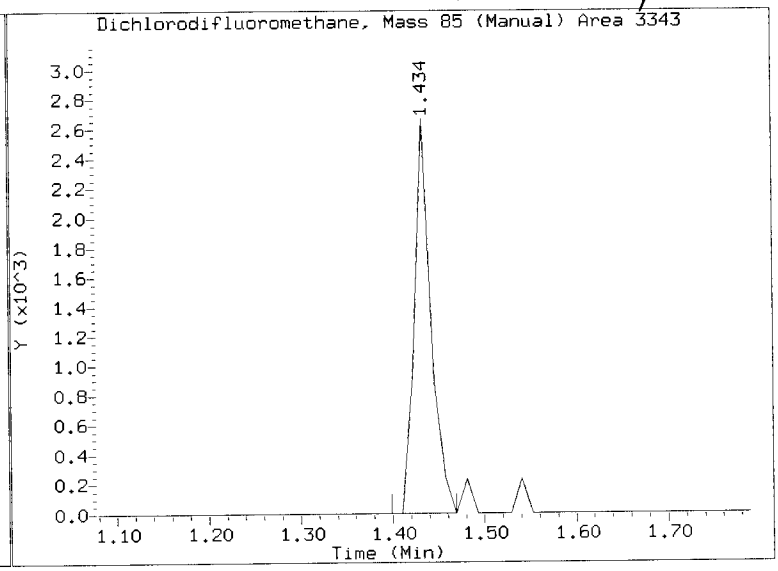


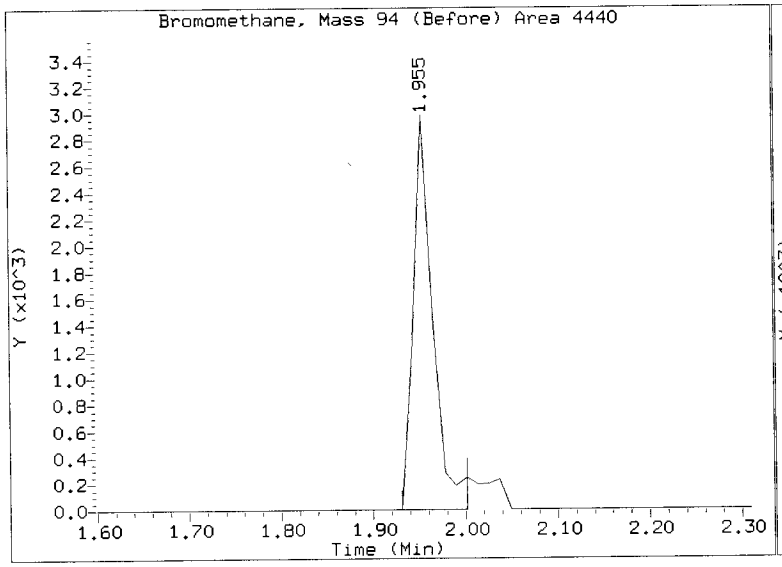
Quant Ion Manual Peak Adjustment Report

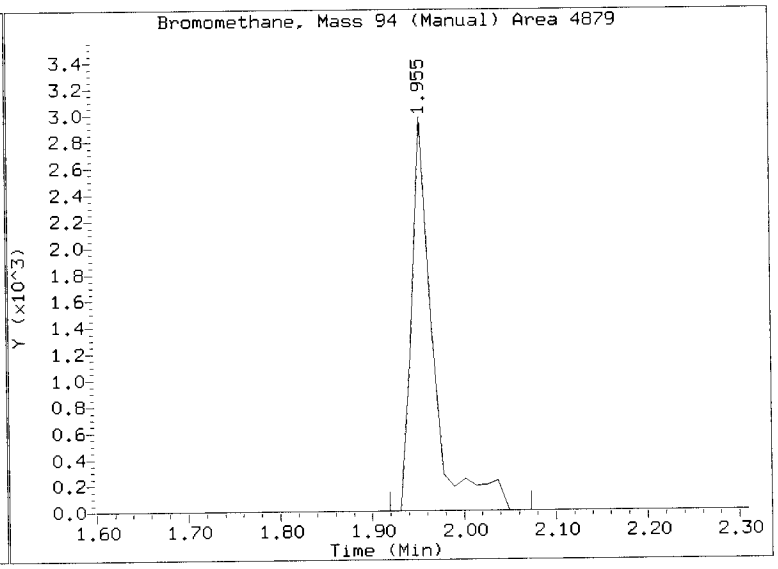
Datafile: //target/share/chem1/nt2.i/20160329.b/03291617.D
Injection Date: 29-MAR-2016 20:03
Lab ID:0020329 Client ID:VSTD0.2
Report Date: 03/30/2016 09:02

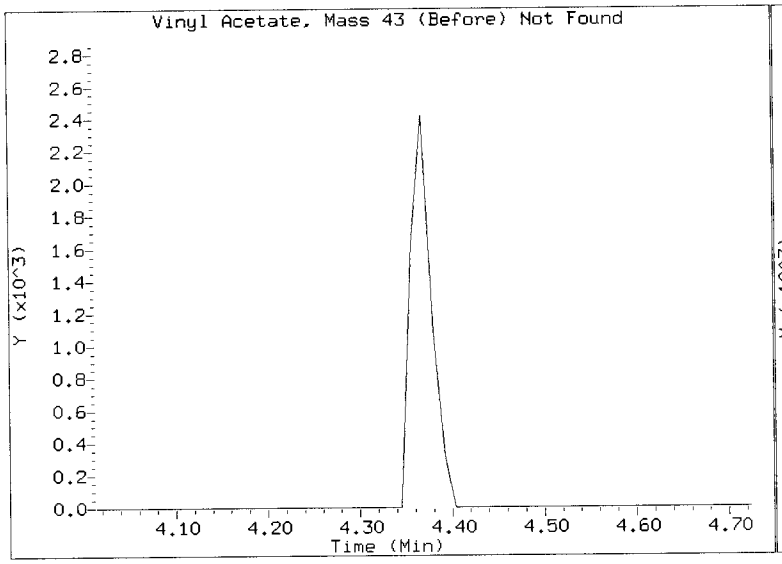
DLH 3/30/16

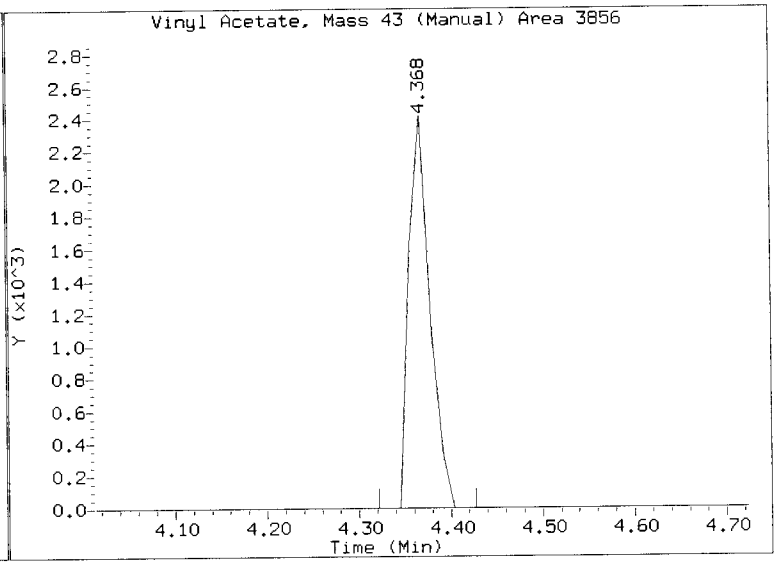








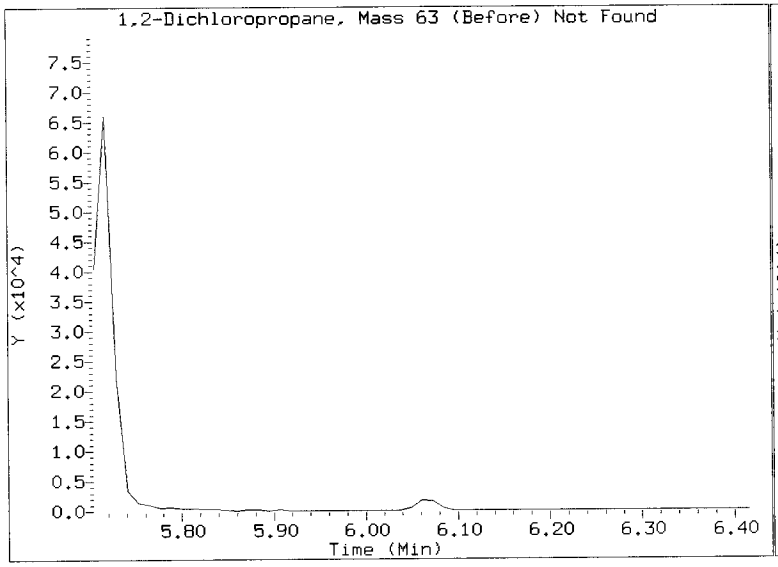


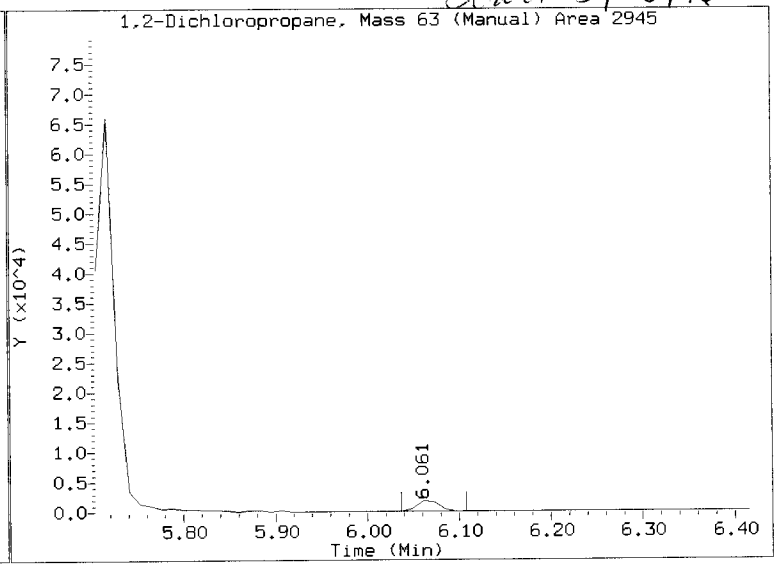


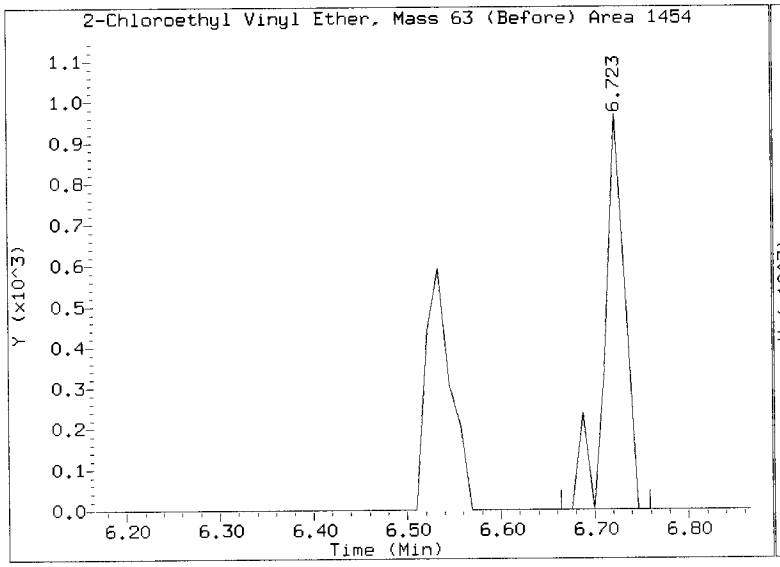
Quant Ion Manual Peak Adjustment Report

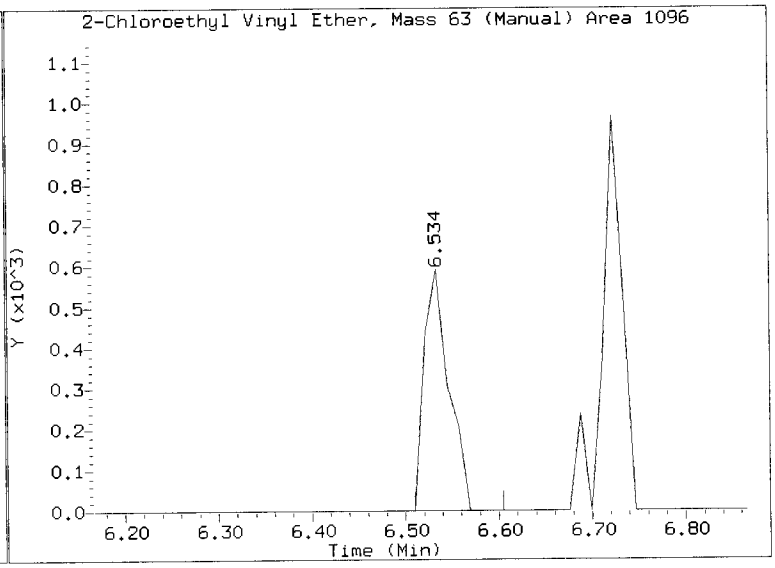
Datafile: //target/share/chem1/nt2.i/20160329.b/03291617.D
Injection Date: 29-MAR-2016 20:03
Lab ID:0020329 Client ID:VSTD0.2
Report Date: 03/30/2016 09:02

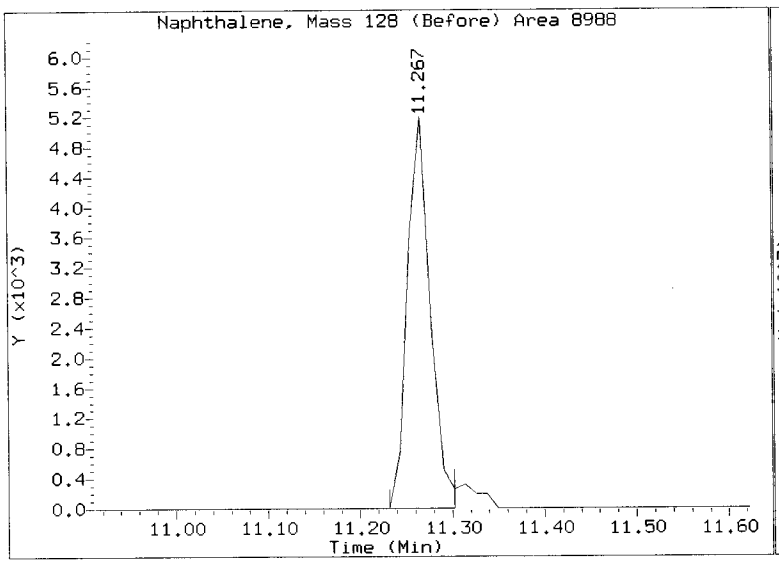
XAH 3/30/16

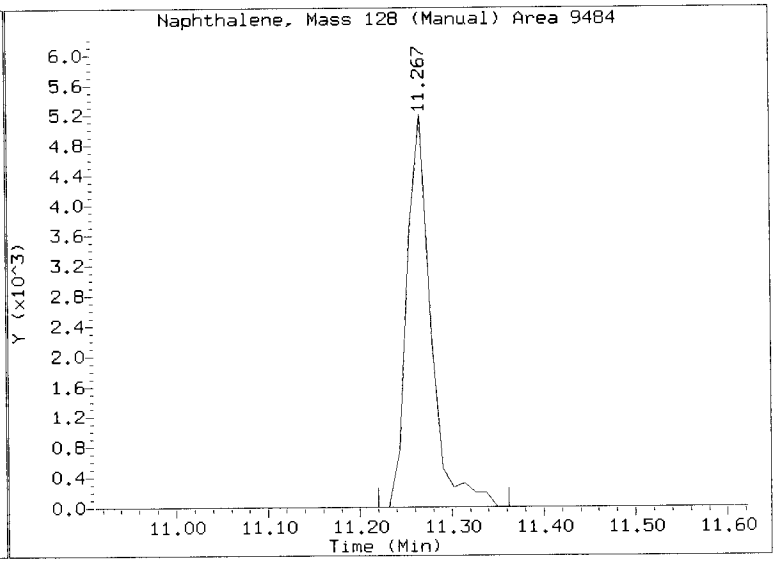












REVIEW SUMMARY FOR FILE - 03291617.D

Lab ID: 0020329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 20:03

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291618.D
Lab Smp Id: SCV0329 Client Smp ID: SCV
Inj Date : 29-MAR-2016 20:24
Operator : PC Inst ID: nt2.i
Smp Info : SCV0329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.433	1.433	(0.269)	225449	10.3583	10.358(M)
173	2-Pentanone	86	6.343	6.344	(1.110)	48731	21.7189	21.719
2	Chloromethane	50	1.599	1.599	(0.300)	258448	11.2147	11.215
3	Vinyl Chloride	62	1.669	1.670	(0.314)	248350	12.0123	12.012(R)
4	Bromomethane	94	1.953	1.954	(0.367)	291995	14.1134	14.113(R)
5	Chloroethane	64	2.060	2.060	(0.387)	101626	12.0717	12.072(R)
6	Trichlorofluoromethane	101	2.178	2.190	(0.409)	398997	10.5428	10.543
7	1,1-Dichloroethene	61	2.687	2.699	(0.505)	356120	10.5934	10.593
8	Carbon Disulfide	76	2.699	2.699	(0.507)	3473620	52.5482	52.548
9	112Trichloro122Trifluoroethane	101	2.746	2.747	(0.516)	433739	20.4141	20.414
10	Iodomethane	142	2.841	2.841	(0.533)	1271272	63.9157	63.916
11	Bromoethane	108	2.971	2.983	(0.558)	283360	19.5916	19.592
12	Acrolein	56	3.101	3.102	(0.582)	30579	10.3899	10.390
13	Methylene Chloride	84	3.338	3.350	(0.627)	244785	13.0898	13.090(R)
14	Acetone	43	3.433	3.433	(0.645)	255594	49.5763	49.576
15	Trans-1,2-Dichloroethene	96	3.504	3.504	(0.658)	230456	10.4469	10.447
17	Methyl tert butyl ether	73	3.657	3.658	(0.687)	695541	11.2155	11.216
18	1,1-Dichloroethane	63	4.095	4.094	(0.769)	352946	10.9977	10.998
19	Acrylonitrile	53	4.178	4.178	(0.785)	55622	10.8519	10.852
20	Vinyl Acetate	43	4.356	4.368	(0.818)	1612557	57.0786	57.079
22	Cis-1,2-Dichloroethene	96	4.569	4.569	(0.858)	209807	10.7064	10.706
23	2,2-Dichloropropane	77	4.651	4.652	(0.873)	219961	9.69383	9.694
24	Bromochloromethane	128	4.734	4.734	(0.889)	99184	10.8102	10.810
25	Chloroform	83	4.805	4.805	(0.902)	334883	10.9693	10.969
26	Carbon Tetrachloride	117	4.888	4.888	(0.855)	180638	9.99153	9.992
$ 27	Dibromofluoromethane	111	4.947	4.947	(0.929)	79636	4.99077	4.991
28	1,1,1-Trichloroethane	97	4.947	4.947	(0.929)	288064	11.0696	11.070
29	2-Butanone	43	5.077	5.078	(0.953)	319923	50.7661	50.766

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	30 1,1-Dichloropropene	75	5.054	5.054	(0.884)	273271	11.3741	11.374
	31 Benzene	78	5.243	5.243	(0.917)	796520	11.2485	11.248
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	333646	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.349	5.350	(1.004)	93256	4.94129	4.941
	34 1,2-Dichloroethane	62	5.409	5.409	(0.946)	255800	10.8245	10.825
	36 Trichloroethene	130	5.681	5.681	(0.994)	213646	10.5504	10.550
*	37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	527779	10.0000	
	38 Dibromomethane	93	5.988	5.989	(1.048)	108948	10.9515	10.952
	39 1,2-Dichloropropane	63	6.059	6.060	(1.060)	191568	11.1929	11.193
	40 Bromodichloromethane	83	6.107	6.107	(1.068)	216339	11.1411	11.141
	41 2-Chloroethyl Vinyl Ether	63	6.521	6.521	(1.141)	500541	51.9511	51.951
	42 Cis 1,3-dichloropropene	75	6.556	6.557	(1.147)	276727	11.7650	11.765
$	43 d8-Toluene	98	6.687	6.687	(1.170)	315699	5.05228	5.052
	44 Toluene	92	6.722	6.722	(1.176)	503248	10.7526	10.753
	45 4-Methyl-2-Pentanone	58	6.994	6.995	(1.224)	288263	49.7932	49.793
	46 Tetrachloroethene	166	6.994	6.995	(0.900)	243724	11.6164	11.616
	47 Trans 1,3-Dichloropropene	75	7.018	7.018	(1.228)	229667	10.6338	10.634
	48 1,1,2-Trichloroethane	97	7.136	7.136	(1.248)	166165	11.4316	11.432
	49 Chlorodibromomethane	129	7.255	7.255	(0.933)	150926	9.69813	9.698
	50 1,3-Dichloropropane	76	7.326	7.326	(0.942)	297101	11.3431	11.343
	51 1,2-Dibromoethane	107	7.420	7.420	(1.298)	161509	11.5595	11.560
	52 2-Hexanone	43	7.574	7.574	(0.974)	513146	51.6055	51.605
*	53 d5-Chlorobenzene	117	7.775	7.775	(1.000)	486532	10.0000	
	54 Chlorobenzene	112	7.787	7.787	(1.002)	564299	10.4289	10.429
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	321736	11.1383	11.138
	56 1,1,1,2-Tetrachloroethane	131	7.834	7.835	(1.008)	161627	9.87990	9.880
	57 m,p-xylene	106	7.905	7.906	(1.017)	792516	22.5100	22.510
	58 o-Xylene	106	8.213	8.212	(1.056)	378350	11.3937	11.394
	59 Styrene	104	8.260	8.260	(1.062)	620376	11.9284	11.928
	60 Bromoform	173	8.284	8.284	(0.874)	81718	8.76488	8.765
	61 Isopropyl Benzene	105	8.438	8.438	(0.890)	909138	10.5300	10.530
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	101818	5.13381	5.134
	63 Bromobenzene	156	8.734	8.734	(0.921)	241773	10.2517	10.252
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	1132032	11.6758	11.676
	65 1,1,2,2-Tetrachloroethane	83	8.793	8.805	(0.928)	204289	11.4452	11.445
	66 2-Chloro Toluene	91	8.864	8.864	(0.935)	740777	10.7958	10.796
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	809593	11.3605	11.360
	68 1,2,3-Trichloropropane	110	8.899	8.900	(0.939)	69579	11.4482	11.448
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.935	(0.943)	38645	9.06246	9.062
	70 4-Chloro Toluene	91	8.982	8.982	(0.948)	677395	10.7639	10.764
	71 T-Butyl Benzene	119	9.124	9.124	(0.963)	794678	12.4454	12.445(R)
	72 1,2,4-Trimethylbenzene	105	9.171	9.172	(0.968)	827978	11.5326	11.533
	73 S-Butyl Benzene	105	9.254	9.255	(0.976)	977625	10.7465	10.747
	74 4-Isopropyl Toluene	119	9.361	9.361	(0.988)	864798	11.4127	11.413
	75 1,3-Dichlorobenzene	146	9.420	9.432	(0.994)	482440	10.6419	10.642
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.479	(1.000)	269269	10.0000	
	77 1,4-Dichlorobenzene	146	9.491	9.491	(1.001)	488865	10.4678	10.468
	78 N-Butyl Benzene	91	9.680	9.692	(1.021)	742417	10.9029	10.903
$	79 d4-1,2-Dichlorobenzene	152	9.810	9.811	(1.035)	129082	5.01359	5.014
	80 1,2-Dichlorobenzene	146	9.810	9.811	(1.035)	449816	10.4706	10.471
	81 1,2-Dibromo 3-Chloropropane	75	10.438	10.450	(1.101)	26973	11.0958	11.096
	83 Hexachloro 1,3-Butadiene	225	10.970	10.970	(1.157)	114116	9.43633	9.436
	84 1,2,4-Trichlorobenzene	180	10.994	10.994	(1.160)	293041	10.1270	10.127
	85 Naphthalene	128	11.254	11.266	(1.187)	705896	11.4462	11.446

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
86 1,2,3-Trichlorobenzene	180	11.408	11.420	(1.203)	289171	10.3299	10.330

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291618.D
Lab Smp Id: SCV0329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: SCV
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	333646	-4.77
37 1,4-Difluorobenze	562526	281263	1125052	527779	-6.18
53 d5-Chlorobenzene	502371	251186	1004742	486532	-3.15
76 d4-1,4-Dichlorobe	277950	138975	555900	269269	-3.12

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: SCV0329 Client Smp ID: SCV
Level: LOW Operator: PC
Data Type: MS DATA SampleType: LCS
SpikeList File: o2siicv.spk Quant Type: ISTD
Sublist File: mdl.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	10.000	10.358	103.58	80-120
2	Chloromethane	10.000	11.215	112.15	80-120
3	Vinyl Chloride	10.000	12.012	120.12*	80-120
4	Bromomethane	10.000	14.113	141.13*	80-120
5	Chloroethane	10.000	12.072	120.72*	80-120
6	Trichlorofluoromet	10.000	10.543	105.43	80-120
7	1,1-Dichloroethene	10.000	10.593	105.93	80-120
8	Carbon Disulfide	60.000	52.548	87.58	80-120
9	112Trichloro122Tri	20.000	20.414	102.07	80-120
10	Iodomethane	60.000	63.916	106.53	80-120
11	Bromoethane	20.000	19.592	97.96	80-120
12	Acrolein	10.000	10.390	103.90	80-120
13	Methylene Chloride	10.000	13.090	130.90*	80-120
14	Acetone	50.000	49.576	99.15	80-120
15	Trans-1,2-Dichloro	10.000	10.447	104.47	80-120
16	n-hexane	10.000	0.0000	*	80-120
17	Methyl tert butyl	10.000	11.216	112.16	80-120
18	1,1-Dichloroethane	10.000	10.998	109.98	80-120
19	Acrylonitrile	10.000	10.852	108.52	80-120
20	Vinyl Acetate	50.000	57.079	114.16	80-120
22	Cis-1,2-Dichloroet	10.000	10.706	107.06	80-120
23	2,2-Dichloropropan	10.000	9.694	96.94	80-120
24	Bromochloromethane	10.000	10.810	108.10	80-120
25	Chloroform	10.000	10.969	109.69	80-120
26	Carbon Tetrachlori	10.000	9.992	99.92	80-120
28	1,1,1-Trichloroeth	10.000	11.070	110.70	80-120
30	1,1-Dichloropropen	10.000	11.374	113.74	80-120
29	2-Butanone	50.000	50.766	101.53	80-120
31	Benzene	10.000	11.248	112.48	80-120
34	1,2-Dichloroethane	10.000	10.825	108.25	80-120
36	Trichloroethene	10.000	10.550	105.50	80-120
38	Dibromomethane	10.000	10.952	109.52	80-120
39	1,2-Dichloropropan	10.000	11.193	111.93	80-120
40	Bromodichlorometha	10.000	11.141	111.41	80-120
173	2-Pentanone	20.000	21.719	108.59	80-120
42	Cis 1,3-dichloropr	10.000	11.765	117.65	80-120
41	2-Chloroethyl Viny	60.000	51.951	86.59	80-120
44	Toluene	10.000	10.753	107.53	80-120
45	4-Methyl-2-Pentano	50.000	49.793	99.59	80-120
46	Tetrachloroethene	10.000	11.616	116.16	80-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
47 Trans 1,3-Dichloro	10.000	10.634	106.34	80-120
48 1,1,2-Trichloroeth	10.000	11.432	114.32	80-120
49 Chlorodibromometha	10.000	9.698	96.98	80-120
50 1,3-Dichloropropan	10.000	11.343	113.43	80-120
51 1,2-Dibromoethane	10.000	11.560	115.60	80-120
52 2-Hexanone	50.000	51.605	103.21	80-120
54 Chlorobenzene	10.000	10.429	104.29	80-120
55 Ethyl Benzene	10.000	11.138	111.38	80-120
56 1,1,1,2-Tetrachlor	10.000	9.880	98.80	80-120
57 m,p-xylene	20.000	22.510	112.55	80-120
58 o-Xylene	10.000	11.394	113.94	80-120
59 Styrene	10.000	11.928	119.28	80-120
60 Bromoform	10.000	8.765	87.65	80-120
61 Isopropyl Benzene	10.000	10.530	105.30	80-120
63 Bromobenzene	10.000	10.252	102.52	80-120
64 N-Propyl Benzene	10.000	11.676	116.76	80-120
65 1,1,2,2-Tetrachlor	10.000	11.445	114.45	80-120
66 2-Chloro Toluene	10.000	10.796	107.96	80-120
67 1,3,5-Trimethyl Be	10.000	11.360	113.60	80-120
68 1,2,3-Trichloropro	10.000	11.448	114.48	80-120
69 Trans-1,4-Dichloro	10.000	9.062	90.62	80-120
70 4-Chloro Toluene	10.000	10.764	107.64	80-120
71 T-Butyl Benzene	10.000	12.445	124.45*	80-120
72 1,2,4-Trimethylben	10.000	11.533	115.33	80-120
73 S-Butyl Benzene	10.000	10.747	107.47	80-120
74 4-Isopropyl Toluen	10.000	11.413	114.13	80-120
75 1,3-Dichlorobenzen	10.000	10.642	106.42	80-120
77 1,4-Dichlorobenzen	10.000	10.468	104.68	80-120
78 N-Butyl Benzene	10.000	10.903	109.03	80-120
80 1,2-Dichlorobenzen	10.000	10.471	104.71	80-120
81 1,2-Dibromo 3-Chlo	10.000	11.096	110.96	80-120
83 Hexachloro 1,3-But	10.000	9.436	94.36	80-120
84 1,2,4-Trichloroben	10.000	10.127	101.27	80-120
85 Naphthalene	10.000	11.446	114.46	80-120
86 1,2,3-Trichloroben	10.000	10.330	103.30	80-120

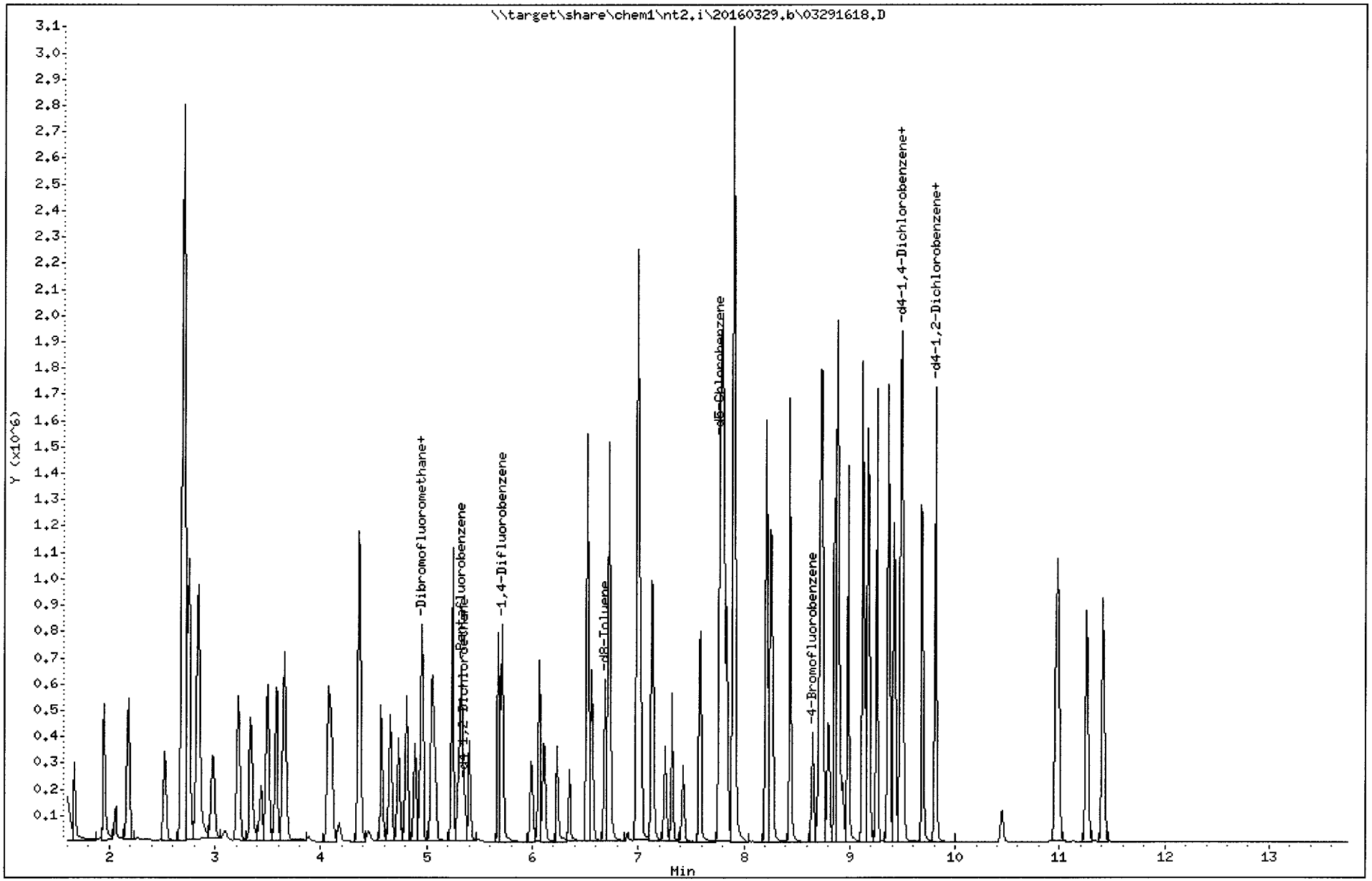
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.991	99.82	0-150
$ 33 d4-1,2-Dichloroeth	5.000	4.941	98.83	0-131
$ 43 d8-Toluene	5.000	5.052	101.05	0-130
$ 62 4-Bromofluorobenze	5.000	5.134	102.68	0-130
$ 79 d4-1,2-Dichloroben	5.000	5.014	100.27	0-130

Data File: \\target\share\chem1\nt2.i\20160329.b\03291618.D
Date : 29-MAR-2016 20:24
Client ID: SCV
Sample Info: SCV0329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

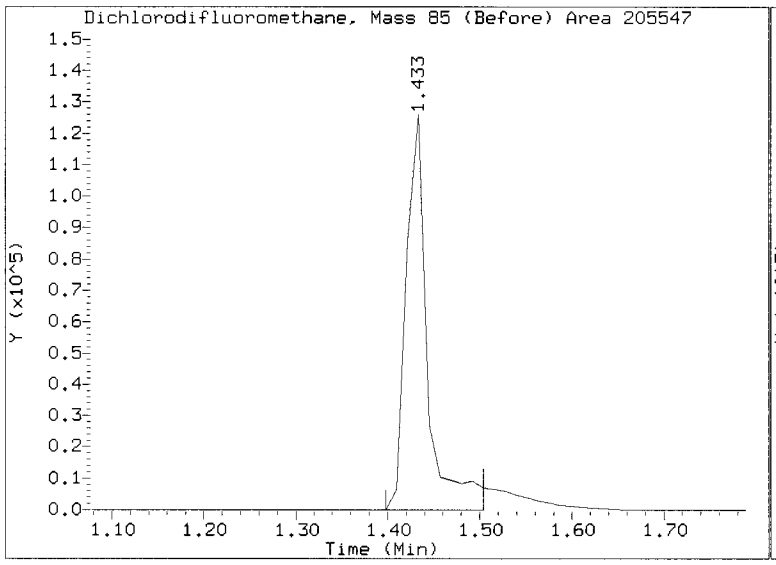
Column phase: RTXVMS

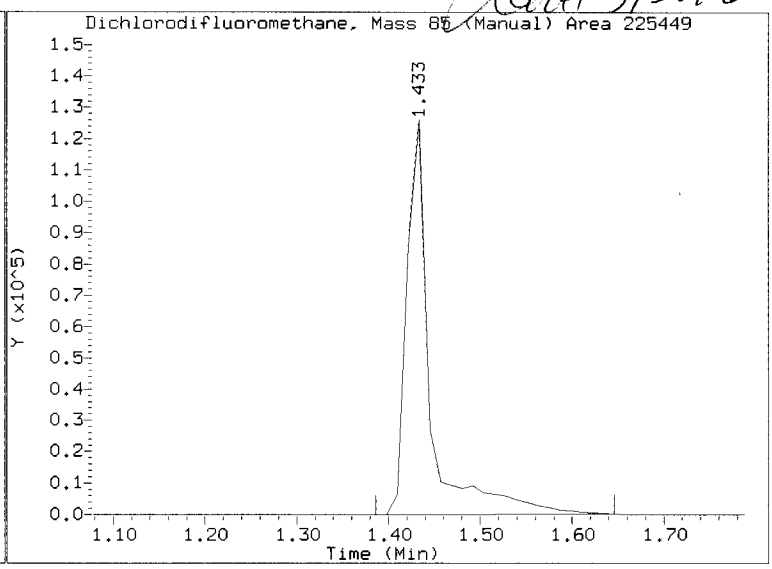


Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem1/nt2.i/20160329.b/03291618.D
Injection Date: 29-MAR-2016 20:24
Lab ID:SCV0329 Client ID:SCV
Report Date: 03/30/2016 09:02

3/30/16





REVIEW SUMMARY FOR FILE - 03291618.D

Lab ID: SCV0329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 20:24

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

6a
8260 GAS INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: 20150930

Instrument: NT2.I Project: GSTD1

Calibration Date: 29-MAR-2016 SDG No.: 20150930

Gas Range	RF1 0.1	RF2 0.25	RF3 0.5	RF4 1.0	RF5 2.5	RF6 5	Ave RF	%RSD
WA Gas	38501187	48112079	49111625	51185622	51287480	49855104	48008849	10.0
AK Gas	49662511	59116003	59473285	60464211	61192091	62329725	58706304	7.8
NW Gas	39259679	48930855	50264215	52493344	52751277	51520615	49203331	10.3
8015Gas	71404863	82873502	83743651	85008808	87381849	88932569	83224207	7.5

<- Indicates %RSD outside limits
Surrogate areas are not included in RF calculation.
Surrogate calibration is from BETX curve files.

Quant Ranges :

WA Gas	Toluene - nC12
AK Gas	nC6 - nC10
NW Gas	Toluene - Naphthalene
Cal Gas	nC6 - nC12
8015 Gas	2-Methylpentane - 1,2,4-Trimethylbenzene

Gas Cal. Files	Analysis Time
03291624.D	29-MAR-2016 22:32
03291623.D	29-MAR-2016 22:11
03291622.D	29-MAR-2016 21:50
03291621.D	29-MAR-2016 21:28
03291620.D	29-MAR-2016 21:07
03291619.D	29-MAR-2016 20:45

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329g.b\GAS032916.m
Batch File: \\target\share\chem1\nt2.i\20160329g.b
Inst ID: nt2.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	03291619	03291620	03291621	03291622	03291623	03291624	03291625
INJ.DATE:	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016
INJ.TIME:	20:45	21:07	21:28	21:50	22:11	22:32	22:54

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	5 2-Methylpentane	3.079	3.079	3.078	3.079	3.082	3.081	3.078	3.078	3.028-3.128	3.079	0.002
	7 nC6	3.587	3.588	3.587	3.588	3.579	3.590	3.587	3.587	3.537-3.637	3.587	0.004
$	10 Dibromofluorobenzene	4.925	4.925	4.948	4.949	4.952	4.951	4.924	4.948	4.898-4.998	4.939	0.014
	37 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.232	5.182-5.282	+++++	+++++
$	29 Pentafluorobenzene	+++++	+++++	5.326	5.327	5.330	5.330	+++++	5.326	5.276-5.376	5.328	0.002
$	30 d4-1,2-dichloroethane	5.351	5.351	+++++	+++++	+++++	+++++	5.350	5.341	5.291-5.391	5.350	0.000
$	31 1,4-Difluorobenzene	5.717	5.718	5.717	5.718	5.721	5.720	5.717	5.717	5.667-5.767	5.718	0.002
	3 AK101	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.234	0.000-3.974	+++++	+++++
	4 8015GAS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.096	2.756-9.436	+++++	+++++
	46 8015mod	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.000	0.930-1.070	+++++	+++++
	38 n-Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.592	6.542-6.642	+++++	+++++
	45 n-Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.221	5.151-5.291	+++++	+++++
$	32 d8-Toluene	+++++	+++++	6.687	6.688	6.691	6.690	+++++	6.687	6.637-6.737	6.689	0.002
	12 Toluene	6.723	6.723	6.723	6.724	6.727	6.726	6.723	6.723	6.673-6.773	6.724	0.002
	39 n-Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.728	7.678-7.778	+++++	+++++
$	33 d5-Chlorobenzene	7.800	7.800	7.776	7.777	7.780	7.779	7.776	7.776	7.726-7.826	7.784	0.011
	40 Ethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.802	7.752-7.852	+++++	+++++

Reviewer 1 _____ Date: 3/30/16
Reviewer 2 _____ Date: _____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329g.b\GAS032916.m
Batch File: \\target\share\chem1\nt2.i\20160329g.b
Inst ID: nt2.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	41 m,p-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.906	7.856-7.956	+++++	+++++
	42 o-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.214	8.164-8.264	+++++	+++++
	2 WAGAS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.610	6.520-10.700	+++++	+++++
$	34 4-Bromofluorobenzene	8.652	8.652	8.651	8.653	8.655	8.655	8.651	8.651	8.601-8.701	8.653	0.002
	17 nC10-Decane	8.747	8.747	8.746	8.747	8.750	+++++	8.746	8.722	8.672-8.772	8.747	0.001
	1 NWTPHG	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.479	6.949-12.009	+++++	+++++
	20 1,2,4-Trimethylbenzene	9.173	9.173	9.172	9.173	9.176	9.175	9.172	9.184	9.134-9.234	9.173	0.002
$	35 d4-Dichlorobenzene	9.504	9.480	9.503	9.481	9.484	9.483	9.480	9.491	9.441-9.541	9.488	0.011
	43 n-Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.610	9.560-9.660	+++++	+++++
$	36 d4-1,2-Dichlorobenzene	9.823	9.812	9.811	9.812	9.803	9.803	9.811	9.811	9.761-9.861	9.811	0.007
	22 nC12-Dodecane	10.450	10.451	10.485	10.487	10.489	10.489	10.450	10.462	10.412-10.512	10.472	0.020
	44 n-Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.362	11.312-11.412	+++++	+++++
	24 Naphthalene	11.255	11.255	11.255	11.256	11.258	11.258	11.255	11.278	11.228-11.328	11.256	0.002

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160329.b

ARI Job No.: G500 Method: 8260032916.m Instrument: nt2.i Date: 29-MAR-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2045	03291619.D	G5000329		1	NO MANUAL INTEGRATION
2107	03291620.D	G2500329		1	NO MANUAL INTEGRATION
2128	03291621.D	G1000329		1	NO MANUAL INTEGRATION
2150	03291622.D	G0500329		1	NO MANUAL INTEGRATION
2211	03291623.D	G0250329		1	NO MANUAL INTEGRATION
2232	03291624.D	G0100329		1	NO MANUAL INTEGRATION
2254	03291625.D	GSCV0329		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160329g.b

ARI Job No.: G500 Method: GAS032916.m Instrument: nt2.i Date: 29-MAR-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2045	03291619.D	G5000329	GSTD5	1	1,4-Difluorobenzene, d4-1,2-dichloroethane, Dibromofluorobenzene,
2107	03291620.D	G2500329	GSTD2.5	1	1,4-Difluorobenzene, d4-1,2-dichloroethane, d4-Dichlorobenzene, Dibromofluorobenzene,
2128	03291621.D	G1000329	GSTD1	1	1,4-Difluorobenzene, d4-Dichlorobenzene, Dibromofluorobenzene, d5-Chlorobenzene,
2150	03291622.D	G0500329	GSTD0.5	1	1,4-Difluorobenzene, d5-Chlorobenzene,
2211	03291623.D	G0250329	GSTD0.25	1	Naphthalene, d5-Chlorobenzene,
2232	03291624.D	G0100329	GSTD0.1	1	Naphthalene,
2254	03291625.D	GSCV0329	GSCV	1	1,4-Difluorobenzene, d4-Dichlorobenzene, Dibromofluorobenzene, d5-Chlorobenzene,

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D

Date : 29-MAR-2016 11:31

Client ID: RTBFB0329

Instrument: nt2.i

Sample Info: BFB0329,RTBFB0329,,1,032916,

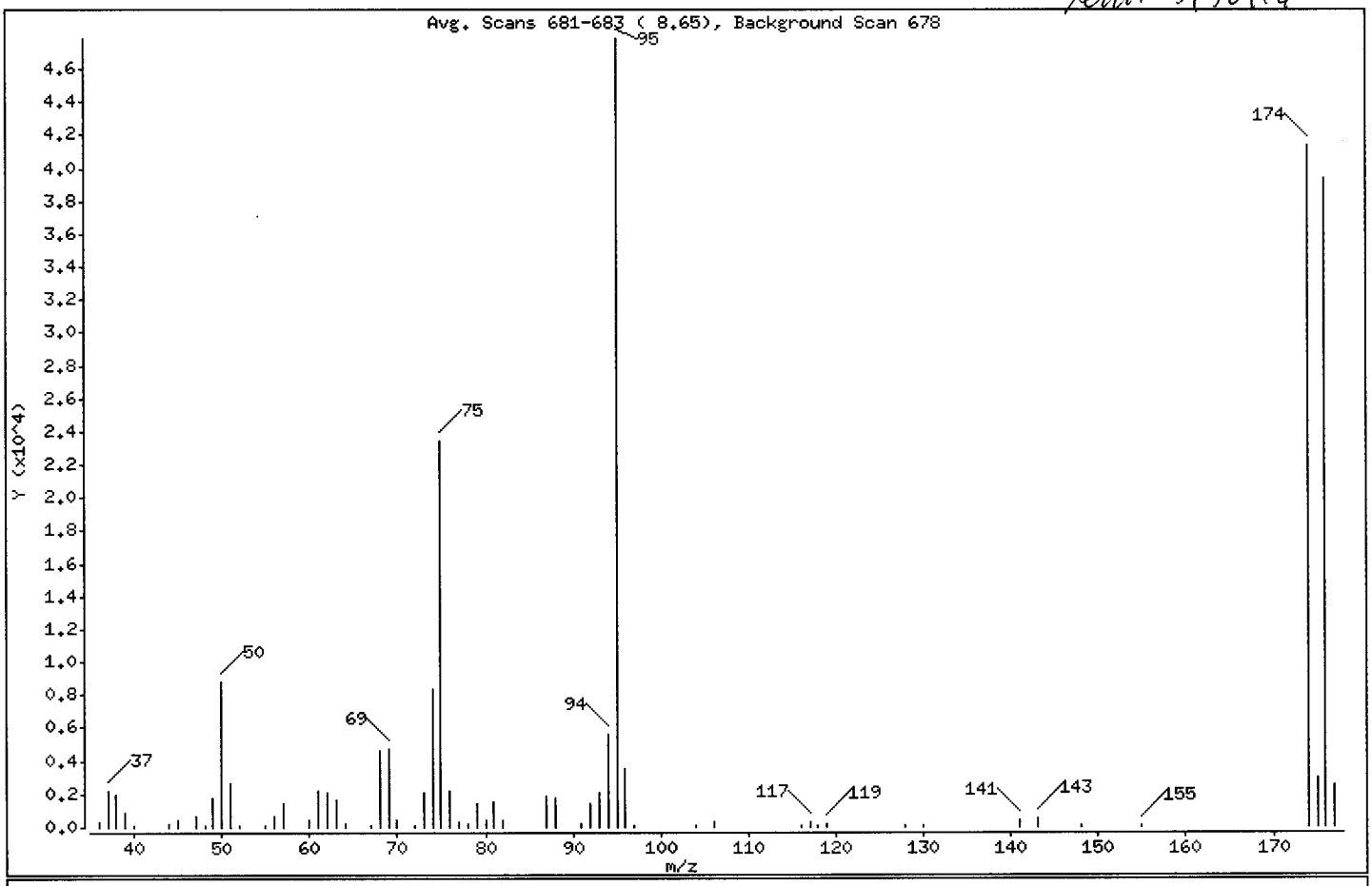
Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

1 Bromofluorobenzene

RMH 3/30/16



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.28
75	30.00 - 60.00% of mass 95	48.95
96	5.00 - 9.00% of mass 95	7.25
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	86.45
175	5.00 - 9.00% of mass 174	6.10 (7.05)
176	95.00 - 101.00% of mass 174	82.26 (95.15)
177	5.00 - 9.00% of mass 176	5.35 (6.50)

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D

Date : 29-MAR-2016 11:31

Client ID: RTBFB0329

Instrument: nt2.i

Sample Info: BFB0329,RTBFB0329,,1,032916,

Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

Data File: 03291602.D

Spectrum: Avg. Scans 681-683 (8.65), Background Scan 678

Location of Maximum: 95.00

Number of points: 61

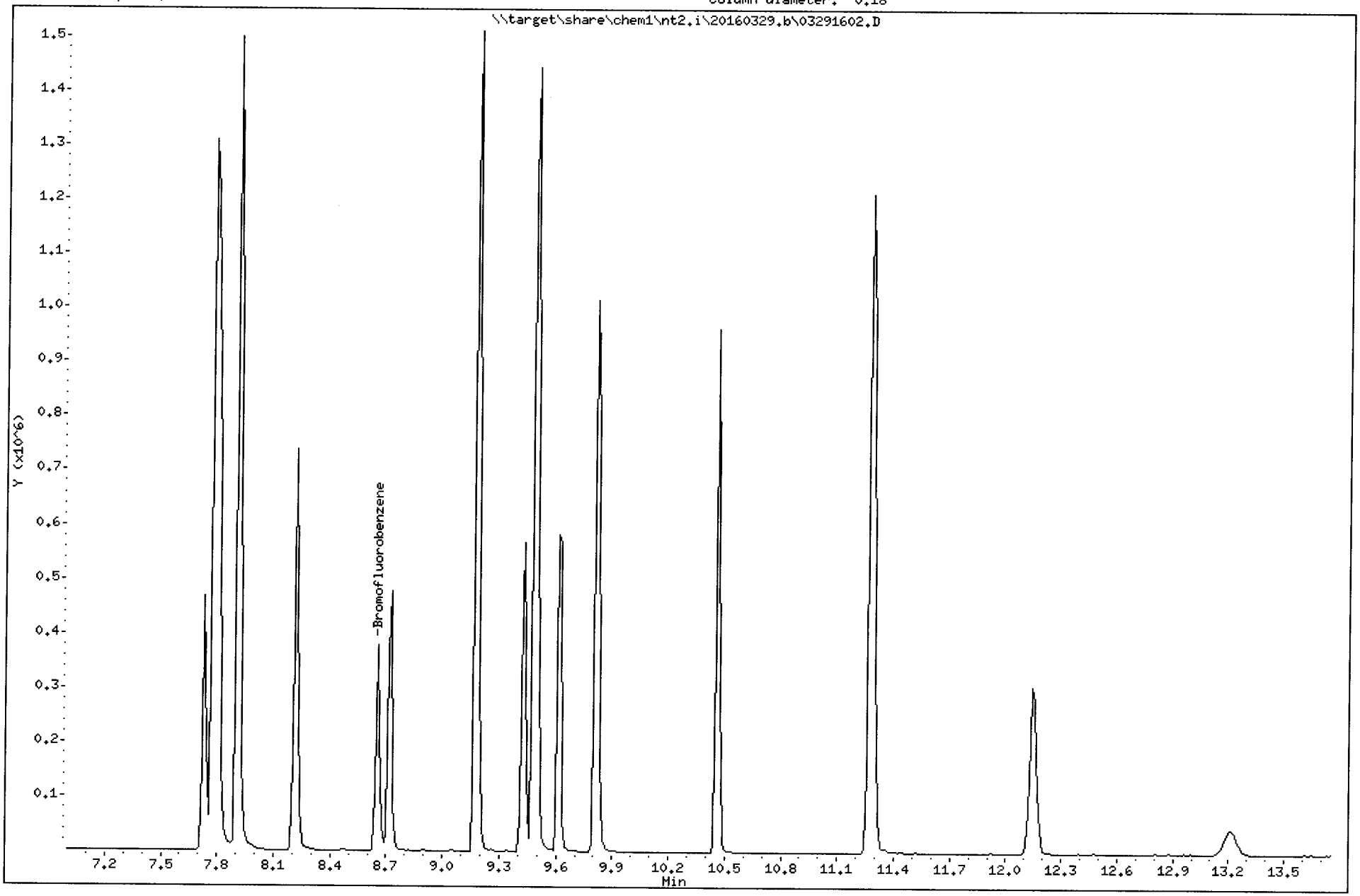
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	334	60.00	421	79.00	1486	117.00	325
37.00	2213	61.00	2183	80.00	387	118.00	128
38.00	1965	62.00	2104	81.00	1524	119.00	234
39.00	876	63.00	1615	82.00	406	128.00	133
40.00	77	64.00	233	87.00	1871	130.00	132
44.00	174	67.00	79	88.00	1722	141.00	480
45.00	431	68.00	4654	91.00	246	143.00	564
47.00	632	69.00	4719	92.00	1396	148.00	149
48.00	113	70.00	410	93.00	2037	155.00	84
49.00	1769	72.00	148	94.00	5584	174.00	41400
50.00	8753	73.00	2107	95.00	47888	175.00	2919
51.00	2685	74.00	8380	96.00	3473	176.00	39392
52.00	71	75.00	23440	97.00	78	177.00	2562
55.00	154	76.00	2154	104.00	122		
56.00	679	77.00	319	106.00	281		
57.00	1379	78.00	194	116.00	127		

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D
Date : 29-MAR-2016 11:31
Client ID: RTBFB0329
Sample Info: BFB0329,RTBFB0329,,1,032916,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



ARI Labs, Inc.

Data file : \\target\share\chem1\nt2.i\20160329g.b\03291602.D
Lab Smp Id: BFB0329 Client Smp ID: RTBFB0329
Inj Date : 29-MAR-2016 11:31
Operator : PC Inst ID: nt2.i
Smp Info : BFB0329,RTBFB0329,,1,032916,
Misc Info : 09-
Comment :
Method : \\target\share\chem1\nt2.i\20160329g.b\GAS032916.m
Meth Date : 30-Mar-2016 09:05 lanih Quant Type: ESTD
Cal Date : 29-MAR-2016 11:31 Cal File: 03291602.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RT.sub
Target Version: 4.14
Processing Host: ORGDATA13

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
5	2-Methylpentane	3.078	3.078	0.000	392124	0.00000	
7	nC6	3.586	3.586	0.000	415558	0.00000	
$ 10	Dibromofluorobenzene	4.947	4.947	0.000	140925	0.00000	
37	Benzene	5.231	5.231	0.000	630212	0.00000	
$ 29	Pentafluorobenzene	5.326	5.326	0.000	666407	0.00000	
$ 31	1,4-Difluorobenzene	5.716	5.716	0.000	822707	0.00000	
38	n-Octane	6.592	6.592	0.000	525079	0.00000	
$ 32	d8-Toluene	6.687	6.687	0.000	634185	0.00000	
12	Toluene	6.722	6.722	0.000	1135403	0.00000	
39	n-Nonane	7.728	7.728	0.000	466173	0.00000	
$ 33	d5-Chlorobenzene	7.775	7.775	0.000	1306440	0.00000	
41	m,p-xylene	7.905	7.905	0.000	1494523	0.00000	
42	o-xylene	8.213	8.213	0.000	736648	0.00000	
$ 34	4-Bromofluorobenzene	8.651	8.651	0.000	376172	0.00000	
17	nC10-Decane	8.722	8.722	0.000	474675	0.00000	
20	1,2,4-Trimethylbenzene	9.183	9.183	0.000	1510817	0.00000	
$ 35	d4-Dichlorobenzene	9.491	9.491	0.000	1442070	0.00000	
43	n-Undecane	9.609	9.609	0.000	582360	0.00000	
$ 36	d4-1,2-Dichlorobenzene	9.810	9.810	0.000	1014284	0.00000	
22	nC12-Dodecane	10.461	10.461	0.000	962411	0.00000	
24	Naphthalene	11.278	11.278	0.000	1212315	0.00000	

Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160329g.b/03291619.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 20:45

ARI ID: G5000329
Client ID: GSTD5
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	249275518	5.192
8015C 2MP-TMB	(2.98 to 9.28)	83224207	444662844	5.343 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	311648625	5.309 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	257603074	5.235
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	424141429	5.790 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

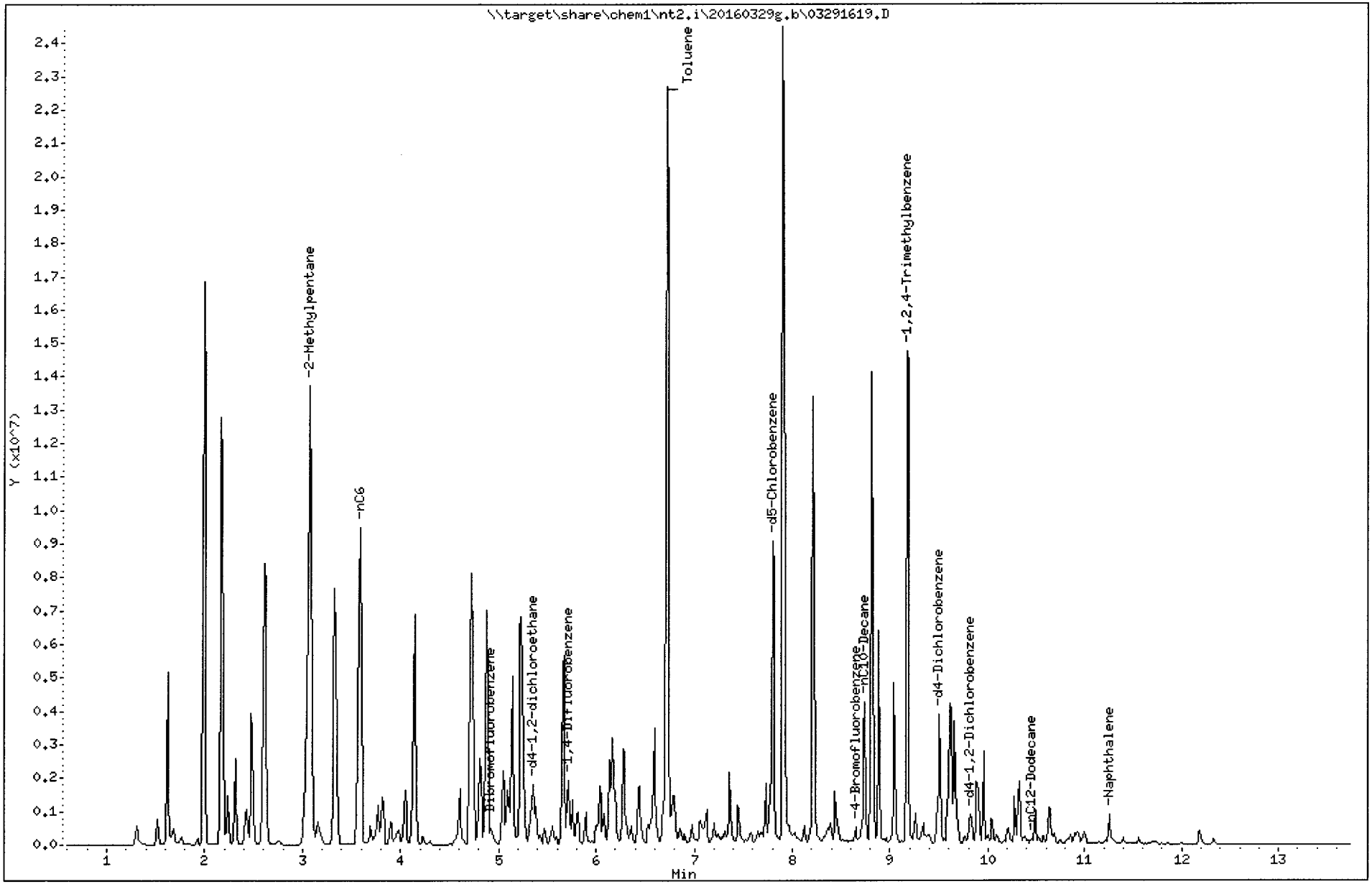
8.652	813730	4-Bromofluorobenzene
9.504	7415398	d4-Dichlorobenzene
7.800	17385186	d5-Chlorobenzene
9.823	2323880	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291619.D
Date : 29-MAR-2016 20:45
Client ID: GSTD5
Sample Info: G5000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

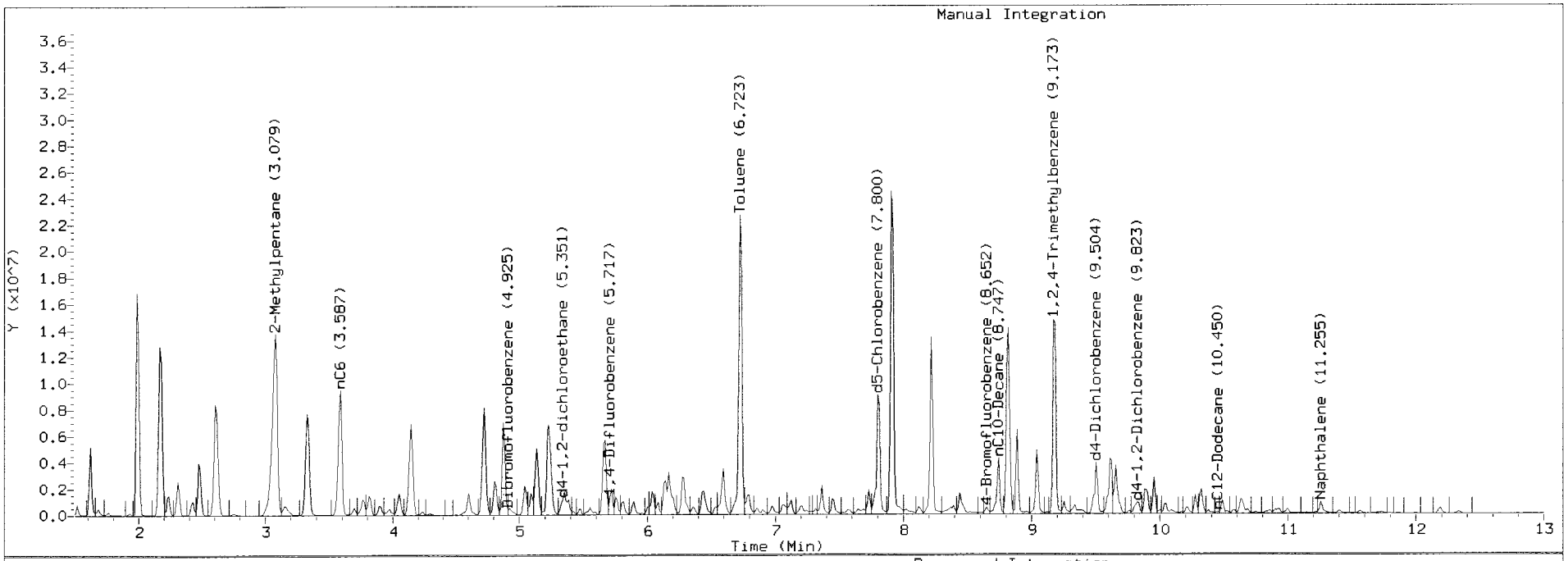
Column phase: RTXVMS

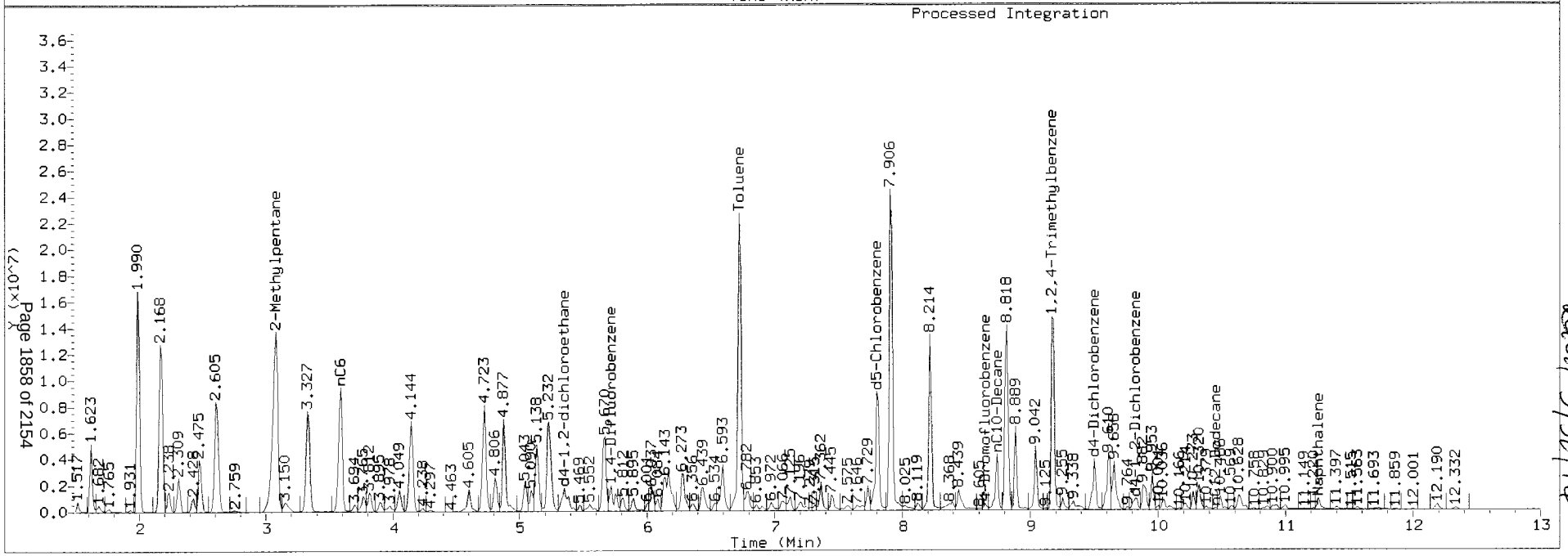


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291619.D Injection: 29-MAR-2016 20:45

Lab ID:G5000329





4/13/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291619.D
Lab Smp Id: G5000329
Inj Date : 29-MAR-2016 20:45
Operator : PC Inst ID: nt2.i
Smp Info : G5000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	27 Dibromofluoromethane	111	4.948	4.947	(0.929)	87942	4.75461	4.755
	31 Benzene	78	5.244	5.243	(0.917)	2898737	35.0848	35.085
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	386746	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	143410	6.55546	6.555
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	615798	10.0000	
$	43 d8-Toluene	98	6.687	6.687	(1.170)	386722	5.30428	5.304
	44 Toluene	92	6.723	6.722	(1.176)	9153352	167.620	167.62
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	554896	10.0000	
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	2216213	67.2715	67.272
	57 m,p-xylene	106	7.906	7.906	(1.017)	6878890	171.311	171.31
	58 o-Xylene	106	8.214	8.212	(1.056)	3206837	84.6732	84.673
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	115448	5.10389	5.104
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	296516	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	141228	4.98129	4.981

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291619.D
Lab Smp Id: G5000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	386746	10.38
37 1,4-Difluorobenze	562526	281263	1125052	615798	9.47
53 d5-Chlorobenzene	502371	251186	1004742	554896	10.46
76 d4-1,4-Dichlorobe	277950	138975	555900	296516	6.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.01
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Client SDG: 20151001
Sample Matrix: SOLID
Fraction: VOA
Lab Smp Id: G5000329
Level: LOW
Operator: PC
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: allspike.spk
Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

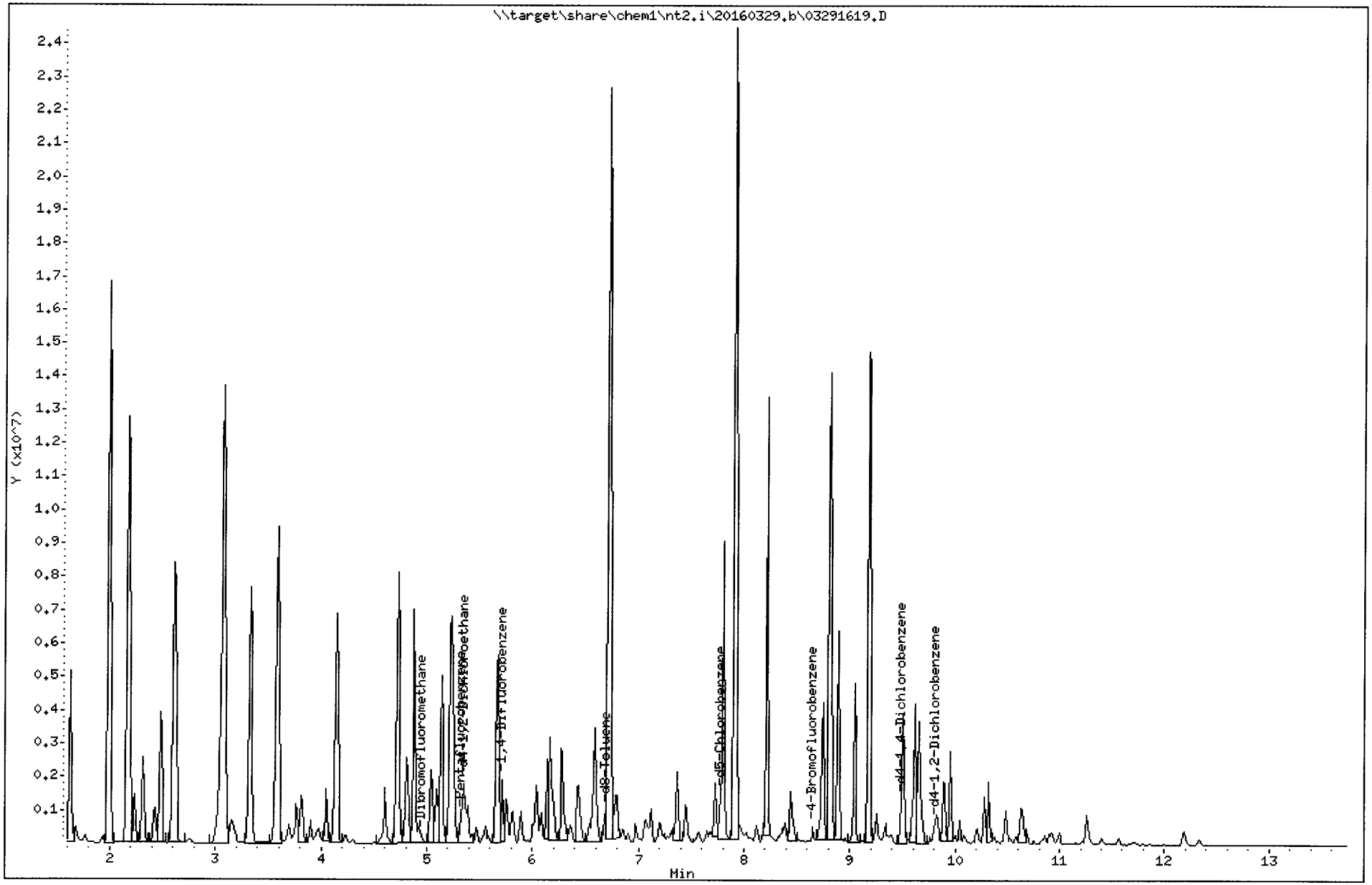
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.755	95.09	80-120
$ 33 d4-1,2-Dichloroeth	5.000	6.555	131.11	80-149
$ 43 d8-Toluene	5.000	5.304	106.09	77-120
$ 62 4-Bromofluorobenze	5.000	5.104	102.08	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.981	99.63	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291619.D
Date : 29-MAR-2016 20:45
Client ID:
Sample Info: G5000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291619.D

Lab ID: G5000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 20:45

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

JMH 3/30/16

Data file: 20160329g.b/03291620.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 21:07

ARI ID: G2500329
Client ID: GSTD2.5
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	128218700	2.671 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	218454623	2.625 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	152980229	2.606 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	131878192	2.680 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	209675553	2.862 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

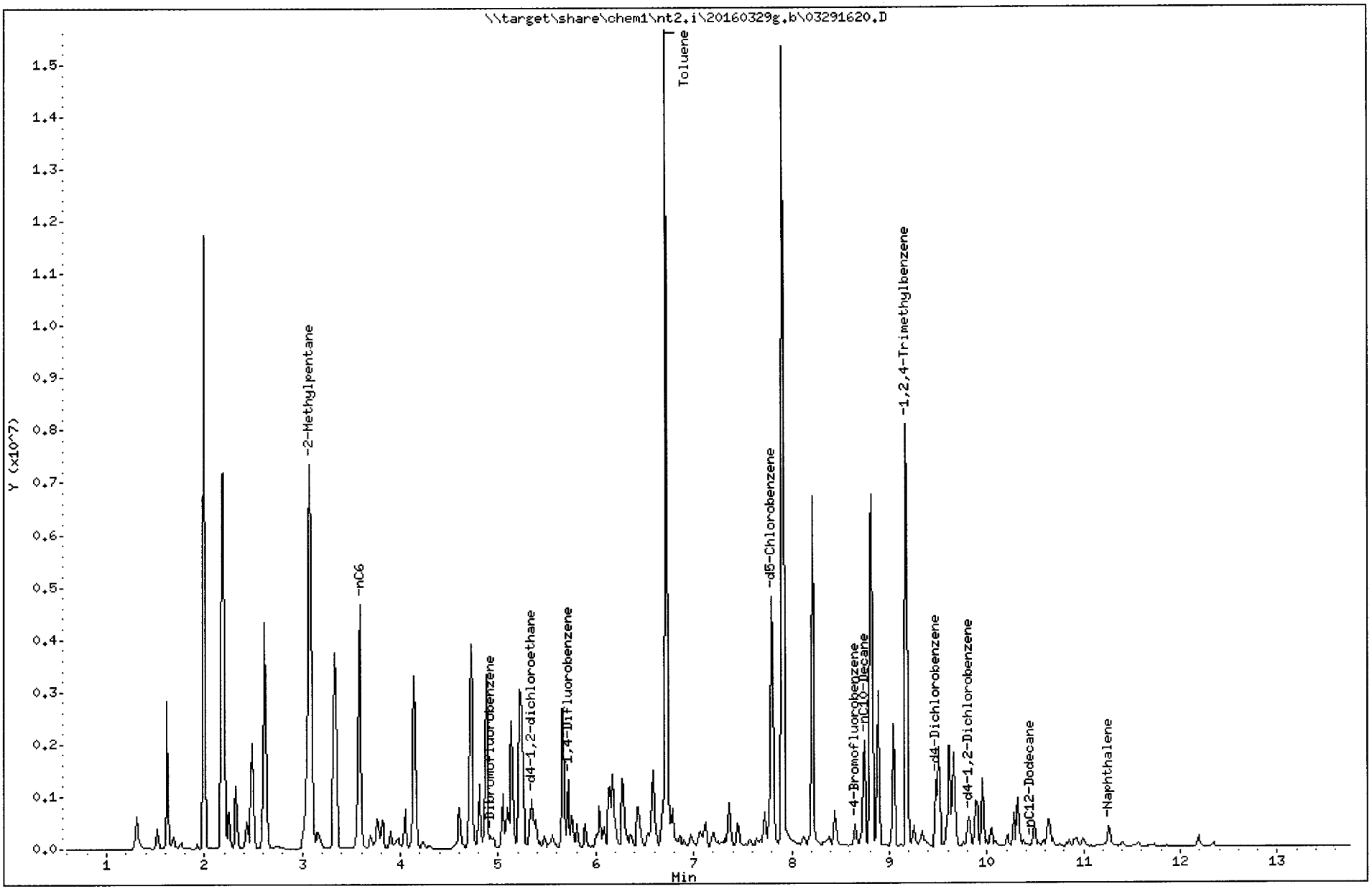
8.652	725527	4-Bromofluorobenzene
9.480	1953245	d4-Dichlorobenzene
7.800	9346764	d5-Chlorobenzene
9.812	1451073	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291620.D
Date : 29-MAR-2016 21:07
Client ID: GSTD2.5
Sample Info: G2500329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

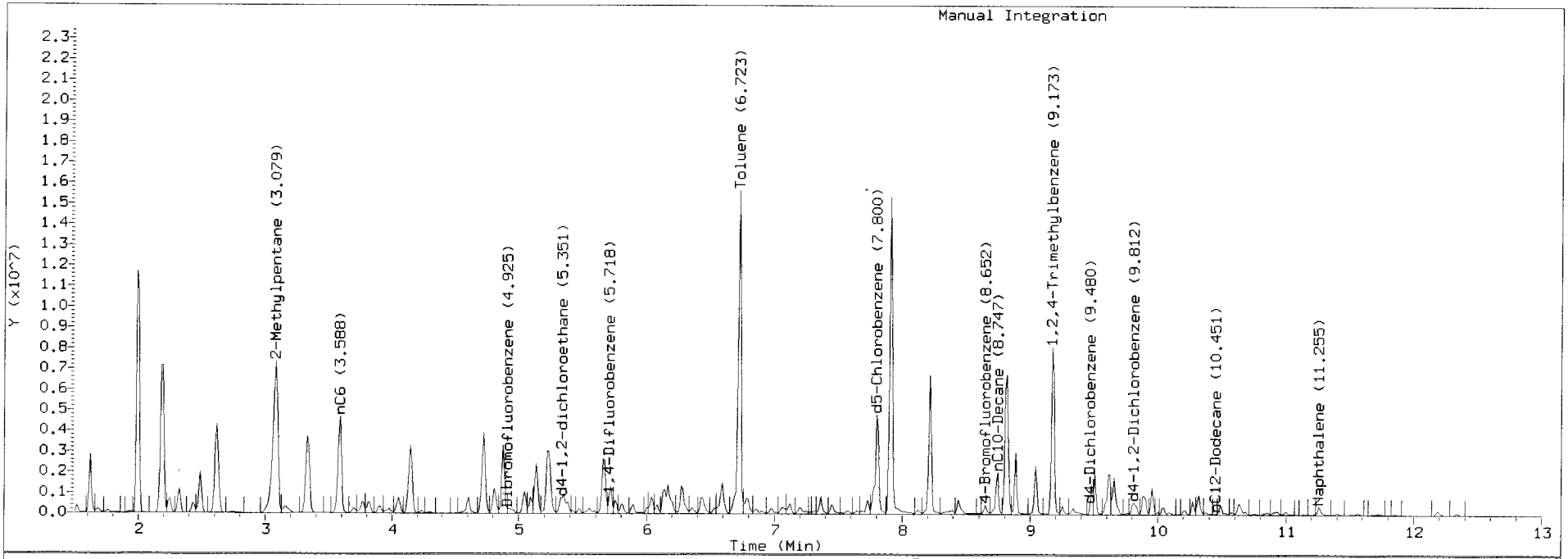
Column phase: RTXVMS

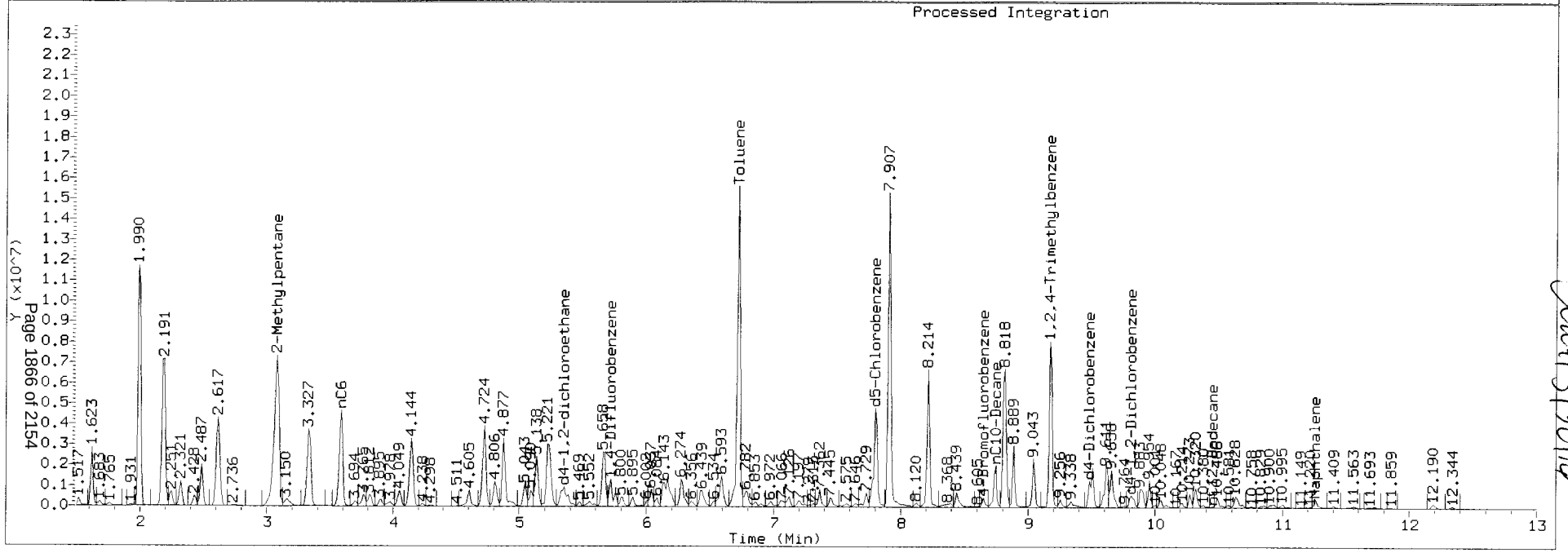


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291620.D Injection: 29-MAR-2016 21:07

Lab ID:G2500329





3/29/16

4/4 3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291620.D
Lab Smp Id: G2500329
Inj Date : 29-MAR-2016 21:07
Operator : PC Inst ID: nt2.i
Smp Info : G2500329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.948	4.947	(0.929)	80895	4.61716	4.617
31 Benzene	78	5.244	5.243	(0.917)	1447462	18.5854	18.585
* 32 Pentafluorobenzene	168	5.327	5.326	(1.000)	366346	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	120364	5.80838	5.808
* 37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	580475	10.0000	
$ 43 d8-Toluene	98	6.687	6.687	(1.170)	363485	5.28895	5.289
44 Toluene	92	6.723	6.722	(1.176)	5827569	113.211	113.21
* 53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	530399	10.0000	
55 Ethyl Benzene	106	7.800	7.811	(1.003)	1077327	34.2118	34.212
57 m,p-xylene	106	7.906	7.906	(1.017)	4034007	105.103	105.10
58 o-Xylene	106	8.214	8.212	(1.056)	1583683	43.7468	43.747
$ 62 4-Bromofluorobenzene	174	8.652	8.651	(1.113)	110194	5.09662	5.097
* 76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	284779	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	136810	5.02434	5.024

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291620.D
Lab Smp Id: G2500329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	366346	4.56
37 1,4-Difluorobenze	562526	281263	1125052	580475	3.19
53 d5-Chlorobenzene	502371	251186	1004742	530399	5.58
76 d4-1,4-Dichlorobe	277950	138975	555900	284779	2.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G2500329
Level: LOW Operator: PC
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

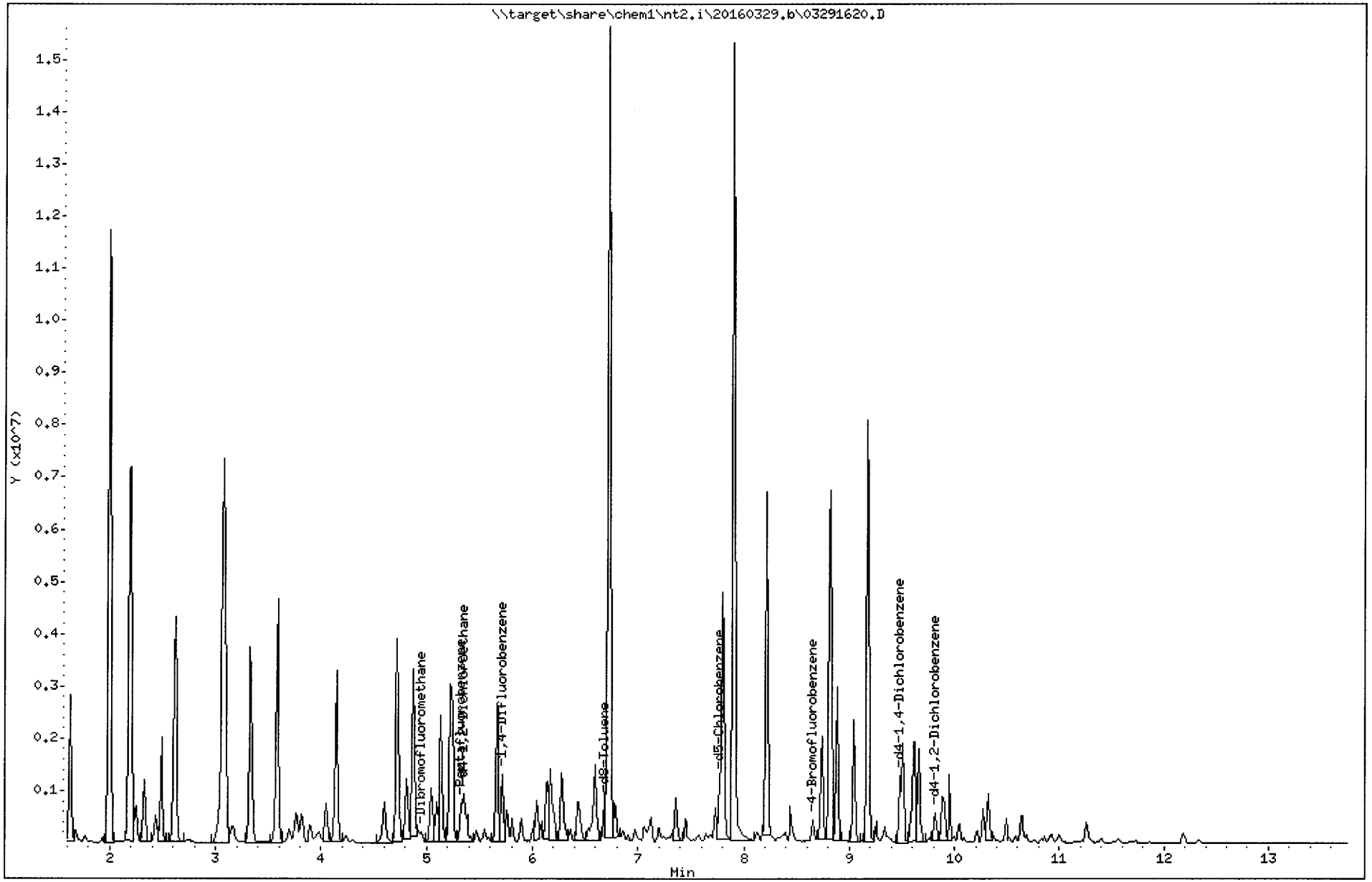
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.617	92.34	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.808	116.17	80-149
$ 43 d8-Toluene	5.000	5.289	105.78	77-120
$ 62 4-Bromofluorobenze	5.000	5.097	101.93	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.024	100.49	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291620.D
Date : 29-MAR-2016 21:07
Client ID:
Sample Info: G2500329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291620.D

Lab ID: G2500329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 21:07

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

3/30/16

Data file: 20160329g.b/03291621.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 21:28

ARI ID: G1000329
Client ID: GSTD1
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	51185622	1.066 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	85008808	1.021 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	60464211	1.030 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	52493344	1.067 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	81213277	1.109 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

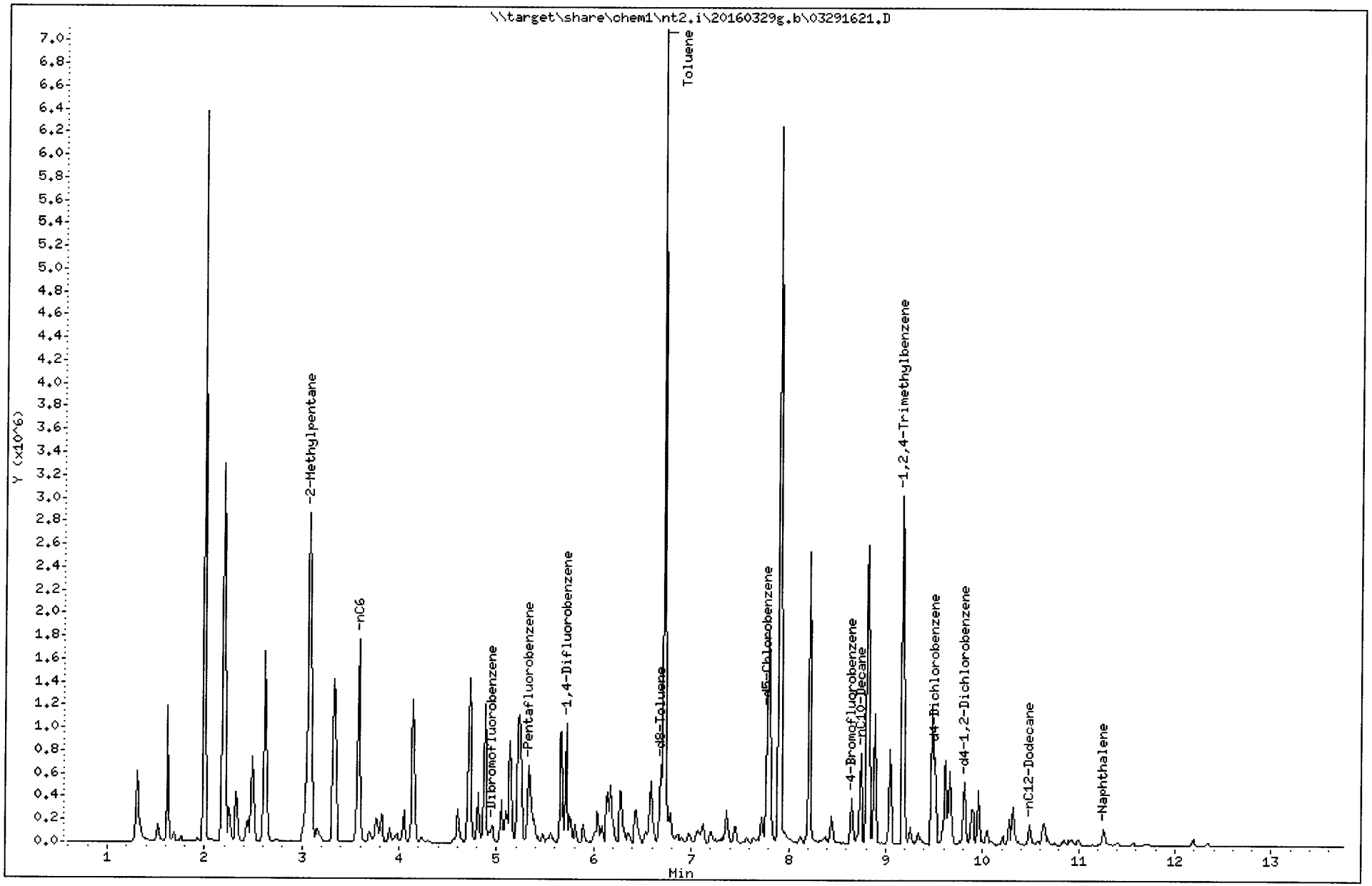
6.687	961710	d8-Toluene
8.651	593851	4-Bromofluorobenzene
9.503	1463362	d4-Dichlorobenzene
7.776	1720498	d5-Chlorobenzene
9.811	972946	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291621.D
Date : 29-MAR-2016 21:28
Client ID: GSTD1
Sample Info: G1000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

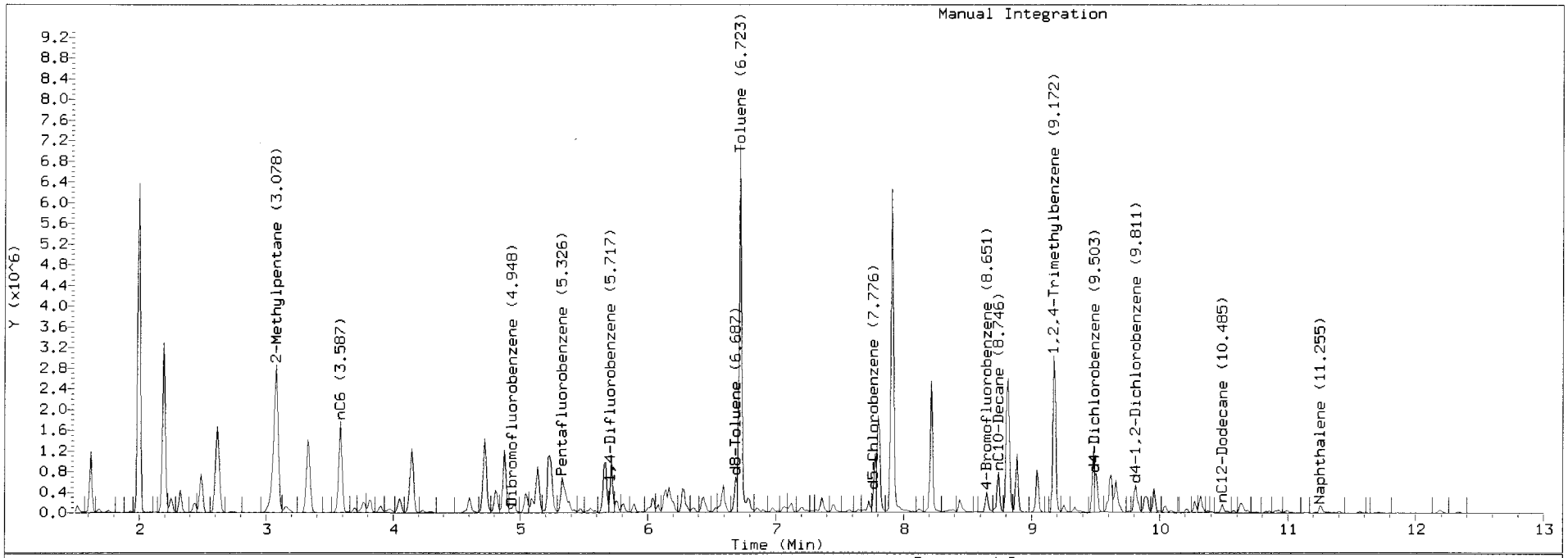
Column phase: RTXVMS

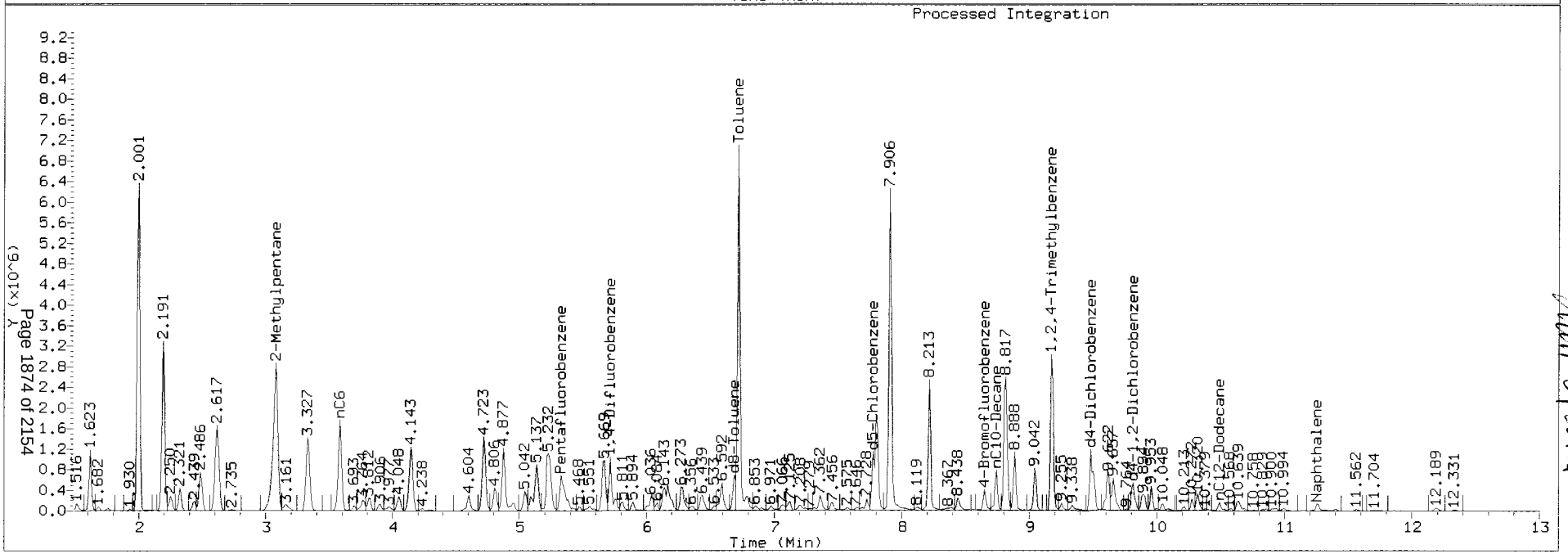


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291621.D Injection: 29-MAR-2016 21:28

Lab ID:G1000329





3/31/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291621.D
Lab Smp Id: G1000329
Inj Date : 29-MAR-2016 21:28
Operator : PC Inst ID: nt2.i
Smp Info : G1000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.947	4.947	(0.929)	80288	4.71446	4.714
31 Benzene	78	5.243	5.243	(0.917)	543579	7.22688	7.227
* 32 Pentafluorobenzene	168	5.326	5.326	(1.000)	356093	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.349	5.350	(1.004)	104791	5.20248	5.202
* 37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	560609	10.0000	
$ 43 d8-Toluene	98	6.687	6.687	(1.170)	341759	5.14904	5.149
44 Toluene	92	6.722	6.722	(1.176)	2490488	50.0965	50.096
* 53 d5-Chlorobenzene	117	7.775	7.775	(1.000)	525882	10.0000	
55 Ethyl Benzene	106	7.811	7.811	(1.005)	408748	13.0918	13.092
57 m,p-xylene	106	7.905	7.906	(1.017)	1583945	41.6228	41.623
58 o-Xylene	106	8.213	8.212	(1.056)	605338	16.8652	16.865
$ 62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	104584	4.87869	4.879
* 76 d4-1,4-Dichlorobenzene	152	9.479	9.479	(1.000)	278120	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.810	9.811	(1.035)	134860	5.07131	5.071

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291621.D
Lab Smp Id: G1000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	356093	1.63
37 1,4-Difluorobenze	562526	281263	1125052	560609	-0.34
53 d5-Chlorobenzene	502371	251186	1004742	525882	4.68
76 d4-1,4-Dichlorobe	277950	138975	555900	278120	0.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Client SDG: 20151001
Sample Matrix: SOLID
Fraction: VOA
Lab Smp Id: G1000329
Level: LOW
Operator: PC
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: allspike.spk
Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

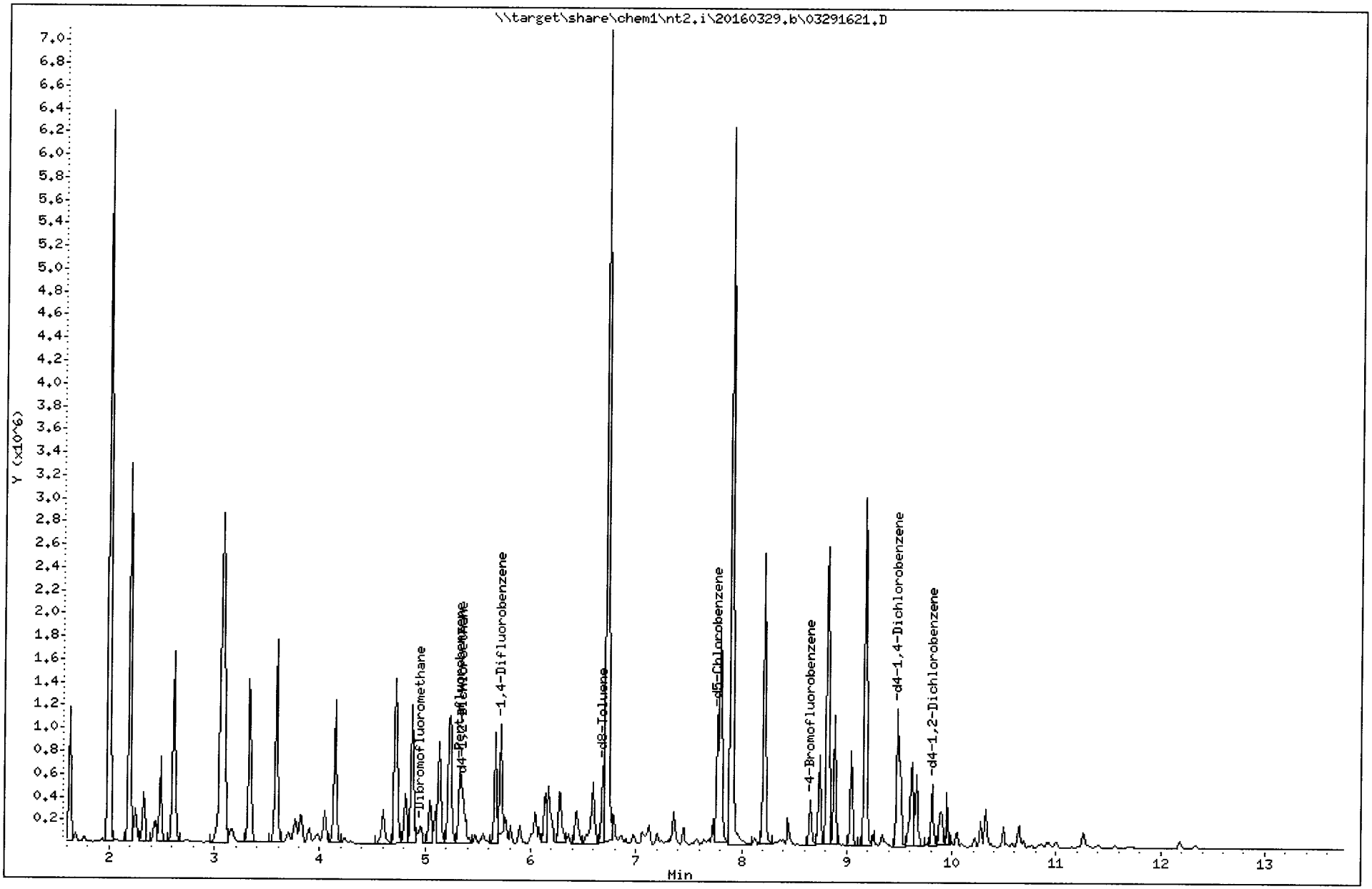
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.714	94.29	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.202	104.05	80-149
$ 43 d8-Toluene	5.000	5.149	102.98	77-120
$ 62 4-Bromofluorobenze	5.000	4.879	97.57	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.071	101.43	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291621.D
Date : 29-MAR-2016 21:28
Client ID:
Sample Info: G1000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291621.D

Lab ID: G1000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 21:28

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

RLH 3/30/16

Data file: 20160329g.b/03291622.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 21:50

ARI ID: G0500329
Client ID: GSTD0.5
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	24555813	0.511 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	41871825	0.503 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	29736642	0.507 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	25132108	0.511 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	39181834	0.535 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

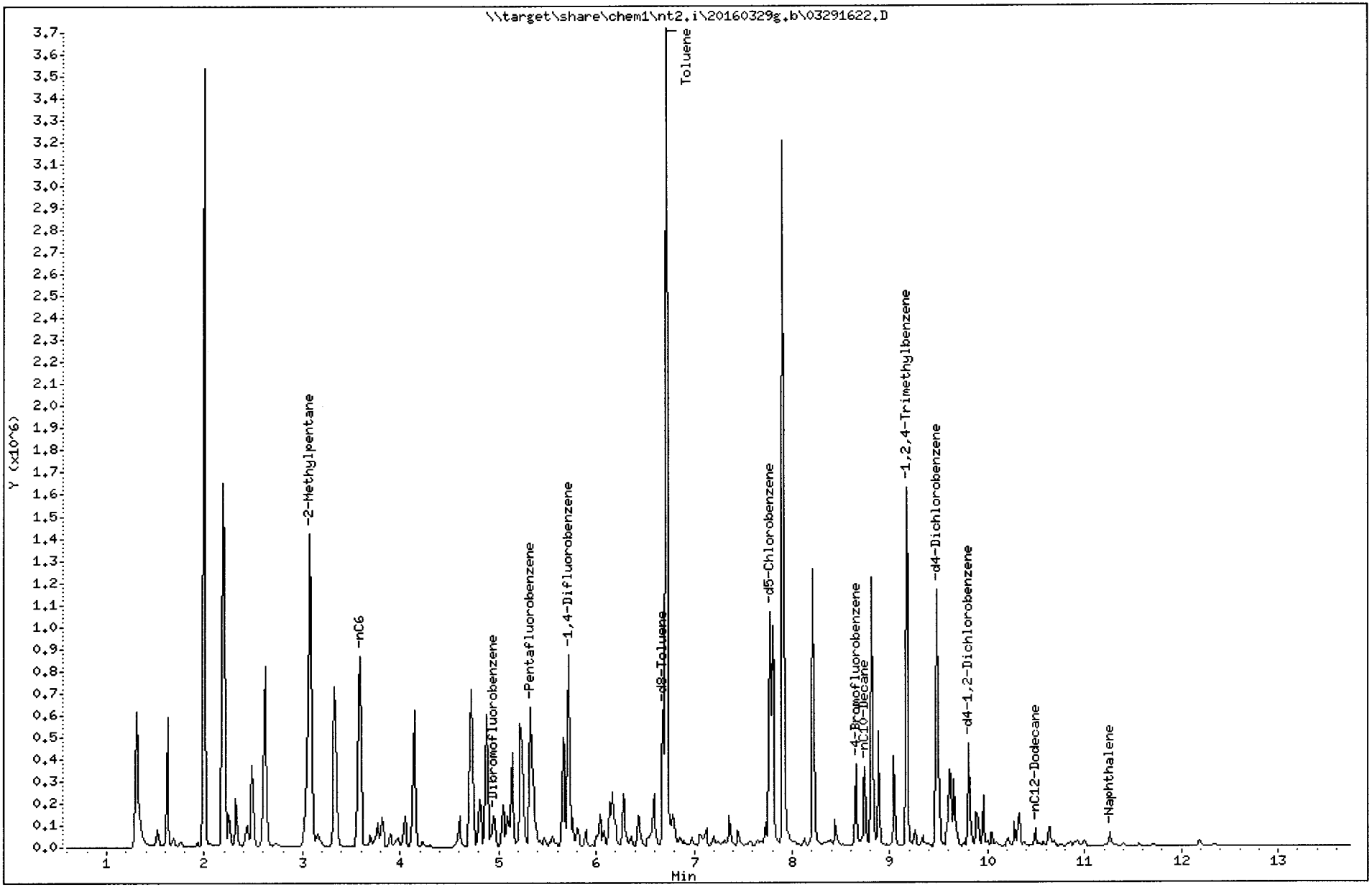
6.688	840841	d8-Toluene
8.653	550626	4-Bromofluorobenzene
9.481	2058351	d4-Dichlorobenzene
7.777	1519780	d5-Chlorobenzene
9.812	870971	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291622.D
Date : 29-MAR-2016 21:50
Client ID: GSTD0.5
Sample Info: G0500329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

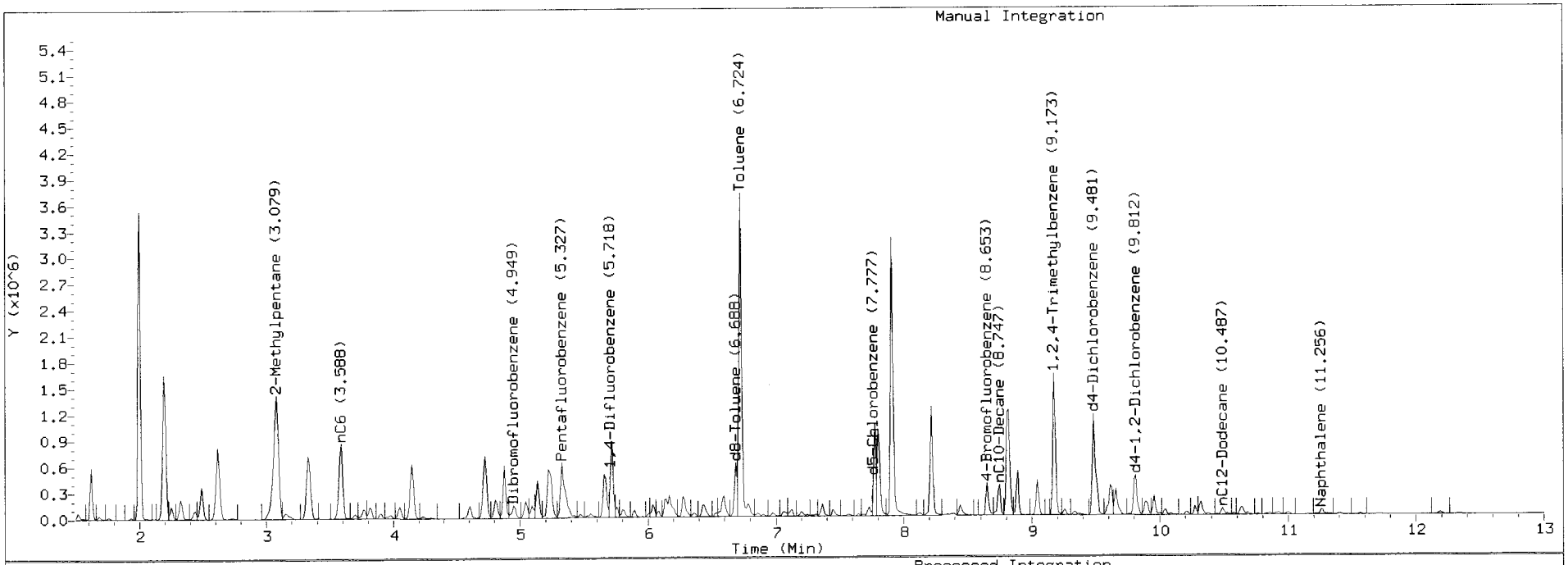
Column phase: RTXVMS

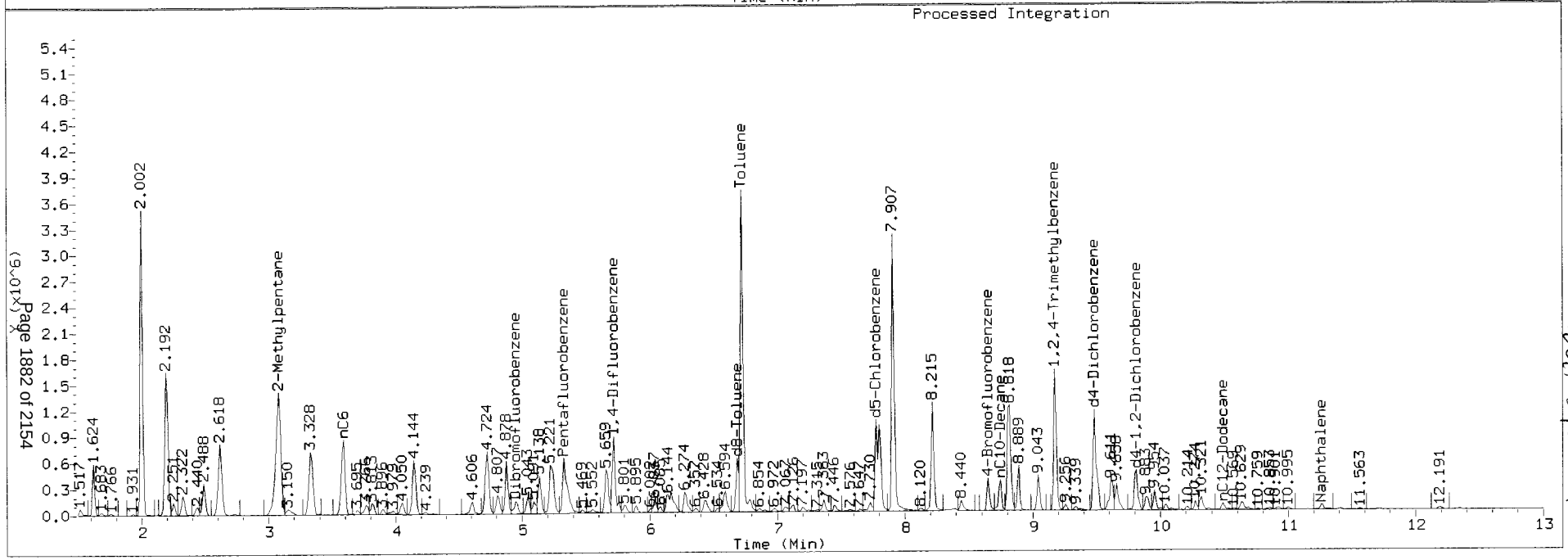


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291622.D Injection: 29-MAR-2016 21:50

Lab ID:G0500329





3/29/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291622.D
Lab Smp Id: G0500329
Inj Date : 29-MAR-2016 21:50
Operator : PC Inst ID: nt2.i
Smp Info : G0500329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	27 Dibromofluoromethane	111	4.948	4.947	(0.929)	74949	4.67769	4.678
	31 Benzene	78	5.244	5.243	(0.917)	267067	3.77717	3.777
*	32 Pentafluorobenzene	168	5.327	5.326	(1.000)	335026	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.351	5.350	(1.004)	95614	5.04537	5.045
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	526989	10.0000	
$	43 d8-Toluene	98	6.688	6.687	(1.170)	317010	5.08086	5.081
	44 Toluene	92	6.723	6.722	(1.176)	1267837	27.1297	27.130
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	495230	10.0000	
	55 Ethyl Benzene	106	7.800	7.811	(1.003)	198708	6.75834	6.758
	57 m,p-xylene	106	7.907	7.906	(1.017)	790422	22.0562	22.056
	58 o-Xylene	106	8.214	8.212	(1.056)	298827	8.84084	8.841
$	62 4-Bromofluorobenzene	174	8.652	8.651	(1.113)	97596	4.83450	4.835
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	263670	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.812	9.811	(1.035)	126127	5.00284	5.003

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291622.D
Lab Smp Id: G0500329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	335026	-4.38
37 1,4-Difluorobenze	562526	281263	1125052	526989	-6.32
53 d5-Chlorobenzene	502371	251186	1004742	495230	-1.42
76 d4-1,4-Dichlorobe	277950	138975	555900	263670	-5.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.03
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G0500329
Level: LOW Operator: PC
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

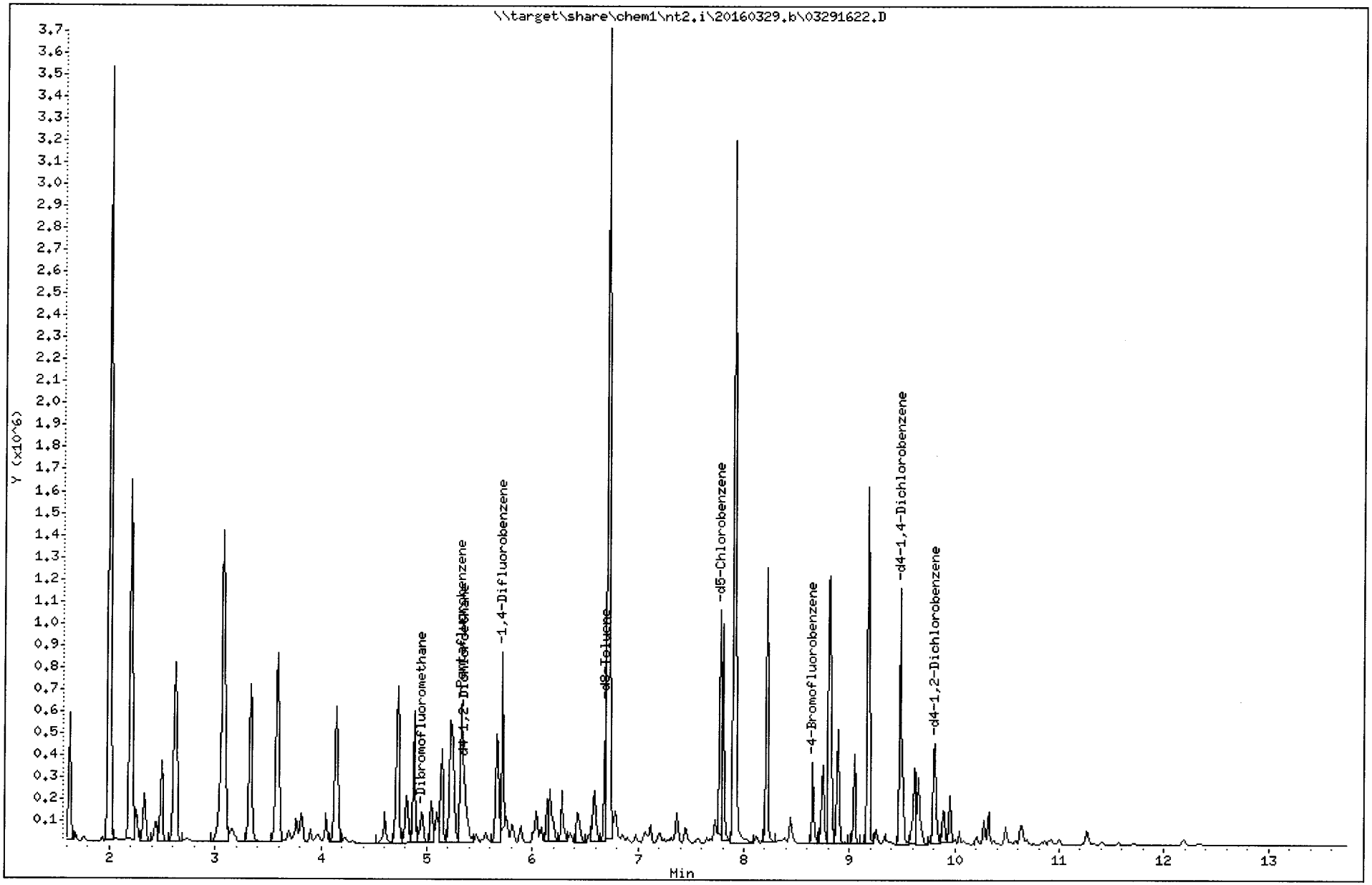
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.678	93.55	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.045	100.91	80-149
$ 43 d8-Toluene	5.000	5.081	101.62	77-120
$ 62 4-Bromofluorobenze	5.000	4.835	96.69	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.003	100.06	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291622.D
Date : 29-MAR-2016 21:50
Client ID:
Sample Info: G0500329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291622.D

Lab ID: G0500329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 21:50

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

XMH 3/30/16

Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160329g.b/03291623.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 22:11

ARI ID: G0250329
Client ID: GSTD0.25
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	12028020	0.251 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	20718376	0.249 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	14779001	0.252 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	12232714	0.249 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	19225550	0.262 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

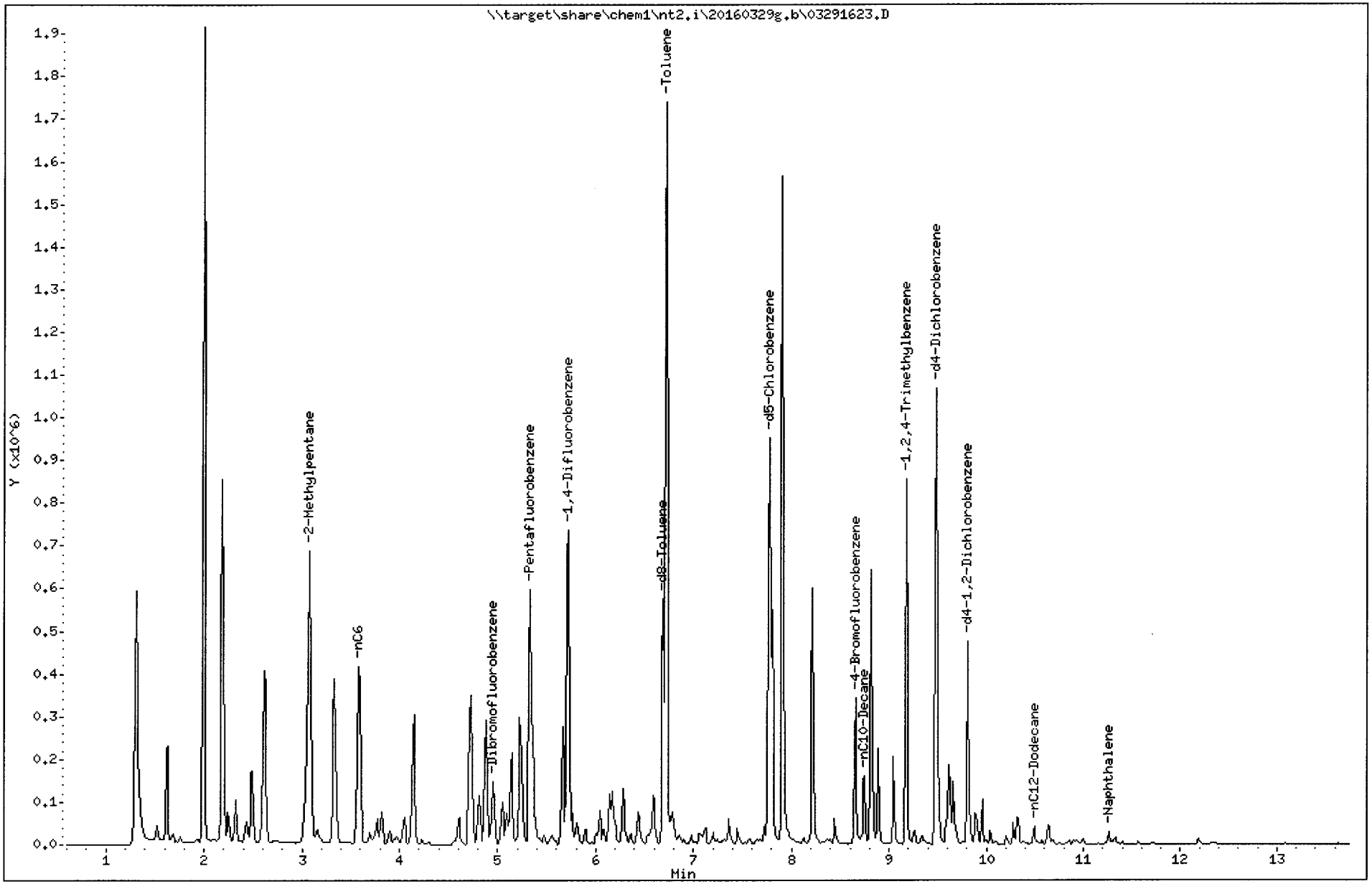
6.691	842876	d8-Toluene
8.655	536470	4-Bromofluorobenzene
9.484	1790369	d4-Dichlorobenzene
7.780	1496568	d5-Chlorobenzene
9.803	804532	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291623.D
Date : 29-MAR-2016 22:11
Client ID: GSTD0.25
Sample Info: G0250329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

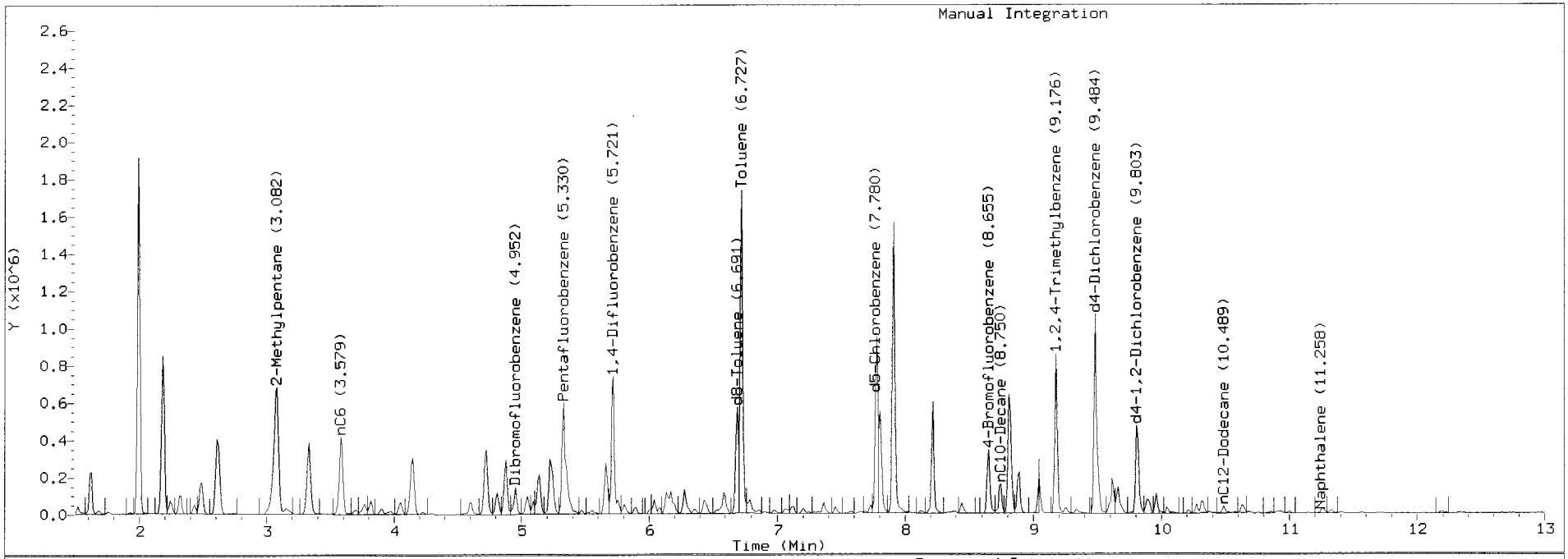
Column phase: RTXVMS

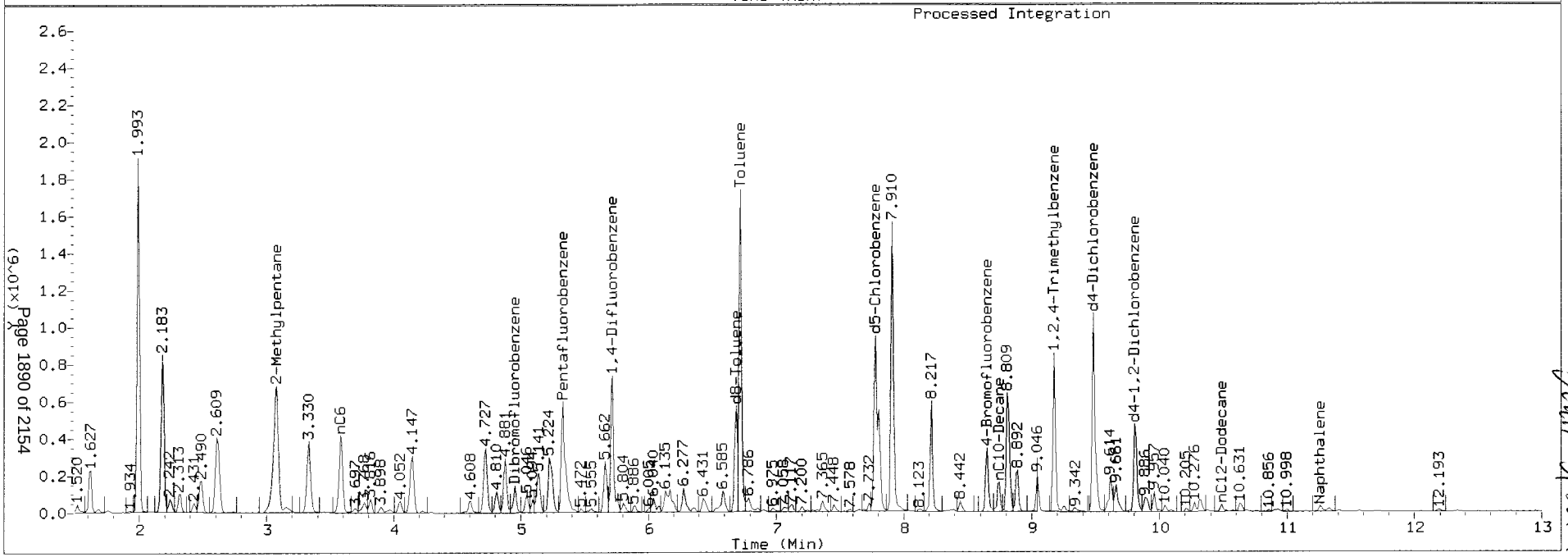


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291623.D Injection: 29-MAR-2016 22:11

Lab ID:G0250329





ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291623.D
Lab Smp Id: G0250329
Inj Date : 29-MAR-2016 22:11
Operator : PC Inst ID: nt2.i
Smp Info : G0250329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.951	4.947	(0.929)	75545	4.78409	4.784
31 Benzene	78	5.247	5.243	(0.917)	138156	1.96530	1.965
* 32 Pentafluorobenzene	168	5.330	5.326	(1.000)	330180	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.353	5.350	(1.004)	95599	5.11861	5.119
* 37 1,4-Difluorobenzene	114	5.720	5.717	(1.000)	523950	10.0000	
$ 43 d8-Toluene	98	6.691	6.687	(1.170)	321950	5.18997	5.190
44 Toluene	92	6.726	6.722	(1.176)	647699	13.9401	13.940
* 53 d5-Chlorobenzene	117	7.779	7.775	(1.000)	490395	10.0000	
55 Ethyl Benzene	106	7.803	7.811	(1.003)	99790	3.42746	3.427
57 m,p-xylene	106	7.909	7.906	(1.017)	394058	11.1044	11.104
58 o-Xylene	106	8.217	8.212	(1.056)	146476	4.37624	4.376
$ 62 4-Bromofluorobenzene	174	8.655	8.651	(1.113)	95586	4.78162	4.782
* 76 d4-1,4-Dichlorobenzene	152	9.483	9.479	(1.000)	259889	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.814	9.811	(1.035)	124653	5.01631	5.016

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291623.D
Lab Smp Id: G0250329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	330180	-5.76
37 1,4-Difluorobenze	562526	281263	1125052	523950	-6.86
53 d5-Chlorobenzene	502371	251186	1004742	490395	-2.38
76 d4-1,4-Dichlorobe	277950	138975	555900	259889	-6.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.08
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.07
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.05
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G0250329
Level: LOW Operator: PC
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

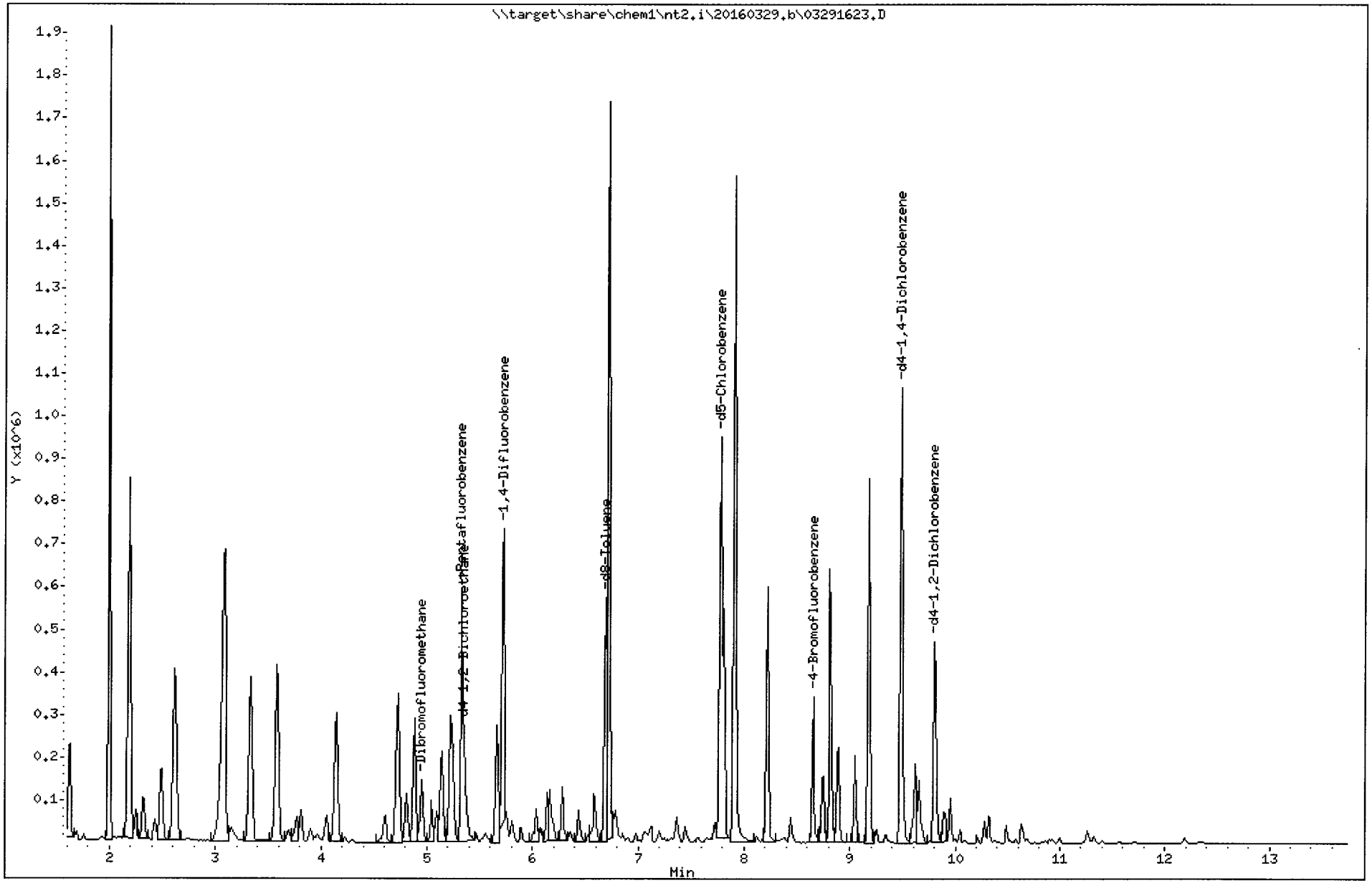
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.784	95.68	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.119	102.37	80-149
$ 43 d8-Toluene	5.000	5.190	103.80	77-120
$ 62 4-Bromofluorobenze	5.000	4.782	95.63	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.016	100.33	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291623.D
Date : 29-MAR-2016 22:11
Client ID:
Sample Info: G0250329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291623.D

Lab ID: G0250329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 22:11

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

MH 3/30/16

Data file: 20160329g.b/03291624.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 22:32

ARI ID: G0100329
Client ID: GSTD0.1
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)	
WAGas Tol-C12	(6.62 to 10.56)	48008849	3850119	0.080	
8015C 2MP-TMB	(2.98 to 9.28)	83224207	7140486	0.086	
AK101 nC6-nC10	(3.49 to 8.62)	58706304	4966251	0.085	
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	3925968	0.080	M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	6419449	0.088	

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

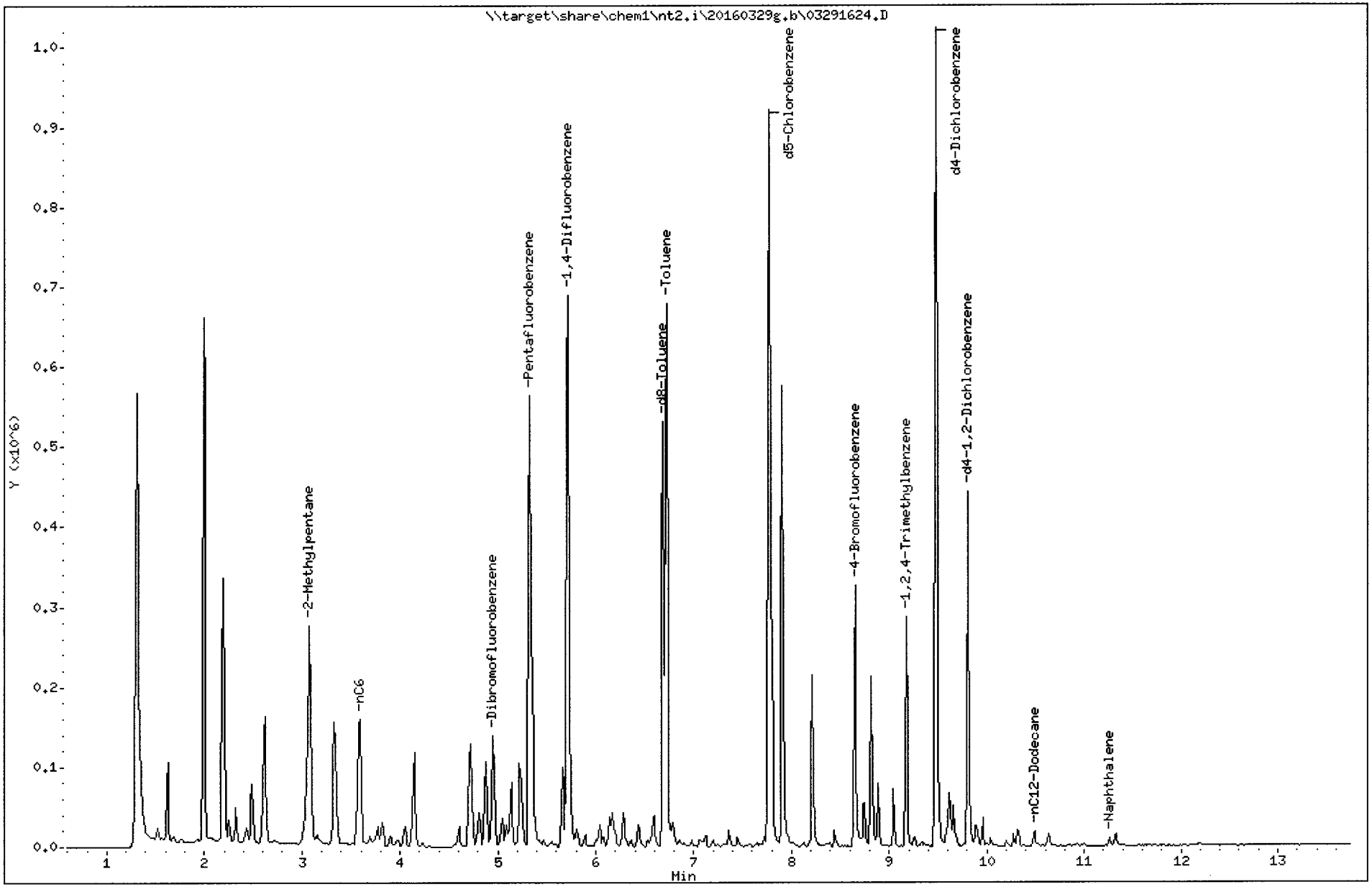
6.690	729346	d8-Toluene
8.655	616898	4-Bromofluorobenzene
9.483	1562613	d4-Dichlorobenzene
7.779	1619441	d5-Chlorobenzene
9.803	713446	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291624.D
Date : 29-MAR-2016 22:32
Client ID: GSTD0.1
Sample Info: G0100329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

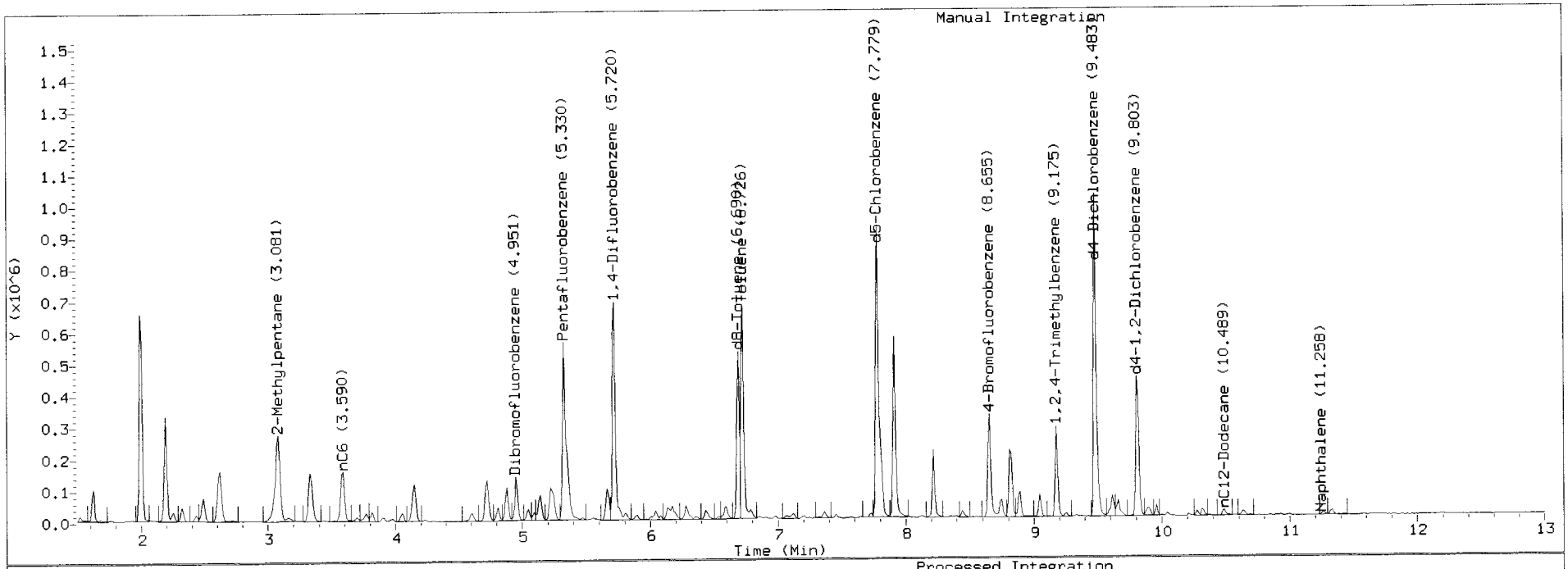
Column phase: RTXVMS

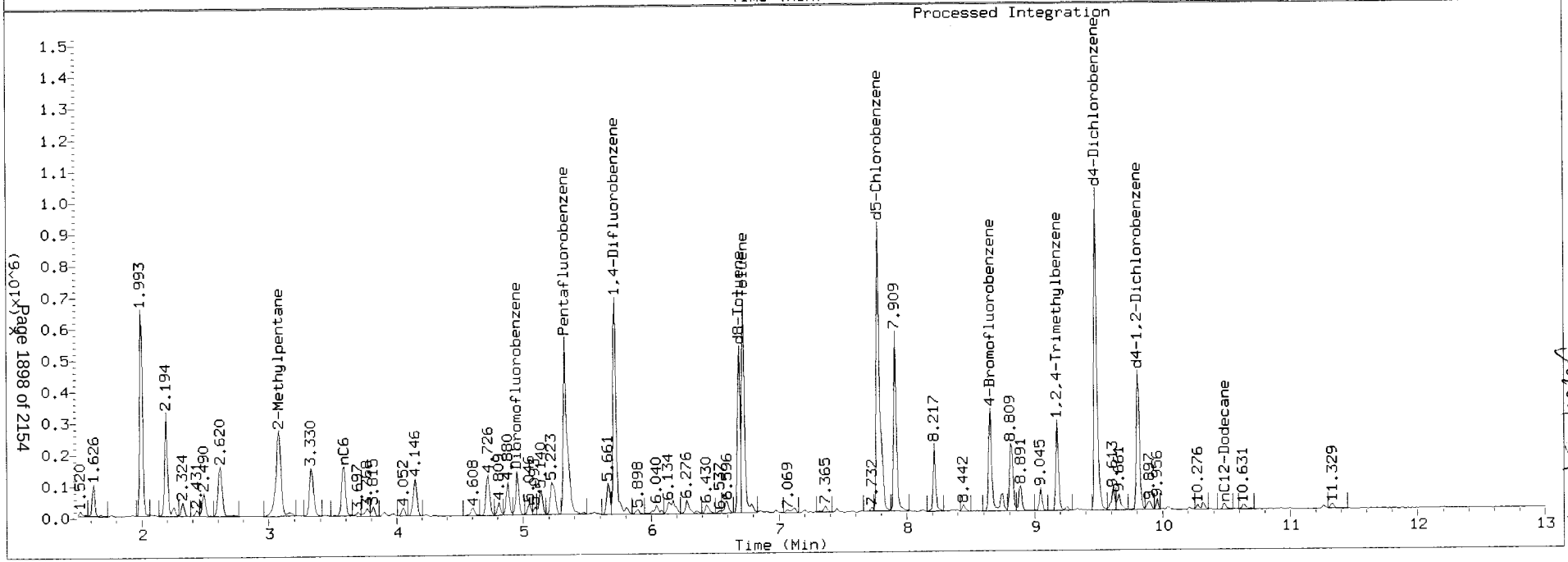


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291624.D Injection: 29-MAR-2016 22:32

Lab ID:G0100329





ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291624.D
Lab Smp Id: G0100329
Inj Date : 29-MAR-2016 22:32
Operator : PC Inst ID: nt2.i
Smp Info : G0100329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.951	4.947	(0.929)	71888	4.95202	4.952
31 Benzene	78	5.246	5.243	(0.917)	51759	0.80004	0.8000
* 32 Pentafluorobenzene	168	5.329	5.326	(1.000)	303542	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.353	5.350	(1.004)	91341	5.31982	5.320
* 37 1,4-Difluorobenzene	114	5.720	5.717	(1.000)	482197	10.0000	
$ 43 d8-Toluene	98	6.690	6.687	(1.170)	292483	5.12321	5.123
44 Toluene	92	6.725	6.722	(1.176)	249861	5.84328	5.843
* 53 d5-Chlorobenzene	117	7.779	7.775	(1.000)	459677	10.0000	
55 Ethyl Benzene	106	7.802	7.811	(1.003)	36717	1.34538	1.345
57 m,p-xylene	106	7.909	7.906	(1.017)	145124	4.36280	4.363
58 o-Xylene	106	8.216	8.212	(1.056)	52554	1.67507	1.675
$ 62 4-Bromofluorobenzene	174	8.654	8.651	(1.113)	87080	4.64721	4.647
* 76 d4-1,4-Dichlorobenzene	152	9.483	9.479	(1.000)	241501	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.814	9.811	(1.035)	117450	5.08632	5.086

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291624.D
Lab Smp Id: G0100329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	303542	-13.37
37 1,4-Difluorobenze	562526	281263	1125052	482197	-14.28
53 d5-Chlorobenzene	502371	251186	1004742	459677	-8.50
76 d4-1,4-Dichlorobe	277950	138975	555900	241501	-13.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.07
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.06
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.05
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G0100329
Level: LOW Operator: PC
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

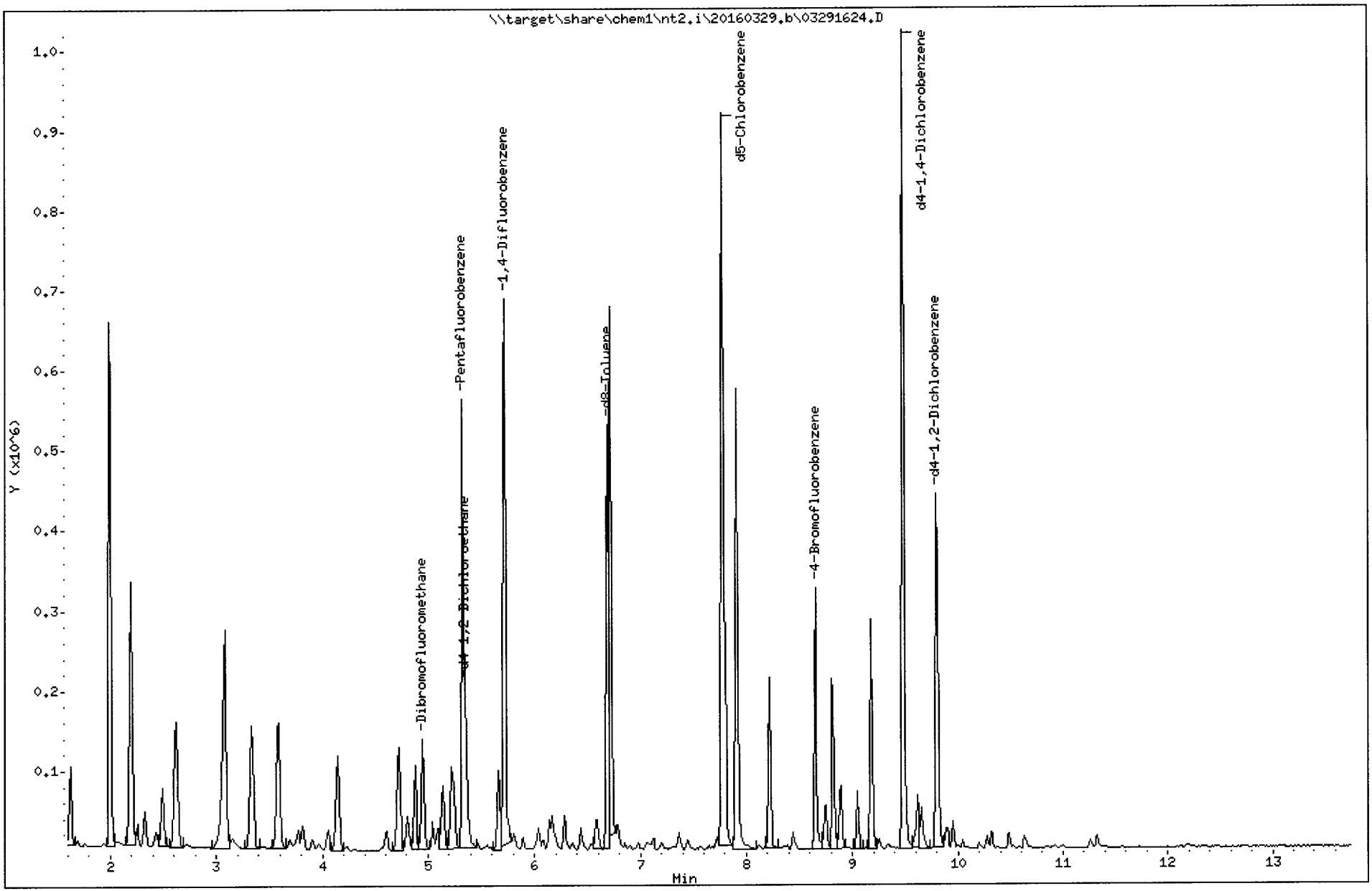
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.952	99.04	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.320	106.40	80-149
$ 43 d8-Toluene	5.000	5.123	102.46	77-120
$ 62 4-Bromofluorobenze	5.000	4.647	92.94	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.086	101.73	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291624.D
Date : 29-MAR-2016 22:32
Client ID:
Sample Info: G0100329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291624.D

Lab ID: G0100329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 22:32

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

3/30/16

Data file: 20160329g.b/03291625.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 22:54

ARI ID: GSCV0329
Client ID: GSCV
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	125458223	2.613 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	208594002	2.506 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	144105640	2.455 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	129715156	2.636 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	203576469	2.779 M

True value = 2.5

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

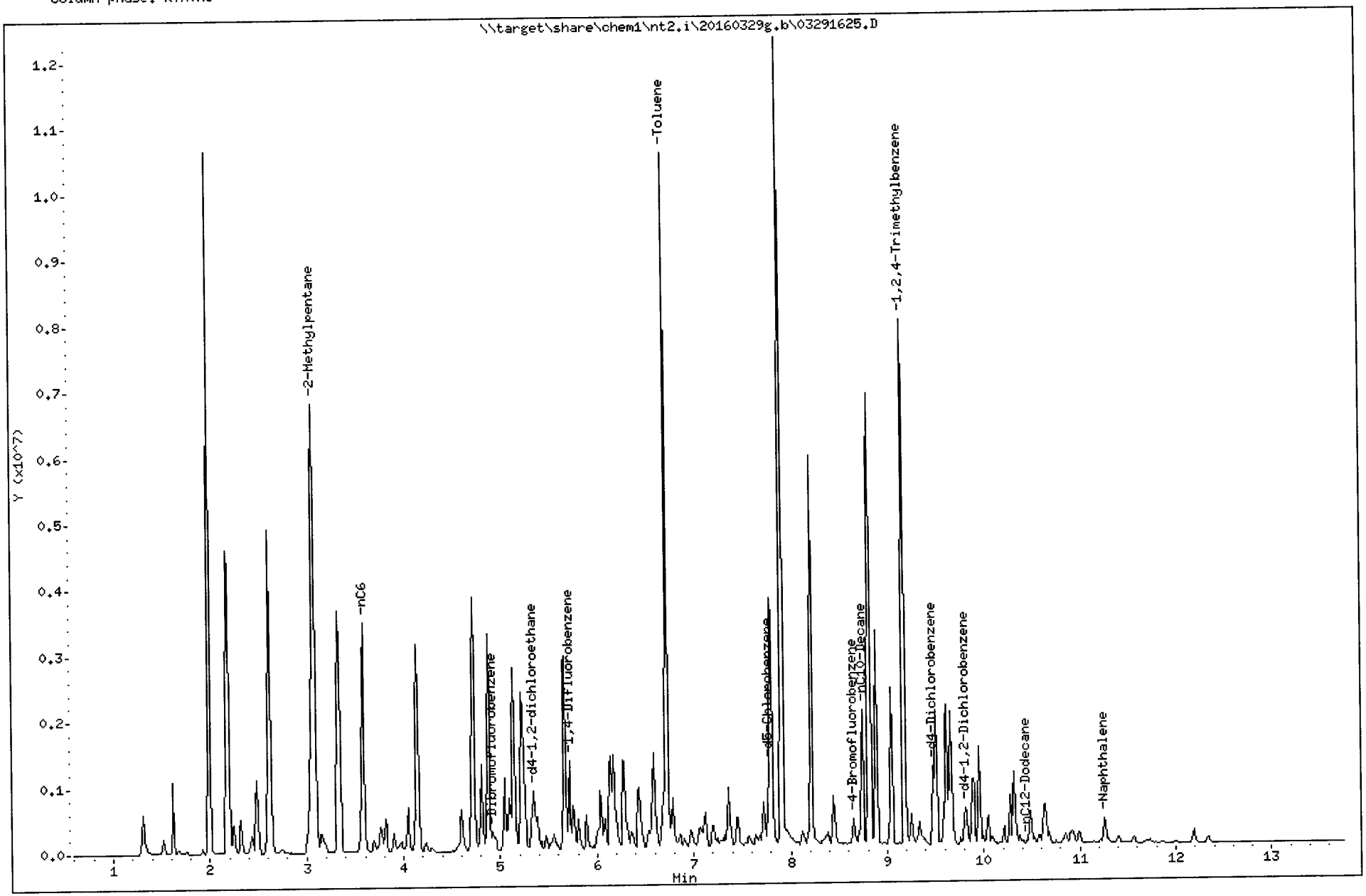
8.651	730123	4-Bromofluorobenzene
9.480	1842491	d4-Dichlorobenzene
7.776	2205885	d5-Chlorobenzene
9.811	1533863	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291625.D
Date : 29-MAR-2016 22:54
Client ID: GSCV
Sample Info: GSCV0329,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

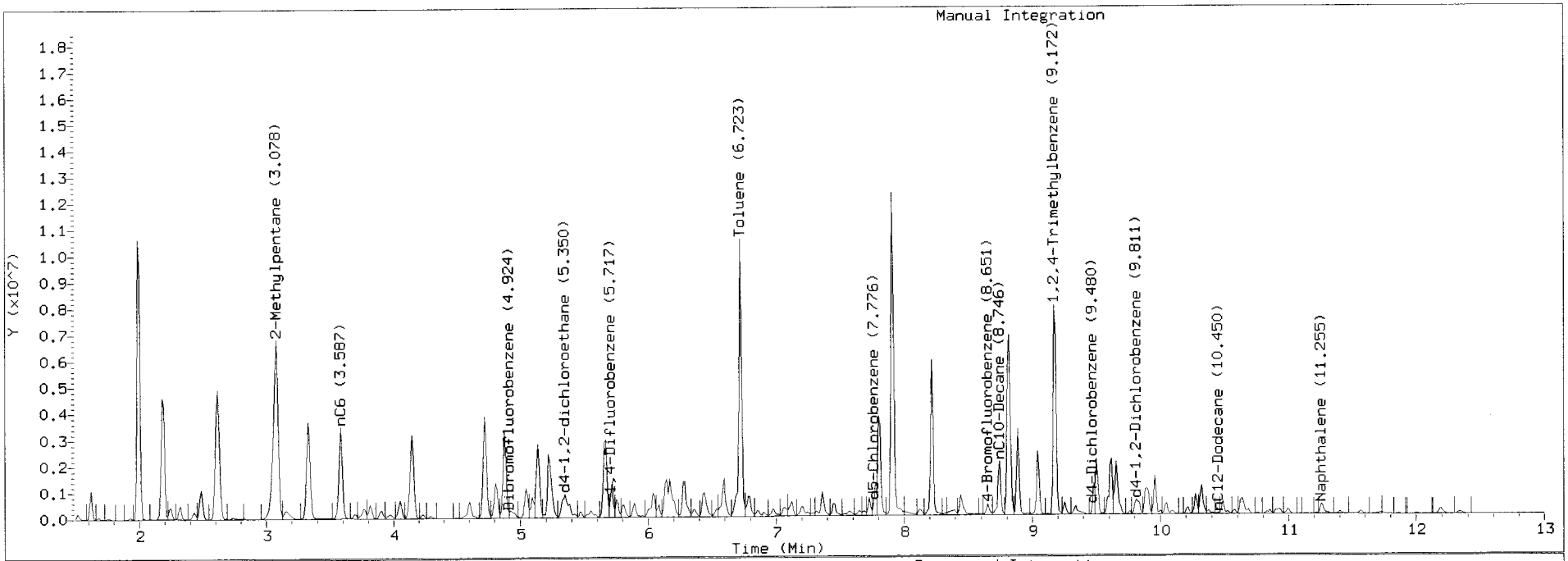
Operator: PC
Column diameter: 0.18

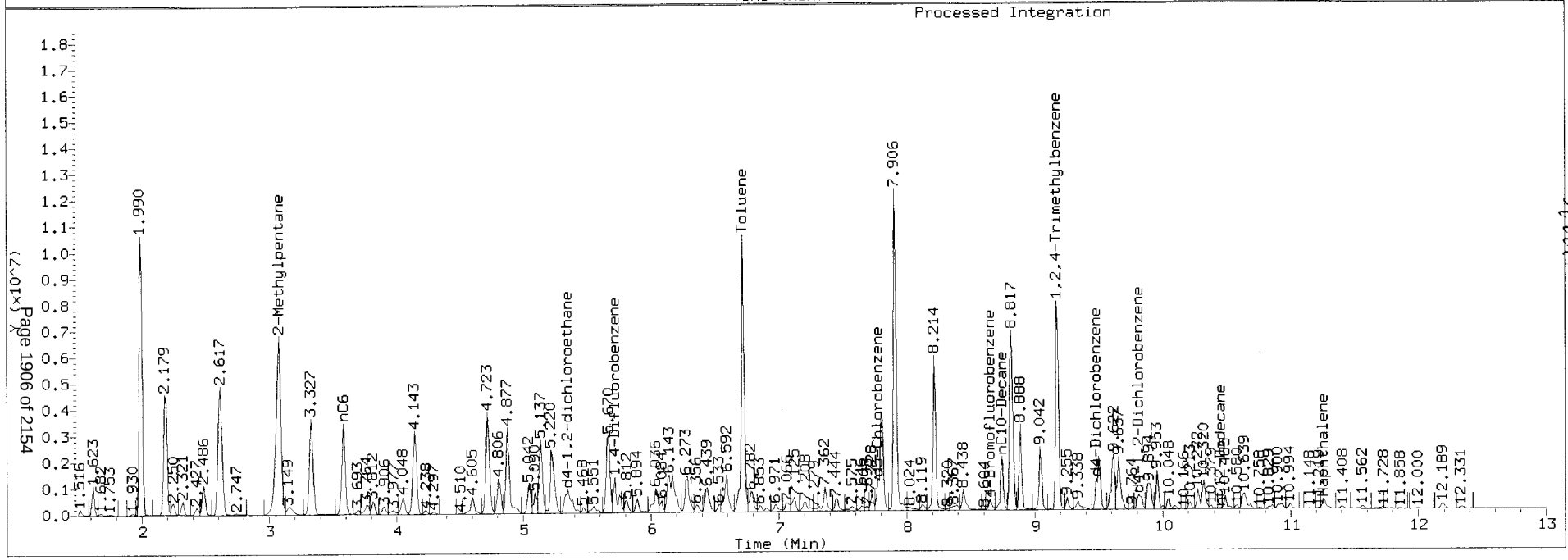


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291625.D Injection: 29-MAR-2016 22:54

Lab ID:GSCV0329





ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291625.D
Lab Smp Id: GSCV0329
Inj Date : 29-MAR-2016 22:54 Inst ID: nt2.i
Operator : PC
Smp Info : GSCV0329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.947	4.947	(0.929)	76997	4.62830	4.628
31 Benzene	78	5.243	5.243	(0.917)	657783	8.82957	8.830
* 32 Pentafluorobenzene	168	5.326	5.326	(1.000)	347854	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	110861	5.63419	5.634
* 37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	555254	10.0000	
$ 43 d8-Toluene	98	6.687	6.687	(1.170)	350286	5.32840	5.328
44 Toluene	92	6.722	6.722	(1.176)	3750272	76.1648	76.165
* 53 d5-Chlorobenzene	117	7.775	7.775	(1.000)	518670	10.0000	
55 Ethyl Benzene	106	7.811	7.811	(1.005)	873090	28.3530	28.353
57 m,p-xylene	106	7.905	7.906	(1.017)	3174736	84.5854	84.585
58 o-Xylene	106	8.213	8.212	(1.056)	1410867	39.8544	39.854
$ 62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	106739	5.04846	5.048
* 76 d4-1,4-Dichlorobenzene	152	9.479	9.479	(1.000)	276192	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.810	9.811	(1.035)	133866	5.06908	5.069

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291625.D
Lab Smp Id: GSCV0329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	347854	-0.72
37 1,4-Difluorobenze	562526	281263	1125052	555254	-1.29
53 d5-Chlorobenzene	502371	251186	1004742	518670	3.24
76 d4-1,4-Dichlorobe	277950	138975	555900	276192	-0.63

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.01
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: GSCV0329
Level: LOW Operator: PC
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

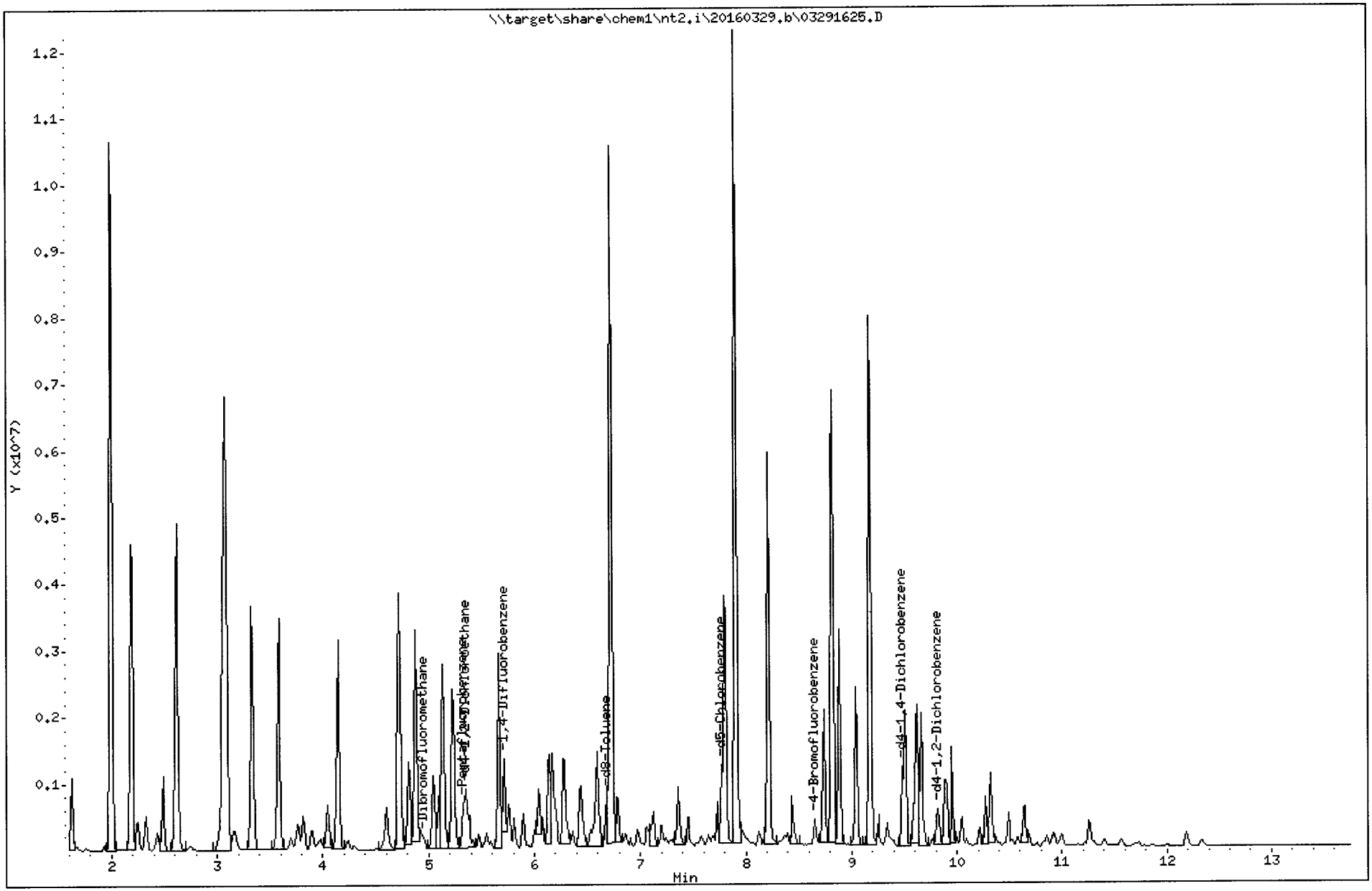
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.628	92.57	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.634	112.68	80-149
$ 43 d8-Toluene	5.000	5.328	106.57	77-120
$ 62 4-Bromofluorobenze	5.000	5.048	100.97	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.069	101.38	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291625.D
Date : 29-MAR-2016 22:54
Client ID:
Sample Info: GSCV0329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291625.D

Lab ID: GSCV0329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 22:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analysis	Matrix	Method
8260C VOA	Water	EPA 8260C

Checklist: Initial Calibration Checklist-VOA

#	Checklist Item	Response	Analyst Initials	Date
1	Element Calibration Code	YES	LH	04/14/2016
	Comments: *ZD00012*			
2	BFB Tune met Criteria	YES	LH	04/14/2016
3	ICal meets 20% RSD, LR COD, and QR COD limits	YES	LH	04/14/2016
4	NO ICAL Q Flag applied	YES	LH	04/14/2016
5	Manual integrations include before/after pictures	YES	LH	04/14/2016
6	Internal Standard areas within 50-200% from reference	YES	LH	04/14/2016
7	Spectral Library updated	NA	LH	04/14/2016
8	Minimum response factors met	YES	LH	04/14/2016
9	All SCV within +/- 20% (DOD)	NO	LH	04/14/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Dichlorodifluoromethane 127.7%, Chloromethane 129.08%, bromoform 78.70%, t-butyl benzene 122.59%.*			
10	All SCV within +/- 30%	NO	LH	04/14/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Vinyl chloride 130.63%, bromomethane 174.16%, chloroethane 135.88%*			
11	NO Linear or Quadratic Fits Used	NO	LH	04/14/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Linear: chloroethane, vinyl acetate, carbon tetrachloride, trans-1,3-dichloropropene, chlorodibromomethane, bromoform, 1,2-dibromo-3-chloropropane.* *Quadratic: iodomethane*			
12	NO Calibration points dropped	NO	LH	04/14/2016
	Comments: *EXCEPTION REPORT REQUIRED* *40 and 80 parts dropped for trichlorofluoromethane. Calibration range 0.2ug/L - 20ug/L.* *Some low points dropped, but all RLs were met.*			
13	Additional Notes	YES	LH	04/14/2016
	Comments: *Raw response factors were compared to element.*			
14	Reviewer Approval (Reviewer)	YES	BB	04/14/2016

* = Indicates Automated Response from Element DataSyst

Analysis	Matrix	Method
8260C Gas (8015C)	Water	EPA 8015C
8260C Gas (AK101)	Water	AK101
8260C Gas (NWTPH)	Water	NWTPHg
8260C VOA	Water	EPA 8260C

Checklist: Initial Calibration Checklist-VOA

#	Checklist Item	Response	Analyst Initials	Date
1	Element Calibration Code	YES	LH	03/30/2016
	Comments: *ZC00032* *Calibration is for 8260C and gas.*			
2	BFB Tune met Criteria	YES	LH	03/30/2016
3	ICal meets 20% RSD, LR COD, and QR COD limits	YES	LH	03/30/2016
4	NO ICAL Q Flag applied	YES	LH	03/30/2016
5	Manual integrations include before/after pictures	YES	LH	03/30/2016
6	Internal Standard areas within 50-200% from reference	YES	LH	03/30/2016
7	Spectral Library updated	NA	LH	03/30/2016
8	Minimum response factors met	YES	LH	03/30/2016
9	All SCV within +/- 20% (DOD)	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Vinyl Chloride 120.12%, Chloroethane 120.72%, t-butylbenzene 124.45%.*			
10	All SCV within +/- 30%	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Bromomethane 141.13%, methylene chloride 130.90%*			
11	NO Linear or Quadratic Fits Used	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Quadratic: Chloroethane* *Linear: Iodomethane, methylene chloride, trans-1,3-dichloropropene, chlorodibromomethane, 1,1,1,2-tetrachloroethane, bromoform.*			
12	NO Calibration points dropped	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Some low points were dropped, but all RLs were met.* *Upper 2 points for trichlorofluoromethane were dropped. Range is 0.2ug/L- 20ug/L*			
13	Additional Notes	YES	LH	03/30/2016
	Comments: *Gas SCV standard was expired, but recovered well.*			
14	Reviewer Approval (Reviewer)	YES	BB	03/30/2016

* = Indicates Automated Response from Element DataSyst

ZD CCC12

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-APR-2016 10:08
End Cal Date : 14-APR-2016 12:37
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160413g.b\8260041416.m
Last Edit : 14-Apr-2016 13:18 lanih
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem1\nt2.i\20160414.b\04141609.D
Level 2: \\target\share\chem1\nt2.i\20160414.b\04141610.D
Level 3: \\target\share\chem1\nt2.i\20160414.b\04141616.D
Level 4: \\target\share\chem1\nt2.i\20160414.b\04141615.D
Level 5: \\target\share\chem1\nt2.i\20160414.b\04141614.D
Level 6: \\target\share\chem1\nt2.i\20160414.b\04141613.D
Level 7: \\target\share\chem1\nt2.i\20160414.b\04141612.D
Level 8: \\target\share\chem1\nt2.i\20160414.b\04141611.D

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	40.000 Level 7	80.000 Level 8	RRF	% RSD	
1 Dichlorodifluoromethane	0.36923	0.54291	0.55410	0.51303	0.58534	0.57513	0.57592	0.60189	0.53969	13.743	
2 Chloromethane	+++++	0.68744	0.68248	0.67292	0.67668	0.67521	0.66710	0.67539	0.67675	0.971	
3 Vinyl Chloride	0.49230	0.61190	0.63621	0.63940	0.67637	0.67251	0.68051	0.69041	0.63745	10.120	
4 Bromomethane	0.35338	0.39610	0.46643	0.44408	0.45091	0.43207	0.43639	0.43536	0.42684	8.390	
5 Chloroethane	0.38321	0.41340	0.19293	0.16999	0.17544	0.16173	0.15217	0.14431	0.22415	48.535	<-
6 Trichlorofluoromethane	0.59766	0.74175	0.75360	0.73573	0.74750	0.72697	+++++	+++++	0.71720	8.266	
7 1,1-Dichloroethene	0.67396	0.80682	0.78825	0.79112	0.77881	0.76915	0.75527	0.73800	0.76267	5.485	
8 Carbon Disulfide	1.51311	1.64058	1.83679	1.83038	1.81435	1.76846	1.73454	1.62619	1.72055	6.778	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-APR-2016 10:08
End Cal Date : 14-APR-2016 12:37
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160413g.b\8260041416.m
Last Edit : 14-Apr-2016 13:18 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
9 112Trichlorol22Trifluoroethan	0.43682	0.52878	0.52759	0.53939	0.52654	0.51964			
	0.52400	0.53582					0.51732	6.403	
10 Iodomethane	+++++	+++++	0.14927	0.18114	0.28532	0.35290			
	0.42085	0.48149					0.31183	42.196	<-
11 Bromoethane	0.33628	0.36674	0.40332	0.39550	0.38402	0.38057			
	0.37246	0.38653					0.37818	5.438	
12 Acrolein	+++++	+++++	0.08093	0.08397	0.08211	0.08217			
	0.08368	0.08526					0.08302	1.888	
13 Methylene Chloride	+++++	+++++	0.56132	0.54720	0.56420	0.55697			
	0.55619	0.58279					0.56145	2.128	
14 Acetone	+++++	+++++	0.12819	0.12641	0.11759	0.11508			
	0.11598	0.11761					0.12014	4.708	
15 Trans-1,2-Dichloroethene	0.45532	0.56304	0.60844	0.59045	0.57589	0.56837			
	0.56487	0.57103					0.56217	8.144	
16 n-hexane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
17 Methyl tert butyl ether	1.13068	1.47248	1.48275	1.49698	1.50124	1.49168			
	1.48024	1.45715					1.43915	8.716	
18 1,1-Dichloroethane	0.80527	1.02806	1.09354	1.10778	1.06687	1.07143			
	1.06583	1.08918					1.04099	9.432	
19 Acrylonitrile	+++++	0.13647	0.16639	0.17431	0.17997	0.18533			
	0.19136	0.20064					0.17635	11.810	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-APR-2016 10:08
End Cal Date : 14-APR-2016 12:37
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160413g.b\8260041416.m
Last Edit : 14-Apr-2016 13:18 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
20 Vinyl Acetate	0.54389	0.80013	0.96629	1.01651	1.14097	1.16941			
	1.19867	1.19945					1.00441	23.107	<-
22 Cis-1,2-Dichloroethene	0.46837	0.61879	0.60933	0.65081	0.63961	0.63737			
	0.64594	0.68184					0.61901	10.440	
23 2,2-Dichloropropane	0.63744	0.70536	0.72292	0.78302	0.83074	0.84943			
	0.87434	0.90471					0.78849	11.784	
24 Bromochloromethane	0.20497	0.25626	0.27275	0.29945	0.29270	0.29483			
	0.29808	0.31323					0.27903	12.436	
25 Chloroform	0.79719	0.96066	1.01399	1.03307	1.00977	1.02304			
	1.01159	1.02780					0.98464	8.017	
26 Carbon Tetrachloride	0.24888	0.34143	0.34919	0.37874	0.42745	0.44537			
	0.48267	0.50519					0.39736	21.260	<-
28 1,1,1-Trichloroethane	0.68220	0.80151	0.85537	0.87441	0.92119	0.93017			
	0.94143	0.96121					0.87094	10.617	
30 1,1-Dichloropropene	0.37210	0.46657	0.49784	0.52850	0.51567	0.50361			
	0.52795	0.54156					0.49423	11.028	
29 2-Butanone	+++++	+++++	0.21596	0.22860	0.22273	0.22695			
	0.22873	0.23354					0.22609	2.679	
31 Benzene	1.26215	1.55393	1.57856	1.64571	1.60411	1.54472			
	1.51805	1.45189					1.51989	7.832	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-APR-2016 10:08
End Cal Date : 14-APR-2016 12:37
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160413g.b\8260041416.m
Last Edit : 14-Apr-2016 13:18 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD
	40.000 Level 7	80.000 Level 8						
35 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
34 1,2-Dichloroethane	0.37927	0.47190	0.49465	0.50527	0.49316	0.47740		
	0.48298	0.48601					0.47383	8.361
36 Trichloroethene	0.33816	0.38358	0.39468	0.42041	0.40634	0.40018		
	0.41310	0.43762					0.39926	7.430
38 Dibromomethane	0.14383	0.19573	0.19006	0.20732	0.20415	0.19483		
	0.20489	0.21624					0.19463	11.368
39 1,2-Dichloropropane	0.28716	0.35523	0.36499	0.37790	0.38470	0.37011		
	0.37621	0.39894					0.36440	9.283
40 Bromodichloromethane	0.29170	0.36651	0.39338	0.42125	0.45653	0.46582		
	0.48392	0.50286					0.42275	16.572
173 2-Pentanone	+++++	+++++	0.04007	0.04352	0.04734	0.04722		
	0.05045	0.05561					0.04737	11.389
42 Cis 1,3-dichloropropene	0.32220	0.42358	0.44769	0.51375	0.55705	0.56255		
	0.59270	0.62136					0.50511	19.890
41 2-Chloroethyl Vinyl Ether	+++++	0.14772	0.17668	0.19641	0.21616	0.22015		
	0.23223	0.24792					0.20532	16.748
44 Toluene	0.85167	0.98291	1.00791	1.01983	1.00112	0.96002		
	0.98868	0.99598					0.97601	5.462
45 4-Methyl-2-Pentanone	+++++	+++++	0.11401	0.12588	0.12776	0.12770		
	0.13220	0.12942					0.12616	5.010

ARI Labs, Inc.

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Method file : \\target\share\chem1\nt2.i\20160413g.b\8260041416.m
Last Edit : 14-Apr-2016 13:18 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
46 Tetrachloroethene	0.36866	0.46287	0.46607	0.46820	0.45067	0.46004			
	0.47791	0.48624					0.45508	8.035	
47 Trans 1,3-Dichloropropene	0.22696	0.32096	0.36686	0.40474	0.47627	0.48321			
	0.51819	0.53337					0.41632	25.627	<-
48 1,1,2-Trichloroethane	0.19655	0.30049	0.29528	0.31793	0.31579	0.31144			
	0.32111	0.34194					0.30007	14.705	
49 Chlorodibromomethane	0.18875	0.23166	0.26123	0.29668	0.34167	0.37024			
	0.39776	0.42127					0.31366	26.401	<-
50 1,3-Dichloropropane	0.39096	0.56956	0.60469	0.62326	0.60667	0.60431			
	0.61979	0.62508					0.58054	13.538	
51 1,2-Dibromoethane	0.18433	0.25073	0.26764	0.29303	0.30704	0.30135			
	0.31016	0.33166					0.28074	16.539	
52 2-Hexanone	+++++	+++++	0.21861	0.22701	0.24226	0.24523			
	0.24318	0.22791					0.23403	4.685	
54 Chlorobenzene	1.00150	1.20484	1.24562	1.23104	1.17757	1.18558			
	1.18629	1.10816					1.16757	6.743	
55 Ethyl Benzene	0.54452	0.65614	0.64636	0.68672	0.65860	0.67176			
	0.68029	0.67837					0.65285	7.027	
56 1,1,1,2-Tetrachloroethane	0.23124	0.29026	0.31552	0.32333	0.36397	0.38578			
	0.40956	0.42161					0.34266	18.879	
57 m,p-xylene	0.61497	0.76453	0.82623	0.83258	0.82052	0.81953			
	0.78279	0.69555					0.76959	10.048	

ARI Labs, Inc.

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Last Edit : 14-Apr-2016 13:18 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
58 o-Xylene	0.56851	0.67934	0.76027	0.78117	0.79028	0.78669			
	0.79748	0.80135					0.74563	10.956	
59 Styrene	0.86789	1.06873	1.21127	1.28487	1.33923	1.35127			
	1.25101	1.24770					1.20275	13.404	
60 Bromoform	0.15674	0.24171	0.23825	0.25970	0.34238	0.37205			
	0.42302	0.45684					0.31134	33.258	<-
61 Isopropyl Benzene	2.86527	3.62846	3.78215	3.74691	3.81354	3.59057			
	3.45860	2.93373					3.47740	10.786	
63 Bromobenzene	0.71164	0.94124	0.93226	0.96750	0.94122	0.91380			
	0.94450	0.96296					0.91439	9.146	
64 N-Propyl Benzene	3.32099	4.13041	4.24493	4.27934	4.28327	4.00054			
	3.81716	3.10394					3.89757	11.672	
82 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
65 1,1,2,2-Tetrachloroethane	0.46539	0.67920	0.74526	0.73068	0.75846	0.74656			
	0.76917	0.78115					0.70948	14.560	
66 2-Chloro Toluene	2.38495	2.88535	3.06556	2.96485	2.97519	2.85156			
	2.84144	2.63954					2.82605	7.713	
67 1,3,5-Trimethyl Benzene	2.26435	2.92458	3.05951	3.12777	3.20222	3.02604			
	2.95963	2.57026					2.89180	10.943	
68 1,2,3-Trichloropropane	0.13951	0.23907	0.24282	0.24622	0.24245	0.24011			
	0.25076	0.25909					0.23250	16.403	

ARI Labs, Inc.

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Last Edit : 14-Apr-2016 13:18 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
69 Trans-1,4-Dichloro 2-Butene	+++++	+++++	0.14241	0.16833	0.18542	0.18754			
	0.19671	0.21227					0.18212	13.291	
70 4-Chloro Toluene	2.26372	2.83525	2.80127	2.82033	2.74592	2.60434			
	2.58295	2.32916					2.62287	8.504	
71 T-Butyl Benzene	1.94456	2.53323	2.70391	2.72460	2.78654	2.62031			
	2.58541	2.37721					2.53447	10.661	
72 1,2,4-Trimethylbenzene	2.29776	2.92997	3.07183	3.13509	3.22240	3.06603			
	2.97235	2.62920					2.91558	10.504	
73 S-Butyl Benzene	2.88817	3.67818	3.88334	3.85852	3.96679	3.71795			
	3.51947	3.01484					3.56591	11.357	
74 4-Isopropyl Toluene	2.25910	2.97601	3.14468	3.27334	3.36141	3.17913			
	3.08364	2.69690					2.99678	12.009	
75 1,3-Dichlorobenzene	1.47476	1.84268	1.86698	1.85287	1.84846	1.75375			
	1.77751	1.73464					1.76896	7.291	
77 1,4-Dichlorobenzene	1.70609	1.96623	1.91896	1.88774	1.85357	1.78329			
	1.75708	1.72670					1.82496	5.226	
78 N-Butyl Benzene	2.10656	2.56111	2.76143	2.71292	2.87719	2.77973			
	2.72302	2.40921					2.61640	9.608	
80 1,2-Dichlorobenzene	1.50438	1.71053	1.78458	1.73707	1.71038	1.65080			
	1.67968	1.63778					1.67690	5.012	
81 1,2-Dibromo 3-Chloropropane	+++++	0.07751	0.07174	0.09114	0.11248	0.11816			
	0.13032	0.13500					0.10519	23.999	<-

ARI Labs, Inc.

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Integrator : HP RTE
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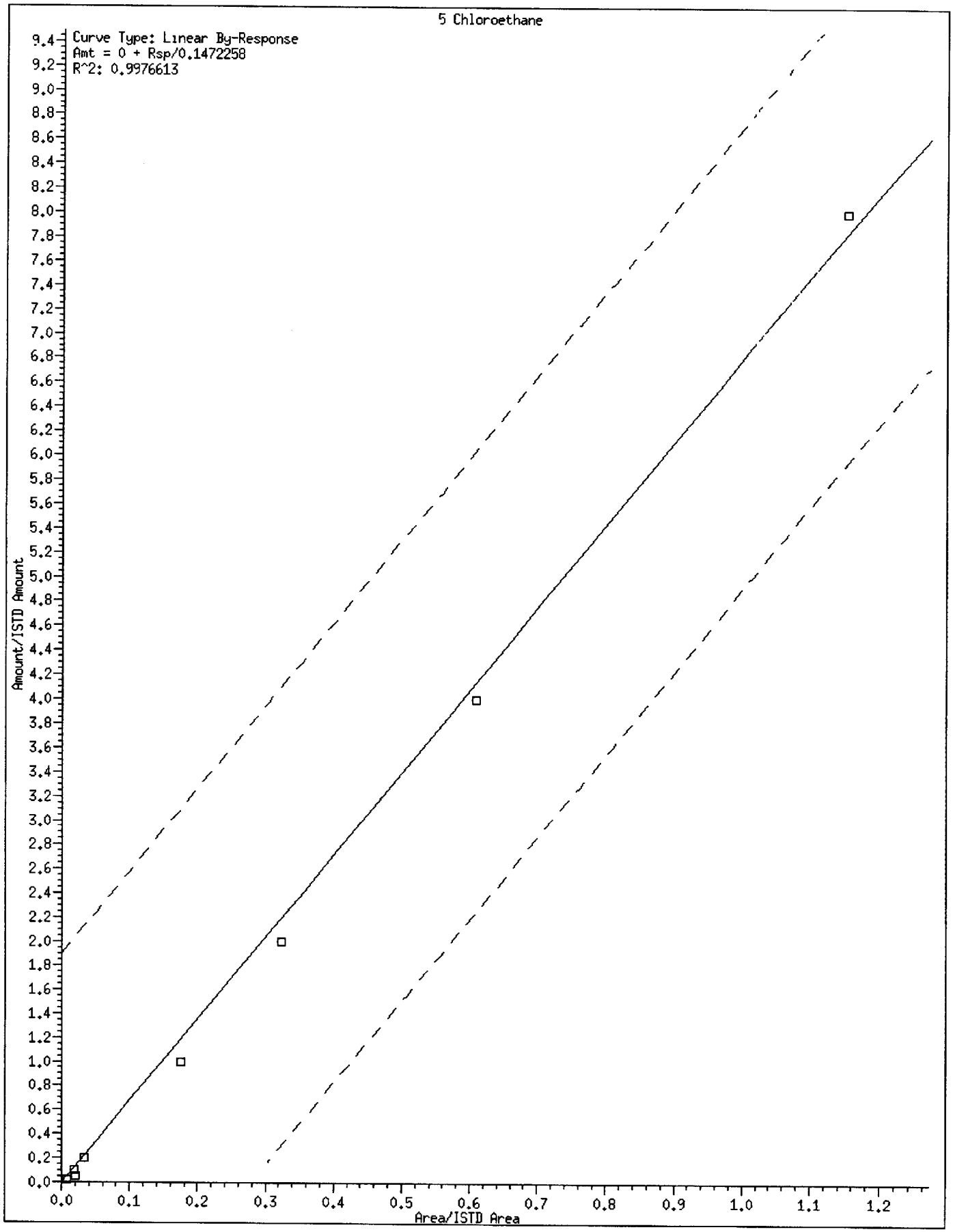
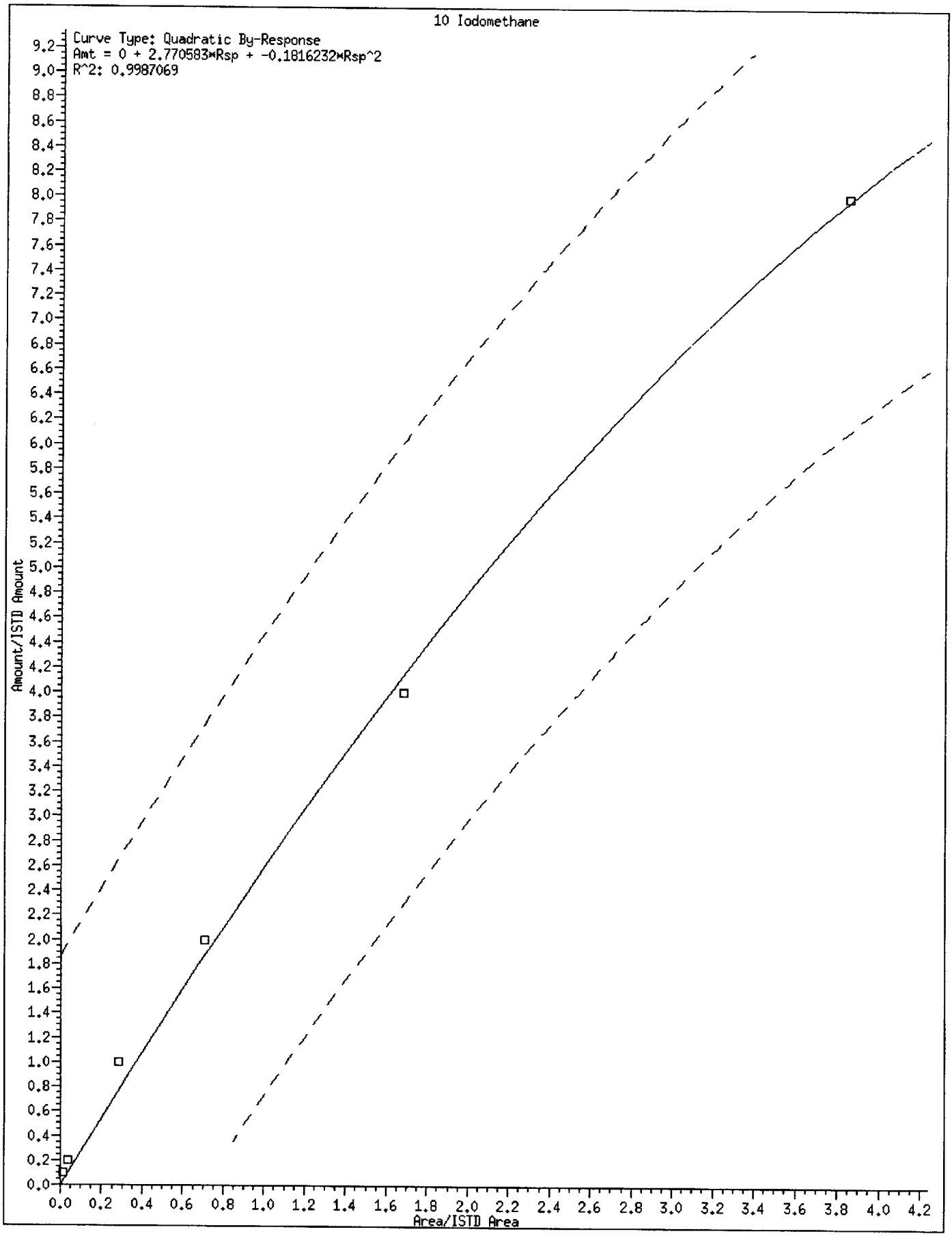
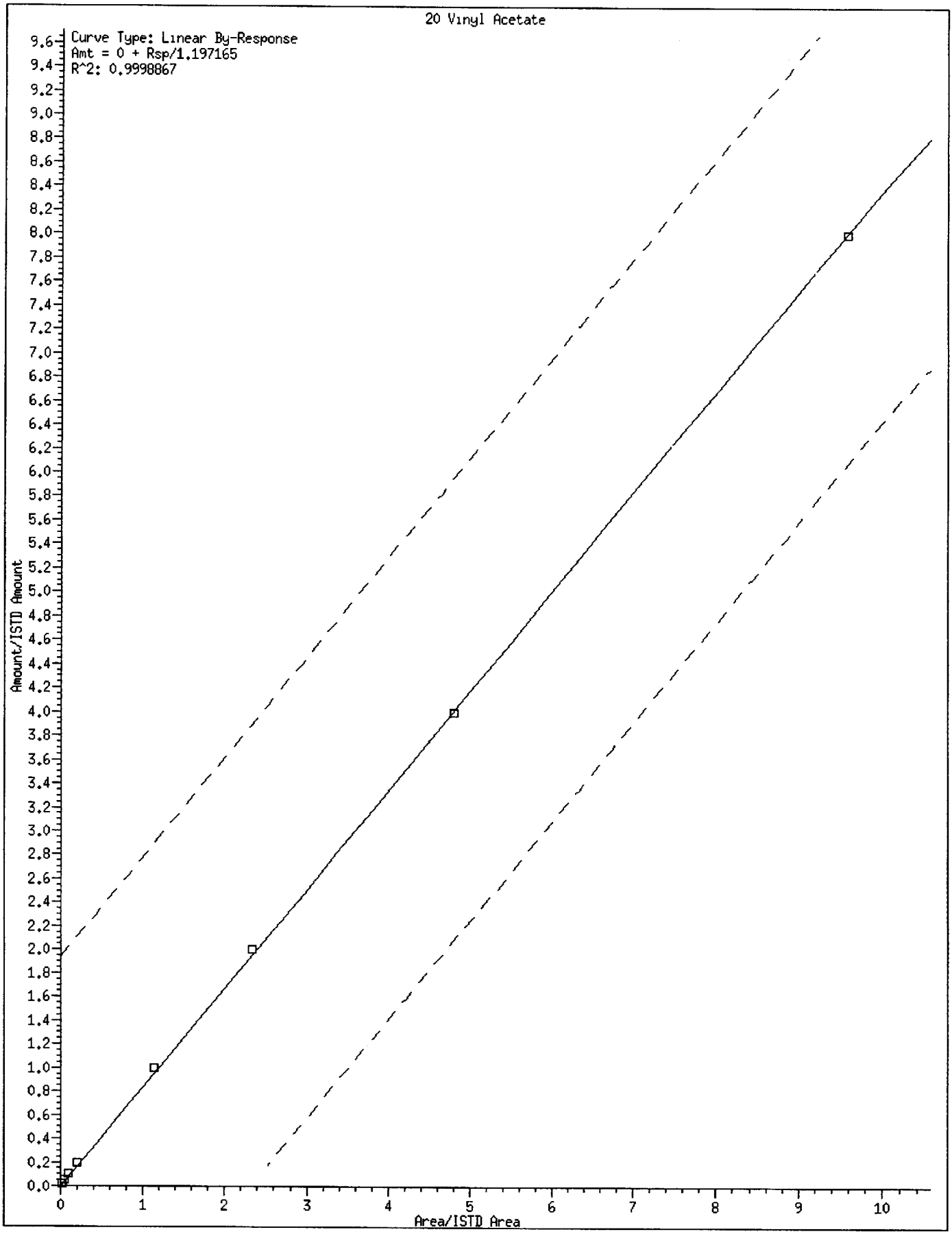
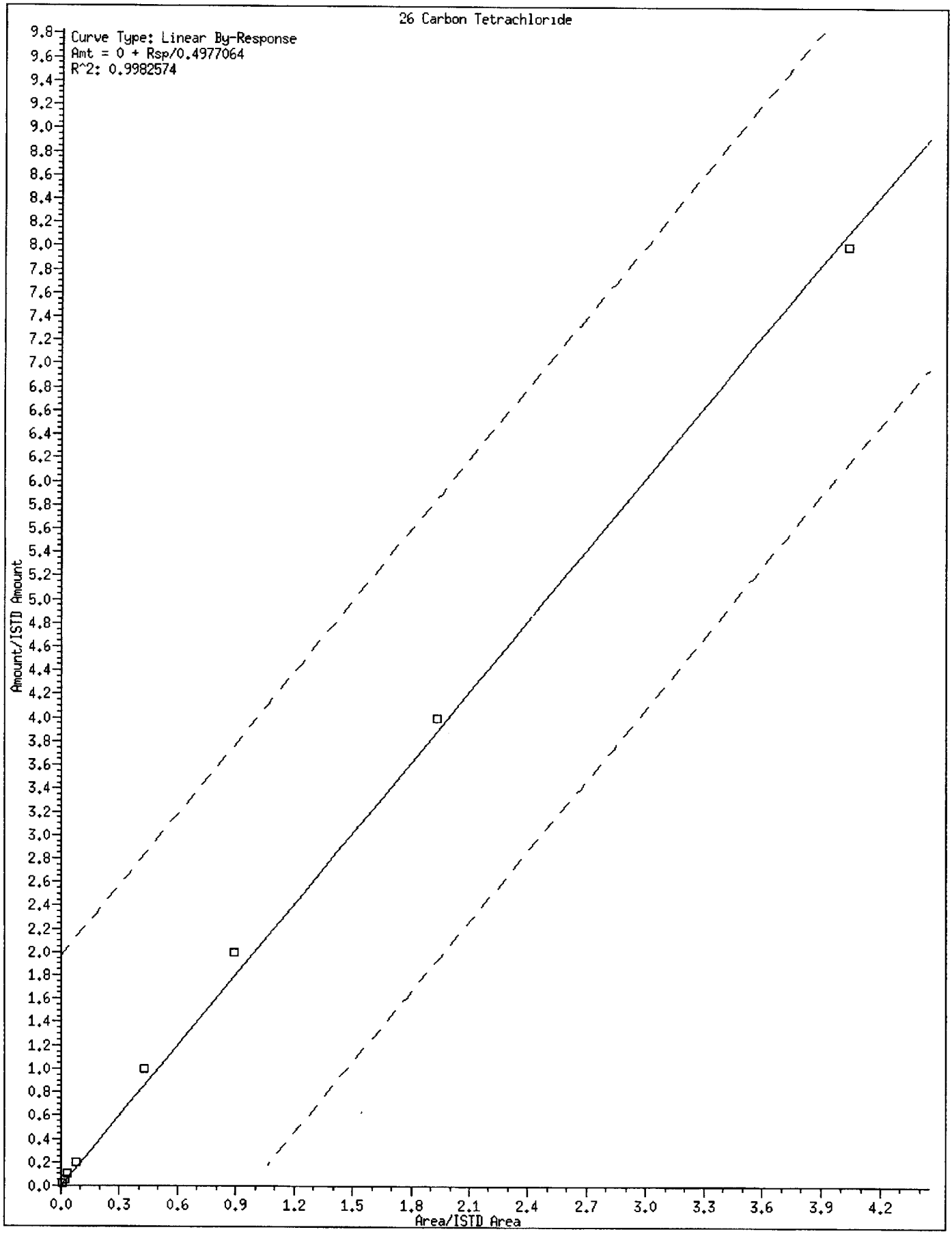
Last Edit : 14-Apr-2016 13:18 lanih
Curve Type : Average

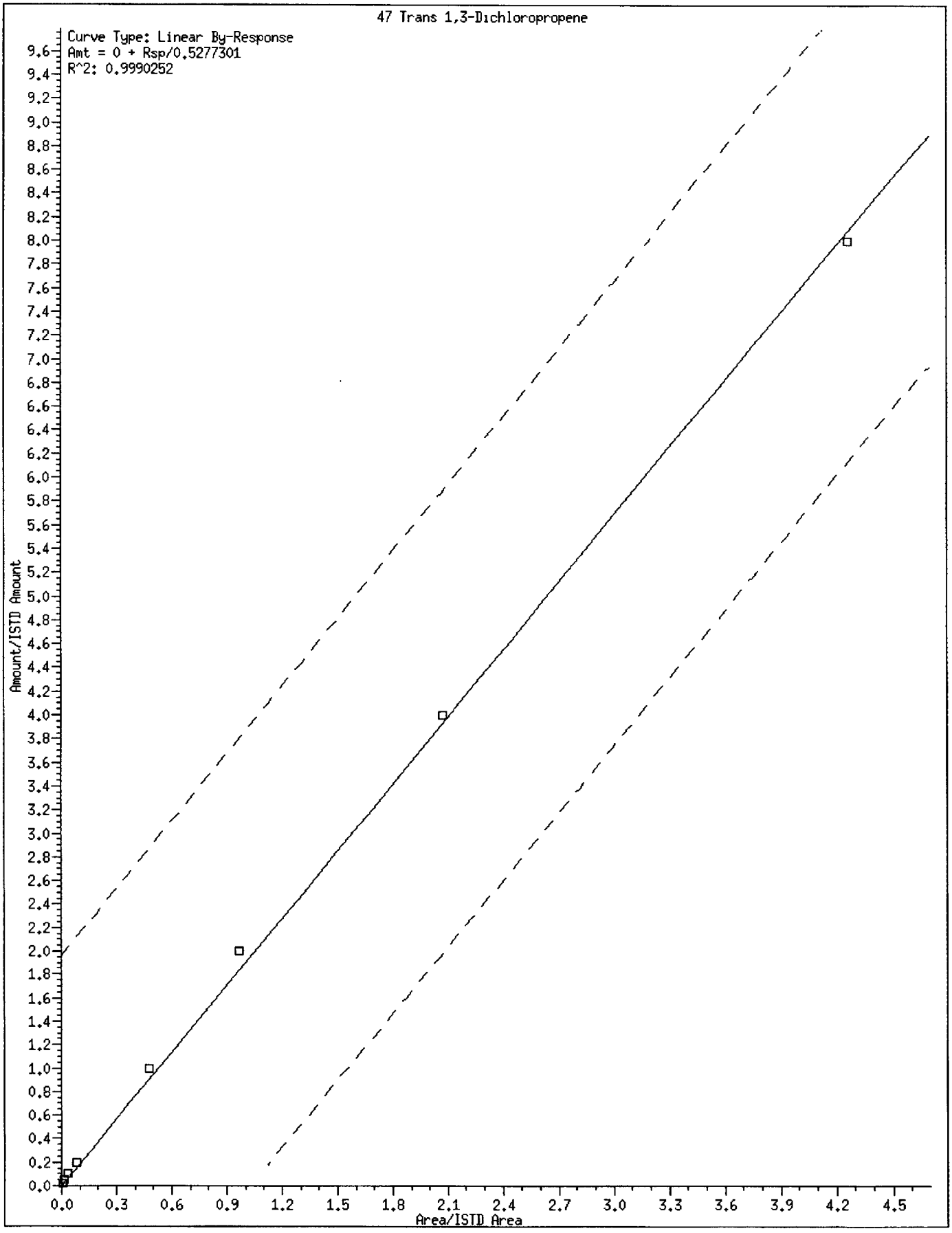
Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD
	40.000 Level 7	80.000 Level 8						
83 Hexachloro 1,3-Butadiene	+++++	0.42766	0.42521	0.44904	0.44229	0.43469		
	0.43883	0.44516					0.43755	2.028
84 1,2,4-Trichlorobenzene	+++++	1.06734	1.14715	1.11649	1.14447	1.11313		
	1.13889	1.17671					1.12917	3.058
85 Naphthalene	+++++	2.08468	2.43621	2.48414	2.67930	2.59491		
	2.55727	2.42009					2.46523	7.753
86 1,2,3-Trichlorobenzene	+++++	1.02915	1.08243	1.07499	1.09010	1.04105		
	1.03303	1.07205					1.06040	2.378
$ 27 Dibromofluoromethane	0.44630	0.45397	0.46349	0.46357	0.48295	0.49043		
	0.49474	0.48323					0.47233	3.780
$ 33 d4-1,2-Dichloroethane	0.55894	0.57091	0.55525	0.56563	0.57146	0.58489		
	0.56289	0.54152					0.56394	2.274
$ 43 d8-Toluene	1.20044	1.19090	1.17743	1.21582	1.21300	1.20961		
	1.21173	1.22205					1.20512	1.222
$ 62 4-Bromofluorobenzene	0.40234	0.40080	0.41143	0.41097	0.40819	0.41791		
	0.41767	0.41121					0.41007	1.521
$ 79 d4-1,2-Dichlorobenzene	0.95743	0.93993	0.95074	0.94483	0.97657	0.94538		
	0.96596	0.94275					0.95295	1.344

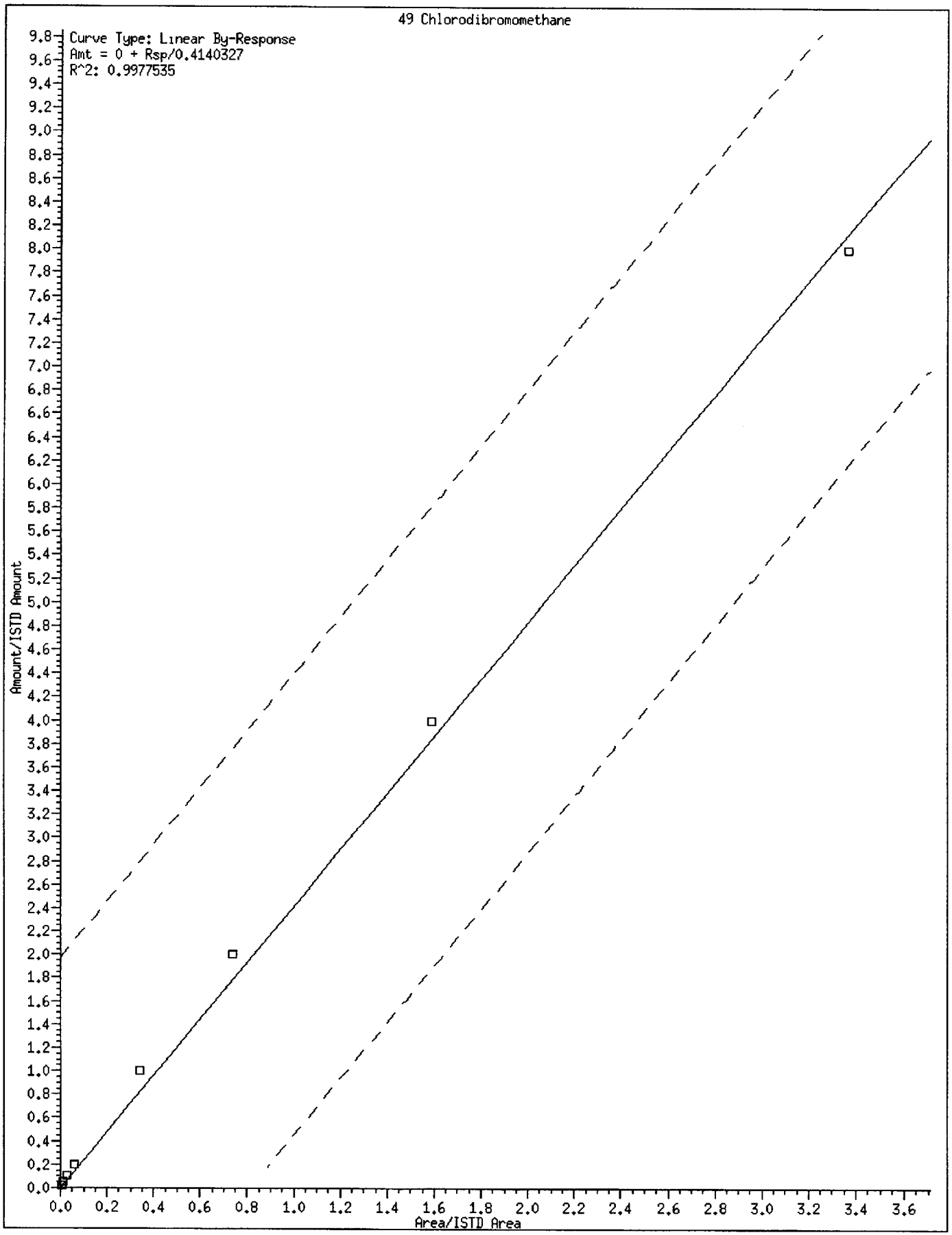

5 Chloroethane
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.1472258
R^2: 0.9976613
Amount/ISTD Amount
Area/ISTD Area
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2

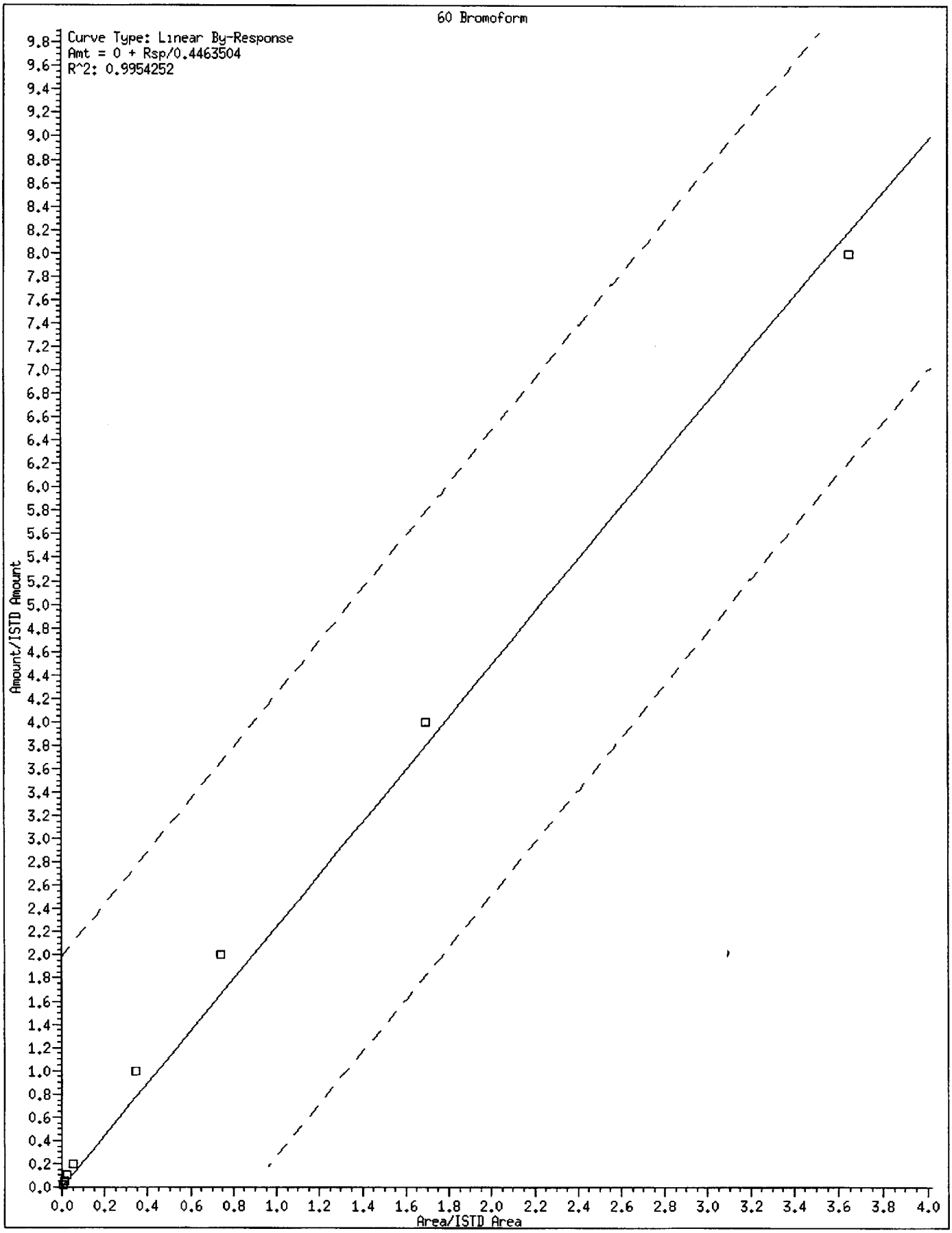

10 Iodomethane
Curve Type: Quadratic By-Response
Amt = 0 + 2.770583*Rsp + -0.1816232*Rsp^2
R^2: 0.9987069
Amount/ISTD Amount
Area/ISTD Area

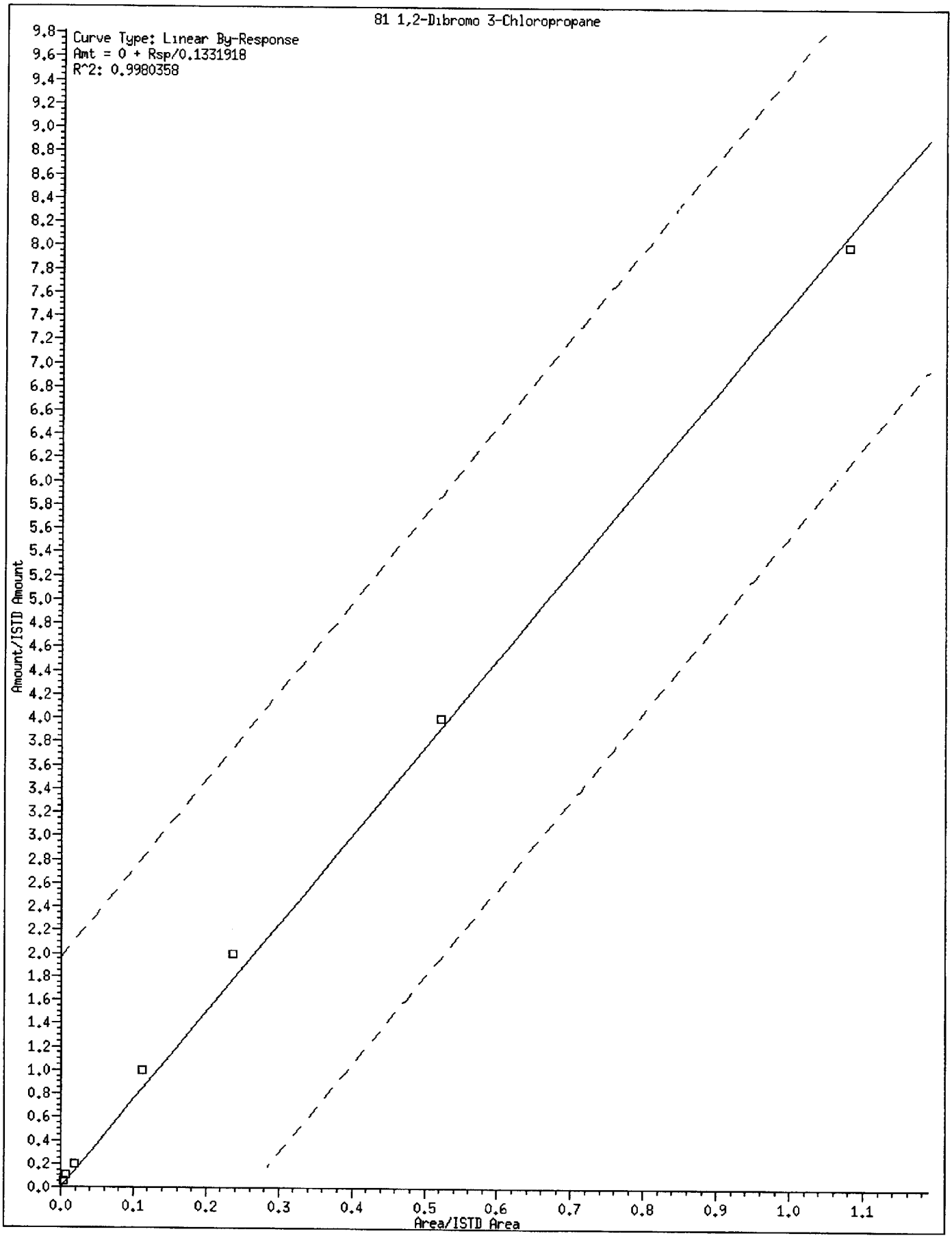

20 Vinyl Acetate
Curve Type: Linear By-Response
Amt = 0 + Rsp/1.197165
R^2: 0.9998867
Amount/ISTD Amount
Area/ISTD Area


26 Carbon Tetrachloride
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.4977064
R^2: 0.9982574
Amount/ISTD Amount
Area/ISTD Area
0.0
0.3
0.6
0.9
1.2
1.5
1.8
2.1
2.4
2.7
3.0
3.3
3.6
3.9
4.2


47 Trans 1,3-Dichloropropene
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.5277301
R^2: 0.9990252
Amount/ISTD Amount
Area/ISTD Area
0.0 0.3 0.6 0.9 1.2 1.5 1.8 2.1 2.4 2.7 3.0 3.3 3.6 3.9 4.2 4.5


49 Chlorodibromomethane
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.4140327
R^2: 0.9977535
Amount/ISTD Amount
Area/ISTD Area


60 Bromoform
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.4463504
R^2: 0.9954252
Amount/ISTD Amount
Area/ISTD Area


81 1,2-Dibromo 3-Chloropropane
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.1331918
R^2: 0.9980358
Amount/ISTD Amount
Area/ISTD Area
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1

ARI Labs, Inc.

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Quant Method : ISTD
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Method file : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Last Edit : 14-Apr-2016 13:14 lanih

Calibration File Names:
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Level 2: \\target\share\chem1\nt2.i\20160414.b\04141610.D
Level 3: \\target\share\chem1\nt2.i\20160414.b\04141616.D
Level 4: \\target\share\chem1\nt2.i\20160414.b\04141615.D
Level 5: \\target\share\chem1\nt2.i\20160414.b\04141614.D
Level 6: \\target\share\chem1\nt2.i\20160414.b\04141613.D
Level 7: \\target\share\chem1\nt2.i\20160414.b\04141612.D
Level 8: \\target\share\chem1\nt2.i\20160414.b\04141611.D

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
1 Dichlorodifluoromethane	0.36923	0.54291	0.55410	0.51303	0.58534	0.57513					
	0.57592	0.60189					AVRG		0.53969		13.74291
2 Chloromethane	+++++	0.68744	0.68248	0.67292	0.67668	0.67521					
	0.66710	0.67539					AVRG		0.67675		0.97121
3 Vinyl Chloride	0.49230	0.61190	0.63621	0.63940	0.67637	0.67251					
	0.68051	0.69041					AVRG		0.63745		10.11965

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Method file : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
4 Bromomethane	0.35338	0.39610	0.46643	0.44408	0.45091	0.43207					
	0.43639	0.43536					AVRG		0.42684		8.38974
5 Chloroethane	2466	5998	5634	9925	49016	95902					
	182129	328919					LINR	0.000e+000	0.14723		0.99766
6 Trichlorofluoromethane	0.59766	0.74175	0.75360	0.73573	0.74750	0.72697					
	+++++	+++++					AVRG		0.71720		8.26636
7 1,1-Dichloroethene	0.67396	0.80682	0.78825	0.79112	0.77881	0.76915					
	0.75527	0.73800					AVRG		0.76267		5.48457
8 Carbon Disulfide	1.51311	1.64058	1.83679	1.83038	1.81435	1.76846					
	1.73454	1.62619					AVRG		1.72055		6.77775
9 112Trichloro122Trifluoroethan	0.43682	0.52878	0.52759	0.53939	0.52654	0.51964					
	0.52400	0.53582					AVRG		0.51732		6.40320
10 Iodomethane	+++++	+++++	4359	10576	79717	209259					
	503696	1097438					QUAD	0.000e+000	2.77058	-0.18162	0.99871

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-APR-2016 10:08
End Cal Date : 14-APR-2016 12:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Last Edit : 14-Apr-2016 13:14 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
11 Bromoethane	0.33628	0.36674	0.40332	0.39550	0.38402	0.38057					
	0.37246	0.38653					AVRG		0.37818		5.43818
12 Acrolein	+++++	+++++	0.08093	0.08397	0.08211	0.08217					
	0.08368	0.08526					AVRG		0.08302		1.88782
13 Methylene Chloride	+++++	+++++	0.56132	0.54720	0.56420	0.55697					
	0.55619	0.58279					AVRG		0.56145		2.12765
14 Acetone	+++++	+++++	0.12819	0.12641	0.11759	0.11508					
	0.11598	0.11761					AVRG		0.12014		4.70825
15 Trans-1,2-Dichloroethene	0.45532	0.56304	0.60844	0.59045	0.57589	0.56837					
	0.56487	0.57103					AVRG		0.56217		8.14361
16 n-hexane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
17 Methyl tert butyl ether	1.13068	1.47248	1.48275	1.49698	1.50124	1.49168					
	1.48024	1.45715					AVRG		1.43915		8.71596

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	40.0000 Level 7	80.0000 Level 8									
18 1,1-Dichloroethane	0.80527	1.02806	1.09354	1.10778	1.06687	1.07143					
	1.06583	1.08918					AVRG		1.04099		9.43221
19 Acrylonitrile	+++++	0.13647	0.16639	0.17431	0.17997	0.18533					
	0.19136	0.20064					AVRG		0.17635		11.81039
21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
20 Vinyl Acetate	3500	11609	28218	59348	318780	693432					
	1434616	2733870					LINR	0.000e+000	1.19717		0.99989
22 Cis-1,2-Dichloroethene	0.46837	0.61879	0.60933	0.65081	0.63961	0.63737					
	0.64594	0.68184					AVRG		0.61901		10.43955
23 2,2-Dichloropropane	0.63744	0.70536	0.72292	0.78302	0.83074	0.84943					
	0.87434	0.90471					AVRG		0.78849		11.78361
24 Bromochloromethane	0.20497	0.25626	0.27275	0.29945	0.29270	0.29483					
	0.29808	0.31323					AVRG		0.27903		12.43585

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	40.0000 Level 7	80.0000 Level 8									
25 Chloroform	0.79719	0.96066	1.01399	1.03307	1.00977	1.02304					
	1.01159	1.02780					AVRG		0.98464		8.01651
26 Carbon Tetrachloride	2464	7623	15869	33763	183821	415819					
	893365	1783936					LINR	0.000e+000	0.49771		0.99826
28 1,1,1-Trichloroethane	0.68220	0.80151	0.85537	0.87441	0.92119	0.93017					
	0.94143	0.96121					AVRG		0.87094		10.61679
30 1,1-Dichloropropene	0.37210	0.46657	0.49784	0.52850	0.51567	0.50361					
	0.52795	0.54156					AVRG		0.49423		11.02763
29 2-Butanone	+++++	+++++	0.21596	0.22860	0.22273	0.22695					
	0.22873	0.23354					AVRG		0.22609		2.67897
31 Benzene	1.26215	1.55393	1.57856	1.64571	1.60411	1.54472					
	1.51805	1.45189					AVRG		1.51989		7.83227
35 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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	40.0000 Level 7	80.0000 Level 8									
34 1,2-Dichloroethane	0.37927	0.47190	0.49465	0.50527	0.49316	0.47740					
	0.48298	0.48601					AVRG		0.47383		8.36052
36 Trichloroethene	0.33816	0.38358	0.39468	0.42041	0.40634	0.40018					
	0.41310	0.43762					AVRG		0.39926		7.43047
38 Dibromomethane	0.14383	0.19573	0.19006	0.20732	0.20415	0.19483					
	0.20489	0.21624					AVRG		0.19463		11.36805
39 1,2-Dichloropropane	0.28716	0.35523	0.36499	0.37790	0.38470	0.37011					
	0.37621	0.39894					AVRG		0.36440		9.28307
40 Bromodichloromethane	0.29170	0.36651	0.39338	0.42125	0.45653	0.46582					
	0.48392	0.50286					AVRG		0.42275		16.57191
173 2-Pentanone	+++++	+++++	0.04007	0.04352	0.04734	0.04722					
	0.05045	0.05561					AVRG		0.04737		11.38943
42 Cis 1,3-dichloropropene	0.32220	0.42358	0.44769	0.51375	0.55705	0.56255					
	0.59270	0.62136					AVRG		0.50511		19.89046

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	40.0000 Level 7	80.0000 Level 8									
41 2-Chloroethyl Vinyl Ether	+++++	0.14772	0.17668	0.19641	0.21616	0.22015					
	0.23223	0.24792					AVRG		0.20532		16.74774
44 Toluene	0.85167	0.98291	1.00791	1.01983	1.00112	0.96002					
	0.98868	0.99598					AVRG		0.97601		5.46162
45 4-Methyl-2-Pentanone	+++++	+++++	0.11401	0.12588	0.12776	0.12770					
	0.13220	0.12942					AVRG		0.12616		5.01032
46 Tetrachloroethene	0.36866	0.46287	0.46607	0.46820	0.45067	0.46004					
	0.47791	0.48624					AVRG		0.45508		8.03480
47 Trans 1,3-Dichloropropene	2247	7166	16672	36081	204812	451153					
	959112	1883445					LINR	0.000e+000	0.52773		0.99903
48 1,1,2-Trichloroethane	0.19655	0.30049	0.29528	0.31793	0.31579	0.31144					
	0.32111	0.34194					AVRG		0.30007		14.70529
49 Chlorodibromomethane	1684	4653	10595	24125	136018	309211					
	669656	1393226					LINR	0.000e+000	0.41403		0.99775

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	40.0000 Level 7	80.0000 Level 8									
50 1,3-Dichloropropane	0.39096	0.56956	0.60469	0.62326	0.60667	0.60431					
	0.61979	0.62508					AVRG		0.58054		13.53845
51 1,2-Dibromoethane	0.18433	0.25073	0.26764	0.29303	0.30704	0.30135					
	0.31016	0.33166					AVRG		0.28074		16.53903
52 2-Hexanone	+++++	+++++	0.21861	0.22701	0.24226	0.24523					
	0.24318	0.22791					AVRG		0.23403		4.68535
54 Chlorobenzene	1.00150	1.20484	1.24562	1.23104	1.17757	1.18558					
	1.18629	1.10816					AVRG		1.16757		6.74345
55 Ethyl Benzene	0.54452	0.65614	0.64636	0.68672	0.65860	0.67176					
	0.68029	0.67837					AVRG		0.65285		7.02666
56 1,1,1,2-Tetrachloroethane	0.23124	0.29026	0.31552	0.32333	0.36397	0.38578					
	0.40956	0.42161					AVRG		0.34266		18.87889
57 m,p-xylene	0.61497	0.76453	0.82623	0.83258	0.82052	0.81953					
	0.78279	0.69555					AVRG		0.76959		10.04773

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	40.0000 Level 7	80.0000 Level 8									
58 o-Xylene	0.56851	0.67934	0.76027	0.78117	0.79028	0.78669					
	0.79748	0.80135					AVRG		0.74563		10.95606
59 Styrene	0.86789	1.06873	1.21127	1.28487	1.33923	1.35127					
	1.25101	1.24770					AVRG		1.20275		13.40432
60 Bromoform	746	2557	5161	11432	73472	174435					
	390585	840558					LINR	0.000e+000	0.44635		0.99543
61 Isopropyl Benzene	2.86527	3.62846	3.78215	3.74691	3.81354	3.59057					
	3.45860	2.93373					AVRG		3.47740		10.78602
63 Bromobenzene	0.71164	0.94124	0.93226	0.96750	0.94122	0.91380					
	0.94450	0.96296					AVRG		0.91439		9.14559
64 N-Propyl Benzene	3.32099	4.13041	4.24493	4.27934	4.28327	4.00054					
	3.81716	3.10394					AVRG		3.89757		11.67225
82 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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	40.0000 Level 7	80.0000 Level 8									
65 1,1,2,2-Tetrachloroethane	0.46539	0.67920	0.74526	0.73068	0.75846	0.74656					
	0.76917	0.78115					AVRG		0.70948		14.56009
66 2-Chloro Toluene	2.38495	2.88535	3.06556	2.96485	2.97519	2.85156					
	2.84144	2.63954					AVRG		2.82605		7.71343
67 1,3,5-Trimethyl Benzene	2.26435	2.92458	3.05951	3.12777	3.20222	3.02604					
	2.95963	2.57026					AVRG		2.89180		10.94274
68 1,2,3-Trichloropropane	0.13951	0.23907	0.24282	0.24622	0.24245	0.24011					
	0.25076	0.25909					AVRG		0.23250		16.40345
69 Trans-1,4-Dichloro 2-Butene	+++++	+++++	0.14241	0.16833	0.18542	0.18754					
	0.19671	0.21227					AVRG		0.18212		13.29084
70 4-Chloro Toluene	2.26372	2.83525	2.80127	2.82033	2.74592	2.60434					
	2.58295	2.32916					AVRG		2.62287		8.50396
71 T-Butyl Benzene	1.94456	2.53323	2.70391	2.72460	2.78654	2.62031					
	2.58541	2.37721					AVRG		2.53447		10.66127

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	40.0000 Level 7	80.0000 Level 8									
72 1,2,4-Trimethylbenzene	2.29776	2.92997	3.07183	3.13509	3.22240	3.06603					
	2.97235	2.62920					AVRG		2.91558		10.50386
73 S-Butyl Benzene	2.88817	3.67818	3.88334	3.85852	3.96679	3.71795					
	3.51947	3.01484					AVRG		3.56591		11.35661
74 4-Isopropyl Toluene	2.25910	2.97601	3.14468	3.27334	3.36141	3.17913					
	3.08364	2.69690					AVRG		2.99678		12.00921
75 1,3-Dichlorobenzene	1.47476	1.84268	1.86698	1.85287	1.84846	1.75375					
	1.77751	1.73464					AVRG		1.76896		7.29099
77 1,4-Dichlorobenzene	1.70609	1.96623	1.91896	1.88774	1.85357	1.78329					
	1.75708	1.72670					AVRG		1.82496		5.22645
78 N-Butyl Benzene	2.10656	2.56111	2.76143	2.71292	2.87719	2.77973					
	2.72302	2.40921					AVRG		2.61640		9.60769
80 1,2-Dichlorobenzene	1.50438	1.71053	1.78458	1.73707	1.71038	1.65080					
	1.67968	1.63778					AVRG		1.67690		5.01199

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	40.0000 Level 7	80.0000 Level 8									
81 1,2-Dibromo 3-Chloropropane	+++++	820	1554	4012	24137	55399					
	120326	248395					LINR	0.000e+000	0.13319		0.99804
83 Hexachloro 1,3-Butadiene	+++++	0.42766	0.42521	0.44904	0.44229	0.43469					
	0.43883	0.44516					AVRG		0.43755		2.02769
84 1,2,4-Trichlorobenzene	+++++	1.06734	1.14715	1.11649	1.14447	1.11313					
	1.13889	1.17671					AVRG		1.12917		3.05770
85 Naphthalene	+++++	2.08468	2.43621	2.48414	2.67930	2.59491					
	2.55727	2.42009					AVRG		2.46523		7.75273
86 1,2,3-Trichlorobenzene	+++++	1.02915	1.08243	1.07499	1.09010	1.04105					
	1.03303	1.07205					AVRG		1.06040		2.37822
$ 27 Dibromofluoromethane	0.44630	0.45397	0.46349	0.46357	0.48295	0.49043					
	0.49474	0.48323					AVRG		0.47233		3.77975
$ 33 d4-1,2-Dichloroethane	0.55894	0.57091	0.55525	0.56563	0.57146	0.58489					
	0.56289	0.54152					AVRG		0.56394		2.27434

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	40.0000 Level 7	80.0000 Level 8									
$ 43 d8-Toluene	1.20044	1.19090	1.17743	1.21582	1.21300	1.20961					
	1.21173	1.22205					AVRG		1.20512		1.22185
$ 62 4-Bromofluorobenzene	0.40234	0.40080	0.41143	0.41097	0.40819	0.41791					
	0.41767	0.41121					AVRG		0.41007		1.52143
$ 79 d4-1,2-Dichlorobenzene	0.95743	0.93993	0.95074	0.94483	0.97657	0.94538					
	0.96596	0.94275					AVRG		0.95295		1.34443

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Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Batch File: \\target\share\chem1\nt2.i\20160414.b
Inst ID: nt2.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08
FILENAME:	04141609	04141610	04141611	04141612	04141613	04141614	04141615	04141616
INJ.DATE:	14-APR-2016	14-APR-2016	14-APR-2016	14-APR-2016	14-APR-2016	14-APR-2016	14-APR-2016	14-APR-2016
INJ.TIME:	10:08	10:29	10:51	11:12	11:33	11:54	12:16	12:37

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Dichlorodifluoromethan	1.434	1.435	1.422	1.424	1.435	1.434	1.434	1.433	1.434	1.327-1.541	1.431	0.005
2 Chloromethane	1.600	1.601	1.588	1.590	1.589	1.599	1.588	1.599	1.599	1.493-1.706	1.594	0.006
3 Vinyl Chloride	1.671	1.672	1.659	1.661	1.672	1.670	1.671	1.670	1.670	1.564-1.777	1.668	0.005
4 Bromomethane	1.955	1.956	1.942	1.945	1.956	1.954	1.955	1.954	1.954	1.848-2.061	1.952	0.005
5 Chloroethane	2.073	2.062	2.049	2.052	2.062	2.061	2.061	2.061	2.061	1.954-2.167	2.060	0.007
6 Trichlorofluoromethane	2.203	2.193	2.155	2.170	2.181	2.191	2.180	2.191	2.191	2.085-2.298	2.183	0.015
7 1,1-Dichloroethene	2.700	2.701	2.664	2.679	2.689	2.700	2.688	2.700	2.700	2.593-2.806	2.690	0.013
8 Carbon Disulfide	2.712	2.701	2.664	2.691	2.701	2.700	2.700	2.700	2.700	2.593-2.806	2.696	0.014
9 112Trichloro122Trifluo	2.747	2.749	2.712	2.738	2.749	2.747	2.747	2.747	2.747	2.641-2.854	2.742	0.013
10 Iodomethane	2.842	2.843	2.806	2.833	2.831	2.842	2.830	2.842	2.842	2.735-2.948	2.834	0.012
11 Bromoethane	2.984	2.985	2.960	2.975	2.973	2.984	2.972	2.984	2.984	2.877-3.090	2.977	0.009
12 Acrolein	3.090	3.092	3.090	3.093	3.092	3.090	3.091	3.090	3.090	2.984-3.197	3.091	0.001
13 Methylene Chloride	3.339	3.340	3.327	3.341	3.340	3.339	3.339	3.350	3.339	3.232-3.445	3.340	0.006
14 Acetone	3.434	3.435	3.445	3.436	3.435	3.434	3.434	3.433	3.434	3.327-3.540	3.436	0.004
15 Trans-1,2-Dichloroethe	3.505	3.506	3.493	3.495	3.506	3.505	3.505	3.504	3.505	3.398-3.611	3.502	0.005
16 n-hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.954	3.847-4.061	+++++	+++++
17 Methyl tert butyl ethe	3.658	3.660	3.658	3.649	3.648	3.658	3.659	3.658	3.658	3.552-3.765	3.656	0.005

Reviewer 1 _____ Date: 4/14/16
Reviewer 2 _____ Date: 4/14/16

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Batch File: \\target\share\chem1\nt2.i\20160414.b
Inst ID: nt2.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 1,1-Dichloroethane	4.096	4.098	4.084	4.099	4.098	4.096	4.096	4.096	4.096	3.990-4.203	4.095	0.005
	19 Acrylonitrile	4.179	4.181	4.179	4.170	4.169	4.179	4.179	4.179	4.179	4.072-4.285	4.177	0.005
	21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.560	4.453-4.666	+++++	+++++
	20 Vinyl Acetate	4.368	4.370	4.356	4.359	4.358	4.357	4.357	4.368	4.357	4.250-4.463	4.362	0.006
	22 Cis-1,2-Dichloroethene	4.581	4.571	4.569	4.572	4.571	4.570	4.570	4.581	4.570	4.463-4.676	4.573	0.005
	23 2,2-Dichloropropane	4.652	4.654	4.652	4.655	4.654	4.652	4.653	4.652	4.652	4.546-4.759	4.653	0.001
	24 Bromochloromethane	4.735	4.737	4.735	4.738	4.737	4.735	4.735	4.735	4.735	4.629-4.842	4.736	0.001
	25 Chloroform	4.806	4.808	4.806	4.809	4.808	4.806	4.806	4.806	4.806	4.700-4.913	4.807	0.001
	26 Carbon Tetrachloride	4.889	4.891	4.889	4.891	4.890	4.889	4.889	4.889	4.889	4.775-5.003	4.890	0.001
$	27 Dibromofluoromethane	4.948	4.950	4.948	4.951	4.950	4.948	4.948	4.948	4.948	4.842-5.055	4.949	0.001
	28 1,1,1-Trichloroethane	4.948	4.950	4.948	4.951	4.950	4.948	4.948	4.948	4.948	4.842-5.055	4.949	0.001
	30 1,1-Dichloropropene	5.055	5.044	5.043	5.045	5.044	5.043	5.043	5.054	5.043	4.928-5.157	5.046	0.005
	29 2-Butanone	5.078	5.080	5.066	5.069	5.068	5.066	5.079	5.078	5.066	4.960-5.173	5.073	0.006
	31 Benzene	5.244	5.245	5.244	5.235	5.245	5.244	5.244	5.244	5.244	5.130-5.358	5.243	0.004
*	32 Pentafluorobenzene	5.327	5.328	5.327	5.329	5.328	5.327	5.327	5.326	5.327	5.220-5.434	5.327	0.001
$	33 d4-1,2-Dichloroethane	5.351	5.352	5.350	5.353	5.352	5.350	5.351	5.350	5.350	5.244-5.457	5.351	0.001
	35 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.693	5.579-5.807	+++++	+++++
	34 1,2-Dichloroethane	5.410	5.411	5.398	5.400	5.399	5.410	5.410	5.409	5.410	5.295-5.524	5.406	0.006
	36 Trichloroethene	5.682	5.683	5.682	5.684	5.683	5.682	5.682	5.681	5.682	5.567-5.796	5.682	0.001
*	37 1,4-Difluorobenzene	5.717	5.719	5.717	5.720	5.719	5.717	5.718	5.717	5.717	5.603-5.831	5.718	0.001
	38 Dibromomethane	5.990	5.991	5.989	5.992	5.991	5.989	5.990	5.989	5.989	5.875-6.103	5.990	0.001
	39 1,2-Dichloropropane	6.061	6.062	6.060	6.063	6.062	6.060	6.061	6.060	6.060	5.946-6.174	6.061	0.001

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Batch File: \\target\share\chem1\nt2.i\20160414.b
Inst ID: nt2.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	40 Bromodichloromethane	6.120	6.109	6.108	6.110	6.109	6.108	6.108	6.107	6.108	5.993-6.222	6.110	0.004
	173 2-Pentanone	6.356	6.358	6.344	6.347	6.346	6.344	6.345	6.344	6.344	6.230-6.458	6.348	0.006
	42 Cis 1,3-dichloropropen	6.557	6.559	6.557	6.560	6.559	6.557	6.558	6.557	6.557	6.443-6.671	6.558	0.001
$	43 d8-Toluene	6.688	6.689	6.687	6.690	6.689	6.688	6.688	6.687	6.688	6.573-6.802	6.688	0.001
	41 2-Chloroethyl Vinyl Et	6.534	6.523	6.522	6.524	6.523	6.522	6.522	6.522	6.522	6.407-6.636	6.524	0.004
	44 Toluene	6.723	6.725	6.723	6.726	6.724	6.723	6.723	6.723	6.723	6.608-6.837	6.724	0.001
	45 4-Methyl-2-Pentanone	7.007	6.997	6.995	6.998	6.997	6.995	6.995	6.995	6.995	6.881-7.109	6.997	0.004
	46 Tetrachloroethene	6.995	6.997	6.983	6.986	6.985	6.995	6.995	6.995	6.995	6.840-7.151	6.991	0.006
	47 Trans 1,3-Dichloroprop	7.019	7.020	7.019	7.021	7.020	7.019	7.019	7.019	7.019	6.904-7.133	7.020	0.001
	48 1,1,2-Trichloroethane	7.137	7.127	7.137	7.128	7.127	7.125	7.126	7.137	7.125	7.011-7.239	7.130	0.006
	49 Chlorodibromomethane	7.256	7.257	7.255	7.258	7.257	7.256	7.256	7.255	7.256	7.100-7.411	7.256	0.001
	50 1,3-Dichloropropane	7.327	7.328	7.315	7.317	7.316	7.315	7.327	7.326	7.315	7.159-7.470	7.321	0.006
	51 1,2-Dibromoethane	7.433	7.423	7.421	7.424	7.423	7.421	7.421	7.421	7.421	7.306-7.535	7.423	0.004
	52 2-Hexanone	7.587	7.588	7.587	7.577	7.576	7.575	7.587	7.586	7.575	7.419-7.730	7.583	0.006
*	53 d5-Chlorobenzene	7.776	7.778	7.776	7.779	7.778	7.776	7.776	7.776	7.776	7.620-7.932	7.777	0.001
	54 Chlorobenzene	7.788	7.790	7.788	7.790	7.789	7.788	7.788	7.788	7.788	7.632-7.943	7.789	0.001
	55 Ethyl Benzene	7.812	7.801	7.812	7.802	7.801	7.800	7.800	7.811	7.800	7.644-7.955	7.805	0.006
	56 1,1,1,2-Tetrachloroeth	7.835	7.837	7.835	7.838	7.837	7.835	7.836	7.835	7.835	7.680-7.991	7.836	0.001
	57 m,p-xylene	7.906	7.908	7.906	7.909	7.908	7.906	7.907	7.906	7.906	7.751-8.062	7.907	0.001
	58 o-Xylene	8.214	8.216	8.214	8.216	8.215	8.214	8.214	8.214	8.214	8.058-8.369	8.215	0.001
	59 Styrene	8.261	8.263	8.261	8.252	8.251	8.250	8.262	8.261	8.250	8.094-8.405	8.258	0.006
	60 Bromoform	8.285	8.287	8.285	8.276	8.275	8.285	8.285	8.285	8.285	8.095-8.475	8.283	0.005
	61 Isopropyl Benzene	8.439	8.440	8.439	8.441	8.440	8.439	8.439	8.438	8.439	8.249-8.628	8.439	0.001
$	62 4-Bromofluorobenzene	8.652	8.653	8.652	8.654	8.653	8.652	8.652	8.651	8.652	8.496-8.807	8.652	0.001

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Batch File: \\target\share\chem1\nt2.i\20160414.b
Inst ID: nt2.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	63 Bromobenzene	8.735	8.736	8.735	8.725	8.724	8.735	8.735	8.734	8.735	8.545-8.924	8.732	0.005
	64 N-Propyl Benzene	8.747	8.748	8.746	8.737	8.748	8.746	8.747	8.746	8.746	8.557-8.936	8.746	0.004
	82 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.074	8.918-9.229	+++++	+++++
	65 1,1,2,2-Tetrachloroeth	8.806	8.807	8.806	8.796	8.795	8.794	8.794	8.805	8.794	8.604-8.983	8.800	0.006
	66 2-Chloro Toluene	8.865	8.866	8.865	8.855	8.854	8.865	8.865	8.864	8.865	8.675-9.054	8.862	0.005
	67 1,3,5-Trimethyl Benzen	8.889	8.890	8.888	8.891	8.890	8.888	8.889	8.888	8.888	8.699-9.078	8.889	0.001
	68 1,2,3-Trichloropropane	8.900	8.902	8.900	8.903	8.902	8.900	8.901	8.900	8.900	8.711-9.090	8.901	0.001
	69 Trans-1,4-Dichloro 2-B	+++++	8.937	8.936	8.926	8.925	8.936	8.936	8.935	8.936	8.746-9.125	8.933	0.005
	70 4-Chloro Toluene	8.995	8.985	8.983	8.986	8.985	8.983	8.983	8.983	8.983	8.793-9.173	8.985	0.004
	71 T-Butyl Benzene	9.125	9.127	9.125	9.128	9.127	9.125	9.125	9.125	9.125	8.935-9.315	9.126	0.001
	72 1,2,4-Trimethylbenzene	9.184	9.174	9.184	9.175	9.174	9.172	9.173	9.172	9.172	8.983-9.362	9.176	0.005
	73 S-Butyl Benzene	9.255	9.257	9.255	9.258	9.257	9.255	9.256	9.255	9.255	9.066-9.445	9.256	0.001
	74 4-Isopropyl Toluene	9.362	9.363	9.362	9.364	9.363	9.362	9.362	9.361	9.362	9.172-9.551	9.362	0.001
	75 1,3-Dichlorobenzene	9.433	9.434	9.433	9.423	9.422	9.421	9.421	9.432	9.421	9.231-9.610	9.428	0.006
*	76 d4-1,4-Dichlorobenzene	9.480	9.482	9.480	9.483	9.481	9.480	9.480	9.480	9.480	9.290-9.670	9.481	0.001
	77 1,4-Dichlorobenzene	9.492	9.493	9.492	9.494	9.493	9.492	9.492	9.492	9.492	9.302-9.681	9.493	0.001
	78 N-Butyl Benzene	9.693	9.695	9.693	9.684	9.683	9.693	9.693	9.693	9.693	9.503-9.882	9.691	0.005
$	79 d4-1,2-Dichlorobenzene	9.811	9.813	9.811	9.814	9.813	9.811	9.812	9.811	9.811	9.622-10.001	9.812	0.001
	80 1,2-Dichlorobenzene	9.823	9.813	9.823	9.814	9.813	9.811	9.812	9.811	9.811	9.622-10.001	9.815	0.005
	81 1,2-Dibromo 3-Chloropr	+++++	10.452	10.450	10.441	10.440	10.450	10.451	10.450	10.450	10.261-10.640	10.448	0.005
	83 Hexachloro 1,3-Butadie	10.983	10.973	10.971	10.973	10.972	10.971	10.971	10.971	10.971	10.781-11.160	10.973	0.004
	84 1,2,4-Trichlorobenzene	11.007	10.996	10.995	10.997	10.996	10.995	10.995	10.994	10.995	10.805-11.184	10.997	0.004
	85 Naphthalene	11.279	11.268	11.267	11.257	11.268	11.267	11.267	11.266	11.267	11.077-11.456	11.268	0.006

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Batch File: \\target\share\chem1\nt2.i\20160414.b
Inst ID: nt2.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
86 1,2,3-Trichlorobenzene	11.433	11.422	11.421	11.423	11.422	11.421	11.421	11.420	11.421	11.231-11.610	11.423	0.004

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160414.b

ARI Job No.: SED0 Method: 8260041416.m Instrument: nt2.i Date: 14-APR-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1008	04141609.D	SED0031-CAL1	VSTD0.2	1	Bromomethane, Acetone, Iodomethane, Vinyl Acetate, 1,2-Dichloropropane, 2-Chloroethyl Vinyl Ether, Chlorobenzene,
1029	04141610.D	SED0031-CAL2	VSTD0.5	1	Chloroethane, 2-Hexanone, Dichlorodifluoromethane,
1051	04141611.D	SED0031-CAL8	VSTD80	1	Chloromethane, Vinyl Chloride, Bromomethane, Dichlorodifluoromethane,
1112	04141612.D	SED0031-CAL7	VSTD40	1	Dichlorodifluoromethane,
1133	04141613.D	SED0031-CAL6	VSTD20	1	Vinyl Chloride, 1,4-Dichlorobenzene,
1154	04141614.D	SED0031-CAL5	VSTD10	1	Vinyl Chloride, 1,4-Dichlorobenzene, Dichlorodifluoromethane,
1216	04141615.D	SED0031-CAL4	VSTD02	1	Dichlorodifluoromethane,
1237	04141616.D	SED0031-CAL3	VSTD01	1	Vinyl Chloride, Methylene Chloride, 1,2-Dichloroethane, Dichlorodifluoromethane, 2-Pentanone,
1258	04141617.D	SED0031-SCV1	SCV	1	NO MANUAL INTEGRATION

Data File: \\target\share\chem1\nt2.1\20160414.b\04141608.D

Date : 14-APR-2016 09:42

Client ID: 10

Instrument: nt2.1

Sample Info: SED0031-TUN1,10,10,0,

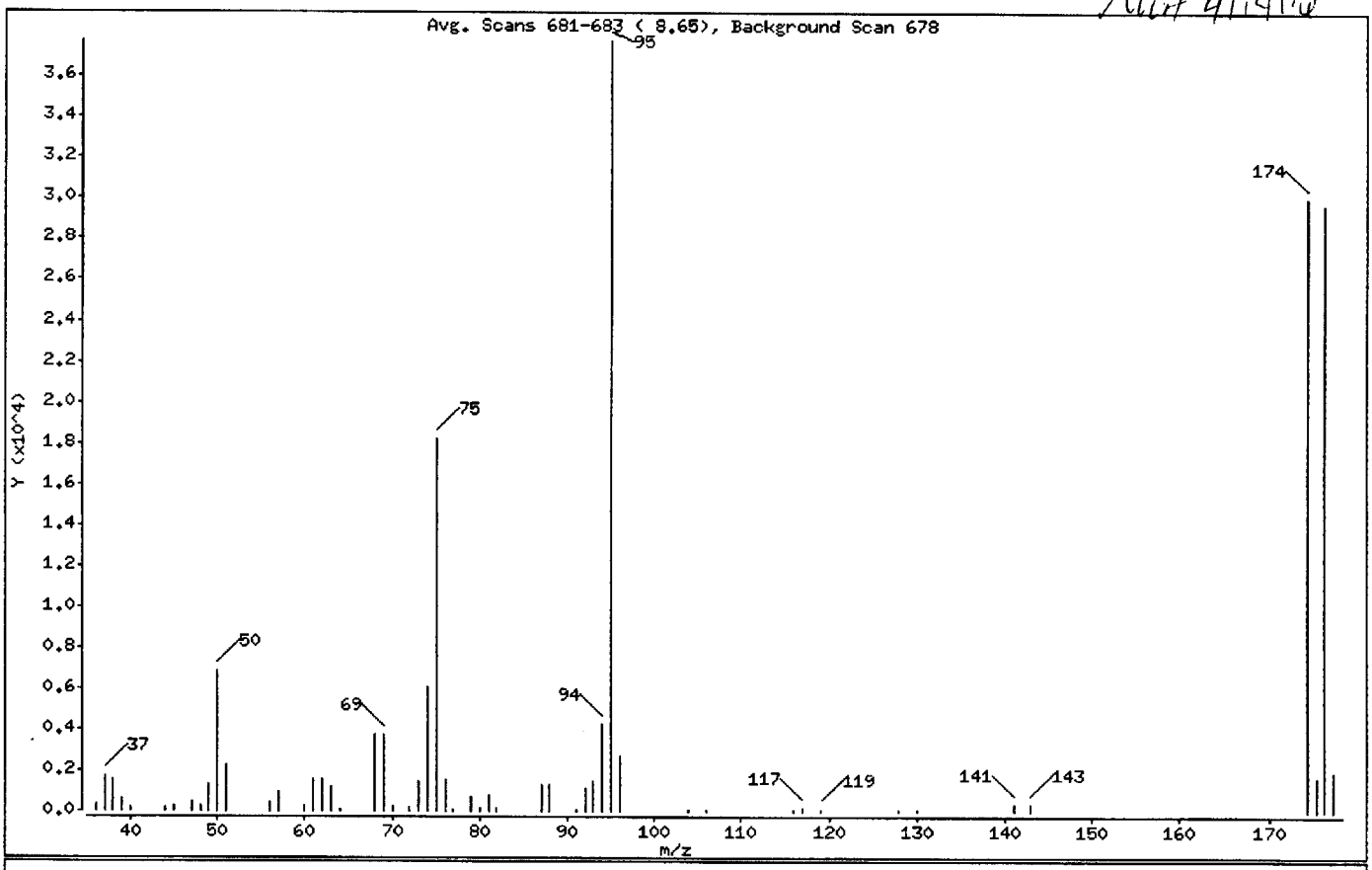
Operator: LH

Column phase: RTXVMS

Column diameter: 0.18

1 Bromofluorobenzene

Rin 4/14/16



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.07
75	30.00 - 60.00% of mass 95	48.18
96	5.00 - 9.00% of mass 95	7.12
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	79.64
175	5.00 - 9.00% of mass 174	4.47 (5.61)
176	95.00 - 101.00% of mass 174	78.71 (98.83)
177	5.00 - 9.00% of mass 176	5.15 (6.54)

Data File: \\target\share\chem1\nt2.i\20160414.b\04141608.D

Date : 14-APR-2016 09:42

Client ID: 10

Instrument: nt2.i

Sample Info: SED0031-TUN1,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18

Data File: 04141608.D
Spectrum: Avg. Scans 681-683 (8.65), Background Scan 678
Location of Maximum: 95.00
Number of points: 53

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	304	60.00	277	79.00	726	116.00	85
37.00	1713	61.00	1596	80.00	188	117.00	174
38.00	1582	62.00	1598	81.00	762	119.00	110
39.00	588	63.00	1186	82.00	150	128.00	73
40.00	213	64.00	68	87.00	1333	130.00	83
44.00	193	68.00	3742	88.00	1338	141.00	384
45.00	241	69.00	3776	91.00	89	143.00	357
47.00	429	70.00	224	92.00	1120	174.00	30072
48.00	273	72.00	160	93.00	1466	175.00	1687
49.00	1316	73.00	1514	94.00	4223	176.00	29720
50.00	6825	74.00	6064	95.00	37760	177.00	1944
51.00	2231	75.00	18192	96.00	2690		
56.00	444	76.00	1572	104.00	89		
57.00	928	77.00	92	106.00	90		

Data File: \\target\share\chem1\nt2.i\20160414.b\04141608.D

Date : 14-APR-2016 09:42

Client ID: 10

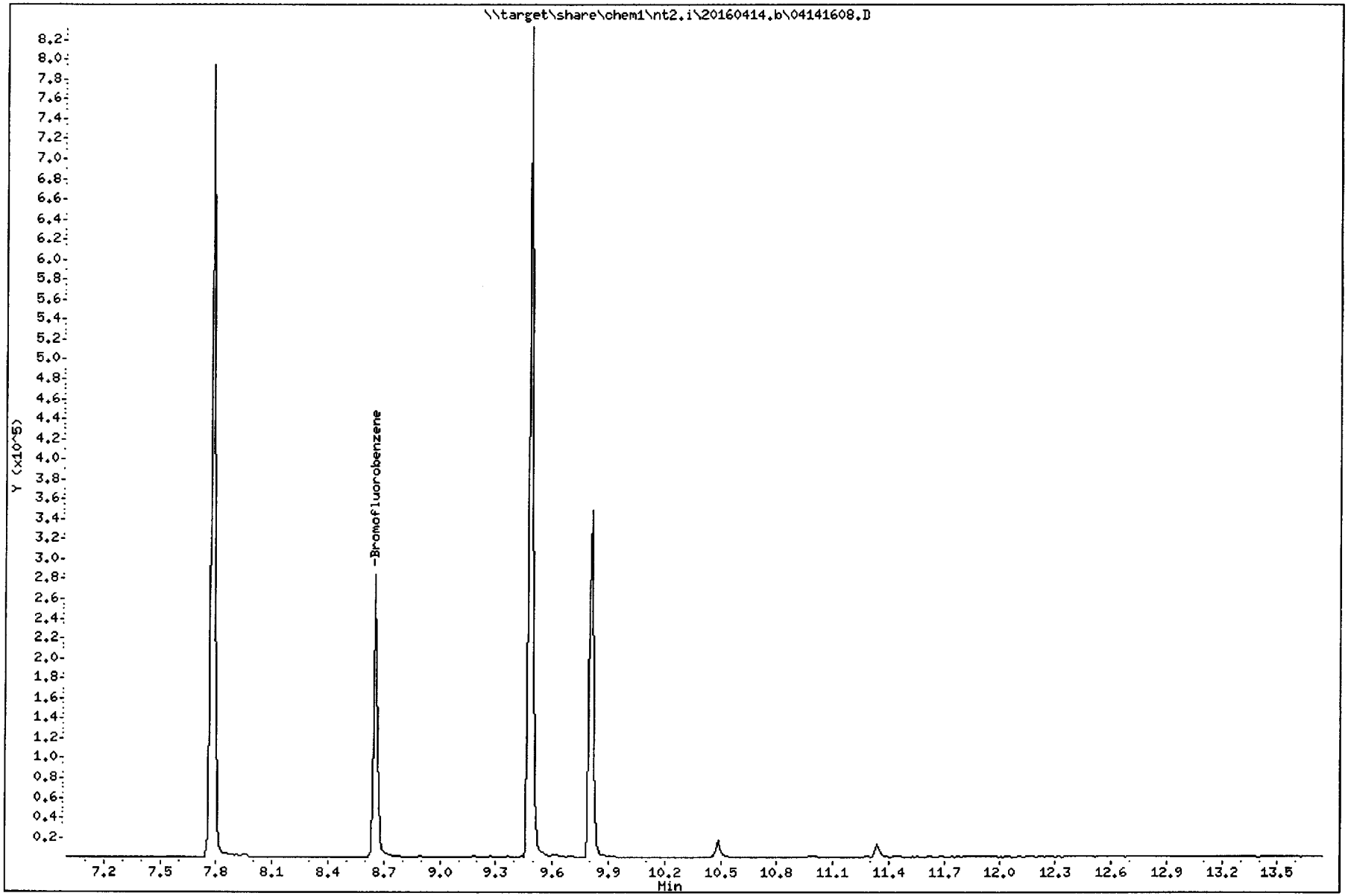
Instrument: nt2.i

Sample Info: SED0031-TUN1,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141609.D
Lab Smp Id: SED0031-CAL1 Client Smp ID: VSTD0.2
Inj Date : 14-APR-2016 10:08
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL1,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 7 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.433	1.434	(0.269)	2376	0.20000	0.1368
173	2-Pentanone	86	6.356	6.344	(1.112)	692	1.00000	0.2951
2	Chloromethane	50	1.599	1.599	(0.300)	4394	0.20000	0.2018(T)
3	Vinyl Chloride	62	1.670	1.670	(0.314)	3168	0.20000	0.1545
4	Bromomethane	94	1.954	1.954	(0.367)	2274	0.20000	0.1656(M)
5	Chloroethane	64	2.072	2.061	(0.389)	2466	0.20000	0.5206
6	Trichlorofluoromethane	101	2.203	2.191	(0.414)	3846	0.20000	0.1667
7	1,1-Dichloroethene	61	2.699	2.700	(0.507)	4337	0.20000	0.1767
8	Carbon Disulfide	76	2.711	2.700	(0.509)	9737	0.20000	0.1759(T)
9	112Trichloro122Trifluoroethane	101	2.747	2.747	(0.516)	2811	0.20000	0.1689
10	Iodomethane	142	2.841	2.842	(0.534)	668	0.20000	0.05751(M)
11	Bromoethane	108	2.983	2.984	(0.560)	2164	0.20000	0.1778
12	Acrolein	56	3.090	3.090	(0.580)	2107	1.00000	0.7888
13	Methylene Chloride	84	3.338	3.339	(0.627)	2979	0.20000	0.1649
14	Acetone	43	3.433	3.434	(0.645)	3559	1.00000	0.9207(M)
15	Trans-1,2-Dichloroethene	96	3.504	3.505	(0.658)	2930	0.20000	0.1620
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	7276	0.20000	0.1571
18	1,1-Dichloroethane	63	4.096	4.096	(0.769)	5182	0.20000	0.1547
19	Acrylonitrile	53	4.179	4.179	(0.785)	579	0.20000	0.1020(T)
20	Vinyl Acetate	43	4.368	4.357	(0.820)	3500	0.20000	0.09086(M)
22	Cis-1,2-Dichloroethene	96	4.581	4.570	(0.860)	3014	0.20000	0.1513
23	2,2-Dichloropropane	77	4.652	4.652	(0.873)	4102	0.20000	0.1617

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	24 Bromochloromethane	128	4.735	4.735	(0.889)	1319	0.20000	0.1469
	25 Chloroform	83	4.806	4.806	(0.902)	5130	0.20000	0.1619
	26 Carbon Tetrachloride	117	4.889	4.889	(0.855)	2464	0.20000	0.1000
$	27 Dibromofluoromethane	111	4.948	4.948	(0.929)	71799	5.00000	4.724
	28 1,1,1-Trichloroethane	97	4.948	4.948	(0.929)	4390	0.20000	0.1567
	29 2-Butanone	43	5.078	5.066	(0.953)	4029	1.00000	0.5539(T)
	30 1,1-Dichloropropene	75	5.054	5.043	(0.884)	3684	0.20000	0.1506
	31 Benzene	78	5.244	5.244	(0.917)	12496	0.20000	0.1661
*	32 Pentafluorobenzene	168	5.326	5.327	(1.000)	321754	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	89920	5.00000	4.956
	34 1,2-Dichloroethane	62	5.409	5.410	(0.946)	3755	0.20000	0.1601
	36 Trichloroethene	130	5.681	5.682	(0.994)	3348	0.20000	0.1694
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	495027	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	1424	0.20000	0.1478
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	2843	0.20000	0.1576(M)
	40 Bromodichloromethane	83	6.119	6.108	(1.070)	2888	0.20000	0.1380
	41 2-Chloroethyl Vinyl Ether	63	6.533	6.522	(1.143)	825	0.20000	0.08117(M)
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	3190	0.20000	0.1276
$	43 d8-Toluene	98	6.687	6.688	(1.170)	297126	5.00000	4.981
	44 Toluene	92	6.723	6.723	(1.176)	8432	0.20000	0.1745
	45 4-Methyl-2-Pentanone	58	7.007	6.995	(1.226)	3213	1.00000	0.5145(T)
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	3289	0.20000	0.1620
	47 Trans 1,3-Dichloropropene	75	7.018	7.019	(1.228)	2247	0.20000	0.08601
	48 1,1,2-Trichloroethane	97	7.137	7.125	(1.248)	1946	0.20000	0.1310
	49 Chlorodibromomethane	129	7.255	7.256	(0.933)	1684	0.20000	0.09118
	50 1,3-Dichloropropane	76	7.326	7.315	(0.942)	3488	0.20000	0.1347
	51 1,2-Dibromoethane	107	7.433	7.421	(1.300)	1825	0.20000	0.1313
	52 2-Hexanone	43	7.586	7.575	(0.976)	4522	1.00000	0.4332(T)
*	53 d5-Chlorobenzene	117	7.776	7.776	(1.000)	446081	10.0000	
	54 Chlorobenzene	112	7.788	7.788	(1.002)	8935	0.20000	0.1716(M)
	55 Ethyl Benzene	106	7.811	7.800	(1.005)	4858	0.20000	0.1668
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	2063	0.20000	0.1350
	57 m,p-xylene	106	7.906	7.906	(1.017)	10973	0.40000	0.3196
	58 o-Xylene	106	8.214	8.214	(1.056)	5072	0.20000	0.1525
	59 Styrene	104	8.261	8.250	(1.062)	7743	0.20000	0.1443
	60 Bromoform	173	8.285	8.285	(0.874)	746	0.20000	0.07023
	61 Isopropyl Benzene	105	8.438	8.439	(0.890)	13637	0.20000	0.1648
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	89739	5.00000	4.906
	63 Bromobenzene	156	8.734	8.734	(0.921)	3387	0.20000	0.1557
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	15806	0.20000	0.1704
	65 1,1,2,2-Tetrachloroethane	83	8.805	8.794	(0.929)	2215	0.20000	0.1312
	66 2-Chloro Toluene	91	8.864	8.865	(0.935)	11351	0.20000	0.1688
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	10777	0.20000	0.1566
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	664	0.20000	0.1200
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	8.995	8.983	(0.949)	10774	0.20000	0.1726
	71 T-Butyl Benzene	119	9.125	9.125	(0.963)	9255	0.20000	0.1534
	72 1,2,4-Trimethylbenzene	105	9.184	9.172	(0.969)	10936	0.20000	0.1576
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	13746	0.20000	0.1620
	74 4-Isopropyl Toluene	119	9.361	9.362	(0.988)	10752	0.20000	0.1508
	75 1,3-Dichlorobenzene	146	9.432	9.421	(0.995)	7019	0.20000	0.1667
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.480	(1.000)	237971	10.0000	
	77 1,4-Dichlorobenzene	146	9.492	9.492	(1.001)	8120	0.20000	0.1870
	78 N-Butyl Benzene	91	9.693	9.693	(1.022)	10026	0.20000	0.1610

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	113920	5.00000	5.024
80 1,2-Dichlorobenzene	146	9.823	9.811	(1.036)	7160	0.20000	0.1794
81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
83 Hexachloro 1,3-Butadiene	225	10.982	10.971	(1.159)	1621	0.20000	0.1557
84 1,2,4-Trichlorobenzene	180	11.006	10.995	(1.161)	4282	0.20000	0.1594
85 Naphthalene	128	11.278	11.267	(1.190)	7582	0.20000	0.1292
86 1,2,3-Trichlorobenzene	180	11.432	11.420	(1.206)	4170	0.20000	0.1653

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141609.D
Lab Smp Id: SED0031-CAL1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD0.2
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	321754	15.16
37 1,4-Difluorobenze	430036	215018	860072	495027	15.11
53 d5-Chlorobenzene	398095	199048	796190	446081	12.05
76 d4-1,4-Dichlorobe	214594	107297	429188	237971	10.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160414.b\04141609.D

Date : 14-APR-2016 10:08

Client ID: VSTD0.2

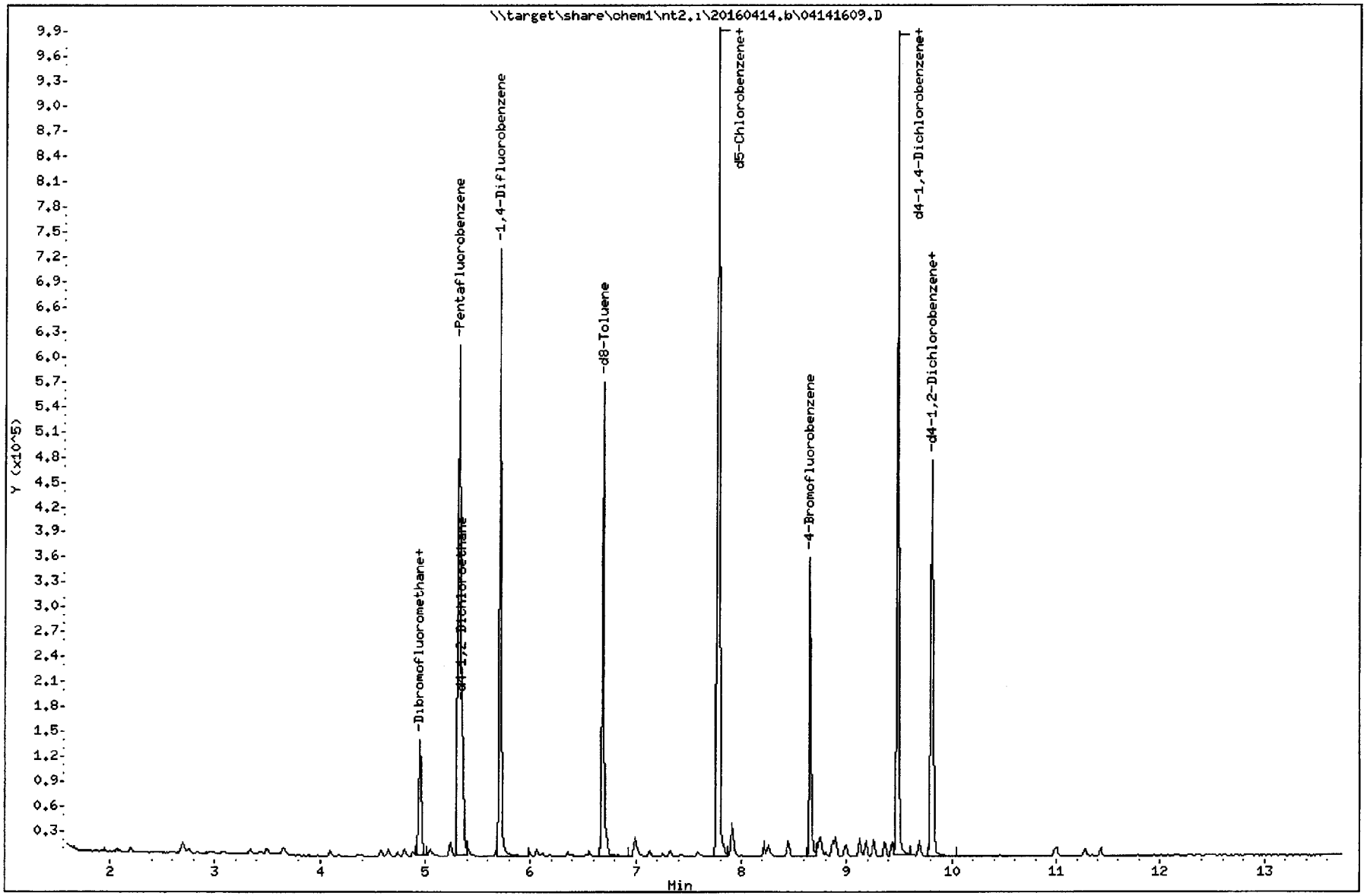
Instrument: nt2.i

Sample Info: SED0031-CAL1,10,10,0,

Operator: LH

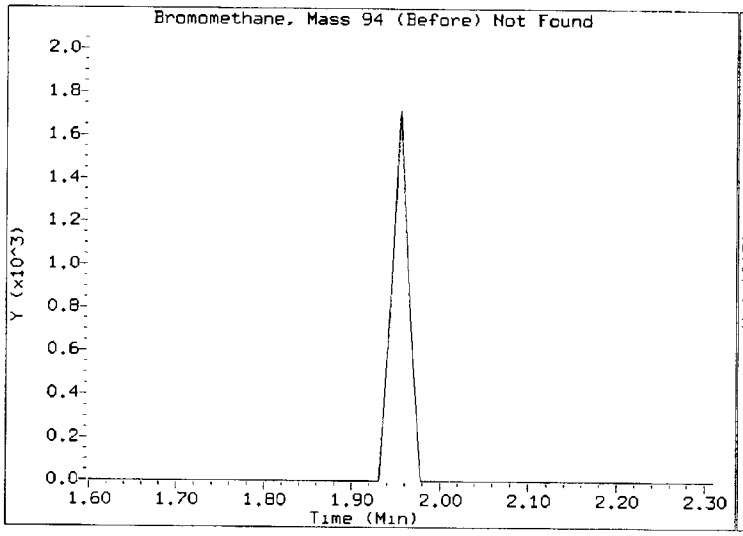
Column phase: RTXVMS

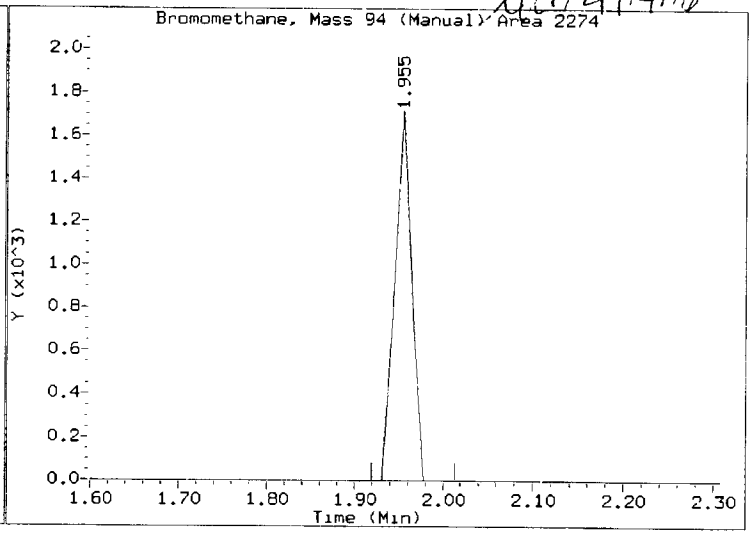
Column diameter: 0.18

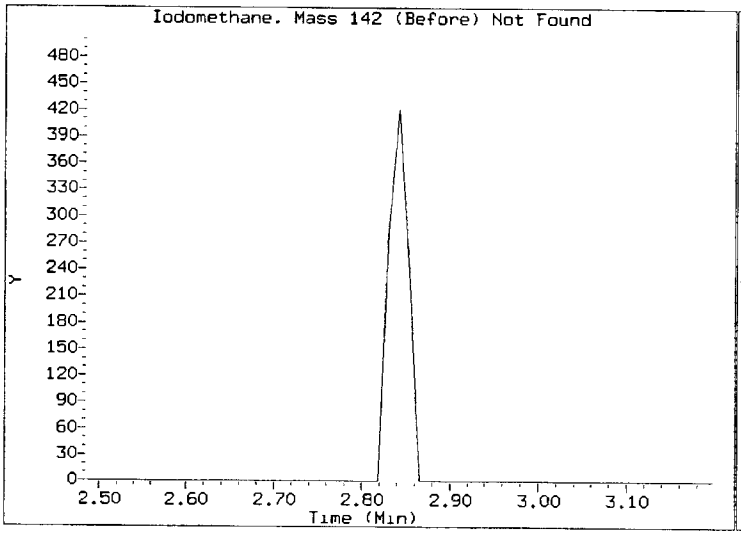


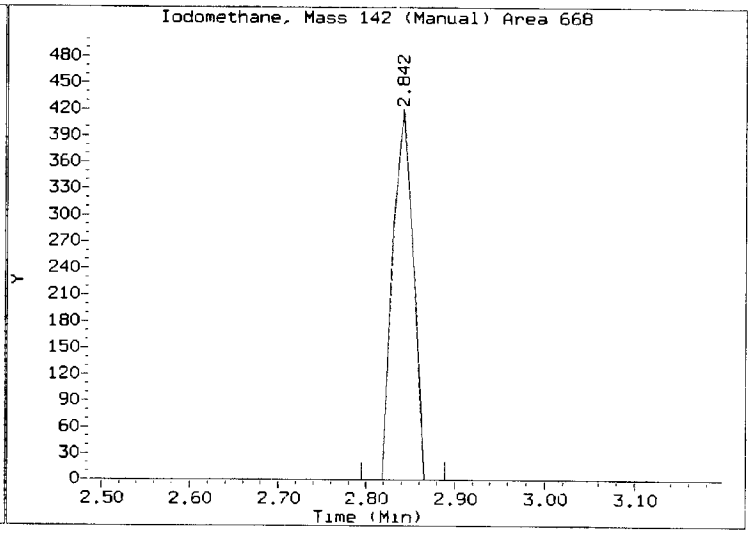
Quant Ion Manual Peak Adjustment Report

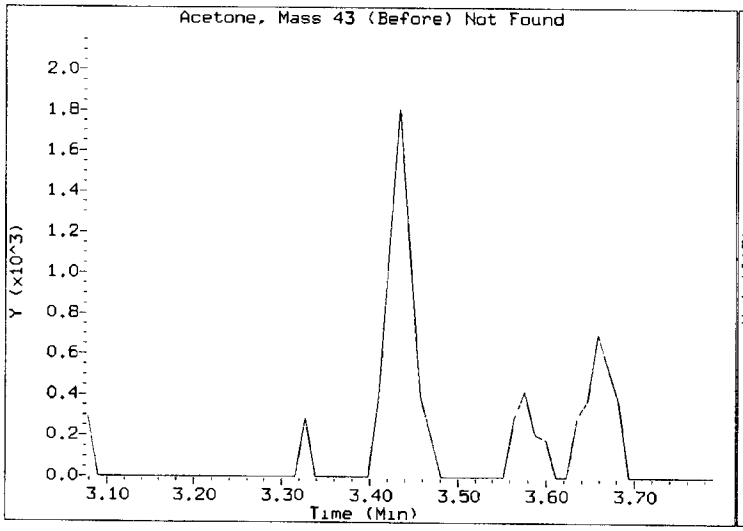
Datafile: \\target\share\chem1\nt2.i\20160414.b\04141609.D
Injection Date: 14-APR-2016 10:08
Lab ID:SED0031-CAL1 Client ID:VSTD0.2
Report Date: 04/14/2016 10:26

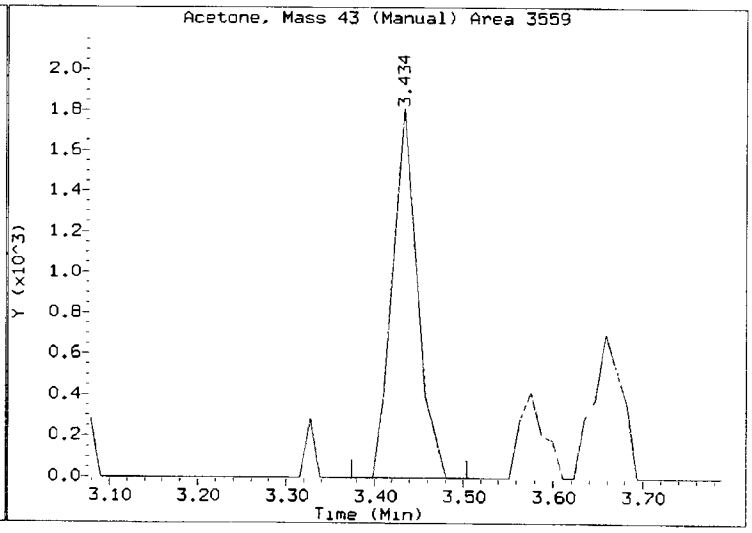






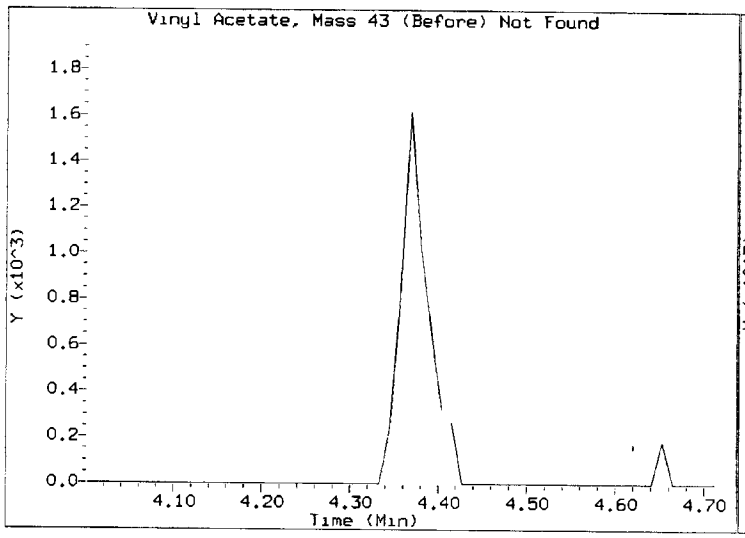


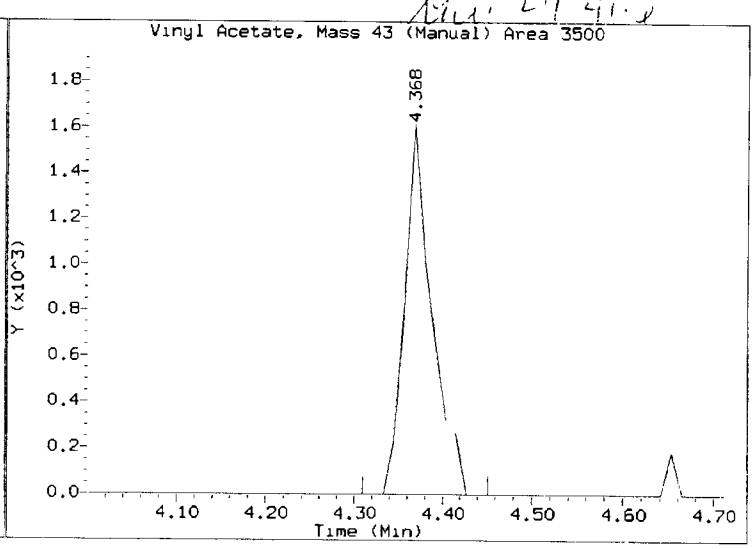


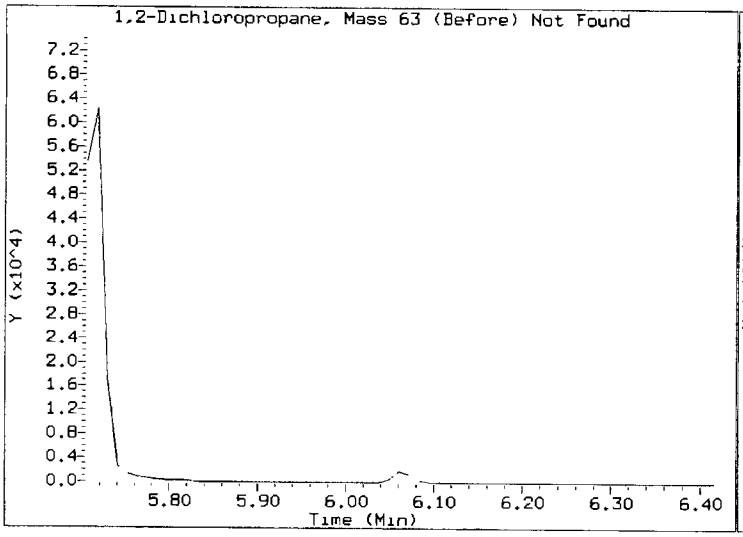


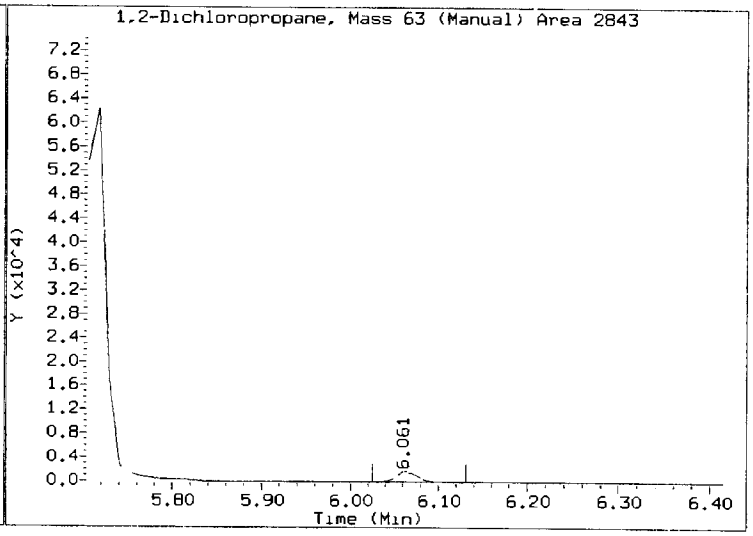
Quant Ion Manual Peak Adjustment Report

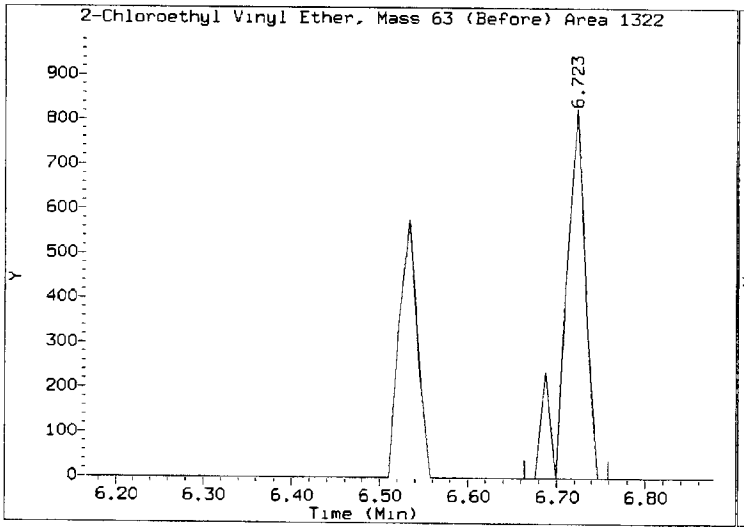
Datafile: \\target\share\chem1\nt2.i\20160414.b\04141609.D
Injection Date: 14-APR-2016 10:08
Lab ID:SED0031-CAL1 Client ID:VSTD0.2
Report Date: 04/14/2016 10:26

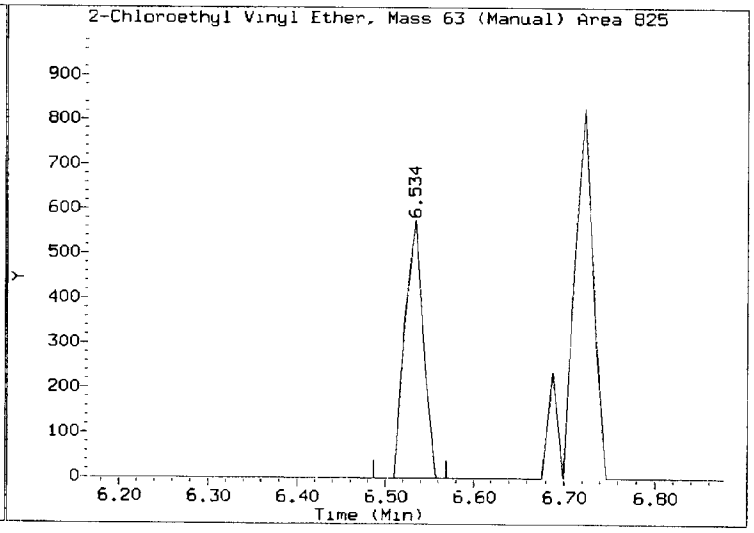






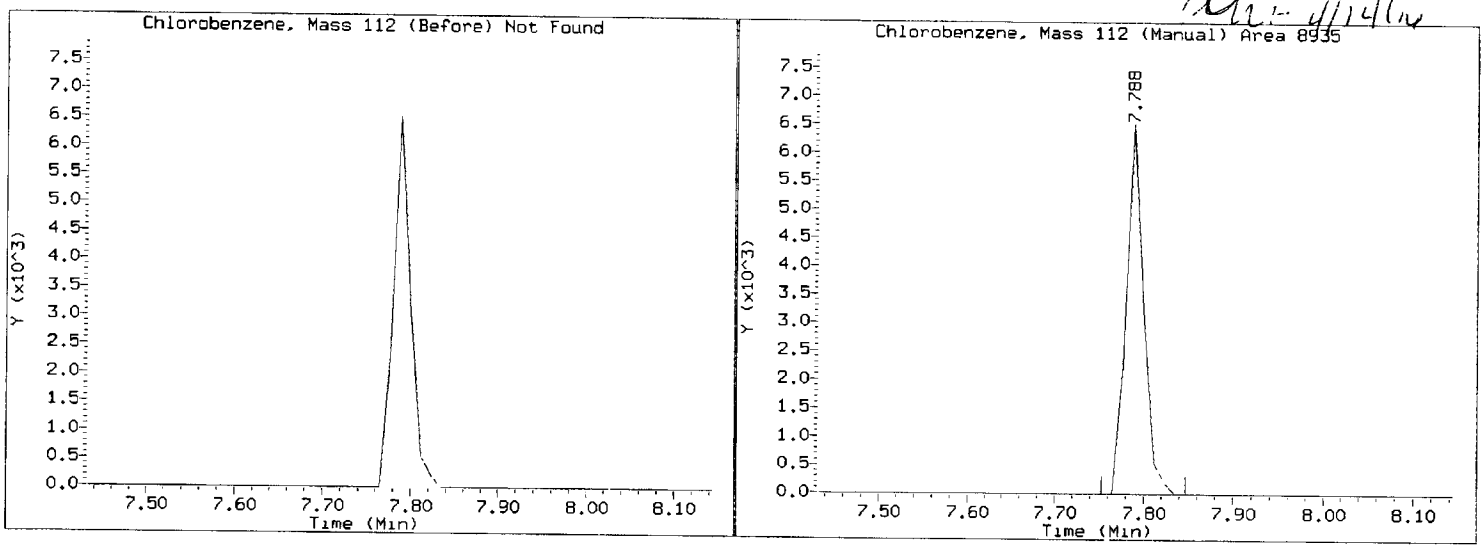






Quant Ion Manual Peak Adjustment Report

Datafile: \\target\share\chem1\nt2.i\20160414.b\04141609.D
Injection Date: 14-APR-2016 10:08
Lab ID:SED0031-CAL1 Client ID:VSTD0.2
Report Date: 04/14/2016 10:26



REVIEW SUMMARY FOR FILE - 04141609.D

Lab ID: SED0031-CAL1
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 10:08

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

Exception: Acrolein 0.0000
Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

4/14/16

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141610.D
Lab Smp Id: SED0031-CAL2 Client Smp ID: VSTD0.5
Inj Date : 14-APR-2016 10:29
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL2,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.435	1.434	(0.269)	7877	0.50000	0.5030(M)
173	2-Pentanone	86	6.357	6.344	(1.112)	3604	2.50000	1.704
2	Chloromethane	50	1.601	1.599	(0.300)	9974	0.50000	0.5079
3	Vinyl Chloride	62	1.672	1.670	(0.314)	8878	0.50000	0.4800
4	Bromomethane	94	1.955	1.954	(0.367)	5747	0.50000	0.4640(T)
5	Chloroethane	64	2.062	2.061	(0.387)	5998	0.50000	1.404(M)
6	Trichlorofluoromethane	101	2.192	2.191	(0.412)	10762	0.50000	0.5171
7	1,1-Dichloroethene	61	2.701	2.700	(0.507)	11706	0.50000	0.5289
8	Carbon Disulfide	76	2.701	2.700	(0.507)	23803	0.50000	0.4768
9	112Trichloro122Trifluoroethane	101	2.748	2.747	(0.516)	7672	0.50000	0.5111
10	Iodomethane	142	2.843	2.842	(0.534)	1792	0.50000	0.1710(T)
11	Bromoethane	108	2.985	2.984	(0.560)	5321	0.50000	0.4849
12	Acrolein	56	3.091	3.090	(0.580)	5727	2.50000	2.377
13	Methylene Chloride	84	3.340	3.339	(0.627)	7940	0.50000	0.4874
14	Acetone	43	3.435	3.434	(0.645)	9194	2.50000	2.637
15	Trans-1,2-Dichloroethene	96	3.506	3.505	(0.658)	8169	0.50000	0.5008
17	Methyl tert butyl ether	73	3.659	3.658	(0.687)	21364	0.50000	0.5116
18	1,1-Dichloroethane	63	4.097	4.096	(0.769)	14916	0.50000	0.4938
19	Acrylonitrile	53	4.180	4.179	(0.785)	1980	0.50000	0.3869(T)
20	Vinyl Acetate	43	4.369	4.357	(0.820)	11609	0.50000	0.3342
22	Cis-1,2-Dichloroethene	96	4.571	4.570	(0.858)	8978	0.50000	0.4998
23	2,2-Dichloropropane	77	4.653	4.652	(0.873)	10234	0.50000	0.4473

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.736	4.735	(0.889)	3718	0.50000	0.4592
	25 Chloroform	83	4.807	4.806	(0.902)	13938	0.50000	0.4878
	26 Carbon Tetrachloride	117	4.890	4.889	(0.855)	7623	0.50000	0.3430
$	27 Dibromofluoromethane	111	4.949	4.948	(0.929)	65866	5.00000	4.806
	28 1,1,1-Trichloroethane	97	4.949	4.948	(0.929)	11629	0.50000	0.4601
	29 2-Butanone	43	5.079	5.066	(0.953)	13927	2.50000	2.123
	30 1,1-Dichloropropene	75	5.044	5.043	(0.882)	10417	0.50000	0.4720
	31 Benzene	78	5.245	5.244	(0.917)	34694	0.50000	0.5112
*	32 Pentafluorobenzene	168	5.328	5.327	(1.000)	290177	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.352	5.350	(1.004)	82833	5.00000	5.062
	34 1,2-Dichloroethane	62	5.411	5.410	(0.946)	10536	0.50000	0.4980
	36 Trichloroethene	130	5.683	5.682	(0.994)	8564	0.50000	0.4804
*	37 1,4-Difluorobenzene	114	5.718	5.717	(1.000)	446531	10.0000	
	38 Dibromomethane	93	5.990	5.989	(1.048)	4370	0.50000	0.5028
	39 1,2-Dichloropropane	63	6.061	6.060	(1.060)	7931	0.50000	0.4874
	40 Bromodichloromethane	83	6.109	6.108	(1.068)	8183	0.50000	0.4335
	41 2-Chloroethyl Vinyl Ether	63	6.523	6.522	(1.141)	3298	0.50000	0.3597
	42 Cis 1,3-dichloropropene	75	6.558	6.557	(1.147)	9457	0.50000	0.4193
$	43 d8-Toluene	98	6.689	6.688	(1.170)	265887	5.00000	4.941
	44 Toluene	92	6.724	6.723	(1.176)	21945	0.50000	0.5035
	45 4-Methyl-2-Pentanone	58	6.996	6.995	(1.223)	11564	2.50000	2.053(T)
	46 Tetrachloroethene	166	6.996	6.995	(0.900)	9297	0.50000	0.5086
	47 Trans 1,3-Dichloropropene	75	7.020	7.019	(1.228)	7166	0.50000	0.3041
	48 1,1,2-Trichloroethane	97	7.126	7.125	(1.246)	6709	0.50000	0.5007
	49 Chlorodibromomethane	129	7.257	7.256	(0.933)	4653	0.50000	0.2798
	50 1,3-Dichloropropane	76	7.328	7.315	(0.942)	11440	0.50000	0.4905
	51 1,2-Dibromoethane	107	7.422	7.421	(1.298)	5598	0.50000	0.4466
	52 2-Hexanone	43	7.588	7.575	(0.976)	19601	2.50000	2.085(M)
*	53 d5-Chlorobenzene	117	7.777	7.776	(1.000)	401712	10.0000	
	54 Chlorobenzene	112	7.789	7.788	(1.002)	24200	0.50000	0.5160
	55 Ethyl Benzene	106	7.801	7.800	(1.003)	13179	0.50000	0.5025
	56 1,1,1,2-Tetrachloroethane	131	7.836	7.835	(1.008)	5830	0.50000	0.4235
	57 m,p-xylene	106	7.907	7.906	(1.017)	30712	1.00000	0.9934
	58 o-Xylene	106	8.215	8.214	(1.056)	13645	0.50000	0.4555
	59 Styrene	104	8.262	8.250	(1.062)	21466	0.50000	0.4443
	60 Bromoform	173	8.286	8.285	(0.874)	2557	0.50000	0.2708
	61 Isopropyl Benzene	105	8.440	8.439	(0.890)	38384	0.50000	0.5217
$	62 4-Bromofluorobenzene	174	8.653	8.651	(1.113)	80503	5.00000	4.887
	63 Bromobenzene	156	8.736	8.734	(0.921)	9957	0.50000	0.5147
	64 N-Propyl Benzene	91	8.748	8.746	(0.923)	43694	0.50000	0.5299
	65 1,1,2,2-Tetrachloroethane	83	8.807	8.794	(0.929)	7185	0.50000	0.4787
	66 2-Chloro Toluene	91	8.866	8.865	(0.935)	30523	0.50000	0.5105
	67 1,3,5-Trimethyl Benzene	105	8.890	8.888	(0.938)	30938	0.50000	0.5057
	68 1,2,3-Trichloropropane	110	8.901	8.900	(0.939)	2529	0.50000	0.5141
	69 Trans-1,4-Dichloro 2-Butene	53	8.937	8.936	(0.943)	1247	0.50000	0.3236
	70 4-Chloro Toluene	91	8.984	8.983	(0.948)	29993	0.50000	0.5405
	71 T-Butyl Benzene	119	9.126	9.125	(0.963)	26798	0.50000	0.4998
	72 1,2,4-Trimethylbenzene	105	9.174	9.172	(0.968)	30995	0.50000	0.5025
	73 S-Butyl Benzene	105	9.256	9.255	(0.976)	38910	0.50000	0.5157
	74 4-Isopropyl Toluene	119	9.363	9.362	(0.988)	31482	0.50000	0.4965
	75 1,3-Dichlorobenzene	146	9.434	9.421	(0.995)	19493	0.50000	0.5208
*	76 d4-1,4-Dichlorobenzene	152	9.481	9.480	(1.000)	211572	10.0000	
	77 1,4-Dichlorobenzene	146	9.493	9.492	(1.001)	20800	0.50000	0.5387
	78 N-Butyl Benzene	91	9.694	9.693	(1.022)	27093	0.50000	0.4894

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.812	9.811	(1.035)	99431	5.00000	4.932
80 1,2-Dichlorobenzene	146	9.812	9.811	(1.035)	18095	0.50000	0.5100
81 1,2-Dibromo 3-Chloropropane	75	10.451	10.450	(1.102)	820	0.50000	0.2910
83 Hexachloro 1,3-Butadiene	225	10.972	10.971	(1.157)	4524	0.50000	0.4887
84 1,2,4-Trichlorobenzene	180	10.996	10.995	(1.160)	11291	0.50000	0.4726
85 Naphthalene	128	11.268	11.267	(1.188)	22053	0.50000	0.4228
86 1,2,3-Trichlorobenzene	180	11.422	11.420	(1.205)	10887	0.50000	0.4853

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141610.D
Lab Smp Id: SED0031-CAL2
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD0.5
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	290177	3.86
37 1,4-Difluorobenze	430036	215018	860072	446531	3.84
53 d5-Chlorobenzene	398095	199048	796190	401712	0.91
76 d4-1,4-Dichlorobe	214594	107297	429188	211572	-1.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.03
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.03
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.1\20160414.b\04141610.D

Date : 14-APR-2016 10:29

Client ID: VSTD0.5

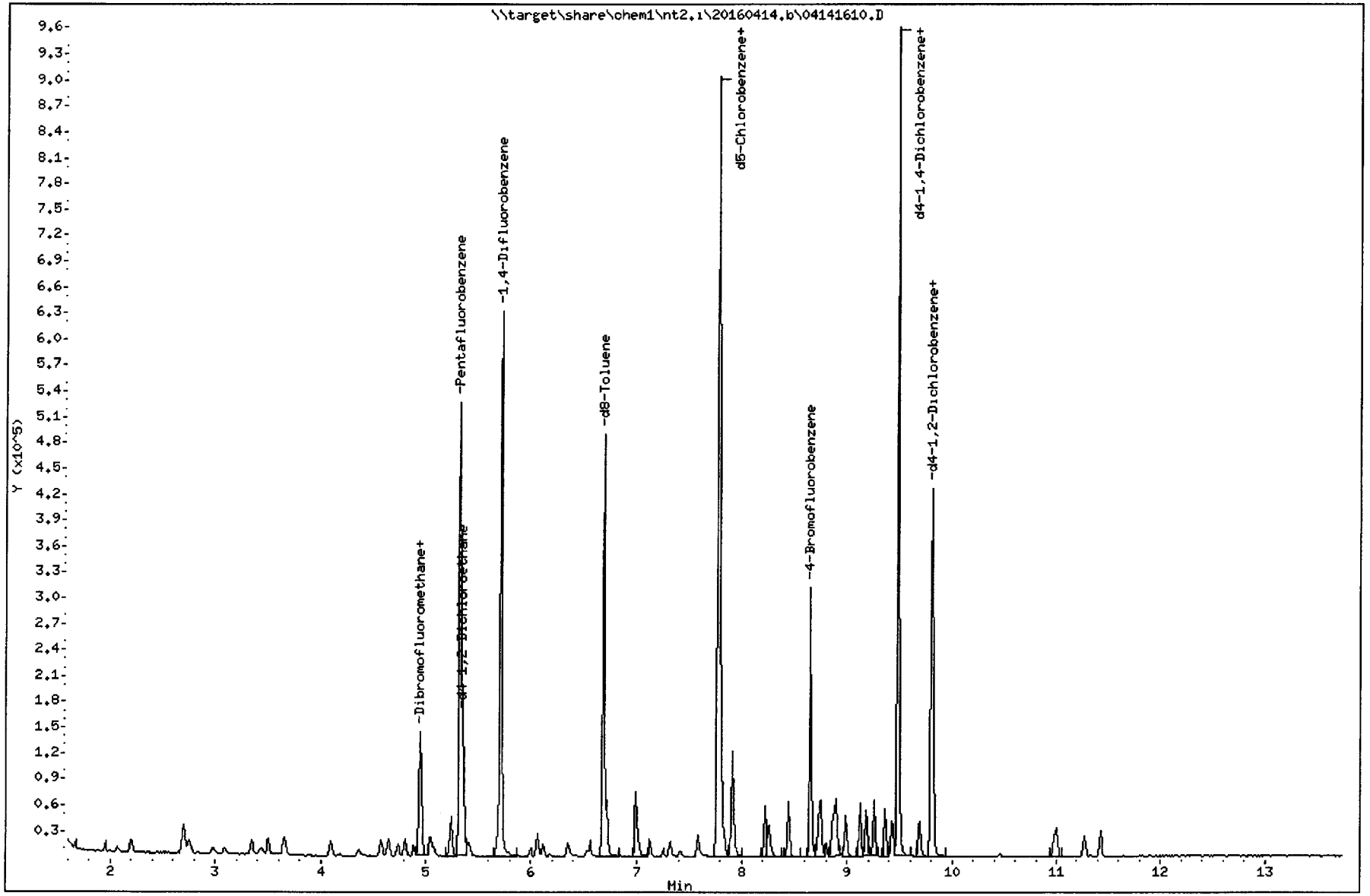
Instrument: nt2.1

Sample Info: SED0031-CAL2,10,10,0,

Operator: LH

Column phase: RTXVMS

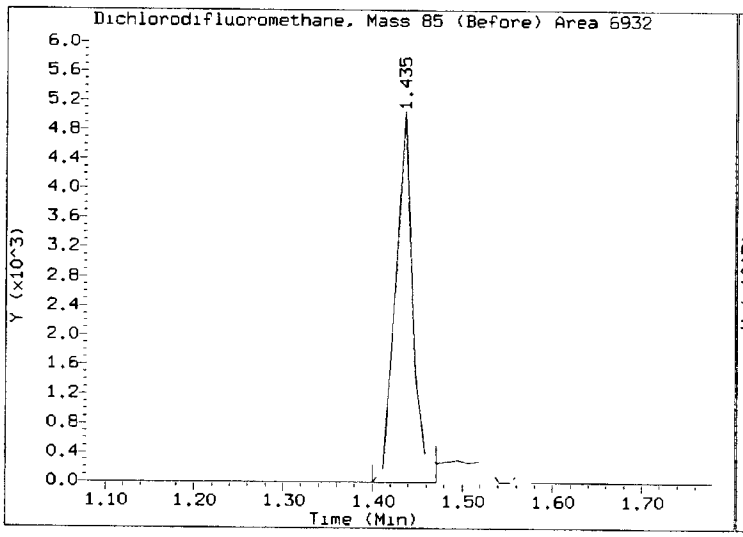
Column diameter: 0.18

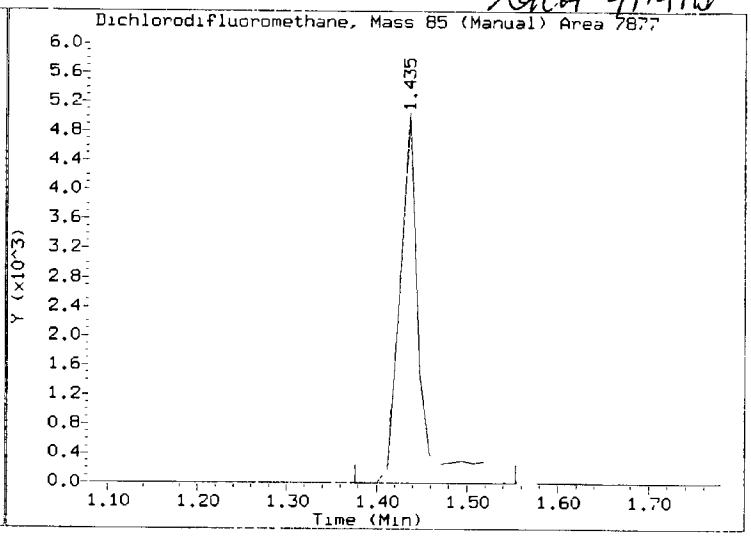


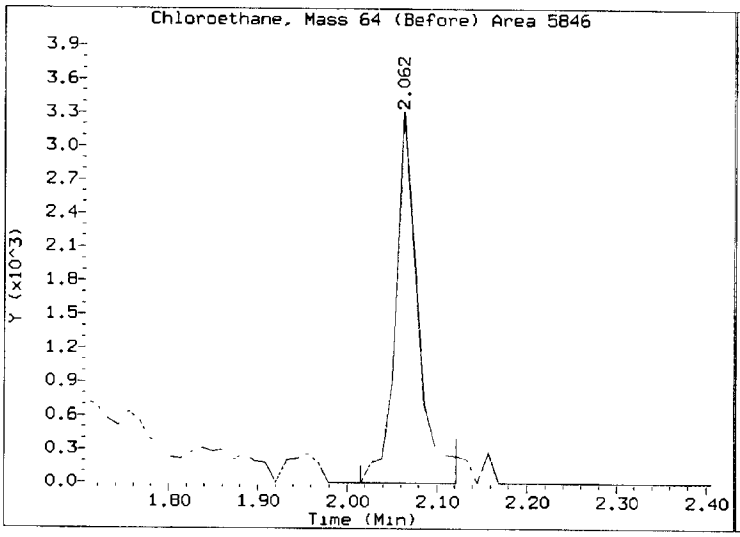
Quant Ion Manual Peak Adjustment Report

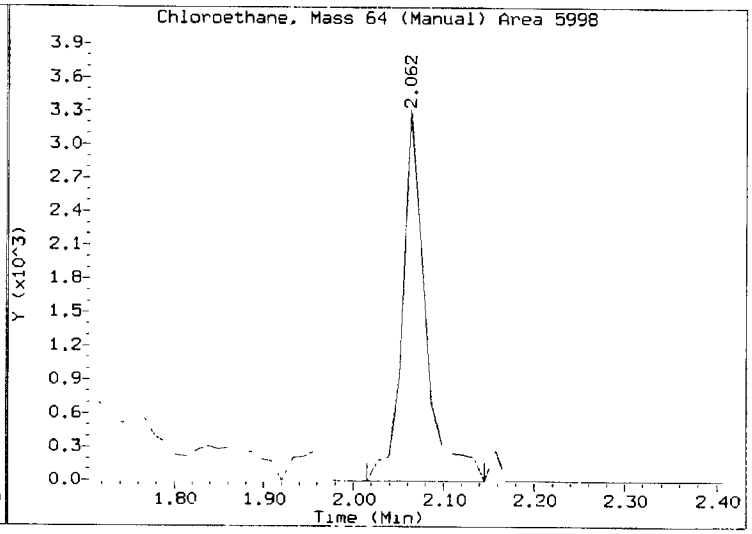
Datafile: \\target\share\chem1\nt2.i\20160414.b\04141610.D
Injection Date: 14-APR-2016 10:29
Lab ID:SED0031-CAL2 Client ID:VSTD0.5
Report Date: 04/14/2016 10:50

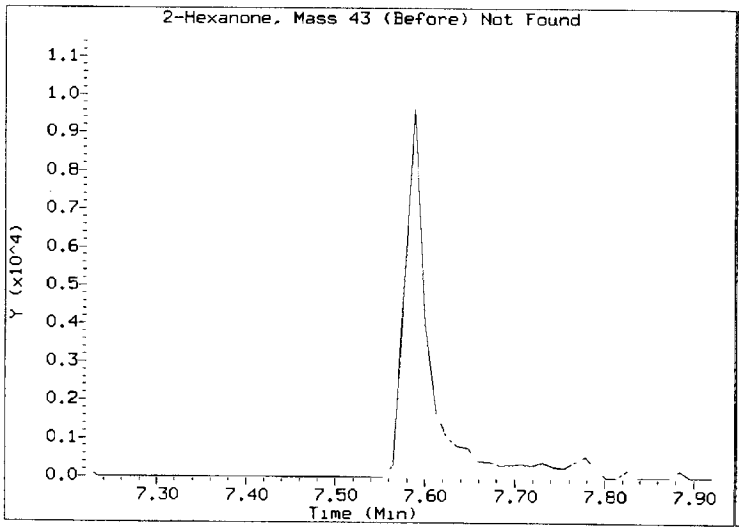
KMH 4/14/16

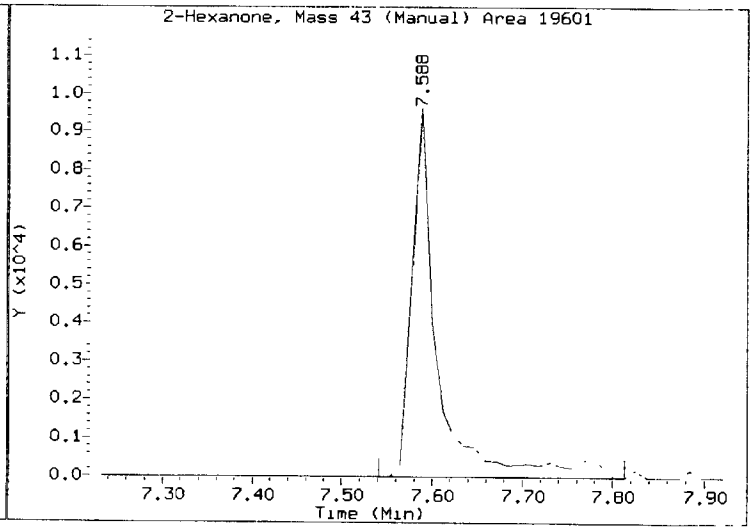












REVIEW SUMMARY FOR FILE - 04141610.D

Lab ID: SED0031-CAL2
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 10:29

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

Exception: Acrolein 0.0000
Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Xu - 4/14/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141611.D
Lab Smp Id: SED0031-CAL8 Client Smp ID: VSTD80
Inj Date : 14-APR-2016 10:51
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL8,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 9 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.421	1.434	(0.267)	1371867	80.0000	89.220(M)
173 2-Pentanone	86	6.344	6.344	(1.110)	981789	400.000	469.57
2 Chloromethane	50	1.587	1.599	(0.298)	1539395	80.0000	79.840(M)
3 Vinyl Chloride	62	1.658	1.670	(0.311)	1573617	80.0000	86.646(M)
4 Bromomethane	94	1.942	1.954	(0.365)	992308	80.0000	81.597(M)
5 Chloroethane	64	2.048	2.061	(0.385)	328919	80.0000	78.415
6 Trichlorofluoromethane	101	2.155	2.191	(0.405)	450805	80.0000	22.062
7 1,1-Dichloroethene	61	2.664	2.700	(0.500)	1682099	80.0000	77.412
8 Carbon Disulfide	76	2.664	2.700	(0.500)	3706523	80.0000	75.613
9 112Trichloro122Trifluoroethane	101	2.711	2.747	(0.509)	1221283	80.0000	82.861
10 Iodomethane	142	2.806	2.842	(0.527)	1097438	80.0000	79.772
11 Bromoethane	108	2.960	2.984	(0.556)	881010	80.0000	81.767
12 Acrolein	56	3.090	3.090	(0.580)	971695	400.000	410.80
13 Methylene Chloride	84	3.326	3.339	(0.625)	1328323	80.0000	83.041
14 Acetone	43	3.445	3.434	(0.647)	1340307	400.000	391.56
15 Trans-1,2-Dichloroethene	96	3.492	3.505	(0.656)	1301520	80.0000	81.260
17 Methyl tert butyl ether	73	3.658	3.658	(0.687)	3321236	80.0000	81.001
18 1,1-Dichloroethane	63	4.084	4.096	(0.767)	2482537	80.0000	83.703
19 Acrylonitrile	53	4.178	4.179	(0.785)	457302	80.0000	91.016
20 Vinyl Acetate	43	4.356	4.357	(0.818)	2733870	80.0000	80.153
22 Cis-1,2-Dichloroethene	96	4.569	4.570	(0.858)	1554095	80.0000	88.120
23 2,2-Dichloropropane	77	4.652	4.652	(0.873)	2062068	80.0000	91.791

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.735	4.735	(0.889)	713925	80.0000	89.803
	25 Chloroform	83	4.806	4.806	(0.902)	2342620	80.0000	83.507
	26 Carbon Tetrachloride	117	4.888	4.889	(0.855)	1783936	80.0000	81.203
$	27 Dibromofluoromethane	111	4.948	4.948	(0.929)	68838	5.00000	5.115
	28 1,1,1-Trichloroethane	97	4.948	4.948	(0.929)	2190854	80.0000	88.292
	29 2-Butanone	43	5.066	5.066	(0.951)	2661493	400.000	413.19
	30 1,1-Dichloropropene	75	5.042	5.043	(0.882)	1912387	80.0000	87.663
	31 Benzene	78	5.243	5.244	(0.917)	5126954	80.0000	76.421
*	32 Pentafluorobenzene	168	5.326	5.327	(1.000)	284908	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	77141	5.00000	4.801
	34 1,2-Dichloroethane	62	5.397	5.410	(0.944)	1716230	80.0000	82.057
	36 Trichloroethene	130	5.681	5.682	(0.994)	1545329	80.0000	87.686
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	441404	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	763610	80.0000	88.884
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	1408743	80.0000	87.582
	40 Bromodichloromethane	83	6.107	6.108	(1.068)	1775718	80.0000	95.161
	41 2-Chloroethyl Vinyl Ether	63	6.521	6.522	(1.141)	875478	80.0000	96.598
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	2194174	80.0000	98.412
$	43 d8-Toluene	98	6.687	6.688	(1.170)	269709	5.00000	5.070
	44 Toluene	92	6.722	6.723	(1.176)	3517050	80.0000	81.637
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	2284989	400.000	410.32
	46 Tetrachloroethene	166	6.983	6.995	(0.898)	1608105	80.0000	85.477
	47 Trans 1,3-Dichloropropene	75	7.018	7.019	(1.228)	1883445	80.0000	80.855
	48 1,1,2-Trichloroethane	97	7.137	7.125	(1.248)	1207485	80.0000	91.165
	49 Chlorodibromomethane	129	7.255	7.256	(0.933)	1393226	80.0000	81.398
	50 1,3-Dichloropropane	76	7.314	7.315	(0.941)	2067279	80.0000	86.138
	51 1,2-Dibromoethane	107	7.421	7.421	(1.298)	1171151	80.0000	94.507
	52 2-Hexanone	43	7.586	7.575	(0.976)	3768760	400.000	389.54
*	53 d5-Chlorobenzene	117	7.776	7.776	(1.000)	413403	10.0000	
	54 Chlorobenzene	112	7.787	7.788	(1.002)	3664917	80.0000	75.929
	55 Ethyl Benzene	106	7.811	7.800	(1.005)	2243527	80.0000	83.128
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	1394359	80.0000	98.433
	57 m,p-xylene	106	7.906	7.906	(1.017)	4600667	160.000	144.61
	58 o-Xylene	106	8.213	8.214	(1.056)	2650228	80.0000	85.977
	59 Styrene	104	8.261	8.250	(1.062)	4126436	80.0000	82.990
	60 Bromoform	173	8.284	8.285	(0.874)	840558	80.0000	81.880
	61 Isopropyl Benzene	105	8.438	8.439	(0.890)	5397900	80.0000	67.492
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	84998	5.00000	5.014
	63 Bromobenzene	156	8.734	8.734	(0.921)	1771789	80.0000	84.249
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	5711067	80.0000	63.710
	65 1,1,2,2-Tetrachloroethane	83	8.805	8.794	(0.929)	1437275	80.0000	88.081
	66 2-Chloro Toluene	91	8.864	8.865	(0.935)	4856608	80.0000	74.720
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	4729126	80.0000	71.105
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	476709	80.0000	89.147
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.936	(0.943)	390572	80.0000	93.248
	70 4-Chloro Toluene	91	8.983	8.983	(0.948)	4285531	80.0000	71.042
	71 T-Butyl Benzene	119	9.125	9.125	(0.963)	4373929	80.0000	75.036
	72 1,2,4-Trimethylbenzene	105	9.184	9.172	(0.969)	4837581	80.0000	72.142
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	5547128	80.0000	67.637
	74 4-Isopropyl Toluene	119	9.361	9.362	(0.988)	4962148	80.0000	71.995
	75 1,3-Dichlorobenzene	146	9.432	9.421	(0.995)	3191637	80.0000	78.448
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.480	(1.000)	229993	10.0000	
	77 1,4-Dichlorobenzene	146	9.491	9.492	(1.001)	3177040	80.0000	75.693
	78 N-Butyl Benzene	91	9.692	9.693	(1.022)	4432809	80.0000	73.665

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	108413	5.00000	4.946
80 1,2-Dichlorobenzene	146	9.823	9.811	(1.036)	3013430	80.0000	78.134
81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	248395	80.0000	81.087
83 Hexachloro 1,3-Butadiene	225	10.970	10.971	(1.157)	819063	80.0000	81.390
84 1,2,4-Trichlorobenzene	180	10.994	10.995	(1.160)	2165083	80.0000	83.368
85 Naphthalene	128	11.266	11.267	(1.188)	4452831	80.0000	78.535
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	1972509	80.0000	80.879

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141611.D
Lab Smp Id: SED0031-CAL8
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD80
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	284908	1.97
37 1,4-Difluorobenze	430036	215018	860072	441404	2.64
53 d5-Chlorobenzene	398095	199048	796190	413403	3.85
76 d4-1,4-Dichlorobe	214594	107297	429188	229993	7.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	-0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.00

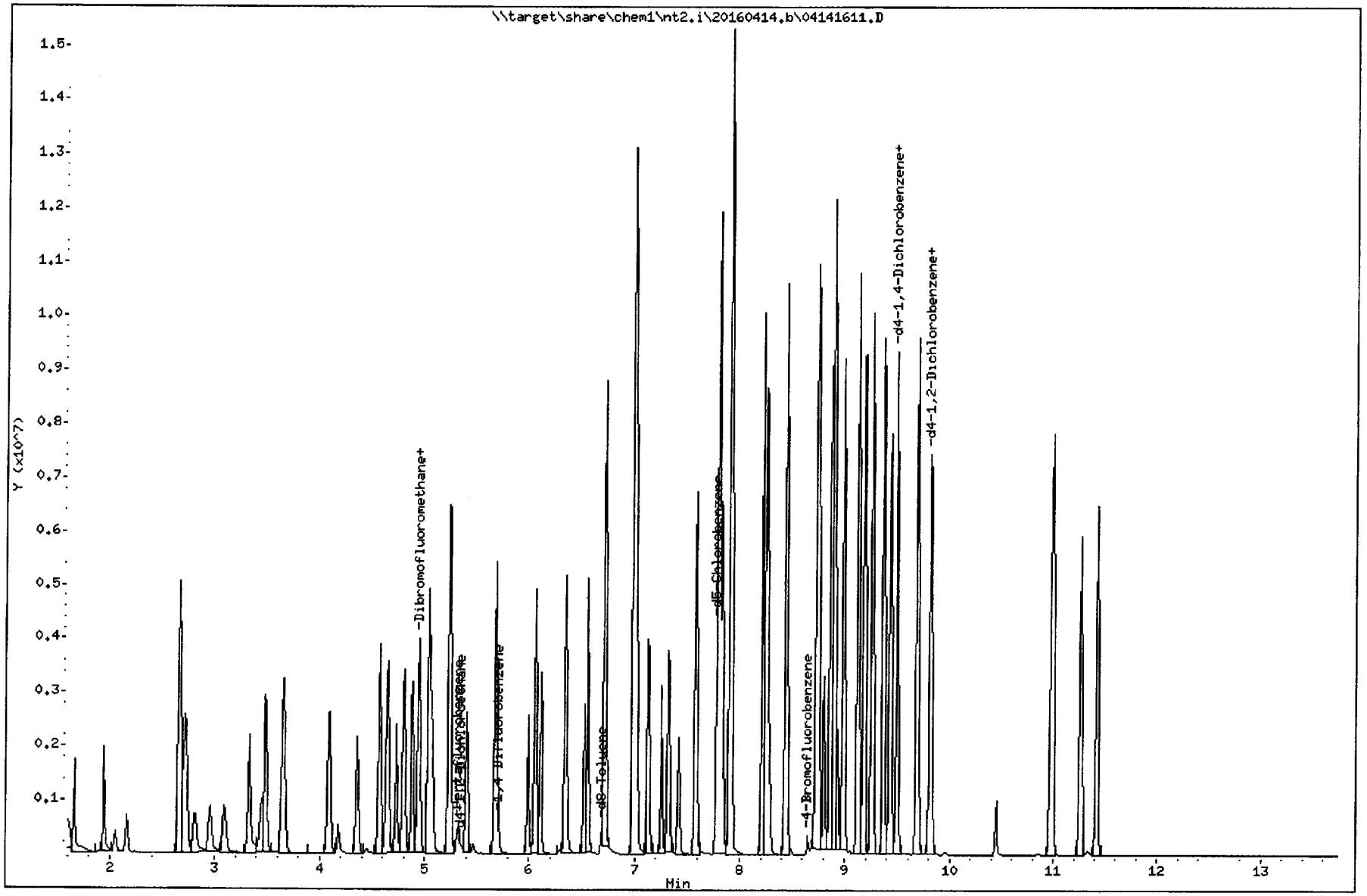
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160414.b\04141611.D
Date : 14-APR-2016 10:51
Client ID: VSTD80
Sample Info: SED0031-CAL8,10,10,0,

Instrument: nt2.i

Operator: LH
Column diameter: 0.18

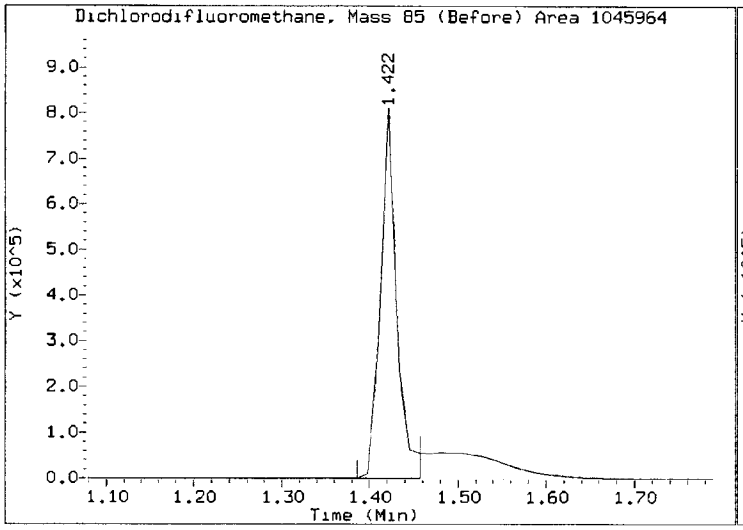
Column phase: RTXVMS

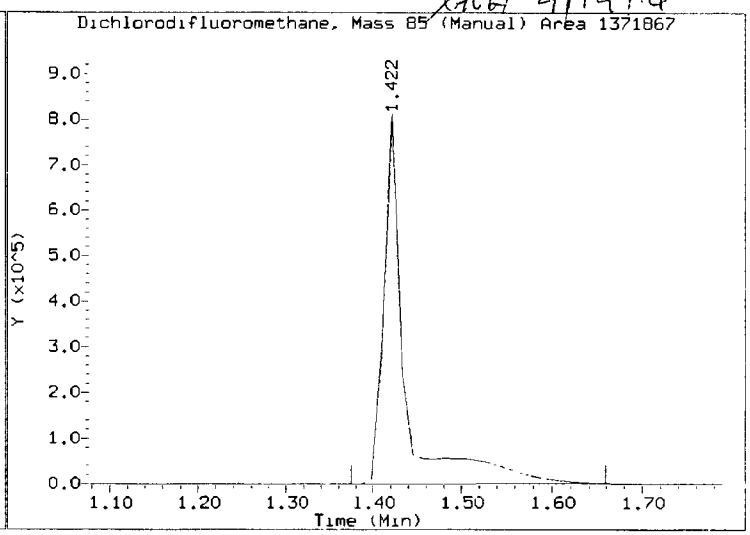


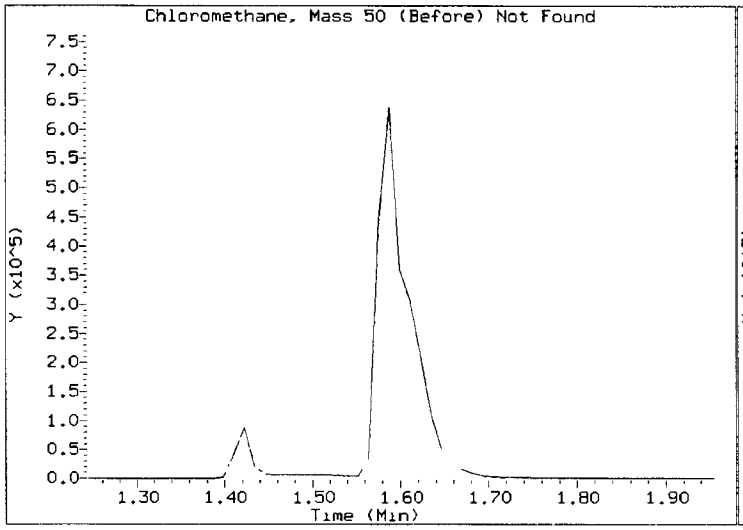
Quant Ion Manual Peak Adjustment Report

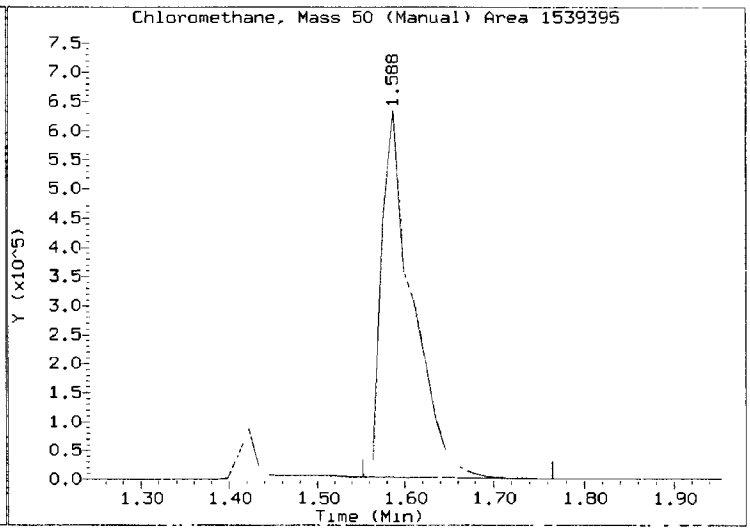
Datafile: \\target\share\chem1\nt2.i\20160414.b\04141611.D
Injection Date: 14-APR-2016 10:51
Lab ID:SED0031-CAL8 Client ID:VSTD80
Report Date: 04/14/2016 12:39

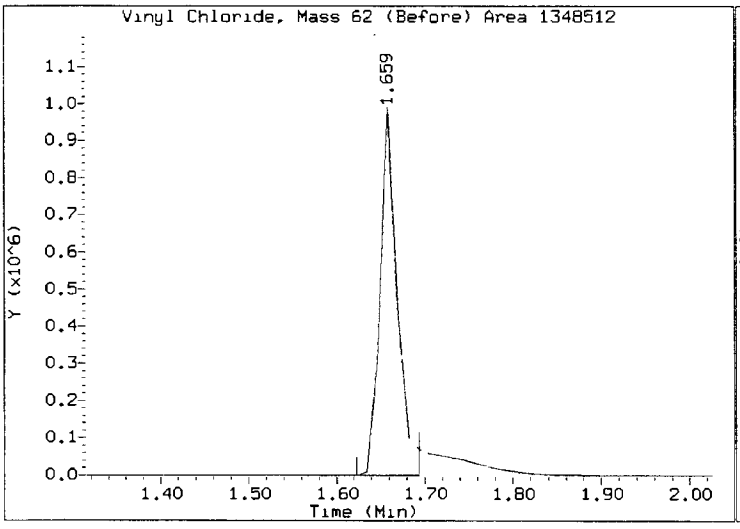
XHH 4/14/16

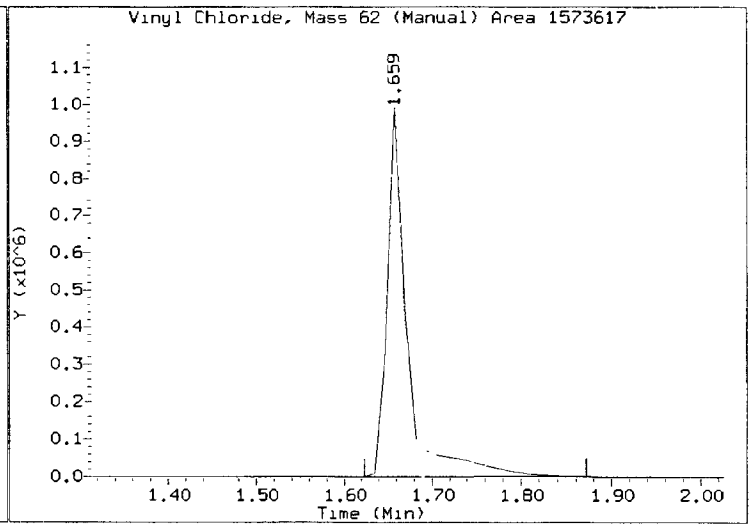








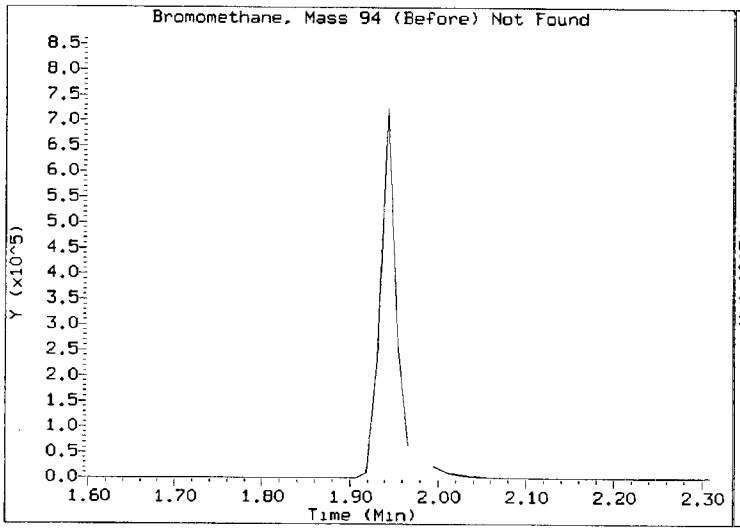


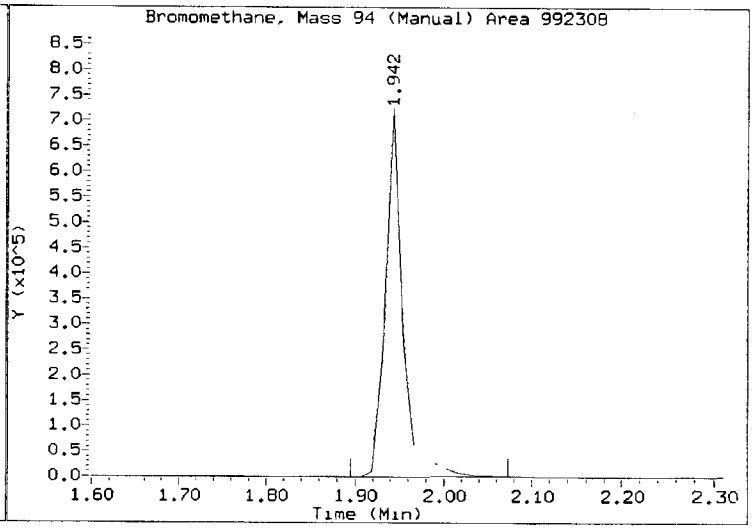


Quant Ion Manual Peak Adjustment Report

Datafile: \\target\share\chem1\nt2.i\20160414.b\04141611.D
Injection Date: 14-APR-2016 10:51
Lab ID:SED0031-CAL8 Client ID:VSTD80
Report Date: 04/14/2016 12:39

Dlw 4/14/16





REVIEW SUMMARY FOR FILE - 04141611.D

Lab ID: SED0031-CAL8
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 10:51

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

Exception: Acrolein 0.0000
Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

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8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141612.D
Lab Smp Id: SED0031-CAL7 Client Smp ID: VSTD40
Inj Date : 14-APR-2016 11:12
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL7,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 10 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.424	1.434	(0.267)	689281	40.0000	42.685(M)
173 2-Pentanone	86	6.346	6.344	(1.110)	466907	200.000	213.02
2 Chloromethane	50	1.590	1.599	(0.298)	798407	40.0000	39.430
3 Vinyl Chloride	62	1.661	1.670	(0.312)	814464	40.0000	42.702
4 Bromomethane	94	1.945	1.954	(0.365)	522291	40.0000	40.895
5 Chloroethane	64	2.051	2.061	(0.385)	182129	40.0000	41.345
6 Trichlorofluoromethane	101	2.169	2.191	(0.407)	256305	40.0000	11.944
7 1,1-Dichloroethene	61	2.678	2.700	(0.503)	903942	40.0000	39.612
8 Carbon Disulfide	76	2.690	2.700	(0.505)	2075965	40.0000	40.325
9 112Trichloro122Trifluoroethane	101	2.737	2.747	(0.514)	627150	40.0000	40.517
10 Iodomethane	142	2.832	2.842	(0.531)	503696	40.0000	41.494
11 Bromoethane	108	2.974	2.984	(0.558)	445777	40.0000	39.395
12 Acrolein	56	3.092	3.090	(0.580)	500780	200.000	201.59
13 Methylene Chloride	84	3.341	3.339	(0.627)	665673	40.0000	39.626
14 Acetone	43	3.436	3.434	(0.645)	694045	200.000	193.07
15 Trans-1,2-Dichloroethene	96	3.495	3.505	(0.656)	676059	40.0000	40.192
17 Methyl tert butyl ether	73	3.648	3.658	(0.685)	1771608	40.0000	41.142
18 1,1-Dichloroethane	63	4.098	4.096	(0.769)	1275623	40.0000	40.954
19 Acrylonitrile	53	4.169	4.179	(0.782)	229031	40.0000	43.405
20 Vinyl Acetate	43	4.358	4.357	(0.818)	1434616	40.0000	40.050
22 Cis-1,2-Dichloroethene	96	4.571	4.570	(0.858)	773089	40.0000	41.740
23 2,2-Dichloropropane	77	4.654	4.652	(0.873)	1046442	40.0000	44.355

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.737	4.735	(0.889)	356754	40.0000	42.730
	25 Chloroform	83	4.808	4.806	(0.902)	1210717	40.0000	41.095
	26 Carbon Tetrachloride	117	4.891	4.889	(0.855)	893365	40.0000	38.791
$	27 Dibromofluoromethane	111	4.950	4.948	(0.929)	74016	5.00000	5.237
	28 1,1,1-Trichloroethane	97	4.950	4.948	(0.929)	1126743	40.0000	43.238
	29 2-Butanone	43	5.068	5.066	(0.951)	1368749	200.000	202.34
	30 1,1-Dichloropropene	75	5.045	5.043	(0.882)	977171	40.0000	42.729
	31 Benzene	78	5.234	5.244	(0.915)	2809742	40.0000	39.952
*	32 Pentafluorobenzene	168	5.329	5.327	(1.000)	299210	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.352	5.350	(1.004)	84211	5.00000	4.991
	34 1,2-Dichloroethane	62	5.400	5.410	(0.944)	893935	40.0000	40.772
	36 Trichloroethene	130	5.684	5.682	(0.994)	764608	40.0000	41.387
*	37 1,4-Difluorobenzene	114	5.719	5.717	(1.000)	462723	10.0000	
	38 Dibromomethane	93	5.991	5.989	(1.048)	379228	40.0000	42.108
	39 1,2-Dichloropropane	63	6.062	6.060	(1.060)	696318	40.0000	41.296
	40 Bromodichloromethane	83	6.110	6.108	(1.068)	895679	40.0000	45.788
	41 2-Chloroethyl Vinyl Ether	63	6.524	6.522	(1.141)	429835	40.0000	45.242
	42 Cis 1,3-dichloropropene	75	6.559	6.557	(1.147)	1097029	40.0000	46.937
$	43 d8-Toluene	98	6.690	6.688	(1.170)	280347	5.00000	5.027
	44 Toluene	92	6.725	6.723	(1.176)	1829938	40.0000	40.519
	45 4-Methyl-2-Pentanone	58	6.997	6.995	(1.223)	1223435	200.000	209.58
	46 Tetrachloroethene	166	6.985	6.995	(0.898)	804590	40.0000	42.006
	47 Trans 1,3-Dichloropropene	75	7.021	7.019	(1.228)	959112	40.0000	39.277
	48 1,1,2-Trichloroethane	97	7.127	7.125	(1.246)	594332	40.0000	42.805
	49 Chlorodibromomethane	129	7.258	7.256	(0.933)	669656	40.0000	38.428
	50 1,3-Dichloropropane	76	7.317	7.315	(0.941)	1043460	40.0000	42.704
	51 1,2-Dibromoethane	107	7.423	7.421	(1.298)	574066	40.0000	44.191
	52 2-Hexanone	43	7.577	7.575	(0.974)	2047081	200.000	207.82
*	53 d5-Chlorobenzene	117	7.778	7.776	(1.000)	420893	10.0000	
	54 Chlorobenzene	112	7.790	7.788	(1.002)	1997207	40.0000	40.641
	55 Ethyl Benzene	106	7.802	7.800	(1.003)	1145310	40.0000	41.681
	56 1,1,1,2-Tetrachloroethane	131	7.837	7.835	(1.008)	689526	40.0000	47.810
	57 m,p-xylene	106	7.908	7.906	(1.017)	2635782	80.0000	81.373
	58 o-Xylene	106	8.216	8.214	(1.056)	1342609	40.0000	42.781
	59 Styrene	104	8.251	8.250	(1.061)	2106172	40.0000	41.605
	60 Bromoform	173	8.275	8.285	(0.873)	390585	40.0000	37.909
	61 Isopropyl Benzene	105	8.441	8.439	(0.890)	3193425	40.0000	39.784
$	62 4-Bromofluorobenzene	174	8.654	8.651	(1.113)	87898	5.00000	5.093
	63 Bromobenzene	156	8.725	8.734	(0.920)	872081	40.0000	41.317
	64 N-Propyl Benzene	91	8.737	8.746	(0.921)	3524488	40.0000	39.175
	65 1,1,2,2-Tetrachloroethane	83	8.796	8.794	(0.928)	710198	40.0000	43.365
	66 2-Chloro Toluene	91	8.855	8.865	(0.934)	2623582	40.0000	40.218
	67 1,3,5-Trimethyl Benzene	105	8.890	8.888	(0.938)	2732713	40.0000	40.938
	68 1,2,3-Trichloropropane	110	8.902	8.900	(0.939)	231535	40.0000	43.141
	69 Trans-1,4-Dichloro 2-Butene	53	8.926	8.936	(0.941)	181632	40.0000	43.206
	70 4-Chloro Toluene	91	8.985	8.983	(0.948)	2384908	40.0000	39.391
	71 T-Butyl Benzene	119	9.127	9.125	(0.963)	2387180	40.0000	40.804
	72 1,2,4-Trimethylbenzene	105	9.174	9.172	(0.968)	2744456	40.0000	40.779
	73 S-Butyl Benzene	105	9.257	9.255	(0.976)	3249626	40.0000	39.479
	74 4-Isopropyl Toluene	119	9.364	9.362	(0.988)	2847210	40.0000	41.159
	75 1,3-Dichlorobenzene	146	9.423	9.421	(0.994)	1641228	40.0000	40.193
*	76 d4-1,4-Dichlorobenzene	152	9.482	9.480	(1.000)	230832	10.0000	
	77 1,4-Dichlorobenzene	146	9.494	9.492	(1.001)	1622357	40.0000	38.512
	78 N-Butyl Benzene	91	9.683	9.693	(1.021)	2514237	40.0000	41.630

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.813	9.811	(1.035)	111487	5.00000	5.068
80 1,2-Dichlorobenzene	146	9.813	9.811	(1.035)	1550896	40.0000	40.066
81 1,2-Dibromo 3-Chloropropane	75	10.441	10.450	(1.101)	120326	40.0000	39.137
83 Hexachloro 1,3-Butadiene	225	10.973	10.971	(1.157)	405187	40.0000	40.117
84 1,2,4-Trichlorobenzene	180	10.997	10.995	(1.160)	1051573	40.0000	40.344
85 Naphthalene	128	11.257	11.267	(1.187)	2361196	40.0000	41.493
86 1,2,3-Trichlorobenzene	180	11.423	11.420	(1.205)	953826	40.0000	38.968

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141612.D
Lab Smp Id: SED0031-CAL7
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD40
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	299210	7.09
37 1,4-Difluorobenze	430036	215018	860072	462723	7.60
53 d5-Chlorobenzene	398095	199048	796190	420893	5.73
76 d4-1,4-Dichlorobe	214594	107297	429188	230832	7.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.05
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.04
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.03
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.03

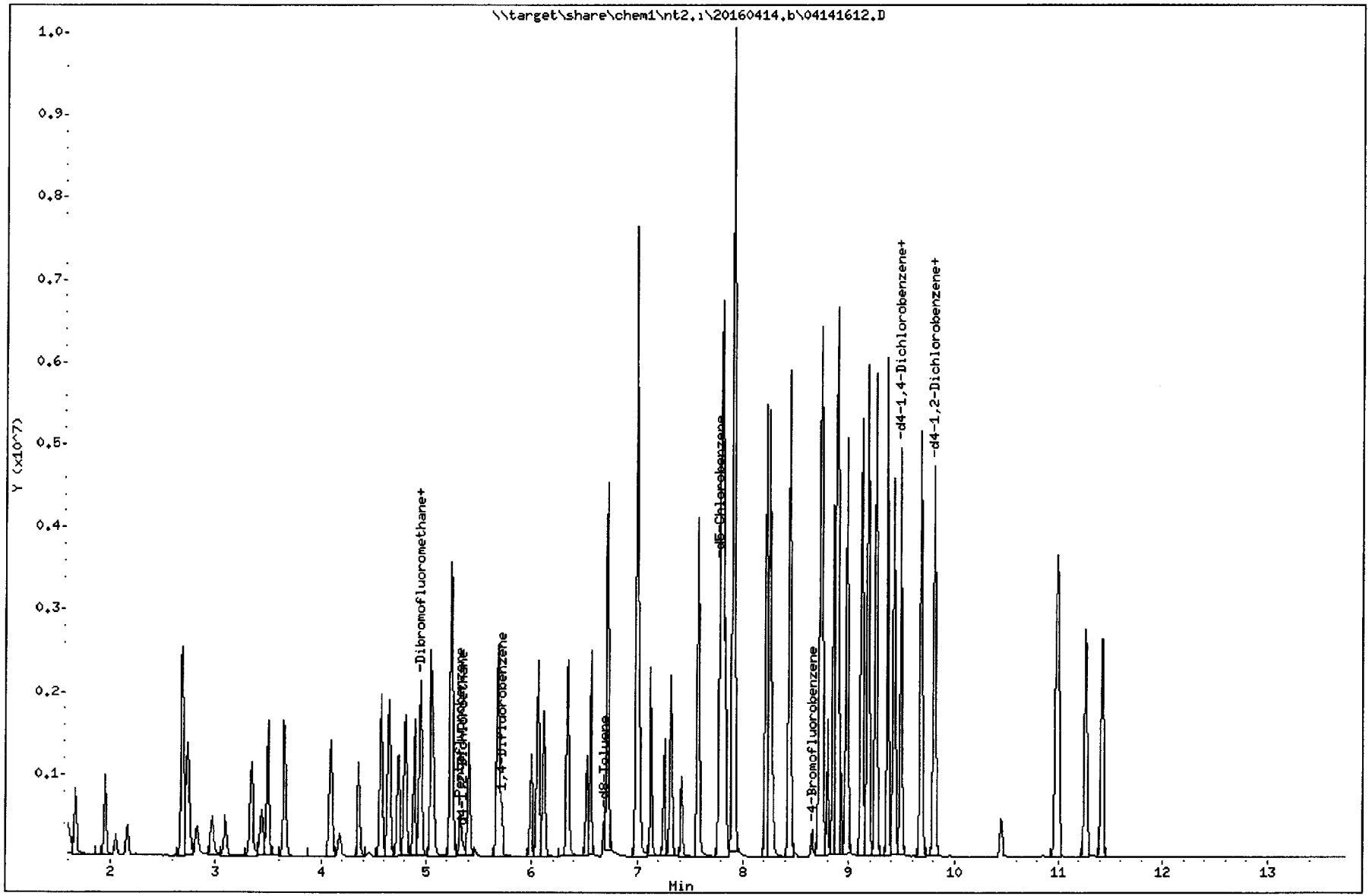
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160414.b\04141612.D
Date : 14-APR-2016 11:12
Client ID: VSTD40
Sample Info: SED0031-CAL7,10,10,0,

Instrument: nt2.i

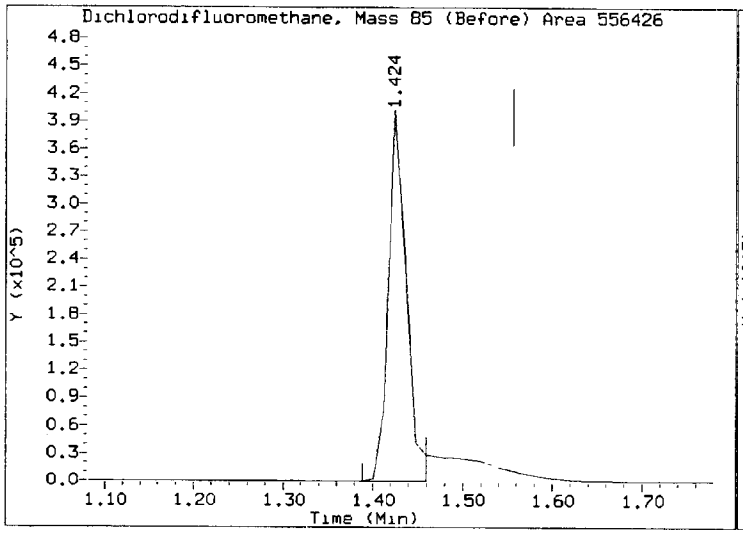
Operator: LH
Column diameter: 0.18

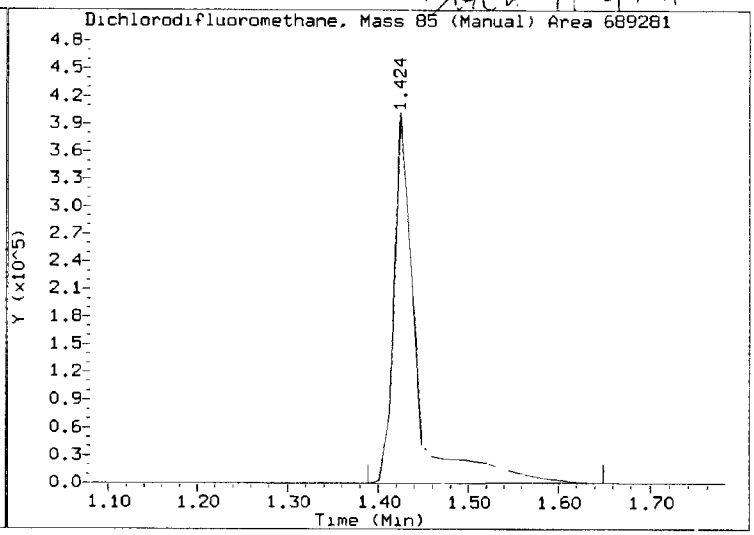
Column phase: RTXVMS



Quant Ion Manual Peak Adjustment Report

Datafile: \\target\share\chem1\nt2.i\20160414.b\04141612.D
Injection Date: 14-APR-2016 11:12
Lab ID:SED0031-CAL7 **Client ID:**VSTD40
Report Date: 04/14/2016 12:40





REVIEW SUMMARY FOR FILE - 04141612.D

Lab ID: SED0031-CAL7
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 11:12

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

Exception: Acrolein 0.0000
Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141613.D
Lab Smp Id: SED0031-CAL6 Client Smp ID: VSTD20
Inj Date : 14-APR-2016 11:33
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL6,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 11 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.435	1.434	(0.269)	341037	20.0000	21.313
173 2-Pentanone	86	6.345	6.344	(1.110)	220437	100.000	99.689
2 Chloromethane	50	1.589	1.599	(0.298)	400383	20.0000	19.955
3 Vinyl Chloride	62	1.671	1.670	(0.314)	398783	20.0000	21.100(M)
4 Bromomethane	94	1.955	1.954	(0.367)	256208	20.0000	20.245
5 Chloroethane	64	2.062	2.061	(0.387)	95902	20.0000	21.970
6 Trichlorofluoromethane	101	2.180	2.191	(0.409)	431078	20.0000	20.272
7 1,1-Dichloroethene	61	2.689	2.700	(0.505)	456087	20.0000	20.170
8 Carbon Disulfide	76	2.701	2.700	(0.507)	1048657	20.0000	20.557
9 112Trichloro122Trifluoroethane	101	2.748	2.747	(0.516)	308132	20.0000	20.089
10 Iodomethane	142	2.831	2.842	(0.531)	209259	20.0000	18.650
11 Bromoethane	108	2.973	2.984	(0.558)	225671	20.0000	20.127
12 Acrolein	56	3.091	3.090	(0.580)	243625	100.000	98.975
13 Methylene Chloride	84	3.340	3.339	(0.627)	330271	20.0000	19.841
14 Acetone	43	3.434	3.434	(0.645)	341201	100.000	95.785
15 Trans-1,2-Dichloroethene	96	3.505	3.505	(0.658)	337029	20.0000	20.220
17 Methyl tert butyl ether	73	3.647	3.658	(0.685)	884530	20.0000	20.730
18 1,1-Dichloroethane	63	4.097	4.096	(0.769)	635330	20.0000	20.585
19 Acrylonitrile	53	4.168	4.179	(0.782)	109895	20.0000	21.018
20 Vinyl Acetate	43	4.357	4.357	(0.818)	693432	20.0000	19.536
22 Cis-1,2-Dichloroethene	96	4.570	4.570	(0.858)	377948	20.0000	20.593
23 2,2-Dichloropropane	77	4.653	4.652	(0.873)	503691	20.0000	21.546

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.736	4.735	(0.889)	174829	20.0000	21.132
	25 Chloroform	83	4.807	4.806	(0.902)	606639	20.0000	20.780
	26 Carbon Tetrachloride	117	4.890	4.889	(0.855)	415819	20.0000	17.897
$	27 Dibromofluoromethane	111	4.949	4.948	(0.929)	72703	5.00000	5.192
	28 1,1,1-Trichloroethane	97	4.949	4.948	(0.929)	551568	20.0000	21.360
	29 2-Butanone	43	5.067	5.066	(0.951)	672891	100.000	100.38
	30 1,1-Dichloropropene	75	5.044	5.043	(0.882)	470196	20.0000	20.380
	31 Benzene	78	5.245	5.244	(0.917)	1442238	20.0000	20.327
*	32 Pentafluorobenzene	168	5.328	5.327	(1.000)	296488	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.351	5.350	(1.004)	86707	5.00000	5.186
	34 1,2-Dichloroethane	62	5.399	5.410	(0.944)	445731	20.0000	20.151
	36 Trichloroethene	130	5.683	5.682	(0.994)	373634	20.0000	20.046
*	37 1,4-Difluorobenzene	114	5.718	5.717	(1.000)	466829	10.0000	
	38 Dibromomethane	93	5.990	5.989	(1.048)	181904	20.0000	20.020
	39 1,2-Dichloropropane	63	6.061	6.060	(1.060)	345560	20.0000	20.313
	40 Bromodichloromethane	83	6.109	6.108	(1.068)	434913	20.0000	22.038
	41 2-Chloroethyl Vinyl Ether	63	6.523	6.522	(1.141)	205545	20.0000	21.444
	42 Cis 1,3-dichloropropene	75	6.558	6.557	(1.147)	525226	20.0000	22.274
$	43 d8-Toluene	98	6.688	6.688	(1.170)	282340	5.00000	5.019
	44 Toluene	92	6.724	6.723	(1.176)	896331	20.0000	19.672
	45 4-Methyl-2-Pentanone	58	6.996	6.995	(1.223)	596128	100.000	101.22
	46 Tetrachloroethene	166	6.984	6.995	(0.898)	384204	20.0000	20.218
	47 Trans 1,3-Dichloropropene	75	7.020	7.019	(1.228)	451153	20.0000	18.313
	48 1,1,2-Trichloroethane	97	7.126	7.125	(1.246)	290774	20.0000	20.758
	49 Chlorodibromomethane	129	7.256	7.256	(0.933)	309211	20.0000	17.885
	50 1,3-Dichloropropane	76	7.316	7.315	(0.941)	504699	20.0000	20.819
	51 1,2-Dibromoethane	107	7.422	7.421	(1.298)	281360	20.0000	21.468
	52 2-Hexanone	43	7.576	7.575	(0.974)	1024013	100.000	104.78
*	53 d5-Chlorobenzene	117	7.777	7.776	(1.000)	417580	10.0000	
	54 Chlorobenzene	112	7.789	7.788	(1.002)	990145	20.0000	20.308
	55 Ethyl Benzene	106	7.801	7.800	(1.003)	561031	20.0000	20.580
	56 1,1,1,2-Tetrachloroethane	131	7.836	7.835	(1.008)	322190	20.0000	22.517
	57 m,p-xylene	106	7.907	7.906	(1.017)	1368875	40.0000	42.596
	58 o-Xylene	106	8.215	8.214	(1.056)	657009	20.0000	21.101
	59 Styrene	104	8.250	8.250	(1.061)	1128526	20.0000	22.470
	60 Bromoform	173	8.274	8.285	(0.873)	174435	20.0000	16.671
	61 Isopropyl Benzene	105	8.440	8.439	(0.890)	1683418	20.0000	20.651
$	62 4-Bromofluorobenzene	174	8.653	8.651	(1.113)	87256	5.00000	5.096
	63 Bromobenzene	156	8.724	8.734	(0.920)	428429	20.0000	19.987
	64 N-Propyl Benzene	91	8.747	8.746	(0.923)	1875629	20.0000	20.528
	65 1,1,2,2-Tetrachloroethane	83	8.795	8.794	(0.928)	350022	20.0000	21.045
	66 2-Chloro Toluene	91	8.854	8.865	(0.934)	1336935	20.0000	20.180
	67 1,3,5-Trimethyl Benzene	105	8.889	8.888	(0.938)	1418739	20.0000	20.928
	68 1,2,3-Trichloropropane	110	8.901	8.900	(0.939)	112574	20.0000	20.654
	69 Trans-1,4-Dichloro 2-Butene	53	8.925	8.936	(0.941)	87927	20.0000	20.596
	70 4-Chloro Toluene	91	8.984	8.983	(0.948)	1221030	20.0000	19.859
	71 T-Butyl Benzene	119	9.126	9.125	(0.963)	1228515	20.0000	20.677
	72 1,2,4-Trimethylbenzene	105	9.173	9.172	(0.968)	1437489	20.0000	21.032
	73 S-Butyl Benzene	105	9.256	9.255	(0.976)	1743138	20.0000	20.853
	74 4-Isopropyl Toluene	119	9.363	9.362	(0.988)	1490515	20.0000	21.217
	75 1,3-Dichlorobenzene	146	9.422	9.421	(0.994)	822236	20.0000	19.828
*	76 d4-1,4-Dichlorobenzene	152	9.481	9.480	(1.000)	234422	10.0000	
	77 1,4-Dichlorobenzene	146	9.493	9.492	(1.001)	836087	20.0000	19.543 (M)
	78 N-Butyl Benzene	91	9.682	9.693	(1.021)	1303259	20.0000	21.249

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.812	9.811	(1.035)	110809	5.00000	4.960
80 1,2-Dichlorobenzene	146	9.812	9.811	(1.035)	773968	20.0000	19.689
81 1,2-Dibromo 3-Chloropropane	75	10.439	10.450	(1.101)	55399	20.0000	17.743
83 Hexachloro 1,3-Butadiene	225	10.972	10.971	(1.157)	203801	20.0000	19.869
84 1,2,4-Trichlorobenzene	180	10.996	10.995	(1.160)	521886	20.0000	19.716
85 Naphthalene	128	11.268	11.267	(1.188)	1216607	20.0000	21.052
86 1,2,3-Trichlorobenzene	180	11.422	11.420	(1.205)	488089	20.0000	19.635

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141613.D
Lab Smp Id: SED0031-CAL6
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD20
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	296488	6.12
37 1,4-Difluorobenze	430036	215018	860072	466829	8.56
53 d5-Chlorobenzene	398095	199048	796190	417580	4.89
76 d4-1,4-Dichlorobe	214594	107297	429188	234422	9.24

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.03
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

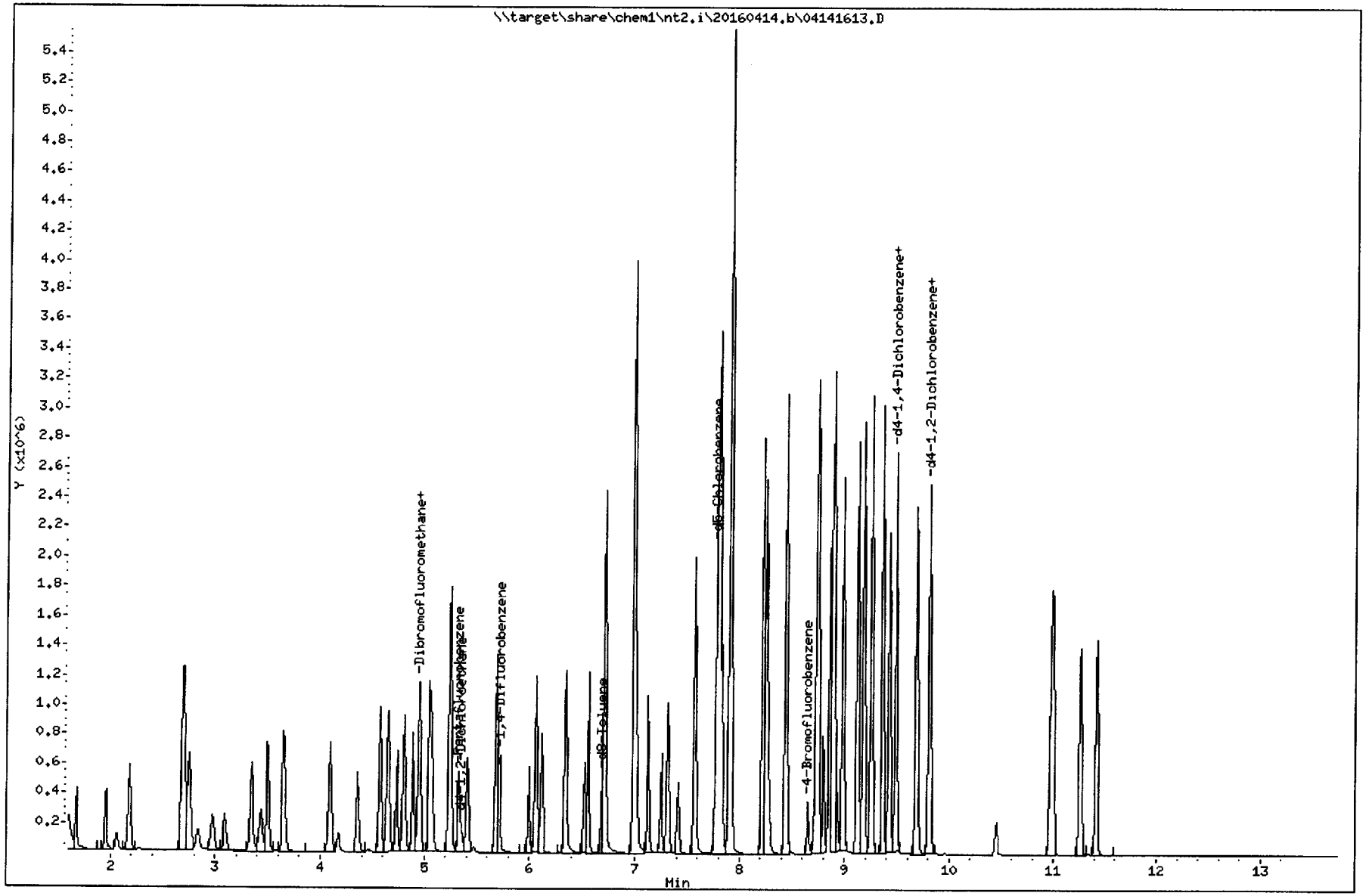
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160414.b\04141613.D
Date : 14-APR-2016 11:33
Client ID: VSTD20
Sample Info: SED0031-CAL6,10,10,0,

Instrument: nt2.i

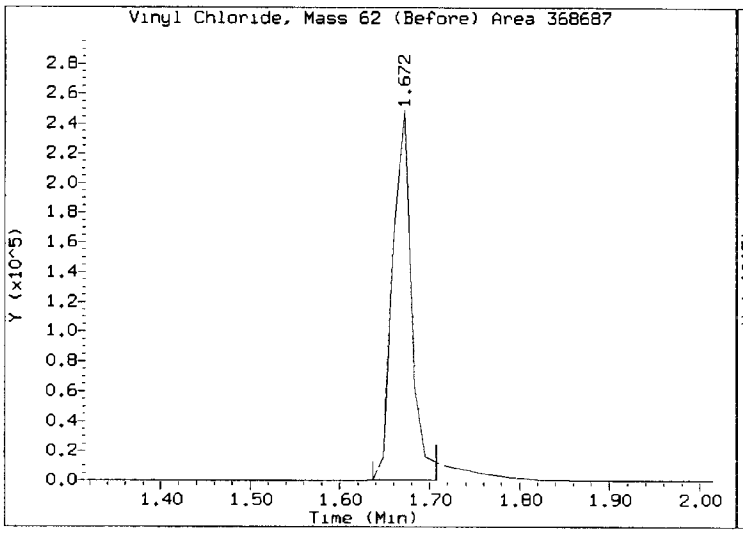
Operator: LH
Column diameter: 0.18

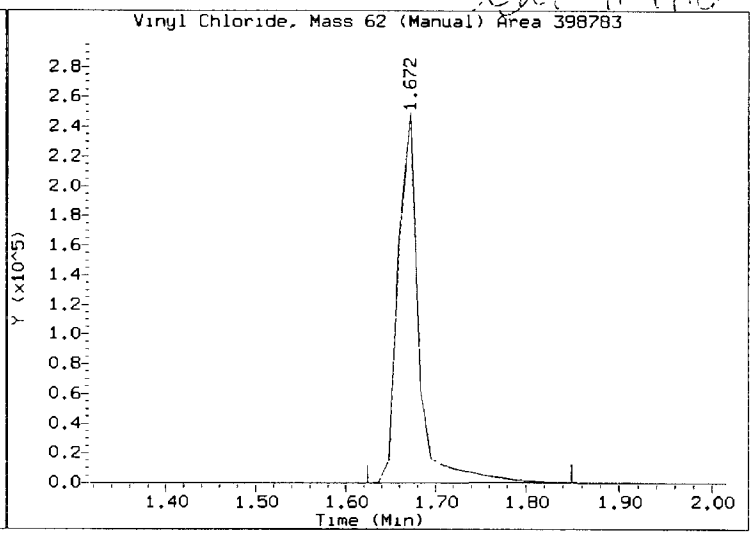
Column phase: RTXVMS

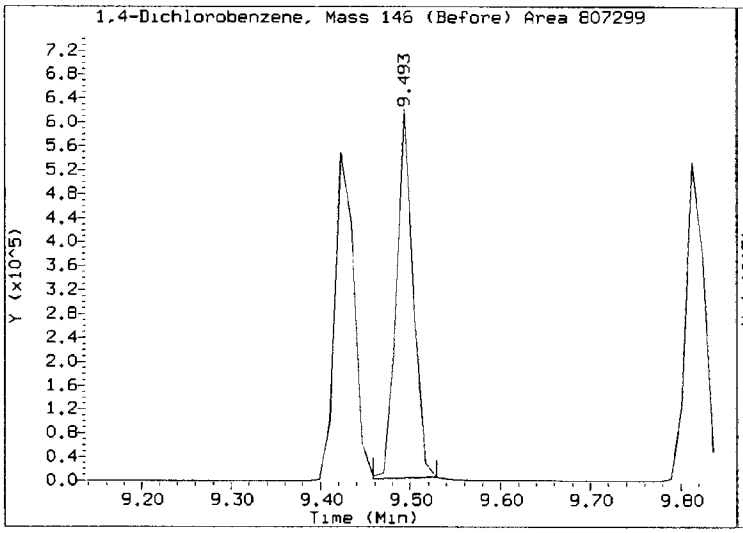


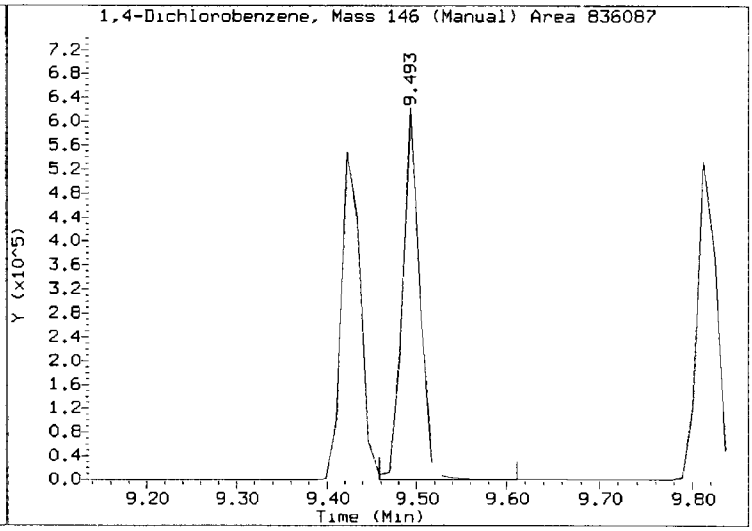
Quant Ion Manual Peak Adjustment Report

Datafile: \\target\share\chem1\nt2.i\20160414.b\04141613.D
Injection Date: 14-APR-2016 11:33
Lab ID:SED0031-CAL6 Client ID:VSTD20
Report Date: 04/14/2016 12:43









REVIEW SUMMARY FOR FILE - 04141613.D

Lab ID: SED0031-CAL6
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 11:33

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

Exception: Acrolein 0.0000
Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141614.D
Lab Smp Id: SED0031-CAL5 Client Smp ID: VSTD10
Inj Date : 14-APR-2016 11:54
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL5,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 12 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.433	1.434	(0.269)	163542	10.0000	10.846(M)
173	2-Pentanone	86	6.344	6.344	(1.110)	101793	50.0000	49.973
2	Chloromethane	50	1.599	1.599	(0.300)	189062	10.0000	9.999
3	Vinyl Chloride	62	1.670	1.670	(0.314)	188975	10.0000	10.611(M)
4	Bromomethane	94	1.954	1.954	(0.367)	125981	10.0000	10.564
5	Chloroethane	64	2.060	2.061	(0.387)	49016	10.0000	11.916
6	Trichlorofluoromethane	101	2.191	2.191	(0.411)	208849	10.0000	10.422
7	1,1-Dichloroethene	61	2.699	2.700	(0.507)	217595	10.0000	10.212
8	Carbon Disulfide	76	2.699	2.700	(0.507)	506921	10.0000	10.545
9	112Trichloro122Trifluoroethane	101	2.747	2.747	(0.516)	147112	10.0000	10.178
10	Iodomethane	142	2.841	2.842	(0.533)	79717	10.0000	7.757
11	Bromoethane	108	2.983	2.984	(0.560)	107294	10.0000	10.155
12	Acrolein	56	3.090	3.090	(0.580)	114709	50.0000	49.452
13	Methylene Chloride	84	3.338	3.339	(0.627)	157635	10.0000	10.049
14	Acetone	43	3.433	3.434	(0.645)	164276	50.0000	48.938
15	Trans-1,2-Dichloroethene	96	3.504	3.505	(0.658)	160900	10.0000	10.244
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	419440	10.0000	10.431
18	1,1-Dichloroethane	63	4.096	4.096	(0.769)	298078	10.0000	10.249
19	Acrylonitrile	53	4.179	4.179	(0.785)	50283	10.0000	10.205
20	Vinyl Acetate	43	4.356	4.357	(0.818)	318780	10.0000	9.531
22	Cis-1,2-Dichloroethene	96	4.569	4.570	(0.858)	178703	10.0000	10.333
23	2,2-Dichloropropane	77	4.652	4.652	(0.873)	232105	10.0000	10.536

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.735	4.735	(0.889)	81780	10.0000	10.490
	25 Chloroform	83	4.806	4.806	(0.902)	282124	10.0000	10.255
	26 Carbon Tetrachloride	117	4.889	4.889	(0.855)	183821	10.0000	8.588
$	27 Dibromofluoromethane	111	4.948	4.948	(0.929)	67467	5.00000	5.112
	28 1,1,1-Trichloroethane	97	4.948	4.948	(0.929)	257375	10.0000	10.577
	29 2-Butanone	43	5.066	5.066	(0.951)	311144	50.0000	49.257
	30 1,1-Dichloropropene	75	5.042	5.043	(0.882)	221757	10.0000	10.434
	31 Benzene	78	5.243	5.244	(0.917)	689825	10.0000	10.554
*	32 Pentafluorobenzene	168	5.326	5.327	(1.000)	279395	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	79831	5.00000	5.067
	34 1,2-Dichloroethane	62	5.409	5.410	(0.946)	212078	10.0000	10.408
	36 Trichloroethene	130	5.681	5.682	(0.994)	174740	10.0000	10.177
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	430036	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	87790	10.0000	10.489
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	165435	10.0000	10.557
	40 Bromodichloromethane	83	6.107	6.108	(1.068)	196324	10.0000	10.799
	41 2-Chloroethyl Vinyl Ether	63	6.521	6.522	(1.141)	92957	10.0000	10.528
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	239551	10.0000	11.028
$	43 d8-Toluene	98	6.687	6.688	(1.170)	260817	5.00000	5.033
	44 Toluene	92	6.723	6.723	(1.176)	430516	10.0000	10.257
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	274706	50.0000	50.634
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	179410	10.0000	9.903
	47 Trans 1,3-Dichloropropene	75	7.018	7.019	(1.228)	204812	10.0000	9.025
	48 1,1,2-Trichloroethane	97	7.125	7.125	(1.246)	135800	10.0000	10.524
	49 Chlorodibromomethane	129	7.255	7.256	(0.933)	136018	10.0000	8.252
	50 1,3-Dichloropropane	76	7.314	7.315	(0.941)	241512	10.0000	10.450
	51 1,2-Dibromoethane	107	7.421	7.421	(1.298)	132040	10.0000	10.937
	52 2-Hexanone	43	7.575	7.575	(0.974)	482209	50.0000	51.757
*	53 d5-Chlorobenzene	117	7.776	7.776	(1.000)	398095	10.0000	
	54 Chlorobenzene	112	7.788	7.788	(1.002)	468785	10.0000	10.086
	55 Ethyl Benzene	106	7.799	7.800	(1.003)	262186	10.0000	10.088
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	144894	10.0000	10.622
	57 m,p-xylene	106	7.906	7.906	(1.017)	653293	20.0000	21.324
	58 o-Xylene	106	8.214	8.214	(1.056)	314606	10.0000	10.599
	59 Styrene	104	8.249	8.250	(1.061)	533140	10.0000	11.135
	60 Bromoform	173	8.285	8.285	(0.874)	73472	10.0000	7.671
	61 Isopropyl Benzene	105	8.438	8.439	(0.890)	818362	10.0000	10.967
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	81249	5.00000	4.977
	63 Bromobenzene	156	8.734	8.734	(0.921)	201981	10.0000	10.293
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	919164	10.0000	10.990
	65 1,1,2,2-Tetrachloroethane	83	8.793	8.794	(0.928)	162760	10.0000	10.690
	66 2-Chloro Toluene	91	8.864	8.865	(0.935)	638457	10.0000	10.528
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	687177	10.0000	11.073
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	52028	10.0000	10.428
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.936	(0.943)	39791	10.0000	10.182
	70 4-Chloro Toluene	91	8.983	8.983	(0.948)	589258	10.0000	10.469
	71 T-Butyl Benzene	119	9.125	9.125	(0.963)	597974	10.0000	10.995
	72 1,2,4-Trimethylbenzene	105	9.172	9.172	(0.968)	691507	10.0000	11.052
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	851250	10.0000	11.124
	74 4-Isopropyl Toluene	119	9.361	9.362	(0.988)	721338	10.0000	11.217
	75 1,3-Dichlorobenzene	146	9.420	9.421	(0.994)	396669	10.0000	10.449
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.480	(1.000)	214594	10.0000	
	77 1,4-Dichlorobenzene	146	9.491	9.492	(1.001)	397764	10.0000	10.157(M)
	78 N-Butyl Benzene	91	9.693	9.693	(1.022)	617427	10.0000	10.997

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	104783	5.00000	5.124
80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	367038	10.0000	10.200
81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	24137	10.0000	8.445
83 Hexachloro 1,3-Butadiene	225	10.971	10.971	(1.157)	94912	10.0000	10.108
84 1,2,4-Trichlorobenzene	180	10.994	10.995	(1.160)	245596	10.0000	10.135
85 Naphthalene	128	11.266	11.267	(1.188)	574961	10.0000	10.868
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	233928	10.0000	10.280

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141614.D
Lab Smp Id: SED0031-CAL5
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD10
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	279395	0.00
37 1,4-Difluorobenze	430036	215018	860072	430036	0.00
53 d5-Chlorobenzene	398095	199048	796190	398095	0.00
76 d4-1,4-Dichlorobe	214594	107297	429188	214594	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

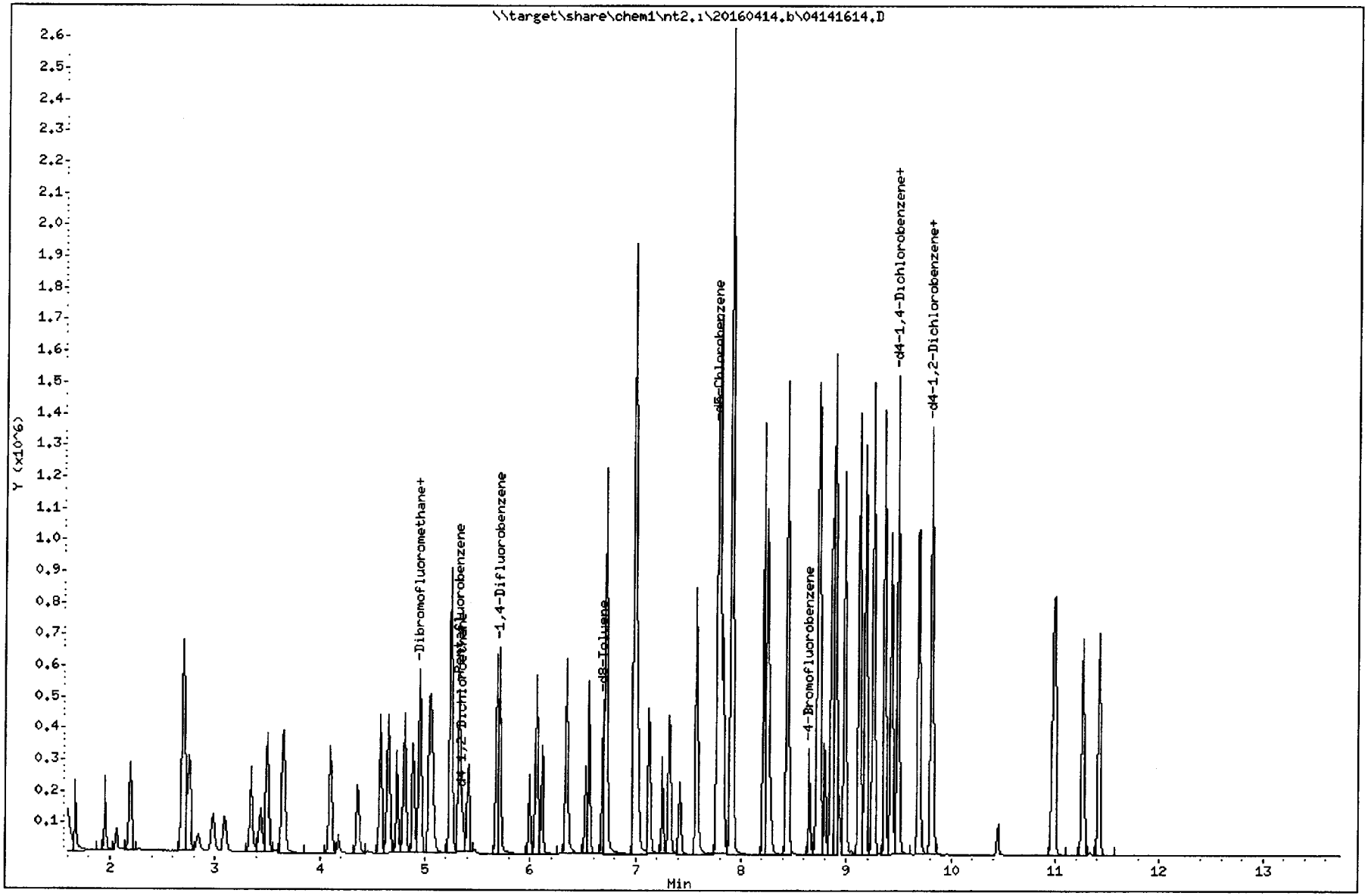
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160414.b\04141614.D
Date : 14-APR-2016 11:54
Client ID: VSTD10
Sample Info: SED0031-CAL5,10,10,0,

Instrument: nt2.1

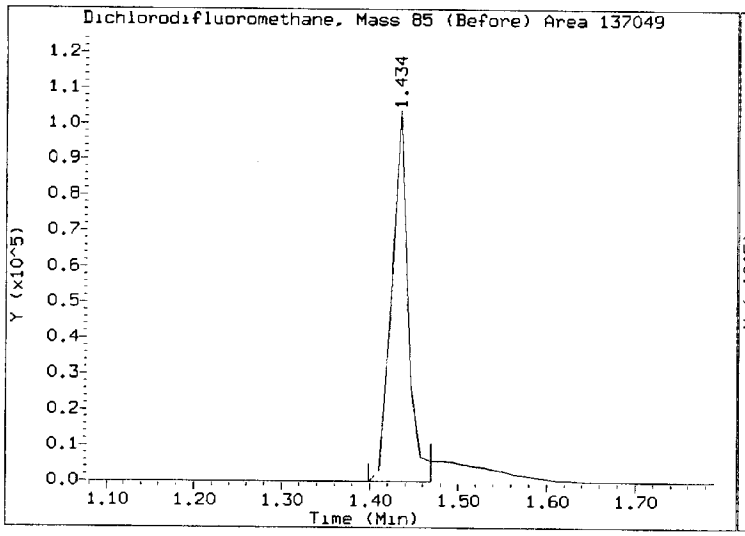
Operator: LH
Column diameter: 0.18

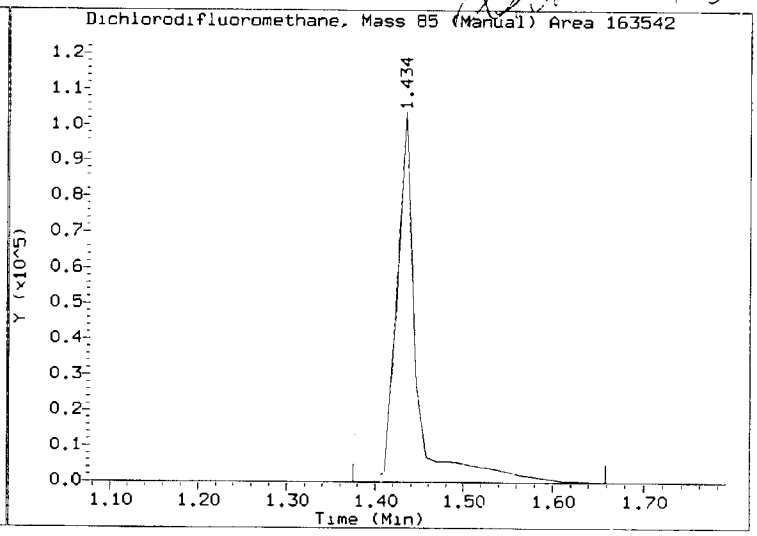
Column phase: RTXVMS

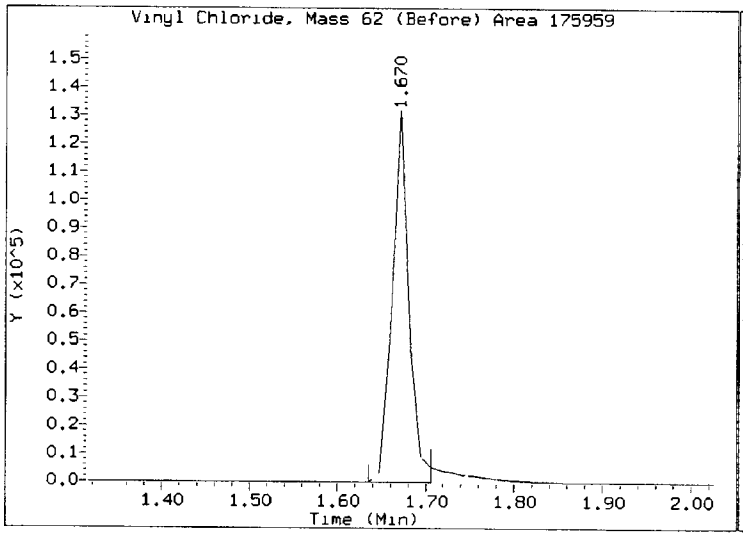


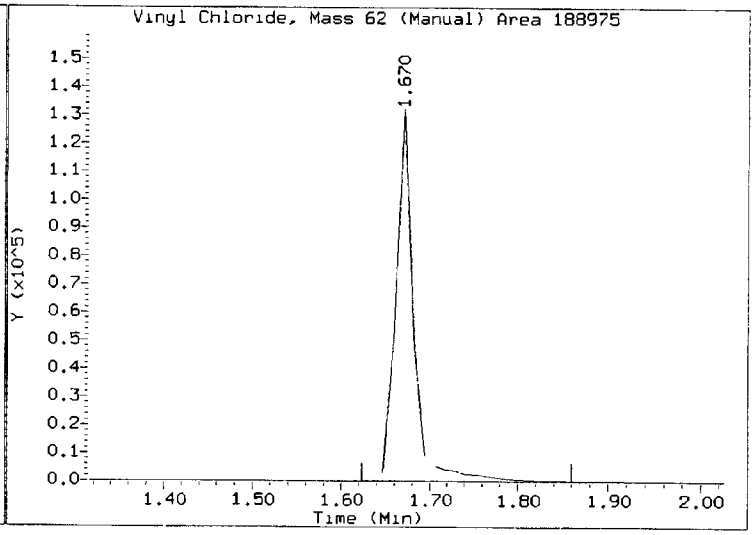
Quant Ion Manual Peak Adjustment Report

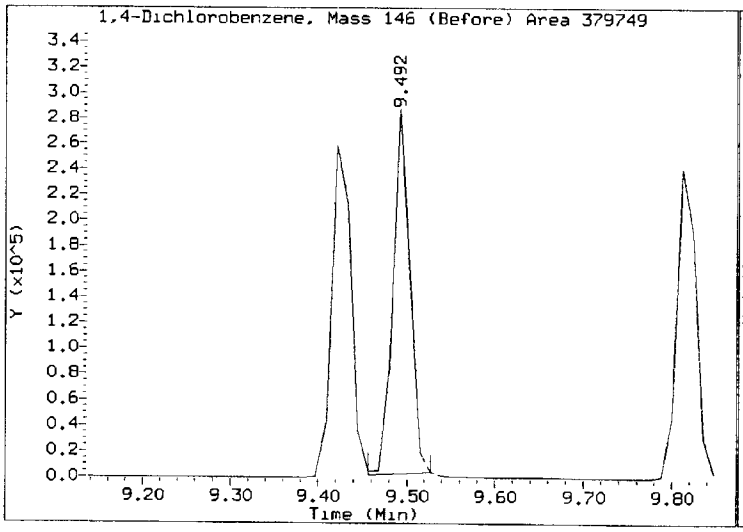
Datafile: \\target\share\chem1\nt2.i\20160414.b\04141614.D
Injection Date: 14-APR-2016 11:54
Lab ID:SED0031-CAL5 Client ID:VSTD10
Report Date: 04/14/2016 12:42

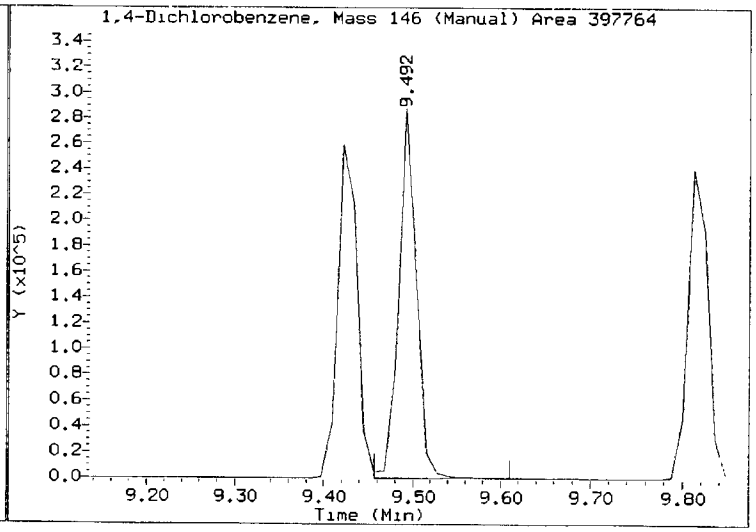












REVIEW SUMMARY FOR FILE - 04141614.D

Lab ID: SED0031-CAL5
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 11:54

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

Exception: Acrolein 0.0000
Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141615.D
Lab Smp Id: SED0031-CAL4 Client Smp ID: VSTD02
Inj Date : 14-APR-2016 12:16
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL4,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.434	1.434	(0.269)	29953	2.00000	1.901(M)
173 2-Pentanone	86	6.344	6.344	(1.110)	19398	10.0000	9.188
2 Chloromethane	50	1.587	1.599	(0.298)	39288	2.00000	1.989
3 Vinyl Chloride	62	1.670	1.670	(0.314)	37331	2.00000	2.006
4 Bromomethane	94	1.954	1.954	(0.367)	25927	2.00000	2.081
5 Chloroethane	64	2.061	2.061	(0.387)	9925	2.00000	2.309
6 Trichlorofluoromethane	101	2.179	2.191	(0.409)	42955	2.00000	2.052
7 1,1-Dichloroethene	61	2.688	2.700	(0.505)	46189	2.00000	2.075
8 Carbon Disulfide	76	2.700	2.700	(0.507)	106865	2.00000	2.128
9 112Trichloro122Trifluoroethane	101	2.747	2.747	(0.516)	31492	2.00000	2.085
10 Iodomethane	142	2.830	2.842	(0.531)	10576	2.00000	1.001
11 Bromoethane	108	2.972	2.984	(0.558)	23091	2.00000	2.092
12 Acrolein	56	3.090	3.090	(0.580)	24512	10.0000	10.114
13 Methylene Chloride	84	3.339	3.339	(0.627)	31948	2.00000	1.949
14 Acetone	43	3.433	3.434	(0.645)	36902	10.0000	10.522
15 Trans-1,2-Dichloroethene	96	3.504	3.505	(0.658)	34473	2.00000	2.101
17 Methyl tert butyl ether	73	3.658	3.658	(0.687)	87400	2.00000	2.080
18 1,1-Dichloroethane	63	4.096	4.096	(0.769)	64677	2.00000	2.128
19 Acrylonitrile	53	4.179	4.179	(0.785)	10177	2.00000	1.977
20 Vinyl Acetate	43	4.356	4.357	(0.818)	59348	2.00000	1.698
22 Cis-1,2-Dichloroethene	96	4.569	4.570	(0.858)	37997	2.00000	2.103
23 2,2-Dichloropropane	77	4.652	4.652	(0.873)	45716	2.00000	1.986

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.735	4.735	(0.889)	17483	2.00000	2.146
	25 Chloroform	83	4.806	4.806	(0.902)	60315	2.00000	2.098
	26 Carbon Tetrachloride	117	4.889	4.889	(0.855)	33763	2.00000	1.522
$	27 Dibromofluoromethane	111	4.948	4.948	(0.929)	67663	5.00000	4.907
	28 1,1,1-Trichloroethane	97	4.948	4.948	(0.929)	51052	2.00000	2.008
	29 2-Butanone	43	5.078	5.066	(0.953)	66734	10.0000	10.111
	30 1,1-Dichloropropene	75	5.043	5.043	(0.882)	47114	2.00000	2.139
	31 Benzene	78	5.244	5.244	(0.917)	146709	2.00000	2.166
*	32 Pentafluorobenzene	168	5.327	5.327	(1.000)	291921	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	82560	5.00000	5.015
	34 1,2-Dichloroethane	62	5.409	5.410	(0.946)	45043	2.00000	2.133
	36 Trichloroethene	130	5.682	5.682	(0.994)	37478	2.00000	2.106
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	445732	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	18482	2.00000	2.130
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	33688	2.00000	2.074
	40 Bromodichloromethane	83	6.107	6.108	(1.068)	37553	2.00000	1.993
	41 2-Chloroethyl Vinyl Ether	63	6.522	6.522	(1.141)	17509	2.00000	1.913
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	45799	2.00000	2.034
$	43 d8-Toluene	98	6.687	6.688	(1.170)	270966	5.00000	5.044
	44 Toluene	92	6.723	6.723	(1.176)	90914	2.00000	2.090
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	56108	10.0000	9.978
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	38072	2.00000	2.058
	47 Trans 1,3-Dichloropropene	75	7.019	7.019	(1.228)	36081	2.00000	1.534
	48 1,1,2-Trichloroethane	97	7.125	7.125	(1.246)	28342	2.00000	2.119
	49 Chlorodibromomethane	129	7.255	7.256	(0.933)	24125	2.00000	1.433
	50 1,3-Dichloropropane	76	7.326	7.315	(0.942)	50681	2.00000	2.147
	51 1,2-Dibromoethane	107	7.421	7.421	(1.298)	26123	2.00000	2.088
	52 2-Hexanone	43	7.587	7.575	(0.976)	92297	10.0000	9.700
*	53 d5-Chlorobenzene	117	7.776	7.776	(1.000)	406578	10.0000	
	54 Chlorobenzene	112	7.788	7.788	(1.002)	100103	2.00000	2.109
	55 Ethyl Benzene	106	7.800	7.800	(1.003)	55841	2.00000	2.104
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	26292	2.00000	1.887
	57 m,p-xylene	106	7.906	7.906	(1.017)	135404	4.00000	4.327
	58 o-Xylene	106	8.214	8.214	(1.056)	63521	2.00000	2.095
	59 Styrene	104	8.261	8.250	(1.062)	104480	2.00000	2.137
	60 Bromoform	173	8.285	8.285	(0.874)	11432	2.00000	1.164
	61 Isopropyl Benzene	105	8.439	8.439	(0.890)	164942	2.00000	2.155
$	62 4-Bromofluorobenzene	174	8.652	8.651	(1.113)	83545	5.00000	5.011
	63 Bromobenzene	156	8.734	8.734	(0.921)	42590	2.00000	2.116
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	188380	2.00000	2.196
	65 1,1,2,2-Tetrachloroethane	83	8.794	8.794	(0.928)	32165	2.00000	2.060
	66 2-Chloro Toluene	91	8.865	8.865	(0.935)	130515	2.00000	2.098
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	137687	2.00000	2.163
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	10839	2.00000	2.118
	69 Trans-1,4-Dichloro 2-Butene	53	8.936	8.936	(0.943)	7410	2.00000	1.849
	70 4-Chloro Toluene	91	8.983	8.983	(0.948)	124153	2.00000	2.151
	71 T-Butyl Benzene	119	9.125	9.125	(0.963)	119939	2.00000	2.150
	72 1,2,4-Trimethylbenzene	105	9.172	9.172	(0.968)	138009	2.00000	2.151
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	169855	2.00000	2.164
	74 4-Isopropyl Toluene	119	9.362	9.362	(0.988)	144095	2.00000	2.185
	75 1,3-Dichlorobenzene	146	9.421	9.421	(0.994)	81565	2.00000	2.095
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.480	(1.000)	220104	10.0000	
	77 1,4-Dichlorobenzene	146	9.492	9.492	(1.001)	83100	2.00000	2.069
	78 N-Butyl Benzene	91	9.693	9.693	(1.022)	119425	2.00000	2.074

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	103980	5.00000	4.957
80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	76467	2.00000	2.072
81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	4012	2.00000	1.369
83 Hexachloro 1,3-Butadiene	225	10.971	10.971	(1.157)	19767	2.00000	2.052
84 1,2,4-Trichlorobenzene	180	10.994	10.995	(1.160)	49149	2.00000	1.978
85 Naphthalene	128	11.267	11.267	(1.188)	109354	2.00000	2.015
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	47322	2.00000	2.028

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141615.D
Lab Smp Id: SED0031-CAL4
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD02
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	291921	4.48
37 1,4-Difluorobenze	430036	215018	860072	445732	3.65
53 d5-Chlorobenzene	398095	199048	796190	406578	2.13
76 d4-1,4-Dichlorobe	214594	107297	429188	220104	2.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

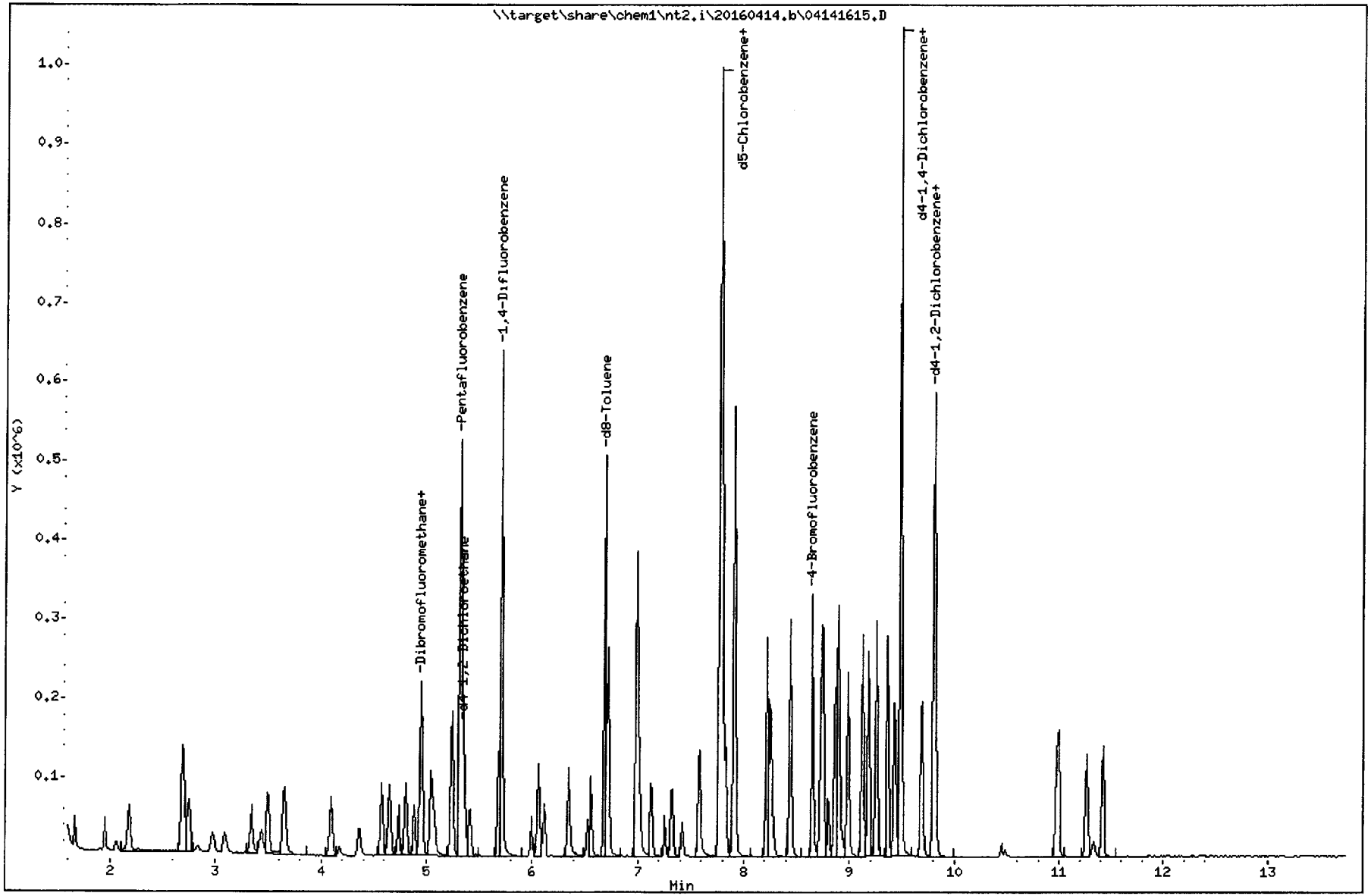
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160414.b\04141615.D
Date : 14-APR-2016 12:16
Client ID: VSTD02
Sample Info: SED0031-CAL4,10,10,0,

Instrument: nt2.i

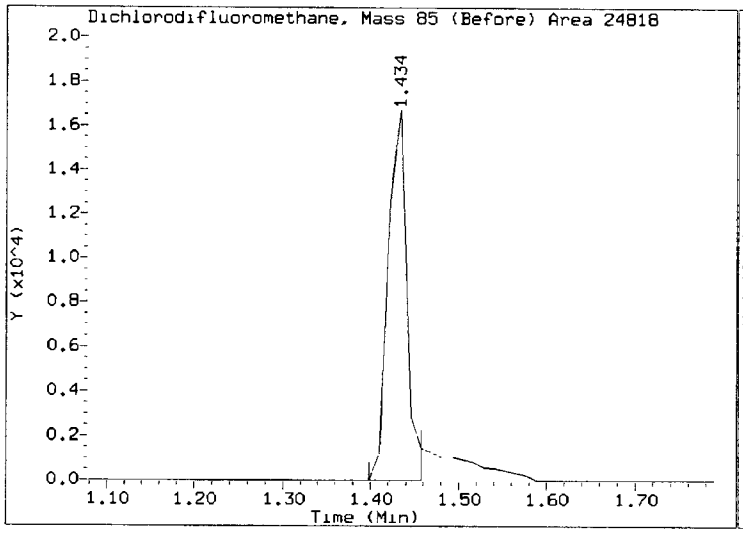
Operator: LH
Column diameter: 0.18

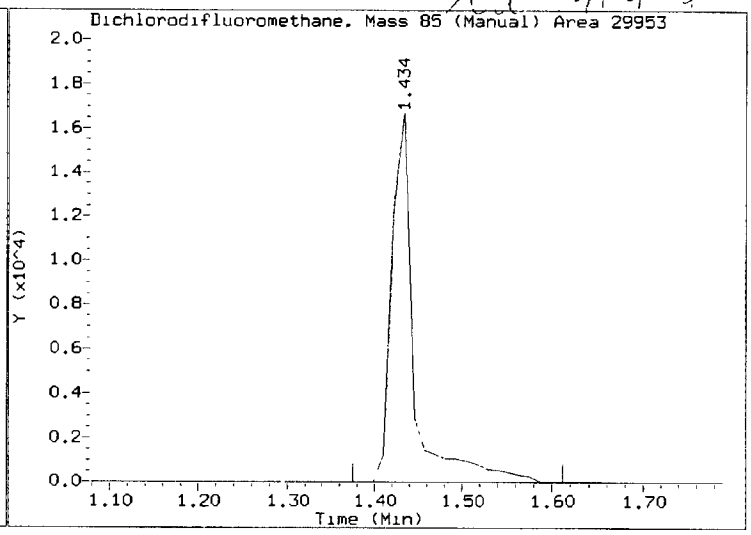
Column phase: RTXVMS



Quant Ion Manual Peak Adjustment Report

Datafile: \\target\share\chem1\nt2.i\20160414.b\04141615.D
Injection Date: 14-APR-2016 12:16
Lab ID:SED0031-CAL4 Client ID:VSTD02
Report Date: 04/14/2016 12:42





REVIEW SUMMARY FOR FILE - 04141615.D

Lab ID: SED0031-CAL4
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 12:16

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

Exception: Acrolein 0.0000
Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141616.D
Lab Smp Id: SED0031-CAL3 Client Smp ID: VSTD01
Inj Date : 14-APR-2016 12:37
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL3,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 14 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.433	1.434	(0.269)	16181	1.00000	1.027(M)
173	2-Pentanone	86	6.344	6.344	(1.110)	9104	5.00000	4.229(M)
2	Chloromethane	50	1.599	1.599	(0.300)	19930	1.00000	1.008
3	Vinyl Chloride	62	1.670	1.670	(0.314)	18579	1.00000	0.9981(M)
4	Bromomethane	94	1.954	1.954	(0.367)	13621	1.00000	1.093(T)
5	Chloroethane	64	2.060	2.061	(0.387)	5634	1.00000	1.310
6	Trichlorofluoromethane	101	2.190	2.191	(0.411)	22007	1.00000	1.051
7	1,1-Dichloroethene	61	2.699	2.700	(0.507)	23019	1.00000	1.034
8	Carbon Disulfide	76	2.699	2.700	(0.507)	53639	1.00000	1.068
9	112Trichloro122Trifluoroethane	101	2.746	2.747	(0.516)	15407	1.00000	1.020
10	Iodomethane	142	2.841	2.842	(0.533)	4359	1.00000	0.4132
11	Bromoethane	108	2.983	2.984	(0.560)	11778	1.00000	1.066
12	Acrolein	56	3.090	3.090	(0.580)	11817	5.00000	4.874
13	Methylene Chloride	84	3.350	3.339	(0.629)	16392	1.00000	0.9998(M)
14	Acetone	43	3.433	3.434	(0.645)	18718	5.00000	5.335
15	Trans-1,2-Dichloroethene	96	3.504	3.505	(0.658)	17768	1.00000	1.082
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	43300	1.00000	1.030
18	1,1-Dichloroethane	63	4.095	4.096	(0.769)	31934	1.00000	1.050
19	Acrylonitrile	53	4.178	4.179	(0.785)	4859	1.00000	0.9435(T)
20	Vinyl Acetate	43	4.367	4.357	(0.820)	28218	1.00000	0.8071
22	Cis-1,2-Dichloroethene	96	4.580	4.570	(0.860)	17794	1.00000	0.9844
23	2,2-Dichloropropane	77	4.651	4.652	(0.873)	21111	1.00000	0.9168

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.734	4.735	(0.889)	7965	1.00000	0.9775
	25 Chloroform	83	4.805	4.806	(0.902)	29611	1.00000	1.030
	26 Carbon Tetrachloride	117	4.888	4.889	(0.855)	15869	1.00000	0.7016
$	27 Dibromofluoromethane	111	4.947	4.948	(0.929)	67675	5.00000	4.906
	28 1,1,1-Trichloroethane	97	4.947	4.948	(0.929)	24979	1.00000	0.9821
	29 2-Butanone	43	5.077	5.066	(0.953)	31533	5.00000	4.776
	30 1,1-Dichloropropene	75	5.054	5.043	(0.884)	22624	1.00000	1.007
	31 Benzene	78	5.243	5.244	(0.917)	71737	1.00000	1.039
*	32 Pentafluorobenzene	168	5.326	5.327	(1.000)	292025	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	81074	5.00000	4.923
	34 1,2-Dichloroethane	62	5.409	5.410	(0.946)	22479	1.00000	1.044 (M)
	36 Trichloroethene	130	5.681	5.682	(0.994)	17936	1.00000	0.9885
*	37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	454446	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	8637	1.00000	0.9765
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	16587	1.00000	1.002
	40 Bromodichloromethane	83	6.107	6.108	(1.068)	17877	1.00000	0.9305
	41 2-Chloroethyl Vinyl Ether	63	6.521	6.522	(1.141)	8029	1.00000	0.8605
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	20345	1.00000	0.8863
$	43 d8-Toluene	98	6.687	6.688	(1.170)	267540	5.00000	4.885
	44 Toluene	92	6.722	6.723	(1.176)	45804	1.00000	1.033
	45 4-Methyl-2-Pentanone	58	6.994	6.995	(1.224)	25905	5.00000	4.518
	46 Tetrachloroethene	166	6.994	6.995	(0.900)	18903	1.00000	1.024
	47 Trans 1,3-Dichloropropene	75	7.018	7.019	(1.228)	16672	1.00000	0.6952
	48 1,1,2-Trichloroethane	97	7.136	7.125	(1.248)	13419	1.00000	0.9841
	49 Chlorodibromomethane	129	7.255	7.256	(0.933)	10595	1.00000	0.6309
	50 1,3-Dichloropropane	76	7.326	7.315	(0.942)	24525	1.00000	1.042
	51 1,2-Dibromoethane	107	7.420	7.421	(1.298)	12163	1.00000	0.9533
	52 2-Hexanone	43	7.586	7.575	(0.976)	44333	5.00000	4.671
*	53 d5-Chlorobenzene	117	7.775	7.776	(1.000)	405581	10.0000	
	54 Chlorobenzene	112	7.787	7.788	(1.002)	50520	1.00000	1.067
	55 Ethyl Benzene	106	7.811	7.800	(1.005)	26215	1.00000	0.9901
	56 1,1,1,2-Tetrachloroethane	131	7.834	7.835	(1.008)	12797	1.00000	0.9208
	57 m,p-xylene	106	7.905	7.906	(1.017)	67021	2.00000	2.147
	58 o-Xylene	106	8.213	8.214	(1.056)	30835	1.00000	1.020
	59 Styrene	104	8.260	8.250	(1.062)	49127	1.00000	1.007
	60 Bromoform	173	8.284	8.285	(0.874)	5161	1.00000	0.5338
	61 Isopropyl Benzene	105	8.438	8.439	(0.890)	81930	1.00000	1.088
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	83435	5.00000	5.017
	63 Bromobenzene	156	8.734	8.734	(0.921)	20195	1.00000	1.020
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	91955	1.00000	1.089
	65 1,1,2,2-Tetrachloroethane	83	8.805	8.794	(0.929)	16144	1.00000	1.050
	66 2-Chloro Toluene	91	8.864	8.865	(0.935)	66407	1.00000	1.085
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	66276	1.00000	1.058
	68 1,2,3-Trichloropropane	110	8.899	8.900	(0.939)	5260	1.00000	1.044
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.936	(0.943)	3085	1.00000	0.7820
	70 4-Chloro Toluene	91	8.982	8.983	(0.948)	60682	1.00000	1.068
	71 T-Butyl Benzene	119	9.124	9.125	(0.963)	58573	1.00000	1.067
	72 1,2,4-Trimethylbenzene	105	9.172	9.172	(0.968)	66543	1.00000	1.054
	73 S-Butyl Benzene	105	9.254	9.255	(0.976)	84122	1.00000	1.089
	74 4-Isopropyl Toluene	119	9.361	9.362	(0.988)	68121	1.00000	1.049
	75 1,3-Dichlorobenzene	146	9.432	9.421	(0.995)	40443	1.00000	1.055
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.480	(1.000)	216623	10.0000	
	77 1,4-Dichlorobenzene	146	9.491	9.492	(1.001)	41569	1.00000	1.052
	78 N-Butyl Benzene	91	9.692	9.693	(1.022)	59819	1.00000	1.055

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	102976	5.00000	4.988
80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	38658	1.00000	1.064
81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	1554	1.00000	0.5386
83 Hexachloro 1,3-Butadiene	225	10.970	10.971	(1.157)	9211	1.00000	0.9718
84 1,2,4-Trichlorobenzene	180	10.994	10.995	(1.160)	24850	1.00000	1.016
85 Naphthalene	128	11.266	11.267	(1.188)	52774	1.00000	0.9882
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	23448	1.00000	1.021

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141616.D
Lab Smp Id: SED0031-CAL3
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD01
Level: LOW
Sample Type: WATER

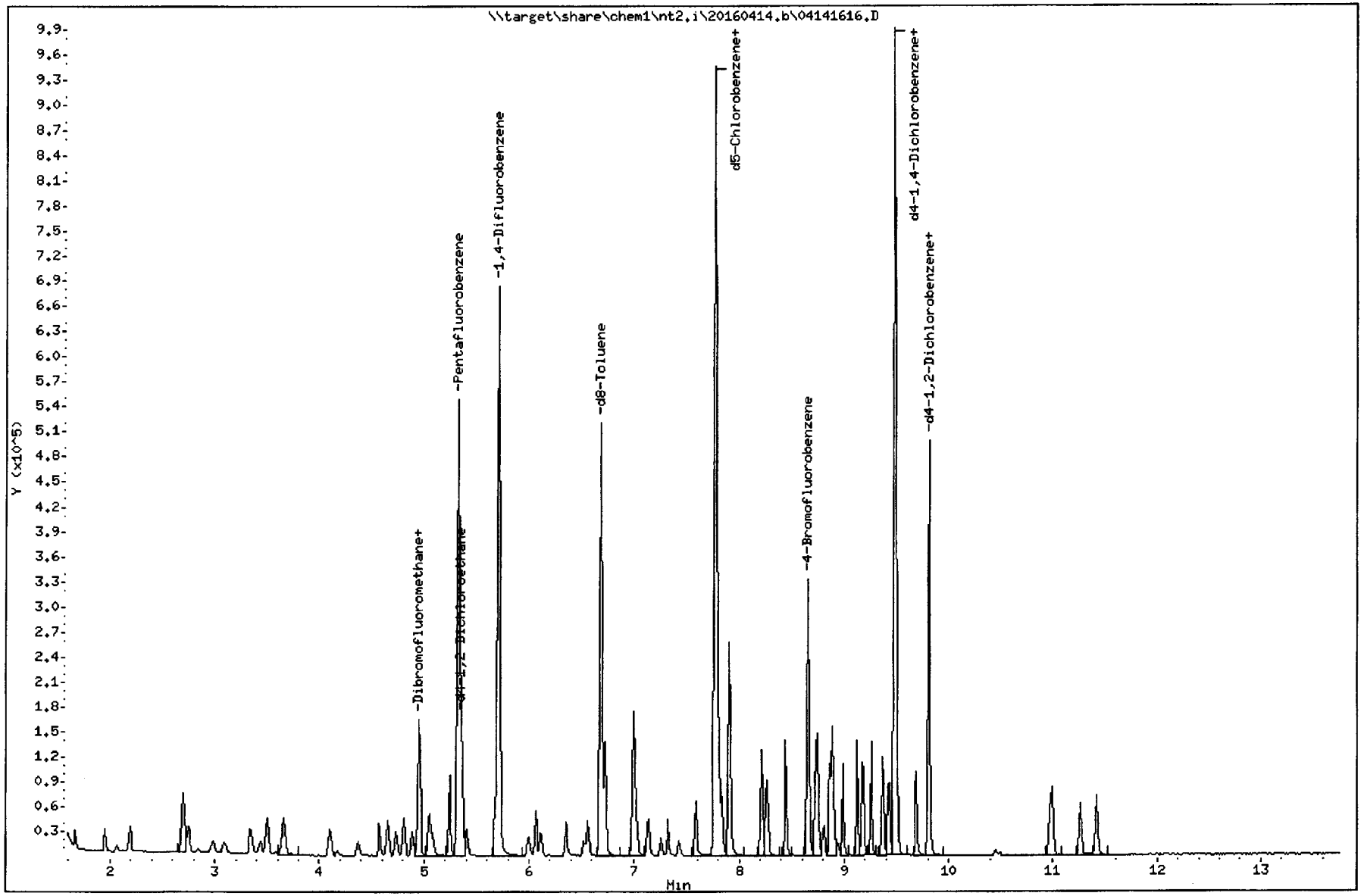
Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	292025	4.52
37 1,4-Difluorobenze	430036	215018	860072	454446	5.68
53 d5-Chlorobenzene	398095	199048	796190	405581	1.88
76 d4-1,4-Dichlorobe	214594	107297	429188	216623	0.95

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.01
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	-0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

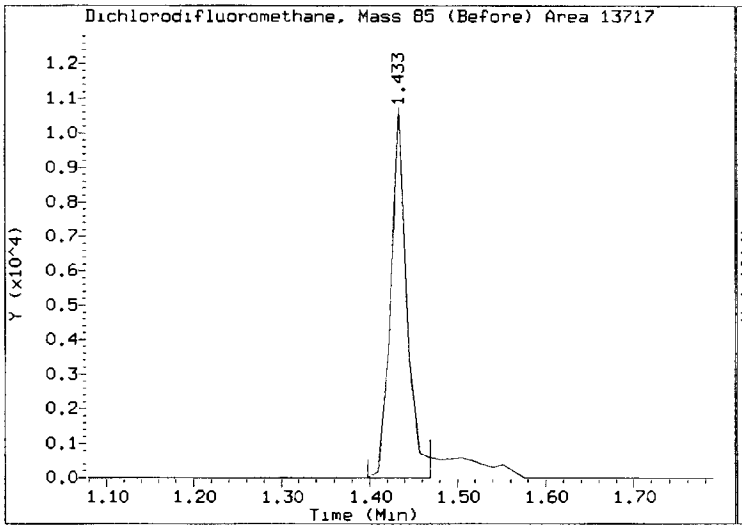
Data File: \\target\share\chem1\nt2.i\20160414.b\04141616.D
Date : 14-APR-2016 12:37
Client ID: VSTD01
Instrument: nt2.i
Sample Info: SED0031-CAL3,10,10,0,
Operator: LH
Column phase: RTXVMS
Column diameter: 0.18

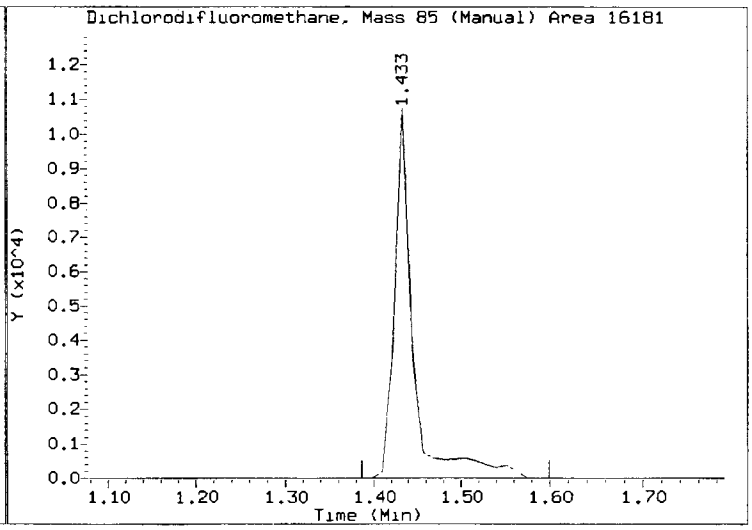


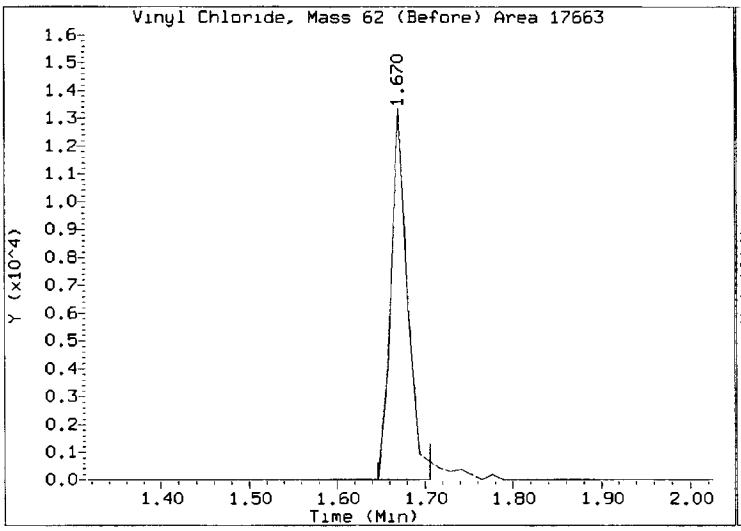
Quant Ion Manual Peak Adjustment Report

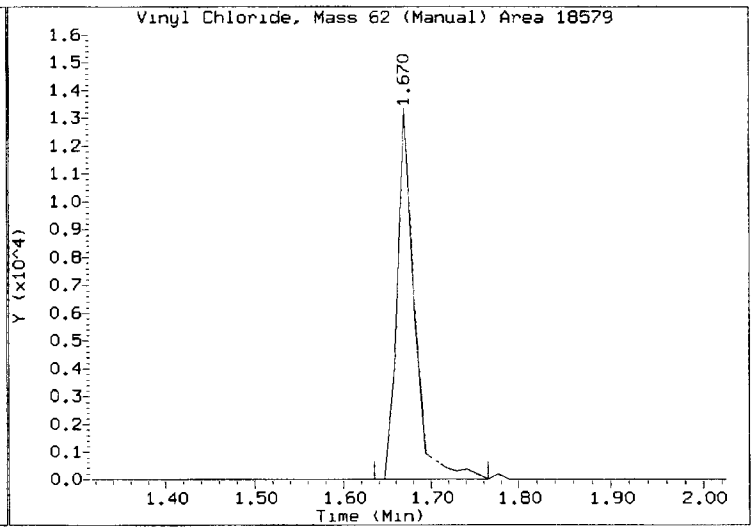
Datafile: \\target\share\chem1\nt2.i\20160414.b\04141616.D
Injection Date: 14-APR-2016 12:37
Lab ID:SED0031-CAL3 Client ID:VSTD01
Report Date: 04/14/2016 13:05

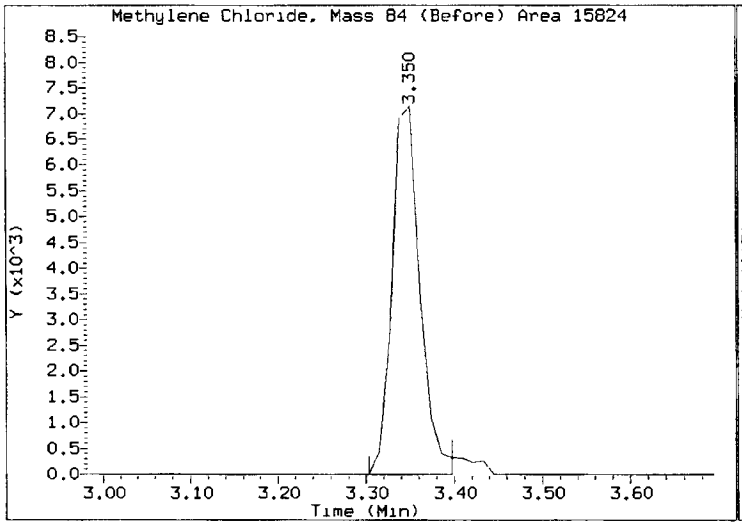
Xlit 4/14/16

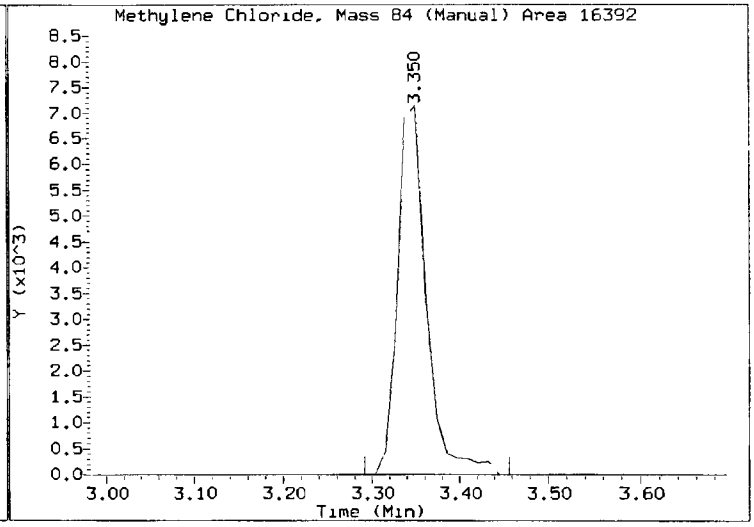






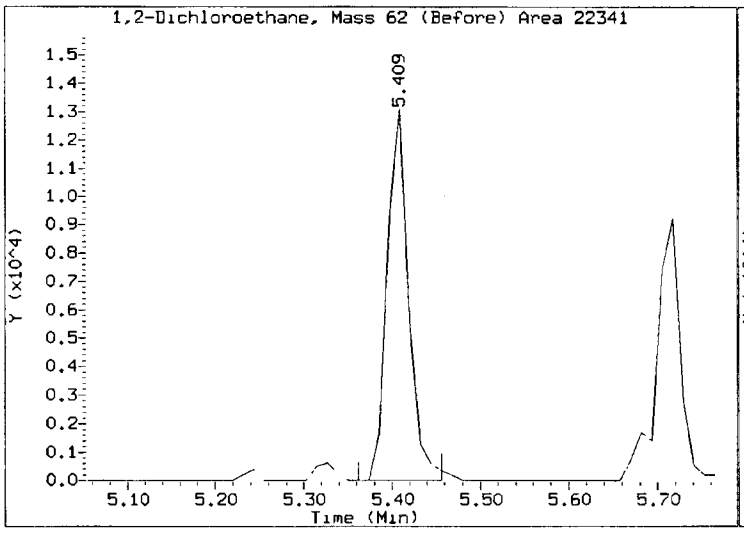


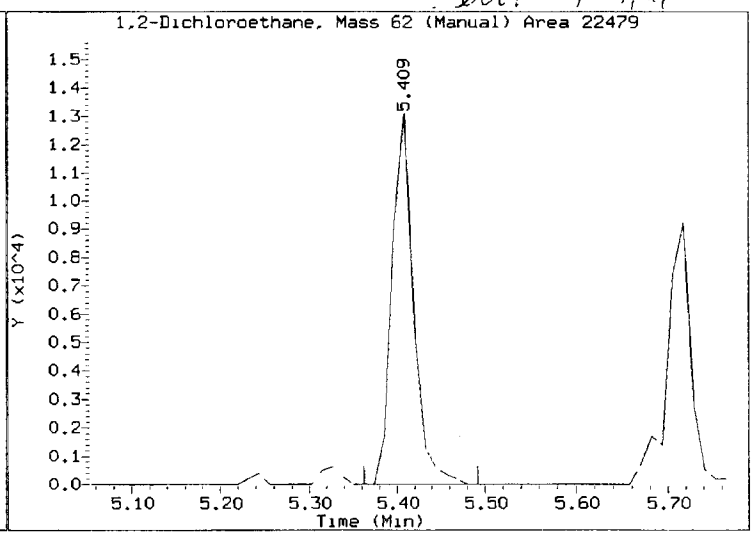


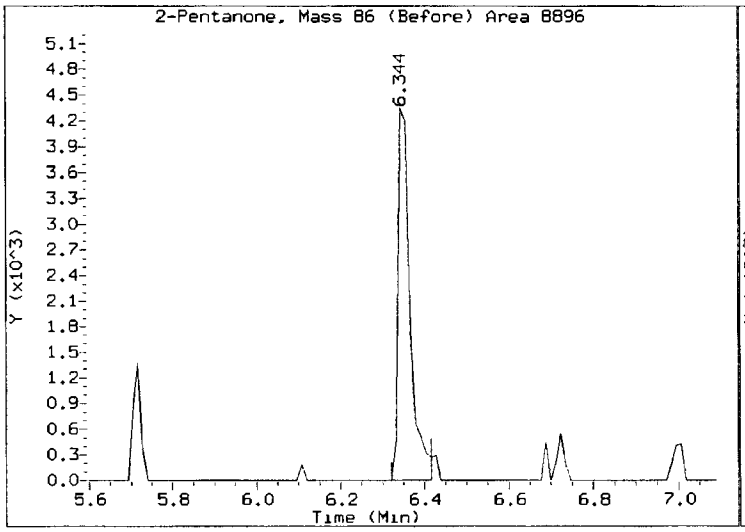


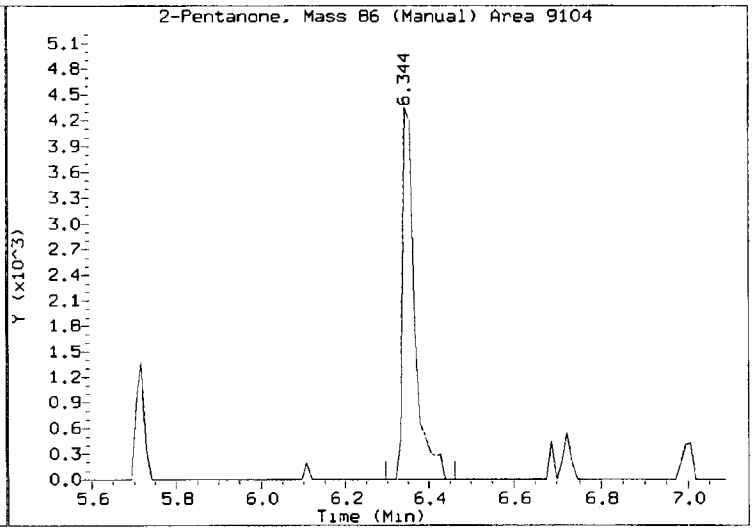
Quant Ion Manual Peak Adjustment Report

Datafile: \\target\share\chem1\nt2.i\20160414.b\04141616.D
Injection Date: 14-APR-2016 12:37
Lab ID:SED0031-CAL3 Client ID:VSTD01
Report Date: 04/14/2016 13:05









REVIEW SUMMARY FOR FILE - 04141616.D

Lab ID: SED0031-CAL3
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 12:37

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

Exception: Acrolein 0.0000
Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

4/14/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141617.D
Lab Smp Id: SED0031-SCV1 Client Smp ID: SCV
Inj Date : 14-APR-2016 12:58
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-SCV1,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 15 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Dichlorodifluoromethane	85	1.433	1.434	(0.269)	204374	12.7701	12.770(R)
2 Chloromethane	50	1.599	1.599	(0.300)	259050	12.9084	12.908(R)
3 Vinyl Chloride	62	1.670	1.670	(0.314)	246931	13.0630	13.063(R)
4 Bromomethane	94	1.954	1.954	(0.367)	220438	17.4155	17.416(R)
5 Chloroethane	64	2.060	2.061	(0.387)	59325	13.5884	13.588(R)
6 Trichlorofluoromethane	101	2.179	2.191	(0.409)	237186	11.1522	11.152
7 1,1-Dichloroethene	61	2.688	2.700	(0.505)	223867	9.89844	9.898
8 Carbon Disulfide	76	2.699	2.700	(0.507)	2560357	50.1820	50.182
9 112Trichloro122Trifluoroethane	101	2.747	2.747	(0.516)	294133	19.1733	19.173
10 Iodomethane	142	2.841	2.842	(0.533)	685392	54.3338	54.334
11 Bromoethane	108	2.983	2.984	(0.560)	207388	18.4927	18.493
12 Acrolein	56	3.102	3.090	(0.582)	23059	9.36622	9.366
13 Methylene Chloride	84	3.338	3.339	(0.627)	169723	10.1941	10.194
14 Acetone	43	3.433	3.434	(0.645)	156677	43.9760	43.976
15 Trans-1,2-Dichloroethene	96	3.504	3.505	(0.658)	166369	9.97968	9.980
17 Methyl tert butyl ether	73	3.658	3.658	(0.687)	445210	10.4322	10.432
18 1,1-Dichloroethane	63	4.096	4.096	(0.769)	319886	10.3624	10.362
19 Acrylonitrile	53	4.178	4.179	(0.785)	53711	10.2706	10.271
20 Vinyl Acetate	43	4.356	4.357	(0.818)	1611639	45.3972	45.397
22 Cis-1,2-Dichloroethene	96	4.569	4.570	(0.858)	187970	10.2402	10.240
23 2,2-Dichloropropane	77	4.652	4.652	(0.873)	231092	9.88328	9.883
24 Bromochloromethane	128	4.735	4.735	(0.889)	87078	10.5237	10.524

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	25 Chloroform	83	4.806	4.806	(0.902)	305227	10.4535	10.453
	26 Carbon Tetrachloride	117	4.888	4.889	(0.855)	190171	8.56603	8.566
$	27 Dibromofluoromethane	111	4.948	4.948	(0.929)	69102	4.93351	4.934
	28 1,1,1-Trichloroethane	97	4.948	4.948	(0.929)	274104	10.6131	10.613
	29 2-Butanone	43	5.066	5.066	(0.951)	304721	45.4512	45.451
	30 1,1-Dichloropropene	75	5.042	5.043	(0.882)	245477	11.1351	11.135
	31 Benzene	78	5.243	5.244	(0.917)	733398	10.8177	10.818
*	32 Pentafluorobenzene	168	5.326	5.327	(1.000)	296541	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	82963	4.96100	4.961
	34 1,2-Dichloroethane	62	5.409	5.410	(0.946)	225589	10.6734	10.673
	36 Trichloroethene	130	5.681	5.682	(0.994)	188289	10.5725	10.573
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	446058	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	93403	10.7586	10.759
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	179291	11.0302	11.030
	40 Bromodichloromethane	83	6.107	6.108	(1.068)	200909	10.6544	10.654
	41 2-Chloroethyl Vinyl Ether	63	6.521	6.522	(1.141)	460660	50.2979	50.298
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	262226	11.6385	11.639
$	43 d8-Toluene	98	6.687	6.688	(1.170)	270333	5.02894	5.029
	44 Toluene	92	6.723	6.723	(1.176)	454744	10.4453	10.445
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	273992	48.6885	48.688
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	204508	11.0289	11.029
	47 Trans 1,3-Dichloropropene	75	7.018	7.019	(1.228)	221791	9.42195	9.422
	48 1,1,2-Trichloroethane	97	7.125	7.125	(1.246)	146192	10.9223	10.922
	49 Chlorodibromomethane	129	7.255	7.256	(0.933)	141948	8.41406	8.414
	50 1,3-Dichloropropane	76	7.314	7.315	(0.941)	260696	11.0208	11.021
	51 1,2-Dibromoethane	107	7.421	7.421	(1.298)	138893	11.0912	11.091
	52 2-Hexanone	43	7.574	7.575	(0.974)	484314	50.7878	50.788
*	53 d5-Chlorobenzene	117	7.776	7.776	(1.000)	407464	10.0000	
	54 Chlorobenzene	112	7.787	7.788	(1.002)	485400	10.2030	10.203
	55 Ethyl Benzene	106	7.799	7.800	(1.003)	281176	10.5701	10.570
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	153967	11.0275	11.027
	57 m,p-xylene	106	7.906	7.906	(1.017)	687109	21.9118	21.912
	58 o-Xylene	106	8.213	8.214	(1.056)	333621	10.9809	10.981
	59 Styrene	104	8.249	8.250	(1.061)	549776	11.2182	11.218
	60 Bromoform	173	8.284	8.285	(0.874)	77576	7.87020	7.870(R)
	61 Isopropyl Benzene	105	8.438	8.439	(0.890)	791564	10.3078	10.308
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	84713	5.06998	5.070
	63 Bromobenzene	156	8.734	8.734	(0.921)	211719	10.4849	10.485
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	971803	11.2906	11.291
	65 1,1,2,2-Tetrachloroethane	83	8.793	8.794	(0.928)	174470	11.1356	11.136
	66 2-Chloro Toluene	91	8.864	8.865	(0.935)	641194	10.2741	10.274
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	686055	10.7430	10.743
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	57174	11.1353	11.135
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.936	(0.943)	37585	9.34546	9.345
	70 4-Chloro Toluene	91	8.983	8.983	(0.948)	595600	10.2828	10.283
	71 T-Butyl Benzene	119	9.125	9.125	(0.963)	686121	12.2588	12.259(R)
	72 1,2,4-Trimethylbenzene	105	9.172	9.172	(0.968)	703013	10.9187	10.919
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	812904	10.3229	10.323
	74 4-Isopropyl Toluene	119	9.361	9.362	(0.988)	718655	10.8593	10.859
	75 1,3-Dichlorobenzene	146	9.420	9.421	(0.994)	399943	10.2380	10.238
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.480	(1.000)	220834	10.0000	
	77 1,4-Dichlorobenzene	146	9.491	9.492	(1.001)	387923	9.62558	9.626
	78 N-Butyl Benzene	91	9.693	9.693	(1.022)	594909	10.2963	10.296
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	106048	5.03927	5.039

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	371827	10.0408	10.041
81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	25846	8.78719	8.787
83 Hexachloro 1,3-Butadiene	225	10.970	10.971	(1.157)	87682	9.07433	9.074
84 1,2,4-Trichlorobenzene	180	10.994	10.995	(1.160)	231984	9.30320	9.303
85 Naphthalene	128	11.266	11.267	(1.188)	557444	10.2395	10.239
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	219465	9.37194	9.372
173 2-Pentanone	86	6.344	6.344	(1.110)	37802	17.8913	17.891

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141617.D
Lab Smp Id: SED0031-SCV1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: SCV
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	296541	6.14
37 1,4-Difluorobenze	430036	215018	860072	446058	3.73
53 d5-Chlorobenzene	398095	199048	796190	407464	2.35
76 d4-1,4-Dichlorobe	214594	107297	429188	220834	2.91

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	-0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: SED0031-SCV1 Client Smp ID: SCV
Level: LOW Operator: LH
Data Type: MS DATA SampleType: LCS
SpikeList File: o2siicv.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1	Dichlorodifluorome	10.000	12.770	127.70*	80-120
2	Chloromethane	10.000	12.908	129.08*	80-120
3	Vinyl Chloride	10.000	13.063	130.63*	80-120
4	Bromomethane	10.000	17.416	174.16*	80-120
5	Chloroethane	10.000	13.588	135.88*	80-120
6	Trichlorofluoromet	10.000	11.152	111.52	80-120
7	1,1-Dichloroethene	10.000	9.898	98.98	80-120
8	Carbon Disulfide	60.000	50.182	83.64	80-120
9	112Trichloro122Tri	20.000	19.173	95.87	80-120
10	Iodomethane	60.000	54.334	90.56	80-120
11	Bromoethane	20.000	18.493	92.46	80-120
12	Acrolein	10.000	9.366	93.66	80-120
13	Methylene Chloride	10.000	10.194	101.94	80-120
14	Acetone	50.000	43.976	87.95	80-120
15	Trans-1,2-Dichloro	10.000	9.980	99.80	80-120
16	n-hexane	10.000	0.0000	*	80-120
17	Methyl tert butyl	10.000	10.432	104.32	80-120
18	1,1-Dichloroethane	10.000	10.362	103.62	80-120
19	Acrylonitrile	10.000	10.271	102.71	80-120
20	Vinyl Acetate	50.000	45.397	90.79	80-120
22	Cis-1,2-Dichloroet	10.000	10.240	102.40	80-120
23	2,2-Dichloropropan	10.000	9.883	98.83	80-120
24	Bromochloromethane	10.000	10.524	105.24	80-120
25	Chloroform	10.000	10.453	104.53	80-120
26	Carbon Tetrachlori	10.000	8.566	85.66	80-120
28	1,1,1-Trichloroeth	10.000	10.613	106.13	80-120
30	1,1-Dichloropropen	10.000	11.135	111.35	80-120
29	2-Butanone	50.000	45.451	90.90	80-120
31	Benzene	10.000	10.818	108.18	80-120
34	1,2-Dichloroethane	10.000	10.673	106.73	80-120
36	Trichloroethene	10.000	10.573	105.73	80-120
38	Dibromomethane	10.000	10.759	107.59	80-120
39	1,2-Dichloropropan	10.000	11.030	110.30	80-120
40	Bromodichlorometha	10.000	10.654	106.54	80-120
173	2-Pentanone	20.000	17.891	89.46	80-120
42	Cis 1,3-dichloropr	10.000	11.639	116.39	80-120
41	2-Chloroethyl Viny	60.000	50.298	83.83	80-120
44	Toluene	10.000	10.445	104.45	80-120
45	4-Methyl-2-Pentano	50.000	48.688	97.38	80-120
46	Tetrachloroethene	10.000	11.029	110.29	80-120

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 Trans 1,3-Dichloro	10.000	9.422	94.22	80-120
48 1,1,2-Trichloroeth	10.000	10.922	109.22	80-120
49 Chlorodibromometha	10.000	8.414	84.14	80-120
50 1,3-Dichloropropan	10.000	11.021	110.21	80-120
51 1,2-Dibromoethane	10.000	11.091	110.91	80-120
52 2-Hexanone	50.000	50.788	101.58	80-120
54 Chlorobenzene	10.000	10.203	102.03	80-120
55 Ethyl Benzene	10.000	10.570	105.70	80-120
56 1,1,1,2-Tetrachlor	10.000	11.027	110.27	80-120
57 m,p-xylene	20.000	21.912	109.56	80-120
58 o-Xylene	10.000	10.981	109.81	80-120
59 Styrene	10.000	11.218	112.18	80-120
60 Bromoform	10.000	7.870	78.70*	80-120
61 Isopropyl Benzene	10.000	10.308	103.08	80-120
63 Bromobenzene	10.000	10.485	104.85	80-120
64 N-Propyl Benzene	10.000	11.291	112.91	80-120
65 1,1,2,2-Tetrachlor	10.000	11.136	111.36	80-120
66 2-Chloro Toluene	10.000	10.274	102.74	80-120
67 1,3,5-Trimethyl Be	10.000	10.743	107.43	80-120
68 1,2,3-Trichloropro	10.000	11.135	111.35	80-120
69 Trans-1,4-Dichloro	10.000	9.345	93.45	80-120
70 4-Chloro Toluene	10.000	10.283	102.83	80-120
71 T-Butyl Benzene	10.000	12.259	122.59*	80-120
72 1,2,4-Trimethylben	10.000	10.919	109.19	80-120
73 S-Butyl Benzene	10.000	10.323	103.23	80-120
74 4-Isopropyl Toluen	10.000	10.859	108.59	80-120
75 1,3-Dichlorobenzen	10.000	10.238	102.38	80-120
77 1,4-Dichlorobenzen	10.000	9.626	96.26	80-120
78 N-Butyl Benzene	10.000	10.296	102.96	80-120
80 1,2-Dichlorobenzen	10.000	10.041	100.41	80-120
81 1,2-Dibromo 3-Chlo	10.000	8.787	87.87	80-120
83 Hexachloro 1,3-But	10.000	9.074	90.74	80-120
84 1,2,4-Trichloroben	10.000	9.303	93.03	80-120
85 Naphthalene	10.000	10.239	102.39	80-120
86 1,2,3-Trichloroben	10.000	9.372	93.72	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.934	98.67	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.961	99.22	80-128
$ 43 d8-Toluene	5.000	5.029	100.58	80-120
$ 62 4-Bromofluorobenze	5.000	5.070	101.40	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.039	100.79	80-120

Data File: \\target\share\chem1\nt2.i\20160414.b\04141617.D

Date : 14-APR-2016 12:58

Client ID: SCV

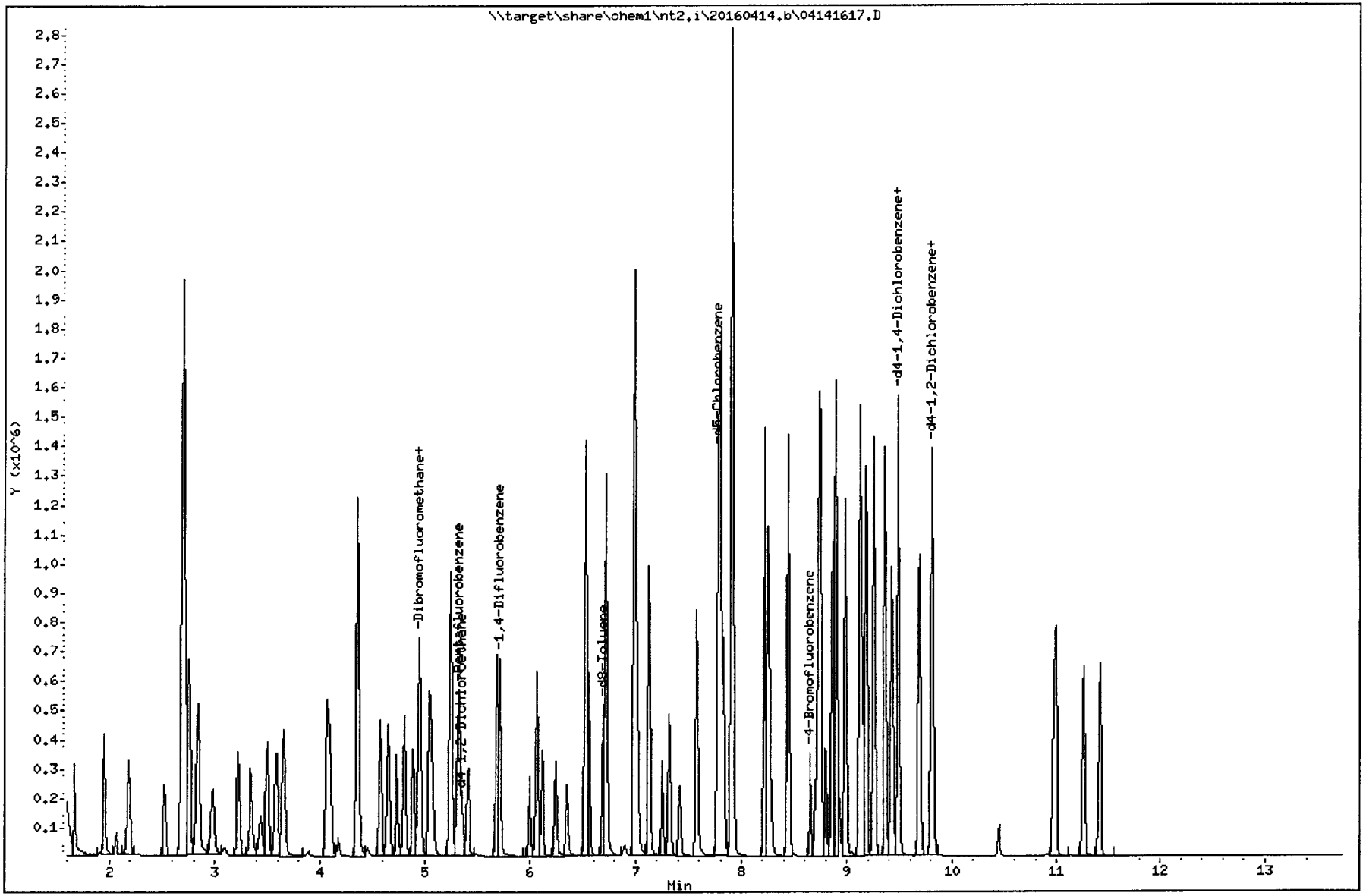
Instrument: nt2.i

Sample Info: SED0031-SCV1,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



REVIEW SUMMARY FOR FILE - 04141617.D

Lab ID: SED0031-SCV1
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 12:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.1000

Exception: Carbon Tetrachloride 0.0400
Exception: 2-Pentanone 0.0000

Analysis	Matrix	Method
8260C Gas (8015C)	Water	EPA 8015C
8260C Gas (AK101)	Water	AK101
8260C Gas (NWTPH)	Water	NWTPHg
8260C VOA	Water	EPA 8260C

Checklist: Initial Calibration Checklist-VOA

#	Checklist Item	Response	Analyst Initials	Date
1	Element Calibration Code	YES	LH	03/30/2016
	Comments: *ZC00032* *Calibration is for 8260C and gas.*			
2	BFB Tune met Criteria	YES	LH	03/30/2016
3	ICal meets 20% RSD, LR COD, and QR COD limits	YES	LH	03/30/2016
4	NO ICAL Q Flag applied	YES	LH	03/30/2016
5	Manual integrations include before/after pictures	YES	LH	03/30/2016
6	Internal Standard areas within 50-200% from reference	YES	LH	03/30/2016
7	Spectral Library updated	NA	LH	03/30/2016
8	Minimum response factors met	YES	LH	03/30/2016
9	All SCV within +/- 20% (DOD)	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Vinyl Chloride 120.12%, Chloroethane 120.72%, t-butylbenzene 124.45%.*			
10	All SCV within +/- 30%	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Bromomethane 141.13%, methylene chloride 130.90%*			
11	NO Linear or Quadratic Fits Used	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Quadratic: Chloroethane* *Linear: Iodomethane, methylene chloride, trans-1,3-dichloropropene, chlorodibromomethane, 1,1,1,2-tetrachloroethane, bromoform.*			
12	NO Calibration points dropped	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Some low points were dropped, but all RLs were met.* *Upper 2 points for trichlorofluoromethane were dropped. Range is 0.2ug/L- 20ug/L*			
13	Additional Notes	YES	LH	03/30/2016
	Comments: *Gas SCV standard was expired, but recovered well.*			
14	Reviewer Approval (Reviewer)	YES	BB	03/30/2016

* = Indicates Automated Response from Element DataSyst

Analytical Resources Inc.: Organics Instrument Log

NT-2 Serial No.: 82321977

Date: 3/29/16 Analysis: 8260c tgas Analyst: RLH for PC

GC Program: VOAW Column No: 1295415 Column Type: RTXVMS

Instrument Tune (.U or .CT.): bfb.u EM Voltage: 2071

Calibration File: 03291602.d Curve Date: 3/29/16 Injection Vol.: 10mL

ZC000032

IS/SS	Ical/Ccal	LCS/ICV
E000043	E000981 2 8260c	8260 SCV: E000942
E000044	E000922 3	GAS SCV: E000933
	E000912 2 GAS	
	E000923 3	

Document All Maintenance Tasks In Element

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160329.b

	Time	Filename	LabID	ClientID	Vial#	pH	DF							
1	1110	03291601.D	RINSE		10		1							
2	1131	03291602.D	SEC0063-TUN1	RTBFB0329			1							
3	1226	03291603.D	GICV				1							
4	1248	03291604.D	VICV				1							
5	1309	03291605.D	VICV	ICV0329a			1							
6	1330	03291606.D	VLCSA	VLCS			1							
7	1352	03291607.D	GLCS				1							
8	1413	03291608.D	GLCSA	GLCSA			1	5.33	366954	5.72	575180	7.78	532674	9.48	286650
9	1435	03291609.D	MB0329	MB0329			1	5.33	353242	5.72	559046	7.78	510480	9.48	262386
10	1733	01291610.D	SEC0063-CAL8	VSTD80			1	5.33	419789	5.72	643017	7.78	591709	9.48	324865
11	1754	03291611.D	SEC0063-CAL7	VSTD40			1	5.33	372674	5.72	577427	7.78	536655	9.48	296811
12	1816	03291612.D	SEC0063-CAL6	VSTD20			1	5.33	356460	5.72	546852	7.78	512009	9.48	277409
13	1837	03291613.D	SEC0063-CAL5	VSTD10			1	5.33	350375	5.72	562526	7.78	502371	9.48	277950
14	1859	03291614.D	SEC0063-CAL4	VSTD02			1	5.33	351970	5.72	569384	7.78	501631	9.48	275297
15	1920	03291615.D	SEC0063-CAL3	VSTD01			1	5.33	322836	5.72	510764	7.78	467709	9.48	255215
16	1941	03291616.D	SEC0063-CAL2	VSTD0.5			1	5.33	318463	5.72	502550	7.78	459981	9.48	246454
17	2003	03291617.D	SEC0063-CAL1	VSTD0.2			1	5.33	311848	5.72	495060	7.78	453911	9.48	235351
18	2024	03291618.D	SEC0063-SCV1	SCV			1	5.33	333646	5.72	527779	7.78	486532	9.48	269269
19	2045	03291619.D	SEC0063-CALS				1	5.33	386746	5.72	615798	7.78	554836	9.48	296516
20	2107	03291620.D	SEC0063-CALD				1	5.33	366346	5.72	580475	7.78	530399	9.48	284779
21	2128	03291621.D	SEC0063-CALC				1	5.33	356093	5.72	560609	7.78	525882	9.48	278120
22	2150	03291622.D	SEC0063-CALB				1	5.33	335026	5.72	526989	7.78	495230	9.48	263670
23	2211	03291623.D	SEC0063-CALA				1	5.33	330180	5.72	523950	7.78	490395	9.48	259889
24	2232	03291624.D	SEC0063-CAL9				1	5.33	303542	5.72	482197	7.78	459677	9.48	241501
25	2254	03291625.D	SEC0063-SCV2				1	5.33	347854	5.72	555254	7.78	519670	9.48	276192

RLH 3/30/16

6a
8260 GAS INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: 20150930

Instrument: NT2.I Project: GSTD1

Calibration Date: 29-MAR-2016 SDG No.: 20150930

Gas Range	RF1 0.1	RF2 0.25	RF3 0.5	RF4 1.0	RF5 2.5	RF6 5	Ave RF	%RSD
WA Gas	38501187	48112079	49111625	51185622	51287480	49855104	48008849	10.0
AK Gas	49662511	59116003	59473285	60464211	61192091	62329725	58706304	7.8
NW Gas	39259679	48930855	50264215	52493344	52751277	51520615	49203331	10.3
8015Gas	71404863	82873502	83743651	85008808	87381849	88932569	83224207	7.5

<- Indicates %RSD outside limits
Surrogate areas are not included in RF calculation.
Surrogate calibration is from BETX curve files.

Quant Ranges :

WA Gas	Toluene - nC12
AK Gas	nC6 - nC10
NW Gas	Toluene - Naphthalene
Cal Gas	nC6 - nC12
8015 Gas	2-Methylpentane - 1,2,4-Trimethylbenzene

Gas Cal. Files	Analysis Time
03291624.D	29-MAR-2016 22:32
03291623.D	29-MAR-2016 22:11
03291622.D	29-MAR-2016 21:50
03291621.D	29-MAR-2016 21:28
03291620.D	29-MAR-2016 21:07
03291619.D	29-MAR-2016 20:45

Report Date : 30-Mar-2016 09:36

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329g.b\GAS032916.m
Batch File: \\target\share\chem1\nt2.i\20160329g.b
Inst ID: nt2.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	03291619	03291620	03291621	03291622	03291623	03291624	03291625
INJ.DATE:	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016
INJ.TIME:	20:45	21:07	21:28	21:50	22:11	22:32	22:54

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
5 2-Methylpentane	3.079	3.079	3.078	3.079	3.082	3.081	3.078	3.078	3.028-3.128	3.079	0.002
7 nC6	3.587	3.588	3.587	3.588	3.579	3.590	3.587	3.587	3.537-3.637	3.587	0.004
$ 10 Dibromofluorobenzene	4.925	4.925	4.948	4.949	4.952	4.951	4.924	4.948	4.898-4.998	4.939	0.014
37 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.232	5.182-5.282	+++++	+++++
$ 29 Pentafluorobenzene	+++++	+++++	5.326	5.327	5.330	5.330	+++++	5.326	5.276-5.376	5.328	0.002
$ 30 d4-1,2-dichloroethane	5.351	5.351	+++++	+++++	+++++	+++++	5.350	5.341	5.291-5.391	5.350	0.000
$ 31 1,4-Difluorobenzene	5.717	5.718	5.717	5.718	5.721	5.720	5.717	5.717	5.667-5.767	5.718	0.002
3 AK101	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.234	0.000-3.974	+++++	+++++
4 8015GAS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.096	2.756-9.436	+++++	+++++
46 8015mod	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.000	0.930-1.070	+++++	+++++
38 n-Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.592	6.542-6.642	+++++	+++++
45 n-Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.221	5.151-5.291	+++++	+++++
$ 32 d8-Toluene	+++++	+++++	6.687	6.688	6.691	6.690	+++++	6.687	6.637-6.737	6.689	0.002
12 Toluene	6.723	6.723	6.723	6.724	6.727	6.726	6.723	6.723	6.673-6.773	6.724	0.002
39 n-Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.728	7.678-7.778	+++++	+++++
$ 33 d5-Chlorobenzene	7.800	7.800	7.776	7.777	7.780	7.779	7.776	7.776	7.726-7.826	7.784	0.011
40 Ethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.802	7.752-7.852	+++++	+++++

Reviewer 1 [signature] Date: 3/30/16
Reviewer 2 _____ Date: _____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329g.b\GAS032916.m
Batch File: \\target\share\chem1\nt2.i\20160329g.b
Inst ID: nt2.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
41 m,p-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.906	7.856-7.956	+++++	+++++
42 o-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.214	8.164-8.264	+++++	+++++
2 WAGAS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.610	6.520-10.700	+++++	+++++
$ 34 4-Bromofluorobenzene	8.652	8.652	8.651	8.653	8.655	8.655	8.651	8.651	8.601-8.701	8.653	0.002
17 nC10-Decane	8.747	8.747	8.746	8.747	8.750	+++++	8.746	8.722	8.672-8.772	8.747	0.001
1 NWTPHG	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.479	6.949-12.009	+++++	+++++
20 1,2,4-Trimethylbenzene	9.173	9.173	9.172	9.173	9.176	9.175	9.172	9.184	9.134-9.234	9.173	0.002
$ 35 d4-Dichlorobenzene	9.504	9.480	9.503	9.481	9.484	9.483	9.480	9.491	9.441-9.541	9.488	0.011
43 n-Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.610	9.560-9.660	+++++	+++++
$ 36 d4-1,2-Dichlorobenzene	9.823	9.812	9.811	9.812	9.803	9.803	9.811	9.811	9.761-9.861	9.811	0.007
22 nC12-Dodecane	10.450	10.451	10.485	10.487	10.489	10.489	10.450	10.462	10.412-10.512	10.472	0.020
44 n-Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.362	11.312-11.412	+++++	+++++
24 Naphthalene	11.255	11.255	11.255	11.256	11.258	11.258	11.255	11.278	11.228-11.328	11.256	0.002

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160329.b

ARI Job No.: G500 Method: 8260032916.m Instrument: nt2.i Date: 29-MAR-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2045	03291619.D	G5000329		1	NO MANUAL INTEGRATION
2107	03291620.D	G2500329		1	NO MANUAL INTEGRATION
2128	03291621.D	G1000329		1	NO MANUAL INTEGRATION
2150	03291622.D	G0500329		1	NO MANUAL INTEGRATION
2211	03291623.D	G0250329		1	NO MANUAL INTEGRATION
2232	03291624.D	G0100329		1	NO MANUAL INTEGRATION
2254	03291625.D	GSCV0329		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160329g.b

ARI Job No.: G500 Method: GAS032916.m Instrument: nt2.i Date: 29-MAR-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2045	03291619.D	G5000329	GSTD5	1	1,4-Difluorobenzene, d4-1,2-dichloroethane, Dibromofluorobenzene,
2107	03291620.D	G2500329	GSTD2.5	1	1,4-Difluorobenzene, d4-1,2-dichloroethane, d4-Dichlorobenzene, Dibromofluorobenzene,
2128	03291621.D	G1000329	GSTD1	1	1,4-Difluorobenzene, d4-Dichlorobenzene, Dibromofluorobenzene, d5-Chlorobenzene,
2150	03291622.D	G0500329	GSTD0.5	1	1,4-Difluorobenzene, d5-Chlorobenzene,
2211	03291623.D	G0250329	GSTD0.25	1	Naphthalene, d5-Chlorobenzene,
2232	03291624.D	G0100329	GSTD0.1	1	Naphthalene,
2254	03291625.D	GSCV0329	GSCV	1	1,4-Difluorobenzene, d4-Dichlorobenzene, Dibromofluorobenzene, d5-Chlorobenzene,

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D

Date : 29-MAR-2016 11:31

Client ID: RTBFB0329

Instrument: nt2.i

Sample Info: BFB0329,RTBFB0329,,1,032916,

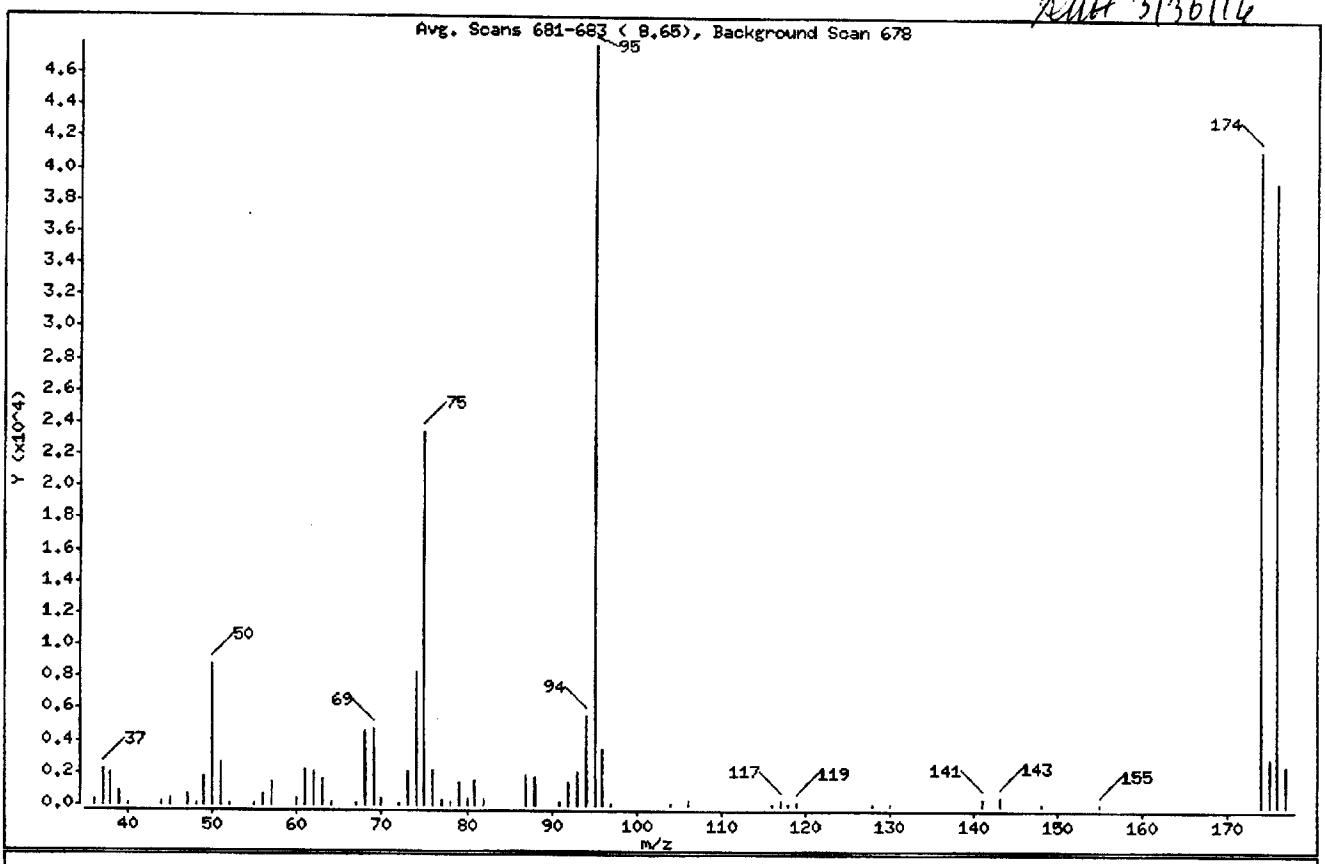
Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

1 Bromofluorobenzene

RMH 3/30/16



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.28
75	30.00 - 60.00% of mass 95	48.95
96	5.00 - 9.00% of mass 95	7.25
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	86.45
175	5.00 - 9.00% of mass 174	6.10 (7.05)
176	95.00 - 101.00% of mass 174	82.26 (95.15)
177	5.00 - 9.00% of mass 176	5.35 (6.50)

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D

Date : 29-MAR-2016 11:31

Client ID: RTBFB0329

Instrument: nt2.i

Sample Info: BFB0329,RTBFB0329,,1,032916,

Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

Data File: 03291602.D

Spectrum: Avg. Scans 681-683 (8.65), Background Scan 678

Location of Maximum: 95.00

Number of points: 61

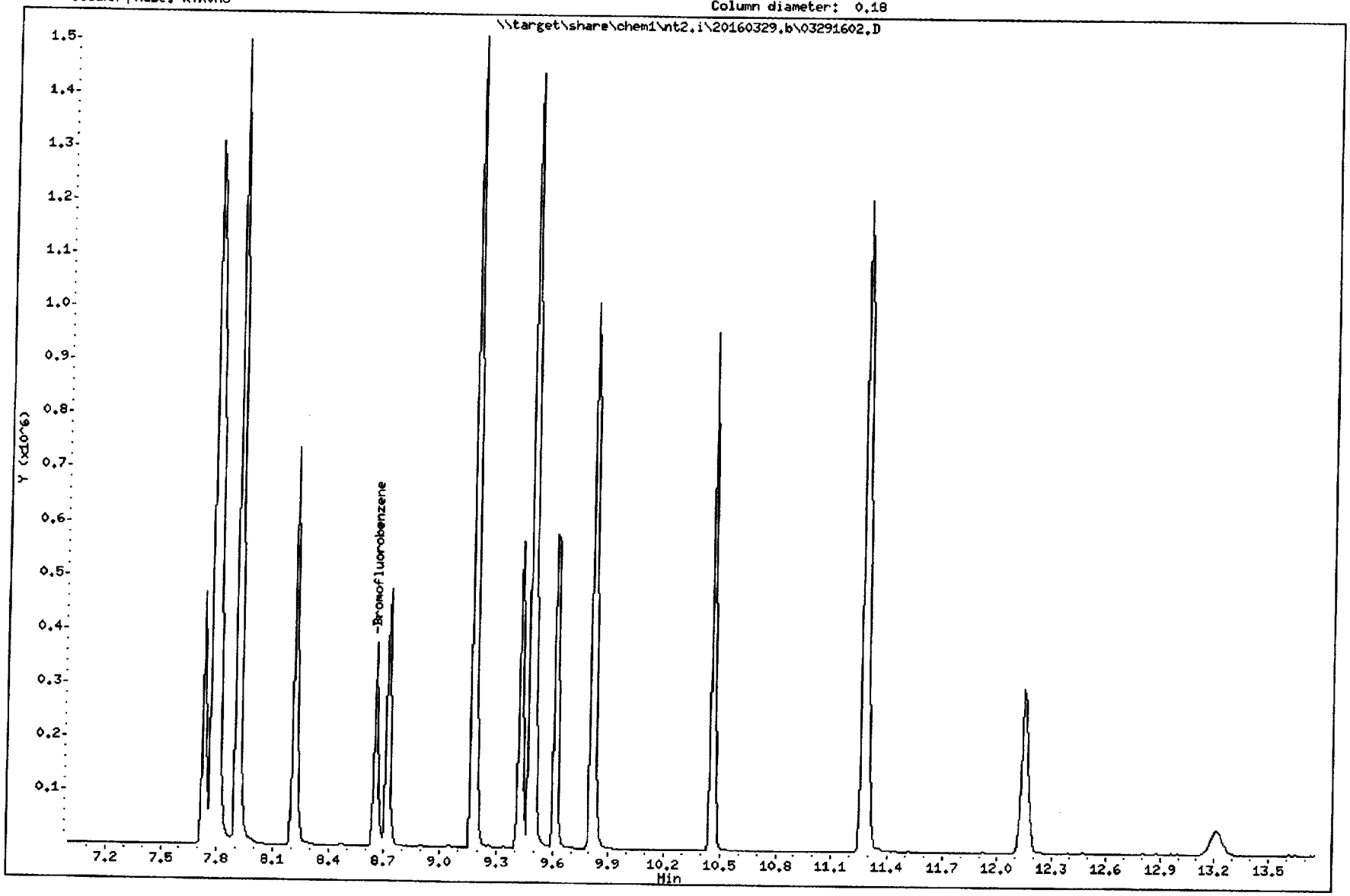
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	334	60.00	421	79.00	1486	117.00	325
37.00	2213	61.00	2183	80.00	387	118.00	128
38.00	1965	62.00	2104	81.00	1524	119.00	234
39.00	876	63.00	1615	82.00	406	128.00	133
40.00	77	64.00	233	87.00	1871	130.00	132
44.00	174	67.00	79	88.00	1722	141.00	480
45.00	431	68.00	4654	91.00	246	143.00	564
47.00	632	69.00	4719	92.00	1396	148.00	149
48.00	113	70.00	410	93.00	2037	155.00	84
49.00	1769	72.00	148	94.00	5584	174.00	41400
50.00	8753	73.00	2107	95.00	47888	175.00	2919
51.00	2685	74.00	8380	96.00	3473	176.00	39392
52.00	71	75.00	23440	97.00	78	177.00	2562
55.00	154	76.00	2154	104.00	122		
56.00	679	77.00	319	106.00	281		
57.00	1379	78.00	194	116.00	127		

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D
Date : 29-MAR-2016 11:31
Client ID: RTBFB0329
Sample Info: BFB0329,RTBFB0329,,1,032916,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



ARI Labs, Inc.

Data file : \\target\share\chem1\nt2.i\20160329g.b\03291602.D
Lab Smp Id: BFB0329 Client Smp ID: RTBFB0329
Inj Date : 29-MAR-2016 11:31
Operator : PC Inst ID: nt2.i
Smp Info : BFB0329,RTBFB0329,,1,032916,
Misc Info : 09-
Comment :
Method : \\target\share\chem1\nt2.i\20160329g.b\GAS032916.m
Meth Date : 30-Mar-2016 09:05 lanih Quant Type: ESTD
Cal Date : 29-MAR-2016 11:31 Cal File: 03291602.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RT.sub
Target Version: 4.14
Processing Host: ORGDATA13

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
5	2-Methylpentane	3.078	3.078	0.000	392124	0.00000	
7	nC6	3.586	3.586	0.000	415559	0.00000	
$ 10	Dibromofluorobenzene	4.947	4.947	0.000	140925	0.00000	
37	Benzene	5.231	5.231	0.000	630212	0.00000	
$ 29	Pentafluorobenzene	5.326	5.326	0.000	666407	0.00000	
$ 31	1,4-Difluorobenzene	5.716	5.716	0.000	822707	0.00000	
38	n-Octane	6.592	6.592	0.000	525079	0.00000	
$ 32	d8-Toluene	6.687	6.687	0.000	634185	0.00000	
12	Toluene	6.722	6.722	0.000	1135403	0.00000	
39	n-Nonane	7.728	7.728	0.000	466173	0.00000	
$ 33	d5-Chlorobenzene	7.775	7.775	0.000	1306440	0.00000	
41	m,p-xylene	7.905	7.905	0.000	1494523	0.00000	
42	o-xylene	8.213	8.213	0.000	736648	0.00000	
$ 34	4-Bromofluorobenzene	8.651	8.651	0.000	376172	0.00000	
17	nC10-Decane	8.722	8.722	0.000	474675	0.00000	
20	1,2,4-Trimethylbenzene	9.183	9.183	0.000	1510817	0.00000	
$ 35	d4-Dichlorobenzene	9.491	9.491	0.000	1442070	0.00000	
43	n-Undecane	9.609	9.609	0.000	582360	0.00000	
$ 36	d4-1,2-Dichlorobenzene	9.810	9.810	0.000	1014284	0.00000	
22	nC12-Dodecane	10.461	10.461	0.000	962411	0.00000	
24	Naphthalene	11.278	11.278	0.000	1212315	0.00000	

Analytical Resources Inc.
GC/MS Gas Quantitation Report

JLH 3/30/16

Data file: 20160329g.b/03291619.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 20:45

ARI ID: G5000329
Client ID: GSTD5
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)	
WAGas Tol-C12	(6.62 to 10.56)	48008849	249275518	5.192	
8015C 2MP-TMB	(2.98 to 9.28)	83224207	444662844	5.343	M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	311648625	5.309	M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	257603074	5.235	
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	424141429	5.790	M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

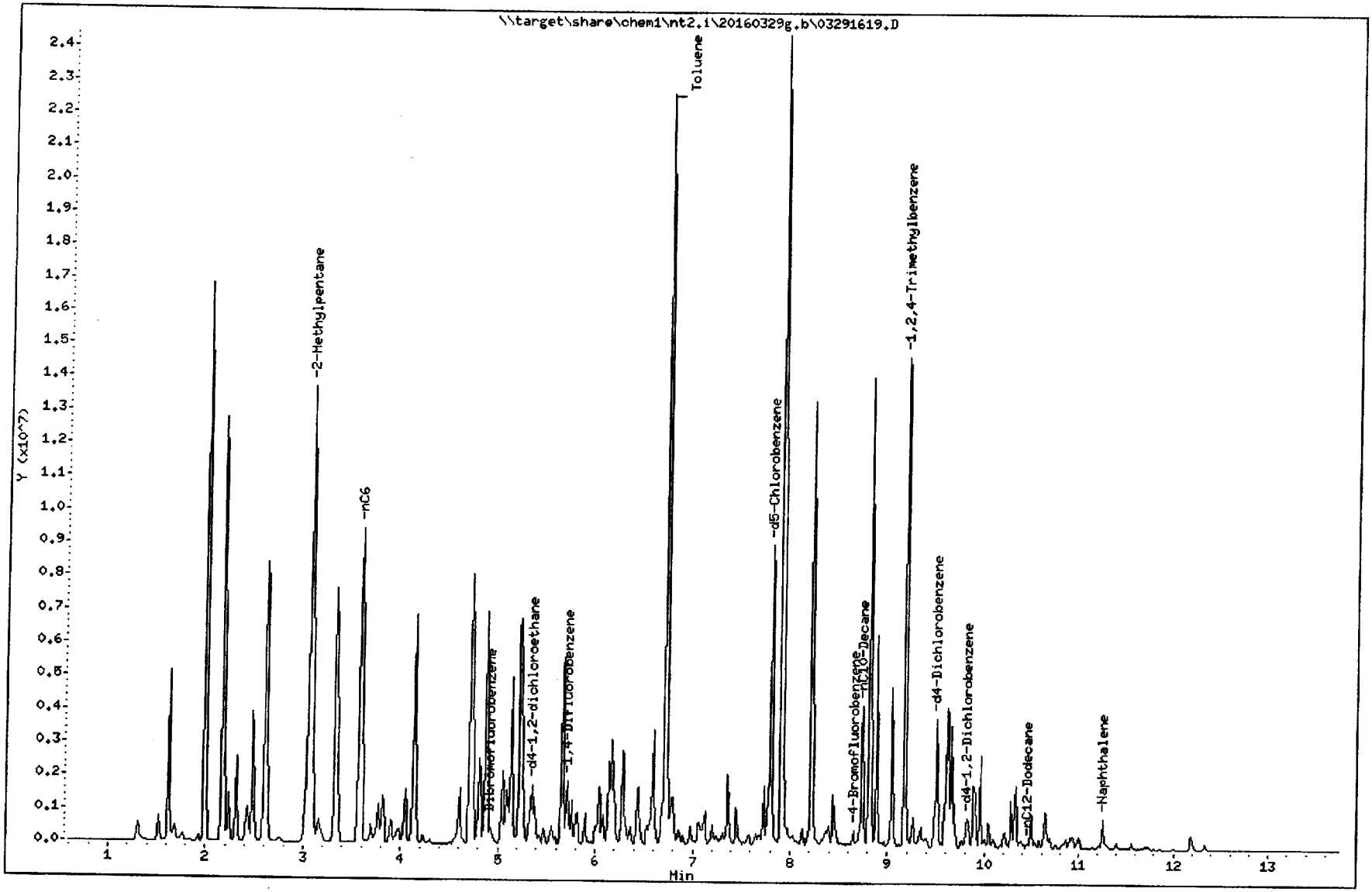
8.652	813730	4-Bromofluorobenzene
9.504	7415398	d4-Dichlorobenzene
7.800	17385186	d5-Chlorobenzene
9.823	2323880	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291619.D
Date : 29-MAR-2016 20:45
Client ID: GSTD5
Sample Info: G5000329,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

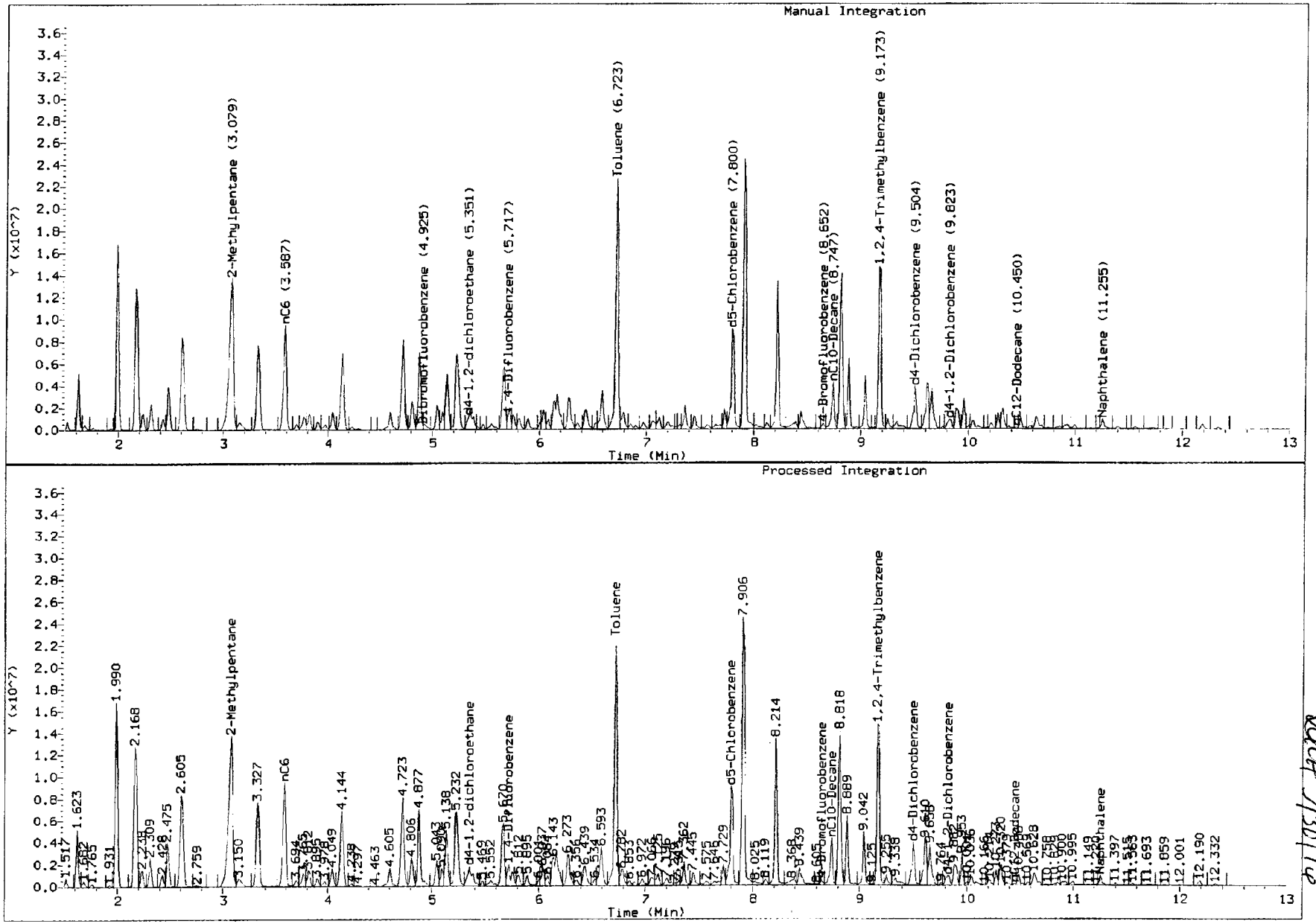
Operator: PC
Column diameter: 0.18



TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291619.D Injection: 29-MAR-2016 20:45

Lab ID:G5000329



2/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291619.D
Lab Smp Id: G5000329
Inj Date : 29-MAR-2016 20:45
Operator : PC Inst ID: nt2.i
Smp Info : G5000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.948	4.947	(0.929)	87942	4.75461	4.755
31 Benzene	78	5.244	5.243	(0.917)	2898737	35.0848	35.085
* 32 Pentafluorobenzene	168	5.326	5.326	(1.000)	386746	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	143410	6.55546	6.555
* 37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	615798	10.0000	
$ 43 d8-Toluene	98	6.687	6.687	(1.170)	386722	5.30428	5.304
44 Toluene	92	6.723	6.722	(1.176)	9153352	167.620	167.62
* 53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	554896	10.0000	
55 Ethyl Benzene	106	7.811	7.811	(1.005)	2216213	67.2715	67.272
57 m,p-xylene	106	7.906	7.906	(1.017)	6878890	171.311	171.31
58 o-Xylene	106	8.214	8.212	(1.056)	3206837	84.6732	84.673
$ 62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	115448	5.10389	5.104
* 76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	296516	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	141228	4.98129	4.981

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291619.D
Lab Smp Id: G5000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	386746	10.38
37 1,4-Difluorobenze	562526	281263	1125052	615798	9.47
53 d5-Chlorobenzene	502371	251186	1004742	554896	10.46
76 d4-1,4-Dichlorobe	277950	138975	555900	296516	6.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.01
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G5000329
Level: LOW
Data Type: MS DATA
SpikeList File: allspike.spk
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Client SDG: 20151001
Fraction: VOA

Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

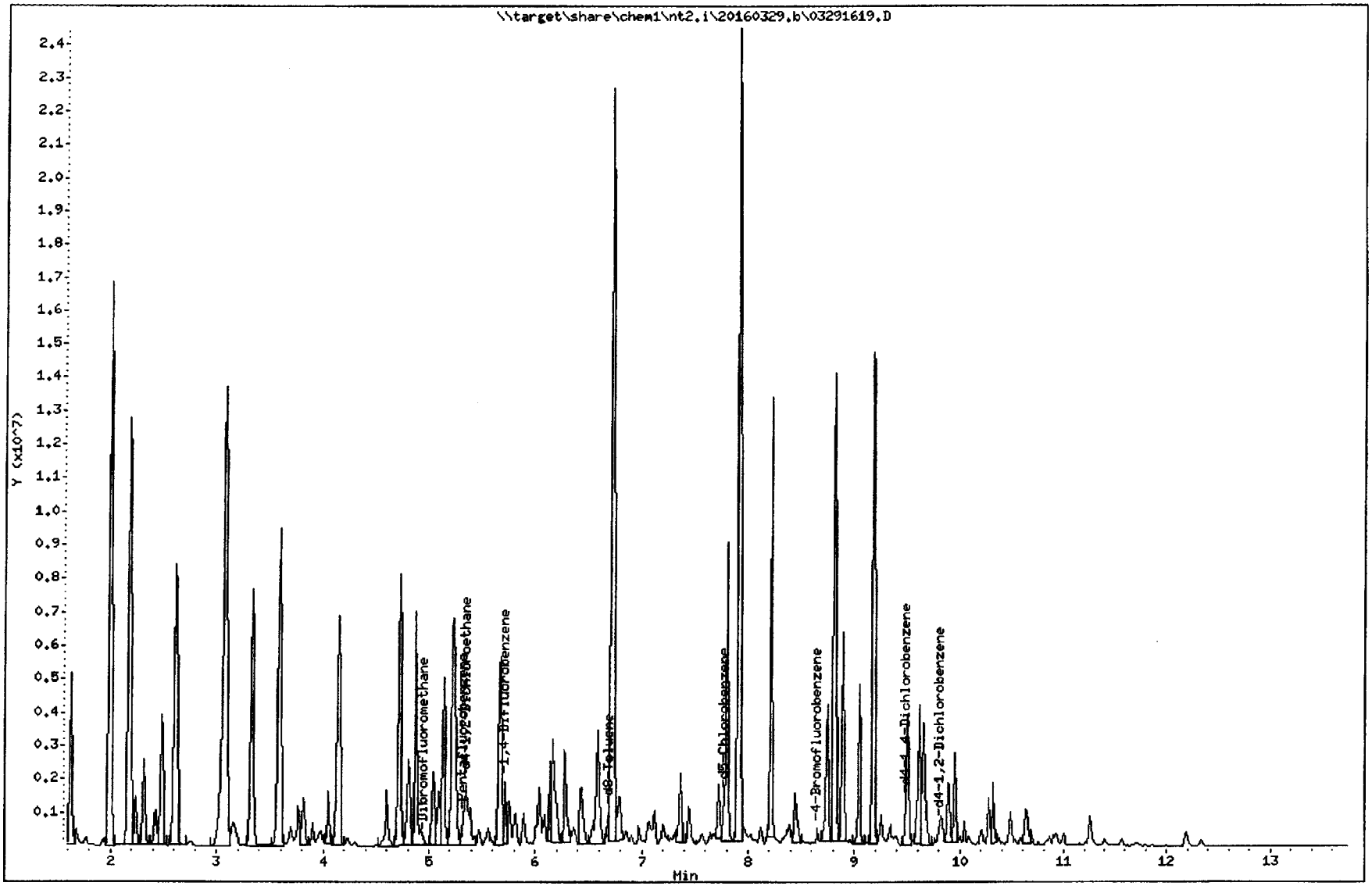
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.755	95.09	80-120
$ 33 d4-1,2-Dichloroeth	5.000	6.555	131.11	80-149
$ 43 d8-Toluene	5.000	5.304	106.09	77-120
$ 62 4-Bromofluorobenze	5.000	5.104	102.08	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.981	99.63	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291619.D
Date : 29-MAR-2016 20:45
Client ID:
Sample Info: G5000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291619.D

Lab ID: G5000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 20:45

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

XMH 3/30/16

Data file: 20160329g.b/03291620.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 21:07

ARI ID: G2500329
Client ID: GSTD2.5
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	128218700	2.671 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	218454623	2.625 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	152980229	2.606 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	131878192	2.680 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	209675553	2.862 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

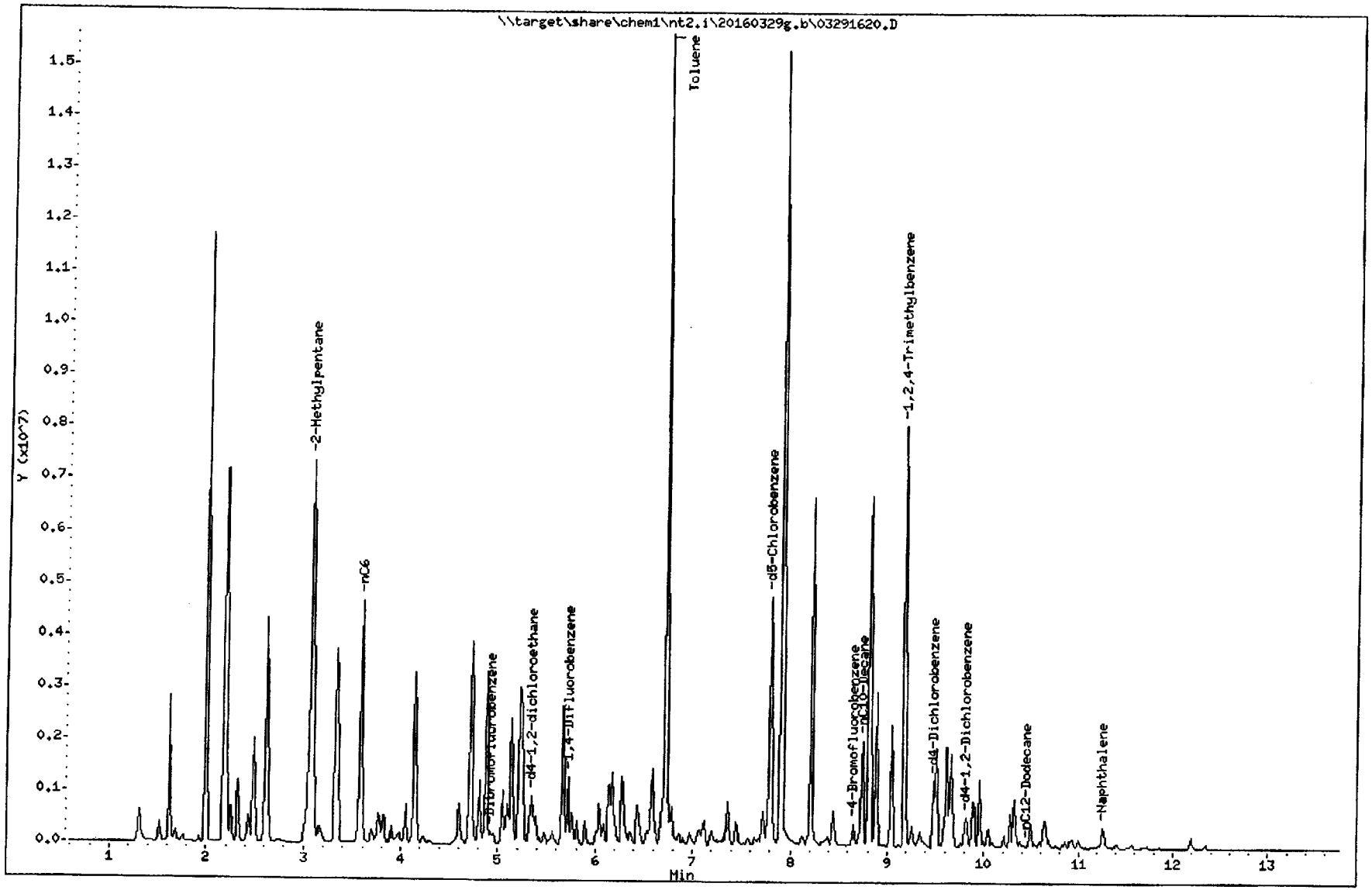
8.652	725527	4-Bromofluorobenzene
9.480	1953245	d4-Dichlorobenzene
7.800	9346764	d5-Chlorobenzene
9.812	1451073	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291620.D
Date : 29-MAR-2016 21:07
Client ID: GSTD2.5
Sample Info: G2500329,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

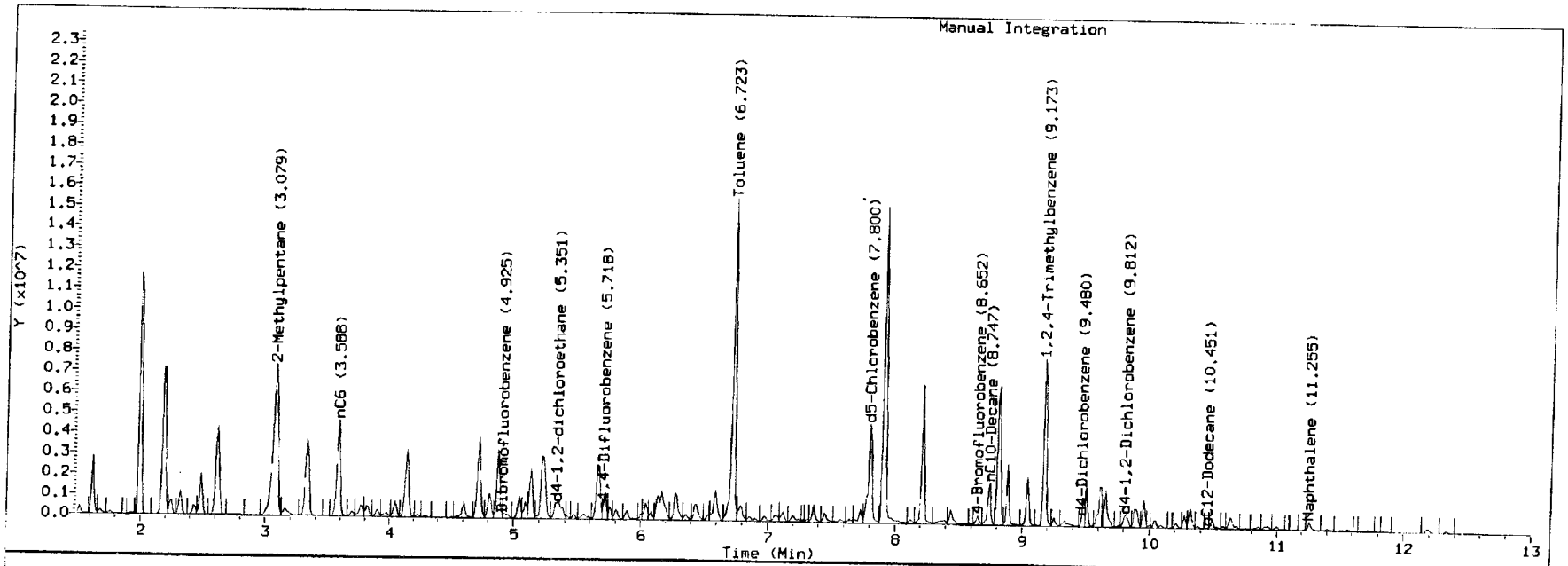
Operator: PC
Column diameter: 0.18

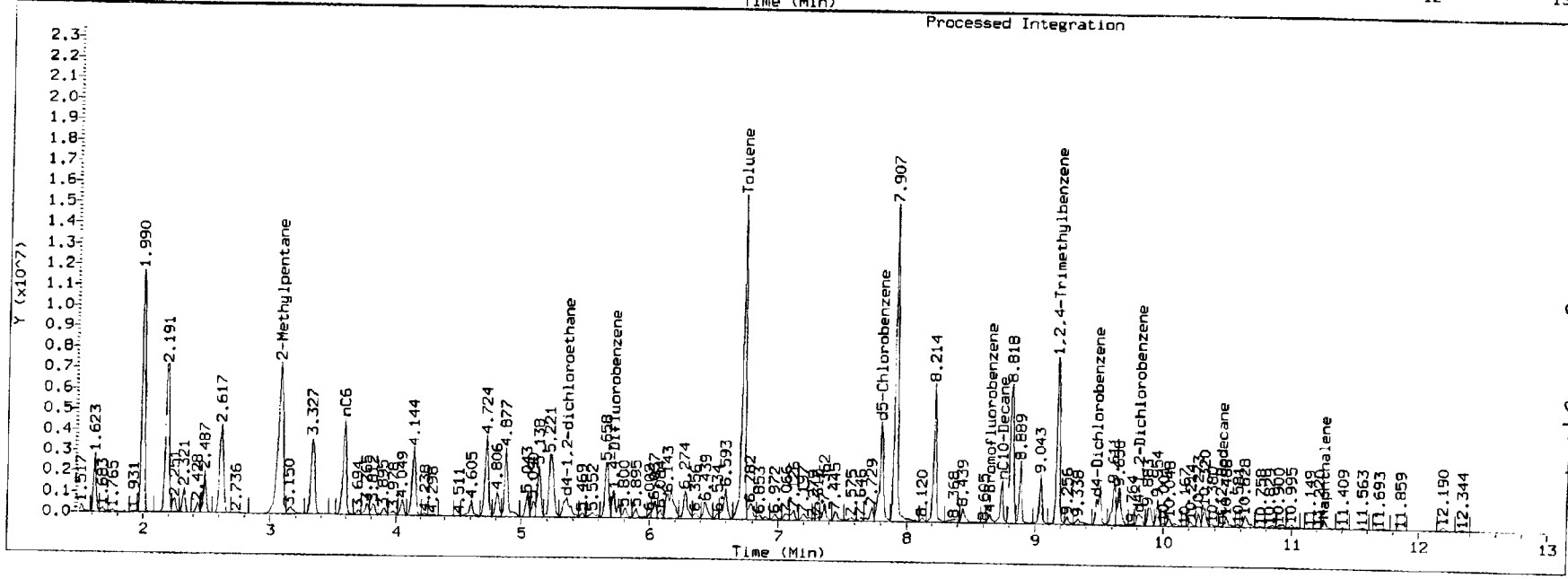


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291620.D Injection: 29-MAR-2016 21:07

Lab ID:G2500329





JMH 3/30/16

XLM 3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291620.D
Lab Smp Id: G2500329
Inj Date : 29-MAR-2016 21:07
Operator : PC Inst ID: nt2.i
Smp Info : G2500329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	27 Dibromofluoromethane	111	4.948	4.947	(0.929)	80895	4.61716	4.617
	31 Benzene	78	5.244	5.243	(0.917)	1447462	18.5854	18.585
*	32 Pentafluorobenzene	168	5.327	5.326	(1.000)	366346	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	120364	5.80838	5.808
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	580475	10.0000	
$	43 d8-Toluene	98	6.687	6.687	(1.170)	363485	5.28895	5.289
	44 Toluene	92	6.723	6.722	(1.176)	5827569	113.211	113.21
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	530399	10.0000	
	55 Ethyl Benzene	106	7.800	7.811	(1.003)	1077327	34.2118	34.212
	57 m,p-xylene	106	7.906	7.906	(1.017)	4034007	105.103	105.10
	58 o-Xylene	106	8.214	8.212	(1.056)	1583683	43.7468	43.747
$	62 4-Bromofluorobenzene	174	8.652	8.651	(1.113)	110194	5.09662	5.097
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	284779	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	136810	5.02434	5.024

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291620.D
Lab Smp Id: G2500329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	366346	4.56
37 1,4-Difluorobenze	562526	281263	1125052	580475	3.19
53 d5-Chlorobenzene	502371	251186	1004742	530399	5.58
76 d4-1,4-Dichlorobe	277950	138975	555900	284779	2.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Client SDG: 20151001
Sample Matrix: SOLID
Fraction: VOA
Lab Smp Id: G2500329
Level: LOW
Operator: PC
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: allspike.spk
Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

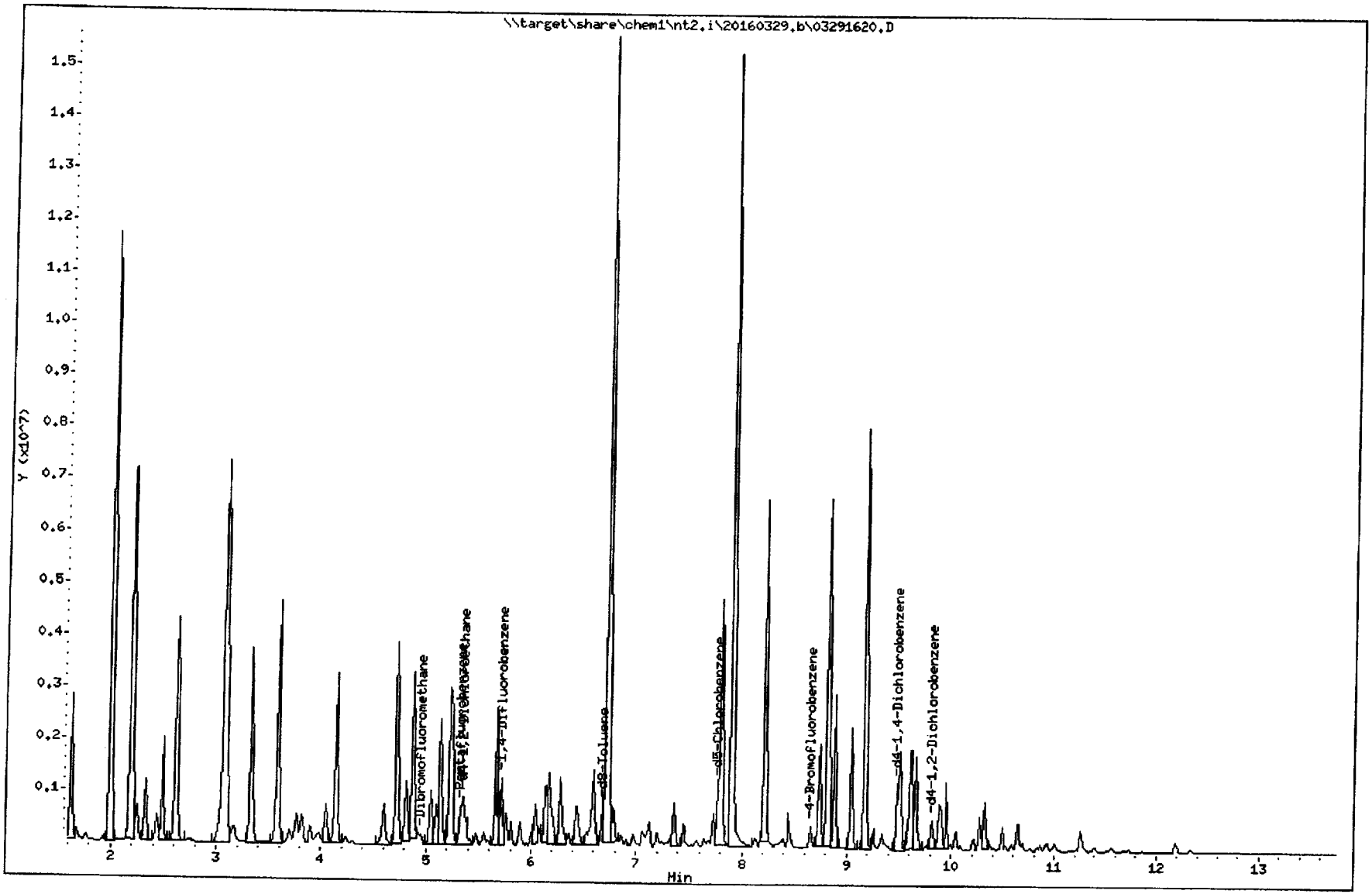
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.617	92.34	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.808	116.17	80-149
$ 43 d8-Toluene	5.000	5.289	105.78	77-120
$ 62 4-Bromofluorobenze	5.000	5.097	101.93	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.024	100.49	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291620.D
Date : 29-MAR-2016 21:07
Client ID:
Sample Info: G2500329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291620.D

Lab ID: G2500329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 21:07

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

3/30/16

Data file: 20160329g.b/03291621.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 21:28

ARI ID: G1000329
Client ID: GSTD1
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	51185622	1.066 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	85008808	1.021 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	60464211	1.030 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	52493344	1.067 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	81213277	1.109 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

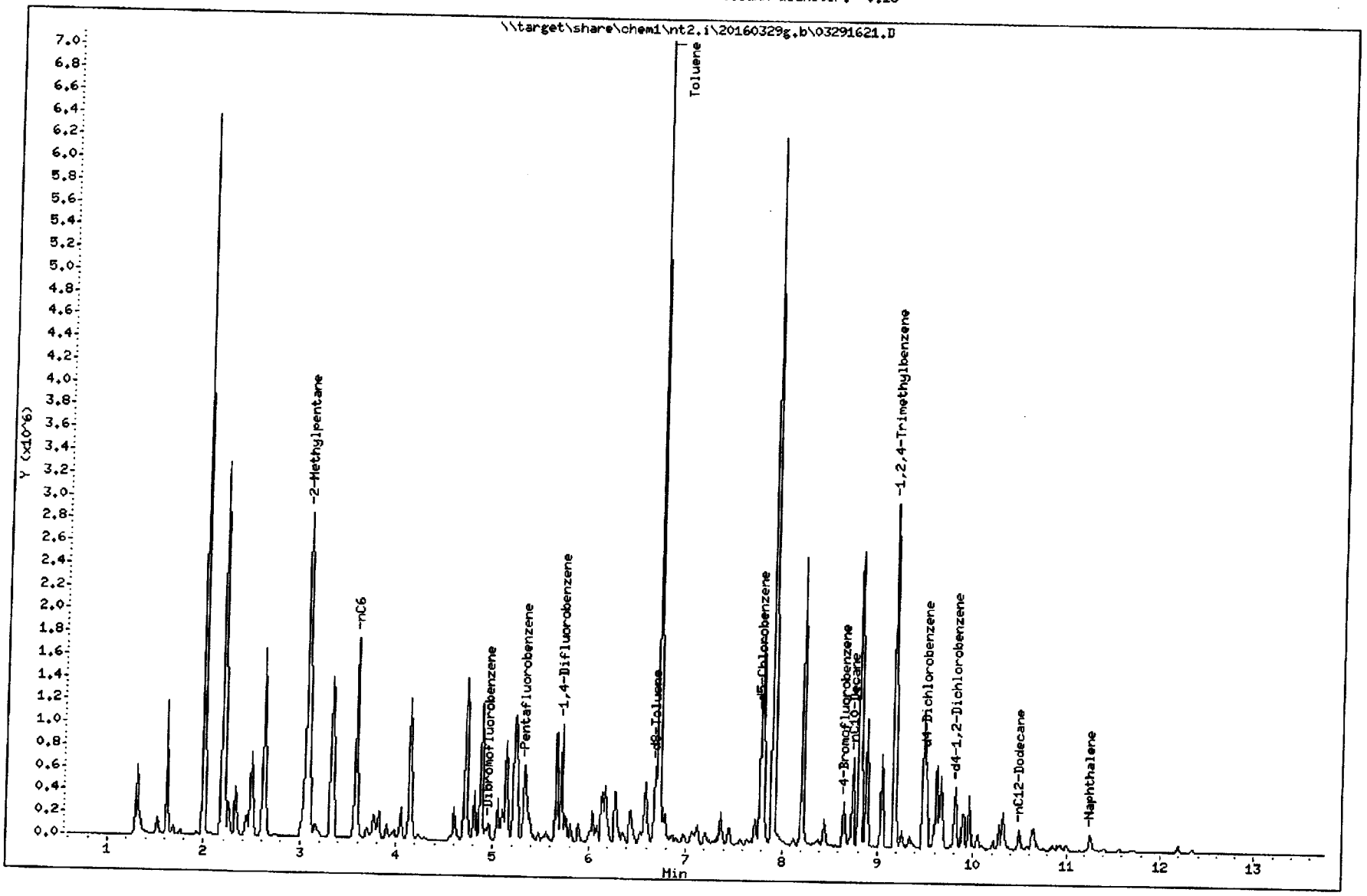
6.687	961710	d8-Toluene
8.651	593851	4-Bromofluorobenzene
9.503	1463362	d4-Dichlorobenzene
7.776	1720498	d5-Chlorobenzene
9.811	972946	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291621.D
Date : 29-MAR-2016 21:28
Client ID: GSTD1
Sample Info: G1000329,10,10,0,

Column phase: RTXVHS

Instrument: nt2.i

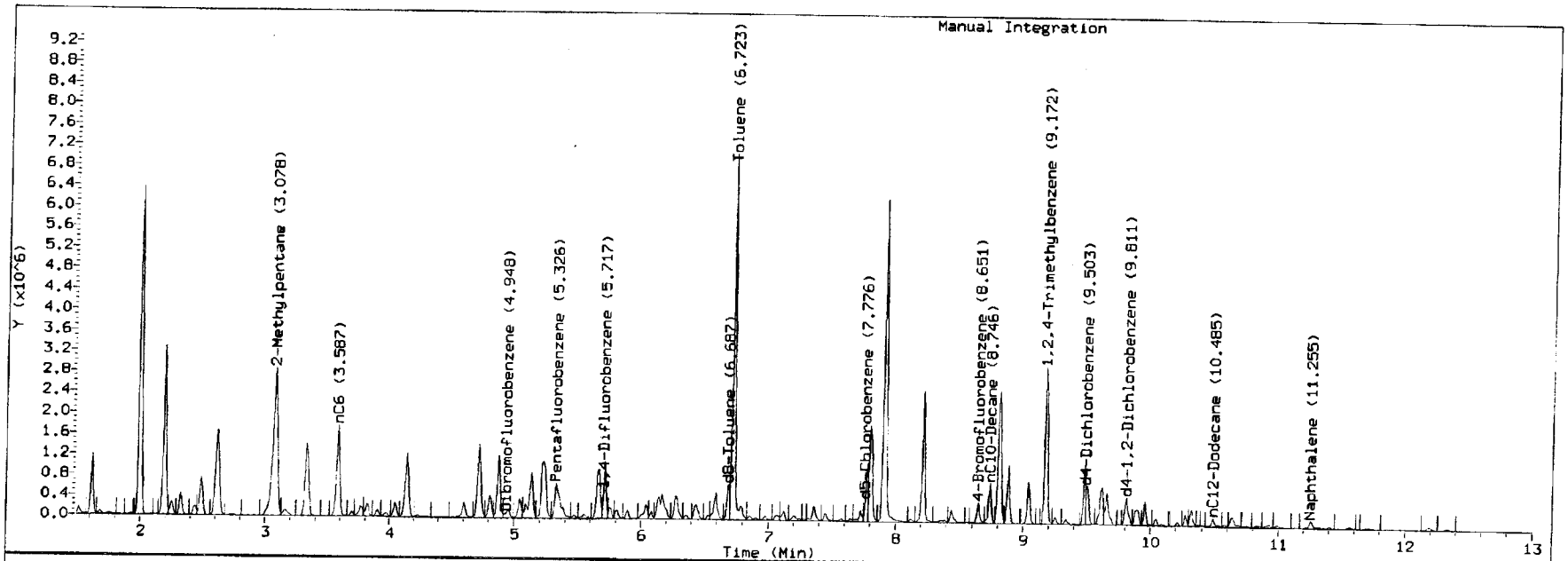
Operator: PC
Column diameter: 0.18

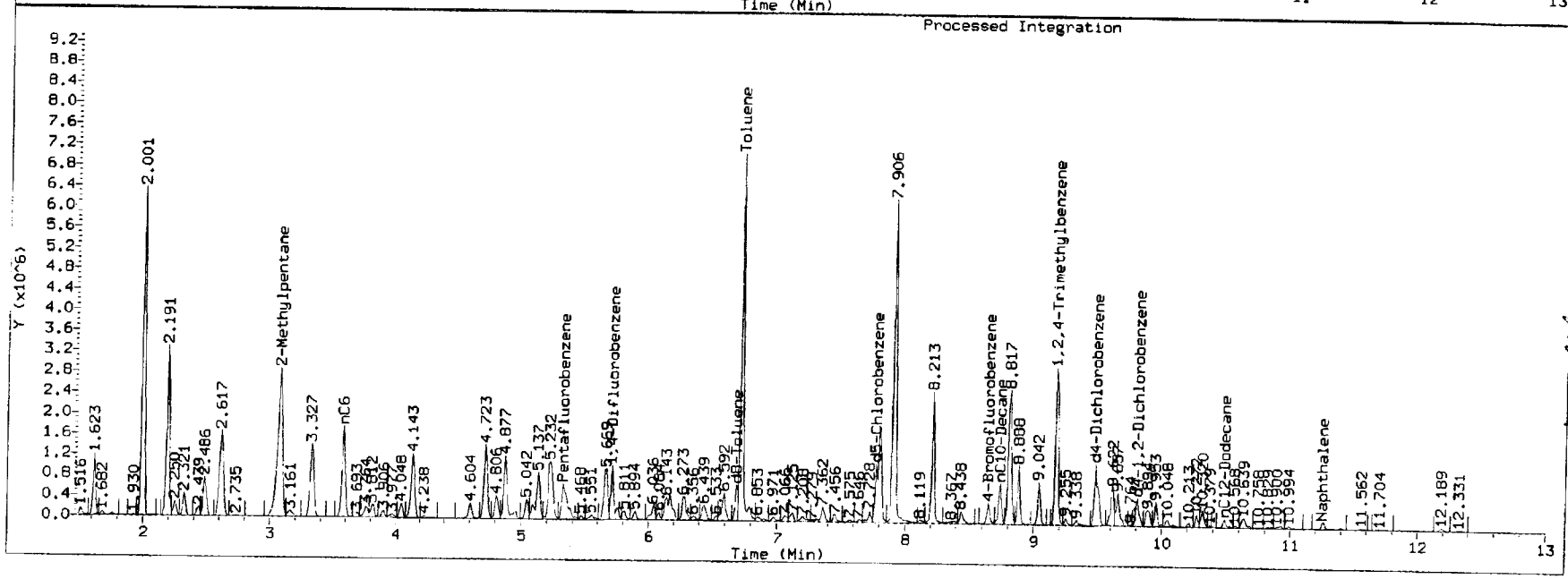


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291621.D Injection: 29-MAR-2016 21:28

Lab ID:G1000329





RLH 3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291621.D
Lab Smp Id: G1000329
Inj Date : 29-MAR-2016 21:28
Operator : PC Inst ID: nt2.i
Smp Info : G1000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	27 Dibromofluoromethane	111	4.947	4.947	(0.929)	80288	4.71446	4.714
	31 Benzene	78	5.243	5.243	(0.917)	543579	7.22688	7.227
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	356093	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.349	5.350	(1.004)	104791	5.20248	5.202
*	37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	560609	10.0000	
$	43 d8-Toluene	98	6.687	6.687	(1.170)	341759	5.14904	5.149
	44 Toluene	92	6.722	6.722	(1.176)	2490488	50.0965	50.096
*	53 d5-Chlorobenzene	117	7.775	7.775	(1.000)	525882	10.0000	
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	408748	13.0918	13.092
	57 m,p-xylene	106	7.905	7.906	(1.017)	1583945	41.6228	41.623
	58 o-Xylene	106	8.213	8.212	(1.056)	605338	16.8652	16.865
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	104584	4.87869	4.879
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.479	(1.000)	278120	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.810	9.811	(1.035)	134860	5.07131	5.071

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291621.D
Lab Smp Id: G1000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	356093	1.63
37 1,4-Difluorobenze	562526	281263	1125052	560609	-0.34
53 d5-Chlorobenzene	502371	251186	1004742	525882	4.68
76 d4-1,4-Dichlorobe	277950	138975	555900	278120	0.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G1000329
Level: LOW
Data Type: MS DATA
SpikeList File: allspike.spk
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Client SDG: 20151001
Fraction: VOA

Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

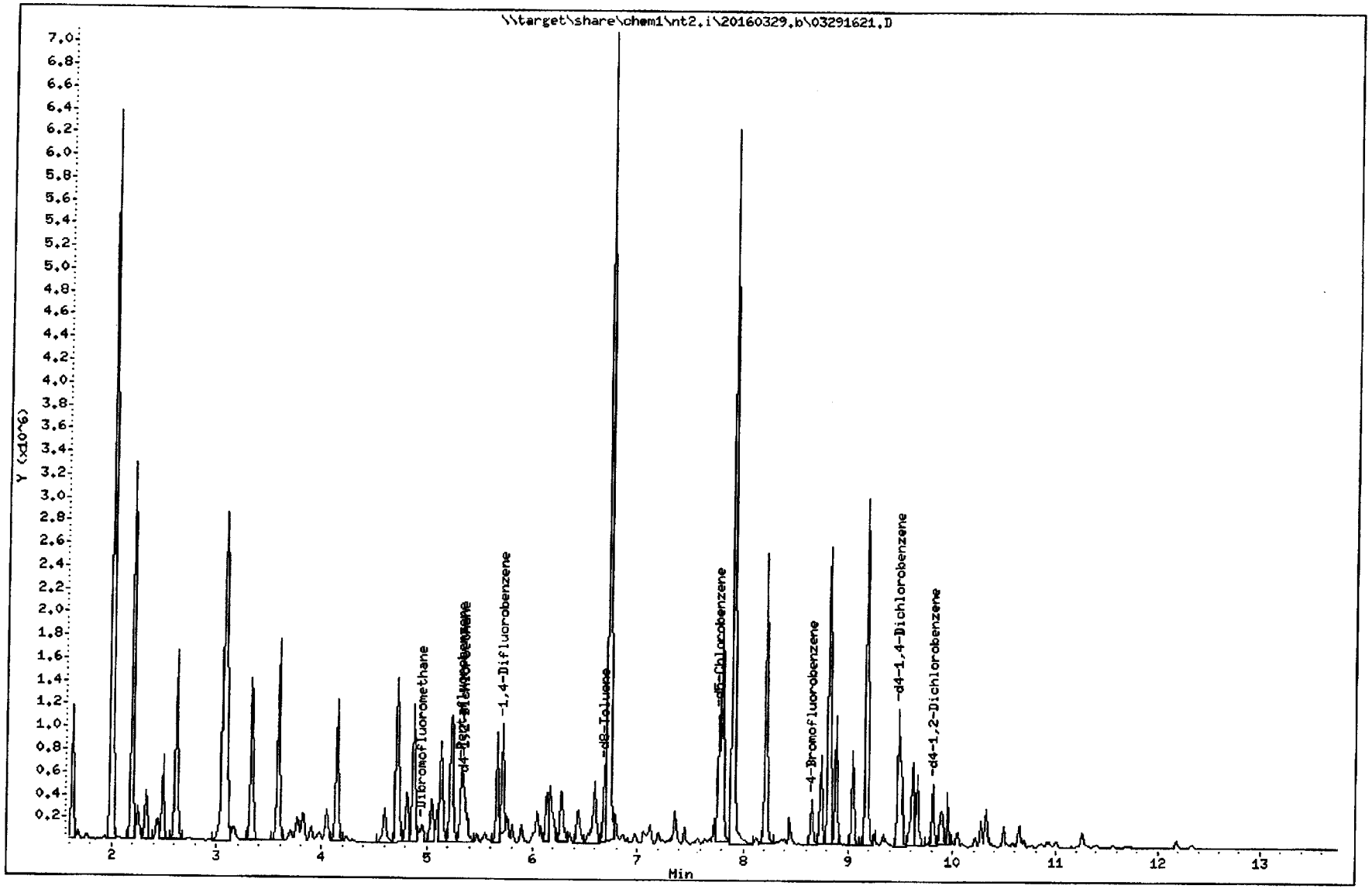
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.714	94.29	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.202	104.05	80-149
$ 43 d8-Toluene	5.000	5.149	102.98	77-120
$ 62 4-Bromofluorobenze	5.000	4.879	97.57	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.071	101.43	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291621.D
Date : 29-MAR-2016 21:28
Client ID:
Sample Info: G1000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291621.D

Lab ID: G1000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 21:28

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

AH 3/30/16

Data file: 20160329g.b/03291622.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 21:50

ARI ID: G0500329
Client ID: GSTD0.5
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	24555813	0.511 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	41871825	0.503 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	29736642	0.507 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	25132108	0.511 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	39181834	0.535 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

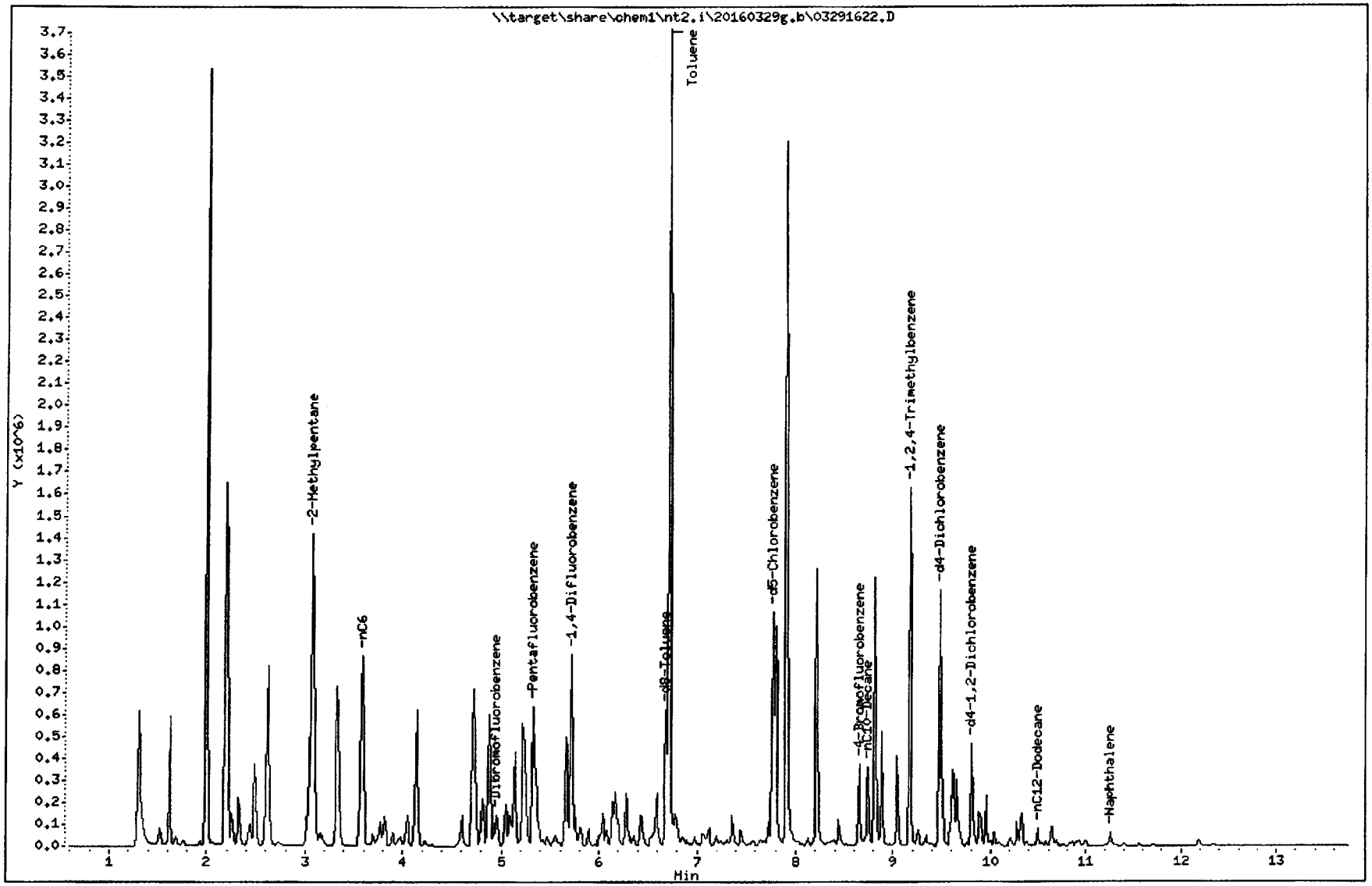
6.688	840841	d8-Toluene
8.653	550626	4-Bromofluorobenzene
9.481	2058351	d4-Dichlorobenzene
7.777	1519780	d5-Chlorobenzene
9.812	870971	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291622.D
Date : 29-MAR-2016 21:50
Client ID: GSTD0.5
Sample Info: G0500329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

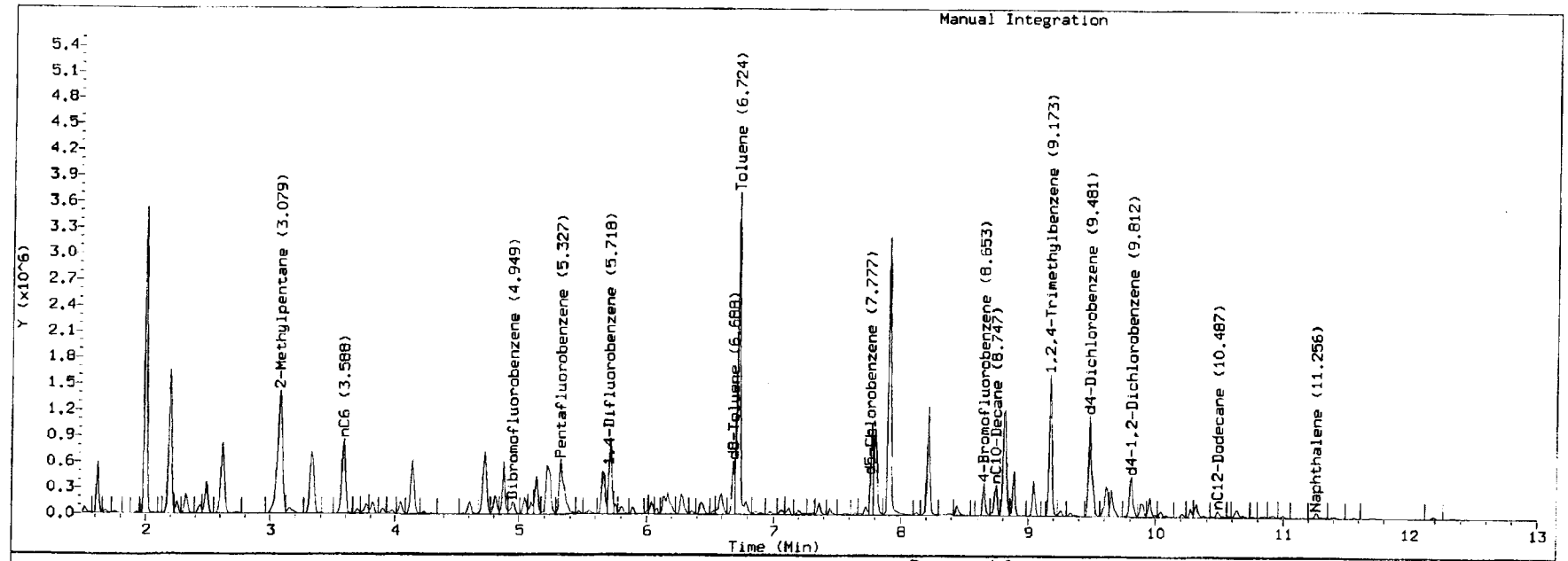
Column phase: RTXVMS

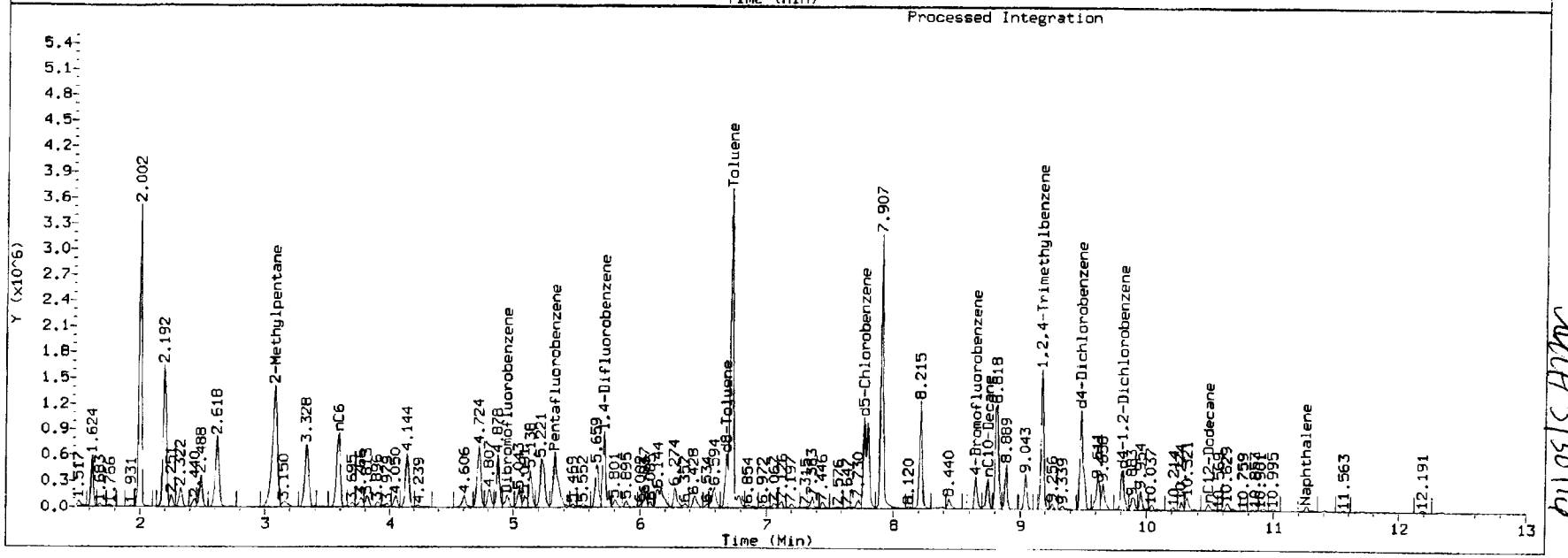


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291622.D Injection: 29-MAR-2016 21:50

Lab ID:G0500329





ALH 3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291622.D
Lab Smp Id: G0500329
Inj Date : 29-MAR-2016 21:50
Operator : PC Inst ID: nt2.i
Smp Info : G0500329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	27 Dibromofluoromethane	111	4.948	4.947	(0.929)	74949	4.67769	4.678
	31 Benzene	78	5.244	5.243	(0.917)	267067	3.77717	3.777
*	32 Pentafluorobenzene	168	5.327	5.326	(1.000)	335026	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.351	5.350	(1.004)	95614	5.04537	5.045
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	526989	10.0000	
$	43 d8-Toluene	98	6.688	6.687	(1.170)	317010	5.08086	5.081
	44 Toluene	92	6.723	6.722	(1.176)	1267837	27.1297	27.130
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	495230	10.0000	
	55 Ethyl Benzene	106	7.800	7.811	(1.003)	198708	6.75834	6.758
	57 m,p-xylene	106	7.907	7.906	(1.017)	790422	22.0562	22.056
	58 o-Xylene	106	8.214	8.212	(1.056)	298827	8.84084	8.841
$	62 4-Bromofluorobenzene	174	8.652	8.651	(1.113)	97596	4.83450	4.835
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	263670	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.812	9.811	(1.035)	126127	5.00284	5.003

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291622.D
Lab Smp Id: G0500329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	335026	-4.38
37 1,4-Difluorobenze	562526	281263	1125052	526989	-6.32
53 d5-Chlorobenzene	502371	251186	1004742	495230	-1.42
76 d4-1,4-Dichlorobe	277950	138975	555900	263670	-5.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.03
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G0500329
Level: LOW
Data Type: MS DATA
SpikeList File: allspike.spk
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Client SDG: 20151001
Fraction: VOA

Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

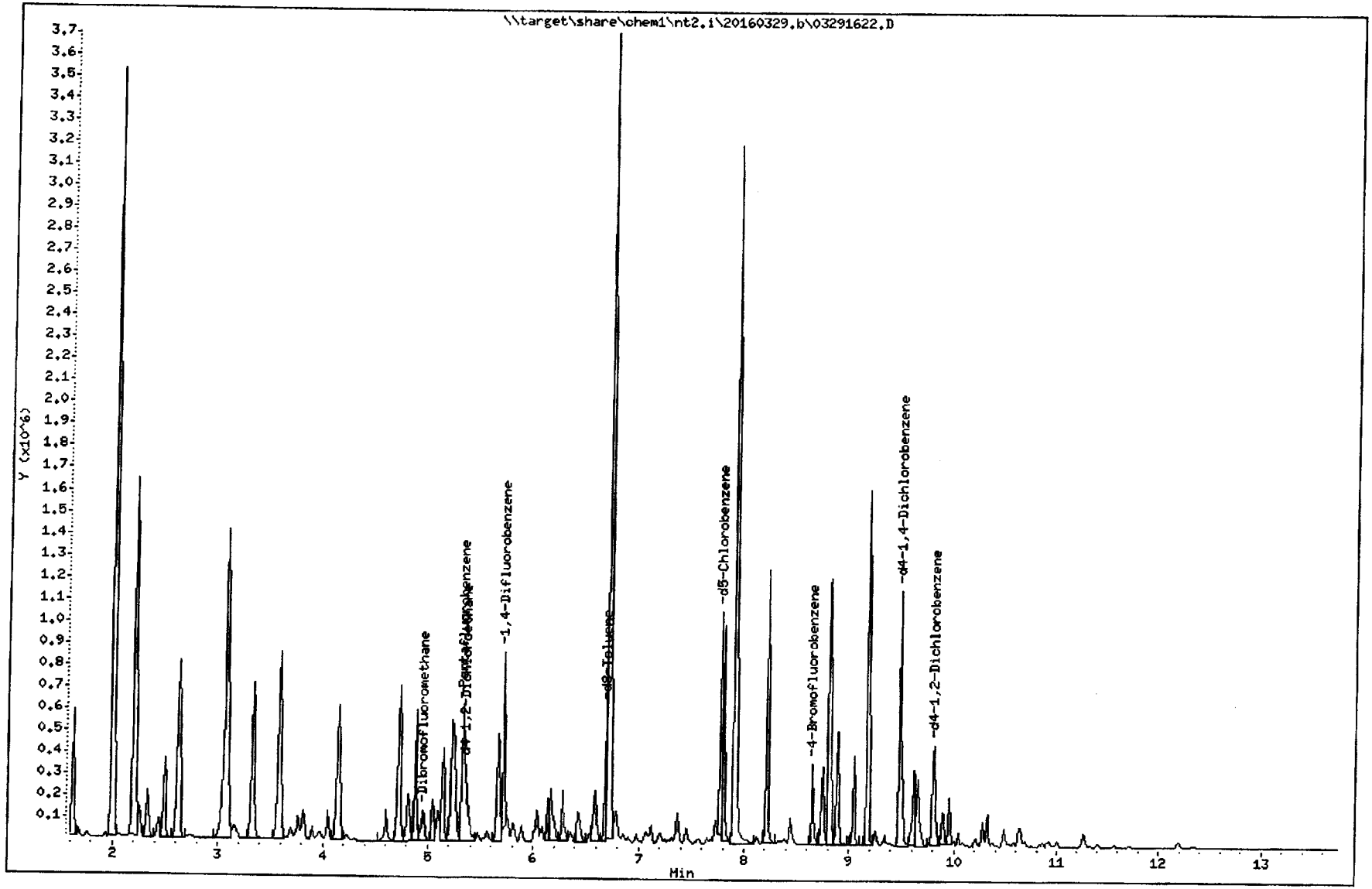
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.678	93.55	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.045	100.91	80-149
$ 43 d8-Toluene	5.000	5.081	101.62	77-120
$ 62 4-Bromofluorobenze	5.000	4.835	96.69	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.003	100.06	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291622.D
Date : 29-MAR-2016 21:50
Client ID:
Sample Info: G0500329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291622.D

Lab ID: G0500329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 21:50

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

XMH 3/30/16

Data file: 20160329g.b/03291623.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 22:11

ARI ID: G0250329
Client ID: GSTD0.25
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	12028020	0.251 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	20718376	0.249 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	14779001	0.252 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	12232714	0.249 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	19225550	0.262 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

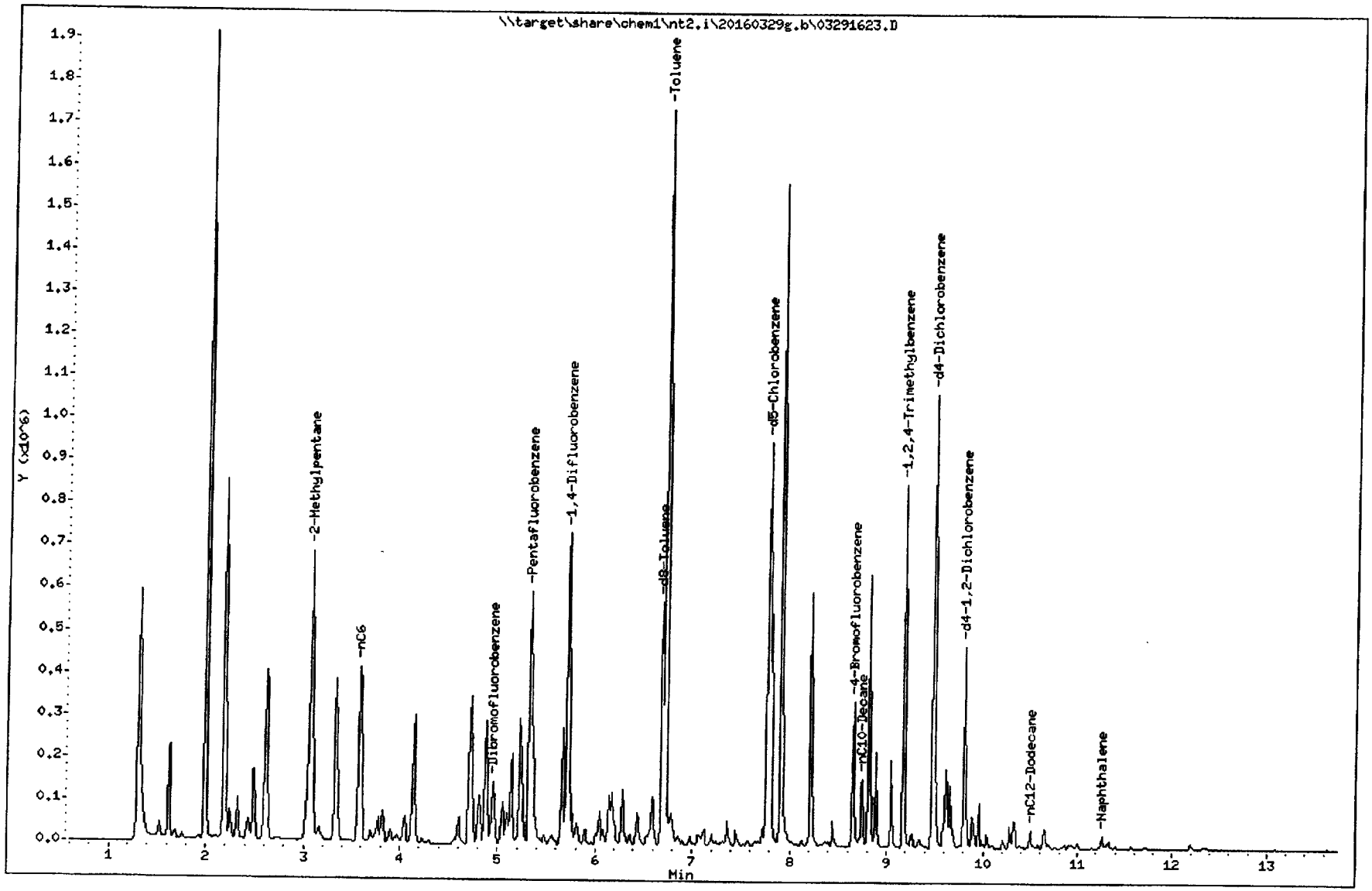
6.691	842876	d8-Toluene
8.655	536470	4-Bromofluorobenzene
9.484	1790369	d4-Dichlorobenzene
7.780	1496568	d5-Chlorobenzene
9.803	804532	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291623.D
Date : 29-MAR-2016 22:11
Client ID: GSTD0.25
Sample Info: G0250329,10,10,0,

Column phase: RTXVHS

Instrument: nt2.i

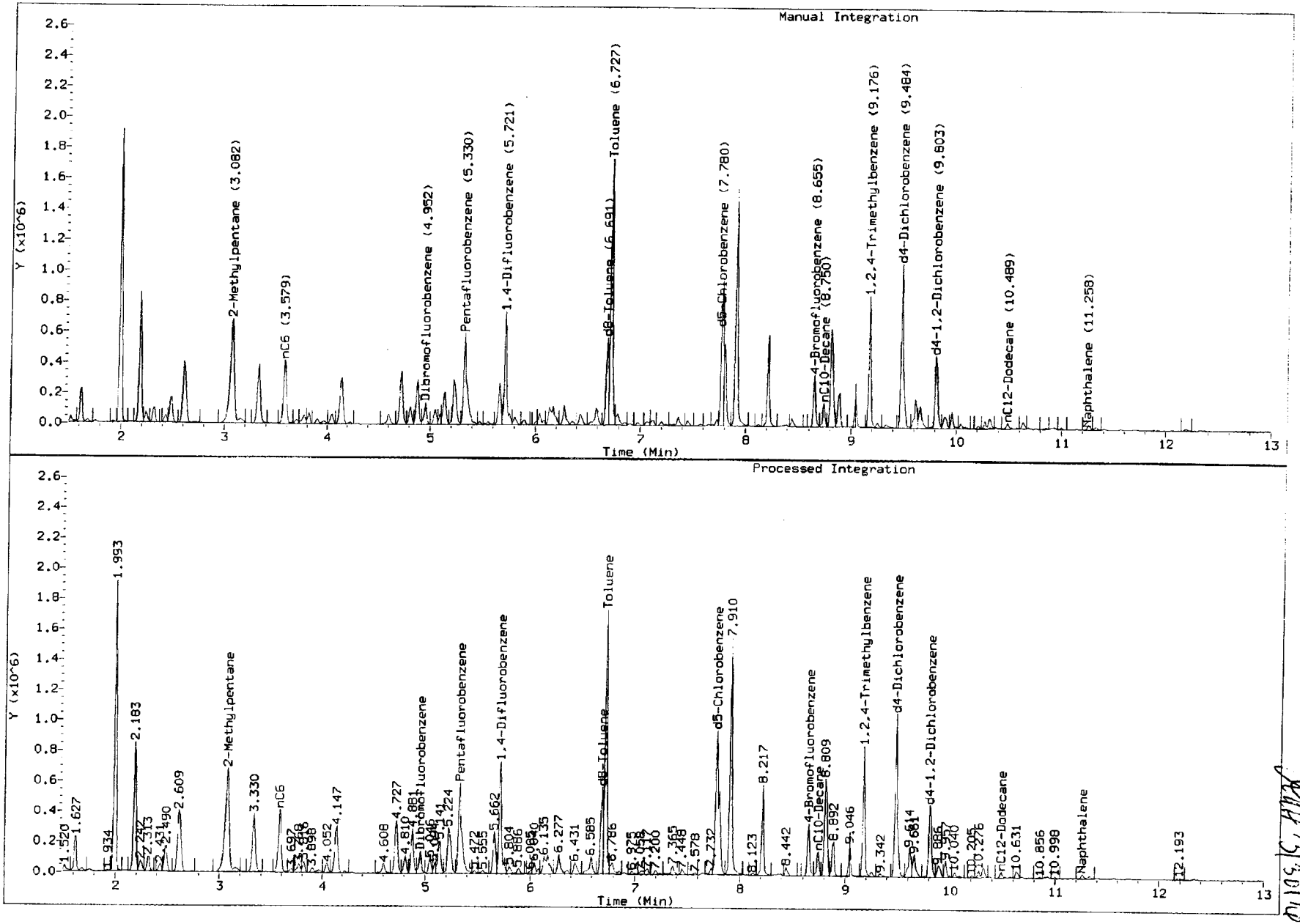
Operator: PC
Column diameter: 0.18



TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291623.D Injection: 29-MAR-2016 22:11

Lab ID:G0250329



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291623.D
Lab Smp Id: G0250329
Inj Date : 29-MAR-2016 22:11
Operator : PC Inst ID: nt2.i
Smp Info : G0250329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	27 Dibromofluoromethane	111	4.951	4.947	(0.929)	75545	4.78409	4.784
	31 Benzene	78	5.247	5.243	(0.917)	138156	1.96530	1.965
*	32 Pentafluorobenzene	168	5.330	5.326	(1.000)	330180	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.353	5.350	(1.004)	95599	5.11861	5.119
*	37 1,4-Difluorobenzene	114	5.720	5.717	(1.000)	523950	10.0000	
$	43 d8-Toluene	98	6.691	6.687	(1.170)	321950	5.18997	5.190
	44 Toluene	92	6.726	6.722	(1.176)	647699	13.9401	13.940
*	53 d5-Chlorobenzene	117	7.779	7.775	(1.000)	490395	10.0000	
	55 Ethyl Benzene	106	7.803	7.811	(1.003)	99790	3.42746	3.427
	57 m,p-xylene	106	7.909	7.906	(1.017)	394058	11.1044	11.104
	58 o-Xylene	106	8.217	8.212	(1.056)	146476	4.37624	4.376
$	62 4-Bromofluorobenzene	174	8.655	8.651	(1.113)	95586	4.78162	4.782
*	76 d4-1,4-Dichlorobenzene	152	9.483	9.479	(1.000)	259889	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.814	9.811	(1.035)	124653	5.01631	5.016

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291623.D
Lab Smp Id: G0250329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	330180	-5.76
37 1,4-Difluorobenze	562526	281263	1125052	523950	-6.86
53 d5-Chlorobenzene	502371	251186	1004742	490395	-2.38
76 d4-1,4-Dichlorobe	277950	138975	555900	259889	-6.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.08
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.07
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.05
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G0250329
Level: LOW
Data Type: MS DATA
SpikeList File: allspike.spk
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Client SDG: 20151001
Fraction: VOA

Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

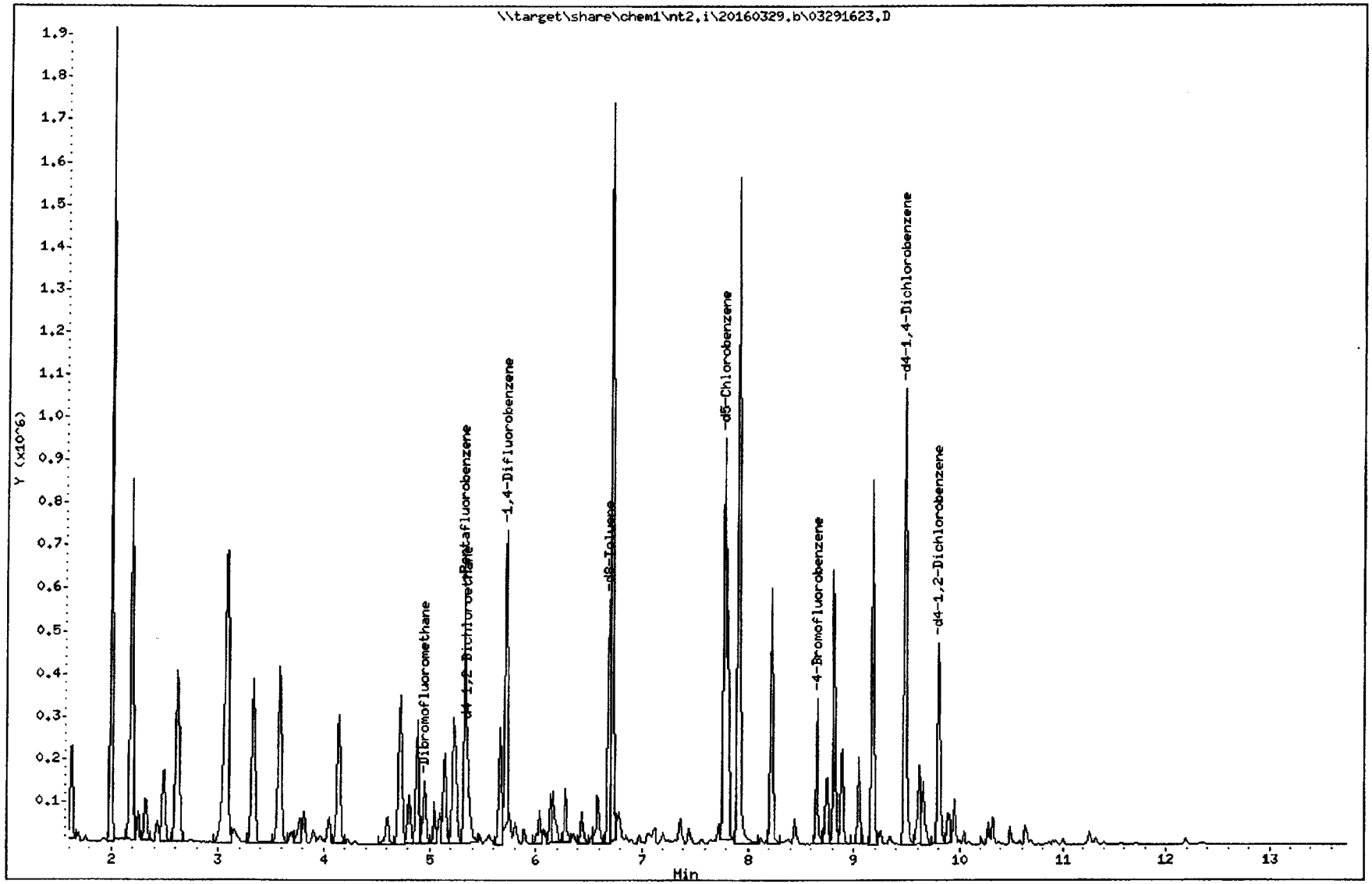
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.784	95.68	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.119	102.37	80-149
$ 43 d8-Toluene	5.000	5.190	103.80	77-120
$ 62 4-Bromofluorobenze	5.000	4.782	95.63	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.016	100.33	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291623.D
Date : 29-MAR-2016 22:11
Client ID:
Sample Info: G0250329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291623.D

Lab ID: G0250329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 22:11

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

RLH 3/30/16

Data file: 20160329g.b/03291624.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 22:32

ARI ID: G0100329
Client ID: GSTD0.1
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	3850119	0.080
8015C 2MP-TMB	(2.98 to 9.28)	83224207	7140486	0.086
AK101 nC6-nC10	(3.49 to 8.62)	58706304	4966251	0.085
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	3925968	0.080 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	6419449	0.088

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

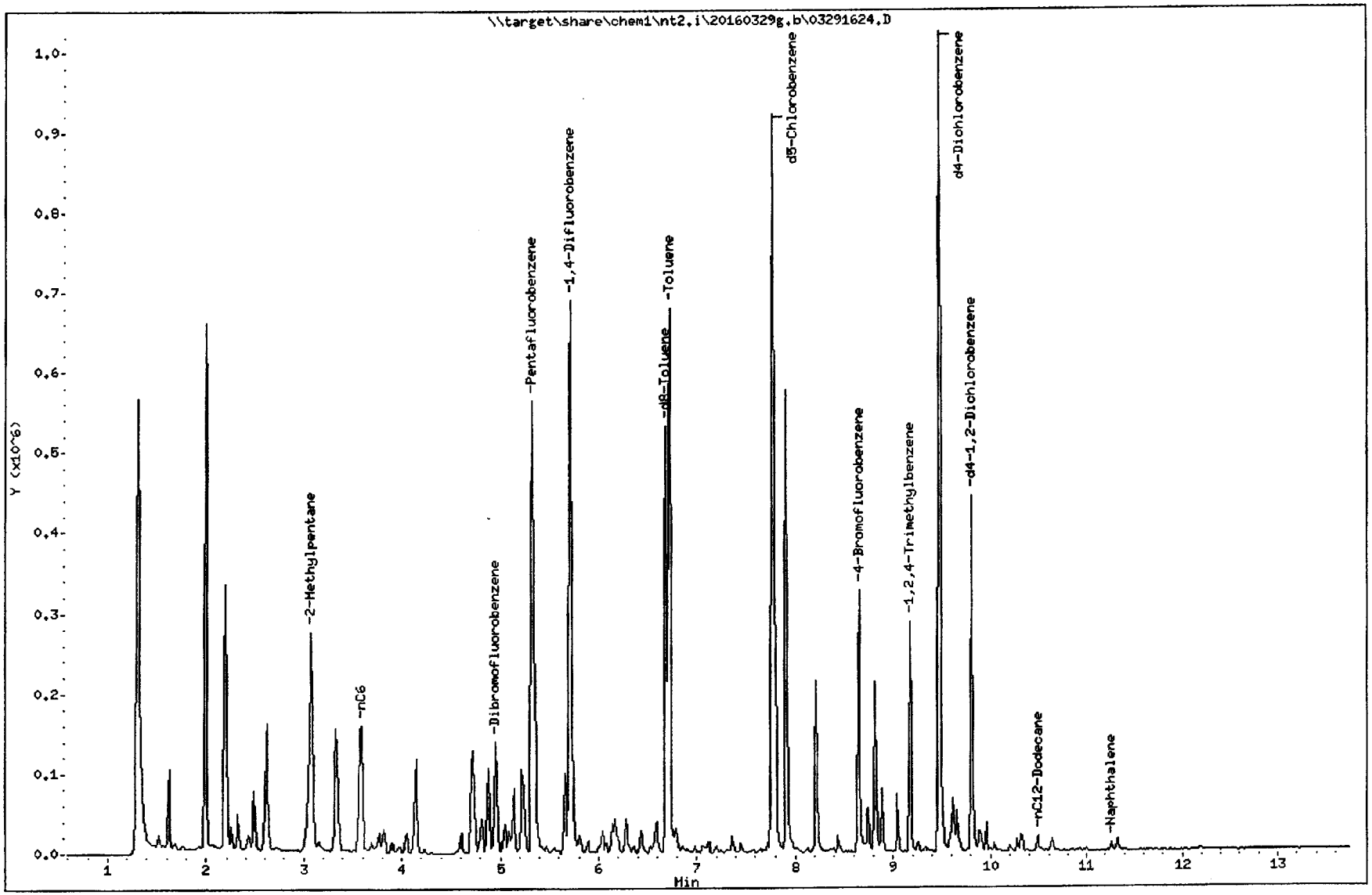
6.690	729346	d8-Toluene
8.655	616898	4-Bromofluorobenzene
9.483	1562613	d4-Dichlorobenzene
7.779	1619441	d5-Chlorobenzene
9.803	713446	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291624.D
Date : 29-MAR-2016 22:32
Client ID: GSTD0.1
Sample Info: G0100329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

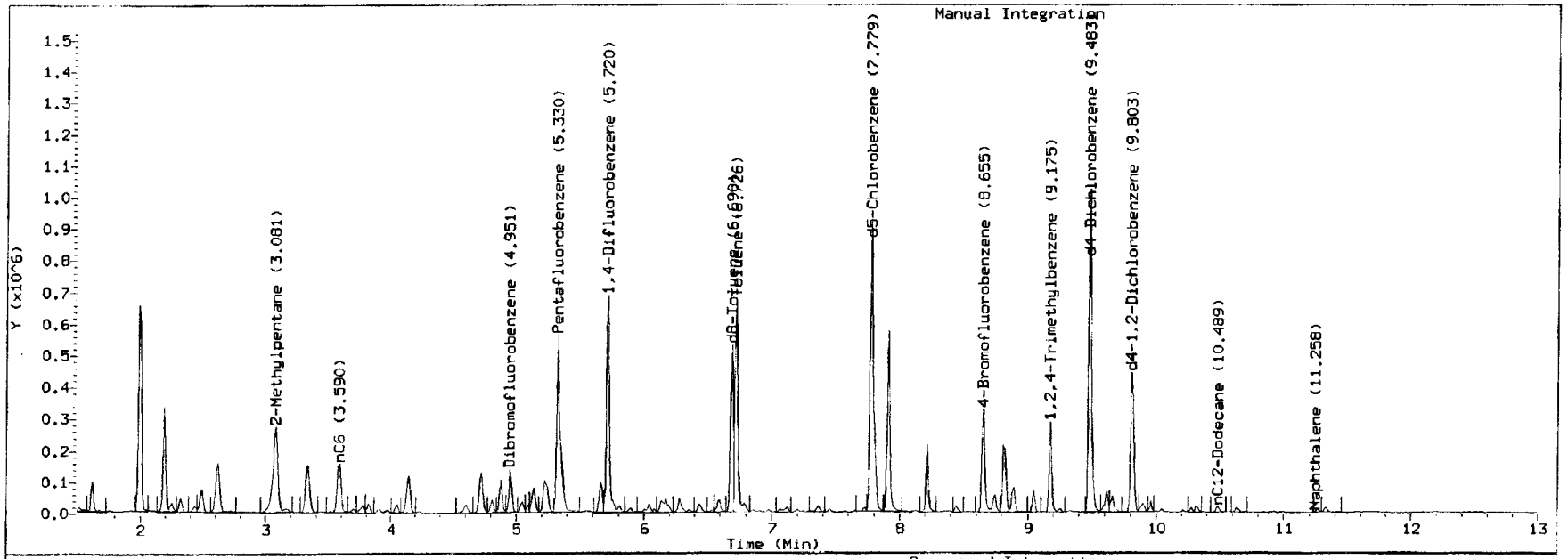
Column phase: RTXVMS

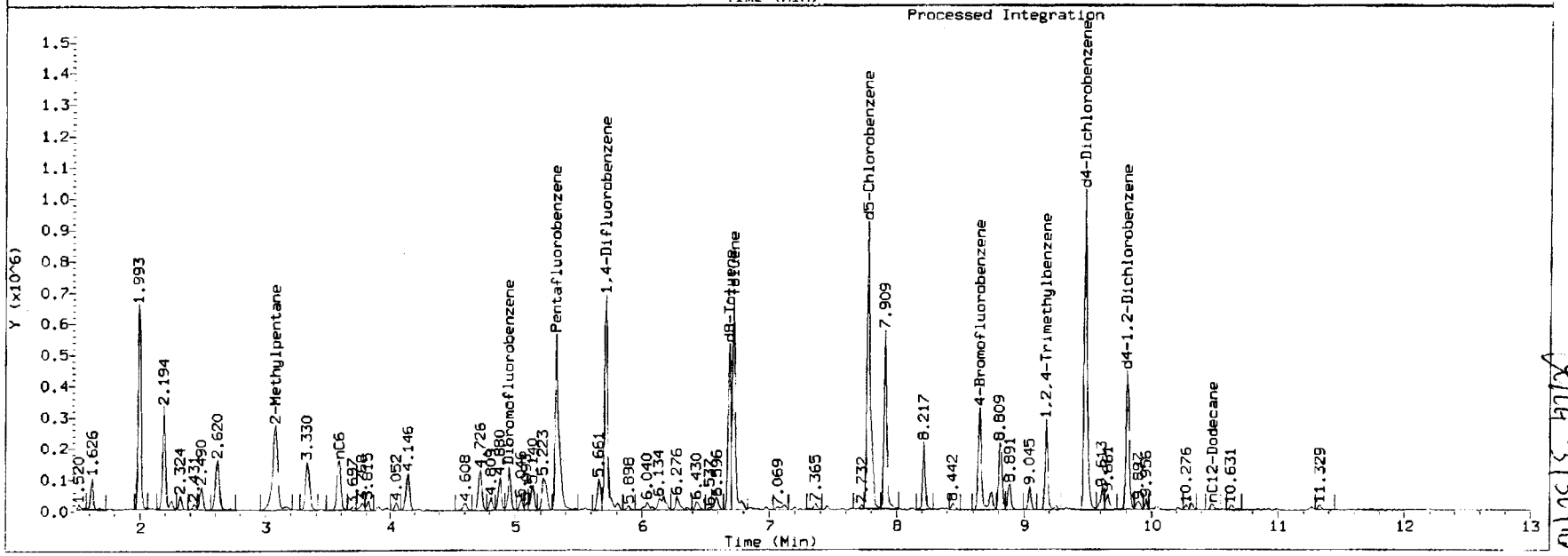


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291624.D Injection: 29-MAR-2016 22:32

Lab ID:G0100329





Page 2074 of 2154

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291624.D
Lab Smp Id: G0100329
Inj Date : 29-MAR-2016 22:32
Operator : PC Inst ID: nt2.i
Smp Info : G0100329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.951	4.947	(0.929)	71888	4.95202	4.952
31 Benzene	78	5.246	5.243	(0.917)	51759	0.80004	0.8000
* 32 Pentafluorobenzene	168	5.329	5.326	(1.000)	303542	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.353	5.350	(1.004)	91341	5.31982	5.320
* 37 1,4-Difluorobenzene	114	5.720	5.717	(1.000)	482197	10.0000	
$ 43 d8-Toluene	98	6.690	6.687	(1.170)	292483	5.12321	5.123
44 Toluene	92	6.725	6.722	(1.176)	249861	5.84328	5.843
* 53 d5-Chlorobenzene	117	7.779	7.775	(1.000)	459677	10.0000	
55 Ethyl Benzene	106	7.802	7.811	(1.003)	36717	1.34538	1.345
57 m,p-xylene	106	7.909	7.906	(1.017)	145124	4.36280	4.363
58 o-Xylene	106	8.216	8.212	(1.056)	52554	1.67507	1.675
$ 62 4-Bromofluorobenzene	174	8.654	8.651	(1.113)	87080	4.64721	4.647
* 76 d4-1,4-Dichlorobenzene	152	9.483	9.479	(1.000)	241501	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.814	9.811	(1.035)	117450	5.08632	5.086

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291624.D
Lab Smp Id: G0100329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	303542	-13.37
37 1,4-Difluorobenze	562526	281263	1125052	482197	-14.28
53 d5-Chlorobenzene	502371	251186	1004742	459677	-8.50
76 d4-1,4-Dichlorobe	277950	138975	555900	241501	-13.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.07
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.06
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.05
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G0100329
Level: LOW Operator: PC
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

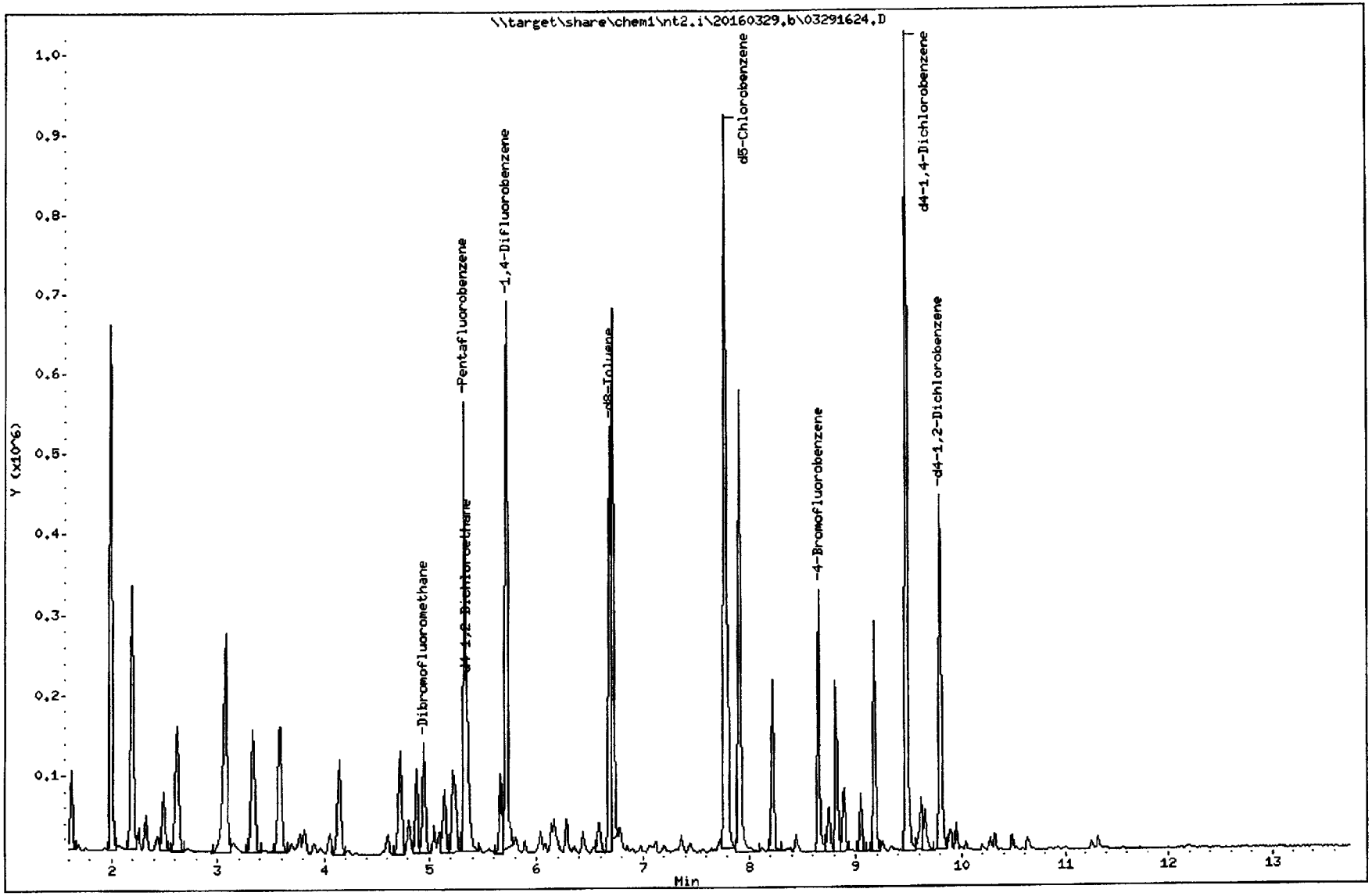
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.952	99.04	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.320	106.40	80-149
$ 43 d8-Toluene	5.000	5.123	102.46	77-120
$ 62 4-Bromofluorobenze	5.000	4.647	92.94	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.086	101.73	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291624.D
Date : 29-MAR-2016 22:32
Client ID:
Sample Info: G0100329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291624.D

Lab ID: G0100329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 22:32

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

3/30/16

Data file: 20160329g.b/03291625.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 22:54

ARI ID: GSCV0329
Client ID: GSCV
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	125458223	2.613 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	208594002	2.506 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	144105640	2.455 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	129715156	2.636 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	203576469	2.779 M

True value = 2.5

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

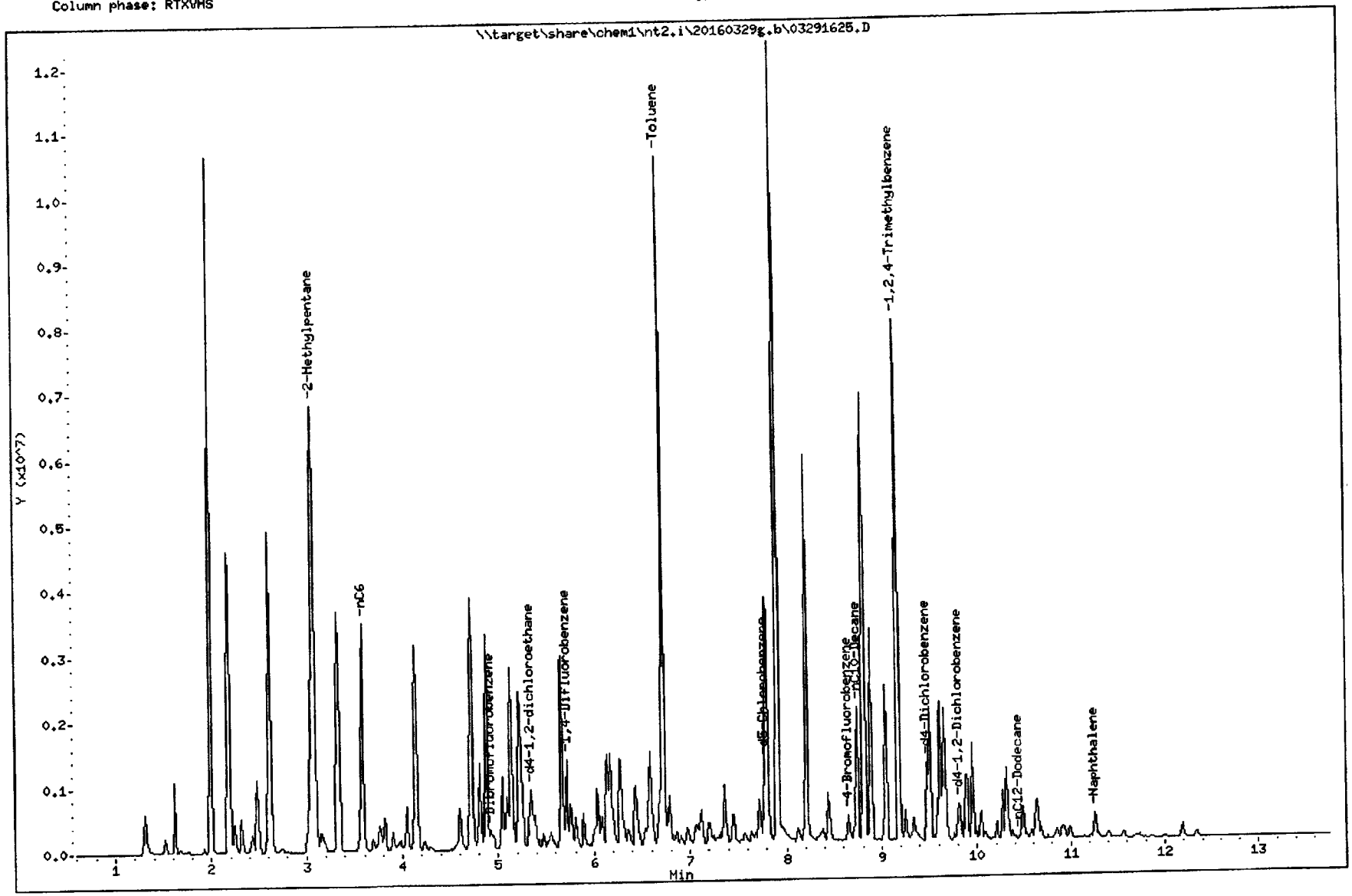
8.651	730123	4-Bromofluorobenzene
9.480	1842491	d4-Dichlorobenzene
7.776	2205885	d5-Chlorobenzene
9.811	1533863	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291625.D
Date : 29-MAR-2016 22:54
Client ID: GSCV
Sample Info: GSCV0329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

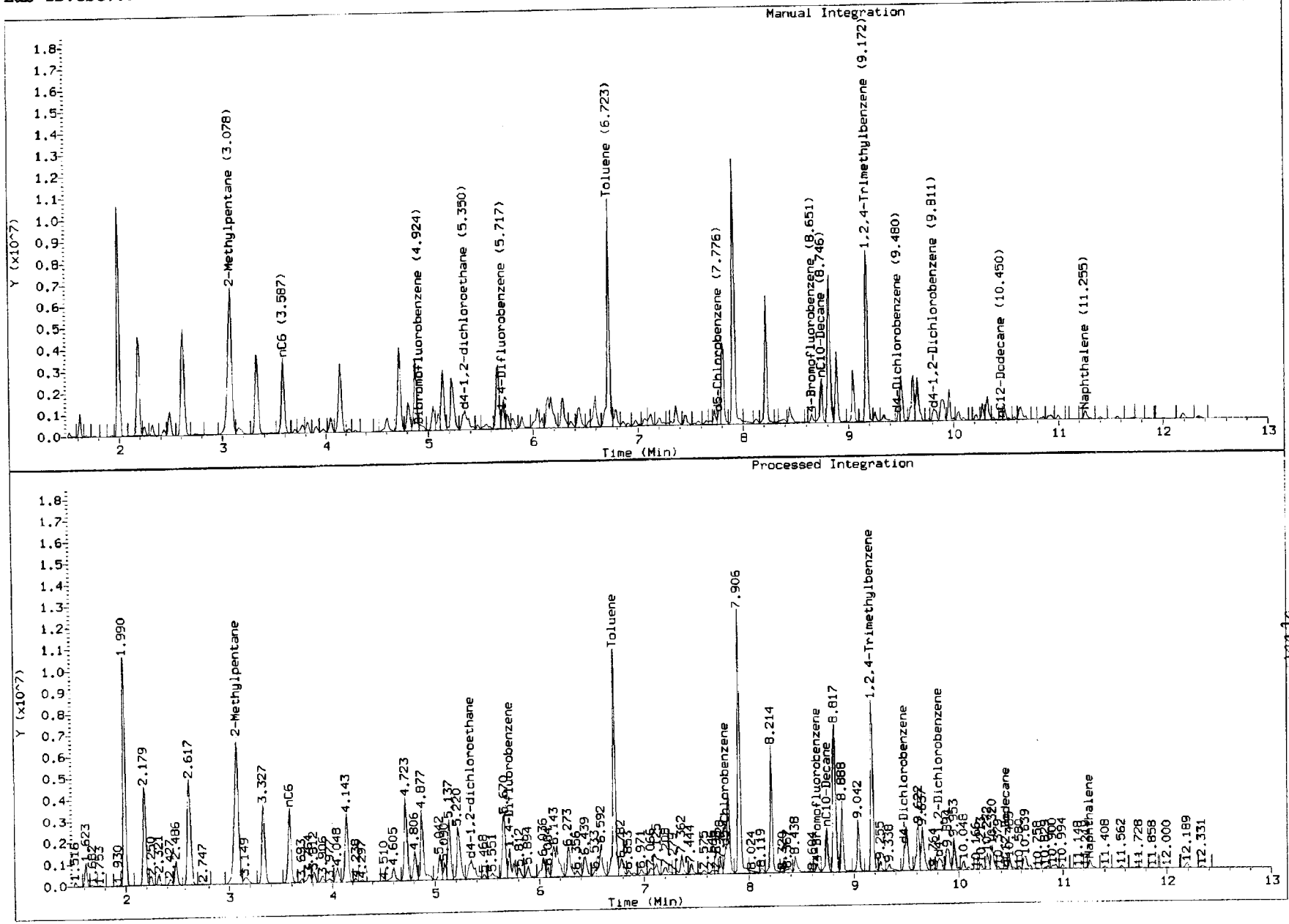
Column phase: RTXVMS



TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291625.D Injection: 29-MAR-2016 22:54

Lab ID:GSCV0329



Page 2082 of 2154

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291625.D
Lab Smp Id: GSCV0329
Inj Date : 29-MAR-2016 22:54
Operator : PC Inst ID: nt2.i
Smp Info : GSCV0329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.947	4.947	(0.929)	76997	4.62830	4.628
31 Benzene	78	5.243	5.243	(0.917)	657783	8.82957	8.830
* 32 Pentafluorobenzene	168	5.326	5.326	(1.000)	347854	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	110861	5.63419	5.634
* 37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	555254	10.0000	
$ 43 d8-Toluene	98	6.687	6.687	(1.170)	350286	5.32840	5.328
44 Toluene	92	6.722	6.722	(1.176)	3750272	76.1648	76.165
* 53 d5-Chlorobenzene	117	7.775	7.775	(1.000)	518670	10.0000	
55 Ethyl Benzene	106	7.811	7.811	(1.005)	873090	28.3530	28.353
57 m,p-xylene	106	7.905	7.906	(1.017)	3174736	84.5854	84.585
58 o-Xylene	106	8.213	8.212	(1.056)	1410867	39.8544	39.854
$ 62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	106739	5.04846	5.048
* 76 d4-1,4-Dichlorobenzene	152	9.479	9.479	(1.000)	276192	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.810	9.811	(1.035)	133866	5.06908	5.069

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291625.D
Lab Smp Id: GSCV0329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	347854	-0.72
37 1,4-Difluorobenze	562526	281263	1125052	555254	-1.29
53 d5-Chlorobenzene	502371	251186	1004742	518670	3.24
76 d4-1,4-Dichlorobe	277950	138975	555900	276192	-0.63

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.01
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: GSCV0329
Level: LOW Operator: PC
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

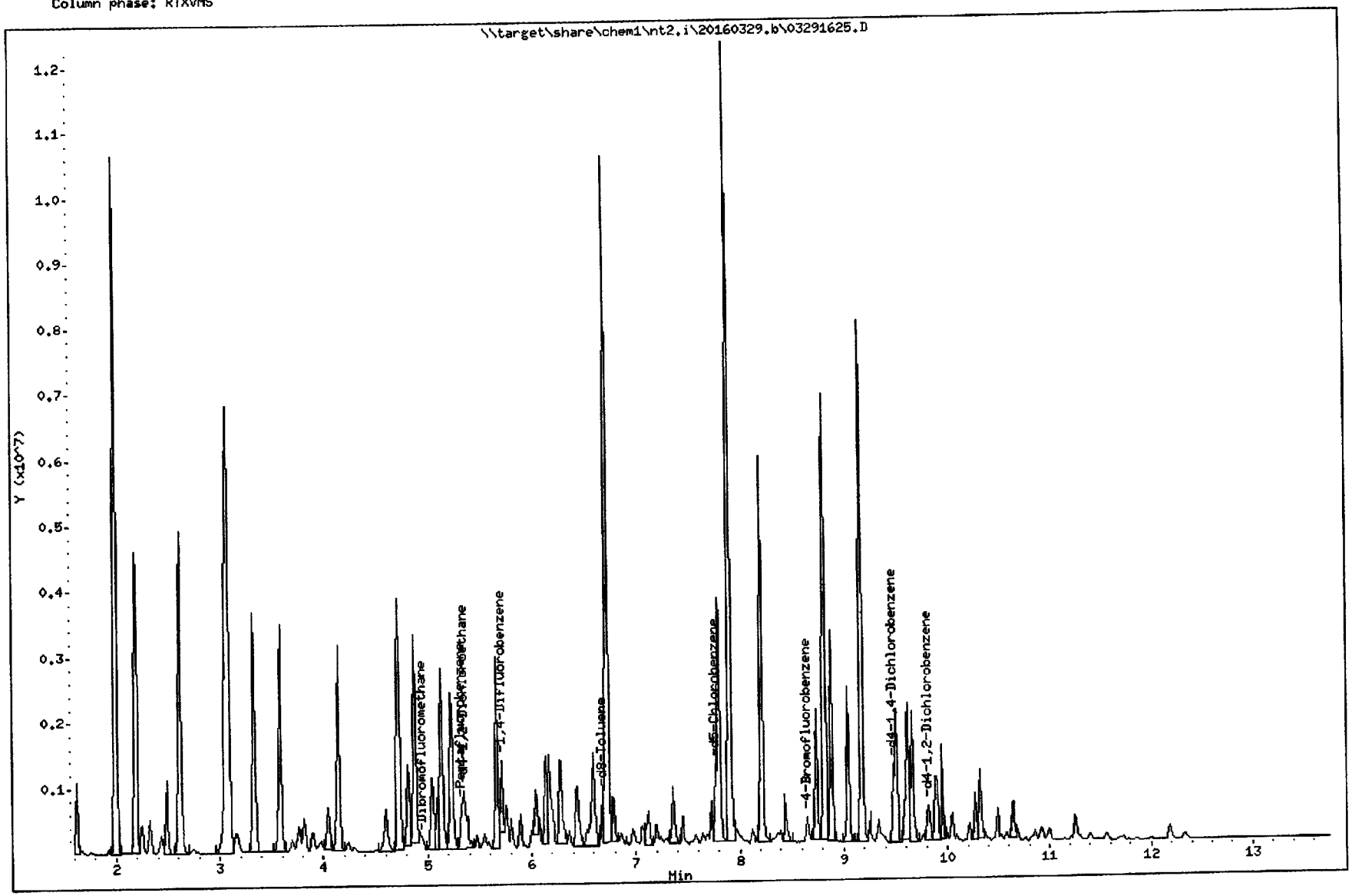
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.628	92.57	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.634	112.68	80-149
$ 43 d8-Toluene	5.000	5.328	106.57	77-120
$ 62 4-Bromofluorobenze	5.000	5.048	100.97	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.069	101.38	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291625.D
Date : 29-MAR-2016 22:54
Client ID:
Sample Info: GSCV0329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291625.D

Lab ID: GSCV0329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 22:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

INITIAL CALIBRATION CHECK

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Instrument ID:	NT3	Calibration:	ZF00014
Lab File ID:	06301604ccG.D	Calibration Date:	06/15/16 12:06
Sequence:	SEF0147	Injection Date:	06/30/16
Lab Sample ID:	SEF0147-ICV1	Injection Time:	08:15

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Gasoline Range Organics (Tol-Nap)	A	1000.0	1140	103441.8000000	117892.2000000		14.0	20
Toluene-d8	A	5.0000	4.52		1.1378470			
4-Bromofluorobenzene	A	5.0000	4.23		0.3929893			

* Values outside of QC limits

Data File: \\target\share\chem1\nt3.i\20160630.b\06301604cc.D

Date : 30-JUN-2016 08:15

Client ID: GICVLCS

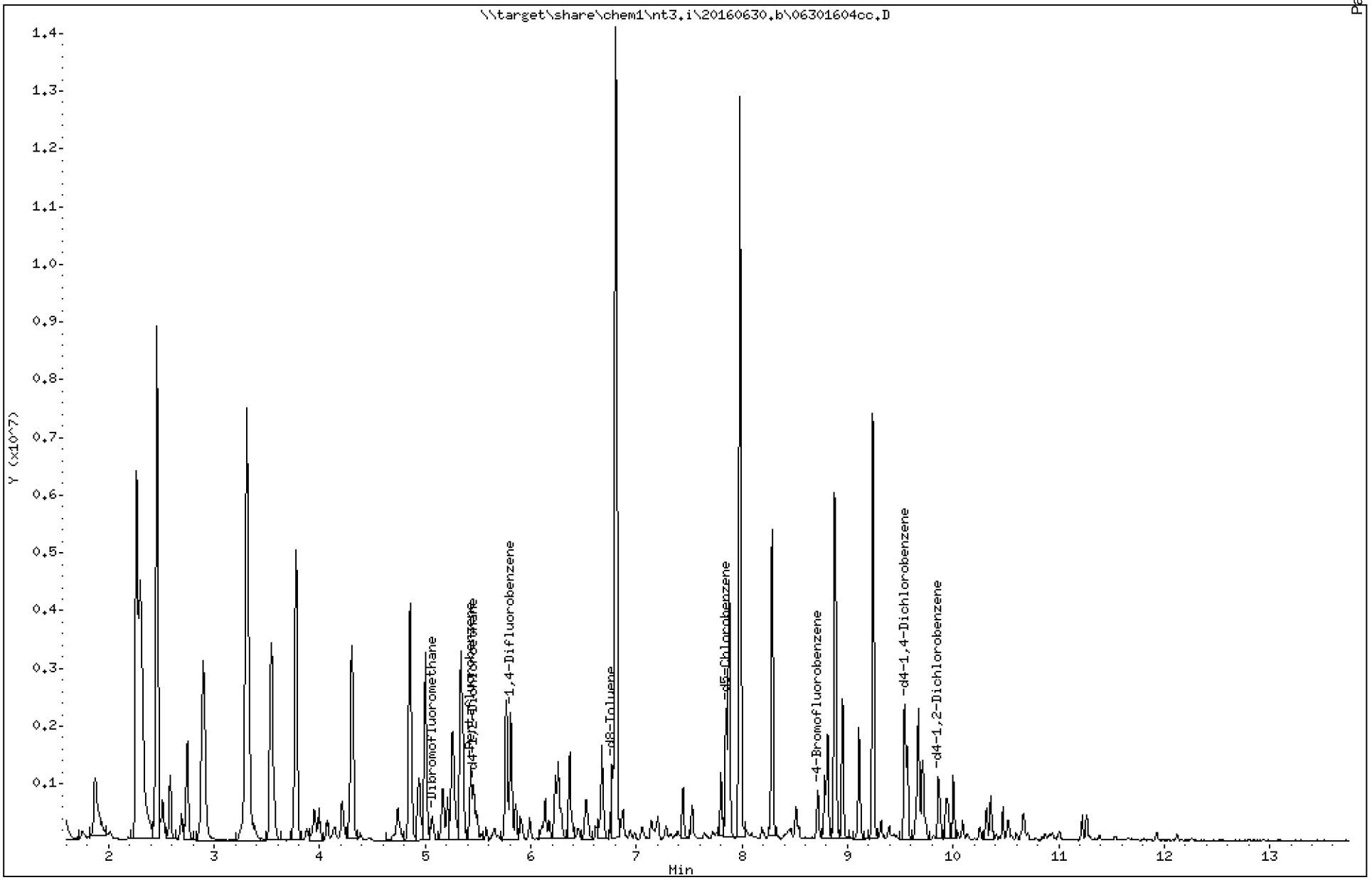
Instrument: nt3.i

Sample Info: GICV/LCS,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160630.b\06301604cc.D
Lab Smp Id: SEF0147-ICV1 Client Smp ID: GICVLCS
Inj Date : 30-JUN-2016 08:15
Operator : LH Inst ID: nt3.i
Smp Info : GICV/LCS,10,10,0,
Misc Info : 16-
Comment   :
Method   : \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Meth Date : 01-Jul-2016 13:57 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 10:35 Cal File: 06151609.D
Als bottle: 11 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.067	5.067	(0.933)	147914	4.63197	4.632
	31 Benzene	78	5.354	5.354	(0.921)	1116702	7.85715	7.857
*	32 Pentafluorobenzene	168	5.428	5.428	(1.000)	665324	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.460	5.460	(1.006)	186609	5.06515	5.065
*	37 1,4-Difluorobenzene	114	5.811	5.811	(1.000)	1070859	10.0000	
$	43 d8-Toluene	98	6.767	6.767	(1.165)	609237	4.51858	4.519
	44 Toluene	92	6.804	6.804	(1.171)	5114779	54.4257	54.426
*	53 d5-Chlorobenzene	117	7.851	7.851	(1.000)	977136	10.0000	
	55 Ethyl Benzene	106	7.878	7.878	(1.003)	843771	14.2173	14.217
	57 m,p-xylene	106	7.979	7.979	(1.016)	3197644	45.9217	45.922
	58 o-Xylene	106	8.287	8.287	(1.055)	1255539	17.9443	17.944
$	62 4-Bromofluorobenzene	174	8.717	8.717	(1.110)	192002	4.23055	4.231
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	542760	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.860	9.860	(1.033)	247866	4.77090	4.771

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 06301604cc.D
Lab Smp Id: SEF0147-ICV1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

Calibration Date: 30-JUN-2016
Calibration Time: 08:15
Client Smp ID: GICVLCS
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	584309	292155	1168618	665324	13.87
37 1,4-Difluorobenze	921067	460534	1842134	1070859	16.26
53 d5-Chlorobenzene	840715	420358	1681430	977136	16.23
76 d4-1,4-Dichlorobe	460394	230197	920788	542760	17.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.00
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.00
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.00
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20150930a
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: SEF0147-ICV1 Client Smp ID: GICVLCS
Level: LOW Operator: LH
Data Type: MS DATA SampleType: LCS
SpikeList File: btexspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
31 Benzene	7.327	7.857	107.24	80-120
44 Toluene	53.083	54.426	102.53	80-120
55 Ethyl Benzene	13.623	14.217	104.36	78-122
57 m,p-xylene	43.355	45.922	105.92	78-126
58 o-Xylene	16.867	17.944	106.39	76-127

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.632	92.64	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.065	101.30	80-128
$ 43 d8-Toluene	5.000	4.519	90.37	80-120
$ 62 4-Bromofluorobenze	5.000	4.231	84.61	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.771	95.42	80-120

REVIEW SUMMARY FOR FILE - 06301604cc.D

Lab ID: SEF0147-ICV1
nt3.i, 20160630.b\AK8260061516.m,   30-JUN-2016 08:15

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,AK8260061516.m,Sublist: betx.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

INITIAL CALIBRATION CHECK

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Instrument ID:	NT2	Calibration:	ZF00027
Lab File ID:	06301603CCG.D	Calibration Date:	06/15/16 11:34
Sequence:	SEF0152	Injection Date:	06/30/16
Lab Sample ID:	SEF0152-ICV1	Injection Time:	07:42

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Gasoline Range Organics (Tol-Nap)	A	1000.0	986	49203.3300000	48528.8600000		-1.4	20
Toluene-d8	A	5.0000	4.91		1.1640630			
4-Bromofluorobenzene	A	5.0000	5.10		0.3749612			

* Values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301603CC.D

Date : 30-JUN-2016 07:42

Client ID: GICVLCS

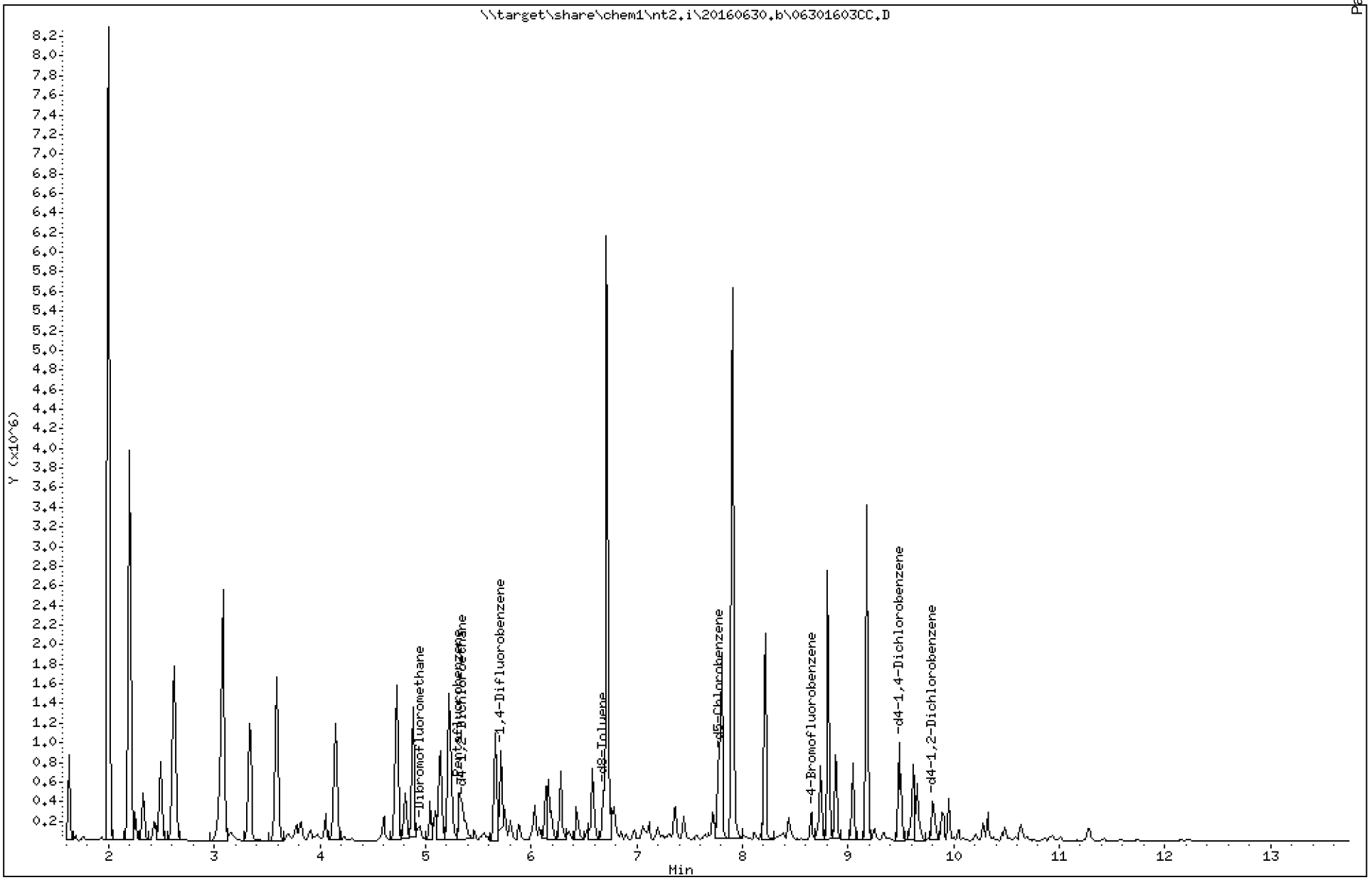
Instrument: nt2.i

Sample Info: GICV/LCS,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301603CC.D
Lab Smp Id: SEF0152-ICV1 Client Smp ID: GICVLCS
Inj Date : 30-JUN-2016 07:42
Operator : LH Inst ID: nt2.i
Smp Info : GICV/LCS,10,10,0,
Misc Info : 16-
Comment   :
Method   : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.950	4.950	(0.929)	63236	4.72967	4.730
	31 Benzene	78	5.234	5.246	(0.917)	499151	6.79262	6.793
*	32 Pentafluorobenzene	168	5.329	5.328	(1.000)	294564	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.353	5.352	(1.004)	77970	5.35372	5.354
*	37 1,4-Difluorobenzene	114	5.708	5.707	(1.000)	489843	10.0000	
$	43 d8-Toluene	98	6.678	6.689	(1.170)	285104	4.91382	4.914
	44 Toluene	92	6.713	6.725	(1.176)	2447105	52.6696	52.670
*	53 d5-Chlorobenzene	117	7.778	7.778	(1.000)	425084	10.0000	
	55 Ethyl Benzene	106	7.802	7.801	(1.003)	356767	13.5459	13.546
	57 m,p-xylene	106	7.908	7.908	(1.017)	1468140	46.1029	46.103
	58 o-Xylene	106	8.216	8.216	(1.056)	533270	18.0594	18.059
$	62 4-Bromofluorobenzene	174	8.654	8.653	(1.113)	79695	5.09554	5.096
*	76 d4-1,4-Dichlorobenzene	152	9.482	9.482	(1.000)	221586	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.813	9.813	(1.035)	102590	4.98531	4.985

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301603CC.D
Lab Smp Id: SEF0152-ICV1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Client Smp ID: GICVLCS
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	294564	18.83
37 1,4-Difluorobenze	400954	200477	801908	489843	22.17
53 d5-Chlorobenzene	354752	177376	709504	425084	19.83
76 d4-1,4-Dichlorobe	191489	95745	382978	221586	15.72

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.01
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: SEF0152-ICV1 Client Smp ID: GICVLCS
Level: LOW Operator: LH
Data Type: MS DATA SampleType: LCS
SpikeList File: btexspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
31 Benzene	7.327	6.793	92.71	80-120
44 Toluene	53.083	52.670	99.22	80-120
55 Ethyl Benzene	13.623	13.546	99.43	78-122
57 m,p-xylene	43.355	46.103	106.34	78-126
58 o-Xylene	16.867	18.059	107.07	76-127

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.730	94.59	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.354	107.07	80-128
$ 43 d8-Toluene	5.000	4.914	98.28	80-120
$ 62 4-Bromofluorobenze	5.000	5.096	101.91	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.985	99.71	80-120

REVIEW SUMMARY FOR FILE - 06301603CC.D

Lab ID: SEF0152-ICV1
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 07:42

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301603CC.D

Date : 30-JUN-2016 07:42

Client ID:

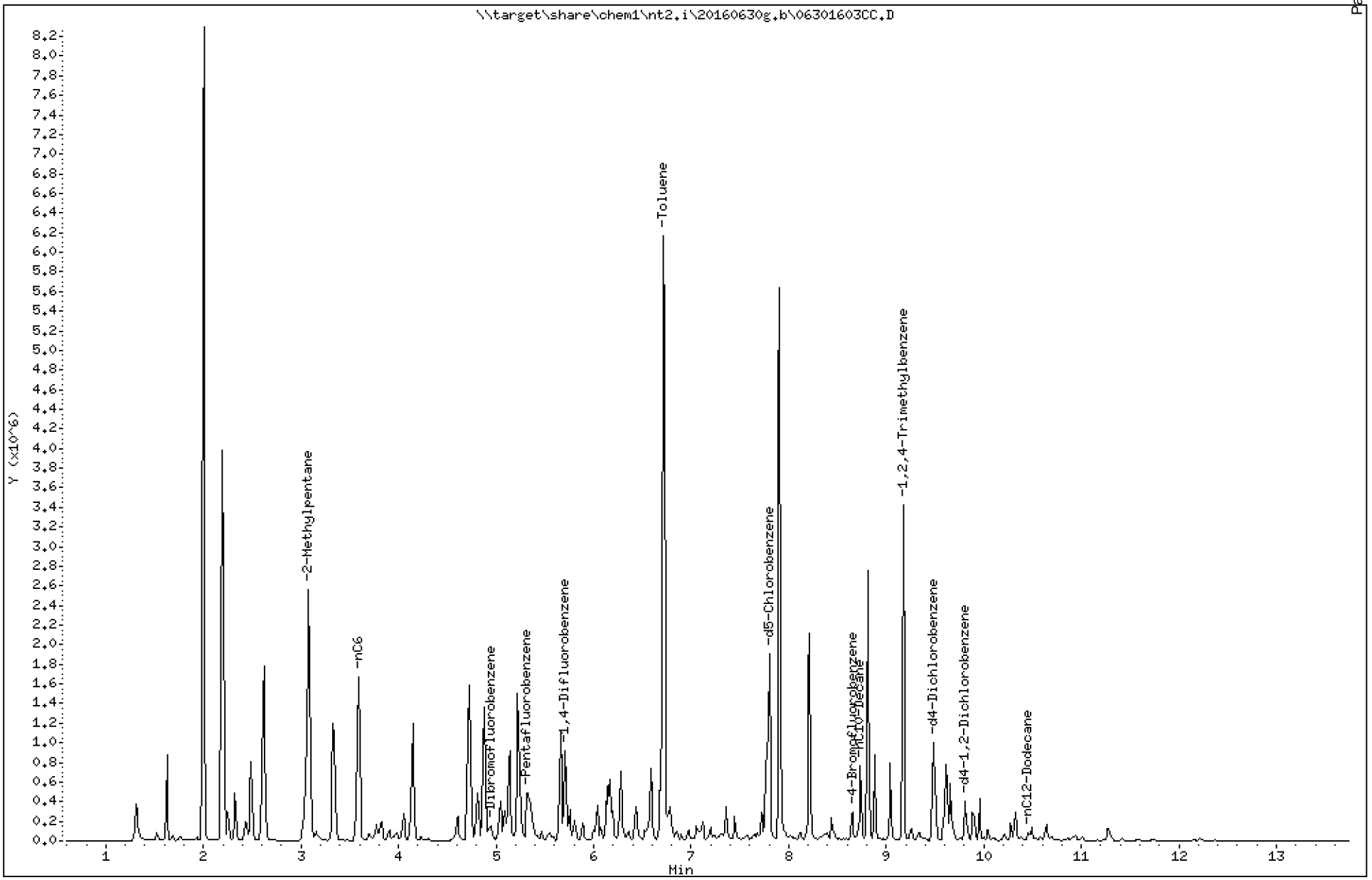
Instrument: nt2.i

Sample Info: GICV/LCS,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301603CC.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 07:42

ARI ID: SEF0152-ICV1
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	47326272	0.986 M
8015C 2MP-TMB	(2.98 to 9.26)	83224207	81619750	0.981
AK101 nC6-nC10	(3.49 to 8.61)	58706304	59548326	1.014
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	48528861	0.986 M
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	78612233	1.073 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

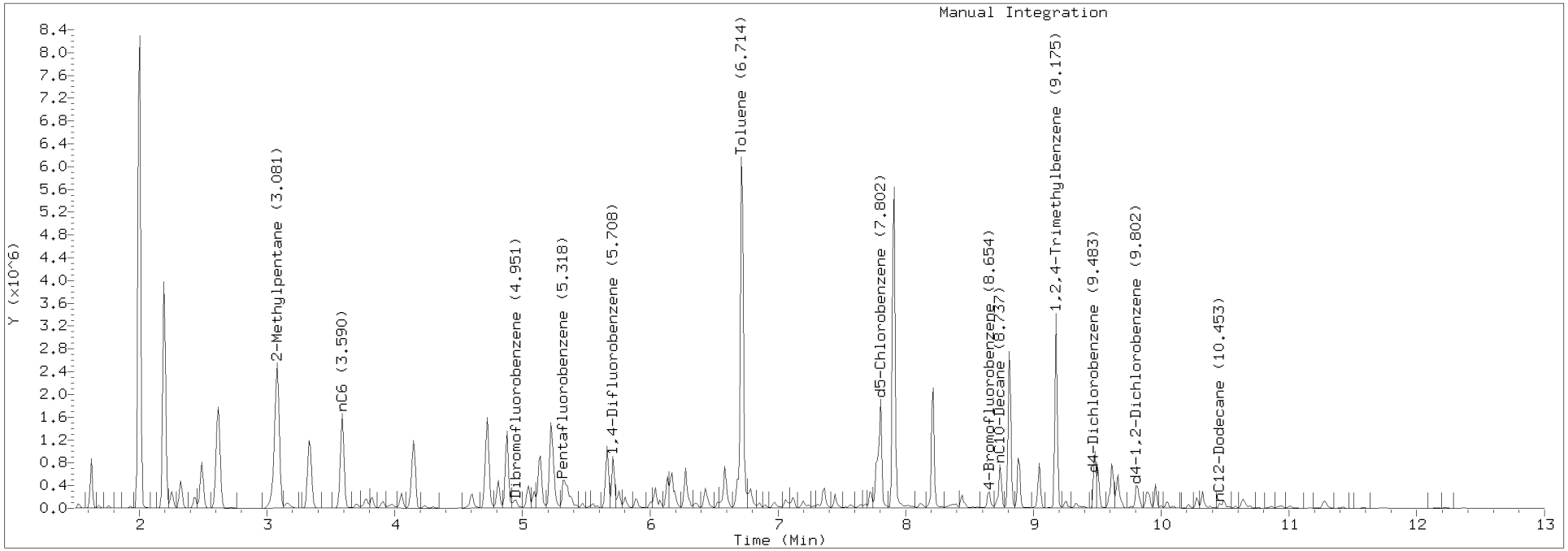
NW Gas Range Subtracted Peaks

8.654	514832	4-Bromofluorobenzene
9.483	1542981	d4-Dichlorobenzene
7.802	4068960	d5-Chlorobenzene
9.802	870364	d4-1,2-Dichlorobenzene

TPHG Manual Integrations Report

Datafile: NT2, 20160630g.b/06301603CC.D Injection: 30-JUN-2016 07:42

Lab ID:SEF0152-ICV1



CONTINUING CALIBRATION CHECK
NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Instrument ID:	NT3	Calibration:	ZF00014
Lab File ID:	06301612G.D	Calibration Date:	06/15/16 12:06
Sequence:	SEF0147	Injection Date:	06/30/16
Lab Sample ID:	SEF0147-CCV1	Injection Time:	11:43

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Gasoline Range Organics (Tol-Nap)	A	1000.0	1100	103441.8000000	113432.7000000		9.7	20
Toluene-d8	A	5.0000	4.75		1.1950160			
4-Bromofluorobenzene	A	5.0000	4.42		0.4105738			

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem1\nt3.i\20160630.b\06301612.D

Date : 30-JUN-2016 11:43

Client ID: GCCV

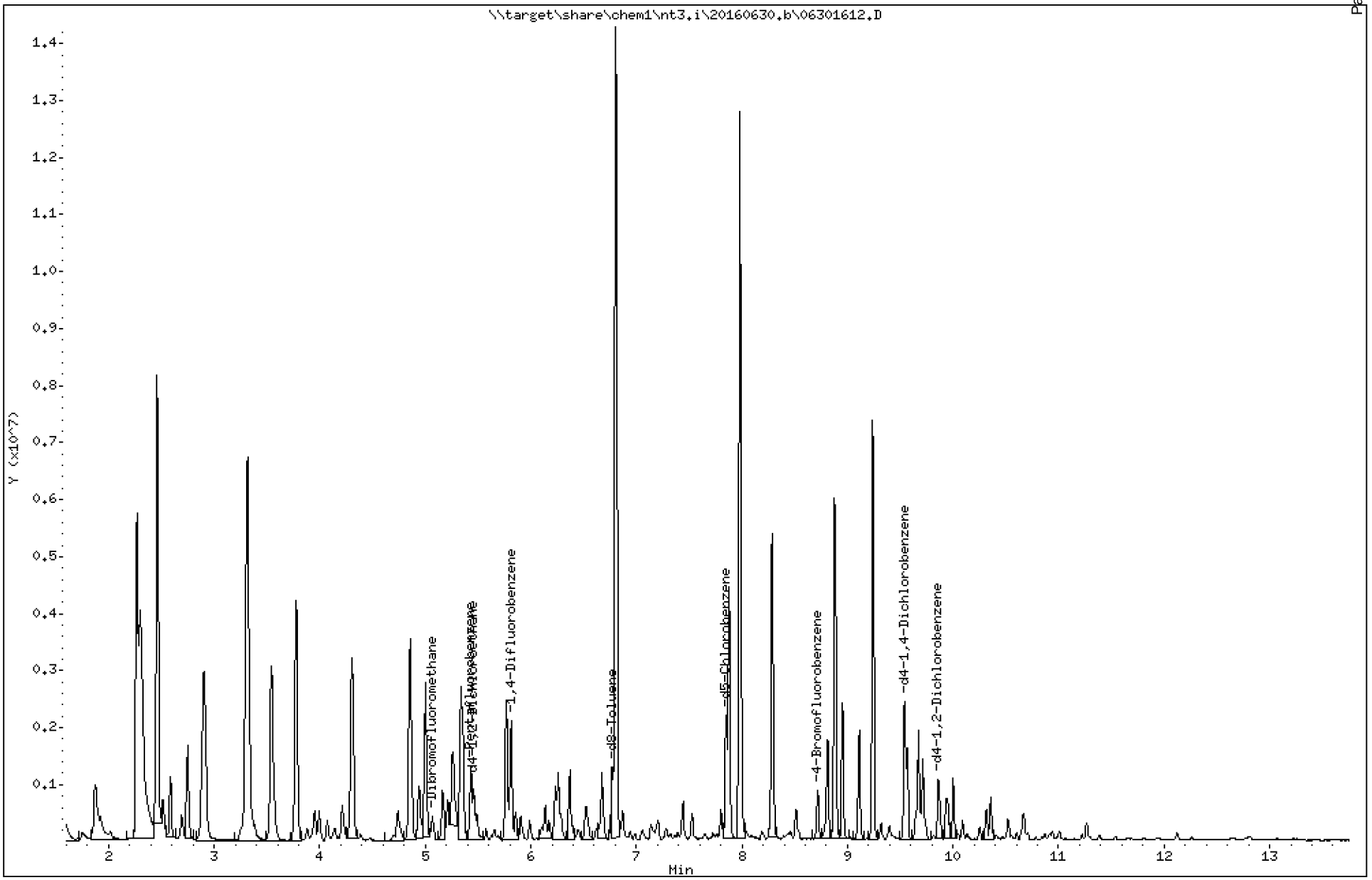
Instrument: nt3.i

Sample Info: GCCV1,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160630.b\06301612.D
Lab Smp Id: SEF0147-CCV1 Client Smp ID: GCCV
Inj Date : 30-JUN-2016 11:43
Operator : LH Inst ID: nt3.i
Smp Info : GCCV1,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Meth Date : 01-Jul-2016 13:57 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 10:35 Cal File: 06151609.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.067	5.067	(0.933)	152694	4.83536	4.835
	31 Benzene	78	5.354	5.354	(0.921)	1112689	7.94039	7.940
*	32 Pentafluorobenzene	168	5.429	5.428	(1.000)	657934	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.461	5.460	(1.006)	181152	4.97226	4.972
*	37 1,4-Difluorobenzene	114	5.811	5.811	(1.000)	1055825	10.0000	
$	43 d8-Toluene	98	6.773	6.767	(1.165)	630864	4.74560	4.746
	44 Toluene	92	6.805	6.804	(1.171)	5129674	55.3614	55.361
*	53 d5-Chlorobenzene	117	7.852	7.851	(1.000)	984997	10.0000	
	55 Ethyl Benzene	106	7.878	7.878	(1.003)	837801	14.0040	14.004
	57 m,p-xylene	106	7.979	7.979	(1.016)	3187778	45.4146	45.415
	58 o-Xylene	106	8.287	8.287	(1.055)	1252795	17.7622	17.762
$	62 4-Bromofluorobenzene	174	8.718	8.717	(1.110)	202207	4.41985	4.420
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	544567	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.865	9.860	(1.034)	250091	4.79775	4.798

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 06301612.D
Lab Smp Id: SEF0147-CCV1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

Calibration Date: 30-JUN-2016
Calibration Time: 08:15
Client Smp ID: GCCV
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	584309	292155	1168618	657934	12.60
37 1,4-Difluorobenze	921067	460534	1842134	1055825	14.63
53 d5-Chlorobenzene	840715	420358	1681430	984997	17.16
76 d4-1,4-Dichlorobe	460394	230197	920788	544567	18.28

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.01
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.01
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.01
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 13:58

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20150930a
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: SEF0147-CCV1 Client Smp ID: GCCV
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.835	96.71	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.972	99.45	80-128
$ 43 d8-Toluene	5.000	4.746	94.91	80-120
$ 62 4-Bromofluorobenze	5.000	4.420	88.40	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.798	95.96	80-120

REVIEW SUMMARY FOR FILE - 06301612.D

Lab ID: SEF0147-CCV1
nt3.i, 20160630.b\AK8260061516.m,   30-JUN-2016 11:43

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,AK8260061516.m,Sublist: betx.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

CONTINUING CALIBRATION CHECK
NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Instrument ID:	NT3	Calibration:	ZF00014
Lab File ID:	06301628G.D	Calibration Date:	06/15/16 12:06
Sequence:	SEF0147	Injection Date:	06/30/16
Lab Sample ID:	SEF0147-CCV2	Injection Time:	18:39

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Gasoline Range Organics (Tol-Nap)	A	1000.0	1000	103441.8000000	103719.1000000		0.3	20
Toluene-d8	A	5.0000	4.69		1.1821270			
4-Bromofluorobenzene	A	5.0000	4.29		0.3989408			

* Values outside of QC limits

Data File: \\target\share\chem1\nt3.i\20160630.b\06301628.D

Date : 30-JUN-2016 18:39

Client ID: GCCV

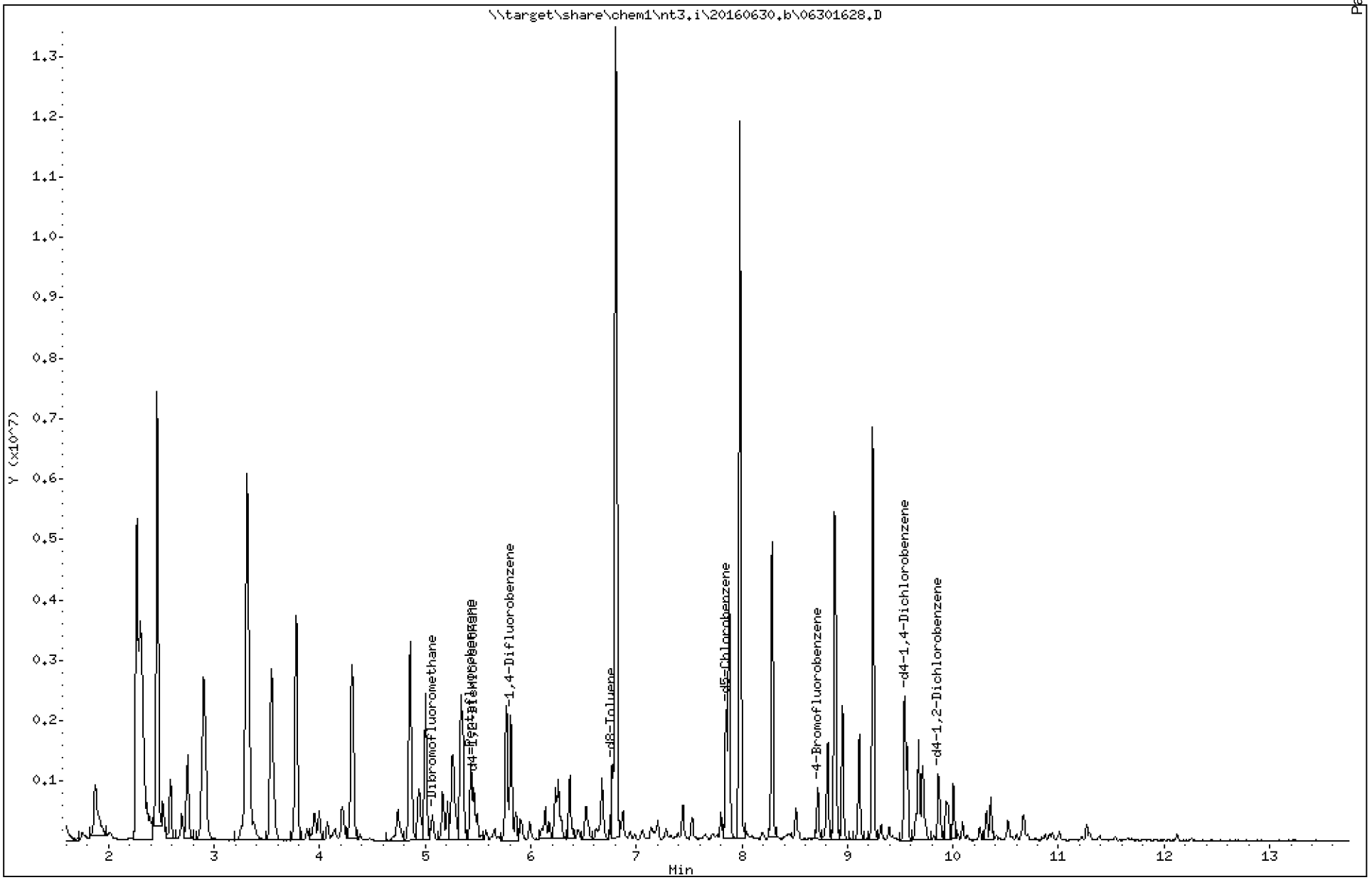
Instrument: nt3.i

Sample Info: GCCV2,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt3.i\20160630.b\06301628.D
Lab Smp Id: SEF0147-CCV2 Client Smp ID: GCCV
Inj Date : 30-JUN-2016 18:39
Operator : LH Inst ID: nt3.i
Smp Info : GCCV2,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Meth Date : 01-Jul-2016 13:57 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 10:35 Cal File: 06151609.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	5.067	5.067	(0.933)	147043	4.72714	4.727
	31 Benzene	78	5.354	5.354	(0.921)	1054551	7.59328	7.593
*	32 Pentafluorobenzene	168	5.428	5.428	(1.000)	648090	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.460	5.460	(1.006)	179432	4.99985	5.000
*	37 1,4-Difluorobenzene	114	5.811	5.811	(1.000)	1046402	10.0000	
$	43 d8-Toluene	98	6.767	6.767	(1.165)	618490	4.69442	4.694
	44 Toluene	92	6.805	6.804	(1.171)	4844711	52.7568	52.757
*	53 d5-Chlorobenzene	117	7.851	7.851	(1.000)	977744	10.0000	
	55 Ethyl Benzene	106	7.878	7.878	(1.003)	756935	12.7462	12.746
	57 m,p-xylene	106	7.979	7.979	(1.016)	2994999	42.9847	42.985
	58 o-Xylene	106	8.287	8.287	(1.055)	1143478	16.3326	16.333
$	62 4-Bromofluorobenzene	174	8.717	8.717	(1.110)	195031	4.29462	4.295
*	76 d4-1,4-Dichlorobenzene	152	9.541	9.541	(1.000)	540142	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.860	9.860	(1.033)	241436	4.66966	4.670

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt3.i
Lab File ID: 06301628.D
Lab Smp Id: SEF0147-CCV2
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

Calibration Date: 30-JUN-2016
Calibration Time: 08:15
Client Smp ID: GCCV
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	584309	292155	1168618	648090	10.92
37 1,4-Difluorobenze	921067	460534	1842134	1046402	13.61
53 d5-Chlorobenzene	840715	420358	1681430	977744	16.30
76 d4-1,4-Dichlorobe	460394	230197	920788	540142	17.32

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.43	4.93	5.93	5.43	0.00
37 1,4-Difluorobenze	5.81	5.31	6.31	5.81	0.00
53 d5-Chlorobenzene	7.85	7.35	8.35	7.85	0.00
76 d4-1,4-Dichlorobe	9.54	9.04	10.04	9.54	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 01-Jul-2016 13:59

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20150930a
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: SEF0147-CCV2 Client Smp ID: GCCV
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt3.i\20160630.b\AK8260061516.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.727	94.54	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.000	100.00	80-128
$ 43 d8-Toluene	5.000	4.694	93.89	80-120
$ 62 4-Bromofluorobenze	5.000	4.295	85.89	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.670	93.39	80-120

REVIEW SUMMARY FOR FILE - 06301628.D

Lab ID: SEF0147-CCV2
nt3.i, 20160630.b\AK8260061516.m,   30-JUN-2016 18:39

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt3.i,AK8260061516.m,Sublist: betx.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt3.i\20160630g.b\06301628.D

Date : 30-JUN-2016 18:39

Client ID:

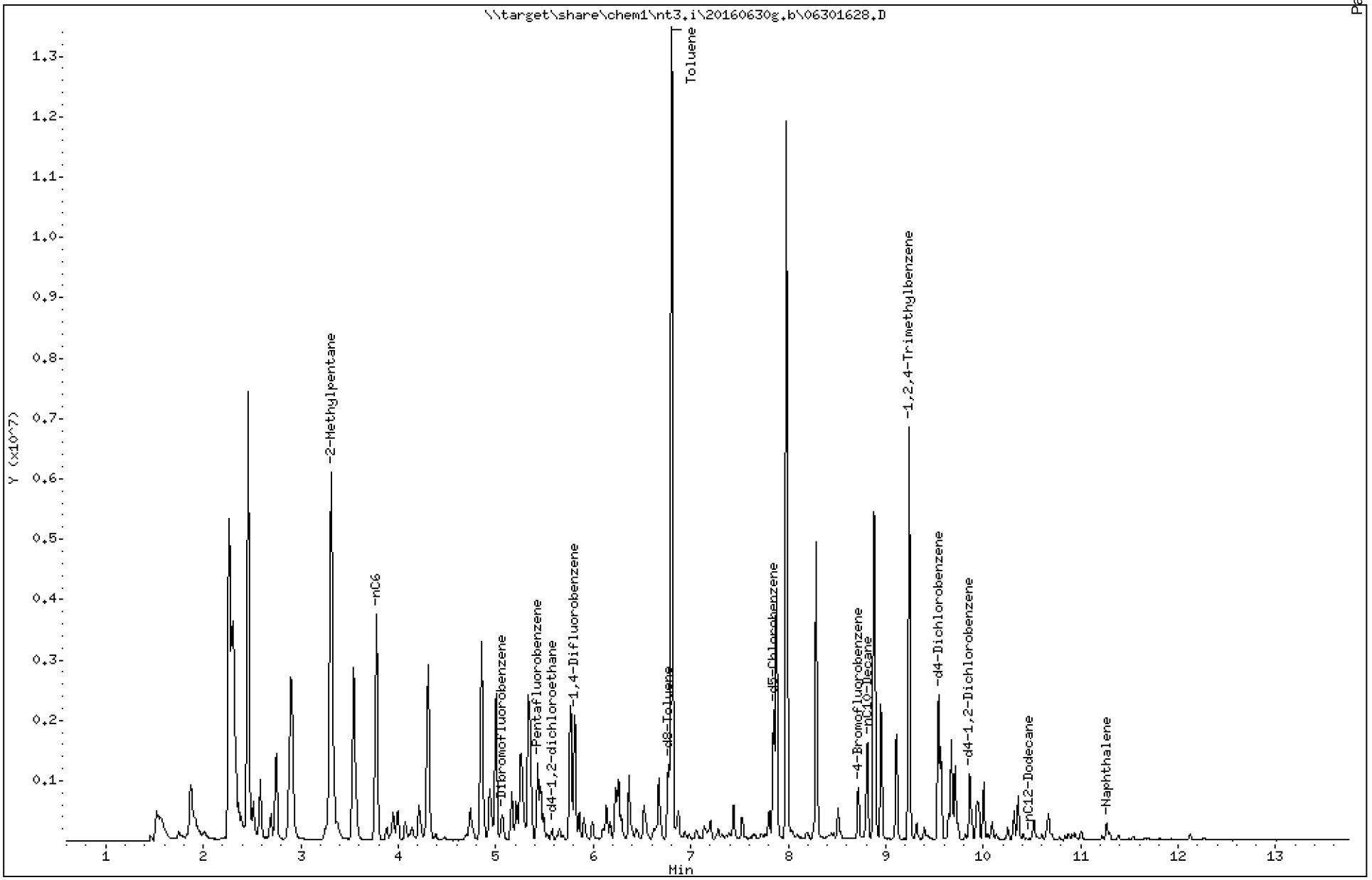
Instrument: nt3.i

Sample Info: GCCV2,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301628.D
Method: \20160630g.b\NWTPHG.m
Instrument: nt3.i
Gas Ical Date: 25-MAY-2016
Injection Date: 30-JUN-2016 18:39

ARI ID: GCCV2
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.71 to 10.57)	99998247	100731027	1.007
8015C 2MP-TMB	(3.21 to 9.34)	176207359	171558550	0.974
AK101 nC6-nC10	(3.68 to 8.68)	125823356	123289003	0.980
NWTPHG Tol-Nap	(6.71 to 11.36)	103441757	103719104	1.003
mod8015 nC6-nC12	(3.68 to 10.57)	111111111	164693015	1.482

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.773	1825098	d8-Toluene
8.718	1277821	4-Bromofluorobenzene
9.541	3571448	d4-Dichlorobenzene
7.852	3207712	d5-Chlorobenzene
9.860	1928071	d4-1,2-Dichlorobenzene

CONTINUING CALIBRATION CHECK
NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Instrument ID:	NT2	Calibration:	ZF00027
Lab File ID:	06301626G.D	Calibration Date:	06/15/16 11:34
Sequence:	SEF0152	Injection Date:	06/30/16
Lab Sample ID:	SEF0152-CCV1	Injection Time:	15:54

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Gasoline Range Organics (Tol-Nap)	A	1000.0	1070	49203.3300000	52605.3700000		6.9	20
Toluene-d8	A	5.0000	5.23		1.2390720			
4-Bromofluorobenzene	A	5.0000	4.86		0.3573946			

* Values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160630.b\06301626.D

Date : 30-JUN-2016 15:54

Client ID:

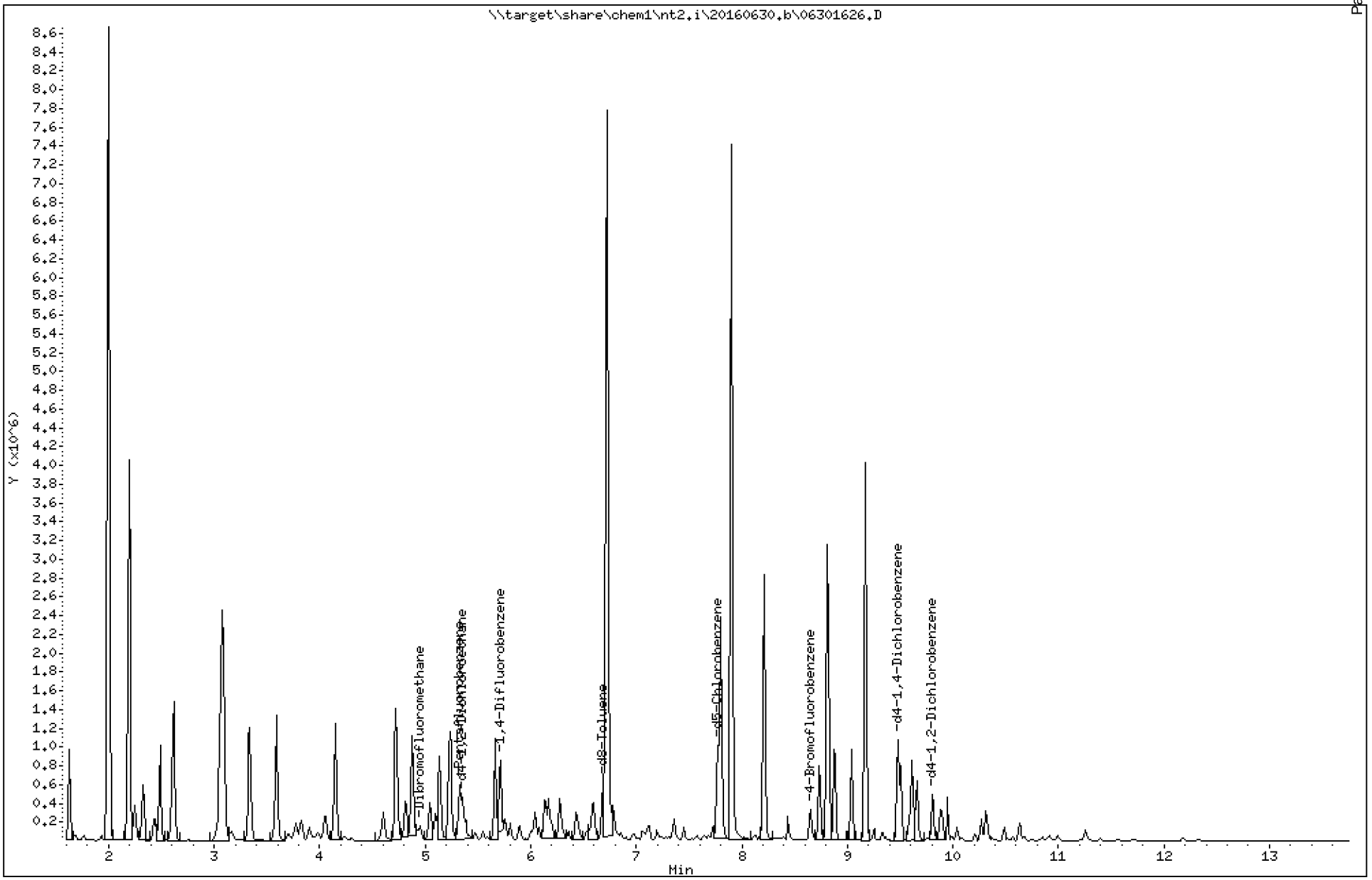
Instrument: nt2.i

Sample Info: GCCV,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160630.b\06301626.D
Lab Smp Id: SEF0152-CCV1
Inj Date : 30-JUN-2016 15:54
Operator : LH Inst ID: nt2.i
Smp Info : GCCV,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Meth Date : 30-Jun-2016 15:52 paul Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 12 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA11

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.947	4.950	(0.929)	64428	4.50315	4.503
	31 Benzene	78	5.243	5.246	(0.917)	624839	8.11404	8.114
*	32 Pentafluorobenzene	168	5.326	5.328	(1.000)	315213	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.352	(1.004)	92165	5.91384	5.914
*	37 1,4-Difluorobenzene	114	5.717	5.707	(1.000)	513326	10.0000	
$	43 d8-Toluene	98	6.687	6.689	(1.170)	318024	5.23046	5.230
	44 Toluene	92	6.722	6.725	(1.176)	2847418	58.4820	58.482
*	53 d5-Chlorobenzene	117	7.775	7.778	(1.000)	478709	10.0000	
	55 Ethyl Benzene	106	7.799	7.801	(1.003)	430612	14.5182	14.518
	57 m,p-xylene	106	7.906	7.908	(1.017)	1757089	48.9957	48.996
	58 o-Xylene	106	8.213	8.216	(1.056)	653248	19.6444	19.644
$	62 4-Bromofluorobenzene	174	8.651	8.653	(1.113)	85544	4.85681	4.857
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.482	(1.000)	246811	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.799	9.813	(1.034)	117477	5.12528	5.125

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 06301626.D
Lab Smp Id: SEF0152-CCV1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 29-JUN-2016
Calibration Time: 09:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	315213	27.16
37 1,4-Difluorobenze	400954	200477	801908	513326	28.03
53 d5-Chlorobenzene	354752	177376	709504	478709	34.94
76 d4-1,4-Dichlorobe	191489	95745	382978	246811	28.89

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.04
37 1,4-Difluorobenze	5.71	5.21	6.21	5.72	0.17
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.03
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: SEF0152-CCV1
Level: LOW Operator: LH
Data Type: MS DATA SampleType: LCS
SpikeList File: btexspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160630.b\8260061516LOW.m
Misc Info: 16-

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
31 Benzene	7.327	8.114	110.74	80-120
44 Toluene	53.083	58.482	110.17	80-120
55 Ethyl Benzene	13.623	14.518	106.57	78-122
57 m,p-xylene	43.355	48.996	113.01	78-126
58 o-Xylene	16.867	19.644	116.47	76-127

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.503	90.06	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.914	118.28	80-128
$ 43 d8-Toluene	5.000	5.230	104.61	80-120
$ 62 4-Bromofluorobenze	5.000	4.857	97.14	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.125	102.51	80-120

REVIEW SUMMARY FOR FILE - 06301626.D

Lab ID: SEF0152-CCV1
nt2.i, 20160630.b\8260061516LOW.m,   30-JUN-2016 15:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160630g.b\06301626.D

Date : 30-JUN-2016 15:54

Client ID:

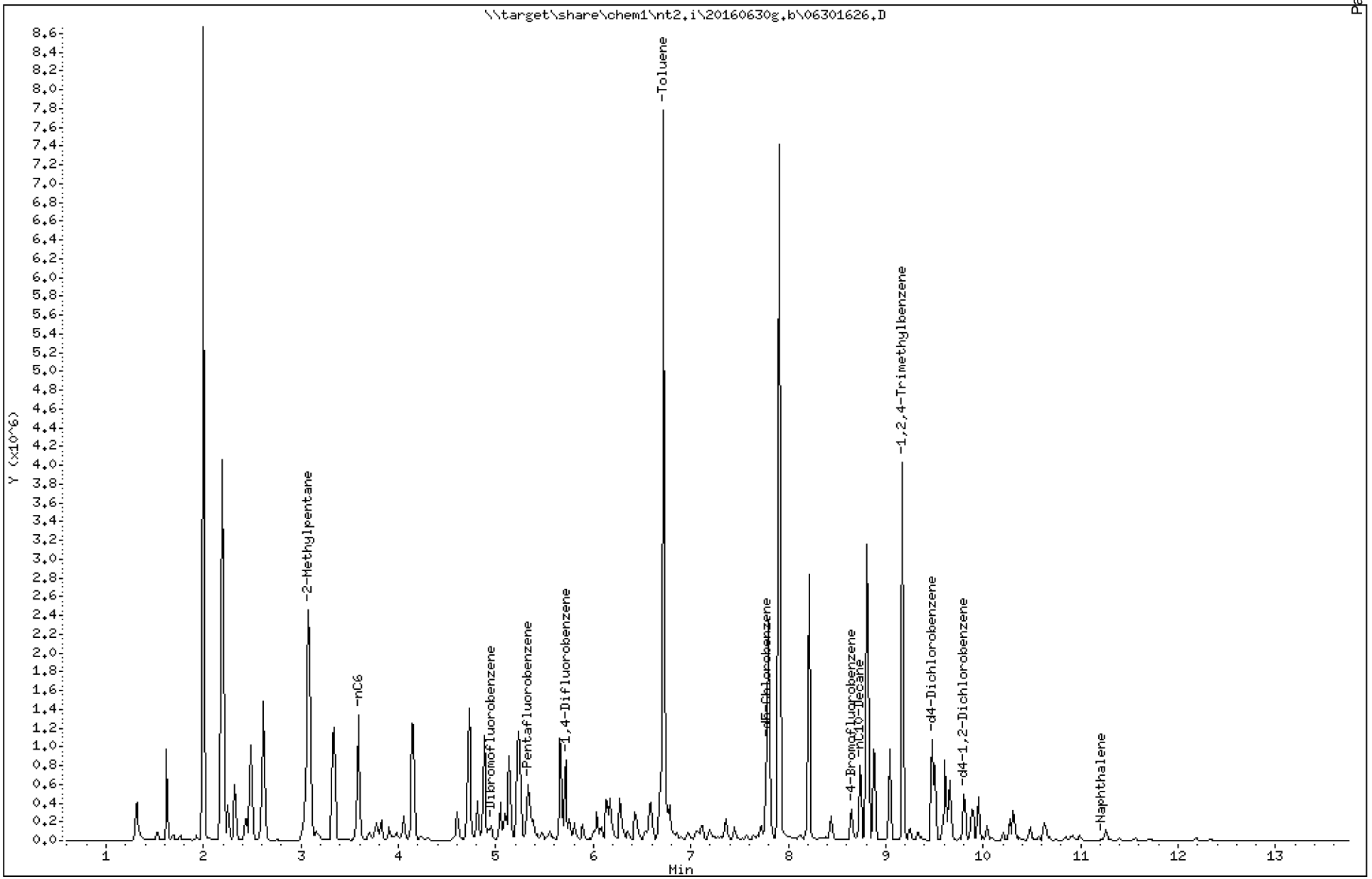
Instrument: nt2.i

Sample Info: GCCV,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160630g.b/06301626.D
Method: \20160630g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 30-JUN-2016 15:54

ARI ID: SEF0152-CCV1
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.63 to 10.52)	48008849	51475797	1.072
8015C 2MP-TMB	(2.98 to 9.26)	83224207	82955239	0.997
AK101 nC6-nC10	(3.49 to 8.61)	58706304	58878854	1.003
NWTPHG Tol-Nap	(6.63 to 11.31)	49203331	52605373	1.069
mod8015 nC6-nC12	(3.49 to 10.52)	73249380	79251296	1.082

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

8.652	526554	4-Bromofluorobenzene
9.480	2561715	d4-Dichlorobenzene
7.776	4650346	d5-Chlorobenzene
9.799	938245	d4-1,2-Dichlorobenzene

Analytical Resources, Incorporated

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEE0142	Instrument:	NT3
		Calibration:	ZE00032

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Secondary Cal Check	SEE0142-SCV1	05251613.D	Water	05/25/16 12:48
Cal Standard	SEE0142-CALE	20160525g.b-002	Water	05/25/16 13:15
Cal Standard	SEE0142-CALE	05251614.D	Water	05/25/16 13:15
Cal Standard	SEE0142-CALD	20160525g.b-003	Water	05/25/16 13:41
Cal Standard	SEE0142-CALD	05251615.D	Water	05/25/16 13:41
Cal Standard	SEE0142-CALC	20160525g.b-004	Water	05/25/16 14:07
Cal Standard	SEE0142-CALC	05251616.D	Water	05/25/16 14:07
Cal Standard	SEE0142-CALB	20160525g.b-005	Water	05/25/16 14:33
Cal Standard	SEE0142-CALB	05251617.D	Water	05/25/16 14:33
Cal Standard	SEE0142-CALA	20160525g.b-006	Water	05/25/16 14:59
Cal Standard	SEE0142-CALA	05251618.D	Water	05/25/16 14:59
Cal Standard	SEE0142-CAL9	20160525g.b-007	Water	05/25/16 15:25
Cal Standard	SEE0142-CAL9	05251619.D	Water	05/25/16 15:25
Secondary Cal Check	SEE0142-SCV2	20160525g.b-008	Water	05/25/16 15:51
Secondary Cal Check	SEE0142-SCV2	05251620.D	Water	05/25/16 15:51

Analytical Resources, Incorporated

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEF0152	Instrument:	NT2
		Calibration:	ZF00027

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SEF0152-ICV1	06301603CCG.D	Solid	06/30/16 07:42
Initial Cal Check	SEF0152-ICV1	06301603CC.D	Solid	06/30/16 07:42
LCS	BEF0239-BS1	06301603.D	Solid	06/30/16 07:42
LCS	BEF0239-BS1	06301603G.D	Solid	06/30/16 07:42
LCS	BEF0240-BS1	06301603W.D	Water	06/30/16 07:42
LCS	BEF0240-BS1	06301603WG.D	Water	06/30/16 07:42
LCS Dup	BEF0239-BSD1	06301604.D	Solid	06/30/16 08:02
LCS Dup	BEF0239-BSD1	06301604G.D	Solid	06/30/16 08:02
LCS Dup	BEF0240-BSD1	06301604W.D	Water	06/30/16 08:02
LCS Dup	BEF0240-BSD1	06301604WG.D	Water	06/30/16 08:02
Blank	BEF0240-BLK1	06301605W.D	Water	06/30/16 08:22
Blank	BEF0240-BLK1	06301605WG.D	Water	06/30/16 08:22
Blank	BEF0239-BLK1	06301605G.D	Solid	06/30/16 08:22
Blank	BEF0239-BLK1	06301605.D	Solid	06/30/16 08:22
CHRL-N-01-160629	16F0096-11	06301606.D	Solid	06/30/16 09:02
CHRL-N-01-160629	16F0096-11	06301606G.D	Solid	06/30/16 09:02
CHRL-N-02-160629	16F0096-12	06301607.D	Solid	06/30/16 09:22
CHRL-N-02-160629	16F0096-12	06301607G.D	Solid	06/30/16 09:22
CHRL-N-03-160629	16F0096-13	06301608.D	Solid	06/30/16 09:43
CHRL-N-03-160629	16F0096-13	06301608G.D	Solid	06/30/16 09:43
CHRL-N-04-160629	16F0096-14	06301609.D	Solid	06/30/16 10:03
CHRL-N-04-160629	16F0096-14	06301609G.D	Solid	06/30/16 10:03
CHRL-N-05-160629	16F0096-15	06301610.D	Solid	06/30/16 10:24
CHRL-N-05-160629	16F0096-15	06301610G.D	Solid	06/30/16 10:24
CHRL-Q-01-160629	16F0096-16	06301611.D	Solid	06/30/16 10:44
CHRL-Q-01-160629	16F0096-16	06301611G.D	Solid	06/30/16 10:44
CHRL-Q-02-160629	16F0096-17	06301612.D	Solid	06/30/16 11:05
CHRL-Q-02-160629	16F0096-17	06301612G.D	Solid	06/30/16 11:05
CHRL-Q-03-160629	16F0096-18	06301613G.D	Solid	06/30/16 11:25
CHRL-Q-03-160629	16F0096-18	06301613.D	Solid	06/30/16 11:25
CHRL-Q-04-160629	16F0096-19	06301614.D	Solid	06/30/16 11:46

Analytical Resources, Incorporated

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEF0152	Instrument:	NT2
		Calibration:	ZF00027

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CHRL-Q-04-160629	16F0096-19	06301614G.D	Solid	06/30/16 11:46
CHRL-Q-05-160629	16F0096-20	06301615.D	Solid	06/30/16 12:07
CHRL-Q-05-160629	16F0096-20	06301615G.D	Solid	06/30/16 12:07
CHRL-P-01-160629	16F0096-21	06301616.D	Solid	06/30/16 12:27
CHRL-P-01-160629	16F0096-21	06301616G.D	Solid	06/30/16 12:27
CHRL-P-02-160629	16F0096-22	06301617.D	Solid	06/30/16 12:48
CHRL-P-02-160629	16F0096-22	06301617G.D	Solid	06/30/16 12:48
CHRL-P-52-160629	16F0096-23	06301618.D	Solid	06/30/16 13:09
CHRL-P-52-160629	16F0096-23	06301618G.D	Solid	06/30/16 13:09
CHRL-P-03-160629	16F0096-24	06301619G.D	Solid	06/30/16 13:29
CHRL-P-03-160629	16F0096-24	06301619.D	Solid	06/30/16 13:29
CHRL-P-04-160629	16F0096-25	06301620.D	Solid	06/30/16 13:50
CHRL-P-04-160629	16F0096-25	06301620G.D	Solid	06/30/16 13:50
CHRL-P-05-160629	16F0096-26	06301621.D	Solid	06/30/16 14:10
CHRL-P-05-160629	16F0096-26	06301621G.D	Solid	06/30/16 14:10
CHRL-R-02-160629	16F0096-27	06301622.D	Solid	06/30/16 14:31
CHRL-R-02-160629	16F0096-27	06301622G.D	Solid	06/30/16 14:31
CHRL-R-03-160629	16F0096-28	06301623.D	Solid	06/30/16 14:52
CHRL-R-03-160629	16F0096-28	06301623G.D	Solid	06/30/16 14:52
CHRL-R-04-160629	16F0096-29	06301624.D	Solid	06/30/16 15:12
CHRL-R-04-160629	16F0096-29	06301624G.D	Solid	06/30/16 15:12
CHRL-TB-160629	16F0096-30	06301625.D	Water	06/30/16 15:33
CHRL-TB-160629	16F0096-30	06301625G.D	Water	06/30/16 15:33
Calibration Check	SEF0152-CCV1	06301626G.D	Solid	06/30/16 15:54
Calibration Check	SEF0152-CCV1	06301626.D	Solid	06/30/16 15:54

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Printed: 6/30/2016 3:08:25PM

ANALYSIS SEQUENCE

SEF0152

Instrument: NT2
Calibration ID: ZF00027
MS Energy: 2247

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
SEF0152-TUN1	MS Tune	QC		1	E001314	E001147	
SEF0152-ICV1	Initial Cal Check	QC		2	E001854	E001147	
BEF0239-BS1	LCS	QC		3		E001147	
BEF0240-BS1	LCS	QC		4		E001147	
BEF0239-BSD1	LCS Dup	QC		5		E001147	
BEF0240-BSD1	LCS Dup	QC		6		E001147	
BEF0240-BLK1	Blank	QC		7		E001147	
BEF0239-BLK1	Blank	QC		8		E001147	
16F0096-11	CHRL-N-01-160629	8260C Gas (NWTPH)	A	9		E001147	
16F0096-12	CHRL-N-02-160629	8260C Gas (NWTPH)	A	10		E001147	
16F0096-13	CHRL-N-03-160629	8260C Gas (NWTPH)	A	11		E001147	
16F0096-14	CHRL-N-04-160629	8260C Gas (NWTPH)	A	12		E001147	
16F0096-15	CHRL-N-05-160629	8260C Gas (NWTPH)	A	13		E001147	
16F0096-16	CHRL-Q-01-160629	8260C Gas (NWTPH)	A	14		E001147	
16F0096-17	CHRL-Q-02-160629	8260C Gas (NWTPH)	A	15		E001147	
16F0096-18	CHRL-Q-03-160629	8260C Gas (NWTPH)	A	16		E001147	
16F0096-19	CHRL-Q-04-160629	8260C Gas (NWTPH)	A	17		E001147	
16F0096-20	CHRL-Q-05-160629	8260C Gas (NWTPH)	A	18		E001147	
16F0096-21	CHRL-P-01-160629	8260C Gas (NWTPH)	A	19		E001147	
16F0096-22	CHRL-P-02-160629	8260C Gas (NWTPH)	A	20		E001147	
16F0096-23	CHRL-P-52-160629	8260C Gas (NWTPH)	A	21		E001147	

Page 12 of 25

Samples Loaded By Date

Data Processed By Date

Printed: 6/30/2016 3:08:25PM

ANALYSIS SEQUENCE

SEF0152

Instrument: NT2
Calibration ID: ZF00027
MS Energy: 2247

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
16F0096-24	CHRL-P-03-160629	8260C Gas (NWTPH)	A	22		E001147	
16F0096-25	CHRL-P-04-160629	8260C Gas (NWTPH)	A	23		E001147	
16F0096-26	CHRL-P-05-160629	8260C Gas (NWTPH)	A	24		E001147	
16F0096-27	CHRL-R-02-160629	8260C Gas (NWTPH)	A	25		E001147	
16F0096-28	CHRL-R-03-160629	8260C Gas (NWTPH)	A	26		E001147	
16F0096-29	CHRL-R-04-160629	8260C Gas (NWTPH)	A	27		E001147	
16F0096-30	CHRL-TB-160629	8260C Gas (NWTPH)	B	28		E001147	
SEF0152-CCV1	GASCCV	QC		29	E001854	E001147	

Samples Loaded By Date

Data Processed By Date

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160630g.b

ARI Job No.: RTBF Method: GAS032916.m Instrument: nt2.i Date: 30-JUN-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0708	06301602G.D	RTBFB0630	RTBFB	1	Naphthalene,
0742	06301603CCG.D	SEF0152-ICV1		1	d4-Dichlorobenzene,
0742	06301603G.D	BEF0239-BS1		1	d4-Dichlorobenzene,
0742	06301603WG.D	BEF0240-BS1		1	d4-Dichlorobenzene,
0802	06301604G.D	BEF0239-BS1		1	d4-Dichlorobenzene,
0802	06301604WG.D	BEF0240-BSD1		1	d4-Dichlorobenzene,
0822	06301605G.D	BEF0239-BLK1		1	NO MANUAL INTEGRATION
0822	06301605WG.D	BEF0240-BLK1		1	NO MANUAL INTEGRATION
0902	06301606G.D	16F0096-11		1	NO MANUAL INTEGRATION
0922	06301607G.D	16F0096-12		1	NO MANUAL INTEGRATION
0943	06301608G.D	16F0096-13		1	NO MANUAL INTEGRATION
1003	06301609G.D	16F0096-14		1	NO MANUAL INTEGRATION
1024	06301610G.D	16F0096-15		1	NO MANUAL INTEGRATION
1044	06301611G.D	16F0096-16		1	NO MANUAL INTEGRATION
1105	06301612G.D	16F0096-17		1	NO MANUAL INTEGRATION
1125	06301613G.D	16F0096-18		1	NO MANUAL INTEGRATION
1145	06301614G.D	16F0096-19		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160630g.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1207	06301615G.D	16F0096-20		1	NO MANUAL INTEGRATION
1227	06301616G.D	16F0096-21		1	NO MANUAL INTEGRATION
1248	06301617G.D	16F0096-22		1	NO MANUAL INTEGRATION
1309	06301618G.D	16F0096-23		1	d8-Toluene,
1329	06301619G.D	16F0096-24		1	1,4-Difluorobenzene,
1350	06301620G.D	16F0096-25		1	NO MANUAL INTEGRATION
1410	06301621G.D	16F0096-26		1	NO MANUAL INTEGRATION
1431	06301622G.D	16F0096-27		1	NO MANUAL INTEGRATION
1452	06301623G.D	16F0096-28		1	NO MANUAL INTEGRATION
1512	06301624G.D	16F0096-29		1	NO MANUAL INTEGRATION
1533	06301625G.D	16F0096-30		1	NO MANUAL INTEGRATION
1554	06301626G.D	SEF0152-CCV1		1	NO MANUAL INTEGRATION

Analytical Resources, Incorporated

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEF0147	Instrument:	NT3
		Calibration:	ZF00014

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SEF0147-ICV1	06301604ccG.D	Solid	06/30/16 08:15
Initial Cal Check	SEF0147-ICV1	06301604cc.D	Solid	06/30/16 08:15
LCS	BEF0233-BS1	06301604.D	Solid	06/30/16 08:15
LCS	BEF0233-BS1	06301604G.D	Solid	06/30/16 08:15
LCS Dup	BEF0233-BSD1	06301605.D	Solid	06/30/16 08:41
LCS Dup	BEF0233-BSD1	06301605G.D	Solid	06/30/16 08:41
Blank	BEF0233-BLK1	06301606G.D	Solid	06/30/16 09:07
Blank	BEF0233-BLK1	06301606.D	Solid	06/30/16 09:07
CHRL-M-02-160629	16F0096-01	06301607.D	Solid	06/30/16 09:33
CHRL-M-02-160629	16F0096-01	06301607G.D	Solid	06/30/16 09:33
Calibration Check	SEF0147-CCV1	06301612.D	Solid	06/30/16 11:43
Calibration Check	SEF0147-CCV1	06301612G.D	Solid	06/30/16 11:43
CHRL-M-03-160629	16F0096-02	06301613.D	Solid	06/30/16 12:09
CHRL-M-03-160629	16F0096-02	06301613G.D	Solid	06/30/16 12:09
CHRL-M-53-160629	16F0096-03	06301614.D	Solid	06/30/16 12:35
CHRL-M-53-160629	16F0096-03	06301614G.D	Solid	06/30/16 12:35
CHRL-M-04-160629	16F0096-04	06301615G.D	Solid	06/30/16 13:01
CHRL-M-04-160629	16F0096-04	06301615.D	Solid	06/30/16 13:01
CHRL-M-05-160629	16F0096-05	06301616.D	Solid	06/30/16 13:27
CHRL-M-05-160629	16F0096-05	06301616G.D	Solid	06/30/16 13:27
CHRL-O-01-160629	16F0096-06	06301617.D	Solid	06/30/16 13:53
CHRL-O-01-160629	16F0096-06	06301617G.D	Solid	06/30/16 13:53
CHRL-O-02-160629	16F0096-07	06301618G.D	Solid	06/30/16 14:19
CHRL-O-02-160629	16F0096-07	06301618.D	Solid	06/30/16 14:19
CHRL-O-03-160629	16F0096-08	06301619.D	Solid	06/30/16 14:45
CHRL-O-03-160629	16F0096-08	06301619G.D	Solid	06/30/16 14:45
CHRL-O-04-160629	16F0096-09	06301620.D	Solid	06/30/16 15:11
CHRL-O-04-160629	16F0096-09	06301620G.D	Solid	06/30/16 15:11
CHRL-O-05-160629	16F0096-10	06301621.D	Solid	06/30/16 15:37
CHRL-O-05-160629	16F0096-10	06301621G.D	Solid	06/30/16 15:37
Calibration Check	SEF0147-CCV2	06301628G.D	Solid	06/30/16 18:39

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEF0147	Instrument:	NT3
		Calibration:	ZF00014

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Check	SEF0147-CCV2	06301628.D	Solid	06/30/16 18:39

Printed: 7/1/2016 10:59:34AM

ANALYSIS SEQUENCE

SEF0147

Instrument: NT3
Calibration ID: ZF00014
MS Energy: 2459

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
SEF0147-TUN1	MS Tune	QC		1	E001314	E001147	
SEF0147-ICV1	Initial Cal Check	QC		2	E001854	E001147	
BEF0233-BS1	LCS	QC		3		E001147	
BEF0233-BSD1	LCS Dup	QC		4		E001147	
BEF0233-BLK1	Blank	QC		5		E001147	
16F0096-01	CHRL-M-02-160629	8260C Gas (NWTPH)	A	6		E001147	
SEF0147-CCV1	GASCCV	QC		7	E001854	E001147	
16F0096-02	CHRL-M-03-160629	8260C Gas (NWTPH)	A	8		E001147	
16F0096-03	CHRL-M-53-160629	8260C Gas (NWTPH)	A	9		E001147	
16F0096-04	CHRL-M-04-160629	8260C Gas (NWTPH)	A	10		E001147	
16F0096-05	CHRL-M-05-160629	8260C Gas (NWTPH)	A	11		E001147	
16F0096-06	CHRL-O-01-160629	8260C Gas (NWTPH)	A	12		E001147	
16F0096-07	CHRL-O-02-160629	8260C Gas (NWTPH)	A	13		E001147	
16F0096-08	CHRL-O-03-160629	8260C Gas (NWTPH)	A	14		E001147	
16F0096-09	CHRL-O-04-160629	8260C Gas (NWTPH)	A	15		E001147	
16F0096-10	CHRL-O-05-160629	8260C Gas (NWTPH)	A	16		E001147	
SEF0147-CCV2	8260 CCV	QC		17	E001854	E001147	

Samples Loaded By Date

Data Processed By Date

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt3.i\20160630gELM.b

ARI Job No.: RTBF Method: NWTPHG.m Instrument: nt3.i Date: 30-JUN-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0743	06301603G.D	RTBFB0630	RTBFB	1	NO MANUAL INTEGRATION
0815	06301604ccG.D	SEF0147-ICV1	GICV	1	Naphthalene,
0815	06301604G.D	BEF0233-BS1	GLCS	1	Naphthalene,
0841	06301605G.D	BEF0233-BSD1	GLCSD	1	NO MANUAL INTEGRATION
0907	06301606G.D	BEF0233-BLK1	MB0630	1	NO MANUAL INTEGRATION
0933	06301607G.D	16F0096-01		1	NO MANUAL INTEGRATION
1143	06301612G.D	SEF0147-CCV1	GCCV	1	NO MANUAL INTEGRATION
1209	06301613G.D	16F0096-02		1	NO MANUAL INTEGRATION
1235	06301614G.D	16F0096-03		1	NO MANUAL INTEGRATION
1301	06301615G.D	16F0096-04		1	NO MANUAL INTEGRATION
1327	06301616G.D	16F0096-05		1	NO MANUAL INTEGRATION
1353	06301617G.D	16F0096-06		1	NO MANUAL INTEGRATION
1419	06301618G.D	16F0096-07		1	NO MANUAL INTEGRATION
1445	06301619G.D	16F0096-08		1	NO MANUAL INTEGRATION
1511	06301620G.D	16F0096-09		1	NO MANUAL INTEGRATION
1537	06301621G.D	16F0096-10		1	NO MANUAL INTEGRATION
1837	06301628G.D	SEF0147-CCV2	GCCV	1	NO MANUAL INTEGRATION

Analytical Resources, Incorporated

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEC0063	Instrument:	NT2
		Calibration:	ZD00012

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Secondary Cal Check	SEC0063-SCV1	03291618.D	Water	03/29/16 20:24
Cal Standard	SEC0063-CALE	20160329g.b-002	Water	03/29/16 20:45
Cal Standard	SEC0063-CALD	20160329g.b-003	Water	03/29/16 21:07
Cal Standard	SEC0063-CALC	20160329g.b-004	Water	03/29/16 21:28
Cal Standard	SEC0063-CALB	20160329g.b-005	Water	03/29/16 21:50
Cal Standard	SEC0063-CALA	20160329g.b-006	Water	03/29/16 22:11
Cal Standard	SEC0063-CAL9	20160329g.b-007	Water	03/29/16 22:32
Secondary Cal Check	SEC0063-SCV2	20160329g.b-008	Water	03/29/16 22:54

SURROGATE RECOVERY SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG/WO:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEF0147	Instrument:	NT3
Calibration:	ZF00014	Calibration Date:	05/25/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
BEF0233-BS1 (Solid)	Lab File ID: 06301604.D		Analyzed: 06/30/16 08:15	
Toluene-d8	5.0000	90.4	80 - 120	
4-Bromofluorobenzene	5.0000	84.6	78 - 123	
SEF0147-ICV1 (Solid)	Lab File ID: 06301604cc.D		Analyzed: 06/30/16 08:15	
Toluene-d8	5.0000	90.4	0 - 200	
4-Bromofluorobenzene	5.0000	84.6	0 - 200	
BEF0233-BSD1 (Solid)	Lab File ID: 06301605.D		Analyzed: 06/30/16 08:41	
Toluene-d8	5.0000	92.0	80 - 120	
4-Bromofluorobenzene	5.0000	89.5	78 - 123	
BEF0233-BLK1 (Solid)	Lab File ID: 06301606.D		Analyzed: 06/30/16 09:07	
Toluene-d8	5.0000	89.5	80 - 120	
4-Bromofluorobenzene	5.0000	90.7	78 - 123	
16F0096-01 (Solid)	Lab File ID: 06301607.D		Analyzed: 06/30/16 09:33	
Toluene-d8	5.0000	93.4	80 - 120	
4-Bromofluorobenzene	5.0000	86.4	78 - 123	
16F0096-02 (Solid)	Lab File ID: 06301613.D		Analyzed: 06/30/16 12:09	
Toluene-d8	5.0000	90.5	80 - 120	
4-Bromofluorobenzene	5.0000	94.2	78 - 123	
16F0096-03 (Solid)	Lab File ID: 06301614.D		Analyzed: 06/30/16 12:35	
Toluene-d8	5.0000	91.6	80 - 120	
4-Bromofluorobenzene	5.0000	85.3	78 - 123	
16F0096-04 (Solid)	Lab File ID: 06301615.D		Analyzed: 06/30/16 13:01	
Toluene-d8	5.0000	90.8	80 - 120	
4-Bromofluorobenzene	5.0000	85.8	78 - 123	
16F0096-05 (Solid)	Lab File ID: 06301616.D		Analyzed: 06/30/16 13:27	
Toluene-d8	5.0000	89.8	80 - 120	
4-Bromofluorobenzene	5.0000	84.2	78 - 123	
16F0096-06 (Solid)	Lab File ID: 06301617.D		Analyzed: 06/30/16 13:53	
Toluene-d8	5.0000	87.7	80 - 120	
4-Bromofluorobenzene	5.0000	84.6	78 - 123	

SURROGATE RECOVERY SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG/WO:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEF0147	Instrument:	NT3
Calibration:	ZF00014	Calibration Date:	05/25/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
16F0096-07 (Solid)	Lab File ID: 06301618.D		Analyzed: 06/30/16 14:19	
Toluene-d8	5.0000	92.6	80 - 120	
4-Bromofluorobenzene	5.0000	87.3	78 - 123	
16F0096-08 (Solid)	Lab File ID: 06301619.D		Analyzed: 06/30/16 14:45	
Toluene-d8	5.0000	93.0	80 - 120	
4-Bromofluorobenzene	5.0000	85.4	78 - 123	
16F0096-09 (Solid)	Lab File ID: 06301620.D		Analyzed: 06/30/16 15:11	
Toluene-d8	5.0000	91.0	80 - 120	
4-Bromofluorobenzene	5.0000	86.9	78 - 123	
16F0096-10 (Solid)	Lab File ID: 06301621.D		Analyzed: 06/30/16 15:37	
Toluene-d8	5.0000	90.4	80 - 120	
4-Bromofluorobenzene	5.0000	89.1	78 - 123	

SURROGATE RECOVERY SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG/WO:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEF0152	Instrument:	NT2
Calibration:	ZF00027	Calibration Date:	03/29/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
BEF0239-BS1 (Solid)	Lab File ID: 06301603.D		Analyzed: 06/30/16 07:42	
Toluene-d8	5.0000	98.3	80 - 120	
4-Bromofluorobenzene	5.0000	102	78 - 123	
BEF0240-BS1 (Water)	Lab File ID: 06301603W.D		Analyzed: 06/30/16 07:42	
Toluene-d8	5.0000	98.3	80 - 120	
4-Bromofluorobenzene	5.0000	102	80 - 120	
SEF0152-ICV1 (Solid)	Lab File ID: 06301603CC.D		Analyzed: 06/30/16 07:42	
Toluene-d8	5.0000	98.3	0 - 200	
4-Bromofluorobenzene	5.0000	102	0 - 200	
BEF0239-BSD1 (Solid)	Lab File ID: 06301604.D		Analyzed: 06/30/16 08:02	
Toluene-d8	5.0000	102	80 - 120	
4-Bromofluorobenzene	5.0000	103	78 - 123	
BEF0240-BSD1 (Water)	Lab File ID: 06301604W.D		Analyzed: 06/30/16 08:02	
Toluene-d8	5.0000	102	80 - 120	
4-Bromofluorobenzene	5.0000	103	80 - 120	
BEF0239-BLK1 (Solid)	Lab File ID: 06301605.D		Analyzed: 06/30/16 08:22	
Toluene-d8	5.0000	92.3	80 - 120	
4-Bromofluorobenzene	5.0000	95.0	78 - 123	
BEF0240-BLK1 (Water)	Lab File ID: 06301605W.D		Analyzed: 06/30/16 08:22	
Toluene-d8	5.0000	92.3	80 - 120	
4-Bromofluorobenzene	5.0000	95.0	80 - 120	
16F0096-11 (Solid)	Lab File ID: 06301606.D		Analyzed: 06/30/16 09:02	
Toluene-d8	5.0000	95.3	80 - 120	
4-Bromofluorobenzene	5.0000	101	78 - 123	
16F0096-12 (Solid)	Lab File ID: 06301607.D		Analyzed: 06/30/16 09:22	
Toluene-d8	5.0000	93.0	80 - 120	
4-Bromofluorobenzene	5.0000	105	78 - 123	
16F0096-13 (Solid)	Lab File ID: 06301608.D		Analyzed: 06/30/16 09:43	
Toluene-d8	5.0000	99.1	80 - 120	
4-Bromofluorobenzene	5.0000	101	78 - 123	

SURROGATE RECOVERY SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG/WO:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEF0152	Instrument:	NT2
Calibration:	ZF00027	Calibration Date:	03/29/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
16F0096-14 (Solid)	Lab File ID: 06301609.D		Analyzed: 06/30/16 10:03	
Toluene-d8	5.0000	96.4	80 - 120	
4-Bromofluorobenzene	5.0000	102	78 - 123	
16F0096-15 (Solid)	Lab File ID: 06301610.D		Analyzed: 06/30/16 10:24	
Toluene-d8	5.0000	94.4	80 - 120	
4-Bromofluorobenzene	5.0000	101	78 - 123	
16F0096-16 (Solid)	Lab File ID: 06301611.D		Analyzed: 06/30/16 10:44	
Toluene-d8	5.0000	94.1	80 - 120	
4-Bromofluorobenzene	5.0000	103	78 - 123	
16F0096-17 (Solid)	Lab File ID: 06301612.D		Analyzed: 06/30/16 11:05	
Toluene-d8	5.0000	95.8	80 - 120	
4-Bromofluorobenzene	5.0000	103	78 - 123	
16F0096-18 (Solid)	Lab File ID: 06301613.D		Analyzed: 06/30/16 11:25	
Toluene-d8	5.0000	96.1	80 - 120	
4-Bromofluorobenzene	5.0000	107	78 - 123	
16F0096-19 (Solid)	Lab File ID: 06301614.D		Analyzed: 06/30/16 11:46	
Toluene-d8	5.0000	96.3	80 - 120	
4-Bromofluorobenzene	5.0000	104	78 - 123	
16F0096-20 (Solid)	Lab File ID: 06301615.D		Analyzed: 06/30/16 12:07	
Toluene-d8	5.0000	95.4	80 - 120	
4-Bromofluorobenzene	5.0000	98.2	78 - 123	
16F0096-21 (Solid)	Lab File ID: 06301616.D		Analyzed: 06/30/16 12:27	
Toluene-d8	5.0000	95.0	80 - 120	
4-Bromofluorobenzene	5.0000	105	78 - 123	
16F0096-22 (Solid)	Lab File ID: 06301617.D		Analyzed: 06/30/16 12:48	
Toluene-d8	5.0000	95.8	80 - 120	
4-Bromofluorobenzene	5.0000	103	78 - 123	
16F0096-23 (Solid)	Lab File ID: 06301618.D		Analyzed: 06/30/16 13:09	
Toluene-d8	5.0000	95.9	80 - 120	
4-Bromofluorobenzene	5.0000	102	78 - 123	

SURROGATE RECOVERY SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG/WO:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEF0152	Instrument:	NT2
Calibration:	ZF00027	Calibration Date:	03/29/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
16F0096-24 (Solid)	Lab File ID: 06301619.D		Analyzed: 06/30/16 13:29	
Toluene-d8	5.0000	97.0	80 - 120	
4-Bromofluorobenzene	5.0000	106	78 - 123	
16F0096-25 (Solid)	Lab File ID: 06301620.D		Analyzed: 06/30/16 13:50	
Toluene-d8	5.0000	94.6	80 - 120	
4-Bromofluorobenzene	5.0000	102	78 - 123	
16F0096-26 (Solid)	Lab File ID: 06301621.D		Analyzed: 06/30/16 14:10	
Toluene-d8	5.0000	95.9	80 - 120	
4-Bromofluorobenzene	5.0000	100	78 - 123	
16F0096-27 (Solid)	Lab File ID: 06301622.D		Analyzed: 06/30/16 14:31	
Toluene-d8	5.0000	95.0	80 - 120	
4-Bromofluorobenzene	5.0000	105	78 - 123	
16F0096-28 (Solid)	Lab File ID: 06301623.D		Analyzed: 06/30/16 14:52	
Toluene-d8	5.0000	95.2	80 - 120	
4-Bromofluorobenzene	5.0000	104	78 - 123	
16F0096-29 (Solid)	Lab File ID: 06301624.D		Analyzed: 06/30/16 15:12	
Toluene-d8	5.0000	95.6	80 - 120	
4-Bromofluorobenzene	5.0000	98.2	78 - 123	
16F0096-30 (Water)	Lab File ID: 06301625.D		Analyzed: 06/30/16 15:33	
Toluene-d8	5.0000	96.6	80 - 120	
4-Bromofluorobenzene	5.0000	91.8	80 - 120	

INTERNAL STANDARD AREA AND RT SUMMARY

NWTPHg

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEF0147
Instrument: NT3
Calibration: ZF00014

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (BEF0233-BS1)		(Solid)		Lab File ID: 06301604.D				Analyzed: 06/30/16 08:15	
Pentafluorobenzene	665324	5.428				50 - 200		+/-0.50	
Chlorobenzene-d5	977136	7.851				50 - 200		+/-0.50	
1,4-Difluorobenzene	1070859	5.811				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	542760	9.541				50 - 200		+/-0.50	
LCS Dup (BEF0233-BSD1)		(Solid)		Lab File ID: 06301605.D				Analyzed: 06/30/16 08:41	
Pentafluorobenzene	644747	5.43	665324	5.428	97	50 - 200	0.0020	+/-0.50	
Chlorobenzene-d5	975004	7.847	977136	7.851	100	50 - 200	-0.0040	+/-0.50	
1,4-Difluorobenzene	1061061	5.812	1070859	5.811	99	50 - 200	0.0010	+/-0.50	
1,4-Dichlorobenzene-d4	549123	9.542	542760	9.541	101	50 - 200	0.0010	+/-0.50	
Blank (BEF0233-BLK1)		(Solid)		Lab File ID: 06301606.D				Analyzed: 06/30/16 09:07	
Pentafluorobenzene	659434	5.429	665324	5.428	99	50 - 200	0.0010	+/-0.50	
Chlorobenzene-d5	944926	7.852	977136	7.851	97	50 - 200	0.0010	+/-0.50	
1,4-Difluorobenzene	1052477	5.812	1070859	5.811	98	50 - 200	0.0010	+/-0.50	
1,4-Dichlorobenzene-d4	529936	9.542	542760	9.541	98	50 - 200	0.0010	+/-0.50	
CHRL-M-02-160629 (16F0096-01)		(Solid)		Lab File ID: 06301607.D				Analyzed: 06/30/16 09:33	
Pentafluorobenzene	672324	5.424	665324	5.428	101	50 - 200	-0.0040	+/-0.50	
Chlorobenzene-d5	971688	7.847	977136	7.851	99	50 - 200	-0.0040	+/-0.50	
1,4-Difluorobenzene	1057498	5.806	1070859	5.811	99	50 - 200	-0.0050	+/-0.50	
1,4-Dichlorobenzene-d4	523073	9.542	542760	9.541	96	50 - 200	0.0010	+/-0.50	
CHRL-M-03-160629 (16F0096-02)		(Solid)		Lab File ID: 06301613.D				Analyzed: 06/30/16 12:09	
Pentafluorobenzene	687801	5.424	657934	5.429	105	50 - 200	-0.0050	+/-0.50	
Chlorobenzene-d5	988448	7.847	984997	7.852	100	50 - 200	-0.0050	+/-0.50	
1,4-Difluorobenzene	1123724	5.806	1055825	5.811	106	50 - 200	-0.0050	+/-0.50	
1,4-Dichlorobenzene-d4	551720	9.542	544567	9.541	101	50 - 200	0.0010	+/-0.50	
CHRL-M-53-160629 (16F0096-03)		(Solid)		Lab File ID: 06301614.D				Analyzed: 06/30/16 12:35	
Pentafluorobenzene	696045	5.424	657934	5.429	106	50 - 200	-0.0050	+/-0.50	
Chlorobenzene-d5	1019177	7.847	984997	7.852	103	50 - 200	-0.0050	+/-0.50	
1,4-Difluorobenzene	1116675	5.806	1055825	5.811	106	50 - 200	-0.0050	+/-0.50	
1,4-Dichlorobenzene-d4	562739	9.542	544567	9.541	103	50 - 200	0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

NWTPHg

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEF0147
Instrument: NT3
Calibration: ZF00014

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
CHRL-M-04-160629 (16F0096-04)		(Solid)		Lab File ID: 06301615.D				Analyzed: 06/30/16 13:01	
Pentafluorobenzene	691513	5.429	657934	5.429	105	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1000301	7.847	984997	7.852	102	50 - 200	-0.0050	+/-0.50	
1,4-Difluorobenzene	1097301	5.812	1055825	5.811	104	50 - 200	0.0010	+/-0.50	
1,4-Dichlorobenzene-d4	521637	9.537	544567	9.541	96	50 - 200	-0.0040	+/-0.50	
CHRL-M-05-160629 (16F0096-05)		(Solid)		Lab File ID: 06301616.D				Analyzed: 06/30/16 13:27	
Pentafluorobenzene	691842	5.424	657934	5.429	105	50 - 200	-0.0050	+/-0.50	
Chlorobenzene-d5	1015417	7.847	984997	7.852	103	50 - 200	-0.0050	+/-0.50	
1,4-Difluorobenzene	1117177	5.806	1055825	5.811	106	50 - 200	-0.0050	+/-0.50	
1,4-Dichlorobenzene-d4	554433	9.542	544567	9.541	102	50 - 200	0.0010	+/-0.50	
CHRL-O-01-160629 (16F0096-06)		(Solid)		Lab File ID: 06301617.D				Analyzed: 06/30/16 13:53	
Pentafluorobenzene	698166	5.429	657934	5.429	106	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1013684	7.847	984997	7.852	103	50 - 200	-0.0050	+/-0.50	
1,4-Difluorobenzene	1127647	5.812	1055825	5.811	107	50 - 200	0.0010	+/-0.50	
1,4-Dichlorobenzene-d4	525265	9.536	544567	9.541	96	50 - 200	-0.0050	+/-0.50	
CHRL-O-02-160629 (16F0096-07)		(Solid)		Lab File ID: 06301618.D				Analyzed: 06/30/16 14:19	
Pentafluorobenzene	691075	5.43	657934	5.429	105	50 - 200	0.0010	+/-0.50	
Chlorobenzene-d5	1016996	7.847	984997	7.852	103	50 - 200	-0.0050	+/-0.50	
1,4-Difluorobenzene	1107473	5.812	1055825	5.811	105	50 - 200	0.0010	+/-0.50	
1,4-Dichlorobenzene-d4	528296	9.542	544567	9.541	97	50 - 200	0.0010	+/-0.50	
CHRL-O-03-160629 (16F0096-08)		(Solid)		Lab File ID: 06301619.D				Analyzed: 06/30/16 14:45	
Pentafluorobenzene	705651	5.429	657934	5.429	107	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1001861	7.847	984997	7.852	102	50 - 200	-0.0050	+/-0.50	
1,4-Difluorobenzene	1098279	5.812	1055825	5.811	104	50 - 200	0.0010	+/-0.50	
1,4-Dichlorobenzene-d4	522108	9.541	544567	9.541	96	50 - 200	0.0000	+/-0.50	
CHRL-O-04-160629 (16F0096-09)		(Solid)		Lab File ID: 06301620.D				Analyzed: 06/30/16 15:11	
Pentafluorobenzene	699744	5.424	657934	5.429	106	50 - 200	-0.0050	+/-0.50	
Chlorobenzene-d5	993437	7.846	984997	7.852	101	50 - 200	-0.0060	+/-0.50	
1,4-Difluorobenzene	1108321	5.811	1055825	5.811	105	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	531852	9.541	544567	9.541	98	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEF0147	Instrument:	NT3
		Calibration:	ZF00014

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
CHRL-O-05-160629 (16F0096-10)		(Solid)		Lab File ID: 06301621.D				Analyzed: 06/30/16 15:37	
Pentafluorobenzene	687060	5.428	657934	5.429	104	50 - 200	-0.0010	+/-0.50	
Chlorobenzene-d5	1003568	7.851	984997	7.852	102	50 - 200	-0.0010	+/-0.50	
1,4-Difluorobenzene	1100963	5.811	1055825	5.811	104	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	537709	9.541	544567	9.541	99	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

NWTPHg

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEF0152
Instrument: NT2
Calibration: ZF00027

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (BEF0239-BS1)		(Solid)		Lab File ID: 06301603.D				Analyzed: 06/30/16 07:42	
Pentafluorobenzene	294564	5.329				50 - 200		+/-0.50	
Chlorobenzene-d5	425084	7.778				50 - 200		+/-0.50	
1,4-Difluorobenzene	489843	5.708				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	221586	9.482				50 - 200		+/-0.50	
LCS (BEF0240-BS1)		(Water)		Lab File ID: 06301603W.D				Analyzed: 06/30/16 07:42	
Pentafluorobenzene	294564	5.329				50 - 200		+/-0.50	
Chlorobenzene-d5	425084	7.778				50 - 200		+/-0.50	
1,4-Difluorobenzene	489843	5.708				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	221586	9.482				50 - 200		+/-0.50	
LCS Dup (BEF0239-BSD1)		(Solid)		Lab File ID: 06301604.D				Analyzed: 06/30/16 08:02	
Pentafluorobenzene	276779	5.328	294564	5.329	94	50 - 200	-0.0010	+/-0.50	
Chlorobenzene-d5	416150	7.778	425084	7.778	98	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	459787	5.707	489843	5.708	94	50 - 200	-0.0010	+/-0.50	
1,4-Dichlorobenzene-d4	220927	9.481	221586	9.482	100	50 - 200	-0.0010	+/-0.50	
LCS Dup (BEF0240-BSD1)		(Water)		Lab File ID: 06301604W.D				Analyzed: 06/30/16 08:02	
Pentafluorobenzene	276779	5.328	294564	5.329	94	50 - 200	-0.0010	+/-0.50	
Chlorobenzene-d5	416150	7.778	425084	7.778	98	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	459787	5.707	489843	5.708	94	50 - 200	-0.0010	+/-0.50	
1,4-Dichlorobenzene-d4	220927	9.481	221586	9.482	100	50 - 200	-0.0010	+/-0.50	
Blank (BEF0239-BLK1)		(Solid)		Lab File ID: 06301605.D				Analyzed: 06/30/16 08:22	
Pentafluorobenzene	256931	5.329	294564	5.329	87	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	373996	7.779	425084	7.778	88	50 - 200	0.0010	+/-0.50	
1,4-Difluorobenzene	436001	5.708	489843	5.708	89	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	187295	9.483	221586	9.482	85	50 - 200	0.0010	+/-0.50	
Blank (BEF0240-BLK1)		(Water)		Lab File ID: 06301605W.D				Analyzed: 06/30/16 08:22	
Pentafluorobenzene	256931	5.329	294564	5.329	87	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	373996	7.779	425084	7.778	88	50 - 200	0.0010	+/-0.50	
1,4-Difluorobenzene	436001	5.708	489843	5.708	89	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	187295	9.483	221586	9.482	85	50 - 200	0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

NWTPHg

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEF0152
Instrument: NT2
Calibration: ZF00027

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
CHRL-N-01-160629 (16F0096-11)		(Solid)		Lab File ID: 06301606.D				Analyzed: 06/30/16 09:02	
Pentafluorobenzene	323402	5.315	294564	5.329	110	50 - 200	-0.0140	+/-0.50	
Chlorobenzene-d5	465786	7.776	425084	7.778	110	50 - 200	-0.0020	+/-0.50	
1,4-Difluorobenzene	521539	5.705	489843	5.708	106	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	224134	9.492	221586	9.482	101	50 - 200	0.0100	+/-0.50	
CHRL-N-02-160629 (16F0096-12)		(Solid)		Lab File ID: 06301607.D				Analyzed: 06/30/16 09:22	
Pentafluorobenzene	308738	5.317	294564	5.329	105	50 - 200	-0.0120	+/-0.50	
Chlorobenzene-d5	438701	7.779	425084	7.778	103	50 - 200	0.0010	+/-0.50	
1,4-Difluorobenzene	505907	5.708	489843	5.708	103	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	234577	9.483	221586	9.482	106	50 - 200	0.0010	+/-0.50	
CHRL-N-03-160629 (16F0096-13)		(Solid)		Lab File ID: 06301608.D				Analyzed: 06/30/16 09:43	
Pentafluorobenzene	316045	5.315	294564	5.329	107	50 - 200	-0.0140	+/-0.50	
Chlorobenzene-d5	477237	7.776	425084	7.778	112	50 - 200	-0.0020	+/-0.50	
1,4-Difluorobenzene	517264	5.705	489843	5.708	106	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	251906	9.48	221586	9.482	114	50 - 200	-0.0020	+/-0.50	
CHRL-N-04-160629 (16F0096-14)		(Solid)		Lab File ID: 06301609.D				Analyzed: 06/30/16 10:03	
Pentafluorobenzene	316789	5.318	294564	5.329	108	50 - 200	-0.0110	+/-0.50	
Chlorobenzene-d5	464986	7.779	425084	7.778	109	50 - 200	0.0010	+/-0.50	
1,4-Difluorobenzene	517985	5.708	489843	5.708	106	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	252095	9.483	221586	9.482	114	50 - 200	0.0010	+/-0.50	
CHRL-N-05-160629 (16F0096-15)		(Solid)		Lab File ID: 06301610.D				Analyzed: 06/30/16 10:24	
Pentafluorobenzene	323784	5.315	294564	5.329	110	50 - 200	-0.0140	+/-0.50	
Chlorobenzene-d5	481143	7.776	425084	7.778	113	50 - 200	-0.0020	+/-0.50	
1,4-Difluorobenzene	547211	5.705	489843	5.708	112	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	257235	9.48	221586	9.482	116	50 - 200	-0.0020	+/-0.50	
CHRL-Q-01-160629 (16F0096-16)		(Solid)		Lab File ID: 06301611.D				Analyzed: 06/30/16 10:44	
Pentafluorobenzene	321401	5.318	294564	5.329	109	50 - 200	-0.0110	+/-0.50	
Chlorobenzene-d5	464377	7.779	425084	7.778	109	50 - 200	0.0010	+/-0.50	
1,4-Difluorobenzene	518782	5.708	489843	5.708	106	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	244745	9.483	221586	9.482	110	50 - 200	0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

NWTPHg

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEF0152
Instrument: NT2
Calibration: ZF00027

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
CHRL-Q-02-160629 (16F0096-17)		(Solid)		Lab File ID: 06301612.D				Analyzed: 06/30/16 11:05	
Pentafluorobenzene	317508	5.314	294564	5.329	108	50 - 200	-0.0150	+/-0.50	
Chlorobenzene-d5	489763	7.776	425084	7.778	115	50 - 200	-0.0020	+/-0.50	
1,4-Difluorobenzene	535185	5.705	489843	5.708	109	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	272265	9.479	221586	9.482	123	50 - 200	-0.0030	+/-0.50	
CHRL-Q-03-160629 (16F0096-18)		(Solid)		Lab File ID: 06301613.D				Analyzed: 06/30/16 11:25	
Pentafluorobenzene	330850	5.316	294564	5.329	112	50 - 200	-0.0130	+/-0.50	
Chlorobenzene-d5	496275	7.777	425084	7.778	117	50 - 200	-0.0010	+/-0.50	
1,4-Difluorobenzene	545130	5.706	489843	5.708	111	50 - 200	-0.0020	+/-0.50	
1,4-Dichlorobenzene-d4	268984	9.481	221586	9.482	121	50 - 200	-0.0010	+/-0.50	
CHRL-Q-04-160629 (16F0096-19)		(Solid)		Lab File ID: 06301614.D				Analyzed: 06/30/16 11:46	
Pentafluorobenzene	318692	5.317	294564	5.329	108	50 - 200	-0.0120	+/-0.50	
Chlorobenzene-d5	479624	7.778	425084	7.778	113	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	535329	5.707	489843	5.708	109	50 - 200	-0.0010	+/-0.50	
1,4-Dichlorobenzene-d4	251810	9.482	221586	9.482	114	50 - 200	0.0000	+/-0.50	
CHRL-Q-05-160629 (16F0096-20)		(Solid)		Lab File ID: 06301615.D				Analyzed: 06/30/16 12:07	
Pentafluorobenzene	332933	5.314	294564	5.329	113	50 - 200	-0.0150	+/-0.50	
Chlorobenzene-d5	505290	7.776	425084	7.778	119	50 - 200	-0.0020	+/-0.50	
1,4-Difluorobenzene	550484	5.705	489843	5.708	112	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	270368	9.479	221586	9.482	122	50 - 200	-0.0030	+/-0.50	
CHRL-P-01-160629 (16F0096-21)		(Solid)		Lab File ID: 06301616.D				Analyzed: 06/30/16 12:27	
Pentafluorobenzene	330154	5.317	294564	5.329	112	50 - 200	-0.0120	+/-0.50	
Chlorobenzene-d5	508432	7.778	425084	7.778	120	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	565072	5.708	489843	5.708	115	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	272993	9.482	221586	9.482	123	50 - 200	0.0000	+/-0.50	
CHRL-P-02-160629 (16F0096-22)		(Solid)		Lab File ID: 06301617.D				Analyzed: 06/30/16 12:48	
Pentafluorobenzene	349800	5.317	294564	5.329	119	50 - 200	-0.0120	+/-0.50	
Chlorobenzene-d5	523712	7.778	425084	7.778	123	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	571307	5.707	489843	5.708	117	50 - 200	-0.0010	+/-0.50	
1,4-Dichlorobenzene-d4	282386	9.482	221586	9.482	127	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

NWTPHg

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEF0152
Instrument: NT2
Calibration: ZF00027

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
CHRL-P-52-160629 (16F0096-23)		(Solid)		Lab File ID: 06301618.D				Analyzed: 06/30/16 13:09	
Pentafluorobenzene	339639	5.314	294564	5.329	115	50 - 200	-0.0150	+/-0.50	
Chlorobenzene-d5	515856	7.775	425084	7.778	121	50 - 200	-0.0030	+/-0.50	
1,4-Difluorobenzene	574215	5.705	489843	5.708	117	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	276341	9.479	221586	9.482	125	50 - 200	-0.0030	+/-0.50	
CHRL-P-03-160629 (16F0096-24)		(Solid)		Lab File ID: 06301619.D				Analyzed: 06/30/16 13:29	
Pentafluorobenzene	320700	5.317	294564	5.329	109	50 - 200	-0.0120	+/-0.50	
Chlorobenzene-d5	501632	7.779	425084	7.778	118	50 - 200	0.0010	+/-0.50	
1,4-Difluorobenzene	556237	5.708	489843	5.708	114	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	263914	9.482	221586	9.482	119	50 - 200	0.0000	+/-0.50	
CHRL-P-04-160629 (16F0096-25)		(Solid)		Lab File ID: 06301620.D				Analyzed: 06/30/16 13:50	
Pentafluorobenzene	343306	5.315	294564	5.329	117	50 - 200	-0.0140	+/-0.50	
Chlorobenzene-d5	513545	7.776	425084	7.778	121	50 - 200	-0.0020	+/-0.50	
1,4-Difluorobenzene	579135	5.706	489843	5.708	118	50 - 200	-0.0020	+/-0.50	
1,4-Dichlorobenzene-d4	280171	9.48	221586	9.482	126	50 - 200	-0.0020	+/-0.50	
CHRL-P-05-160629 (16F0096-26)		(Solid)		Lab File ID: 06301621.D				Analyzed: 06/30/16 14:10	
Pentafluorobenzene	340093	5.314	294564	5.329	115	50 - 200	-0.0150	+/-0.50	
Chlorobenzene-d5	491425	7.776	425084	7.778	116	50 - 200	-0.0020	+/-0.50	
1,4-Difluorobenzene	550013	5.705	489843	5.708	112	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	265791	9.479	221586	9.482	120	50 - 200	-0.0030	+/-0.50	
CHRL-R-02-160629 (16F0096-27)		(Solid)		Lab File ID: 06301622.D				Analyzed: 06/30/16 14:31	
Pentafluorobenzene	334241	5.315	294564	5.329	113	50 - 200	-0.0140	+/-0.50	
Chlorobenzene-d5	507420	7.776	425084	7.778	119	50 - 200	-0.0020	+/-0.50	
1,4-Difluorobenzene	560863	5.705	489843	5.708	114	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	277292	9.48	221586	9.482	125	50 - 200	-0.0020	+/-0.50	
CHRL-R-03-160629 (16F0096-28)		(Solid)		Lab File ID: 06301623.D				Analyzed: 06/30/16 14:52	
Pentafluorobenzene	342217	5.315	294564	5.329	116	50 - 200	-0.0140	+/-0.50	
Chlorobenzene-d5	526450	7.776	425084	7.778	124	50 - 200	-0.0020	+/-0.50	
1,4-Difluorobenzene	582596	5.705	489843	5.708	119	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	283884	9.48	221586	9.482	128	50 - 200	-0.0020	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16F0096
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEF0152	Instrument:	NT2
		Calibration:	ZF00027

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
CHRL-R-04-160629 (16F0096-29)		(Solid)		Lab File ID: 06301624.D				Analyzed: 06/30/16 15:12	
Pentafluorobenzene	346039	5.314	294564	5.329	117	50 - 200	-0.0150	+/-0.50	
Chlorobenzene-d5	535253	7.776	425084	7.778	126	50 - 200	-0.0020	+/-0.50	
1,4-Difluorobenzene	583123	5.705	489843	5.708	119	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	282916	9.48	221586	9.482	128	50 - 200	-0.0020	+/-0.50	
CHRL-TB-160629 (16F0096-30)		(Water)		Lab File ID: 06301625.D				Analyzed: 06/30/16 15:33	
Pentafluorobenzene	316002	5.326	294564	5.329	107	50 - 200	-0.0030	+/-0.50	
Chlorobenzene-d5	485865	7.776	425084	7.778	114	50 - 200	-0.0020	+/-0.50	
1,4-Difluorobenzene	533290	5.717	489843	5.708	109	50 - 200	0.0090	+/-0.50	
1,4-Dichlorobenzene-d4	240396	9.479	221586	9.482	108	50 - 200	-0.0030	+/-0.50	

Analytical Resources, Incorporated

HOLDING TIME SUMMARY

Analysis: NWTPHg

Laboratory: Analytical Resources, Inc. SDG: 16F0096

Client: Anchor QEA, LLC Project: CHRL SSWA

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
CHRL-M-02-160629 16F0096-01	06/29/16 11:00	06/29/16 14:45	06/29/16 17:30	0	14	06/30/16 09:33	1	14	
CHRL-M-03-160629 16F0096-02	06/29/16 11:00	06/29/16 14:45	06/29/16 17:30	0	14	06/30/16 12:09	1	14	
CHRL-M-53-160629 16F0096-03	06/29/16 11:00	06/29/16 14:45	06/29/16 17:30	0	14	06/30/16 12:35	1	14	
CHRL-M-04-160629 16F0096-04	06/29/16 11:15	06/29/16 14:45	06/29/16 17:30	0	14	06/30/16 13:01	1	14	
CHRL-M-05-160629 16F0096-05	06/29/16 11:15	06/29/16 14:45	06/29/16 17:30	0	14	06/30/16 13:27	1	14	
CHRL-O-01-160629 16F0096-06	06/29/16 12:15	06/29/16 14:45	06/29/16 17:30	0	14	06/30/16 13:53	1	14	
CHRL-O-02-160629 16F0096-07	06/29/16 12:05	06/29/16 14:45	06/29/16 17:30	0	14	06/30/16 14:19	1	14	
CHRL-O-03-160629 16F0096-08	06/29/16 11:55	06/29/16 14:45	06/29/16 17:30	0	14	06/30/16 14:45	1	14	
CHRL-O-04-160629 16F0096-09	06/29/16 11:45	06/29/16 14:45	06/29/16 17:30	0	14	06/30/16 15:11	1	14	
CHRL-O-05-160629 16F0096-10	06/29/16 11:35	06/29/16 14:45	06/29/16 17:30	0	14	06/30/16 15:37	1	14	
CHRL-N-01-160629 16F0096-11	06/29/16 11:25	06/29/16 14:45	06/30/16 09:02	1	14	06/30/16 09:02	1	14	
CHRL-N-02-160629 16F0096-12	06/29/16 11:35	06/29/16 14:45	06/30/16 09:22	1	14	06/30/16 09:22	1	14	
CHRL-N-03-160629 16F0096-13	06/29/16 11:45	06/29/16 14:45	06/30/16 09:43	1	14	06/30/16 09:43	1	14	
CHRL-N-04-160629 16F0096-14	06/29/16 11:55	06/29/16 14:45	06/30/16 10:03	1	14	06/30/16 10:03	1	14	
CHRL-N-05-160629 16F0096-15	06/29/16 11:20	06/29/16 14:45	06/30/16 10:24	1	14	06/30/16 10:24	1	14	
CHRL-Q-01-160629 16F0096-16	06/29/16 13:05	06/29/16 14:45	06/30/16 10:44	1	14	06/30/16 10:44	1	14	
CHRL-Q-02-160629 16F0096-17	06/29/16 12:55	06/29/16 14:45	06/30/16 11:05	1	14	06/30/16 11:05	1	14	
CHRL-Q-03-160629 16F0096-18	06/29/16 12:45	06/29/16 14:45	06/30/16 11:25	1	14	06/30/16 11:25	1	14	
CHRL-Q-04-160629 16F0096-19	06/29/16 12:35	06/29/16 14:45	06/30/16 11:46	1	14	06/30/16 11:46	1	14	
CHRL-Q-05-160629 16F0096-20	06/29/16 12:25	06/29/16 14:45	06/30/16 12:07	1	14	06/30/16 12:07	1	14	
CHRL-P-01-160629 16F0096-21	06/29/16 13:00	06/29/16 14:45	06/30/16 12:27	1	14	06/30/16 12:27	1	14	
CHRL-P-02-160629 16F0096-22	06/29/16 13:10	06/29/16 14:45	06/30/16 12:48	1	14	06/30/16 12:48	1	14	
CHRL-P-52-160629 16F0096-23	06/29/16 13:15	06/29/16 14:45	06/30/16 13:09	1	14	06/30/16 13:09	1	14	
CHRL-P-03-160629 16F0096-24	06/29/16 13:25	06/29/16 14:45	06/30/16 13:29	1	14	06/30/16 13:29	1	14	

Analytical Resources, Incorporated

HOLDING TIME SUMMARY

Analysis: NWTPHg

Laboratory: Analytical Resources, Inc. SDG: 16F0096

Client: Anchor QEA, LLC Project: CHRL SSWA

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
CHRL-P-04-160629 16F0096-25	06/29/16 12:25	06/29/16 14:45	06/30/16 13:50	1	14	06/30/16 13:50	1	14	
CHRL-P-05-160629 16F0096-26	06/29/16 12:20	06/29/16 14:45	06/30/16 14:10	1	14	06/30/16 14:10	1	14	
CHRL-R-02-160629 16F0096-27	06/29/16 13:45	06/29/16 14:45	06/30/16 14:31	1	14	06/30/16 14:31	1	14	
CHRL-R-03-160629 16F0096-28	06/29/16 13:50	06/29/16 14:45	06/30/16 14:52	1	14	06/30/16 14:52	1	14	
CHRL-R-04-160629 16F0096-29	06/29/16 13:30	06/29/16 14:45	06/30/16 15:12	1	14	06/30/16 15:12	1	14	
CHRL-TB-160629 16F0096-30	06/29/16 00:00	06/29/16 14:45	06/30/16 15:33	2	14	06/30/16 15:33	2	14	

* Indicates hold time exceedance.

Analytical Resources, Incorporated

METHOD DETECTION AND REPORTING LIMITS

NWTPHg

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Matrix: Solid
Instrument: NT2

Analyte	MDL	RL	Units
Gasoline Range Organics (Tol-Nap)	2500	5000	ug/kg

METHOD DETECTION AND REPORTING LIMITS

NWTPHg

Laboratory: Analytical Resources, Inc.
SDG: 16F0096
Client: Anchor QEA, LLC
Project: CHRL SSWA
Matrix: Solid
Instrument: NT3

Analyte	MDL	RL	Units
Gasoline Range Organics (Tol-Nap)	2500	5000	ug/kg

Analytical Resources, Incorporated

METHOD DETECTION AND REPORTING LIMITS

NWTPHg

Laboratory: Analytical Resources, Inc. SDG: 16F0096

Client: Anchor QEA, LLC Project: CHRL SSWA

Matrix: Water Instrument: NT2

Analyte	MDL	RL	Units
Gasoline Range Organics (Tol-Nap)	9.06	100	ug/L

Analytical Resources, Incorporated
Analytical Chemists and Consultants

12 July 2016

Cindy Fields
Anchor QEA, LLC
720 Olive Way, Suite 1900
Seattle, WA 98101

RE: CHRL SSWA

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)	Associated SDG ID(s)
16G0006	N/A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the reqirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, Inc.

Cheronne Oreiro, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ACCREDITED IN ACCORDANCE WITH nelac
Cert# 100006

PJLA Testing
Accreditation # 66169

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: ~~BCX5~~ 160006	Turn-around Requested: 2-DAY	Page: 1 of 1	
ARI Client Company: Anchor QEA	Phone: 206-326-8170	Date: 7/5/16	Ice Present? Y
Client Contact: Cindy Fields		No. of Coolers: 1	Cooler Temps: 4.3
Client Project Name: CHRL SSWA			
Client Project #: 150067-01.01	Samplers: RLG		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested: Total Solids	TPH-Dx	VOC's						Notes/Comments
CHRL-0-03A-160705	7/5/16	1710	Soil	5	X	X	X						
CHRL-0-04A-160705	7/5/16	1700		5	X	X	X						
CHRL-P-03A-160705	7/5/16	1645		5	X	X	X						
CHRL-TB-160705	7/5/16	1800	H2O	2		X	X						

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by (Signature)	Received by (Signature)
	Printed Name: Rick Goode	Printed Name: A. Volgardsen	Printed Name	Printed Name:
	Company: Anchor QEA	Company: ARI	Company:	Company:
	Date & Time: 7/6/16 07:15	Date & Time: 7/6/16 715	Date & Time	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: ARCNOV

Project Name: CHRL SSWIA

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: 166D026

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 4.3

Time: _____

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: D005276

Cooler Accepted by: AV Date: 7/6/16 Time: 715

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		(YES)	NO
What kind of packing material was used? ... Bubble Wrap (Wet Ice) Gel Packs (Baggies) Foam Block Paper Other: _____			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		(YES)	NO
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	(NA)	YES	NO
Were all VOC vials free of air bubbles?	NA	(YES)	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	NA	6/29/16	

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

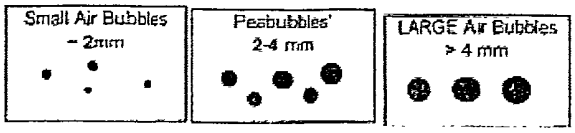
Samples Logged by: AV Date: 7/6/16 Time: 743

*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm" (< 2 mm)

Peabubbles → "pb" (2 to < 4 mm)

Large → "lg" (4 to < 6 mm)

Headspace → "hs" (> 6 mm)

Anchor QEA, LLC	Project: CHRL SSWA	
720 Olive Way, Suite 1900	Project Number: 150067-01.01	**Reported:**
Seattle WA, 98101	Project Manager: Cindy Fields	12-Jul-2016 12:16

Case Narrative

Sample Receipt

Three soil samples and a trip blank trip blank were received on July 6, 2016. The cooler temperature measured by IR thermometer following ARI SOP was 4.3ºC. For further details regarding sample receipt, please refer to the Cooler Receipt Form.

Volatiles by SW8260C

The samples were analyzed outside method recommended holding times.

Initial calibrations and initial calibration verifications were within method requirements. Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blanks were clean at the reporting limits. The LCS and LCSD percent recoveries were within control limits.

NWTPH-Gx

The samples were analyzed within method recommended holding times.

Initial calibrations, initial calibration verifications, and continuing calibration verifications were within method requirements. Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blanks were clean at the reporting limits. The LCS and LCSD percent recoveries were within control limits.

Anchor QEA, LLC	Project: CHRL SSWA	
720 Olive Way, Suite 1900	Project Number: 150067-01.01	**Reported:**
Seattle, WA 98101	Project Manager: Cindy Fields	07/12/2016 12:16

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CHRL-O-03A-160705	16G0006-01	Solid	07/05/16 17:10	07/06/16 07:15
CHRL-O-04A-160705	16G0006-02	Solid	07/05/16 17:00	07/06/16 07:15
CHRL-P-03A-160705	16G0006-03	Solid	07/05/16 16:45	07/06/16 07:15
CHRL-TB-160705	16G0006-04	Water	07/05/16 00:00	07/06/16 07:15

Analytical Resources, Incorporated

QUALIFIERS AND NOTES

Qualifier	Definition
U	This analyte is not detected above the applicable reporting or detection limit.
J	Estimated concentration value detected below the reporting limit.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

CHRL-O-03A-160705

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16G0006
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16G0006-01	File ID:	07071617.D
Sampled:	07/05/16 17:10	Prepared:	07/07/16 09:52	Analyzed:	07/07/16 18:34
Solids:	92.87	Preparation:	No Prep - Volatiles	Initial/Final:	4.74 g / 5 g
Batch:	BEG0040	Sequence:	SEG0027	Calibration:	ZG00011
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	54.8		0.27	1.14
74-83-9	Bromomethane	1	1.14	U	0.21	1.14
156-59-2	cis-1,2-Dichloroethene	1	1.76		0.27	1.14
71-43-2	Benzene	1	1.14	U	0.34	1.14
79-01-6	Trichloroethene	1	1.14	U	0.24	1.14
108-88-3	Toluene	1	0.33	J	0.17	1.14
127-18-4	Tetrachloroethene	1	1.14	U	0.29	1.14
100-41-4	Ethylbenzene	1	1.14	U	0.23	1.14
179601-23-1	m,p-Xylene	1	1.14	U	0.45	1.14
95-47-6	o-Xylene	1	1.14	U	0.25	1.14

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	52.4	105	80 - 149	
1,2-Dichlorobenzene-d4	50.000	51.5	103	80 - 120	
Toluene-d8	50.000	49.7	99.5	77 - 120	
4-Bromofluorobenzene	50.000	48.8	97.7	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160707.b\07071617.D

Date : 07-JUL-2016 18:34

Client ID:

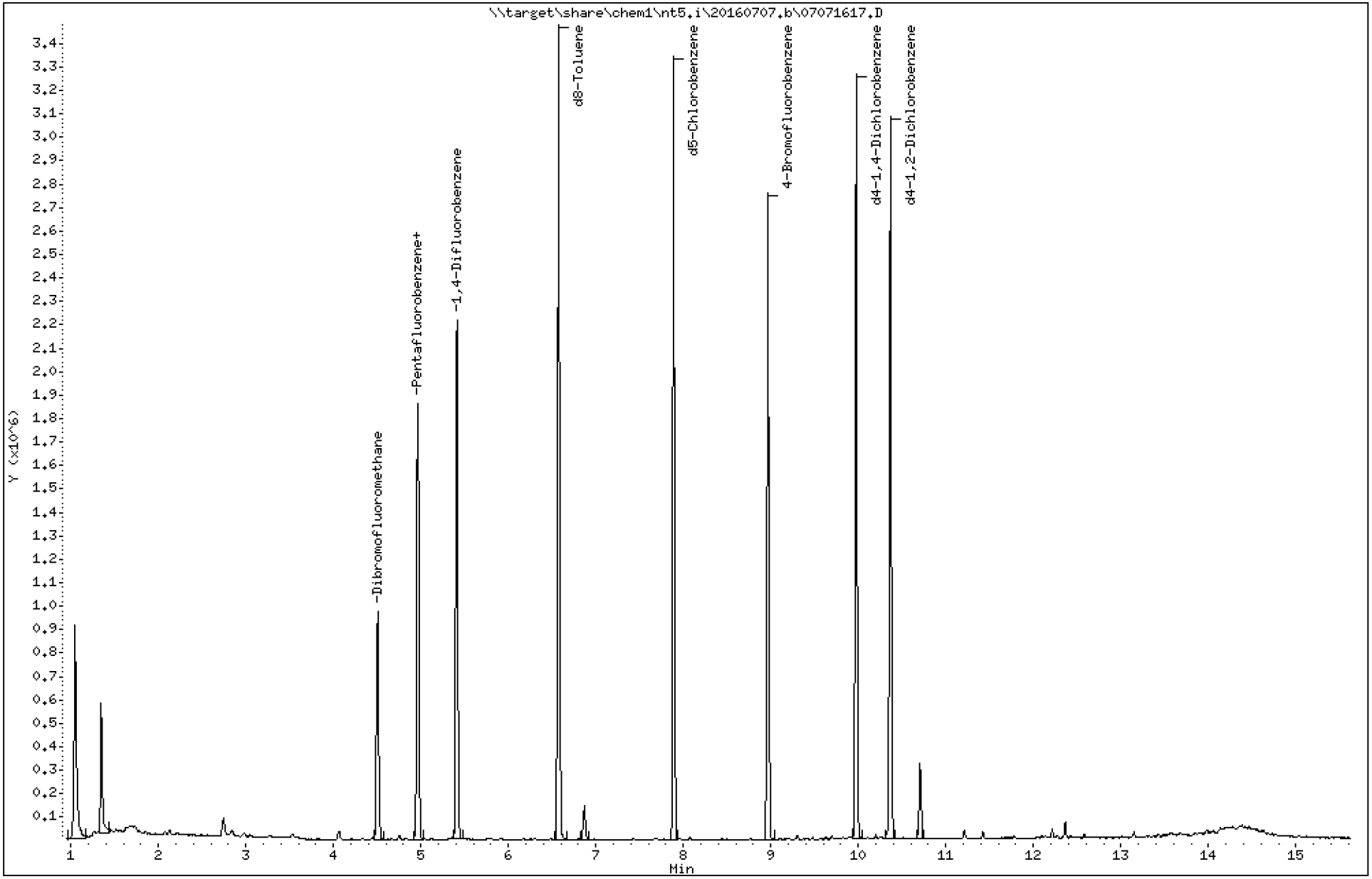
Sample Info: 16G0006-01

Instrument: nt5.i

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



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Date : 07-JUL-2016 18:34

Client ID:

Instrument: nt5.i

Sample Info: 16G0006-01

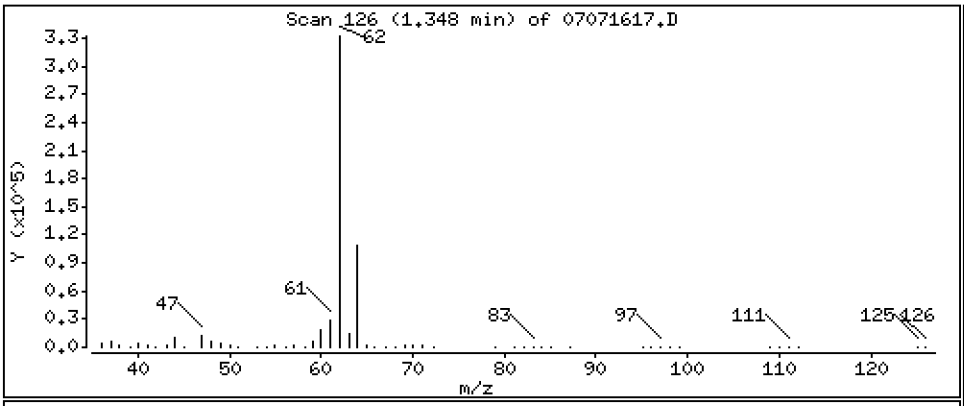
Operator: PB

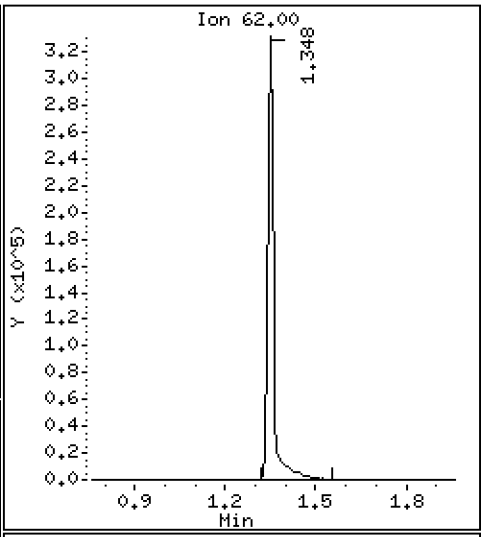
Column phase: RTXVMS

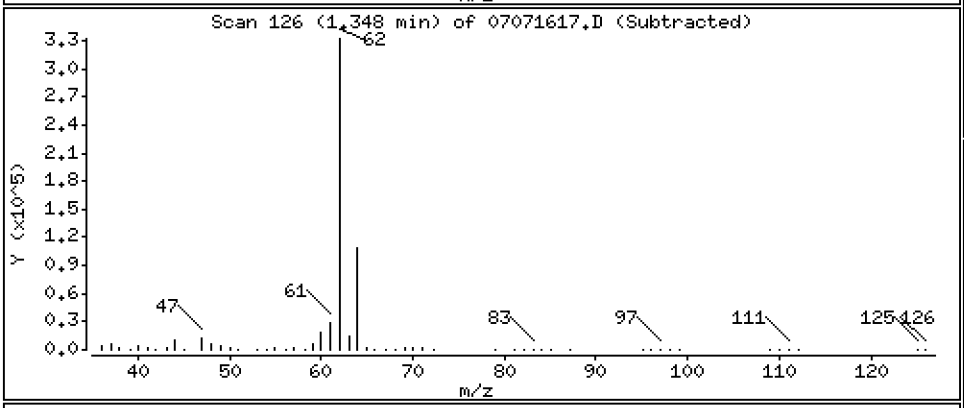
Column diameter: 0.18

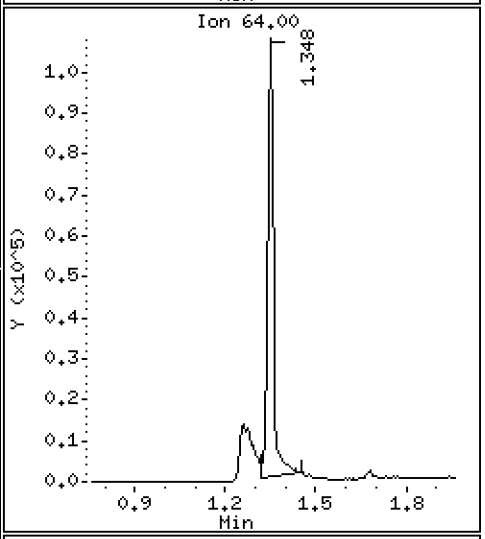
3 Vinyl Chloride

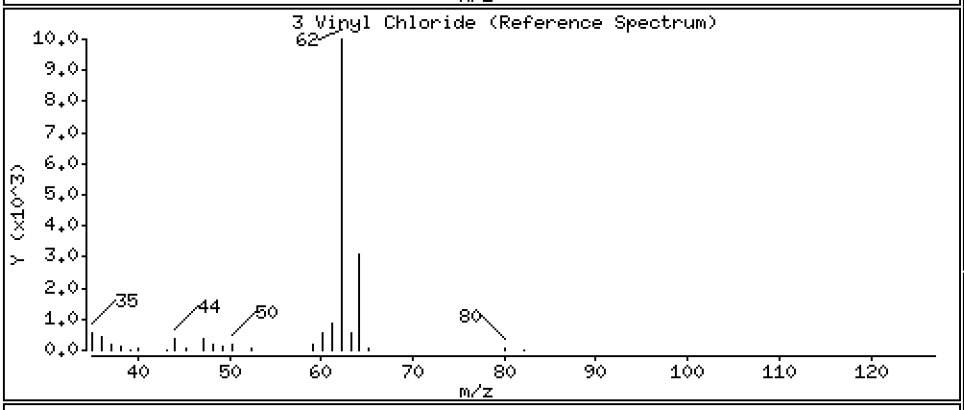
Concentration: 48.262 ug/Kg

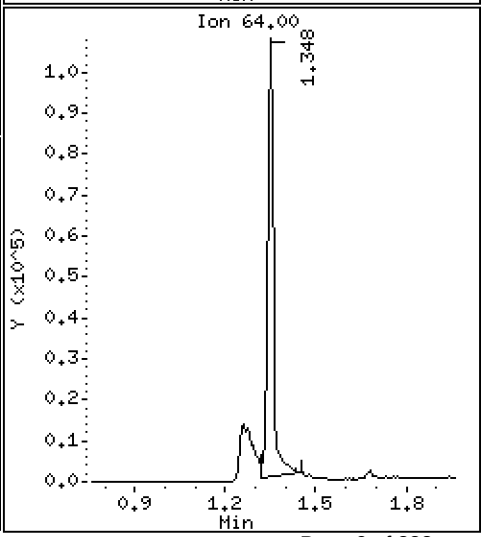


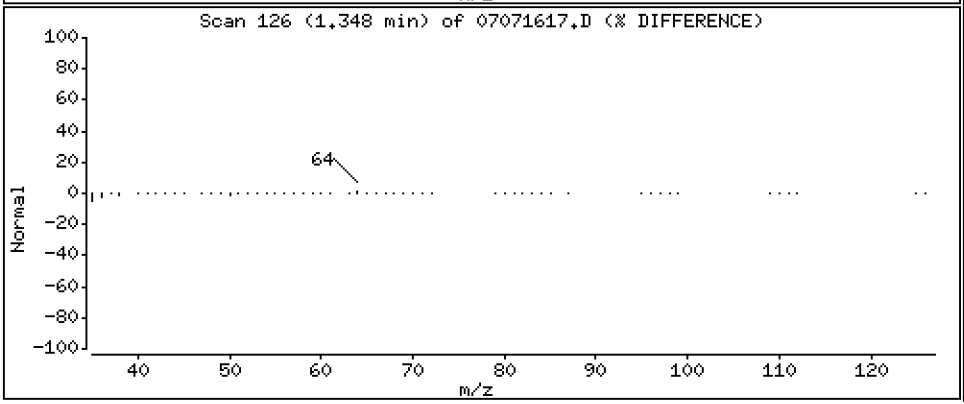












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Date : 07-JUL-2016 18:34

Client ID:

Instrument: nt5.i

Sample Info: 16G0006-01

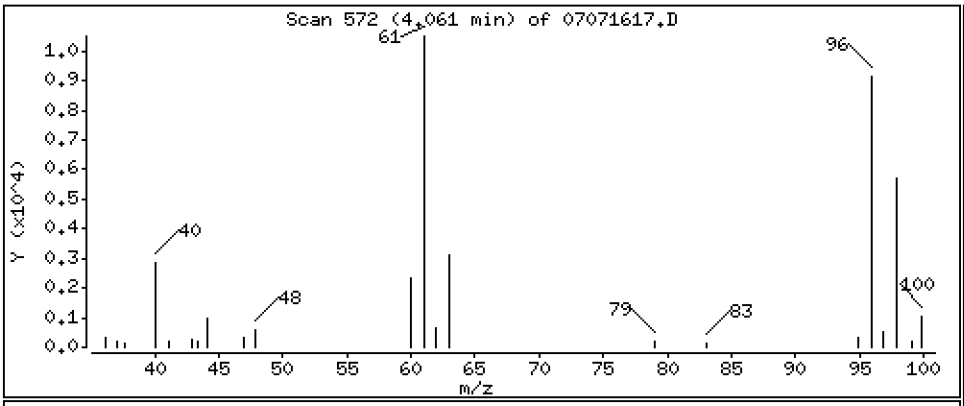
Operator: PB

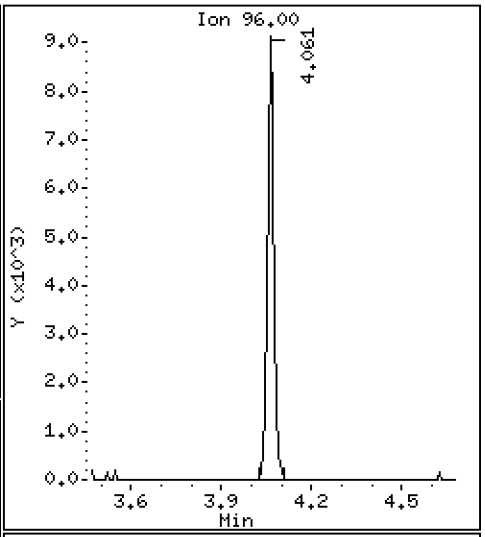
Column phase: RTXVMS

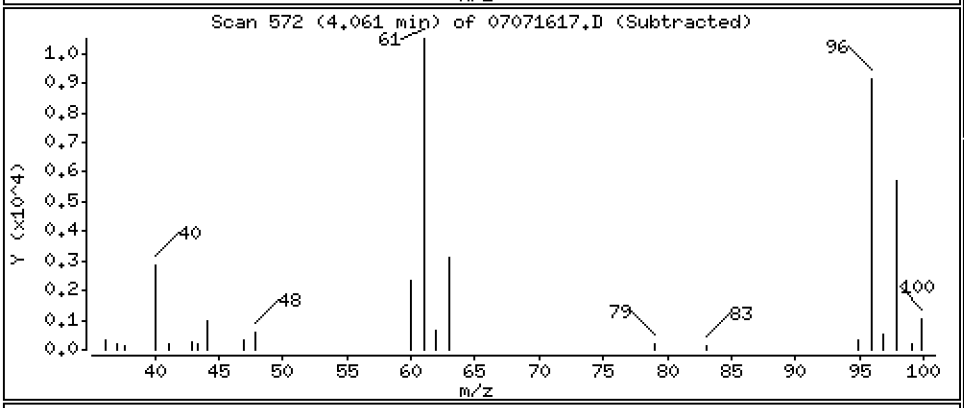
Column diameter: 0.18

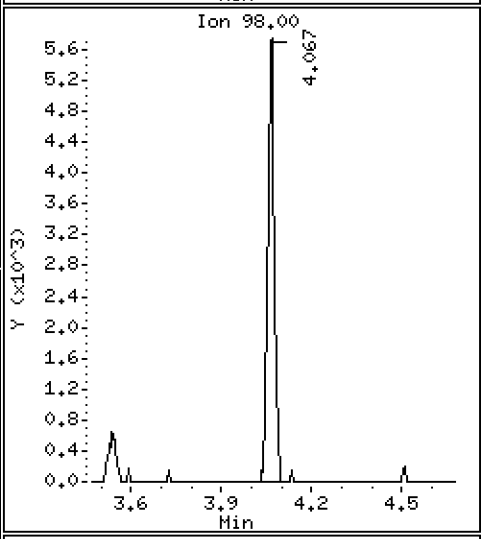
20 Cis-1,2-Dichloroethene

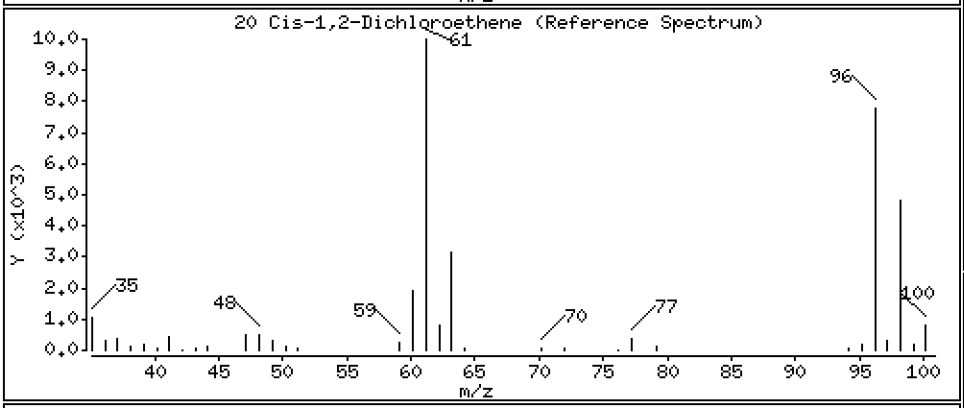
Concentration: 1.545 ug/Kg

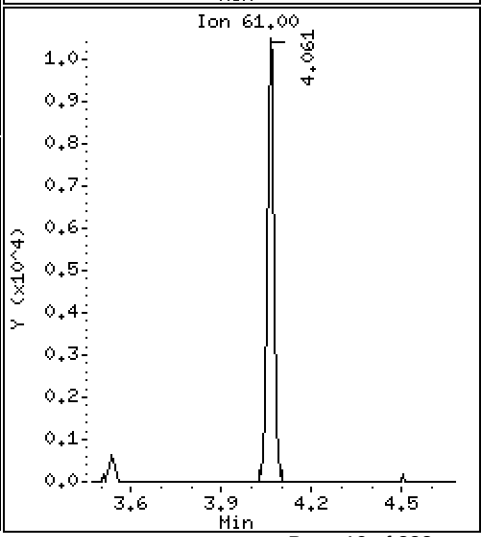


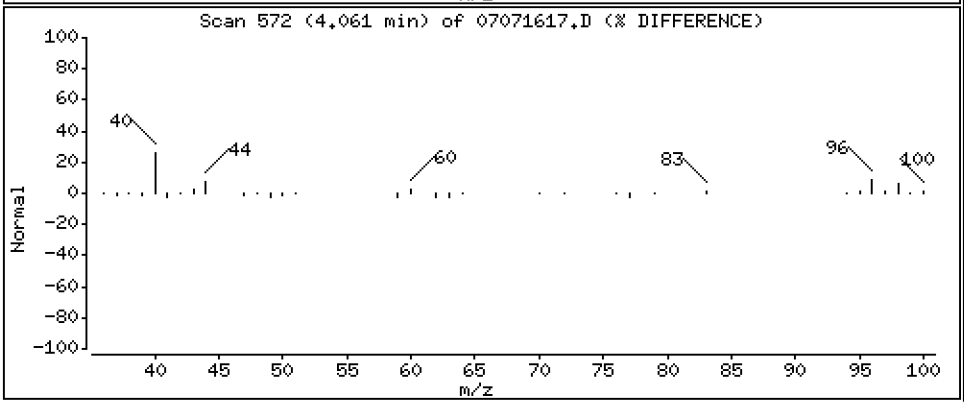












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Date : 07-JUL-2016 18:34

Client ID:

Instrument: nt5.i

Sample Info: 16G0006-01

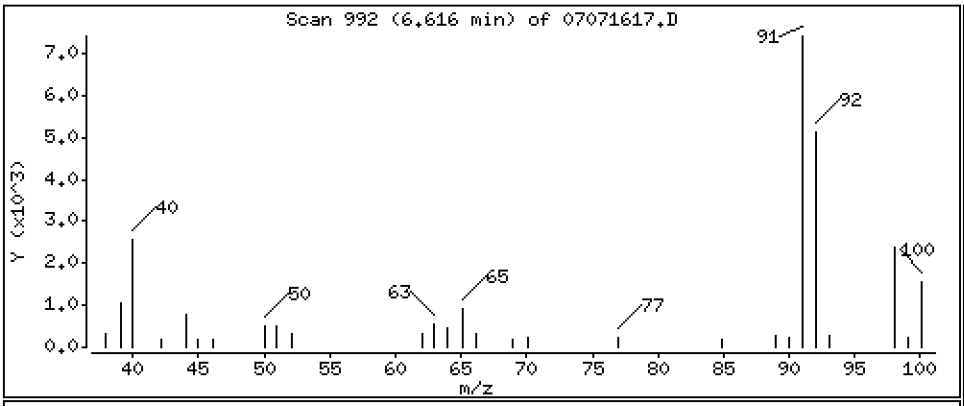
Operator: PB

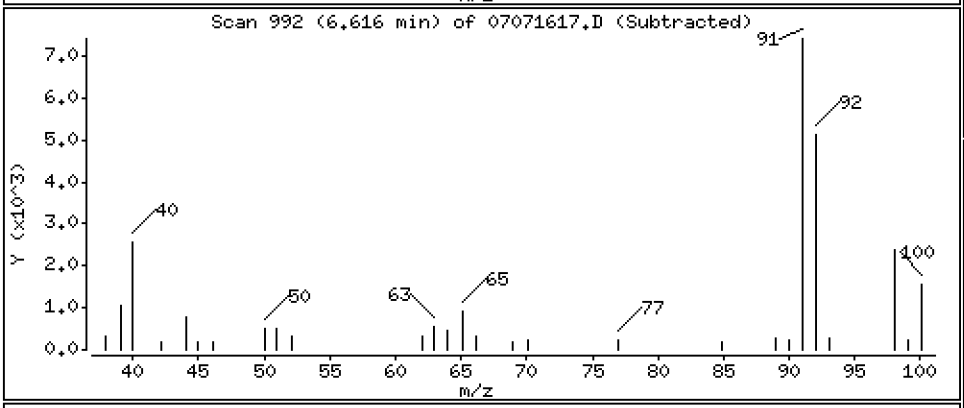
Column phase: RTXVMS

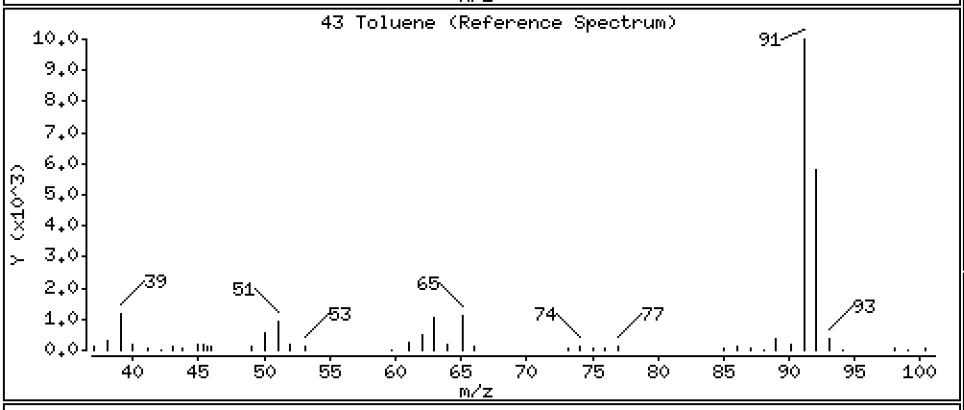
Column diameter: 0.18

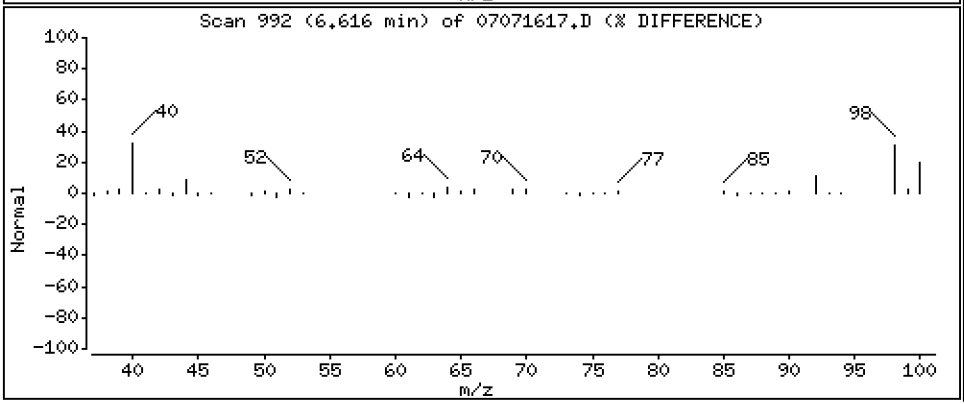
43 Toluene

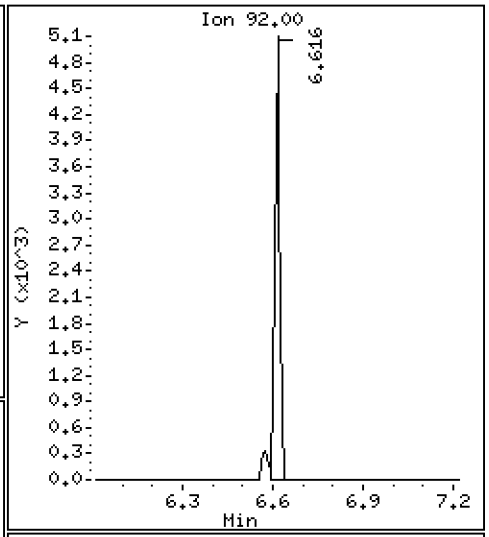
Concentration: 0.2927 ug/Kg

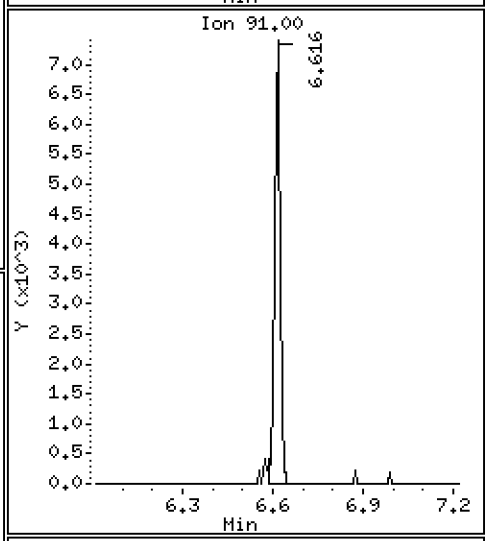


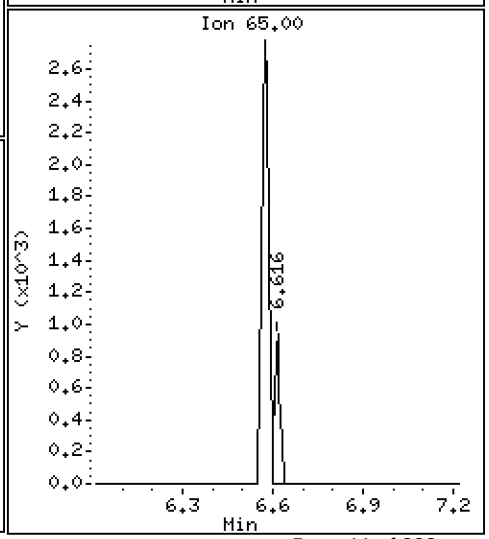












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071617.D
Lab Smp Id: 16G0006-01
Inj Date : 07-JUL-2016 18:34
Operator : PB Inst ID: nt5.i
Smp Info : 16G0006-01
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 13:44 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 13:37 Cal File: 07071610.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	Compound Not Detected.					
3 Vinyl Chloride	62	1.347	1.359	(0.272)	469567	48.2625	48.262
4 Bromomethane	94	Compound Not Detected.					
5 Chloroethane	64	Compound Not Detected.					
6 Trichlorofluoromethane	101	Compound Not Detected.					
7 1,1-Dichloroethene	96	Compound Not Detected.					
8 Carbon Disulfide	76	Compound Not Detected.					
9 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10 Iodomethane	142	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Acrolein	56	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acetone	43	Compound Not Detected.					
15 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16 Methyl tert butyl ether	73	Compound Not Detected.					
17 1,1-Dichloroethane	63	Compound Not Detected.					
18 Acrylonitrile	53	Compound Not Detected.					
19 Vinyl Acetate	43	Compound Not Detected.					
20 Cis-1,2-Dichloroethene	96	4.061	4.073	(0.819)	15075	1.54536	1.545
22 2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.505	4.511	(0.908)	512377	51.4101	51.410
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.961	4.967	(1.000)	572527	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.967	4.967	(1.001)	517885	52.3736	52.374
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.411	5.411	(1.000)	1567255	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.573	6.573	(1.215)	1870575	49.7353	49.735
	43 Toluene	92	6.616	6.616	(1.223)	6763	0.29271	0.2927
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1558381	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	780370	48.8320	48.832
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	733906	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.363	10.369	(1.039)	732246	51.4809	51.481
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071617.D
Lab Smp Id: 16G0006-01
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	572527	1.87
35 1,4-Difluorobenze	1551589	775795	3103178	1567255	1.01
52 d5-Chlorobenzene	1542777	771389	3085554	1558381	1.01
76 d4-1,4-Dichlorobe	775053	387527	1550106	733906	-5.31

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.96	-0.12
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	0.00
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 08-Jul-2016 13:45

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16G0006-01
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	51.410	102.82	70-130
$ 32 d4-1,2-Dichloroeth	50.000	52.374	104.75	80-149
$ 42 d8-Toluene	50.000	49.735	99.47	77-120
$ 62 4-Bromofluorobenze	50.000	48.832	97.66	80-120
$ 79 d4-1,2-Dichloroben	50.000	51.481	102.96	80-120

REVIEW SUMMARY FOR FILE - 07071617.D

Lab ID: 16G0006-01
nt5.i, 20160707.b\VO051314S.m,   07-JUL-2016 18:34

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-O-04A-160705

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16G0006
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16G0006-02	File ID:	07071618.D
Sampled:	07/05/16 17:00	Prepared:	07/07/16 09:52	Analyzed:	07/07/16 18:57
Solids:	94.03	Preparation:	No Prep - Volatiles	Initial/Final:	4.25 g / 5 g
Batch:	BEG0040	Sequence:	SEG0027	Calibration:	ZG00011
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	26.6		0.29	1.25
74-83-9	Bromomethane	1	1.25	U	0.23	1.25
156-59-2	cis-1,2-Dichloroethene	1	99.7		0.30	1.25
71-43-2	Benzene	1	1.25	U	0.37	1.25
79-01-6	Trichloroethene	1	6.33		0.27	1.25
108-88-3	Toluene	1	0.58	J	0.19	1.25
127-18-4	Tetrachloroethene	1	1.25	U	0.32	1.25
100-41-4	Ethylbenzene	1	1.25	U	0.25	1.25
179601-23-1	m,p-Xylene	1	1.25	U	0.49	1.25
95-47-6	o-Xylene	1	1.25	U	0.28	1.25

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	52.8	106	80 - 149	
1,2-Dichlorobenzene-d4	50.000	50.7	101	80 - 120	
Toluene-d8	50.000	50.0	99.9	77 - 120	
4-Bromofluorobenzene	50.000	49.2	98.4	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160707.b\07071618.D

Date : 07-JUL-2016 18:57

Client ID:

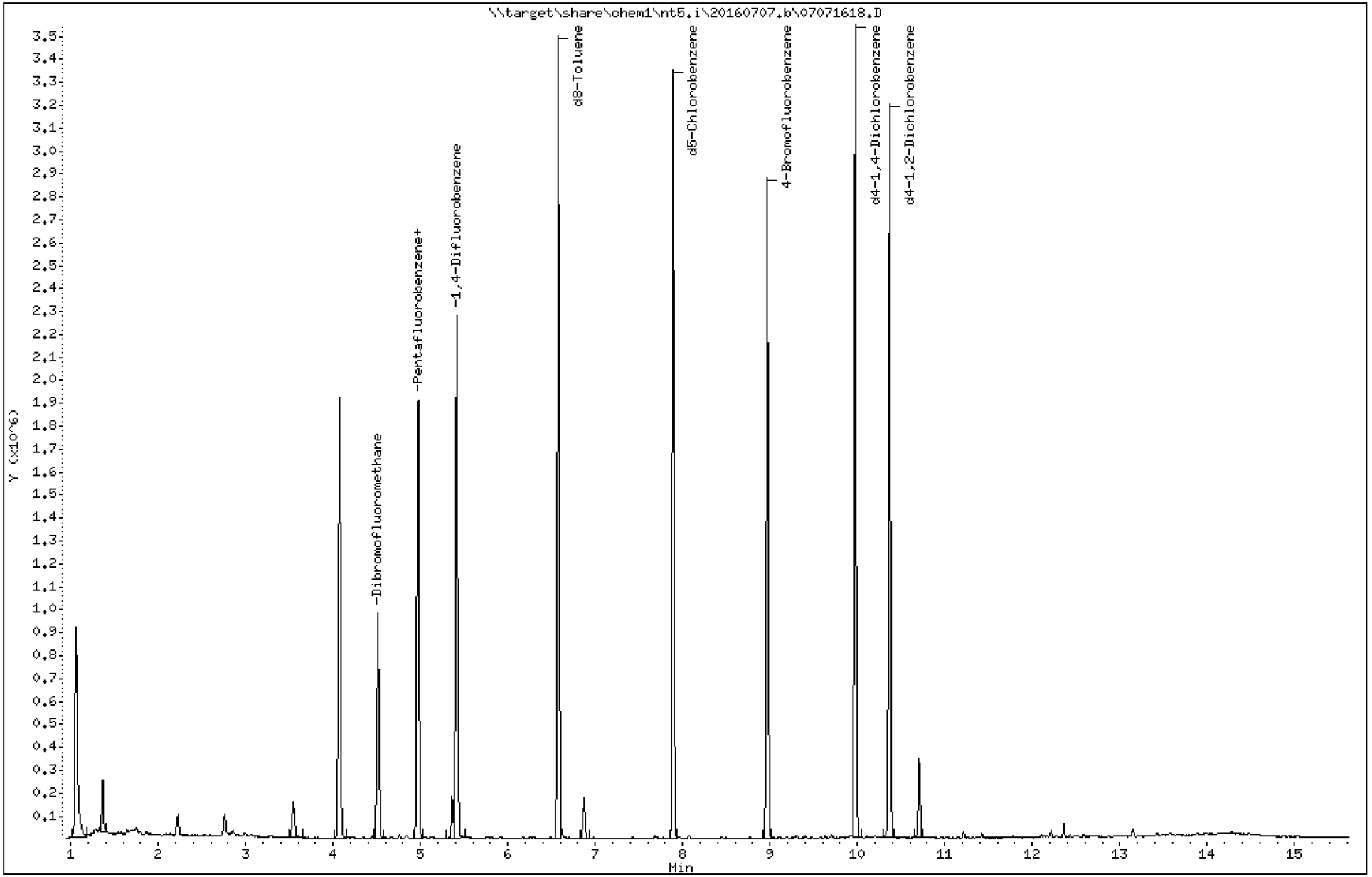
Sample Info: 16G0006-02

Column phase: RTXVMS

Instrument: nt5.i

Operator: PB

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160707.b\07071618.D

Date : 07-JUL-2016 18:57

Client ID:

Instrument: nt5.i

Sample Info: 16G0006-02

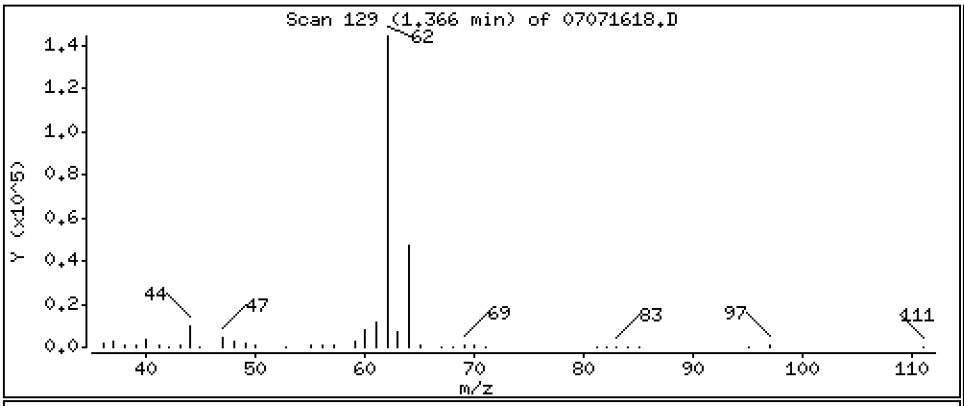
Operator: PB

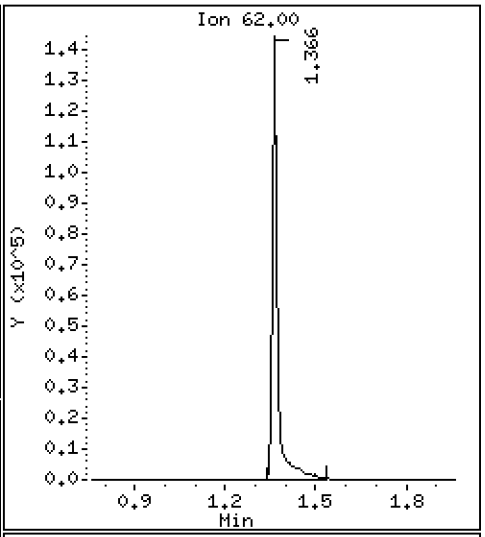
Column phase: RTXVMS

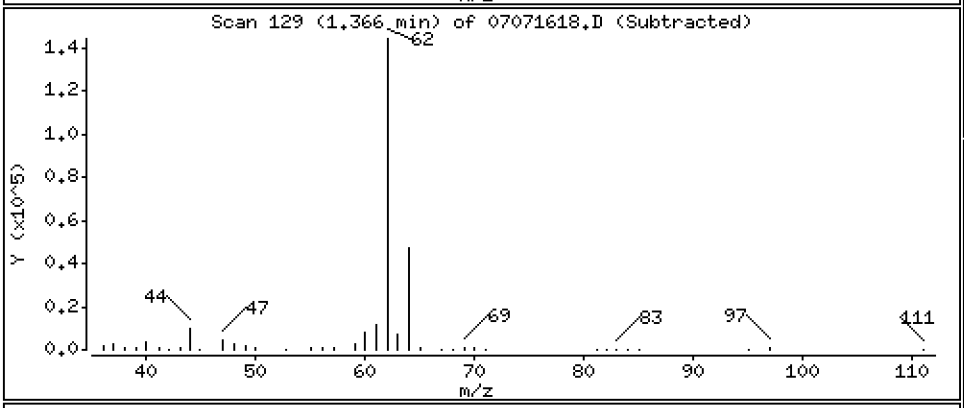
Column diameter: 0.18

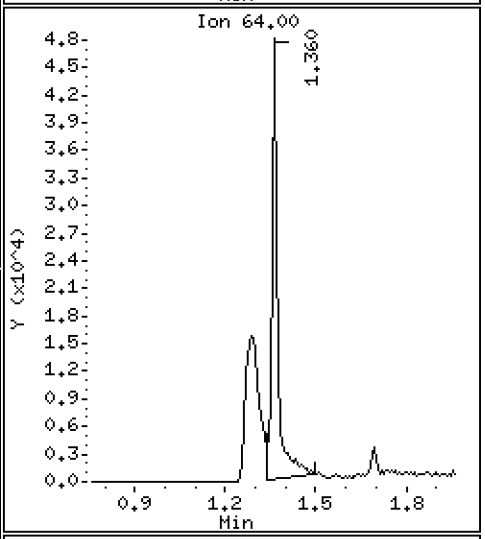
3 Vinyl Chloride

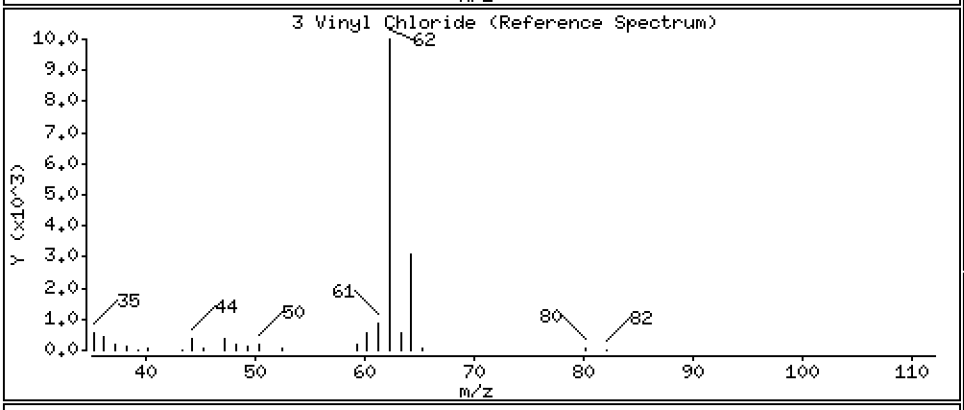
Concentration: 21.224 ug/Kg

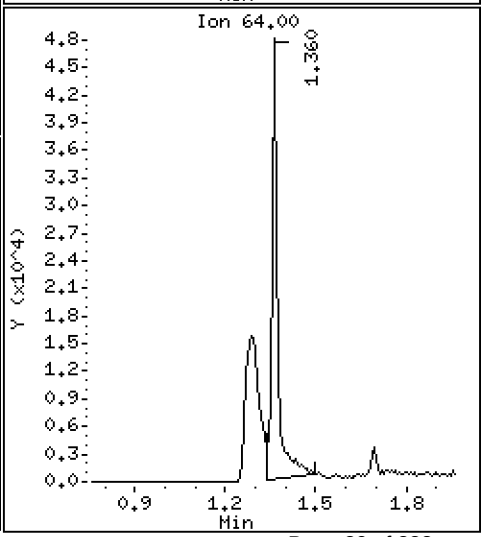


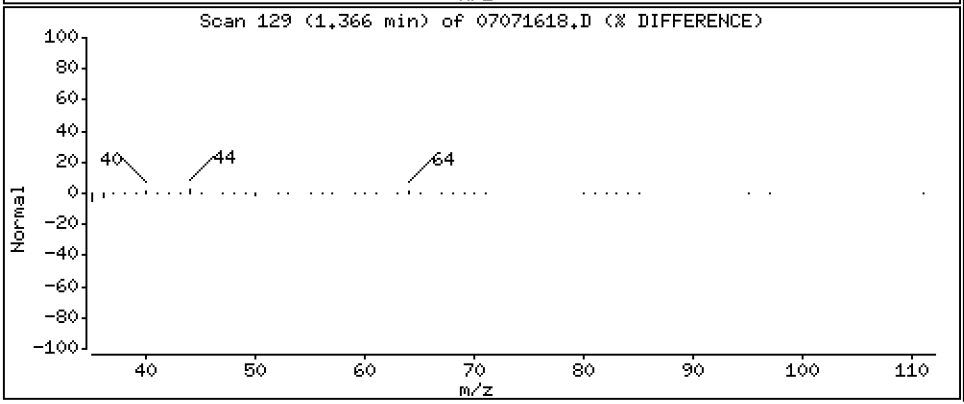












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Date : 07-JUL-2016 18:57

Client ID:

Instrument: nt5.i

Sample Info: 16G0006-02

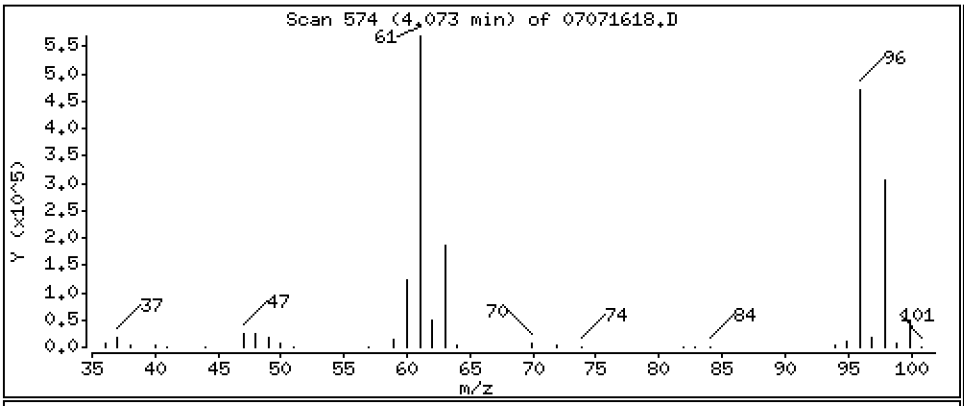
Operator: PB

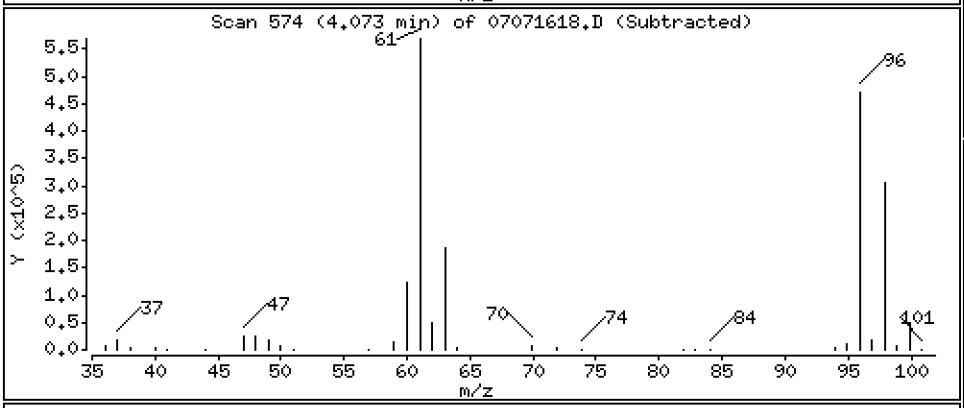
Column phase: RTXVMS

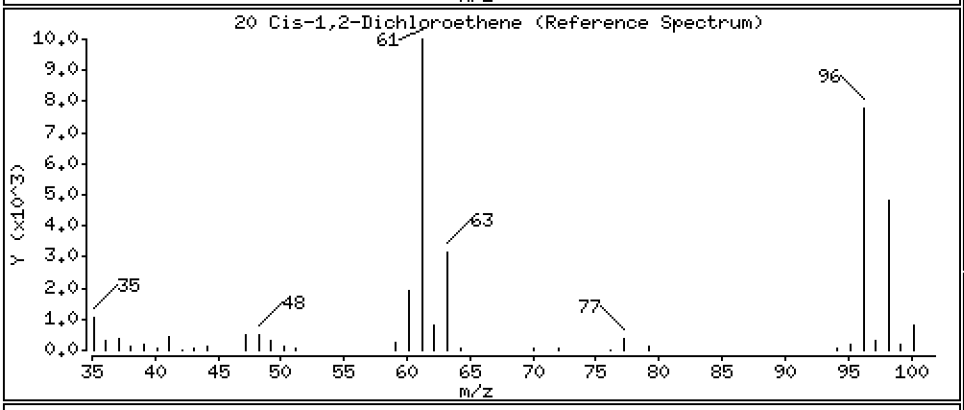
Column diameter: 0.18

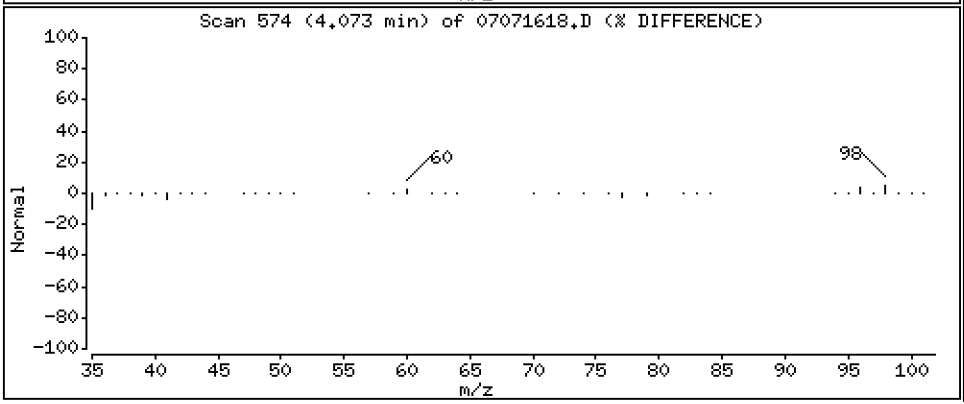
20 Cis-1,2-Dichloroethene

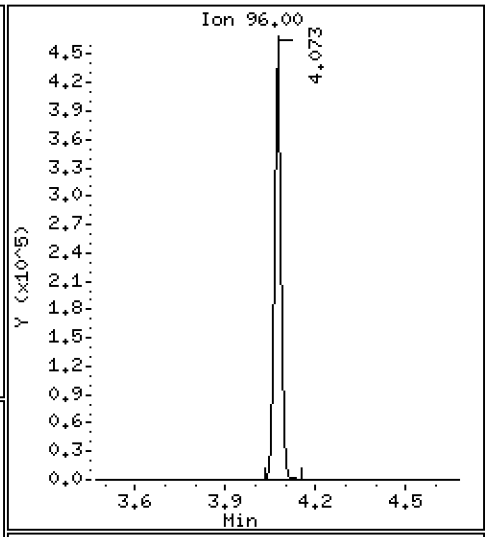
Concentration: 79.680 ug/Kg

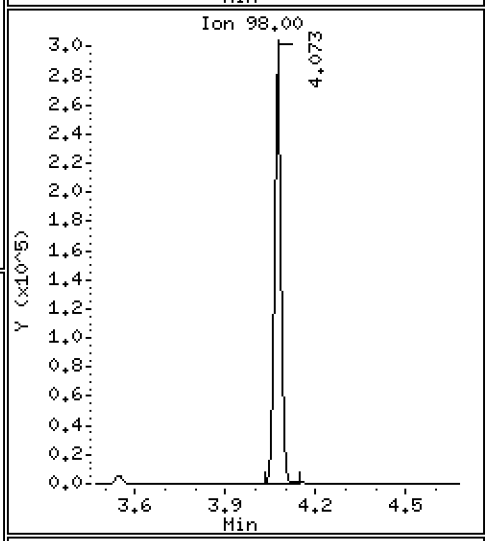


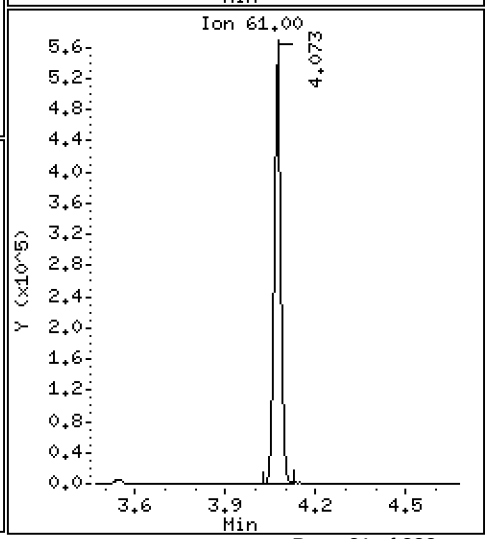












Data File: \\target\share\chem1\nt5.i\20160707.b\07071618.D

Date : 07-JUL-2016 18:57

Client ID:

Instrument: nt5.i

Sample Info: 16G0006-02

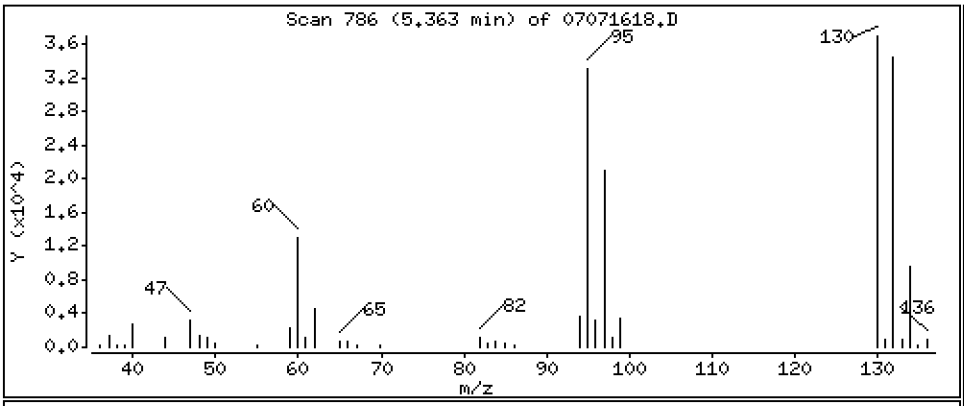
Operator: PB

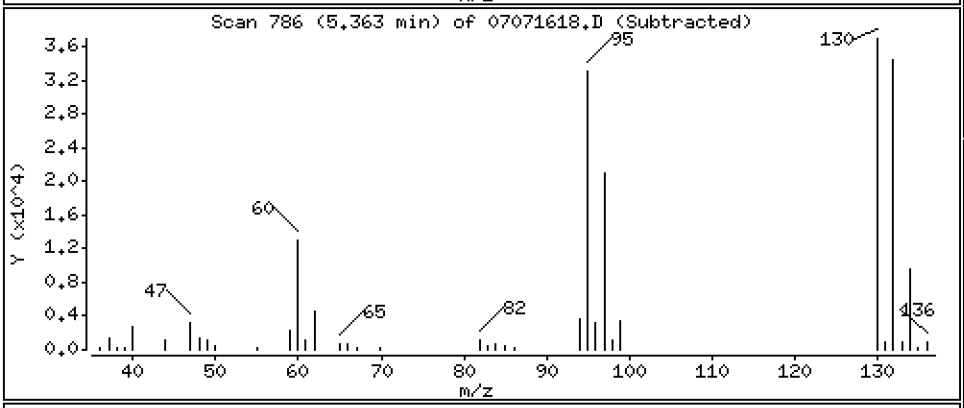
Column phase: RTXVMS

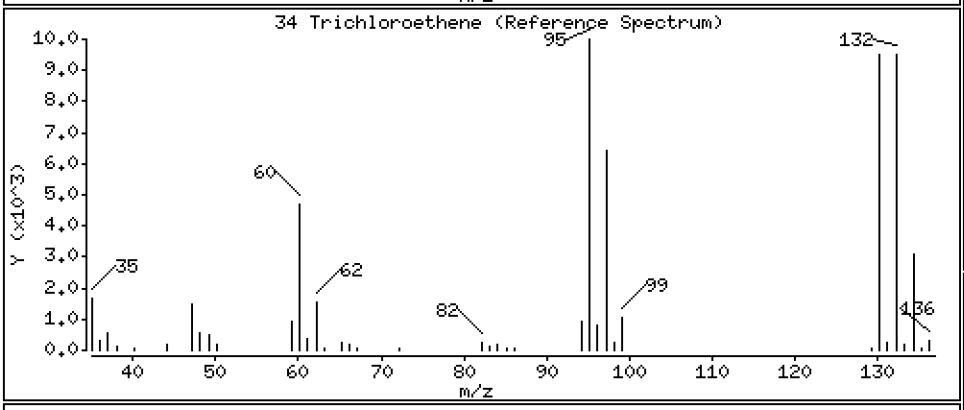
Column diameter: 0.18

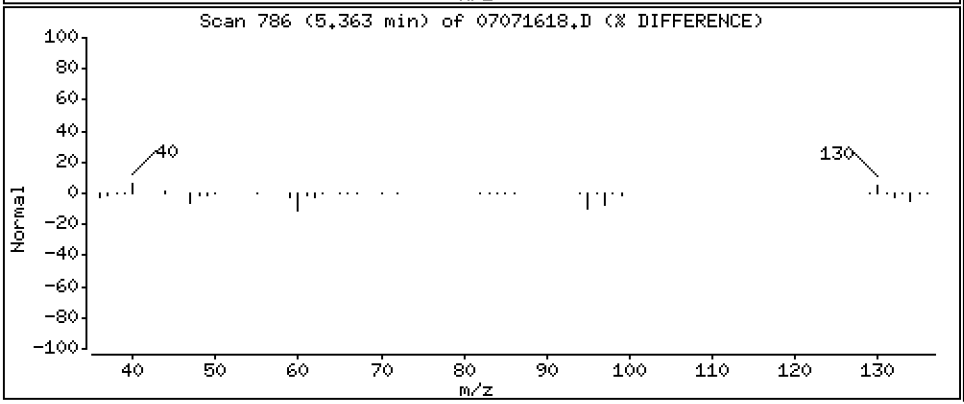
34 Trichloroethene

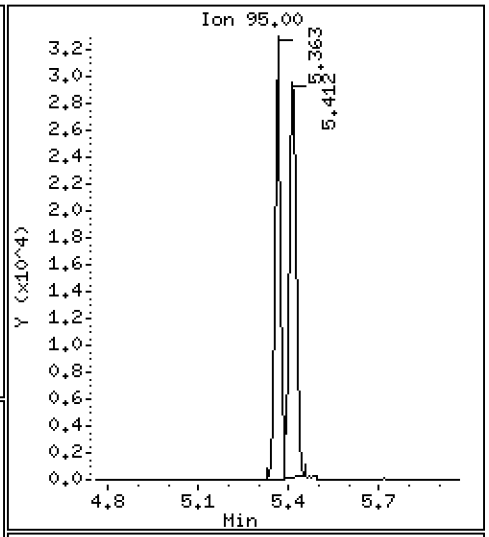
Concentration: 5.059 ug/Kg

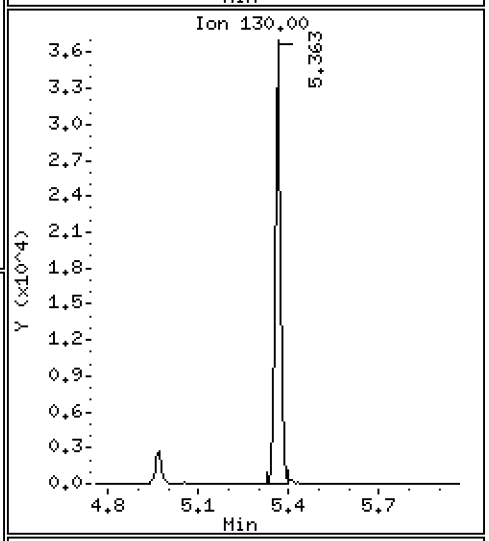


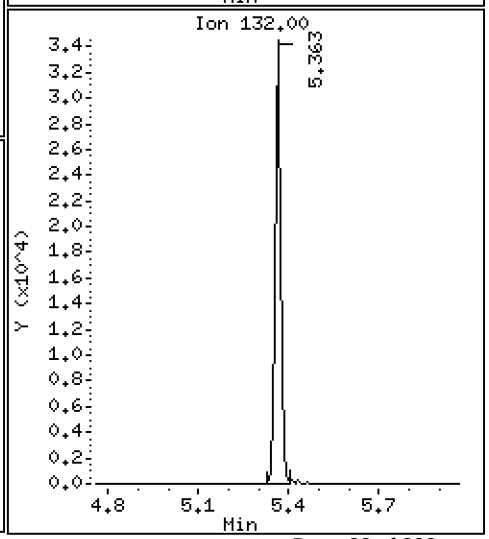












Data File: \\target\share\chem1\nt5.i\20160707.b\07071618.D

Date : 07-JUL-2016 18:57

Client ID:

Instrument: nt5.i

Sample Info: 16G0006-02

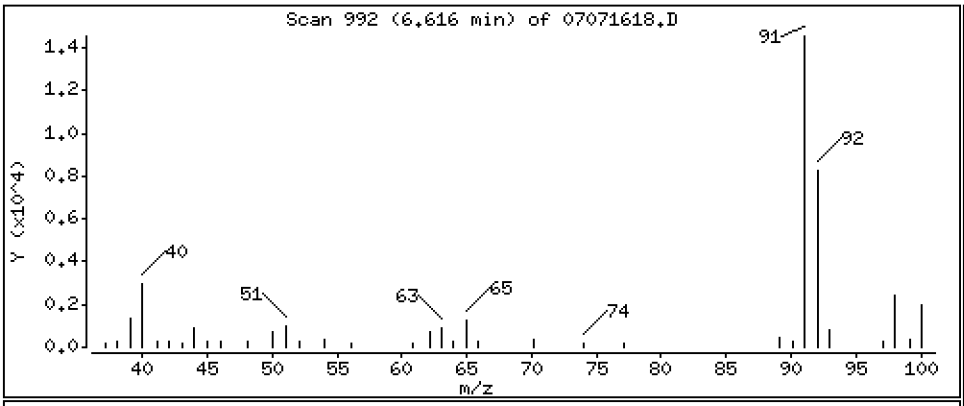
Operator: PB

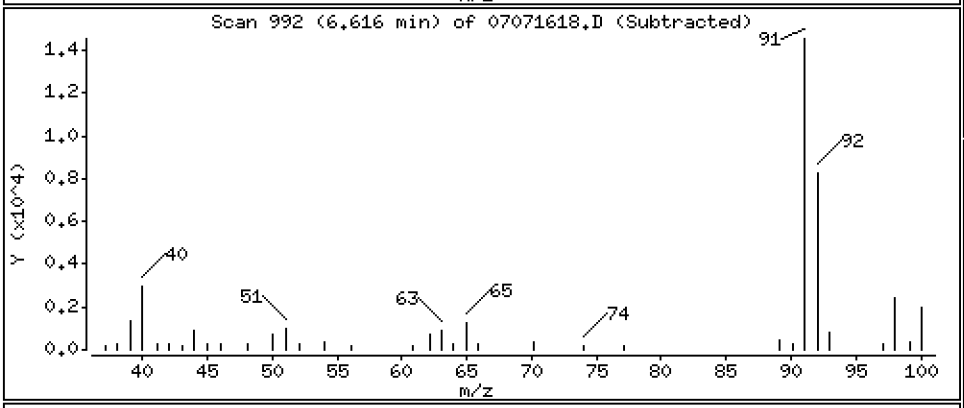
Column phase: RTXVMS

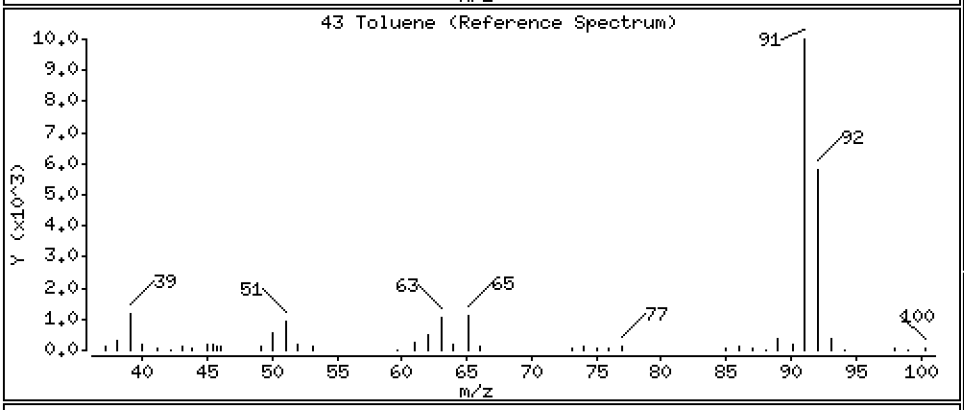
Column diameter: 0.18

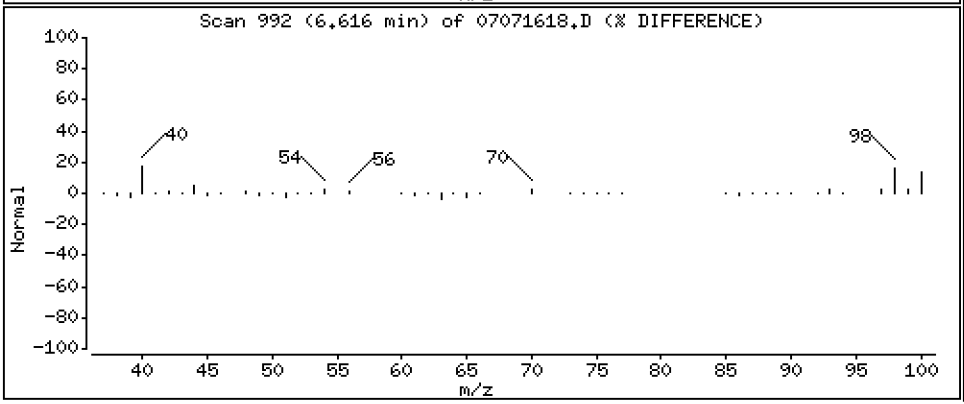
43 Toluene

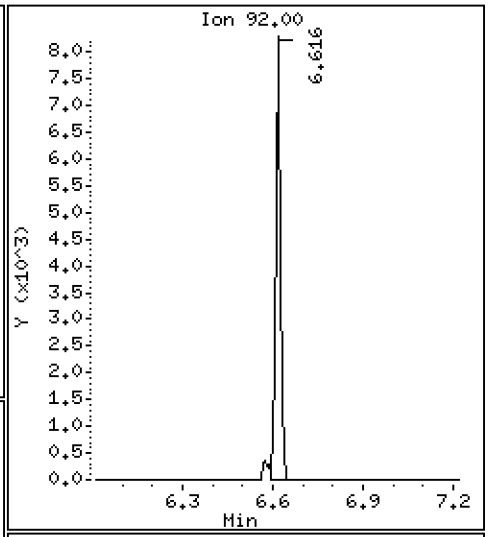
Concentration: 0.4633 ug/Kg

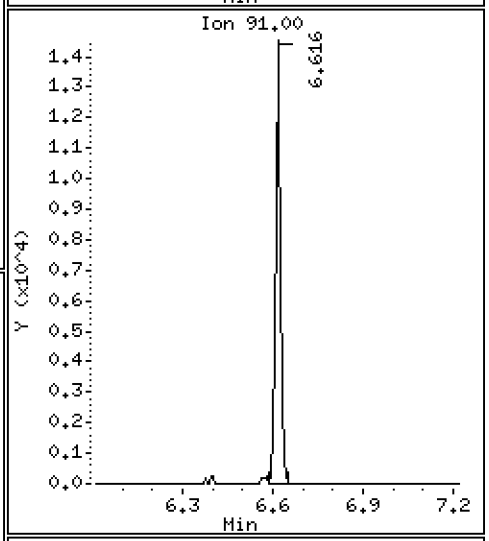


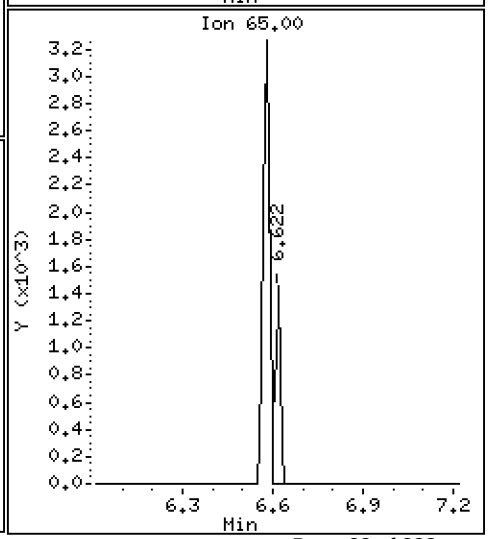












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071618.D
Lab Smp Id: 16G0006-02
Inj Date : 07-JUL-2016 18:57
Operator : PB Inst ID: nt5.i
Smp Info : 16G0006-02
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 13:44 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 13:37 Cal File: 07071610.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	1.365	1.359	(0.275)	214119	21.2242	21.224
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.073	4.073	(0.820)	805956	79.6797	79.680
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.511	4.511	(0.908)	524358	50.7399	50.740
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.967	4.967	(1.000)	593653	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.973	4.967	(1.001)	541338	52.7972	52.797
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.362	5.362	(0.990)	49079	5.05901	5.059
*	35 1,4-Difluorobenzene	114	5.417	5.411	(1.000)	1628342	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.573	6.573	(1.213)	1952504	49.9661	49.966
	43 Toluene	92	6.616	6.616	(1.221)	11123	0.46335	0.4633
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1629838	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	822321	49.2011	49.201
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	795559	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.369	10.369	(1.040)	781012	50.6542	50.654
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071618.D
Lab Smp Id: 16G0006-02
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	593653	5.63
35 1,4-Difluorobenze	1551589	775795	3103178	1628342	4.95
52 d5-Chlorobenzene	1542777	771389	3085554	1629838	5.64
76 d4-1,4-Dichlorobe	775053	387527	1550106	795559	2.65

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.97	-0.00
35 1,4-Difluorobenze	5.41	4.91	5.91	5.42	0.11
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	-0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 08-Jul-2016 13:45

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16G0006-02
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	50.740	101.48	70-130
$ 32 d4-1,2-Dichloroeth	50.000	52.797	105.59	80-149
$ 42 d8-Toluene	50.000	49.966	99.93	77-120
$ 62 4-Bromofluorobenze	50.000	49.201	98.40	80-120
$ 79 d4-1,2-Dichloroben	50.000	50.654	101.31	80-120

REVIEW SUMMARY FOR FILE - 07071618.D

Lab ID: 16G0006-02
nt5.i, 20160707.b\VO051314S.m,   07-JUL-2016 18:57

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-P-03A-160705

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA Solid

Laboratory:	Analytical Resources, Inc.			SDG:	16G0006
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16G0006-03	File ID:	07071619.D
Sampled:	07/05/16 16:45	Prepared:	07/07/16 09:52	Analyzed:	07/07/16 19:19
Solids:	91.96	Preparation:	No Prep - Volatiles	Initial/Final:	5.32 g / 5 g
Batch:	BEG0040	Sequence:	SEG0027	Calibration:	ZG00011
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
75-01-4	Vinyl Chloride	1	31.3		0.24	1.02
74-83-9	Bromomethane	1	1.02	U	0.19	1.02
156-59-2	cis-1,2-Dichloroethene	1	61.6		0.25	1.02
71-43-2	Benzene	1	1.02	U	0.30	1.02
79-01-6	Trichloroethene	1	7.91		0.22	1.02
108-88-3	Toluene	1	0.80	J	0.15	1.02
127-18-4	Tetrachloroethene	1	1.02	U	0.26	1.02
100-41-4	Ethylbenzene	1	1.02	U	0.21	1.02
179601-23-1	m,p-Xylene	1	1.02	U	0.40	1.02
95-47-6	o-Xylene	1	1.02	U	0.23	1.02

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	52.5	105	80 - 149	
1,2-Dichlorobenzene-d4	50.000	51.4	103	80 - 120	
Toluene-d8	50.000	50.0	100	77 - 120	
4-Bromofluorobenzene	50.000	49.4	98.9	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160707.b\07071619.D

Date : 07-JUL-2016 19:19

Client ID:

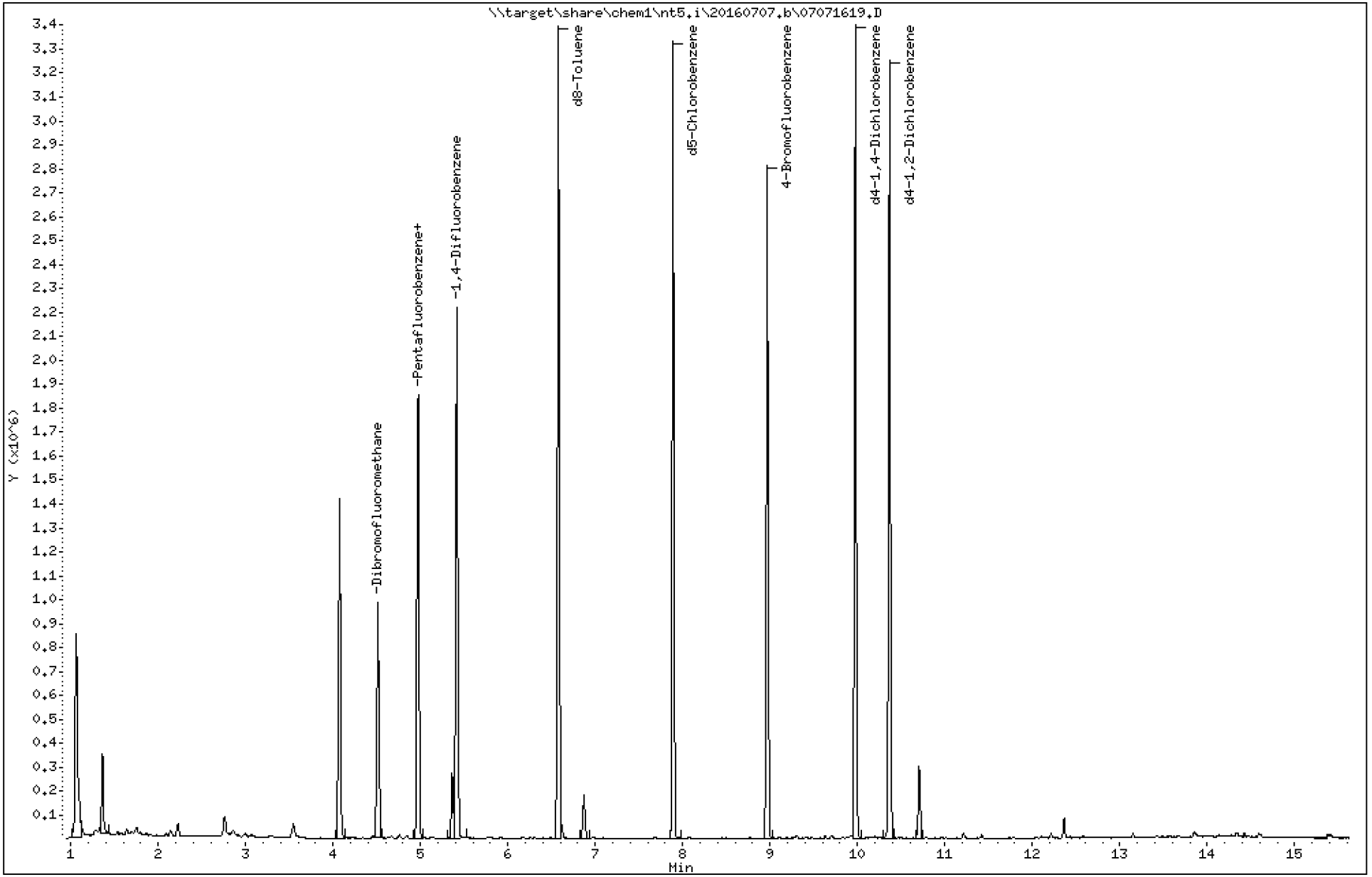
Sample Info: 16G0006-03

Column phase: RTXVMS

Instrument: nt5.i

Operator: PB

Column diameter: 0.18



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Date : 07-JUL-2016 19:19

Client ID:

Instrument: nt5.i

Sample Info: 16G0006-03

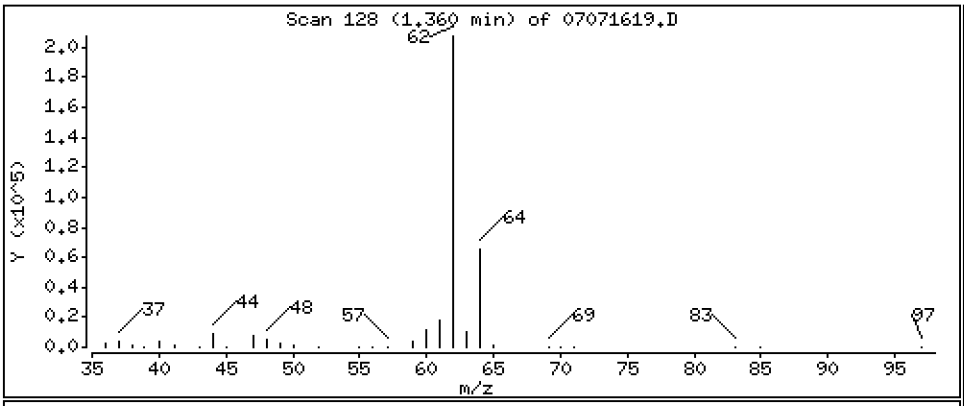
Operator: PB

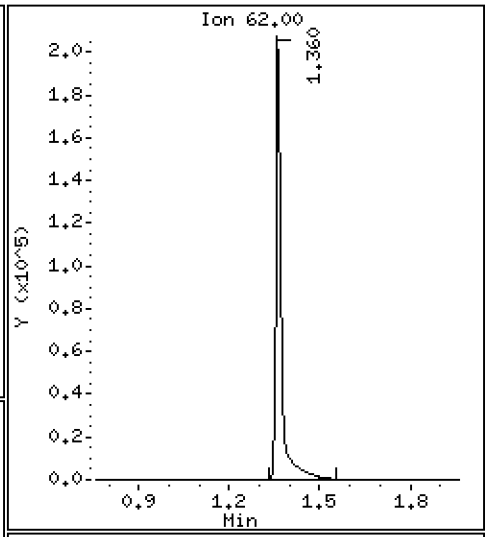
Column phase: RTXVMS

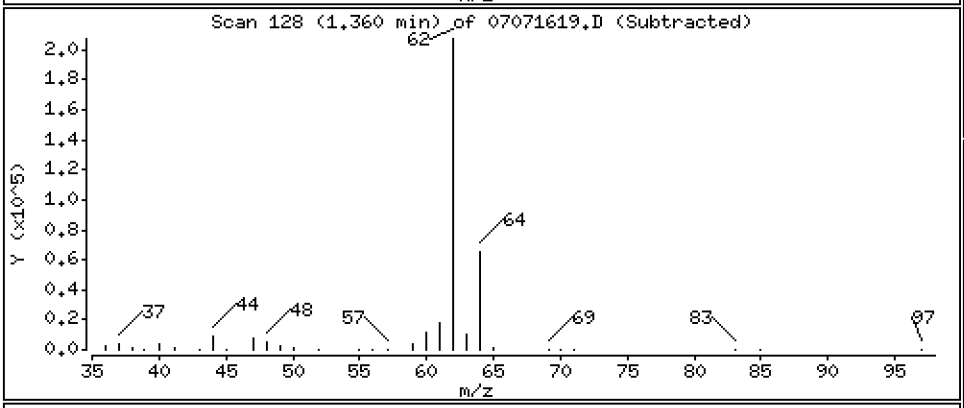
Column diameter: 0.18

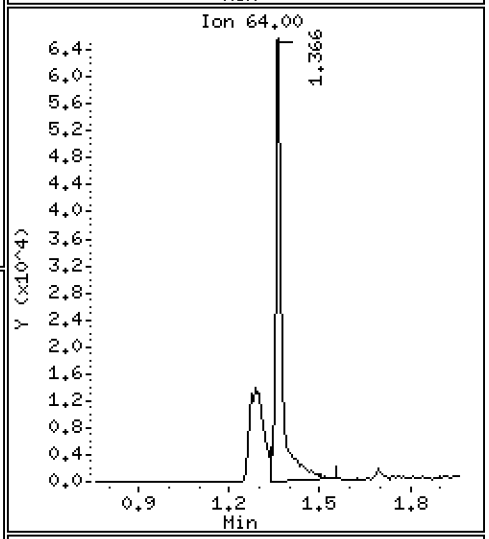
3 Vinyl Chloride

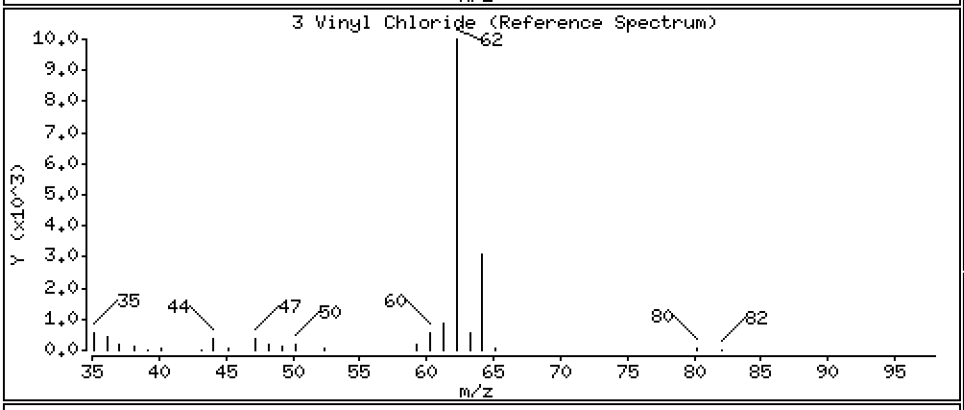
Concentration: 30.590 ug/Kg

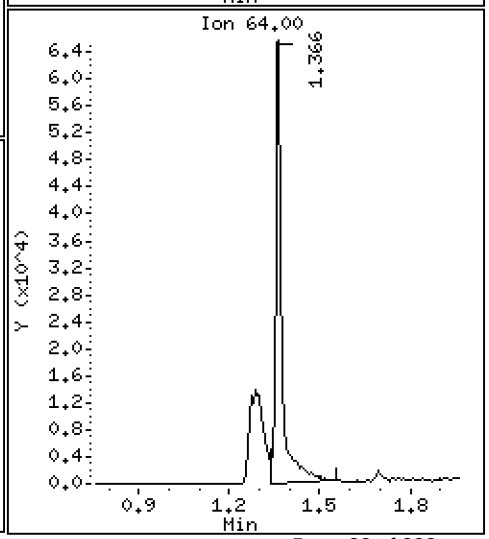


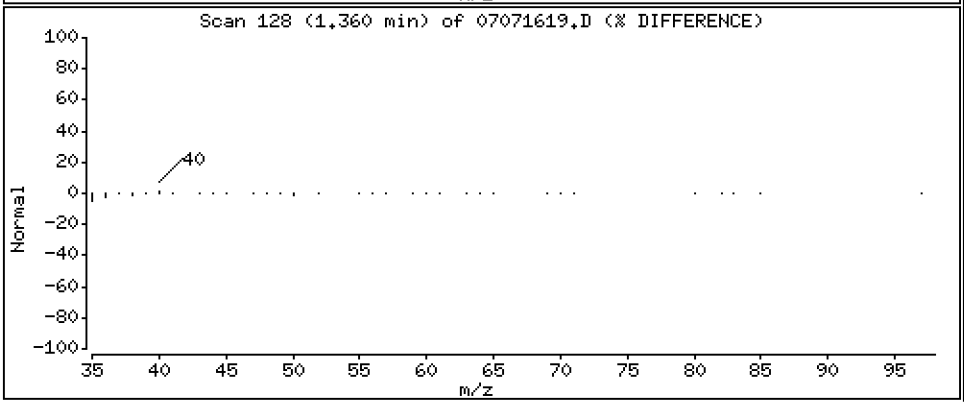












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Date : 07-JUL-2016 19:19

Client ID:

Instrument: nt5.i

Sample Info: 16G0006-03

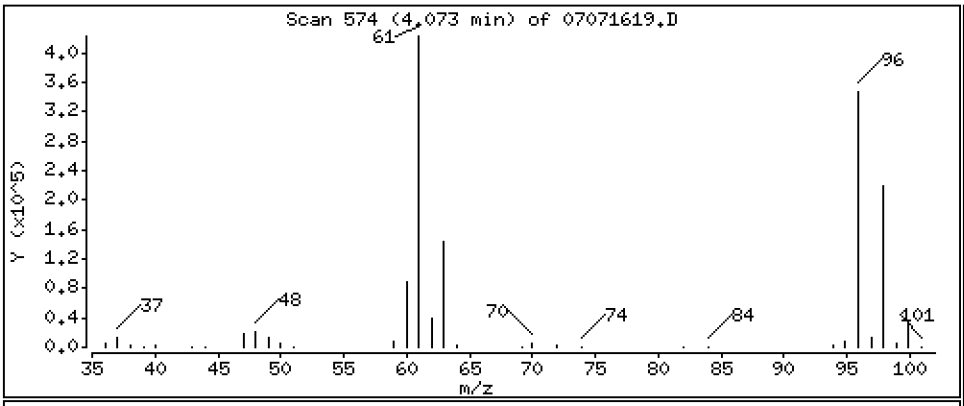
Operator: PB

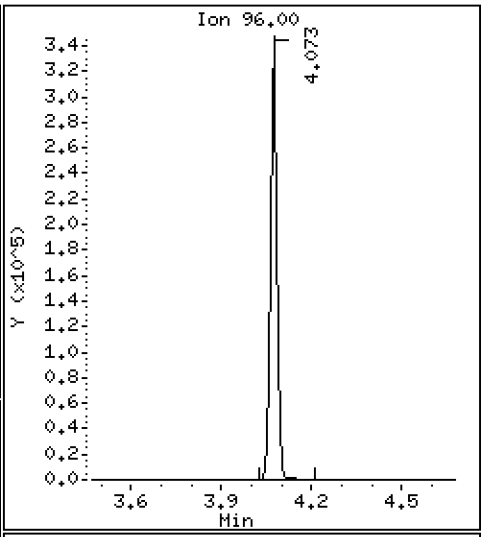
Column phase: RTXVMS

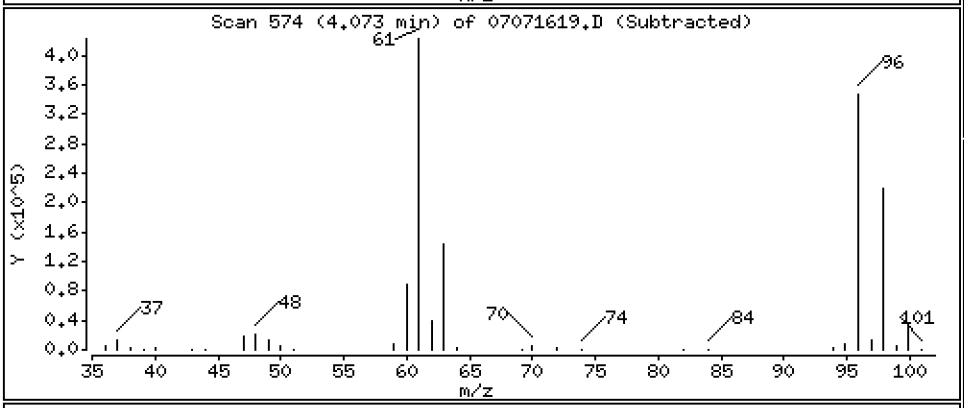
Column diameter: 0.18

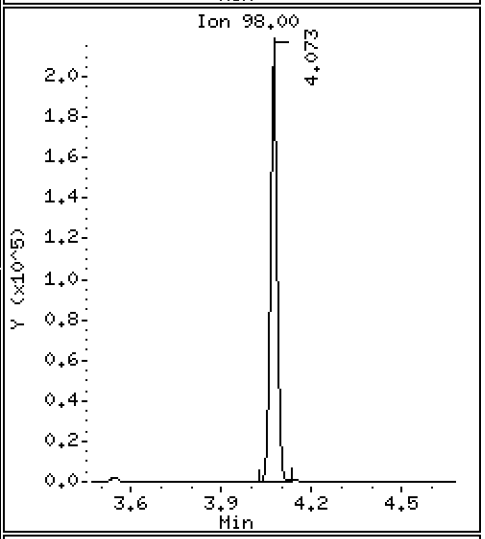
20 Cis-1,2-Dichloroethene

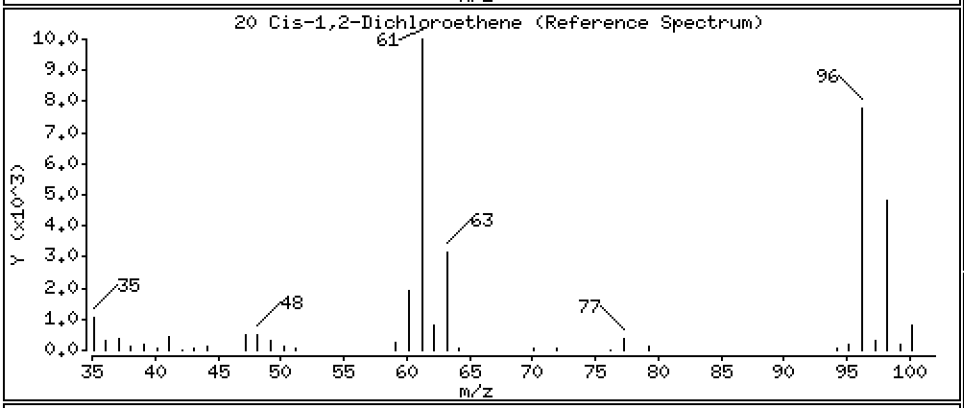
Concentration: 60.268 ug/Kg

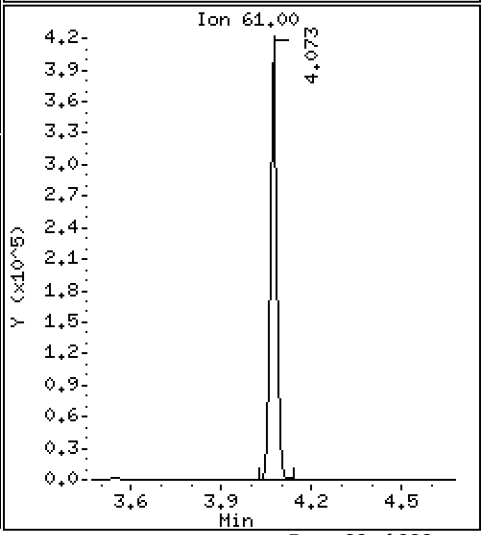


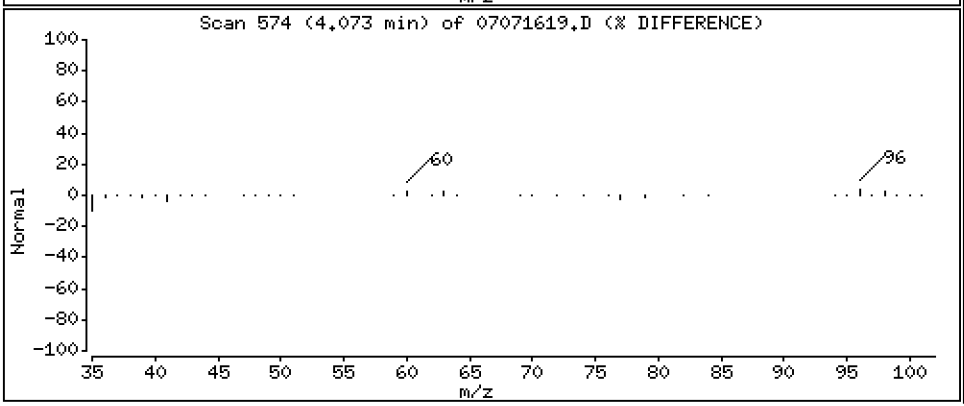












Data File: \\target\share\chem1\nt5.i\20160707.b\07071619.D

Date : 07-JUL-2016 19:19

Client ID:

Instrument: nt5.i

Sample Info: 16G0006-03

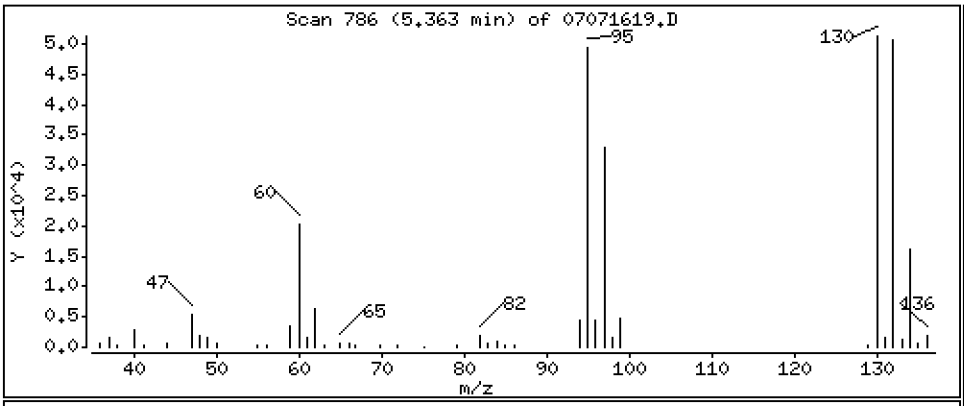
Operator: PB

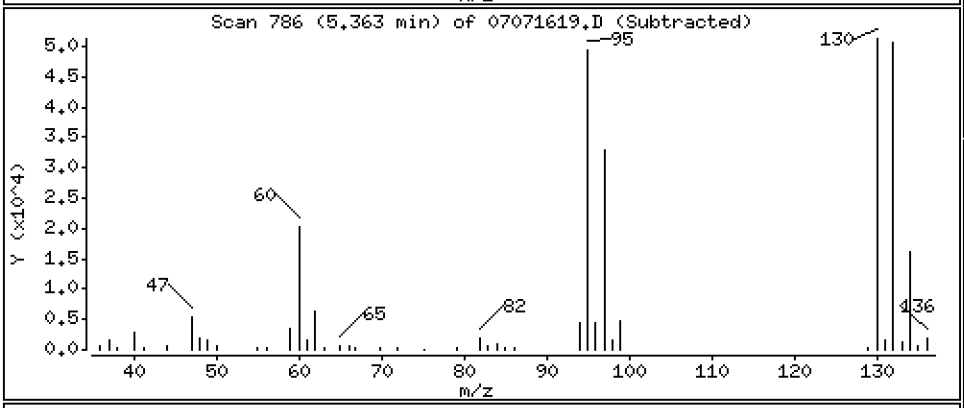
Column phase: RTXVMS

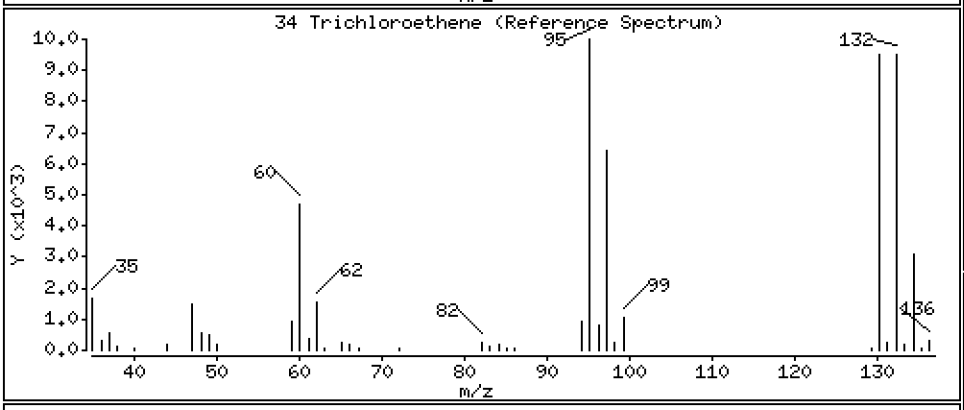
Column diameter: 0.18

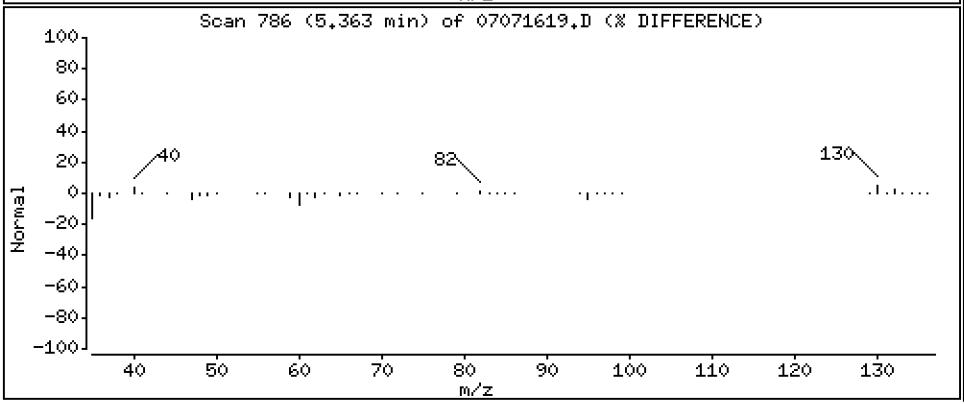
34 Trichloroethene

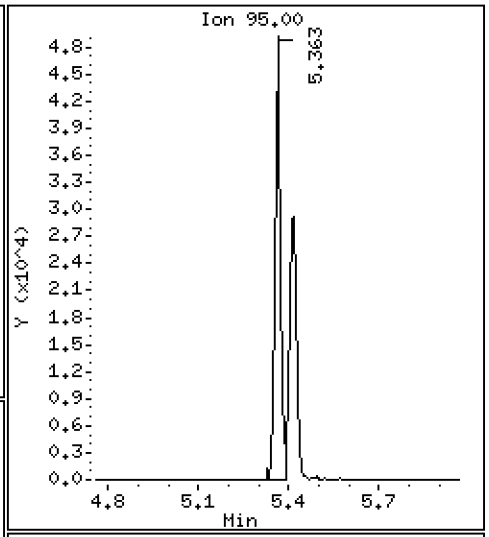
Concentration: 7.739 ug/Kg

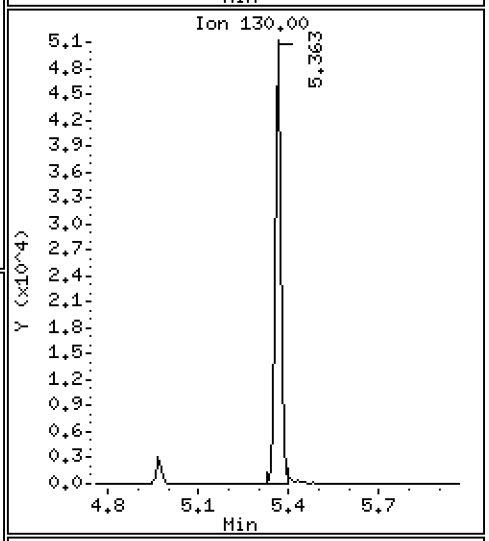


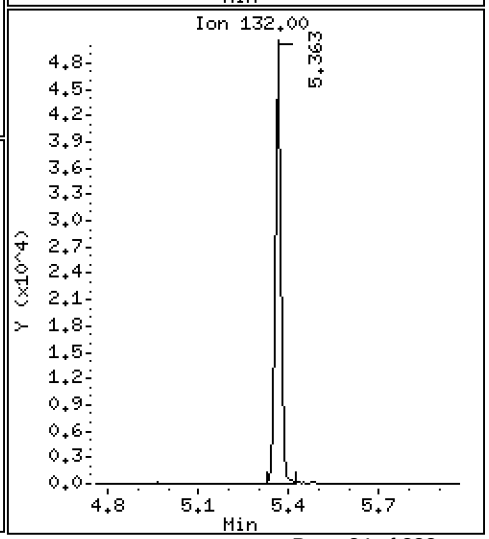












Data File: \\target\share\chem1\nt5.i\20160707.b\07071619.D

Date : 07-JUL-2016 19:19

Client ID:

Instrument: nt5.i

Sample Info: 16G0006-03

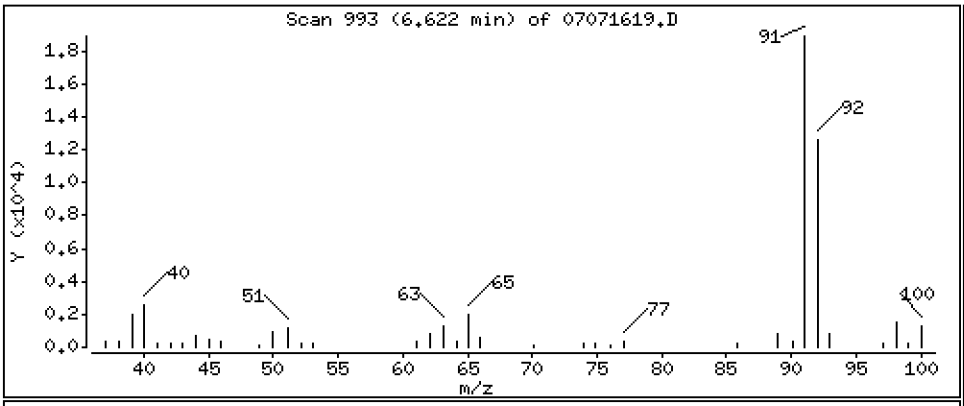
Operator: PB

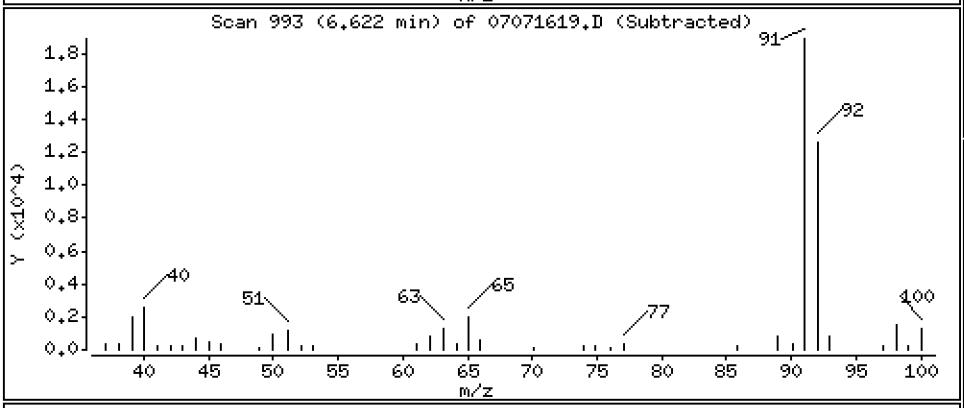
Column phase: RTXVMS

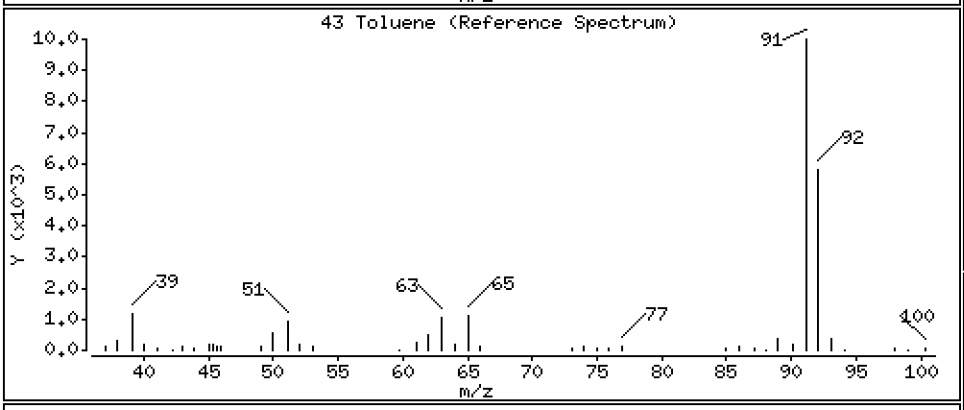
Column diameter: 0.18

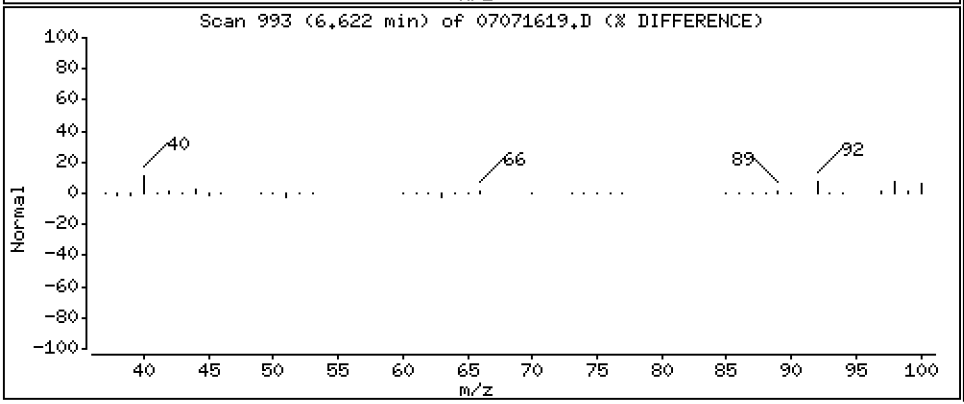
43 Toluene

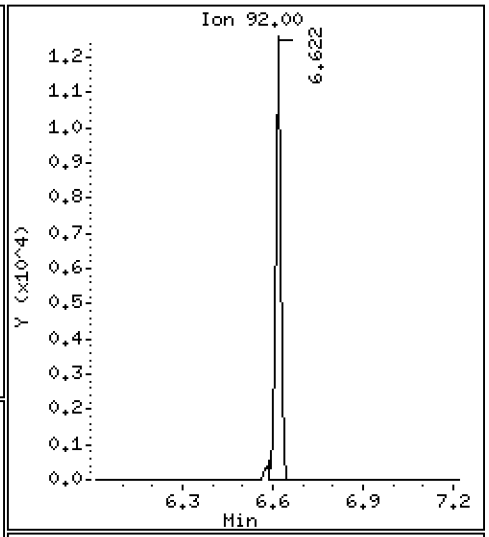
Concentration: 0.7810 ug/Kg

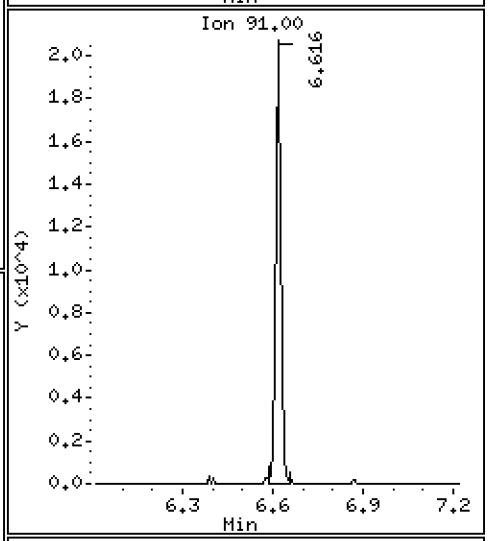


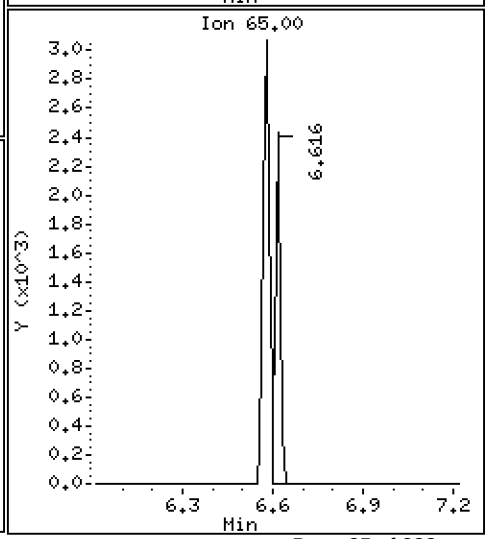












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071619.D
Lab Smp Id: 16G0006-03
Inj Date : 07-JUL-2016 19:19
Operator : PB Inst ID: nt5.i
Smp Info : 16G0006-03
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 13:44 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 13:37 Cal File: 07071610.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	1.360	1.359	(0.274)	300499	30.5898	30.590
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	4.073	4.073	(0.820)	593601	60.2684	60.268
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.511	4.511	(0.908)	518290	51.5055	51.506
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.967	4.967	(1.000)	578061	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.973	4.967	(1.001)	523878	52.4724	52.472
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	5.363	5.362	(0.990)	73096	7.73914	7.739
*	35 1,4-Difluorobenzene	114	5.417	5.411	(1.000)	1585318	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.573	6.573	(1.213)	1901991	49.9944	49.994
	43 Toluene	92	6.622	6.616	(1.222)	18252	0.78095	0.7810
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1597693	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	810148	49.4480	49.448
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	777486	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.369	10.369	(1.040)	774176	51.3780	51.378
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071619.D
Lab Smp Id: 16G0006-03
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	578061	2.85
35 1,4-Difluorobenze	1551589	775795	3103178	1585318	2.17
52 d5-Chlorobenzene	1542777	771389	3085554	1597693	3.56
76 d4-1,4-Dichlorobe	775053	387527	1550106	777486	0.31

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.97	0.00
35 1,4-Difluorobenze	5.41	4.91	5.91	5.42	0.11
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 08-Jul-2016 13:45

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16G0006-03
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	51.506	103.01	70-130
$ 32 d4-1,2-Dichloroeth	50.000	52.472	104.94	80-149
$ 42 d8-Toluene	50.000	49.994	99.99	77-120
$ 62 4-Bromofluorobenze	50.000	49.448	98.90	80-120
$ 79 d4-1,2-Dichloroben	50.000	51.378	102.76	80-120

REVIEW SUMMARY FOR FILE - 07071619.D

Lab ID: 16G0006-03
nt5.i, 20160707.b\VO051314S.m,   07-JUL-2016 19:19

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

CHRL-TB-160705

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

8260C VOA

Laboratory:	Analytical Resources, Inc.			SDG:	16G0006
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Water	Laboratory ID:	16G0006-04	File ID:	07071620.D
Sampled:	07/05/16 00:00	Prepared:	07/07/16 09:52	Analyzed:	07/07/16 19:42
Solids:		Preparation:	No Prep - Volatiles	Initial/Final:	5 mL / 5 mL
Batch:	BEG0041	Sequence:	SEG0027	Calibration:	ZG00011
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q	DL	RL
75-01-4	Vinyl Chloride	1	1.00	U	0.24	1.00
74-83-9	Bromomethane	1	1.00	U	0.19	1.00
108-05-4	Vinyl Acetate	1	5.00	U	0.38	5.00
156-59-2	cis-1,2-Dichloroethene	1	1.00	U	0.24	1.00
71-43-2	Benzene	1	1.00	U	0.30	1.00
79-01-6	Trichloroethene	1	1.00	U	0.21	1.00
108-88-3	Toluene	1	1.00	U	0.15	1.00
127-18-4	Tetrachloroethene	1	1.00	U	0.26	1.00
100-41-4	Ethylbenzene	1	1.00	U	0.20	1.00
179601-23-1	m,p-Xylene	1	1.00	U	0.39	1.00
95-47-6	o-Xylene	1	1.00	U	0.22	1.00

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	48.2	96.3	80 - 129	
Toluene-d8	50.000	49.4	98.8	80 - 120	
4-Bromofluorobenzene	50.000	49.4	98.9	80 - 120	
1,2-Dichlorobenzene-d4	50.000	49.4	98.7	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160707.b\07071620.D

Date : 07-JUL-2016 19:42

Client ID:

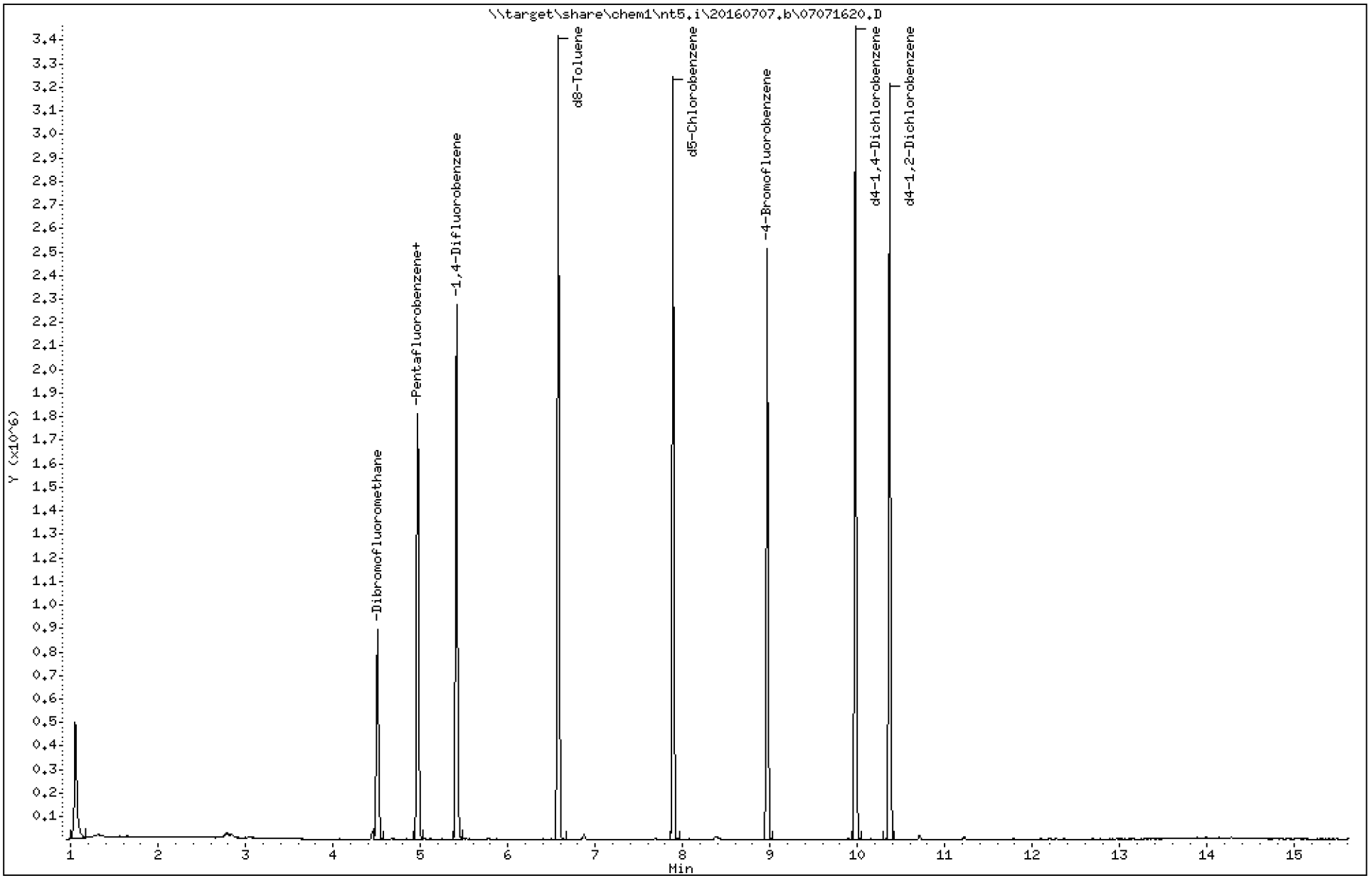
Sample Info: 16G0006-04

Instrument: nt5.i

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071620.D
Lab Smp Id: 16G0006-04
Inj Date : 07-JUL-2016 19:42
Operator : PB Inst ID: nt5.i
Smp Info : 16G0006-04
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 13:44 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 13:37 Cal File: 07071610.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	Compound Not Detected.					
3 Vinyl Chloride	62	Compound Not Detected.					
4 Bromomethane	94	Compound Not Detected.					
5 Chloroethane	64	Compound Not Detected.					
6 Trichlorofluoromethane	101	Compound Not Detected.					
7 1,1-Dichloroethene	96	Compound Not Detected.					
8 Carbon Disulfide	76	Compound Not Detected.					
9 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10 Iodomethane	142	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Acrolein	56	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acetone	43	Compound Not Detected.					
15 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16 Methyl tert butyl ether	73	Compound Not Detected.					
17 1,1-Dichloroethane	63	Compound Not Detected.					
18 Acrylonitrile	53	Compound Not Detected.					
19 Vinyl Acetate	43	Compound Not Detected.					
20 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
22 2,2-Dichloropropane	77	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/Kg)	(ug/Kg)
	23	Bromochloromethane	128	Compound Not Detected.					
	24	Chloroform	83	Compound Not Detected.					
	25	Carbon Tetrachloride	117	Compound Not Detected.					
$	27	Dibromofluoromethane	111	4.505	4.511	(0.907)	494424	49.6171	49.617
	26	1,1,1-Trichloroethane	97	Compound Not Detected.					
	28	1,1-Dichloropropene	75	Compound Not Detected.					
	29	2-Butanone	72	Compound Not Detected.					
	30	Benzene	78	Compound Not Detected.					
*	31	Pentafluorobenzene	168	4.967	4.967	(1.000)	572431	50.0000	
$	32	d4-1,2-Dichloroethane	65	4.967	4.967	(1.000)	476046	48.1505	48.150
	33	1,2-Dichloroethane	62	Compound Not Detected.					
	34	Trichloroethene	95	Compound Not Detected.					
*	35	1,4-Difluorobenzene	114	5.411	5.411	(1.000)	1572724	50.0000	
	37	Dibromomethane	93	Compound Not Detected.					
	38	1,2-Dichloropropane	63	Compound Not Detected.					
	39	Bromodichloromethane	83	Compound Not Detected.					
	172	2-Pentanone	86	Compound Not Detected.					
	40	2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41	Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42	d8-Toluene	98	6.573	6.573	(1.215)	1864012	49.3885	49.388
	43	Toluene	92	Compound Not Detected.					
	44	Tetrachloroethene	166	Compound Not Detected.					
	45	4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46	Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47	1,1,2-Trichloroethane	97	Compound Not Detected.					
	48	Chlorodibromomethane	129	Compound Not Detected.					
	49	1,3-Dichloropropane	76	Compound Not Detected.					
	50	1,2-Dibromoethane	107	Compound Not Detected.					
	51	2-Hexanone	43	Compound Not Detected.					
*	52	d5-Chlorobenzene	117	7.887	7.887	(1.000)	1555589	50.0000	
	53	Chlorobenzene	112	Compound Not Detected.					
	54	Ethyl Benzene	91	Compound Not Detected.					
	55	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56	m,p-xylene	106	Compound Not Detected.					
	57	o-Xylene	106	Compound Not Detected.					
	58	Styrene	104	Compound Not Detected.					
	59	Bromoform	173	Compound Not Detected.					
	60	Isopropyl Benzene	105	Compound Not Detected.					
$	62	4-Bromofluorobenzene	95	8.964	8.964	(1.137)	788806	49.4485	49.449
	63	Bromobenzene	156	Compound Not Detected.					
	64	N-Propyl Benzene	91	Compound Not Detected.					
	65	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66	2-Chloro Toluene	91	Compound Not Detected.					
	67	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68	1,2,3-Trichloropropane	110	Compound Not Detected.					
	69	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70	4-Chloro Toluene	91	Compound Not Detected.					
	71	T-Butyl Benzene	119	Compound Not Detected.					
	72	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73	S-Butyl Benzene	105	Compound Not Detected.					
	74	4-Isopropyl Toluene	119	Compound Not Detected.					
	75	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76	d4-1,4-Dichlorobenzene	152	9.980	9.974	(1.000)	798067	50.0000	
	77	1,4-Dichlorobenzene	146	Compound Not Detected.					

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78	N-Butyl Benzene	91	Compound Not Detected.					
$	79	d4-1,2-Dichlorobenzene	152	10.369	10.369	(1.039)	763500	49.3628	49.363
	80	1,2-Dichlorobenzene	146	Compound Not Detected.					
	81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
	82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
	83	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	84	Naphthalene	128	Compound Not Detected.					
	85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071620.D
Lab Smp Id: 16G0006-04
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	572431	1.85
35 1,4-Difluorobenze	1551589	775795	3103178	1572724	1.36
52 d5-Chlorobenzene	1542777	771389	3085554	1555589	0.83
76 d4-1,4-Dichlorobe	775053	387527	1550106	798067	2.97

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.97	0.00
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	0.00
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.98	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: 16G0006-04
Level: LOW Operator: PB
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	49.617	99.23	70-130
$ 32 d4-1,2-Dichloroeth	50.000	48.150	96.30	80-149
$ 42 d8-Toluene	50.000	49.388	98.78	77-120
$ 62 4-Bromofluorobenze	50.000	49.449	98.90	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.363	98.73	80-120

REVIEW SUMMARY FOR FILE - 07071620.D

Lab ID: 16G0006-04
nt5.i, 20160707.b\VO051314S.m,   07-JUL-2016 19:42

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

Analytical Resources, Incorporated

Form I
METHOD BLANK DATA SHEET
EPA 8260C

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	16G0006
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Solid	Laboratory ID:	BEG0040-BLK1	File ID:	07071614.D
Sampled:	N/A	Prepared:	07/07/16 09:52	Analyzed:	07/07/16 17:08
Solids:		Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g
Batch:	BEG0040	Sequence:	SEG0027	Calibration:	ZG00011
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg wet)	Q	DL	RL	LOQ
75-01-4	Vinyl Chloride	1	1.00	U	0.24	1.00	1.00
74-83-9	Bromomethane	1	1.00	U	0.19	1.00	1.00
156-59-2	cis-1,2-Dichloroethene	1	1.00	U	0.24	1.00	1.00
71-43-2	Benzene	1	1.00	U	0.30	1.00	1.00
79-01-6	Trichloroethene	1	1.00	U	0.21	1.00	1.00
108-88-3	Toluene	1	1.00	U	0.15	1.00	1.00
127-18-4	Tetrachloroethene	1	1.00	U	0.26	1.00	1.00
100-41-4	Ethylbenzene	1	1.00	U	0.20	1.00	1.00
179601-23-1	m,p-Xylene	1	1.00	U	0.39	1.00	1.00
95-47-6	o-Xylene	1	1.00	U	0.22	1.00	1.00

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	47.5	95.0	80 - 149	
1,2-Dichlorobenzene-d4	50.000	49.5	99.1	80 - 120	
Toluene-d8	50.000	49.5	99.0	77 - 120	
4-Bromofluorobenzene	50.000	49.4	98.7	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160707.b\07071614.D

Date : 07-JUL-2016 17:08

Client ID: MB0707

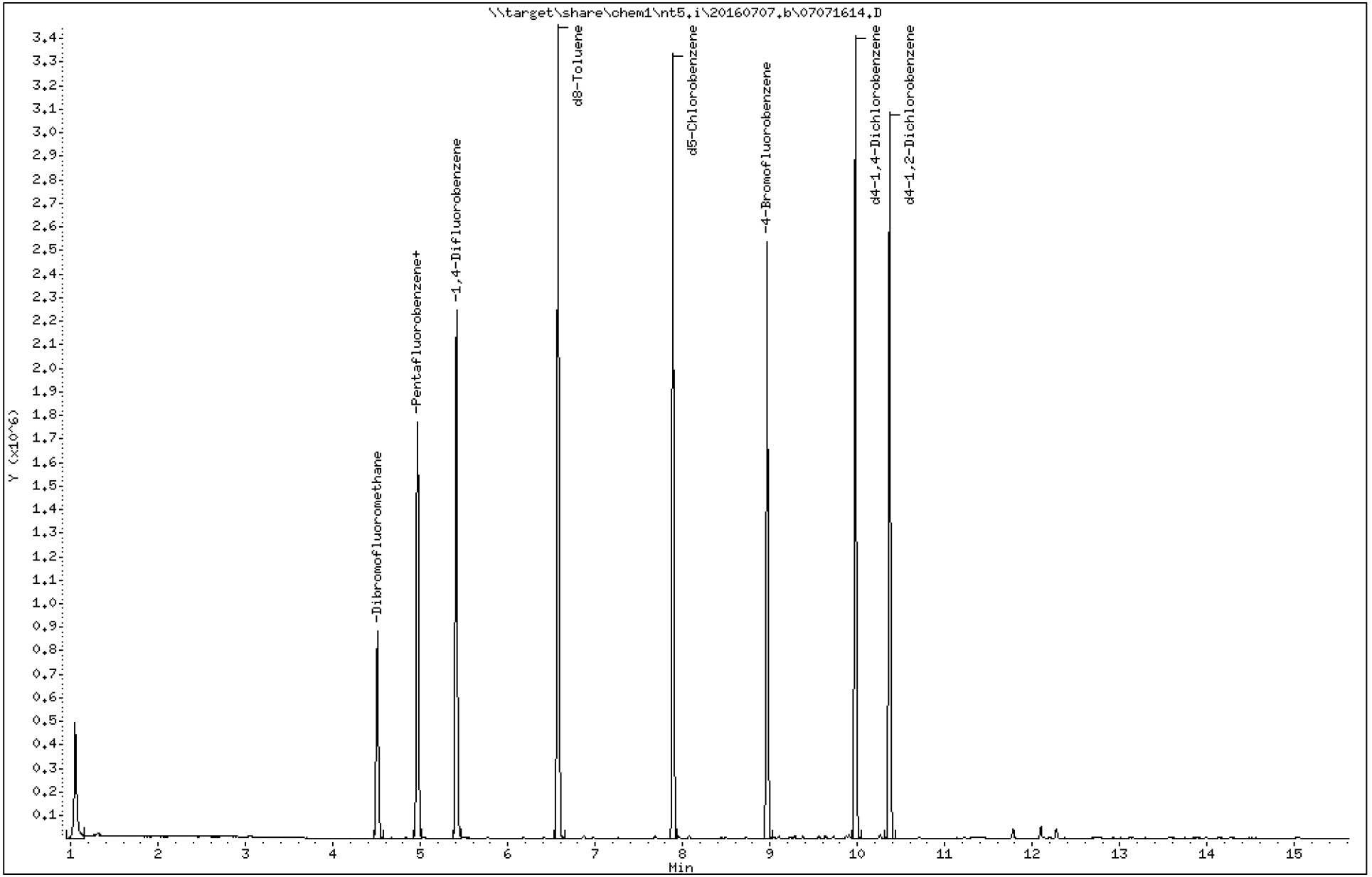
Sample Info: MB0707,5,5,0

Instrument: nt5.i

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160707.b\07071614.D

Date : 07-JUL-2016 17:08

Client ID: MB0707

Instrument: nt5.i

Sample Info: MB0707,5,5,0

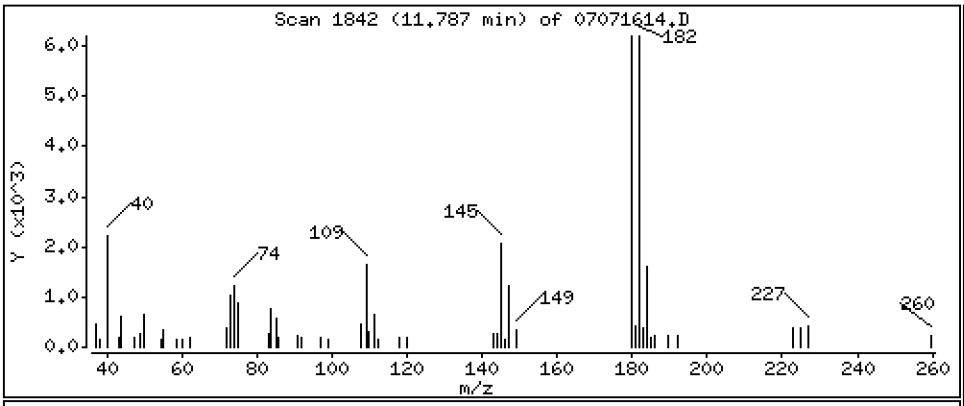
Operator: PB

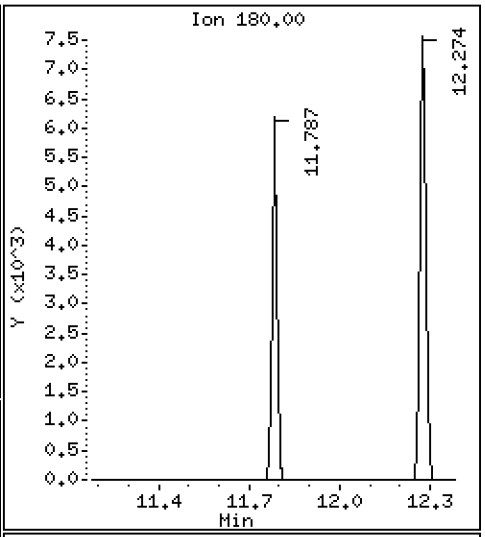
Column phase: RTXVMS

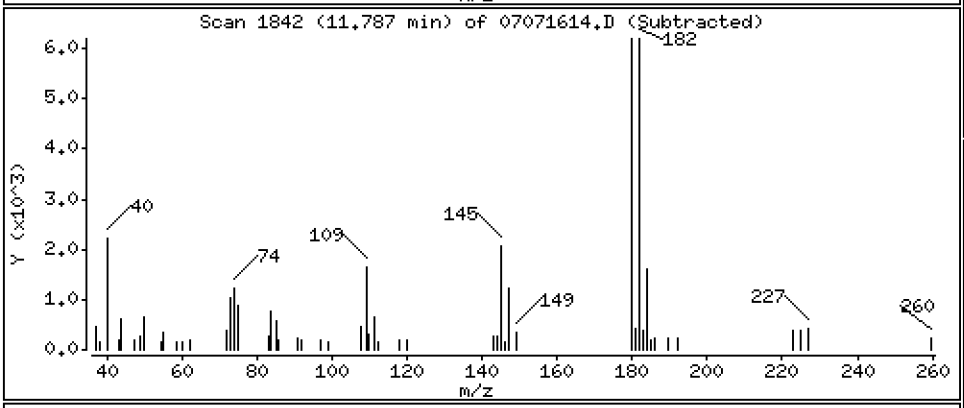
Column diameter: 0.18

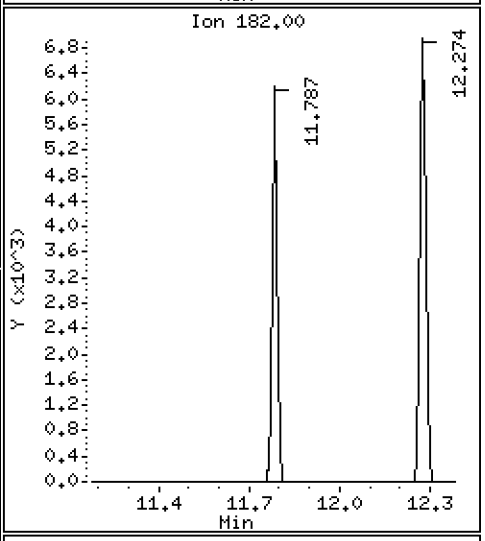
83 1,2,4-Trichlorobenzene

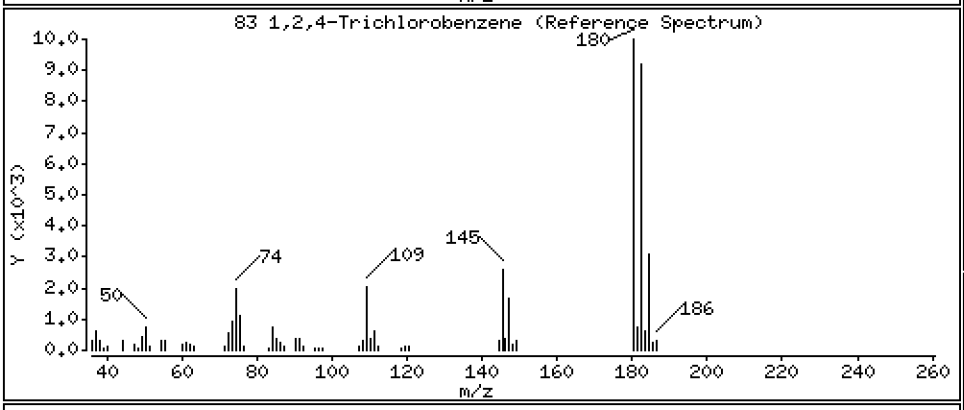
Concentration: 0.7422 ug/Kg

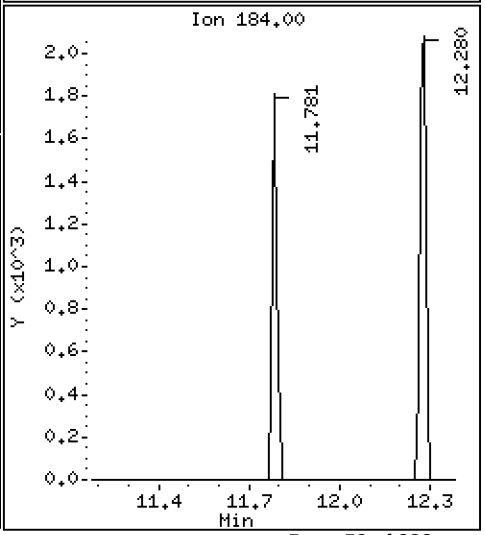


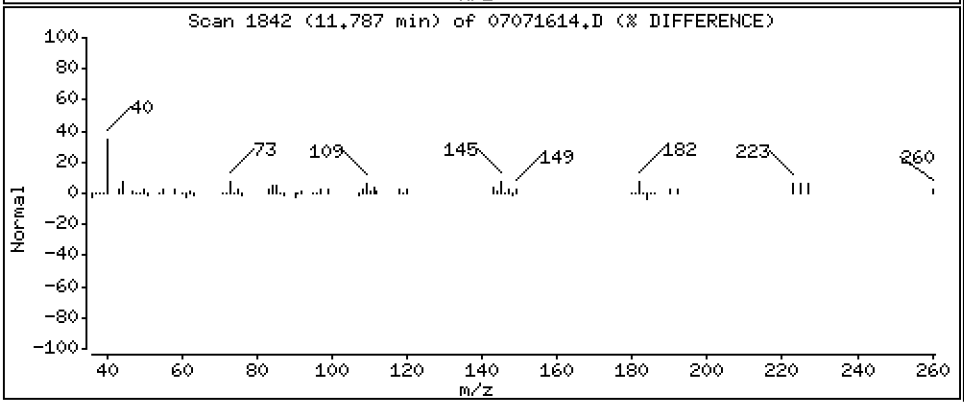












Data File: \\target\share\chem1\nt5.i\20160707.b\07071614.D

Date : 07-JUL-2016 17:08

Client ID: MB0707

Instrument: nt5.i

Sample Info: MB0707,5,5,0

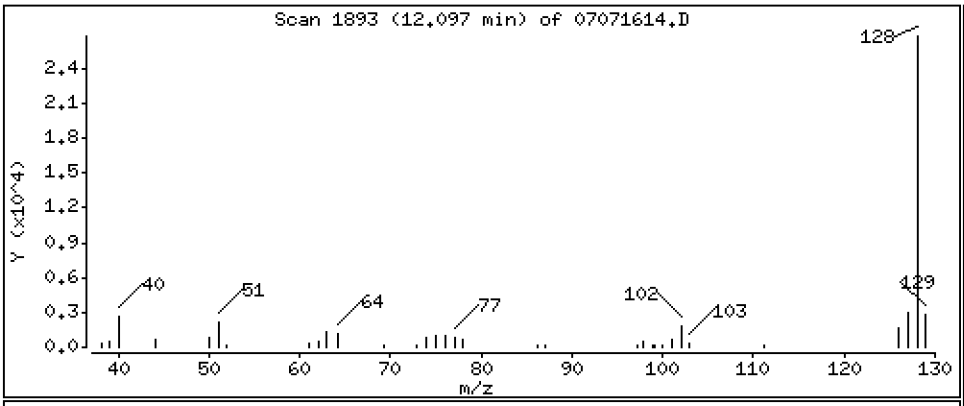
Operator: PB

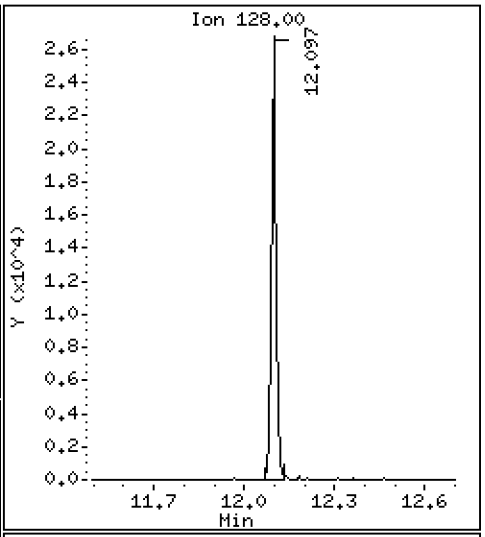
Column phase: RTXVMS

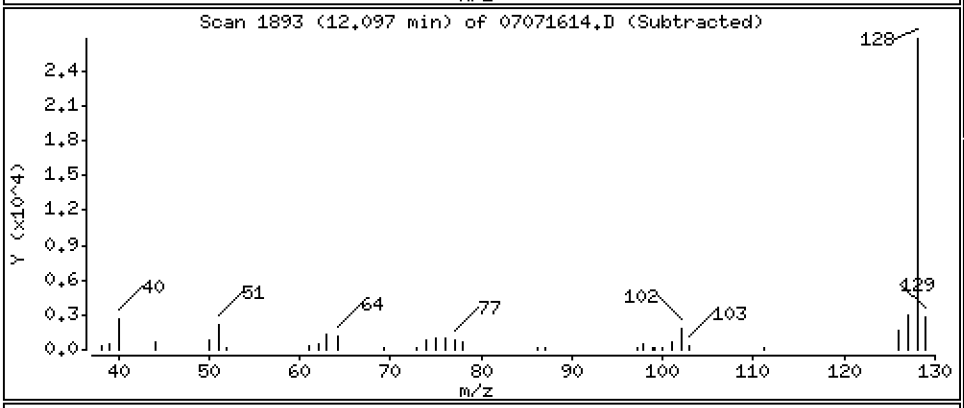
Column diameter: 0.18

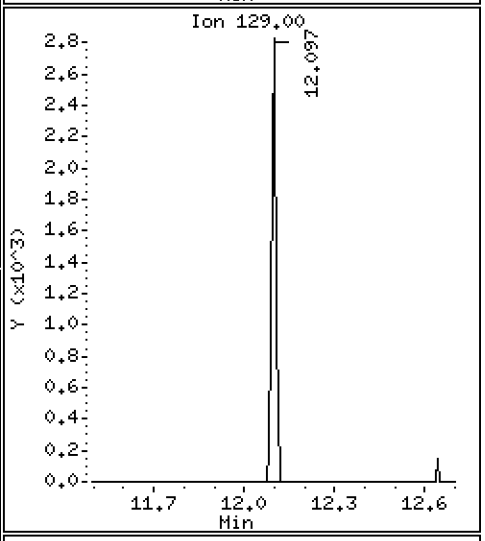
84 Naphthalene

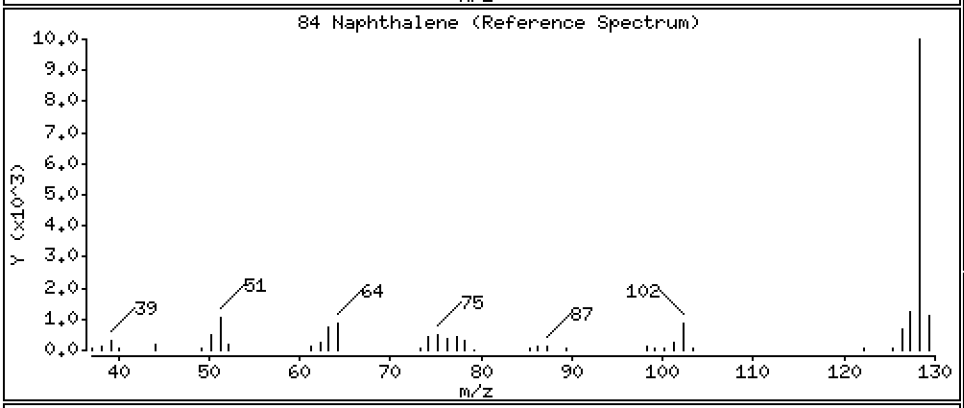
Concentration: 1.067 ug/Kg

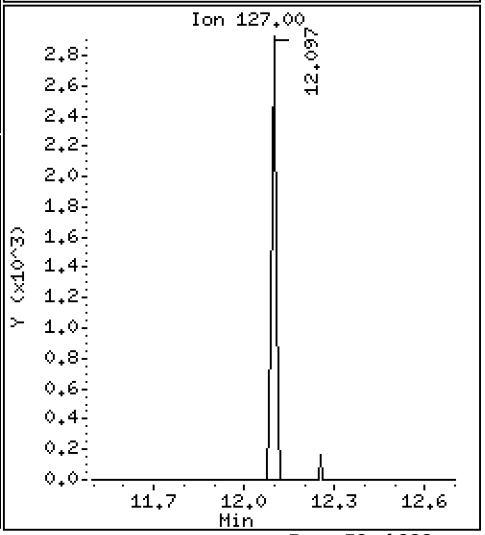


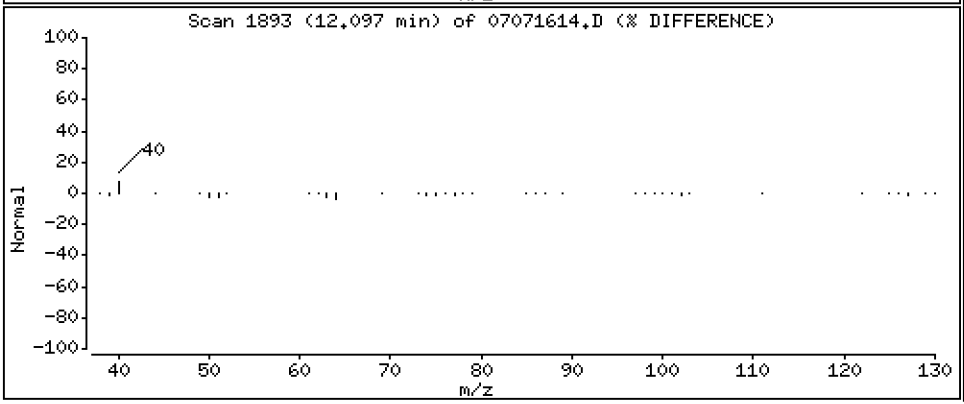












Data File: \\target\share\chem1\nt5.i\20160707.b\07071614.D

Date : 07-JUL-2016 17:08

Client ID: MB0707

Instrument: nt5.i

Sample Info: MB0707,5,5,0

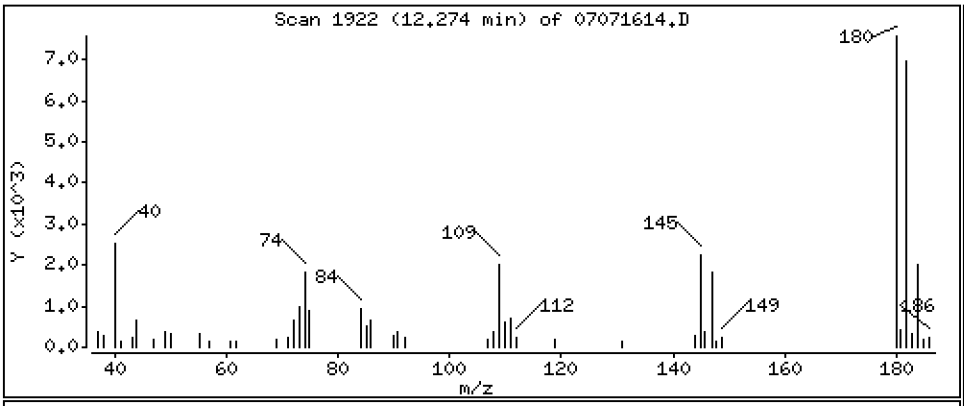
Operator: PB

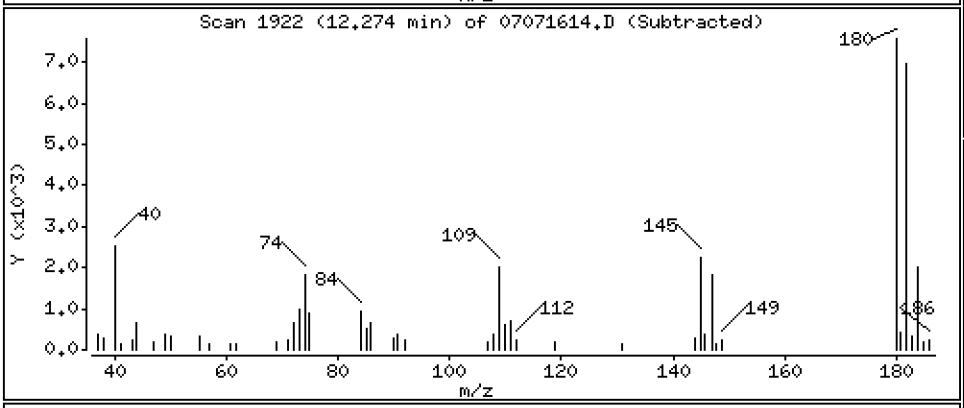
Column phase: RTXVMS

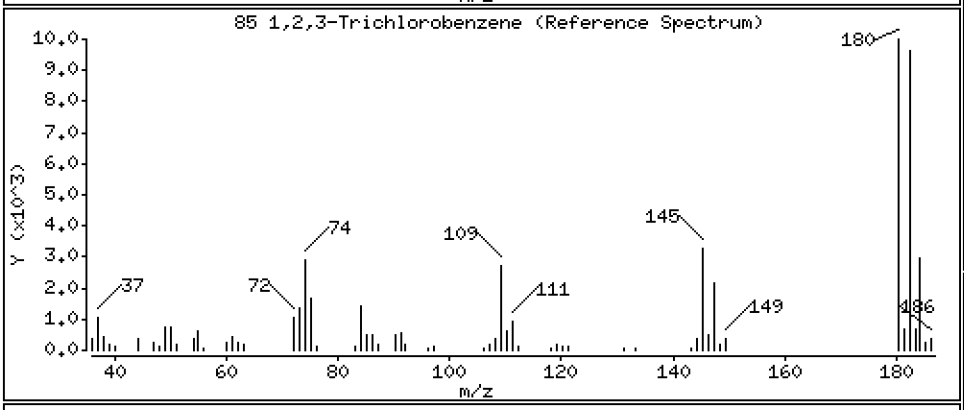
Column diameter: 0.18

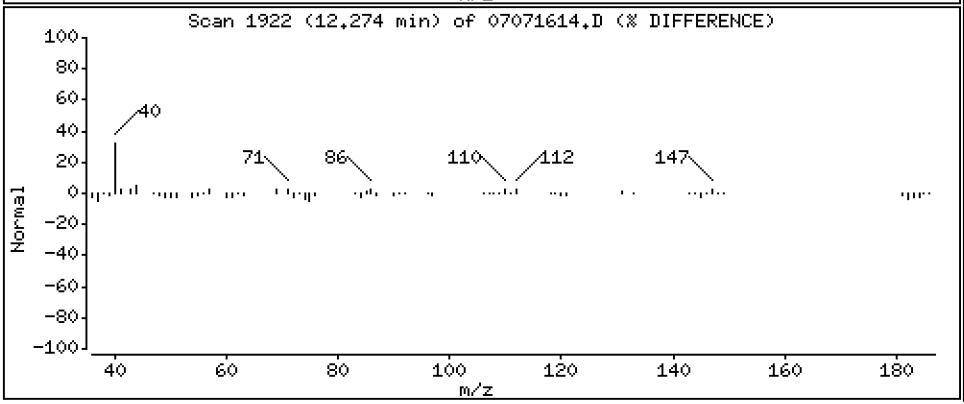
85 1,2,3-Trichlorobenzene

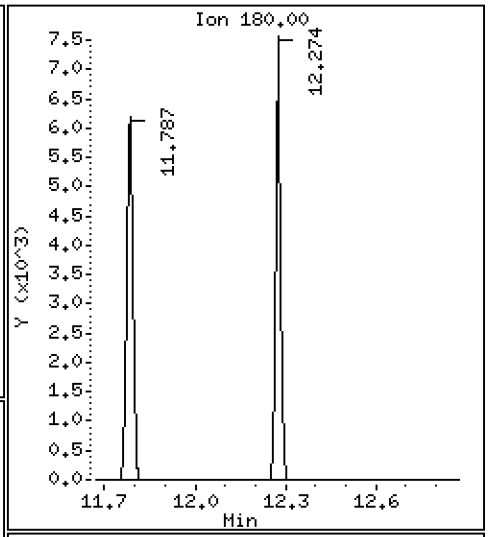
Concentration: 0.9430 ug/Kg

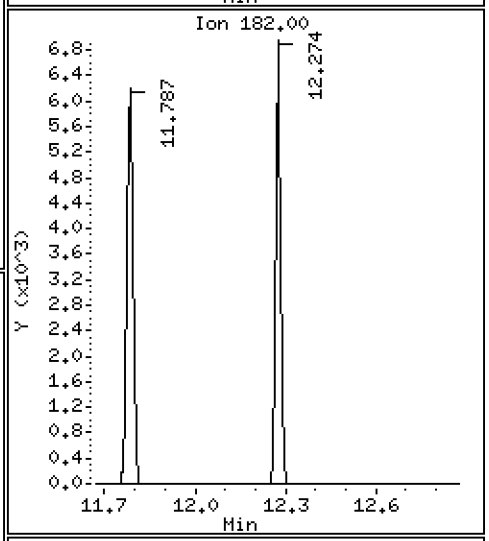


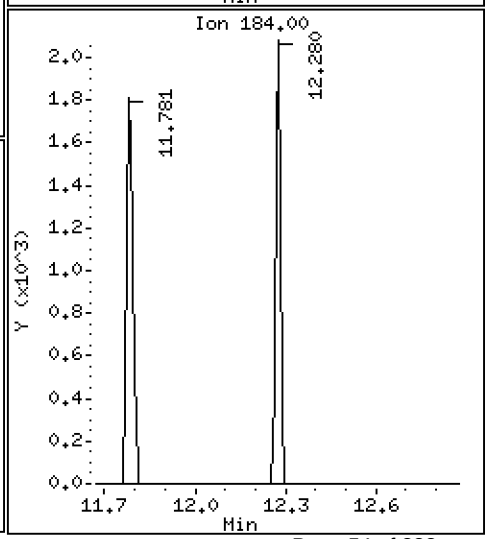












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071614.D
Lab Smp Id: BEG0041-BLK1 Client Smp ID: MB0707
Inj Date : 07-JUL-2016 17:08
Operator : PB Inst ID: nt5.i
Smp Info : MB0707,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 13:44 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 13:37 Cal File: 07071610.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	Compound Not Detected.					
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.505	4.511	(0.908)	485010	48.3524	48.352
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.961	4.967	(1.000)	576218	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.967	4.967	(1.001)	472515	47.4792	47.479
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.411	5.411	(1.000)	1566377	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.573	6.573	(1.215)	1860317	49.4903	49.490
	43 Toluene	92	Compound Not Detected.					
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1537712	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	778408	49.3640	49.364
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	782784	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	10.369	10.369	(1.040)	751472	49.5337	49.534
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
83	1,2,4-Trichlorobenzene	180	11.787	11.781	(1.182)	8449	0.74223	0.7422
84	Naphthalene	128	12.097	12.097	(1.213)	34620	1.06734	1.067
85	1,2,3-Trichlorobenzene	180	12.273	12.273	(1.231)	9983	0.94296	0.9430

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071614.D
Lab Smp Id: BEG0041-BLK1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: MB0707
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	576218	2.52
35 1,4-Difluorobenze	1551589	775795	3103178	1566377	0.95
52 d5-Chlorobenzene	1542777	771389	3085554	1537712	-0.33
76 d4-1,4-Dichlorobe	775053	387527	1550106	782784	1.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.96	-0.12
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	-0.00
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	-0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEG0041-BLK1 Client Smp ID: MB0707
Level: LOW Operator: PB
Data Type: MS DATA SampleType: BLANK
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	48.352	96.70	70-130
$ 32 d4-1,2-Dichloroeth	50.000	47.479	94.96	80-149
$ 42 d8-Toluene	50.000	49.490	98.98	77-120
$ 62 4-Bromofluorobenze	50.000	49.364	98.73	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.534	99.07	80-120

REVIEW SUMMARY FOR FILE - 07071614.D

Lab ID: BEG0041-BLK1
nt5.i, 20160707.b\VO051314S.m,   07-JUL-2016 17:08

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

Analytical Resources, Incorporated

Form I
METHOD BLANK DATA SHEET
EPA 8260C

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	16G0006
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Water	Laboratory ID:	BEG0041-BLK1	File ID:	07071614a.D
Sampled:	N/A	Prepared:	07/07/16 09:52	Analyzed:	07/07/16 17:08
Solids:		Preparation:	No Prep - Volatiles	Initial/Final:	5 mL / 5 mL
Batch:	BEG0041	Sequence:	SEG0027	Calibration:	ZG00011
Instrument:	NT5	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q	DL	RL	LOQ
75-01-4	Vinyl Chloride	1	1.00	U	0.24	1.00	1.00
74-83-9	Bromomethane	1	1.00	U	0.19	1.00	1.00
156-59-2	cis-1,2-Dichloroethene	1	1.00	U	0.24	1.00	1.00
71-43-2	Benzene	1	1.00	U	0.30	1.00	1.00
79-01-6	Trichloroethene	1	1.00	U	0.21	1.00	1.00
108-88-3	Toluene	1	1.00	U	0.15	1.00	1.00
127-18-4	Tetrachloroethene	1	1.00	U	0.26	1.00	1.00
100-41-4	Ethylbenzene	1	1.00	U	0.20	1.00	1.00
179601-23-1	m,p-Xylene	1	1.00	U	0.39	1.00	1.00
95-47-6	o-Xylene	1	1.00	U	0.22	1.00	1.00

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.000	47.5	95.0	80 - 129	
Toluene-d8	50.000	49.5	99.0	80 - 120	
4-Bromofluorobenzene	50.000	49.4	98.7	80 - 120	
1,2-Dichlorobenzene-d4	50.000	49.5	99.1	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160707.b\SampleInfo\07071614a.D

Date : 07-JUL-2016 17:08

Client ID: MB0707

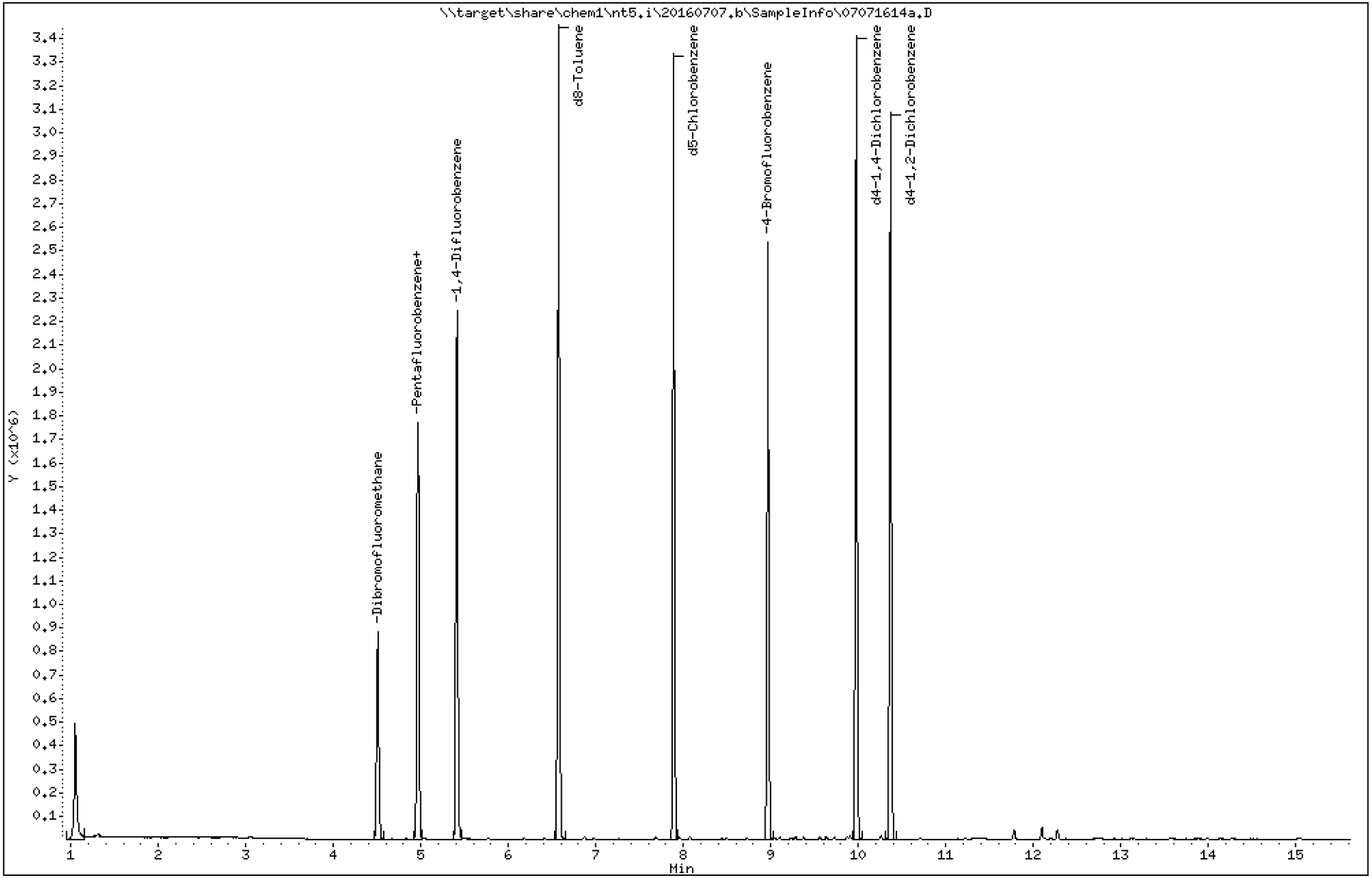
Sample Info: MB0707,5,5,0

Column phase: RTXVMS

Instrument: nt5.i

Operator: PB

Column diameter: 0.18



ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\SampleInfo\07071614a.D
Lab Smp Id: BEG0041-BLK1 Client Smp ID: MB0707
Inj Date : 07-JUL-2016 17:08
Operator : PB Inst ID: nt5.i
Smp Info : MB0707,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\SampleInfo\VO051314S.m
Meth Date : 11-Jul-2016 11:10 patrickb Quant Type: ISTD
Cal Date : 07-JUL-2016 13:37 Cal File: 07071610.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	96	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
16	Methyl tert butyl ether	73	Compound Not Detected.					
17	1,1-Dichloroethane	63	Compound Not Detected.					
18	Acrylonitrile	53	Compound Not Detected.					
19	Vinyl Acetate	43	Compound Not Detected.					
20	Cis-1,2-Dichloroethene	96	Compound Not Detected.					
22	2,2-Dichloropropane	77	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	Compound Not Detected.					
	24 Chloroform	83	Compound Not Detected.					
	25 Carbon Tetrachloride	117	Compound Not Detected.					
$	27 Dibromofluoromethane	111	4.505	4.511	(0.908)	485010	48.3524	48.352
	26 1,1,1-Trichloroethane	97	Compound Not Detected.					
	28 1,1-Dichloropropene	75	Compound Not Detected.					
	29 2-Butanone	72	Compound Not Detected.					
	30 Benzene	78	Compound Not Detected.					
*	31 Pentafluorobenzene	168	4.961	4.967	(1.000)	576218	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.967	4.967	(1.001)	472515	47.4792	47.479
	33 1,2-Dichloroethane	62	Compound Not Detected.					
	34 Trichloroethene	95	Compound Not Detected.					
*	35 1,4-Difluorobenzene	114	5.411	5.411	(1.000)	1566377	50.0000	
	37 Dibromomethane	93	Compound Not Detected.					
	38 1,2-Dichloropropane	63	Compound Not Detected.					
	39 Bromodichloromethane	83	Compound Not Detected.					
	172 2-Pentanone	86	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	42 d8-Toluene	98	6.573	6.573	(1.215)	1860317	49.4903	49.490
	43 Toluene	92	Compound Not Detected.					
	44 Tetrachloroethene	166	Compound Not Detected.					
	45 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 Chlorodibromomethane	129	Compound Not Detected.					
	49 1,3-Dichloropropane	76	Compound Not Detected.					
	50 1,2-Dibromoethane	107	Compound Not Detected.					
	51 2-Hexanone	43	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1537712	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Bromoform	173	Compound Not Detected.					
	60 Isopropyl Benzene	105	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	778408	49.3640	49.364
	63 Bromobenzene	156	Compound Not Detected.					
	64 N-Propyl Benzene	91	Compound Not Detected.					
	65 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66 2-Chloro Toluene	91	Compound Not Detected.					
	67 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68 1,2,3-Trichloropropane	110	Compound Not Detected.					
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	782784	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	Compound Not Detected.					
$	79 d4-1,2-Dichlorobenzene	152	10.369	10.369	(1.040)	751472	49.5337	49.534
	80 1,2-Dichlorobenzene	146	Compound Not Detected.					
	81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
	82 Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
	83 1,2,4-Trichlorobenzene	180	11.787	11.781	(1.182)	8449	0.74223	0.7422
	84 Naphthalene	128	12.097	12.097	(1.213)	34620	1.06734	1.067
	85 1,2,3-Trichlorobenzene	180	12.273	12.273	(1.231)	9983	0.94296	0.9430

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071614a.D
Lab Smp Id: BEG0041-BLK1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\SampleInfo\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: MB0707
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	576218	2.52
35 1,4-Difluorobenze	1551589	775795	3103178	1566377	0.95
52 d5-Chlorobenzene	1542777	771389	3085554	1537712	-0.33
76 d4-1,4-Dichlorobe	775053	387527	1550106	782784	1.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.96	-0.12
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	-0.00
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	-0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEG0041-BLK1 Client Smp ID: MB0707
Level: LOW Operator: PB
Data Type: MS DATA SampleType: BLANK
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160707.b\SampleInfo\VO051314S.m
Misc Info: 1

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	48.352	96.70	70-130
$ 32 d4-1,2-Dichloroeth	50.000	47.479	94.96	80-149
$ 42 d8-Toluene	50.000	49.490	98.98	77-120
$ 62 4-Bromofluorobenze	50.000	49.364	98.73	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.534	99.07	80-120

REVIEW SUMMARY FOR FILE - 07071614a.D

Lab ID: BEG0041-BLK1
nt5.i, 20160707.b\SampleInfo\VO051314S.m,   07-JUL-2016 17:08

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,SampleInfo\VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Solid	Analyzed:	07/07/16 16:23
Batch:	BEG0040	Laboratory ID:	BEG0040-BS1
Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Vinyl Chloride	50.0	51.6	103	74 - 135
Bromomethane	50.0	43.1	86.3	53 - 144
cis-1,2-Dichloroethene	50.0	45.9	91.9	80 - 125
Benzene	50.0	46.8	93.6	80 - 120
Trichloroethene	50.0	47.0	93.9	80 - 120
Toluene	50.0	46.0	92.0	75 - 120
Tetrachloroethene	50.0	49.3	98.5	74 - 124
Ethylbenzene	50.0	48.4	96.7	80 - 125
m,p-Xylene	100	96.9	96.9	76 - 121
o-Xylene	50.0	47.4	94.7	67 - 132

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Solid	Analyzed:	07/07/16 16:45
Batch:	BEG0040	Laboratory ID:	BEG0040-BSD1
Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Vinyl Chloride	50.0	52.3	105	1.28	30	74 - 135
Bromomethane	50.0	44.8	89.6	3.73	30	53 - 144
cis-1,2-Dichloroethene	50.0	47.5	94.9	3.29	30	80 - 125
Benzene	50.0	48.4	96.7	3.28	30	80 - 120
Trichloroethene	50.0	48.9	97.7	3.95	30	80 - 120
Toluene	50.0	48.2	96.5	4.81	30	75 - 120
Tetrachloroethene	50.0	51.7	103	4.79	30	74 - 124
Ethylbenzene	50.0	50.3	101	3.98	30	80 - 125
m,p-Xylene	100	101	101	4.66	30	76 - 121
o-Xylene	50.0	49.2	98.5	3.89	30	67 - 132

* Values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

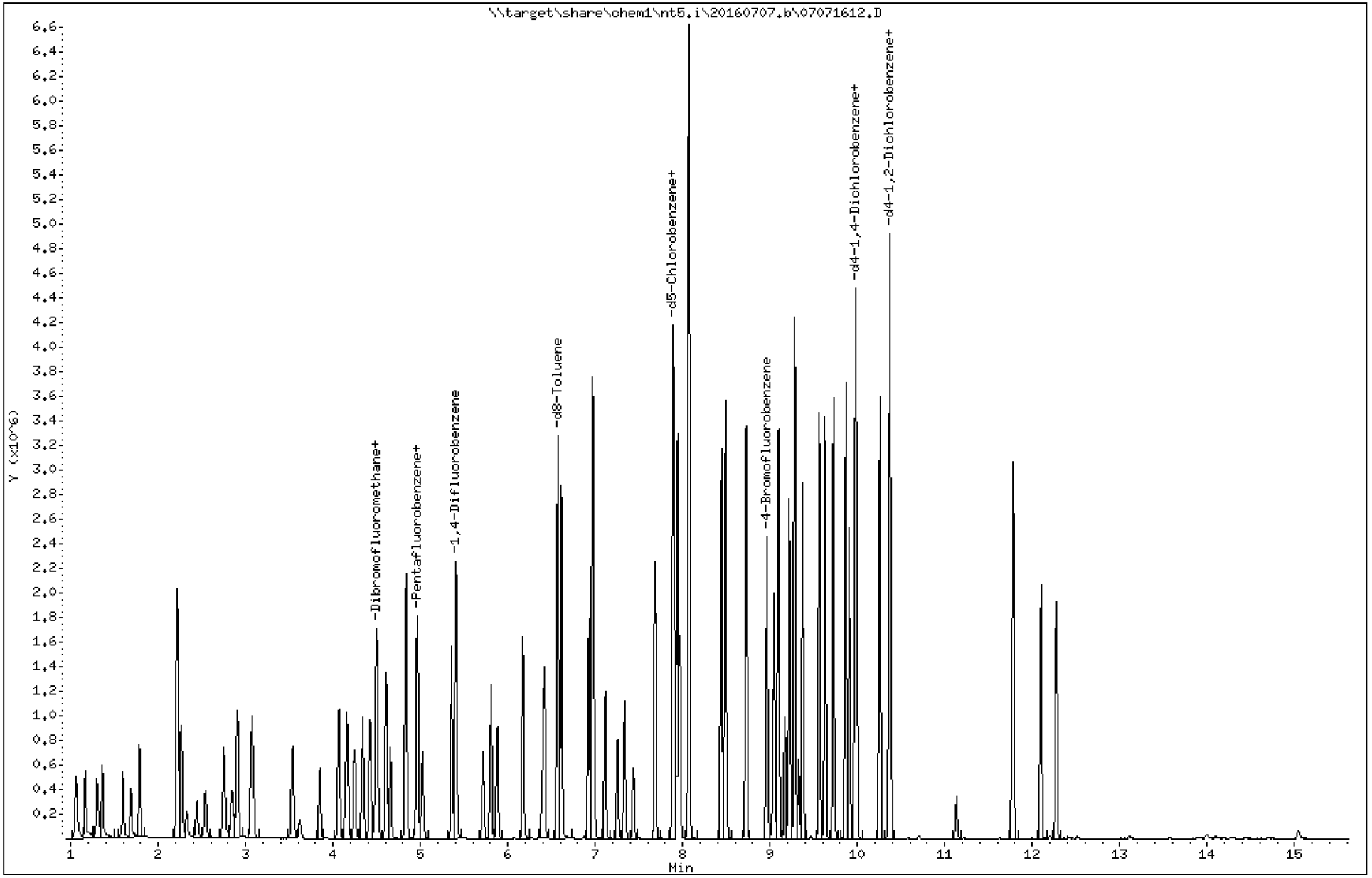
Instrument: nt5.i

Sample Info: LCS0707,5,5,0

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

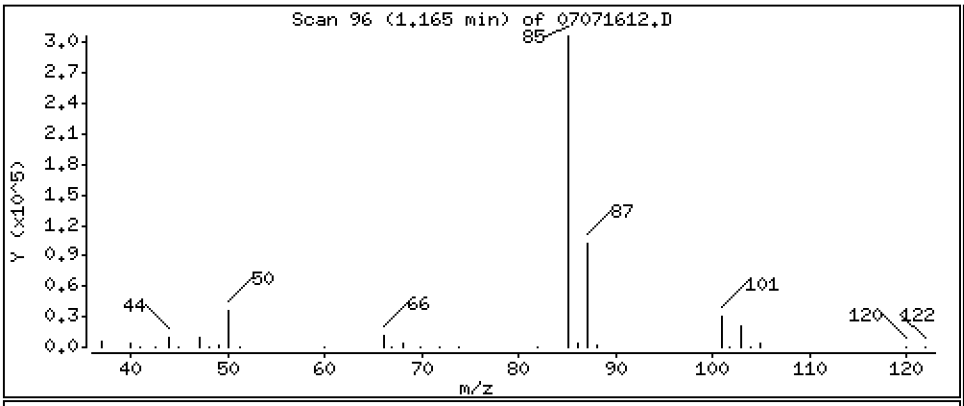
Operator: PB

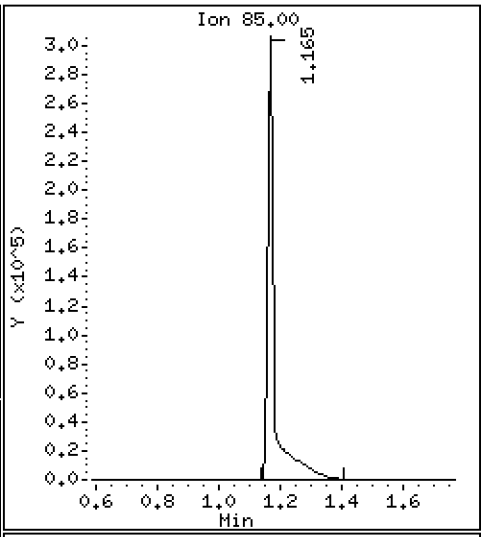
Column phase: RTXVMS

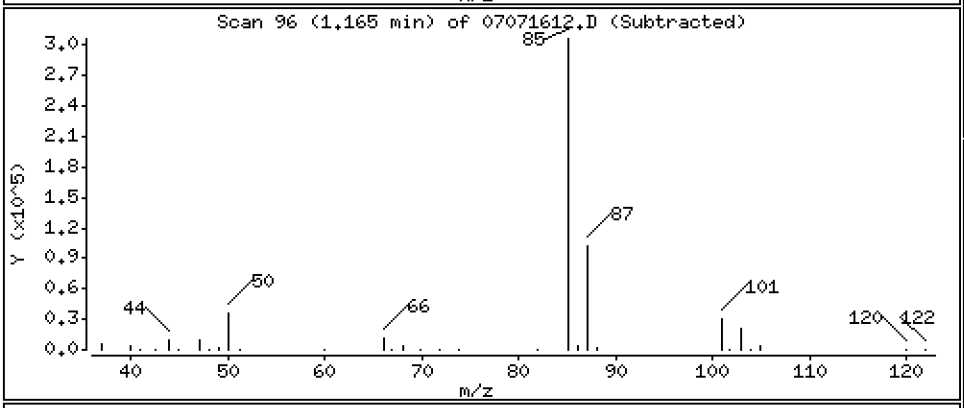
Column diameter: 0.18

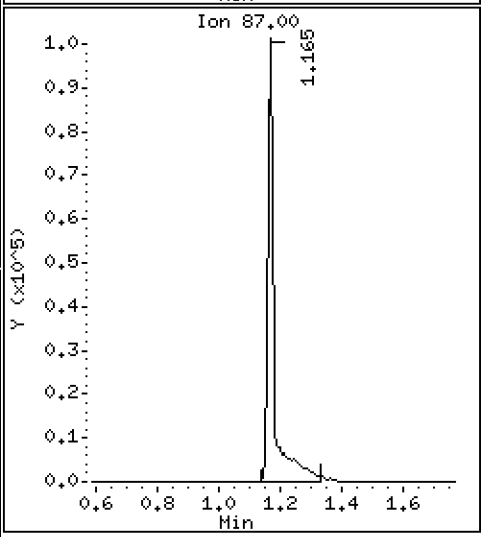
1 Dichlorodifluoromethane

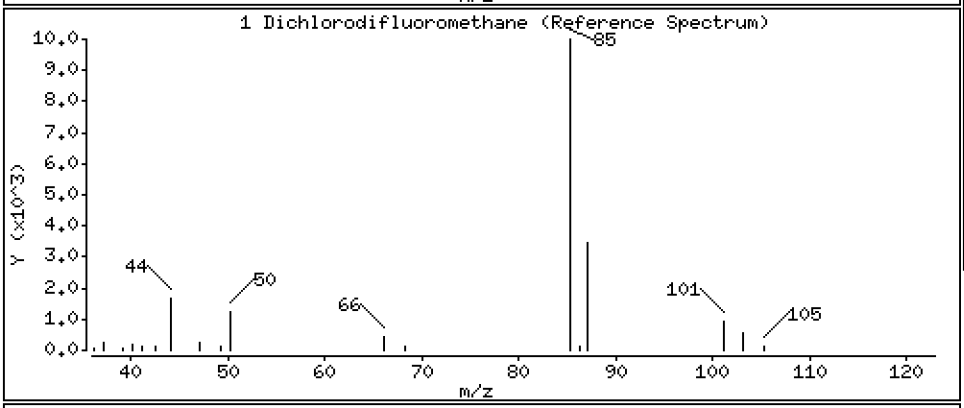
Concentration: 56.761 ug/Kg

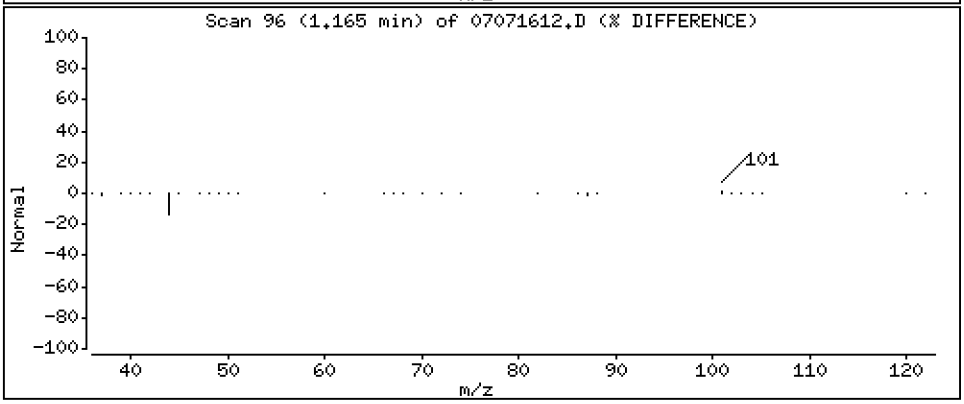












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

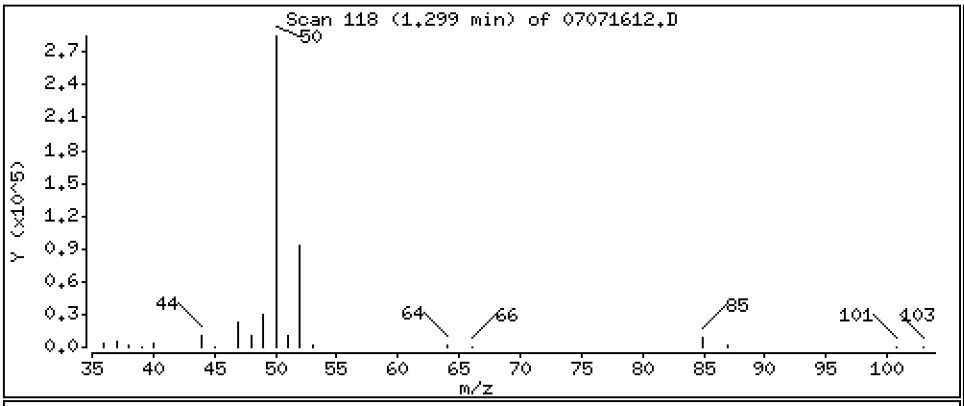
Operator: PB

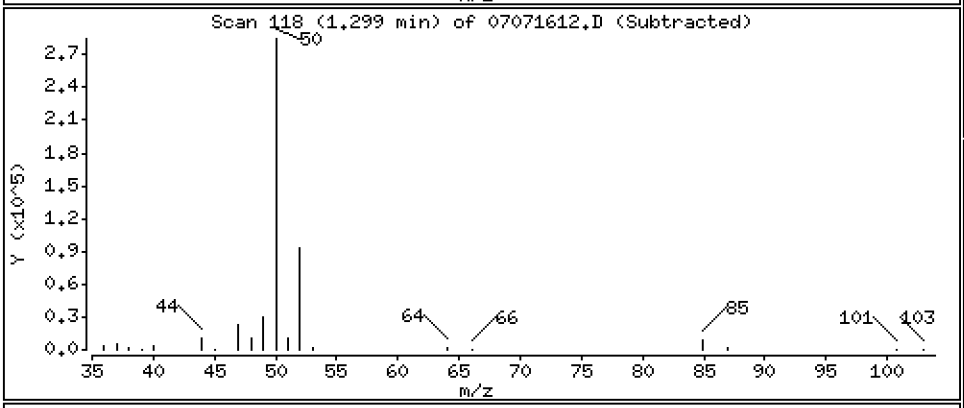
Column phase: RTXVMS

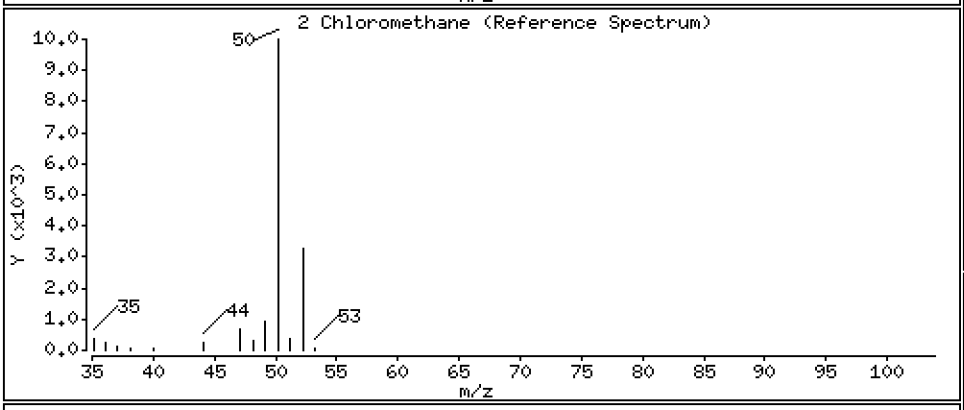
Column diameter: 0.18

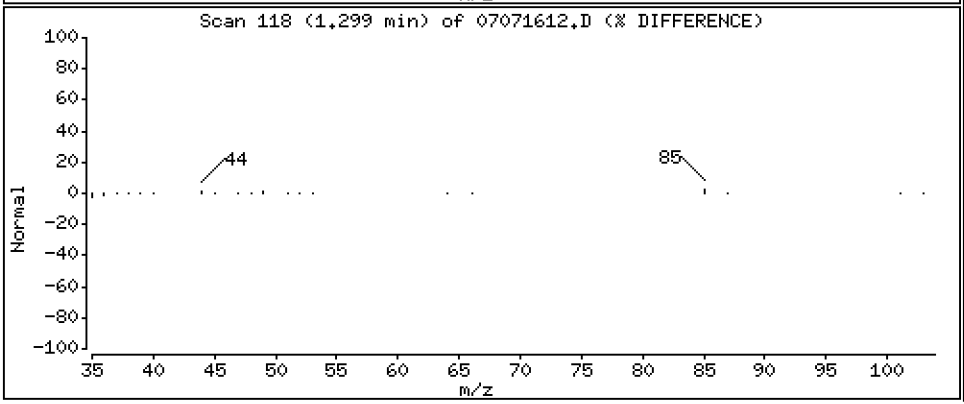
2 Chloromethane

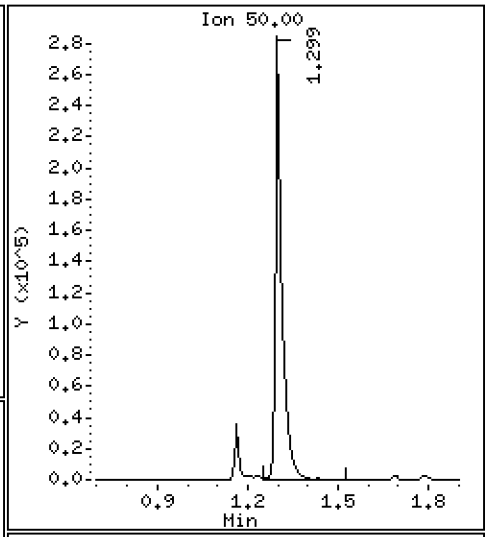
Concentration: 47.602 ug/Kg

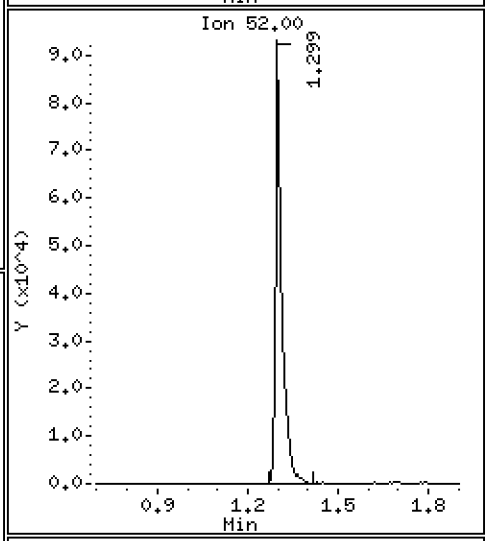


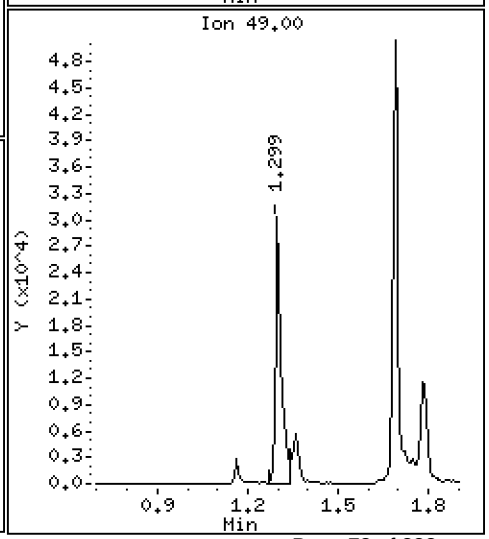












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

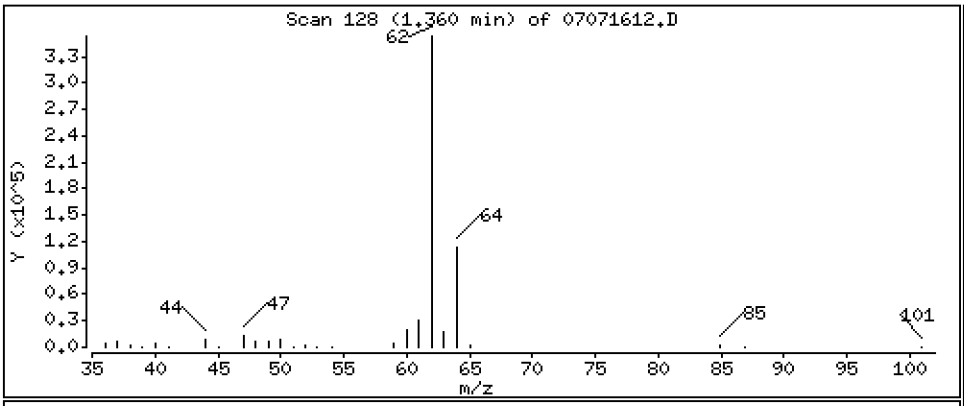
Operator: PB

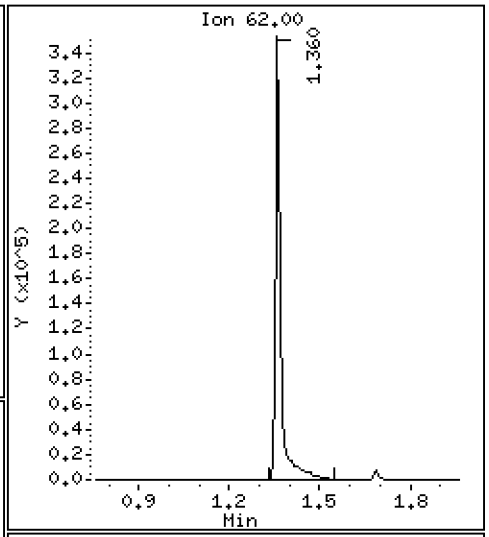
Column phase: RTXVMS

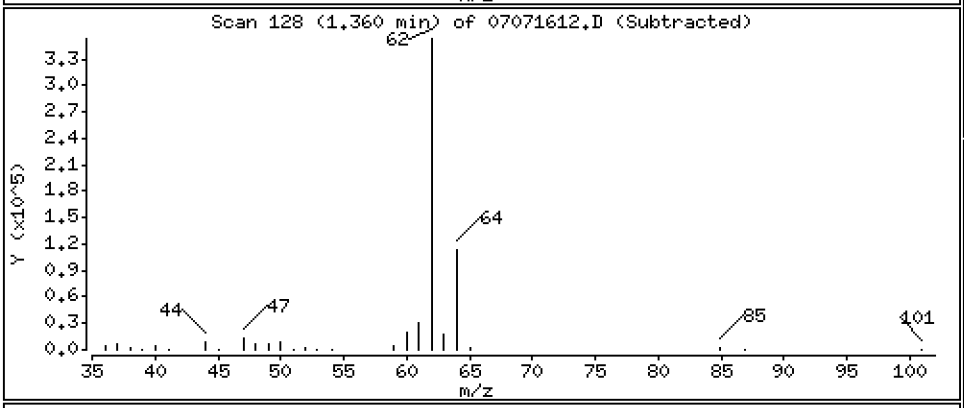
Column diameter: 0.18

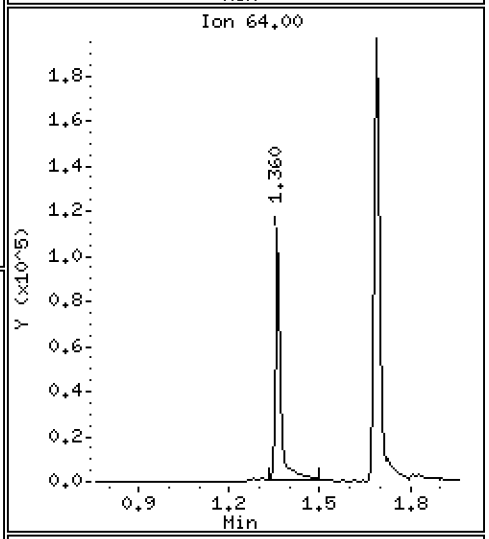
3 Vinyl Chloride

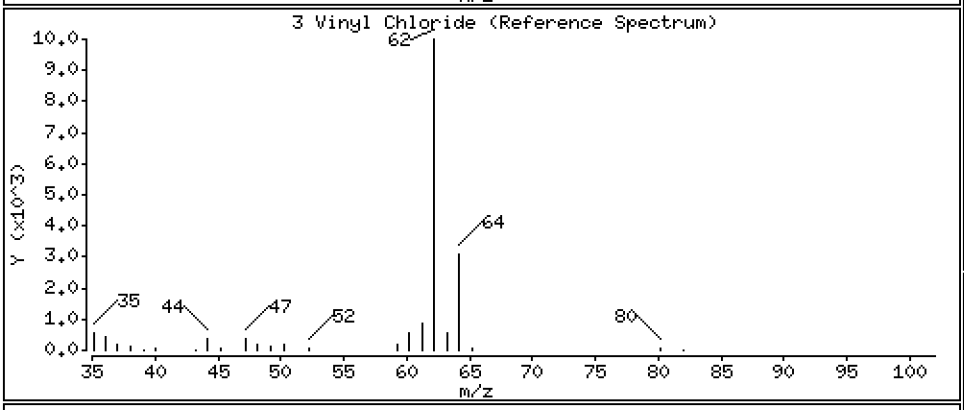
Concentration: 51.619 ug/Kg

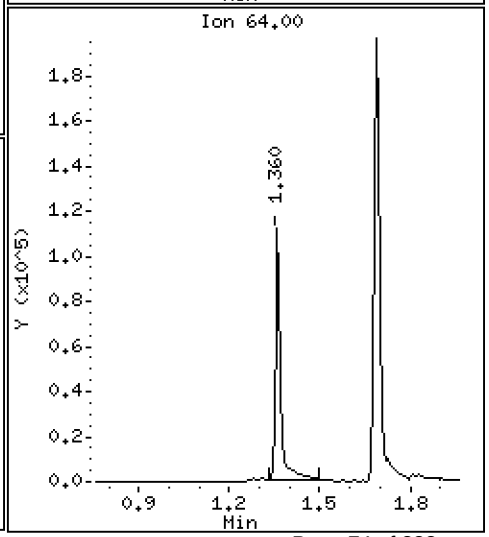


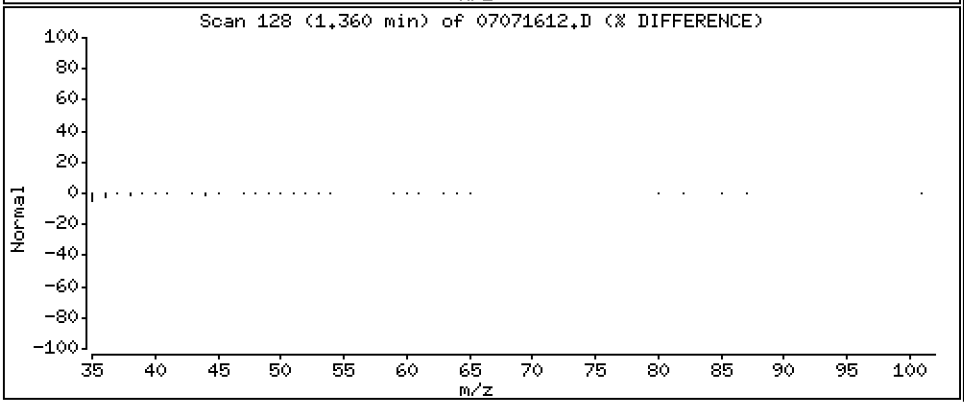












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

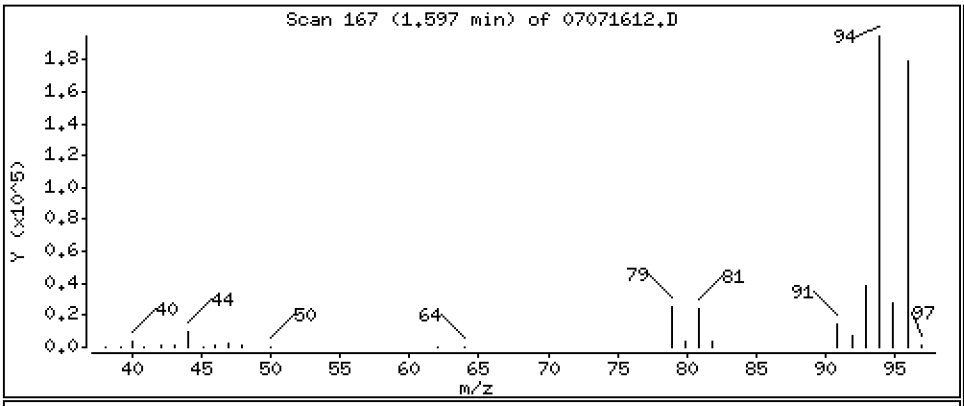
Operator: PB

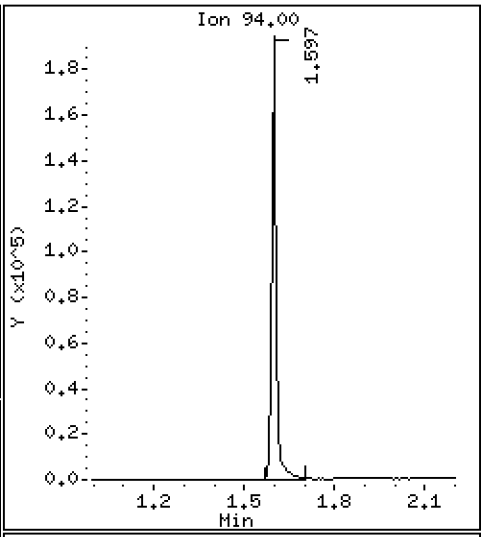
Column phase: RTXVMS

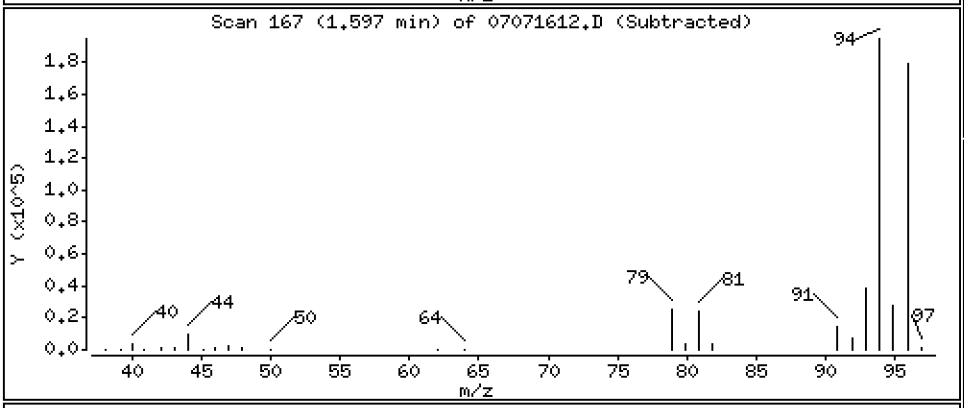
Column diameter: 0.18

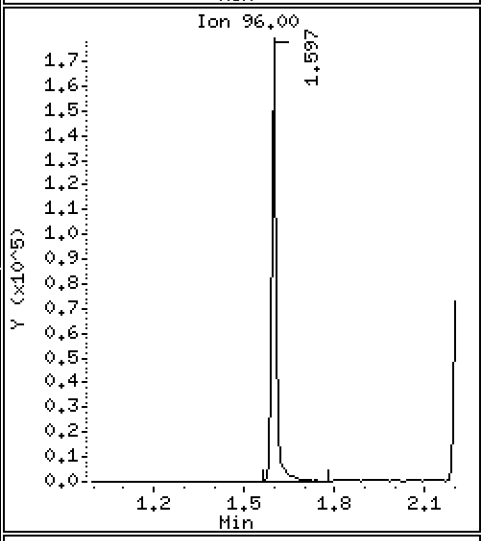
4 Bromomethane

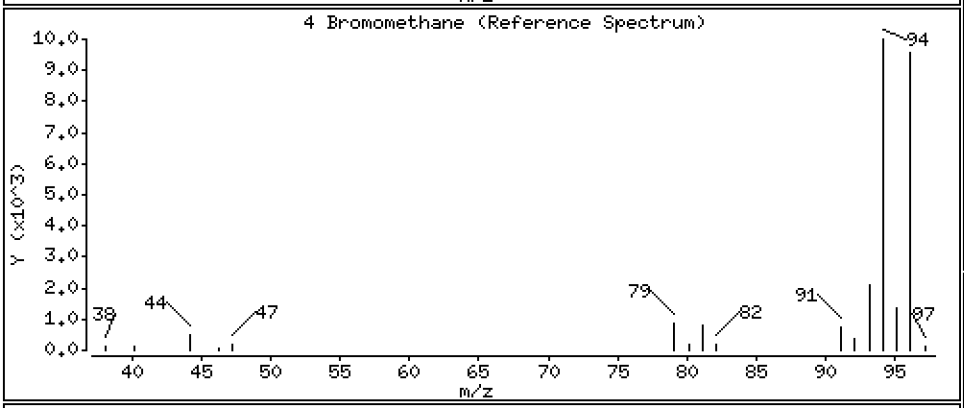
Concentration: 43.144 ug/Kg

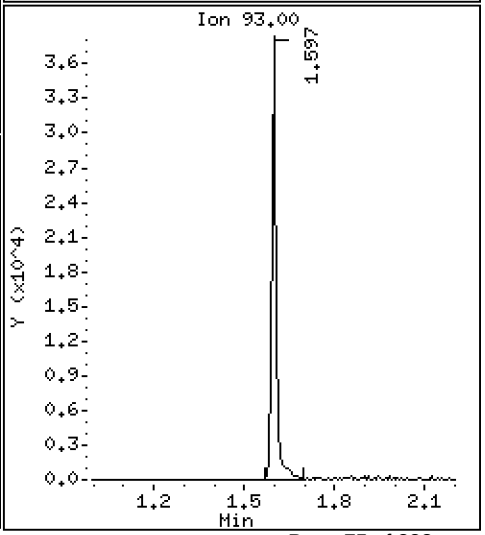


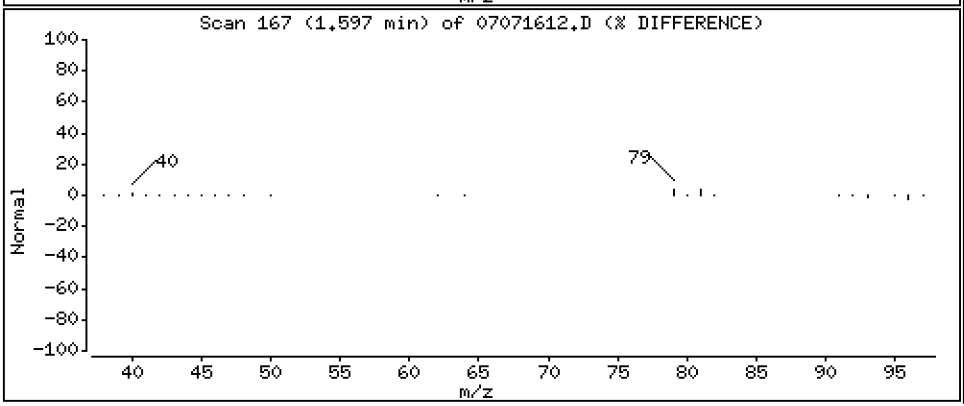












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

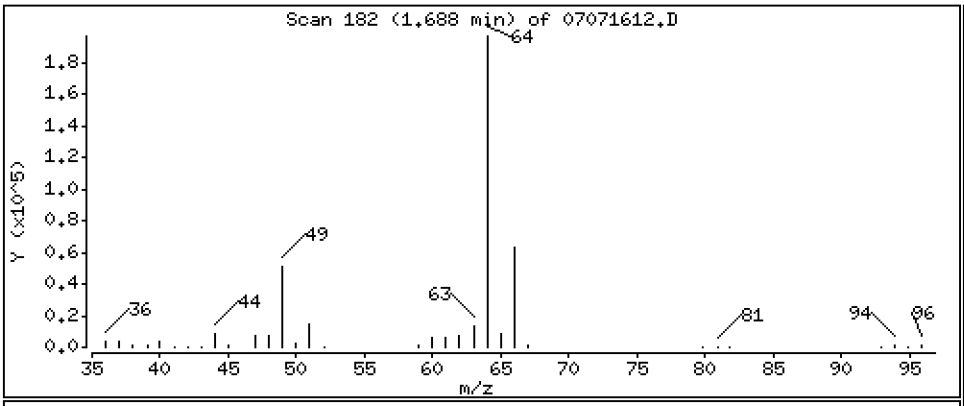
Operator: PB

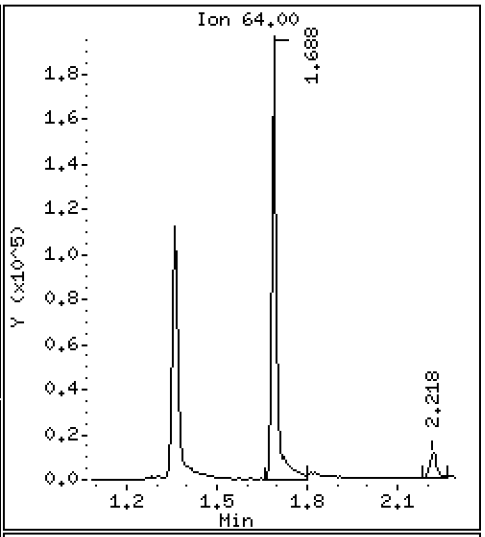
Column phase: RTXVMS

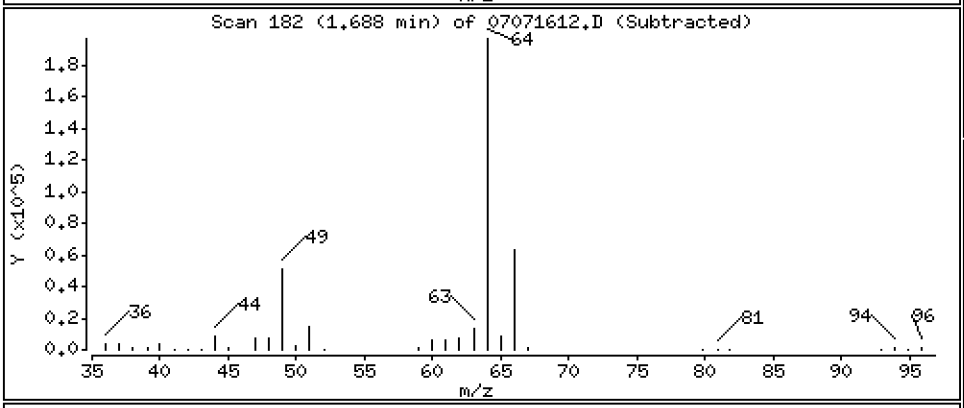
Column diameter: 0.18

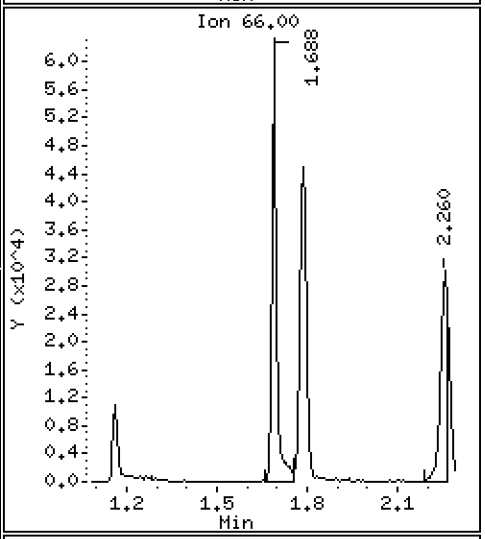
5 Chloroethane

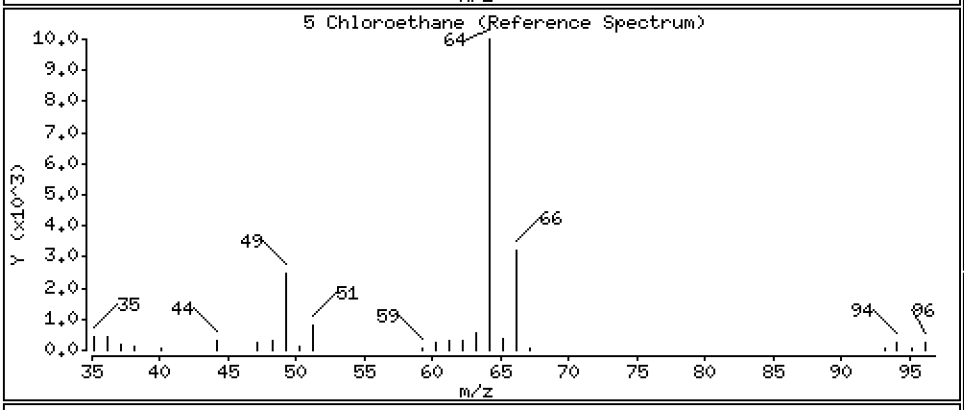
Concentration: 48.264 ug/Kg

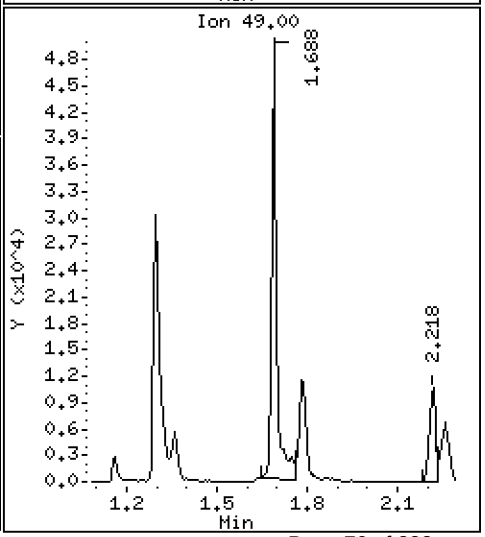


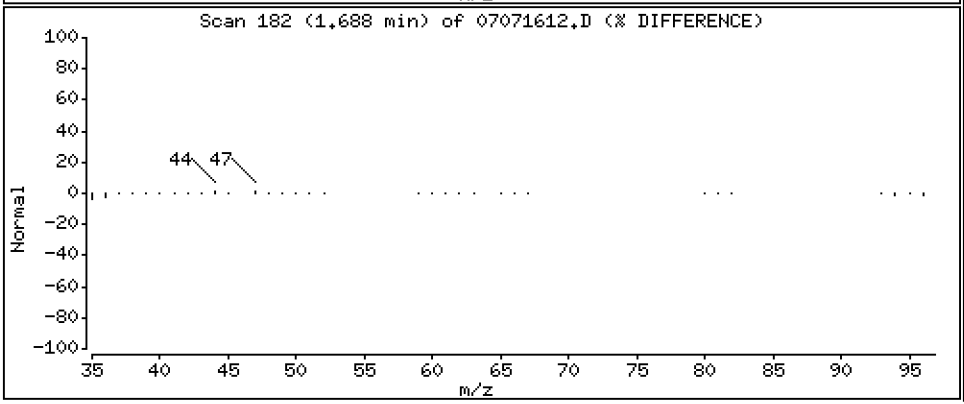












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

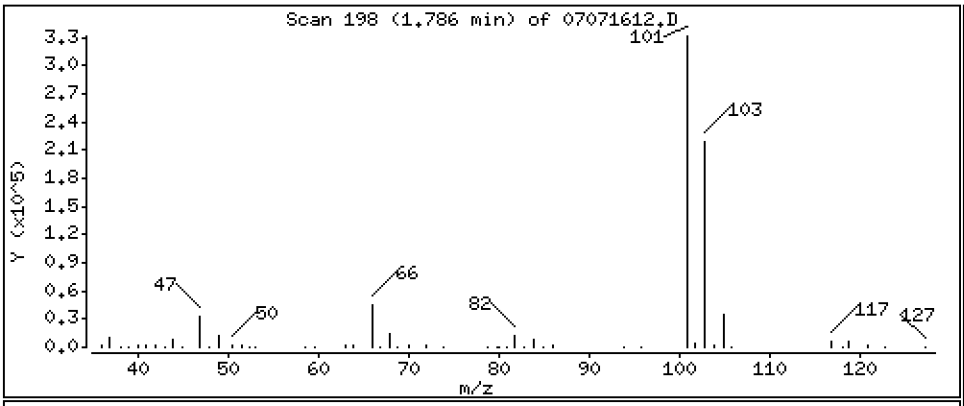
Operator: PB

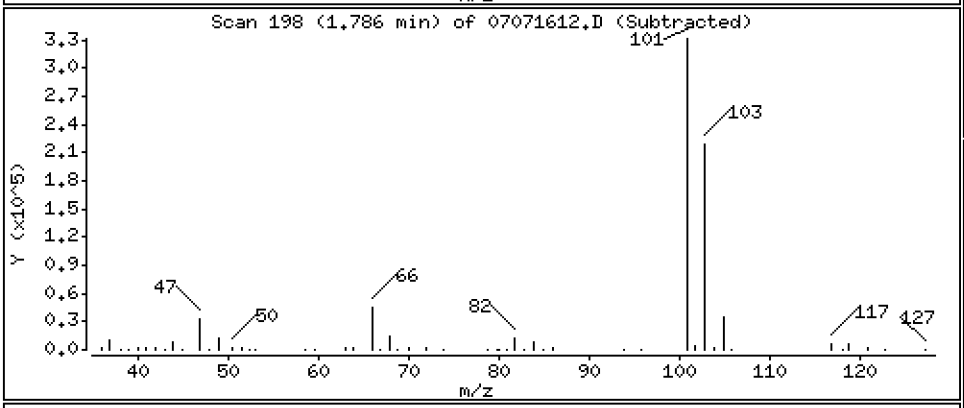
Column phase: RTXVMS

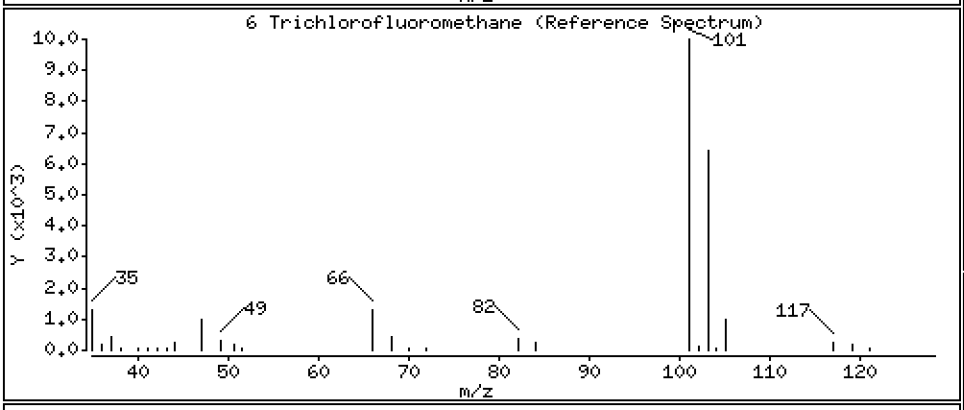
Column diameter: 0.18

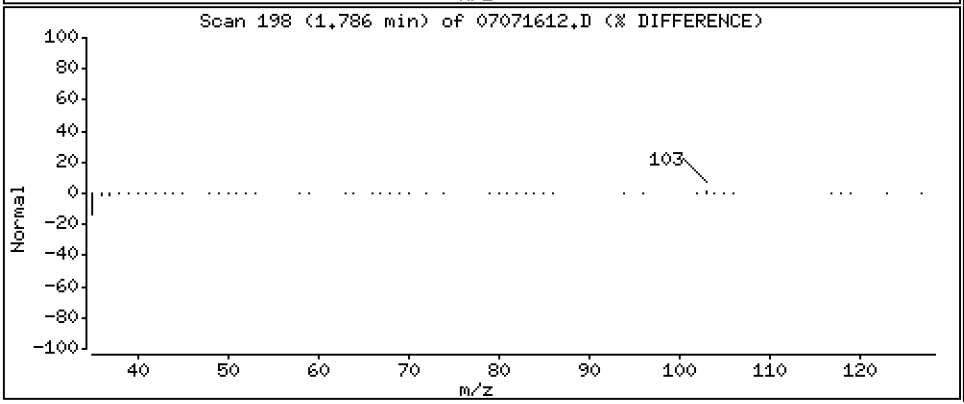
6 Trichlorofluoromethane

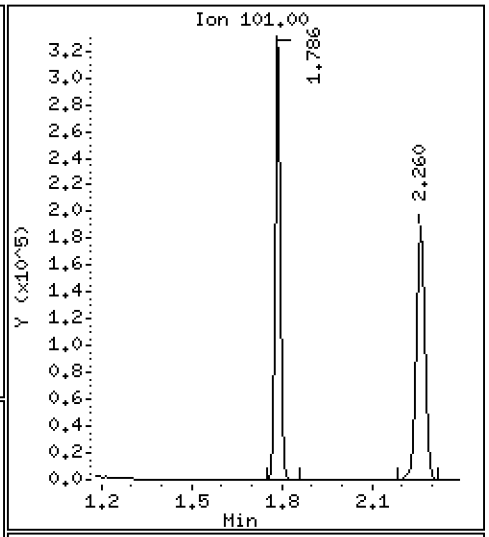
Concentration: 71.898 ug/Kg

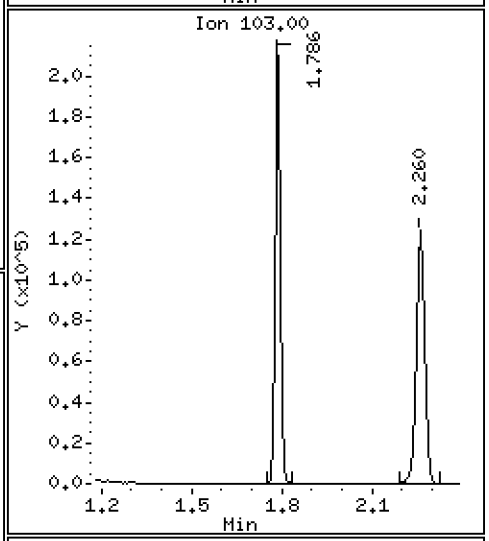


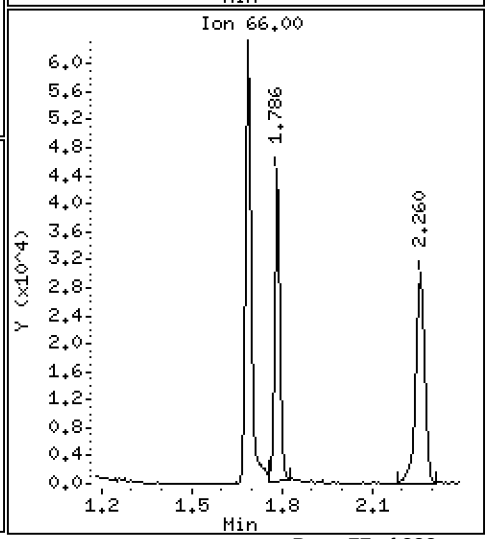












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

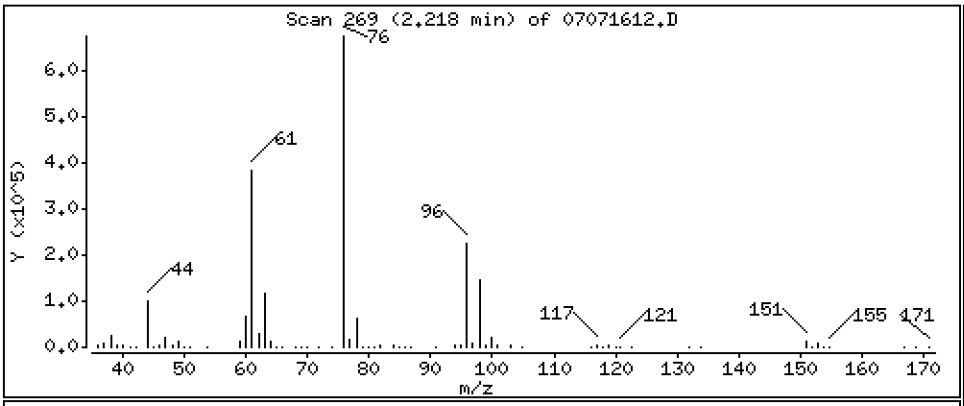
Operator: PB

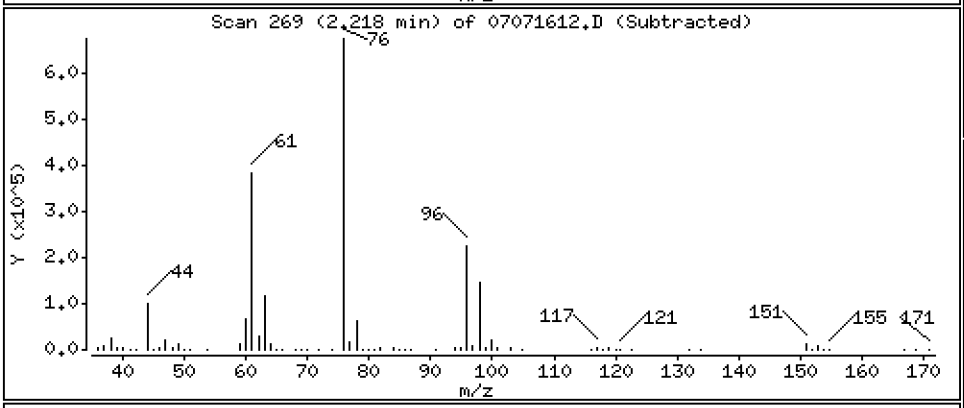
Column phase: RTXVMS

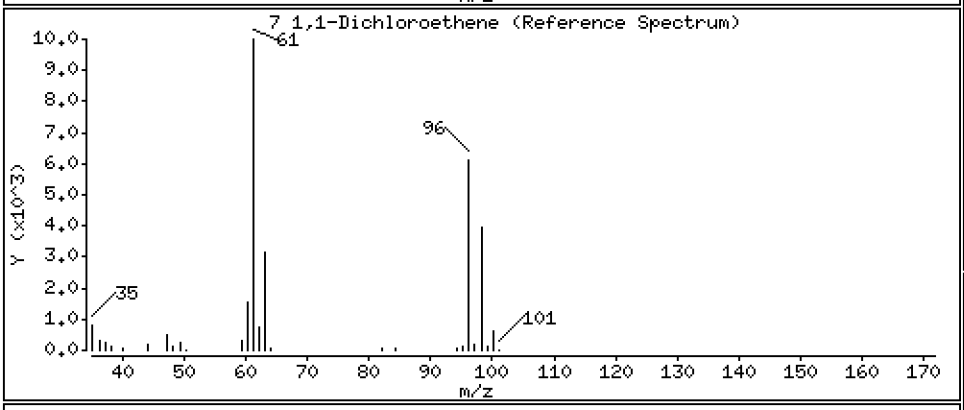
Column diameter: 0.18

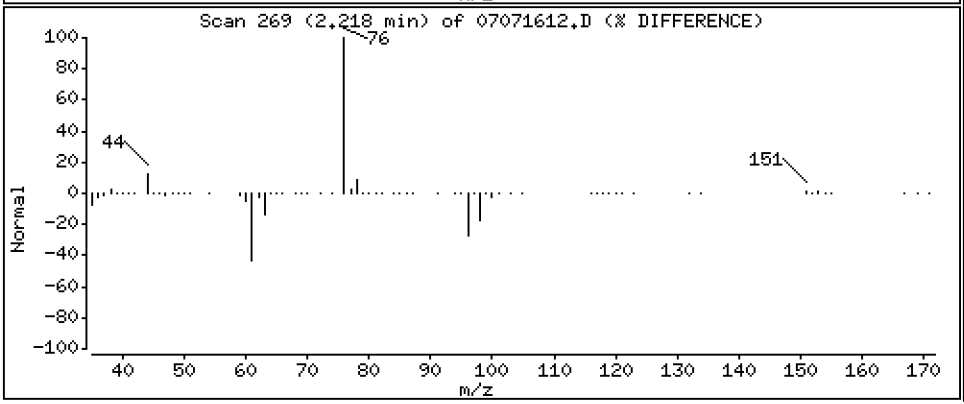
7 1,1-Dichloroethene

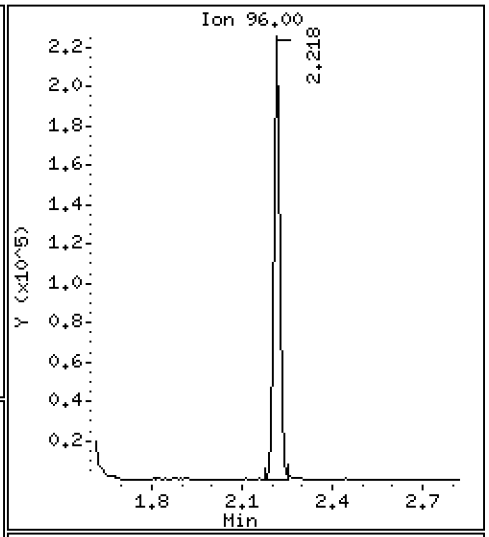
Concentration: 48.203 ug/Kg

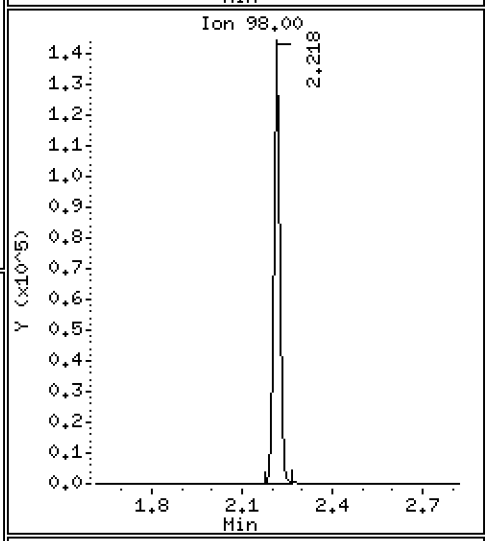


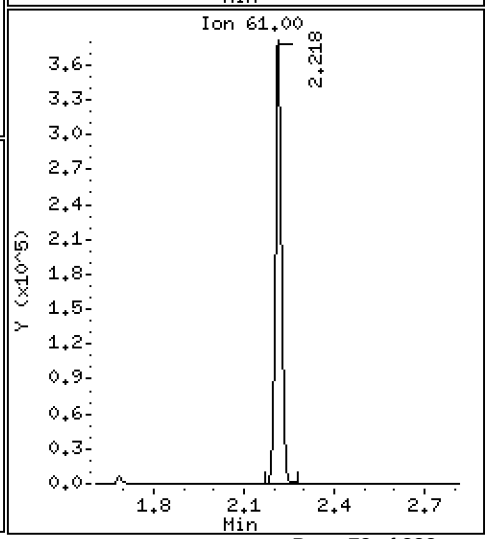












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

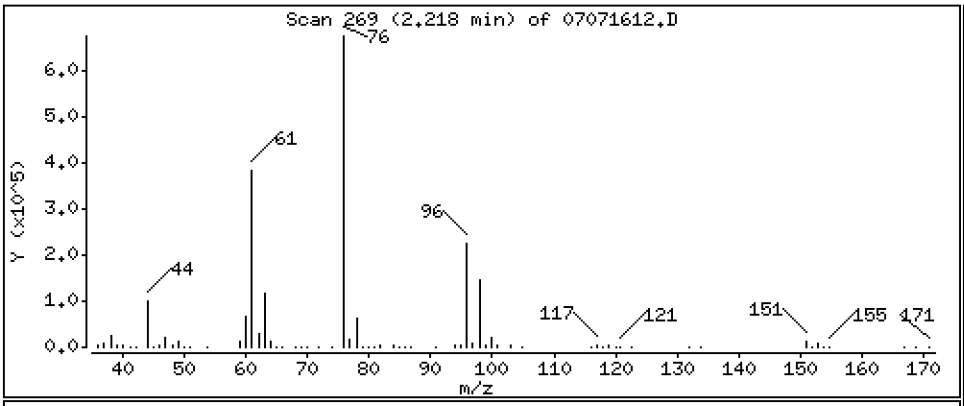
Operator: PB

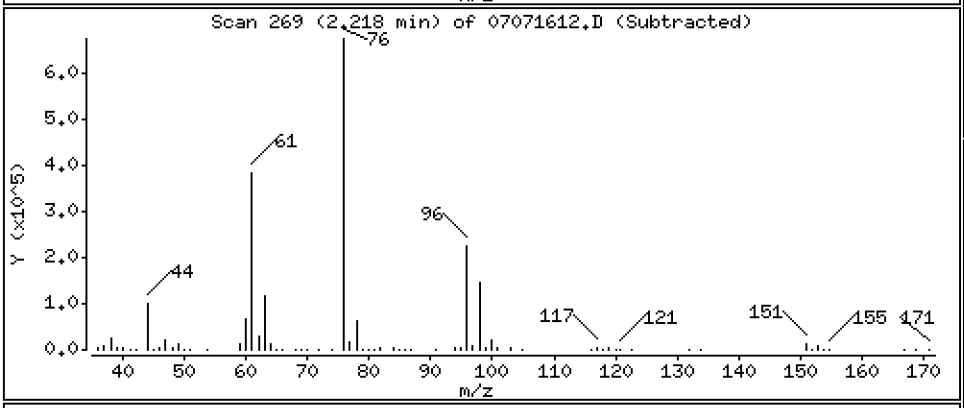
Column phase: RTXVMS

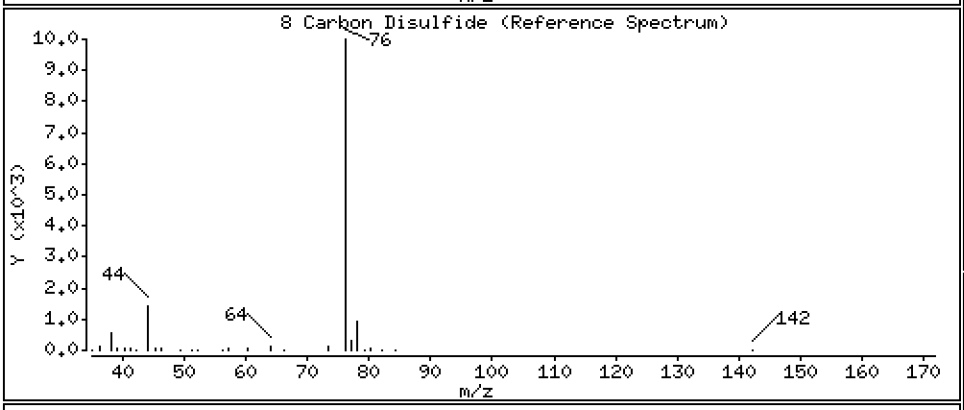
Column diameter: 0.18

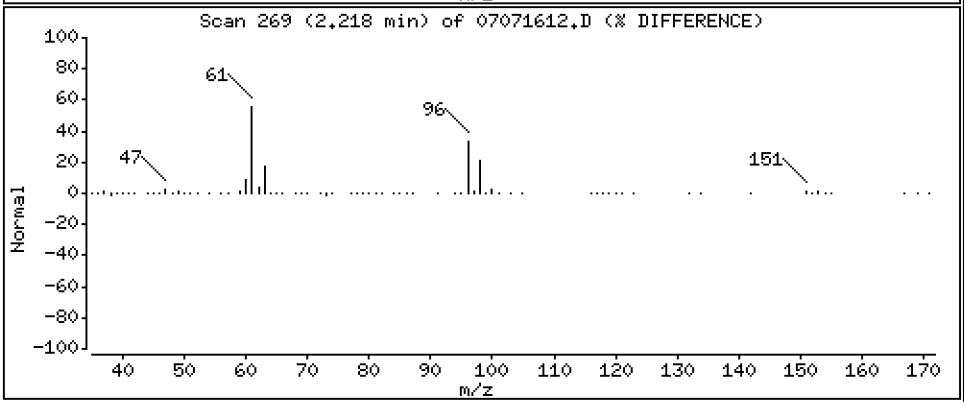
8 Carbon Disulfide

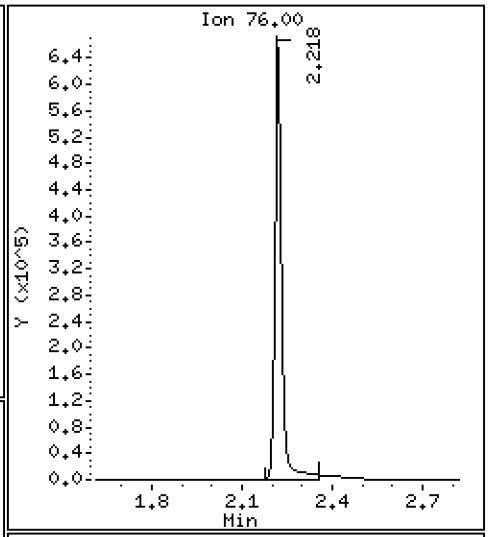
Concentration: 50.238 ug/Kg

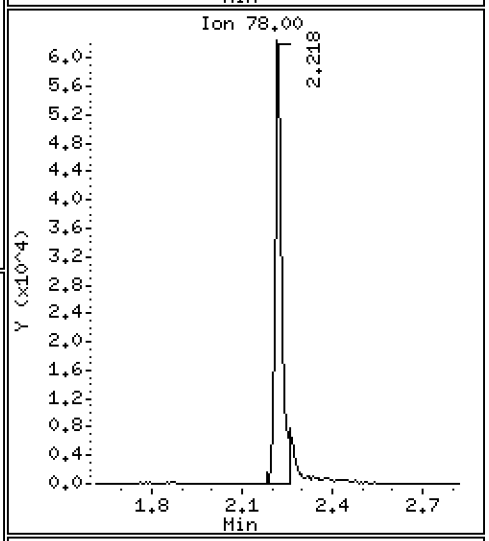


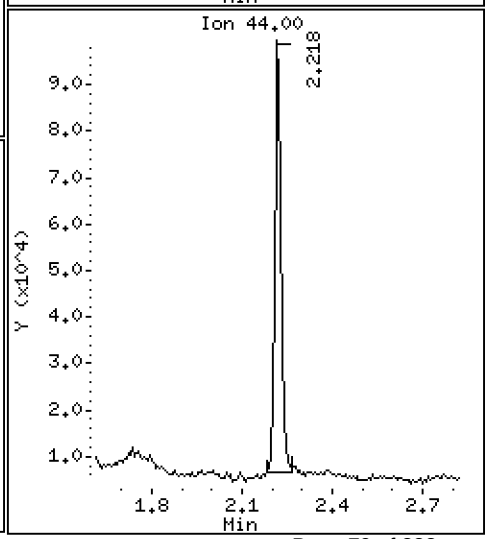












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

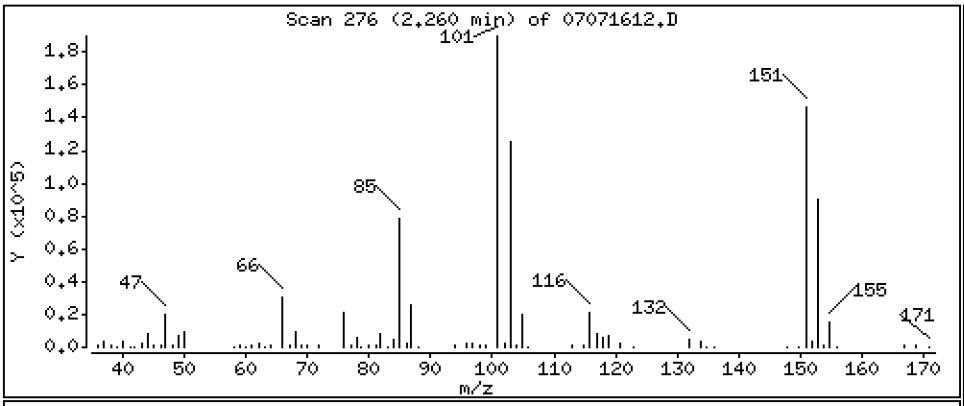
Operator: PB

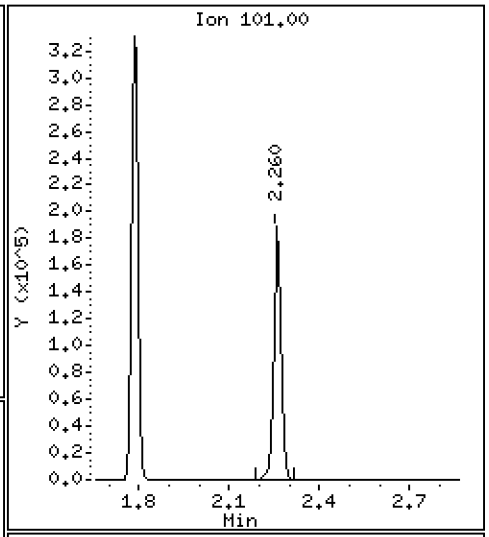
Column phase: RTXVMS

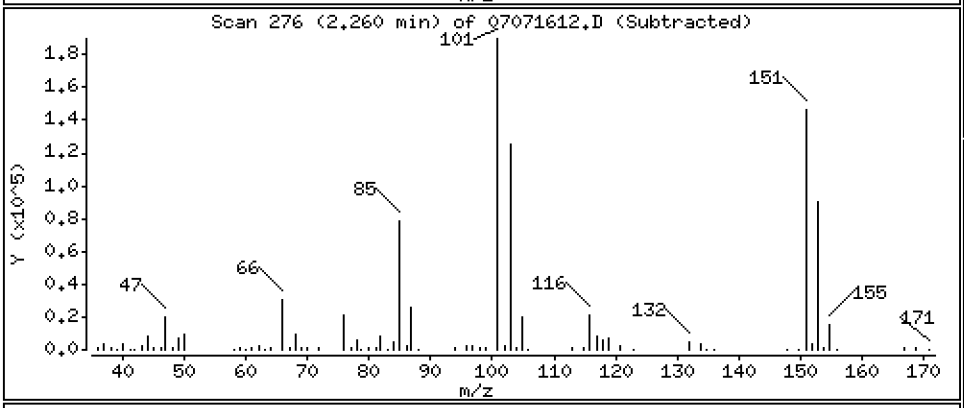
Column diameter: 0.18

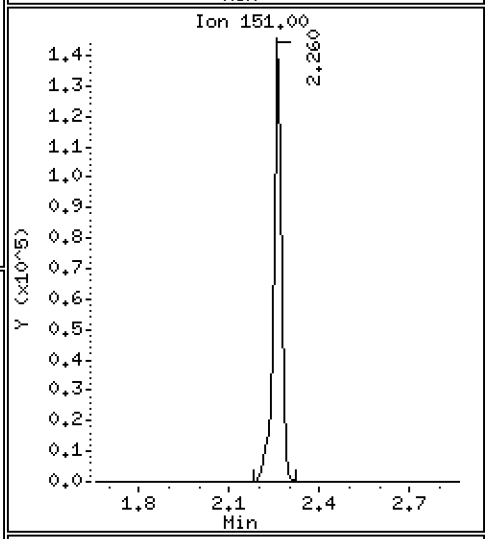
9 112Trichloro122Trifluoroethane

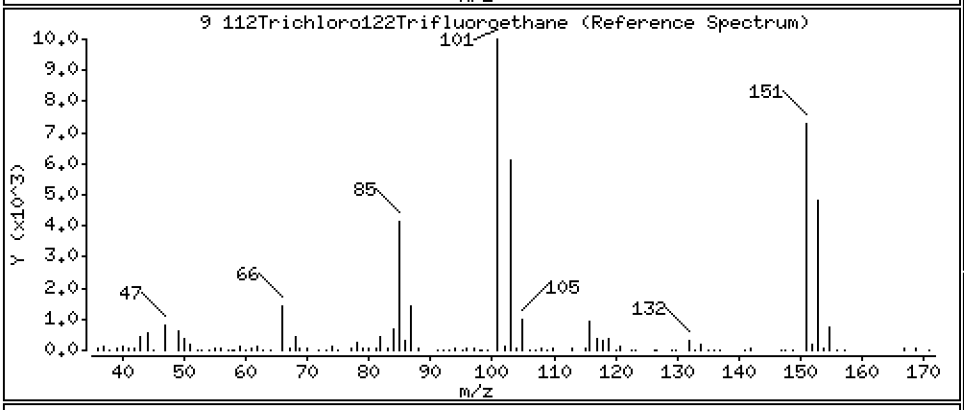
Concentration: 48.211 ug/Kg

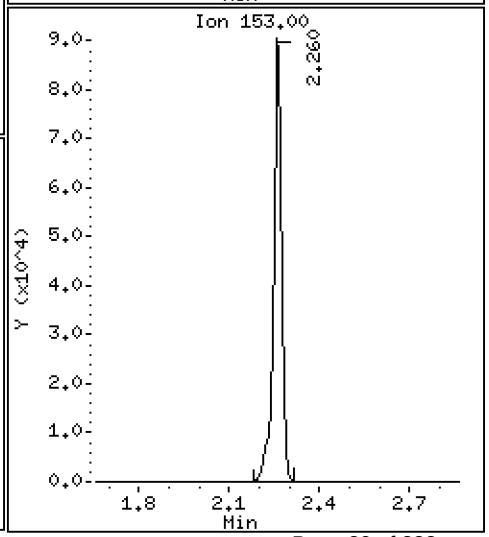


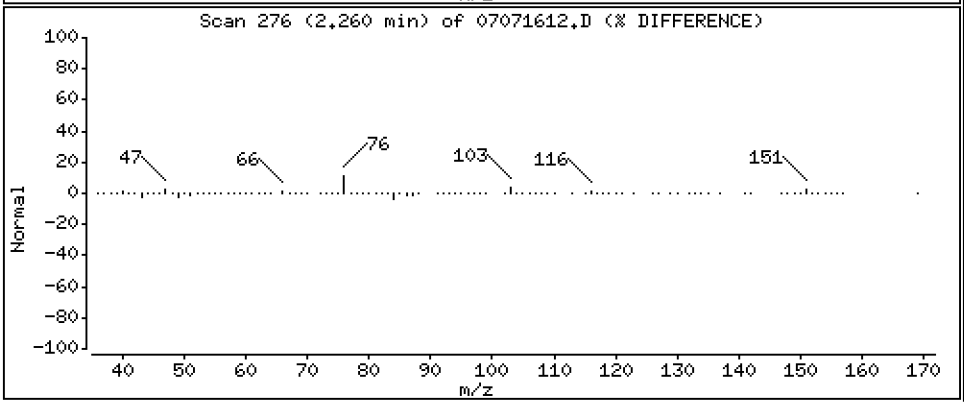












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

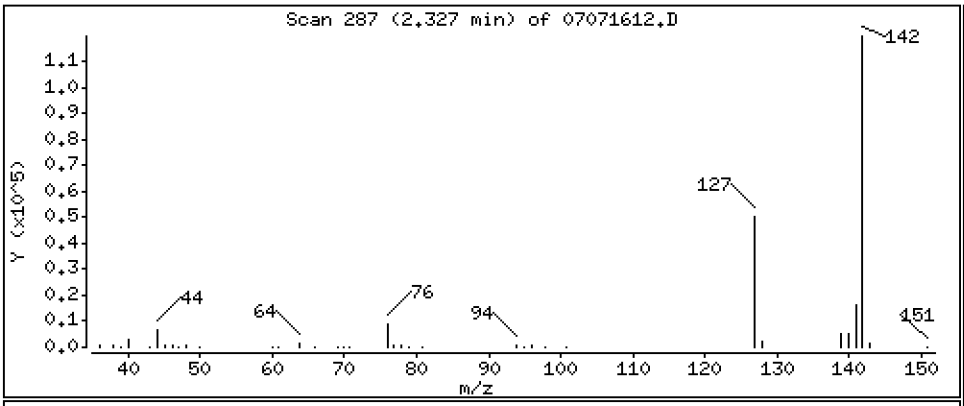
Operator: PB

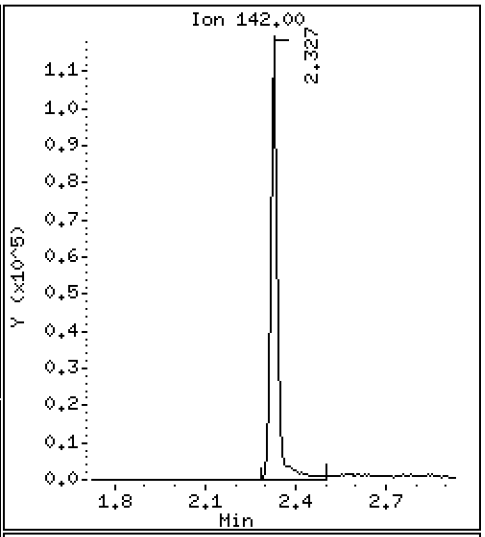
Column phase: RTXVMS

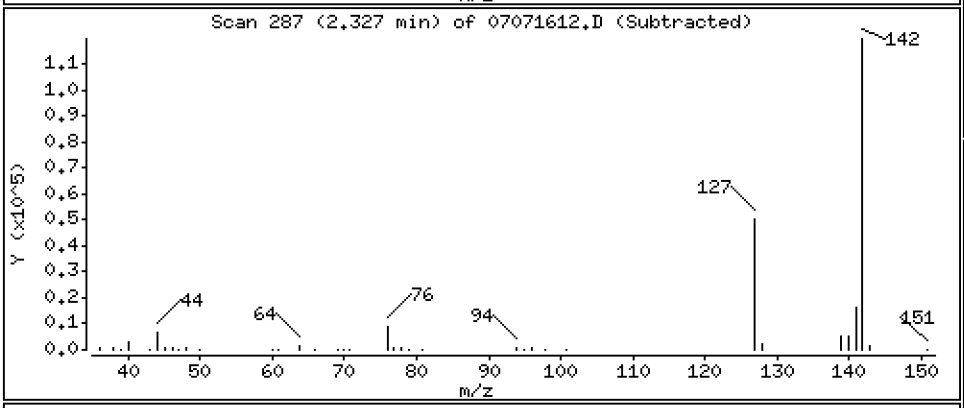
Column diameter: 0.18

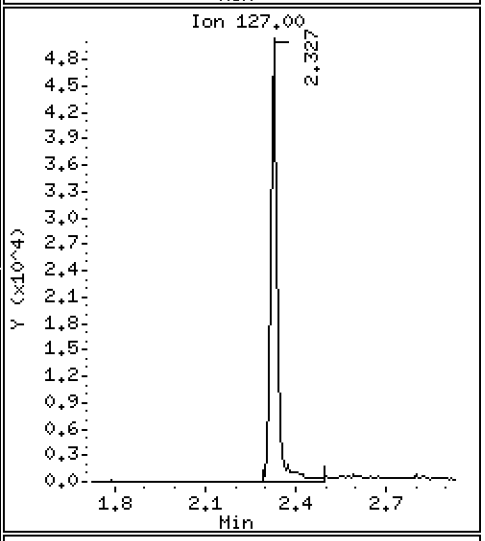
10 Iodomethane

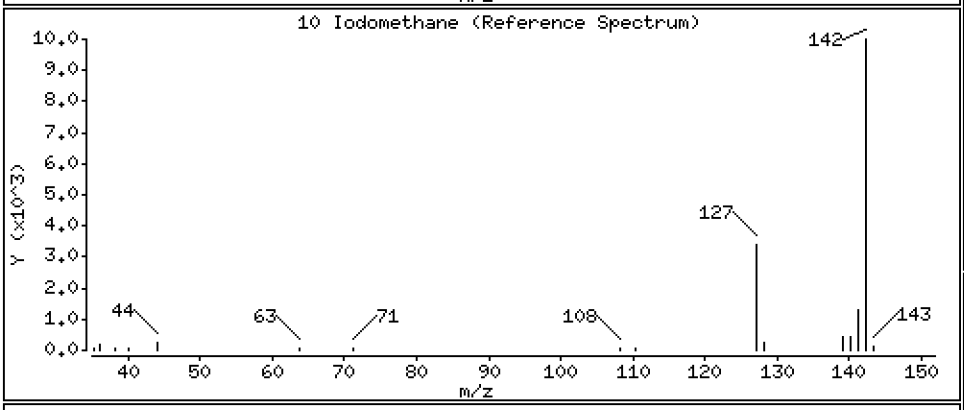
Concentration: 57.646 ug/Kg

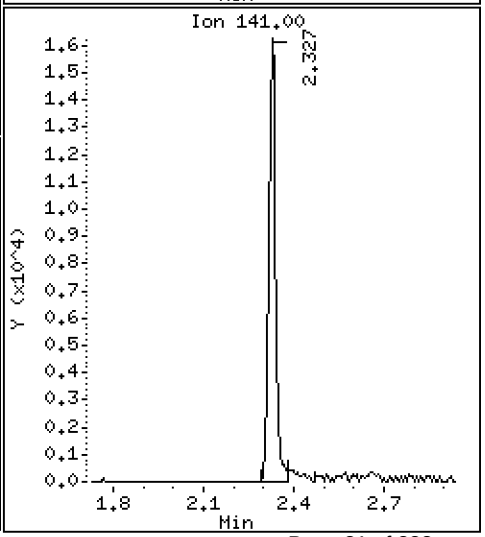


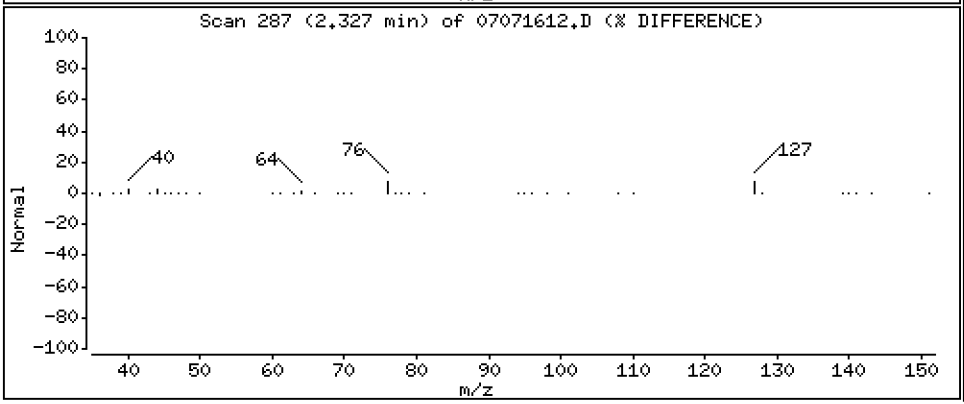












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

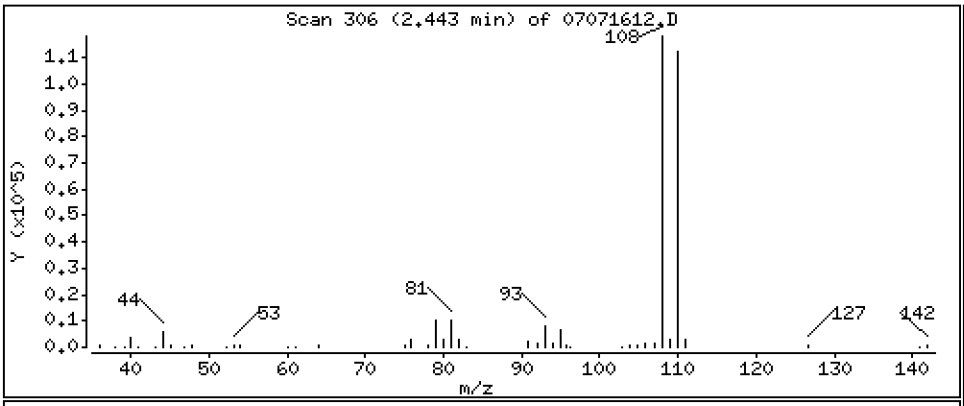
Operator: PB

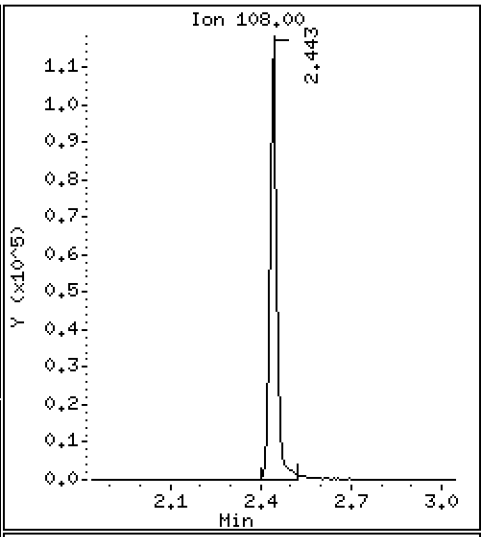
Column phase: RTXVMS

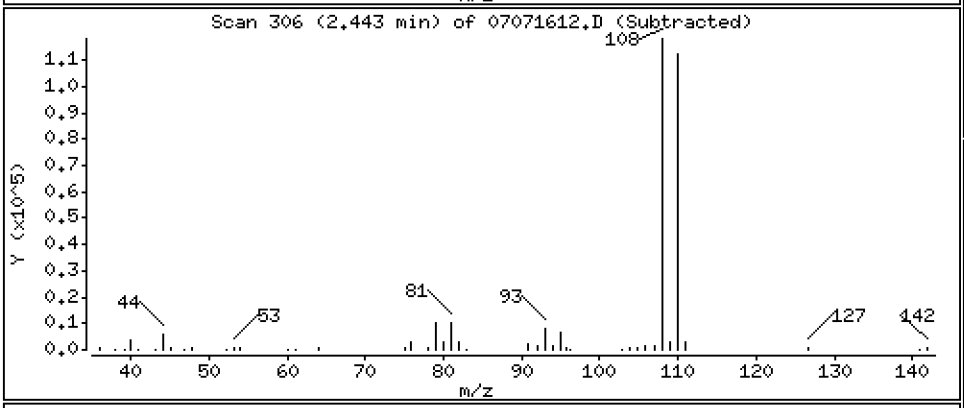
Column diameter: 0.18

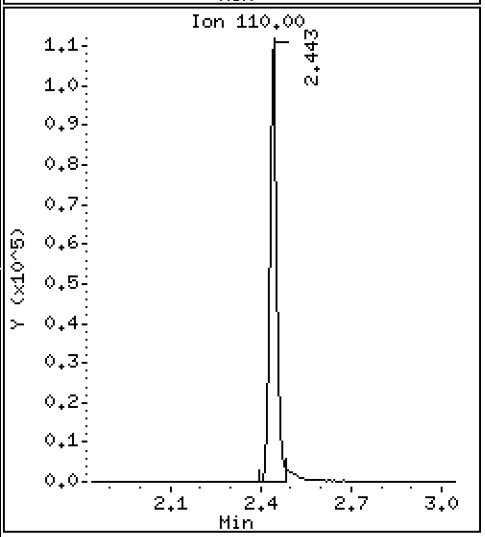
11 Bromoethane

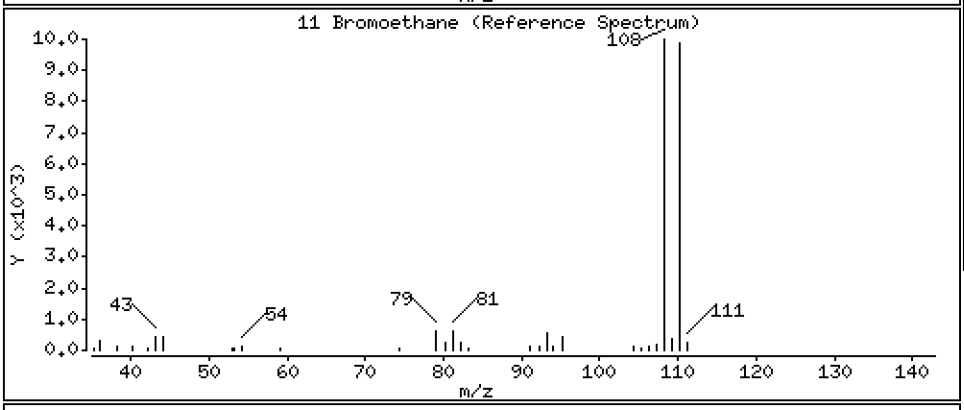
Concentration: 48.107 ug/Kg

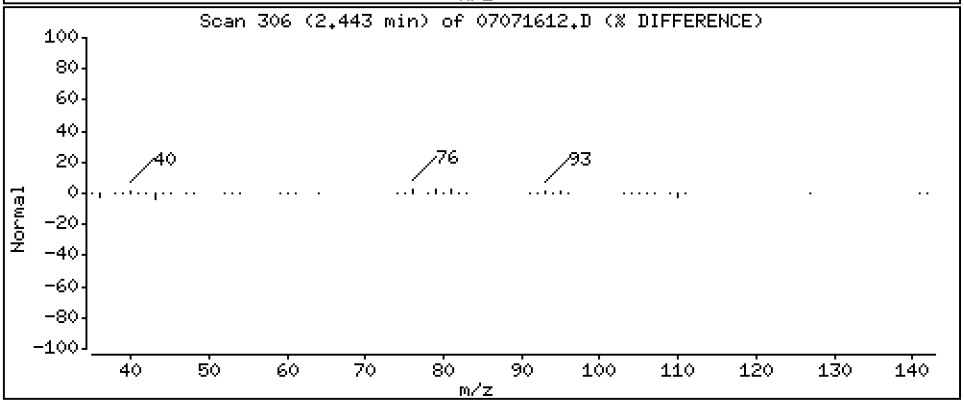












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

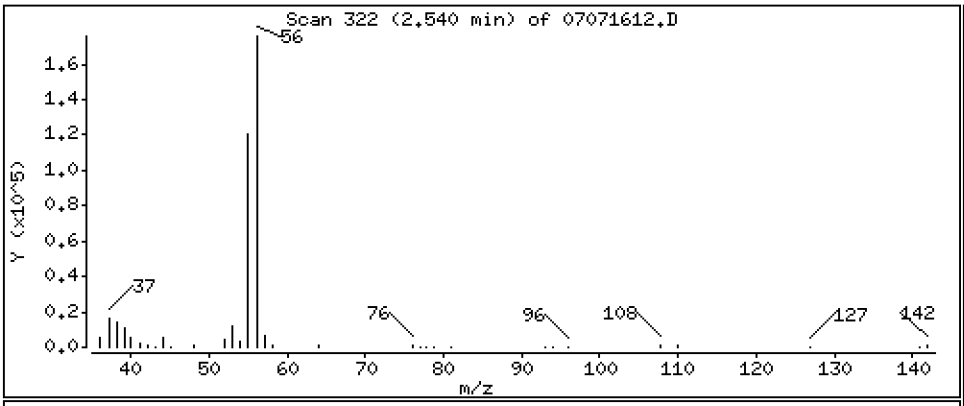
Operator: PB

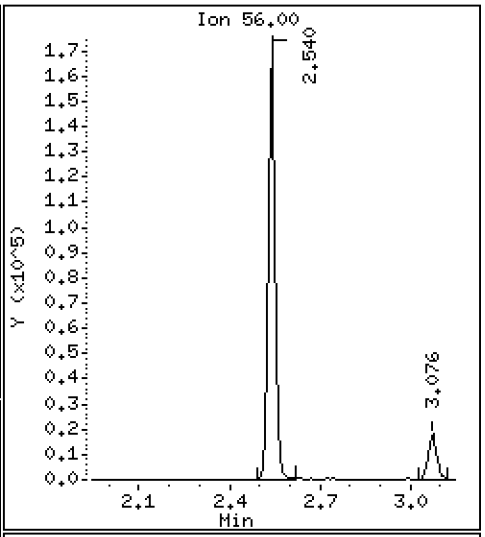
Column phase: RTXVMS

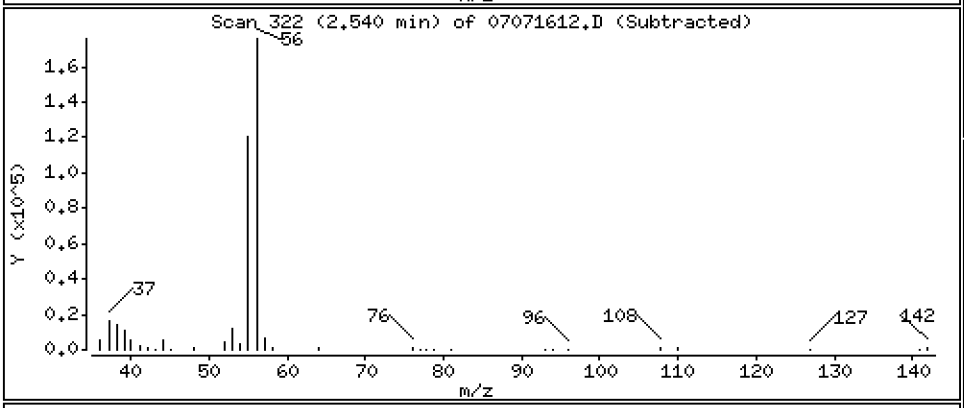
Column diameter: 0.18

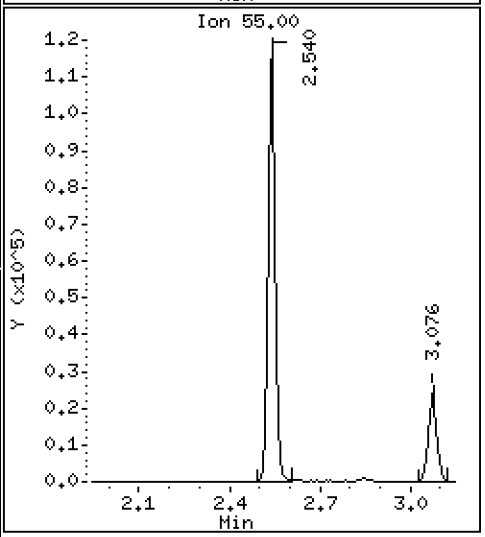
12 Acrolein

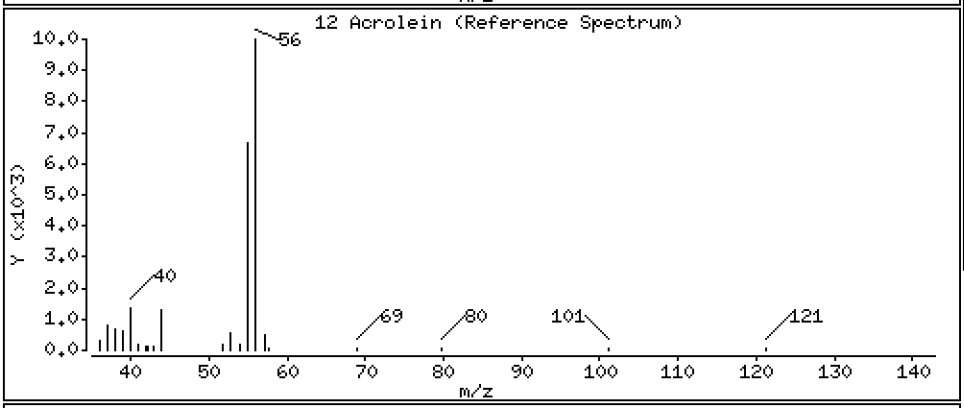
Concentration: 229.68 ug/Kg

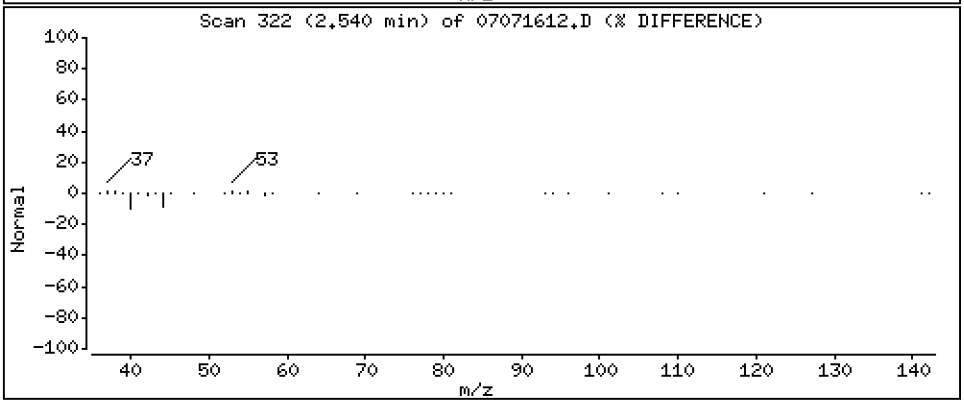












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

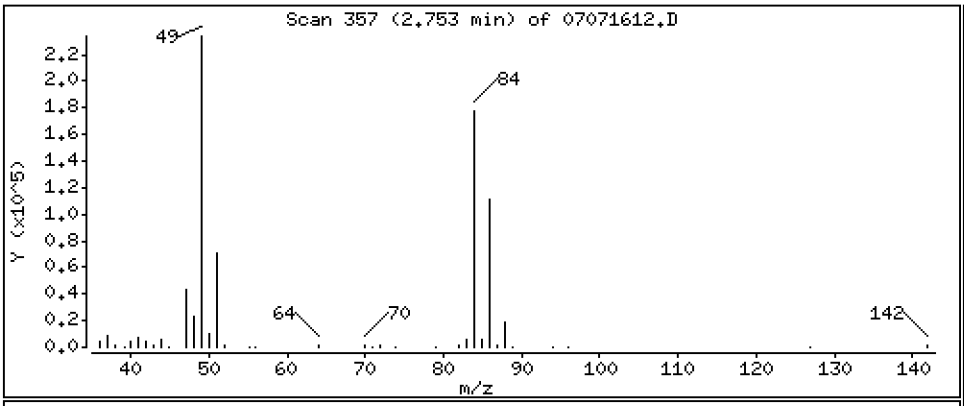
Operator: PB

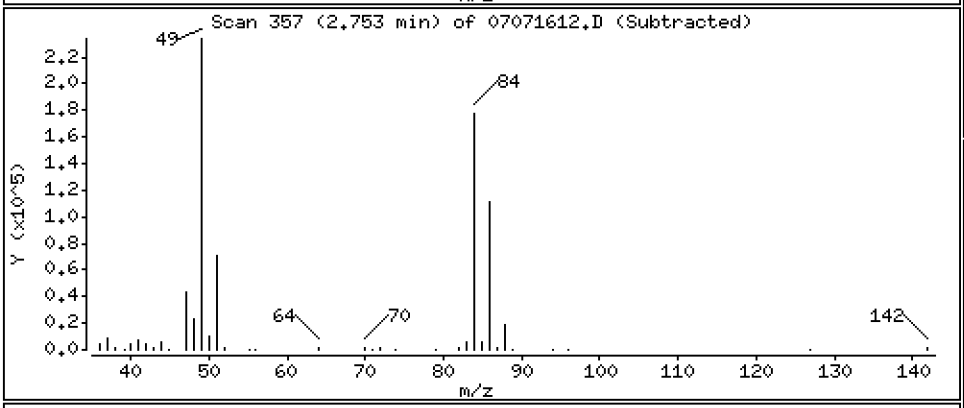
Column phase: RTXVMS

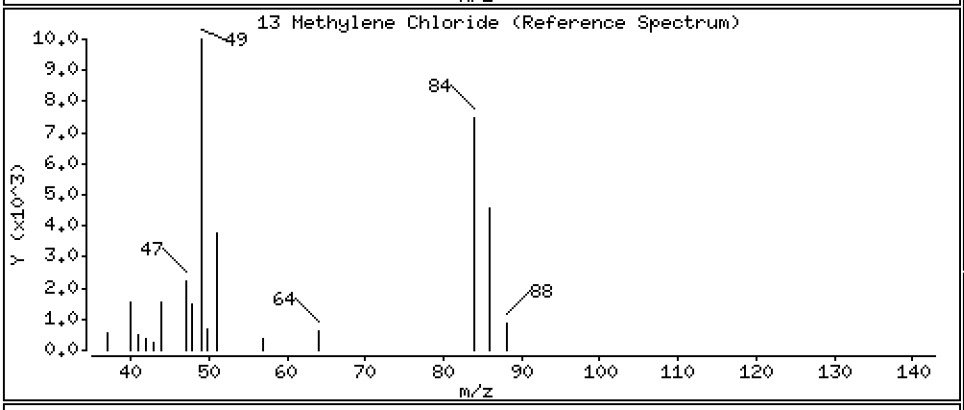
Column diameter: 0.18

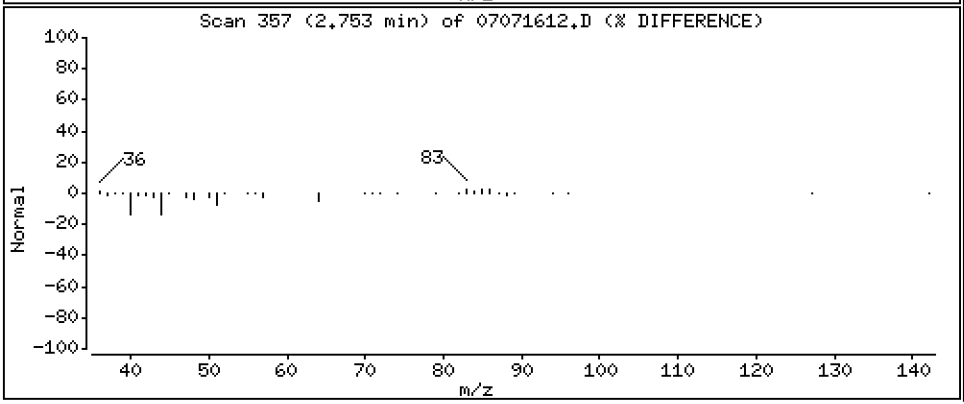
13 Methylene Chloride

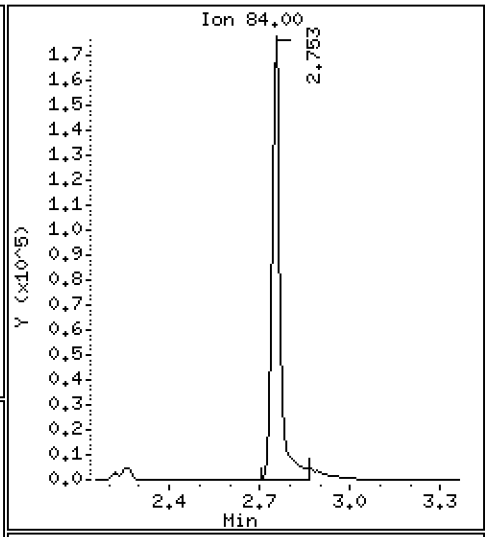
Concentration: 47.142 ug/Kg

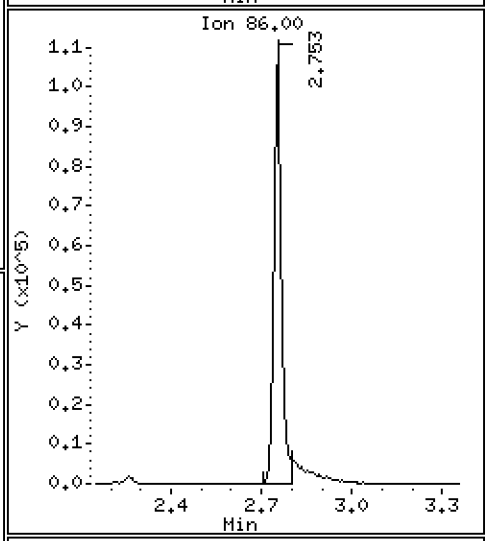


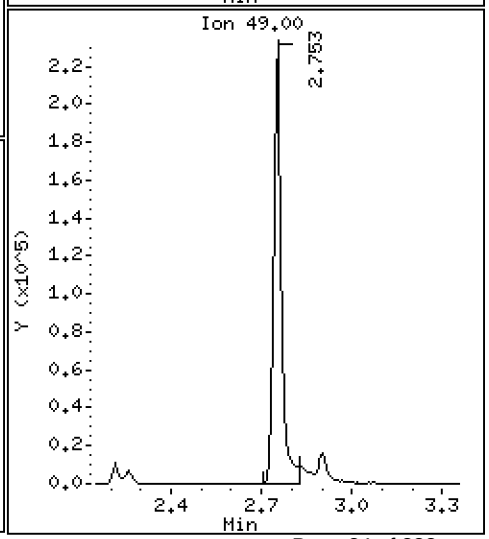












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

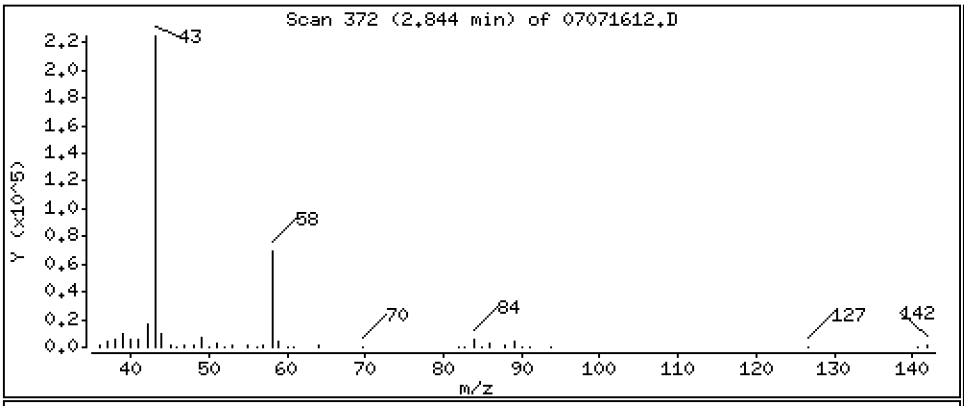
Operator: PB

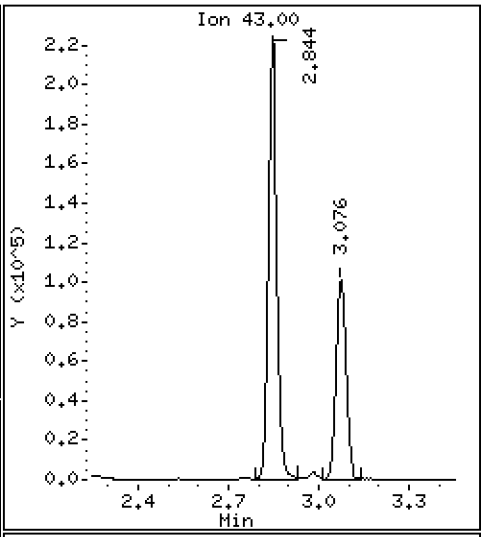
Column phase: RTXVMS

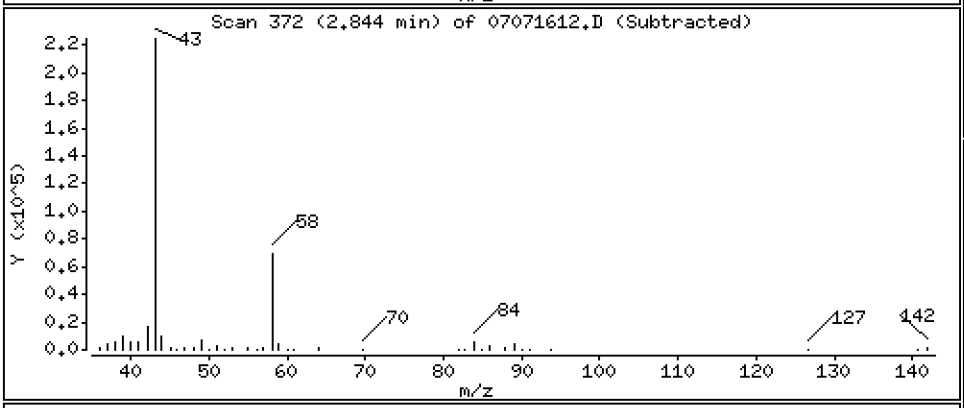
Column diameter: 0.18

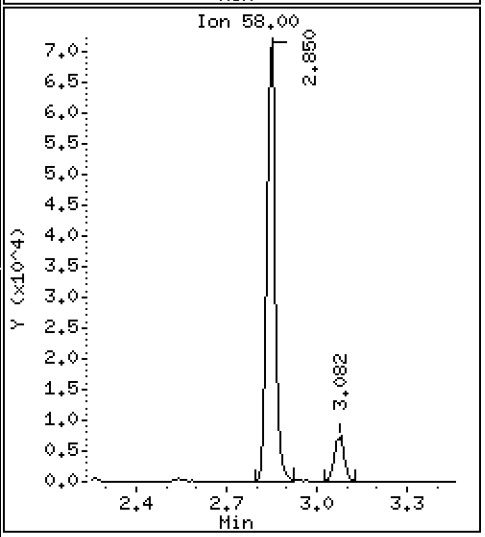
14 Acetone

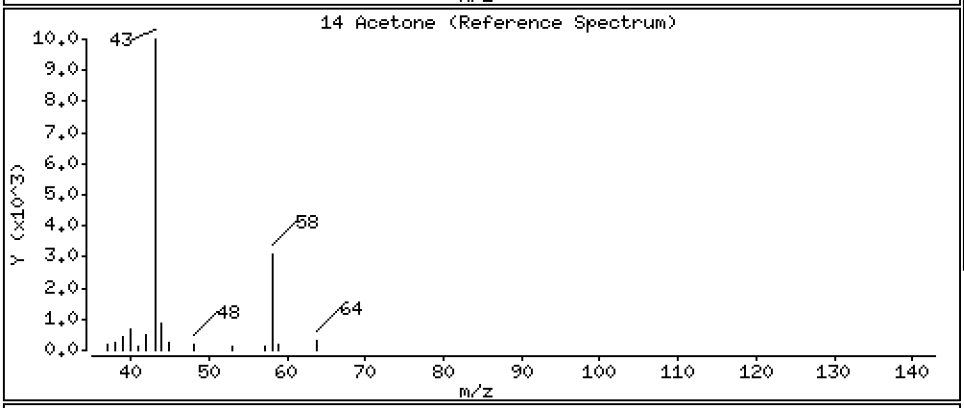
Concentration: 201.02 ug/Kg

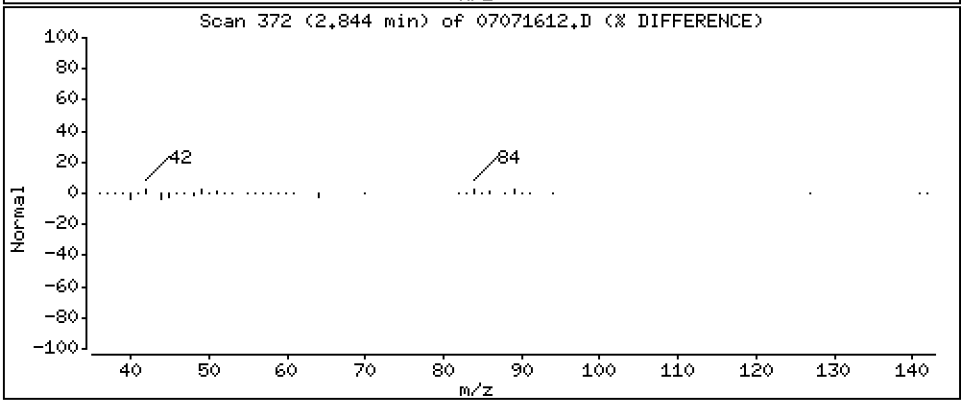












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

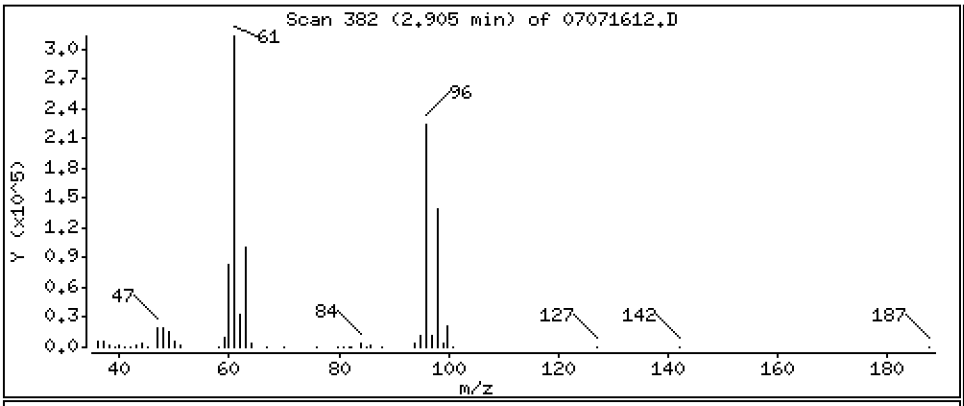
Operator: PB

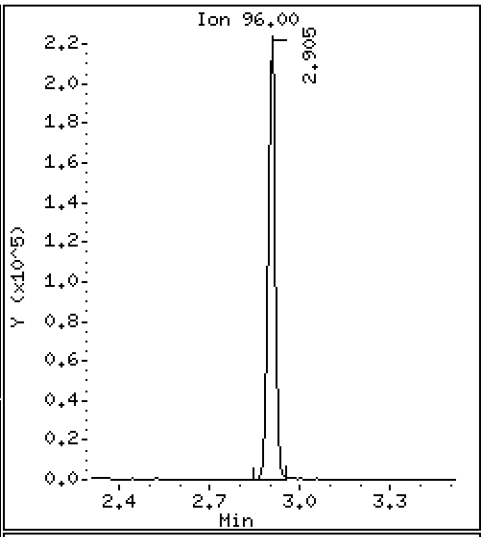
Column phase: RTXVMS

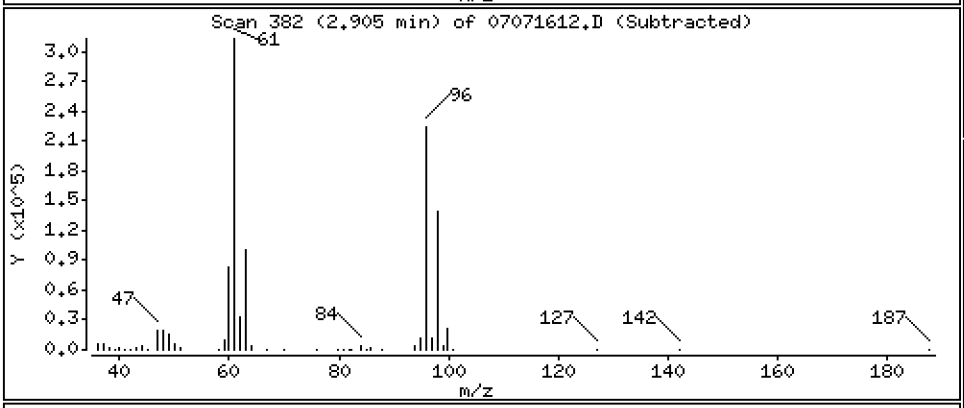
Column diameter: 0.18

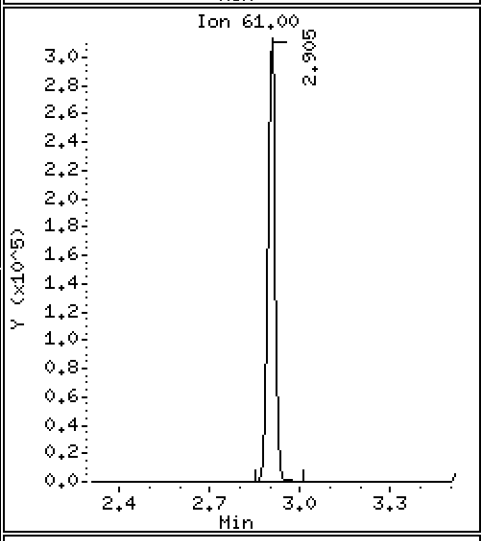
15 Trans-1,2-Dichloroethene

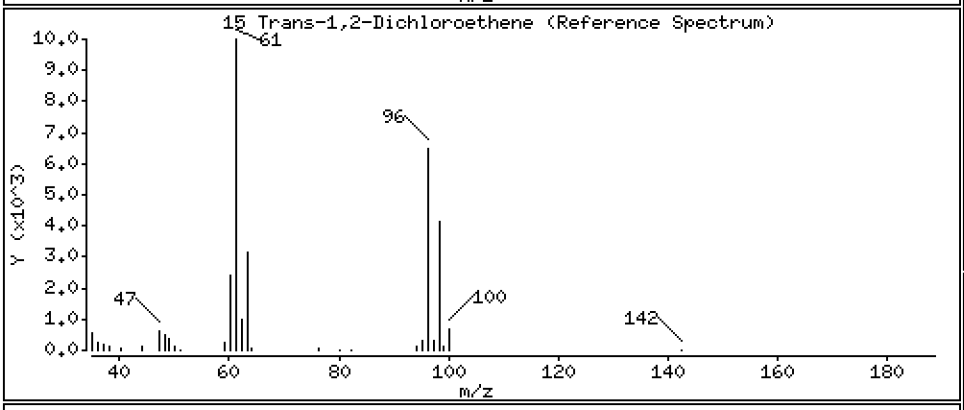
Concentration: 46.989 ug/Kg

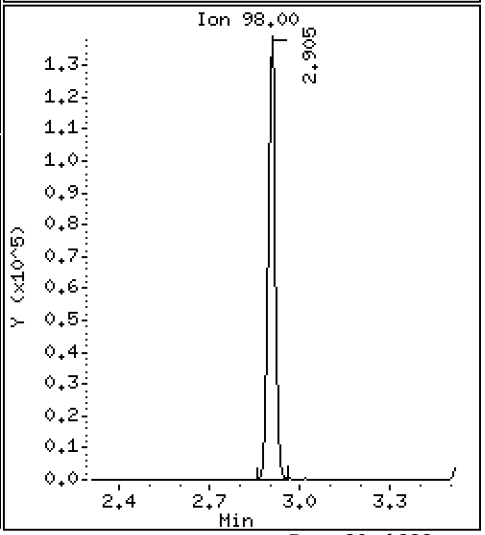


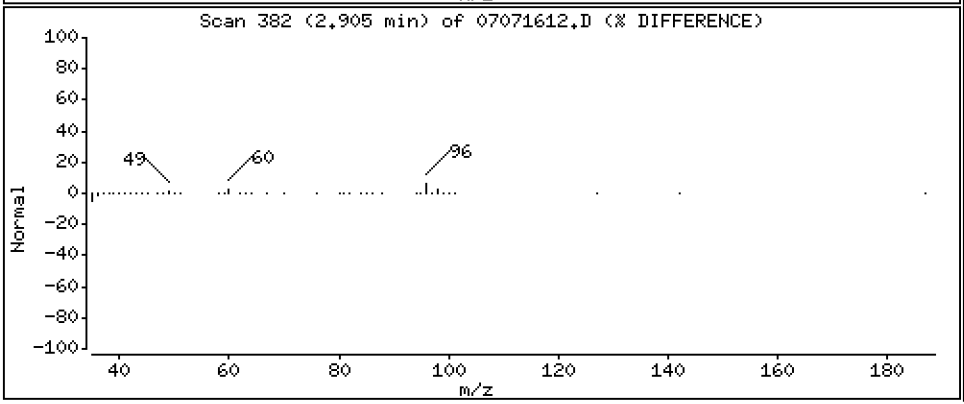












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

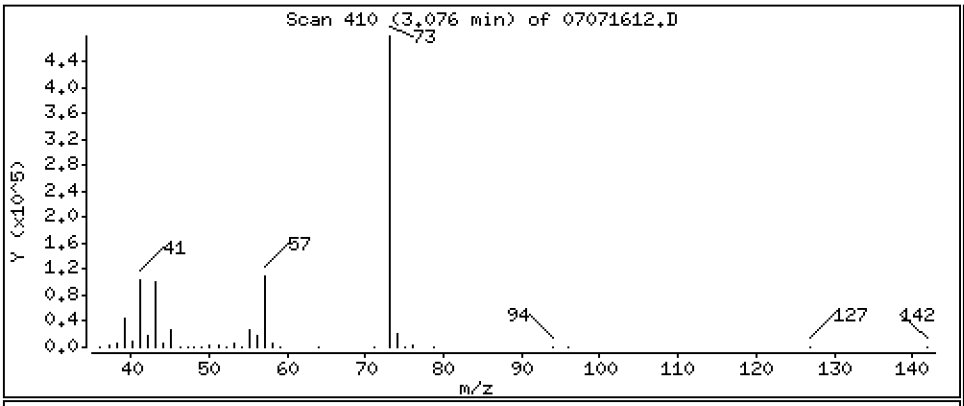
Operator: PB

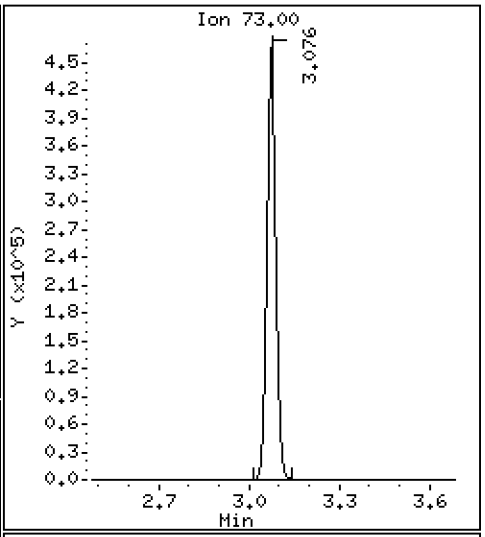
Column phase: RTXVMS

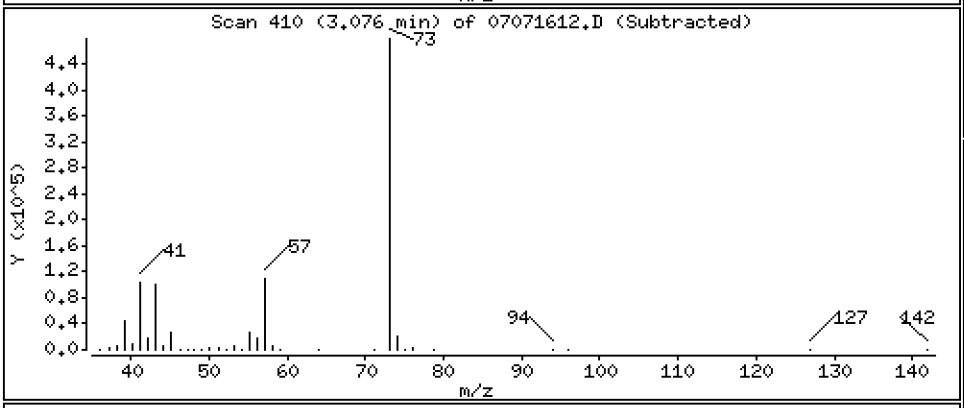
Column diameter: 0.18

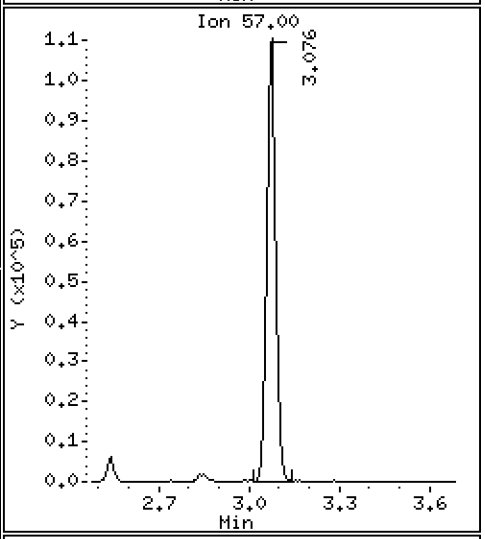
16 Methyl tert butyl ether

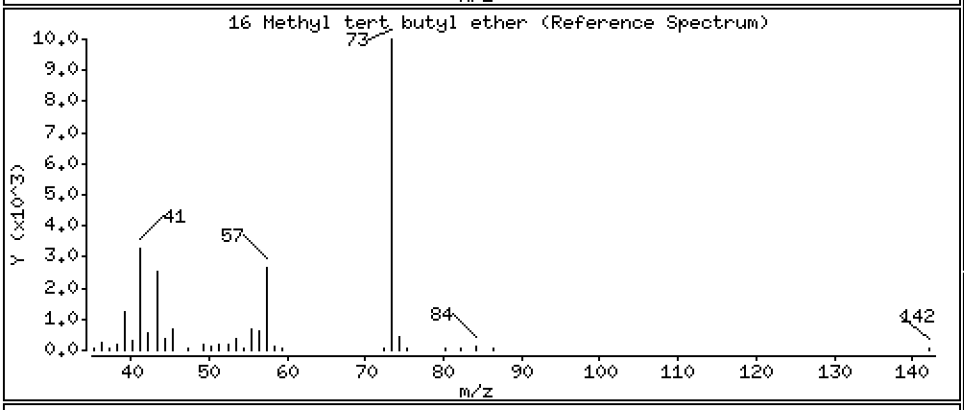
Concentration: 44.562 ug/Kg

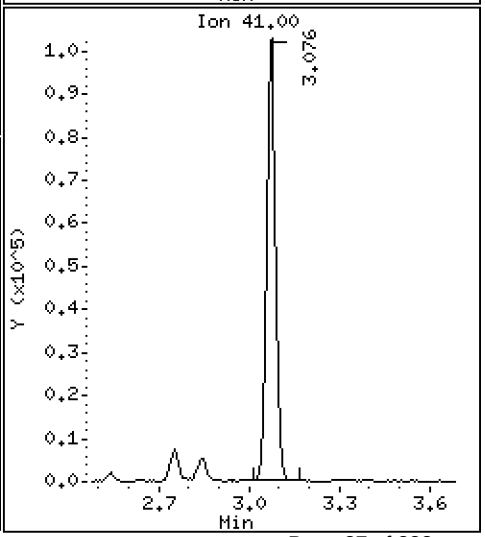


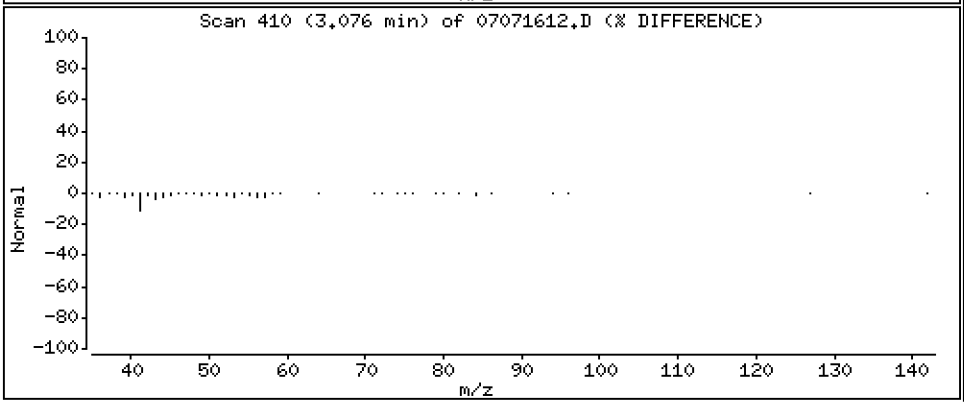












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

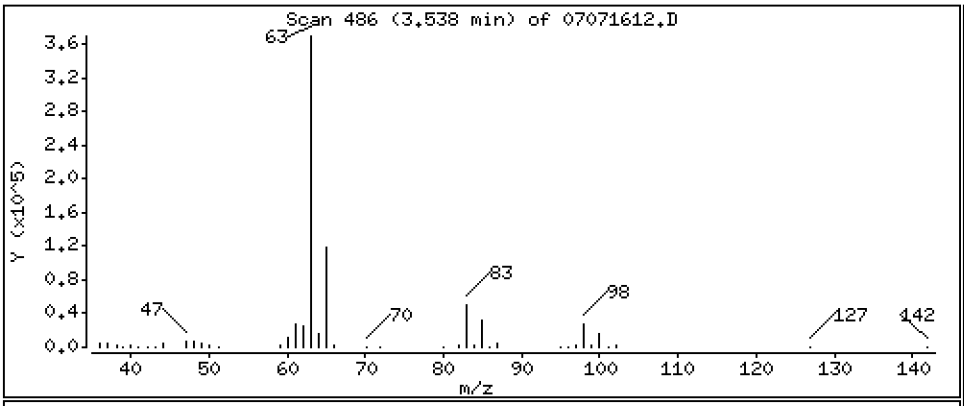
Operator: PB

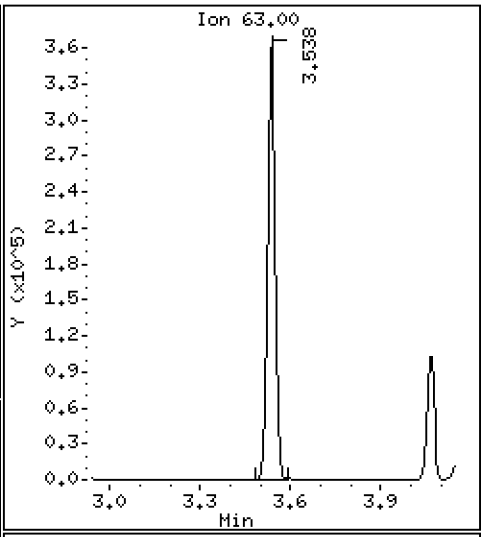
Column phase: RTXVMS

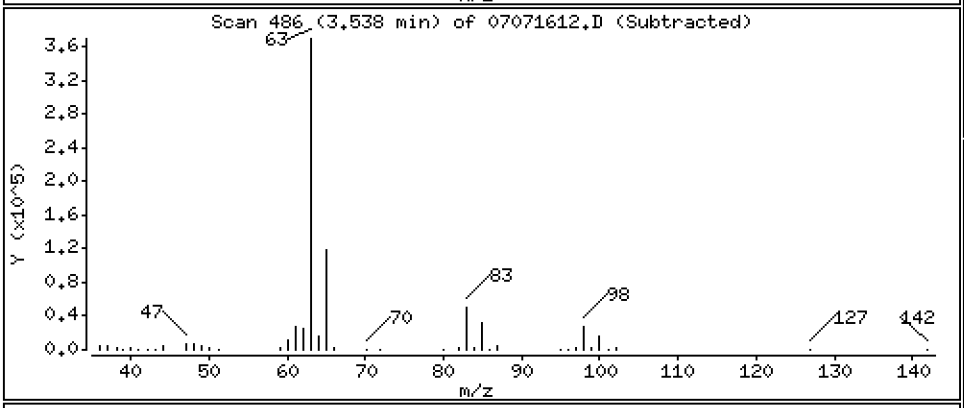
Column diameter: 0.18

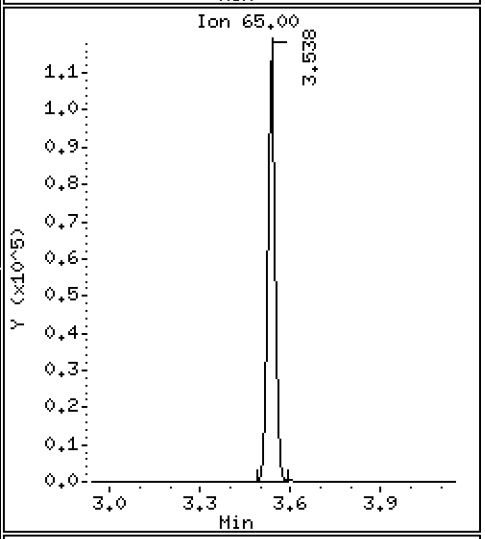
17 1,1-Dichloroethane

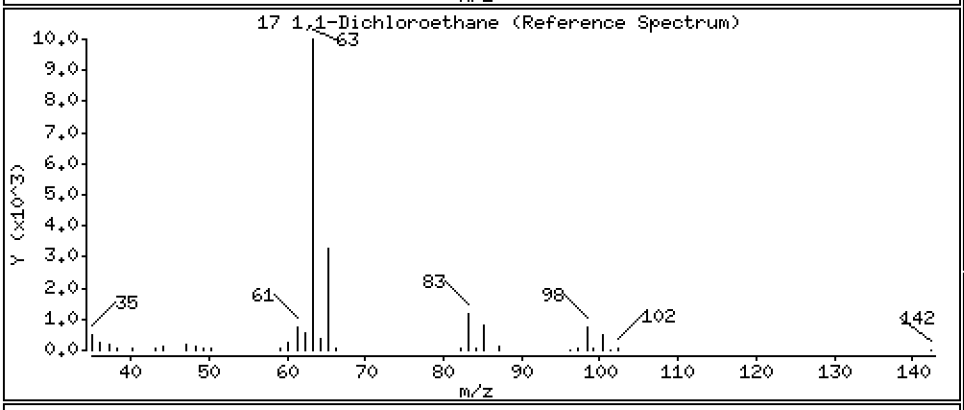
Concentration: 45.455 ug/Kg

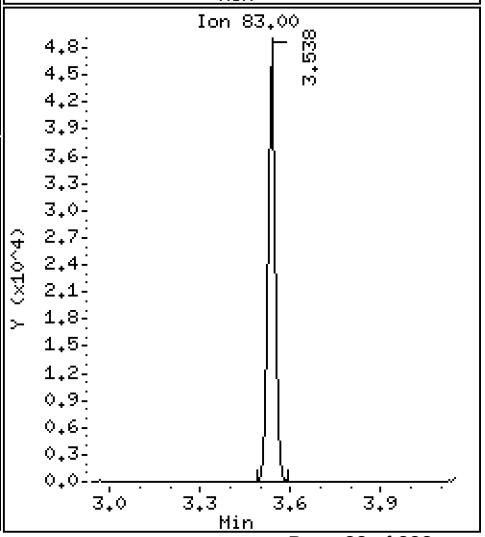


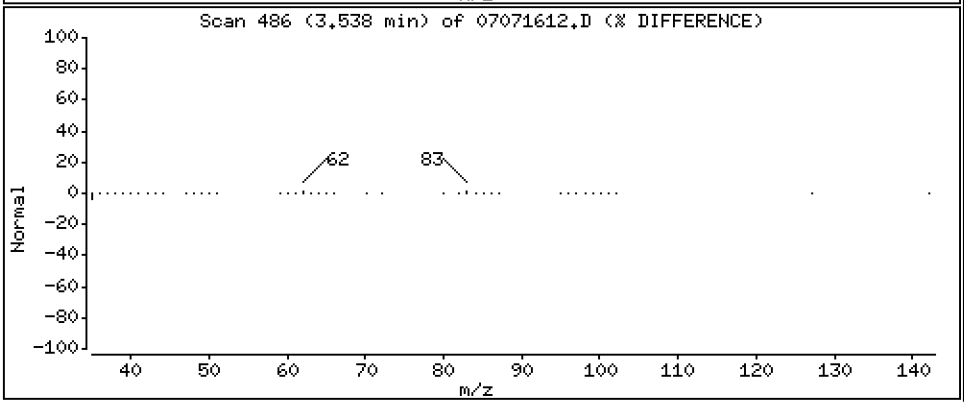












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

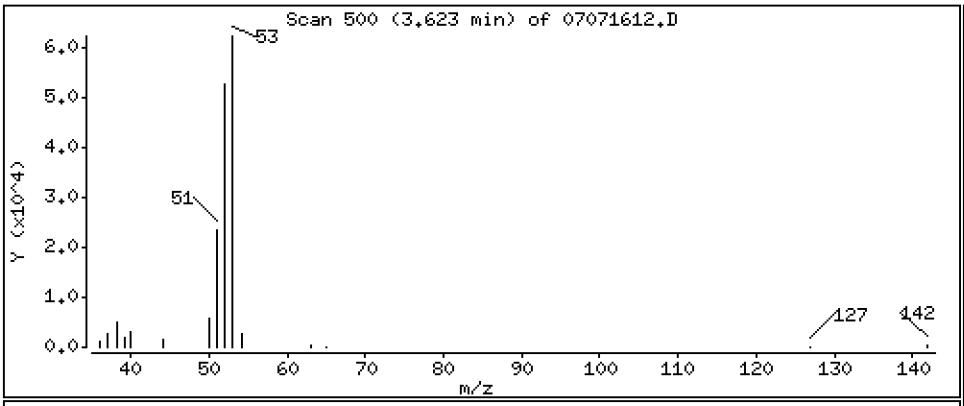
Operator: PB

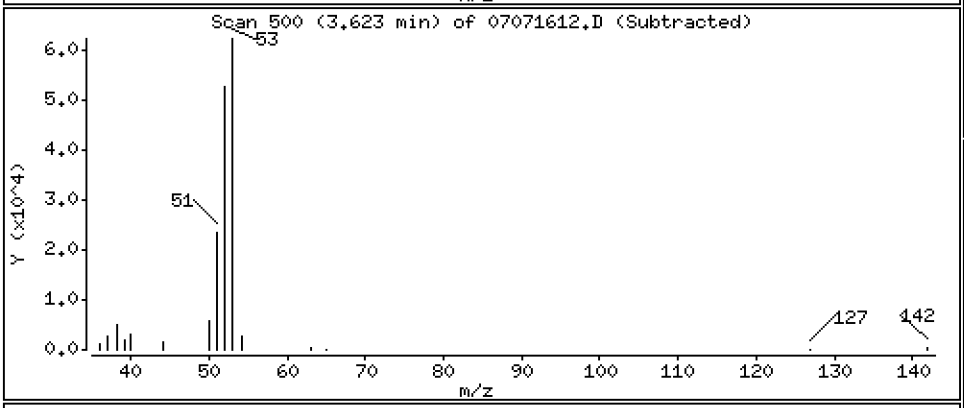
Column phase: RTXVMS

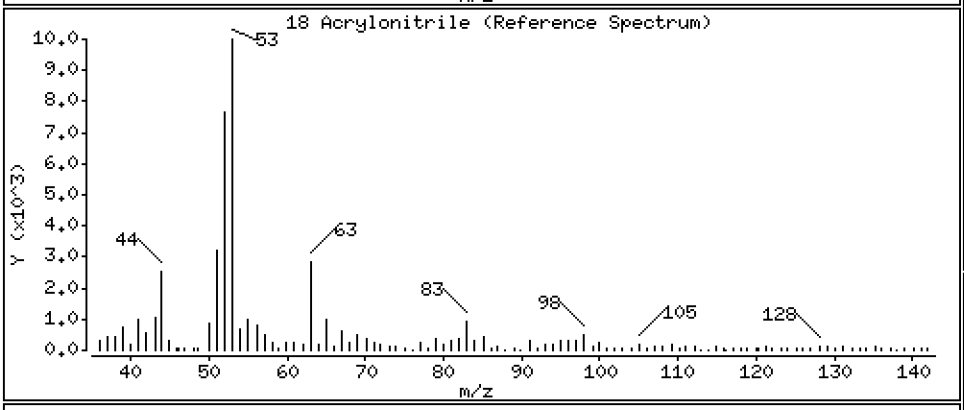
Column diameter: 0.18

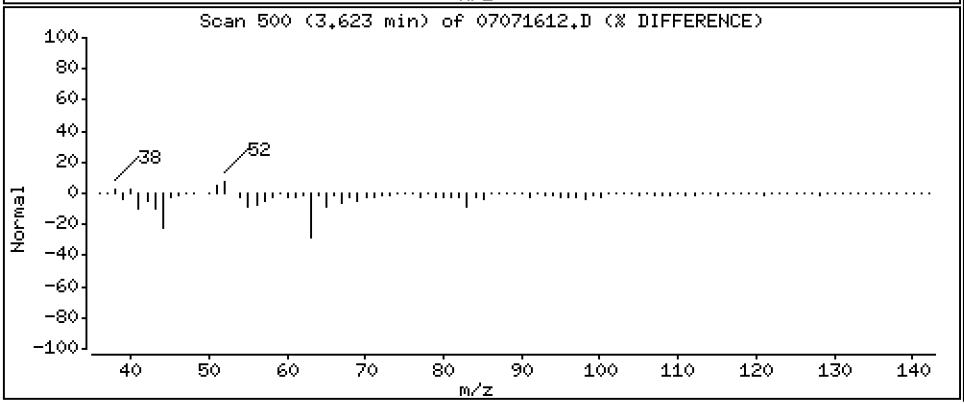
18 Acrylonitrile

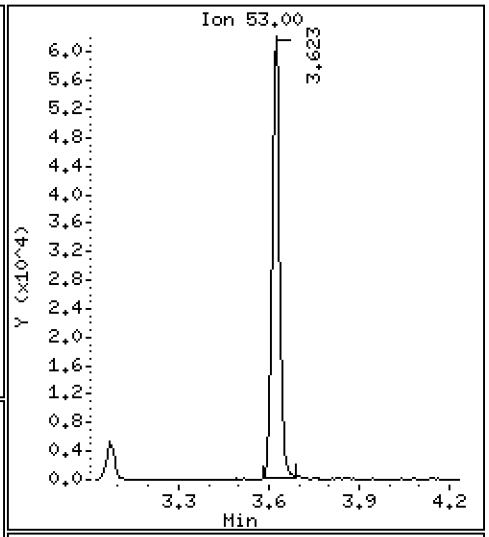
Concentration: 42.512 ug/Kg

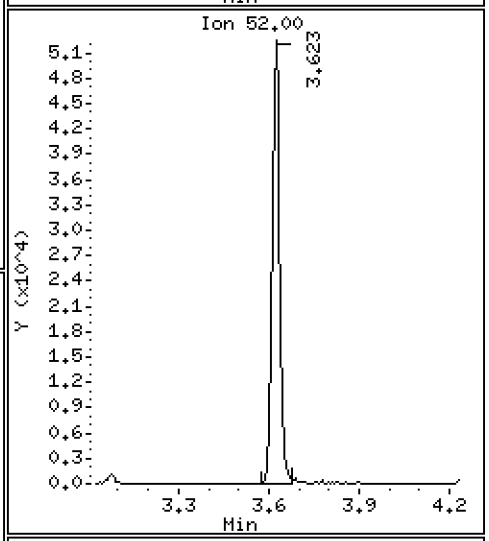


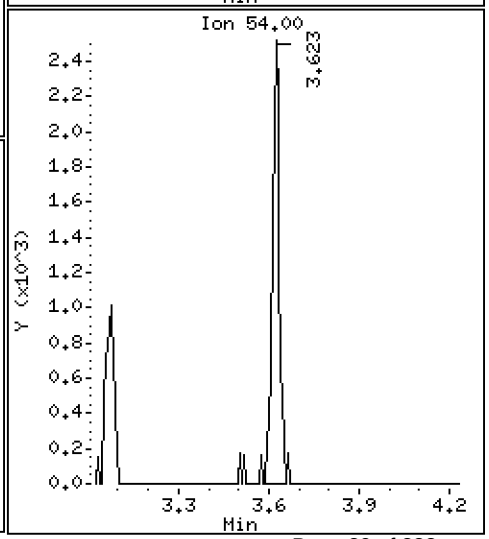












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

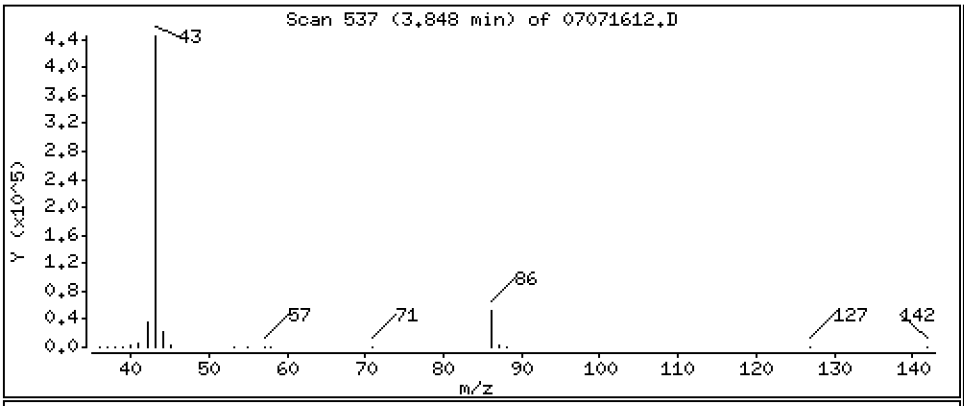
Operator: PB

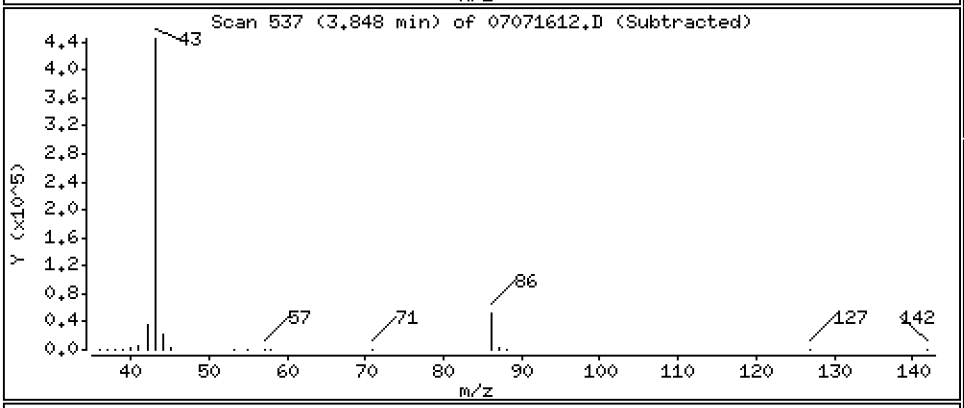
Column phase: RTXVMS

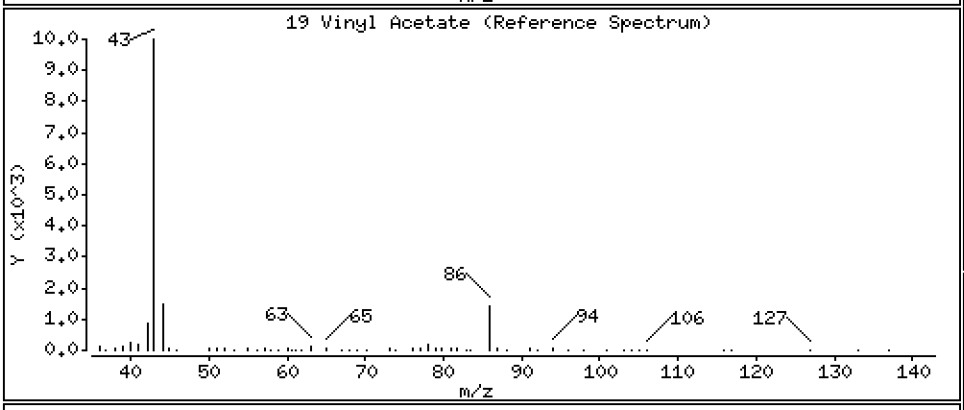
Column diameter: 0.18

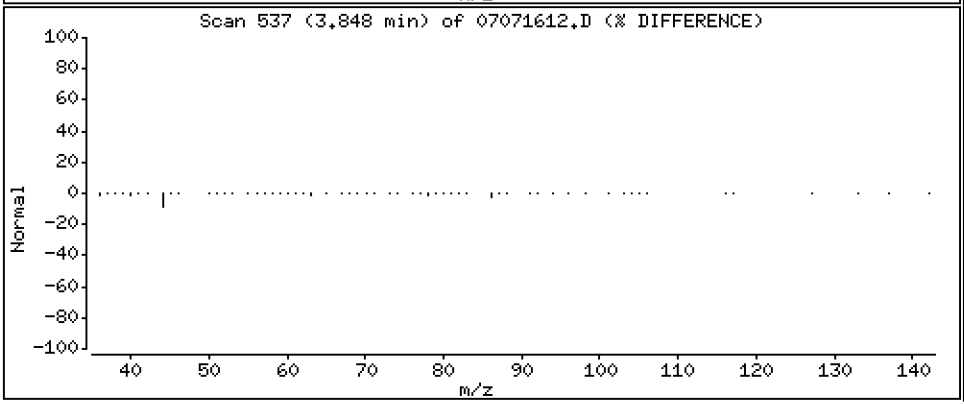
19 Vinyl Acetate

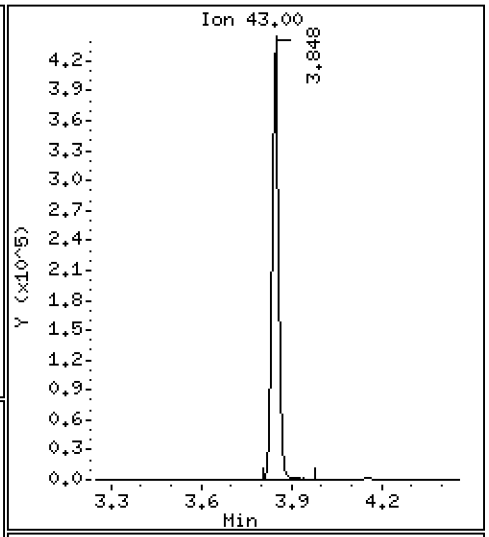
Concentration: 43.939 ug/Kg

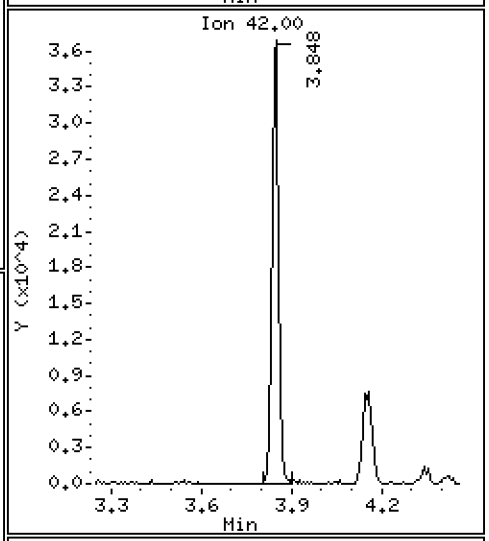


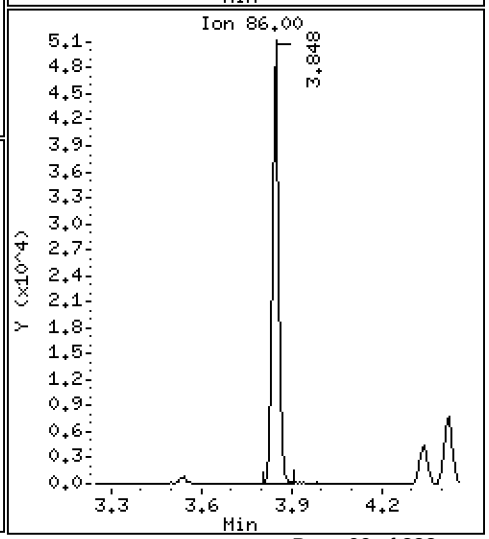












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

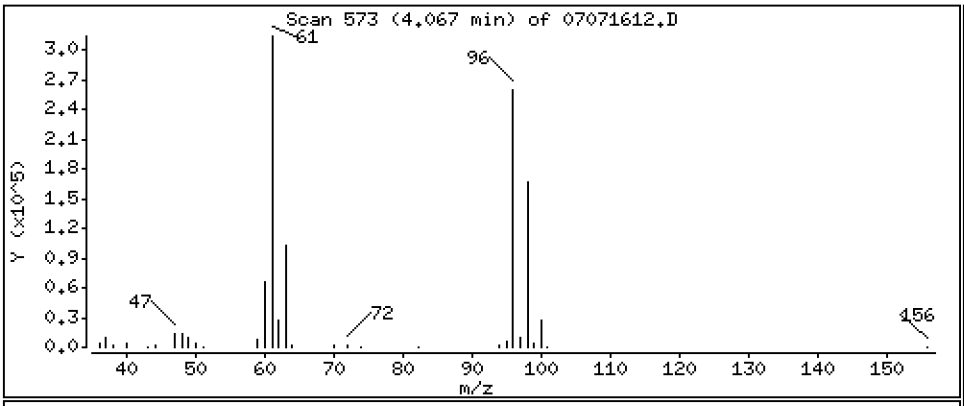
Operator: PB

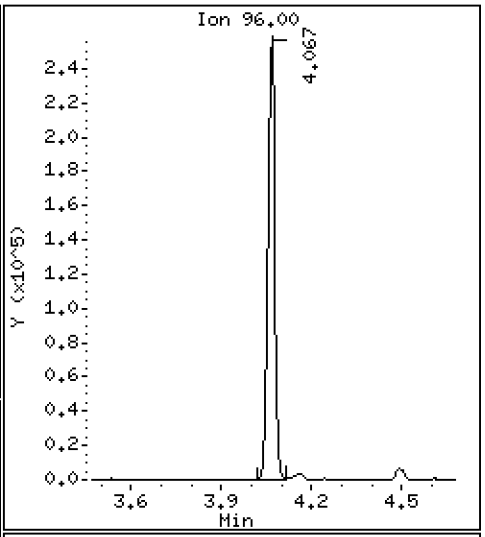
Column phase: RTXVMS

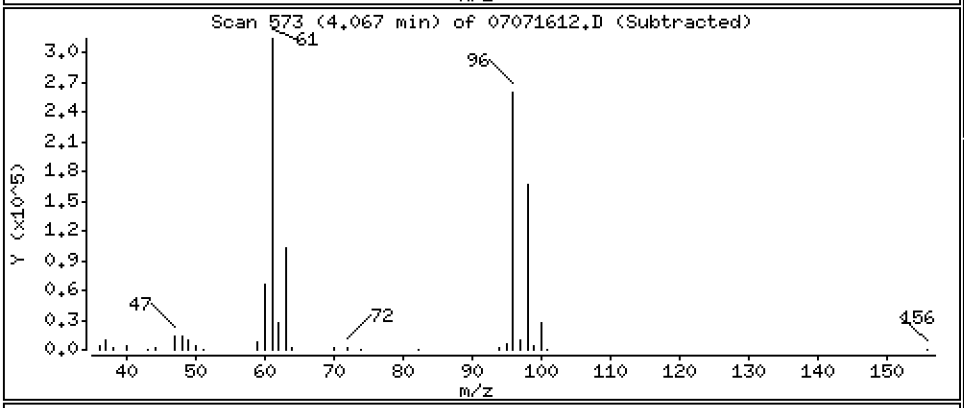
Column diameter: 0.18

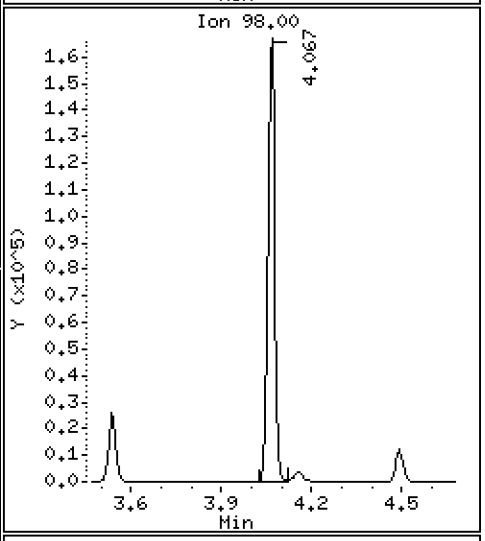
20 Cis-1,2-Dichloroethene

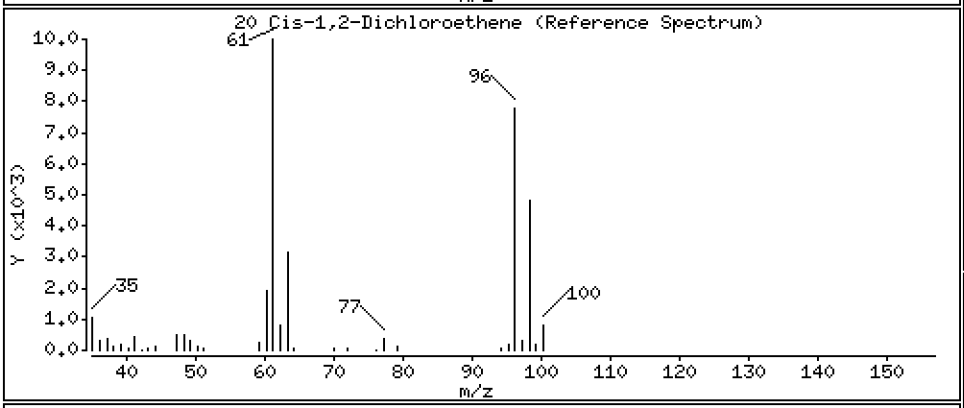
Concentration: 45.935 ug/Kg

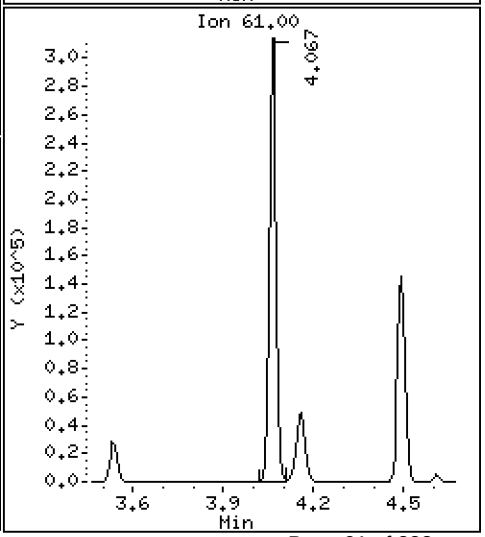


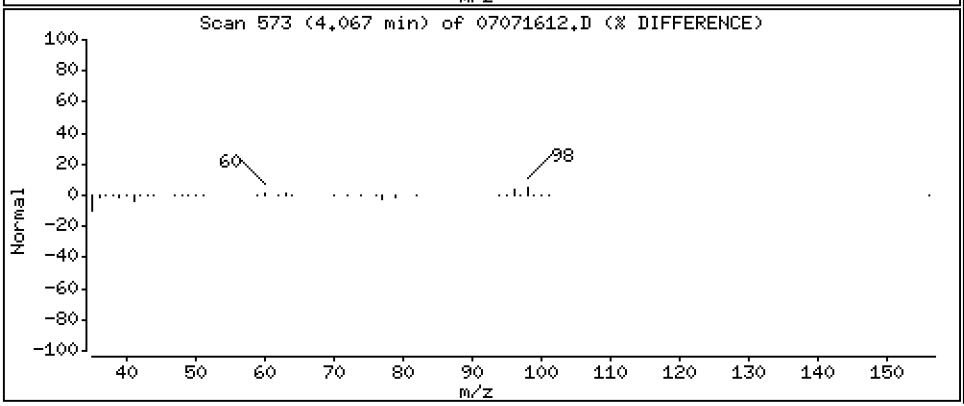












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

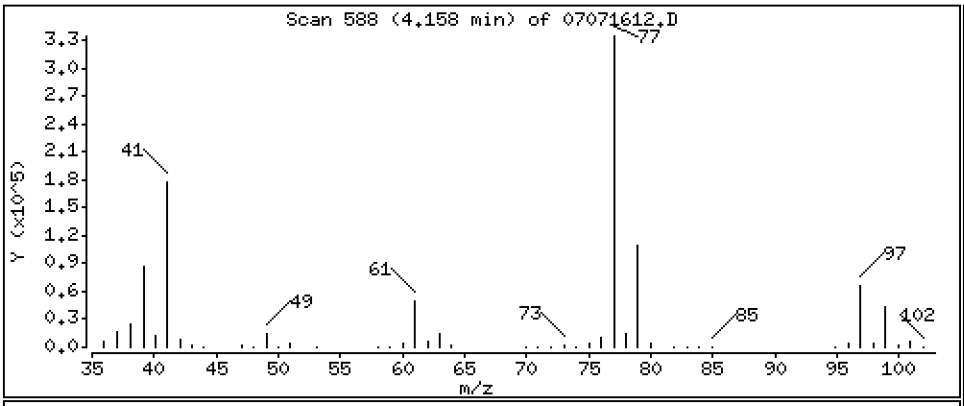
Operator: PB

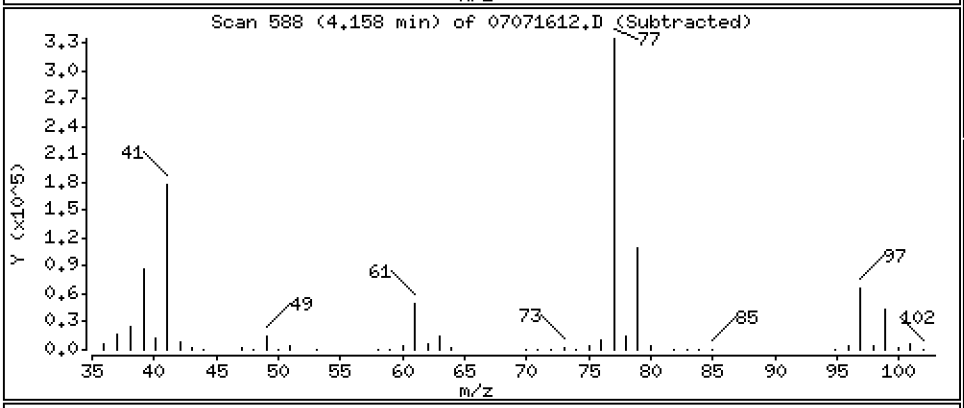
Column phase: RTXVMS

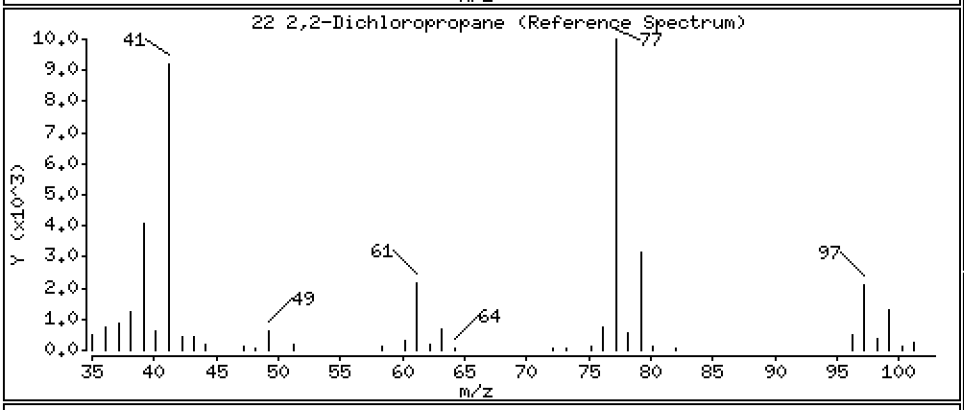
Column diameter: 0.18

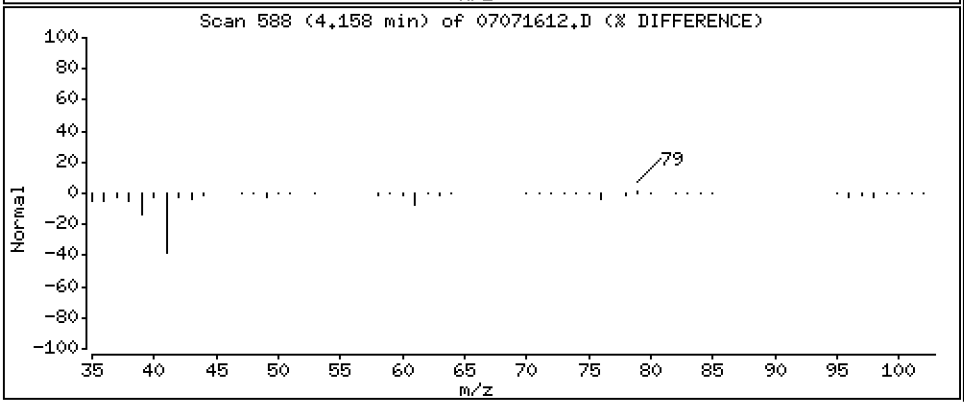
22 2,2-Dichloropropane

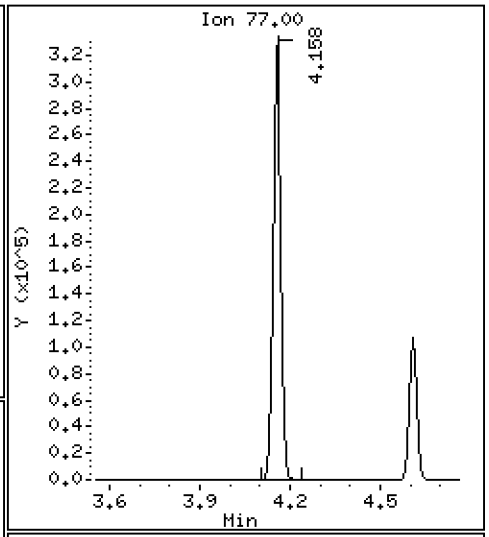
Concentration: 46.985 ug/Kg

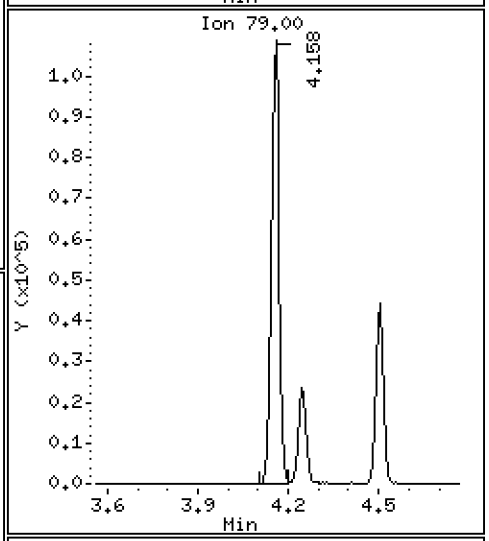


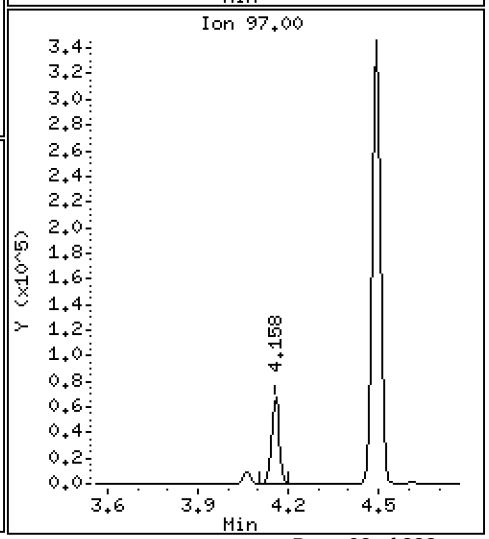












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

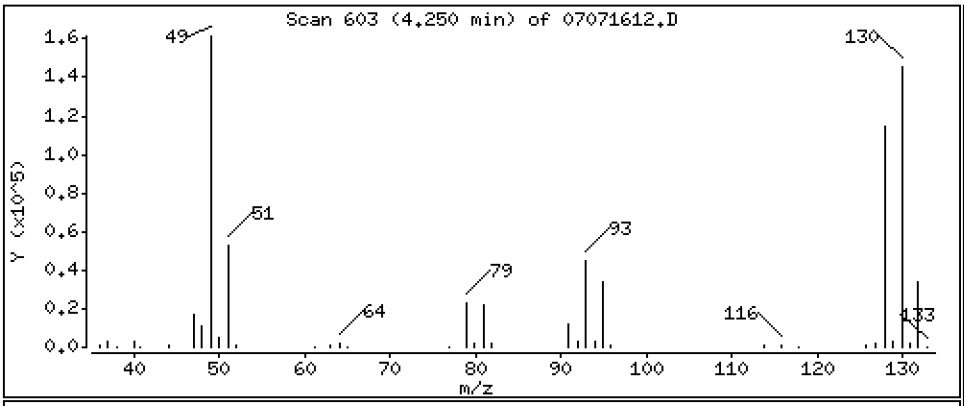
Operator: PB

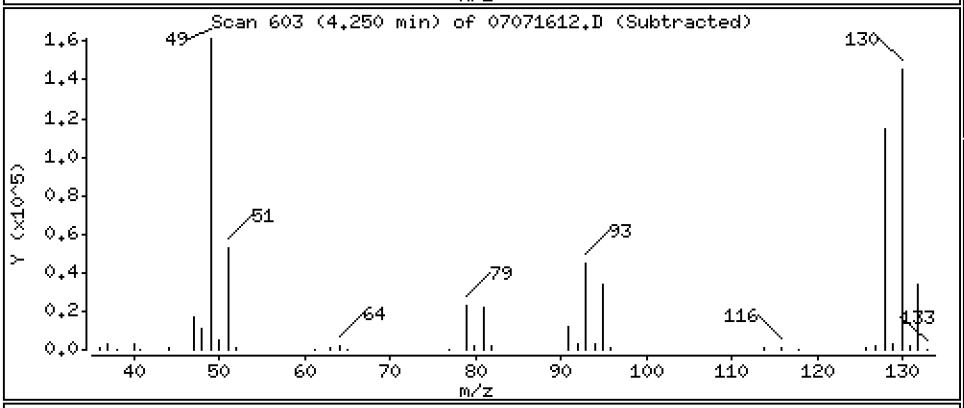
Column phase: RTXVMS

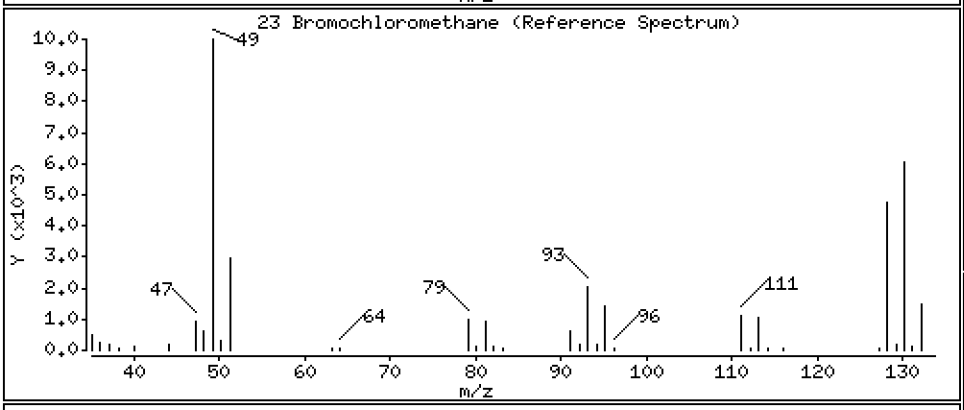
Column diameter: 0.18

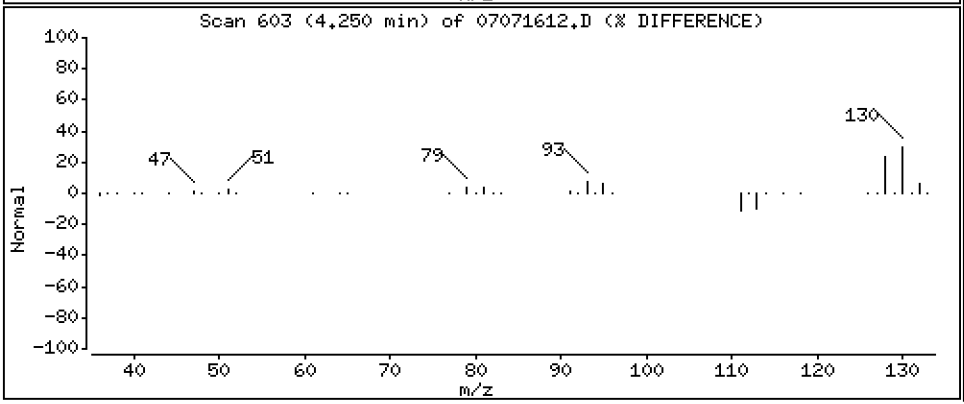
23 Bromochloromethane

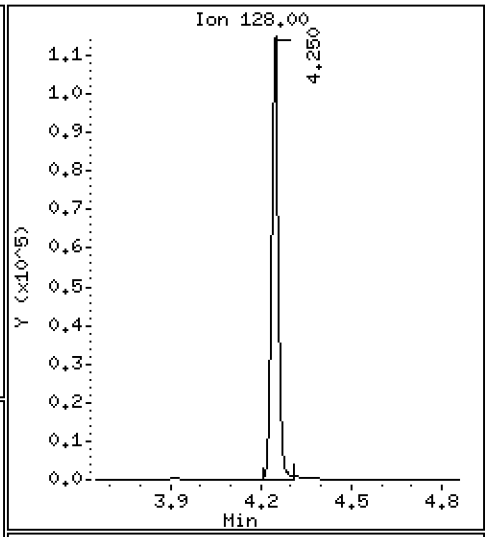
Concentration: 47.131 ug/Kg

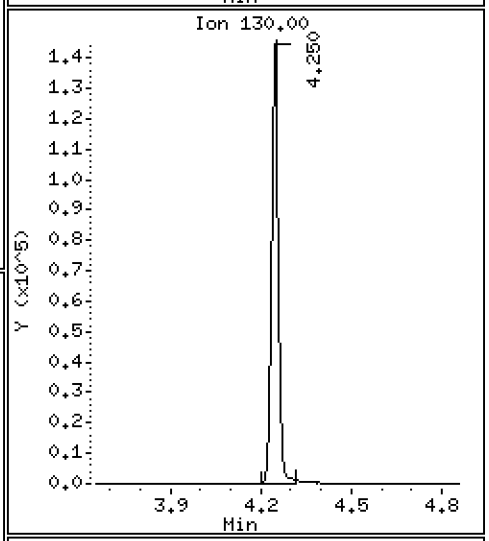


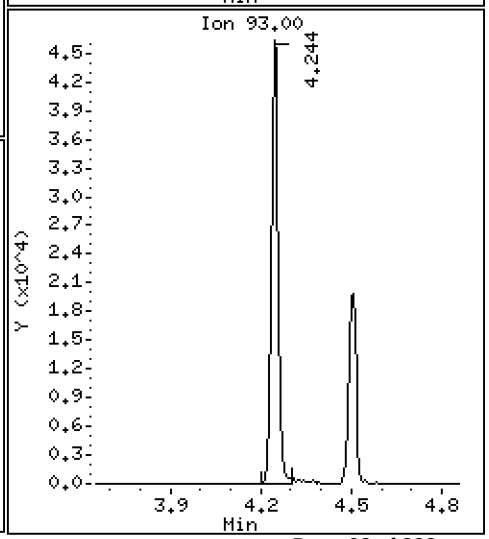












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

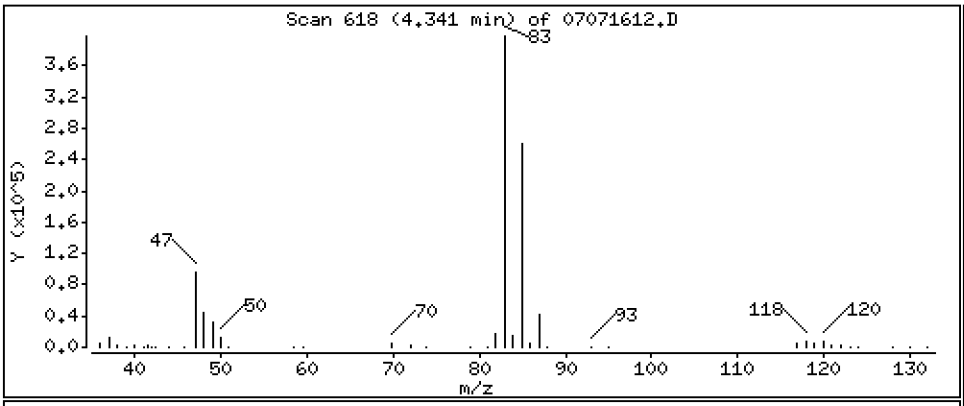
Operator: PB

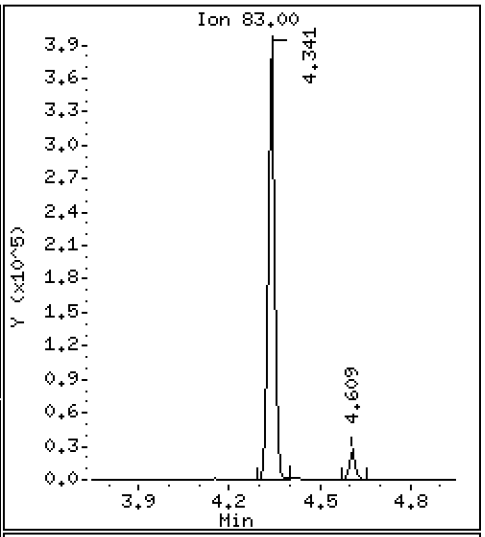
Column phase: RTXVMS

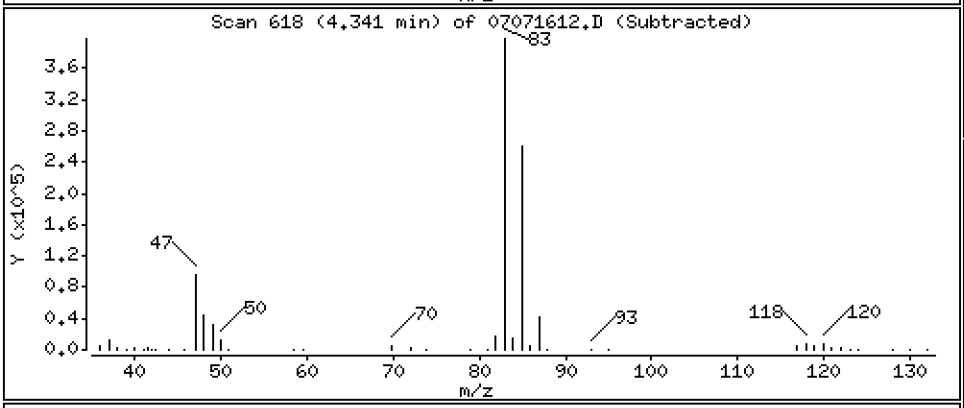
Column diameter: 0.18

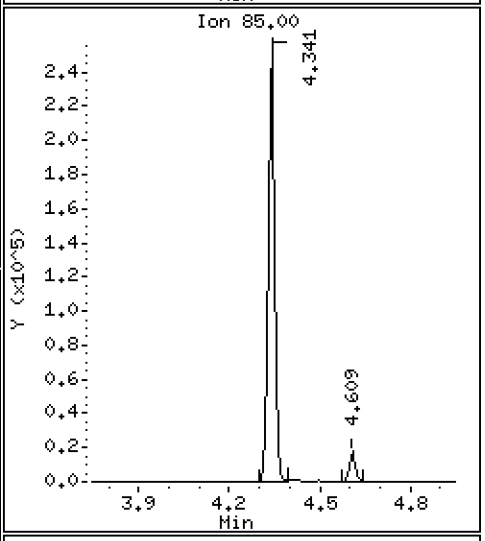
24 Chloroform

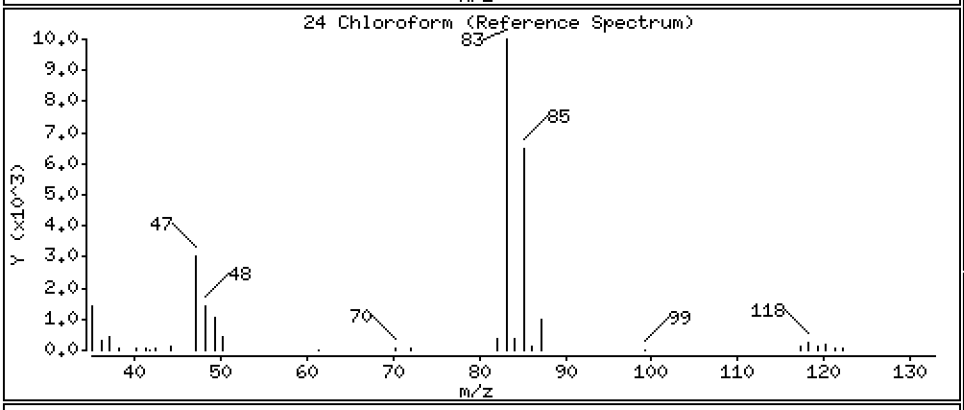
Concentration: 45.451 ug/Kg

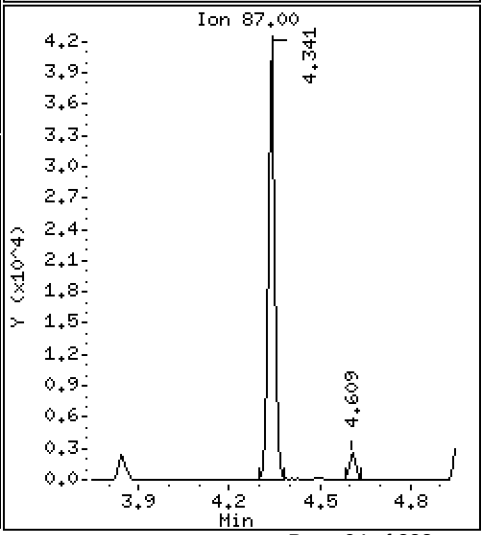


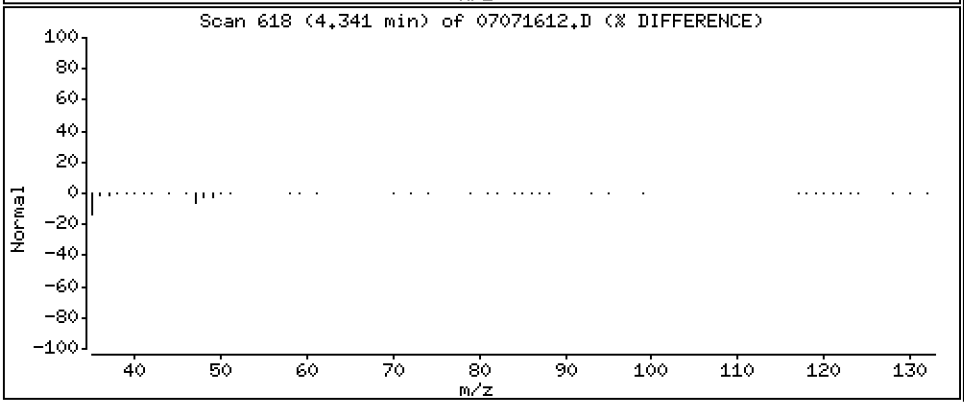












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

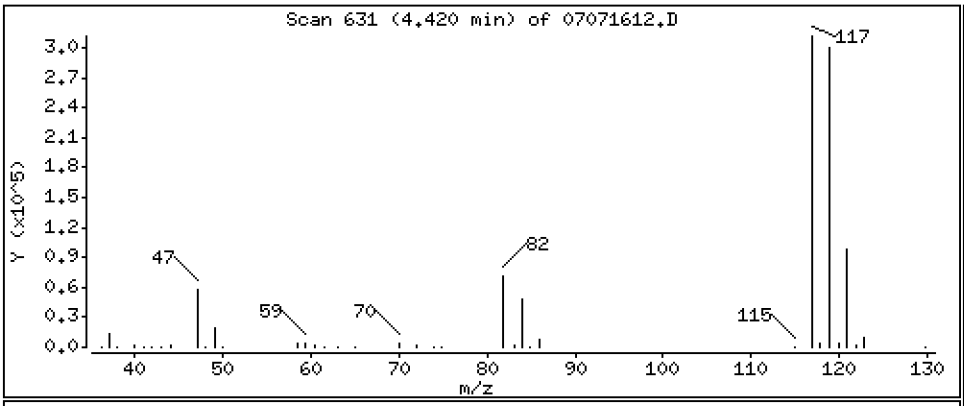
Operator: PB

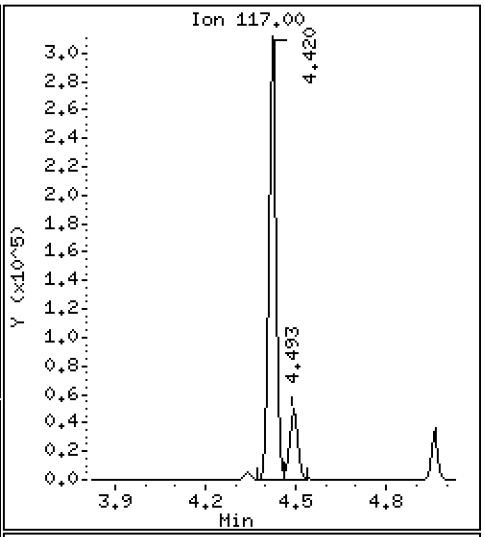
Column phase: RTXVMS

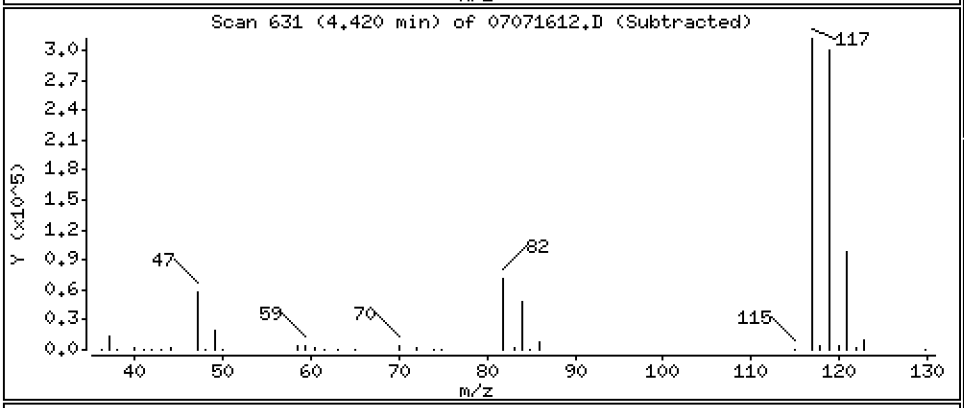
Column diameter: 0.18

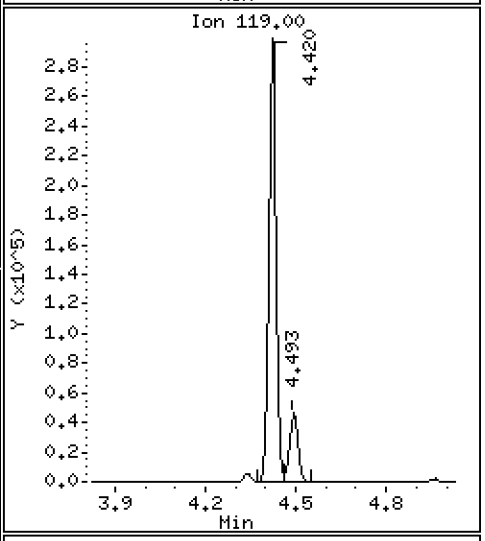
25 Carbon Tetrachloride

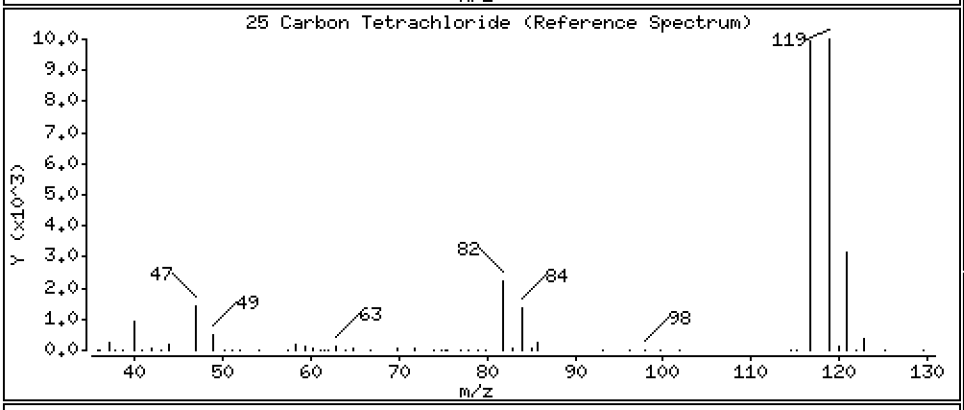
Concentration: 49.040 ug/Kg

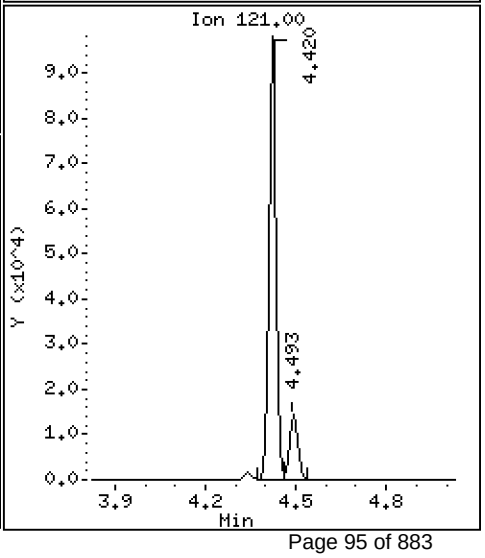


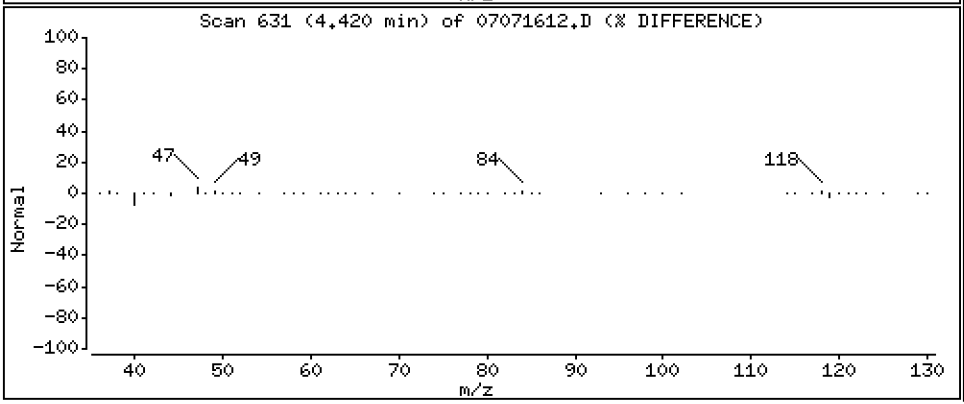












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

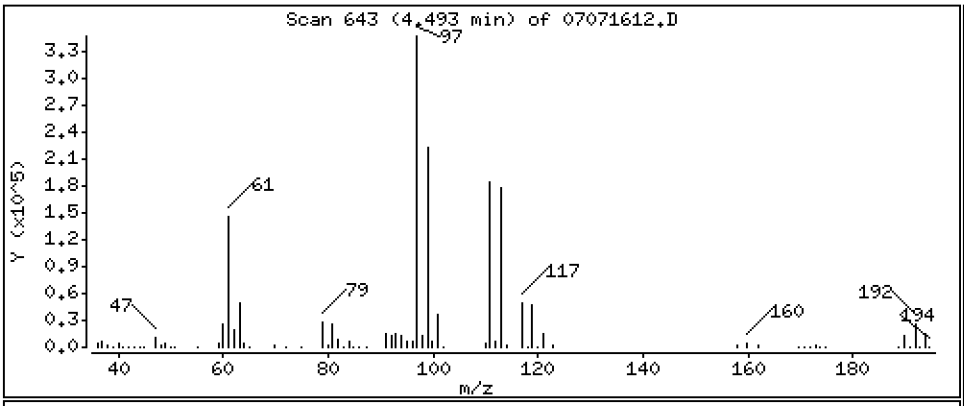
Operator: PB

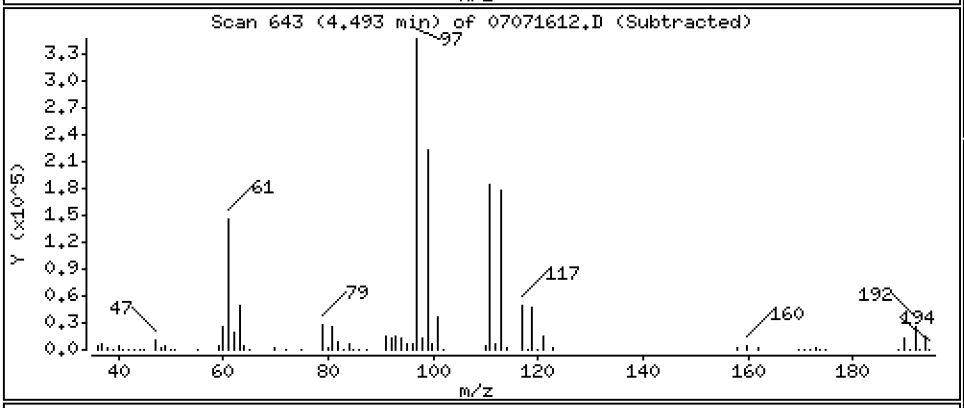
Column phase: RTXVMS

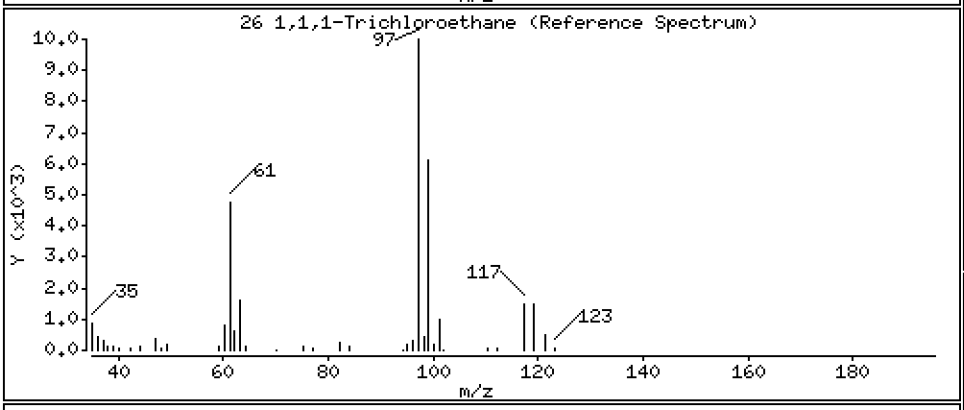
Column diameter: 0.18

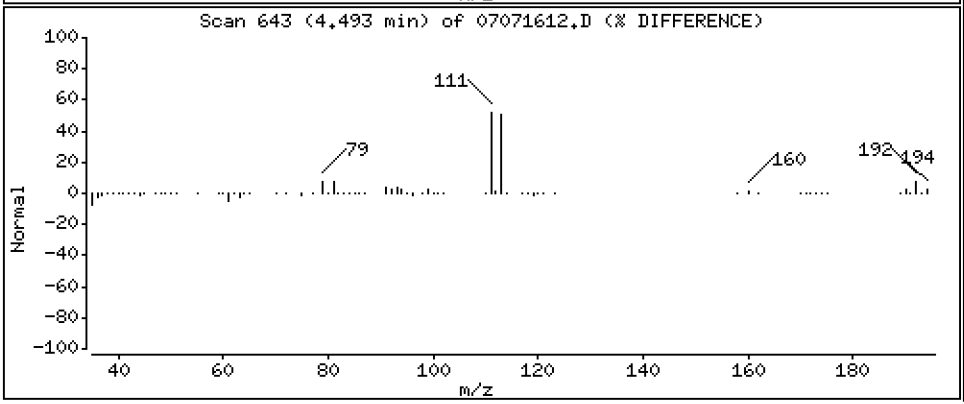
26 1,1,1-Trichloroethane

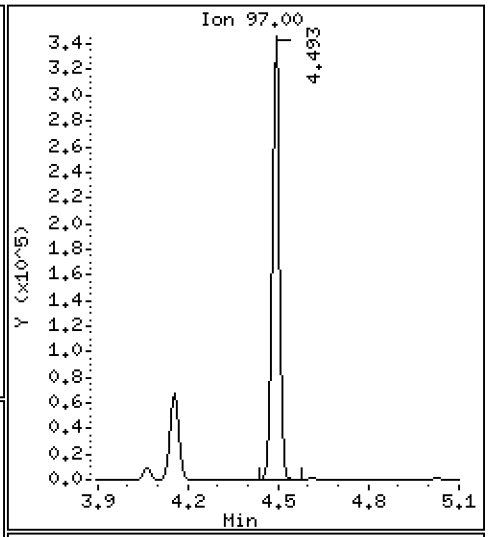
Concentration: 45.607 ug/Kg

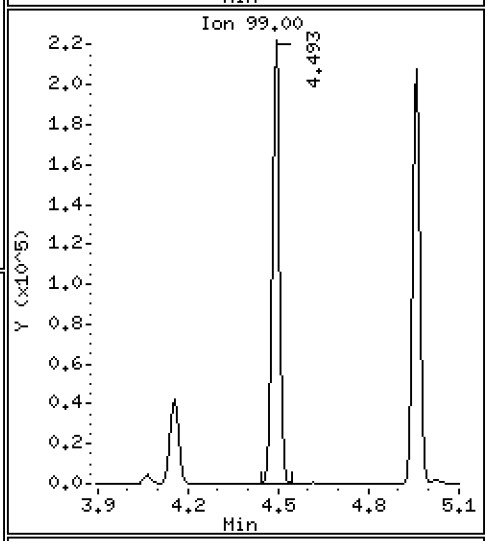


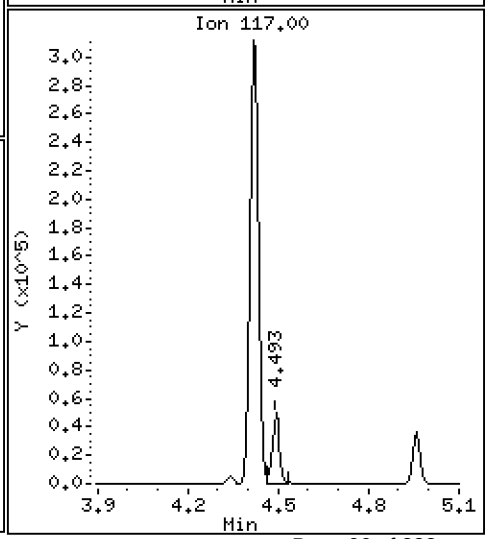












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

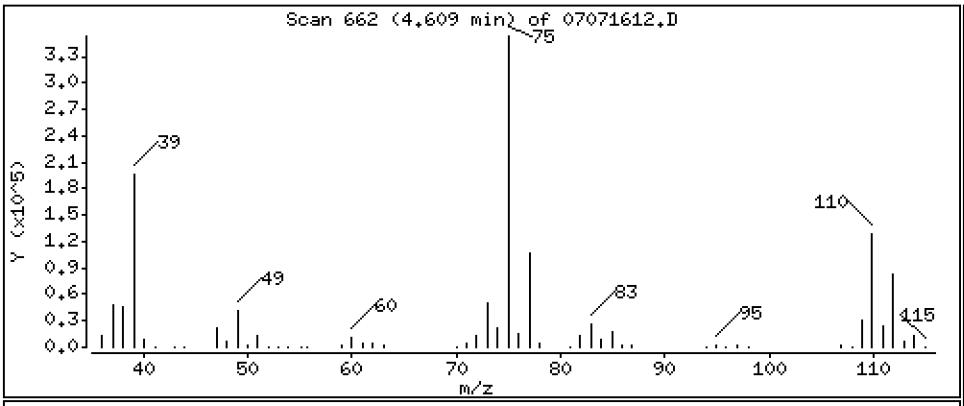
Operator: PB

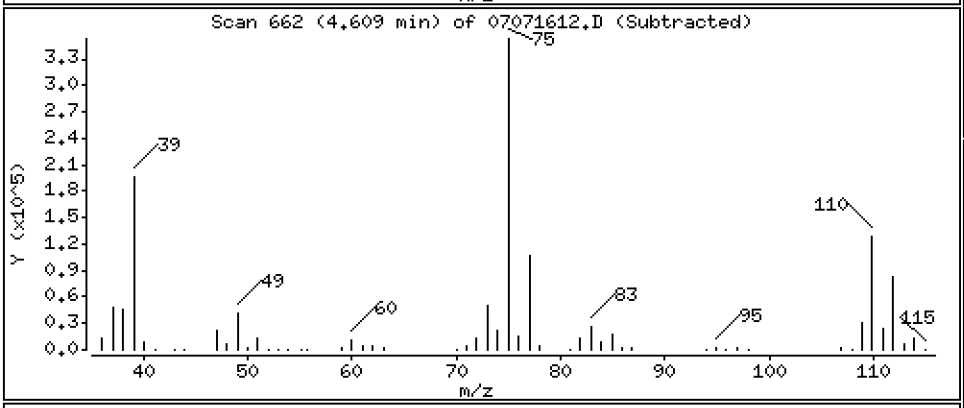
Column phase: RTXVMS

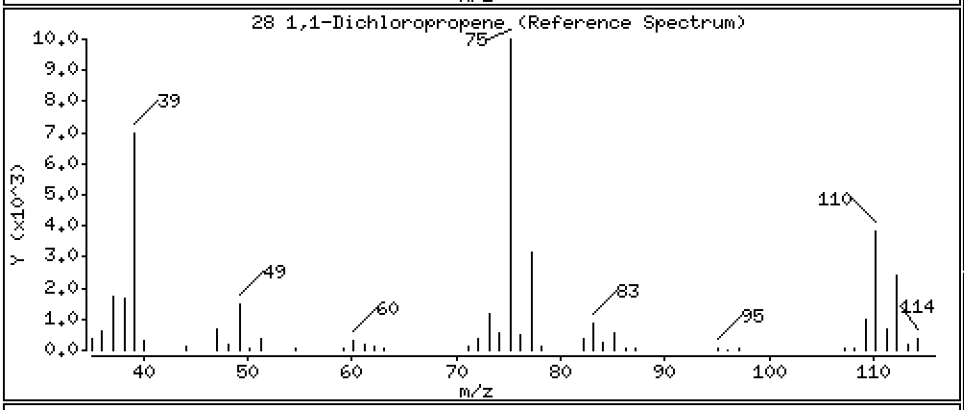
Column diameter: 0.18

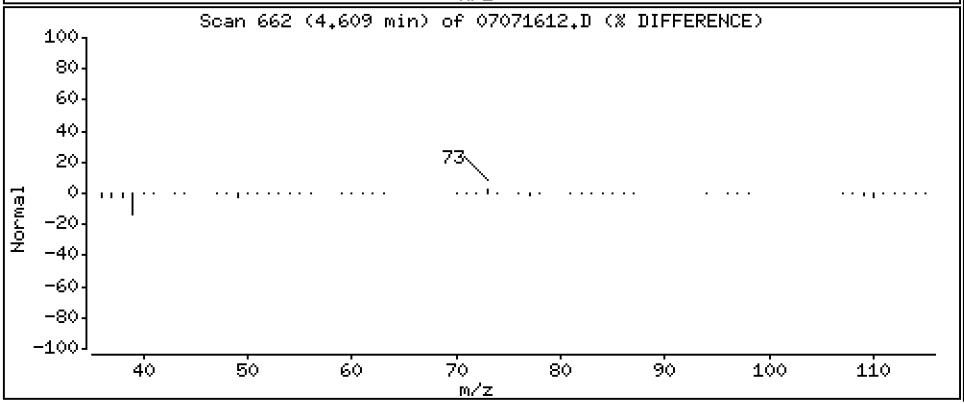
28 1,1-Dichloropropene

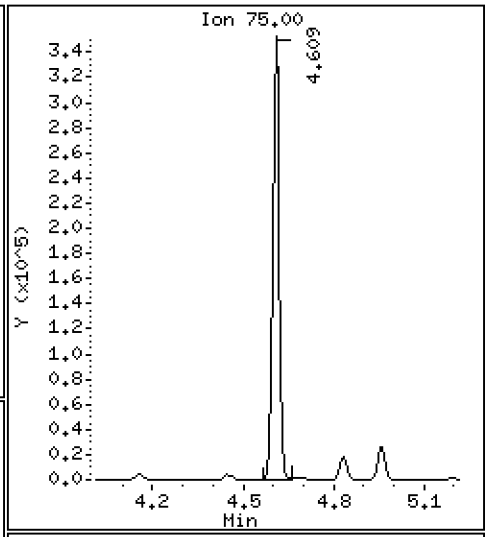
Concentration: 47.498 ug/Kg

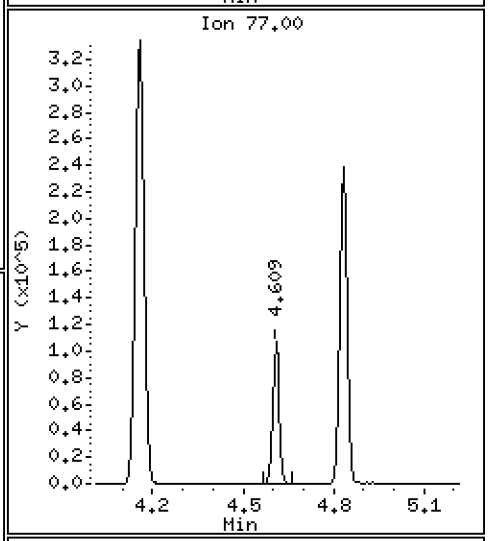


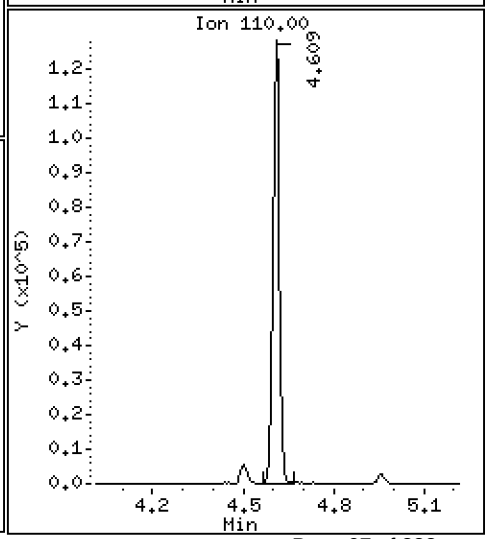












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

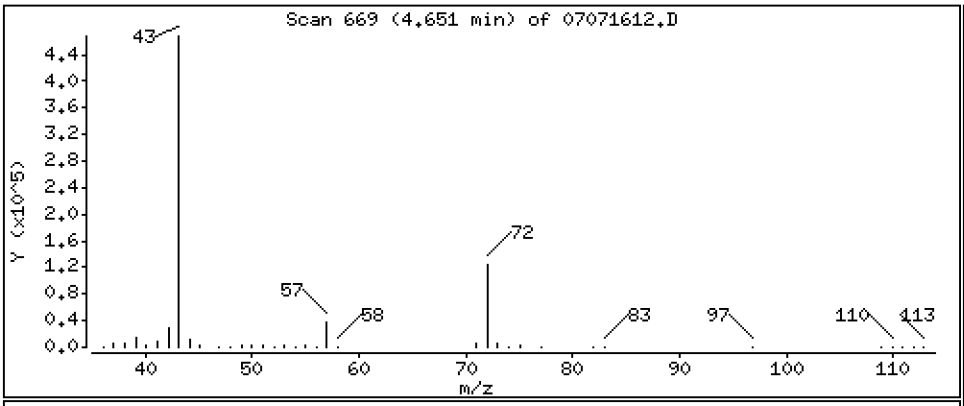
Operator: PB

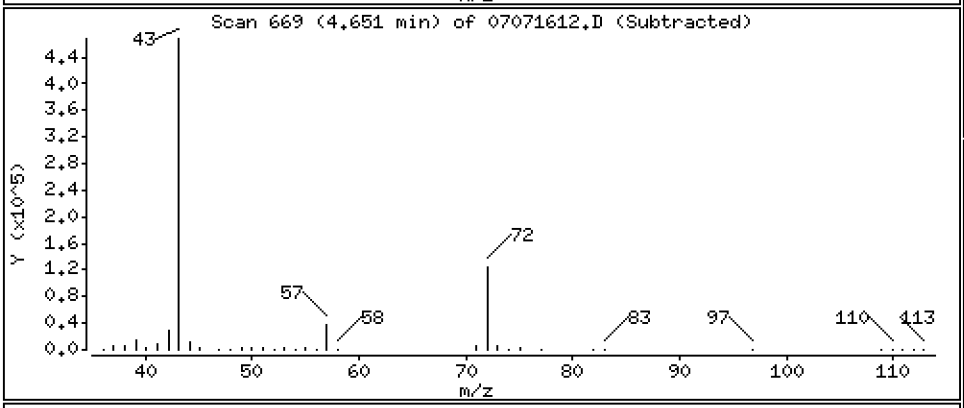
Column phase: RTXVMS

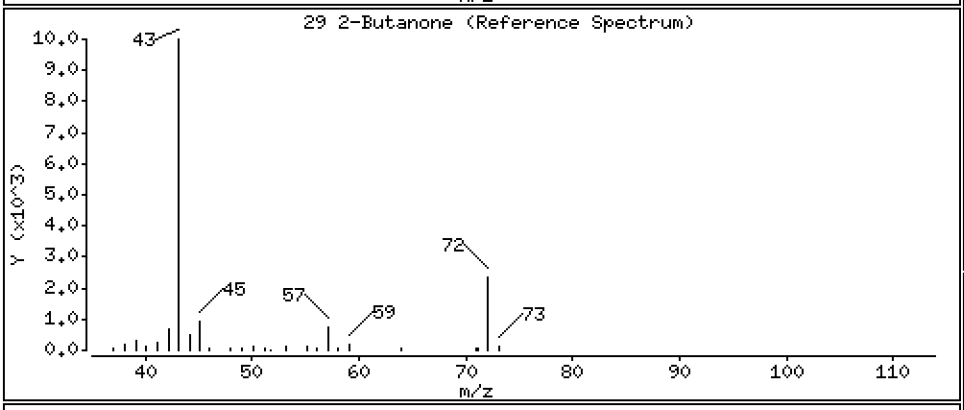
Column diameter: 0.18

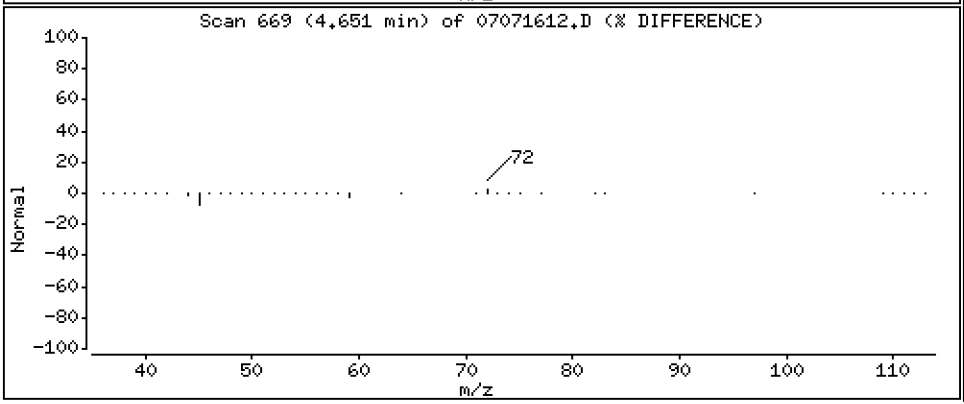
29 2-Butanone

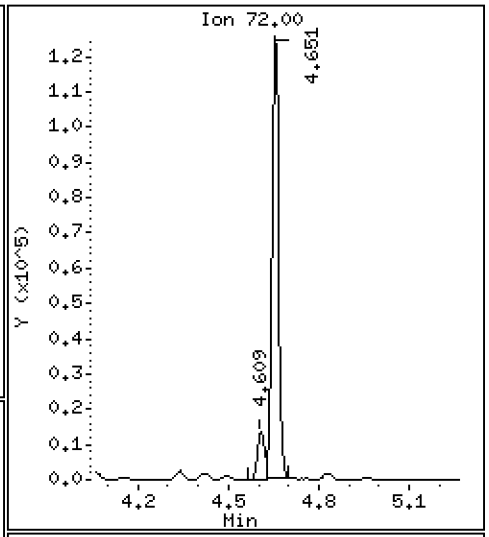
Concentration: 217.17 ug/Kg

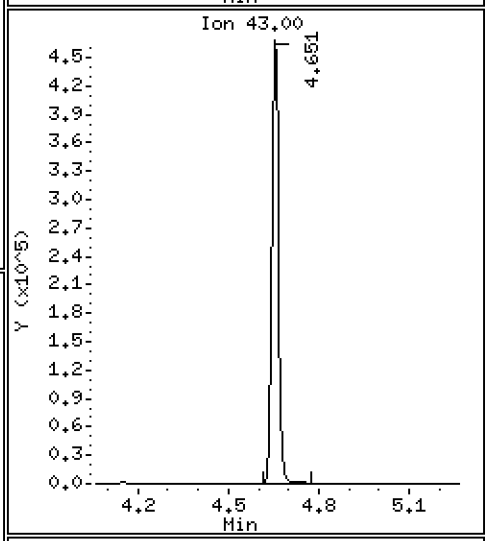


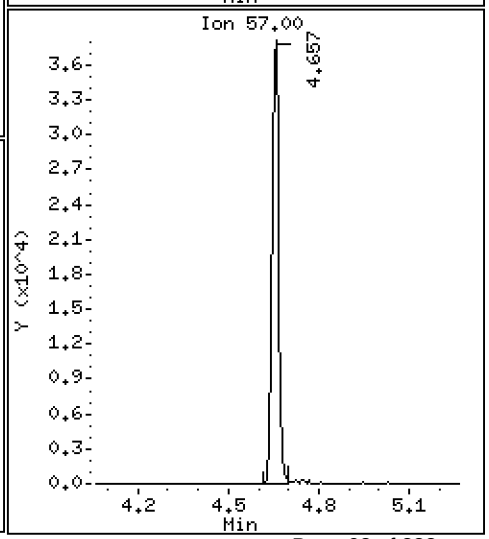












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

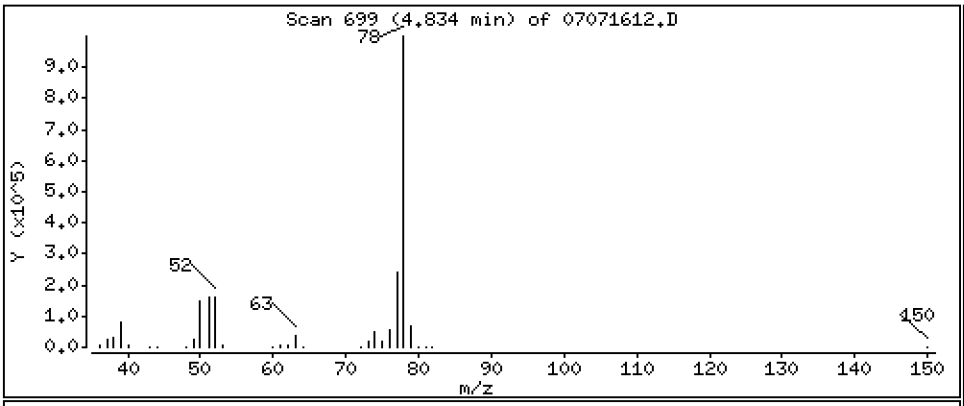
Operator: PB

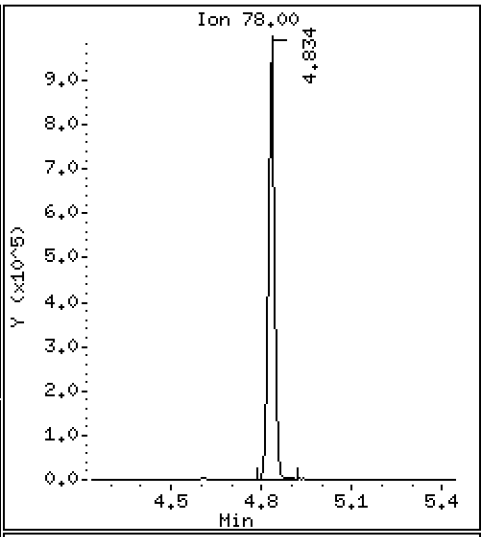
Column phase: RTXVMS

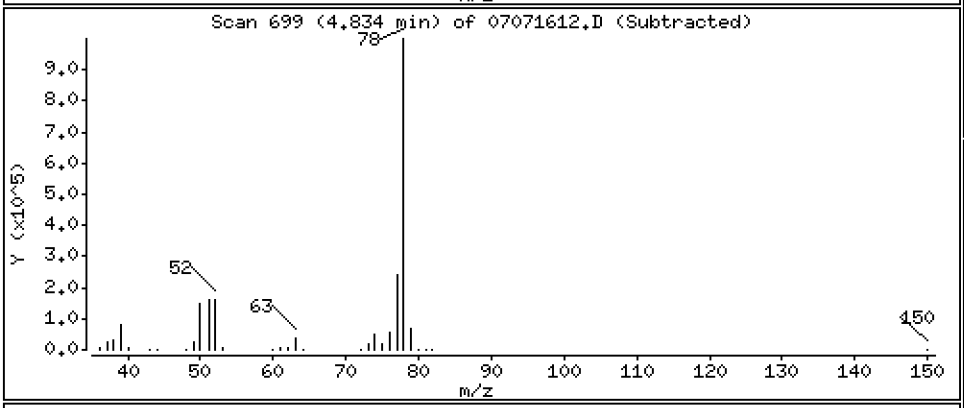
Column diameter: 0.18

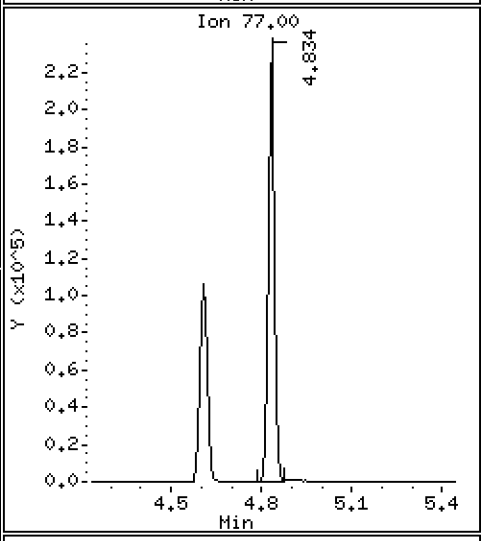
30 Benzene

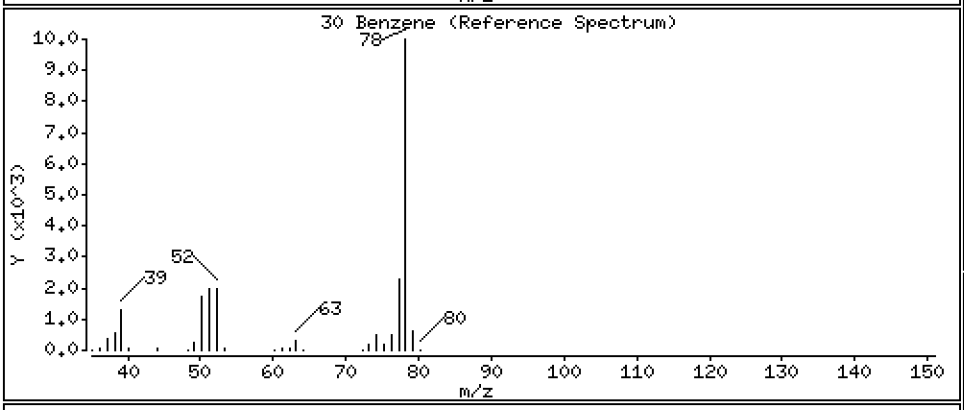
Concentration: 46.810 ug/Kg

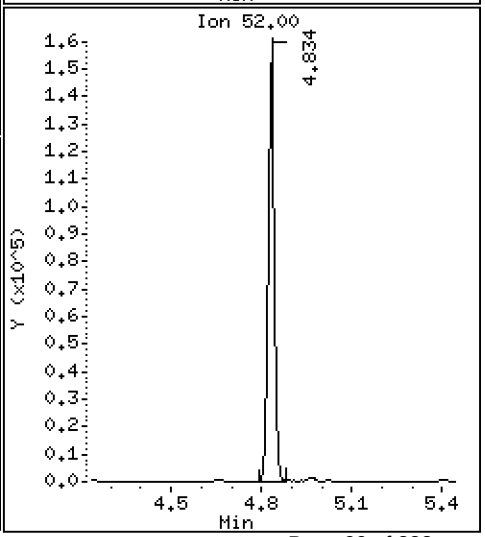


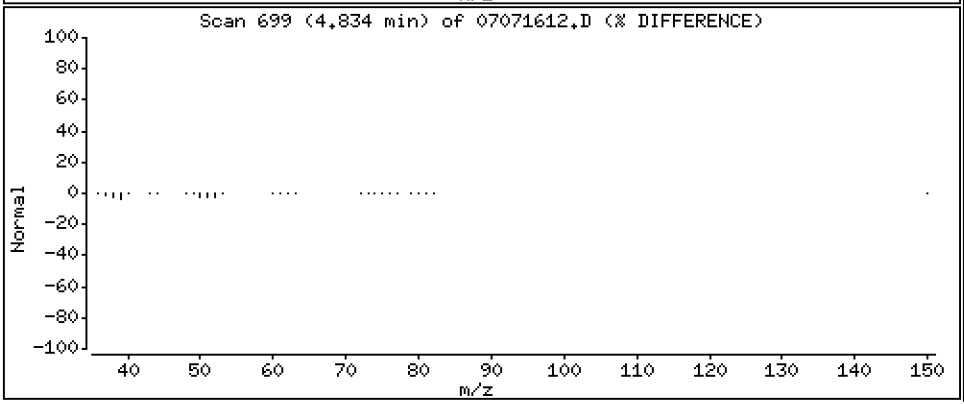












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

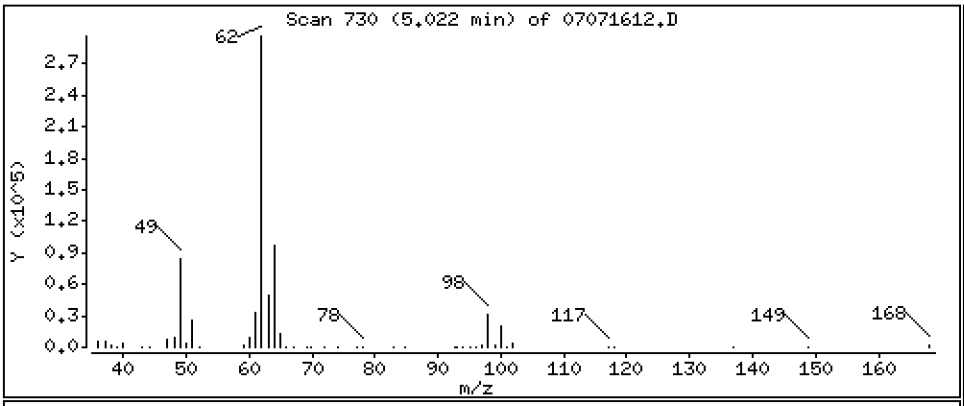
Client ID: LCS0707 Instrument: nt5.i

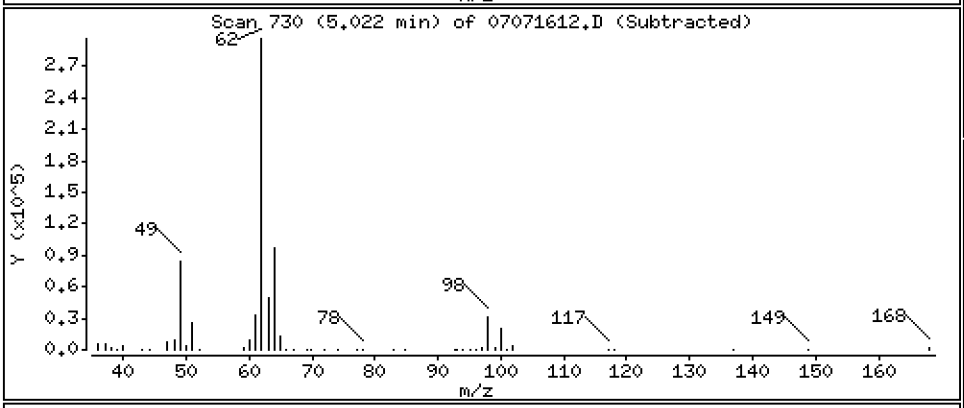
Sample Info: LCS0707,5,5,0

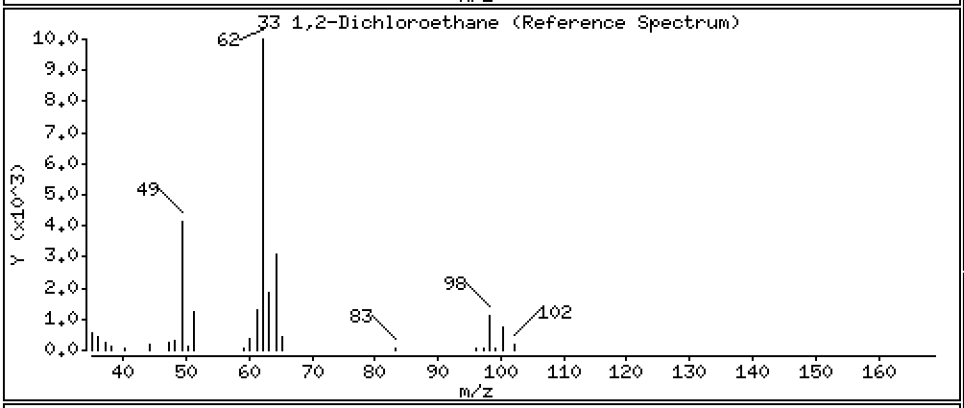
Operator: PB

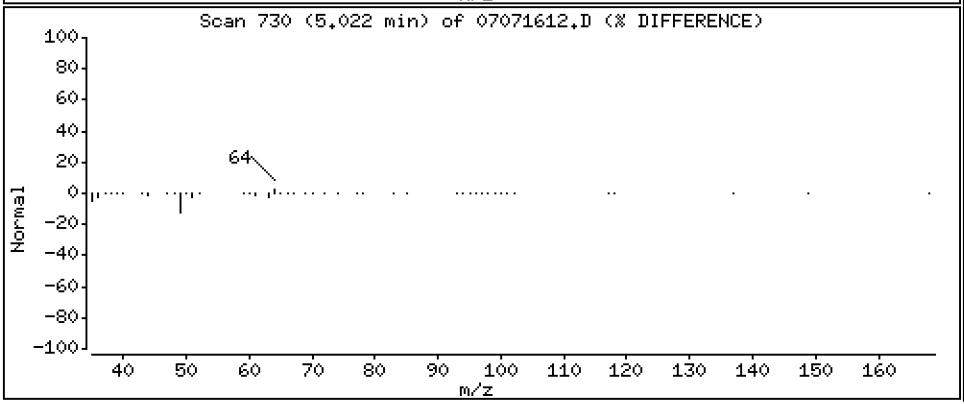
Column phase: RTXVMS Column diameter: 0.18

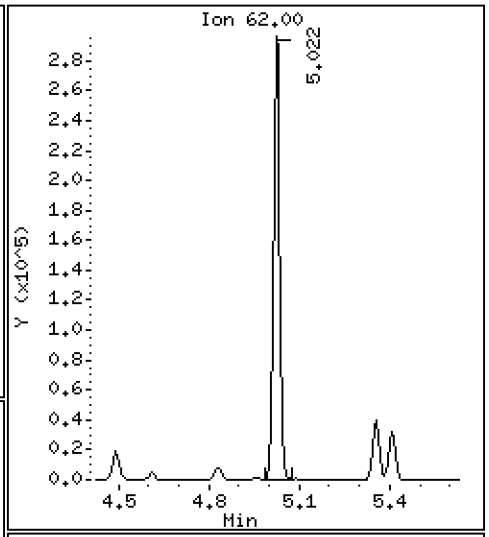
33 1,2-Dichloroethane Concentration: 44.285 ug/Kg

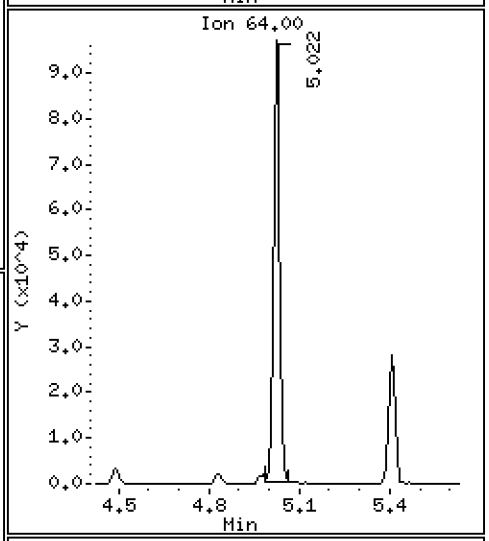


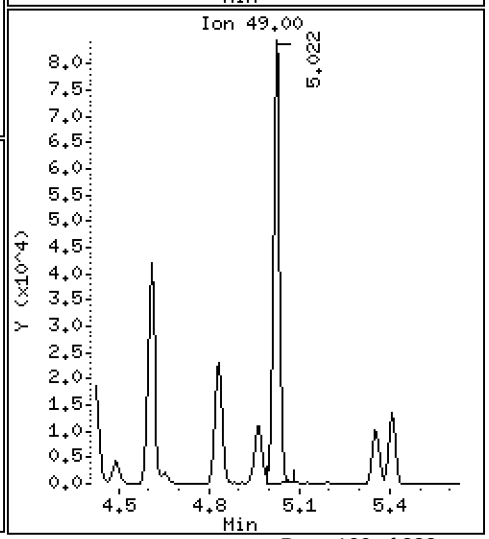












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

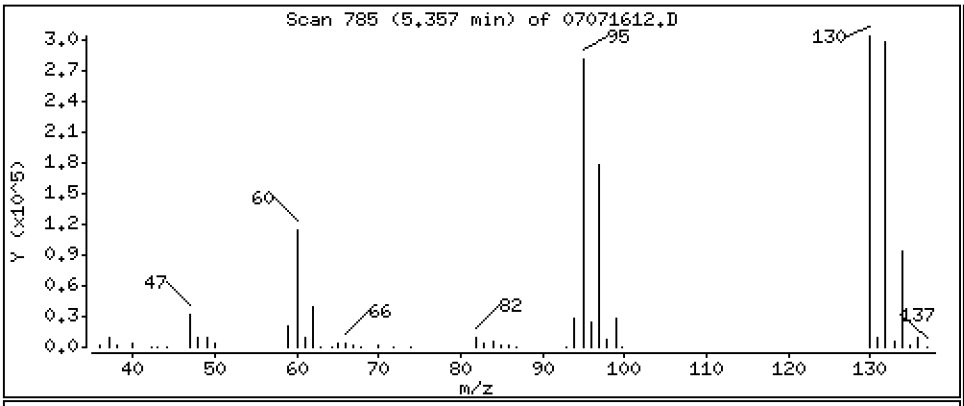
Operator: PB

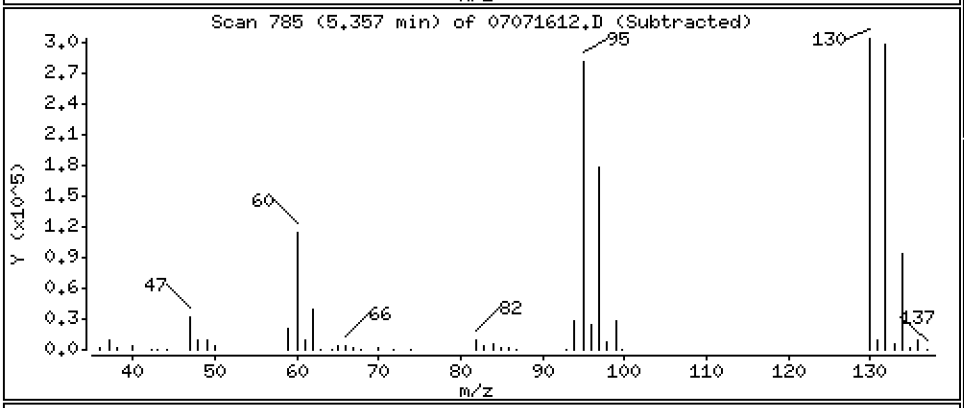
Column phase: RTXVMS

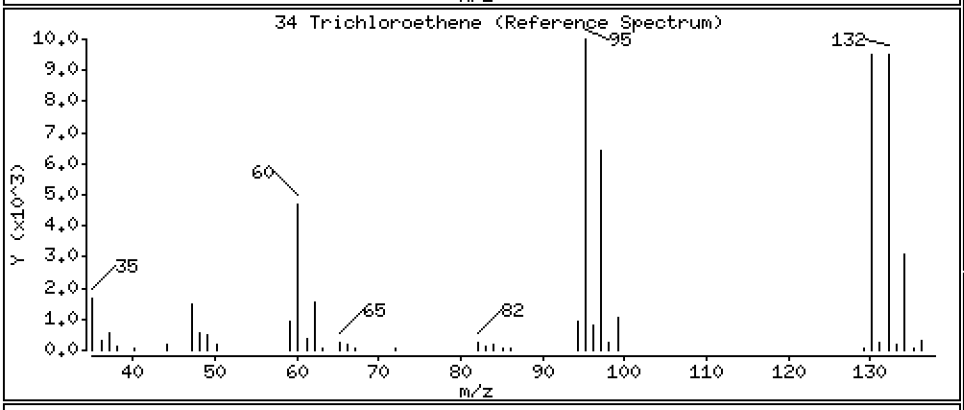
Column diameter: 0.18

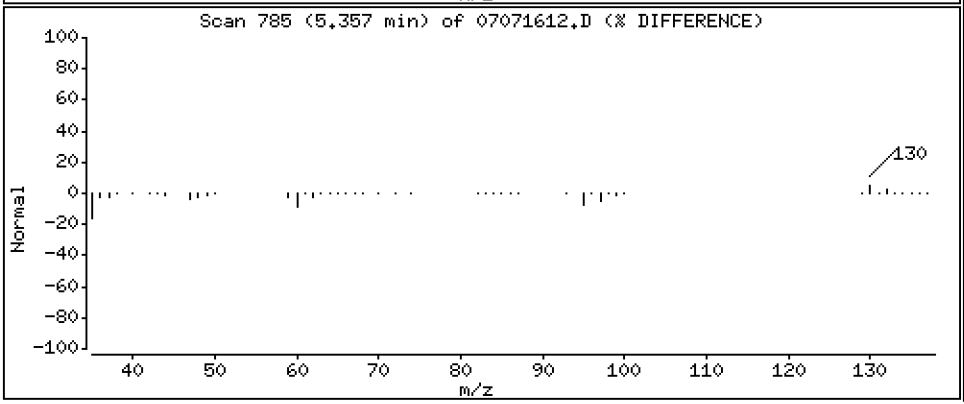
34 Trichloroethene

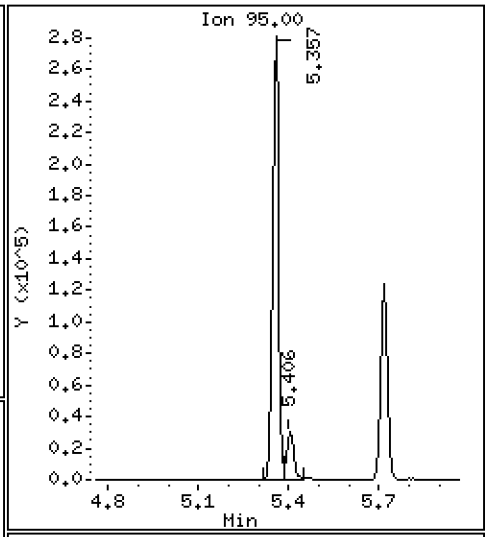
Concentration: 46.958 ug/Kg

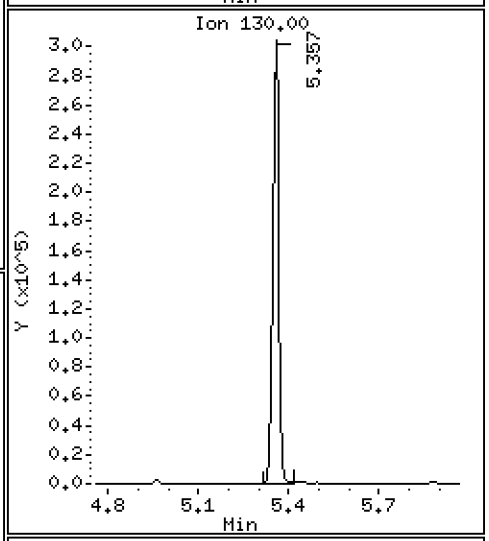


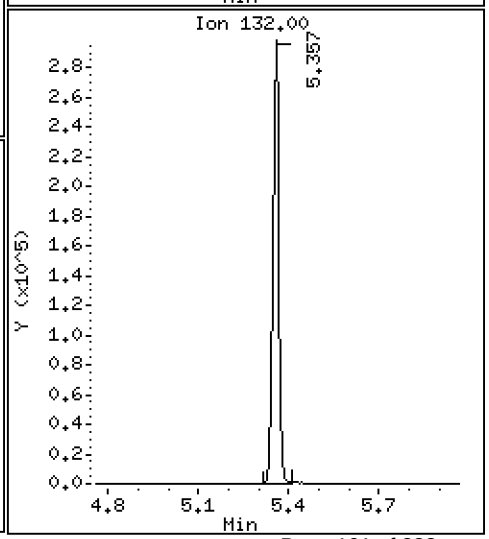












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

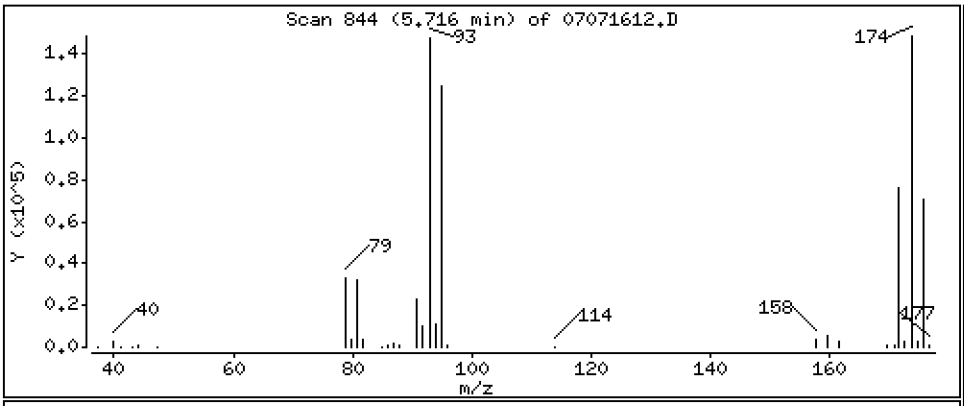
Operator: PB

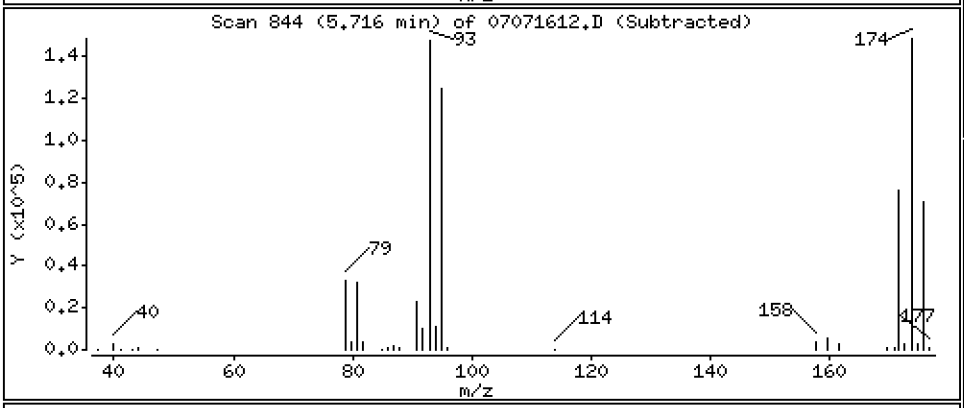
Column phase: RTXVMS

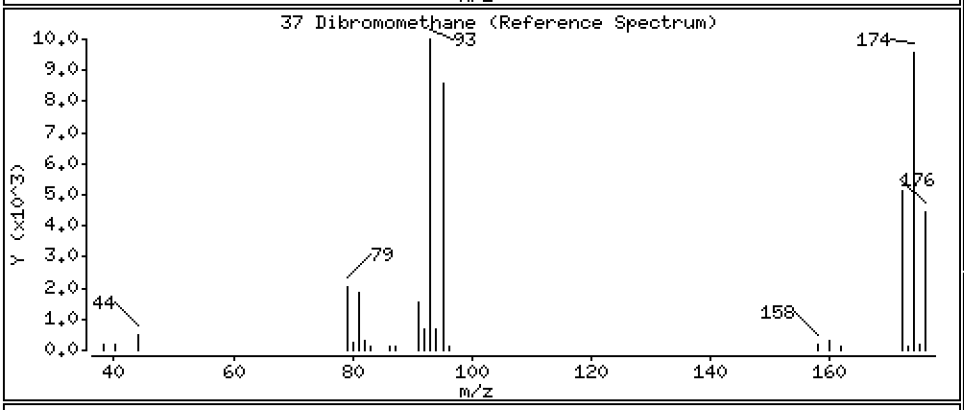
Column diameter: 0.18

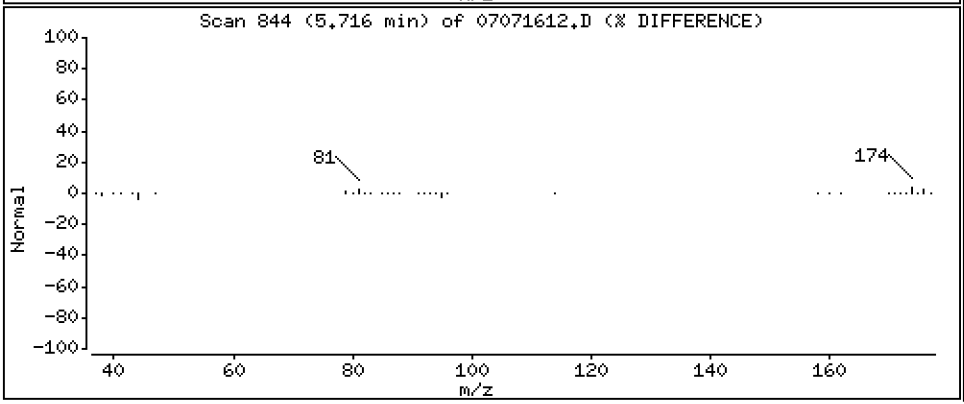
37 Dibromomethane

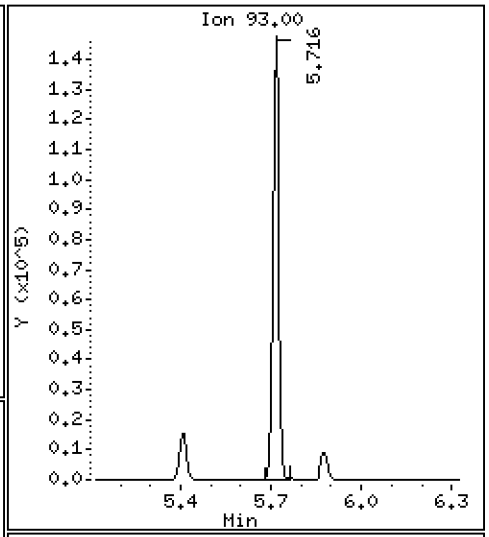
Concentration: 45.781 ug/Kg

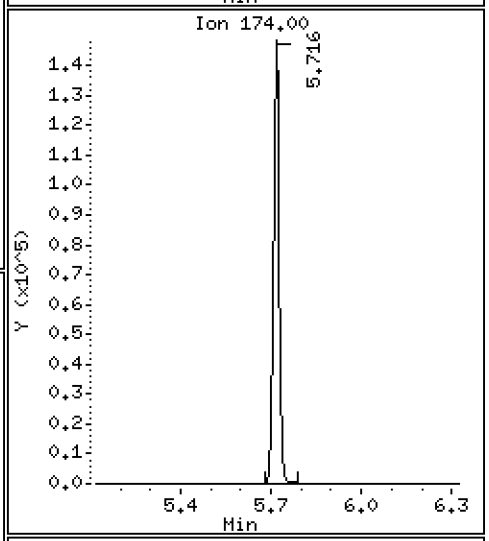


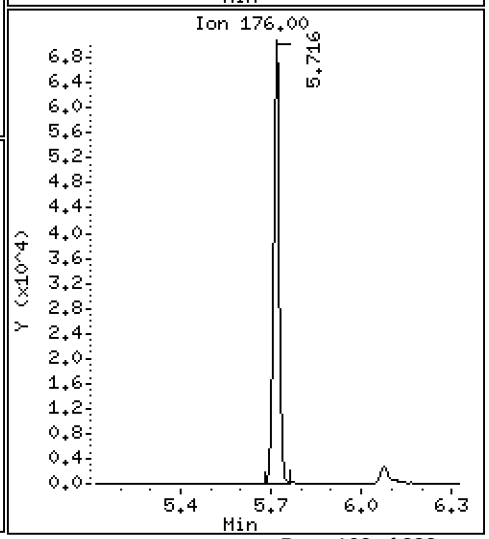












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

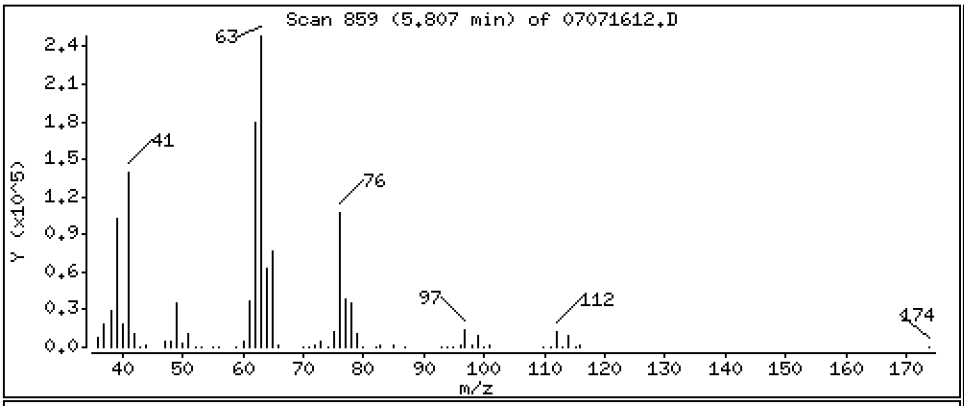
Operator: PB

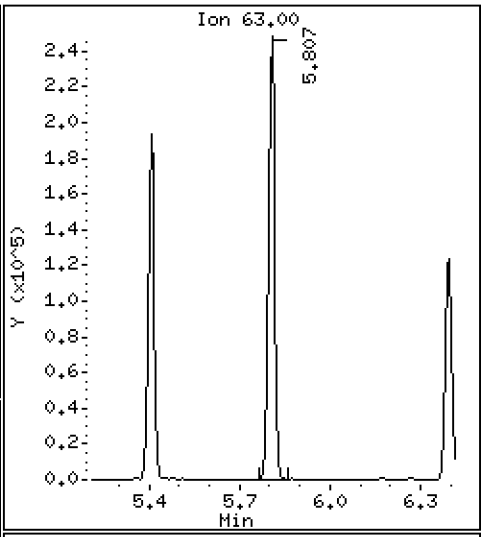
Column phase: RTXVMS

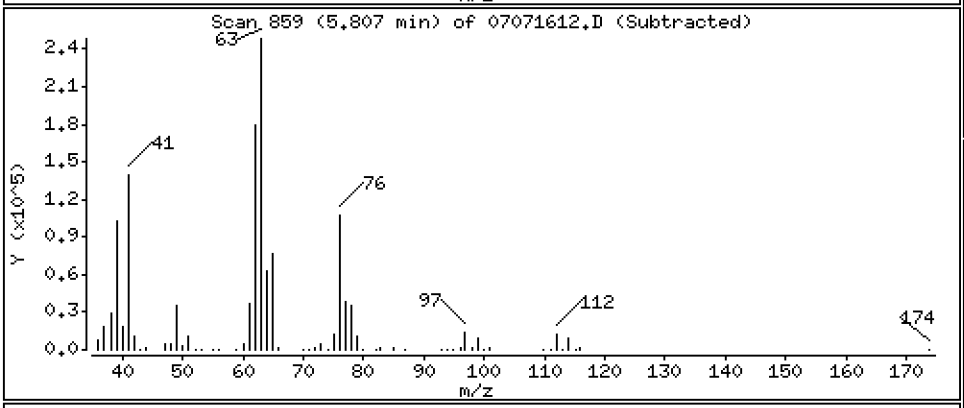
Column diameter: 0.18

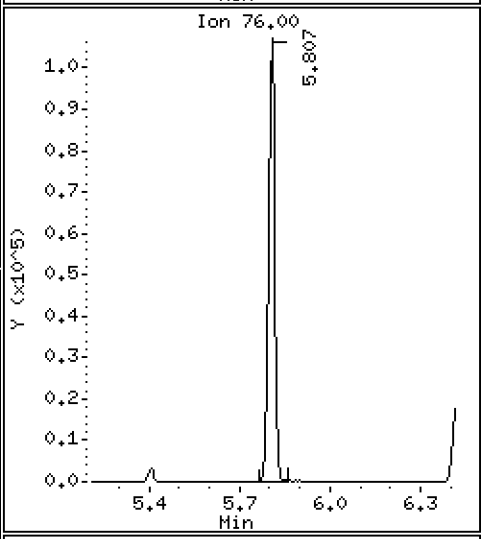
38 1,2-Dichloropropane

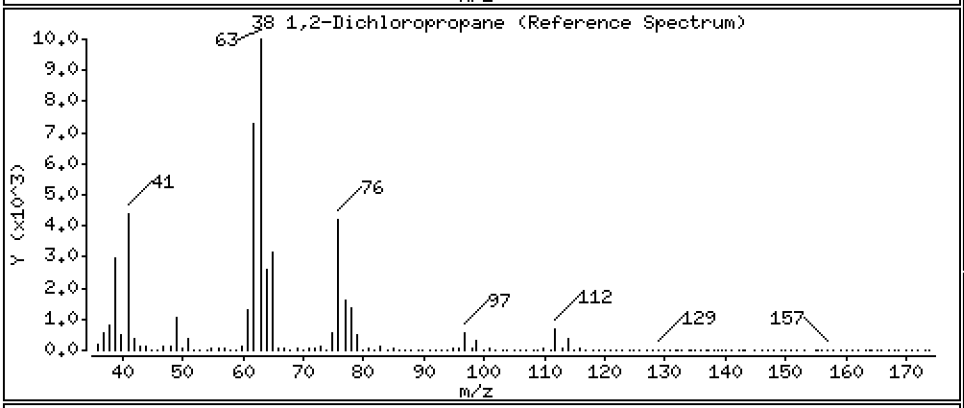
Concentration: 45.118 ug/Kg

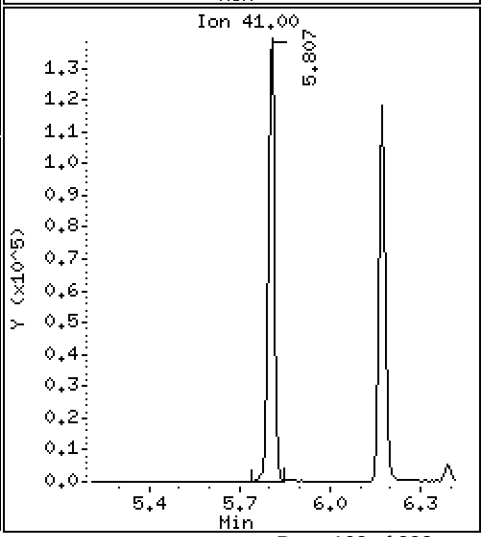


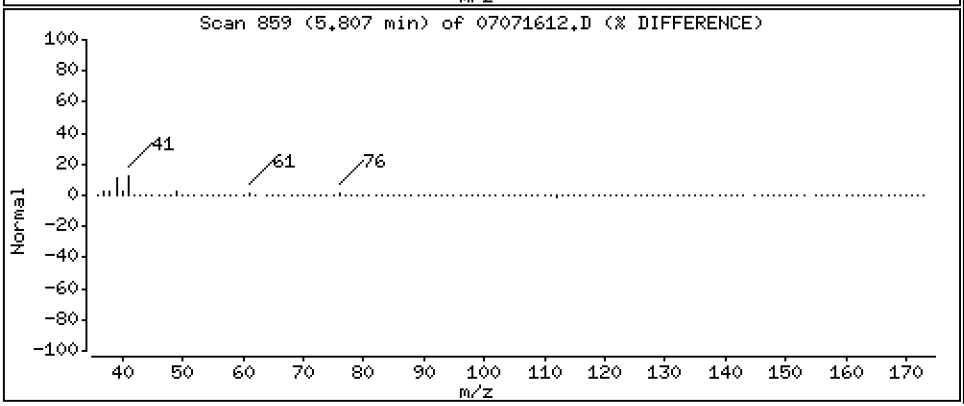












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

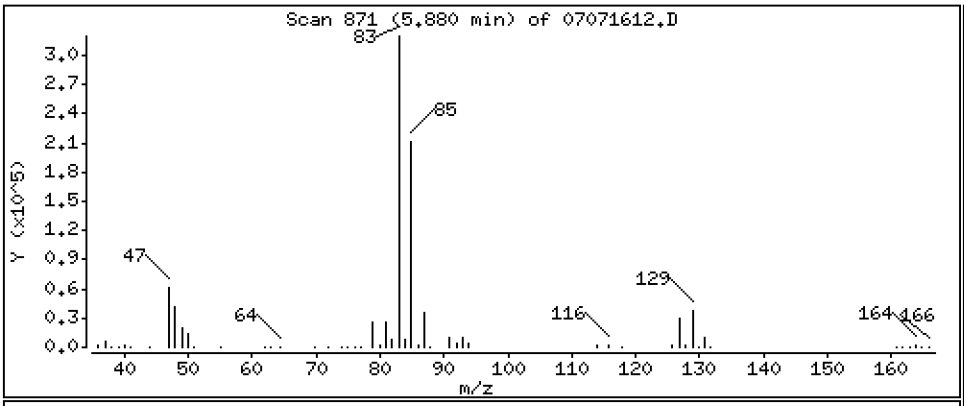
Operator: PB

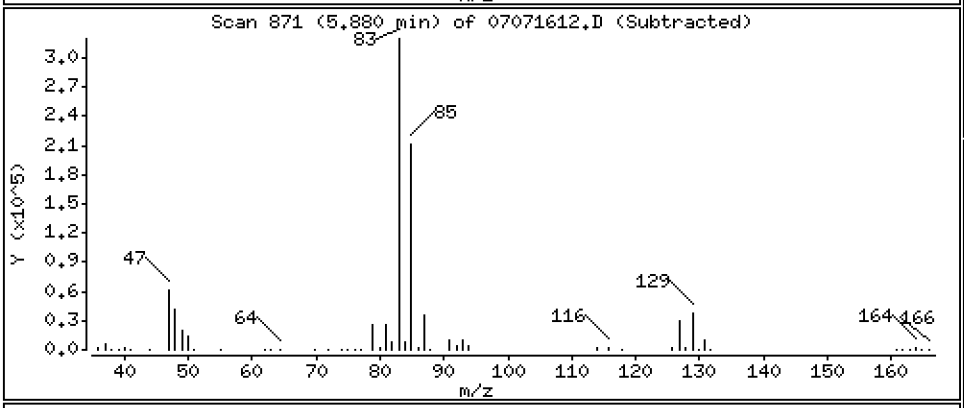
Column phase: RTXVMS

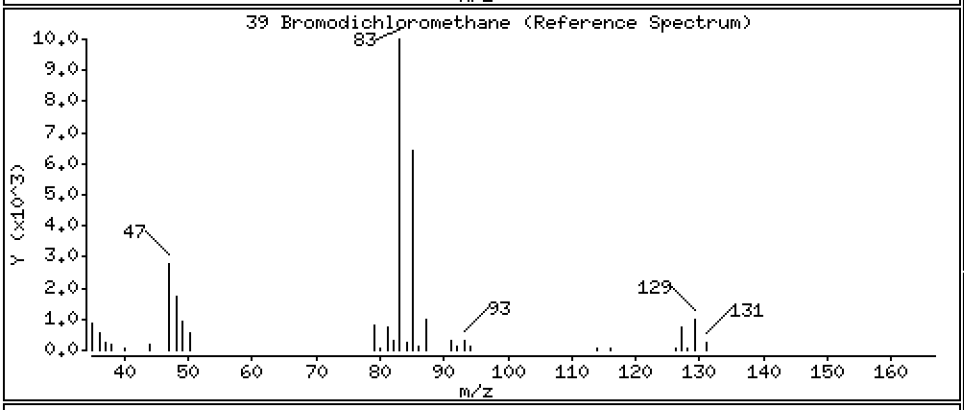
Column diameter: 0.18

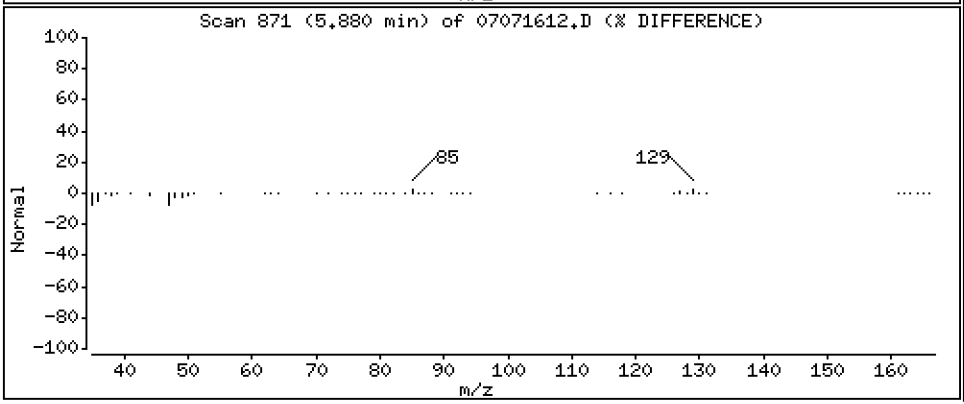
39 Bromodichloromethane

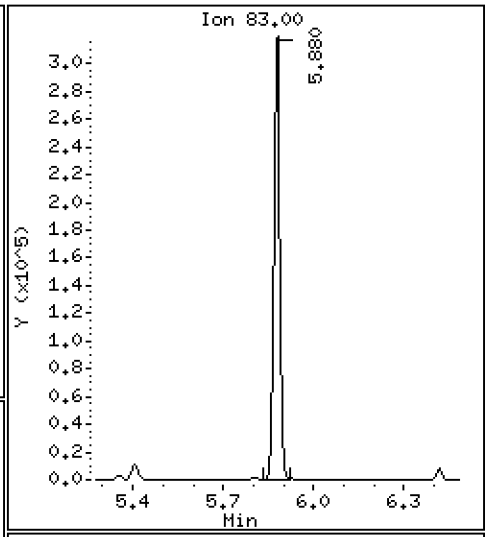
Concentration: 46.768 ug/Kg

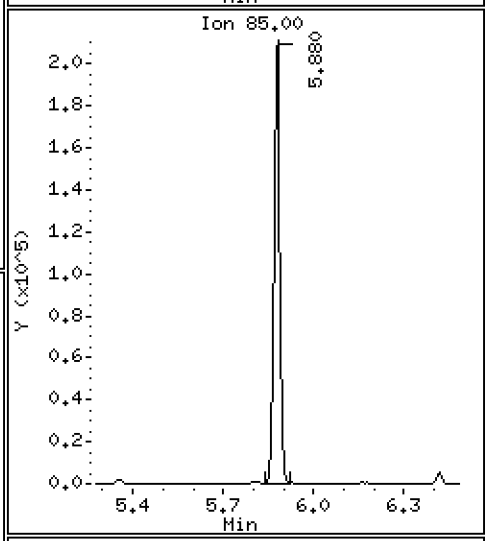


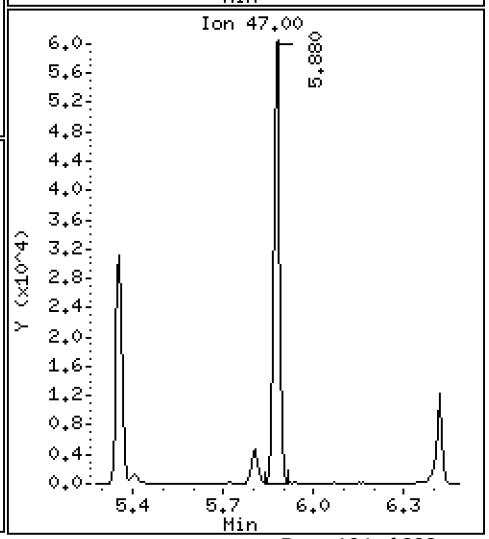












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

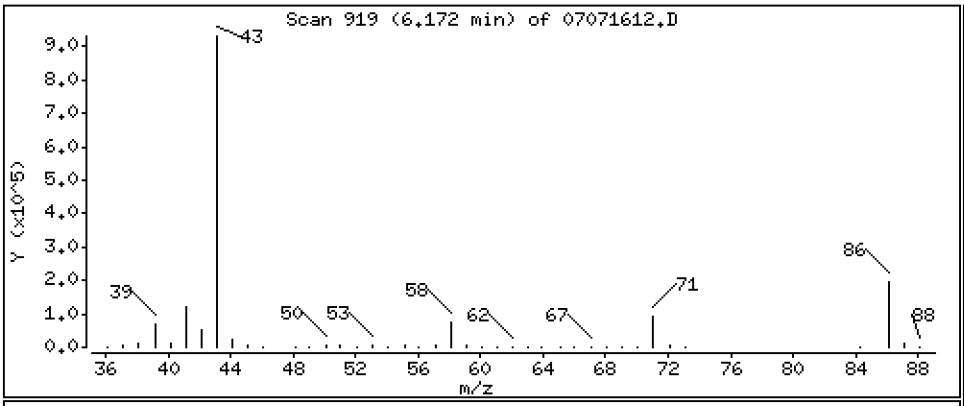
Operator: PB

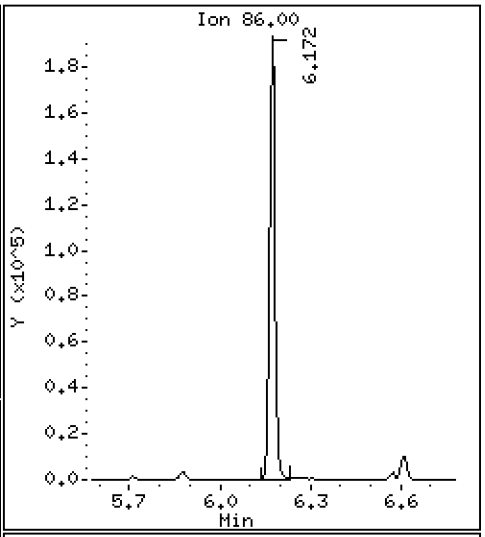
Column phase: RTXVMS

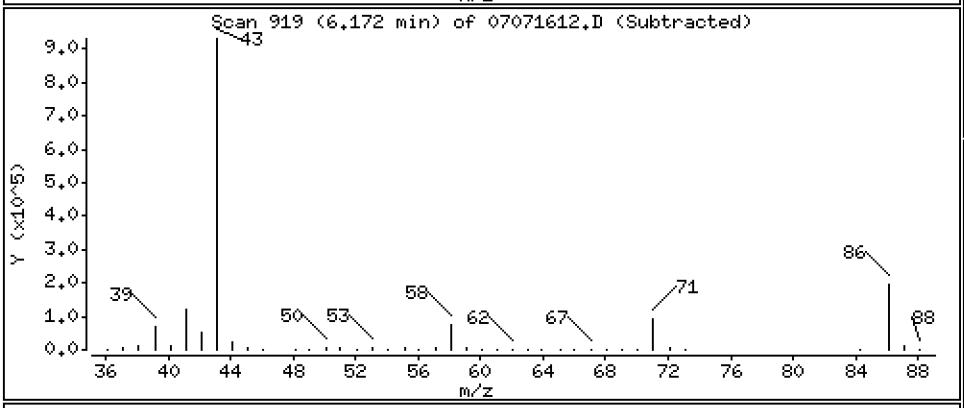
Column diameter: 0.18

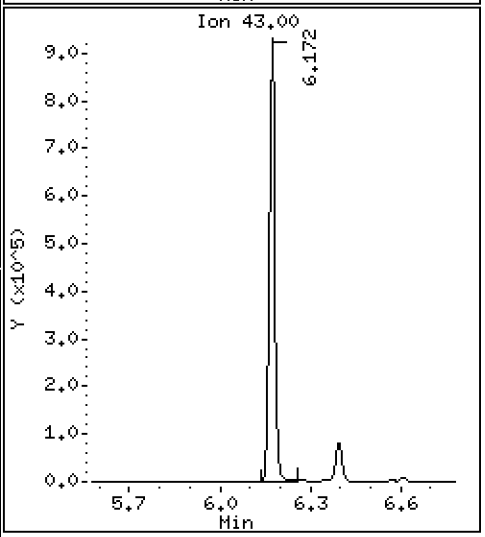
172 2-Pentanone

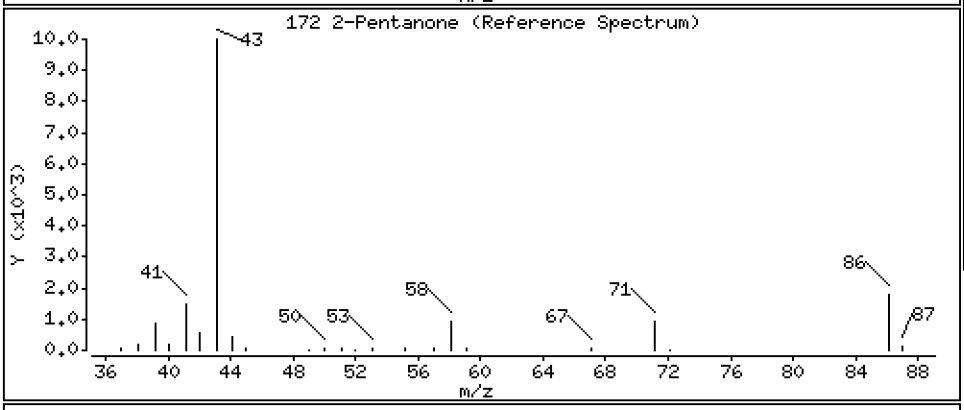
Concentration: 236.42 ug/Kg

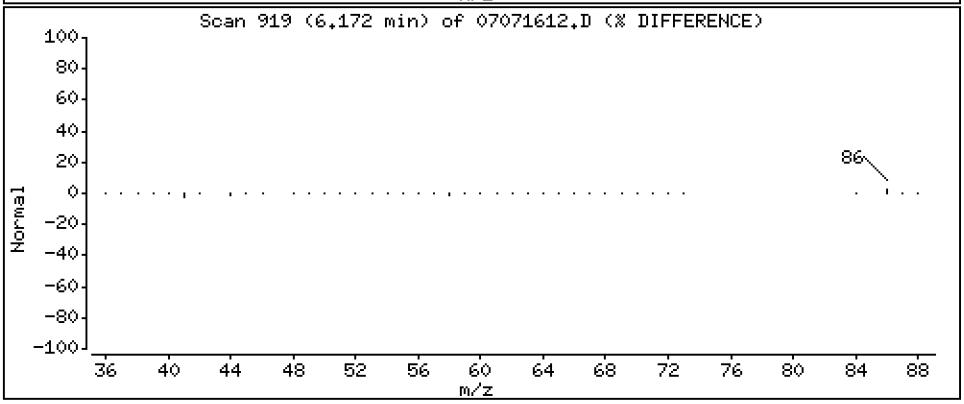












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

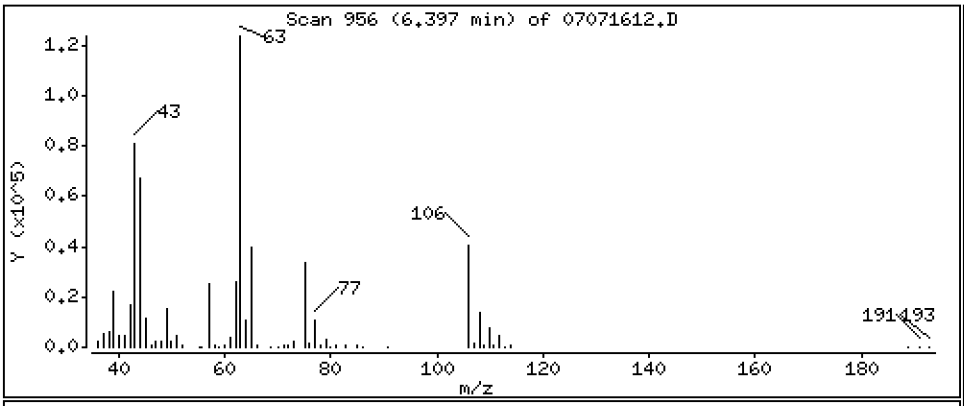
Operator: PB

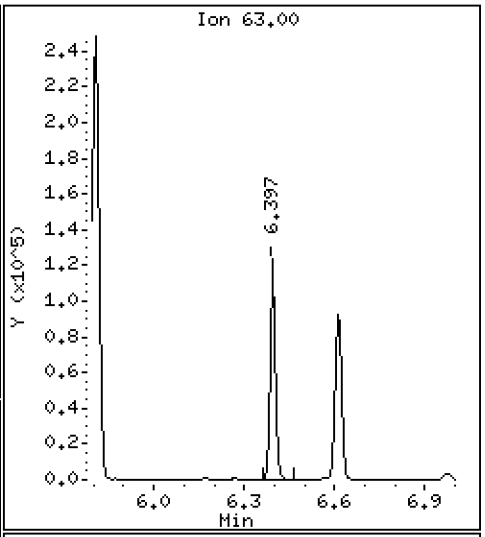
Column phase: RTXVMS

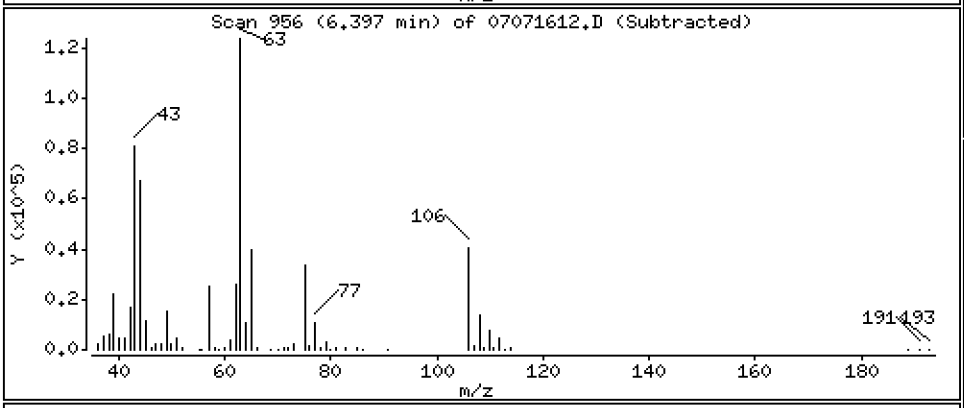
Column diameter: 0.18

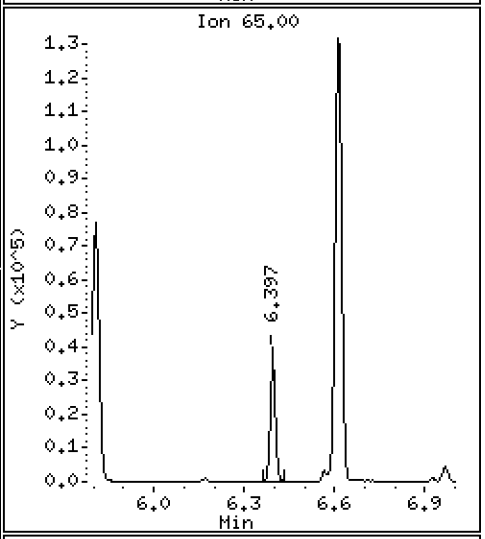
40 2-Chloroethyl Vinyl Ether

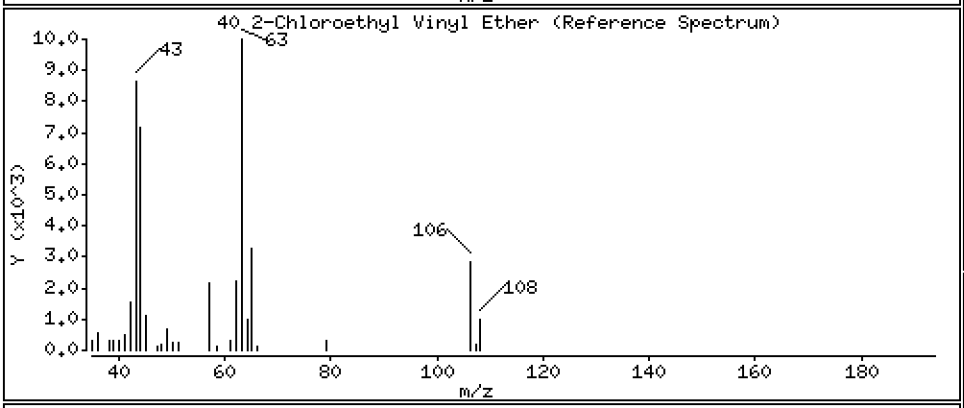
Concentration: 46.372 ug/Kg

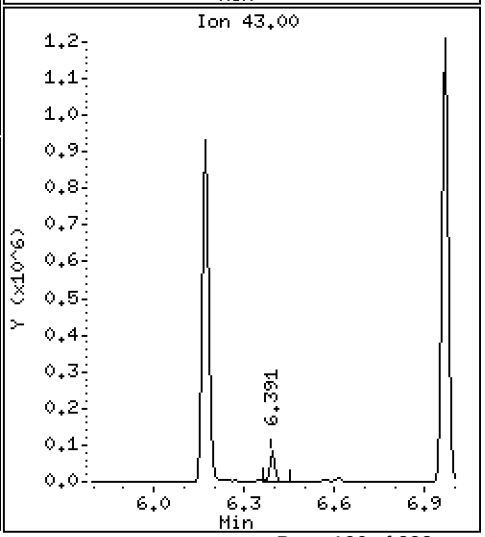


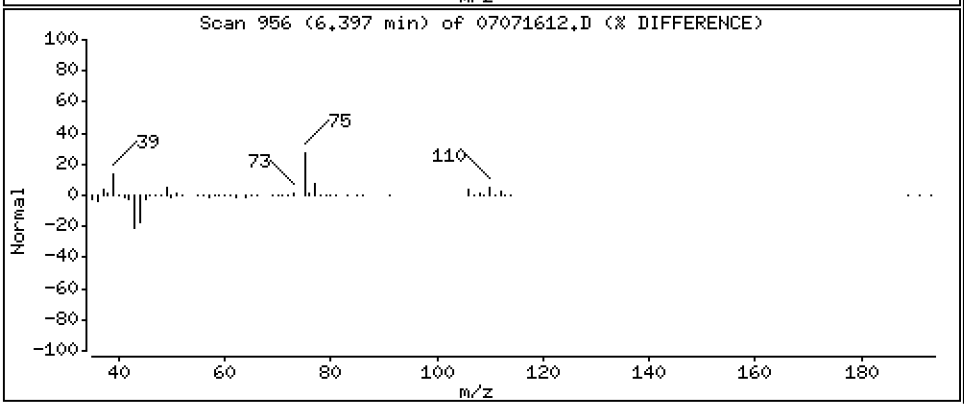












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

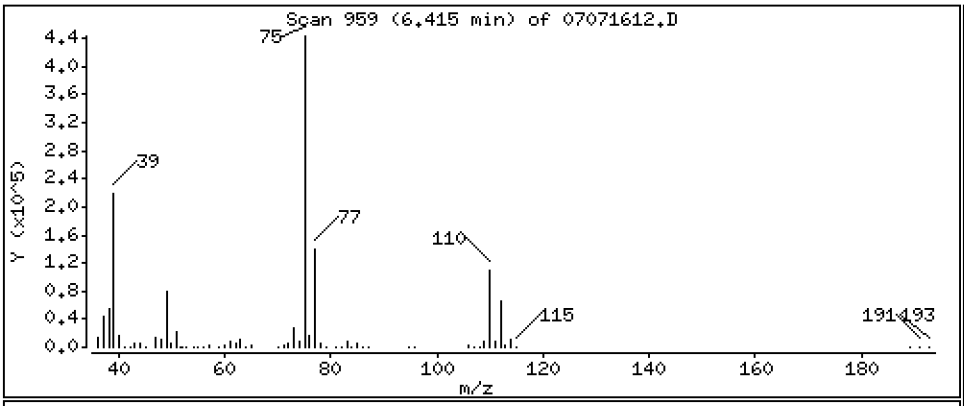
Operator: PB

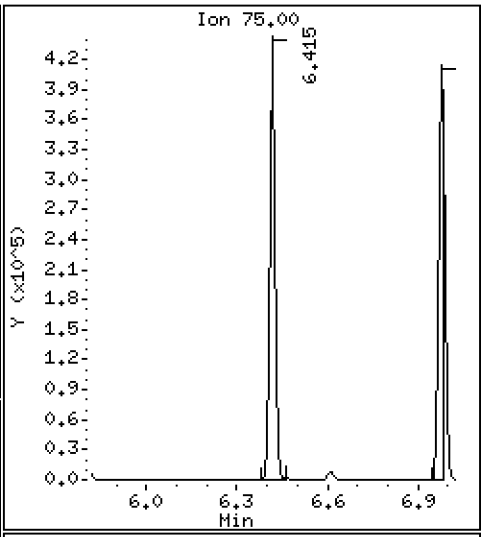
Column phase: RTXVMS

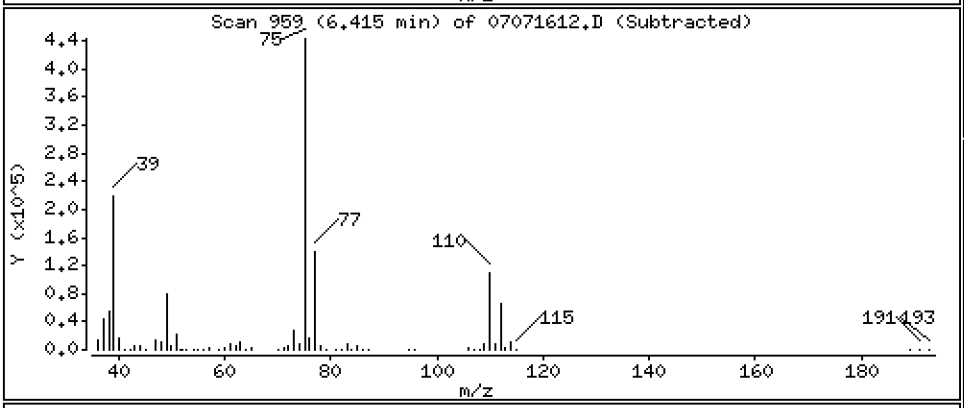
Column diameter: 0.18

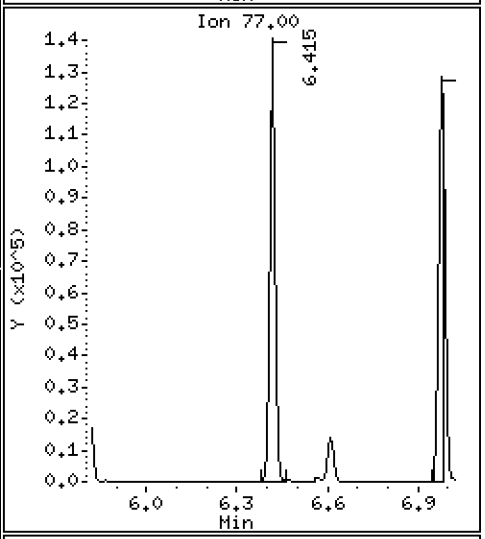
41 Cis 1,3-dichloropropene

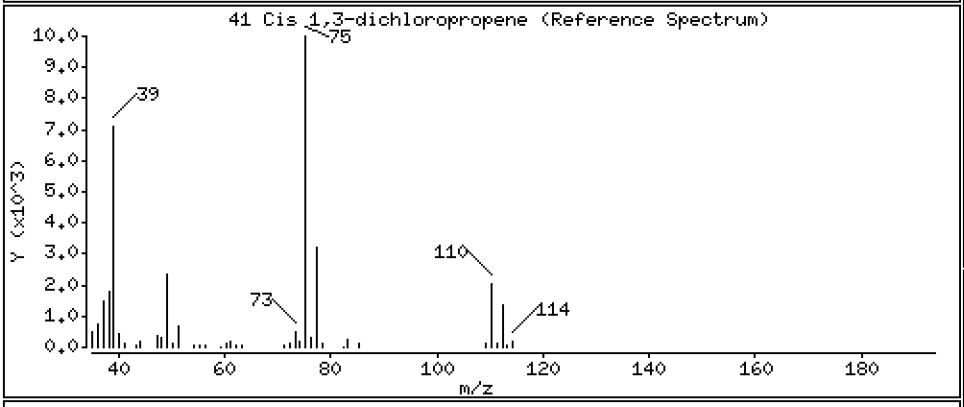
Concentration: 46.414 ug/Kg

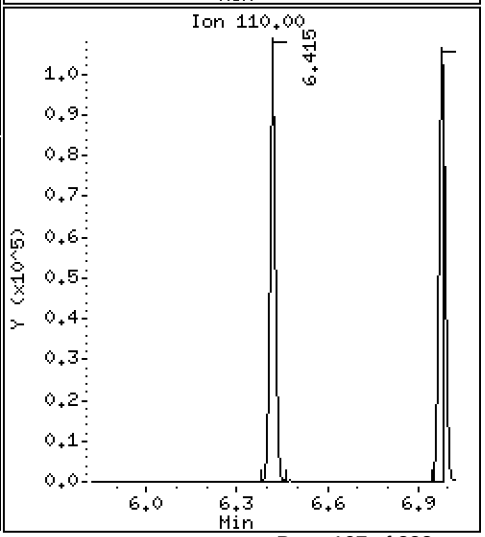


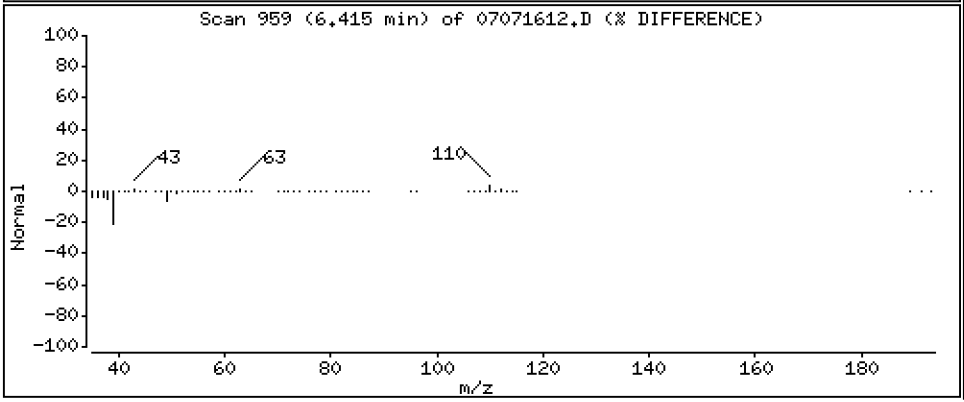












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

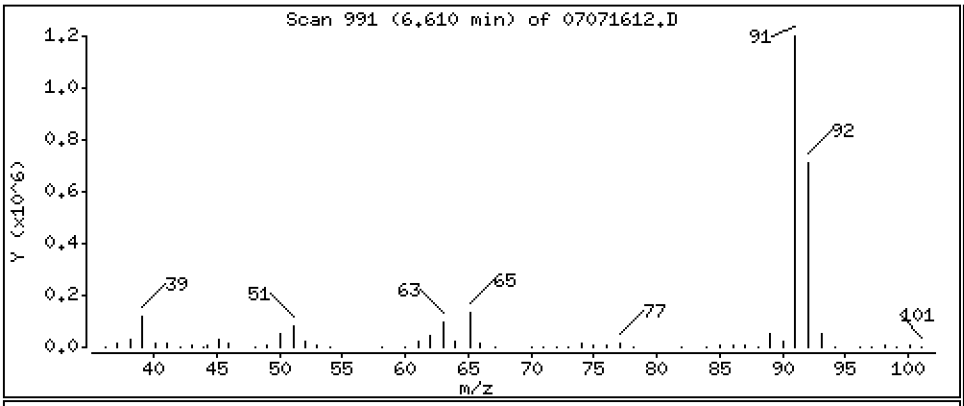
Operator: PB

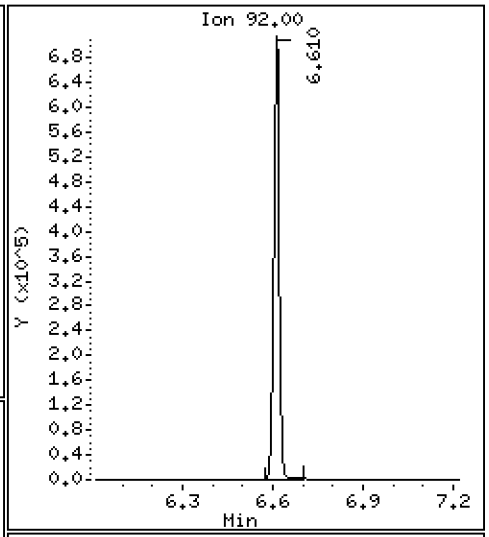
Column phase: RTXVMS

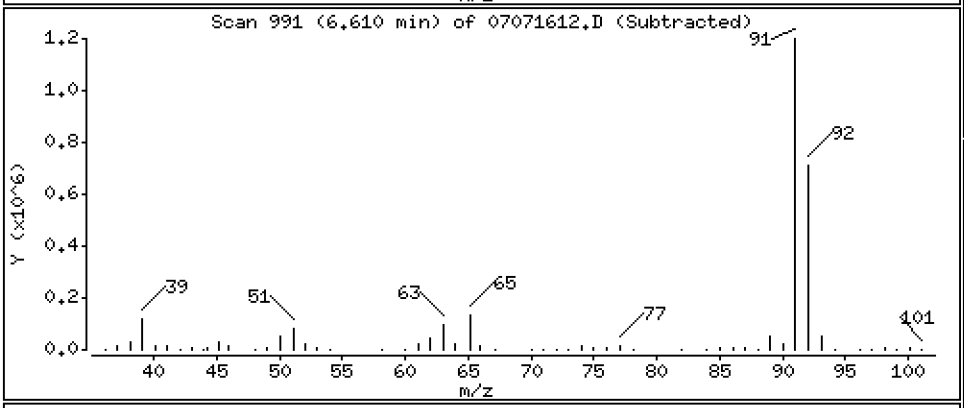
Column diameter: 0.18

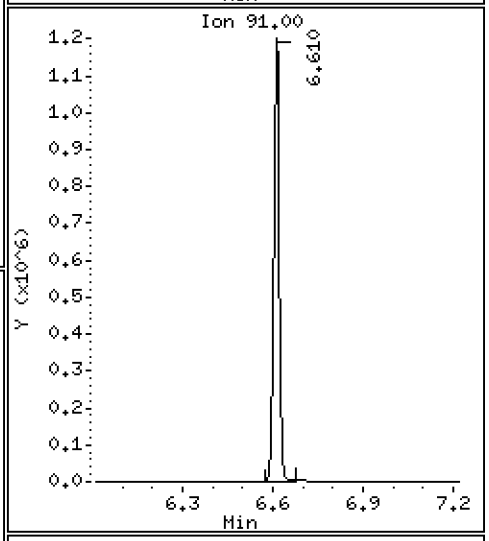
43 Toluene

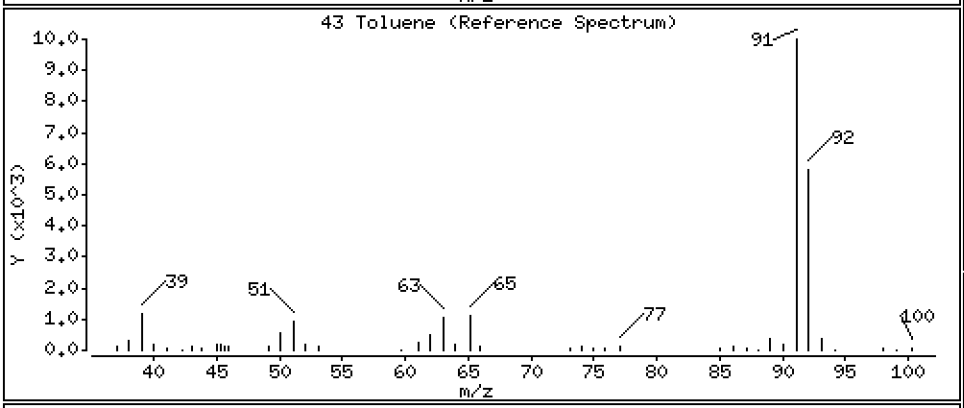
Concentration: 45.978 ug/Kg

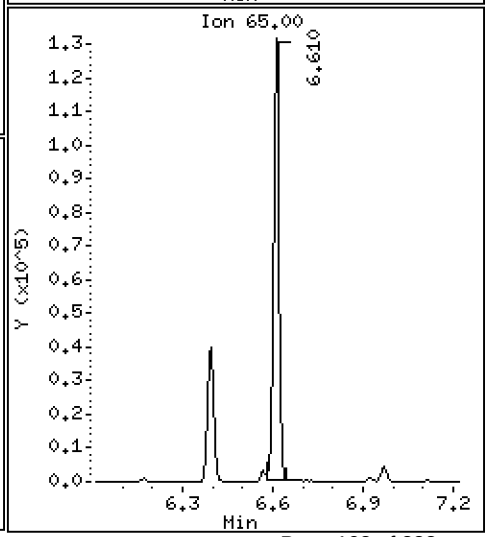


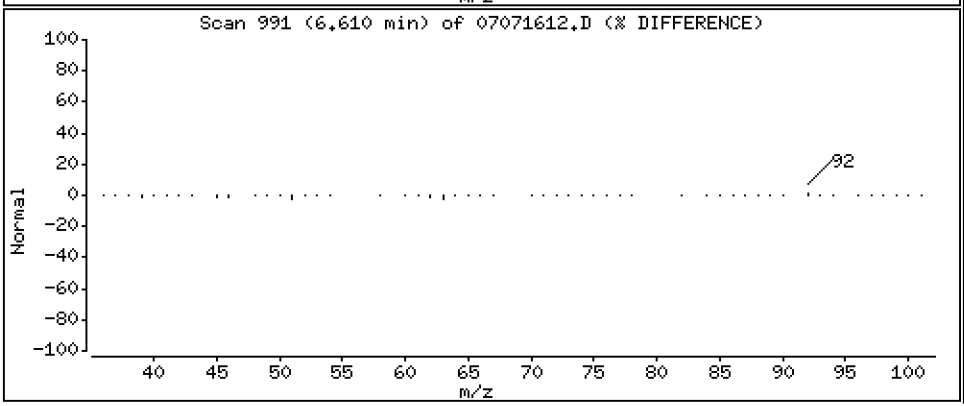












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

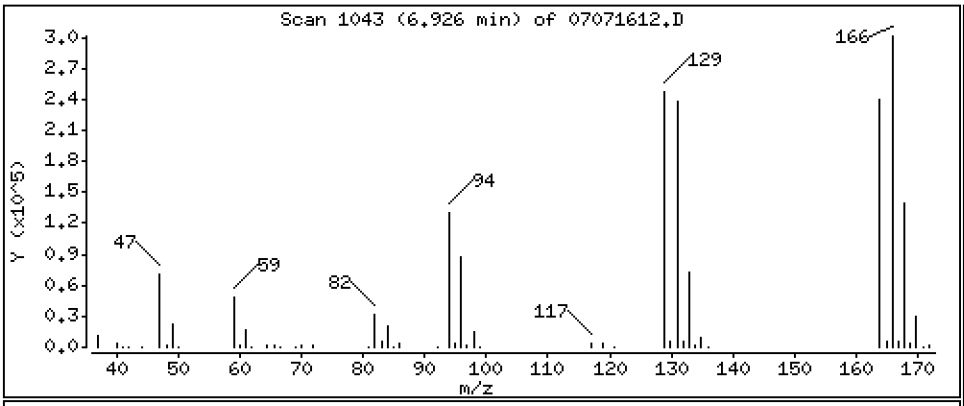
Operator: PB

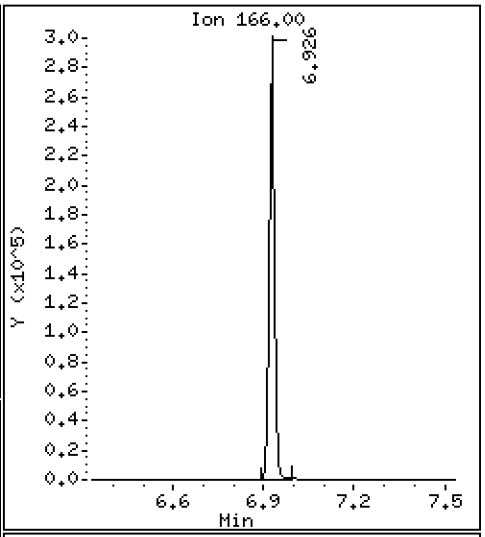
Column phase: RTXVMS

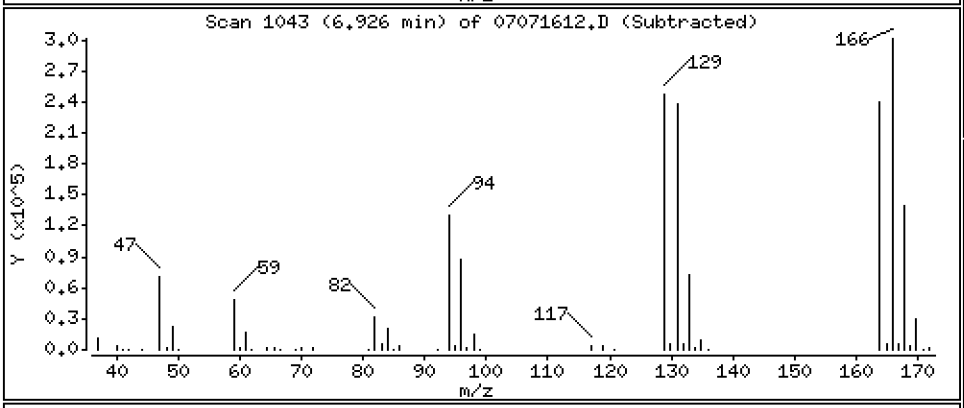
Column diameter: 0.18

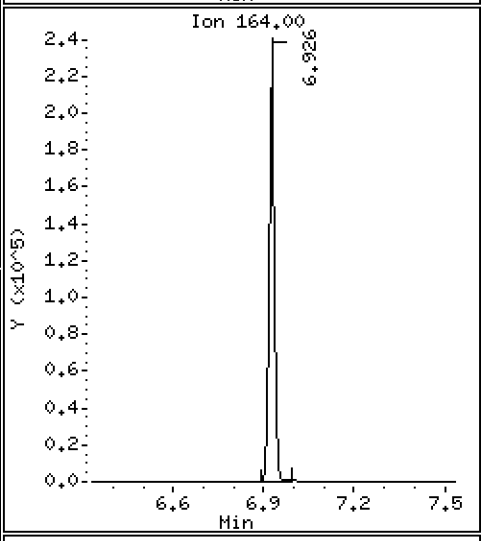
44 Tetrachloroethene

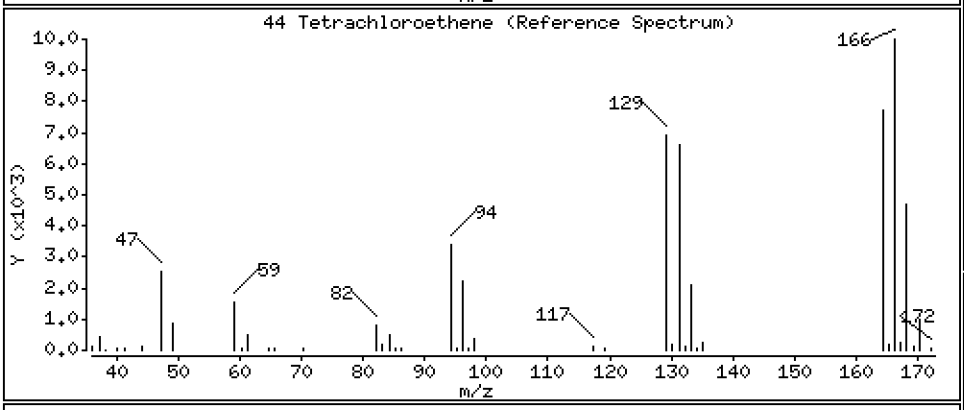
Concentration: 49.265 ug/Kg

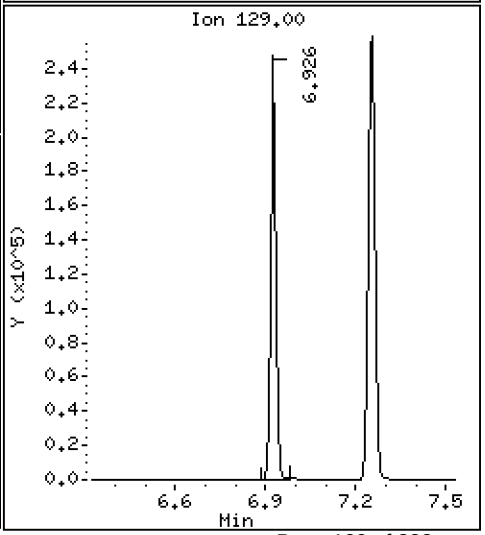


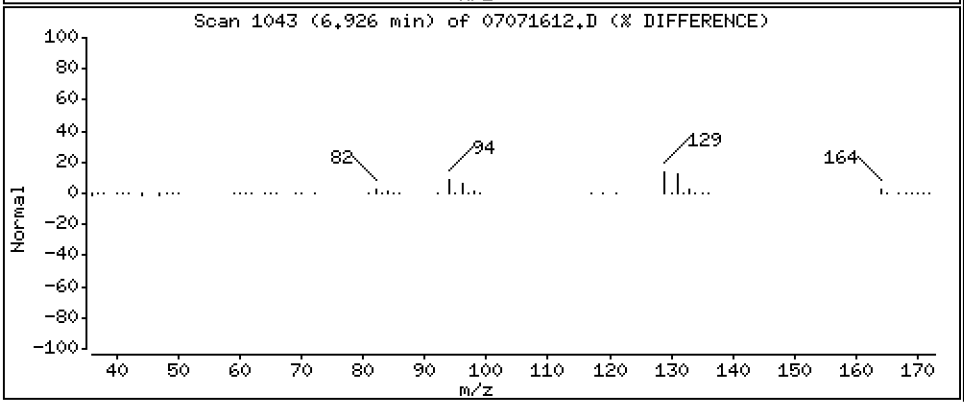












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

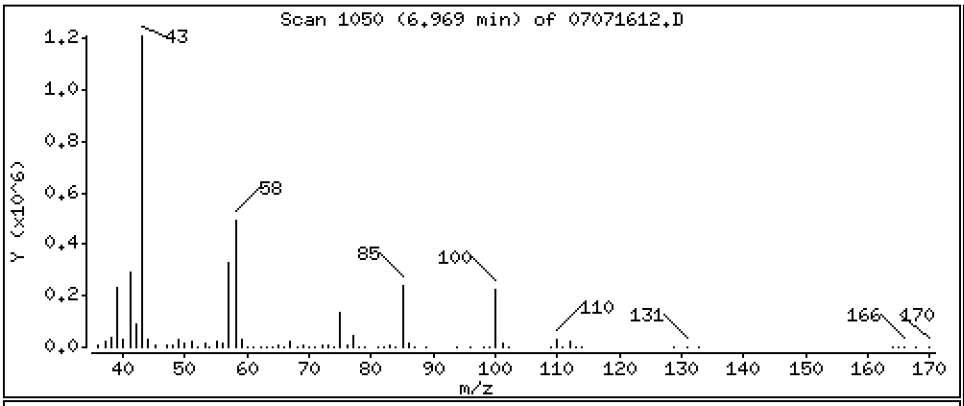
Operator: PB

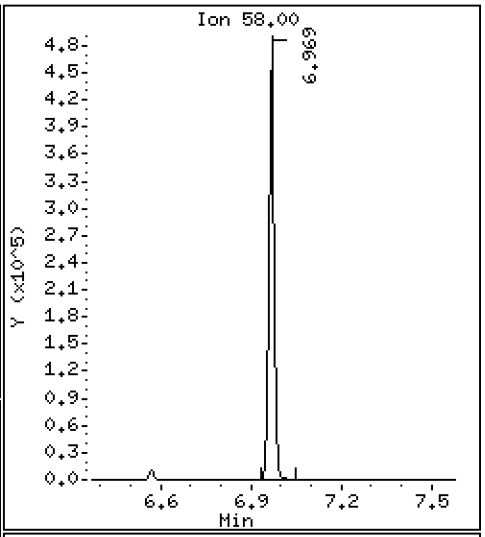
Column phase: RTXVMS

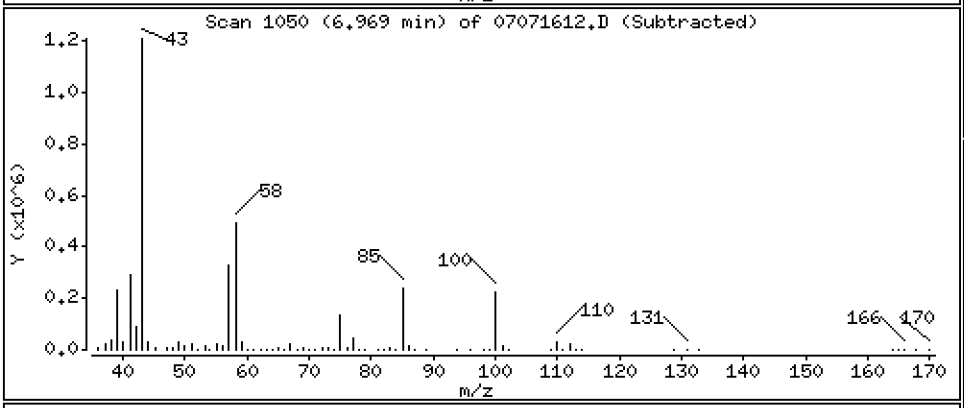
Column diameter: 0.18

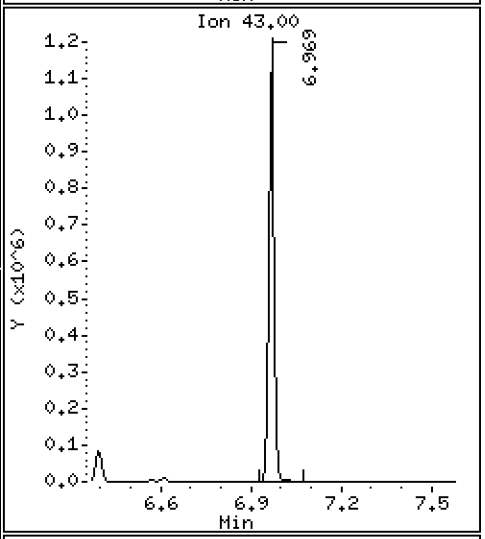
45 4-Methyl-2-Pentanone

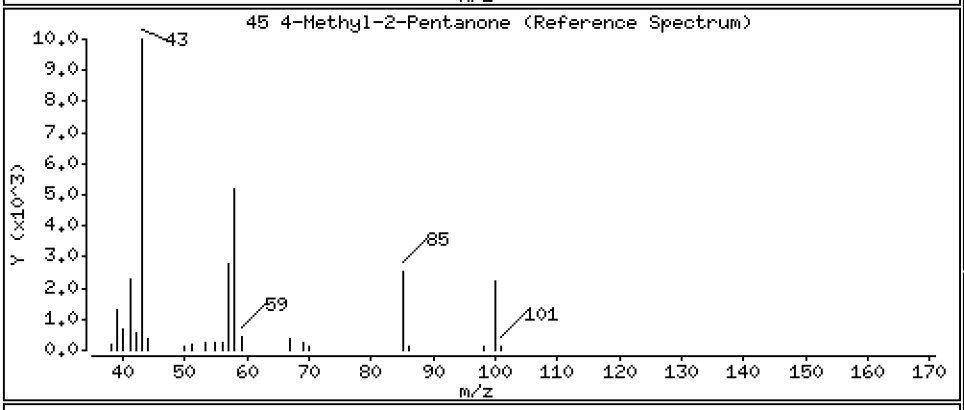
Concentration: 216.42 ug/Kg

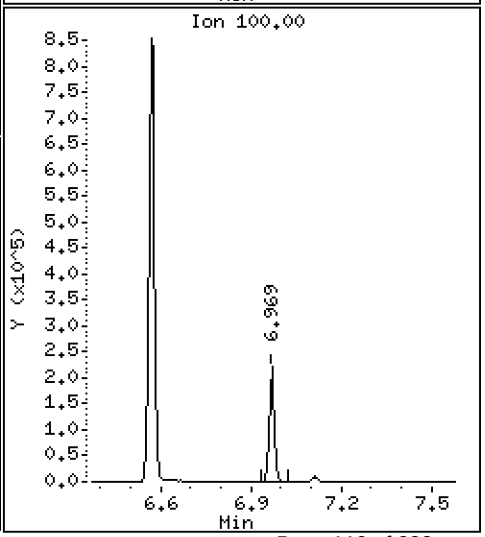


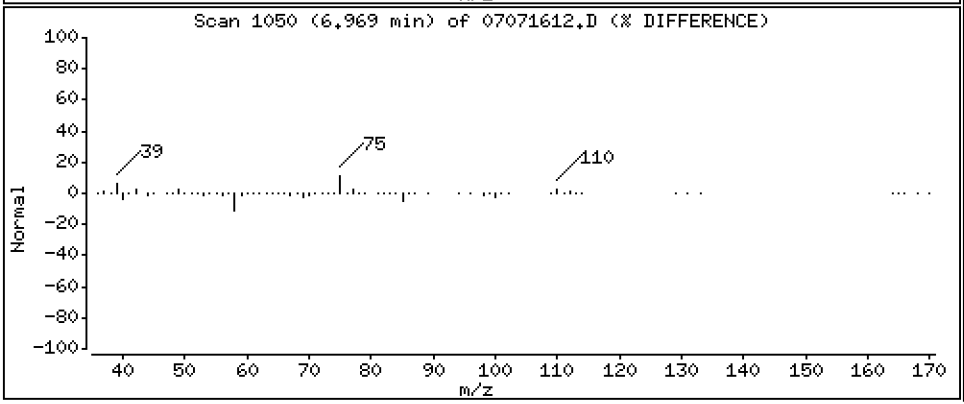












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

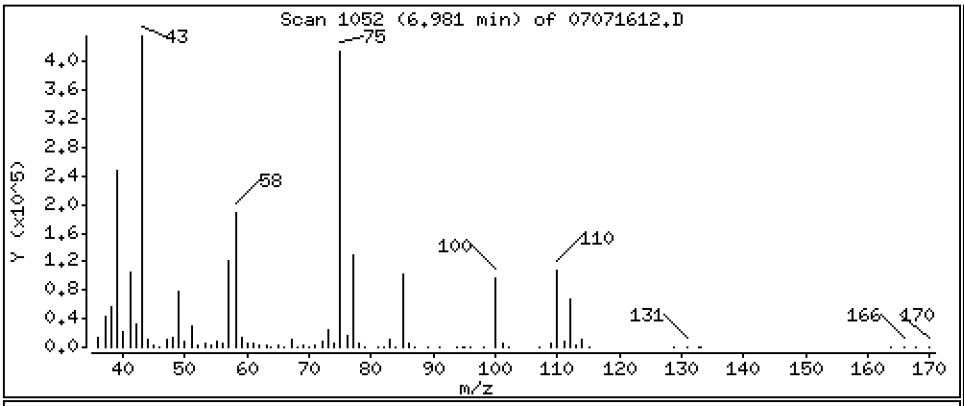
Operator: PB

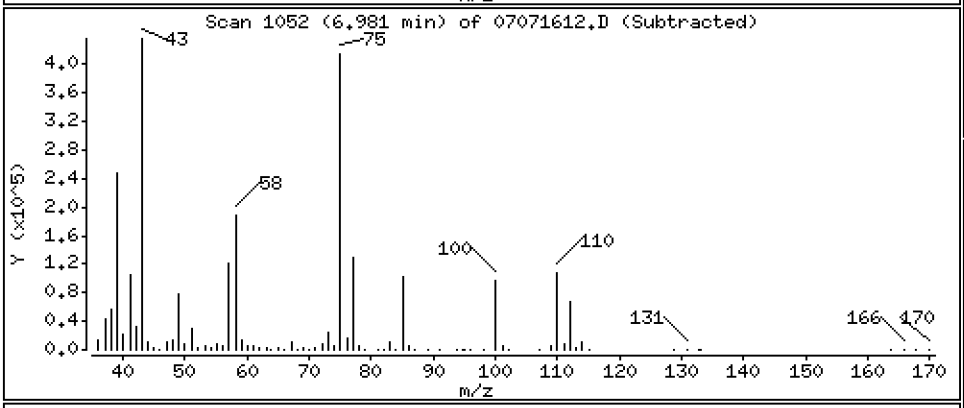
Column phase: RTXVMS

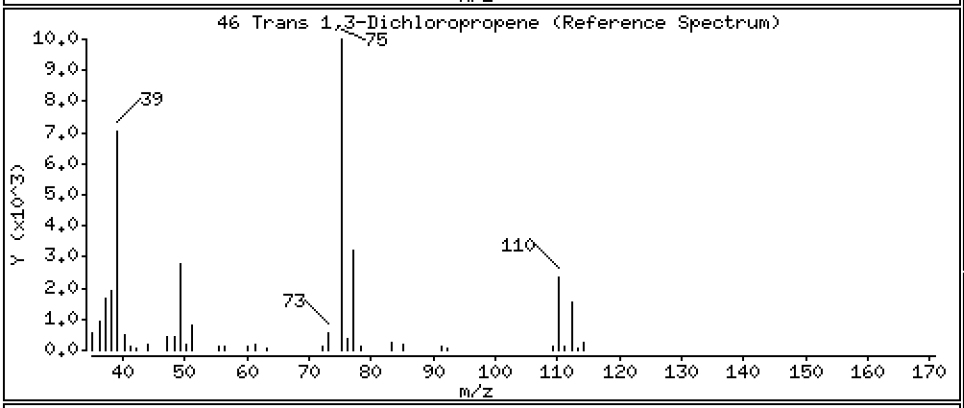
Column diameter: 0.18

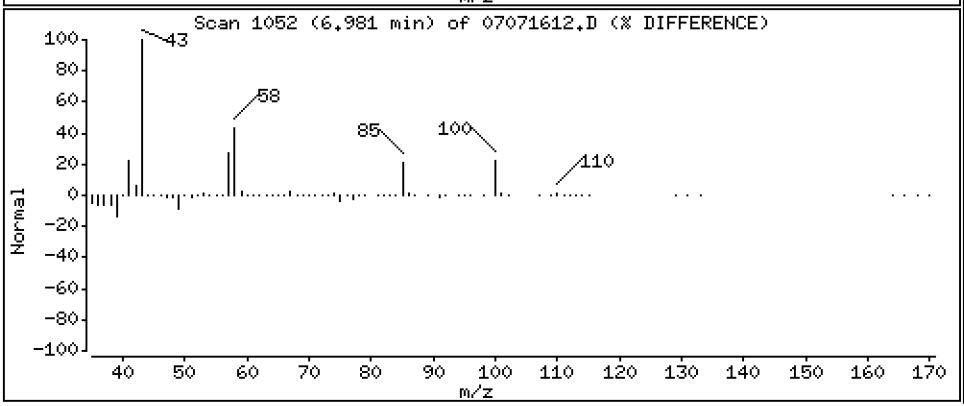
46 Trans 1,3-Dichloropropene

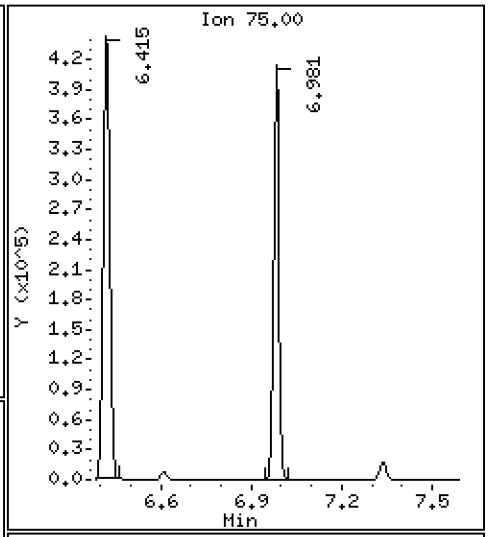
Concentration: 47.117 ug/Kg

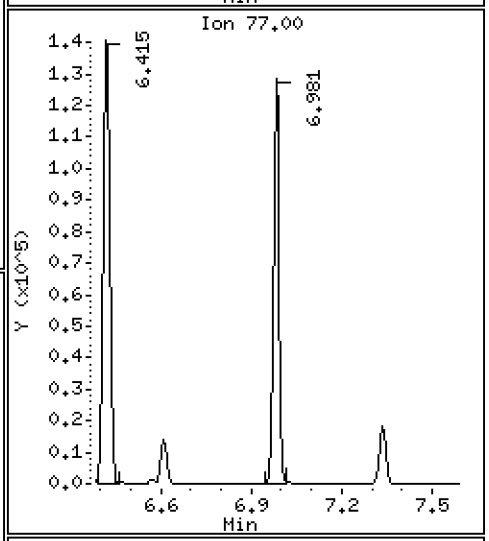


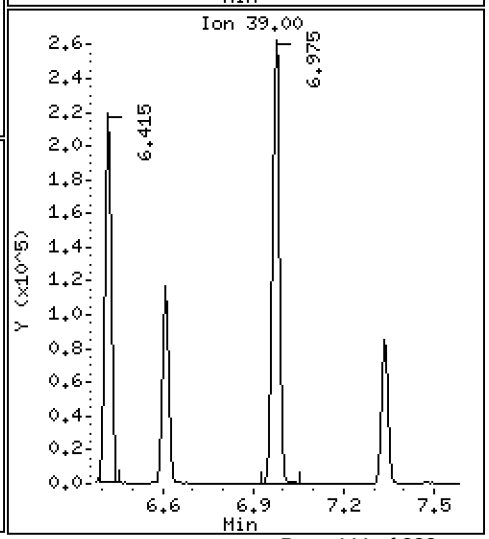












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

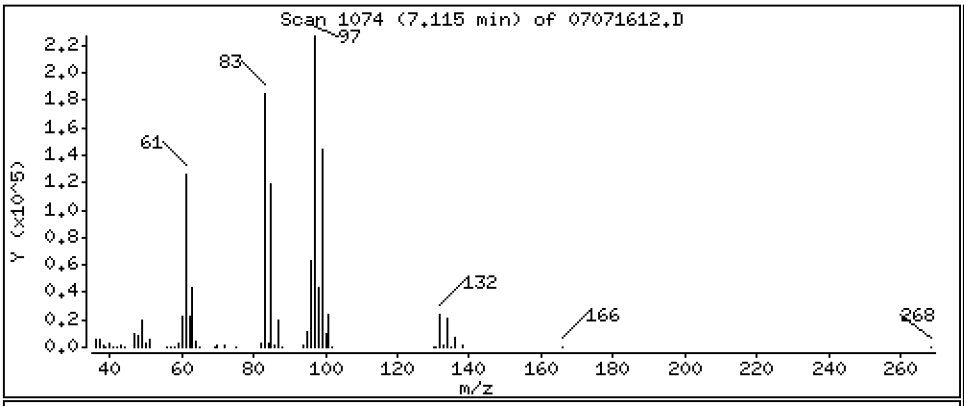
Operator: PB

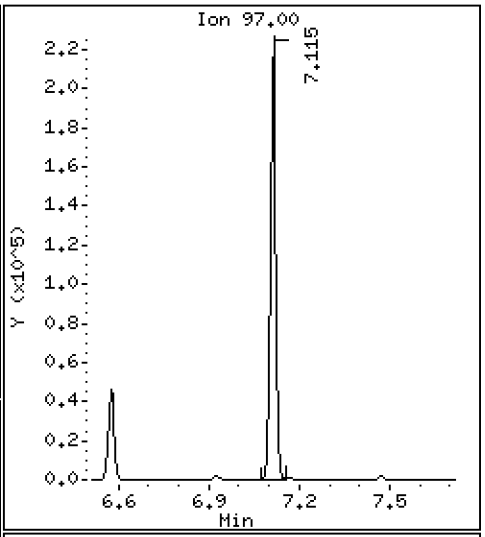
Column phase: RTXVMS

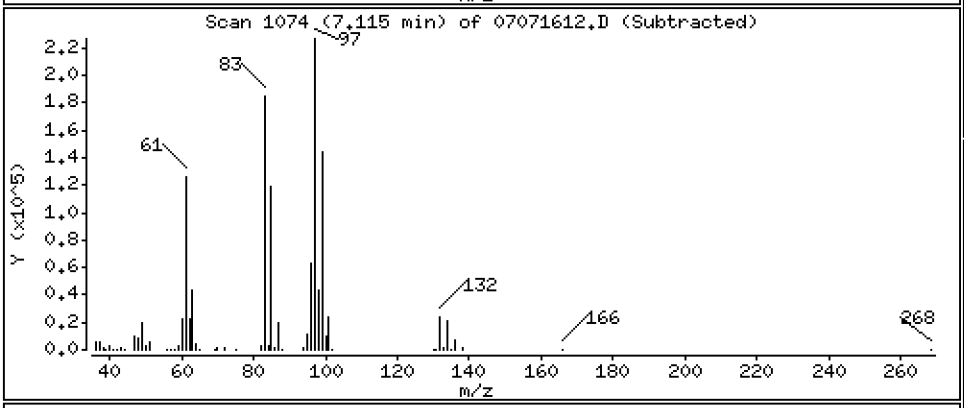
Column diameter: 0.18

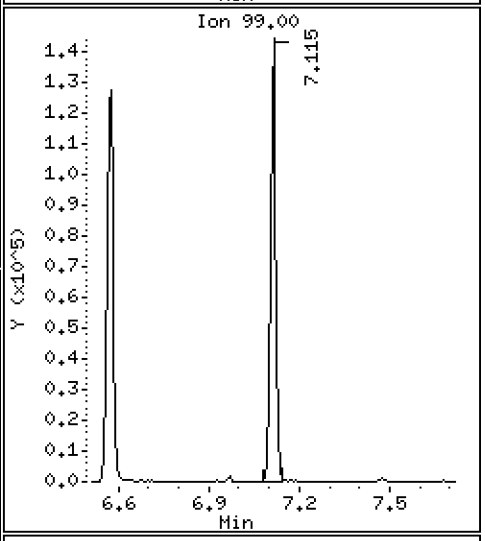
47 1,1,2-Trichloroethane

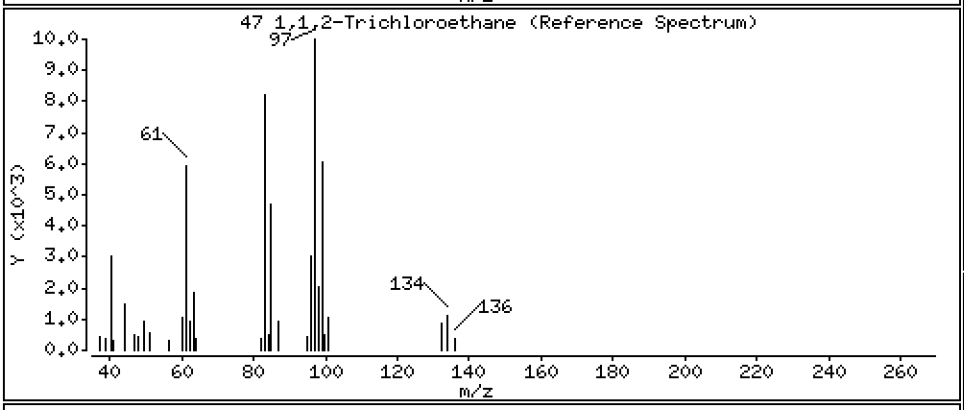
Concentration: 45.605 ug/Kg

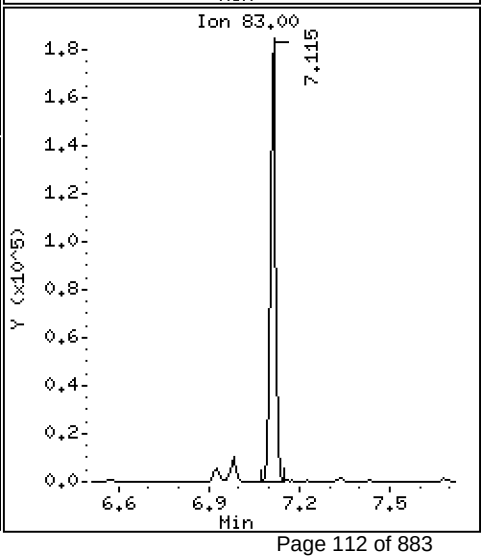


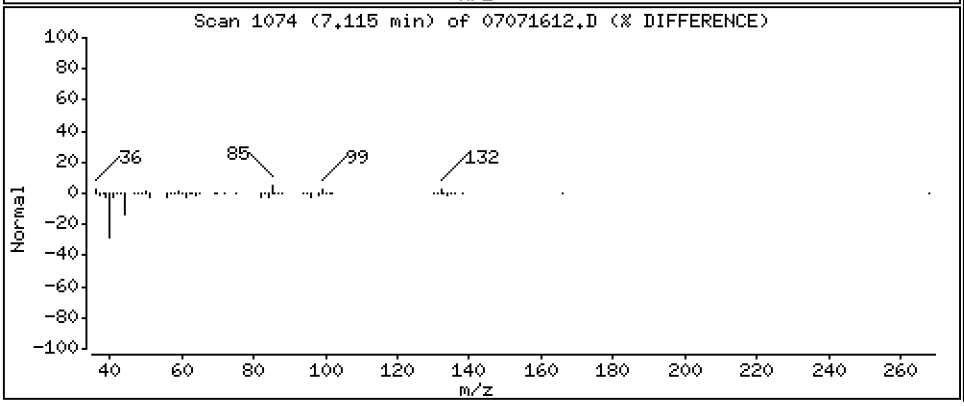












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

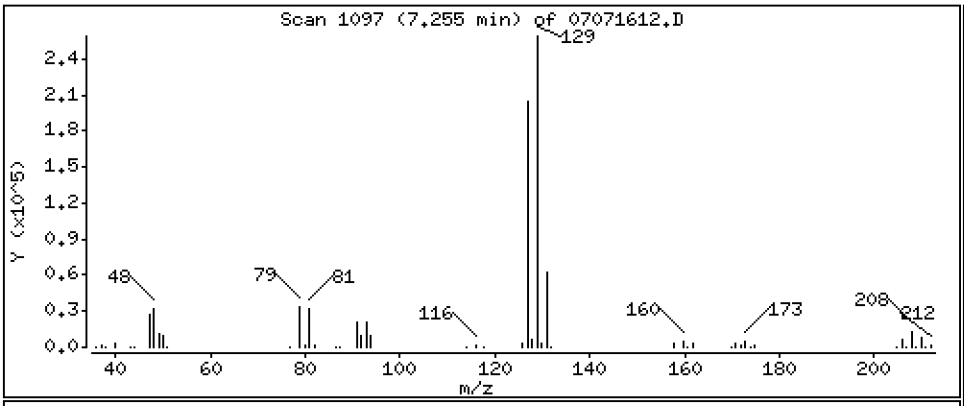
Operator: PB

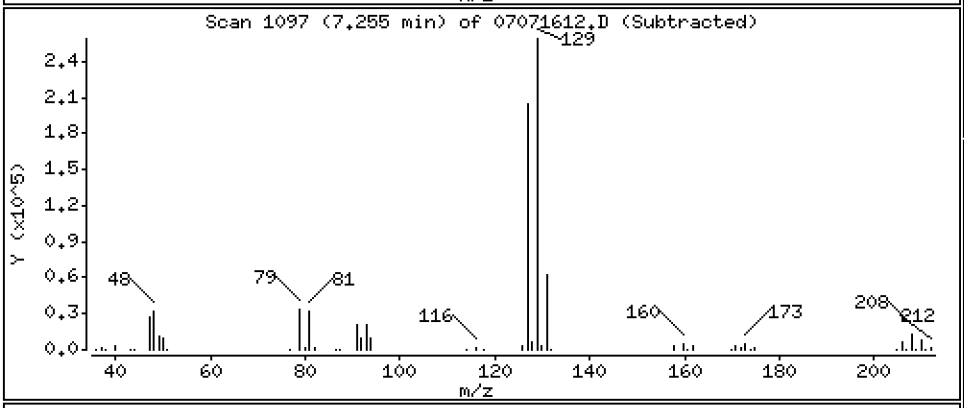
Column phase: RTXVMS

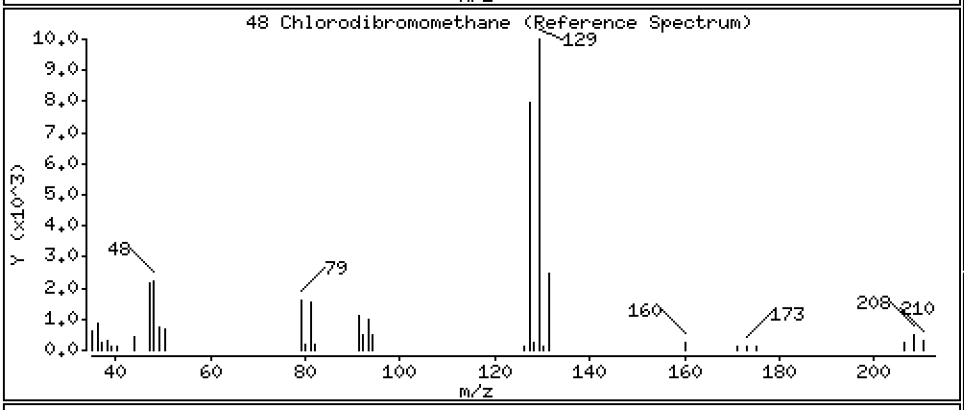
Column diameter: 0.18

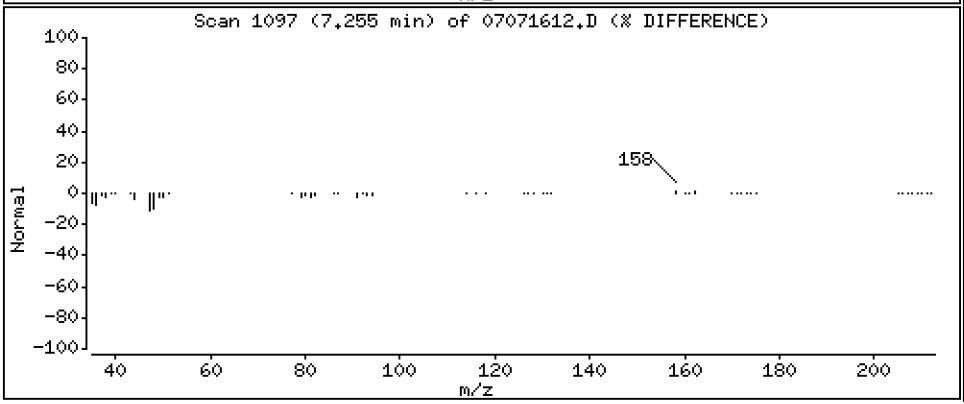
48 Chlorodibromomethane

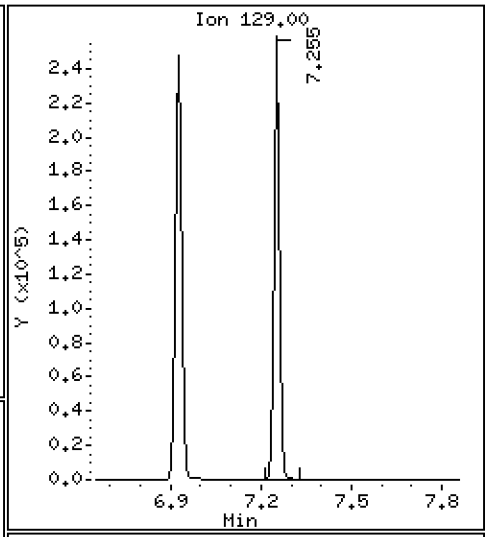
Concentration: 47.818 ug/Kg

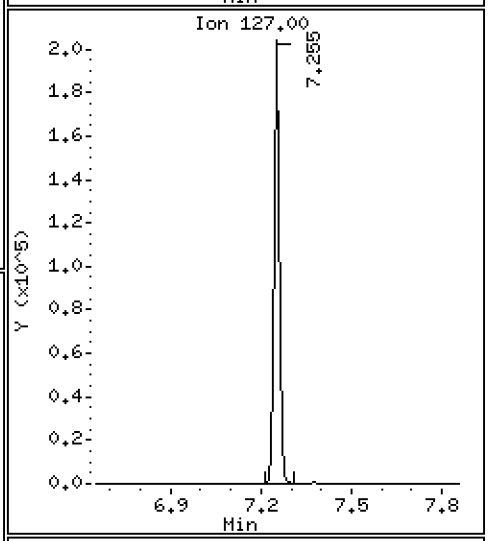


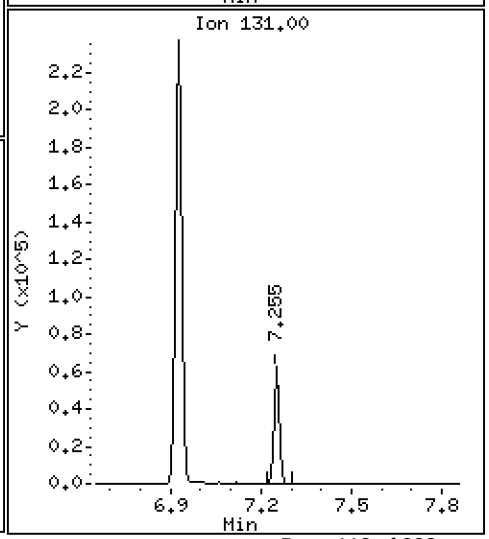












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

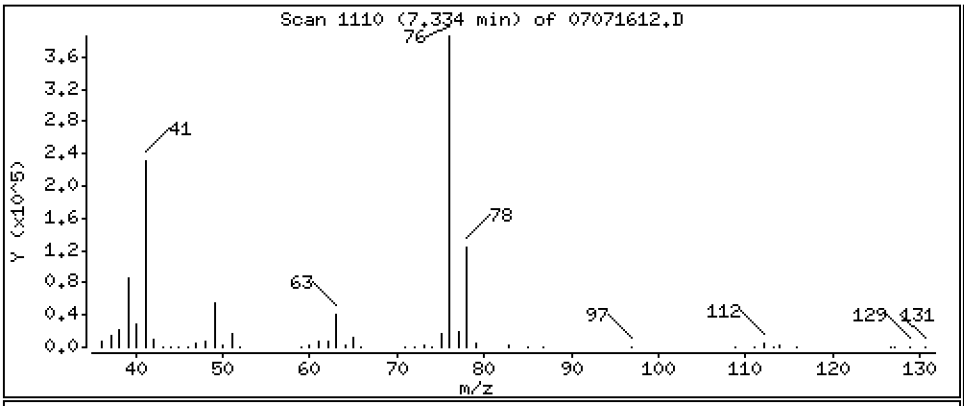
Operator: PB

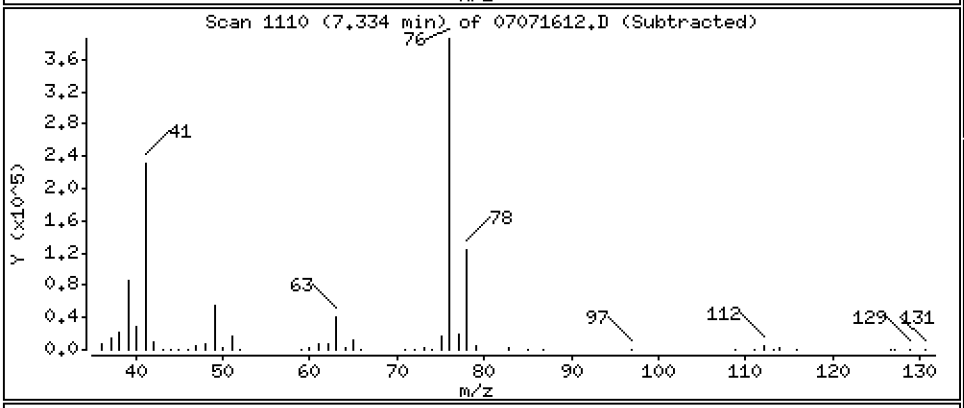
Column phase: RTXVMS

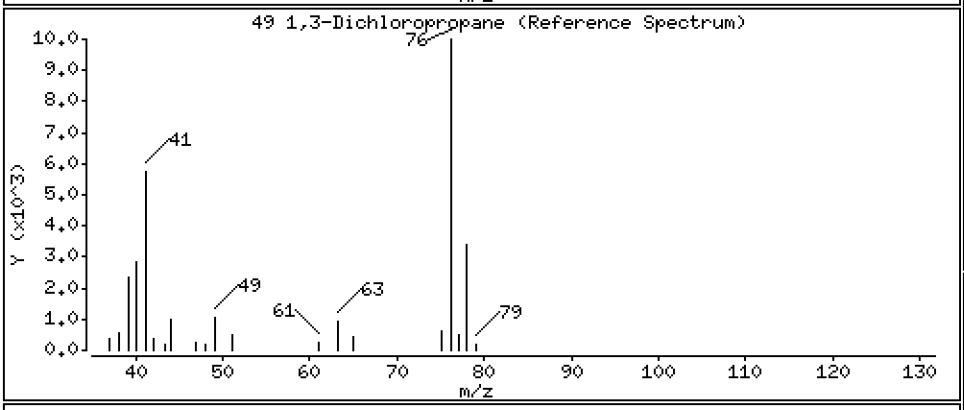
Column diameter: 0.18

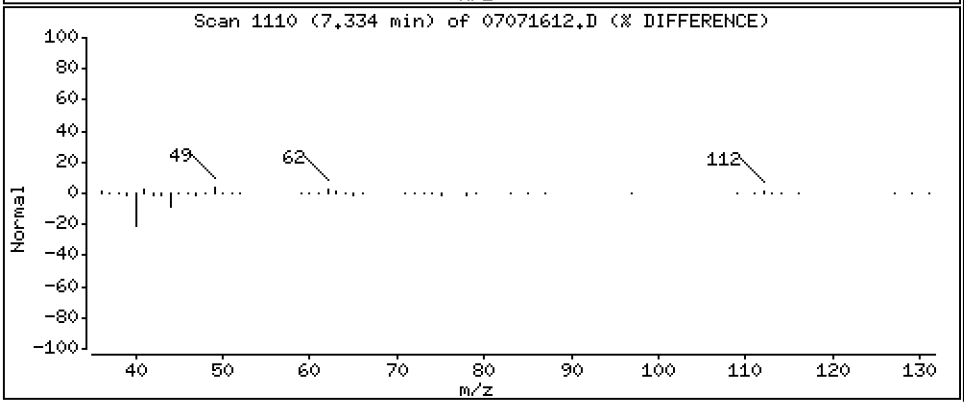
49 1,3-Dichloropropane

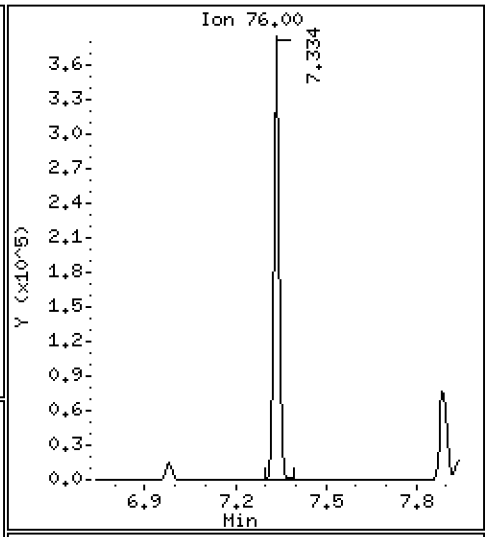
Concentration: 46.785 ug/Kg

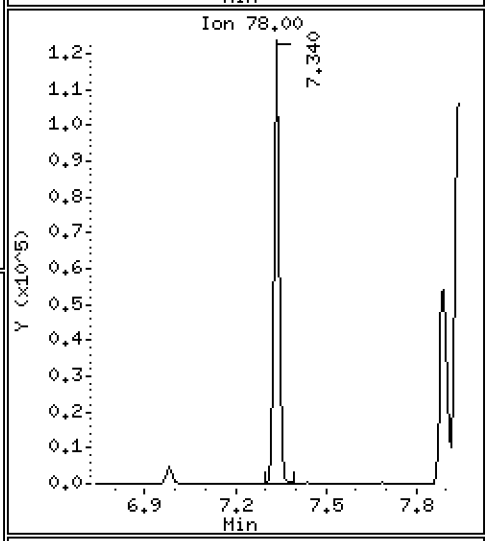


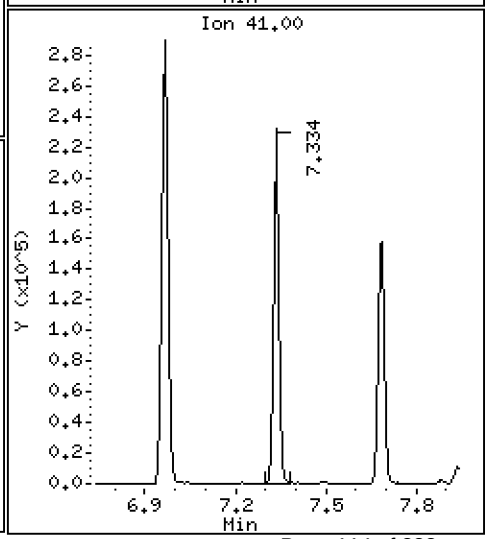












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

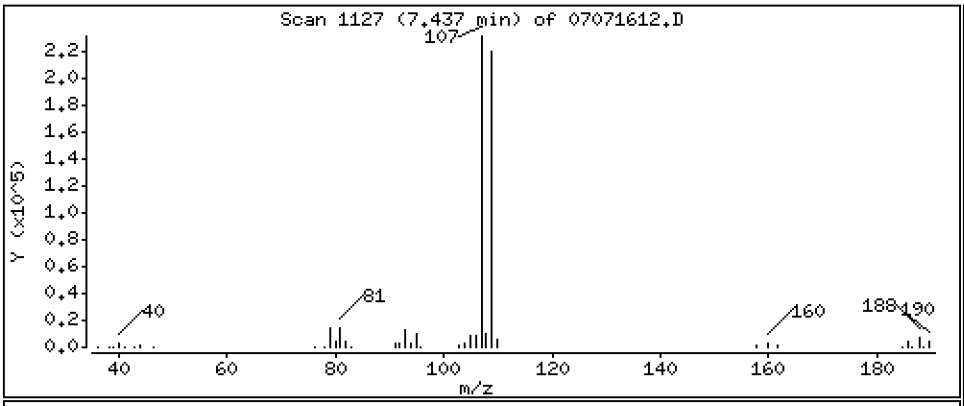
Operator: PB

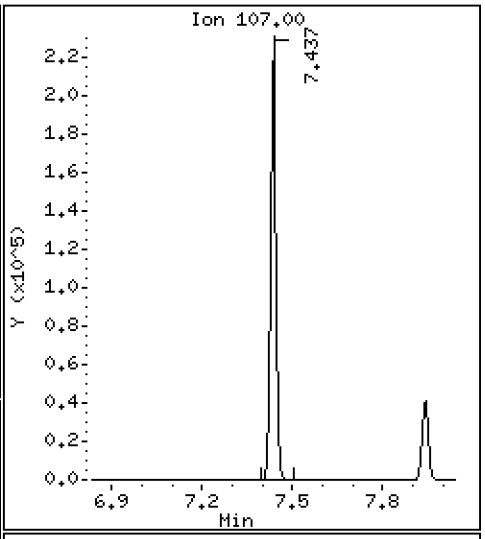
Column phase: RTXVMS

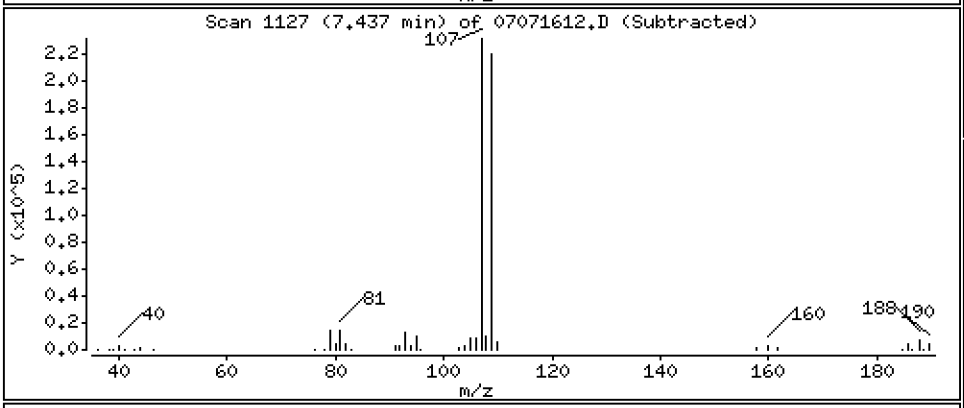
Column diameter: 0.18

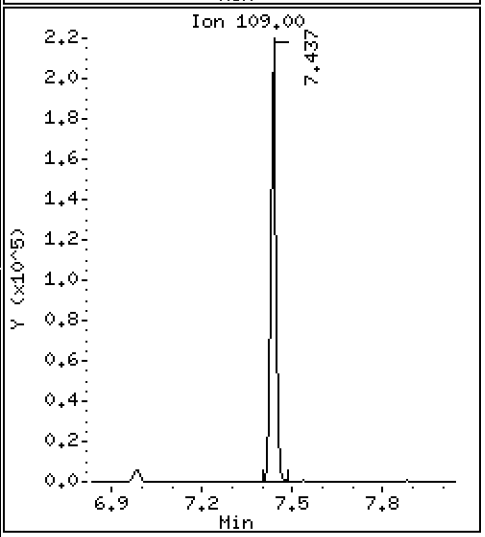
50 1,2-Dibromoethane

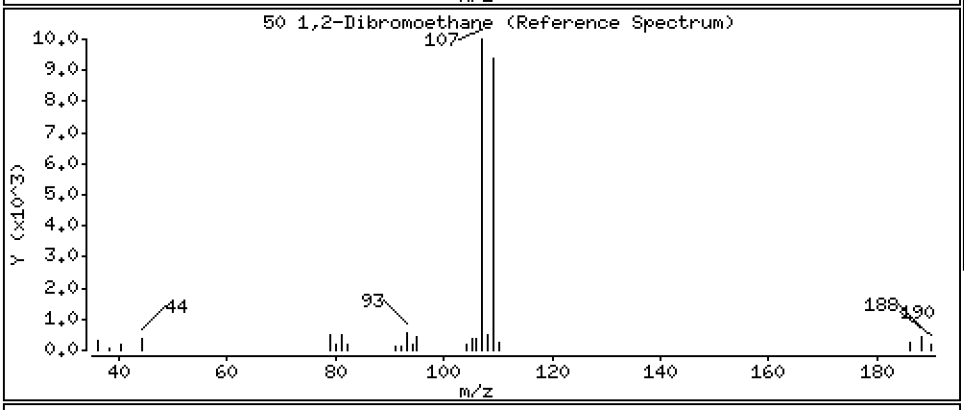
Concentration: 45.784 ug/Kg

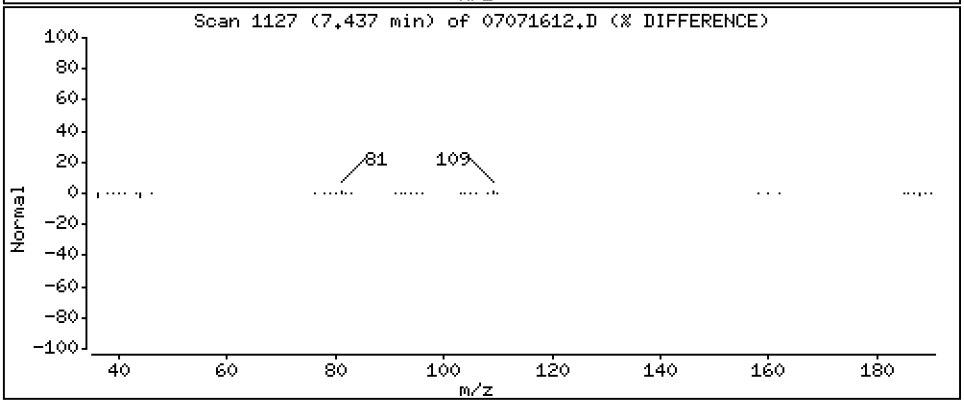












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

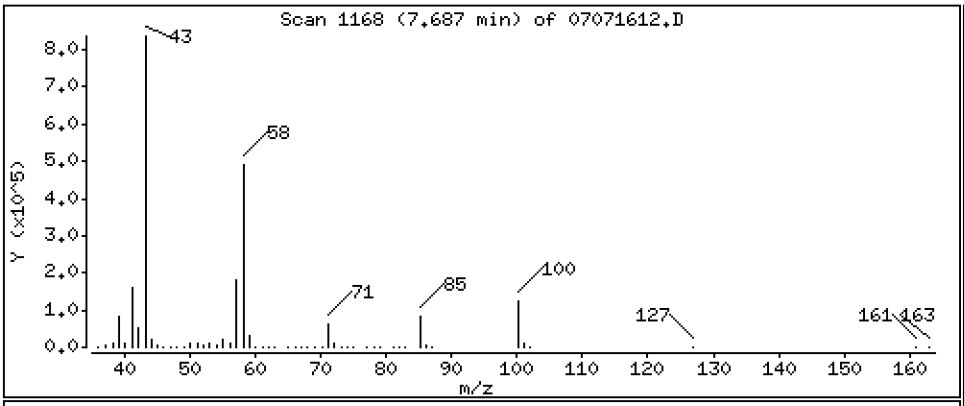
Operator: PB

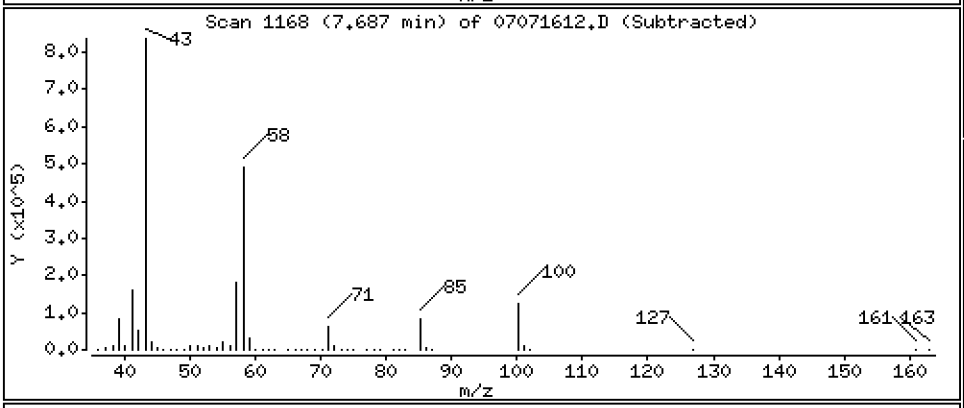
Column phase: RTXVMS

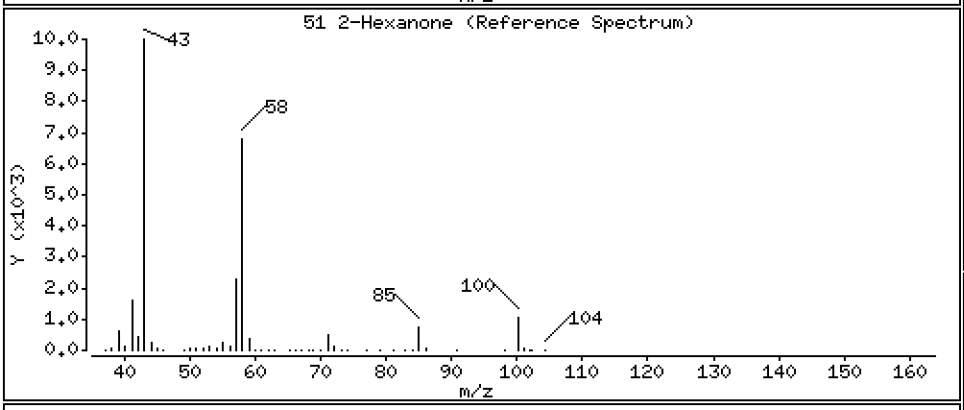
Column diameter: 0.18

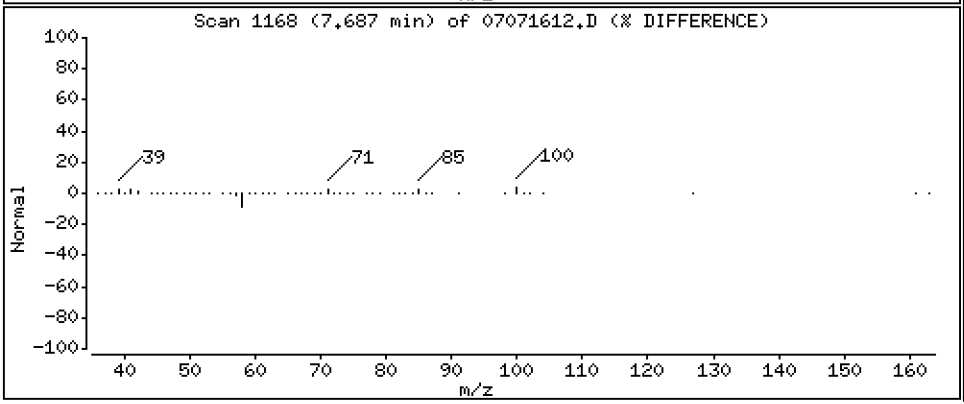
51 2-Hexanone

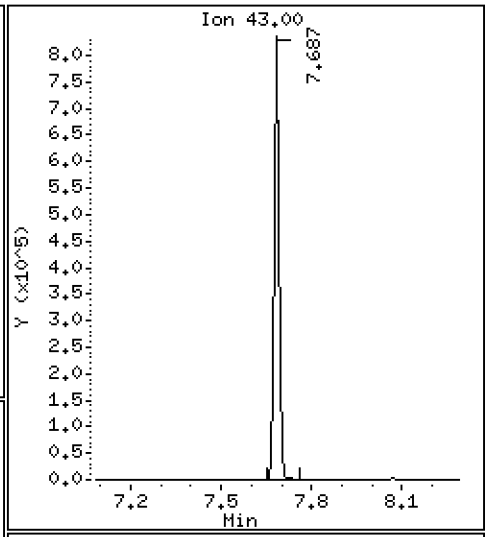
Concentration: 219.32 ug/Kg

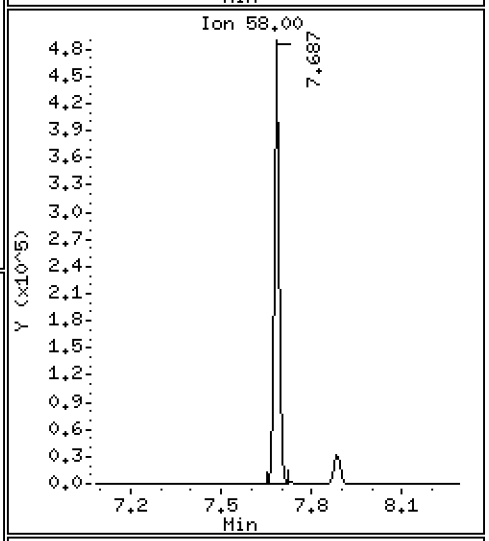


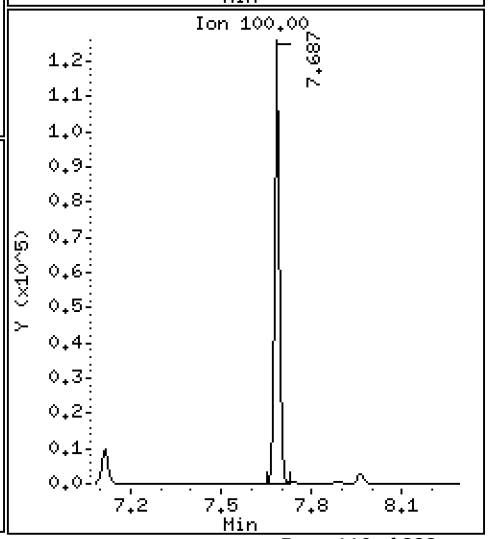












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

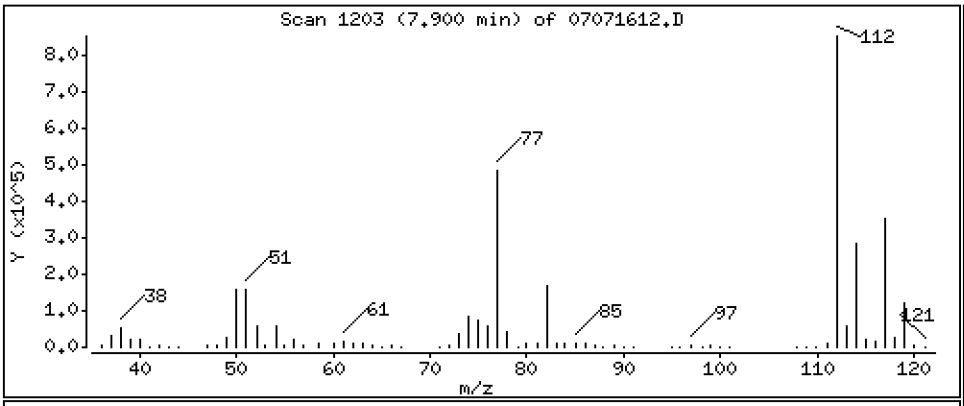
Operator: PB

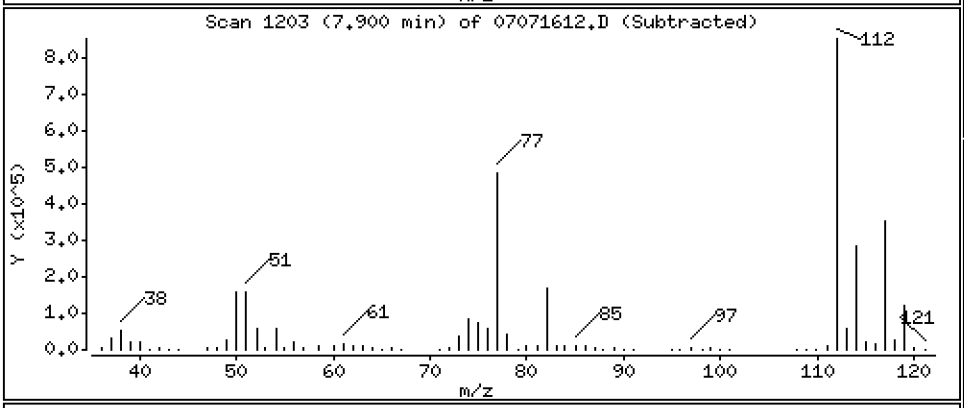
Column phase: RTXVMS

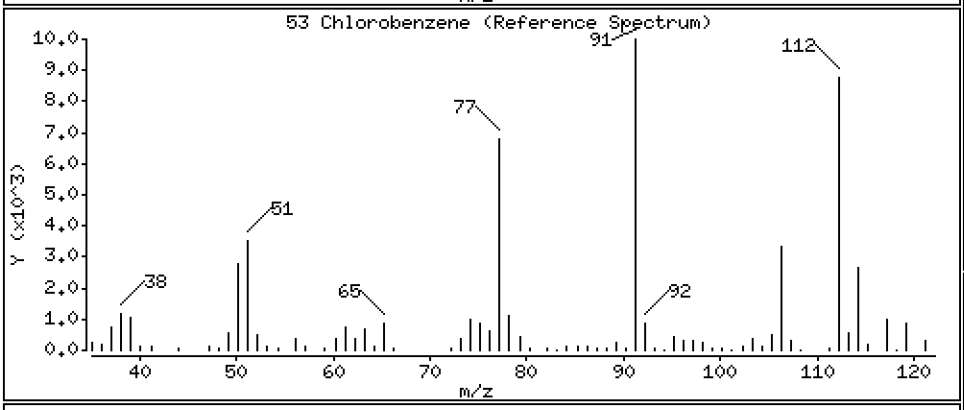
Column diameter: 0.18

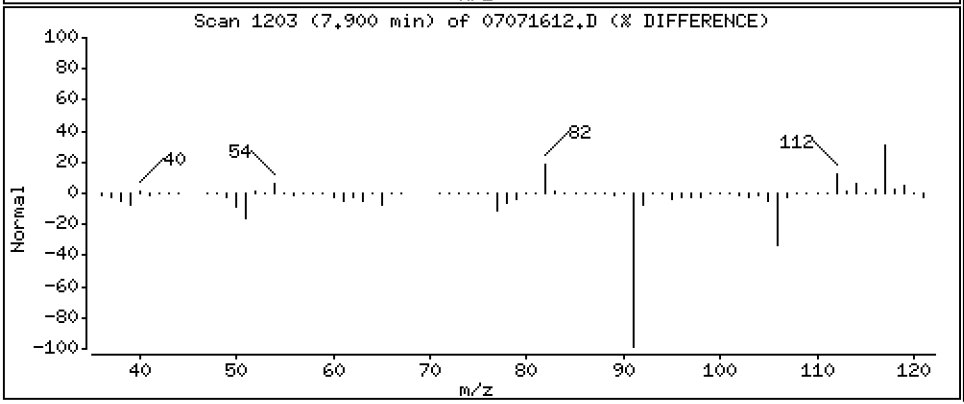
53 Chlorobenzene

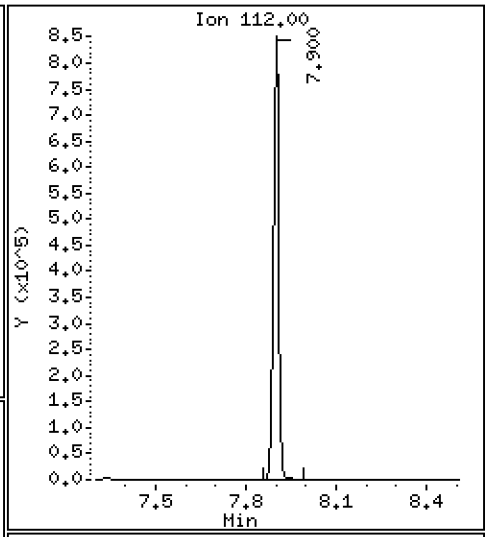
Concentration: 47.976 ug/Kg

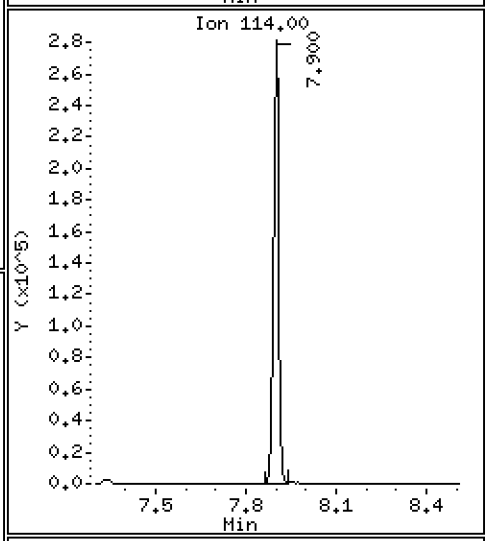


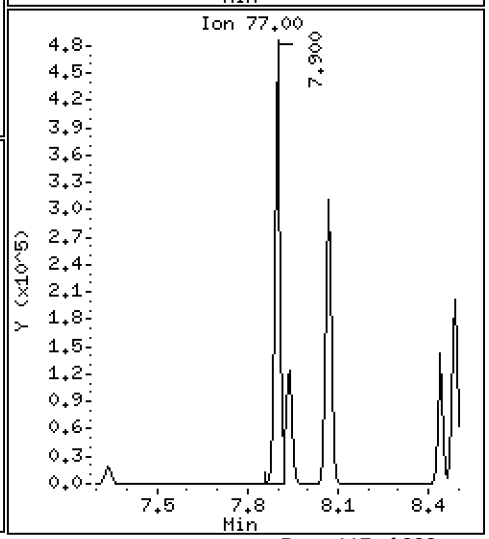












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

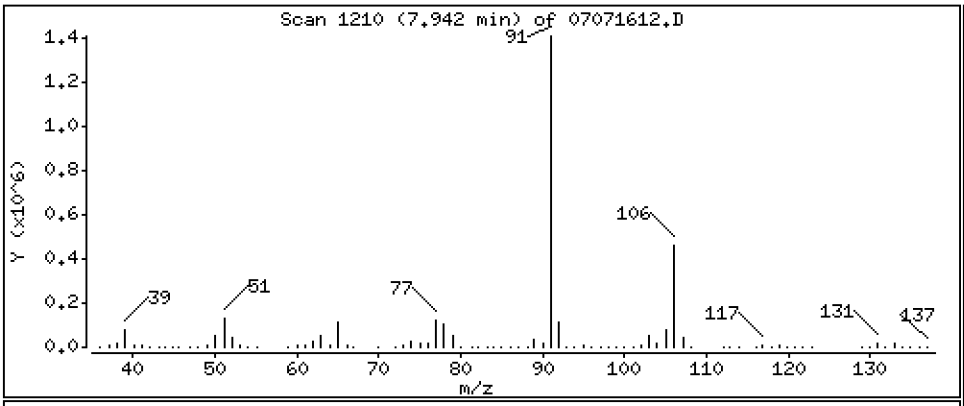
Operator: PB

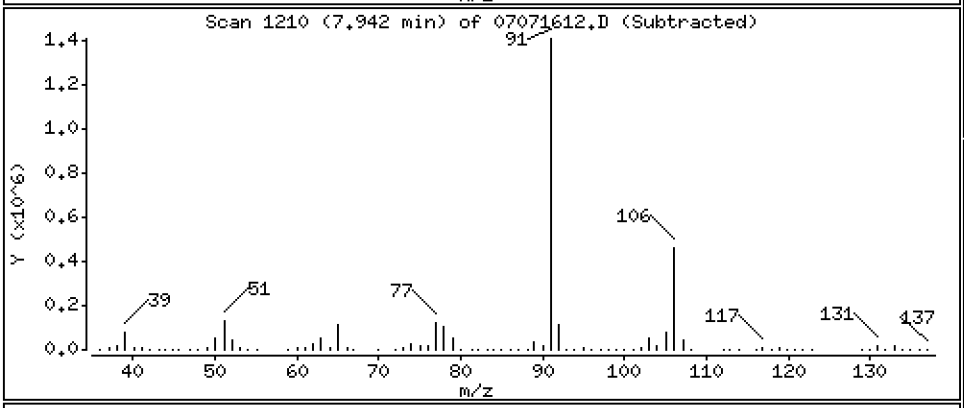
Column phase: RTXVMS

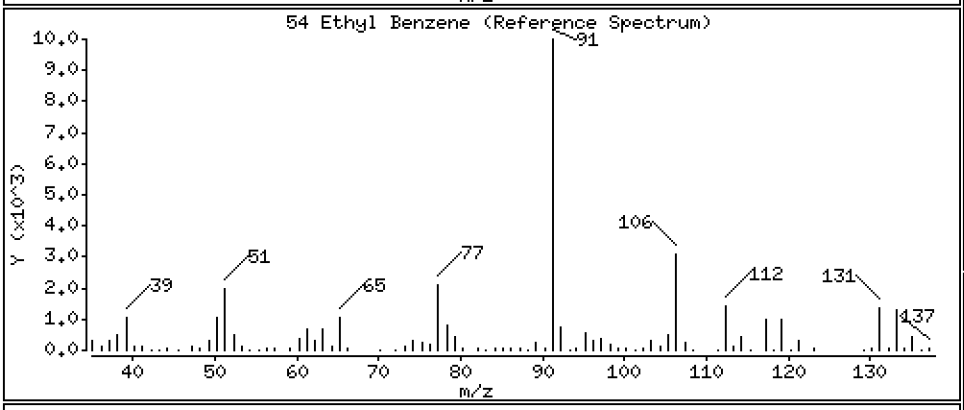
Column diameter: 0.18

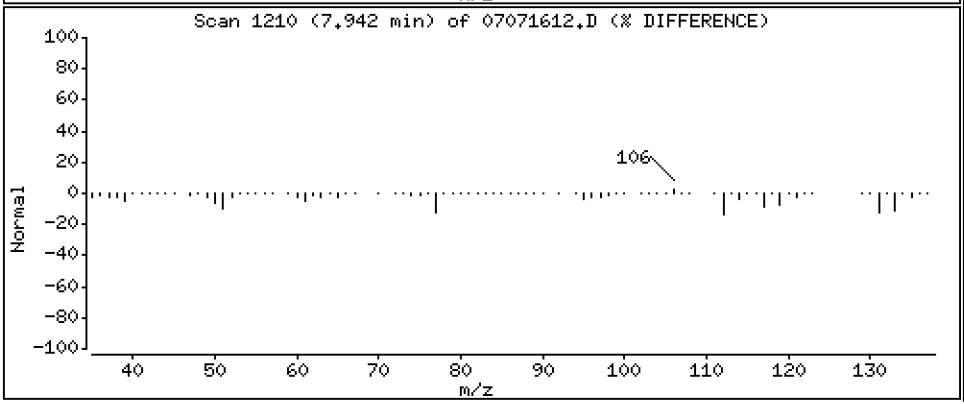
54 Ethyl Benzene

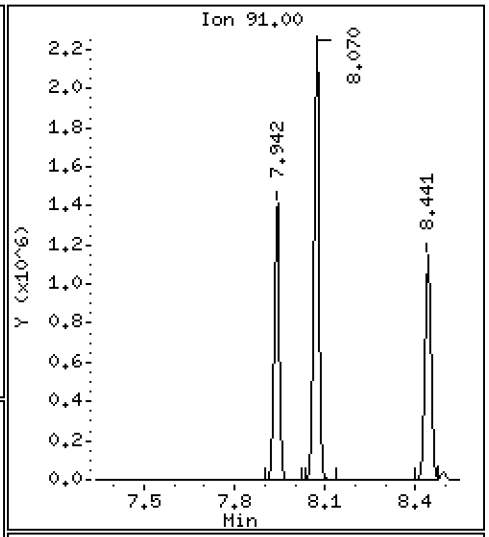
Concentration: 48.362 ug/Kg

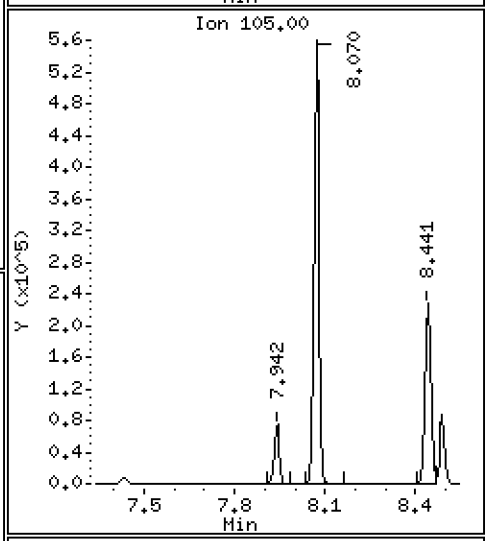


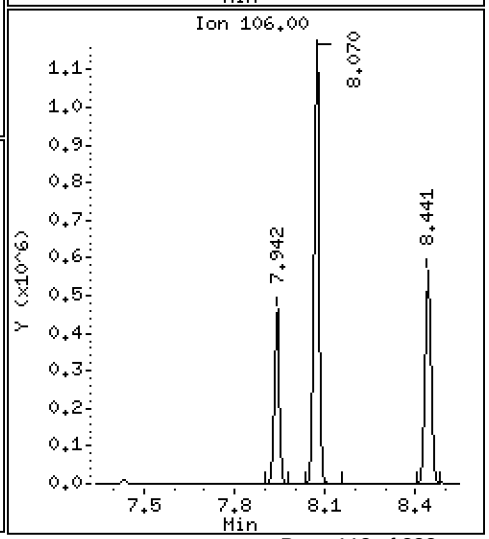












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

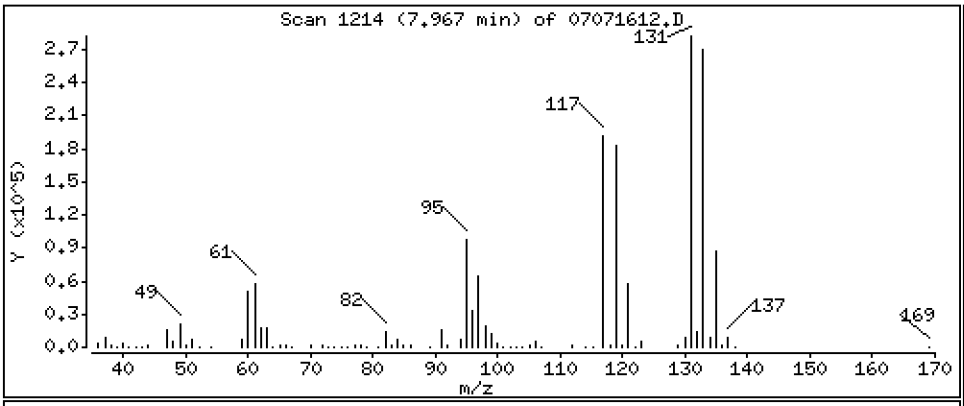
Operator: PB

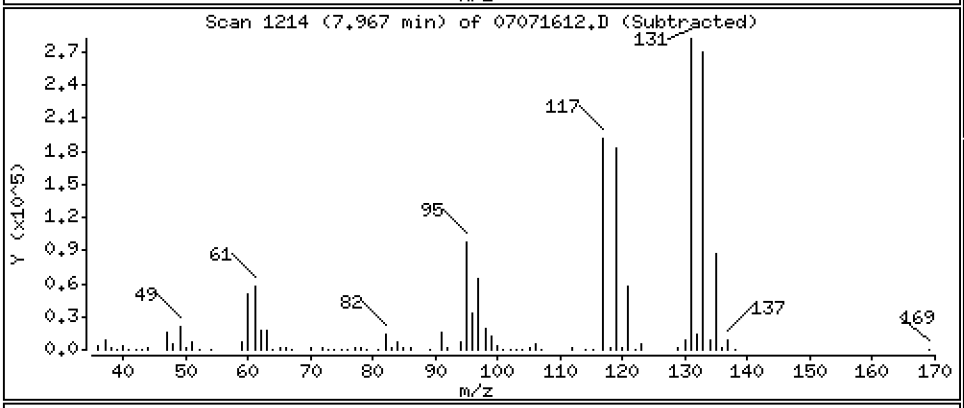
Column phase: RTXVMS

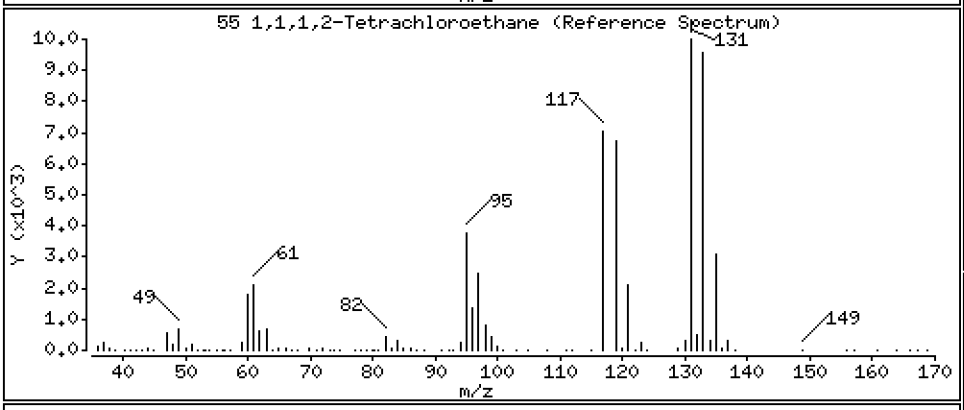
Column diameter: 0.18

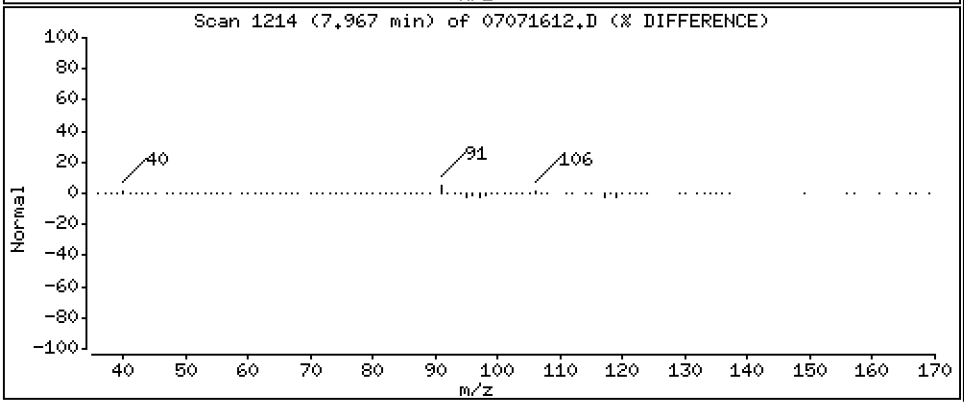
55 1,1,1,2-Tetrachloroethane

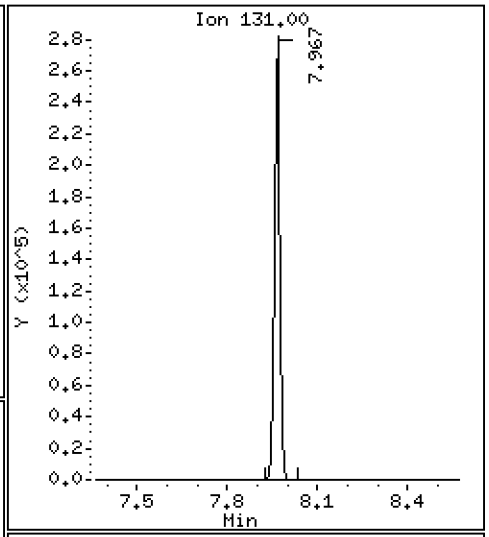
Concentration: 46.944 ug/Kg

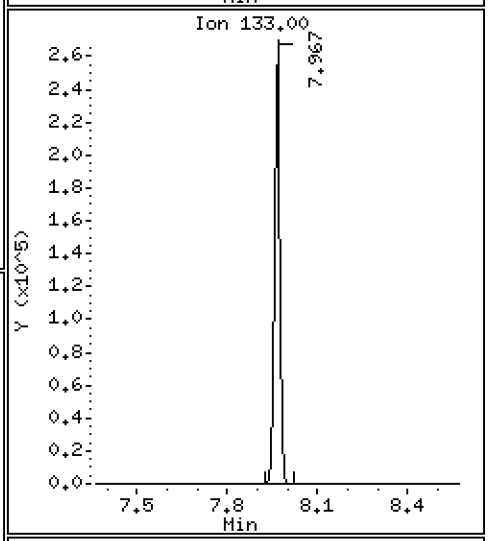


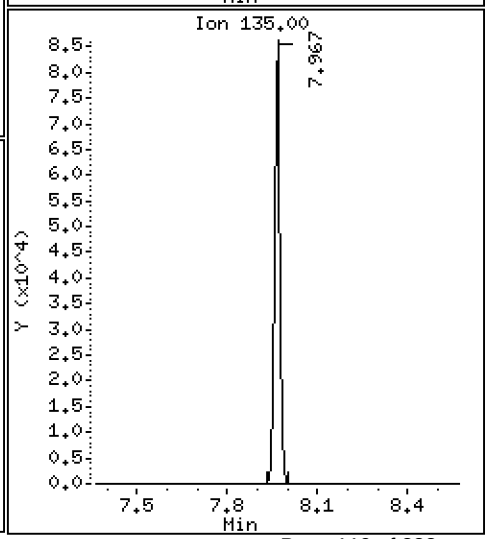












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

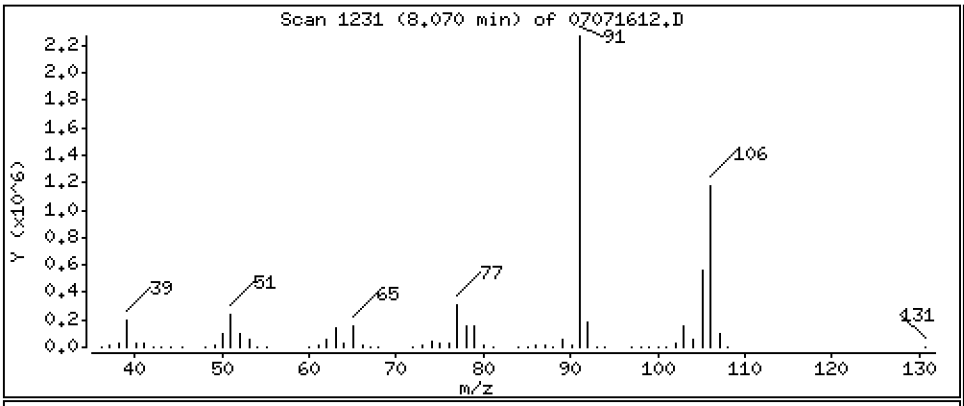
Operator: PB

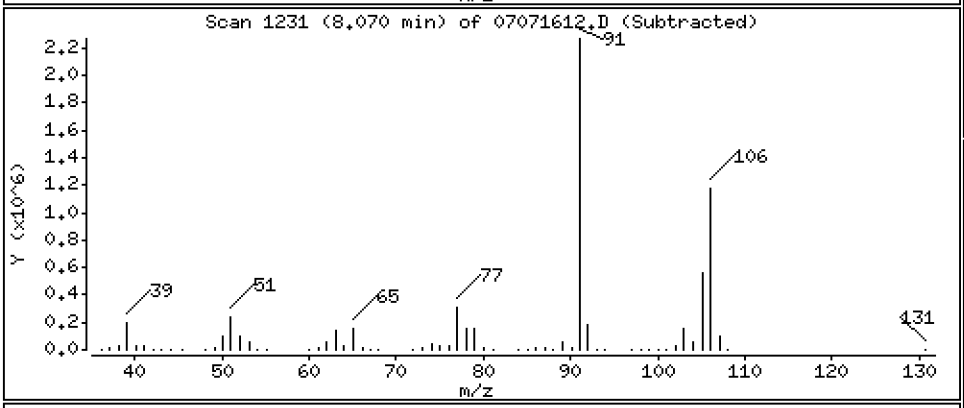
Column phase: RTXVMS

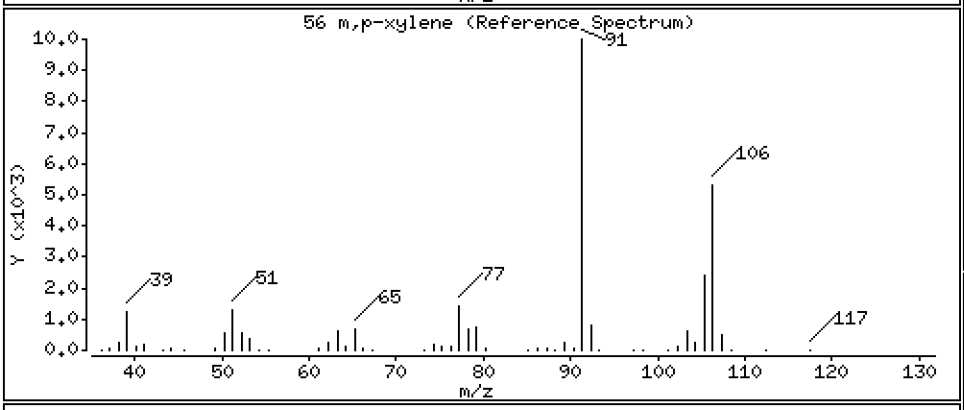
Column diameter: 0.18

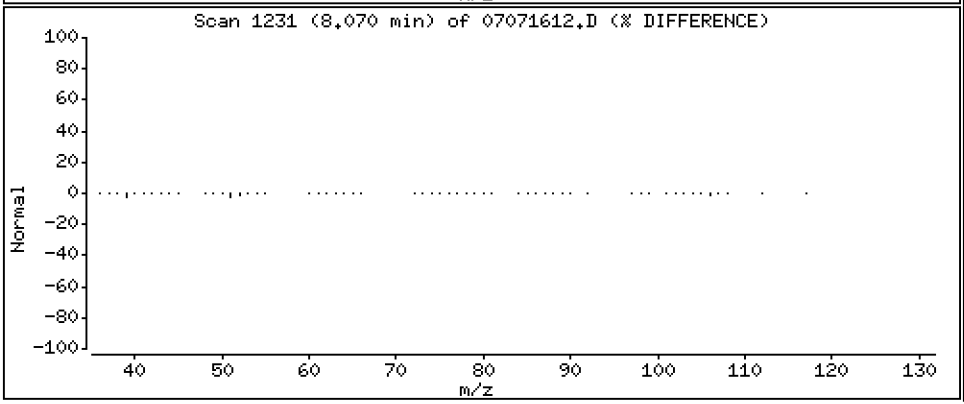
56 m,p-xylene

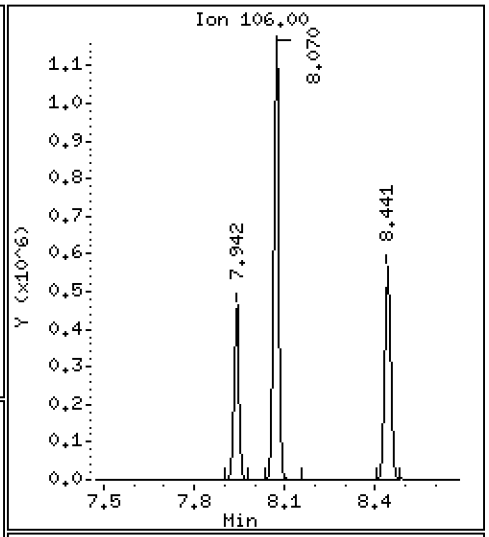
Concentration: 96.862 ug/Kg

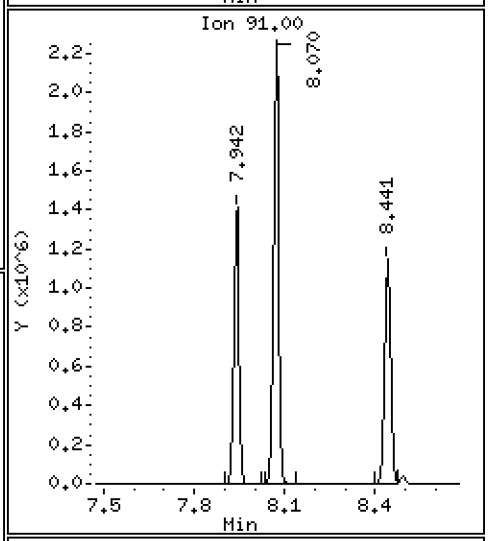


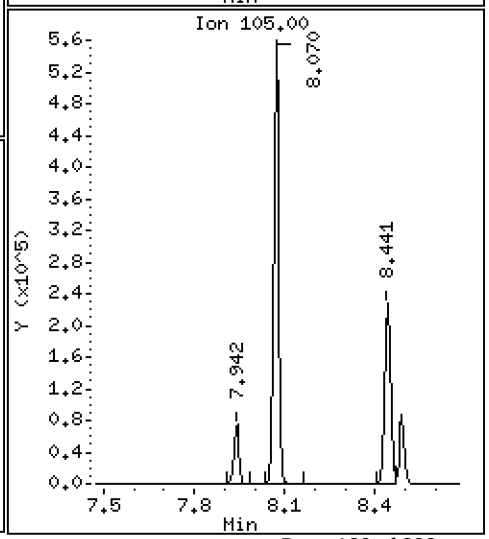












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

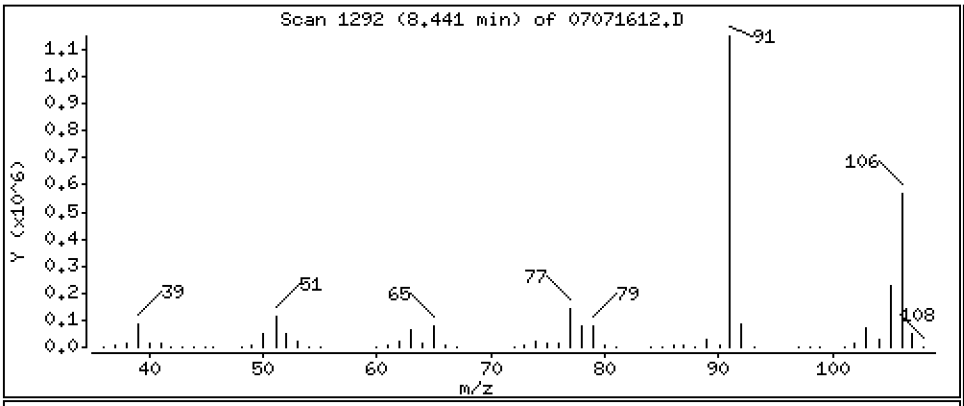
Operator: PB

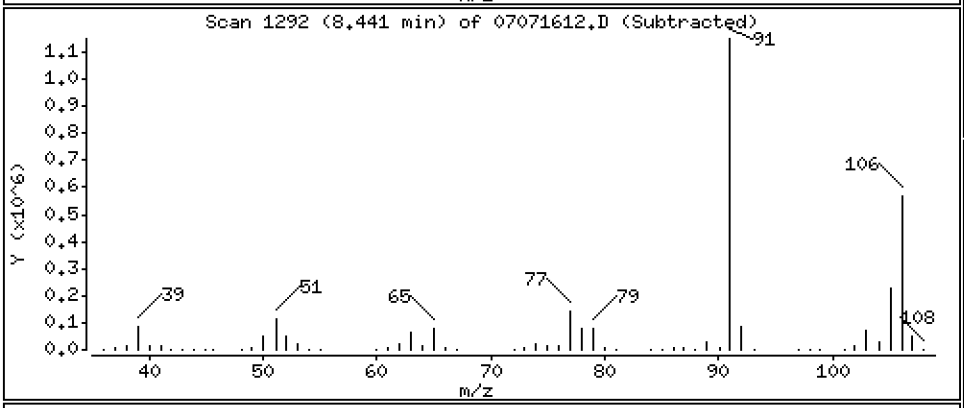
Column phase: RTXVMS

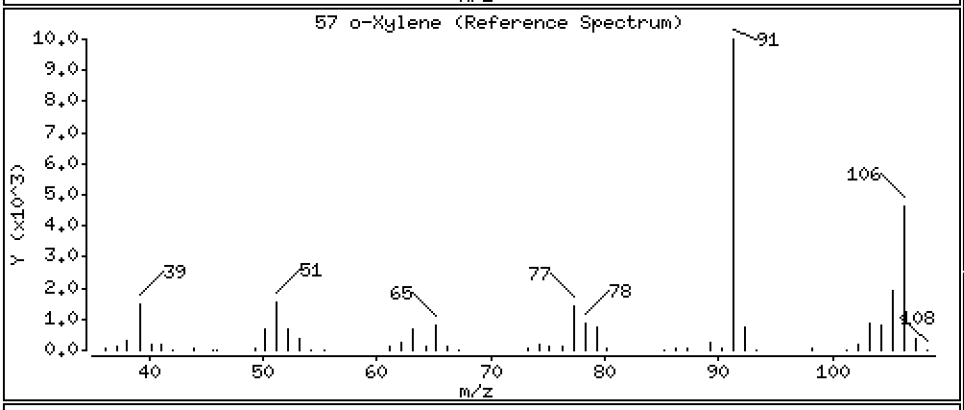
Column diameter: 0.18

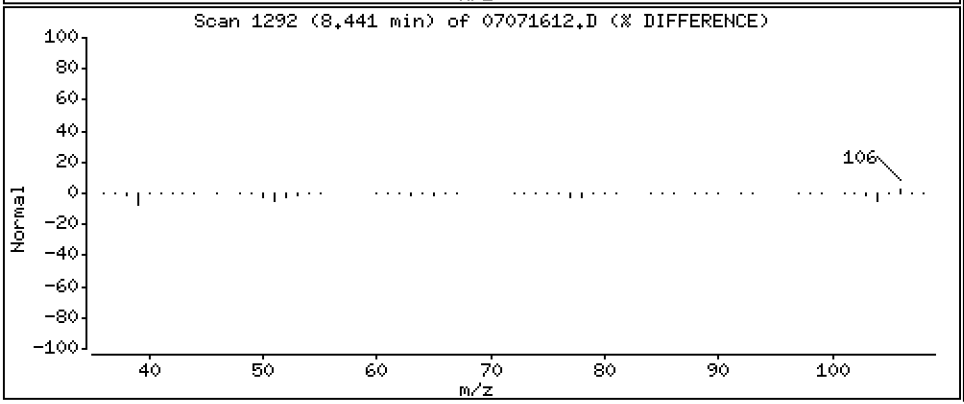
57 o-Xylene

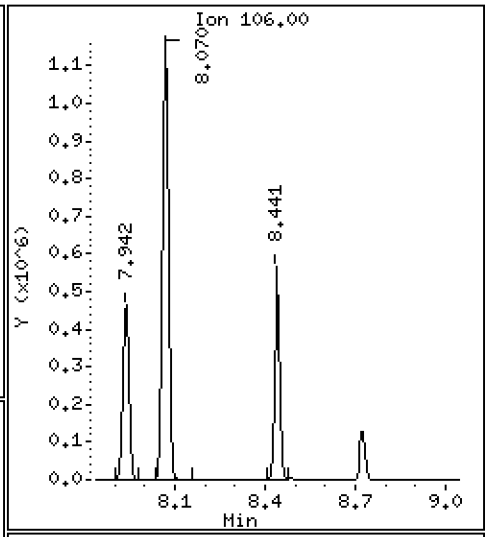
Concentration: 47.357 ug/Kg

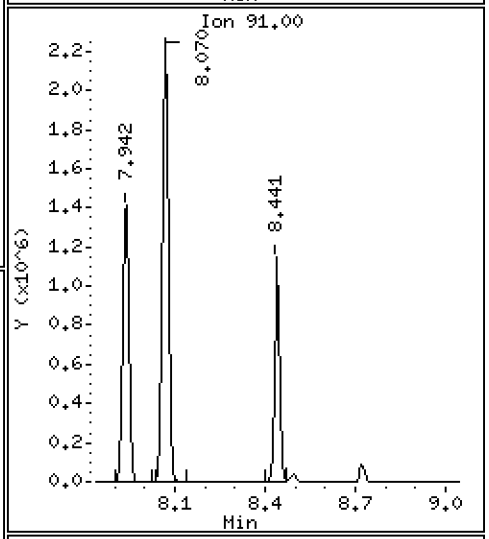


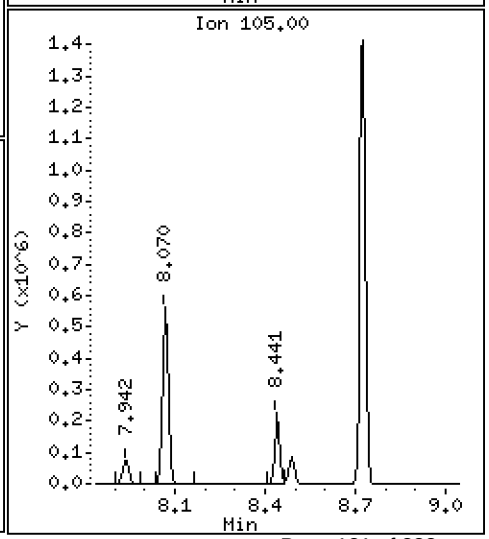












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

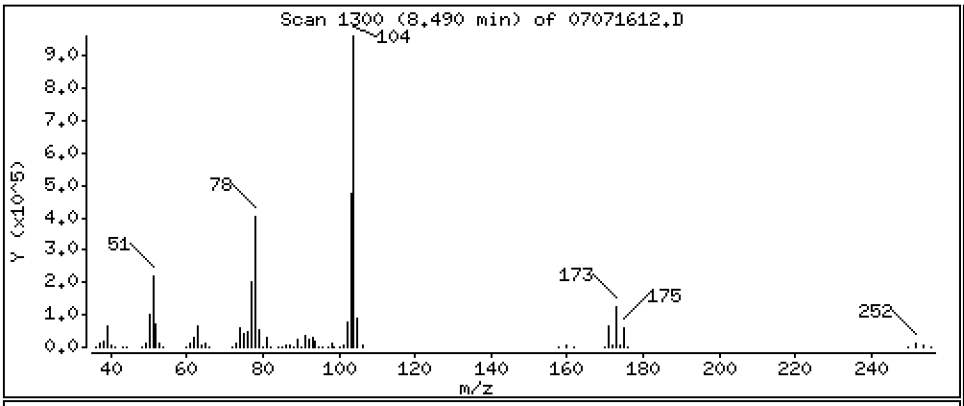
Operator: PB

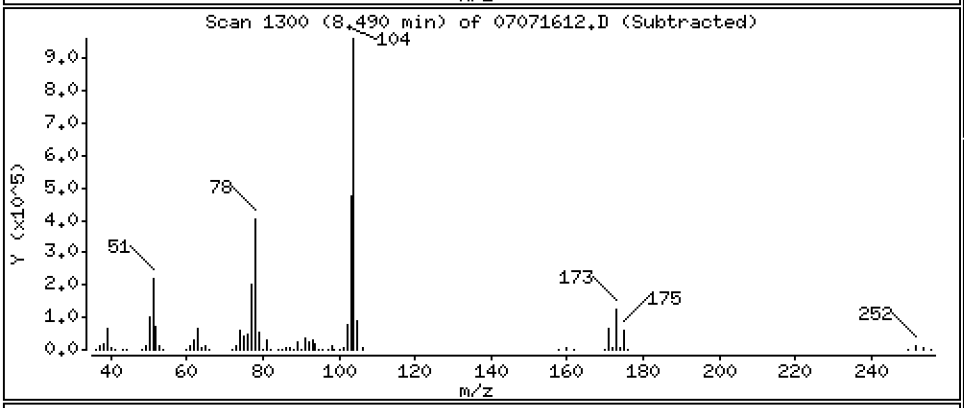
Column phase: RTXVMS

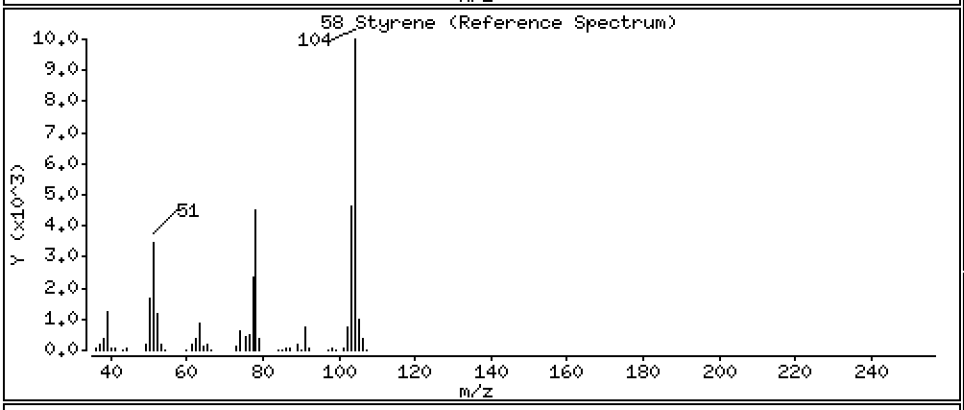
Column diameter: 0.18

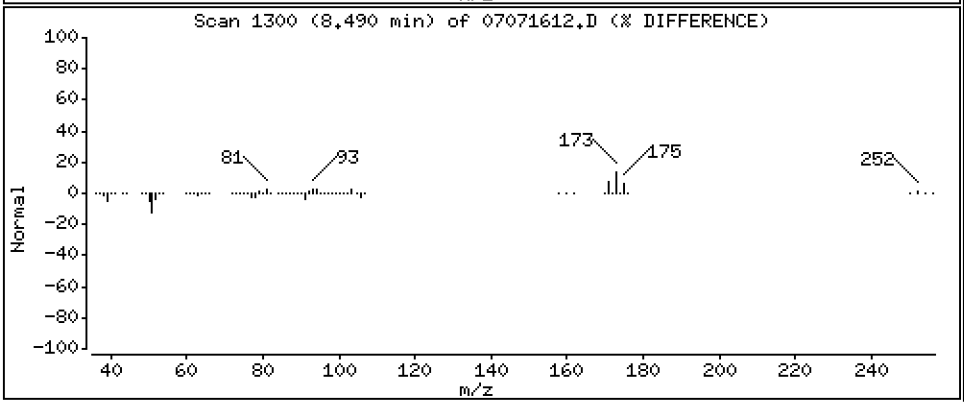
58 Styrene

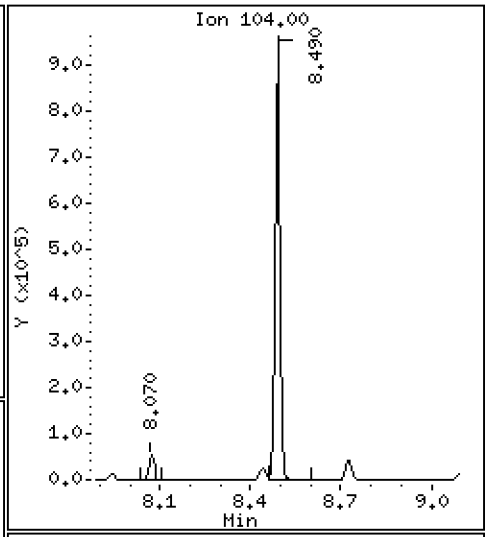
Concentration: 48.103 ug/Kg

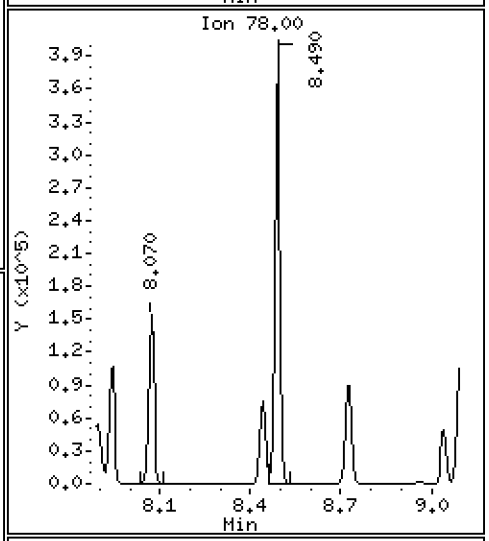


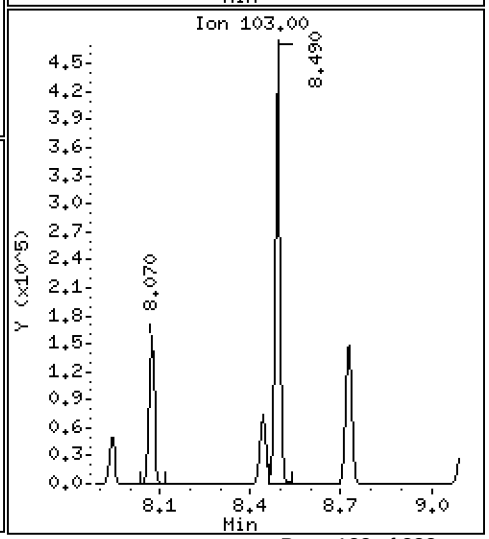












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

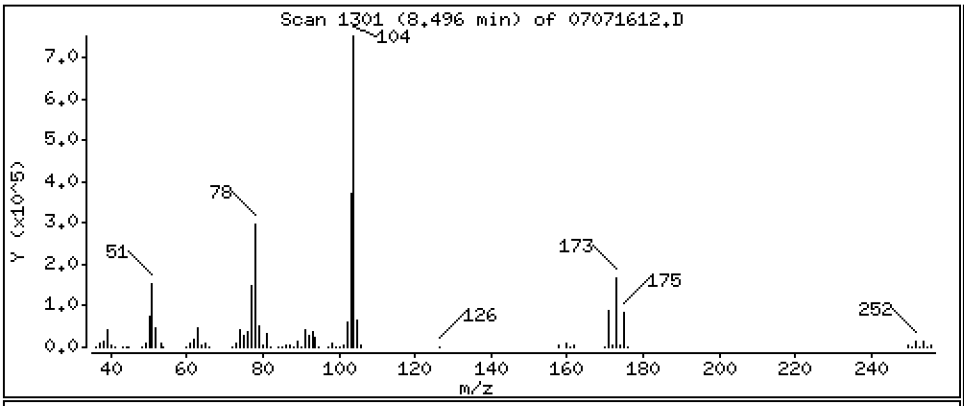
Operator: PB

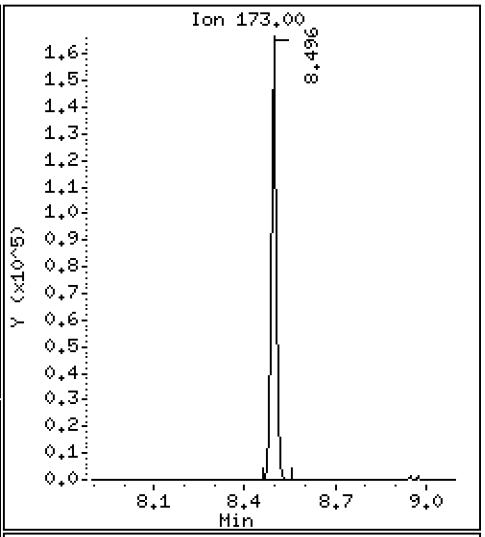
Column phase: RTXVMS

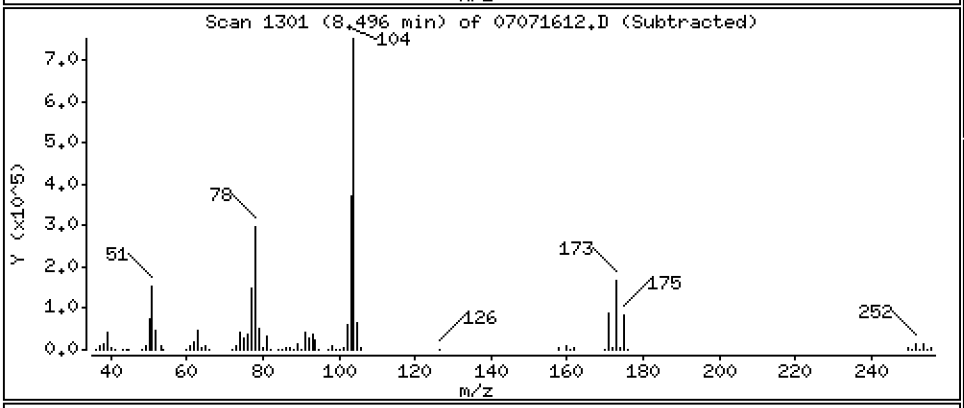
Column diameter: 0.18

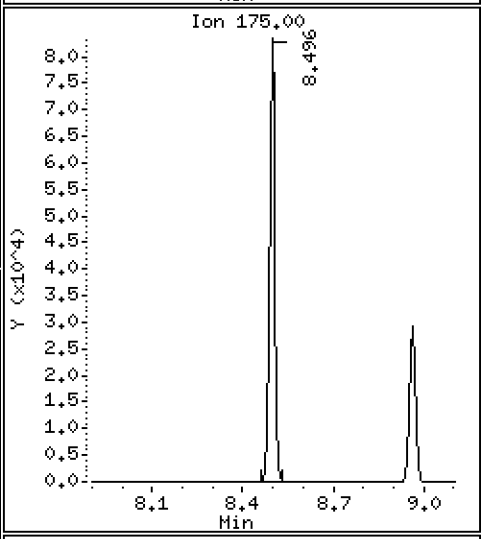
59 Bromoform

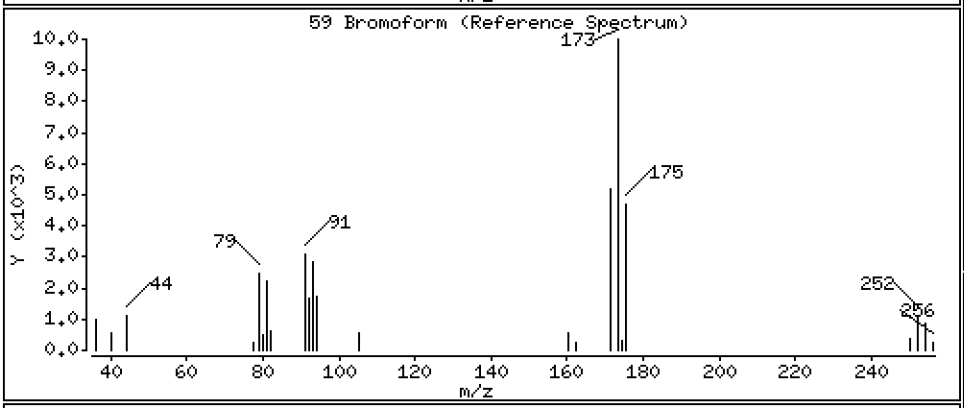
Concentration: 47.189 ug/Kg

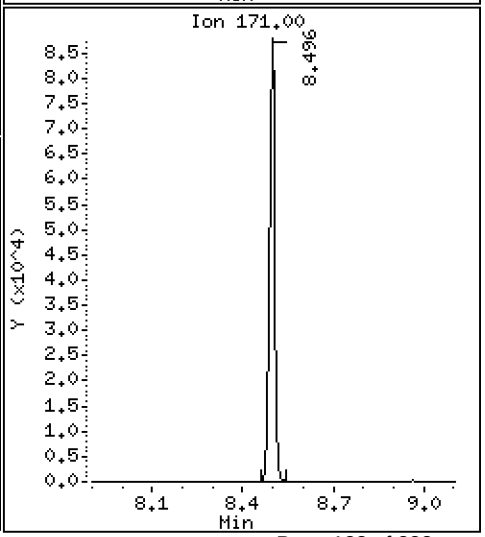


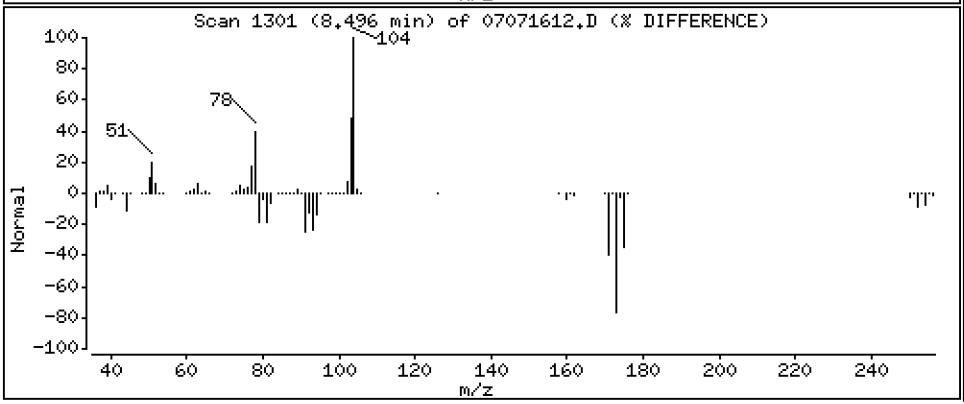












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

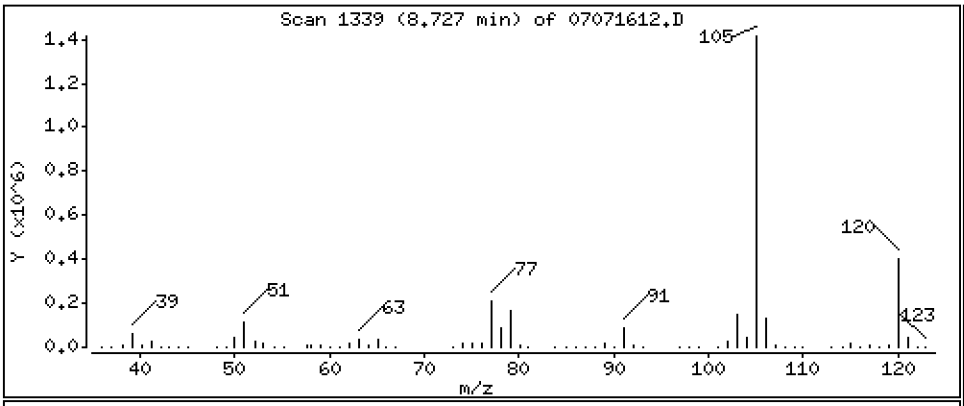
Operator: PB

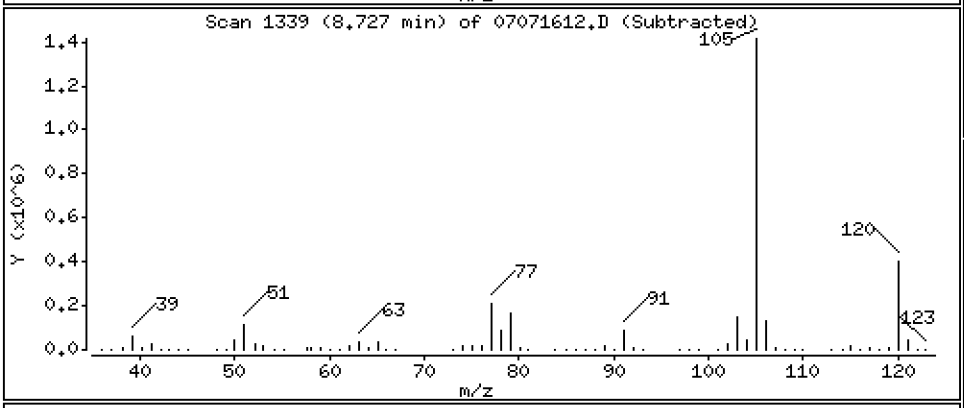
Column phase: RTXVMS

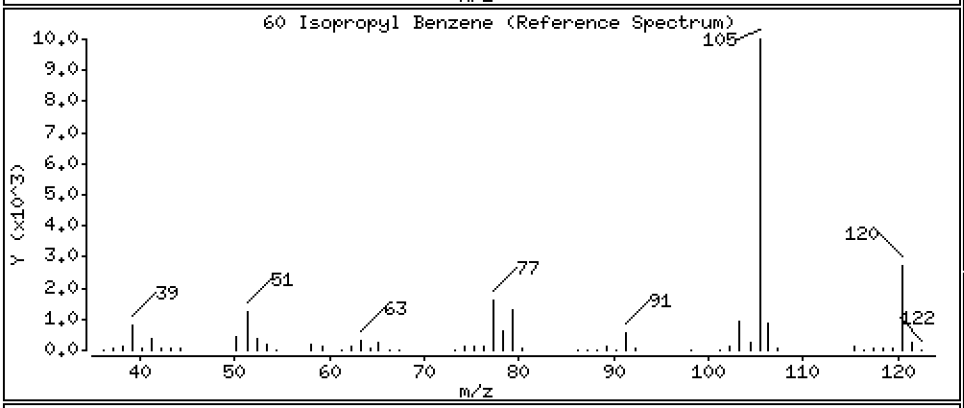
Column diameter: 0.18

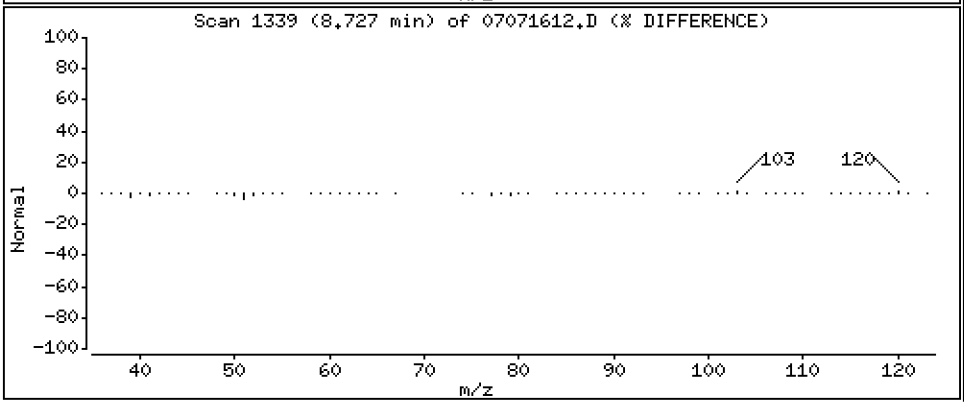
60 Isopropyl Benzene

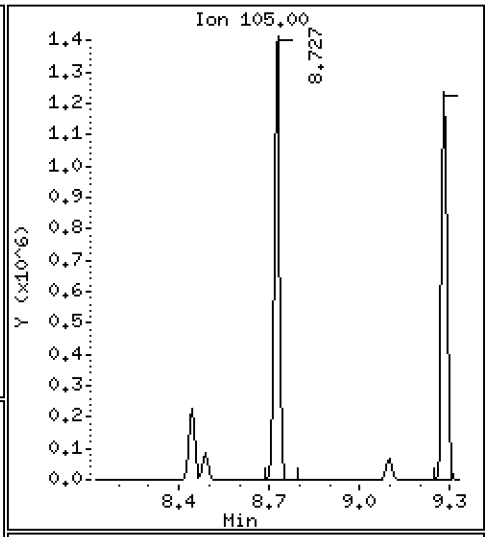
Concentration: 49.325 ug/Kg

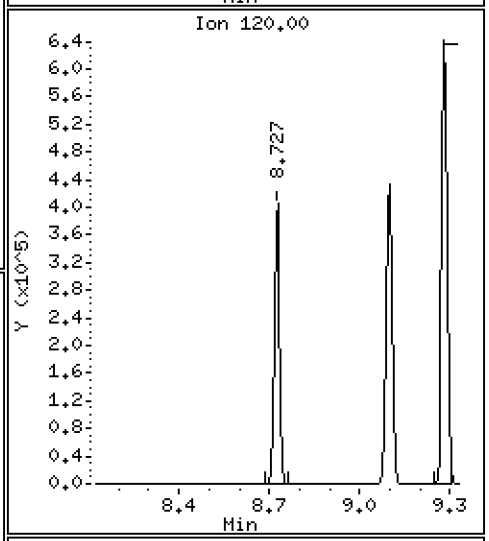


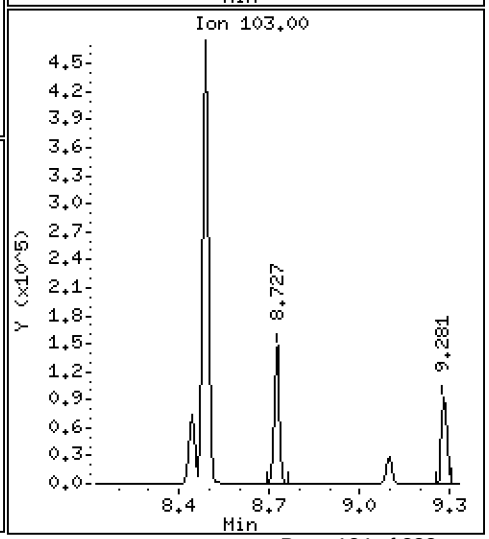












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

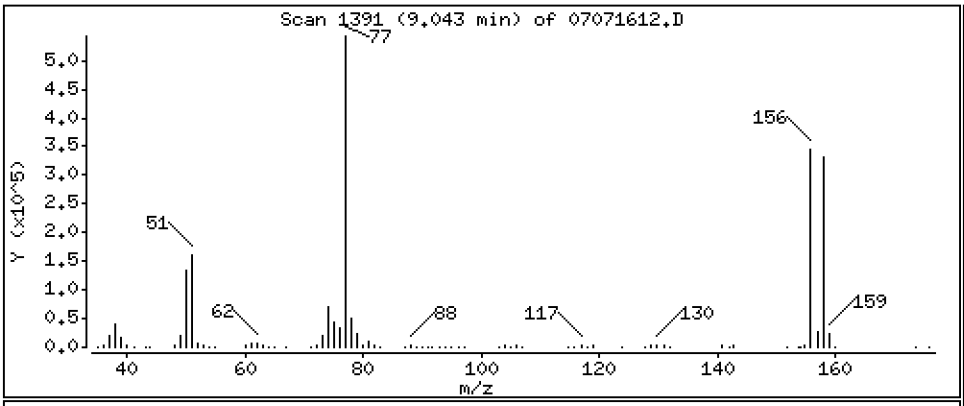
Operator: PB

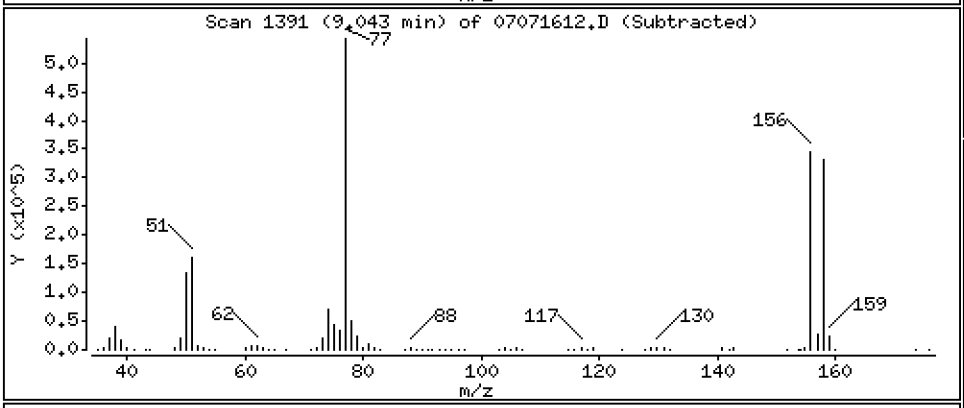
Column phase: RTXVMS

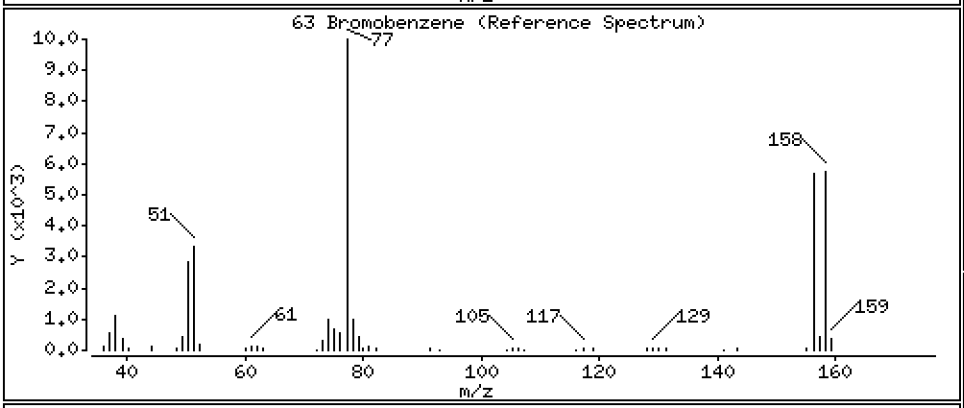
Column diameter: 0.18

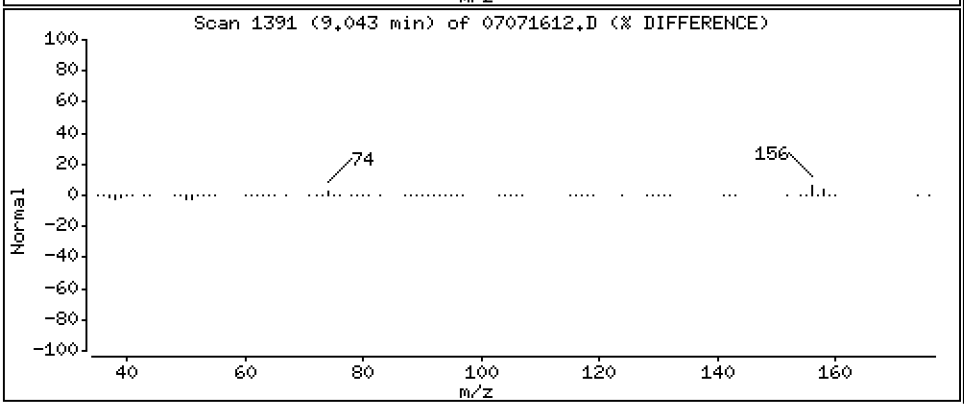
63 Bromobenzene

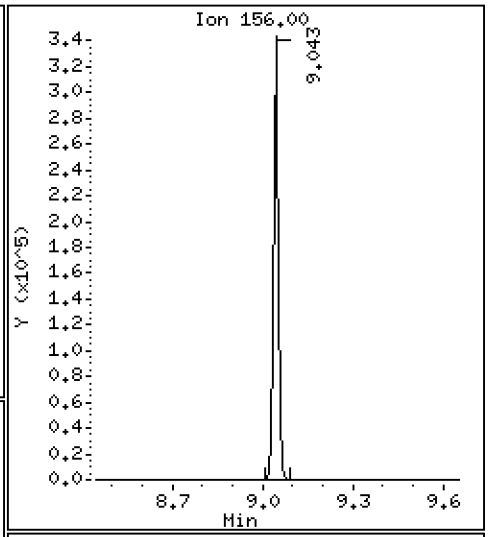
Concentration: 48.246 ug/Kg

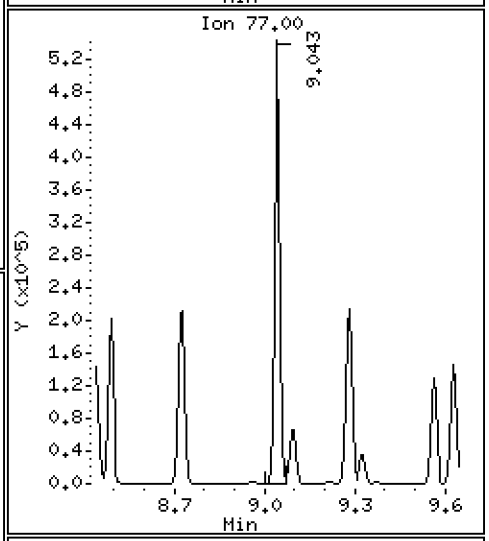


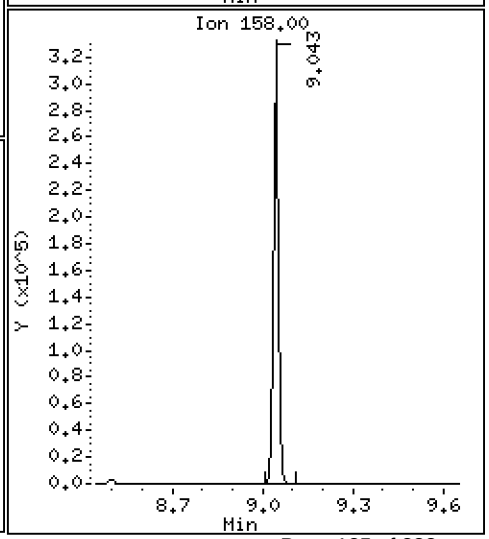












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

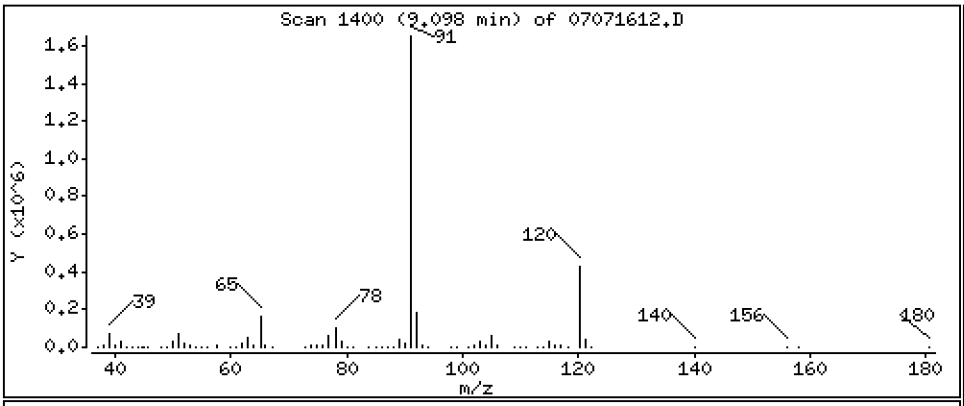
Operator: PB

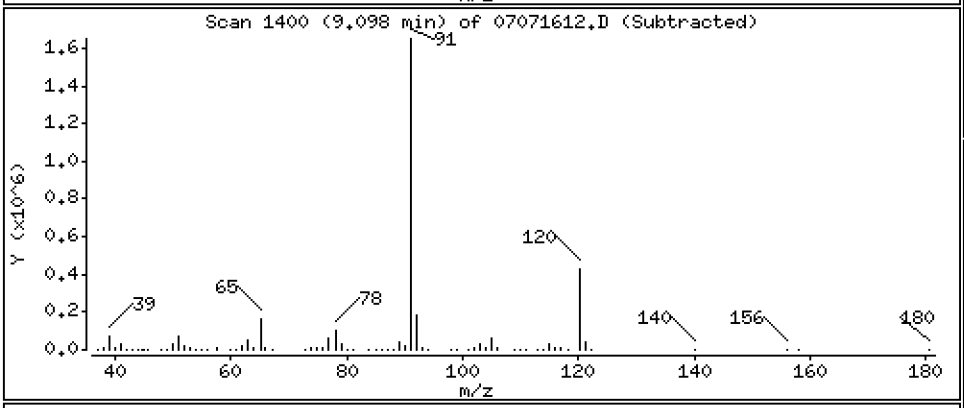
Column phase: RTXVMS

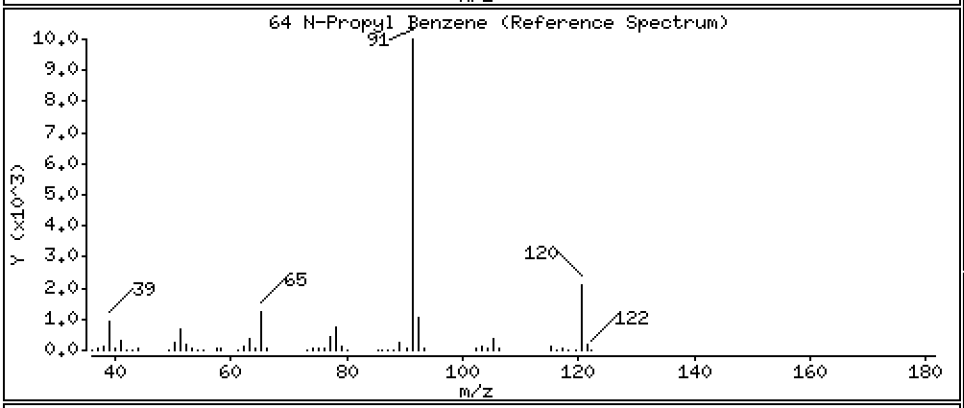
Column diameter: 0.18

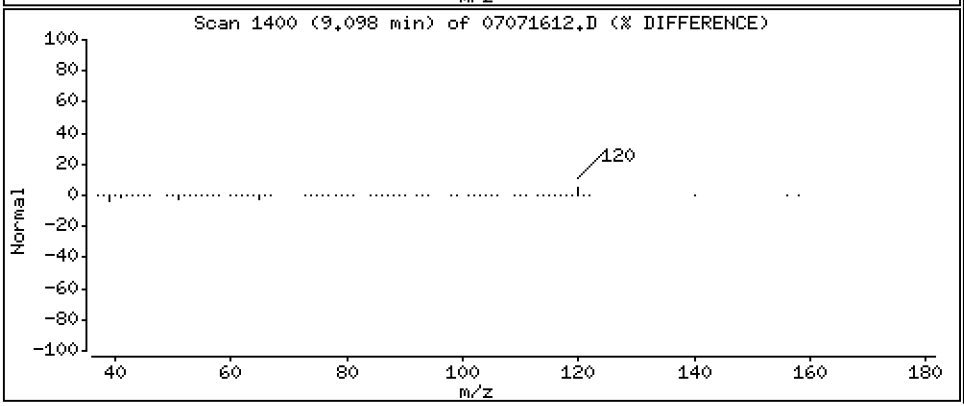
64 N-Propyl Benzene

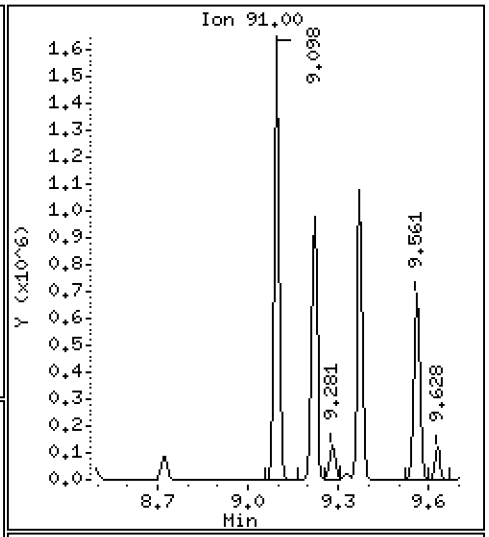
Concentration: 49.228 ug/Kg

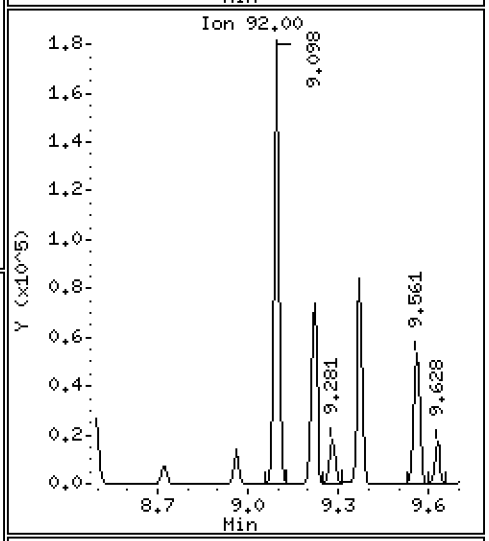


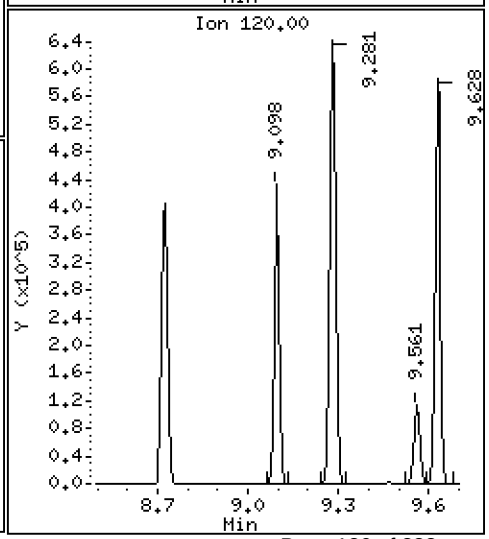












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

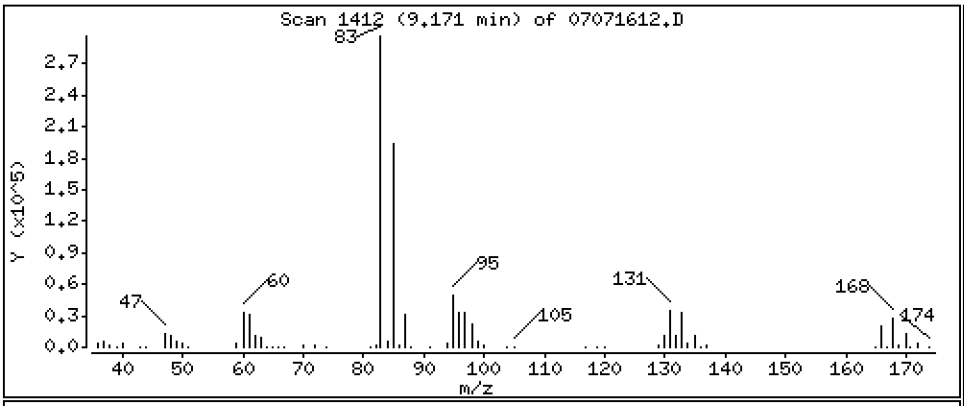
Operator: PB

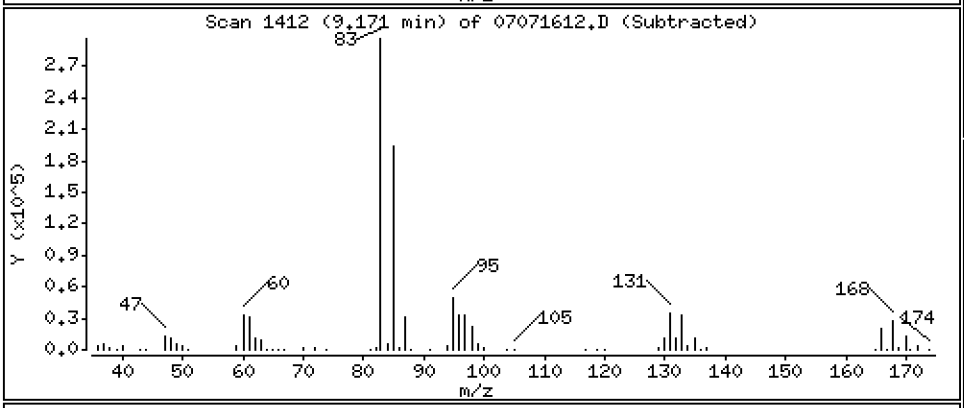
Column phase: RTXVMS

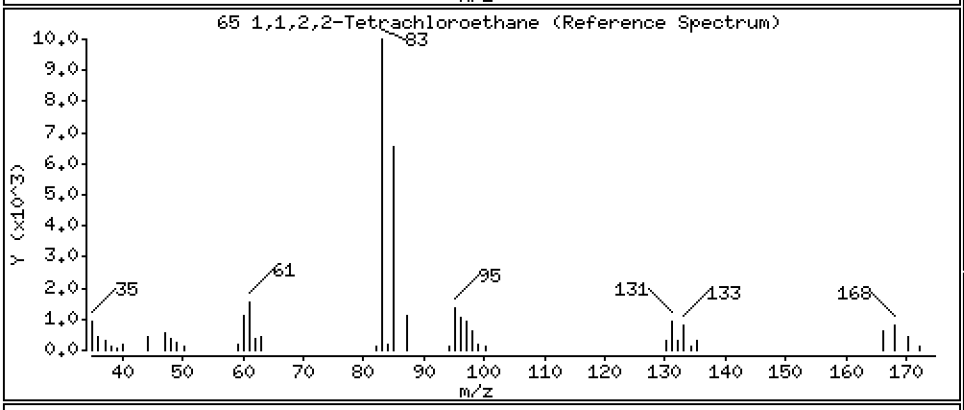
Column diameter: 0.18

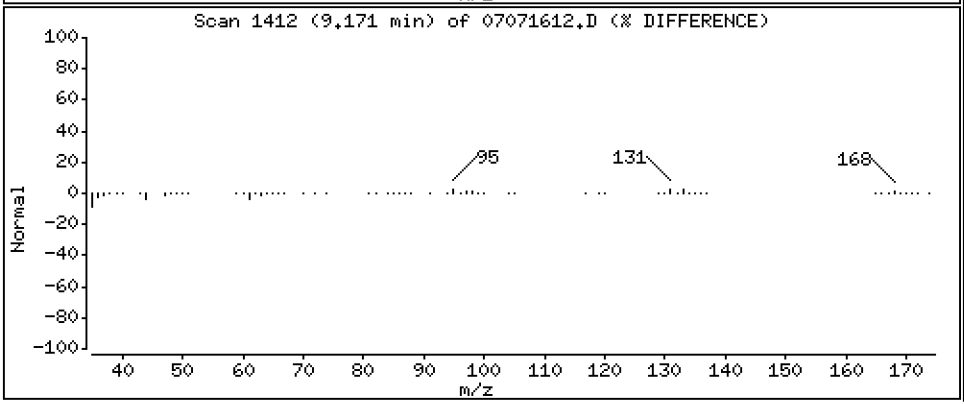
65 1,1,2,2-Tetrachloroethane

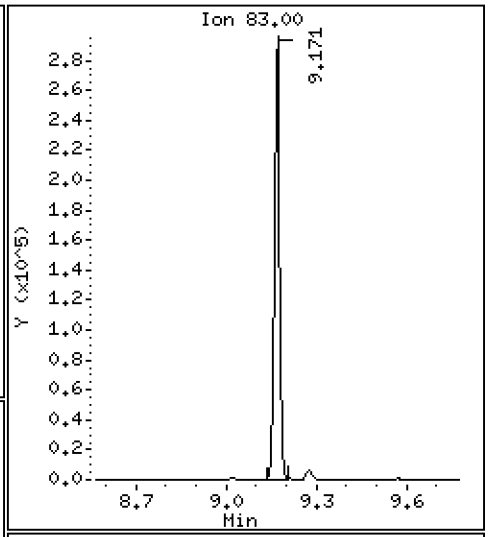
Concentration: 45.854 ug/Kg

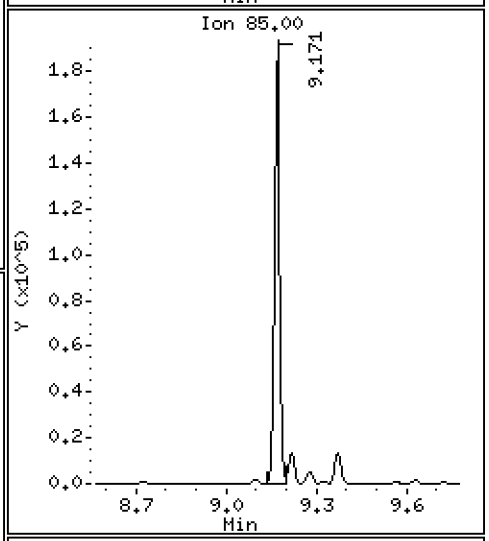


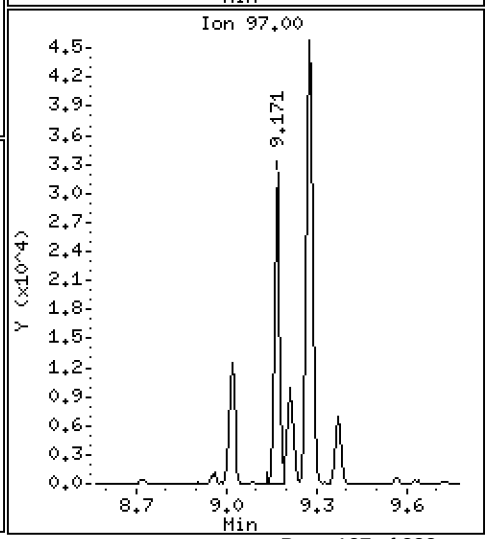












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

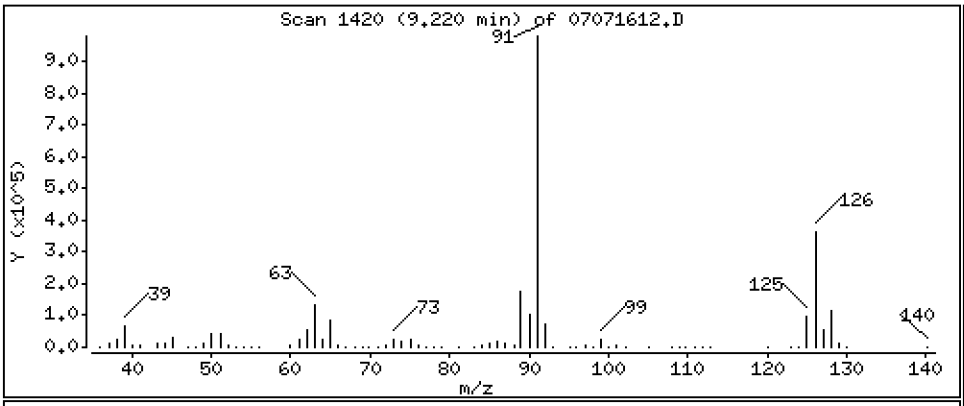
Operator: PB

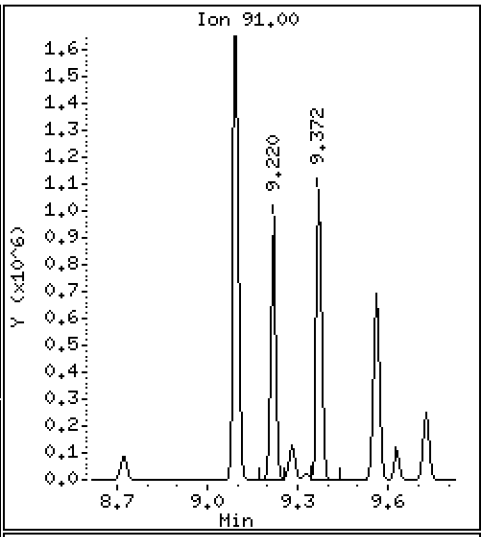
Column phase: RTXVMS

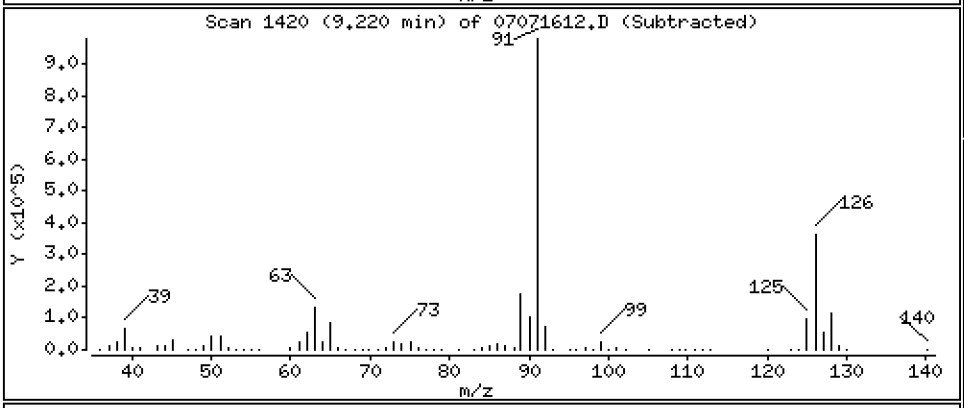
Column diameter: 0.18

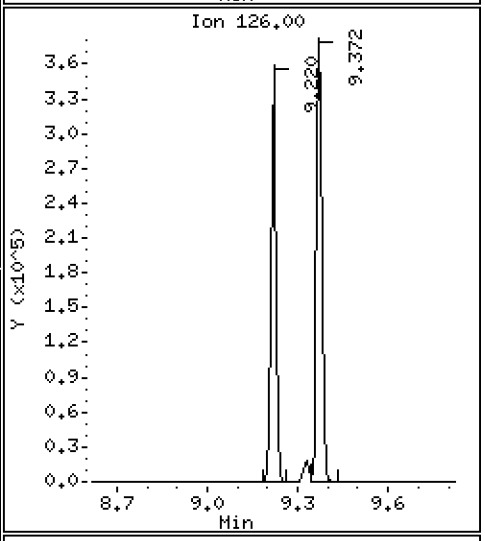
66 2-Chloro Toluene

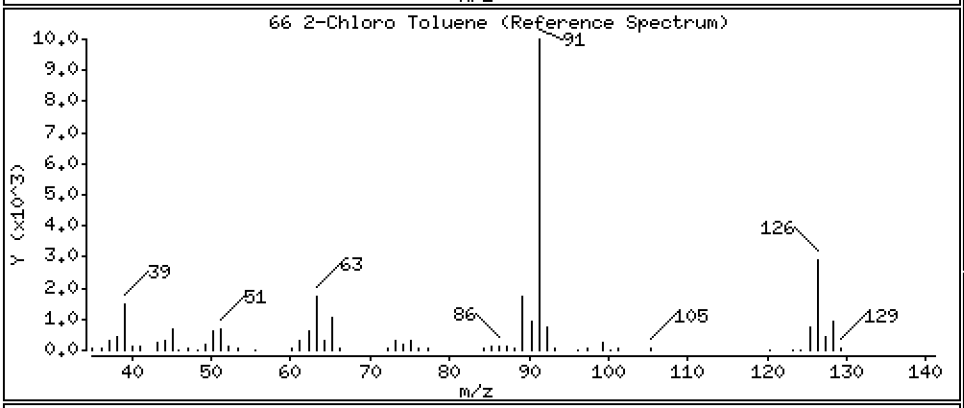
Concentration: 48.702 ug/Kg

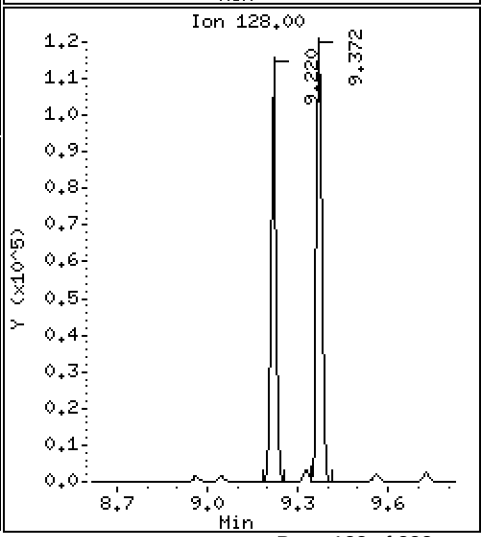


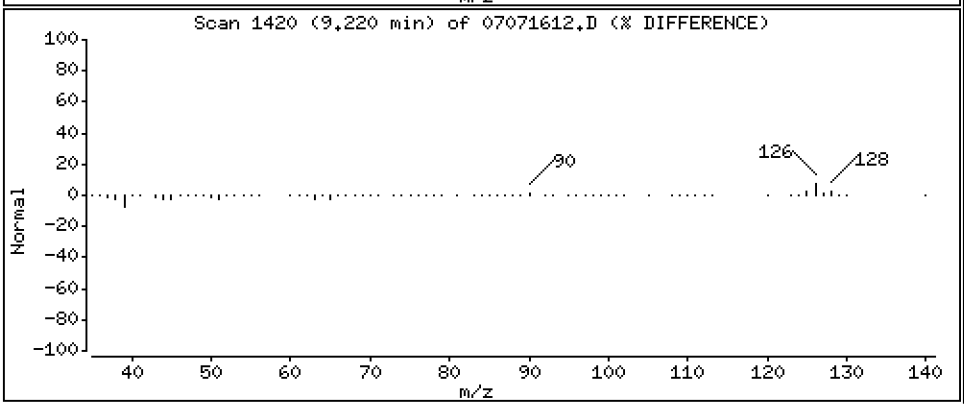












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

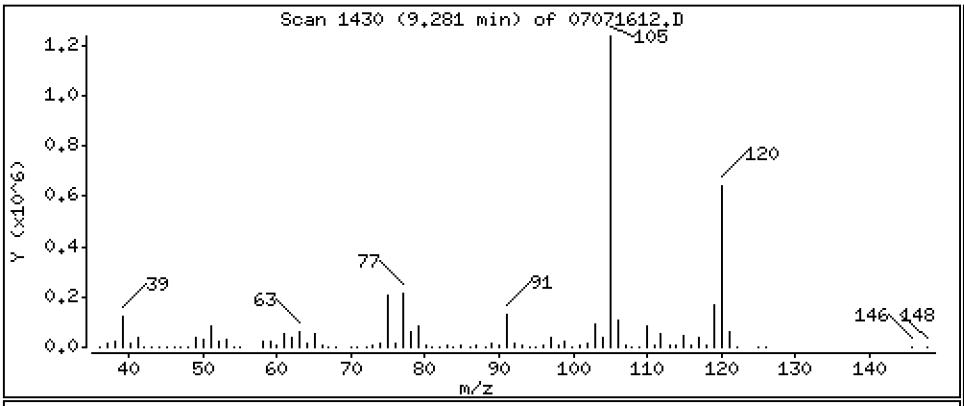
Operator: PB

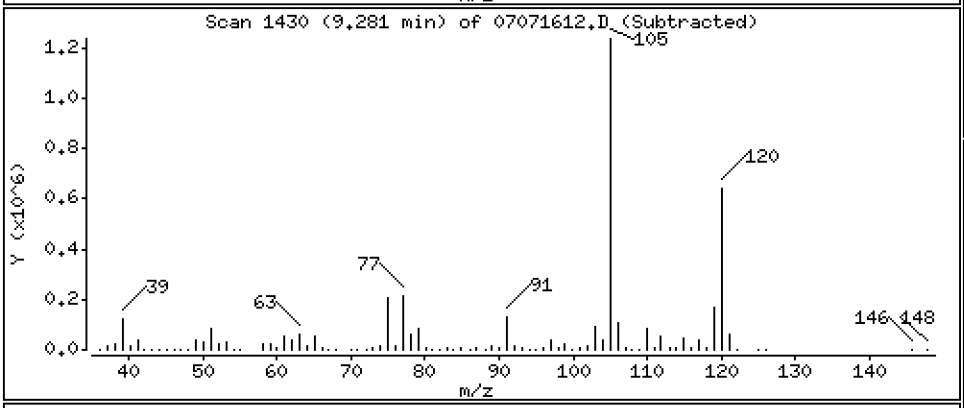
Column phase: RTXVMS

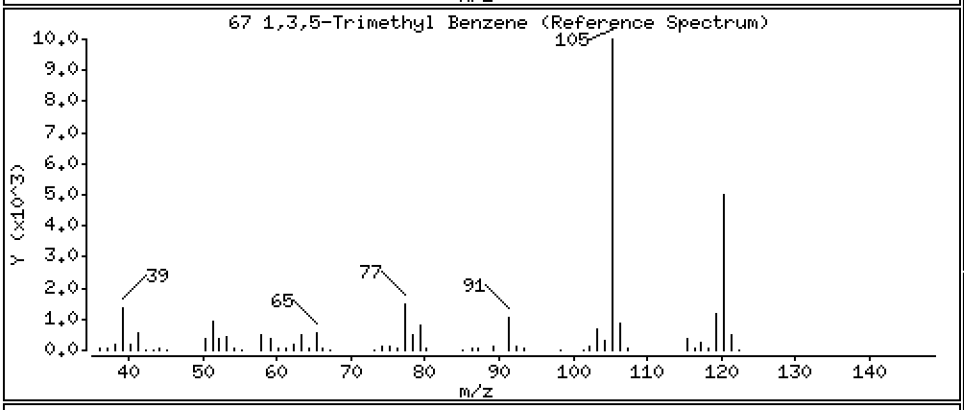
Column diameter: 0.18

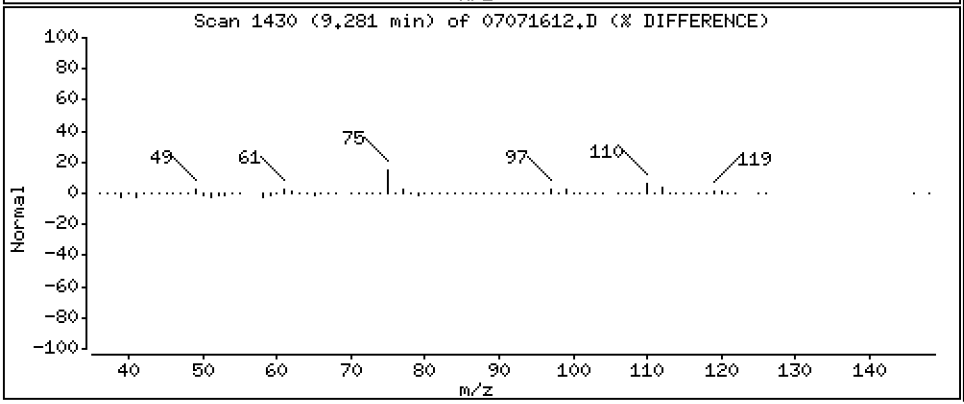
67 1,3,5-Trimethyl Benzene

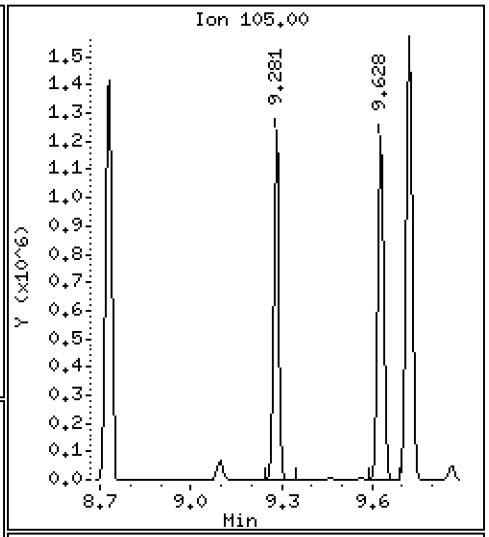
Concentration: 49.485 ug/Kg

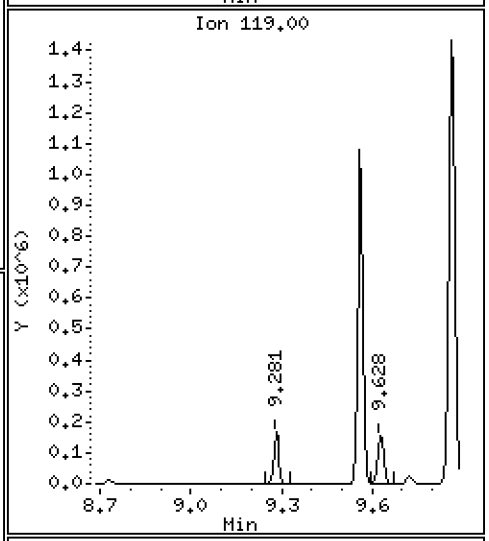


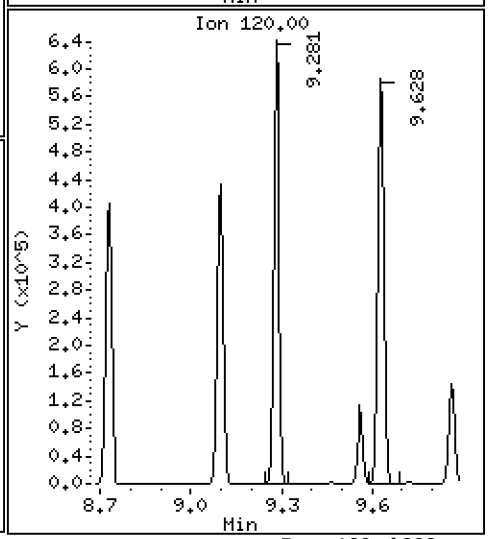












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

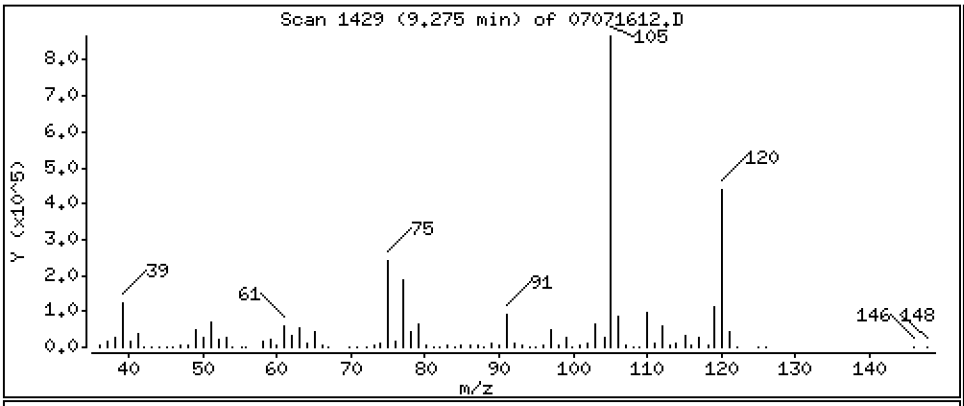
Operator: PB

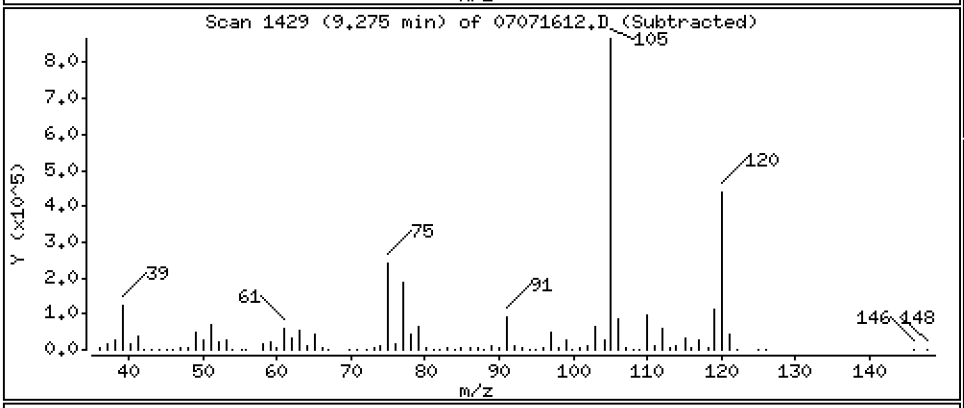
Column phase: RTXVMS

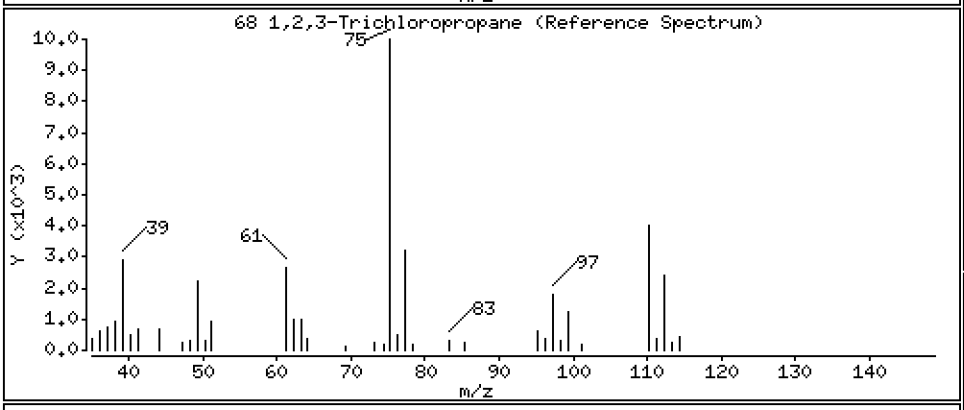
Column diameter: 0.18

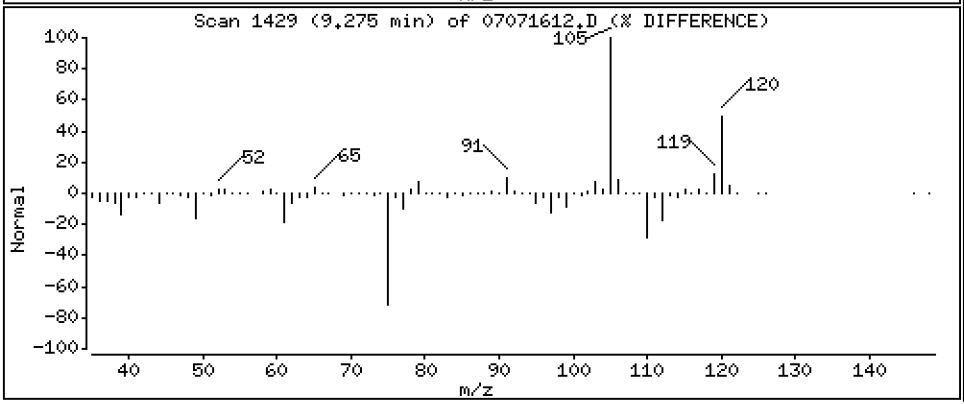
68 1,2,3-Trichloropropane

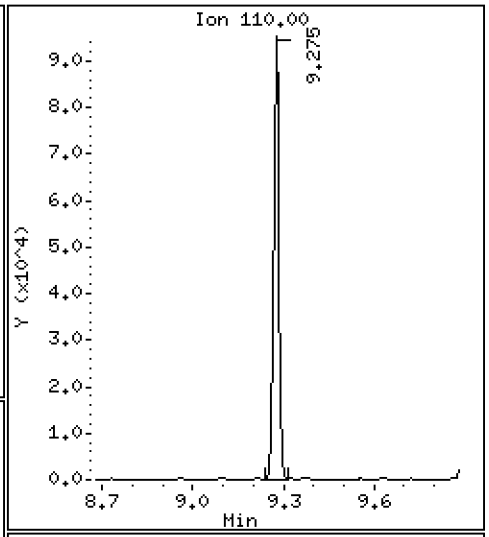
Concentration: 46.025 ug/Kg

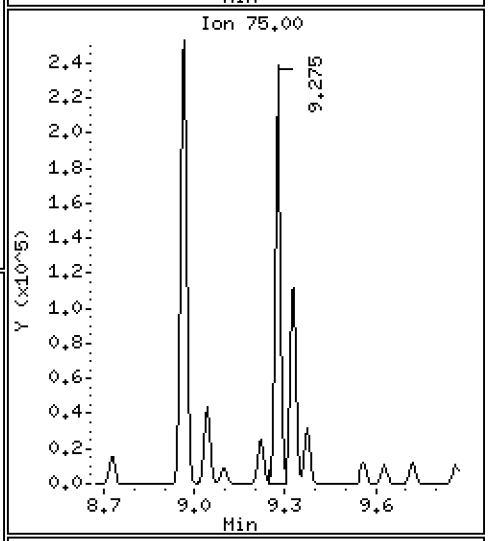


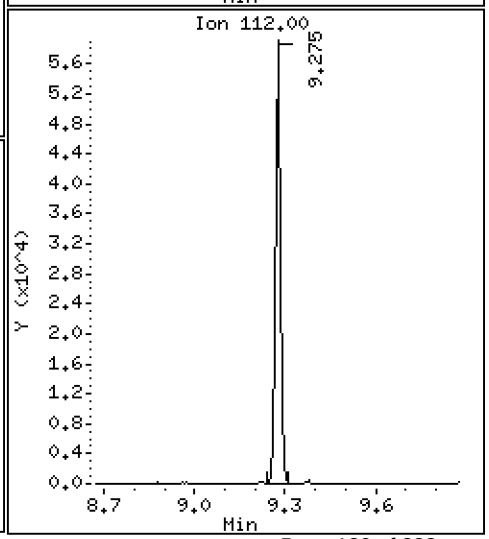












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

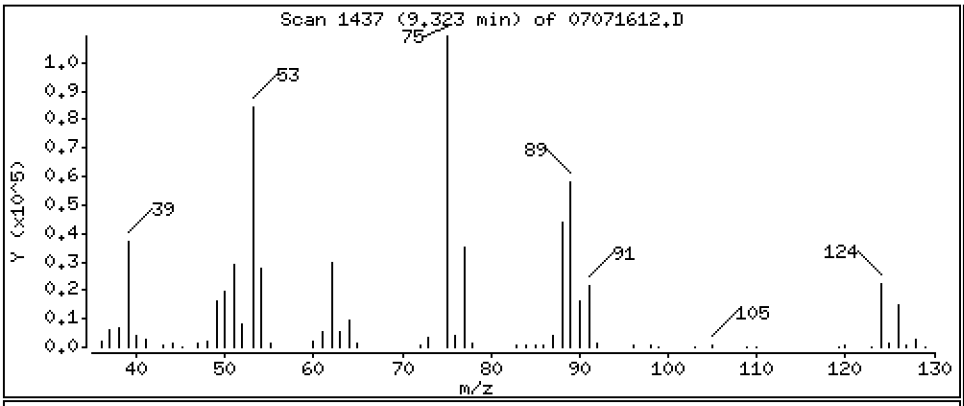
Operator: PB

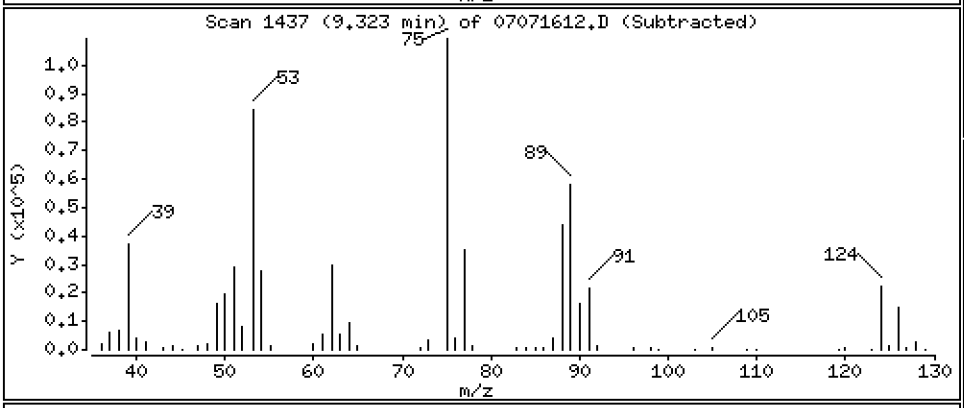
Column phase: RTXVMS

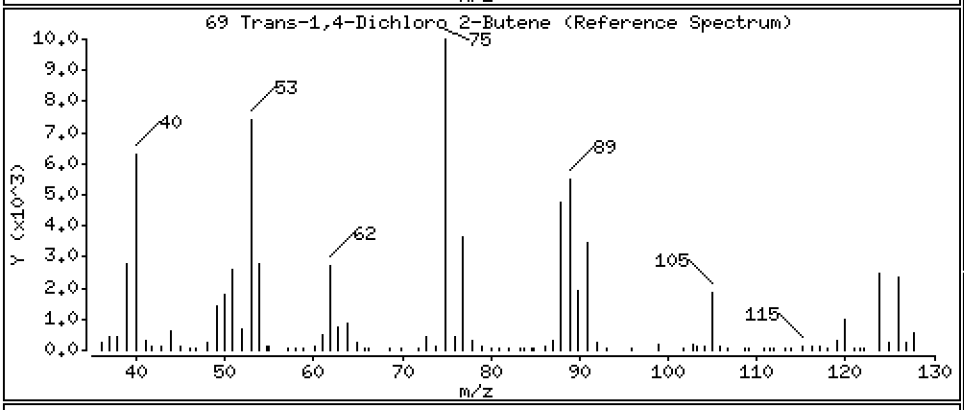
Column diameter: 0.18

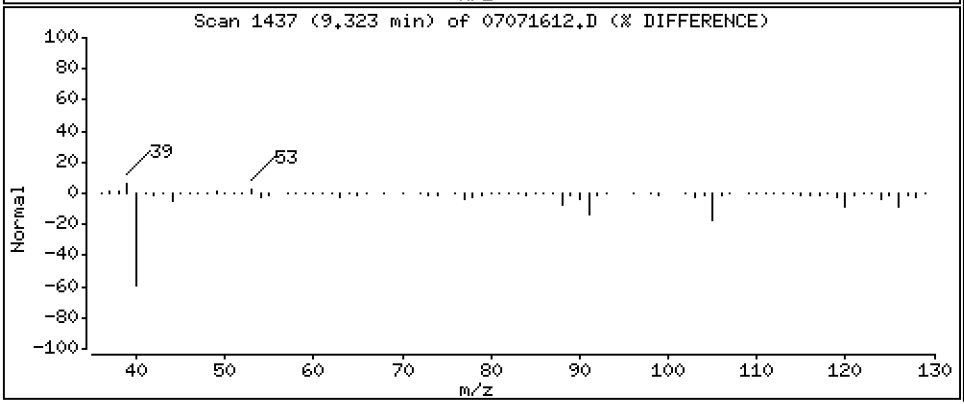
69 Trans-1,4-Dichloro 2-Butene

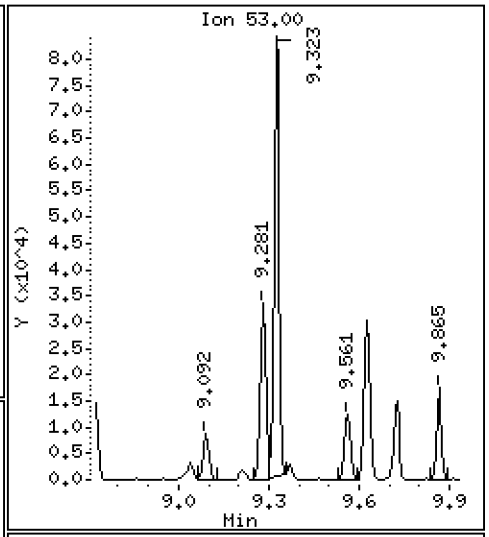
Concentration: 47.867 ug/Kg

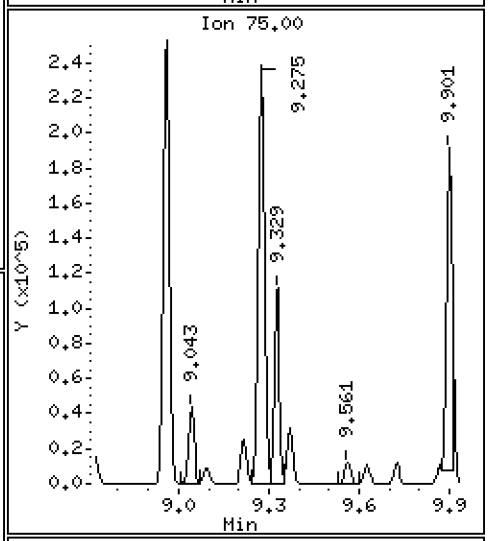


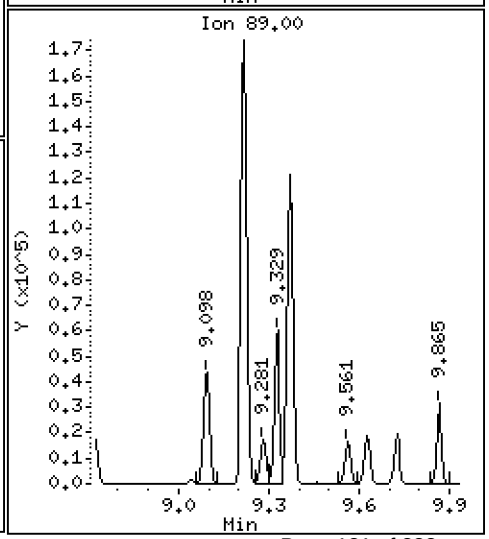












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

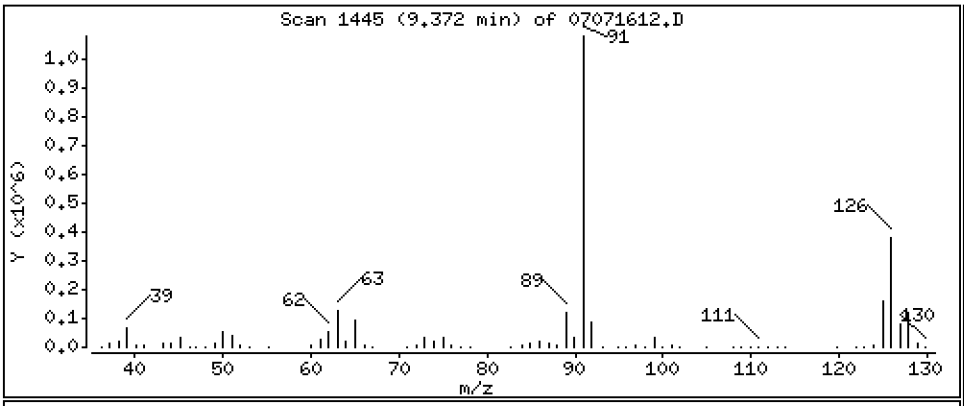
Operator: PB

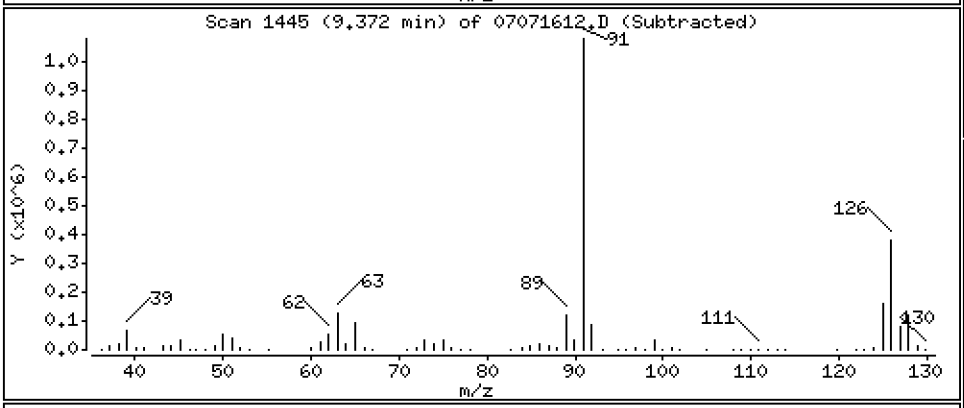
Column phase: RTXVMS

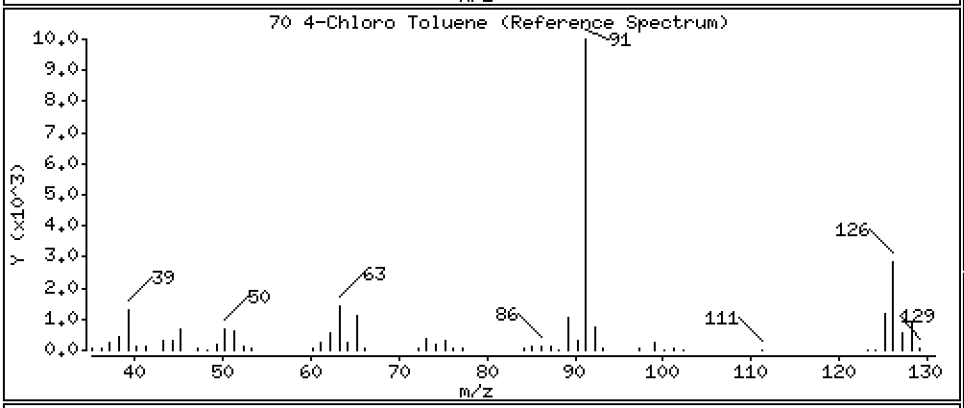
Column diameter: 0.18

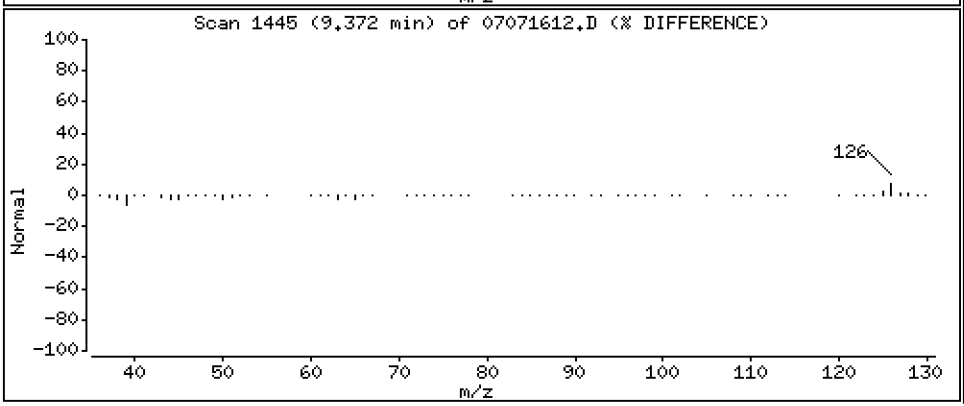
70 4-Chloro Toluene

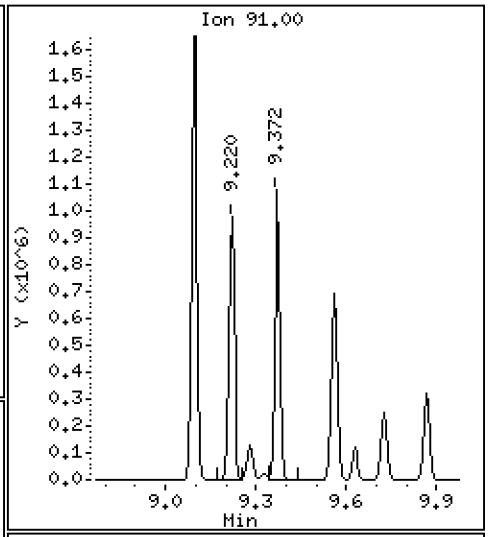
Concentration: 49.358 ug/Kg

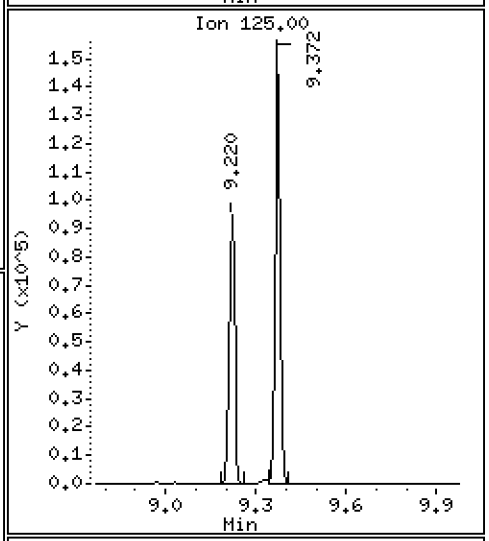


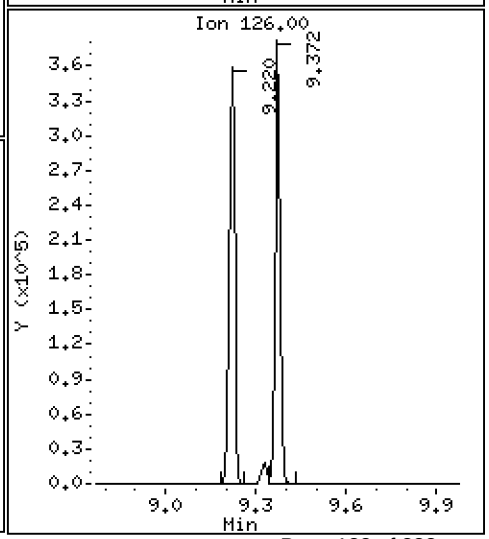












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

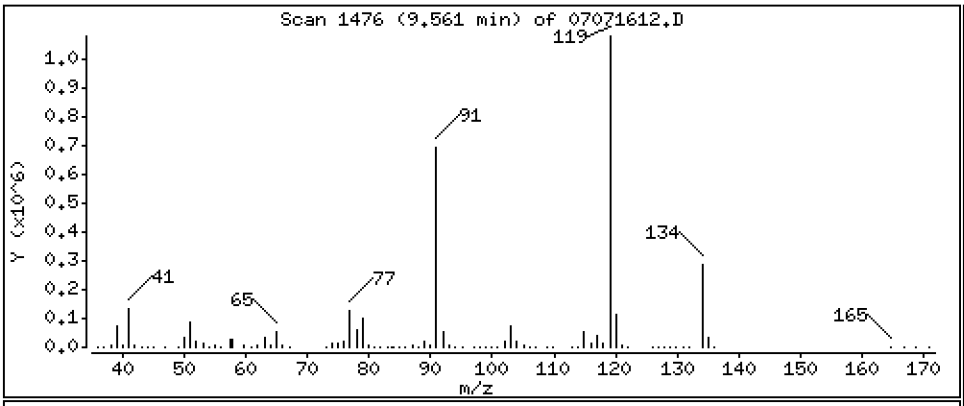
Operator: PB

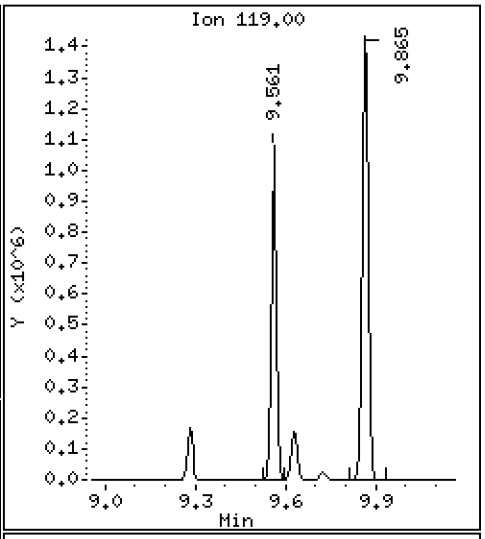
Column phase: RTXVMS

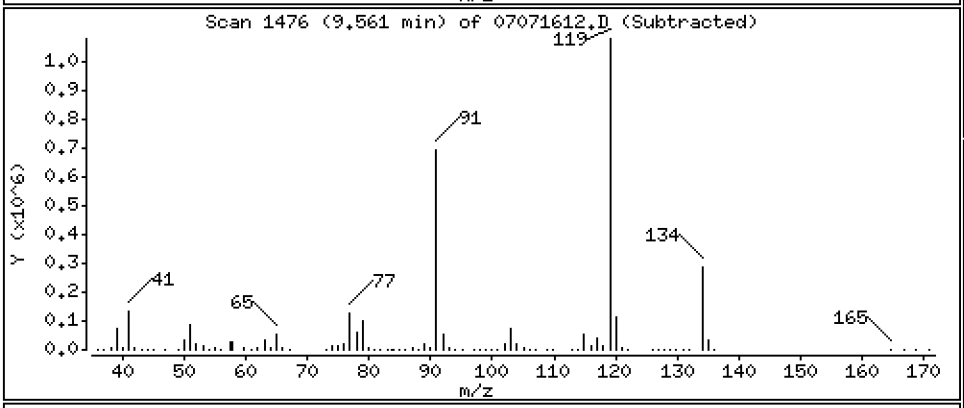
Column diameter: 0.18

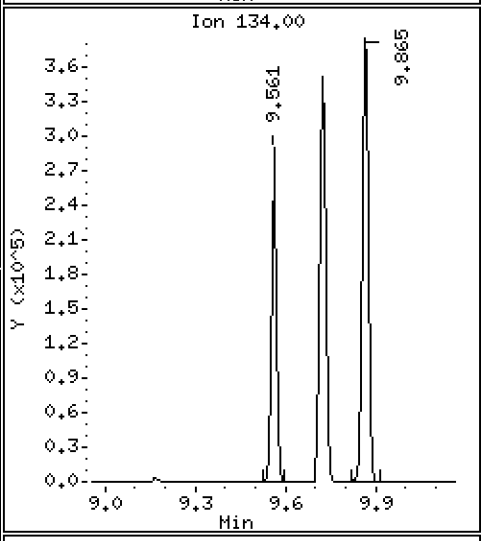
71 T-Butyl Benzene

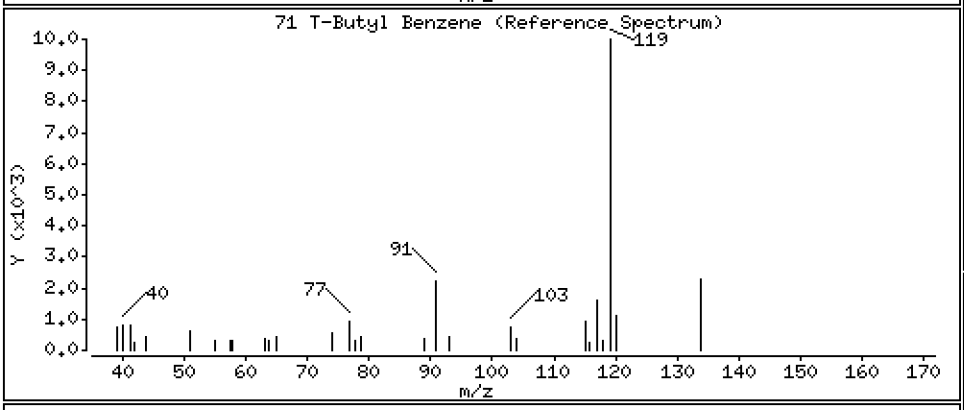
Concentration: 48.182 ug/Kg

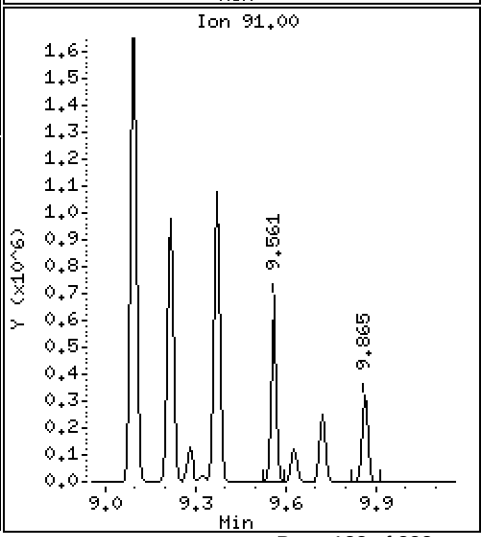


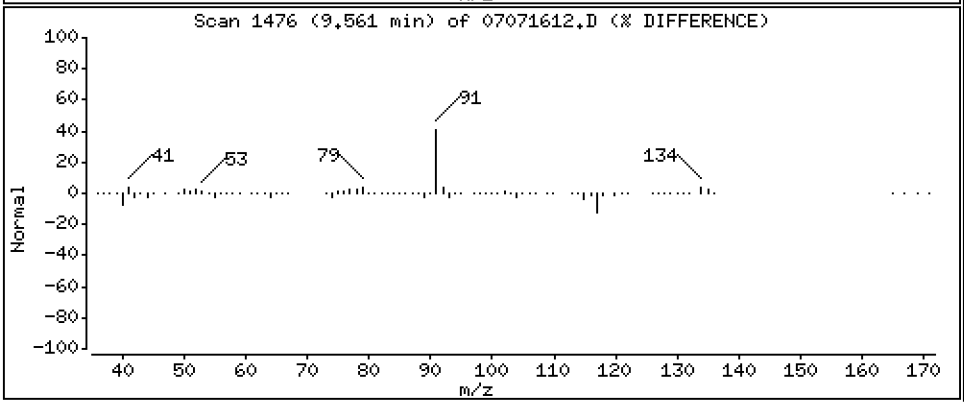












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

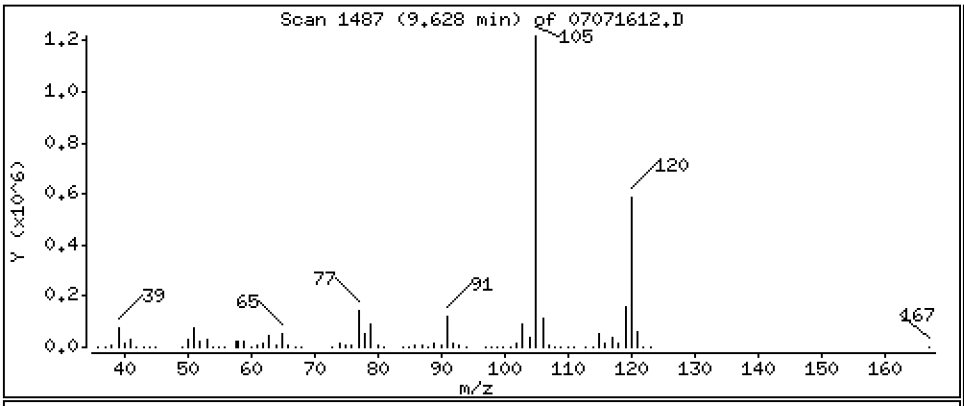
Operator: PB

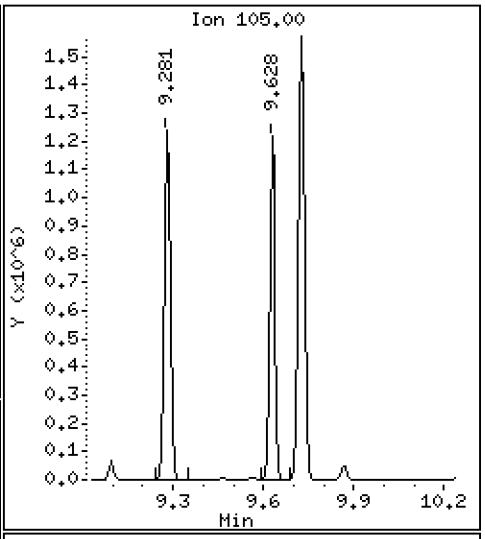
Column phase: RTXVMS

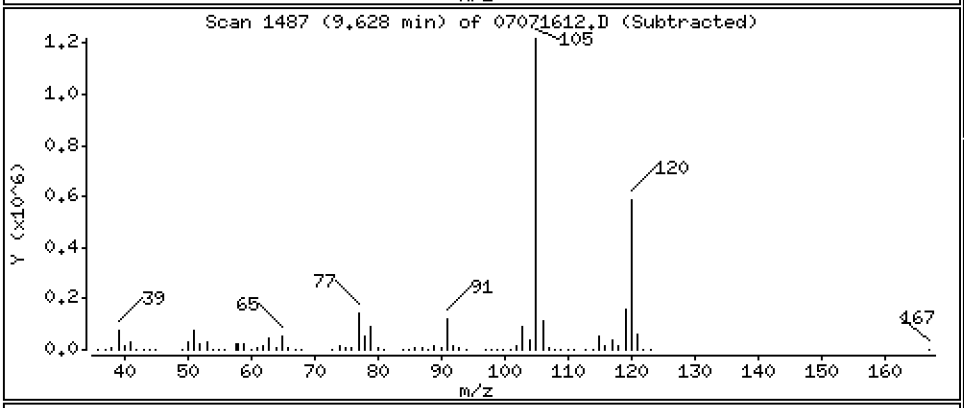
Column diameter: 0.18

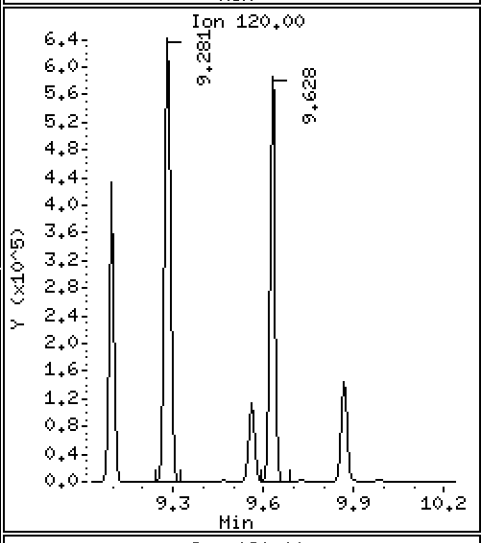
72 1,2,4-Trimethylbenzene

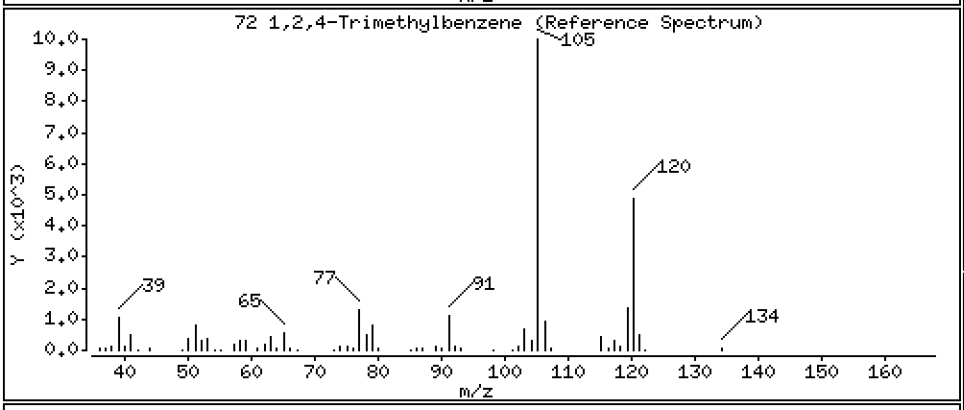
Concentration: 48.805 ug/Kg

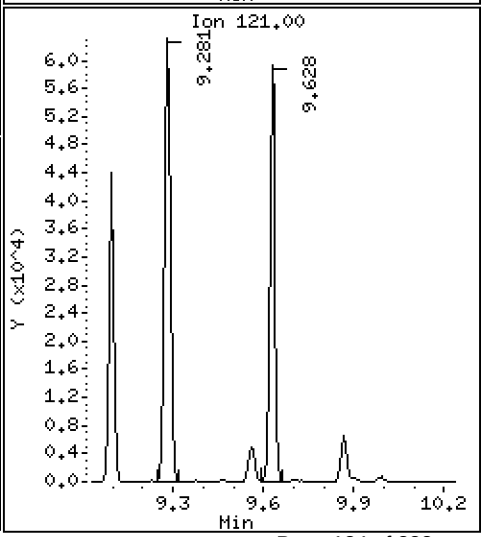


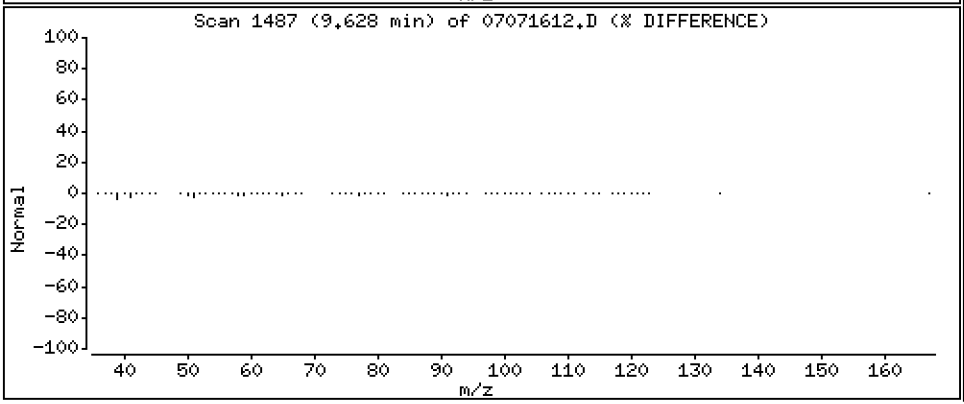












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

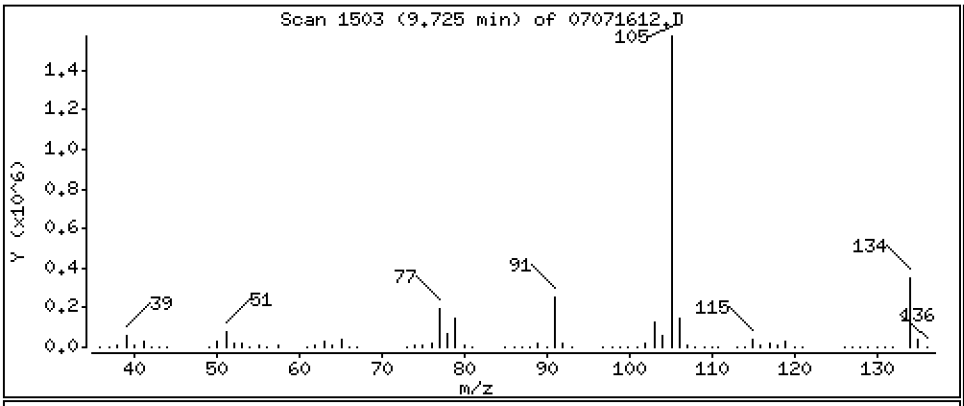
Operator: PB

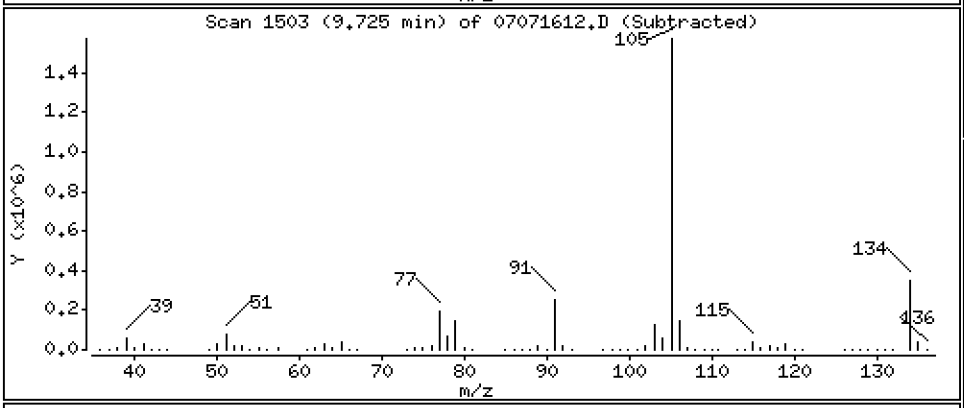
Column phase: RTXVMS

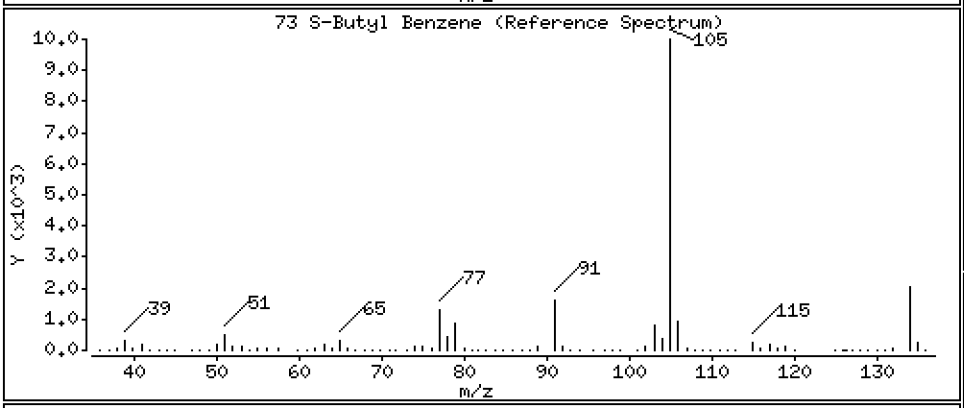
Column diameter: 0.18

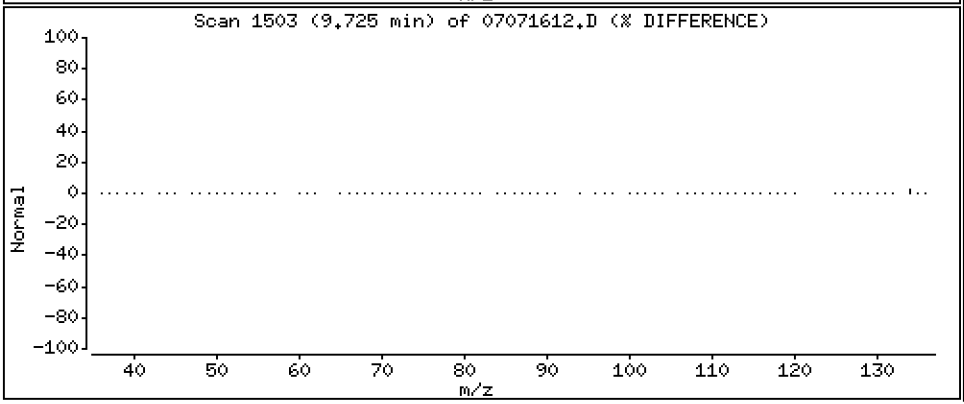
73 S-Butyl Benzene

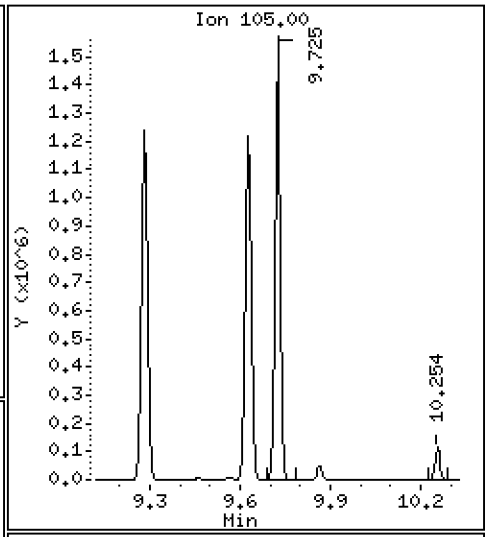
Concentration: 49.118 ug/Kg

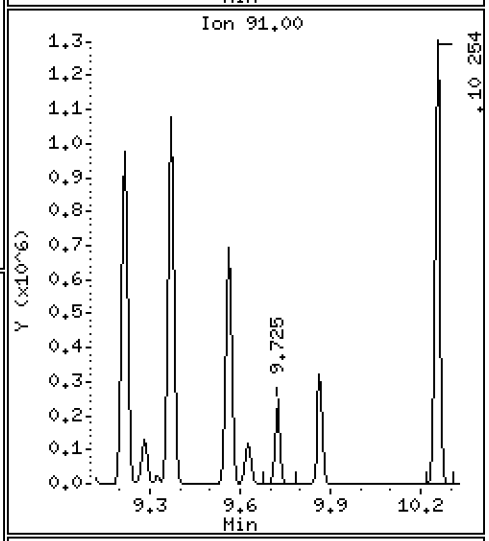


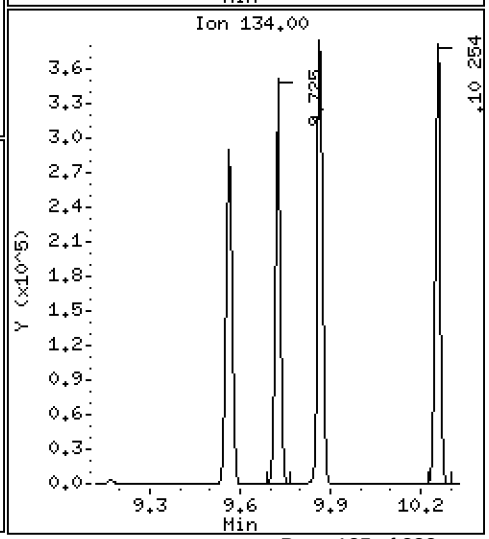












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

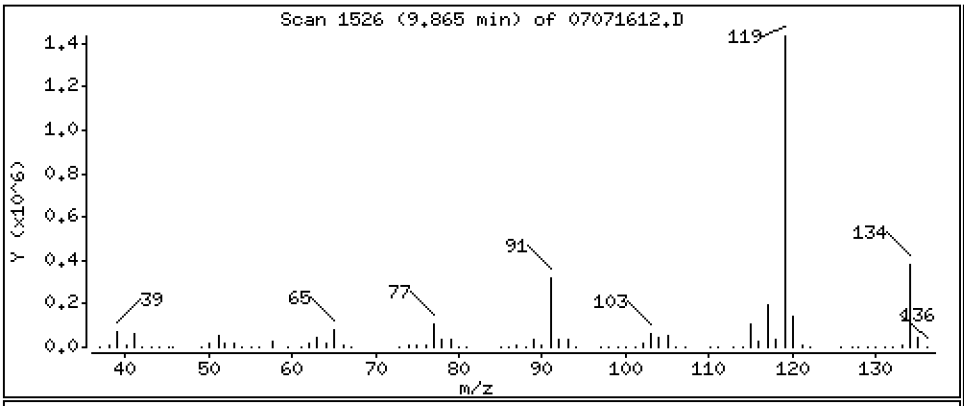
Operator: PB

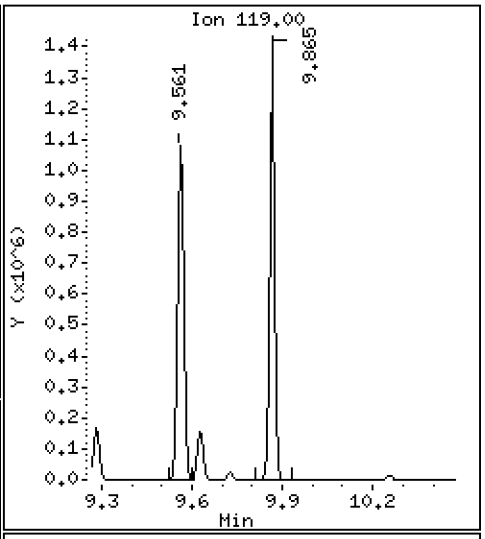
Column phase: RTXVMS

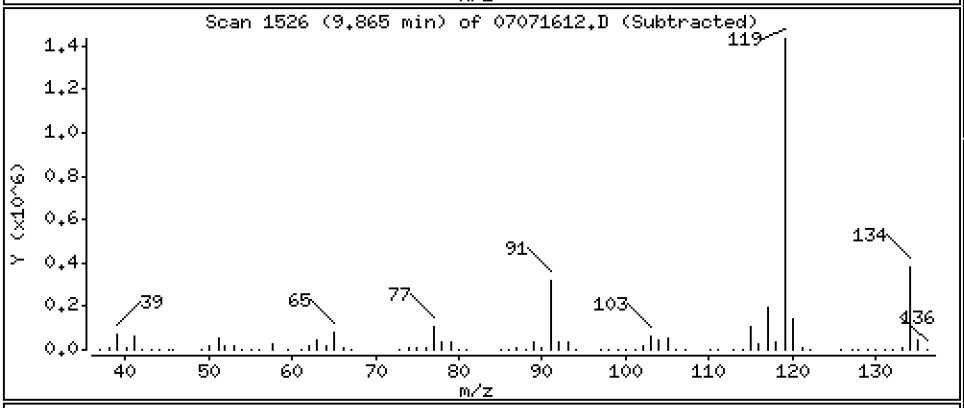
Column diameter: 0.18

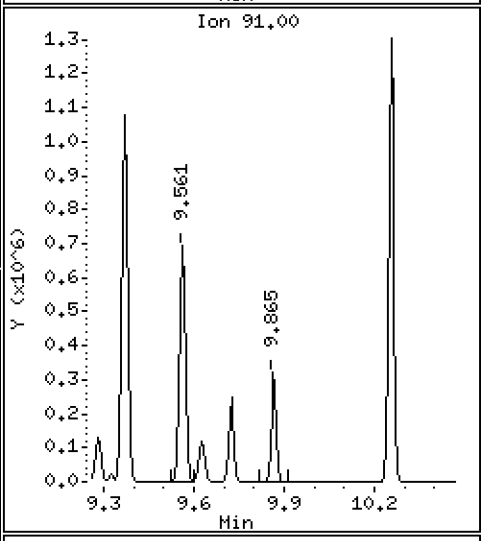
74 4-Isopropyl Toluene

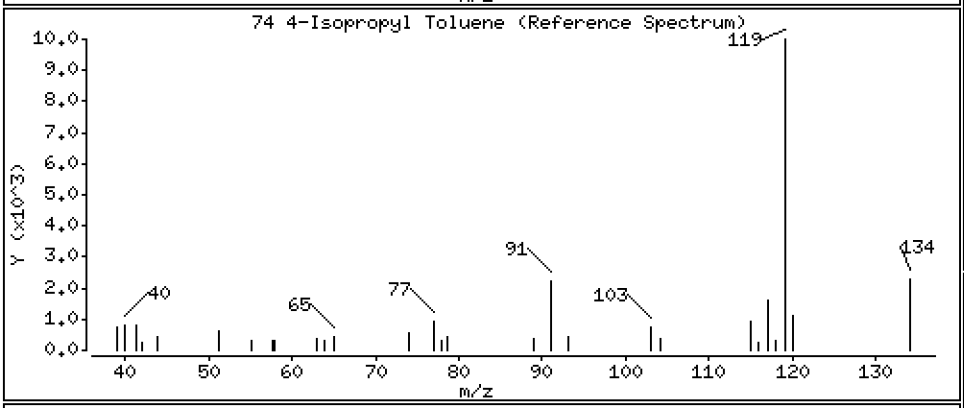
Concentration: 50.427 ug/Kg

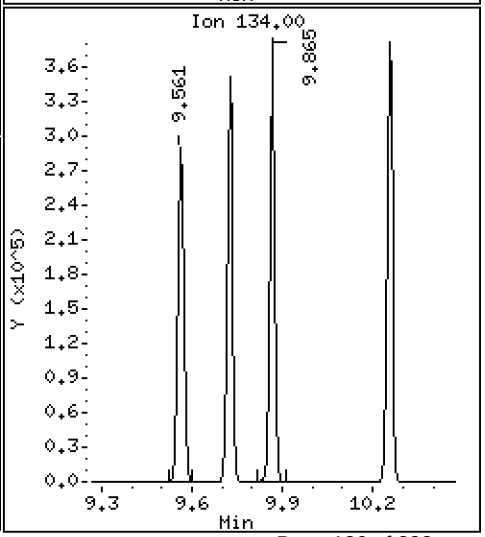


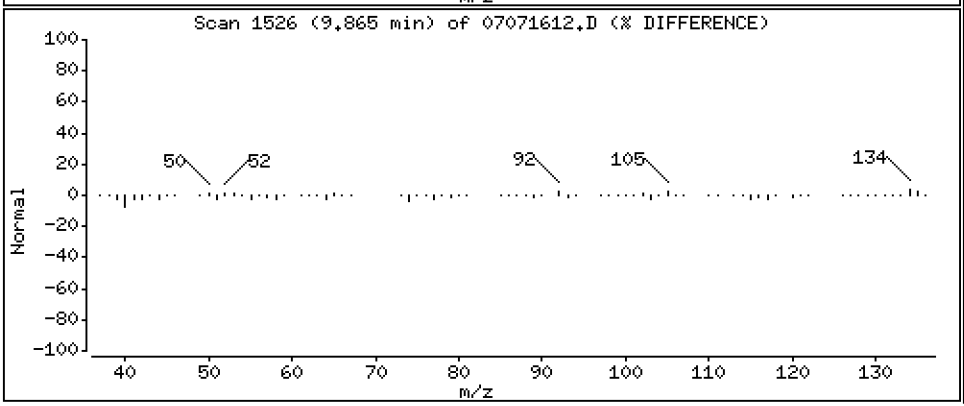












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

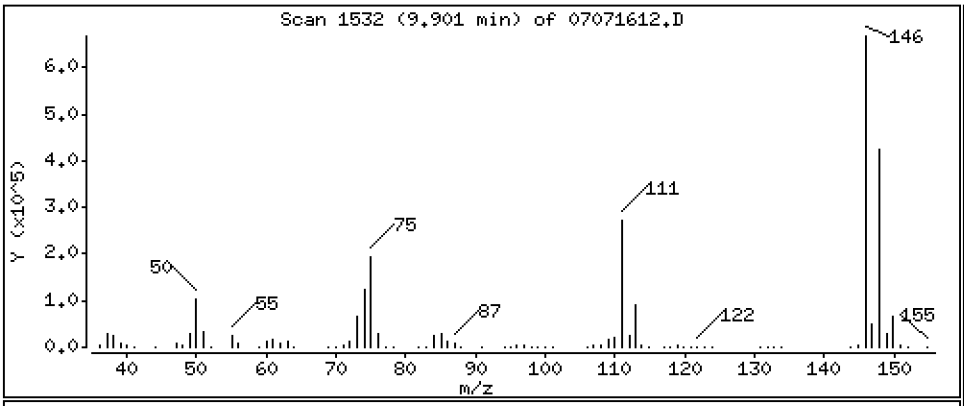
Operator: PB

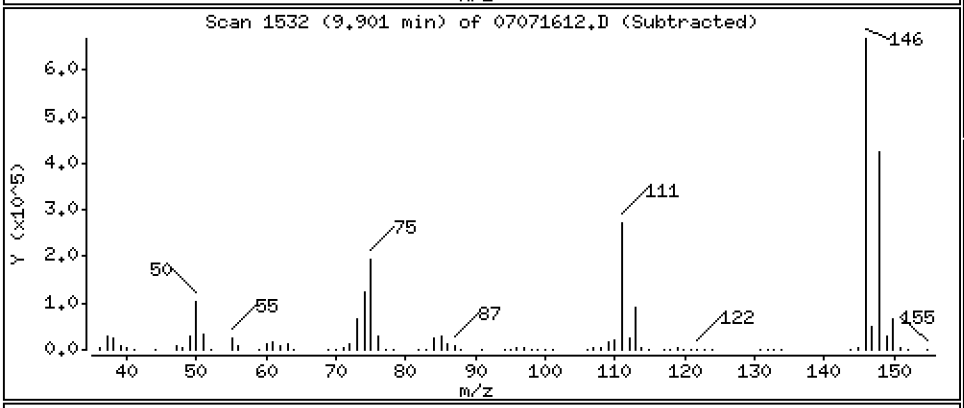
Column phase: RTXVMS

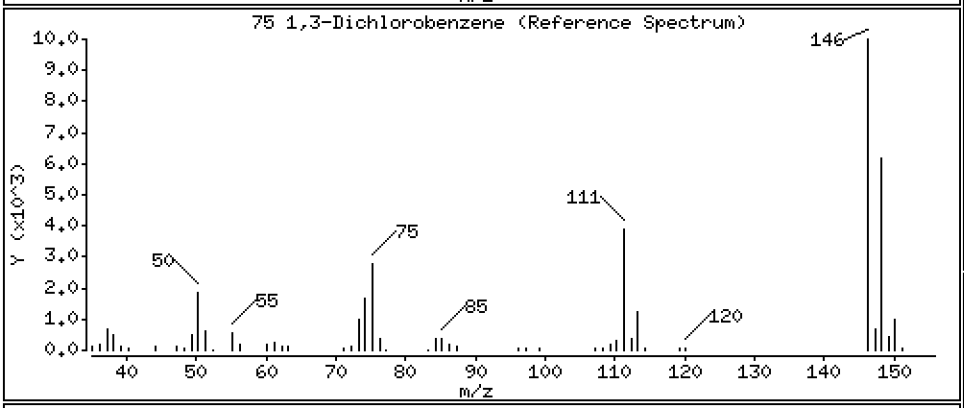
Column diameter: 0.18

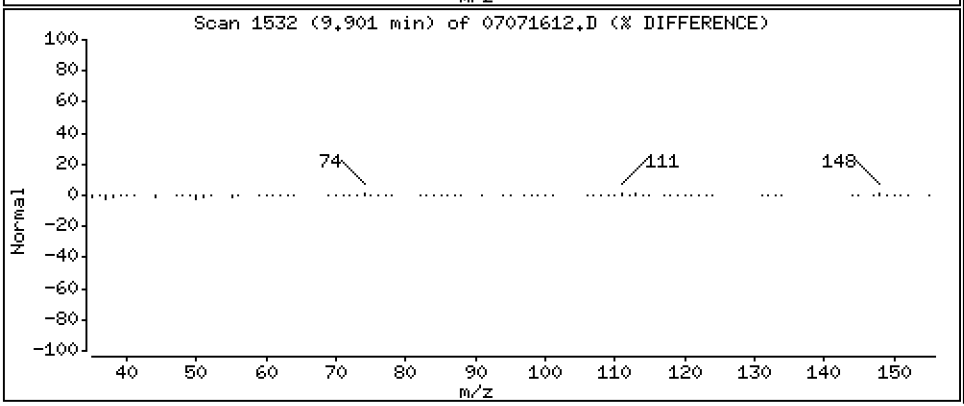
75 1,3-Dichlorobenzene

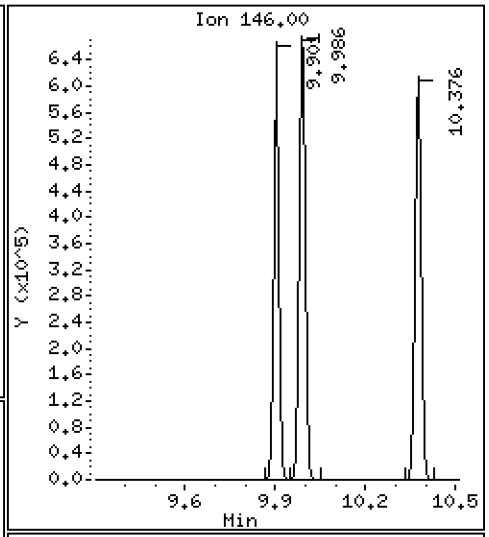
Concentration: 49.373 ug/Kg

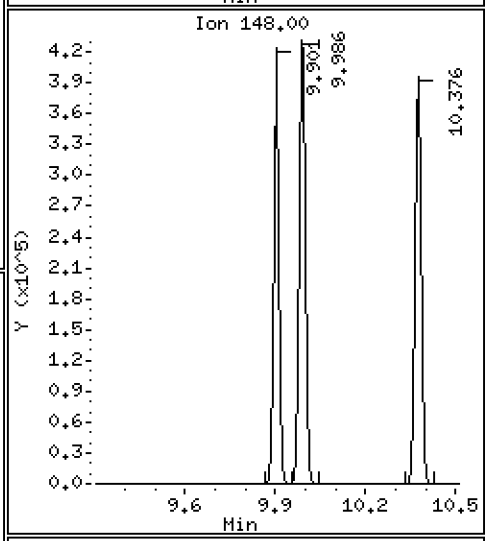


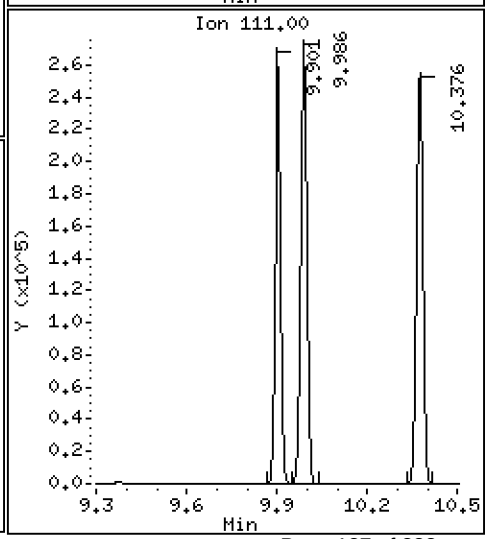












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Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

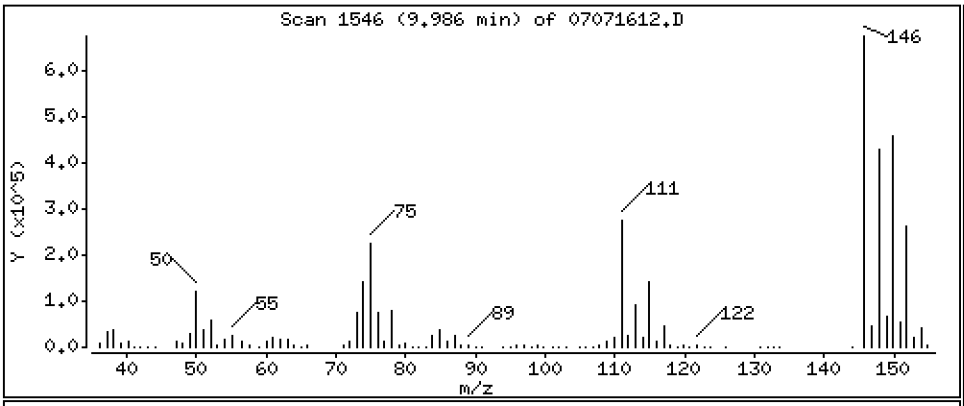
Operator: PB

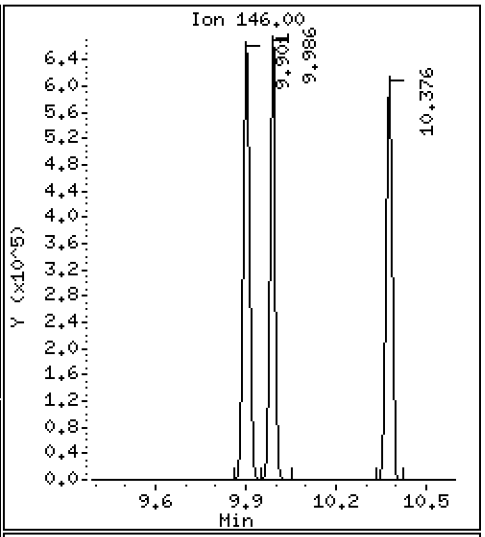
Column phase: RTXVMS

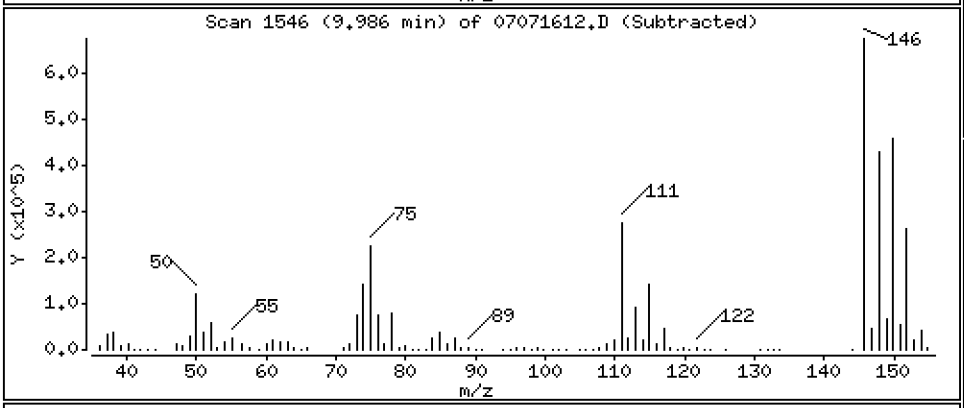
Column diameter: 0.18

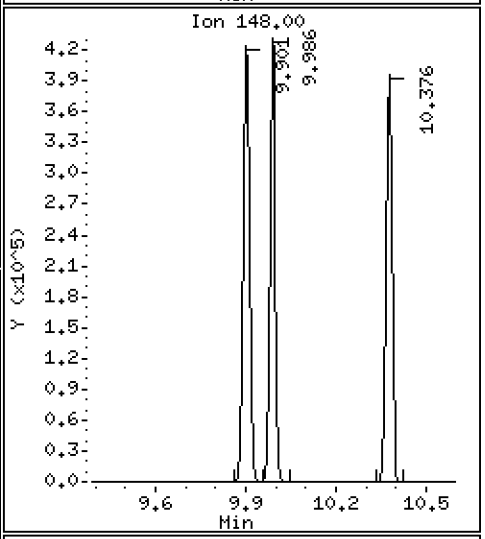
77 1,4-Dichlorobenzene

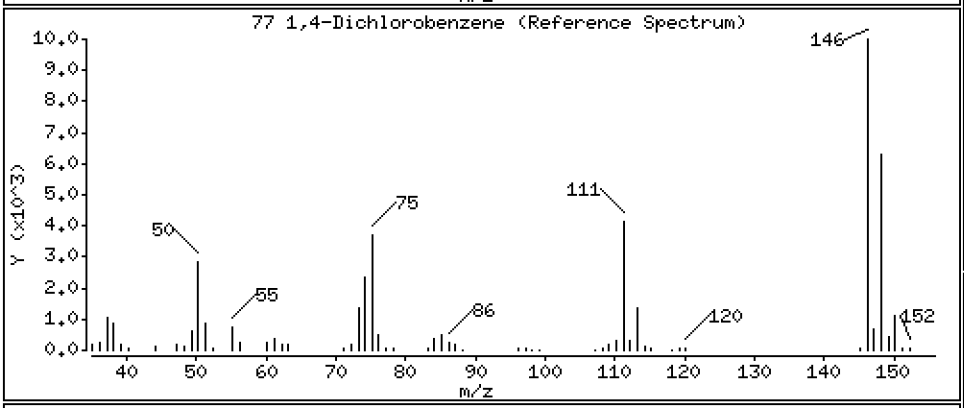
Concentration: 48.975 ug/Kg

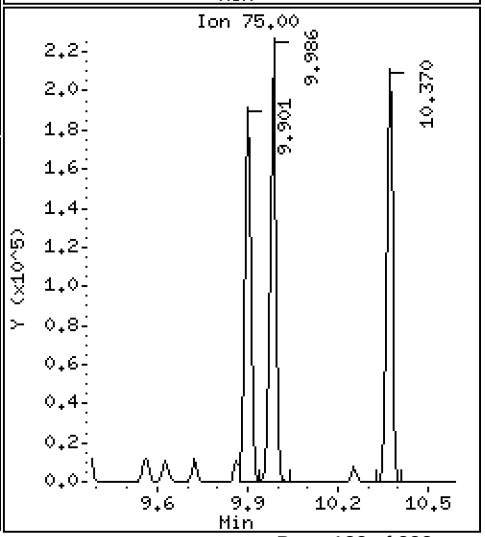


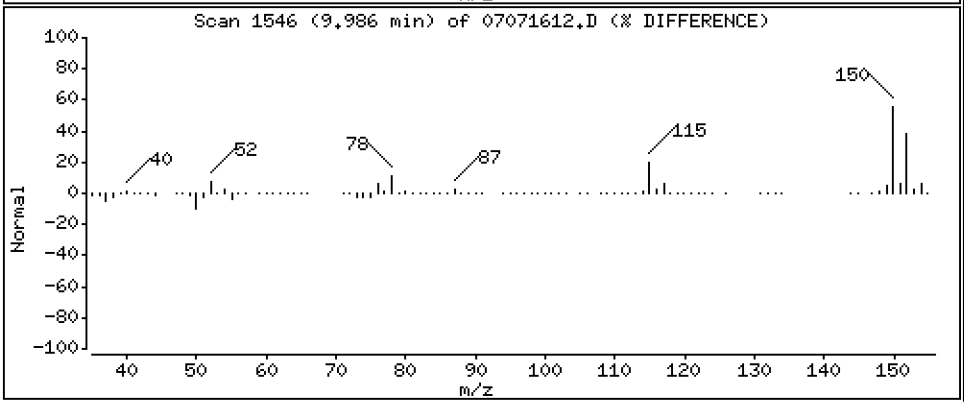












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

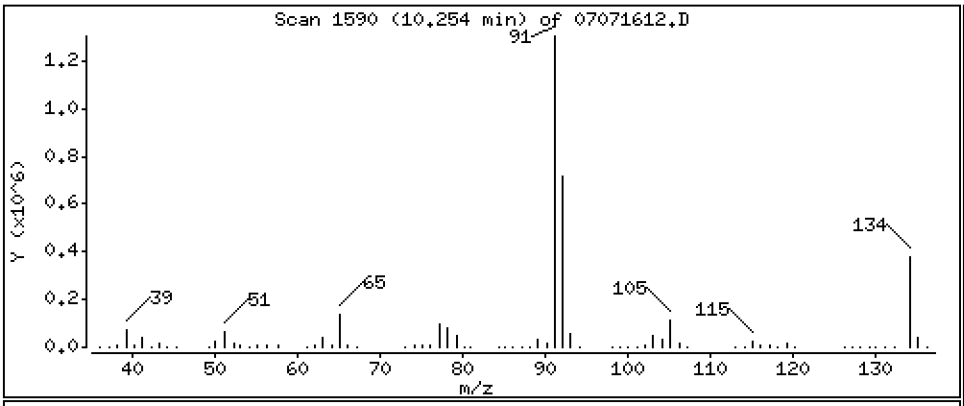
Operator: PB

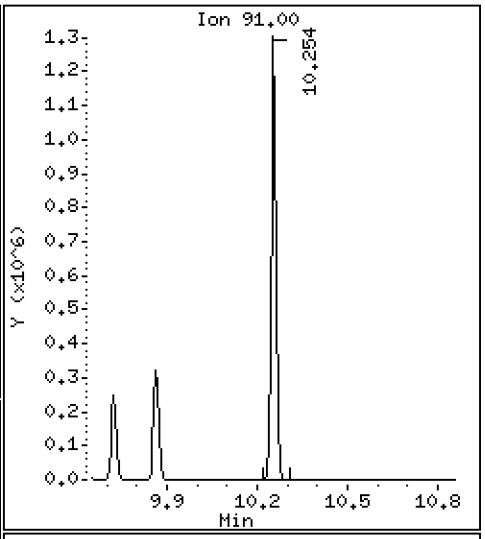
Column phase: RTXVMS

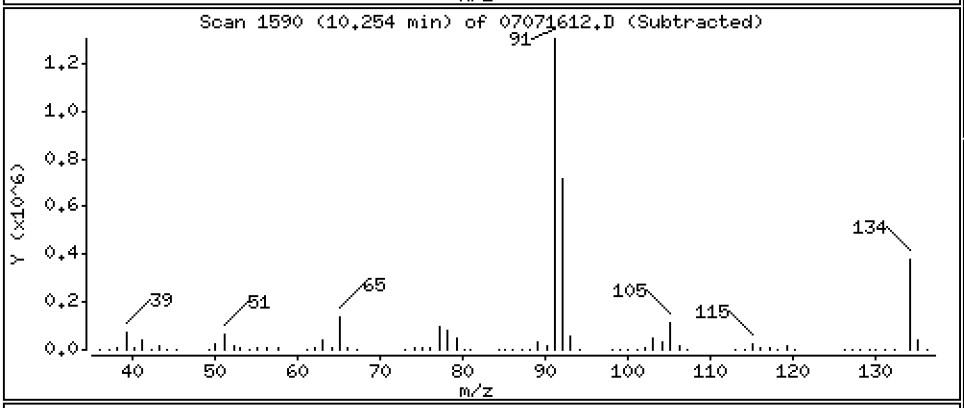
Column diameter: 0.18

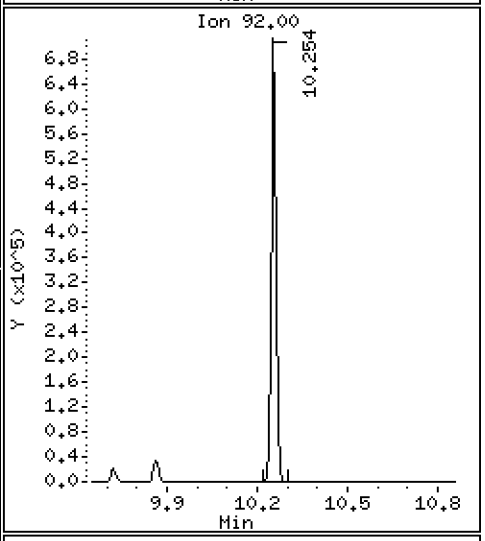
78 N-Butyl Benzene

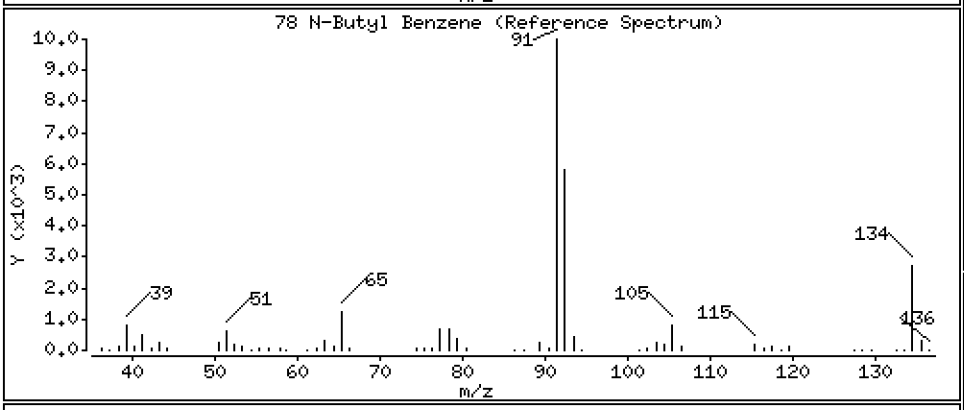
Concentration: 50.892 ug/Kg

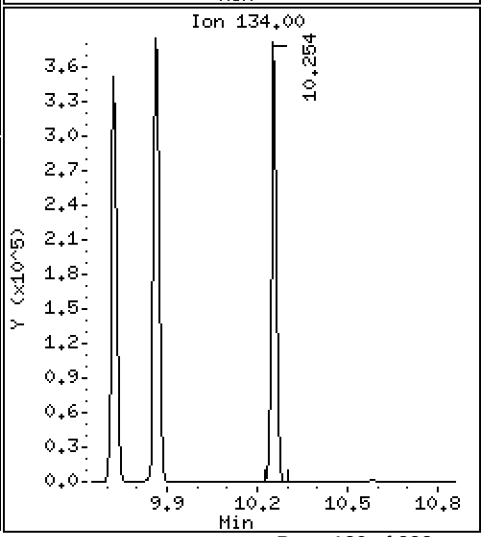


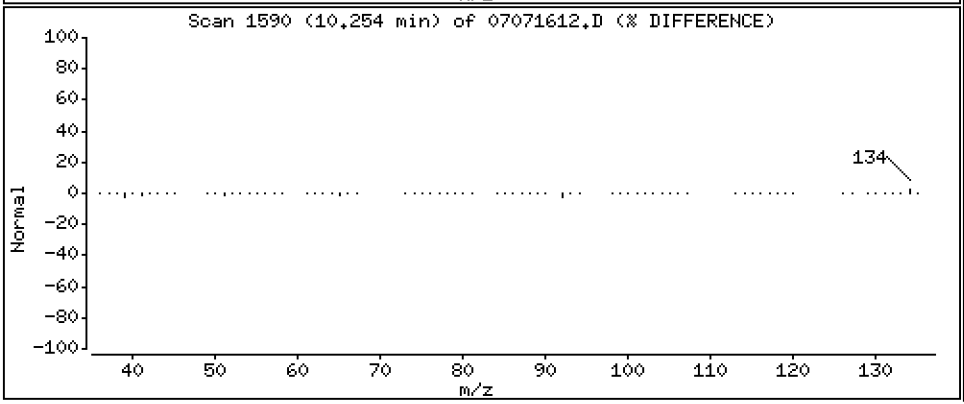












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

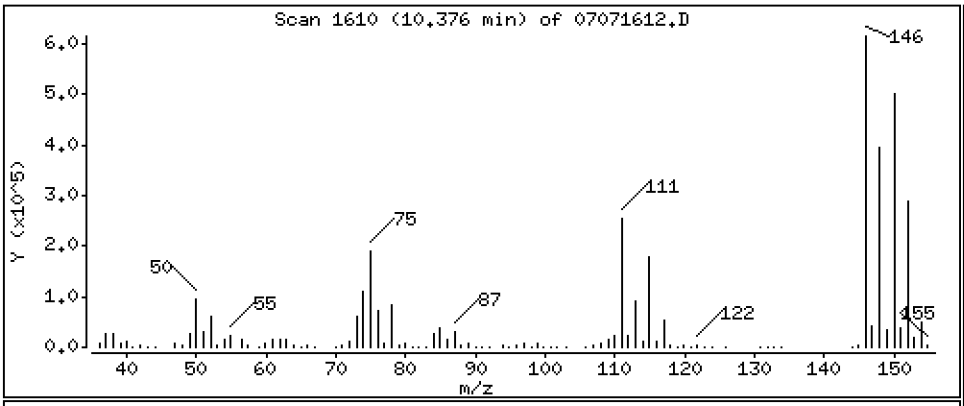
Operator: PB

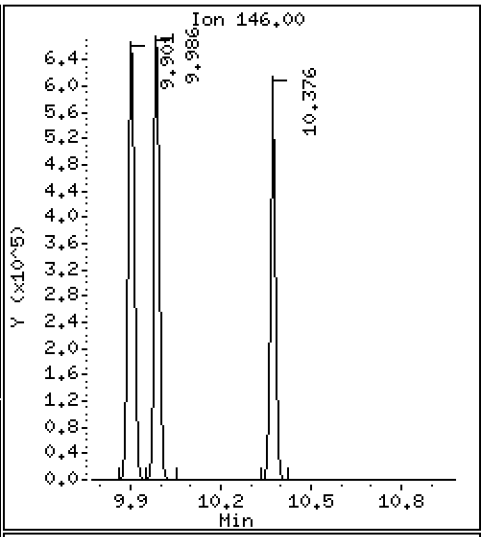
Column phase: RTXVMS

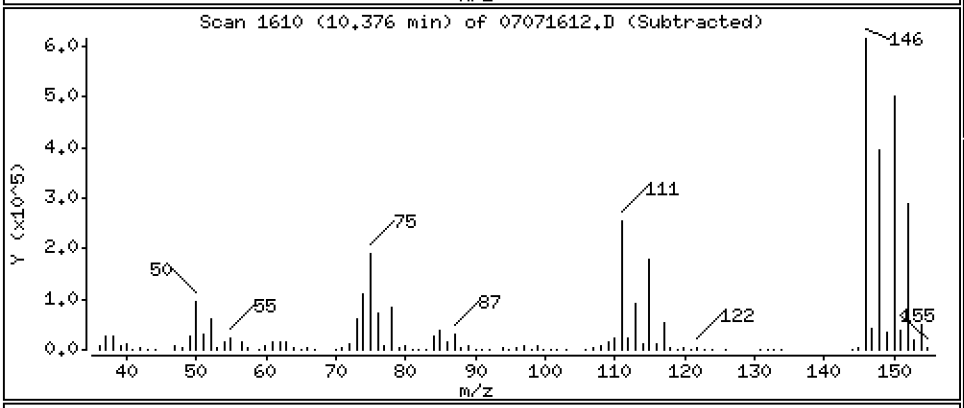
Column diameter: 0.18

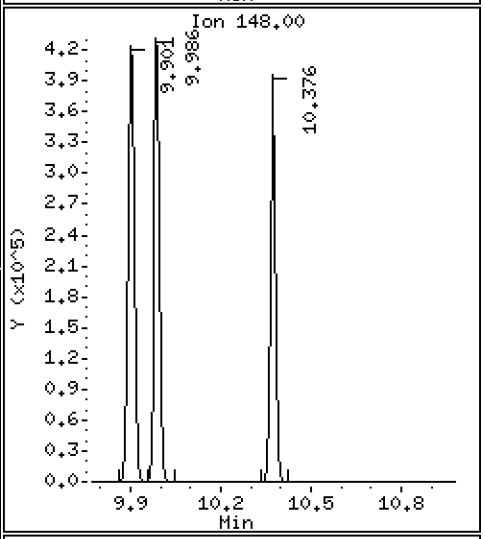
80 1,2-Dichlorobenzene

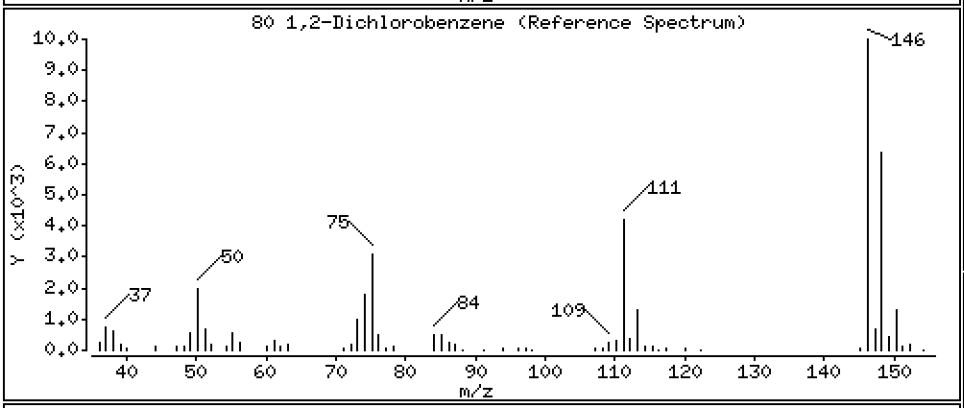
Concentration: 47.839 ug/Kg

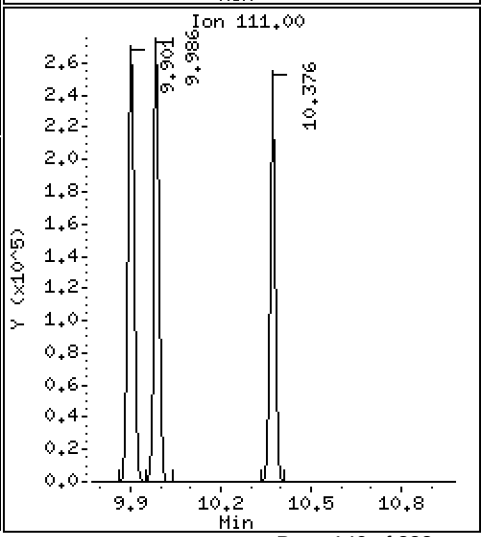


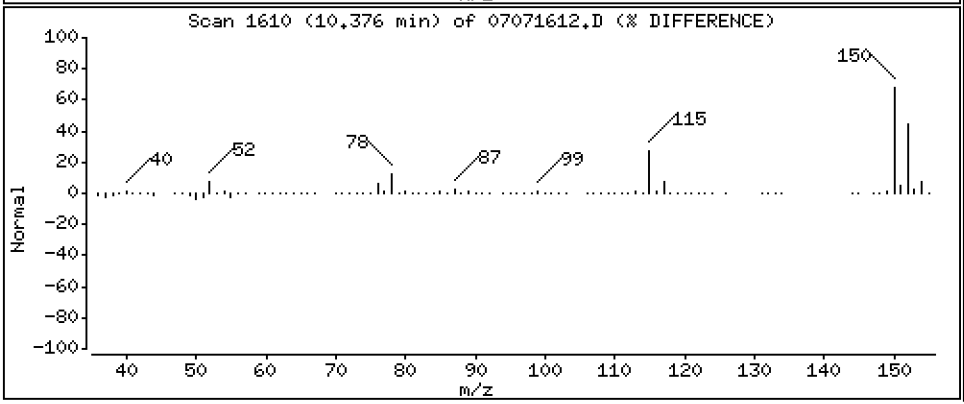












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Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

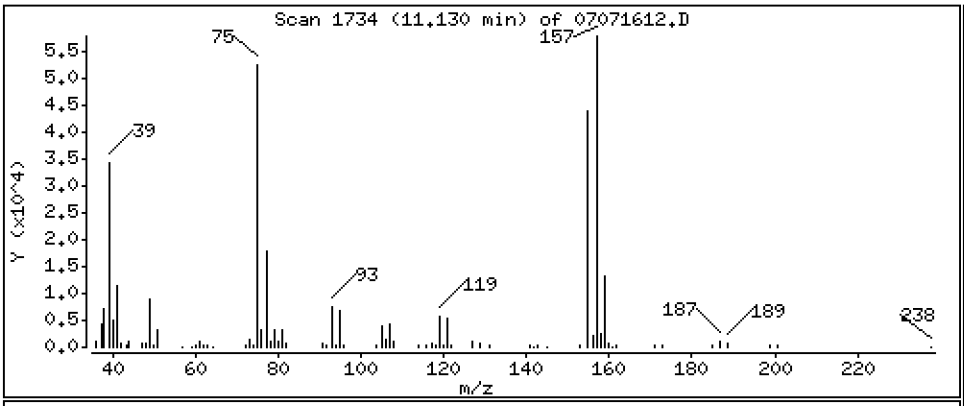
Operator: PB

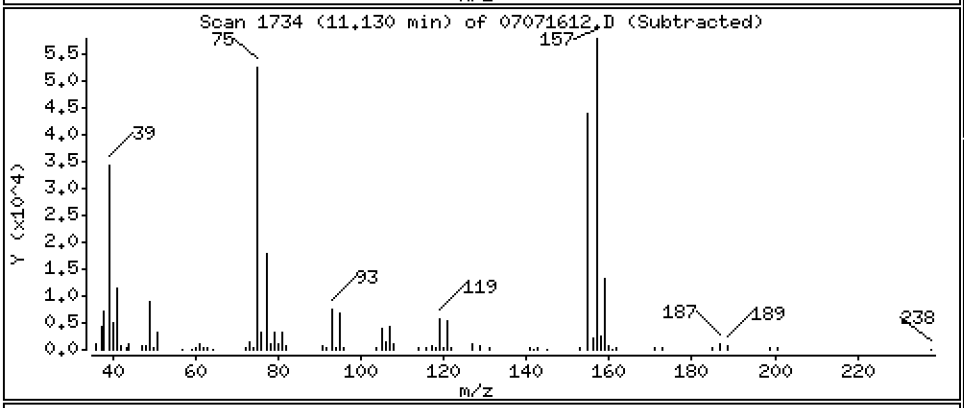
Column phase: RTXVMS

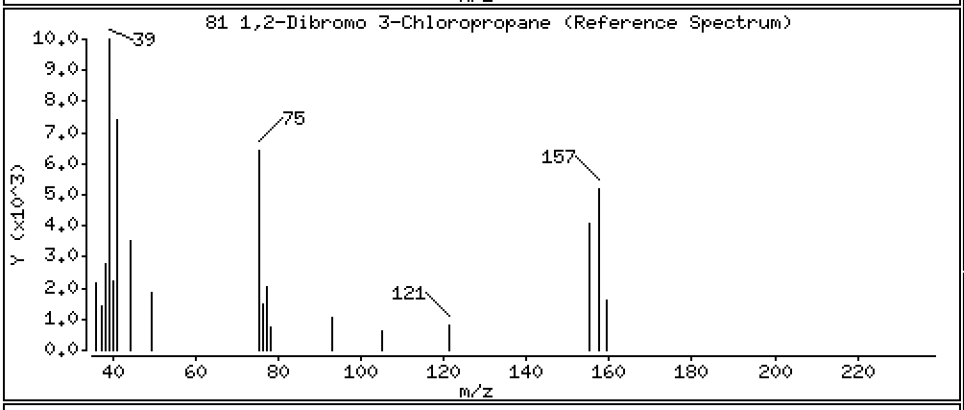
Column diameter: 0.18

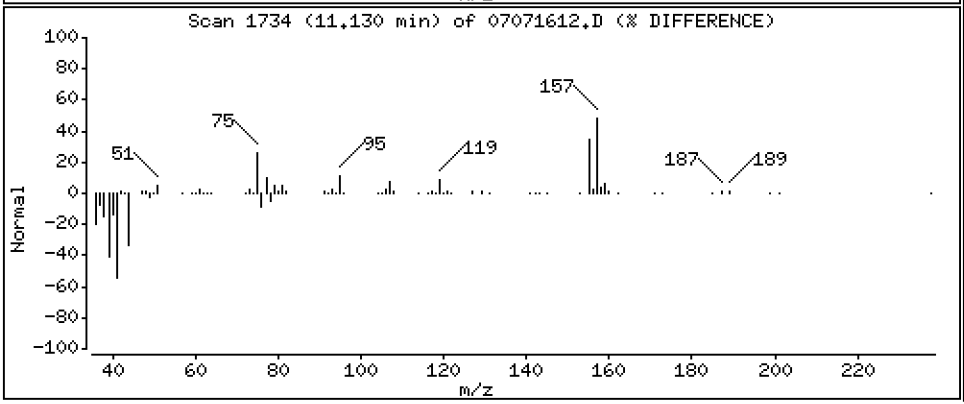
81 1,2-Dibromo 3-Chloropropane

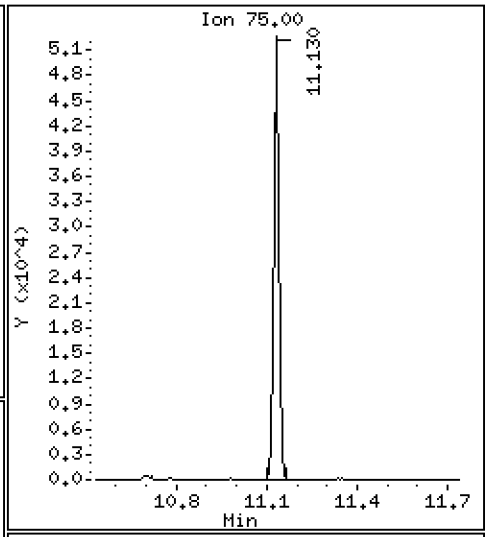
Concentration: 44.997 ug/Kg

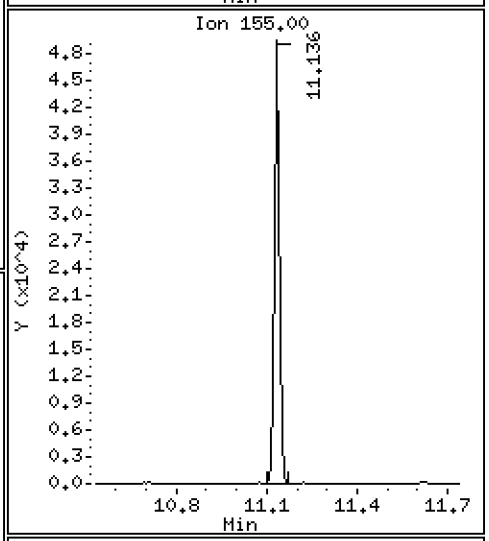


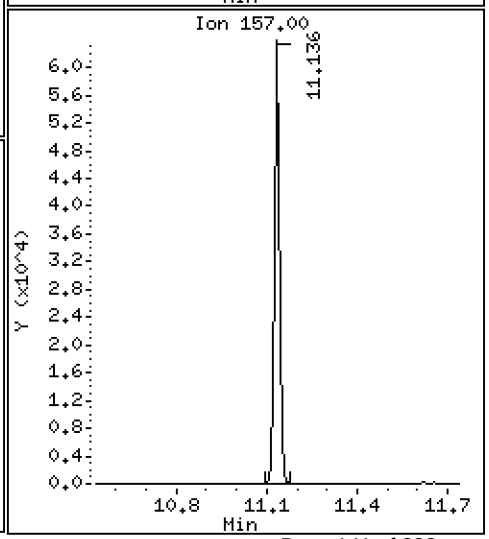












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

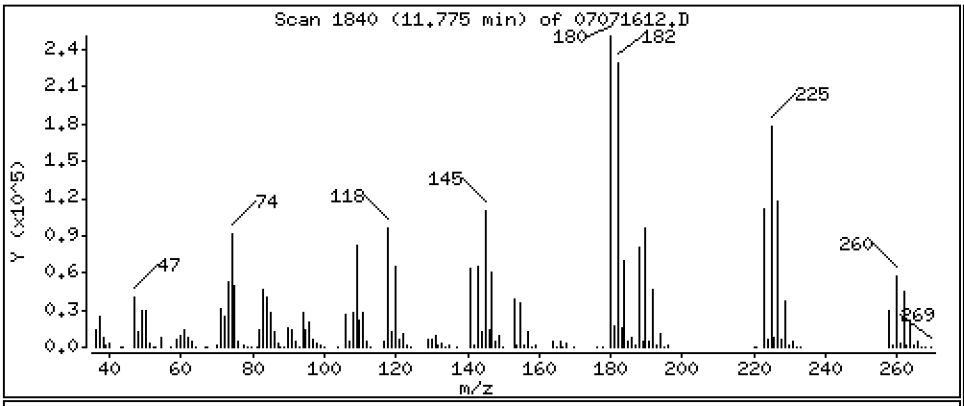
Operator: PB

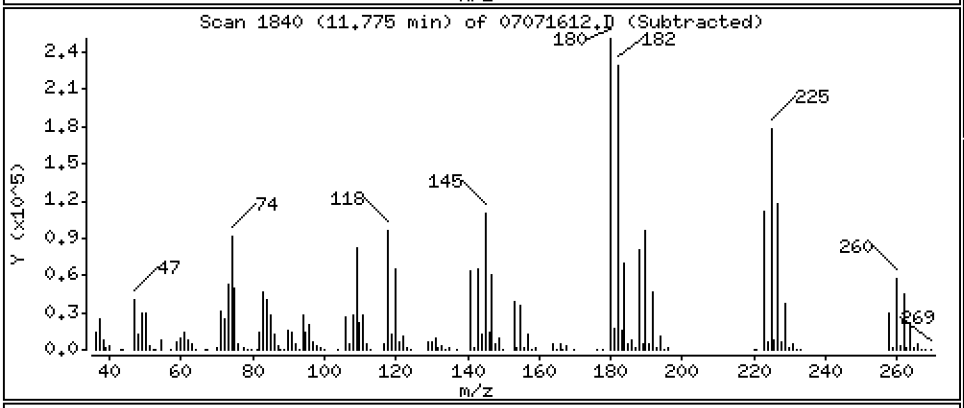
Column phase: RTXVMS

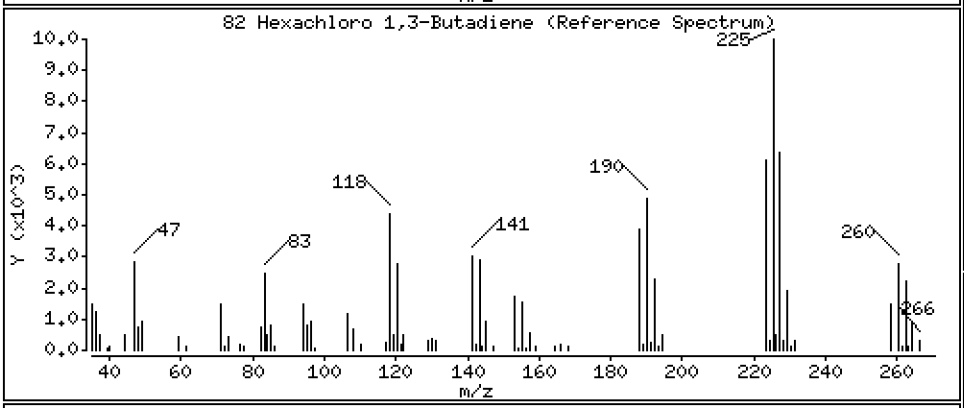
Column diameter: 0.18

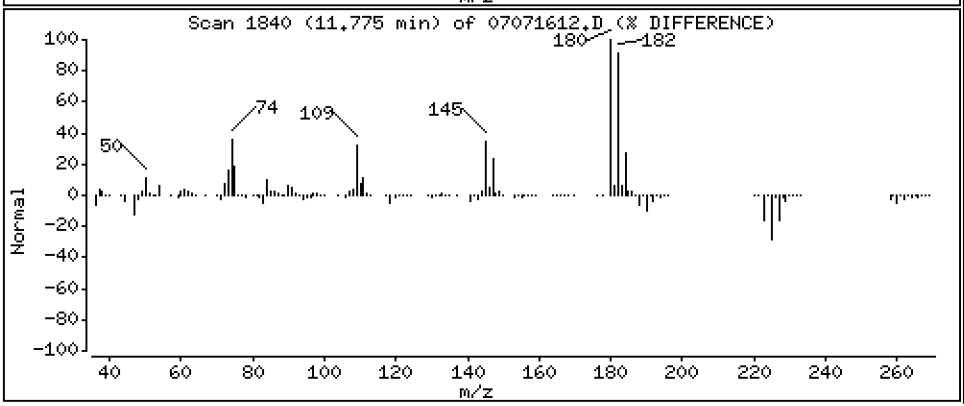
82 Hexachloro 1,3-Butadiene

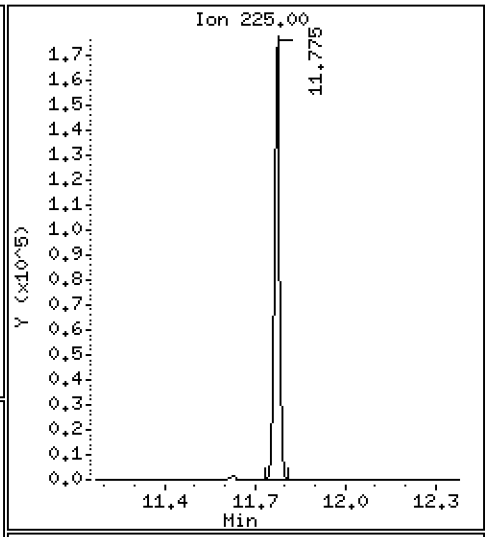
Concentration: 47.871 ug/Kg

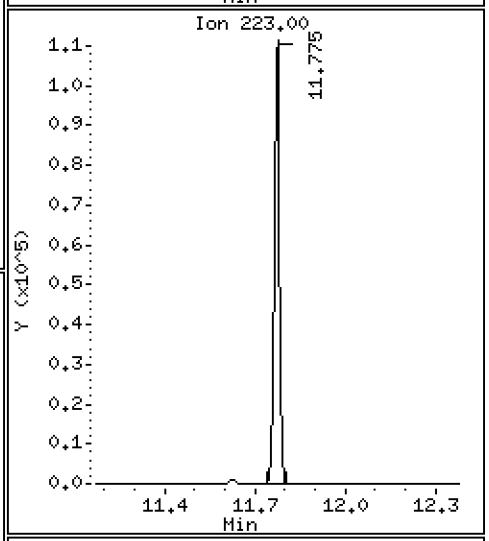


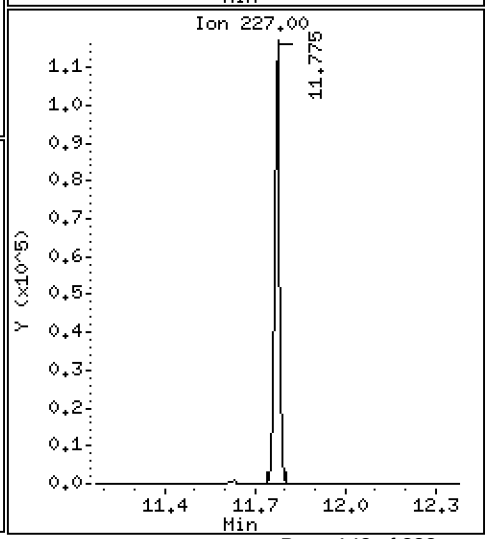












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

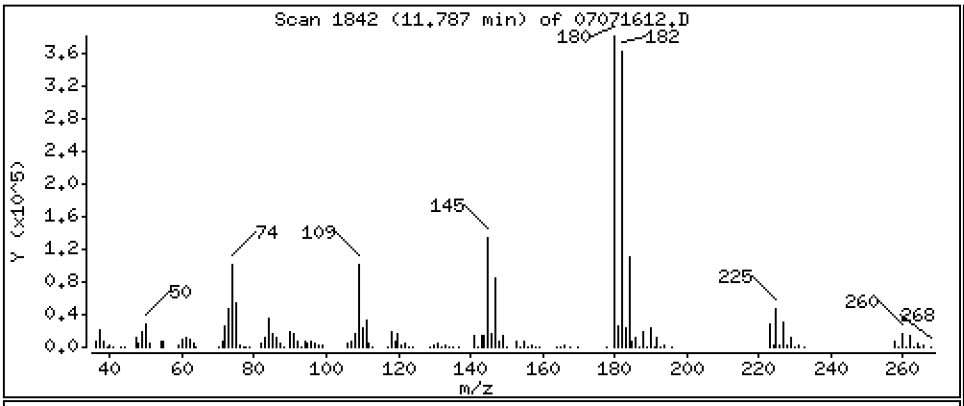
Operator: PB

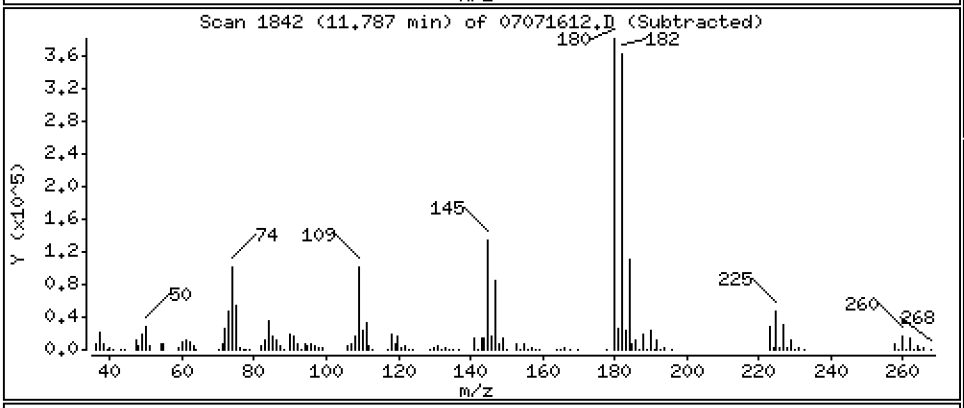
Column phase: RTXVMS

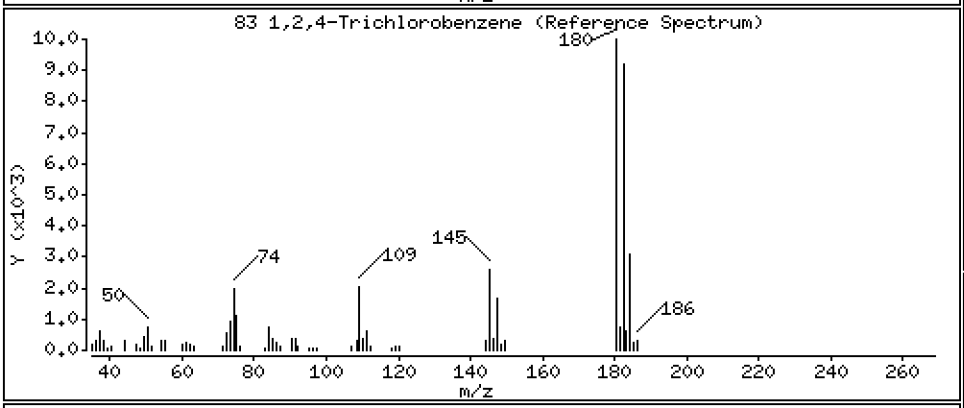
Column diameter: 0.18

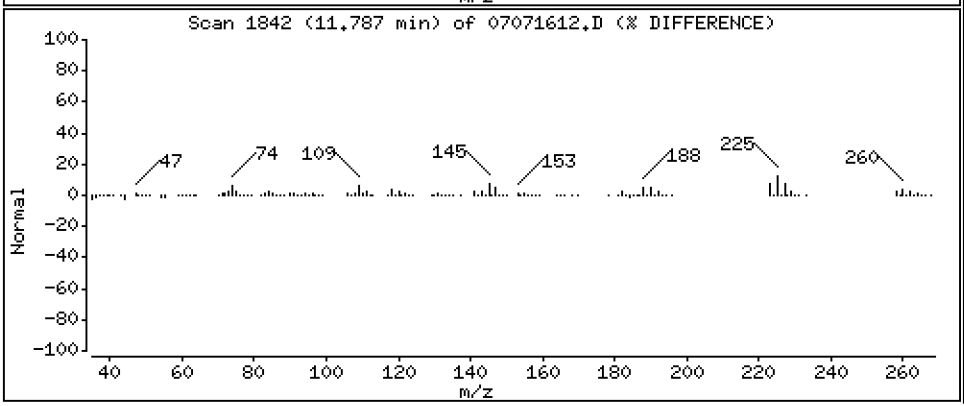
83 1,2,4-Trichlorobenzene

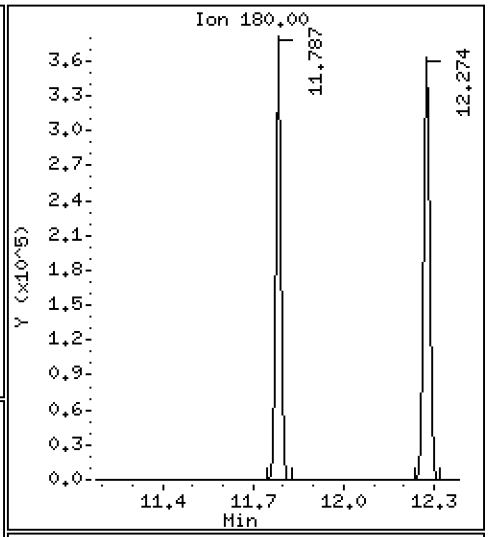
Concentration: 50.628 ug/Kg

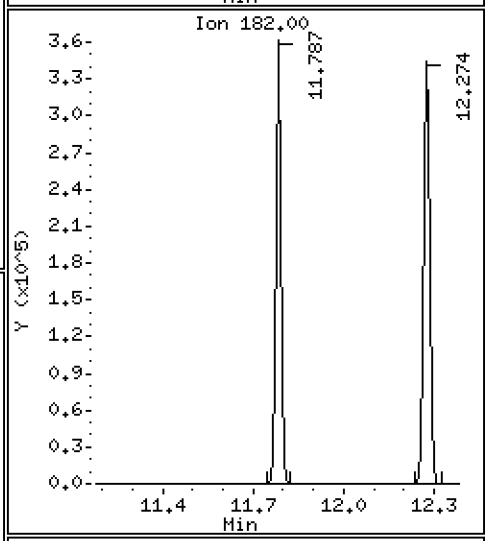


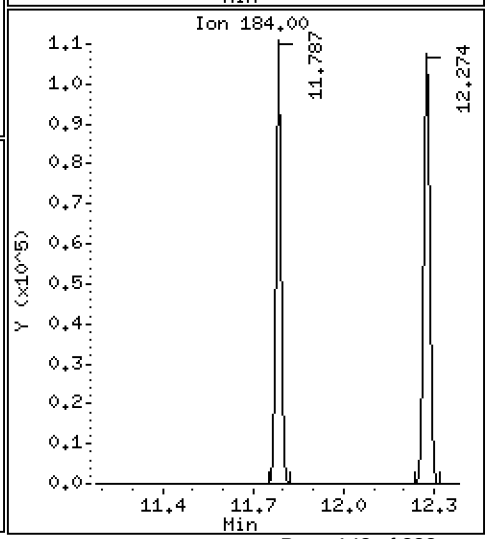












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

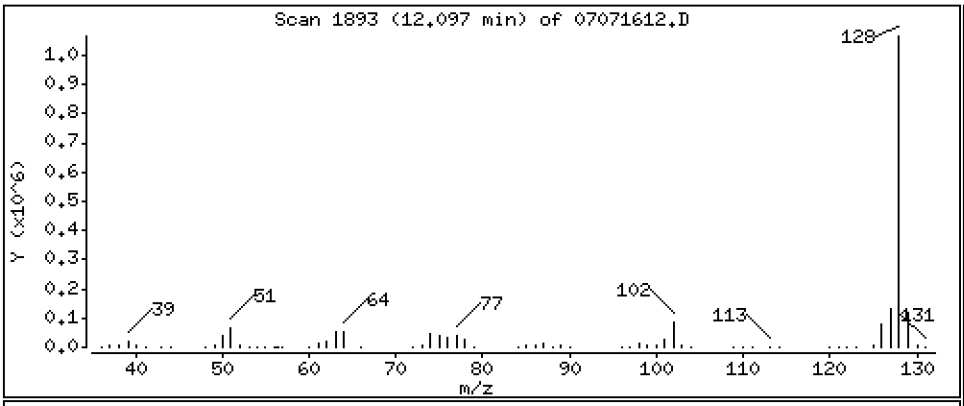
Operator: PB

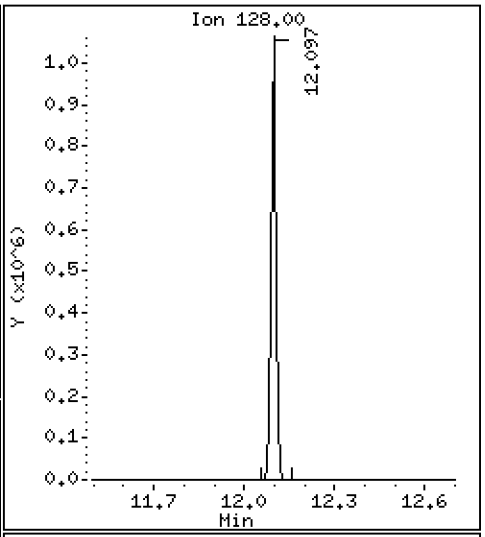
Column phase: RTXVMS

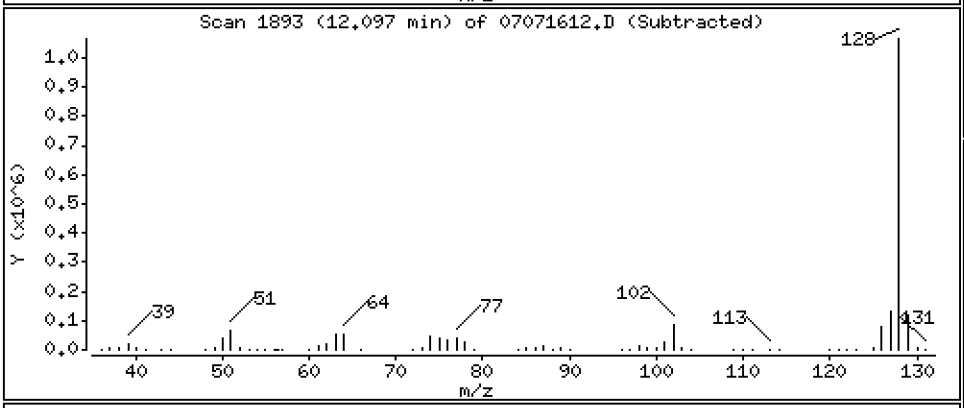
Column diameter: 0.18

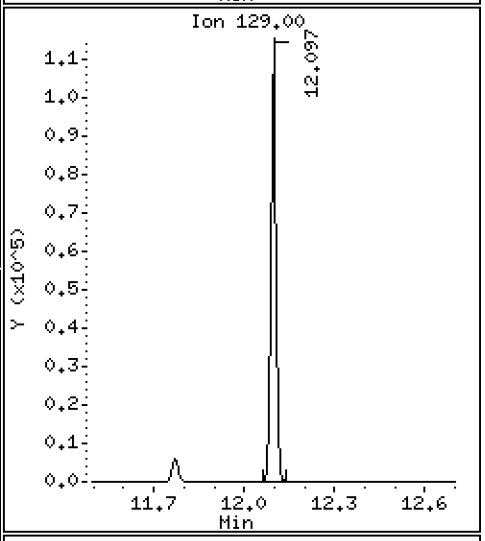
84 Naphthalene

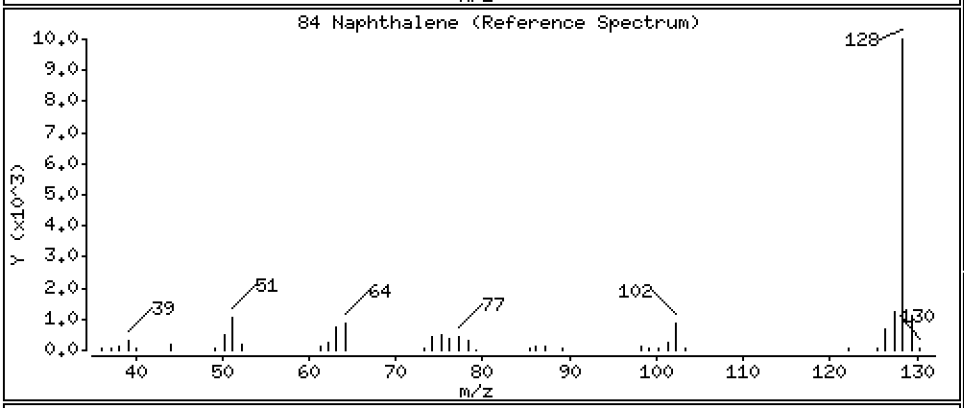
Concentration: 47.559 ug/Kg

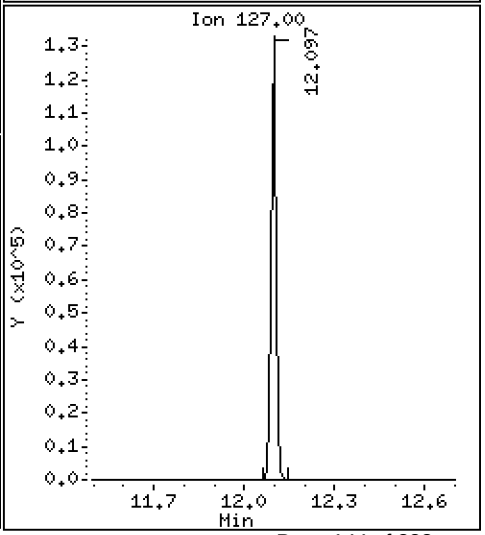


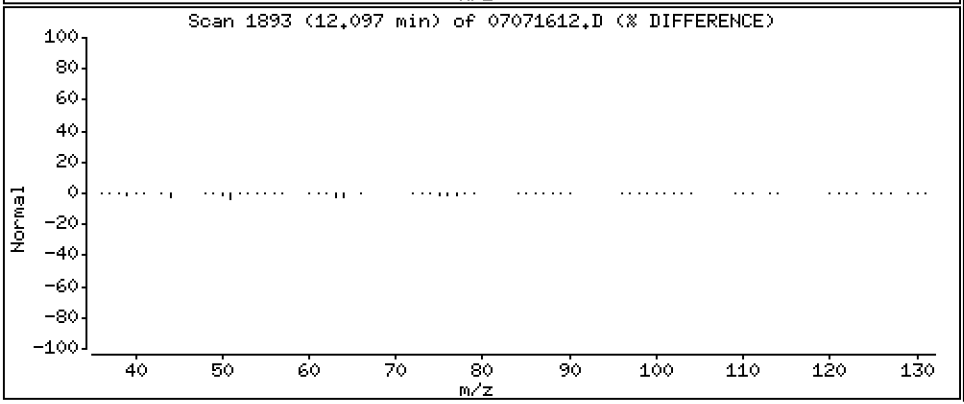












Data File: \\target\share\chem1\nt5.i\20160707.b\07071612.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

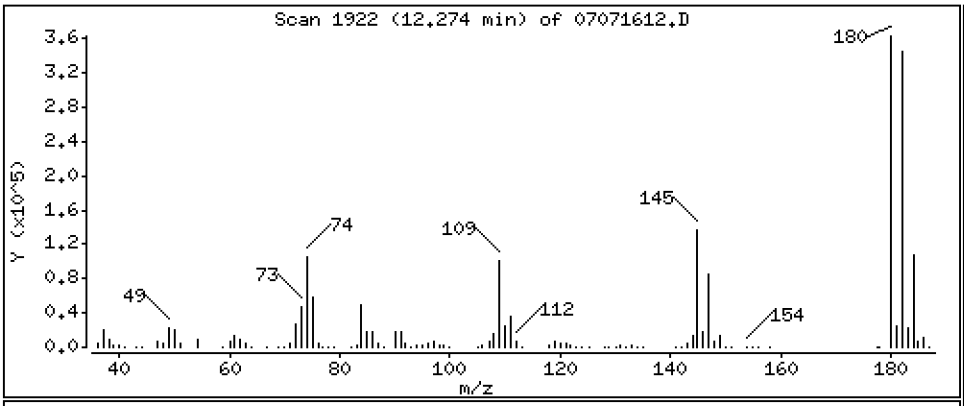
Operator: PB

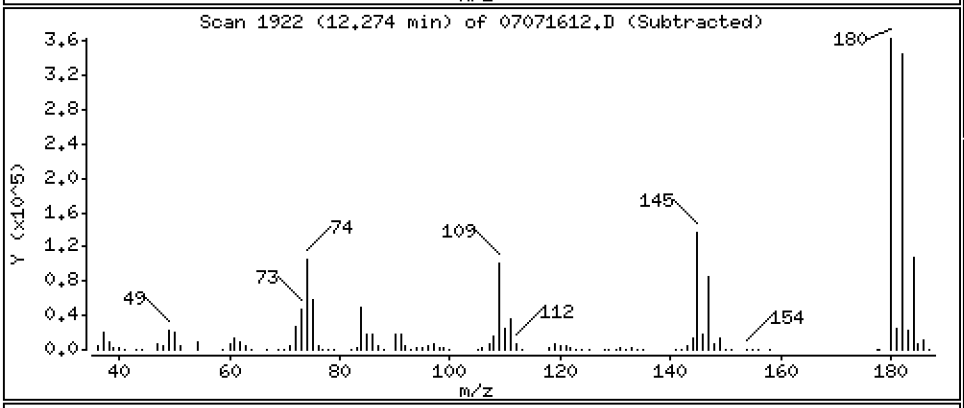
Column phase: RTXVMS

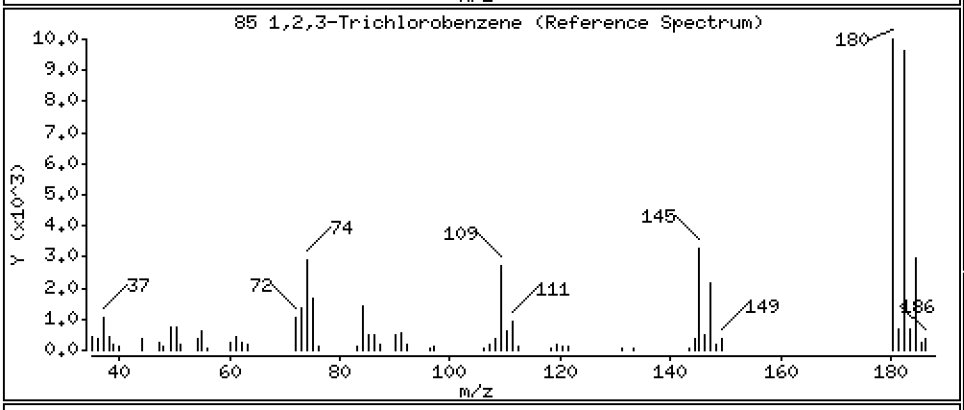
Column diameter: 0.18

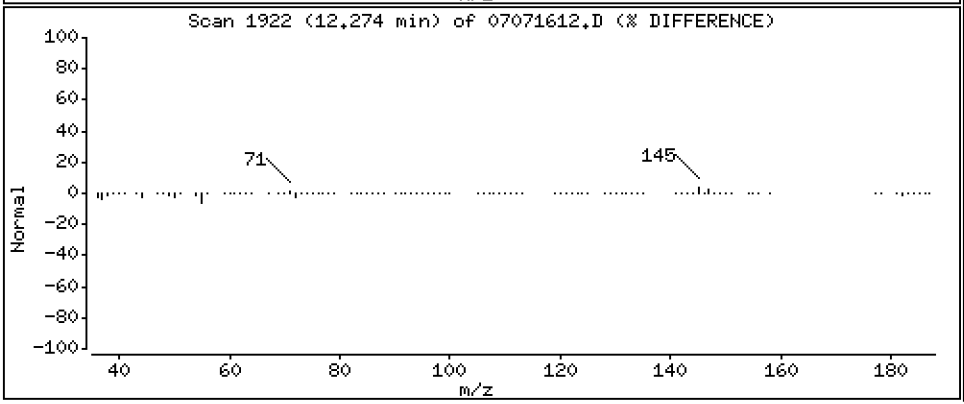
85 1,2,3-Trichlorobenzene

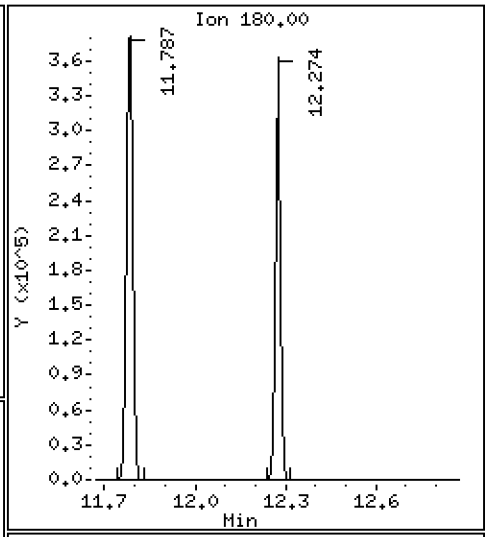
Concentration: 48.737 ug/Kg

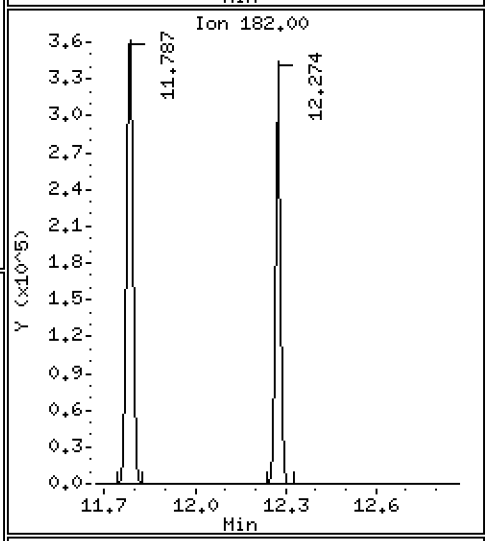


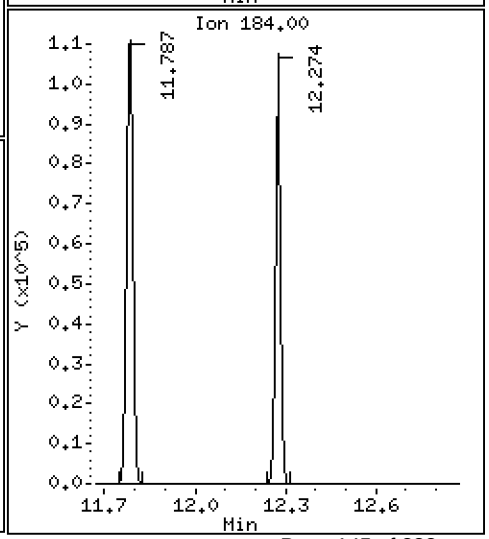












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071612.D
Lab Smp Id: BEG0041-BS1 Client Smp ID: LCS0707
Inj Date : 07-JUL-2016 16:23
Operator : PB Inst ID: nt5.i
Smp Info : LCS0707,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 13:44 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 13:37 Cal File: 07071610.D
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.165	1.165	(0.235)	476698	56.7607	56.761
2	Chloromethane	50	1.299	1.299	(0.262)	476317	47.6016	47.602
3	Vinyl Chloride	62	1.359	1.359	(0.274)	499966	51.6193	51.619
4	Bromomethane	94	1.597	1.597	(0.322)	245288	43.1440	43.144
5	Chloroethane	64	1.688	1.688	(0.340)	259171	48.2643	48.264
6	Trichlorofluoromethane	101	1.785	1.785	(0.360)	473363	71.8980	71.898
7	1,1-Dichloroethene	96	2.217	2.217	(0.447)	369756	48.2031	48.203
8	Carbon Disulfide	76	2.217	2.217	(0.447)	1186900	50.2379	50.238
9	112Trichloro122Trifluoroethane	101	2.260	2.260	(0.456)	359424	48.2112	48.211
10	Iodomethane	142	2.327	2.327	(0.469)	214703	57.6464	57.646
11	Bromoethane	108	2.442	2.442	(0.492)	212306	48.1067	48.107
12	Acrolein	56	2.540	2.546	(0.512)	312219	229.677	229.68
13	Methylene Chloride	84	2.753	2.759	(0.555)	366083	47.1422	47.142
14	Acetone	43	2.844	2.850	(0.573)	478696	201.022	201.02
15	Trans-1,2-Dichloroethene	96	2.905	2.911	(0.586)	403091	46.9893	46.989
16	Methyl tert butyl ether	73	3.075	3.081	(0.620)	1064265	44.5618	44.562
17	1,1-Dichloroethane	63	3.537	3.543	(0.713)	714093	45.4552	45.455
18	Acrylonitrile	53	3.623	3.629	(0.730)	119590	42.5123	42.512
19	Vinyl Acetate	43	3.848	3.854	(0.776)	760654	43.9395	43.939
20	Cis-1,2-Dichloroethene	96	4.067	4.073	(0.820)	446079	45.9350	45.935
22	2,2-Dichloropropane	77	4.158	4.158	(0.838)	648707	46.9855	46.985

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	4.249	4.255	(0.857)	203077	47.1309	47.131
	24 Chloroform	83	4.340	4.346	(0.875)	677055	45.4513	45.451
	25 Carbon Tetrachloride	117	4.419	4.426	(0.818)	582293	49.0404	49.040
$	27 Dibromofluoromethane	111	4.505	4.511	(0.908)	491605	49.5489	49.549
	26 1,1,1-Trichloroethane	97	4.493	4.499	(0.906)	634367	45.6073	45.607
	28 1,1-Dichloropropene	75	4.608	4.614	(0.853)	574268	47.4979	47.498
	29 2-Butanone	72	4.651	4.663	(0.937)	209284	217.174	217.17
	30 Benzene	78	4.833	4.839	(0.894)	1623811	46.8104	46.810
*	31 Pentafluorobenzene	168	4.961	4.967	(1.000)	569950	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.967	4.967	(1.001)	466309	47.3709	47.371
	33 1,2-Dichloroethane	62	5.022	5.028	(0.929)	475262	44.2854	44.285
	34 Trichloroethene	95	5.356	5.362	(0.991)	429323	46.9577	46.958
*	35 1,4-Difluorobenzene	114	5.405	5.411	(1.000)	1534591	50.0000	
	37 Dibromomethane	93	5.715	5.721	(1.057)	217787	45.7809	45.781
	38 1,2-Dichloropropane	63	5.807	5.813	(1.074)	389151	45.1184	45.118
	39 Bromodichloromethane	83	5.880	5.880	(1.088)	503742	46.7682	46.768
	172 2-Pentanone	86	6.172	6.178	(1.142)	279620	236.424	236.42
	40 2-Chloroethyl Vinyl Ether	63	6.397	6.397	(1.183)	178950	46.3717	46.372
	41 Cis 1,3-dichloropropene	75	6.415	6.421	(1.187)	643718	46.4143	46.414
$	42 d8-Toluene	98	6.567	6.573	(1.215)	1835143	49.8318	49.832
	43 Toluene	92	6.610	6.616	(1.223)	1040187	45.9779	45.978
	44 Tetrachloroethene	166	6.926	6.932	(0.878)	428045	49.2655	49.265
	45 4-Methyl-2-Pentanone	58	6.969	6.975	(1.289)	681547	216.419	216.42
	46 Trans 1,3-Dichloropropene	75	6.981	6.987	(1.291)	571858	47.1166	47.117
	47 1,1,2-Trichloroethane	97	7.115	7.114	(1.316)	319303	45.6054	45.605
	48 Chlorodibromomethane	129	7.254	7.254	(0.920)	387159	47.8178	47.818
	49 1,3-Dichloropropane	76	7.334	7.340	(0.930)	569181	46.7846	46.785
	50 1,2-Dibromoethane	107	7.437	7.437	(1.376)	328284	45.7835	45.784
	51 2-Hexanone	43	7.686	7.686	(0.975)	1171621	219.315	219.32
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1485852	50.0000	
	53 Chlorobenzene	112	7.899	7.905	(1.002)	1165480	47.9757	47.976
	54 Ethyl Benzene	91	7.942	7.942	(1.007)	1963936	48.3623	48.362
	55 1,1,1,2-Tetrachloroethane	131	7.966	7.966	(1.010)	405956	46.9440	46.944
	56 m,p-xylene	106	8.070	8.076	(1.023)	1555940	96.8624	96.862
	57 o-Xylene	106	8.441	8.441	(1.070)	746780	47.3569	47.357
	58 Styrene	104	8.489	8.489	(1.076)	1253154	48.1030	48.103
	59 Bromoform	173	8.495	8.495	(0.852)	230371	47.1887	47.189
	60 Isopropyl Benzene	105	8.727	8.727	(0.875)	1977558	49.3246	49.325
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	752088	49.3595	49.360
	63 Bromobenzene	156	9.043	9.049	(0.907)	454297	48.2461	48.246
	64 N-Propyl Benzene	91	9.098	9.098	(0.912)	2297926	49.2285	49.228
	65 1,1,2,2-Tetrachloroethane	83	9.171	9.171	(0.919)	409804	45.8544	45.854
	66 2-Chloro Toluene	91	9.219	9.219	(0.924)	1331847	48.7022	48.702
	67 1,3,5-Trimethyl Benzene	105	9.280	9.286	(0.930)	1655493	49.4852	49.485
	68 1,2,3-Trichloropropane	110	9.274	9.280	(0.930)	129748	46.0249	46.025
	69 Trans-1,4-Dichloro 2-Butene	53	9.323	9.329	(0.935)	109191	47.8668	47.867
	70 4-Chloro Toluene	91	9.372	9.372	(0.940)	1403049	49.3584	49.358
	71 T-Butyl Benzene	119	9.560	9.560	(0.959)	1477975	48.1823	48.182
	72 1,2,4-Trimethylbenzene	105	9.627	9.633	(0.965)	1633618	48.8046	48.805
	73 S-Butyl Benzene	105	9.724	9.724	(0.975)	2159364	49.1176	49.118
	74 4-Isopropyl Toluene	119	9.864	9.870	(0.989)	1902651	50.4275	50.427
	75 1,3-Dichlorobenzene	146	9.901	9.907	(0.993)	929106	49.3729	49.373
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	740406	50.0000	
	77 1,4-Dichlorobenzene	146	9.986	9.992	(1.001)	921008	48.9748	48.975

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	10.254	10.254	(1.028)	1679114	50.8924	50.892
$	79 d4-1,2-Dichlorobenzene	152	10.363	10.369	(1.039)	713774	49.7417	49.742
	80 1,2-Dichlorobenzene	146	10.375	10.375	(1.040)	839286	47.8395	47.839
	81 1,2-Dibromo 3-Chloropropane	75	11.130	11.136	(1.116)	75994	44.9968	44.997
	82 Hexachloro 1,3-Butadiene	225	11.775	11.775	(1.181)	242403	47.8709	47.871
	83 1,2,4-Trichlorobenzene	180	11.787	11.781	(1.182)	545111	50.6279	50.628
	84 Naphthalene	128	12.097	12.097	(1.213)	1459079	47.5585	47.559
	85 1,2,3-Trichlorobenzene	180	12.273	12.273	(1.231)	488040	48.7373	48.737

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071612.D
Lab Smp Id: BEG0041-BS1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: LCS0707
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	569950	1.41
35 1,4-Difluorobenze	1551589	775795	3103178	1534591	-1.10
52 d5-Chlorobenzene	1542777	771389	3085554	1485852	-3.69
76 d4-1,4-Dichlorobe	775053	387527	1550106	740406	-4.47

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.96	-0.12
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	-0.11
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEG0041-BS1 Client Smp ID: LCS0707
Level: LOW Operator: PB
Data Type: MS DATA SampleType: LCS
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	56.761	113.52	67-142
2	Chloromethane	50.000	47.602	95.20	65-129
3	Vinyl Chloride	50.000	51.619	103.24	74-134
4	Bromomethane	50.000	43.144	86.29	40-172
5	Chloroethane	50.000	48.264	96.53	53-154
6	Trichlorofluoromet	50.000	71.898	143.80	57-161
12	Acrolein	250.00	229.68	91.87	60-130
9	112Trichloro122Tri	50.000	48.211	96.42	72-142
14	Acetone	250.00	201.02	80.41	48-132
7	1,1-Dichloroethene	50.000	48.203	96.41	73-138
11	Bromoethane	50.000	48.107	96.21	74-132
10	Iodomethane	50.000	57.646	115.29	34-181
13	Methylene Chloride	50.000	47.142	94.28	61-128
8	Carbon Disulfide	50.000	50.238	100.48	72-146
18	Acrylonitrile	50.000	42.512	85.02	59-124
15	Trans-1,2-Dichloro	50.000	46.989	93.98	73-131
19	Vinyl Acetate	50.000	43.939	87.88	54-138
17	1,1-Dichloroethane	50.000	45.455	90.91	65-139
29	2-Butanone	250.00	217.17	86.87	64-120
22	2,2-Dichloropropan	50.000	46.985	93.97	77-137
20	Cis-1,2-Dichloroet	50.000	45.935	91.87	74-124
24	Chloroform	50.000	45.451	90.90	75-126
23	Bromochloromethane	50.000	47.131	94.26	69-133
26	1,1,1-Trichloroeth	50.000	45.607	91.21	78-133
28	1,1-Dichloropropen	50.000	47.498	95.00	80-123
25	Carbon Tetrachlori	50.000	49.040	98.08	76-136
33	1,2-Dichloroethane	50.000	44.285	88.57	77-120
30	Benzene	50.000	46.810	93.62	80-120
34	Trichloroethene	50.000	46.958	93.92	80-120
38	1,2-Dichloropropan	50.000	45.118	90.24	74-120
39	Bromodichlorometha	50.000	46.768	93.54	80-122
172	2-Pentanone	250.00	236.42	94.57	70-130
37	Dibromomethane	50.000	45.781	91.56	80-120
40	2-Chloroethyl Viny	50.000	46.372	92.74	20-157
45	4-Methyl-2-Pentano	250.00	216.42	86.57	70-124
41	Cis 1,3-dichloropr	50.000	46.414	92.83	80-124
43	Toluene	50.000	45.978	91.96	78-120
46	Trans 1,3-Dichloro	50.000	47.117	94.23	80-126
51	2-Hexanone	250.00	219.32	87.73	62-128
47	1,1,2-Trichloroeth	50.000	45.605	91.21	77-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
49 1,3-Dichloropropan	50.000	46.785	93.57	77-120
44 Tetrachloroethene	50.000	49.265	98.53	76-131
48 Chlorodibromometha	50.000	47.818	95.64	77-123
50 1,2-Dibromoethane	50.000	45.784	91.57	79-120
53 Chlorobenzene	50.000	47.976	95.95	80-120
55 1,1,1,2-Tetrachlor	50.000	46.944	93.89	80-120
54 Ethyl Benzene	50.000	48.362	96.72	80-120
56 m,p-xylene	100.00	96.862	96.86	80-123
57 o-Xylene	50.000	47.357	94.71	80-120
58 Styrene	50.000	48.103	96.21	80-122
60 Isopropyl Benzene	50.000	49.325	98.65	77-127
59 Bromoform	50.000	47.189	94.38	63-120
65 1,1,2,2-Tetrachlor	50.000	45.854	91.71	71-120
68 1,2,3-Trichloropro	50.000	46.025	92.05	75-120
69 Trans-1,4-Dichloro	50.000	47.867	95.73	62-127
64 N-Propyl Benzene	50.000	49.228	98.46	76-126
63 Bromobenzene	50.000	48.246	96.49	75-120
67 1,3,5-Trimethyl Be	50.000	49.485	98.97	77-126
66 2-Chloro Toluene	50.000	48.702	97.40	76-120
70 4-Chloro Toluene	50.000	49.358	98.72	75-121
71 T-Butyl Benzene	50.000	48.182	96.36	77-125
72 1,2,4-Trimethylben	50.000	48.805	97.61	77-125
73 S-Butyl Benzene	50.000	49.118	98.24	77-127
74 4-Isopropyl Toluen	50.000	50.427	100.85	78-131
75 1,3-Dichlorobenzen	50.000	49.373	98.75	76-120
77 1,4-Dichlorobenzen	50.000	48.975	97.95	75-120
78 N-Butyl Benzene	50.000	50.892	101.78	75-134
80 1,2-Dichlorobenzen	50.000	47.839	95.68	77-120
81 1,2-Dibromo 3-Chlo	50.000	44.997	89.99	61-128
83 1,2,4-Trichloroben	50.000	50.628	101.26	75-130
82 Hexachloro 1,3-But	50.000	47.871	95.74	72-135
84 Naphthalene	50.000	47.559	95.12	71-122
85 1,2,3-Trichloroben	50.000	48.737	97.47	76-122

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	49.549	99.10	70-130
$ 32 d4-1,2-Dichloroeth	50.000	47.371	94.74	80-149
$ 42 d8-Toluene	50.000	49.832	99.66	77-120
$ 62 4-Bromofluorobenze	50.000	49.360	98.72	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.742	99.48	80-120

REVIEW SUMMARY FOR FILE - 07071612.D

Lab ID: BEG0041-BS1
nt5.i, 20160707.b\VO051314S.m,   07-JUL-2016 16:23

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

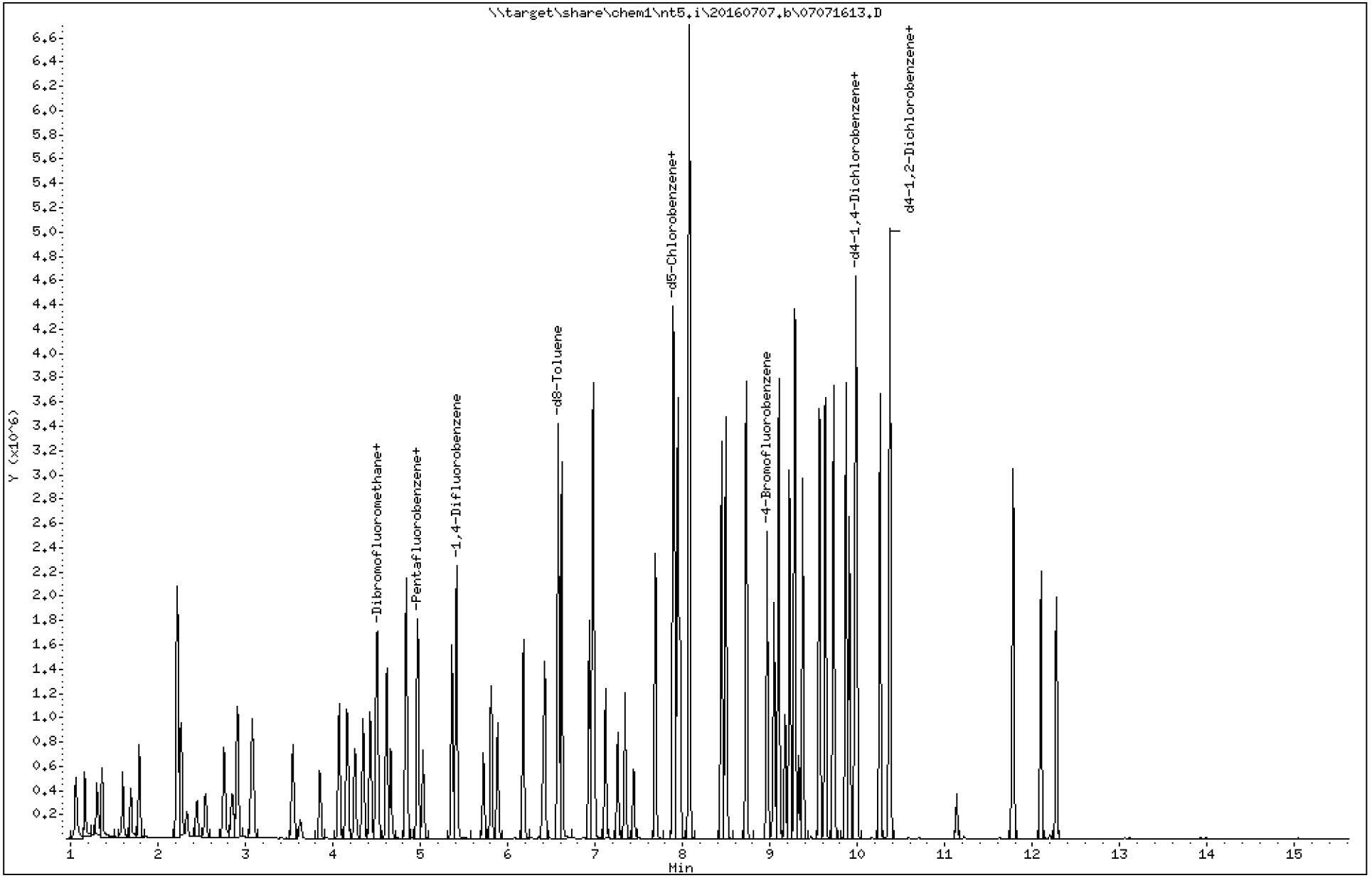
Instrument: nt5.i

Sample Info: LCS0707,5,5,0

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

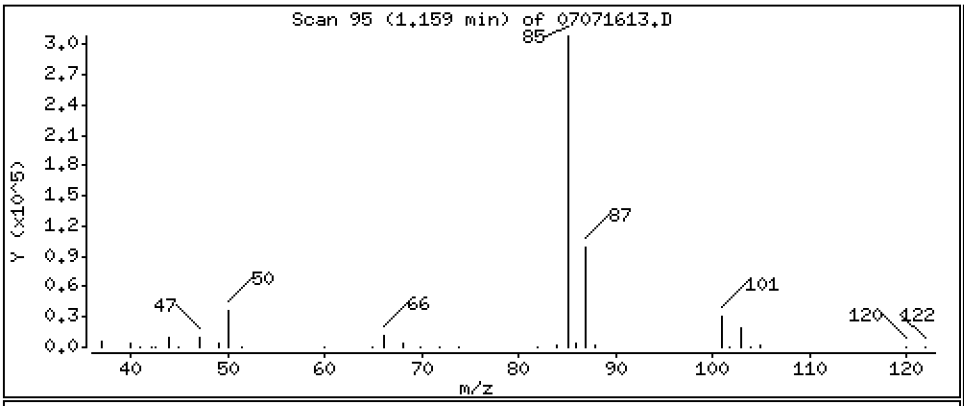
Operator: PB

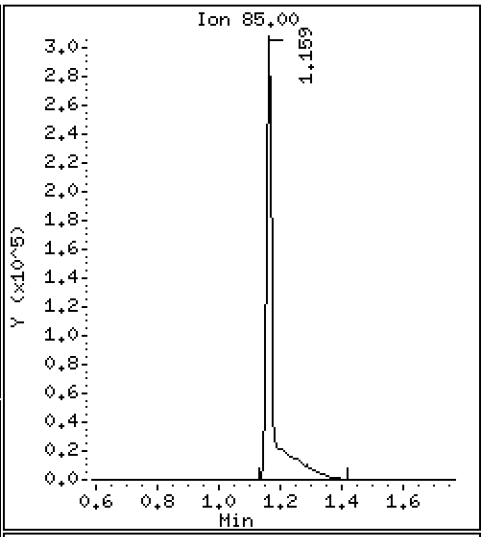
Column phase: RTXVMS

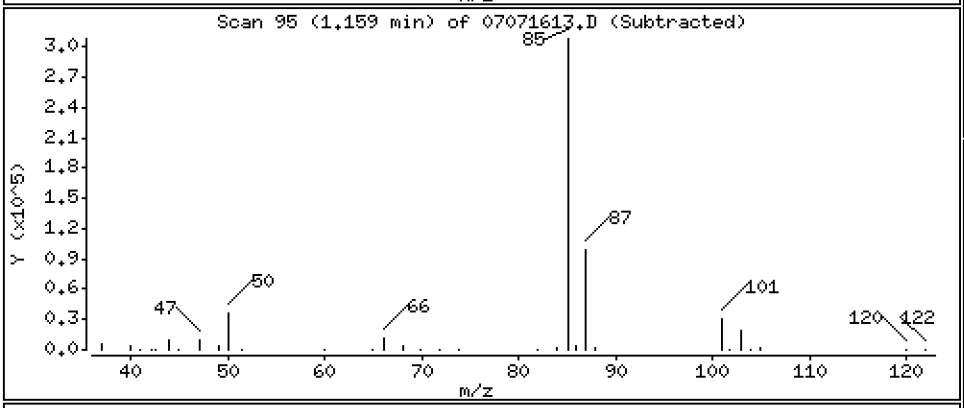
Column diameter: 0.18

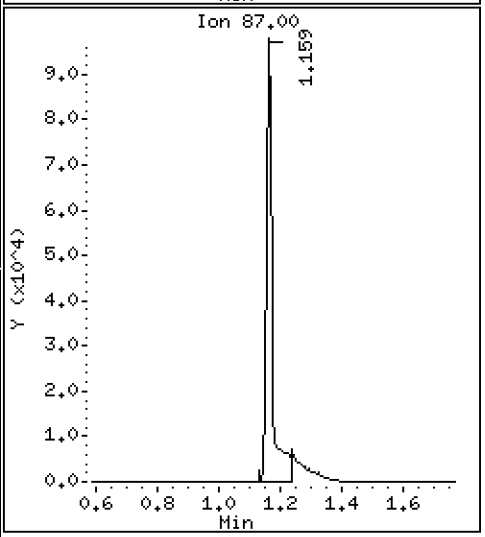
1 Dichlorodifluoromethane

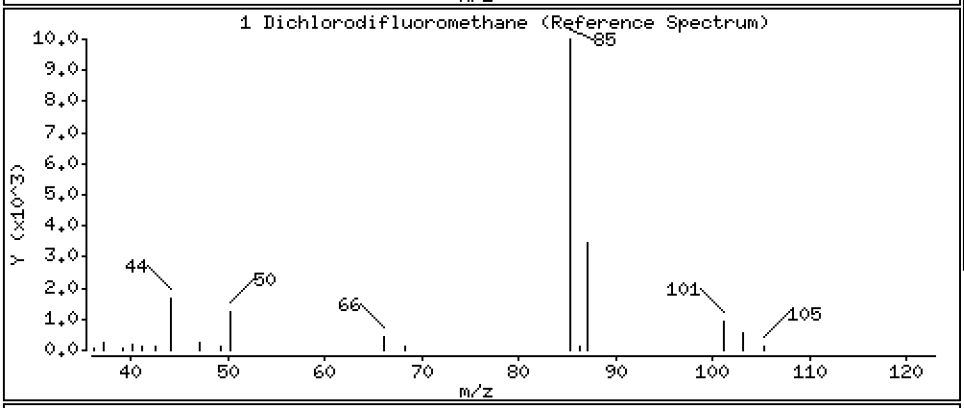
Concentration: 57.557 ug/Kg

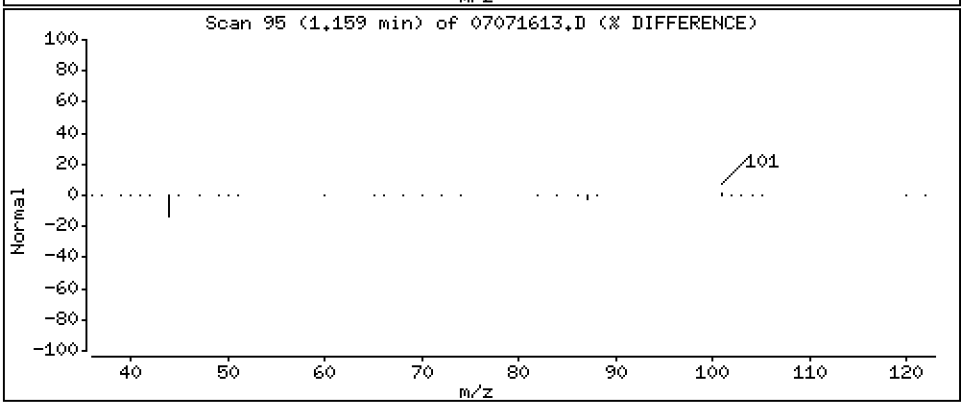












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

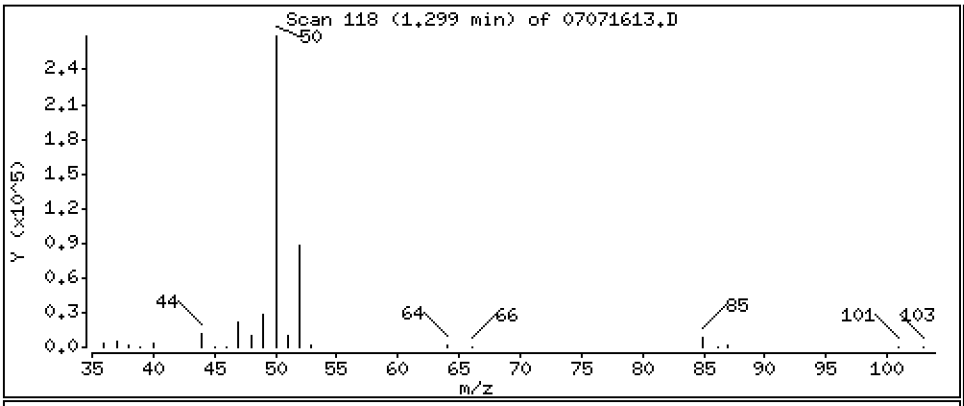
Operator: PB

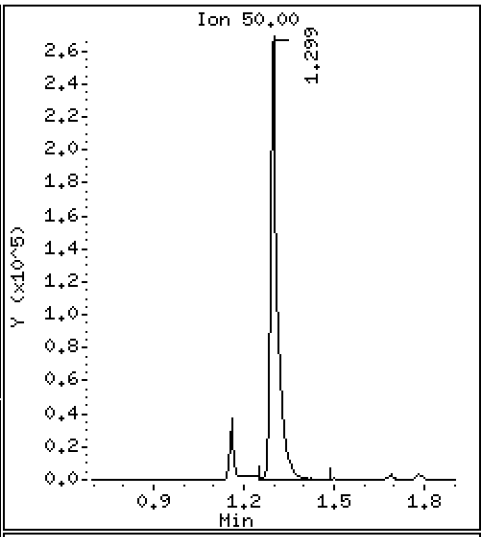
Column phase: RTXVMS

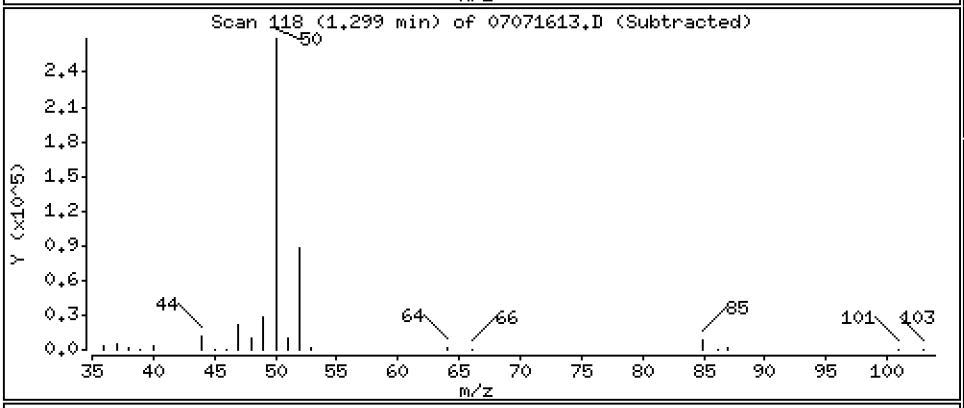
Column diameter: 0.18

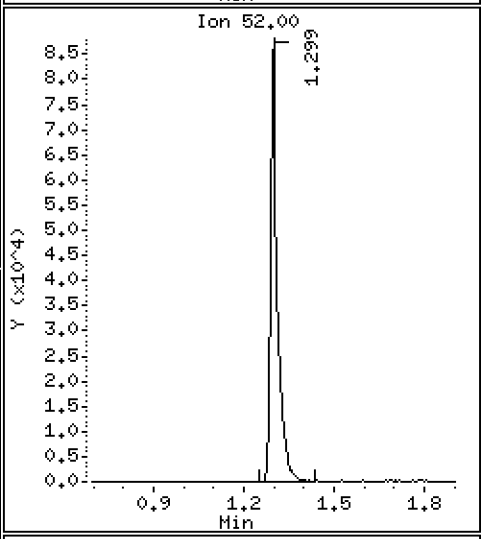
2 Chloromethane

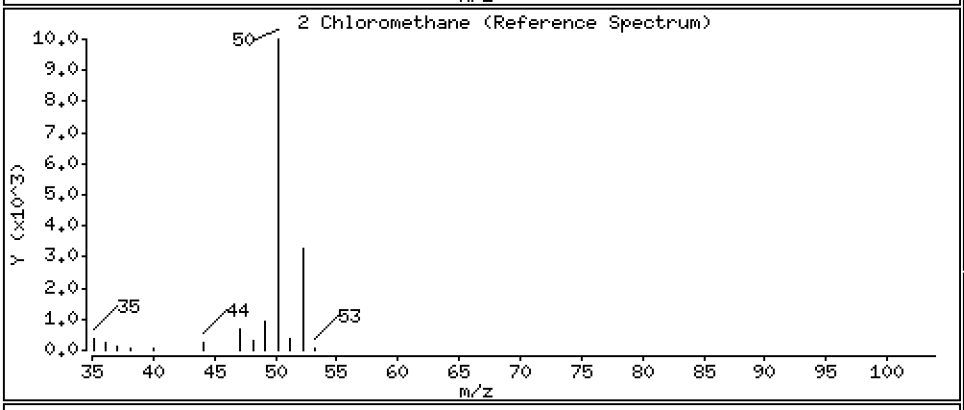
Concentration: 47.336 ug/Kg

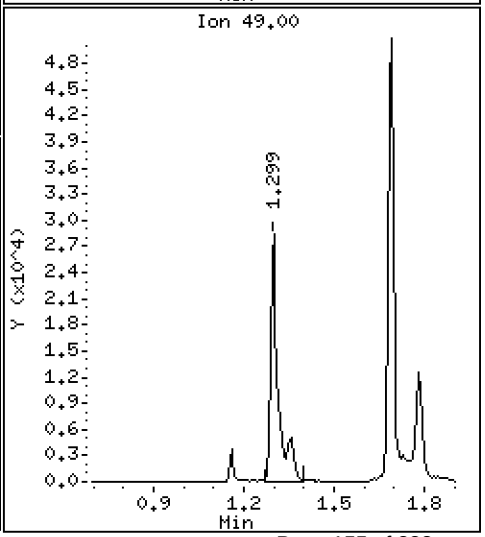


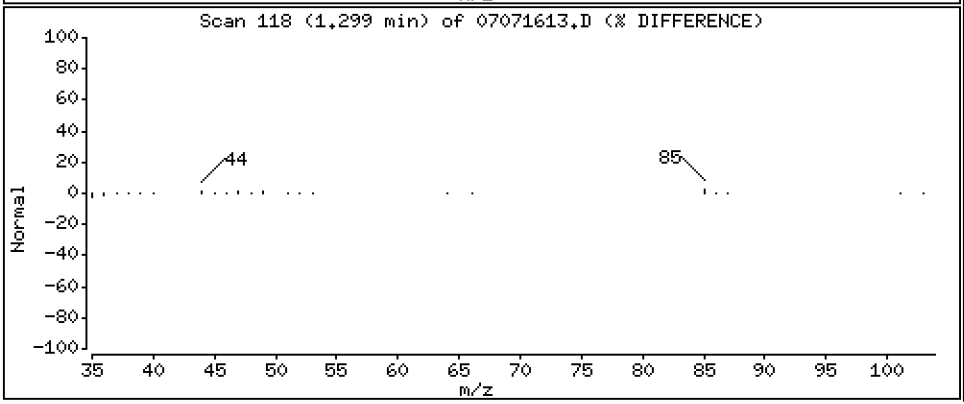












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

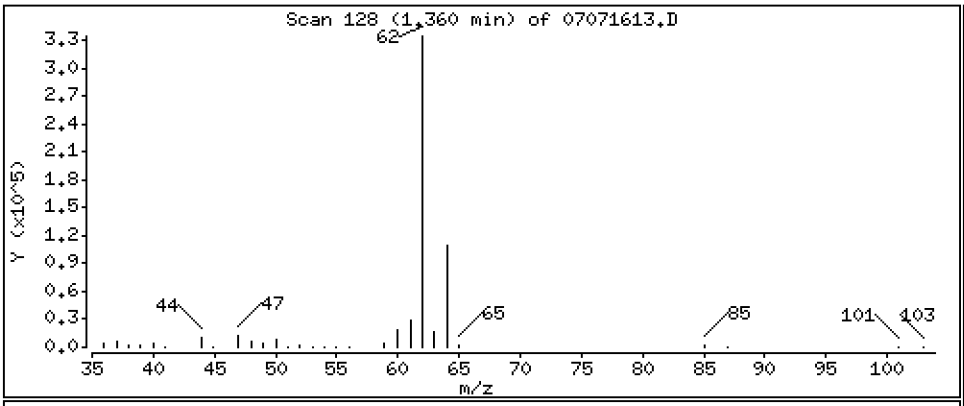
Operator: PB

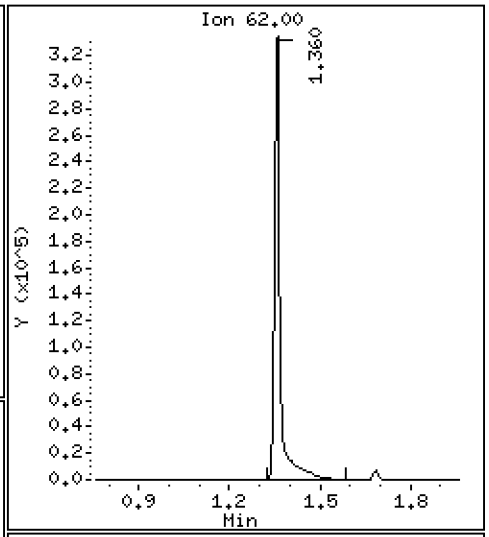
Column phase: RTXVMS

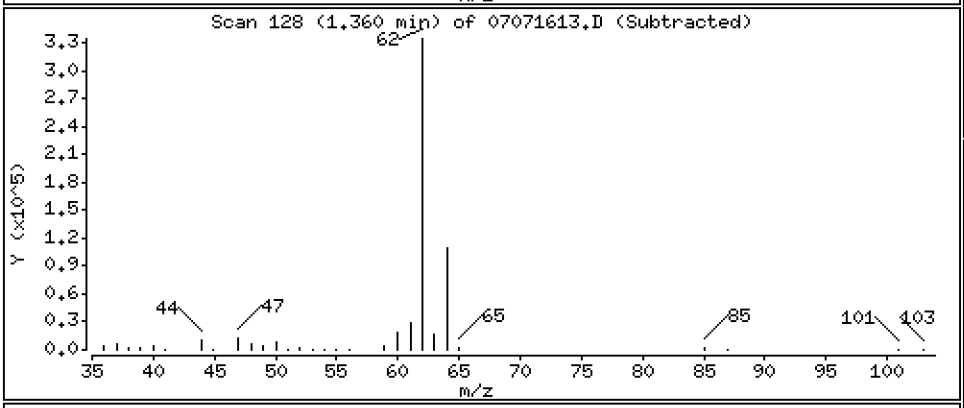
Column diameter: 0.18

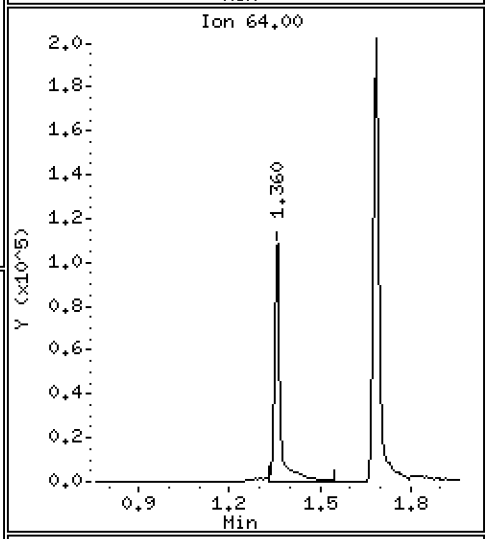
3 Vinyl Chloride

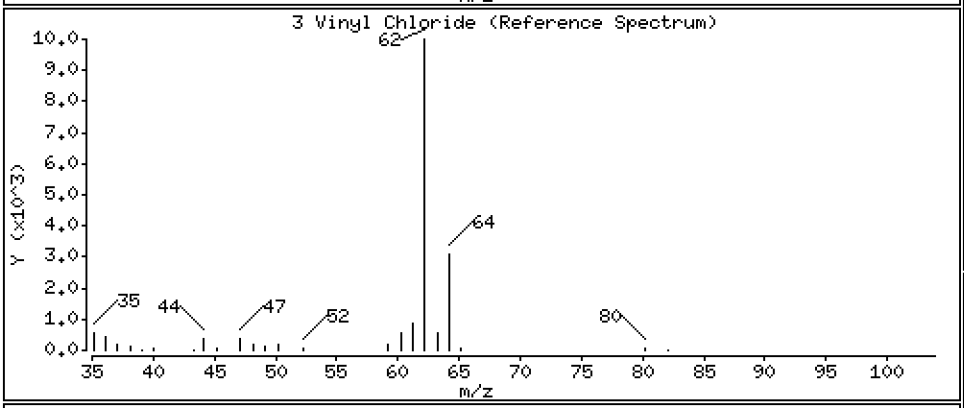
Concentration: 52.284 ug/Kg

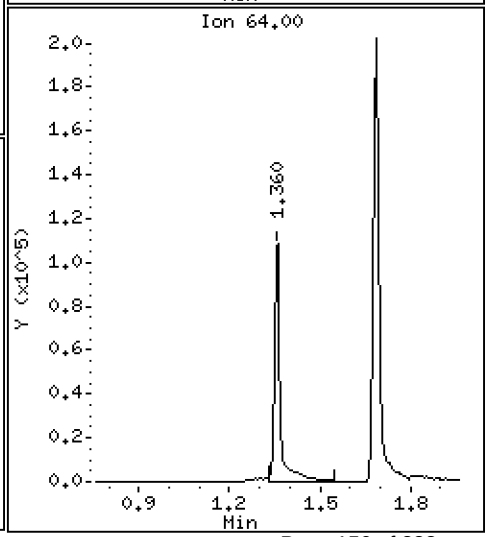


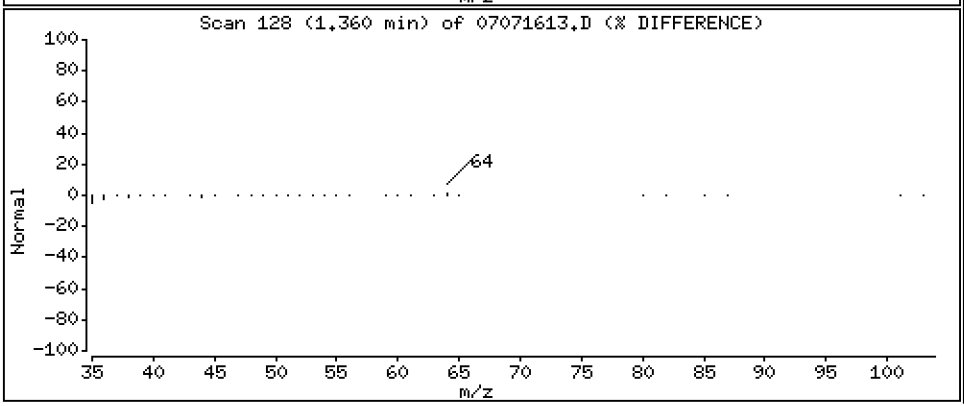












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

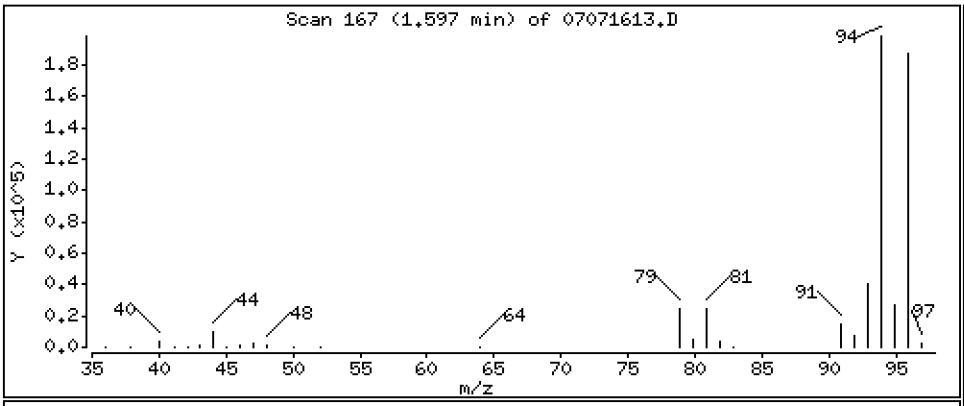
Operator: PB

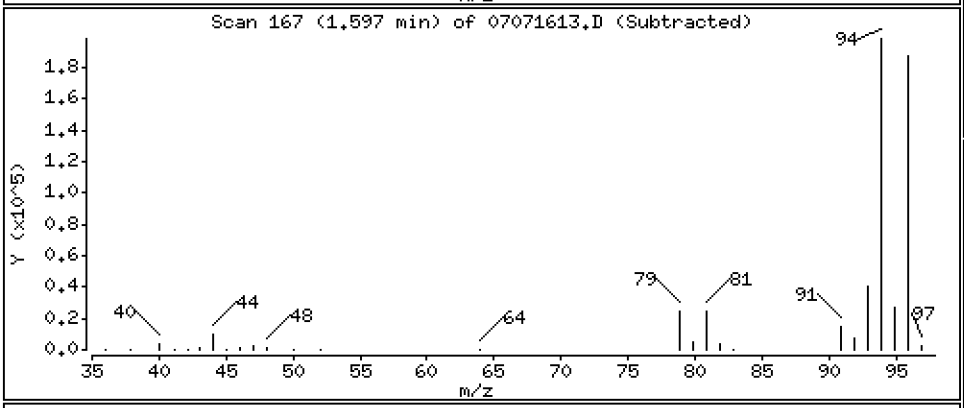
Column phase: RTXVMS

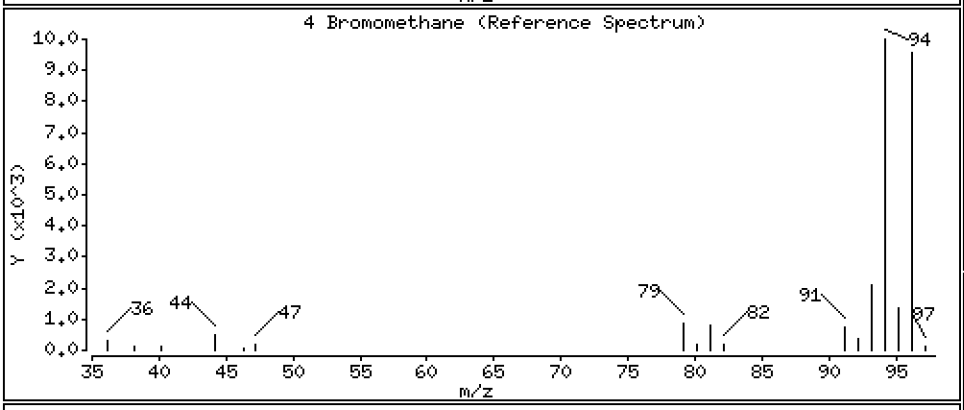
Column diameter: 0.18

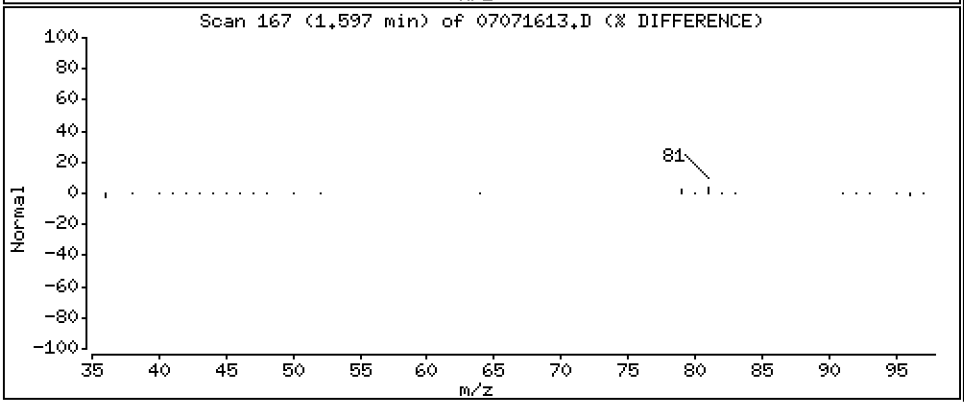
4 Bromomethane

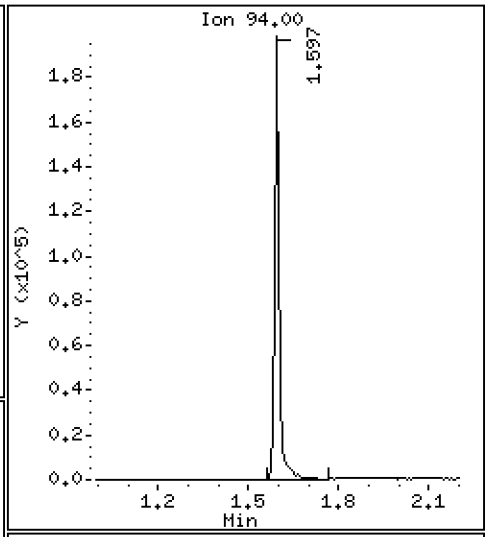
Concentration: 44.784 ug/Kg

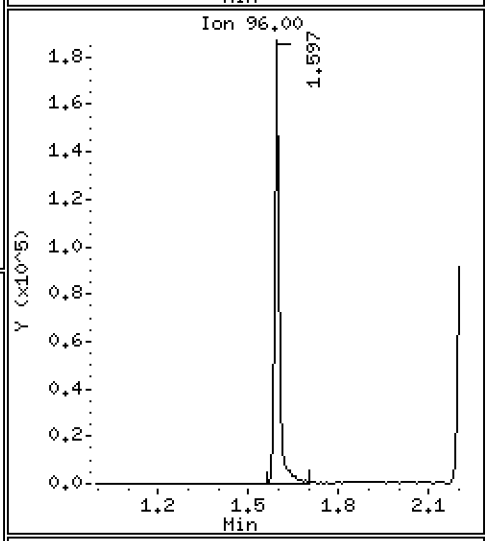


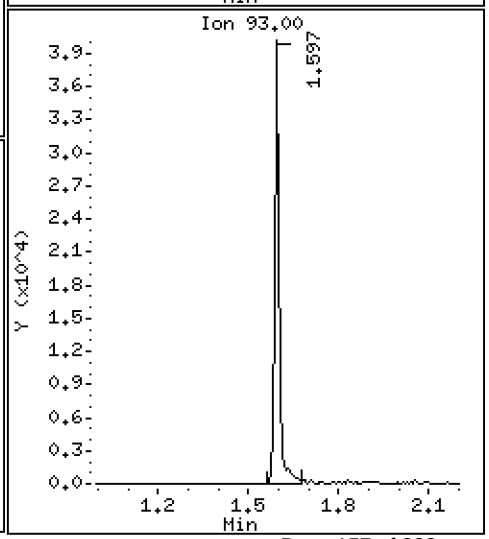












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

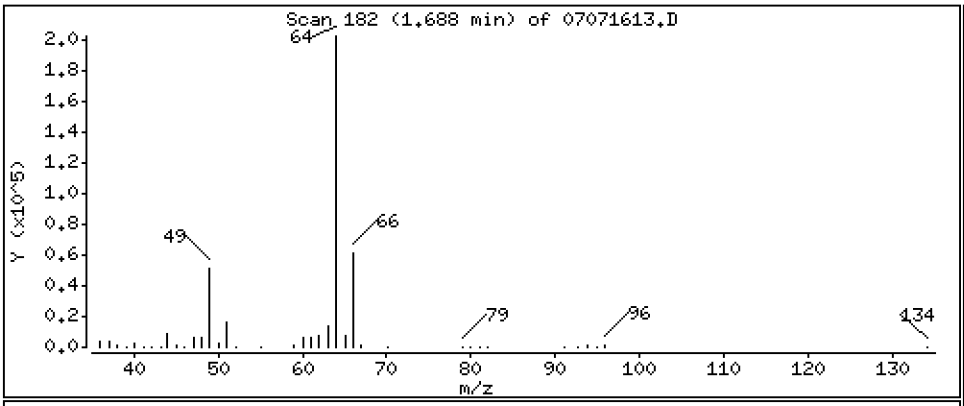
Operator: PB

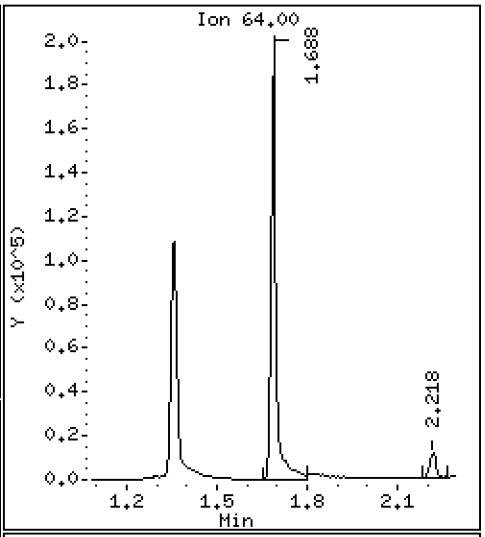
Column phase: RTXVMS

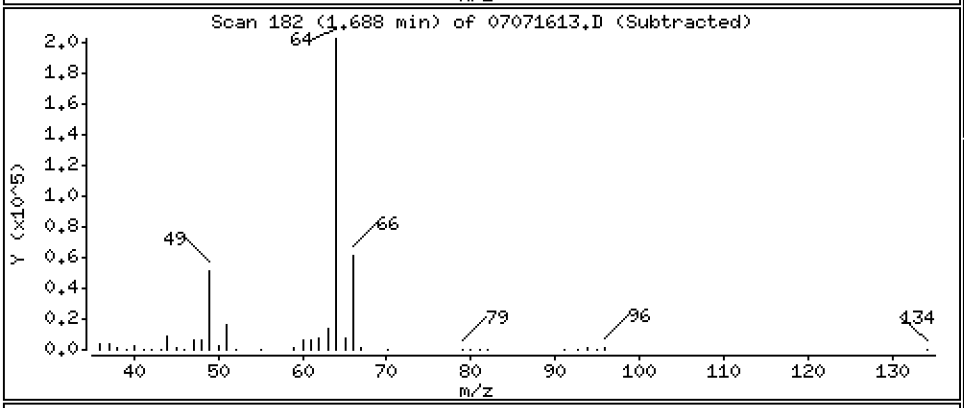
Column diameter: 0.18

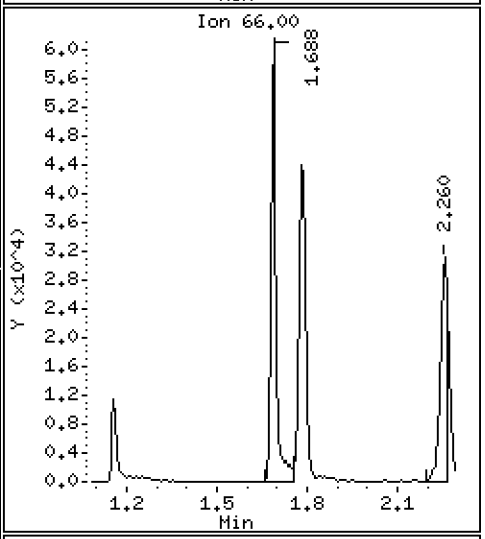
5 Chloroethane

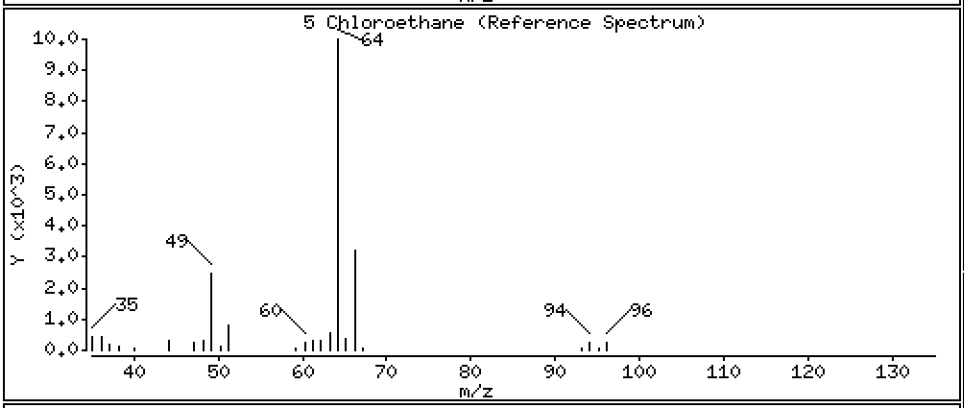
Concentration: 49.784 ug/Kg

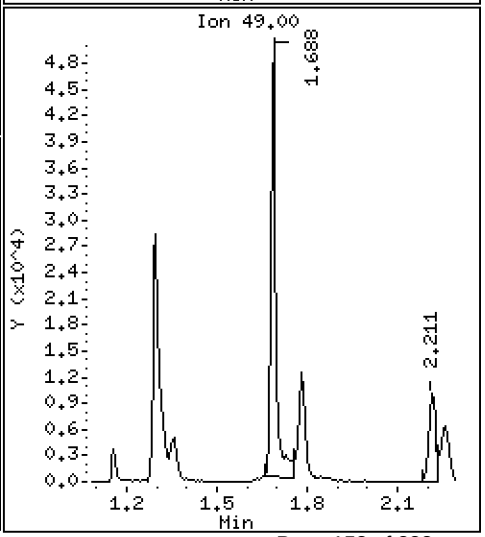


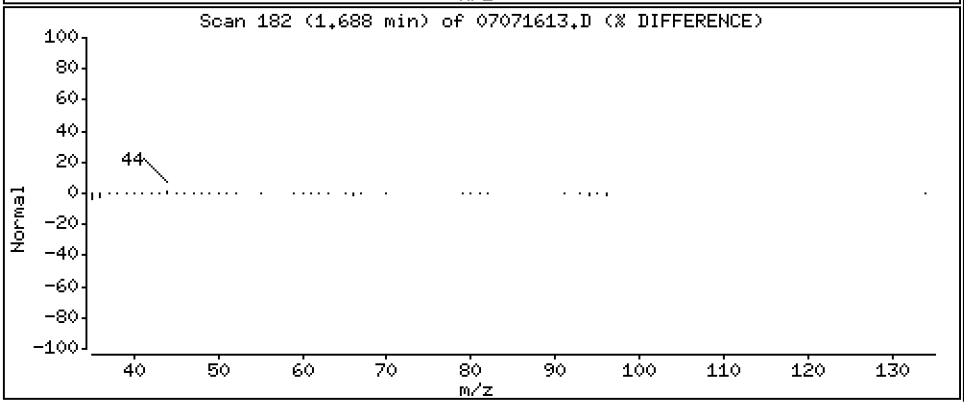












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

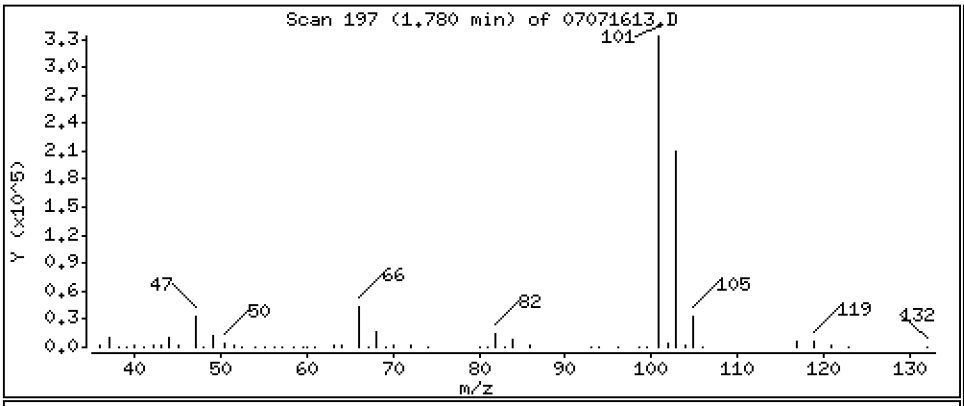
Operator: PB

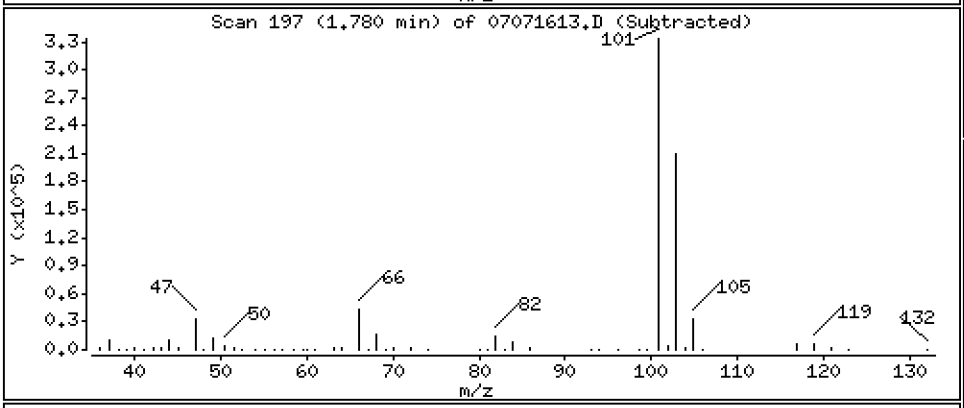
Column phase: RTXVMS

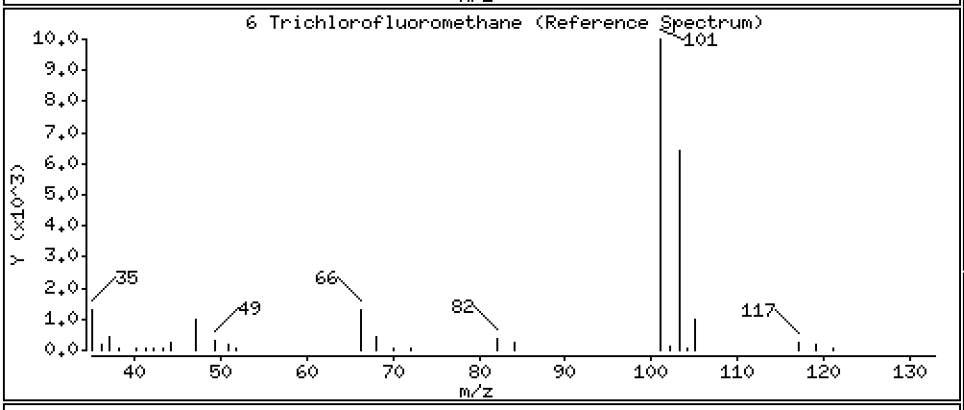
Column diameter: 0.18

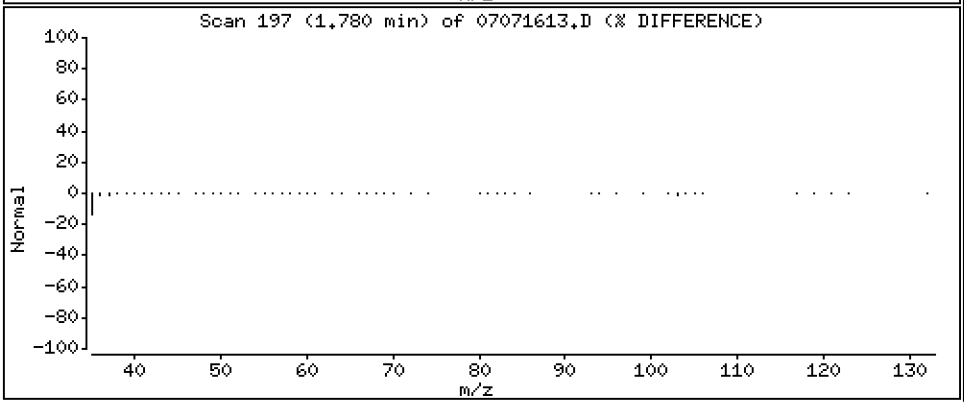
6 Trichlorofluoromethane

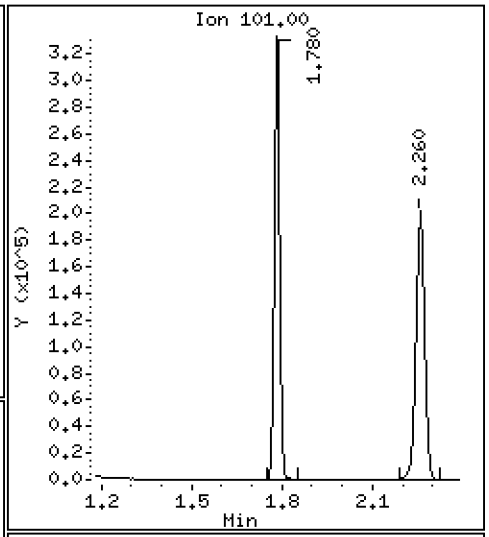
Concentration: 73.552 ug/Kg

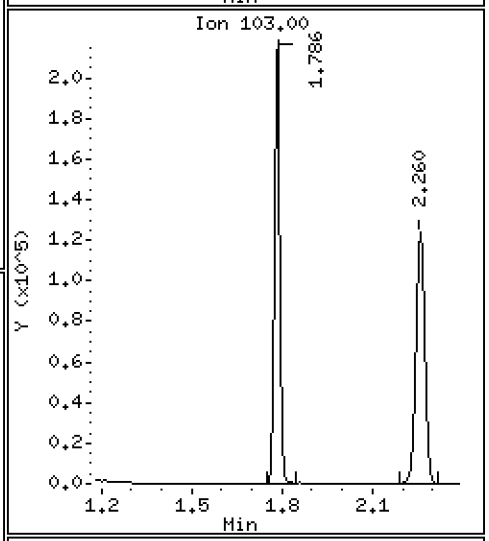


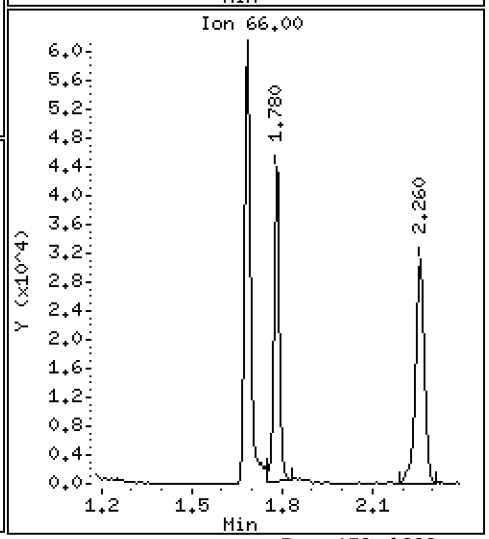












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

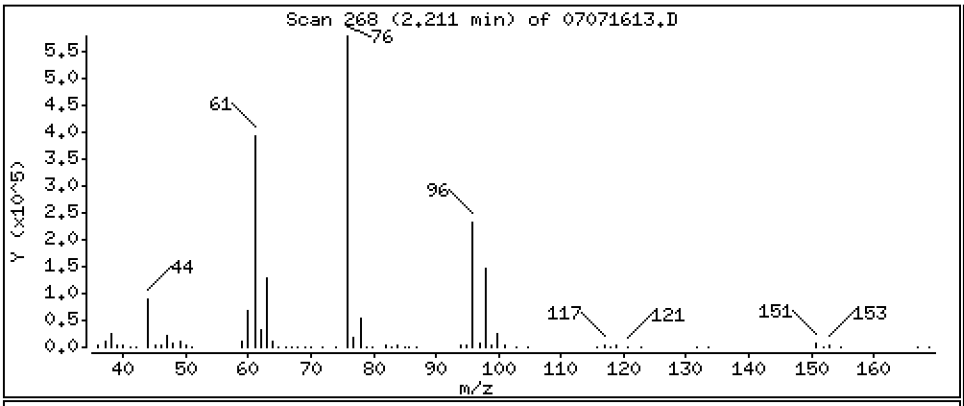
Operator: PB

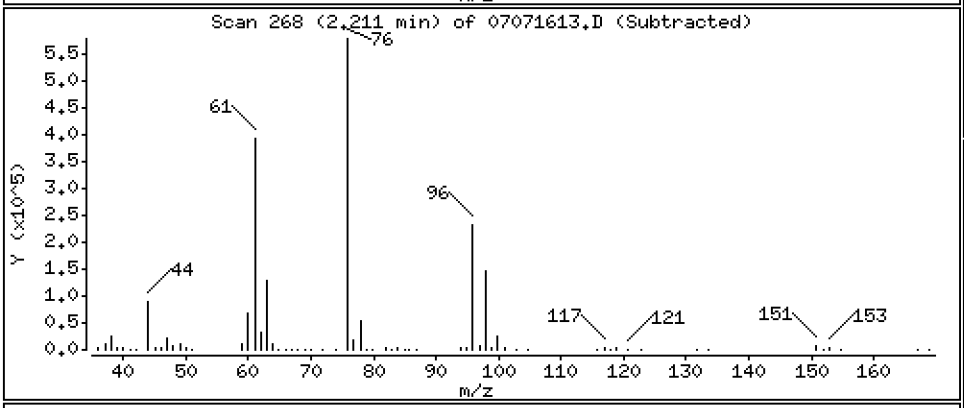
Column phase: RTXVMS

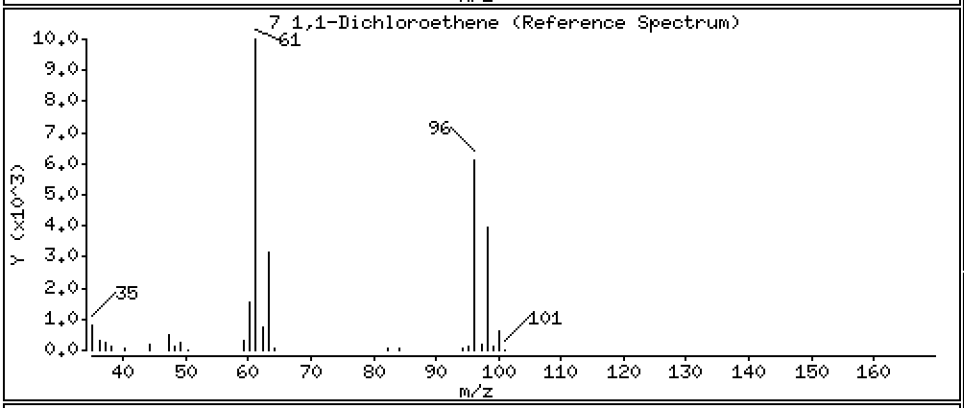
Column diameter: 0.18

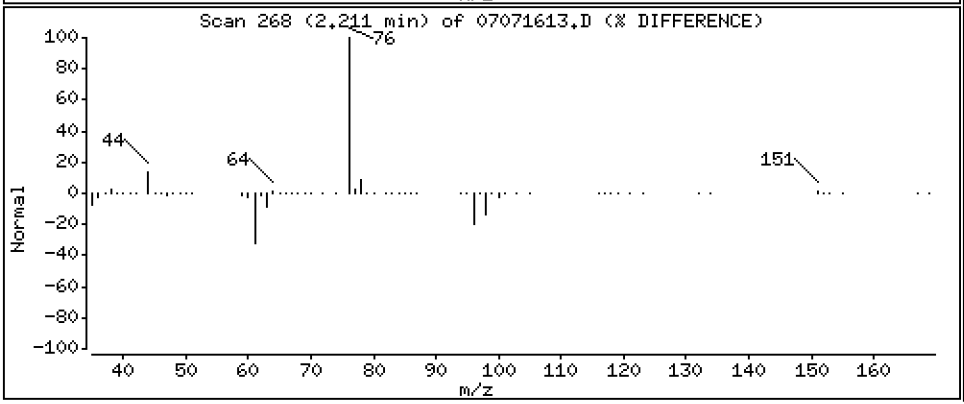
7 1,1-Dichloroethene

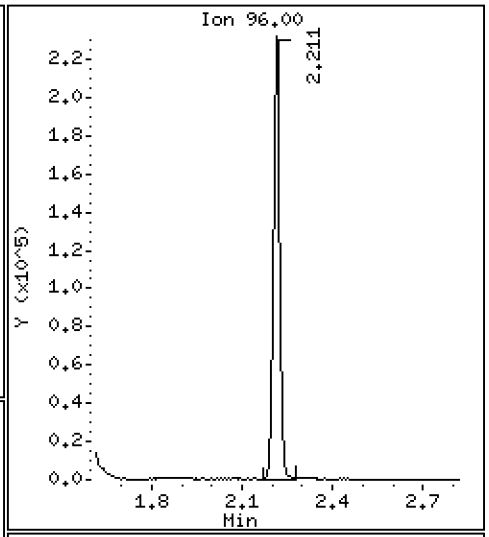
Concentration: 49.642 ug/Kg

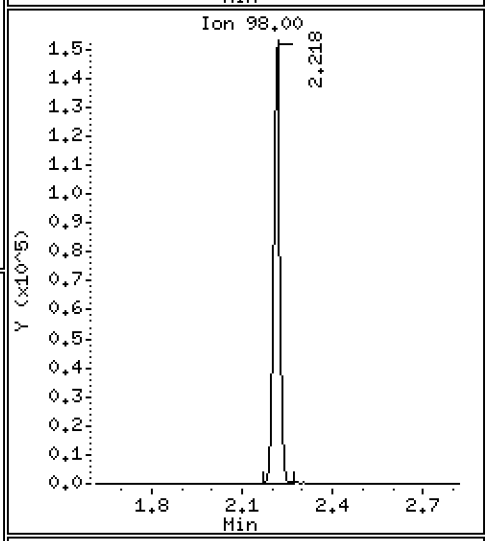


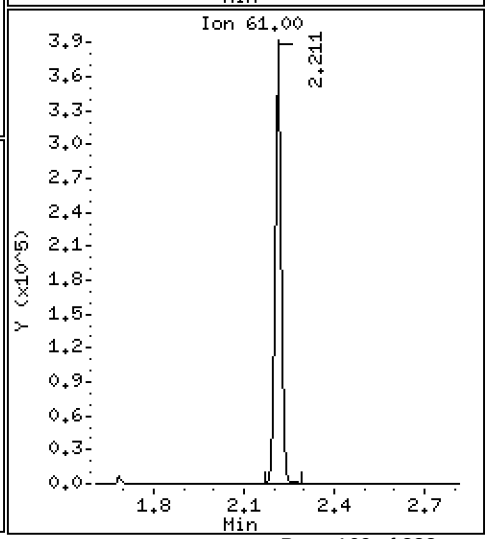












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

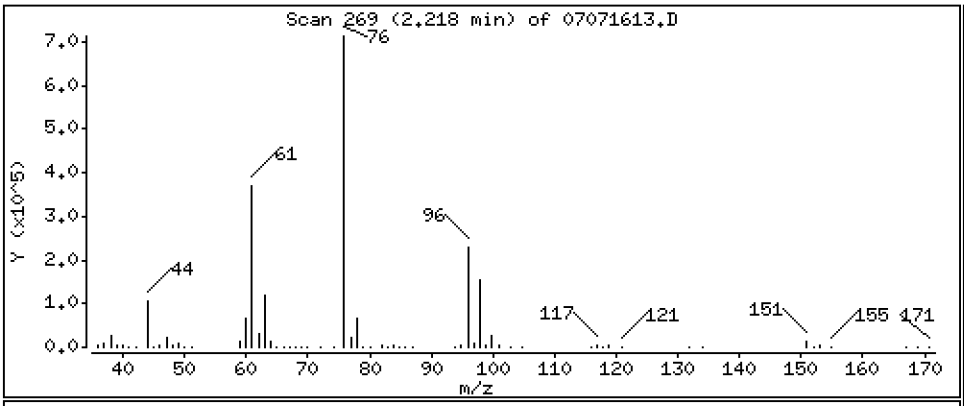
Operator: PB

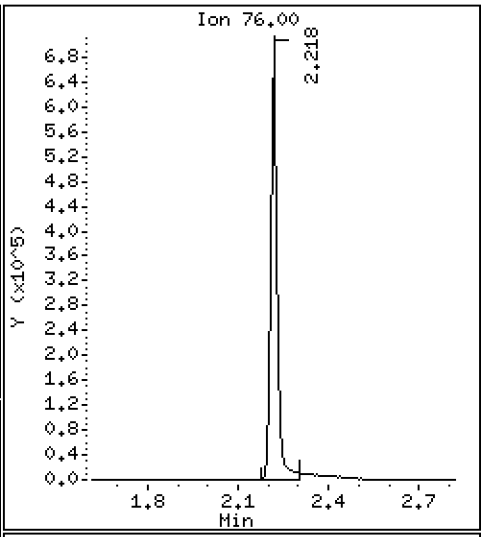
Column phase: RTXVMS

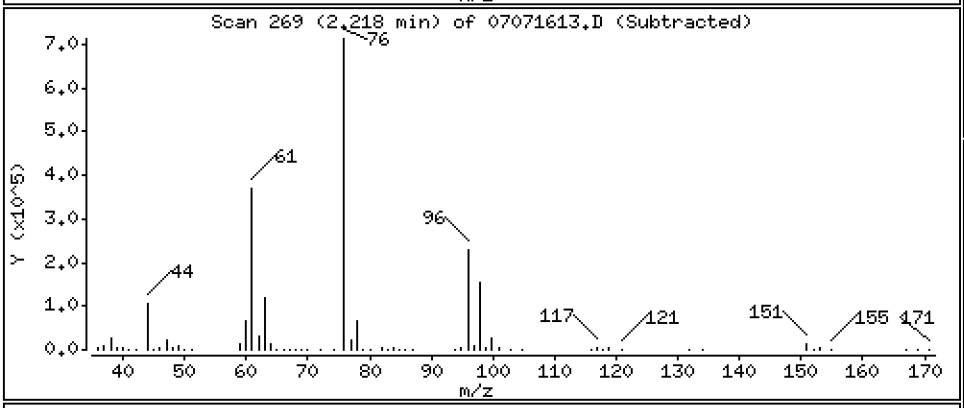
Column diameter: 0.18

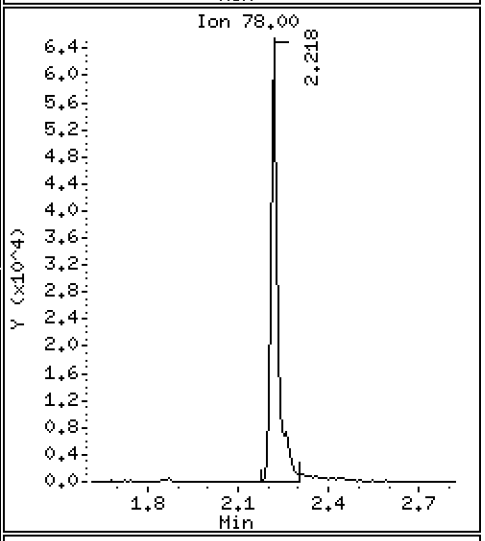
8 Carbon Disulfide

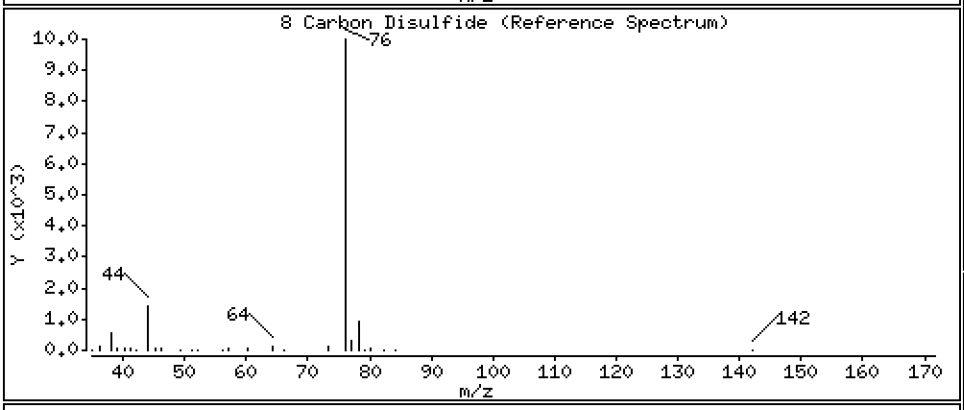
Concentration: 50.280 ug/Kg

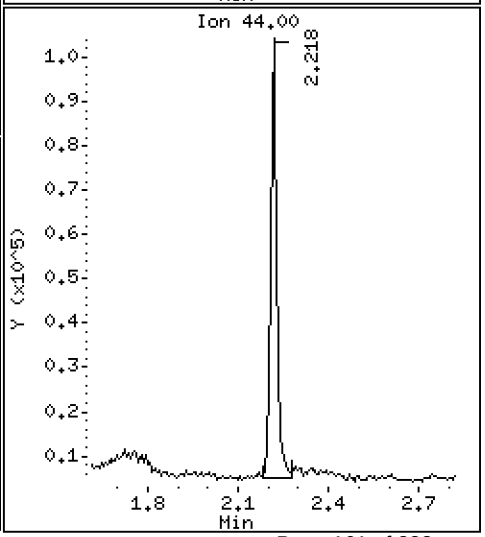


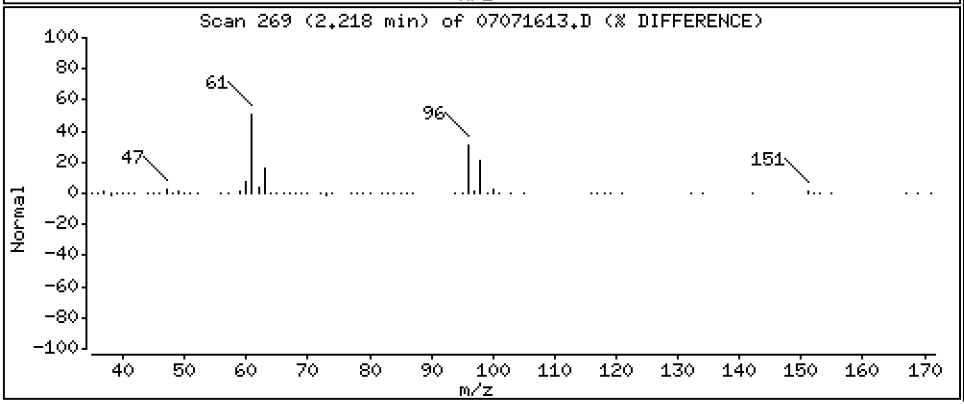












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

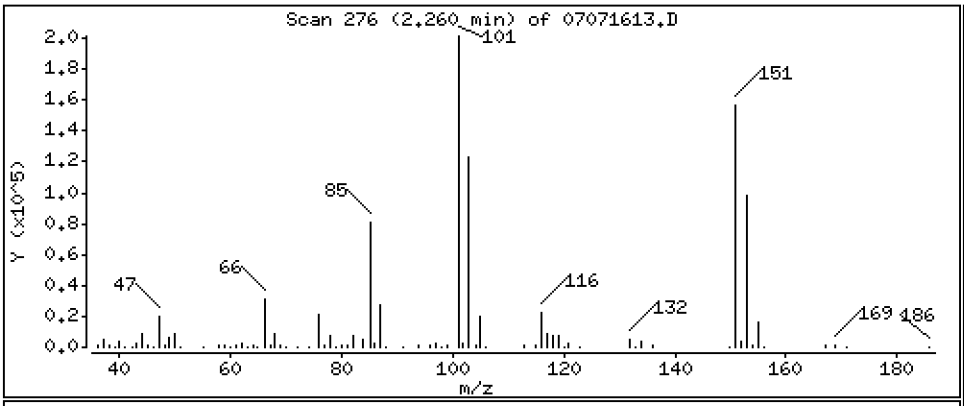
Operator: PB

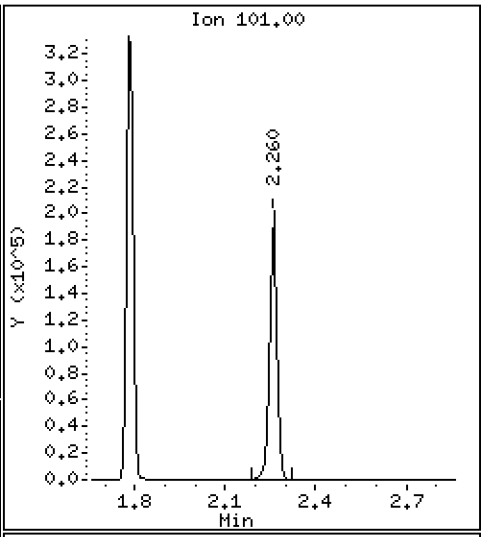
Column phase: RTXVMS

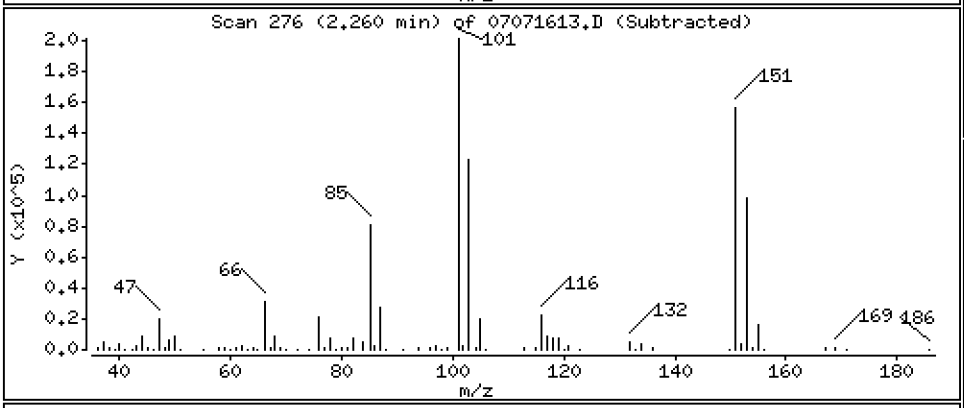
Column diameter: 0.18

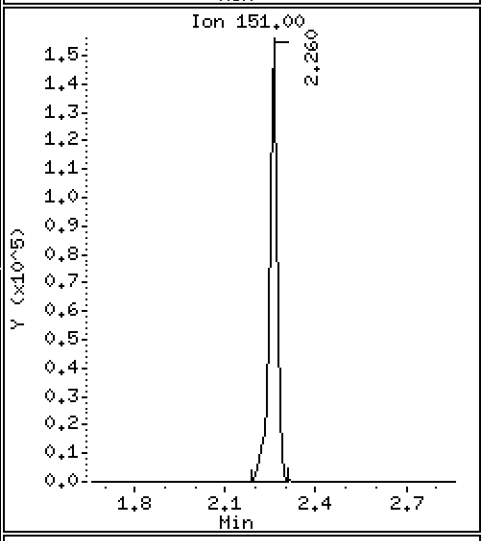
9 112Trichloro122Trifluoroethane

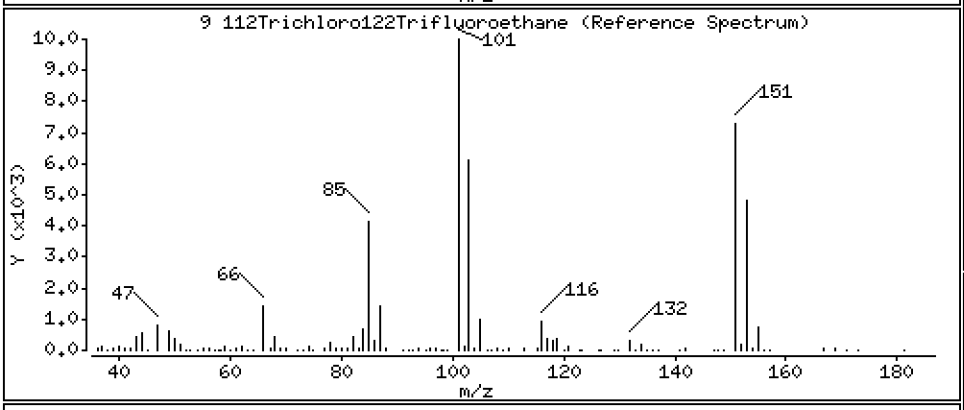
Concentration: 50.738 ug/Kg

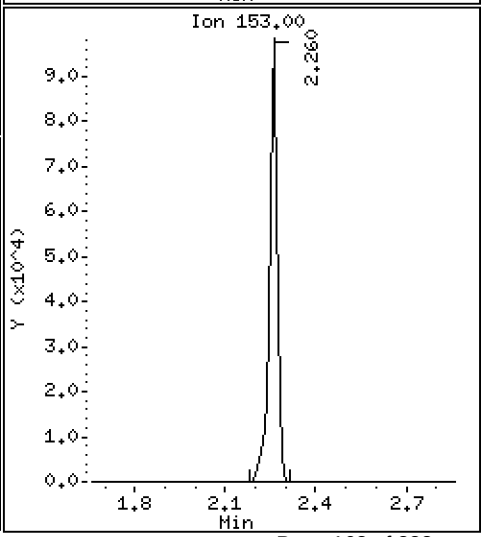


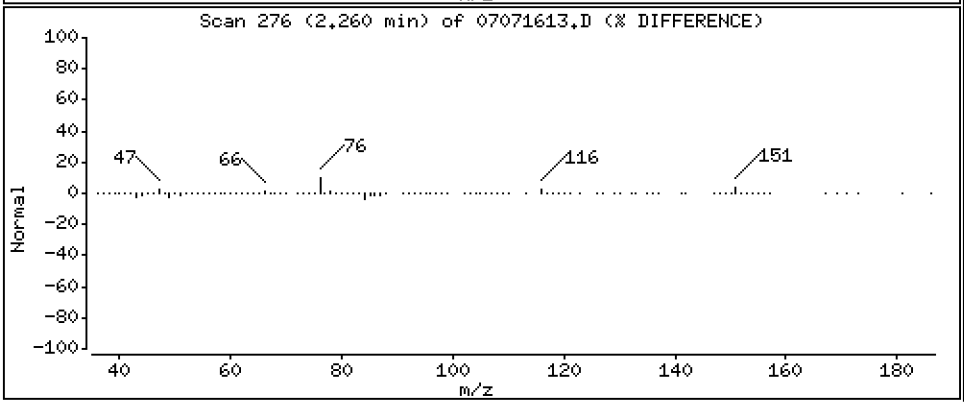












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

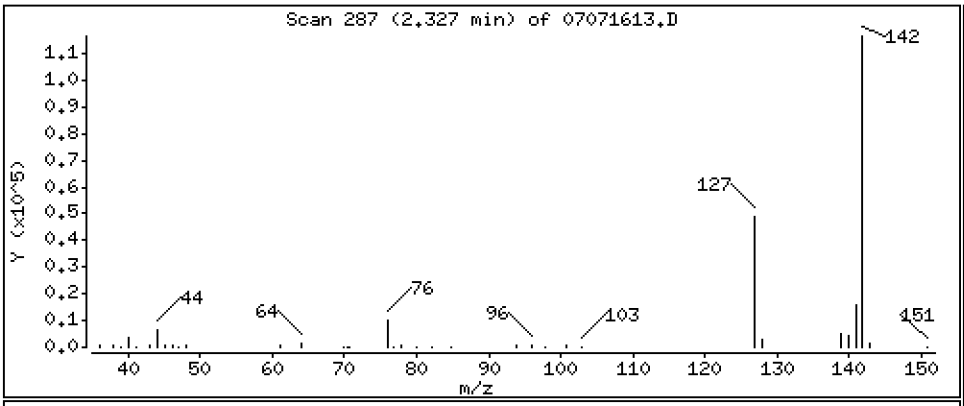
Operator: PB

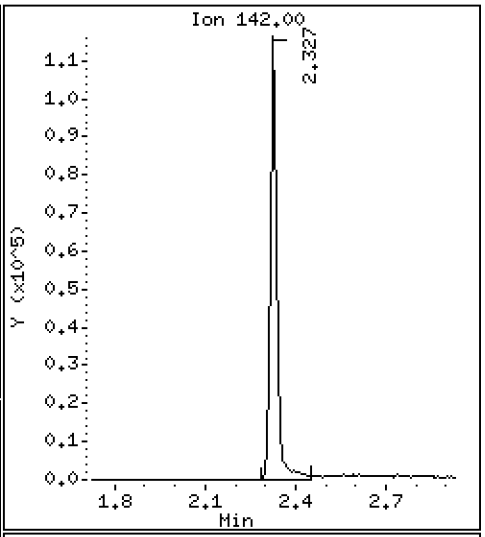
Column phase: RTXVMS

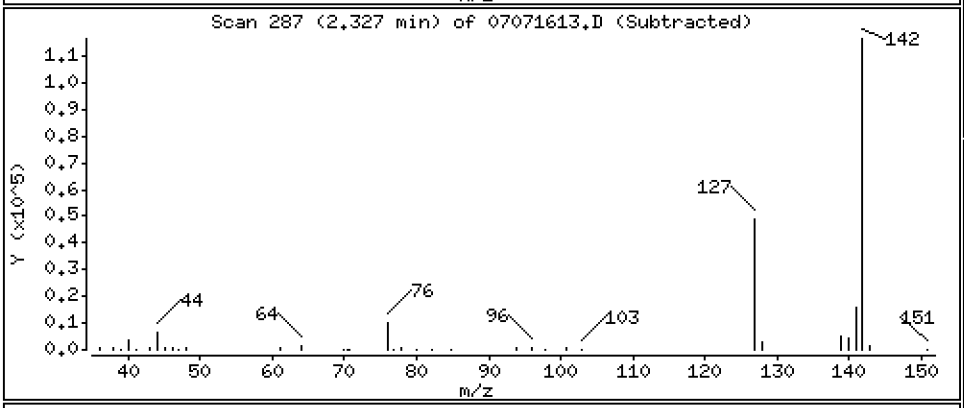
Column diameter: 0.18

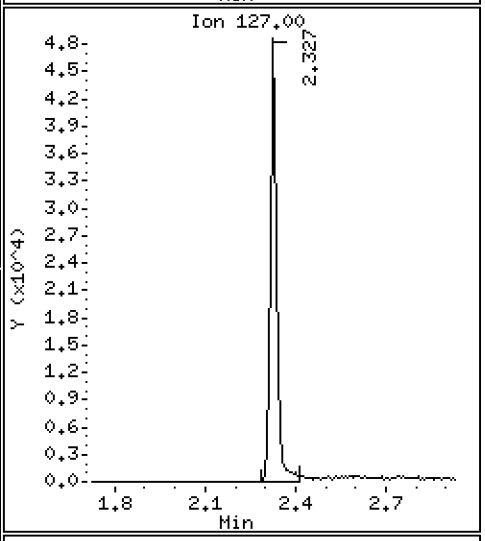
10 Iodomethane

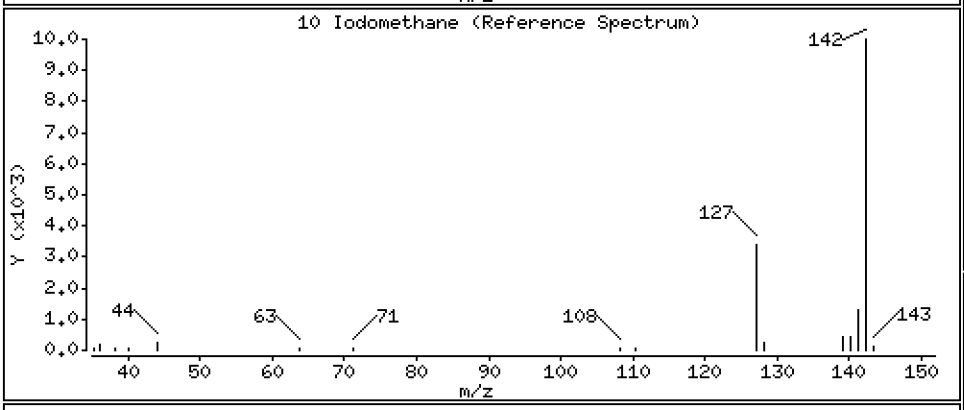
Concentration: 54.141 ug/Kg

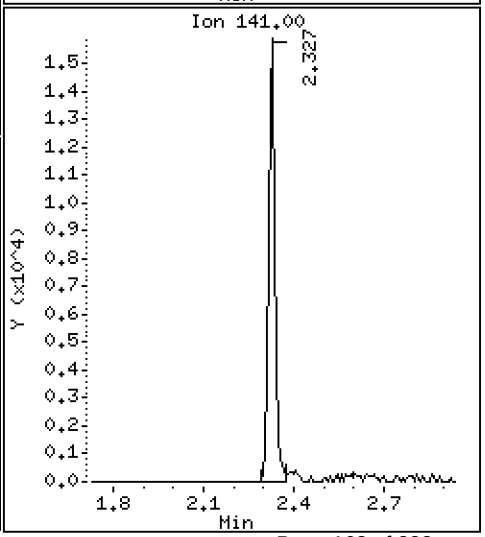


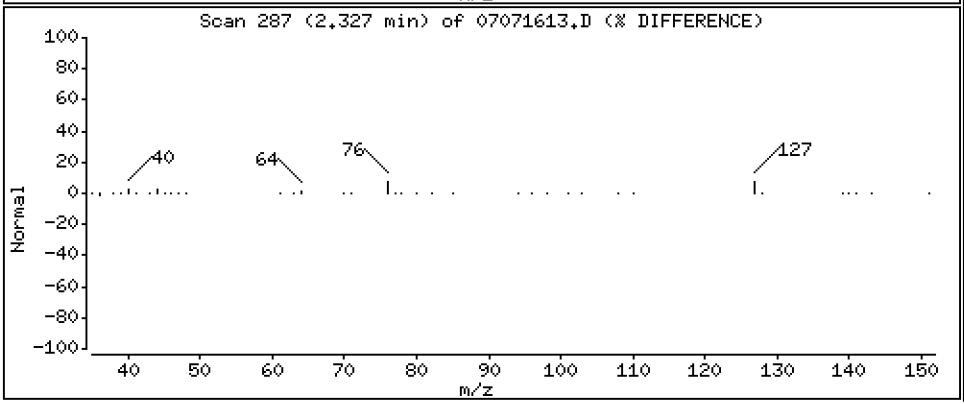












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

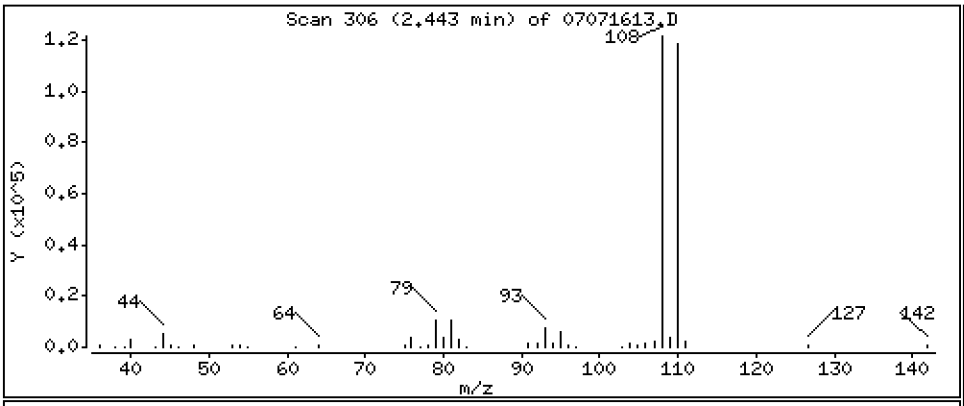
Operator: PB

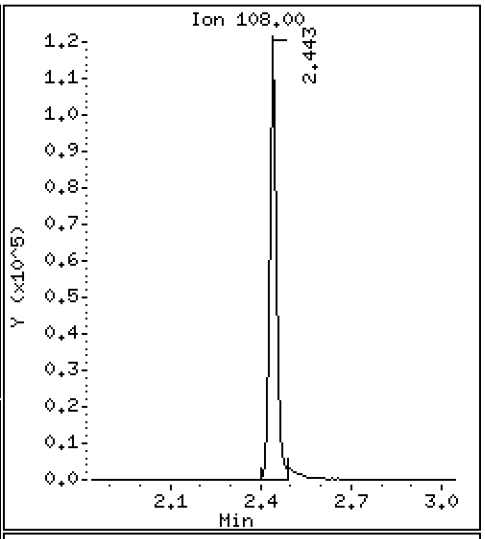
Column phase: RTXVMS

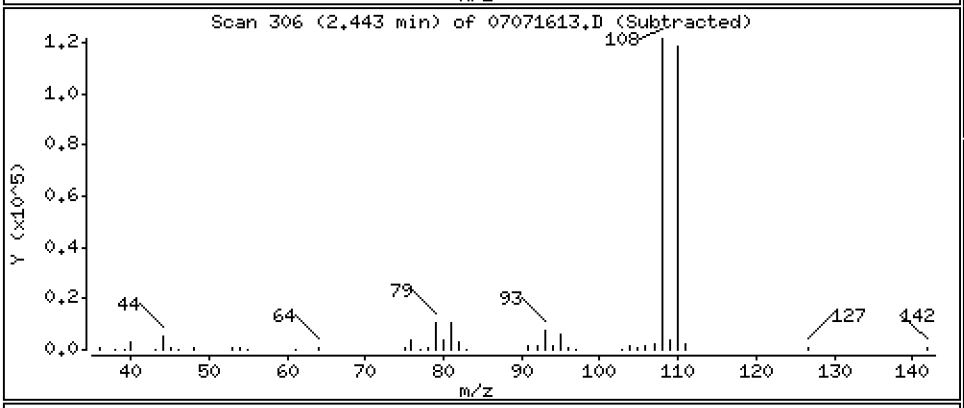
Column diameter: 0.18

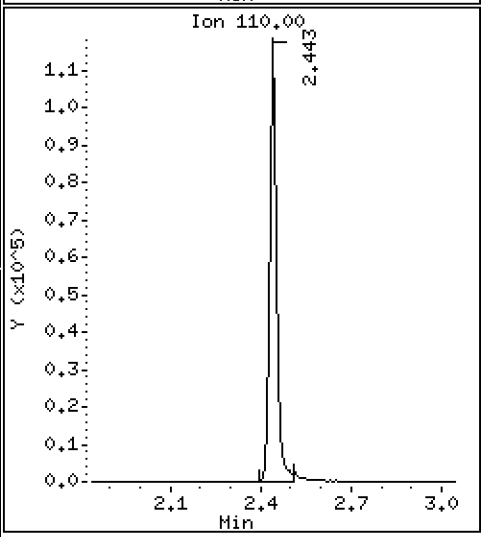
11 Bromoethane

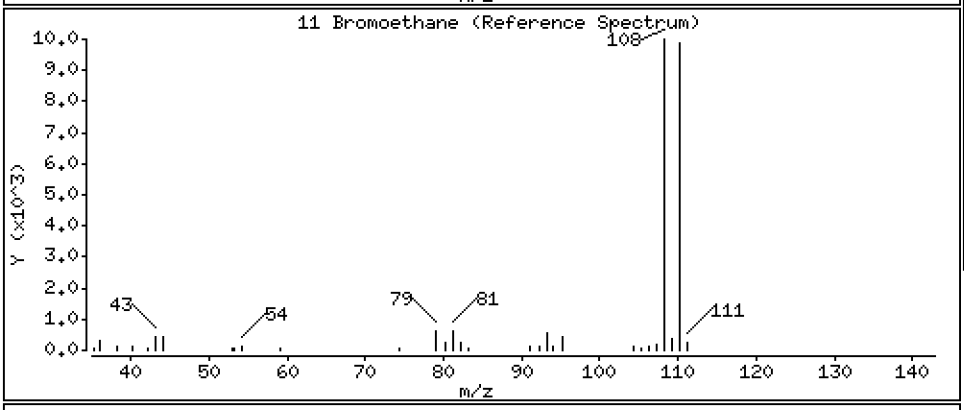
Concentration: 48.548 ug/Kg

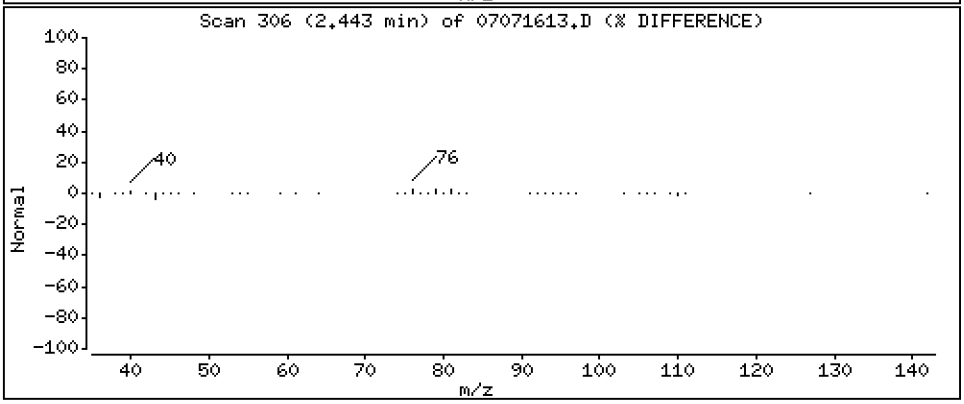












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

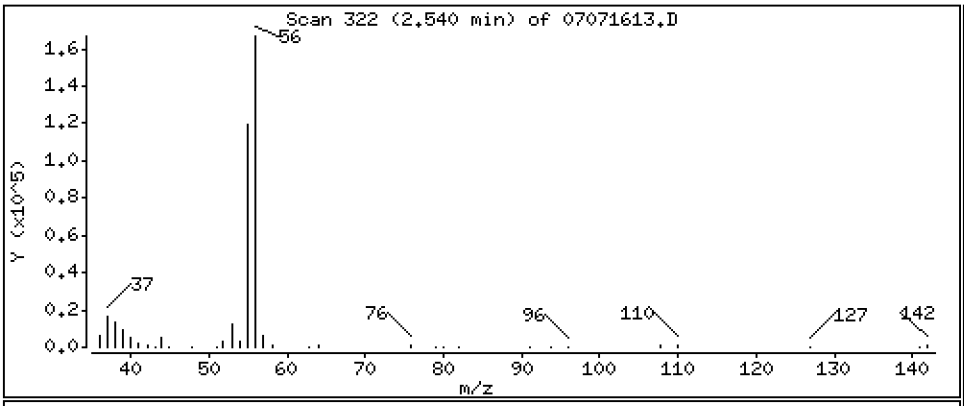
Operator: PB

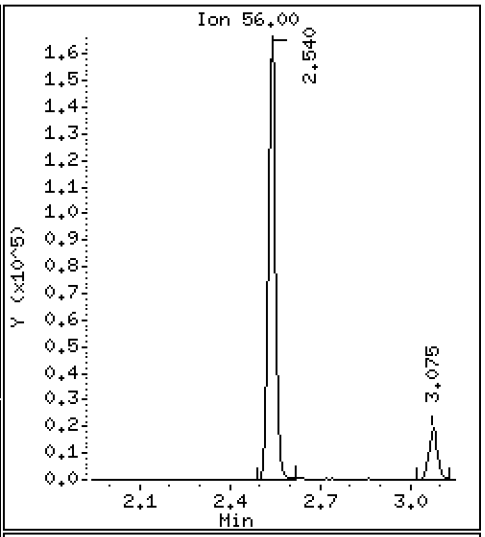
Column phase: RTXVMS

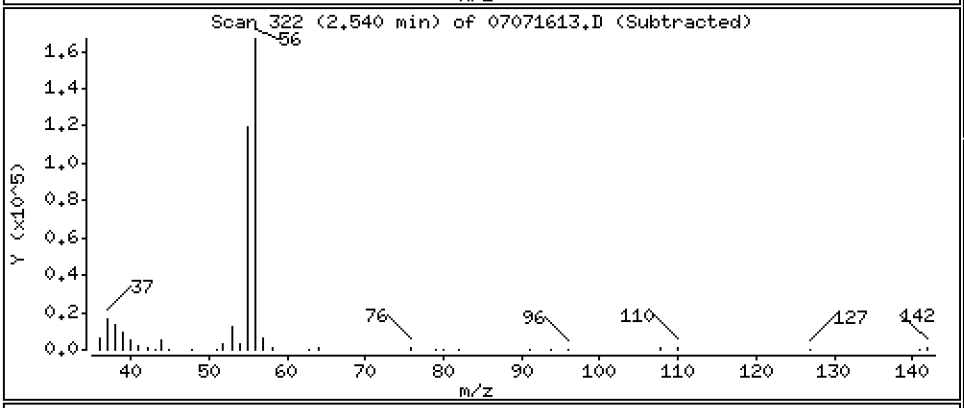
Column diameter: 0.18

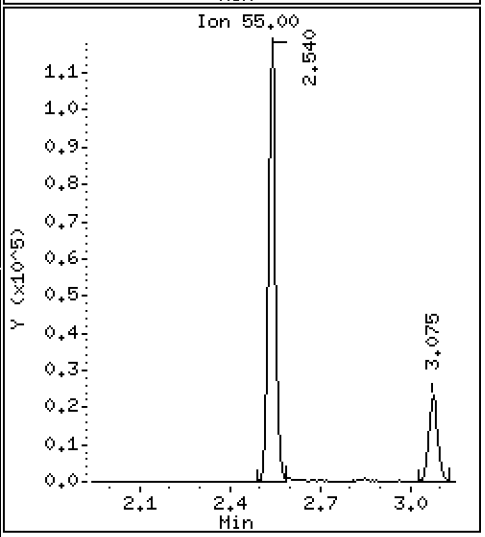
12 Acrolein

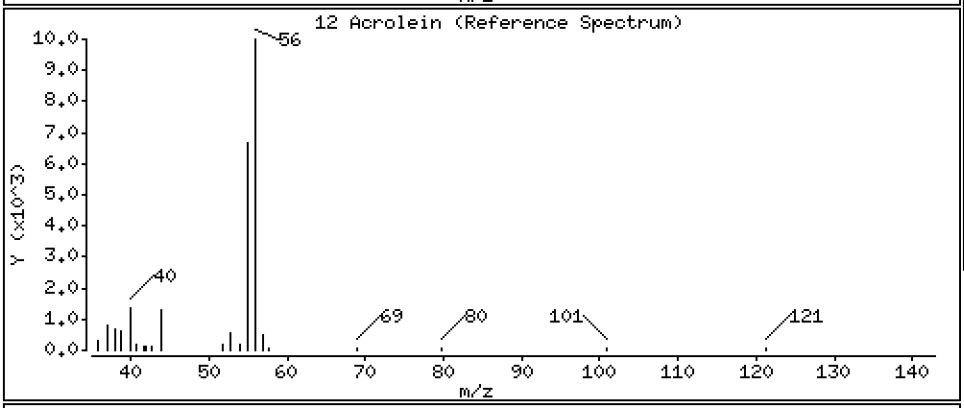
Concentration: 222.51 ug/Kg

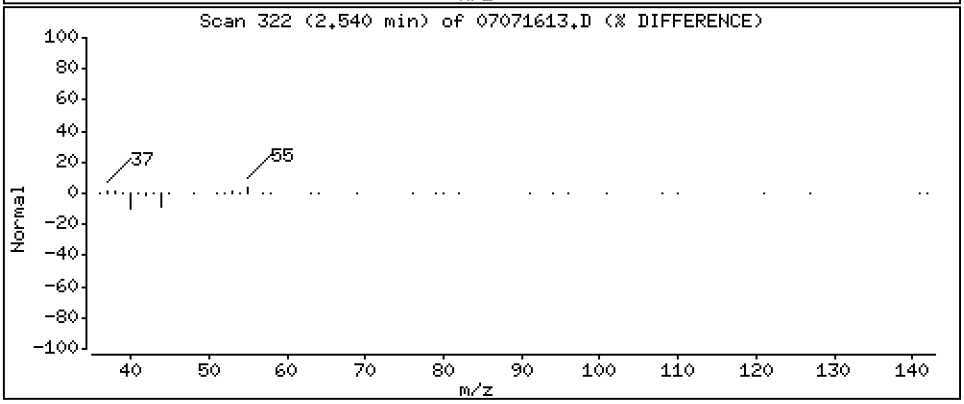












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

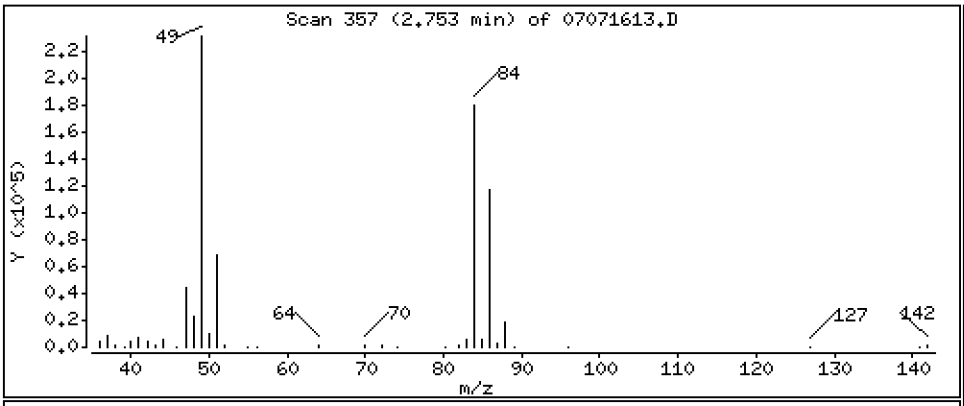
Operator: PB

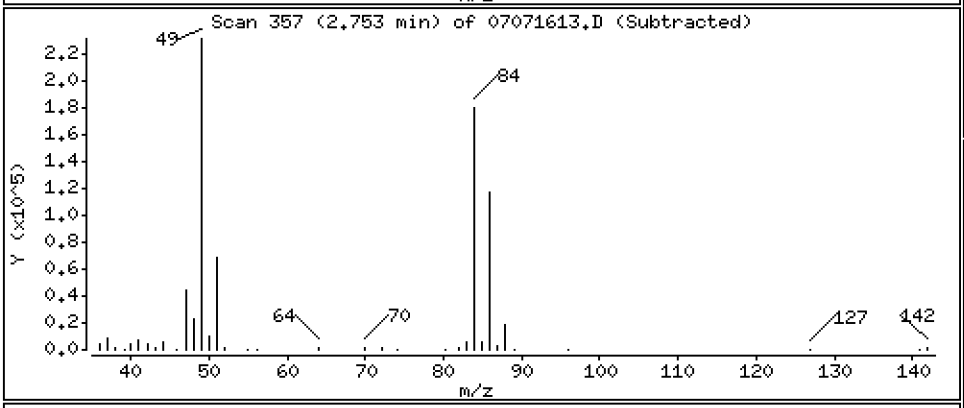
Column phase: RTXVMS

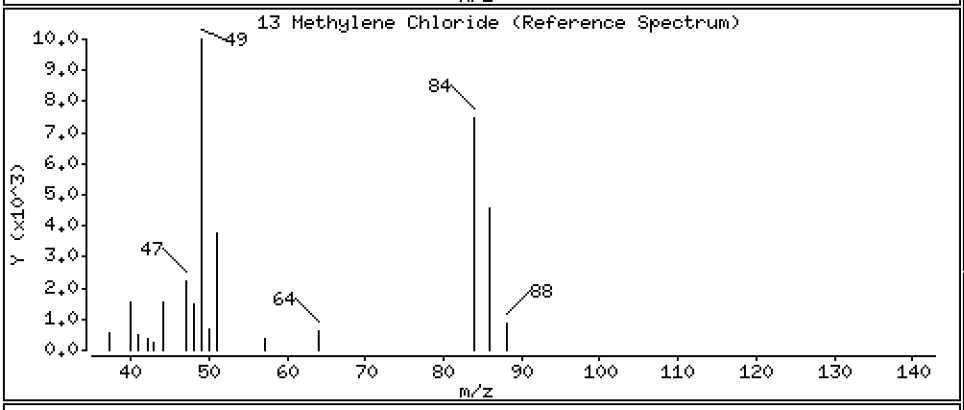
Column diameter: 0.18

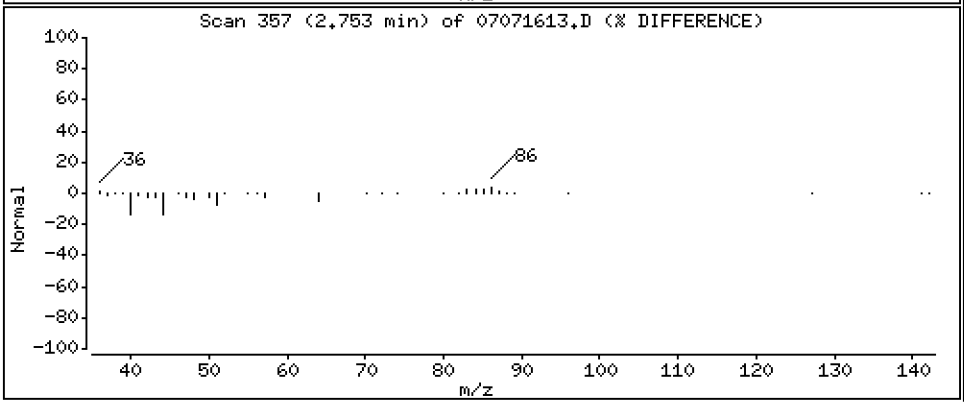
13 Methylene Chloride

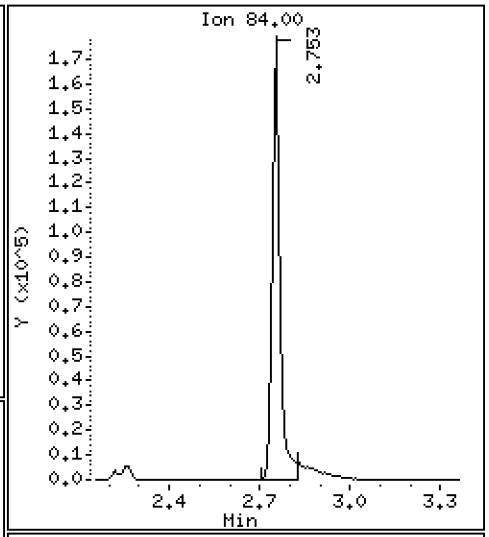
Concentration: 45.793 ug/Kg

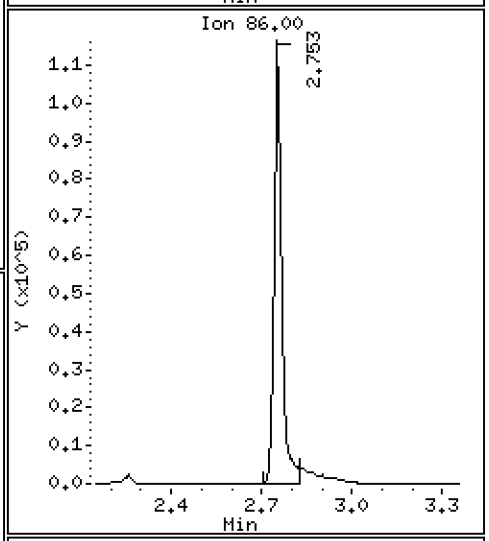


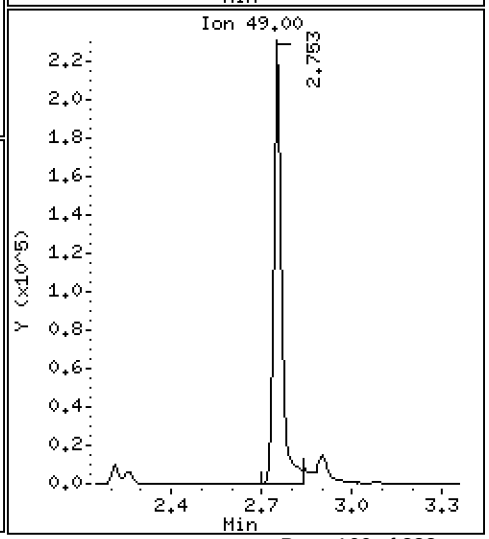












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

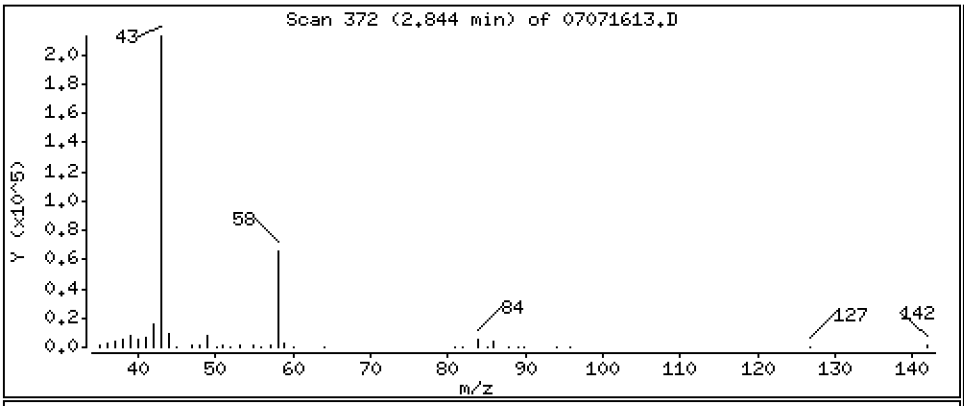
Operator: PB

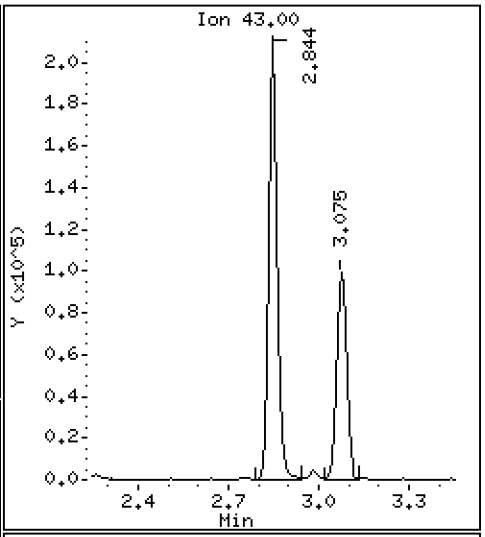
Column phase: RTXVMS

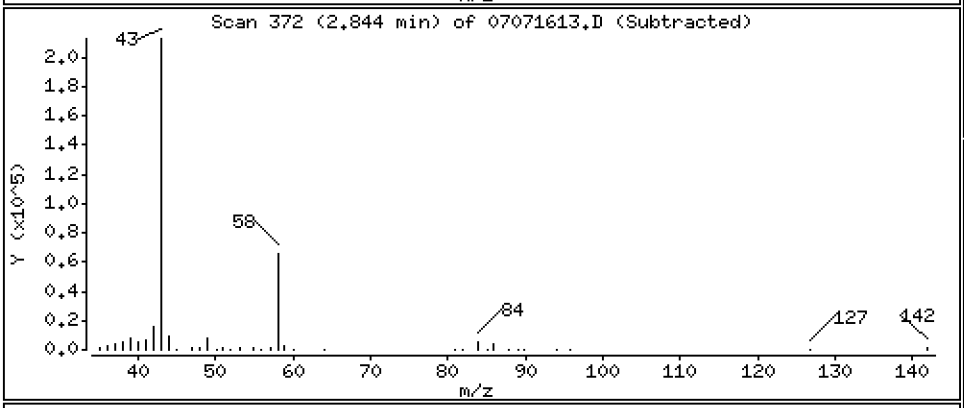
Column diameter: 0.18

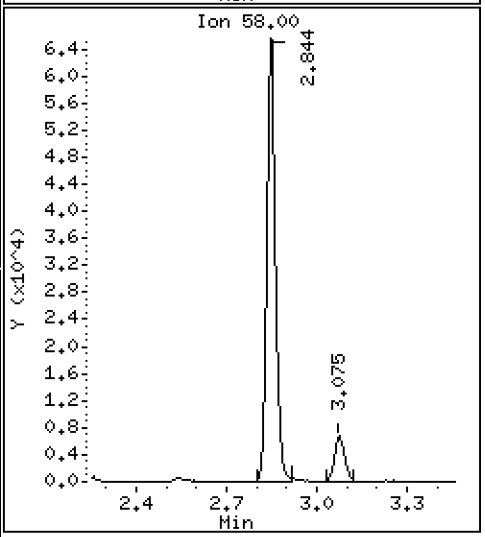
14 Acetone

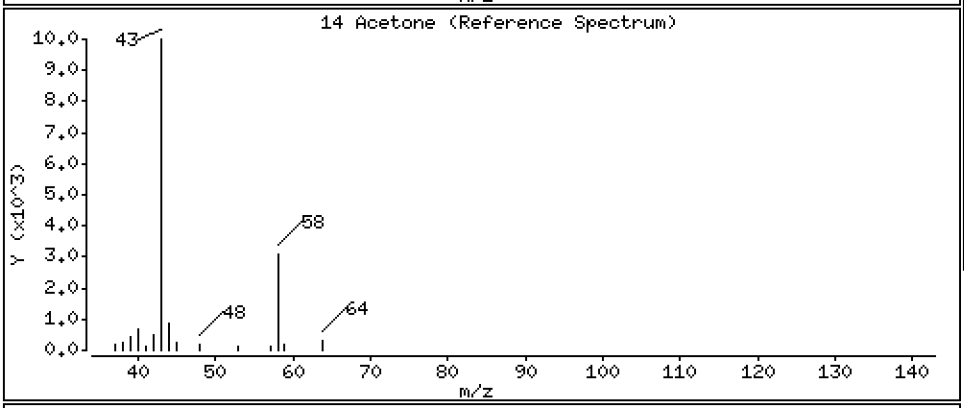
Concentration: 192.28 ug/Kg

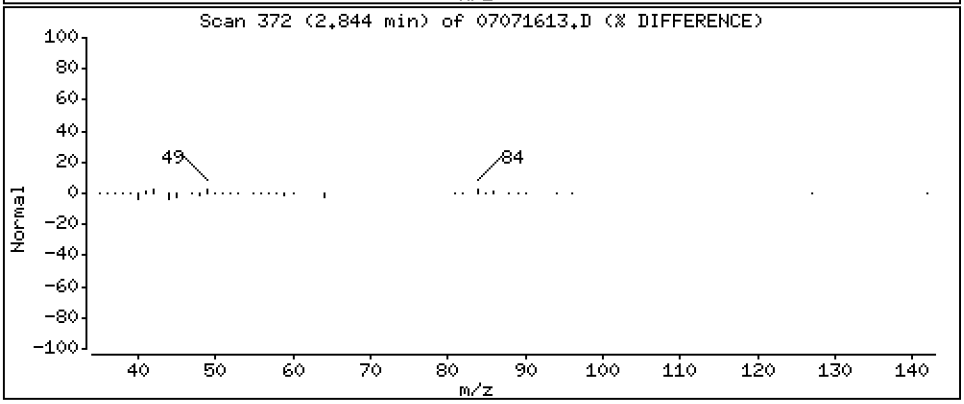












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

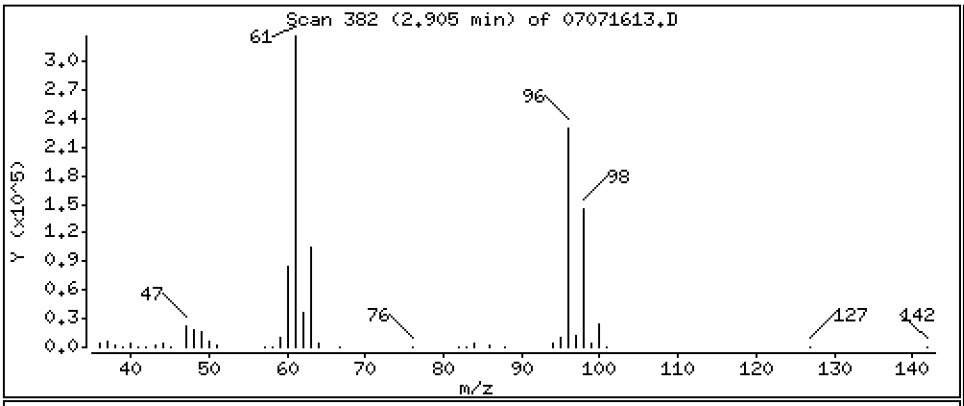
Operator: PB

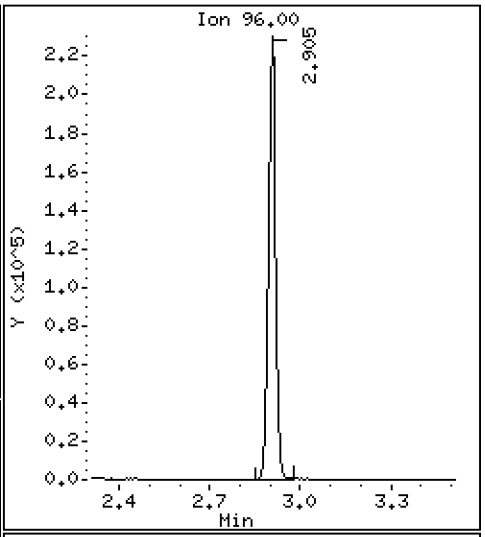
Column phase: RTXVMS

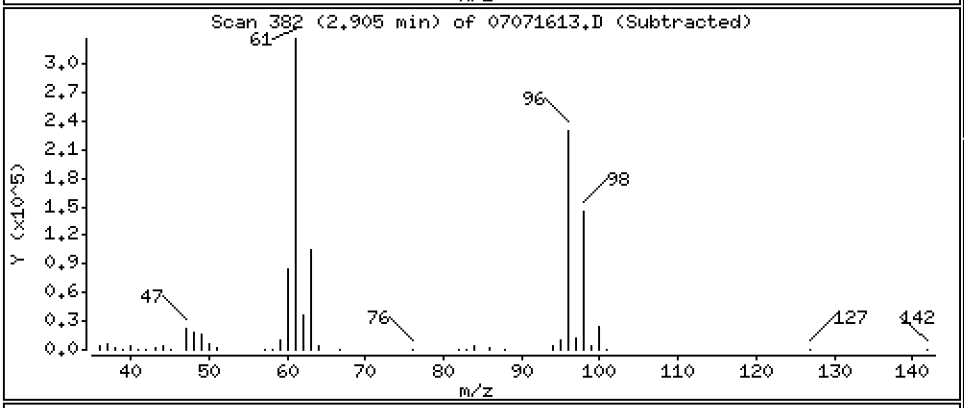
Column diameter: 0.18

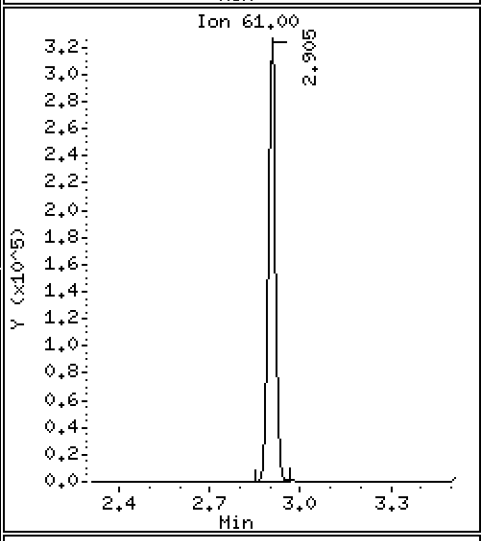
15 Trans-1,2-Dichloroethene

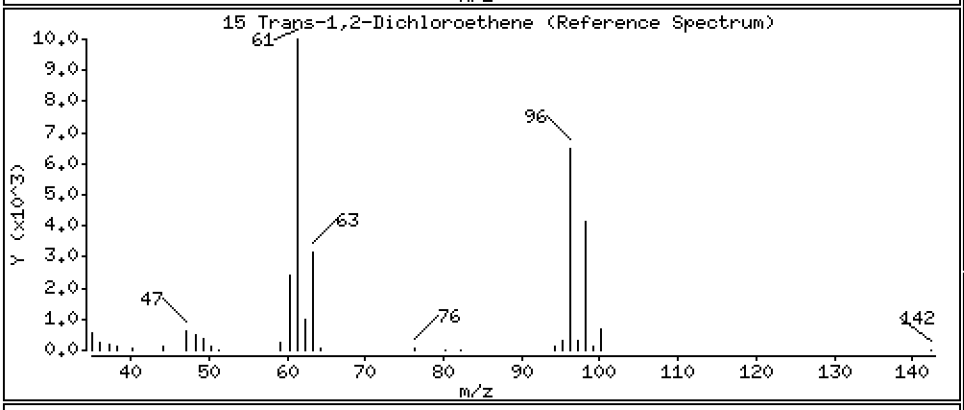
Concentration: 48.660 ug/Kg

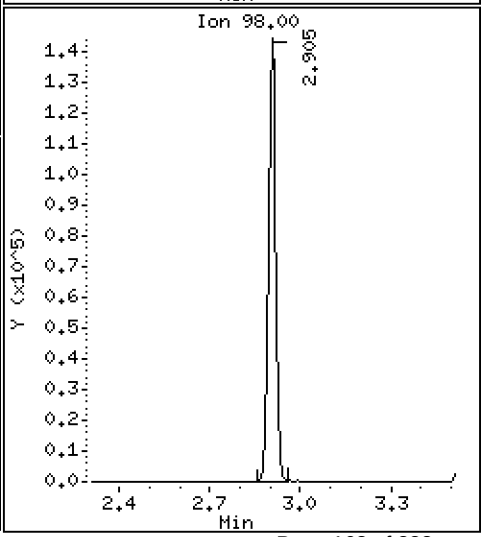


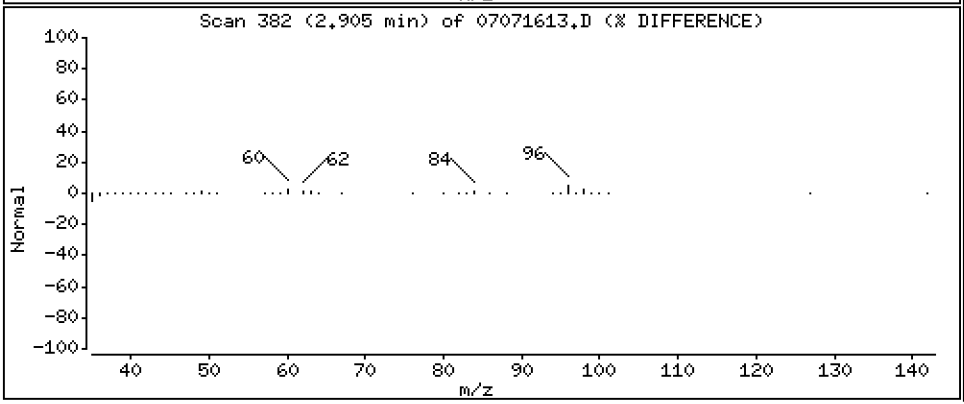












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Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

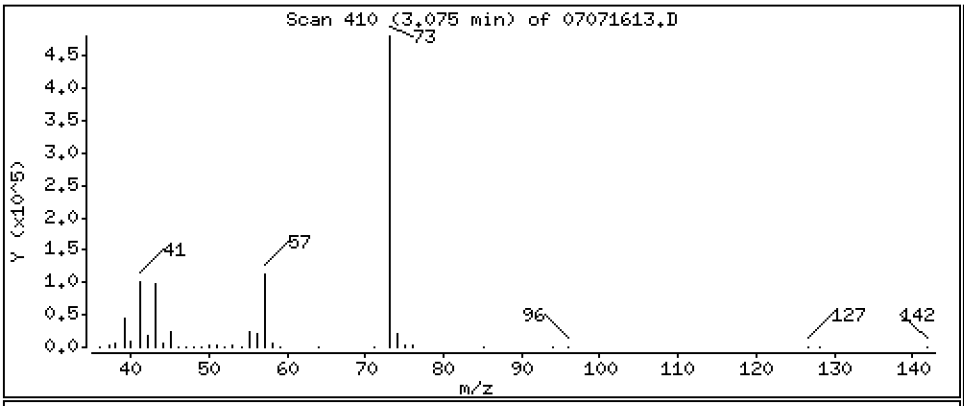
Operator: PB

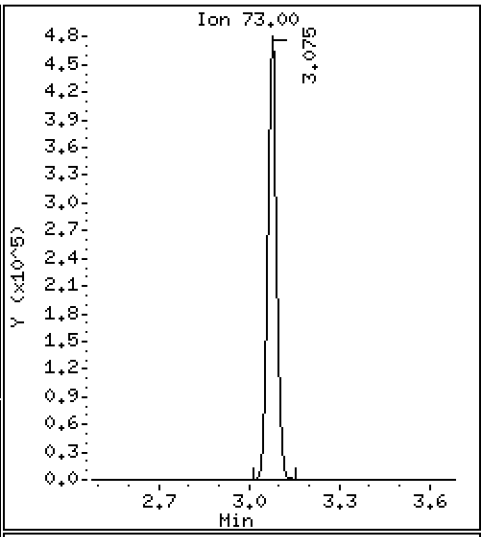
Column phase: RTXVMS

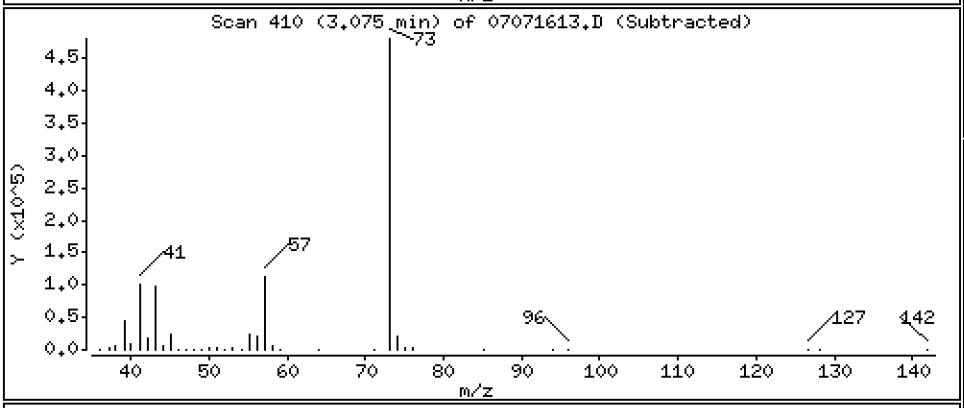
Column diameter: 0.18

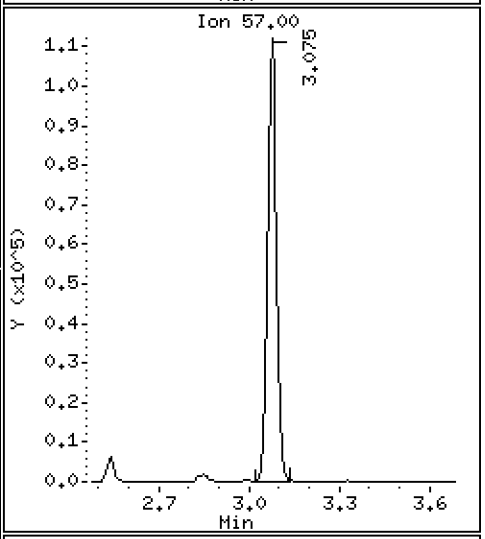
16 Methyl tert butyl ether

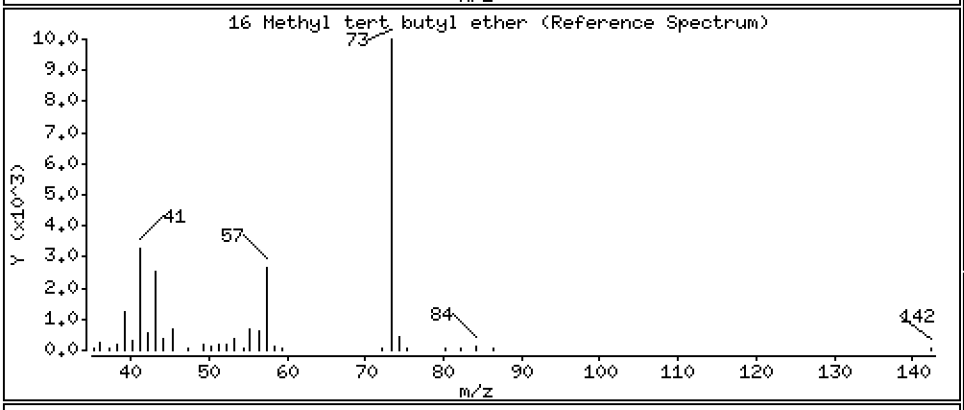
Concentration: 44.479 ug/Kg

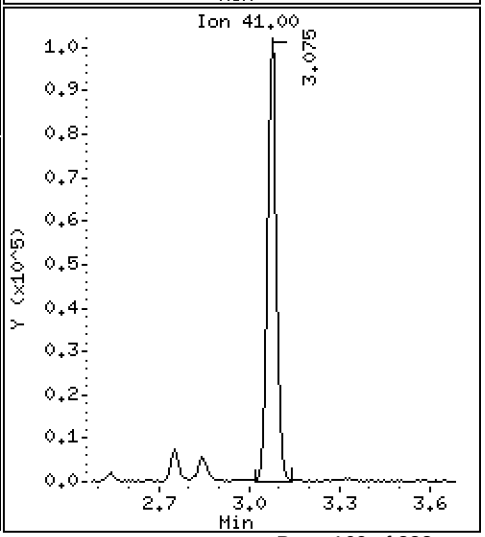


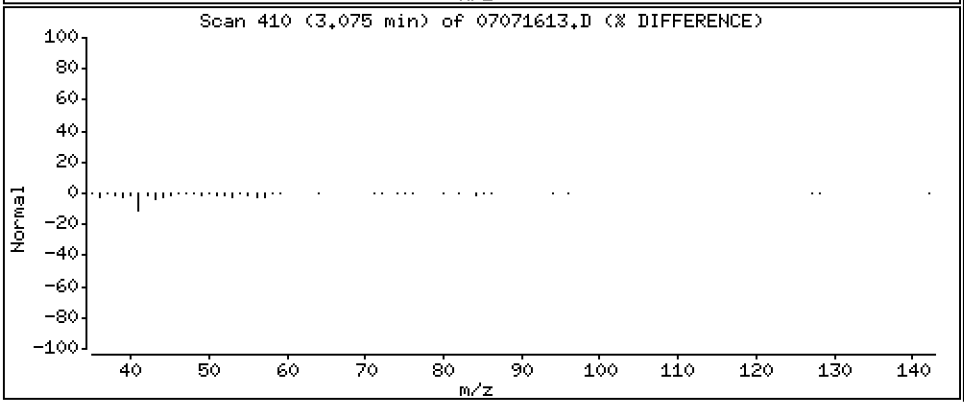












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Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

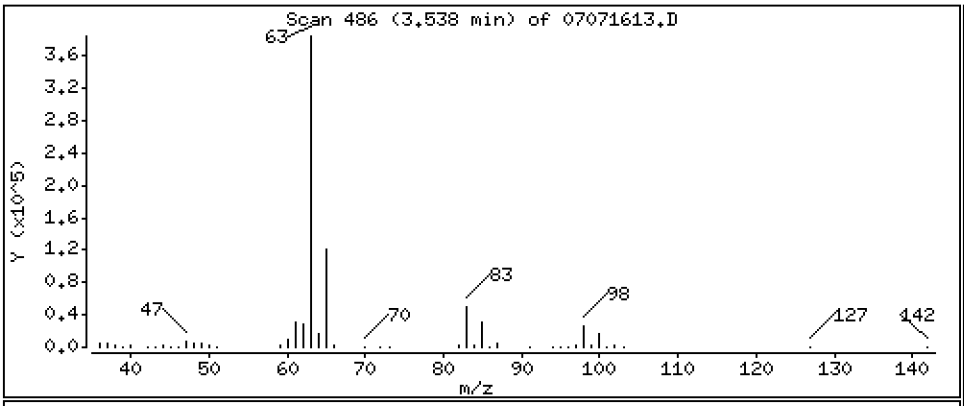
Operator: PB

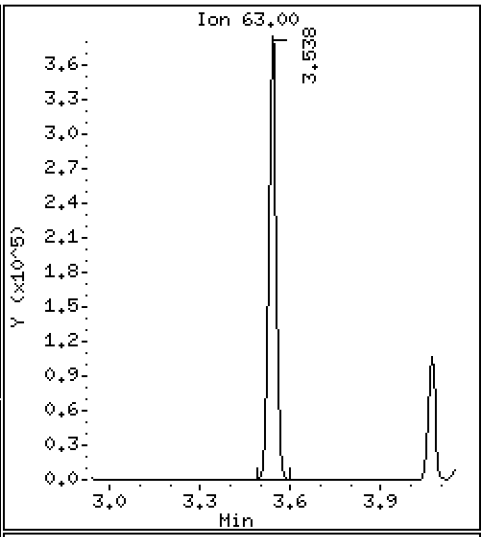
Column phase: RTXVMS

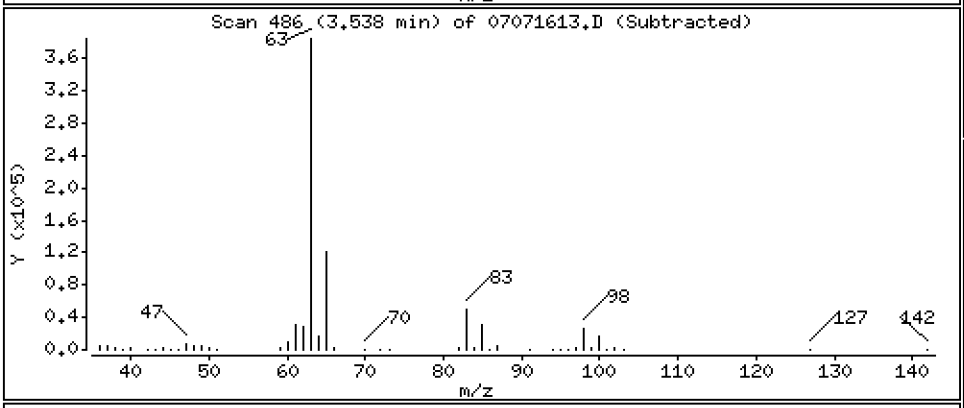
Column diameter: 0.18

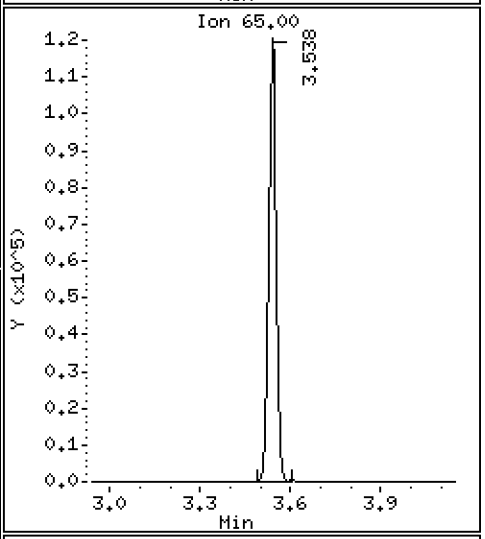
17 1,1-Dichloroethane

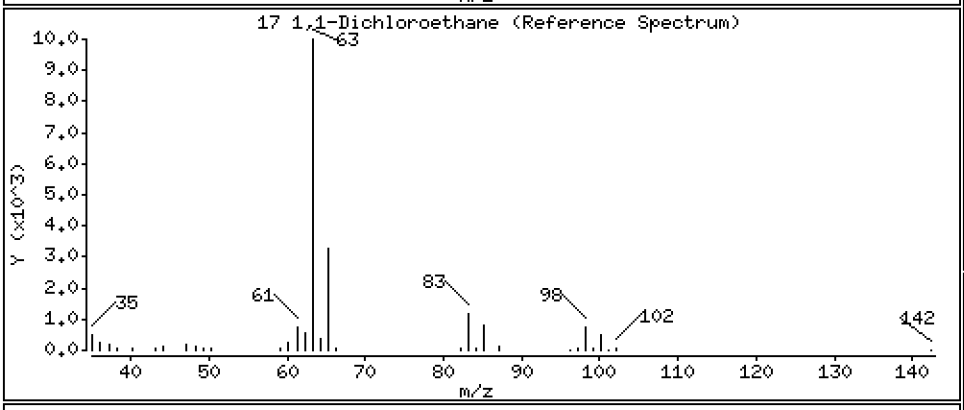
Concentration: 46.251 ug/Kg

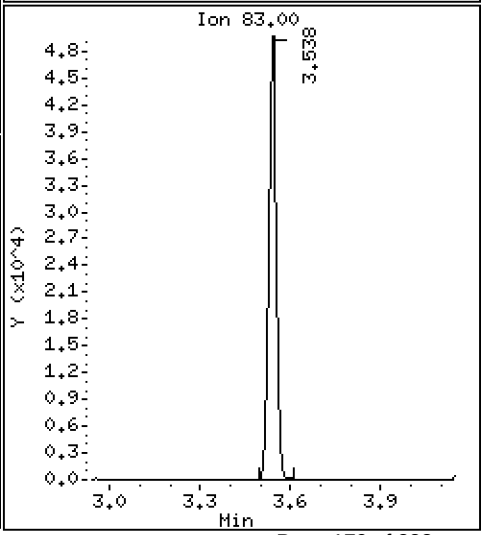


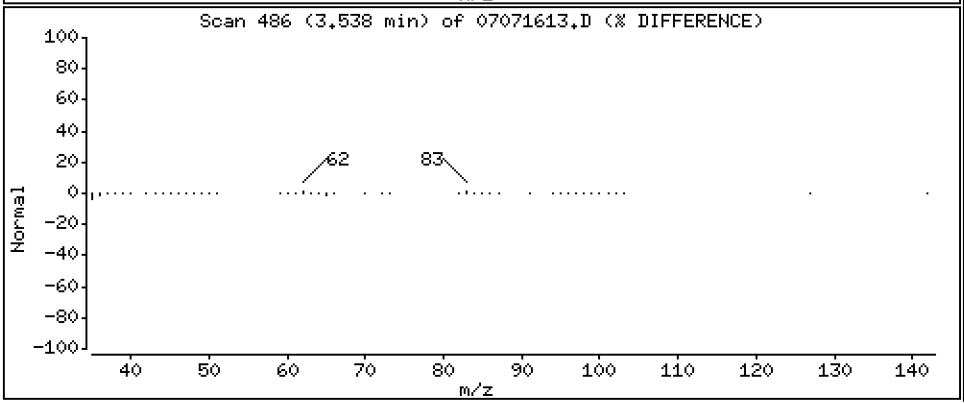












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Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

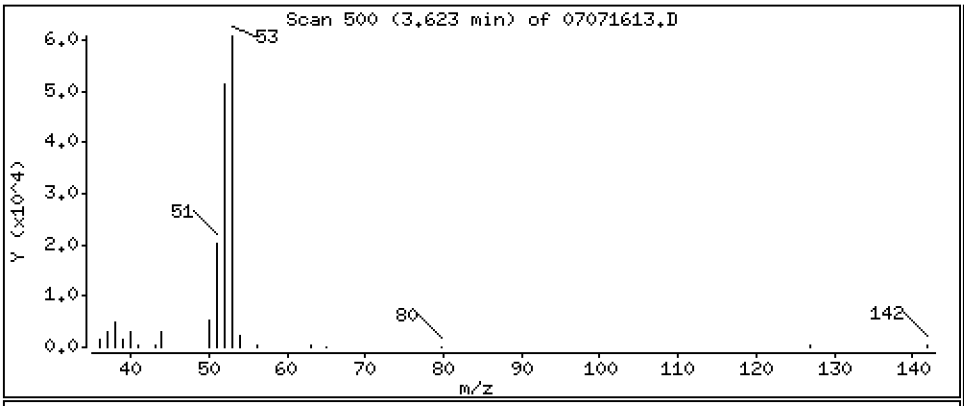
Operator: PB

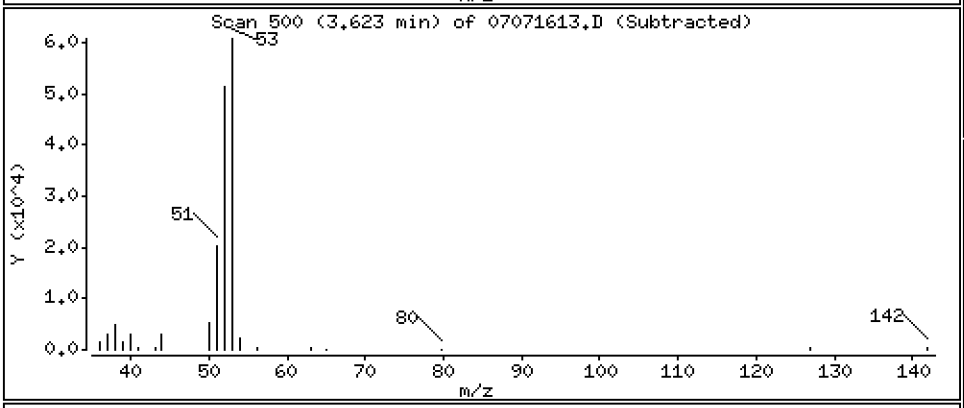
Column phase: RTXVMS

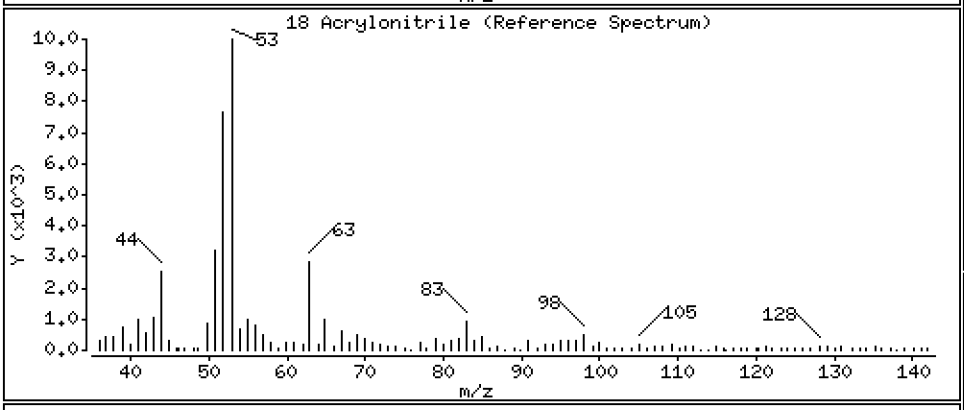
Column diameter: 0.18

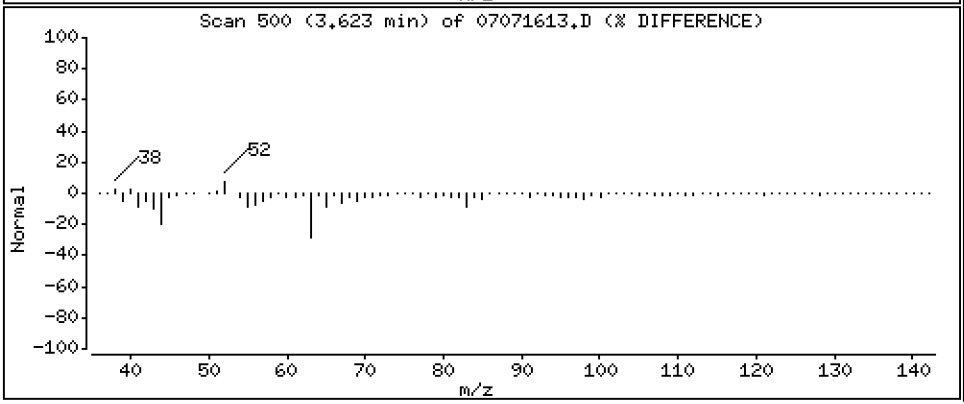
18 Acrylonitrile

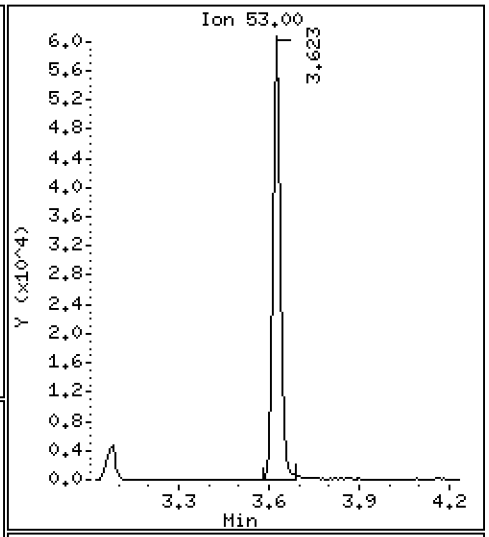
Concentration: 42.424 ug/Kg

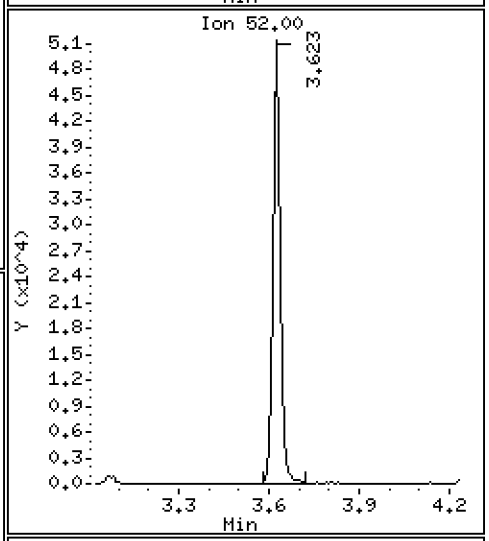


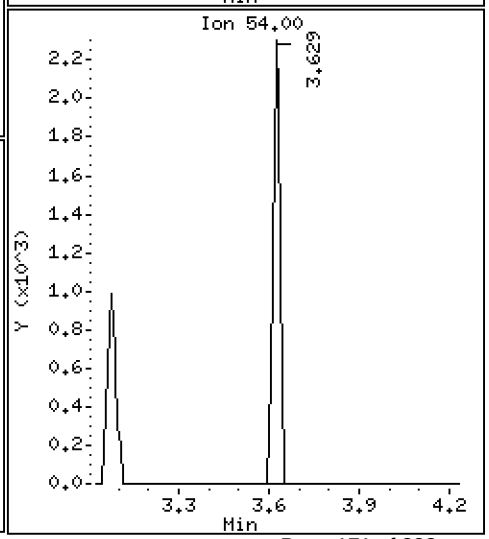












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

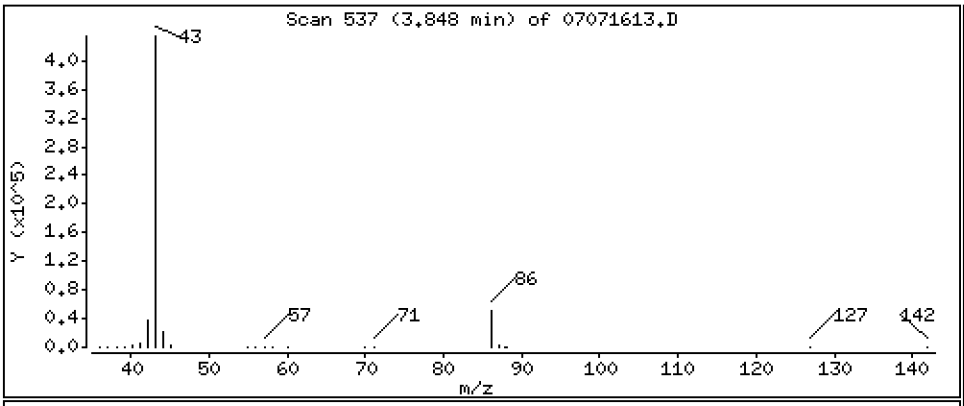
Operator: PB

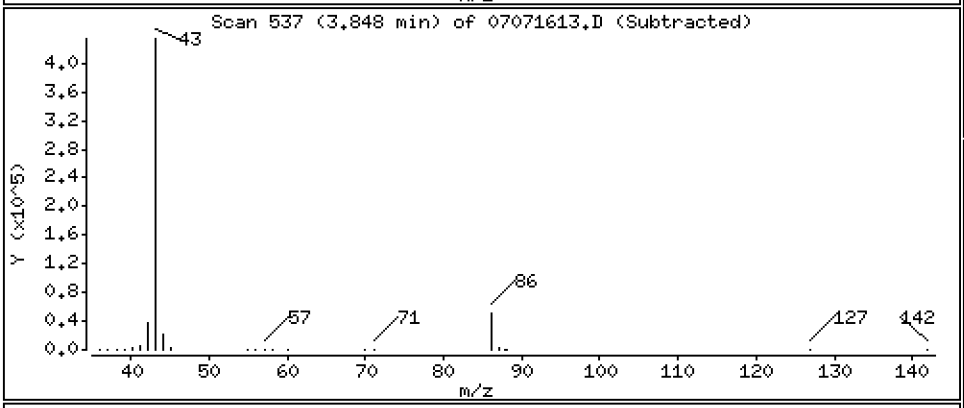
Column phase: RTXVMS

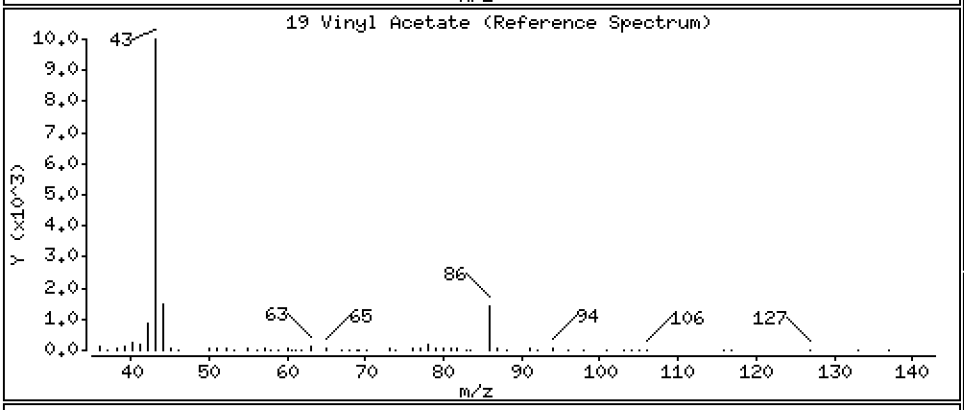
Column diameter: 0.18

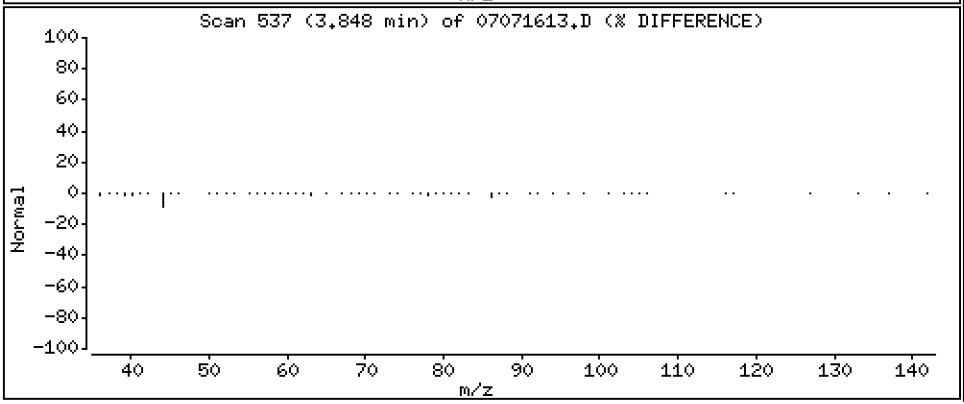
19 Vinyl Acetate

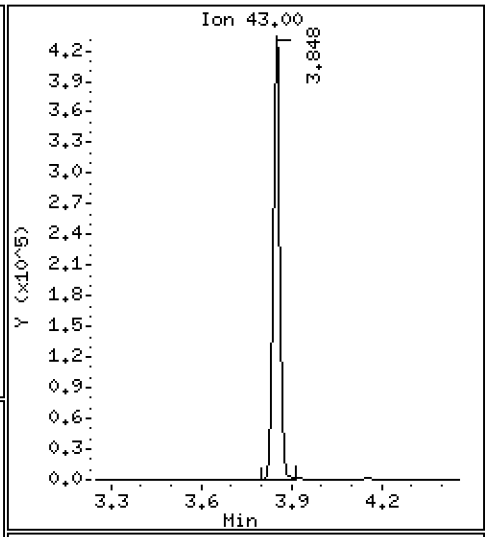
Concentration: 42.677 ug/Kg

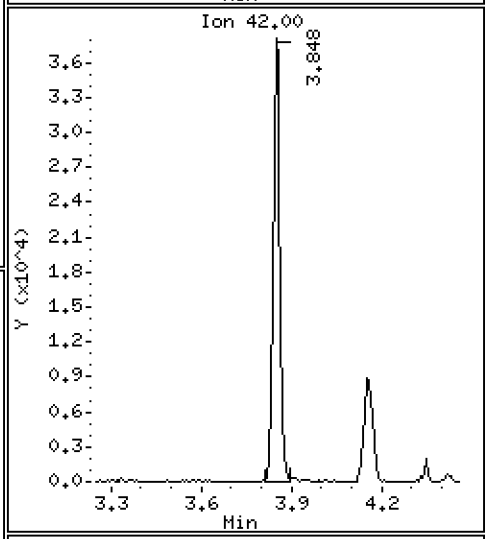


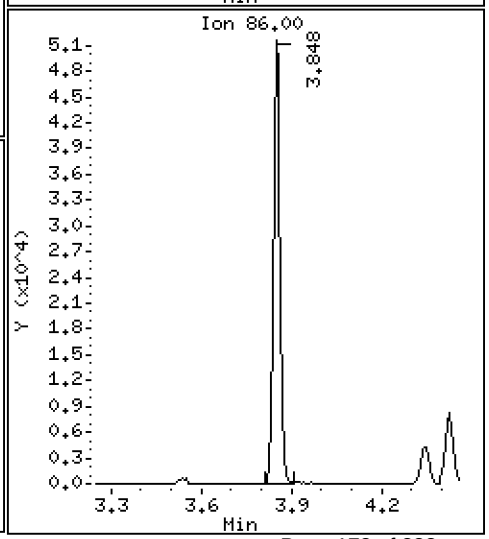












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

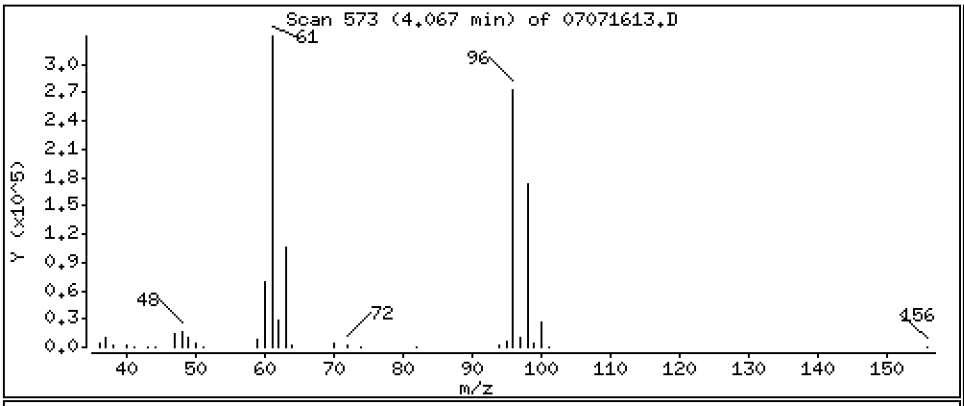
Operator: PB

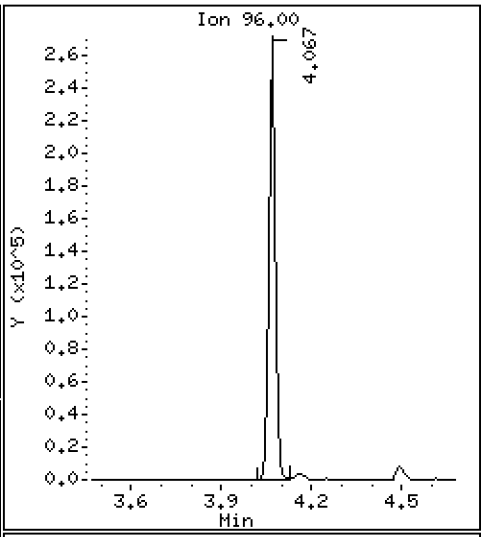
Column phase: RTXVMS

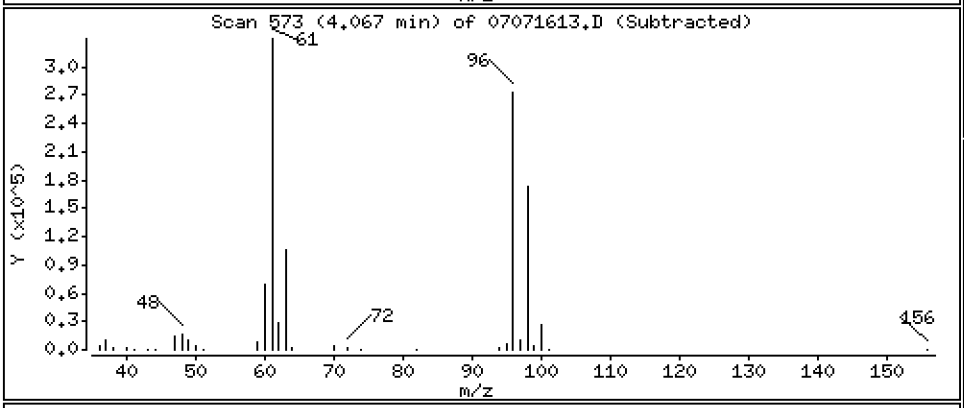
Column diameter: 0.18

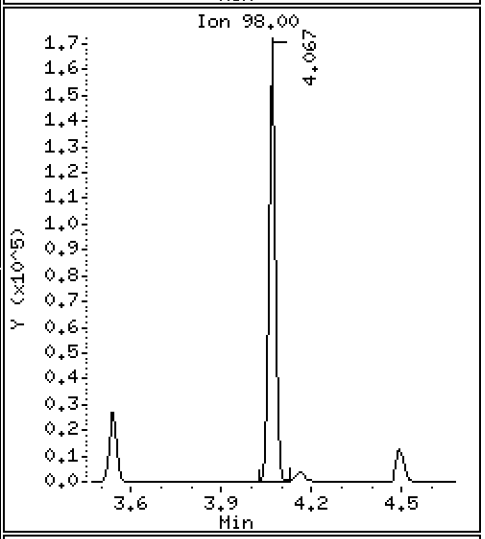
20 Cis-1,2-Dichloroethene

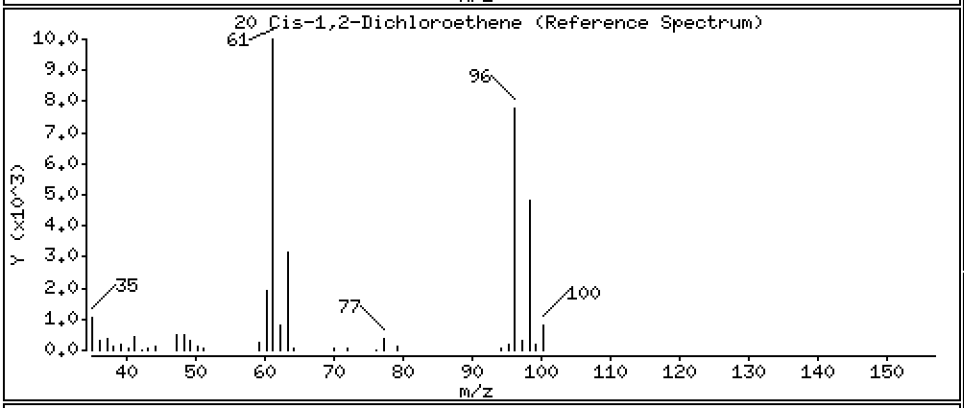
Concentration: 47.469 ug/Kg

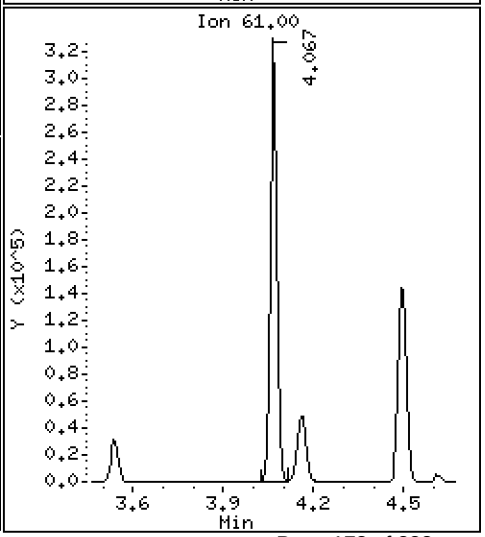


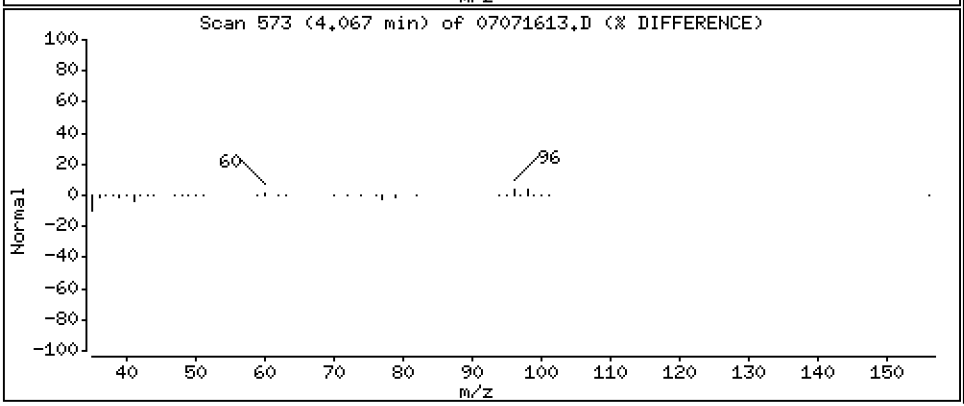












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

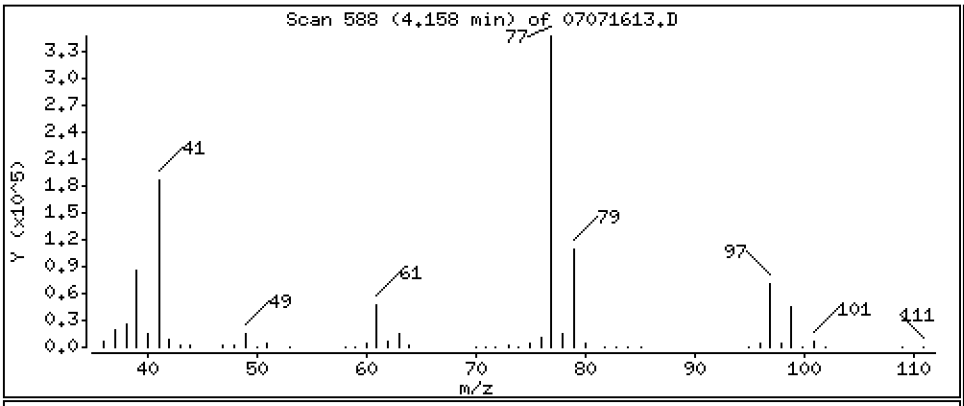
Operator: PB

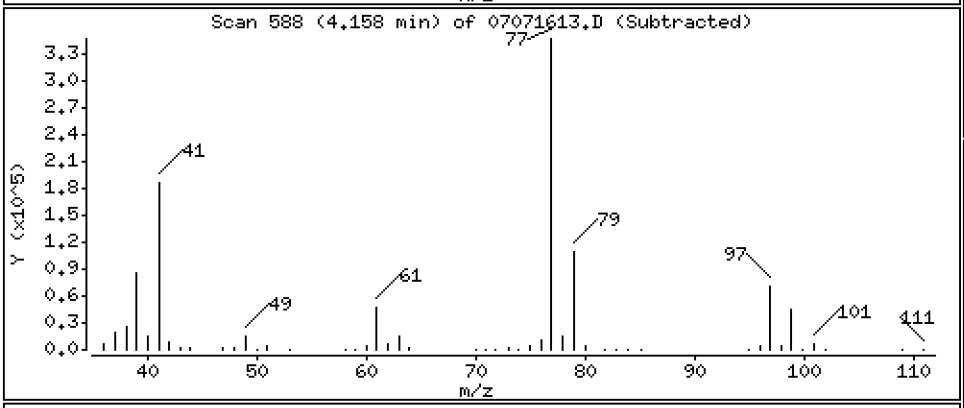
Column phase: RTXVMS

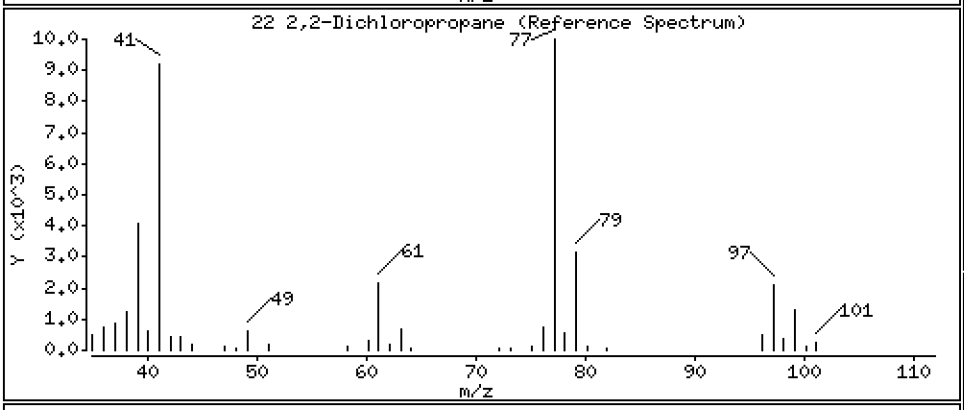
Column diameter: 0.18

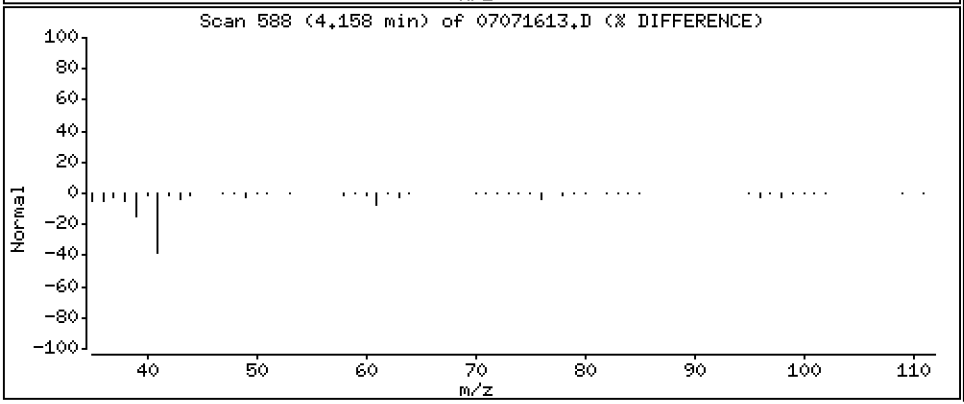
22 2,2-Dichloropropane

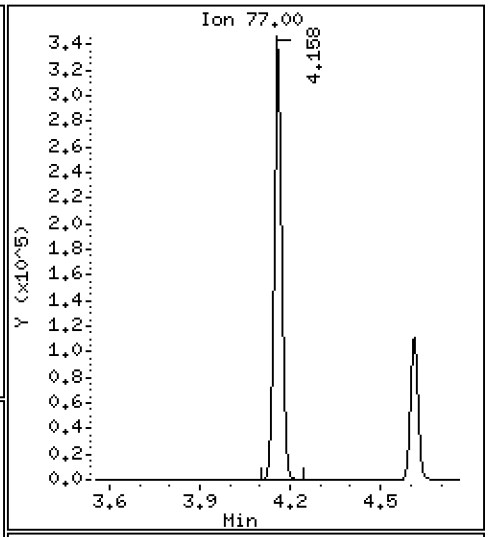
Concentration: 48.051 ug/Kg

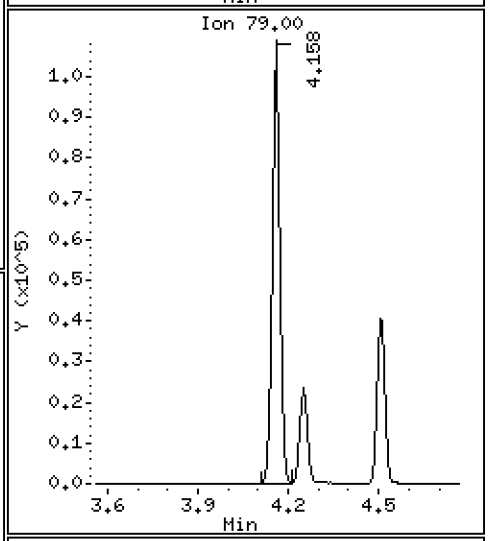


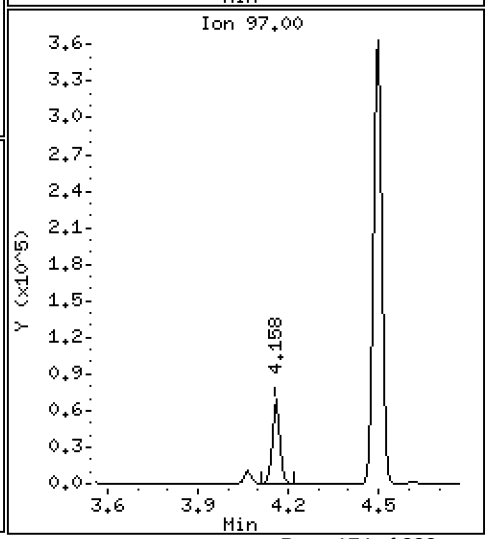












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

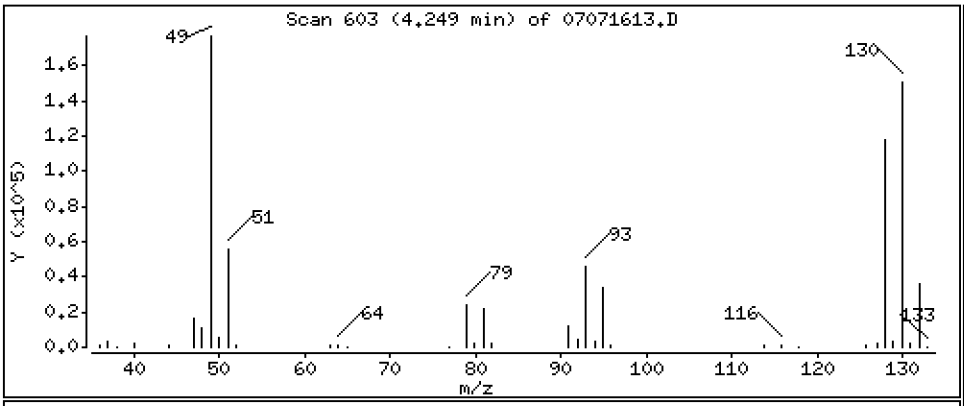
Operator: PB

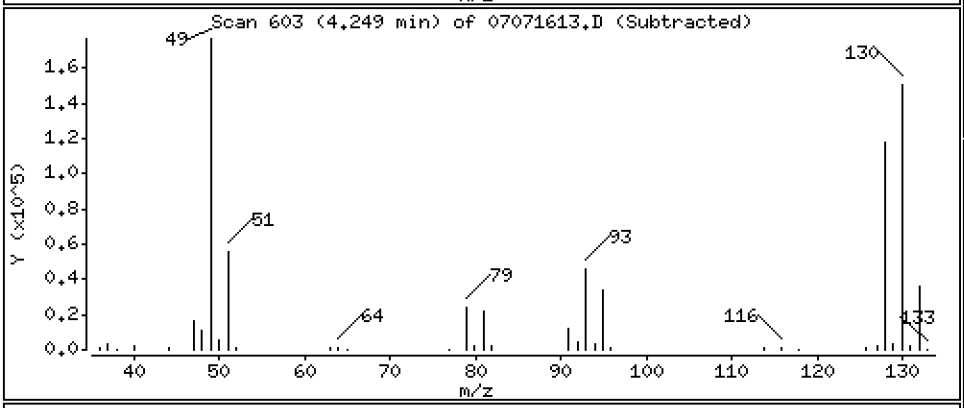
Column phase: RTXVMS

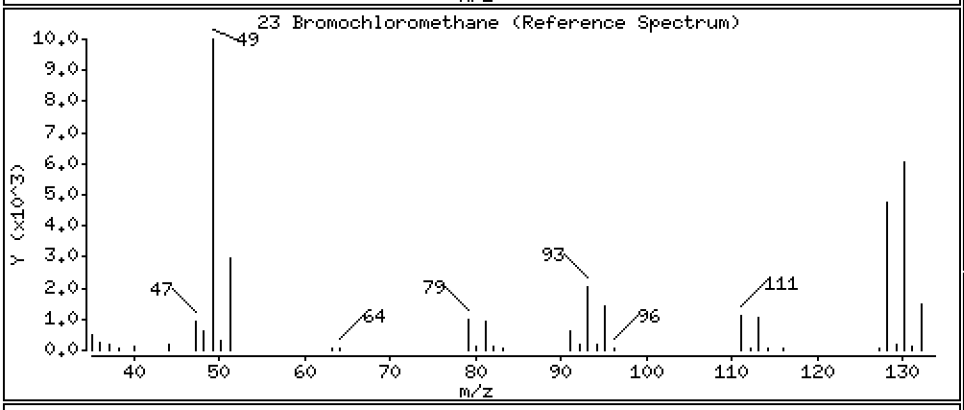
Column diameter: 0.18

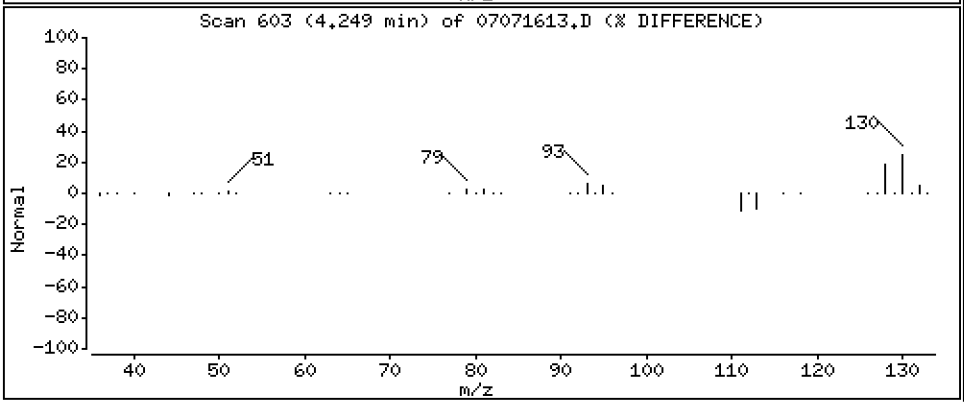
23 Bromochloromethane

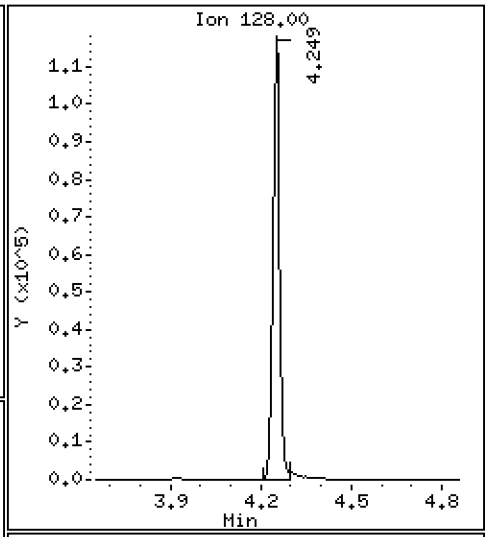
Concentration: 46.405 ug/Kg

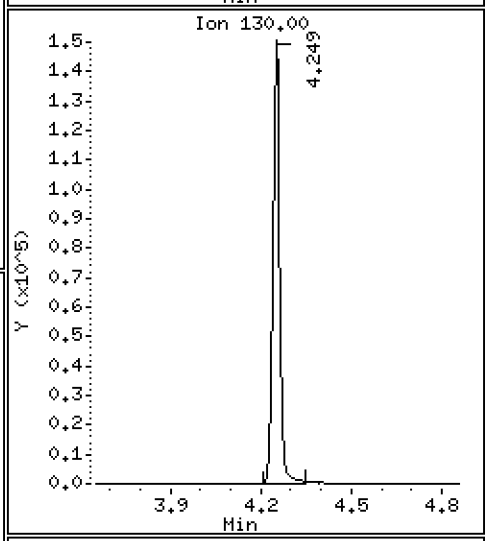


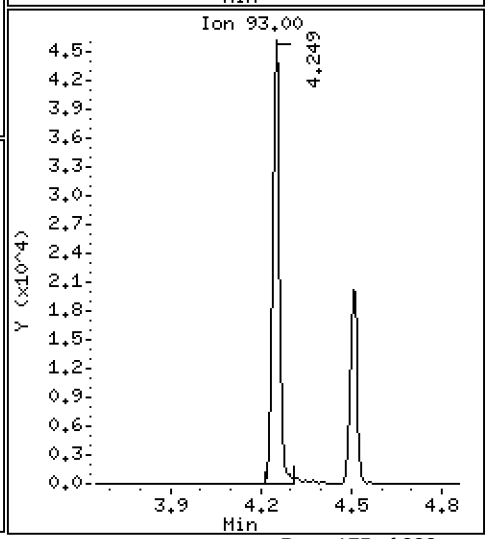












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Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

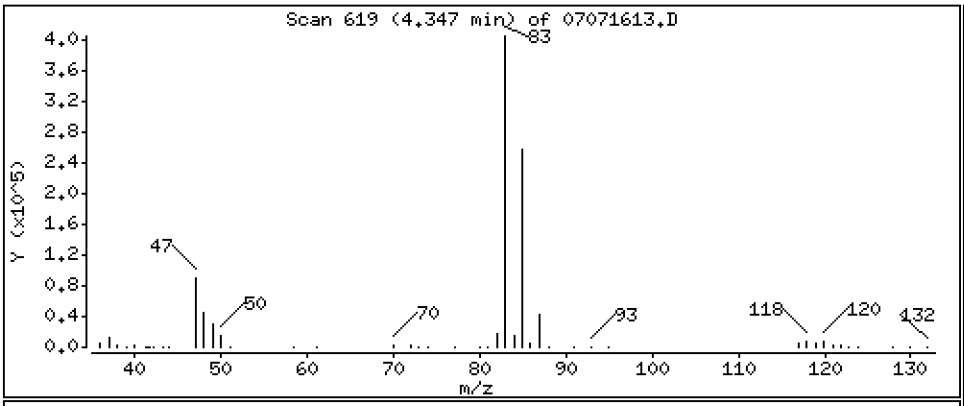
Operator: PB

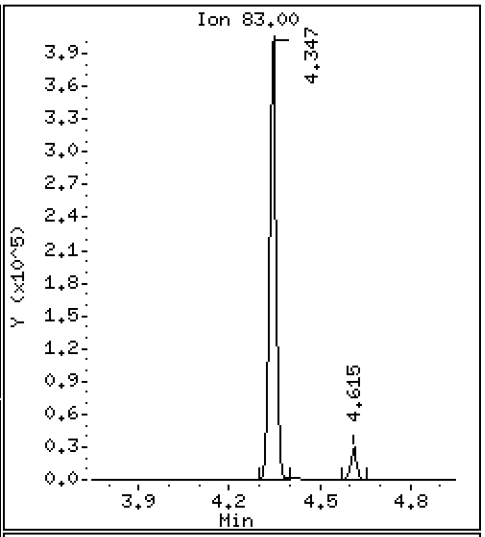
Column phase: RTXVMS

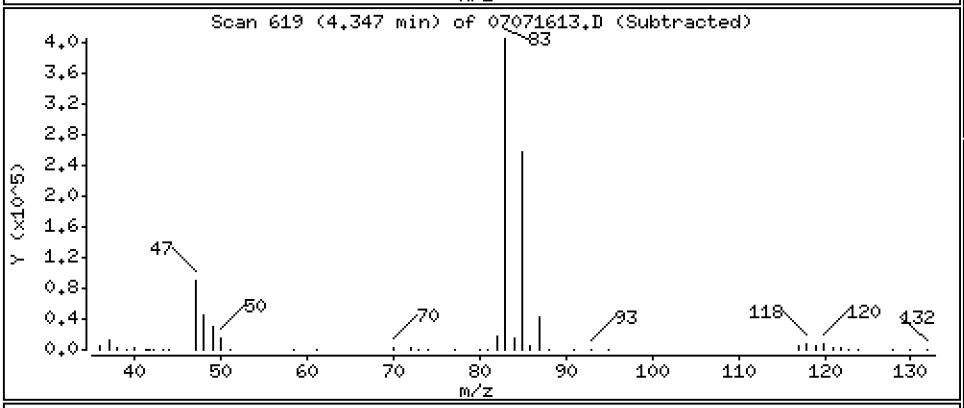
Column diameter: 0.18

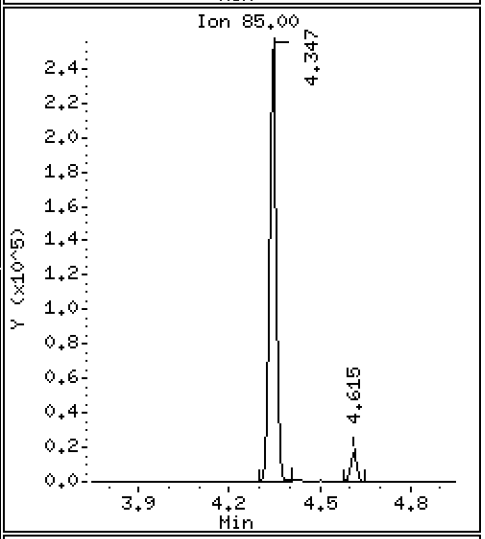
24 Chloroform

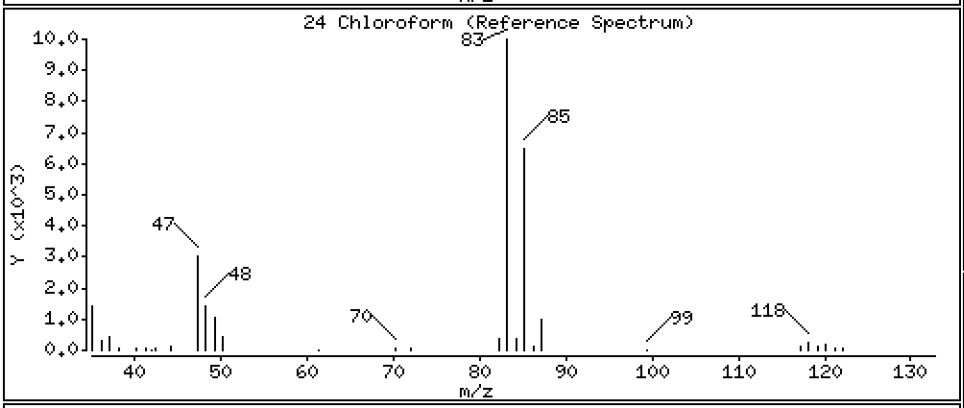
Concentration: 46.348 ug/Kg

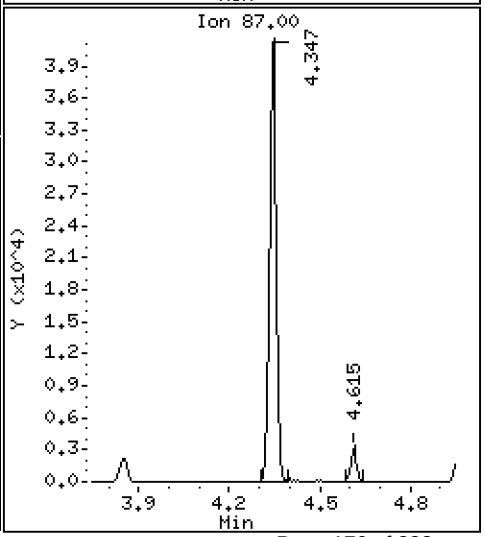


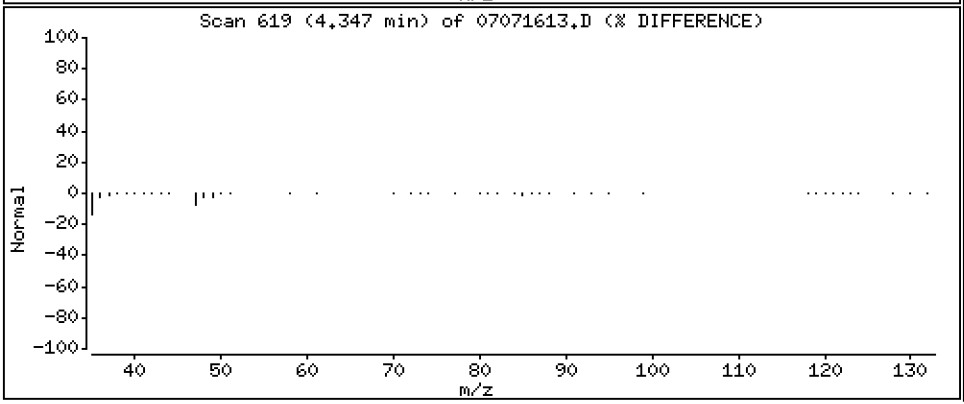












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

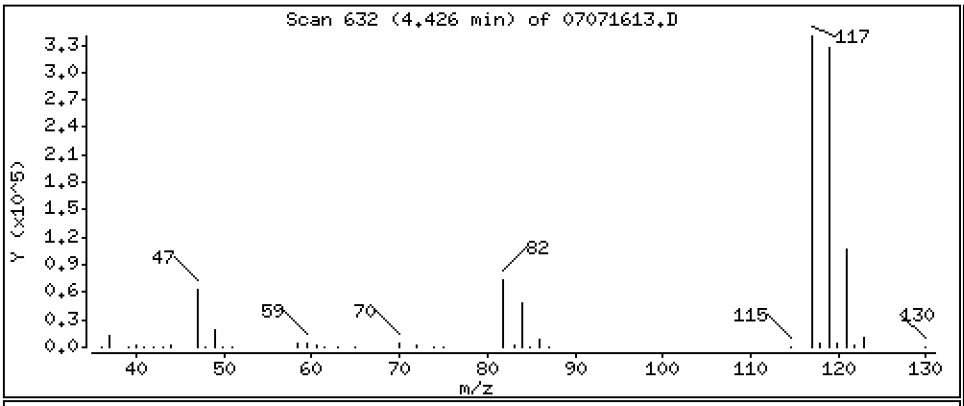
Operator: PB

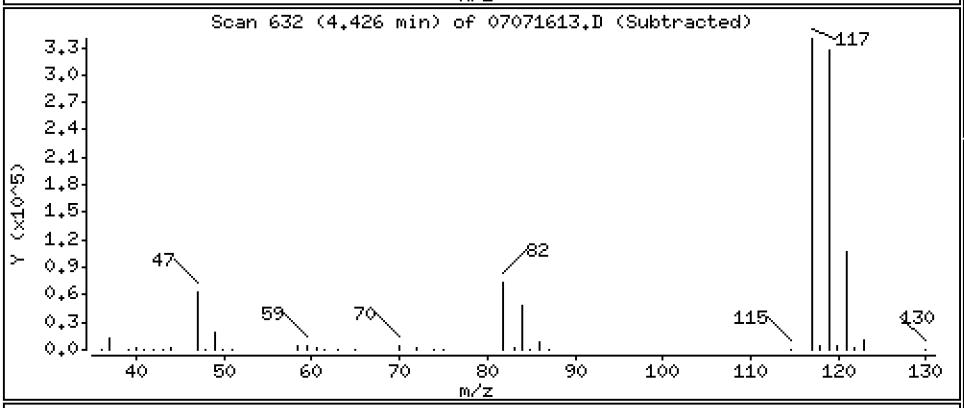
Column phase: RTXVMS

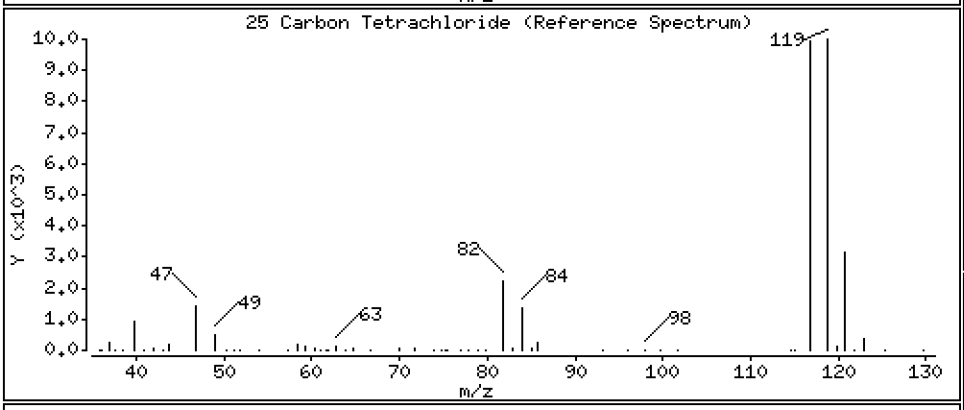
Column diameter: 0.18

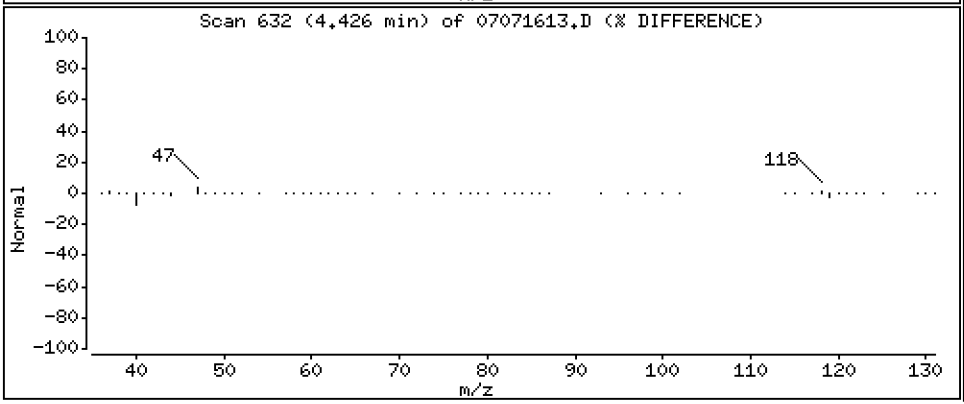
25 Carbon Tetrachloride

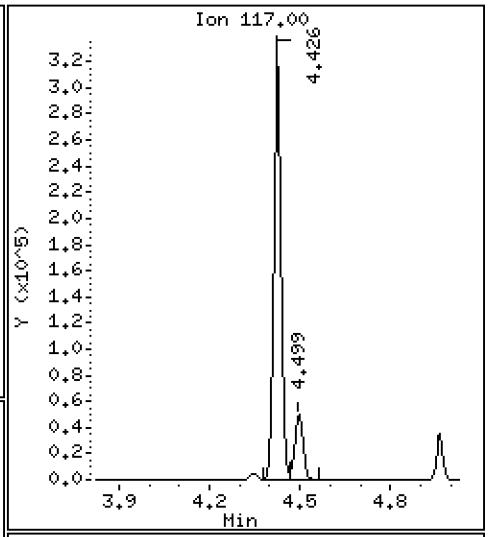
Concentration: 51.675 ug/Kg

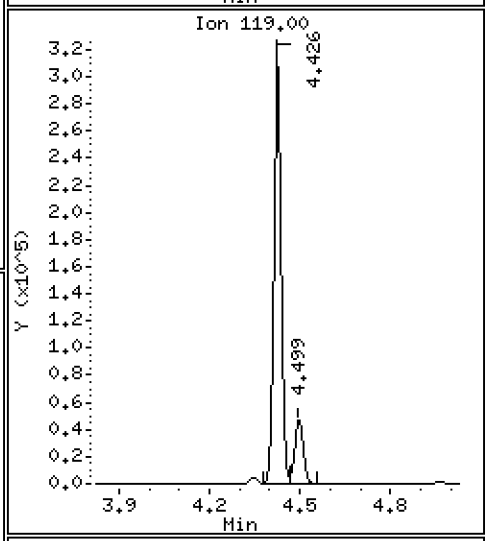


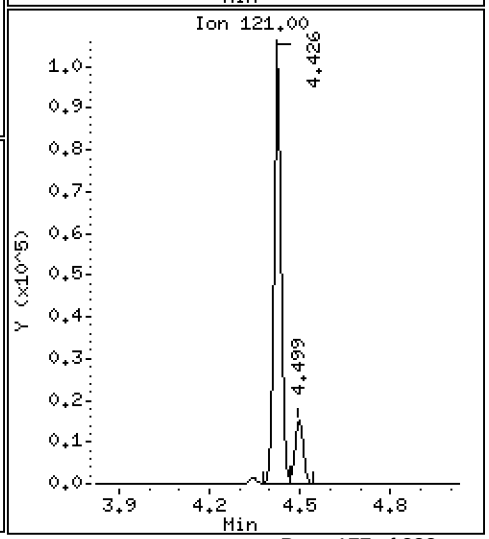












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

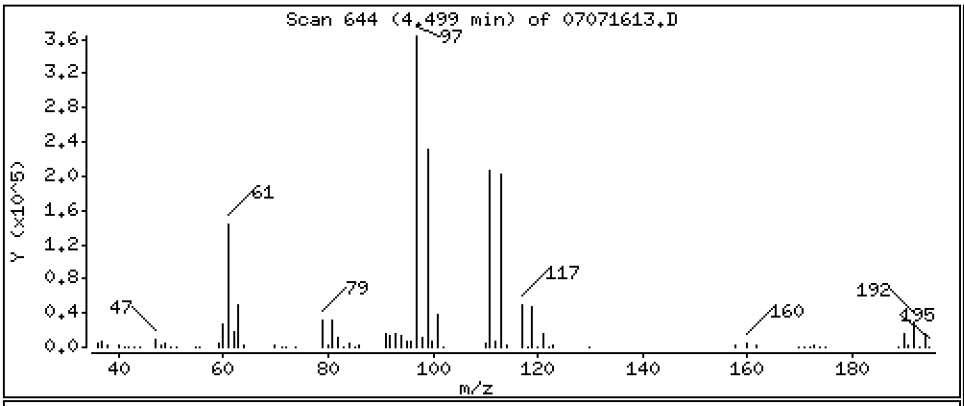
Operator: PB

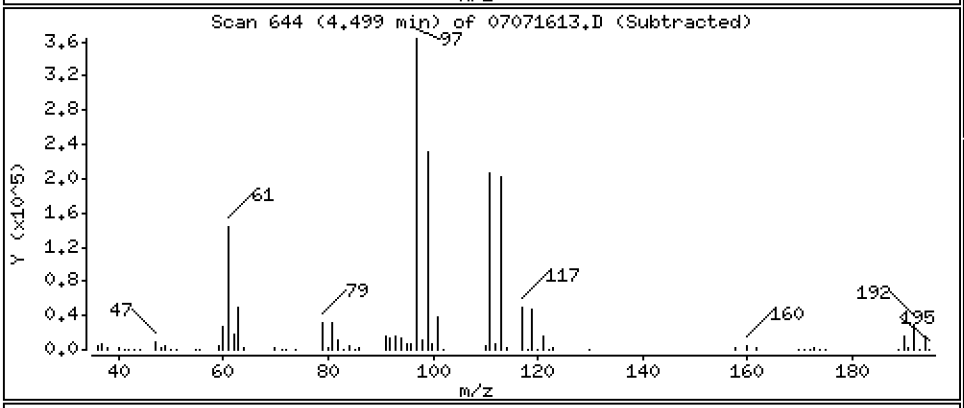
Column phase: RTXVMS

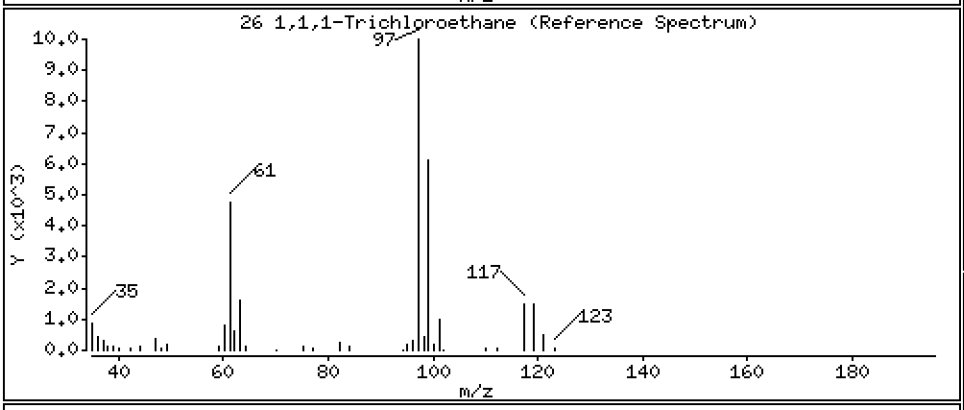
Column diameter: 0.18

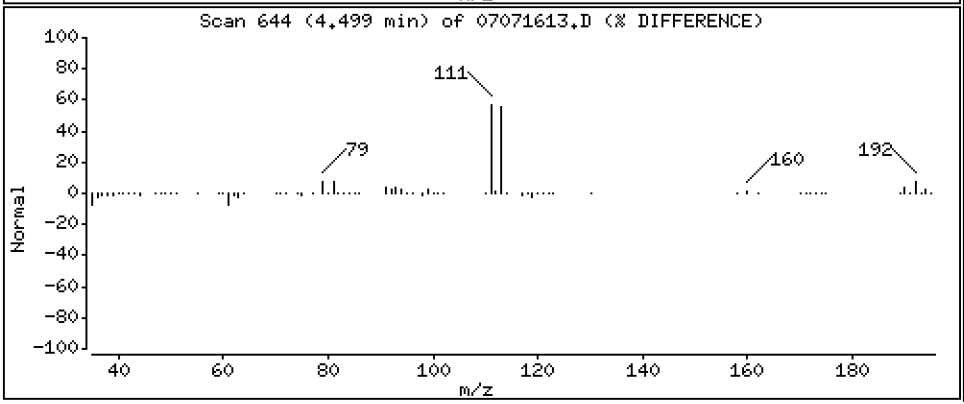
26 1,1,1-Trichloroethane

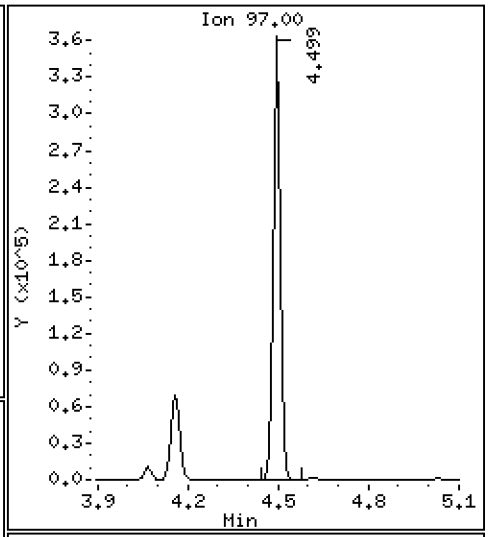
Concentration: 47.938 ug/Kg

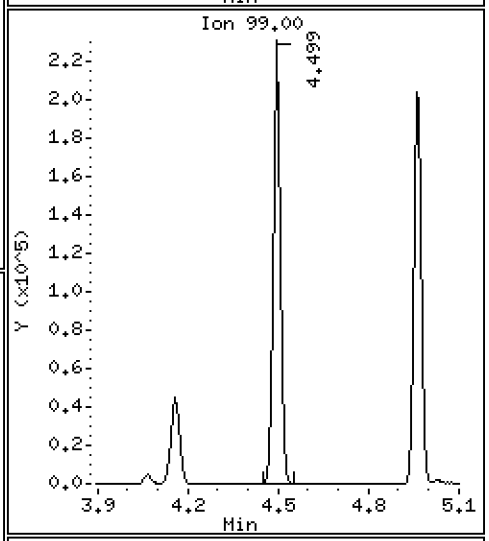


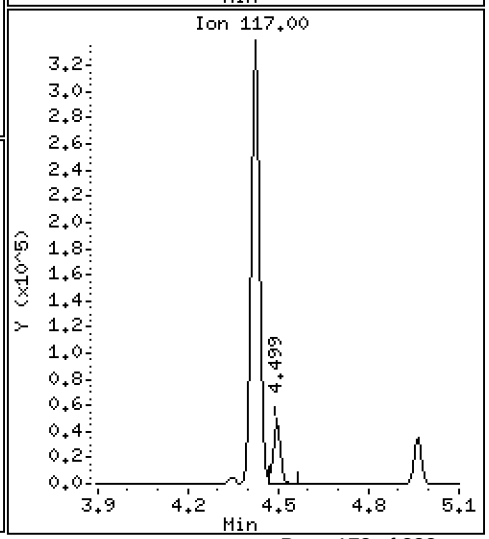












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

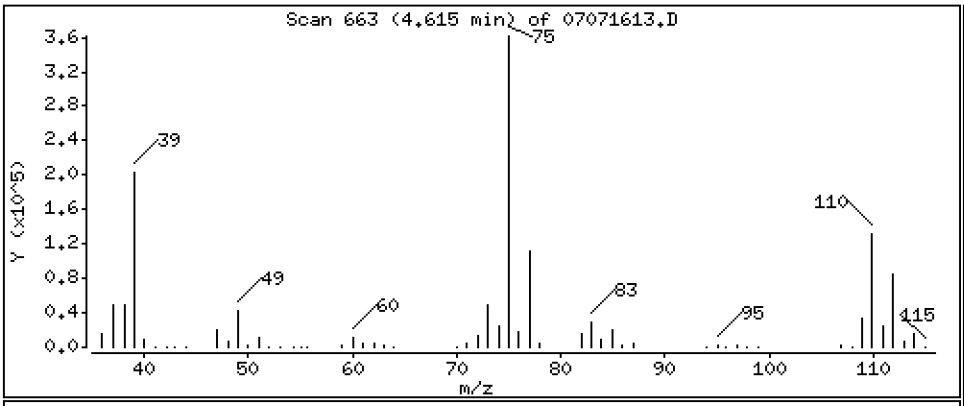
Operator: PB

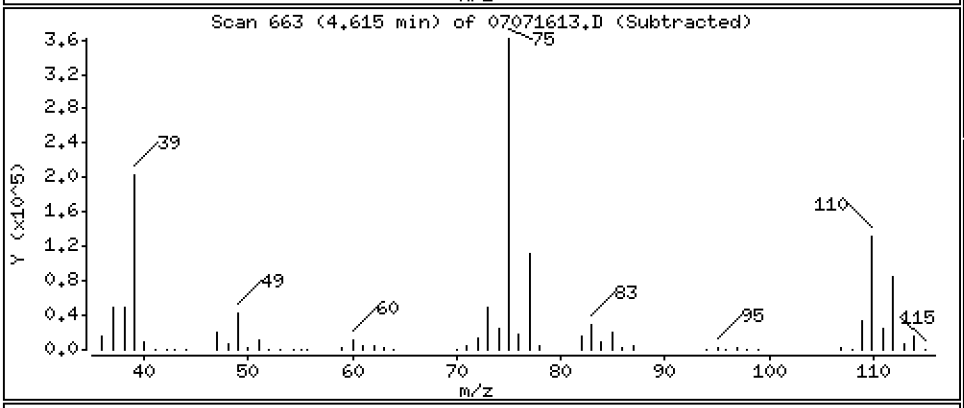
Column phase: RTXVMS

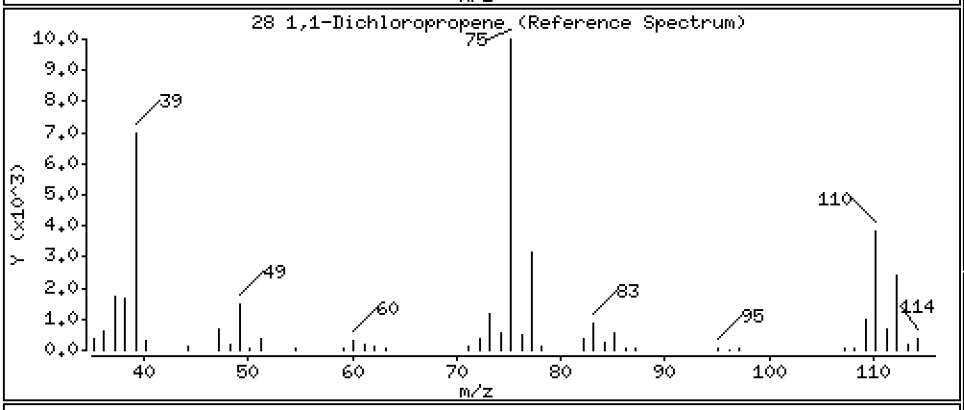
Column diameter: 0.18

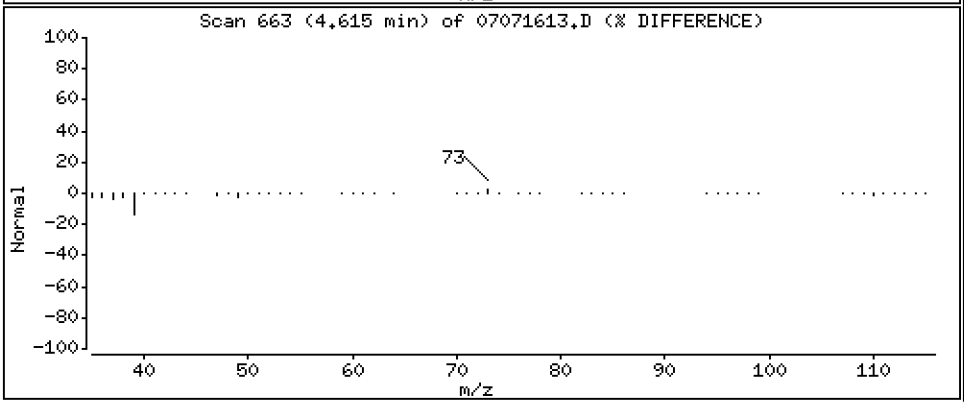
28 1,1-Dichloropropene

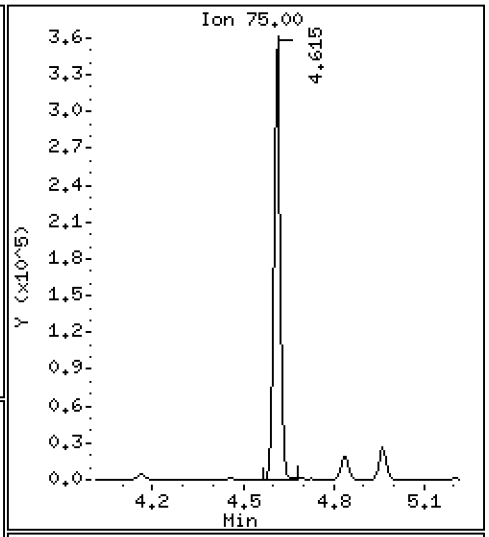
Concentration: 49.249 ug/Kg

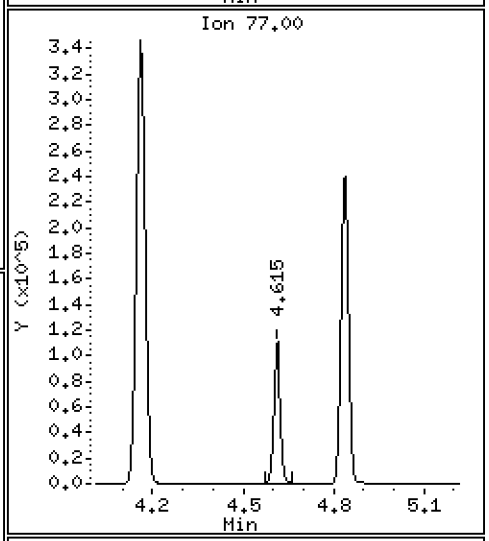


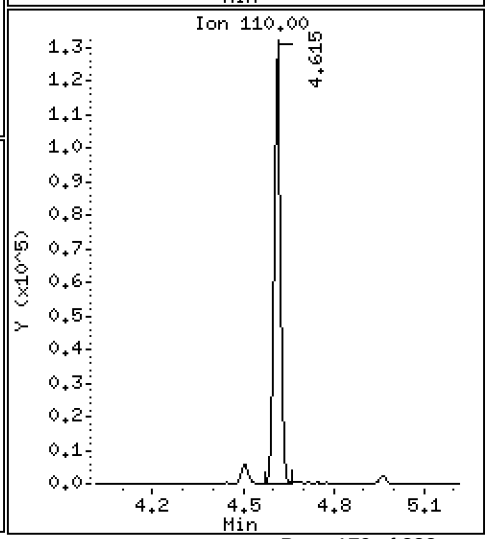












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

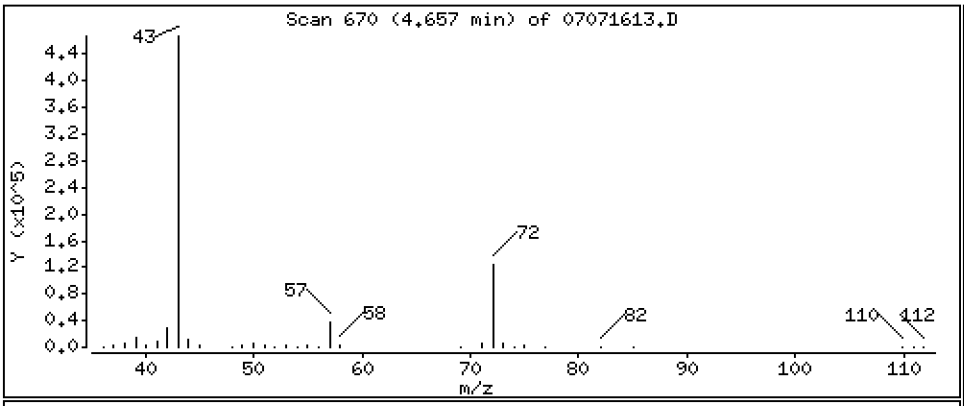
Operator: PB

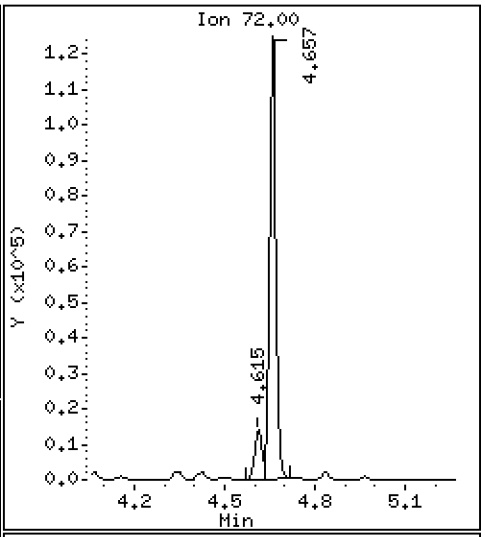
Column phase: RTXVMS

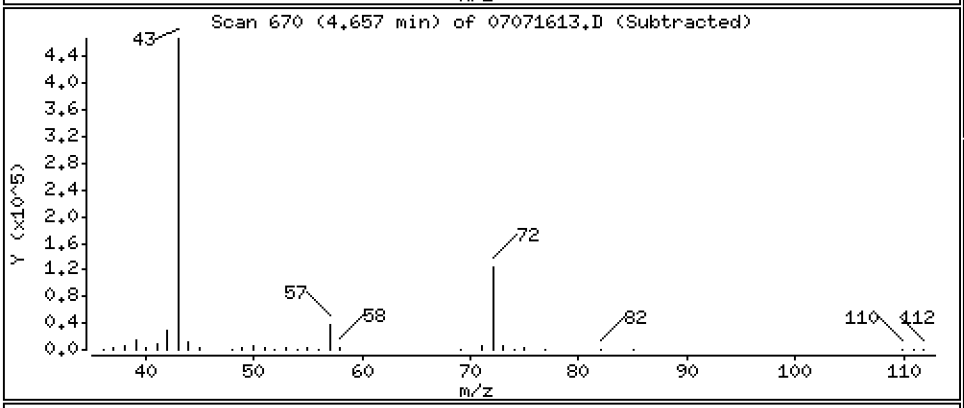
Column diameter: 0.18

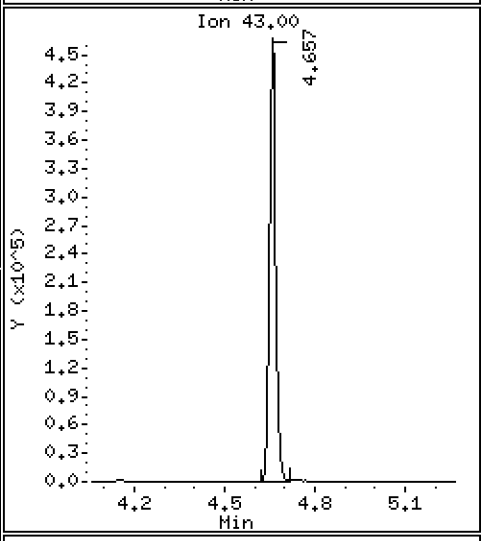
29 2-Butanone

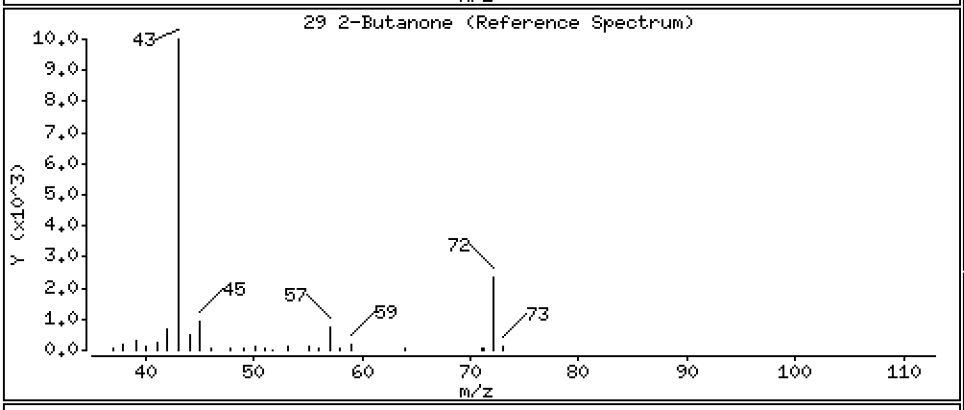
Concentration: 214.36 ug/Kg

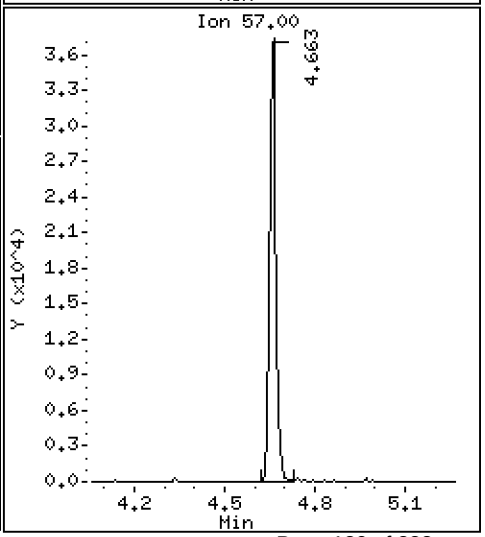


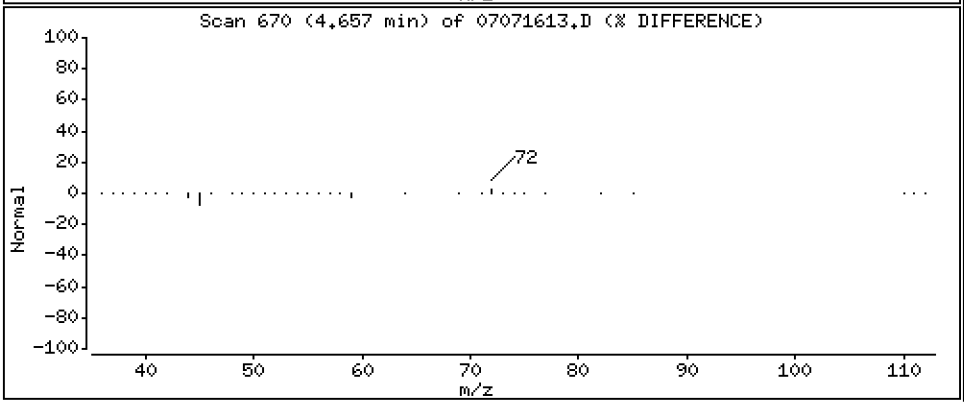












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

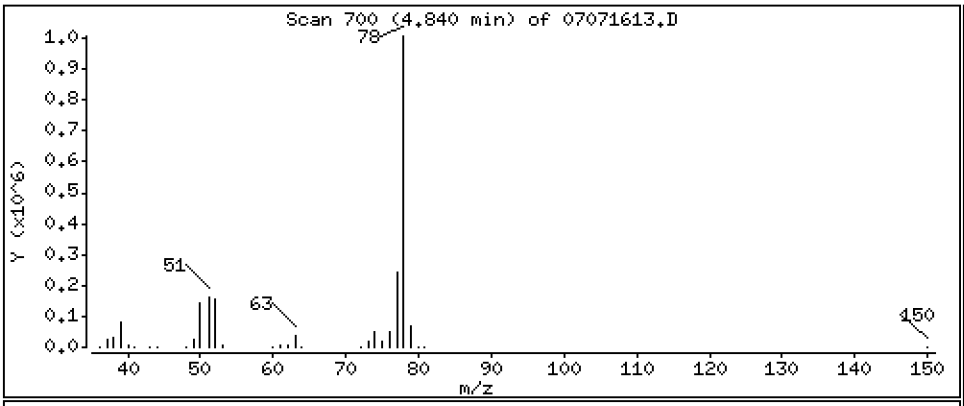
Operator: PB

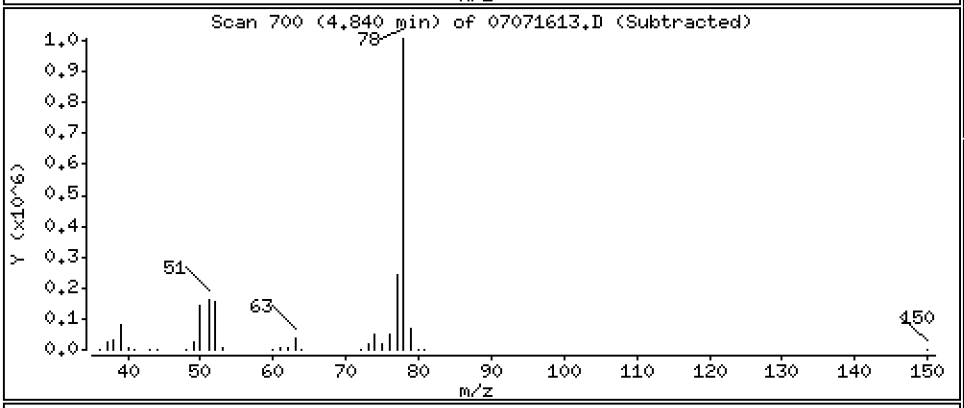
Column phase: RTXVMS

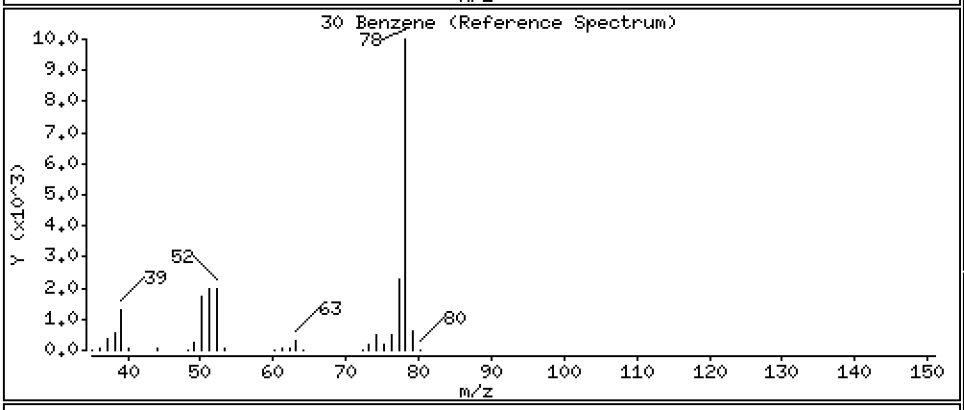
Column diameter: 0.18

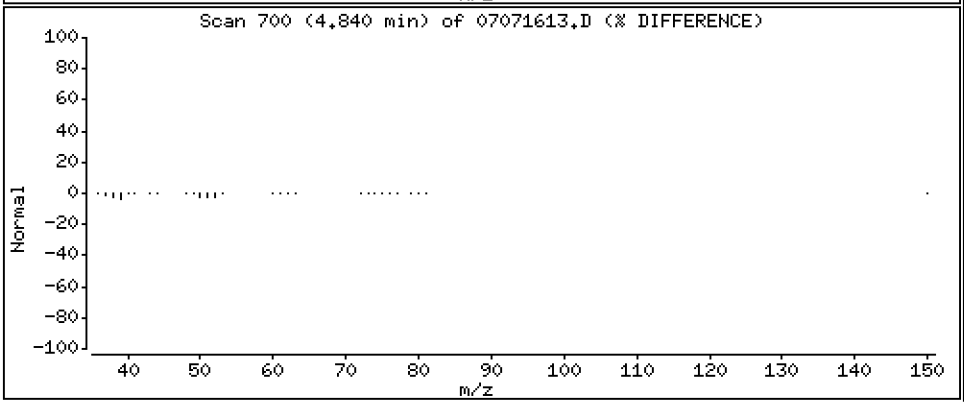
30 Benzene

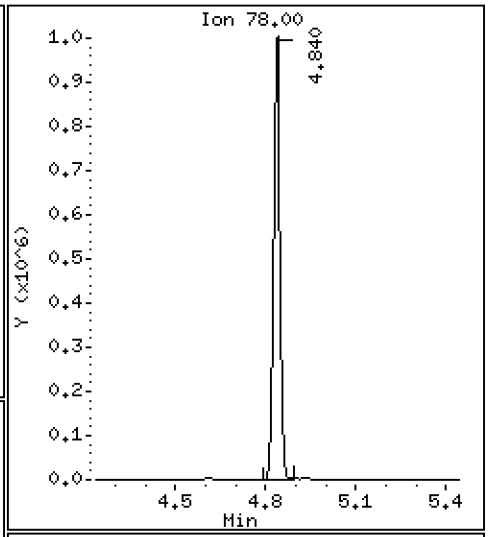
Concentration: 48.371 ug/Kg

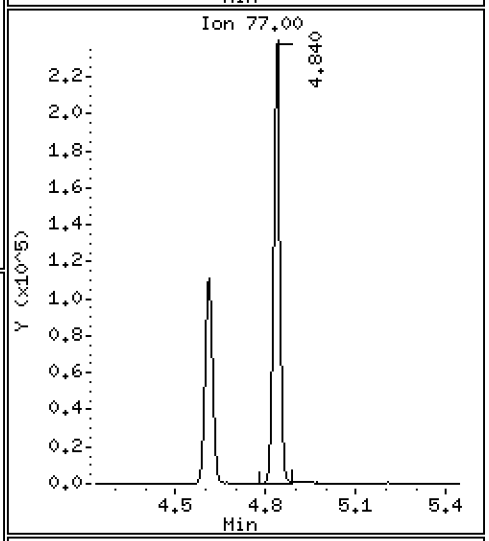


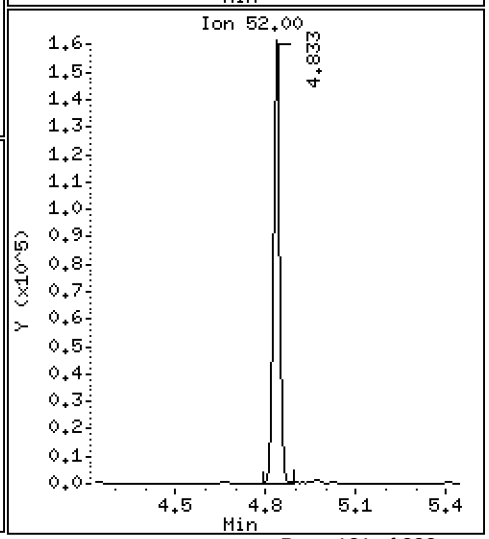












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

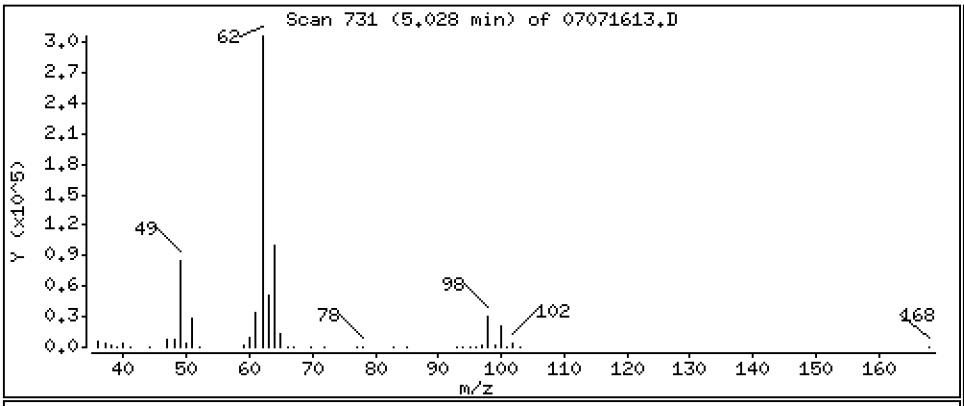
Operator: PB

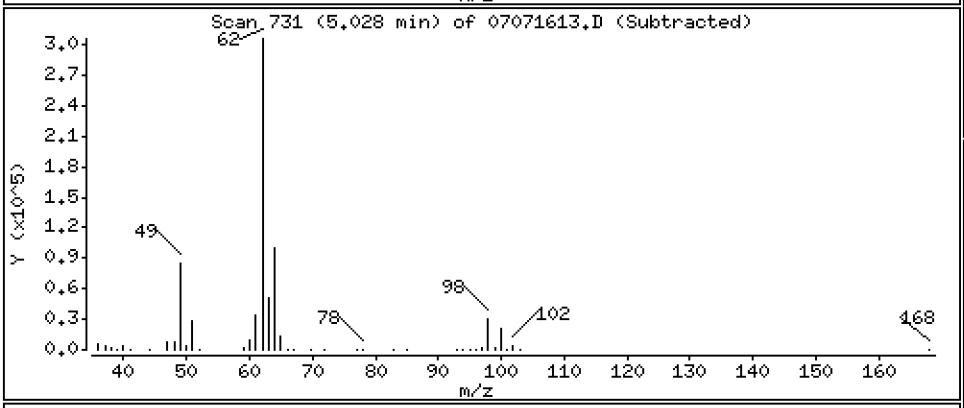
Column phase: RTXVMS

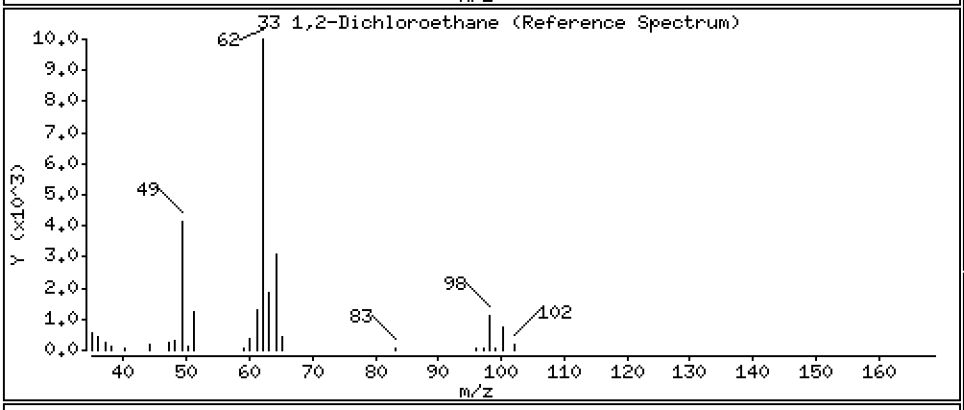
Column diameter: 0.18

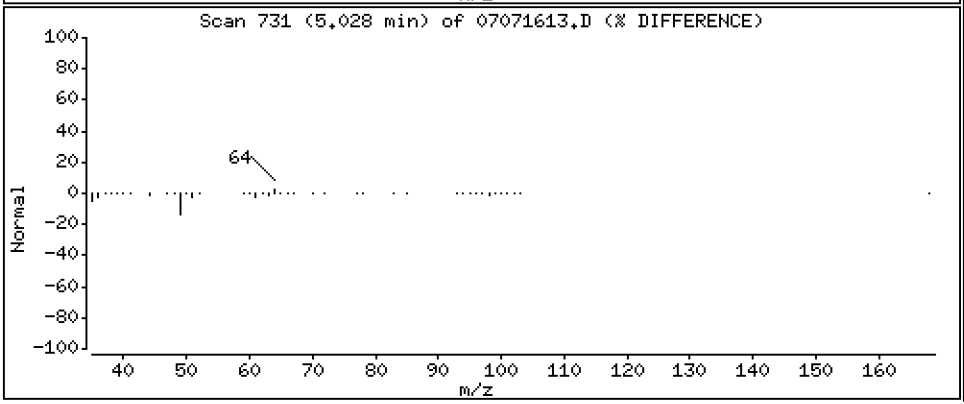
33 1,2-Dichloroethane

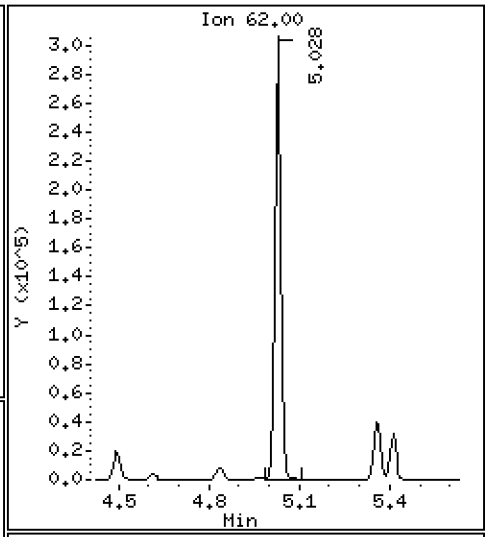
Concentration: 44.701 ug/Kg

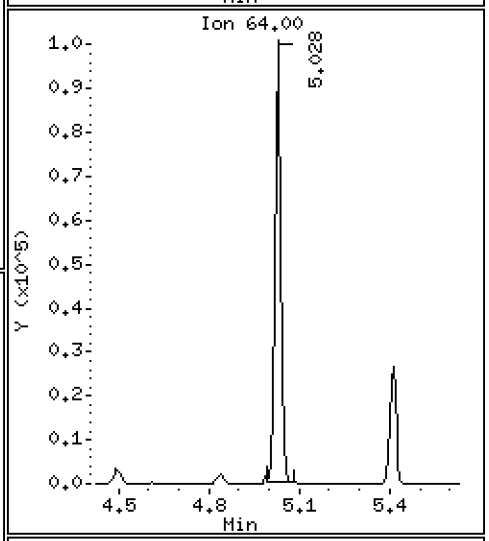


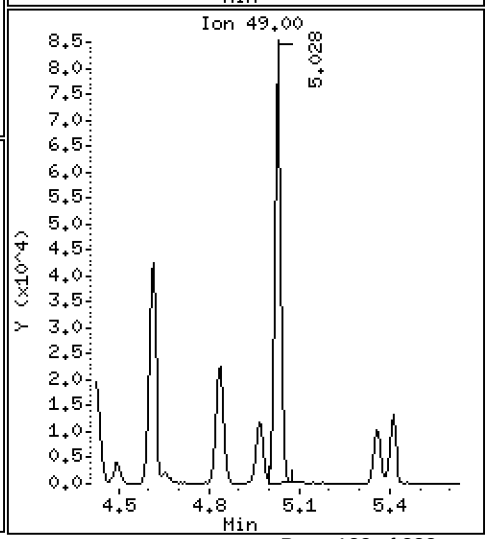












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

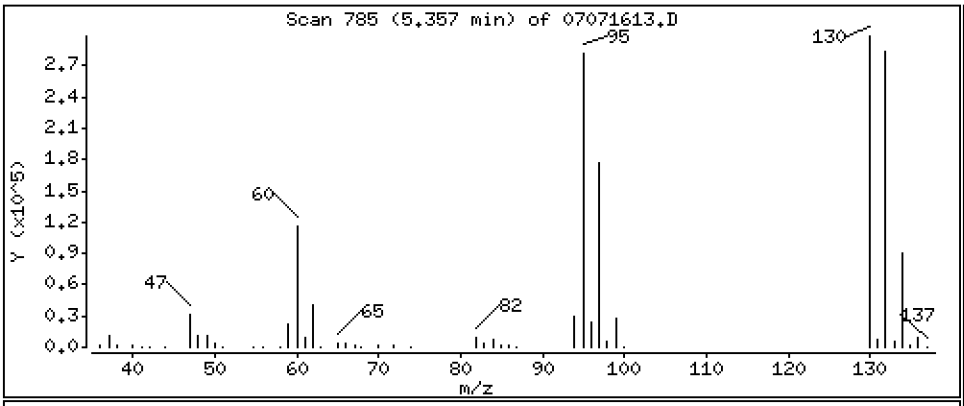
Operator: PB

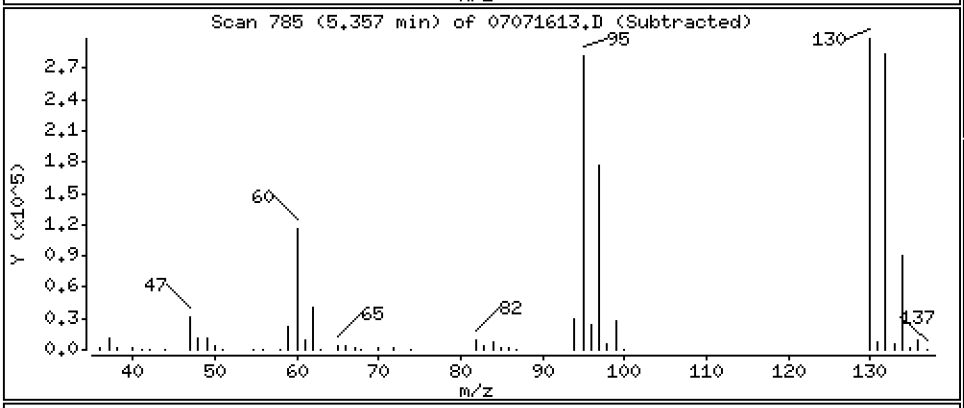
Column phase: RTXVMS

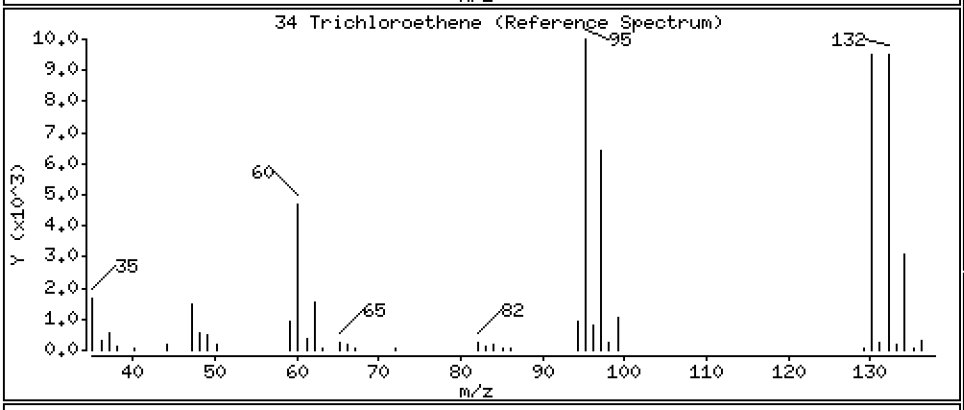
Column diameter: 0.18

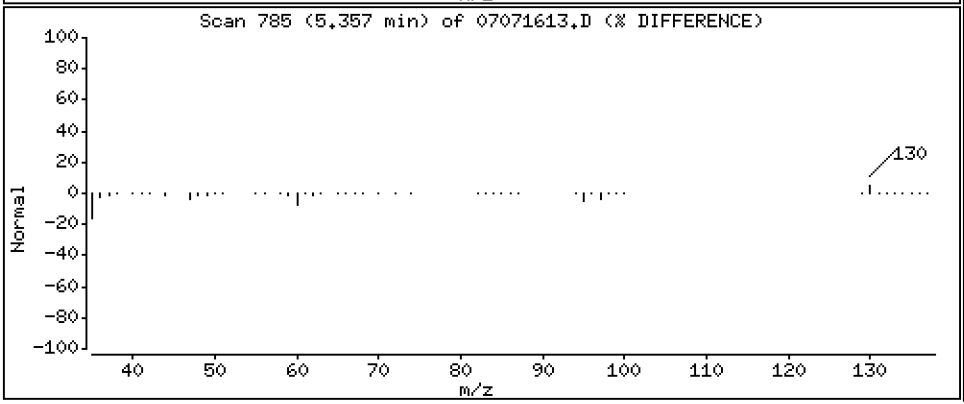
34 Trichloroethene

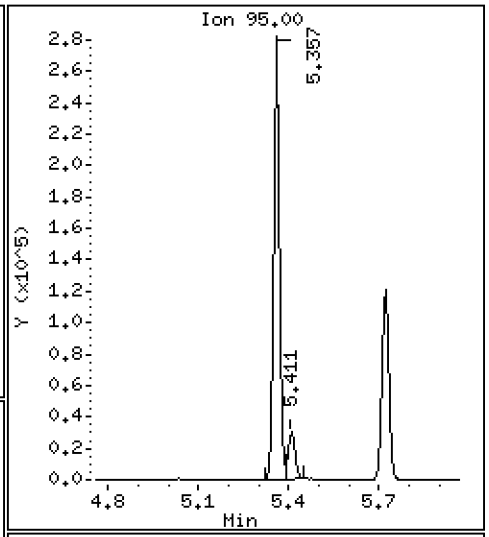
Concentration: 48.851 ug/Kg

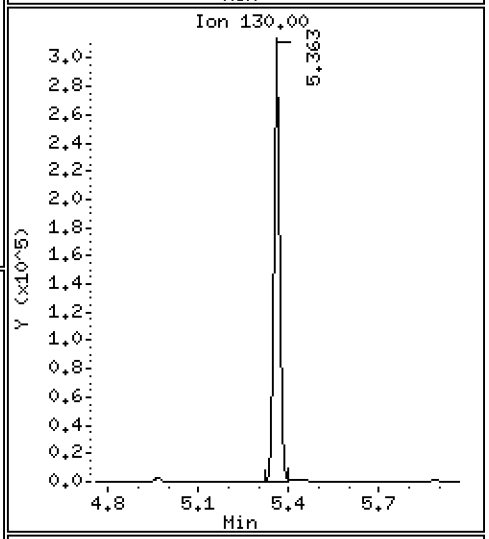


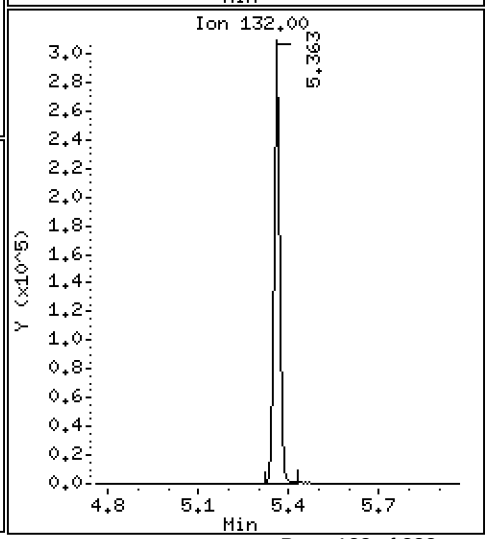












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

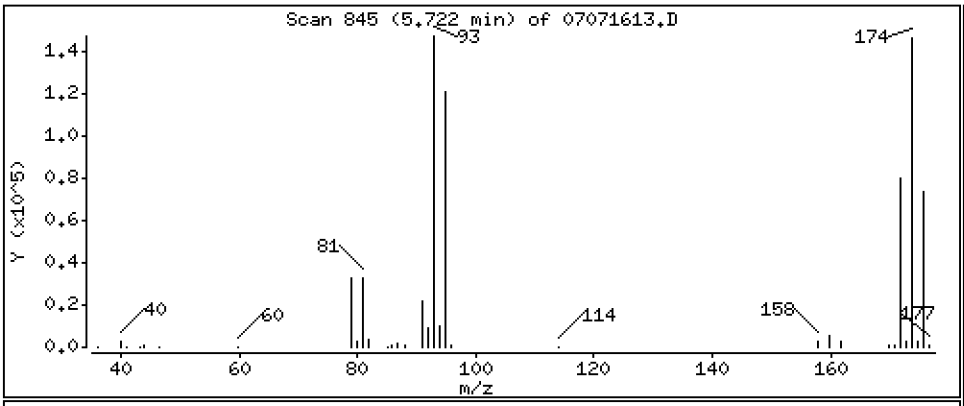
Operator: PB

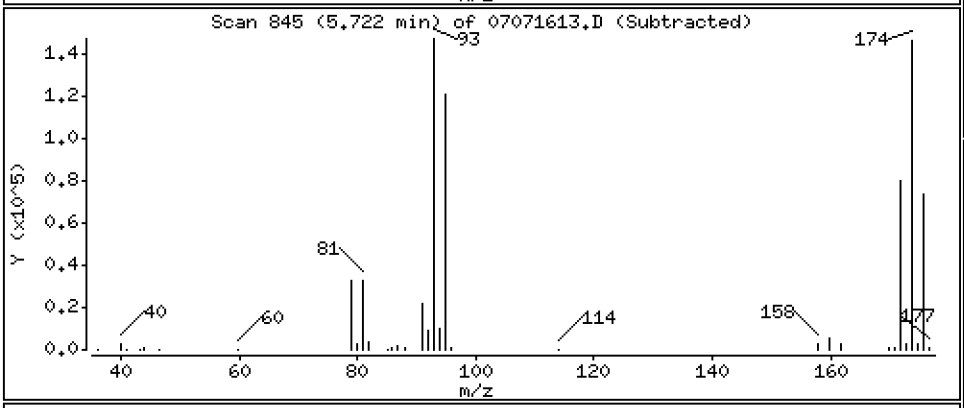
Column phase: RTXVMS

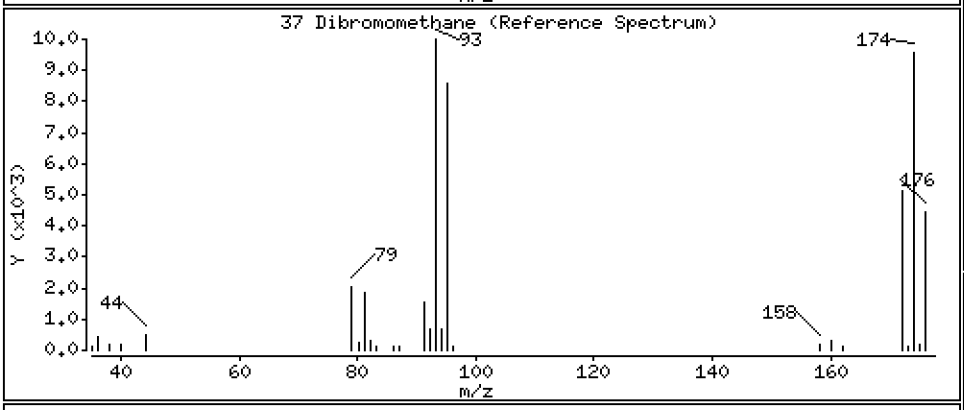
Column diameter: 0.18

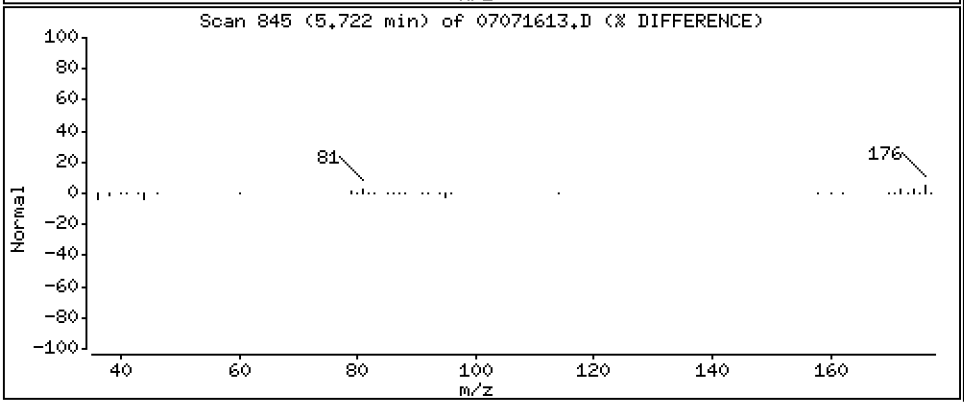
37 Dibromomethane

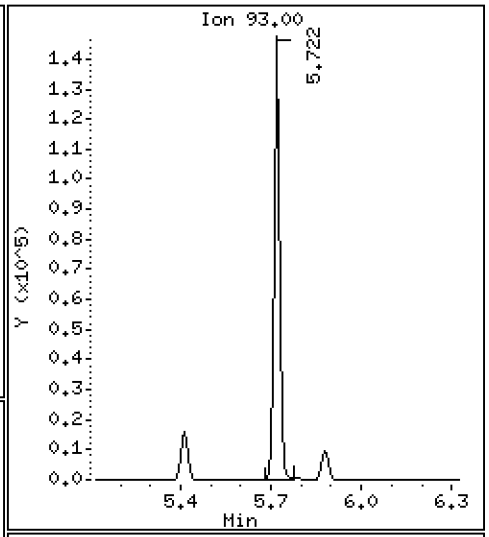
Concentration: 46.243 ug/Kg

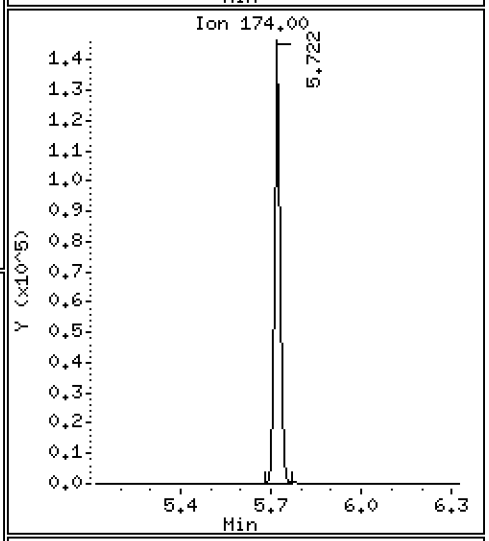


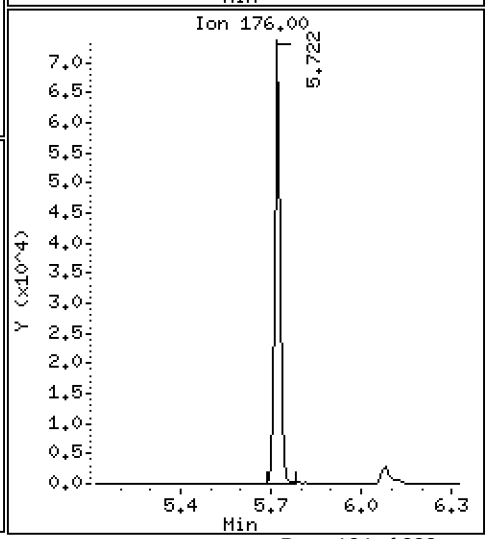












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

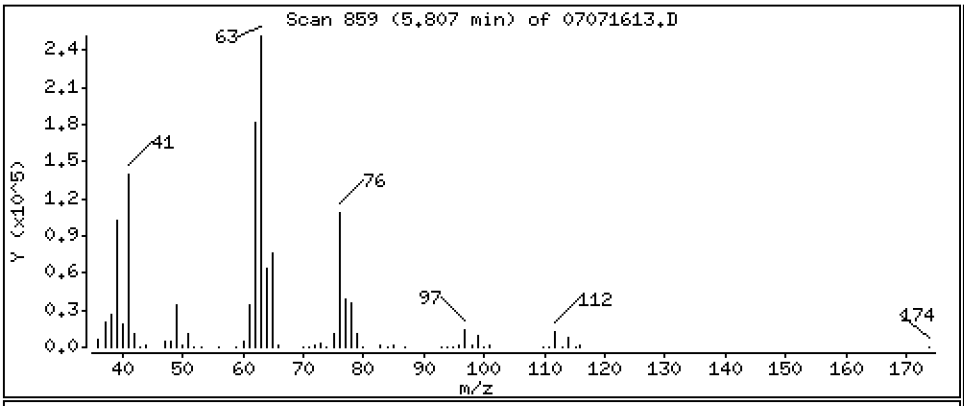
Operator: PB

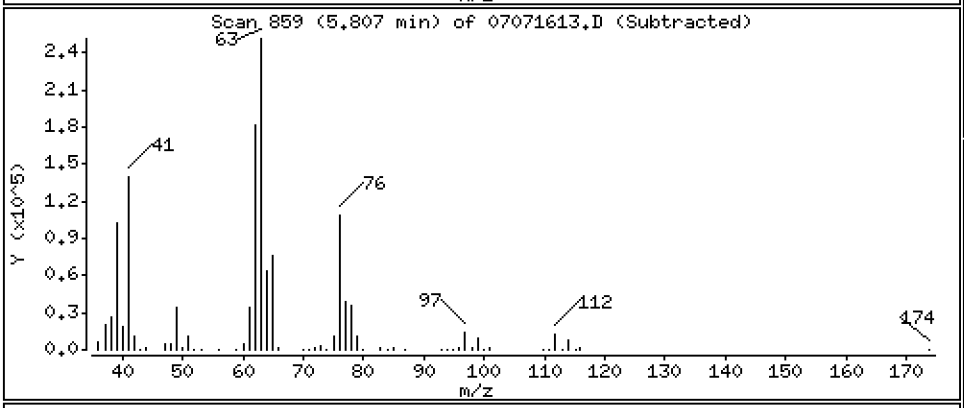
Column phase: RTXVMS

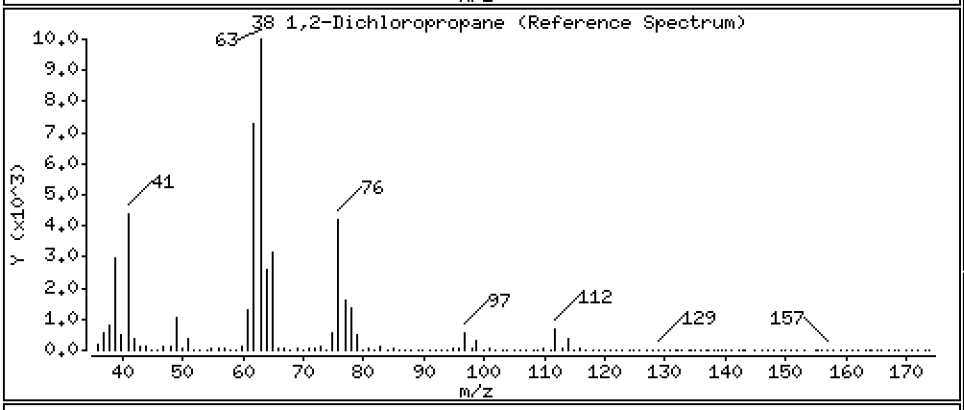
Column diameter: 0.18

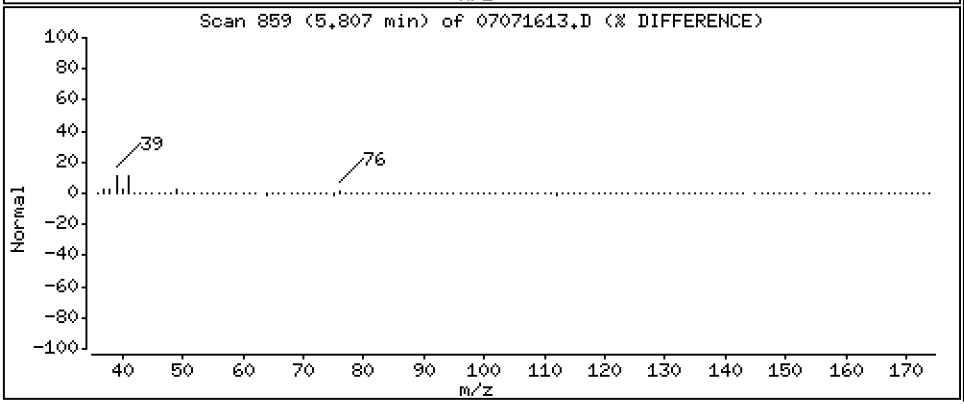
38 1,2-Dichloropropane

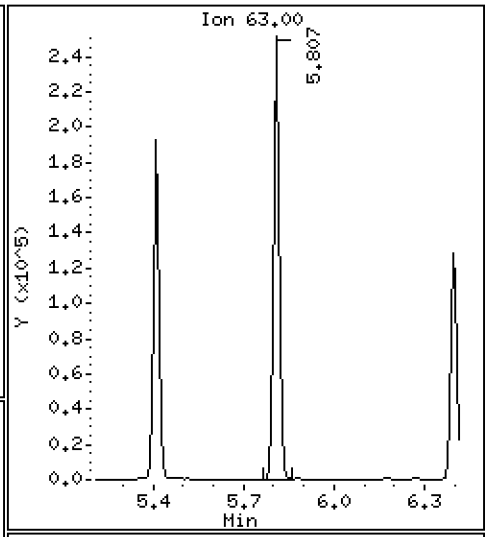
Concentration: 45.916 ug/Kg

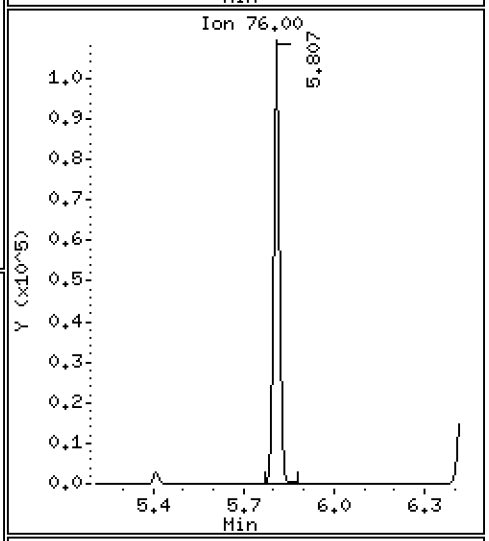


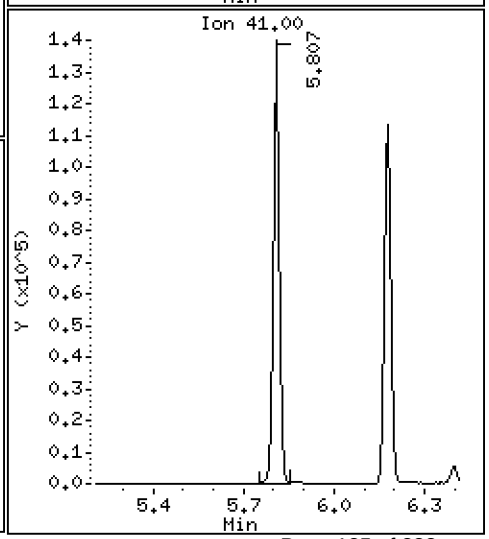












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

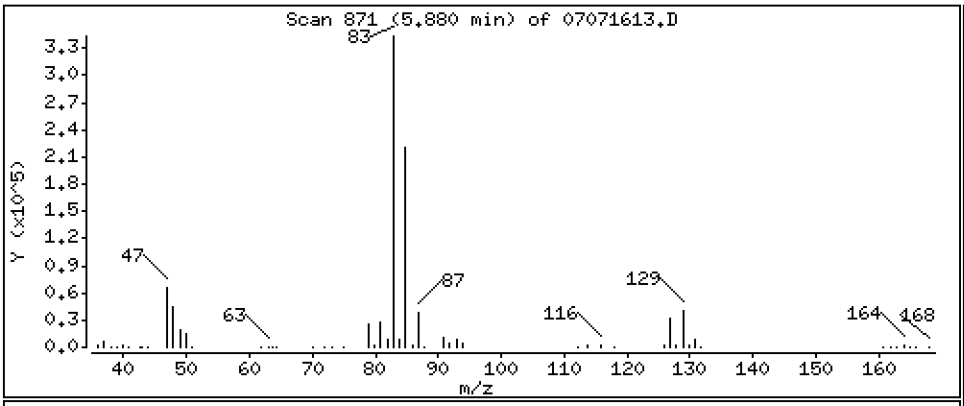
Operator: PB

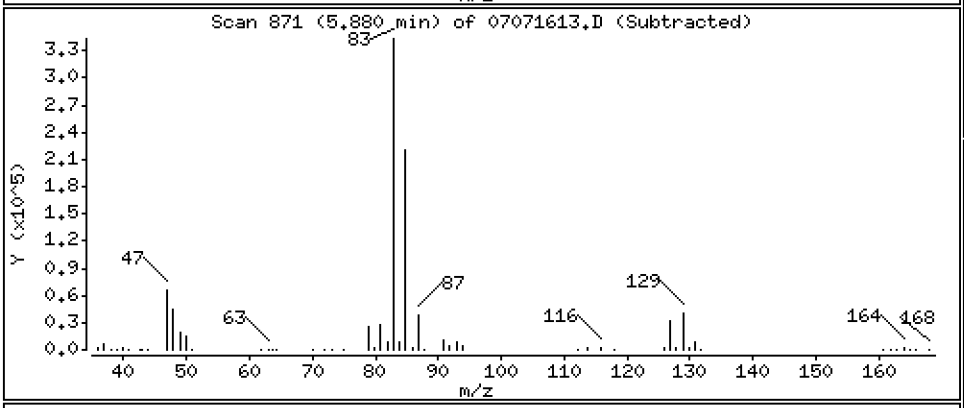
Column phase: RTXVMS

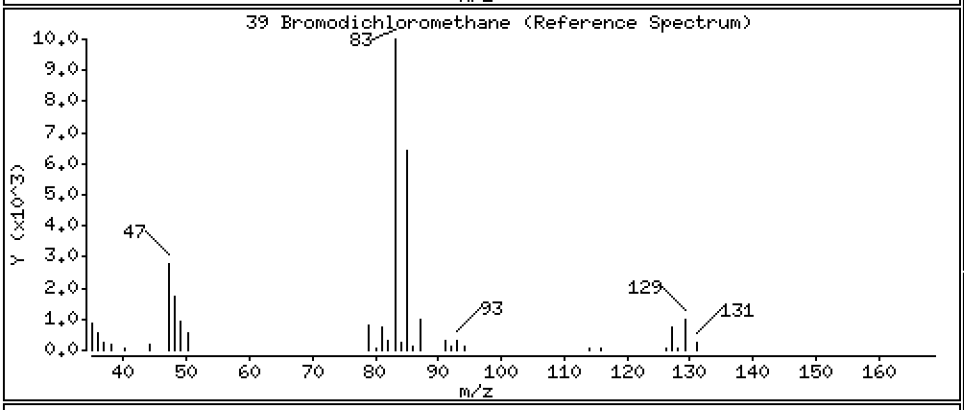
Column diameter: 0.18

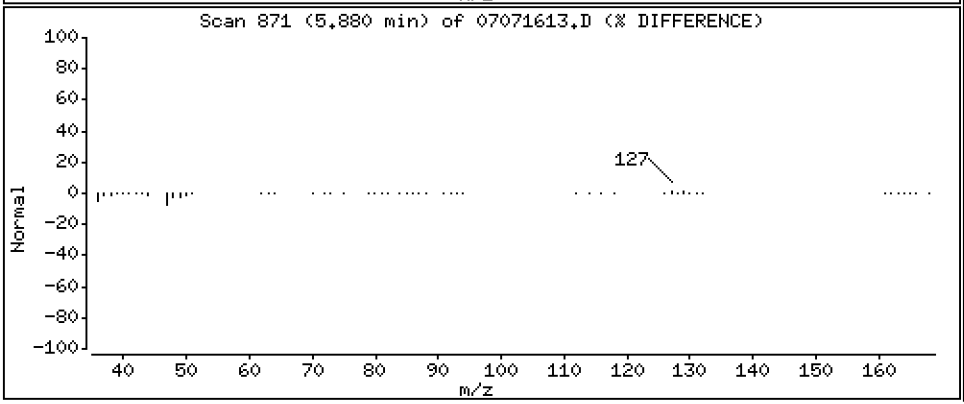
39 Bromodichloromethane

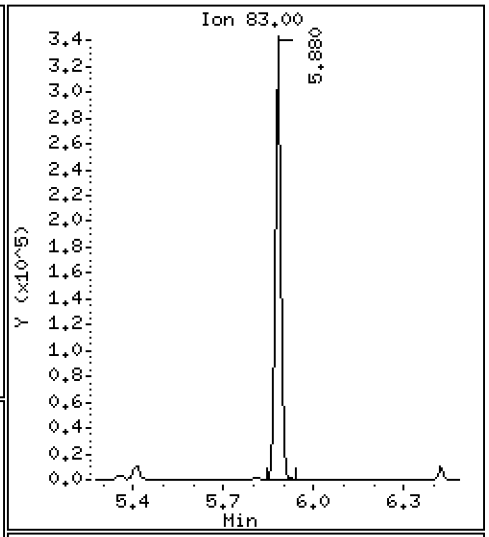
Concentration: 48.172 ug/Kg

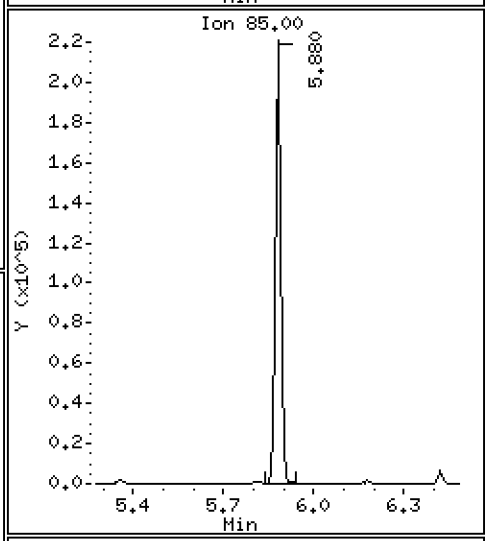


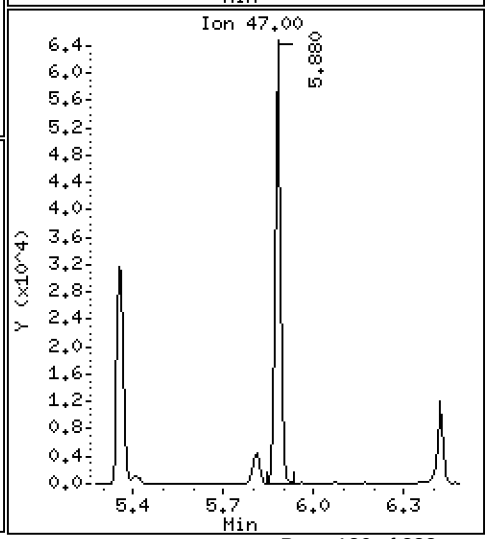












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

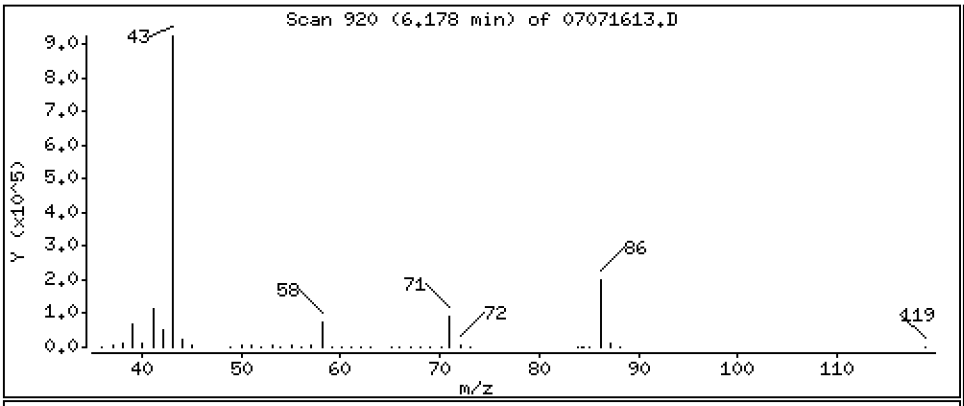
Operator: PB

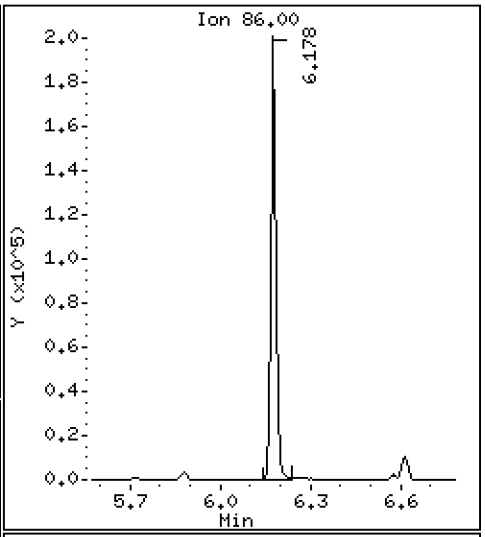
Column phase: RTXVMS

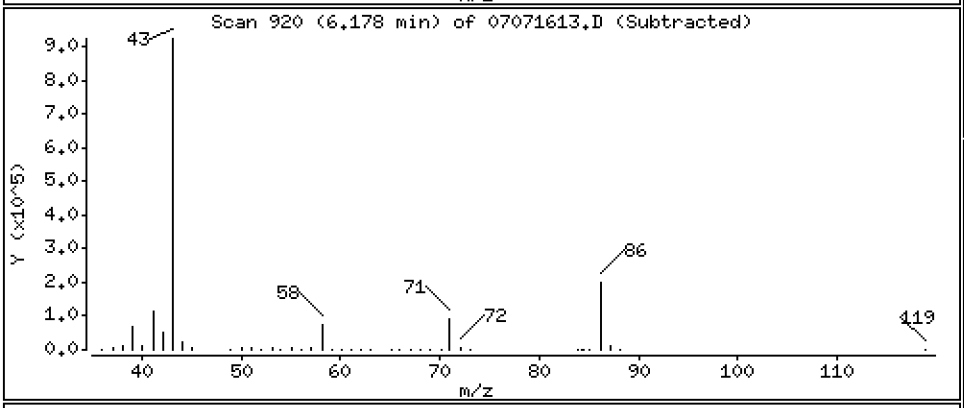
Column diameter: 0.18

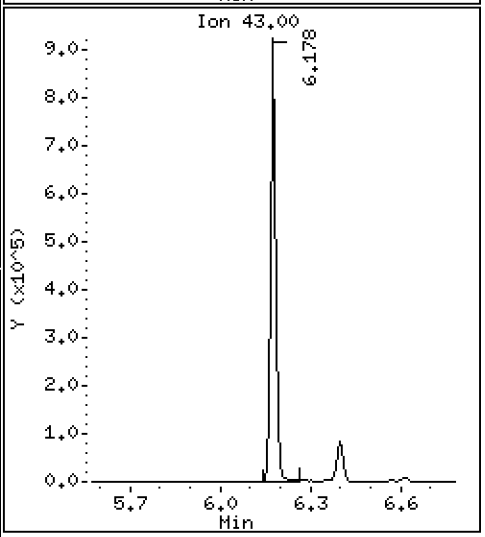
172 2-Pentanone

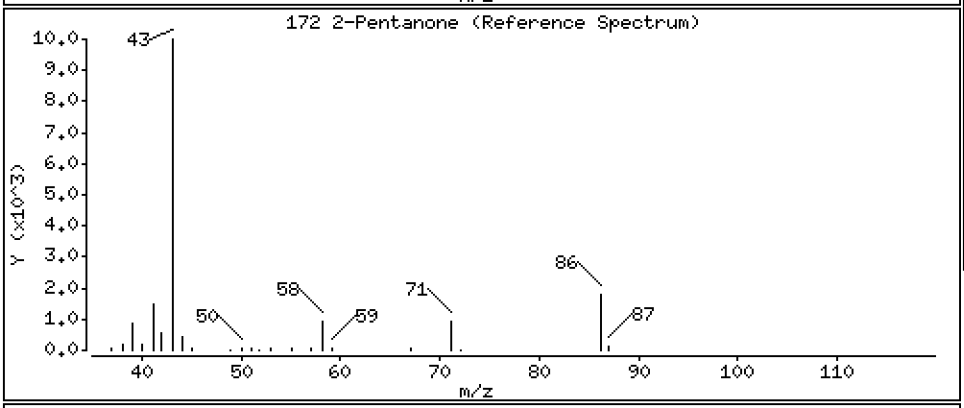
Concentration: 232.70 ug/Kg

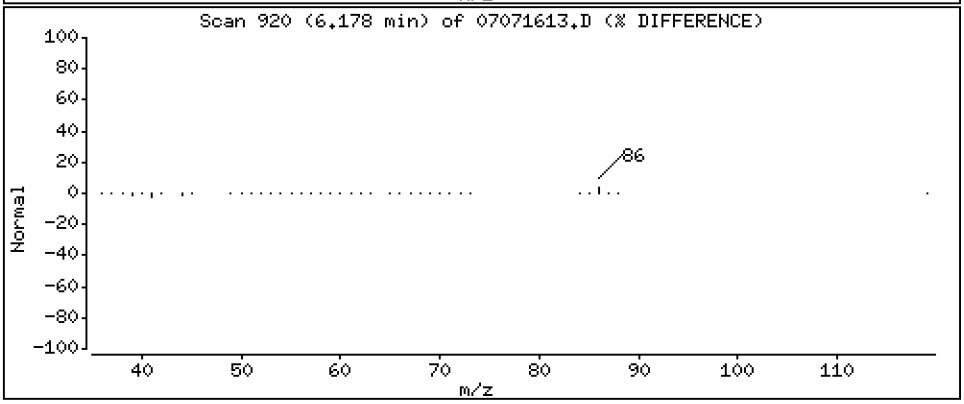












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

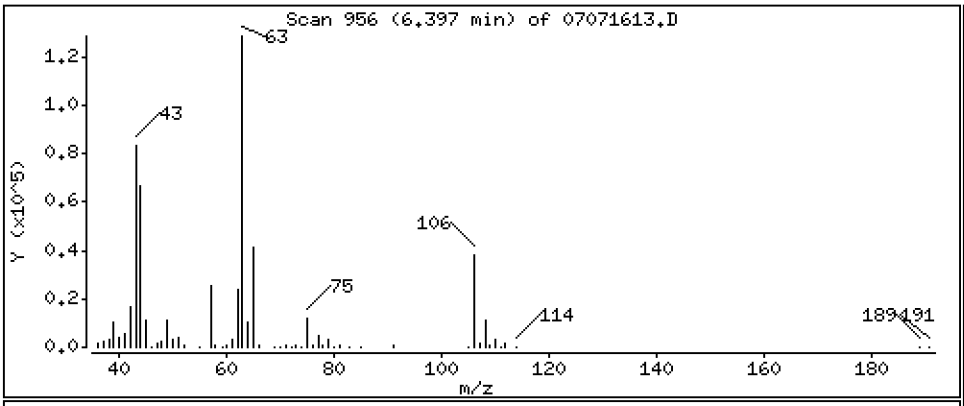
Operator: PB

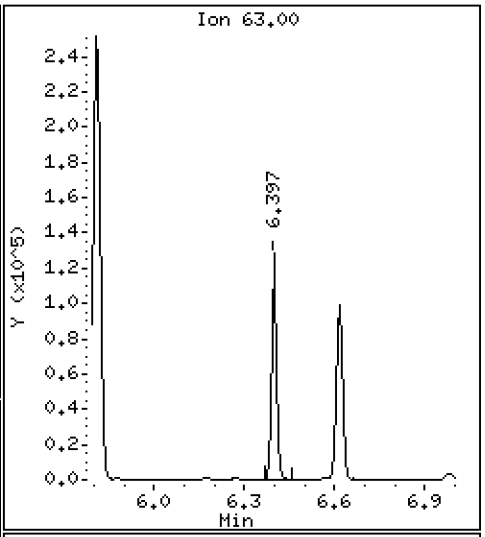
Column phase: RTXVMS

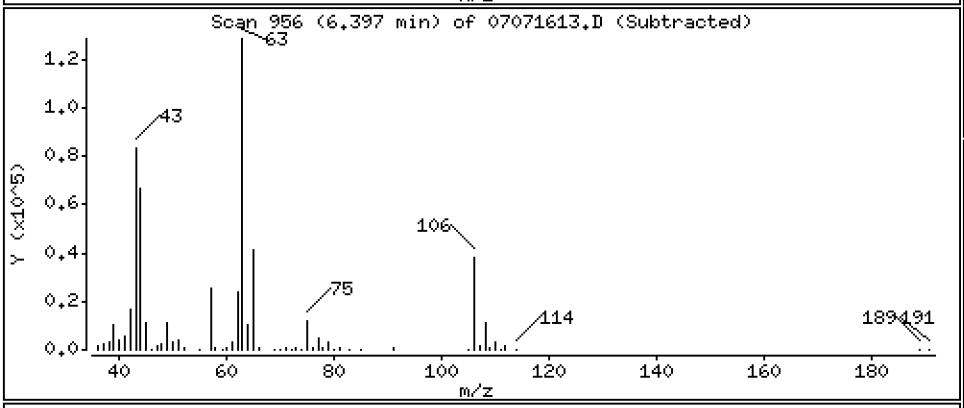
Column diameter: 0.18

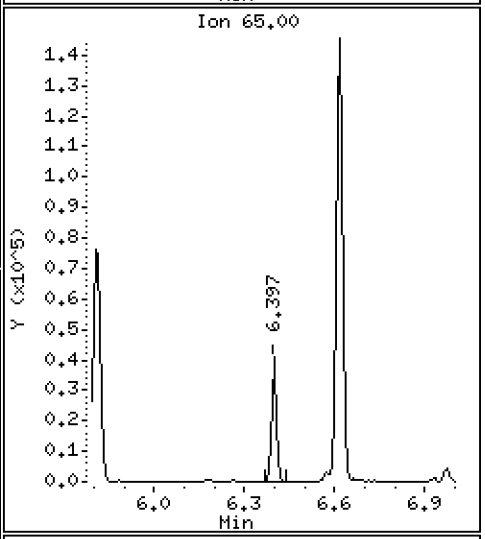
40 2-Chloroethyl Vinyl Ether

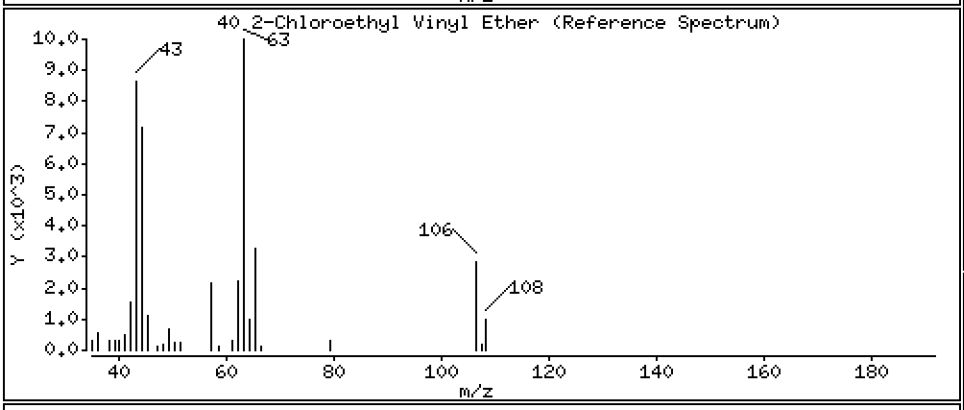
Concentration: 44.750 ug/Kg

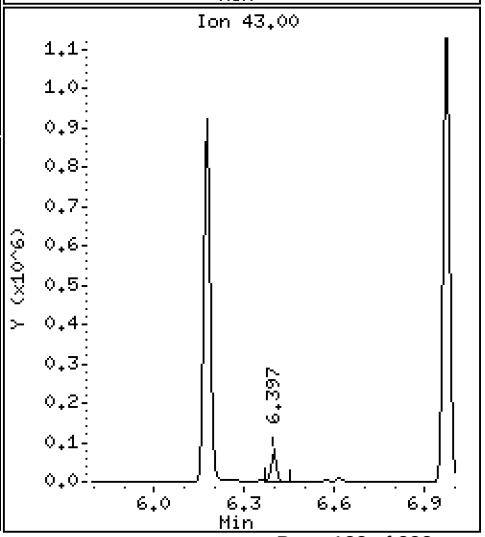


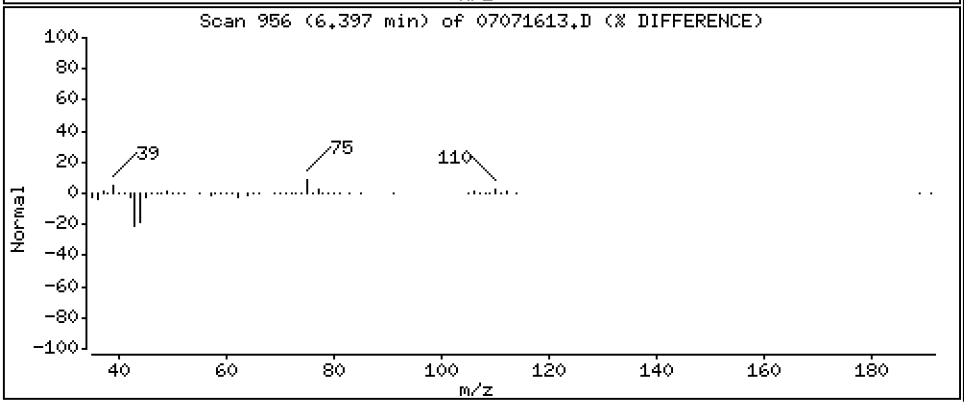












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

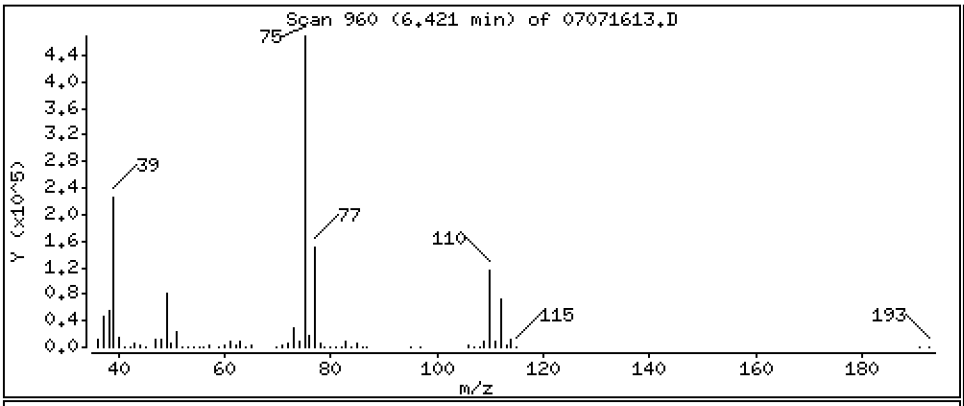
Operator: PB

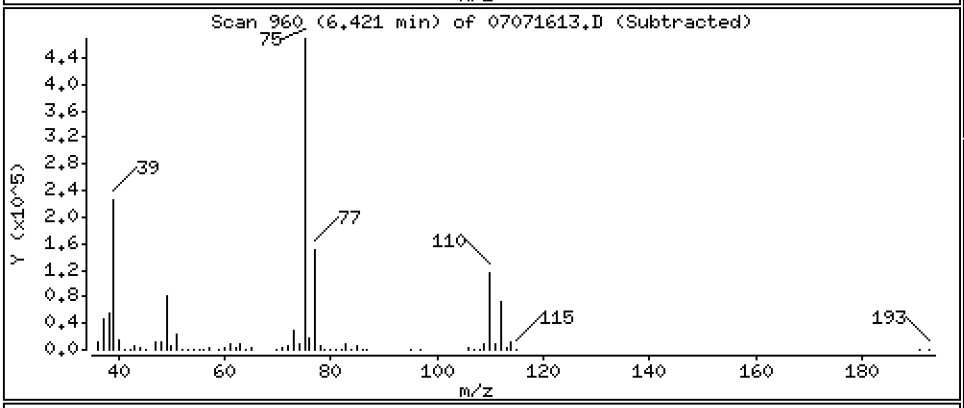
Column phase: RTXVMS

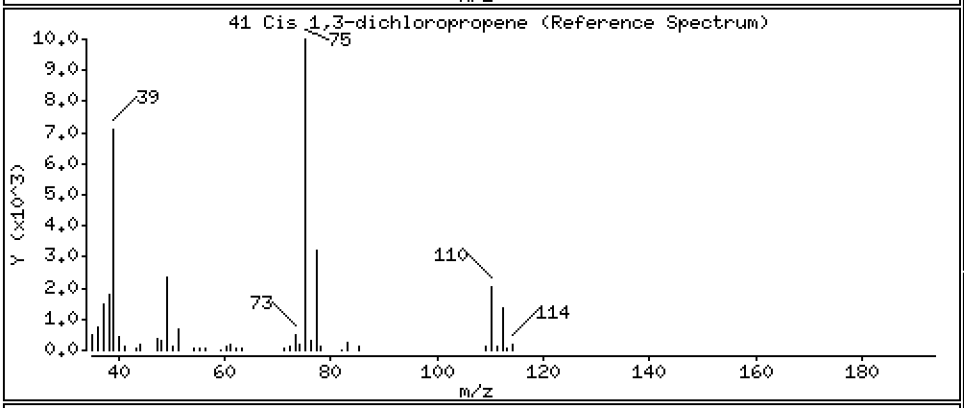
Column diameter: 0.18

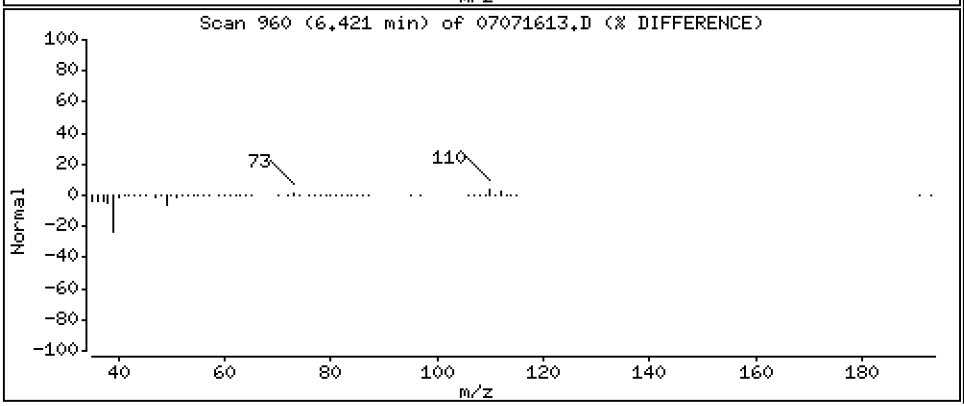
41 Cis 1,3-dichloropropene

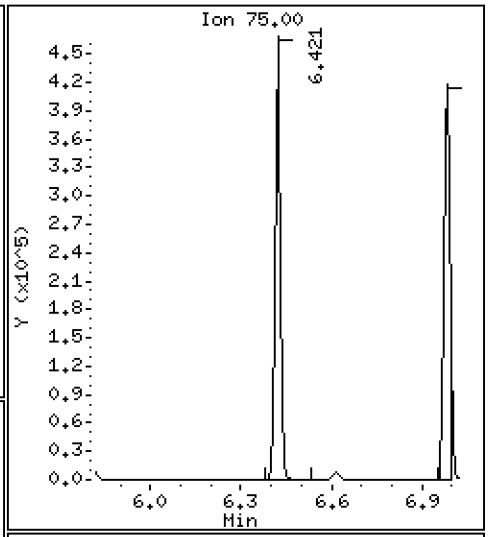
Concentration: 47.084 ug/Kg

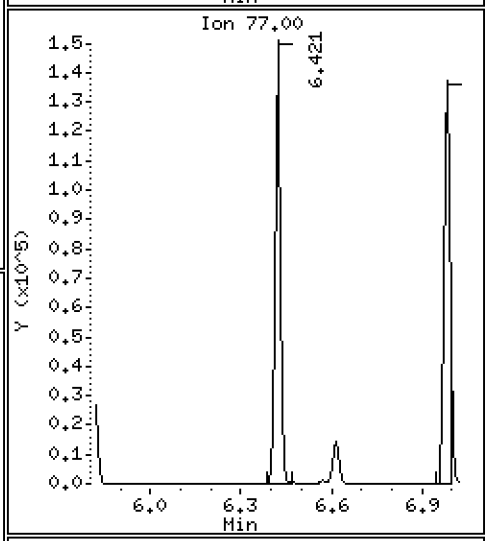


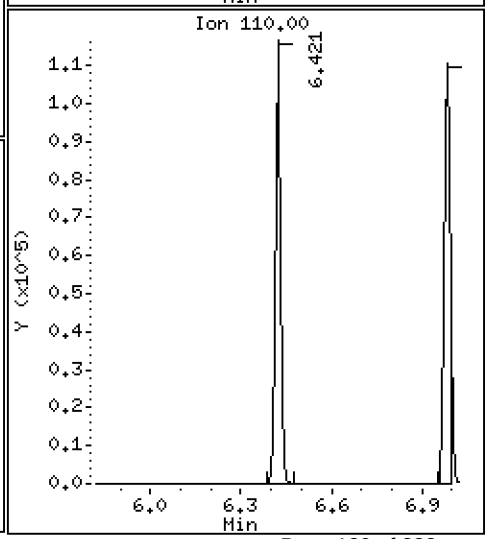












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

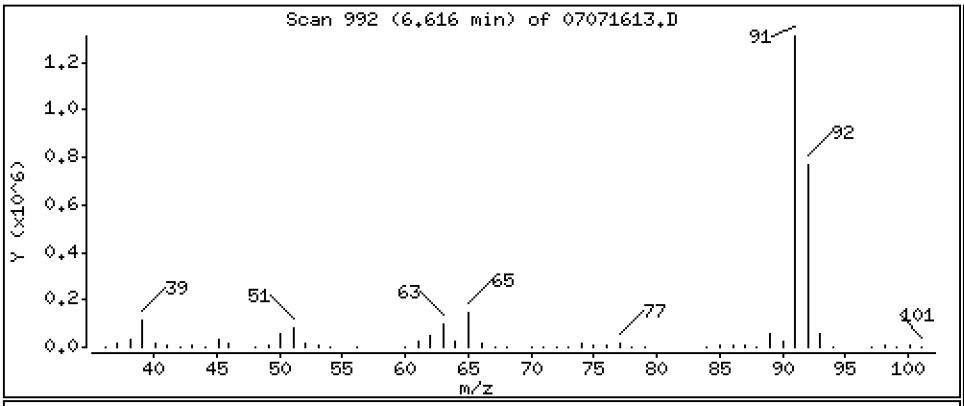
Operator: PB

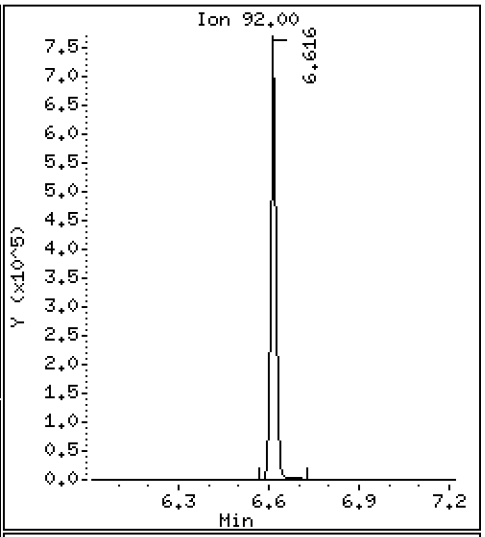
Column phase: RTXVMS

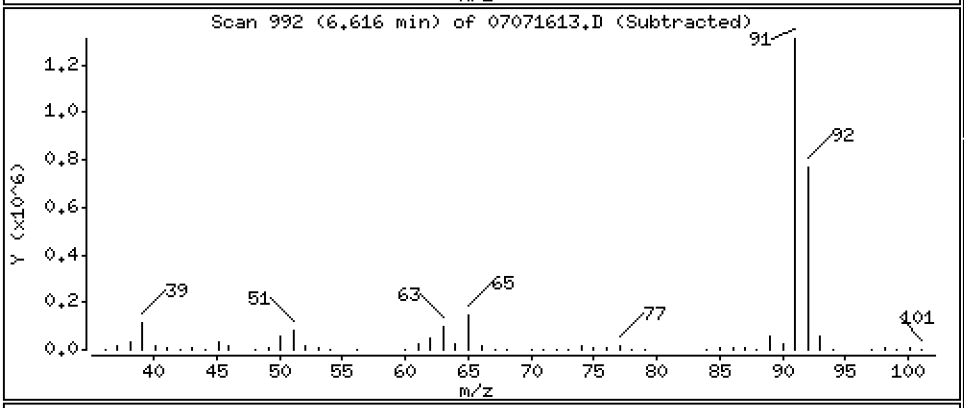
Column diameter: 0.18

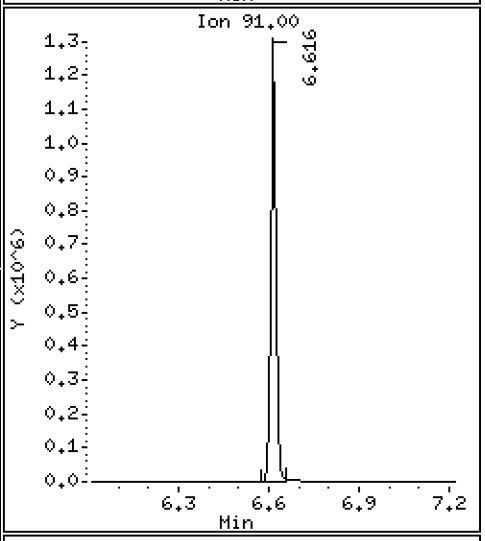
43 Toluene

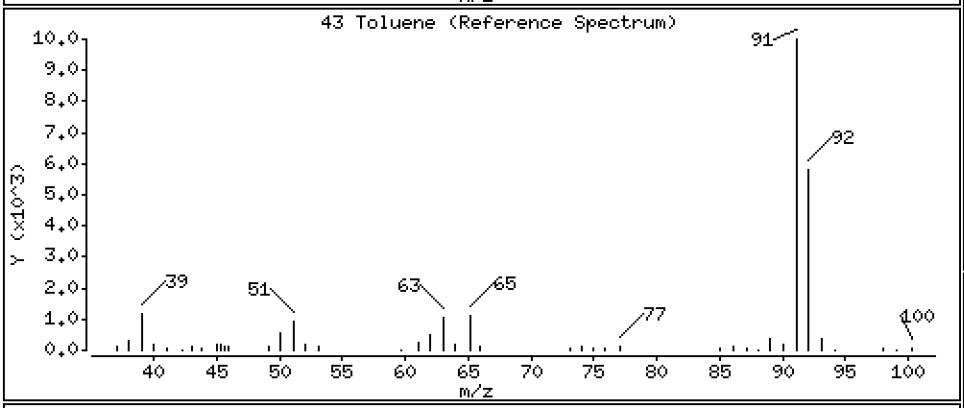
Concentration: 48.246 ug/Kg

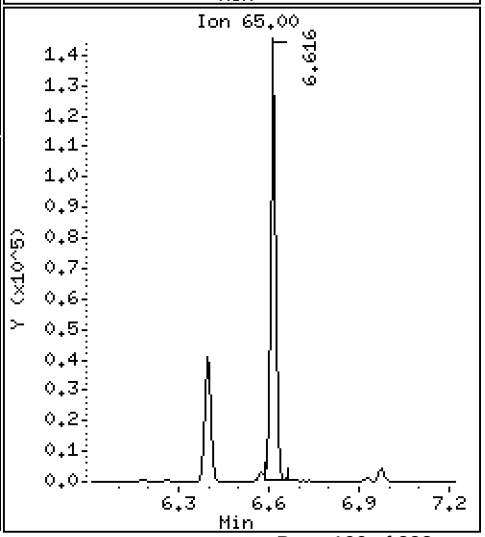


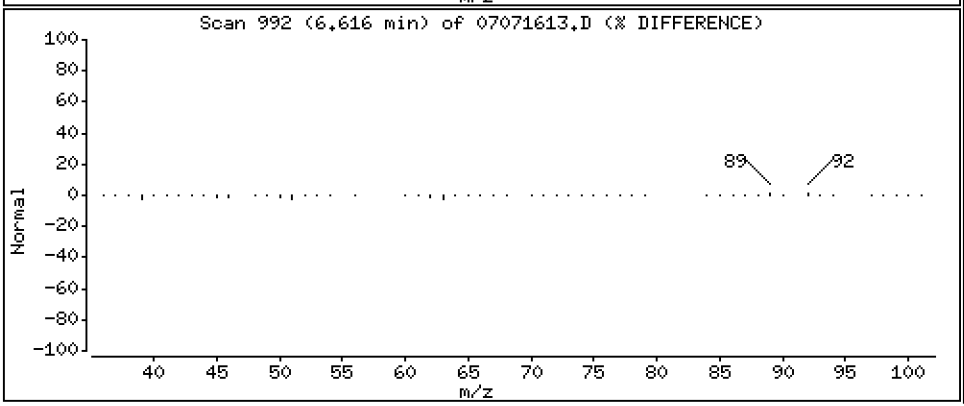












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

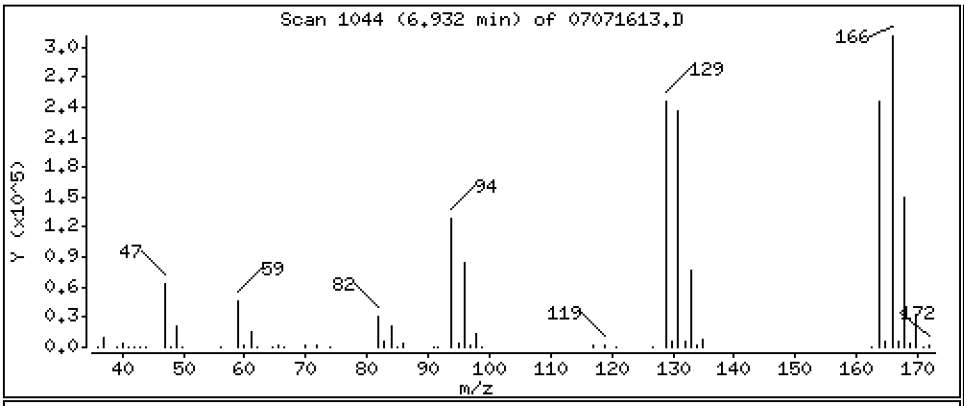
Operator: PB

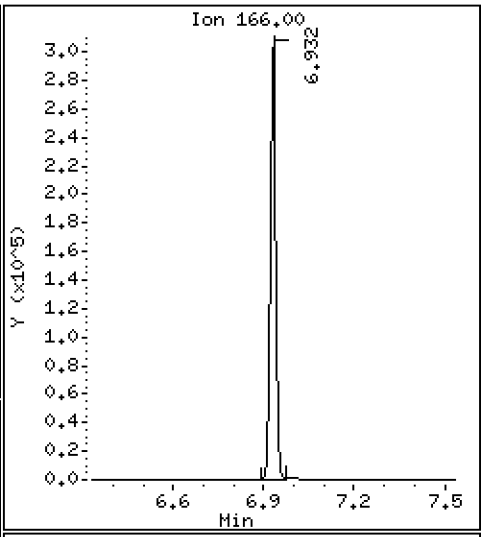
Column phase: RTXVMS

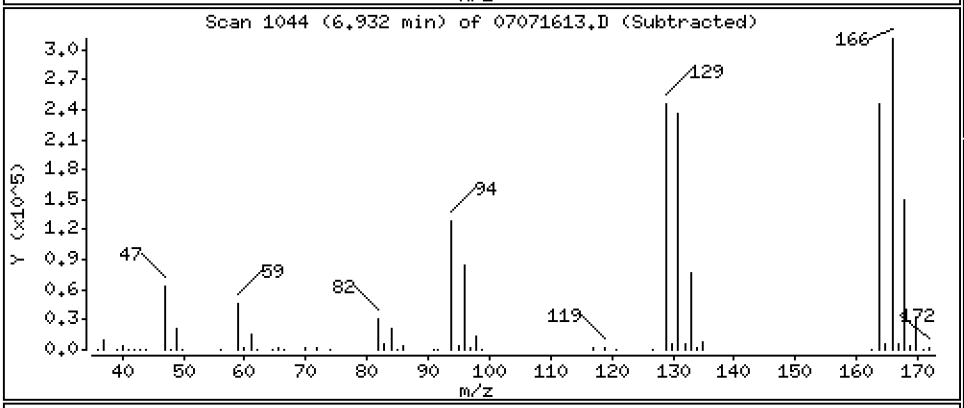
Column diameter: 0.18

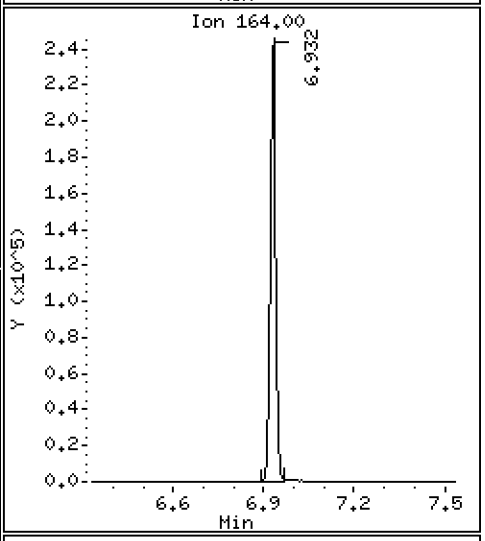
44 Tetrachloroethene

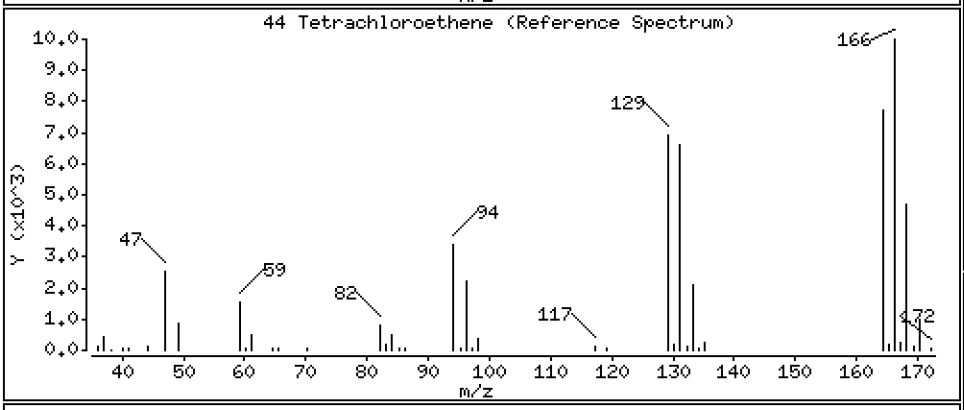
Concentration: 51.685 ug/Kg

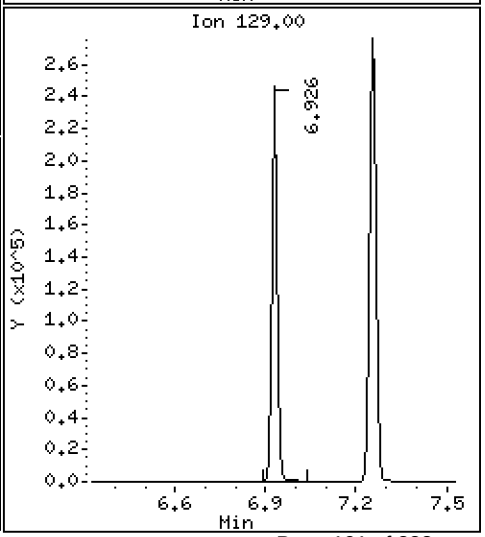


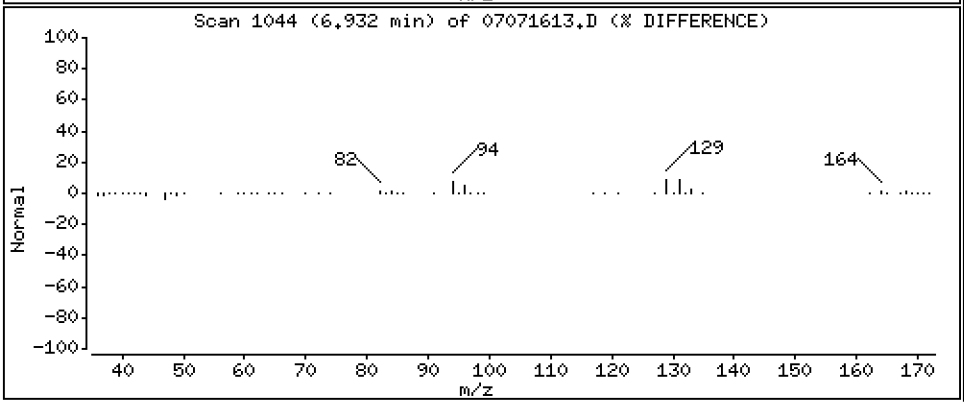












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

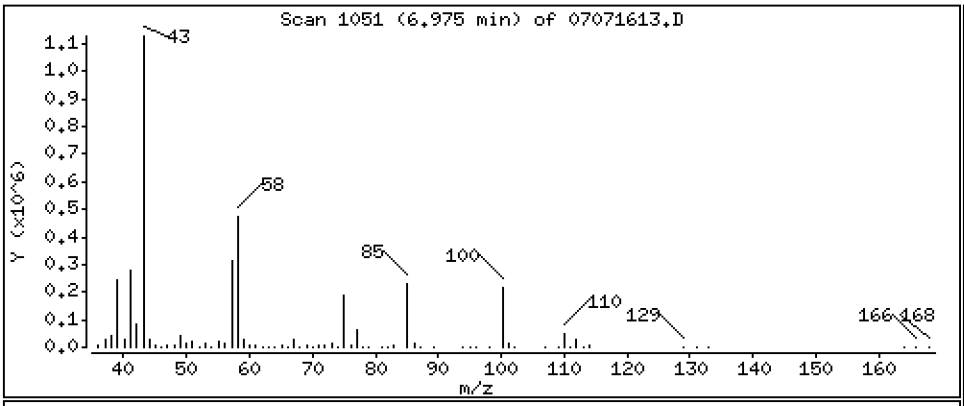
Operator: PB

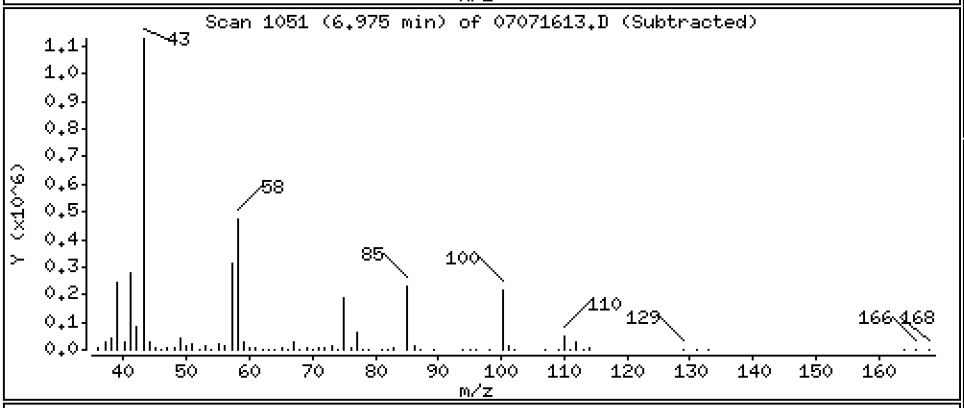
Column phase: RTXVMS

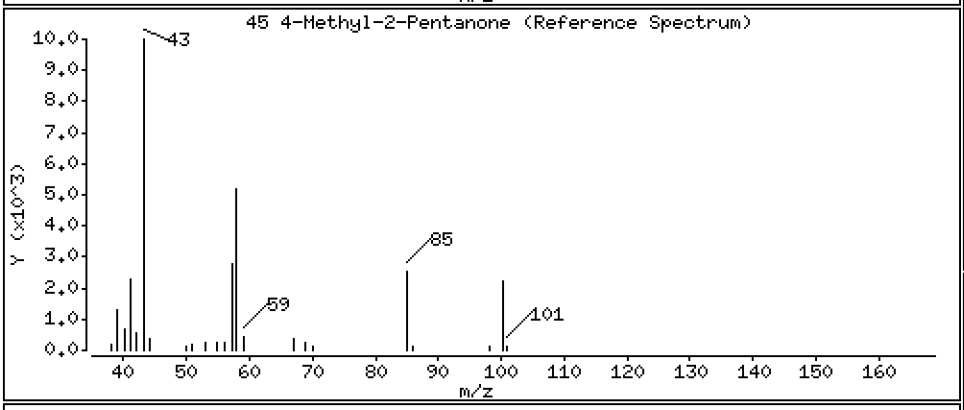
Column diameter: 0.18

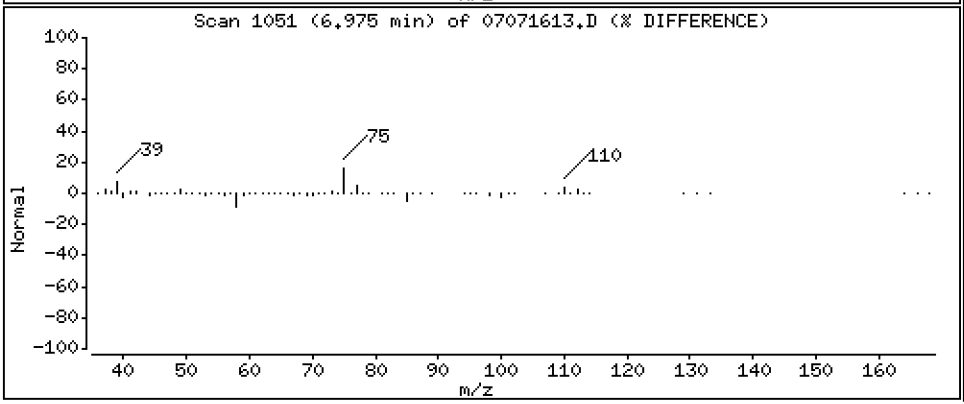
45 4-Methyl-2-Pentanone

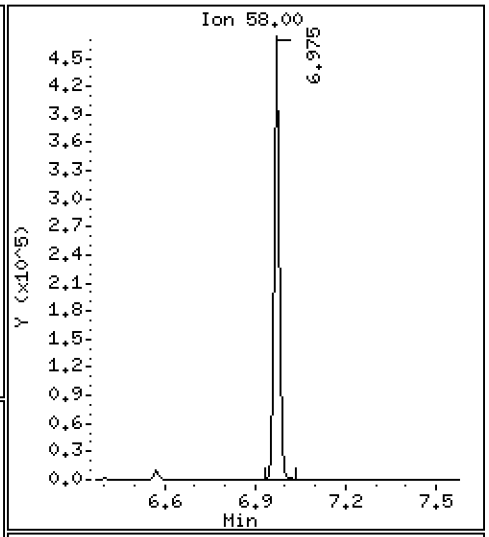
Concentration: 216.30 ug/Kg

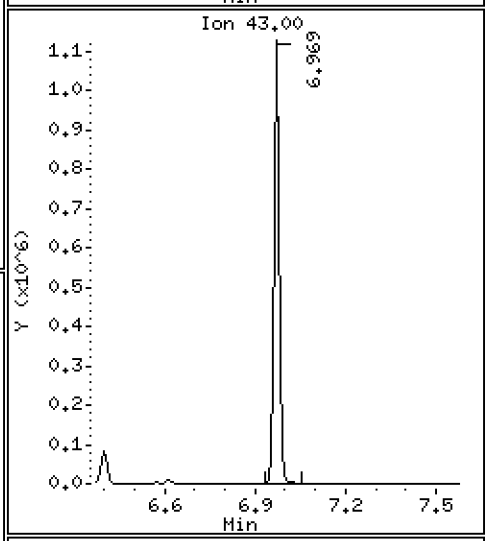


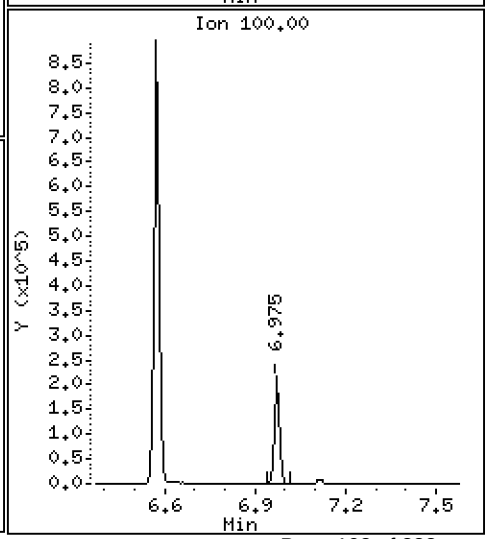












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

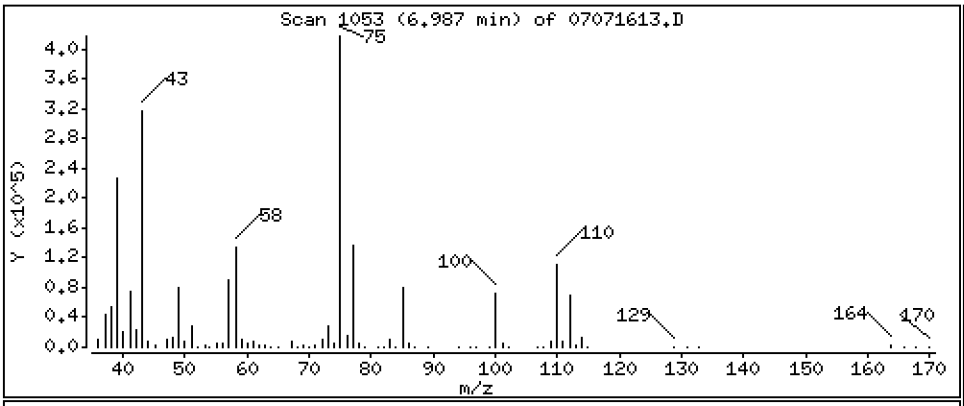
Operator: PB

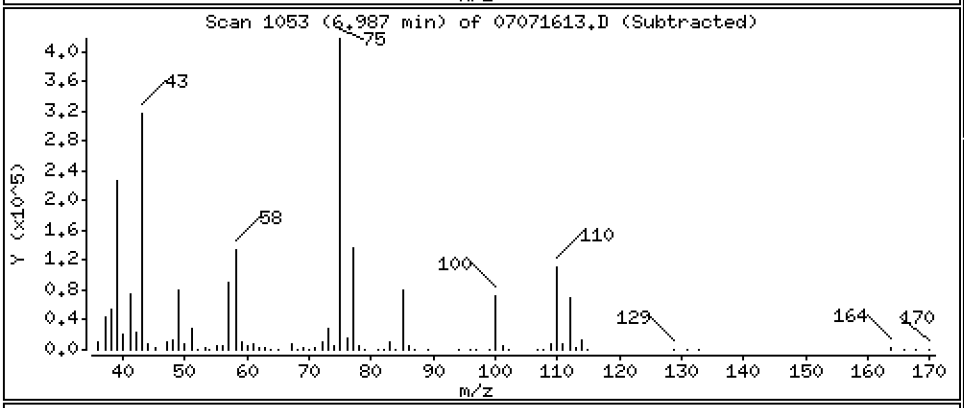
Column phase: RTXVMS

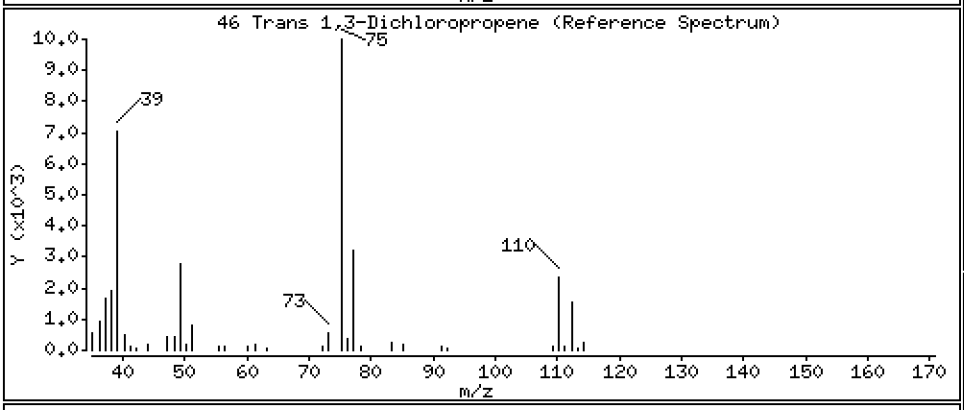
Column diameter: 0.18

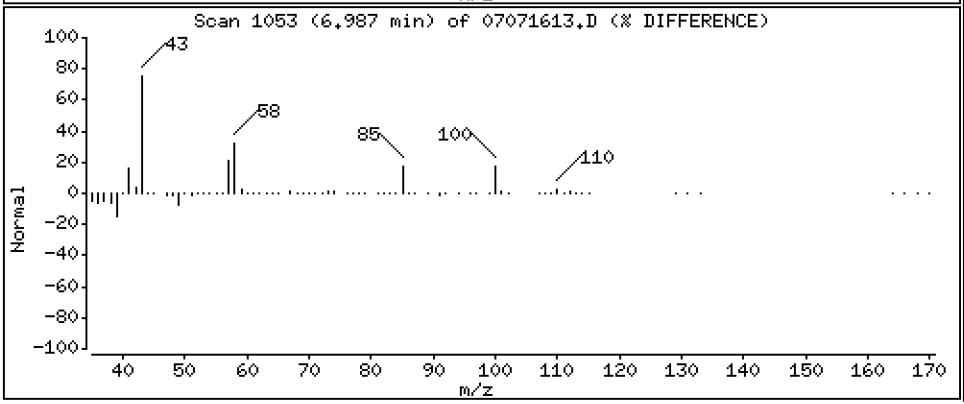
46 Trans 1,3-Dichloropropene

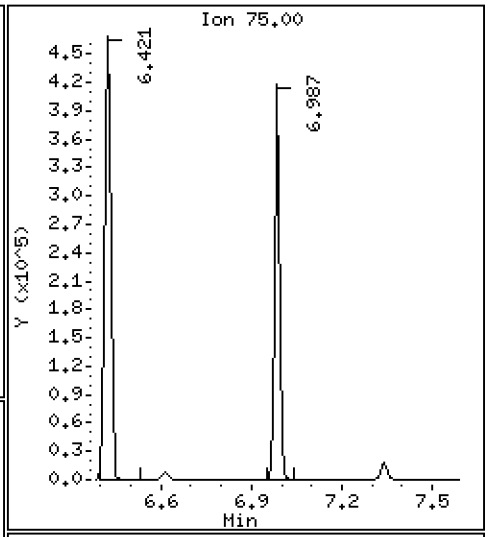
Concentration: 46.990 ug/Kg

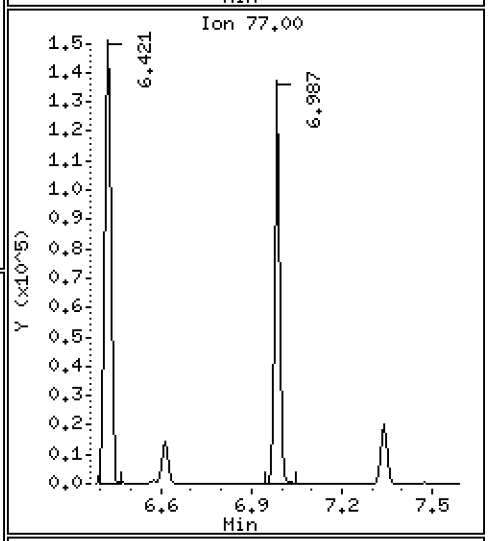


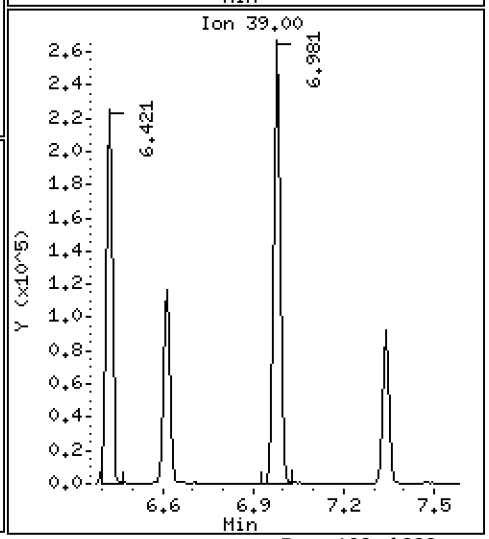












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

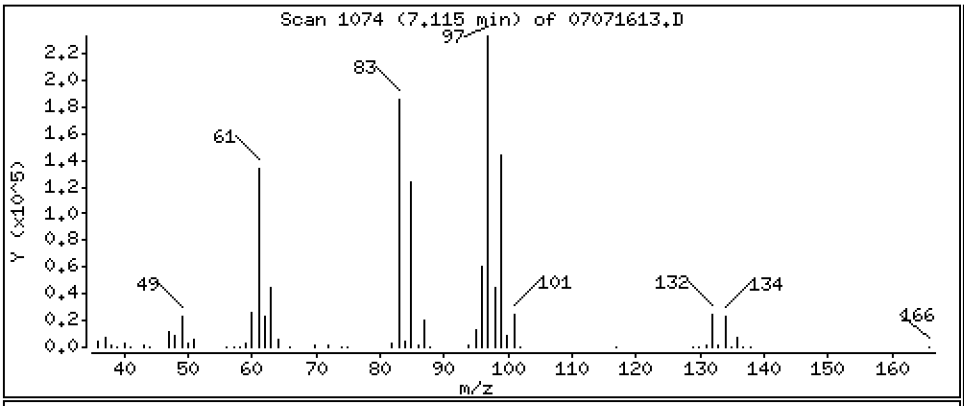
Operator: PB

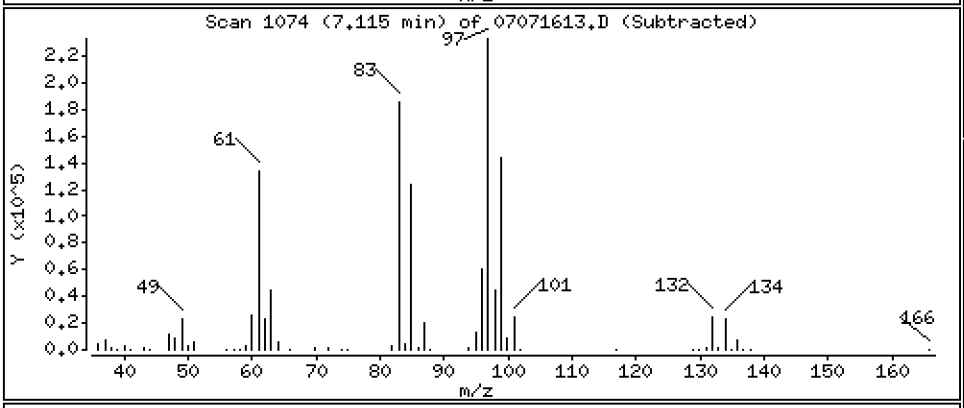
Column phase: RTXVMS

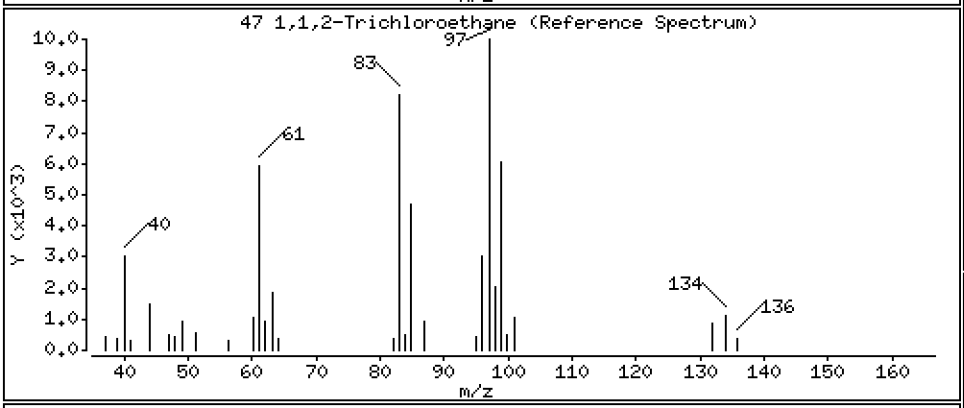
Column diameter: 0.18

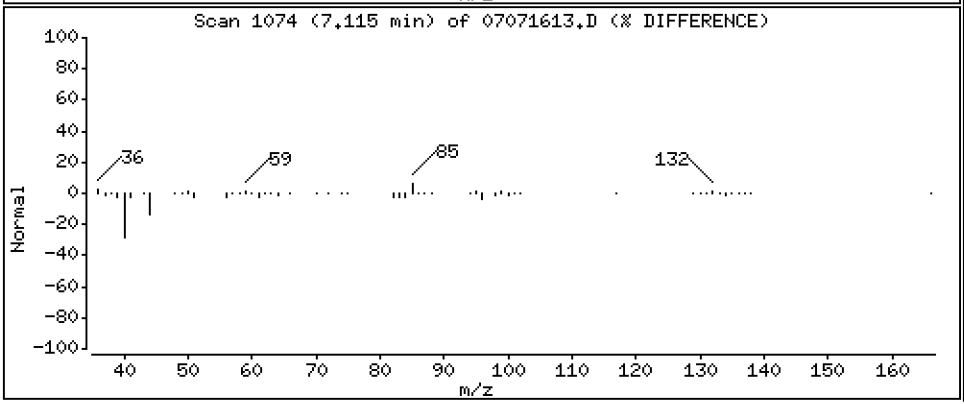
47 1,1,2-Trichloroethane

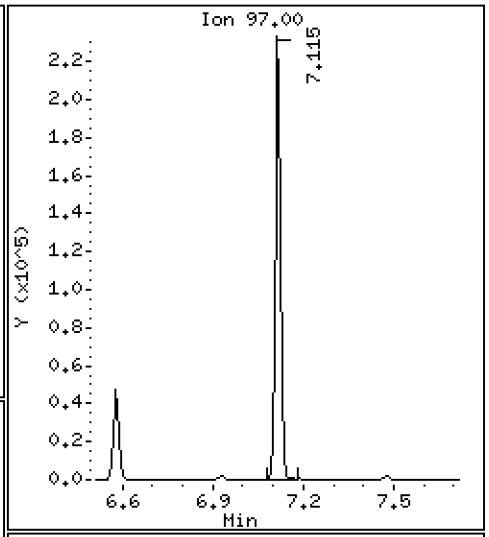
Concentration: 46.518 ug/Kg

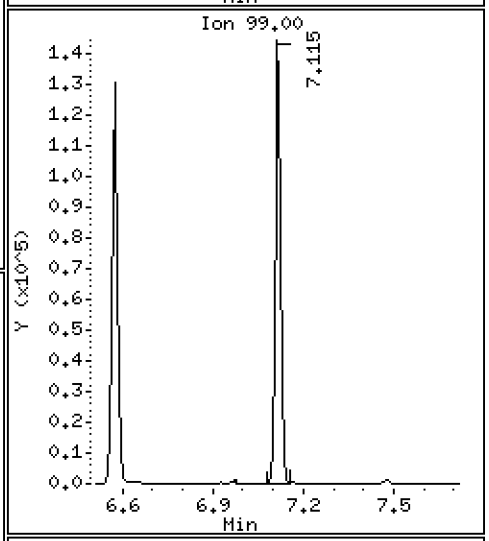


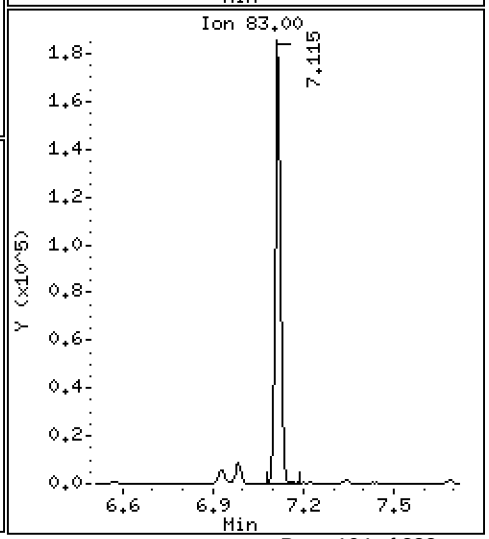












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

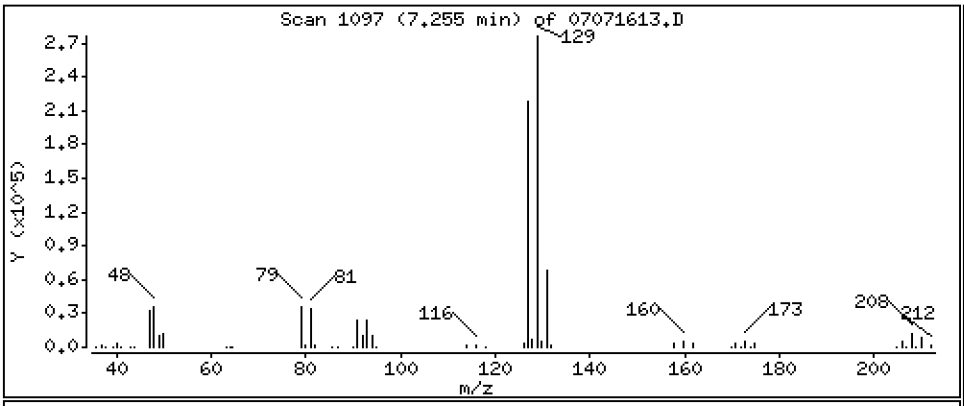
Operator: PB

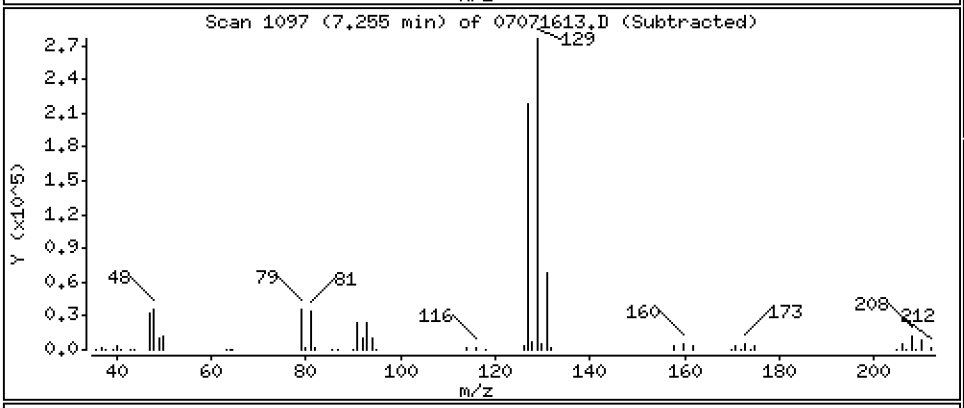
Column phase: RTXVMS

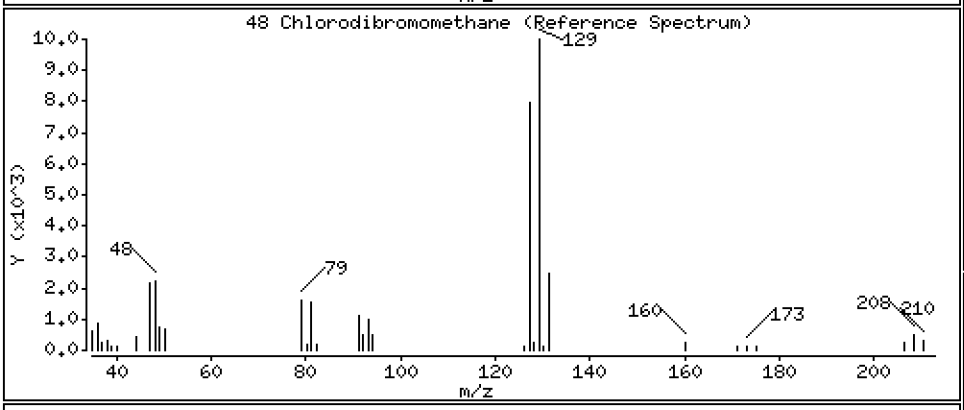
Column diameter: 0.18

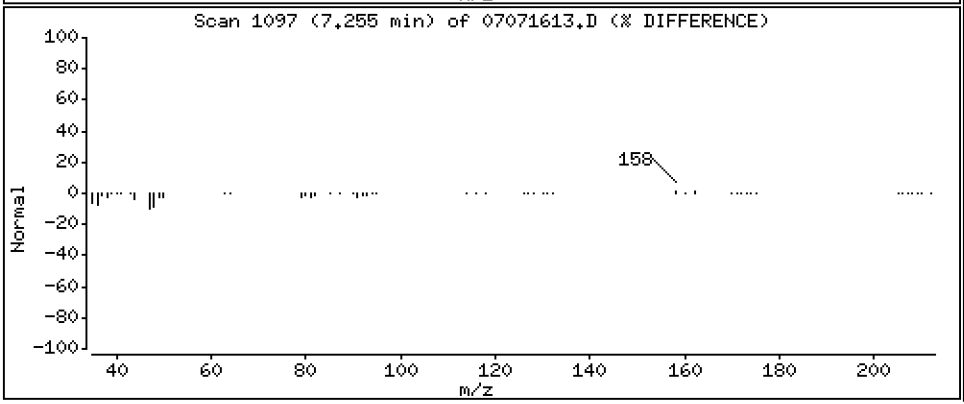
48 Chlorodibromomethane

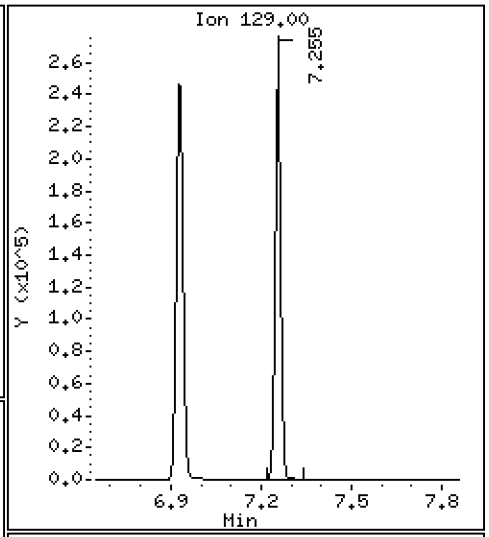
Concentration: 48.794 ug/Kg

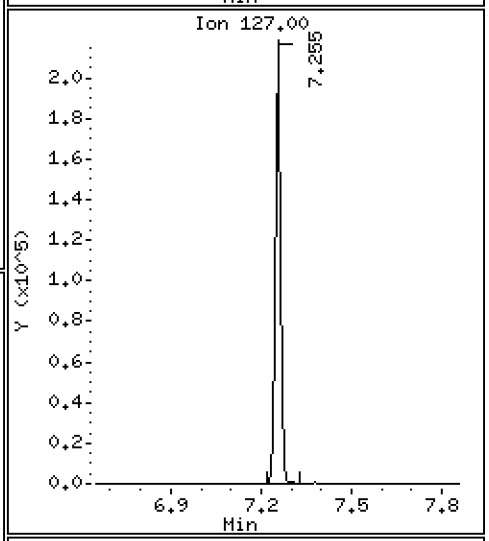


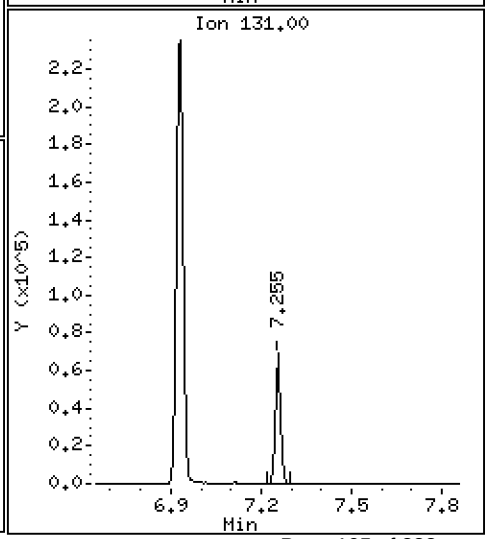












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

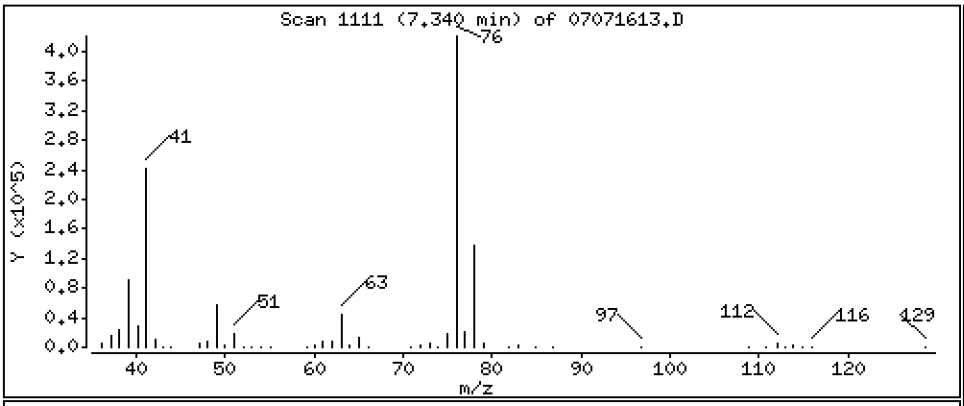
Operator: PB

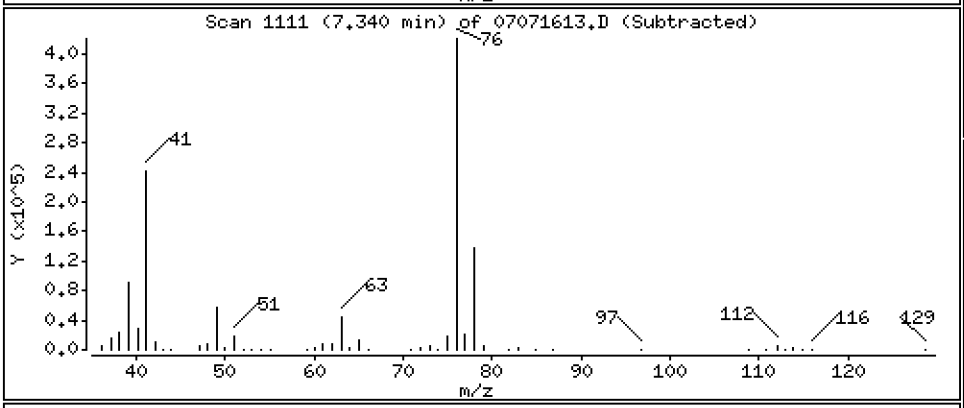
Column phase: RTXVMS

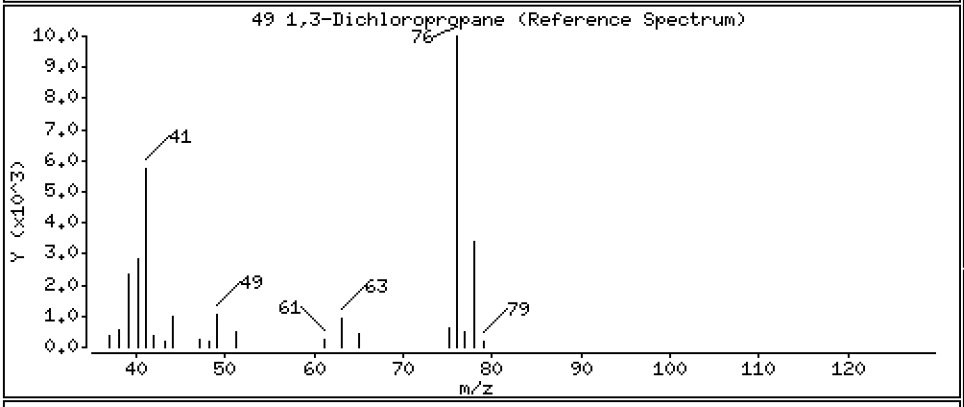
Column diameter: 0.18

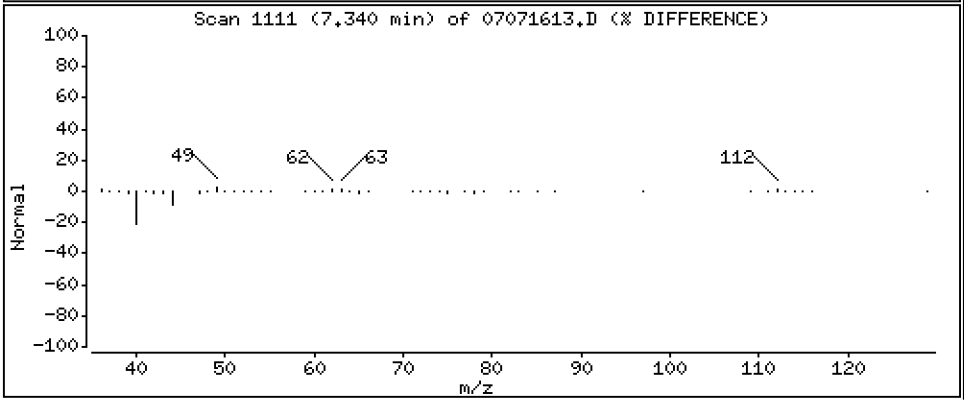
49 1,3-Dichloropropane

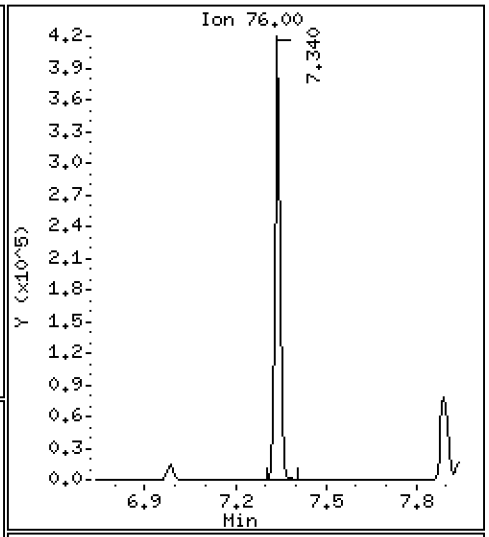
Concentration: 47.046 ug/Kg

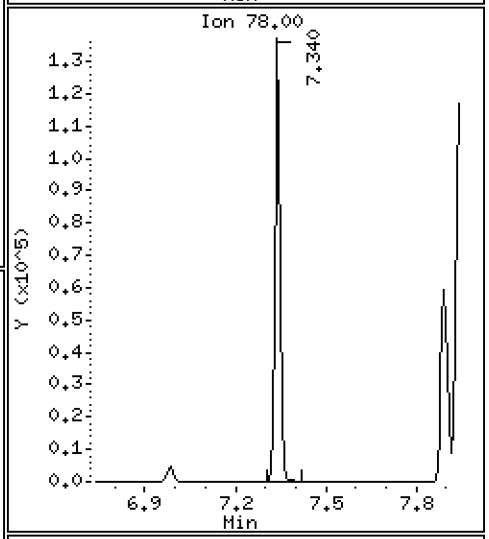


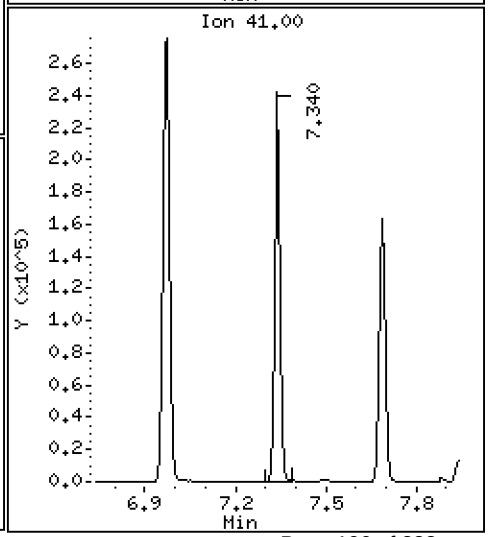












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

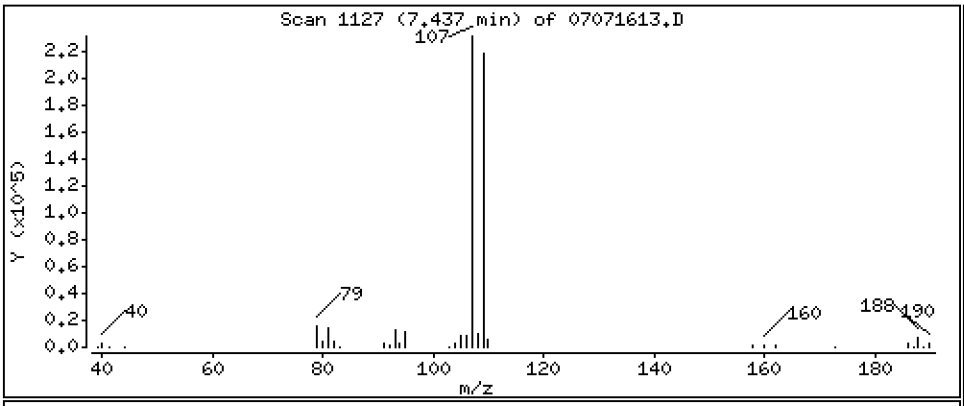
Operator: PB

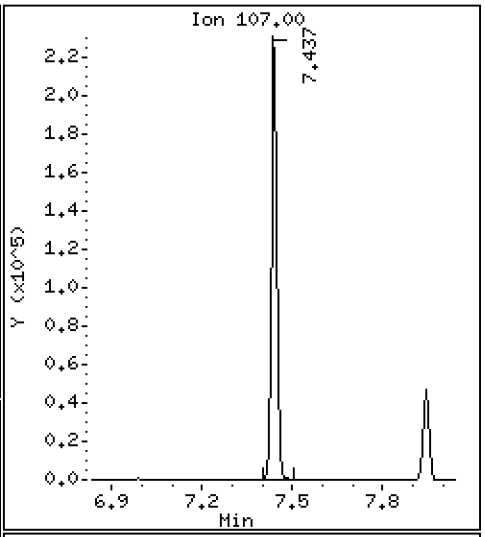
Column phase: RTXVMS

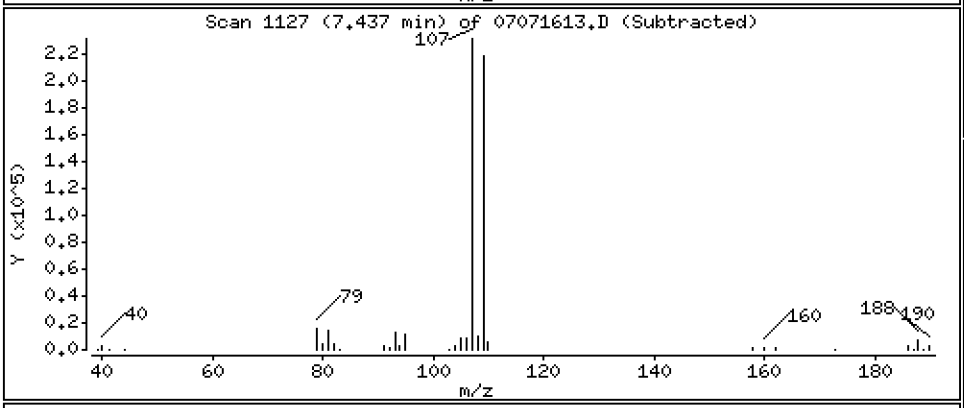
Column diameter: 0.18

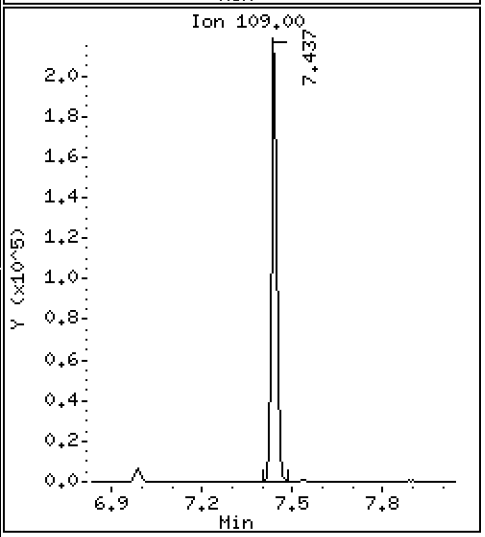
50 1,2-Dibromoethane

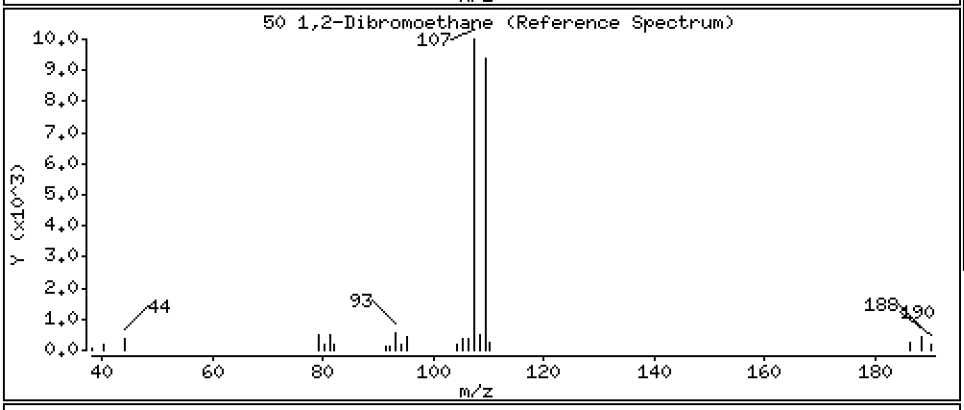
Concentration: 46.279 ug/Kg

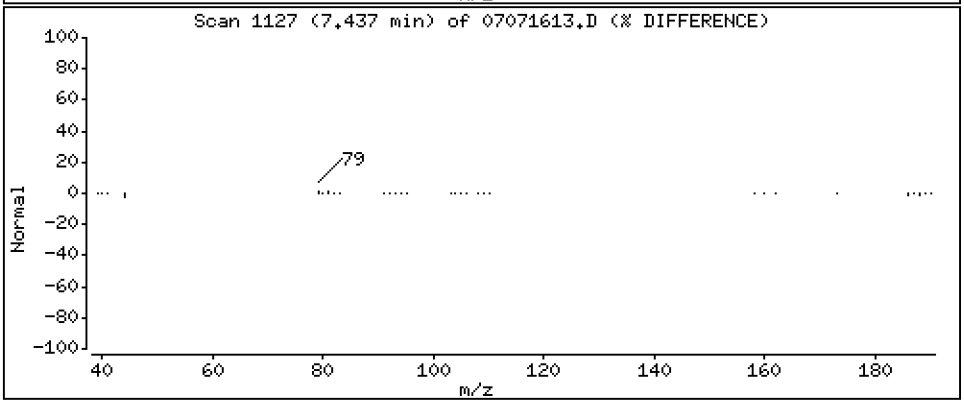












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

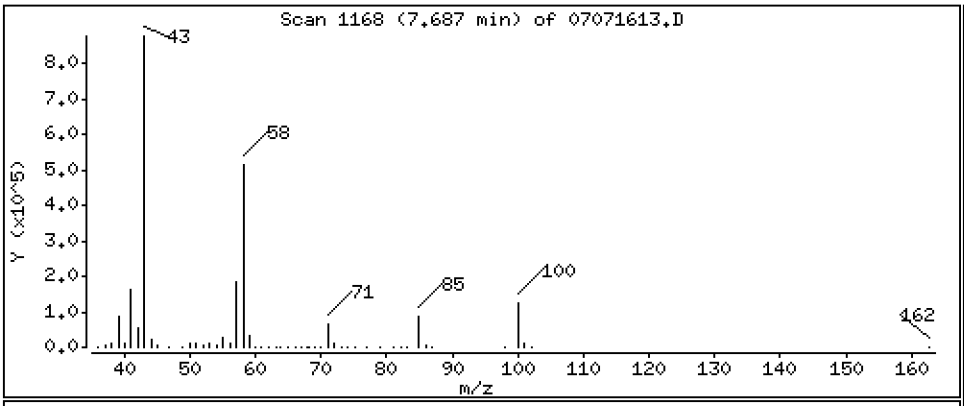
Operator: PB

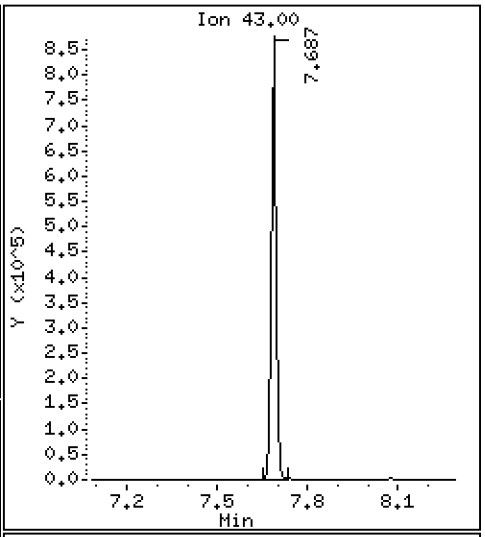
Column phase: RTXVMS

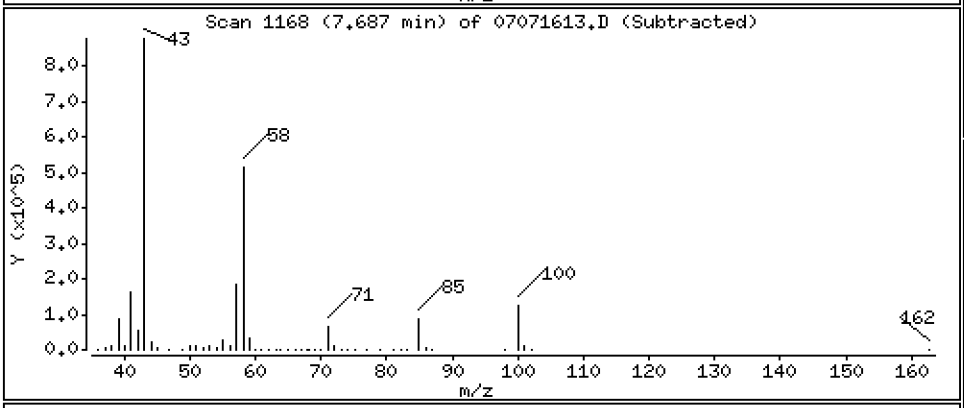
Column diameter: 0.18

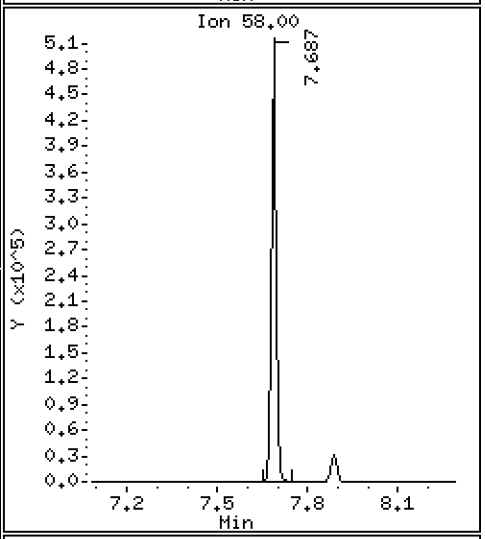
51 2-Hexanone

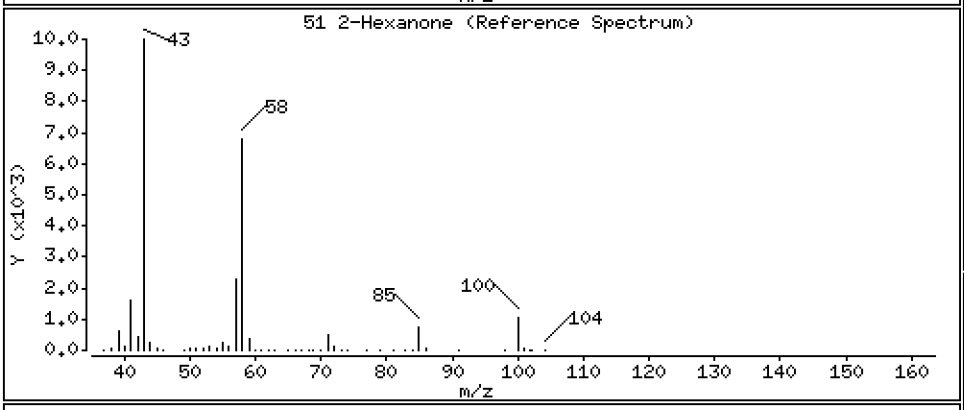
Concentration: 215.36 ug/Kg

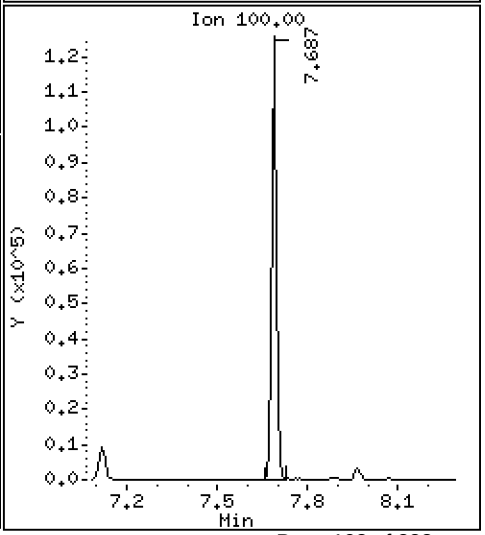


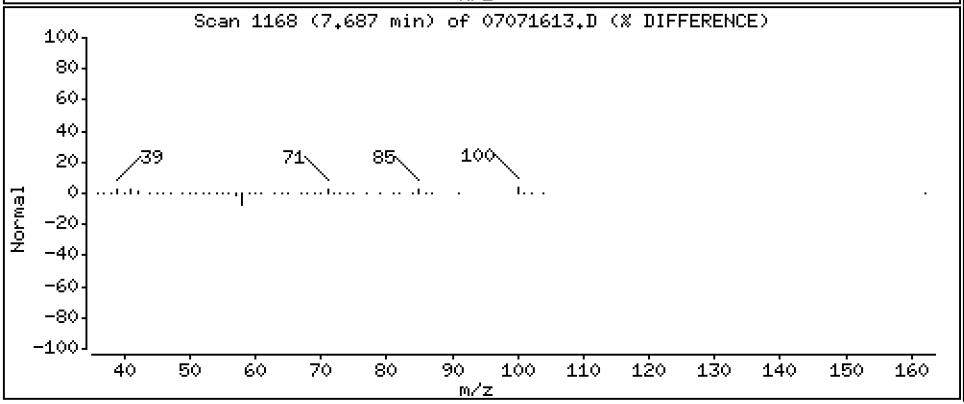












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

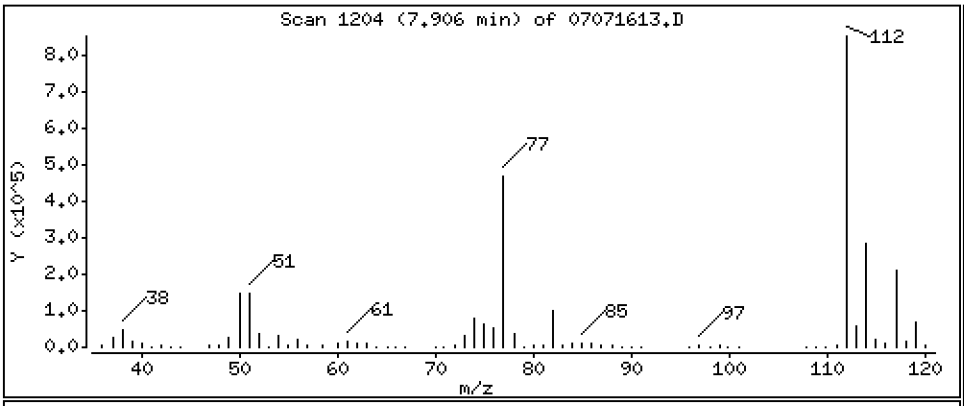
Operator: PB

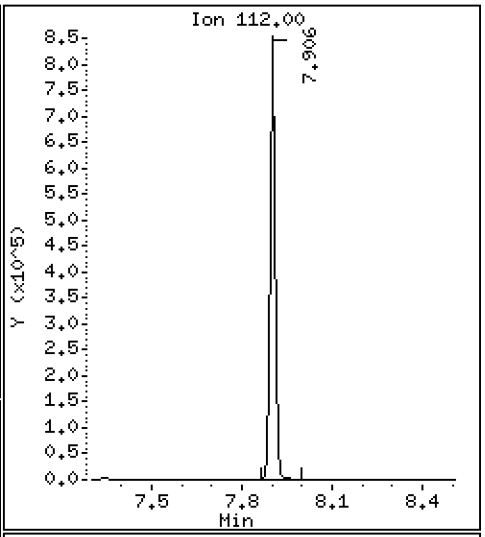
Column phase: RTXVMS

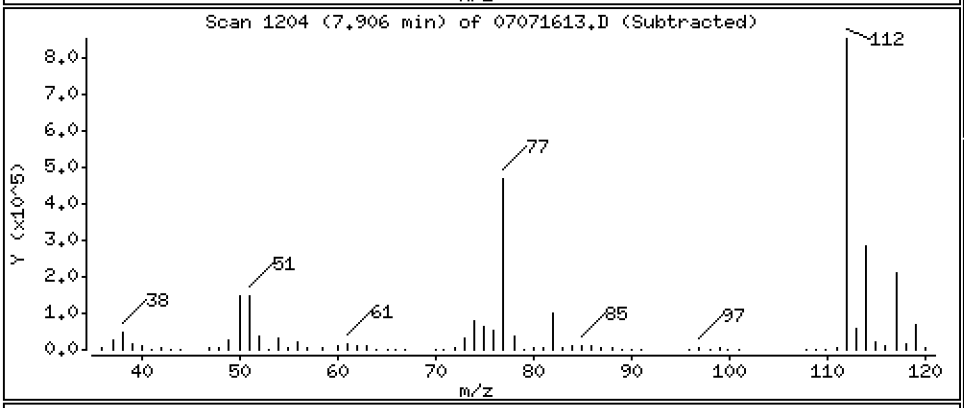
Column diameter: 0.18

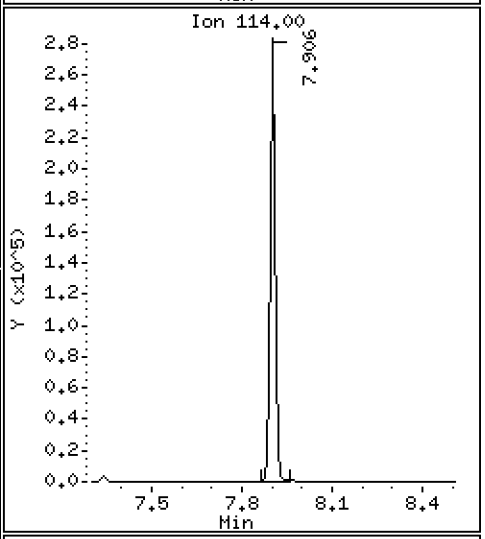
53 Chlorobenzene

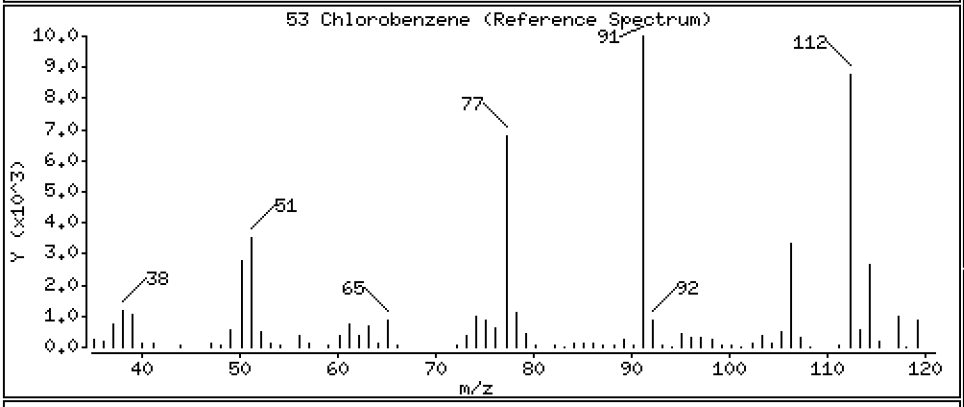
Concentration: 49.182 ug/Kg

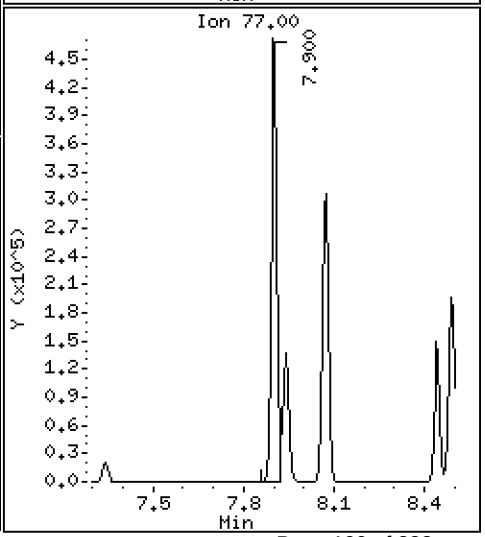


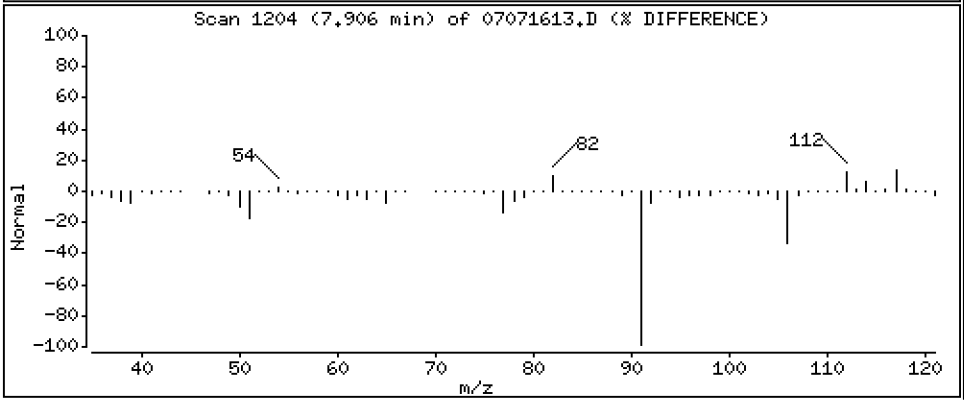












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

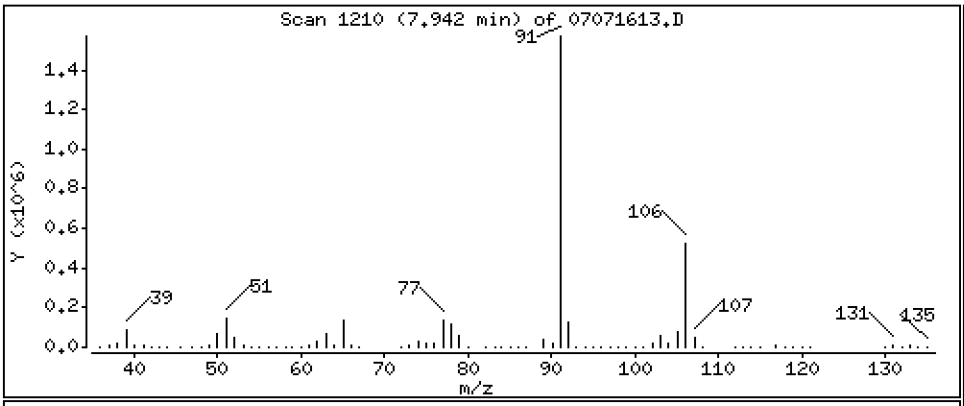
Operator: PB

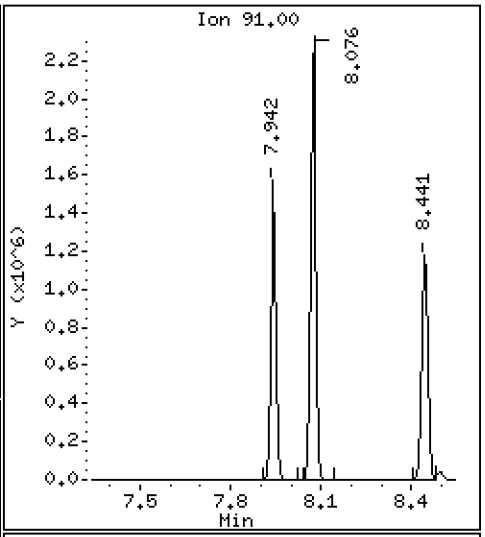
Column phase: RTXVMS

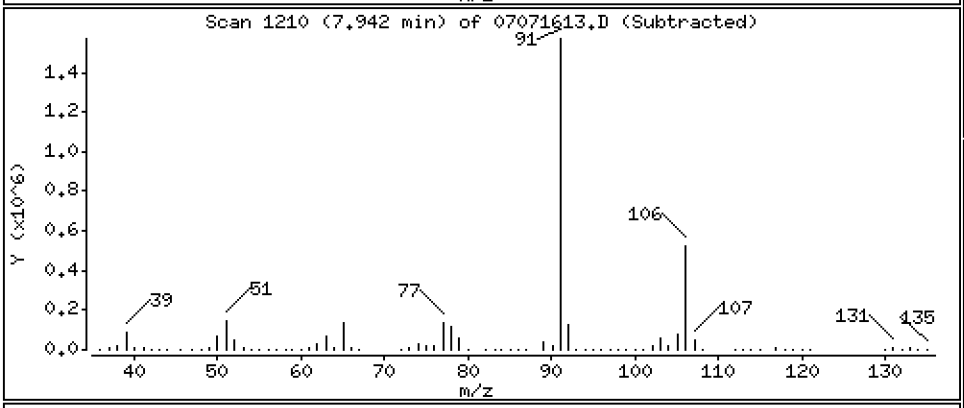
Column diameter: 0.18

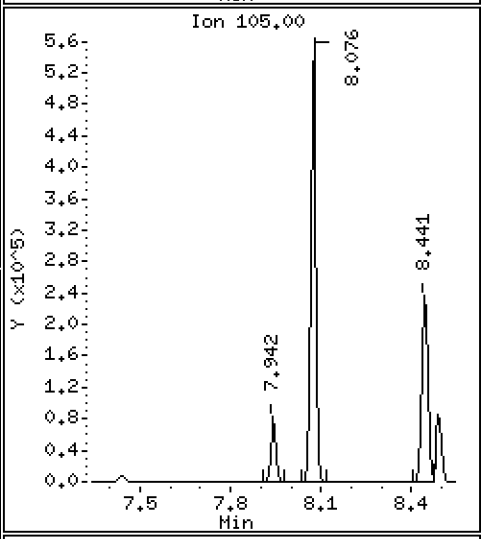
54 Ethyl Benzene

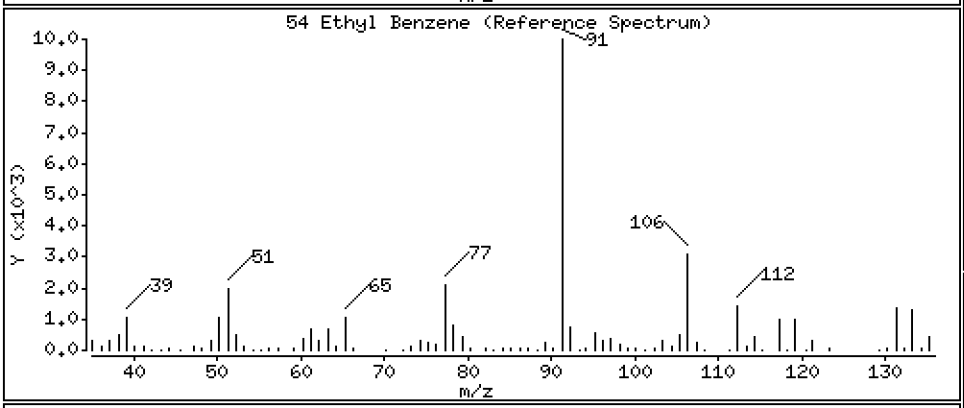
Concentration: 50.327 ug/Kg

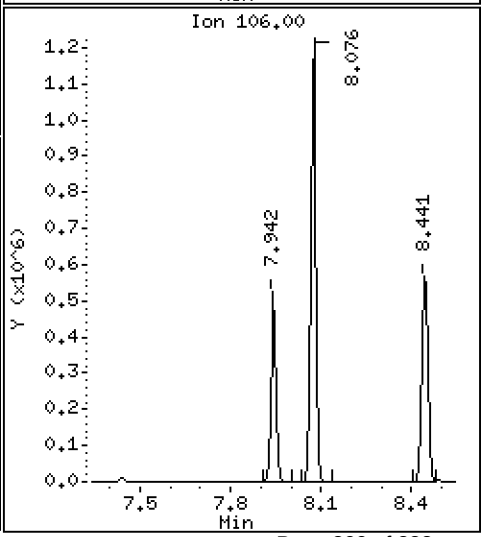


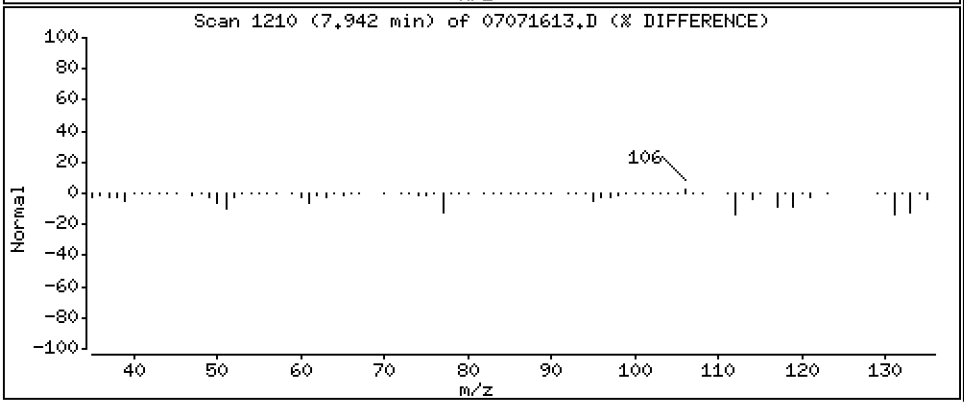












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

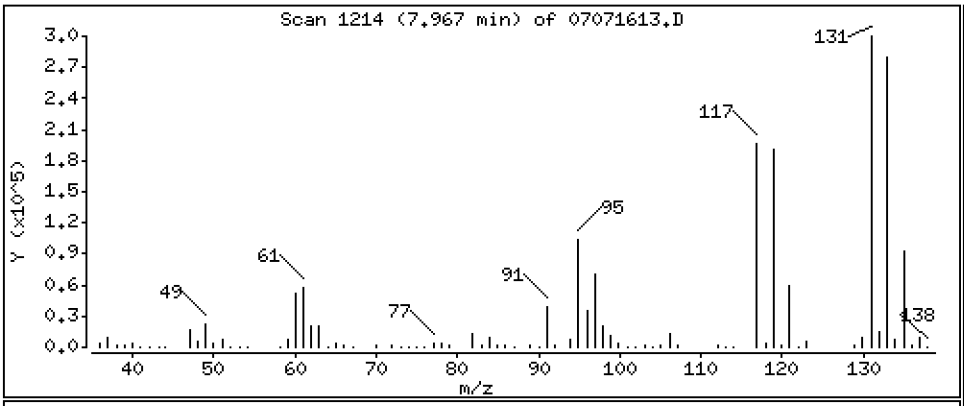
Operator: PB

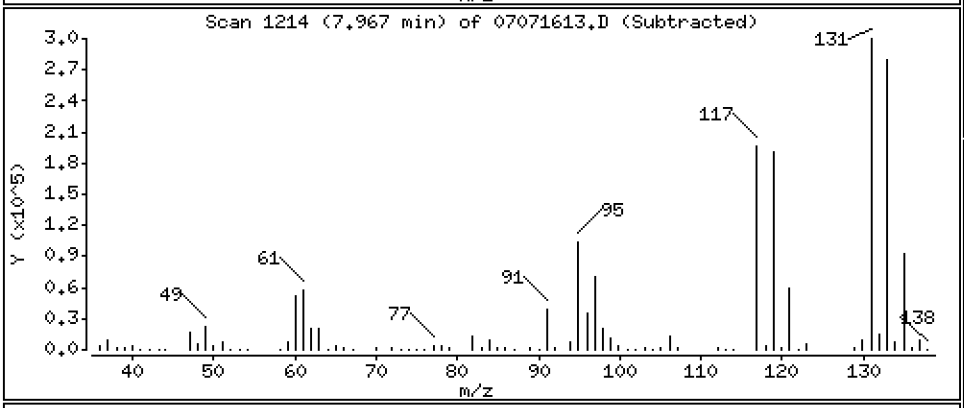
Column phase: RTXVMS

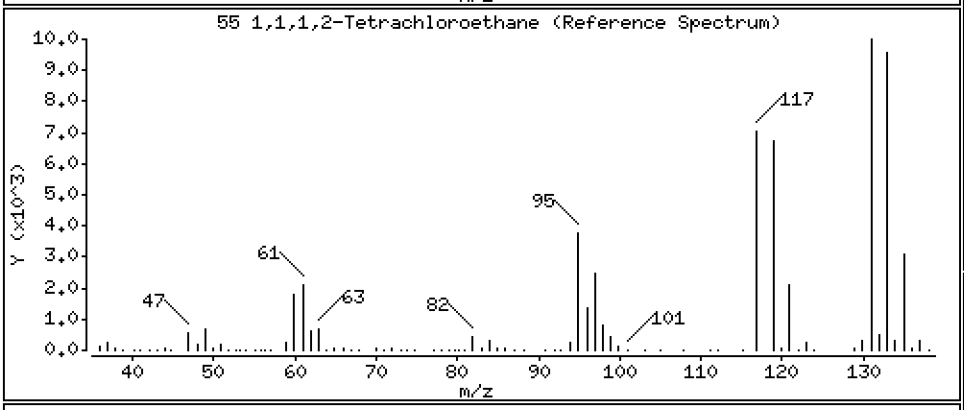
Column diameter: 0.18

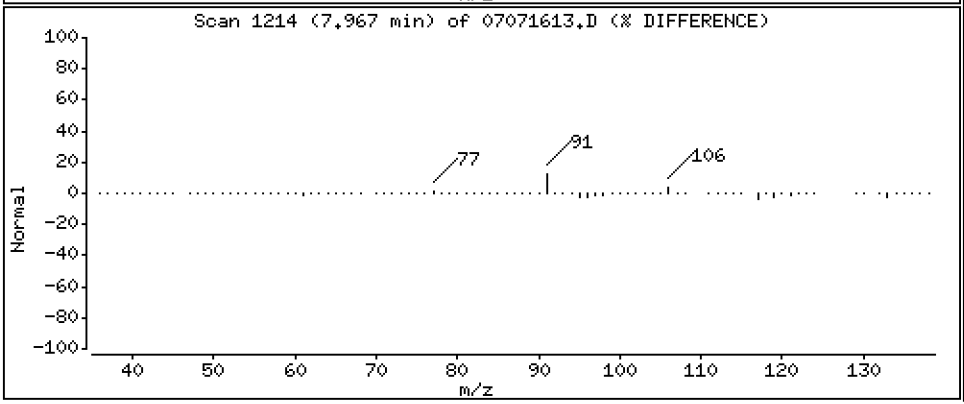
55 1,1,1,2-Tetrachloroethane

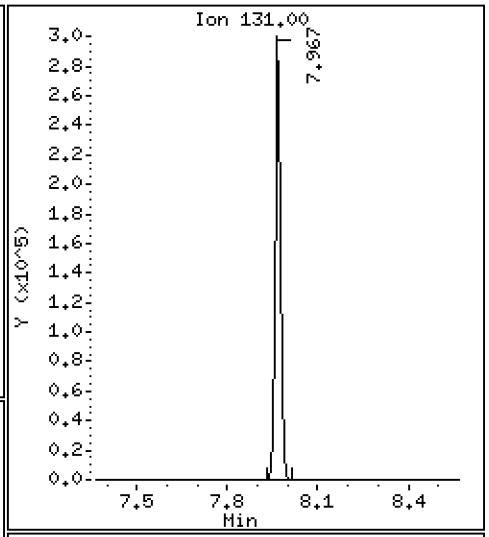
Concentration: 49.000 ug/Kg

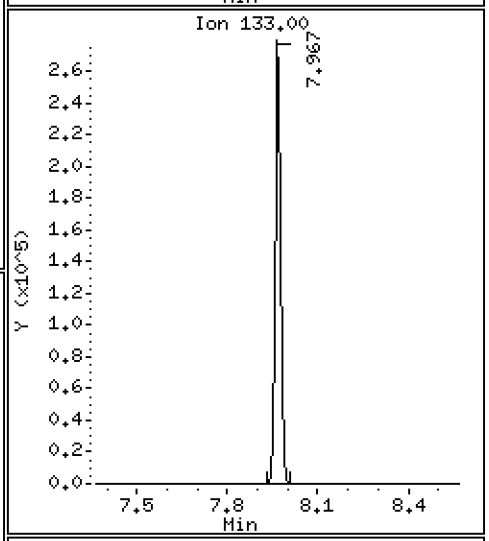


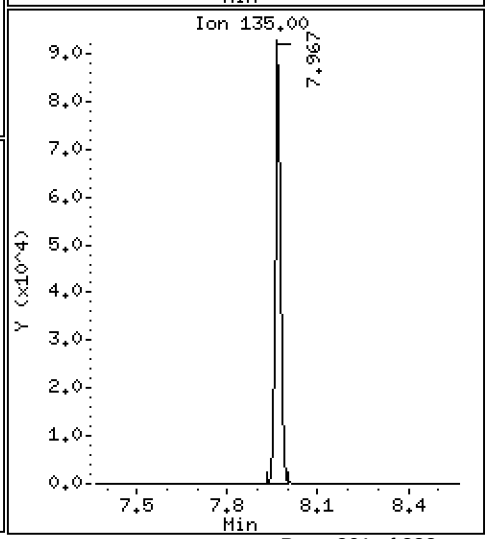












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

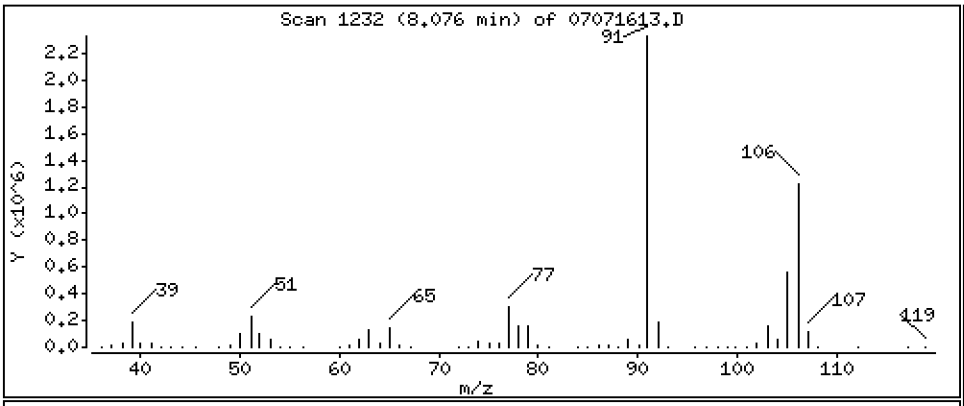
Operator: PB

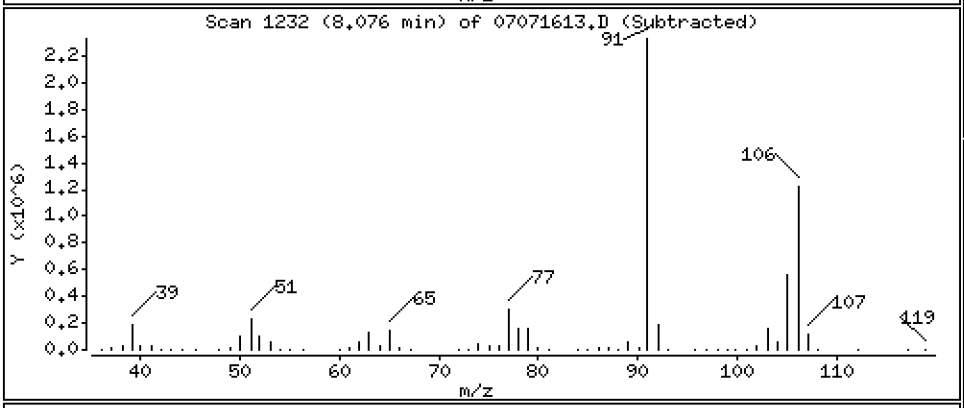
Column phase: RTXVMS

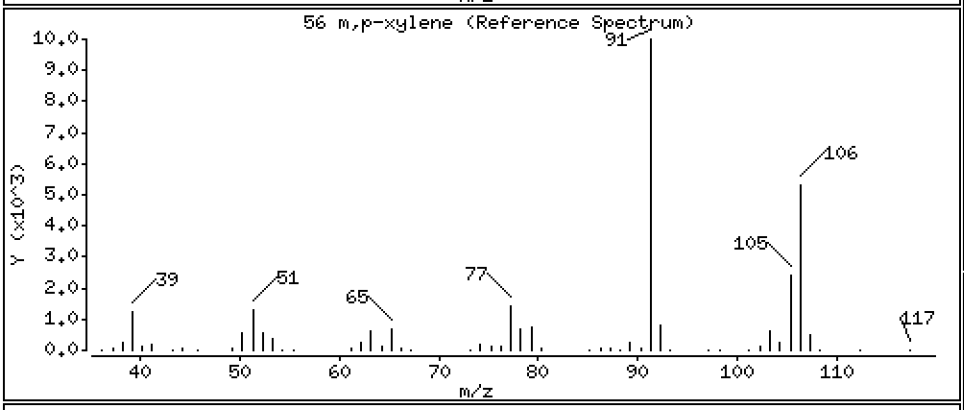
Column diameter: 0.18

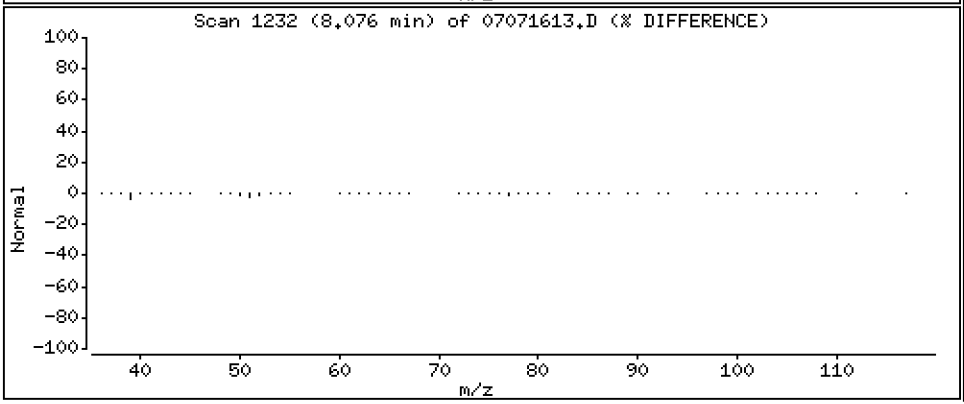
56 m,p-xylene

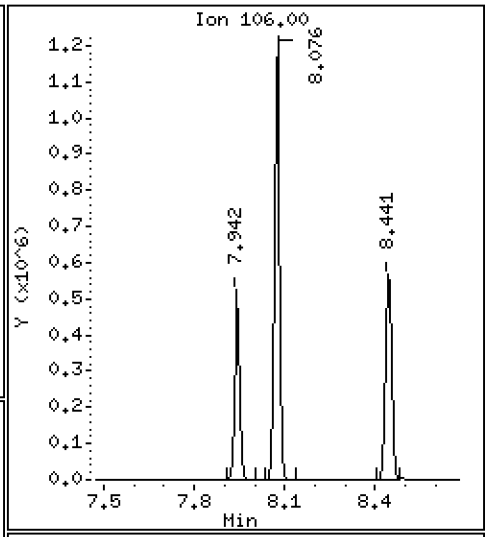
Concentration: 101.49 ug/Kg

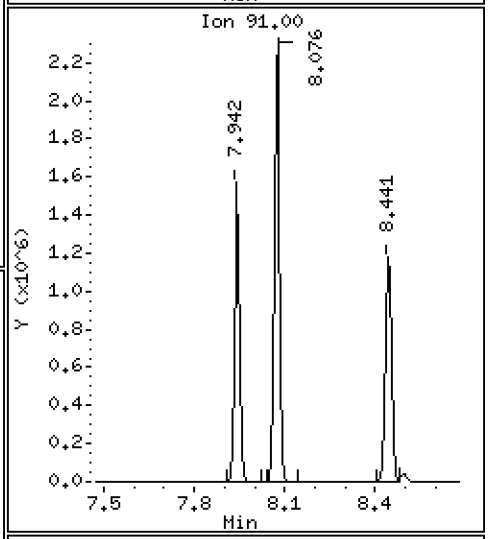


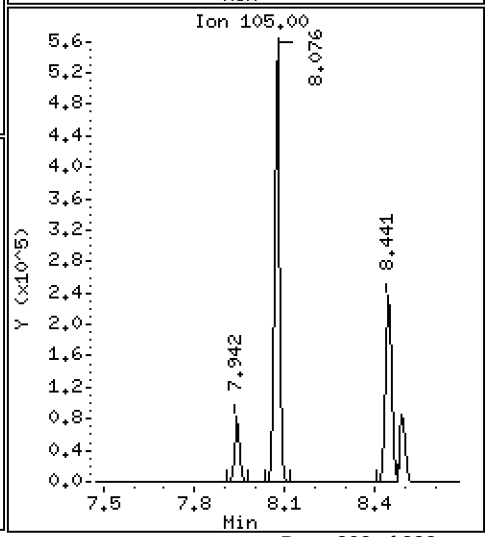












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

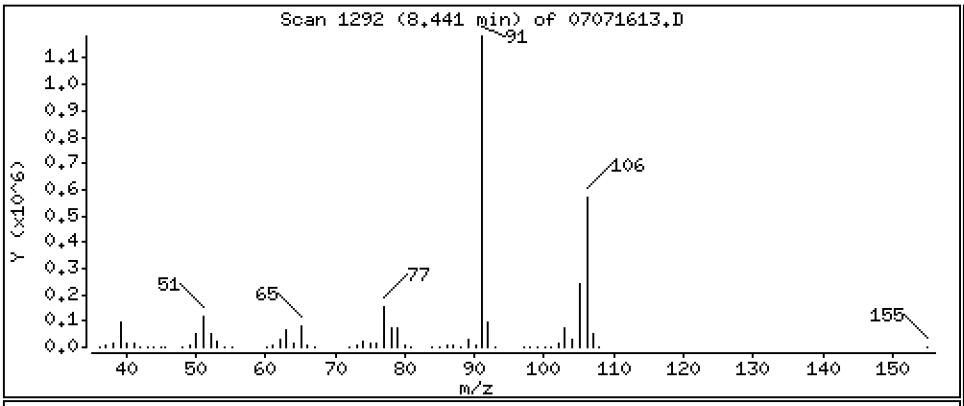
Operator: PB

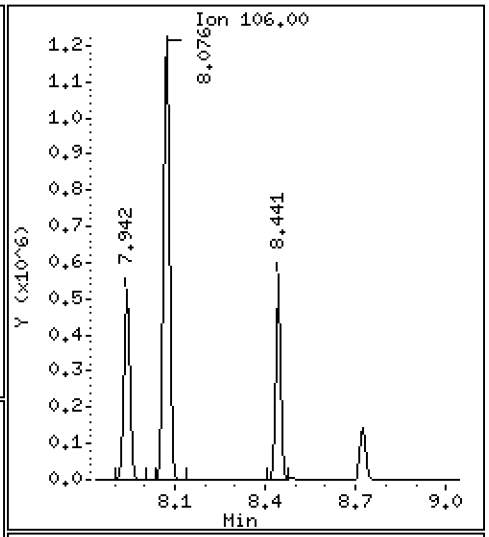
Column phase: RTXVMS

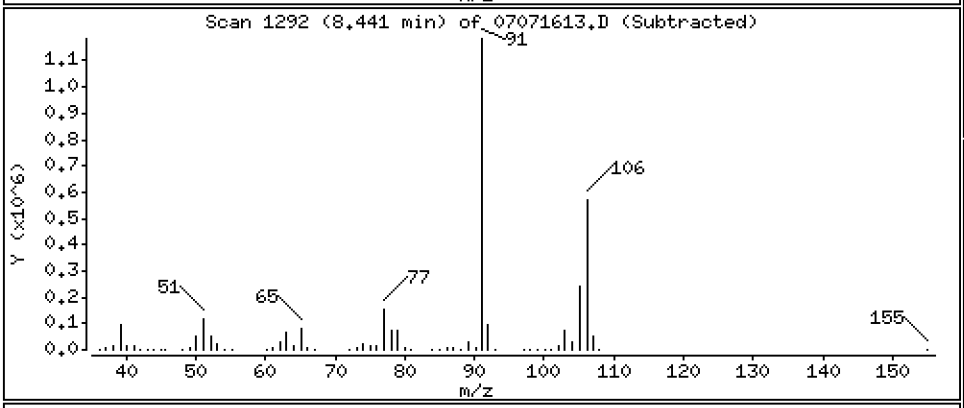
Column diameter: 0.18

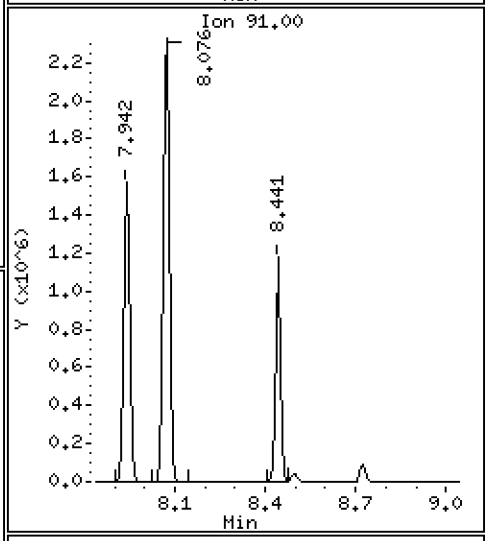
57 o-Xylene

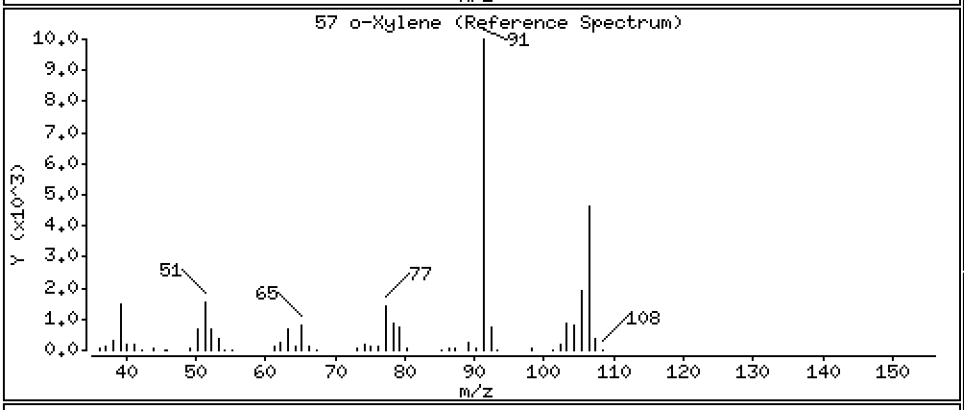
Concentration: 49.235 ug/Kg

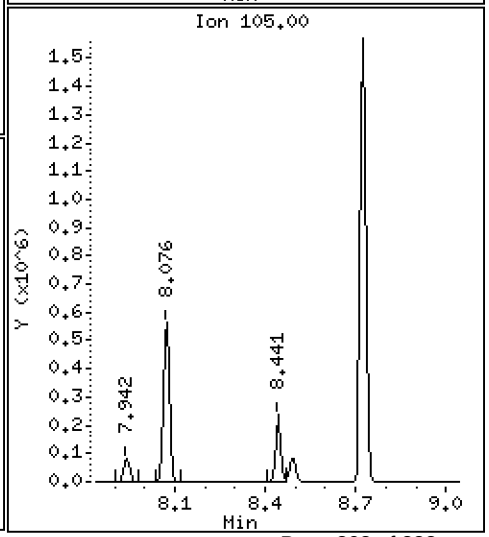


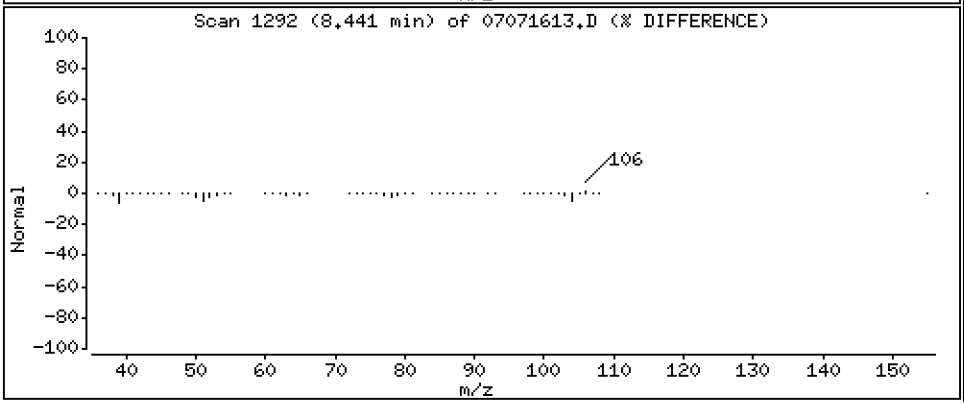












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

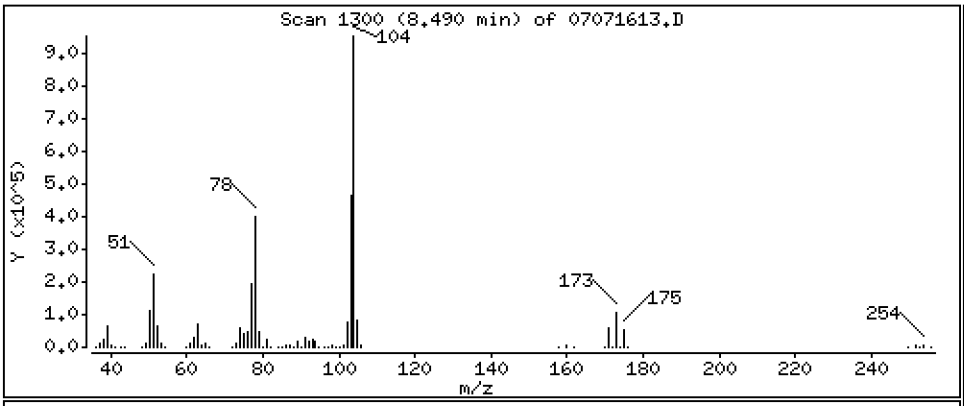
Operator: PB

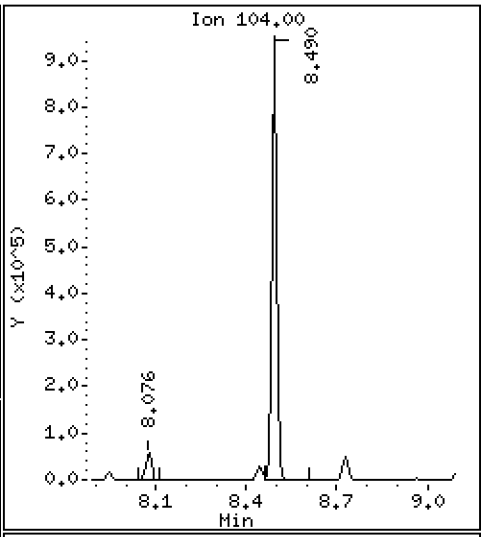
Column phase: RTXVMS

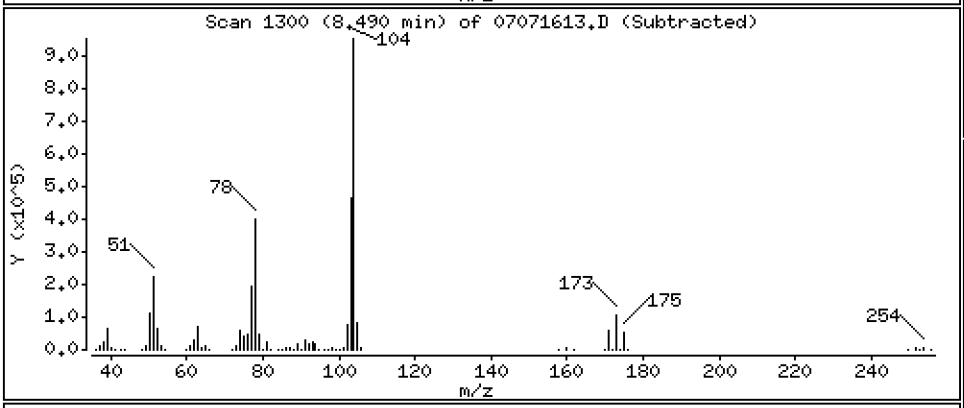
Column diameter: 0.18

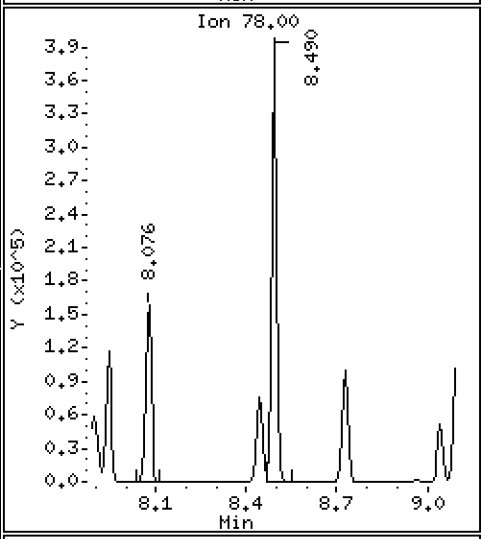
58 Styrene

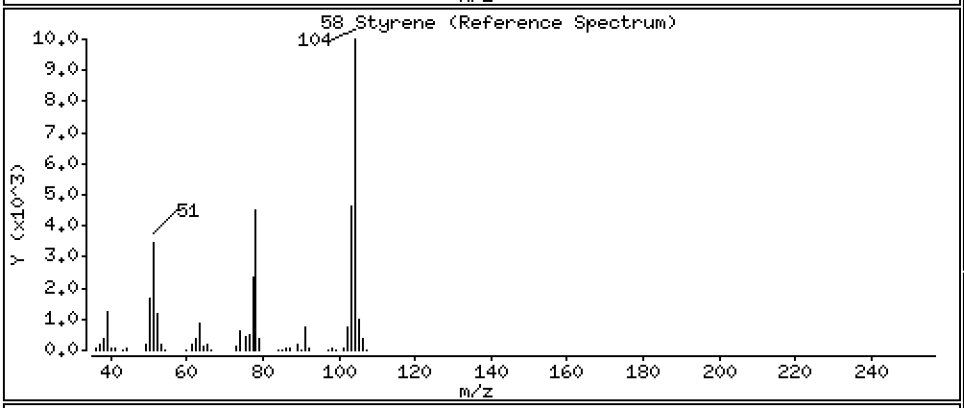
Concentration: 50.010 ug/Kg

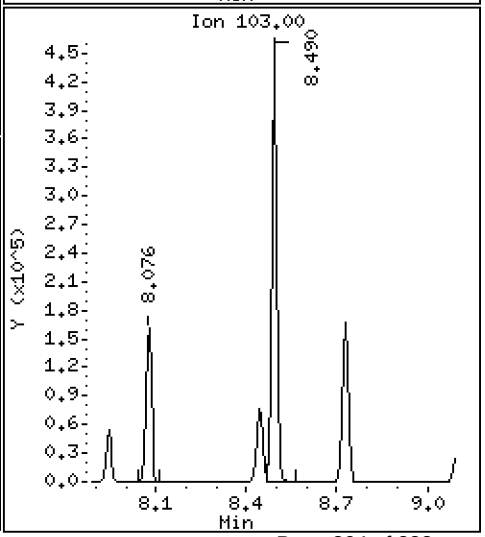


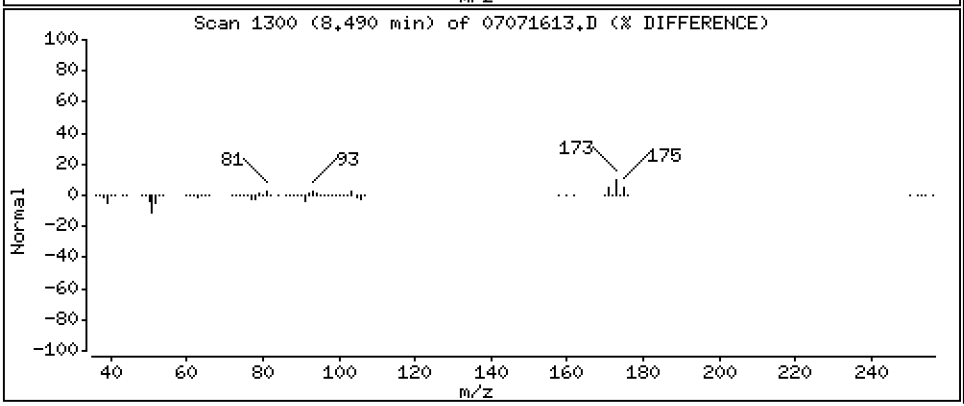












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

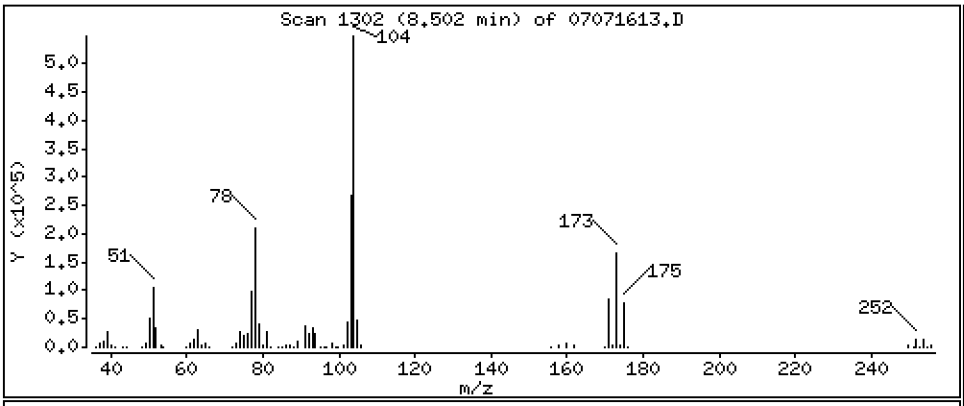
Operator: PB

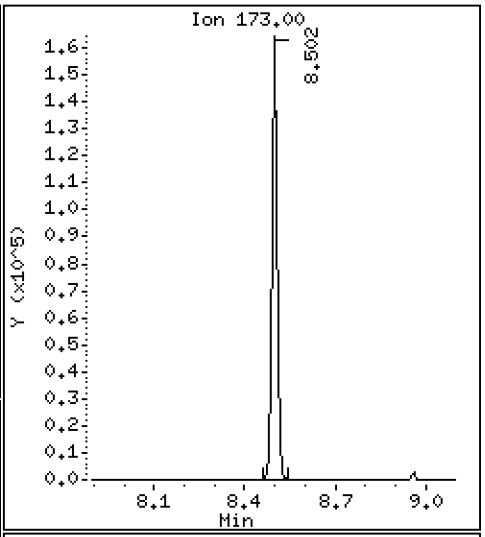
Column phase: RTXVMS

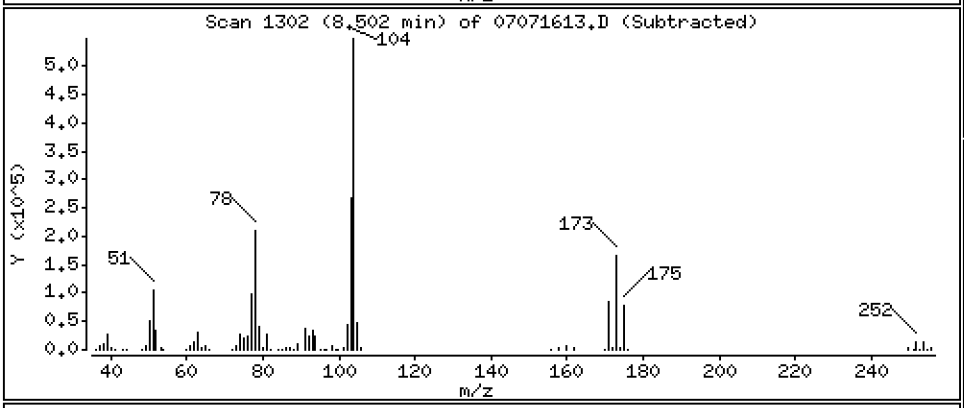
Column diameter: 0.18

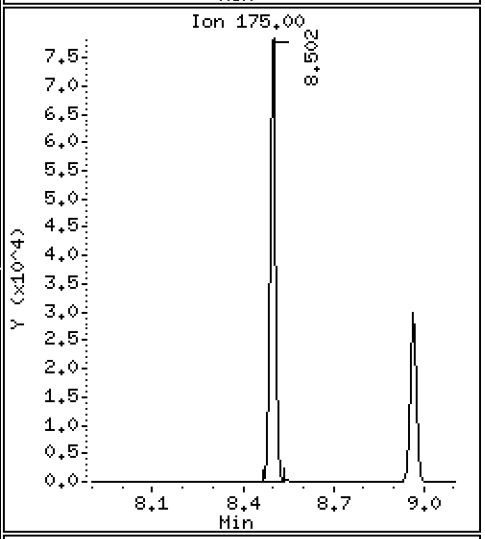
59 Bromoform

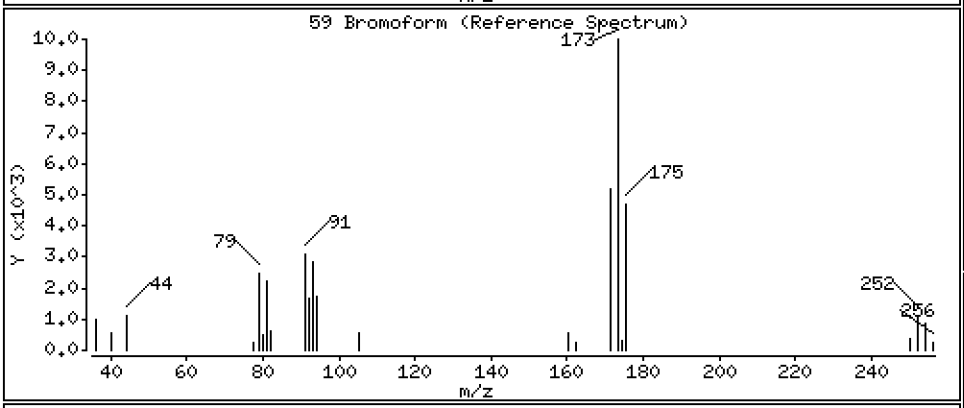
Concentration: 47.801 ug/Kg

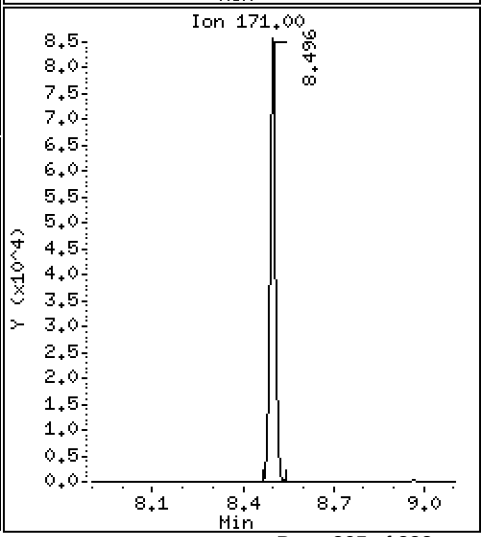


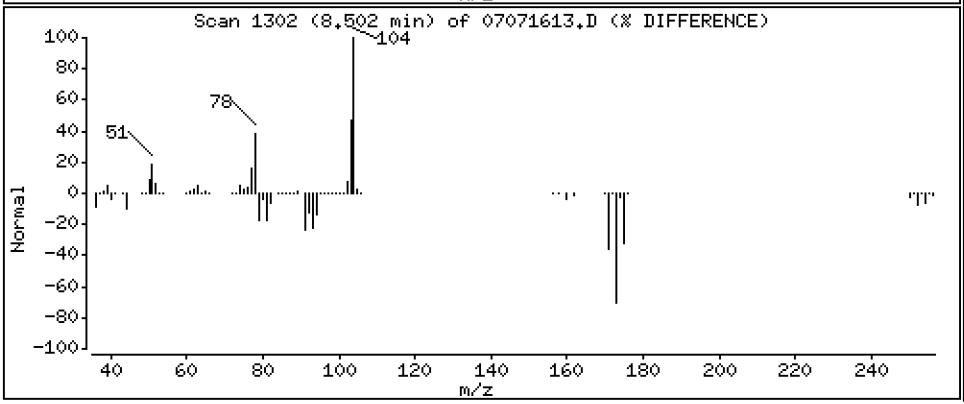












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

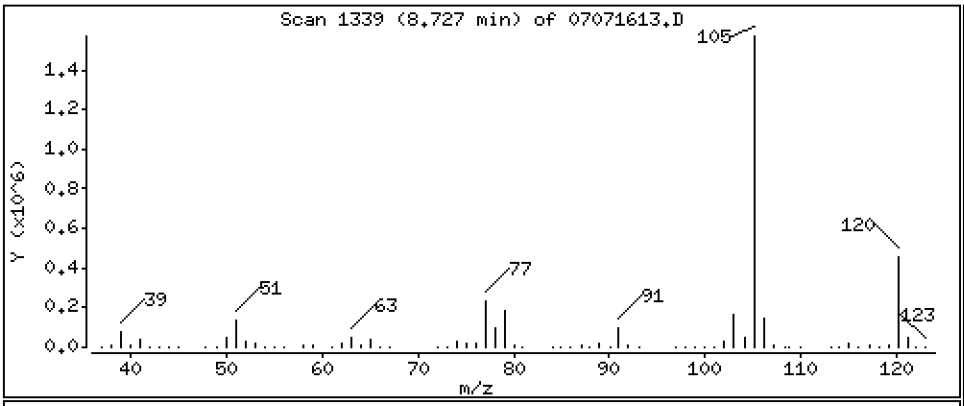
Operator: PB

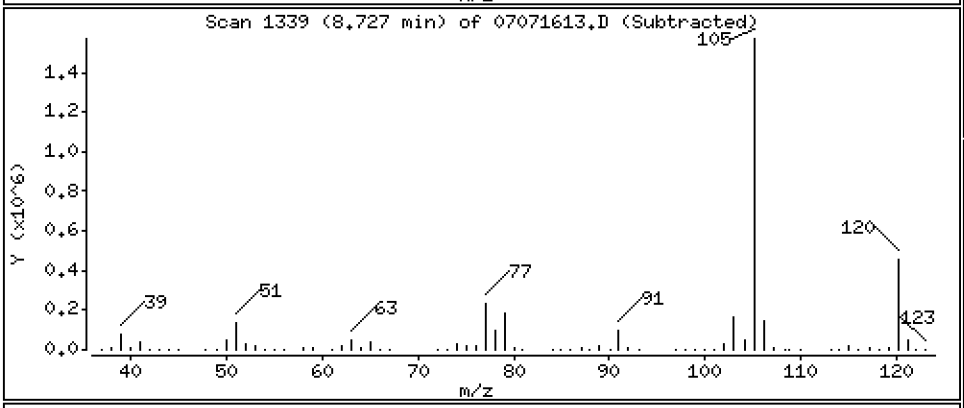
Column phase: RTXVMS

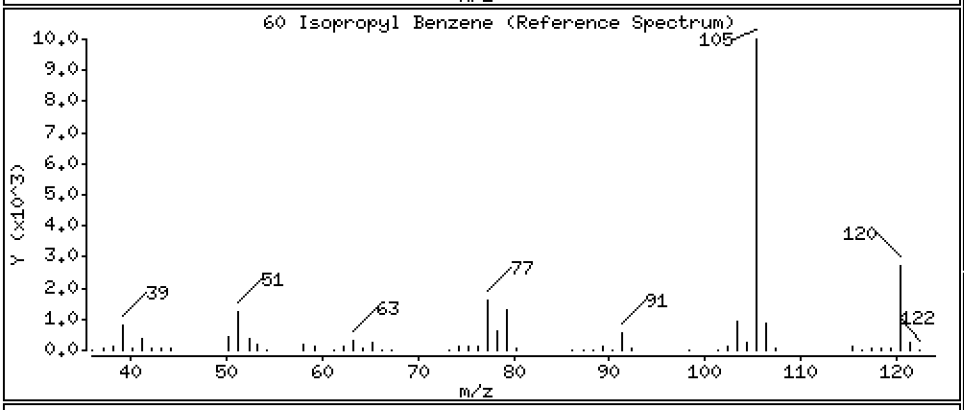
Column diameter: 0.18

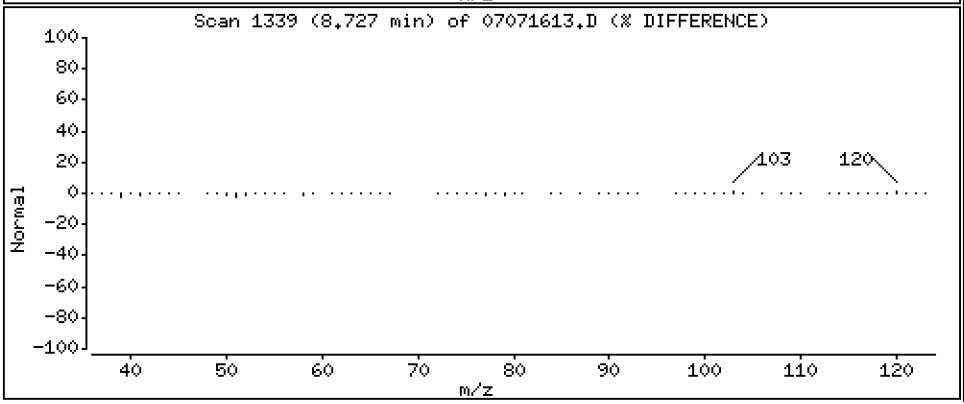
60 Isopropyl Benzene

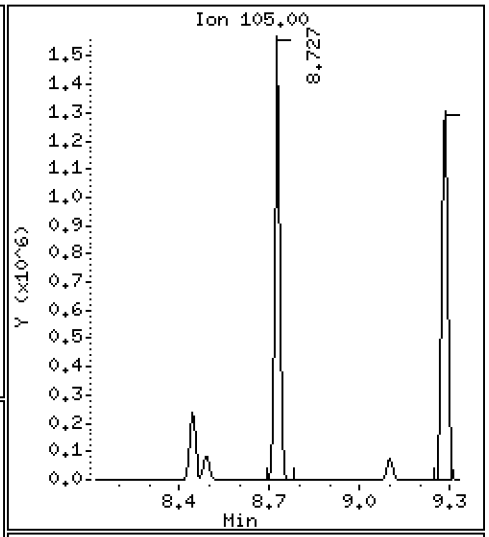
Concentration: 50.989 ug/Kg

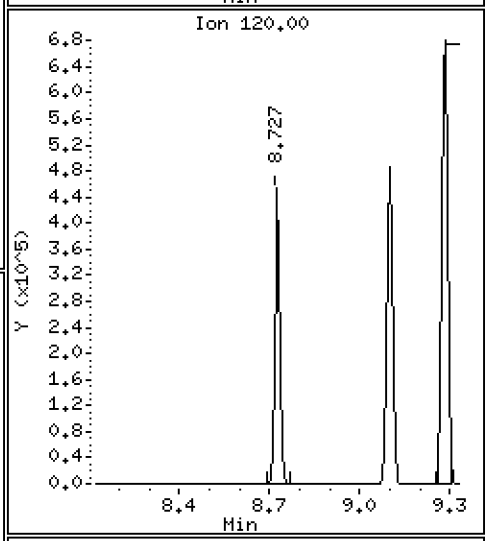


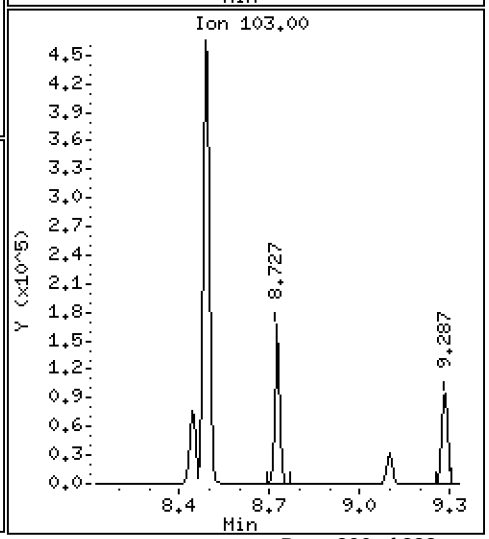












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

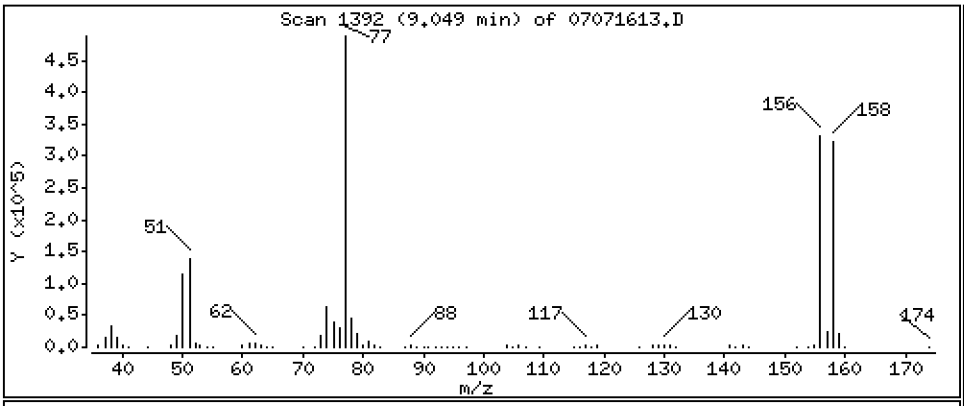
Operator: PB

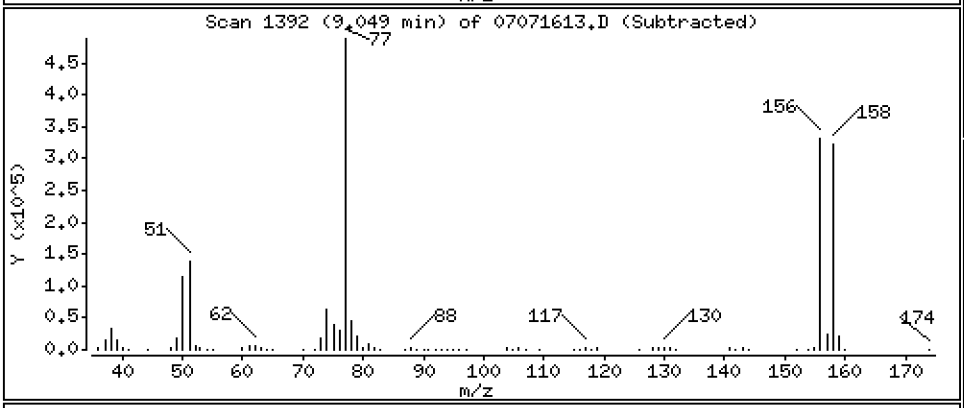
Column phase: RTXVMS

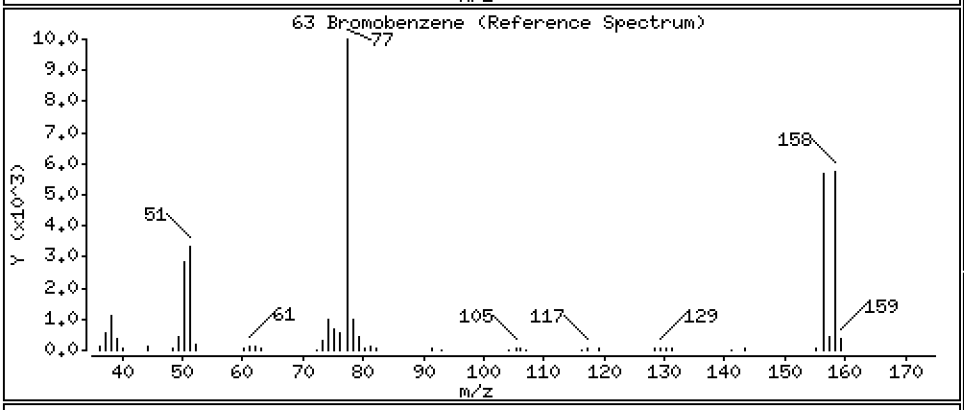
Column diameter: 0.18

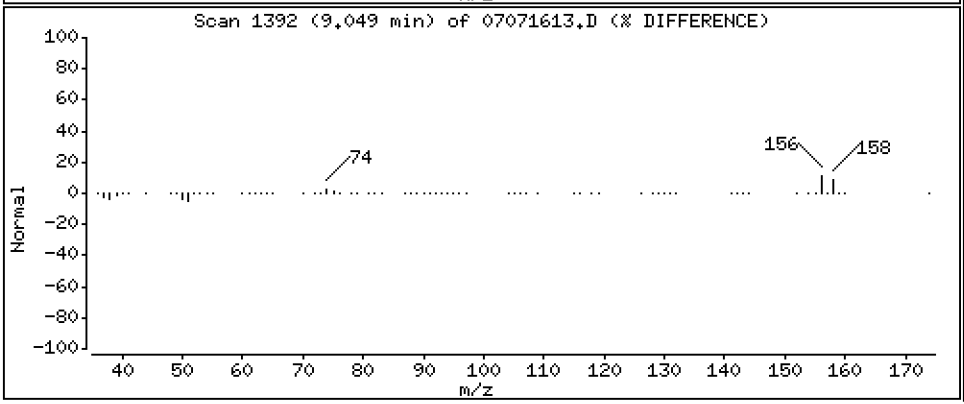
63 Bromobenzene

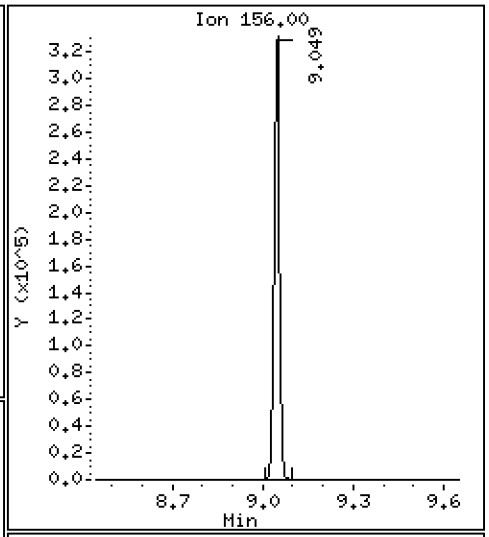
Concentration: 49.445 ug/Kg

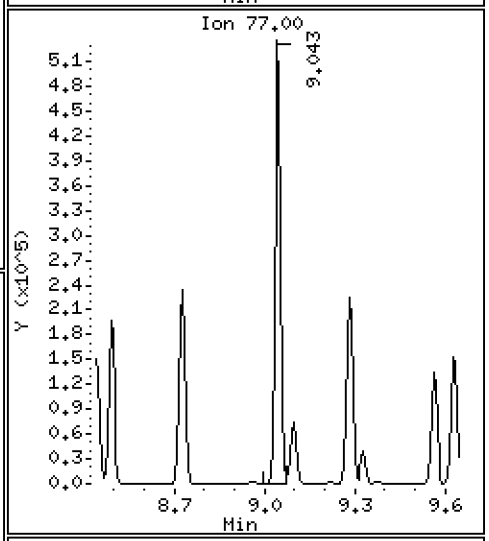


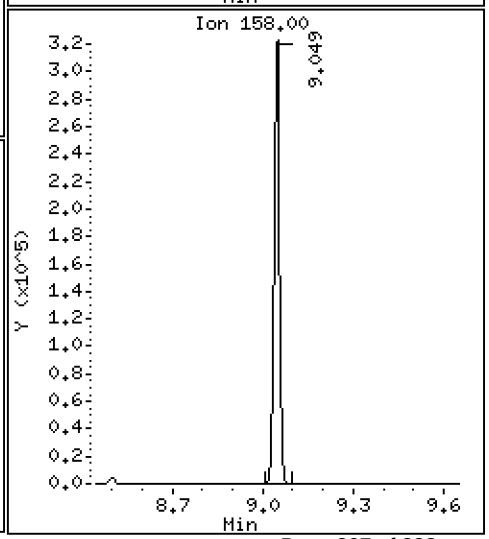












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

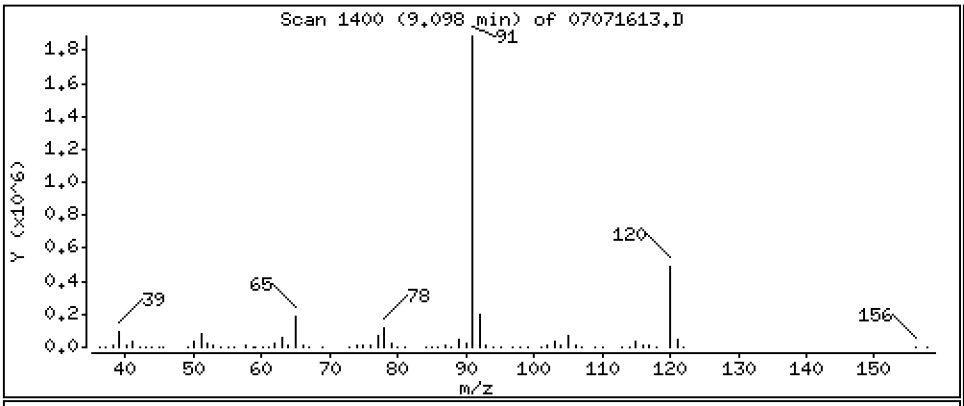
Operator: PB

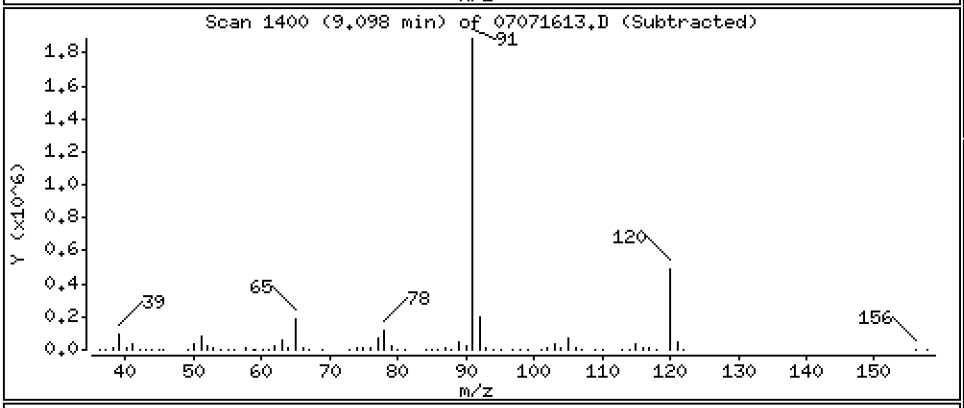
Column phase: RTXVMS

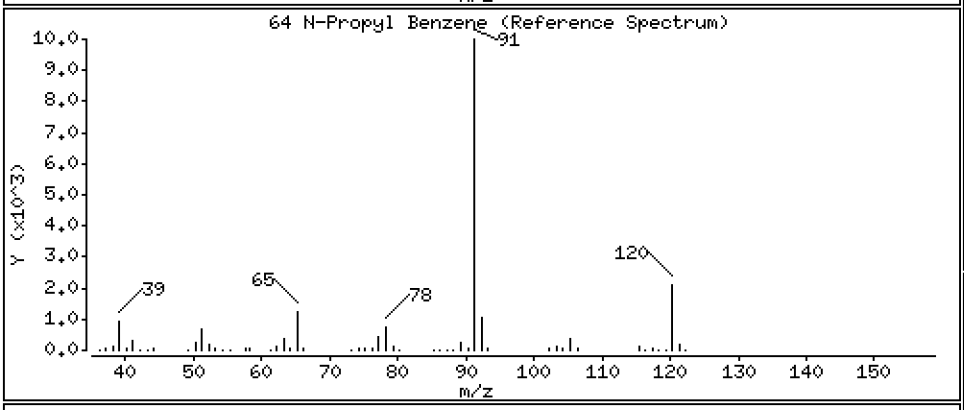
Column diameter: 0.18

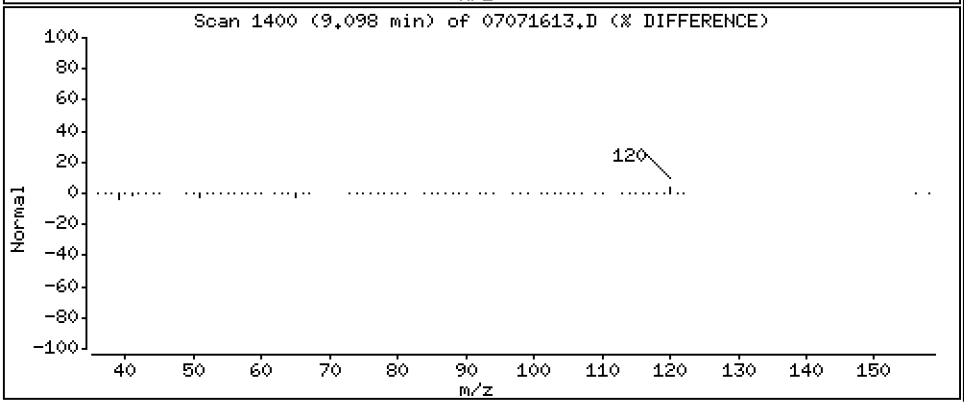
64 N-Propyl Benzene

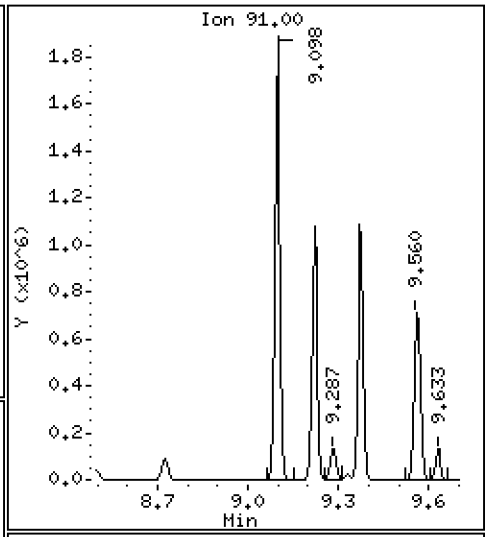
Concentration: 51.161 ug/Kg

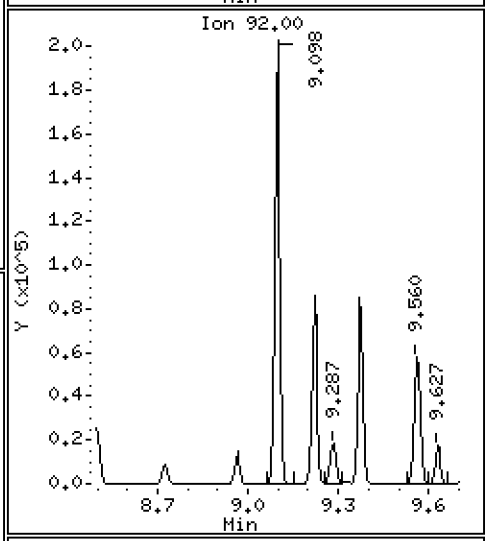


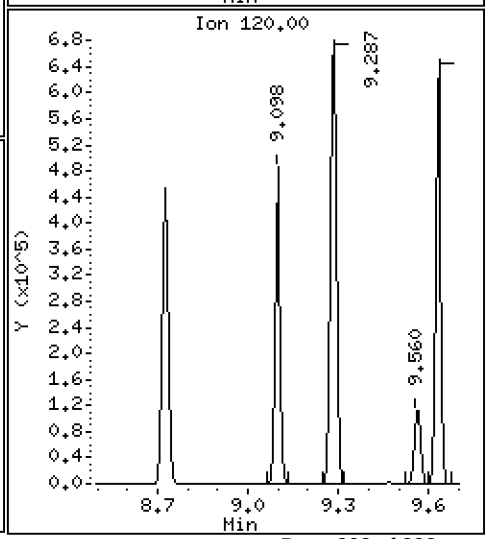












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

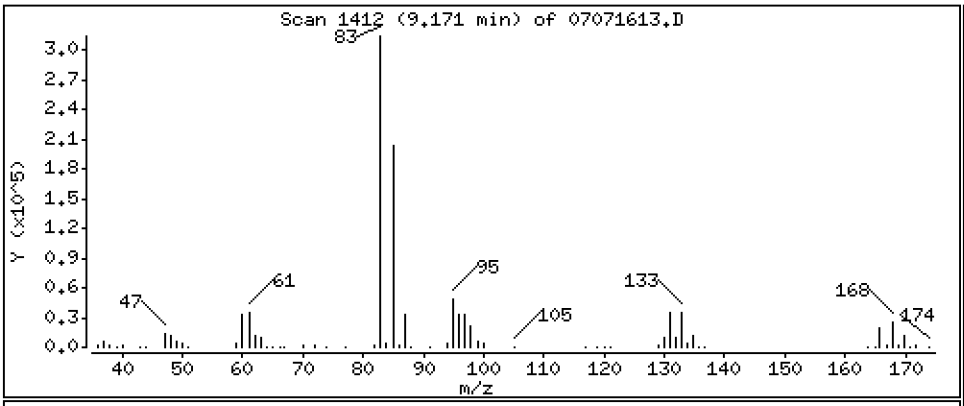
Operator: PB

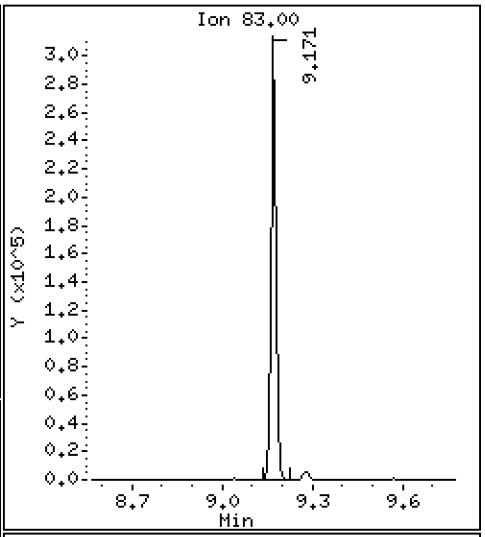
Column phase: RTXVMS

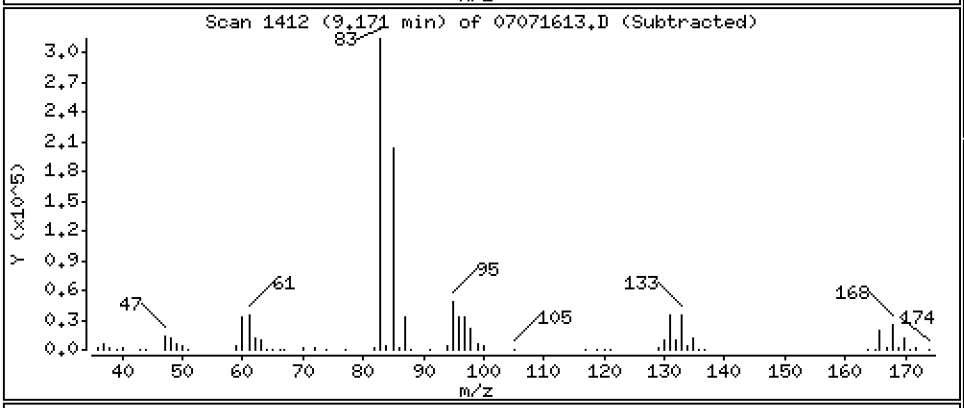
Column diameter: 0.18

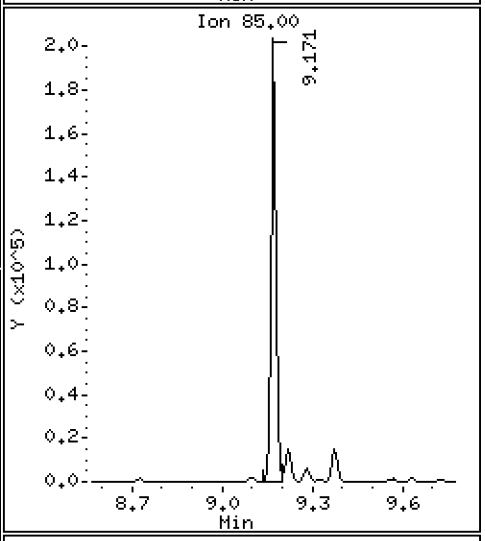
65 1,1,2,2-Tetrachloroethane

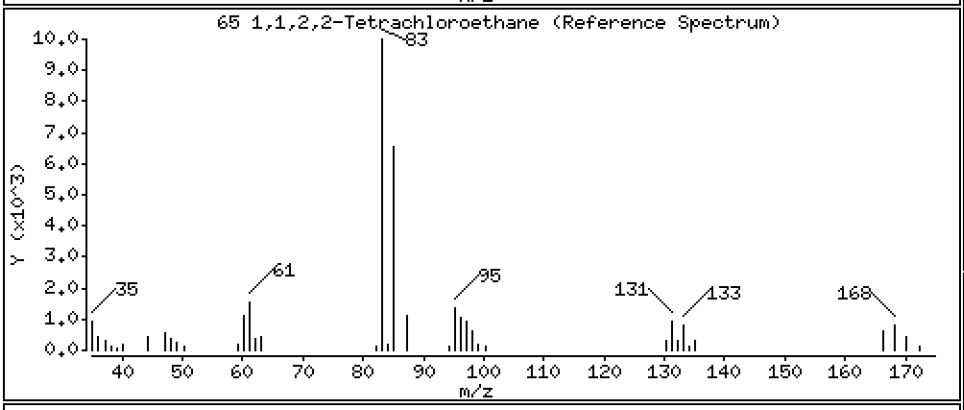
Concentration: 46.005 ug/Kg

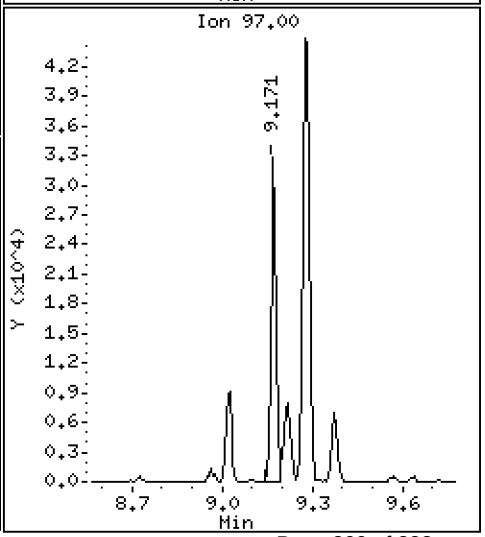


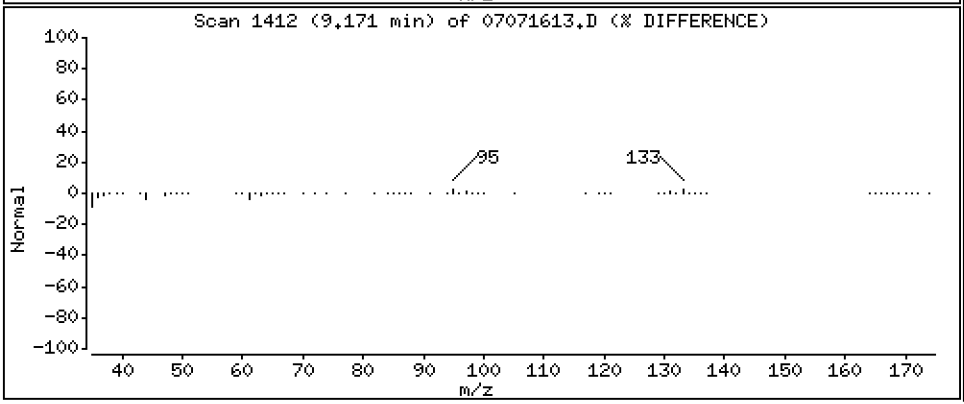












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

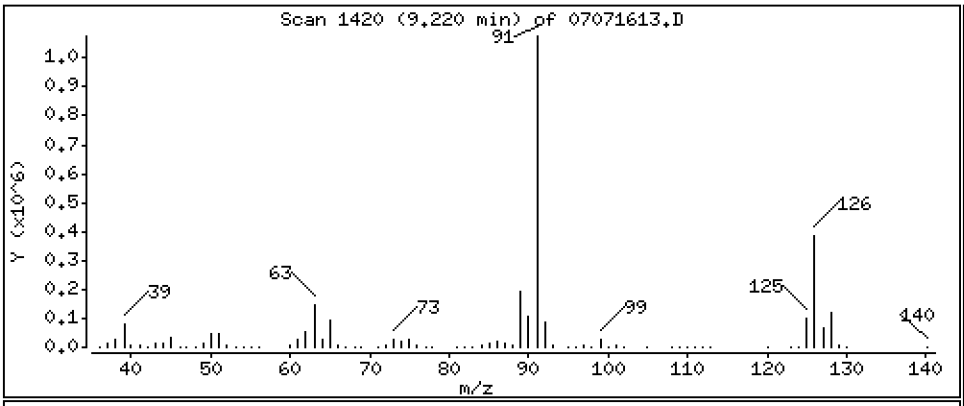
Operator: PB

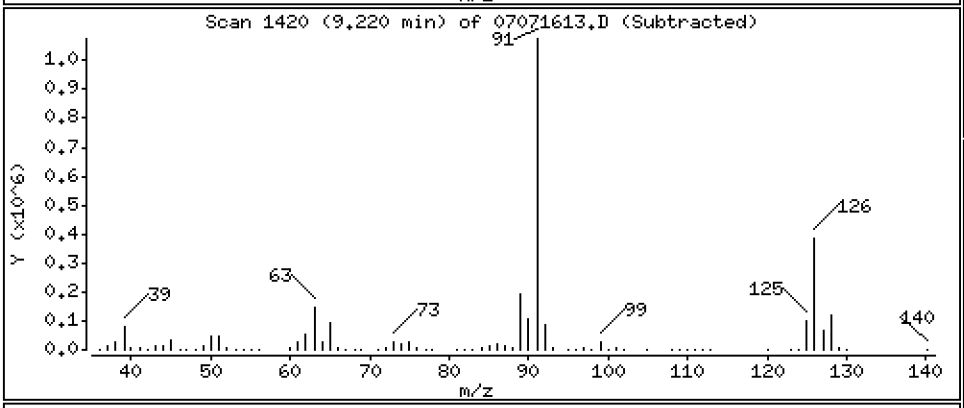
Column phase: RTXVMS

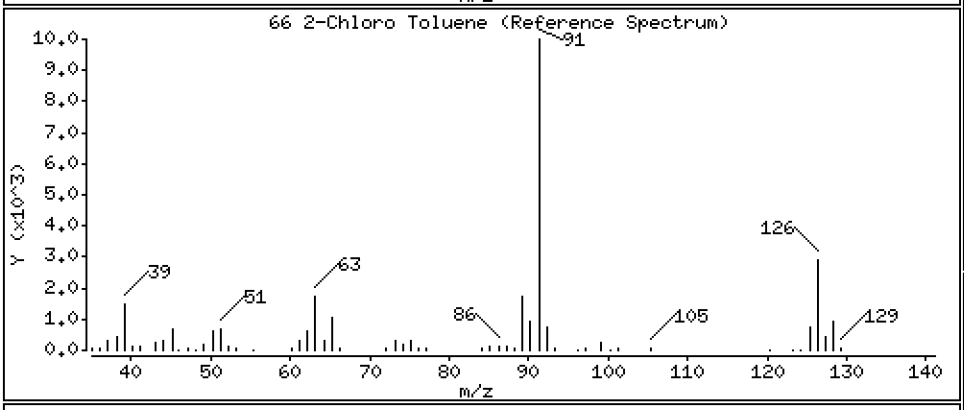
Column diameter: 0.18

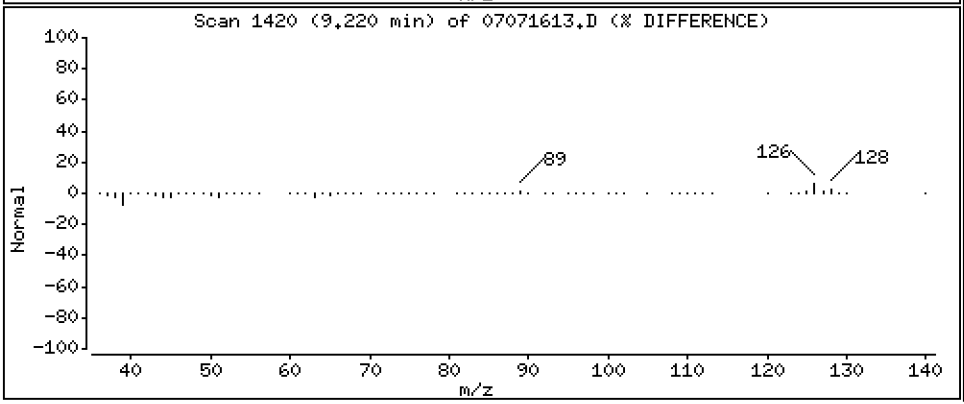
66 2-Chloro Toluene

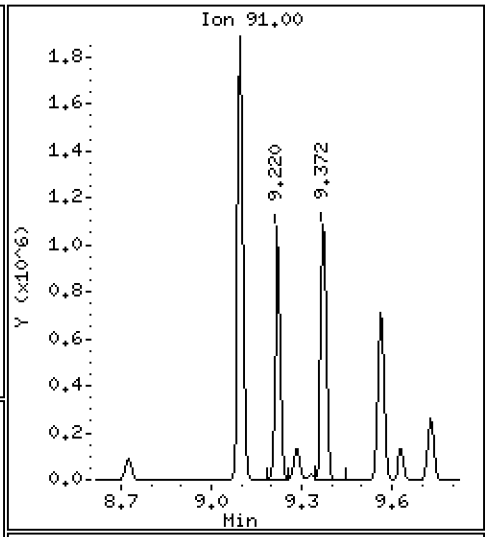
Concentration: 50.087 ug/Kg

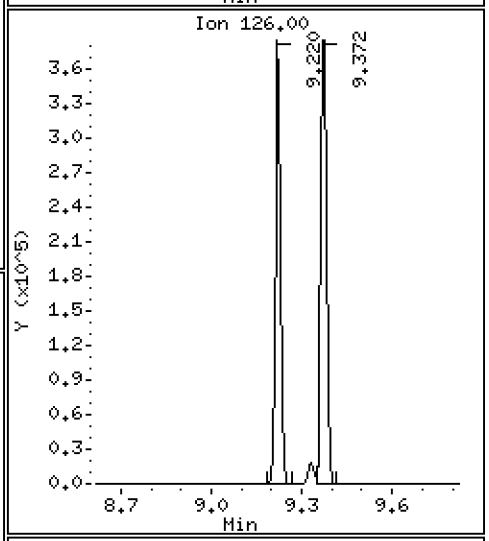


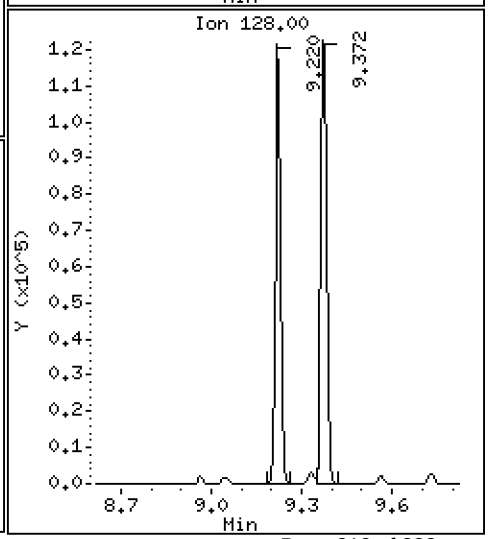












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

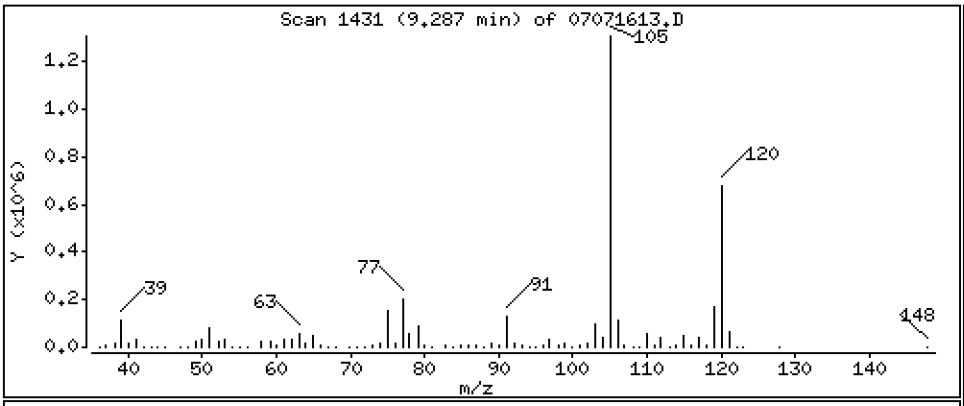
Operator: PB

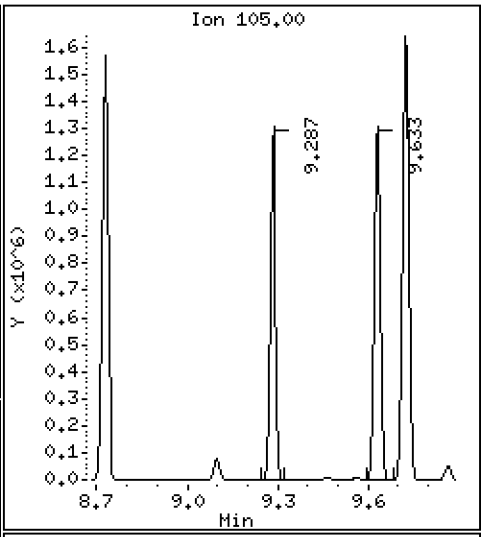
Column phase: RTXVMS

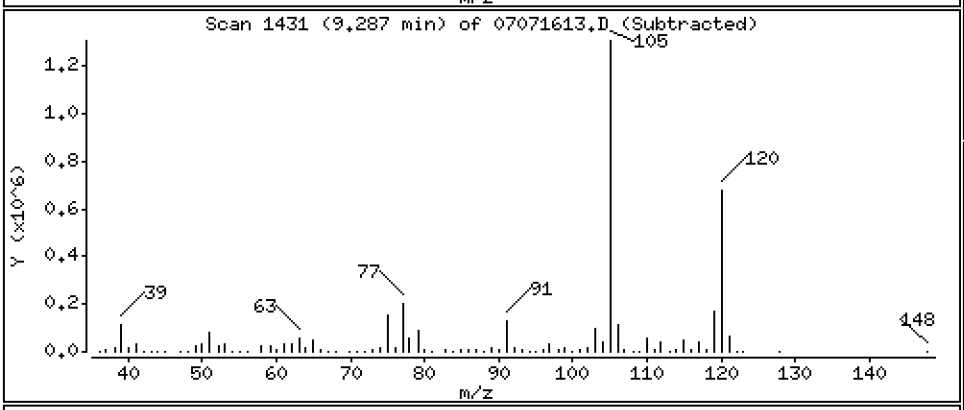
Column diameter: 0.18

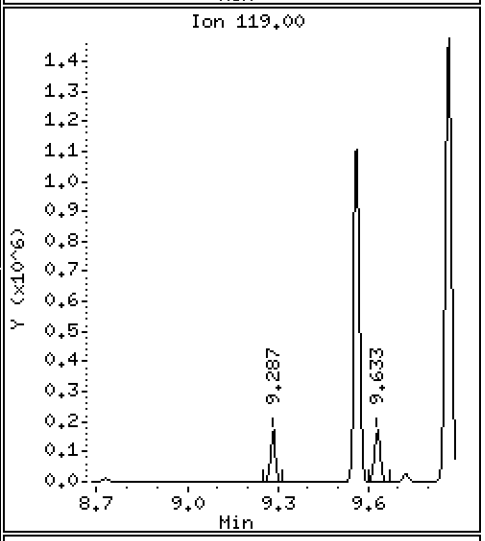
67 1,3,5-Trimethyl Benzene

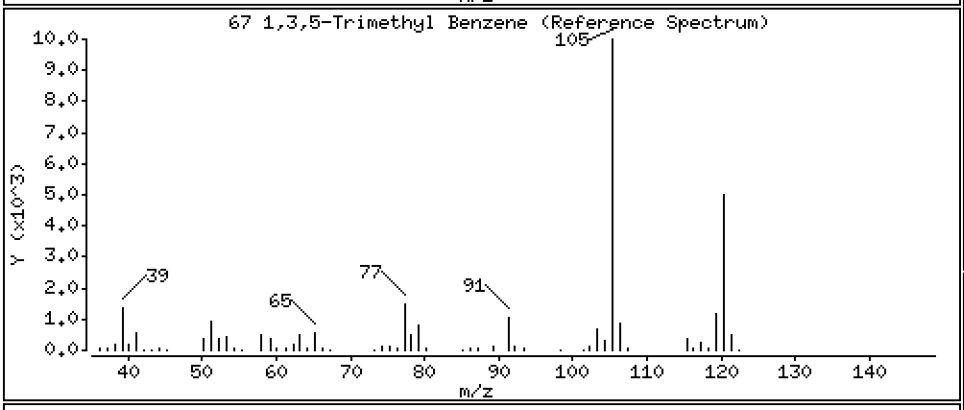
Concentration: 51.135 ug/Kg

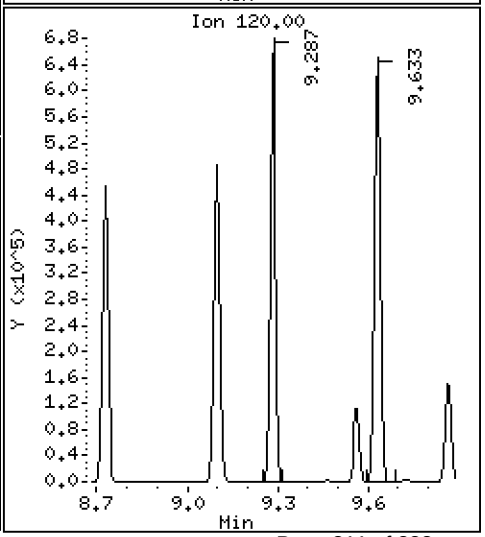


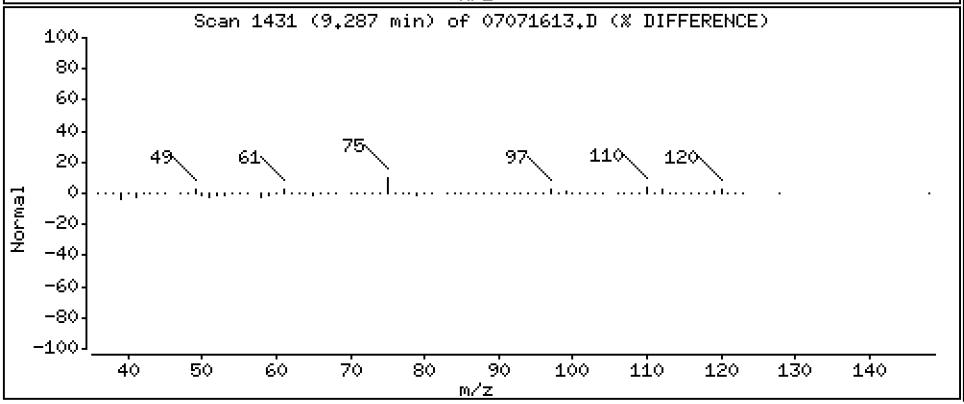












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

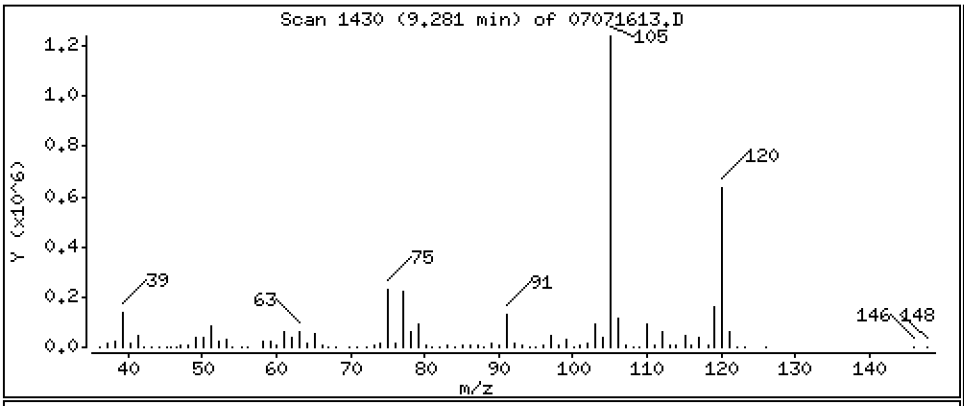
Operator: PB

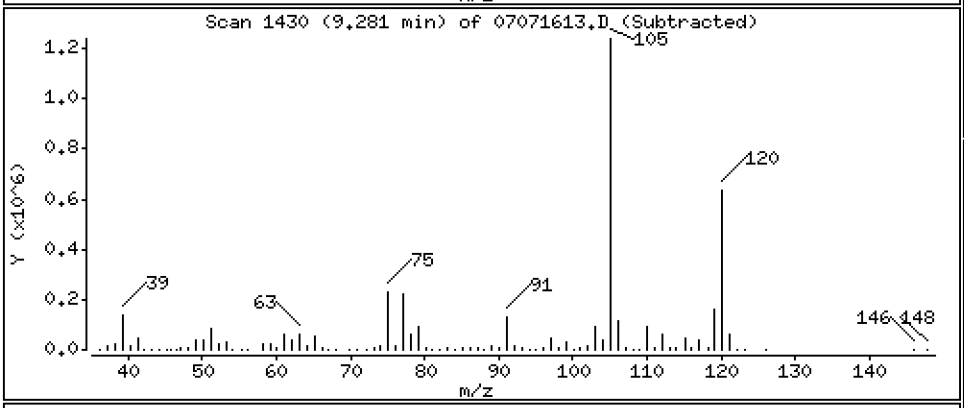
Column phase: RTXVMS

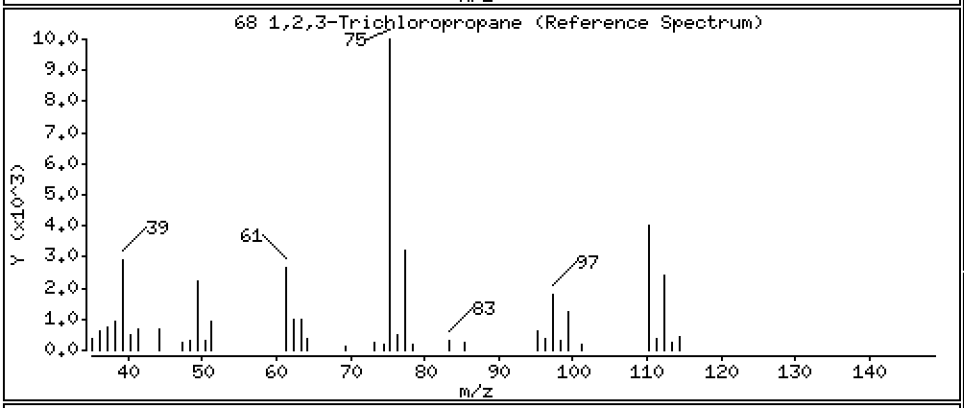
Column diameter: 0.18

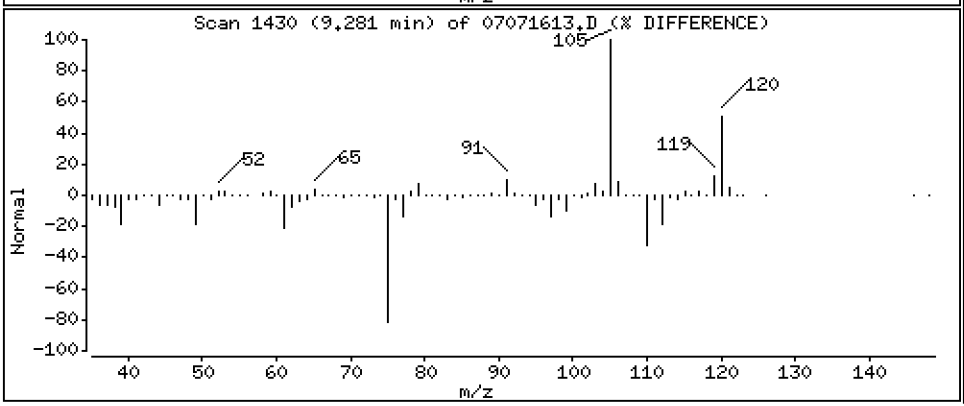
68 1,2,3-Trichloropropane

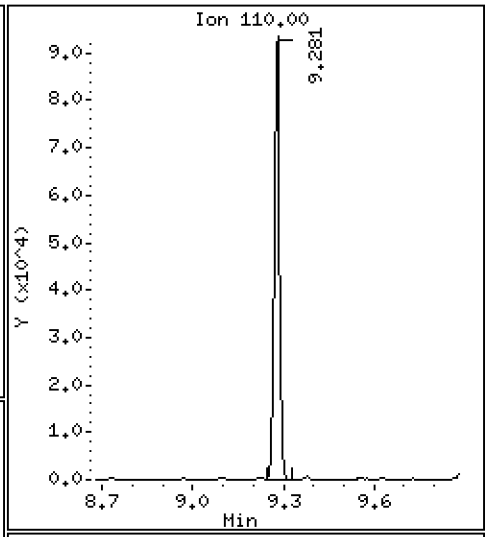
Concentration: 45.726 ug/Kg

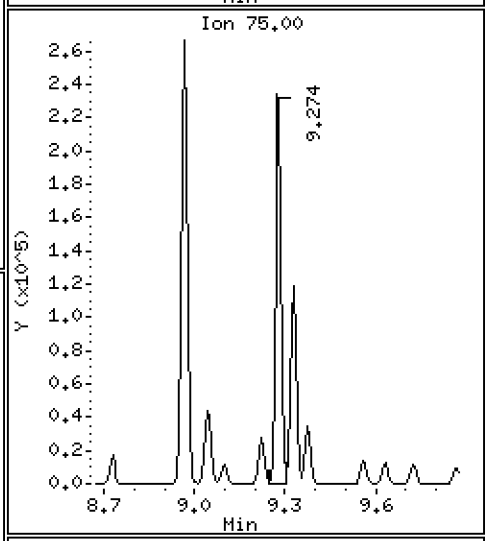


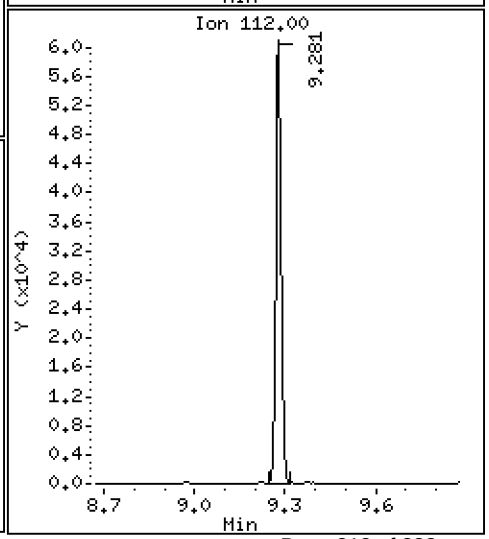












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

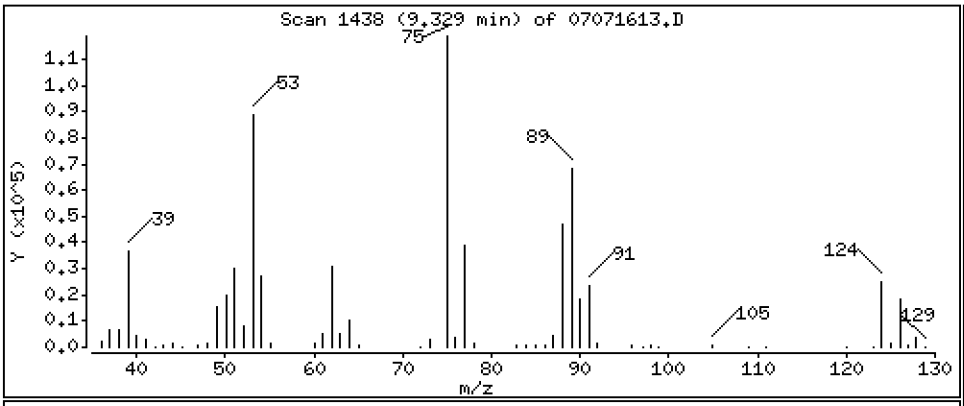
Operator: PB

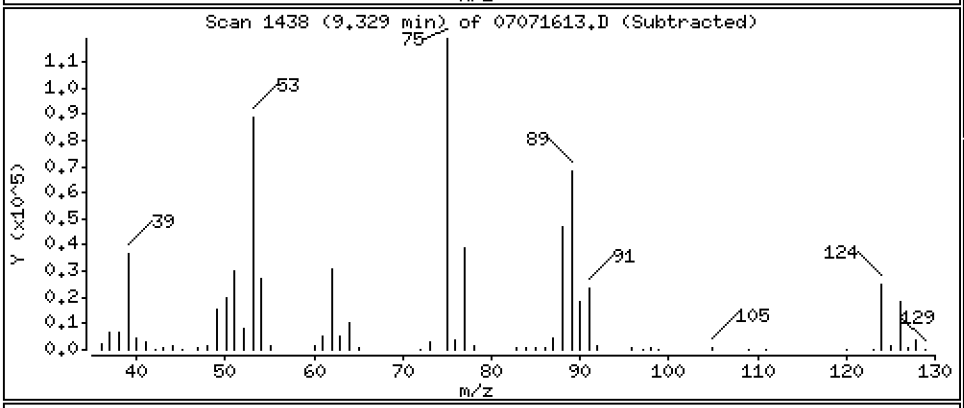
Column phase: RTXVMS

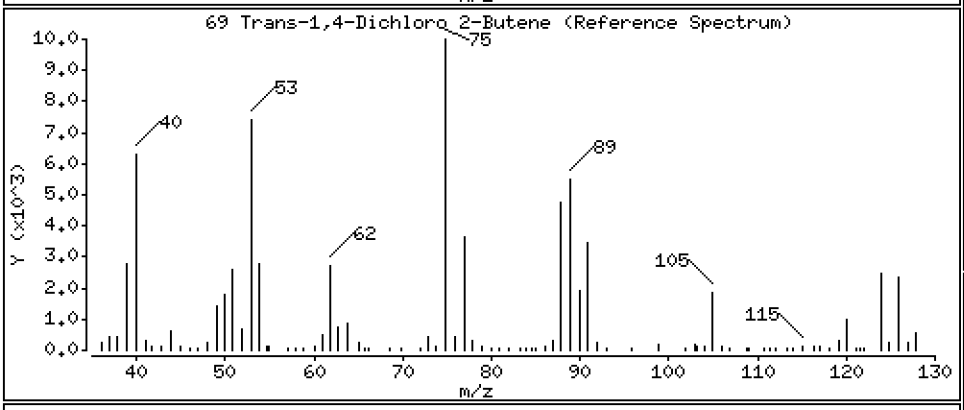
Column diameter: 0.18

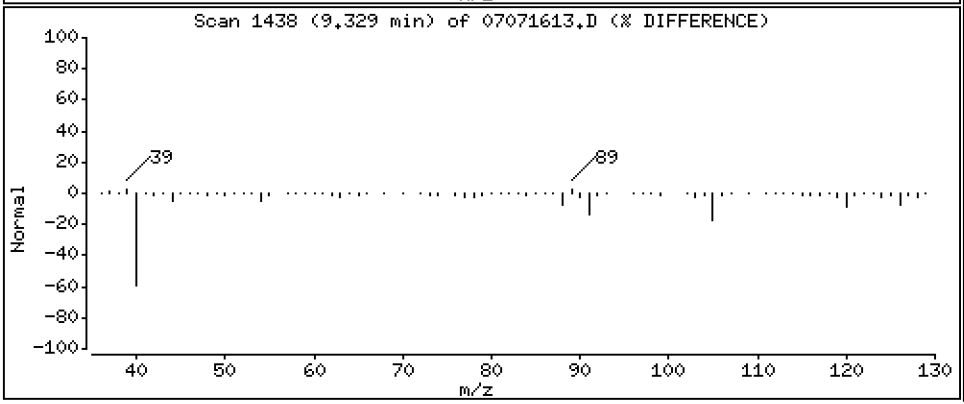
69 Trans-1,4-Dichloro 2-Butene

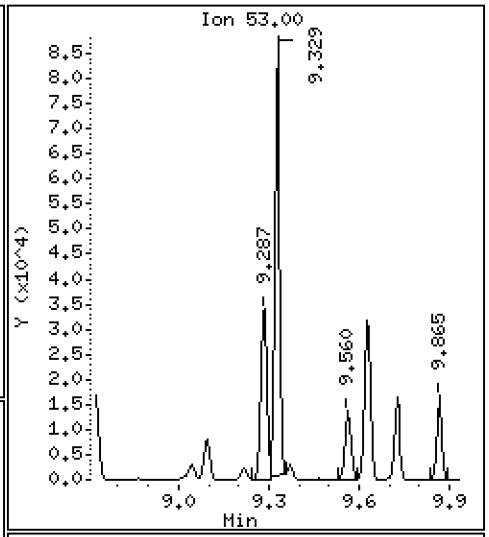
Concentration: 47.142 ug/Kg

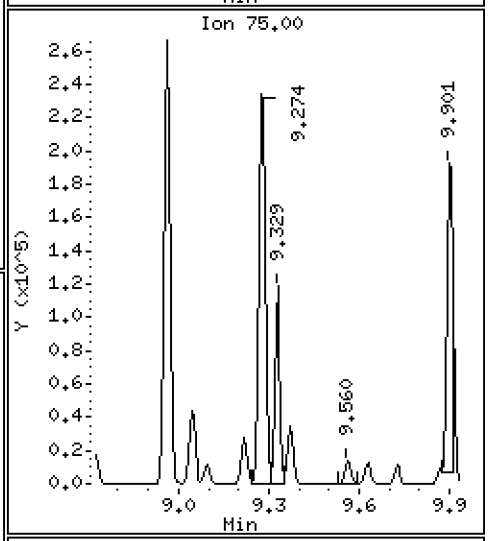


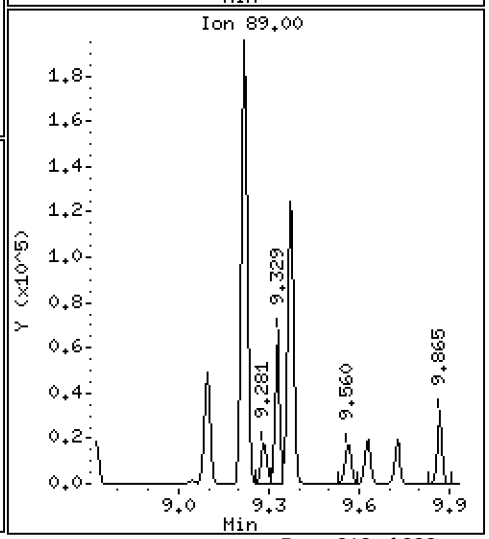












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

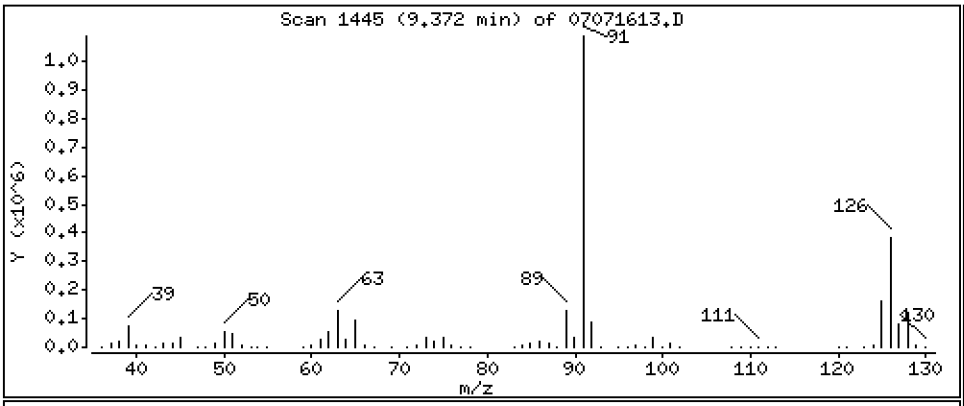
Operator: PB

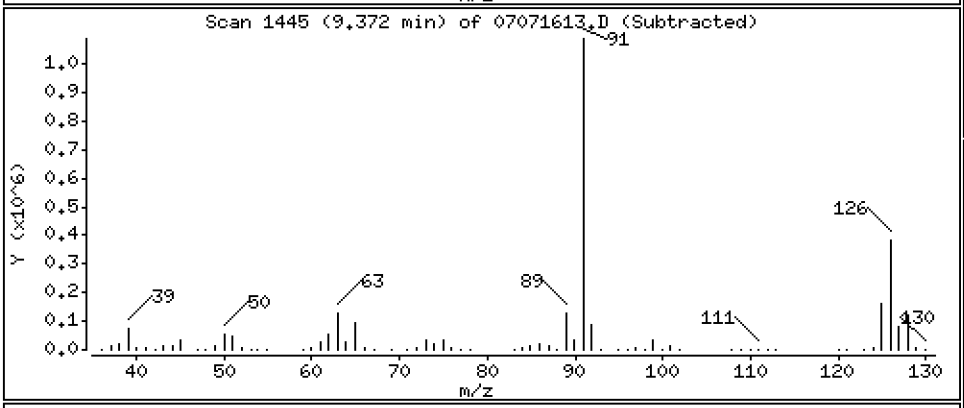
Column phase: RTXVMS

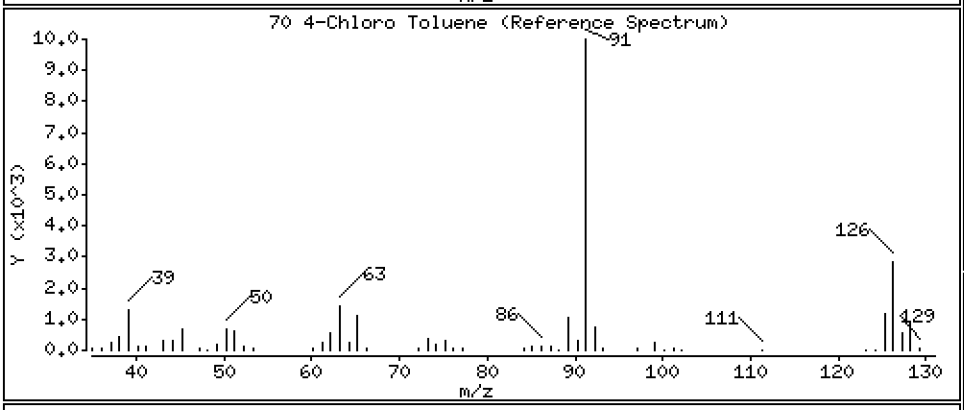
Column diameter: 0.18

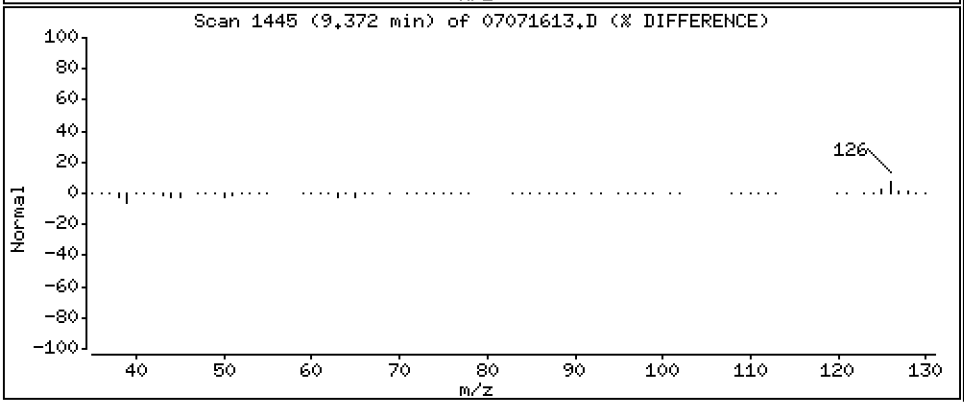
70 4-Chloro Toluene

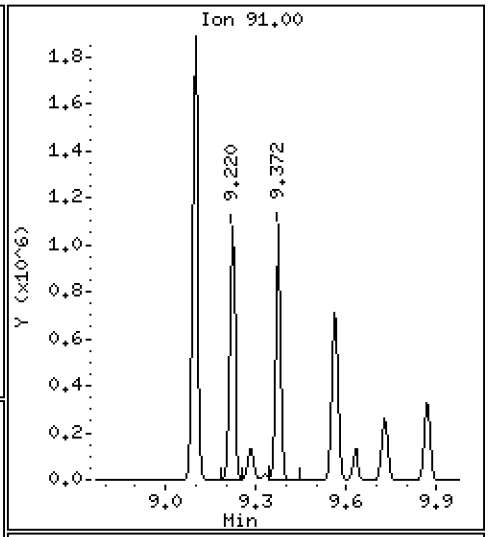
Concentration: 50.723 ug/Kg

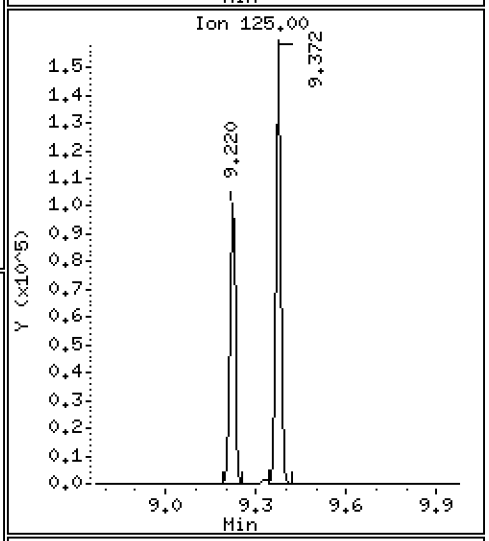


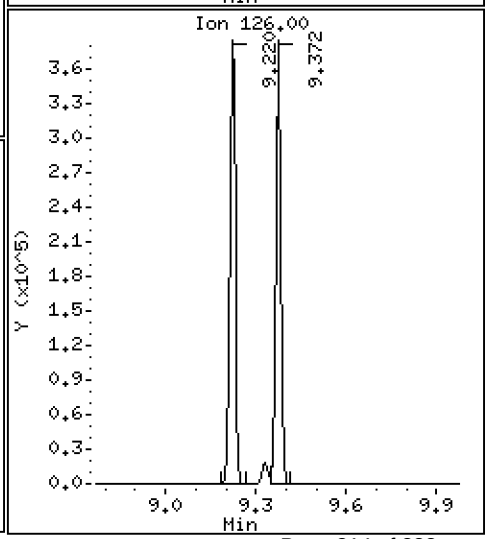












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

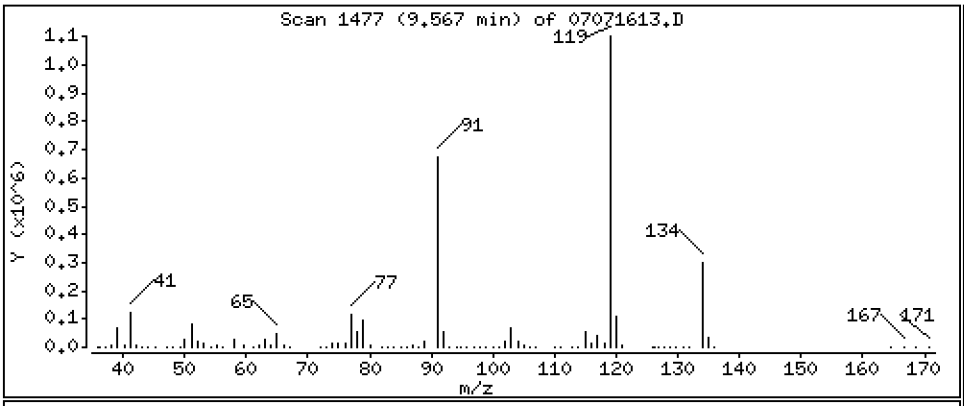
Operator: PB

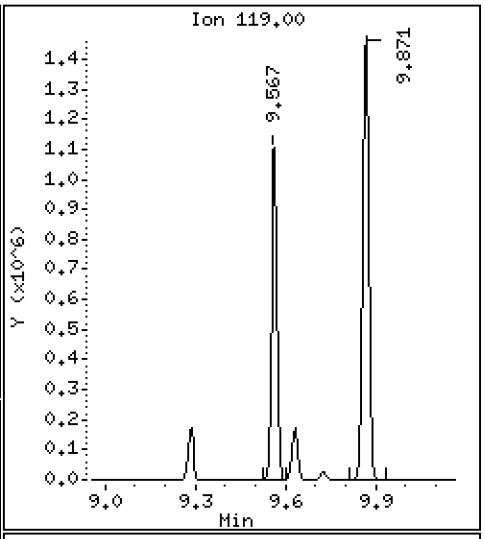
Column phase: RTXVMS

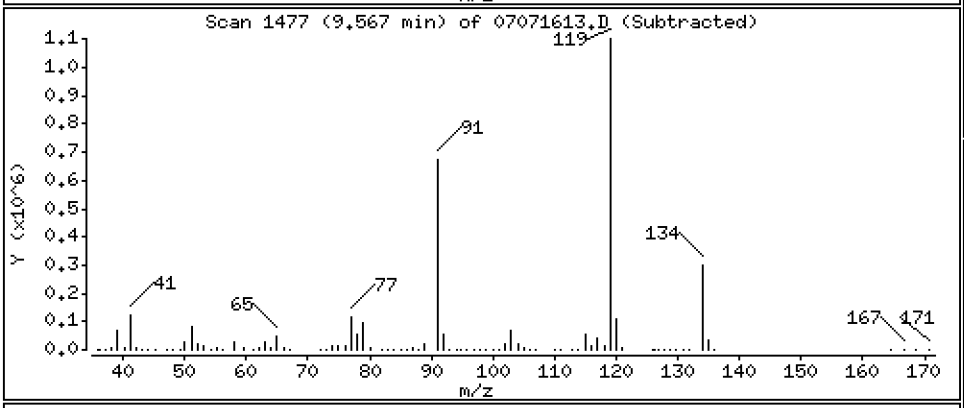
Column diameter: 0.18

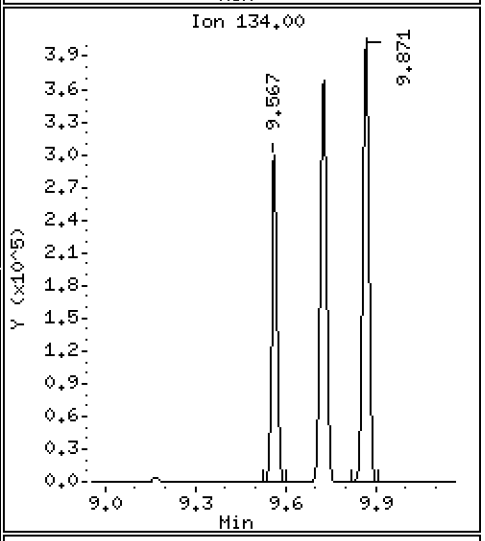
71 T-Butyl Benzene

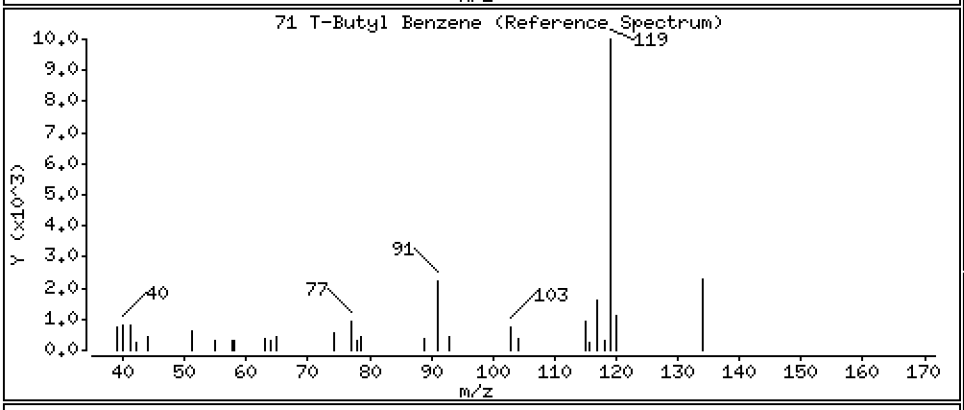
Concentration: 50.217 ug/Kg

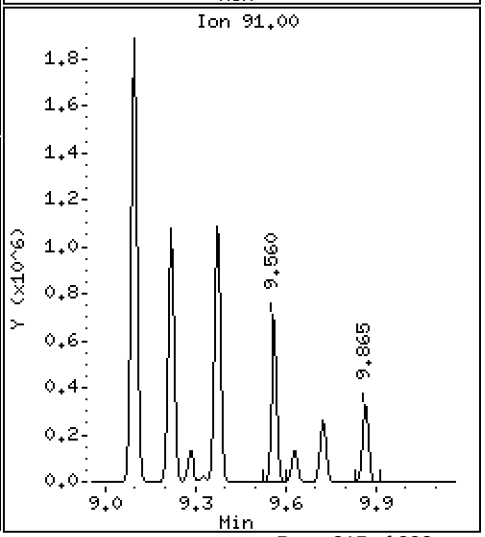


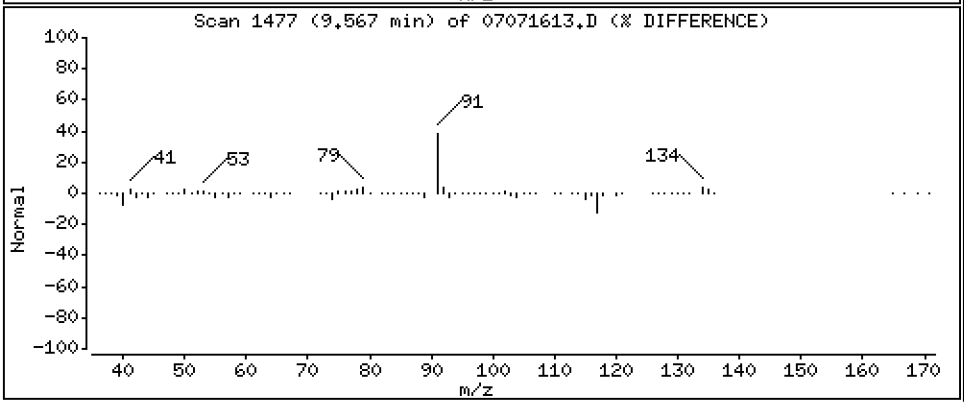












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

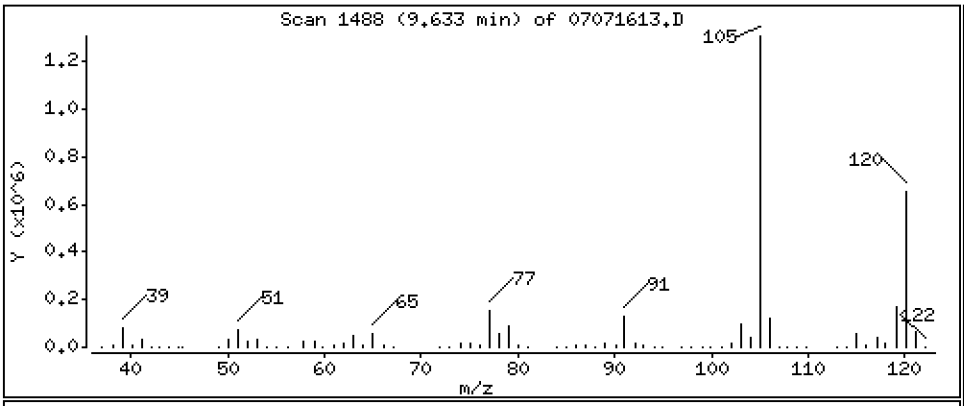
Operator: PB

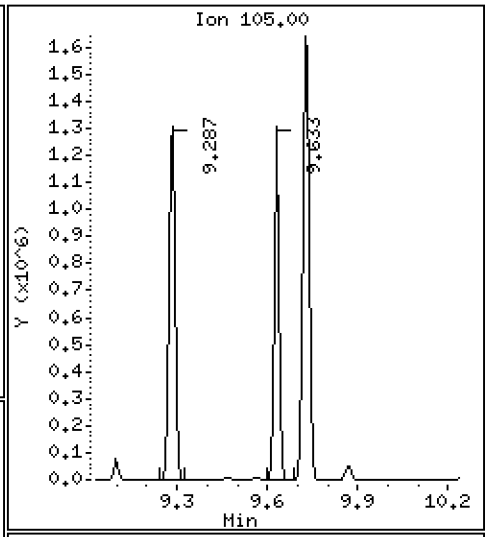
Column phase: RTXVMS

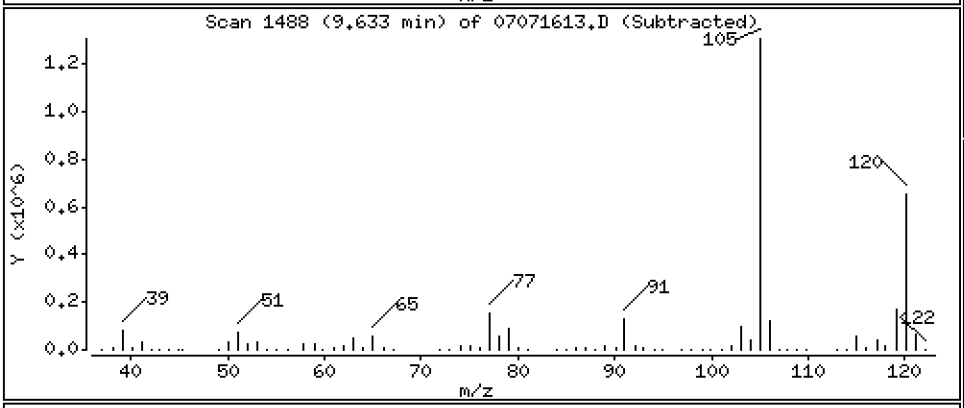
Column diameter: 0.18

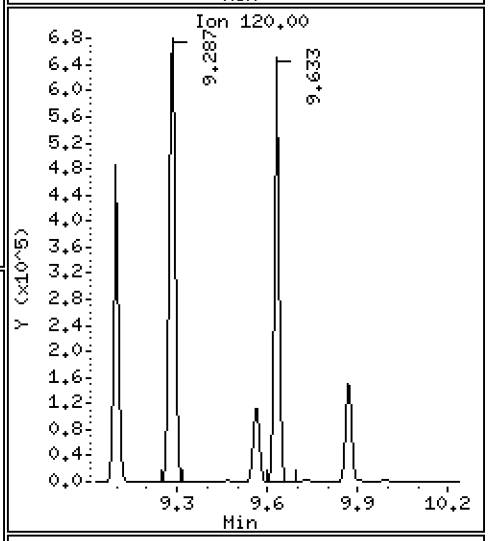
72 1,2,4-Trimethylbenzene

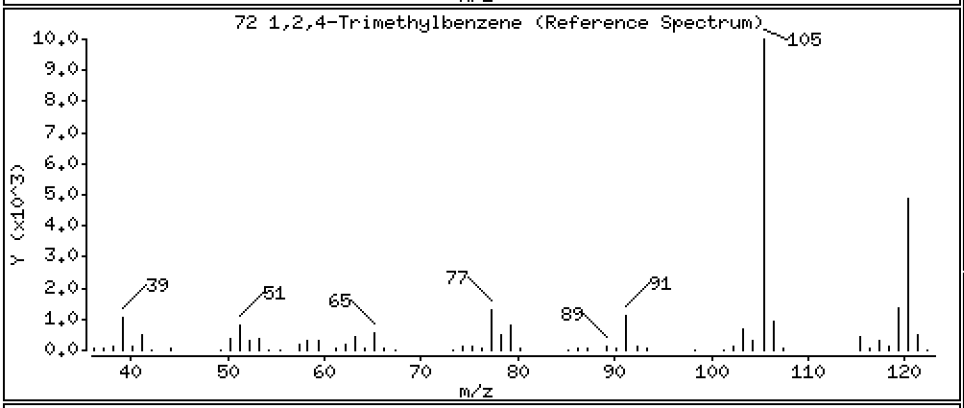
Concentration: 50.801 ug/Kg

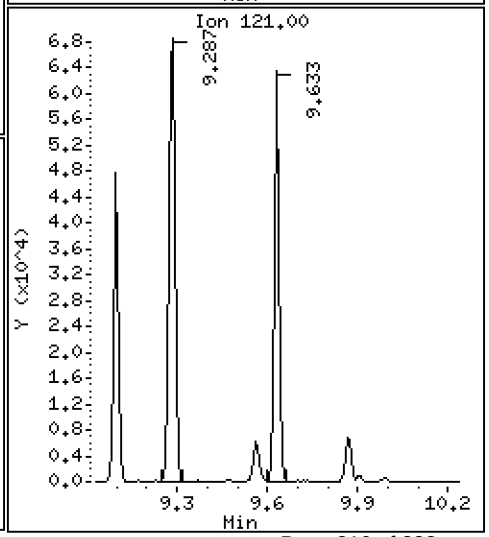


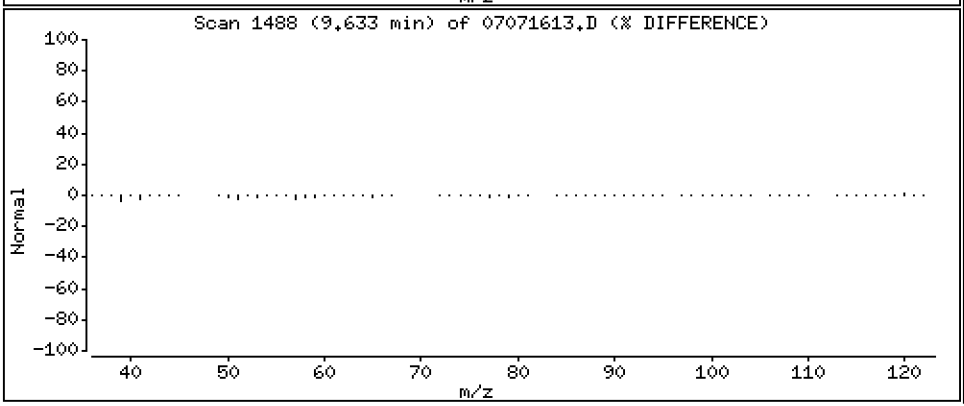












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

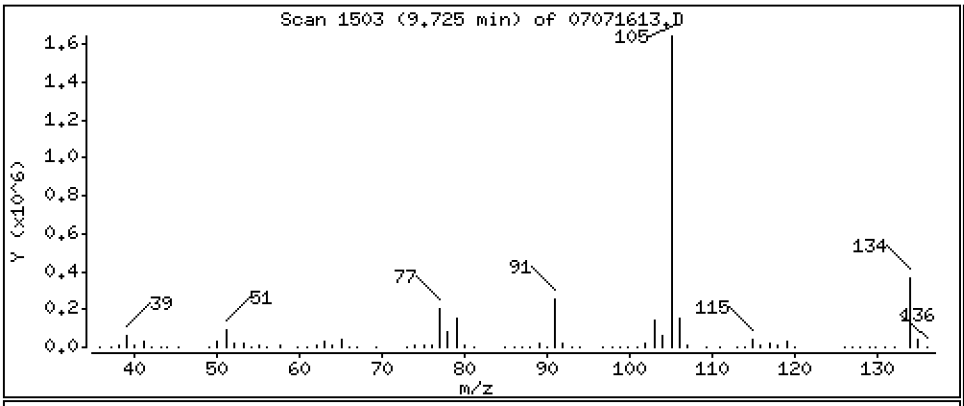
Operator: PB

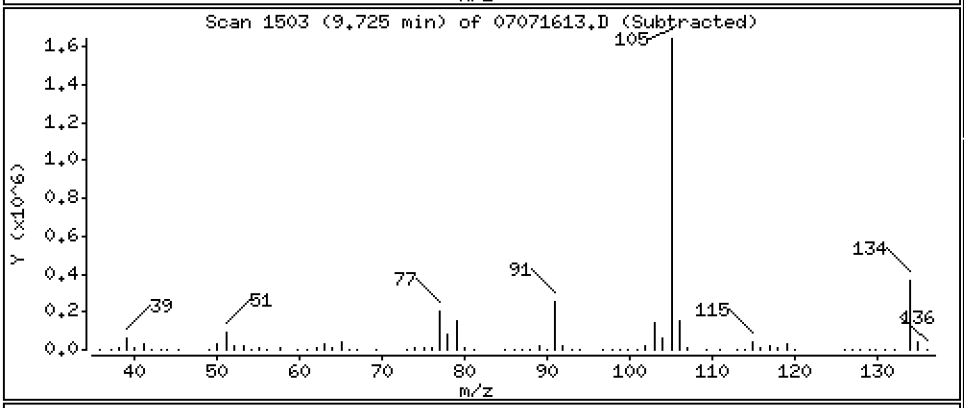
Column phase: RTXVMS

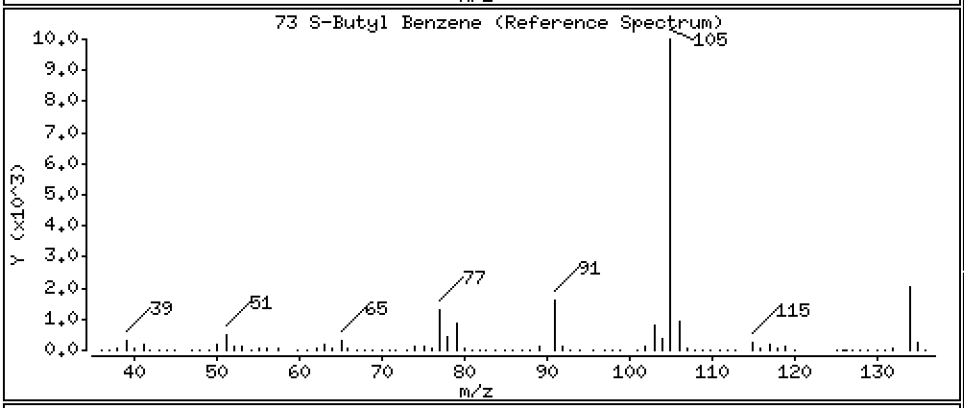
Column diameter: 0.18

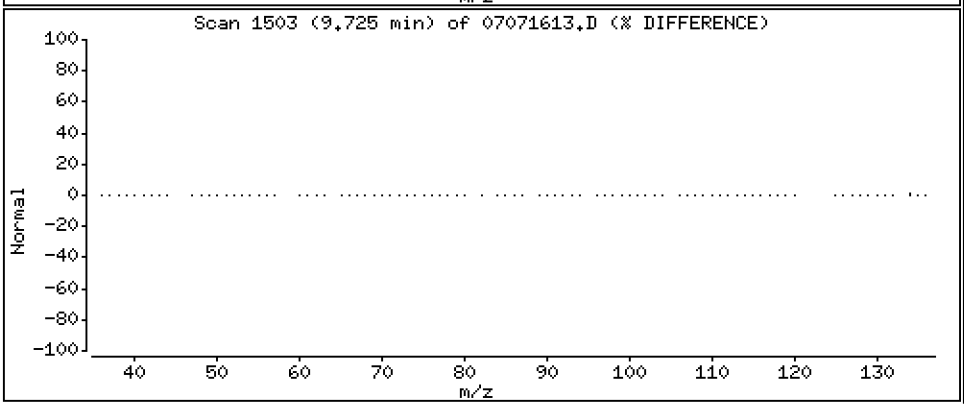
73 S-Butyl Benzene

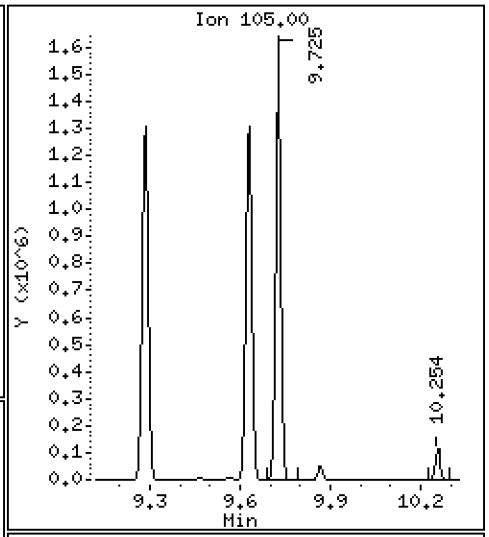
Concentration: 50.622 ug/Kg

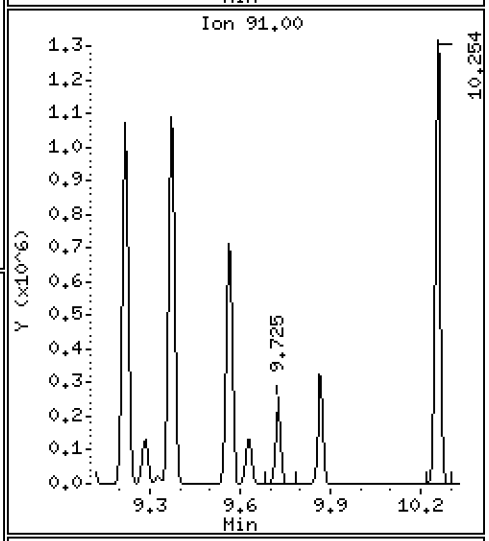


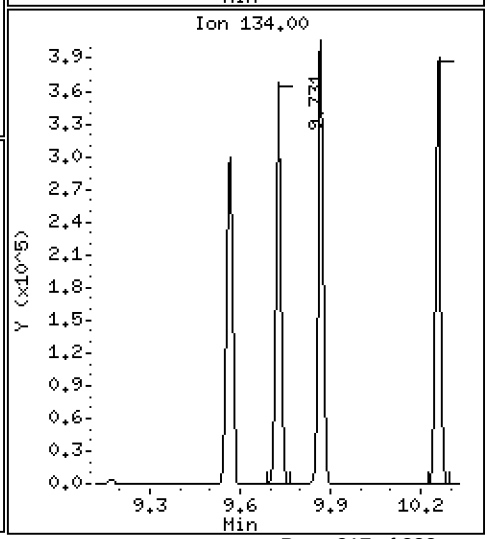












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

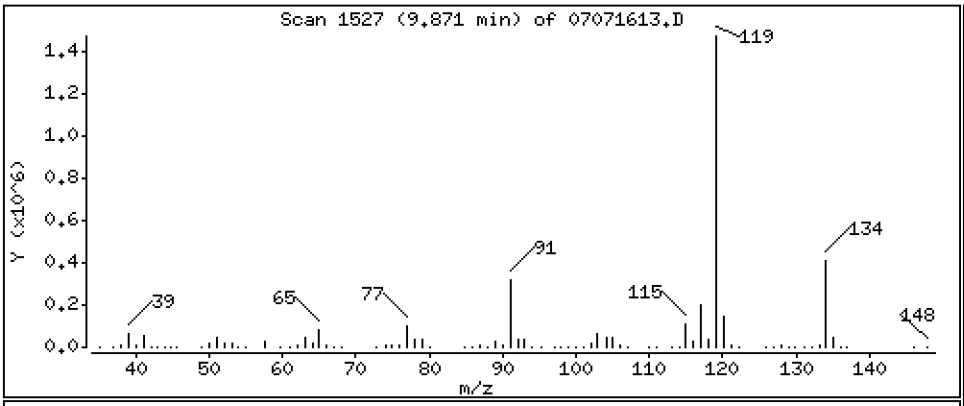
Operator: PB

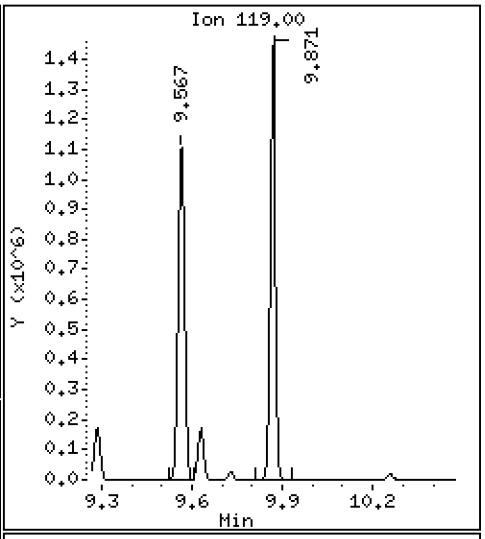
Column phase: RTXVMS

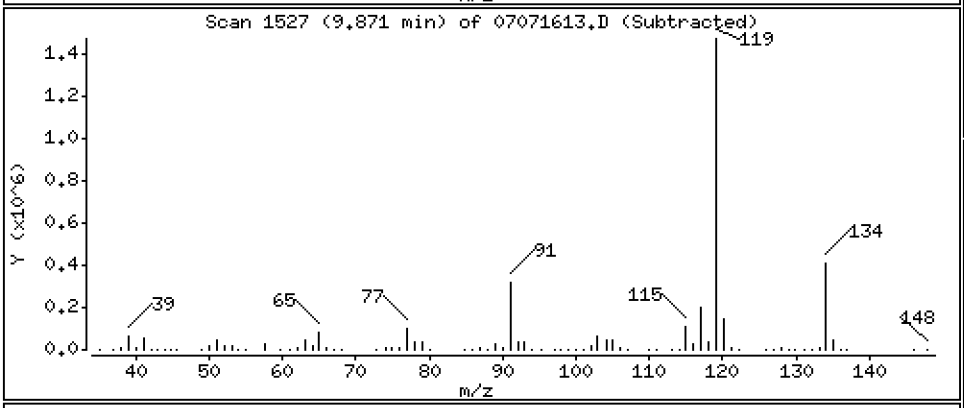
Column diameter: 0.18

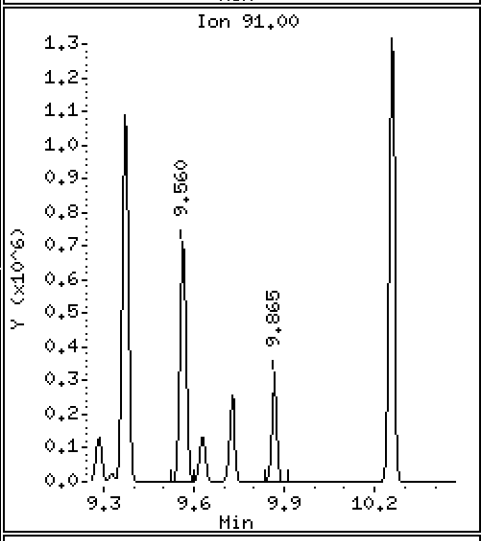
74 4-Isopropyl Toluene

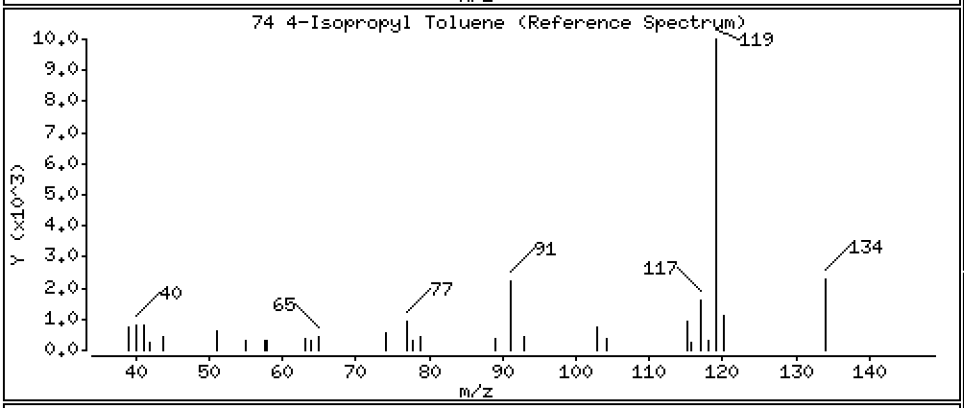
Concentration: 51.727 ug/Kg

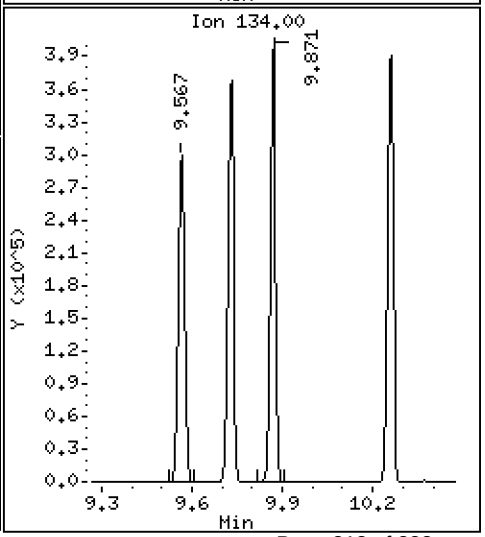


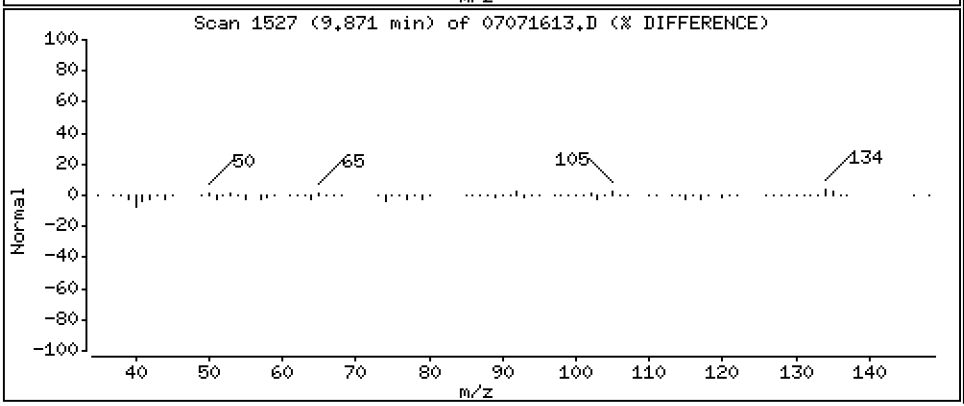












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

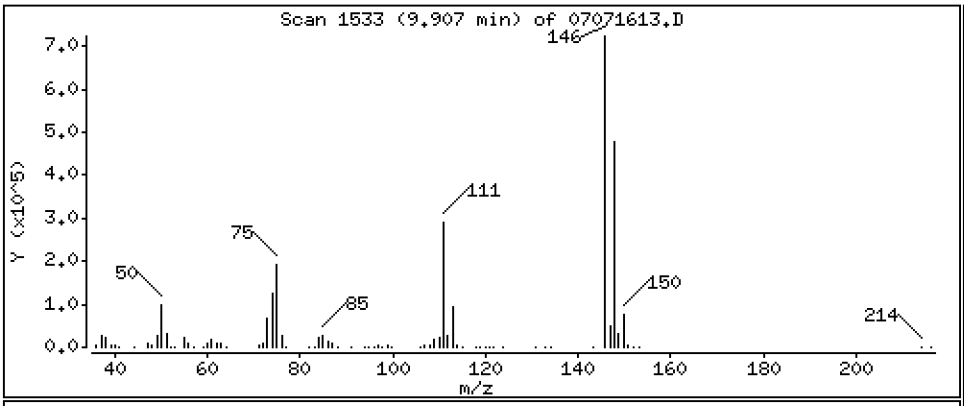
Operator: PB

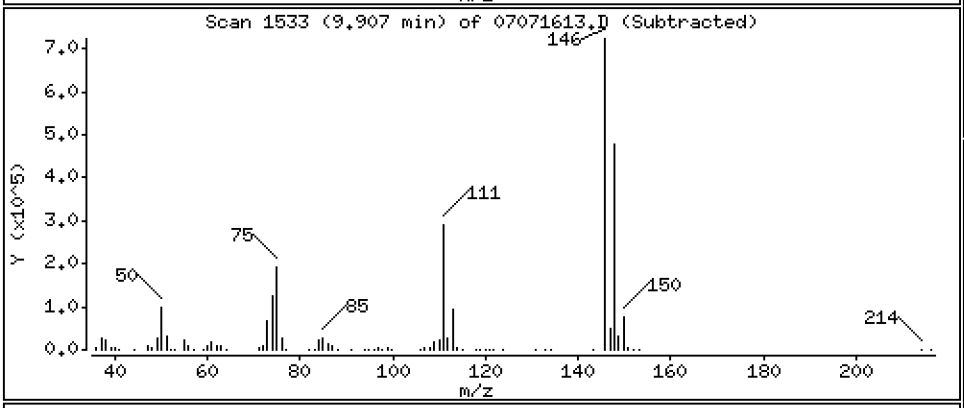
Column phase: RTXVMS

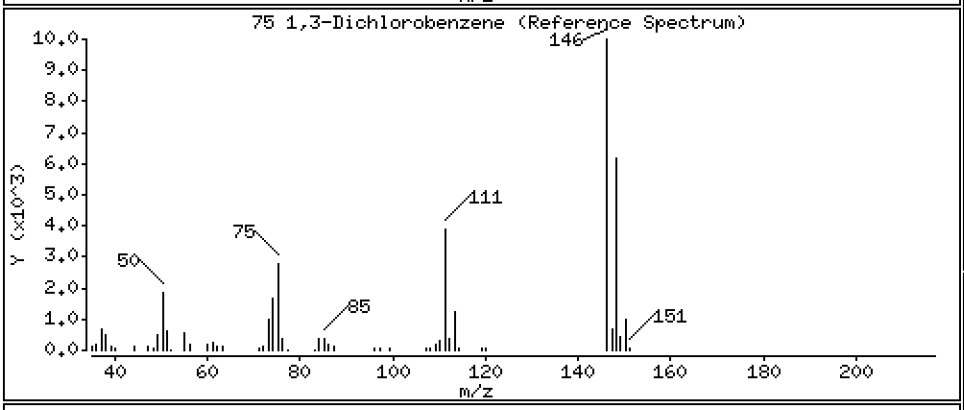
Column diameter: 0.18

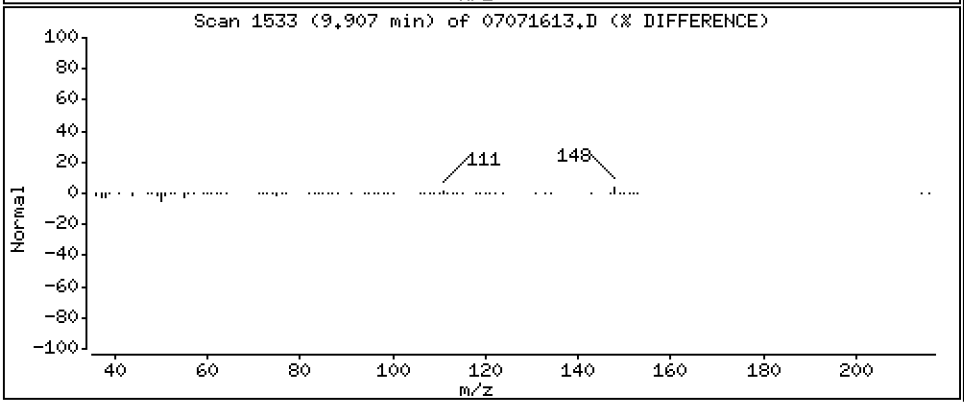
75 1,3-Dichlorobenzene

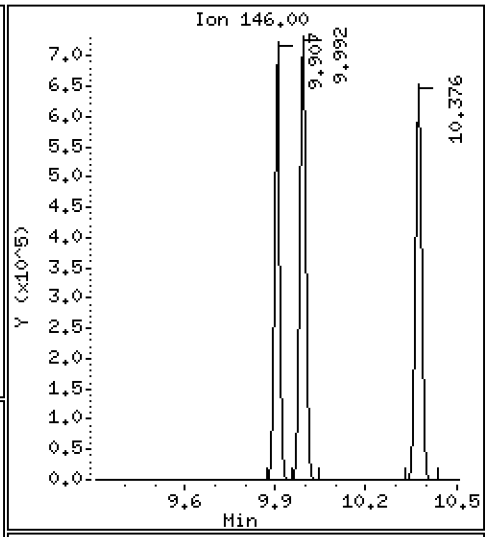
Concentration: 50.542 ug/Kg

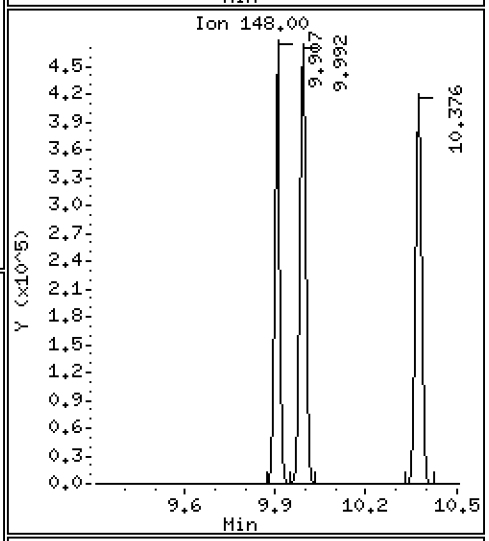


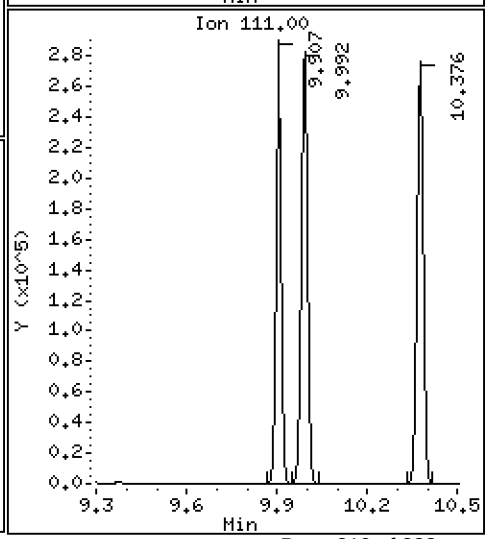












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

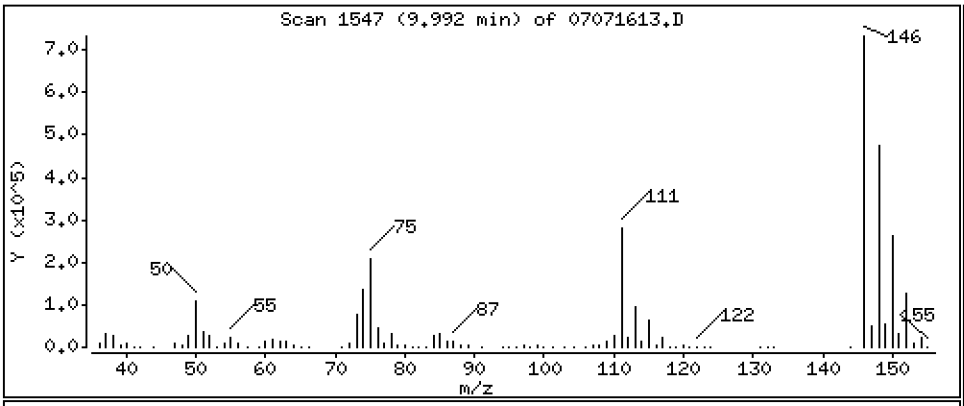
Operator: PB

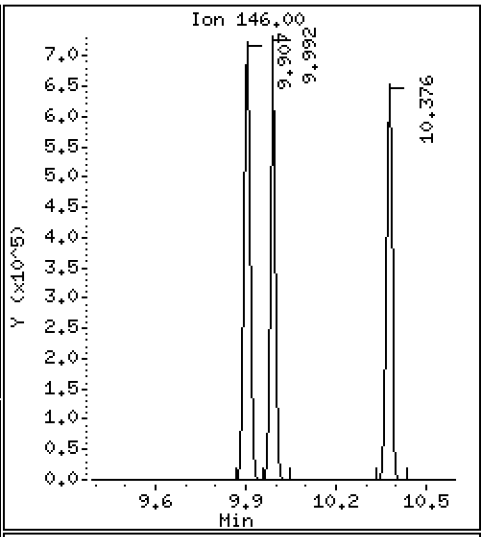
Column phase: RTXVMS

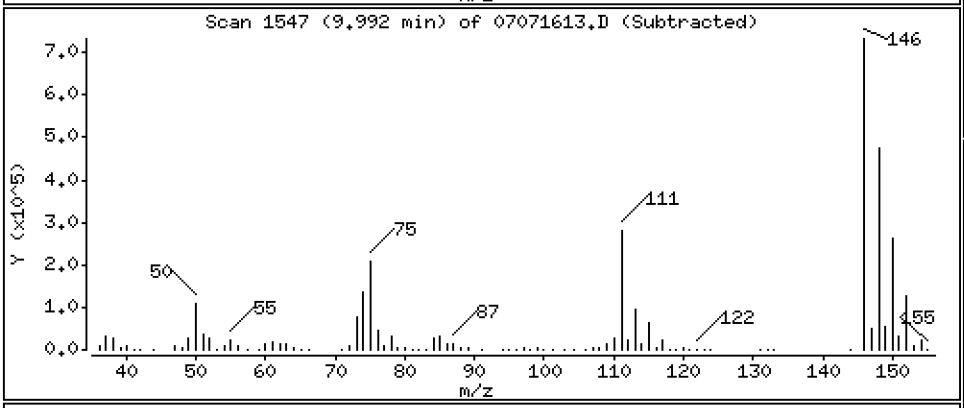
Column diameter: 0.18

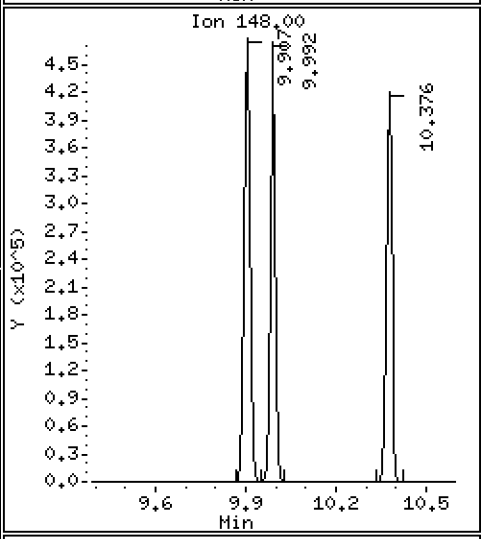
77 1,4-Dichlorobenzene

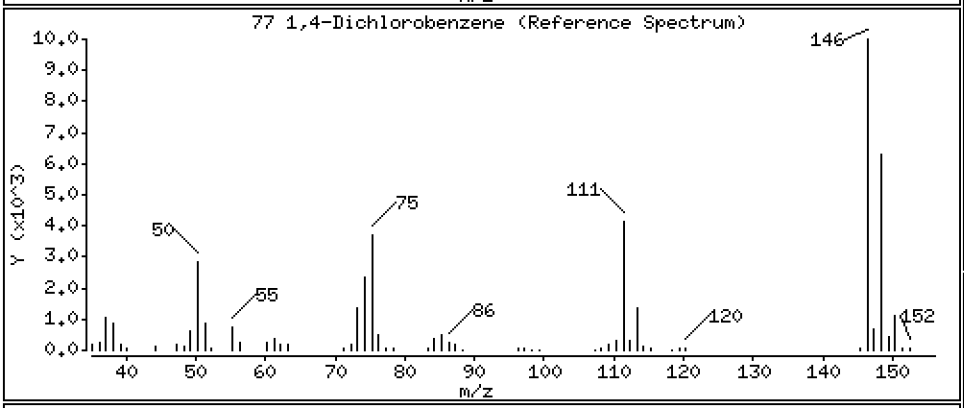
Concentration: 50.240 ug/Kg

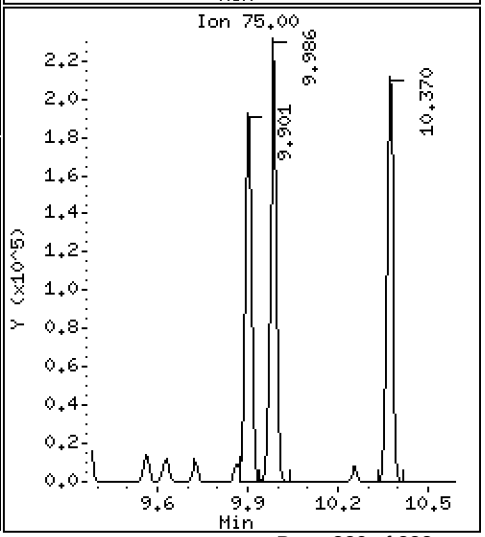


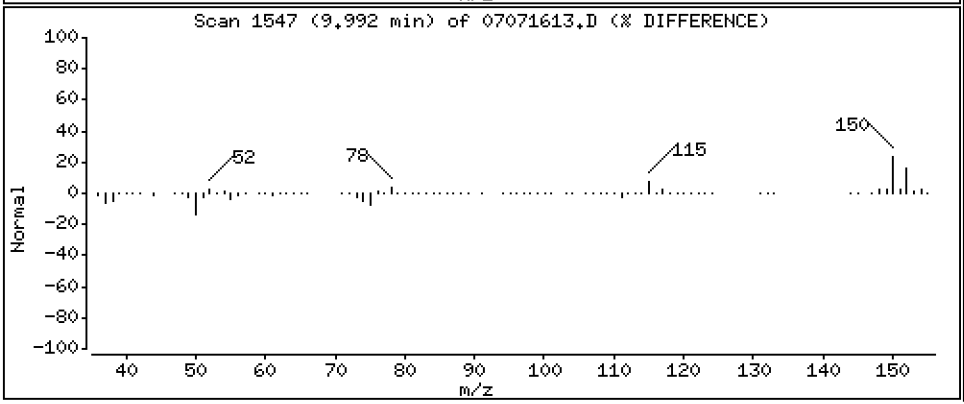












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Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

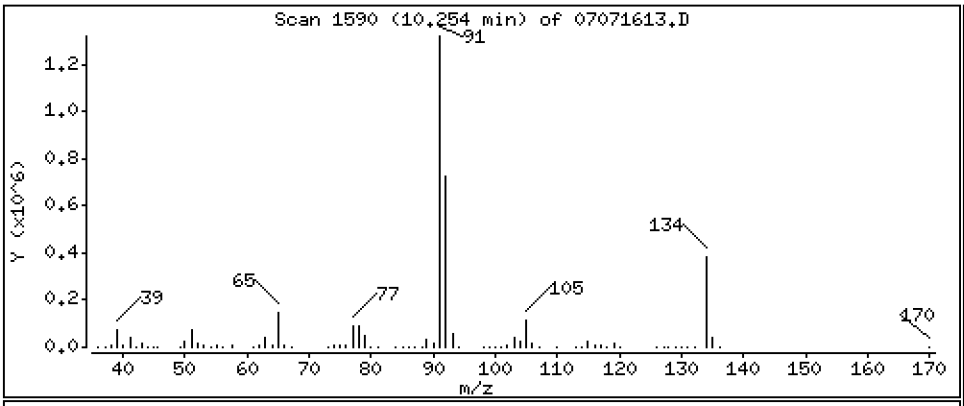
Operator: PB

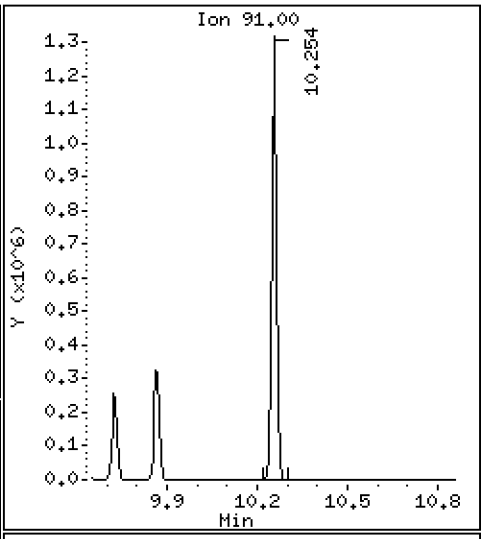
Column phase: RTXVMS

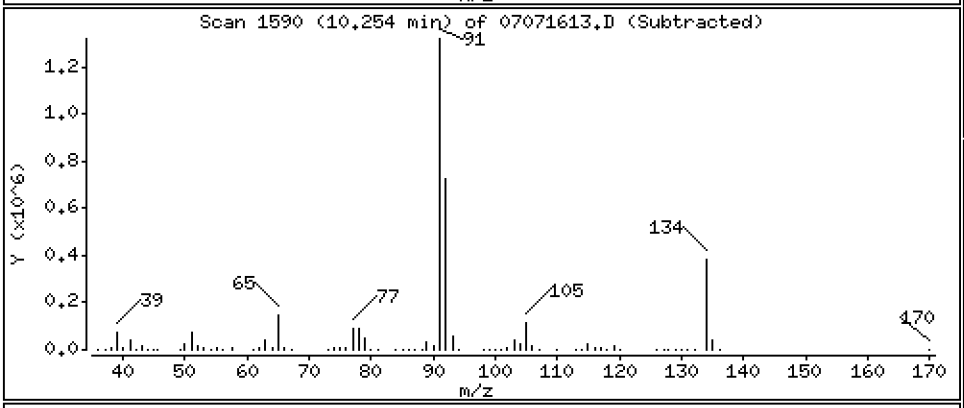
Column diameter: 0.18

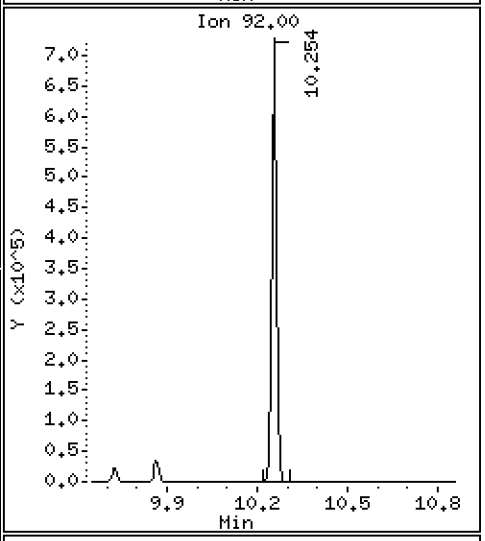
78 N-Butyl Benzene

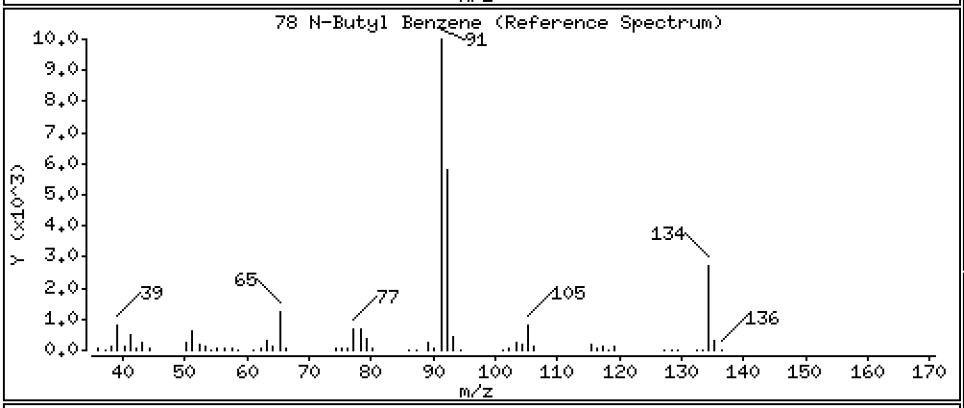
Concentration: 51.822 ug/Kg

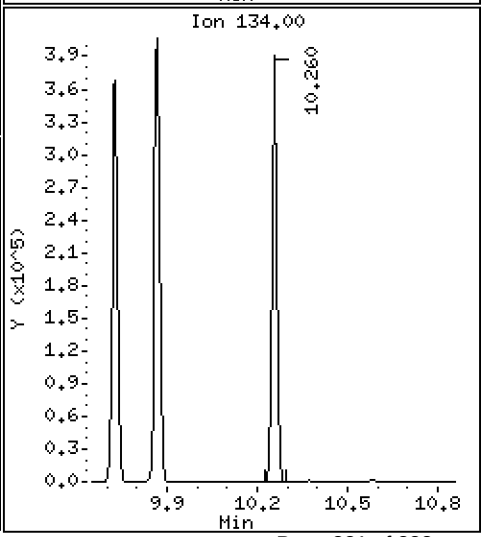


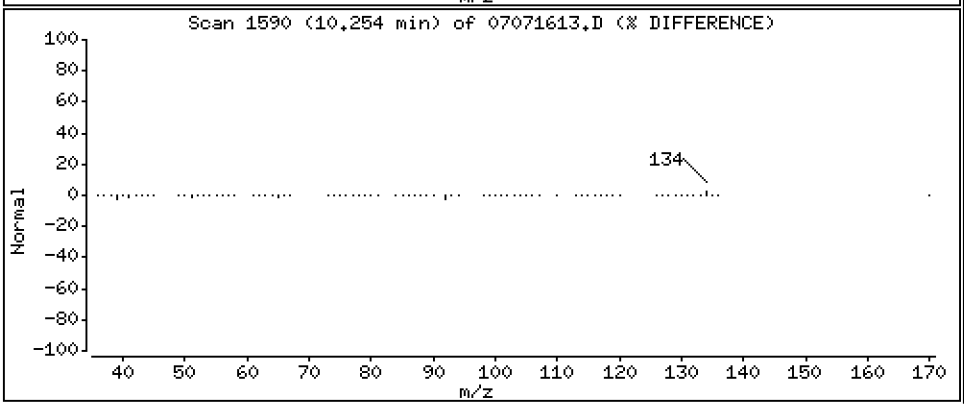












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

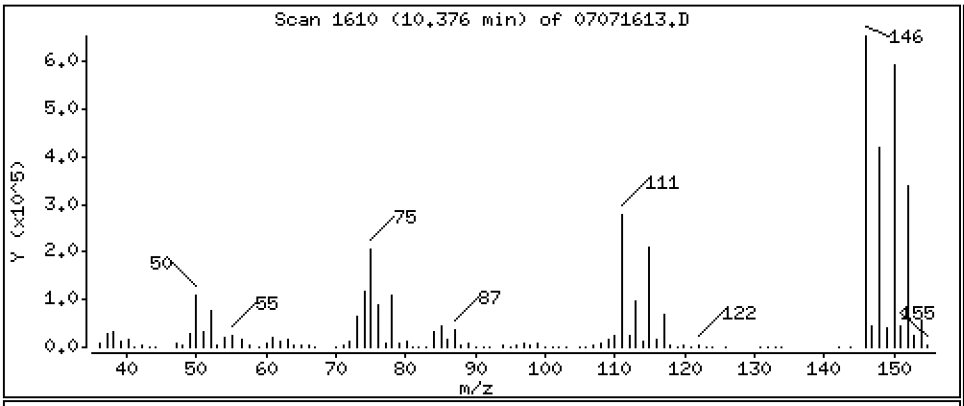
Operator: PB

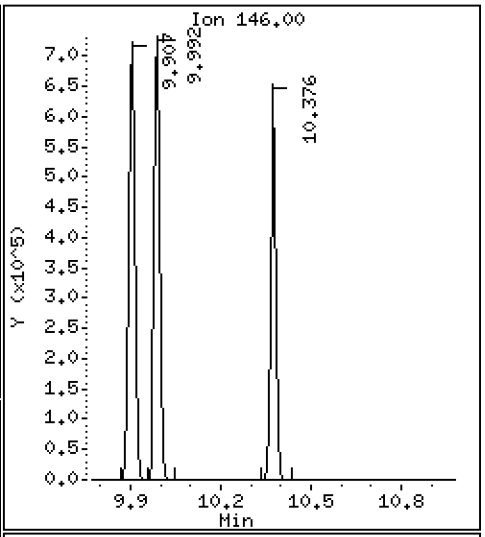
Column phase: RTXVMS

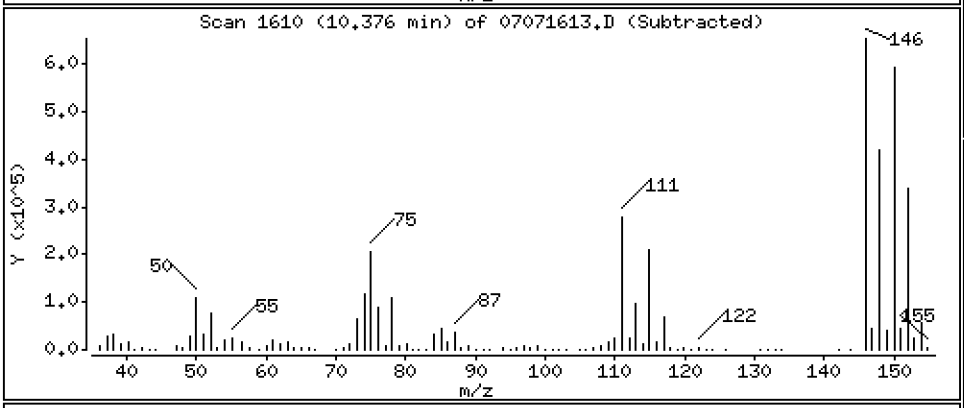
Column diameter: 0.18

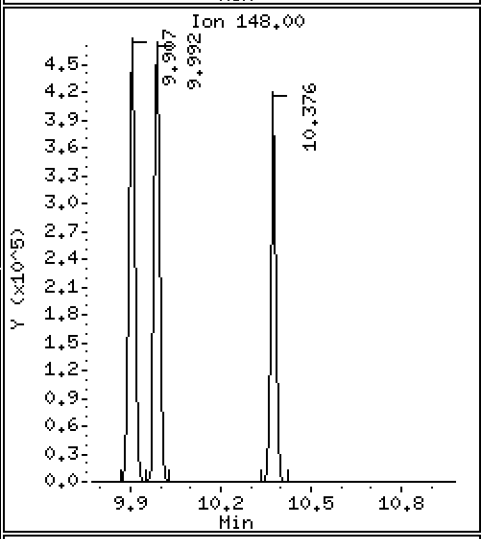
80 1,2-Dichlorobenzene

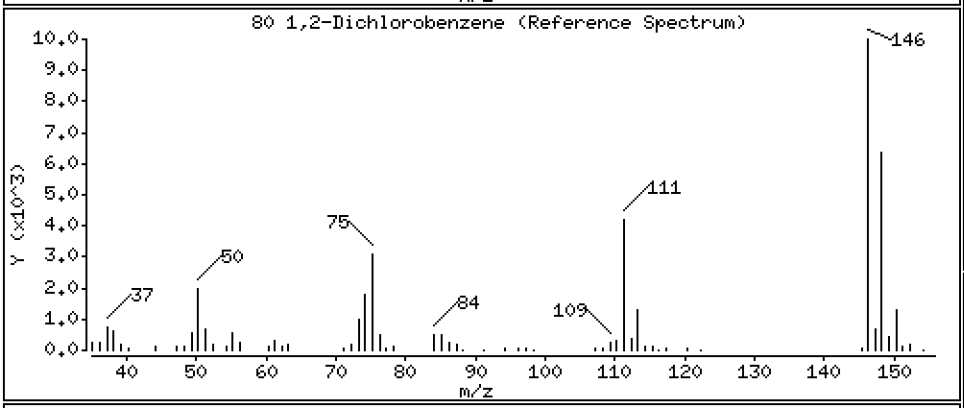
Concentration: 49.216 ug/Kg

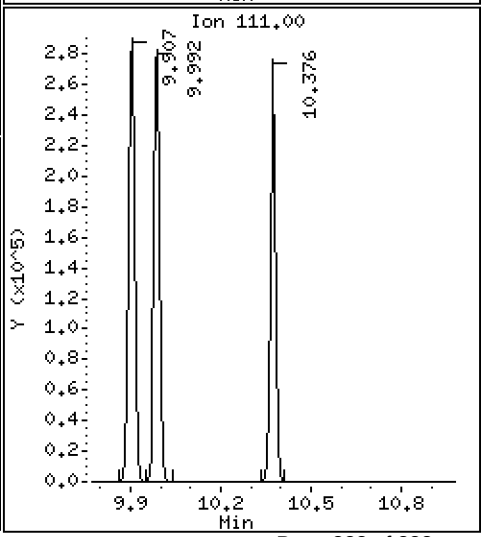


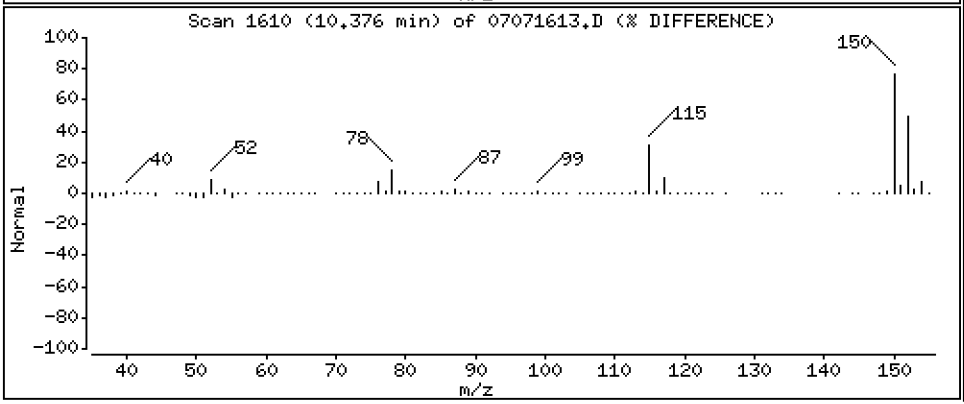












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

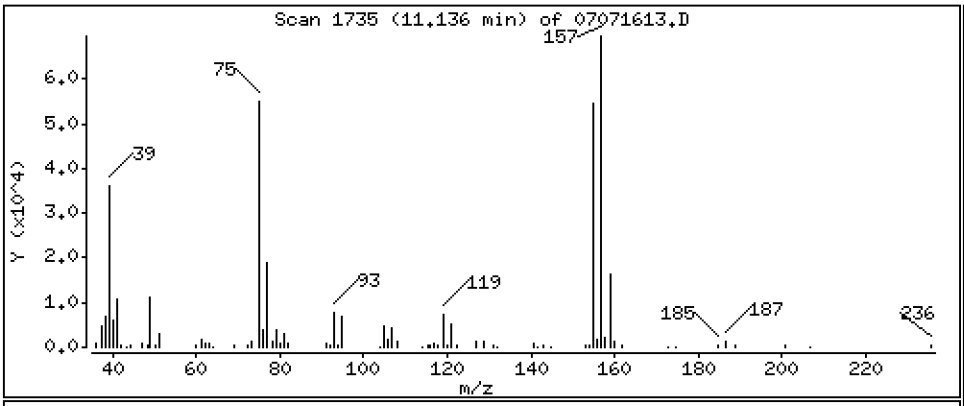
Operator: PB

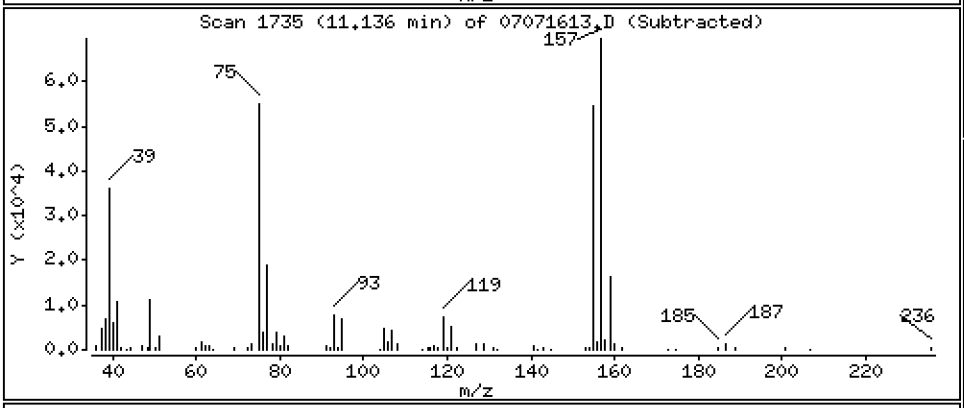
Column phase: RTXVMS

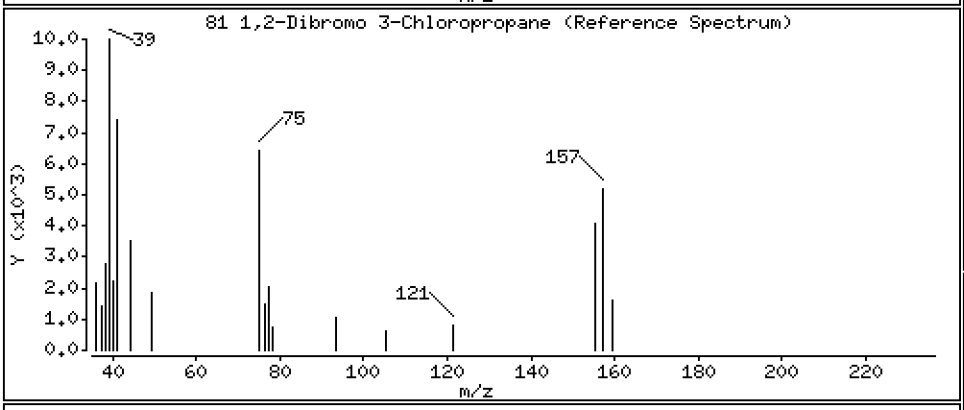
Column diameter: 0.18

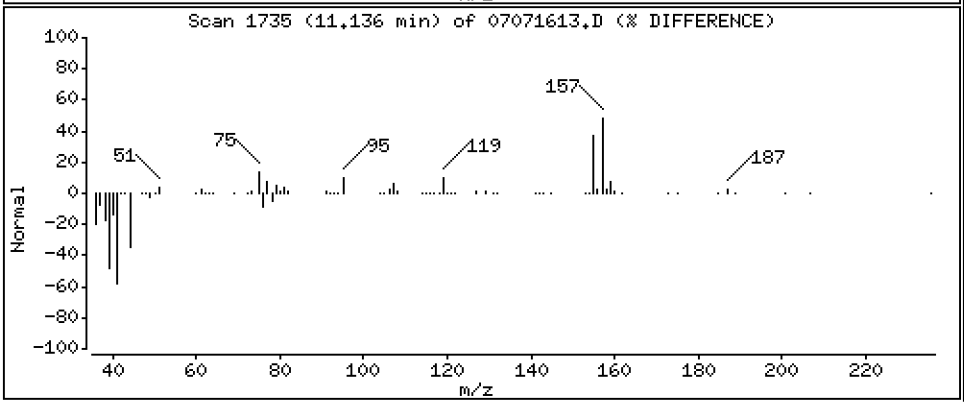
81 1,2-Dibromo 3-Chloropropane

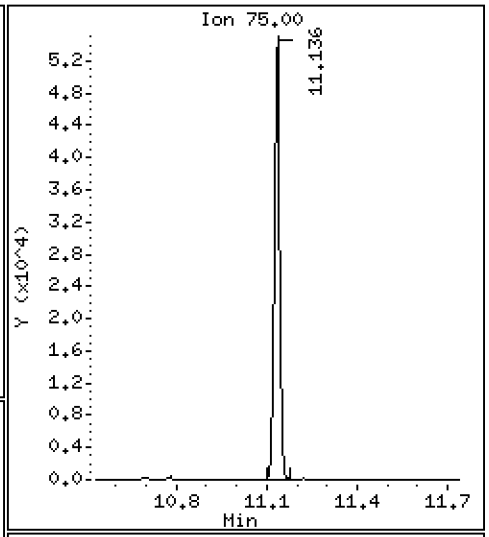
Concentration: 45.851 ug/Kg

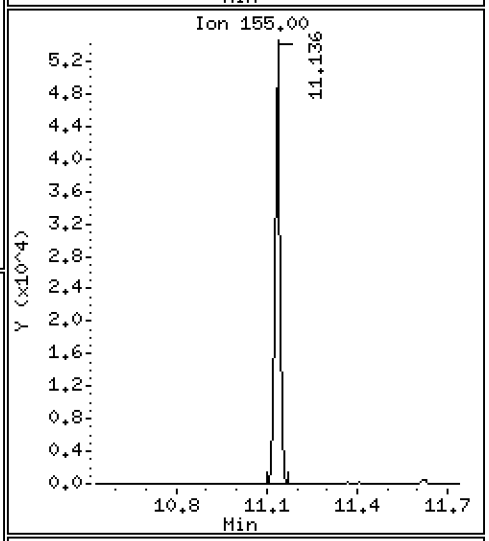


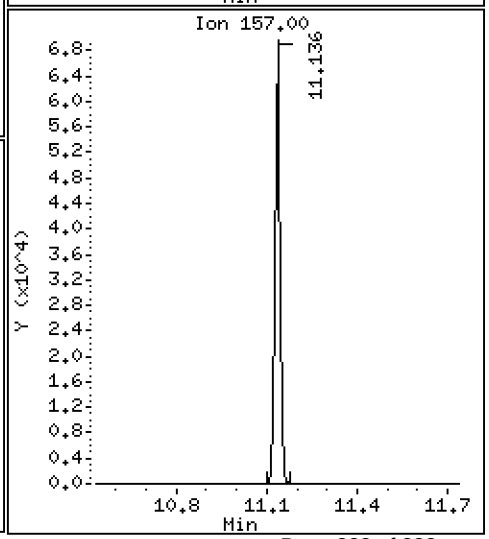












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

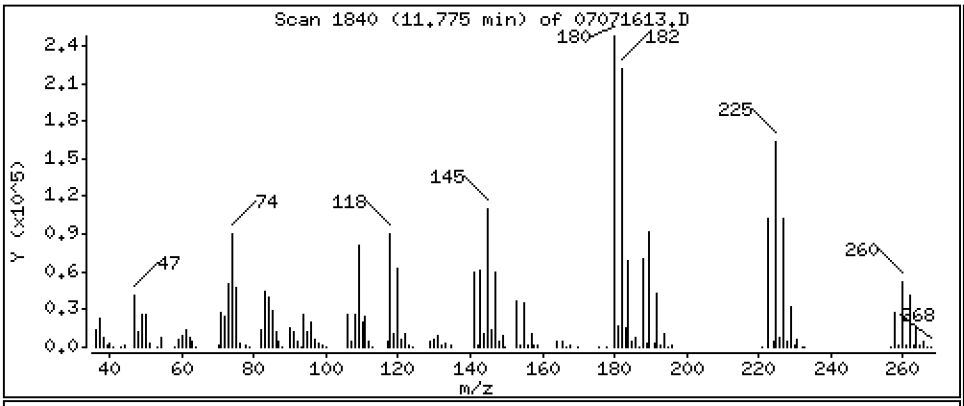
Operator: PB

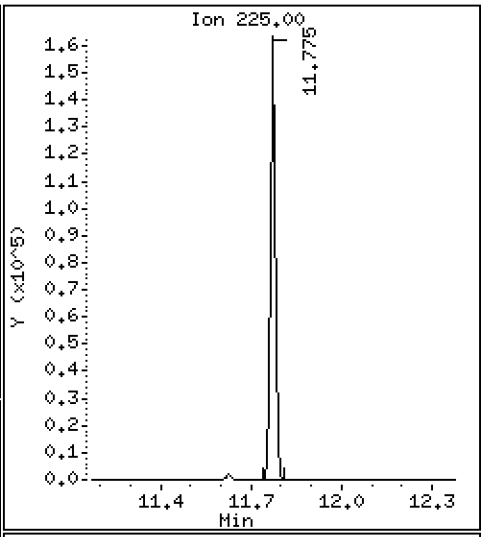
Column phase: RTXVMS

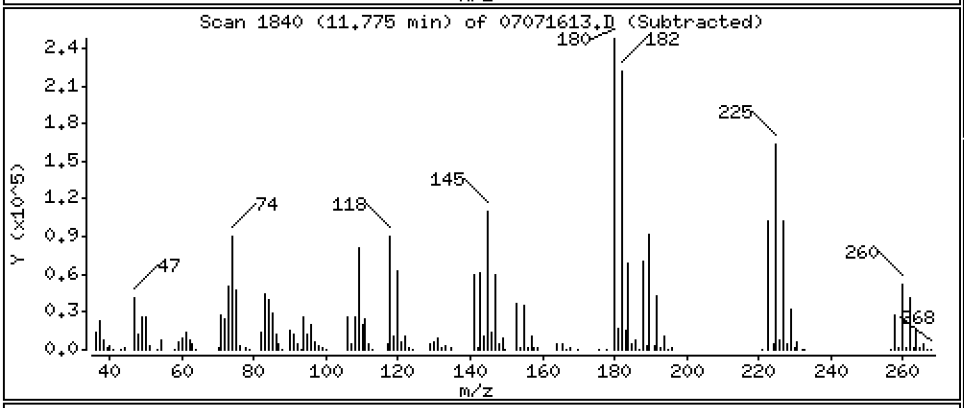
Column diameter: 0.18

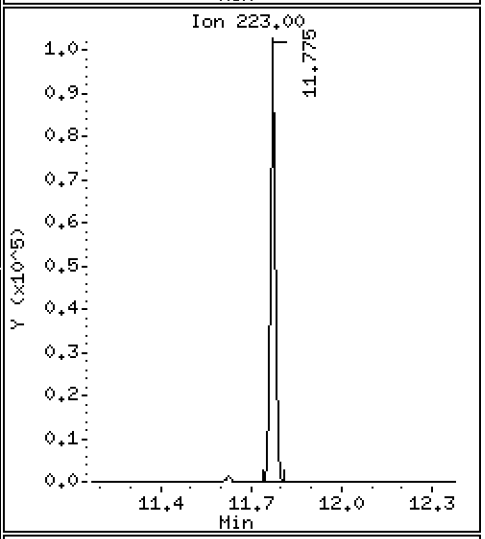
82 Hexachloro 1,3-Butadiene

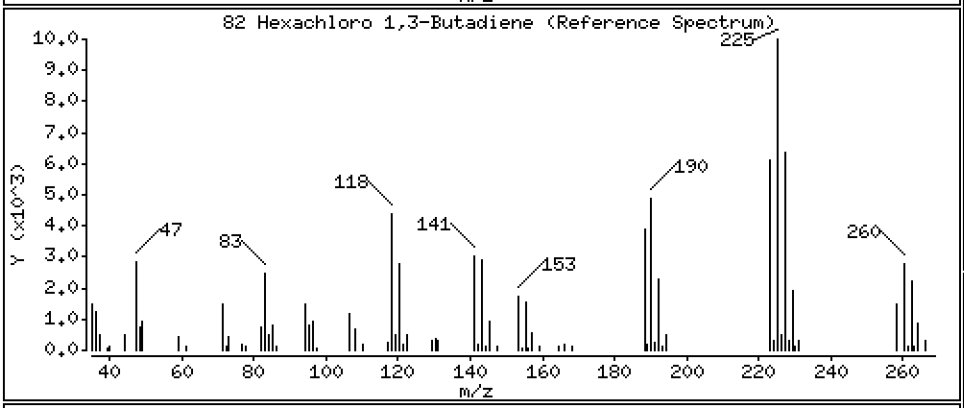
Concentration: 43.109 ug/Kg

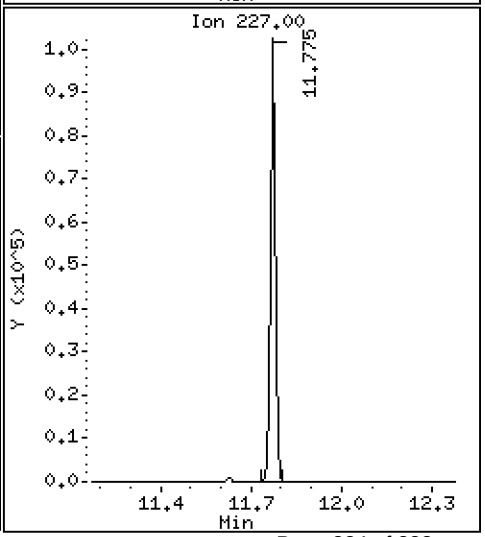


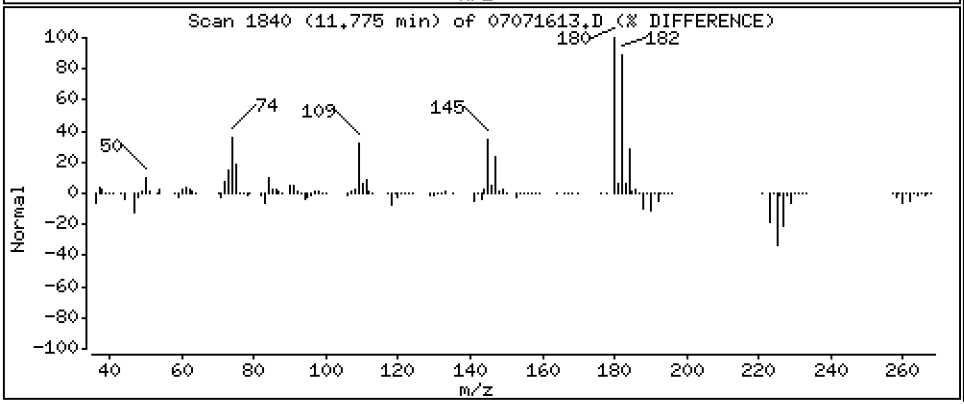












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

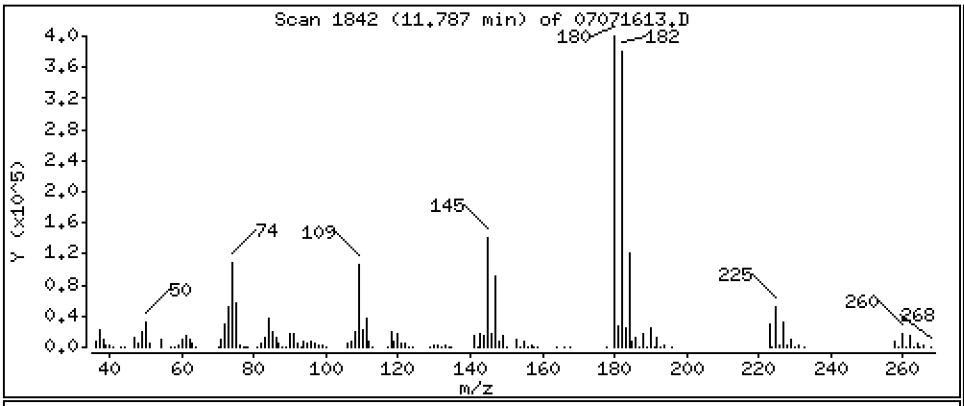
Operator: PB

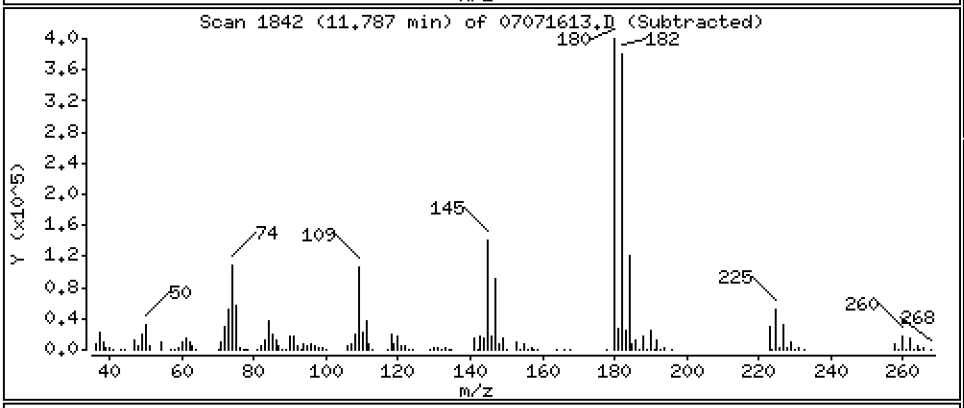
Column phase: RTXVMS

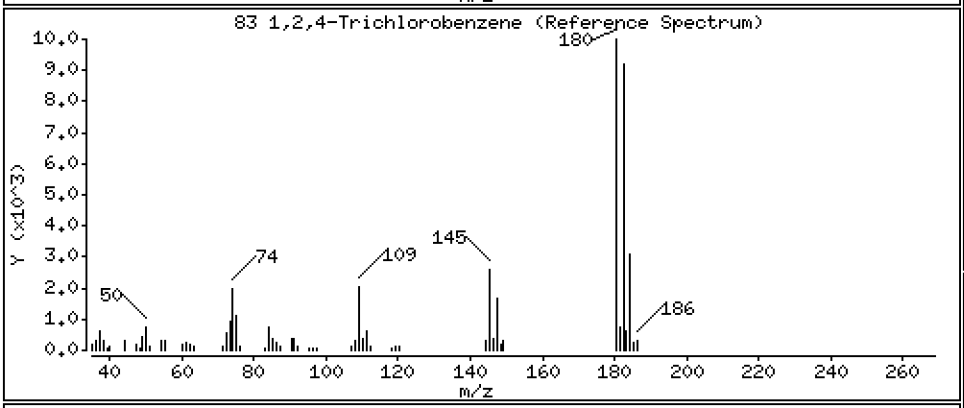
Column diameter: 0.18

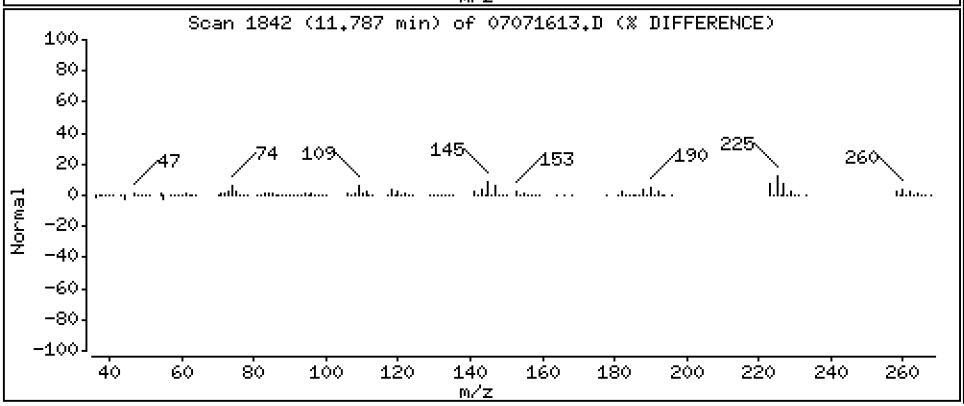
83 1,2,4-Trichlorobenzene

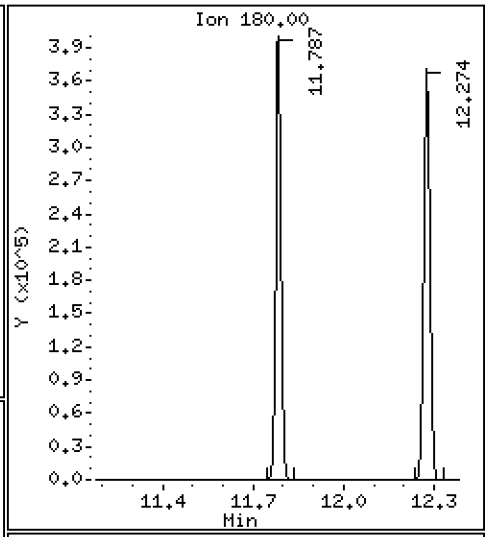
Concentration: 50.972 ug/Kg

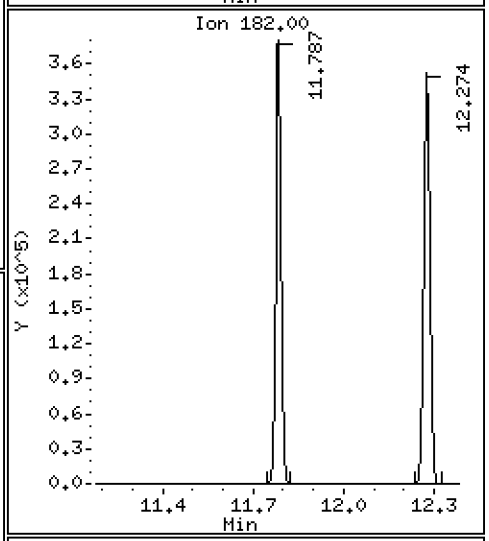


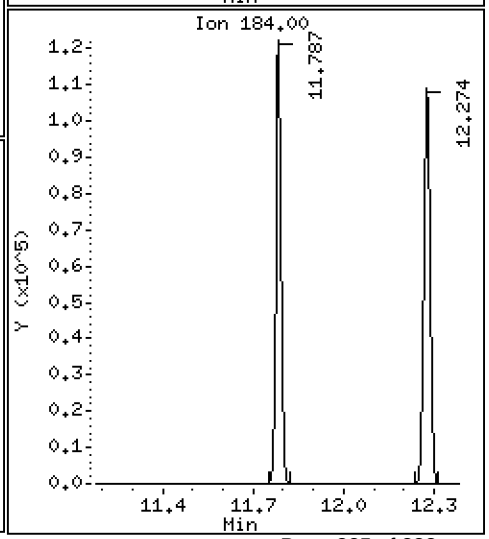












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Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

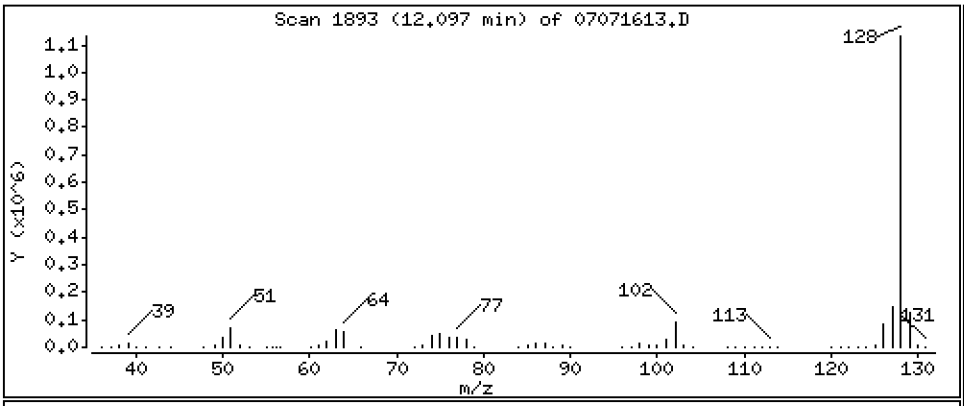
Operator: PB

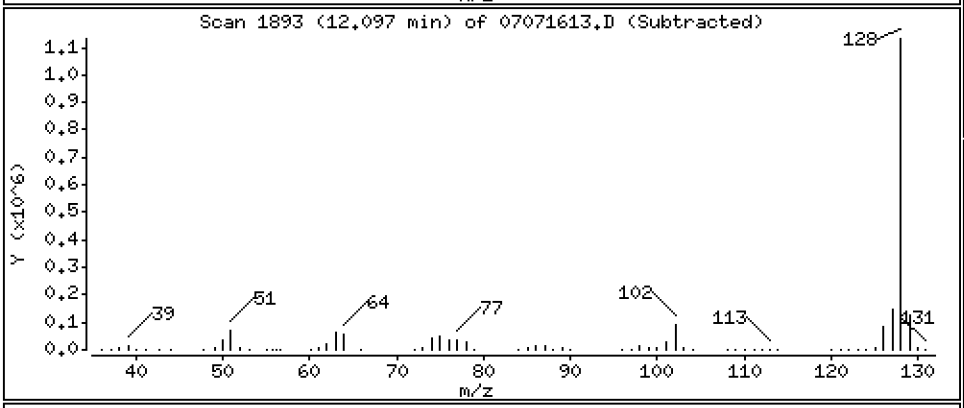
Column phase: RTXVMS

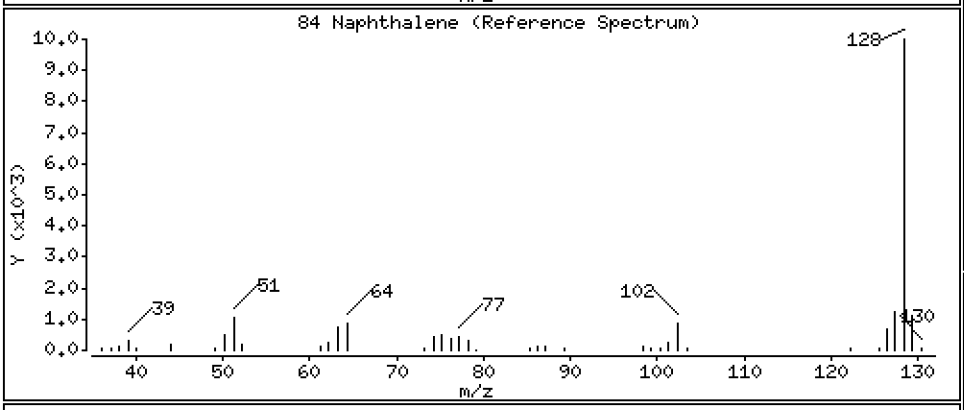
Column diameter: 0.18

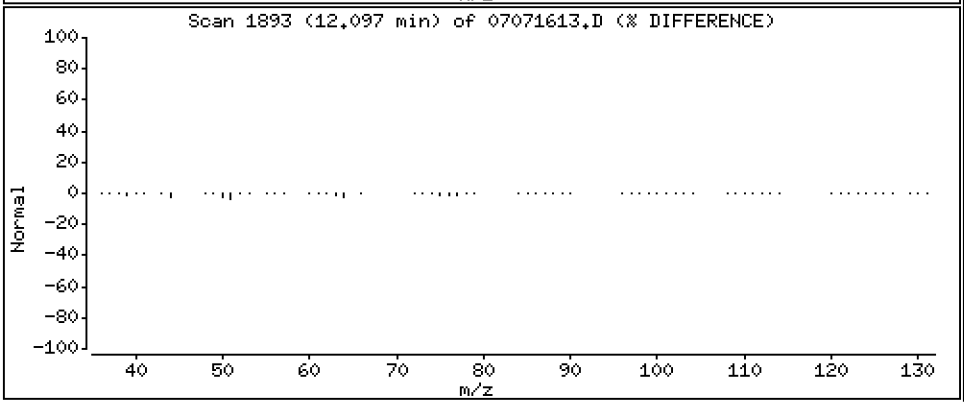
84 Naphthalene

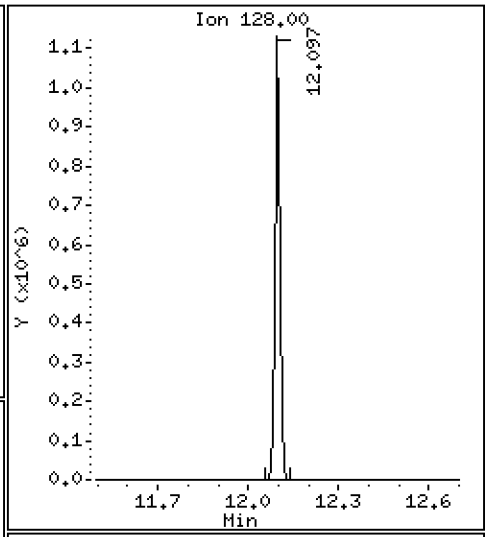
Concentration: 48.431 ug/Kg

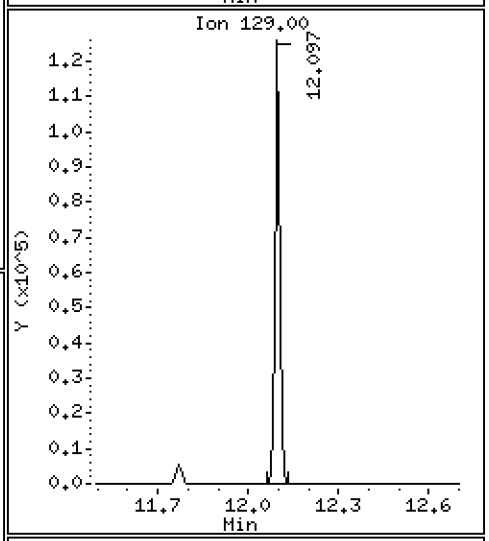


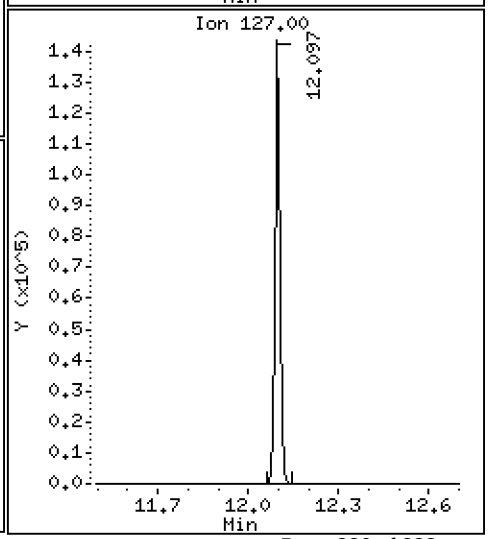












Data File: \\target\share\chem1\nt5.i\20160707.b\07071613.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

Instrument: nt5.i

Sample Info: LCS0707,5,5,0

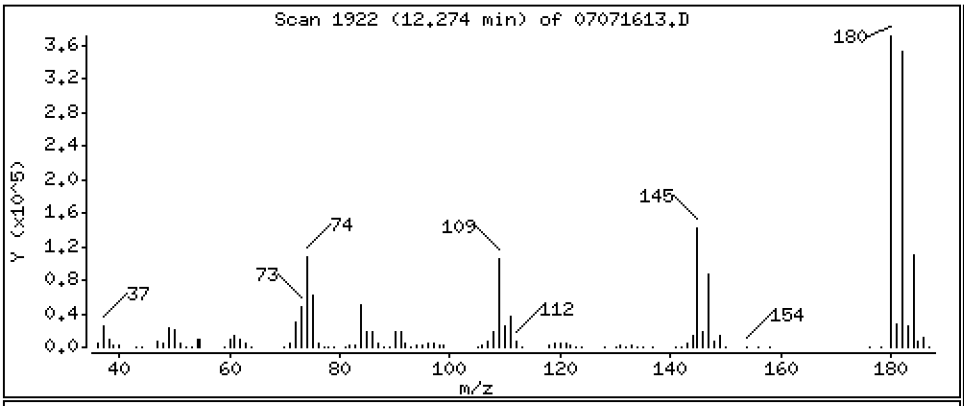
Operator: PB

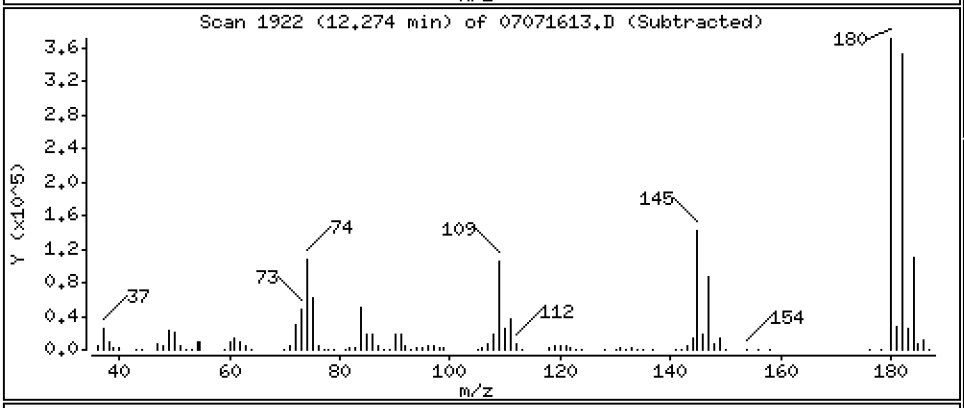
Column phase: RTXVMS

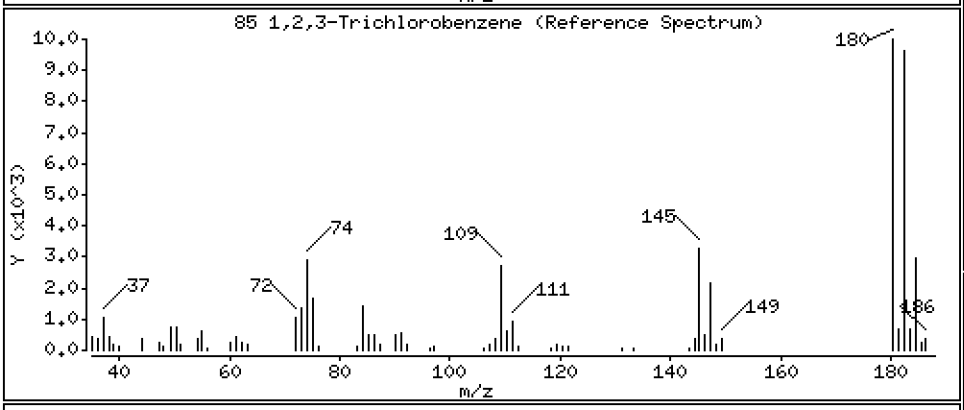
Column diameter: 0.18

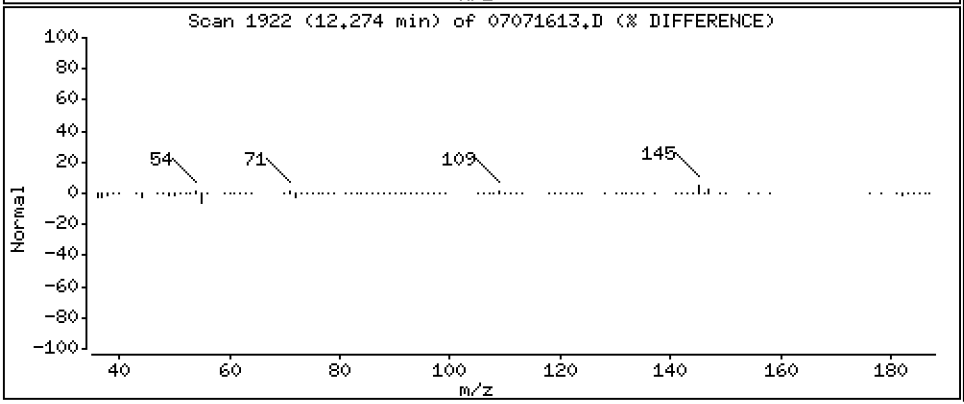
85 1,2,3-Trichlorobenzene

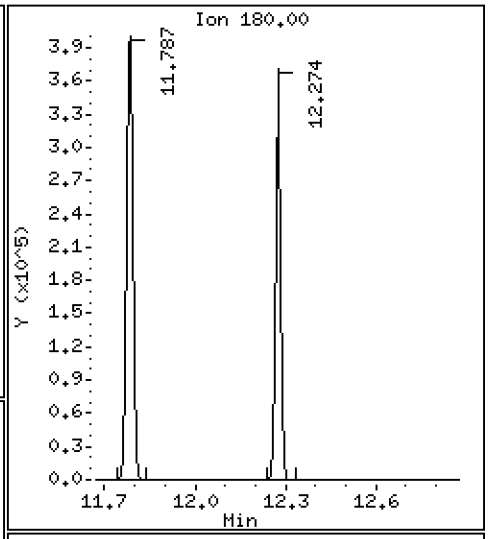
Concentration: 48.937 ug/Kg

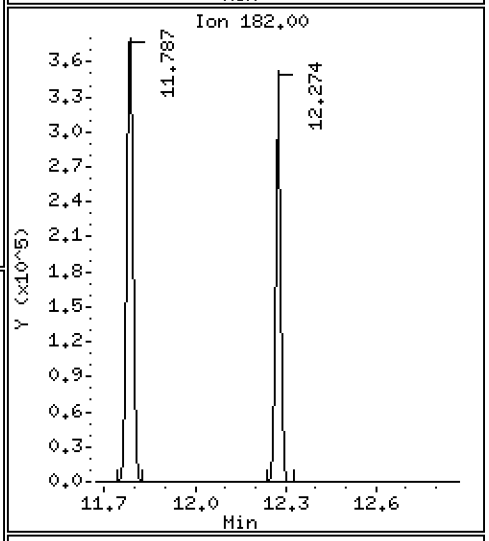


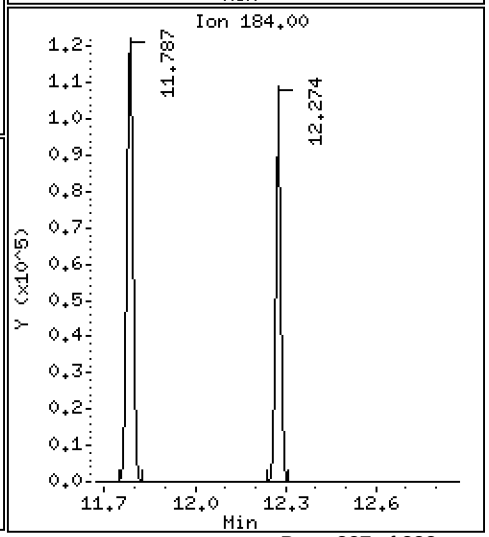












ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071613.D
Lab Smp Id: BEG0041-BSD1 Client Smp ID: LCS0707
Inj Date : 07-JUL-2016 16:45
Operator : PB Inst ID: nt5.i
Smp Info : LCS0707,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 13:44 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 13:37 Cal File: 07071610.D
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.159	1.165	(0.233)	490819	57.5572	57.557
2	Chloromethane	50	1.298	1.299	(0.261)	480944	47.3362	47.336
3	Vinyl Chloride	62	1.359	1.359	(0.274)	514194	52.2844	52.284
4	Bromomethane	94	1.597	1.597	(0.322)	258527	44.7841	44.784
5	Chloroethane	64	1.688	1.688	(0.340)	271444	49.7845	49.784
6	Trichlorofluoromethane	101	1.779	1.785	(0.358)	491696	73.5517	73.552
7	1,1-Dichloroethene	96	2.211	2.217	(0.445)	386650	49.6422	49.642
8	Carbon Disulfide	76	2.217	2.217	(0.446)	1206153	50.2798	50.280
9	112Trichloro122Trifluoroethane	101	2.260	2.260	(0.455)	384080	50.7383	50.738
10	Iodomethane	142	2.327	2.327	(0.468)	204748	54.1411	54.141
11	Bromoethane	108	2.442	2.442	(0.492)	217547	48.5478	48.548
12	Acrolein	56	2.540	2.546	(0.511)	307130	222.512	222.51
13	Methylene Chloride	84	2.752	2.759	(0.554)	361075	45.7932	45.793
14	Acetone	43	2.844	2.850	(0.573)	464918	192.280	192.28
15	Trans-1,2-Dichloroethene	96	2.905	2.911	(0.585)	423844	48.6604	48.660
16	Methyl tert butyl ether	73	3.075	3.081	(0.619)	1078627	44.4792	44.479
17	1,1-Dichloroethane	63	3.537	3.543	(0.712)	737760	46.2506	46.251
18	Acrylonitrile	53	3.622	3.629	(0.729)	121177	42.4242	42.424
19	Vinyl Acetate	43	3.847	3.854	(0.775)	750156	42.6769	42.677
20	Cis-1,2-Dichloroethene	96	4.066	4.073	(0.819)	468065	47.4692	47.469
22	2,2-Dichloropropane	77	4.158	4.158	(0.837)	673612	48.0505	48.051

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/Kg)	(ug/Kg)
	23 Bromochloromethane	128	4.249	4.255	(0.855)	203023	46.4049	46.405
	24 Chloroform	83	4.346	4.346	(0.875)	701021	46.3475	46.348
	25 Carbon Tetrachloride	117	4.425	4.426	(0.818)	617553	51.6755	51.675
$	27 Dibromofluoromethane	111	4.511	4.511	(0.908)	490414	48.6804	48.680
	26 1,1,1-Trichloroethane	97	4.498	4.499	(0.906)	677041	47.9382	47.938
	28 1,1-Dichloropropene	75	4.614	4.614	(0.853)	599288	49.2486	49.249
	29 2-Butanone	72	4.657	4.663	(0.938)	209748	214.360	214.36
	30 Benzene	78	4.839	4.839	(0.894)	1688799	48.3708	48.371
*	31 Pentafluorobenzene	168	4.967	4.967	(1.000)	578713	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.967	4.967	(1.000)	460943	46.1167	46.117
	33 1,2-Dichloroethane	62	5.028	5.028	(0.929)	482830	44.7012	44.701
	34 Trichloroethene	95	5.356	5.362	(0.990)	449524	48.8510	48.851
*	35 1,4-Difluorobenzene	114	5.411	5.411	(1.000)	1544524	50.0000	
	37 Dibromomethane	93	5.721	5.721	(1.057)	221410	46.2431	46.243
	38 1,2-Dichloropropane	63	5.806	5.813	(1.073)	398594	45.9160	45.916
	39 Bromodichloromethane	83	5.879	5.880	(1.087)	522220	48.1719	48.172
	172 2-Pentanone	86	6.177	6.178	(1.142)	277000	232.702	232.70
	40 2-Chloroethyl Vinyl Ether	63	6.396	6.397	(1.182)	173809	44.7498	44.750
	41 Cis 1,3-dichloropropene	75	6.421	6.421	(1.187)	657230	47.0839	47.084
$	42 d8-Toluene	98	6.573	6.573	(1.215)	1846900	49.8285	49.829
	43 Toluene	92	6.615	6.616	(1.223)	1098558	48.2457	48.246
	44 Tetrachloroethene	166	6.932	6.932	(0.879)	456660	51.6852	51.685
	45 4-Methyl-2-Pentanone	58	6.974	6.975	(1.289)	685570	216.297	216.30
	46 Trans 1,3-Dichloropropene	75	6.987	6.987	(1.291)	574011	46.9898	46.990
	47 1,1,2-Trichloroethane	97	7.114	7.114	(1.315)	327800	46.5179	46.518
	48 Chlorodibromomethane	129	7.254	7.254	(0.920)	401742	48.7941	48.794
	49 1,3-Dichloropropane	76	7.339	7.340	(0.931)	582033	47.0457	47.046
	50 1,2-Dibromoethane	107	7.437	7.437	(1.374)	333987	46.2793	46.279
	51 2-Hexanone	43	7.686	7.686	(0.975)	1169958	215.363	215.36
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1510970	50.0000	
	53 Chlorobenzene	112	7.905	7.905	(1.002)	1214973	49.1816	49.182
	54 Ethyl Benzene	91	7.942	7.942	(1.007)	2078283	50.3274	50.327
	55 1,1,1,2-Tetrachloroethane	131	7.966	7.966	(1.010)	430896	48.9997	49.000
	56 m,p-xylene	106	8.076	8.076	(1.024)	1657757	101.485	101.49
	57 o-Xylene	106	8.441	8.441	(1.070)	789521	49.2350	49.235
	58 Styrene	104	8.489	8.489	(1.076)	1324859	50.0100	50.010
	59 Bromoform	173	8.501	8.495	(0.852)	240349	47.8014	47.801
	60 Isopropyl Benzene	105	8.726	8.727	(0.875)	2105501	50.9892	50.989
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	761095	49.1203	49.120
	63 Bromobenzene	156	9.049	9.049	(0.907)	479522	49.4446	49.445
	64 N-Propyl Benzene	91	9.098	9.098	(0.912)	2459632	51.1609	51.161
	65 1,1,2,2-Tetrachloroethane	83	9.171	9.171	(0.919)	423462	46.0053	46.005
	66 2-Chloro Toluene	91	9.219	9.219	(0.924)	1410729	50.0871	50.087
	67 1,3,5-Trimethyl Benzene	105	9.286	9.286	(0.931)	1761911	51.1352	51.135
	68 1,2,3-Trichloropropane	110	9.280	9.280	(0.930)	132764	45.7257	45.726
	69 Trans-1,4-Dichloro 2-Butene	53	9.329	9.329	(0.935)	110758	47.1423	47.142
	70 4-Chloro Toluene	91	9.371	9.372	(0.940)	1485021	50.7234	50.723
	71 T-Butyl Benzene	119	9.566	9.560	(0.959)	1586518	50.2173	50.217
	72 1,2,4-Trimethylbenzene	105	9.633	9.633	(0.966)	1751366	50.8013	50.801
	73 S-Butyl Benzene	105	9.724	9.724	(0.975)	2292153	50.6224	50.622
	74 4-Isopropyl Toluene	119	9.870	9.870	(0.990)	2010100	51.7266	51.727
	75 1,3-Dichlorobenzene	146	9.907	9.907	(0.993)	979591	50.5425	50.542
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	762574	50.0000	
	77 1,4-Dichlorobenzene	146	9.992	9.992	(1.002)	973084	50.2398	50.240

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	10.253	10.254	(1.028)	1760975	51.8219	51.822
$	79 d4-1,2-Dichlorobenzene	152	10.369	10.369	(1.040)	727731	49.2401	49.240
	80 1,2-Dichlorobenzene	146	10.375	10.375	(1.040)	889294	49.2164	49.216
	81 1,2-Dibromo 3-Chloropropane	75	11.136	11.136	(1.116)	79755	45.8509	45.851
	82 Hexachloro 1,3-Butadiene	225	11.774	11.775	(1.181)	224824	43.1086	43.109
	83 1,2,4-Trichlorobenzene	180	11.787	11.781	(1.182)	565246	50.9718	50.972
	84 Naphthalene	128	12.097	12.097	(1.213)	1530320	48.4306	48.431
	85 1,2,3-Trichlorobenzene	180	12.273	12.273	(1.231)	504713	48.9371	48.937

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071613.D
Lab Smp Id: BEG0041-BSD1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: LCS0707
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	578713	2.97
35 1,4-Difluorobenze	1551589	775795	3103178	1544524	-0.46
52 d5-Chlorobenzene	1542777	771389	3085554	1510970	-2.06
76 d4-1,4-Dichlorobe	775053	387527	1550106	762574	-1.61

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.97	-0.00
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	-0.00
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	-0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEG0041-BSD1 Client Smp ID: LCS0707
Level: LOW Operator: PB
Data Type: MS DATA SampleType: LCSD
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	57.557	115.11	67-142
2	Chloromethane	50.000	47.336	94.67	65-129
3	Vinyl Chloride	50.000	52.284	104.57	74-134
4	Bromomethane	50.000	44.784	89.57	40-172
5	Chloroethane	50.000	49.784	99.57	53-154
6	Trichlorofluoromet	50.000	73.552	147.10	57-161
12	Acrolein	250.00	222.51	89.00	60-130
9	112Trichloro122Tri	50.000	50.738	101.48	72-142
14	Acetone	250.00	192.28	76.91	48-132
7	1,1-Dichloroethene	50.000	49.642	99.28	73-138
11	Bromoethane	50.000	48.548	97.10	74-132
10	Iodomethane	50.000	54.141	108.28	34-181
13	Methylene Chloride	50.000	45.793	91.59	61-128
8	Carbon Disulfide	50.000	50.280	100.56	72-146
18	Acrylonitrile	50.000	42.424	84.85	59-124
15	Trans-1,2-Dichloro	50.000	48.660	97.32	73-131
19	Vinyl Acetate	50.000	42.677	85.35	54-138
17	1,1-Dichloroethane	50.000	46.251	92.50	65-139
29	2-Butanone	250.00	214.36	85.74	64-120
22	2,2-Dichloropropan	50.000	48.051	96.10	77-137
20	Cis-1,2-Dichloroet	50.000	47.469	94.94	74-124
24	Chloroform	50.000	46.348	92.70	75-126
23	Bromochloromethane	50.000	46.405	92.81	69-133
26	1,1,1-Trichloroeth	50.000	47.938	95.88	78-133
28	1,1-Dichloropropen	50.000	49.249	98.50	80-123
25	Carbon Tetrachlori	50.000	51.675	103.35	76-136
33	1,2-Dichloroethane	50.000	44.701	89.40	77-120
30	Benzene	50.000	48.371	96.74	80-120
34	Trichloroethene	50.000	48.851	97.70	80-120
38	1,2-Dichloropropan	50.000	45.916	91.83	74-120
39	Bromodichlorometha	50.000	48.172	96.34	80-122
172	2-Pentanone	250.00	232.70	93.08	70-130
37	Dibromomethane	50.000	46.243	92.49	80-120
40	2-Chloroethyl Viny	50.000	44.750	89.50	20-157
45	4-Methyl-2-Pentano	250.00	216.30	86.52	70-124
41	Cis 1,3-dichloropr	50.000	47.084	94.17	80-124
43	Toluene	50.000	48.246	96.49	78-120
46	Trans 1,3-Dichloro	50.000	46.990	93.98	80-126
51	2-Hexanone	250.00	215.36	86.15	62-128
47	1,1,2-Trichloroeth	50.000	46.518	93.04	77-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
49 1,3-Dichloropropan	50.000	47.046	94.09	77-120
44 Tetrachloroethene	50.000	51.685	103.37	76-131
48 Chlorodibromometha	50.000	48.794	97.59	77-123
50 1,2-Dibromoethane	50.000	46.279	92.56	79-120
53 Chlorobenzene	50.000	49.182	98.36	80-120
55 1,1,1,2-Tetrachlor	50.000	49.000	98.00	80-120
54 Ethyl Benzene	50.000	50.327	100.65	80-120
56 m,p-xylene	100.00	101.49	101.49	80-123
57 o-Xylene	50.000	49.235	98.47	80-120
58 Styrene	50.000	50.010	100.02	80-122
60 Isopropyl Benzene	50.000	50.989	101.98	77-127
59 Bromoform	50.000	47.801	95.60	63-120
65 1,1,2,2-Tetrachlor	50.000	46.005	92.01	71-120
68 1,2,3-Trichloropro	50.000	45.726	91.45	75-120
69 Trans-1,4-Dichloro	50.000	47.142	94.28	62-127
64 N-Propyl Benzene	50.000	51.161	102.32	76-126
63 Bromobenzene	50.000	49.445	98.89	75-120
67 1,3,5-Trimethyl Be	50.000	51.135	102.27	77-126
66 2-Chloro Toluene	50.000	50.087	100.17	76-120
70 4-Chloro Toluene	50.000	50.723	101.45	75-121
71 T-Butyl Benzene	50.000	50.217	100.43	77-125
72 1,2,4-Trimethylben	50.000	50.801	101.60	77-125
73 S-Butyl Benzene	50.000	50.622	101.24	77-127
74 4-Isopropyl Toluen	50.000	51.727	103.45	78-131
75 1,3-Dichlorobenzen	50.000	50.542	101.08	76-120
77 1,4-Dichlorobenzen	50.000	50.240	100.48	75-120
78 N-Butyl Benzene	50.000	51.822	103.64	75-134
80 1,2-Dichlorobenzen	50.000	49.216	98.43	77-120
81 1,2-Dibromo 3-Chlo	50.000	45.851	91.70	61-128
83 1,2,4-Trichloroben	50.000	50.972	101.94	75-130
82 Hexachloro 1,3-But	50.000	43.109	86.22	72-135
84 Naphthalene	50.000	48.431	96.86	71-122
85 1,2,3-Trichloroben	50.000	48.937	97.87	76-122

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	48.680	97.36	70-130
$ 32 d4-1,2-Dichloroeth	50.000	46.117	92.23	80-149
$ 42 d8-Toluene	50.000	49.829	99.66	77-120
$ 62 4-Bromofluorobenze	50.000	49.120	98.24	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.240	98.48	80-120

REVIEW SUMMARY FOR FILE - 07071613.D

Lab ID: BEG0041-BSD1
nt5.i, 20160707.b\VO051314S.m,   07-JUL-2016 16:45

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Water	Analyzed:	07/07/16 16:23
Batch:	BEG0041	Laboratory ID:	BEG0041-BS1
Preparation:	No Prep - Volatiles	Initial/Final:	5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Vinyl Chloride	50.0	51.6	103	66 - 139
Bromomethane	50.0	43.1	86.3	49 - 145
cis-1,2-Dichloroethene	50.0	45.9	91.9	63 - 135
Benzene	50.0	46.8	93.6	73 - 121
Trichloroethene	50.0	47.0	93.9	75 - 120
Toluene	50.0	46.0	92.0	72 - 122
Tetrachloroethene	50.0	49.3	98.5	76 - 120
Ethylbenzene	50.0	48.4	96.7	70 - 131
m,p-Xylene	100	96.9	96.9	72 - 130
o-Xylene	50.0	47.4	94.7	67 - 135

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Water	Analyzed:	07/07/16 16:45
Batch:	BEG0041	Laboratory ID:	BEG0041-BSD1
Preparation:	No Prep - Volatiles	Initial/Final:	5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Vinyl Chloride	50.0	52.3	105	1.28	30	66 - 139
Bromomethane	50.0	44.8	89.6	3.73	30	49 - 145
cis-1,2-Dichloroethene	50.0	47.5	94.9	3.29	30	63 - 135
Benzene	50.0	48.4	96.7	3.28	30	73 - 121
Trichloroethene	50.0	48.9	97.7	3.95	30	75 - 120
Toluene	50.0	48.2	96.5	4.81	30	72 - 122
Tetrachloroethene	50.0	51.7	103	4.79	30	76 - 120
Ethylbenzene	50.0	50.3	101	3.98	30	70 - 131
m,p-Xylene	100	101	101	4.66	30	72 - 130
o-Xylene	50.0	49.2	98.5	3.89	30	67 - 135

* Values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160707.b\SampleInfo\07071612a.D

Date : 07-JUL-2016 16:23

Client ID: LCS0707

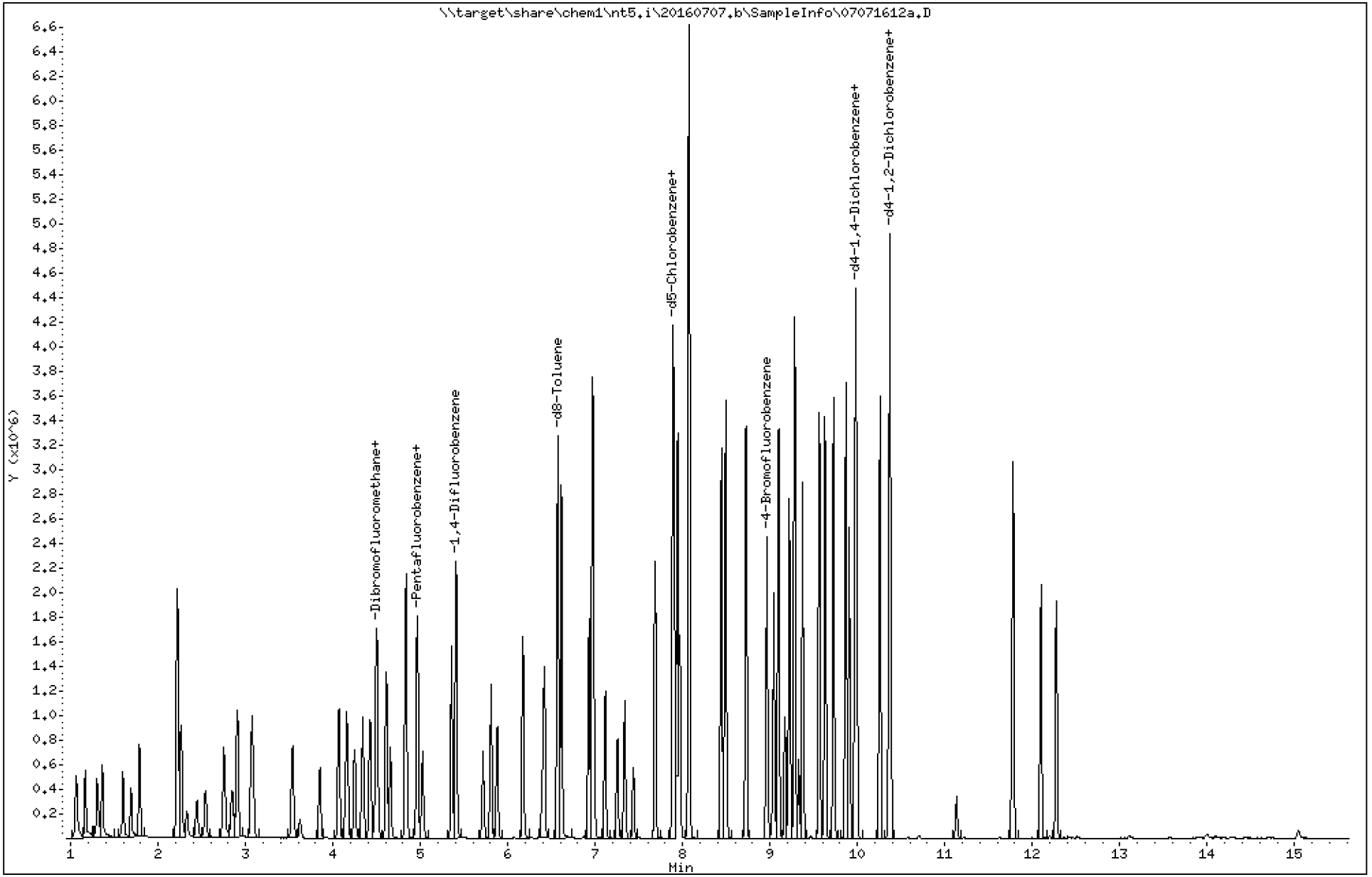
Instrument: nt5.i

Sample Info: LCS0707,5,5,0

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\SampleInfo\07071612a.D
Lab Smp Id: BEG0041-BS1 Client Smp ID: LCS0707
Inj Date : 07-JUL-2016 16:23
Operator : PB Inst ID: nt5.i
Smp Info : LCS0707,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\SampleInfo\VO051314S.m
Meth Date : 11-Jul-2016 11:10 patrickb Quant Type: ISTD
Cal Date : 07-JUL-2016 13:37 Cal File: 07071610.D
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.165	1.165	(0.235)	476698	56.7607	56.761
2	Chloromethane	50	1.299	1.299	(0.262)	476317	47.6016	47.602
3	Vinyl Chloride	62	1.359	1.359	(0.274)	499966	51.6193	51.619
4	Bromomethane	94	1.597	1.597	(0.322)	245288	43.1440	43.144
5	Chloroethane	64	1.688	1.688	(0.340)	259171	48.2643	48.264
6	Trichlorofluoromethane	101	1.785	1.785	(0.360)	473363	71.8980	71.898
7	1,1-Dichloroethene	96	2.217	2.217	(0.447)	369756	48.2031	48.203
8	Carbon Disulfide	76	2.217	2.217	(0.447)	1186900	50.2379	50.238
9	112Trichloro122Trifluoroethane	101	2.260	2.260	(0.456)	359424	48.2112	48.211
10	Iodomethane	142	2.327	2.327	(0.469)	214703	57.6464	57.646
11	Bromoethane	108	2.442	2.442	(0.492)	212306	48.1067	48.107
12	Acrolein	56	2.540	2.546	(0.512)	312219	229.677	229.68
13	Methylene Chloride	84	2.753	2.759	(0.555)	366083	47.1422	47.142
14	Acetone	43	2.844	2.850	(0.573)	478696	201.022	201.02
15	Trans-1,2-Dichloroethene	96	2.905	2.911	(0.586)	403091	46.9893	46.989
16	Methyl tert butyl ether	73	3.075	3.081	(0.620)	1064265	44.5618	44.562
17	1,1-Dichloroethane	63	3.537	3.543	(0.713)	714093	45.4552	45.455
18	Acrylonitrile	53	3.623	3.629	(0.730)	119590	42.5123	42.512
19	Vinyl Acetate	43	3.848	3.854	(0.776)	760654	43.9395	43.939
20	Cis-1,2-Dichloroethene	96	4.067	4.073	(0.820)	446079	45.9350	45.935
22	2,2-Dichloropropane	77	4.158	4.158	(0.838)	648707	46.9855	46.985

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/Kg)	(ug/Kg)
	23 Bromochloromethane	128	4.249	4.255	(0.857)	203077	47.1309	47.131
	24 Chloroform	83	4.340	4.346	(0.875)	677055	45.4513	45.451
	25 Carbon Tetrachloride	117	4.419	4.426	(0.818)	582293	49.0404	49.040
$	27 Dibromofluoromethane	111	4.505	4.511	(0.908)	491605	49.5489	49.549
	26 1,1,1-Trichloroethane	97	4.493	4.499	(0.906)	634367	45.6073	45.607
	28 1,1-Dichloropropene	75	4.608	4.614	(0.853)	574268	47.4979	47.498
	29 2-Butanone	72	4.651	4.663	(0.937)	209284	217.174	217.17
	30 Benzene	78	4.833	4.839	(0.894)	1623811	46.8104	46.810
*	31 Pentafluorobenzene	168	4.961	4.967	(1.000)	569950	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.967	4.967	(1.001)	466309	47.3709	47.371
	33 1,2-Dichloroethane	62	5.022	5.028	(0.929)	475262	44.2854	44.285
	34 Trichloroethene	95	5.356	5.362	(0.991)	429323	46.9577	46.958
*	35 1,4-Difluorobenzene	114	5.405	5.411	(1.000)	1534591	50.0000	
	37 Dibromomethane	93	5.715	5.721	(1.057)	217787	45.7809	45.781
	38 1,2-Dichloropropane	63	5.807	5.813	(1.074)	389151	45.1184	45.118
	39 Bromodichloromethane	83	5.880	5.880	(1.088)	503742	46.7682	46.768
	172 2-Pentanone	86	6.172	6.178	(1.142)	279620	236.424	236.42
	40 2-Chloroethyl Vinyl Ether	63	6.397	6.397	(1.183)	178950	46.3717	46.372
	41 Cis 1,3-dichloropropene	75	6.415	6.421	(1.187)	643718	46.4143	46.414
$	42 d8-Toluene	98	6.567	6.573	(1.215)	1835143	49.8318	49.832
	43 Toluene	92	6.610	6.616	(1.223)	1040187	45.9779	45.978
	44 Tetrachloroethene	166	6.926	6.932	(0.878)	428045	49.2655	49.265
	45 4-Methyl-2-Pentanone	58	6.969	6.975	(1.289)	681547	216.419	216.42
	46 Trans 1,3-Dichloropropene	75	6.981	6.987	(1.291)	571858	47.1166	47.117
	47 1,1,2-Trichloroethane	97	7.115	7.114	(1.316)	319303	45.6054	45.605
	48 Chlorodibromomethane	129	7.254	7.254	(0.920)	387159	47.8178	47.818
	49 1,3-Dichloropropane	76	7.334	7.340	(0.930)	569181	46.7846	46.785
	50 1,2-Dibromoethane	107	7.437	7.437	(1.376)	328284	45.7835	45.784
	51 2-Hexanone	43	7.686	7.686	(0.975)	1171621	219.315	219.32
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1485852	50.0000	
	53 Chlorobenzene	112	7.899	7.905	(1.002)	1165480	47.9757	47.976
	54 Ethyl Benzene	91	7.942	7.942	(1.007)	1963936	48.3623	48.362
	55 1,1,1,2-Tetrachloroethane	131	7.966	7.966	(1.010)	405956	46.9440	46.944
	56 m,p-xylene	106	8.070	8.076	(1.023)	1555940	96.8624	96.862
	57 o-Xylene	106	8.441	8.441	(1.070)	746780	47.3569	47.357
	58 Styrene	104	8.489	8.489	(1.076)	1253154	48.1030	48.103
	59 Bromoform	173	8.495	8.495	(0.852)	230371	47.1887	47.189
	60 Isopropyl Benzene	105	8.727	8.727	(0.875)	1977558	49.3246	49.325
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	752088	49.3595	49.360
	63 Bromobenzene	156	9.043	9.049	(0.907)	454297	48.2461	48.246
	64 N-Propyl Benzene	91	9.098	9.098	(0.912)	2297926	49.2285	49.228
	65 1,1,2,2-Tetrachloroethane	83	9.171	9.171	(0.919)	409804	45.8544	45.854
	66 2-Chloro Toluene	91	9.219	9.219	(0.924)	1331847	48.7022	48.702
	67 1,3,5-Trimethyl Benzene	105	9.280	9.286	(0.930)	1655493	49.4852	49.485
	68 1,2,3-Trichloropropane	110	9.274	9.280	(0.930)	129748	46.0249	46.025
	69 Trans-1,4-Dichloro 2-Butene	53	9.323	9.329	(0.935)	109191	47.8668	47.867
	70 4-Chloro Toluene	91	9.372	9.372	(0.940)	1403049	49.3584	49.358
	71 T-Butyl Benzene	119	9.560	9.560	(0.959)	1477975	48.1823	48.182
	72 1,2,4-Trimethylbenzene	105	9.627	9.633	(0.965)	1633618	48.8046	48.805
	73 S-Butyl Benzene	105	9.724	9.724	(0.975)	2159364	49.1176	49.118
	74 4-Isopropyl Toluene	119	9.864	9.870	(0.989)	1902651	50.4275	50.427
	75 1,3-Dichlorobenzene	146	9.901	9.907	(0.993)	929106	49.3729	49.373
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	740406	50.0000	
	77 1,4-Dichlorobenzene	146	9.986	9.992	(1.001)	921008	48.9748	48.975

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	10.254	10.254	(1.028)	1679114	50.8924	50.892
$	79 d4-1,2-Dichlorobenzene	152	10.363	10.369	(1.039)	713774	49.7417	49.742
	80 1,2-Dichlorobenzene	146	10.375	10.375	(1.040)	839286	47.8395	47.839
	81 1,2-Dibromo 3-Chloropropane	75	11.130	11.136	(1.116)	75994	44.9968	44.997
	82 Hexachloro 1,3-Butadiene	225	11.775	11.775	(1.181)	242403	47.8709	47.871
	83 1,2,4-Trichlorobenzene	180	11.787	11.781	(1.182)	545111	50.6279	50.628
	84 Naphthalene	128	12.097	12.097	(1.213)	1459079	47.5585	47.559
	85 1,2,3-Trichlorobenzene	180	12.273	12.273	(1.231)	488040	48.7373	48.737

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071612a.D
Lab Smp Id: BEG0041-BS1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\SampleInfo\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: LCS0707
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	569950	1.41
35 1,4-Difluorobenze	1551589	775795	3103178	1534591	-1.10
52 d5-Chlorobenzene	1542777	771389	3085554	1485852	-3.69
76 d4-1,4-Dichlorobe	775053	387527	1550106	740406	-4.47

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.96	-0.12
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	-0.11
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEG0041-BS1 Client Smp ID: LCS0707
Level: LOW Operator: PB
Data Type: MS DATA SampleType: LCS
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160707.b\SampleInfo\VO051314S.m
Misc Info: 1

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	56.761	113.52	67-142
2	Chloromethane	50.000	47.602	95.20	65-129
3	Vinyl Chloride	50.000	51.619	103.24	74-134
4	Bromomethane	50.000	43.144	86.29	40-172
5	Chloroethane	50.000	48.264	96.53	53-154
6	Trichlorofluoromet	50.000	71.898	143.80	57-161
12	Acrolein	250.00	229.68	91.87	60-130
9	112Trichloro122Tri	50.000	48.211	96.42	72-142
14	Acetone	250.00	201.02	80.41	48-132
7	1,1-Dichloroethene	50.000	48.203	96.41	73-138
11	Bromoethane	50.000	48.107	96.21	74-132
10	Iodomethane	50.000	57.646	115.29	34-181
13	Methylene Chloride	50.000	47.142	94.28	61-128
8	Carbon Disulfide	50.000	50.238	100.48	72-146
18	Acrylonitrile	50.000	42.512	85.02	59-124
15	Trans-1,2-Dichloro	50.000	46.989	93.98	73-131
19	Vinyl Acetate	50.000	43.939	87.88	54-138
17	1,1-Dichloroethane	50.000	45.455	90.91	65-139
29	2-Butanone	250.00	217.17	86.87	64-120
22	2,2-Dichloropropan	50.000	46.985	93.97	77-137
20	Cis-1,2-Dichloroet	50.000	45.935	91.87	74-124
24	Chloroform	50.000	45.451	90.90	75-126
23	Bromochloromethane	50.000	47.131	94.26	69-133
26	1,1,1-Trichloroeth	50.000	45.607	91.21	78-133
28	1,1-Dichloropropen	50.000	47.498	95.00	80-123
25	Carbon Tetrachlori	50.000	49.040	98.08	76-136
33	1,2-Dichloroethane	50.000	44.285	88.57	77-120
30	Benzene	50.000	46.810	93.62	80-120
34	Trichloroethene	50.000	46.958	93.92	80-120
38	1,2-Dichloropropan	50.000	45.118	90.24	74-120
39	Bromodichlorometha	50.000	46.768	93.54	80-122
172	2-Pentanone	250.00	236.42	94.57	70-130
37	Dibromomethane	50.000	45.781	91.56	80-120
40	2-Chloroethyl Viny	50.000	46.372	92.74	20-157
45	4-Methyl-2-Pentano	250.00	216.42	86.57	70-124
41	Cis 1,3-dichloropr	50.000	46.414	92.83	80-124
43	Toluene	50.000	45.978	91.96	78-120
46	Trans 1,3-Dichloro	50.000	47.117	94.23	80-126
51	2-Hexanone	250.00	219.32	87.73	62-128
47	1,1,2-Trichloroeth	50.000	45.605	91.21	77-120

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
49	1,3-Dichloropropan	50.000	46.785	93.57	77-120
44	Tetrachloroethene	50.000	49.265	98.53	76-131
48	Chlorodibromometha	50.000	47.818	95.64	77-123
50	1,2-Dibromoethane	50.000	45.784	91.57	79-120
53	Chlorobenzene	50.000	47.976	95.95	80-120
55	1,1,1,2-Tetrachlor	50.000	46.944	93.89	80-120
54	Ethyl Benzene	50.000	48.362	96.72	80-120
56	m,p-xylene	100.00	96.862	96.86	80-123
57	o-Xylene	50.000	47.357	94.71	80-120
58	Styrene	50.000	48.103	96.21	80-122
60	Isopropyl Benzene	50.000	49.325	98.65	77-127
59	Bromoform	50.000	47.189	94.38	63-120
65	1,1,2,2-Tetrachlor	50.000	45.854	91.71	71-120
68	1,2,3-Trichloropro	50.000	46.025	92.05	75-120
69	Trans-1,4-Dichloro	50.000	47.867	95.73	62-127
64	N-Propyl Benzene	50.000	49.228	98.46	76-126
63	Bromobenzene	50.000	48.246	96.49	75-120
67	1,3,5-Trimethyl Be	50.000	49.485	98.97	77-126
66	2-Chloro Toluene	50.000	48.702	97.40	76-120
70	4-Chloro Toluene	50.000	49.358	98.72	75-121
71	T-Butyl Benzene	50.000	48.182	96.36	77-125
72	1,2,4-Trimethylben	50.000	48.805	97.61	77-125
73	S-Butyl Benzene	50.000	49.118	98.24	77-127
74	4-Isopropyl Toluen	50.000	50.427	100.85	78-131
75	1,3-Dichlorobenzen	50.000	49.373	98.75	76-120
77	1,4-Dichlorobenzen	50.000	48.975	97.95	75-120
78	N-Butyl Benzene	50.000	50.892	101.78	75-134
80	1,2-Dichlorobenzen	50.000	47.839	95.68	77-120
81	1,2-Dibromo 3-Chlo	50.000	44.997	89.99	61-128
83	1,2,4-Trichloroben	50.000	50.628	101.26	75-130
82	Hexachloro 1,3-But	50.000	47.871	95.74	72-135
84	Naphthalene	50.000	47.559	95.12	71-122
85	1,2,3-Trichloroben	50.000	48.737	97.47	76-122

	SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27	Dibromofluorometha	50.000	49.549	99.10	70-130
$ 32	d4-1,2-Dichloroeth	50.000	47.371	94.74	80-149
$ 42	d8-Toluene	50.000	49.832	99.66	77-120
$ 62	4-Bromofluorobenze	50.000	49.360	98.72	80-120
$ 79	d4-1,2-Dichloroben	50.000	49.742	99.48	80-120

REVIEW SUMMARY FOR FILE - 07071612a.D

Lab ID: BEG0041-BS1
nt5.i, 20160707.b\SampleInfo\VO051314S.m,   07-JUL-2016 16:23

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,SampleInfo\VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

Data File: \\target\share\chem1\nt5.i\20160707.b\SampleInfo\07071613a.D

Date : 07-JUL-2016 16:45

Client ID: LCS0707

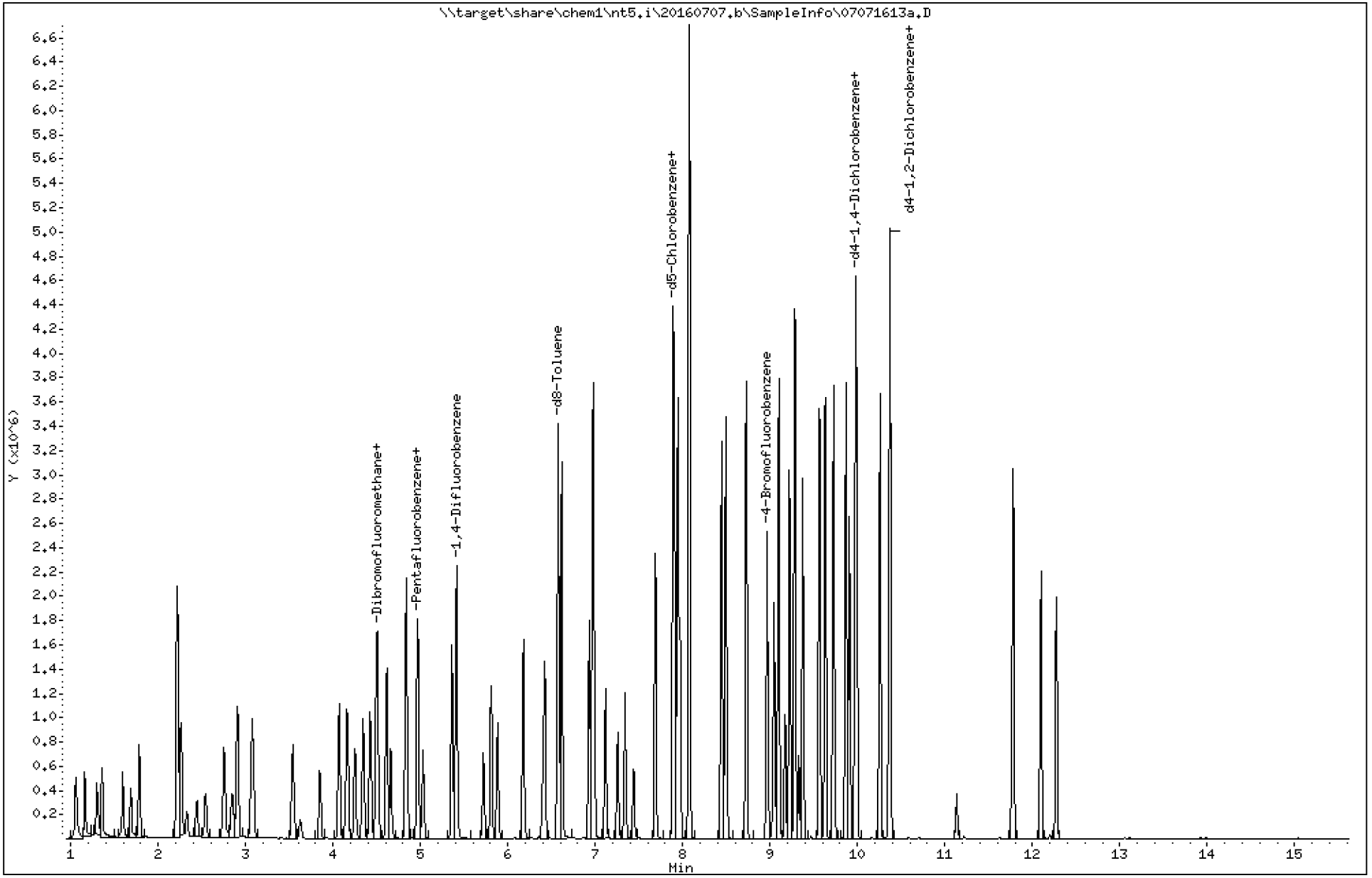
Sample Info: LCS0707,5,5,0

Column phase: RTXVMS

Instrument: nt5.i

Operator: PB

Column diameter: 0.18



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8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\SampleInfo\07071613a.D
Lab Smp Id: BEG0041-BSD1 Client Smp ID: LCS0707
Inj Date : 07-JUL-2016 16:45
Operator : PB Inst ID: nt5.i
Smp Info : LCS0707,5,5,0
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\SampleInfo\VO051314S.m
Meth Date : 11-Jul-2016 11:10 patrickb Quant Type: ISTD
Cal Date : 07-JUL-2016 13:37 Cal File: 07071610.D
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.159	1.165	(0.233)	490819	57.5572	57.557
2	Chloromethane	50	1.298	1.299	(0.261)	480944	47.3362	47.336
3	Vinyl Chloride	62	1.359	1.359	(0.274)	514194	52.2844	52.284
4	Bromomethane	94	1.597	1.597	(0.322)	258527	44.7841	44.784
5	Chloroethane	64	1.688	1.688	(0.340)	271444	49.7845	49.784
6	Trichlorofluoromethane	101	1.779	1.785	(0.358)	491696	73.5517	73.552
7	1,1-Dichloroethene	96	2.211	2.217	(0.445)	386650	49.6422	49.642
8	Carbon Disulfide	76	2.217	2.217	(0.446)	1206153	50.2798	50.280
9	112Trichloro122Trifluoroethane	101	2.260	2.260	(0.455)	384080	50.7383	50.738
10	Iodomethane	142	2.327	2.327	(0.468)	204748	54.1411	54.141
11	Bromoethane	108	2.442	2.442	(0.492)	217547	48.5478	48.548
12	Acrolein	56	2.540	2.546	(0.511)	307130	222.512	222.51
13	Methylene Chloride	84	2.752	2.759	(0.554)	361075	45.7932	45.793
14	Acetone	43	2.844	2.850	(0.573)	464918	192.280	192.28
15	Trans-1,2-Dichloroethene	96	2.905	2.911	(0.585)	423844	48.6604	48.660
16	Methyl tert butyl ether	73	3.075	3.081	(0.619)	1078627	44.4792	44.479
17	1,1-Dichloroethane	63	3.537	3.543	(0.712)	737760	46.2506	46.251
18	Acrylonitrile	53	3.622	3.629	(0.729)	121177	42.4242	42.424
19	Vinyl Acetate	43	3.847	3.854	(0.775)	750156	42.6769	42.677
20	Cis-1,2-Dichloroethene	96	4.066	4.073	(0.819)	468065	47.4692	47.469
22	2,2-Dichloropropane	77	4.158	4.158	(0.837)	673612	48.0505	48.051

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	4.249	4.255	(0.855)	203023	46.4049	46.405
	24 Chloroform	83	4.346	4.346	(0.875)	701021	46.3475	46.348
	25 Carbon Tetrachloride	117	4.425	4.426	(0.818)	617553	51.6755	51.675
$	27 Dibromofluoromethane	111	4.511	4.511	(0.908)	490414	48.6804	48.680
	26 1,1,1-Trichloroethane	97	4.498	4.499	(0.906)	677041	47.9382	47.938
	28 1,1-Dichloropropene	75	4.614	4.614	(0.853)	599288	49.2486	49.249
	29 2-Butanone	72	4.657	4.663	(0.938)	209748	214.360	214.36
	30 Benzene	78	4.839	4.839	(0.894)	1688799	48.3708	48.371
*	31 Pentafluorobenzene	168	4.967	4.967	(1.000)	578713	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.967	4.967	(1.000)	460943	46.1167	46.117
	33 1,2-Dichloroethane	62	5.028	5.028	(0.929)	482830	44.7012	44.701
	34 Trichloroethene	95	5.356	5.362	(0.990)	449524	48.8510	48.851
*	35 1,4-Difluorobenzene	114	5.411	5.411	(1.000)	1544524	50.0000	
	37 Dibromomethane	93	5.721	5.721	(1.057)	221410	46.2431	46.243
	38 1,2-Dichloropropane	63	5.806	5.813	(1.073)	398594	45.9160	45.916
	39 Bromodichloromethane	83	5.879	5.880	(1.087)	522220	48.1719	48.172
	172 2-Pentanone	86	6.177	6.178	(1.142)	277000	232.702	232.70
	40 2-Chloroethyl Vinyl Ether	63	6.396	6.397	(1.182)	173809	44.7498	44.750
	41 Cis 1,3-dichloropropene	75	6.421	6.421	(1.187)	657230	47.0839	47.084
$	42 d8-Toluene	98	6.573	6.573	(1.215)	1846900	49.8285	49.829
	43 Toluene	92	6.615	6.616	(1.223)	1098558	48.2457	48.246
	44 Tetrachloroethene	166	6.932	6.932	(0.879)	456660	51.6852	51.685
	45 4-Methyl-2-Pentanone	58	6.974	6.975	(1.289)	685570	216.297	216.30
	46 Trans 1,3-Dichloropropene	75	6.987	6.987	(1.291)	574011	46.9898	46.990
	47 1,1,2-Trichloroethane	97	7.114	7.114	(1.315)	327800	46.5179	46.518
	48 Chlorodibromomethane	129	7.254	7.254	(0.920)	401742	48.7941	48.794
	49 1,3-Dichloropropane	76	7.339	7.340	(0.931)	582033	47.0457	47.046
	50 1,2-Dibromoethane	107	7.437	7.437	(1.374)	333987	46.2793	46.279
	51 2-Hexanone	43	7.686	7.686	(0.975)	1169958	215.363	215.36
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1510970	50.0000	
	53 Chlorobenzene	112	7.905	7.905	(1.002)	1214973	49.1816	49.182
	54 Ethyl Benzene	91	7.942	7.942	(1.007)	2078283	50.3274	50.327
	55 1,1,1,2-Tetrachloroethane	131	7.966	7.966	(1.010)	430896	48.9997	49.000
	56 m,p-xylene	106	8.076	8.076	(1.024)	1657757	101.485	101.49
	57 o-Xylene	106	8.441	8.441	(1.070)	789521	49.2350	49.235
	58 Styrene	104	8.489	8.489	(1.076)	1324859	50.0100	50.010
	59 Bromoform	173	8.501	8.495	(0.852)	240349	47.8014	47.801
	60 Isopropyl Benzene	105	8.726	8.727	(0.875)	2105501	50.9892	50.989
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	761095	49.1203	49.120
	63 Bromobenzene	156	9.049	9.049	(0.907)	479522	49.4446	49.445
	64 N-Propyl Benzene	91	9.098	9.098	(0.912)	2459632	51.1609	51.161
	65 1,1,2,2-Tetrachloroethane	83	9.171	9.171	(0.919)	423462	46.0053	46.005
	66 2-Chloro Toluene	91	9.219	9.219	(0.924)	1410729	50.0871	50.087
	67 1,3,5-Trimethyl Benzene	105	9.286	9.286	(0.931)	1761911	51.1352	51.135
	68 1,2,3-Trichloropropane	110	9.280	9.280	(0.930)	132764	45.7257	45.726
	69 Trans-1,4-Dichloro 2-Butene	53	9.329	9.329	(0.935)	110758	47.1423	47.142
	70 4-Chloro Toluene	91	9.371	9.372	(0.940)	1485021	50.7234	50.723
	71 T-Butyl Benzene	119	9.566	9.560	(0.959)	1586518	50.2173	50.217
	72 1,2,4-Trimethylbenzene	105	9.633	9.633	(0.966)	1751366	50.8013	50.801
	73 S-Butyl Benzene	105	9.724	9.724	(0.975)	2292153	50.6224	50.622
	74 4-Isopropyl Toluene	119	9.870	9.870	(0.990)	2010100	51.7266	51.727
	75 1,3-Dichlorobenzene	146	9.907	9.907	(0.993)	979591	50.5425	50.542
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	762574	50.0000	
	77 1,4-Dichlorobenzene	146	9.992	9.992	(1.002)	973084	50.2398	50.240

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	10.253	10.254	(1.028)	1760975	51.8219	51.822
$	79 d4-1,2-Dichlorobenzene	152	10.369	10.369	(1.040)	727731	49.2401	49.240
	80 1,2-Dichlorobenzene	146	10.375	10.375	(1.040)	889294	49.2164	49.216
	81 1,2-Dibromo 3-Chloropropane	75	11.136	11.136	(1.116)	79755	45.8509	45.851
	82 Hexachloro 1,3-Butadiene	225	11.774	11.775	(1.181)	224824	43.1086	43.109
	83 1,2,4-Trichlorobenzene	180	11.787	11.781	(1.182)	565246	50.9718	50.972
	84 Naphthalene	128	12.097	12.097	(1.213)	1530320	48.4306	48.431
	85 1,2,3-Trichlorobenzene	180	12.273	12.273	(1.231)	504713	48.9371	48.937

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071613a.D
Lab Smp Id: BEG0041-BSD1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\SampleInfo\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: LCS0707
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	578713	2.97
35 1,4-Difluorobenze	1551589	775795	3103178	1544524	-0.46
52 d5-Chlorobenzene	1542777	771389	3085554	1510970	-2.06
76 d4-1,4-Dichlorobe	775053	387527	1550106	762574	-1.61

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.97	-0.00
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	-0.00
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	-0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151013
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: BEG0041-BSD1 Client Smp ID: LCS0707
Level: LOW Operator: PB
Data Type: MS DATA SampleType: LCSD
SpikeList File: voasoil.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160707.b\SampleInfo\VO051314S.m
Misc Info: 1

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	57.557	115.11	67-142
2	Chloromethane	50.000	47.336	94.67	65-129
3	Vinyl Chloride	50.000	52.284	104.57	74-134
4	Bromomethane	50.000	44.784	89.57	40-172
5	Chloroethane	50.000	49.784	99.57	53-154
6	Trichlorofluoromet	50.000	73.552	147.10	57-161
12	Acrolein	250.00	222.51	89.00	60-130
9	112Trichloro122Tri	50.000	50.738	101.48	72-142
14	Acetone	250.00	192.28	76.91	48-132
7	1,1-Dichloroethene	50.000	49.642	99.28	73-138
11	Bromoethane	50.000	48.548	97.10	74-132
10	Iodomethane	50.000	54.141	108.28	34-181
13	Methylene Chloride	50.000	45.793	91.59	61-128
8	Carbon Disulfide	50.000	50.280	100.56	72-146
18	Acrylonitrile	50.000	42.424	84.85	59-124
15	Trans-1,2-Dichloro	50.000	48.660	97.32	73-131
19	Vinyl Acetate	50.000	42.677	85.35	54-138
17	1,1-Dichloroethane	50.000	46.251	92.50	65-139
29	2-Butanone	250.00	214.36	85.74	64-120
22	2,2-Dichloropropan	50.000	48.051	96.10	77-137
20	Cis-1,2-Dichloroet	50.000	47.469	94.94	74-124
24	Chloroform	50.000	46.348	92.70	75-126
23	Bromochloromethane	50.000	46.405	92.81	69-133
26	1,1,1-Trichloroeth	50.000	47.938	95.88	78-133
28	1,1-Dichloropropen	50.000	49.249	98.50	80-123
25	Carbon Tetrachlori	50.000	51.675	103.35	76-136
33	1,2-Dichloroethane	50.000	44.701	89.40	77-120
30	Benzene	50.000	48.371	96.74	80-120
34	Trichloroethene	50.000	48.851	97.70	80-120
38	1,2-Dichloropropan	50.000	45.916	91.83	74-120
39	Bromodichlorometha	50.000	48.172	96.34	80-122
172	2-Pentanone	250.00	232.70	93.08	70-130
37	Dibromomethane	50.000	46.243	92.49	80-120
40	2-Chloroethyl Viny	50.000	44.750	89.50	20-157
45	4-Methyl-2-Pentano	250.00	216.30	86.52	70-124
41	Cis 1,3-dichloropr	50.000	47.084	94.17	80-124
43	Toluene	50.000	48.246	96.49	78-120
46	Trans 1,3-Dichloro	50.000	46.990	93.98	80-126
51	2-Hexanone	250.00	215.36	86.15	62-128
47	1,1,2-Trichloroeth	50.000	46.518	93.04	77-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
49 1,3-Dichloropropan	50.000	47.046	94.09	77-120
44 Tetrachloroethene	50.000	51.685	103.37	76-131
48 Chlorodibromometha	50.000	48.794	97.59	77-123
50 1,2-Dibromoethane	50.000	46.279	92.56	79-120
53 Chlorobenzene	50.000	49.182	98.36	80-120
55 1,1,1,2-Tetrachlor	50.000	49.000	98.00	80-120
54 Ethyl Benzene	50.000	50.327	100.65	80-120
56 m,p-xylene	100.00	101.49	101.49	80-123
57 o-Xylene	50.000	49.235	98.47	80-120
58 Styrene	50.000	50.010	100.02	80-122
60 Isopropyl Benzene	50.000	50.989	101.98	77-127
59 Bromoform	50.000	47.801	95.60	63-120
65 1,1,2,2-Tetrachlor	50.000	46.005	92.01	71-120
68 1,2,3-Trichloropro	50.000	45.726	91.45	75-120
69 Trans-1,4-Dichloro	50.000	47.142	94.28	62-127
64 N-Propyl Benzene	50.000	51.161	102.32	76-126
63 Bromobenzene	50.000	49.445	98.89	75-120
67 1,3,5-Trimethyl Be	50.000	51.135	102.27	77-126
66 2-Chloro Toluene	50.000	50.087	100.17	76-120
70 4-Chloro Toluene	50.000	50.723	101.45	75-121
71 T-Butyl Benzene	50.000	50.217	100.43	77-125
72 1,2,4-Trimethylben	50.000	50.801	101.60	77-125
73 S-Butyl Benzene	50.000	50.622	101.24	77-127
74 4-Isopropyl Toluen	50.000	51.727	103.45	78-131
75 1,3-Dichlorobenzen	50.000	50.542	101.08	76-120
77 1,4-Dichlorobenzen	50.000	50.240	100.48	75-120
78 N-Butyl Benzene	50.000	51.822	103.64	75-134
80 1,2-Dichlorobenzen	50.000	49.216	98.43	77-120
81 1,2-Dibromo 3-Chlo	50.000	45.851	91.70	61-128
83 1,2,4-Trichloroben	50.000	50.972	101.94	75-130
82 Hexachloro 1,3-But	50.000	43.109	86.22	72-135
84 Naphthalene	50.000	48.431	96.86	71-122
85 1,2,3-Trichloroben	50.000	48.937	97.87	76-122

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	48.680	97.36	70-130
$ 32 d4-1,2-Dichloroeth	50.000	46.117	92.23	80-149
$ 42 d8-Toluene	50.000	49.829	99.66	77-120
$ 62 4-Bromofluorobenze	50.000	49.120	98.24	80-120
$ 79 d4-1,2-Dichloroben	50.000	49.240	98.48	80-120

REVIEW SUMMARY FOR FILE - 07071613a.D

Lab ID: BEG0041-BSD1
nt5.i, 20160707.b\SampleInfo\VO051314S.m,   07-JUL-2016 16:45

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,SampleInfo\VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

PREPARATION BATCH SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc. SDG: 16G0006

Client: Anchor QEA, LLC Project: CHRL SSWA

Batch: BEG0040 Batch Matrix: Solid Preparation: No Prep - Volatiles

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
CHRL-O-03A-160705	16G0006-01	07071617.D	07/07/16 09:52	
CHRL-O-04A-160705	16G0006-02	07071618.D	07/07/16 09:52	
CHRL-P-03A-160705	16G0006-03	07071619.D	07/07/16 09:52	
Blank	BEG0040-BLK1	07071614.D	07/07/16 09:52	
LCS	BEG0040-BS1	07071612.D	07/07/16 09:52	
LCS Dup	BEG0040-BSD1	07071613.D	07/07/16 09:52	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Method 5035 Extraction Bench Sheet

(8260C, 8260C-SIM, NWTPH-Gx, AK-101, TPH-G, VPH, TCLP-ZHE)

Work order: BCT9/BCRG/16G0006 BCT7/BCTY/DDA1/BDA3

Element Batch: BEG0040/BEG0041

Prep/Extraction Date: 7/7/16

Analyst: B

	Lab ID	Vial No.	Method 5035 Sample Weight						Extract Split Basis		
			$NaHSO_3$ Lot#	CH_3OH Lot#	Vial Weight (g)	Tare (from vial) (g)	Initial Weight (g)	Final Volume (mL)	MeOH Spilt Volume (µL)	Diluent Volume (mL)	Dilution
1	BCT9 A						0.55				
2											
3	BCRGL		E1649		41.13	35.42	5.71				
4	16G0006-01	C	E1715		40.70	35.96	4.74				
5	02	C	↓		39.83	35.58	4.25				
6	03	C			40.59	35.27	5.32				
7											
8	BCT7 A						0.53				
9	BCTY A						0.55				
10	BDA1 A						0.54				
11	BDA3 A						0.52				
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

Balance ID: SLF302

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Total Solids Bench Sheet

Laboratory Section VOA

Oven Identification: 16 **Balance ID:** B423665###

Samples in Oven: Date: 7/7/14 Time: 1630 Temp: 104 Analyst: PB

Removed from Oven: Date: 7/8/14 Time: 11:20 Temp: 103 Analyst: PB

Source of Total Solids Data If From A Different Lab:

ARI Sample ID	Tare Weight (g)	Tare + Sample Wet (g)	Tare + Sample Dry (g)	Date & Time Last Weight	Final Weighting >12 hrs[1]
16G0006-01	1.16	15.44	14.43	7/8/14 11:21	✓
-02	1.15	10.87	10.29	↓	✓
-03	1.17	11.99	11.12	↓	✓

1) Place a check mark in this column if samples have dried > 12 but < 24 hours. When samples have been at 104°C < 12 hours, constant weight must be verified as described in SOP 10023S. Use a 2nd bench sheet for additional weightings.

PREPARATION BATCH SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc. SDG: 16G0006

Client: Anchor QEA, LLC Project: CHRL SSWA

Batch: BEG0041 Batch Matrix: Water Preparation: No Prep - Volatiles

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
CHRL-TB-160705	16G0006-04	07071620.D	07/07/16 09:52	
Blank	BEG0041-BLK1	07071614a.D	07/07/16 09:52	
LCS	BEG0041-BS1	07071612a.D	07/07/16 09:52	
LCS Dup	BEG0041-BSD1	07071613a.D	07/07/16 09:52	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Method 5035 Extraction Bench Sheet

(8260C, 8260C-SIM, NWTPH-Gx, AK-101, TPH-G, VPH, TCLP-ZHE)

Work order: BCT9/BCR6/16G0006 BCT7/BCT8/DDA1/DDA3

Element Batch: BEG0040/BEG0041

Prep/Extraction Date: 7/7/16

Analyst: B

	Lab ID	Vial No.	Method 5035 Sample Weight						Extract Split Basis		
			$NaHSO_3$ Lot#	CH_3OH Lot#	Vial Weight (g)	Tare (from vial) (g)	Initial Weight (g)	Final Volume (mL)	MeOH Spilt Volume (µL)	Diluent Volume (mL)	Dilution
1	BCT9 A						0.55				
2											
3	BCR6L		E1649		41.13	35.42	5.71				
4	16G0006-01	C	E1715		40.70	35.96	4.74				
5	02	C			39.83	35.58	4.25				
6	03	C	↓		40.59	35.27	5.32				
7											
8	BCT7 A						0.53				
9	BCT8 A						0.55				
10	BDA1 A						0.54				
11	BDA3 A						0.52				
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

Balance ID: SLF302

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Total Solids Bench Sheet

Laboratory Section VOA

Oven Identification: 16 **Balance ID:** B423665###

Samples in Oven: Date: 7/7/14 Time: 1630 Temp: 104 Analyst: PB

Removed from Oven: Date: 7/8/14 Time: 11:20 Temp: 103 Analyst: PB

Source of Total Solids Data If From A Different Lab:

ARI Sample ID	Tare Weight (g)	Tare + Sample Wet (g)	Tare + Sample Dry (g)	Date & Time Last Weight	Final Weighting >12 hrs[1]
16G0006-01	1.16	15.44	14.43	7/8/14 11:21	✓
-02	1.15	10.87	10.29	↓	✓
-03	1.17	11.99	11.12	↓	✓

1) Place a check mark in this column if samples have dried > 12 but < 24 hours. When samples have been at 104°C < 12 hours, constant weight must be verified as described in SOP 10023S. Use a 2nd bench sheet for additional weightings.

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8260C

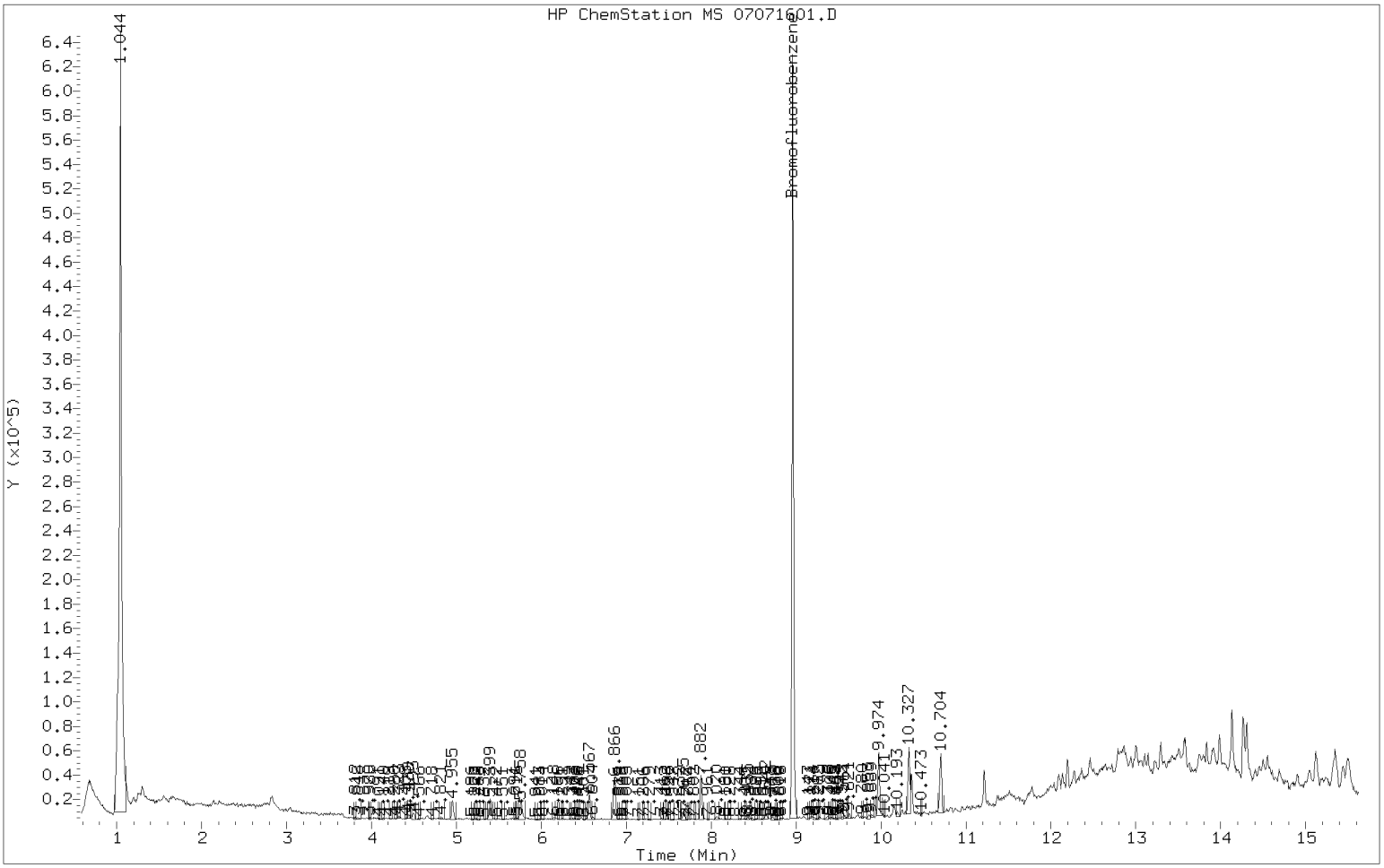
Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Lab File ID:	07071601.D	Injection Date:	07/07/16
Instrument ID:	NT5	Injection Time:	09:52
Sequence:	SEG0022	Lab Sample ID:	SEG0022-TUN1

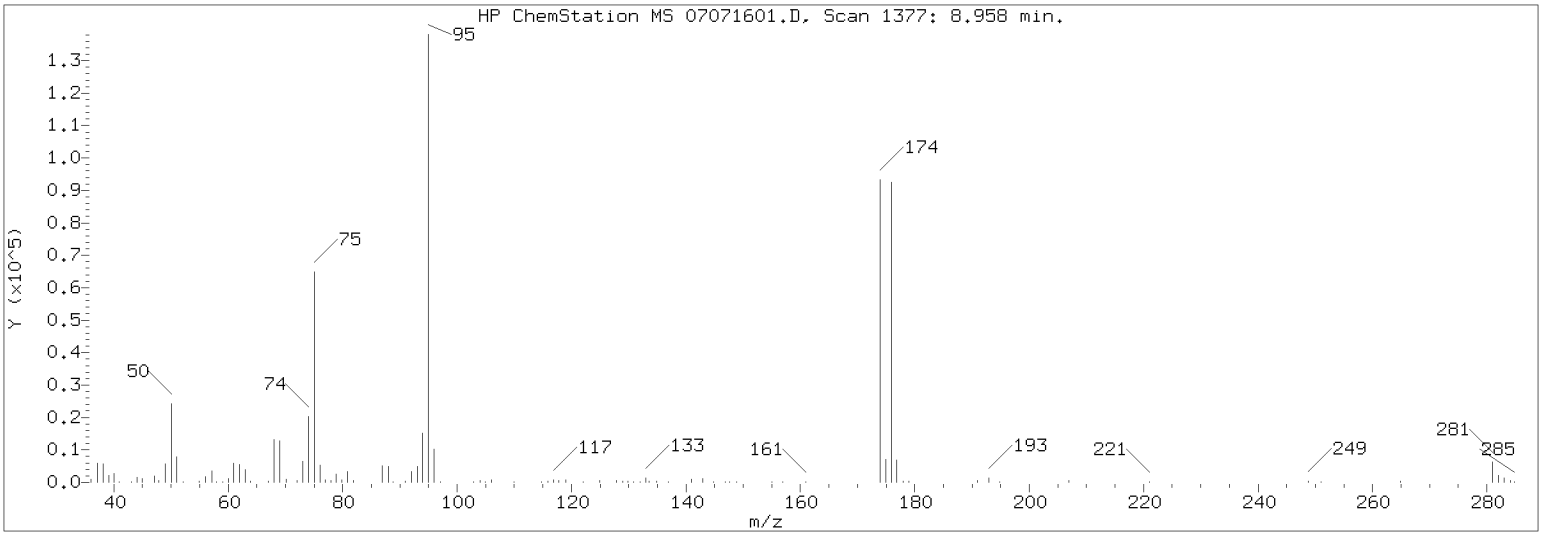
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	17.1	PASS
75	30 - 80% of 95	46.6	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.04	PASS
173	Less than 2% of 174	0.3	PASS
174	50 - 120% of 95	67.8	PASS
175	5 - 9% of 174	7.25	PASS
176	95 - 101% of 174	97.9	PASS
177	5 - 9% of 176	7.22	PASS

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Cal Standard	SEG0022-CAL1	07071603.D	07/07/2016	10:58
Cal Standard	SEG0022-CAL2	07071604.D	07/07/2016	11:21
Cal Standard	SEG0022-CAL3	07071605.D	07/07/2016	11:44
Cal Standard	SEG0022-CAL4	07071606.D	07/07/2016	12:06
Cal Standard	SEG0022-CAL5	07071607.D	07/07/2016	12:29
Cal Standard	SEG0022-CAL6	07071608.D	07/07/2016	12:51
Cal Standard	SEG0022-CAL7	07071609.D	07/07/2016	13:14
Cal Standard	SEG0022-CAL8	07071610.D	07/07/2016	13:37
Secondary Cal Check	SEG0022-SCV1	07071611.D	07/07/2016	15:10
Secondary Cal Check	SEG0022-SCV1	07071602.D	07/07/2016	15:10

BFB TUNE GRAPHIC REPORT

Datafile Analyzed: /20160707.b/07071601.D
Method Used: \20160707.b\bfb8260.m Inst: nt5
Injection Date: 07-JUL-2016 09:52 Operator: PB
Sample Info: SEG0027-TUN1 BFB0707
Report Date: 07/11/2016 11:24





m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.07
75	30.00 - 60.00% of mass 95	46.59
96	5.00 - 9.00% of mass 95	7.04
173	Less than 2.00% of mass 174	0.20 (0.30)
174	50.00 - 100.00% of mass 95	67.85
175	5.00 - 9.00% of mass 174	4.92 (7.25)
176	95.00 - 101.00% of mass 174	66.44 (97.93)
177	5.00 - 9.00% of mass 176	4.79 (7.22)

Data File: 07071601.D
Spectrum: Avg. Scans 1376-1378 (8.96), Background Scan 1371
Location of Maximum: 95.00
Number of points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1079	74.00	18184	119.00	660	172.00	67
37.00	5566	75.00	56280	122.00	56	173.00	246
38.00	5148	76.00	4745	125.00	492	174.00	81960
39.00	1890	77.00	710	126.00	103	175.00	5945
41.00	125	78.00	528	128.00	248	176.00	80264
43.00	136	79.00	2394	129.00	285	177.00	5792
44.00	742	80.00	662	130.00	371	178.00	252
45.00	1086	81.00	2649	131.00	256	179.00	301
47.00	1640	82.00	540	132.00	51	181.00	51
48.00	599	86.00	83	133.00	1370	191.00	596
49.00	4797	87.00	4762	134.00	229	193.00	1198
50.00	20624	88.00	4403	135.00	190	194.00	162
51.00	6853	89.00	86	137.00	130	195.00	134
52.00	258	91.00	339	139.00	51	205.00	126
55.00	398	92.00	2876	141.00	983	207.00	487
56.00	1601	93.00	4383	143.00	1164	208.00	58
57.00	3008	94.00	13072	146.00	137	221.00	58
58.00	237	95.00	120800	147.00	246	249.00	458
59.00	236	96.00	8501	148.00	232	250.00	61
60.00	994	97.00	314	149.00	196	251.00	230
61.00	5158	103.00	267	150.00	51	254.00	51
62.00	5050	104.00	577	152.00	52	265.00	437
63.00	3646	105.00	203	153.00	77	266.00	96
64.00	426	106.00	568	155.00	219	267.00	61
67.00	322	110.00	228	157.00	229	281.00	6821
68.00	11181	111.00	74	159.00	55	282.00	1993
69.00	11211	115.00	149	161.00	150	283.00	1382
70.00	931	116.00	382	163.00	96	284.00	340
72.00	486	117.00	691	165.00	83	285.00	145
73.00	5762	118.00	557	169.00	66		

Analytical Resources, Incorporated
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8260C

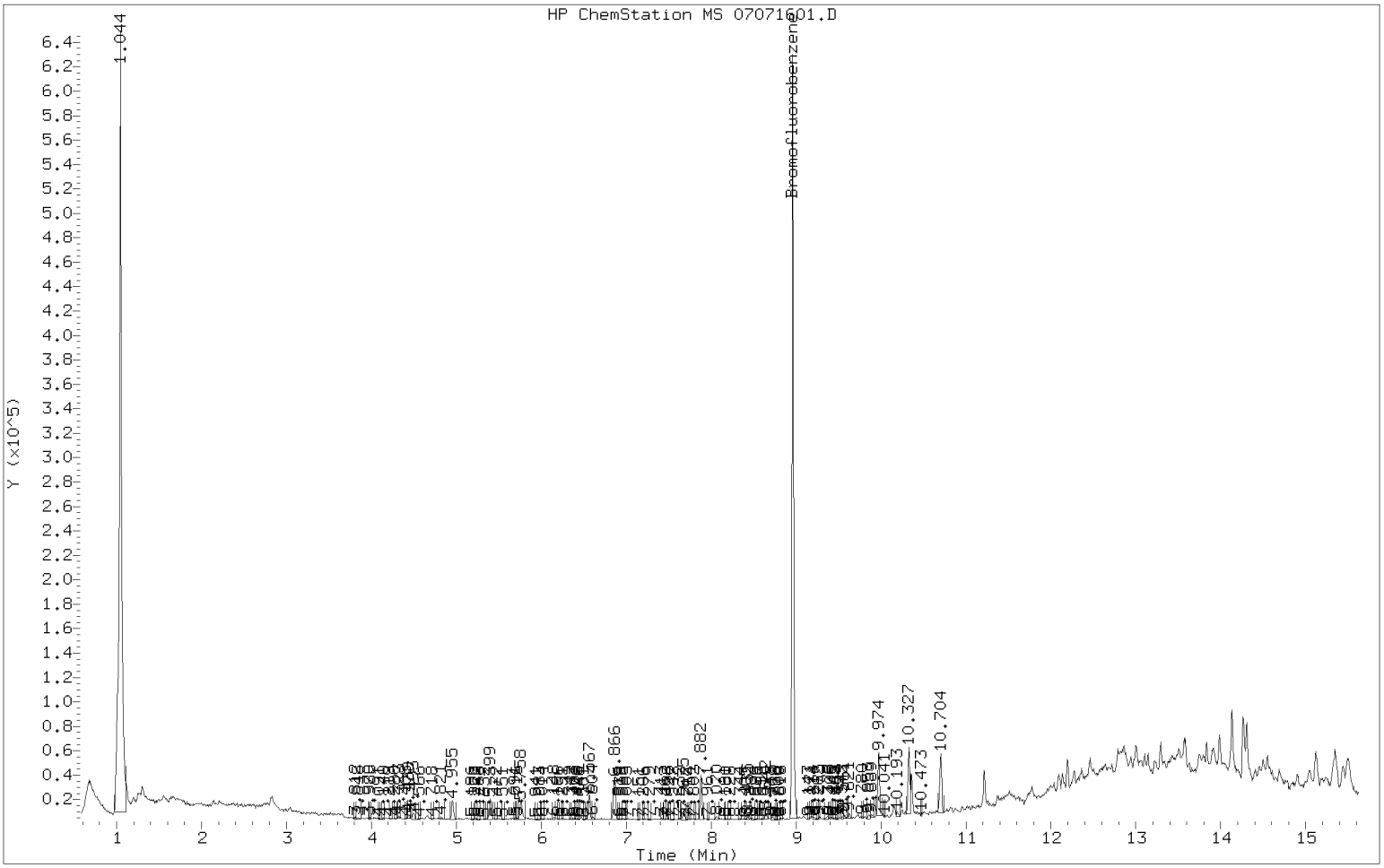
Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Lab File ID:	07071601.D	Injection Date:	07/07/16
Instrument ID:	NT5	Injection Time:	09:52
Sequence:	SEG0027	Lab Sample ID:	SEG0027-TUN1

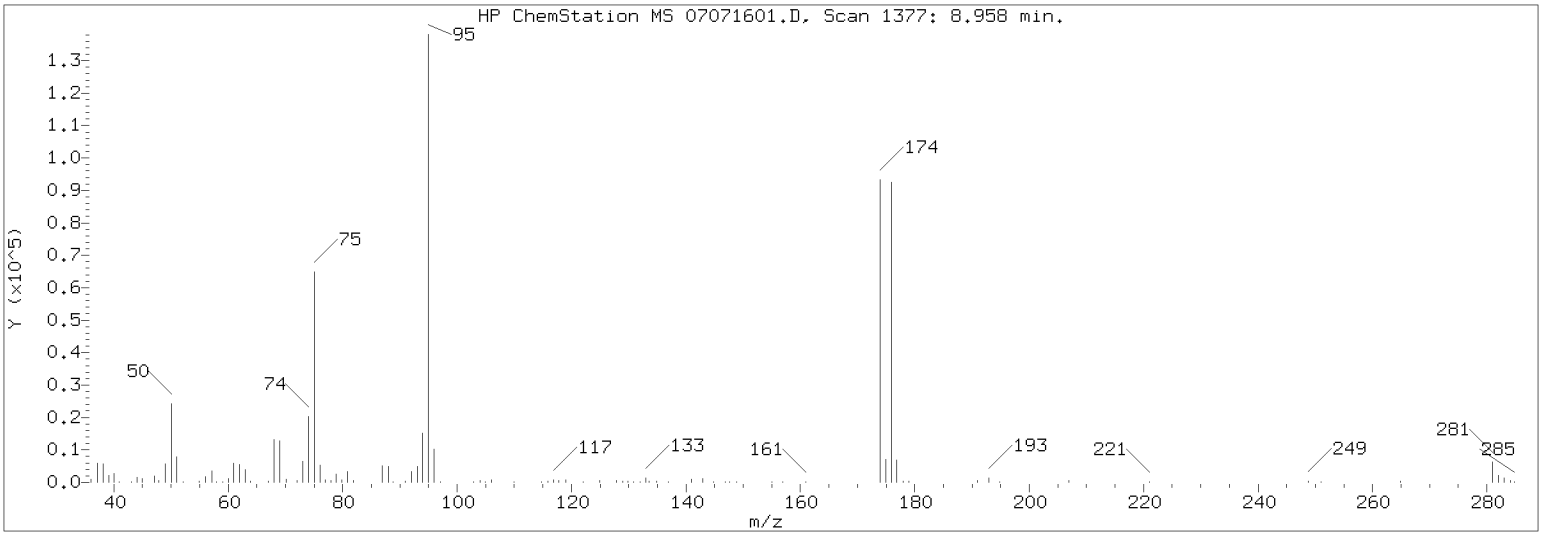
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	17.1	PASS
75	30 - 80% of 95	46.6	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.04	PASS
173	Less than 2% of 174	0.3	PASS
174	50 - 120% of 95	67.8	PASS
175	5 - 9% of 174	7.25	PASS
176	95 - 101% of 174	97.9	PASS
177	5 - 9% of 176	7.22	PASS

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Cal Check	SEG0027-ICV1	0707160icv.D	07/07/2016	12:29
LCS	BEG0041-BS1	07071612a.D	07/07/2016	16:23
LCS	BEG0040-BS1	07071612.D	07/07/2016	16:23
LCS Dup	BEG0041-BSD1	07071613a.D	07/07/2016	16:45
LCS Dup	BEG0040-BSD1	07071613.D	07/07/2016	16:45
Blank	BEG0041-BLK1	07071614a.D	07/07/2016	17:08
Blank	BEG0040-BLK1	07071614.D	07/07/2016	17:08
CHRL-O-03A-160705	16G0006-01	07071617.D	07/07/2016	18:34
CHRL-O-04A-160705	16G0006-02	07071618.D	07/07/2016	18:57
CHRL-P-03A-160705	16G0006-03	07071619.D	07/07/2016	19:19
CHRL-TB-160705	16G0006-04	07071620.D	07/07/2016	19:42
Calibration Check	SEG0027-CCV1	07071625.D	07/07/2016	21:35

BFB TUNE GRAPHIC REPORT

Datafile Analyzed: /20160707.b/07071601.D
Method Used: \20160707.b\bfb8260.m Inst: nt5
Injection Date: 07-JUL-2016 09:52 Operator: PB
Sample Info: SEG0027-TUN1 BFB0707
Report Date: 07/11/2016 11:24





m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.07
75	30.00 - 60.00% of mass 95	46.59
96	5.00 - 9.00% of mass 95	7.04
173	Less than 2.00% of mass 174	0.20 (0.30)
174	50.00 - 100.00% of mass 95	67.85
175	5.00 - 9.00% of mass 174	4.92 (7.25)
176	95.00 - 101.00% of mass 174	66.44 (97.93)
177	5.00 - 9.00% of mass 176	4.79 (7.22)

Data File: 07071601.D
Spectrum: Avg. Scans 1376-1378 (8.96), Background Scan 1371
Location of Maximum: 95.00
Number of points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1079	74.00	18184	119.00	660	172.00	67
37.00	5566	75.00	56280	122.00	56	173.00	246
38.00	5148	76.00	4745	125.00	492	174.00	81960
39.00	1890	77.00	710	126.00	103	175.00	5945
41.00	125	78.00	528	128.00	248	176.00	80264
43.00	136	79.00	2394	129.00	285	177.00	5792
44.00	742	80.00	662	130.00	371	178.00	252
45.00	1086	81.00	2649	131.00	256	179.00	301
47.00	1640	82.00	540	132.00	51	181.00	51
48.00	599	86.00	83	133.00	1370	191.00	596
49.00	4797	87.00	4762	134.00	229	193.00	1198
50.00	20624	88.00	4403	135.00	190	194.00	162
51.00	6853	89.00	86	137.00	130	195.00	134
52.00	258	91.00	339	139.00	51	205.00	126
55.00	398	92.00	2876	141.00	983	207.00	487
56.00	1601	93.00	4383	143.00	1164	208.00	58
57.00	3008	94.00	13072	146.00	137	221.00	58
58.00	237	95.00	120800	147.00	246	249.00	458
59.00	236	96.00	8501	148.00	232	250.00	61
60.00	994	97.00	314	149.00	196	251.00	230
61.00	5158	103.00	267	150.00	51	254.00	51
62.00	5050	104.00	577	152.00	52	265.00	437
63.00	3646	105.00	203	153.00	77	266.00	96
64.00	426	106.00	568	155.00	219	267.00	61
67.00	322	110.00	228	157.00	229	281.00	6821
68.00	11181	111.00	74	159.00	55	282.00	1993
69.00	11211	115.00	149	161.00	150	283.00	1382
70.00	931	116.00	382	163.00	96	284.00	340
72.00	486	117.00	691	165.00	83	285.00	145
73.00	5762	118.00	557	169.00	66		

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZG00011	Instrument:	NT5
Calibration Date:	07/07/2016 0:59	Column (1):	RTX-VMS

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Chloromethane	1	1.062393	2	0.9040749	5	0.8695418	10	0.8764056	50	0.8091066	100	0.8351325
Vinyl Chloride	1	0.8687339	2	0.810835	5	0.8033962	10	0.8142169	50	0.848197	100	0.8836404
Bromomethane	1	0.5581825	2	0.4745117	5	0.4871772	10	0.4683641	50	0.4663675	100	0.5082585
Chloroethane	1	0.5689204	2	0.4663803	5	0.4791247	10	0.4535076	50	0.4498862	100	0.4619628
Trichlorofluoromethane	1	1.239191	2	1.110296	5	0.8009099	10	0.6786055	50	0.7258283	100	0.6294601
Acrolein	5	0.1159693	10	0.1149327	25	0.1185464	50	0.1237664	250	0.1201806	500	0.1242883
1,1,2-Trichloro-1,2,2-Trifluor oethane	1	0.6325	2	0.6560224	5	0.6543875	10	0.6548479	50	0.6427599	100	0.6524427
Acetone	5	0.2641335	10	0.2242005	25	0.2151617	50	0.219073	250	0.1862484	500	0.1924921
1,1-Dichloroethene	1	0.7549498	2	0.6581456	5	0.6920525	10	0.6890161	50	0.6466334	100	0.6668364
Bromoethane	1	0.4261251	2	0.3733663	5	0.411272	10	0.3959935	50	0.3714297	100	0.374006
Iodomethane	1	0.1233917	2	0.1081475	5	0.1073731	10	0.1282563	50	0.2433958	100	0.3133759
Methylene Chloride			2	0.7033651	5	0.6896776	10	0.6916965	50	0.6459911	100	0.6673099
Acrylonitrile	1	0.2526233	2	0.2458842	5	0.263859	10	0.2664016	50	0.2382858	100	0.242985
Carbon Disulfide	1	2.234802	2	2.117775	5	2.095788	10	2.058513	50	2.049657	100	2.01266
trans-1,2-Dichloroethene	1	0.8190946	2	0.7302439	5	0.7529659	10	0.7743403	50	0.7141955	100	0.7434898
Vinyl Acetate	1	1.509617	2	1.551785	5	1.56768	10	1.572045	50	1.481751	100	1.527303
1,1-Dichloroethane	1	1.483149	2	1.343441	5	1.376943	10	1.43475	50	1.315404	100	1.365883
2-Butanone	5	8.262532E-02	10	8.009418E-02	25	8.179426E-02	50	9.307453E-02	250	8.397295E-02	500	8.661416E-02
2,2-Dichloropropane	1	1.268485	2	1.204891	5	1.227433	10	1.217501	50	1.160383	100	1.213398
cis-1,2-Dichloroethene	1	0.857054	2	0.8298986	5	0.8598009	10	0.8923324	50	0.8256431	100	0.848417
Chloroform	1	1.304278	2	1.318821	5	1.328108	10	1.34165	50	1.250746	100	1.307172
Bromochloromethane	1	0.3506772	2	0.3845243	5	0.396373	10	0.3899375	50	0.370129	100	0.3766027
1,1,1-Trichloroethane	1	1.260008	2	1.220928	5	1.242518	10	1.231882	50	1.158635	100	1.215808
1,1-Dichloropropene	1	0.4252615	2	0.3807344	5	0.3890415	10	0.3967227	50	0.3731355	100	0.3904223
Carbon tetrachloride	1	0.3654269	2	0.3521716	5	0.3735121	10	0.3892881	50	0.3809772	100	0.405183
1,2-Dichloroethane	1	0.3860024	2	0.3663076	5	0.3458977	10	0.3544266	50	0.3263345	100	0.3419394
Benzene	1	1.187468	2	1.142203	5	1.154187	10	1.168015	50	1.087973	100	1.124267
Trichloroethene	1	0.3191066	2	0.2832042	5	0.2986484	10	0.3022166	50	0.2837156	100	0.2935229

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZG00011	Instrument:	NT5
Calibration Date:	07/07/2016 0:59	Column (1):	RTX-VMS

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
1,2-Dichloropropane	1	0.2743742	2	0.2834142	5	0.285975	10	0.2886346	50	0.2694902	100	0.2807991
Bromodichloromethane	1	0.3295126	2	0.3270984	5	0.3436235	10	0.3630566	50	0.3467381	100	0.3647597
Dibromomethane	1	0.1536239	2	0.1524101	5	0.1511951	10	0.1618285	50	0.1493862	100	0.1565233
2-Chloroethyl vinyl ether	1	0.1141621	2	0.1122477	5	0.1180869	10	0.1258965	50	0.1240509	100	0.1308083
4-Methyl-2-Pentanone	5	0.1009924	10	0.1002443	25	0.1038493	50	0.1083751	250	0.0997045	500	0.1051686
cis-1,3-Dichloropropene	1	0.4428639	2	0.427682	5	0.4560447	10	0.4590963	50	0.4376449	100	0.4614209
Toluene	1	0.7874449	2	0.7344246	5	0.7504223	10	0.7556417	50	0.6990208	100	0.7239444
trans-1,3-Dichloropropene	1	0.3866781	2	0.3574221	5	0.3853129	10	0.4058453	50	0.3887621	100	0.4120283
2-Hexanone	5	0.1817862	10	0.1819813	25	0.1833464	50	0.1962099	250	0.1730336	500	0.1810391
1,1,2-Trichloroethane	1	0.2172763	2	0.2244308	5	0.2300585	10	0.2334592	50	0.2213325	100	0.2319291
1,3-Dichloropropane	1	0.3968909	2	0.3927567	5	0.4069993	10	0.4303421	50	0.398497	100	0.4197589
Tetrachloroethene	1	0.2949624	2	0.2834665	5	0.2959091	10	0.2950401	50	0.2801319	100	0.2909071
Dibromochloromethane	1	0.2414637	2	0.2559581	5	0.2636832	10	0.2737364	50	0.270214	100	0.2886974
1,2-Dibromoethane	1	0.2219725	2	0.2332355	5	0.2329277	10	0.2396985	50	0.2259973	100	0.2402857
Chlorobenzene	1	0.8395743	2	0.8004063	5	0.8185737	10	0.8423153	50	0.787714	100	0.8195269
Ethylbenzene	1	1.45505	2	1.371894	5	1.410619	10	1.422817	50	1.329704	100	1.356978
1,1,1,2-Tetrachloroethane	1	0.2717408	2	0.2707219	5	0.2865922	10	0.298291	50	0.2815378	100	0.301928
m,p-Xylene	2	0.5676965	4	0.5328262	10	0.5501753	20	0.5568895	100	0.5287284	200	0.5416863
o-Xylene	1	0.5472491	2	0.5102364	5	0.5288603	10	0.5410698	50	0.5047171	100	0.5350099
Xylenes, total	3	0.5608807	6	0.5252962	15	0.5430703	30	0.5516163	150	0.5207246	300	0.5394608
Styrene	1	0.9040673	2	0.82764	5	0.8761028	10	0.8962793	50	0.8570487	100	0.8849613
Bromoform	1	0.3277716	2	0.3171486	5	0.328131	10	0.331394	50	0.3210813	100	0.3407545
1,1,2,2-Tetrachloroethane	1	0.6187142	2	0.5961041	5	0.6031192	10	0.6361363	50	0.5886139	100	0.6090795
1,2,3-Trichloropropane			2	0.1924605	5	0.1908243	10	0.1970003	50	0.1859266	100	0.1949888
trans-1,4-Dichloro 2-Butene			2	0.1477665	5	0.1528976	10	0.1612712	50	0.1526902	100	0.158235
n-Propylbenzene	1	3.398089	2	3.192386	5	3.258667	10	3.265591	50	3.124198	100	3.016992
Bromobenzene	1	0.6471192	2	0.6139817	5	0.6443648	10	0.6511621	50	0.6238502	100	0.6379875
Isopropyl Benzene	1	2.982736	2	2.769825	5	2.80811	10	2.821333	50	2.667501	100	2.665563

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZG00011	Instrument:	NT5
Calibration Date:	07/07/2016 0:59	Column (1):	RTX-VMS

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
2-Chlorotoluene	1	1.961756	2	1.802029	5	1.917423	10	1.926402	50	1.813322	100	1.820038
4-Chlorotoluene	1	2.002832	2	1.939784	5	1.977672	10	1.994357	50	1.889129	100	1.880656
t-Butylbenzene	1	2.224433	2	2.020461	5	2.133782	10	2.134887	50	2.026981	100	2.072063
1,3,5-Trimethylbenzene	1	2.417699	2	2.234895	5	2.314248	10	2.329048	50	2.249484	100	2.252356
1,2,4-Trimethylbenzene	1	2.411294	2	2.223161	5	2.328193	10	2.335403	50	2.255843	100	2.233626
s-Butylbenzene	1	3.16702	2	2.924255	5	3.068645	10	3.080694	50	2.925217	100	2.896728
4-Isopropyl Toluene	1	2.783274	2	2.491747	5	2.609404	10	2.61419	50	2.571603	100	2.507816
1,3-Dichlorobenzene	1	1.310808	2	1.245906	5	1.270221	10	1.296969	50	1.254637	100	1.259806
1,4-Dichlorobenzene	1	1.358289	2	1.238885	5	1.286227	10	1.293086	50	1.240322	100	1.242158
n-Butylbenzene	1	2.394028	2	2.190331	5	2.277151	10	2.273106	50	2.256293	100	2.182733
1,2-Dichlorobenzene	1	1.188068	2	1.184472	5	1.207724	10	1.219079	50	1.15251	100	1.177645
1,2-Dibromo-3-chloropropane	1	0.125734	2	0.1089883	5	0.1117725	10	0.1166131	50	0.1117227	100	0.1208333
1,2,4-Trichlorobenzene	1	0.8114923	2	0.6872799	5	0.7088428	10	0.7307493	50	0.7354749	100	0.7202286
Hexachloro-1,3-Butadiene	1	0.3452463	2	0.3312556	5	0.3402558	10	0.3364004	50	0.3360248	100	0.3389991
Naphthalene	1	2.381078	2	2.170665	5	2.150524	10	2.170132	50	2.096284	100	2.088731
1,2,3-Trichlorobenzene	1	0.6960621	2	0.6632914	5	0.6784907	10	0.6763041	50	0.6749771	100	0.6742945
1,2-Dichloroethane-d4	50	0.8828401	50	0.8891529	50	0.8821828	50	0.8887537	50	0.8587	50	0.8435575
Toluene-d8	50	1.207126	50	1.21476	50	1.189217	50	1.196509	50	1.2117	50	1.190682
4-Bromofluorobenzene	50	0.5138682	50	0.5090837	50	0.5100716	50	0.5192016	50	0.5060686	50	0.5077201
1,2-Dichlorobenzene-d4	50	0.9615753	50	0.9590688	50	0.971456	50	0.9850039	50	0.9722496	50	0.9702971
Vinyl Chloride	1	0.8687339	2	0.810835	5	0.8033962	10	0.8142169	50	0.848197	100	0.8836404
Bromomethane	1	0.5581825	2	0.4745117	5	0.4871772	10	0.4683641	50	0.4663675	100	0.5082585
cis-1,2-Dichloroethene	1	0.857054	2	0.8298986	5	0.8598009	10	0.8923324	50	0.8256431	100	0.848417
Benzene	1	1.187468	2	1.142203	5	1.154187	10	1.168015	50	1.087973	100	1.124267
Trichloroethene	1	0.3191066	2	0.2832042	5	0.2986484	10	0.3022166	50	0.2837156	100	0.2935229
Toluene	1	0.7874449	2	0.7344246	5	0.7504223	10	0.7556417	50	0.6990208	100	0.7239444
Tetrachloroethene	1	0.2949624	2	0.2834665	5	0.2959091	10	0.2950401	50	0.2801319	100	0.2909071
Ethylbenzene	1	1.45505	2	1.371894	5	1.410619	10	1.422817	50	1.329704	100	1.356978

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZG00011	Instrument:	NT5
Calibration Date:	07/07/2016 0:59	Column (1):	RTX-VMS

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
m,p-Xylene	2	0.5676965	4	0.5328262	10	0.5501753	20	0.5568895	100	0.5287284	200	0.5416863
o-Xylene	1	0.5472491	2	0.5102364	5	0.5288603	10	0.5410698	50	0.5047171	100	0.5350099
1,2-Dichloroethane-d4	50	0.8828401	50	0.8891529	50	0.8821828	50	0.8887537	50	0.8587	50	0.8435575
1,2-Dichlorobenzene-d4	50	0.9615753	50	0.9590688	50	0.971456	50	0.9850039	50	0.9722496	50	0.9702971
Toluene-d8	50	1.207126	50	1.21476	50	1.189217	50	1.196509	50	1.2117	50	1.190682
4-Bromofluorobenzene	50	0.5138682	50	0.5090837	50	0.5100716	50	0.5192016	50	0.5060686	50	0.5077201

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZG00011	Instrument:	NT5
Calibration Date:	07/07/2016 0:59	Column (1):	RTX-VMS

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
Chloromethane	150	0.8276109	200	0.8383373								
Vinyl Chloride	150	0.8804117	200	0.8881128								
Bromomethane	150	0.5069203	200	0.520274								
Chloroethane	150	0.4478963	200	0.4409494								
Trichlorofluoromethane	150	0.585554	200	0.5447575								
Acrolein	750	0.1192747	1000	0.1170777								
1,1,2-Trichloro-1,2,2-Trifluor oethane	150	0.680949	200	0.6582668								
Acetone	750	0.1819971	1000	0.1879341								
1,1-Dichloroethene	150	0.6633048	200	0.6125506								
Bromoethane	150	0.3779597	200	0.3671265								
Iodomethane	150	0.340662	200	0.3259028								
Methylene Chloride	150	0.6996484	200	0.6710209								
Acrylonitrile	150	0.2338408	200	0.2362166								
Carbon Disulfide	150	1.990917	200	2.020691								
trans-1,2-Dichloroethene	150	0.750199	200	0.7359009								
Vinyl Acetate	150	1.500459	200	1.438786								
1,1-Dichloroethane	150	1.36565	200	1.340186								
2-Butanone	750	8.285519E-02	1000	0.0852881								
2,2-Dichloropropane	150	1.202756	200	1.194809								
cis-1,2-Dichloroethene	150	0.8580525	200	0.8441982								
Chloroform	150	1.313947	200	1.28973								
Bromochloromethane	150	0.3763944	200	0.3793393								
1,1,1-Trichloroethane	150	1.223758	200	1.208255								
1,1-Dichloropropene	150	0.394837	200	0.4012717								
Carbon tetrachloride	150	0.4110906	200	0.4173112								
1,2-Dichloroethane	150	0.3429034	200	0.3334954								
Benzene	150	1.099839	200	1.077963								
Trichloroethene	150	0.2995509	200	0.3031465								

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZG00011	Instrument:	NT5
Calibration Date:	07/07/2016 0:59	Column (1):	RTX-VMS

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
1,2-Dichloropropane	150	0.2842908	200	0.281206								
Bromodichloromethane	150	0.3664302	200	0.3663131								
Dibromomethane	150	0.1585749	200	0.15644								
2-Chloroethyl vinyl ether	150	0.1298326	200	0.1232429								
4-Methyl-2-Pentanone	750	0.1014194	1000	0.1011034								
cis-1,3-Dichloropropene	150	0.4673541	200	0.4629135								
Toluene	150	0.7237795	200	0.7222993								
trans-1,3-Dichloropropene	150	0.4140174	200	0.4135355								
2-Hexanone	750	0.171434	1000	0.1693152								
1,1,2-Trichloroethane	150	0.2338887	200	0.2325885								
1,3-Dichloropropane	150	0.4166474	200	0.4132651								
Tetrachloroethene	150	0.297167	200	0.3014201								
Dibromochloromethane	150	0.2938385	200	0.2920459								
1,2-Dibromoethane	150	0.2379556	200	0.2369208								
Chlorobenzene	150	0.819106	200	0.8126386								
Ethylbenzene	150	1.309668	200	1.275392								
1,1,1,2-Tetrachloroethane	150	0.3073454	200	0.3098432								
m,p-Xylene	300	0.5308289	400	0.5155313								
o-Xylene	150	0.5391897	200	0.5388222								
Xylenes, total	450	0.5336158	600	0.523295								
Styrene	150	0.8931805	200	0.8739304								
Bromoform	150	0.3323895	200	0.3387514								
1,1,2,2-Tetrachloroethane	150	0.5880118	200	0.5884175								
1,2,3-Trichloropropane	150	0.1845413	200	0.1868782								
trans-1,4-Dichloro 2-Butene	150	0.1522282	200	0.153239								
n-Propylbenzene	150	2.809782										
Bromobenzene	150	0.6287045	200	0.6398949								
Isopropyl Benzene	150	2.486884	200	2.457896								

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZG00011	Instrument:	NT5
Calibration Date:	07/07/2016 0:59	Column (1):	RTX-VMS

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
2-Chlorotoluene	150	1.763945	200	1.769015								
4-Chlorotoluene	150	1.839887	200	1.832536								
t-Butylbenzene	150	1.975202	200	1.983994								
1,3,5-Trimethylbenzene	150	2.150565	200	2.125196								
1,2,4-Trimethylbenzene	150	2.165483	200	2.130386								
s-Butylbenzene	150	2.719425										
4-Isopropyl Toluene	150	2.424585	200	2.381023								
1,3-Dichlorobenzene	150	1.264224	200	1.263811								
1,4-Dichlorobenzene	150	1.251153	200	1.249579								
n-Butylbenzene	150	2.137284	200	2.113581								
1,2-Dichlorobenzene	150	1.176168	200	1.172264								
1,2-Dibromo-3-chloropropane	150	0.1124239	200	0.1160005								
1,2,4-Trichlorobenzene	150	0.7485373	200	0.7585986								
Hexachloro-1,3-Butadiene	150	0.3492502	200	0.3614845								
Naphthalene	150	1.917534	200	1.908825								
1,2,3-Trichlorobenzene	150	0.6735966	200	0.6926559								
1,2-Dichloroethane-d4	50	0.8461465	50	0.8171914								
Toluene-d8	50	1.196909	50	1.192201								
4-Bromofluorobenzene	50	0.5212442	50	0.5146131								
1,2-Dichlorobenzene-d4	50	0.9734792	50	0.9591627								
Vinyl Chloride	150	0.8804117	200	0.8881128								
Bromomethane	150	0.5069203	200	0.520274								
cis-1,2-Dichloroethene	150	0.8580525	200	0.8441982								
Benzene	150	1.099839	200	1.077963								
Trichloroethene	150	0.2995509	200	0.3031465								
Toluene	150	0.7237795	200	0.7222993								
Tetrachloroethene	150	0.297167	200	0.3014201								
Ethylbenzene	150	1.309668	200	1.275392								

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZG00011	Instrument:	NT5
Calibration Date:	07/07/2016 0:59	Column (1):	RTX-VMS

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
m,p-Xylene	300	0.5308289	400	0.5155313								
o-Xylene	150	0.5391897	200	0.5388222								
1,2-Dichloroethane-d4	50	0.8461465	50	0.8171914								
1,2-Dichlorobenzene-d4	50	0.9734792	50	0.9591627								
Toluene-d8	50	1.196909	50	1.192201								
4-Bromofluorobenzene	50	0.5212442	50	0.5146131								

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZG00011	Instrument:	NT5
Calibration Date:	07/07/2016 0:59	Column (1):	RTX-VMS

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	RSD Limit	Q
Chloromethane	0.8778253	9.2			20	
Vinyl Chloride	0.849693	4.2			20	
Bromomethane	0.498757	6.3			20	
Chloroethane	0.4710785	8.8			20	
Trichlorofluoromethane	0.7893253	32.1	0.9906		0.99	*
Acrolein	0.1192545	2.9			20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.654022	2.1			20	
Acetone	0.2089051	13.3	0.9993		0.99	*
1,1-Dichloroethene	0.6729361	6.2			20	
Bromoethane	0.3871599	5.6			20	
Iodomethane	0.2113131	49.8	0.9935		0.99	*
Methylene Chloride	0.6812442	3.0			20	
Acrylonitrile	0.247512	5.0			20	
Carbon Disulfide	2.0726	3.8			20	
trans-1,2-Dichloroethene	0.7525537	4.3			20	
Vinyl Acetate	1.518678	3.0			20	
1,1-Dichloroethane	1.378176	4.0			20	
2-Butanone	8.453984E-02	4.7			20	
2,2-Dichloropropane	1.211207	2.5			20	
cis-1,2-Dichloroethene	0.8519246	2.4			20	
Chloroform	1.306806	2.1			20	
Bromochloromethane	0.3779972	3.7			20	
1,1,1-Trichloroethane	1.220224	2.4			20	
1,1-Dichloropropene	0.3939283	3.9			20	
Carbon tetrachloride	0.3868701	6.0			20	
1,2-Dichloroethane	0.3496634	5.5			20	
Benzene	1.130239	3.5			20	
Trichloroethene	0.297889	3.9			20	
1,2-Dichloropropane	0.281023	2.2			20	
Bromodichloromethane	0.3509415	4.7			20	
Dibromomethane	0.1549977	2.7			20	
2-Chloroethyl vinyl ether	0.122291	5.6			20	

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZG00011	Instrument:	NT5
Calibration Date:	07/07/2016 0:59	Column (1):	RTX-VMS

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	RSD Limit	Q
4-Methyl-2-Pentanone	0.1026071	2.9			20	
cis-1,3-Dichloropropene	0.4518775	3.1			20	
Toluene	0.7371222	3.7			20	
trans-1,3-Dichloropropene	0.3954502	5.0			20	
2-Hexanone	0.1797682	4.8			20	
1,1,2-Trichloroethane	0.2281205	2.8			20	
1,3-Dichloropropane	0.4093947	3.2			20	
Tetrachloroethene	0.2923755	2.5			20	
Dibromochloromethane	0.2724546	6.8			20	
1,2-Dibromoethane	0.2336242	2.8			20	
Chlorobenzene	0.8174819	2.2			20	
Ethylbenzene	1.366515	4.5			20	
1,1,1,2-Tetrachloroethane	0.291	5.3			20	
m,p-Xylene	0.5405453	3.1			20	
o-Xylene	0.5306443	2.9			20	
Xylenes, total	0.537245	2.7			20	
Styrene	0.8766513	2.8			20	
Bromoform	0.3296777	2.4			20	
1,1,2,2-Tetrachloroethane	0.6035246	2.9			20	
1,2,3-Trichloropropane	0.1903743	2.5			20	
trans-1,4-Dichloro 2-Butene	0.1540468	2.9			20	
n-Propylbenzene	3.152244	6.1			20	
Bromobenzene	0.6358831	2.0			20	
Isopropyl Benzene	2.707481	6.5			20	
2-Chlorotoluene	1.846741	4.2			20	
4-Chlorotoluene	1.919607	3.6			20	
t-Butylbenzene	2.071475	4.2			20	
1,3,5-Trimethylbenzene	2.259186	4.2			20	
1,2,4-Trimethylbenzene	2.260424	4.1			20	
s-Butylbenzene	2.968855	5.0			20	
4-Isopropyl Toluene	2.547955	5.0			20	
1,3-Dichlorobenzene	1.270798	1.7			20	

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZG00011	Instrument:	NT5
Calibration Date:	07/07/2016 0:59	Column (1):	RTX-VMS

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	RSD Limit	Q
1,4-Dichlorobenzene	1.269962	3.3			20	
n-Butylbenzene	2.228063	4.1			20	
1,2-Dichlorobenzene	1.184741	1.8			20	
1,2-Dibromo-3-chloropropane	0.115511	4.8			20	
1,2,4-Trichlorobenzene	0.7376505	5.1			20	
Hexachloro-1,3-Butadiene	0.3423646	2.8			20	
Naphthalene	2.110472	7.2			20	
1,2,3-Trichlorobenzene	0.6787091	1.6			20	
1,2-Dichloroethane-d4	0.8635656	3.1			20	
Toluene-d8	1.199888	0.8			20	
4-Bromofluorobenzene	0.5127339	1.1			20	
1,2-Dichlorobenzene-d4	0.9690366	0.9			20	
Vinyl Chloride	0.849693	4.2			20	
Bromomethane	0.498757	6.3			20	
cis-1,2-Dichloroethene	0.8519246	2.4			20	
Benzene	1.130239	3.5			20	
Trichloroethene	0.297889	3.9			20	
Toluene	0.7371222	3.7			20	
Tetrachloroethene	0.2923755	2.5			20	
Ethylbenzene	1.366515	4.5			20	
m,p-Xylene	0.5405453	3.1			20	
o-Xylene	0.5306443	2.9			20	
1,2-Dichloroethane-d4	0.8635656	3.1			20	
1,2-Dichlorobenzene-d4	0.9690366	0.9			20	
Toluene-d8	1.199888	0.8			20	
4-Bromofluorobenzene	0.5127339	1.1			20	

Analysis	Matrix	Method
8260C VOA	Solid	EPA 8260C
8260C VOA Solid	Solid	EPA 8260C
8260C VOA Solid (MeOH)	Solid	EPA 8260C

Checklist: Initial Calibration Checklist-VOA

#	Checklist Item	Response	Analyst Initials	Date
1	Element Calibration Code	YES	PAB	07/08/2016
	Comments: *ZG00011*			
2	BFB Tune met Criteria	YES	PAB	07/08/2016
3	ICal meets 20% RSD, LR COD, and QR COD limits	YES	PAB	07/08/2016
4	NO ICAL Q Flag applied	YES	PAB	07/08/2016
5	Manual integrations include before/after pictures	YES	PAB	07/08/2016
6	Internal Standard areas within 50-200% from reference	YES	PAB	07/08/2016
7	Spectral Library updated	YES	PAB	07/08/2016
8	Minimum response factors met	NO	PAB	07/08/2016
	Comments: *4MIBK 50 level 0.09970 RF (RRF 0.10261 2.89255%RSD)*			
9	All SCV within +/- 20% (DOD)	NO	PAB	07/08/2016
	Comments: *VC 128.63%R, TCFM 120.49%, iodomethane 125.59%, carbon disulfide 78.53%, 2CEVE 72.90%, acetone 78.82%*			
10	All SCV within +/- 30%	NO	PAB	07/08/2016
	Comments: *bromomethane 159.76%R*			
11	NO Linear or Quadratic Fits Used	NO	PAB	07/08/2016
	Comments: *TCFM, iodomethane- linear*			
12	NO Calibration points dropped	NO	PAB	07/08/2016
	Comments: *DCM 1, acrylonitrile 1, 2CEVE 1,2,200, n-propyl benzene 200, 1,2,3TCP 1, trans 1,4dichloro2butene 1, s-butyl benzene 200, 1,2DBCP 1, HCBD 1, 1,2,4 TCB 1, naphthalene 1, 1,2,3 TCB 1*			
13	Additional Notes	NA	PAB	07/08/2016
14	Reviewer Approval (Reviewer)	YES	BB	07/08/2016

* = Indicates Automated Response from Element DataSyst

Data File: \\target\share\chem1\nt5.i\20160707.b\07071601.D

Date : 07-JUL-2016 09:52

Client ID: BFB070

Instrument: nt5.i

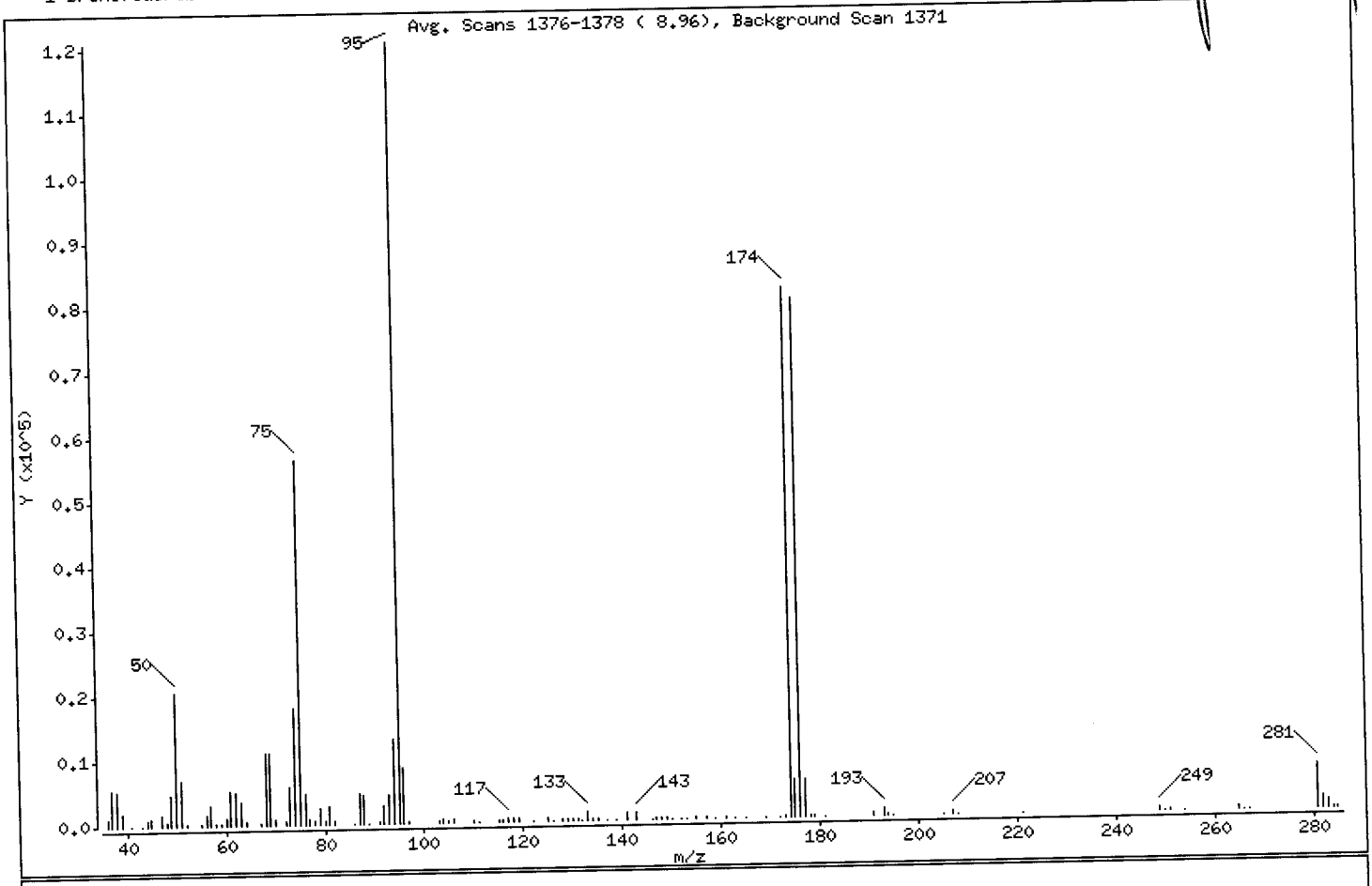
Sample Info: BFB0707

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.07
75	30.00 - 60.00% of mass 95	46.59
96	5.00 - 9.00% of mass 95	7.04
173	Less than 2.00% of mass 174	0.20 (0.30)
174	50.00 - 100.00% of mass 95	67.85
175	5.00 - 9.00% of mass 174	4.92 (7.25)
176	95.00 - 101.00% of mass 174	66.44 (97.93)
177	5.00 - 9.00% of mass 176	4.79 (7.22)

Data File: \\target\share\chem1\nt5.i\20160707.b\07071601.D

Date : 07-JUL-2016 09:52

Client ID: BFB070

Instrument: nt5.i

Sample Info: BFB0707

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18

Data File: 07071601.D

Spectrum: Avg. Scans 1376-1378 (8.96), Background Scan 1371

Location of Maximum: 95.00

Number of points: 119

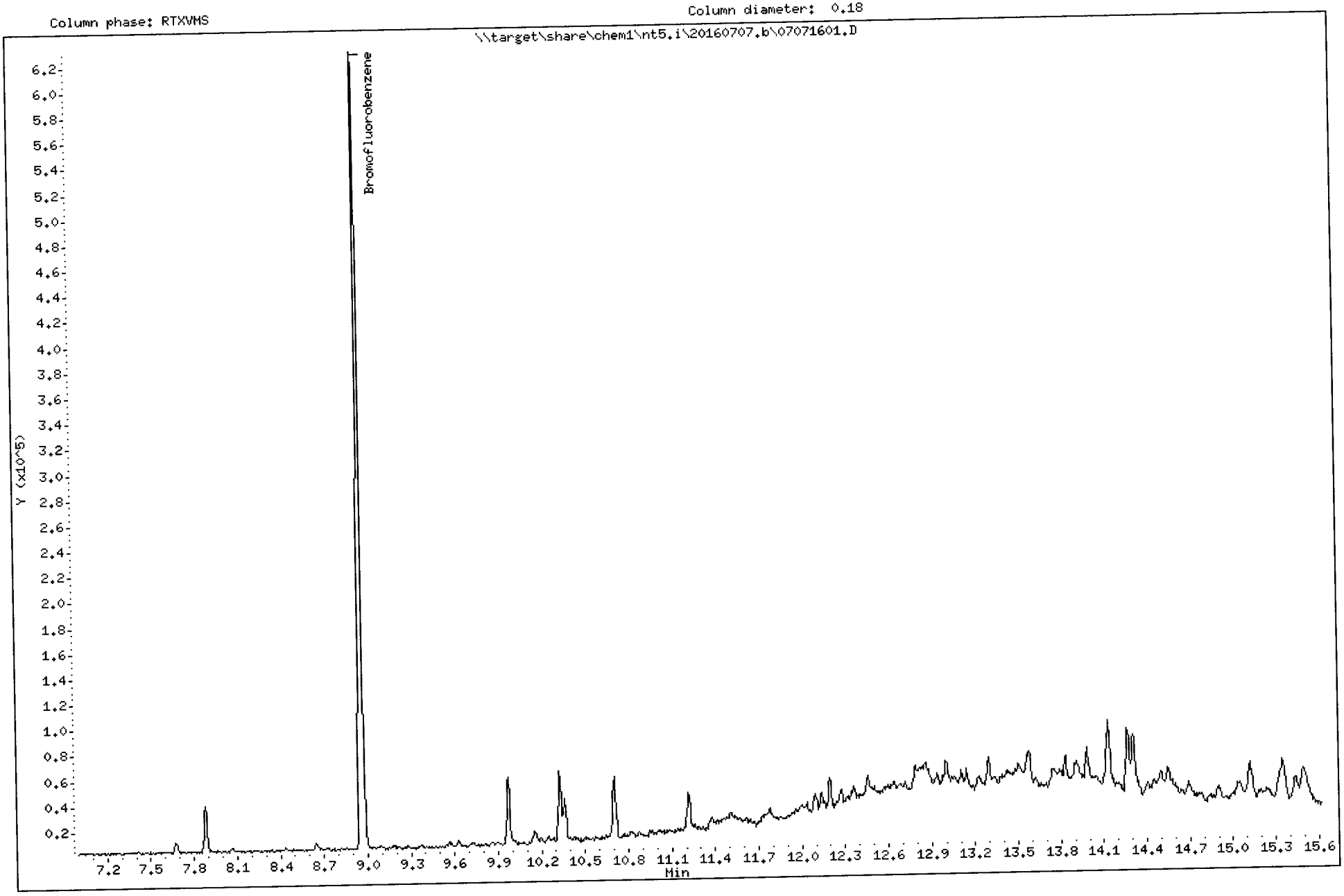
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1079	74.00	18184	119.00	660	172.00	67
37.00	5566	75.00	56280	122.00	56	173.00	246
38.00	5148	76.00	4745	125.00	492	174.00	81960
39.00	1890	77.00	710	126.00	103	175.00	5945
41.00	125	78.00	528	128.00	248	176.00	80264
43.00	136	79.00	2394	129.00	285	177.00	5792
44.00	742	80.00	662	130.00	371	178.00	252
45.00	1086	81.00	2649	131.00	256	179.00	301
47.00	1640	82.00	540	132.00	51	181.00	51
48.00	599	86.00	83	133.00	1370	191.00	596
49.00	4797	87.00	4762	134.00	229	193.00	1198
50.00	20624	88.00	4403	135.00	190	194.00	162
51.00	6853	89.00	86	137.00	130	195.00	134
52.00	258	91.00	339	139.00	51	205.00	126
55.00	398	92.00	2876	141.00	983	207.00	487
56.00	1601	93.00	4383	143.00	1164	208.00	58
57.00	3008	94.00	13072	146.00	137	221.00	58
58.00	237	95.00	120800	147.00	246	249.00	458
59.00	236	96.00	8501	148.00	232	250.00	61
60.00	994	97.00	314	149.00	196	251.00	230
61.00	5158	103.00	267	150.00	51	254.00	51
62.00	5050	104.00	577	152.00	52	265.00	437
63.00	3646	105.00	203	153.00	77	266.00	96
64.00	426	106.00	568	155.00	219	267.00	61
67.00	322	110.00	228	157.00	229	281.00	6821
68.00	11181	111.00	74	159.00	55	282.00	1993
69.00	11211	115.00	149	161.00	150	283.00	1382
70.00	931	116.00	382	163.00	96	284.00	340
72.00	486	117.00	691	165.00	83	285.00	145
73.00	5762	118.00	557	169.00	66		

Data File: \\target\share\chem1\nt5.i\20160707.b\07071601.D
Date : 07-JUL-2016 09:52
Client ID: BFB070
Sample Info: BFB0707

Instrument: nt5.i

Operator: PB
Column diameter: 0.18

Column phase: RTXVMS



ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JUL-2016 10:58
End Cal Date : 07-JUL-2016 13:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb

Calibration File Names:
Level 1: \\target\share\chem1\nt5.i\20160707.b\07071603.D
Level 2: \\target\share\chem1\nt5.i\20160707.b\07071604.D
Level 3: \\target\share\chem1\nt5.i\20160707.b\07071605.D
Level 4: \\target\share\chem1\nt5.i\20160707.b\07071606.D
Level 5: \\target\share\chem1\nt5.i\20160707.b\07071607.D
Level 6: \\target\share\chem1\nt5.i\20160707.b\07071608.D
Level 7: \\target\share\chem1\nt5.i\20160707.b\07071609.D
Level 8: \\target\share\chem1\nt5.i\20160707.b\07071610.D

Compound	1.0000 Level 1	2.0000 Level 2	5.0000 Level 3	10.0000 Level 4	50.0000 Level 5	100.0000 Level 6	150.0000 Level 7	200.0000 Level 8	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
1 Dichlorodifluoromethane	0.75617	0.71606	0.72116	0.67947	0.72463	0.75607	0.77069	0.76986	AVRG		0.73676		4.32180
2 Chloromethane	1.06239	0.90407	0.86954	0.87641	0.80911	0.83513	0.82761	0.83834	AVRG		0.87783		9.17936
3 Vinyl Chloride	0.86873	0.81083	0.80340	0.81422	0.84820	0.88364	0.88041	0.88811	AVRG		0.84969		4.18439

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JUL-2016 10:58
End Cal Date : 07-JUL-2016 13:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb

Compound	1.0000 Level 1	2.0000 Level 2	5.0000 Level 3	10.0000 Level 4	50.0000 Level 5	100.0000 Level 6	150.0000 Level 7	200.0000 Level 8	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
4 Bromomethane	0.55818	0.47451	0.48718	0.46836	0.46637	0.50826							
	0.50692	0.52027							AVRG		0.49876		6.27020
5 Chloroethane	0.56892	0.46638	0.47912	0.45351	0.44989	0.46196							
	0.44790	0.44095							AVRG		0.47108		8.76937
6 Trichlorofluoromethane	13156	24578	43166	74180	407938	721880							
	1026068	1280263							LINR	0.000e+000	0.57758		0.99061
7 1,1-Dichloroethene	0.75495	0.65815	0.69205	0.68902	0.64663	0.66684							
	0.66330	0.61255							AVRG		0.67294		6.16226
8 Carbon Disulfide	2.23480	2.11778	2.09579	2.05851	2.04966	2.01266							
	1.99092	2.02069							AVRG		2.07260		3.76269
9 112Trichloro122Trifluoroethan	0.63250	0.65602	0.65439	0.65485	0.64276	0.65244							
	0.68095	0.65827							AVRG		0.65402		2.11582
10 Iodomethane	1310	2394	5787	14020	136796	359387							
	596943	765921							LINR	0.000e+000	0.32674		0.99349

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JUL-2016 10:58
End Cal Date : 07-JUL-2016 13:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb

Compound	1.0000 Level 1	2.0000 Level 2	5.0000 Level 3	10.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	150.0000 Level 7	200.0000 Level 8									
11 Bromoethane	0.42613	0.37337	0.41127	0.39599	0.37143	0.37401					
	0.37796	0.36713					AVRG		0.38716		5.58635
12 Acrolein	0.11597	0.11493	0.11855	0.12377	0.12018	0.12429					
	0.11927	0.11708					AVRG		0.11925		2.85711
13 Methylene Chloride	+++++	0.70337	0.68968	0.69170	0.64599	0.66731					
	0.69965	0.67102					AVRG		0.68124		3.02609
14 Acetone	0.26413	0.22420	0.21516	0.21907	0.18625	0.19249					
	0.18200	0.18793					AVRG		0.20891		13.26228
15 Trans-1,2-Dichloroethene	0.81909	0.73024	0.75297	0.77434	0.71420	0.74349					
	0.75020	0.73590					AVRG		0.75255		4.27249
16 Methyl tert butyl ether	2.05650	2.09835	2.14869	2.21984	2.02529	2.10154					
	2.10221	2.00900					AVRG		2.09518		3.24262
17 1,1-Dichloroethane	1.48315	1.34344	1.37694	1.43475	1.31540	1.36588					
	1.36565	1.34019					AVRG		1.37818		3.98556

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JUL-2016 10:58
End Cal Date : 07-JUL-2016 13:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb

Compound	1.0000 Level 1	2.0000 Level 2	5.0000 Level 3	10.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	150.0000 Level 7	200.0000 Level 8										
18 Acrylonitrile	+++++	0.24588	0.26386	0.26640	0.23829	0.24298						
	0.23384	0.23622					AVRG		0.24678		5.34277	
19 Vinyl Acetate	1.50962	1.55179	1.56768	1.57204	1.48175	1.52730						
	1.50046	1.43879					AVRG		1.51868		3.00514	
20 Cis-1,2-Dichloroethene	0.85705	0.82990	0.85980	0.89233	0.82564	0.84842						
	0.85805	0.84420					AVRG		0.85192		2.43268	
21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+000		0.000e+000	<-
22 2,2-Dichloropropane	1.26849	1.20489	1.22743	1.21750	1.16038	1.21340						
	1.20276	1.19481					AVRG		1.21121		2.52589	
23 Bromochloromethane	0.35068	0.38452	0.39637	0.38994	0.37013	0.37660						
	0.37639	0.37934					AVRG		0.37800		3.65680	
24 Chloroform	1.30428	1.31882	1.32811	1.34165	1.25075	1.30717						
	1.31395	1.28973					AVRG		1.30681		2.10643	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JUL-2016 10:58
End Cal Date : 07-JUL-2016 13:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb

Compound	1.0000 Level 1	2.0000 Level 2	5.0000 Level 3	10.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	150.0000 Level 7	200.0000 Level 8									
25 Carbon Tetrachloride	0.36543	0.35217	0.37351	0.38929	0.38098	0.40518					
	0.41109	0.41731					AVRG		0.38687		5.96795
26 1,1,1-Trichloroethane	1.26001	1.22093	1.24252	1.23188	1.15864	1.21581					
	1.22376	1.20826					AVRG		1.22022		2.43594
28 1,1-Dichloropropene	0.42526	0.38073	0.38904	0.39672	0.37314	0.39042					
	0.39484	0.40127					AVRG		0.39393		3.94077
29 2-Butanone	0.08263	0.08009	0.08179	0.09307	0.08397	0.08661					
	0.08286	0.08529					AVRG		0.08454		4.72791
30 Benzene	1.18747	1.14220	1.15419	1.16802	1.08797	1.12427					
	1.09984	1.07796					AVRG		1.13024		3.49101
33 1,2-Dichloroethane	0.38600	0.36631	0.34590	0.35443	0.32633	0.34194					
	0.34290	0.33350					AVRG		0.34966		5.45357
34 Trichloroethene	0.31911	0.28320	0.29865	0.30222	0.28372	0.29352					
	0.29955	0.30315					AVRG		0.29789		3.88075

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JUL-2016 10:58
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Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb

Compound	1.0000 Level 1	2.0000 Level 2	5.0000 Level 3	10.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	150.0000 Level 7	200.0000 Level 8										
36 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+000		0.000e+000	<-
37 Dibromomethane	0.15362	0.15241	0.15120	0.16183	0.14939	0.15652						
	0.15857	0.15644					AVRG		0.15500		2.65333	
38 1,2-Dichloropropane	0.27437	0.28341	0.28597	0.28863	0.26949	0.28080						
	0.28429	0.28121					AVRG		0.28102		2.23502	
39 Bromodichloromethane	0.32951	0.32710	0.34362	0.36306	0.34674	0.36476						
	0.36643	0.36631					AVRG		0.35094		4.71035	
172 2-Pentanone	0.03525	0.03690	0.03782	0.04106	0.03814	0.04012						
	0.03917	0.03983					AVRG		0.03853		4.91826	
40 2-Chloroethyl Vinyl Ether	+++++	+++++	0.11809	0.12590	0.12405	0.13081						
	0.12983	+++++					AVRG		0.12574		4.05312	
41 Cis 1,3-dichloropropene	0.44286	0.42768	0.45604	0.45910	0.43764	0.46142						
	0.46735	0.46291					AVRG		0.45188		3.11968	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JUL-2016 10:58
End Cal Date : 07-JUL-2016 13:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb

Compound	1.0000 Level 1	2.0000 Level 2	5.0000 Level 3	10.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	150.0000 Level 7	200.0000 Level 8										
43 Toluene	0.78744	0.73442	0.75042	0.75564	0.69902	0.72394						
	0.72378	0.72230					AVRG		0.73712		3.65558	
44 Tetrachloroethene	0.29496	0.28347	0.29591	0.29504	0.28013	0.29091						
	0.29717	0.30142					AVRG		0.29238		2.46122	
45 4-Methyl-2-Pentanone	0.10099	0.10024	0.10385	0.10838	0.09970	0.10517						
	0.10142	0.10110					AVRG		0.10261		2.89255	<-
46 Trans 1,3-Dichloropropene	0.38668	0.35742	0.38531	0.40585	0.38876	0.41203						
	0.41402	0.41354					AVRG		0.39545		4.98960	
47 1,1,2-Trichloroethane	0.21728	0.22443	0.23006	0.23346	0.22133	0.23193						
	0.23389	0.23259					AVRG		0.22812		2.75899	
48 Chlorodibromomethane	0.24146	0.25596	0.26368	0.27374	0.27021	0.28870						
	0.29384	0.29205					AVRG		0.27245		6.82593	
49 1,3-Dichloropropane	0.39689	0.39276	0.40700	0.43034	0.39850	0.41976						
	0.41665	0.41327					AVRG		0.40939		3.15989	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JUL-2016 10:58
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Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb

Compound	1.0000 Level 1 / 150.0000 Level 7	2.0000 Level 2 / 200.0000 Level 8	5.0000 Level 3	10.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
50 1,2-Dibromoethane	0.22197	0.23324	0.23293	0.23970	0.22600	0.24029					
	0.23796	0.23692					AVRG		0.23362		2.82759
51 2-Hexanone	0.18179	0.18198	0.18335	0.19621	0.17303	0.18104					
	0.17143	0.16932					AVRG		0.17977		4.78429
53 Chlorobenzene	0.83957	0.80041	0.81857	0.84232	0.78771	0.81953					
	0.81911	0.81264					AVRG		0.81748		2.22407
54 Ethyl Benzene	1.45505	1.37189	1.41062	1.42282	1.32970	1.35698					
	1.30967	1.27539					AVRG		1.36652		4.45674
55 1,1,1,2-Tetrachloroethane	0.27174	0.27072	0.28659	0.29829	0.28154	0.30193					
	0.30735	0.30984					AVRG		0.29100		5.33303
56 m,p-xylene	0.56770	0.53283	0.55018	0.55689	0.52873	0.54169					
	0.53083	0.51553					AVRG		0.54055		3.14084
57 o-Xylene	0.54725	0.51024	0.52886	0.54107	0.50472	0.53501					
	0.53919	0.53882					AVRG		0.53064		2.88032

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JUL-2016 10:58
End Cal Date : 07-JUL-2016 13:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb

Compound	1.0000 Level 1	2.0000 Level 2	5.0000 Level 3	10.0000 Level 4	50.0000 Level 5	100.0000 Level 6	150.0000 Level 7	200.0000 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
58 Styrene	0.90407	0.82764	0.87610	0.89628	0.85705	0.88496								
	0.89318	0.87393							AVRG		0.87665		2.81840	
59 Bromoform	0.32777	0.31715	0.32813	0.33139	0.32108	0.34075								
	0.33239	0.33875							AVRG		0.32968		2.43804	
60 Isopropyl Benzene	2.98274	2.76982	2.80811	2.82133	2.66750	2.66556								
	2.48688	2.45790							AVRG		2.70748		6.50379	
61 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++								
	+++++	+++++							AVRG		0.000e+000		0.000e+000	<-
63 Bromobenzene	0.64712	0.61398	0.64436	0.65116	0.62385	0.63799								
	0.62870	0.63989							AVRG		0.63588		1.99645	
64 N-Propyl Benzene	3.39809	3.19239	3.25867	3.26559	3.12420	3.01699								
	2.80978	+++++							AVRG		3.15224		6.11016	
65 1,1,2,2-Tetrachloroethane	0.61871	0.59610	0.60312	0.63614	0.58861	0.60908								
	0.58801	0.58842							AVRG		0.60352		2.85037	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JUL-2016 10:58
End Cal Date : 07-JUL-2016 13:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb

Compound	1.0000 Level 1	2.0000 Level 2	5.0000 Level 3	10.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	150.0000 Level 7	200.0000 Level 8									
66 2-Chloro Toluene	1.96176	1.80203	1.91742	1.92640	1.81332	1.82004					
	1.76394	1.76901					AVRG		1.84674		4.15909
67 1,3,5-Trimethyl Benzene	2.41770	2.23489	2.31425	2.32905	2.24948	2.25236					
	2.15057	2.12520					AVRG		2.25919		4.21657
68 1,2,3-Trichloropropane	+++++	0.19246	0.19082	0.19700	0.18593	0.19499					
	0.18454	0.18688					AVRG		0.19037		2.49882
69 Trans-1,4-Dichloro 2-Butene	+++++	0.14777	0.15290	0.16127	0.15269	0.15824					
	0.15223	0.15324					AVRG		0.15405		2.85795
70 4-Chloro Toluene	2.00283	1.93978	1.97767	1.99436	1.88913	1.88066					
	1.83989	1.83254					AVRG		1.91961		3.55918
71 T-Butyl Benzene	2.22443	2.02046	2.13378	2.13489	2.02698	2.07206					
	1.97520	1.98399					AVRG		2.07148		4.19277
72 1,2,4-Trimethylbenzene	2.41129	2.22316	2.32819	2.33540	2.25584	2.23363					
	2.16548	2.13039					AVRG		2.26042		4.13070

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JUL-2016 10:58
End Cal Date : 07-JUL-2016 13:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb

Compound	1.0000 Level 1	2.0000 Level 2	5.0000 Level 3	10.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	150.0000 Level 7	200.0000 Level 8									
73 S-Butyl Benzene	3.16702	2.92425	3.06865	3.08069	2.92522	2.89673					
	2.71943	+++++					AVRG		2.96885		5.01576
74 4-Isopropyl Toluene	2.78327	2.49175	2.60940	2.61419	2.57160	2.50782					
	2.42458	2.38102					AVRG		2.54796		4.96340
75 1,3-Dichlorobenzene	1.31081	1.24591	1.27022	1.29697	1.25464	1.25981					
	1.26422	1.26381					AVRG		1.27080		1.72908
77 1,4-Dichlorobenzene	1.35829	1.23889	1.28623	1.29309	1.24032	1.24216					
	1.25115	1.24958					AVRG		1.26996		3.25855
78 N-Butyl Benzene	2.39403	2.19033	2.27715	2.27311	2.25629	2.18273					
	2.13728	2.11358					AVRG		2.22806		4.07150
80 1,2-Dichlorobenzene	1.18807	1.18447	1.20772	1.21908	1.15251	1.17764					
	1.17617	1.17226					AVRG		1.18474		1.75808
81 1,2-Dibromo 3-Chloropropane	+++++	0.10899	0.11177	0.11661	0.11172	0.12083					
	0.11242	0.11600					AVRG		0.11405		3.49358

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JUL-2016 10:58
End Cal Date : 07-JUL-2016 13:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb

Compound	1.0000 Level 1	2.0000 Level 2	5.0000 Level 3	10.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	150.0000 Level 7	200.0000 Level 8									
82 Hexachloro 1,3-Butadiene	+++++	0.33126	0.34026	0.33640	0.33602	0.33900					
	0.34925	0.36148					AVRG		0.34195		2.98884
83 1,2,4-Trichlorobenzene	+++++	0.68728	0.70884	0.73075	0.73547	0.72023					
	0.74854	0.75860					AVRG		0.72710		3.32237
84 Naphthalene	+++++	2.17067	2.15052	2.17013	2.09628	2.08873					
	1.91753	1.90883					AVRG		2.07181		5.46383
85 1,2,3-Trichlorobenzene	+++++	0.66329	0.67849	0.67630	0.67498	0.67429					
	0.67360	0.69266					AVRG		0.67623		1.28718
$ 27 Dibromofluoromethane	0.86222	0.86404	0.87061	0.87341	0.88418	0.86283					
	0.88796	0.85790					AVRG		0.87039		1.24972
$ 32 d4-1,2-Dichloroethane	0.88284	0.88915	0.88218	0.88875	0.85870	0.84356					
	0.84615	0.81719					AVRG		0.86357		3.05914
$ 42 d8-Toluene	1.20713	1.21476	1.18922	1.19651	1.21170	1.19068					
	1.19691	1.19220					AVRG		1.19989		0.82809

ARI Labs, Inc.

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Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb

Compound	1.0000 Level 1	2.0000 Level 2	5.0000 Level 3	10.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	150.0000 Level 7	200.0000 Level 8									
$ 62 4-Bromofluorobenzene	0.51387	0.50908	0.51007	0.51920	0.50607	0.50772					
	0.52124	0.51461					AVRG		0.51273		1.06582
$ 79 d4-1,2-Dichlorobenzene	0.96158	0.95907	0.97146	0.98500	0.97225	0.97030					
	0.97348	0.95916					AVRG		0.96904		0.91054

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JUL-2016 10:58
End Cal Date : 07-JUL-2016 13:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JUL-2016 10:58
End Cal Date : 07-JUL-2016 13:37
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem1\nt5.i\20160707.b\07071603.D
Level 2: \\target\share\chem1\nt5.i\20160707.b\07071604.D
Level 3: \\target\share\chem1\nt5.i\20160707.b\07071605.D
Level 4: \\target\share\chem1\nt5.i\20160707.b\07071606.D
Level 5: \\target\share\chem1\nt5.i\20160707.b\07071607.D
Level 6: \\target\share\chem1\nt5.i\20160707.b\07071608.D
Level 7: \\target\share\chem1\nt5.i\20160707.b\07071609.D
Level 8: \\target\share\chem1\nt5.i\20160707.b\07071610.D

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	150.000 Level 7	200.000 Level 8	RRF	% RSD	
1 Dichlorodifluoromethane	0.75617	0.71606	0.72116	0.67947	0.72463	0.75607	0.77069	0.76986	0.73676	4.322	
2 Chloromethane	1.06239	0.90407	0.86954	0.87641	0.80911	0.83513	0.82761	0.83834	0.87783	9.179	
3 Vinyl Chloride	0.86873	0.81083	0.80340	0.81422	0.84820	0.88364	0.88041	0.88811	0.84969	4.184	
4 Bromomethane	0.55818	0.47451	0.48718	0.46836	0.46637	0.50826	0.50692	0.52027	0.49876	6.270	
5 Chloroethane	0.56892	0.46638	0.47912	0.45351	0.44989	0.46196	0.44790	0.44095	0.47108	8.769	
6 Trichlorofluoromethane	1.23919	1.11030	0.80091	0.67861	0.72583	0.62946	0.58555	0.54476	0.78933	32.076	<-
7 1,1-Dichloroethene	0.75495	0.65815	0.69205	0.68902	0.64663	0.66684	0.66330	0.61255	0.67294	6.162	
8 Carbon Disulfide	2.23480	2.11778	2.09579	2.05851	2.04966	2.01266	1.99092	2.02069	2.07260	3.763	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JUL-2016 10:58
End Cal Date : 07-JUL-2016 13:37
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	150.000 Level 7	200.000 Level 8							
9 112Trichloro122Trifluoroethan	0.63250	0.65602	0.65439	0.65485	0.64276	0.65244			
	0.68095	0.65827					0.65402	2.116	
10 Iodomethane	0.12339	0.10815	0.10737	0.12826	0.24340	0.31338			
	0.34066	0.32590					0.21131	49.756	<-
11 Bromoethane	0.42613	0.37337	0.41127	0.39599	0.37143	0.37401			
	0.37796	0.36713					0.38716	5.586	
12 Acrolein	0.11597	0.11493	0.11855	0.12377	0.12018	0.12429			
	0.11927	0.11708					0.11925	2.857	
13 Methylene Chloride	+++++	0.70337	0.68968	0.69170	0.64599	0.66731			
	0.69965	0.67102					0.68124	3.026	
14 Acetone	0.26413	0.22420	0.21516	0.21907	0.18625	0.19249			
	0.18200	0.18793					0.20891	13.262	
15 Trans-1,2-Dichloroethene	0.81909	0.73024	0.75297	0.77434	0.71420	0.74349			
	0.75020	0.73590					0.75255	4.272	
16 Methyl tert butyl ether	2.05650	2.09835	2.14869	2.21984	2.02529	2.10154			
	2.10221	2.00900					2.09518	3.243	
17 1,1-Dichloroethane	1.48315	1.34344	1.37694	1.43475	1.31540	1.36588			
	1.36565	1.34019					1.37818	3.986	
18 Acrylonitrile	+++++	0.24588	0.26386	0.26640	0.23829	0.24298			
	0.23384	0.23622					0.24678	5.343	
19 Vinyl Acetate	1.50962	1.55179	1.56768	1.57204	1.48175	1.52730			
	1.50046	1.43879					1.51868	3.005	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	150.000 Level 7	200.000 Level 8							
20 Cis-1,2-Dichloroethene	0.85705	0.82990	0.85980	0.89233	0.82564	0.84842			
	0.85805	0.84420					0.85192	2.433	
21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
22 2,2-Dichloropropane	1.26849	1.20489	1.22743	1.21750	1.16038	1.21340			
	1.20276	1.19481					1.21121	2.526	
23 Bromochloromethane	0.35068	0.38452	0.39637	0.38994	0.37013	0.37660			
	0.37639	0.37934					0.37800	3.657	
24 Chloroform	1.30428	1.31882	1.32811	1.34165	1.25075	1.30717			
	1.31395	1.28973					1.30681	2.106	
25 Carbon Tetrachloride	0.36543	0.35217	0.37351	0.38929	0.38098	0.40518			
	0.41109	0.41731					0.38687	5.968	
26 1,1,1-Trichloroethane	1.26001	1.22093	1.24252	1.23188	1.15864	1.21581			
	1.22376	1.20826					1.22022	2.436	
28 1,1-Dichloropropene	0.42526	0.38073	0.38904	0.39672	0.37314	0.39042			
	0.39484	0.40127					0.39393	3.941	
29 2-Butanone	0.08263	0.08009	0.08179	0.09307	0.08397	0.08661			
	0.08286	0.08529					0.08454	4.728	
30 Benzene	1.18747	1.14220	1.15419	1.16802	1.08797	1.12427			
	1.09984	1.07796					1.13024	3.491	
33 1,2-Dichloroethane	0.38600	0.36631	0.34590	0.35443	0.32633	0.34194			
	0.34290	0.33350					0.34966	5.454	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	150.000 Level 7	200.000 Level 8							
34 Trichloroethene	0.31911	0.28320	0.29865	0.30222	0.28372	0.29352			
	0.29955	0.30315					0.29789	3.881	
36 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
37 Dibromomethane	0.15362	0.15241	0.15120	0.16183	0.14939	0.15652			
	0.15857	0.15644					0.15500	2.653	
38 1,2-Dichloropropane	0.27437	0.28341	0.28597	0.28863	0.26949	0.28080			
	0.28429	0.28121					0.28102	2.235	
39 Bromodichloromethane	0.32951	0.32710	0.34362	0.36306	0.34674	0.36476			
	0.36643	0.36631					0.35094	4.710	
172 2-Pentanone	0.03525	0.03690	0.03782	0.04106	0.03814	0.04012			
	0.03917	0.03983					0.03853	4.918	
40 2-Chloroethyl Vinyl Ether	+++++	+++++	0.11809	0.12590	0.12405	0.13081			
	0.12983	+++++					0.12574	4.053	
41 Cis 1,3-dichloropropene	0.44286	0.42768	0.45604	0.45910	0.43764	0.46142			
	0.46735	0.46291					0.45188	3.120	
43 Toluene	0.78744	0.73442	0.75042	0.75564	0.69902	0.72394			
	0.72378	0.72230					0.73712	3.656	
44 Tetrachloroethene	0.29496	0.28347	0.29591	0.29504	0.28013	0.29091			
	0.29717	0.30142					0.29238	2.461	
45 4-Methyl-2-Pentanone	0.10099	0.10024	0.10385	0.10838	0.09970	0.10517			
	0.10142	0.10110					0.10261	2.893	<-

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	150.000 Level 7	200.000 Level 8						
46 Trans 1,3-Dichloropropene	0.38668	0.35742	0.38531	0.40585	0.38876	0.41203		
	0.41402	0.41354					0.39545	4.990
47 1,1,2-Trichloroethane	0.21728	0.22443	0.23006	0.23346	0.22133	0.23193		
	0.23389	0.23259					0.22812	2.759
48 Chlorodibromomethane	0.24146	0.25596	0.26368	0.27374	0.27021	0.28870		
	0.29384	0.29205					0.27245	6.826
49 1,3-Dichloropropane	0.39689	0.39276	0.40700	0.43034	0.39850	0.41976		
	0.41665	0.41327					0.40939	3.160
50 1,2-Dibromoethane	0.22197	0.23324	0.23293	0.23970	0.22600	0.24029		
	0.23796	0.23692					0.23362	2.828
51 2-Hexanone	0.18179	0.18198	0.18335	0.19621	0.17303	0.18104		
	0.17143	0.16932					0.17977	4.784
53 Chlorobenzene	0.83957	0.80041	0.81857	0.84232	0.78771	0.81953		
	0.81911	0.81264					0.81748	2.224
54 Ethyl Benzene	1.45505	1.37189	1.41062	1.42282	1.32970	1.35698		
	1.30967	1.27539					1.36652	4.457
55 1,1,1,2-Tetrachloroethane	0.27174	0.27072	0.28659	0.29829	0.28154	0.30193		
	0.30735	0.30984					0.29100	5.333
56 m,p-xylene	0.56770	0.53283	0.55018	0.55689	0.52873	0.54169		
	0.53083	0.51553					0.54055	3.141
57 o-Xylene	0.54725	0.51024	0.52886	0.54107	0.50472	0.53501		
	0.53919	0.53882					0.53064	2.880

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	150.000 Level 7	200.000 Level 8							
58 Styrene	0.90407	0.82764	0.87610	0.89628	0.85705	0.88496			
	0.89318	0.87393					0.87665	2.818	
59 Bromoform	0.32777	0.31715	0.32813	0.33139	0.32108	0.34075			
	0.33239	0.33875					0.32968	2.438	
60 Isopropyl Benzene	2.98274	2.76982	2.80811	2.82133	2.66750	2.66556			
	2.48688	2.45790					2.70748	6.504	
61 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
63 Bromobenzene	0.64712	0.61398	0.64436	0.65116	0.62385	0.63799			
	0.62870	0.63989					0.63588	1.996	
64 N-Propyl Benzene	3.39809	3.19239	3.25867	3.26559	3.12420	3.01699			
	2.80978	+++++					3.15224	6.110	
65 1,1,2,2-Tetrachloroethane	0.61871	0.59610	0.60312	0.63614	0.58861	0.60908			
	0.58801	0.58842					0.60352	2.850	
66 2-Chloro Toluene	1.96176	1.80203	1.91742	1.92640	1.81332	1.82004			
	1.76394	1.76901					1.84674	4.159	
67 1,3,5-Trimethyl Benzene	2.41770	2.23489	2.31425	2.32905	2.24948	2.25236			
	2.15057	2.12520					2.25919	4.217	
68 1,2,3-Trichloropropane	+++++	0.19246	0.19082	0.19700	0.18593	0.19499			
	0.18454	0.18688					0.19037	2.499	
69 Trans-1,4-Dichloro 2-Butene	+++++	0.14777	0.15290	0.16127	0.15269	0.15824			
	0.15223	0.15324					0.15405	2.858	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Last Edit : 07-Jul-2016 14:09 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	150.000 Level 7	200.000 Level 8						
70 4-Chloro Toluene	2.00283	1.93978	1.97767	1.99436	1.88913	1.88066		
	1.83989	1.83254					1.91961	3.559
71 T-Butyl Benzene	2.22443	2.02046	2.13378	2.13489	2.02698	2.07206		
	1.97520	1.98399					2.07148	4.193
72 1,2,4-Trimethylbenzene	2.41129	2.22316	2.32819	2.33540	2.25584	2.23363		
	2.16548	2.13039					2.26042	4.131
73 S-Butyl Benzene	3.16702	2.92425	3.06865	3.08069	2.92522	2.89673		
	2.71943	+++++					2.96885	5.016
74 4-Isopropyl Toluene	2.78327	2.49175	2.60940	2.61419	2.57160	2.50782		
	2.42458	2.38102					2.54796	4.963
75 1,3-Dichlorobenzene	1.31081	1.24591	1.27022	1.29697	1.25464	1.25981		
	1.26422	1.26381					1.27080	1.729
77 1,4-Dichlorobenzene	1.35829	1.23889	1.28623	1.29309	1.24032	1.24216		
	1.25115	1.24958					1.26996	3.259
78 N-Butyl Benzene	2.39403	2.19033	2.27715	2.27311	2.25629	2.18273		
	2.13728	2.11358					2.22806	4.071
80 1,2-Dichlorobenzene	1.18807	1.18447	1.20772	1.21908	1.15251	1.17764		
	1.17617	1.17226					1.18474	1.758
81 1,2-Dibromo 3-Chloropropane	+++++	0.10899	0.11177	0.11661	0.11172	0.12083		
	0.11242	0.11600					0.11405	3.494
82 Hexachloro 1,3-Butadiene	+++++	0.33126	0.34026	0.33640	0.33602	0.33900		
	0.34925	0.36148					0.34195	2.989

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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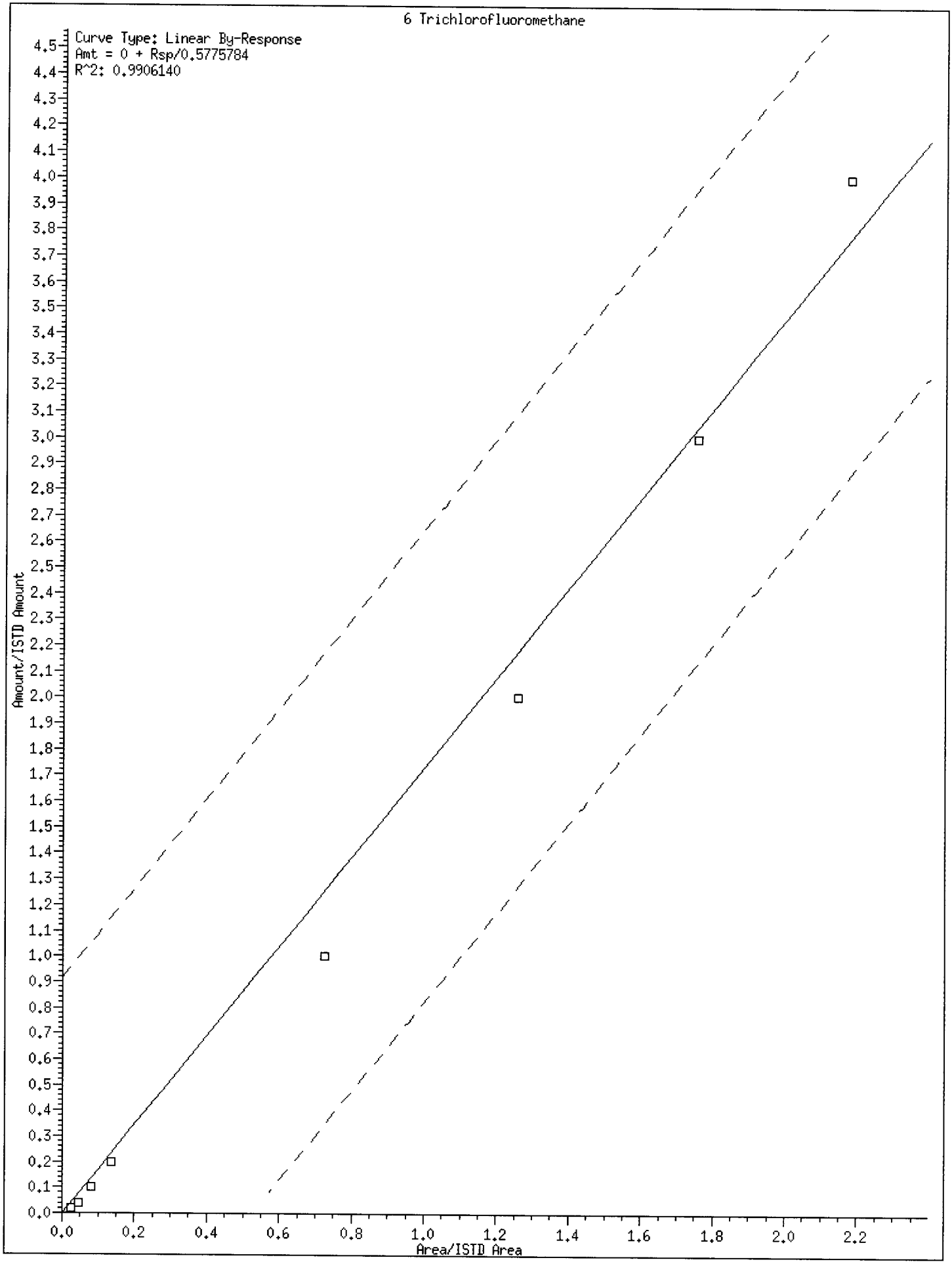
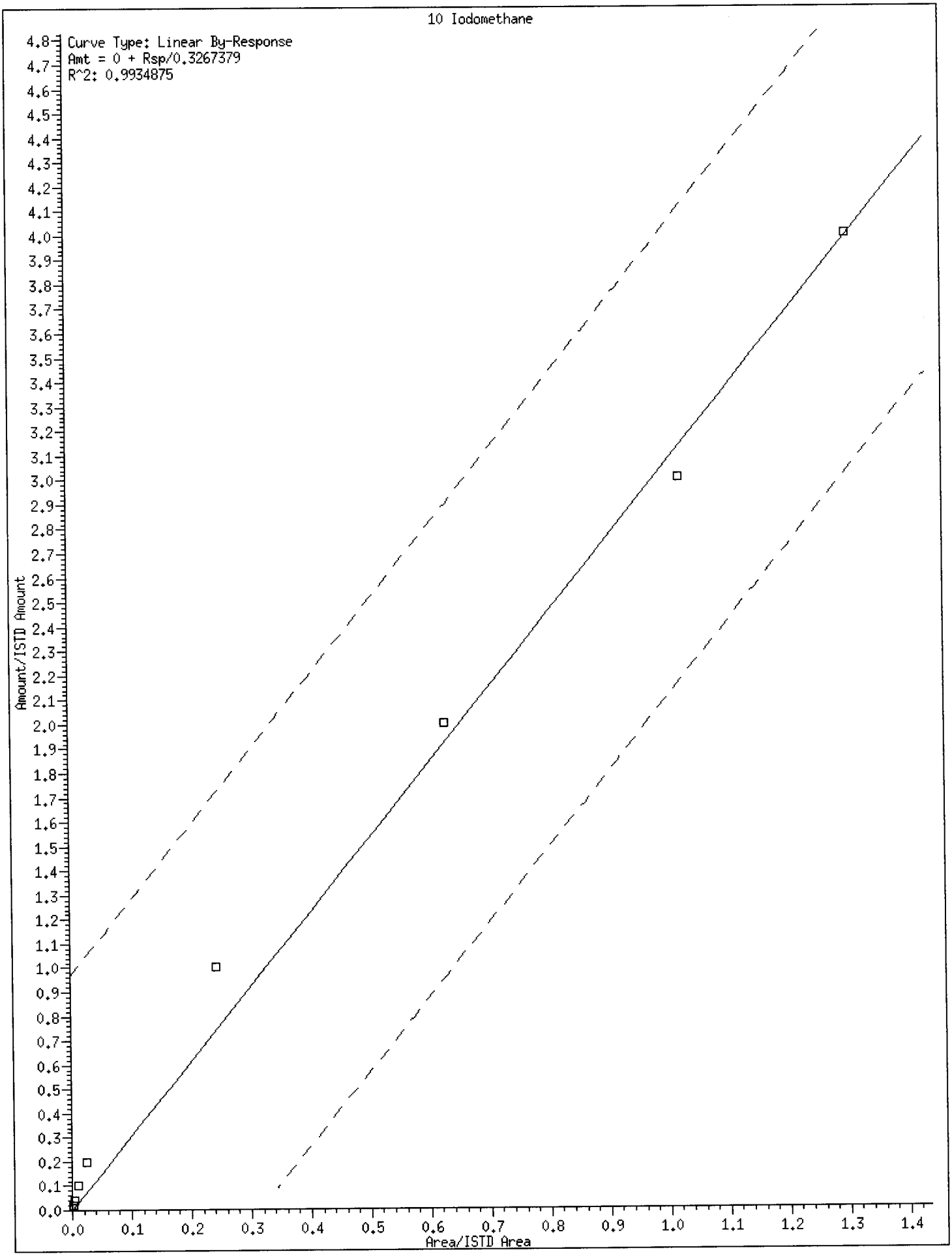
Last Edit : 07-Jul-2016 14:09 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	150.000 Level 7	200.000 Level 8	___ RRF	% RSD
83 1,2,4-Trichlorobenzene	+++++	0.68728	0.70884	0.73075	0.73547	0.72023	0.74854	0.75860	0.72710	3.322
84 Naphthalene	+++++	2.17067	2.15052	2.17013	2.09628	2.08873	1.91753	1.90883	2.07181	5.464
85 1,2,3-Trichlorobenzene	+++++	0.66329	0.67849	0.67630	0.67498	0.67429	0.67360	0.69266	0.67623	1.287
$ 27 Dibromofluoromethane	0.86222	0.86404	0.87061	0.87341	0.88418	0.86283	0.88796	0.85790	0.87039	1.250
$ 32 d4-1,2-Dichloroethane	0.88284	0.88915	0.88218	0.88875	0.85870	0.84356	0.84615	0.81719	0.86357	3.059
$ 42 d8-Toluene	1.20713	1.21476	1.18922	1.19651	1.21170	1.19068	1.19691	1.19220	1.19989	0.828
$ 62 4-Bromofluorobenzene	0.51387	0.50908	0.51007	0.51920	0.50607	0.50772	0.52124	0.51461	0.51273	1.066
$ 79 d4-1,2-Dichlorobenzene	0.96158	0.95907	0.97146	0.98500	0.97225	0.97030	0.97348	0.95916	0.96904	0.911


6 Trichlorofluoromethane
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.5775784
R^2: 0.9906140
Amount/ISTD Amount
Area/ISTD Area
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2


10 Iodomethane
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.3267379
R^2: 0.9934875
Amount/ISTD Amount
Area/ISTD Area

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Batch File: \\target\share\chem1\nt5.i\20160707.b
Inst ID: nt5.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08
FILENAME:	07071603	07071604	07071605	07071606	07071607	07071608	07071609	07071610
INJ.DATE:	07-JUL-2016	07-JUL-2016	07-JUL-2016	07-JUL-2016	07-JUL-2016	07-JUL-2016	07-JUL-2016	07-JUL-2016
INJ.TIME:	10:58	11:21	11:44	12:06	12:29	12:51	13:14	13:37

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Dichlorodifluoromethan	1.165	1.153	1.165	1.159	1.165	1.165	1.153	1.147	1.165	1.066-1.264	1.159	0.007
2 Chloromethane	1.299	1.293	1.299	1.299	1.299	1.299	1.287	1.281	1.299	1.200-1.398	1.294	0.007
3 Vinyl Chloride	1.360	1.348	1.360	1.360	1.360	1.360	1.348	1.342	1.360	1.261-1.459	1.355	0.008
4 Bromomethane	1.597	1.585	1.597	1.597	1.597	1.597	1.591	1.585	1.597	1.498-1.696	1.593	0.006
5 Chloroethane	1.688	1.682	1.688	1.688	1.688	1.688	1.682	1.676	1.688	1.589-1.787	1.685	0.005
6 Trichlorofluoromethane	1.804	1.786	1.786	1.786	1.786	1.786	1.780	1.773	1.786	1.687-1.885	1.786	0.009
7 1,1-Dichloroethene	2.224	2.212	2.212	2.199	2.218	2.205	2.193	2.175	2.218	2.119-2.317	2.205	0.015
8 Carbon Disulfide	2.230	2.212	2.218	2.199	2.218	2.205	2.193	2.169	2.218	2.119-2.317	2.205	0.019
9 112Trichloro122Trifluo	2.272	2.254	2.260	2.242	2.260	2.248	2.236	2.212	2.260	2.161-2.359	2.248	0.019
10 Iodomethane	2.327	2.327	2.327	2.315	2.327	2.321	2.309	2.291	2.327	2.228-2.426	2.318	0.013
11 Bromoethane	2.449	2.437	2.443	2.431	2.443	2.437	2.425	2.406	2.443	2.344-2.542	2.434	0.013
12 Acrolein	2.546	2.534	2.546	2.558	2.546	2.552	2.552	2.558	2.546	2.447-2.645	2.549	0.008
13 Methylene Chloride	2.753	2.747	2.753	2.753	2.759	2.753	2.747	2.735	2.759	2.660-2.858	2.750	0.007
14 Acetone	2.844	2.838	2.856	2.881	2.850	2.869	2.875	2.893	2.850	2.751-2.949	2.863	0.019
15 Trans-1,2-Dichloroethe	2.911	2.899	2.905	2.899	2.911	2.905	2.893	2.881	2.911	2.812-3.010	2.901	0.010
16 Methyl tert butyl ethe	3.075	3.069	3.081	3.100	3.082	3.088	3.088	3.100	3.082	2.982-3.181	3.085	0.011
17 1,1-Dichloroethane	3.544	3.538	3.544	3.538	3.544	3.538	3.532	3.526	3.544	3.445-3.643	3.538	0.007

Reviewer 1 _____ Date: 7/8/16
Reviewer 2 _____ Date: 7/8/16

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Batch File: \\target\share\chem1\nt5.i\20160707.b
Inst ID: nt5.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 Acrylonitrile	3.629	3.623	3.629	3.641	3.629	3.635	3.635	3.647	3.629	3.530-3.728	3.634	0.008
	19 Vinyl Acetate	3.848	3.848	3.854	3.860	3.854	3.854	3.854	3.854	3.854	3.755-3.953	3.853	0.004
	20 Cis-1,2-Dichloroethene	4.073	4.067	4.073	4.073	4.073	4.073	4.067	4.061	4.073	3.974-4.172	4.070	0.005
	21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.560	4.458-4.662	+++++	+++++
	22 2,2-Dichloropropane	4.158	4.158	4.164	4.158	4.158	4.158	4.158	4.152	4.158	4.059-4.257	4.158	0.003
	23 Bromochloromethane	4.249	4.244	4.250	4.256	4.256	4.256	4.250	4.250	4.256	4.157-4.355	4.251	0.004
	24 Chloroform	4.347	4.341	4.347	4.347	4.347	4.347	4.347	4.347	4.347	4.248-4.446	4.346	0.002
	25 Carbon Tetrachloride	4.432	4.426	4.426	4.426	4.426	4.426	4.420	4.414	4.426	4.318-4.534	4.424	0.005
$	27 Dibromofluoromethane	4.499	4.493	4.499	4.499	4.499	4.499	4.493	4.487	4.499	4.400-4.598	4.496	0.005
	28 1,1-Dichloropropene	4.511	4.505	4.511	4.511	4.511	4.511	4.511	4.511	4.511	4.412-4.610	4.510	0.002
	29 2-Butanone	4.615	4.609	4.615	4.609	4.615	4.615	4.609	4.602	4.615	4.507-4.723	4.611	0.005
	30 Benzene	4.669	4.657	4.669	4.675	4.663	4.669	4.669	4.681	4.663	4.564-4.762	4.669	0.007
*	31 Pentafluorobenzene	4.840	4.834	4.840	4.834	4.840	4.840	4.834	4.834	4.840	4.732-4.948	4.837	0.003
$	32 d4-1,2-Dichloroethane	4.967	4.961	4.967	4.967	4.967	4.967	4.961	4.961	4.967	4.868-5.067	4.965	0.003
	33 1,2-Dichloroethane	4.967	4.968	4.973	4.974	4.967	4.974	4.968	4.967	4.967	4.868-5.067	4.970	0.003
	34 Trichloroethene	5.028	5.028	5.034	5.028	5.028	5.034	5.028	5.028	5.028	4.920-5.136	5.030	0.003
*	35 1,4-Difluorobenzene	5.363	5.357	5.357	5.363	5.363	5.363	5.357	5.357	5.363	5.255-5.471	5.360	0.003
	36 Methyl Methacrylate	5.411	5.412	5.412	5.412	5.412	5.412	5.412	5.411	5.412	5.303-5.520	5.412	0.000
	37 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.693	5.582-5.804	+++++	+++++
	38 1,2-Dichloropropane	5.722	5.716	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.614-5.830	5.721	0.002
	39 Bromodichloromethane	5.807	5.807	5.813	5.813	5.813	5.813	5.813	5.813	5.813	5.705-5.921	5.812	0.003
		5.880	5.880	5.886	5.886	5.880	5.886	5.880	5.886	5.880	5.772-5.988	5.883	0.003

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Batch File: \\target\share\chem1\nt5.i\20160707.b
Inst ID: nt5.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	172 2-Pentanone	6.184	6.178	6.178	6.184	6.178	6.184	6.184	6.190	6.178	6.070-6.286	6.183	0.004
	40 2-Chloroethyl Vinyl Et	6.403	6.397	6.397	6.397	6.397	6.403	6.403	6.403	6.397	6.289-6.505	6.400	0.003
	41 Cis 1,3-dichloropropen	6.421	6.422	6.421	6.421	6.421	6.421	6.421	6.421	6.421	6.313-6.530	6.421	0.000
$	42 d8-Toluene	6.573	6.574	6.573	6.574	6.574	6.573	6.574	6.573	6.574	6.465-6.682	6.574	0.000
	43 Toluene	6.616	6.616	6.616	6.616	6.616	6.616	6.616	6.616	6.616	6.508-6.724	6.616	0.000
	44 Tetrachloroethene	6.926	6.926	6.932	6.932	6.932	6.932	6.933	6.932	6.932	6.775-7.090	6.931	0.003
	45 4-Methyl-2-Pentanone	6.975	6.969	6.975	6.975	6.975	6.975	6.981	6.981	6.975	6.867-7.083	6.976	0.004
	46 Trans 1,3-Dichloroprop	6.987	6.981	6.987	6.987	6.987	6.987	6.987	6.987	6.987	6.879-7.095	6.986	0.002
	47 1,1,2-Trichloroethane	7.115	7.115	7.115	7.115	7.115	7.121	7.121	7.121	7.115	7.007-7.223	7.117	0.003
	48 Chlorodibromomethane	7.255	7.255	7.255	7.255	7.255	7.255	7.255	7.261	7.255	7.097-7.412	7.256	0.002
	49 1,3-Dichloropropane	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.346	7.340	7.182-7.498	7.341	0.002
	50 1,2-Dibromoethane	7.437	7.437	7.443	7.437	7.437	7.443	7.444	7.443	7.437	7.329-7.546	7.440	0.003
	51 2-Hexanone	7.687	7.687	7.687	7.687	7.687	7.687	7.693	7.699	7.687	7.529-7.844	7.689	0.005
*	52 d5-Chlorobenzene	7.887	7.888	7.888	7.888	7.888	7.888	7.894	7.894	7.888	7.730-8.045	7.889	0.003
	53 Chlorobenzene	7.900	7.900	7.900	7.900	7.906	7.906	7.906	7.906	7.906	7.748-8.063	7.903	0.003
	54 Ethyl Benzene	7.942	7.942	7.942	7.942	7.942	7.942	7.948	7.948	7.942	7.785-8.100	7.944	0.003
	55 1,1,1,2-Tetrachloroeth	7.967	7.967	7.967	7.967	7.967	7.973	7.973	7.973	7.967	7.809-8.124	7.969	0.003
	56 m,p-xylene	8.070	8.070	8.070	8.070	8.076	8.076	8.076	8.082	8.076	7.918-8.234	8.074	0.005
	57 o-Xylene	8.441	8.441	8.441	8.441	8.441	8.447	8.447	8.447	8.441	8.283-8.599	8.443	0.003
	58 Styrene	8.490	8.490	8.490	8.490	8.490	8.496	8.496	8.496	8.490	8.332-8.648	8.492	0.003
	59 Bromoform	8.502	8.496	8.496	8.496	8.496	8.502	8.502	8.508	8.496	8.297-8.695	8.500	0.004
	60 Isopropyl Benzene	8.727	8.727	8.727	8.727	8.727	8.727	8.727	8.727	8.727	8.528-8.926	8.727	0.000
	61 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.568	8.409-8.727	+++++	+++++
$	62 4-Bromofluorobenzene	8.964	8.964	8.964	8.964	8.964	8.964	8.964	8.970	8.964	8.807-9.122	8.965	0.002

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Batch File: \\target\share\chem1\nt5.i\20160707.b
Inst ID: nt5.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	63 Bromobenzene	9.043	9.044	9.043	9.043	9.050	9.049	9.050	9.049	9.050	8.850-9.249	9.046	0.003
	64 N-Propyl Benzene	9.098	9.098	9.098	9.098	9.098	9.098	9.098	9.104	9.098	8.899-9.298	9.099	0.002
	65 1,1,2,2-Tetrachloroeth	9.165	9.171	9.171	9.171	9.171	9.171	9.177	9.177	9.171	8.972-9.370	9.172	0.004
	66 2-Chloro Toluene	9.220	9.220	9.220	9.220	9.220	9.220	9.226	9.226	9.220	9.020-9.419	9.221	0.003
	67 1,3,5-Trimethyl Benzen	9.281	9.281	9.281	9.281	9.287	9.287	9.287	9.293	9.287	9.087-9.486	9.284	0.005
	68 1,2,3-Trichloropropane	9.281	9.275	9.275	9.281	9.281	9.281	9.281	9.281	9.281	9.081-9.480	9.279	0.003
	69 Trans-1,4-Dichloro 2-B	9.329	9.329	9.323	9.329	9.329	9.329	9.329	9.335	9.329	9.130-9.529	9.329	0.003
	70 4-Chloro Toluene	9.372	9.372	9.372	9.372	9.372	9.378	9.378	9.378	9.372	9.173-9.571	9.374	0.003
	71 T-Butyl Benzene	9.560	9.561	9.561	9.561	9.561	9.567	9.567	9.567	9.561	9.361-9.760	9.563	0.003
	72 1,2,4-Trimethylbenzene	9.627	9.628	9.627	9.627	9.634	9.634	9.634	9.633	9.634	9.434-9.833	9.630	0.003
	73 S-Butyl Benzene	9.725	9.725	9.725	9.725	9.725	9.731	9.731	9.731	9.725	9.525-9.924	9.727	0.003
	74 4-Isopropyl Toluene	9.865	9.865	9.865	9.865	9.871	9.871	9.871	9.877	9.871	9.671-10.070	9.869	0.005
	75 1,3-Dichlorobenzene	9.901	9.907	9.901	9.901	9.907	9.907	9.907	9.913	9.907	9.708-10.107	9.906	0.004
*	76 d4-1,4-Dichlorobenzene	9.974	9.974	9.974	9.974	9.974	9.980	9.980	9.980	9.974	9.775-10.174	9.977	0.003
	77 1,4-Dichlorobenzene	9.986	9.987	9.986	9.992	9.993	9.992	9.993	9.992	9.993	9.793-10.192	9.990	0.003
	78 N-Butyl Benzene	10.254	10.254	10.254	10.254	10.254	10.260	10.260	10.260	10.254	10.055-10.454	10.256	0.003
$	79 d4-1,2-Dichlorobenzene	10.363	10.364	10.364	10.364	10.370	10.370	10.370	10.370	10.370	10.170-10.569	10.367	0.003
	80 1,2-Dichlorobenzene	10.376	10.376	10.376	10.376	10.376	10.376	10.376	10.382	10.376	10.176-10.575	10.376	0.002
	81 1,2-Dibromo 3-Chloropr	11.130	11.136	11.130	11.136	11.136	11.136	11.136	11.136	11.136	10.937-11.336	11.135	0.003
	82 Hexachloro 1,3-Butadie	11.775	11.775	11.775	11.775	11.775	11.775	11.775	11.775	11.775	11.575-11.974	11.775	0.000
	83 1,2,4-Trichlorobenzene	11.787	11.781	11.781	11.781	11.781	11.787	11.787	11.787	11.781	11.581-11.980	11.784	0.003
	84 Naphthalene	12.097	12.098	12.097	12.097	12.097	12.097	12.097	12.103	12.097	11.898-12.297	12.098	0.002
	85 1,2,3-Trichlorobenzene	12.274	12.274	12.274	12.274	12.274	12.274	12.274	12.280	12.274	12.074-12.473	12.275	0.002

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt5.i\20160707.b

ARI Job No.: SEG0 Method: VO051314S.m Instrument: nt5.i Date: 07-JUL-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1058	07071603.D	SEG0022-CAL1	VSTD1	1	1,1,1-Trichloroethane, 1,2-Dichloropropane, 4-Methyl-2-Pentanone, 1,1,2-Trichloroethane, 1,2,3-Trichloropropane, Trans-1,4-Dichl Dichlorodifluoromethane,
1121	07071604.D	SEG0022-CAL2	VSTD2	1	4-Methyl-2-Pentanone, 1,1,2-Trichloroethane, 1,2,3-Trichloropropane, Trans-1,4-Dichloro 2-Butene, Dichlorodifluoromethane,
1144	07071605.D	SEG0022-CAL3	VSTD5	1	4-Methyl-2-Pentanone, Dichlorodifluoromethane,
1206	07071606.D	SEG0022-CAL4	VSTD10	1	Dichlorodifluoromethane,
1229	07071607.D	SEG0022-CAL5	VSTD50	1	NO MANUAL INTEGRATION
1251	07071608.D	SEG0022-CAL6	VSTD100	1	NO MANUAL INTEGRATION
1314	07071609.D	SEG0022-CAL7	VSTD150	1	NO MANUAL INTEGRATION
1337	07071610.D	SEG0022-CAL8	VSTD200	1	NO MANUAL INTEGRATION
1510	07071611.D	SEG0022-SCV1	SCV0707	1	NO MANUAL INTEGRATION

ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071603.D
Lab Smp Id: SEG0022-CAL1 Client Smp ID: VSTD1
Inj Date : 07-JUL-2016 10:58
Operator : PB Inst ID: nt5.i
Smp Info : SEG0022-CAL1
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 11:49 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 13:37 Cal File: 07071610.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndV

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
1 Dichlorodifluoromethane	85	1.165	1.165	(0.235)	8028	1.00000	1.026(M)
2 Chloromethane	50	1.298	1.299	(0.261)	11279	1.00000	1.210
3 Vinyl Chloride	62	1.359	1.359	(0.274)	9223	1.00000	1.022
4 Bromomethane	94	1.597	1.597	(0.322)	5926	1.00000	1.119
5 Chloroethane	64	1.688	1.688	(0.340)	6040	1.00000	1.208
6 Trichlorofluoromethane	101	1.803	1.786	(0.363)	13156	1.00000	2.145
7 1,1-Dichloroethene	96	2.223	2.217	(0.448)	8015	1.00000	1.122
8 Carbon Disulfide	76	2.229	2.217	(0.449)	23726	1.00000	1.078
9 112Trichloro122Trifluoroethane	101	2.272	2.260	(0.457)	6715	1.00000	0.9671
10 Iodomethane	142	2.327	2.327	(0.468)	1310	1.00000	0.3776
11 Bromoethane	108	2.448	2.442	(0.493)	4524	1.00000	1.101
12 Acrolein	56	2.546	2.546	(0.513)	6156	5.00000	4.862
13 Methylene Chloride	84	2.752	2.759	(0.554)	8788	1.00000	1.215
14 Acetone	43	2.844	2.850	(0.573)	14021	5.00000	6.322
15 Trans-1,2-Dichloroethene	96	2.911	2.911	(0.586)	8696	1.00000	1.088
16 Methyl tert butyl ether	73	3.075	3.081	(0.619)	21833	1.00000	0.9815
17 1,1-Dichloroethane	63	3.543	3.543	(0.713)	15746	1.00000	1.076
18 Acrylonitrile	53	3.628	3.629	(0.731)	2682	1.00000	1.024(T)
19 Vinyl Acetate	43	3.847	3.854	(0.775)	16027	1.00000	0.9940
20 Cis-1,2-Dichloroethene	96	4.073	4.073	(0.820)	9099	1.00000	1.006
22 2,2-Dichloropropane	77	4.158	4.158	(0.837)	13467	1.00000	1.047

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	23 Bromochloromethane	128	4.249	4.255	(0.855)	3723	1.00000	0.9277
	24 Chloroform	83	4.346	4.346	(0.875)	13847	1.00000	0.9981
	25 Carbon Tetrachloride	117	4.431	4.426	(0.819)	10816	1.00000	0.9446
$	27 Dibromofluoromethane	111	4.511	4.511	(0.908)	457691	50.0000	49.530
	26 1,1,1-Trichloroethane	97	4.498	4.499	(0.906)	13377	1.00000	1.033(M)
	28 1,1-Dichloropropene	75	4.614	4.614	(0.853)	12587	1.00000	1.080
	29 2-Butanone	72	4.669	4.663	(0.940)	4386	5.00000	4.887
	30 Benzene	78	4.839	4.839	(0.894)	35147	1.00000	1.051
*	31 Pentafluorobenzene	168	4.967	4.967	(1.000)	530830	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.967	4.967	(1.000)	468638	50.0000	51.116
	33 1,2-Dichloroethane	62	5.028	5.028	(0.929)	11425	1.00000	1.104
	34 Trichloroethene	95	5.362	5.362	(0.991)	9445	1.00000	1.071
*	35 1,4-Difluorobenzene	114	5.411	5.411	(1.000)	1479913	50.0000	
	37 Dibromomethane	93	5.721	5.721	(1.057)	4547	1.00000	0.9911
	38 1,2-Dichloropropane	63	5.806	5.813	(1.073)	8121	1.00000	0.9763(M)
	39 Bromodichloromethane	83	5.879	5.880	(1.087)	9753	1.00000	0.9389
	172 2-Pentanone	86	6.184	6.178	(1.143)	5216	5.00000	4.573
	40 2-Chloroethyl Vinyl Ether	63	6.403	6.397	(1.183)	3379	1.00000	0.9080
	41 Cis 1,3-dichloropropene	75	6.421	6.421	(1.187)	13108	1.00000	0.9801
$	42 d8-Toluene	98	6.573	6.573	(1.215)	1786442	50.0000	50.302
	43 Toluene	92	6.616	6.616	(1.223)	23307	1.00000	1.068
	44 Tetrachloroethene	166	6.926	6.932	(0.878)	8612	1.00000	1.009
	45 4-Methyl-2-Pentanone	58	6.974	6.975	(1.289)	14946	5.00000	4.921(TM)
	46 Trans 1,3-Dichloropropene	75	6.987	6.987	(1.291)	11445	1.00000	0.9778
	47 1,1,2-Trichloroethane	97	7.114	7.114	(1.315)	6431	1.00000	0.9525(TM)
	48 Chlorodibromomethane	129	7.254	7.254	(0.920)	7050	1.00000	0.8863
	49 1,3-Dichloropropane	76	7.339	7.340	(0.931)	11588	1.00000	0.9695
	50 1,2-Dibromoethane	107	7.437	7.437	(1.374)	6570	1.00000	0.9501
	51 2-Hexanone	43	7.686	7.686	(0.975)	26538	5.00000	5.056
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1459847	50.0000	
	53 Chlorobenzene	112	7.899	7.905	(1.002)	24513	1.00000	1.027
	54 Ethyl Benzene	91	7.942	7.942	(1.007)	42483	1.00000	1.065
	55 1,1,1,2-Tetrachloroethane	131	7.966	7.966	(1.010)	7934	1.00000	0.9338
	56 m,p-xylene	106	8.069	8.076	(1.023)	33150	2.00000	2.100
	57 o-Xylene	106	8.441	8.441	(1.070)	15978	1.00000	1.031
	58 Styrene	104	8.489	8.489	(1.076)	26396	1.00000	1.031
	59 Bromoform	173	8.501	8.495	(0.852)	4708	1.00000	0.9942
	60 Isopropyl Benzene	105	8.726	8.727	(0.875)	42843	1.00000	1.102
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	750169	50.0000	50.111
	63 Bromobenzene	156	9.043	9.049	(0.907)	9295	1.00000	1.018
	64 N-Propyl Benzene	91	9.098	9.098	(0.912)	48809	1.00000	1.078
	65 1,1,2,2-Tetrachloroethane	83	9.165	9.171	(0.919)	8887	1.00000	1.025
	66 2-Chloro Toluene	91	9.219	9.219	(0.924)	28178	1.00000	1.062
	67 1,3,5-Trimethyl Benzene	105	9.280	9.286	(0.930)	34727	1.00000	1.070
	68 1,2,3-Trichloropropane	110	9.280	9.280	(0.930)	2297	1.00000	0.8400(TM)
	69 Trans-1,4-Dichloro 2-Butene	53	9.329	9.329	(0.935)	2150	1.00000	0.9717(M)
	70 4-Chloro Toluene	91	9.371	9.372	(0.940)	28768	1.00000	1.043
	71 T-Butyl Benzene	119	9.560	9.560	(0.959)	31951	1.00000	1.074
	72 1,2,4-Trimethylbenzene	105	9.627	9.633	(0.965)	34635	1.00000	1.067
	73 S-Butyl Benzene	105	9.724	9.724	(0.975)	45490	1.00000	1.067
	74 4-Isopropyl Toluene	119	9.864	9.870	(0.989)	39978	1.00000	1.092
	75 1,3-Dichlorobenzene	146	9.901	9.907	(0.993)	18828	1.00000	1.031
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	718183	50.0000	
	77 1,4-Dichlorobenzene	146	9.986	9.992	(1.001)	19510	1.00000	1.070

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
78 N-Butyl Benzene	91	10.253	10.254	(1.028)	34387	1.00000	1.074
$ 79 d4-1,2-Dichlorobenzene	152	10.363	10.369	(1.039)	690587	50.0000	49.615
80 1,2-Dichlorobenzene	146	10.375	10.375	(1.040)	17065	1.00000	1.003
81 1,2-Dibromo 3-Chloropropane	75	11.130	11.136	(1.116)	1806	1.00000	1.102
82 Hexachloro 1,3-Butadiene	225	11.774	11.775	(1.181)	4959	1.00000	1.010
83 1,2,4-Trichlorobenzene	180	11.787	11.781	(1.182)	11656	1.00000	1.116
84 Naphthalene	128	12.097	12.097	(1.213)	34201	1.00000	1.149
85 1,2,3-Trichlorobenzene	180	12.273	12.273	(1.231)	9998	1.00000	1.029

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071603.D
Lab Smp Id: SEG0022-CAL1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: VSTD1
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	530830	-5.55
35 1,4-Difluorobenze	1551589	775795	3103178	1479913	-4.62
52 d5-Chlorobenzene	1542777	771389	3085554	1459847	-5.38
76 d4-1,4-Dichlorobe	775053	387527	1550106	718183	-7.34

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.97	-0.00
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	-0.00
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	-0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	-0.00

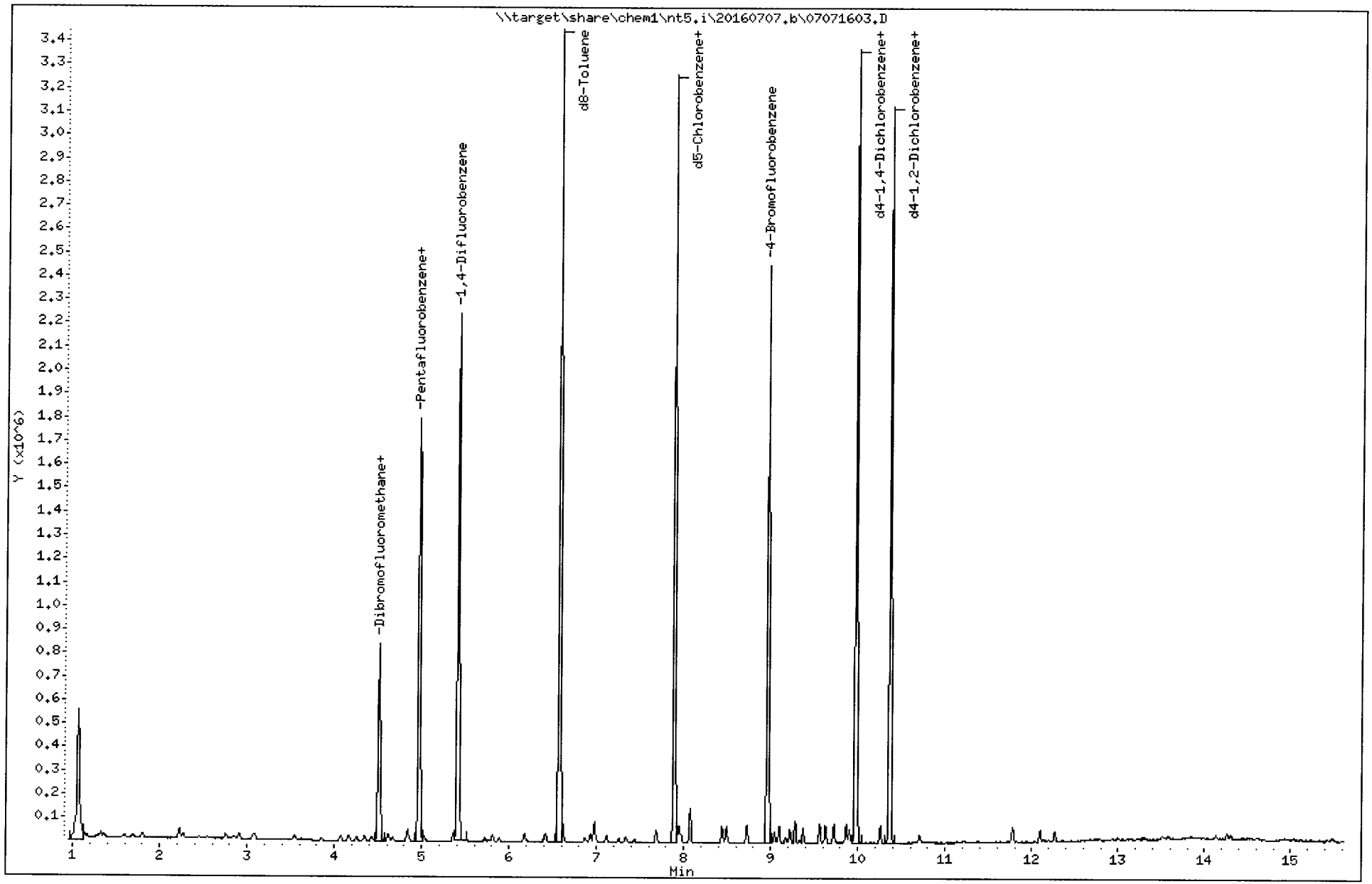
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt5.i\20160707.b\07071603.D
Date : 07-JUL-2016 10:58
Client ID: VSTD1
Sample Info: SEG0022-CAL1

Instrument: nt5.i

Operator: PB
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 07071603.D

Lab ID: SEG0022-CAL1
nt5.i, 20160707.b\VO051314S.m, 07-JUL-2016 10:58

RT	CO-ELUTION COMPOUNDS
9.281	1,2,3-Trichloropropane and 1,3,5-Trimethyl Benzene
9.281	1,3,5-Trimethyl Benzene and 1,2,3-Trichloropropane

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

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8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071604.D
Lab Smp Id: SEG0022-CAL2 Client Smp ID: VSTD2
Inj Date : 07-JUL-2016 11:21
Operator : PB Inst ID: nt5.i
Smp Info : SEG0022-CAL2
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 11:49 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 10:58 Cal File: 07071603.D
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndV

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
1 Dichlorodifluoromethane	85	1.153	1.165	(0.232)	15851	2.00000	1.944(M)
2 Chloromethane	50	1.293	1.299	(0.261)	20013	2.00000	2.060
3 Vinyl Chloride	62	1.347	1.359	(0.272)	17949	2.00000	1.909
4 Bromomethane	94	1.585	1.597	(0.319)	10504	2.00000	1.903
5 Chloroethane	64	1.682	1.688	(0.339)	10324	2.00000	1.980
6 Trichlorofluoromethane	101	1.785	1.786	(0.360)	24578	2.00000	3.845
7 1,1-Dichloroethene	96	2.211	2.217	(0.446)	14569	2.00000	1.956
8 Carbon Disulfide	76	2.211	2.217	(0.446)	46880	2.00000	2.044
9 112Trichloro122Trifluoroethane	101	2.254	2.260	(0.454)	14522	2.00000	2.006
10 Iodomethane	142	2.327	2.327	(0.469)	2394	2.00000	0.6620
11 Bromoethane	108	2.436	2.442	(0.491)	8265	2.00000	1.929
12 Acrolein	56	2.534	2.546	(0.511)	12721	10.0000	9.638
13 Methylene Chloride	84	2.747	2.759	(0.554)	15570	2.00000	2.065
14 Acetone	43	2.838	2.850	(0.572)	24815	10.0000	10.732
15 Trans-1,2-Dichloroethene	96	2.899	2.911	(0.584)	16165	2.00000	1.941
16 Methyl tert butyl ether	73	3.069	3.081	(0.619)	46450	2.00000	2.003
17 1,1-Dichloroethane	63	3.537	3.543	(0.713)	29739	2.00000	1.950
18 Acrylonitrile	53	3.623	3.629	(0.730)	5443	2.00000	1.993(T)
19 Vinyl Acetate	43	3.848	3.854	(0.776)	34351	2.00000	2.044
20 Cis-1,2-Dichloroethene	96	4.067	4.073	(0.820)	18371	2.00000	1.948
22 2,2-Dichloropropane	77	4.158	4.158	(0.838)	26672	2.00000	1.990

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	23 Bromochloromethane	128	4.243	4.255	(0.855)	8512	2.00000	2.035
	24 Chloroform	83	4.340	4.346	(0.875)	29194	2.00000	2.018
	25 Carbon Tetrachloride	117	4.426	4.426	(0.818)	21799	2.00000	1.821
$	27 Dibromofluoromethane	111	4.505	4.511	(0.908)	478172	50.0000	49.635
	26 1,1,1-Trichloroethane	97	4.493	4.499	(0.906)	27027	2.00000	2.001
	28 1,1-Dichloropropene	75	4.608	4.614	(0.852)	23567	2.00000	1.933
	29 2-Butanone	72	4.657	4.663	(0.939)	8865	10.0000	9.474
	30 Benzene	78	4.833	4.839	(0.893)	70701	2.00000	2.021
*	31 Pentafluorobenzene	168	4.961	4.967	(1.000)	553411	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.967	4.967	(1.001)	492067	50.0000	51.481
	33 1,2-Dichloroethane	62	5.028	5.028	(0.929)	22674	2.00000	2.095
	34 Trichloroethene	95	5.356	5.362	(0.990)	17530	2.00000	1.901
*	35 1,4-Difluorobenzene	114	5.411	5.411	(1.000)	1547470	50.0000	
	37 Dibromomethane	93	5.715	5.721	(1.056)	9434	2.00000	1.967
	38 1,2-Dichloropropane	63	5.807	5.813	(1.073)	17543	2.00000	2.017
	39 Bromodichloromethane	83	5.880	5.880	(1.087)	20247	2.00000	1.864
	172 2-Pentanone	86	6.178	6.178	(1.142)	11419	10.0000	9.575
	40 2-Chloroethyl Vinyl Ether	63	6.397	6.397	(1.182)	6948	2.00000	1.785
	41 Cis 1,3-dichloropropene	75	6.421	6.421	(1.187)	26473	2.00000	1.893
$	42 d8-Toluene	98	6.573	6.573	(1.215)	1879804	50.0000	50.620
	43 Toluene	92	6.616	6.616	(1.223)	45460	2.00000	1.993
	44 Tetrachloroethene	166	6.926	6.932	(0.878)	17549	2.00000	1.939
	45 4-Methyl-2-Pentanone	58	6.969	6.975	(1.288)	31025	10.0000	9.770(TM)
	46 Trans 1,3-Dichloropropene	75	6.981	6.987	(1.290)	22124	2.00000	1.808
	47 1,1,2-Trichloroethane	97	7.115	7.114	(1.315)	13892	2.00000	1.968(TM)
	48 Chlorodibromomethane	129	7.254	7.254	(0.920)	15846	2.00000	1.879
	49 1,3-Dichloropropane	76	7.340	7.340	(0.931)	24315	2.00000	1.919
	50 1,2-Dibromoethane	107	7.437	7.437	(1.374)	14437	2.00000	1.997
	51 2-Hexanone	43	7.686	7.686	(0.975)	56331	10.0000	10.123
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1547714	50.0000	
	53 Chlorobenzene	112	7.899	7.905	(1.002)	49552	2.00000	1.958
	54 Ethyl Benzene	91	7.942	7.942	(1.007)	84932	2.00000	2.008
	55 1,1,1,2-Tetrachloroethane	131	7.966	7.966	(1.010)	16760	2.00000	1.861
	56 m,p-xylene	106	8.070	8.076	(1.023)	65973	4.00000	3.943
	57 o-Xylene	106	8.441	8.441	(1.070)	31588	2.00000	1.923
	58 Styrene	104	8.489	8.489	(1.076)	51238	2.00000	1.888
	59 Bromoform	173	8.496	8.495	(0.852)	9757	2.00000	1.924
	60 Isopropyl Benzene	105	8.727	8.727	(0.875)	85213	2.00000	2.046
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	787916	50.0000	49.644
	63 Bromobenzene	156	9.043	9.049	(0.907)	18889	2.00000	1.931
	64 N-Propyl Benzene	91	9.098	9.098	(0.912)	98213	2.00000	2.025
	65 1,1,2,2-Tetrachloroethane	83	9.171	9.171	(0.919)	18339	2.00000	1.975
	66 2-Chloro Toluene	91	9.219	9.219	(0.924)	55439	2.00000	1.952
	67 1,3,5-Trimethyl Benzene	105	9.280	9.286	(0.930)	68756	2.00000	1.978
	68 1,2,3-Trichloropropane	110	9.274	9.280	(0.930)	5921	2.00000	2.022(TM)
	69 Trans-1,4-Dichloro 2-Butene	53	9.329	9.329	(0.935)	4546	2.00000	1.918(M)
	70 4-Chloro Toluene	91	9.372	9.372	(0.940)	59677	2.00000	2.021
	71 T-Butyl Benzene	119	9.560	9.560	(0.959)	62159	2.00000	1.951
	72 1,2,4-Trimethylbenzene	105	9.627	9.633	(0.965)	68395	2.00000	1.967
	73 S-Butyl Benzene	105	9.724	9.724	(0.975)	89964	2.00000	1.970
	74 4-Isopropyl Toluene	119	9.864	9.870	(0.989)	76658	2.00000	1.956
	75 1,3-Dichlorobenzene	146	9.907	9.907	(0.993)	38330	2.00000	1.961
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	769119	50.0000	
	77 1,4-Dichlorobenzene	146	9.986	9.992	(1.001)	38114	2.00000	1.951

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
78 N-Butyl Benzene	91	10.254	10.254	(1.028)	67385	2.00000	1.966
$ 79 d4-1,2-Dichlorobenzene	152	10.363	10.369	(1.039)	737638	50.0000	49.486
80 1,2-Dichlorobenzene	146	10.375	10.375	(1.040)	36440	2.00000	2.000
81 1,2-Dibromo 3-Chloropropane	75	11.136	11.136	(1.116)	3353	2.00000	1.911
82 Hexachloro 1,3-Butadiene	225	11.775	11.775	(1.181)	10191	2.00000	1.937
83 1,2,4-Trichlorobenzene	180	11.781	11.781	(1.181)	21144	2.00000	1.890
84 Naphthalene	128	12.097	12.097	(1.213)	66780	2.00000	2.095
85 1,2,3-Trichlorobenzene	180	12.273	12.273	(1.231)	20406	2.00000	1.962

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071604.D
Lab Smp Id: SEG0022-CAL2
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: VSTD2
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	553411	-1.53
35 1,4-Difluorobenze	1551589	775795	3103178	1547470	-0.27
52 d5-Chlorobenzene	1542777	771389	3085554	1547714	0.32
76 d4-1,4-Dichlorobe	775053	387527	1550106	769119	-0.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.96	-0.12
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	0.00
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

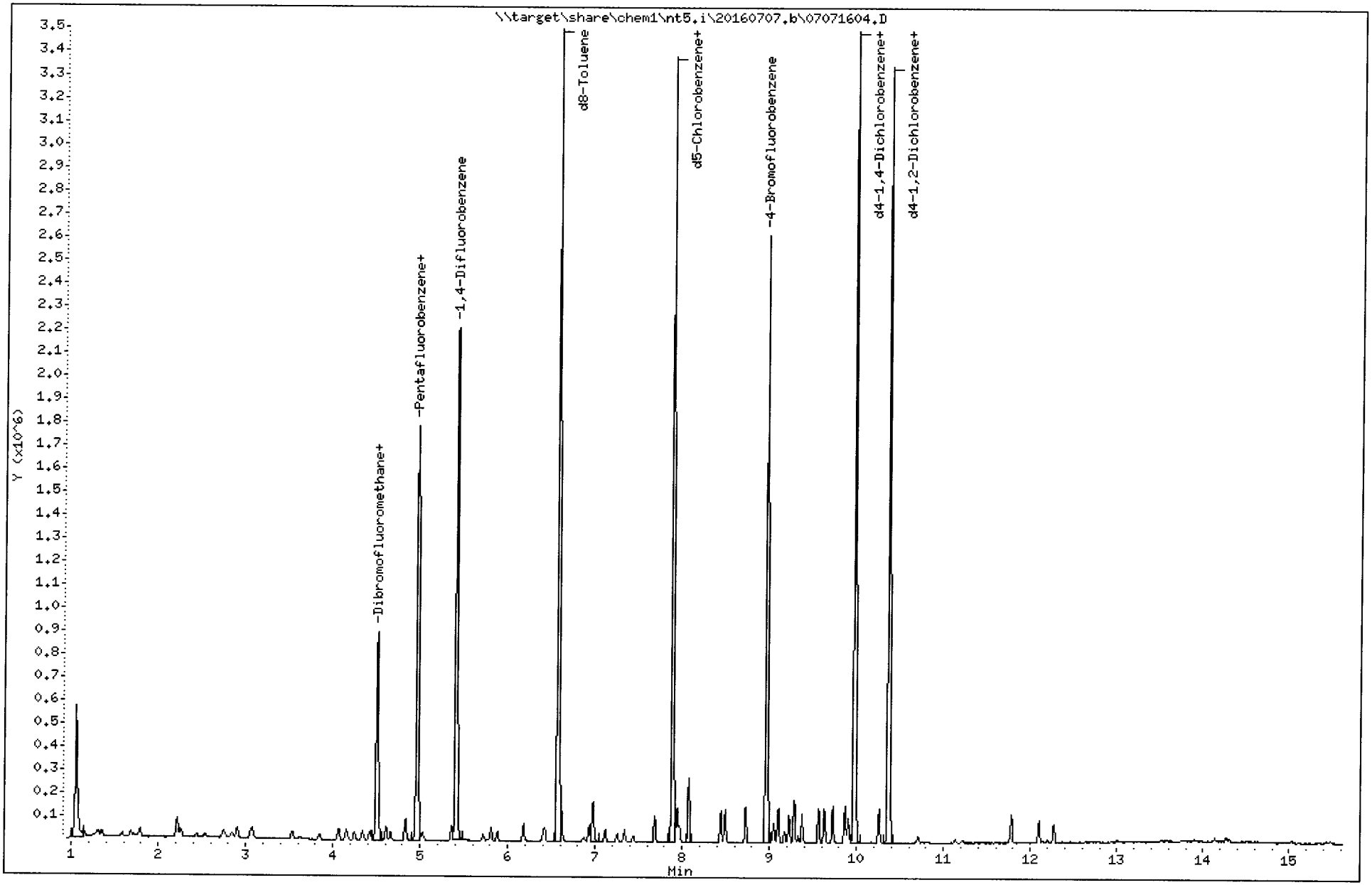
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt5.i\20160707.b\07071604.D
Date : 07-JUL-2016 11:21
Client ID: VSTD2
Sample Info: SEG0022-CAL2

Instrument: nt5.i

Operator: PB
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 07071604.D

Lab ID: SEG0022-CAL2
nt5.i, 20160707.b\VO051314S.m, 07-JUL-2016 11:21

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

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8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071605.D
Lab Smp Id: SEG0022-CAL3 Client Smp ID: VSTD5
Inj Date : 07-JUL-2016 11:44
Operator : PB Inst ID: nt5.i
Smp Info : SEG0022-CAL3
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 11:49 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 11:21 Cal File: 07071604.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndV

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
1 Dichlorodifluoromethane	85	1.165	1.165	(0.235)	38868	5.00000	4.894 (M)
2 Chloromethane	50	1.299	1.299	(0.262)	46865	5.00000	4.953
3 Vinyl Chloride	62	1.359	1.359	(0.274)	43300	5.00000	4.728
4 Bromomethane	94	1.597	1.597	(0.322)	26257	5.00000	4.884
5 Chloroethane	64	1.688	1.688	(0.340)	25823	5.00000	5.085
6 Trichlorofluoromethane	101	1.785	1.786	(0.359)	43166	5.00000	6.933
7 1,1-Dichloroethene	96	2.211	2.217	(0.445)	37299	5.00000	5.142
8 Carbon Disulfide	76	2.217	2.217	(0.446)	112955	5.00000	5.056
9 112Trichloro122Trifluoroethane	101	2.260	2.260	(0.455)	35269	5.00000	5.003
10 Iodomethane	142	2.327	2.327	(0.468)	5787	5.00000	1.643
11 Bromoethane	108	2.442	2.442	(0.492)	22166	5.00000	5.311
12 Acrolein	56	2.546	2.546	(0.513)	31946	25.0000	24.852
13 Methylene Chloride	84	2.752	2.759	(0.554)	37171	5.00000	5.062
14 Acetone	43	2.856	2.850	(0.575)	57982	25.0000	25.749
15 Trans-1,2-Dichloroethene	96	2.905	2.911	(0.585)	40582	5.00000	5.003
16 Methyl tert butyl ether	73	3.081	3.081	(0.620)	115806	5.00000	5.128
17 1,1-Dichloroethane	63	3.543	3.543	(0.713)	74212	5.00000	4.996
18 Acrylonitrile	53	3.629	3.629	(0.731)	14221	5.00000	5.346
19 Vinyl Acetate	43	3.854	3.854	(0.776)	84492	5.00000	5.161
20 Cis-1,2-Dichloroethene	96	4.073	4.073	(0.820)	46340	5.00000	5.046
22 2,2-Dichloropropane	77	4.164	4.158	(0.838)	66154	5.00000	5.067

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	23 Bromochloromethane	128	4.249	4.255	(0.855)	21363	5.00000	5.243
	24 Chloroform	83	4.346	4.346	(0.875)	71580	5.00000	5.082
	25 Carbon Tetrachloride	117	4.425	4.426	(0.818)	56498	5.00000	4.827
$	27 Dibromofluoromethane	111	4.511	4.511	(0.908)	469226	50.0000	50.012
	26 1,1,1-Trichloroethane	97	4.498	4.499	(0.906)	66967	5.00000	5.091
	28 1,1-Dichloropropene	75	4.614	4.614	(0.853)	58847	5.00000	4.938
	29 2-Butanone	72	4.669	4.663	(0.940)	22042	25.0000	24.188
	30 Benzene	78	4.839	4.839	(0.894)	174584	5.00000	5.106
*	31 Pentafluorobenzene	168	4.967	4.967	(1.000)	538962	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.973	4.967	(1.001)	475463	50.0000	51.078
	33 1,2-Dichloroethane	62	5.034	5.028	(0.930)	52321	5.00000	4.946
	34 Trichloroethene	95	5.356	5.362	(0.990)	45174	5.00000	5.013
*	35 1,4-Difluorobenzene	114	5.411	5.411	(1.000)	1512615	50.0000	
	37 Dibromomethane	93	5.721	5.721	(1.057)	22870	5.00000	4.877
	38 1,2-Dichloropropane	63	5.813	5.813	(1.074)	43257	5.00000	5.088
	39 Bromodichloromethane	83	5.886	5.880	(1.088)	51977	5.00000	4.896
	172 2-Pentanone	86	6.178	6.178	(1.142)	28604	25.0000	24.537
	40 2-Chloroethyl Vinyl Ether	63	6.397	6.397	(1.182)	17862	5.00000	4.696
	41 Cis 1,3-dichloropropene	75	6.421	6.421	(1.187)	68982	5.00000	5.046
$	42 d8-Toluene	98	6.573	6.573	(1.215)	1798828	50.0000	49.555
	43 Toluene	92	6.616	6.616	(1.223)	113510	5.00000	5.090
	44 Tetrachloroethene	166	6.932	6.932	(0.879)	44369	5.00000	5.060
	45 4-Methyl-2-Pentanone	58	6.974	6.975	(1.289)	78542	25.0000	25.303(M)
	46 Trans 1,3-Dichloropropene	75	6.987	6.987	(1.291)	58283	5.00000	4.872
	47 1,1,2-Trichloroethane	97	7.114	7.114	(1.315)	34799	5.00000	5.042
	48 Chlorodibromomethane	129	7.254	7.254	(0.920)	39537	5.00000	4.839
	49 1,3-Dichloropropane	76	7.339	7.340	(0.931)	61026	5.00000	4.971
	50 1,2-Dibromoethane	107	7.443	7.437	(1.375)	35233	5.00000	4.985
	51 2-Hexanone	43	7.686	7.686	(0.975)	137456	25.0000	25.498
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1499413	50.0000	
	53 Chlorobenzene	112	7.899	7.905	(1.002)	122738	5.00000	5.007
	54 Ethyl Benzene	91	7.942	7.942	(1.007)	211510	5.00000	5.161
	55 1,1,1,2-Tetrachloroethane	131	7.966	7.966	(1.010)	42972	5.00000	4.924
	56 m,p-xylene	106	8.070	8.076	(1.023)	164988	10.0000	10.178
	57 o-Xylene	106	8.441	8.441	(1.070)	79298	5.00000	4.983
	58 Styrene	104	8.489	8.489	(1.076)	131364	5.00000	4.997
	59 Bromoform	173	8.495	8.495	(0.852)	24519	5.00000	4.977
	60 Isopropyl Benzene	105	8.727	8.727	(0.875)	209831	5.00000	5.186
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	764808	50.0000	49.740
	63 Bromobenzene	156	9.043	9.049	(0.907)	48149	5.00000	5.067
	64 N-Propyl Benzene	91	9.098	9.098	(0.912)	243498	5.00000	5.169
	65 1,1,2,2-Tetrachloroethane	83	9.171	9.171	(0.919)	45067	5.00000	4.997
	66 2-Chloro Toluene	91	9.219	9.219	(0.924)	143276	5.00000	5.191
	67 1,3,5-Trimethyl Benzene	105	9.280	9.286	(0.930)	172928	5.00000	5.122
	68 1,2,3-Trichloropropane	110	9.274	9.280	(0.930)	14259	5.00000	5.012
	69 Trans-1,4-Dichloro 2-Butene	53	9.323	9.329	(0.935)	11425	5.00000	4.963
	70 4-Chloro Toluene	91	9.371	9.372	(0.940)	147778	5.00000	5.151
	71 T-Butyl Benzene	119	9.560	9.560	(0.959)	159443	5.00000	5.150
	72 1,2,4-Trimethylbenzene	105	9.627	9.633	(0.965)	173970	5.00000	5.150
	73 S-Butyl Benzene	105	9.724	9.724	(0.975)	229299	5.00000	5.168
	74 4-Isopropyl Toluene	119	9.864	9.870	(0.989)	194983	5.00000	5.121
	75 1,3-Dichlorobenzene	146	9.901	9.907	(0.993)	94915	5.00000	4.998
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	747232	50.0000	
	77 1,4-Dichlorobenzene	146	9.986	9.992	(1.001)	96111	5.00000	5.064

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
78	N-Butyl Benzene	91	10.254	10.254	(1.028)	170156	5.00000	5.110
$ 79	d4-1,2-Dichlorobenzene	152	10.363	10.369	(1.039)	725903	50.0000	50.125
80	1,2-Dichlorobenzene	146	10.375	10.375	(1.040)	90245	5.00000	5.097
81	1,2-Dibromo 3-Chloropropane	75	11.130	11.136	(1.116)	8352	5.00000	4.900
82	Hexachloro 1,3-Butadiene	225	11.774	11.775	(1.181)	25425	5.00000	4.975
83	1,2,4-Trichlorobenzene	180	11.781	11.781	(1.181)	52967	5.00000	4.874
84	Naphthalene	128	12.097	12.097	(1.213)	160694	5.00000	5.190
85	1,2,3-Trichlorobenzene	180	12.273	12.273	(1.231)	50699	5.00000	5.017

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071605.D
Lab Smp Id: SEG0022-CAL3
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: VSTD5
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	538962	-4.10
35 1,4-Difluorobenze	1551589	775795	3103178	1512615	-2.51
52 d5-Chlorobenzene	1542777	771389	3085554	1499413	-2.81
76 d4-1,4-Dichlorobe	775053	387527	1550106	747232	-3.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.97	-0.00
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	-0.00
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	-0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	-0.00

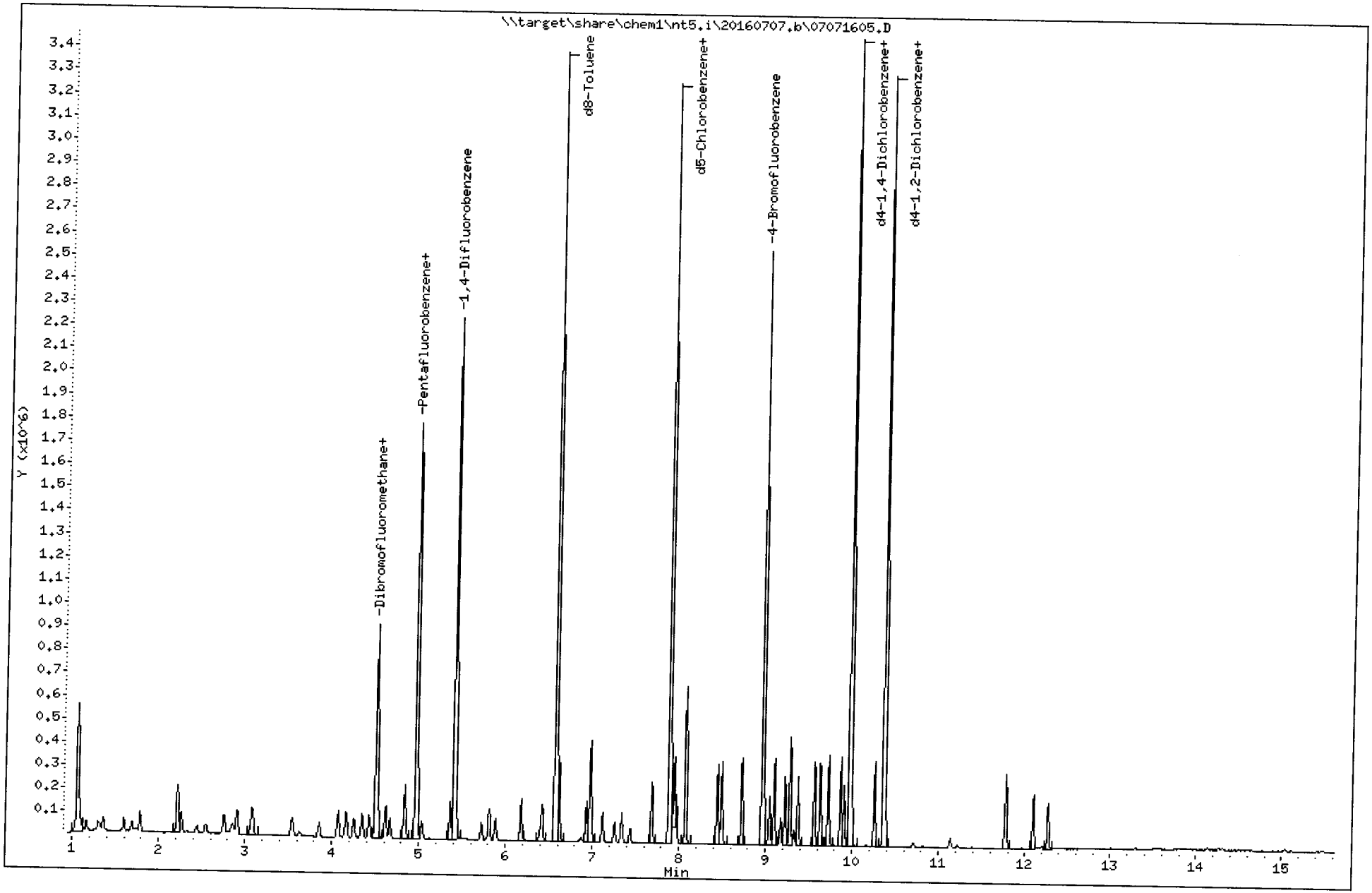
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt5.i\20160707.b\07071605.D
Date : 07-JUL-2016 11:44
Client ID: VSTD5
Sample Info: SEG0022-CAL3

Column phase: RTXVMS

Instrument: nt5.i

Operator: PB
Column diameter: 0.18



REVIEW SUMMARY FOR FILE - 07071605.D

Lab ID: SEG0022-CAL3
nt5.i, 20160707.b\VO051314S.m, 07-JUL-2016 11:44

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071606.D
Lab Smp Id: SEG0022-CAL4 Client Smp ID: VSTD10
Inj Date : 07-JUL-2016 12:06
Operator : PB Inst ID: nt5.i
Smp Info : SEG0022-CAL4
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 11:49 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 11:44 Cal File: 07071605.D
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndV

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
1 Dichlorodifluoromethane	85	1.159	1.165	(0.233)	74275	10.0000	9.222(M)
2 Chloromethane	50	1.299	1.299	(0.262)	95802	10.0000	9.984
3 Vinyl Chloride	62	1.359	1.359	(0.274)	89004	10.0000	9.582
4 Bromomethane	94	1.597	1.597	(0.322)	51198	10.0000	9.391
5 Chloroethane	64	1.688	1.688	(0.340)	49574	10.0000	9.627
6 Trichlorofluoromethane	101	1.785	1.786	(0.359)	74180	10.0000	11.749
7 1,1-Dichloroethene	96	2.199	2.217	(0.443)	75318	10.0000	10.239
8 Carbon Disulfide	76	2.199	2.217	(0.443)	225021	10.0000	9.932
9 112Trichloro122Trifluoroethane	101	2.242	2.260	(0.451)	71583	10.0000	10.013
10 Iodomethane	142	2.315	2.327	(0.466)	14020	10.0000	3.925
11 Bromoethane	108	2.430	2.442	(0.489)	43287	10.0000	10.228
12 Acrolein	56	2.558	2.546	(0.515)	67646	50.0000	51.892
13 Methylene Chloride	84	2.753	2.759	(0.554)	75611	10.0000	10.153
14 Acetone	43	2.880	2.850	(0.580)	119737	50.0000	52.434
15 Trans-1,2-Dichloroethene	96	2.899	2.911	(0.584)	84645	10.0000	10.290
16 Methyl tert butyl ether	73	3.099	3.081	(0.624)	242656	10.0000	10.595
17 1,1-Dichloroethane	63	3.537	3.543	(0.712)	156836	10.0000	10.411
18 Acrylonitrile	53	3.641	3.629	(0.733)	29121	10.0000	10.795
19 Vinyl Acetate	43	3.860	3.854	(0.777)	171844	10.0000	10.351
20 Cis-1,2-Dichloroethene	96	4.073	4.073	(0.820)	97543	10.0000	10.474
22 2,2-Dichloropropane	77	4.158	4.158	(0.837)	133088	10.0000	10.052

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	23 Bromochloromethane	128	4.255	4.255	(0.857)	42625	10.0000	10.316
	24 Chloroform	83	4.346	4.346	(0.875)	146659	10.0000	10.267
	25 Carbon Tetrachloride	117	4.426	4.426	(0.818)	118546	10.0000	10.063
$	27 Dibromofluoromethane	111	4.511	4.511	(0.908)	477371	50.0000	50.173
	26 1,1,1-Trichloroethane	97	4.499	4.499	(0.906)	134660	10.0000	10.096
	28 1,1-Dichloropropene	75	4.608	4.614	(0.852)	120810	10.0000	10.071
	29 2-Butanone	72	4.675	4.663	(0.941)	50871	50.0000	55.048
	30 Benzene	78	4.833	4.839	(0.893)	355684	10.0000	10.334
*	31 Pentafluorobenzene	168	4.967	4.967	(1.000)	546562	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.973	4.967	(1.001)	485759	50.0000	51.458
	33 1,2-Dichloroethane	62	5.028	5.028	(0.929)	107930	10.0000	10.136
	34 Trichloroethene	95	5.362	5.362	(0.991)	92031	10.0000	10.145
*	35 1,4-Difluorobenzene	114	5.411	5.411	(1.000)	1522600	50.0000	
	37 Dibromomethane	93	5.721	5.721	(1.057)	49280	10.0000	10.441
	38 1,2-Dichloropropane	63	5.813	5.813	(1.074)	87895	10.0000	10.271
	39 Bromodichloromethane	83	5.886	5.880	(1.088)	110558	10.0000	10.345
	172 2-Pentanone	86	6.184	6.178	(1.143)	62518	50.0000	53.276
	40 2-Chloroethyl Vinyl Ether	63	6.397	6.397	(1.182)	38338	10.0000	10.013
	41 Cis 1,3-dichloropropene	75	6.421	6.421	(1.187)	139804	10.0000	10.160
$	42 d8-Toluene	98	6.573	6.573	(1.215)	1821805	50.0000	49.859
	43 Toluene	92	6.616	6.616	(1.223)	230108	10.0000	10.251
	44 Tetrachloroethene	166	6.932	6.932	(0.879)	89577	10.0000	10.091
	45 4-Methyl-2-Pentanone	58	6.975	6.975	(1.289)	165012	50.0000	52.811
	46 Trans 1,3-Dichloropropene	75	6.987	6.987	(1.291)	123588	10.0000	10.263
	47 1,1,2-Trichloroethane	97	7.114	7.114	(1.315)	71093	10.0000	10.234
	48 Chlorodibromomethane	129	7.254	7.254	(0.920)	83109	10.0000	10.047
	49 1,3-Dichloropropane	76	7.340	7.340	(0.931)	130656	10.0000	10.512
	50 1,2-Dibromoethane	107	7.437	7.437	(1.374)	72993	10.0000	10.260
	51 2-Hexanone	43	7.686	7.686	(0.975)	297856	50.0000	54.573
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1518048	50.0000	
	53 Chlorobenzene	112	7.899	7.905	(1.002)	255735	10.0000	10.304
	54 Ethyl Benzene	91	7.942	7.942	(1.007)	431981	10.0000	10.412
	55 1,1,1,2-Tetrachloroethane	131	7.966	7.966	(1.010)	90564	10.0000	10.251
	56 m,p-xylene	106	8.070	8.076	(1.023)	338154	20.0000	20.605
	57 o-Xylene	106	8.441	8.441	(1.070)	164274	10.0000	10.196
	58 Styrene	104	8.489	8.489	(1.076)	272119	10.0000	10.224
	59 Bromoform	173	8.495	8.495	(0.852)	51366	10.0000	10.052
	60 Isopropyl Benzene	105	8.727	8.727	(0.875)	437306	10.0000	10.421
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	788173	50.0000	50.631
	63 Bromobenzene	156	9.043	9.049	(0.907)	100930	10.0000	10.240
	64 N-Propyl Benzene	91	9.098	9.098	(0.912)	506166	10.0000	10.360
	65 1,1,2,2-Tetrachloroethane	83	9.171	9.171	(0.919)	98601	10.0000	10.540
	66 2-Chloro Toluene	91	9.219	9.219	(0.924)	298592	10.0000	10.431
	67 1,3,5-Trimethyl Benzene	105	9.280	9.286	(0.930)	361002	10.0000	10.309
	68 1,2,3-Trichloropropane	110	9.280	9.280	(0.930)	30535	10.0000	10.348
	69 Trans-1,4-Dichloro 2-Butene	53	9.329	9.329	(0.935)	24997	10.0000	10.469
	70 4-Chloro Toluene	91	9.371	9.372	(0.940)	309125	10.0000	10.389
	71 T-Butyl Benzene	119	9.560	9.560	(0.959)	330907	10.0000	10.306
	72 1,2,4-Trimethylbenzene	105	9.627	9.633	(0.965)	361987	10.0000	10.332
	73 S-Butyl Benzene	105	9.724	9.724	(0.975)	477507	10.0000	10.377
	74 4-Isopropyl Toluene	119	9.864	9.870	(0.989)	405199	10.0000	10.260
	75 1,3-Dichlorobenzene	146	9.901	9.907	(0.993)	201030	10.0000	10.206
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	774999	50.0000	
	77 1,4-Dichlorobenzene	146	9.992	9.992	(1.002)	200428	10.0000	10.182

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	78 N-Butyl Benzene	91	10.254	10.254	(1.028)	352331	10.0000	10.202
$	79 d4-1,2-Dichlorobenzene	152	10.363	10.369	(1.039)	763377	50.0000	50.824
	80 1,2-Dichlorobenzene	146	10.375	10.375	(1.040)	188957	10.0000	10.290
	81 1,2-Dibromo 3-Chloropropane	75	11.136	11.136	(1.116)	18075	10.0000	10.225
	82 Hexachloro 1,3-Butadiene	225	11.774	11.775	(1.181)	52142	10.0000	9.838
	83 1,2,4-Trichlorobenzene	180	11.781	11.781	(1.181)	113266	10.0000	10.050
	84 Naphthalene	128	12.097	12.097	(1.213)	336370	10.0000	10.475
	85 1,2,3-Trichlorobenzene	180	12.273	12.273	(1.231)	104827	10.0000	10.001

QC Flag Legend

M - Compound response manually integrated.

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071606.D
Lab Smp Id: SEG0022-CAL4
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: VSTD10
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	546562	-2.75
35 1,4-Difluorobenze	1551589	775795	3103178	1522600	-1.87
52 d5-Chlorobenzene	1542777	771389	3085554	1518048	-1.60
76 d4-1,4-Dichlorobe	775053	387527	1550106	774999	-0.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.97	-0.00
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	-0.00
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	-0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	-0.00

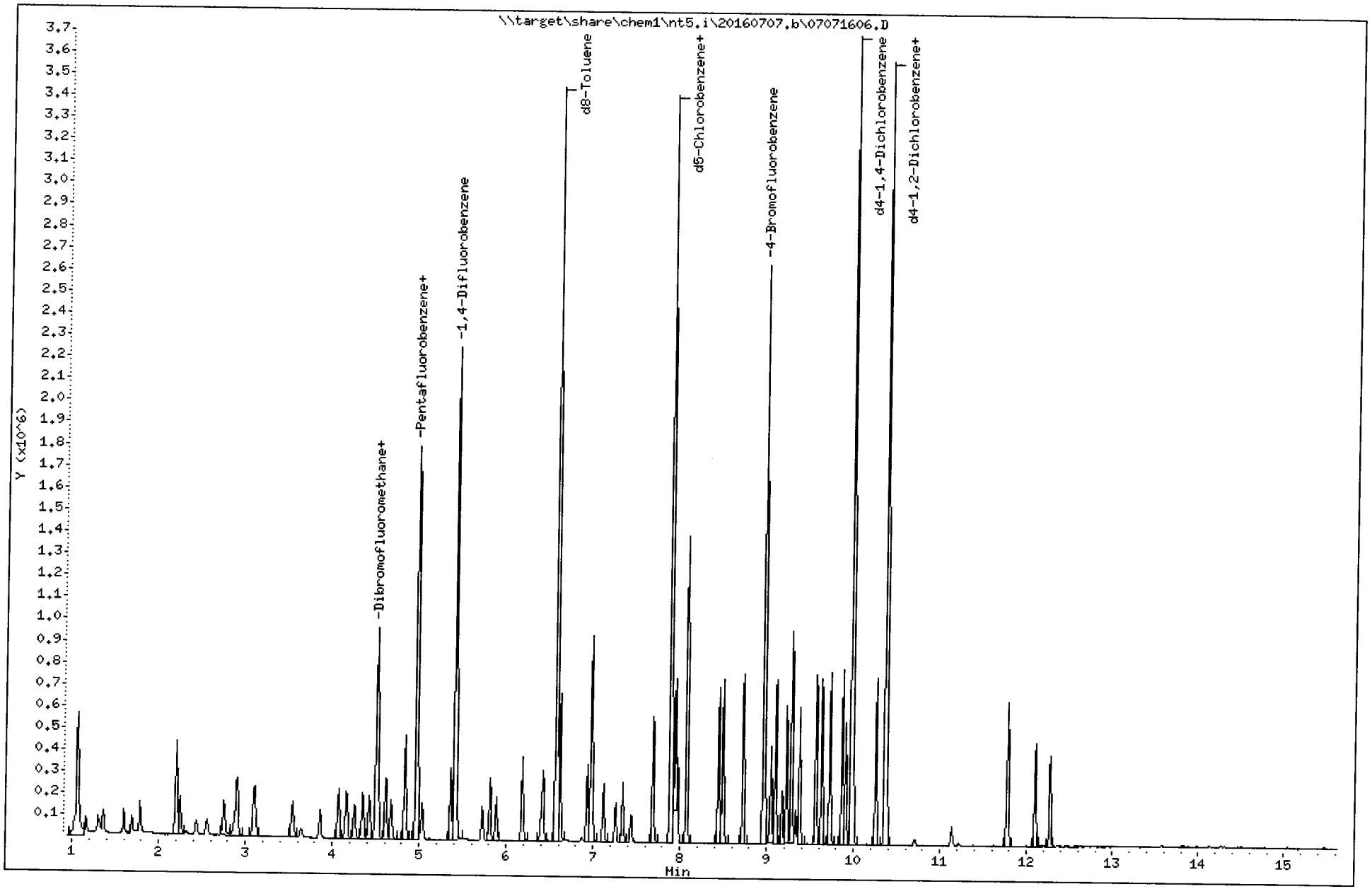
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt5.i\20160707.b\07071606.D
Date : 07-JUL-2016 12:06
Client ID: VSTD10
Sample Info: SEG0022-CAL4

Instrument: nt5.i

Operator: PB
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 07071606.D

Lab ID: SEG0022-CAL4
nt5.i, 20160707.b\VO051314S.m, 07-JUL-2016 12:06

RT	CO-ELUTION COMPOUNDS
9.281	1,2,3-Trichloropropane and 1,3,5-Trimethyl Benzene
9.281	1,3,5-Trimethyl Benzene and 1,2,3-Trichloropropane

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

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8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071607.D
Lab Smp Id: SEG0022-CAL5 Client Smp ID: VSTD50
Inj Date : 07-JUL-2016 12:29
Operator : PB Inst ID: nt5.i
Smp Info : SEG0022-CAL5
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 11:49 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 12:06 Cal File: 07071606.D
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndV

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
1 Dichlorodifluoromethane	85	1.165	1.165	(0.235)	407263	50.0000	49.176
2 Chloromethane	50	1.299	1.299	(0.262)	454743	50.0000	46.086
3 Vinyl Chloride	62	1.359	1.359	(0.274)	476713	50.0000	49.912
4 Bromomethane	94	1.597	1.597	(0.322)	262113	50.0000	46.753
5 Chloroethane	64	1.688	1.688	(0.340)	252850	50.0000	47.751
6 Trichlorofluoromethane	101	1.785	1.785	(0.359)	407938	50.0000	62.834
7 1,1-Dichloroethene	96	2.217	2.217	(0.446)	363428	50.0000	48.046
8 Carbon Disulfide	76	2.217	2.217	(0.446)	1151971	50.0000	49.447
9 112Trichloro122Trifluoroethane	101	2.260	2.260	(0.455)	361251	50.0000	49.139
10 Iodomethane	142	2.327	2.327	(0.468)	136796	50.0000	37.246
11 Bromoethane	108	2.442	2.442	(0.492)	208755	50.0000	47.969
12 Acrolein	56	2.546	2.546	(0.513)	337726	250.000	251.94
13 Methylene Chloride	84	2.759	2.759	(0.555)	363067	50.0000	47.413
14 Acetone	43	2.850	2.850	(0.574)	523387	250.000	222.89
15 Trans-1,2-Dichloroethene	96	2.911	2.911	(0.586)	401400	50.0000	47.451
16 Methyl tert butyl ether	73	3.081	3.081	(0.620)	1138278	50.0000	48.332
17 1,1-Dichloroethane	63	3.543	3.543	(0.713)	739298	50.0000	47.723
18 Acrylonitrile	53	3.629	3.629	(0.731)	133924	50.0000	48.279
19 Vinyl Acetate	43	3.854	3.854	(0.776)	832790	50.0000	48.784
20 Cis-1,2-Dichloroethene	96	4.073	4.073	(0.820)	464037	50.0000	48.458
22 2,2-Dichloropropane	77	4.158	4.158	(0.837)	652171	50.0000	47.902

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	23 Bromochloromethane	128	4.255	4.255	(0.857)	208024	50.0000	48.959
	24 Chloroform	83	4.346	4.346	(0.875)	702958	50.0000	47.855
	25 Carbon Tetrachloride	117	4.426	4.426	(0.818)	591120	50.0000	49.238
$	27 Dibromofluoromethane	111	4.511	4.511	(0.908)	496934	50.0000	50.792
	26 1,1,1-Trichloroethane	97	4.499	4.499	(0.906)	651189	50.0000	47.476
	28 1,1-Dichloropropene	75	4.614	4.614	(0.853)	578953	50.0000	47.361
	29 2-Butanone	72	4.663	4.663	(0.939)	235977	250.000	248.32
	30 Benzene	78	4.839	4.839	(0.894)	1688087	50.0000	48.130
*	31 Pentafluorobenzene	168	4.967	4.967	(1.000)	562031	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.967	4.967	(1.000)	482616	50.0000	49.718
	33 1,2-Dichloroethane	62	5.028	5.028	(0.929)	506337	50.0000	46.664
	34 Trichloroethene	95	5.362	5.362	(0.991)	440210	50.0000	47.621
*	35 1,4-Difluorobenzene	114	5.411	5.411	(1.000)	1551589	50.0000	
	37 Dibromomethane	93	5.721	5.721	(1.057)	231786	50.0000	48.190
	38 1,2-Dichloropropane	63	5.813	5.813	(1.074)	418138	50.0000	47.948
	39 Bromodichloromethane	83	5.880	5.880	(1.087)	537995	50.0000	49.401
	172 2-Pentanone	86	6.178	6.178	(1.142)	295885	250.000	247.44
	40 2-Chloroethyl Vinyl Ether	63	6.397	6.397	(1.182)	192476	50.0000	49.330
	41 Cis 1,3-dichloropropene	75	6.421	6.421	(1.187)	679045	50.0000	48.425
$	42 d8-Toluene	98	6.573	6.573	(1.215)	1880060	50.0000	50.492
	43 Toluene	92	6.616	6.616	(1.223)	1084593	50.0000	47.416
	44 Tetrachloroethene	166	6.932	6.932	(0.879)	432181	50.0000	47.906
	45 4-Methyl-2-Pentanone	58	6.975	6.975	(1.289)	773502	250.000	242.93
	46 Trans 1,3-Dichloropropene	75	6.987	6.987	(1.291)	603199	50.0000	49.154
	47 1,1,2-Trichloroethane	97	7.114	7.114	(1.315)	343417	50.0000	48.512
	48 Chlorodibromomethane	129	7.254	7.254	(0.920)	416880	50.0000	49.589
	49 1,3-Dichloropropane	76	7.340	7.340	(0.931)	614792	50.0000	48.669
	50 1,2-Dibromoethane	107	7.437	7.437	(1.374)	350655	50.0000	48.368
	51 2-Hexanone	43	7.686	7.686	(0.975)	1334761	250.000	240.63
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1542777	50.0000	
	53 Chlorobenzene	112	7.905	7.905	(1.002)	1215267	50.0000	48.179
	54 Ethyl Benzene	91	7.942	7.942	(1.007)	2051437	50.0000	48.653
	55 1,1,1,2-Tetrachloroethane	131	7.966	7.966	(1.010)	434350	50.0000	48.374
	56 m,p-xylene	106	8.076	8.076	(1.024)	1631420	100.000	97.814
	57 o-Xylene	106	8.441	8.441	(1.070)	778666	50.0000	47.557
	58 Styrene	104	8.489	8.489	(1.076)	1322235	50.0000	48.882
	59 Bromoform	173	8.495	8.495	(0.852)	248855	50.0000	48.696
	60 Isopropyl Benzene	105	8.727	8.727	(0.875)	2067455	50.0000	49.262
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	780751	50.0000	49.350
	63 Bromobenzene	156	9.049	9.049	(0.907)	483517	50.0000	49.054
	64 N-Propyl Benzene	91	9.098	9.098	(0.912)	2421419	50.0000	49.555
	65 1,1,2,2-Tetrachloroethane	83	9.171	9.171	(0.919)	456207	50.0000	48.765
	66 2-Chloro Toluene	91	9.219	9.219	(0.924)	1405421	50.0000	49.095
	67 1,3,5-Trimethyl Benzene	105	9.286	9.286	(0.931)	1743469	50.0000	49.785
	68 1,2,3-Trichloropropane	110	9.280	9.280	(0.930)	144103	50.0000	48.832
	69 Trans-1,4-Dichloro 2-Butene	53	9.329	9.329	(0.935)	118343	50.0000	49.560
	70 4-Chloro Toluene	91	9.372	9.372	(0.940)	1464175	50.0000	49.206
	71 T-Butyl Benzene	119	9.560	9.560	(0.959)	1571018	50.0000	48.926
	72 1,2,4-Trimethylbenzene	105	9.633	9.633	(0.966)	1748398	50.0000	49.899
	73 S-Butyl Benzene	105	9.724	9.724	(0.975)	2267198	50.0000	49.265
	74 4-Isopropyl Toluene	119	9.870	9.870	(0.990)	1993129	50.0000	50.464
	75 1,3-Dichlorobenzene	146	9.907	9.907	(0.993)	972410	50.0000	49.364
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	775053	50.0000	
	77 1,4-Dichlorobenzene	146	9.992	9.992	(1.002)	961315	50.0000	48.833

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	78 N-Butyl Benzene	91	10.254	10.254	(1.028)	1748747	50.0000	50.634
$	79 d4-1,2-Dichlorobenzene	152	10.369	10.369	(1.040)	753545	50.0000	50.166
	80 1,2-Dichlorobenzene	146	10.375	10.375	(1.040)	893256	50.0000	48.640
	81 1,2-Dibromo 3-Chloropropane	75	11.136	11.136	(1.116)	86591	50.0000	48.979
	82 Hexachloro 1,3-Butadiene	225	11.775	11.775	(1.181)	260437	50.0000	49.133
	83 1,2,4-Trichlorobenzene	180	11.781	11.781	(1.181)	570032	50.0000	50.576
	84 Naphthalene	128	12.097	12.097	(1.213)	1624731	50.0000	50.591
	85 1,2,3-Trichlorobenzene	180	12.273	12.273	(1.231)	523143	50.0000	49.907

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071607.D
Lab Smp Id: SEG0022-CAL5
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: VSTD50
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	562031	0.00
35 1,4-Difluorobenze	1551589	775795	3103178	1551589	0.00
52 d5-Chlorobenzene	1542777	771389	3085554	1542777	0.00
76 d4-1,4-Dichlorobe	775053	387527	1550106	775053	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.97	0.00
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	0.00
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

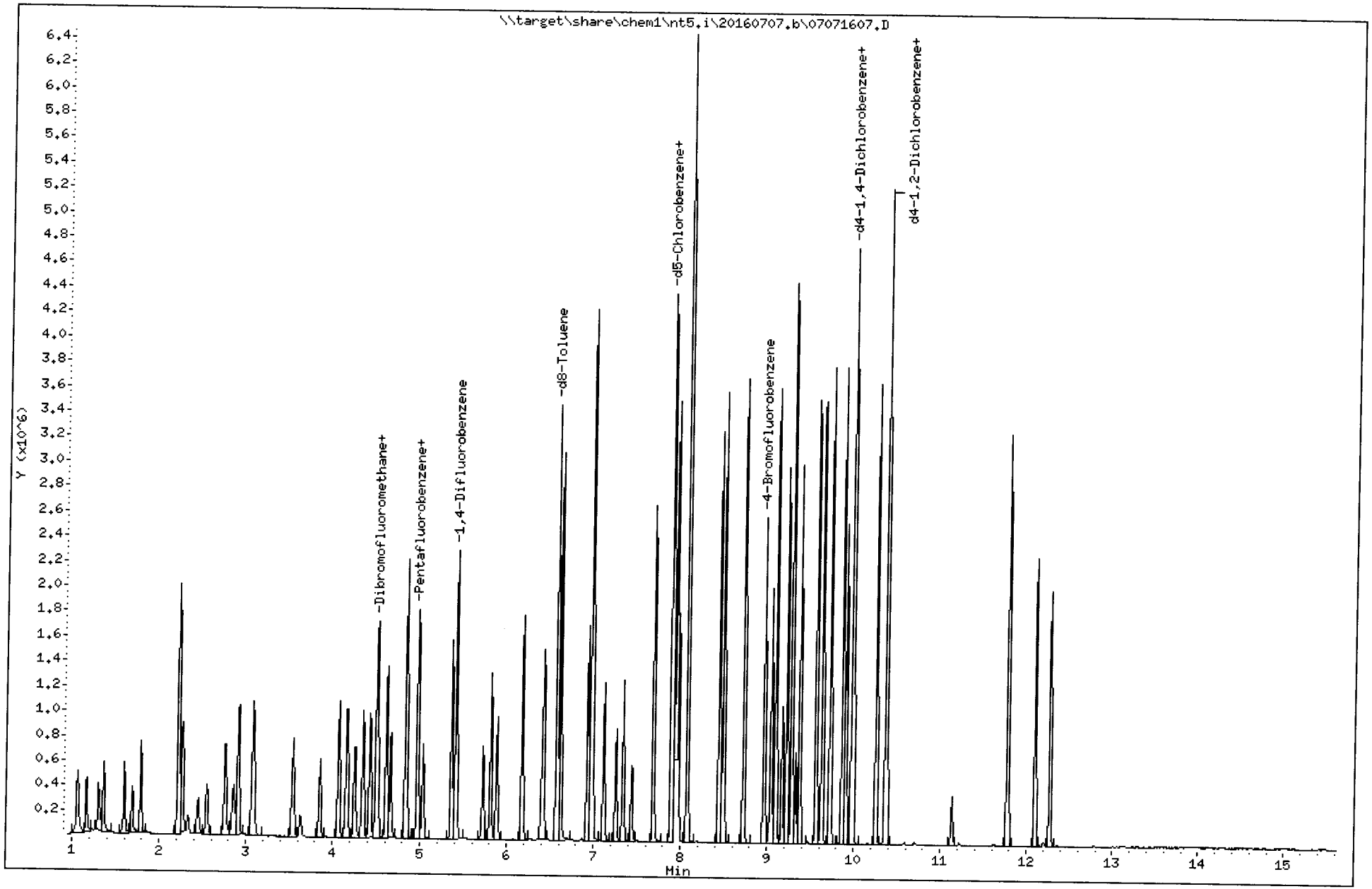
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt5.i\20160707.b\07071607.D
Date : 07-JUL-2016 12:29
Client ID: VSTD50
Sample Info: SEG0022-CAL5

Instrument: nt5.i

Operator: PB
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 07071607.D

Lab ID: SEG0022-CAL5
nt5.i, 20160707.b\VO051314S.m, 07-JUL-2016 12:29

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071608.D
Lab Smp Id: SEG0022-CAL6 Client Smp ID: VSTD100
Inj Date : 07-JUL-2016 12:51
Operator : PB Inst ID: nt5.i
Smp Info : SEG0022-CAL6
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 11:49 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 12:29 Cal File: 07071607.D
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndV

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
1 Dichlorodifluoromethane	85	1.165	1.165	(0.235)	867074	100.000	102.62
2 Chloromethane	50	1.299	1.299	(0.262)	957750	100.000	95.137
3 Vinyl Chloride	62	1.359	1.359	(0.274)	1013380	100.000	104.00
4 Bromomethane	94	1.597	1.597	(0.322)	582883	100.000	101.91
5 Chloroethane	64	1.688	1.688	(0.340)	529790	100.000	98.065
6 Trichlorofluoromethane	101	1.785	1.785	(0.359)	721880	100.000	108.98
7 1,1-Dichloroethene	96	2.205	2.217	(0.444)	764744	100.000	99.094
8 Carbon Disulfide	76	2.205	2.217	(0.444)	2308167	100.000	97.108
9 112Trichloro122Trifluoroethane	101	2.248	2.260	(0.453)	748237	100.000	99.759
10 Iodomethane	142	2.321	2.327	(0.467)	359387	100.000	95.910
11 Bromoethane	108	2.436	2.442	(0.491)	428919	100.000	96.602
12 Acrolein	56	2.552	2.546	(0.514)	712684	500.000	521.11
13 Methylene Chloride	84	2.752	2.759	(0.554)	765287	100.000	97.955
14 Acetone	43	2.868	2.850	(0.577)	1103773	500.000	460.72
15 Trans-1,2-Dichloroethene	96	2.905	2.911	(0.585)	852652	100.000	98.796
16 Methyl tert butyl ether	73	3.087	3.081	(0.622)	2410095	100.000	100.30
17 1,1-Dichloroethane	63	3.537	3.543	(0.712)	1566427	100.000	99.108
18 Acrylonitrile	53	3.635	3.629	(0.732)	278661	100.000	98.461
19 Vinyl Acetate	43	3.854	3.854	(0.776)	1751548	100.000	100.57
20 Cis-1,2-Dichloroethene	96	4.073	4.073	(0.820)	972985	100.000	99.588
22 2,2-Dichloropropane	77	4.158	4.158	(0.837)	1391554	100.000	100.18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	23 Bromochloromethane	128	4.255	4.255	(0.857)	431897	100.000	99.631
	24 Chloroform	83	4.346	4.346	(0.875)	1499096	100.000	100.03
	25 Carbon Tetrachloride	117	4.425	4.426	(0.818)	1275632	100.000	104.73
$	27 Dibromofluoromethane	111	4.511	4.511	(0.908)	494755	50.0000	49.565
	26 1,1,1-Trichloroethane	97	4.498	4.499	(0.906)	1394318	100.000	99.638
	28 1,1-Dichloropropene	75	4.614	4.614	(0.853)	1229161	100.000	99.110
	29 2-Butanone	72	4.669	4.663	(0.940)	496656	500.000	512.27
	30 Benzene	78	4.839	4.839	(0.894)	3539514	100.000	99.472
*	31 Pentafluorobenzene	168	4.967	4.967	(1.000)	573412	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.973	4.967	(1.001)	483706	50.0000	48.842
	33 1,2-Dichloroethane	62	5.034	5.028	(0.930)	1076523	100.000	97.791
	34 Trichloroethene	95	5.362	5.362	(0.991)	924094	100.000	98.534
*	35 1,4-Difluorobenzene	114	5.411	5.411	(1.000)	1574143	50.0000	
	37 Dibromomethane	93	5.721	5.721	(1.057)	492780	100.000	100.98
	38 1,2-Dichloropropane	63	5.813	5.813	(1.074)	884036	100.000	99.920
	39 Bromodichloromethane	83	5.886	5.880	(1.088)	1148368	100.000	103.94
	172 2-Pentanone	86	6.184	6.178	(1.143)	631546	500.000	520.57
	40 2-Chloroethyl Vinyl Ether	63	6.403	6.397	(1.183)	411822	100.000	104.03
	41 Cis 1,3-dichloropropene	75	6.421	6.421	(1.187)	1452685	100.000	102.11
$	42 d8-Toluene	98	6.573	6.573	(1.215)	1874303	50.0000	49.616
	43 Toluene	92	6.616	6.616	(1.223)	2279184	100.000	98.212
	44 Tetrachloroethene	166	6.932	6.932	(0.879)	907042	100.000	99.498
	45 4-Methyl-2-Pentanone	58	6.974	6.975	(1.289)	1655504	500.000	512.48
	46 Trans 1,3-Dichloropropene	75	6.987	6.987	(1.291)	1297183	100.000	104.19
	47 1,1,2-Trichloroethane	97	7.121	7.114	(1.316)	730179	100.000	101.67
	48 Chlorodibromomethane	129	7.254	7.254	(0.920)	900152	100.000	105.96
	49 1,3-Dichloropropane	76	7.340	7.340	(0.931)	1308799	100.000	102.53
	50 1,2-Dibromoethane	107	7.443	7.437	(1.375)	756488	100.000	102.85
	51 2-Hexanone	43	7.686	7.686	(0.975)	2822379	500.000	503.53
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1558989	50.0000	
	53 Chlorobenzene	112	7.905	7.905	(1.002)	2555267	100.000	100.25
	54 Ethyl Benzene	91	7.942	7.942	(1.007)	4231027	100.000	99.302
	55 1,1,1,2-Tetrachloroethane	131	7.972	7.966	(1.011)	941405	100.000	103.76
	56 m,p-xylene	106	8.076	8.076	(1.024)	3377932	200.000	200.42
	57 o-Xylene	106	8.447	8.441	(1.071)	1668149	100.000	100.82
	58 Styrene	104	8.495	8.489	(1.077)	2759290	100.000	100.95
	59 Bromoform	173	8.501	8.495	(0.852)	545291	100.000	103.36
	60 Isopropyl Benzene	105	8.727	8.727	(0.874)	4265557	100.000	98.452
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	791530	50.0000	49.511
	63 Bromobenzene	156	9.049	9.049	(0.907)	1020937	100.000	100.33
	64 N-Propyl Benzene	91	9.098	9.098	(0.912)	4827929	100.000	95.709
	65 1,1,2,2-Tetrachloroethane	83	9.171	9.171	(0.919)	974677	100.000	100.92
	66 2-Chloro Toluene	91	9.219	9.219	(0.924)	2912509	100.000	98.554
	67 1,3,5-Trimethyl Benzene	105	9.286	9.286	(0.930)	3604323	100.000	99.698
	68 1,2,3-Trichloropropane	110	9.280	9.280	(0.930)	312030	100.000	102.42
	69 Trans-1,4-Dichloro 2-Butene	53	9.329	9.329	(0.935)	253215	100.000	102.72
	70 4-Chloro Toluene	91	9.378	9.372	(0.940)	3009512	100.000	97.971
	71 T-Butyl Benzene	119	9.566	9.560	(0.959)	3315810	100.000	100.03
	72 1,2,4-Trimethylbenzene	105	9.633	9.633	(0.965)	3574351	100.000	98.814
	73 S-Butyl Benzene	105	9.730	9.724	(0.975)	4635478	100.000	97.571
	74 4-Isopropyl Toluene	119	9.870	9.870	(0.989)	4013123	100.000	98.425
	75 1,3-Dichlorobenzene	146	9.907	9.907	(0.993)	2016000	100.000	99.135
*	76 d4-1,4-Dichlorobenzene	152	9.980	9.974	(1.000)	800123	50.0000	
	77 1,4-Dichlorobenzene	146	9.992	9.992	(1.001)	1987759	100.000	97.811

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
78	N-Butyl Benzene	91	10.260	10.254	(1.028)	3492909	100.000	97.965
$ 79	d4-1,2-Dichlorobenzene	152	10.369	10.369	(1.039)	776357	50.0000	50.065
80	1,2-Dichlorobenzene	146	10.375	10.375	(1.040)	1884521	100.000	99.401
81	1,2-Dibromo 3-Chloropropane	75	11.136	11.136	(1.116)	193363	100.000	105.95
82	Hexachloro 1,3-Butadiene	225	11.774	11.775	(1.180)	542482	100.000	99.136
83	1,2,4-Trichlorobenzene	180	11.787	11.781	(1.181)	1152543	100.000	99.055
84	Naphthalene	128	12.097	12.097	(1.212)	3342484	100.000	100.82
85	1,2,3-Trichlorobenzene	180	12.273	12.273	(1.230)	1079037	100.000	99.714

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071608.D
Lab Smp Id: SEG0022-CAL6
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: VSTD100
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

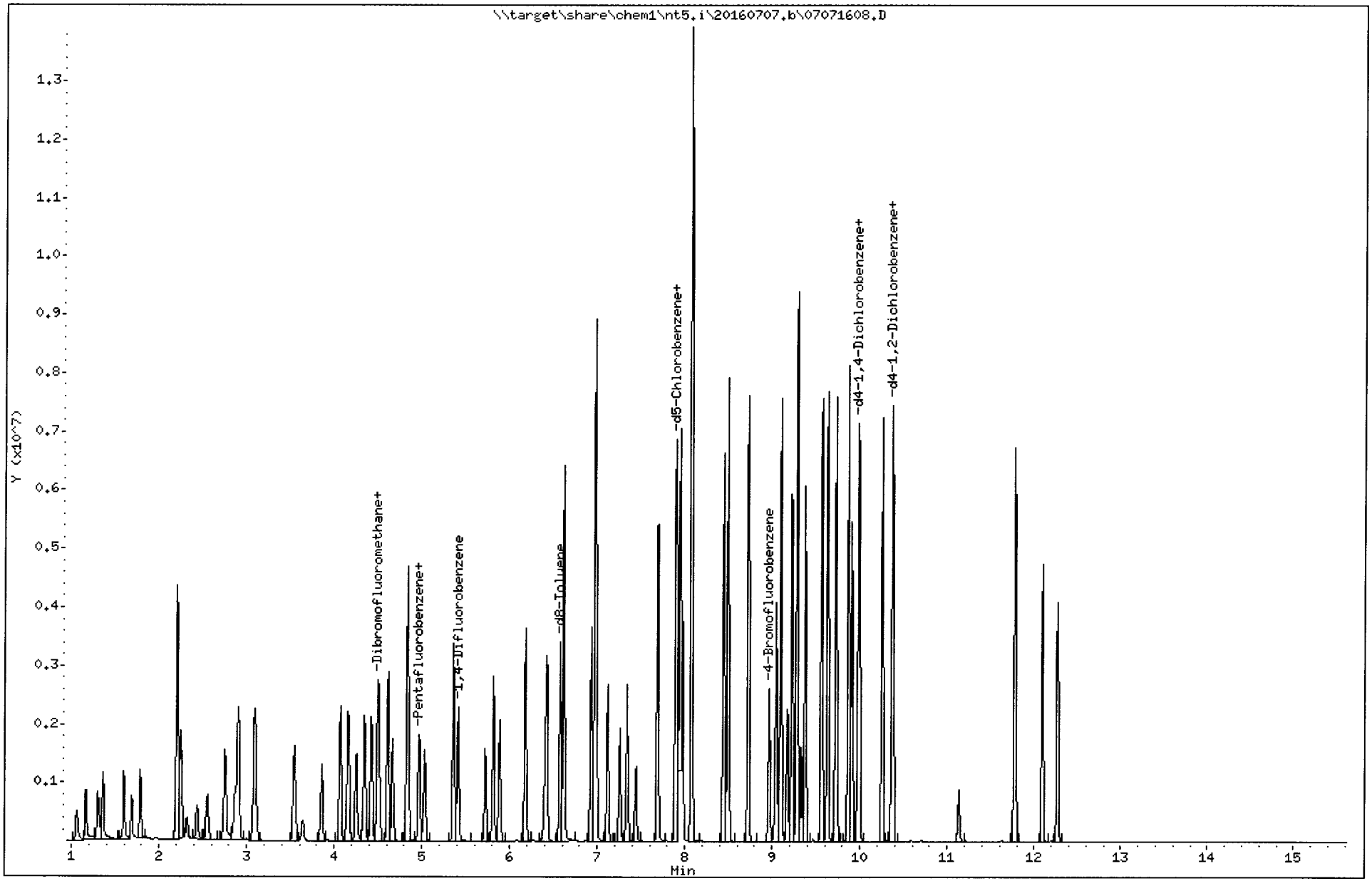
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	573412	2.02
35 1,4-Difluorobenze	1551589	775795	3103178	1574143	1.45
52 d5-Chlorobenzene	1542777	771389	3085554	1558989	1.05
76 d4-1,4-Dichlorobe	775053	387527	1550106	800123	3.23

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.97	-0.00
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	-0.00
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	-0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.98	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt5.i\20160707.b\07071608.D
Date : 07-JUL-2016 12:51
Client ID: VSTD100
Sample Info: SEG0022-CAL6

Instrument: nt5.i
Operator: PB
Column phase: RTXVMS
Column diameter: 0.18



REVIEW SUMMARY FOR FILE - 07071608.D

Lab ID: SEG0022-CAL6
nt5.i, 20160707.b\VO051314S.m, 07-JUL-2016 12:51

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071609.D
Lab Smp Id: SEG0022-CAL7 Client Smp ID: VSTD150
Inj Date : 07-JUL-2016 13:14
Operator : PB Inst ID: nt5.i
Smp Info : SEG0022-CAL7
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 11:49 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 12:51 Cal File: 07071608.D
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndV

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
1	Dichlorodifluoromethane	85	1.153	1.165	(0.232)	1350490	150.000	156.91
2	Chloromethane	50	1.286	1.299	(0.259)	1450225	150.000	141.42
3	Vinyl Chloride	62	1.347	1.359	(0.272)	1542748	150.000	155.42
4	Bromomethane	94	1.591	1.597	(0.321)	888278	150.000	152.46
5	Chloroethane	64	1.682	1.688	(0.339)	784850	150.000	142.62
6	Trichlorofluoromethane	101	1.779	1.785	(0.359)	1026068	150.000	152.07
7	1,1-Dichloroethene	96	2.193	2.217	(0.442)	1162311	150.000	147.85
8	Carbon Disulfide	76	2.193	2.217	(0.442)	3488690	150.000	144.09
9	112Trichloro122Trifluoroethane	101	2.235	2.260	(0.451)	1193229	150.000	156.18
10	Iodomethane	142	2.308	2.327	(0.465)	596943	150.000	156.39
11	Bromoethane	108	2.424	2.442	(0.489)	662300	150.000	146.44
12	Acrolein	56	2.552	2.546	(0.514)	1045027	750.000	750.13
13	Methylene Chloride	84	2.747	2.759	(0.554)	1225996	150.000	154.05
14	Acetone	43	2.874	2.850	(0.579)	1594570	750.000	653.40
15	Trans-1,2-Dichloroethene	96	2.893	2.911	(0.583)	1314576	150.000	149.53
16	Methyl tert butyl ether	73	3.087	3.081	(0.622)	3683701	150.000	150.50
17	1,1-Dichloroethane	63	3.531	3.543	(0.712)	2393032	150.000	148.64
18	Acrylonitrile	53	3.635	3.629	(0.733)	409760	150.000	142.13
19	Vinyl Acetate	43	3.854	3.854	(0.777)	2629258	150.000	148.20
20	Cis-1,2-Dichloroethene	96	4.067	4.073	(0.820)	1503568	150.000	151.08
22	2,2-Dichloropropane	77	4.158	4.158	(0.838)	2107593	150.000	148.95

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
	23	Bromochloromethane	128	4.249	4.255	(0.857)	659557	150.000	149.36
	24	Chloroform	83	4.346	4.346	(0.876)	2302434	150.000	150.82
	25	Carbon Tetrachloride	117	4.419	4.426	(0.817)	1977644	150.000	159.39
$	27	Dibromofluoromethane	111	4.511	4.511	(0.909)	518660	50.0000	51.009
	26	1,1,1-Trichloroethane	97	4.492	4.499	(0.906)	2144394	150.000	150.43
	28	1,1-Dichloropropene	75	4.608	4.614	(0.852)	1899452	150.000	150.35
	29	2-Butanone	72	4.669	4.663	(0.941)	725937	750.000	735.05
	30	Benzene	78	4.833	4.839	(0.893)	5291021	150.000	145.97
*	31	Pentafluorobenzene	168	4.961	4.967	(1.000)	584101	50.0000	
$	32	d4-1,2-Dichloroethane	65	4.967	4.967	(1.001)	494235	50.0000	48.991
	33	1,2-Dichloroethane	62	5.028	5.028	(0.929)	1649614	150.000	147.10
	34	Trichloroethene	95	5.356	5.362	(0.990)	1441057	150.000	150.84
*	35	1,4-Difluorobenzene	114	5.411	5.411	(1.000)	1603575	50.0000	
	37	Dibromomethane	93	5.721	5.721	(1.057)	762860	150.000	153.46
	38	1,2-Dichloropropane	63	5.813	5.813	(1.074)	1367645	150.000	151.74
	39	Bromodichloromethane	83	5.880	5.880	(1.087)	1762795	150.000	156.62
	172	2-Pentanone	86	6.184	6.178	(1.143)	942102	750.000	762.30
	40	2-Chloroethyl Vinyl Ether	63	6.403	6.397	(1.183)	624589	150.000	154.89
	41	Cis 1,3-dichloropropene	75	6.421	6.421	(1.187)	2248312	150.000	155.14
$	42	d8-Toluene	98	6.573	6.573	(1.215)	1919333	50.0000	49.876
	43	Toluene	92	6.616	6.616	(1.223)	3481904	150.000	147.28
	44	Tetrachloroethene	166	6.932	6.932	(0.878)	1420433	150.000	152.46
	45	4-Methyl-2-Pentanone	58	6.981	6.975	(1.290)	2439505	750.000	741.32
	46	Trans 1,3-Dichloropropene	75	6.987	6.987	(1.291)	1991724	150.000	157.04
	47	1,1,2-Trichloroethane	97	7.121	7.114	(1.316)	1125174	150.000	153.79
	48	Chlorodibromomethane	129	7.254	7.254	(0.919)	1404523	150.000	161.77
	49	1,3-Dichloropropane	76	7.340	7.340	(0.930)	1991539	150.000	152.66
	50	1,2-Dibromoethane	107	7.443	7.437	(1.375)	1144739	150.000	152.78
	51	2-Hexanone	43	7.692	7.686	(0.975)	4097199	750.000	715.23
*	52	d5-Chlorobenzene	117	7.893	7.887	(1.000)	1593305	50.0000	
	53	Chlorobenzene	112	7.905	7.905	(1.002)	3915257	150.000	150.30
	54	Ethyl Benzene	91	7.948	7.942	(1.007)	6260103	150.000	143.76
	55	1,1,1,2-Tetrachloroethane	131	7.972	7.966	(1.010)	1469085	150.000	158.43
	56	m,p-xylene	106	8.076	8.076	(1.023)	5074634	300.000	294.61
	57	o-Xylene	106	8.447	8.441	(1.070)	2577281	150.000	152.42
	58	Styrene	104	8.495	8.489	(1.076)	4269327	150.000	152.83
	59	Bromoform	173	8.502	8.495	(0.852)	852229	150.000	151.23
	60	Isopropyl Benzene	105	8.727	8.727	(0.874)	6376240	150.000	137.78
$	62	4-Bromofluorobenzene	95	8.964	8.964	(1.136)	830501	50.0000	50.830
	63	Bromobenzene	156	9.049	9.049	(0.907)	1611965	150.000	148.31
	64	N-Propyl Benzene	91	9.098	9.098	(0.912)	7204132	150.000	133.70
	65	1,1,2,2-Tetrachloroethane	83	9.177	9.171	(0.920)	1507631	150.000	146.14
	66	2-Chloro Toluene	91	9.226	9.219	(0.924)	4522661	150.000	143.27
	67	1,3,5-Trimethyl Benzene	105	9.286	9.286	(0.930)	5513935	150.000	142.79
	68	1,2,3-Trichloropropane	110	9.280	9.280	(0.930)	473154	150.000	145.40
	69	Trans-1,4-Dichloro 2-Butene	53	9.329	9.329	(0.935)	390305	150.000	148.23
	70	4-Chloro Toluene	91	9.378	9.372	(0.940)	4717373	150.000	143.77
	71	T-Butyl Benzene	119	9.566	9.560	(0.959)	5064314	150.000	143.03
	72	1,2,4-Trimethylbenzene	105	9.633	9.633	(0.965)	5552184	150.000	143.70
	73	S-Butyl Benzene	105	9.730	9.724	(0.975)	6972462	150.000	137.40
	74	4-Isopropyl Toluene	119	9.870	9.870	(0.989)	6216507	150.000	142.74
	75	1,3-Dichlorobenzene	146	9.907	9.907	(0.993)	3241404	150.000	149.22
*	76	d4-1,4-Dichlorobenzene	152	9.980	9.974	(1.000)	854649	50.0000	
	77	1,4-Dichlorobenzene	146	9.992	9.992	(1.001)	3207891	150.000	147.78

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
78	N-Butyl Benzene	91	10.260	10.254	(1.028)	5479883	150.000	143.89
$ 79	d4-1,2-Dichlorobenzene	152	10.369	10.369	(1.039)	831983	50.0000	50.229
80	1,2-Dichlorobenzene	146	10.375	10.375	(1.040)	3015632	150.000	148.91
81	1,2-Dibromo 3-Chloropropane	75	11.136	11.136	(1.116)	288249	150.000	147.86
82	Hexachloro 1,3-Butadiene	225	11.775	11.775	(1.180)	895459	150.000	153.20
83	1,2,4-Trichlorobenzene	180	11.787	11.781	(1.181)	1919210	150.000	154.42
84	Naphthalene	128	12.097	12.097	(1.212)	4916455	150.000	138.83
85	1,2,3-Trichlorobenzene	180	12.273	12.273	(1.230)	1727066	150.000	149.42

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071609.D
Lab Smp Id: SEG0022-CAL7
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: VSTD150
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	584101	3.93
35 1,4-Difluorobenze	1551589	775795	3103178	1603575	3.35
52 d5-Chlorobenzene	1542777	771389	3085554	1593305	3.28
76 d4-1,4-Dichlorobe	775053	387527	1550106	854649	10.27

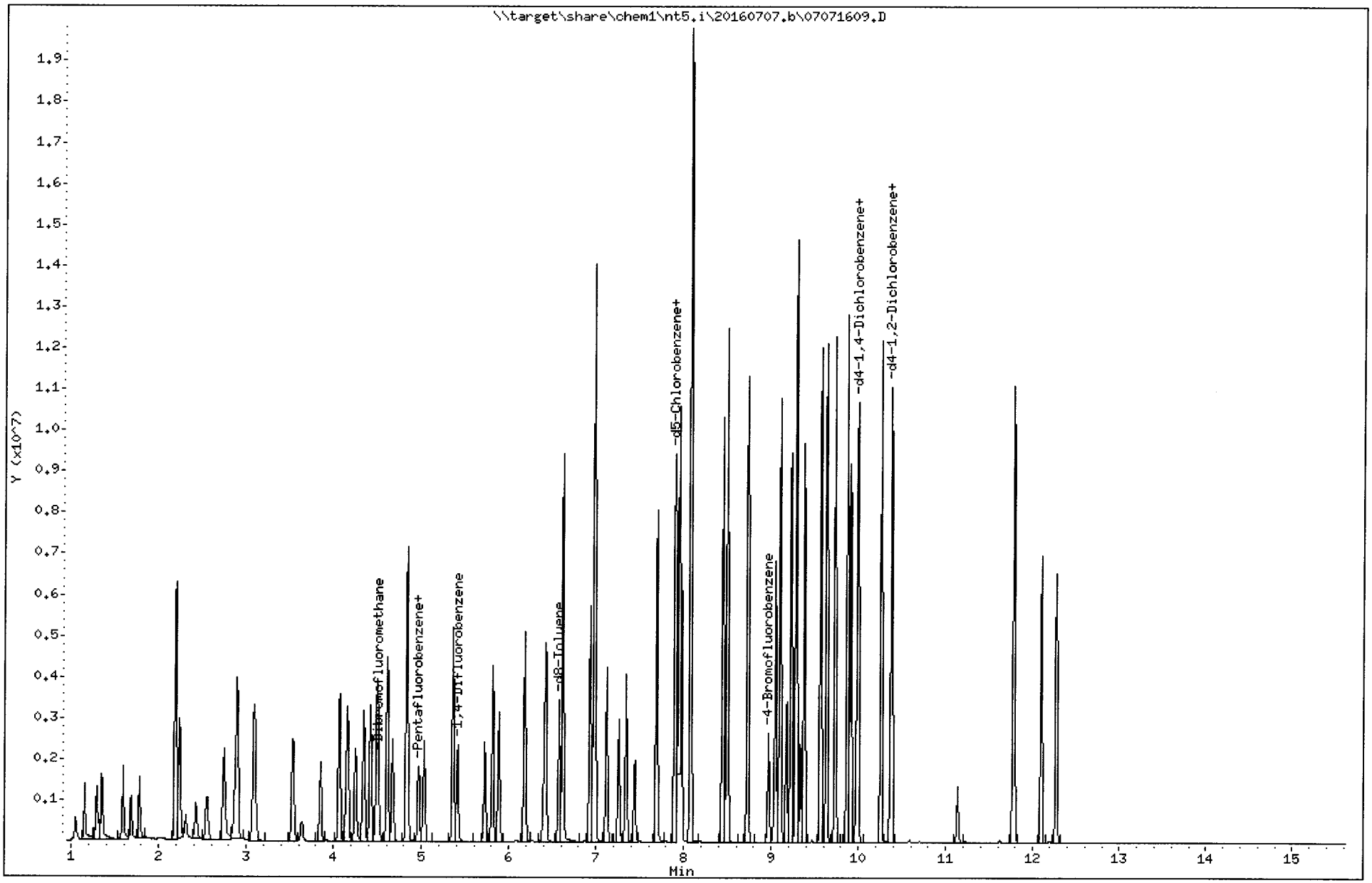
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.96	-0.12
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	0.00
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.98	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt5.i\20160707.b\07071609.D
Date : 07-JUL-2016 13:14
Client ID: VSTD150
Sample Info: SEG0022-CAL7

Instrument: nt5.i

Operator: PB
Column phase: RTXVMS
Column diameter: 0.18



REVIEW SUMMARY FOR FILE - 07071609.D

Lab ID: SEG0022-CAL7
nt5.i, 20160707.b\VO051314S.m, 07-JUL-2016 13:14

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

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8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071610.D
Lab Smp Id: SEG0022-CAL8 Client Smp ID: VSTD200
Inj Date : 07-JUL-2016 13:37
Operator : PB Inst ID: nt5.i
Smp Info : SEG0022-CAL8
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 11:49 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 13:14 Cal File: 07071609.D
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndV

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
1 Dichlorodifluoromethane	85	1.146	1.165	(0.231)	1809282	200.000	208.98
2 Chloromethane	50	1.280	1.299	(0.258)	1970220	200.000	191.00
3 Vinyl Chloride	62	1.341	1.359	(0.270)	2087200	200.000	209.04
4 Bromomethane	94	1.584	1.597	(0.319)	1222723	200.000	208.63
5 Chloroethane	64	1.676	1.688	(0.338)	1036298	200.000	187.21
6 Trichlorofluoromethane	101	1.773	1.785	(0.357)	1280263	200.000	188.64
7 1,1-Dichloroethene	96	2.175	2.217	(0.438)	1439587	200.000	182.05
8 Carbon Disulfide	76	2.168	2.217	(0.437)	4748932	200.000	194.99
9 112Trichloro122Trifluoroethane	101	2.211	2.260	(0.446)	1547027	200.000	201.30
10 Iodomethane	142	2.290	2.327	(0.462)	765921	200.000	199.49
11 Bromoethane	108	2.406	2.442	(0.485)	862803	200.000	189.65
12 Acrolein	56	2.558	2.546	(0.516)	1375752	1000.00	981.75
13 Methylene Chloride	84	2.734	2.759	(0.551)	1577001	200.000	197.00
14 Acetone	43	2.892	2.850	(0.583)	2208369	1000.00	899.62
15 Trans-1,2-Dichloroethene	96	2.880	2.911	(0.581)	1729479	200.000	195.57
16 Methyl tert butyl ether	73	3.099	3.081	(0.625)	4721463	200.000	191.77
17 1,1-Dichloroethane	63	3.525	3.543	(0.711)	3149641	200.000	194.49
18 Acrylonitrile	53	3.647	3.629	(0.735)	555145	200.000	191.44
19 Vinyl Acetate	43	3.854	3.854	(0.777)	3381366	200.000	189.48
20 Cis-1,2-Dichloroethene	96	4.060	4.073	(0.819)	1983994	200.000	198.19
22 2,2-Dichloropropane	77	4.152	4.158	(0.837)	2807982	200.000	197.29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
	23 Bromochloromethane	128	4.249	4.255	(0.857)	891505	200.000	200.71
	24 Chloroform	83	4.346	4.346	(0.876)	3031061	200.000	197.39
	25 Carbon Tetrachloride	117	4.413	4.426	(0.816)	2643668	200.000	215.74
$	27 Dibromofluoromethane	111	4.511	4.511	(0.909)	504049	50.0000	49.282
	26 1,1,1-Trichloroethane	97	4.486	4.499	(0.904)	2839583	200.000	198.04
	28 1,1-Dichloropropene	75	4.602	4.614	(0.850)	2542058	200.000	203.73
	29 2-Butanone	72	4.681	4.663	(0.944)	1002200	1000.00	1008.9
	30 Benzene	78	4.833	4.839	(0.893)	6828903	200.000	190.75
*	31 Pentafluorobenzene	168	4.961	4.967	(1.000)	587538	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.967	4.967	(1.001)	480131	50.0000	47.315
	33 1,2-Dichloroethane	62	5.028	5.028	(0.929)	2112695	200.000	190.75
	34 Trichloroethene	95	5.356	5.362	(0.990)	1920434	200.000	203.53
*	35 1,4-Difluorobenzene	114	5.411	5.411	(1.000)	1583751	50.0000	
	37 Dibromomethane	93	5.721	5.721	(1.057)	991048	200.000	201.86
	38 1,2-Dichloropropane	63	5.812	5.813	(1.074)	1781441	200.000	200.13
	39 Bromodichloromethane	83	5.885	5.880	(1.088)	2320595	200.000	208.76
	172 2-Pentanone	86	6.190	6.178	(1.144)	1261661	1000.00	1033.6
	40 2-Chloroethyl Vinyl Ether	63	6.403	6.397	(1.183)	780744	200.000	196.04
	41 Cis 1,3-dichloropropene	75	6.421	6.421	(1.187)	2932559	200.000	204.88
$	42 d8-Toluene	98	6.573	6.573	(1.215)	1888149	50.0000	49.680
	43 Toluene	92	6.616	6.616	(1.223)	4575769	200.000	195.98
	44 Tetrachloroethene	166	6.932	6.932	(0.878)	1900337	200.000	206.19
	45 4-Methyl-2-Pentanone	58	6.981	6.975	(1.290)	3202453	1000.00	985.34
	46 Trans 1,3-Dichloropropene	75	6.987	6.987	(1.291)	2619749	200.000	209.15
	47 1,1,2-Trichloroethane	97	7.120	7.114	(1.316)	1473449	200.000	203.92
	48 Chlorodibromomethane	129	7.260	7.254	(0.920)	1841236	200.000	214.38
	49 1,3-Dichloropropane	76	7.346	7.340	(0.931)	2605476	200.000	201.89
	50 1,2-Dibromoethane	107	7.443	7.437	(1.375)	1500894	200.000	202.82
	51 2-Hexanone	43	7.698	7.686	(0.975)	5337334	1000.00	941.85
*	52 d5-Chlorobenzene	117	7.893	7.887	(1.000)	1576153	50.0000	
	53 Chlorobenzene	112	7.905	7.905	(1.002)	5123371	200.000	198.82
	54 Ethyl Benzene	91	7.948	7.942	(1.007)	8040851	200.000	186.66
	55 1,1,1,2-Tetrachloroethane	131	7.972	7.966	(1.010)	1953441	200.000	212.95
	56 m,p-xylene	106	8.082	8.076	(1.024)	6500450	400.000	381.49
	57 o-Xylene	106	8.447	8.441	(1.070)	3397065	200.000	203.08
	58 Styrene	104	8.495	8.489	(1.076)	5509792	200.000	199.38
	59 Bromoform	173	8.508	8.495	(0.852)	1123064	200.000	205.50
	60 Isopropyl Benzene	105	8.727	8.727	(0.874)	8148674	200.000	181.56
$	62 4-Bromofluorobenzene	95	8.970	8.964	(1.136)	811109	50.0000	50.183
	63 Bromobenzene	156	9.049	9.049	(0.907)	2121446	200.000	201.26
	64 N-Propyl Benzene	91	9.104	9.098	(0.912)	9068407	200.000	173.55
	65 1,1,2,2-Tetrachloroethane	83	9.177	9.171	(0.920)	1950783	200.000	194.99
	66 2-Chloro Toluene	91	9.225	9.219	(0.924)	5864822	200.000	191.58
	67 1,3,5-Trimethyl Benzene	105	9.292	9.286	(0.931)	7045671	200.000	188.14
	68 1,2,3-Trichloropropane	110	9.280	9.280	(0.930)	619558	200.000	196.33
	69 Trans-1,4-Dichloro 2-Butene	53	9.335	9.329	(0.935)	508034	200.000	198.95
	70 4-Chloro Toluene	91	9.377	9.372	(0.940)	6075414	200.000	190.93
	71 T-Butyl Benzene	119	9.566	9.560	(0.959)	6577543	200.000	191.55
	72 1,2,4-Trimethylbenzene	105	9.633	9.633	(0.965)	7062877	200.000	188.49
	73 S-Butyl Benzene	105	9.730	9.724	(0.975)	8823997	200.000	179.30
	74 4-Isopropyl Toluene	119	9.876	9.870	(0.990)	7893815	200.000	186.90
	75 1,3-Dichlorobenzene	146	9.913	9.907	(0.993)	4189918	200.000	198.90
*	76 d4-1,4-Dichlorobenzene	152	9.980	9.974	(1.000)	828826	50.0000	
	77 1,4-Dichlorobenzene	146	9.992	9.992	(1.001)	4142733	200.000	196.79

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
78 N-Butyl Benzene	91	10.260	10.254	(1.028)	7007164	200.000	189.72
$ 79 d4-1,2-Dichlorobenzene	152	10.369	10.369	(1.039)	794979	50.0000	49.491
80 1,2-Dichlorobenzene	146	10.381	10.375	(1.040)	3886413	200.000	197.89
81 1,2-Dibromo 3-Chloropropane	75	11.136	11.136	(1.116)	384577	200.000	203.42
82 Hexachloro 1,3-Butadiene	225	11.774	11.775	(1.180)	1198431	200.000	211.42
83 1,2,4-Trichlorobenzene	180	11.787	11.781	(1.181)	2514985	200.000	208.66
84 Naphthalene	128	12.103	12.097	(1.213)	6328336	200.000	184.27
85 1,2,3-Trichlorobenzene	180	12.279	12.273	(1.230)	2296365	200.000	204.86

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071610.D
Lab Smp Id: SEG0022-CAL8
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: VSTD200
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	587538	4.54
35 1,4-Difluorobenze	1551589	775795	3103178	1583751	2.07
52 d5-Chlorobenzene	1542777	771389	3085554	1576153	2.16
76 d4-1,4-Dichlorobe	775053	387527	1550106	828826	6.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.96	-0.12
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	-0.00
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	0.08
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.98	0.06

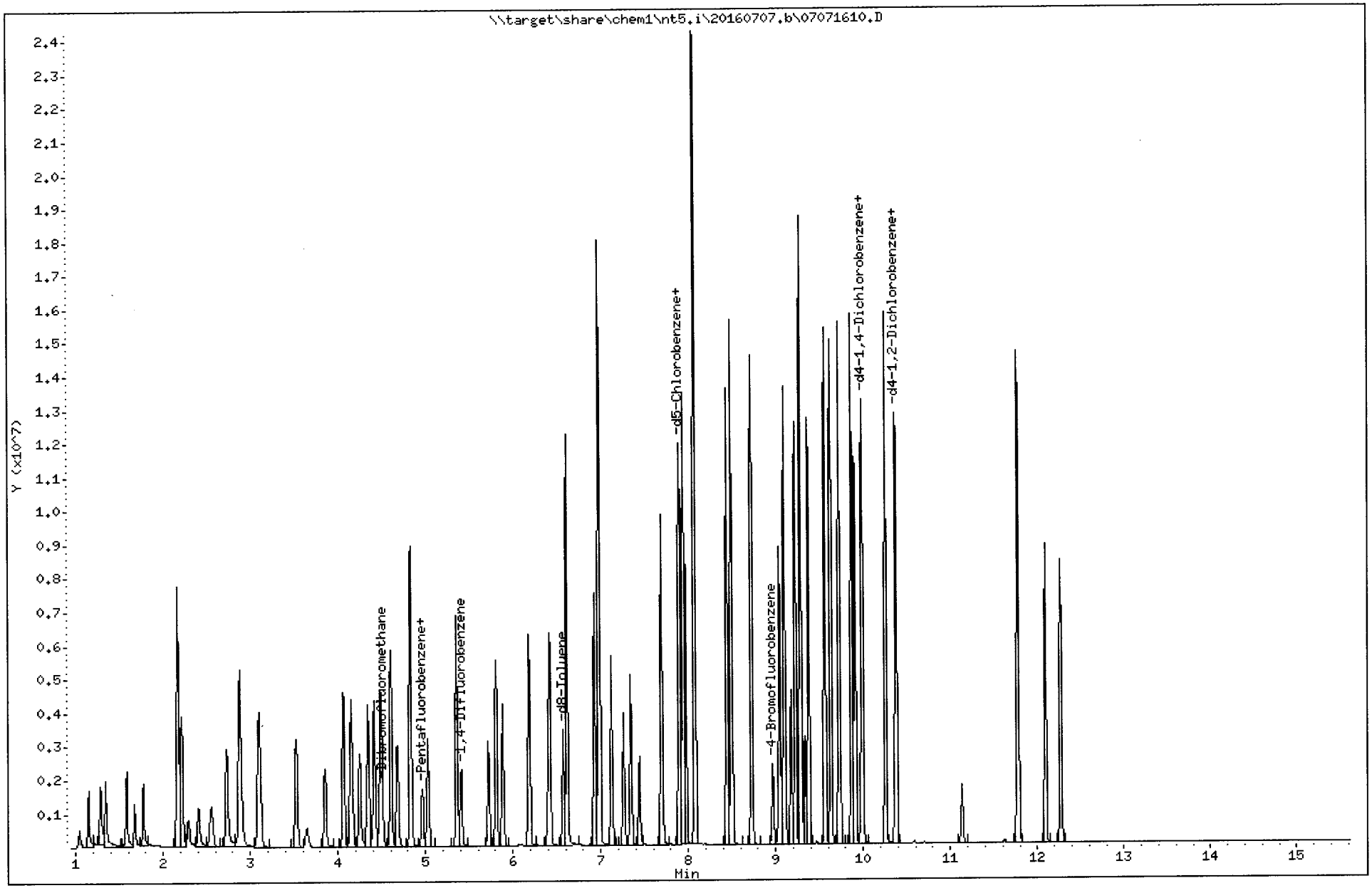
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt5.i\20160707.b\07071610.D
Date : 07-JUL-2016 13:37
Client ID: VSTD200
Sample Info: SEG0022-CAL8

Instrument: nt5.i

Operator: PB
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 07071610.D

Lab ID: SEG0022-CAL8
nt5.i, 20160707.b\VO051314S.m, 07-JUL-2016 13:37

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

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8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\07071611.D
Lab Smp Id: SEG0022-SCV1 Client Smp ID: SCV0707
Inj Date : 07-JUL-2016 15:10
Operator : PB Inst ID: nt5.i
Smp Info : SCV1
Misc Info : 1
Comment :
Method : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 11:49 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 13:37 Cal File: 07071610.D
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndV

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	1.153	1.165	(0.233)	513308	59.6318	59.632
2 Chloromethane	50	1.286	1.299	(0.260)	576219	56.1834	56.183
3 Vinyl Chloride	62	1.347	1.359	(0.272)	638475	64.3147	64.315(R)
4 Bromomethane	94	1.585	1.597	(0.320)	465489	79.8820	79.882(R)
5 Chloroethane	64	1.676	1.688	(0.338)	299810	54.4730	54.473
6 Trichlorofluoromethane	101	1.773	1.785	(0.358)	406549	60.2463	60.246(R)
7 1,1-Dichloroethene	96	2.193	2.217	(0.443)	368309	46.8454	46.845
8 Carbon Disulfide	76	2.199	2.217	(0.444)	5704592	235.580	235.58(R)
9 112Trichloro122Trifluoroethane	101	2.242	2.260	(0.452)	816942	106.912	106.91
10 Iodomethane	142	2.308	2.327	(0.466)	1438265	376.763	376.76(R)
11 Bromoethane	108	2.424	2.442	(0.489)	447202	98.8649	98.865
12 Acrolein	56	2.534	2.546	(0.511)	68095	48.8730	48.873
13 Methylene Chloride	84	2.740	2.759	(0.553)	377519	47.4312	47.431
14 Acetone	43	2.850	2.850	(0.575)	480968	197.059	197.06(R)
15 Trans-1,2-Dichloroethene	96	2.892	2.911	(0.584)	421977	47.9932	47.993
16 Methyl tert butyl ether	73	3.069	3.081	(0.619)	1178831	48.1570	48.157
17 1,1-Dichloroethane	63	3.525	3.543	(0.711)	773530	48.0398	48.040
18 Acrylonitrile	53	3.616	3.629	(0.730)	126401	43.8395	43.840
19 Vinyl Acetate	43	3.842	3.854	(0.775)	3819846	215.282	215.28
20 Cis-1,2-Dichloroethene	96	4.061	4.073	(0.820)	480283	48.2530	48.253
22 2,2-Dichloropropane	77	4.152	4.158	(0.838)	698412	49.3539	49.354

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	23 Bromochloromethane	128	4.243	4.255	(0.856)	205419	46.5137	46.514
	24 Chloroform	83	4.334	4.346	(0.875)	738662	48.3797	48.380
	25 Carbon Tetrachloride	117	4.413	4.426	(0.817)	629784	52.1780	52.178
$	27 Dibromofluoromethane	111	4.499	4.511	(0.908)	505515	49.7104	49.710
	26 1,1,1-Trichloroethane	97	4.486	4.499	(0.905)	698512	48.9962	48.996
	28 1,1-Dichloropropene	75	4.602	4.614	(0.851)	639635	52.0446	52.045
	29 2-Butanone	72	4.651	4.663	(0.939)	204701	207.246	207.25
	30 Benzene	78	4.827	4.839	(0.893)	1760833	49.9354	49.935
*	31 Pentafluorobenzene	168	4.955	4.967	(1.000)	584173	50.0000	
$	32 d4-1,2-Dichloroethane	65	4.961	4.967	(1.001)	479667	47.5415	47.542
	33 1,2-Dichloroethane	62	5.022	5.028	(0.929)	511039	46.8451	46.845
	34 Trichloroethene	95	5.350	5.362	(0.990)	466000	50.1409	50.141
*	35 1,4-Difluorobenzene	114	5.405	5.411	(1.000)	1559945	50.0000	
	37 Dibromomethane	93	5.709	5.721	(1.056)	231640	47.9015	47.901
	38 1,2-Dichloropropane	63	5.800	5.813	(1.073)	431077	49.1670	49.167
	39 Bromodichloromethane	83	5.873	5.880	(1.087)	554695	50.6618	50.662
	172 2-Pentanone	86	6.172	6.178	(1.142)	109423	91.0154	91.015
	40 2-Chloroethyl Vinyl Ether	63	6.397	6.397	(1.183)	857944	218.707	218.71(R)
	41 Cis 1,3-dichloropropene	75	6.415	6.421	(1.187)	724437	51.3855	51.386
$	42 d8-Toluene	98	6.567	6.573	(1.215)	1883899	50.3243	50.324
	43 Toluene	92	6.610	6.616	(1.223)	1146030	49.8330	49.833
	44 Tetrachloroethene	166	6.926	6.932	(0.878)	490920	53.8958	53.896
	45 4-Methyl-2-Pentanone	58	6.968	6.975	(1.289)	671695	209.824	209.82
	46 Trans 1,3-Dichloropropene	75	6.981	6.987	(1.291)	627623	50.8707	50.871
	47 1,1,2-Trichloroethane	97	7.114	7.114	(1.316)	346418	48.6740	48.674
	48 Chlorodibromomethane	129	7.254	7.254	(0.920)	426011	50.1894	50.189
	49 1,3-Dichloropropane	76	7.333	7.340	(0.930)	615122	48.2286	48.229
	50 1,2-Dibromoethane	107	7.437	7.437	(1.376)	350187	48.0444	48.044
	51 2-Hexanone	43	7.686	7.686	(0.975)	1141866	203.886	203.89
*	52 d5-Chlorobenzene	117	7.887	7.887	(1.000)	1557703	50.0000	
	53 Chlorobenzene	112	7.899	7.905	(1.002)	1263276	49.6027	49.603
	54 Ethyl Benzene	91	7.936	7.942	(1.006)	2226683	52.3033	52.303
	55 1,1,1,2-Tetrachloroethane	131	7.966	7.966	(1.010)	455822	50.2791	50.279
	56 m,p-xylene	106	8.070	8.076	(1.023)	1766599	104.904	104.90
	57 o-Xylene	106	8.441	8.441	(1.070)	851374	51.4994	51.499
	58 Styrene	104	8.489	8.489	(1.076)	1391373	50.9451	50.945
	59 Bromoform	173	8.495	8.495	(0.852)	245667	46.5492	46.549
	60 Isopropyl Benzene	105	8.727	8.727	(0.875)	2081069	48.0149	48.015
$	62 4-Bromofluorobenzene	95	8.964	8.964	(1.137)	799003	50.0198	50.020
	63 Bromobenzene	156	9.043	9.049	(0.907)	499168	49.0370	49.037
	64 N-Propyl Benzene	91	9.098	9.098	(0.912)	2669572	52.9026	52.903
	65 1,1,2,2-Tetrachloroethane	83	9.171	9.171	(0.919)	432339	44.7491	44.749
	66 2-Chloro Toluene	91	9.219	9.219	(0.924)	1472116	49.7956	49.796
	67 1,3,5-Trimethyl Benzene	105	9.280	9.286	(0.930)	1882622	52.0554	52.055
	68 1,2,3-Trichloropropane	110	9.274	9.280	(0.930)	141294	46.3629	46.363
	69 Trans-1,4-Dichloro 2-Butene	53	9.329	9.329	(0.935)	120617	48.9115	48.911
	70 4-Chloro Toluene	91	9.371	9.372	(0.940)	1572293	51.1654	51.165
	71 T-Butyl Benzene	119	9.560	9.560	(0.959)	1940398	58.5148	58.515
	72 1,2,4-Trimethylbenzene	105	9.627	9.633	(0.965)	1893760	52.3347	52.335
	73 S-Butyl Benzene	105	9.724	9.724	(0.975)	2372441	49.9185	49.918
	74 4-Isopropyl Toluene	119	9.864	9.870	(0.989)	2180779	53.4656	53.466
	75 1,3-Dichlorobenzene	146	9.901	9.907	(0.993)	1050346	51.6310	51.631
*	76 d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	800415	50.0000	
	77 1,4-Dichlorobenzene	146	9.986	9.992	(1.001)	1037668	51.0414	51.041

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	78 N-Butyl Benzene	91	10.254	10.254	(1.028)	1958192	54.9013	54.901
$	79 d4-1,2-Dichlorobenzene	152	10.363	10.369	(1.039)	759700	48.9730	48.973
	80 1,2-Dichlorobenzene	146	10.375	10.375	(1.040)	940625	49.5961	49.596
	81 1,2-Dibromo 3-Chloropropane	75	11.130	11.136	(1.116)	80885	44.3022	44.302
	82 Hexachloro 1,3-Butadiene	225	11.775	11.775	(1.181)	284322	51.9396	51.940
	83 1,2,4-Trichlorobenzene	180	11.781	11.781	(1.181)	629835	54.1111	54.111
	84 Naphthalene	128	12.097	12.097	(1.213)	1616226	48.7311	48.731
	85 1,2,3-Trichlorobenzene	180	12.273	12.273	(1.231)	557424	51.4927	51.493

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 07071611.D
Lab Smp Id: SEG0022-SCV1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: SCV0707
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	584173	3.94
35 1,4-Difluorobenze	1551589	775795	3103178	1559945	0.54
52 d5-Chlorobenzene	1542777	771389	3085554	1557703	0.97
76 d4-1,4-Dichlorobe	775053	387527	1550106	800415	3.27

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.96	-0.24
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	-0.11
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Client SDG: 20151013
Sample Matrix: SOLID
Fraction: VOA
Lab Smp Id: SEG0022-SCV1
Client Smp ID: SCV0707
Level: LOW
Operator: PB
Data Type: MS DATA
SampleType: LCS
SpikeList File: icv2.spk
Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1 Dichlorodifluorome	50.000	59.632	119.26	80-120
2 Chloromethane	50.000	56.183	112.37	80-120
3 Vinyl Chloride	50.000	64.315	128.63*	80-120
4 Bromomethane	50.000	79.882	159.76*	80-120
5 Chloroethane	50.000	54.473	108.95	80-120
6 Trichlorofluoromet	50.000	60.246	120.49*	80-120
12 Acrolein	50.000	48.873	97.75	80-120
9 112Trichloro122Tri	100.00	106.91	106.91	80-120
14 Acetone	250.00	197.06	78.82*	80-120
7 1,1-Dichloroethene	50.000	46.845	93.69	80-120
11 Bromoethane	100.00	98.865	98.86	80-120
10 Iodomethane	300.00	376.76	125.59*	80-120
13 Methylene Chloride	50.000	47.431	94.86	80-120
8 Carbon Disulfide	300.00	235.58	78.53*	80-120
18 Acrylonitrile	50.000	43.840	87.68	80-120
15 Trans-1,2-Dichloro	50.000	47.993	95.99	80-120
16 Methyl tert butyl	50.000	48.157	96.31	80-120
19 Vinyl Acetate	250.00	215.28	86.11	80-120
17 1,1-Dichloroethane	50.000	48.040	96.08	80-120
29 2-Butanone	250.00	207.25	82.90	80-120
22 2,2-Dichloropropan	50.000	49.354	98.71	80-120
20 Cis-1,2-Dichloroet	50.000	48.253	96.51	80-120
24 Chloroform	50.000	48.380	96.76	80-120
23 Bromochloromethane	50.000	46.514	93.03	80-120
26 1,1,1-Trichloroeth	50.000	48.996	97.99	80-120
28 1,1-Dichloropropen	50.000	52.045	104.09	80-120
25 Carbon Tetrachlori	50.000	52.178	104.36	80-120
33 1,2-Dichloroethane	50.000	46.845	93.69	80-120
30 Benzene	50.000	49.935	99.87	80-120
34 Trichloroethene	50.000	50.141	100.28	80-120
38 1,2-Dichloropropan	50.000	49.167	98.33	80-120
39 Bromodichlorometha	50.000	50.662	101.32	80-120
37 Dibromomethane	50.000	47.901	95.80	80-120
40 2-Chloroethyl Viny	300.00	218.71	72.90*	80-120
45 4-Methyl-2-Pentano	250.00	209.82	83.93	80-120
41 Cis 1,3-dichloropr	50.000	51.386	102.77	80-120
43 Toluene	50.000	49.833	99.67	80-120
46 Trans 1,3-Dichloro	50.000	50.871	101.74	80-120
51 2-Hexanone	250.00	203.89	81.55	80-120
47 1,1,2-Trichloroeth	50.000	48.674	97.35	80-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
49 1,3-Dichloropropan	50.000	48.229	96.46	80-120
44 Tetrachloroethene	50.000	53.896	107.79	80-120
48 Chlorodibromometha	50.000	50.189	100.38	80-120
50 1,2-Dibromoethane	50.000	48.044	96.09	80-120
53 Chlorobenzene	50.000	49.603	99.21	80-120
55 1,1,1,2-Tetrachlor	50.000	50.279	100.56	80-120
54 Ethyl Benzene	50.000	52.303	104.61	80-120
56 m,p-xylene	100.00	104.90	104.90	80-120
57 o-Xylene	50.000	51.499	103.00	80-120
58 Styrene	50.000	50.945	101.89	80-120
60 Isopropyl Benzene	50.000	48.015	96.03	80-120
59 Bromoform	50.000	46.549	93.10	80-120
65 1,1,2,2-Tetrachlor	50.000	44.749	89.50	80-120
68 1,2,3-Trichloropro	50.000	46.363	92.73	80-120
69 Trans-1,4-Dichloro	50.000	48.911	97.82	80-120
64 N-Propyl Benzene	50.000	52.903	105.81	80-120
63 Bromobenzene	50.000	49.037	98.07	80-120
67 1,3,5-Trimethyl Be	50.000	52.055	104.11	80-120
66 2-Chloro Toluene	50.000	49.796	99.59	80-120
70 4-Chloro Toluene	50.000	51.165	102.33	80-120
71 T-Butyl Benzene	50.000	58.515	117.03	80-120
72 1,2,4-Trimethylben	50.000	52.335	104.67	80-120
73 S-Butyl Benzene	50.000	49.918	99.84	80-120
74 4-Isopropyl Toluen	50.000	53.466	106.93	80-120
75 1,3-Dichlorobenzen	50.000	51.631	103.26	80-120
77 1,4-Dichlorobenzen	50.000	51.041	102.08	80-120
78 N-Butyl Benzene	50.000	54.901	109.80	80-120
80 1,2-Dichlorobenzen	50.000	49.596	99.19	80-120
81 1,2-Dibromo 3-Chlo	50.000	44.302	88.60	80-120
83 1,2,4-Trichloroben	50.000	54.111	108.22	80-120
82 Hexachloro 1,3-But	50.000	51.940	103.88	80-120
84 Naphthalene	50.000	48.731	97.46	80-120
85 1,2,3-Trichloroben	50.000	51.493	102.99	80-120

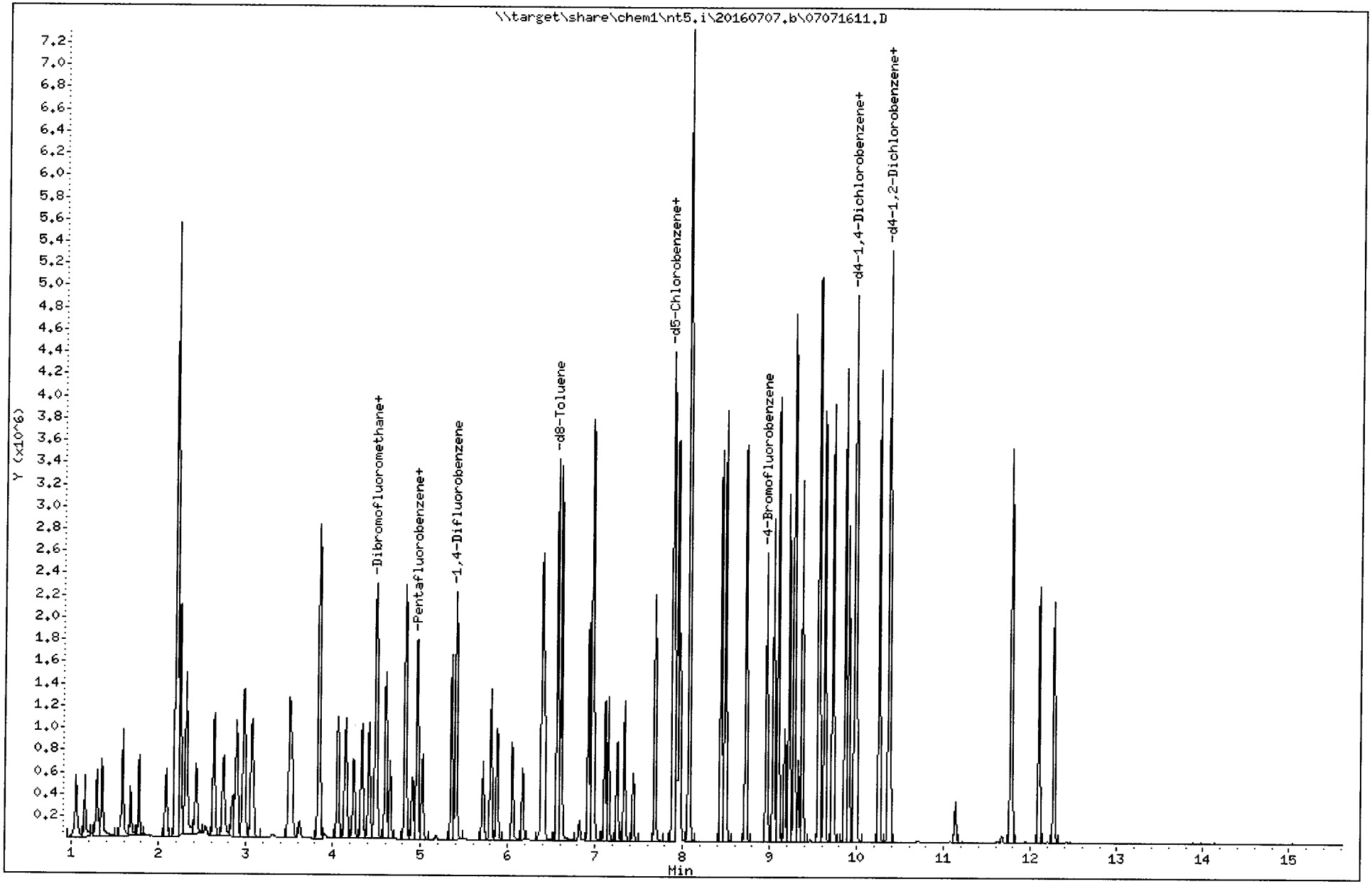
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	50.000	49.710	99.42	70-130
$ 32 d4-1,2-Dichloroeth	50.000	47.542	95.08	80-149
$ 42 d8-Toluene	50.000	50.324	100.65	77-120
$ 62 4-Bromofluorobenze	50.000	50.020	100.04	80-120
$ 79 d4-1,2-Dichloroben	50.000	48.973	97.95	80-120

Data File: \\target\share\chem1\nt5.i\20160707.b\07071611.D
Date : 07-JUL-2016 15:10
Client ID: SCV0707
Sample Info: SCV1

Instrument: nt5.i

Operator: PB
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 07071611.D

Lab ID: SEG0022-SCV1
nt5.i, 20160707.b\VO051314S.m, 07-JUL-2016 15:10

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

Quant Ion Manual Peak Adjustment Report

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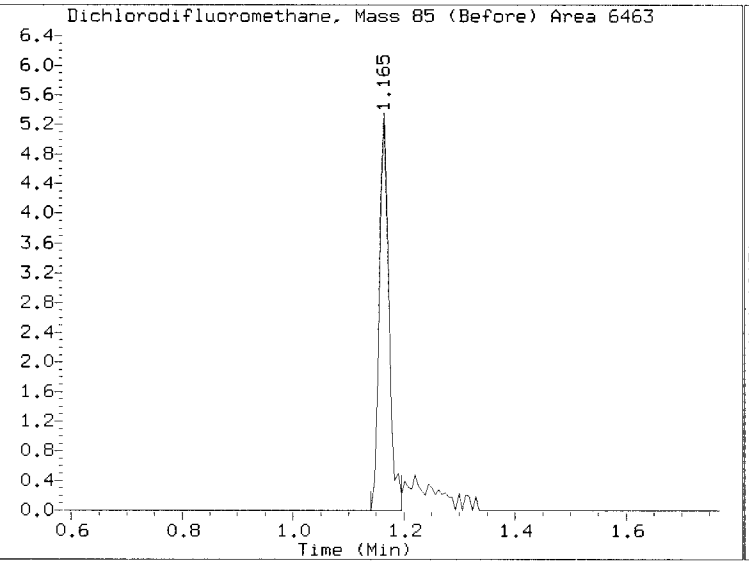
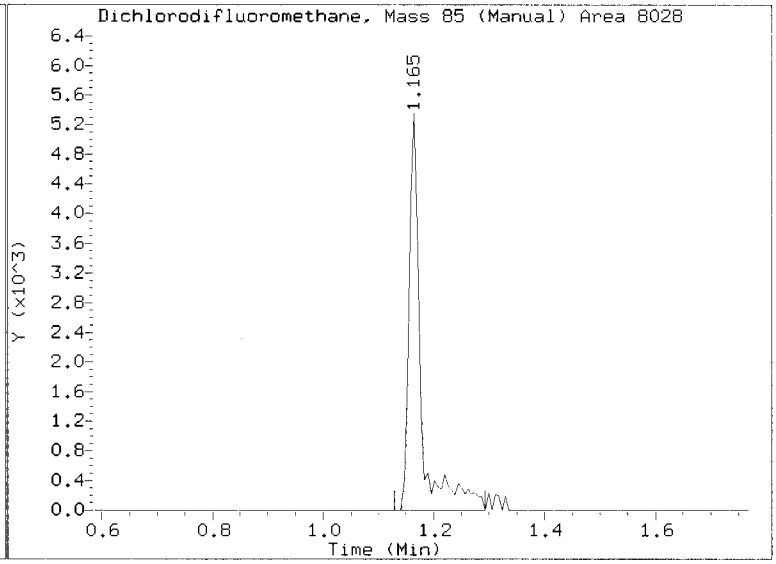
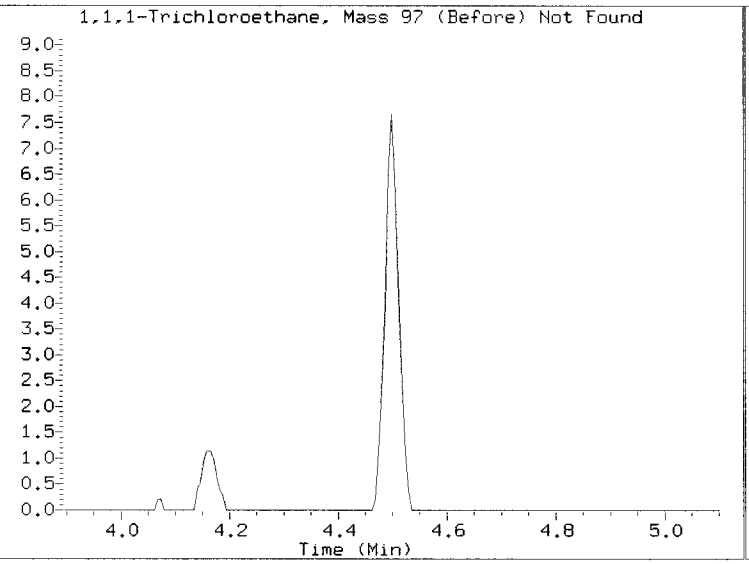
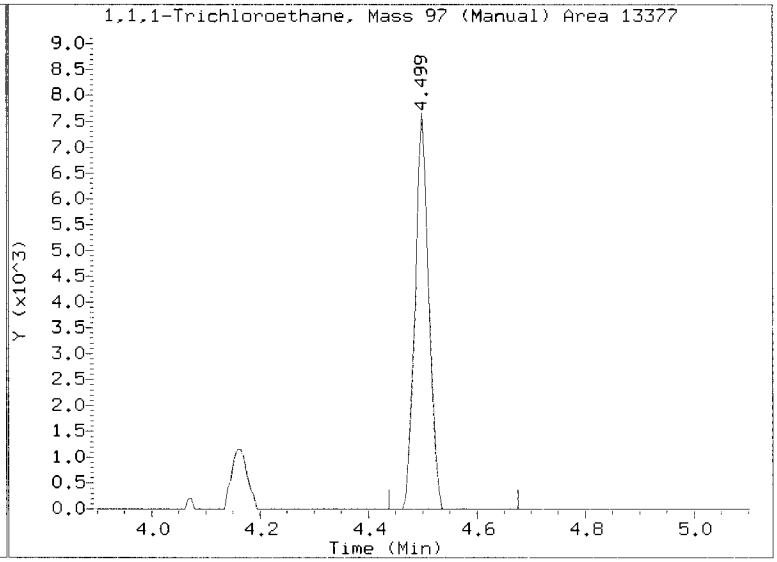
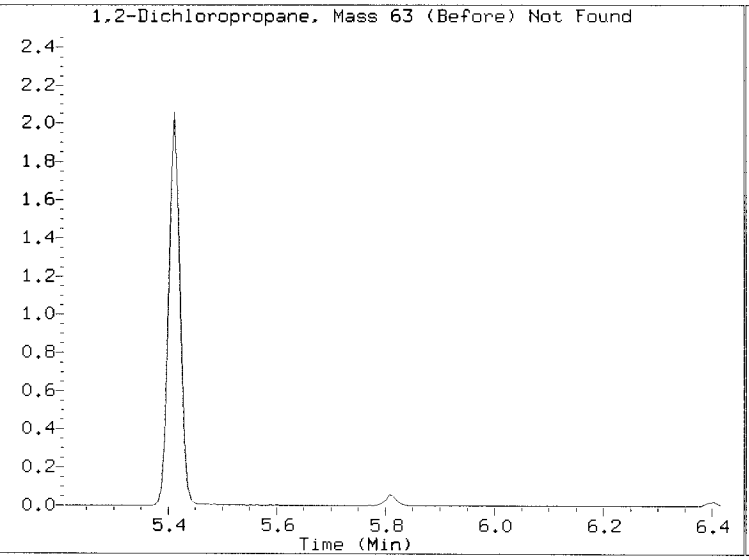
ab ID:SEG0022-CAL1 Client ID:VSTD1
eport Date: 07/08/2016 11:49

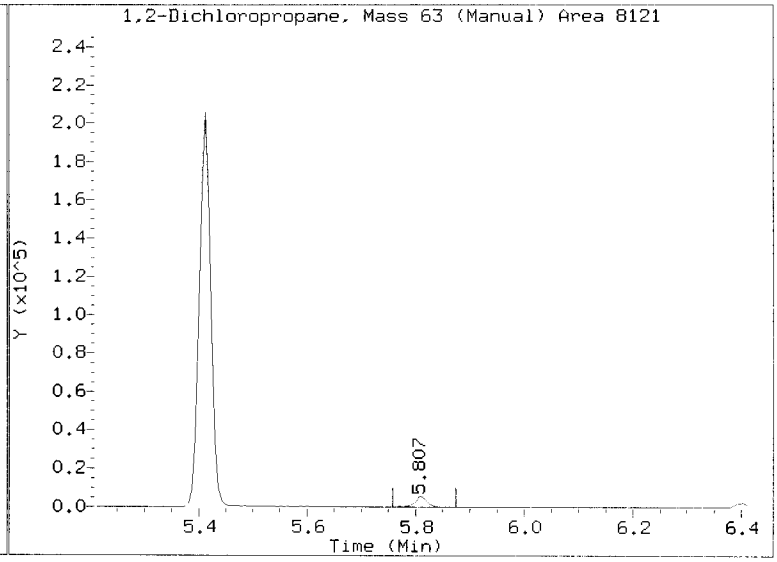












Quant Ion Manual Peak Adjustment Report

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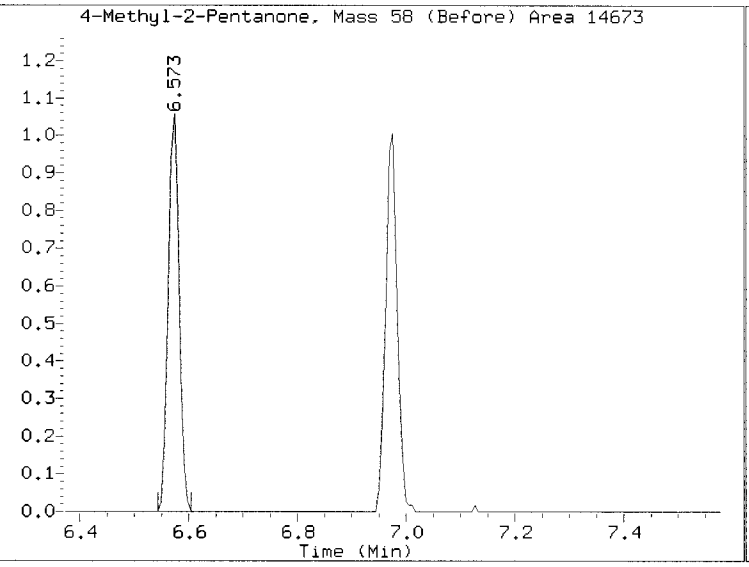
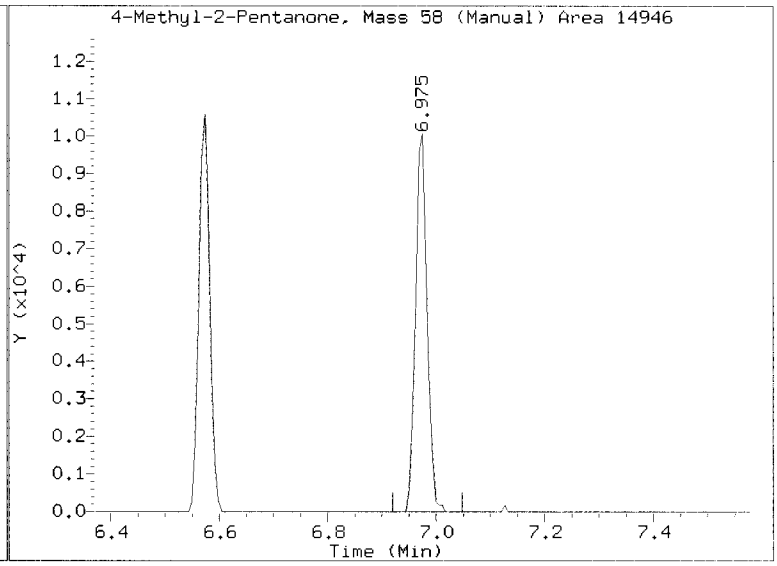
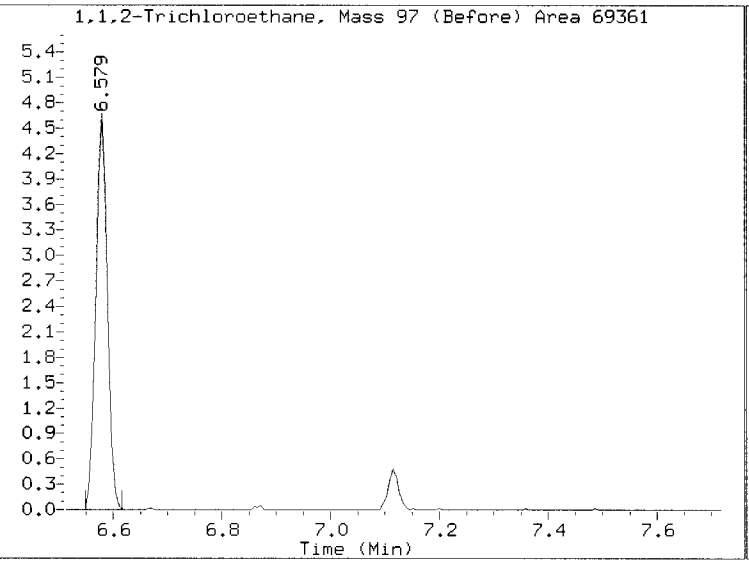
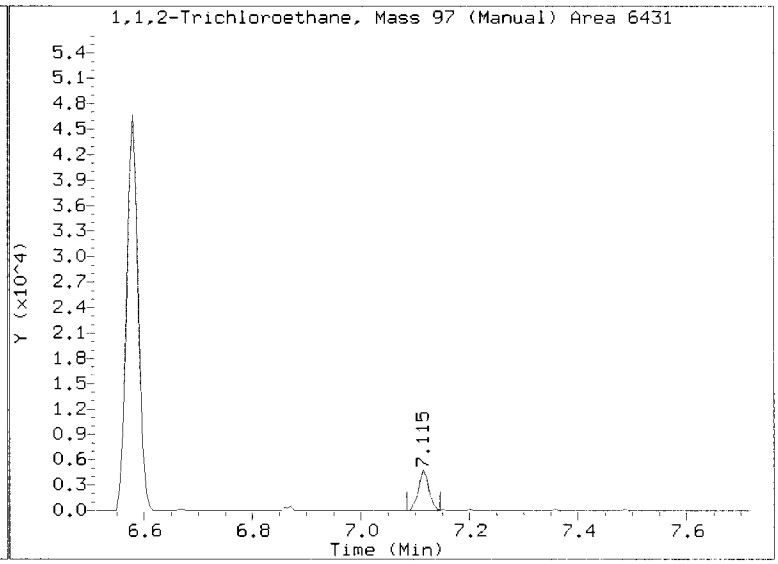
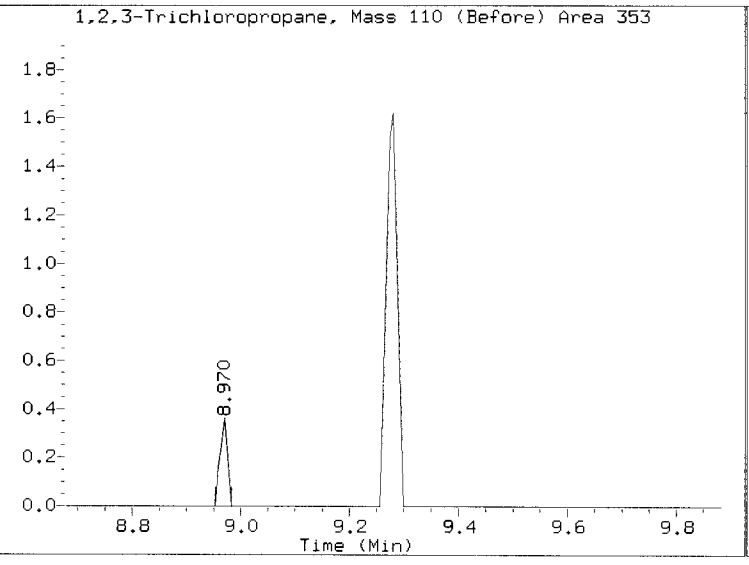
njection Date: 07-JUL-2016 10:58
ab ID:SEG0022-CAL1 Client ID:VSTD1
eport Date: 07/08/2016 11:49

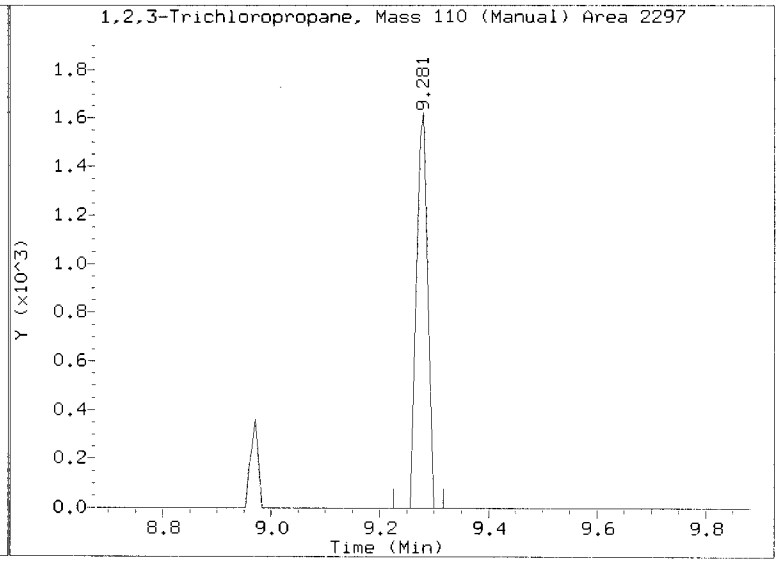






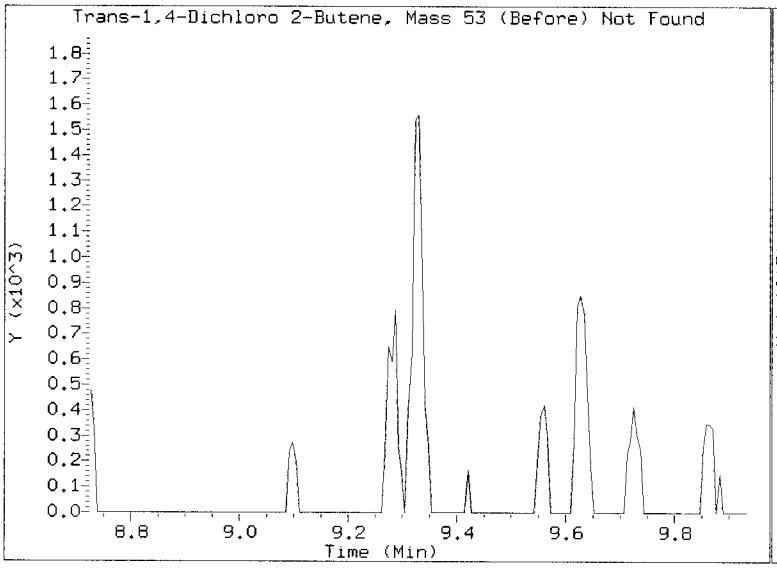


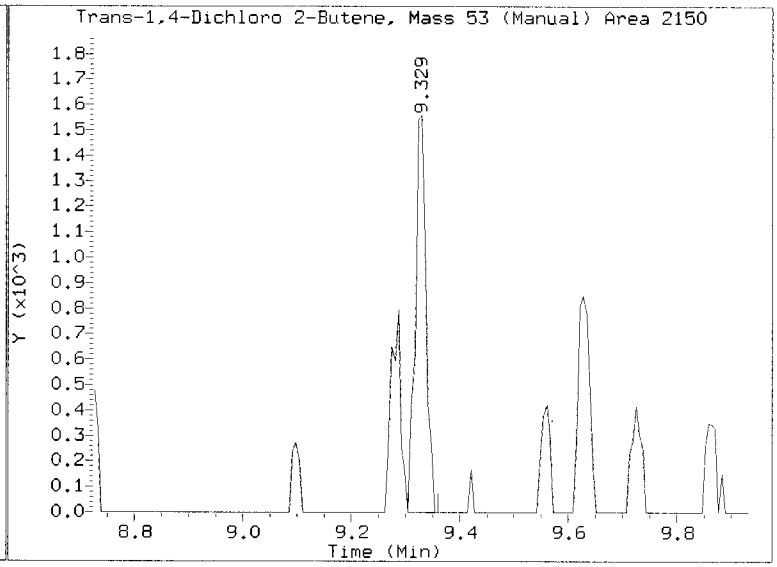




Quant Ion Manual Peak Adjustment Report

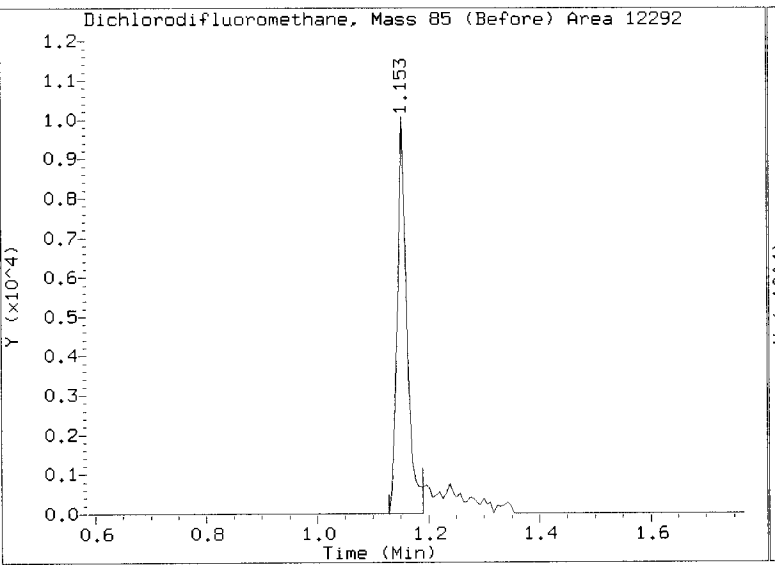
Datafile: //target/share/chem1/nt5.i/20160707.b/07071603.D
Injection Date: 07-JUL-2016 10:58
Lab ID:SEG0022-CAL1 Client ID:VSTD1
Report Date: 07/08/2016 11:49

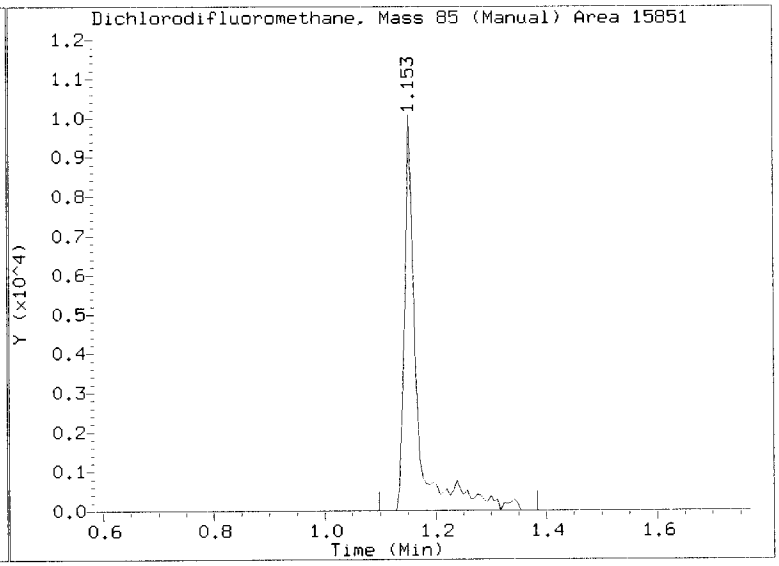


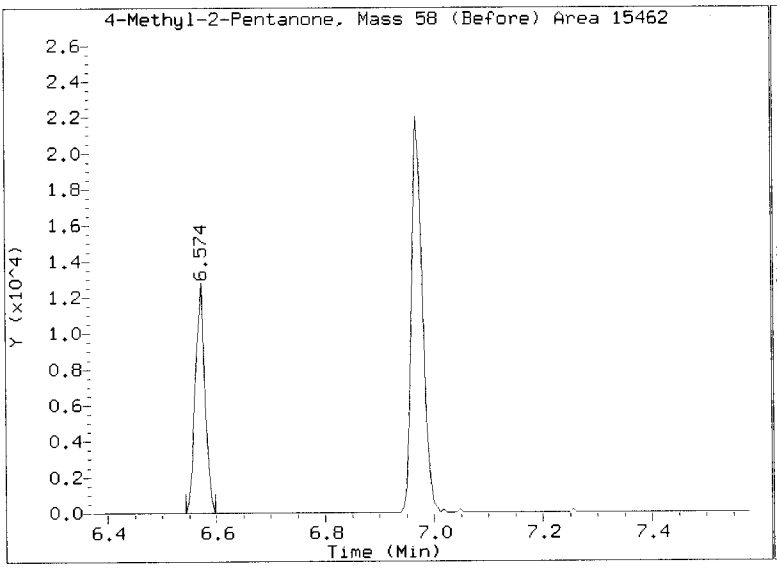


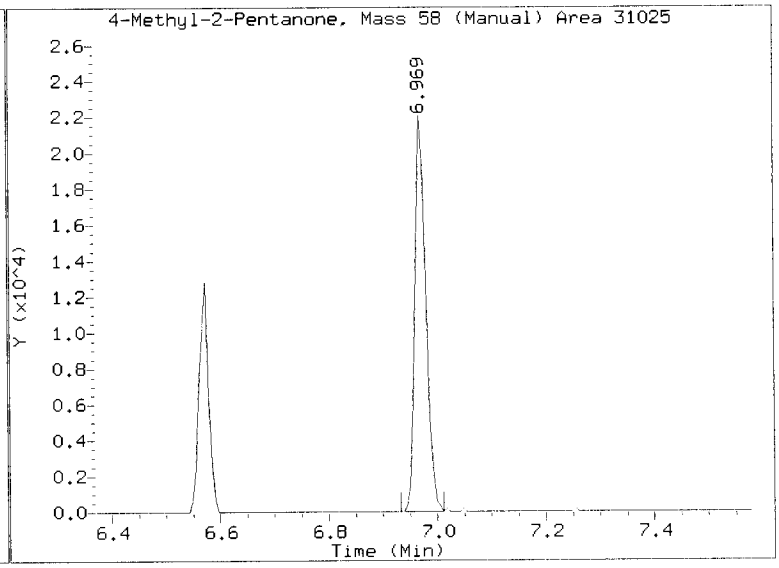
Quant Ion Manual Peak Adjustment Report

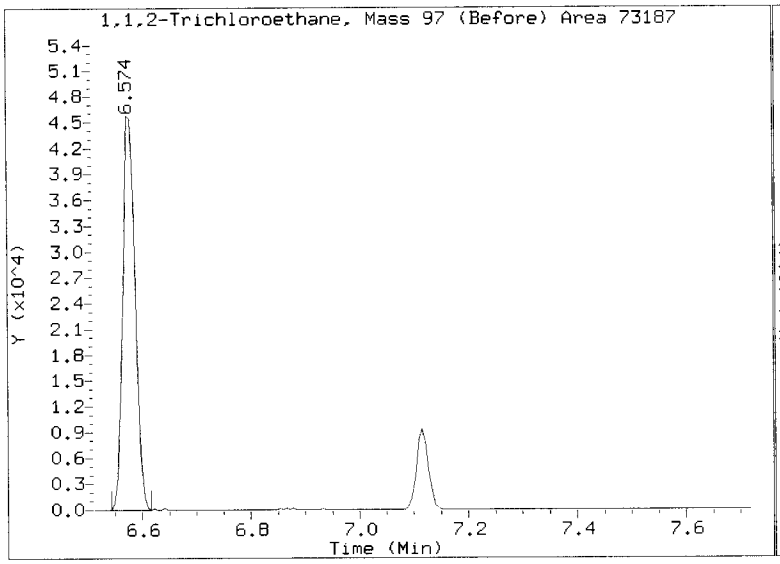
Datafile: //target/share/chem1/nt5.i/20160707.b/07071604.D
Injection Date: 07-JUL-2016 11:21
Lab ID:SEG0022-CAL2 Client ID:VSTD2
Report Date: 07/08/2016 11:49

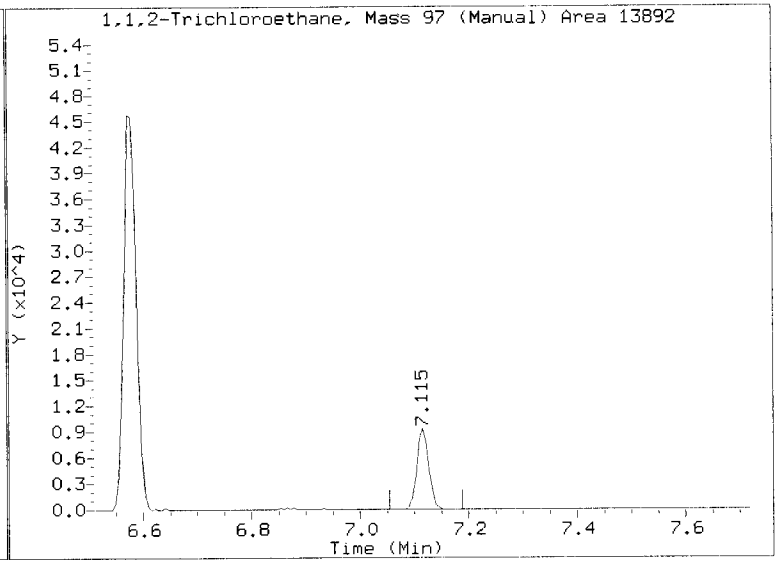












Quant Ion Manual Peak Adjustment Report

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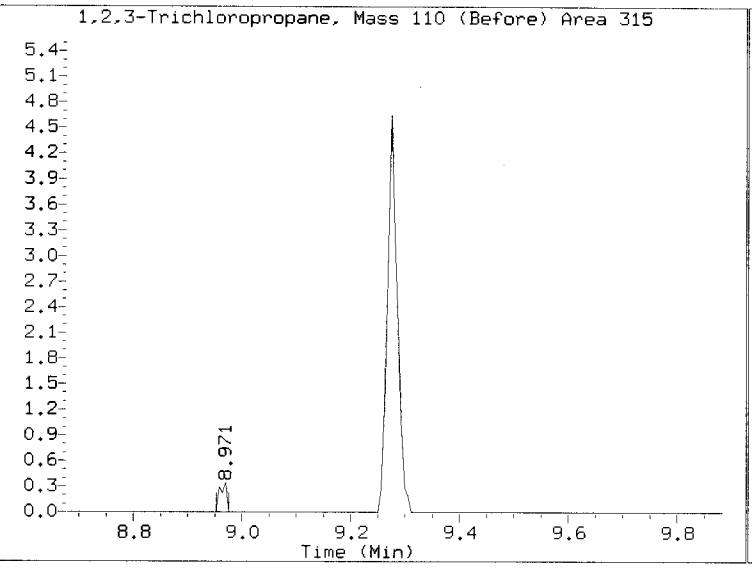
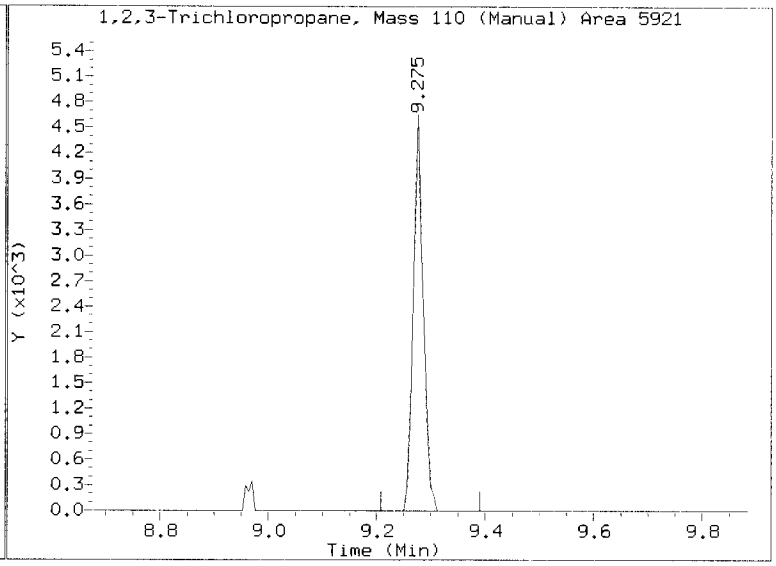
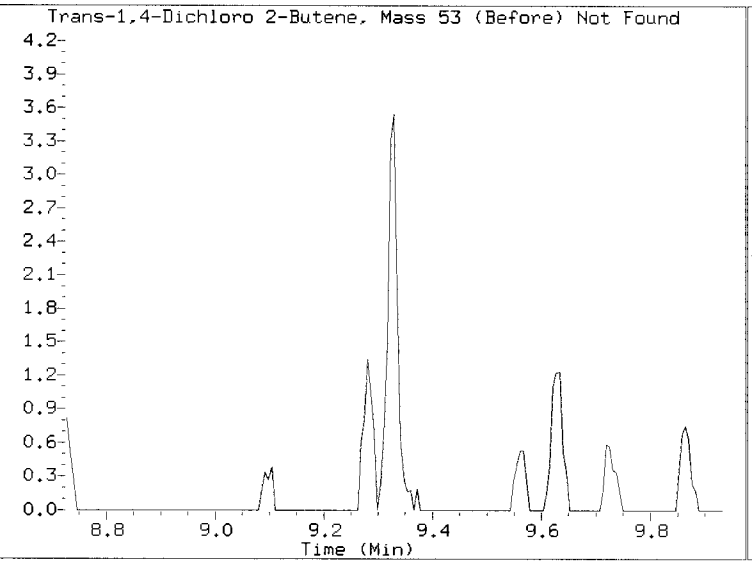
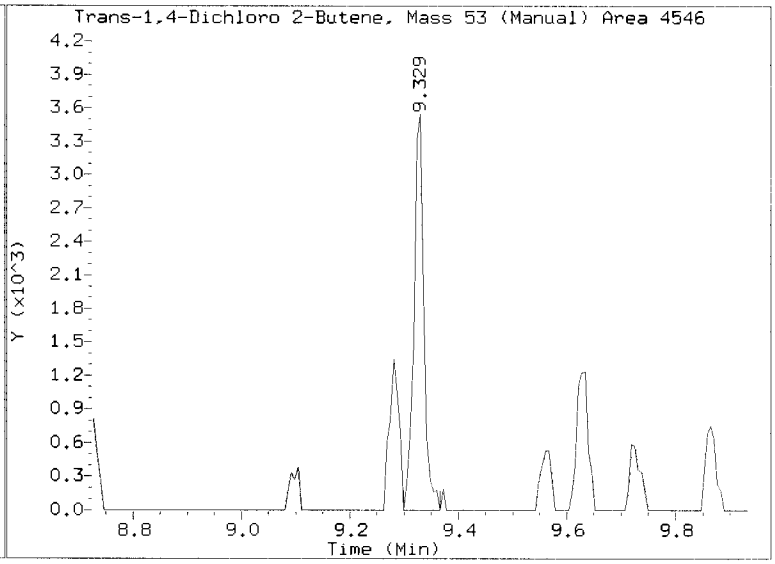
ab ID:SEG0022-CAL2 Client ID:VSTD2
eport Date: 07/08/2016 11:49



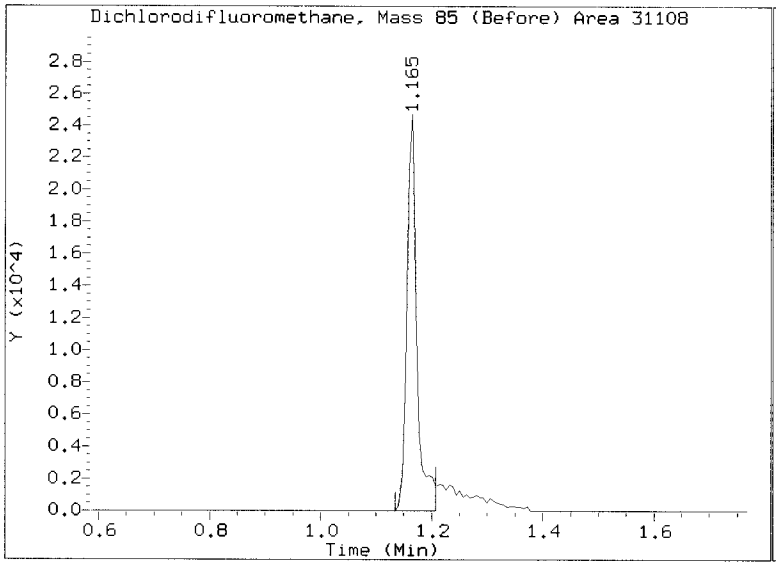


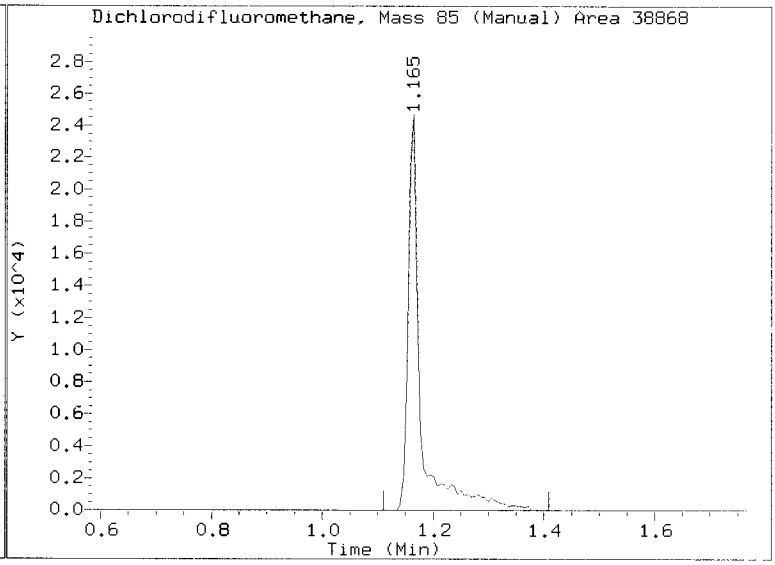


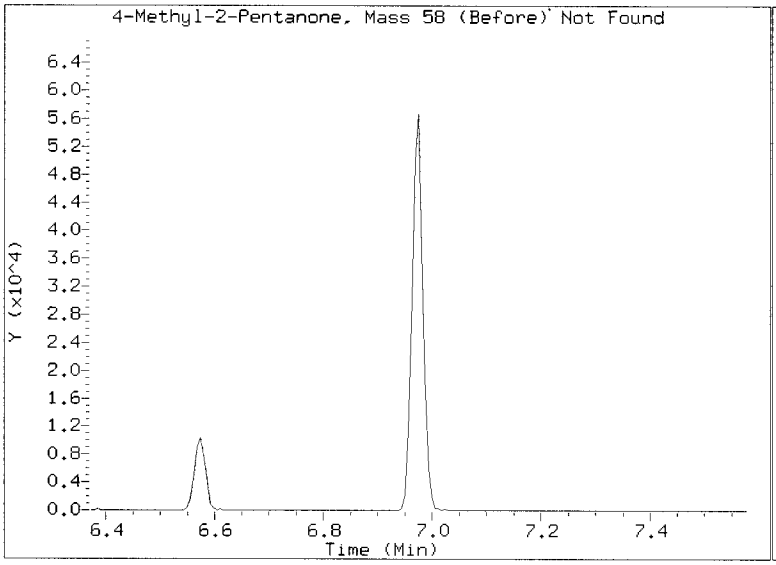


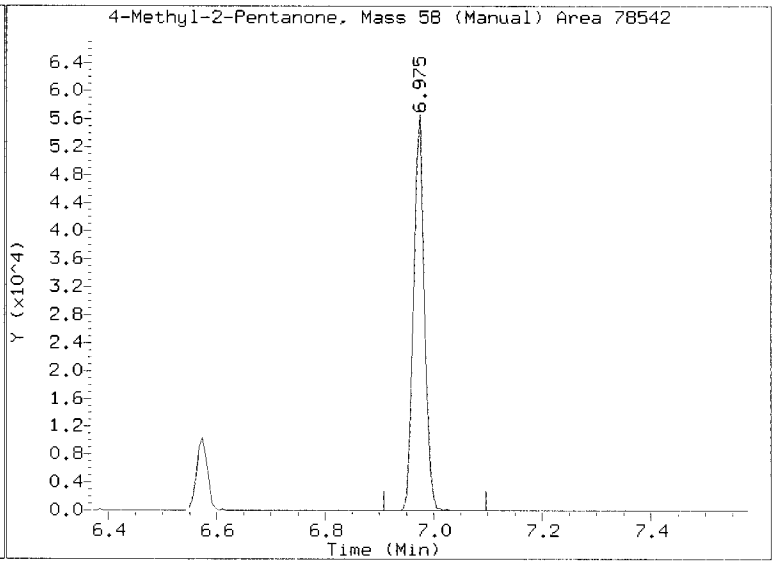
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem1/nt5.i/20160707.b/07071605.D
Injection Date: 07-JUL-2016 11:44
Lab ID:SEG0022-CAL3 Client ID:VSTD5
Report Date: 07/08/2016 11:49



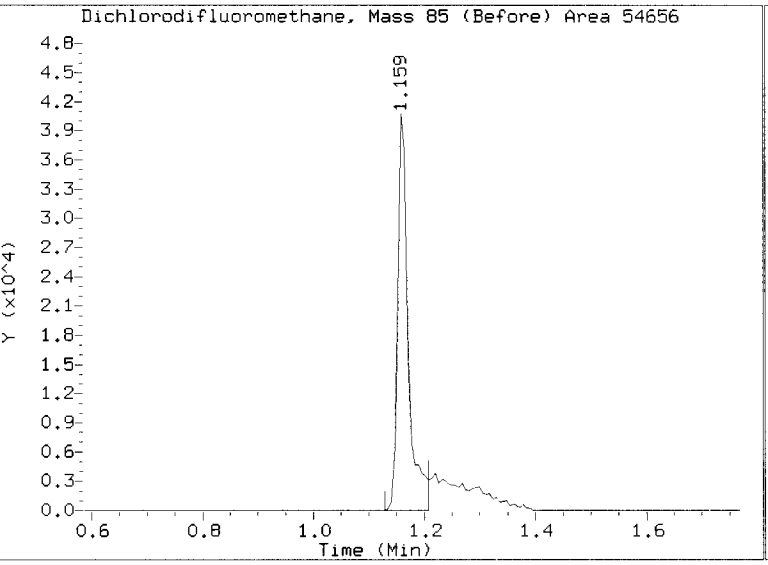


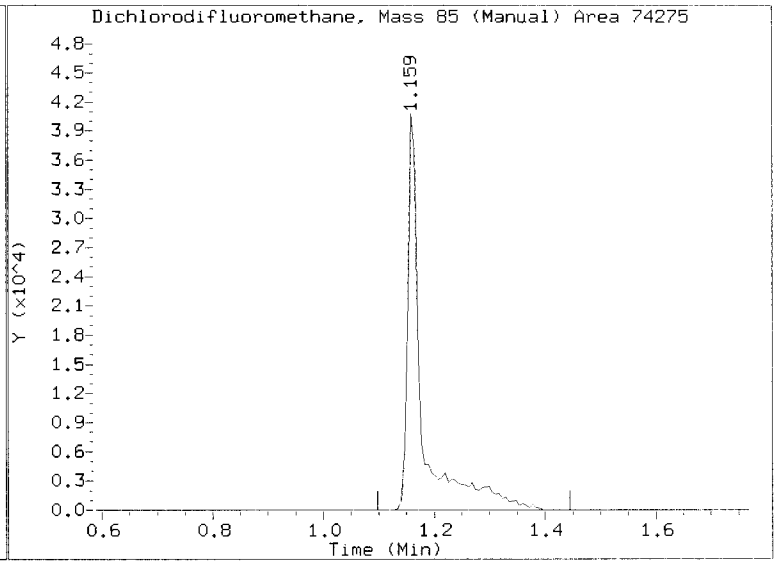




Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem1/nt5.i/20160707.b/07071606.D
Injection Date: 07-JUL-2016 12:06
Lab ID:SEG0022-CAL4 Client ID:VSTD10
Report Date: 07/08/2016 11:49





INITIAL CALIBRATION CHECK

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Instrument ID:	NT5	Calibration:	ZG00011
Lab File ID:	0707160icv.D	Calibration Date:	07/07/16 00:59
Sequence:	SEG0027	Injection Date:	07/07/16
Lab Sample ID:	SEG0027-ICV1	Injection Time:	12:29

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Vinyl Chloride	A	50.000	49.9	0.8496930	0.8481970		-0.2	20
Bromomethane	A	50.000	46.8	0.4987570	0.4663675		-6.5	20
cis-1,2-Dichloroethene	A	50.000	48.5	0.8519246	0.8256431		-3.1	20
Benzene	A	50.000	48.1	1.1302390	1.0879730		-3.7	20
Trichloroethene	A	50.000	47.6	0.2978890	0.2837156		-4.8	20
Toluene	A	50.000	47.4	0.7371222	0.6990208		-5.2	20
Tetrachloroethene	A	50.000	47.9	0.2923755	0.2801319		-4.2	20
Ethylbenzene	A	50.000	48.7	1.3665150	1.3297040		-2.7	20
m,p-Xylene	A	100.00	97.8	0.5405453	0.5287284		-2.2	20
o-Xylene	A	50.000	47.6	0.5306443	0.5047171		-4.9	20
1,2-Dichloroethane-d4	A	50.000	49.7	0.8635656	0.8587000		-0.6	20
Toluene-d8	A	50.000	50.5	1.1998880	1.2117000		1.0	20
4-Bromofluorobenzene	A	50.000	49.4	0.5127339	0.5060686		-1.3	20
1,2-Dichlorobenzene-d4	A	50.000	50.2	0.9690366	0.9722496		0.3	20

* Values outside of QC limits

Data File: \\target\share\chem1\nt5.i\20160707.b\0707160icv.D

Date : 07-JUL-2016 12:29

Client ID: VSTD50

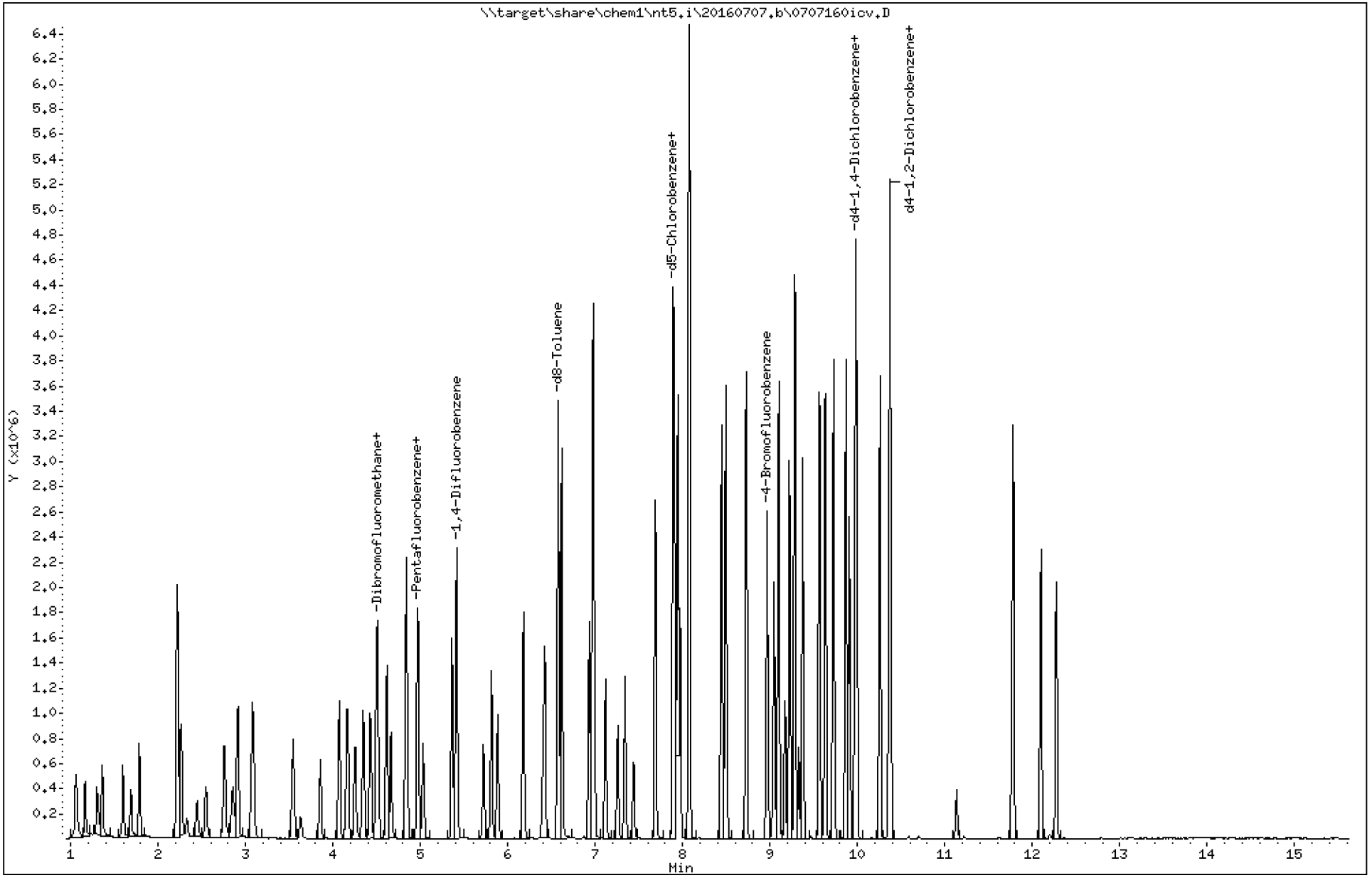
Instrument: nt5.i

Sample Info: SEG0022-CAL5

Operator: PB

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C

Data file : \\target\share\chem1\nt5.i\20160707.b\0707160icv.D
Lab Smp Id: SEG0027-ICV1 Client Smp ID: VSTD50
Inj Date : 07-JUL-2016 12:29
Operator : PB Inst ID: nt5.i
Smp Info : SEG0022-CAL5
Misc Info : 1
Comment   :
Method   : \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Meth Date : 08-Jul-2016 13:44 nt5.i Quant Type: ISTD
Cal Date : 07-JUL-2016 13:37 Cal File: 07071610.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA08

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Pv	5.000	Purge Volume
Sa	5.000	Sample Amount
M	0.00000	% Moisture (not decanted)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
1	Dichlorodifluoromethane	85	1.165	1.165	(0.235)	407263	50.0000	49.176
2	Chloromethane	50	1.299	1.299	(0.262)	454743	50.0000	46.086
3	Vinyl Chloride	62	1.359	1.359	(0.274)	476713	50.0000	49.912
4	Bromomethane	94	1.597	1.597	(0.322)	262113	50.0000	46.753
5	Chloroethane	64	1.688	1.688	(0.340)	252850	50.0000	47.751
6	Trichlorofluoromethane	101	1.785	1.785	(0.359)	407938	50.0000	62.834
7	1,1-Dichloroethene	96	2.217	2.217	(0.446)	363428	50.0000	48.046
8	Carbon Disulfide	76	2.217	2.217	(0.446)	1151971	50.0000	49.447
9	112Trichloro122Trifluoroethane	101	2.260	2.260	(0.455)	361251	50.0000	49.139
10	Iodomethane	142	2.327	2.327	(0.468)	136796	50.0000	37.246
11	Bromoethane	108	2.442	2.442	(0.492)	208755	50.0000	47.969
12	Acrolein	56	2.546	2.546	(0.513)	337726	250.000	251.94
13	Methylene Chloride	84	2.759	2.759	(0.555)	363067	50.0000	47.413
14	Acetone	43	2.850	2.850	(0.574)	523387	250.000	222.89
15	Trans-1,2-Dichloroethene	96	2.911	2.911	(0.586)	401400	50.0000	47.451
16	Methyl tert butyl ether	73	3.081	3.081	(0.620)	1138278	50.0000	48.332
17	1,1-Dichloroethane	63	3.543	3.543	(0.713)	739298	50.0000	47.723
18	Acrylonitrile	53	3.629	3.629	(0.731)	133924	50.0000	48.279
19	Vinyl Acetate	43	3.854	3.854	(0.776)	832790	50.0000	48.784
20	Cis-1,2-Dichloroethene	96	4.073	4.073	(0.820)	464037	50.0000	48.458
22	2,2-Dichloropropane	77	4.158	4.158	(0.837)	652171	50.0000	47.902

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
23	Bromochloromethane	128	4.255	4.255	(0.857)	208024	50.0000	48.959
24	Chloroform	83	4.346	4.346	(0.875)	702958	50.0000	47.855
25	Carbon Tetrachloride	117	4.426	4.426	(0.818)	591120	50.0000	49.238
$ 27	Dibromofluoromethane	111	4.511	4.511	(0.908)	496934	50.0000	50.792
26	1,1,1-Trichloroethane	97	4.499	4.499	(0.906)	651189	50.0000	47.476
28	1,1-Dichloropropene	75	4.614	4.614	(0.853)	578953	50.0000	47.361
29	2-Butanone	72	4.663	4.663	(0.939)	235977	250.000	248.32
30	Benzene	78	4.839	4.839	(0.894)	1688087	50.0000	48.130
* 31	Pentafluorobenzene	168	4.967	4.967	(1.000)	562031	50.0000	
$ 32	d4-1,2-Dichloroethane	65	4.967	4.967	(1.000)	482616	50.0000	49.718
33	1,2-Dichloroethane	62	5.028	5.028	(0.929)	506337	50.0000	46.664
34	Trichloroethene	95	5.362	5.362	(0.991)	440210	50.0000	47.621
* 35	1,4-Difluorobenzene	114	5.411	5.411	(1.000)	1551589	50.0000	
37	Dibromomethane	93	5.721	5.721	(1.057)	231786	50.0000	48.190
38	1,2-Dichloropropane	63	5.813	5.813	(1.074)	418138	50.0000	47.948
39	Bromodichloromethane	83	5.880	5.880	(1.087)	537995	50.0000	49.401
172	2-Pentanone	86	6.178	6.178	(1.142)	295885	250.000	247.44
40	2-Chloroethyl Vinyl Ether	63	6.397	6.397	(1.182)	192476	50.0000	49.330
41	Cis 1,3-dichloropropene	75	6.421	6.421	(1.187)	679045	50.0000	48.425
$ 42	d8-Toluene	98	6.573	6.573	(1.215)	1880060	50.0000	50.492
43	Toluene	92	6.616	6.616	(1.223)	1084593	50.0000	47.416
44	Tetrachloroethene	166	6.932	6.932	(0.879)	432181	50.0000	47.906
45	4-Methyl-2-Pentanone	58	6.975	6.975	(1.289)	773502	250.000	242.93
46	Trans 1,3-Dichloropropene	75	6.987	6.987	(1.291)	603199	50.0000	49.154
47	1,1,2-Trichloroethane	97	7.114	7.114	(1.315)	343417	50.0000	48.512
48	Chlorodibromomethane	129	7.254	7.254	(0.920)	416880	50.0000	49.589
49	1,3-Dichloropropane	76	7.340	7.340	(0.931)	614792	50.0000	48.669
50	1,2-Dibromoethane	107	7.437	7.437	(1.374)	350655	50.0000	48.368
51	2-Hexanone	43	7.686	7.686	(0.975)	1334761	250.000	240.63
* 52	d5-Chlorobenzene	117	7.887	7.887	(1.000)	1542777	50.0000	
53	Chlorobenzene	112	7.905	7.905	(1.002)	1215267	50.0000	48.179
54	Ethyl Benzene	91	7.942	7.942	(1.007)	2051437	50.0000	48.653
55	1,1,1,2-Tetrachloroethane	131	7.966	7.966	(1.010)	434350	50.0000	48.374
56	m,p-xylene	106	8.076	8.076	(1.024)	1631420	100.000	97.814
57	o-Xylene	106	8.441	8.441	(1.070)	778666	50.0000	47.557
58	Styrene	104	8.489	8.489	(1.076)	1322235	50.0000	48.882
59	Bromoform	173	8.495	8.495	(0.852)	248855	50.0000	48.696
60	Isopropyl Benzene	105	8.727	8.727	(0.875)	2067455	50.0000	49.262
$ 62	4-Bromofluorobenzene	95	8.964	8.964	(1.137)	780751	50.0000	49.350
63	Bromobenzene	156	9.049	9.049	(0.907)	483517	50.0000	49.054
64	N-Propyl Benzene	91	9.098	9.098	(0.912)	2421419	50.0000	49.555
65	1,1,2,2-Tetrachloroethane	83	9.171	9.171	(0.919)	456207	50.0000	48.765
66	2-Chloro Toluene	91	9.219	9.219	(0.924)	1405421	50.0000	49.095
67	1,3,5-Trimethyl Benzene	105	9.286	9.286	(0.931)	1743469	50.0000	49.785
68	1,2,3-Trichloropropane	110	9.280	9.280	(0.930)	144103	50.0000	48.832
69	Trans-1,4-Dichloro 2-Butene	53	9.329	9.329	(0.935)	118343	50.0000	49.560
70	4-Chloro Toluene	91	9.372	9.372	(0.940)	1464175	50.0000	49.206
71	T-Butyl Benzene	119	9.560	9.560	(0.959)	1571018	50.0000	48.926
72	1,2,4-Trimethylbenzene	105	9.633	9.633	(0.966)	1748398	50.0000	49.899
73	S-Butyl Benzene	105	9.724	9.724	(0.975)	2267198	50.0000	49.265
74	4-Isopropyl Toluene	119	9.870	9.870	(0.990)	1993129	50.0000	50.464
75	1,3-Dichlorobenzene	146	9.907	9.907	(0.993)	972410	50.0000	49.364
* 76	d4-1,4-Dichlorobenzene	152	9.974	9.974	(1.000)	775053	50.0000	
77	1,4-Dichlorobenzene	146	9.992	9.992	(1.002)	961315	50.0000	48.833

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
78	N-Butyl Benzene	91	10.254	10.254	(1.028)	1748747	50.0000	50.634
$ 79	d4-1,2-Dichlorobenzene	152	10.369	10.369	(1.040)	753545	50.0000	50.166
80	1,2-Dichlorobenzene	146	10.375	10.375	(1.040)	893256	50.0000	48.640
81	1,2-Dibromo 3-Chloropropane	75	11.136	11.136	(1.116)	86591	50.0000	48.979
82	Hexachloro 1,3-Butadiene	225	11.775	11.775	(1.181)	260437	50.0000	49.133
83	1,2,4-Trichlorobenzene	180	11.781	11.781	(1.181)	570032	50.0000	50.576
84	Naphthalene	128	12.097	12.097	(1.213)	1624731	50.0000	50.591
85	1,2,3-Trichlorobenzene	180	12.273	12.273	(1.231)	523143	50.0000	49.907

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt5.i
Lab File ID: 0707160icv.D
Lab Smp Id: SEG0027-ICV1
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: \\target\share\chem1\nt5.i\20160707.b\VO051314S.m
Misc Info: 1

Calibration Date: 07-JUL-2016
Calibration Time: 12:29
Client Smp ID: VSTD50
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	562031	281016	1124062	562031	0.00
35 1,4-Difluorobenze	1551589	775795	3103178	1551589	0.00
52 d5-Chlorobenzene	1542777	771389	3085554	1542777	0.00
76 d4-1,4-Dichlorobe	775053	387527	1550106	775053	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
31 Pentafluorobenzen	4.97	4.47	5.47	4.97	0.00
35 1,4-Difluorobenze	5.41	4.91	5.91	5.41	0.00
52 d5-Chlorobenzene	7.89	7.39	8.39	7.89	0.00
76 d4-1,4-Dichlorobe	9.97	9.47	10.47	9.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - 0707160icv.D

Lab ID: SEG0027-ICV1
nt5.i, 20160707.b\VO051314S.m,   07-JUL-2016 12:29

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt5.i,VO051314S.m,Sublist: voa.sub = 0.5000

Exception: Bromomethane 0.2500
Exception: Acrolein 2.5000
Exception: Acetone 2.5000
Exception: Iodomethane 0.1000
Exception: 2-Butanone 2.5000
Exception: Benzene 0.2960
Exception: 4-Methyl-2-Pentanone 2.5000
Exception: Toluene 0.1510
Exception: 2-Hexanone 2.5000
Exception: Ethyl Benzene 0.2020
Exception: m,p-xylene 0.3920
Exception: o-Xylene 0.2240
Exception: 2-Pentanone 1.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.2500
Exception: d8-Toluene (Surr) 0.2500
Exception: 4-Bromofluorobenzene (Surr) 0.2500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.2500
Exception: Dibromofluoromethane (Surr) 0.2500

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEG0022	Instrument:	NT5
		Calibration:	ZG00011

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SEG0022-CAL1	07071603.D	Solid	07/07/16 10:58
Cal Standard	SEG0022-CAL2	07071604.D	Solid	07/07/16 11:21
Cal Standard	SEG0022-CAL3	07071605.D	Solid	07/07/16 11:44
Cal Standard	SEG0022-CAL4	07071606.D	Solid	07/07/16 12:06
Cal Standard	SEG0022-CAL5	07071607.D	Solid	07/07/16 12:29
Cal Standard	SEG0022-CAL6	07071608.D	Solid	07/07/16 12:51
Cal Standard	SEG0022-CAL7	07071609.D	Solid	07/07/16 13:14
Cal Standard	SEG0022-CAL8	07071610.D	Solid	07/07/16 13:37
Secondary Cal Check	SEG0022-SCV1	07071602.D	Solid	07/07/16 15:10
Secondary Cal Check	SEG0022-SCV1	07071611.D	Solid	07/07/16 15:10

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEG0027	Instrument:	NT5
		Calibration:	ZG00011

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SEG0027-ICV1	0707160icv.D	Solid	07/07/16 12:29
LCS	BEG0040-BS1	07071612.D	Solid	07/07/16 16:23
LCS	BEG0041-BS1	07071612a.D	Water	07/07/16 16:23
LCS Dup	BEG0040-BSD1	07071613.D	Solid	07/07/16 16:45
LCS Dup	BEG0041-BSD1	07071613a.D	Water	07/07/16 16:45
Blank	BEG0040-BLK1	07071614.D	Solid	07/07/16 17:08
Blank	BEG0041-BLK1	07071614a.D	Water	07/07/16 17:08
CHRL-O-03A-160705	16G0006-01	07071617.D	Solid	07/07/16 18:34
CHRL-O-04A-160705	16G0006-02	07071618.D	Solid	07/07/16 18:57
CHRL-P-03A-160705	16G0006-03	07071619.D	Solid	07/07/16 19:19
CHRL-TB-160705	16G0006-04	07071620.D	Water	07/07/16 19:42
Calibration Check	SEG0027-CCV1	07071625.D	Solid	07/07/16 21:35

ANALYSIS SEQUENCE

SEG0027

Instrument: NT5
Calibration ID: ZG00011

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
SEG0027-TUN1	MS Tune	QC		1	E002063	E001646	
SEG0027-ICV1	Initial Cal Check	QC		2	E002459	E001646	
BEG0040-BS1	LCS	QC		3		E001646	
BEG0040-BSD1	LCS Dup	QC		4		E001646	
BEG0040-BLK1	Blank	QC		5		E001646	
16G0006-01	CHRL-O-03A-160705	8260C VOA Solid	A	6		E001646	
16G0006-02	CHRL-O-04A-160705	8260C VOA Solid	A	7		E001646	
16G0006-03	CHRL-P-03A-160705	8260C VOA Solid	A	8		E001646	
BEG0041-BS1	LCS	QC		9		E001646	
BEG0041-BSD1	LCS Dup	QC		10		E001646	
BEG0041-BLK1	Blank	QC		11		E001646	
16G0006-04	CHRL-TB-160705	8260C VOA	A	12		E001646	
SEG0027-CCV1	GASCCV	QC		13	E002459	E001646	

Samples Loaded By Date

Data Processed By Date

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt5.i\20160707.b

ARI Job No.: SEG0 Method: bfb8260.m Instrument: nt5.i Date: 07-JUL-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0952	07071601.D	SEG0022-TUN1	BFB070	1	NO MANUAL INTEGRATION
1229	0707160icv.D	SEG0022-ICV1	VSTD50	1	NO MANUAL INTEGRATION
1708	07071614.D	BEG0040-BLK1	MB0707	1	NO MANUAL INTEGRATION
1749	07071615.D	BCT9A	EVT 45-06	1	NO MANUAL INTEGRATION
1811	07071616.D	BCR6L		1	NO MANUAL INTEGRATION
1834	07071617.D	16G0006-01		1	NO MANUAL INTEGRATION
1857	07071618.D	16G0006-02		1	NO MANUAL INTEGRATION
1919	07071619.D	16G0006-03		1	NO MANUAL INTEGRATION
1942	07071620.D	16G0006-04		1	NO MANUAL INTEGRATION
2135	07071625.D	SEG0022-CCV1		1	NO MANUAL INTEGRATION

SURROGATE RECOVERY SUMMARY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG/WO:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEG0022	Instrument:	NT5
Calibration:	ZG00011	Calibration Date:	07/07/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
SEG0022-SCV1 (Solid)	Lab File ID: 07071602.D		Analyzed: 07/07/16 15:10	
1,2-Dichloroethane-d4	50.000	95.1	80 - 120	
Dibromofluoromethane	50.000	99.4	80 - 120	
1,2-Dichlorobenzene-d4	50.000	97.9	80 - 120	
1,2-Dichloroethane-d4	50.000	95.1	80 - 120	
Toluene-d8	50.000	101	80 - 120	
Toluene-d8	50.000	101	80 - 120	
4-Bromofluorobenzene	50.000	100	80 - 120	
4-Bromofluorobenzene	50.000	100	80 - 120	
1,2-Dichlorobenzene-d4	50.000	97.9	80 - 120	

SURROGATE RECOVERY SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG/WO: 16G0006
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0027
Instrument: NT5
Calibration: ZG00011
Calibration Date: 07/07/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
SEG0027-ICV1 (Solid)	Lab File ID: 0707160icv.D		Analyzed: 07/07/16 12:29	
1,2-Dichloroethane-d4	50.000	99.4	80 - 120	
1,2-Dichlorobenzene-d4	50.000	100	80 - 120	
Toluene-d8	50.000	101	80 - 120	
4-Bromofluorobenzene	50.000	98.7	80 - 120	
BEG0040-BS1 (Solid)	Lab File ID: 07071612.D		Analyzed: 07/07/16 16:23	
1,2-Dichloroethane-d4	50.000	94.7	80 - 149	
1,2-Dichlorobenzene-d4	50.000	99.5	80 - 120	
Toluene-d8	50.000	99.7	77 - 120	
4-Bromofluorobenzene	50.000	98.7	80 - 120	
BEG0041-BS1 (Water)	Lab File ID: 07071612a.D		Analyzed: 07/07/16 16:23	
1,2-Dichloroethane-d4	50.000	94.7	80 - 129	
Toluene-d8	50.000	99.7	80 - 120	
4-Bromofluorobenzene	50.000	98.7	80 - 120	
1,2-Dichlorobenzene-d4	50.000	99.5	80 - 120	
BEG0040-BSD1 (Solid)	Lab File ID: 07071613.D		Analyzed: 07/07/16 16:45	
1,2-Dichloroethane-d4	50.000	92.2	80 - 149	
1,2-Dichlorobenzene-d4	50.000	98.5	80 - 120	
Toluene-d8	50.000	99.7	77 - 120	
4-Bromofluorobenzene	50.000	98.2	80 - 120	
BEG0041-BSD1 (Water)	Lab File ID: 07071613a.D		Analyzed: 07/07/16 16:45	
1,2-Dichloroethane-d4	50.000	92.2	80 - 129	
Toluene-d8	50.000	99.7	80 - 120	
4-Bromofluorobenzene	50.000	98.2	80 - 120	
1,2-Dichlorobenzene-d4	50.000	98.5	80 - 120	
BEG0040-BLK1 (Solid)	Lab File ID: 07071614.D		Analyzed: 07/07/16 17:08	
1,2-Dichloroethane-d4	50.000	95.0	80 - 149	
1,2-Dichlorobenzene-d4	50.000	99.1	80 - 120	
Toluene-d8	50.000	99.0	77 - 120	
4-Bromofluorobenzene	50.000	98.7	80 - 120	

SURROGATE RECOVERY SUMMARY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG/WO:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEG0027	Instrument:	NT5
Calibration:	ZG00011	Calibration Date:	07/07/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
BEG0041-BLK1 (Water)	Lab File ID: 07071614a.D		Analyzed: 07/07/16 17:08	
1,2-Dichloroethane-d4	50.000	95.0	80 - 129	
Toluene-d8	50.000	99.0	80 - 120	
4-Bromofluorobenzene	50.000	98.7	80 - 120	
1,2-Dichlorobenzene-d4	50.000	99.1	80 - 120	
16G0006-01 (Solid)	Lab File ID: 07071617.D		Analyzed: 07/07/16 18:34	
1,2-Dichloroethane-d4	50.000	105	80 - 149	
1,2-Dichlorobenzene-d4	50.000	103	80 - 120	
Toluene-d8	50.000	99.5	77 - 120	
4-Bromofluorobenzene	50.000	97.7	80 - 120	
16G0006-02 (Solid)	Lab File ID: 07071618.D		Analyzed: 07/07/16 18:57	
1,2-Dichloroethane-d4	50.000	106	80 - 149	
1,2-Dichlorobenzene-d4	50.000	101	80 - 120	
Toluene-d8	50.000	99.9	77 - 120	
4-Bromofluorobenzene	50.000	98.4	80 - 120	
16G0006-03 (Solid)	Lab File ID: 07071619.D		Analyzed: 07/07/16 19:19	
1,2-Dichloroethane-d4	50.000	105	80 - 149	
1,2-Dichlorobenzene-d4	50.000	103	80 - 120	
Toluene-d8	50.000	100	77 - 120	
4-Bromofluorobenzene	50.000	98.9	80 - 120	
16G0006-04 (Water)	Lab File ID: 07071620.D		Analyzed: 07/07/16 19:42	
1,2-Dichloroethane-d4	50.000	96.3	80 - 129	
Toluene-d8	50.000	98.8	80 - 120	
4-Bromofluorobenzene	50.000	98.9	80 - 120	
1,2-Dichlorobenzene-d4	50.000	98.7	80 - 120	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8260C

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEG0022	Instrument:	NT5
		Calibration:	ZG00011

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SEG0022-SCV1)		(Solid)		Lab File ID: 07071611.D				Analyzed: 07/07/16 15:10	
Pentafluorobenzene	584173	4.955	546562	4.967	107	50 - 200	-0.0120	+/-0.50	
Pentafluorobenzene	584173	4.955	546562	4.967	107	50 - 200	-0.0120	+/-0.50	
Chlorobenzene-d5	1557703	7.887	1518048	7.887	103	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1557703	7.887	1518048	7.887	103	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	1559945	5.405	1522600	5.411	102	50 - 200	-0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	800415	9.974	774999	9.974	103	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	800415	9.974	774999	9.974	103	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG: 16G0006
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0027
Instrument: NT5
Calibration: ZG00011

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SEG0027-ICV1)		(Solid)		Lab File ID: 0707160icv.D				Analyzed: 07/07/16 12:29	
Pentafluorobenzene	562031	4.967				50 - 200		+/-0.50	
Chlorobenzene-d5	1542777	7.887				50 - 200		+/-0.50	
1,4-Difluorobenzene	1551589	5.411				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	775053	9.974				50 - 200		+/-0.50	
LCS (BEG0040-BS1)		(Solid)		Lab File ID: 07071612.D				Analyzed: 07/07/16 16:23	
Pentafluorobenzene	569950	4.961	562031	4.967	101	50 - 200	-0.0060	+/-0.50	
Chlorobenzene-d5	1485852	7.887	1542777	7.887	96	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	1534591	5.405	1551589	5.411	99	50 - 200	-0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	740406	9.974	775053	9.974	96	50 - 200	0.0000	+/-0.50	
LCS (BEG0041-BS1)		(Water)		Lab File ID: 07071612a.D				Analyzed: 07/07/16 16:23	
Pentafluorobenzene	569950	4.961	562031	4.967	101	50 - 200	-0.0060	+/-0.50	
Chlorobenzene-d5	1485852	7.887	1542777	7.887	96	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	1534591	5.405	1551589	5.411	99	50 - 200	-0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	740406	9.974	775053	9.974	96	50 - 200	0.0000	+/-0.50	
LCS Dup (BEG0040-BSD1)		(Solid)		Lab File ID: 07071613.D				Analyzed: 07/07/16 16:45	
Pentafluorobenzene	578713	4.967	562031	4.967	103	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1510970	7.887	1542777	7.887	98	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	1544524	5.411	1551589	5.411	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	762574	9.974	775053	9.974	98	50 - 200	0.0000	+/-0.50	
LCS Dup (BEG0041-BSD1)		(Water)		Lab File ID: 07071613a.D				Analyzed: 07/07/16 16:45	
Pentafluorobenzene	578713	4.967	562031	4.967	103	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1510970	7.887	1542777	7.887	98	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	1544524	5.411	1551589	5.411	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	762574	9.974	775053	9.974	98	50 - 200	0.0000	+/-0.50	
Blank (BEG0040-BLK1)		(Solid)		Lab File ID: 07071614.D				Analyzed: 07/07/16 17:08	
Pentafluorobenzene	576218	4.961	562031	4.967	103	50 - 200	-0.0060	+/-0.50	
Chlorobenzene-d5	1537712	7.887	1542777	7.887	100	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	1566377	5.411	1551589	5.411	101	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	782784	9.974	775053	9.974	101	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8260C

Laboratory: Analytical Resources, Inc.
SDG: 16G0006
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0027
Instrument: NT5
Calibration: ZG00011

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (BEG0041-BLK1)		(Water)		Lab File ID: 07071614a.D				Analyzed: 07/07/16 17:08	
Pentafluorobenzene	576218	4.961	562031	4.967	103	50 - 200	-0.0060	+/-0.50	
Chlorobenzene-d5	1537712	7.887	1542777	7.887	100	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	1566377	5.411	1551589	5.411	101	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	782784	9.974	775053	9.974	101	50 - 200	0.0000	+/-0.50	
CHRL-O-03A-160705 (16G0006-01)		(Solid)		Lab File ID: 07071617.D				Analyzed: 07/07/16 18:34	
Pentafluorobenzene	572527	4.961	562031	4.967	102	50 - 200	-0.0060	+/-0.50	
Chlorobenzene-d5	1558381	7.887	1542777	7.887	101	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	1567255	5.411	1551589	5.411	101	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	733906	9.974	775053	9.974	95	50 - 200	0.0000	+/-0.50	
CHRL-O-04A-160705 (16G0006-02)		(Solid)		Lab File ID: 07071618.D				Analyzed: 07/07/16 18:57	
Pentafluorobenzene	593653	4.967	562031	4.967	106	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1629838	7.887	1542777	7.887	106	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	1628342	5.417	1551589	5.411	105	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	795559	9.974	775053	9.974	103	50 - 200	0.0000	+/-0.50	
CHRL-P-03A-160705 (16G0006-03)		(Solid)		Lab File ID: 07071619.D				Analyzed: 07/07/16 19:19	
Pentafluorobenzene	578061	4.967	562031	4.967	103	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1597693	7.887	1542777	7.887	104	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	1585318	5.417	1551589	5.411	102	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	777486	9.974	775053	9.974	100	50 - 200	0.0000	+/-0.50	
CHRL-TB-160705 (16G0006-04)		(Water)		Lab File ID: 07071620.D				Analyzed: 07/07/16 19:42	
Pentafluorobenzene	572431	4.967	562031	4.967	102	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1555589	7.887	1542777	7.887	101	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	1572724	5.411	1551589	5.411	101	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	798067	9.98	775053	9.974	103	50 - 200	0.0060	+/-0.50	
Calibration Check (SEG0027-CCV1)		(Solid)		Lab File ID: 07071625.D				Analyzed: 07/07/16 21:35	
Pentafluorobenzene	596577	4.967	562031	4.967	106	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1655803	7.893	1542777	7.887	107	50 - 200	0.0060	+/-0.50	
1,4-Difluorobenzene	1635827	5.417	1551589	5.411	105	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	854234	9.98	775053	9.974	110	50 - 200	0.0060	+/-0.50	

Analytical Resources, Incorporated

HOLDING TIME SUMMARY

Analysis: EPA 8260C

Laboratory: Analytical Resources, Inc. SDG: 16G0006

Client: Anchor QEA, LLC Project: CHRL SSWA

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
CHRL-O-03A-160705 16G0006-01	07/05/16 17:10	07/06/16 07:15	07/07/16 09:52	2	14	07/07/16 18:34	2	14	
CHRL-O-04A-160705 16G0006-02	07/05/16 17:00	07/06/16 07:15	07/07/16 09:52	2	14	07/07/16 18:57	2	14	
CHRL-P-03A-160705 16G0006-03	07/05/16 16:45	07/06/16 07:15	07/07/16 09:52	2	14	07/07/16 19:19	2	14	
CHRL-TB-160705 16G0006-04	07/05/16 00:00	07/06/16 07:15	07/07/16 09:52	2	14	07/07/16 19:42	3	14	

* Indicates hold time exceedance.

Analytical Resources, Incorporated

METHOD DETECTION AND REPORTING LIMITS

EPA 8260C

Laboratory: Analytical Resources, Inc. SDG: 16G0006

Client: Anchor QEA, LLC Project: CHRL SSWA

Matrix: Solid Instrument: NT5

Analyte	MDL	RL	Units
Vinyl Chloride	0.24	1.00	ug/kg
Bromomethane	0.19	1.00	ug/kg
Chloromethane	0.26	1.00	ug/L
Vinyl Chloride	0.24	1.00	ug/L
Bromomethane	0.19	1.00	ug/L
Chloroethane	0.46	1.00	ug/L
Trichlorofluoromethane	0.27	1.00	ug/L
Acrolein	3.81	5.00	ug/L
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.29	2.00	ug/L
Acetone	0.48	5.00	ug/L
1,1-Dichloroethene	0.34	1.00	ug/L
Bromoethane	0.44	2.00	ug/L
Iodomethane	0.22	1.00	ug/L
Methylene Chloride	0.64	2.00	ug/L
Acrylonitrile	1.03	5.00	ug/L
Carbon Disulfide	0.56	1.00	ug/L
trans-1,2-Dichloroethene	0.27	1.00	ug/L
cis-1,2-Dichloroethene	0.24	1.00	ug/kg
Vinyl Acetate	0.38	5.00	ug/L
1,1-Dichloroethane	0.20	1.00	ug/L
2-Butanone	0.51	5.00	ug/L
2,2-Dichloropropane	0.29	1.00	ug/L
cis-1,2-Dichloroethene	0.24	1.00	ug/L
Chloroform	0.23	1.00	ug/L
Bromochloromethane	0.32	1.00	ug/L
1,1,1-Trichloroethane	0.23	1.00	ug/L
Benzene	0.30	1.00	ug/kg
1,1-Dichloropropene	0.31	1.00	ug/L
Trichloroethene	0.21	1.00	ug/kg
Carbon tetrachloride	0.21	1.00	ug/L
1,2-Dichloroethane	0.19	1.00	ug/L
Benzene	0.30	1.00	ug/L
Trichloroethene	0.21	1.00	ug/L
1,2-Dichloropropane	0.16	1.00	ug/L
Bromodichloromethane	0.25	1.00	ug/L
Dibromomethane	0.15	1.00	ug/L
Toluene	0.15	1.00	ug/kg
2-Chloroethyl vinyl ether	0.28	5.00	ug/L

Analytical Resources, Incorporated

METHOD DETECTION AND REPORTING LIMITS

EPA 8260C

Laboratory: Analytical Resources, Inc. SDG: 16G0006

Client: Anchor QEA, LLC Project: CHRL SSWA

Matrix: Solid Instrument: NT5

Analyte	MDL	RL	Units
4-Methyl-2-Pentanone	0.42	5.00	ug/L
cis-1,3-Dichloropropene	0.23	1.00	ug/L
Toluene	0.15	1.00	ug/L
trans-1,3-Dichloropropene	0.22	1.00	ug/L
2-Hexanone	0.44	5.00	ug/L
Tetrachloroethene	0.26	1.00	ug/kg
1,1,2-Trichloroethane	0.29	1.00	ug/L
1,3-Dichloropropane	0.21	1.00	ug/L
Tetrachloroethene	0.26	1.00	ug/L
Dibromochloromethane	0.27	1.00	ug/L
Ethylbenzene	0.20	1.00	ug/kg
1,2-Dibromoethane	0.18	1.00	ug/L
m,p-Xylene	0.39	1.00	ug/kg
Chlorobenzene	0.22	1.00	ug/L
o-Xylene	0.22	1.00	ug/kg
Ethylbenzene	0.20	1.00	ug/L
1,1,1,2-Tetrachloroethane	0.23	1.00	ug/L
m,p-Xylene	0.39	1.00	ug/L
o-Xylene	0.22	1.00	ug/L
Xylenes, total	0.62	2.00	ug/L
Styrene	0.14	1.00	ug/L
Bromoform	0.30	1.00	ug/L
1,1,2,2-Tetrachloroethane	0.25	1.00	ug/L
1,2,3-Trichloropropane	0.52	2.00	ug/L
trans-1,4-Dichloro 2-Butene	0.44	5.00	ug/L
n-Propylbenzene	0.27	1.00	ug/L
Bromobenzene	0.15	1.00	ug/L
Isopropyl Benzene	0.23	1.00	ug/L
2-Chlorotoluene	0.30	1.00	ug/L
4-Chlorotoluene	0.28	1.00	ug/L
t-Butylbenzene	0.31	1.00	ug/L
1,3,5-Trimethylbenzene	0.25	1.00	ug/L
1,2,4-Trimethylbenzene	0.23	1.00	ug/L
s-Butylbenzene	0.24	1.00	ug/L
4-Isopropyl Toluene	0.24	1.00	ug/L
1,3-Dichlorobenzene	0.23	1.00	ug/L
1,4-Dichlorobenzene	0.23	1.00	ug/L
n-Butylbenzene	0.26	1.00	ug/L

Analytical Resources, Incorporated

METHOD DETECTION AND REPORTING LIMITS

EPA 8260C

Laboratory: Analytical Resources, Inc. SDG: 16G0006

Client: Anchor QEA, LLC Project: CHRL SSWA

Matrix: Solid Instrument: NT5

Analyte	MDL	RL	Units
1,2-Dichlorobenzene	0.29	1.00	ug/L
1,2-Dibromo-3-chloropropane	0.59	5.00	ug/L
1,2,4-Trichlorobenzene	0.33	5.00	ug/L
Hexachloro-1,3-Butadiene	0.41	5.00	ug/L
Naphthalene	0.43	5.00	ug/L
1,2,3-Trichlorobenzene	0.31	5.00	ug/L

Analytical Resources, Incorporated

METHOD DETECTION AND REPORTING LIMITS

EPA 8260C

Laboratory: Analytical Resources, Inc. SDG: 16G0006

Client: Anchor QEA, LLC Project: CHRL SSWA

Matrix: Water Instrument: NT5

Analyte	MDL	RL	Units
Vinyl Chloride	0.06	0.20	ug/L
Bromomethane	0.25	1.00	ug/L
cis-1,2-Dichloroethene	0.04	0.20	ug/L
Benzene	0.03	0.20	ug/L
Trichloroethene	0.05	0.20	ug/L
Toluene	0.04	0.20	ug/L
Tetrachloroethene	0.05	0.20	ug/L
Ethylbenzene	0.04	0.20	ug/L
m,p-Xylene	0.05	0.40	ug/L
o-Xylene	0.03	0.20	ug/L

CHRL-O-03A-160705

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16G0006
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16G0006-01	File ID:	07061622G.D
Sampled:	07/05/16 17:10	Prepared:	07/06/16 14:20	Analyzed:	07/06/16 15:09
Solids:	92.87	Preparation:	No Prep - Volatiles	Initial/Final:	5.107 g / 5 g
Batch:	BEG0020	Sequence:	SEG0023	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5650	U	2830	5650

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.79	95.9	80 - 120	
4-Bromofluorobenzene	5.0000	5.18	104	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160706.b\07061622.D

Date : 06-JUL-2016 15:09

Client ID:

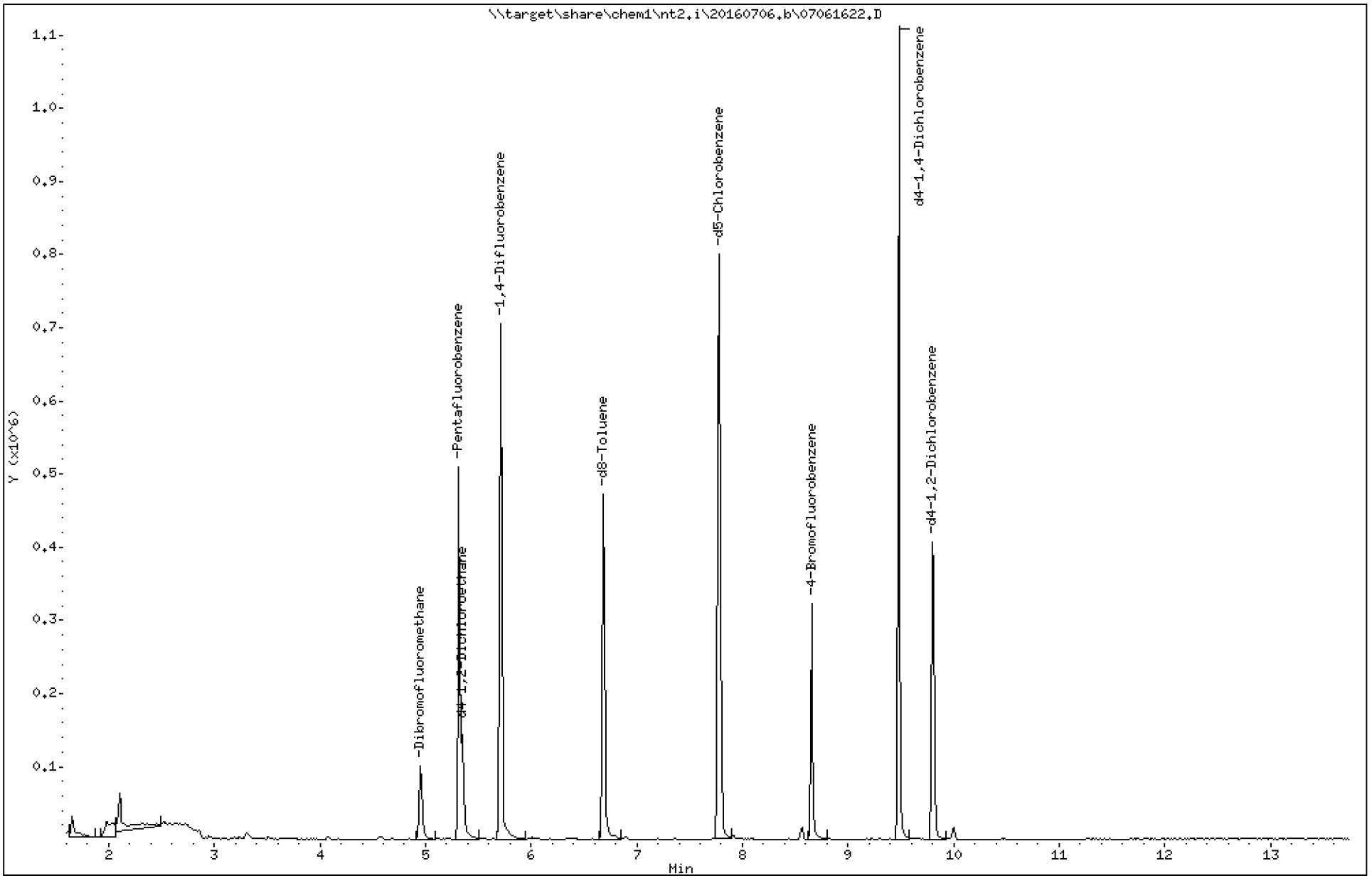
Sample Info: 16G0006-01,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



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Date : 06-JUL-2016 15:09

Client ID:

Instrument: nt2.i

Sample Info: 16G0006-01,10,10,0,

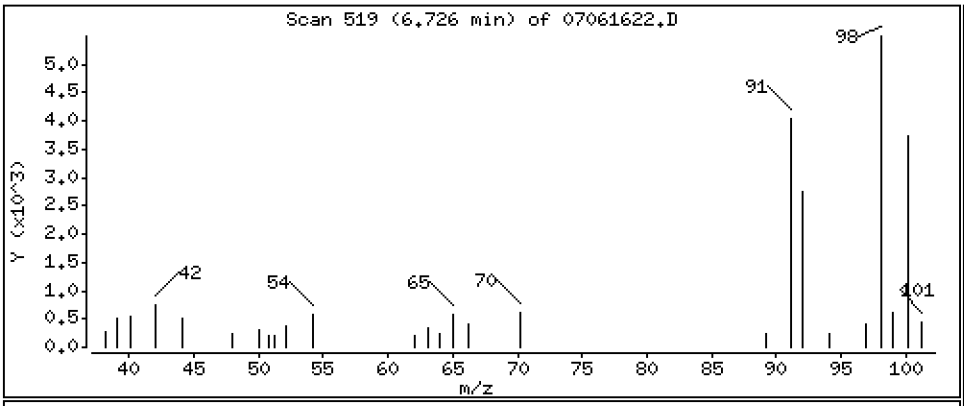
Operator: LH

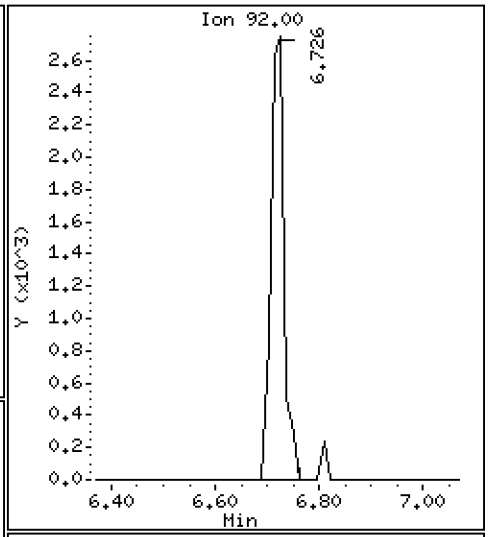
Column phase: RTXVMS

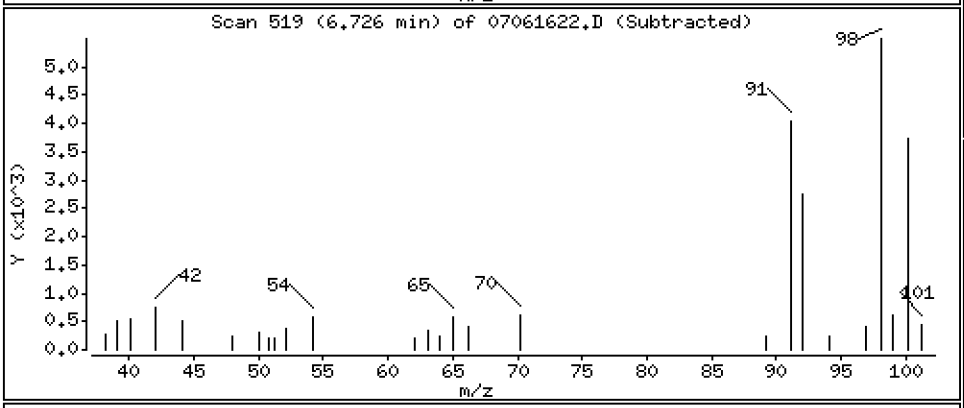
Column diameter: 0.18

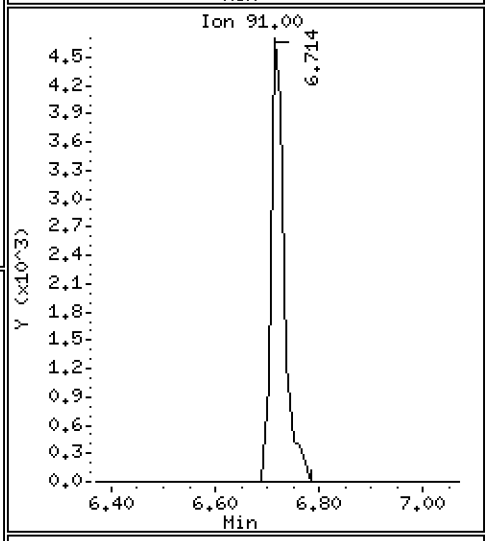
44 Toluene

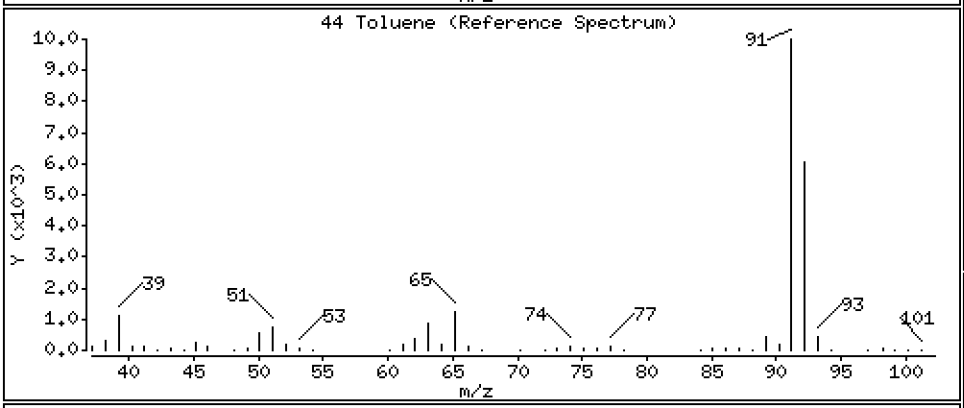
Concentration: 0.1055 ug/L

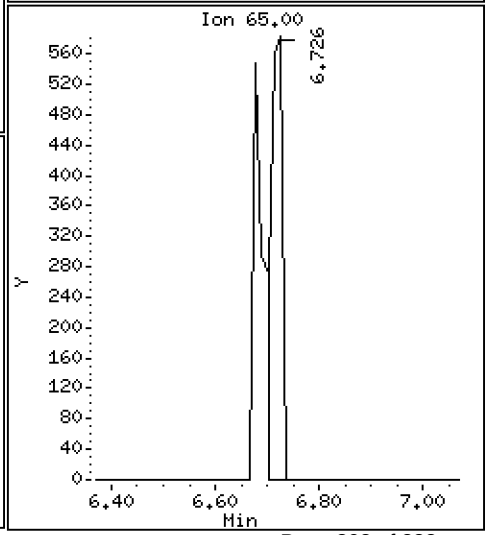


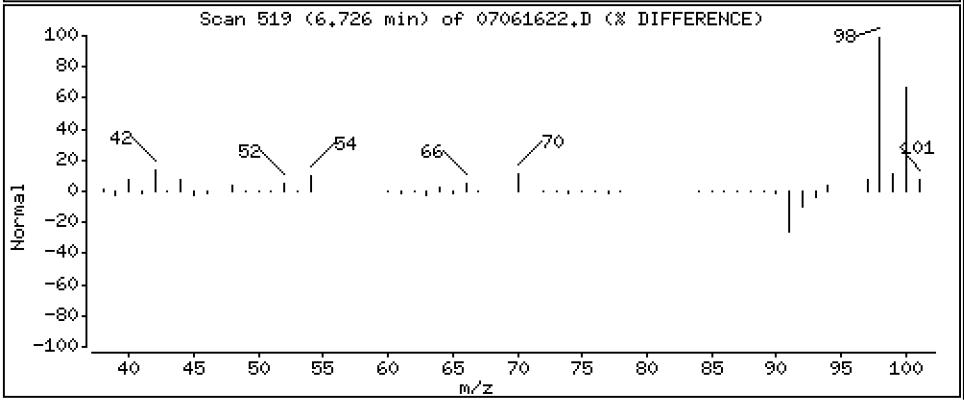












Data File: \\target\share\chem1\nt2.i\20160706.b\07061622.D

Date : 06-JUL-2016 15:09

Client ID:

Instrument: nt2.i

Sample Info: 16G0006-01,10,10,0,

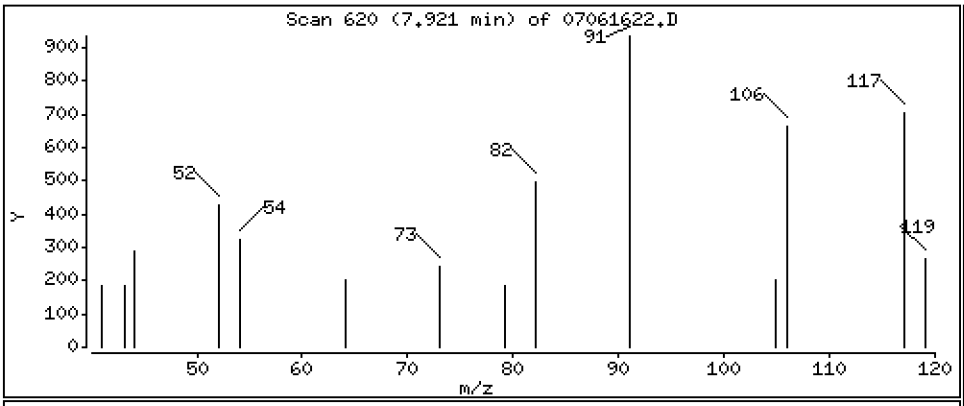
Operator: LH

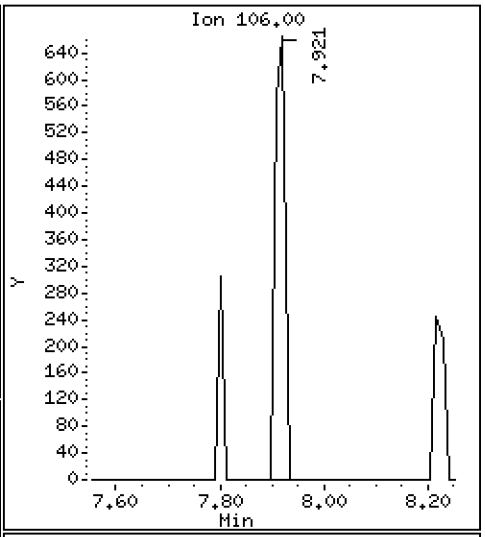
Column phase: RTXVMS

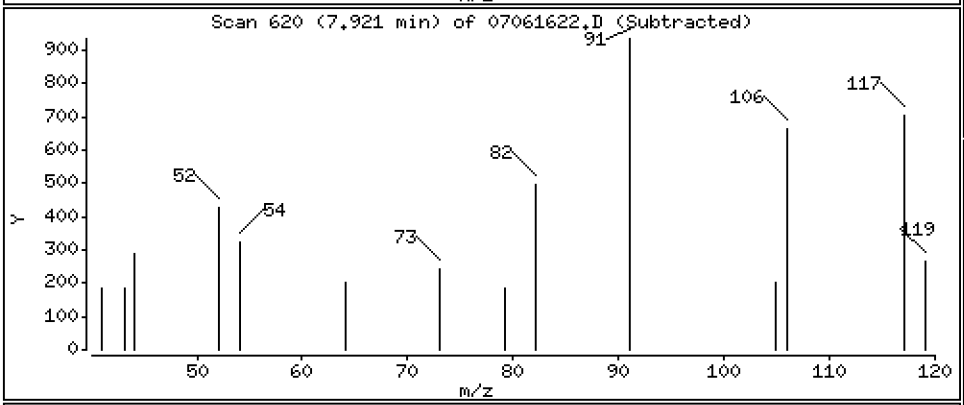
Column diameter: 0.18

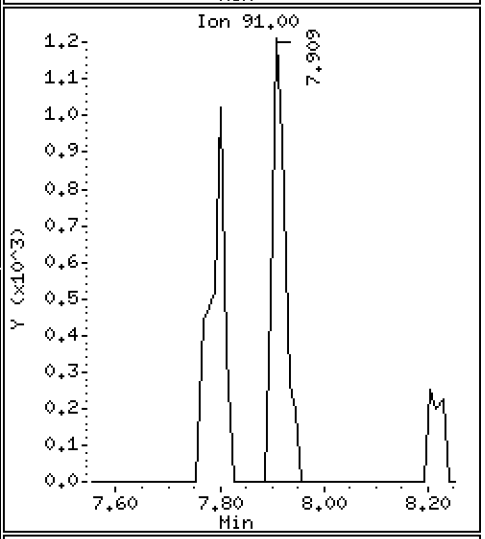
57 m,p-xylene

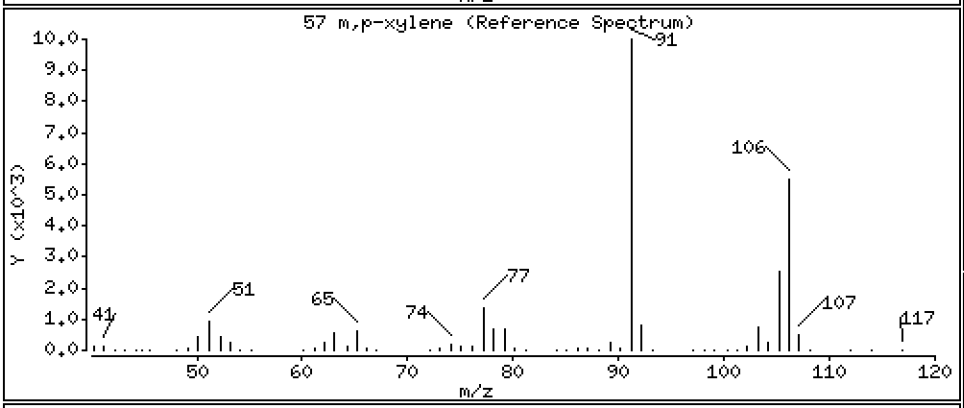
Concentration: 0.02589 ug/L

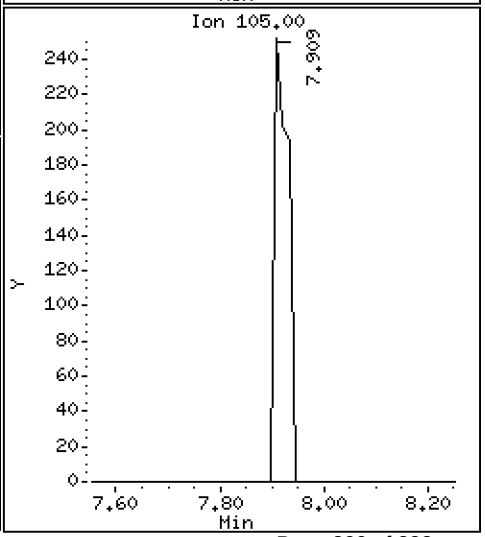


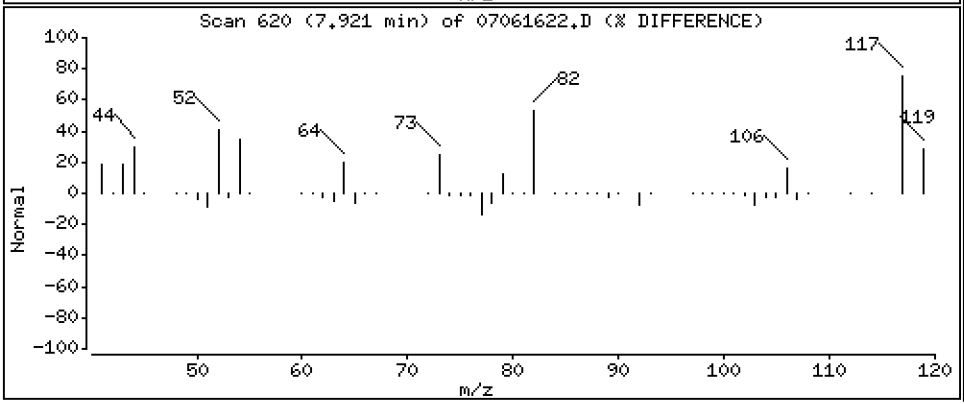












Data File: \\target\share\chem1\nt2.i\20160706.b\07061622.D

Date : 06-JUL-2016 15:09

Client ID:

Instrument: nt2.i

Sample Info: 16G0006-01,10,10,0,

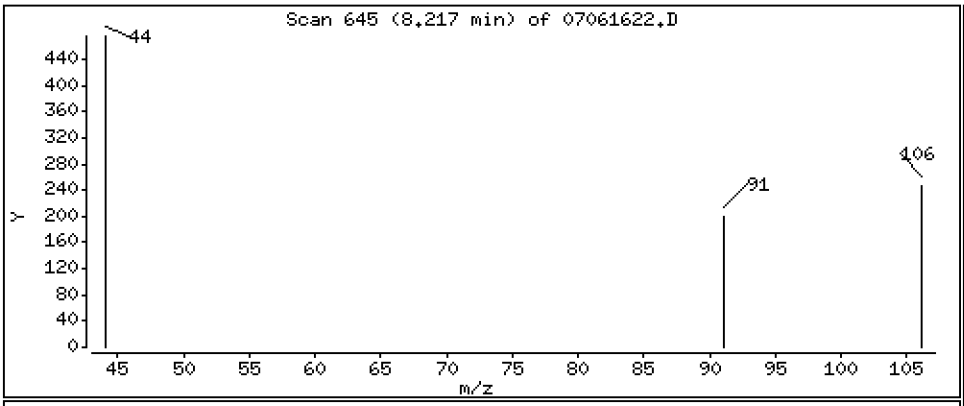
Operator: LH

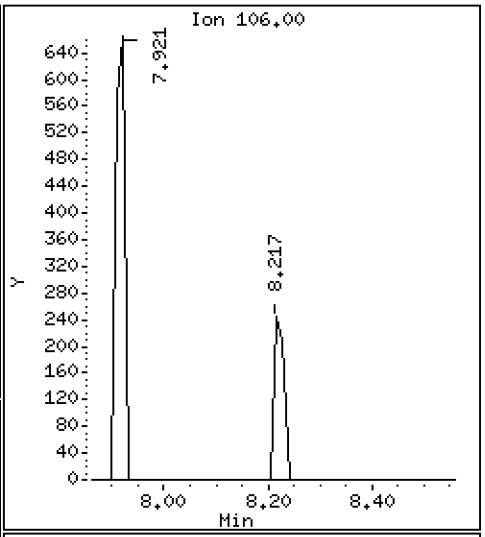
Column phase: RTXVMS

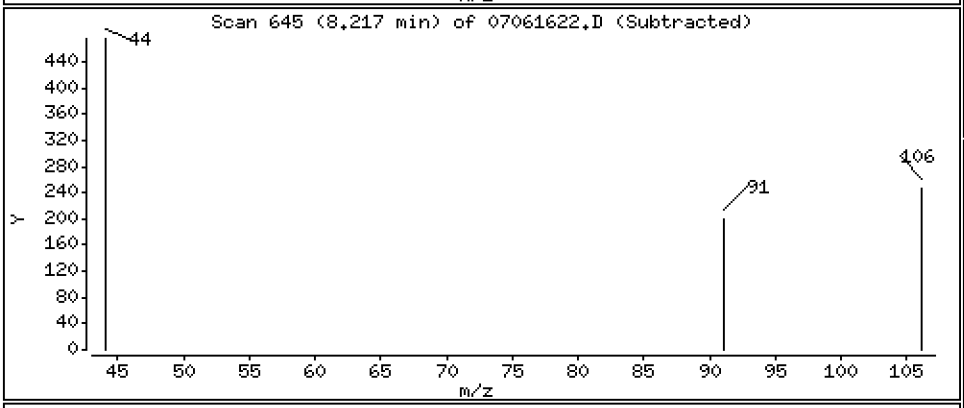
Column diameter: 0.18

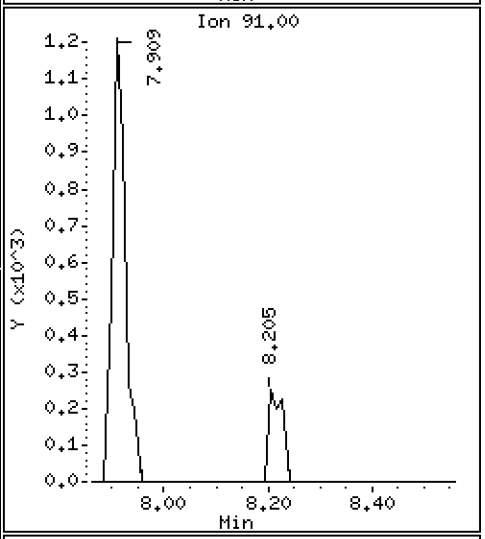
58 o-Xylene

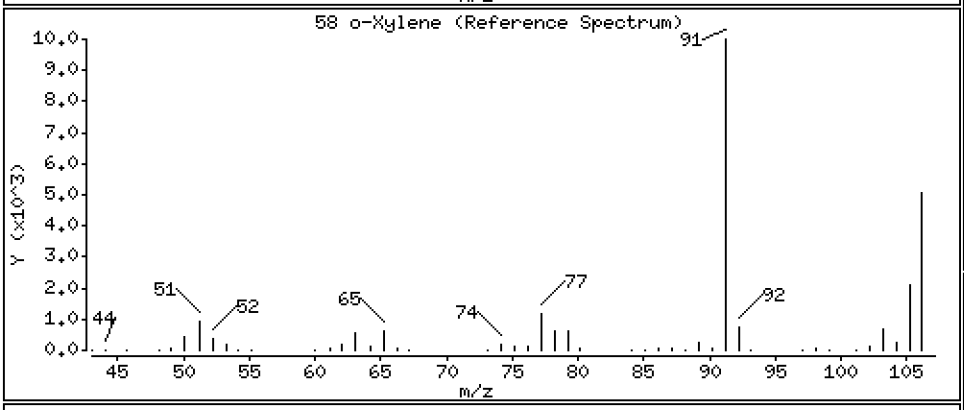
Concentration: 0.01027 ug/L

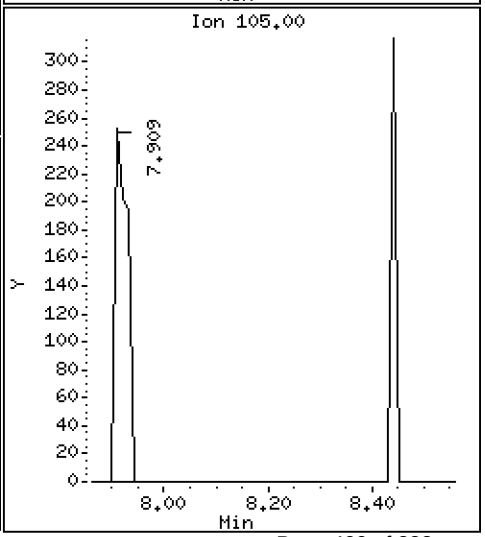


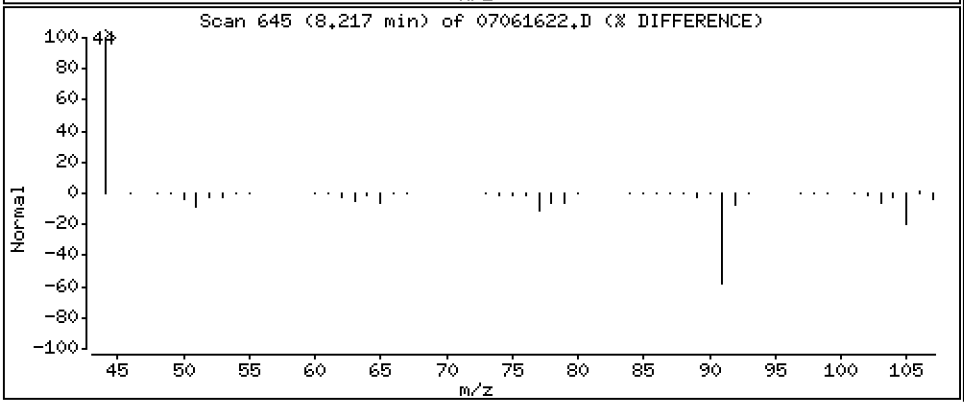












ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160706.b\07061622.D
Lab Smp Id: 16G0006-01
Inj Date : 06-JUL-2016 15:09
Operator : LH Inst ID: nt2.i
Smp Info : 16G0006-01,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Meth Date : 07-Jul-2016 13:15 lanih Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.950	4.949	(0.931)	59798	4.73078	4.731
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.317	5.328	(1.000)	278484	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.353	5.352	(1.007)	79710	5.78923	5.789
*	37 1,4-Difluorobenzene	114	5.708	5.707	(1.000)	497596	10.0000	
$	43 d8-Toluene	98	6.678	6.689	(1.170)	282548	4.79390	4.794
	44 Toluene	92	6.725	6.724	(1.178)	4978	0.10547	0.1055
*	53 d5-Chlorobenzene	117	7.778	7.777	(1.000)	452678	10.0000	
	55 Ethyl Benzene	106	Compound Not Detected.					
	57 m,p-xylene	106	7.920	7.908	(1.018)	878	0.02589	0.02589
	58 o-Xylene	106	8.216	8.215	(1.056)	323	0.01027	0.01027
$	62 4-Bromofluorobenzene	174	8.654	8.653	(1.113)	86342	5.18402	5.184
*	76 d4-1,4-Dichlorobenzene	152	9.482	9.481	(1.000)	241436	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.814	9.813	(1.035)	111675	4.98062	4.981

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 07061622.D
Lab Smp Id: 16G0006-01
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 06-JUL-2016
Calibration Time: 08:26
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	278484	12.35
37 1,4-Difluorobenze	400954	200477	801908	497596	24.10
53 d5-Chlorobenzene	354752	177376	709504	452678	27.60
76 d4-1,4-Dichlorobe	191489	95745	382978	241436	26.08

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.20
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 07-Jul-2016 13:18

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16G0006-01
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.731	94.62	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.789	115.78	80-128
$ 43 d8-Toluene	5.000	4.794	95.88	80-120
$ 62 4-Bromofluorobenze	5.000	5.184	103.68	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.981	99.61	80-120

REVIEW SUMMARY FOR FILE - 07061622.D

Lab ID: 16G0006-01
nt2.i, 20160706.b\8260061516LOW.m,   06-JUL-2016 15:09

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160706elementg.b\07061622G.D

Date : 06-JUL-2016 15:09

Client ID:

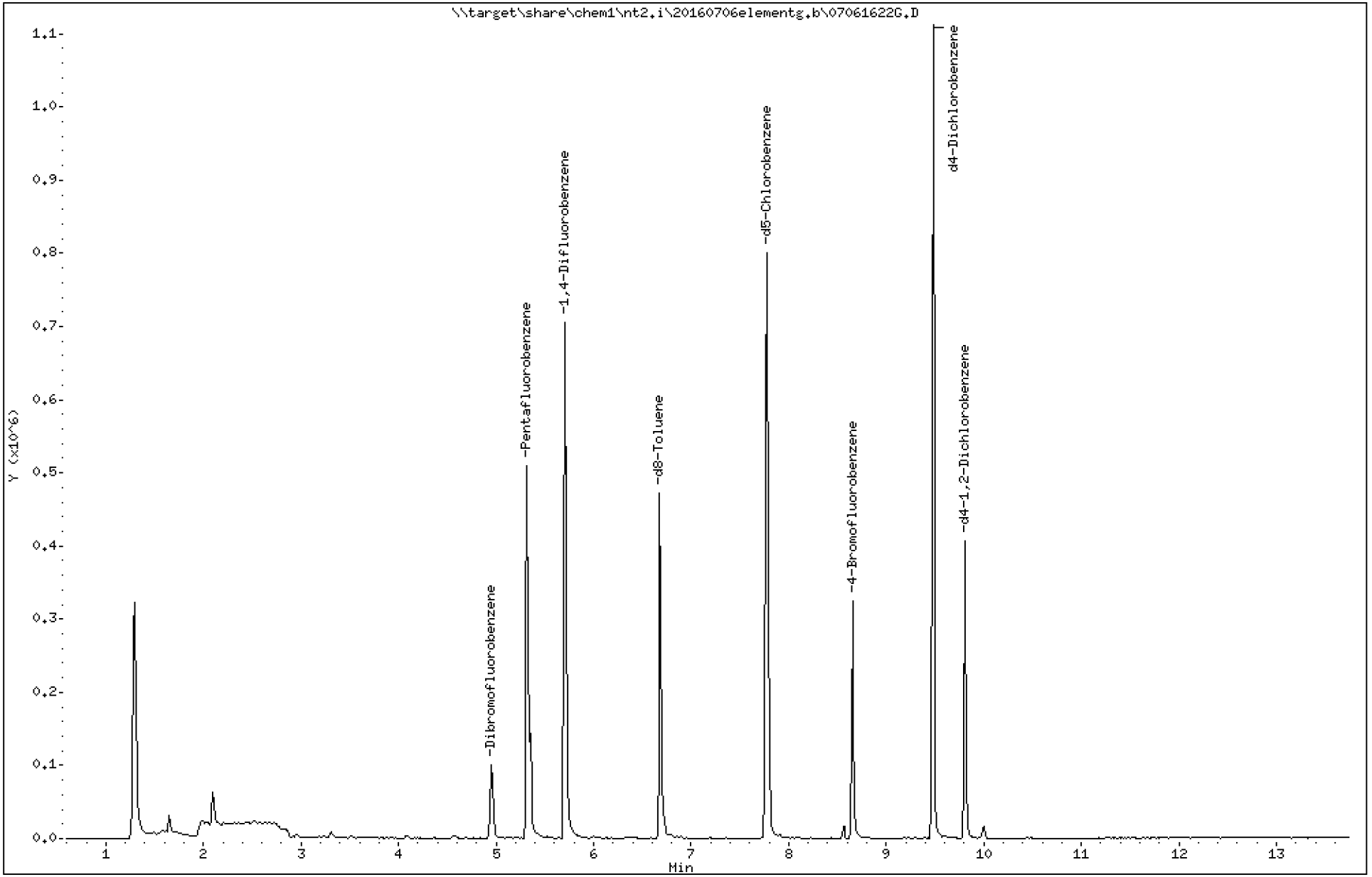
Sample Info: 16G0006-01,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160706elementg.b/07061622G.D
Method: \20160706elementg.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 06-JUL-2016 15:09

ARI ID: 16G0006-01
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.58)	48008849	58579	0.001
8015C 2MP-TMB	(2.98 to 9.27)	83224207	44387	0.001
AK101 nC6-nC10	(3.49 to 8.61)	58706304	27258	0.000
NWTPHG Tol-Nap	(6.62 to 11.39)	49203331	58579	0.001
mod8015 nC6-nC12	(3.49 to 10.58)	73249380	58582	0.001

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.678	765047	d8-Toluene
8.654	509209	4-Bromofluorobenzene
9.483	1534166	d4-Dichlorobenzene
7.779	1384615	d5-Chlorobenzene
9.802	686744	d4-1,2-Dichlorobenzene

CHRL-O-04A-160705

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16G0006
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16G0006-02	File ID:	07061623G.D
Sampled:	07/05/16 17:00	Prepared:	07/06/16 14:20	Analyzed:	07/06/16 15:30
Solids:	94.03	Preparation:	No Prep - Volatiles	Initial/Final:	4.865 g / 5 g
Batch:	BEG0020	Sequence:	SEG0023	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5780	U	2890	5780

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.87	97.5	80 - 120	
4-Bromofluorobenzene	5.0000	5.15	103	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160706.b\07061623.D

Date : 06-JUL-2016 15:30

Client ID:

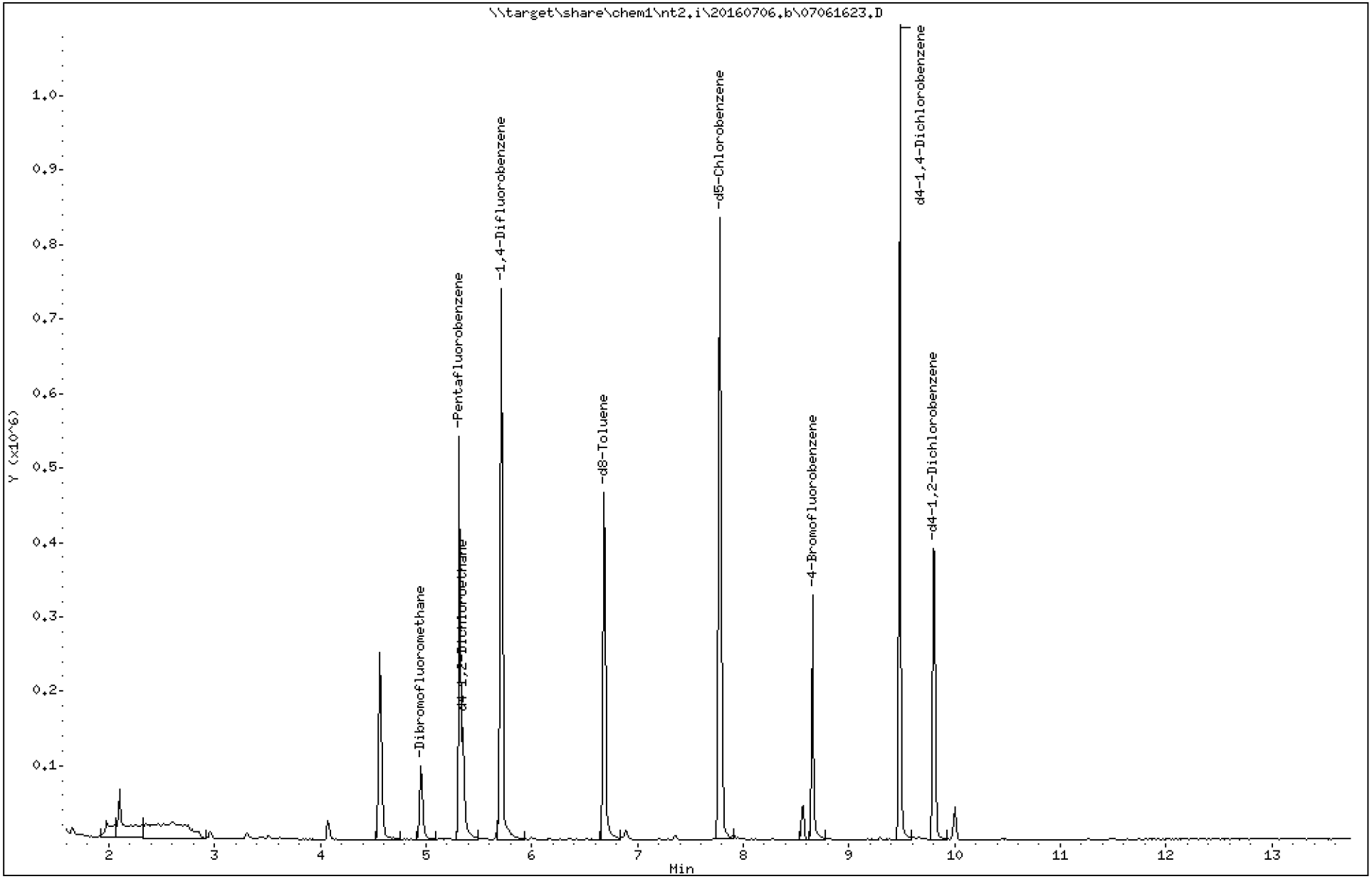
Sample Info: 16G0006-02,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Data File: \\target\share\chem1\nt2.i\20160706.b\07061623.D

Date : 06-JUL-2016 15:30

Client ID:

Instrument: nt2.i

Sample Info: 16G0006-02,10,10,0,

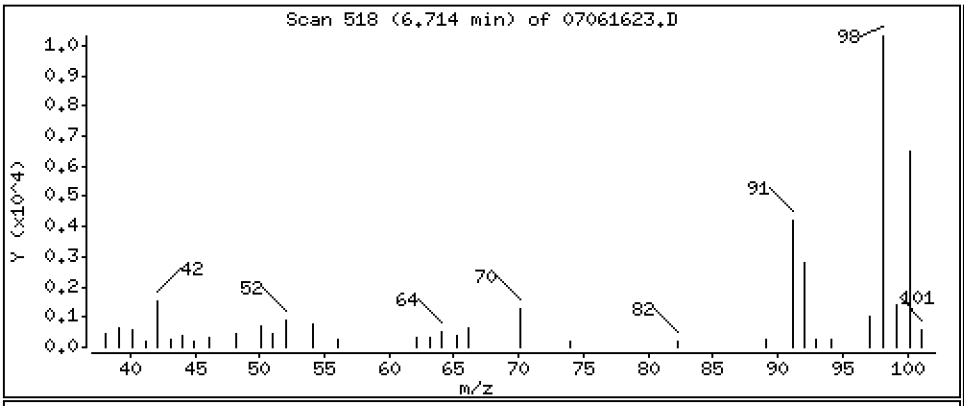
Operator: LH

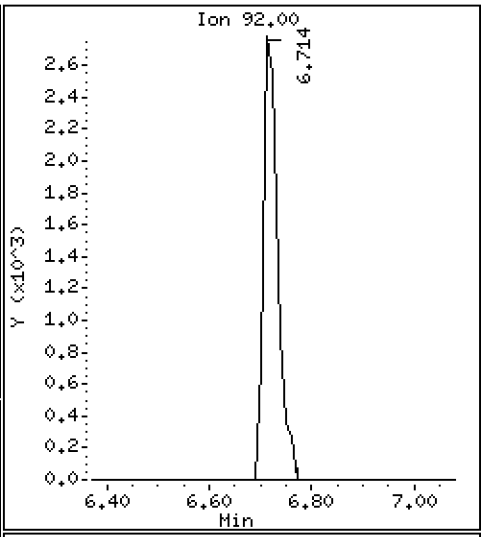
Column phase: RTXVMS

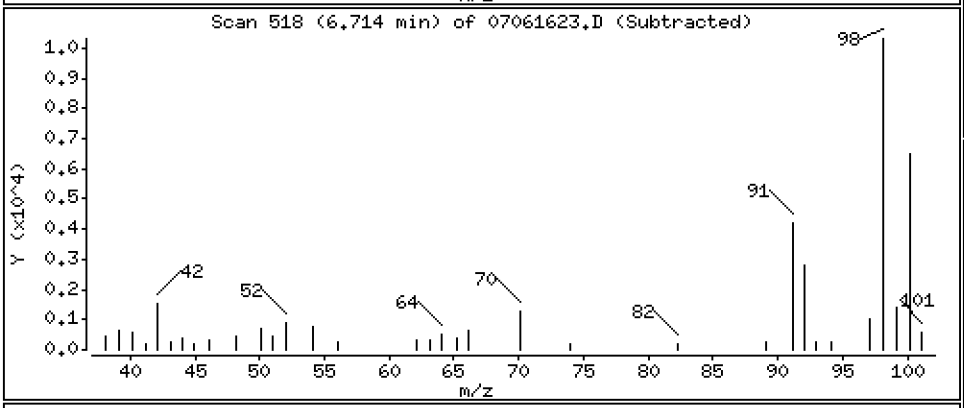
Column diameter: 0.18

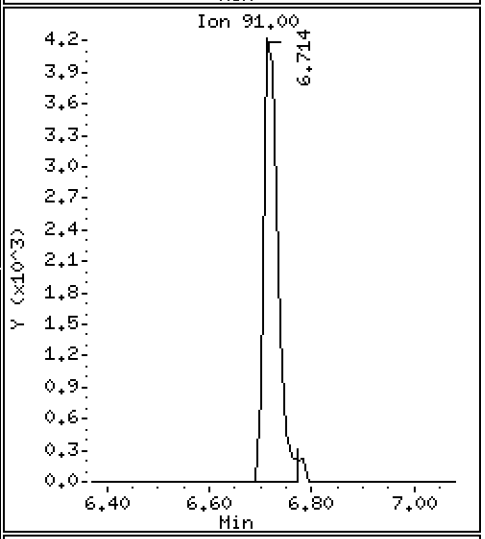
44 Toluene

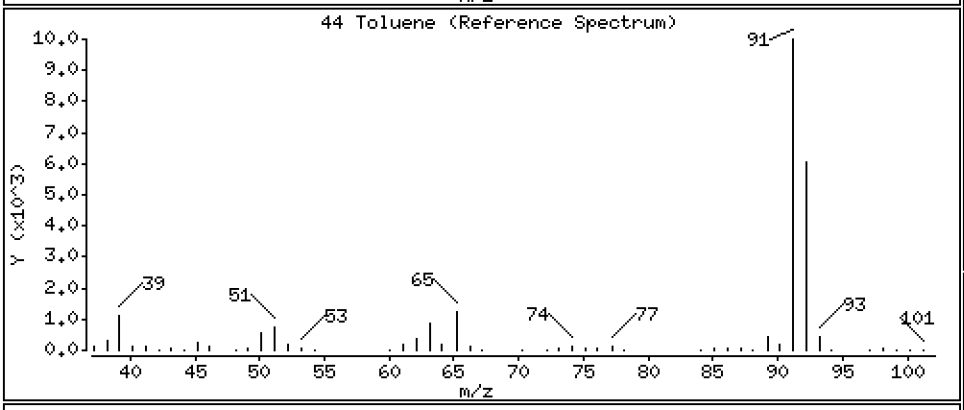
Concentration: 0.1093 ug/L

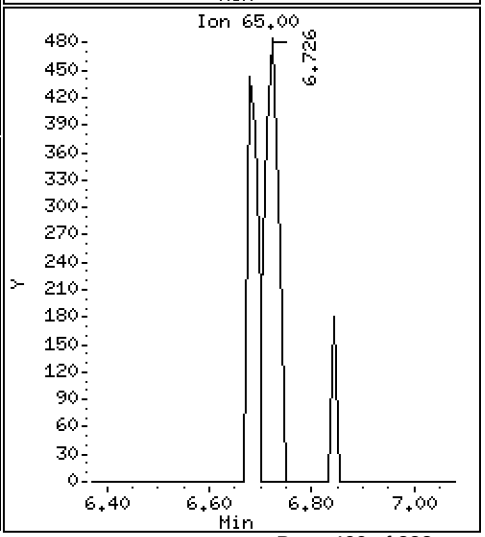


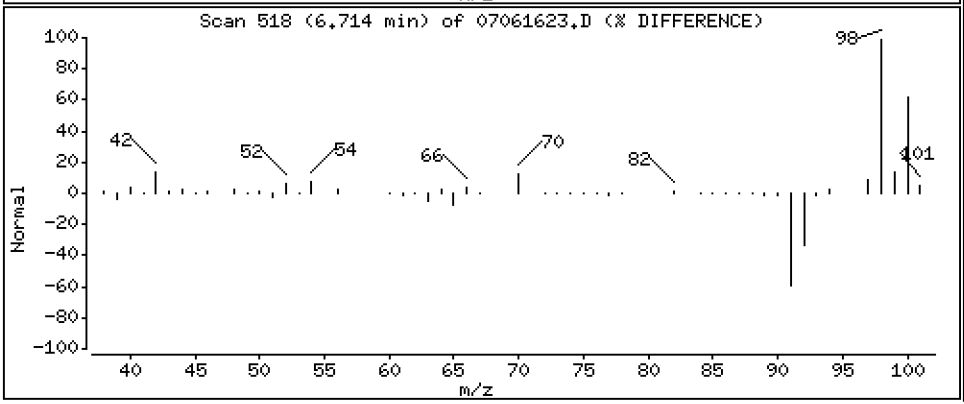












Data File: \\target\share\chem1\nt2.i\20160706.b\07061623.D

Date : 06-JUL-2016 15:30

Client ID:

Instrument: nt2.i

Sample Info: 16G0006-02,10,10,0,

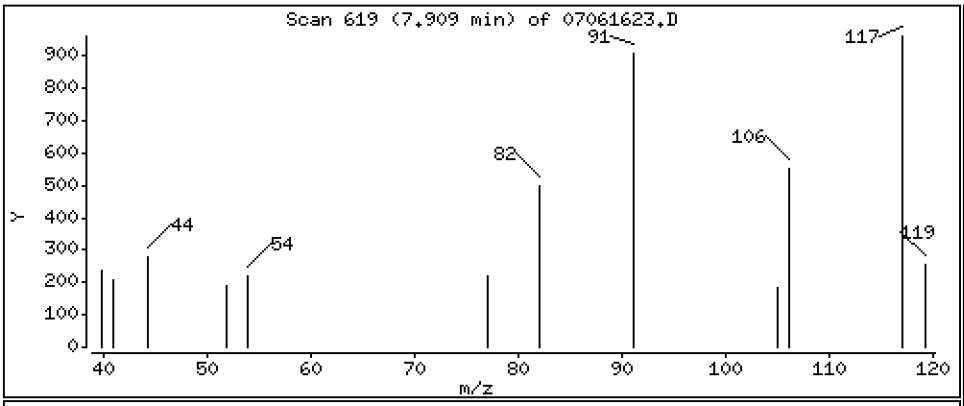
Operator: LH

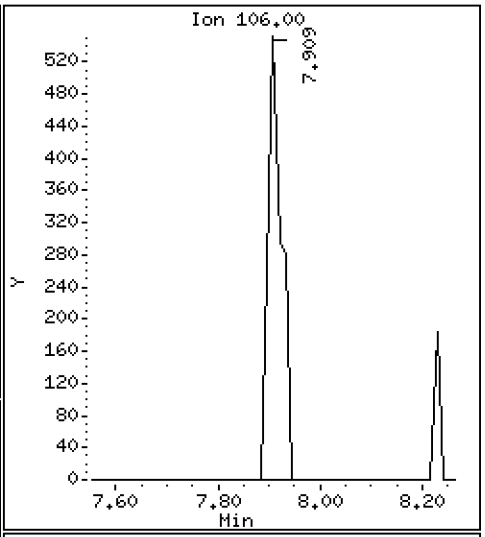
Column phase: RTXVMS

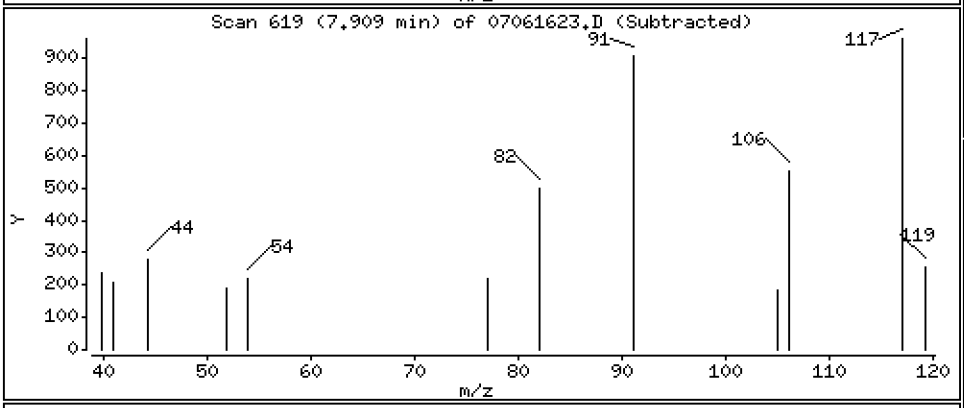
Column diameter: 0.18

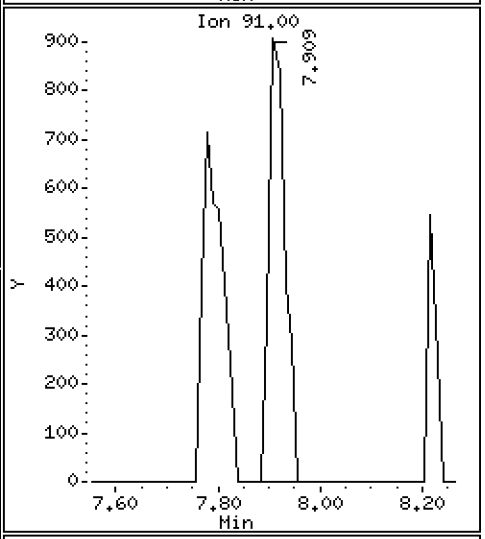
57 m,p-xylene

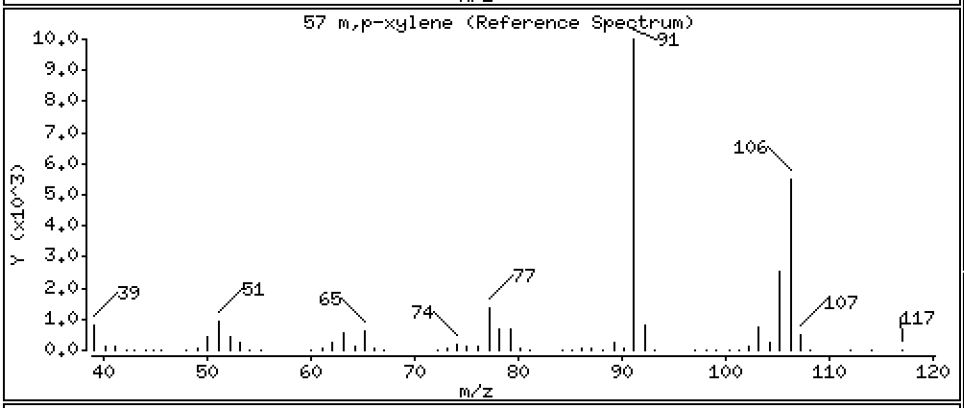
Concentration: 0.02875 ug/L

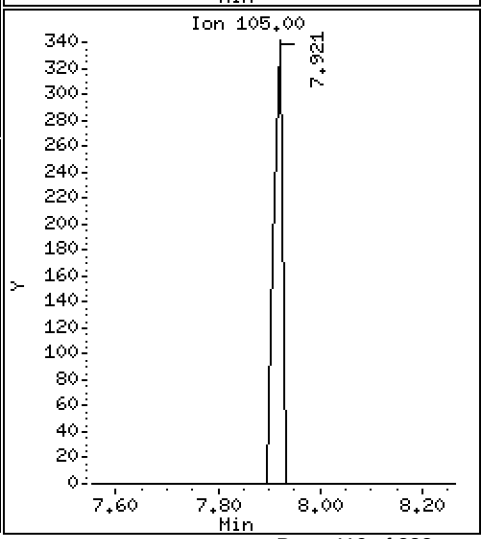


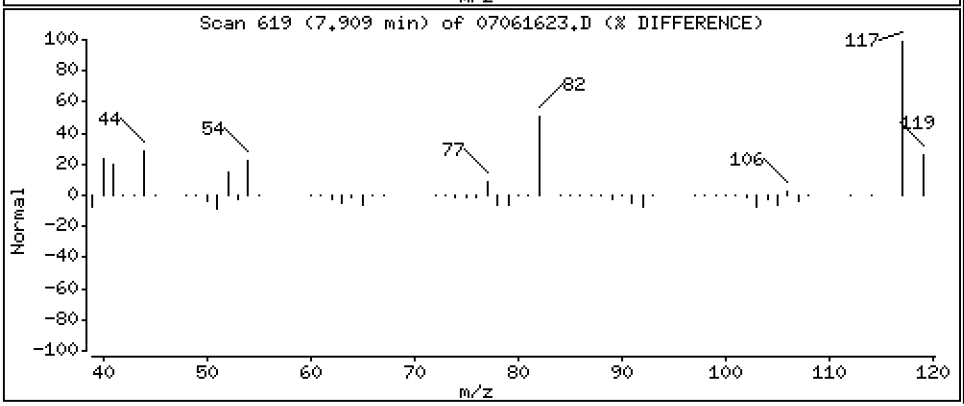












ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160706.b\07061623.D
Lab Smp Id: 16G0006-02
Inj Date : 06-JUL-2016 15:30
Operator : LH Inst ID: nt2.i
Smp Info : 16G0006-02,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Meth Date : 07-Jul-2016 13:15 lanih Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 27	Dibromofluoromethane	111	4.950	4.949	(0.931)	60362	4.44966	4.450
31	Benzene	78	Compound Not Detected.					
* 32	Pentafluorobenzene	168	5.317	5.328	(1.000)	298870	10.0000	
$ 33	d4-1,2-Dichloroethane	65	5.352	5.352	(1.007)	80462	5.44523	5.445
* 37	1,4-Difluorobenzene	114	5.707	5.707	(1.000)	518514	10.0000	
$ 43	d8-Toluene	98	6.678	6.689	(1.170)	299372	4.87443	4.874
44	Toluene	92	6.713	6.724	(1.176)	5377	0.10933	0.1093
* 53	d5-Chlorobenzene	117	7.778	7.777	(1.000)	456828	10.0000	
55	Ethyl Benzene	106	Compound Not Detected.					
57	m,p-xylene	106	7.908	7.908	(1.017)	984	0.02875	0.02875
58	o-Xylene	106	Compound Not Detected.					
$ 62	4-Bromofluorobenzene	174	8.654	8.653	(1.113)	86568	5.15037	5.150
* 76	d4-1,4-Dichlorobenzene	152	9.482	9.481	(1.000)	238021	10.0000	
$ 79	d4-1,2-Dichlorobenzene	152	9.813	9.813	(1.035)	108057	4.88840	4.888

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 07061623.D
Lab Smp Id: 16G0006-02
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 06-JUL-2016
Calibration Time: 08:26
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	298870	20.57
37 1,4-Difluorobenze	400954	200477	801908	518514	29.32
53 d5-Chlorobenzene	354752	177376	709504	456828	28.77
76 d4-1,4-Dichlorobe	191489	95745	382978	238021	24.30

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.21
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 07-Jul-2016 13:18

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16G0006-02
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.450	88.99	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.445	108.90	80-128
$ 43 d8-Toluene	5.000	4.874	97.49	80-120
$ 62 4-Bromofluorobenze	5.000	5.150	103.01	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.888	97.77	80-120

REVIEW SUMMARY FOR FILE - 07061623.D

Lab ID: 16G0006-02
nt2.i, 20160706.b\8260061516LOW.m,   06-JUL-2016 15:30

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160706elementg.b\07061623G.D

Date : 06-JUL-2016 15:30

Client ID:

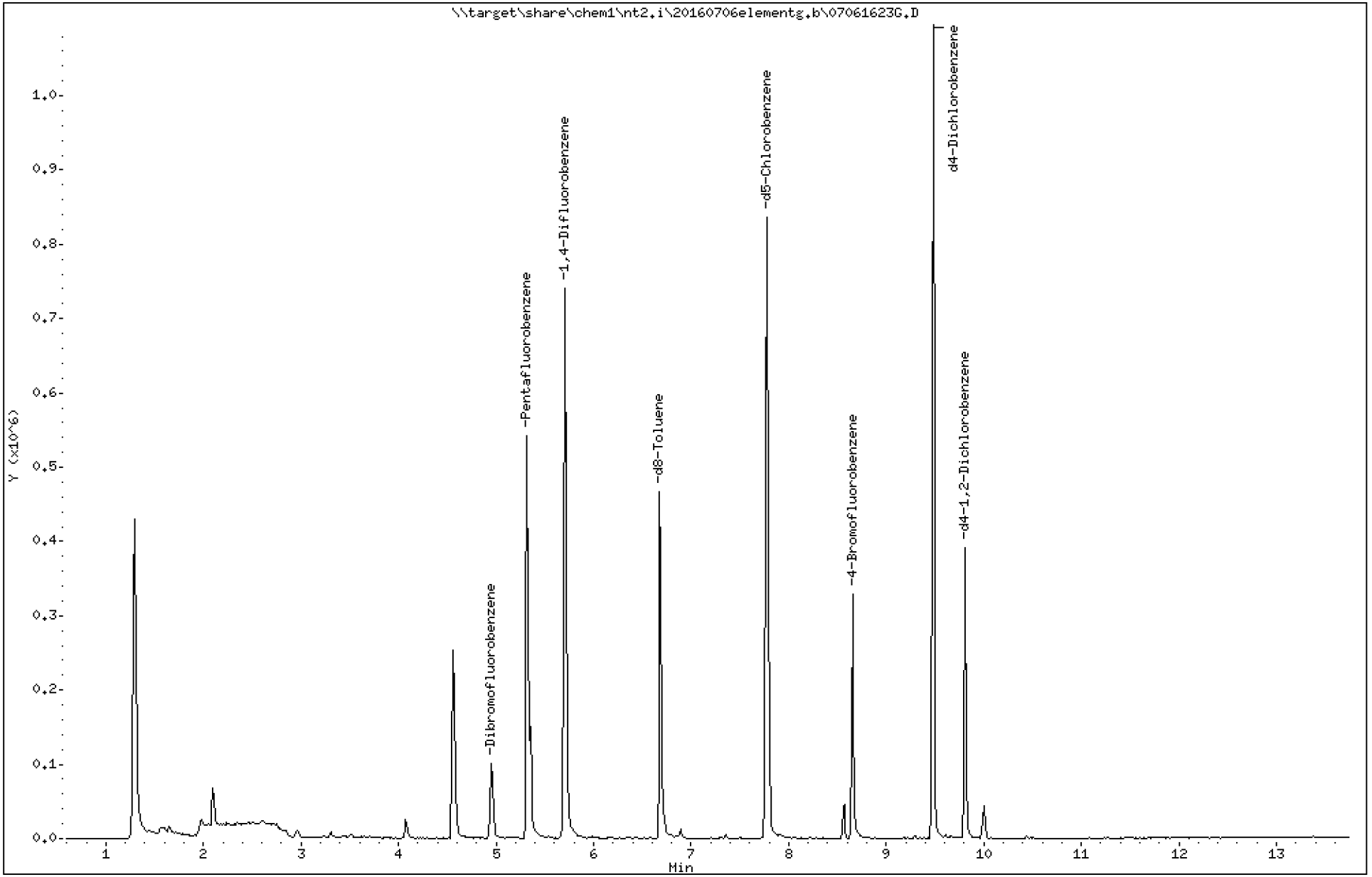
Instrument: nt2.i

Sample Info: 16G0006-02,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160706elementg.b/07061623G.D
Method: \20160706elementg.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 06-JUL-2016 15:30

ARI ID: 16G0006-02
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.58)	48008849	150281	0.003
8015C 2MP-TMB	(2.98 to 9.27)	83224207	593589	0.007
AK101 nC6-nC10	(3.49 to 8.61)	58706304	593589	0.010
NWTPHG Tol-Nap	(6.62 to 11.39)	49203331	150281	0.003
mod8015 nC6-nC12	(3.49 to 10.58)	73249380	664639	0.009

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.678	807562	d8-Toluene
8.654	515185	4-Bromofluorobenzene
9.483	1519147	d4-Dichlorobenzene
7.779	1392966	d5-Chlorobenzene
9.802	678145	d4-1,2-Dichlorobenzene

CHRL-P-03A-160705

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16G0006
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Soil	Laboratory ID:	16G0006-03	File ID:	07061624G.D
Sampled:	07/05/16 16:45	Prepared:	07/06/16 14:20	Analyzed:	07/06/16 15:50
Solids:	91.96	Preparation:	No Prep - Volatiles	Initial/Final:	5.047 g / 5 g
Batch:	BEG0020	Sequence:	SEG0023	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	1	5820	U	2910	5820

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.75	95.1	80 - 120	
4-Bromofluorobenzene	5.0000	5.19	104	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160706.b\07061624.D

Date : 06-JUL-2016 15:50

Client ID:

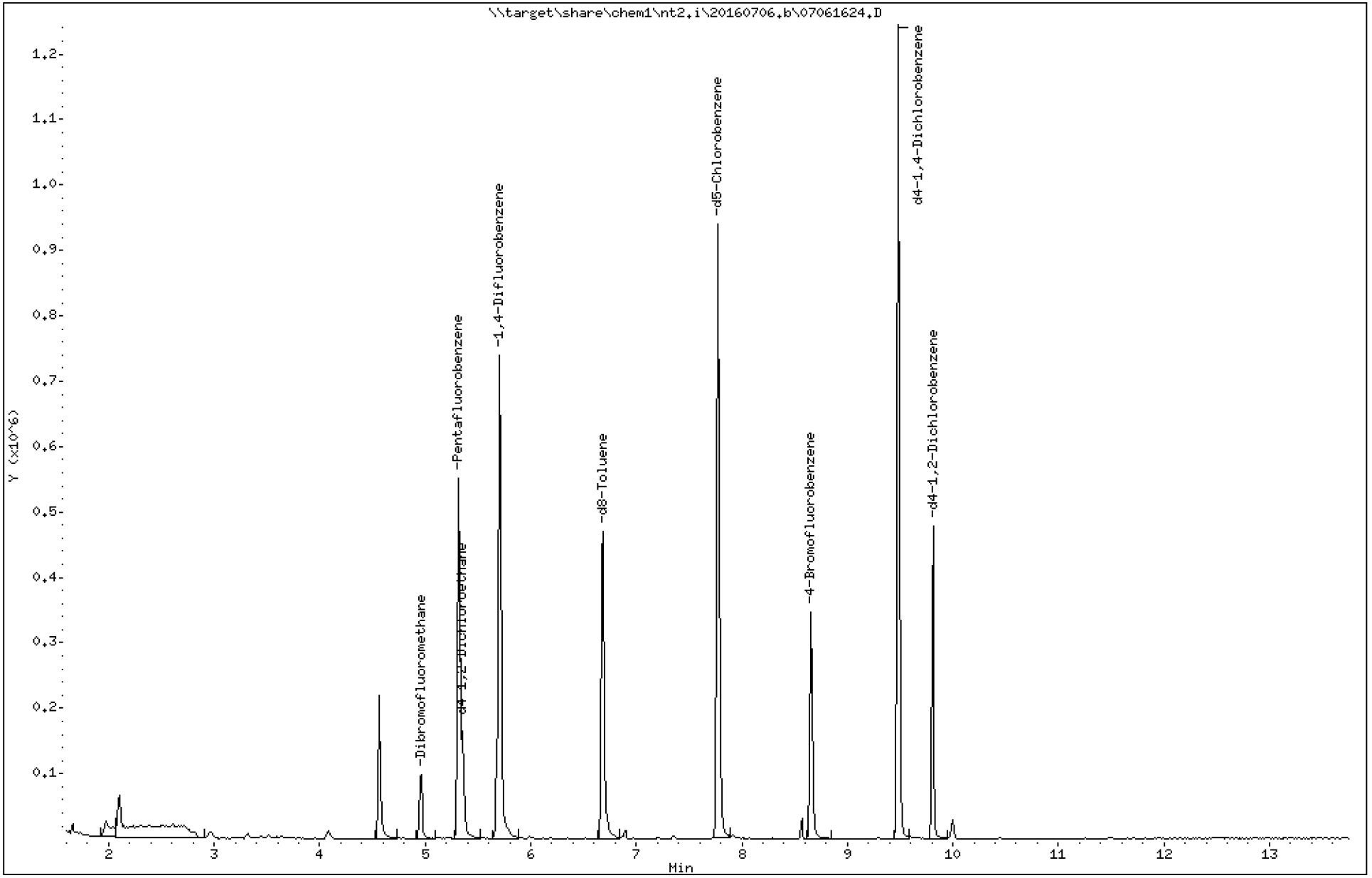
Instrument: nt2.i

Sample Info: 16G0006-03,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt2.i\20160706.b\07061624.D

Date : 06-JUL-2016 15:50

Client ID:

Instrument: nt2.i

Sample Info: 16G0006-03,10,10,0,

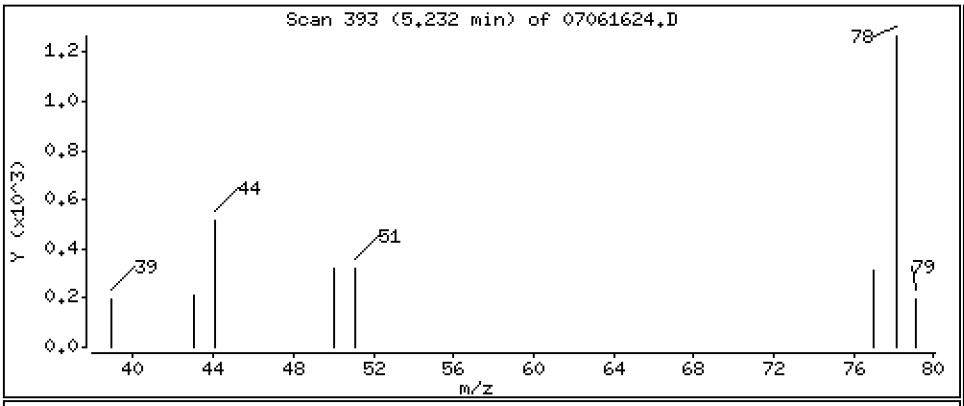
Operator: LH

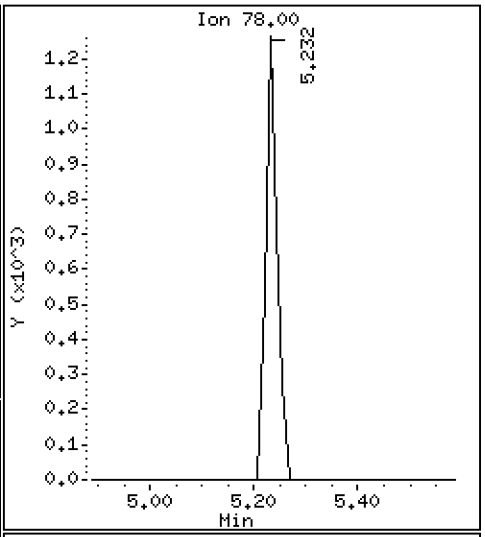
Column phase: RTXVMS

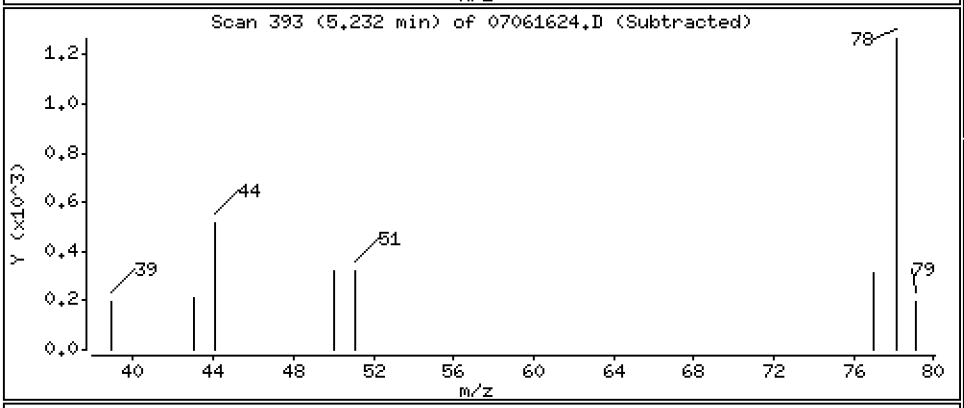
Column diameter: 0.18

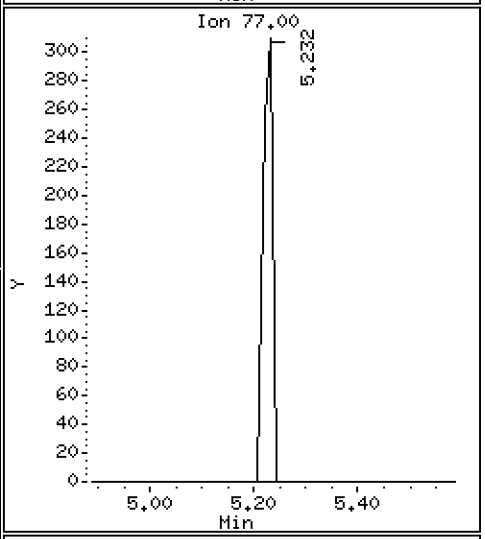
31 Benzene

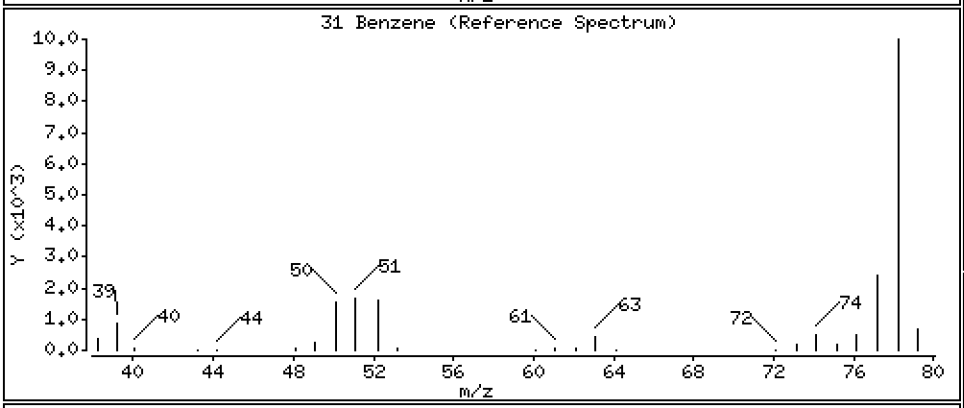
Concentration: 0.02367 ug/L

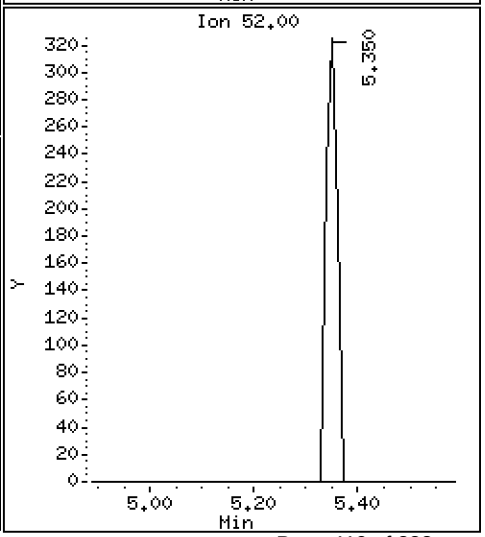


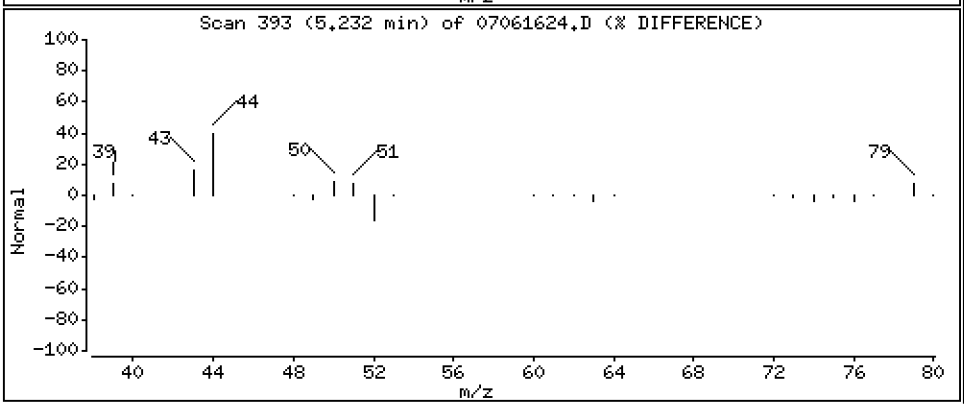












Data File: \\target\share\chem1\nt2.i\20160706.b\07061624.D

Date : 06-JUL-2016 15:50

Client ID:

Instrument: nt2.i

Sample Info: 16G0006-03,10,10,0,

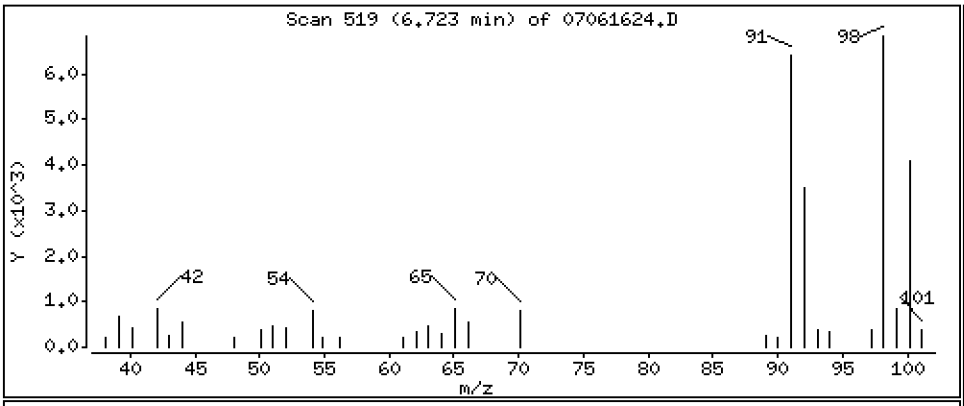
Operator: LH

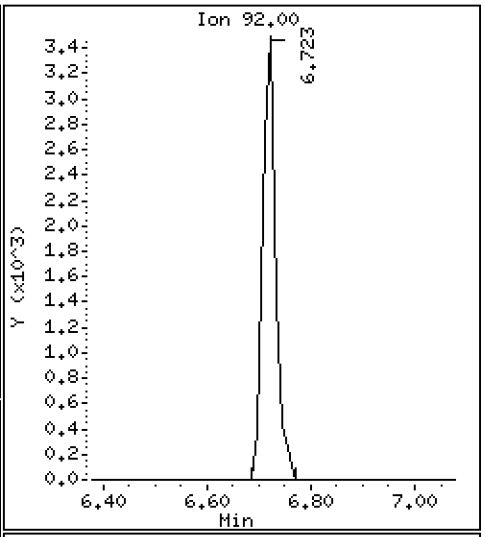
Column phase: RTXVMS

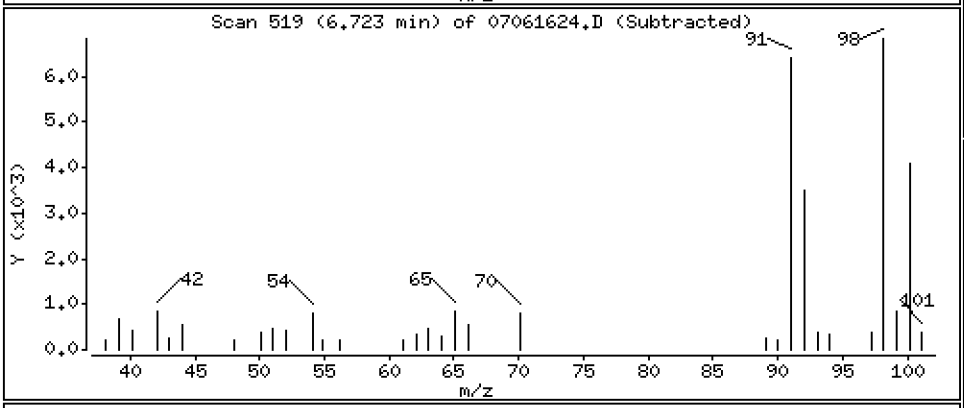
Column diameter: 0.18

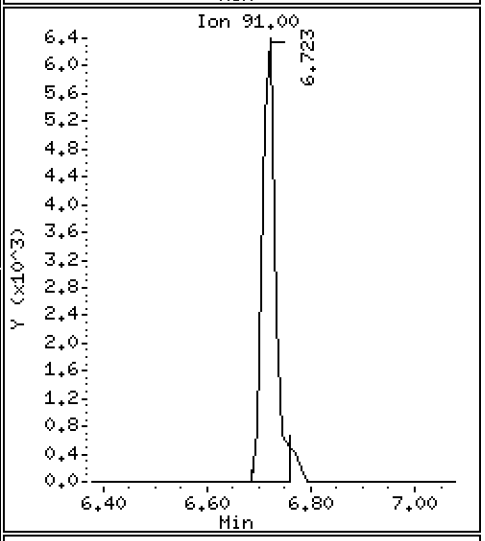
44 Toluene

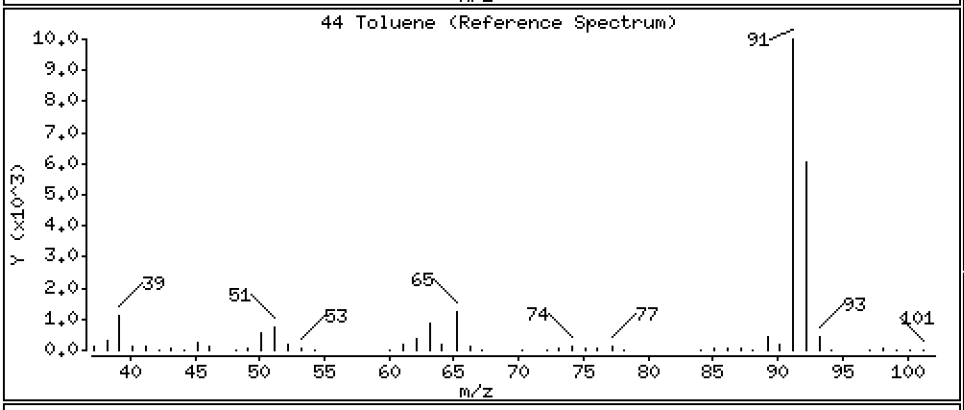
Concentration: 0.1157 ug/L

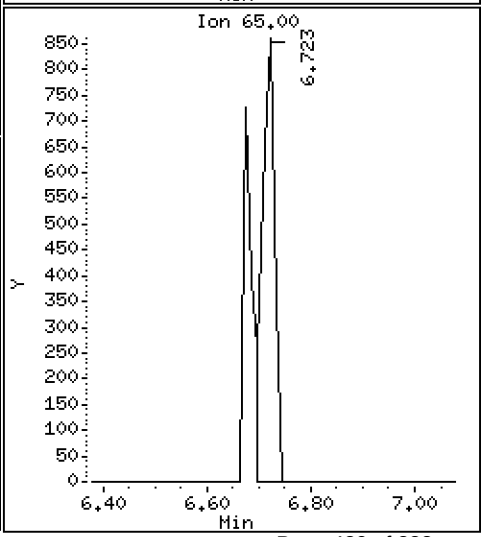


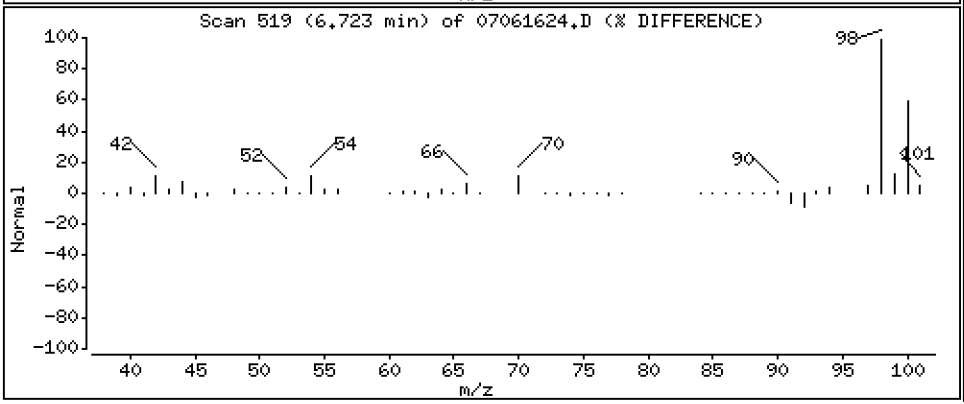












Data File: \\target\share\chem1\nt2.i\20160706.b\07061624.D

Date : 06-JUL-2016 15:50

Client ID:

Instrument: nt2.i

Sample Info: 16G0006-03,10,10,0,

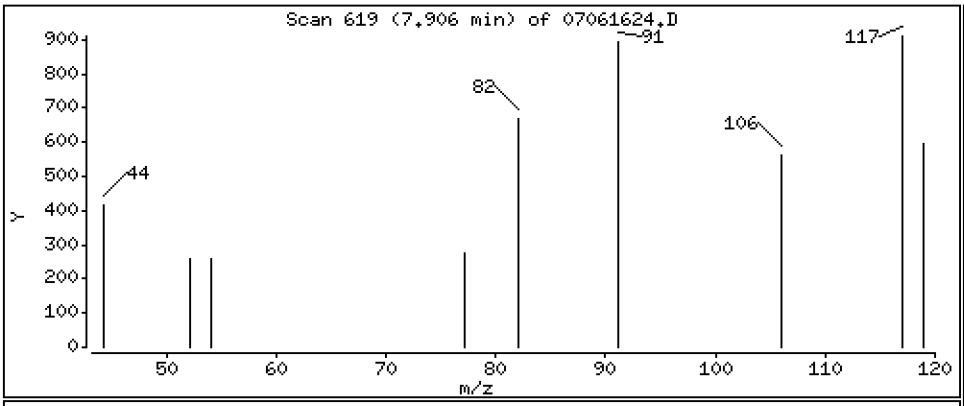
Operator: LH

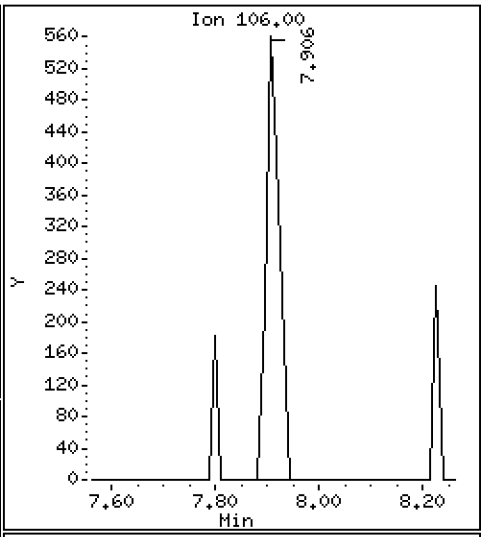
Column phase: RTXVMS

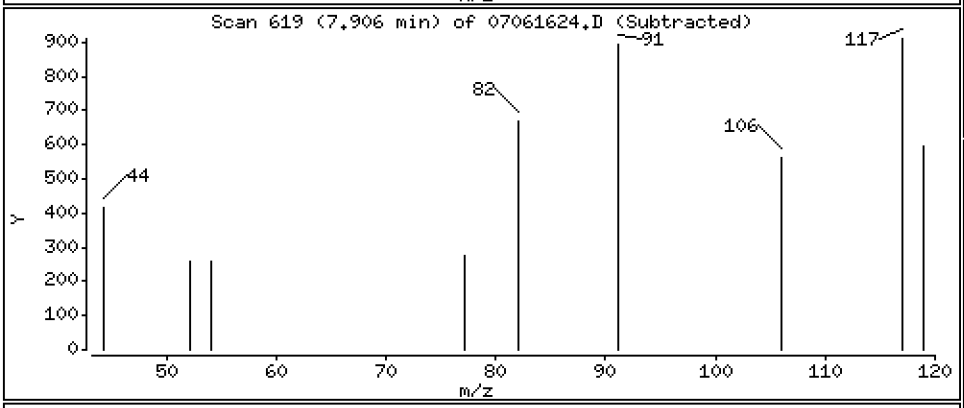
Column diameter: 0.18

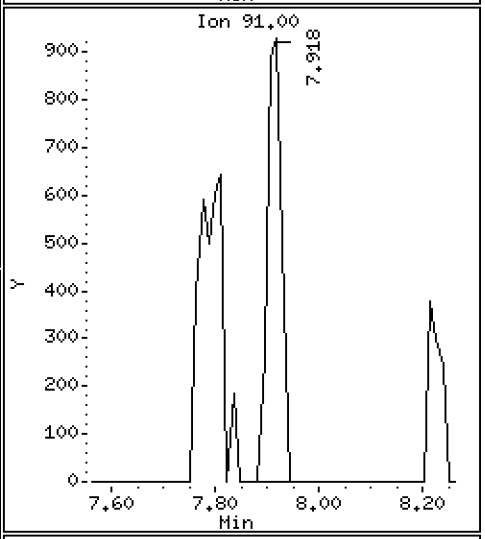
57 m,p-xylene

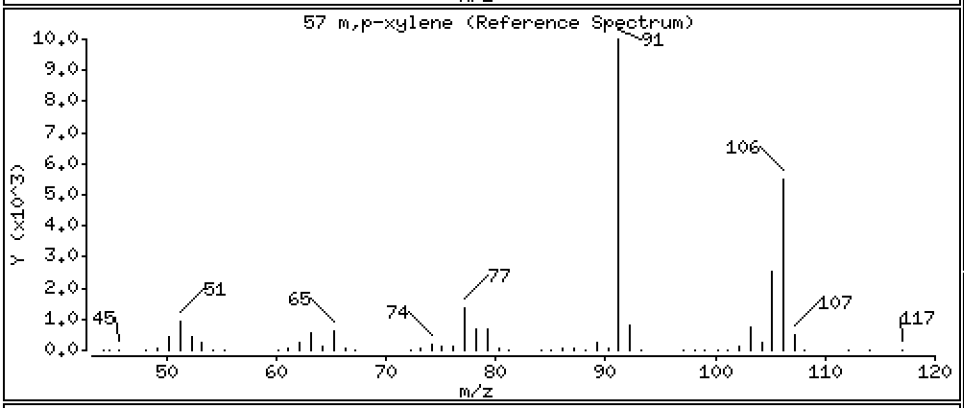
Concentration: 0.02689 ug/L

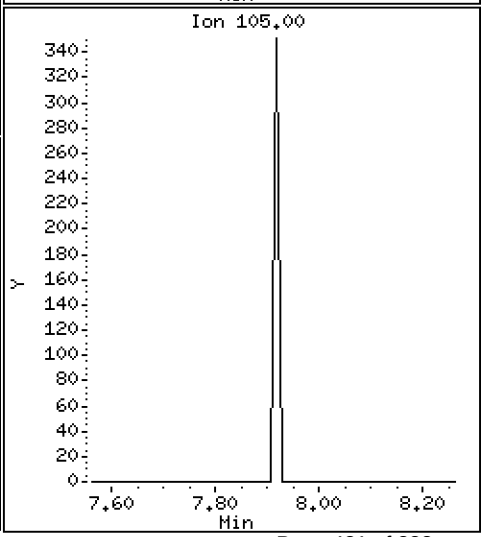


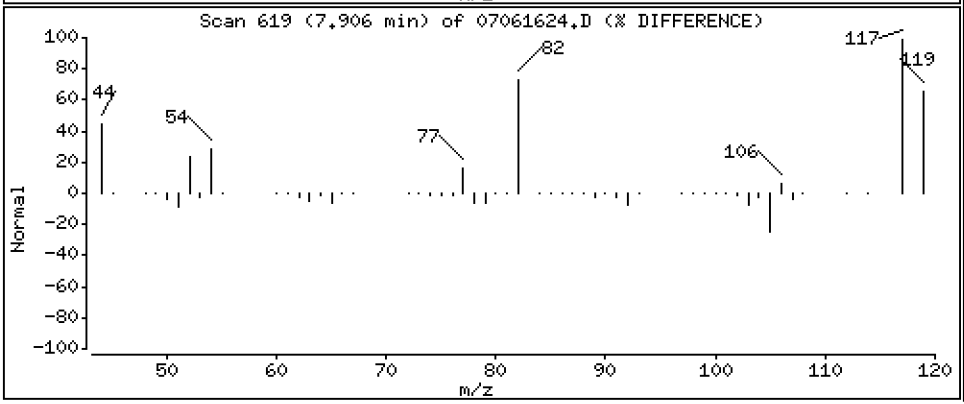












ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160706.b\07061624.D
Lab Smp Id: 16G0006-03
Inj Date : 06-JUL-2016 15:50
Operator : LH Inst ID: nt2.i
Smp Info : 16G0006-03,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Meth Date : 07-Jul-2016 13:15 lanih Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.959	4.949	(0.933)	63349	4.42203	4.422
	31 Benzene	78	5.231	5.233	(0.917)	1976	0.02367	0.02367
*	32 Pentafluorobenzene	168	5.314	5.328	(1.000)	315620	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.352	(1.007)	87770	5.62457	5.625
*	37 1,4-Difluorobenzene	114	5.705	5.707	(1.000)	556411	10.0000	
$	43 d8-Toluene	98	6.687	6.689	(1.172)	313332	4.75425	4.754
	44 Toluene	92	6.722	6.724	(1.178)	6104	0.11566	0.1157
*	53 d5-Chlorobenzene	117	7.775	7.777	(1.000)	500300	10.0000	
	55 Ethyl Benzene	106	Compound Not Detected.					
	57 m,p-xylene	106	7.905	7.908	(1.017)	1008	0.02689	0.02689
	58 o-Xylene	106	Compound Not Detected.					
$	62 4-Bromofluorobenzene	174	8.651	8.653	(1.113)	95484	5.18721	5.187
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.481	(1.000)	266019	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.813	(1.035)	117625	4.76120	4.761

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 07061624.D
Lab Smp Id: 16G0006-03
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 06-JUL-2016
Calibration Time: 08:26
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	315620	27.33
37 1,4-Difluorobenze	400954	200477	801908	556411	38.77
53 d5-Chlorobenzene	354752	177376	709504	500300	41.03
76 d4-1,4-Dichlorobe	191489	95745	382978	266019	38.92

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.31	-0.26
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	-0.04
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.03
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 07-Jul-2016 13:18

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16G0006-03
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.422	88.44	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.625	112.49	80-128
$ 43 d8-Toluene	5.000	4.754	95.09	80-120
$ 62 4-Bromofluorobenze	5.000	5.187	103.74	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.761	95.22	80-120

REVIEW SUMMARY FOR FILE - 07061624.D

Lab ID: 16G0006-03
nt2.i, 20160706.b\8260061516LOW.m,   06-JUL-2016 15:50

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160706elementg.b\07061624G.D

Date : 06-JUL-2016 15:50

Client ID:

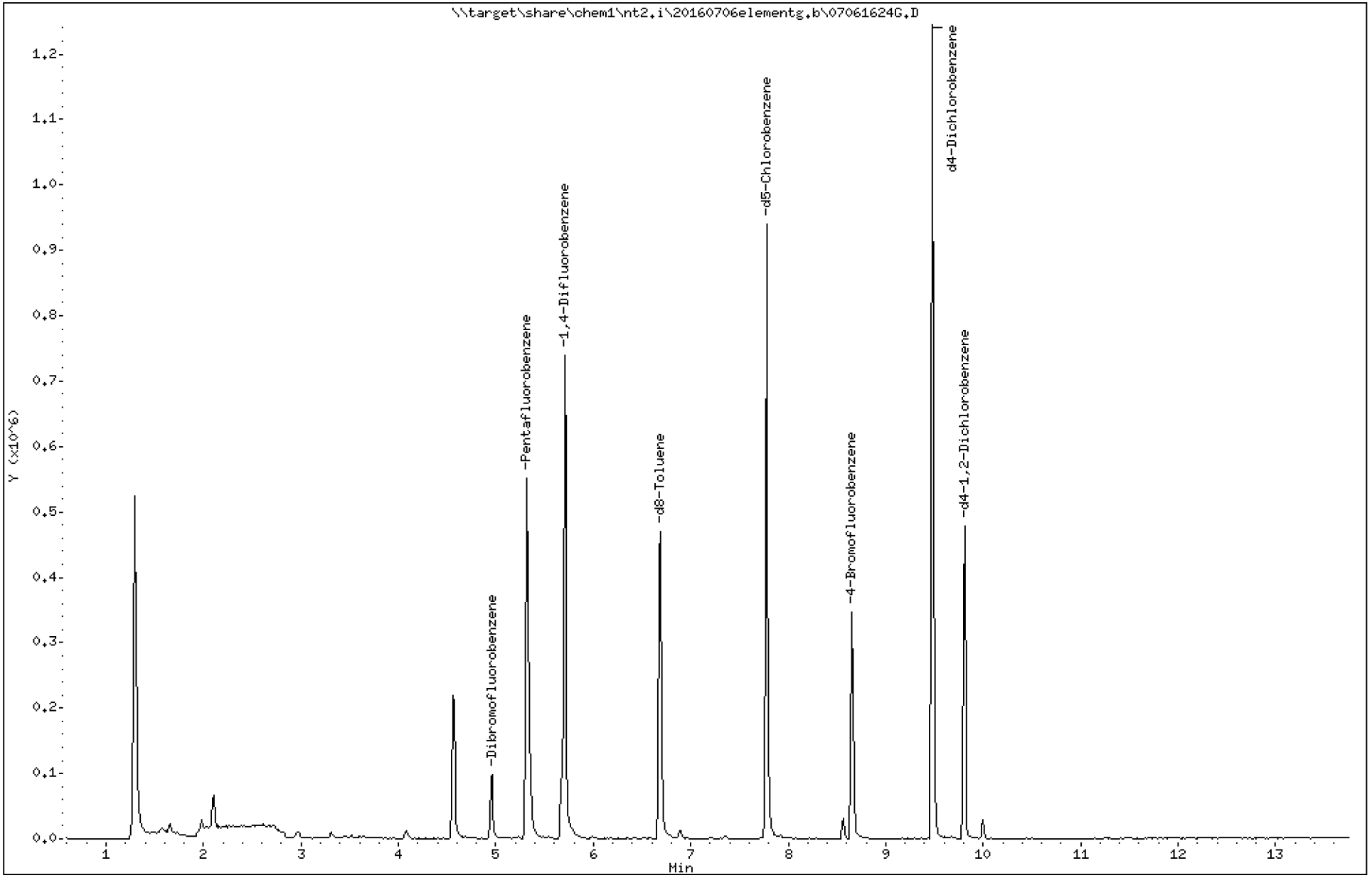
Sample Info: 16G0006-03,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160706elementg.b/07061624G.D
Method: \20160706elementg.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 06-JUL-2016 15:50

ARI ID: 16G0006-03
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.58)	48008849	116711	0.002
8015C 2MP-TMB	(2.98 to 9.27)	83224207	561024	0.007
AK101 nC6-nC10	(3.49 to 8.61)	58706304	543282	0.009
NWTPHG Tol-Nap	(6.62 to 11.39)	49203331	116711	0.002
mod8015 nC6-nC12	(3.49 to 10.58)	73249380	591396	0.008

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.687	857403	d8-Toluene
8.651	560356	4-Bromofluorobenzene
9.480	1687570	d4-Dichlorobenzene
7.776	1519575	d5-Chlorobenzene
9.811	743740	d4-1,2-Dichlorobenzene

CHRL-TB-160705

Form I

ORGANIC ANALYSIS DATA SHEET

NWTPHg

8260C VOA Gas

Laboratory:	Analytical Resources, Inc.			SDG:	16G0006
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Water	Laboratory ID:	16G0006-04	File ID:	07061621G.D
Sampled:	07/05/16 00:00	Prepared:	07/06/16 12:23	Analyzed:	07/06/16 14:48
Solids:		Preparation:	No Prep - Volatiles	Initial/Final:	10 mL / 10 mL
Batch:	BEG0016	Sequence:	SEG0023	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q	DL	RL
	Gasoline Range Organics (Tol-Nap)	50	5000	U	453	5000

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.77	95.5	80 - 120	
4-Bromofluorobenzene	5.0000	4.68	93.6	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160706.b\07061621.D

Date : 06-JUL-2016 14:48

Client ID:

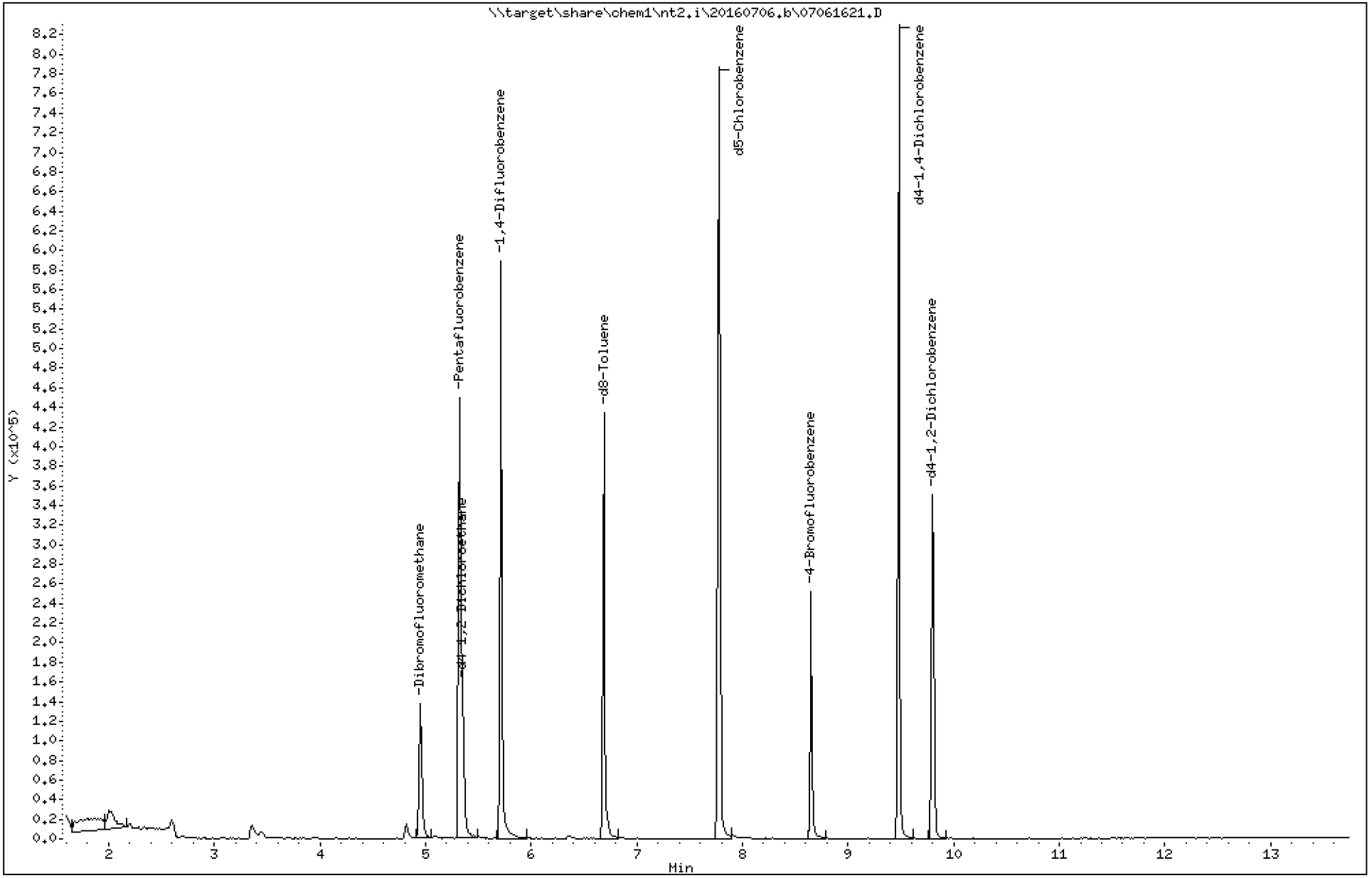
Instrument: nt2.i

Sample Info: 16G0006-04,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt2.i\20160706.b\07061621.D

Date : 06-JUL-2016 14:48

Client ID:

Instrument: nt2.i

Sample Info: 16G0006-04,10,10,0,

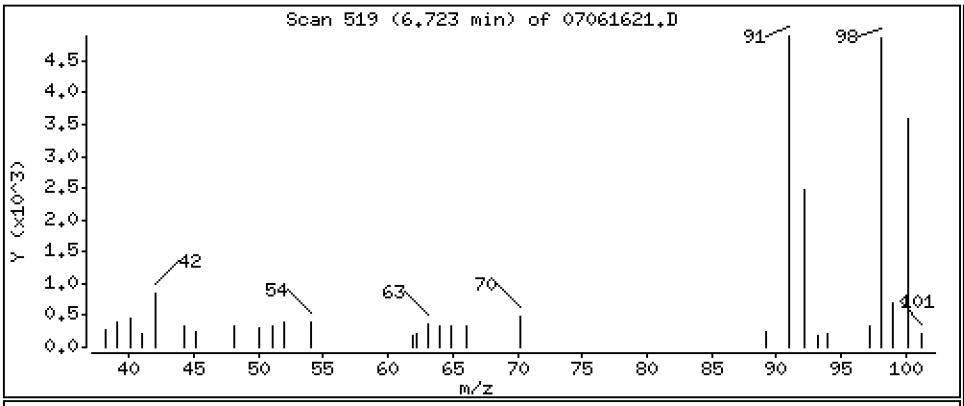
Operator: LH

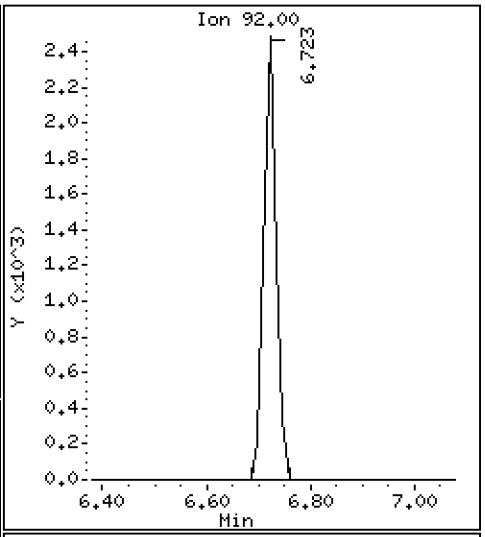
Column phase: RTXVMS

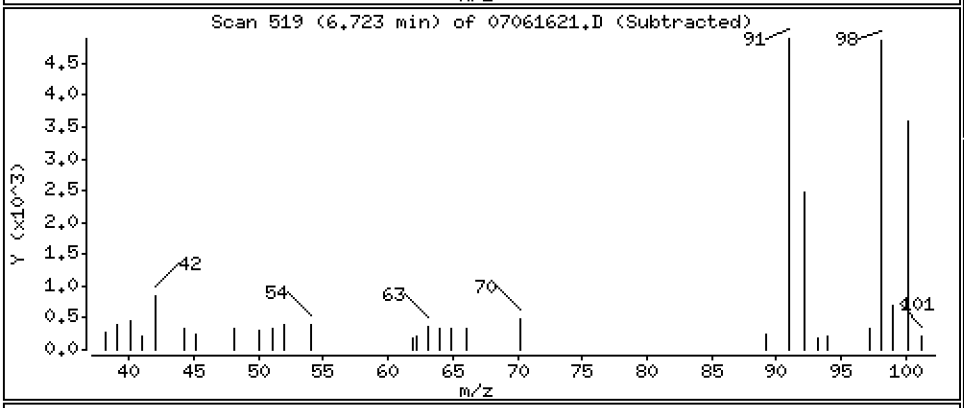
Column diameter: 0.18

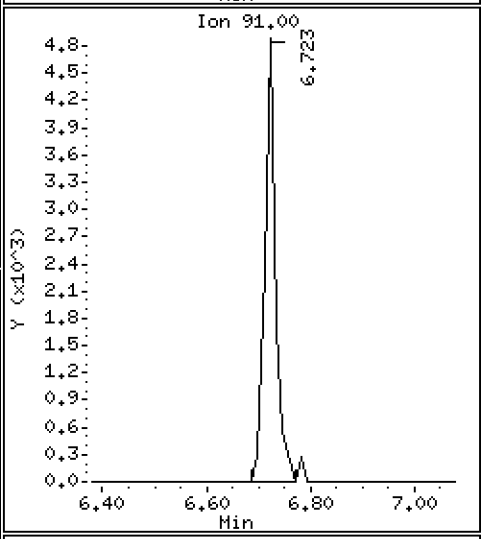
44 Toluene

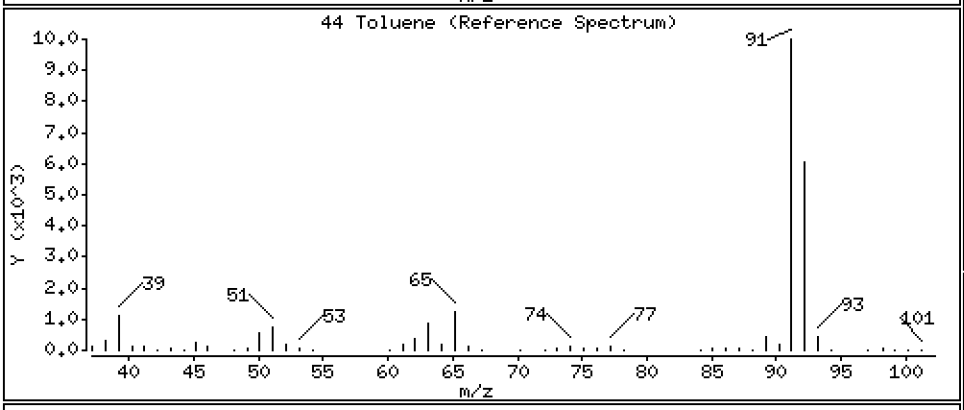
Concentration: 0.09996 ug/L

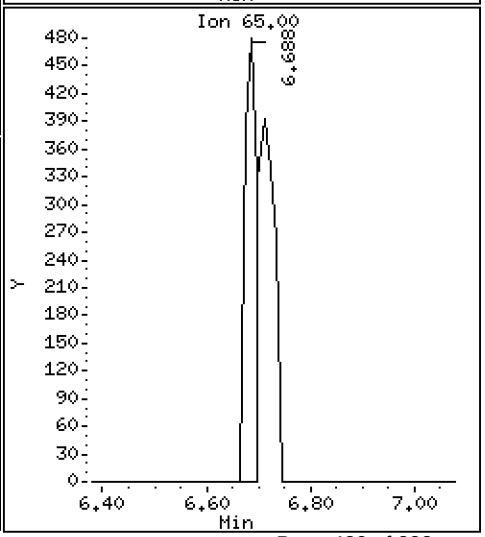


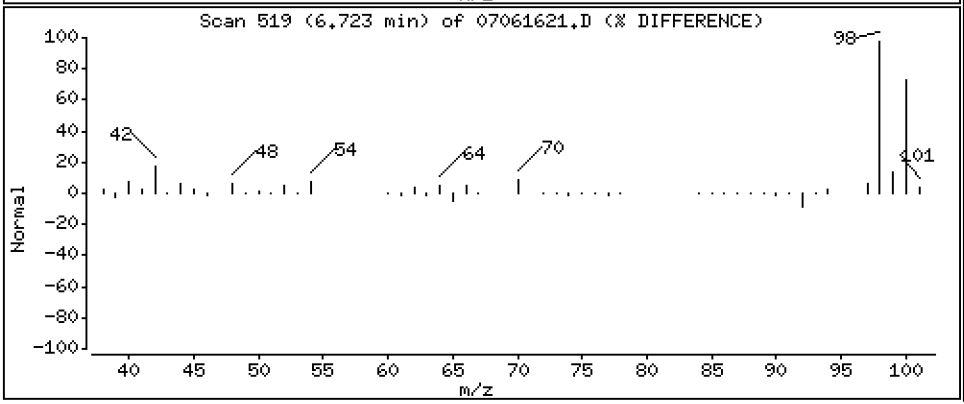












Data File: \\target\share\chem1\nt2.i\20160706.b\07061621.D

Date : 06-JUL-2016 14:48

Client ID:

Instrument: nt2.i

Sample Info: 16G0006-04,10,10,0,

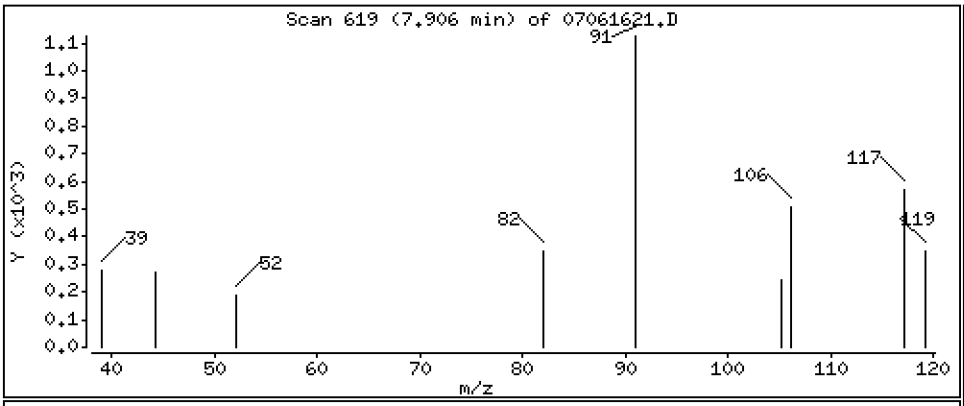
Operator: LH

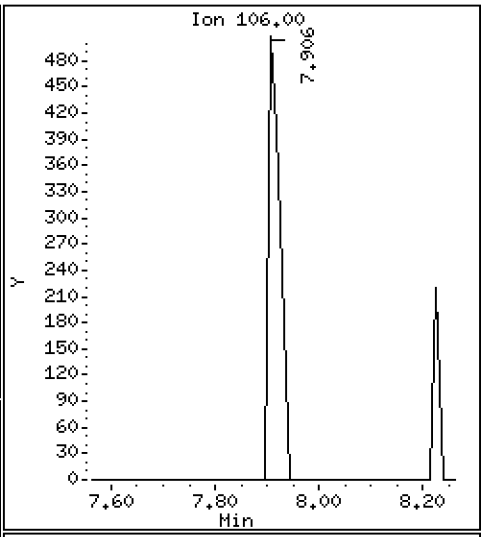
Column phase: RTXVMS

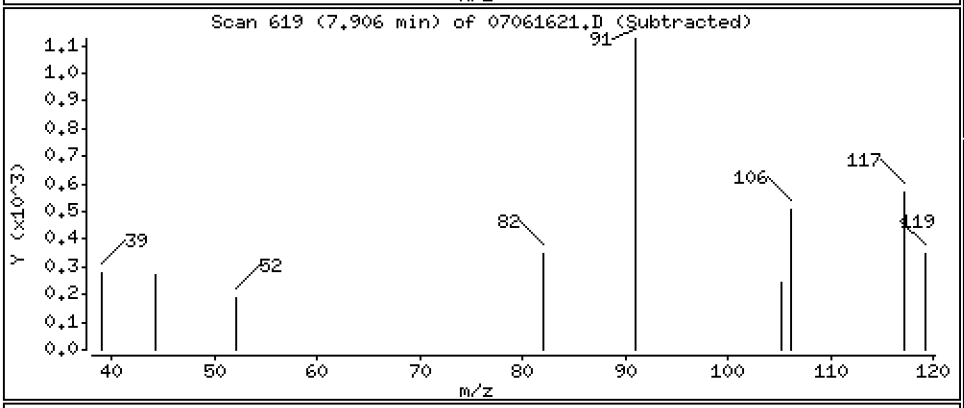
Column diameter: 0.18

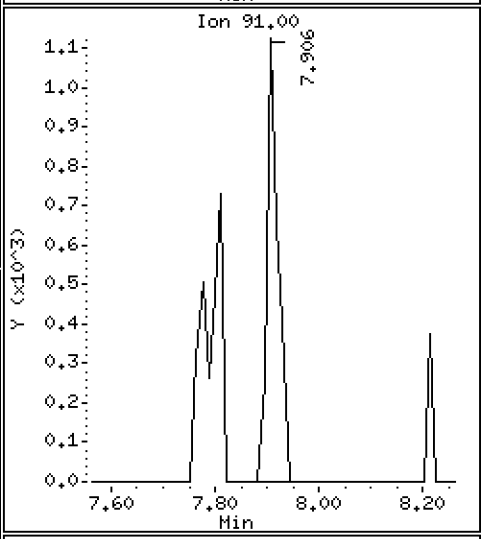
57 m,p-xylene

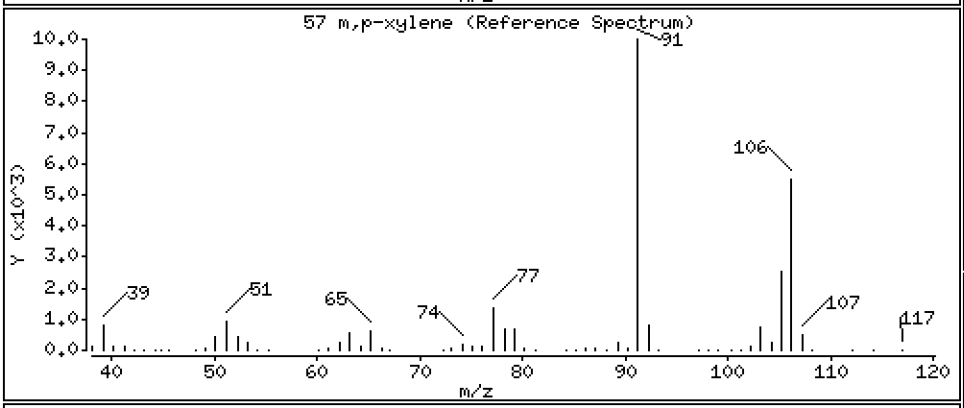
Concentration: 0.02864 ug/L

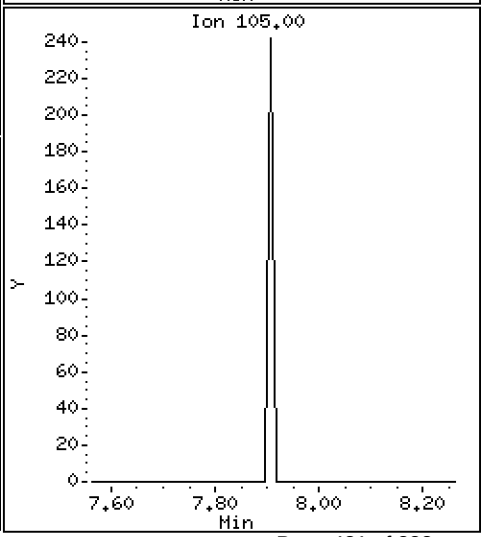


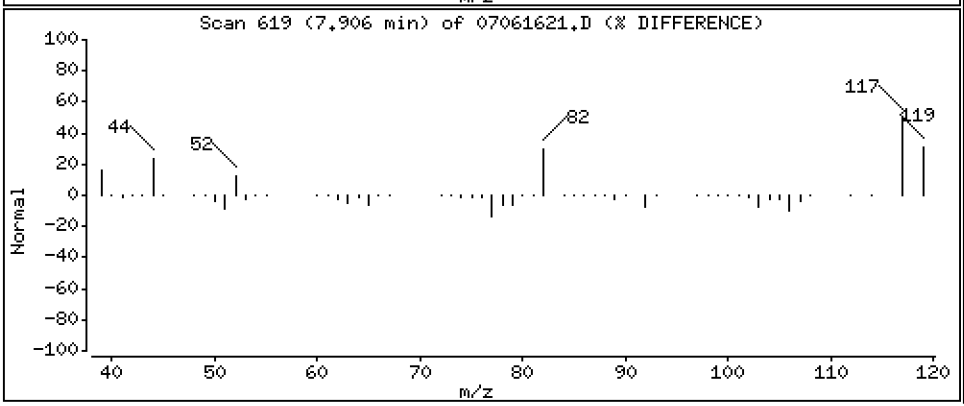












ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160706.b\07061621.D
Lab Smp Id: 16G0006-04
Inj Date : 06-JUL-2016 14:48
Operator : LH Inst ID: nt2.i
Smp Info : 16G0006-04,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Meth Date : 07-Jul-2016 13:15 lanih Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.948	4.949	(0.929)	61400	5.37322	5.373
	31 Benzene	78	Compound Not Detected.					
*	32 Pentafluorobenzene	168	5.326	5.328	(1.000)	251756	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.352	(1.004)	69924	5.61765	5.618
*	37 1,4-Difluorobenzene	114	5.717	5.707	(1.000)	439922	10.0000	
$	43 d8-Toluene	98	6.687	6.689	(1.170)	248795	4.77462	4.775
	44 Toluene	92	6.723	6.724	(1.176)	4171	0.09996	0.09996
*	53 d5-Chlorobenzene	117	7.776	7.777	(1.000)	379362	10.0000	
	55 Ethyl Benzene	106	Compound Not Detected.					
	57 m,p-xylene	106	7.906	7.908	(1.017)	814	0.02864	0.02864
	58 o-Xylene	106	Compound Not Detected.					
$	62 4-Bromofluorobenzene	174	8.651	8.653	(1.113)	65311	4.67914	4.679
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.481	(1.000)	183671	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.813	(1.035)	89729	5.26044	5.260

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 07061621.D
Lab Smp Id: 16G0006-04
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 06-JUL-2016
Calibration Time: 08:26
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	251756	1.56
37 1,4-Difluorobenze	400954	200477	801908	439922	9.72
53 d5-Chlorobenzene	354752	177376	709504	379362	6.94
76 d4-1,4-Dichlorobe	191489	95745	382978	183671	-4.08

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.03
37 1,4-Difluorobenze	5.71	5.21	6.21	5.72	0.18
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 07-Jul-2016 13:18

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: 16G0006-04
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	5.373	107.46	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.618	112.35	80-128
$ 43 d8-Toluene	5.000	4.775	95.49	80-120
$ 62 4-Bromofluorobenze	5.000	4.679	93.58	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.260	105.21	80-120

REVIEW SUMMARY FOR FILE - 07061621.D

Lab ID: 16G0006-04
nt2.i, 20160706.b\8260061516LOW.m,   06-JUL-2016 14:48

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Data File: \\target\share\chem1\nt2.i\20160706elementg.b\07061621G.D

Date : 06-JUL-2016 14:48

Client ID:

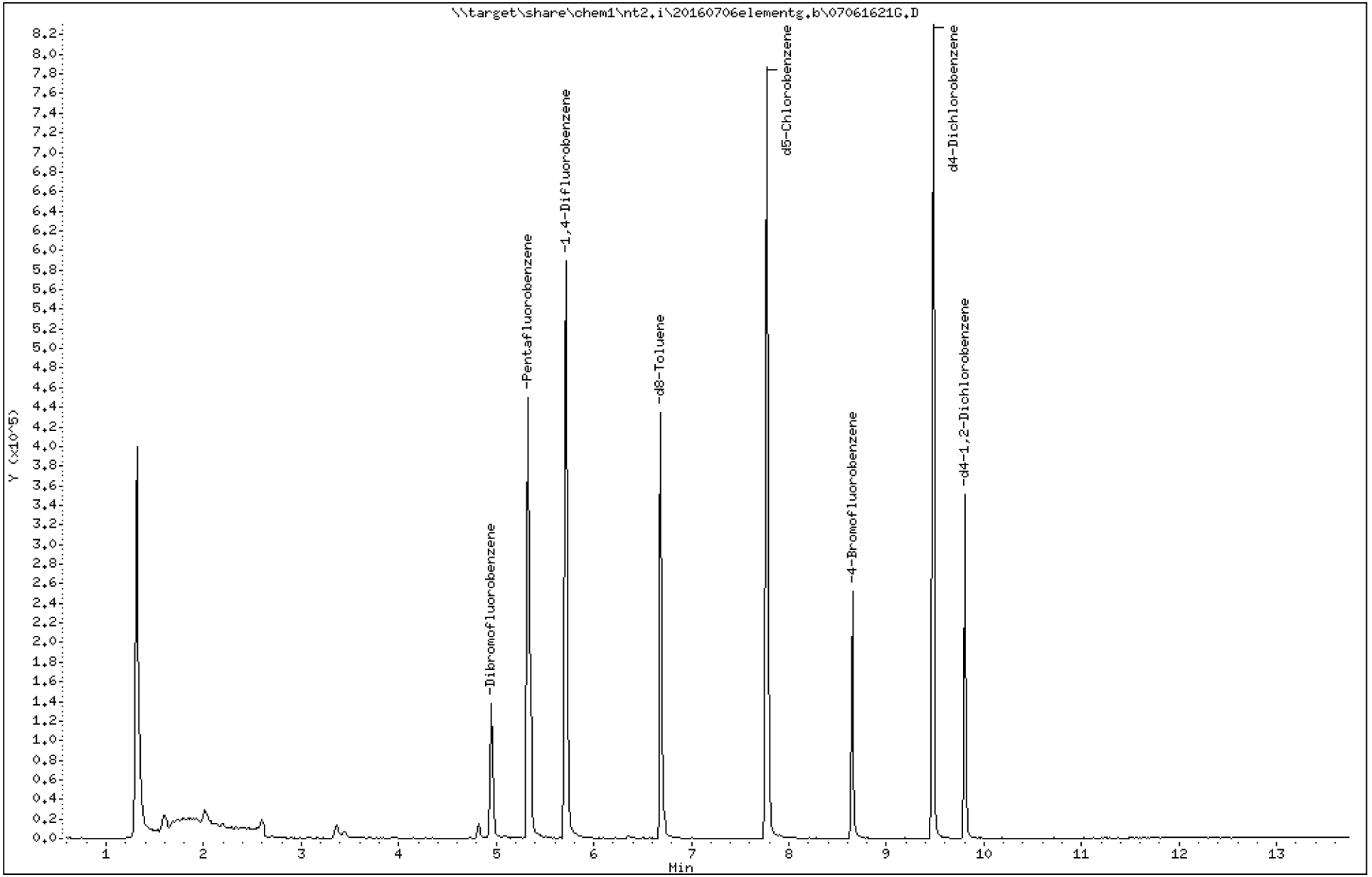
Instrument: nt2.i

Sample Info: 16G0006-04,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160706elementg.b/07061621G.D
Method: \20160706elementg.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 06-JUL-2016 14:48
ARI ID: 16G0006-04
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.58)	48008849	1	0.000
8015C 2MP-TMB	(2.98 to 9.27)	83224207	85079	0.001
AK101 nC6-nC10	(3.49 to 8.61)	58706304	26146	0.000
NWTPHG Tol-Nap	(6.62 to 11.39)	49203331	1	0.000
mod8015 nC6-nC12	(3.49 to 10.58)	73249380	26147	0.000

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

6.688	666770	d8-Toluene
8.652	386967	4-Bromofluorobenzene
9.480	1183806	d4-Dichlorobenzene
7.776	1164546	d5-Chlorobenzene
9.800	550396	d4-1,2-Dichlorobenzene

Analytical Resources, Incorporated

Form I
METHOD BLANK DATA SHEET
NWTPHg

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	16G0006
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Water	Laboratory ID:	BEG0016-BLK1	File ID:	07061606G.D
Sampled:	N/A	Prepared:	07/06/16 07:23	Analyzed:	07/06/16 09:07
Solids:		Preparation:	No Prep - Volatiles	Initial/Final:	10 mL / 10 mL
Batch:	BEG0016	Sequence:	SEG0023	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q	DL	RL	LOQ
	Gasoline Range Organics (Tol-Nap)	1	100	U	9.06	100	100

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.85	97.0	80 - 120	
4-Bromofluorobenzene	5.0000	4.74	94.8	80 - 120	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160706.b\07061606.D

Date : 06-JUL-2016 09:07

Client ID: MB

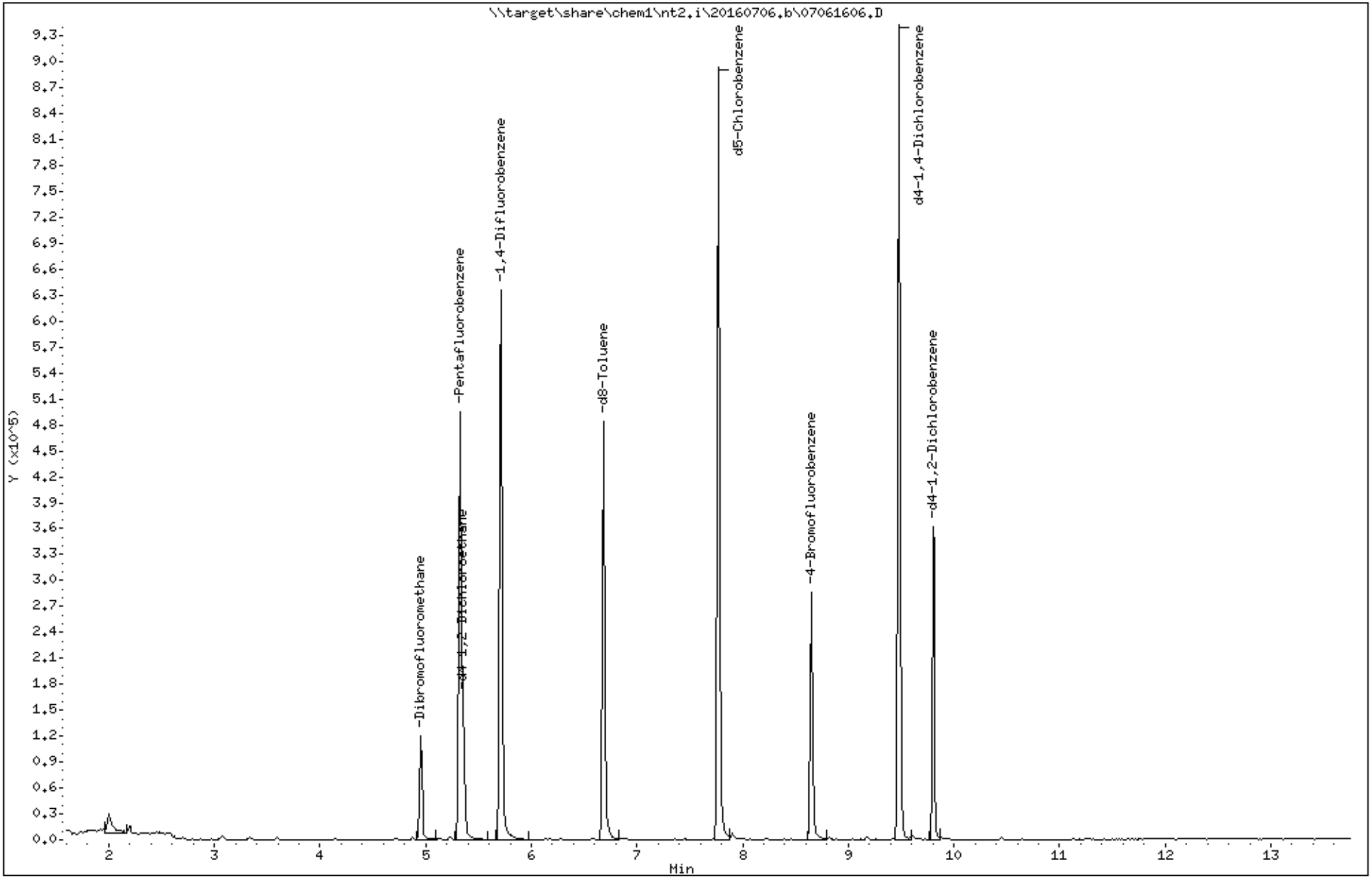
Instrument: nt2.i

Sample Info: MB,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160706.b\07061606.D
Lab Smp Id: BEG0016-BLK1 Client Smp ID: MB
Inj Date : 06-JUL-2016 09:07
Operator : LH Inst ID: nt2.i
Smp Info : MB,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Meth Date : 07-Jul-2016 13:15 lanih Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	61	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
17	Methyl tert butyl ether	73	Compound Not Detected.					
18	1,1-Dichloroethane	63	Compound Not Detected.					
19	Acrylonitrile	53	Compound Not Detected.					
20	Vinyl Acetate	43	Compound Not Detected.					
22	Cis-1,2-Dichloroethene	96	Compound Not Detected.					
23	2,2-Dichloropropane	77	Compound Not Detected.					
24	Bromochloromethane	128	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
	25	Chloroform	83	Compound Not Detected.					
	26	Carbon Tetrachloride	117	Compound Not Detected.					
$	27	Dibromofluoromethane	111	4.947	4.949	(0.929)	65716	5.45630	5.456
	28	1,1,1-Trichloroethane	97	Compound Not Detected.					
	29	2-Butanone	43	Compound Not Detected.					
	30	1,1-Dichloropropene	75	Compound Not Detected.					
	31	Benzene	78	Compound Not Detected.					
*	32	Pentafluorobenzene	168	5.326	5.328	(1.000)	265350	10.0000	
$	33	d4-1,2-Dichloroethane	65	5.349	5.352	(1.004)	75892	5.78475	5.785
	34	1,2-Dichloroethane	62	Compound Not Detected.					
	36	Trichloroethene	130	Compound Not Detected.					
*	37	1,4-Difluorobenzene	114	5.716	5.707	(1.000)	463868	10.0000	
	38	Dibromomethane	93	Compound Not Detected.					
	39	1,2-Dichloropropane	63	Compound Not Detected.					
	40	Bromodichloromethane	83	Compound Not Detected.					
	41	2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	42	Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43	d8-Toluene	98	6.686	6.689	(1.170)	266519	4.85073	4.851
	44	Toluene	92	Compound Not Detected.					
	45	4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46	Tetrachloroethene	166	Compound Not Detected.					
	47	Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	48	1,1,2-Trichloroethane	97	Compound Not Detected.					
	49	Chlorodibromomethane	129	Compound Not Detected.					
	50	1,3-Dichloropropane	76	Compound Not Detected.					
	51	1,2-Dibromoethane	107	Compound Not Detected.					
	52	2-Hexanone	43	Compound Not Detected.					
*	53	d5-Chlorobenzene	117	7.775	7.777	(1.000)	419693	10.0000	
	54	Chlorobenzene	112	Compound Not Detected.					
	55	Ethyl Benzene	106	Compound Not Detected.					
	56	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	57	m,p-xylene	106	Compound Not Detected.					
	58	o-Xylene	106	Compound Not Detected.					
	59	Styrene	104	Compound Not Detected.					
	60	Bromoform	173	Compound Not Detected.					
	61	Isopropyl Benzene	105	Compound Not Detected.					
$	62	4-Bromofluorobenzene	174	8.651	8.653	(1.113)	73202	4.74051	4.741
	63	Bromobenzene	156	Compound Not Detected.					
	64	N-Propyl Benzene	91	Compound Not Detected.					
	65	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66	2-Chloro Toluene	91	Compound Not Detected.					
	67	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68	1,2,3-Trichloropropane	110	Compound Not Detected.					
	69	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70	4-Chloro Toluene	91	Compound Not Detected.					
	71	T-Butyl Benzene	119	Compound Not Detected.					
	72	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73	S-Butyl Benzene	105	Compound Not Detected.					
	74	4-Isopropyl Toluene	119	Compound Not Detected.					
	75	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76	d4-1,4-Dichlorobenzene	152	9.479	9.481	(1.000)	210020	10.0000	
	77	1,4-Dichlorobenzene	146	Compound Not Detected.					
	78	N-Butyl Benzene	91	Compound Not Detected.					
$	79	d4-1,2-Dichlorobenzene	152	9.810	9.813	(1.035)	96956	4.97100	4.971
	80	1,2-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
85	Naphthalene	128	Compound Not Detected.					
86	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
173	2-Pentanone	86	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 07061606.D
Lab Smp Id: BEG0016-BLK1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 06-JUL-2016
Calibration Time: 08:26
Client Smp ID: MB
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	265350	7.05
37 1,4-Difluorobenze	400954	200477	801908	463868	15.69
53 d5-Chlorobenzene	354752	177376	709504	419693	18.31
76 d4-1,4-Dichlorobe	191489	95745	382978	210020	9.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.05
37 1,4-Difluorobenze	5.71	5.21	6.21	5.72	0.16
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.03
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 07-Jul-2016 13:18

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: BEG0016-BLK1 Client Smp ID: MB
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	5.456	109.13	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.785	115.70	80-128
$ 43 d8-Toluene	5.000	4.851	97.01	80-120
$ 62 4-Bromofluorobenze	5.000	4.741	94.81	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.971	99.42	80-120

REVIEW SUMMARY FOR FILE - 07061606.D

Lab ID: BEG0016-BLK1
nt2.i, 20160706.b\8260061516LOW.m,   06-JUL-2016 09:07

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.1000

Exception: Carbon Tetrachloride 0.0400
Exception: 2-Pentanone 0.0000

Analytical Resources, Incorporated

Form I
METHOD BLANK DATA SHEET
NWTPHg

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	16G0006
Client:	Anchor QEA, LLC			Project:	CHRL SSWA
Matrix:	Solid	Laboratory ID:	BEG0020-BLK1	File ID:	07061606mbsG.D
Sampled:	N/A	Prepared:	07/06/16 07:20	Analyzed:	07/06/16 09:07
Solids:		Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g
Batch:	BEG0020	Sequence:	SEG0023	Calibration:	ZF00027
Instrument:	NT2	Column:	RTX-VMS		

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg wet)	Q	DL	RL	LOQ
	Gasoline Range Organics (Tol-Nap)	50	5000	U	2500	5000	5000

SURROGATES	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Toluene-d8	5.0000	4.85	97.0	80 - 120	
4-Bromofluorobenzene	5.0000	4.74	94.8	78 - 123	

* Indicates values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160706.b\07061606mbs.D

Date : 06-JUL-2016 09:07

Client ID: MB

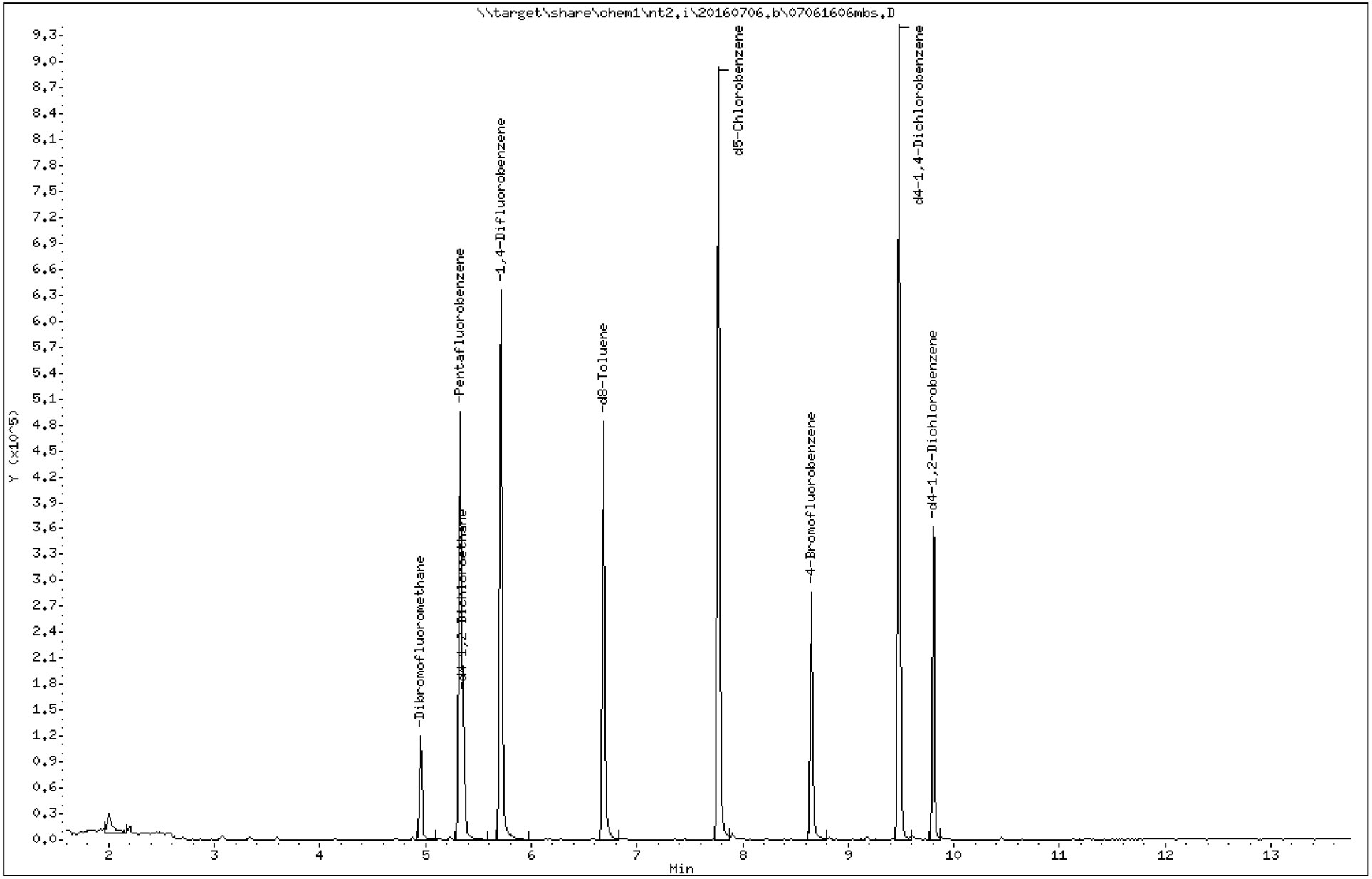
Instrument: nt2.i

Sample Info: MB,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160706.b\07061606mbs.D
Lab Smp Id: BEG0020-BLK1 Client Smp ID: MB
Inj Date : 06-JUL-2016 09:07
Operator : LH Inst ID: nt2.i
Smp Info : MB,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Meth Date : 07-Jul-2016 13:15 lanih Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	1,1-Dichloroethene	61	Compound Not Detected.					
8	Carbon Disulfide	76	Compound Not Detected.					
9	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
10	Iodomethane	142	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Acrolein	56	Compound Not Detected.					
13	Methylene Chloride	84	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
15	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
17	Methyl tert butyl ether	73	Compound Not Detected.					
18	1,1-Dichloroethane	63	Compound Not Detected.					
19	Acrylonitrile	53	Compound Not Detected.					
20	Vinyl Acetate	43	Compound Not Detected.					
22	Cis-1,2-Dichloroethene	96	Compound Not Detected.					
23	2,2-Dichloropropane	77	Compound Not Detected.					
24	Bromochloromethane	128	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
	25	Chloroform	83	Compound Not Detected.					
	26	Carbon Tetrachloride	117	Compound Not Detected.					
$	27	Dibromofluoromethane	111	4.947	4.949	(0.929)	65716	5.45630	5.456
	28	1,1,1-Trichloroethane	97	Compound Not Detected.					
	29	2-Butanone	43	Compound Not Detected.					
	30	1,1-Dichloropropene	75	Compound Not Detected.					
	31	Benzene	78	Compound Not Detected.					
*	32	Pentafluorobenzene	168	5.326	5.328	(1.000)	265350	10.0000	
$	33	d4-1,2-Dichloroethane	65	5.349	5.352	(1.004)	75892	5.78475	5.785
	34	1,2-Dichloroethane	62	Compound Not Detected.					
	36	Trichloroethene	130	Compound Not Detected.					
*	37	1,4-Difluorobenzene	114	5.716	5.707	(1.000)	463868	10.0000	
	38	Dibromomethane	93	Compound Not Detected.					
	39	1,2-Dichloropropane	63	Compound Not Detected.					
	40	Bromodichloromethane	83	Compound Not Detected.					
	41	2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	42	Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43	d8-Toluene	98	6.686	6.689	(1.170)	266519	4.85073	4.851
	44	Toluene	92	Compound Not Detected.					
	45	4-Methyl-2-Pentanone	58	Compound Not Detected.					
	46	Tetrachloroethene	166	Compound Not Detected.					
	47	Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	48	1,1,2-Trichloroethane	97	Compound Not Detected.					
	49	Chlorodibromomethane	129	Compound Not Detected.					
	50	1,3-Dichloropropane	76	Compound Not Detected.					
	51	1,2-Dibromoethane	107	Compound Not Detected.					
	52	2-Hexanone	43	Compound Not Detected.					
*	53	d5-Chlorobenzene	117	7.775	7.777	(1.000)	419693	10.0000	
	54	Chlorobenzene	112	Compound Not Detected.					
	55	Ethyl Benzene	106	Compound Not Detected.					
	56	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	57	m,p-xylene	106	Compound Not Detected.					
	58	o-Xylene	106	Compound Not Detected.					
	59	Styrene	104	Compound Not Detected.					
	60	Bromoform	173	Compound Not Detected.					
	61	Isopropyl Benzene	105	Compound Not Detected.					
$	62	4-Bromofluorobenzene	174	8.651	8.653	(1.113)	73202	4.74051	4.741
	63	Bromobenzene	156	Compound Not Detected.					
	64	N-Propyl Benzene	91	Compound Not Detected.					
	65	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	66	2-Chloro Toluene	91	Compound Not Detected.					
	67	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	68	1,2,3-Trichloropropane	110	Compound Not Detected.					
	69	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70	4-Chloro Toluene	91	Compound Not Detected.					
	71	T-Butyl Benzene	119	Compound Not Detected.					
	72	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73	S-Butyl Benzene	105	Compound Not Detected.					
	74	4-Isopropyl Toluene	119	Compound Not Detected.					
	75	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76	d4-1,4-Dichlorobenzene	152	9.479	9.481	(1.000)	210020	10.0000	
	77	1,4-Dichlorobenzene	146	Compound Not Detected.					
	78	N-Butyl Benzene	91	Compound Not Detected.					
$	79	d4-1,2-Dichlorobenzene	152	9.810	9.813	(1.035)	96956	4.97100	4.971
	80	1,2-Dichlorobenzene	146	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
85	Naphthalene	128	Compound Not Detected.					
86	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
173	2-Pentanone	86	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 07061606mbs.D
Lab Smp Id: BEG0020-BLK1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 06-JUL-2016
Calibration Time: 08:26
Client Smp ID: MB
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	265350	7.05
37 1,4-Difluorobenze	400954	200477	801908	463868	15.69
53 d5-Chlorobenzene	354752	177376	709504	419693	18.31
76 d4-1,4-Dichlorobe	191489	95745	382978	210020	9.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.05
37 1,4-Difluorobenze	5.71	5.21	6.21	5.72	0.16
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.03
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 07-Jul-2016 13:18

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: BEG0020-BLK1 Client Smp ID: MB
Level: LOW Operator: LH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	5.456	109.13	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.785	115.70	80-128
$ 43 d8-Toluene	5.000	4.851	97.01	80-120
$ 62 4-Bromofluorobenze	5.000	4.741	94.81	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.971	99.42	80-120

REVIEW SUMMARY FOR FILE - 07061606mbs.D

Lab ID: BEG0020-BLK1
nt2.i, 20160706.b\8260061516LOW.m,   06-JUL-2016 09:07

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.1000

Exception: Carbon Tetrachloride 0.0400
Exception: 2-Pentanone 0.0000

LCS / LCS DUPLICATE RECOVERY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Water	Analyzed:	07/06/16 08:06
Batch:	BEG0016	Laboratory ID:	BEG0016-BS1
Preparation:	No Prep - Volatiles	Initial/Final:	10 mL / 10 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Gasoline Range Organics (Tol-Nap)	1000	1130	113	80 - 120

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Water	Analyzed:	07/06/16 08:47
Batch:	BEG0016	Laboratory ID:	BEG0016-BSD1
Preparation:	No Prep - Volatiles	Initial/Final:	10 mL / 10 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Gasoline Range Organics (Tol-Nap)	1000	1150	115	1.46	30	80 - 120

* Values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160706elementg.b\07061603G.D

Date : 06-JUL-2016 08:06

Client ID:

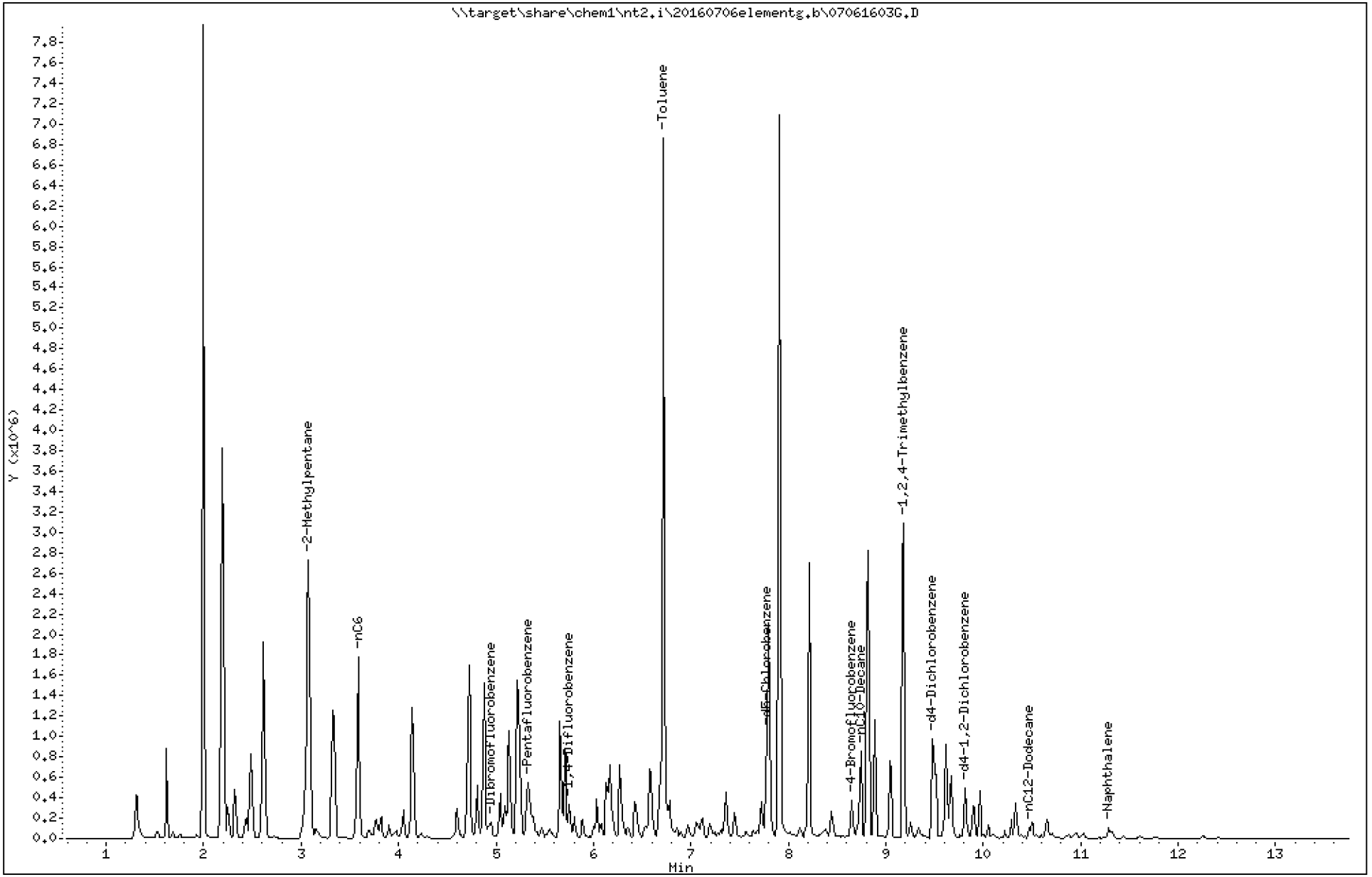
Sample Info: GICV/LCS,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160706elementg.b/07061603G.D
Method: \20160706elementg.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 06-JUL-2016 08:06
ARI ID: SEG0023-ICV1
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.58)	48008849	54554880	1.136 M
8015C 2MP-TMB	(2.98 to 9.27)	83224207	92752765	1.114 M
AK101 nC6-nC10	(3.49 to 8.61)	58706304	68491510	1.167 M
NWTPHG Tol-Nap	(6.62 to 11.39)	49203331	55843914	1.135 M
mod8015 nC6-nC12	(3.49 to 10.58)	73249380	88752967	1.212 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

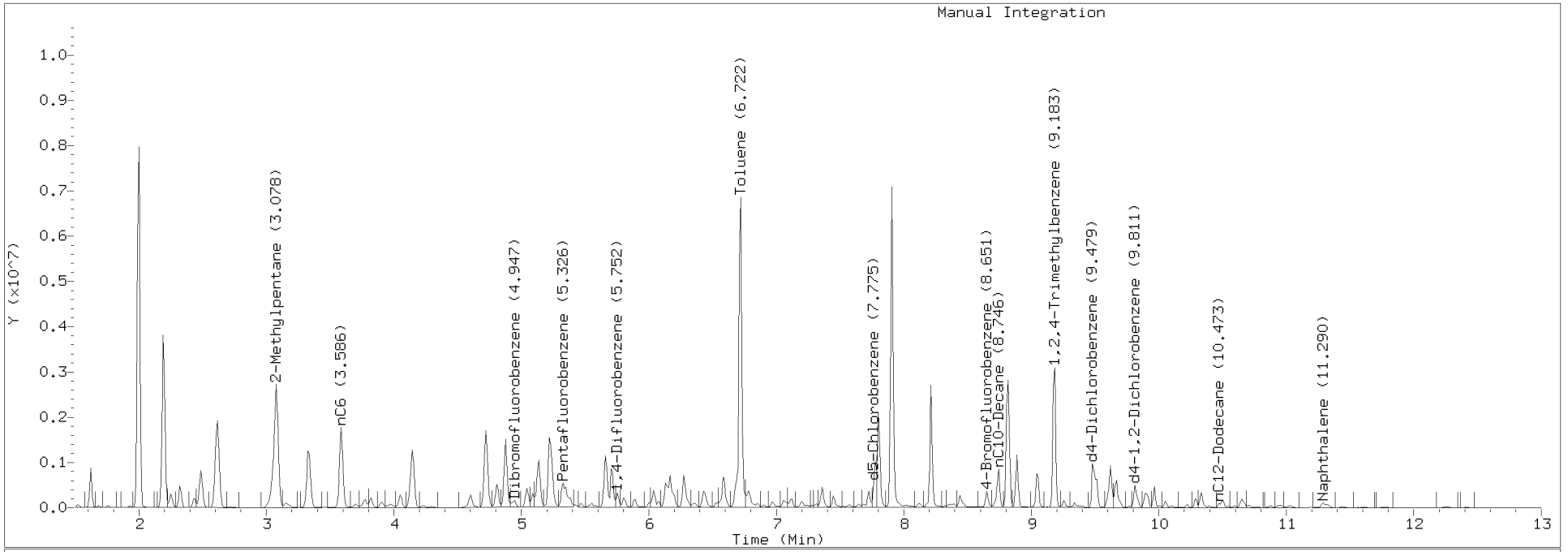
NW Gas Range Subtracted Peaks

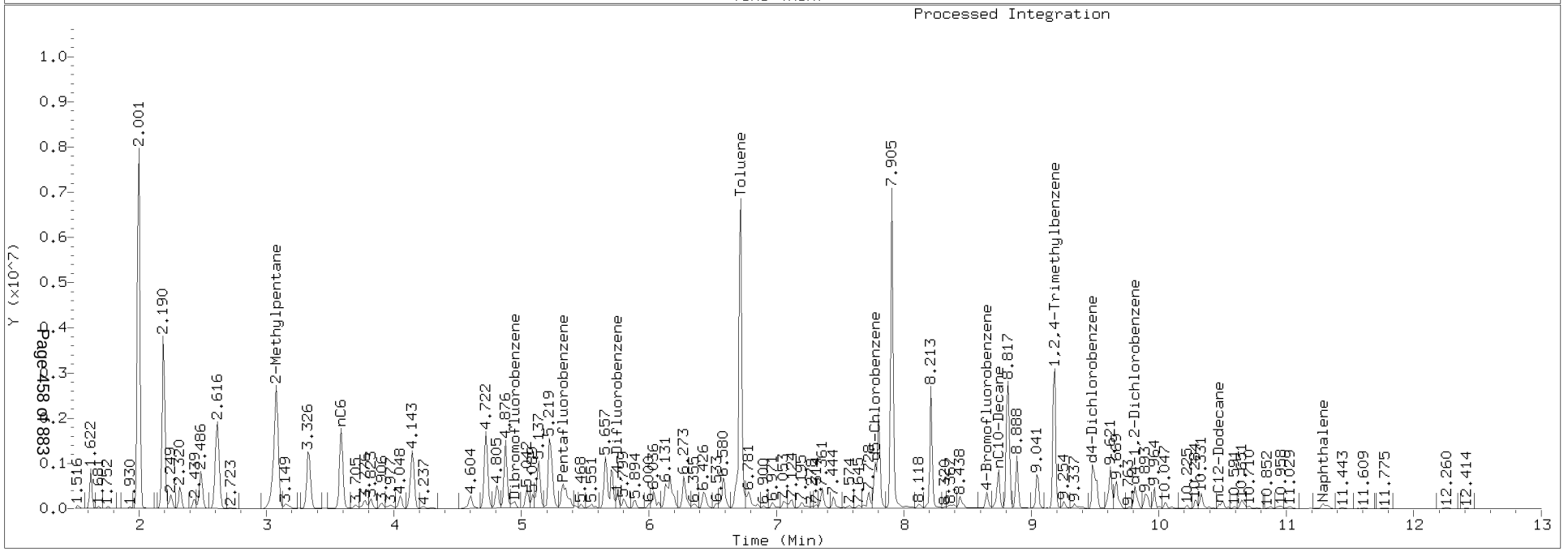
8.651	552470	4-Bromofluorobenzene
9.479	2466153	d4-Dichlorobenzene
7.775	1767983	d5-Chlorobenzene
9.811	916235	d4-1,2-Dichlorobenzene

TPHG Manual Integrations Report

Datafile: NT2, 20160706elementg.b/07061603G.D Injection: 06-JUL-2016 08:06

Lab ID:SEG0023-ICV1





Data File: \\target\share\chem1\nt2.i\20160706elementg.b\07061605G.D

Date : 06-JUL-2016 08:47

Client ID:

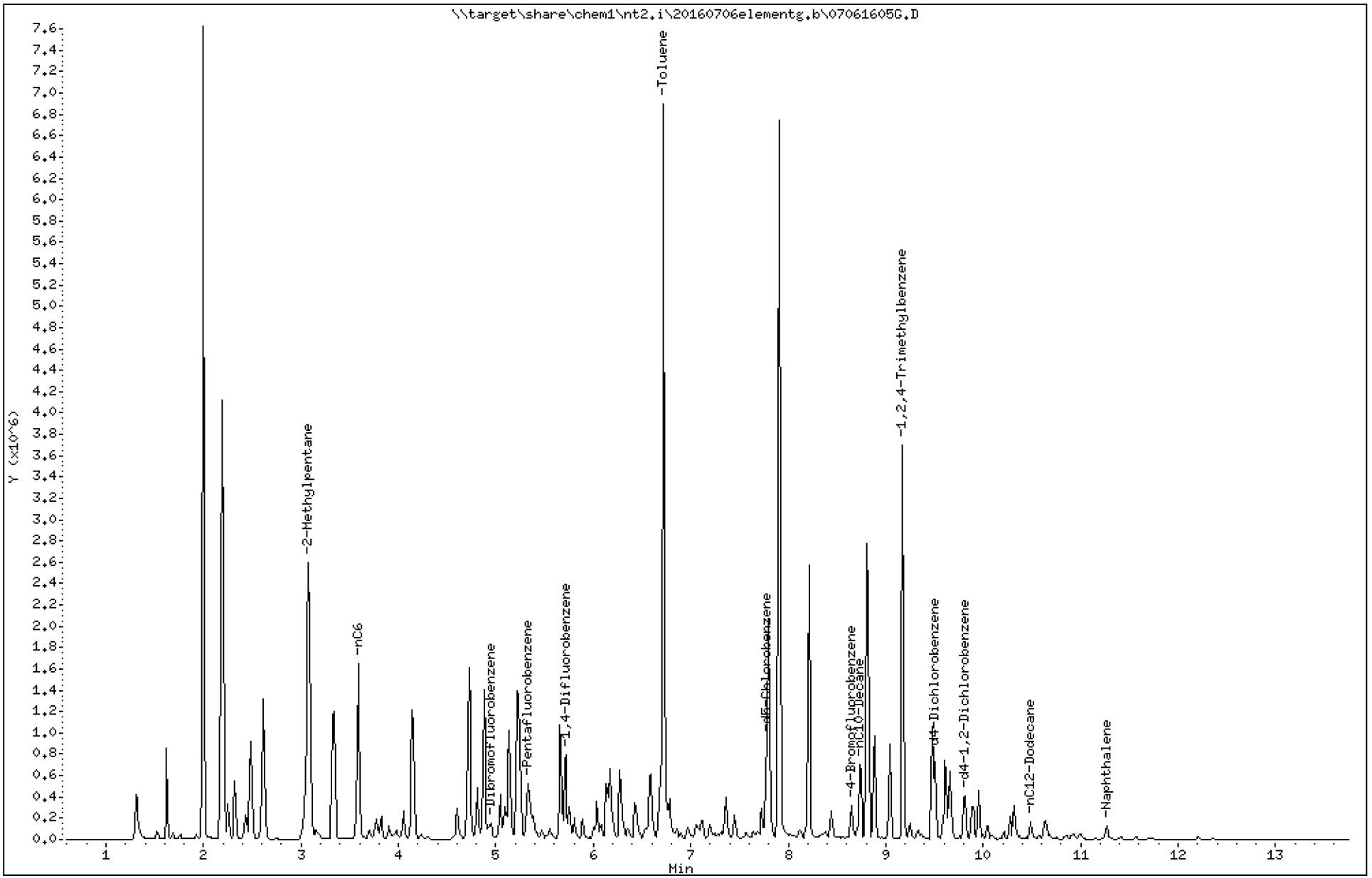
Sample Info: GLCSD,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160706elementg.b/07061605G.D
Method: \20160706elementg.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 06-JUL-2016 08:47

ARI ID: BEG0016-BSD1
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)	
WAGas Tol-C12	(6.62 to 10.58)	48008849	55463378	1.155	M
8015C 2MP-TMB	(2.98 to 9.27)	83224207	90286129	1.085	M
AK101 nC6-nC10	(3.49 to 8.61)	58706304	66740244	1.137	M
NWTPHG Tol-Nap	(6.62 to 11.39)	49203331	56667685	1.152	M
mod8015 nC6-nC12	(3.49 to 10.58)	73249380	87932759	1.200	M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

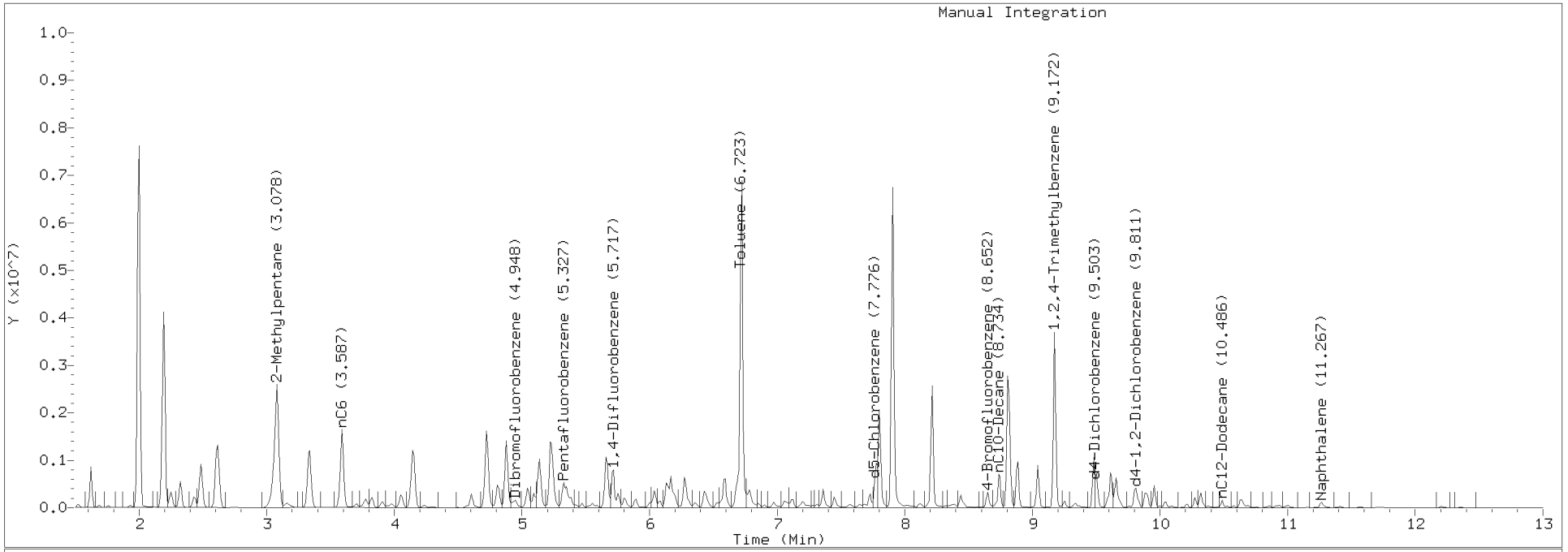
NW Gas Range Subtracted Peaks

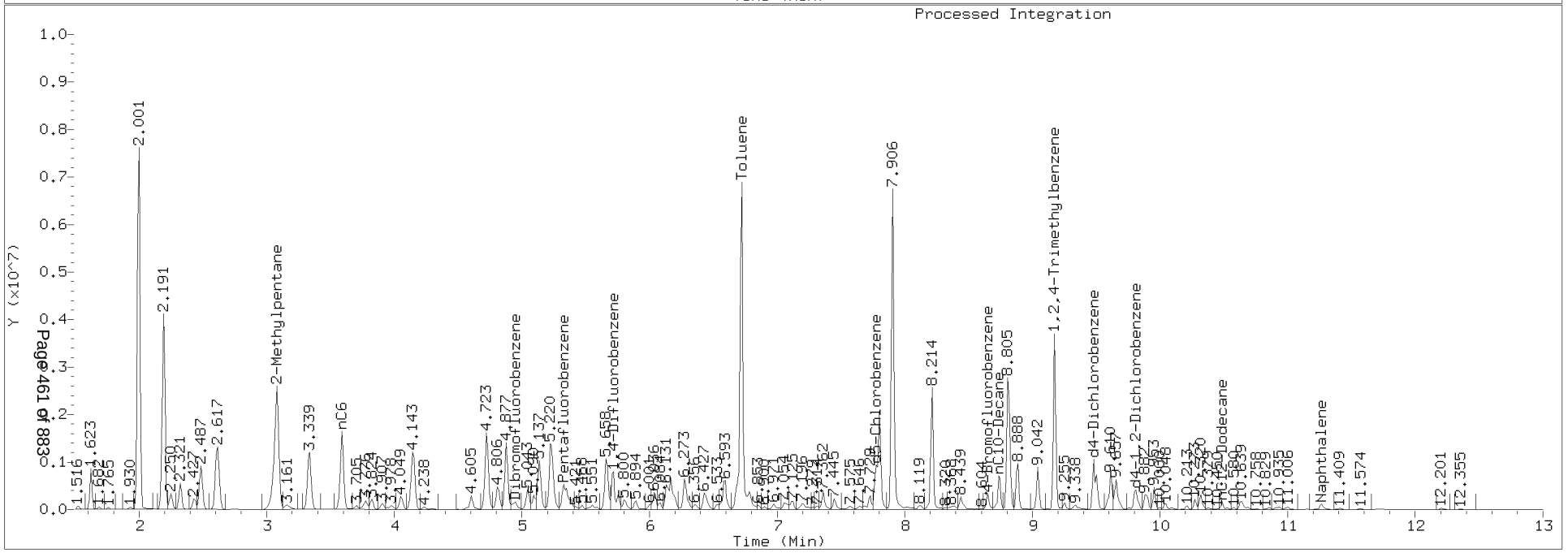
8.652	533008	4-Bromofluorobenzene
9.503	1219163	d4-Dichlorobenzene
7.776	1800161	d5-Chlorobenzene
9.811	927281	d4-1,2-Dichlorobenzene

TPHG Manual Integrations Report

Datafile: NT2, 20160706elementg.b/07061605G.D Injection: 06-JUL-2016 08:47

Lab ID:BEG0016-BSD1





LCS / LCS DUPLICATE RECOVERY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Solid	Analyzed:	07/06/16 08:06
Batch:	BEG0020	Laboratory ID:	BEG0020-BS1
Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Gasoline Range Organics (Tol-Nap)	50000	56700	113	70 - 121

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Matrix:	Solid	Analyzed:	07/06/16 08:47
Batch:	BEG0020	Laboratory ID:	BEG0020-BSD1
Preparation:	No Prep - Volatiles	Initial/Final:	5 g / 5 g

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Gasoline Range Organics (Tol-Nap)	50000	57600	115	1.46	30	70 - 121

* Values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160706elementg.b\07061603G.D

Date : 06-JUL-2016 08:06

Client ID:

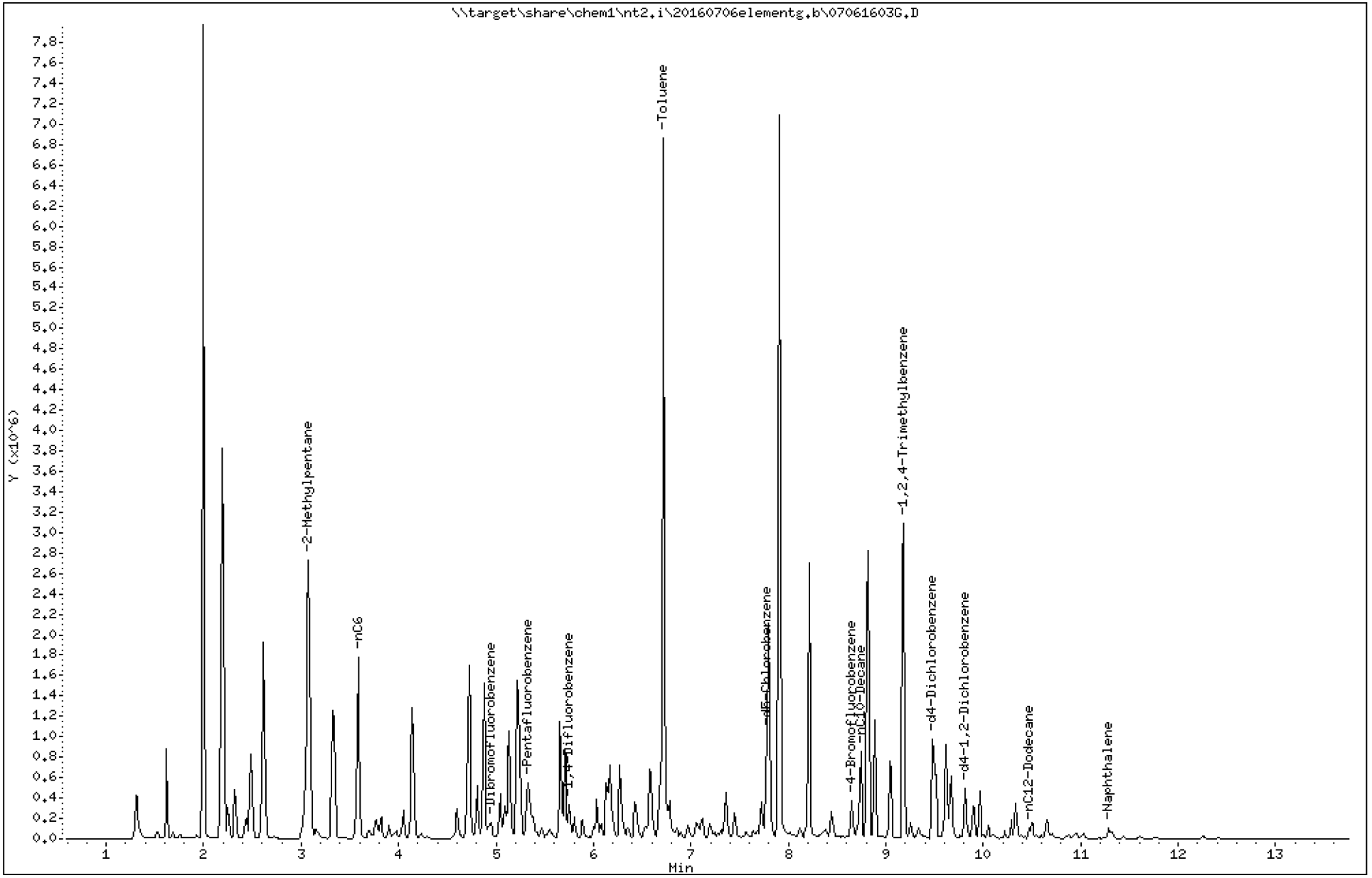
Sample Info: GICV/LCS,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160706elementg.b/07061603G.D
Method: \20160706elementg.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 06-JUL-2016 08:06
ARI ID: SEG0023-ICV1
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.58)	48008849	54554880	1.136 M
8015C 2MP-TMB	(2.98 to 9.27)	83224207	92752765	1.114 M
AK101 nC6-nC10	(3.49 to 8.61)	58706304	68491510	1.167 M
NWTPHG Tol-Nap	(6.62 to 11.39)	49203331	55843914	1.135 M
mod8015 nC6-nC12	(3.49 to 10.58)	73249380	88752967	1.212 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

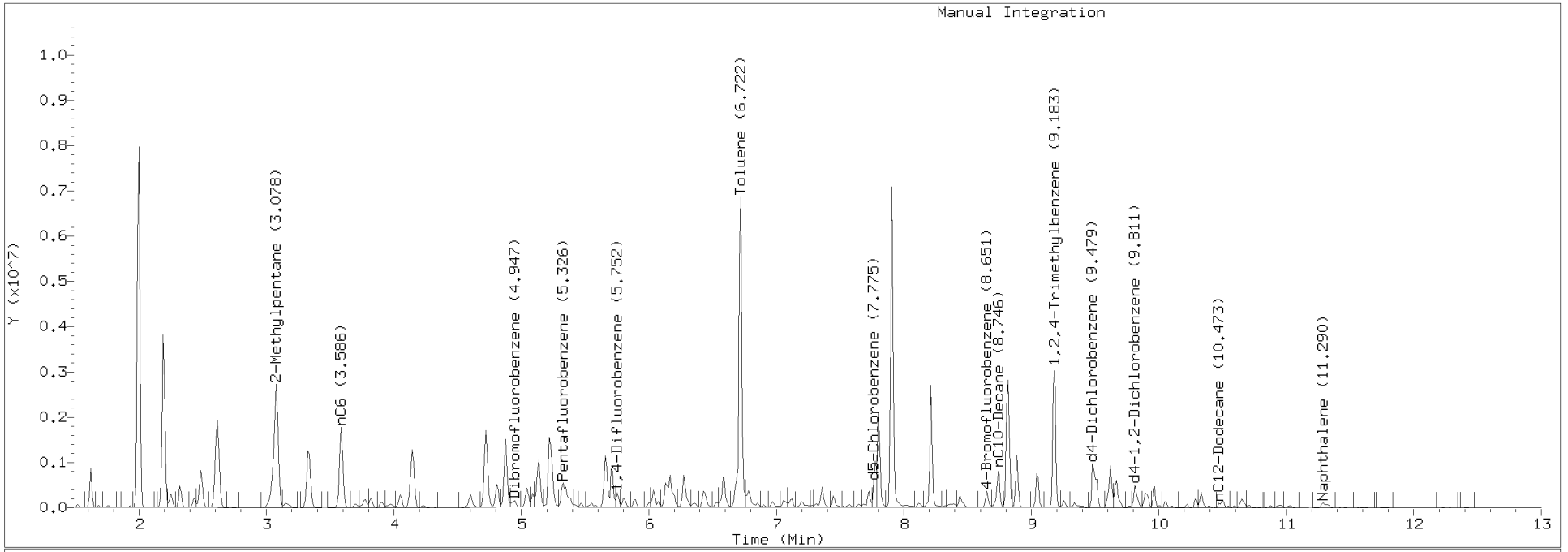
NW Gas Range Subtracted Peaks

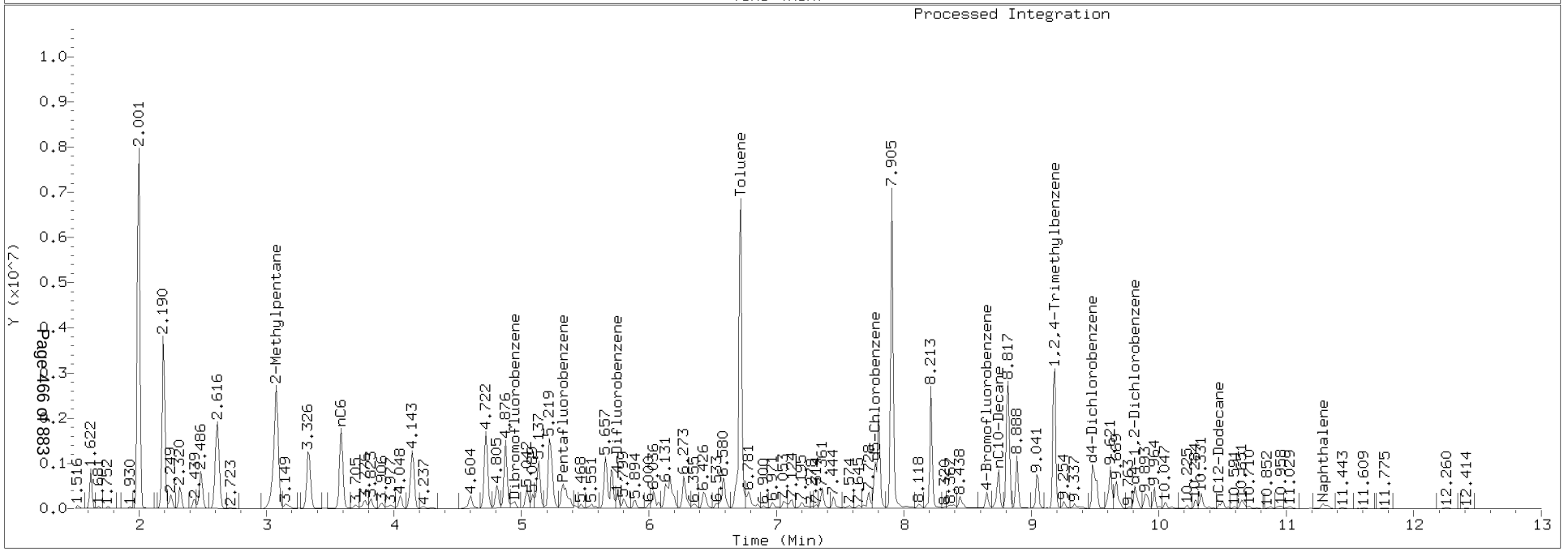
8.651	552470	4-Bromofluorobenzene
9.479	2466153	d4-Dichlorobenzene
7.775	1767983	d5-Chlorobenzene
9.811	916235	d4-1,2-Dichlorobenzene

TPHG Manual Integrations Report

Datafile: NT2, 20160706elementg.b/07061603G.D Injection: 06-JUL-2016 08:06

Lab ID:SEG0023-ICV1





Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160706elementg.b/07061605G.D
Method: \20160706elementg.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 06-JUL-2016 08:47

ARI ID: BEG0016-BSD1
Client ID:
Matrix: WATER
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.58)	48008849	55463378	1.155 M
8015C 2MP-TMB	(2.98 to 9.27)	83224207	90286129	1.085 M
AK101 nC6-nC10	(3.49 to 8.61)	58706304	66740244	1.137 M
NWTPHG Tol-Nap	(6.62 to 11.39)	49203331	56667685	1.152 M
mod8015 nC6-nC12	(3.49 to 10.58)	73249380	87932759	1.200 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

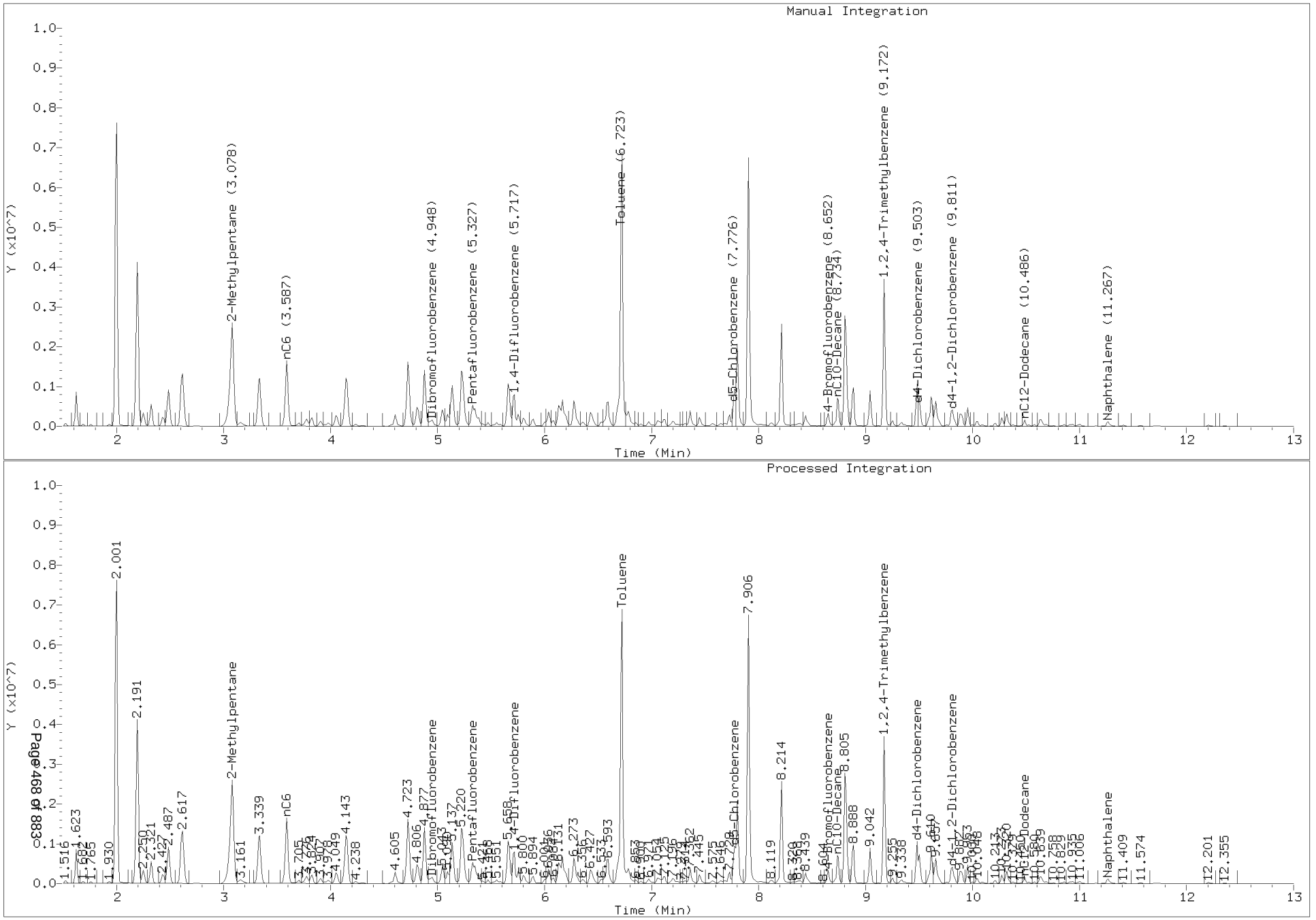
NW Gas Range Subtracted Peaks

8.652	533008	4-Bromofluorobenzene
9.503	1219163	d4-Dichlorobenzene
7.776	1800161	d5-Chlorobenzene
9.811	927281	d4-1,2-Dichlorobenzene

TPHG Manual Integrations Report

Datafile: NT2, 20160706elementg.b/07061605G.D Injection: 06-JUL-2016 08:47

Lab ID:BEG0016-BSD1



Data File: \\target\share\chem1\nt2.i\20160706elementg.b\07061605G.D

Date : 06-JUL-2016 08:47

Client ID:

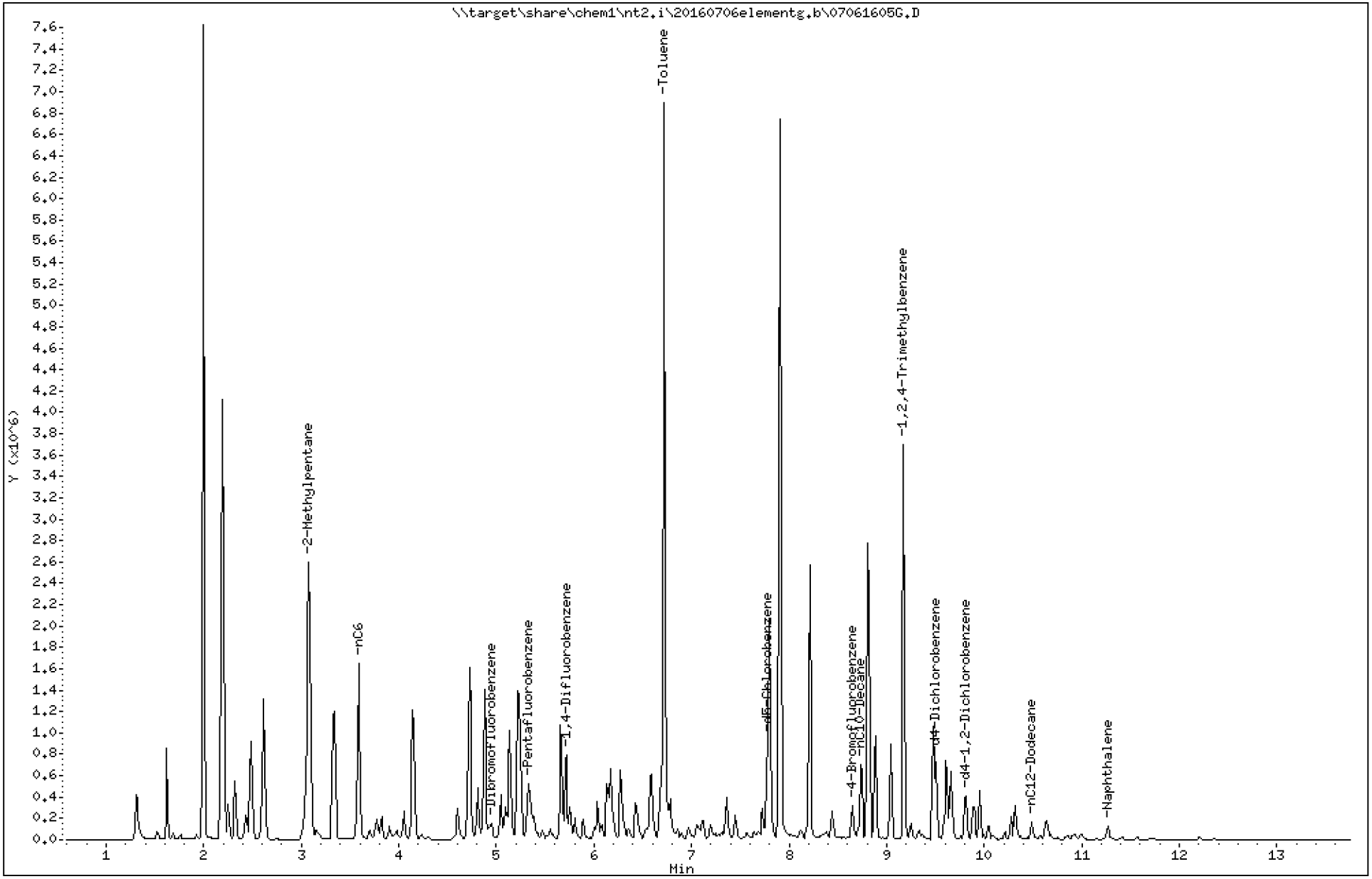
Sample Info: GLCSD,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: LH

Column diameter: 0.18



PREPARATION BATCH SUMMARY

NWTPHg

Laboratory: Analytical Resources, Inc. SDG: 16G0006

Client: Anchor QEA, LLC Project: CHRL SSWA

Batch: BEG0016 Batch Matrix: Water Preparation: No Prep - Volatiles

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
CHRL-TB-160705	16G0006-04	07061621G.D	07/06/16 12:23	
Blank	BEG0016-BLK1	07061606G.D	07/06/16 07:23	
LCS	BEG0016-BS1	07061603LCSG.D	07/06/16 07:23	
LCS Dup	BEG0016-BSD1	07061605G.D	07/06/16 07:23	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

PREPARATION BENCH SHEET

BEG0016

Printed: 7/7/2016 1:43:33PM

Matrix: Water **Prepared using: Volatiles - No Prep - Volatiles** **Surrogate used: E001116**

Surrogate ID: E001116

Lab Number	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	uL Spike	Surrogate	Client	Extraction Comments
16F0100-02	8260C VOA	06-Jul-2016 12:23	2	10				1	G & K Services	
16F0100-02RE1	8260C VOA	06-Jul-2016 12:23	0.2	10				1	G & K Services	Added 7/7/2016 by LH
16G0006-04	8260C Gas (NWTPH)	06-Jul-2016 12:23	10	10				1	Anchor QEA, LLC	
BEG0016-BLK1	QC	06-Jul-2016 07:23	10	10				1		
BEG0016-BS1	QC	06-Jul-2016 07:23	10	10	E000912		2	1		
BEG0016-BSD1	QC	06-Jul-2016 07:23	10	10	E000912		2	1		

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Method 5035 Extraction Bench Sheet

(8260C, 8260C-SIM, NWTPH-Gx, AK-101, TPH-G, VPH, TCLP-ZHE)

Work order: 1606000'16 | Element Batch: BEG0020 | Prep/Extraction Date: 7/16/16 | Analyst: Dana

	Lab ID	Vial No.	Method 5035 Sample Weight						Extract Split Basis		
			$NaHSO_3$ Lot#	CH_3OH Lot#	Vial Weight (g)	Tare (from vial) (g)	Initial Weight (g)	Final Volume (mL)	MeOH Spilt Volume (µL)	Diluent Volume (mL)	Dilution
1	1606000'16-01	A		DP303	34.47	29.363	5.107	5mL	900µL	45mL	50x
2	-02	A		↓	34.22	29.355	4.865	↓	↓	↓	↓
3	-03	B		↓	34.57	29.523	5.047	↓	↓	↓	↓
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

Balance ID: SLF302

Analytical Resources, Incorporated
Analytical Chemists and Consultants

PREPARATION BENCH SHEET

BEG0016

rinted: 7/11/2016 12:55:52PM

Matrix: Water **Prepared using: Volatiles - No Prep - Volatiles** **Surrogate used: E001116**

Lab Number	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	pH	Client	Extraction Comments
16F0100-02	8260C VOA	06-Jul-2016 12:23	2	10				1	<2	G & K Services	
16F0100-02RE1	8260C VOA	06-Jul-2016 12:23	0.2	10				1	<2	G & K Services	Added 7/7/2016 by LH
16G0006-04	8260C Gas (NWTPH)	06-Jul-2016 12:23	10	10				1	<2	Anchor QEA, LLC	
BEG0016-BLK1	QC	06-Jul-2016 07:23	10	10				1			
BEG0016-BS1	QC	06-Jul-2016 07:23	10	10	E000912		2	1			
BEG0016-BSD1	QC	06-Jul-2016 07:23	10	10	E000912		2	1			

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160706.b

ARI Job No.: RTBF Method: bfb8260.m Instrument: nt2.i Date: 06-JUL-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0731	07061602.D	RTBFB0706	10	1	NO MANUAL INTEGRATION
0806	07061603.D	SEG0023-ICV1	GICV/LCS	1	NO MANUAL INTEGRATION
0806	07061603lcs.D	BEG0016-BS1	GICV/LCS	1	NO MANUAL INTEGRATION
0806	07061603lcss.D	BEG0020-BS1	GICV/LCS	1	NO MANUAL INTEGRATION
0826	07061604.D	ICV/LCS	ICV/LCS	1	NO MANUAL INTEGRATION
0826	07061604lcs.D	ICV/LCS	ICV/LCS	1	NO MANUAL INTEGRATION
0847	07061605.D	BEG0016-BSD1	GLCSD	1	NO MANUAL INTEGRATION
0847	07061605lcsds.D	BEG0020-BSD1	GLCSD	1	NO MANUAL INTEGRATION
0907	07061606.D	BEG0016-BLK1	MB	1	NO MANUAL INTEGRATION
0907	07061606mbs.D	BEG0020-BLK1	MB	1	NO MANUAL INTEGRATION
1131	07061613.D	LCS	LCS	1	2-Butanone,
1152	07061614.D	LOW	LOW	1	Vinyl Acetate, 2-Butanone, 2-Hexanone, 1,2-Dibromo 3-Chloropropane,
1245	07061615.D	16F0100-02		1	NO MANUAL INTEGRATION
1305	07061616.D	SEG0023-CCV1	GCCV	1	NO MANUAL INTEGRATION
1448	07061621.D	16G0006-04		1	NO MANUAL INTEGRATION
1506	07061622.D	16G0006-01		1	NO MANUAL INTEGRATION
1530	07061623.D	16G0006-02		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160706.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1550	07061624.D	16G0006-03		1	NO MANUAL INTEGRATION
1755	07061630.D	16F0100-02RE1		1	Toluene,
1815	07061631.D	SEG0023-CCV2	GCCV	1	NO MANUAL INTEGRATION
1835	07061632.D	CCV	CCV	1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160706elementg.b

ARI Job No.: RTBF Method: GAS032916.m Instrument: nt2.i Date: 06-JUL-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0731	07061602G.D	RTBFB0706	10	1	Naphthalene,
0806	07061603G.D	SEG0023-ICV1		1	d5-Chlorobenzene,
0806	07061603LCSG.D	BEG0016-BS1		1	d5-Chlorobenzene,
0806	07061603LCSSG.D	BEG0020-BS1		1	d5-Chlorobenzene,
0847	07061605G.D	BEG0016-BSD1		1	Toluene, d4-Dichlorobenzene, d5-Chlorobenzene,
0847	07061605LCSDSG.D	BEG0020-BSD1		1	Toluene, d4-Dichlorobenzene, d5-Chlorobenzene,
0907	07061606G.D	BEG0016-BLK1		1	NO MANUAL INTEGRATION
0907	07061606mbsG.D	BEG0020-BLK1		1	NO MANUAL INTEGRATION
1305	07061616G.D	SEG0023-CCV1	GCCV	1	d4-Dichlorobenzene, d5-Chlorobenzene,
1448	07061621G.D	16G0006-04		1	NO MANUAL INTEGRATION
1509	07061622G.D	16G0006-01		1	NO MANUAL INTEGRATION
1530	07061623G.D	16G0006-02		1	NO MANUAL INTEGRATION
1550	07061624G.D	16G0006-03		1	NO MANUAL INTEGRATION
1815	07061631G.D	SEG0023-CCV2		1	d4-Dichlorobenzene,

PREPARATION BATCH SUMMARY

NWTPHg

Laboratory: Analytical Resources, Inc. SDG: 16G0006

Client: Anchor QEA, LLC Project: CHRL SSWA

Batch: BEG0020 Batch Matrix: Solid Preparation: No Prep - Volatiles

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
CHRL-O-03A-160705	16G0006-01	07061622G.D	07/06/16 14:20	
CHRL-O-04A-160705	16G0006-02	07061623G.D	07/06/16 14:20	
CHRL-P-03A-160705	16G0006-03	07061624G.D	07/06/16 14:20	
Blank	BEG0020-BLK1	07061606mbsG.D	07/06/16 07:20	
LCS	BEG0020-BS1	07061603LCSSG.D	07/06/16 07:20	
LCS Dup	BEG0020-BSD1	07061605LCSDSG.D	07/06/16 07:20	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

PREPARATION BENCH SHEET

BEG0020

Printed: 7/7/2016 1:42:28PM

Matrix: Solid **Prepared using: Volatiles - No Prep - Volatiles** **Surrogate used: E001314**

Surrogate ID: E001314

Lab Number	Analysis	Prepared	Initial (g)	Final (g)	Spike ID	Source ID	uL Spike	Surrogate	Client	Extraction Comments
16G0006-01	8260C Gas (NWTPH)	06-Jul-2016 14:20	5.107	5				100	Anchor QEA, LLC	
16G0006-02	8260C Gas (NWTPH)	06-Jul-2016 14:20	4.865	5				100	Anchor QEA, LLC	
16G0006-03	8260C Gas (NWTPH)	06-Jul-2016 14:20	5.047	5				100	Anchor QEA, LLC	
BEG0020-BLK1	QC	06-Jul-2016 07:20	5	5				100		
BEG0020-BS1	QC	06-Jul-2016 07:20	5	5	E000912		50	100		
BEG0020-BSD1	QC	06-Jul-2016 07:20	5	5	E000912		50	100		

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160706.b

ARI Job No.: RTBF Method: bfb8260.m Instrument: nt2.i Date: 06-JUL-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0731	07061602.D	RTBFB0706	10	1	NO MANUAL INTEGRATION
0806	07061603.D	SEG0023-ICV1	GICV/LCS	1	NO MANUAL INTEGRATION
0806	07061603lcs.D	BEG0016-BS1	GICV/LCS	1	NO MANUAL INTEGRATION
0806	07061603lcss.D	BEG0020-BS1	GICV/LCS	1	NO MANUAL INTEGRATION
0826	07061604.D	ICV/LCS	ICV/LCS	1	NO MANUAL INTEGRATION
0826	07061604lcs.D	ICV/LCS	ICV/LCS	1	NO MANUAL INTEGRATION
0847	07061605.D	BEG0016-BSD1	GLCSD	1	NO MANUAL INTEGRATION
0847	07061605lcsds.D	BEG0020-BSD1	GLCSD	1	NO MANUAL INTEGRATION
0907	07061606.D	BEG0016-BLK1	MB	1	NO MANUAL INTEGRATION
0907	07061606mbs.D	BEG0020-BLK1	MB	1	NO MANUAL INTEGRATION
1131	07061613.D	LCS	LCS	1	2-Butanone,
1152	07061614.D	LOW	LOW	1	Vinyl Acetate, 2-Butanone, 2-Hexanone, 1,2-Dibromo 3-Chloropropane,
1245	07061615.D	16F0100-02		1	NO MANUAL INTEGRATION
1305	07061616.D	SEG0023-CCV1	GCCV	1	NO MANUAL INTEGRATION
1448	07061621.D	16G0006-04		1	NO MANUAL INTEGRATION
1505	07061622.D	16G0006-01		1	NO MANUAL INTEGRATION
1530	07061623.D	16G0006-02		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160706.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1550	07061624.D	16G0006-03		1	NO MANUAL INTEGRATION
1755	07061630.D	16F0100-02RE1		1	Toluene,
1815	07061631.D	SEG0023-CCV2	GCCV	1	NO MANUAL INTEGRATION
1835	07061632.D	CCV	CCV	1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160706elementg.b

ARI Job No.: RTBF Method: GAS032916.m Instrument: nt2.i Date: 06-JUL-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0731	07061602G.D	RTBFB0706	10	1	Naphthalene,
0806	07061603G.D	SEG0023-ICV1		1	d5-Chlorobenzene,
0806	07061603LCSG.D	BEG0016-BS1		1	d5-Chlorobenzene,
0806	07061603LCSSG.D	BEG0020-BS1		1	d5-Chlorobenzene,
0847	07061605G.D	BEG0016-BSD1		1	Toluene, d4-Dichlorobenzene, d5-Chlorobenzene,
0847	07061605LCSDSG.D	BEG0020-BSD1		1	Toluene, d4-Dichlorobenzene, d5-Chlorobenzene,
0907	07061606G.D	BEG0016-BLK1		1	NO MANUAL INTEGRATION
0907	07061606mbsG.D	BEG0020-BLK1		1	NO MANUAL INTEGRATION
1305	07061616G.D	SEG0023-CCV1	GCCV	1	d4-Dichlorobenzene, d5-Chlorobenzene,
1448	07061621G.D	16G0006-04		1	NO MANUAL INTEGRATION
1509	07061622G.D	16G0006-01		1	NO MANUAL INTEGRATION
1530	07061623G.D	16G0006-02		1	NO MANUAL INTEGRATION
1550	07061624G.D	16G0006-03		1	NO MANUAL INTEGRATION
1815	07061631G.D	SEG0023-CCV2		1	d4-Dichlorobenzene,

Analytical Resources, Incorporated
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
NWTPHg

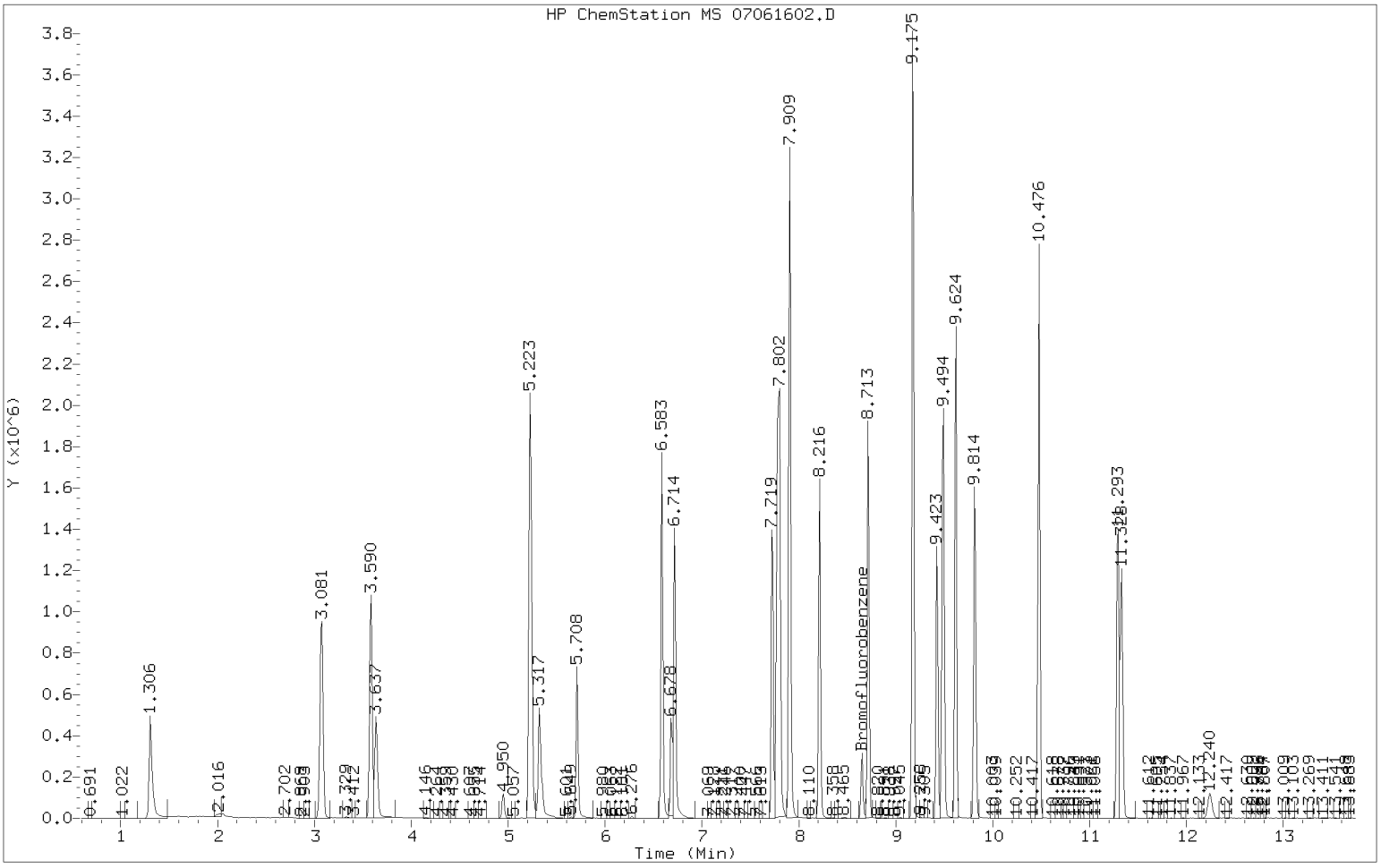
Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Lab File ID:	07061602.D	Injection Date:	07/06/16
Instrument ID:	NT2	Injection Time:	07:31
Sequence:	SEG0023	Lab Sample ID:	SEG0023-TUN1

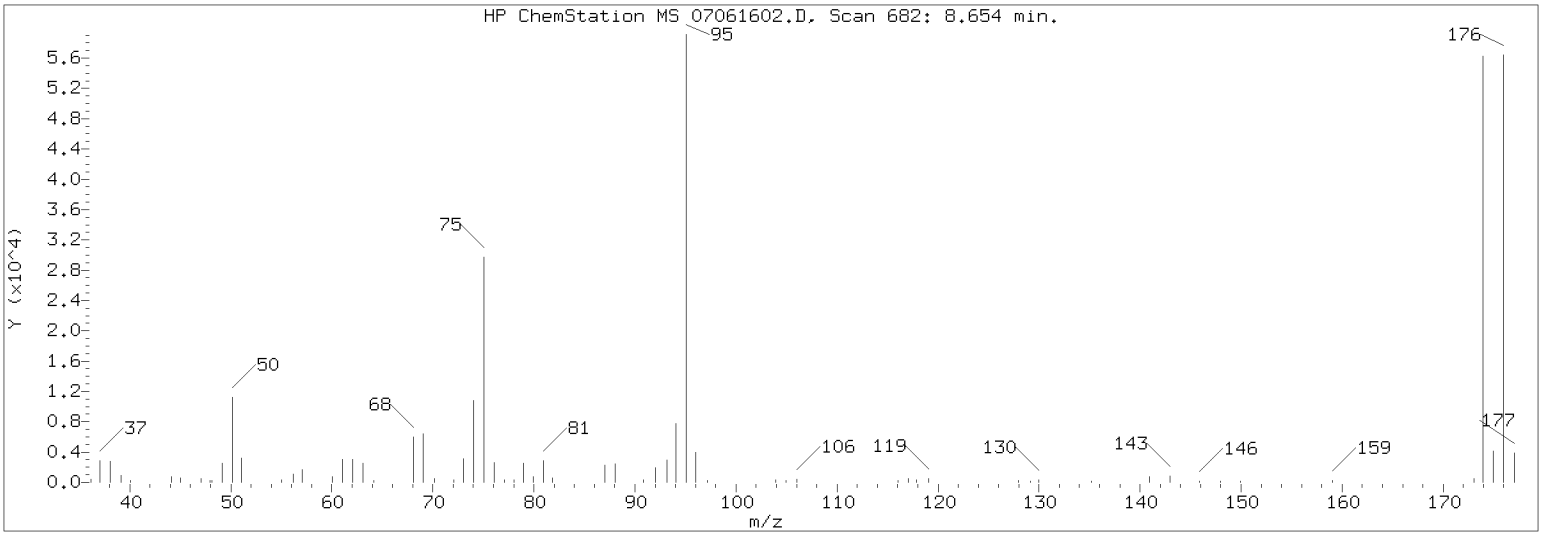
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	20.5	PASS
75	30 - 80% of 95	52.3	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.81	PASS
173	Less than 2% of 174	0.504	PASS
174	50 - 120% of 95	84.6	PASS
175	5 - 9% of 174	7.16	PASS
176	95 - 101% of 174	98.4	PASS
177	5 - 9% of 176	6.6	PASS

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Cal Check	SEG0023-ICV1	07061603G.D	07/06/2016	8:06
LCS	BEG0016-BS1	07061603lcs.D	07/06/2016	8:06
LCS	BEG0016-BS1	07061603LCSG.D	07/06/2016	8:06
LCS	BEG0020-BS1	07061603lcss.D	07/06/2016	8:06
LCS	BEG0020-BS1	07061603LCSSG.D	07/06/2016	8:06
Initial Cal Check	SEG0023-ICV1	07061603.D	07/06/2016	8:06
LCS Dup	BEG0016-BSD1	07061605.D	07/06/2016	8:47
LCS Dup	BEG0016-BSD1	07061605G.D	07/06/2016	8:47
LCS Dup	BEG0020-BSD1	07061605lcsds.D	07/06/2016	8:47
LCS Dup	BEG0020-BSD1	07061605LCSDSG.D	07/06/2016	8:47
Blank	BEG0020-BLK1	07061606mbsG.D	07/06/2016	9:07
Blank	BEG0016-BLK1	07061606.D	07/06/2016	9:07
Blank	BEG0020-BLK1	07061606mbs.D	07/06/2016	9:07
Blank	BEG0016-BLK1	07061606G.D	07/06/2016	9:07
Calibration Check	SEG0023-CCV1	07061616.D	07/06/2016	13:05
Calibration Check	SEG0023-CCV1	07061616G.D	07/06/2016	13:05
CHRL-TB-160705	16G0006-04	07061621.D	07/06/2016	14:48
CHRL-TB-160705	16G0006-04	07061621G.D	07/06/2016	14:48
CHRL-O-03A-160705	16G0006-01	07061622.D	07/06/2016	15:09
CHRL-O-03A-160705	16G0006-01	07061622G.D	07/06/2016	15:09
CHRL-O-04A-160705	16G0006-02	07061623.D	07/06/2016	15:30
CHRL-O-04A-160705	16G0006-02	07061623G.D	07/06/2016	15:30
CHRL-P-03A-160705	16G0006-03	07061624.D	07/06/2016	15:50
CHRL-P-03A-160705	16G0006-03	07061624G.D	07/06/2016	15:50
Calibration Check	SEG0023-CCV2	07061631G.D	07/06/2016	18:15
Calibration Check	SEG0023-CCV2	07061631.D	07/06/2016	18:15

BFB TUNE GRAPHIC REPORT

Datafile Analyzed: /20160706.b/07061602.D
Method Used: \20160706.b\bfb8260.m Inst: nt2
Injection Date: 06-JUL-2016 07:31 Operator: LH
Sample Info: RTBFB0706 RTBFB0706,10,10,0,
Report Date: 07/06/2016 07:49





Data File: \\target\share\chem1\nt2.i\20160706g.b\07061602.D

Date : 06-JUL-2016 07:31

Client ID: 10

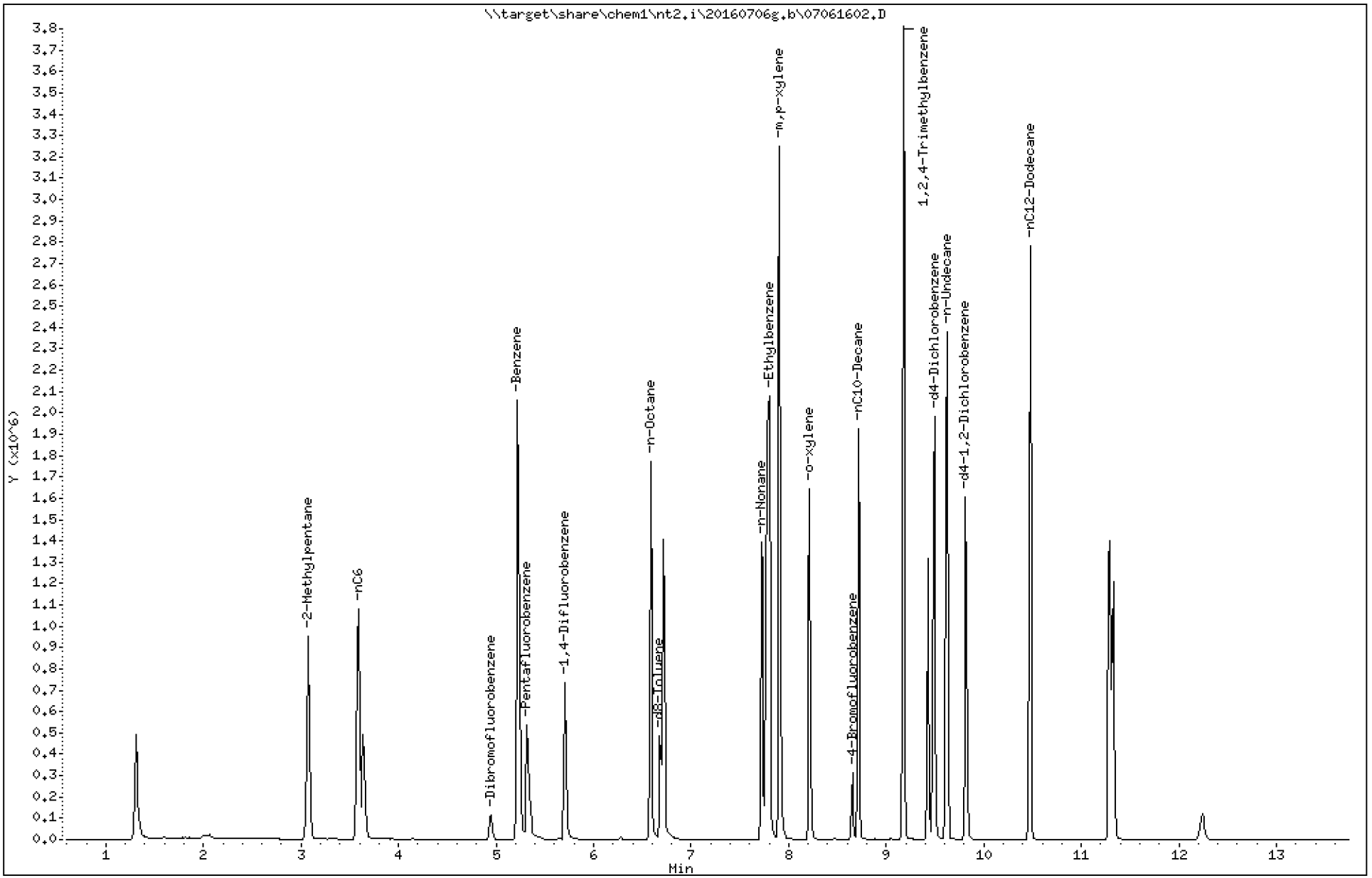
Instrument: nt2.i

Sample Info: RTBFB0706,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160706g.b/07061602.D
Method: \20160706g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 06-JUL-2016 07:31

ARI ID: RTBFB0706
Client ID: 10
Matrix: NONE
Dilution Factor: 1.000
Operator: LH

GASOLINE HYDROCARBONS

	Range	RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.53)	48008849	31487229	0.656
8015C 2MP-TMB	(2.99 to 9.27)	83224207	34746667	0.418
AK101 nC6-nC10	(3.50 to 8.61)	58706304	24723962	0.421
NWTPHG Tol-Nap	(6.62 to 11.31)	49203331	33865714	0.688
mod8015 nC6-nC12	(3.50 to 10.53)	73249380	41317669	0.564

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

8.654	462980	4-Bromofluorobenzene
6.678	2872291	d8-Toluene
9.494	3481651	d4-Dichlorobenzene
9.814	2513440	d4-1,2-Dichlorobenzene

INITIAL CALIBRATION DATA

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZD00012	Instrument:	NT2
Calibration Date:	04/14/2016 13:36	Column (1):	RTX-VMS

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
Gasoline Range Organics (Tol-Nap)					100	39259.68	250	48930.84	500	50264.22	1000	52493.34

INITIAL CALIBRATION DATA

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZD00012	Instrument:	NT2
Calibration Date:	04/14/2016 13:36	Column (1):	RTX-VMS

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
		RF		RF		RF		RF		RF		RF
Gasoline Range Organics (Tol-Nap)	2500	52751.28	5000	51520.62								

INITIAL CALIBRATION DATA

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Calibration:	ZD00012	Instrument:	NT2
Calibration Date:	04/14/2016 13:36	Column (1):	RTX-VMS

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	RSD Limit	Q
Gasoline Range Organics (Tol-Nap)	49203.33	10.3			20	

Analysis	Matrix	Method
8260C Gas (8015C)	Water	EPA 8015C
8260C Gas (AK101)	Water	AK101
8260C Gas (NWTPH)	Water	NWTPHg
8260C VOA	Water	EPA 8260C

Checklist: Initial Calibration Checklist-VOA

#	Checklist Item	Response	Analyst Initials	Date
1	Element Calibration Code	YES	LH	03/30/2016
	Comments: *ZC00032* *Calibration is for 8260C and gas.*			
2	BFB Tune met Criteria	YES	LH	03/30/2016
3	ICal meets 20% RSD, LR COD, and QR COD limits	YES	LH	03/30/2016
4	NO ICAL Q Flag applied	YES	LH	03/30/2016
5	Manual integrations include before/after pictures	YES	LH	03/30/2016
6	Internal Standard areas within 50-200% from reference	YES	LH	03/30/2016
7	Spectral Library updated	NA	LH	03/30/2016
8	Minimum response factors met	YES	LH	03/30/2016
9	All SCV within +/- 20% (DOD)	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Vinyl Chloride 120.12%, Chloroethane 120.72%, t-butylbenzene 124.45%.*			
10	All SCV within +/- 30%	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Bromomethane 141.13%, methylene chloride 130.90%*			
11	NO Linear or Quadratic Fits Used	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Quadratic: Chloroethane* *Linear: Iodomethane, methylene chloride, trans-1,3-dichloropropene, chlorodibromomethane, 1,1,1,2-tetrachloroethane, bromoform.*			
12	NO Calibration points dropped	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Some low points were dropped, but all RLs were met.* *Upper 2 points for trichlorofluoromethane were dropped. Range is 0.2ug/L- 20ug/L*			
13	Additional Notes	YES	LH	03/30/2016
	Comments: *Gas SCV standard was expired, but recovered well.*			
14	Reviewer Approval (Reviewer)	YES	BB	03/30/2016

Analytical Resources Inc.: Organics Instrument Log

NT-2 Serial No.: 82321977

Date: 3/29/16 Analysis: 8260C + gas Analyst: [illegible] for PC

GC Program: VOAW Column No: 1295415 Column Type: RTXVMS

Instrument Tune (.U or .CT.): bfb.u EM Voltage: 2071

Calibration File: 03291602.d Curve Date: 3/29/16 Injection Vol.: 10mL

ZC00032

IS/SS	Ical/Ccal	LCS/ICV
E000043	E000921 } 8260C	8260 SCV: E000942
E000044	E000922 }	Gas SCV: E000933
	E000912 } Gas	
	E000923 }	

Document All Maintenance Tasks In Element

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160329.b

	Time	Filename	LabID	ClientID	Vial#	pH	DF								
1	1110	03291601.D	RINSE	10			1								
2	1131	03291602.D	SEC0063-TUN1	RTBFB0329			1								
3	1226	03291603.D	GICV				1								
4	1248	03291604.D	VICV				1								
5	1309	03291605.D	VICV	ICV0329a			1								
6	1330	03291606.D	VLCSA	VLCS			1								
7	1352	03291607.D	GLCS				1								
8	1413	03291608.D	GLCSA	GLCSA			1	5.33	366954	5.72	575180	7.78	532674	9.48	286650
9	1435	03291609.D	MB0329	MB0329			1	5.33	353242	5.72	559046	7.78	510480	9.48	262386
10	1733	03291610.D	SEC0063-CAL8	VSTD80			1	5.33	419789	5.72	643017	7.78	591709	9.49	324865
11	1754	03291611.D	SEC0063-CAL7	VSTD40			1	5.33	372674	5.72	577427	7.78	536655	9.48	296811
12	1816	03291612.D	SEC0063-CAL6	VSTD20			1	5.33	356460	5.72	546852	7.78	512009	9.48	277409
13	1837	03291613.D	SEC0063-CAL5	VSTD10			1	5.33	350375	5.72	562526	7.78	502371	9.48	277950
14	1859	03291614.D	SEC0063-CAL4	VSTD02			1	5.33	351970	5.72	569384	7.78	501631	9.48	275297
15	1920	03291615.D	SEC0063-CAL3	VSTD01			1	5.33	322836	5.72	510764	7.78	467709	9.48	255215
16	1941	03291616.D	SEC0063-CAL2	VSTD0.5			1	5.33	318463	5.72	502550	7.78	459981	9.48	246454
17	2003	03291617.D	SEC0063-CAL1	VSTD0.2			1	5.33	311848	5.72	495060	7.78	453911	9.48	235351
18	2024	03291618.D	SEC0063-SCV1	SCV			1	5.33	333646	5.72	527779	7.78	486532	9.48	269269
19	2045	03291619.D	SEC0063-CALE				1	5.33	386746	5.72	615798	7.78	554896	9.48	296516
20	2107	03291620.D	SEC0063-CALD				1	5.33	366346	5.72	580475	7.78	530399	9.48	284779
21	2128	03291621.D	SEC0063-CALC				1	5.33	356093	5.72	560609	7.78	525882	9.48	278120
22	2150	03291622.D	SEC0063-CALB				1	5.33	335026	5.72	526989	7.78	495230	9.48	263670
23	2211	03291623.D	SEC0063-CALA				1	5.33	330180	5.72	523950	7.78	490395	9.48	259889
24	2232	03291624.D	SEC0063-CAL9				1	5.33	303542	5.72	482197	7.78	459677	9.48	241501
25	2254	03291625.D	SEC0063-SCV2				1	5.33	347854	5.72	555254	7.78	518670	9.48	276192

[illegible] 3/30/16

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
End Cal Date : 29-MAR-2016 20:03
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem1\nt2.i\20160329.b\03291617.D
Level 2: \\target\share\chem1\nt2.i\20160329.b\03291616.D
Level 3: \\target\share\chem1\nt2.i\20160329.b\03291615.D
Level 4: \\target\share\chem1\nt2.i\20160329.b\03291614.D
Level 5: \\target\share\chem1\nt2.i\20160329.b\03291613.D
Level 6: \\target\share\chem1\nt2.i\20160329.b\03291612.D
Level 7: \\target\share\chem1\nt2.i\20160329.b\03291611.D
Level 8: \\target\share\chem1\nt2.i\20160329.b\03291610.D

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
1 Dichlorodifluoromethane	0.53600	0.72103	0.75655	0.68389	0.66518	0.67125			
	0.63304	0.55180					0.65234	11.748	
2 Chloromethane	+++++	0.73271	0.78922	0.73091	0.68491	0.69009			
	0.65642	0.55073					0.69071	10.881	
3 Vinyl Chloride	0.55925	0.57778	0.65631	0.66895	0.66697	0.66768			
	0.62851	0.53183					0.61966	8.947	
4 Bromomethane	0.78227	0.71355	0.73867	0.64487	0.57653	0.55945			
	0.51690	0.42850					0.62009	19.528	
5 Chloroethane	0.47892	0.28970	0.29009	0.46966	0.26038	0.24378			
	0.20149	0.17328					0.30091	37.992	<-
6 Trichlorofluoromethane	1.11625	1.16095	1.20891	1.13829	1.09301	1.08840			
	+++++	+++++					1.13430	4.027	
7 1,1-Dichloroethene	1.06847	1.07717	1.09207	1.04134	1.01649	1.00377			
	0.95080	0.81045					1.00757	9.112	
8 Carbon Disulfide	2.31475	2.09086	2.11789	2.02050	1.98297	1.97893			
	1.85517	1.48891					1.98125	12.092	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
End Cal Date : 29-MAR-2016 20:03
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
9 112Trichloro122Trifluoroethan	0.69088	0.65358	0.69116	0.65344	0.62529	0.63097			
	0.60231	0.54688					0.63681	7.479	
10 Iodomethane	+++++	+++++	0.32075	0.33916	0.49975	0.57906			
	0.62050	0.59218					0.49190	26.797	<-
11 Bromoethane	0.47379	0.45921	0.47603	0.45343	0.43105	0.42449			
	0.39812	0.35182					0.43349	9.748	
12 Acrolein	+++++	+++++	0.09936	0.09563	0.09252	0.09096			
	0.08619	0.06461					0.08821	14.037	
13 Methylene Chloride	+++++	+++++	1.07959	0.83102	0.68108	0.65582			
	0.61413	0.53496					0.73277	26.724	<-
14 Acetone	+++++	+++++	0.18692	0.17264	0.16306	0.15577			
	0.14425	0.10448					0.15452	18.447	
15 Trans-1,2-Dichloroethene	0.72086	0.70771	0.69847	0.68699	0.65227	0.64907			
	0.62240	0.55163					0.66117	8.385	
16 n-hexane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
17 Methyl tert butyl ether	1.90958	1.93203	2.03850	1.98312	1.95086	1.91080			
	1.78604	1.35892					1.85873	11.540	
18 1,1-Dichloroethane	0.90525	0.99101	1.06292	1.00001	0.99854	0.99611			
	0.93712	0.80410					0.96188	8.218	
19 Acrylonitrile	0.12282	0.14294	0.16076	0.16453	0.17575	0.17124			
	0.16530	0.12564					0.15362	13.369	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
End Cal Date : 29-MAR-2016 20:03
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD
	40.000 Level 7	80.000 Level 8						
21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
20 Vinyl Acetate	0.61825	0.70595	0.84981	0.84558	1.00279	1.01660		
	0.98059	0.75443					0.84675	17.384
22 Cis-1,2-Dichloroethene	0.53311	0.58550	0.64652	0.61909	0.60600	0.60718		
	0.58396	0.51736					0.58734	7.367
23 2,2-Dichloropropane	0.55861	0.59046	0.65485	0.67952	0.73980	0.77630		
	0.76319	0.67797					0.68009	11.546
24 Bromochloromethane	0.26407	0.25799	0.28439	0.29517	0.29203	0.29470		
	0.27095	0.24064					0.27499	7.245
25 Chloroform	0.86901	0.91942	0.96371	0.96613	0.95582	0.95677		
	0.90942	0.77982					0.91501	7.015
26 Carbon Tetrachloride	0.29087	0.25960	0.29824	0.31863	0.35736	0.40984		
	0.41616	0.38969					0.34255	17.262
28 1,1,1-Trichloroethane	0.66763	0.71186	0.78232	0.81064	0.83763	0.86079		
	0.83256	0.73624					0.77996	8.768
30 1,1-Dichloropropene	0.46257	0.43733	0.46477	0.45432	0.45917	0.48903		
	0.46665	0.40793					0.45522	5.246
29 2-Butanone	0.15325	0.18833	0.20808	0.21101	0.21179	0.20858		
	0.19373	0.13627					0.18888	15.282
31 Benzene	1.32055	1.36508	1.45165	1.40094	1.38163	1.43745		
	1.31385	1.06235					1.34169	9.179

ARI Labs, Inc.

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Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD
	40.000 Level 7	80.000 Level 8						
35 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
34 1,2-Dichloroethane	0.47176	0.46738	0.46928	0.45909	0.44857	0.46409		
	0.43485	0.36702					0.44775	7.785
36 Trichloroethene	0.39864	0.36183	0.40277	0.39100	0.38670	0.40504		
	0.38331	0.34017					0.38368	5.809
38 Dibromomethane	0.17614	0.18637	0.19060	0.19576	0.19491	0.20895		
	0.19328	0.16193					0.18849	7.509
39 1,2-Dichloropropane	0.29744	0.31129	0.35044	0.32310	0.33412	0.35795		
	0.33293	0.28701					0.32429	7.615
40 Bromodichloromethane	0.28926	0.31225	0.35870	0.36126	0.39714	0.42977		
	0.42192	0.37309					0.36792	13.409
173 2-Pentanone	+++++	+++++	0.03759	0.04108	0.04748	0.04941		
	0.04615	0.03337					0.04251	14.703
42 Cis 1,3-dichloropropene	0.33046	0.37342	0.41522	0.43652	0.49860	0.54426		
	0.51848	0.44837					0.44567	16.387
41 2-Chloroethyl Vinyl Ether	+++++	0.15003	0.15305	0.17629	0.20168	0.21859		
	0.21019	0.16805					0.18255	15.177
44 Toluene	0.88323	0.91171	0.95990	0.91884	0.88958	0.92455		
	0.86740	0.73905					0.88678	7.461
45 4-Methyl-2-Pentanone	+++++	+++++	0.10868	0.11148	0.11923	0.12248		
	0.11347	0.08280					0.10969	12.870

ARI Labs, Inc.

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Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
46 Tetrachloroethene	0.40658	0.43063	0.46749	0.44914	0.44114	0.43852			
	0.42327	0.39313					0.43124	5.481	
47 Trans 1,3-Dichloropropene	0.24128	0.26795	0.33236	0.34700	0.42566	0.46057			
	0.45296	0.39261					0.36505	22.548	<-
48 1,1,2-Trichloroethane	0.24462	0.25932	0.29094	0.28973	0.29299	0.30652			
	0.28646	0.23270					0.27541	9.583	
49 Chlorodibromomethane	0.19277	0.20318	0.22672	0.26945	0.32941	0.34835			
	0.35097	+++++					0.27441	25.068	<-
50 1,3-Dichloropropane	0.51431	0.53167	0.56170	0.57898	0.56813	0.57741			
	0.53934	0.43524					0.53835	8.843	
51 1,2-Dibromoethane	0.21240	0.25617	0.26762	0.27665	0.28969	0.30154			
	0.28534	0.22844					0.26473	11.671	
52 2-Hexanone	+++++	+++++	0.19017	0.20676	0.23629	0.23586			
	0.21093	0.14625					0.20438	16.431	
54 Chlorobenzene	1.07532	1.20248	1.21400	1.17337	1.15096	1.14082			
	1.05081	0.88935					1.11214	9.574	
55 Ethyl Benzene	0.54229	0.59224	0.61034	0.61537	0.62685	0.62510			
	0.59457	0.54286					0.59370	5.716	
56 1,1,1,2-Tetrachloroethane	0.19354	0.22627	0.27819	0.29599	0.34090	0.36448			
	0.35681	0.32866					0.29810	20.876	<-
57 m,p-xylene	0.67161	0.70427	0.78267	0.78402	0.77720	0.76947			
	0.71796	0.58191					0.72364	9.814	

ARI Labs, Inc.

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Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
58 o-Xylene	0.55066	0.64029	0.72776	0.73609	0.74060	0.73737			
	0.70493	0.62251					0.68253	10.297	
59 Styrene	0.80699	0.96378	1.09771	1.14658	1.23360	1.26288			
	1.11636	0.92376					1.06896	14.774	
60 Bromoform	0.14638	0.17813	0.21594	0.23429	0.32671	0.37748			
	0.38262	0.33399					0.27444	33.540	<-
61 Isopropyl Benzene	2.98915	3.17666	3.47241	3.52265	3.50917	3.53443			
	3.07478	2.37176					3.20638	12.542	
63 Bromobenzene	0.87104	0.84113	0.95825	0.92242	0.90158	0.92126			
	0.83514	0.75589					0.87584	7.344	
64 N-Propyl Benzene	3.44485	3.66981	3.94789	3.85809	3.96230	3.95703			
	3.40598	2.55951					3.60068	13.259	
82 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
65 1,1,2,2-Tetrachloroethane	0.57021	0.66698	0.68205	0.70110	0.73224	0.74994			
	0.67965	0.52089					0.66288	11.860	
66 2-Chloro Toluene	2.43530	2.56389	2.64812	2.64905	2.71380	2.74440			
	2.50403	2.12763					2.54828	7.819	
67 1,3,5-Trimethyl Benzene	2.33439	2.48371	2.81633	2.86681	2.96151	2.96960			
	2.64077	2.09947					2.64657	11.984	
68 1,2,3-Trichloropropane	0.15679	0.23420	0.24470	0.25596	0.25009	0.24859			
	0.23008	0.18528					0.22571	15.771	

ARI Labs, Inc.

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Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	___ RRF	% RSD
	40.000 Level 7	80.000 Level 8						
69 Trans-1,4-Dichloro 2-Butene	+++++	+++++	0.14533	0.16308	0.16059	0.16796		
	0.16664	0.14660					0.15837	6.290
70 4-Chloro Toluene	2.20543	2.41043	2.59052	2.48386	2.43654	2.47572		
	2.22956	1.86508					2.33714	9.863
71 T-Butyl Benzene	2.15274	2.30201	2.44927	2.52053	2.62912	2.63217		
	2.36280	1.92215					2.37135	10.296
72 1,2,4-Trimethylbenzene	2.28637	2.55115	2.78969	2.88715	2.98717	3.00685		
	2.69861	2.12329					2.66629	12.165
73 S-Butyl Benzene	3.14212	3.34918	3.63266	3.64579	3.73776	3.73505		
	3.30940	2.47561					3.37845	12.603
74 4-Isopropyl Toluene	2.26470	2.60974	2.98533	3.07072	3.20958	3.25810		
	2.87670	2.23789					2.81409	14.266
75 1,3-Dichlorobenzene	1.56681	1.73688	1.80746	1.78077	1.76264	1.77797		
	1.63509	1.40117					1.68360	8.356
77 1,4-Dichlorobenzene	1.79009	1.80383	1.94107	1.83424	1.75981	1.77822		
	1.60720	1.36061					1.73438	10.200
78 N-Butyl Benzene	2.26428	2.43932	2.59134	2.68141	2.77713	2.84695		
	2.59185	2.03827					2.52882	10.702
80 1,2-Dichlorobenzene	1.55172	1.68632	1.75914	1.66362	1.64186	1.65571		
	1.51993	1.28505					1.59542	9.158
81 1,2-Dibromo 3-Chloropropane	+++++	0.07417	0.07202	0.08120	0.10209	0.11141		
	0.10864	0.08242					0.09028	18.426

ARI Labs, Inc.

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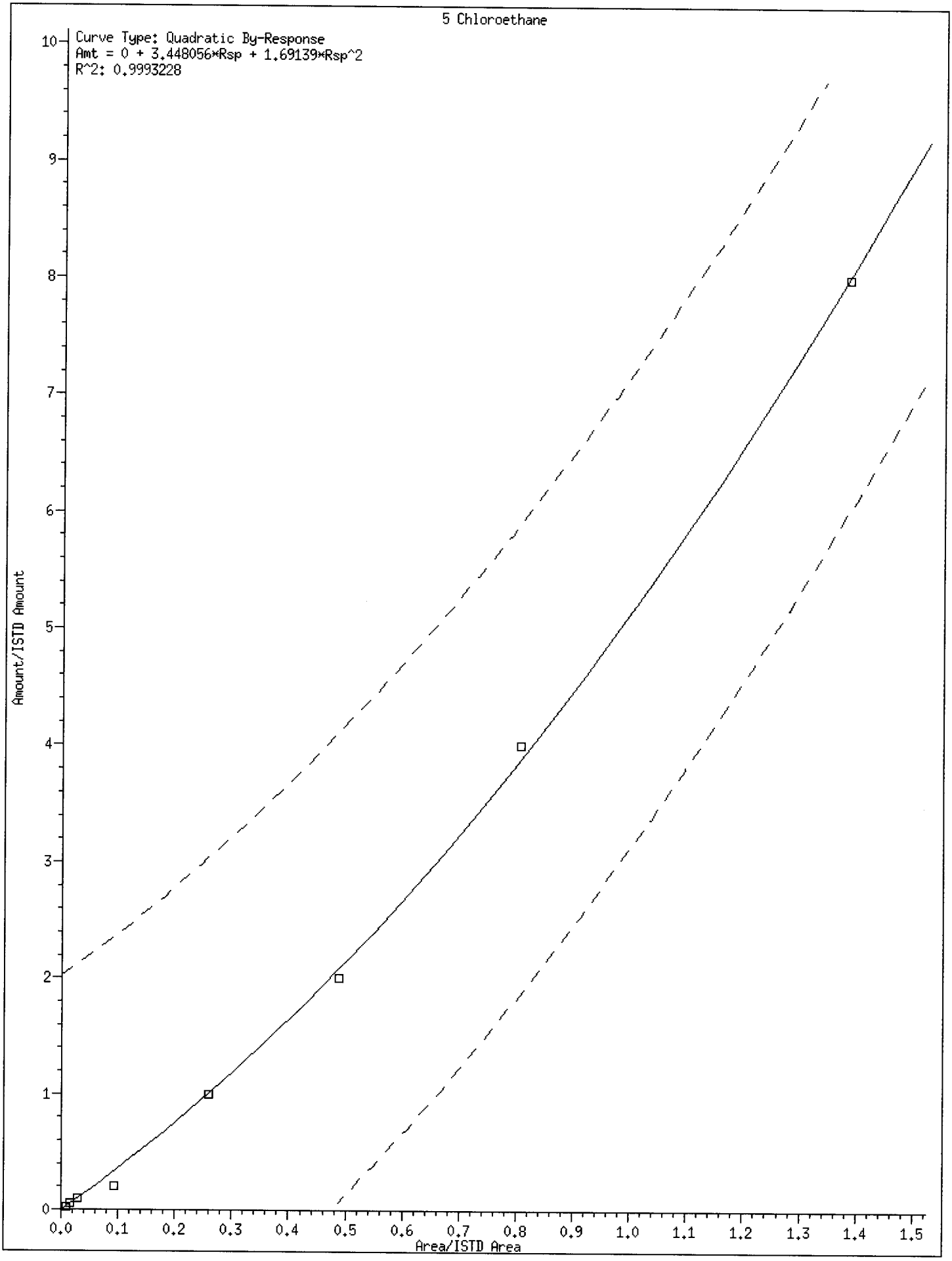
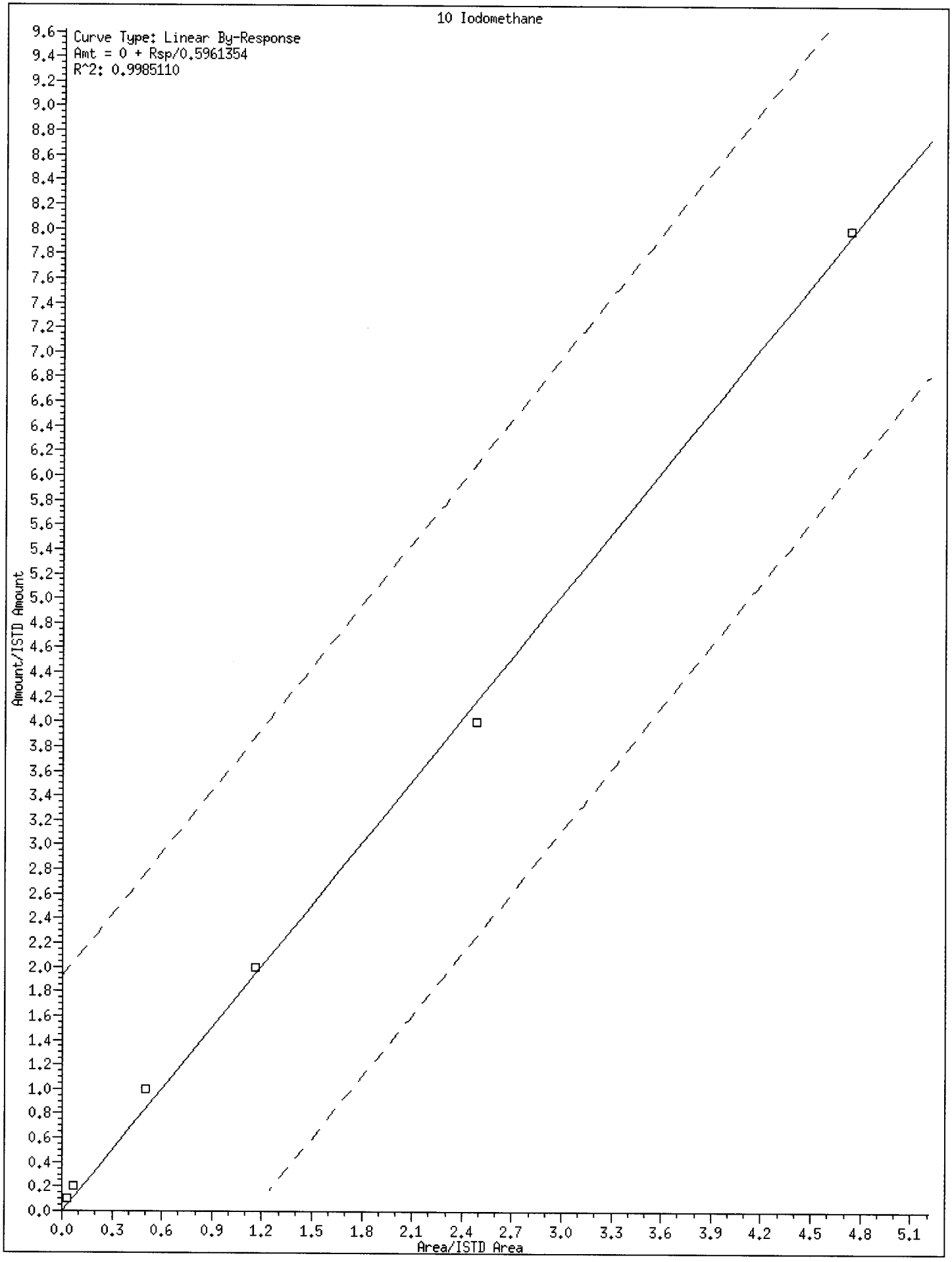
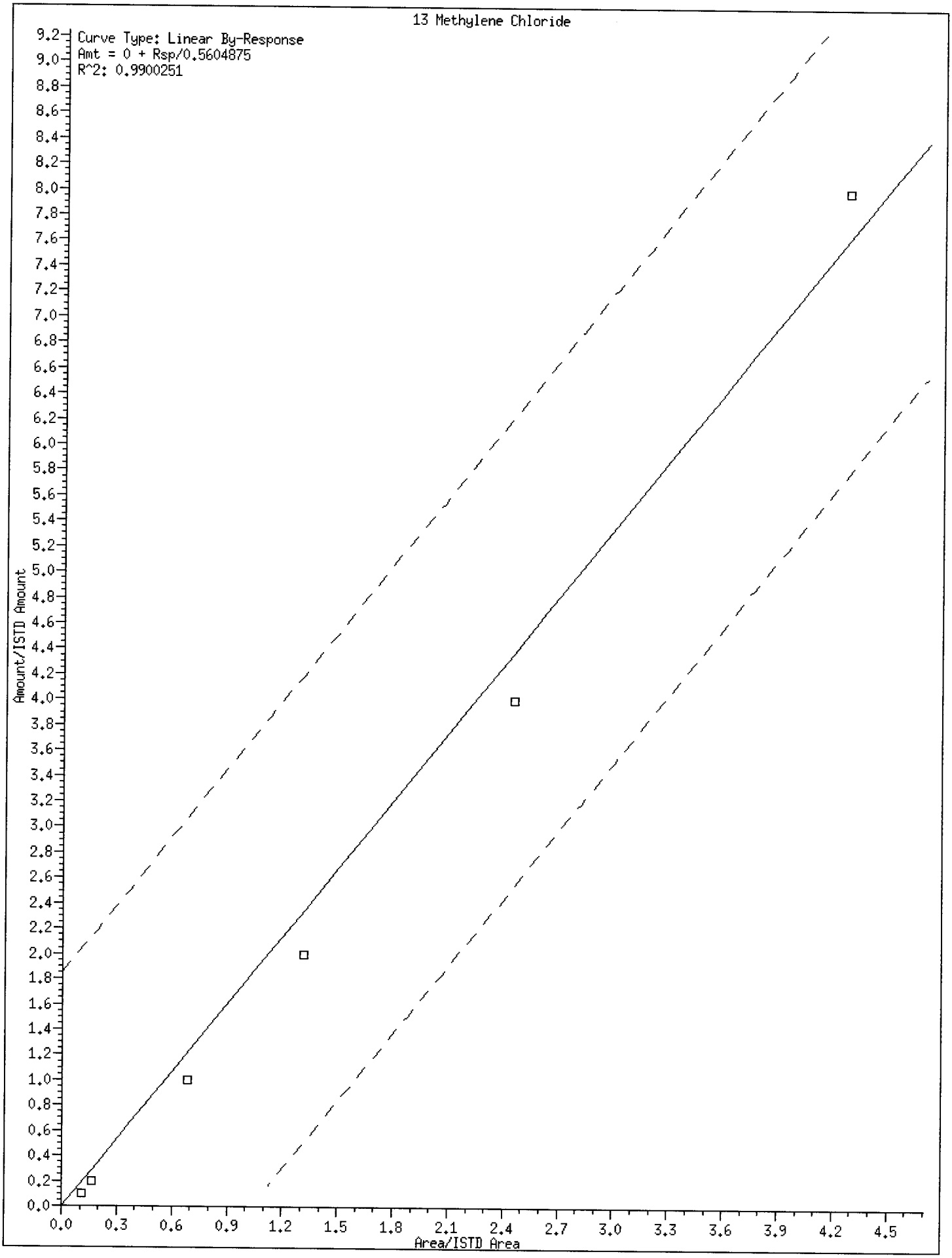
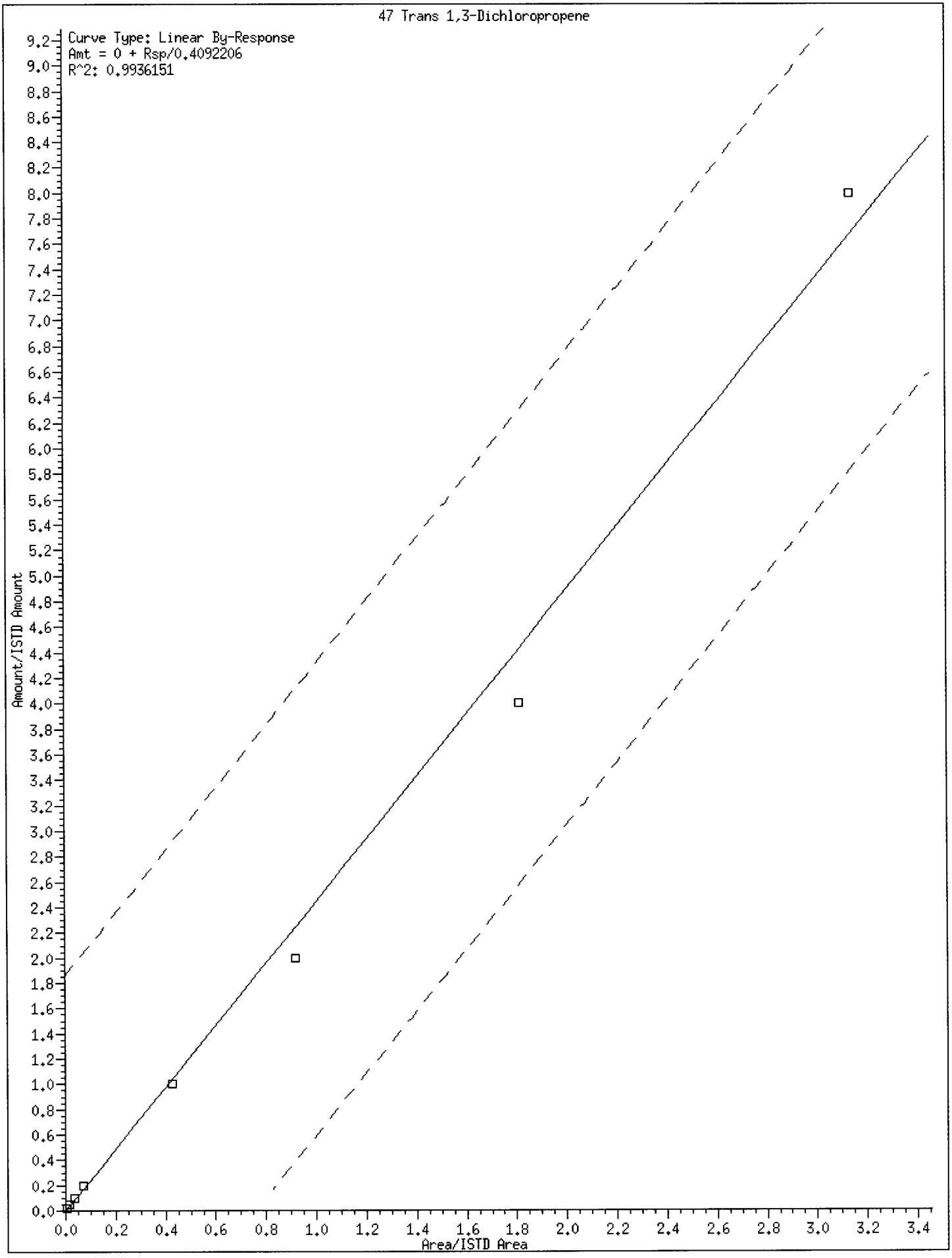
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih
Curve Type : Average

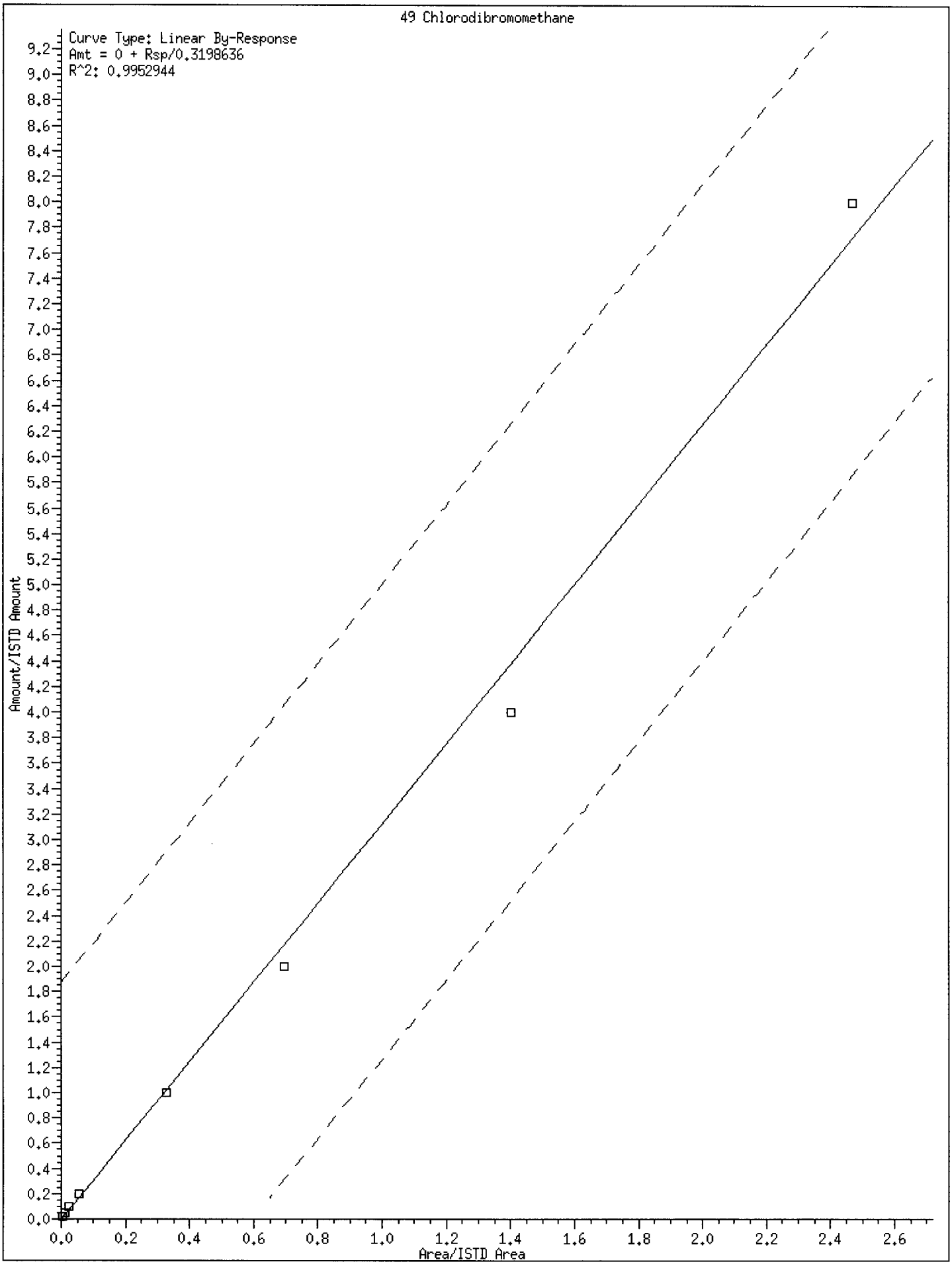
Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD
	40.000 Level 7	80.000 Level 8						
83 Hexachloro 1,3-Butadiene	+++++	0.41460	0.46608	0.46381	0.45746	0.46619		
	0.45805	0.41761					0.44911	5.084
84 1,2,4-Trichlorobenzene	+++++	1.00457	1.10707	1.12511	1.11797	1.13909		
	1.08669	0.94194					1.07463	6.827
85 Naphthalene	+++++	2.00549	2.22550	2.46801	2.58239	2.59273		
	2.39812	1.75994					2.29031	13.652
86 1,2,3-Trichlorobenzene	+++++	1.03054	1.07596	1.10007	1.08009	1.09935		
	1.03067	0.86060					1.03961	8.085
$ 27 Dibromofluoromethane	0.47598	0.47904	0.47333	0.48317	0.47943	0.48605		
	0.47996	0.46905					0.47825	1.128
$ 33 d4-1,2-Dichloroethane	0.61951	0.61264	0.55984	0.55504	0.55543	0.56237		
	0.55870	0.50169					0.56565	6.516
$ 43 d8-Toluene	1.17360	1.18154	1.19875	1.17298	1.14565	1.21168		
	1.19231	1.19510					1.18395	1.714
$ 62 4-Bromofluorobenzene	0.37326	0.40026	0.41569	0.40512	0.41074	0.41640		
	0.41962	0.42001					0.40764	3.812
$ 79 d4-1,2-Dichlorobenzene	0.95424	0.95645	0.96750	0.94079	0.95644	0.96268		
	0.96282	0.94836					0.95616	0.898

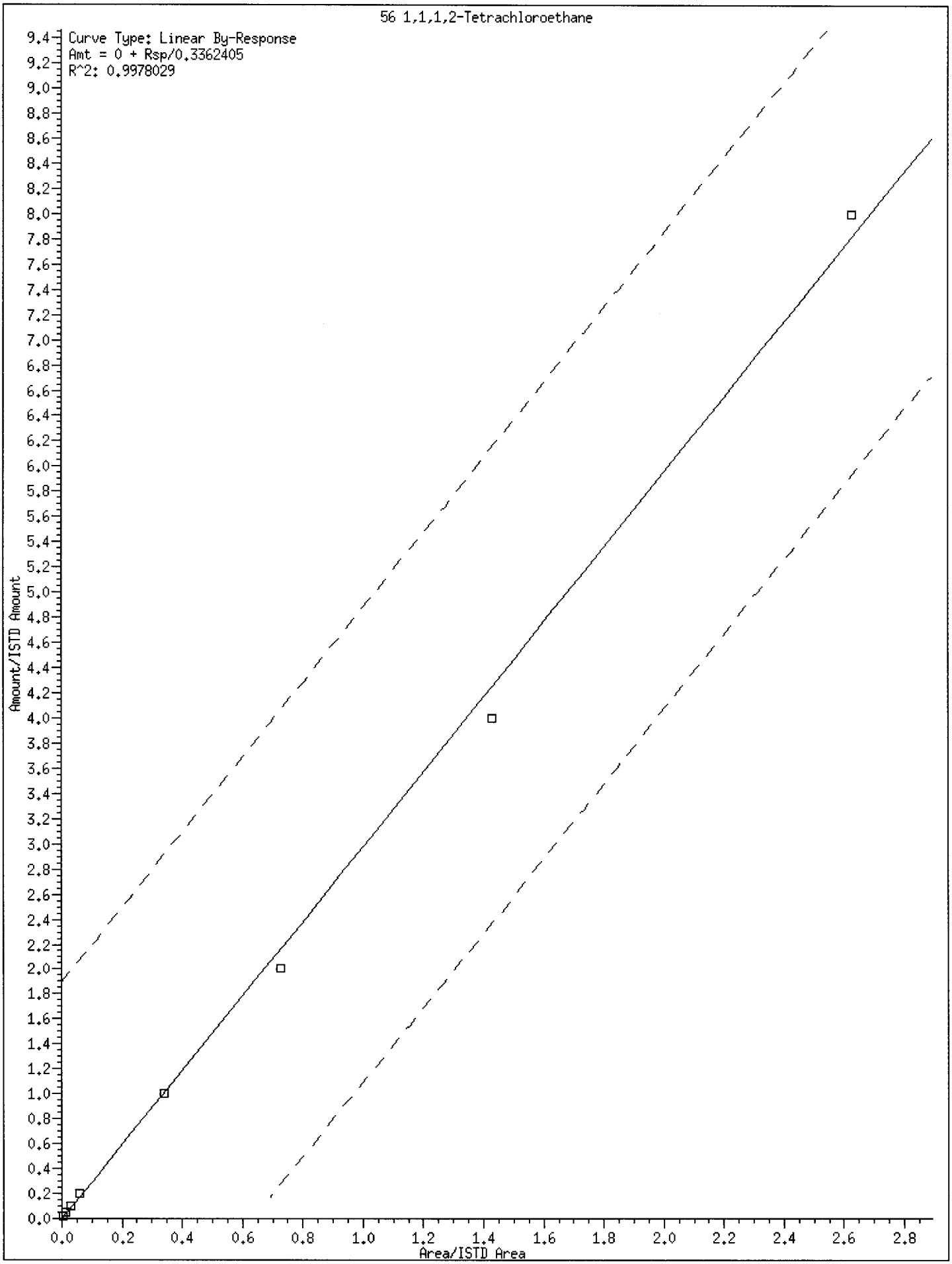

5 Chloroethane
Curve Type: Quadratic By-Response
Amt = 0 + 3.448056*Rsp + 1.69139*Rsp^2
R^2: 0.9993228
Amount/ISTD Amount
Area/ISTD Area
0
1
2
3
4
5
6
7
8
9
10
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5

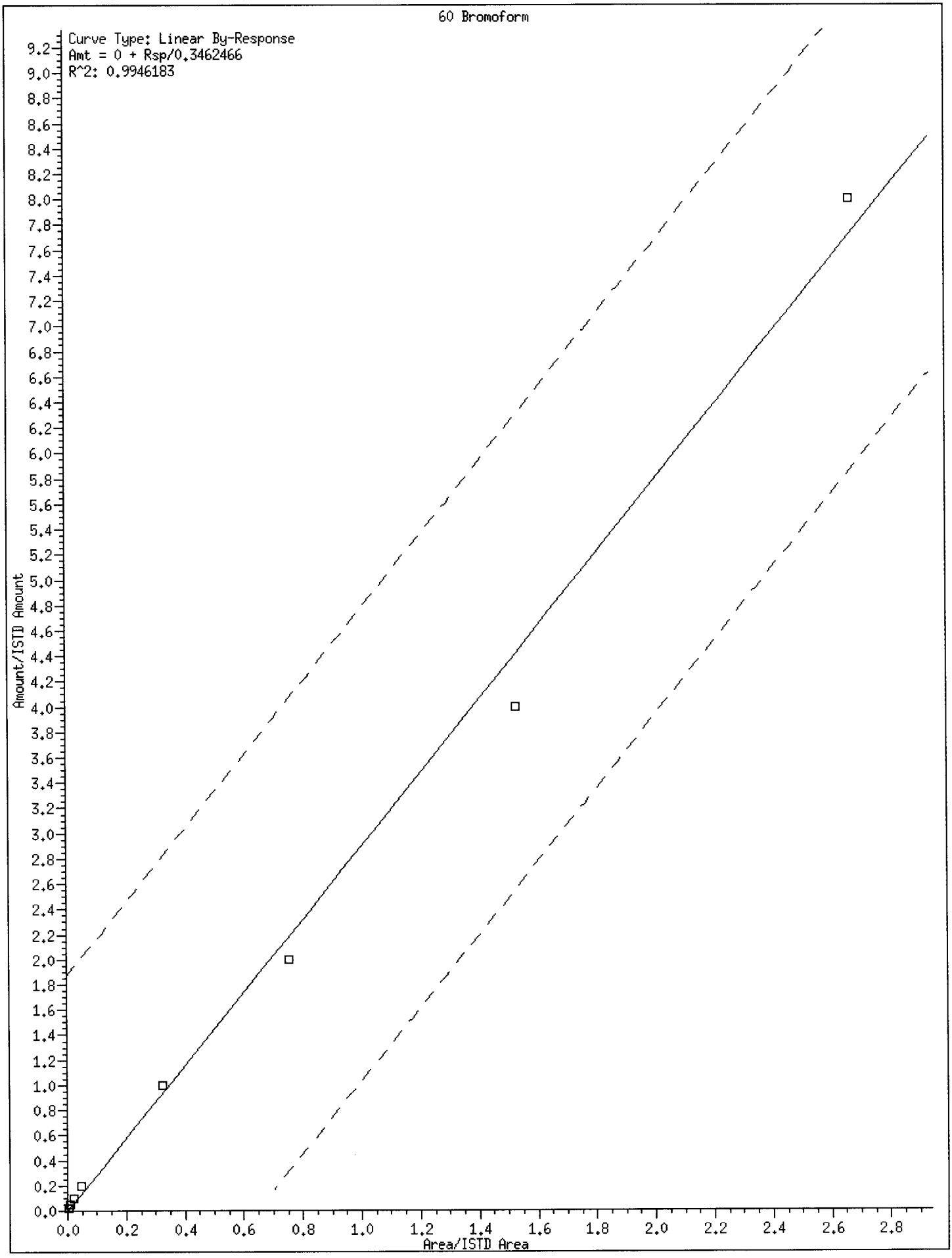

10 Iodomethane
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.5961354
R^2: 0.9985110
Amount/ISTD Amount
Area/ISTD Area
0.0
0.3
0.6
0.9
1.2
1.5
1.8
2.1
2.4
2.7
3.0
3.3
3.6
3.9
4.2
4.5
4.8
5.1


13 Methylene Chloride
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.5604875
R^2: 0.9900251
Amount/ISTD Amount
Area/ISTD Area
0.0
0.3
0.6
0.9
1.2
1.5
1.8
2.1
2.4
2.7
3.0
3.3
3.6
3.9
4.2
4.5


47 Trans 1,3-Dichloropropene
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.4092206
R^2: 0.9936151
Amount/ISTD Amount
Area/ISTD Area


49 Chlorodibromomethane
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.3198636
R^2: 0.9952944
Amount/ISTD Amount
Area/ISTD Area


56 1,1,1,2-Tetrachloroethane
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.3362405
R^2: 0.9978029
Amount/ISTD Amount
Area/ISTD Area
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
9.4
9.2
9.0
8.8
8.6
8.4
8.2
8.0
7.8
7.6
7.4
7.2
7.0
6.8
6.6
6.4
6.2
6.0
5.8
5.6
5.4
5.2
5.0
4.8
4.6
4.4
4.2
4.0
3.8
3.6
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0


60 Bromoform
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.3462466
R^2: 0.9946183
Amount/ISTD Amount
Area/ISTD Area
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
9.2
9.0
8.8
8.6
8.4
8.2
8.0
7.8
7.6
7.4
7.2
7.0
6.8
6.6
6.4
6.2
6.0
5.8
5.6
5.4
5.2
5.0
4.8
4.6
4.4
4.2
4.0
3.8
3.6
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0

ARI Labs, Inc.

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Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih

Calibration File Names:
Level 1: \\target\share\chem1\nt2.i\20160329.b\03291617.D
Level 2: \\target\share\chem1\nt2.i\20160329.b\03291616.D
Level 3: \\target\share\chem1\nt2.i\20160329.b\03291615.D
Level 4: \\target\share\chem1\nt2.i\20160329.b\03291614.D
Level 5: \\target\share\chem1\nt2.i\20160329.b\03291613.D
Level 6: \\target\share\chem1\nt2.i\20160329.b\03291612.D
Level 7: \\target\share\chem1\nt2.i\20160329.b\03291611.D
Level 8: \\target\share\chem1\nt2.i\20160329.b\03291610.D

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
1 Dichlorodifluoromethane	0.53600	0.72103	0.75655	0.68389	0.66518	0.67125					
	0.63304	0.55180					AVRG		0.65234		11.74770
2 Chloromethane	+++++	0.73271	0.78922	0.73091	0.68491	0.69009					
	0.65642	0.55073					AVRG		0.69071		10.88054
3 Vinyl Chloride	0.55925	0.57778	0.65631	0.66895	0.66697	0.66768					
	0.62851	0.53183					AVRG		0.61966		8.94660

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
End Cal Date : 29-MAR-2016 20:03
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
4 Bromomethane	0.78227	0.71355	0.73867	0.64487	0.57653	0.55945					
	0.51690	0.42850					AVRG		0.62009		19.52827
5 Chloroethane	2987	4613	9365	33061	91229	173796					
	300362	581921					QUAD	0.000e+000	3.44806	1.69139	0.99932
6 Trichlorofluoromethane	1.11625	1.16095	1.20891	1.13829	1.09301	1.08840					
	+++++	+++++					AVRG		1.13430		4.02664
7 1,1-Dichloroethene	1.06847	1.07717	1.09207	1.04134	1.01649	1.00377					
	0.95080	0.81045					AVRG		1.00757		9.11220
8 Carbon Disulfide	2.31475	2.09086	2.11789	2.02050	1.98297	1.97893					
	1.85517	1.48891					AVRG		1.98125		12.09181
9 112Trichloro122Trifluoroethan	0.69088	0.65358	0.69116	0.65344	0.62529	0.63097					
	0.60231	0.54688					AVRG		0.63681		7.47907
10 Iodomethane	+++++	+++++	10355	23875	175099	412820					
	924984	1988731					LINR	0.000e+000	0.59614		0.99851

ARI Labs, Inc.

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Last Edit : 30-Mar-2016 08:05 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
11 Bromoethane	0.47379	0.45921	0.47603	0.45343	0.43105	0.42449					
	0.39812	0.35182					AVRG		0.43349		9.74827
12 Acrolein	+++++	+++++	0.09936	0.09563	0.09252	0.09096					
	0.08619	0.06461					AVRG		0.08821		14.03670
13 Methylene Chloride	+++++	+++++	34853	58499	238633	467547					
	915481	1796572					LINR	0.000e+000	0.56049		0.99003
14 Acetone	+++++	+++++	0.18692	0.17264	0.16306	0.15577					
	0.14425	0.10448					AVRG		0.15452		18.44681
15 Trans-1,2-Dichloroethene	0.72086	0.70771	0.69847	0.68699	0.65227	0.64907					
	0.62240	0.55163					AVRG		0.66117		8.38527
16 n-hexane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
17 Methyl tert butyl ether	1.90958	1.93203	2.03850	1.98312	1.95086	1.91080					
	1.78604	1.35892					AVRG		1.85873		11.53955

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Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih

Compound	0.2000000 Level 1 / 40.0000 Level 7	0.5000000 Level 2 / 80.0000 Level 8	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
18 1,1-Dichloroethane	0.90525	0.99101	1.06292	1.00001	0.99854	0.99611					
	0.93712	0.80410					AVRG		0.96188		8.21822
19 Acrylonitrile	0.12282	0.14294	0.16076	0.16453	0.17575	0.17124					
	0.16530	0.12564					AVRG		0.15362		13.36885
21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
20 Vinyl Acetate	0.61825	0.70595	0.84981	0.84558	1.00279	1.01660					
	0.98059	0.75443					AVRG		0.84675		17.38432
22 Cis-1,2-Dichloroethene	0.53311	0.58550	0.64652	0.61909	0.60600	0.60718					
	0.58396	0.51736					AVRG		0.58734		7.36678
23 2,2-Dichloropropane	0.55861	0.59046	0.65485	0.67952	0.73980	0.77630					
	0.76319	0.67797					AVRG		0.68009		11.54589
24 Bromochloromethane	0.26407	0.25799	0.28439	0.29517	0.29203	0.29470					
	0.27095	0.24064					AVRG		0.27499		7.24496

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Last Edit : 30-Mar-2016 08:05 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
25 Chloroform	0.86901	0.91942	0.96371	0.96613	0.95582	0.95677					
	0.90942	0.77982					AVRG		0.91501		7.01465
26 Carbon Tetrachloride	0.29087	0.25960	0.29824	0.31863	0.35736	0.40984					
	0.41616	0.38969					AVRG		0.34255		17.26231
28 1,1,1-Trichloroethane	0.66763	0.71186	0.78232	0.81064	0.83763	0.86079					
	0.83256	0.73624					AVRG		0.77996		8.76820
30 1,1-Dichloropropene	0.46257	0.43733	0.46477	0.45432	0.45917	0.48903					
	0.46665	0.40793					AVRG		0.45522		5.24594
29 2-Butanone	0.15325	0.18833	0.20808	0.21101	0.21179	0.20858					
	0.19373	0.13627					AVRG		0.18888		15.28242
31 Benzene	1.32055	1.36508	1.45165	1.40094	1.38163	1.43745					
	1.31385	1.06235					AVRG		1.34169		9.17888
35 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
34 1,2-Dichloroethane	0.47176	0.46738	0.46928	0.45909	0.44857	0.46409					
	0.43485	0.36702					AVRG		0.44775		7.78515
36 Trichloroethene	0.39864	0.36183	0.40277	0.39100	0.38670	0.40504					
	0.38331	0.34017					AVRG		0.38368		5.80900
38 Dibromomethane	0.17614	0.18637	0.19060	0.19576	0.19491	0.20895					
	0.19328	0.16193					AVRG		0.18849		7.50903
39 1,2-Dichloropropane	0.29744	0.31129	0.35044	0.32310	0.33412	0.35795					
	0.33293	0.28701					AVRG		0.32429		7.61513
40 Bromodichloromethane	0.28926	0.31225	0.35870	0.36126	0.39714	0.42977					
	0.42192	0.37309					AVRG		0.36792		13.40949
173 2-Pentanone	+++++	+++++	0.03759	0.04108	0.04748	0.04941					
	0.04615	0.03337					AVRG		0.04251		14.70285
42 Cis 1,3-dichloropropene	0.33046	0.37342	0.41522	0.43652	0.49860	0.54426					
	0.51848	0.44837					AVRG		0.44567		16.38687

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
41 2-Chloroethyl Vinyl Ether	+++++	0.15003	0.15305	0.17629	0.20168	0.21859					
	0.21019	0.16805					AVRG		0.18255		15.17699
44 Toluene	0.88323	0.91171	0.95990	0.91884	0.88958	0.92455					
	0.86740	0.73905					AVRG		0.88678		7.46106
45 4-Methyl-2-Pentanone	+++++	+++++	0.10868	0.11148	0.11923	0.12248					
	0.11347	0.08280					AVRG		0.10969		12.86980
46 Tetrachloroethene	0.40658	0.43063	0.46749	0.44914	0.44114	0.43852					
	0.42327	0.39313					AVRG		0.43124		5.48082
47 Trans 1,3-Dichloropropene	2389	6733	16976	39515	239443	503726					
	1046214	2019636					LINR	0.000e+000	0.40922		0.99362
48 1,1,2-Trichloroethane	0.24462	0.25932	0.29094	0.28973	0.29299	0.30652					
	0.28646	0.23270					AVRG		0.27541		9.58344
49 Chlorodibromomethane	1750	4673	10604	27033	165488	356719					
	753390	1462250					LINR	0.000e+000	0.31986		0.99529

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
50 1,3-Dichloropropane	0.51431	0.53167	0.56170	0.57898	0.56813	0.57741					
	0.53934	0.43524					AVRG		0.53835		8.84302
51 1,2-Dibromoethane	0.21240	0.25617	0.26762	0.27665	0.28969	0.30154					
	0.28534	0.22844					AVRG		0.26473		11.67059
52 2-Hexanone	+++++	+++++	0.19017	0.20676	0.23629	0.23586					
	0.21093	0.14625					AVRG		0.20438		16.43148
54 Chlorobenzene	1.07532	1.20248	1.21400	1.17337	1.15096	1.14082					
	1.05081	0.88935					AVRG		1.11214		9.57448
55 Ethyl Benzene	0.54229	0.59224	0.61034	0.61537	0.62685	0.62510					
	0.59457	0.54286					AVRG		0.59370		5.71618
56 1,1,1,2-Tetrachloroethane	1757	5204	13011	29696	171258	373231					
	765925	1555770					LINR	0.000e+000	0.33624		0.99780
57 m,p-xylene	0.67161	0.70427	0.78267	0.78402	0.77720	0.76947					
	0.71796	0.58191					AVRG		0.72364		9.81359

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
58 o-Xylene	0.55066	0.64029	0.72776	0.73609	0.74060	0.73737					
	0.70493	0.62251					AVRG		0.68253		10.29686
59 Styrene	0.80699	0.96378	1.09771	1.14658	1.23360	1.26288					
	1.11636	0.92376					AVRG		1.06896		14.77390
60 Bromoform	689	2195	5511	12900	90808	209435					
	454259	868010					LINR	0.000e+000	0.34625		0.99462
61 Isopropyl Benzene	2.98915	3.17666	3.47241	3.52265	3.50917	3.53443					
	3.07478	2.37176					AVRG		3.20638		12.54218
63 Bromobenzene	0.87104	0.84113	0.95825	0.92242	0.90158	0.92126					
	0.83514	0.75589					AVRG		0.87584		7.34362
64 N-Propyl Benzene	3.44485	3.66981	3.94789	3.85809	3.96230	3.95703					
	3.40598	2.55951					AVRG		3.60068		13.25947
82 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
65 1,1,2,2-Tetrachloroethane	0.57021	0.66698	0.68205	0.70110	0.73224	0.74994					
	0.67965	0.52089					AVRG		0.66288		11.85992
66 2-Chloro Toluene	2.43530	2.56389	2.64812	2.64905	2.71380	2.74440					
	2.50403	2.12763					AVRG		2.54828		7.81886
67 1,3,5-Trimethyl Benzene	2.33439	2.48371	2.81633	2.86681	2.96151	2.96960					
	2.64077	2.09947					AVRG		2.64657		11.98431
68 1,2,3-Trichloropropane	0.15679	0.23420	0.24470	0.25596	0.25009	0.24859					
	0.23008	0.18528					AVRG		0.22571		15.77073
69 Trans-1,4-Dichloro 2-Butene	+++++	+++++	0.14533	0.16308	0.16059	0.16796					
	0.16664	0.14660					AVRG		0.15837		6.29019
70 4-Chloro Toluene	2.20543	2.41043	2.59052	2.48386	2.43654	2.47572					
	2.22956	1.86508					AVRG		2.33714		9.86300
71 T-Butyl Benzene	2.15274	2.30201	2.44927	2.52053	2.62912	2.63217					
	2.36280	1.92215					AVRG		2.37135		10.29559

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
72 1,2,4-Trimethylbenzene	2.28637	2.55115	2.78969	2.88715	2.98717	3.00685					
	2.69861	2.12329					AVRG		2.66629		12.16513
73 S-Butyl Benzene	3.14212	3.34918	3.63266	3.64579	3.73776	3.73505					
	3.30940	2.47561					AVRG		3.37845		12.60256
74 4-Isopropyl Toluene	2.26470	2.60974	2.98533	3.07072	3.20958	3.25810					
	2.87670	2.23789					AVRG		2.81409		14.26640
75 1,3-Dichlorobenzene	1.56681	1.73688	1.80746	1.78077	1.76264	1.77797					
	1.63509	1.40117					AVRG		1.68360		8.35577
77 1,4-Dichlorobenzene	1.79009	1.80383	1.94107	1.83424	1.75981	1.77822					
	1.60720	1.36061					AVRG		1.73438		10.19975
78 N-Butyl Benzene	2.26428	2.43932	2.59134	2.68141	2.77713	2.84695					
	2.59185	2.03827					AVRG		2.52882		10.70159
80 1,2-Dichlorobenzene	1.55172	1.68632	1.75914	1.66362	1.64186	1.65571					
	1.51993	1.28505					AVRG		1.59542		9.15839

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	40.0000 Level 7	80.0000 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
81 1,2-Dibromo 3-Chloropropane	+++++	0.07417	0.07202	0.08120	0.10209	0.11141	0.10864	0.08242	AVRG		0.09028		18.42560
83 Hexachloro 1,3-Butadiene	+++++	0.41460	0.46608	0.46381	0.45746	0.46619	0.45805	0.41761	AVRG		0.44911		5.08410
84 1,2,4-Trichlorobenzene	+++++	1.00457	1.10707	1.12511	1.11797	1.13909	1.08669	0.94194	AVRG		1.07463		6.82695
85 Naphthalene	+++++	2.00549	2.22550	2.46801	2.58239	2.59273	2.39812	1.75994	AVRG		2.29031		13.65207
86 1,2,3-Trichlorobenzene	+++++	1.03054	1.07596	1.10007	1.08009	1.09935	1.03067	0.86060	AVRG		1.03961		8.08499
$ 27 Dibromofluoromethane	0.47598	0.47904	0.47333	0.48317	0.47943	0.48605	0.47996	0.46905	AVRG		0.47825		1.12818
S 33 d4-1,2-Dichloroethane	0.61951	0.61264	0.55984	0.55504	0.55543	0.56237	0.55870	0.50169	AVRG		0.56565		6.51621

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
$ 43 d8-Toluene	1.17360	1.18154	1.19875	1.17298	1.14565	1.21168					
	1.19231	1.19510					AVRG		1.18395		1.71391
$ 62 4-Bromofluorobenzene	0.37326	0.40026	0.41569	0.40512	0.41074	0.41640					
	0.41962	0.42001					AVRG		0.40764		3.81199
$ 79 d4-1,2-Dichlorobenzene	0.95424	0.95645	0.96750	0.94079	0.95644	0.96268					
	0.96282	0.94836					AVRG		0.95616		0.89815

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAR-2016 17:33
End Cal Date : 29-MAR-2016 20:03
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Last Edit : 30-Mar-2016 08:05 lanih

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Batch File: \\target\share\chem1\nt2.i\20160329.b
Inst ID: nt2.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08
FILENAME:	03291610	03291611	03291612	03291613	03291614	03291615	03291616	03291617
INJ.DATE:	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016
INJ.TIME:	17:33	17:54	18:16	18:37	18:59	19:20	19:41	20:03

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Dichlorodifluoromethan	1.422	1.422	1.434	1.433	1.433	1.434	1.434	1.434	1.433	1.327-1.540	1.431	0.006
2 Chloromethane	1.587	1.588	1.588	1.599	1.599	1.600	1.600	1.600	1.599	1.492-1.705	1.595	0.006
3 Vinyl Chloride	1.658	1.659	1.671	1.670	1.670	1.671	1.671	1.671	1.670	1.563-1.776	1.667	0.006
4 Bromomethane	1.942	1.943	1.955	1.954	1.954	1.955	1.955	1.955	1.954	1.847-2.060	1.951	0.006
5 Chloroethane	2.049	2.049	2.061	2.060	2.072	2.061	2.061	2.061	2.060	1.954-2.167	2.059	0.008
6 Trichlorofluoromethane	2.155	2.168	2.179	2.190	2.202	2.180	2.191	2.191	2.190	2.084-2.297	2.182	0.015
7 1,1-Dichloroethene	2.664	2.676	2.688	2.699	2.699	2.688	2.700	2.700	2.699	2.593-2.806	2.689	0.013
8 Carbon Disulfide	2.676	2.688	2.700	2.699	2.711	2.700	2.700	2.712	2.699	2.593-2.806	2.698	0.012
9 112Trichloro122Trifluo	2.723	2.736	2.747	2.747	2.759	2.748	2.747	2.759	2.747	2.640-2.853	2.746	0.012
10 Iodomethane	2.818	2.830	2.842	2.841	2.841	2.842	2.842	2.842	2.841	2.735-2.948	2.837	0.009
11 Bromoethane	2.960	2.972	2.972	2.983	2.983	2.984	2.984	2.984	2.983	2.877-3.090	2.978	0.009
12 Acrolein	3.090	3.091	3.091	3.102	3.102	3.102	3.102	3.102	3.102	2.995-3.208	3.098	0.006
13 Methylene Chloride	3.327	3.339	3.339	3.350	3.350	3.339	3.351	3.351	3.350	3.243-3.456	3.343	0.009
14 Acetone	3.433	3.434	3.434	3.433	3.433	3.434	3.434	3.434	3.433	3.326-3.539	3.433	0.000
15 Trans-1,2-Dichloroethe	3.492	3.493	3.505	3.504	3.504	3.505	3.505	3.505	3.504	3.397-3.610	3.501	0.006
16 n-hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.954	3.847-4.061	+++++	+++++
17 Methyl tert butyl ethe	3.658	3.658	3.659	3.658	3.658	3.659	3.659	3.658	3.658	3.551-3.764	3.658	0.000

Reviewer 1 _____ Date: 3/30/16
Reviewer 2 _____ Date: 3/30/16

Report Date : 30-Mar-2016 08:59

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Batch File: \\target\share\chem1\nt2.i\20160329.b
Inst ID: nt2.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 1,1-Dichloroethane	4.084	4.096	4.096	4.095	4.096	4.096	4.096	4.108	4.095	3.989-4.202	4.096	0.006
	19 Acrylonitrile	4.167	4.179	4.179	4.178	4.179	4.179	4.179	4.179	4.178	4.072-4.285	4.177	0.004
	21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.560	4.453-4.667	+++++	+++++
	20 Vinyl Acetate	4.356	4.357	4.357	4.368	4.368	4.369	4.369	4.368	4.368	4.261-4.474	4.364	0.006
	22 Cis-1,2-Dichloroethene	4.569	4.570	4.570	4.569	4.581	4.570	4.582	4.581	4.569	4.462-4.675	4.574	0.006
	23 2,2-Dichloropropane	4.652	4.652	4.652	4.652	4.652	4.653	4.652	4.652	4.652	4.545-4.758	4.652	0.000
	24 Bromochloromethane	4.735	4.735	4.735	4.734	4.735	4.735	4.735	4.747	4.734	4.628-4.841	4.737	0.004
	25 Chloroform	4.806	4.806	4.806	4.805	4.806	4.806	4.806	4.806	4.805	4.699-4.912	4.806	0.000
	26 Carbon Tetrachloride	4.889	4.889	4.889	4.888	4.889	4.889	4.889	4.901	4.888	4.774-5.003	4.890	0.004
$	27 Dibromofluoromethane	4.948	4.948	4.948	4.947	4.948	4.948	4.948	4.948	4.947	4.841-5.054	4.948	0.000
	28 1,1,1-Trichloroethane	4.948	4.948	4.948	4.947	4.948	4.948	4.948	4.948	4.947	4.841-5.054	4.948	0.000
	30 1,1-Dichloropropene	5.042	5.043	5.043	5.054	5.054	5.055	5.055	5.055	5.054	4.940-5.168	5.050	0.006
	29 2-Butanone	5.066	5.067	5.067	5.078	5.078	5.079	5.078	5.078	5.078	4.971-5.184	5.074	0.006
	31 Benzene	5.244	5.244	5.244	5.243	5.244	5.244	5.244	5.244	5.243	5.129-5.358	5.244	0.000
*	32 Pentafluorobenzene	5.326	5.327	5.327	5.326	5.326	5.327	5.327	5.327	5.326	5.220-5.433	5.327	0.000
$	33 d4-1,2-Dichloroethane	5.350	5.351	5.351	5.350	5.350	5.351	5.351	5.351	5.350	5.243-5.456	5.350	0.000
	35 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.693	5.579-5.807	+++++	+++++
	34 1,2-Dichloroethane	5.397	5.398	5.410	5.409	5.409	5.410	5.410	5.410	5.409	5.294-5.523	5.407	0.006
	36 Trichloroethene	5.681	5.682	5.682	5.681	5.681	5.682	5.682	5.694	5.681	5.567-5.795	5.683	0.004
*	37 1,4-Difluorobenzene	5.717	5.717	5.717	5.717	5.717	5.718	5.717	5.717	5.717	5.602-5.831	5.717	0.000
	38 Dibromomethane	5.989	5.990	5.990	5.989	5.989	5.990	6.001	6.001	5.989	5.874-6.103	5.992	0.006
	39 1,2-Dichloropropane	6.060	6.061	6.061	6.060	6.060	6.061	6.061	6.061	6.060	5.945-6.174	6.060	0.000

Report Date : 30-Mar-2016 08:59

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Batch File: \\target\share\chem1\nt2.i\20160329.b
Inst ID: nt2.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 Bromodichloromethane	6.107	6.108	6.108	6.107	6.119	6.120	6.120	6.120	6.107	5.993-6.221	6.114	0.006
173 2-Pentanone	6.344	6.345	6.345	6.344	6.344	6.357	6.356	6.356	6.344	6.229-6.458	6.349	0.006
42 Cis 1,3-dichloropropen	6.557	6.558	6.558	6.557	6.557	6.558	6.558	6.569	6.557	6.442-6.671	6.559	0.004
$ 43 d8-Toluene	6.687	6.688	6.688	6.687	6.687	6.688	6.688	6.688	6.687	6.572-6.801	6.687	0.000
41 2-Chloroethyl Vinyl Et	6.522	6.522	6.522	6.521	6.521	6.522	6.522	6.534	6.521	6.407-6.635	6.523	0.004
44 Toluene	6.723	6.723	6.723	6.722	6.723	6.723	6.723	6.723	6.722	6.608-6.837	6.723	0.000
45 4-Methyl-2-Pentanone	6.995	6.995	6.995	6.995	6.995	6.995	6.995	7.007	6.995	6.880-7.109	6.997	0.004
46 Tetrachloroethene	6.995	6.995	6.995	6.995	6.995	6.995	6.995	6.995	6.995	6.839-7.150	6.995	0.000
47 Trans 1,3-Dichloroprop	7.019	7.019	7.019	7.018	7.018	7.019	7.019	7.031	7.018	6.904-7.132	7.020	0.004
48 1,1,2-Trichloroethane	7.137	7.137	7.137	7.136	7.137	7.137	7.137	7.137	7.136	7.022-7.251	7.137	0.000
49 Chlorodibromomethane	7.255	7.256	7.256	7.255	7.255	7.256	7.256	7.256	7.255	7.099-7.410	7.255	0.000
50 1,3-Dichloropropane	7.326	7.327	7.327	7.326	7.326	7.327	7.327	7.327	7.326	7.170-7.481	7.326	0.000
51 1,2-Dibromoethane	7.421	7.421	7.421	7.420	7.421	7.421	7.421	7.433	7.420	7.306-7.535	7.423	0.004
52 2-Hexanone	7.587	7.575	7.575	7.574	7.586	7.587	7.587	7.587	7.574	7.419-7.730	7.582	0.006
* 53 d5-Chlorobenzene	7.776	7.776	7.776	7.775	7.776	7.776	7.776	7.776	7.775	7.620-7.931	7.776	0.000
54 Chlorobenzene	7.788	7.788	7.788	7.787	7.788	7.788	7.788	7.788	7.787	7.632-7.943	7.788	0.000
55 Ethyl Benzene	7.811	7.812	7.800	7.811	7.811	7.812	7.812	7.812	7.811	7.655-7.966	7.810	0.004
56 1,1,1,2-Tetrachloroeth	7.835	7.835	7.835	7.835	7.835	7.836	7.836	7.835	7.835	7.679-7.990	7.835	0.000
57 m,p-xylene	7.918	7.906	7.906	7.906	7.906	7.907	7.907	7.906	7.906	7.750-8.061	7.908	0.004
58 o-Xylene	8.225	8.214	8.214	8.213	8.214	8.214	8.214	8.214	8.213	8.058-8.369	8.215	0.004
59 Styrene	8.261	8.261	8.261	8.261	8.261	8.262	8.261	8.261	8.261	8.105-8.416	8.261	0.000
60 Bromoform	8.285	8.285	8.285	8.284	8.285	8.285	8.285	8.285	8.284	8.095-8.474	8.285	0.000
61 Isopropyl Benzene	8.450	8.439	8.439	8.438	8.438	8.439	8.439	8.439	8.438	8.248-8.628	8.440	0.004
$ 62 4-Bromofluorobenzene	8.663	8.652	8.652	8.651	8.651	8.652	8.652	8.652	8.651	8.495-8.806	8.653	0.004

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Batch File: \\target\share\chem1\nt2.i\20160329.b
Inst ID: nt2.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	63 Bromobenzene	8.734	8.735	8.735	8.734	8.734	8.735	8.735	8.735	8.734	8.544-8.923	8.735	0.000
	64 N-Propyl Benzene	8.746	8.747	8.747	8.746	8.746	8.747	8.747	8.747	8.746	8.556-8.935	8.746	0.000
	82 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.074	8.918-9.229	+++++	+++++
	65 1,1,2,2-Tetrachloroeth	8.805	8.806	8.794	8.805	8.805	8.794	8.794	8.806	8.805	8.615-8.994	8.801	0.006
	66 2-Chloro Toluene	8.864	8.865	8.865	8.864	8.864	8.865	8.865	8.865	8.864	8.674-9.054	8.865	0.000
	67 1,3,5-Trimethyl Benzen	8.900	8.889	8.889	8.888	8.888	8.889	8.889	8.889	8.888	8.698-9.077	8.890	0.004
	68 1,2,3-Trichloropropane	8.912	8.900	8.900	8.900	8.900	8.901	8.900	8.900	8.900	8.710-9.089	8.902	0.004
	69 Trans-1,4-Dichloro 2-B	8.935	8.936	8.936	8.935	8.935	8.936	8.936	+++++	8.935	8.745-9.125	8.936	0.000
	70 4-Chloro Toluene	8.995	8.983	8.983	8.982	8.983	8.983	8.983	8.983	8.982	8.793-9.172	8.985	0.004
	71 T-Butyl Benzene	9.137	9.125	9.125	9.124	9.125	9.125	9.125	9.125	9.124	8.935-9.314	9.127	0.004
	72 1,2,4-Trimethylbenzene	9.184	9.184	9.173	9.172	9.172	9.173	9.173	9.184	9.172	8.982-9.361	9.177	0.006
	73 S-Butyl Benzene	9.267	9.255	9.255	9.255	9.255	9.256	9.255	9.255	9.255	9.065-9.444	9.257	0.004
	74 4-Isopropyl Toluene	9.373	9.374	9.362	9.361	9.361	9.362	9.362	9.362	9.361	9.171-9.551	9.365	0.005
	75 1,3-Dichlorobenzene	9.432	9.433	9.421	9.432	9.432	9.421	9.433	9.433	9.432	9.242-9.622	9.430	0.005
*	76 d4-1,4-Dichlorobenzene	9.492	9.480	9.480	9.479	9.480	9.480	9.480	9.480	9.479	9.290-9.669	9.481	0.004
	77 1,4-Dichlorobenzene	9.503	9.492	9.492	9.491	9.491	9.492	9.492	9.492	9.491	9.301-9.681	9.493	0.004
	78 N-Butyl Benzene	9.705	9.693	9.693	9.692	9.693	9.693	9.681	9.693	9.692	9.503-9.882	9.693	0.006
$	79 d4-1,2-Dichlorobenzene	9.823	9.812	9.812	9.811	9.811	9.812	9.812	9.812	9.811	9.621-10.000	9.813	0.004
	80 1,2-Dichlorobenzene	9.835	9.823	9.812	9.811	9.811	9.812	9.812	9.812	9.811	9.621-10.000	9.816	0.009
	81 1,2-Dibromo 3-Chloropr	10.462	10.451	10.451	10.450	10.450	10.451	10.451	+++++	10.450	10.260-10.639	10.452	0.004
	83 Hexachloro 1,3-Butadie	11.006	10.983	10.971	10.970	10.971	10.971	10.971	10.971	10.970	10.781-11.160	10.977	0.013
	84 1,2,4-Trichlorobenzene	11.030	10.995	10.995	10.994	10.994	10.995	10.995	10.995	10.994	10.804-11.183	10.999	0.012
	85 Naphthalene	11.302	11.267	11.267	11.266	11.266	11.255	11.255	11.267	11.266	11.077-11.456	11.268	0.015

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Batch File: \\target\share\chem1\nt2.i\20160329.b
Inst ID: nt2.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
86 1,2,3-Trichlorobenzene	11.456	11.433	11.421	11.420	11.420	11.409	11.409	11.421	11.420	11.230-11.609	11.424	0.015

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160329.b

ARI Job No.: 8000 Method: 8260032916.m Instrument: nt2.i Date: 29-MAR-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1733	03291610.D	8000329	VSTD80	1	Vinyl Chloride, Dichlorodifluoromethane,
1754	03291611.D	4000329	VSTD40	1	Bromomethane, Chloroethane, Dichlorodifluoromethane,
1816	03291612.D	2000329	VSTD20	1	Bromomethane, 1,4-Dichlorobenzene, Dichlorodifluoromethane,
1837	03291613.D	1000329	VSTD10	1	Vinyl Chloride, Bromomethane, Dichlorodifluoromethane,
1859	03291614.D	0200329	VSTD02	1	Dichlorodifluoromethane,
1920	03291615.D	0100329	VSTD01	1	Vinyl Chloride, Bromomethane, Bromoethane, Trans-1,4-Dichloro 2-Butene, Dichlorodifluoromethane,
1941	03291616.D	0050329	VSTD0.5	1	Chloroethane, Dichlorodifluoromethane,
2003	03291617.D	0020329	VSTD0.2	1	Bromomethane, Vinyl Acetate, 1,2-Dichloropropane, 2-Chloroethyl Vinyl Ether, Naphthalene, Dichlorodifluoromethane,
2024	03291618.D	SCV0329	SCV	1	Dichlorodifluoromethane,

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D

Date : 29-MAR-2016 11:31

Client ID: RTBFB0329

Instrument: nt2.i

Sample Info: BFB0329,RTBFB0329,,1,032916,

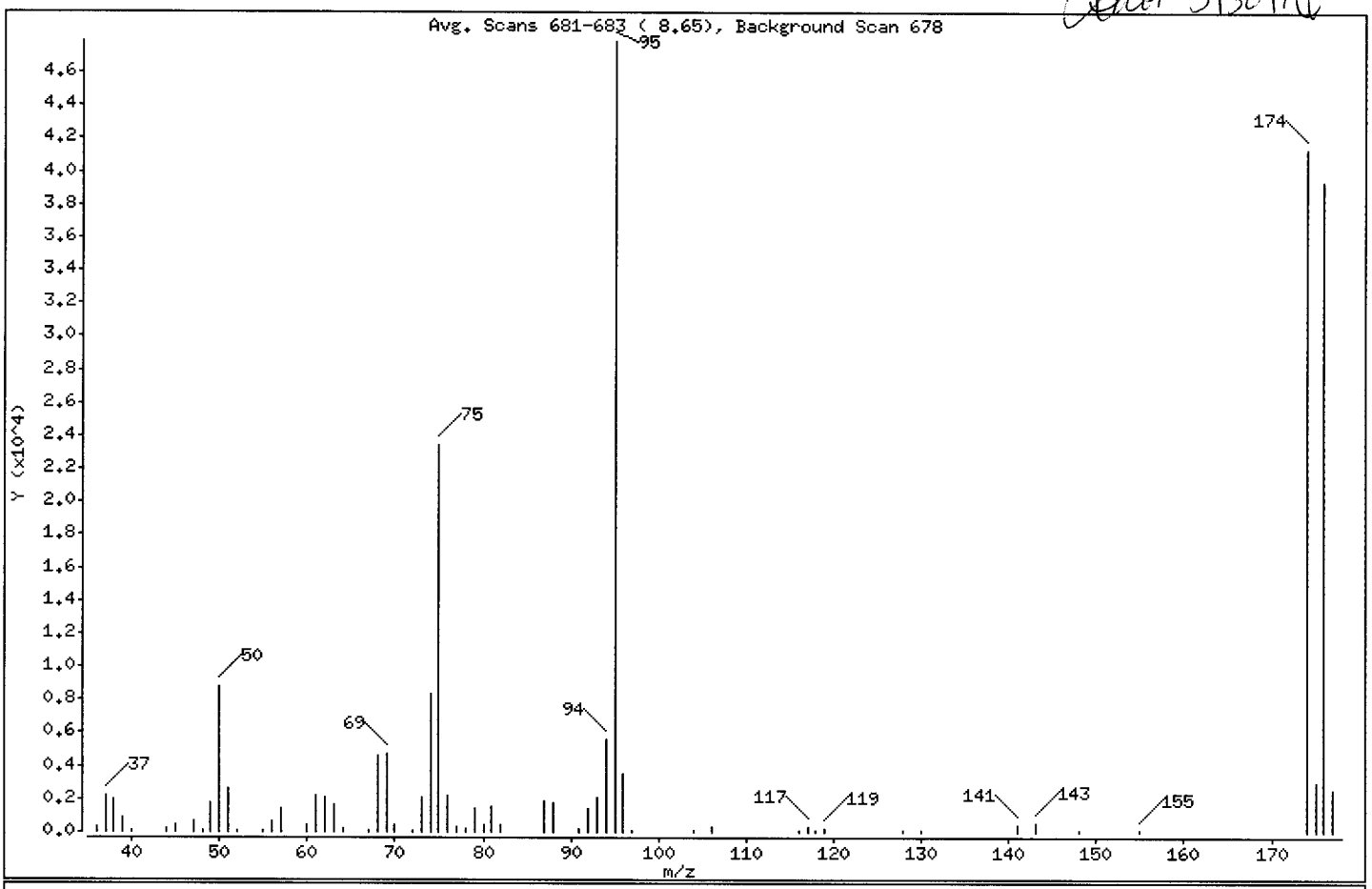
Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

1 Bromofluorobenzene

3/30/16



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.28
75	30.00 - 60.00% of mass 95	48.95
96	5.00 - 9.00% of mass 95	7.25
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	86.45
175	5.00 - 9.00% of mass 174	6.10 (7.05)
176	95.00 - 101.00% of mass 174	82.26 (95.15)
177	5.00 - 9.00% of mass 176	5.35 (6.50)

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D

Date : 29-MAR-2016 11:31

Client ID: RTBFB0329

Instrument: nt2.i

Sample Info: BFB0329,RTBFB0329,,1,032916,

Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

Data File: 03291602.D
Spectrum: Avg. Scans 681-683 (8.65), Background Scan 678
Location of Maximum: 95.00
Number of points: 61

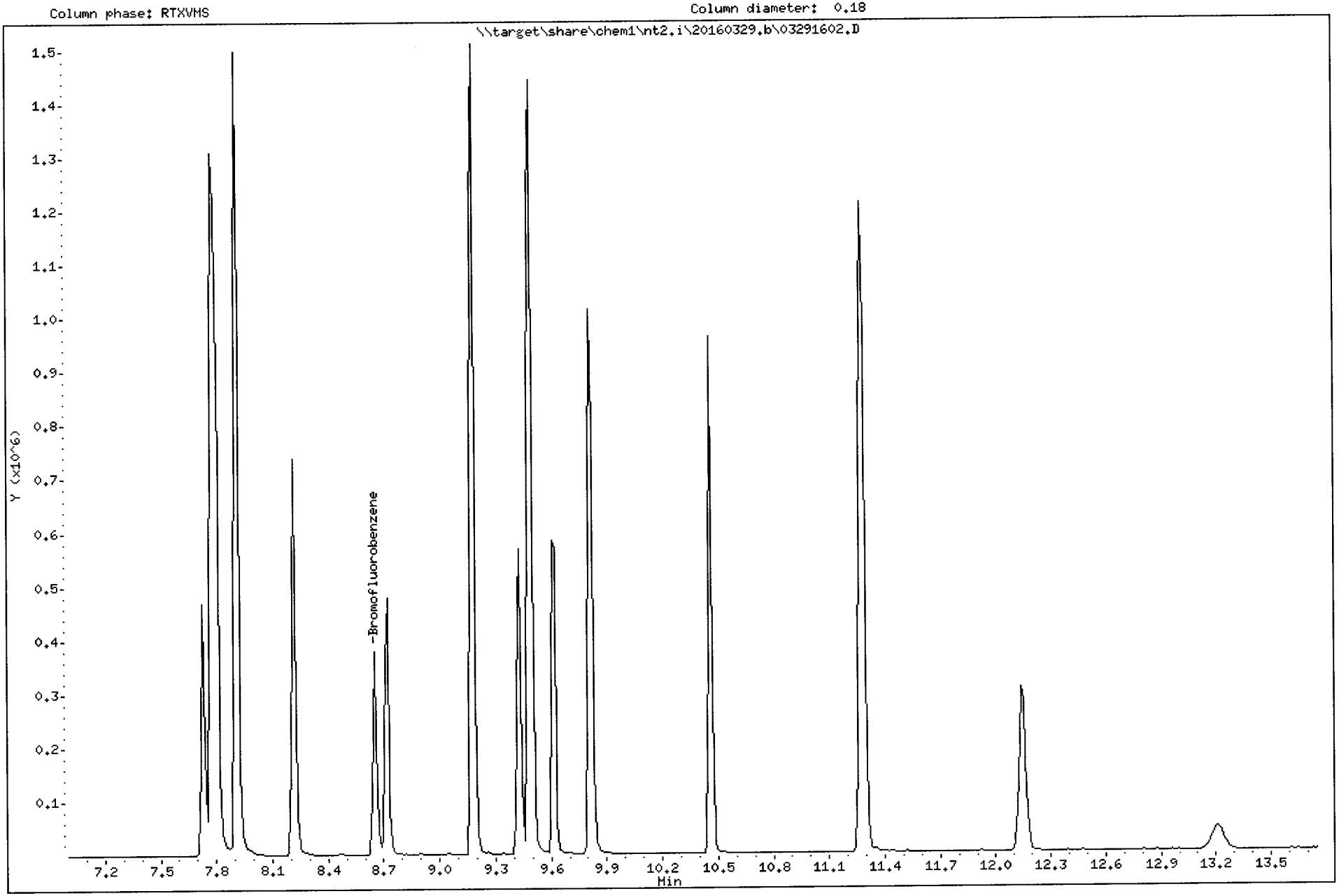
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	334	60.00	421	79.00	1486	117.00	325
37.00	2213	61.00	2183	80.00	387	118.00	128
38.00	1965	62.00	2104	81.00	1524	119.00	234
39.00	876	63.00	1615	82.00	406	128.00	133
40.00	77	64.00	233	87.00	1871	130.00	132
44.00	174	67.00	79	88.00	1722	141.00	480
45.00	431	68.00	4654	91.00	246	143.00	564
47.00	632	69.00	4719	92.00	1396	148.00	149
48.00	113	70.00	410	93.00	2037	155.00	84
49.00	1769	72.00	148	94.00	5584	174.00	41400
50.00	8753	73.00	2107	95.00	47888	175.00	2919
51.00	2685	74.00	8380	96.00	3473	176.00	39392
52.00	71	75.00	23440	97.00	78	177.00	2562
55.00	154	76.00	2154	104.00	122		
56.00	679	77.00	319	106.00	281		
57.00	1379	78.00	194	116.00	127		

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D
Date : 29-MAR-2016 11:31
Client ID: RTBFB0329
Sample Info: BFB0329,RTBFB0329,,1,032916,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291610.D
Lab Smp Id: 8000329 Client Smp ID: VSTD80
Inj Date : 29-MAR-2016 17:33
Operator : PC Inst ID: nt2.i
Smp Info : 8000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.421	1.433	(0.267)	1853120	80.0000	67.670(M)
173	2-Pentanone	86	6.344	6.344	(1.110)	858275	400.000	313.97
2	Chloromethane	50	1.587	1.599	(0.298)	1849539	80.0000	63.787
3	Vinyl Chloride	62	1.658	1.670	(0.311)	1786039	80.0000	68.661(M)
4	Bromomethane	94	1.942	1.954	(0.365)	1439020	80.0000	55.281
5	Chloroethane	64	2.048	2.060	(0.385)	581921	80.0000	80.300
6	Trichlorofluoromethane	101	2.155	2.190	(0.405)	844814	80.0000	17.742
7	1,1-Dichloroethene	61	2.664	2.699	(0.500)	2721758	80.0000	64.349
8	Carbon Disulfide	76	2.675	2.699	(0.502)	5000214	80.0000	60.120
9	112Trichloro122Trifluoroethane	101	2.723	2.747	(0.511)	1836598	80.0000	68.702
10	Iodomethane	142	2.817	2.841	(0.529)	1988731	80.0000	79.469
11	Bromoethane	108	2.959	2.983	(0.556)	1181526	80.0000	64.928
12	Acrolein	56	3.090	3.102	(0.580)	1084892	400.000	292.97
13	Methylene Chloride	84	3.326	3.350	(0.625)	1796572	80.0000	76.357
14	Acetone	43	3.433	3.433	(0.645)	1754385	400.000	270.46
15	Trans-1,2-Dichloroethene	96	3.492	3.504	(0.656)	1852533	80.0000	66.745
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	4563688	80.0000	58.488
18	1,1-Dichloroethane	63	4.083	4.094	(0.767)	2700428	80.0000	66.877
19	Acrylonitrile	53	4.166	4.178	(0.782)	421945	80.0000	65.429
20	Vinyl Acetate	43	4.356	4.368	(0.818)	2533625	80.0000	71.278
22	Cis-1,2-Dichloroethene	96	4.569	4.569	(0.858)	1737447	80.0000	70.468
23	2,2-Dichloropropane	77	4.651	4.652	(0.873)	2276836	80.0000	79.751
24	Bromochloromethane	128	4.734	4.734	(0.889)	808151	80.0000	70.007
25	Chloroform	83	4.805	4.805	(0.902)	2618864	80.0000	68.180
26	Carbon Tetrachloride	117	4.888	4.888	(0.855)	2004642	80.0000	91.010
$ 27	Dibromofluoromethane	111	4.947	4.947	(0.929)	98452	5.00000	4.904
28	1,1,1-Trichloroethane	97	4.947	4.947	(0.929)	2472538	80.0000	75.516
29	2-Butanone	43	5.066	5.078	(0.951)	2288220	400.000	288.59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	30 1,1-Dichloropropene	75	5.042	5.054	(0.882)	2098462	80.0000	71.689
	31 Benzene	78	5.243	5.243	(0.917)	5464889	80.0000	63.344
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	419789	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	105301	5.00000	4.435
	34 1,2-Dichloroethane	62	5.397	5.409	(0.944)	1887982	80.0000	65.575
	36 Trichloroethene	130	5.681	5.681	(0.994)	1749895	80.0000	70.928
*	37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	643017	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	833003	80.0000	68.728
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	1476437	80.0000	70.805
	40 Bromodichloromethane	83	6.107	6.107	(1.068)	1919215	80.0000	81.123
	41 2-Chloroethyl Vinyl Ether	63	6.521	6.521	(1.141)	864496	80.0000	73.646
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	2306456	80.0000	80.485
$	43 d8-Toluene	98	6.687	6.687	(1.170)	384234	5.00000	5.047
	44 Toluene	92	6.722	6.722	(1.176)	3801760	80.0000	66.672
	45 4-Methyl-2-Pentanone	58	6.994	6.995	(1.224)	2129567	400.000	301.93
	46 Tetrachloroethene	166	6.994	6.995	(0.900)	1860950	80.0000	72.931
	47 Trans 1,3-Dichloropropene	75	7.018	7.018	(1.228)	2019636	80.0000	76.753
	48 1,1,2-Trichloroethane	97	7.136	7.136	(1.248)	1197043	80.0000	67.594
	49 Chlorodibromomethane	129	7.255	7.255	(0.933)	1462250	80.0000	77.259
	50 1,3-Dichloropropane	76	7.326	7.326	(0.942)	2060264	80.0000	64.677
	51 1,2-Dibromoethane	107	7.420	7.420	(1.298)	1175121	80.0000	69.033
	52 2-Hexanone	43	7.586	7.574	(0.976)	3461552	400.000	286.24
*	53 d5-Chlorobenzene	117	7.775	7.775	(1.000)	591709	10.0000	
	54 Chlorobenzene	112	7.787	7.787	(1.002)	4209906	80.0000	63.974
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	2569720	80.0000	73.149
	56 1,1,1,2-Tetrachloroethane	131	7.834	7.835	(1.008)	1555770	80.0000	78.196
	57 m,p-xylene	106	7.917	7.906	(1.018)	5509128	160.000	128.66
	58 o-Xylene	106	8.225	8.212	(1.058)	2946741	80.0000	72.965
	59 Styrene	104	8.260	8.260	(1.062)	4372759	80.0000	69.133
	60 Bromoform	173	8.284	8.284	(0.873)	868010	80.0000	77.168
	61 Isopropyl Benzene	105	8.450	8.438	(0.890)	6164025	80.0000	59.176
$	62 4-Bromofluorobenzene	174	8.663	8.651	(1.114)	124261	5.00000	5.152
	63 Bromobenzene	156	8.734	8.734	(0.920)	1964510	80.0000	69.044
	64 N-Propyl Benzene	91	8.746	8.746	(0.921)	6651949	80.0000	56.867
	65 1,1,2,2-Tetrachloroethane	83	8.805	8.805	(0.928)	1353752	80.0000	62.864
	66 2-Chloro Toluene	91	8.864	8.864	(0.934)	5529548	80.0000	66.794
	67 1,3,5-Trimethyl Benzene	105	8.899	8.888	(0.938)	5456352	80.0000	63.462
	68 1,2,3-Trichloropropane	110	8.911	8.900	(0.939)	481531	80.0000	65.670
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.935	(0.941)	380989	80.0000	74.054
	70 4-Chloro Toluene	91	8.994	8.982	(0.948)	4847187	80.0000	63.841
	71 T-Butyl Benzene	119	9.136	9.124	(0.963)	4995518	80.0000	64.846
	72 1,2,4-Trimethylbenzene	105	9.183	9.172	(0.968)	5518249	80.0000	63.708
	73 S-Butyl Benzene	105	9.266	9.255	(0.976)	6433901	80.0000	58.621
	74 4-Isopropyl Toluene	119	9.373	9.361	(0.988)	5816107	80.0000	63.620
	75 1,3-Dichlorobenzene	146	9.432	9.432	(0.994)	3641535	80.0000	66.580
*	76 d4-1,4-Dichlorobenzene	152	9.491	9.479	(1.000)	324865	10.0000	
	77 1,4-Dichlorobenzene	146	9.503	9.491	(1.001)	3536126	80.0000	62.759
	78 N-Butyl Benzene	91	9.704	9.692	(1.022)	5297310	80.0000	64.481
$	79 d4-1,2-Dichlorobenzene	152	9.822	9.811	(1.035)	154044	5.00000	4.959
	80 1,2-Dichlorobenzene	146	9.834	9.811	(1.036)	3339751	80.0000	64.437
	81 1,2-Dibromo 3-Chloropropane	75	10.461	10.450	(1.102)	214199	80.0000	73.035
	83 Hexachloro 1,3-Butadiene	225	11.006	10.970	(1.160)	1085346	80.0000	74.389
	84 1,2,4-Trichlorobenzene	180	11.029	10.994	(1.162)	2448031	80.0000	70.122
	85 Naphthalene	128	11.301	11.266	(1.191)	4573935	80.0000	61.474

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
86 1,2,3-Trichlorobenzene	180	11.455	11.420	(1.207)	2236639	80.0000	66.225

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291610.D
Lab Smp Id: 8000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD80
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	419789	19.81
37 1,4-Difluorobenze	562526	281263	1125052	643017	14.31
53 d5-Chlorobenzene	502371	251186	1004742	591709	17.78
76 d4-1,4-Dichlorobe	277950	138975	555900	324865	16.88

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.01
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.49	0.13

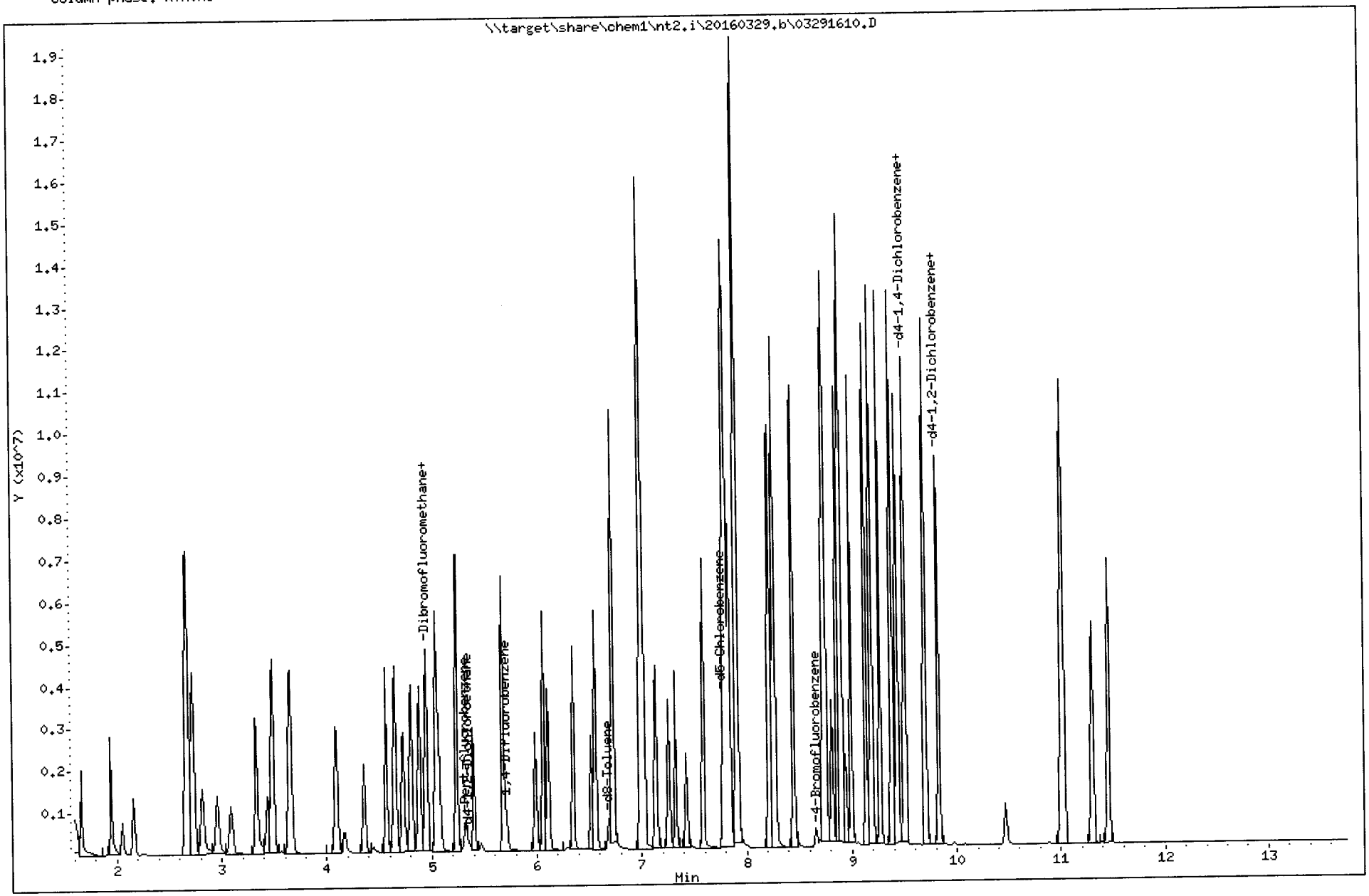
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291610.D
Date : 29-MAR-2016 17:33
Client ID: VSTD80
Sample Info: 8000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

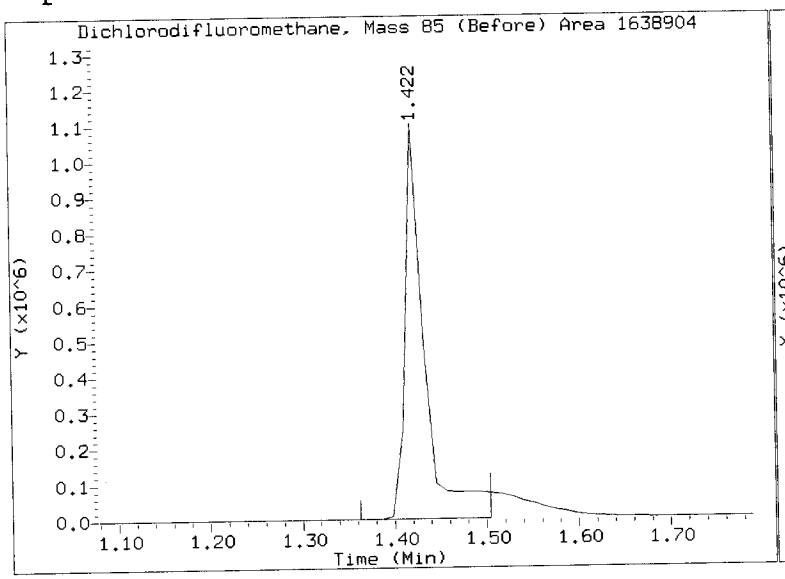
Column phase: RTXVMS

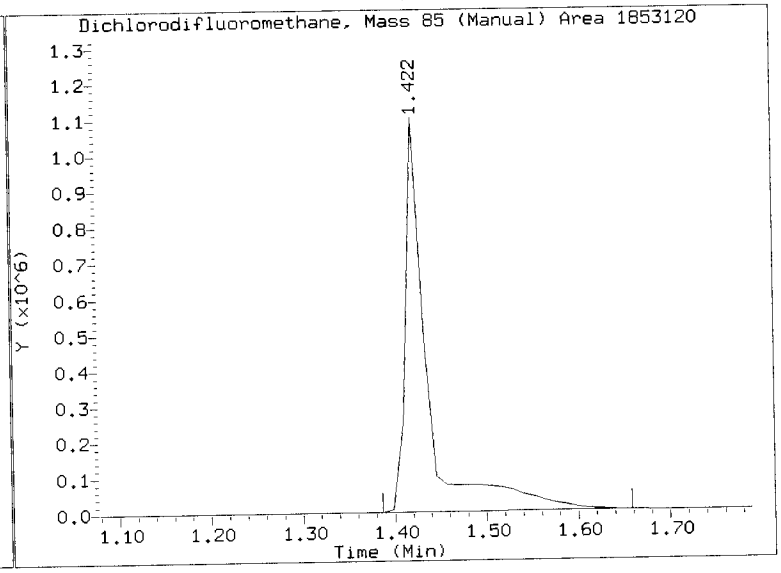


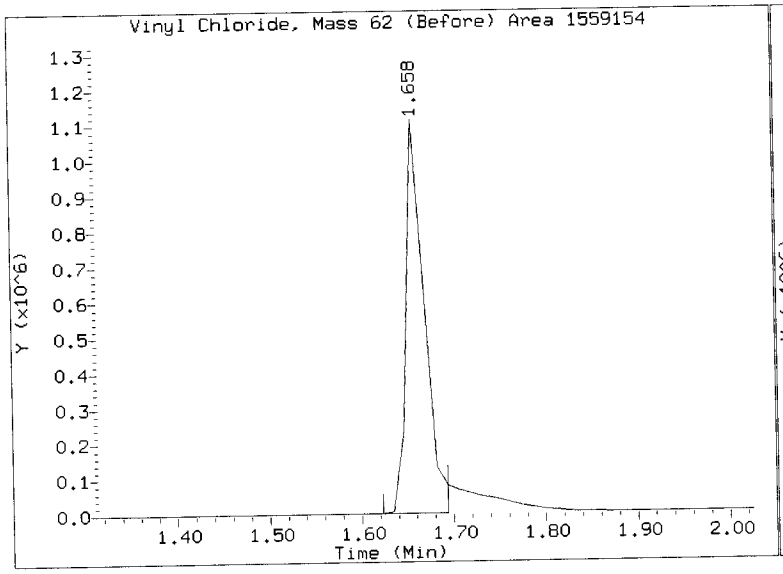
Quant Ion Manual Peak Adjustment Report

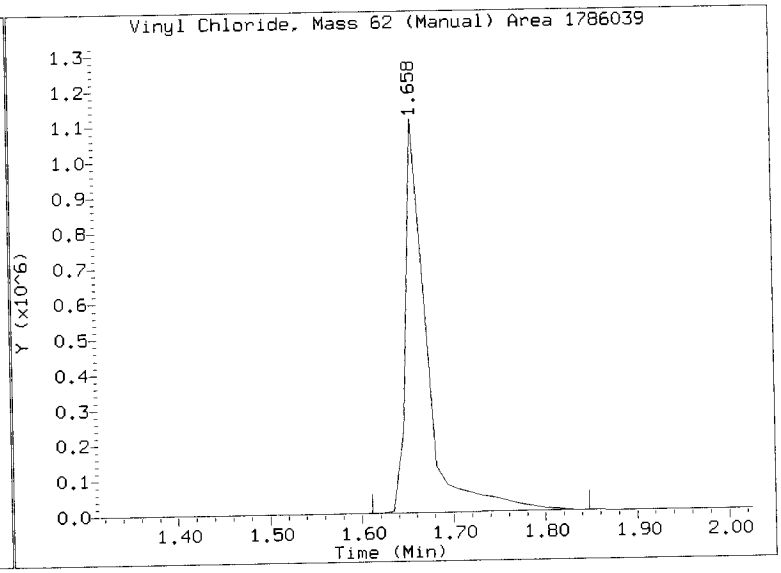
Datafile: //target/share/chem1/nt2.i/20160329.b/03291610.D
Injection Date: 29-MAR-2016 17:33
Lab ID:8000329 Client ID:VSTD80
Report Date: 03/30/2016 09:02

DLH 3/30/16









REVIEW SUMMARY FOR FILE - 03291610.D

Lab ID: 8000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 17:33

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291611.D
Lab Smp Id: 4000329 Client Smp ID: VSTD40
Inj Date : 29-MAR-2016 17:54
Operator : PC Inst ID: nt2.i
Smp Info : 4000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.422	1.433	(0.267)	943663	40.0000	38.816(M)
173	2-Pentanone	86	6.344	6.344	(1.110)	532974	200.000	217.12
2	Chloromethane	50	1.587	1.599	(0.298)	978518	40.0000	38.014
3	Vinyl Chloride	62	1.658	1.670	(0.311)	936916	40.0000	40.571
4	Bromomethane	94	1.942	1.954	(0.365)	770544	40.0000	33.344(M)
5	Chloroethane	64	2.049	2.060	(0.385)	300362	40.0000	38.777(M)
6	Trichlorofluoromethane	101	2.167	2.190	(0.407)	482820	40.0000	11.422
7	1,1-Dichloroethene	61	2.676	2.699	(0.502)	1417350	40.0000	37.746
8	Carbon Disulfide	76	2.688	2.699	(0.505)	2765495	40.0000	37.455
9	112Trichloro122Trifluoroethane	101	2.735	2.747	(0.514)	897865	40.0000	37.833
10	Iodomethane	142	2.830	2.841	(0.531)	924984	40.0000	41.635
11	Bromoethane	108	2.972	2.983	(0.558)	593482	40.0000	36.736
12	Acrolein	56	3.090	3.102	(0.580)	642402	200.000	195.41
13	Methylene Chloride	84	3.338	3.350	(0.627)	915481	40.0000	43.828
14	Acetone	43	3.433	3.433	(0.645)	1075158	200.000	186.70
15	Trans-1,2-Dichloroethene	96	3.492	3.504	(0.656)	927805	40.0000	37.654
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	2662440	40.0000	38.436
18	1,1-Dichloroethane	63	4.096	4.094	(0.769)	1396954	40.0000	38.970
19	Acrylonitrile	53	4.179	4.178	(0.785)	246411	40.0000	43.040
20	Vinyl Acetate	43	4.356	4.368	(0.818)	1461767	40.0000	46.323
22	Cis-1,2-Dichloroethene	96	4.569	4.569	(0.858)	870511	40.0000	39.770
23	2,2-Dichloropropane	77	4.652	4.652	(0.873)	1137679	40.0000	44.888
24	Bromochloromethane	128	4.735	4.734	(0.889)	403908	40.0000	39.412
25	Chloroform	83	4.806	4.805	(0.902)	1355676	40.0000	39.756
26	Carbon Tetrachloride	117	4.889	4.888	(0.855)	961210	40.0000	48.595
$ 27	Dibromofluoromethane	111	4.948	4.947	(0.929)	89434	5.00000	5.018
28	1,1,1-Trichloroethane	97	4.948	4.947	(0.929)	1241092	40.0000	42.698
29	2-Butanone	43	5.066	5.078	(0.951)	1443930	200.000	205.13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	30 1,1-Dichloropropene	75	5.042	5.054	(0.882)	1077836	40.0000	41.005
	31 Benzene	78	5.244	5.243	(0.917)	3034620	40.0000	39.170
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	372674	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	104107	5.00000	4.939
	34 1,2-Dichloroethane	62	5.397	5.409	(0.944)	1004387	40.0000	38.848
	36 Trichloroethene	130	5.681	5.681	(0.994)	885344	40.0000	39.961
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	577427	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	446416	40.0000	41.016
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	768978	40.0000	41.067
	40 Bromodichloromethane	83	6.107	6.107	(1.068)	974522	40.0000	45.871
	41 2-Chloroethyl Vinyl Ether	63	6.522	6.521	(1.141)	485471	40.0000	46.055
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	1197540	40.0000	46.535
$	43 d8-Toluene	98	6.687	6.687	(1.170)	344237	5.00000	5.035
	44 Toluene	92	6.723	6.722	(1.176)	2003446	40.0000	39.126
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	1310451	200.000	206.90
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	908591	40.0000	39.261
	47 Trans 1,3-Dichloropropene	75	7.018	7.018	(1.228)	1046214	40.0000	44.276
	48 1,1,2-Trichloroethane	97	7.137	7.136	(1.248)	661644	40.0000	41.605
	49 Chlorodibromomethane	129	7.255	7.255	(0.933)	753390	40.0000	43.889
	50 1,3-Dichloropropane	76	7.326	7.326	(0.942)	1157767	40.0000	40.074
	51 1,2-Dibromoethane	107	7.421	7.420	(1.298)	659043	40.0000	43.113
	52 2-Hexanone	43	7.575	7.574	(0.974)	2263927	200.000	206.41
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	536655	10.0000	
	54 Chlorobenzene	112	7.788	7.787	(1.002)	2255687	40.0000	37.794
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	1276322	40.0000	40.059
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	765925	40.0000	42.446
	57 m,p-xylene	106	7.906	7.906	(1.017)	3082360	80.0000	79.372
	58 o-Xylene	106	8.214	8.212	(1.056)	1513216	40.0000	41.313
	59 Styrene	104	8.261	8.260	(1.062)	2396397	40.0000	41.774
	60 Bromoform	173	8.285	8.284	(0.874)	454259	40.0000	44.202
	61 Isopropyl Benzene	105	8.438	8.438	(0.890)	3650517	40.0000	38.358
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	112596	5.00000	5.147
	63 Bromobenzene	156	8.734	8.734	(0.921)	991515	40.0000	38.141
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	4043724	40.0000	37.837
	65 1,1,2,2-Tetrachloroethane	83	8.805	8.805	(0.929)	806905	40.0000	41.012
	66 2-Chloro Toluene	91	8.864	8.864	(0.935)	2972894	40.0000	39.305
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	3135235	40.0000	39.912
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	273159	40.0000	40.774
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.935	(0.943)	197842	40.0000	42.090
	70 4-Chloro Toluene	91	8.983	8.982	(0.948)	2647026	40.0000	38.159
	71 T-Butyl Benzene	119	9.125	9.124	(0.963)	2805225	40.0000	39.856
	72 1,2,4-Trimethylbenzene	105	9.184	9.172	(0.969)	3203905	40.0000	40.485
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	3929065	40.0000	39.183
	74 4-Isopropyl Toluene	119	9.373	9.361	(0.989)	3415341	40.0000	40.890
	75 1,3-Dichlorobenzene	146	9.432	9.432	(0.995)	1941252	40.0000	38.848
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	296811	10.0000	
	77 1,4-Dichlorobenzene	146	9.492	9.491	(1.001)	1908143	40.0000	37.067
	78 N-Butyl Benzene	91	9.693	9.692	(1.022)	3077154	40.0000	40.997
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	142888	5.00000	5.035
	80 1,2-Dichlorobenzene	146	9.823	9.811	(1.036)	1804531	40.0000	38.107
	81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	128988	40.0000	48.138
	83 Hexachloro 1,3-Butadiene	225	10.982	10.970	(1.159)	543812	40.0000	40.795
	84 1,2,4-Trichlorobenzene	180	10.994	10.994	(1.160)	1290168	40.0000	40.449
	85 Naphthalene	128	11.266	11.266	(1.188)	2847158	40.0000	41.883

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
86 1,2,3-Trichlorobenzene	180	11.432	11.420	(1.206)	1223661	40.0000	39.656

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291611.D
Lab Smp Id: 4000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD40
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	372674	6.36
37 1,4-Difluorobenze	562526	281263	1125052	577427	2.65
53 d5-Chlorobenzene	502371	251186	1004742	536655	6.82
76 d4-1,4-Dichlorobe	277950	138975	555900	296811	6.79

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

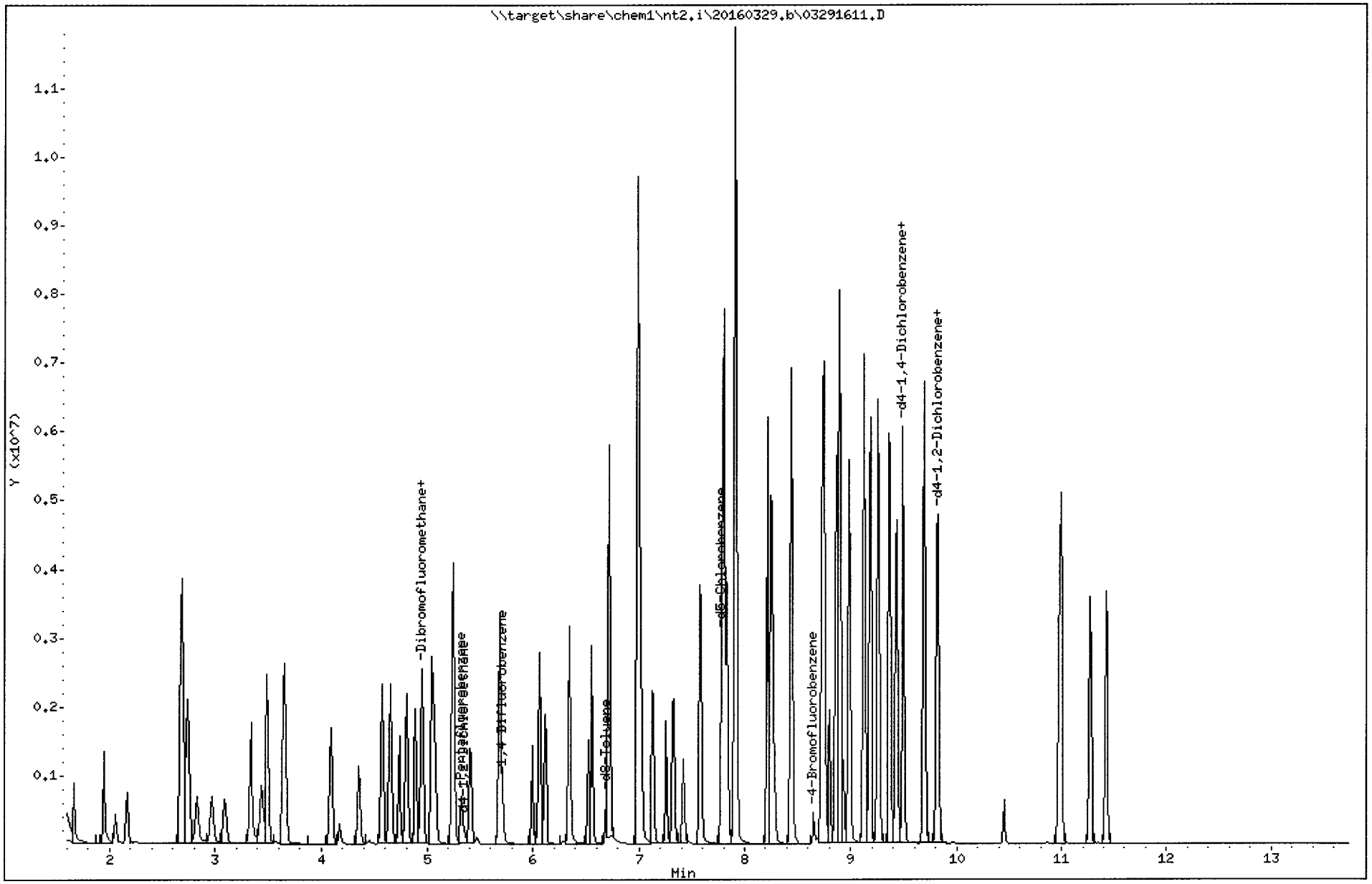
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291611.D
Date : 29-MAR-2016 17:54
Client ID: VSTD40
Sample Info: 4000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

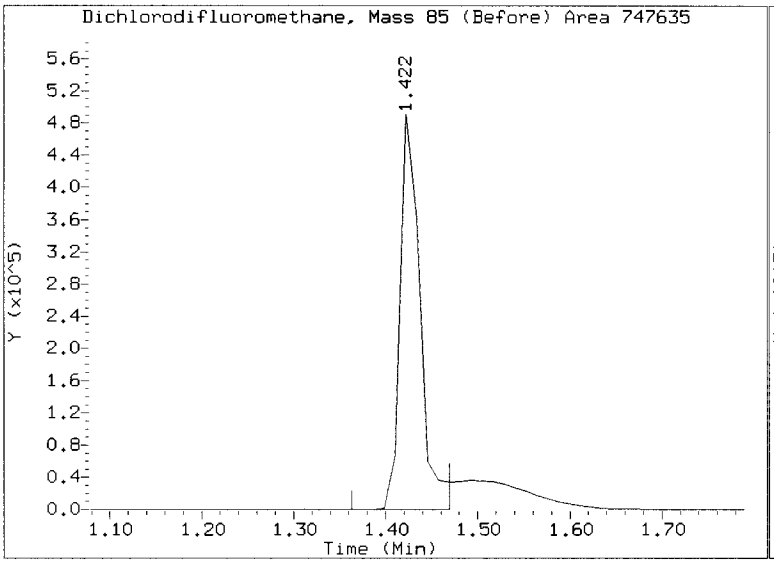
Column phase: RTXVMS

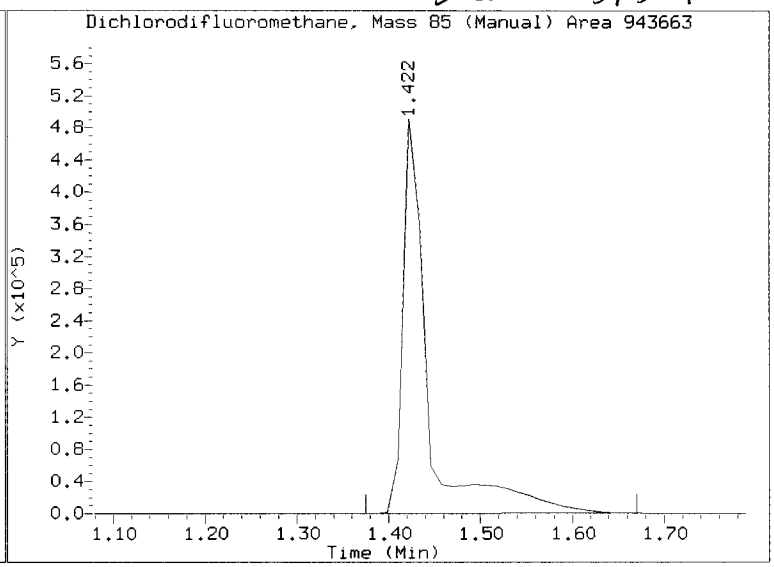


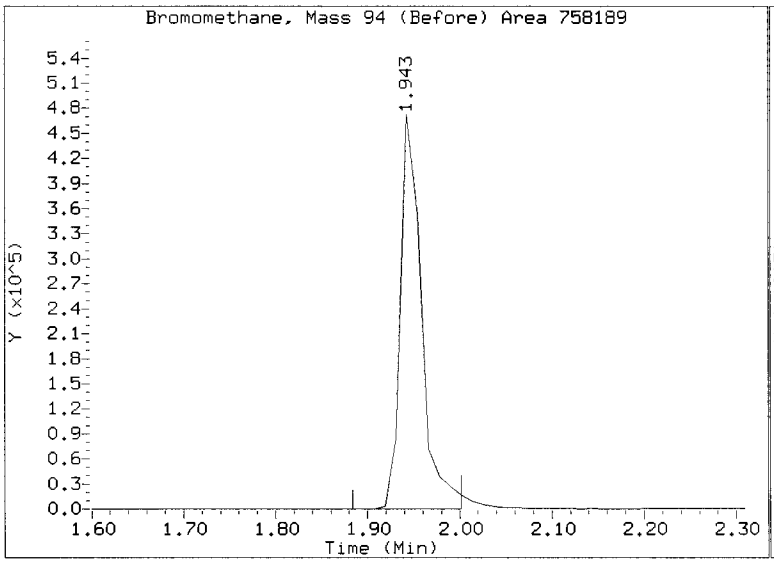
Quant Ion Manual Peak Adjustment Report

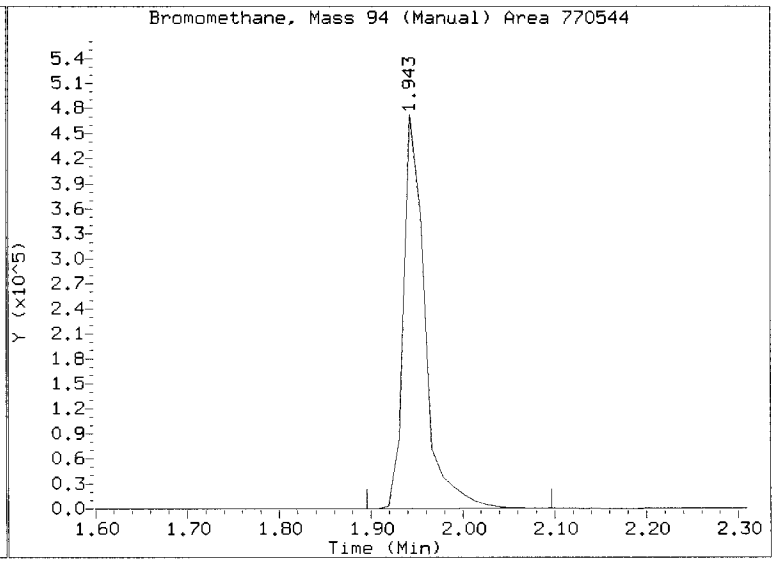
Datafile: //target/share/chem1/nt2.i/20160329.b/03291611.D
Injection Date: 29-MAR-2016 17:54
Lab ID:4000329 Client ID:VSTD40
Report Date: 03/30/2016 09:02

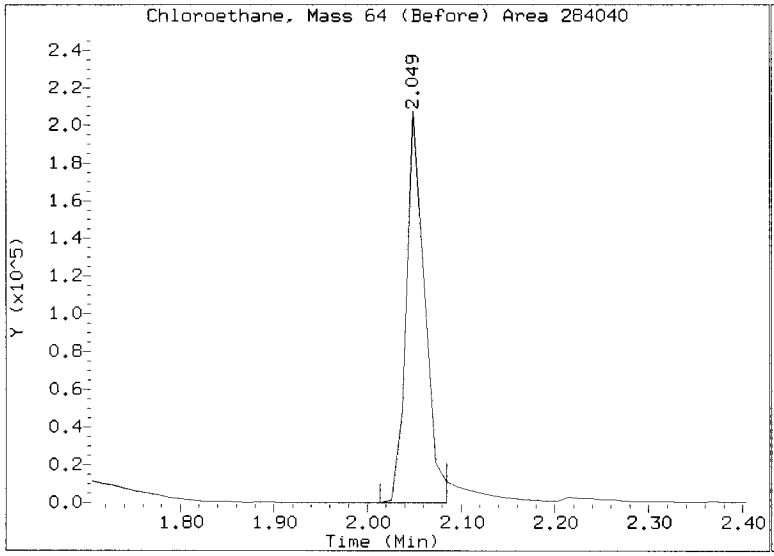
Quant 3/30/16

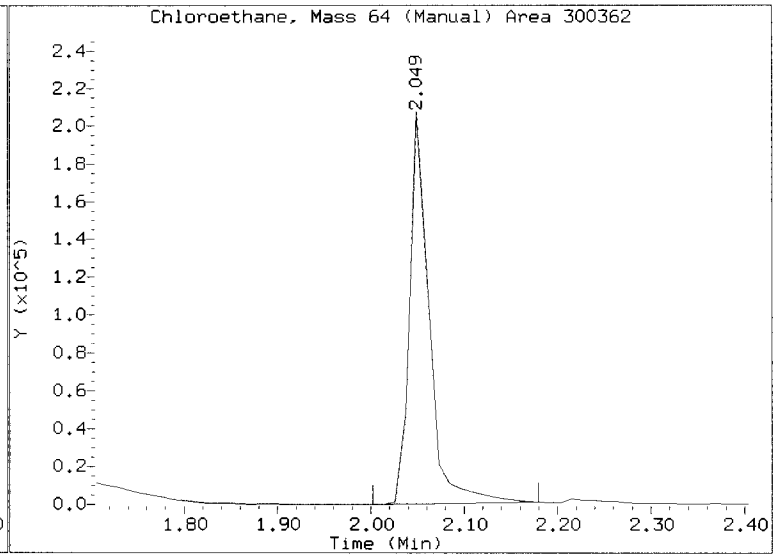












REVIEW SUMMARY FOR FILE - 03291611.D

Lab ID: 4000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 17:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

3/32/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291612.D
Lab Smp Id: 2000329 Client Smp ID: VSTD20
Inj Date : 29-MAR-2016 18:16
Operator : PC Inst ID: nt2.i
Smp Info : 2000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.433	1.433	(0.269)	478546	20.0000	20.580(M)
173	2-Pentanone	86	6.344	6.344	(1.110)	270174	100.000	116.21
2	Chloromethane	50	1.587	1.599	(0.298)	491978	20.0000	19.982
3	Vinyl Chloride	62	1.670	1.670	(0.314)	476002	20.0000	21.550
4	Bromomethane	94	1.954	1.954	(0.367)	398840	20.0000	18.044(M)
5	Chloroethane	64	2.061	2.060	(0.387)	173796	20.0000	20.832
6	Trichlorofluoromethane	101	2.179	2.190	(0.409)	775940	20.0000	19.191
7	1,1-Dichloroethene	61	2.688	2.699	(0.505)	715609	20.0000	19.925
8	Carbon Disulfide	76	2.700	2.699	(0.507)	1410817	20.0000	19.977
9	112Trichloro122Trifluoroethane	101	2.747	2.747	(0.516)	449832	20.0000	19.817
10	Iodomethane	142	2.842	2.841	(0.534)	412820	20.0000	19.427
11	Bromoethane	108	2.972	2.983	(0.558)	302628	20.0000	19.585
12	Acrolein	56	3.090	3.102	(0.580)	324243	100.000	103.12
13	Methylene Chloride	84	3.339	3.350	(0.627)	467547	20.0000	23.402
14	Acetone	43	3.433	3.433	(0.645)	555274	100.000	100.81
15	Trans-1,2-Dichloroethene	96	3.504	3.504	(0.658)	462733	20.0000	19.634
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	1362250	20.0000	20.560
18	1,1-Dichloroethane	63	4.096	4.094	(0.769)	710146	20.0000	20.712
19	Acrylonitrile	53	4.179	4.178	(0.785)	122078	20.0000	22.293
20	Vinyl Acetate	43	4.356	4.368	(0.818)	724754	20.0000	24.012
22	Cis-1,2-Dichloroethene	96	4.569	4.569	(0.858)	432870	20.0000	20.676
23	2,2-Dichloropropane	77	4.652	4.652	(0.873)	553438	20.0000	22.829
24	Bromochloromethane	128	4.735	4.734	(0.889)	210096	20.0000	21.433
25	Chloroform	83	4.806	4.805	(0.902)	682099	20.0000	20.913
26	Carbon Tetrachloride	117	4.889	4.888	(0.855)	448248	20.0000	23.929
$ 27	Dibromofluoromethane	111	4.948	4.947	(0.929)	86628	5.00000	5.082
28	1,1,1-Trichloroethane	97	4.948	4.947	(0.929)	613675	20.0000	22.073
29	2-Butanone	43	5.066	5.078	(0.951)	743519	100.000	110.43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	30 1,1-Dichloropropene	75	5.042	5.054	(0.882)	534859	20.0000	21.486
	31 Benzene	78	5.244	5.243	(0.917)	1572141	20.0000	21.427
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	356460	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	100232	5.00000	4.971
	34 1,2-Dichloroethane	62	5.409	5.409	(0.946)	507579	20.0000	20.730
	36 Trichloroethene	130	5.681	5.681	(0.994)	442993	20.0000	21.113
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	546852	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	228531	20.0000	22.171
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	391493	20.0000	22.076
	40 Bromodichloromethane	83	6.107	6.107	(1.068)	470039	20.0000	23.362
	41 2-Chloroethyl Vinyl Ether	63	6.522	6.521	(1.141)	239071	20.0000	23.948
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	595260	20.0000	24.425
$	43 d8-Toluene	98	6.687	6.687	(1.170)	331304	5.00000	5.117
	44 Toluene	92	6.723	6.722	(1.176)	1011187	20.0000	20.852
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	669784	100.000	111.66
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	449053	20.0000	20.338
	47 Trans 1,3-Dichloropropene	75	7.019	7.018	(1.228)	503726	20.0000	22.510
	48 1,1,2-Trichloroethane	97	7.137	7.136	(1.248)	335239	20.0000	22.259
	49 Chlorodibromomethane	129	7.255	7.255	(0.933)	356719	20.0000	21.781
	50 1,3-Dichloropropane	76	7.326	7.326	(0.942)	591275	20.0000	21.451
	51 1,2-Dibromoethane	107	7.421	7.420	(1.298)	329797	20.0000	22.781
	52 2-Hexanone	43	7.575	7.574	(0.974)	1207640	100.000	115.41
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	512009	10.0000	
	54 Chlorobenzene	112	7.788	7.787	(1.002)	1168222	20.0000	20.516
	55 Ethyl Benzene	106	7.799	7.811	(1.003)	640113	20.0000	21.058
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	373231	20.0000	21.680
	57 m,p-xylene	106	7.906	7.906	(1.017)	1575905	40.0000	42.534
	58 o-Xylene	106	8.214	8.212	(1.056)	755085	20.0000	21.607
	59 Styrene	104	8.261	8.260	(1.062)	1293208	20.0000	23.628
	60 Bromoform	173	8.285	8.284	(0.874)	209435	20.0000	21.804
	61 Isopropyl Benzene	105	8.438	8.438	(0.890)	1960967	20.0000	22.046
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	106600	5.00000	5.107
	63 Bromobenzene	156	8.734	8.734	(0.921)	511132	20.0000	21.037
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	2195434	20.0000	21.979
	65 1,1,2,2-Tetrachloroethane	83	8.793	8.805	(0.928)	416079	20.0000	22.627
	66 2-Chloro Toluene	91	8.864	8.864	(0.935)	1522643	20.0000	21.539
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	1647585	20.0000	22.441
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	137924	20.0000	22.028
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.935	(0.943)	93186	20.0000	21.211
	70 4-Chloro Toluene	91	8.983	8.982	(0.948)	1373575	20.0000	21.186
	71 T-Butyl Benzene	119	9.125	9.124	(0.963)	1460374	20.0000	22.200
	72 1,2,4-Trimethylbenzene	105	9.172	9.172	(0.968)	1668257	20.0000	22.555
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	2072271	20.0000	22.111
	74 4-Isopropyl Toluene	119	9.361	9.361	(0.988)	1807652	20.0000	23.156
	75 1,3-Dichlorobenzene	146	9.421	9.432	(0.994)	986449	20.0000	21.121
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	277409	10.0000	
	77 1,4-Dichlorobenzene	146	9.492	9.491	(1.001)	986590	20.0000	20.506(M)
	78 N-Butyl Benzene	91	9.693	9.692	(1.022)	1579539	20.0000	22.516
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	133528	5.00000	5.034
	80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	918619	20.0000	20.756
	81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	61811	20.0000	24.681
	83 Hexachloro 1,3-Butadiene	225	10.971	10.970	(1.157)	258651	20.0000	20.760
	84 1,2,4-Trichlorobenzene	180	10.994	10.994	(1.160)	631989	20.0000	21.200
	85 Naphthalene	128	11.267	11.266	(1.188)	1438495	20.0000	22.641

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	609937	20.0000	21.149

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291612.D
Lab Smp Id: 2000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD20
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	356460	1.74
37 1,4-Difluorobenze	562526	281263	1125052	546852	-2.79
53 d5-Chlorobenzene	502371	251186	1004742	512009	1.92
76 d4-1,4-Dichlorobe	277950	138975	555900	277409	-0.19

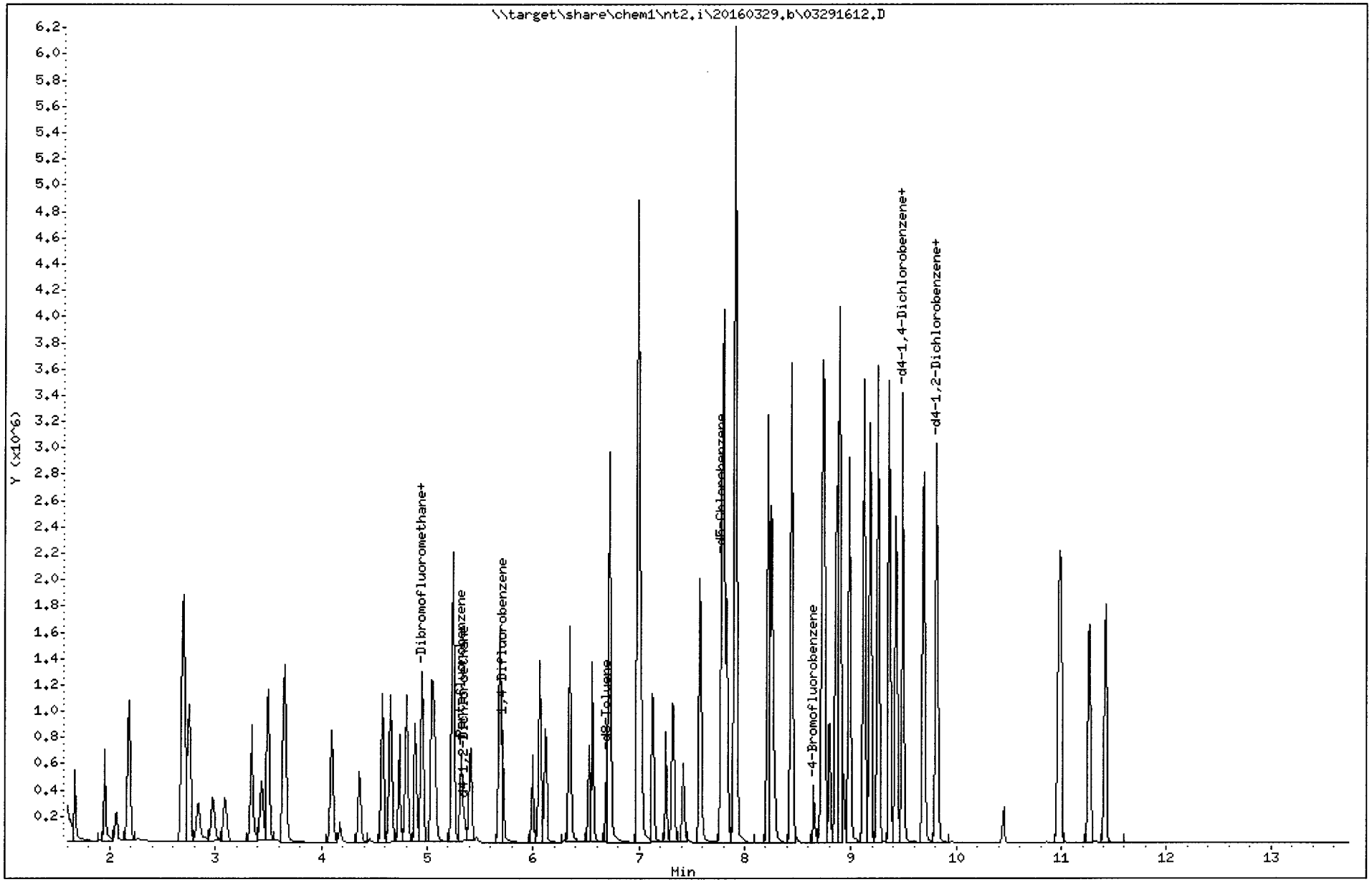
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291612.D
Date : 29-MAR-2016 18:16
Client ID: VSTD20
Sample Info: 2000329,10,10,0,

Instrument: nt2.i
Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



Quant Ion Manual Peak Adjustment Report

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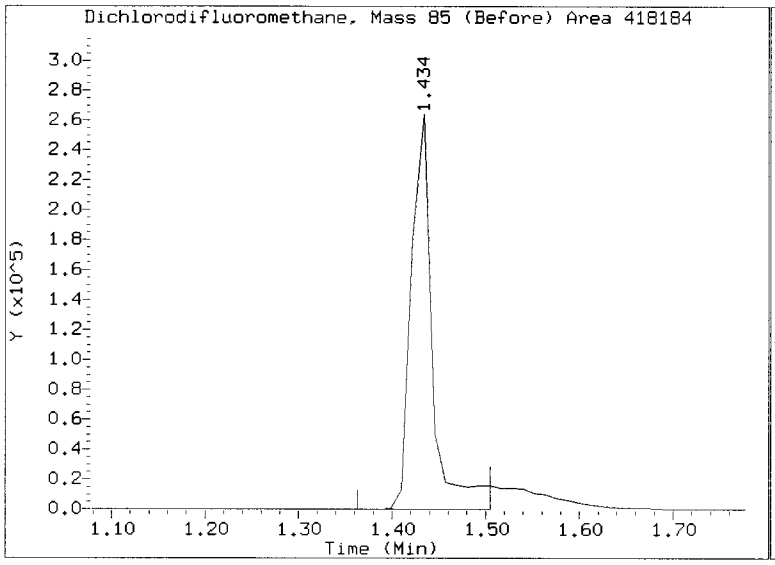
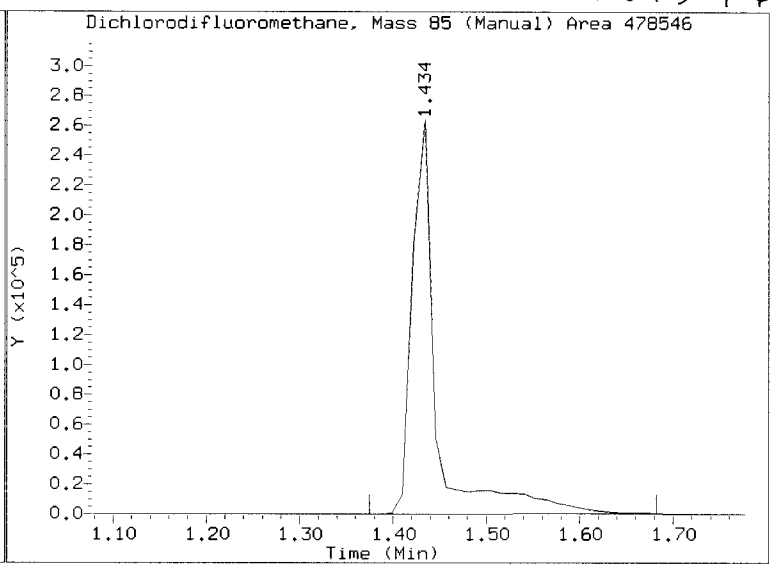
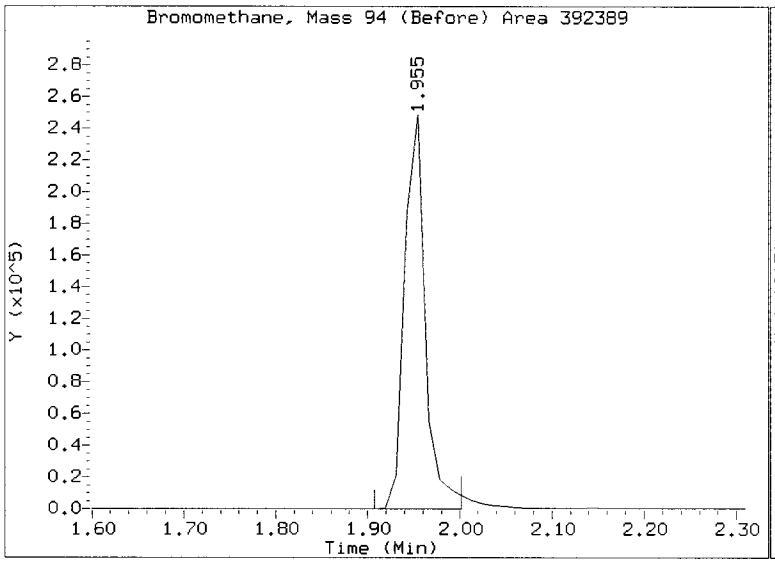
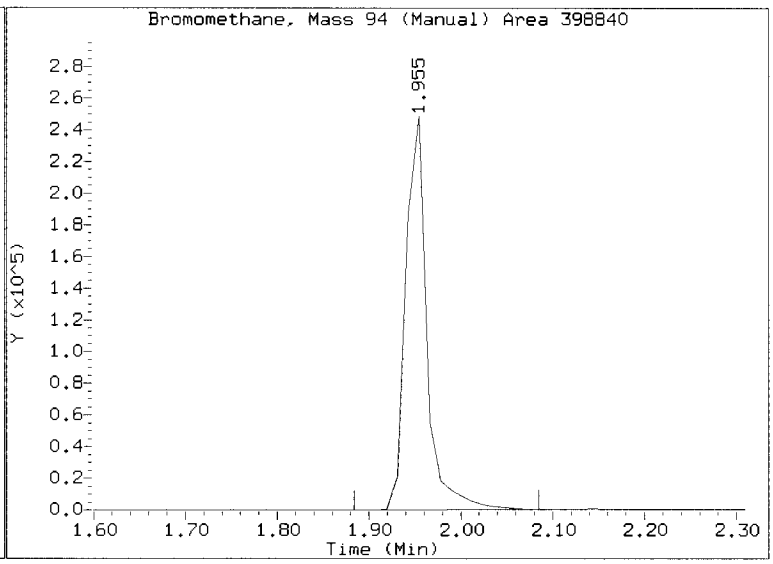
Injection Date: 29-MAR-2016 18:16
Lab ID:2000329 Client ID:VSTD20
Report Date: 03/30/2016 09:02

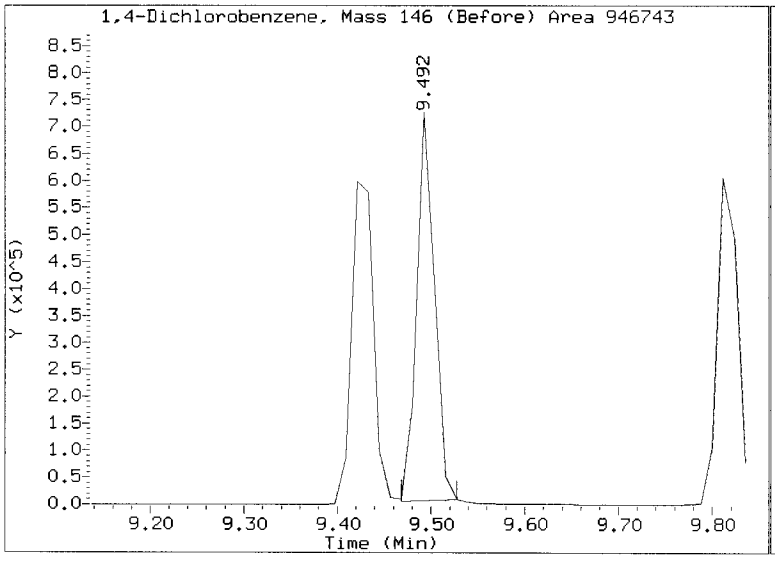
AH 3/30/16

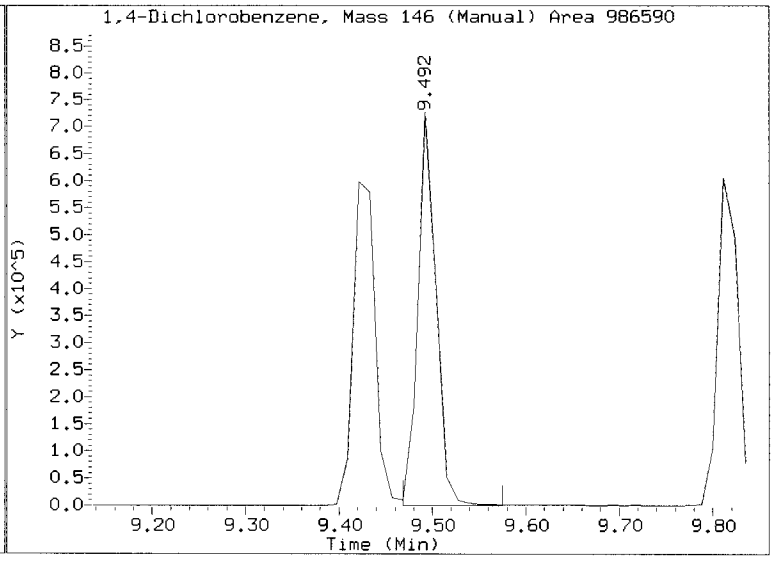












REVIEW SUMMARY FOR FILE - 03291612.D

Lab ID: 2000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 18:16

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

XLH 3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291613.D
Lab Smp Id: 1000329 Client Smp ID: VSTD10
Inj Date : 29-MAR-2016 18:37
Operator : PC Inst ID: nt2.i
Smp Info : 1000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.433	1.433	(0.269)	233061	10.0000	10.197(M)
173	2-Pentanone	86	6.343	6.344	(1.110)	133546	50.0000	55.844
2	Chloromethane	50	1.598	1.599	(0.300)	239977	10.0000	9.916
3	Vinyl Chloride	62	1.669	1.670	(0.314)	233690	10.0000	10.764(M)
4	Bromomethane	94	1.953	1.954	(0.367)	202003	10.0000	9.298(M)
5	Chloroethane	64	2.060	2.060	(0.387)	91229	10.0000	10.125
6	Trichlorofluoromethane	101	2.190	2.190	(0.411)	382964	10.0000	9.636
7	1,1-Dichloroethene	61	2.699	2.699	(0.507)	356152	10.0000	10.089
8	Carbon Disulfide	76	2.699	2.699	(0.507)	694782	10.0000	10.009
9	112Trichloro122Trifluoroethane	101	2.746	2.747	(0.516)	219086	10.0000	9.819
10	Iodomethane	142	2.841	2.841	(0.533)	175099	10.0000	8.383
11	Bromoethane	108	2.983	2.983	(0.560)	151029	10.0000	9.944
12	Acrolein	56	3.101	3.102	(0.582)	162089	50.0000	52.444
13	Methylene Chloride	84	3.349	3.350	(0.629)	238633	10.0000	12.152
14	Acetone	43	3.432	3.433	(0.645)	285665	50.0000	52.763
15	Trans-1,2-Dichloroethene	96	3.503	3.504	(0.658)	228538	10.0000	9.865
17	Methyl tert butyl ether	73	3.657	3.658	(0.687)	683534	10.0000	10.496
18	1,1-Dichloroethane	63	4.095	4.094	(0.769)	349862	10.0000	10.381
19	Acrylonitrile	53	4.178	4.178	(0.784)	61580	10.0000	11.441
20	Vinyl Acetate	43	4.367	4.368	(0.820)	351351	10.0000	11.843
22	Cis-1,2-Dichloroethene	96	4.568	4.569	(0.858)	212326	10.0000	10.318
23	2,2-Dichloropropane	77	4.651	4.652	(0.873)	259208	10.0000	10.878
24	Bromochloromethane	128	4.734	4.734	(0.889)	102320	10.0000	10.620
25	Chloroform	83	4.805	4.805	(0.902)	334894	10.0000	10.446
26	Carbon Tetrachloride	117	4.888	4.888	(0.855)	201027	10.0000	10.432
$ 27	Dibromofluoromethane	111	4.947	4.947	(0.929)	83990	5.00000	5.012
28	1,1,1-Trichloroethane	97	4.947	4.947	(0.929)	293483	10.0000	10.739
29	2-Butanone	43	5.077	5.078	(0.953)	371027	50.0000	56.064

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	30 1,1-Dichloropropene	75	5.053	5.054	(0.884)	258293	10.0000	10.087
	31 Benzene	78	5.243	5.243	(0.917)	777205	10.0000	10.298
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	350375	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.349	5.350	(1.004)	97304	5.00000	4.910
	34 1,2-Dichloroethane	62	5.408	5.409	(0.946)	252332	10.0000	10.018
	36 Trichloroethene	130	5.681	5.681	(0.994)	217531	10.0000	10.079
*	37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	562526	10.0000	
	38 Dibromomethane	93	5.988	5.989	(1.048)	109641	10.0000	10.340
	39 1,2-Dichloropropane	63	6.059	6.060	(1.060)	187949	10.0000	10.303
	40 Bromodichloromethane	83	6.107	6.107	(1.068)	223401	10.0000	10.794
	41 2-Chloroethyl Vinyl Ether	63	6.521	6.521	(1.141)	113453	10.0000	11.048
	42 Cis 1,3-dichloropropene	75	6.556	6.557	(1.147)	280476	10.0000	11.188
$	43 d8-Toluene	98	6.686	6.687	(1.170)	322229	5.00000	4.838
	44 Toluene	92	6.722	6.722	(1.176)	500412	10.0000	10.032
	45 4-Methyl-2-Pentanone	58	6.994	6.995	(1.224)	335351	50.0000	54.349
	46 Tetrachloroethene	166	6.994	6.995	(0.900)	221618	10.0000	10.230
	47 Trans 1,3-Dichloropropene	75	7.018	7.018	(1.228)	239443	10.0000	10.402
	48 1,1,2-Trichloroethane	97	7.136	7.136	(1.248)	164814	10.0000	10.638
	49 Chlorodibromomethane	129	7.254	7.255	(0.933)	165488	10.0000	10.299
	50 1,3-Dichloropropane	76	7.325	7.326	(0.942)	285413	10.0000	10.553
	51 1,2-Dibromoethane	107	7.420	7.420	(1.298)	162956	10.0000	10.943
	52 2-Hexanone	43	7.574	7.574	(0.974)	593530	50.0000	57.808
*	53 d5-Chlorobenzene	117	7.775	7.775	(1.000)	502371	10.0000	
	54 Chlorobenzene	112	7.787	7.787	(1.002)	578209	10.0000	10.349
	55 Ethyl Benzene	106	7.810	7.811	(1.005)	314910	10.0000	10.558
	56 1,1,1,2-Tetrachloroethane	131	7.834	7.835	(1.008)	171258	10.0000	10.139
	57 m,p-xylene	106	7.905	7.906	(1.017)	780882	20.0000	21.480
	58 o-Xylene	106	8.213	8.212	(1.056)	372057	10.0000	10.851
	59 Styrene	104	8.260	8.260	(1.062)	619725	10.0000	11.540
	60 Bromoform	173	8.284	8.284	(0.874)	90808	10.0000	9.436
	61 Isopropyl Benzene	105	8.438	8.438	(0.890)	975374	10.0000	10.944
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	103172	5.00000	5.038
	63 Bromobenzene	156	8.733	8.734	(0.921)	250593	10.0000	10.294
	64 N-Propyl Benzene	91	8.745	8.746	(0.923)	1101321	10.0000	11.004
	65 1,1,2,2-Tetrachloroethane	83	8.804	8.805	(0.929)	203527	10.0000	11.046
	66 2-Chloro Toluene	91	8.864	8.864	(0.935)	754301	10.0000	10.650
	67 1,3,5-Trimethyl Benzene	105	8.887	8.888	(0.938)	823151	10.0000	11.190
	68 1,2,3-Trichloropropane	110	8.899	8.900	(0.939)	69513	10.0000	11.080
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.935	(0.943)	44637	10.0000	10.141
	70 4-Chloro Toluene	91	8.982	8.982	(0.948)	677236	10.0000	10.425
	71 T-Butyl Benzene	119	9.124	9.124	(0.963)	730763	10.0000	11.087
	72 1,2,4-Trimethylbenzene	105	9.171	9.172	(0.968)	830285	10.0000	11.204
	73 S-Butyl Benzene	105	9.254	9.255	(0.976)	1038910	10.0000	11.064
	74 4-Isopropyl Toluene	119	9.361	9.361	(0.988)	892103	10.0000	11.405
	75 1,3-Dichlorobenzene	146	9.432	9.432	(0.995)	489925	10.0000	10.469
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.479	(1.000)	277950	10.0000	
	77 1,4-Dichlorobenzene	146	9.491	9.491	(1.001)	489140	10.0000	10.147
	78 N-Butyl Benzene	91	9.692	9.692	(1.022)	771904	10.0000	10.982
$	79 d4-1,2-Dichlorobenzene	152	9.810	9.811	(1.035)	132921	5.00000	5.001
	80 1,2-Dichlorobenzene	146	9.810	9.811	(1.035)	456356	10.0000	10.291
	81 1,2-Dibromo 3-Chloropropane	75	10.449	10.450	(1.102)	28375	10.0000	11.308
	83 Hexachloro 1,3-Butadiene	225	10.970	10.970	(1.157)	127152	10.0000	10.186
	84 1,2,4-Trichlorobenzene	180	10.993	10.994	(1.160)	310739	10.0000	10.403
	85 Naphthalene	128	11.266	11.266	(1.188)	717776	10.0000	11.275

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
86 1,2,3-Trichlorobenzene	180	11.419	11.420	(1.205)	300212	10.0000	10.389

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291613.D
Lab Smp Id: 1000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD10
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	350375	0.00
37 1,4-Difluorobenze	562526	281263	1125052	562526	0.00
53 d5-Chlorobenzene	502371	251186	1004742	502371	0.00
76 d4-1,4-Dichlorobe	277950	138975	555900	277950	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

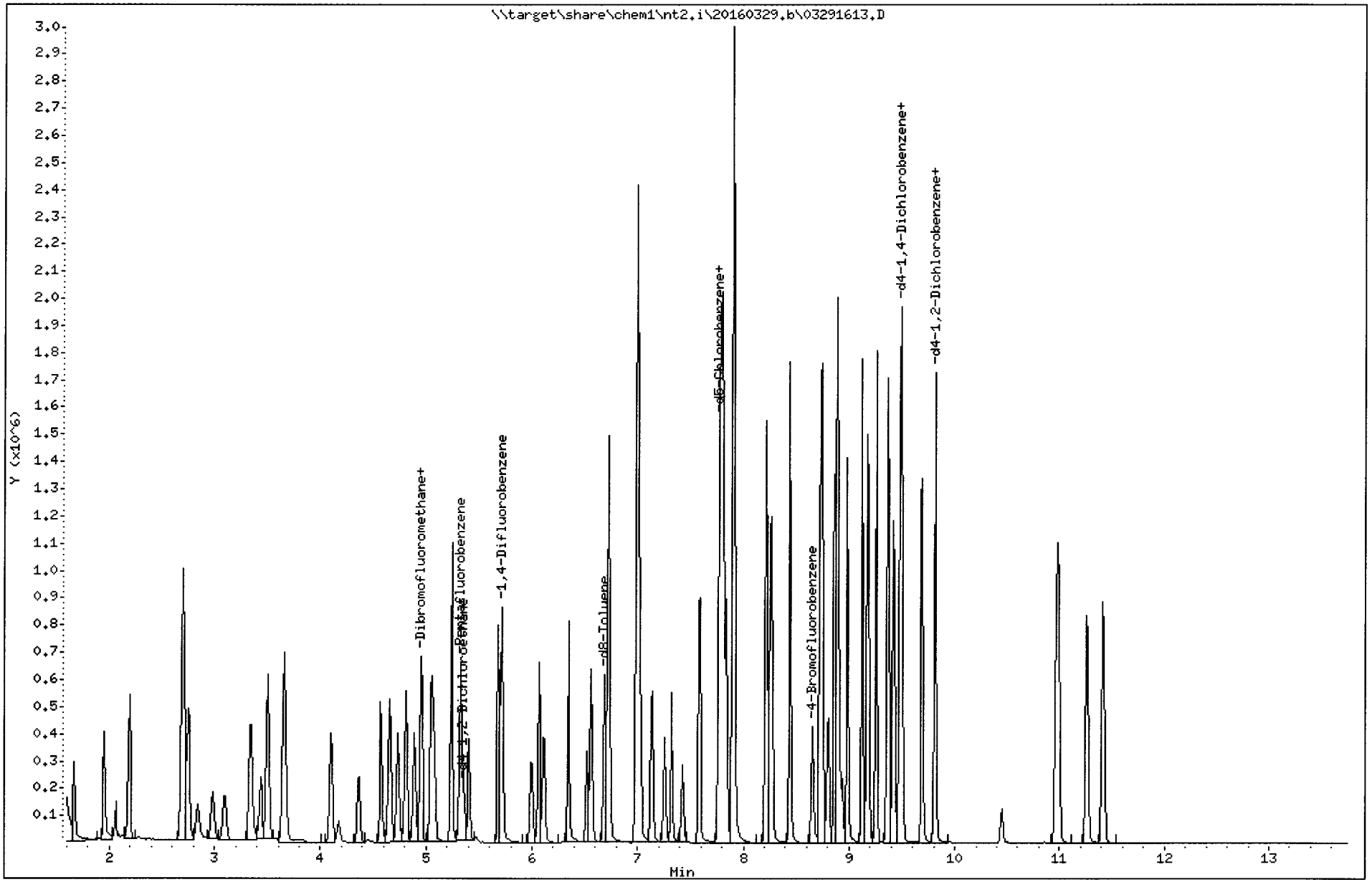
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291613.D
Date : 29-MAR-2016 18:37
Client ID: VSTD10
Sample Info: 1000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

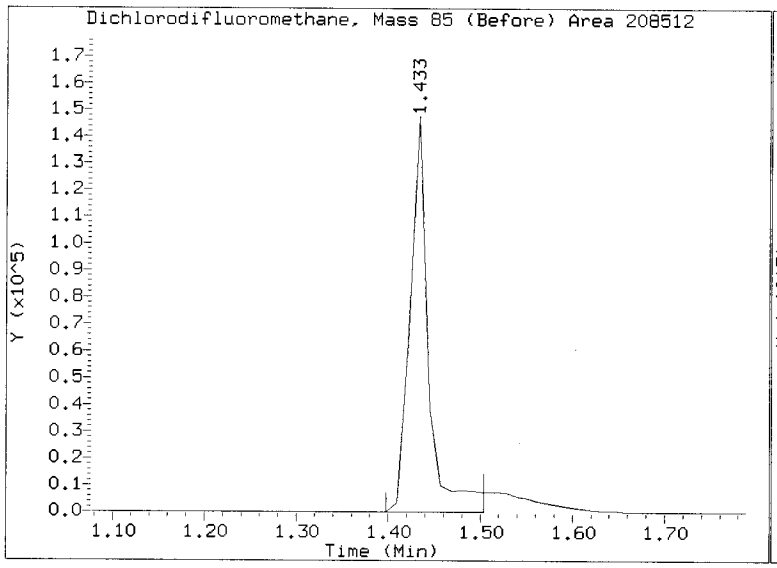
Column phase: RTXVMS

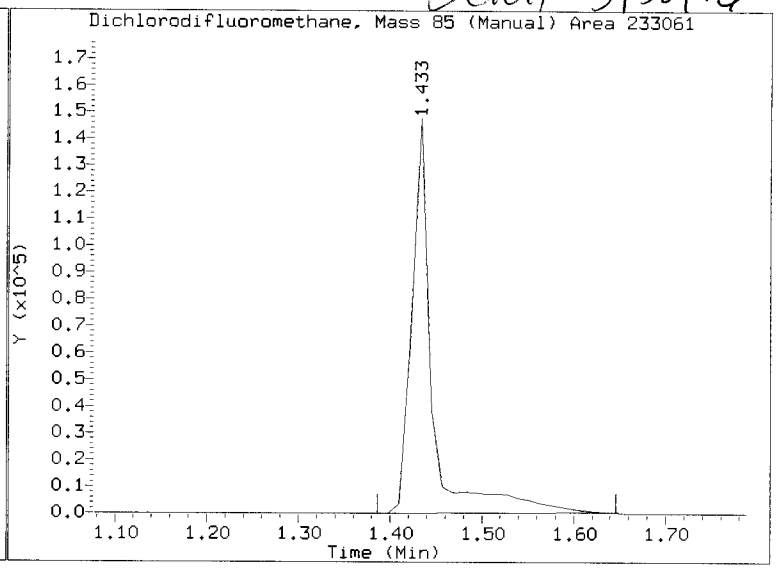


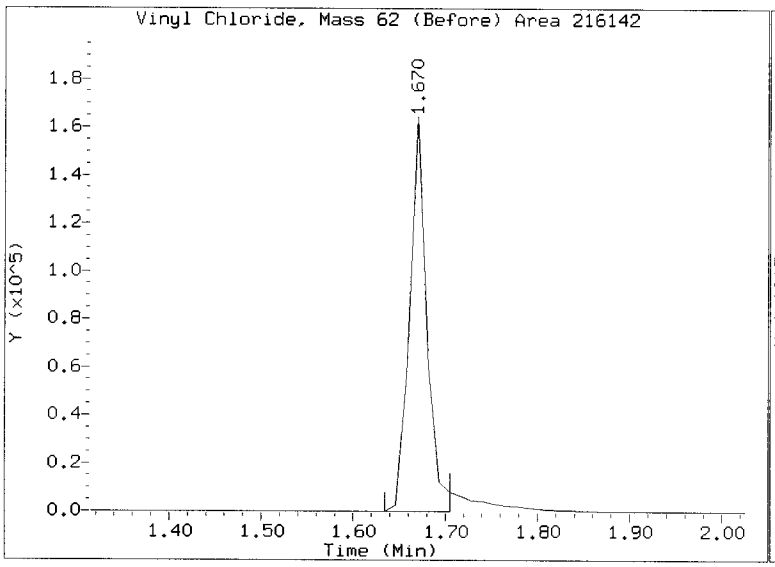
Quant Ion Manual Peak Adjustment Report

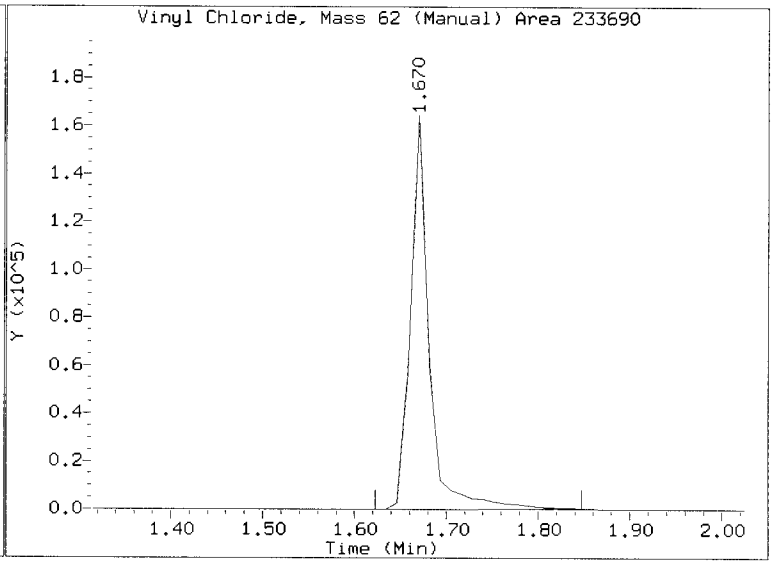
Datafile: //target/share/chem1/nt2.i/20160329.b/03291613.D
Injection Date: 29-MAR-2016 18:37
Lab ID:1000329 Client ID:VSTD10
Report Date: 03/30/2016 09:02

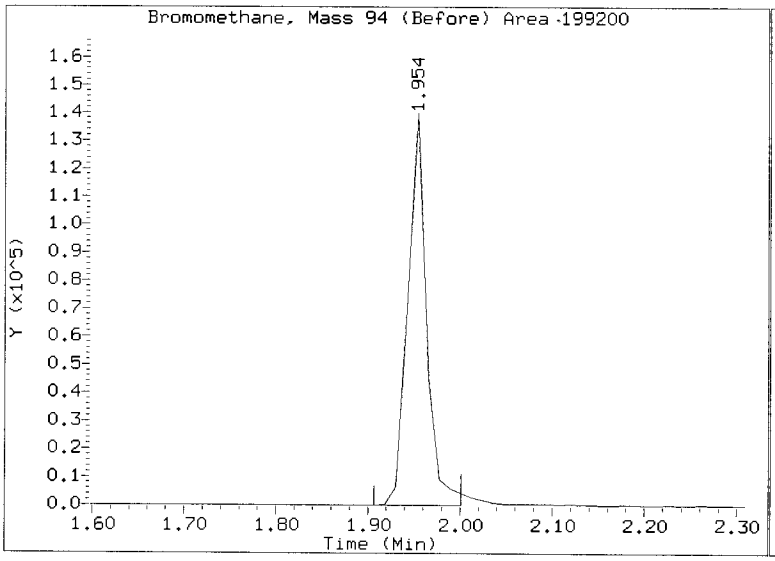
3/30/16

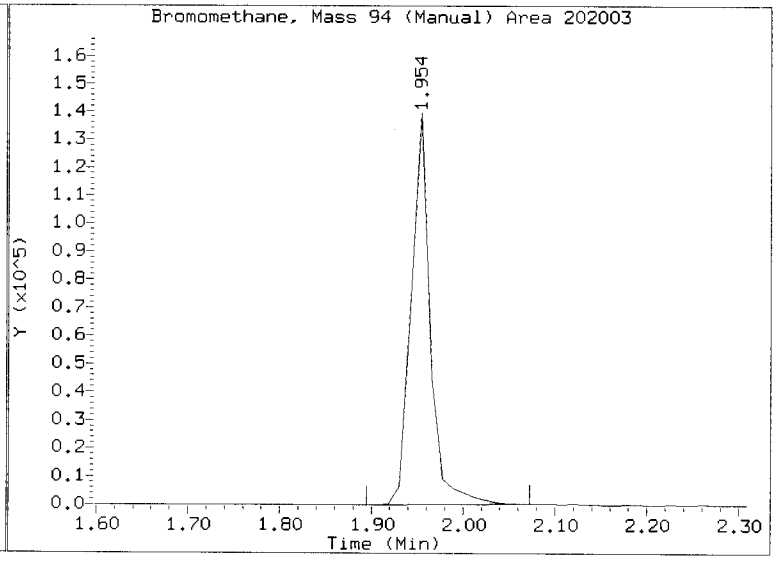












REVIEW SUMMARY FOR FILE - 03291613.D

Lab ID: 1000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 18:37

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

Quant 3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291614.D
Lab Smp Id: 0200329 Client Smp ID: VSTD02
Inj Date : 29-MAR-2016 18:59
Operator : PC Inst ID: nt2.i
Smp Info : 0200329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.433	1.433	(0.269)	48142	2.00000	2.097(M)
173	2-Pentanone	86	6.343	6.344	(1.110)	23391	10.0000	9.663
2	Chloromethane	50	1.599	1.599	(0.300)	51452	2.00000	2.116
3	Vinyl Chloride	62	1.669	1.670	(0.314)	47090	2.00000	2.159
4	Bromomethane	94	1.953	1.954	(0.367)	45395	2.00000	2.080
5	Chloroethane	64	2.072	2.060	(0.389)	33061	2.00000	3.388
6	Trichlorofluoromethane	101	2.202	2.190	(0.414)	80129	2.00000	2.007
7	1,1-Dichloroethene	61	2.699	2.699	(0.507)	73304	2.00000	2.067
8	Carbon Disulfide	76	2.711	2.699	(0.509)	142231	2.00000	2.040
9	112Trichloro122Trifluoroethane	101	2.758	2.747	(0.518)	45998	2.00000	2.052
10	Iodomethane	142	2.841	2.841	(0.533)	23875	2.00000	1.138
11	Bromoethane	108	2.983	2.983	(0.560)	31919	2.00000	2.092
12	Acrolein	56	3.101	3.102	(0.582)	33659	10.0000	10.841
13	Methylene Chloride	84	3.350	3.350	(0.629)	58499	2.00000	2.965
14	Acetone	43	3.433	3.433	(0.645)	60765	10.0000	11.173
15	Trans-1,2-Dichloroethene	96	3.504	3.504	(0.658)	48360	2.00000	2.078
17	Methyl tert butyl ether	73	3.657	3.658	(0.687)	139600	2.00000	2.134
18	1,1-Dichloroethane	63	4.095	4.094	(0.769)	70395	2.00000	2.079
19	Acrylonitrile	53	4.178	4.178	(0.785)	11582	2.00000	2.142(T)
20	Vinyl Acetate	43	4.367	4.368	(0.820)	59524	2.00000	1.997
22	Cis-1,2-Dichloroethene	96	4.580	4.569	(0.860)	43580	2.00000	2.108
23	2,2-Dichloropropane	77	4.651	4.652	(0.873)	47834	2.00000	1.998
24	Bromochloromethane	128	4.734	4.734	(0.889)	20778	2.00000	2.147
25	Chloroform	83	4.805	4.805	(0.902)	68010	2.00000	2.112
26	Carbon Tetrachloride	117	4.888	4.888	(0.855)	36285	2.00000	1.860
$ 27	Dibromofluoromethane	111	4.947	4.947	(0.929)	85030	5.00000	5.051
28	1,1,1-Trichloroethane	97	4.947	4.947	(0.929)	57064	2.00000	2.079
29	2-Butanone	43	5.077	5.078	(0.953)	74269	10.0000	11.172

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	30 1,1-Dichloropropene	75	5.054	5.054	(0.884)	51736	2.00000	1.996
	31 Benzene	78	5.243	5.243	(0.917)	159535	2.00000	2.088
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	351970	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.349	5.350	(1.004)	97679	5.00000	4.906
	34 1,2-Dichloroethane	62	5.409	5.409	(0.946)	52280	2.00000	2.051
	36 Trichloroethene	130	5.681	5.681	(0.994)	44526	2.00000	2.038
*	37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	569384	10.0000	
	38 Dibromomethane	93	5.988	5.989	(1.048)	22292	2.00000	2.077
	39 1,2-Dichloropropane	63	6.059	6.060	(1.060)	36794	2.00000	1.993
	40 Bromodichloromethane	83	6.119	6.107	(1.070)	41139	2.00000	1.964
	41 2-Chloroethyl Vinyl Ether	63	6.521	6.521	(1.141)	20075	2.00000	1.931
	42 Cis 1,3-dichloropropene	75	6.556	6.557	(1.147)	49709	2.00000	1.959
$	43 d8-Toluene	98	6.687	6.687	(1.170)	333939	5.00000	4.954
	44 Toluene	92	6.722	6.722	(1.176)	104635	2.00000	2.072
	45 4-Methyl-2-Pentanone	58	6.994	6.995	(1.224)	63475	10.0000	10.163
	46 Tetrachloroethene	166	6.994	6.995	(0.900)	45061	2.00000	2.083
	47 Trans 1,3-Dichloropropene	75	7.018	7.018	(1.228)	39515	2.00000	1.696
	48 1,1,2-Trichloroethane	97	7.136	7.136	(1.248)	32994	2.00000	2.104
	49 Chlorodibromomethane	129	7.255	7.255	(0.933)	27033	2.00000	1.685
	50 1,3-Dichloropropane	76	7.326	7.326	(0.942)	58087	2.00000	2.151
	51 1,2-Dibromoethane	107	7.420	7.420	(1.298)	31504	2.00000	2.090
	52 2-Hexanone	43	7.586	7.574	(0.976)	103718	10.0000	10.117
*	53 d5-Chlorobenzene	117	7.775	7.775	(1.000)	501631	10.0000	
	54 Chlorobenzene	112	7.787	7.787	(1.002)	117720	2.00000	2.110
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	61738	2.00000	2.073
	56 1,1,1,2-Tetrachloroethane	131	7.834	7.835	(1.008)	29696	2.00000	1.761
	57 m,p-xylene	106	7.905	7.906	(1.017)	157316	4.00000	4.334
	58 o-Xylene	106	8.213	8.212	(1.056)	73849	2.00000	2.157
	59 Styrene	104	8.260	8.260	(1.062)	115032	2.00000	2.145
	60 Bromoform	173	8.284	8.284	(0.874)	12900	2.00000	1.353
	61 Isopropyl Benzene	105	8.438	8.438	(0.890)	193955	2.00000	2.197
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	101611	5.00000	4.969
	63 Bromobenzene	156	8.734	8.734	(0.921)	50788	2.00000	2.106
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	212424	2.00000	2.143
	65 1,1,2,2-Tetrachloroethane	83	8.805	8.805	(0.929)	38602	2.00000	2.115
	66 2-Chloro Toluene	91	8.864	8.864	(0.935)	145855	2.00000	2.079
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	157845	2.00000	2.166
	68 1,2,3-Trichloropropane	110	8.899	8.900	(0.939)	14093	2.00000	2.268
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.935	(0.943)	8979	2.00000	2.060
	70 4-Chloro Toluene	91	8.982	8.982	(0.948)	136760	2.00000	2.126
	71 T-Butyl Benzene	119	9.124	9.124	(0.963)	138779	2.00000	2.126
	72 1,2,4-Trimethylbenzene	105	9.171	9.172	(0.968)	158965	2.00000	2.166
	73 S-Butyl Benzene	105	9.254	9.255	(0.976)	200735	2.00000	2.158
	74 4-Isopropyl Toluene	119	9.361	9.361	(0.988)	169072	2.00000	2.182
	75 1,3-Dichlorobenzene	146	9.432	9.432	(0.995)	98048	2.00000	2.115
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.479	(1.000)	275297	10.0000	
	77 1,4-Dichlorobenzene	146	9.491	9.491	(1.001)	100992	2.00000	2.115
	78 N-Butyl Benzene	91	9.692	9.692	(1.022)	147637	2.00000	2.121
$	79 d4-1,2-Dichlorobenzene	152	9.810	9.811	(1.035)	129499	5.00000	4.920
	80 1,2-Dichlorobenzene	146	9.810	9.811	(1.035)	91598	2.00000	2.085
	81 1,2-Dibromo 3-Chloropropane	75	10.449	10.450	(1.102)	4471	2.00000	1.799
	83 Hexachloro 1,3-Butadiene	225	10.970	10.970	(1.157)	25537	2.00000	2.065
	84 1,2,4-Trichlorobenzene	180	10.994	10.994	(1.160)	61948	2.00000	2.094
	85 Naphthalene	128	11.266	11.266	(1.188)	135887	2.00000	2.155

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	60569	2.00000	2.116

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291614.D
Lab Smp Id: 0200329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD02
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	351970	0.46
37 1,4-Difluorobenze	562526	281263	1125052	569384	1.22
53 d5-Chlorobenzene	502371	251186	1004742	501631	-0.15
76 d4-1,4-Dichlorobe	277950	138975	555900	275297	-0.95

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.01
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

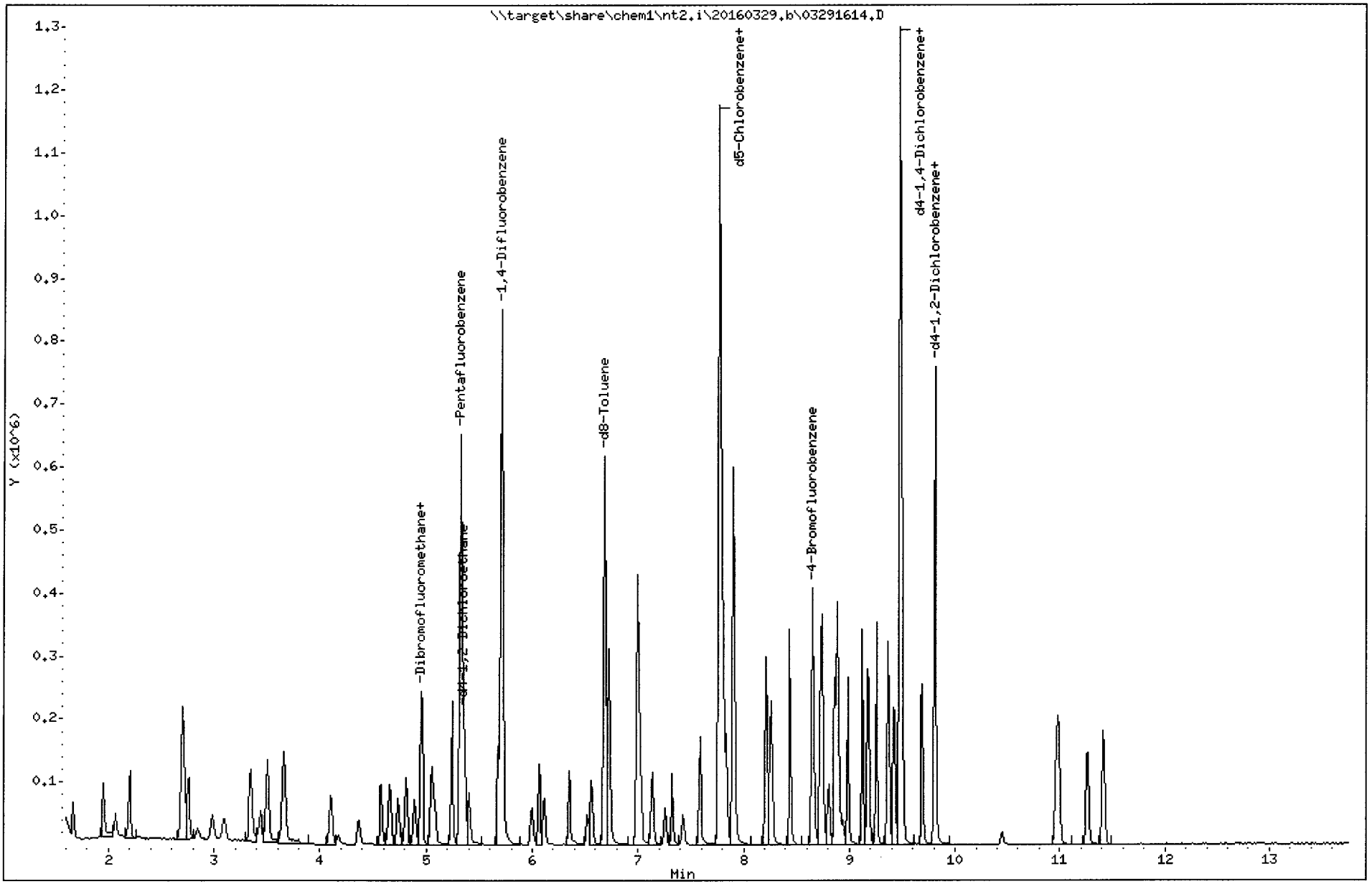
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291614.D
Date : 29-MAR-2016 18:59
Client ID: VSTD02
Sample Info: 0200329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

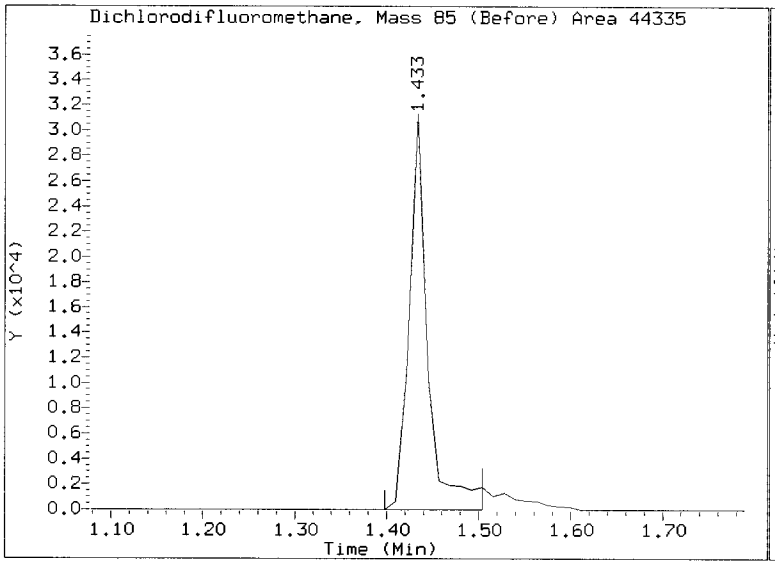
Column phase: RTXVMS

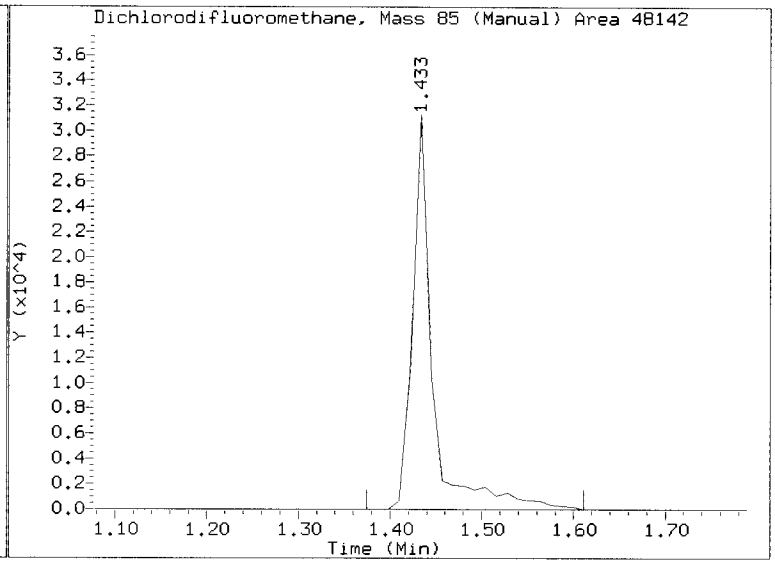


Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem1/nt2.i/20160329.b/03291614.D
Injection Date: 29-MAR-2016 18:59
Lab ID:0200329 Client ID:VSTD02
Report Date: 03/30/2016 09:02

3/30/16





REVIEW SUMMARY FOR FILE - 03291614.D

Lab ID: 0200329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 18:59

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291615.D
Lab Smp Id: 0100329 Client Smp ID: VSTD01
Inj Date : 29-MAR-2016 19:20
Operator : PC Inst ID: nt2.i
Smp Info : 0100329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.434	1.433	(0.269)	24424	1.00000	1.160(M)
173	2-Pentanone	86	6.356	6.344	(1.112)	9599	5.00000	4.421
2	Chloromethane	50	1.599	1.599	(0.300)	25479	1.00000	1.143
3	Vinyl Chloride	62	1.670	1.670	(0.314)	21188	1.00000	1.059(M)
4	Bromomethane	94	1.954	1.954	(0.367)	23847	1.00000	1.191(M)
5	Chloroethane	64	2.061	2.060	(0.387)	9365	1.00000	1.014
6	Trichlorofluoromethane	101	2.179	2.190	(0.409)	39028	1.00000	1.066
7	1,1-Dichloroethene	61	2.688	2.699	(0.505)	35256	1.00000	1.084
8	Carbon Disulfide	76	2.700	2.699	(0.507)	68373	1.00000	1.069
9	112Trichloro122Trifluoroethane	101	2.747	2.747	(0.516)	22313	1.00000	1.085
10	Iodomethane	142	2.842	2.841	(0.534)	10355	1.00000	0.5381
11	Bromoethane	108	2.984	2.983	(0.560)	15368	1.00000	1.098(M)
12	Acrolein	56	3.102	3.102	(0.582)	16038	5.00000	5.632
13	Methylene Chloride	84	3.339	3.350	(0.627)	34853	1.00000	1.926
14	Acetone	43	3.433	3.433	(0.645)	30173	5.00000	6.048
15	Trans-1,2-Dichloroethene	96	3.504	3.504	(0.658)	22549	1.00000	1.056
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	65810	1.00000	1.097
18	1,1-Dichloroethane	63	4.096	4.094	(0.769)	34315	1.00000	1.105
19	Acrylonitrile	53	4.179	4.178	(0.785)	5190	1.00000	1.046(T)
20	Vinyl Acetate	43	4.368	4.368	(0.820)	27435	1.00000	1.004
22	Cis-1,2-Dichloroethene	96	4.569	4.569	(0.858)	20872	1.00000	1.101
23	2,2-Dichloropropane	77	4.652	4.652	(0.873)	21141	1.00000	0.9629
24	Bromochloromethane	128	4.735	4.734	(0.889)	9181	1.00000	1.034
25	Chloroform	83	4.806	4.805	(0.902)	31112	1.00000	1.053
26	Carbon Tetrachloride	117	4.889	4.888	(0.855)	15233	1.00000	0.8706
$ 27	Dibromofluoromethane	111	4.948	4.947	(0.929)	76404	5.00000	4.949
28	1,1,1-Trichloroethane	97	4.948	4.947	(0.929)	25256	1.00000	1.003
29	2-Butanone	43	5.078	5.078	(0.953)	33588	5.00000	5.508

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	30 1,1-Dichloropropene	75	5.054	5.054	(0.884)	23739	1.00000	1.021
	31 Benzene	78	5.244	5.243	(0.917)	74145	1.00000	1.082
*	32 Pentafluorobenzene	168	5.327	5.326	(1.000)	322836	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	90369	5.00000	4.949
	34 1,2-Dichloroethane	62	5.409	5.409	(0.946)	23969	1.00000	1.048
	36 Trichloroethene	130	5.682	5.681	(0.994)	20572	1.00000	1.050
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	510764	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	9735	1.00000	1.011
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	17899	1.00000	1.081
	40 Bromodichloromethane	83	6.119	6.107	(1.070)	18321	1.00000	0.9749
	41 2-Chloroethyl Vinyl Ether	63	6.522	6.521	(1.141)	7817	1.00000	0.8384
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	21208	1.00000	0.9317
$	43 d8-Toluene	98	6.687	6.687	(1.170)	306140	5.00000	5.063
	44 Toluene	92	6.723	6.722	(1.176)	49028	1.00000	1.082
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	27755	5.00000	4.954
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	21865	1.00000	1.084
	47 Trans 1,3-Dichloropropene	75	7.019	7.018	(1.228)	16976	1.00000	0.8122
	48 1,1,2-Trichloroethane	97	7.137	7.136	(1.248)	14860	1.00000	1.056
	49 Chlorodibromomethane	129	7.255	7.255	(0.933)	10604	1.00000	0.7088
	50 1,3-Dichloropropane	76	7.326	7.326	(0.942)	26271	1.00000	1.043
	51 1,2-Dibromoethane	107	7.421	7.420	(1.298)	13669	1.00000	1.011
	52 2-Hexanone	43	7.587	7.574	(0.976)	44472	5.00000	4.652
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	467709	10.0000	
	54 Chlorobenzene	112	7.788	7.787	(1.002)	56780	1.00000	1.092
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	28546	1.00000	1.028
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	13011	1.00000	0.8273
	57 m,p-xylene	106	7.906	7.906	(1.017)	73212	2.00000	2.163
	58 o-Xylene	106	8.214	8.212	(1.056)	34038	1.00000	1.066
	59 Styrene	104	8.261	8.260	(1.062)	51341	1.00000	1.027
	60 Bromoform	173	8.285	8.284	(0.874)	5511	1.00000	0.6236
	61 Isopropyl Benzene	105	8.439	8.438	(0.890)	88621	1.00000	1.083
$	62 4-Bromofluorobenzene	174	8.652	8.651	(1.113)	97210	5.00000	5.099
	63 Bromobenzene	156	8.734	8.734	(0.921)	24456	1.00000	1.094
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	100756	1.00000	1.096
	65 1,1,2,2-Tetrachloroethane	83	8.794	8.805	(0.928)	17407	1.00000	1.029
	66 2-Chloro Toluene	91	8.865	8.864	(0.935)	67584	1.00000	1.039
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	71877	1.00000	1.064
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	6245	1.00000	1.084
	69 Trans-1,4-Dichloro 2-Butene	53	8.936	8.935	(0.943)	3709	1.00000	0.9177(M)
	70 4-Chloro Toluene	91	8.983	8.982	(0.948)	66114	1.00000	1.108
	71 T-Butyl Benzene	119	9.125	9.124	(0.963)	62509	1.00000	1.033
	72 1,2,4-Trimethylbenzene	105	9.172	9.172	(0.968)	71197	1.00000	1.046
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	92711	1.00000	1.075
	74 4-Isopropyl Toluene	119	9.362	9.361	(0.988)	76190	1.00000	1.061
	75 1,3-Dichlorobenzene	146	9.421	9.432	(0.994)	46129	1.00000	1.074
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	255215	10.0000	
	77 1,4-Dichlorobenzene	146	9.492	9.491	(1.001)	49539	1.00000	1.119
	78 N-Butyl Benzene	91	9.693	9.692	(1.022)	66135	1.00000	1.025
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	123460	5.00000	5.059
	80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	44896	1.00000	1.103
	81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	1838	1.00000	0.7977
	83 Hexachloro 1,3-Butadiene	225	10.971	10.970	(1.157)	11895	1.00000	1.038
	84 1,2,4-Trichlorobenzene	180	10.994	10.994	(1.160)	28254	1.00000	1.030
	85 Naphthalene	128	11.255	11.266	(1.187)	56798	1.00000	0.9717

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
86 1,2,3-Trichlorobenzene	180	11.409	11.420	(1.203)	27460	1.00000	1.035

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291615.D
Lab Smp Id: 0100329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD01
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	322836	-7.86
37 1,4-Difluorobenze	562526	281263	1125052	510764	-9.20
53 d5-Chlorobenzene	502371	251186	1004742	467709	-6.90
76 d4-1,4-Dichlorobe	277950	138975	555900	255215	-8.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

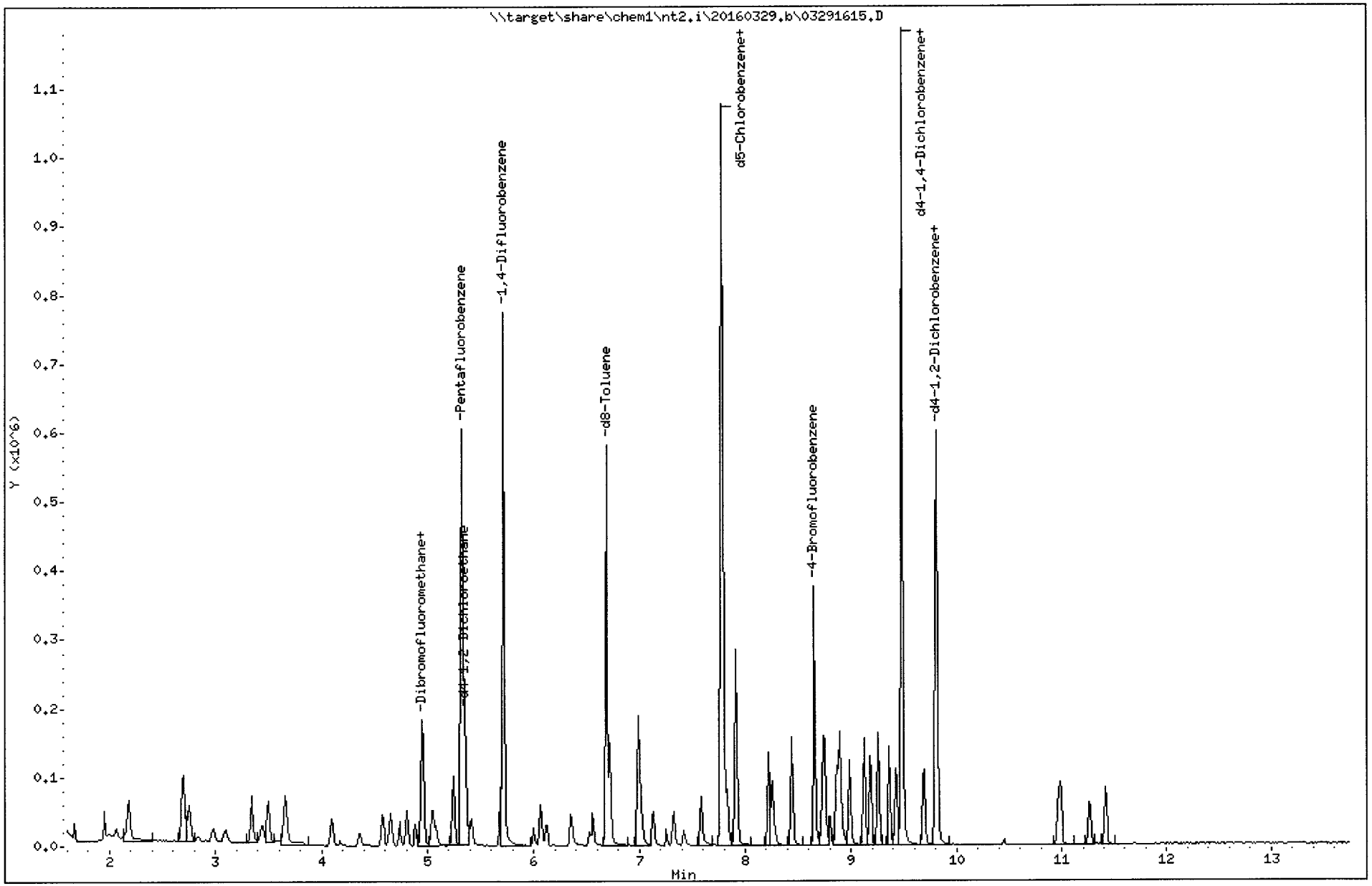
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291615.D
Date : 29-MAR-2016 19:20
Client ID: VSTD01
Sample Info: 0100329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

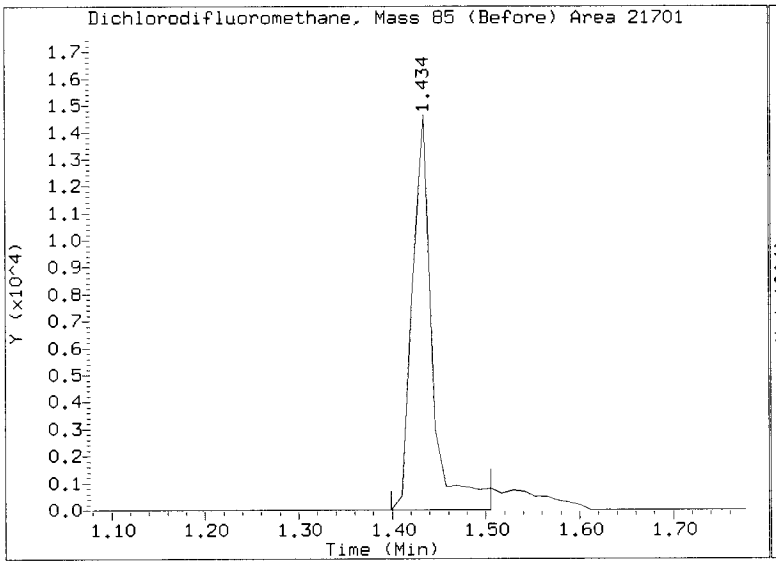
Column phase: RTXVMS

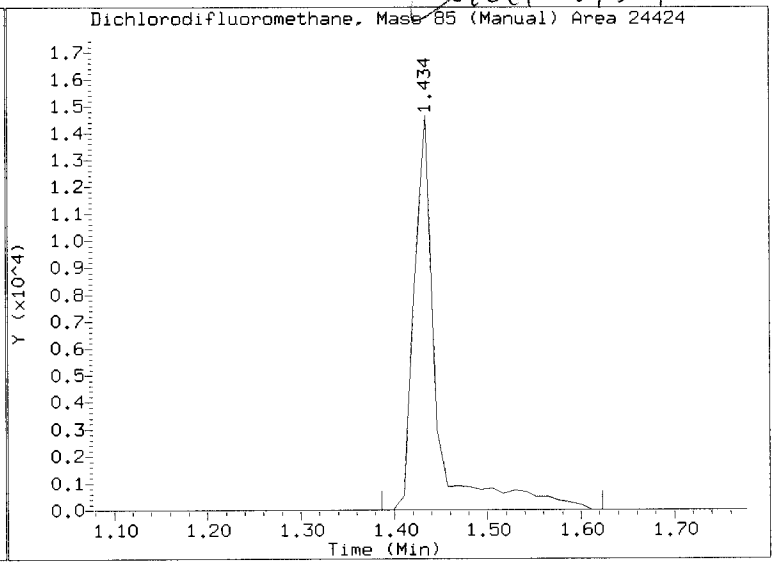


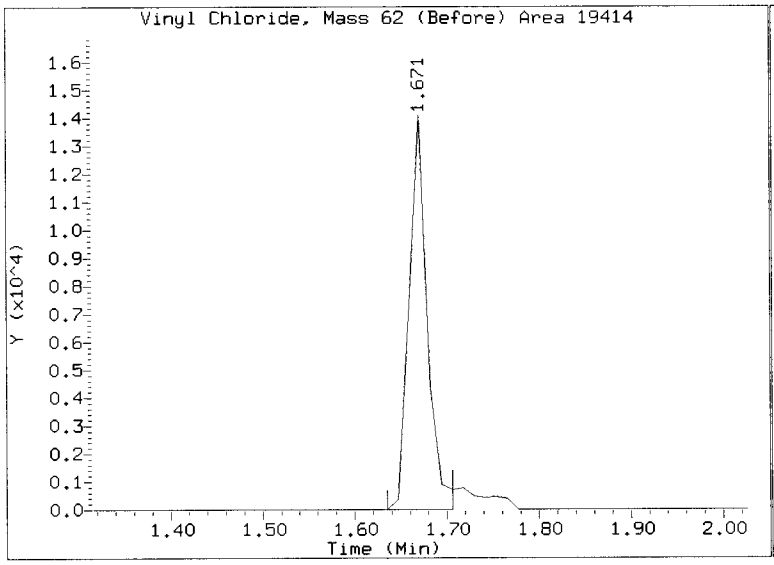
Quant Ion Manual Peak Adjustment Report

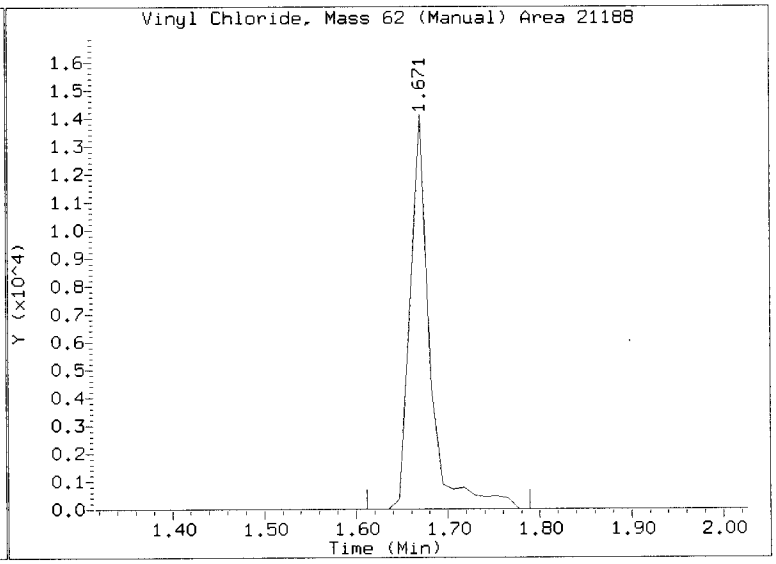
Datafile: //target/share/chem1/nt2.i/20160329.b/03291615.D
Injection Date: 29-MAR-2016 19:20
Lab ID:0100329 Client ID:VSTD01
Report Date: 03/30/2016 09:02

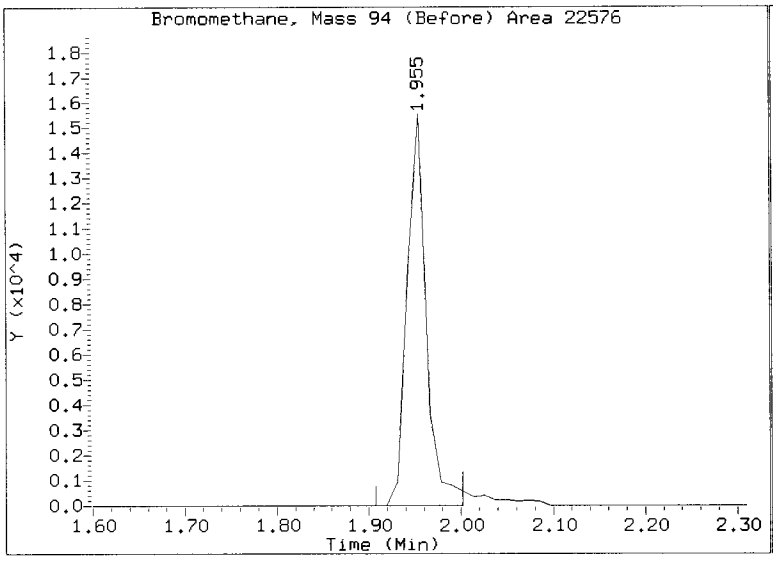
MLL 3/30/16

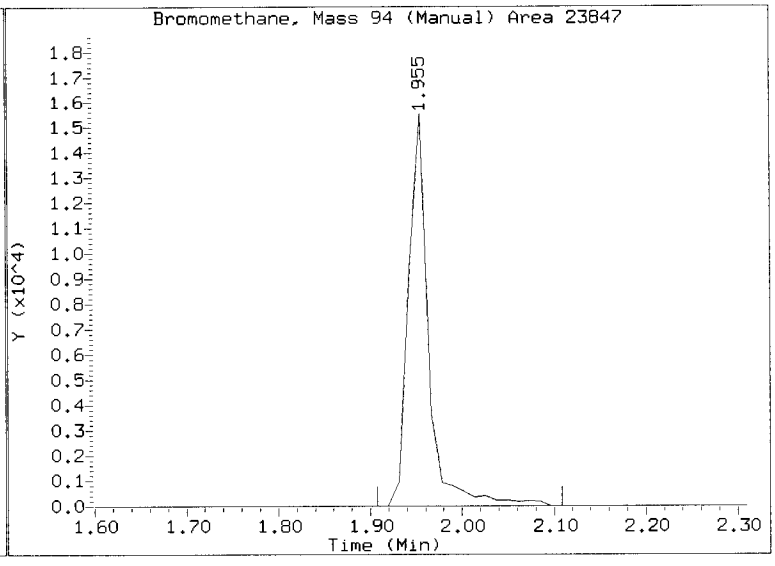








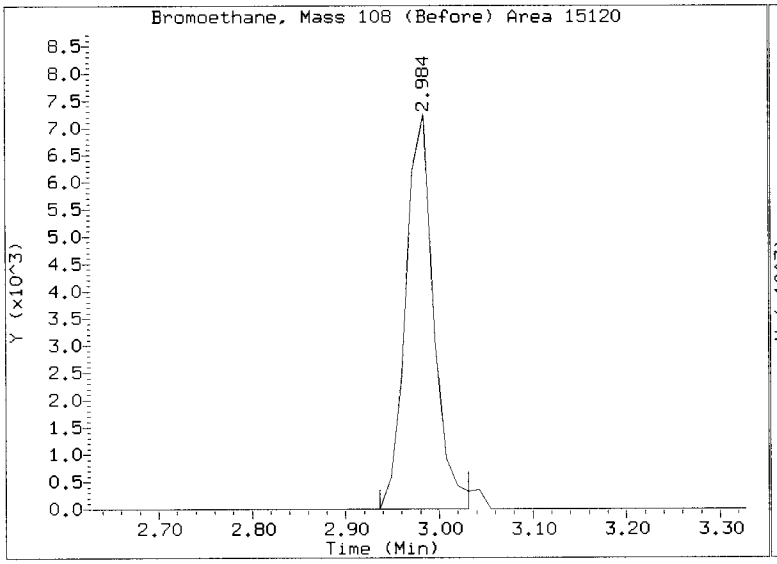


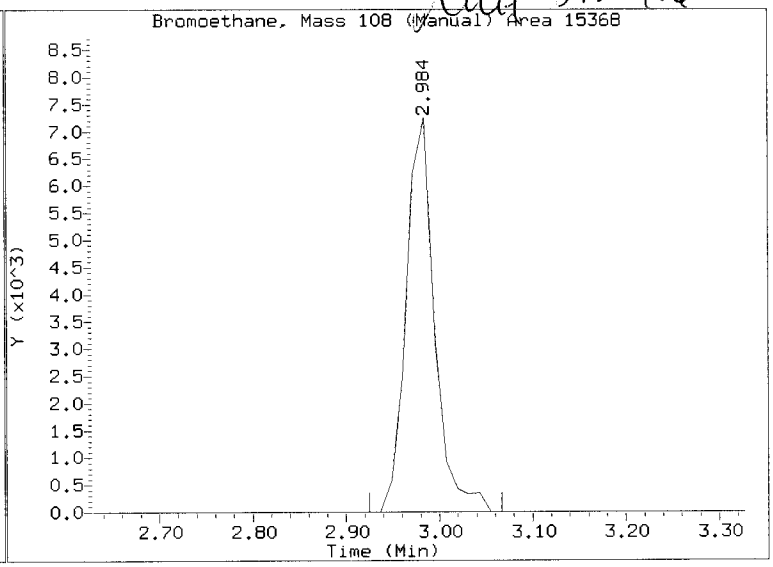


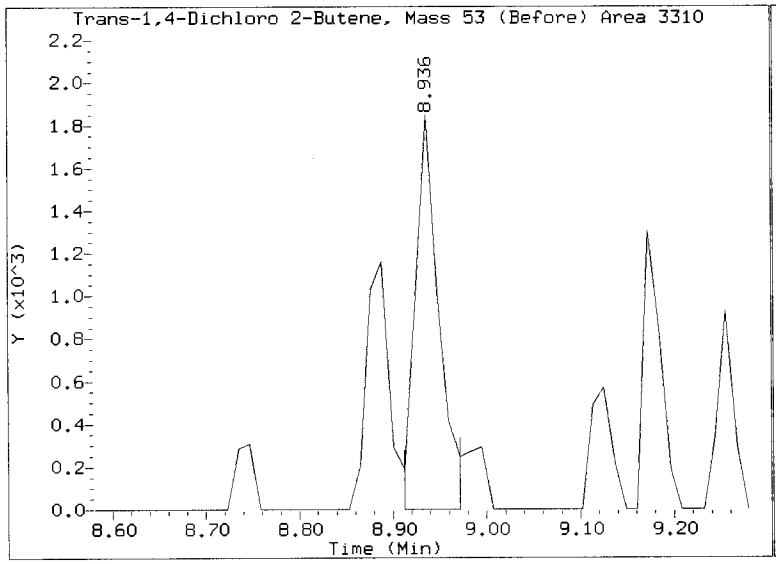
Quant Ion Manual Peak Adjustment Report

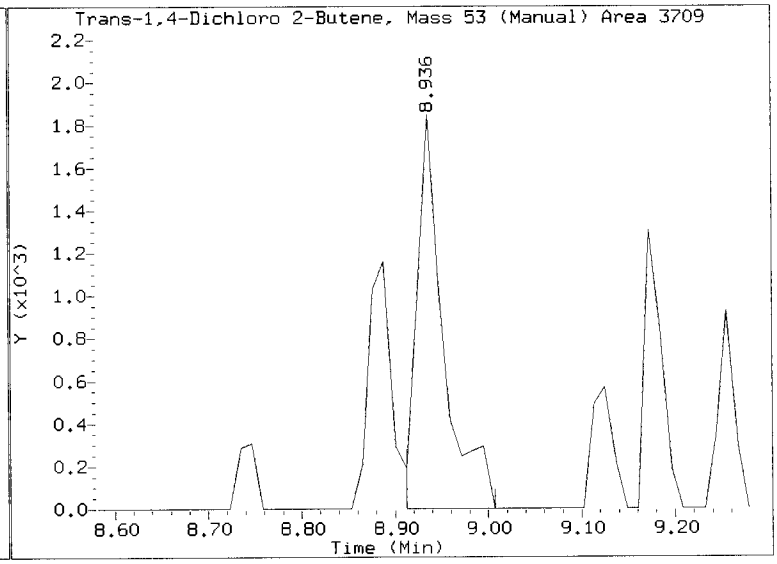
Datafile: //target/share/chem1/nt2.i/20160329.b/03291615.D
Injection Date: 29-MAR-2016 19:20
Lab ID:0100329 Client ID:VSTD01
Report Date: 03/30/2016 09:02

3/30/16









REVIEW SUMMARY FOR FILE - 03291615.D

Lab ID: 0100329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 19:20

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291616.D
Lab Smp Id: 0050329 Client Smp ID: VSTD0.5
Inj Date : 29-MAR-2016 19:41
Operator : PC Inst ID: nt2.i
Smp Info : 0050329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.433	1.433	(0.269)	11481	0.50000	0.5526(M)
173	2-Pentanone	86	6.356	6.344	(1.112)	3557	2.50000	1.665
2	Chloromethane	50	1.599	1.599	(0.300)	11667	0.50000	0.5304
3	Vinyl Chloride	62	1.670	1.670	(0.314)	9200	0.50000	0.4662
4	Bromomethane	94	1.954	1.954	(0.367)	11362	0.50000	0.5754(T)
5	Chloroethane	64	2.061	2.060	(0.387)	4613	0.50000	0.5030(M)
6	Trichlorofluoromethane	101	2.191	2.190	(0.411)	18486	0.50000	0.5117
7	1,1-Dichloroethene	61	2.700	2.699	(0.507)	17152	0.50000	0.5345
8	Carbon Disulfide	76	2.700	2.699	(0.507)	33293	0.50000	0.5277
9	112Trichloro122Trifluoroethane	101	2.747	2.747	(0.516)	10407	0.50000	0.5132
11	Bromoethane	108	2.984	2.983	(0.560)	7312	0.50000	0.5297
12	Acrolein	56	3.102	3.102	(0.582)	7610	2.50000	2.709
13	Methylene Chloride	84	3.350	3.350	(0.629)	22068	0.50000	1.236
14	Acetone	43	3.433	3.433	(0.645)	15348	2.50000	3.119
15	Trans-1,2-Dichloroethene	96	3.504	3.504	(0.658)	11269	0.50000	0.5352
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	30764	0.50000	0.5197
18	1,1-Dichloroethane	63	4.096	4.094	(0.769)	15780	0.50000	0.5151
19	Acrylonitrile	53	4.179	4.178	(0.785)	2276	0.50000	0.4652(T)
20	Vinyl Acetate	43	4.368	4.368	(0.820)	11241	0.50000	0.4169
22	Cis-1,2-Dichloroethene	96	4.581	4.569	(0.860)	9323	0.50000	0.4984
23	2,2-Dichloropropane	77	4.652	4.652	(0.873)	9402	0.50000	0.4341
24	Bromochloromethane	128	4.735	4.734	(0.889)	4108	0.50000	0.4691
25	Chloroform	83	4.806	4.805	(0.902)	14640	0.50000	0.5024
26	Carbon Tetrachloride	117	4.889	4.888	(0.855)	6523	0.50000	0.3789
$ 27	Dibromofluoromethane	111	4.948	4.947	(0.929)	76278	5.00000	5.008
28	1,1,1-Trichloroethane	97	4.948	4.947	(0.929)	11335	0.50000	0.4563
29	2-Butanone	43	5.078	5.078	(0.953)	14994	2.50000	2.493(T)
30	1,1-Dichloropropene	75	5.054	5.054	(0.884)	10989	0.50000	0.4803

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	31 Benzene	78	5.244	5.243	(0.917)	34301	0.50000	0.5087
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	318463	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	97551	5.00000	5.415
	34 1,2-Dichloroethane	62	5.409	5.409	(0.946)	11744	0.50000	0.5219
	36 Trichloroethene	130	5.681	5.681	(0.994)	9092	0.50000	0.4715
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	502550	10.0000	
	38 Dibromomethane	93	6.001	5.989	(1.050)	4683	0.50000	0.4944
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	7822	0.50000	0.4800
	40 Bromodichloromethane	83	6.119	6.107	(1.070)	7846	0.50000	0.4243
	41 2-Chloroethyl Vinyl Ether	63	6.522	6.521	(1.141)	3770	0.50000	0.4109
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	9383	0.50000	0.4189
$	43 d8-Toluene	98	6.687	6.687	(1.170)	296892	5.00000	4.990
	44 Toluene	92	6.723	6.722	(1.176)	22909	0.50000	0.5141
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	11684	2.50000	2.120(T)
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	9904	0.50000	0.4993
	47 Trans 1,3-Dichloropropene	75	7.019	7.018	(1.228)	6733	0.50000	0.3274
	48 1,1,2-Trichloroethane	97	7.137	7.136	(1.248)	6516	0.50000	0.4708
	49 Chlorodibromomethane	129	7.255	7.255	(0.933)	4673	0.50000	0.3176
	50 1,3-Dichloropropane	76	7.326	7.326	(0.942)	12228	0.50000	0.4938
	51 1,2-Dibromoethane	107	7.421	7.420	(1.298)	6437	0.50000	0.4838
	52 2-Hexanone	43	7.587	7.574	(0.976)	18785	2.50000	1.998
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	459981	10.0000	
	54 Chlorobenzene	112	7.788	7.787	(1.002)	27656	0.50000	0.5406
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	13621	0.50000	0.4988
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	5204	0.50000	0.3365
	57 m,p-xylene	106	7.906	7.906	(1.017)	32395	1.00000	0.9732
	58 o-Xylene	106	8.214	8.212	(1.056)	14726	0.50000	0.4691
	59 Styrene	104	8.261	8.260	(1.062)	22166	0.50000	0.4508
	60 Bromoform	173	8.285	8.284	(0.874)	2195	0.50000	0.2572
	61 Isopropyl Benzene	105	8.439	8.438	(0.890)	39145	0.50000	0.4954
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	92055	5.00000	4.909
	63 Bromobenzene	156	8.734	8.734	(0.921)	10365	0.50000	0.4802
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	45222	0.50000	0.5096
	65 1,1,2,2-Tetrachloroethane	83	8.793	8.805	(0.928)	8219	0.50000	0.5031
	66 2-Chloro Toluene	91	8.864	8.864	(0.935)	31594	0.50000	0.5031
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	30606	0.50000	0.4692
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	2886	0.50000	0.5188
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.935	(0.943)	1603	0.50000	0.4107
	70 4-Chloro Toluene	91	8.983	8.982	(0.948)	29703	0.50000	0.5157
	71 T-Butyl Benzene	119	9.125	9.124	(0.963)	28367	0.50000	0.4854
	72 1,2,4-Trimethylbenzene	105	9.172	9.172	(0.968)	31437	0.50000	0.4784
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	41271	0.50000	0.4957
	74 4-Isopropyl Toluene	119	9.361	9.361	(0.988)	32159	0.50000	0.4637
	75 1,3-Dichlorobenzene	146	9.432	9.432	(0.995)	21403	0.50000	0.5158
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	246454	10.0000	
	77 1,4-Dichlorobenzene	146	9.492	9.491	(1.001)	22228	0.50000	0.5200
	78 N-Butyl Benzene	91	9.681	9.692	(1.021)	30059	0.50000	0.4823
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	117860	5.00000	5.001
	80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	20780	0.50000	0.5285
	81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	914	0.50000	0.4108
	83 Hexachloro 1,3-Butadiene	225	10.971	10.970	(1.157)	5109	0.50000	0.4616
	84 1,2,4-Trichlorobenzene	180	10.994	10.994	(1.160)	12379	0.50000	0.4674
	85 Naphthalene	128	11.255	11.266	(1.187)	24713	0.50000	0.4378
	86 1,2,3-Trichlorobenzene	180	11.409	11.420	(1.203)	12699	0.50000	0.4956

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291616.D
Lab Smp Id: 0050329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD0.5
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	318463	-9.11
37 1,4-Difluorobenze	562526	281263	1125052	502550	-10.66
53 d5-Chlorobenzene	502371	251186	1004742	459981	-8.44
76 d4-1,4-Dichlorobe	277950	138975	555900	246454	-11.33

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

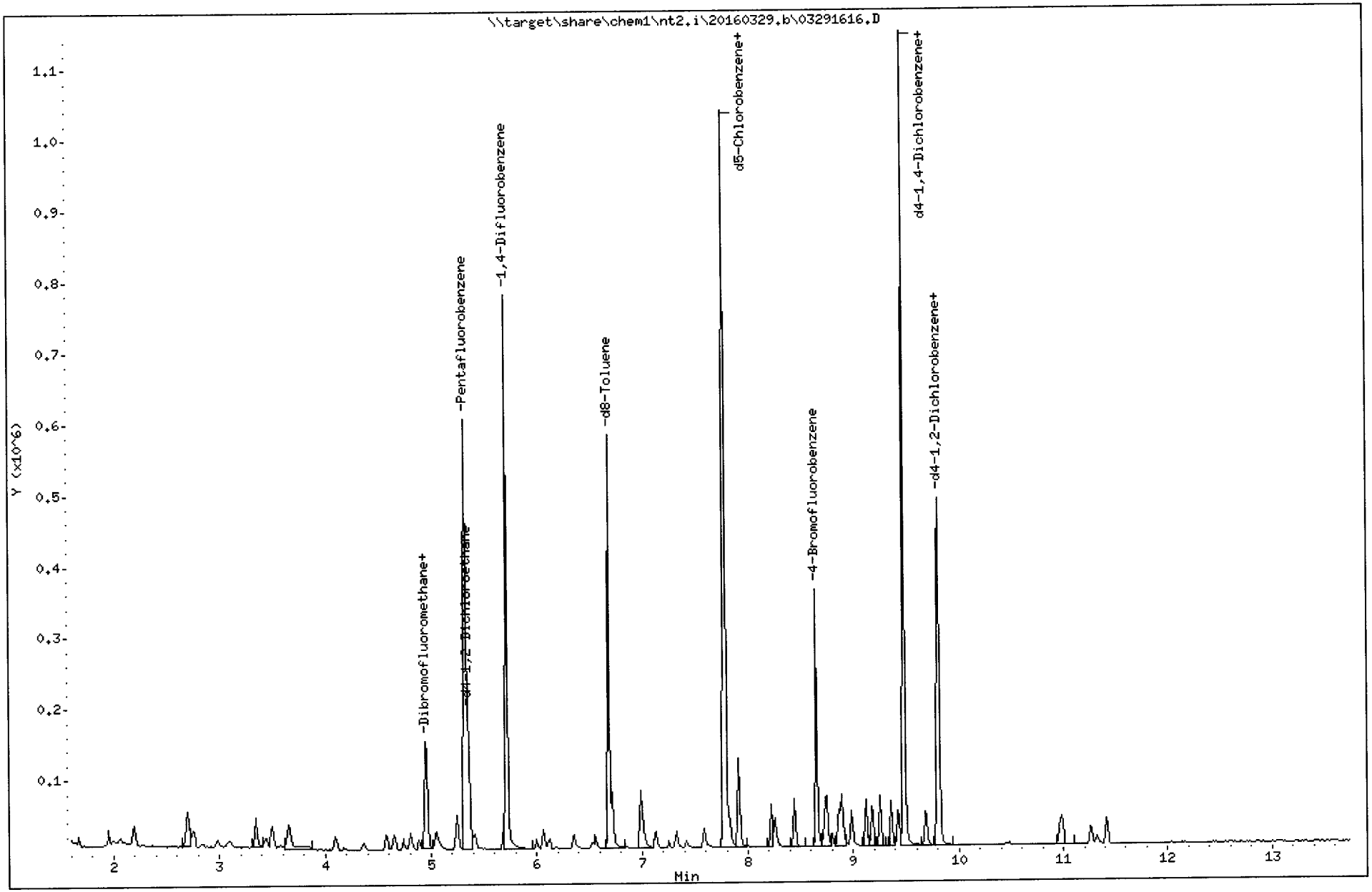
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291616.D
Date : 29-MAR-2016 19:41
Client ID: VSTD0.5
Sample Info: 0050329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

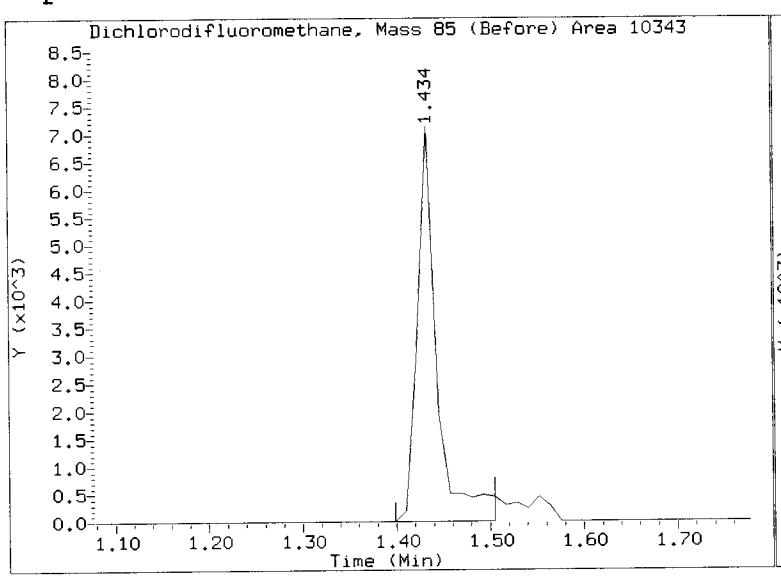
Column phase: RTXVMS

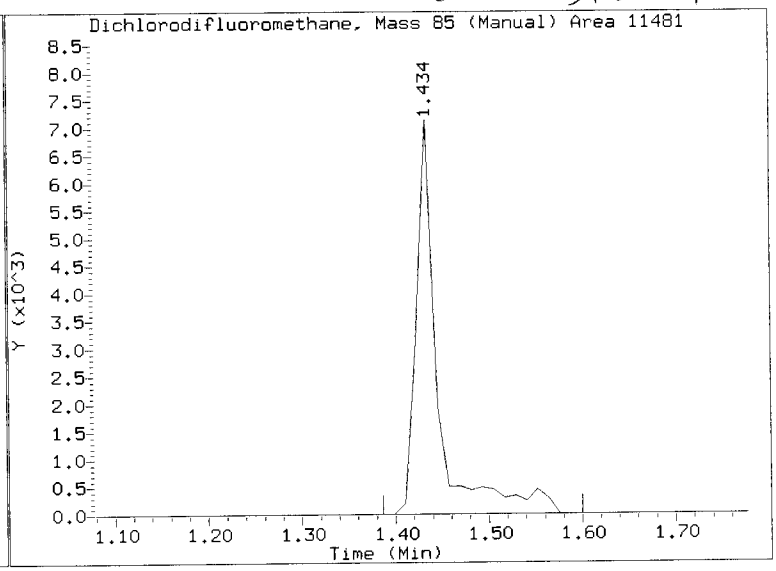


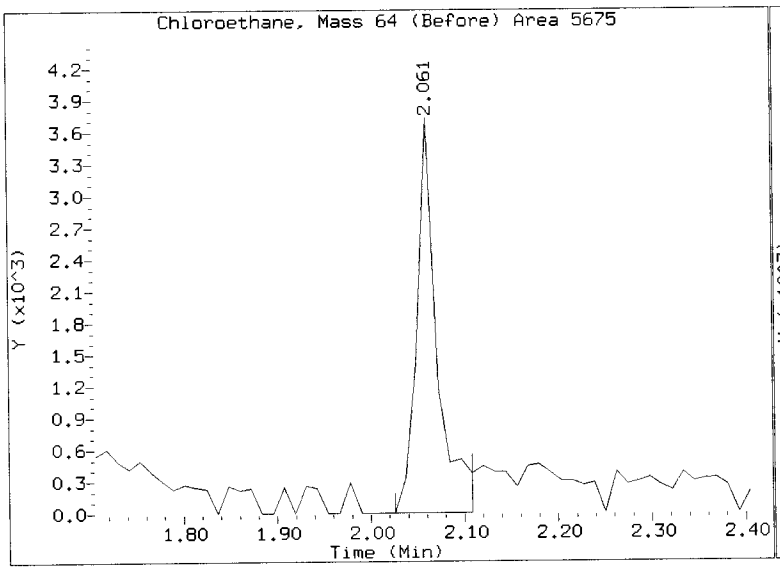
Quant Ion Manual Peak Adjustment Report

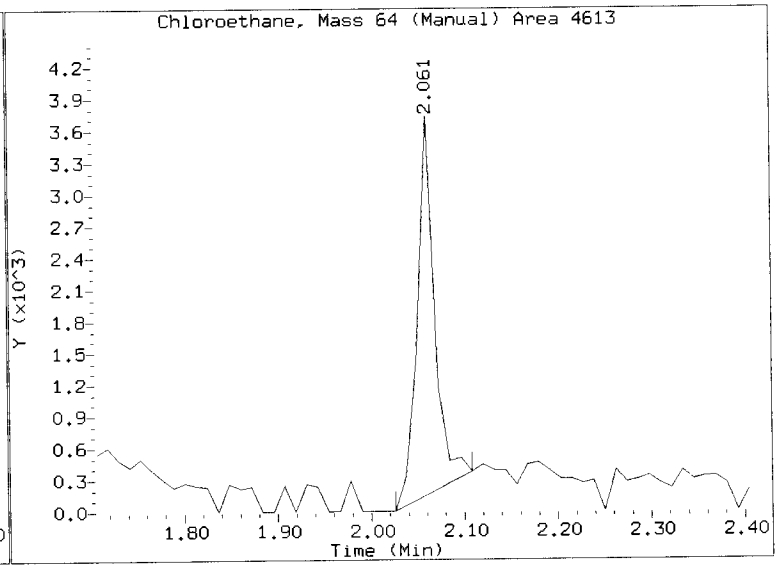
Datafile: //target/share/chem1/nt2.i/20160329.b/03291616.D
Injection Date: 29-MAR-2016 19:41
Lab ID:0050329 Client ID:VSTD0.5
Report Date: 03/30/2016 09:02

DH 3/30/16









REVIEW SUMMARY FOR FILE - 03291616.D

Lab ID: 0050329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 19:41

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291617.D
Lab Smp Id: SEC0063-CAL1 Client Smp ID: VSTD0.2
Inj Date : 29-MAR-2016 20:03
Operator : PC Inst ID: nt2.i
Smp Info : 0020329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 13:01 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	5.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.433	1.433	(0.269)	3343	0.20000	0.1643(M)
173 2-Pentanone	86	6.356	6.344	(1.112)	1328	1.00000	0.6310
2 Chloromethane	50	1.599	1.599	(0.300)	5142	0.20000	0.2387(T)
3 Vinyl Chloride	62	1.670	1.670	(0.314)	3488	0.20000	0.1805
4 Bromomethane	94	1.954	1.954	(0.367)	4879	0.20000	0.2523(TM)
5 Chloroethane	64	2.061	2.060	(0.387)	2987	0.20000	0.3318
6 Trichlorofluoromethane	101	2.191	2.190	(0.411)	6962	0.20000	0.1968
7 1,1-Dichloroethene	61	2.699	2.699	(0.507)	6664	0.20000	0.2121
8 Carbon Disulfide	76	2.711	2.699	(0.509)	14437	0.20000	0.2337(T)
9 112Trichloro122Trifluoroethane	101	2.759	2.747	(0.518)	4309	0.20000	0.2170
10 Iodomethane	142	2.841	2.841	(0.534)	1704	0.20000	0.09166(T)
11 Bromoethane	108	2.983	2.983	(0.560)	2955	0.20000	0.2186
12 Acrolein	56	3.102	3.102	(0.582)	2794	1.00000	1.016
13 Methylene Chloride	84	3.350	3.350	(0.629)	15999	0.20000	0.9153
14 Acetone	43	3.433	3.433	(0.645)	7163	1.00000	1.486
15 Trans-1,2-Dichloroethene	96	3.504	3.504	(0.658)	4496	0.20000	0.2181
17 Methyl tert butyl ether	73	3.658	3.658	(0.687)	11910	0.20000	0.2055
18 1,1-Dichloroethane	63	4.108	4.094	(0.771)	5646	0.20000	0.1882
19 Acrylonitrile	53	4.179	4.178	(0.785)	766	0.20000	0.1599(T)
20 Vinyl Acetate	43	4.368	4.368	(0.820)	3856	0.20000	0.1460(M)
22 Cis-1,2-Dichloroethene	96	4.581	4.569	(0.860)	3325	0.20000	0.1815
23 2,2-Dichloropropane	77	4.652	4.652	(0.873)	3484	0.20000	0.1643

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	24 Bromochloromethane	128	4.747	4.734	(0.891)	1647	0.20000	0.1921
	25 Chloroform	83	4.806	4.805	(0.902)	5420	0.20000	0.1899
	26 Carbon Tetrachloride	117	4.900	4.888	(0.857)	2880	0.20000	0.1698
$	27 Dibromofluoromethane	111	4.948	4.947	(0.929)	74217	5.00000	4.976
	28 1,1,1-Trichloroethane	97	4.948	4.947	(0.929)	4164	0.20000	0.1712
	29 2-Butanone	43	5.078	5.078	(0.953)	4779	1.00000	0.8114(T)
	30 1,1-Dichloropropene	75	5.054	5.054	(0.884)	4580	0.20000	0.2032
	31 Benzene	78	5.244	5.243	(0.917)	13075	0.20000	0.1968
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	311848	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	96597	5.00000	5.476
	34 1,2-Dichloroethane	62	5.409	5.409	(0.946)	4671	0.20000	0.2107
	36 Trichloroethene	130	5.693	5.681	(0.996)	3947	0.20000	0.2078
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	495060	10.0000	
	38 Dibromomethane	93	6.001	5.989	(1.050)	1744	0.20000	0.1869
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	2945	0.20000	0.1834(M)
	40 Bromodichloromethane	83	6.119	6.107	(1.070)	2864	0.20000	0.1572
	41 2-Chloroethyl Vinyl Ether	63	6.533	6.521	(1.143)	1096	0.20000	0.1213(TM)
	42 Cis 1,3-dichloropropene	75	6.569	6.557	(1.149)	3272	0.20000	0.1483
$	43 d8-Toluene	98	6.687	6.687	(1.170)	290500	5.00000	4.956
	44 Toluene	92	6.723	6.722	(1.176)	8745	0.20000	0.1992
	45 4-Methyl-2-Pentanone	58	7.007	6.995	(1.226)	4379	1.00000	0.8064(T)
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	3691	0.20000	0.1886
	47 Trans 1,3-Dichloropropene	75	7.030	7.018	(1.230)	2389	0.20000	0.1179
	48 1,1,2-Trichloroethane	97	7.137	7.136	(1.248)	2422	0.20000	0.1776
	49 Chlorodibromomethane	129	7.255	7.255	(0.933)	1750	0.20000	0.1205(T)
	50 1,3-Dichloropropane	76	7.326	7.326	(0.942)	4669	0.20000	0.1911
	51 1,2-Dibromoethane	107	7.433	7.420	(1.300)	2103	0.20000	0.1605
	52 2-Hexanone	43	7.586	7.574	(0.976)	5853	1.00000	0.6309
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	453911	10.0000	
	54 Chlorobenzene	112	7.788	7.787	(1.002)	9762	0.20000	0.1934
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	4923	0.20000	0.1827
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	1757	0.20000	0.1151
	57 m,p-xylene	106	7.906	7.906	(1.017)	12194	0.40000	0.3712
	58 o-Xylene	106	8.214	8.212	(1.056)	4999	0.20000	0.1614
	59 Styrene	104	8.261	8.260	(1.062)	7326	0.20000	0.1510
	60 Bromoform	173	8.285	8.284	(0.874)	689	0.20000	0.08455
	61 Isopropyl Benzene	105	8.438	8.438	(0.890)	14070	0.20000	0.1865
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	84714	5.00000	4.578
	63 Bromobenzene	156	8.734	8.734	(0.921)	4100	0.20000	0.1989
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	16215	0.20000	0.1913
	65 1,1,2,2-Tetrachloroethane	83	8.805	8.805	(0.929)	2684	0.20000	0.1720
	66 2-Chloro Toluene	91	8.864	8.864	(0.935)	11463	0.20000	0.1911
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	10988	0.20000	0.1764
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	738	0.20000	0.1389
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	8.983	8.982	(0.948)	10381	0.20000	0.1887
	71 T-Butyl Benzene	119	9.125	9.124	(0.963)	10133	0.20000	0.1816
	72 1,2,4-Trimethylbenzene	105	9.184	9.172	(0.969)	10762	0.20000	0.1715
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	14790	0.20000	0.1860
	74 4-Isopropyl Toluene	119	9.361	9.361	(0.988)	10660	0.20000	0.1610
	75 1,3-Dichlorobenzene	146	9.432	9.432	(0.995)	7375	0.20000	0.1861
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	235351	10.0000	
	77 1,4-Dichlorobenzene	146	9.492	9.491	(1.001)	8426	0.20000	0.2064
	78 N-Butyl Benzene	91	9.693	9.692	(1.022)	10658	0.20000	0.1791

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	112291	5.00000	4.990
80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	7304	0.20000	0.1945
81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
83 Hexachloro 1,3-Butadiene	225	10.971	10.970	(1.157)	2248	0.20000	0.2127
84 1,2,4-Trichlorobenzene	180	10.994	10.994	(1.160)	4974	0.20000	0.1967
85 Naphthalene	128	11.266	11.266	(1.188)	9484	0.20000	0.1759(M)
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	4431	0.20000	0.1811

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291617.D
Lab Smp Id: 0020329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: VSTD0.2
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	311848	-11.00
37 1,4-Difluorobenze	562526	281263	1125052	495060	-11.99
53 d5-Chlorobenzene	502371	251186	1004742	453911	-9.65
76 d4-1,4-Dichlorobe	277950	138975	555900	235351	-15.33

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

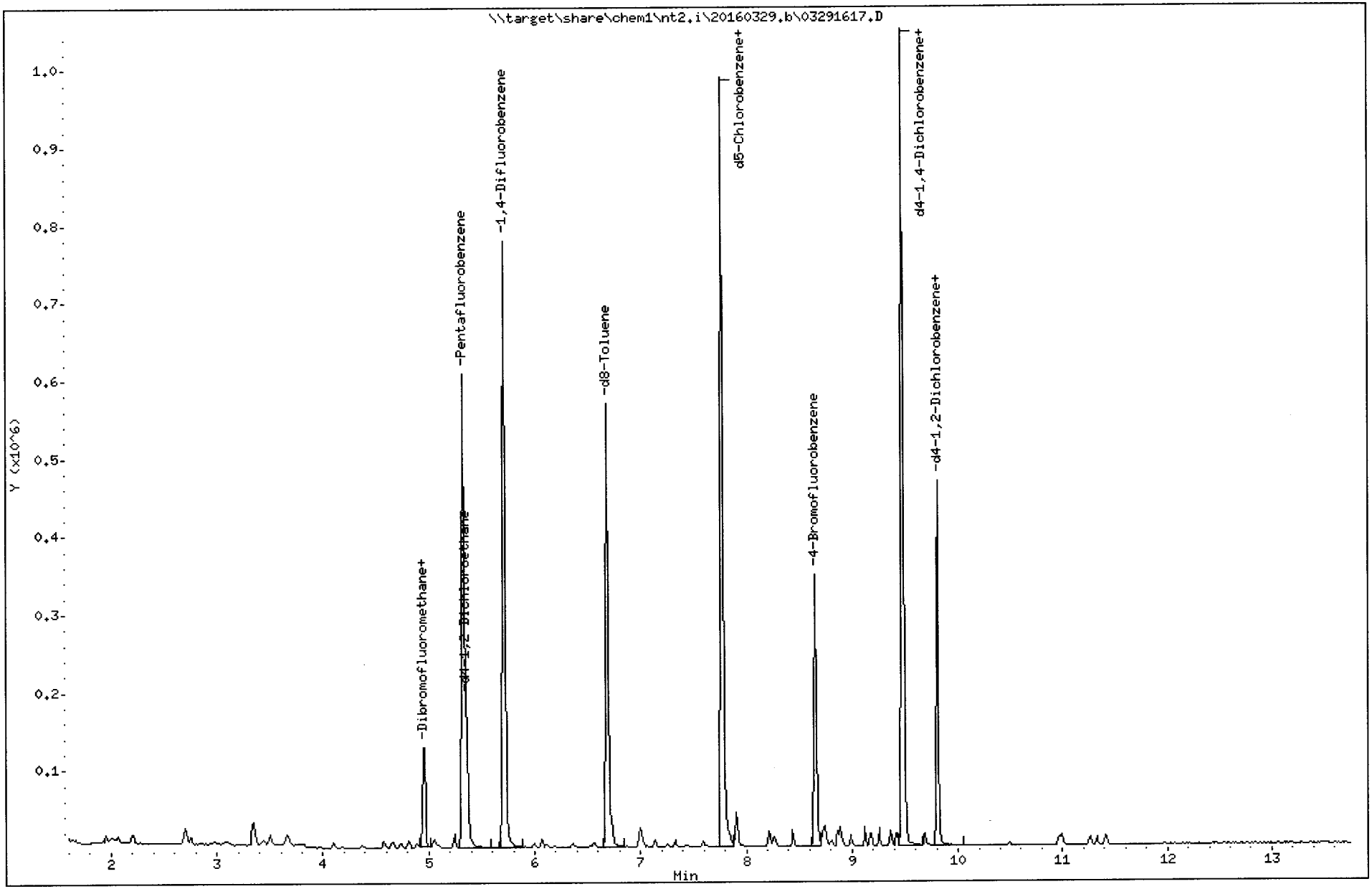
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160329.b\03291617.D
Date : 29-MAR-2016 20:03
Client ID: VSTD0.2
Sample Info: 0020329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

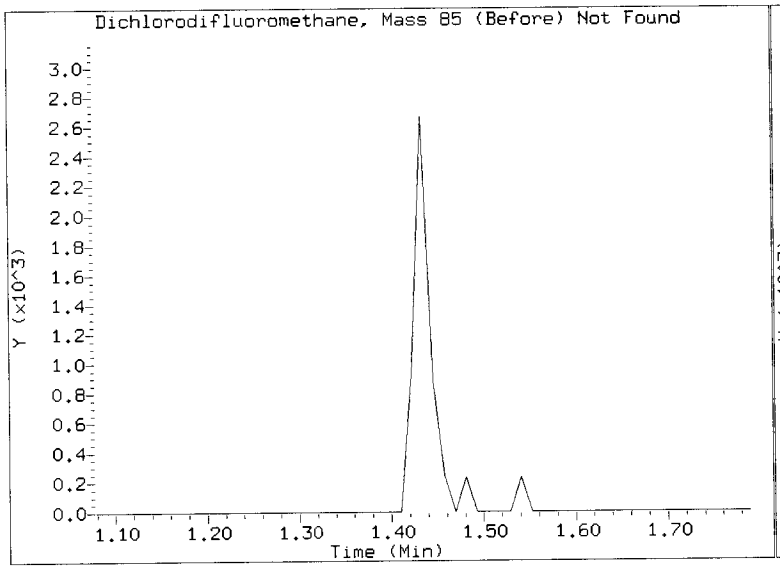
Column phase: RTXVMS

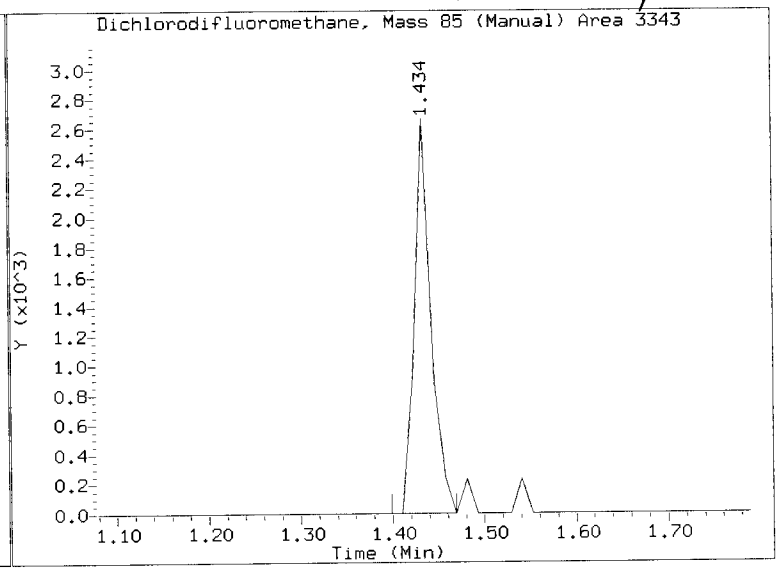


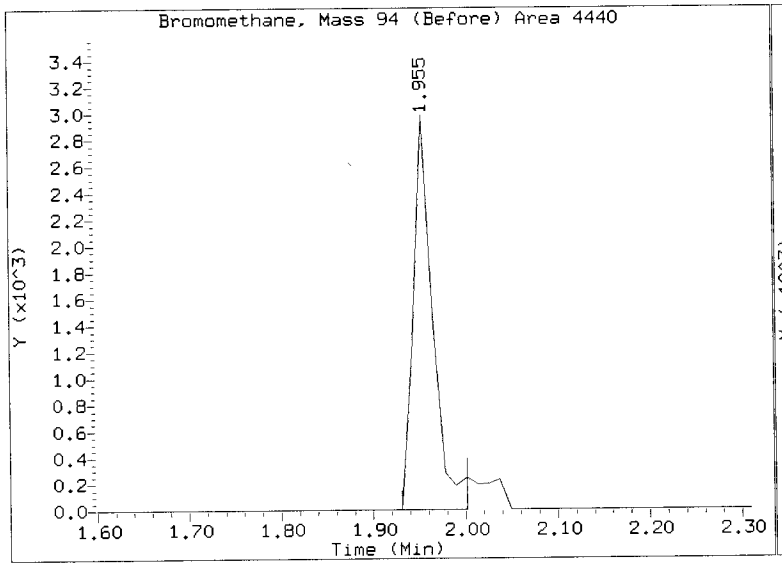
Quant Ion Manual Peak Adjustment Report

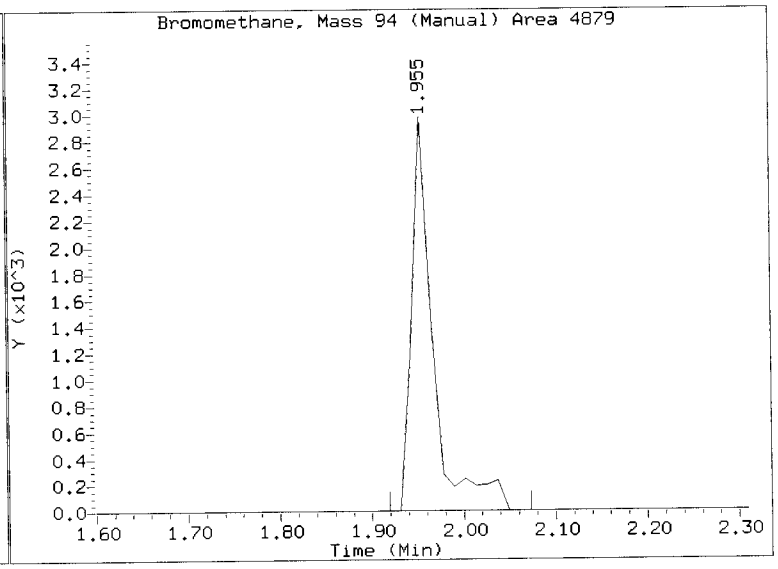
Datafile: //target/share/chem1/nt2.i/20160329.b/03291617.D
Injection Date: 29-MAR-2016 20:03
Lab ID:0020329 Client ID:VSTD0.2
Report Date: 03/30/2016 09:02

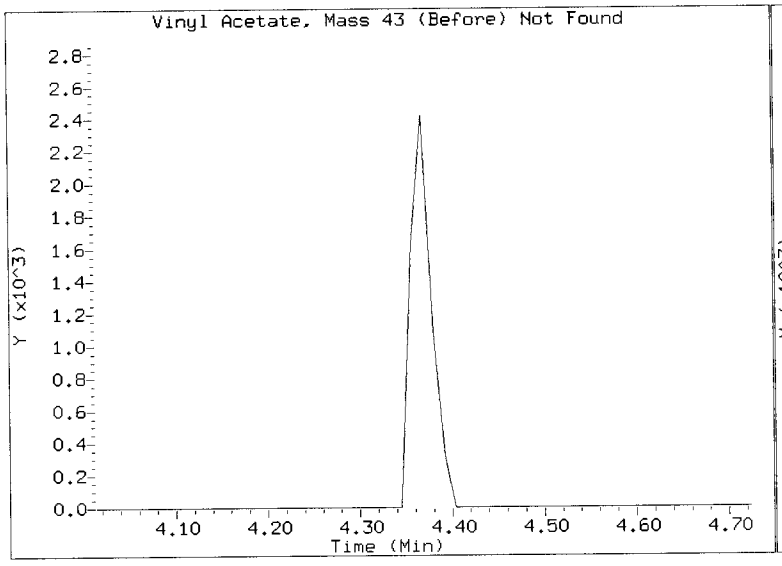
DLH 3/30/16

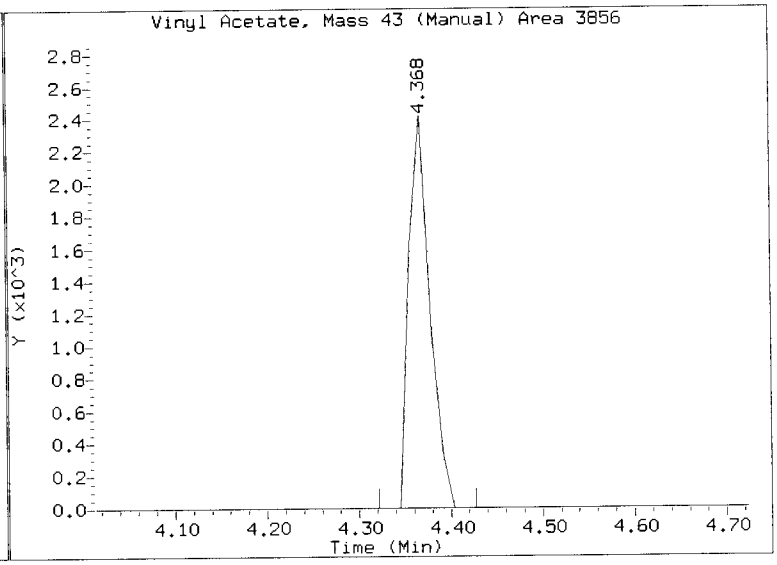












Quant Ion Manual Peak Adjustment Report

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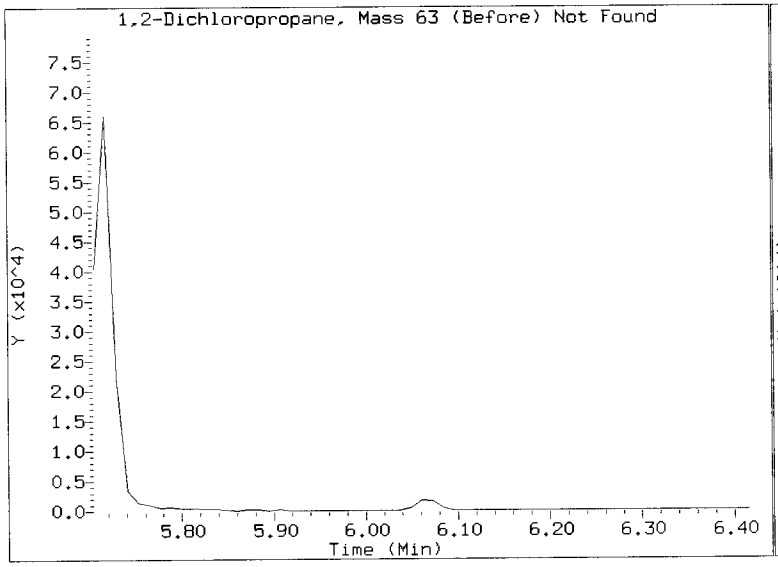
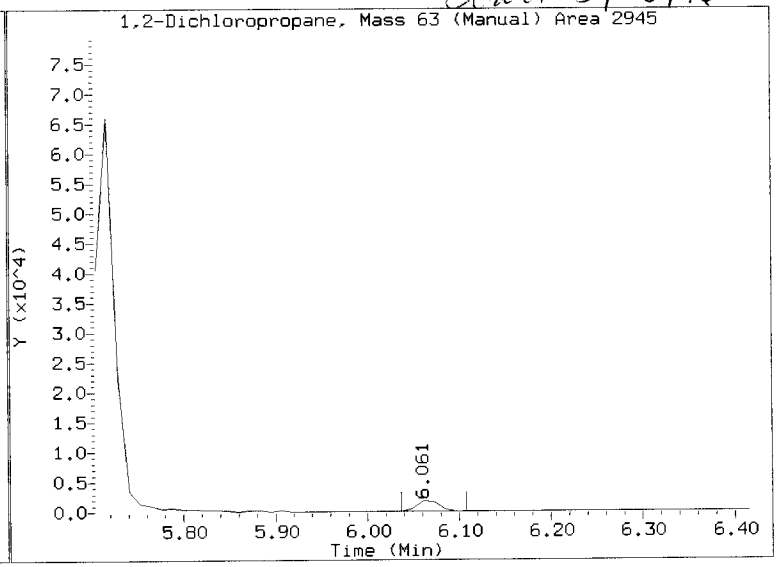
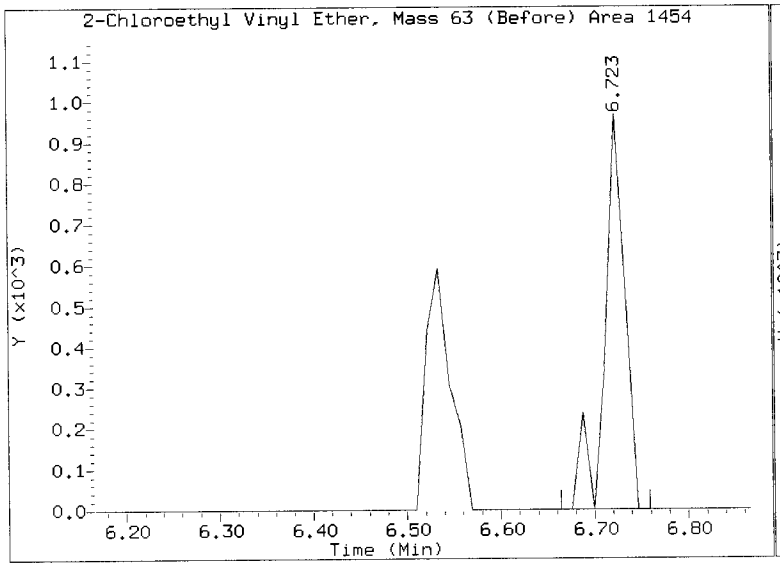
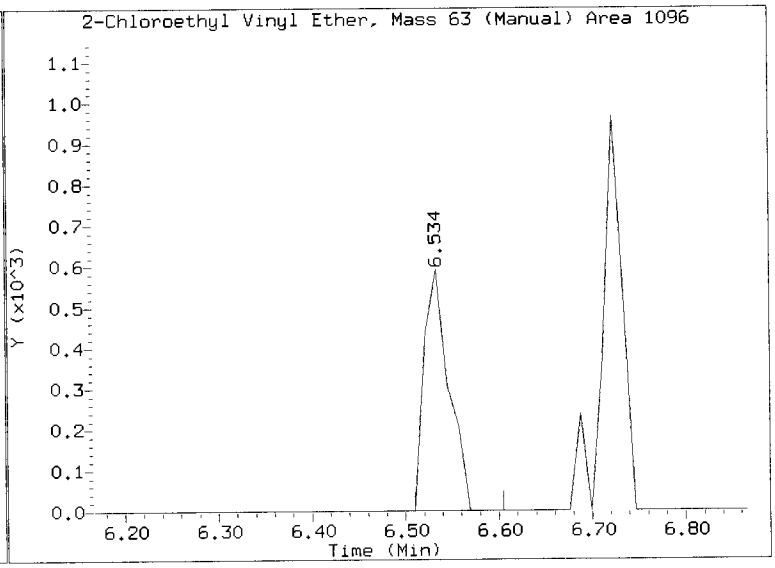
Injection Date: 29-MAR-2016 20:03
Lab ID:0020329 Client ID:VSTD0.2
Report Date: 03/30/2016 09:02

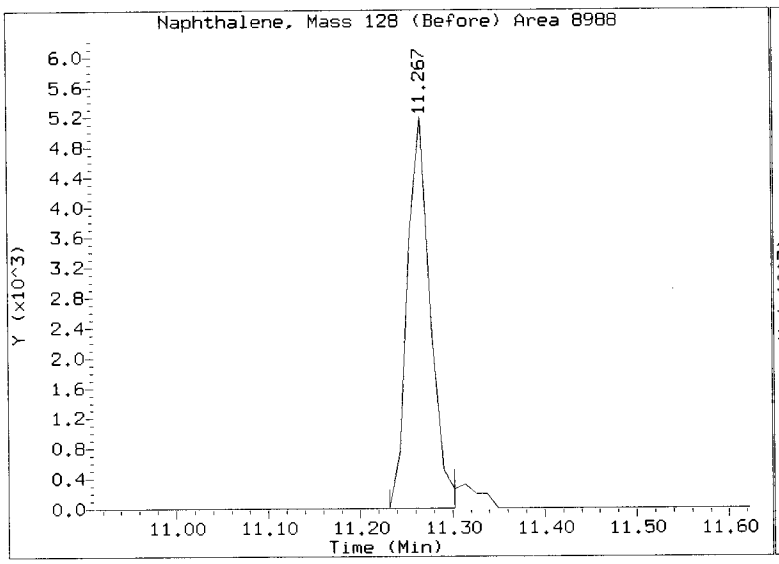
XAH 3/30/16

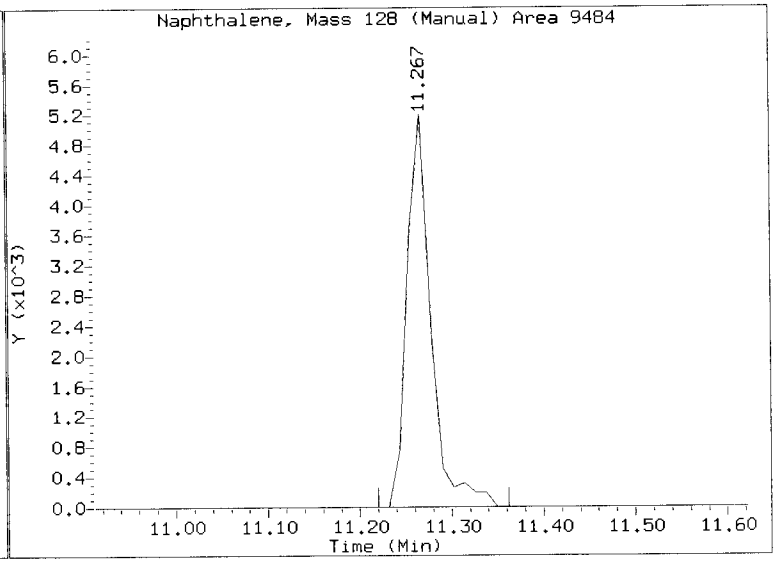












REVIEW SUMMARY FOR FILE - 03291617.D

Lab ID: 0020329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 20:03

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291618.D
Lab Smp Id: SCV0329 Client Smp ID: SCV
Inj Date : 29-MAR-2016 20:24
Operator : PC Inst ID: nt2.i
Smp Info : SCV0329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.433	1.433	(0.269)	225449	10.3583	10.358(M)
173	2-Pentanone	86	6.343	6.344	(1.110)	48731	21.7189	21.719
2	Chloromethane	50	1.599	1.599	(0.300)	258448	11.2147	11.215
3	Vinyl Chloride	62	1.669	1.670	(0.314)	248350	12.0123	12.012(R)
4	Bromomethane	94	1.953	1.954	(0.367)	291995	14.1134	14.113(R)
5	Chloroethane	64	2.060	2.060	(0.387)	101626	12.0717	12.072(R)
6	Trichlorofluoromethane	101	2.178	2.190	(0.409)	398997	10.5428	10.543
7	1,1-Dichloroethene	61	2.687	2.699	(0.505)	356120	10.5934	10.593
8	Carbon Disulfide	76	2.699	2.699	(0.507)	3473620	52.5482	52.548
9	112Trichloro122Trifluoroethane	101	2.746	2.747	(0.516)	433739	20.4141	20.414
10	Iodomethane	142	2.841	2.841	(0.533)	1271272	63.9157	63.916
11	Bromoethane	108	2.971	2.983	(0.558)	283360	19.5916	19.592
12	Acrolein	56	3.101	3.102	(0.582)	30579	10.3899	10.390
13	Methylene Chloride	84	3.338	3.350	(0.627)	244785	13.0898	13.090(R)
14	Acetone	43	3.433	3.433	(0.645)	255594	49.5763	49.576
15	Trans-1,2-Dichloroethene	96	3.504	3.504	(0.658)	230456	10.4469	10.447
17	Methyl tert butyl ether	73	3.657	3.658	(0.687)	695541	11.2155	11.216
18	1,1-Dichloroethane	63	4.095	4.094	(0.769)	352946	10.9977	10.998
19	Acrylonitrile	53	4.178	4.178	(0.785)	55622	10.8519	10.852
20	Vinyl Acetate	43	4.356	4.368	(0.818)	1612557	57.0786	57.079
22	Cis-1,2-Dichloroethene	96	4.569	4.569	(0.858)	209807	10.7064	10.706
23	2,2-Dichloropropane	77	4.651	4.652	(0.873)	219961	9.69383	9.694
24	Bromochloromethane	128	4.734	4.734	(0.889)	99184	10.8102	10.810
25	Chloroform	83	4.805	4.805	(0.902)	334883	10.9693	10.969
26	Carbon Tetrachloride	117	4.888	4.888	(0.855)	180638	9.99153	9.992
$ 27	Dibromofluoromethane	111	4.947	4.947	(0.929)	79636	4.99077	4.991
28	1,1,1-Trichloroethane	97	4.947	4.947	(0.929)	288064	11.0696	11.070
29	2-Butanone	43	5.077	5.078	(0.953)	319923	50.7661	50.766

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	30 1,1-Dichloropropene	75	5.054	5.054	(0.884)	273271	11.3741	11.374
	31 Benzene	78	5.243	5.243	(0.917)	796520	11.2485	11.248
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	333646	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.349	5.350	(1.004)	93256	4.94129	4.941
	34 1,2-Dichloroethane	62	5.409	5.409	(0.946)	255800	10.8245	10.825
	36 Trichloroethene	130	5.681	5.681	(0.994)	213646	10.5504	10.550
*	37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	527779	10.0000	
	38 Dibromomethane	93	5.988	5.989	(1.048)	108948	10.9515	10.952
	39 1,2-Dichloropropane	63	6.059	6.060	(1.060)	191568	11.1929	11.193
	40 Bromodichloromethane	83	6.107	6.107	(1.068)	216339	11.1411	11.141
	41 2-Chloroethyl Vinyl Ether	63	6.521	6.521	(1.141)	500541	51.9511	51.951
	42 Cis 1,3-dichloropropene	75	6.556	6.557	(1.147)	276727	11.7650	11.765
$	43 d8-Toluene	98	6.687	6.687	(1.170)	315699	5.05228	5.052
	44 Toluene	92	6.722	6.722	(1.176)	503248	10.7526	10.753
	45 4-Methyl-2-Pentanone	58	6.994	6.995	(1.224)	288263	49.7932	49.793
	46 Tetrachloroethene	166	6.994	6.995	(0.900)	243724	11.6164	11.616
	47 Trans 1,3-Dichloropropene	75	7.018	7.018	(1.228)	229667	10.6338	10.634
	48 1,1,2-Trichloroethane	97	7.136	7.136	(1.248)	166165	11.4316	11.432
	49 Chlorodibromomethane	129	7.255	7.255	(0.933)	150926	9.69813	9.698
	50 1,3-Dichloropropane	76	7.326	7.326	(0.942)	297101	11.3431	11.343
	51 1,2-Dibromoethane	107	7.420	7.420	(1.298)	161509	11.5595	11.560
	52 2-Hexanone	43	7.574	7.574	(0.974)	513146	51.6055	51.605
*	53 d5-Chlorobenzene	117	7.775	7.775	(1.000)	486532	10.0000	
	54 Chlorobenzene	112	7.787	7.787	(1.002)	564299	10.4289	10.429
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	321736	11.1383	11.138
	56 1,1,1,2-Tetrachloroethane	131	7.834	7.835	(1.008)	161627	9.87990	9.880
	57 m,p-xylene	106	7.905	7.906	(1.017)	792516	22.5100	22.510
	58 o-Xylene	106	8.213	8.212	(1.056)	378350	11.3937	11.394
	59 Styrene	104	8.260	8.260	(1.062)	620376	11.9284	11.928
	60 Bromoform	173	8.284	8.284	(0.874)	81718	8.76488	8.765
	61 Isopropyl Benzene	105	8.438	8.438	(0.890)	909138	10.5300	10.530
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	101818	5.13381	5.134
	63 Bromobenzene	156	8.734	8.734	(0.921)	241773	10.2517	10.252
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	1132032	11.6758	11.676
	65 1,1,2,2-Tetrachloroethane	83	8.793	8.805	(0.928)	204289	11.4452	11.445
	66 2-Chloro Toluene	91	8.864	8.864	(0.935)	740777	10.7958	10.796
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	809593	11.3605	11.360
	68 1,2,3-Trichloropropane	110	8.899	8.900	(0.939)	69579	11.4482	11.448
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.935	(0.943)	38645	9.06246	9.062
	70 4-Chloro Toluene	91	8.982	8.982	(0.948)	677395	10.7639	10.764
	71 T-Butyl Benzene	119	9.124	9.124	(0.963)	794678	12.4454	12.445(R)
	72 1,2,4-Trimethylbenzene	105	9.171	9.172	(0.968)	827978	11.5326	11.533
	73 S-Butyl Benzene	105	9.254	9.255	(0.976)	977625	10.7465	10.747
	74 4-Isopropyl Toluene	119	9.361	9.361	(0.988)	864798	11.4127	11.413
	75 1,3-Dichlorobenzene	146	9.420	9.432	(0.994)	482440	10.6419	10.642
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.479	(1.000)	269269	10.0000	
	77 1,4-Dichlorobenzene	146	9.491	9.491	(1.001)	488865	10.4678	10.468
	78 N-Butyl Benzene	91	9.680	9.692	(1.021)	742417	10.9029	10.903
$	79 d4-1,2-Dichlorobenzene	152	9.810	9.811	(1.035)	129082	5.01359	5.014
	80 1,2-Dichlorobenzene	146	9.810	9.811	(1.035)	449816	10.4706	10.471
	81 1,2-Dibromo 3-Chloropropane	75	10.438	10.450	(1.101)	26973	11.0958	11.096
	83 Hexachloro 1,3-Butadiene	225	10.970	10.970	(1.157)	114116	9.43633	9.436
	84 1,2,4-Trichlorobenzene	180	10.994	10.994	(1.160)	293041	10.1270	10.127
	85 Naphthalene	128	11.254	11.266	(1.187)	705896	11.4462	11.446

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
86 1,2,3-Trichlorobenzene	180	11.408	11.420	(1.203)	289171	10.3299	10.330

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291618.D
Lab Smp Id: SCV0329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Client Smp ID: SCV
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	333646	-4.77
37 1,4-Difluorobenze	562526	281263	1125052	527779	-6.18
53 d5-Chlorobenzene	502371	251186	1004742	486532	-3.15
76 d4-1,4-Dichlorobe	277950	138975	555900	269269	-3.12

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: SCV0329 Client Smp ID: SCV
Level: LOW Operator: PC
Data Type: MS DATA SampleType: LCS
SpikeList File: o2siicv.spk Quant Type: ISTD
Sublist File: mdl.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	10.000	10.358	103.58	80-120
2	Chloromethane	10.000	11.215	112.15	80-120
3	Vinyl Chloride	10.000	12.012	120.12*	80-120
4	Bromomethane	10.000	14.113	141.13*	80-120
5	Chloroethane	10.000	12.072	120.72*	80-120
6	Trichlorofluoromet	10.000	10.543	105.43	80-120
7	1,1-Dichloroethene	10.000	10.593	105.93	80-120
8	Carbon Disulfide	60.000	52.548	87.58	80-120
9	112Trichloro122Tri	20.000	20.414	102.07	80-120
10	Iodomethane	60.000	63.916	106.53	80-120
11	Bromoethane	20.000	19.592	97.96	80-120
12	Acrolein	10.000	10.390	103.90	80-120
13	Methylene Chloride	10.000	13.090	130.90*	80-120
14	Acetone	50.000	49.576	99.15	80-120
15	Trans-1,2-Dichloro	10.000	10.447	104.47	80-120
16	n-hexane	10.000	0.0000	*	80-120
17	Methyl tert butyl	10.000	11.216	112.16	80-120
18	1,1-Dichloroethane	10.000	10.998	109.98	80-120
19	Acrylonitrile	10.000	10.852	108.52	80-120
20	Vinyl Acetate	50.000	57.079	114.16	80-120
22	Cis-1,2-Dichloroet	10.000	10.706	107.06	80-120
23	2,2-Dichloropropan	10.000	9.694	96.94	80-120
24	Bromochloromethane	10.000	10.810	108.10	80-120
25	Chloroform	10.000	10.969	109.69	80-120
26	Carbon Tetrachlori	10.000	9.992	99.92	80-120
28	1,1,1-Trichloroeth	10.000	11.070	110.70	80-120
30	1,1-Dichloropropen	10.000	11.374	113.74	80-120
29	2-Butanone	50.000	50.766	101.53	80-120
31	Benzene	10.000	11.248	112.48	80-120
34	1,2-Dichloroethane	10.000	10.825	108.25	80-120
36	Trichloroethene	10.000	10.550	105.50	80-120
38	Dibromomethane	10.000	10.952	109.52	80-120
39	1,2-Dichloropropan	10.000	11.193	111.93	80-120
40	Bromodichlorometha	10.000	11.141	111.41	80-120
173	2-Pentanone	20.000	21.719	108.59	80-120
42	Cis 1,3-dichloropr	10.000	11.765	117.65	80-120
41	2-Chloroethyl Viny	60.000	51.951	86.59	80-120
44	Toluene	10.000	10.753	107.53	80-120
45	4-Methyl-2-Pentano	50.000	49.793	99.59	80-120
46	Tetrachloroethene	10.000	11.616	116.16	80-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
47 Trans 1,3-Dichloro	10.000	10.634	106.34	80-120
48 1,1,2-Trichloroeth	10.000	11.432	114.32	80-120
49 Chlorodibromometha	10.000	9.698	96.98	80-120
50 1,3-Dichloropropan	10.000	11.343	113.43	80-120
51 1,2-Dibromoethane	10.000	11.560	115.60	80-120
52 2-Hexanone	50.000	51.605	103.21	80-120
54 Chlorobenzene	10.000	10.429	104.29	80-120
55 Ethyl Benzene	10.000	11.138	111.38	80-120
56 1,1,1,2-Tetrachlor	10.000	9.880	98.80	80-120
57 m,p-xylene	20.000	22.510	112.55	80-120
58 o-Xylene	10.000	11.394	113.94	80-120
59 Styrene	10.000	11.928	119.28	80-120
60 Bromoform	10.000	8.765	87.65	80-120
61 Isopropyl Benzene	10.000	10.530	105.30	80-120
63 Bromobenzene	10.000	10.252	102.52	80-120
64 N-Propyl Benzene	10.000	11.676	116.76	80-120
65 1,1,2,2-Tetrachlor	10.000	11.445	114.45	80-120
66 2-Chloro Toluene	10.000	10.796	107.96	80-120
67 1,3,5-Trimethyl Be	10.000	11.360	113.60	80-120
68 1,2,3-Trichloropro	10.000	11.448	114.48	80-120
69 Trans-1,4-Dichloro	10.000	9.062	90.62	80-120
70 4-Chloro Toluene	10.000	10.764	107.64	80-120
71 T-Butyl Benzene	10.000	12.445	124.45*	80-120
72 1,2,4-Trimethylben	10.000	11.533	115.33	80-120
73 S-Butyl Benzene	10.000	10.747	107.47	80-120
74 4-Isopropyl Toluen	10.000	11.413	114.13	80-120
75 1,3-Dichlorobenzen	10.000	10.642	106.42	80-120
77 1,4-Dichlorobenzen	10.000	10.468	104.68	80-120
78 N-Butyl Benzene	10.000	10.903	109.03	80-120
80 1,2-Dichlorobenzen	10.000	10.471	104.71	80-120
81 1,2-Dibromo 3-Chlo	10.000	11.096	110.96	80-120
83 Hexachloro 1,3-But	10.000	9.436	94.36	80-120
84 1,2,4-Trichloroben	10.000	10.127	101.27	80-120
85 Naphthalene	10.000	11.446	114.46	80-120
86 1,2,3-Trichloroben	10.000	10.330	103.30	80-120

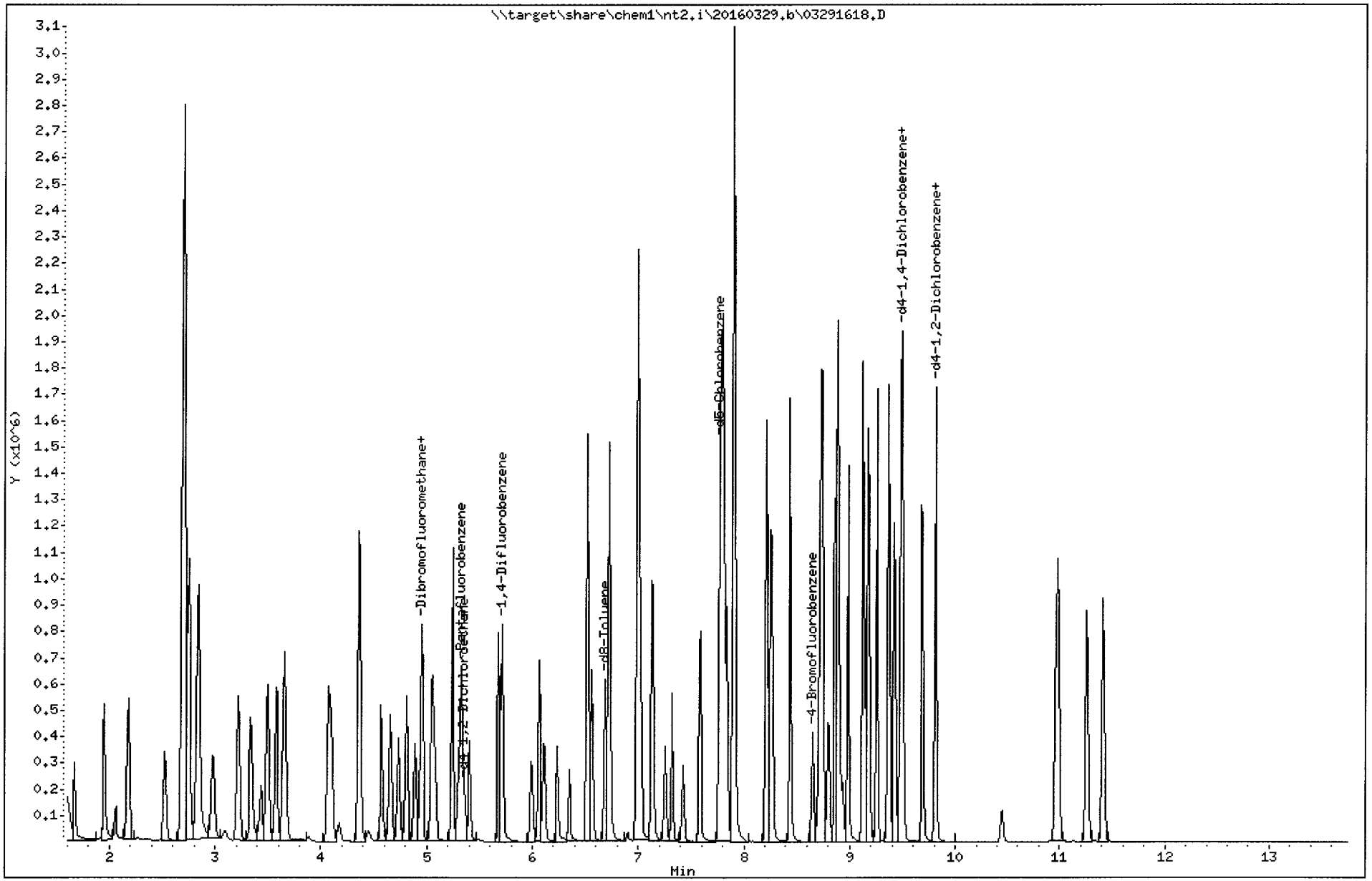
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.991	99.82	0-150
$ 33 d4-1,2-Dichloroeth	5.000	4.941	98.83	0-131
$ 43 d8-Toluene	5.000	5.052	101.05	0-130
$ 62 4-Bromofluorobenze	5.000	5.134	102.68	0-130
$ 79 d4-1,2-Dichloroben	5.000	5.014	100.27	0-130

Data File: \\target\share\chem1\nt2.i\20160329.b\03291618.D
Date : 29-MAR-2016 20:24
Client ID: SCV
Sample Info: SCV0329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

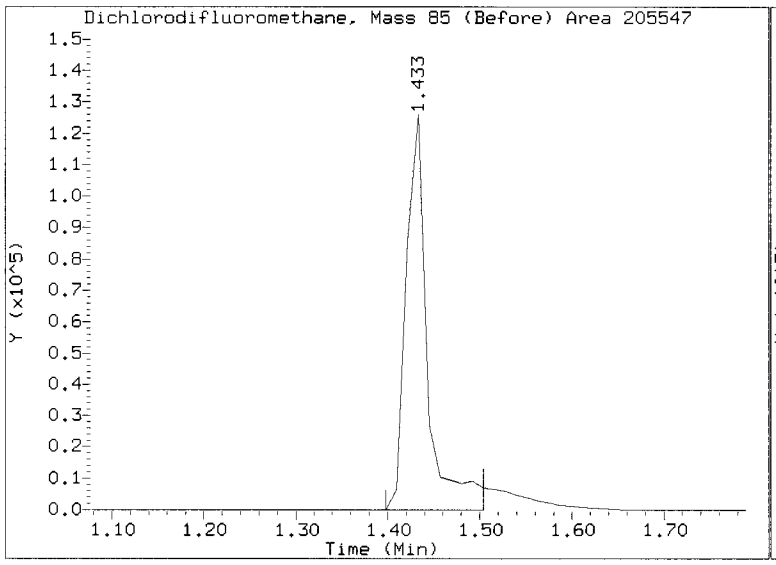
Column phase: RTXVMS

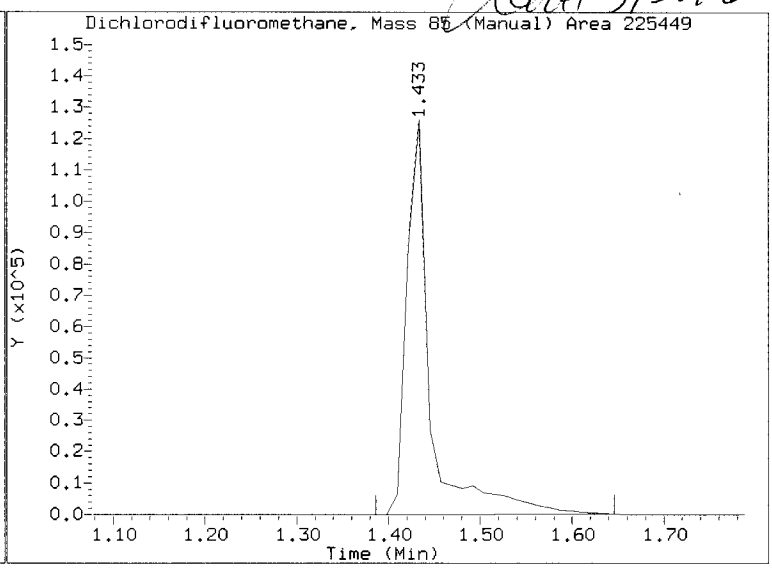


Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem1/nt2.i/20160329.b/03291618.D
Injection Date: 29-MAR-2016 20:24
Lab ID:SCV0329 Client ID:SCV
Report Date: 03/30/2016 09:02

3/30/16





REVIEW SUMMARY FOR FILE - 03291618.D

Lab ID: SCV0329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 20:24

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: 2-Pentanone 0.0000

6a
8260 GAS INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: 20150930

Instrument: NT2.I Project: GSTD1

Calibration Date: 29-MAR-2016 SDG No.: 20150930

Gas Range	RF1 0.1	RF2 0.25	RF3 0.5	RF4 1.0	RF5 2.5	RF6 5	Ave RF	%RSD
WA Gas	38501187	48112079	49111625	51185622	51287480	49855104	48008849	10.0
AK Gas	49662511	59116003	59473285	60464211	61192091	62329725	58706304	7.8
NW Gas	39259679	48930855	50264215	52493344	52751277	51520615	49203331	10.3
8015Gas	71404863	82873502	83743651	85008808	87381849	88932569	83224207	7.5

<- Indicates %RSD outside limits
Surrogate areas are not included in RF calculation.
Surrogate calibration is from BETX curve files.

Quant Ranges :

WA Gas	Toluene - nC12
AK Gas	nC6 - nC10
NW Gas	Toluene - Naphthalene
Cal Gas	nC6 - nC12
8015 Gas	2-Methylpentane - 1,2,4-Trimethylbenzene

Gas Cal. Files	Analysis Time
03291624.D	29-MAR-2016 22:32
03291623.D	29-MAR-2016 22:11
03291622.D	29-MAR-2016 21:50
03291621.D	29-MAR-2016 21:28
03291620.D	29-MAR-2016 21:07
03291619.D	29-MAR-2016 20:45

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329g.b\GAS032916.m
Batch File: \\target\share\chem1\nt2.i\20160329g.b
Inst ID: nt2.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	03291619	03291620	03291621	03291622	03291623	03291624	03291625
INJ.DATE:	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016
INJ.TIME:	20:45	21:07	21:28	21:50	22:11	22:32	22:54

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	5 2-Methylpentane	3.079	3.079	3.078	3.079	3.082	3.081	3.078	3.078	3.028-3.128	3.079	0.002
	7 nC6	3.587	3.588	3.587	3.588	3.579	3.590	3.587	3.587	3.537-3.637	3.587	0.004
$	10 Dibromofluorobenzene	4.925	4.925	4.948	4.949	4.952	4.951	4.924	4.948	4.898-4.998	4.939	0.014
	37 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.232	5.182-5.282	+++++	+++++
$	29 Pentafluorobenzene	+++++	+++++	5.326	5.327	5.330	5.330	+++++	5.326	5.276-5.376	5.328	0.002
$	30 d4-1,2-dichloroethane	5.351	5.351	+++++	+++++	+++++	+++++	5.350	5.341	5.291-5.391	5.350	0.000
$	31 1,4-Difluorobenzene	5.717	5.718	5.717	5.718	5.721	5.720	5.717	5.717	5.667-5.767	5.718	0.002
	3 AK101	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.234	0.000-3.974	+++++	+++++
	4 8015GAS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.096	2.756-9.436	+++++	+++++
	46 8015mod	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.000	0.930-1.070	+++++	+++++
	38 n-Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.592	6.542-6.642	+++++	+++++
	45 n-Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.221	5.151-5.291	+++++	+++++
$	32 d8-Toluene	+++++	+++++	6.687	6.688	6.691	6.690	+++++	6.687	6.637-6.737	6.689	0.002
	12 Toluene	6.723	6.723	6.723	6.724	6.727	6.726	6.723	6.723	6.673-6.773	6.724	0.002
	39 n-Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.728	7.678-7.778	+++++	+++++
$	33 d5-Chlorobenzene	7.800	7.800	7.776	7.777	7.780	7.779	7.776	7.776	7.726-7.826	7.784	0.011
	40 Ethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.802	7.752-7.852	+++++	+++++

Reviewer 1 _____ Date: 3/30/16
Reviewer 2 _____ Date: _____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329g.b\GAS032916.m
Batch File: \\target\share\chem1\nt2.i\20160329g.b
Inst ID: nt2.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	41 m,p-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.906	7.856-7.956	+++++	+++++
	42 o-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.214	8.164-8.264	+++++	+++++
	2 WAGAS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.610	6.520-10.700	+++++	+++++
$	34 4-Bromofluorobenzene	8.652	8.652	8.651	8.653	8.655	8.655	8.651	8.651	8.601-8.701	8.653	0.002
	17 nC10-Decane	8.747	8.747	8.746	8.747	8.750	+++++	8.746	8.722	8.672-8.772	8.747	0.001
	1 NWTPHG	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.479	6.949-12.009	+++++	+++++
	20 1,2,4-Trimethylbenzene	9.173	9.173	9.172	9.173	9.176	9.175	9.172	9.184	9.134-9.234	9.173	0.002
$	35 d4-Dichlorobenzene	9.504	9.480	9.503	9.481	9.484	9.483	9.480	9.491	9.441-9.541	9.488	0.011
	43 n-Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.610	9.560-9.660	+++++	+++++
$	36 d4-1,2-Dichlorobenzene	9.823	9.812	9.811	9.812	9.803	9.803	9.811	9.811	9.761-9.861	9.811	0.007
	22 nC12-Dodecane	10.450	10.451	10.485	10.487	10.489	10.489	10.450	10.462	10.412-10.512	10.472	0.020
	44 n-Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.362	11.312-11.412	+++++	+++++
	24 Naphthalene	11.255	11.255	11.255	11.256	11.258	11.258	11.255	11.278	11.228-11.328	11.256	0.002

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160329.b

ARI Job No.: G500 Method: 8260032916.m Instrument: nt2.i Date: 29-MAR-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2045	03291619.D	G5000329		1	NO MANUAL INTEGRATION
2107	03291620.D	G2500329		1	NO MANUAL INTEGRATION
2128	03291621.D	G1000329		1	NO MANUAL INTEGRATION
2150	03291622.D	G0500329		1	NO MANUAL INTEGRATION
2211	03291623.D	G0250329		1	NO MANUAL INTEGRATION
2232	03291624.D	G0100329		1	NO MANUAL INTEGRATION
2254	03291625.D	GSCV0329		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160329g.b

ARI Job No.: G500 Method: GAS032916.m Instrument: nt2.i Date: 29-MAR-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2045	03291619.D	G5000329	GSTD5	1	1,4-Difluorobenzene, d4-1,2-dichloroethane, Dibromofluorobenzene,
2107	03291620.D	G2500329	GSTD2.5	1	1,4-Difluorobenzene, d4-1,2-dichloroethane, d4-Dichlorobenzene, Dibromofluorobenzene,
2128	03291621.D	G1000329	GSTD1	1	1,4-Difluorobenzene, d4-Dichlorobenzene, Dibromofluorobenzene, d5-Chlorobenzene,
2150	03291622.D	G0500329	GSTD0.5	1	1,4-Difluorobenzene, d5-Chlorobenzene,
2211	03291623.D	G0250329	GSTD0.25	1	Naphthalene, d5-Chlorobenzene,
2232	03291624.D	G0100329	GSTD0.1	1	Naphthalene,
2254	03291625.D	GSCV0329	GSCV	1	1,4-Difluorobenzene, d4-Dichlorobenzene, Dibromofluorobenzene, d5-Chlorobenzene,

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D

Date : 29-MAR-2016 11:31

Client ID: RTBFB0329

Instrument: nt2.i

Sample Info: BFB0329,RTBFB0329,,1,032916,

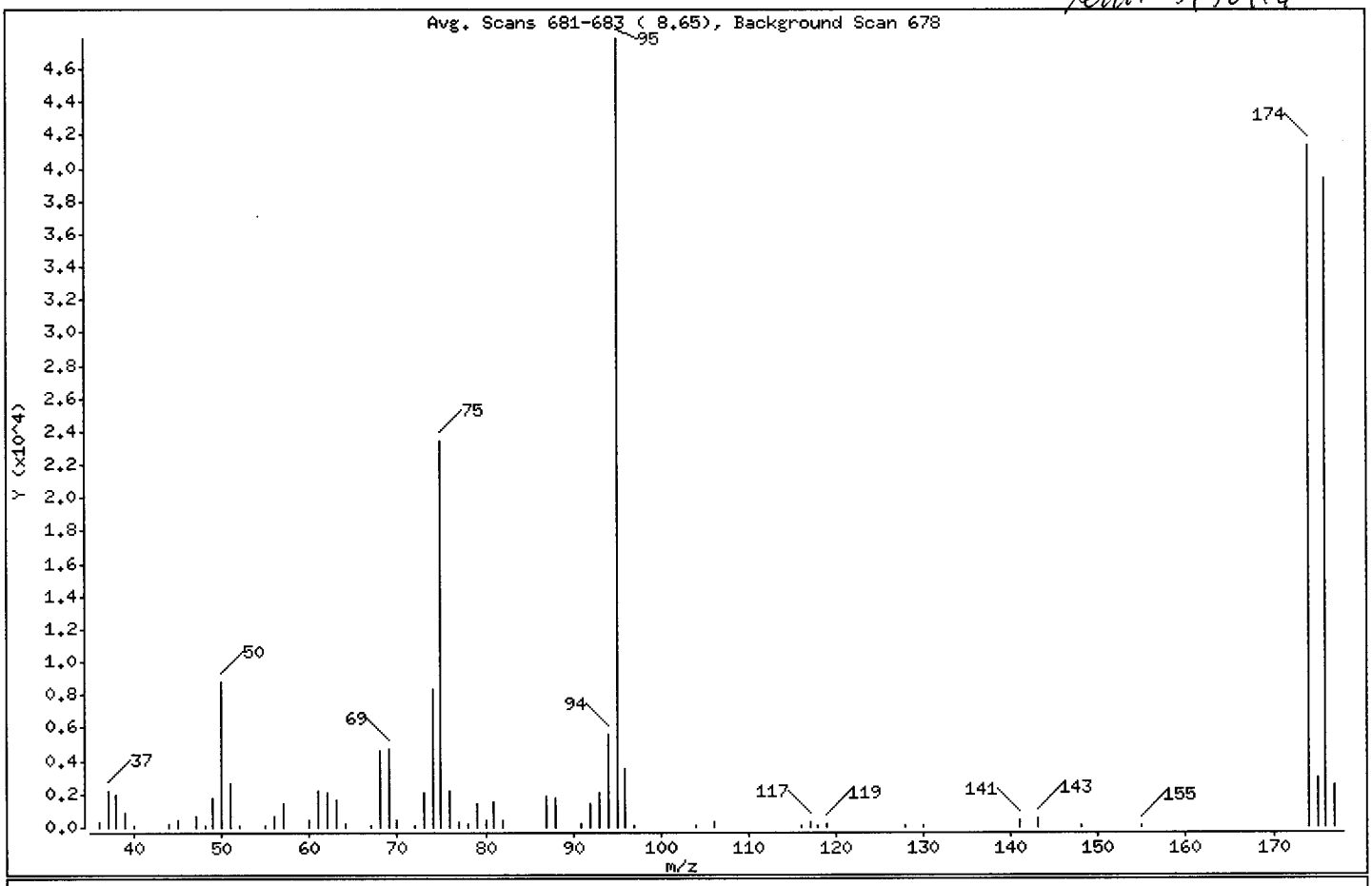
Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

1 Bromofluorobenzene

RMH 3/30/16



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.28
75	30.00 - 60.00% of mass 95	48.95
96	5.00 - 9.00% of mass 95	7.25
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	86.45
175	5.00 - 9.00% of mass 174	6.10 (7.05)
176	95.00 - 101.00% of mass 174	82.26 (95.15)
177	5.00 - 9.00% of mass 176	5.35 (6.50)

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D

Date : 29-MAR-2016 11:31

Client ID: RTBFB0329

Instrument: nt2.i

Sample Info: BFB0329,RTBFB0329,,1,032916,

Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

Data File: 03291602.D

Spectrum: Avg. Scans 681-683 (8.65), Background Scan 678

Location of Maximum: 95.00

Number of points: 61

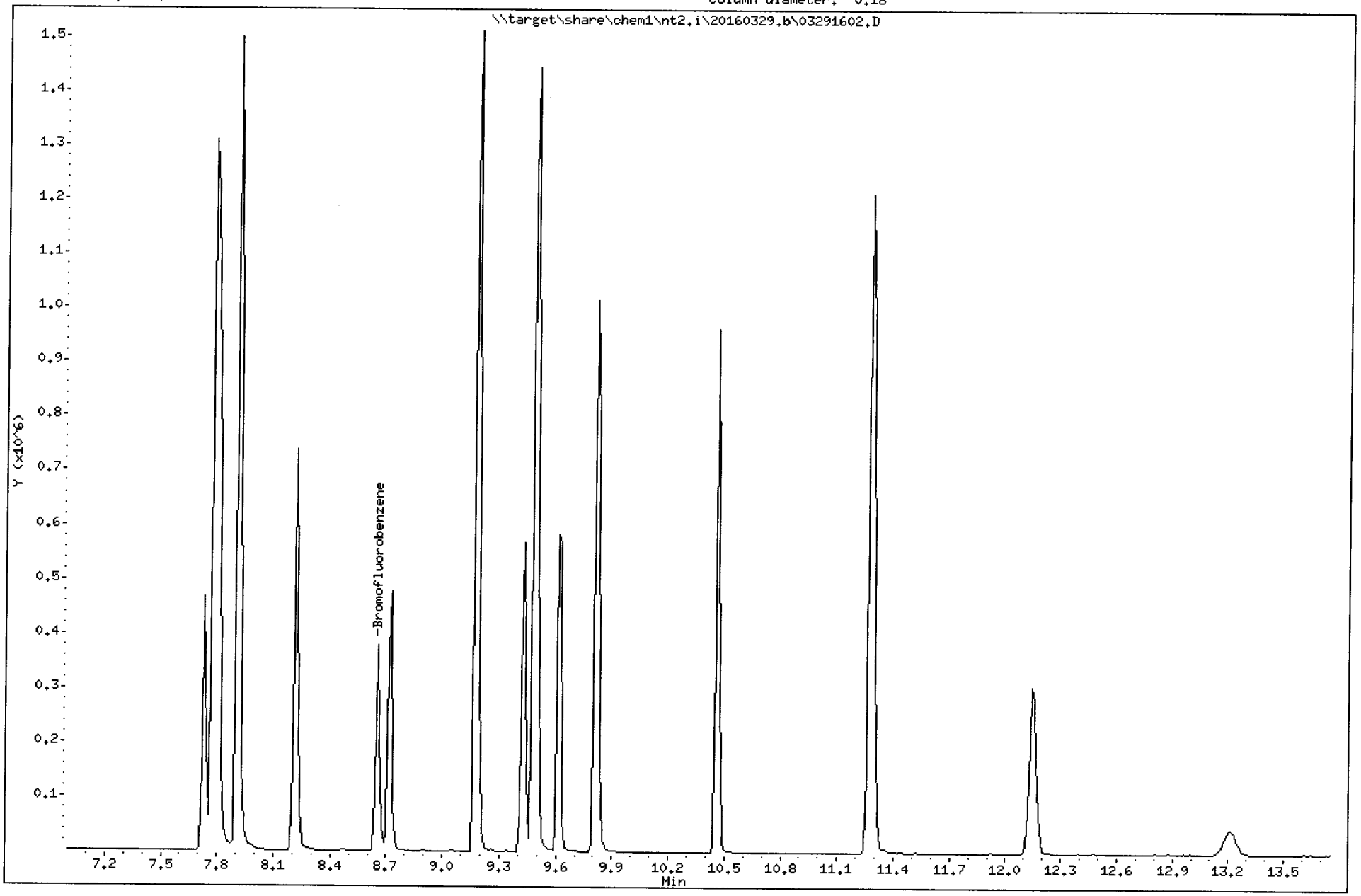
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	334	60.00	421	79.00	1486	117.00	325
37.00	2213	61.00	2183	80.00	387	118.00	128
38.00	1965	62.00	2104	81.00	1524	119.00	234
39.00	876	63.00	1615	82.00	406	128.00	133
40.00	77	64.00	233	87.00	1871	130.00	132
44.00	174	67.00	79	88.00	1722	141.00	480
45.00	431	68.00	4654	91.00	246	143.00	564
47.00	632	69.00	4719	92.00	1396	148.00	149
48.00	113	70.00	410	93.00	2037	155.00	84
49.00	1769	72.00	148	94.00	5584	174.00	41400
50.00	8753	73.00	2107	95.00	47888	175.00	2919
51.00	2685	74.00	8380	96.00	3473	176.00	39392
52.00	71	75.00	23440	97.00	78	177.00	2562
55.00	154	76.00	2154	104.00	122		
56.00	679	77.00	319	106.00	281		
57.00	1379	78.00	194	116.00	127		

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D
Date : 29-MAR-2016 11:31
Client ID: RTBFB0329
Sample Info: BFB0329,RTBFB0329,,1,032916,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



ARI Labs, Inc.

Data file : \\target\share\chem1\nt2.i\20160329g.b\03291602.D
Lab Smp Id: BFB0329 Client Smp ID: RTBFB0329
Inj Date : 29-MAR-2016 11:31
Operator : PC Inst ID: nt2.i
Smp Info : BFB0329,RTBFB0329,,1,032916,
Misc Info : 09-
Comment :
Method : \\target\share\chem1\nt2.i\20160329g.b\GAS032916.m
Meth Date : 30-Mar-2016 09:05 lanih Quant Type: ESTD
Cal Date : 29-MAR-2016 11:31 Cal File: 03291602.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RT.sub
Target Version: 4.14
Processing Host: ORGDATA13

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
5	2-Methylpentane	3.078	3.078	0.000	392124	0.00000	
7	nC6	3.586	3.586	0.000	415558	0.00000	
$ 10	Dibromofluorobenzene	4.947	4.947	0.000	140925	0.00000	
37	Benzene	5.231	5.231	0.000	630212	0.00000	
$ 29	Pentafluorobenzene	5.326	5.326	0.000	666407	0.00000	
$ 31	1,4-Difluorobenzene	5.716	5.716	0.000	822707	0.00000	
38	n-Octane	6.592	6.592	0.000	525079	0.00000	
$ 32	d8-Toluene	6.687	6.687	0.000	634185	0.00000	
12	Toluene	6.722	6.722	0.000	1135403	0.00000	
39	n-Nonane	7.728	7.728	0.000	466173	0.00000	
$ 33	d5-Chlorobenzene	7.775	7.775	0.000	1306440	0.00000	
41	m,p-xylene	7.905	7.905	0.000	1494523	0.00000	
42	o-xylene	8.213	8.213	0.000	736648	0.00000	
$ 34	4-Bromofluorobenzene	8.651	8.651	0.000	376172	0.00000	
17	nC10-Decane	8.722	8.722	0.000	474675	0.00000	
20	1,2,4-Trimethylbenzene	9.183	9.183	0.000	1510817	0.00000	
$ 35	d4-Dichlorobenzene	9.491	9.491	0.000	1442070	0.00000	
43	n-Undecane	9.609	9.609	0.000	582360	0.00000	
$ 36	d4-1,2-Dichlorobenzene	9.810	9.810	0.000	1014284	0.00000	
22	nC12-Dodecane	10.461	10.461	0.000	962411	0.00000	
24	Naphthalene	11.278	11.278	0.000	1212315	0.00000	

Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160329g.b/03291619.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 20:45

ARI ID: G5000329
Client ID: GSTD5
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	249275518	5.192
8015C 2MP-TMB	(2.98 to 9.28)	83224207	444662844	5.343 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	311648625	5.309 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	257603074	5.235
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	424141429	5.790 M

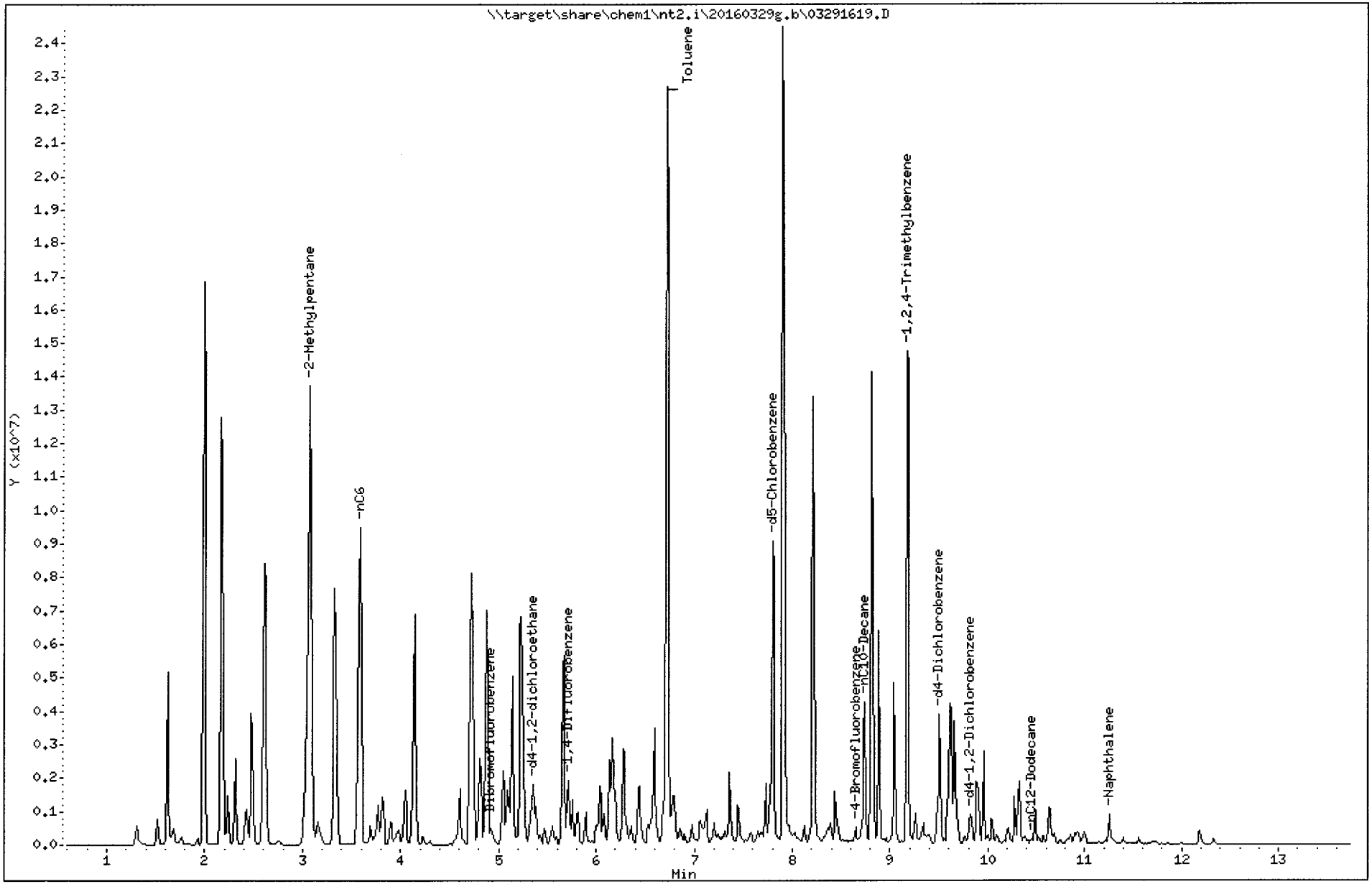
M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

8.652	813730	4-Bromofluorobenzene
9.504	7415398	d4-Dichlorobenzene
7.800	17385186	d5-Chlorobenzene
9.823	2323880	d4-1,2-Dichlorobenzene

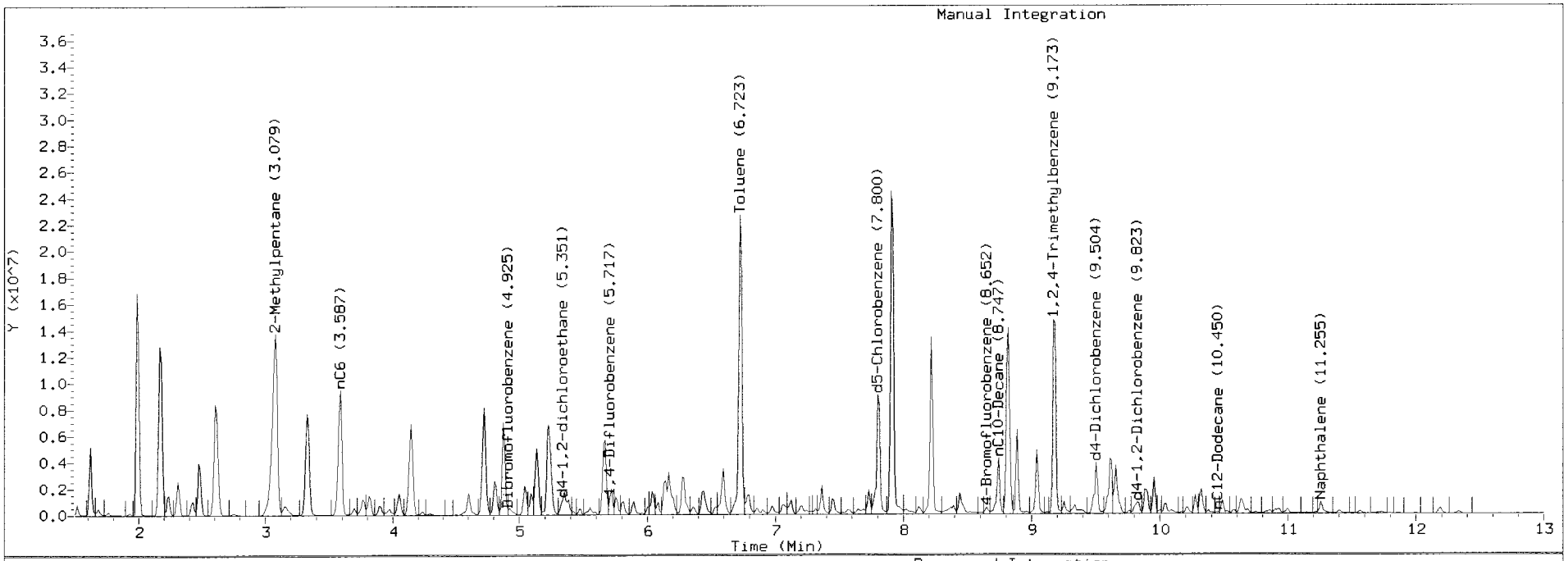
Data File: \\target\share\chem1\nt2.i\20160329g.b\03291619.D
Date : 29-MAR-2016 20:45
Client ID: GSTD5
Instrument: nt2.i
Sample Info: G5000329,10,10,0,
Operator: PC
Column phase: RTXVMS
Column diameter: 0.18

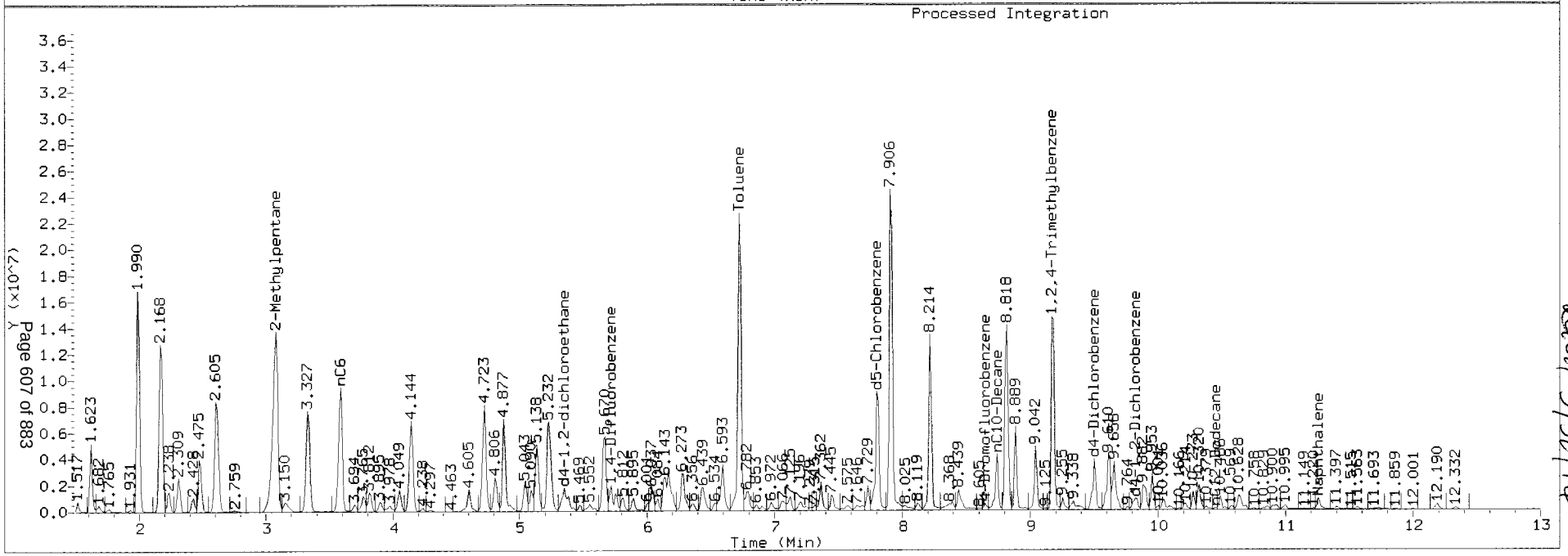


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291619.D Injection: 29-MAR-2016 20:45

Lab ID:G5000329





4/13/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291619.D
Lab Smp Id: G5000329
Inj Date : 29-MAR-2016 20:45
Operator : PC Inst ID: nt2.i
Smp Info : G5000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	27 Dibromofluoromethane	111	4.948	4.947	(0.929)	87942	4.75461	4.755
	31 Benzene	78	5.244	5.243	(0.917)	2898737	35.0848	35.085
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	386746	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	143410	6.55546	6.555
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	615798	10.0000	
$	43 d8-Toluene	98	6.687	6.687	(1.170)	386722	5.30428	5.304
	44 Toluene	92	6.723	6.722	(1.176)	9153352	167.620	167.62
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	554896	10.0000	
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	2216213	67.2715	67.272
	57 m,p-xylene	106	7.906	7.906	(1.017)	6878890	171.311	171.31
	58 o-Xylene	106	8.214	8.212	(1.056)	3206837	84.6732	84.673
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	115448	5.10389	5.104
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	296516	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	141228	4.98129	4.981

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291619.D
Lab Smp Id: G5000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	386746	10.38
37 1,4-Difluorobenze	562526	281263	1125052	615798	9.47
53 d5-Chlorobenzene	502371	251186	1004742	554896	10.46
76 d4-1,4-Dichlorobe	277950	138975	555900	296516	6.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.01
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G5000329
Level: LOW Operator: PC
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

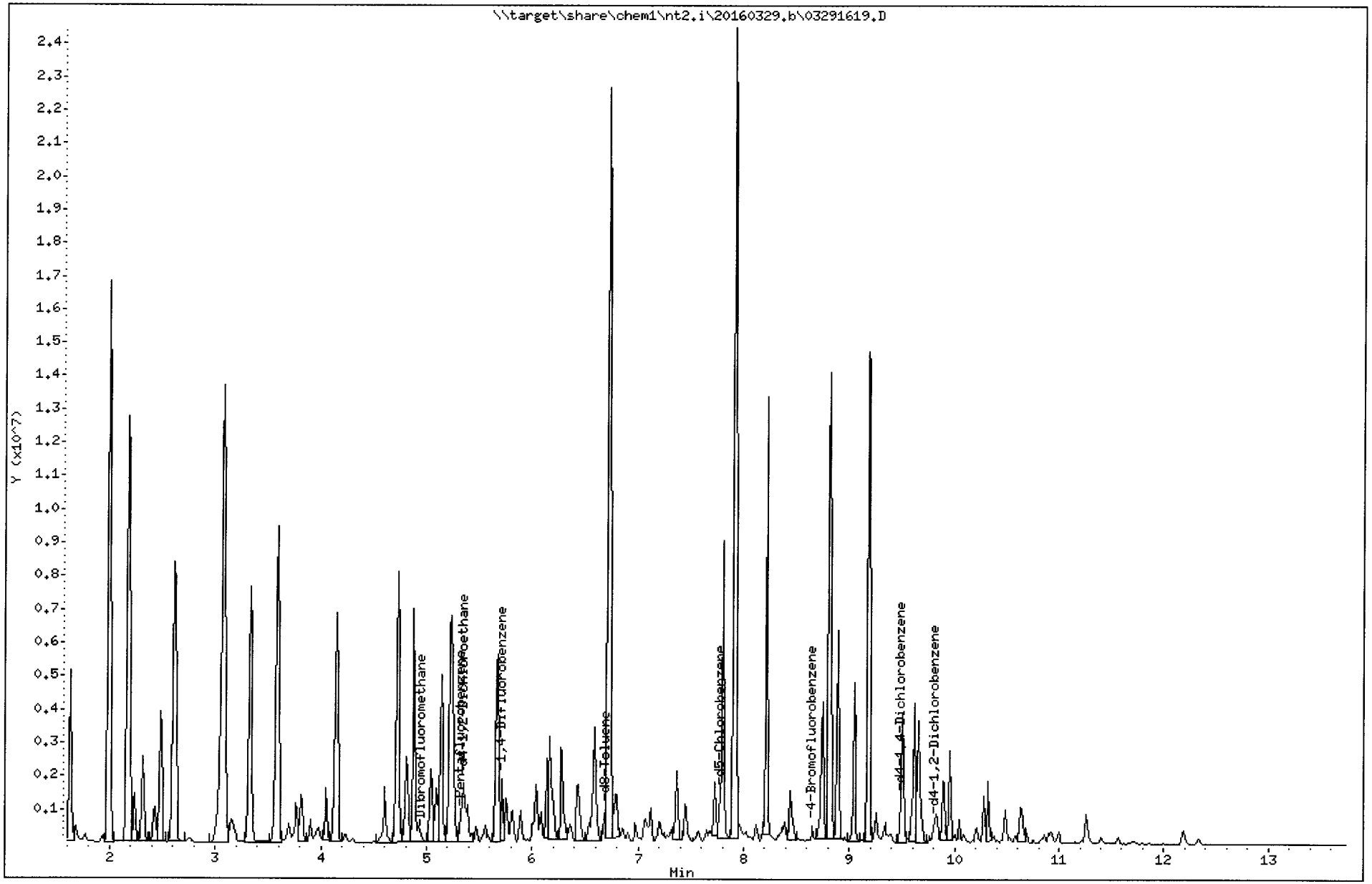
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.755	95.09	80-120
$ 33 d4-1,2-Dichloroeth	5.000	6.555	131.11	80-149
$ 43 d8-Toluene	5.000	5.304	106.09	77-120
$ 62 4-Bromofluorobenze	5.000	5.104	102.08	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.981	99.63	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291619.D
Date : 29-MAR-2016 20:45
Client ID:
Sample Info: G5000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291619.D

Lab ID: G5000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 20:45

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

JMH 3/30/16

Data file: 20160329g.b/03291620.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 21:07

ARI ID: G2500329
Client ID: GSTD2.5
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	128218700	2.671 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	218454623	2.625 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	152980229	2.606 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	131878192	2.680 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	209675553	2.862 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

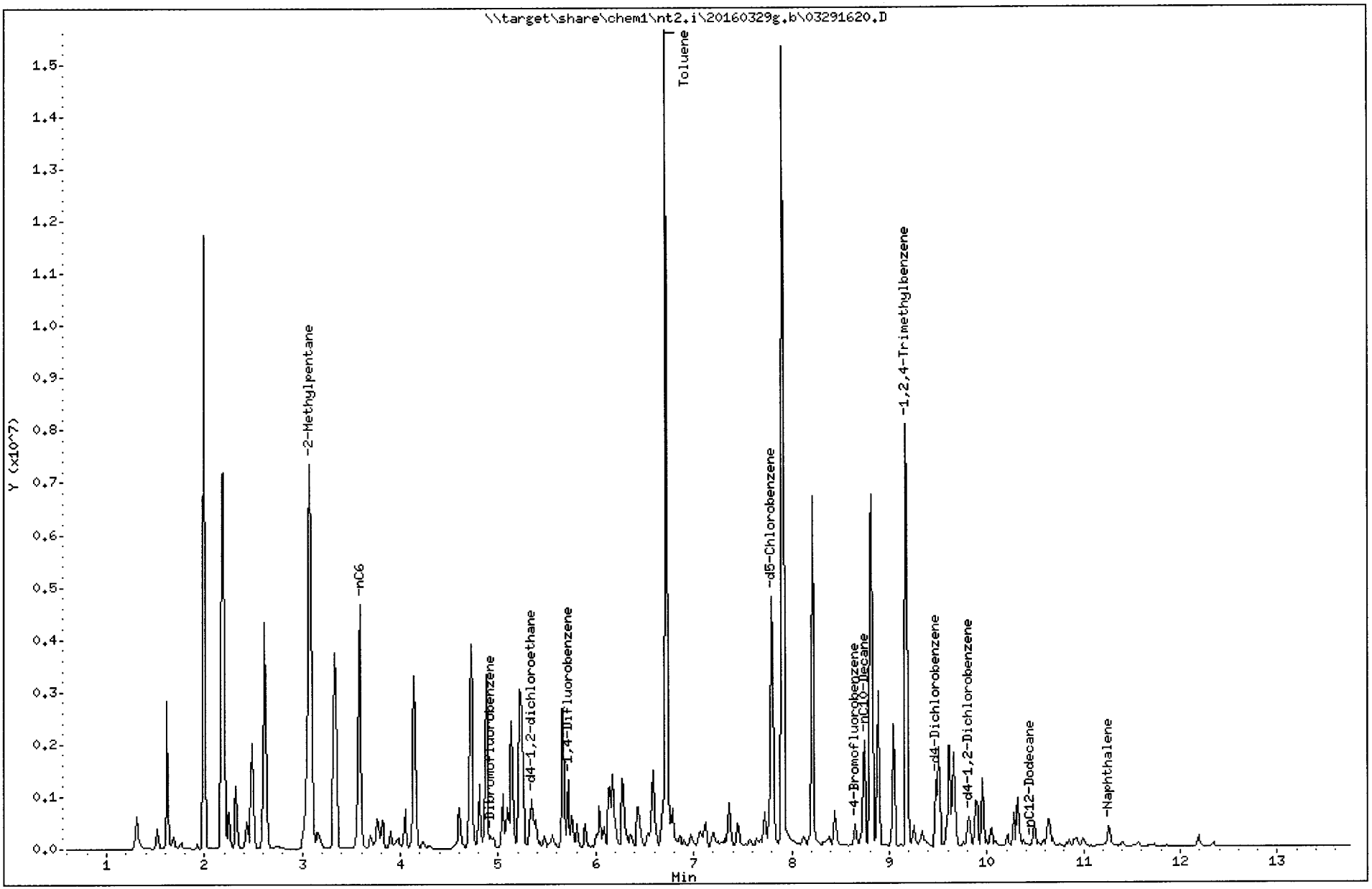
8.652	725527	4-Bromofluorobenzene
9.480	1953245	d4-Dichlorobenzene
7.800	9346764	d5-Chlorobenzene
9.812	1451073	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291620.D
Date : 29-MAR-2016 21:07
Client ID: GSTD2.5
Sample Info: G2500329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

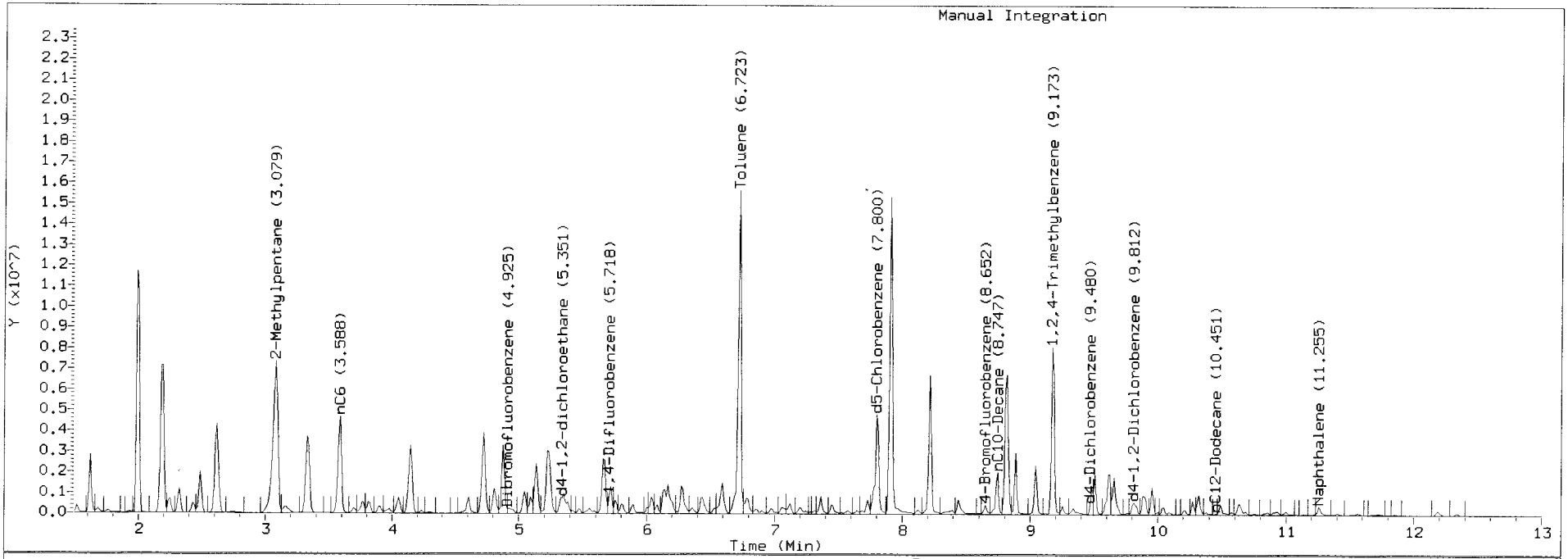
Column phase: RTXVMS

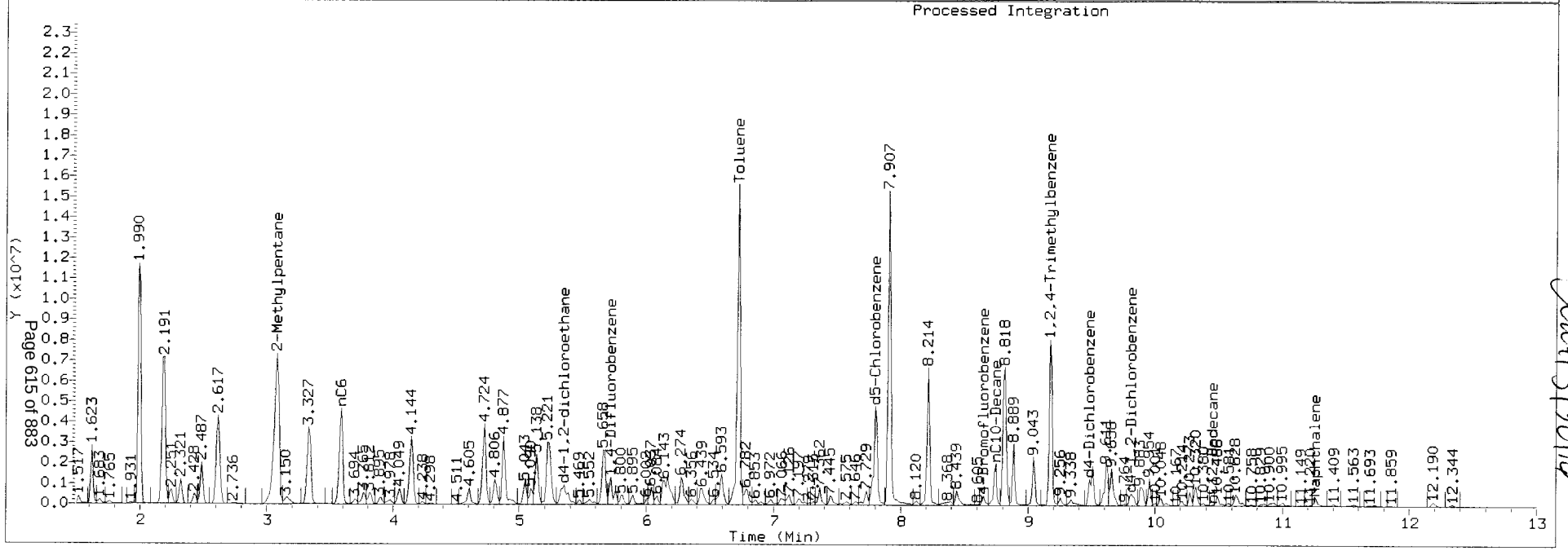


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291620.D Injection: 29-MAR-2016 21:07

Lab ID:G2500329





4/13/2016

4/4 3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291620.D
Lab Smp Id: G2500329
Inj Date : 29-MAR-2016 21:07
Operator : PC Inst ID: nt2.i
Smp Info : G2500329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.948	4.947	(0.929)	80895	4.61716	4.617
31 Benzene	78	5.244	5.243	(0.917)	1447462	18.5854	18.585
* 32 Pentafluorobenzene	168	5.327	5.326	(1.000)	366346	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	120364	5.80838	5.808
* 37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	580475	10.0000	
$ 43 d8-Toluene	98	6.687	6.687	(1.170)	363485	5.28895	5.289
44 Toluene	92	6.723	6.722	(1.176)	5827569	113.211	113.21
* 53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	530399	10.0000	
55 Ethyl Benzene	106	7.800	7.811	(1.003)	1077327	34.2118	34.212
57 m,p-xylene	106	7.906	7.906	(1.017)	4034007	105.103	105.10
58 o-Xylene	106	8.214	8.212	(1.056)	1583683	43.7468	43.747
$ 62 4-Bromofluorobenzene	174	8.652	8.651	(1.113)	110194	5.09662	5.097
* 76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	284779	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	136810	5.02434	5.024

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291620.D
Lab Smp Id: G2500329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	366346	4.56
37 1,4-Difluorobenze	562526	281263	1125052	580475	3.19
53 d5-Chlorobenzene	502371	251186	1004742	530399	5.58
76 d4-1,4-Dichlorobe	277950	138975	555900	284779	2.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G2500329
Level: LOW Operator: PC
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

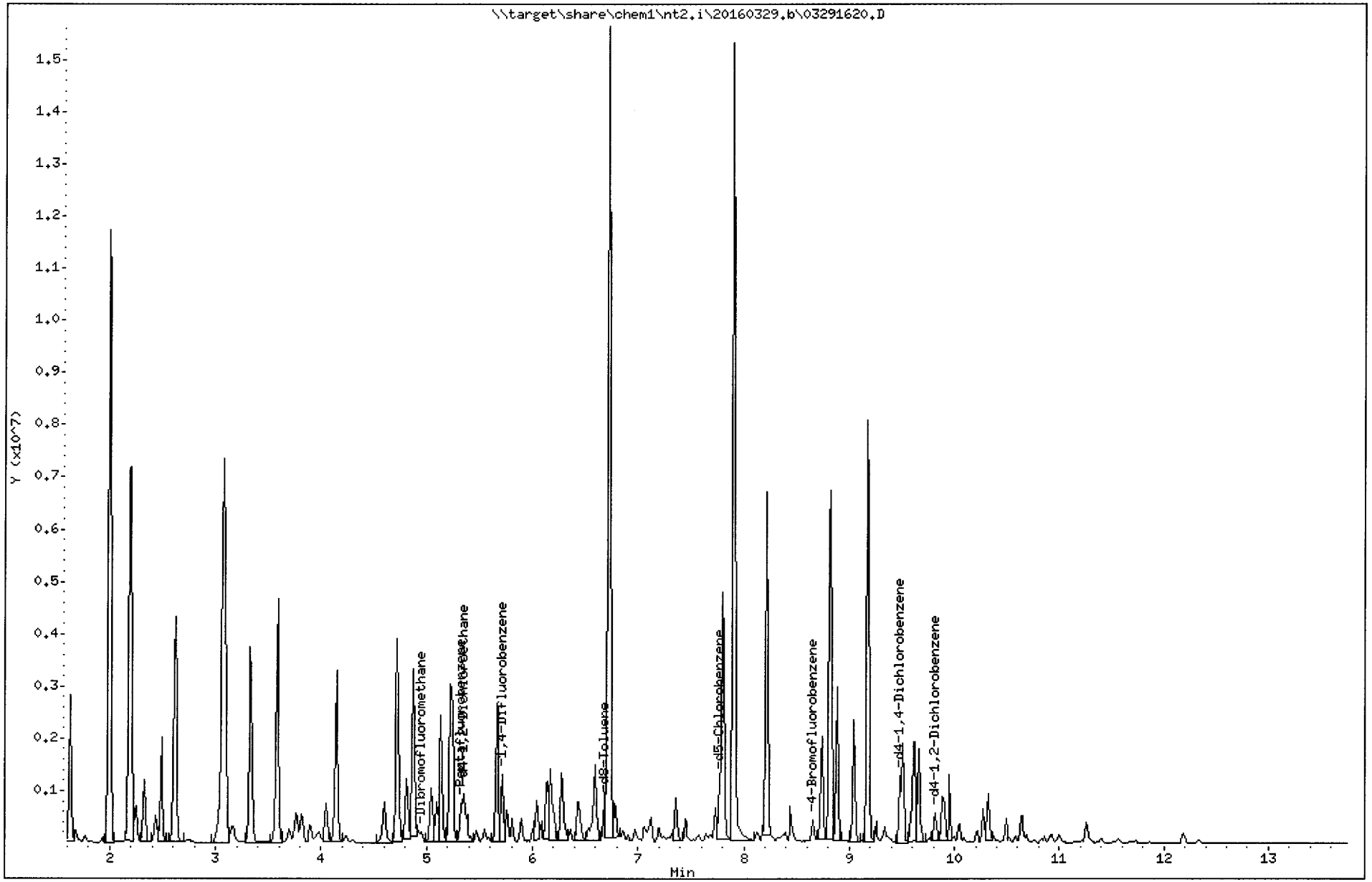
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.617	92.34	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.808	116.17	80-149
$ 43 d8-Toluene	5.000	5.289	105.78	77-120
$ 62 4-Bromofluorobenze	5.000	5.097	101.93	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.024	100.49	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291620.D
Date : 29-MAR-2016 21:07
Client ID:
Sample Info: G2500329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291620.D

Lab ID: G2500329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 21:07

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

3/30/16

Data file: 20160329g.b/03291621.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 21:28

ARI ID: G1000329
Client ID: GSTD1
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	51185622	1.066 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	85008808	1.021 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	60464211	1.030 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	52493344	1.067 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	81213277	1.109 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

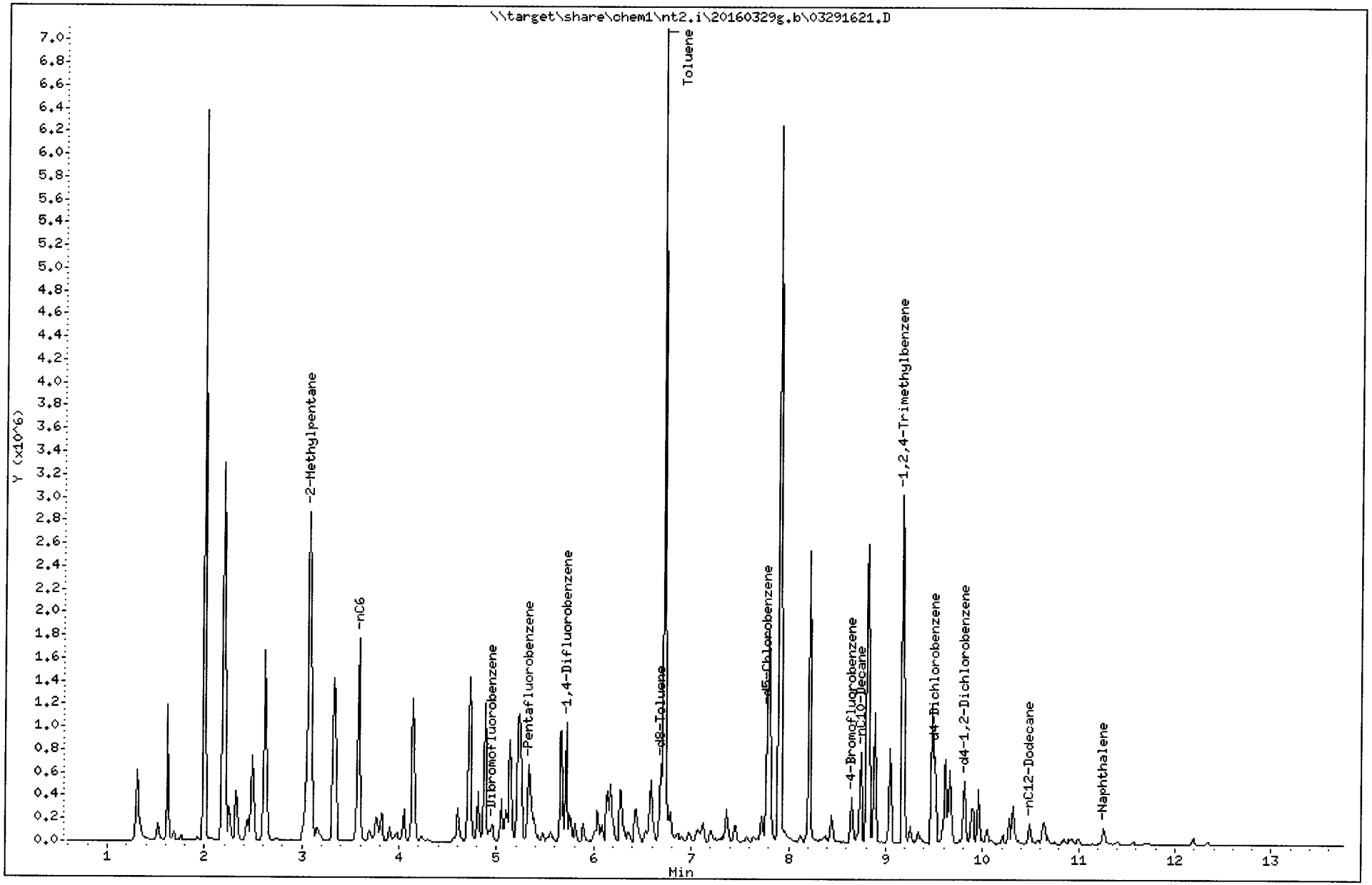
6.687	961710	d8-Toluene
8.651	593851	4-Bromofluorobenzene
9.503	1463362	d4-Dichlorobenzene
7.776	1720498	d5-Chlorobenzene
9.811	972946	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291621.D
Date : 29-MAR-2016 21:28
Client ID: GSTD1
Sample Info: G1000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

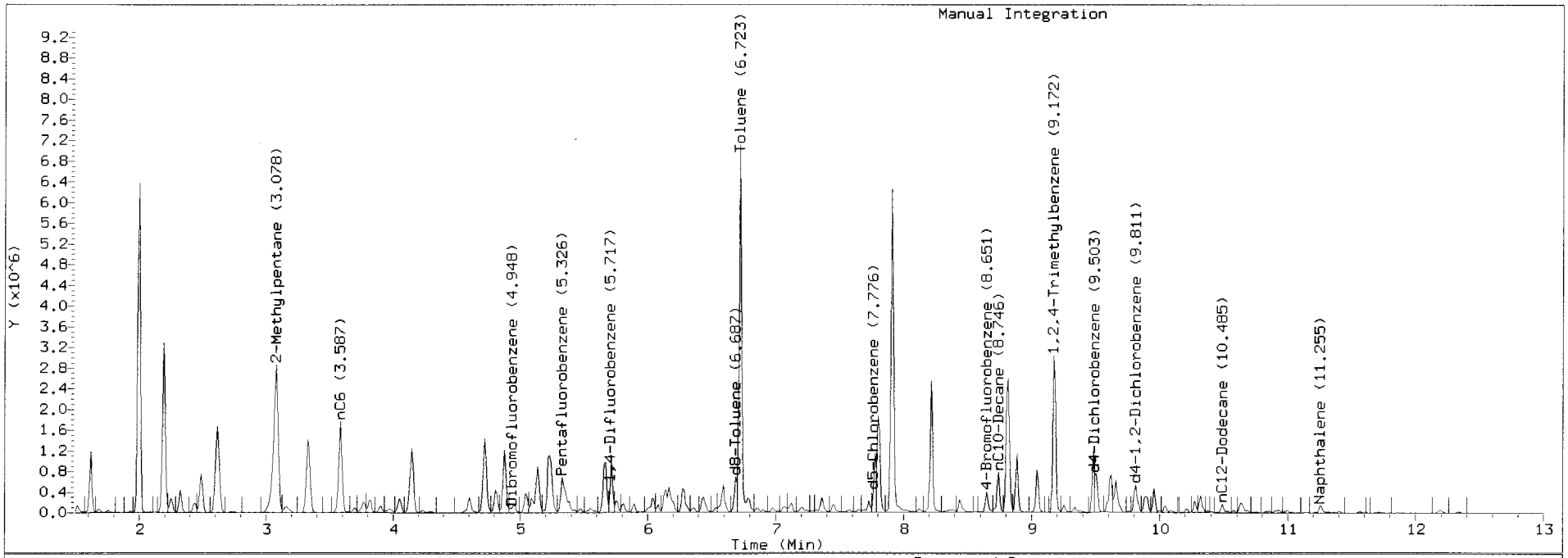
Column phase: RTXVMS

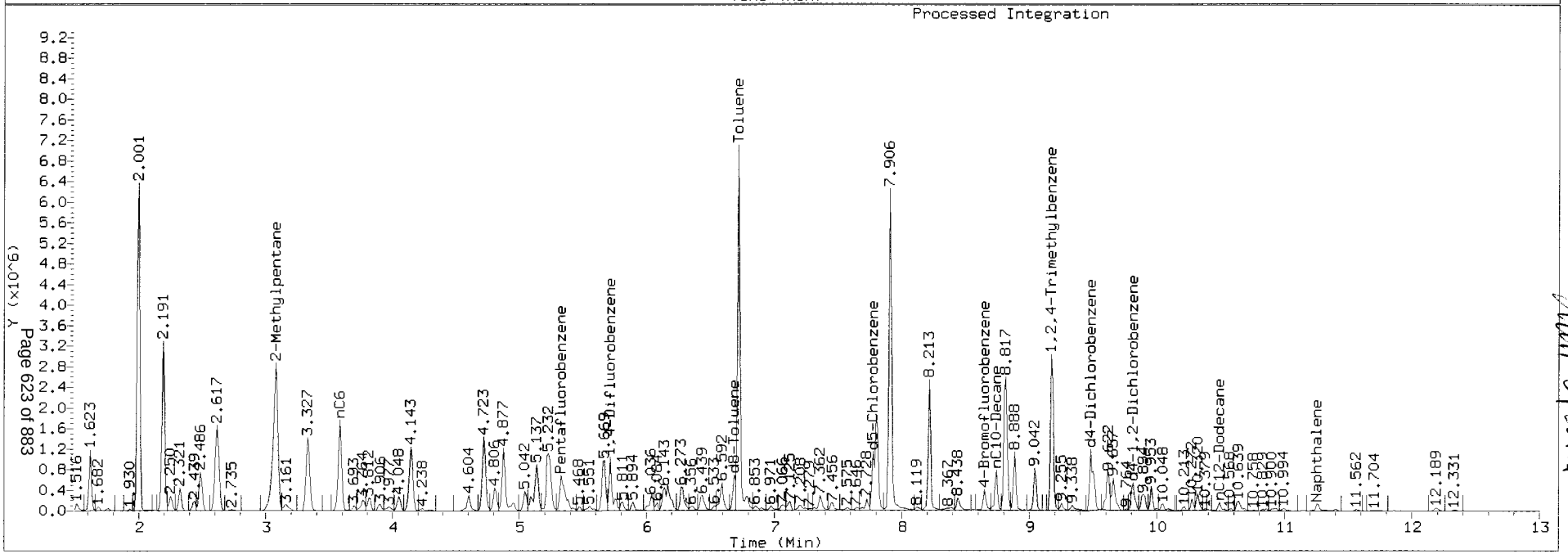


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291621.D Injection: 29-MAR-2016 21:28

Lab ID:G1000329





4/4/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291621.D
Lab Smp Id: G1000329
Inj Date : 29-MAR-2016 21:28
Operator : PC Inst ID: nt2.i
Smp Info : G1000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.947	4.947	(0.929)	80288	4.71446	4.714
31 Benzene	78	5.243	5.243	(0.917)	543579	7.22688	7.227
* 32 Pentafluorobenzene	168	5.326	5.326	(1.000)	356093	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.349	5.350	(1.004)	104791	5.20248	5.202
* 37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	560609	10.0000	
$ 43 d8-Toluene	98	6.687	6.687	(1.170)	341759	5.14904	5.149
44 Toluene	92	6.722	6.722	(1.176)	2490488	50.0965	50.096
* 53 d5-Chlorobenzene	117	7.775	7.775	(1.000)	525882	10.0000	
55 Ethyl Benzene	106	7.811	7.811	(1.005)	408748	13.0918	13.092
57 m,p-xylene	106	7.905	7.906	(1.017)	1583945	41.6228	41.623
58 o-Xylene	106	8.213	8.212	(1.056)	605338	16.8652	16.865
$ 62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	104584	4.87869	4.879
* 76 d4-1,4-Dichlorobenzene	152	9.479	9.479	(1.000)	278120	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.810	9.811	(1.035)	134860	5.07131	5.071

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291621.D
Lab Smp Id: G1000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	356093	1.63
37 1,4-Difluorobenze	562526	281263	1125052	560609	-0.34
53 d5-Chlorobenzene	502371	251186	1004742	525882	4.68
76 d4-1,4-Dichlorobe	277950	138975	555900	278120	0.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Client SDG: 20151001
Sample Matrix: SOLID
Fraction: VOA
Lab Smp Id: G1000329
Level: LOW
Operator: PC
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: allspike.spk
Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

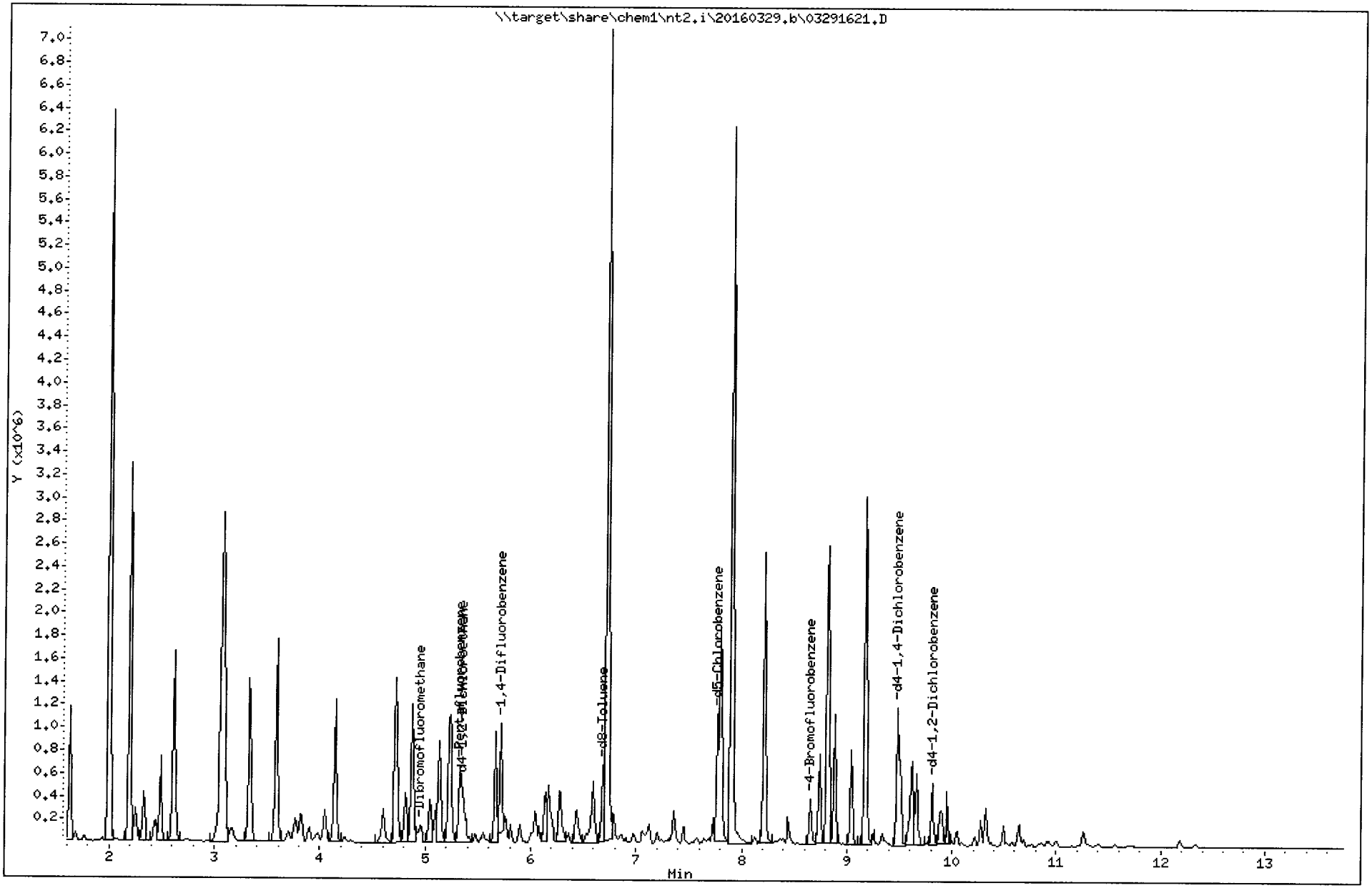
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.714	94.29	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.202	104.05	80-149
$ 43 d8-Toluene	5.000	5.149	102.98	77-120
$ 62 4-Bromofluorobenze	5.000	4.879	97.57	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.071	101.43	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291621.D
Date : 29-MAR-2016 21:28
Client ID:
Sample Info: G1000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291621.D

Lab ID: G1000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 21:28

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

RH 3/30/14

Data file: 20160329g.b/03291622.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 21:50

ARI ID: G0500329
Client ID: GSTD0.5
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	24555813	0.511 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	41871825	0.503 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	29736642	0.507 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	25132108	0.511 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	39181834	0.535 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

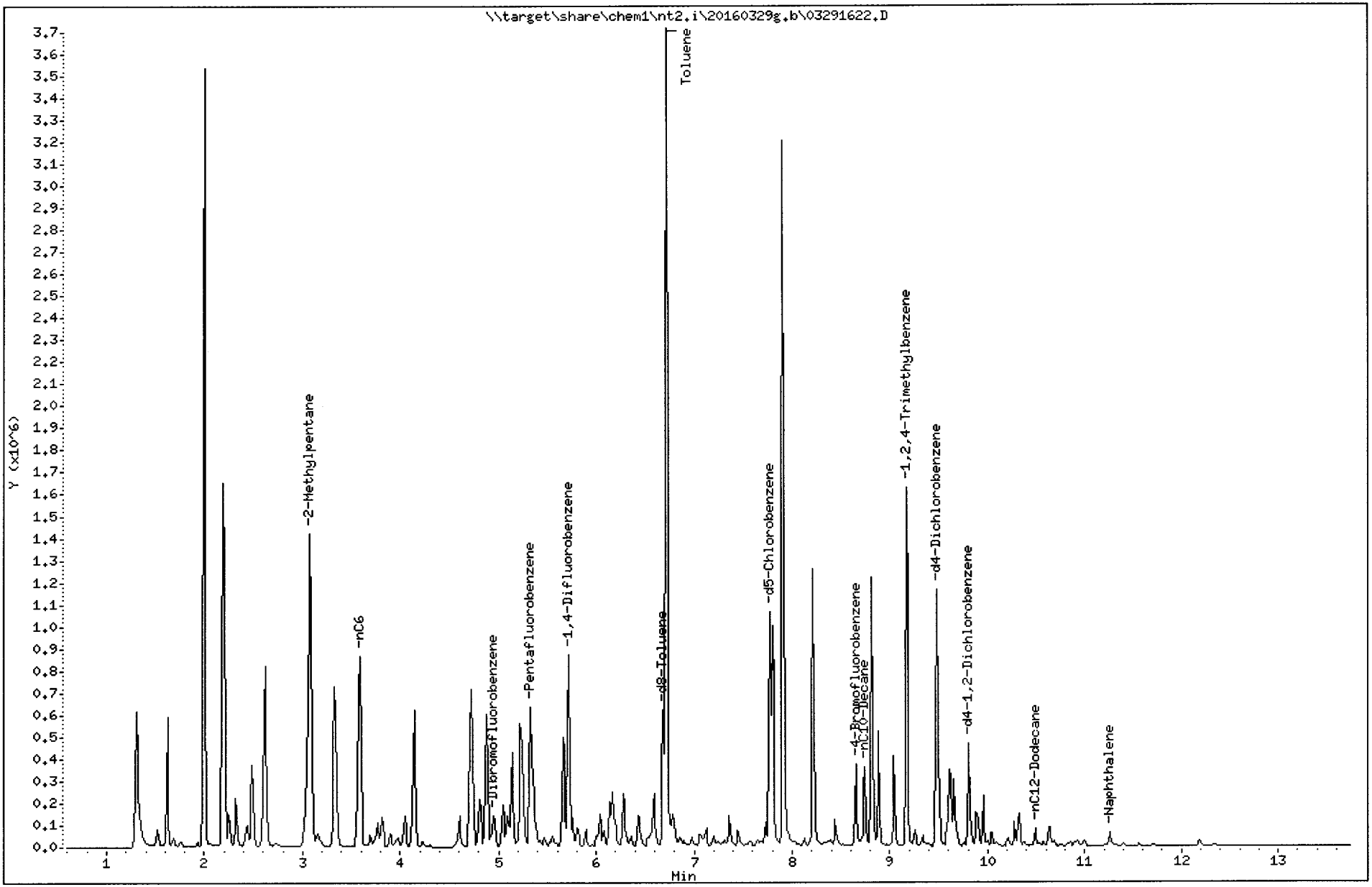
6.688	840841	d8-Toluene
8.653	550626	4-Bromofluorobenzene
9.481	2058351	d4-Dichlorobenzene
7.777	1519780	d5-Chlorobenzene
9.812	870971	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291622.D
Date : 29-MAR-2016 21:50
Client ID: GSTD0.5
Sample Info: G0500329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

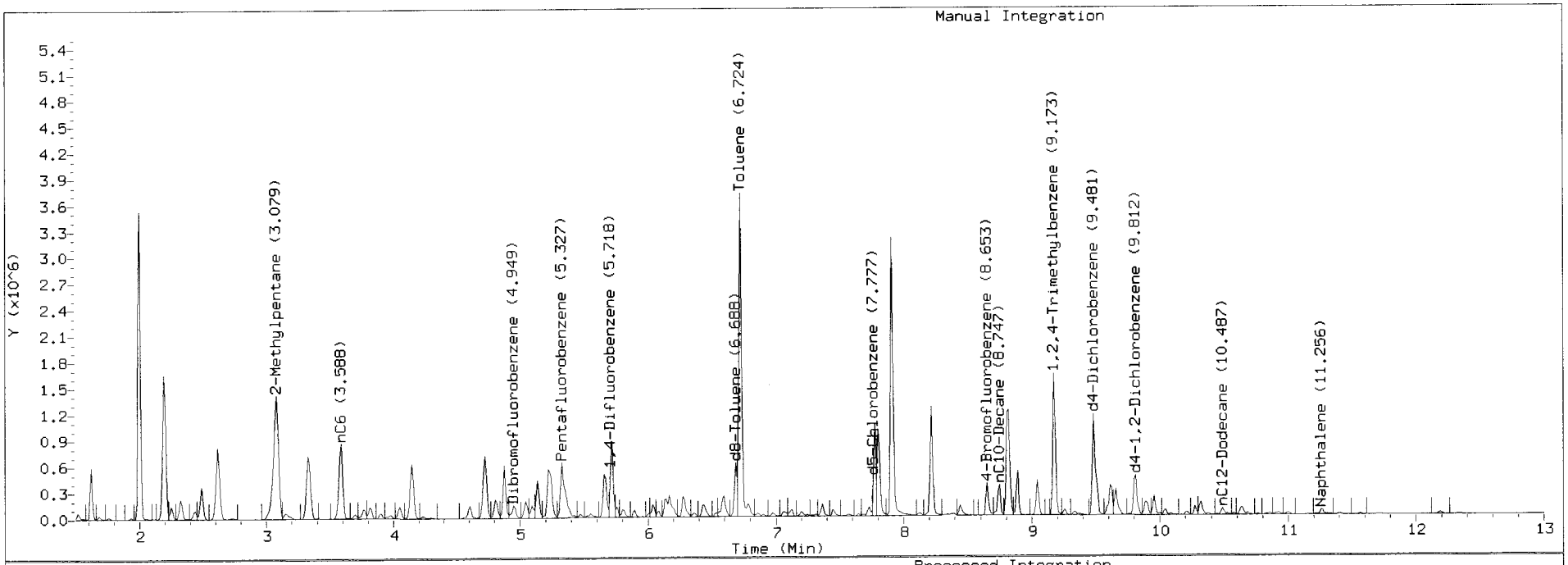
Column phase: RTXVMS

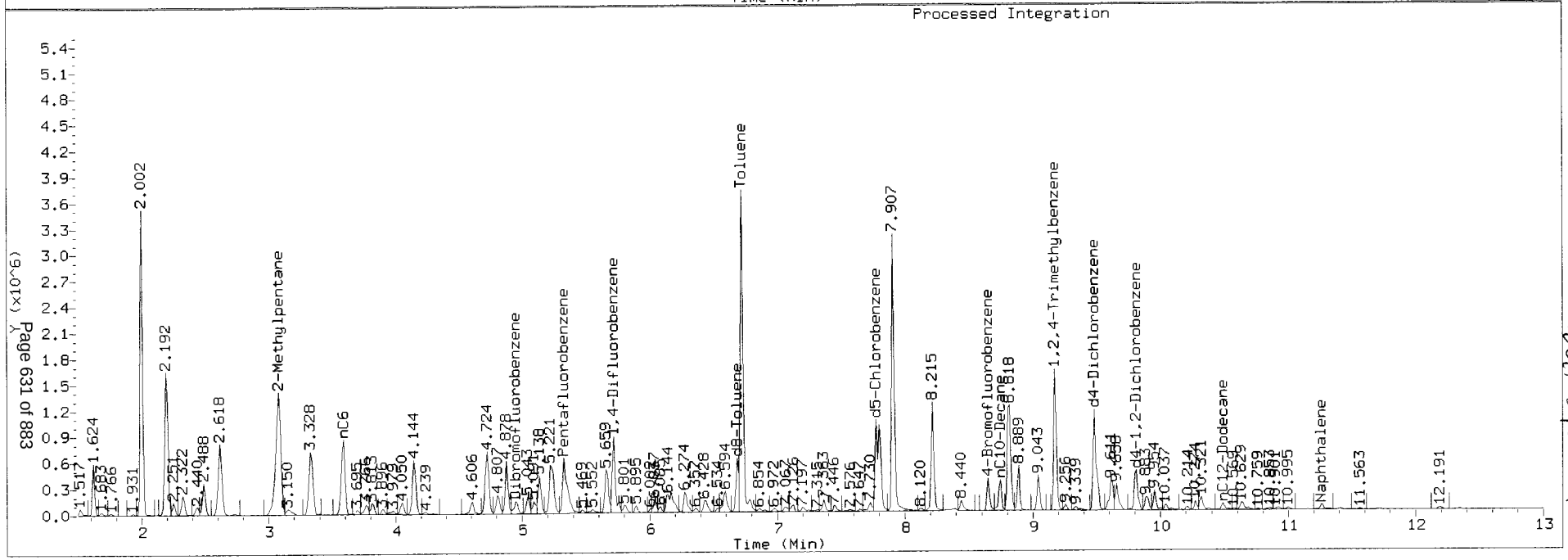


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291622.D Injection: 29-MAR-2016 21:50

Lab ID:G0500329





AJH 3/29/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291622.D
Lab Smp Id: G0500329
Inj Date : 29-MAR-2016 21:50
Operator : PC Inst ID: nt2.i
Smp Info : G0500329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	27 Dibromofluoromethane	111	4.948	4.947	(0.929)	74949	4.67769	4.678
	31 Benzene	78	5.244	5.243	(0.917)	267067	3.77717	3.777
*	32 Pentafluorobenzene	168	5.327	5.326	(1.000)	335026	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.351	5.350	(1.004)	95614	5.04537	5.045
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	526989	10.0000	
$	43 d8-Toluene	98	6.688	6.687	(1.170)	317010	5.08086	5.081
	44 Toluene	92	6.723	6.722	(1.176)	1267837	27.1297	27.130
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	495230	10.0000	
	55 Ethyl Benzene	106	7.800	7.811	(1.003)	198708	6.75834	6.758
	57 m,p-xylene	106	7.907	7.906	(1.017)	790422	22.0562	22.056
	58 o-Xylene	106	8.214	8.212	(1.056)	298827	8.84084	8.841
$	62 4-Bromofluorobenzene	174	8.652	8.651	(1.113)	97596	4.83450	4.835
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	263670	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.812	9.811	(1.035)	126127	5.00284	5.003

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291622.D
Lab Smp Id: G0500329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	335026	-4.38
37 1,4-Difluorobenze	562526	281263	1125052	526989	-6.32
53 d5-Chlorobenzene	502371	251186	1004742	495230	-1.42
76 d4-1,4-Dichlorobe	277950	138975	555900	263670	-5.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.03
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G0500329
Level: LOW Operator: PC
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

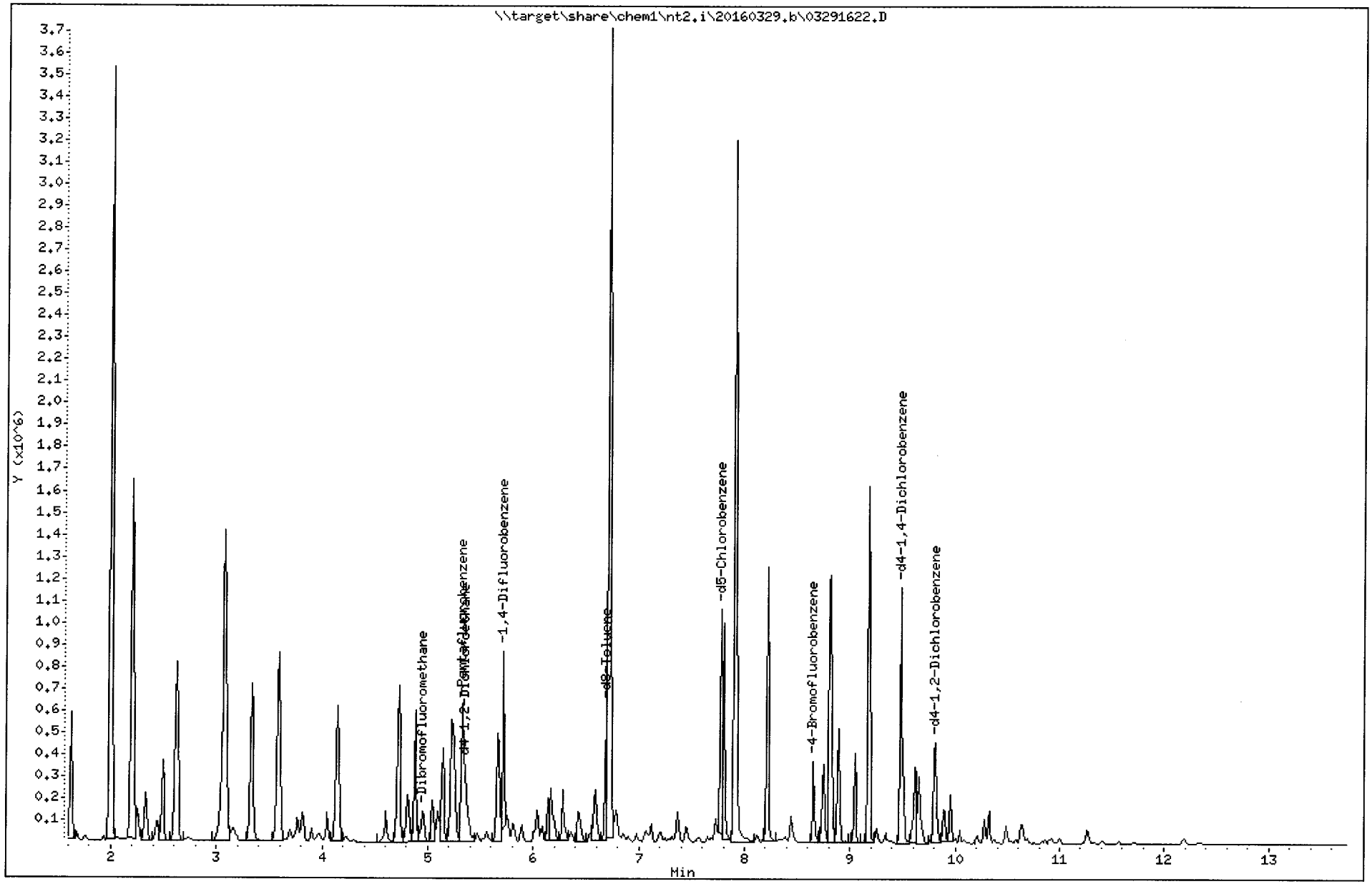
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.678	93.55	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.045	100.91	80-149
$ 43 d8-Toluene	5.000	5.081	101.62	77-120
$ 62 4-Bromofluorobenze	5.000	4.835	96.69	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.003	100.06	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291622.D
Date : 29-MAR-2016 21:50
Client ID:
Sample Info: G0500329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291622.D

Lab ID: G0500329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 21:50

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

XMH 3/30/16

Analytical Resources Inc.
GC/MS Gas Quantitation Report

Data file: 20160329g.b/03291623.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 22:11

ARI ID: G0250329
Client ID: GSTD0.25
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	12028020	0.251 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	20718376	0.249 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	14779001	0.252 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	12232714	0.249 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	19225550	0.262 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

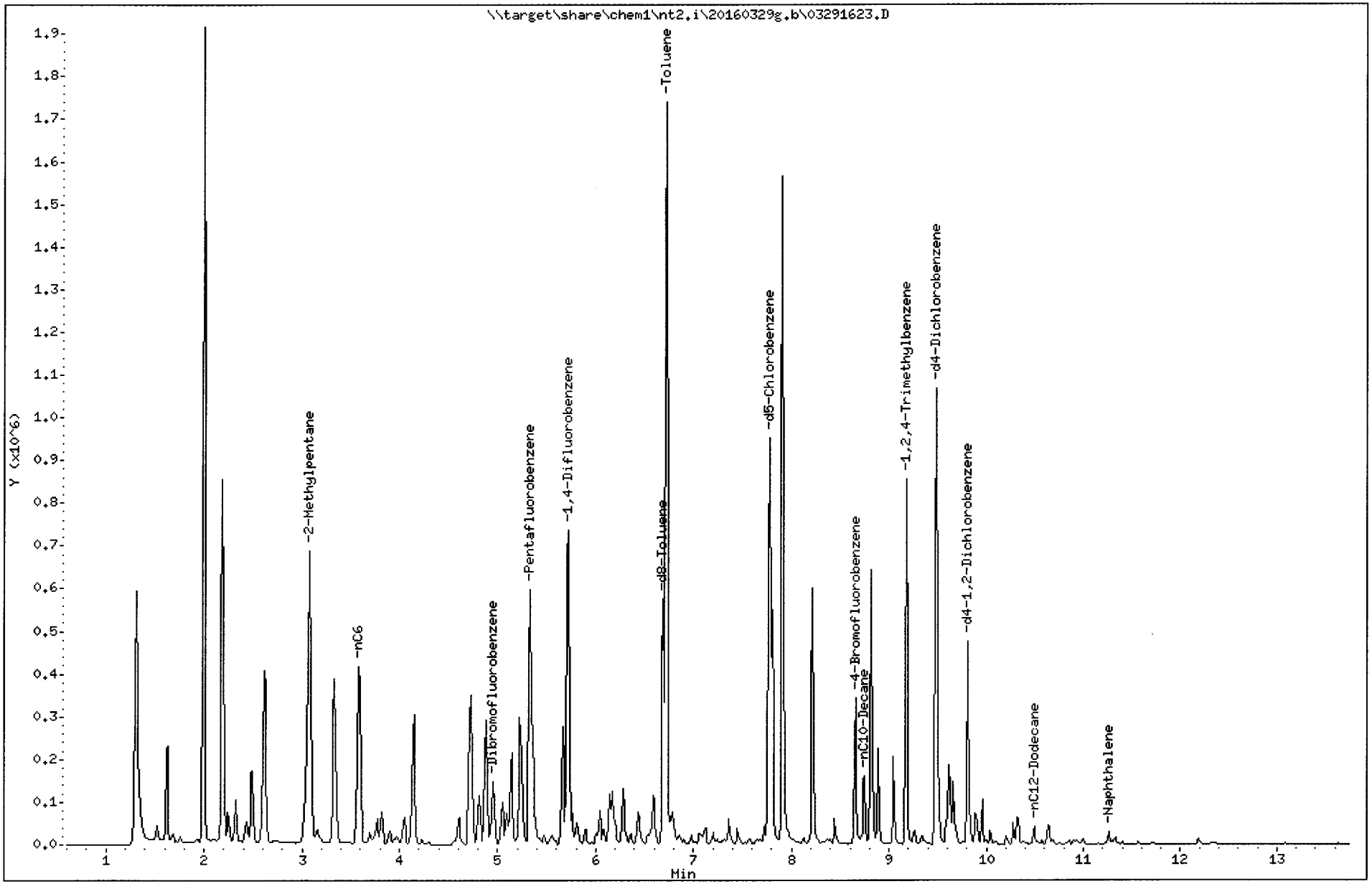
6.691	842876	d8-Toluene
8.655	536470	4-Bromofluorobenzene
9.484	1790369	d4-Dichlorobenzene
7.780	1496568	d5-Chlorobenzene
9.803	804532	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291623.D
Date : 29-MAR-2016 22:11
Client ID: GSTD0.25
Sample Info: G0250329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

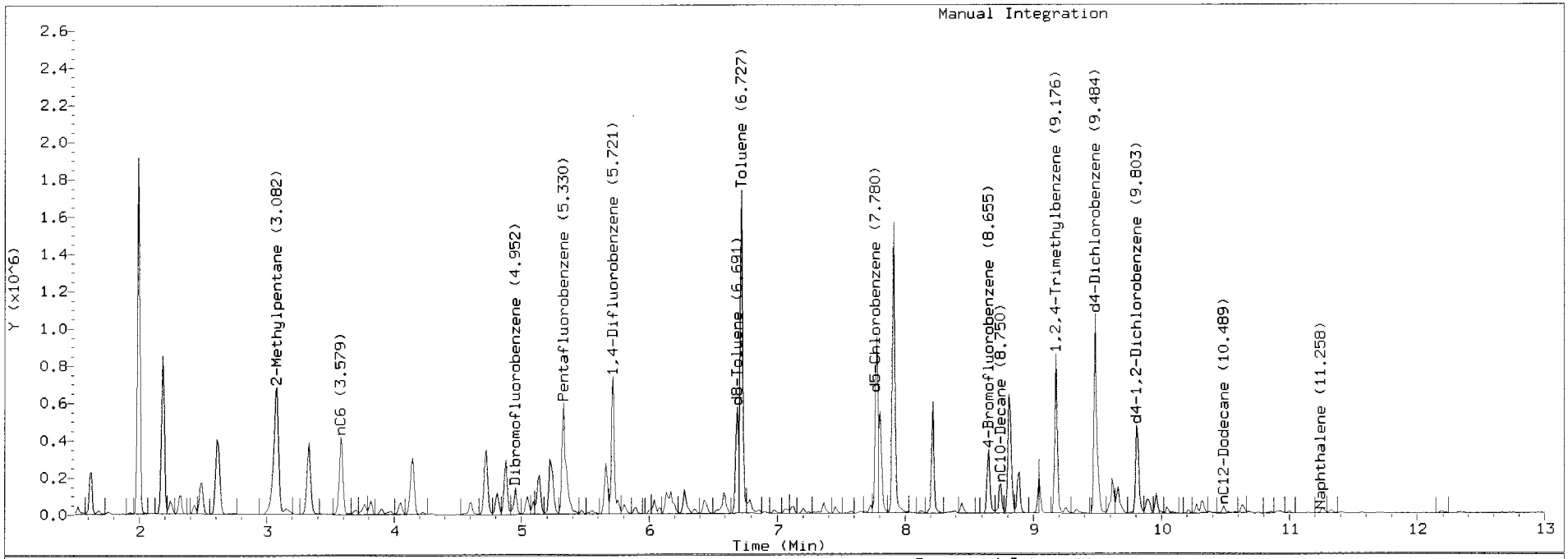
Column phase: RTXVMS

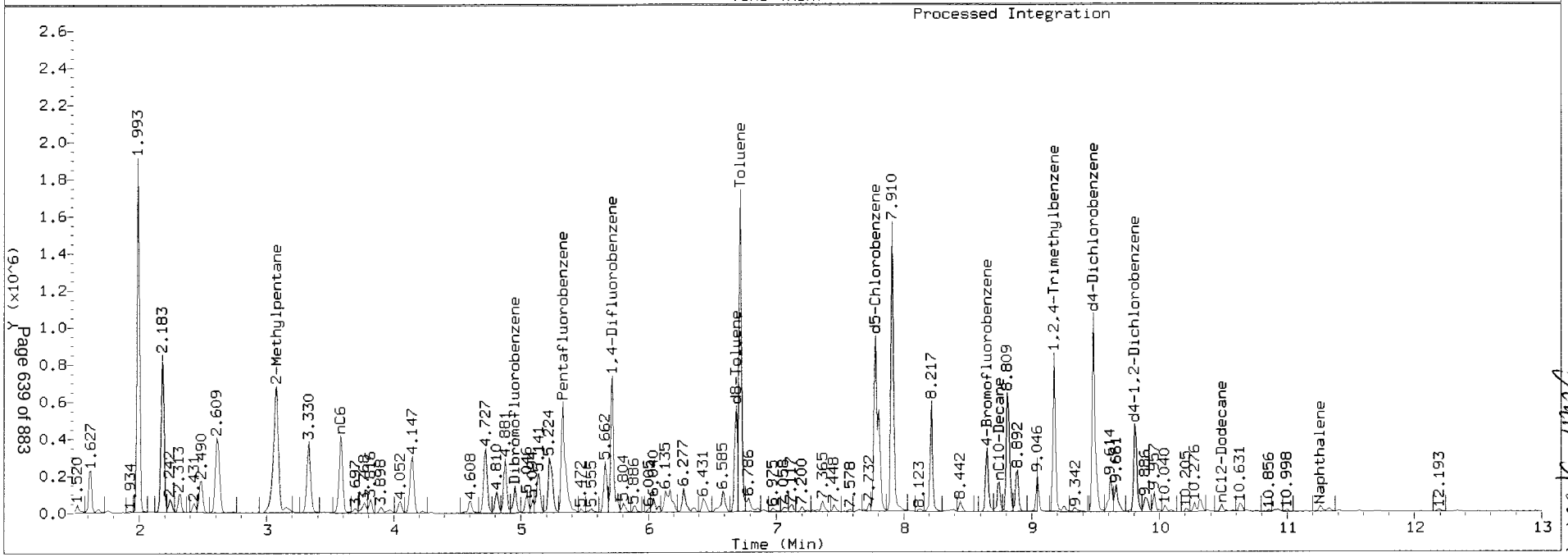


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291623.D Injection: 29-MAR-2016 22:11

Lab ID:G0250329





ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291623.D
Lab Smp Id: G0250329
Inj Date : 29-MAR-2016 22:11
Operator : PC Inst ID: nt2.i
Smp Info : G0250329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	27 Dibromofluoromethane	111	4.951	4.947	(0.929)	75545	4.78409	4.784
	31 Benzene	78	5.247	5.243	(0.917)	138156	1.96530	1.965
*	32 Pentafluorobenzene	168	5.330	5.326	(1.000)	330180	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.353	5.350	(1.004)	95599	5.11861	5.119
*	37 1,4-Difluorobenzene	114	5.720	5.717	(1.000)	523950	10.0000	
$	43 d8-Toluene	98	6.691	6.687	(1.170)	321950	5.18997	5.190
	44 Toluene	92	6.726	6.722	(1.176)	647699	13.9401	13.940
*	53 d5-Chlorobenzene	117	7.779	7.775	(1.000)	490395	10.0000	
	55 Ethyl Benzene	106	7.803	7.811	(1.003)	99790	3.42746	3.427
	57 m,p-xylene	106	7.909	7.906	(1.017)	394058	11.1044	11.104
	58 o-Xylene	106	8.217	8.212	(1.056)	146476	4.37624	4.376
$	62 4-Bromofluorobenzene	174	8.655	8.651	(1.113)	95586	4.78162	4.782
*	76 d4-1,4-Dichlorobenzene	152	9.483	9.479	(1.000)	259889	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.814	9.811	(1.035)	124653	5.01631	5.016

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291623.D
Lab Smp Id: G0250329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	330180	-5.76
37 1,4-Difluorobenze	562526	281263	1125052	523950	-6.86
53 d5-Chlorobenzene	502371	251186	1004742	490395	-2.38
76 d4-1,4-Dichlorobe	277950	138975	555900	259889	-6.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.08
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.07
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.05
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G0250329
Level: LOW Operator: PC
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

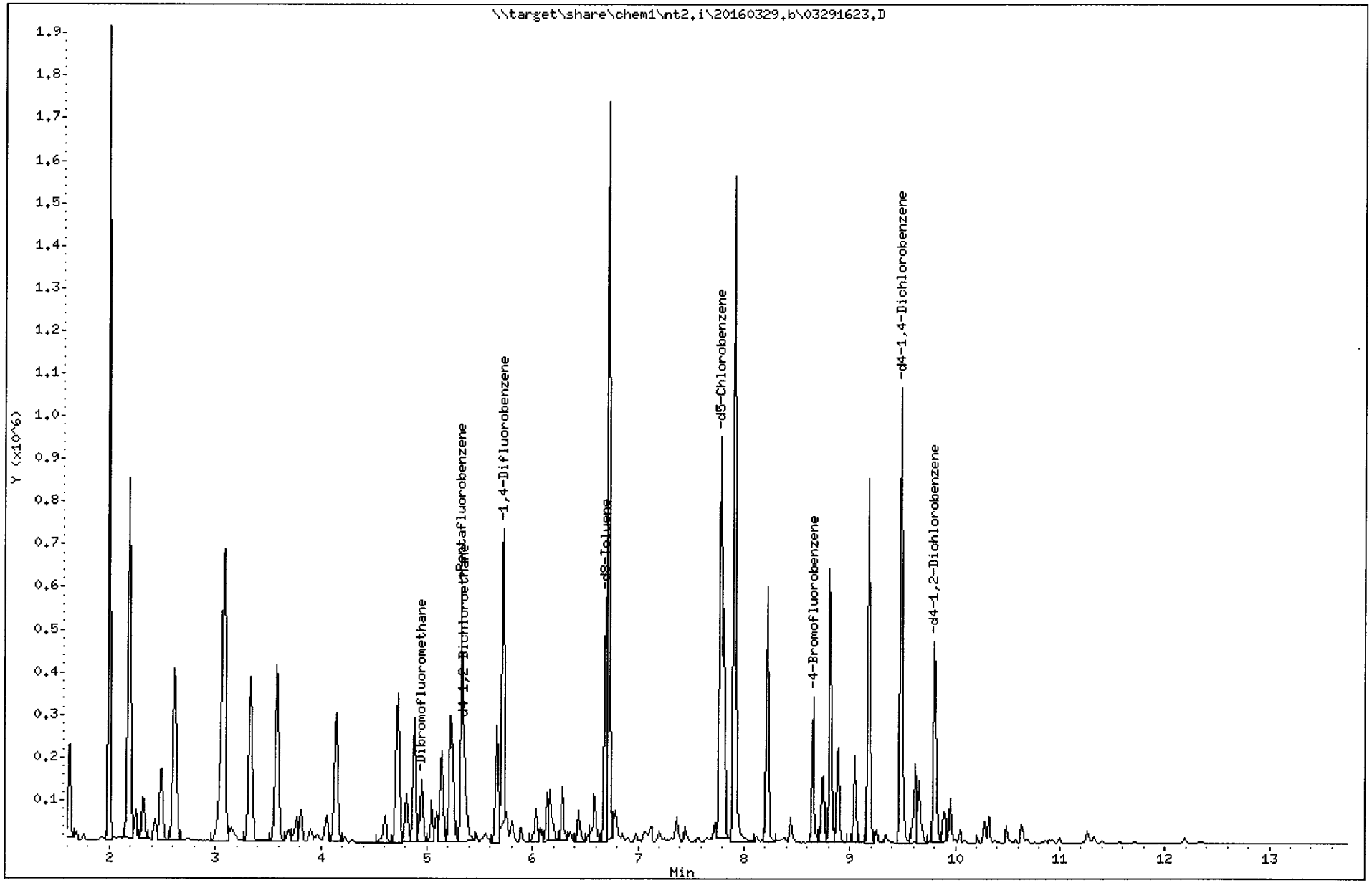
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.784	95.68	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.119	102.37	80-149
$ 43 d8-Toluene	5.000	5.190	103.80	77-120
$ 62 4-Bromofluorobenze	5.000	4.782	95.63	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.016	100.33	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291623.D
Date : 29-MAR-2016 22:11
Client ID:
Sample Info: G0250329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291623.D

Lab ID: G0250329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 22:11

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

MH 3/30/16

Data file: 20160329g.b/03291624.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 22:32

ARI ID: G0100329
Client ID: GSTD0.1
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)	
WAGas Tol-C12	(6.62 to 10.56)	48008849	3850119	0.080	
8015C 2MP-TMB	(2.98 to 9.28)	83224207	7140486	0.086	
AK101 nC6-nC10	(3.49 to 8.62)	58706304	4966251	0.085	
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	3925968	0.080	M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	6419449	0.088	

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

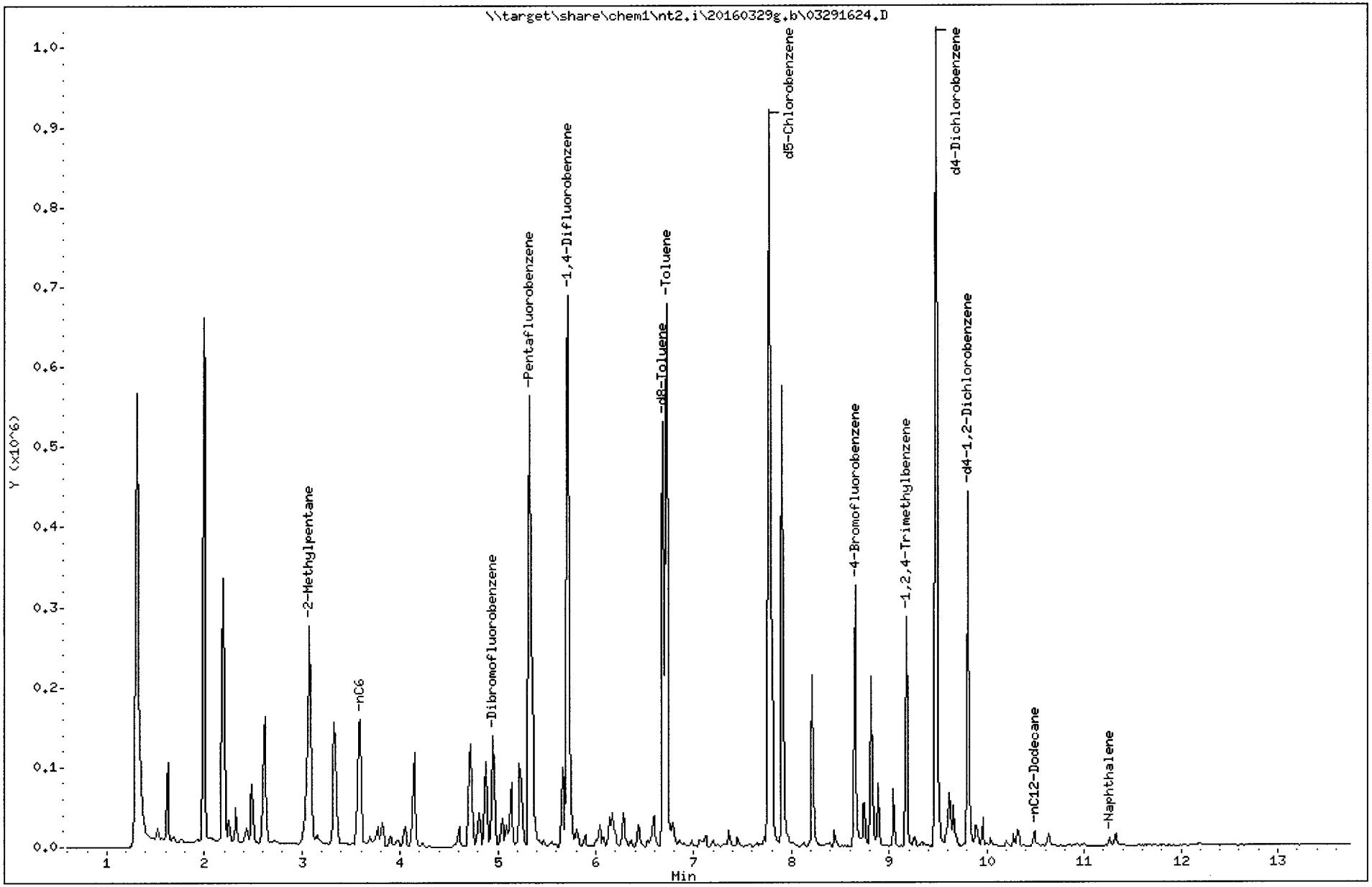
6.690	729346	d8-Toluene
8.655	616898	4-Bromofluorobenzene
9.483	1562613	d4-Dichlorobenzene
7.779	1619441	d5-Chlorobenzene
9.803	713446	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291624.D
Date : 29-MAR-2016 22:32
Client ID: GSTD0.1
Sample Info: G0100329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

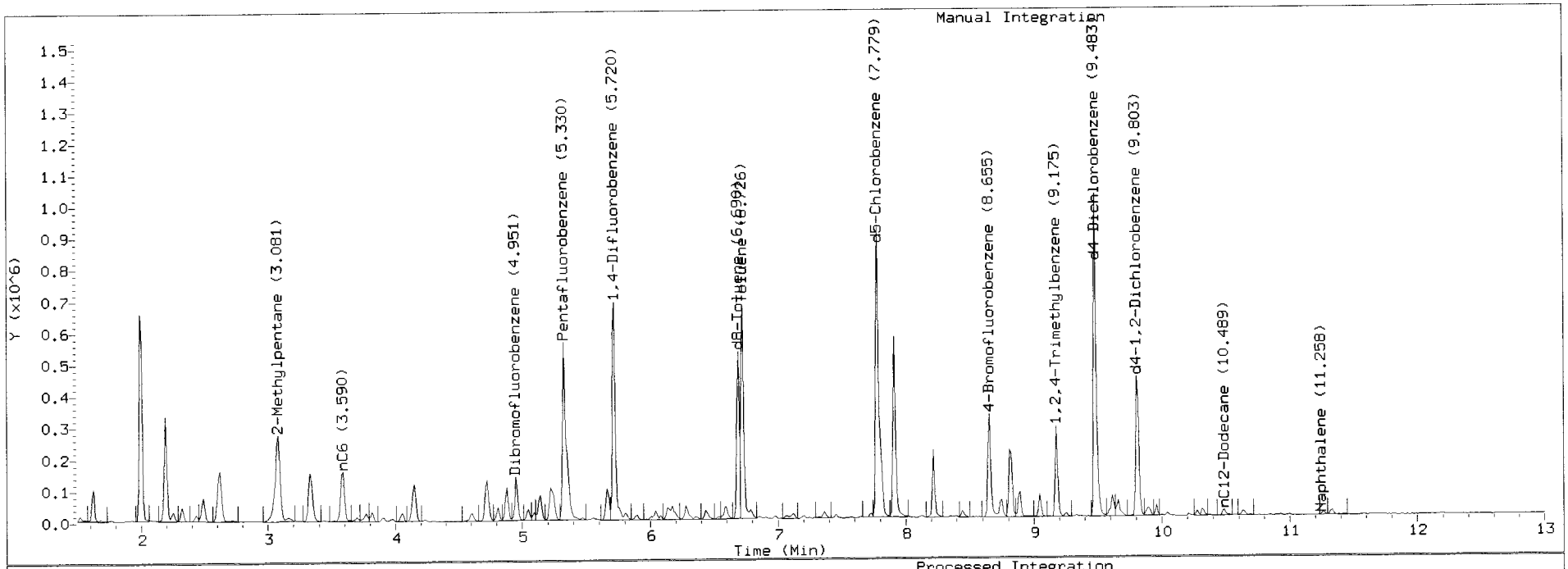
Column phase: RTXVMS

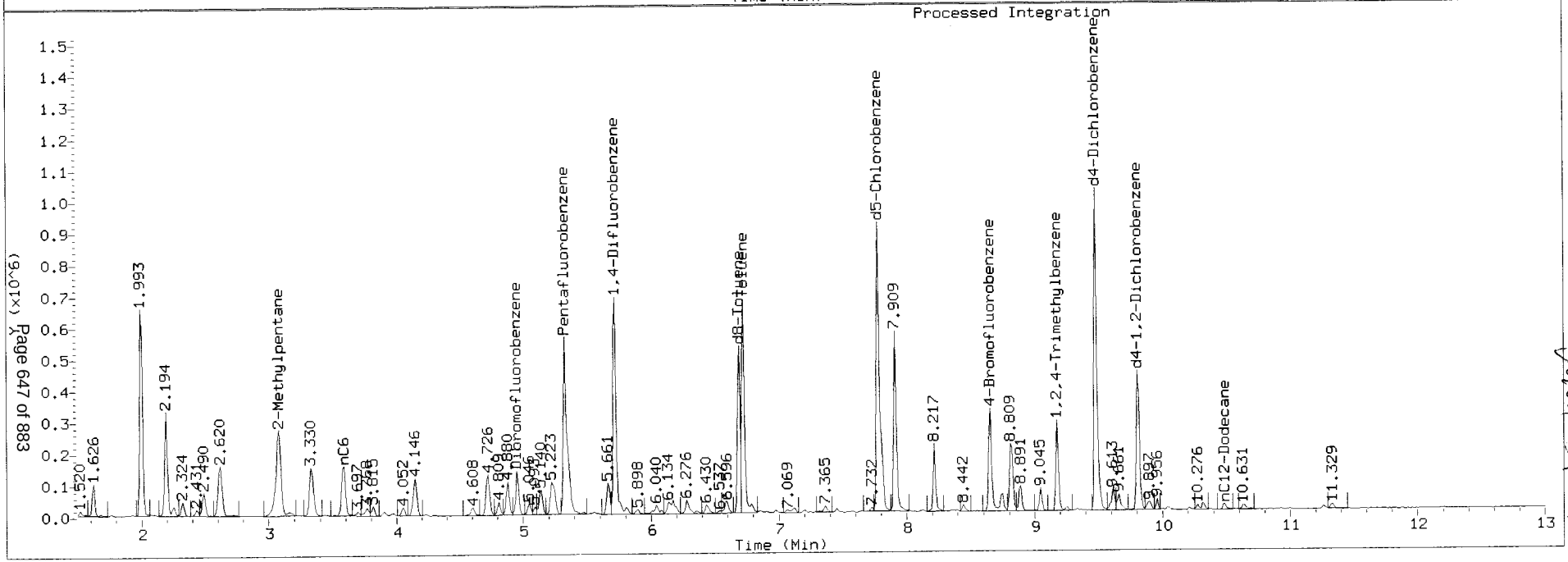


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291624.D Injection: 29-MAR-2016 22:32

Lab ID:G0100329





ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291624.D
Lab Smp Id: G0100329
Inj Date : 29-MAR-2016 22:32
Operator : PC Inst ID: nt2.i
Smp Info : G0100329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.951	4.947	(0.929)	71888	4.95202	4.952
31 Benzene	78	5.246	5.243	(0.917)	51759	0.80004	0.8000
* 32 Pentafluorobenzene	168	5.329	5.326	(1.000)	303542	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.353	5.350	(1.004)	91341	5.31982	5.320
* 37 1,4-Difluorobenzene	114	5.720	5.717	(1.000)	482197	10.0000	
$ 43 d8-Toluene	98	6.690	6.687	(1.170)	292483	5.12321	5.123
44 Toluene	92	6.725	6.722	(1.176)	249861	5.84328	5.843
* 53 d5-Chlorobenzene	117	7.779	7.775	(1.000)	459677	10.0000	
55 Ethyl Benzene	106	7.802	7.811	(1.003)	36717	1.34538	1.345
57 m,p-xylene	106	7.909	7.906	(1.017)	145124	4.36280	4.363
58 o-Xylene	106	8.216	8.212	(1.056)	52554	1.67507	1.675
$ 62 4-Bromofluorobenzene	174	8.654	8.651	(1.113)	87080	4.64721	4.647
* 76 d4-1,4-Dichlorobenzene	152	9.483	9.479	(1.000)	241501	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.814	9.811	(1.035)	117450	5.08632	5.086

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291624.D
Lab Smp Id: G0100329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	303542	-13.37
37 1,4-Difluorobenze	562526	281263	1125052	482197	-14.28
53 d5-Chlorobenzene	502371	251186	1004742	459677	-8.50
76 d4-1,4-Dichlorobe	277950	138975	555900	241501	-13.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.07
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.06
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.05
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G0100329
Level: LOW Operator: PC
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

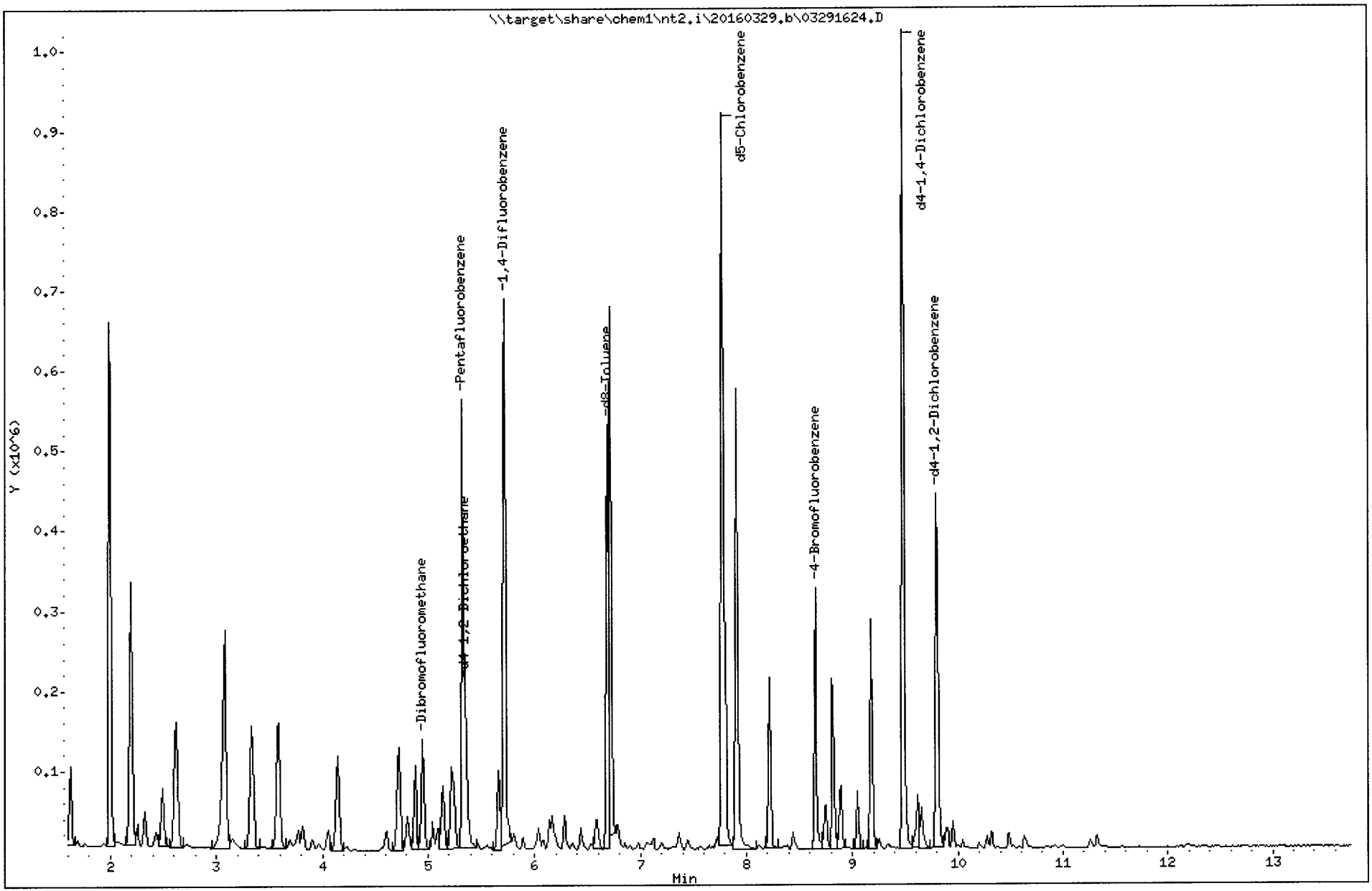
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.952	99.04	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.320	106.40	80-149
$ 43 d8-Toluene	5.000	5.123	102.46	77-120
$ 62 4-Bromofluorobenze	5.000	4.647	92.94	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.086	101.73	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291624.D
Date : 29-MAR-2016 22:32
Client ID:
Sample Info: G0100329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291624.D

Lab ID: G0100329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 22:32

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

3/30/16

Data file: 20160329g.b/03291625.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 22:54

ARI ID: GSCV0329
Client ID: GSCV
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	125458223	2.613 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	208594002	2.506 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	144105640	2.455 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	129715156	2.636 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	203576469	2.779 M

True value = 2.5

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

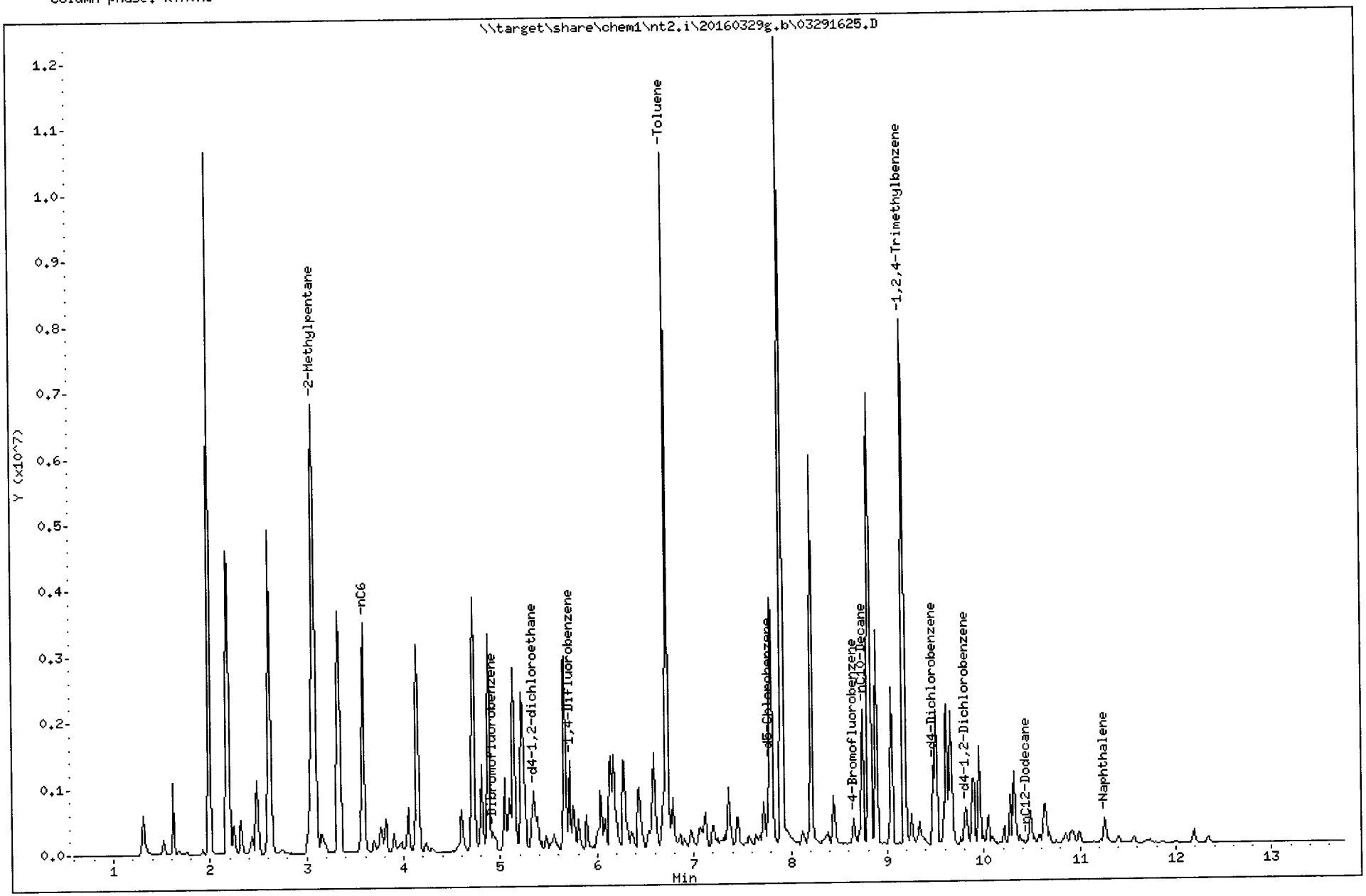
8.651	730123	4-Bromofluorobenzene
9.480	1842491	d4-Dichlorobenzene
7.776	2205885	d5-Chlorobenzene
9.811	1533863	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291625.D
Date : 29-MAR-2016 22:54
Client ID: GSCV
Sample Info: GSCV0329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

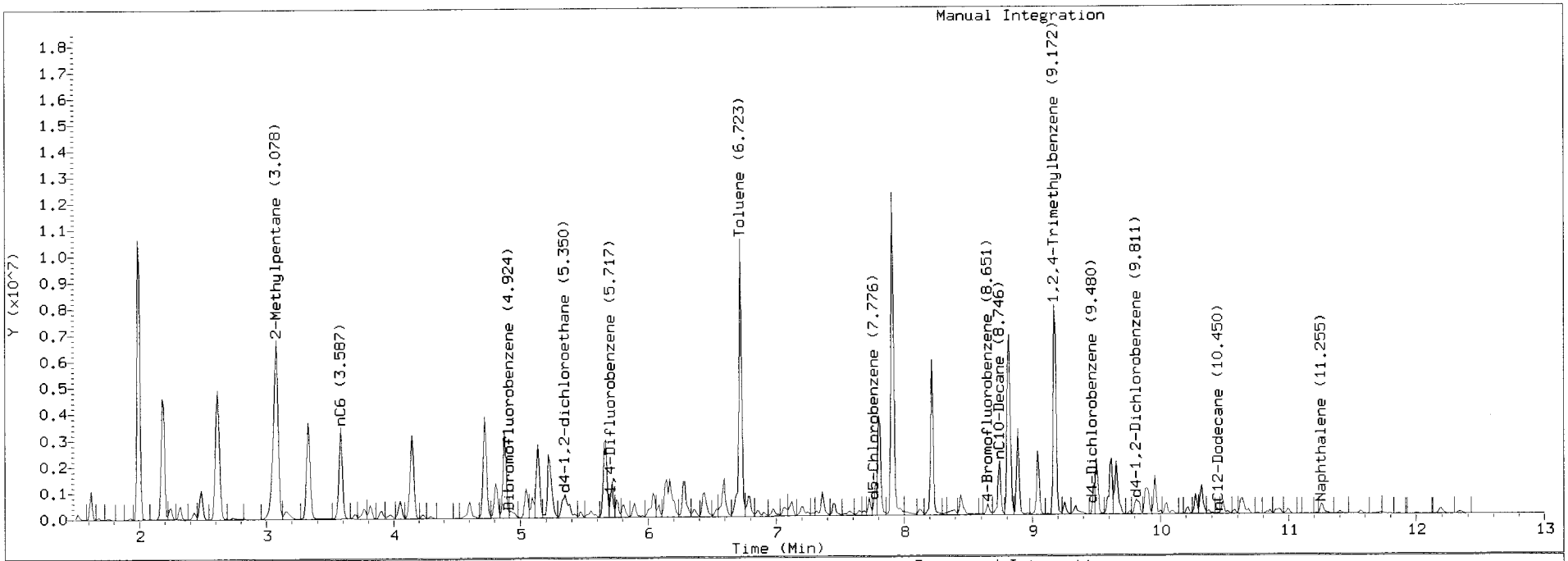
Column phase: RTXVMS

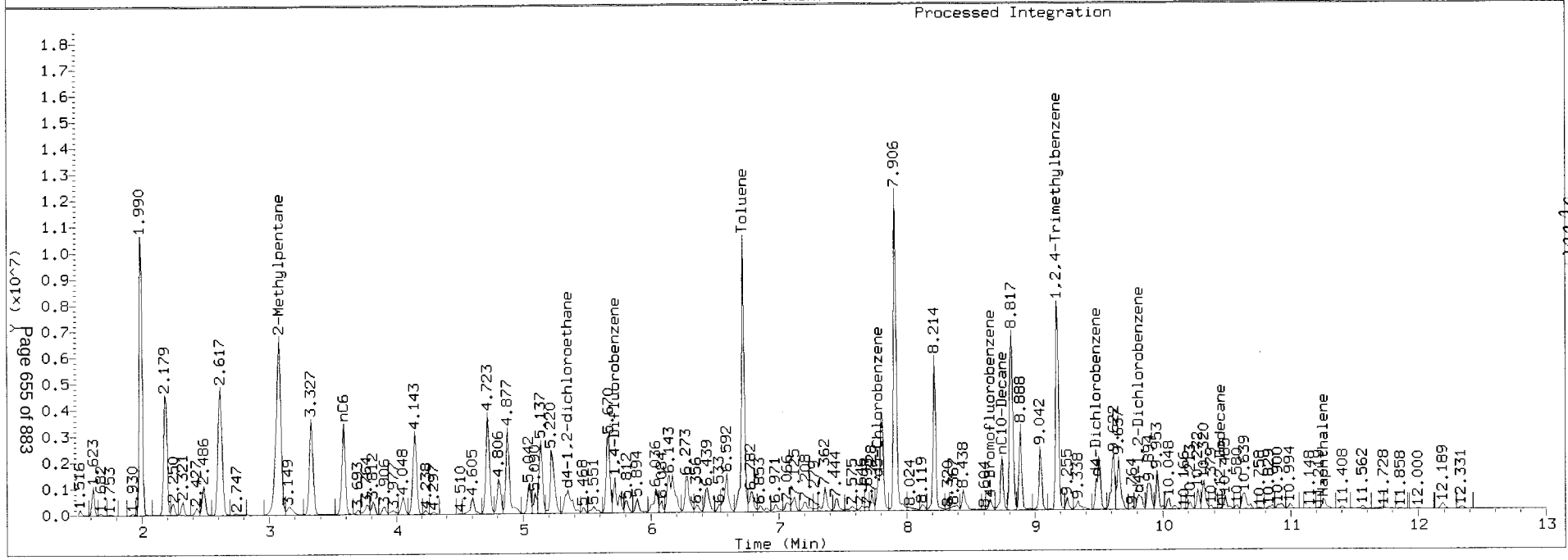


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291625.D Injection: 29-MAR-2016 22:54

Lab ID:GSCV0329





ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291625.D
Lab Smp Id: GSCV0329
Inj Date : 29-MAR-2016 22:54 Inst ID: nt2.i
Operator : PC
Smp Info : GSCV0329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.947	4.947	(0.929)	76997	4.62830	4.628
31 Benzene	78	5.243	5.243	(0.917)	657783	8.82957	8.830
* 32 Pentafluorobenzene	168	5.326	5.326	(1.000)	347854	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	110861	5.63419	5.634
* 37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	555254	10.0000	
$ 43 d8-Toluene	98	6.687	6.687	(1.170)	350286	5.32840	5.328
44 Toluene	92	6.722	6.722	(1.176)	3750272	76.1648	76.165
* 53 d5-Chlorobenzene	117	7.775	7.775	(1.000)	518670	10.0000	
55 Ethyl Benzene	106	7.811	7.811	(1.005)	873090	28.3530	28.353
57 m,p-xylene	106	7.905	7.906	(1.017)	3174736	84.5854	84.585
58 o-Xylene	106	8.213	8.212	(1.056)	1410867	39.8544	39.854
$ 62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	106739	5.04846	5.048
* 76 d4-1,4-Dichlorobenzene	152	9.479	9.479	(1.000)	276192	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.810	9.811	(1.035)	133866	5.06908	5.069

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291625.D
Lab Smp Id: GSCV0329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	347854	-0.72
37 1,4-Difluorobenze	562526	281263	1125052	555254	-1.29
53 d5-Chlorobenzene	502371	251186	1004742	518670	3.24
76 d4-1,4-Dichlorobe	277950	138975	555900	276192	-0.63

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.01
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: GSCV0329
Level: LOW Operator: PC
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

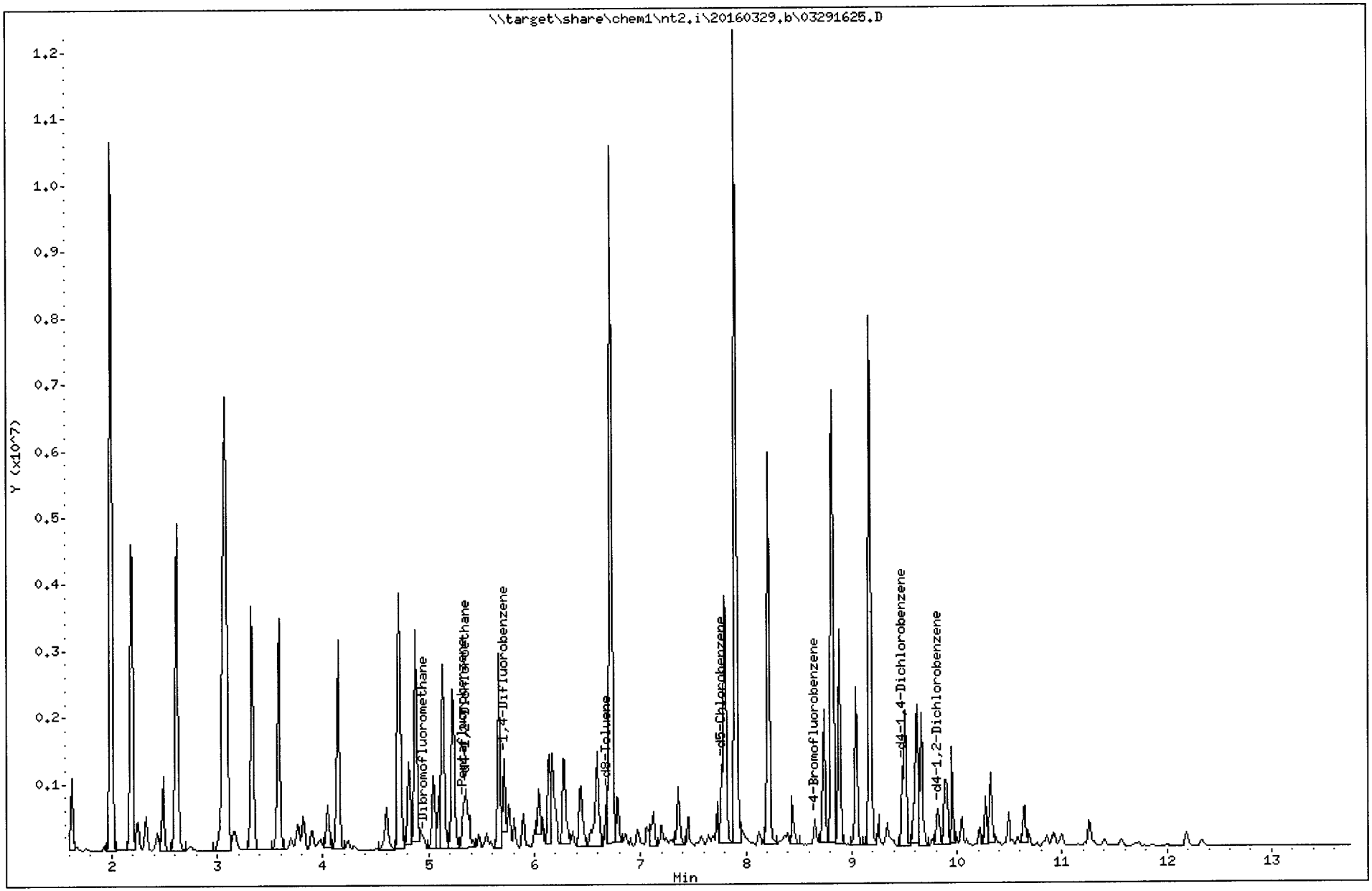
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.628	92.57	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.634	112.68	80-149
$ 43 d8-Toluene	5.000	5.328	106.57	77-120
$ 62 4-Bromofluorobenze	5.000	5.048	100.97	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.069	101.38	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291625.D
Date : 29-MAR-2016 22:54
Client ID:
Sample Info: GSCV0329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291625.D

Lab ID: GSCV0329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 22:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analysis	Matrix	Method
8260C VOA	Water	EPA 8260C

Checklist: Initial Calibration Checklist-VOA

#	Checklist Item	Response	Analyst Initials	Date
1	Element Calibration Code	YES	LH	04/14/2016
	Comments: *ZD00012*			
2	BFB Tune met Criteria	YES	LH	04/14/2016
3	ICal meets 20% RSD, LR COD, and QR COD limits	YES	LH	04/14/2016
4	NO ICAL Q Flag applied	YES	LH	04/14/2016
5	Manual integrations include before/after pictures	YES	LH	04/14/2016
6	Internal Standard areas within 50-200% from reference	YES	LH	04/14/2016
7	Spectral Library updated	NA	LH	04/14/2016
8	Minimum response factors met	YES	LH	04/14/2016
9	All SCV within +/- 20% (DOD)	NO	LH	04/14/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Dichlorodifluoromethane 127.7%, Chloromethane 129.08%, bromoform 78.70%, t-butyl benzene 122.59%.*			
10	All SCV within +/- 30%	NO	LH	04/14/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Vinyl chloride 130.63%, bromomethane 174.16%, chloroethane 135.88%*			
11	NO Linear or Quadratic Fits Used	NO	LH	04/14/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Linear: chloroethane, vinyl acetate, carbon tetrachloride, trans-1,3-dichloropropene, chlorodibromomethane, bromoform, 1,2-dibromo-3-chloropropane.* *Quadratic: iodomethane*			
12	NO Calibration points dropped	NO	LH	04/14/2016
	Comments: *EXCEPTION REPORT REQUIRED* *40 and 80 parts dropped for trichlorofluoromethane. Calibration range 0.2ug/L - 20ug/L.* *Some low points dropped, but all RLs were met.*			
13	Additional Notes	YES	LH	04/14/2016
	Comments: *Raw response factors were compared to element.*			
14	Reviewer Approval (Reviewer)	YES	BB	04/14/2016

* = Indicates Automated Response from Element DataSyst

Analysis	Matrix	Method
8260C Gas (8015C)	Water	EPA 8015C
8260C Gas (AK101)	Water	AK101
8260C Gas (NWTPH)	Water	NWTPHg
8260C VOA	Water	EPA 8260C

Checklist: Initial Calibration Checklist-VOA

#	Checklist Item	Response	Analyst Initials	Date
1	Element Calibration Code	YES	LH	03/30/2016
	Comments: *ZC00032* *Calibration is for 8260C and gas.*			
2	BFB Tune met Criteria	YES	LH	03/30/2016
3	ICal meets 20% RSD, LR COD, and QR COD limits	YES	LH	03/30/2016
4	NO ICAL Q Flag applied	YES	LH	03/30/2016
5	Manual integrations include before/after pictures	YES	LH	03/30/2016
6	Internal Standard areas within 50-200% from reference	YES	LH	03/30/2016
7	Spectral Library updated	NA	LH	03/30/2016
8	Minimum response factors met	YES	LH	03/30/2016
9	All SCV within +/- 20% (DOD)	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Vinyl Chloride 120.12%, Chloroethane 120.72%, t-butylbenzene 124.45%.*			
10	All SCV within +/- 30%	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Bromomethane 141.13%, methylene chloride 130.90%*			
11	NO Linear or Quadratic Fits Used	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Quadratic: Chloroethane* *Linear: Iodomethane, methylene chloride, trans-1,3-dichloropropene, chlorodibromomethane, 1,1,1,2-tetrachloroethane, bromoform.*			
12	NO Calibration points dropped	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Some low points were dropped, but all RLs were met.* *Upper 2 points for trichlorofluoromethane were dropped. Range is 0.2ug/L- 20ug/L*			
13	Additional Notes	YES	LH	03/30/2016
	Comments: *Gas SCV standard was expired, but recovered well.*			
14	Reviewer Approval (Reviewer)	YES	BB	03/30/2016

* = Indicates Automated Response from Element DataSyst

ZD0012

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-APR-2016 10:08
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Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160413g.b\8260041416.m
Last Edit : 14-Apr-2016 13:18 lanih
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem1\nt2.i\20160414.b\04141609.D
Level 2: \\target\share\chem1\nt2.i\20160414.b\04141610.D
Level 3: \\target\share\chem1\nt2.i\20160414.b\04141616.D
Level 4: \\target\share\chem1\nt2.i\20160414.b\04141615.D
Level 5: \\target\share\chem1\nt2.i\20160414.b\04141614.D
Level 6: \\target\share\chem1\nt2.i\20160414.b\04141613.D
Level 7: \\target\share\chem1\nt2.i\20160414.b\04141612.D
Level 8: \\target\share\chem1\nt2.i\20160414.b\04141611.D

Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
1 Dichlorodifluoromethane	0.36923	0.54291	0.55410	0.51303	0.58534	0.57513			
	0.57592	0.60189					0.53969	13.743	
2 Chloromethane	+++++	0.68744	0.68248	0.67292	0.67668	0.67521			
	0.66710	0.67539					0.67675	0.971	
3 Vinyl Chloride	0.49230	0.61190	0.63621	0.63940	0.67637	0.67251			
	0.68051	0.69041					0.63745	10.120	
4 Bromomethane	0.35338	0.39610	0.46643	0.44408	0.45091	0.43207			
	0.43639	0.43536					0.42684	8.390	
5 Chloroethane	0.38321	0.41340	0.19293	0.16999	0.17544	0.16173			
	0.15217	0.14431					0.22415	48.535	<-
6 Trichlorofluoromethane	0.59766	0.74175	0.75360	0.73573	0.74750	0.72697			
	+++++	+++++					0.71720	8.266	
7 1,1-Dichloroethene	0.67396	0.80682	0.78825	0.79112	0.77881	0.76915			
	0.75527	0.73800					0.76267	5.485	
8 Carbon Disulfide	1.51311	1.64058	1.83679	1.83038	1.81435	1.76846			
	1.73454	1.62619					1.72055	6.778	

ARI Labs, Inc.

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Last Edit : 14-Apr-2016 13:18 lanih
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Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
9 112Trichlorol22Trifluoroethan	0.43682	0.52878	0.52759	0.53939	0.52654	0.51964			
	0.52400	0.53582					0.51732	6.403	
10 Iodomethane	+++++	+++++	0.14927	0.18114	0.28532	0.35290			
	0.42085	0.48149					0.31183	42.196	<-
11 Bromoethane	0.33628	0.36674	0.40332	0.39550	0.38402	0.38057			
	0.37246	0.38653					0.37818	5.438	
12 Acrolein	+++++	+++++	0.08093	0.08397	0.08211	0.08217			
	0.08368	0.08526					0.08302	1.888	
13 Methylene Chloride	+++++	+++++	0.56132	0.54720	0.56420	0.55697			
	0.55619	0.58279					0.56145	2.128	
14 Acetone	+++++	+++++	0.12819	0.12641	0.11759	0.11508			
	0.11598	0.11761					0.12014	4.708	
15 Trans-1,2-Dichloroethene	0.45532	0.56304	0.60844	0.59045	0.57589	0.56837			
	0.56487	0.57103					0.56217	8.144	
16 n-hexane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
17 Methyl tert butyl ether	1.13068	1.47248	1.48275	1.49698	1.50124	1.49168			
	1.48024	1.45715					1.43915	8.716	
18 1,1-Dichloroethane	0.80527	1.02806	1.09354	1.10778	1.06687	1.07143			
	1.06583	1.08918					1.04099	9.432	
19 Acrylonitrile	+++++	0.13647	0.16639	0.17431	0.17997	0.18533			
	0.19136	0.20064					0.17635	11.810	

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	40.000 Level 7	80.000 Level 8							
21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
20 Vinyl Acetate	0.54389	0.80013	0.96629	1.01651	1.14097	1.16941			
	1.19867	1.19945					1.00441	23.107	<-
22 Cis-1,2-Dichloroethene	0.46837	0.61879	0.60933	0.65081	0.63961	0.63737			
	0.64594	0.68184					0.61901	10.440	
23 2,2-Dichloropropane	0.63744	0.70536	0.72292	0.78302	0.83074	0.84943			
	0.87434	0.90471					0.78849	11.784	
24 Bromochloromethane	0.20497	0.25626	0.27275	0.29945	0.29270	0.29483			
	0.29808	0.31323					0.27903	12.436	
25 Chloroform	0.79719	0.96066	1.01399	1.03307	1.00977	1.02304			
	1.01159	1.02780					0.98464	8.017	
26 Carbon Tetrachloride	0.24888	0.34143	0.34919	0.37874	0.42745	0.44537			
	0.48267	0.50519					0.39736	21.260	<-
28 1,1,1-Trichloroethane	0.68220	0.80151	0.85537	0.87441	0.92119	0.93017			
	0.94143	0.96121					0.87094	10.617	
30 1,1-Dichloropropene	0.37210	0.46657	0.49784	0.52850	0.51567	0.50361			
	0.52795	0.54156					0.49423	11.028	
29 2-Butanone	+++++	+++++	0.21596	0.22860	0.22273	0.22695			
	0.22873	0.23354					0.22609	2.679	
31 Benzene	1.26215	1.55393	1.57856	1.64571	1.60411	1.54472			
	1.51805	1.45189					1.51989	7.832	

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	40.000 Level 7	80.000 Level 8						
35 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
34 1,2-Dichloroethane	0.37927	0.47190	0.49465	0.50527	0.49316	0.47740		
	0.48298	0.48601					0.47383	8.361
36 Trichloroethene	0.33816	0.38358	0.39468	0.42041	0.40634	0.40018		
	0.41310	0.43762					0.39926	7.430
38 Dibromomethane	0.14383	0.19573	0.19006	0.20732	0.20415	0.19483		
	0.20489	0.21624					0.19463	11.368
39 1,2-Dichloropropane	0.28716	0.35523	0.36499	0.37790	0.38470	0.37011		
	0.37621	0.39894					0.36440	9.283
40 Bromodichloromethane	0.29170	0.36651	0.39338	0.42125	0.45653	0.46582		
	0.48392	0.50286					0.42275	16.572
173 2-Pentanone	+++++	+++++	0.04007	0.04352	0.04734	0.04722		
	0.05045	0.05561					0.04737	11.389
42 Cis 1,3-dichloropropene	0.32220	0.42358	0.44769	0.51375	0.55705	0.56255		
	0.59270	0.62136					0.50511	19.890
41 2-Chloroethyl Vinyl Ether	+++++	0.14772	0.17668	0.19641	0.21616	0.22015		
	0.23223	0.24792					0.20532	16.748
44 Toluene	0.85167	0.98291	1.00791	1.01983	1.00112	0.96002		
	0.98868	0.99598					0.97601	5.462
45 4-Methyl-2-Pentanone	+++++	+++++	0.11401	0.12588	0.12776	0.12770		
	0.13220	0.12942					0.12616	5.010

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	40.000 Level 7	80.000 Level 8							
46 Tetrachloroethene	0.36866	0.46287	0.46607	0.46820	0.45067	0.46004			
	0.47791	0.48624					0.45508	8.035	
47 Trans 1,3-Dichloropropene	0.22696	0.32096	0.36686	0.40474	0.47627	0.48321			
	0.51819	0.53337					0.41632	25.627	<-
48 1,1,2-Trichloroethane	0.19655	0.30049	0.29528	0.31793	0.31579	0.31144			
	0.32111	0.34194					0.30007	14.705	
49 Chlorodibromomethane	0.18875	0.23166	0.26123	0.29668	0.34167	0.37024			
	0.39776	0.42127					0.31366	26.401	<-
50 1,3-Dichloropropane	0.39096	0.56956	0.60469	0.62326	0.60667	0.60431			
	0.61979	0.62508					0.58054	13.538	
51 1,2-Dibromoethane	0.18433	0.25073	0.26764	0.29303	0.30704	0.30135			
	0.31016	0.33166					0.28074	16.539	
52 2-Hexanone	+++++	+++++	0.21861	0.22701	0.24226	0.24523			
	0.24318	0.22791					0.23403	4.685	
54 Chlorobenzene	1.00150	1.20484	1.24562	1.23104	1.17757	1.18558			
	1.18629	1.10816					1.16757	6.743	
55 Ethyl Benzene	0.54452	0.65614	0.64636	0.68672	0.65860	0.67176			
	0.68029	0.67837					0.65285	7.027	
56 1,1,1,2-Tetrachloroethane	0.23124	0.29026	0.31552	0.32333	0.36397	0.38578			
	0.40956	0.42161					0.34266	18.879	
57 m,p-xylene	0.61497	0.76453	0.82623	0.83258	0.82052	0.81953			
	0.78279	0.69555					0.76959	10.048	

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Compound	0.20000 Level 1	0.50000 Level 2	1.000 Level 3	2.000 Level 4	10.000 Level 5	20.000 Level 6	RRF	% RSD	
	40.000 Level 7	80.000 Level 8							
58 o-Xylene	0.56851	0.67934	0.76027	0.78117	0.79028	0.78669			
	0.79748	0.80135					0.74563	10.956	
59 Styrene	0.86789	1.06873	1.21127	1.28487	1.33923	1.35127			
	1.25101	1.24770					1.20275	13.404	
60 Bromoform	0.15674	0.24171	0.23825	0.25970	0.34238	0.37205			
	0.42302	0.45684					0.31134	33.258	<-
61 Isopropyl Benzene	2.86527	3.62846	3.78215	3.74691	3.81354	3.59057			
	3.45860	2.93373					3.47740	10.786	
63 Bromobenzene	0.71164	0.94124	0.93226	0.96750	0.94122	0.91380			
	0.94450	0.96296					0.91439	9.146	
64 N-Propyl Benzene	3.32099	4.13041	4.24493	4.27934	4.28327	4.00054			
	3.81716	3.10394					3.89757	11.672	
82 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
65 1,1,2,2-Tetrachloroethane	0.46539	0.67920	0.74526	0.73068	0.75846	0.74656			
	0.76917	0.78115					0.70948	14.560	
66 2-Chloro Toluene	2.38495	2.88535	3.06556	2.96485	2.97519	2.85156			
	2.84144	2.63954					2.82605	7.713	
67 1,3,5-Trimethyl Benzene	2.26435	2.92458	3.05951	3.12777	3.20222	3.02604			
	2.95963	2.57026					2.89180	10.943	
68 1,2,3-Trichloropropane	0.13951	0.23907	0.24282	0.24622	0.24245	0.24011			
	0.25076	0.25909					0.23250	16.403	

ARI Labs, Inc.

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	40.000 Level 7	80.000 Level 8							
69 Trans-1,4-Dichloro 2-Butene	+++++	+++++	0.14241	0.16833	0.18542	0.18754			
	0.19671	0.21227					0.18212	13.291	
70 4-Chloro Toluene	2.26372	2.83525	2.80127	2.82033	2.74592	2.60434			
	2.58295	2.32916					2.62287	8.504	
71 T-Butyl Benzene	1.94456	2.53323	2.70391	2.72460	2.78654	2.62031			
	2.58541	2.37721					2.53447	10.661	
72 1,2,4-Trimethylbenzene	2.29776	2.92997	3.07183	3.13509	3.22240	3.06603			
	2.97235	2.62920					2.91558	10.504	
73 S-Butyl Benzene	2.88817	3.67818	3.88334	3.85852	3.96679	3.71795			
	3.51947	3.01484					3.56591	11.357	
74 4-Isopropyl Toluene	2.25910	2.97601	3.14468	3.27334	3.36141	3.17913			
	3.08364	2.69690					2.99678	12.009	
75 1,3-Dichlorobenzene	1.47476	1.84268	1.86698	1.85287	1.84846	1.75375			
	1.77751	1.73464					1.76896	7.291	
77 1,4-Dichlorobenzene	1.70609	1.96623	1.91896	1.88774	1.85357	1.78329			
	1.75708	1.72670					1.82496	5.226	
78 N-Butyl Benzene	2.10656	2.56111	2.76143	2.71292	2.87719	2.77973			
	2.72302	2.40921					2.61640	9.608	
80 1,2-Dichlorobenzene	1.50438	1.71053	1.78458	1.73707	1.71038	1.65080			
	1.67968	1.63778					1.67690	5.012	
81 1,2-Dibromo 3-Chloropropane	+++++	0.07751	0.07174	0.09114	0.11248	0.11816			
	0.13032	0.13500					0.10519	23.999	<-

ARI Labs, Inc.

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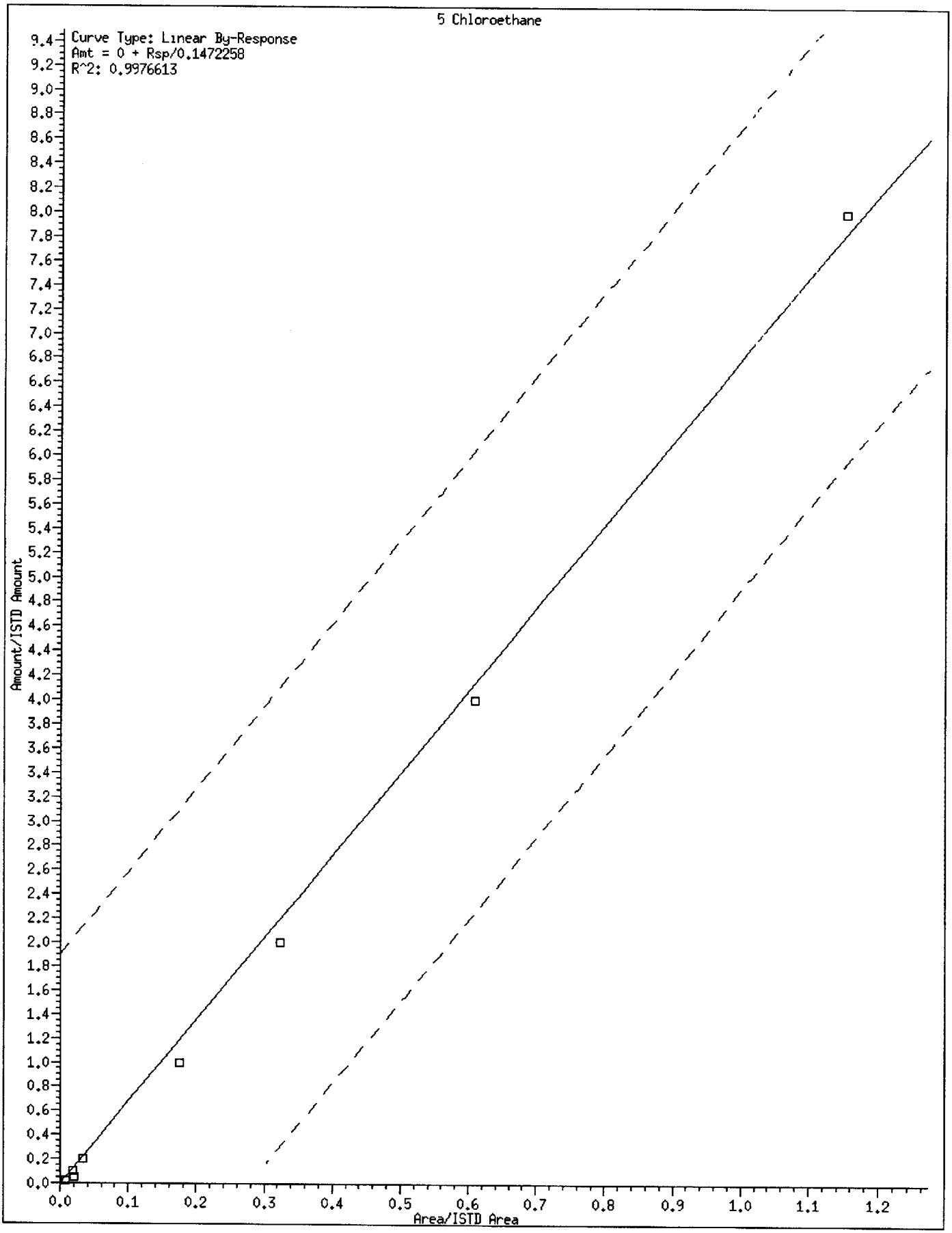
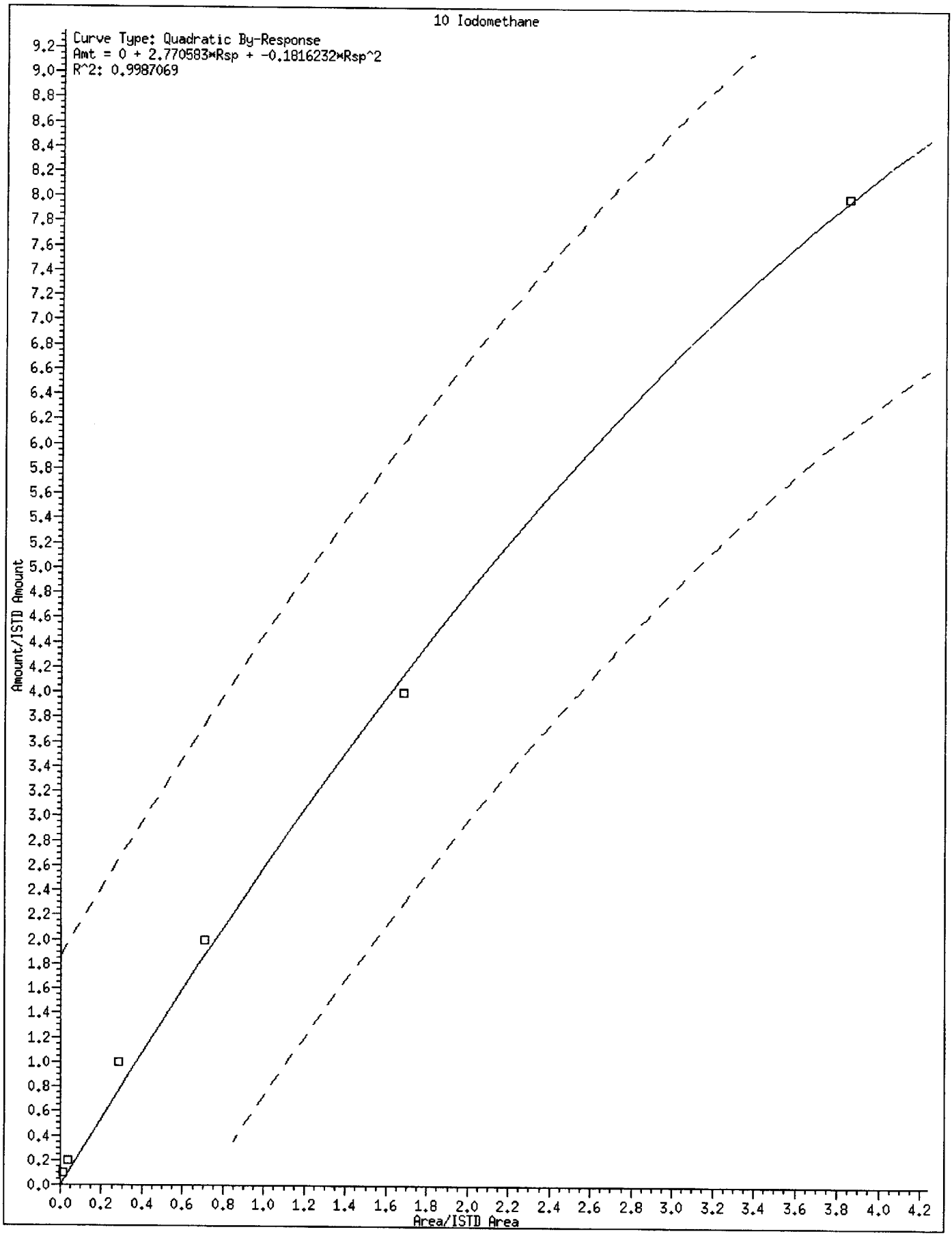
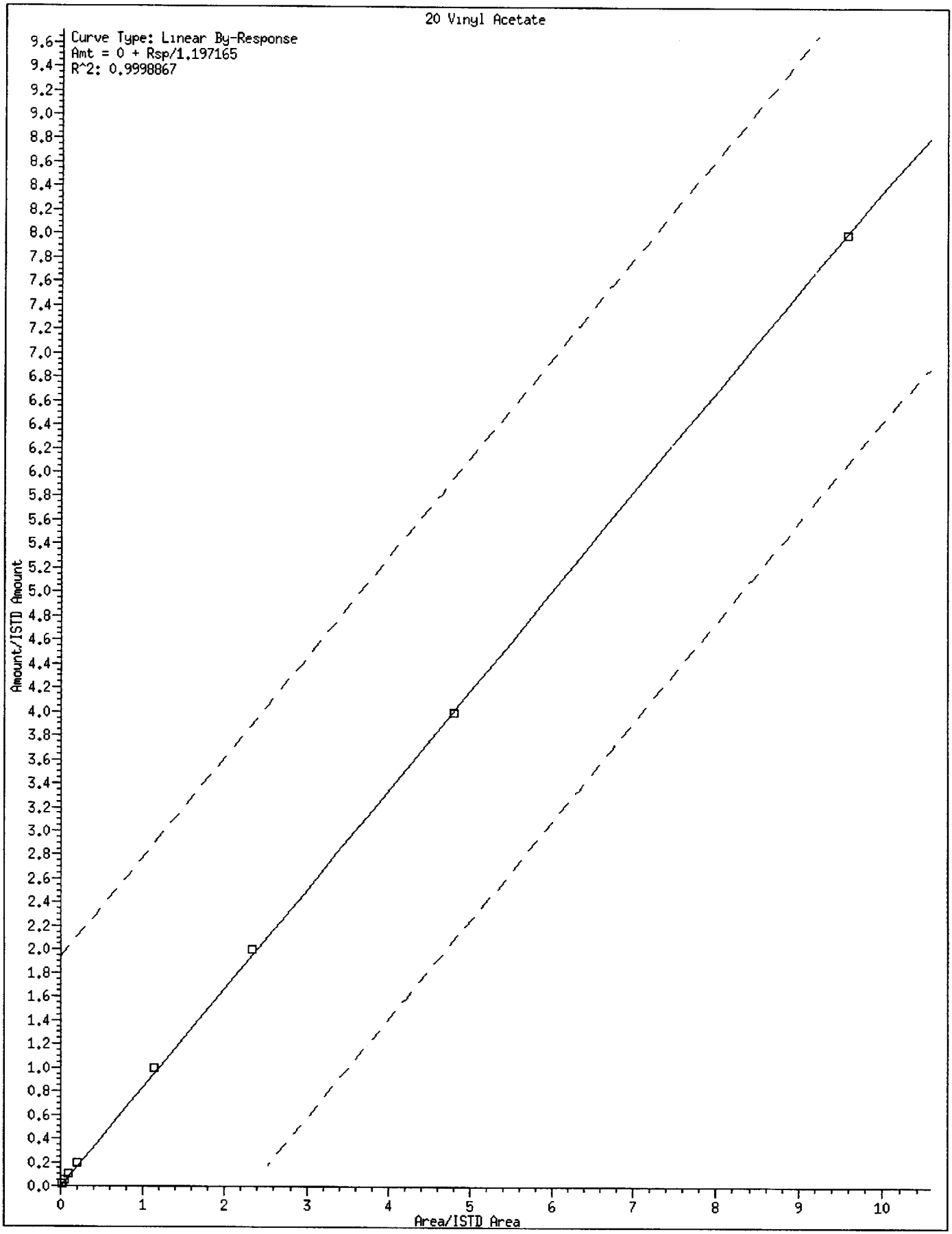
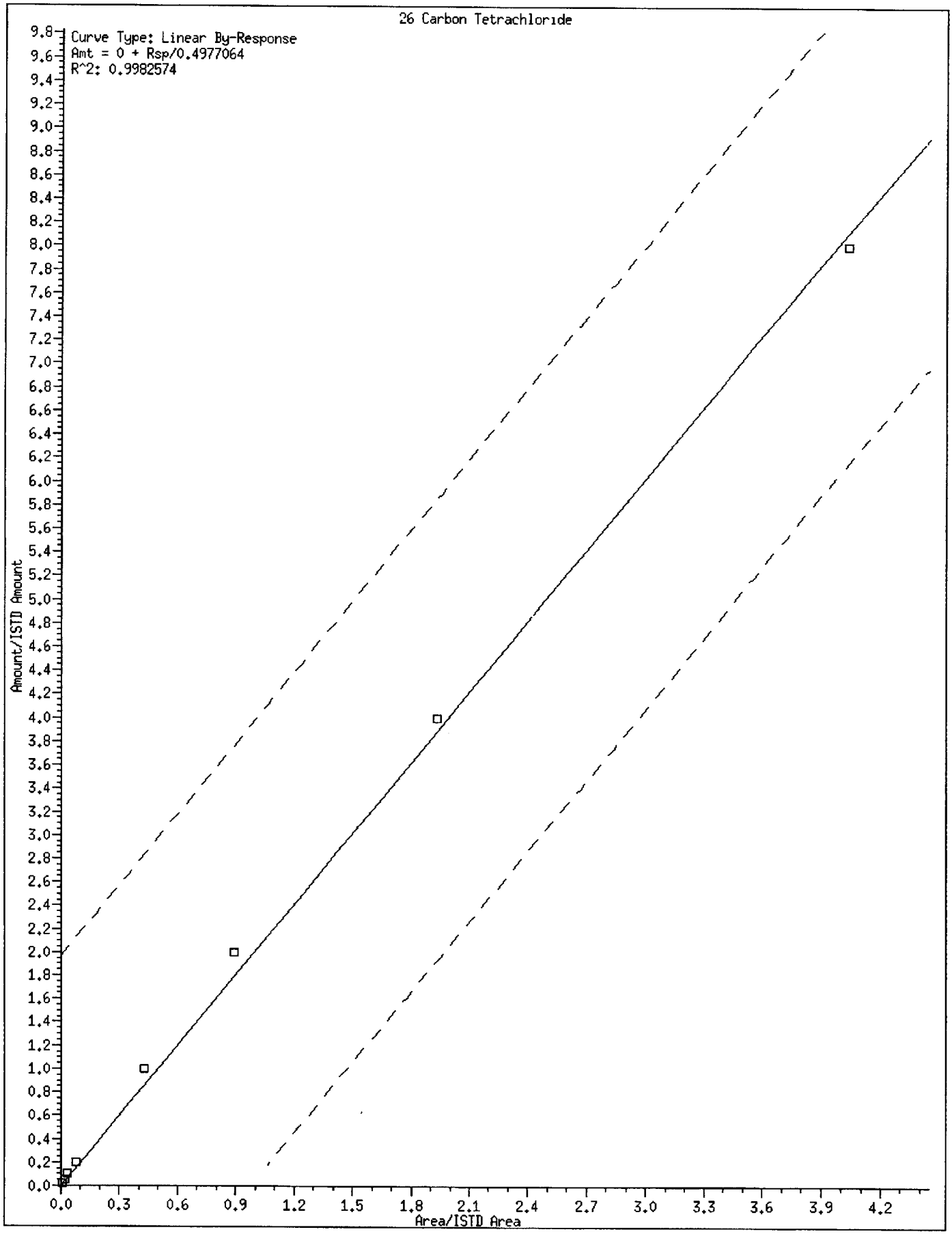
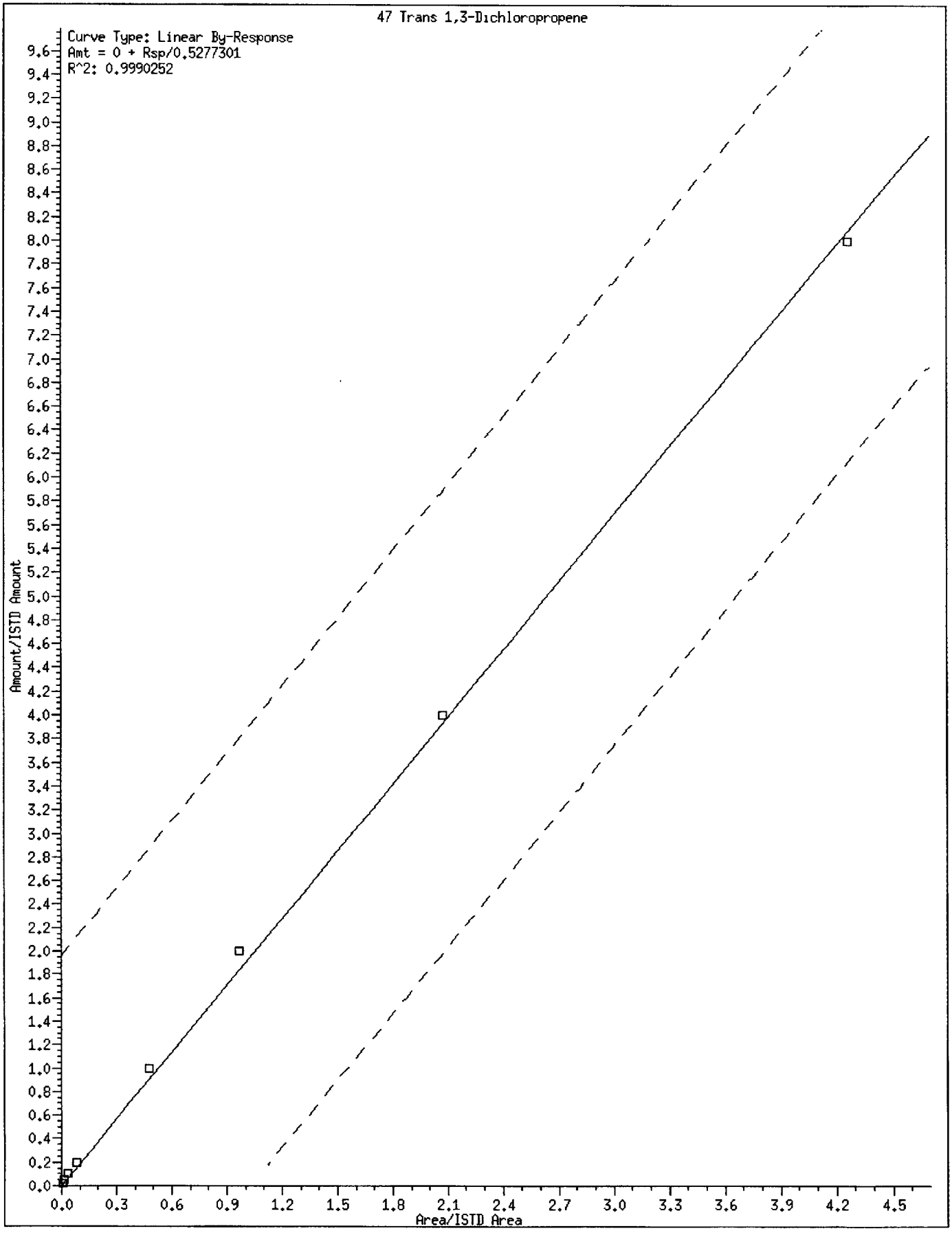
	40.000 Level 7	80.000 Level 8						
83 Hexachloro 1,3-Butadiene	+++++	0.42766	0.42521	0.44904	0.44229	0.43469		
	0.43883	0.44516					0.43755	2.028
84 1,2,4-Trichlorobenzene	+++++	1.06734	1.14715	1.11649	1.14447	1.11313		
	1.13889	1.17671					1.12917	3.058
85 Naphthalene	+++++	2.08468	2.43621	2.48414	2.67930	2.59491		
	2.55727	2.42009					2.46523	7.753
86 1,2,3-Trichlorobenzene	+++++	1.02915	1.08243	1.07499	1.09010	1.04105		
	1.03303	1.07205					1.06040	2.378
$ 27 Dibromofluoromethane	0.44630	0.45397	0.46349	0.46357	0.48295	0.49043		
	0.49474	0.48323					0.47233	3.780
$ 33 d4-1,2-Dichloroethane	0.55894	0.57091	0.55525	0.56563	0.57146	0.58489		
	0.56289	0.54152					0.56394	2.274
$ 43 d8-Toluene	1.20044	1.19090	1.17743	1.21582	1.21300	1.20961		
	1.21173	1.22205					1.20512	1.222
$ 62 4-Bromofluorobenzene	0.40234	0.40080	0.41143	0.41097	0.40819	0.41791		
	0.41767	0.41121					0.41007	1.521
$ 79 d4-1,2-Dichlorobenzene	0.95743	0.93993	0.95074	0.94483	0.97657	0.94538		
	0.96596	0.94275					0.95295	1.344

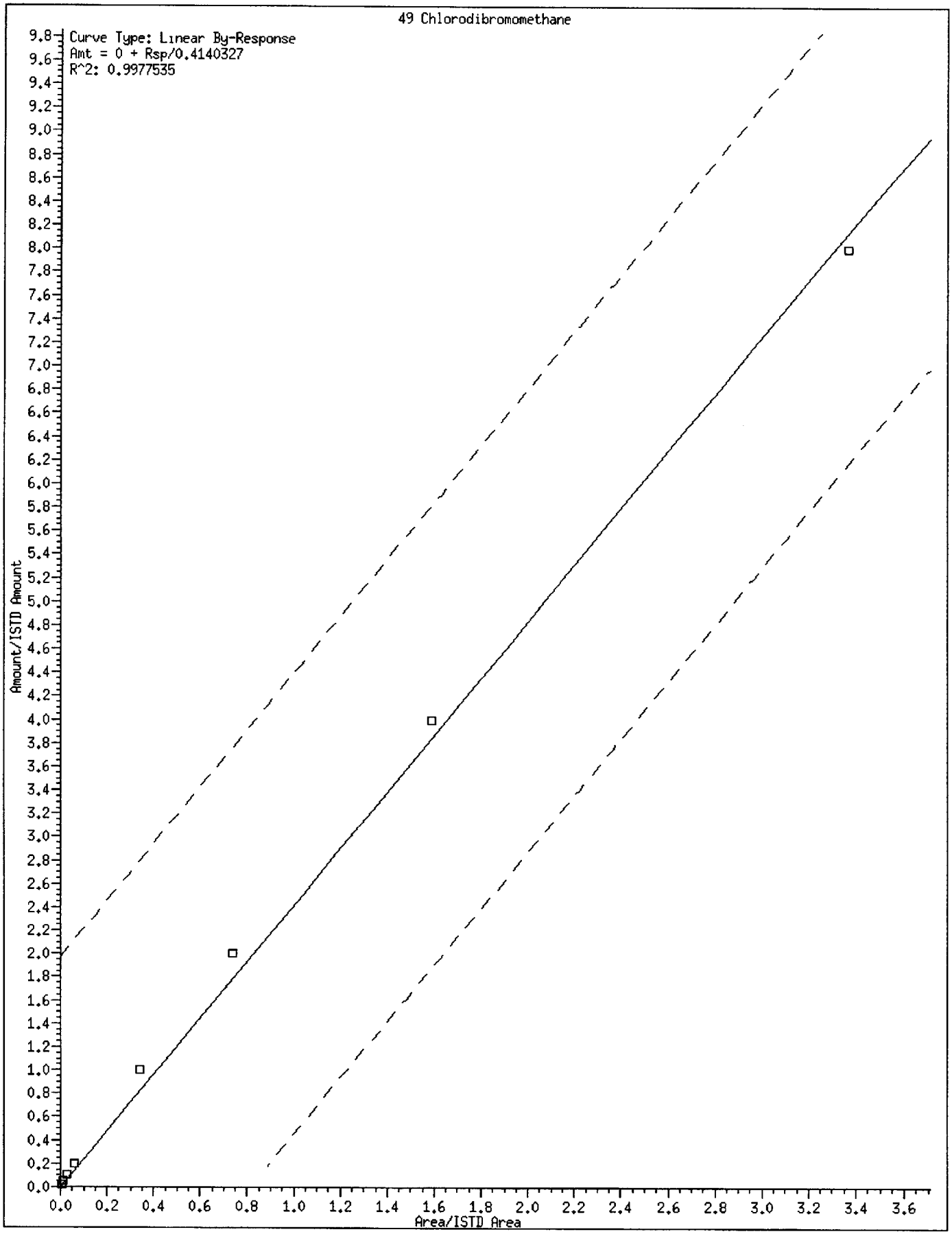

5 Chloroethane
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.1472258
R^2: 0.9976613
Amount/ISTD Amount
Area/ISTD Area
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2

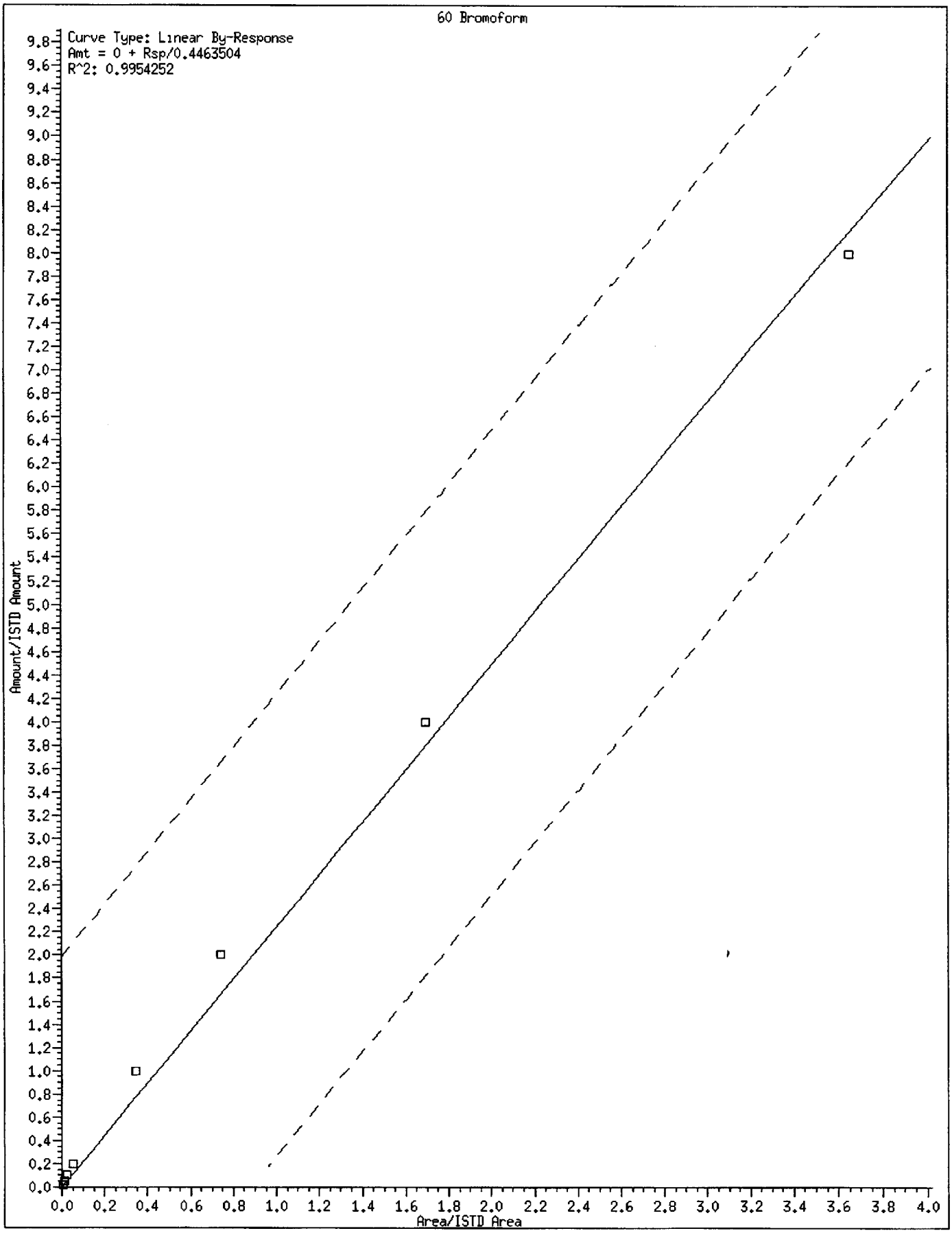

10 Iodomethane
Curve Type: Quadratic By-Response
Amt = 0 + 2.770583*Rsp + -0.1816232*Rsp^2
R^2: 0.9987069
Amount/ISTD Amount
Area/ISTD Area

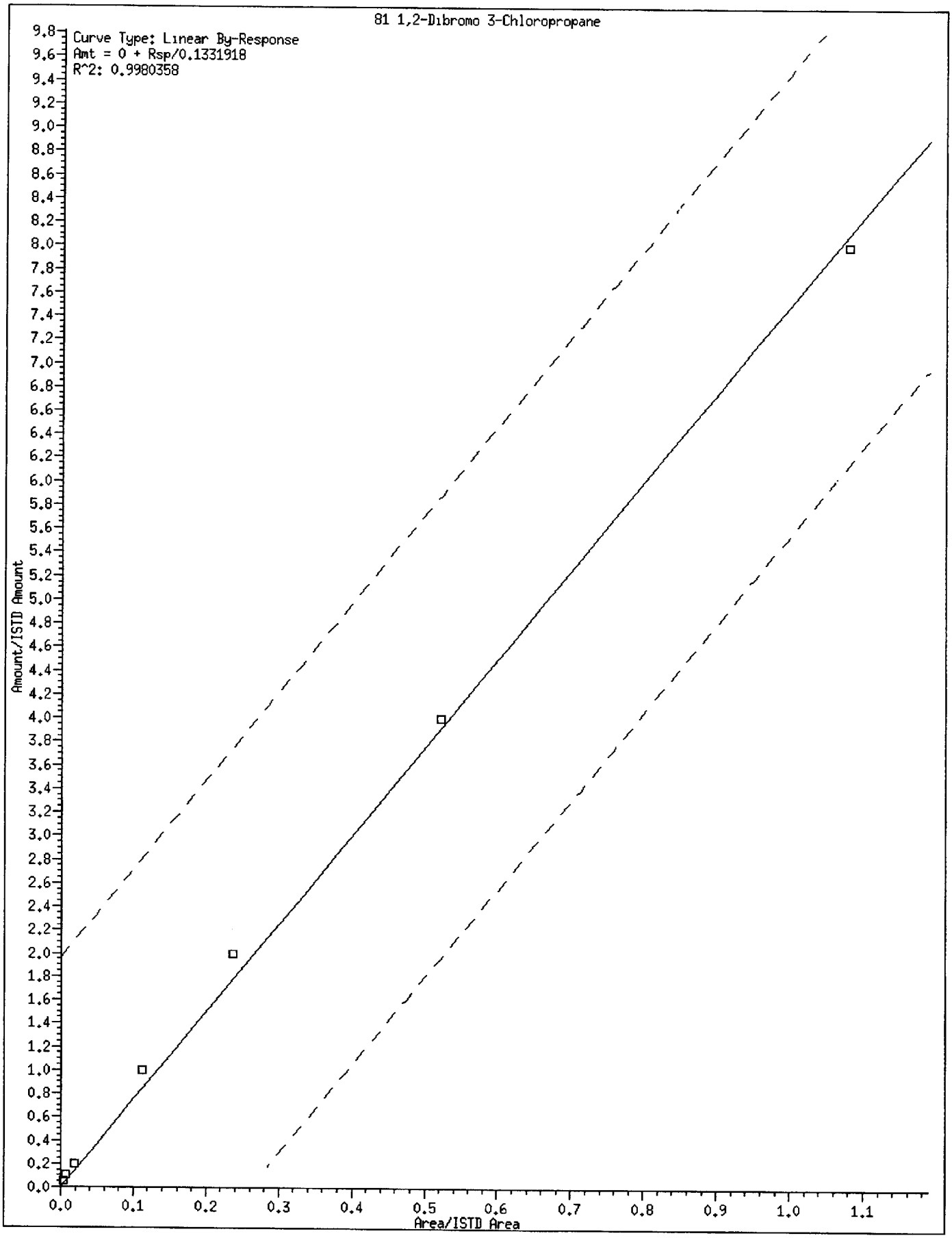

20 Vinyl Acetate
Curve Type: Linear By-Response
Amt = 0 + Rsp/1.197165
R^2: 0.9998867
Amount/ISTD Amount
Area/ISTD Area


26 Carbon Tetrachloride
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.4977064
R^2: 0.9982574
Amount/ISTD Amount
Area/ISTD Area
0.0
0.3
0.6
0.9
1.2
1.5
1.8
2.1
2.4
2.7
3.0
3.3
3.6
3.9
4.2


47 Trans 1,3-Dichloropropene
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.5277301
R^2: 0.9990252
Amount/ISTD Amount
Area/ISTD Area
0.0 0.3 0.6 0.9 1.2 1.5 1.8 2.1 2.4 2.7 3.0 3.3 3.6 3.9 4.2 4.5
0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6 5.8 6.0 6.2 6.4 6.6 6.8 7.0 7.2 7.4 7.6 7.8 8.0 8.2 8.4 8.6 8.8 9.0 9.2 9.4 9.6


49 Chlorodibromomethane
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.4140327
R^2: 0.9977535
Amount/ISTD Amount
Area/ISTD Area


60 Bromoform
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.4463504
R^2: 0.9954252
Amount/ISTD Amount
Area/ISTD Area


81 1,2-Dibromo 3-Chloropropane
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.1331918
R^2: 0.9980358
Amount/ISTD Amount
Area/ISTD Area
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1

ARI Labs, Inc.

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Start Cal Date : 14-APR-2016 10:08
End Cal Date : 14-APR-2016 12:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Last Edit : 14-Apr-2016 13:14 lanih

Calibration File Names:
Level 1: \\target\share\chem1\nt2.i\20160414.b\04141609.D
Level 2: \\target\share\chem1\nt2.i\20160414.b\04141610.D
Level 3: \\target\share\chem1\nt2.i\20160414.b\04141616.D
Level 4: \\target\share\chem1\nt2.i\20160414.b\04141615.D
Level 5: \\target\share\chem1\nt2.i\20160414.b\04141614.D
Level 6: \\target\share\chem1\nt2.i\20160414.b\04141613.D
Level 7: \\target\share\chem1\nt2.i\20160414.b\04141612.D
Level 8: \\target\share\chem1\nt2.i\20160414.b\04141611.D

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
1 Dichlorodifluoromethane	0.36923	0.54291	0.55410	0.51303	0.58534	0.57513					
	0.57592	0.60189					AVRG		0.53969		13.74291
2 Chloromethane	+++++	0.68744	0.68248	0.67292	0.67668	0.67521					
	0.66710	0.67539					AVRG		0.67675		0.97121
3 Vinyl Chloride	0.49230	0.61190	0.63621	0.63940	0.67637	0.67251					
	0.68051	0.69041					AVRG		0.63745		10.11965

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Method file : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
4 Bromomethane	0.35338	0.39610	0.46643	0.44408	0.45091	0.43207					
	0.43639	0.43536					AVRG		0.42684		8.38974
5 Chloroethane	2466	5998	5634	9925	49016	95902					
	182129	328919					LINR	0.000e+000	0.14723		0.99766
6 Trichlorofluoromethane	0.59766	0.74175	0.75360	0.73573	0.74750	0.72697					
	+++++	+++++					AVRG		0.71720		8.26636
7 1,1-Dichloroethene	0.67396	0.80682	0.78825	0.79112	0.77881	0.76915					
	0.75527	0.73800					AVRG		0.76267		5.48457
8 Carbon Disulfide	1.51311	1.64058	1.83679	1.83038	1.81435	1.76846					
	1.73454	1.62619					AVRG		1.72055		6.77775
9 112Trichloro122Trifluoroethan	0.43682	0.52878	0.52759	0.53939	0.52654	0.51964					
	0.52400	0.53582					AVRG		0.51732		6.40320
10 Iodomethane	+++++	+++++	4359	10576	79717	209259					
	503696	1097438					QUAD	0.000e+000	2.77058	-0.18162	0.99871

ARI Labs, Inc.

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
11 Bromoethane	0.33628	0.36674	0.40332	0.39550	0.38402	0.38057					
	0.37246	0.38653					AVRG		0.37818		5.43818
12 Acrolein	+++++	+++++	0.08093	0.08397	0.08211	0.08217					
	0.08368	0.08526					AVRG		0.08302		1.88782
13 Methylene Chloride	+++++	+++++	0.56132	0.54720	0.56420	0.55697					
	0.55619	0.58279					AVRG		0.56145		2.12765
14 Acetone	+++++	+++++	0.12819	0.12641	0.11759	0.11508					
	0.11598	0.11761					AVRG		0.12014		4.70825
15 Trans-1,2-Dichloroethene	0.45532	0.56304	0.60844	0.59045	0.57589	0.56837					
	0.56487	0.57103					AVRG		0.56217		8.14361
16 n-hexane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
17 Methyl tert butyl ether	1.13068	1.47248	1.48275	1.49698	1.50124	1.49168					
	1.48024	1.45715					AVRG		1.43915		8.71596

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Method file : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
18 1,1-Dichloroethane	0.80527	1.02806	1.09354	1.10778	1.06687	1.07143					
	1.06583	1.08918					AVRG		1.04099		9.43221
19 Acrylonitrile	+++++	0.13647	0.16639	0.17431	0.17997	0.18533					
	0.19136	0.20064					AVRG		0.17635		11.81039
21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
20 Vinyl Acetate	3500	11609	28218	59348	318780	693432					
	1434616	2733870					LINR	0.000e+000	1.19717		0.99989
22 Cis-1,2-Dichloroethene	0.46837	0.61879	0.60933	0.65081	0.63961	0.63737					
	0.64594	0.68184					AVRG		0.61901		10.43955
23 2,2-Dichloropropane	0.63744	0.70536	0.72292	0.78302	0.83074	0.84943					
	0.87434	0.90471					AVRG		0.78849		11.78361
24 Bromochloromethane	0.20497	0.25626	0.27275	0.29945	0.29270	0.29483					
	0.29808	0.31323					AVRG		0.27903		12.43585

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
25 Chloroform	0.79719	0.96066	1.01399	1.03307	1.00977	1.02304					
	1.01159	1.02780					AVRG		0.98464		8.01651
26 Carbon Tetrachloride	2464	7623	15869	33763	183821	415819					
	893365	1783936					LINR	0.000e+000	0.49771		0.99826
28 1,1,1-Trichloroethane	0.68220	0.80151	0.85537	0.87441	0.92119	0.93017					
	0.94143	0.96121					AVRG		0.87094		10.61679
30 1,1-Dichloropropene	0.37210	0.46657	0.49784	0.52850	0.51567	0.50361					
	0.52795	0.54156					AVRG		0.49423		11.02763
29 2-Butanone	+++++	+++++	0.21596	0.22860	0.22273	0.22695					
	0.22873	0.23354					AVRG		0.22609		2.67897
31 Benzene	1.26215	1.55393	1.57856	1.64571	1.60411	1.54472					
	1.51805	1.45189					AVRG		1.51989		7.83227
35 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Last Edit : 14-Apr-2016 13:14 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
34 1,2-Dichloroethane	0.37927	0.47190	0.49465	0.50527	0.49316	0.47740					
	0.48298	0.48601					AVRG		0.47383		8.36052
36 Trichloroethene	0.33816	0.38358	0.39468	0.42041	0.40634	0.40018					
	0.41310	0.43762					AVRG		0.39926		7.43047
38 Dibromomethane	0.14383	0.19573	0.19006	0.20732	0.20415	0.19483					
	0.20489	0.21624					AVRG		0.19463		11.36805
39 1,2-Dichloropropane	0.28716	0.35523	0.36499	0.37790	0.38470	0.37011					
	0.37621	0.39894					AVRG		0.36440		9.28307
40 Bromodichloromethane	0.29170	0.36651	0.39338	0.42125	0.45653	0.46582					
	0.48392	0.50286					AVRG		0.42275		16.57191
173 2-Pentanone	+++++	+++++	0.04007	0.04352	0.04734	0.04722					
	0.05045	0.05561					AVRG		0.04737		11.38943
42 Cis 1,3-dichloropropene	0.32220	0.42358	0.44769	0.51375	0.55705	0.56255					
	0.59270	0.62136					AVRG		0.50511		19.89046

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Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Last Edit : 14-Apr-2016 13:14 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
41 2-Chloroethyl Vinyl Ether	+++++	0.14772	0.17668	0.19641	0.21616	0.22015					
	0.23223	0.24792					AVRG		0.20532		16.74774
44 Toluene	0.85167	0.98291	1.00791	1.01983	1.00112	0.96002					
	0.98868	0.99598					AVRG		0.97601		5.46162
45 4-Methyl-2-Pentanone	+++++	+++++	0.11401	0.12588	0.12776	0.12770					
	0.13220	0.12942					AVRG		0.12616		5.01032
46 Tetrachloroethene	0.36866	0.46287	0.46607	0.46820	0.45067	0.46004					
	0.47791	0.48624					AVRG		0.45508		8.03480
47 Trans 1,3-Dichloropropene	2247	7166	16672	36081	204812	451153					
	959112	1883445					LINR	0.000e+000	0.52773		0.99903
48 1,1,2-Trichloroethane	0.19655	0.30049	0.29528	0.31793	0.31579	0.31144					
	0.32111	0.34194					AVRG		0.30007		14.70529
49 Chlorodibromomethane	1684	4653	10595	24125	136018	309211					
	669656	1393226					LINR	0.000e+000	0.41403		0.99775

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Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Last Edit : 14-Apr-2016 13:14 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
50 1,3-Dichloropropane	0.39096	0.56956	0.60469	0.62326	0.60667	0.60431					
	0.61979	0.62508					AVRG		0.58054		13.53845
51 1,2-Dibromoethane	0.18433	0.25073	0.26764	0.29303	0.30704	0.30135					
	0.31016	0.33166					AVRG		0.28074		16.53903
52 2-Hexanone	+++++	+++++	0.21861	0.22701	0.24226	0.24523					
	0.24318	0.22791					AVRG		0.23403		4.68535
54 Chlorobenzene	1.00150	1.20484	1.24562	1.23104	1.17757	1.18558					
	1.18629	1.10816					AVRG		1.16757		6.74345
55 Ethyl Benzene	0.54452	0.65614	0.64636	0.68672	0.65860	0.67176					
	0.68029	0.67837					AVRG		0.65285		7.02666
56 1,1,1,2-Tetrachloroethane	0.23124	0.29026	0.31552	0.32333	0.36397	0.38578					
	0.40956	0.42161					AVRG		0.34266		18.87889
57 m,p-xylene	0.61497	0.76453	0.82623	0.83258	0.82052	0.81953					
	0.78279	0.69555					AVRG		0.76959		10.04773

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	40.0000 Level 7	80.0000 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
58 o-Xylene	0.56851	0.67934	0.76027	0.78117	0.79028	0.78669	0.79748	0.80135	AVRG		0.74563		10.95606
59 Styrene	0.86789	1.06873	1.21127	1.28487	1.33923	1.35127	1.25101	1.24770	AVRG		1.20275		13.40432
60 Bromoform	746	2557	5161	11432	73472	174435	390585	840558	LINR	0.000e+000	0.44635		0.99543
61 Isopropyl Benzene	2.86527	3.62846	3.78215	3.74691	3.81354	3.59057	3.45860	2.93373	AVRG		3.47740		10.78602
63 Bromobenzene	0.71164	0.94124	0.93226	0.96750	0.94122	0.91380	0.94450	0.96296	AVRG		0.91439		9.14559
64 N-Propyl Benzene	3.32099	4.13041	4.24493	4.27934	4.28327	4.00054	3.81716	3.10394	AVRG		3.89757		11.67225
82 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
65 1,1,2,2-Tetrachloroethane	0.46539	0.67920	0.74526	0.73068	0.75846	0.74656					
	0.76917	0.78115					AVRG		0.70948		14.56009
66 2-Chloro Toluene	2.38495	2.88535	3.06556	2.96485	2.97519	2.85156					
	2.84144	2.63954					AVRG		2.82605		7.71343
67 1,3,5-Trimethyl Benzene	2.26435	2.92458	3.05951	3.12777	3.20222	3.02604					
	2.95963	2.57026					AVRG		2.89180		10.94274
68 1,2,3-Trichloropropane	0.13951	0.23907	0.24282	0.24622	0.24245	0.24011					
	0.25076	0.25909					AVRG		0.23250		16.40345
69 Trans-1,4-Dichloro 2-Butene	+++++	+++++	0.14241	0.16833	0.18542	0.18754					
	0.19671	0.21227					AVRG		0.18212		13.29084
70 4-Chloro Toluene	2.26372	2.83525	2.80127	2.82033	2.74592	2.60434					
	2.58295	2.32916					AVRG		2.62287		8.50396
71 T-Butyl Benzene	1.94456	2.53323	2.70391	2.72460	2.78654	2.62031					
	2.58541	2.37721					AVRG		2.53447		10.66127

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-APR-2016 10:08
End Cal Date : 14-APR-2016 12:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Last Edit : 14-Apr-2016 13:14 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
72 1,2,4-Trimethylbenzene	2.29776	2.92997	3.07183	3.13509	3.22240	3.06603					
	2.97235	2.62920					AVRG		2.91558		10.50386
73 S-Butyl Benzene	2.88817	3.67818	3.88334	3.85852	3.96679	3.71795					
	3.51947	3.01484					AVRG		3.56591		11.35661
74 4-Isopropyl Toluene	2.25910	2.97601	3.14468	3.27334	3.36141	3.17913					
	3.08364	2.69690					AVRG		2.99678		12.00921
75 1,3-Dichlorobenzene	1.47476	1.84268	1.86698	1.85287	1.84846	1.75375					
	1.77751	1.73464					AVRG		1.76896		7.29099
77 1,4-Dichlorobenzene	1.70609	1.96623	1.91896	1.88774	1.85357	1.78329					
	1.75708	1.72670					AVRG		1.82496		5.22645
78 N-Butyl Benzene	2.10656	2.56111	2.76143	2.71292	2.87719	2.77973					
	2.72302	2.40921					AVRG		2.61640		9.60769
80 1,2-Dichlorobenzene	1.50438	1.71053	1.78458	1.73707	1.71038	1.65080					
	1.67968	1.63778					AVRG		1.67690		5.01199

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-APR-2016 10:08
End Cal Date : 14-APR-2016 12:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Last Edit : 14-Apr-2016 13:14 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
81 1,2-Dibromo 3-Chloropropane	+++++	820	1554	4012	24137	55399					
	120326	248395					LINR	0.000e+000	0.13319		0.99804
83 Hexachloro 1,3-Butadiene	+++++	0.42766	0.42521	0.44904	0.44229	0.43469					
	0.43883	0.44516					AVRG		0.43755		2.02769
84 1,2,4-Trichlorobenzene	+++++	1.06734	1.14715	1.11649	1.14447	1.11313					
	1.13889	1.17671					AVRG		1.12917		3.05770
85 Naphthalene	+++++	2.08468	2.43621	2.48414	2.67930	2.59491					
	2.55727	2.42009					AVRG		2.46523		7.75273
86 1,2,3-Trichlorobenzene	+++++	1.02915	1.08243	1.07499	1.09010	1.04105					
	1.03303	1.07205					AVRG		1.06040		2.37822
$ 27 Dibromofluoromethane	0.44630	0.45397	0.46349	0.46357	0.48295	0.49043					
	0.49474	0.48323					AVRG		0.47233		3.77975
$ 33 d4-1,2-Dichloroethane	0.55894	0.57091	0.55525	0.56563	0.57146	0.58489					
	0.56289	0.54152					AVRG		0.56394		2.27434

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-APR-2016 10:08
End Cal Date : 14-APR-2016 12:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Last Edit : 14-Apr-2016 13:14 lanih

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	40.0000 Level 7	80.0000 Level 8									
$ 43 d8-Toluene	1.20044	1.19090	1.17743	1.21582	1.21300	1.20961					
	1.21173	1.22205					AVRG		1.20512		1.22185
$ 62 4-Bromofluorobenzene	0.40234	0.40080	0.41143	0.41097	0.40819	0.41791					
	0.41767	0.41121					AVRG		0.41007		1.52143
$ 79 d4-1,2-Dichlorobenzene	0.95743	0.93993	0.95074	0.94483	0.97657	0.94538					
	0.96596	0.94275					AVRG		0.95295		1.34443

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-APR-2016 10:08
End Cal Date : 14-APR-2016 12:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Last Edit : 14-Apr-2016 13:14 lanih

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Batch File: \\target\share\chem1\nt2.i\20160414.b
Inst ID: nt2.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08
FILENAME:	04141609	04141610	04141611	04141612	04141613	04141614	04141615	04141616
INJ.DATE:	14-APR-2016	14-APR-2016	14-APR-2016	14-APR-2016	14-APR-2016	14-APR-2016	14-APR-2016	14-APR-2016
INJ.TIME:	10:08	10:29	10:51	11:12	11:33	11:54	12:16	12:37

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Dichlorodifluoromethan	1.434	1.435	1.422	1.424	1.435	1.434	1.434	1.433	1.434	1.327-1.541	1.431	0.005
2 Chloromethane	1.600	1.601	1.588	1.590	1.589	1.599	1.588	1.599	1.599	1.493-1.706	1.594	0.006
3 Vinyl Chloride	1.671	1.672	1.659	1.661	1.672	1.670	1.671	1.670	1.670	1.564-1.777	1.668	0.005
4 Bromomethane	1.955	1.956	1.942	1.945	1.956	1.954	1.955	1.954	1.954	1.848-2.061	1.952	0.005
5 Chloroethane	2.073	2.062	2.049	2.052	2.062	2.061	2.061	2.061	2.061	1.954-2.167	2.060	0.007
6 Trichlorofluoromethane	2.203	2.193	2.155	2.170	2.181	2.191	2.180	2.191	2.191	2.085-2.298	2.183	0.015
7 1,1-Dichloroethene	2.700	2.701	2.664	2.679	2.689	2.700	2.688	2.700	2.700	2.593-2.806	2.690	0.013
8 Carbon Disulfide	2.712	2.701	2.664	2.691	2.701	2.700	2.700	2.700	2.700	2.593-2.806	2.696	0.014
9 112Trichloro122Trifluo	2.747	2.749	2.712	2.738	2.749	2.747	2.747	2.747	2.747	2.641-2.854	2.742	0.013
10 Iodomethane	2.842	2.843	2.806	2.833	2.831	2.842	2.830	2.842	2.842	2.735-2.948	2.834	0.012
11 Bromoethane	2.984	2.985	2.960	2.975	2.973	2.984	2.972	2.984	2.984	2.877-3.090	2.977	0.009
12 Acrolein	3.090	3.092	3.090	3.093	3.092	3.090	3.091	3.090	3.090	2.984-3.197	3.091	0.001
13 Methylene Chloride	3.339	3.340	3.327	3.341	3.340	3.339	3.339	3.350	3.339	3.232-3.445	3.340	0.006
14 Acetone	3.434	3.435	3.445	3.436	3.435	3.434	3.434	3.433	3.434	3.327-3.540	3.436	0.004
15 Trans-1,2-Dichloroethe	3.505	3.506	3.493	3.495	3.506	3.505	3.505	3.504	3.505	3.398-3.611	3.502	0.005
16 n-hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.954	3.847-4.061	+++++	+++++
17 Methyl tert butyl ethe	3.658	3.660	3.658	3.649	3.648	3.658	3.659	3.658	3.658	3.552-3.765	3.656	0.005

Reviewer 1 _____ Date: 4/14/16
Reviewer 2 _____ Date: 4/14/16

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Batch File: \\target\share\chem1\nt2.i\20160414.b
Inst ID: nt2.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 1,1-Dichloroethane	4.096	4.098	4.084	4.099	4.098	4.096	4.096	4.096	4.096	3.990-4.203	4.095	0.005
	19 Acrylonitrile	4.179	4.181	4.179	4.170	4.169	4.179	4.179	4.179	4.179	4.072-4.285	4.177	0.005
	21 Allyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.560	4.453-4.666	+++++	+++++
	20 Vinyl Acetate	4.368	4.370	4.356	4.359	4.358	4.357	4.357	4.368	4.357	4.250-4.463	4.362	0.006
	22 Cis-1,2-Dichloroethene	4.581	4.571	4.569	4.572	4.571	4.570	4.570	4.581	4.570	4.463-4.676	4.573	0.005
	23 2,2-Dichloropropane	4.652	4.654	4.652	4.655	4.654	4.652	4.653	4.652	4.652	4.546-4.759	4.653	0.001
	24 Bromochloromethane	4.735	4.737	4.735	4.738	4.737	4.735	4.735	4.735	4.735	4.629-4.842	4.736	0.001
	25 Chloroform	4.806	4.808	4.806	4.809	4.808	4.806	4.806	4.806	4.806	4.700-4.913	4.807	0.001
	26 Carbon Tetrachloride	4.889	4.891	4.889	4.891	4.890	4.889	4.889	4.889	4.889	4.775-5.003	4.890	0.001
$	27 Dibromofluoromethane	4.948	4.950	4.948	4.951	4.950	4.948	4.948	4.948	4.948	4.842-5.055	4.949	0.001
	28 1,1,1-Trichloroethane	4.948	4.950	4.948	4.951	4.950	4.948	4.948	4.948	4.948	4.842-5.055	4.949	0.001
	30 1,1-Dichloropropene	5.055	5.044	5.043	5.045	5.044	5.043	5.043	5.054	5.043	4.928-5.157	5.046	0.005
	29 2-Butanone	5.078	5.080	5.066	5.069	5.068	5.066	5.079	5.078	5.066	4.960-5.173	5.073	0.006
	31 Benzene	5.244	5.245	5.244	5.235	5.245	5.244	5.244	5.244	5.244	5.130-5.358	5.243	0.004
*	32 Pentafluorobenzene	5.327	5.328	5.327	5.329	5.328	5.327	5.327	5.326	5.327	5.220-5.434	5.327	0.001
$	33 d4-1,2-Dichloroethane	5.351	5.352	5.350	5.353	5.352	5.350	5.351	5.350	5.350	5.244-5.457	5.351	0.001
	35 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.693	5.579-5.807	+++++	+++++
	34 1,2-Dichloroethane	5.410	5.411	5.398	5.400	5.399	5.410	5.410	5.409	5.410	5.295-5.524	5.406	0.006
	36 Trichloroethene	5.682	5.683	5.682	5.684	5.683	5.682	5.682	5.681	5.682	5.567-5.796	5.682	0.001
*	37 1,4-Difluorobenzene	5.717	5.719	5.717	5.720	5.719	5.717	5.718	5.717	5.717	5.603-5.831	5.718	0.001
	38 Dibromomethane	5.990	5.991	5.989	5.992	5.991	5.989	5.990	5.989	5.989	5.875-6.103	5.990	0.001
	39 1,2-Dichloropropane	6.061	6.062	6.060	6.063	6.062	6.060	6.061	6.060	6.060	5.946-6.174	6.061	0.001

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Batch File: \\target\share\chem1\nt2.i\20160414.b
Inst ID: nt2.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	40 Bromodichloromethane	6.120	6.109	6.108	6.110	6.109	6.108	6.108	6.107	6.108	5.993-6.222	6.110	0.004
	173 2-Pentanone	6.356	6.358	6.344	6.347	6.346	6.344	6.345	6.344	6.344	6.230-6.458	6.348	0.006
	42 Cis 1,3-dichloropropen	6.557	6.559	6.557	6.560	6.559	6.557	6.558	6.557	6.557	6.443-6.671	6.558	0.001
$	43 d8-Toluene	6.688	6.689	6.687	6.690	6.689	6.688	6.688	6.687	6.688	6.573-6.802	6.688	0.001
	41 2-Chloroethyl Vinyl Et	6.534	6.523	6.522	6.524	6.523	6.522	6.522	6.522	6.522	6.407-6.636	6.524	0.004
	44 Toluene	6.723	6.725	6.723	6.726	6.724	6.723	6.723	6.723	6.723	6.608-6.837	6.724	0.001
	45 4-Methyl-2-Pentanone	7.007	6.997	6.995	6.998	6.997	6.995	6.995	6.995	6.995	6.881-7.109	6.997	0.004
	46 Tetrachloroethene	6.995	6.997	6.983	6.986	6.985	6.995	6.995	6.995	6.995	6.840-7.151	6.991	0.006
	47 Trans 1,3-Dichloroprop	7.019	7.020	7.019	7.021	7.020	7.019	7.019	7.019	7.019	6.904-7.133	7.020	0.001
	48 1,1,2-Trichloroethane	7.137	7.127	7.137	7.128	7.127	7.125	7.126	7.137	7.125	7.011-7.239	7.130	0.006
	49 Chlorodibromomethane	7.256	7.257	7.255	7.258	7.257	7.256	7.256	7.255	7.256	7.100-7.411	7.256	0.001
	50 1,3-Dichloropropane	7.327	7.328	7.315	7.317	7.316	7.315	7.327	7.326	7.315	7.159-7.470	7.321	0.006
	51 1,2-Dibromoethane	7.433	7.423	7.421	7.424	7.423	7.421	7.421	7.421	7.421	7.306-7.535	7.423	0.004
	52 2-Hexanone	7.587	7.588	7.587	7.577	7.576	7.575	7.587	7.586	7.575	7.419-7.730	7.583	0.006
*	53 d5-Chlorobenzene	7.776	7.778	7.776	7.779	7.778	7.776	7.776	7.776	7.776	7.620-7.932	7.777	0.001
	54 Chlorobenzene	7.788	7.790	7.788	7.790	7.789	7.788	7.788	7.788	7.788	7.632-7.943	7.789	0.001
	55 Ethyl Benzene	7.812	7.801	7.812	7.802	7.801	7.800	7.800	7.811	7.800	7.644-7.955	7.805	0.006
	56 1,1,1,2-Tetrachloroeth	7.835	7.837	7.835	7.838	7.837	7.835	7.836	7.835	7.835	7.680-7.991	7.836	0.001
	57 m,p-xylene	7.906	7.908	7.906	7.909	7.908	7.906	7.907	7.906	7.906	7.751-8.062	7.907	0.001
	58 o-Xylene	8.214	8.216	8.214	8.216	8.215	8.214	8.214	8.214	8.214	8.058-8.369	8.215	0.001
	59 Styrene	8.261	8.263	8.261	8.252	8.251	8.250	8.262	8.261	8.250	8.094-8.405	8.258	0.006
	60 Bromoform	8.285	8.287	8.285	8.276	8.275	8.285	8.285	8.285	8.285	8.095-8.475	8.283	0.005
	61 Isopropyl Benzene	8.439	8.440	8.439	8.441	8.440	8.439	8.439	8.438	8.439	8.249-8.628	8.439	0.001
$	62 4-Bromofluorobenzene	8.652	8.653	8.652	8.654	8.653	8.652	8.652	8.651	8.652	8.496-8.807	8.652	0.001

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Batch File: \\target\share\chem1\nt2.i\20160414.b
Inst ID: nt2.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
63	Bromobenzene	8.735	8.736	8.735	8.725	8.724	8.735	8.735	8.734	8.735	8.545-8.924	8.732	0.005
64	N-Propyl Benzene	8.747	8.748	8.746	8.737	8.748	8.746	8.747	8.746	8.746	8.557-8.936	8.746	0.004
82	Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.074	8.918-9.229	+++++	+++++
65	1,1,2,2-Tetrachloroeth	8.806	8.807	8.806	8.796	8.795	8.794	8.794	8.805	8.794	8.604-8.983	8.800	0.006
66	2-Chloro Toluene	8.865	8.866	8.865	8.855	8.854	8.865	8.865	8.864	8.865	8.675-9.054	8.862	0.005
67	1,3,5-Trimethyl Benzen	8.889	8.890	8.888	8.891	8.890	8.888	8.889	8.888	8.888	8.699-9.078	8.889	0.001
68	1,2,3-Trichloropropane	8.900	8.902	8.900	8.903	8.902	8.900	8.901	8.900	8.900	8.711-9.090	8.901	0.001
69	Trans-1,4-Dichloro 2-B	+++++	8.937	8.936	8.926	8.925	8.936	8.936	8.935	8.936	8.746-9.125	8.933	0.005
70	4-Chloro Toluene	8.995	8.985	8.983	8.986	8.985	8.983	8.983	8.983	8.983	8.793-9.173	8.985	0.004
71	T-Butyl Benzene	9.125	9.127	9.125	9.128	9.127	9.125	9.125	9.125	9.125	8.935-9.315	9.126	0.001
72	1,2,4-Trimethylbenzene	9.184	9.174	9.184	9.175	9.174	9.172	9.173	9.172	9.172	8.983-9.362	9.176	0.005
73	S-Butyl Benzene	9.255	9.257	9.255	9.258	9.257	9.255	9.256	9.255	9.255	9.066-9.445	9.256	0.001
74	4-Isopropyl Toluene	9.362	9.363	9.362	9.364	9.363	9.362	9.362	9.361	9.362	9.172-9.551	9.362	0.001
75	1,3-Dichlorobenzene	9.433	9.434	9.433	9.423	9.422	9.421	9.421	9.432	9.421	9.231-9.610	9.428	0.006
* 76	d4-1,4-Dichlorobenzene	9.480	9.482	9.480	9.483	9.481	9.480	9.480	9.480	9.480	9.290-9.670	9.481	0.001
77	1,4-Dichlorobenzene	9.492	9.493	9.492	9.494	9.493	9.492	9.492	9.492	9.492	9.302-9.681	9.493	0.001
78	N-Butyl Benzene	9.693	9.695	9.693	9.684	9.683	9.693	9.693	9.693	9.693	9.503-9.882	9.691	0.005
$ 79	d4-1,2-Dichlorobenzene	9.811	9.813	9.811	9.814	9.813	9.811	9.812	9.811	9.811	9.622-10.001	9.812	0.001
80	1,2-Dichlorobenzene	9.823	9.813	9.823	9.814	9.813	9.811	9.812	9.811	9.811	9.622-10.001	9.815	0.005
81	1,2-Dibromo 3-Chloropr	+++++	10.452	10.450	10.441	10.440	10.450	10.451	10.450	10.450	10.261-10.640	10.448	0.005
83	Hexachloro 1,3-Butadie	10.983	10.973	10.971	10.973	10.972	10.971	10.971	10.971	10.971	10.781-11.160	10.973	0.004
84	1,2,4-Trichlorobenzene	11.007	10.996	10.995	10.997	10.996	10.995	10.995	10.994	10.995	10.805-11.184	10.997	0.004
85	Naphthalene	11.279	11.268	11.267	11.257	11.268	11.267	11.267	11.266	11.267	11.077-11.456	11.268	0.006

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Batch File: \\target\share\chem1\nt2.i\20160414.b
Inst ID: nt2.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
86 1,2,3-Trichlorobenzene	11.433	11.422	11.421	11.423	11.422	11.421	11.421	11.420	11.421	11.231-11.610	11.423	0.004

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160414.b

ARI Job No.: SED0 Method: 8260041416.m Instrument: nt2.i Date: 14-APR-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1008	04141609.D	SED0031-CAL1	VSTD0.2	1	Bromomethane, Acetone, Iodomethane, Vinyl Acetate, 1,2-Dichloropropane, 2-Chloroethyl Vinyl Ether, Chlorobenzene,
1029	04141610.D	SED0031-CAL2	VSTD0.5	1	Chloroethane, 2-Hexanone, Dichlorodifluoromethane,
1051	04141611.D	SED0031-CAL8	VSTD80	1	Chloromethane, Vinyl Chloride, Bromomethane, Dichlorodifluoromethane,
1112	04141612.D	SED0031-CAL7	VSTD40	1	Dichlorodifluoromethane,
1133	04141613.D	SED0031-CAL6	VSTD20	1	Vinyl Chloride, 1,4-Dichlorobenzene,
1154	04141614.D	SED0031-CAL5	VSTD10	1	Vinyl Chloride, 1,4-Dichlorobenzene, Dichlorodifluoromethane,
1216	04141615.D	SED0031-CAL4	VSTD02	1	Dichlorodifluoromethane,
1237	04141616.D	SED0031-CAL3	VSTD01	1	Vinyl Chloride, Methylene Chloride, 1,2-Dichloroethane, Dichlorodifluoromethane, 2-Pentanone,
1258	04141617.D	SED0031-SCV1	SCV	1	NO MANUAL INTEGRATION

Data File: \\target\share\chem1\nt2.1\20160414.b\04141608.D

Date : 14-APR-2016 09:42

Client ID: 10

Instrument: nt2.1

Sample Info: SED0031-TUN1,10,10,0,

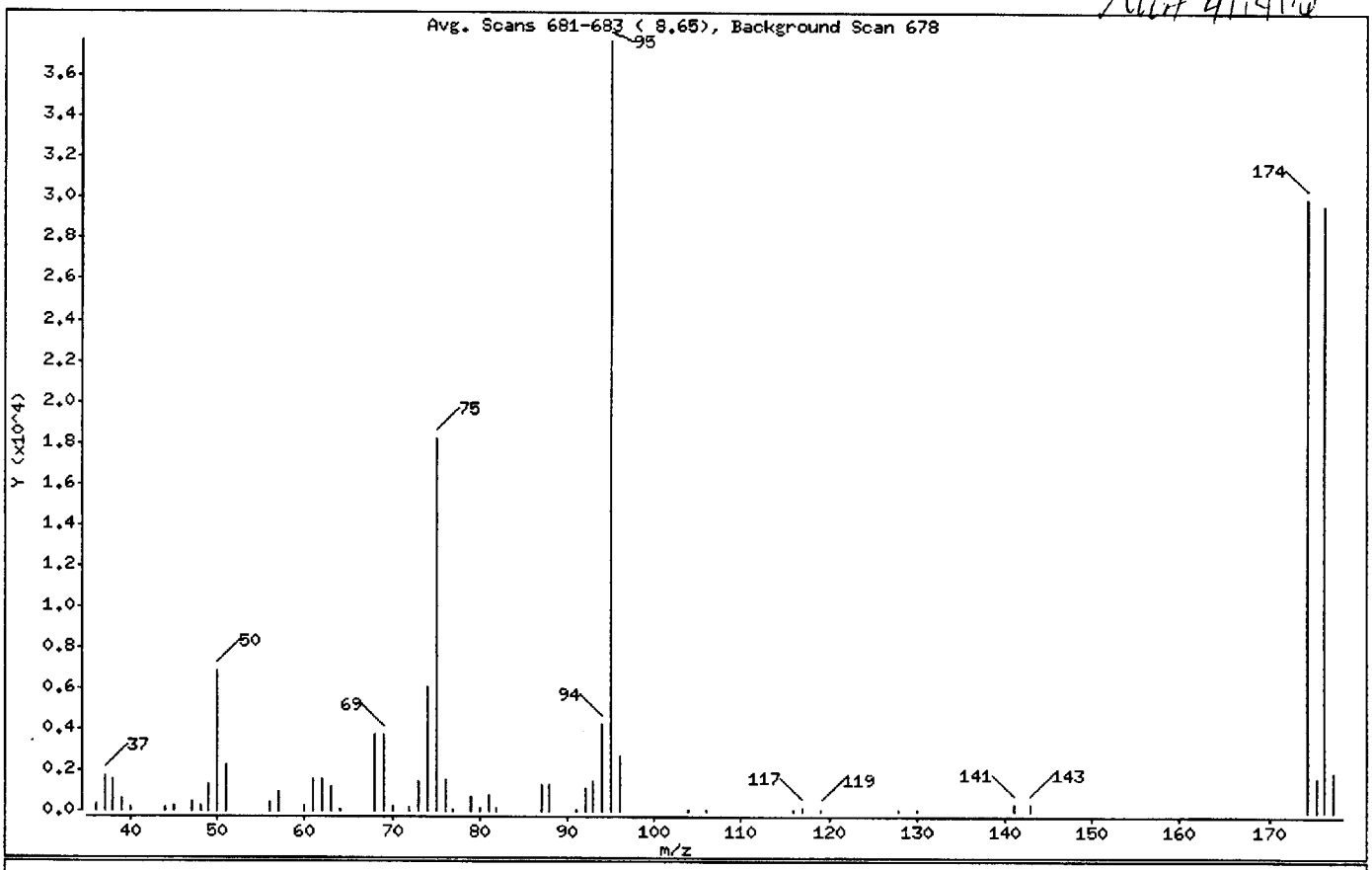
Operator: LH

Column phase: RTXVMS

Column diameter: 0.18

1 Bromofluorobenzene

Rin 4/14/16



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.07
75	30.00 - 60.00% of mass 95	48.18
96	5.00 - 9.00% of mass 95	7.12
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	79.64
175	5.00 - 9.00% of mass 174	4.47 (5.61)
176	95.00 - 101.00% of mass 174	78.71 (98.83)
177	5.00 - 9.00% of mass 176	5.15 (6.54)

Data File: \\target\share\chem1\nt2.i\20160414.b\04141608.D

Date : 14-APR-2016 09:42

Client ID: 10

Instrument: nt2.i

Sample Info: SED0031-TUN1,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18

Data File: 04141608.D
Spectrum: Avg. Scans 681-683 (8.65), Background Scan 678
Location of Maximum: 95.00
Number of points: 53

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	304	60.00	277	79.00	726	116.00	85
37.00	1713	61.00	1596	80.00	188	117.00	174
38.00	1582	62.00	1598	81.00	762	119.00	110
39.00	588	63.00	1186	82.00	150	128.00	73
40.00	213	64.00	68	87.00	1333	130.00	83
44.00	193	68.00	3742	88.00	1338	141.00	384
45.00	241	69.00	3776	91.00	89	143.00	357
47.00	429	70.00	224	92.00	1120	174.00	30072
48.00	273	72.00	160	93.00	1466	175.00	1687
49.00	1316	73.00	1514	94.00	4223	176.00	29720
50.00	6825	74.00	6064	95.00	37760	177.00	1944
51.00	2231	75.00	18192	96.00	2690		
56.00	444	76.00	1572	104.00	89		
57.00	928	77.00	92	106.00	90		

Data File: \\target\share\chem1\nt2.i\20160414.b\04141608.D

Date : 14-APR-2016 09:42

Client ID: 10

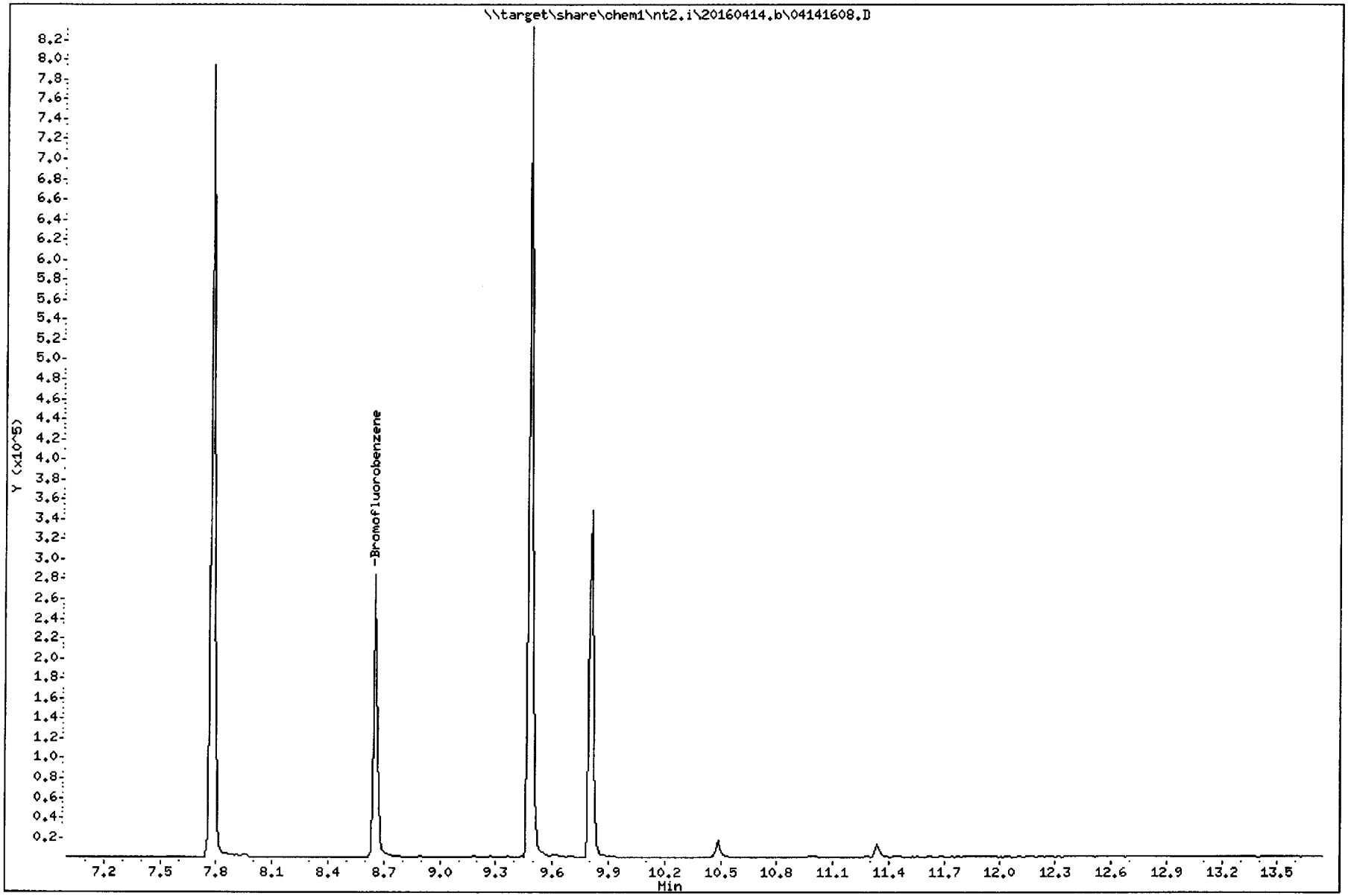
Instrument: nt2.i

Sample Info: SED0031-TUN1,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141609.D
Lab Smp Id: SED0031-CAL1 Client Smp ID: VSTD0.2
Inj Date : 14-APR-2016 10:08
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL1,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 7 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.433	1.434	(0.269)	2376	0.20000	0.1368
173	2-Pentanone	86	6.356	6.344	(1.112)	692	1.00000	0.2951
2	Chloromethane	50	1.599	1.599	(0.300)	4394	0.20000	0.2018(T)
3	Vinyl Chloride	62	1.670	1.670	(0.314)	3168	0.20000	0.1545
4	Bromomethane	94	1.954	1.954	(0.367)	2274	0.20000	0.1656(M)
5	Chloroethane	64	2.072	2.061	(0.389)	2466	0.20000	0.5206
6	Trichlorofluoromethane	101	2.203	2.191	(0.414)	3846	0.20000	0.1667
7	1,1-Dichloroethene	61	2.699	2.700	(0.507)	4337	0.20000	0.1767
8	Carbon Disulfide	76	2.711	2.700	(0.509)	9737	0.20000	0.1759(T)
9	112Trichloro122Trifluoroethane	101	2.747	2.747	(0.516)	2811	0.20000	0.1689
10	Iodomethane	142	2.841	2.842	(0.534)	668	0.20000	0.05751(M)
11	Bromoethane	108	2.983	2.984	(0.560)	2164	0.20000	0.1778
12	Acrolein	56	3.090	3.090	(0.580)	2107	1.00000	0.7888
13	Methylene Chloride	84	3.338	3.339	(0.627)	2979	0.20000	0.1649
14	Acetone	43	3.433	3.434	(0.645)	3559	1.00000	0.9207(M)
15	Trans-1,2-Dichloroethene	96	3.504	3.505	(0.658)	2930	0.20000	0.1620
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	7276	0.20000	0.1571
18	1,1-Dichloroethane	63	4.096	4.096	(0.769)	5182	0.20000	0.1547
19	Acrylonitrile	53	4.179	4.179	(0.785)	579	0.20000	0.1020(T)
20	Vinyl Acetate	43	4.368	4.357	(0.820)	3500	0.20000	0.09086(M)
22	Cis-1,2-Dichloroethene	96	4.581	4.570	(0.860)	3014	0.20000	0.1513
23	2,2-Dichloropropane	77	4.652	4.652	(0.873)	4102	0.20000	0.1617

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	24 Bromochloromethane	128	4.735	4.735	(0.889)	1319	0.20000	0.1469
	25 Chloroform	83	4.806	4.806	(0.902)	5130	0.20000	0.1619
	26 Carbon Tetrachloride	117	4.889	4.889	(0.855)	2464	0.20000	0.1000
$	27 Dibromofluoromethane	111	4.948	4.948	(0.929)	71799	5.00000	4.724
	28 1,1,1-Trichloroethane	97	4.948	4.948	(0.929)	4390	0.20000	0.1567
	29 2-Butanone	43	5.078	5.066	(0.953)	4029	1.00000	0.5539(T)
	30 1,1-Dichloropropene	75	5.054	5.043	(0.884)	3684	0.20000	0.1506
	31 Benzene	78	5.244	5.244	(0.917)	12496	0.20000	0.1661
*	32 Pentafluorobenzene	168	5.326	5.327	(1.000)	321754	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	89920	5.00000	4.956
	34 1,2-Dichloroethane	62	5.409	5.410	(0.946)	3755	0.20000	0.1601
	36 Trichloroethene	130	5.681	5.682	(0.994)	3348	0.20000	0.1694
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	495027	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	1424	0.20000	0.1478
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	2843	0.20000	0.1576(M)
	40 Bromodichloromethane	83	6.119	6.108	(1.070)	2888	0.20000	0.1380
	41 2-Chloroethyl Vinyl Ether	63	6.533	6.522	(1.143)	825	0.20000	0.08117(M)
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	3190	0.20000	0.1276
$	43 d8-Toluene	98	6.687	6.688	(1.170)	297126	5.00000	4.981
	44 Toluene	92	6.723	6.723	(1.176)	8432	0.20000	0.1745
	45 4-Methyl-2-Pentanone	58	7.007	6.995	(1.226)	3213	1.00000	0.5145(T)
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	3289	0.20000	0.1620
	47 Trans 1,3-Dichloropropene	75	7.018	7.019	(1.228)	2247	0.20000	0.08601
	48 1,1,2-Trichloroethane	97	7.137	7.125	(1.248)	1946	0.20000	0.1310
	49 Chlorodibromomethane	129	7.255	7.256	(0.933)	1684	0.20000	0.09118
	50 1,3-Dichloropropane	76	7.326	7.315	(0.942)	3488	0.20000	0.1347
	51 1,2-Dibromoethane	107	7.433	7.421	(1.300)	1825	0.20000	0.1313
	52 2-Hexanone	43	7.586	7.575	(0.976)	4522	1.00000	0.4332(T)
*	53 d5-Chlorobenzene	117	7.776	7.776	(1.000)	446081	10.0000	
	54 Chlorobenzene	112	7.788	7.788	(1.002)	8935	0.20000	0.1716(M)
	55 Ethyl Benzene	106	7.811	7.800	(1.005)	4858	0.20000	0.1668
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	2063	0.20000	0.1350
	57 m,p-xylene	106	7.906	7.906	(1.017)	10973	0.40000	0.3196
	58 o-Xylene	106	8.214	8.214	(1.056)	5072	0.20000	0.1525
	59 Styrene	104	8.261	8.250	(1.062)	7743	0.20000	0.1443
	60 Bromoform	173	8.285	8.285	(0.874)	746	0.20000	0.07023
	61 Isopropyl Benzene	105	8.438	8.439	(0.890)	13637	0.20000	0.1648
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	89739	5.00000	4.906
	63 Bromobenzene	156	8.734	8.734	(0.921)	3387	0.20000	0.1557
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	15806	0.20000	0.1704
	65 1,1,2,2-Tetrachloroethane	83	8.805	8.794	(0.929)	2215	0.20000	0.1312
	66 2-Chloro Toluene	91	8.864	8.865	(0.935)	11351	0.20000	0.1688
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	10777	0.20000	0.1566
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	664	0.20000	0.1200
	69 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	70 4-Chloro Toluene	91	8.995	8.983	(0.949)	10774	0.20000	0.1726
	71 T-Butyl Benzene	119	9.125	9.125	(0.963)	9255	0.20000	0.1534
	72 1,2,4-Trimethylbenzene	105	9.184	9.172	(0.969)	10936	0.20000	0.1576
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	13746	0.20000	0.1620
	74 4-Isopropyl Toluene	119	9.361	9.362	(0.988)	10752	0.20000	0.1508
	75 1,3-Dichlorobenzene	146	9.432	9.421	(0.995)	7019	0.20000	0.1667
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.480	(1.000)	237971	10.0000	
	77 1,4-Dichlorobenzene	146	9.492	9.492	(1.001)	8120	0.20000	0.1870
	78 N-Butyl Benzene	91	9.693	9.693	(1.022)	10026	0.20000	0.1610

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	113920	5.00000	5.024
80 1,2-Dichlorobenzene	146	9.823	9.811	(1.036)	7160	0.20000	0.1794
81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
83 Hexachloro 1,3-Butadiene	225	10.982	10.971	(1.159)	1621	0.20000	0.1557
84 1,2,4-Trichlorobenzene	180	11.006	10.995	(1.161)	4282	0.20000	0.1594
85 Naphthalene	128	11.278	11.267	(1.190)	7582	0.20000	0.1292
86 1,2,3-Trichlorobenzene	180	11.432	11.420	(1.206)	4170	0.20000	0.1653

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141609.D
Lab Smp Id: SED0031-CAL1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD0.2
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	321754	15.16
37 1,4-Difluorobenze	430036	215018	860072	495027	15.11
53 d5-Chlorobenzene	398095	199048	796190	446081	12.05
76 d4-1,4-Dichlorobe	214594	107297	429188	237971	10.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160414.b\04141609.D

Date : 14-APR-2016 10:08

Client ID: VSTD0.2

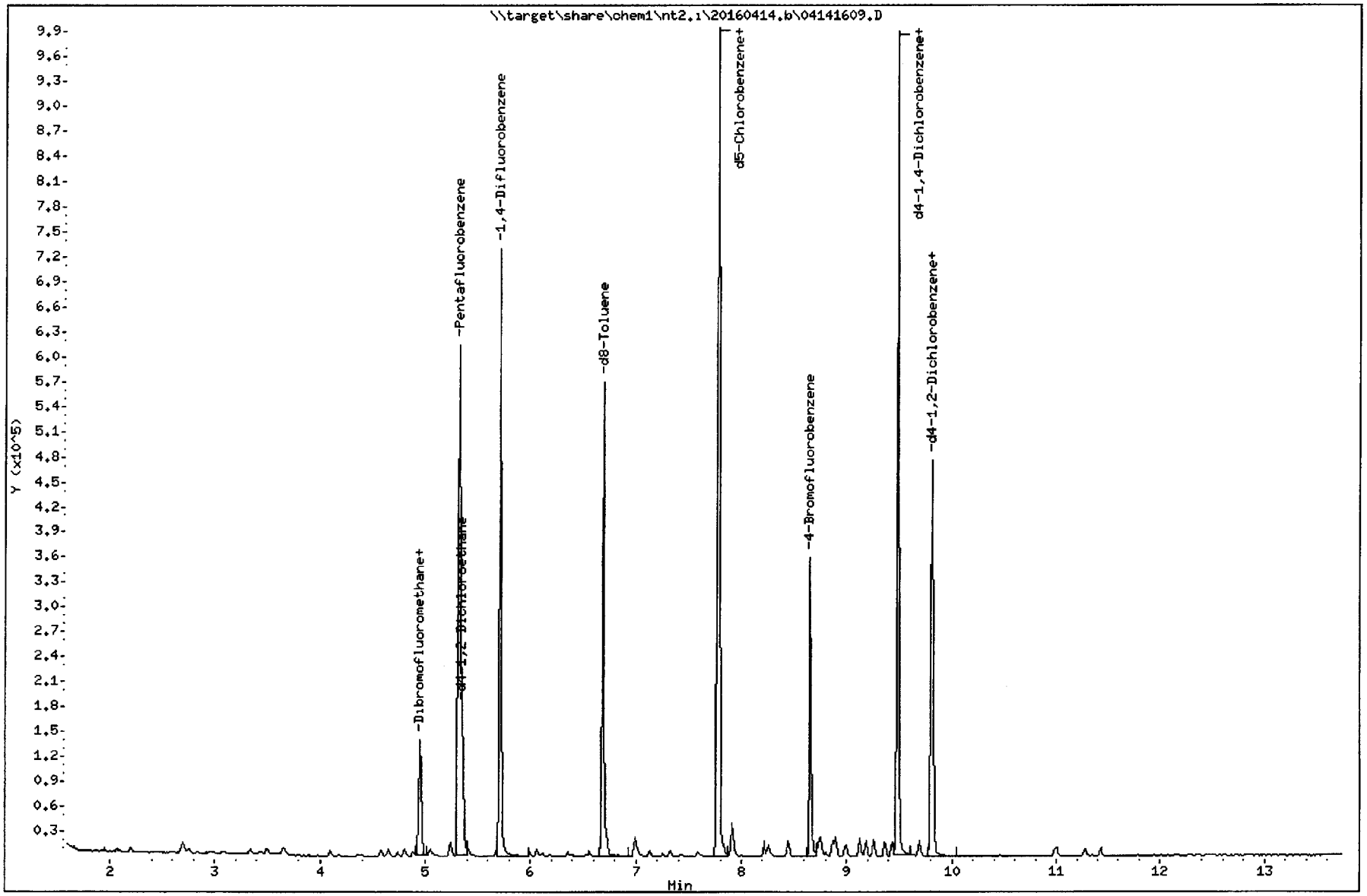
Instrument: nt2.i

Sample Info: SED0031-CAL1,10,10,0,

Operator: LH

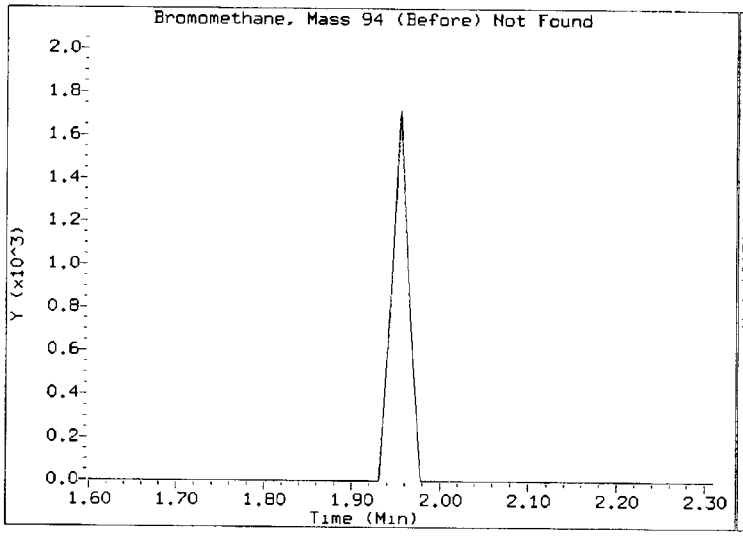
Column phase: RTXVMS

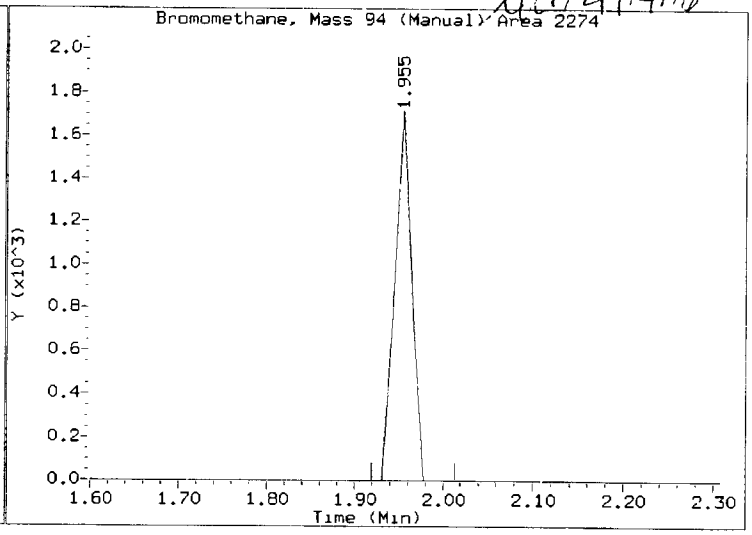
Column diameter: 0.18

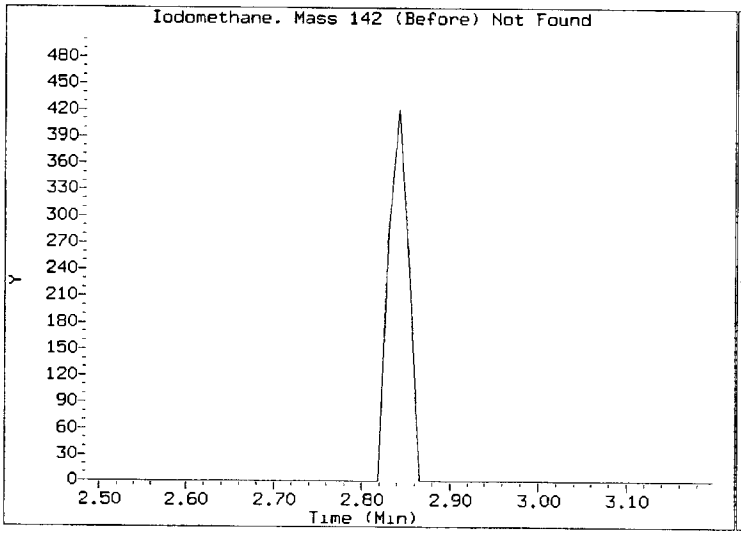


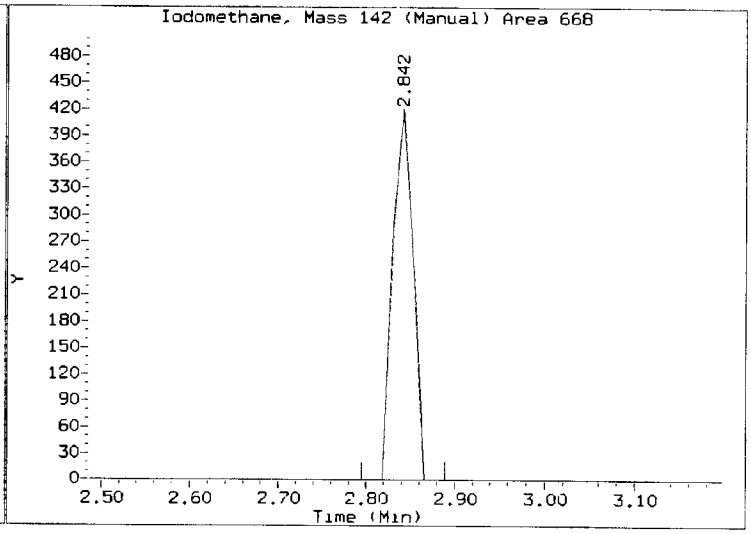
Quant Ion Manual Peak Adjustment Report

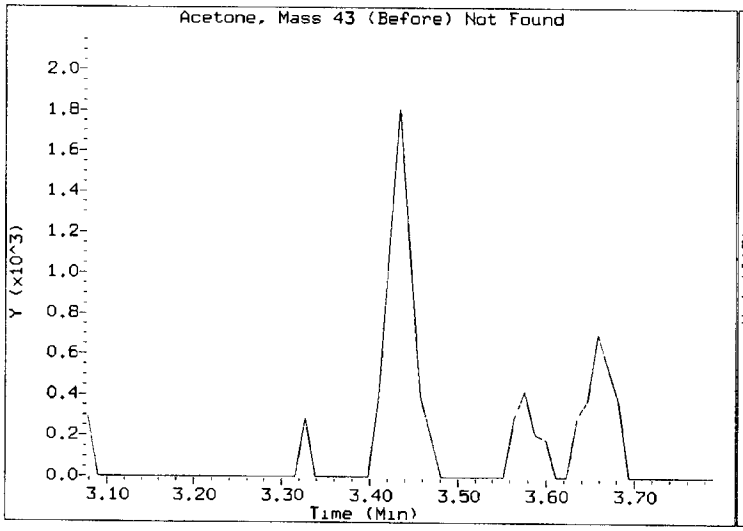
Datafile: \\target\share\chem1\nt2.i\20160414.b\04141609.D
Injection Date: 14-APR-2016 10:08
Lab ID:SED0031-CAL1 Client ID:VSTD0.2
Report Date: 04/14/2016 10:26

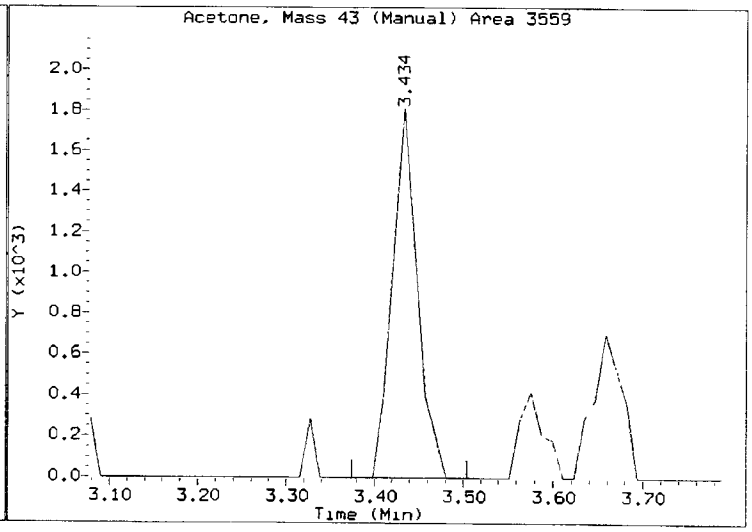






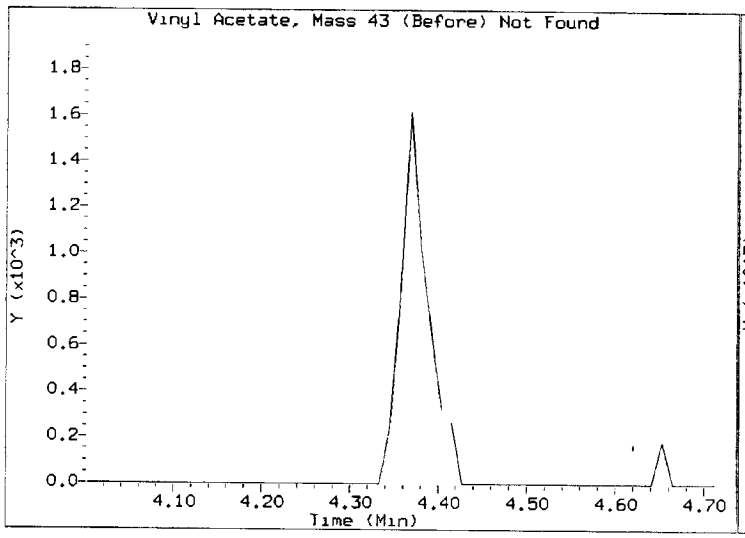


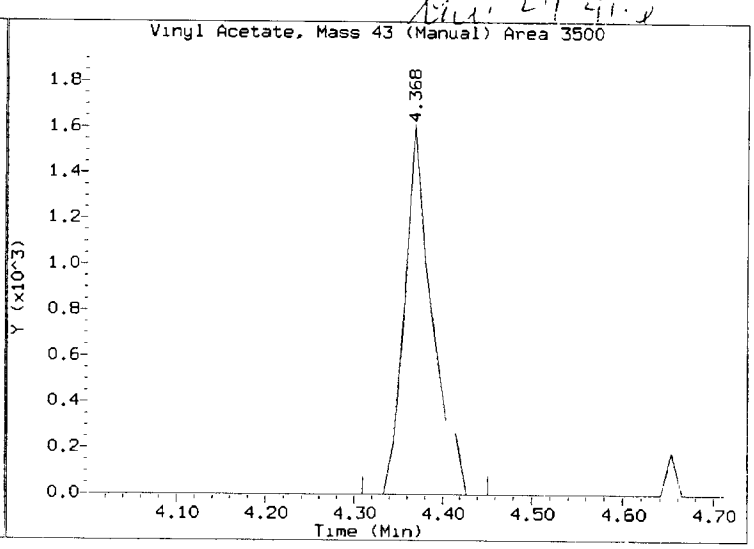


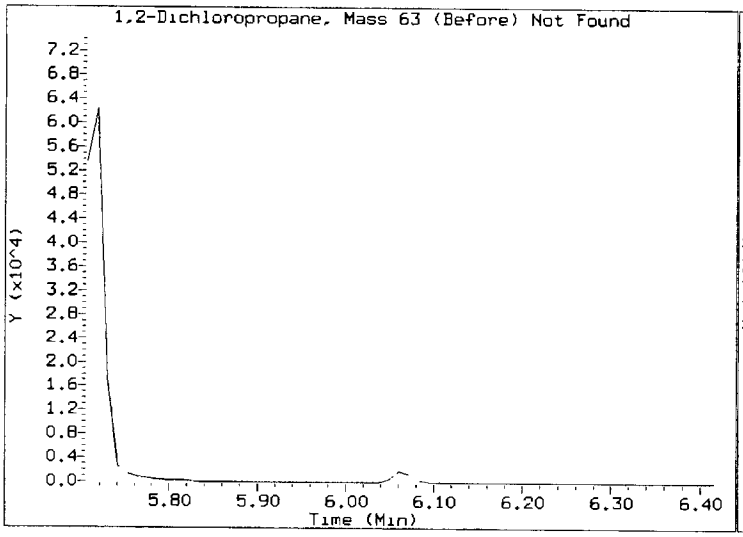


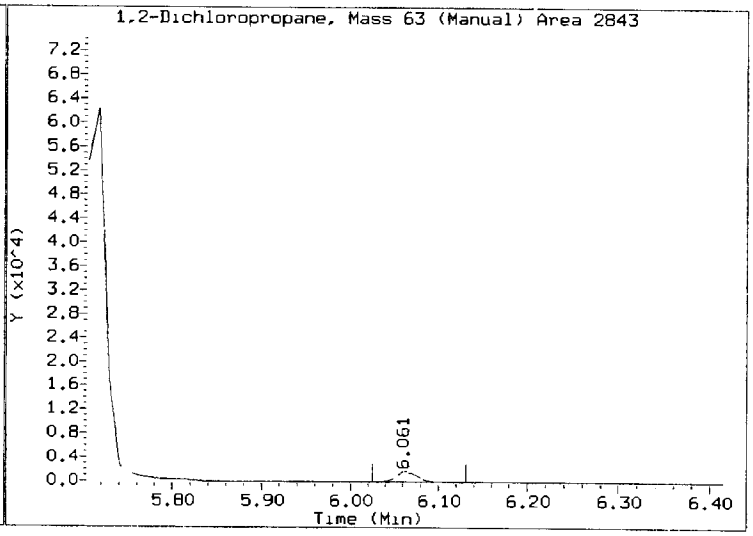
Quant Ion Manual Peak Adjustment Report

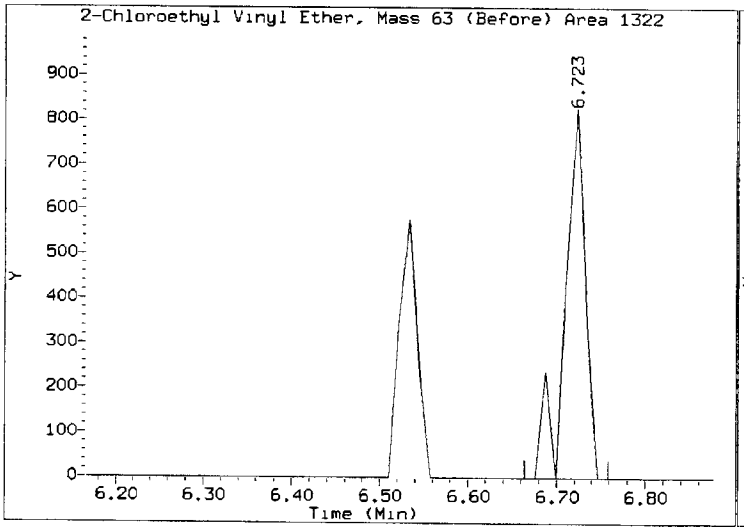
Datafile: \\target\share\chem1\nt2.i\20160414.b\04141609.D
Injection Date: 14-APR-2016 10:08
Lab ID:SED0031-CAL1 Client ID:VSTD0.2
Report Date: 04/14/2016 10:26

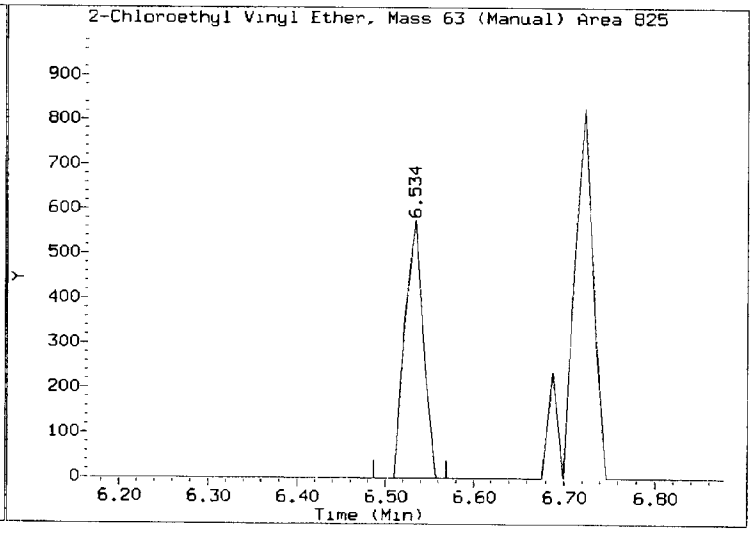






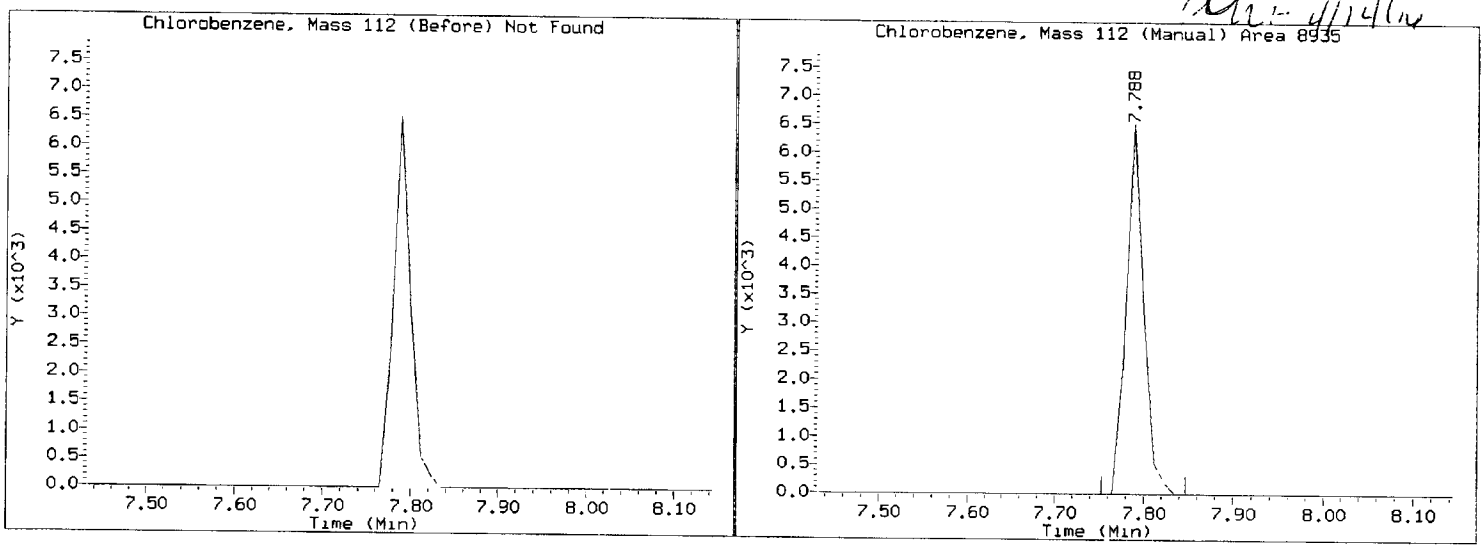






Quant Ion Manual Peak Adjustment Report

Datafile: \\target\share\chem1\nt2.i\20160414.b\04141609.D
Injection Date: 14-APR-2016 10:08
Lab ID:SED0031-CAL1 Client ID:VSTD0.2
Report Date: 04/14/2016 10:26



REVIEW SUMMARY FOR FILE - 04141609.D

Lab ID: SED0031-CAL1
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 10:08

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

Exception: Acrolein 0.0000
Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

4/14/14

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141610.D
Lab Smp Id: SED0031-CAL2 Client Smp ID: VSTD0.5
Inj Date : 14-APR-2016 10:29
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL2,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.435	1.434	(0.269)	7877	0.50000	0.5030(M)
173	2-Pentanone	86	6.357	6.344	(1.112)	3604	2.50000	1.704
2	Chloromethane	50	1.601	1.599	(0.300)	9974	0.50000	0.5079
3	Vinyl Chloride	62	1.672	1.670	(0.314)	8878	0.50000	0.4800
4	Bromomethane	94	1.955	1.954	(0.367)	5747	0.50000	0.4640(T)
5	Chloroethane	64	2.062	2.061	(0.387)	5998	0.50000	1.404(M)
6	Trichlorofluoromethane	101	2.192	2.191	(0.412)	10762	0.50000	0.5171
7	1,1-Dichloroethene	61	2.701	2.700	(0.507)	11706	0.50000	0.5289
8	Carbon Disulfide	76	2.701	2.700	(0.507)	23803	0.50000	0.4768
9	112Trichloro122Trifluoroethane	101	2.748	2.747	(0.516)	7672	0.50000	0.5111
10	Iodomethane	142	2.843	2.842	(0.534)	1792	0.50000	0.1710(T)
11	Bromoethane	108	2.985	2.984	(0.560)	5321	0.50000	0.4849
12	Acrolein	56	3.091	3.090	(0.580)	5727	2.50000	2.377
13	Methylene Chloride	84	3.340	3.339	(0.627)	7940	0.50000	0.4874
14	Acetone	43	3.435	3.434	(0.645)	9194	2.50000	2.637
15	Trans-1,2-Dichloroethene	96	3.506	3.505	(0.658)	8169	0.50000	0.5008
17	Methyl tert butyl ether	73	3.659	3.658	(0.687)	21364	0.50000	0.5116
18	1,1-Dichloroethane	63	4.097	4.096	(0.769)	14916	0.50000	0.4938
19	Acrylonitrile	53	4.180	4.179	(0.785)	1980	0.50000	0.3869(T)
20	Vinyl Acetate	43	4.369	4.357	(0.820)	11609	0.50000	0.3342
22	Cis-1,2-Dichloroethene	96	4.571	4.570	(0.858)	8978	0.50000	0.4998
23	2,2-Dichloropropane	77	4.653	4.652	(0.873)	10234	0.50000	0.4473

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.736	4.735	(0.889)	3718	0.50000	0.4592
	25 Chloroform	83	4.807	4.806	(0.902)	13938	0.50000	0.4878
	26 Carbon Tetrachloride	117	4.890	4.889	(0.855)	7623	0.50000	0.3430
$	27 Dibromofluoromethane	111	4.949	4.948	(0.929)	65866	5.00000	4.806
	28 1,1,1-Trichloroethane	97	4.949	4.948	(0.929)	11629	0.50000	0.4601
	29 2-Butanone	43	5.079	5.066	(0.953)	13927	2.50000	2.123
	30 1,1-Dichloropropene	75	5.044	5.043	(0.882)	10417	0.50000	0.4720
	31 Benzene	78	5.245	5.244	(0.917)	34694	0.50000	0.5112
*	32 Pentafluorobenzene	168	5.328	5.327	(1.000)	290177	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.352	5.350	(1.004)	82833	5.00000	5.062
	34 1,2-Dichloroethane	62	5.411	5.410	(0.946)	10536	0.50000	0.4980
	36 Trichloroethene	130	5.683	5.682	(0.994)	8564	0.50000	0.4804
*	37 1,4-Difluorobenzene	114	5.718	5.717	(1.000)	446531	10.0000	
	38 Dibromomethane	93	5.990	5.989	(1.048)	4370	0.50000	0.5028
	39 1,2-Dichloropropane	63	6.061	6.060	(1.060)	7931	0.50000	0.4874
	40 Bromodichloromethane	83	6.109	6.108	(1.068)	8183	0.50000	0.4335
	41 2-Chloroethyl Vinyl Ether	63	6.523	6.522	(1.141)	3298	0.50000	0.3597
	42 Cis 1,3-dichloropropene	75	6.558	6.557	(1.147)	9457	0.50000	0.4193
$	43 d8-Toluene	98	6.689	6.688	(1.170)	265887	5.00000	4.941
	44 Toluene	92	6.724	6.723	(1.176)	21945	0.50000	0.5035
	45 4-Methyl-2-Pentanone	58	6.996	6.995	(1.223)	11564	2.50000	2.053(T)
	46 Tetrachloroethene	166	6.996	6.995	(0.900)	9297	0.50000	0.5086
	47 Trans 1,3-Dichloropropene	75	7.020	7.019	(1.228)	7166	0.50000	0.3041
	48 1,1,2-Trichloroethane	97	7.126	7.125	(1.246)	6709	0.50000	0.5007
	49 Chlorodibromomethane	129	7.257	7.256	(0.933)	4653	0.50000	0.2798
	50 1,3-Dichloropropane	76	7.328	7.315	(0.942)	11440	0.50000	0.4905
	51 1,2-Dibromoethane	107	7.422	7.421	(1.298)	5598	0.50000	0.4466
	52 2-Hexanone	43	7.588	7.575	(0.976)	19601	2.50000	2.085(M)
*	53 d5-Chlorobenzene	117	7.777	7.776	(1.000)	401712	10.0000	
	54 Chlorobenzene	112	7.789	7.788	(1.002)	24200	0.50000	0.5160
	55 Ethyl Benzene	106	7.801	7.800	(1.003)	13179	0.50000	0.5025
	56 1,1,1,2-Tetrachloroethane	131	7.836	7.835	(1.008)	5830	0.50000	0.4235
	57 m,p-xylene	106	7.907	7.906	(1.017)	30712	1.00000	0.9934
	58 o-Xylene	106	8.215	8.214	(1.056)	13645	0.50000	0.4555
	59 Styrene	104	8.262	8.250	(1.062)	21466	0.50000	0.4443
	60 Bromoform	173	8.286	8.285	(0.874)	2557	0.50000	0.2708
	61 Isopropyl Benzene	105	8.440	8.439	(0.890)	38384	0.50000	0.5217
$	62 4-Bromofluorobenzene	174	8.653	8.651	(1.113)	80503	5.00000	4.887
	63 Bromobenzene	156	8.736	8.734	(0.921)	9957	0.50000	0.5147
	64 N-Propyl Benzene	91	8.748	8.746	(0.923)	43694	0.50000	0.5299
	65 1,1,2,2-Tetrachloroethane	83	8.807	8.794	(0.929)	7185	0.50000	0.4787
	66 2-Chloro Toluene	91	8.866	8.865	(0.935)	30523	0.50000	0.5105
	67 1,3,5-Trimethyl Benzene	105	8.890	8.888	(0.938)	30938	0.50000	0.5057
	68 1,2,3-Trichloropropane	110	8.901	8.900	(0.939)	2529	0.50000	0.5141
	69 Trans-1,4-Dichloro 2-Butene	53	8.937	8.936	(0.943)	1247	0.50000	0.3236
	70 4-Chloro Toluene	91	8.984	8.983	(0.948)	29993	0.50000	0.5405
	71 T-Butyl Benzene	119	9.126	9.125	(0.963)	26798	0.50000	0.4998
	72 1,2,4-Trimethylbenzene	105	9.174	9.172	(0.968)	30995	0.50000	0.5025
	73 S-Butyl Benzene	105	9.256	9.255	(0.976)	38910	0.50000	0.5157
	74 4-Isopropyl Toluene	119	9.363	9.362	(0.988)	31482	0.50000	0.4965
	75 1,3-Dichlorobenzene	146	9.434	9.421	(0.995)	19493	0.50000	0.5208
*	76 d4-1,4-Dichlorobenzene	152	9.481	9.480	(1.000)	211572	10.0000	
	77 1,4-Dichlorobenzene	146	9.493	9.492	(1.001)	20800	0.50000	0.5387
	78 N-Butyl Benzene	91	9.694	9.693	(1.022)	27093	0.50000	0.4894

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.812	9.811	(1.035)	99431	5.00000	4.932
80 1,2-Dichlorobenzene	146	9.812	9.811	(1.035)	18095	0.50000	0.5100
81 1,2-Dibromo 3-Chloropropane	75	10.451	10.450	(1.102)	820	0.50000	0.2910
83 Hexachloro 1,3-Butadiene	225	10.972	10.971	(1.157)	4524	0.50000	0.4887
84 1,2,4-Trichlorobenzene	180	10.996	10.995	(1.160)	11291	0.50000	0.4726
85 Naphthalene	128	11.268	11.267	(1.188)	22053	0.50000	0.4228
86 1,2,3-Trichlorobenzene	180	11.422	11.420	(1.205)	10887	0.50000	0.4853

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141610.D
Lab Smp Id: SED0031-CAL2
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD0.5
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	290177	3.86
37 1,4-Difluorobenze	430036	215018	860072	446531	3.84
53 d5-Chlorobenzene	398095	199048	796190	401712	0.91
76 d4-1,4-Dichlorobe	214594	107297	429188	211572	-1.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.03
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.03
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.1\20160414.b\04141610.D

Date : 14-APR-2016 10:29

Client ID: VSTD0.5

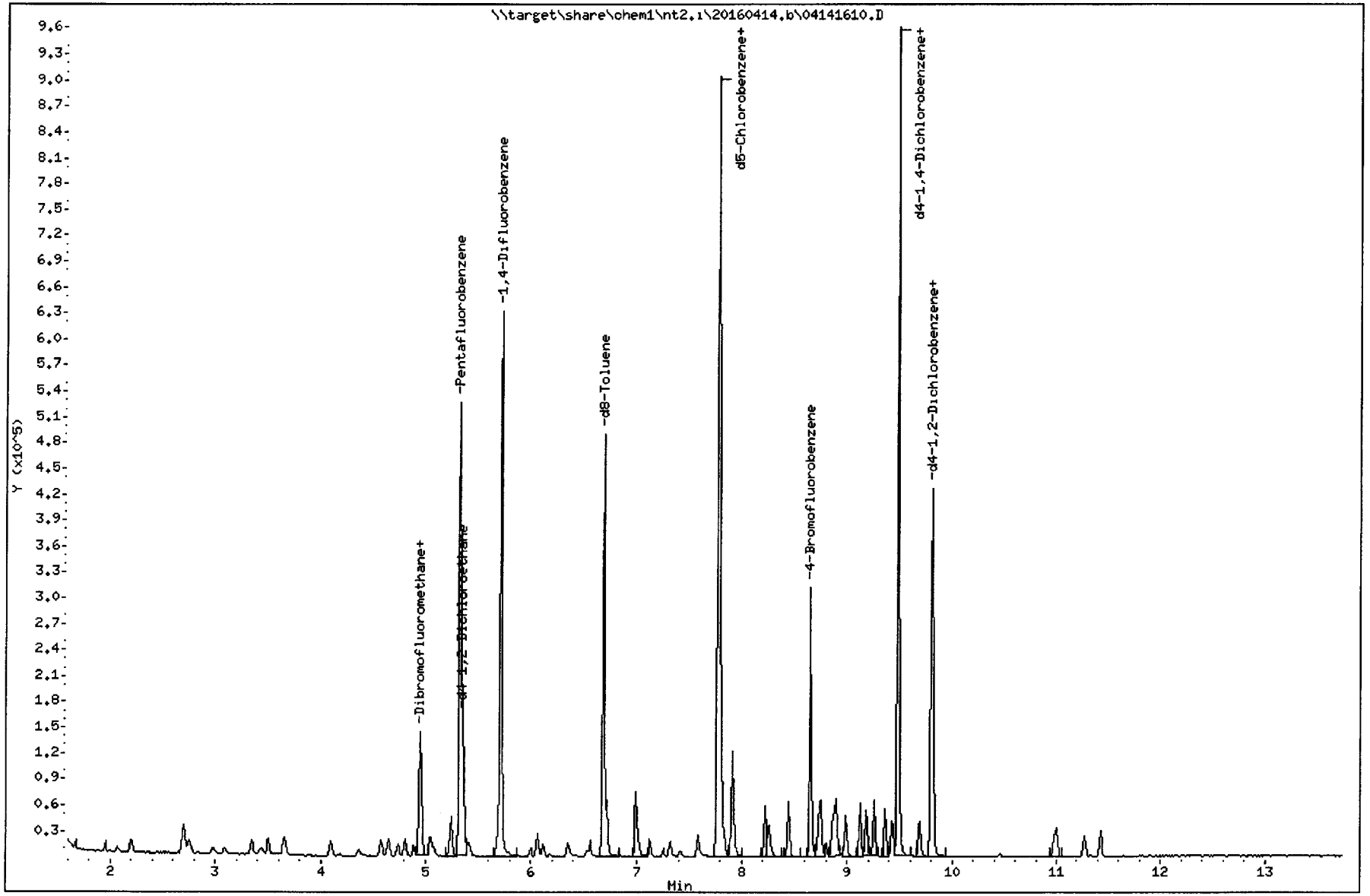
Instrument: nt2.1

Sample Info: SED0031-CAL2,10,10,0,

Operator: LH

Column phase: RTXVMS

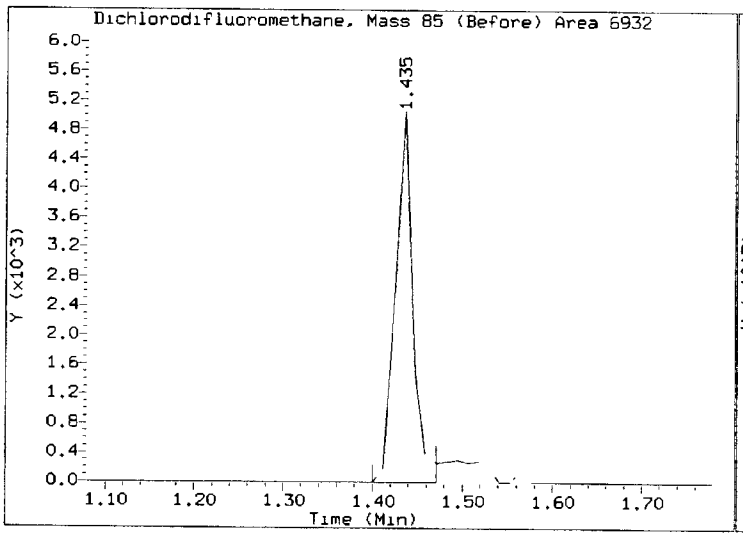
Column diameter: 0.18

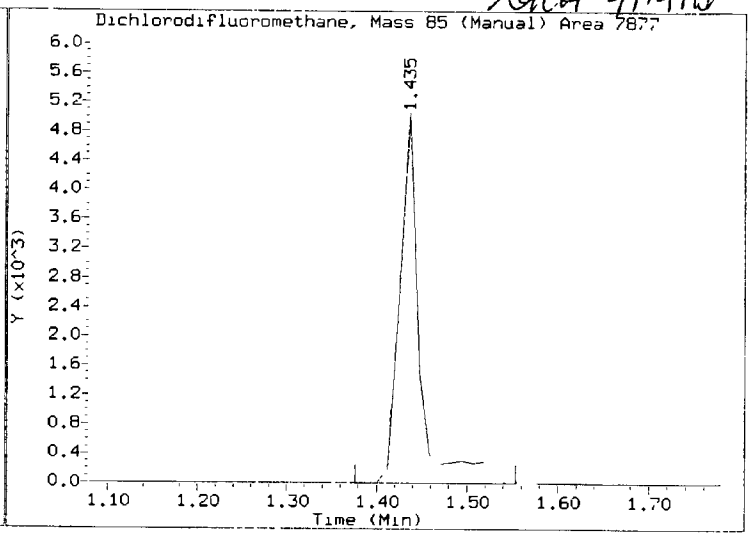


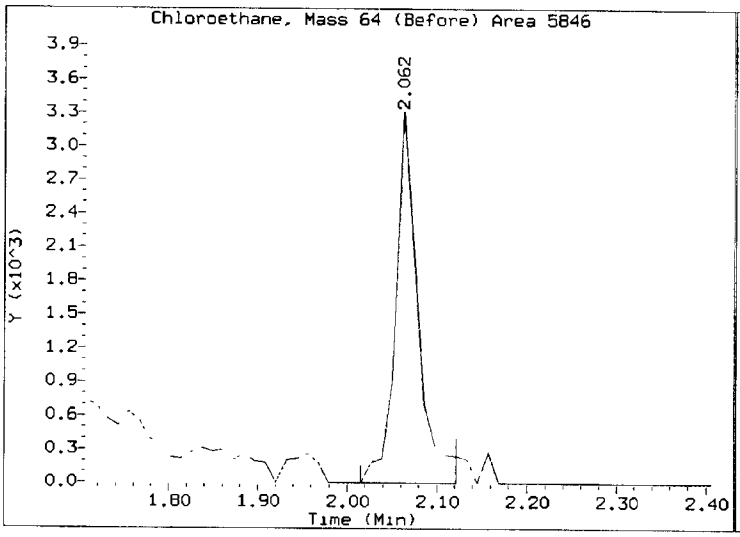
Quant Ion Manual Peak Adjustment Report

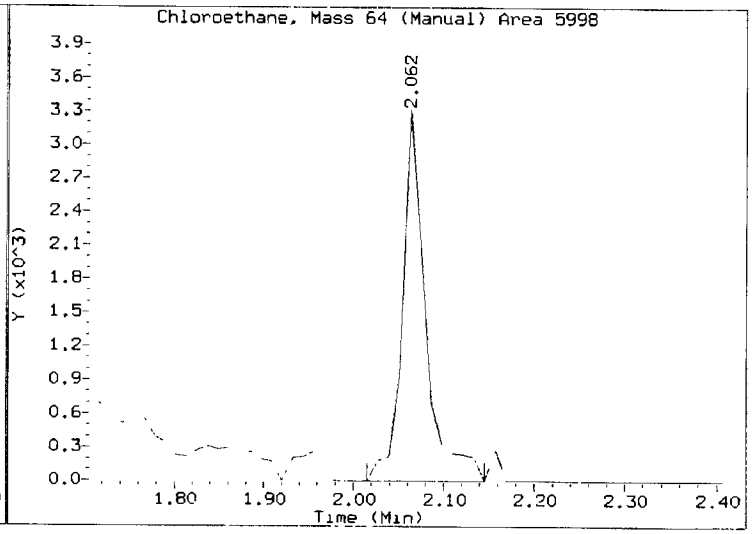
Datafile: \\target\share\chem1\nt2.i\20160414.b\04141610.D
Injection Date: 14-APR-2016 10:29
Lab ID:SED0031-CAL2 Client ID:VSTD0.5
Report Date: 04/14/2016 10:50

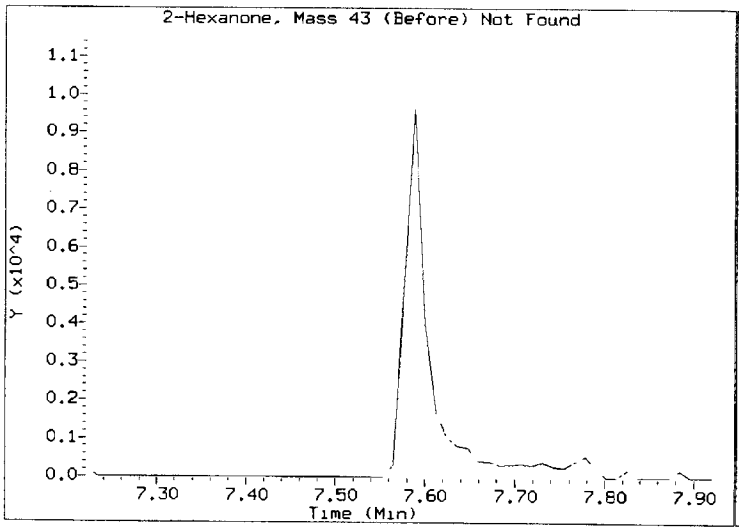
KMH 4/14/16

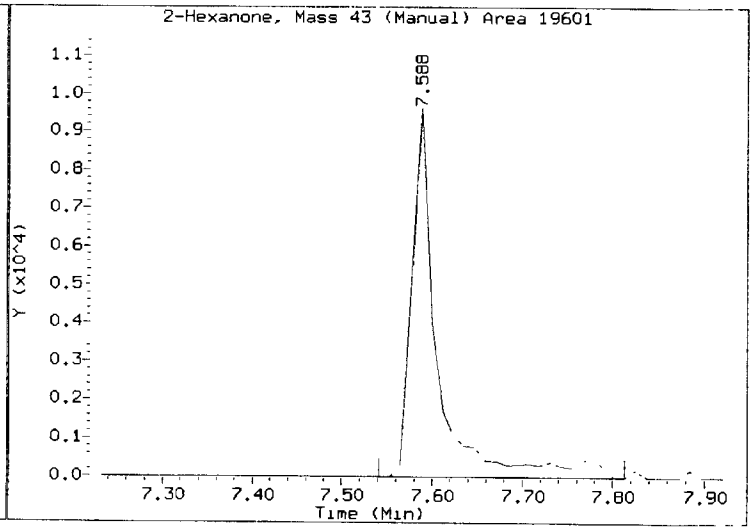












REVIEW SUMMARY FOR FILE - 04141610.D

Lab ID: SED0031-CAL2
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 10:29

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

Exception: Acrolein 0.0000
Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141611.D
Lab Smp Id: SED0031-CAL8 Client Smp ID: VSTD80
Inj Date : 14-APR-2016 10:51
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL8,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 9 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.421	1.434	(0.267)	1371867	80.0000	89.220(M)
173 2-Pentanone	86	6.344	6.344	(1.110)	981789	400.000	469.57
2 Chloromethane	50	1.587	1.599	(0.298)	1539395	80.0000	79.840(M)
3 Vinyl Chloride	62	1.658	1.670	(0.311)	1573617	80.0000	86.646(M)
4 Bromomethane	94	1.942	1.954	(0.365)	992308	80.0000	81.597(M)
5 Chloroethane	64	2.048	2.061	(0.385)	328919	80.0000	78.415
6 Trichlorofluoromethane	101	2.155	2.191	(0.405)	450805	80.0000	22.062
7 1,1-Dichloroethene	61	2.664	2.700	(0.500)	1682099	80.0000	77.412
8 Carbon Disulfide	76	2.664	2.700	(0.500)	3706523	80.0000	75.613
9 112Trichloro122Trifluoroethane	101	2.711	2.747	(0.509)	1221283	80.0000	82.861
10 Iodomethane	142	2.806	2.842	(0.527)	1097438	80.0000	79.772
11 Bromoethane	108	2.960	2.984	(0.556)	881010	80.0000	81.767
12 Acrolein	56	3.090	3.090	(0.580)	971695	400.000	410.80
13 Methylene Chloride	84	3.326	3.339	(0.625)	1328323	80.0000	83.041
14 Acetone	43	3.445	3.434	(0.647)	1340307	400.000	391.56
15 Trans-1,2-Dichloroethene	96	3.492	3.505	(0.656)	1301520	80.0000	81.260
17 Methyl tert butyl ether	73	3.658	3.658	(0.687)	3321236	80.0000	81.001
18 1,1-Dichloroethane	63	4.084	4.096	(0.767)	2482537	80.0000	83.703
19 Acrylonitrile	53	4.178	4.179	(0.785)	457302	80.0000	91.016
20 Vinyl Acetate	43	4.356	4.357	(0.818)	2733870	80.0000	80.153
22 Cis-1,2-Dichloroethene	96	4.569	4.570	(0.858)	1554095	80.0000	88.120
23 2,2-Dichloropropane	77	4.652	4.652	(0.873)	2062068	80.0000	91.791

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.735	4.735	(0.889)	713925	80.0000	89.803
	25 Chloroform	83	4.806	4.806	(0.902)	2342620	80.0000	83.507
	26 Carbon Tetrachloride	117	4.888	4.889	(0.855)	1783936	80.0000	81.203
$	27 Dibromofluoromethane	111	4.948	4.948	(0.929)	68838	5.00000	5.115
	28 1,1,1-Trichloroethane	97	4.948	4.948	(0.929)	2190854	80.0000	88.292
	29 2-Butanone	43	5.066	5.066	(0.951)	2661493	400.000	413.19
	30 1,1-Dichloropropene	75	5.042	5.043	(0.882)	1912387	80.0000	87.663
	31 Benzene	78	5.243	5.244	(0.917)	5126954	80.0000	76.421
*	32 Pentafluorobenzene	168	5.326	5.327	(1.000)	284908	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	77141	5.00000	4.801
	34 1,2-Dichloroethane	62	5.397	5.410	(0.944)	1716230	80.0000	82.057
	36 Trichloroethene	130	5.681	5.682	(0.994)	1545329	80.0000	87.686
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	441404	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	763610	80.0000	88.884
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	1408743	80.0000	87.582
	40 Bromodichloromethane	83	6.107	6.108	(1.068)	1775718	80.0000	95.161
	41 2-Chloroethyl Vinyl Ether	63	6.521	6.522	(1.141)	875478	80.0000	96.598
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	2194174	80.0000	98.412
$	43 d8-Toluene	98	6.687	6.688	(1.170)	269709	5.00000	5.070
	44 Toluene	92	6.722	6.723	(1.176)	3517050	80.0000	81.637
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	2284989	400.000	410.32
	46 Tetrachloroethene	166	6.983	6.995	(0.898)	1608105	80.0000	85.477
	47 Trans 1,3-Dichloropropene	75	7.018	7.019	(1.228)	1883445	80.0000	80.855
	48 1,1,2-Trichloroethane	97	7.137	7.125	(1.248)	1207485	80.0000	91.165
	49 Chlorodibromomethane	129	7.255	7.256	(0.933)	1393226	80.0000	81.398
	50 1,3-Dichloropropane	76	7.314	7.315	(0.941)	2067279	80.0000	86.138
	51 1,2-Dibromoethane	107	7.421	7.421	(1.298)	1171151	80.0000	94.507
	52 2-Hexanone	43	7.586	7.575	(0.976)	3768760	400.000	389.54
*	53 d5-Chlorobenzene	117	7.776	7.776	(1.000)	413403	10.0000	
	54 Chlorobenzene	112	7.787	7.788	(1.002)	3664917	80.0000	75.929
	55 Ethyl Benzene	106	7.811	7.800	(1.005)	2243527	80.0000	83.128
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	1394359	80.0000	98.433
	57 m,p-xylene	106	7.906	7.906	(1.017)	4600667	160.000	144.61
	58 o-Xylene	106	8.213	8.214	(1.056)	2650228	80.0000	85.977
	59 Styrene	104	8.261	8.250	(1.062)	4126436	80.0000	82.990
	60 Bromoform	173	8.284	8.285	(0.874)	840558	80.0000	81.880
	61 Isopropyl Benzene	105	8.438	8.439	(0.890)	5397900	80.0000	67.492
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	84998	5.00000	5.014
	63 Bromobenzene	156	8.734	8.734	(0.921)	1771789	80.0000	84.249
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	5711067	80.0000	63.710
	65 1,1,2,2-Tetrachloroethane	83	8.805	8.794	(0.929)	1437275	80.0000	88.081
	66 2-Chloro Toluene	91	8.864	8.865	(0.935)	4856608	80.0000	74.720
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	4729126	80.0000	71.105
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	476709	80.0000	89.147
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.936	(0.943)	390572	80.0000	93.248
	70 4-Chloro Toluene	91	8.983	8.983	(0.948)	4285531	80.0000	71.042
	71 T-Butyl Benzene	119	9.125	9.125	(0.963)	4373929	80.0000	75.036
	72 1,2,4-Trimethylbenzene	105	9.184	9.172	(0.969)	4837581	80.0000	72.142
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	5547128	80.0000	67.637
	74 4-Isopropyl Toluene	119	9.361	9.362	(0.988)	4962148	80.0000	71.995
	75 1,3-Dichlorobenzene	146	9.432	9.421	(0.995)	3191637	80.0000	78.448
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.480	(1.000)	229993	10.0000	
	77 1,4-Dichlorobenzene	146	9.491	9.492	(1.001)	3177040	80.0000	75.693
	78 N-Butyl Benzene	91	9.692	9.693	(1.022)	4432809	80.0000	73.665

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	108413	5.00000	4.946
80 1,2-Dichlorobenzene	146	9.823	9.811	(1.036)	3013430	80.0000	78.134
81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	248395	80.0000	81.087
83 Hexachloro 1,3-Butadiene	225	10.970	10.971	(1.157)	819063	80.0000	81.390
84 1,2,4-Trichlorobenzene	180	10.994	10.995	(1.160)	2165083	80.0000	83.368
85 Naphthalene	128	11.266	11.267	(1.188)	4452831	80.0000	78.535
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	1972509	80.0000	80.879

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141611.D
Lab Smp Id: SED0031-CAL8
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD80
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	284908	1.97
37 1,4-Difluorobenze	430036	215018	860072	441404	2.64
53 d5-Chlorobenzene	398095	199048	796190	413403	3.85
76 d4-1,4-Dichlorobe	214594	107297	429188	229993	7.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	-0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.00

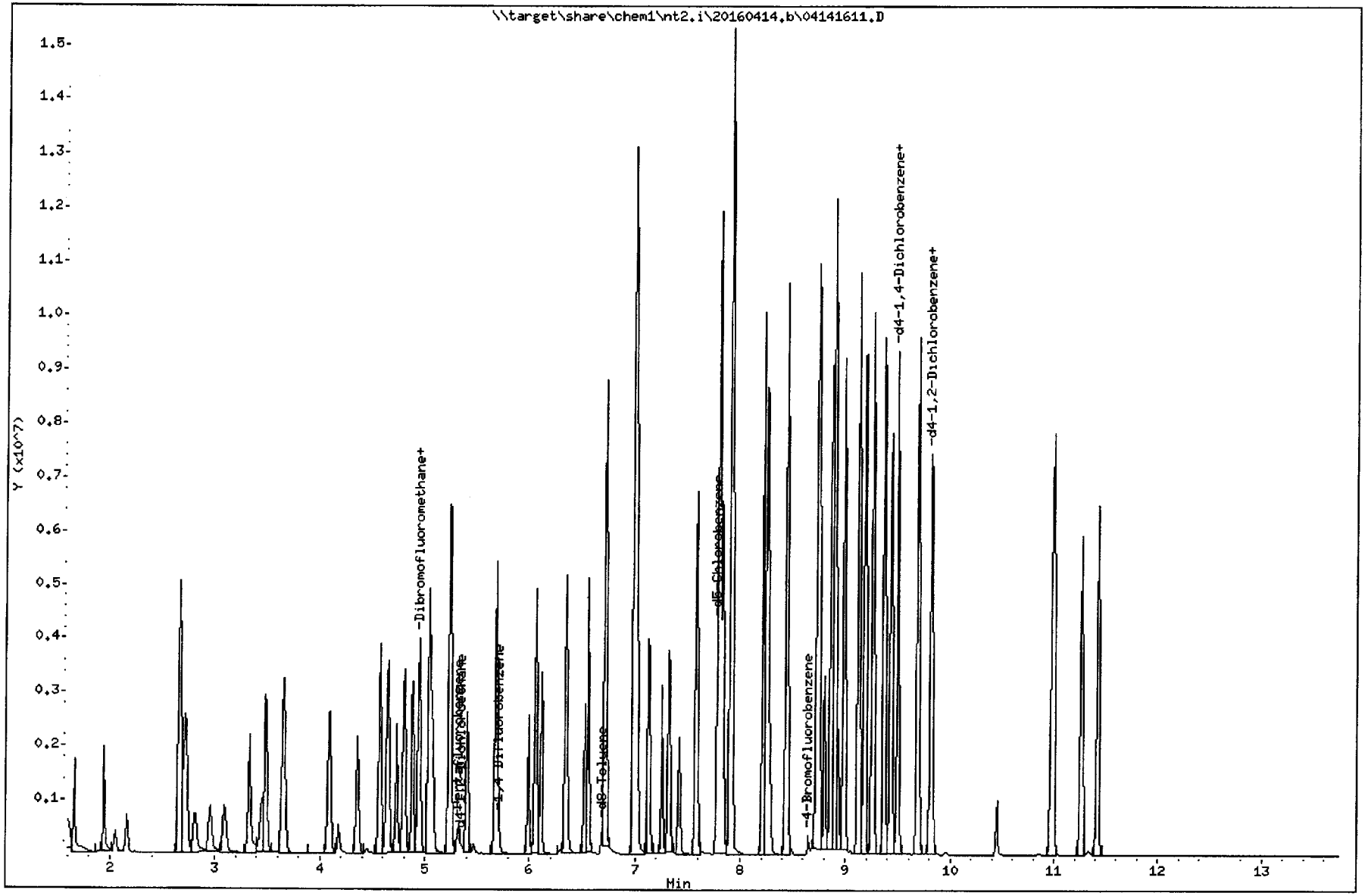
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160414.b\04141611.D
Date : 14-APR-2016 10:51
Client ID: VSTD80
Sample Info: SED0031-CAL8,10,10,0,

Instrument: nt2.i

Operator: LH
Column diameter: 0.18

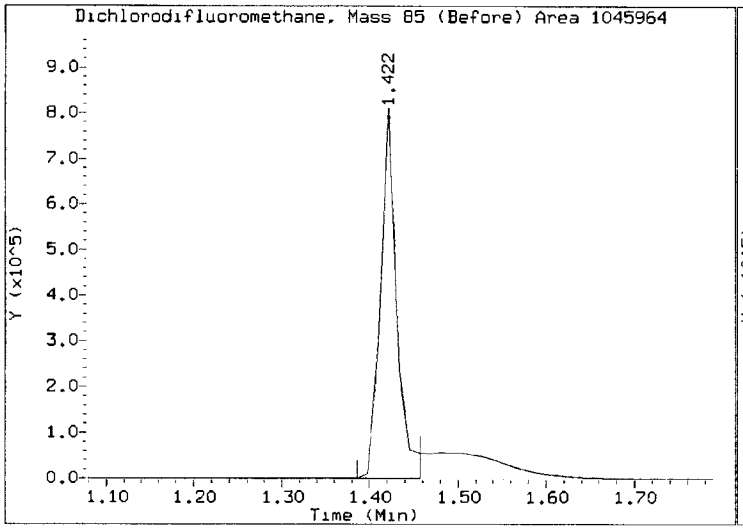
Column phase: RTXVMS

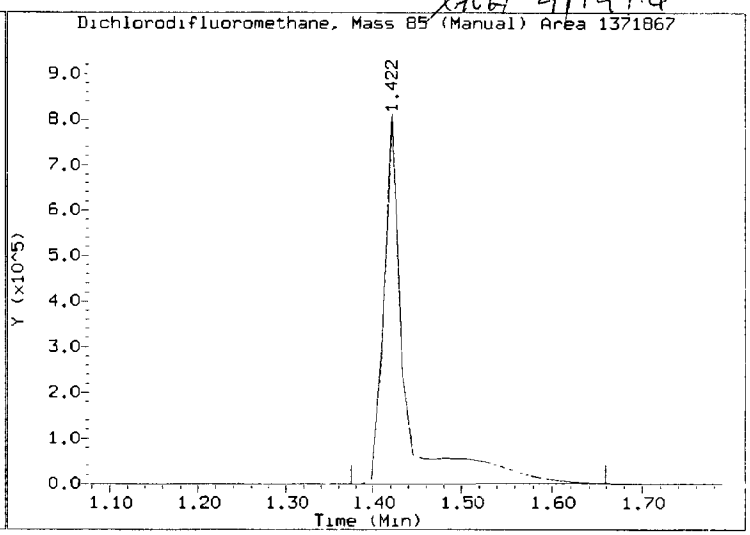


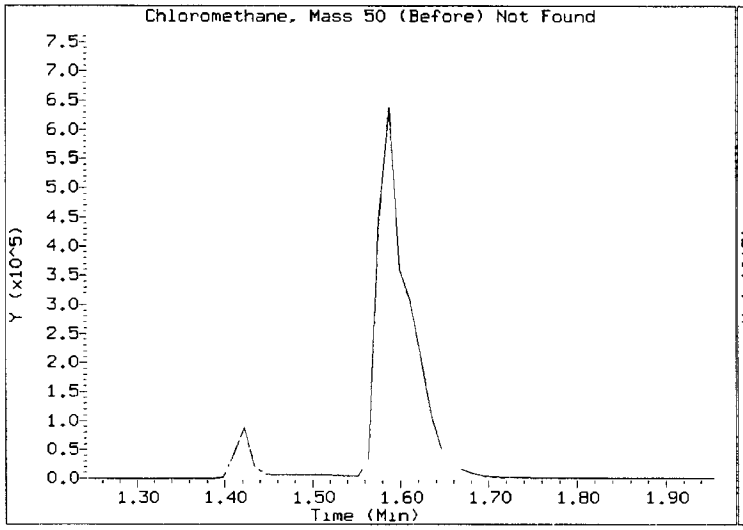
Quant Ion Manual Peak Adjustment Report

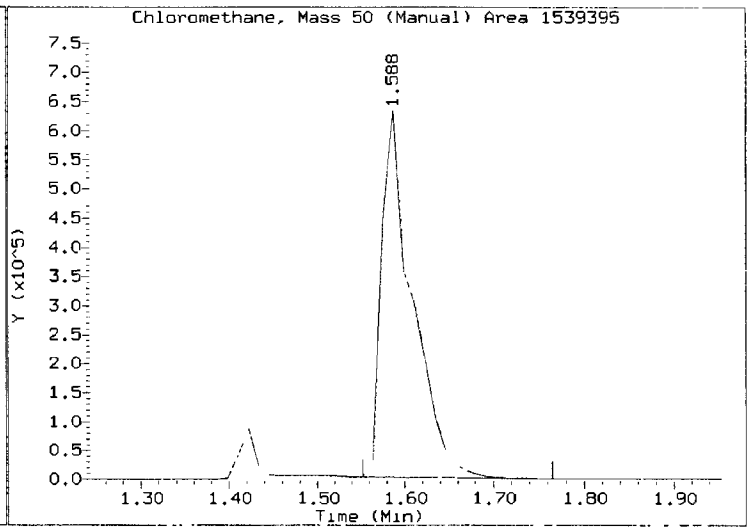
Datafile: \\target\share\chem1\nt2.i\20160414.b\04141611.D
Injection Date: 14-APR-2016 10:51
Lab ID:SED0031-CAL8 Client ID:VSTD80
Report Date: 04/14/2016 12:39

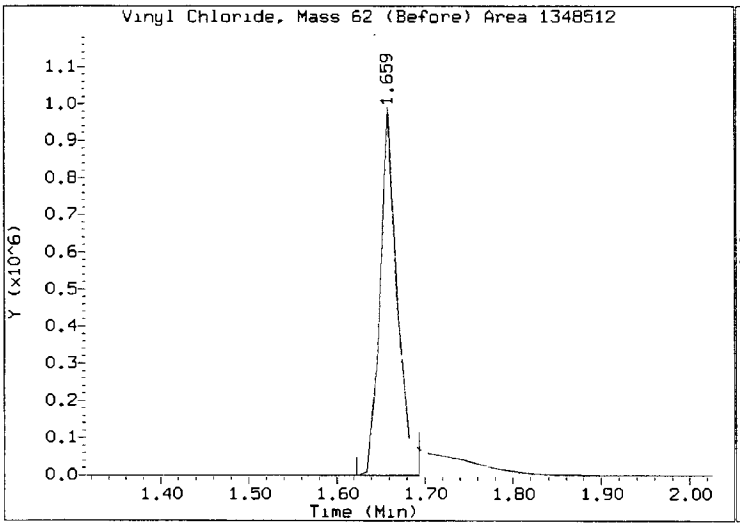
XHH 4/14/16

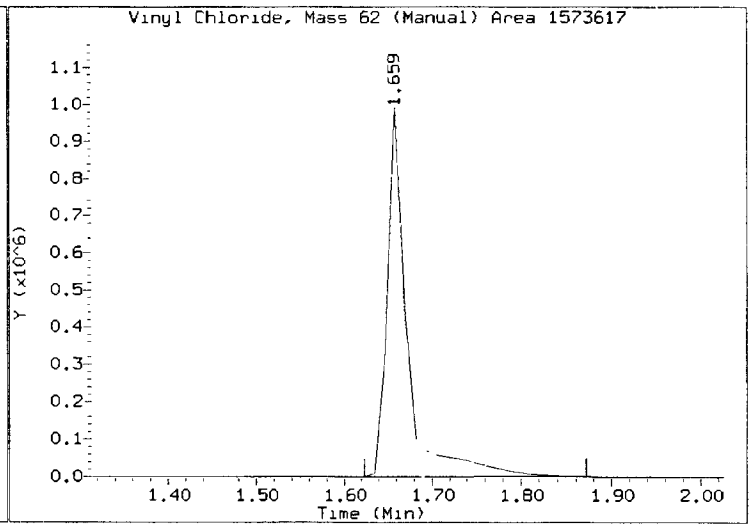






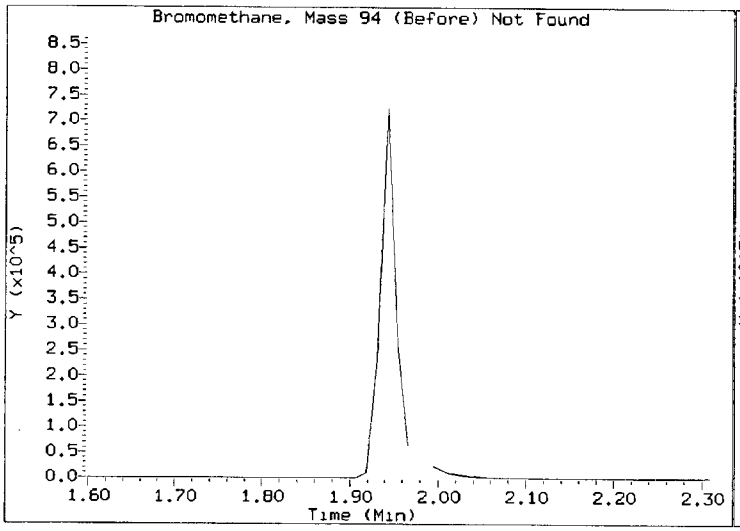


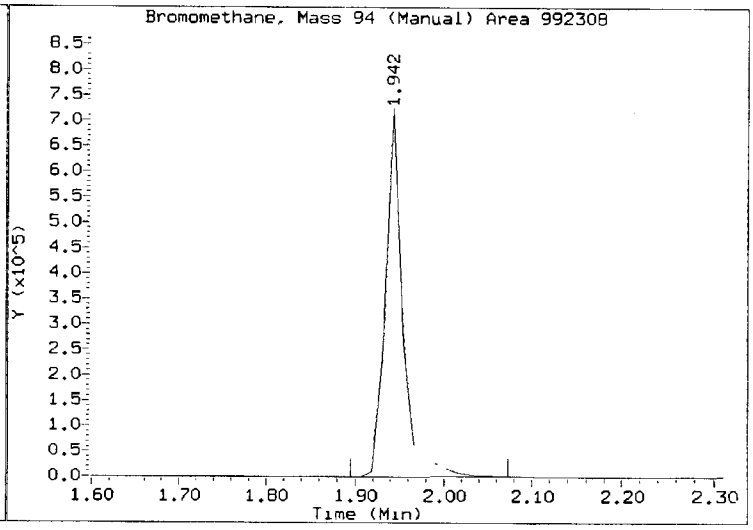




Quant Ion Manual Peak Adjustment Report

Datafile: \\target\share\chem1\nt2.i\20160414.b\04141611.D
Injection Date: 14-APR-2016 10:51
Lab ID:SED0031-CAL8 Client ID:VSTD80
Report Date: 04/14/2016 12:39





REVIEW SUMMARY FOR FILE - 04141611.D

Lab ID: SED0031-CAL8
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 10:51

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

Exception: Acrolein 0.0000
Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141612.D
Lab Smp Id: SED0031-CAL7 Client Smp ID: VSTD40
Inj Date : 14-APR-2016 11:12
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL7,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 10 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.424	1.434	(0.267)	689281	40.0000	42.685(M)
173	2-Pentanone	86	6.346	6.344	(1.110)	466907	200.000	213.02
2	Chloromethane	50	1.590	1.599	(0.298)	798407	40.0000	39.430
3	Vinyl Chloride	62	1.661	1.670	(0.312)	814464	40.0000	42.702
4	Bromomethane	94	1.945	1.954	(0.365)	522291	40.0000	40.895
5	Chloroethane	64	2.051	2.061	(0.385)	182129	40.0000	41.345
6	Trichlorofluoromethane	101	2.169	2.191	(0.407)	256305	40.0000	11.944
7	1,1-Dichloroethene	61	2.678	2.700	(0.503)	903942	40.0000	39.612
8	Carbon Disulfide	76	2.690	2.700	(0.505)	2075965	40.0000	40.325
9	112Trichloro122Trifluoroethane	101	2.737	2.747	(0.514)	627150	40.0000	40.517
10	Iodomethane	142	2.832	2.842	(0.531)	503696	40.0000	41.494
11	Bromoethane	108	2.974	2.984	(0.558)	445777	40.0000	39.395
12	Acrolein	56	3.092	3.090	(0.580)	500780	200.000	201.59
13	Methylene Chloride	84	3.341	3.339	(0.627)	665673	40.0000	39.626
14	Acetone	43	3.436	3.434	(0.645)	694045	200.000	193.07
15	Trans-1,2-Dichloroethene	96	3.495	3.505	(0.656)	676059	40.0000	40.192
17	Methyl tert butyl ether	73	3.648	3.658	(0.685)	1771608	40.0000	41.142
18	1,1-Dichloroethane	63	4.098	4.096	(0.769)	1275623	40.0000	40.954
19	Acrylonitrile	53	4.169	4.179	(0.782)	229031	40.0000	43.405
20	Vinyl Acetate	43	4.358	4.357	(0.818)	1434616	40.0000	40.050
22	Cis-1,2-Dichloroethene	96	4.571	4.570	(0.858)	773089	40.0000	41.740
23	2,2-Dichloropropane	77	4.654	4.652	(0.873)	1046442	40.0000	44.355

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.737	4.735	(0.889)	356754	40.0000	42.730
	25 Chloroform	83	4.808	4.806	(0.902)	1210717	40.0000	41.095
	26 Carbon Tetrachloride	117	4.891	4.889	(0.855)	893365	40.0000	38.791
$	27 Dibromofluoromethane	111	4.950	4.948	(0.929)	74016	5.00000	5.237
	28 1,1,1-Trichloroethane	97	4.950	4.948	(0.929)	1126743	40.0000	43.238
	29 2-Butanone	43	5.068	5.066	(0.951)	1368749	200.000	202.34
	30 1,1-Dichloropropene	75	5.045	5.043	(0.882)	977171	40.0000	42.729
	31 Benzene	78	5.234	5.244	(0.915)	2809742	40.0000	39.952
*	32 Pentafluorobenzene	168	5.329	5.327	(1.000)	299210	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.352	5.350	(1.004)	84211	5.00000	4.991
	34 1,2-Dichloroethane	62	5.400	5.410	(0.944)	893935	40.0000	40.772
	36 Trichloroethene	130	5.684	5.682	(0.994)	764608	40.0000	41.387
*	37 1,4-Difluorobenzene	114	5.719	5.717	(1.000)	462723	10.0000	
	38 Dibromomethane	93	5.991	5.989	(1.048)	379228	40.0000	42.108
	39 1,2-Dichloropropane	63	6.062	6.060	(1.060)	696318	40.0000	41.296
	40 Bromodichloromethane	83	6.110	6.108	(1.068)	895679	40.0000	45.788
	41 2-Chloroethyl Vinyl Ether	63	6.524	6.522	(1.141)	429835	40.0000	45.242
	42 Cis 1,3-dichloropropene	75	6.559	6.557	(1.147)	1097029	40.0000	46.937
$	43 d8-Toluene	98	6.690	6.688	(1.170)	280347	5.00000	5.027
	44 Toluene	92	6.725	6.723	(1.176)	1829938	40.0000	40.519
	45 4-Methyl-2-Pentanone	58	6.997	6.995	(1.223)	1223435	200.000	209.58
	46 Tetrachloroethene	166	6.985	6.995	(0.898)	804590	40.0000	42.006
	47 Trans 1,3-Dichloropropene	75	7.021	7.019	(1.228)	959112	40.0000	39.277
	48 1,1,2-Trichloroethane	97	7.127	7.125	(1.246)	594332	40.0000	42.805
	49 Chlorodibromomethane	129	7.258	7.256	(0.933)	669656	40.0000	38.428
	50 1,3-Dichloropropane	76	7.317	7.315	(0.941)	1043460	40.0000	42.704
	51 1,2-Dibromoethane	107	7.423	7.421	(1.298)	574066	40.0000	44.191
	52 2-Hexanone	43	7.577	7.575	(0.974)	2047081	200.000	207.82
*	53 d5-Chlorobenzene	117	7.778	7.776	(1.000)	420893	10.0000	
	54 Chlorobenzene	112	7.790	7.788	(1.002)	1997207	40.0000	40.641
	55 Ethyl Benzene	106	7.802	7.800	(1.003)	1145310	40.0000	41.681
	56 1,1,1,2-Tetrachloroethane	131	7.837	7.835	(1.008)	689526	40.0000	47.810
	57 m,p-xylene	106	7.908	7.906	(1.017)	2635782	80.0000	81.373
	58 o-Xylene	106	8.216	8.214	(1.056)	1342609	40.0000	42.781
	59 Styrene	104	8.251	8.250	(1.061)	2106172	40.0000	41.605
	60 Bromoform	173	8.275	8.285	(0.873)	390585	40.0000	37.909
	61 Isopropyl Benzene	105	8.441	8.439	(0.890)	3193425	40.0000	39.784
$	62 4-Bromofluorobenzene	174	8.654	8.651	(1.113)	87898	5.00000	5.093
	63 Bromobenzene	156	8.725	8.734	(0.920)	872081	40.0000	41.317
	64 N-Propyl Benzene	91	8.737	8.746	(0.921)	3524488	40.0000	39.175
	65 1,1,2,2-Tetrachloroethane	83	8.796	8.794	(0.928)	710198	40.0000	43.365
	66 2-Chloro Toluene	91	8.855	8.865	(0.934)	2623582	40.0000	40.218
	67 1,3,5-Trimethyl Benzene	105	8.890	8.888	(0.938)	2732713	40.0000	40.938
	68 1,2,3-Trichloropropane	110	8.902	8.900	(0.939)	231535	40.0000	43.141
	69 Trans-1,4-Dichloro 2-Butene	53	8.926	8.936	(0.941)	181632	40.0000	43.206
	70 4-Chloro Toluene	91	8.985	8.983	(0.948)	2384908	40.0000	39.391
	71 T-Butyl Benzene	119	9.127	9.125	(0.963)	2387180	40.0000	40.804
	72 1,2,4-Trimethylbenzene	105	9.174	9.172	(0.968)	2744456	40.0000	40.779
	73 S-Butyl Benzene	105	9.257	9.255	(0.976)	3249626	40.0000	39.479
	74 4-Isopropyl Toluene	119	9.364	9.362	(0.988)	2847210	40.0000	41.159
	75 1,3-Dichlorobenzene	146	9.423	9.421	(0.994)	1641228	40.0000	40.193
*	76 d4-1,4-Dichlorobenzene	152	9.482	9.480	(1.000)	230832	10.0000	
	77 1,4-Dichlorobenzene	146	9.494	9.492	(1.001)	1622357	40.0000	38.512
	78 N-Butyl Benzene	91	9.683	9.693	(1.021)	2514237	40.0000	41.630

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.813	9.811	(1.035)	111487	5.00000	5.068
80 1,2-Dichlorobenzene	146	9.813	9.811	(1.035)	1550896	40.0000	40.066
81 1,2-Dibromo 3-Chloropropane	75	10.441	10.450	(1.101)	120326	40.0000	39.137
83 Hexachloro 1,3-Butadiene	225	10.973	10.971	(1.157)	405187	40.0000	40.117
84 1,2,4-Trichlorobenzene	180	10.997	10.995	(1.160)	1051573	40.0000	40.344
85 Naphthalene	128	11.257	11.267	(1.187)	2361196	40.0000	41.493
86 1,2,3-Trichlorobenzene	180	11.423	11.420	(1.205)	953826	40.0000	38.968

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141612.D
Lab Smp Id: SED0031-CAL7
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD40
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	299210	7.09
37 1,4-Difluorobenze	430036	215018	860072	462723	7.60
53 d5-Chlorobenzene	398095	199048	796190	420893	5.73
76 d4-1,4-Dichlorobe	214594	107297	429188	230832	7.57

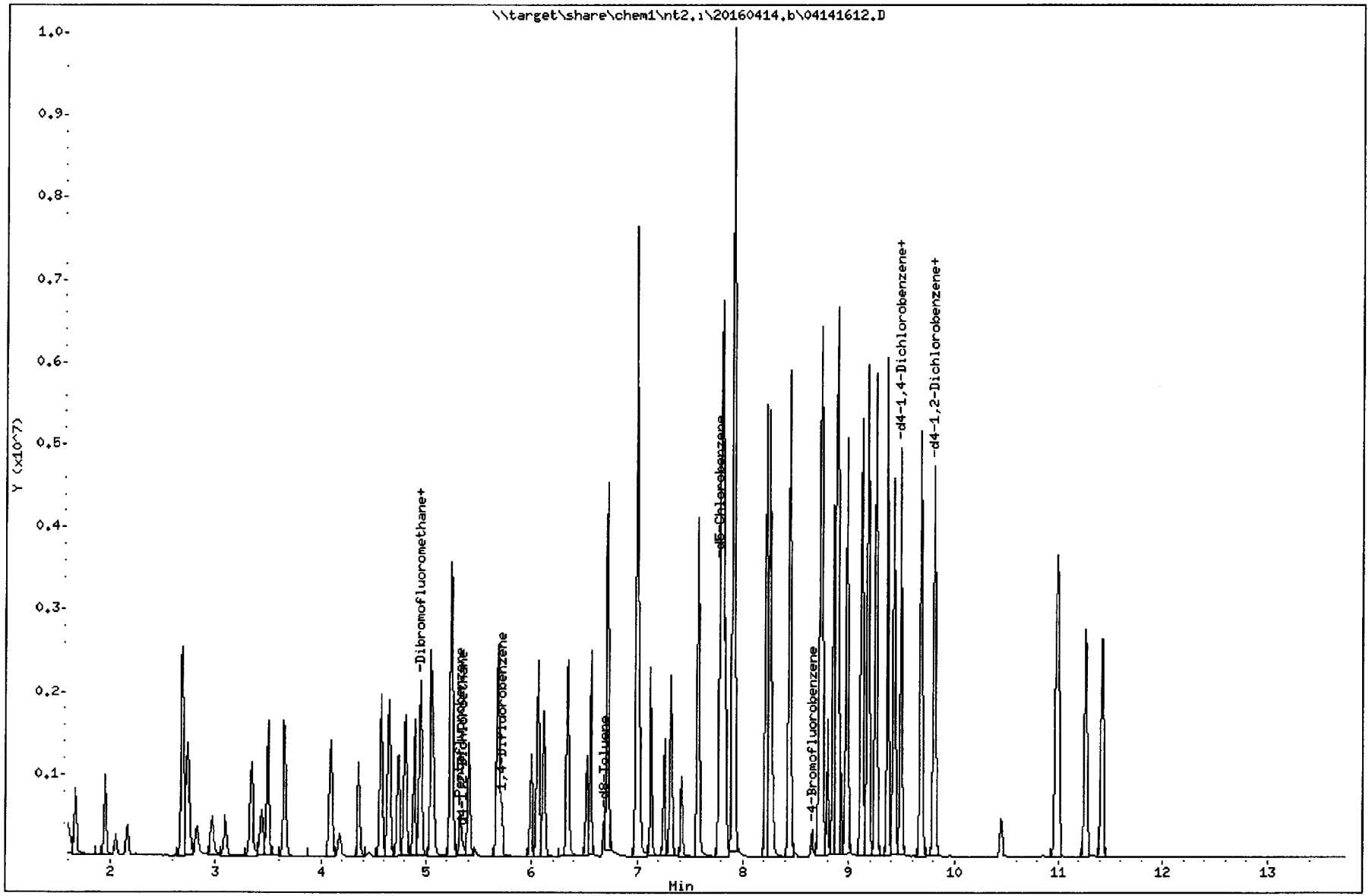
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.05
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.04
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.03
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160414.b\04141612.D
Date : 14-APR-2016 11:12
Client ID: VSTD40
Sample Info: SED0031-CAL7,10,10,0,

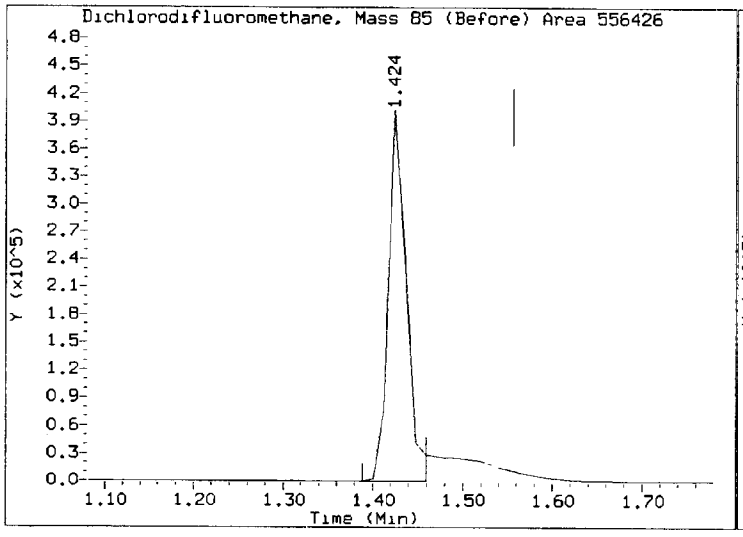
Instrument: nt2.i

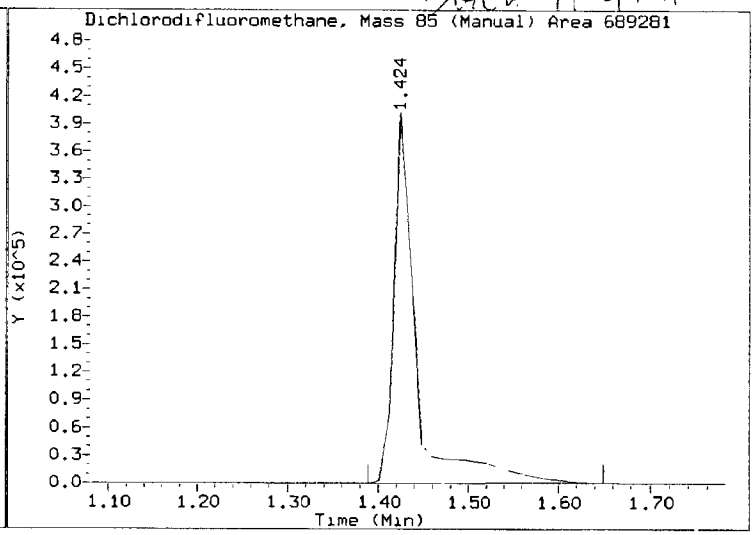
Operator: LH
Column phase: RTXVMS
Column diameter: 0.18



Quant Ion Manual Peak Adjustment Report

Datafile: \\target\share\chem1\nt2.i\20160414.b\04141612.D
Injection Date: 14-APR-2016 11:12
Lab ID:SED0031-CAL7 Client ID:VSTD40
Report Date: 04/14/2016 12:40





REVIEW SUMMARY FOR FILE - 04141612.D

Lab ID: SED0031-CAL7
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 11:12

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

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Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141613.D
Lab Smp Id: SED0031-CAL6 Client Smp ID: VSTD20
Inj Date : 14-APR-2016 11:33
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL6,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 11 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.435	1.434	(0.269)	341037	20.0000	21.313
173	2-Pentanone	86	6.345	6.344	(1.110)	220437	100.000	99.689
2	Chloromethane	50	1.589	1.599	(0.298)	400383	20.0000	19.955
3	Vinyl Chloride	62	1.671	1.670	(0.314)	398783	20.0000	21.100(M)
4	Bromomethane	94	1.955	1.954	(0.367)	256208	20.0000	20.245
5	Chloroethane	64	2.062	2.061	(0.387)	95902	20.0000	21.970
6	Trichlorofluoromethane	101	2.180	2.191	(0.409)	431078	20.0000	20.272
7	1,1-Dichloroethene	61	2.689	2.700	(0.505)	456087	20.0000	20.170
8	Carbon Disulfide	76	2.701	2.700	(0.507)	1048657	20.0000	20.557
9	112Trichloro122Trifluoroethane	101	2.748	2.747	(0.516)	308132	20.0000	20.089
10	Iodomethane	142	2.831	2.842	(0.531)	209259	20.0000	18.650
11	Bromoethane	108	2.973	2.984	(0.558)	225671	20.0000	20.127
12	Acrolein	56	3.091	3.090	(0.580)	243625	100.000	98.975
13	Methylene Chloride	84	3.340	3.339	(0.627)	330271	20.0000	19.841
14	Acetone	43	3.434	3.434	(0.645)	341201	100.000	95.785
15	Trans-1,2-Dichloroethene	96	3.505	3.505	(0.658)	337029	20.0000	20.220
17	Methyl tert butyl ether	73	3.647	3.658	(0.685)	884530	20.0000	20.730
18	1,1-Dichloroethane	63	4.097	4.096	(0.769)	635330	20.0000	20.585
19	Acrylonitrile	53	4.168	4.179	(0.782)	109895	20.0000	21.018
20	Vinyl Acetate	43	4.357	4.357	(0.818)	693432	20.0000	19.536
22	Cis-1,2-Dichloroethene	96	4.570	4.570	(0.858)	377948	20.0000	20.593
23	2,2-Dichloropropane	77	4.653	4.652	(0.873)	503691	20.0000	21.546

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.736	4.735	(0.889)	174829	20.0000	21.132
	25 Chloroform	83	4.807	4.806	(0.902)	606639	20.0000	20.780
	26 Carbon Tetrachloride	117	4.890	4.889	(0.855)	415819	20.0000	17.897
$	27 Dibromofluoromethane	111	4.949	4.948	(0.929)	72703	5.00000	5.192
	28 1,1,1-Trichloroethane	97	4.949	4.948	(0.929)	551568	20.0000	21.360
	29 2-Butanone	43	5.067	5.066	(0.951)	672891	100.000	100.38
	30 1,1-Dichloropropene	75	5.044	5.043	(0.882)	470196	20.0000	20.380
	31 Benzene	78	5.245	5.244	(0.917)	1442238	20.0000	20.327
*	32 Pentafluorobenzene	168	5.328	5.327	(1.000)	296488	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.351	5.350	(1.004)	86707	5.00000	5.186
	34 1,2-Dichloroethane	62	5.399	5.410	(0.944)	445731	20.0000	20.151
	36 Trichloroethene	130	5.683	5.682	(0.994)	373634	20.0000	20.046
*	37 1,4-Difluorobenzene	114	5.718	5.717	(1.000)	466829	10.0000	
	38 Dibromomethane	93	5.990	5.989	(1.048)	181904	20.0000	20.020
	39 1,2-Dichloropropane	63	6.061	6.060	(1.060)	345560	20.0000	20.313
	40 Bromodichloromethane	83	6.109	6.108	(1.068)	434913	20.0000	22.038
	41 2-Chloroethyl Vinyl Ether	63	6.523	6.522	(1.141)	205545	20.0000	21.444
	42 Cis 1,3-dichloropropene	75	6.558	6.557	(1.147)	525226	20.0000	22.274
$	43 d8-Toluene	98	6.688	6.688	(1.170)	282340	5.00000	5.019
	44 Toluene	92	6.724	6.723	(1.176)	896331	20.0000	19.672
	45 4-Methyl-2-Pentanone	58	6.996	6.995	(1.223)	596128	100.000	101.22
	46 Tetrachloroethene	166	6.984	6.995	(0.898)	384204	20.0000	20.218
	47 Trans 1,3-Dichloropropene	75	7.020	7.019	(1.228)	451153	20.0000	18.313
	48 1,1,2-Trichloroethane	97	7.126	7.125	(1.246)	290774	20.0000	20.758
	49 Chlorodibromomethane	129	7.256	7.256	(0.933)	309211	20.0000	17.885
	50 1,3-Dichloropropane	76	7.316	7.315	(0.941)	504699	20.0000	20.819
	51 1,2-Dibromoethane	107	7.422	7.421	(1.298)	281360	20.0000	21.468
	52 2-Hexanone	43	7.576	7.575	(0.974)	1024013	100.000	104.78
*	53 d5-Chlorobenzene	117	7.777	7.776	(1.000)	417580	10.0000	
	54 Chlorobenzene	112	7.789	7.788	(1.002)	990145	20.0000	20.308
	55 Ethyl Benzene	106	7.801	7.800	(1.003)	561031	20.0000	20.580
	56 1,1,1,2-Tetrachloroethane	131	7.836	7.835	(1.008)	322190	20.0000	22.517
	57 m,p-xylene	106	7.907	7.906	(1.017)	1368875	40.0000	42.596
	58 o-Xylene	106	8.215	8.214	(1.056)	657009	20.0000	21.101
	59 Styrene	104	8.250	8.250	(1.061)	1128526	20.0000	22.470
	60 Bromoform	173	8.274	8.285	(0.873)	174435	20.0000	16.671
	61 Isopropyl Benzene	105	8.440	8.439	(0.890)	1683418	20.0000	20.651
$	62 4-Bromofluorobenzene	174	8.653	8.651	(1.113)	87256	5.00000	5.096
	63 Bromobenzene	156	8.724	8.734	(0.920)	428429	20.0000	19.987
	64 N-Propyl Benzene	91	8.747	8.746	(0.923)	1875629	20.0000	20.528
	65 1,1,2,2-Tetrachloroethane	83	8.795	8.794	(0.928)	350022	20.0000	21.045
	66 2-Chloro Toluene	91	8.854	8.865	(0.934)	1336935	20.0000	20.180
	67 1,3,5-Trimethyl Benzene	105	8.889	8.888	(0.938)	1418739	20.0000	20.928
	68 1,2,3-Trichloropropane	110	8.901	8.900	(0.939)	112574	20.0000	20.654
	69 Trans-1,4-Dichloro 2-Butene	53	8.925	8.936	(0.941)	87927	20.0000	20.596
	70 4-Chloro Toluene	91	8.984	8.983	(0.948)	1221030	20.0000	19.859
	71 T-Butyl Benzene	119	9.126	9.125	(0.963)	1228515	20.0000	20.677
	72 1,2,4-Trimethylbenzene	105	9.173	9.172	(0.968)	1437489	20.0000	21.032
	73 S-Butyl Benzene	105	9.256	9.255	(0.976)	1743138	20.0000	20.853
	74 4-Isopropyl Toluene	119	9.363	9.362	(0.988)	1490515	20.0000	21.217
	75 1,3-Dichlorobenzene	146	9.422	9.421	(0.994)	822236	20.0000	19.828
*	76 d4-1,4-Dichlorobenzene	152	9.481	9.480	(1.000)	234422	10.0000	
	77 1,4-Dichlorobenzene	146	9.493	9.492	(1.001)	836087	20.0000	19.543 (M)
	78 N-Butyl Benzene	91	9.682	9.693	(1.021)	1303259	20.0000	21.249

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.812	9.811	(1.035)	110809	5.00000	4.960
80 1,2-Dichlorobenzene	146	9.812	9.811	(1.035)	773968	20.0000	19.689
81 1,2-Dibromo 3-Chloropropane	75	10.439	10.450	(1.101)	55399	20.0000	17.743
83 Hexachloro 1,3-Butadiene	225	10.972	10.971	(1.157)	203801	20.0000	19.869
84 1,2,4-Trichlorobenzene	180	10.996	10.995	(1.160)	521886	20.0000	19.716
85 Naphthalene	128	11.268	11.267	(1.188)	1216607	20.0000	21.052
86 1,2,3-Trichlorobenzene	180	11.422	11.420	(1.205)	488089	20.0000	19.635

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141613.D
Lab Smp Id: SED0031-CAL6
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD20
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	296488	6.12
37 1,4-Difluorobenze	430036	215018	860072	466829	8.56
53 d5-Chlorobenzene	398095	199048	796190	417580	4.89
76 d4-1,4-Dichlorobe	214594	107297	429188	234422	9.24

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.03
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

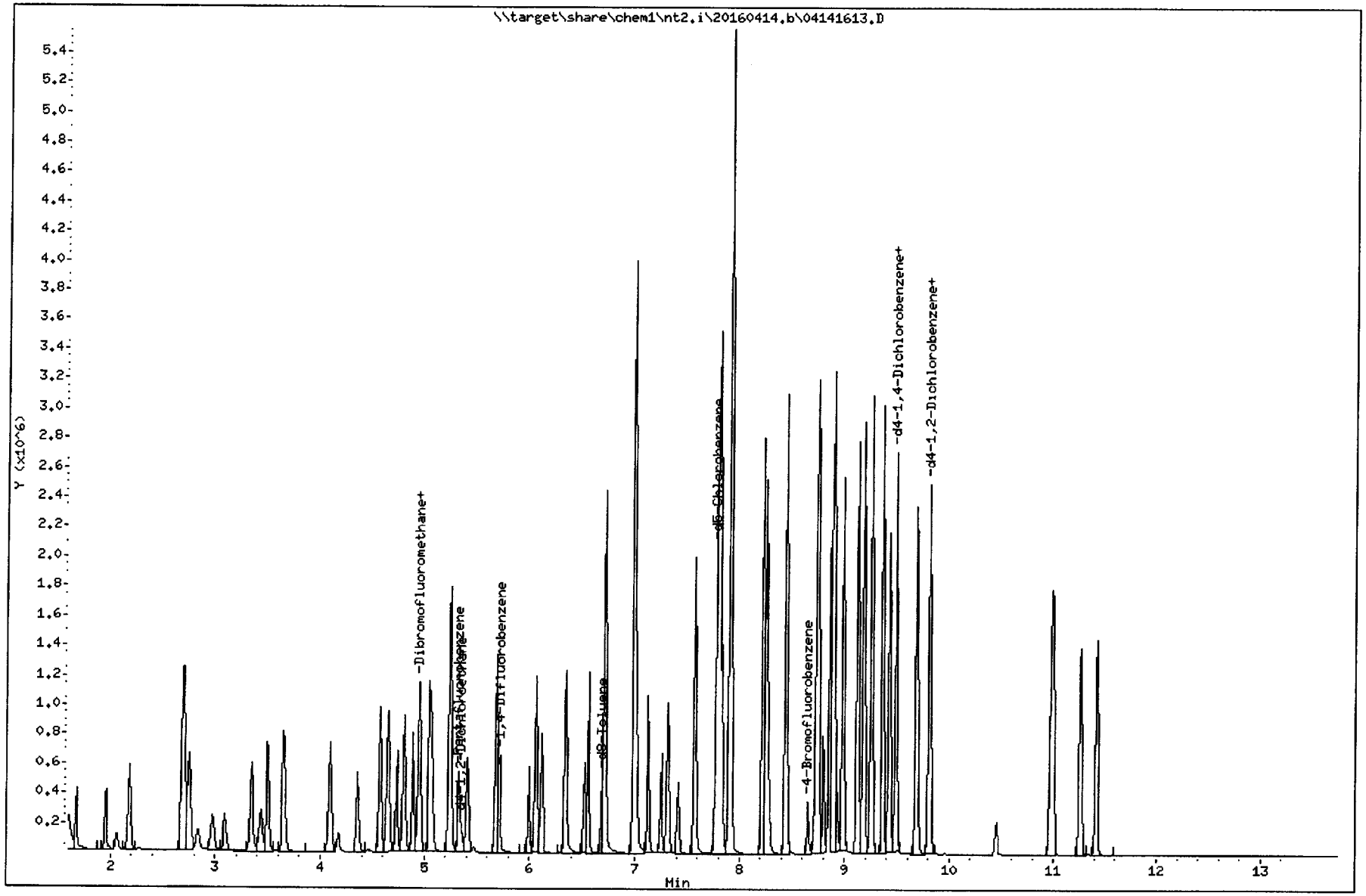
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160414.b\04141613.D
Date : 14-APR-2016 11:33
Client ID: VSTD20
Sample Info: SED0031-CAL6,10,10,0,

Instrument: nt2.i

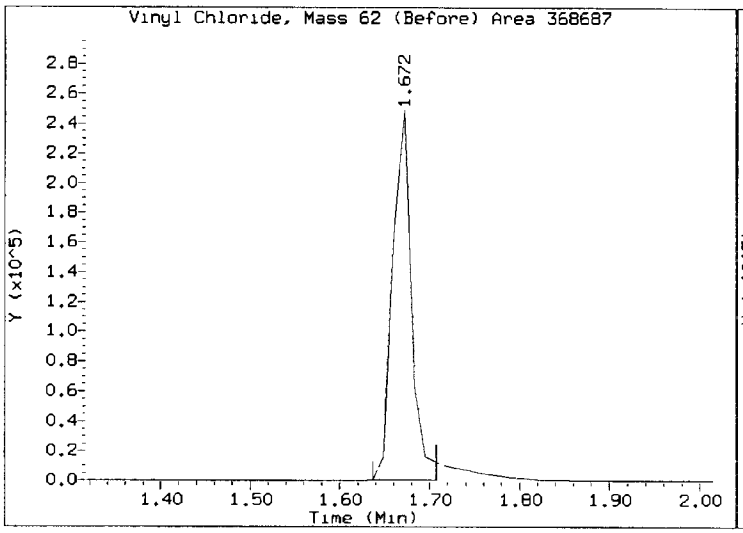
Operator: LH
Column diameter: 0.18

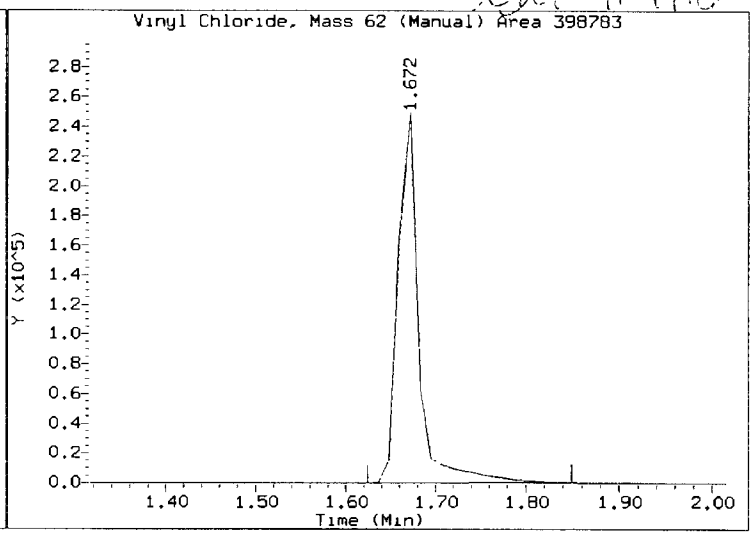
Column phase: RTXVMS

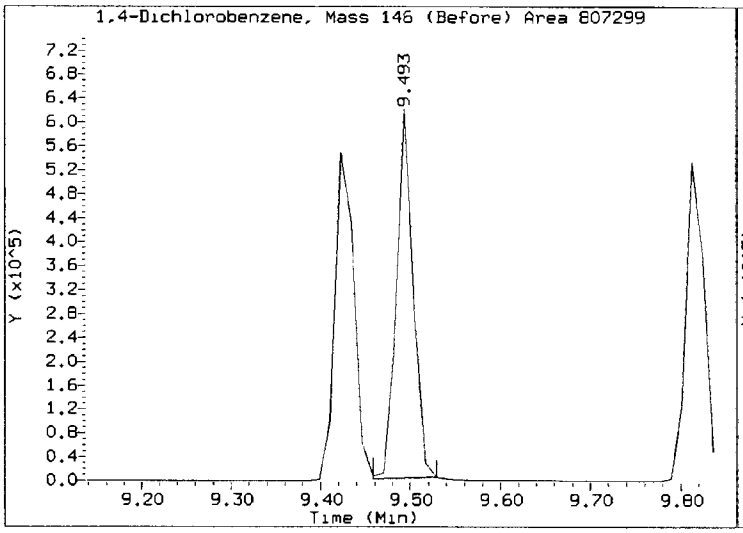


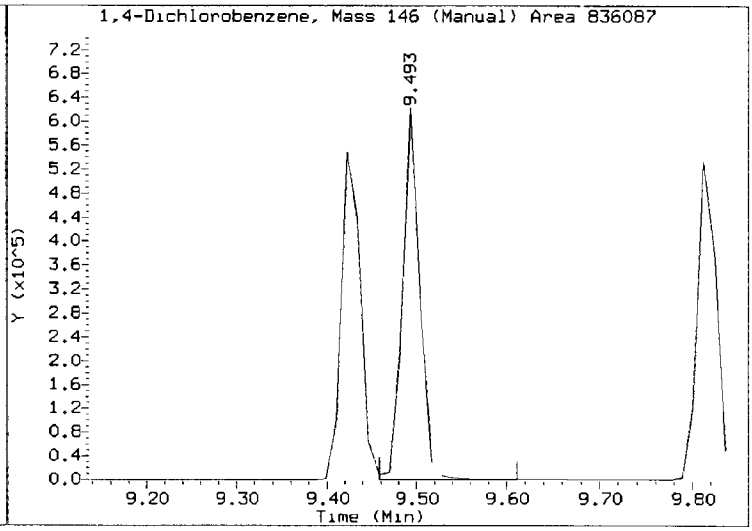
Quant Ion Manual Peak Adjustment Report

Datafile: \\target\share\chem1\nt2.i\20160414.b\04141613.D
Injection Date: 14-APR-2016 11:33
Lab ID:SED0031-CAL6 Client ID:VSTD20
Report Date: 04/14/2016 12:43









REVIEW SUMMARY FOR FILE - 04141613.D

Lab ID: SED0031-CAL6
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 11:33

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

Exception: Acrolein 0.0000
Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141614.D
Lab Smp Id: SED0031-CAL5 Client Smp ID: VSTD10
Inj Date : 14-APR-2016 11:54
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL5,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 12 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.433	1.434	(0.269)	163542	10.0000	10.846(M)
173	2-Pentanone	86	6.344	6.344	(1.110)	101793	50.0000	49.973
2	Chloromethane	50	1.599	1.599	(0.300)	189062	10.0000	9.999
3	Vinyl Chloride	62	1.670	1.670	(0.314)	188975	10.0000	10.611(M)
4	Bromomethane	94	1.954	1.954	(0.367)	125981	10.0000	10.564
5	Chloroethane	64	2.060	2.061	(0.387)	49016	10.0000	11.916
6	Trichlorofluoromethane	101	2.191	2.191	(0.411)	208849	10.0000	10.422
7	1,1-Dichloroethene	61	2.699	2.700	(0.507)	217595	10.0000	10.212
8	Carbon Disulfide	76	2.699	2.700	(0.507)	506921	10.0000	10.545
9	112Trichloro122Trifluoroethane	101	2.747	2.747	(0.516)	147112	10.0000	10.178
10	Iodomethane	142	2.841	2.842	(0.533)	79717	10.0000	7.757
11	Bromoethane	108	2.983	2.984	(0.560)	107294	10.0000	10.155
12	Acrolein	56	3.090	3.090	(0.580)	114709	50.0000	49.452
13	Methylene Chloride	84	3.338	3.339	(0.627)	157635	10.0000	10.049
14	Acetone	43	3.433	3.434	(0.645)	164276	50.0000	48.938
15	Trans-1,2-Dichloroethene	96	3.504	3.505	(0.658)	160900	10.0000	10.244
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	419440	10.0000	10.431
18	1,1-Dichloroethane	63	4.096	4.096	(0.769)	298078	10.0000	10.249
19	Acrylonitrile	53	4.179	4.179	(0.785)	50283	10.0000	10.205
20	Vinyl Acetate	43	4.356	4.357	(0.818)	318780	10.0000	9.531
22	Cis-1,2-Dichloroethene	96	4.569	4.570	(0.858)	178703	10.0000	10.333
23	2,2-Dichloropropane	77	4.652	4.652	(0.873)	232105	10.0000	10.536

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.735	4.735	(0.889)	81780	10.0000	10.490
	25 Chloroform	83	4.806	4.806	(0.902)	282124	10.0000	10.255
	26 Carbon Tetrachloride	117	4.889	4.889	(0.855)	183821	10.0000	8.588
$	27 Dibromofluoromethane	111	4.948	4.948	(0.929)	67467	5.00000	5.112
	28 1,1,1-Trichloroethane	97	4.948	4.948	(0.929)	257375	10.0000	10.577
	29 2-Butanone	43	5.066	5.066	(0.951)	311144	50.0000	49.257
	30 1,1-Dichloropropene	75	5.042	5.043	(0.882)	221757	10.0000	10.434
	31 Benzene	78	5.243	5.244	(0.917)	689825	10.0000	10.554
*	32 Pentafluorobenzene	168	5.326	5.327	(1.000)	279395	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	79831	5.00000	5.067
	34 1,2-Dichloroethane	62	5.409	5.410	(0.946)	212078	10.0000	10.408
	36 Trichloroethene	130	5.681	5.682	(0.994)	174740	10.0000	10.177
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	430036	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	87790	10.0000	10.489
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	165435	10.0000	10.557
	40 Bromodichloromethane	83	6.107	6.108	(1.068)	196324	10.0000	10.799
	41 2-Chloroethyl Vinyl Ether	63	6.521	6.522	(1.141)	92957	10.0000	10.528
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	239551	10.0000	11.028
$	43 d8-Toluene	98	6.687	6.688	(1.170)	260817	5.00000	5.033
	44 Toluene	92	6.723	6.723	(1.176)	430516	10.0000	10.257
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	274706	50.0000	50.634
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	179410	10.0000	9.903
	47 Trans 1,3-Dichloropropene	75	7.018	7.019	(1.228)	204812	10.0000	9.025
	48 1,1,2-Trichloroethane	97	7.125	7.125	(1.246)	135800	10.0000	10.524
	49 Chlorodibromomethane	129	7.255	7.256	(0.933)	136018	10.0000	8.252
	50 1,3-Dichloropropane	76	7.314	7.315	(0.941)	241512	10.0000	10.450
	51 1,2-Dibromoethane	107	7.421	7.421	(1.298)	132040	10.0000	10.937
	52 2-Hexanone	43	7.575	7.575	(0.974)	482209	50.0000	51.757
*	53 d5-Chlorobenzene	117	7.776	7.776	(1.000)	398095	10.0000	
	54 Chlorobenzene	112	7.788	7.788	(1.002)	468785	10.0000	10.086
	55 Ethyl Benzene	106	7.799	7.800	(1.003)	262186	10.0000	10.088
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	144894	10.0000	10.622
	57 m,p-xylene	106	7.906	7.906	(1.017)	653293	20.0000	21.324
	58 o-Xylene	106	8.214	8.214	(1.056)	314606	10.0000	10.599
	59 Styrene	104	8.249	8.250	(1.061)	533140	10.0000	11.135
	60 Bromoform	173	8.285	8.285	(0.874)	73472	10.0000	7.671
	61 Isopropyl Benzene	105	8.438	8.439	(0.890)	818362	10.0000	10.967
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	81249	5.00000	4.977
	63 Bromobenzene	156	8.734	8.734	(0.921)	201981	10.0000	10.293
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	919164	10.0000	10.990
	65 1,1,2,2-Tetrachloroethane	83	8.793	8.794	(0.928)	162760	10.0000	10.690
	66 2-Chloro Toluene	91	8.864	8.865	(0.935)	638457	10.0000	10.528
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	687177	10.0000	11.073
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	52028	10.0000	10.428
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.936	(0.943)	39791	10.0000	10.182
	70 4-Chloro Toluene	91	8.983	8.983	(0.948)	589258	10.0000	10.469
	71 T-Butyl Benzene	119	9.125	9.125	(0.963)	597974	10.0000	10.995
	72 1,2,4-Trimethylbenzene	105	9.172	9.172	(0.968)	691507	10.0000	11.052
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	851250	10.0000	11.124
	74 4-Isopropyl Toluene	119	9.361	9.362	(0.988)	721338	10.0000	11.217
	75 1,3-Dichlorobenzene	146	9.420	9.421	(0.994)	396669	10.0000	10.449
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.480	(1.000)	214594	10.0000	
	77 1,4-Dichlorobenzene	146	9.491	9.492	(1.001)	397764	10.0000	10.157(M)
	78 N-Butyl Benzene	91	9.693	9.693	(1.022)	617427	10.0000	10.997

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	104783	5.00000	5.124
80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	367038	10.0000	10.200
81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	24137	10.0000	8.445
83 Hexachloro 1,3-Butadiene	225	10.971	10.971	(1.157)	94912	10.0000	10.108
84 1,2,4-Trichlorobenzene	180	10.994	10.995	(1.160)	245596	10.0000	10.135
85 Naphthalene	128	11.266	11.267	(1.188)	574961	10.0000	10.868
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	233928	10.0000	10.280

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141614.D
Lab Smp Id: SED0031-CAL5
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD10
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	279395	0.00
37 1,4-Difluorobenze	430036	215018	860072	430036	0.00
53 d5-Chlorobenzene	398095	199048	796190	398095	0.00
76 d4-1,4-Dichlorobe	214594	107297	429188	214594	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

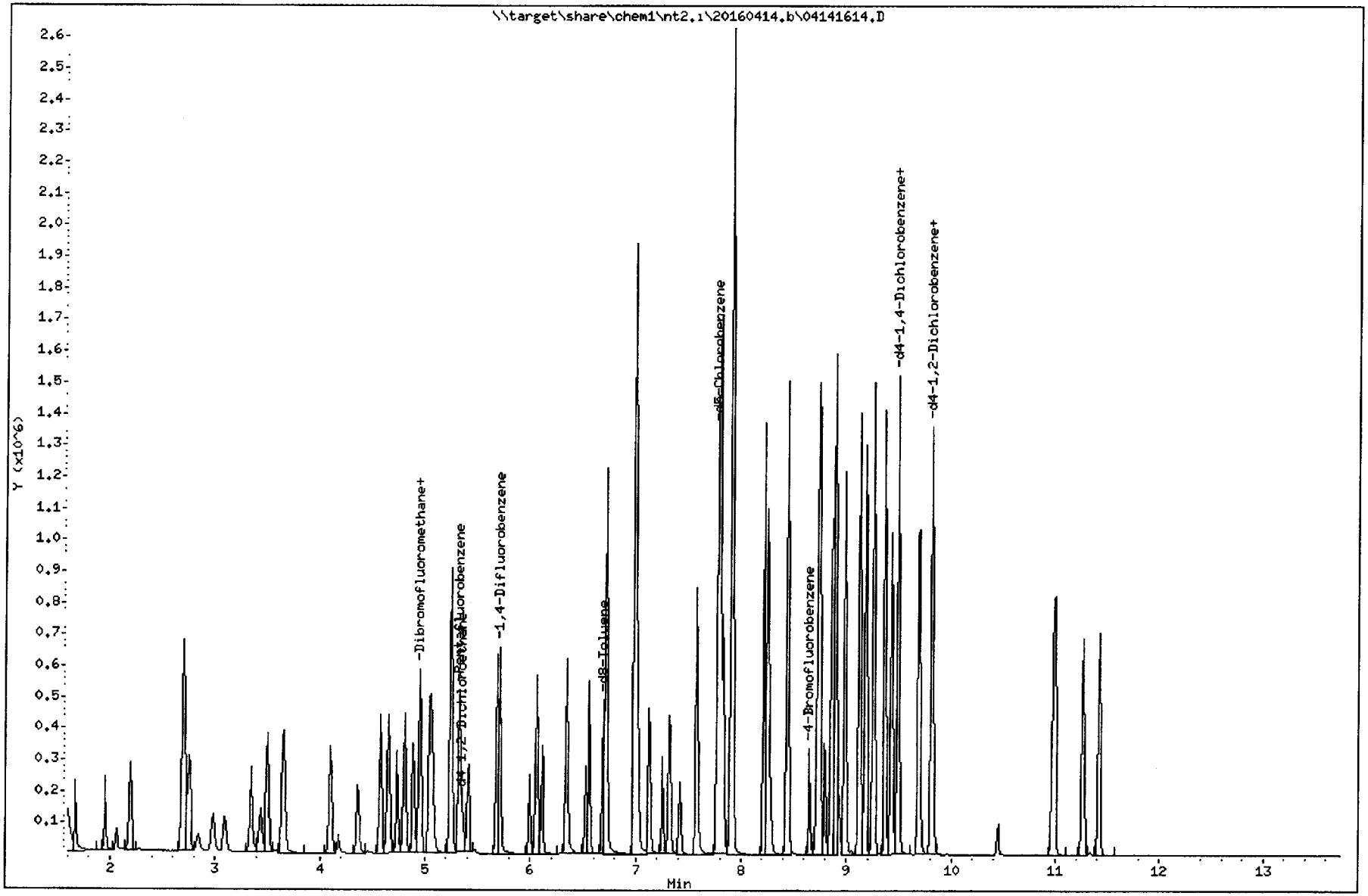
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160414.b\04141614.D
Date : 14-APR-2016 11:54
Client ID: VSTD10
Sample Info: SED0031-CAL5,10,10,0,

Instrument: nt2.1

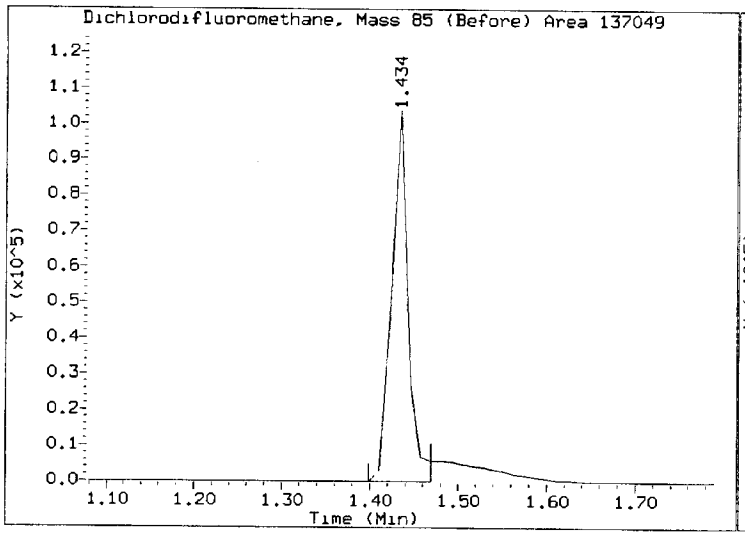
Operator: LH
Column diameter: 0.18

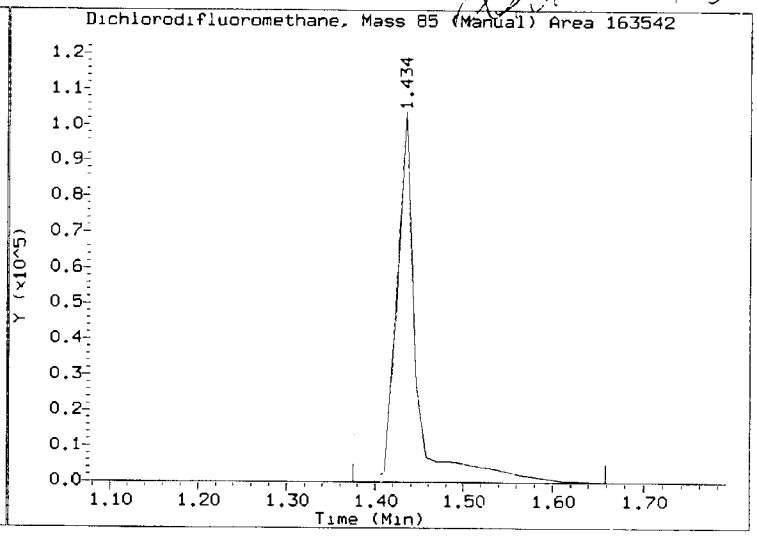
Column phase: RTXVMS

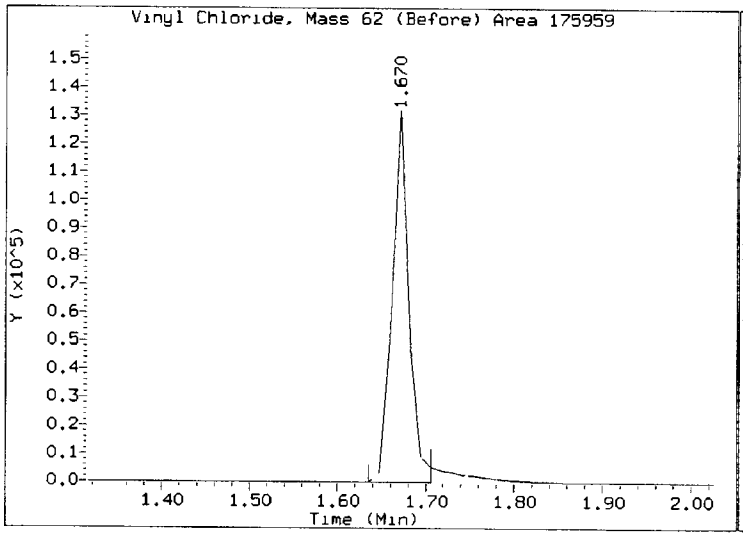


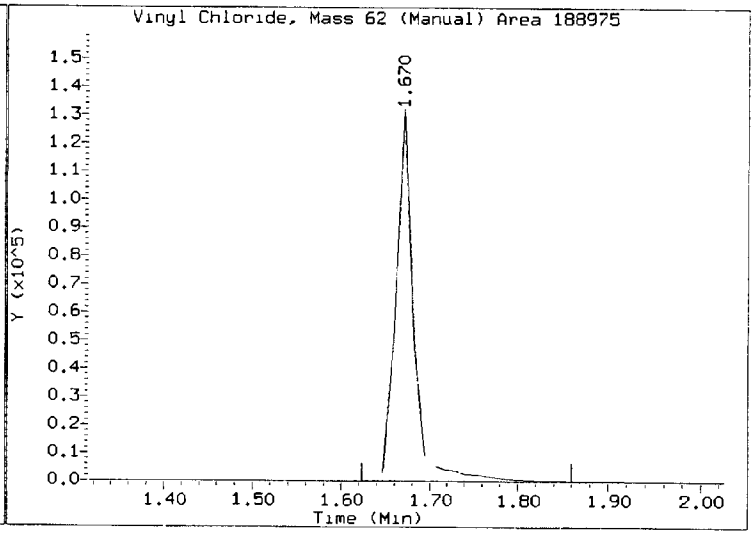
Quant Ion Manual Peak Adjustment Report

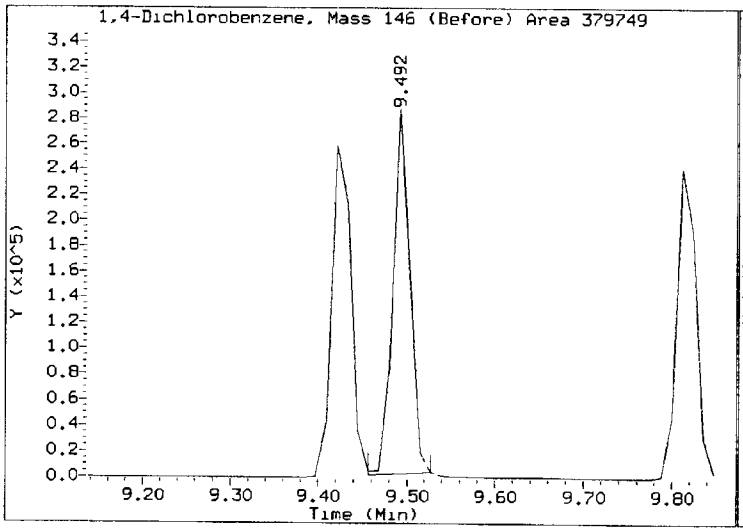
Datafile: \\target\share\chem1\nt2.i\20160414.b\04141614.D
Injection Date: 14-APR-2016 11:54
Lab ID:SED0031-CAL5 Client ID:VSTD10
Report Date: 04/14/2016 12:42

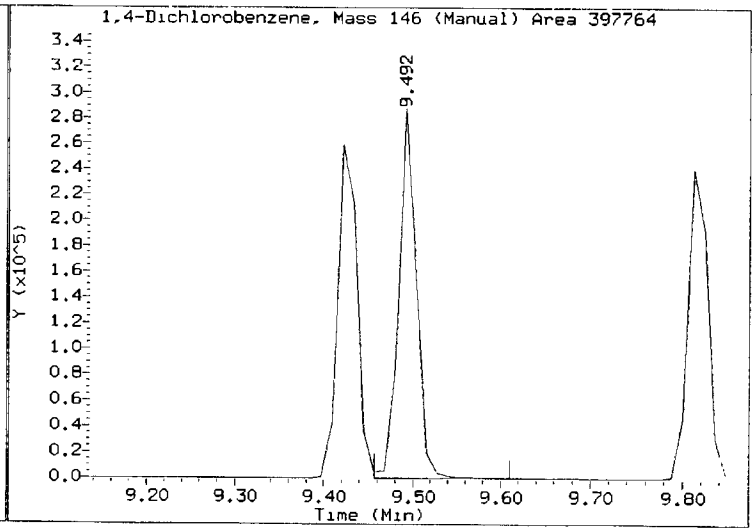












REVIEW SUMMARY FOR FILE - 04141614.D

Lab ID: SED0031-CAL5
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 11:54

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

Exception: Acrolein 0.0000
Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141615.D
Lab Smp Id: SED0031-CAL4 Client Smp ID: VSTD02
Inj Date : 14-APR-2016 12:16
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL4,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.434	1.434	(0.269)	29953	2.00000	1.901(M)
173 2-Pentanone	86	6.344	6.344	(1.110)	19398	10.0000	9.188
2 Chloromethane	50	1.587	1.599	(0.298)	39288	2.00000	1.989
3 Vinyl Chloride	62	1.670	1.670	(0.314)	37331	2.00000	2.006
4 Bromomethane	94	1.954	1.954	(0.367)	25927	2.00000	2.081
5 Chloroethane	64	2.061	2.061	(0.387)	9925	2.00000	2.309
6 Trichlorofluoromethane	101	2.179	2.191	(0.409)	42955	2.00000	2.052
7 1,1-Dichloroethene	61	2.688	2.700	(0.505)	46189	2.00000	2.075
8 Carbon Disulfide	76	2.700	2.700	(0.507)	106865	2.00000	2.128
9 112Trichloro122Trifluoroethane	101	2.747	2.747	(0.516)	31492	2.00000	2.085
10 Iodomethane	142	2.830	2.842	(0.531)	10576	2.00000	1.001
11 Bromoethane	108	2.972	2.984	(0.558)	23091	2.00000	2.092
12 Acrolein	56	3.090	3.090	(0.580)	24512	10.0000	10.114
13 Methylene Chloride	84	3.339	3.339	(0.627)	31948	2.00000	1.949
14 Acetone	43	3.433	3.434	(0.645)	36902	10.0000	10.522
15 Trans-1,2-Dichloroethene	96	3.504	3.505	(0.658)	34473	2.00000	2.101
17 Methyl tert butyl ether	73	3.658	3.658	(0.687)	87400	2.00000	2.080
18 1,1-Dichloroethane	63	4.096	4.096	(0.769)	64677	2.00000	2.128
19 Acrylonitrile	53	4.179	4.179	(0.785)	10177	2.00000	1.977
20 Vinyl Acetate	43	4.356	4.357	(0.818)	59348	2.00000	1.698
22 Cis-1,2-Dichloroethene	96	4.569	4.570	(0.858)	37997	2.00000	2.103
23 2,2-Dichloropropane	77	4.652	4.652	(0.873)	45716	2.00000	1.986

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.735	4.735	(0.889)	17483	2.00000	2.146
	25 Chloroform	83	4.806	4.806	(0.902)	60315	2.00000	2.098
	26 Carbon Tetrachloride	117	4.889	4.889	(0.855)	33763	2.00000	1.522
$	27 Dibromofluoromethane	111	4.948	4.948	(0.929)	67663	5.00000	4.907
	28 1,1,1-Trichloroethane	97	4.948	4.948	(0.929)	51052	2.00000	2.008
	29 2-Butanone	43	5.078	5.066	(0.953)	66734	10.0000	10.111
	30 1,1-Dichloropropene	75	5.043	5.043	(0.882)	47114	2.00000	2.139
	31 Benzene	78	5.244	5.244	(0.917)	146709	2.00000	2.166
*	32 Pentafluorobenzene	168	5.327	5.327	(1.000)	291921	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	82560	5.00000	5.015
	34 1,2-Dichloroethane	62	5.409	5.410	(0.946)	45043	2.00000	2.133
	36 Trichloroethene	130	5.682	5.682	(0.994)	37478	2.00000	2.106
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	445732	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	18482	2.00000	2.130
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	33688	2.00000	2.074
	40 Bromodichloromethane	83	6.107	6.108	(1.068)	37553	2.00000	1.993
	41 2-Chloroethyl Vinyl Ether	63	6.522	6.522	(1.141)	17509	2.00000	1.913
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	45799	2.00000	2.034
$	43 d8-Toluene	98	6.687	6.688	(1.170)	270966	5.00000	5.044
	44 Toluene	92	6.723	6.723	(1.176)	90914	2.00000	2.090
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	56108	10.0000	9.978
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	38072	2.00000	2.058
	47 Trans 1,3-Dichloropropene	75	7.019	7.019	(1.228)	36081	2.00000	1.534
	48 1,1,2-Trichloroethane	97	7.125	7.125	(1.246)	28342	2.00000	2.119
	49 Chlorodibromomethane	129	7.255	7.256	(0.933)	24125	2.00000	1.433
	50 1,3-Dichloropropane	76	7.326	7.315	(0.942)	50681	2.00000	2.147
	51 1,2-Dibromoethane	107	7.421	7.421	(1.298)	26123	2.00000	2.088
	52 2-Hexanone	43	7.587	7.575	(0.976)	92297	10.0000	9.700
*	53 d5-Chlorobenzene	117	7.776	7.776	(1.000)	406578	10.0000	
	54 Chlorobenzene	112	7.788	7.788	(1.002)	100103	2.00000	2.109
	55 Ethyl Benzene	106	7.800	7.800	(1.003)	55841	2.00000	2.104
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	26292	2.00000	1.887
	57 m,p-xylene	106	7.906	7.906	(1.017)	135404	4.00000	4.327
	58 o-Xylene	106	8.214	8.214	(1.056)	63521	2.00000	2.095
	59 Styrene	104	8.261	8.250	(1.062)	104480	2.00000	2.137
	60 Bromoform	173	8.285	8.285	(0.874)	11432	2.00000	1.164
	61 Isopropyl Benzene	105	8.439	8.439	(0.890)	164942	2.00000	2.155
$	62 4-Bromofluorobenzene	174	8.652	8.651	(1.113)	83545	5.00000	5.011
	63 Bromobenzene	156	8.734	8.734	(0.921)	42590	2.00000	2.116
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	188380	2.00000	2.196
	65 1,1,2,2-Tetrachloroethane	83	8.794	8.794	(0.928)	32165	2.00000	2.060
	66 2-Chloro Toluene	91	8.865	8.865	(0.935)	130515	2.00000	2.098
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	137687	2.00000	2.163
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	10839	2.00000	2.118
	69 Trans-1,4-Dichloro 2-Butene	53	8.936	8.936	(0.943)	7410	2.00000	1.849
	70 4-Chloro Toluene	91	8.983	8.983	(0.948)	124153	2.00000	2.151
	71 T-Butyl Benzene	119	9.125	9.125	(0.963)	119939	2.00000	2.150
	72 1,2,4-Trimethylbenzene	105	9.172	9.172	(0.968)	138009	2.00000	2.151
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	169855	2.00000	2.164
	74 4-Isopropyl Toluene	119	9.362	9.362	(0.988)	144095	2.00000	2.185
	75 1,3-Dichlorobenzene	146	9.421	9.421	(0.994)	81565	2.00000	2.095
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.480	(1.000)	220104	10.0000	
	77 1,4-Dichlorobenzene	146	9.492	9.492	(1.001)	83100	2.00000	2.069
	78 N-Butyl Benzene	91	9.693	9.693	(1.022)	119425	2.00000	2.074

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	103980	5.00000	4.957
80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	76467	2.00000	2.072
81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	4012	2.00000	1.369
83 Hexachloro 1,3-Butadiene	225	10.971	10.971	(1.157)	19767	2.00000	2.052
84 1,2,4-Trichlorobenzene	180	10.994	10.995	(1.160)	49149	2.00000	1.978
85 Naphthalene	128	11.267	11.267	(1.188)	109354	2.00000	2.015
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	47322	2.00000	2.028

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141615.D
Lab Smp Id: SED0031-CAL4
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD02
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	291921	4.48
37 1,4-Difluorobenze	430036	215018	860072	445732	3.65
53 d5-Chlorobenzene	398095	199048	796190	406578	2.13
76 d4-1,4-Dichlorobe	214594	107297	429188	220104	2.57

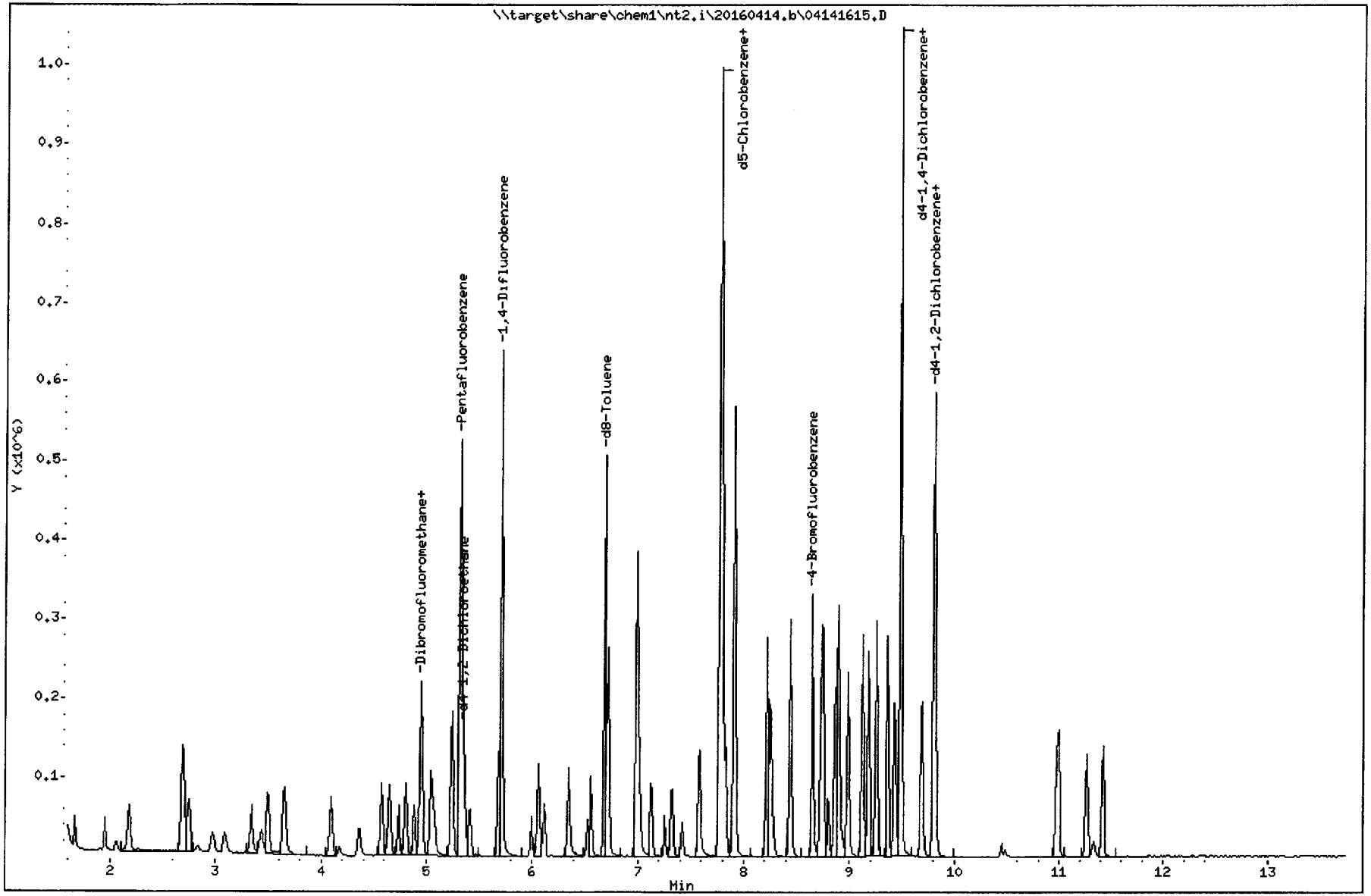
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160414.b\04141615.D
Date : 14-APR-2016 12:16
Client ID: VSTD02
Sample Info: SED0031-CAL4,10,10,0,

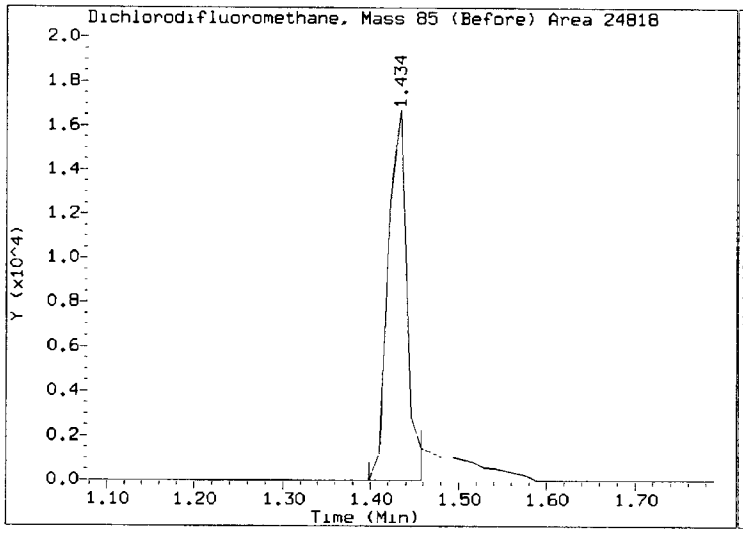
Instrument: nt2.i

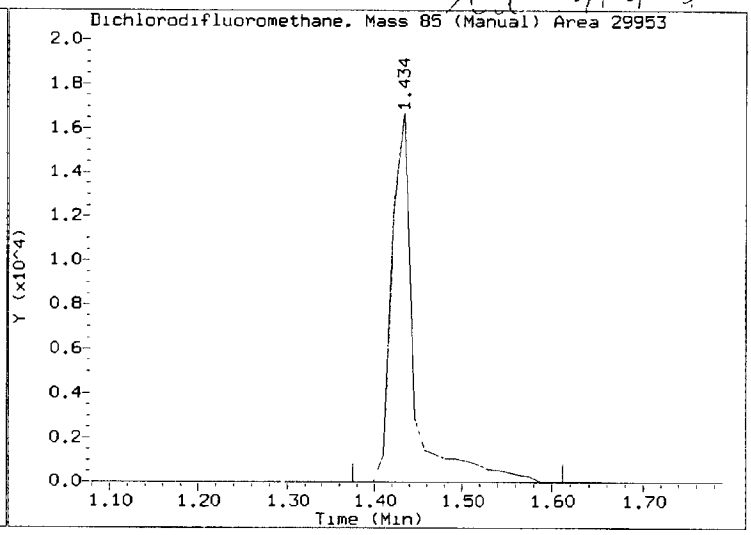
Operator: LH
Column phase: RTXVMS
Column diameter: 0.18



Quant Ion Manual Peak Adjustment Report

Datafile: \\target\share\chem1\nt2.i\20160414.b\04141615.D
Injection Date: 14-APR-2016 12:16
Lab ID:SED0031-CAL4 Client ID:VSTD02
Report Date: 04/14/2016 12:42





REVIEW SUMMARY FOR FILE - 04141615.D

Lab ID: SED0031-CAL4
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 12:16

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

Exception: Acrolein 0.0000
Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141616.D
Lab Smp Id: SED0031-CAL3 Client Smp ID: VSTD01
Inj Date : 14-APR-2016 12:37
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-CAL3,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 14 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: mdl.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.433	1.434	(0.269)	16181	1.00000	1.027(M)
173	2-Pentanone	86	6.344	6.344	(1.110)	9104	5.00000	4.229(M)
2	Chloromethane	50	1.599	1.599	(0.300)	19930	1.00000	1.008
3	Vinyl Chloride	62	1.670	1.670	(0.314)	18579	1.00000	0.9981(M)
4	Bromomethane	94	1.954	1.954	(0.367)	13621	1.00000	1.093(T)
5	Chloroethane	64	2.060	2.061	(0.387)	5634	1.00000	1.310
6	Trichlorofluoromethane	101	2.190	2.191	(0.411)	22007	1.00000	1.051
7	1,1-Dichloroethene	61	2.699	2.700	(0.507)	23019	1.00000	1.034
8	Carbon Disulfide	76	2.699	2.700	(0.507)	53639	1.00000	1.068
9	112Trichloro122Trifluoroethane	101	2.746	2.747	(0.516)	15407	1.00000	1.020
10	Iodomethane	142	2.841	2.842	(0.533)	4359	1.00000	0.4132
11	Bromoethane	108	2.983	2.984	(0.560)	11778	1.00000	1.066
12	Acrolein	56	3.090	3.090	(0.580)	11817	5.00000	4.874
13	Methylene Chloride	84	3.350	3.339	(0.629)	16392	1.00000	0.9998(M)
14	Acetone	43	3.433	3.434	(0.645)	18718	5.00000	5.335
15	Trans-1,2-Dichloroethene	96	3.504	3.505	(0.658)	17768	1.00000	1.082
17	Methyl tert butyl ether	73	3.658	3.658	(0.687)	43300	1.00000	1.030
18	1,1-Dichloroethane	63	4.095	4.096	(0.769)	31934	1.00000	1.050
19	Acrylonitrile	53	4.178	4.179	(0.785)	4859	1.00000	0.9435(T)
20	Vinyl Acetate	43	4.367	4.357	(0.820)	28218	1.00000	0.8071
22	Cis-1,2-Dichloroethene	96	4.580	4.570	(0.860)	17794	1.00000	0.9844
23	2,2-Dichloropropane	77	4.651	4.652	(0.873)	21111	1.00000	0.9168

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Bromochloromethane	128	4.734	4.735	(0.889)	7965	1.00000	0.9775
	25 Chloroform	83	4.805	4.806	(0.902)	29611	1.00000	1.030
	26 Carbon Tetrachloride	117	4.888	4.889	(0.855)	15869	1.00000	0.7016
$	27 Dibromofluoromethane	111	4.947	4.948	(0.929)	67675	5.00000	4.906
	28 1,1,1-Trichloroethane	97	4.947	4.948	(0.929)	24979	1.00000	0.9821
	29 2-Butanone	43	5.077	5.066	(0.953)	31533	5.00000	4.776
	30 1,1-Dichloropropene	75	5.054	5.043	(0.884)	22624	1.00000	1.007
	31 Benzene	78	5.243	5.244	(0.917)	71737	1.00000	1.039
*	32 Pentafluorobenzene	168	5.326	5.327	(1.000)	292025	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	81074	5.00000	4.923
	34 1,2-Dichloroethane	62	5.409	5.410	(0.946)	22479	1.00000	1.044 (M)
	36 Trichloroethene	130	5.681	5.682	(0.994)	17936	1.00000	0.9885
*	37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	454446	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	8637	1.00000	0.9765
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	16587	1.00000	1.002
	40 Bromodichloromethane	83	6.107	6.108	(1.068)	17877	1.00000	0.9305
	41 2-Chloroethyl Vinyl Ether	63	6.521	6.522	(1.141)	8029	1.00000	0.8605
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	20345	1.00000	0.8863
$	43 d8-Toluene	98	6.687	6.688	(1.170)	267540	5.00000	4.885
	44 Toluene	92	6.722	6.723	(1.176)	45804	1.00000	1.033
	45 4-Methyl-2-Pentanone	58	6.994	6.995	(1.224)	25905	5.00000	4.518
	46 Tetrachloroethene	166	6.994	6.995	(0.900)	18903	1.00000	1.024
	47 Trans 1,3-Dichloropropene	75	7.018	7.019	(1.228)	16672	1.00000	0.6952
	48 1,1,2-Trichloroethane	97	7.136	7.125	(1.248)	13419	1.00000	0.9841
	49 Chlorodibromomethane	129	7.255	7.256	(0.933)	10595	1.00000	0.6309
	50 1,3-Dichloropropane	76	7.326	7.315	(0.942)	24525	1.00000	1.042
	51 1,2-Dibromoethane	107	7.420	7.421	(1.298)	12163	1.00000	0.9533
	52 2-Hexanone	43	7.586	7.575	(0.976)	44333	5.00000	4.671
*	53 d5-Chlorobenzene	117	7.775	7.776	(1.000)	405581	10.0000	
	54 Chlorobenzene	112	7.787	7.788	(1.002)	50520	1.00000	1.067
	55 Ethyl Benzene	106	7.811	7.800	(1.005)	26215	1.00000	0.9901
	56 1,1,1,2-Tetrachloroethane	131	7.834	7.835	(1.008)	12797	1.00000	0.9208
	57 m,p-xylene	106	7.905	7.906	(1.017)	67021	2.00000	2.147
	58 o-Xylene	106	8.213	8.214	(1.056)	30835	1.00000	1.020
	59 Styrene	104	8.260	8.250	(1.062)	49127	1.00000	1.007
	60 Bromoform	173	8.284	8.285	(0.874)	5161	1.00000	0.5338
	61 Isopropyl Benzene	105	8.438	8.439	(0.890)	81930	1.00000	1.088
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	83435	5.00000	5.017
	63 Bromobenzene	156	8.734	8.734	(0.921)	20195	1.00000	1.020
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	91955	1.00000	1.089
	65 1,1,2,2-Tetrachloroethane	83	8.805	8.794	(0.929)	16144	1.00000	1.050
	66 2-Chloro Toluene	91	8.864	8.865	(0.935)	66407	1.00000	1.085
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	66276	1.00000	1.058
	68 1,2,3-Trichloropropane	110	8.899	8.900	(0.939)	5260	1.00000	1.044
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.936	(0.943)	3085	1.00000	0.7820
	70 4-Chloro Toluene	91	8.982	8.983	(0.948)	60682	1.00000	1.068
	71 T-Butyl Benzene	119	9.124	9.125	(0.963)	58573	1.00000	1.067
	72 1,2,4-Trimethylbenzene	105	9.172	9.172	(0.968)	66543	1.00000	1.054
	73 S-Butyl Benzene	105	9.254	9.255	(0.976)	84122	1.00000	1.089
	74 4-Isopropyl Toluene	119	9.361	9.362	(0.988)	68121	1.00000	1.049
	75 1,3-Dichlorobenzene	146	9.432	9.421	(0.995)	40443	1.00000	1.055
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.480	(1.000)	216623	10.0000	
	77 1,4-Dichlorobenzene	146	9.491	9.492	(1.001)	41569	1.00000	1.052
	78 N-Butyl Benzene	91	9.692	9.693	(1.022)	59819	1.00000	1.055

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	102976	5.00000	4.988
80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	38658	1.00000	1.064
81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	1554	1.00000	0.5386
83 Hexachloro 1,3-Butadiene	225	10.970	10.971	(1.157)	9211	1.00000	0.9718
84 1,2,4-Trichlorobenzene	180	10.994	10.995	(1.160)	24850	1.00000	1.016
85 Naphthalene	128	11.266	11.267	(1.188)	52774	1.00000	0.9882
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	23448	1.00000	1.021

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141616.D
Lab Smp Id: SED0031-CAL3
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: VSTD01
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	292025	4.52
37 1,4-Difluorobenze	430036	215018	860072	454446	5.68
53 d5-Chlorobenzene	398095	199048	796190	405581	1.88
76 d4-1,4-Dichlorobe	214594	107297	429188	216623	0.95

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.01
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	-0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\target\share\chem1\nt2.i\20160414.b\04141616.D

Date : 14-APR-2016 12:37

Client ID: VSTD01

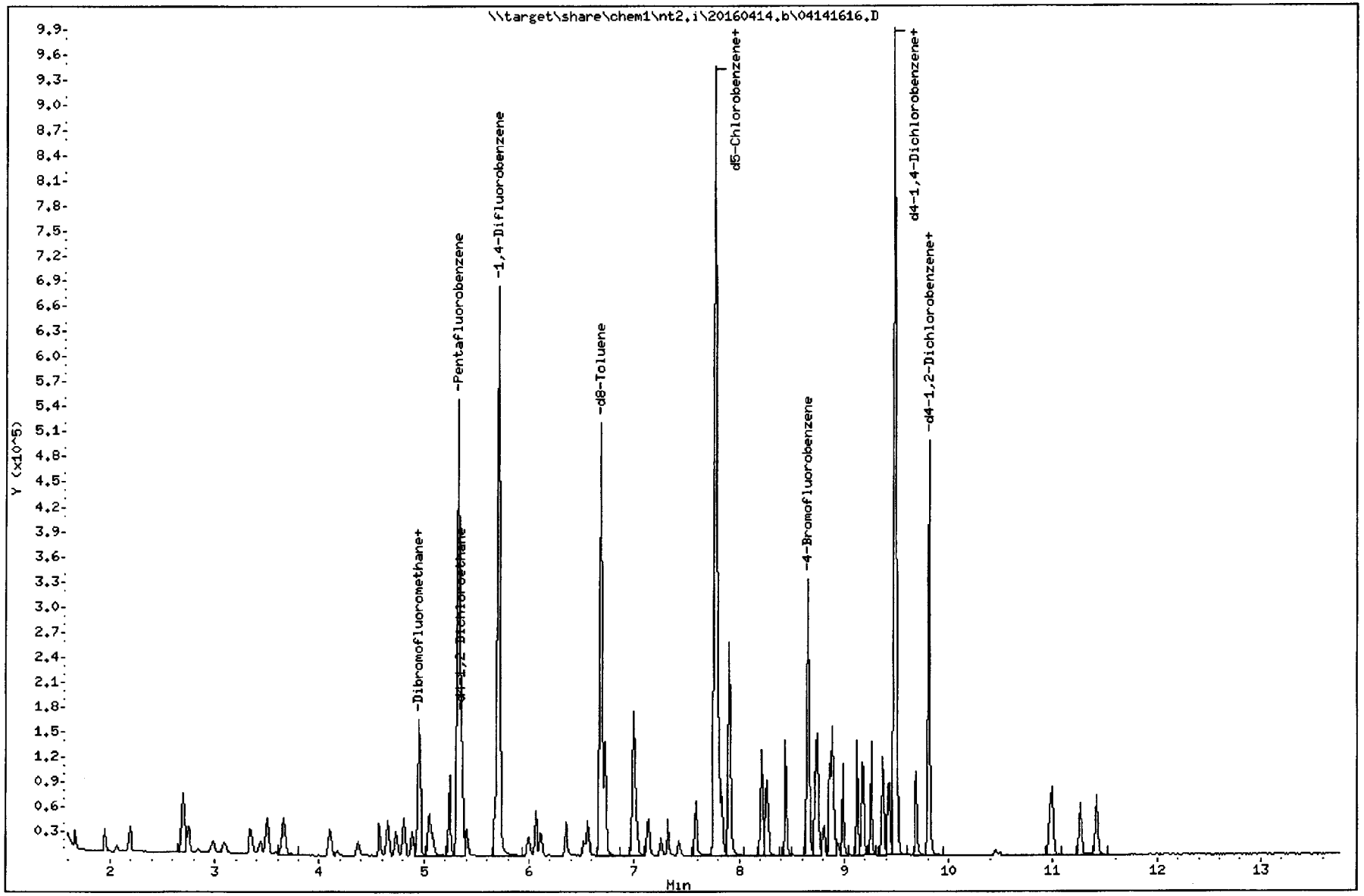
Instrument: nt2.i

Sample Info: SED0031-CAL3,10,10,0,

Operator: LH

Column phase: RTXVMS

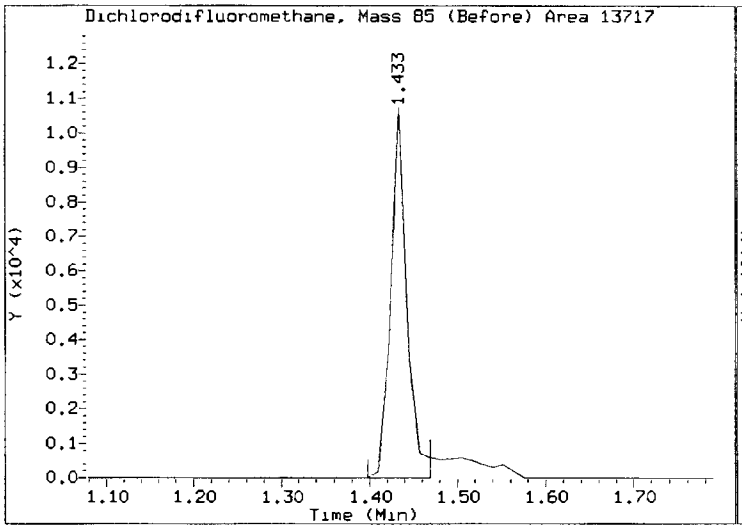
Column diameter: 0.18

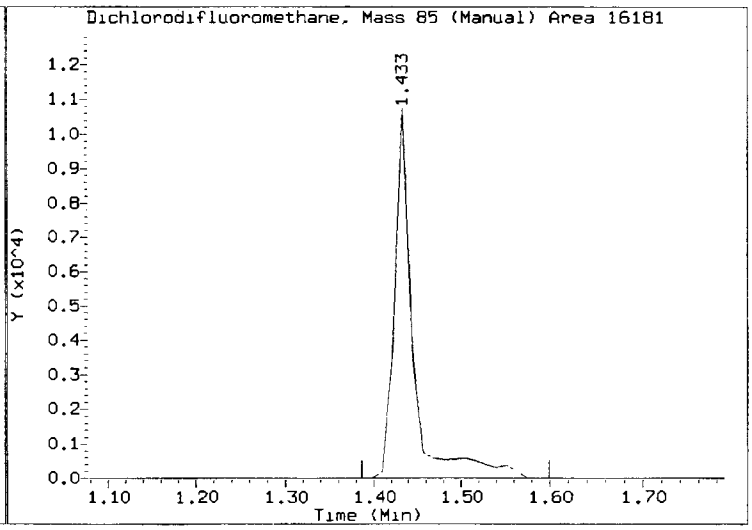


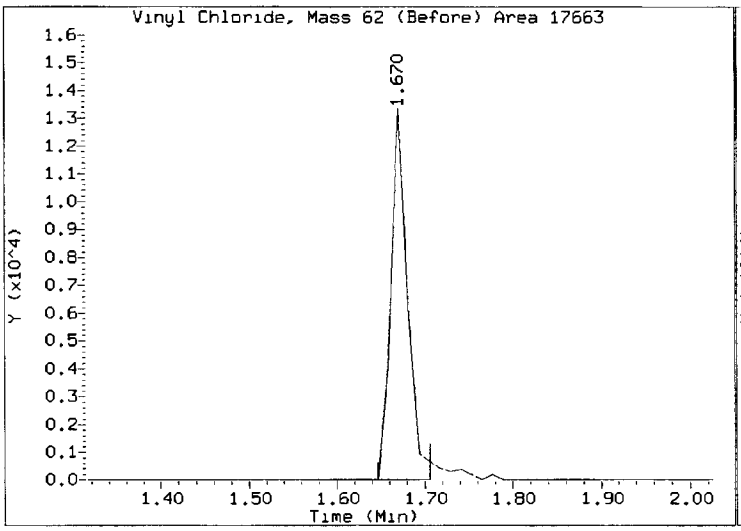
Quant Ion Manual Peak Adjustment Report

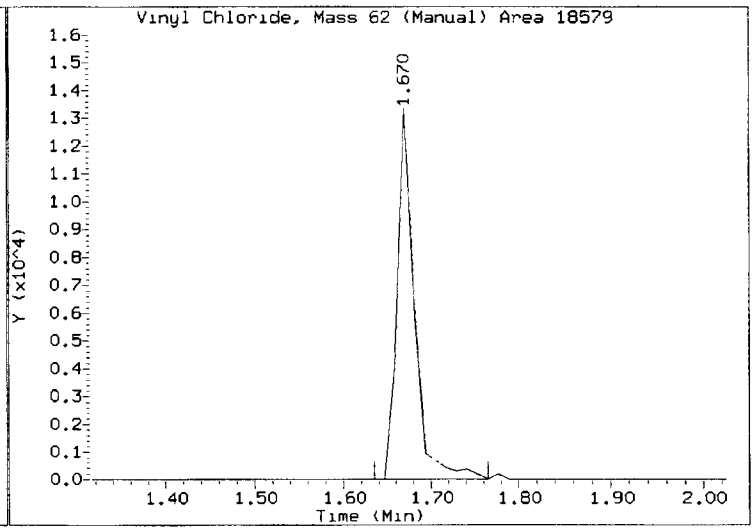
Datafile: \\target\share\chem1\nt2.i\20160414.b\04141616.D
Injection Date: 14-APR-2016 12:37
Lab ID:SED0031-CAL3 Client ID:VSTD01
Report Date: 04/14/2016 13:05

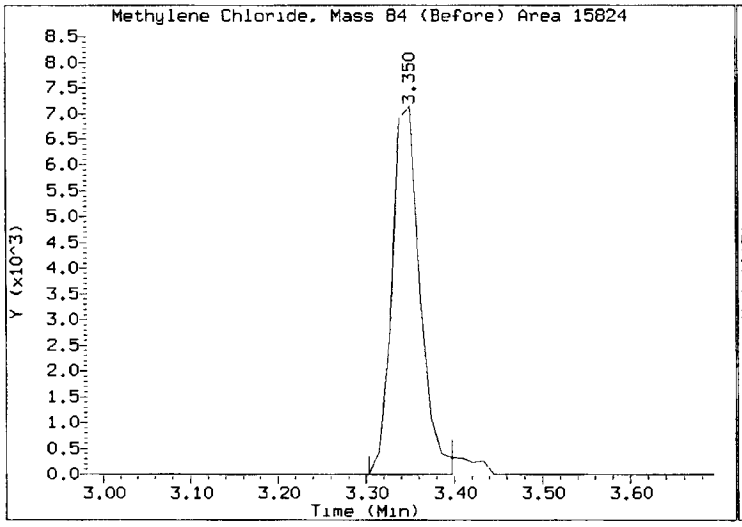
XLL 4/14/16

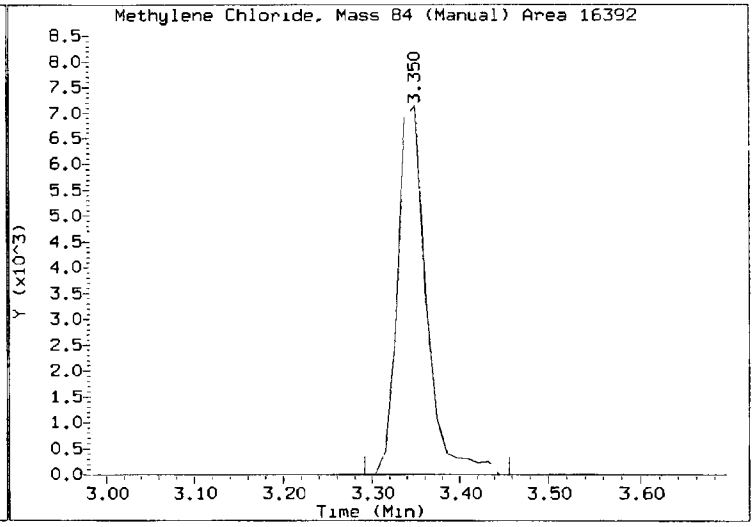






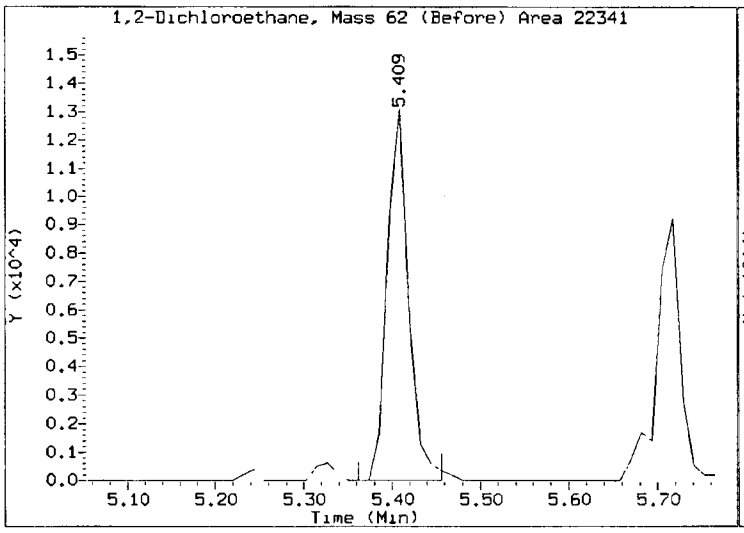


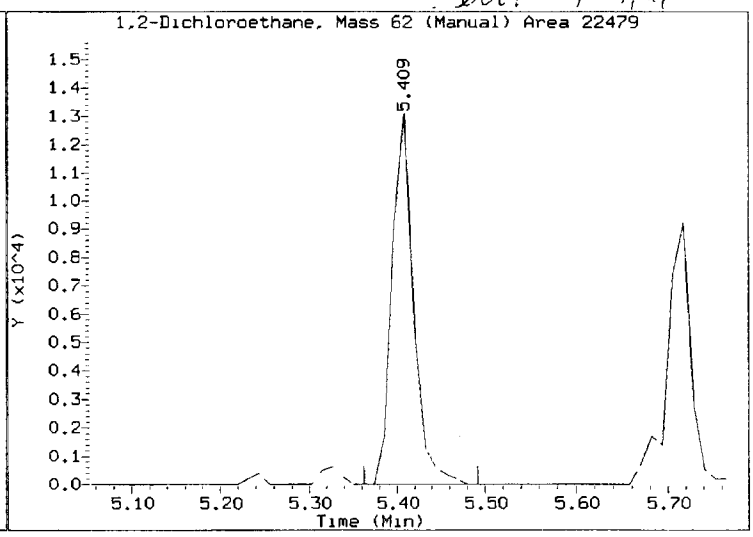


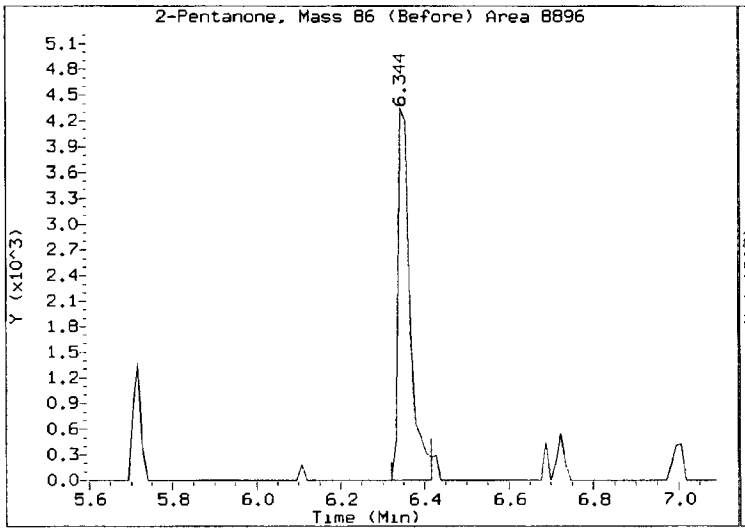


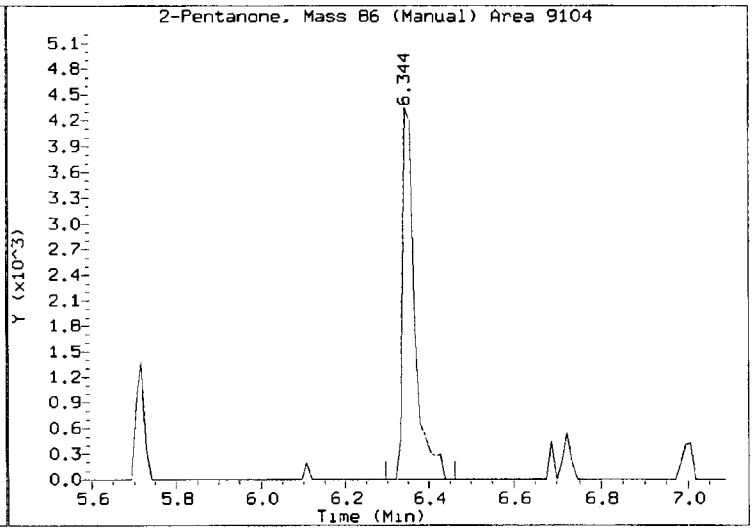
Quant Ion Manual Peak Adjustment Report

Datafile: \\target\share\chem1\nt2.i\20160414.b\04141616.D
Injection Date: 14-APR-2016 12:37
Lab ID:SED0031-CAL3 Client ID:VSTD01
Report Date: 04/14/2016 13:05









REVIEW SUMMARY FOR FILE - 04141616.D

Lab ID: SED0031-CAL3
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 12:37

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.0100

Exception: Acrolein 0.0000
Exception: Acetone 0.0000
Exception: Methylene Chloride 0.0000
Exception: Acrylonitrile 0.0000
Exception: 2-Butanone 0.0000
Exception: 4-Methyl-2-Pentanone 0.0000
Exception: 2-Hexanone 0.0000
Exception: 1,2-Dibromo 3-Chloropropane 0.0000
Exception: 1,2,4-Trichlorobenzene 0.1000
Exception: Naphthalene 0.1000
Exception: 1,2,3-Trichlorobenzene 0.1000
Exception: 2-Pentanone 0.0000
Exception: d4-1,2-Dichloroethane (Surr) 0.1000
Exception: d8-Toluene (Surr) 0.1000
Exception: 4-Bromofluorobenzene (Surr) 0.1000
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160414.b\04141617.D
Lab Smp Id: SED0031-SCV1 Client Smp ID: SCV
Inj Date : 14-APR-2016 12:58
Operator : LH Inst ID: nt2.i
Smp Info : SED0031-SCV1,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Meth Date : 14-Apr-2016 13:14 lanih Quant Type: ISTD
Cal Date : 14-APR-2016 12:37 Cal File: 04141616.D
Als bottle: 15 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Dichlorodifluoromethane	85	1.433	1.434	(0.269)	204374	12.7701	12.770(R)
2 Chloromethane	50	1.599	1.599	(0.300)	259050	12.9084	12.908(R)
3 Vinyl Chloride	62	1.670	1.670	(0.314)	246931	13.0630	13.063(R)
4 Bromomethane	94	1.954	1.954	(0.367)	220438	17.4155	17.416(R)
5 Chloroethane	64	2.060	2.061	(0.387)	59325	13.5884	13.588(R)
6 Trichlorofluoromethane	101	2.179	2.191	(0.409)	237186	11.1522	11.152
7 1,1-Dichloroethene	61	2.688	2.700	(0.505)	223867	9.89844	9.898
8 Carbon Disulfide	76	2.699	2.700	(0.507)	2560357	50.1820	50.182
9 112Trichloro122Trifluoroethane	101	2.747	2.747	(0.516)	294133	19.1733	19.173
10 Iodomethane	142	2.841	2.842	(0.533)	685392	54.3338	54.334
11 Bromoethane	108	2.983	2.984	(0.560)	207388	18.4927	18.493
12 Acrolein	56	3.102	3.090	(0.582)	23059	9.36622	9.366
13 Methylene Chloride	84	3.338	3.339	(0.627)	169723	10.1941	10.194
14 Acetone	43	3.433	3.434	(0.645)	156677	43.9760	43.976
15 Trans-1,2-Dichloroethene	96	3.504	3.505	(0.658)	166369	9.97968	9.980
17 Methyl tert butyl ether	73	3.658	3.658	(0.687)	445210	10.4322	10.432
18 1,1-Dichloroethane	63	4.096	4.096	(0.769)	319886	10.3624	10.362
19 Acrylonitrile	53	4.178	4.179	(0.785)	53711	10.2706	10.271
20 Vinyl Acetate	43	4.356	4.357	(0.818)	1611639	45.3972	45.397
22 Cis-1,2-Dichloroethene	96	4.569	4.570	(0.858)	187970	10.2402	10.240
23 2,2-Dichloropropane	77	4.652	4.652	(0.873)	231092	9.88328	9.883
24 Bromochloromethane	128	4.735	4.735	(0.889)	87078	10.5237	10.524

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	25 Chloroform	83	4.806	4.806	(0.902)	305227	10.4535	10.453
	26 Carbon Tetrachloride	117	4.888	4.889	(0.855)	190171	8.56603	8.566
$	27 Dibromofluoromethane	111	4.948	4.948	(0.929)	69102	4.93351	4.934
	28 1,1,1-Trichloroethane	97	4.948	4.948	(0.929)	274104	10.6131	10.613
	29 2-Butanone	43	5.066	5.066	(0.951)	304721	45.4512	45.451
	30 1,1-Dichloropropene	75	5.042	5.043	(0.882)	245477	11.1351	11.135
	31 Benzene	78	5.243	5.244	(0.917)	733398	10.8177	10.818
*	32 Pentafluorobenzene	168	5.326	5.327	(1.000)	296541	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	82963	4.96100	4.961
	34 1,2-Dichloroethane	62	5.409	5.410	(0.946)	225589	10.6734	10.673
	36 Trichloroethene	130	5.681	5.682	(0.994)	188289	10.5725	10.573
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	446058	10.0000	
	38 Dibromomethane	93	5.989	5.989	(1.048)	93403	10.7586	10.759
	39 1,2-Dichloropropane	63	6.060	6.060	(1.060)	179291	11.0302	11.030
	40 Bromodichloromethane	83	6.107	6.108	(1.068)	200909	10.6544	10.654
	41 2-Chloroethyl Vinyl Ether	63	6.521	6.522	(1.141)	460660	50.2979	50.298
	42 Cis 1,3-dichloropropene	75	6.557	6.557	(1.147)	262226	11.6385	11.639
$	43 d8-Toluene	98	6.687	6.688	(1.170)	270333	5.02894	5.029
	44 Toluene	92	6.723	6.723	(1.176)	454744	10.4453	10.445
	45 4-Methyl-2-Pentanone	58	6.995	6.995	(1.224)	273992	48.6885	48.688
	46 Tetrachloroethene	166	6.995	6.995	(0.900)	204508	11.0289	11.029
	47 Trans 1,3-Dichloropropene	75	7.018	7.019	(1.228)	221791	9.42195	9.422
	48 1,1,2-Trichloroethane	97	7.125	7.125	(1.246)	146192	10.9223	10.922
	49 Chlorodibromomethane	129	7.255	7.256	(0.933)	141948	8.41406	8.414
	50 1,3-Dichloropropane	76	7.314	7.315	(0.941)	260696	11.0208	11.021
	51 1,2-Dibromoethane	107	7.421	7.421	(1.298)	138893	11.0912	11.091
	52 2-Hexanone	43	7.574	7.575	(0.974)	484314	50.7878	50.788
*	53 d5-Chlorobenzene	117	7.776	7.776	(1.000)	407464	10.0000	
	54 Chlorobenzene	112	7.787	7.788	(1.002)	485400	10.2030	10.203
	55 Ethyl Benzene	106	7.799	7.800	(1.003)	281176	10.5701	10.570
	56 1,1,1,2-Tetrachloroethane	131	7.835	7.835	(1.008)	153967	11.0275	11.027
	57 m,p-xylene	106	7.906	7.906	(1.017)	687109	21.9118	21.912
	58 o-Xylene	106	8.213	8.214	(1.056)	333621	10.9809	10.981
	59 Styrene	104	8.249	8.250	(1.061)	549776	11.2182	11.218
	60 Bromoform	173	8.284	8.285	(0.874)	77576	7.87020	7.870(R)
	61 Isopropyl Benzene	105	8.438	8.439	(0.890)	791564	10.3078	10.308
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	84713	5.06998	5.070
	63 Bromobenzene	156	8.734	8.734	(0.921)	211719	10.4849	10.485
	64 N-Propyl Benzene	91	8.746	8.746	(0.923)	971803	11.2906	11.291
	65 1,1,2,2-Tetrachloroethane	83	8.793	8.794	(0.928)	174470	11.1356	11.136
	66 2-Chloro Toluene	91	8.864	8.865	(0.935)	641194	10.2741	10.274
	67 1,3,5-Trimethyl Benzene	105	8.888	8.888	(0.938)	686055	10.7430	10.743
	68 1,2,3-Trichloropropane	110	8.900	8.900	(0.939)	57174	11.1353	11.135
	69 Trans-1,4-Dichloro 2-Butene	53	8.935	8.936	(0.943)	37585	9.34546	9.345
	70 4-Chloro Toluene	91	8.983	8.983	(0.948)	595600	10.2828	10.283
	71 T-Butyl Benzene	119	9.125	9.125	(0.963)	686121	12.2588	12.259(R)
	72 1,2,4-Trimethylbenzene	105	9.172	9.172	(0.968)	703013	10.9187	10.919
	73 S-Butyl Benzene	105	9.255	9.255	(0.976)	812904	10.3229	10.323
	74 4-Isopropyl Toluene	119	9.361	9.362	(0.988)	718655	10.8593	10.859
	75 1,3-Dichlorobenzene	146	9.420	9.421	(0.994)	399943	10.2380	10.238
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.480	(1.000)	220834	10.0000	
	77 1,4-Dichlorobenzene	146	9.491	9.492	(1.001)	387923	9.62558	9.626
	78 N-Butyl Benzene	91	9.693	9.693	(1.022)	594909	10.2963	10.296
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	106048	5.03927	5.039

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
80 1,2-Dichlorobenzene	146	9.811	9.811	(1.035)	371827	10.0408	10.041
81 1,2-Dibromo 3-Chloropropane	75	10.450	10.450	(1.102)	25846	8.78719	8.787
83 Hexachloro 1,3-Butadiene	225	10.970	10.971	(1.157)	87682	9.07433	9.074
84 1,2,4-Trichlorobenzene	180	10.994	10.995	(1.160)	231984	9.30320	9.303
85 Naphthalene	128	11.266	11.267	(1.188)	557444	10.2395	10.239
86 1,2,3-Trichlorobenzene	180	11.420	11.420	(1.205)	219465	9.37194	9.372
173 2-Pentanone	86	6.344	6.344	(1.110)	37802	17.8913	17.891

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 04141617.D
Lab Smp Id: SED0031-SCV1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

Calibration Date: 14-APR-2016
Calibration Time: 11:54
Client Smp ID: SCV
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	279395	139698	558790	296541	6.14
37 1,4-Difluorobenze	430036	215018	860072	446058	3.73
53 d5-Chlorobenzene	398095	199048	796190	407464	2.35
76 d4-1,4-Dichlorobe	214594	107297	429188	220834	2.91

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	-0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

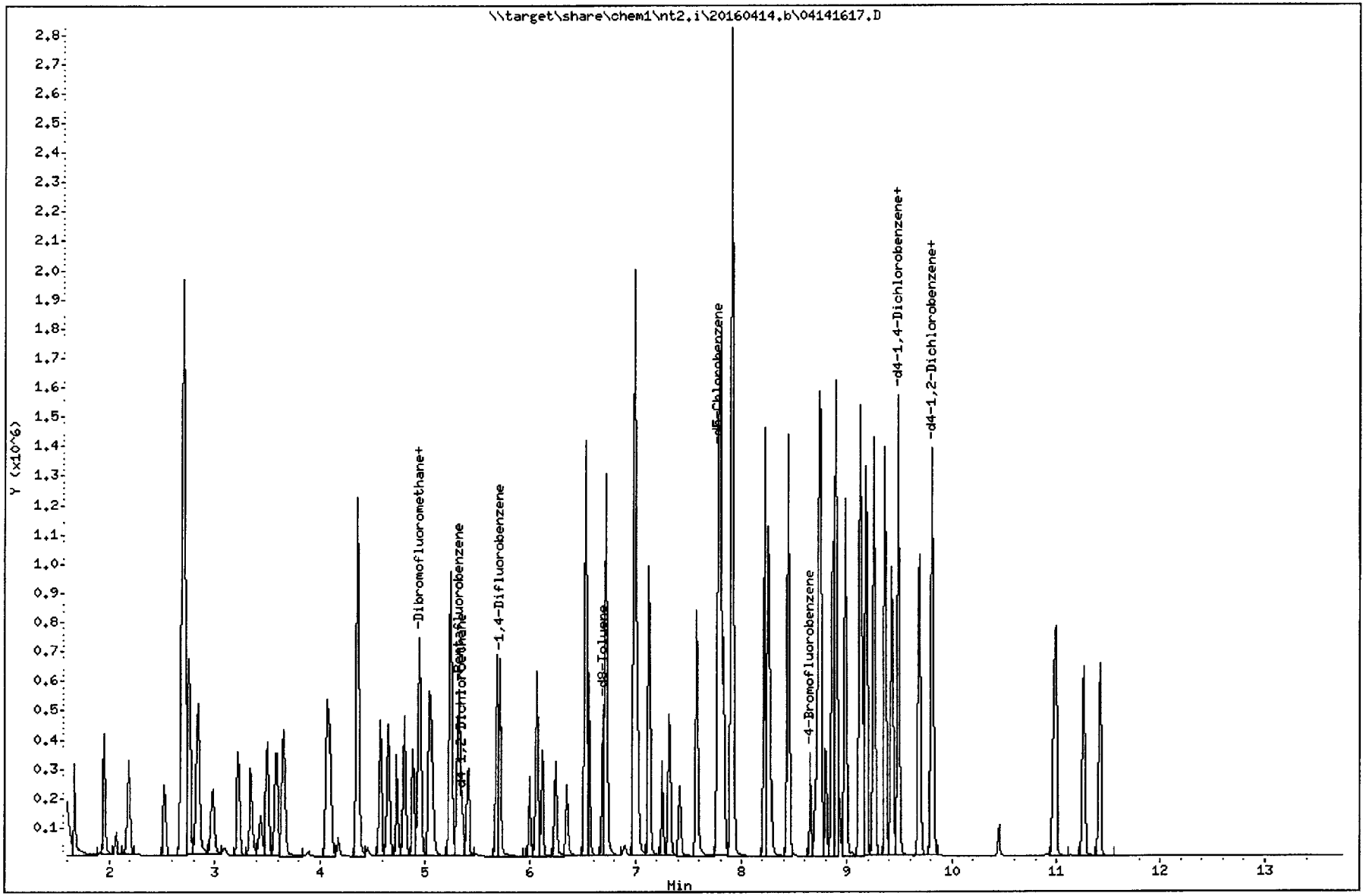
Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: SED0031-SCV1 Client Smp ID: SCV
Level: LOW Operator: LH
Data Type: MS DATA SampleType: LCS
SpikeList File: o2siicv.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: \\target\share\chem1\nt2.i\20160414.b\8260041416.m
Misc Info: 16-

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1	Dichlorodifluorome	10.000	12.770	127.70*	80-120
2	Chloromethane	10.000	12.908	129.08*	80-120
3	Vinyl Chloride	10.000	13.063	130.63*	80-120
4	Bromomethane	10.000	17.416	174.16*	80-120
5	Chloroethane	10.000	13.588	135.88*	80-120
6	Trichlorofluoromet	10.000	11.152	111.52	80-120
7	1,1-Dichloroethene	10.000	9.898	98.98	80-120
8	Carbon Disulfide	60.000	50.182	83.64	80-120
9	112Trichloro122Tri	20.000	19.173	95.87	80-120
10	Iodomethane	60.000	54.334	90.56	80-120
11	Bromoethane	20.000	18.493	92.46	80-120
12	Acrolein	10.000	9.366	93.66	80-120
13	Methylene Chloride	10.000	10.194	101.94	80-120
14	Acetone	50.000	43.976	87.95	80-120
15	Trans-1,2-Dichloro	10.000	9.980	99.80	80-120
16	n-hexane	10.000	0.0000	*	80-120
17	Methyl tert butyl	10.000	10.432	104.32	80-120
18	1,1-Dichloroethane	10.000	10.362	103.62	80-120
19	Acrylonitrile	10.000	10.271	102.71	80-120
20	Vinyl Acetate	50.000	45.397	90.79	80-120
22	Cis-1,2-Dichloroet	10.000	10.240	102.40	80-120
23	2,2-Dichloropropan	10.000	9.883	98.83	80-120
24	Bromochloromethane	10.000	10.524	105.24	80-120
25	Chloroform	10.000	10.453	104.53	80-120
26	Carbon Tetrachlori	10.000	8.566	85.66	80-120
28	1,1,1-Trichloroeth	10.000	10.613	106.13	80-120
30	1,1-Dichloropropen	10.000	11.135	111.35	80-120
29	2-Butanone	50.000	45.451	90.90	80-120
31	Benzene	10.000	10.818	108.18	80-120
34	1,2-Dichloroethane	10.000	10.673	106.73	80-120
36	Trichloroethene	10.000	10.573	105.73	80-120
38	Dibromomethane	10.000	10.759	107.59	80-120
39	1,2-Dichloropropan	10.000	11.030	110.30	80-120
40	Bromodichlorometha	10.000	10.654	106.54	80-120
173	2-Pentanone	20.000	17.891	89.46	80-120
42	Cis 1,3-dichloropr	10.000	11.639	116.39	80-120
41	2-Chloroethyl Viny	60.000	50.298	83.83	80-120
44	Toluene	10.000	10.445	104.45	80-120
45	4-Methyl-2-Pentano	50.000	48.688	97.38	80-120
46	Tetrachloroethene	10.000	11.029	110.29	80-120

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 Trans 1,3-Dichloro	10.000	9.422	94.22	80-120
48 1,1,2-Trichloroeth	10.000	10.922	109.22	80-120
49 Chlorodibromometha	10.000	8.414	84.14	80-120
50 1,3-Dichloropropan	10.000	11.021	110.21	80-120
51 1,2-Dibromoethane	10.000	11.091	110.91	80-120
52 2-Hexanone	50.000	50.788	101.58	80-120
54 Chlorobenzene	10.000	10.203	102.03	80-120
55 Ethyl Benzene	10.000	10.570	105.70	80-120
56 1,1,1,2-Tetrachlor	10.000	11.027	110.27	80-120
57 m,p-xylene	20.000	21.912	109.56	80-120
58 o-Xylene	10.000	10.981	109.81	80-120
59 Styrene	10.000	11.218	112.18	80-120
60 Bromoform	10.000	7.870	78.70*	80-120
61 Isopropyl Benzene	10.000	10.308	103.08	80-120
63 Bromobenzene	10.000	10.485	104.85	80-120
64 N-Propyl Benzene	10.000	11.291	112.91	80-120
65 1,1,2,2-Tetrachlor	10.000	11.136	111.36	80-120
66 2-Chloro Toluene	10.000	10.274	102.74	80-120
67 1,3,5-Trimethyl Be	10.000	10.743	107.43	80-120
68 1,2,3-Trichloropro	10.000	11.135	111.35	80-120
69 Trans-1,4-Dichloro	10.000	9.345	93.45	80-120
70 4-Chloro Toluene	10.000	10.283	102.83	80-120
71 T-Butyl Benzene	10.000	12.259	122.59*	80-120
72 1,2,4-Trimethylben	10.000	10.919	109.19	80-120
73 S-Butyl Benzene	10.000	10.323	103.23	80-120
74 4-Isopropyl Toluen	10.000	10.859	108.59	80-120
75 1,3-Dichlorobenzen	10.000	10.238	102.38	80-120
77 1,4-Dichlorobenzen	10.000	9.626	96.26	80-120
78 N-Butyl Benzene	10.000	10.296	102.96	80-120
80 1,2-Dichlorobenzen	10.000	10.041	100.41	80-120
81 1,2-Dibromo 3-Chlo	10.000	8.787	87.87	80-120
83 Hexachloro 1,3-But	10.000	9.074	90.74	80-120
84 1,2,4-Trichloroben	10.000	9.303	93.03	80-120
85 Naphthalene	10.000	10.239	102.39	80-120
86 1,2,3-Trichloroben	10.000	9.372	93.72	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.934	98.67	80-120
$ 33 d4-1,2-Dichloroeth	5.000	4.961	99.22	80-128
$ 43 d8-Toluene	5.000	5.029	100.58	80-120
$ 62 4-Bromofluorobenze	5.000	5.070	101.40	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.039	100.79	80-120

Data File: \\target\share\chem1\nt2.i\20160414.b\04141617.D
Date : 14-APR-2016 12:58
Client ID: SCV
Instrument: nt2.i
Sample Info: SED0031-SCV1,10,10,0,
Operator: LH
Column phase: RTXVMS
Column diameter: 0.18



REVIEW SUMMARY FOR FILE - 04141617.D

Lab ID: SED0031-SCV1
nt2.i, 20160414.b\8260041416.m, 14-APR-2016 12:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260041416.m,Sublist: mdl.sub = 0.1000

Exception: Carbon Tetrachloride 0.0400
Exception: 2-Pentanone 0.0000

Analysis	Matrix	Method
8260C Gas (8015C)	Water	EPA 8015C
8260C Gas (AK101)	Water	AK101
8260C Gas (NWTPH)	Water	NWTPHg
8260C VOA	Water	EPA 8260C

Checklist: Initial Calibration Checklist-VOA

#	Checklist Item	Response	Analyst Initials	Date
1	Element Calibration Code	YES	LH	03/30/2016
	Comments: *ZC00032* *Calibration is for 8260C and gas.*			
2	BFB Tune met Criteria	YES	LH	03/30/2016
3	ICal meets 20% RSD, LR COD, and QR COD limits	YES	LH	03/30/2016
4	NO ICAL Q Flag applied	YES	LH	03/30/2016
5	Manual integrations include before/after pictures	YES	LH	03/30/2016
6	Internal Standard areas within 50-200% from reference	YES	LH	03/30/2016
7	Spectral Library updated	NA	LH	03/30/2016
8	Minimum response factors met	YES	LH	03/30/2016
9	All SCV within +/- 20% (DOD)	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Vinyl Chloride 120.12%, Chloroethane 120.72%, t-butylbenzene 124.45%.*			
10	All SCV within +/- 30%	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Bromomethane 141.13%, methylene chloride 130.90%*			
11	NO Linear or Quadratic Fits Used	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Quadratic: Chloroethane* *Linear: Iodomethane, methylene chloride, trans-1,3-dichloropropene, chlorodibromomethane, 1,1,1,2-tetrachloroethane, bromoform.*			
12	NO Calibration points dropped	NO	LH	03/30/2016
	Comments: *EXCEPTION REPORT REQUIRED* *Some low points were dropped, but all RLs were met.* *Upper 2 points for trichlorofluoromethane were dropped. Range is 0.2ug/L- 20ug/L*			
13	Additional Notes	YES	LH	03/30/2016
	Comments: *Gas SCV standard was expired, but recovered well.*			
14	Reviewer Approval (Reviewer)	YES	BB	03/30/2016

* = Indicates Automated Response from Element DataSyst

Analytical Resources Inc.: Organics Instrument Log

NT-2 Serial No.: 82321977

Date: 3/29/16 Analysis: 8260c tgas Analyst: RLH for PC

GC Program: VOATW Column No: 1295415 Column Type: RTXVMS

Instrument Tune (.U or .CT.): bfb.u EM Voltage: 2071

Calibration File: 03291602.d Curve Date: 3/29/16 Injection Vol.: 10mL

ZC000032

IS/SS	Ical/Ccal	LCS/ICV
E000043	E000981 2 8260c	8260 SCV: E000942
E000044	E000922 3	GAS SCV: E000933
	E000912 2 GAS	
	E000923 3	

Document All Maintenance Tasks In Element

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160329.b

	Time	Filename	LabID	ClientID	Vial#	pH	DF							
1	1110	03291601.D	RINSE		10		1							
2	1131	03291602.D	SEC0063-TUN1	RTBFB0329			1							
3	1226	03291603.D	GICV				1							
4	1248	03291604.D	VICV				1							
5	1309	03291605.D	VICV	ICV0329a			1							
6	1330	03291606.D	VLCSA	VLCS			1							
7	1352	03291607.D	GLCS				1							
8	1413	03291608.D	GLCSA	GLCSA			1	5.33	366954	5.72	575180	7.78	532674	9.48	286650
9	1435	03291609.D	MB0329	MB0329			1	5.33	353242	5.72	559046	7.78	510480	9.48	262386
10	1733	01291610.D	SEC0063-CAL8	VSTD80			1	5.33	419789	5.72	643017	7.78	591709	9.48	324865
11	1754	03291611.D	SEC0063-CAL7	VSTD40			1	5.33	372674	5.72	577427	7.78	536655	9.48	296811
12	1816	03291612.D	SEC0063-CAL6	VSTD20			1	5.33	356460	5.72	546852	7.78	512009	9.48	277409
13	1837	03291613.D	SEC0063-CAL5	VSTD10			1	5.33	350375	5.72	562526	7.78	502371	9.48	277950
14	1859	03291614.D	SEC0063-CAL4	VSTD02			1	5.33	351970	5.72	569384	7.78	501631	9.48	275297
15	1920	03291615.D	SEC0063-CAL3	VSTD01			1	5.33	322836	5.72	510764	7.78	467709	9.48	255215
16	1941	03291616.D	SEC0063-CAL2	VSTD0.5			1	5.33	318463	5.72	502550	7.78	459981	9.48	246454
17	2003	03291617.D	SEC0063-CAL1	VSTD0.2			1	5.33	311848	5.72	495060	7.78	453911	9.48	235351
18	2024	03291618.D	SEC0063-SCV1	SCV			1	5.33	333646	5.72	527779	7.78	486532	9.48	269269
19	2045	03291619.D	SEC0063-CALE				1	5.33	386746	5.72	615798	7.78	554836	9.48	296516
20	2107	03291620.D	SEC0063-CALD				1	5.33	366346	5.72	580475	7.78	530399	9.48	284779
21	2128	03291621.D	SEC0063-CALC				1	5.33	356093	5.72	560609	7.78	525882	9.48	278120
22	2150	03291622.D	SEC0063-CALB				1	5.33	335026	5.72	526989	7.78	495230	9.48	263670
23	2211	03291623.D	SEC0063-CALA				1	5.33	330180	5.72	523950	7.78	490395	9.48	259889
24	2232	03291624.D	SEC0063-CAL9				1	5.33	303542	5.72	482197	7.78	459677	9.48	241501
25	2254	03291625.D	SEC0063-SCV2				1	5.33	367854	5.72	555254	7.78	519670	9.48	276192

RLH 3/30/16

6a
8260 GAS INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: 20150930

Instrument: NT2.I Project: GSTD1

Calibration Date: 29-MAR-2016 SDG No.: 20150930

Gas Range	RF1 0.1	RF2 0.25	RF3 0.5	RF4 1.0	RF5 2.5	RF6 5	Ave RF	%RSD
WA Gas	38501187	48112079	49111625	51185622	51287480	49855104	48008849	10.0
AK Gas	49662511	59116003	59473285	60464211	61192091	62329725	58706304	7.8
NW Gas	39259679	48930855	50264215	52493344	52751277	51520615	49203331	10.3
8015Gas	71404863	82873502	83743651	85008808	87381849	88932569	83224207	7.5

<- Indicates %RSD outside limits
Surrogate areas are not included in RF calculation.
Surrogate calibration is from BETX curve files.

Quant Ranges :

WA Gas	Toluene - nC12
AK Gas	nC6 - nC10
NW Gas	Toluene - Naphthalene
Cal Gas	nC6 - nC12
8015 Gas	2-Methylpentane - 1,2,4-Trimethylbenzene

Gas Cal. Files	Analysis Time
03291624.D	29-MAR-2016 22:32
03291623.D	29-MAR-2016 22:11
03291622.D	29-MAR-2016 21:50
03291621.D	29-MAR-2016 21:28
03291620.D	29-MAR-2016 21:07
03291619.D	29-MAR-2016 20:45

Report Date : 30-Mar-2016 09:36

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329g.b\GAS032916.m
Batch File: \\target\share\chem1\nt2.i\20160329g.b
Inst ID: nt2.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	03291619	03291620	03291621	03291622	03291623	03291624	03291625
INJ.DATE:	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016	29-MAR-2016
INJ.TIME:	20:45	21:07	21:28	21:50	22:11	22:32	22:54

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
5 2-Methylpentane	3.079	3.079	3.078	3.079	3.082	3.081	3.078	3.078	3.028-3.128	3.079	0.002
7 nC6	3.587	3.588	3.587	3.588	3.579	3.590	3.587	3.587	3.537-3.637	3.587	0.004
$ 10 Dibromofluorobenzene	4.925	4.925	4.948	4.949	4.952	4.951	4.924	4.948	4.898-4.998	4.939	0.014
37 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.232	5.182-5.282	+++++	+++++
$ 29 Pentafluorobenzene	+++++	+++++	5.326	5.327	5.330	5.330	+++++	5.326	5.276-5.376	5.328	0.002
$ 30 d4-1,2-dichloroethane	5.351	5.351	+++++	+++++	+++++	+++++	5.350	5.341	5.291-5.391	5.350	0.000
$ 31 1,4-Difluorobenzene	5.717	5.718	5.717	5.718	5.721	5.720	5.717	5.717	5.667-5.767	5.718	0.002
3 AK101	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.234	0.000-3.974	+++++	+++++
4 8015GAS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.096	2.756-9.436	+++++	+++++
46 8015mod	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.000	0.930-1.070	+++++	+++++
38 n-Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.592	6.542-6.642	+++++	+++++
45 n-Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.221	5.151-5.291	+++++	+++++
$ 32 d8-Toluene	+++++	+++++	6.687	6.688	6.691	6.690	+++++	6.687	6.637-6.737	6.689	0.002
12 Toluene	6.723	6.723	6.723	6.724	6.727	6.726	6.723	6.723	6.673-6.773	6.724	0.002
39 n-Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.728	7.678-7.778	+++++	+++++
$ 33 d5-Chlorobenzene	7.800	7.800	7.776	7.777	7.780	7.779	7.776	7.776	7.726-7.826	7.784	0.011
40 Ethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.802	7.752-7.852	+++++	+++++

Reviewer 1 [signature] Date: 3/30/16
Reviewer 2 _____ Date: _____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem1\nt2.i\20160329g.b\GAS032916.m
Batch File: \\target\share\chem1\nt2.i\20160329g.b
Inst ID: nt2.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
41 m,p-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.906	7.856-7.956	+++++	+++++
42 o-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.214	8.164-8.264	+++++	+++++
2 WAGAS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.610	6.520-10.700	+++++	+++++
$ 34 4-Bromofluorobenzene	8.652	8.652	8.651	8.653	8.655	8.655	8.651	8.651	8.601-8.701	8.653	0.002
17 nC10-Decane	8.747	8.747	8.746	8.747	8.750	+++++	8.746	8.722	8.672-8.772	8.747	0.001
1 NWTPHG	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.479	6.949-12.009	+++++	+++++
20 1,2,4-Trimethylbenzene	9.173	9.173	9.172	9.173	9.176	9.175	9.172	9.184	9.134-9.234	9.173	0.002
$ 35 d4-Dichlorobenzene	9.504	9.480	9.503	9.481	9.484	9.483	9.480	9.491	9.441-9.541	9.488	0.011
43 n-Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.610	9.560-9.660	+++++	+++++
$ 36 d4-1,2-Dichlorobenzene	9.823	9.812	9.811	9.812	9.803	9.803	9.811	9.811	9.761-9.861	9.811	0.007
22 nC12-Dodecane	10.450	10.451	10.485	10.487	10.489	10.489	10.450	10.462	10.412-10.512	10.472	0.020
44 n-Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.362	11.312-11.412	+++++	+++++
24 Naphthalene	11.255	11.255	11.255	11.256	11.258	11.258	11.255	11.278	11.228-11.328	11.256	0.002

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160329.b

ARI Job No.: G500 Method: 8260032916.m Instrument: nt2.i Date: 29-MAR-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2045	03291619.D	G5000329		1	NO MANUAL INTEGRATION
2107	03291620.D	G2500329		1	NO MANUAL INTEGRATION
2128	03291621.D	G1000329		1	NO MANUAL INTEGRATION
2150	03291622.D	G0500329		1	NO MANUAL INTEGRATION
2211	03291623.D	G0250329		1	NO MANUAL INTEGRATION
2232	03291624.D	G0100329		1	NO MANUAL INTEGRATION
2254	03291625.D	GSCV0329		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160329g.b

ARI Job No.: G500 Method: GAS032916.m Instrument: nt2.i Date: 29-MAR-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2045	03291619.D	G5000329	GSTD5	1	1,4-Difluorobenzene, d4-1,2-dichloroethane, Dibromofluorobenzene,
2107	03291620.D	G2500329	GSTD2.5	1	1,4-Difluorobenzene, d4-1,2-dichloroethane, d4-Dichlorobenzene, Dibromofluorobenzene,
2128	03291621.D	G1000329	GSTD1	1	1,4-Difluorobenzene, d4-Dichlorobenzene, Dibromofluorobenzene, d5-Chlorobenzene,
2150	03291622.D	G0500329	GSTD0.5	1	1,4-Difluorobenzene, d5-Chlorobenzene,
2211	03291623.D	G0250329	GSTD0.25	1	Naphthalene, d5-Chlorobenzene,
2232	03291624.D	G0100329	GSTD0.1	1	Naphthalene,
2254	03291625.D	GSCV0329	GSCV	1	1,4-Difluorobenzene, d4-Dichlorobenzene, Dibromofluorobenzene, d5-Chlorobenzene,

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D

Date : 29-MAR-2016 11:31

Client ID: RTBFB0329

Instrument: nt2.i

Sample Info: BFB0329,RTBFB0329,,1,032916,

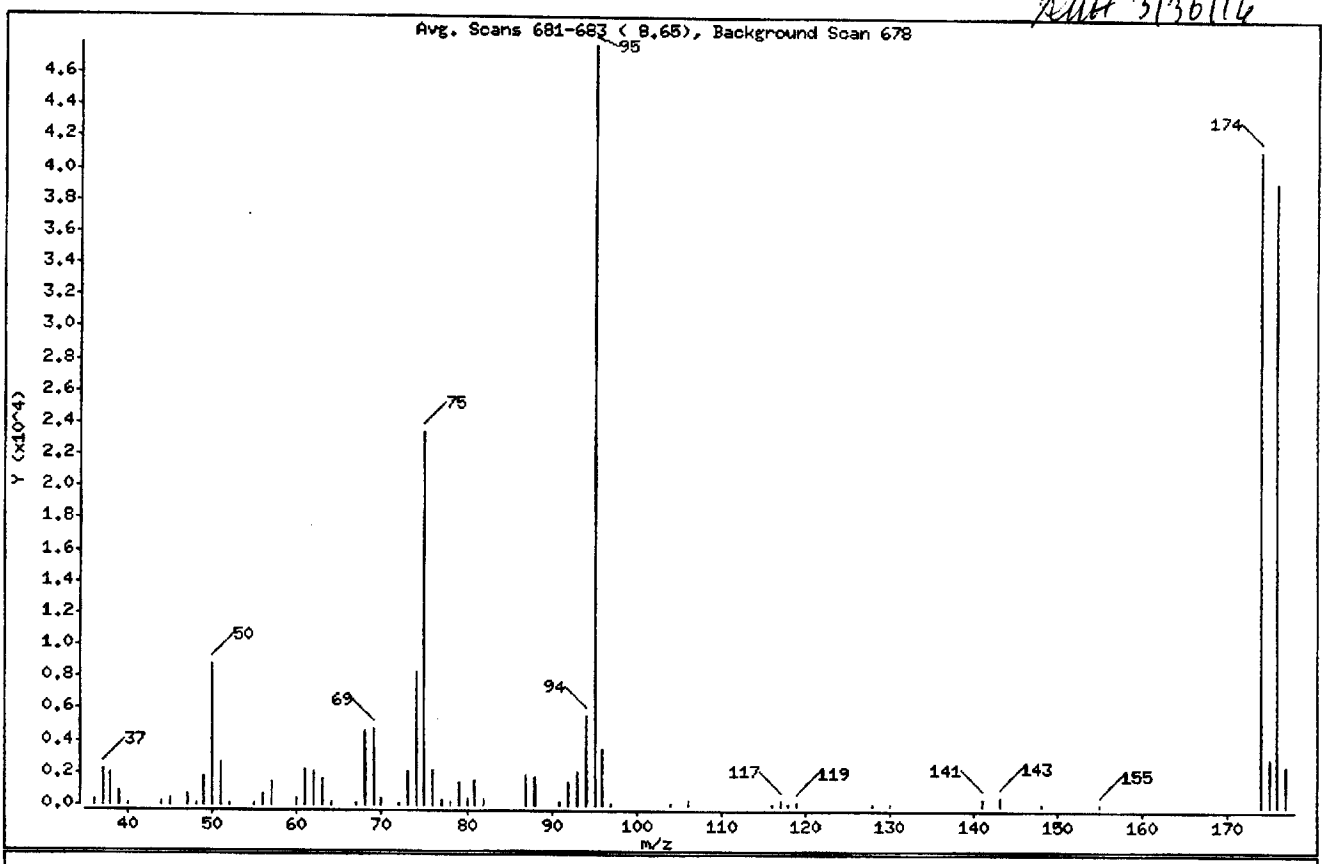
Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

1 Bromofluorobenzene

RMH 3/30/16



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.28
75	30.00 - 60.00% of mass 95	48.95
96	5.00 - 9.00% of mass 95	7.25
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	86.45
175	5.00 - 9.00% of mass 174	6.10 (7.05)
176	95.00 - 101.00% of mass 174	82.26 (95.15)
177	5.00 - 9.00% of mass 176	5.35 (6.50)

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D

Date : 29-MAR-2016 11:31

Client ID: RTBFB0329

Instrument: nt2.i

Sample Info: BFB0329,RTBFB0329,,1,032916,

Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

Data File: 03291602.D

Spectrum: Avg. Scans 681-683 (8.65), Background Scan 678

Location of Maximum: 95.00

Number of points: 61

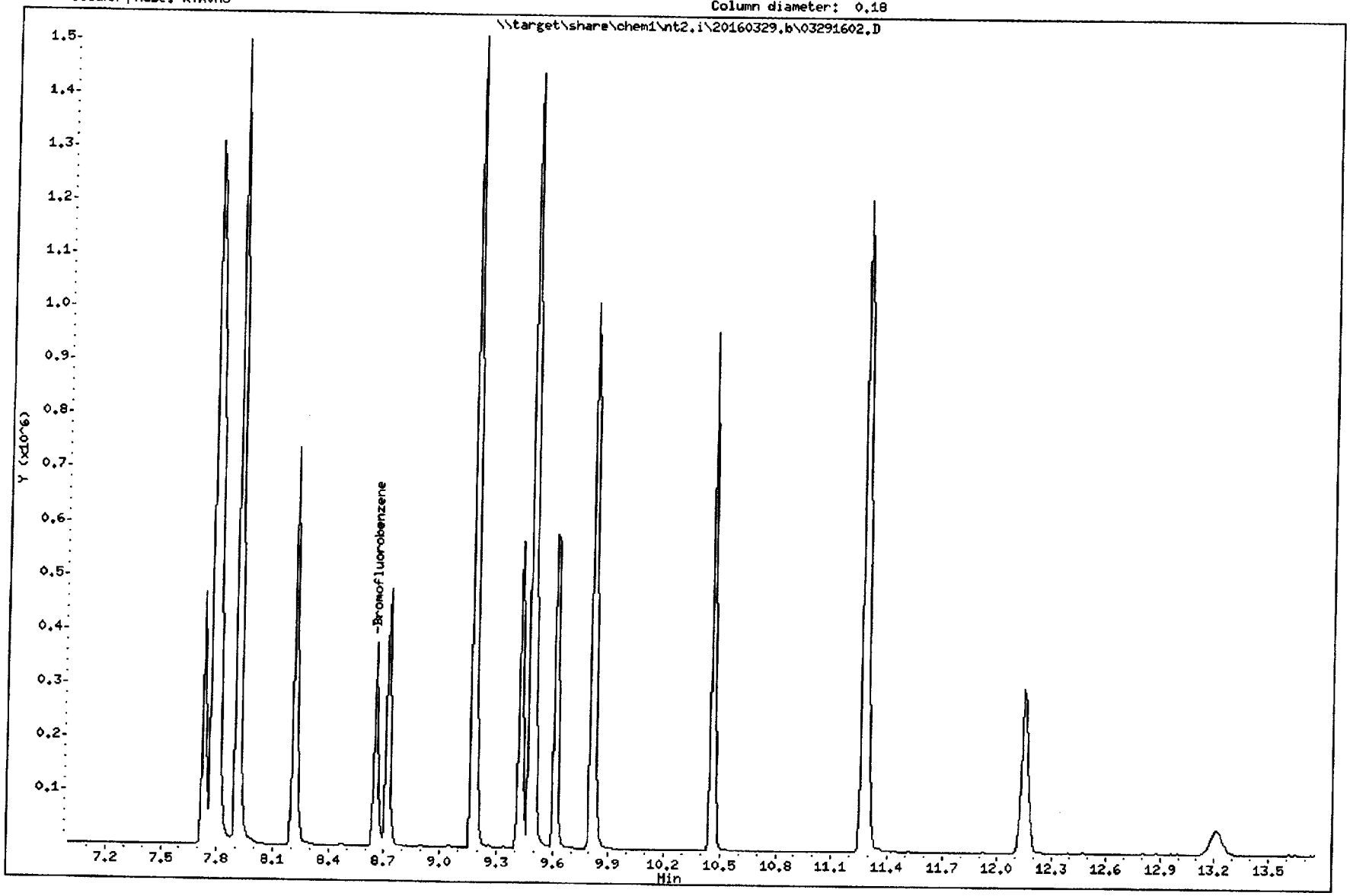
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	334	60.00	421	79.00	1486	117.00	325
37.00	2213	61.00	2183	80.00	387	118.00	128
38.00	1965	62.00	2104	81.00	1524	119.00	234
39.00	876	63.00	1615	82.00	406	128.00	133
40.00	77	64.00	233	87.00	1871	130.00	132
44.00	174	67.00	79	88.00	1722	141.00	480
45.00	431	68.00	4654	91.00	246	143.00	564
47.00	632	69.00	4719	92.00	1396	148.00	149
48.00	113	70.00	410	93.00	2037	155.00	84
49.00	1769	72.00	148	94.00	5584	174.00	41400
50.00	8753	73.00	2107	95.00	47888	175.00	2919
51.00	2685	74.00	8380	96.00	3473	176.00	39392
52.00	71	75.00	23440	97.00	78	177.00	2562
55.00	154	76.00	2154	104.00	122		
56.00	679	77.00	319	106.00	281		
57.00	1379	78.00	194	116.00	127		

Data File: \\target\share\chem1\nt2.i\20160329.b\03291602.D
Date : 29-MAR-2016 11:31
Client ID: RTBFB0329
Sample Info: BFB0329,RTBFB0329,,1,032916,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



ARI Labs, Inc.

Data file : \\target\share\chem1\nt2.i\20160329g.b\03291602.D
Lab Smp Id: BFB0329 Client Smp ID: RTBFB0329
Inj Date : 29-MAR-2016 11:31
Operator : PC Inst ID: nt2.i
Smp Info : BFB0329,RTBFB0329,,1,032916,
Misc Info : 09-
Comment :
Method : \\target\share\chem1\nt2.i\20160329g.b\GAS032916.m
Meth Date : 30-Mar-2016 09:05 lanih Quant Type: ESTD
Cal Date : 29-MAR-2016 11:31 Cal File: 03291602.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RT.sub
Target Version: 4.14
Processing Host: ORGDATA13

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
5	2-Methylpentane	3.078	3.078	0.000	392124	0.00000	
7	nC6	3.586	3.586	0.000	415559	0.00000	
$ 10	Dibromofluorobenzene	4.947	4.947	0.000	140925	0.00000	
37	Benzene	5.231	5.231	0.000	630212	0.00000	
$ 29	Pentafluorobenzene	5.326	5.326	0.000	666407	0.00000	
$ 31	1,4-Difluorobenzene	5.716	5.716	0.000	822707	0.00000	
38	n-Octane	6.592	6.592	0.000	525079	0.00000	
$ 32	d8-Toluene	6.687	6.687	0.000	634185	0.00000	
12	Toluene	6.722	6.722	0.000	1135403	0.00000	
39	n-Nonane	7.728	7.728	0.000	466173	0.00000	
$ 33	d5-Chlorobenzene	7.775	7.775	0.000	1306440	0.00000	
41	m,p-xylene	7.905	7.905	0.000	1494523	0.00000	
42	o-xylene	8.213	8.213	0.000	736648	0.00000	
$ 34	4-Bromofluorobenzene	8.651	8.651	0.000	376172	0.00000	
17	nC10-Decane	8.722	8.722	0.000	474675	0.00000	
20	1,2,4-Trimethylbenzene	9.183	9.183	0.000	1510817	0.00000	
$ 35	d4-Dichlorobenzene	9.491	9.491	0.000	1442070	0.00000	
43	n-Undecane	9.609	9.609	0.000	582360	0.00000	
$ 36	d4-1,2-Dichlorobenzene	9.810	9.810	0.000	1014284	0.00000	
22	nC12-Dodecane	10.461	10.461	0.000	962411	0.00000	
24	Naphthalene	11.278	11.278	0.000	1212315	0.00000	

Analytical Resources Inc.
GC/MS Gas Quantitation Report

JLH 3/30/16

Data file: 20160329g.b/03291619.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 20:45

ARI ID: G5000329
Client ID: GSTD5
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)	
WAGas Tol-C12	(6.62 to 10.56)	48008849	249275518	5.192	
8015C 2MP-TMB	(2.98 to 9.28)	83224207	444662844	5.343	M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	311648625	5.309	M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	257603074	5.235	
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	424141429	5.790	M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

8.652	813730	4-Bromofluorobenzene
9.504	7415398	d4-Dichlorobenzene
7.800	17385186	d5-Chlorobenzene
9.823	2323880	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291619.D

Date : 29-MAR-2016 20:45

Client ID: GSTD5

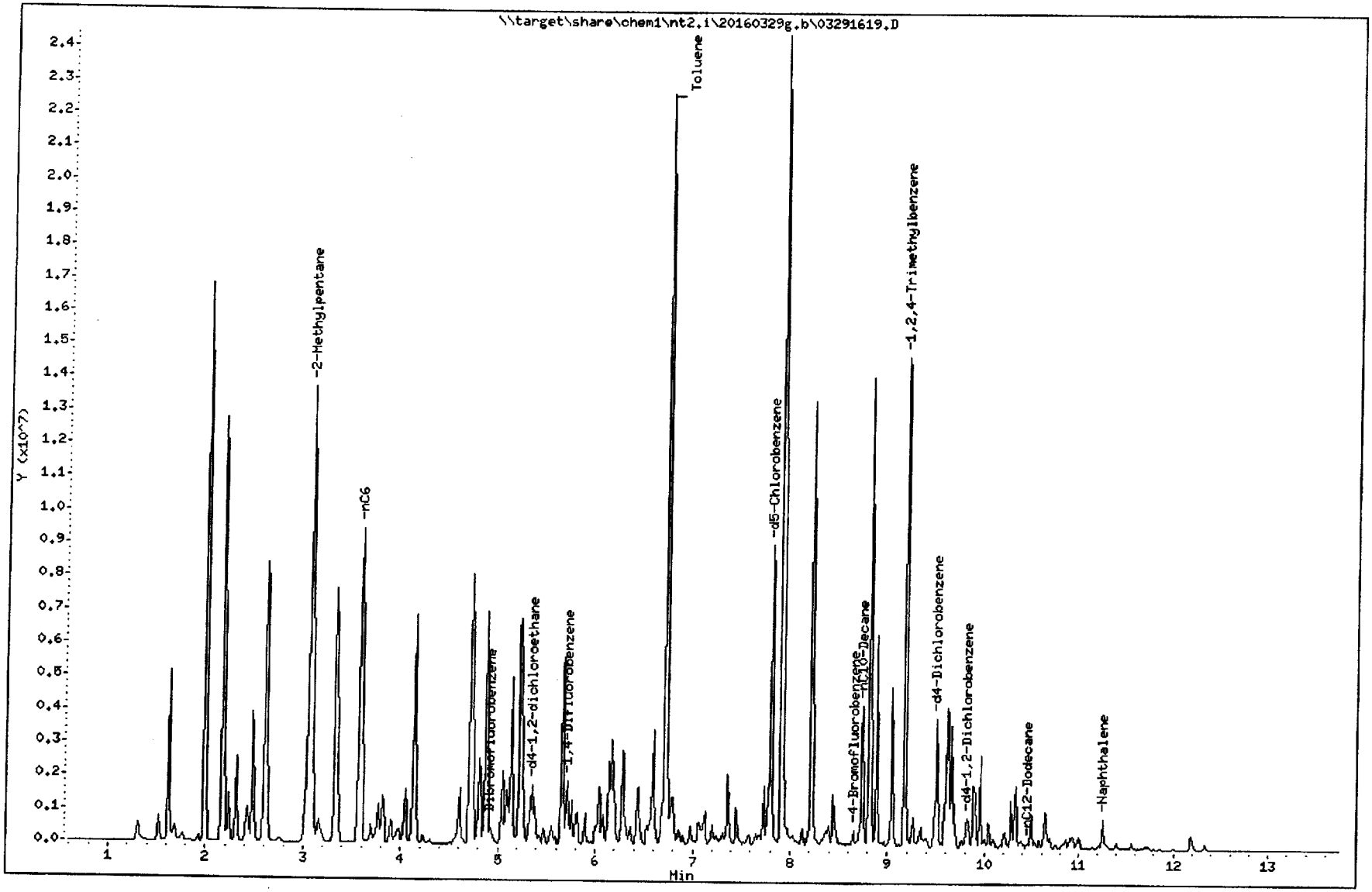
Sample Info: G5000329,10,10,0,

Column phase: RTXVMS

Instrument: nt2.i

Operator: PC

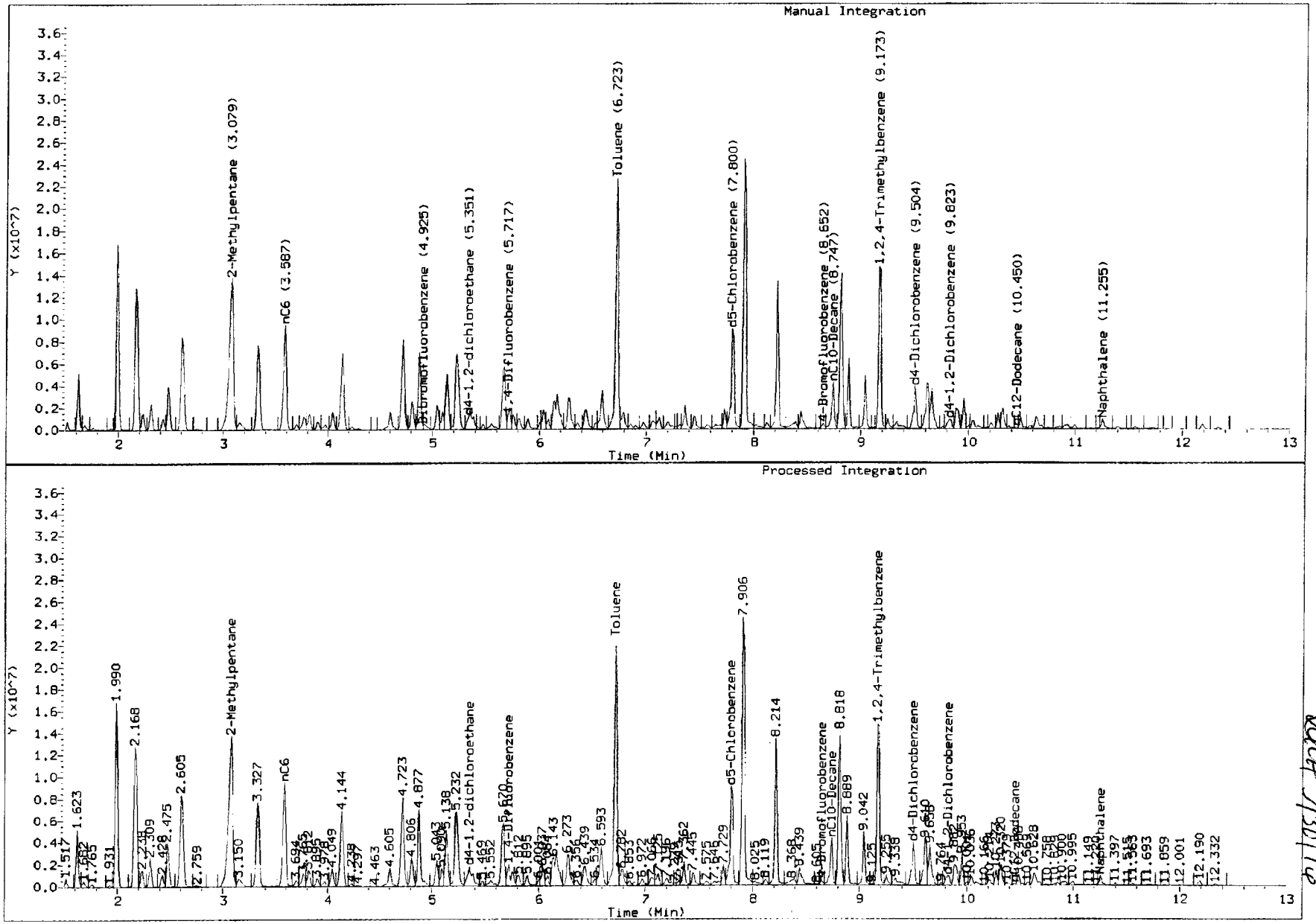
Column diameter: 0.18



TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291619.D Injection: 29-MAR-2016 20:45

Lab ID:G5000329



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291619.D
Lab Smp Id: G5000329
Inj Date : 29-MAR-2016 20:45
Operator : PC Inst ID: nt2.i
Smp Info : G5000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.948	4.947	(0.929)	87942	4.75461	4.755
31 Benzene	78	5.244	5.243	(0.917)	2898737	35.0848	35.085
* 32 Pentafluorobenzene	168	5.326	5.326	(1.000)	386746	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	143410	6.55546	6.555
* 37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	615798	10.0000	
$ 43 d8-Toluene	98	6.687	6.687	(1.170)	386722	5.30428	5.304
44 Toluene	92	6.723	6.722	(1.176)	9153352	167.620	167.62
* 53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	554896	10.0000	
55 Ethyl Benzene	106	7.811	7.811	(1.005)	2216213	67.2715	67.272
57 m,p-xylene	106	7.906	7.906	(1.017)	6878890	171.311	171.31
58 o-Xylene	106	8.214	8.212	(1.056)	3206837	84.6732	84.673
$ 62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	115448	5.10389	5.104
* 76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	296516	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	141228	4.98129	4.981

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291619.D
Lab Smp Id: G5000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	386746	10.38
37 1,4-Difluorobenze	562526	281263	1125052	615798	9.47
53 d5-Chlorobenzene	502371	251186	1004742	554896	10.46
76 d4-1,4-Dichlorobe	277950	138975	555900	296516	6.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.01
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.01
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G5000329
Level: LOW
Data Type: MS DATA
SpikeList File: allspike.spk
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Client SDG: 20151001
Fraction: VOA

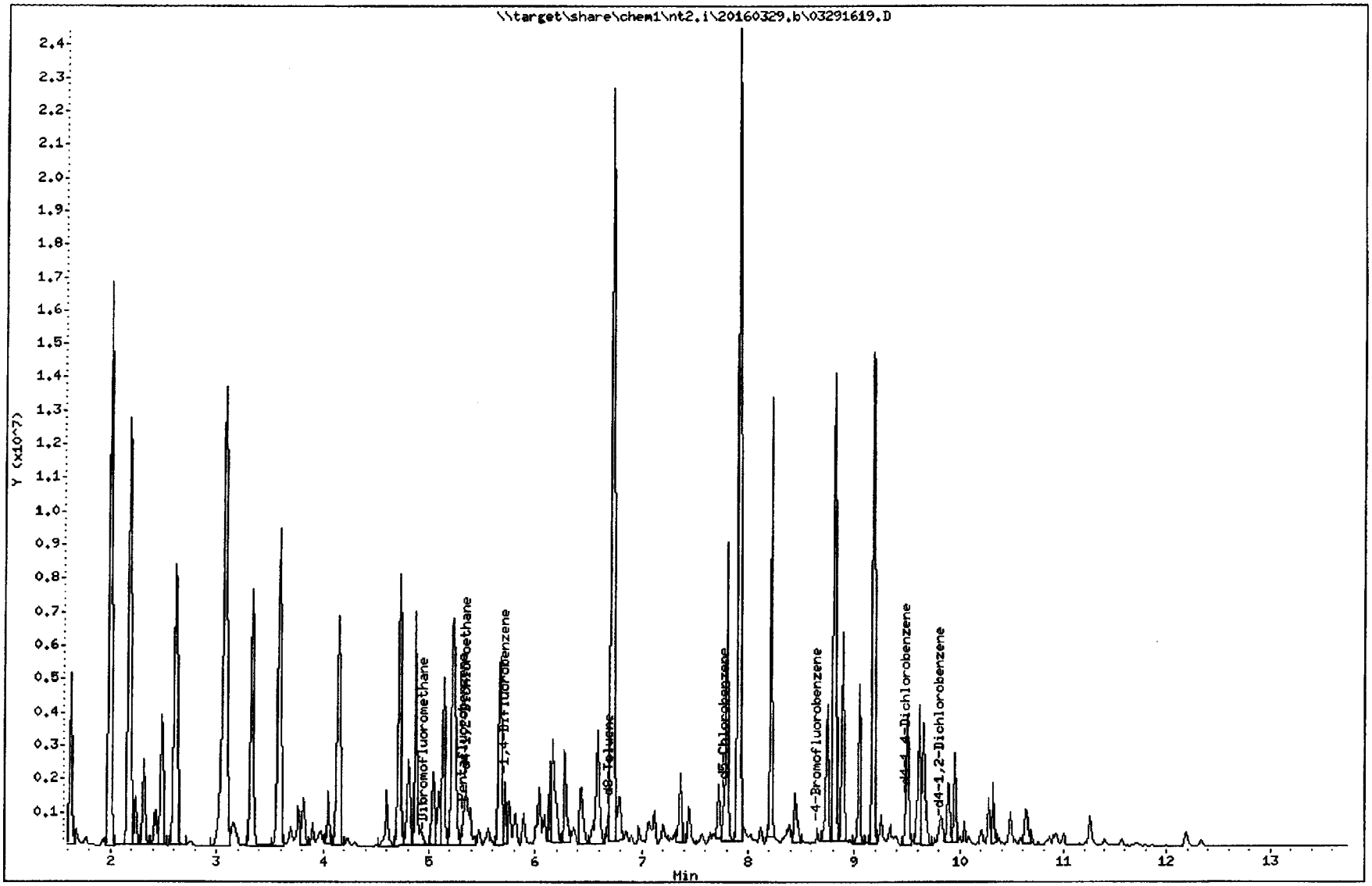
Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.755	95.09	80-120
$ 33 d4-1,2-Dichloroeth	5.000	6.555	131.11	80-149
$ 43 d8-Toluene	5.000	5.304	106.09	77-120
$ 62 4-Bromofluorobenze	5.000	5.104	102.08	80-120
$ 79 d4-1,2-Dichloroben	5.000	4.981	99.63	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291619.D
Date : 29-MAR-2016 20:45
Client ID:
Sample Info: G5000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column phase: RTXVMS
Column diameter: 0.18



REVIEW SUMMARY FOR FILE - 03291619.D

Lab ID: G5000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 20:45

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

XMH 3/30/16

Data file: 20160329g.b/03291620.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 21:07

ARI ID: G2500329
Client ID: GSTD2.5
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	128218700	2.671 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	218454623	2.625 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	152980229	2.606 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	131878192	2.680 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	209675553	2.862 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

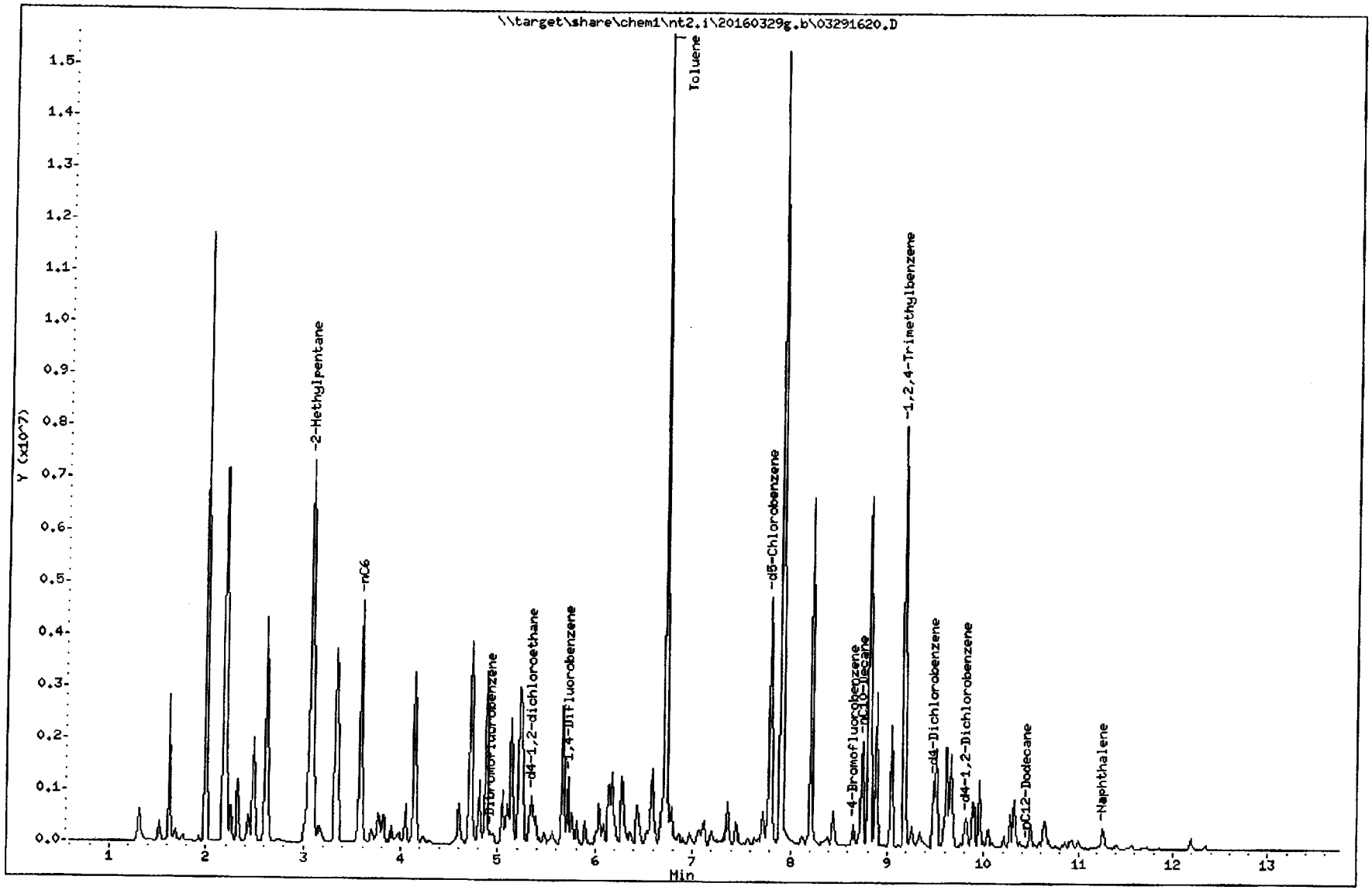
8.652	725527	4-Bromofluorobenzene
9.480	1953245	d4-Dichlorobenzene
7.800	9346764	d5-Chlorobenzene
9.812	1451073	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291620.D
Date : 29-MAR-2016 21:07
Client ID: GSTD2.5
Sample Info: G2500329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

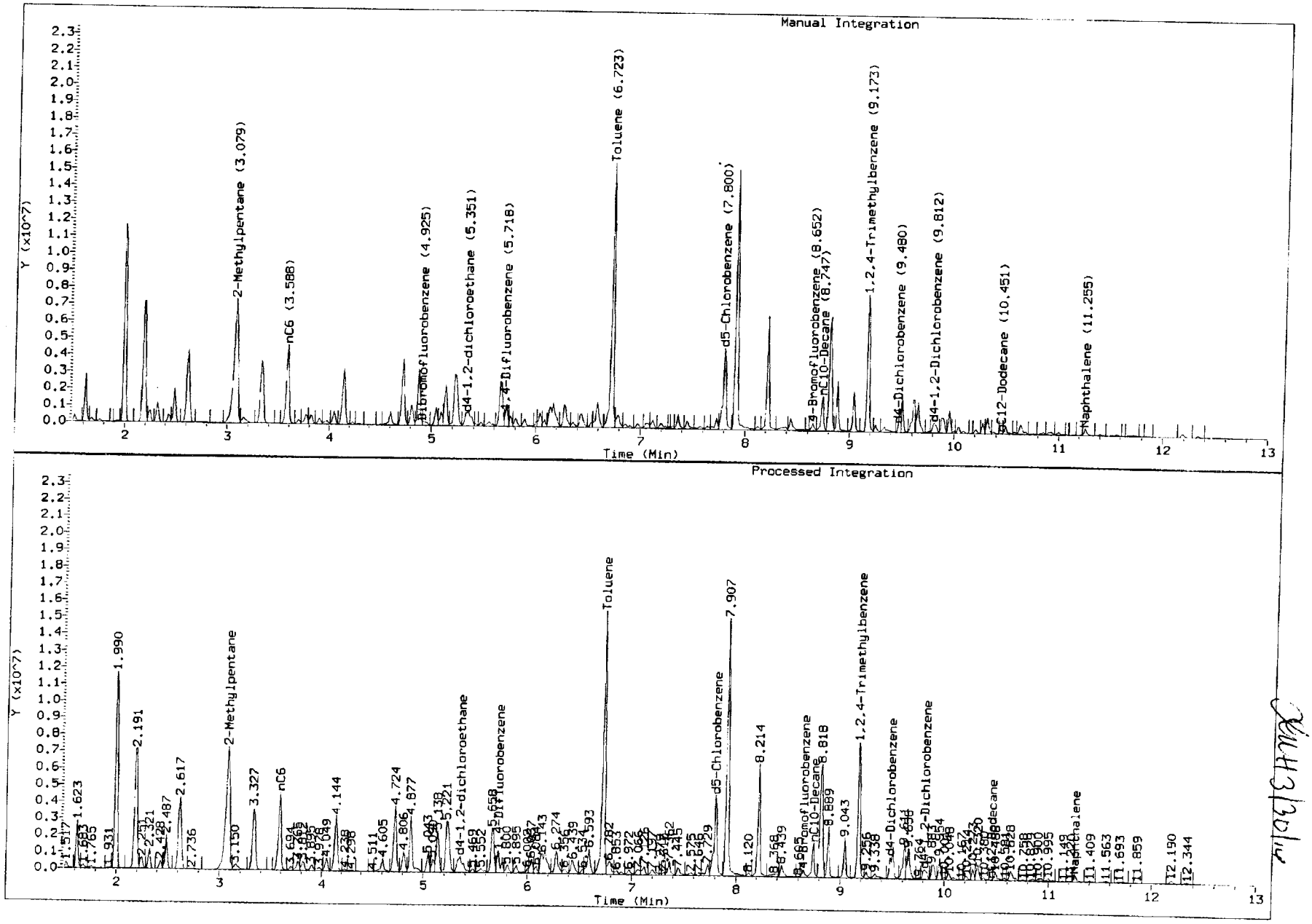
Column phase: RTXVMS



TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291620.D Injection: 29-MAR-2016 21:07

Lab ID:G2500329



JMH 3/30/16

XLM 3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291620.D
Lab Smp Id: G2500329
Inj Date : 29-MAR-2016 21:07
Operator : PC Inst ID: nt2.i
Smp Info : G2500329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	27 Dibromofluoromethane	111	4.948	4.947	(0.929)	80895	4.61716	4.617
	31 Benzene	78	5.244	5.243	(0.917)	1447462	18.5854	18.585
*	32 Pentafluorobenzene	168	5.327	5.326	(1.000)	366346	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	120364	5.80838	5.808
*	37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	580475	10.0000	
$	43 d8-Toluene	98	6.687	6.687	(1.170)	363485	5.28895	5.289
	44 Toluene	92	6.723	6.722	(1.176)	5827569	113.211	113.21
*	53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	530399	10.0000	
	55 Ethyl Benzene	106	7.800	7.811	(1.003)	1077327	34.2118	34.212
	57 m,p-xylene	106	7.906	7.906	(1.017)	4034007	105.103	105.10
	58 o-Xylene	106	8.214	8.212	(1.056)	1583683	43.7468	43.747
$	62 4-Bromofluorobenzene	174	8.652	8.651	(1.113)	110194	5.09662	5.097
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	284779	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.811	(1.035)	136810	5.02434	5.024

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291620.D
Lab Smp Id: G2500329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	366346	4.56
37 1,4-Difluorobenze	562526	281263	1125052	580475	3.19
53 d5-Chlorobenzene	502371	251186	1004742	530399	5.58
76 d4-1,4-Dichlorobe	277950	138975	555900	284779	2.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Client SDG: 20151001
Sample Matrix: SOLID
Fraction: VOA
Lab Smp Id: G2500329
Level: LOW
Operator: PC
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: allspike.spk
Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

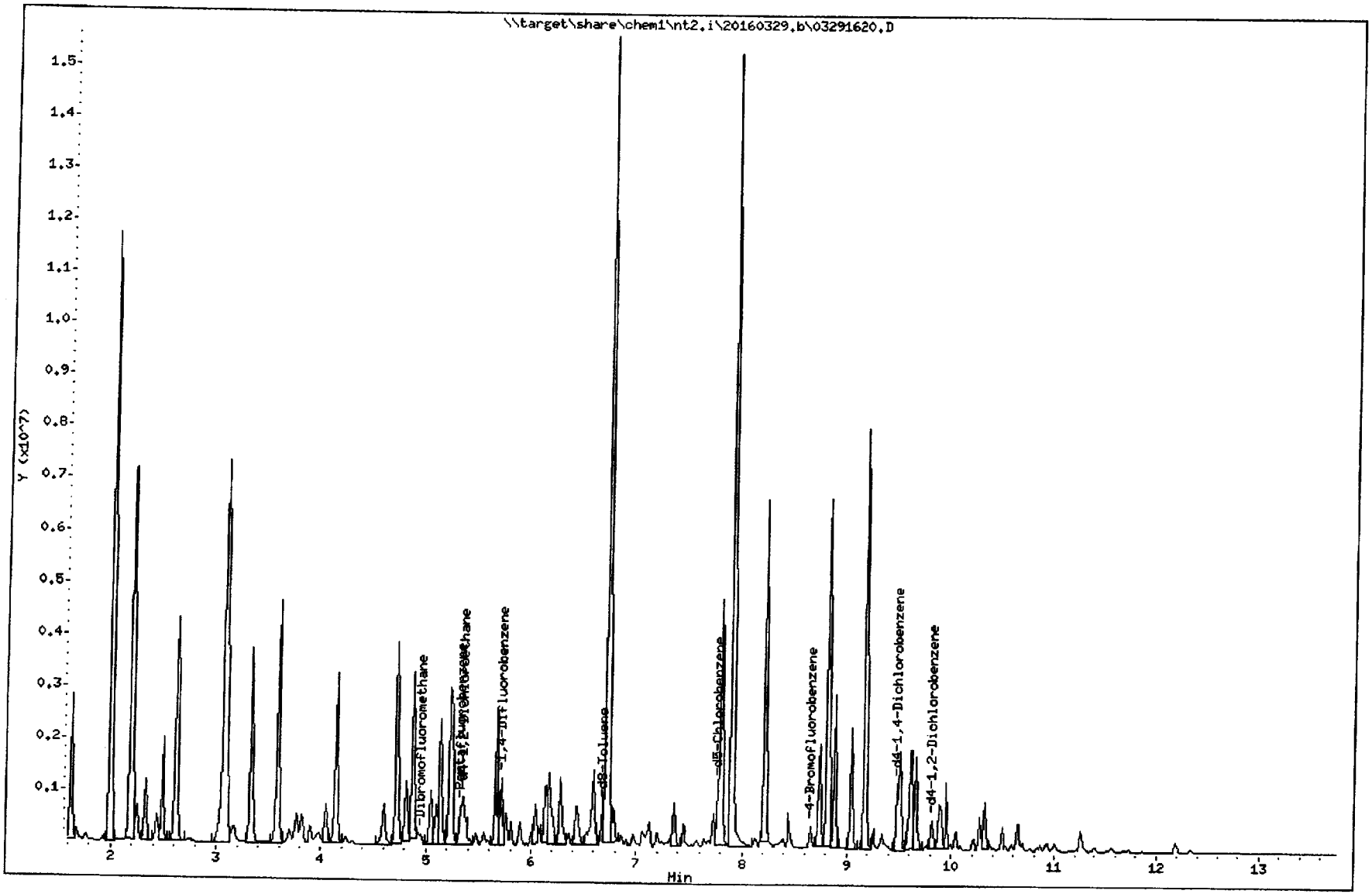
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.617	92.34	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.808	116.17	80-149
$ 43 d8-Toluene	5.000	5.289	105.78	77-120
$ 62 4-Bromofluorobenze	5.000	5.097	101.93	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.024	100.49	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291620.D
Date : 29-MAR-2016 21:07
Client ID:
Sample Info: G2500329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291620.D

Lab ID: G2500329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 21:07

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

3/30/16

Data file: 20160329g.b/03291621.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 21:28

ARI ID: G1000329
Client ID: GSTD1
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	51185622	1.066 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	85008808	1.021 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	60464211	1.030 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	52493344	1.067 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	81213277	1.109 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

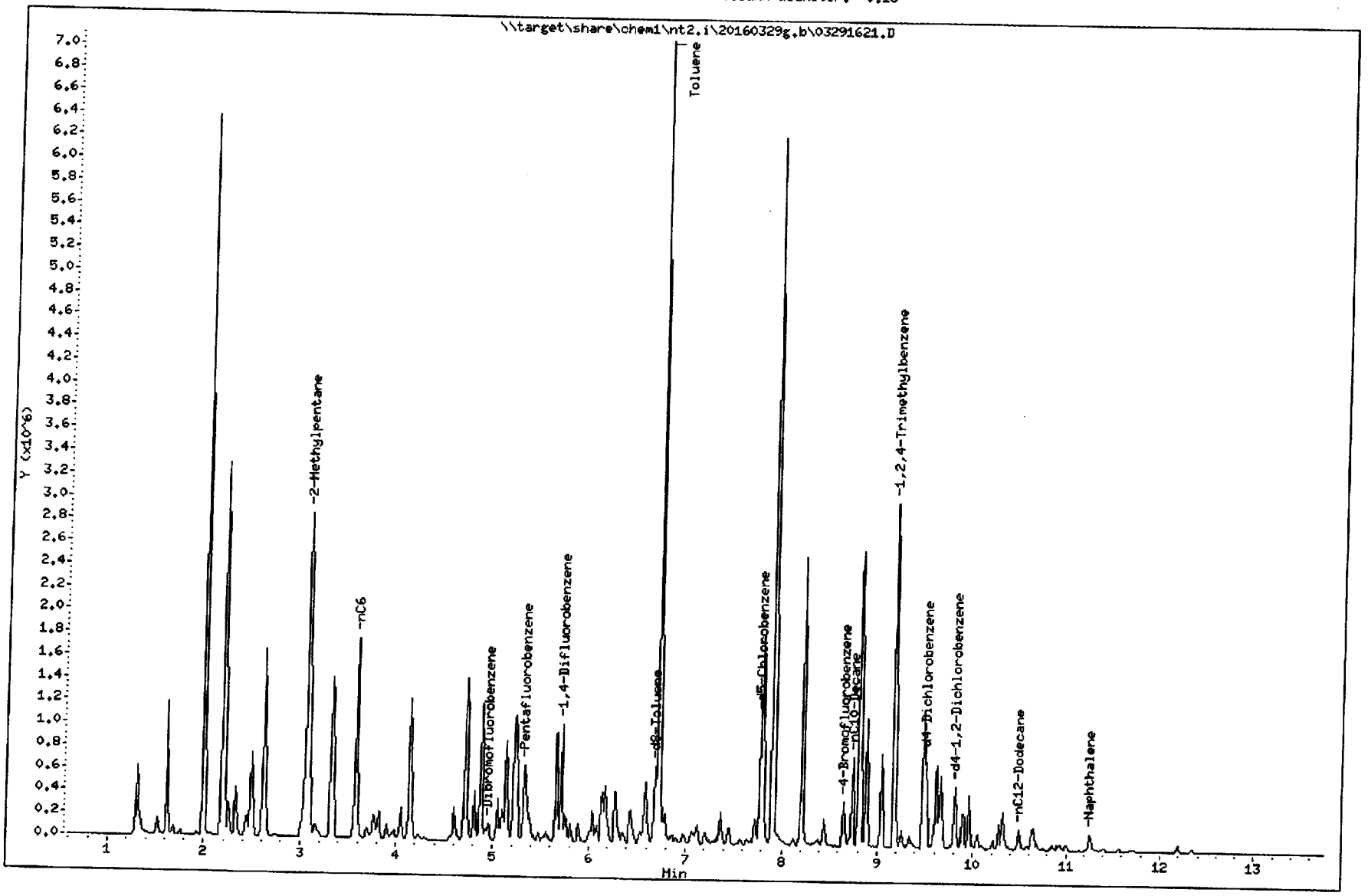
6.687	961710	d8-Toluene
8.651	593851	4-Bromofluorobenzene
9.503	1463362	d4-Dichlorobenzene
7.776	1720498	d5-Chlorobenzene
9.811	972946	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291621.D
Date : 29-MAR-2016 21:28
Client ID: GSTD1
Sample Info: G1000329,10,10,0,

Column phase: RTXVHS

Instrument: nt2.i

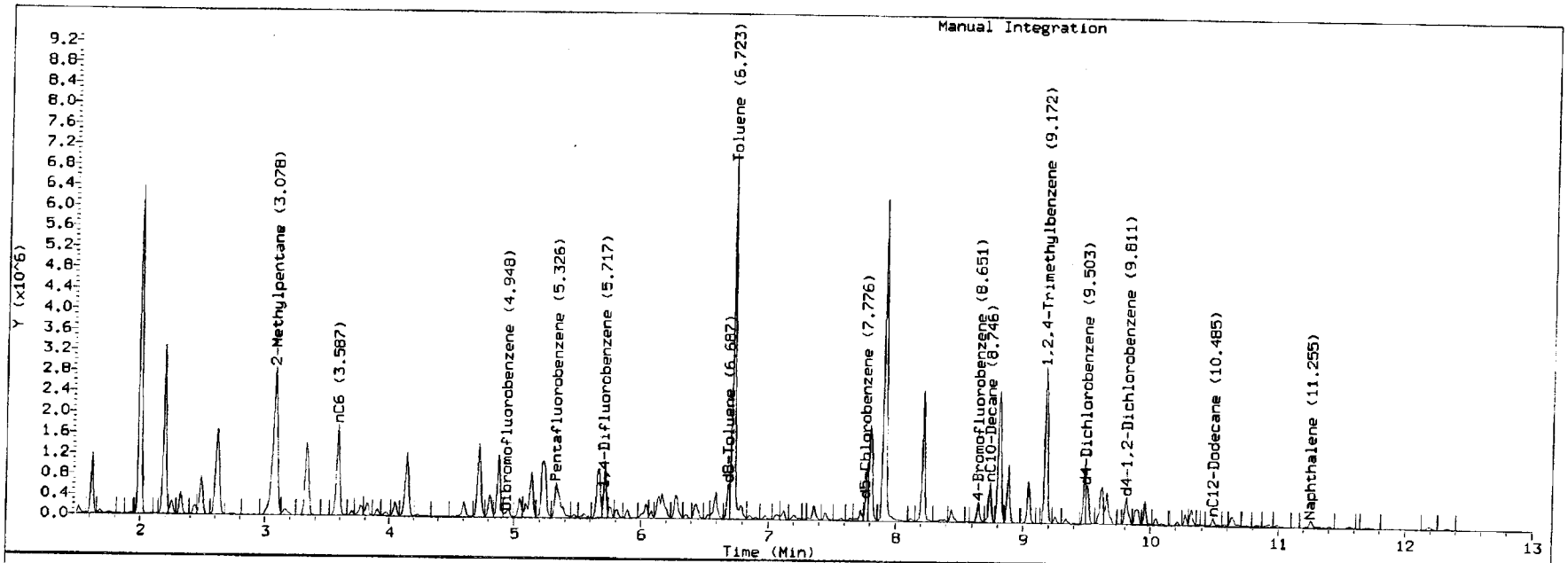
Operator: PC
Column diameter: 0.18

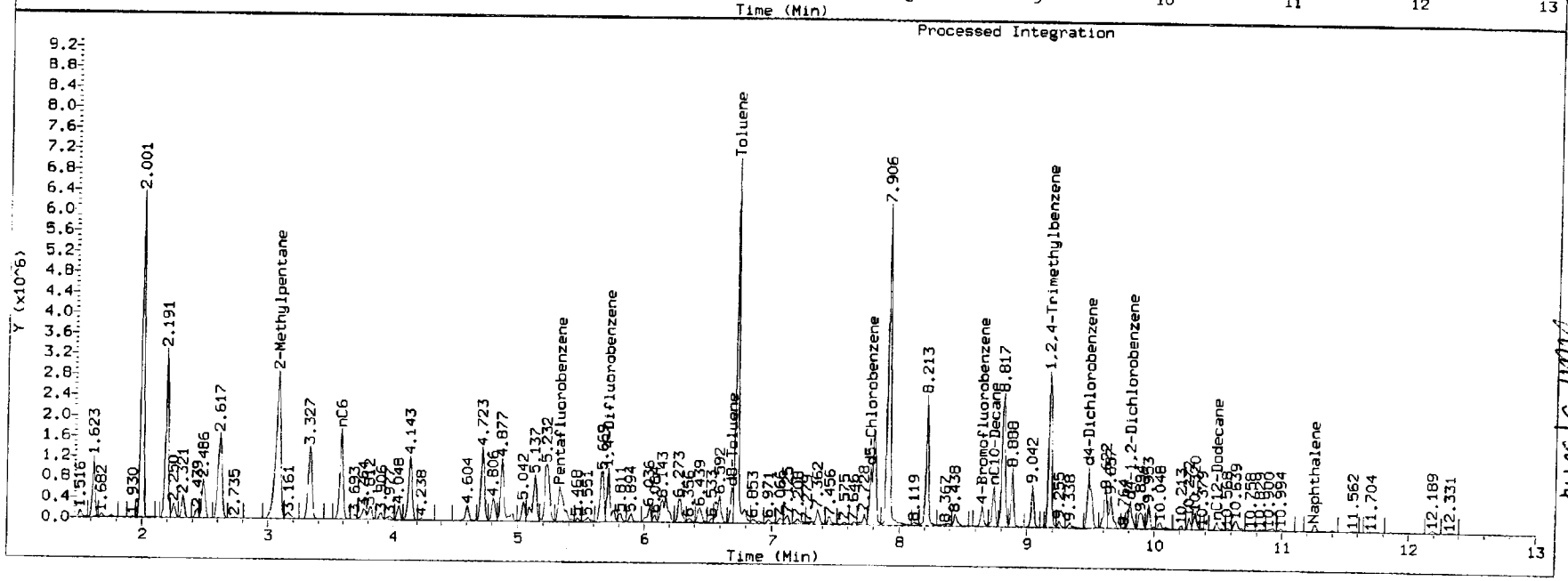


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291621.D Injection: 29-MAR-2016 21:28

Lab ID:G1000329





3/29/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291621.D
Lab Smp Id: G1000329
Inj Date : 29-MAR-2016 21:28
Operator : PC Inst ID: nt2.i
Smp Info : G1000329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	27 Dibromofluoromethane	111	4.947	4.947	(0.929)	80288	4.71446	4.714
	31 Benzene	78	5.243	5.243	(0.917)	543579	7.22688	7.227
*	32 Pentafluorobenzene	168	5.326	5.326	(1.000)	356093	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.349	5.350	(1.004)	104791	5.20248	5.202
*	37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	560609	10.0000	
$	43 d8-Toluene	98	6.687	6.687	(1.170)	341759	5.14904	5.149
	44 Toluene	92	6.722	6.722	(1.176)	2490488	50.0965	50.096
*	53 d5-Chlorobenzene	117	7.775	7.775	(1.000)	525882	10.0000	
	55 Ethyl Benzene	106	7.811	7.811	(1.005)	408748	13.0918	13.092
	57 m,p-xylene	106	7.905	7.906	(1.017)	1583945	41.6228	41.623
	58 o-Xylene	106	8.213	8.212	(1.056)	605338	16.8652	16.865
$	62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	104584	4.87869	4.879
*	76 d4-1,4-Dichlorobenzene	152	9.479	9.479	(1.000)	278120	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.810	9.811	(1.035)	134860	5.07131	5.071

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291621.D
Lab Smp Id: G1000329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	356093	1.63
37 1,4-Difluorobenze	562526	281263	1125052	560609	-0.34
53 d5-Chlorobenzene	502371	251186	1004742	525882	4.68
76 d4-1,4-Dichlorobe	277950	138975	555900	278120	0.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G1000329
Level: LOW
Data Type: MS DATA
SpikeList File: allspike.spk
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Client SDG: 20151001
Fraction: VOA

Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

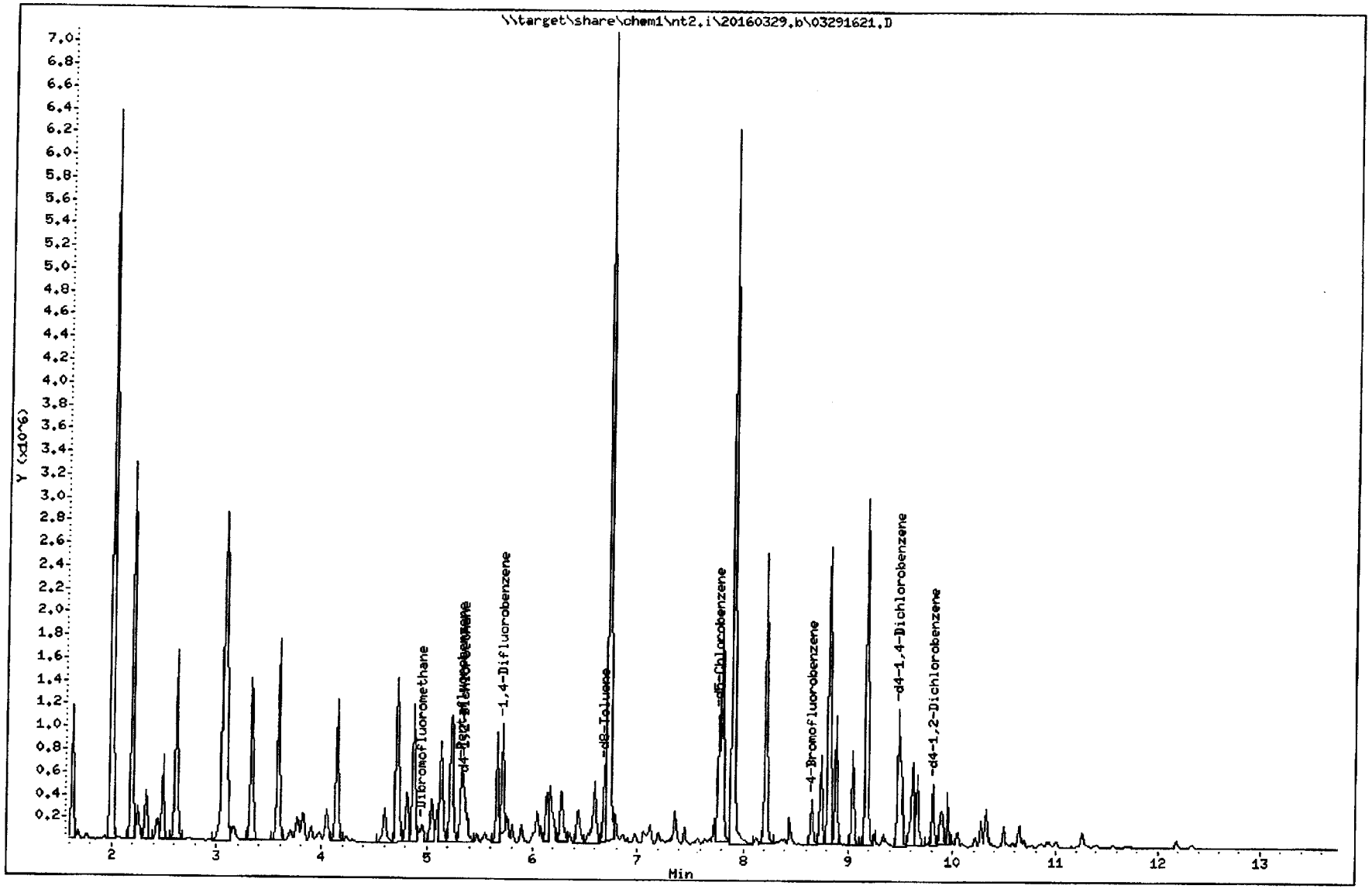
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.714	94.29	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.202	104.05	80-149
$ 43 d8-Toluene	5.000	5.149	102.98	77-120
$ 62 4-Bromofluorobenze	5.000	4.879	97.57	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.071	101.43	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291621.D
Date : 29-MAR-2016 21:28
Client ID:
Sample Info: G1000329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291621.D

Lab ID: G1000329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 21:28

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

AH 3/30/14

Data file: 20160329g.b/03291622.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 21:50

ARI ID: G0500329
Client ID: GSTD0.5
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	24555813	0.511 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	41871825	0.503 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	29736642	0.507 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	25132108	0.511 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	39181834	0.535 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

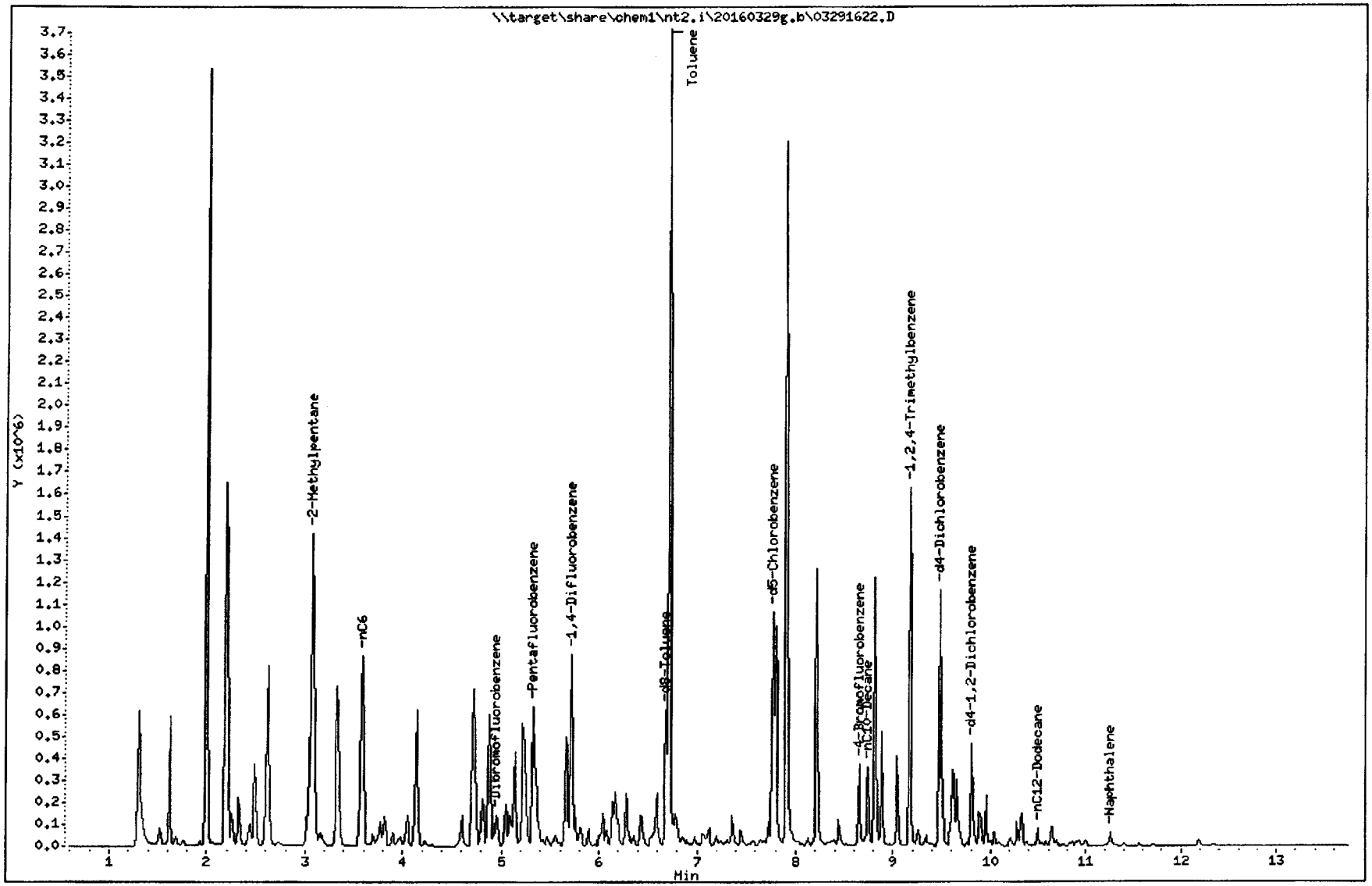
6.688	840841	d8-Toluene
8.653	550626	4-Bromofluorobenzene
9.481	2058351	d4-Dichlorobenzene
7.777	1519780	d5-Chlorobenzene
9.812	870971	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291622.D
Date : 29-MAR-2016 21:50
Client ID: GSTD0.5
Sample Info: G0500329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

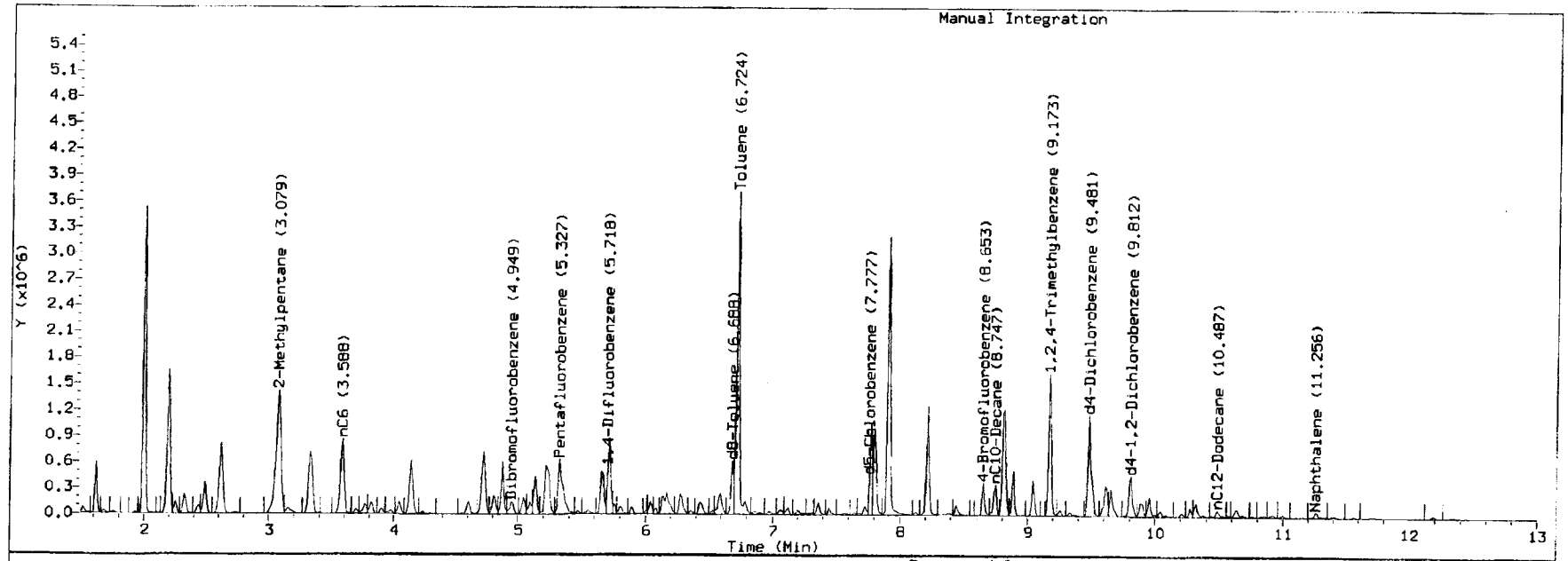
Column phase: RTXVMS

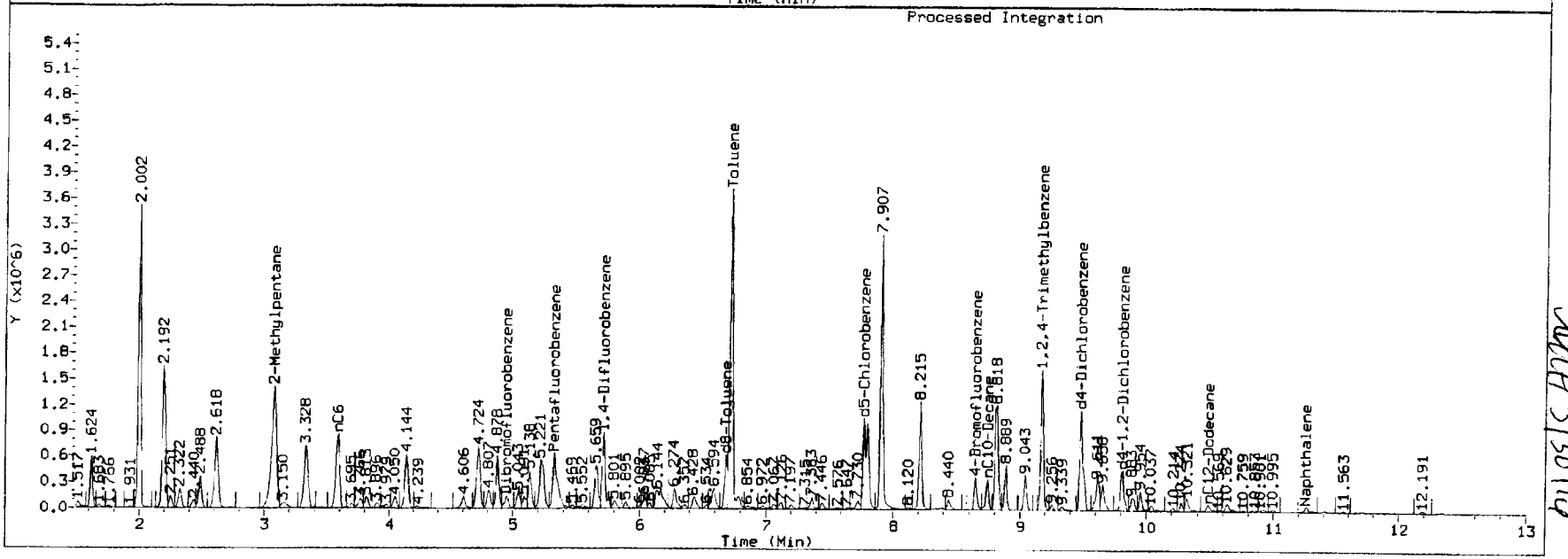


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291622.D Injection: 29-MAR-2016 21:50

Lab ID:G0500329





ALH 3/30/16

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291622.D
Lab Smp Id: G0500329
Inj Date : 29-MAR-2016 21:50
Operator : PC Inst ID: nt2.i
Smp Info : G0500329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.948	4.947	(0.929)	74949	4.67769	4.678
31 Benzene	78	5.244	5.243	(0.917)	267067	3.77717	3.777
* 32 Pentafluorobenzene	168	5.327	5.326	(1.000)	335026	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.351	5.350	(1.004)	95614	5.04537	5.045
* 37 1,4-Difluorobenzene	114	5.717	5.717	(1.000)	526989	10.0000	
$ 43 d8-Toluene	98	6.688	6.687	(1.170)	317010	5.08086	5.081
44 Toluene	92	6.723	6.722	(1.176)	1267837	27.1297	27.130
* 53 d5-Chlorobenzene	117	7.776	7.775	(1.000)	495230	10.0000	
55 Ethyl Benzene	106	7.800	7.811	(1.003)	198708	6.75834	6.758
57 m,p-xylene	106	7.907	7.906	(1.017)	790422	22.0562	22.056
58 o-Xylene	106	8.214	8.212	(1.056)	298827	8.84084	8.841
$ 62 4-Bromofluorobenzene	174	8.652	8.651	(1.113)	97596	4.83450	4.835
* 76 d4-1,4-Dichlorobenzene	152	9.480	9.479	(1.000)	263670	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.812	9.811	(1.035)	126127	5.00284	5.003

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291622.D
Lab Smp Id: G0500329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	335026	-4.38
37 1,4-Difluorobenze	562526	281263	1125052	526989	-6.32
53 d5-Chlorobenzene	502371	251186	1004742	495230	-1.42
76 d4-1,4-Dichlorobe	277950	138975	555900	263670	-5.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.03
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G0500329
Level: LOW
Data Type: MS DATA
SpikeList File: allspike.spk
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Client SDG: 20151001
Fraction: VOA

Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

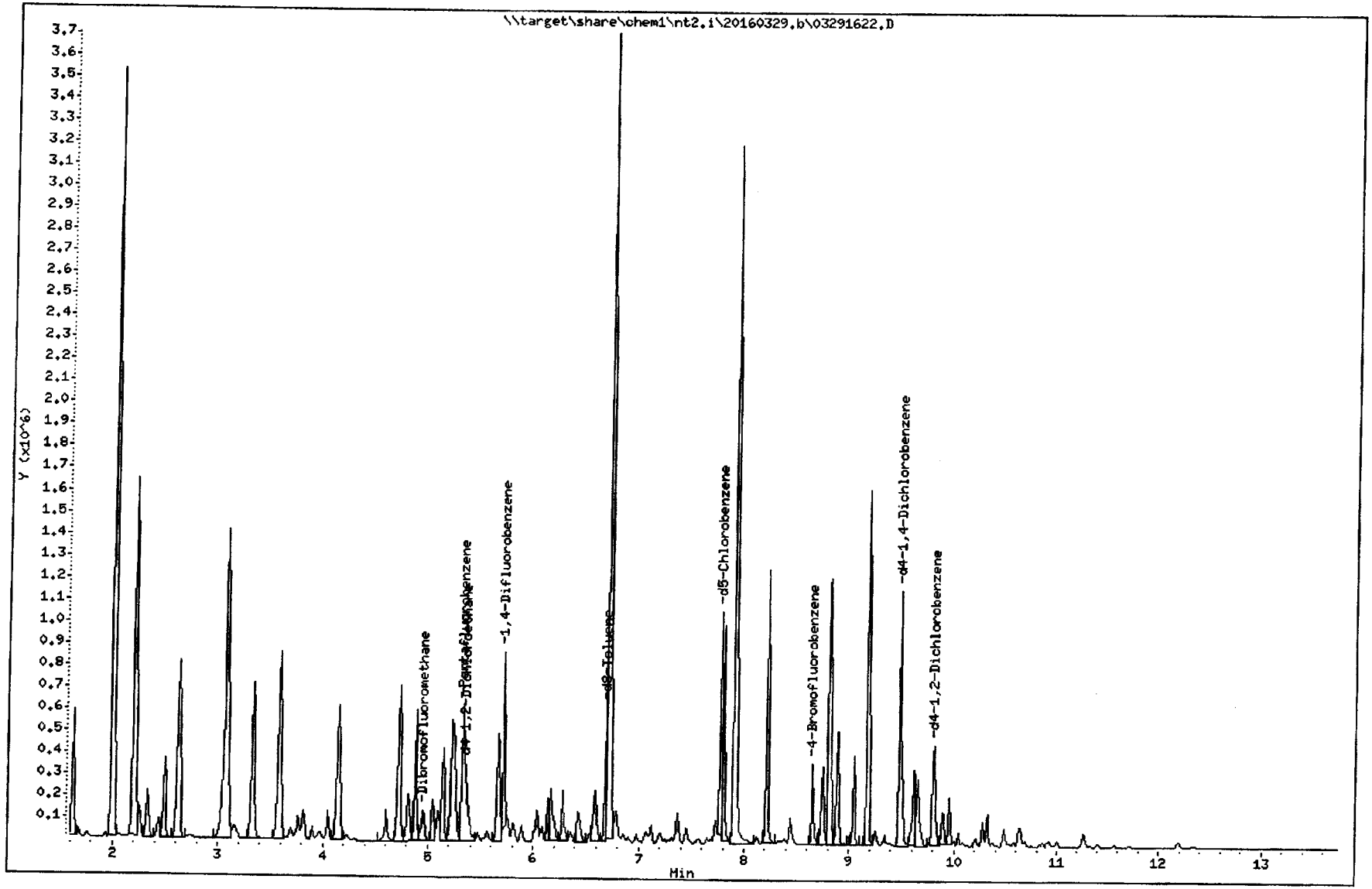
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.678	93.55	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.045	100.91	80-149
$ 43 d8-Toluene	5.000	5.081	101.62	77-120
$ 62 4-Bromofluorobenze	5.000	4.835	96.69	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.003	100.06	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291622.D
Date : 29-MAR-2016 21:50
Client ID:
Sample Info: G0500329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291622.D

Lab ID: G0500329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 21:50

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

XMH 3/30/16

Data file: 20160329g.b/03291623.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 22:11

ARI ID: G0250329
Client ID: GSTD0.25
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	12028020	0.251 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	20718376	0.249 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	14779001	0.252 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	12232714	0.249 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	19225550	0.262 M

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

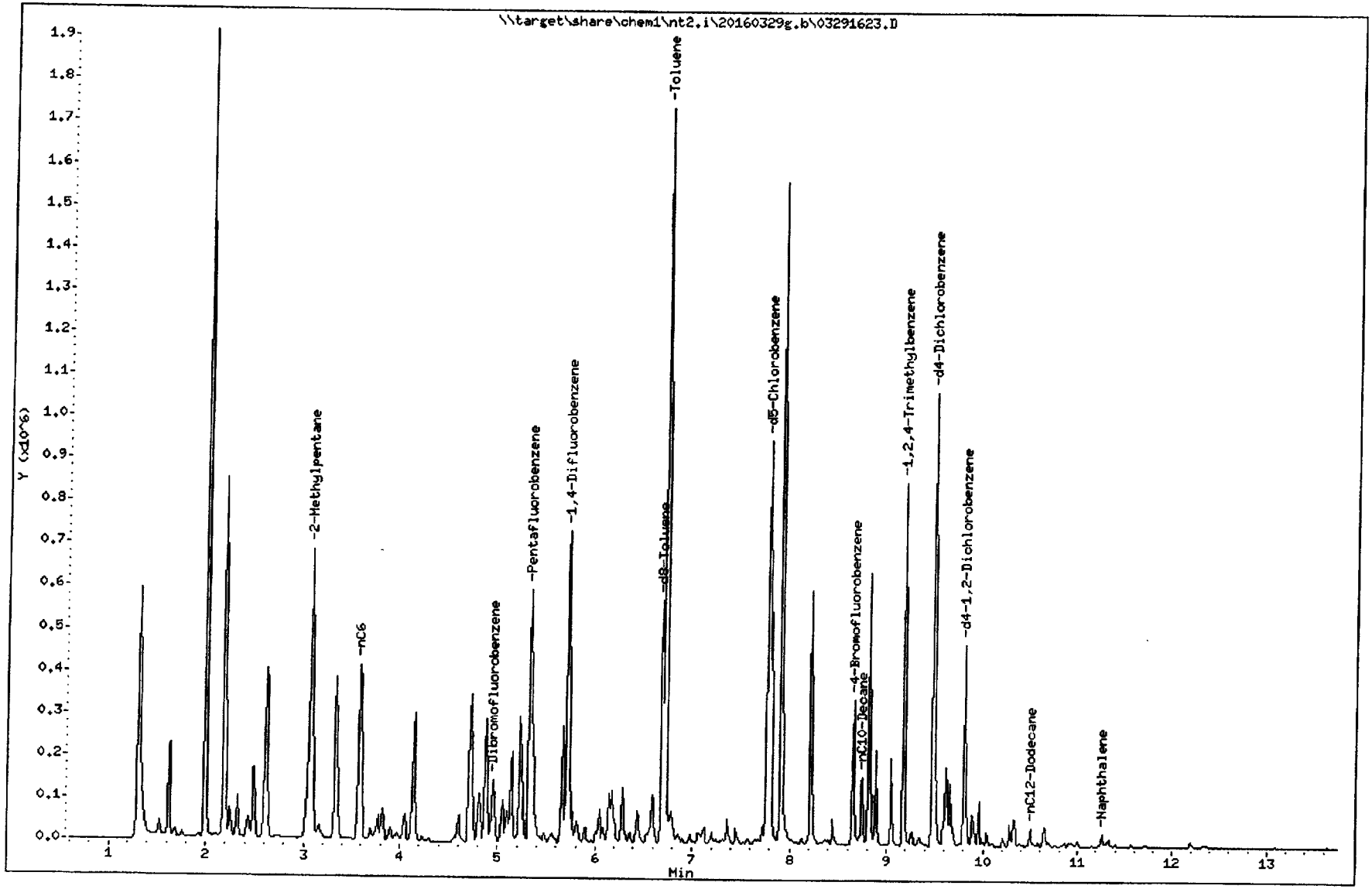
6.691	842876	d8-Toluene
8.655	536470	4-Bromofluorobenzene
9.484	1790369	d4-Dichlorobenzene
7.780	1496568	d5-Chlorobenzene
9.803	804532	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291623.D
Date : 29-MAR-2016 22:11
Client ID: GSTD0.25
Sample Info: G0250329,10,10,0,

Column phase: RTXVHS

Instrument: nt2.i

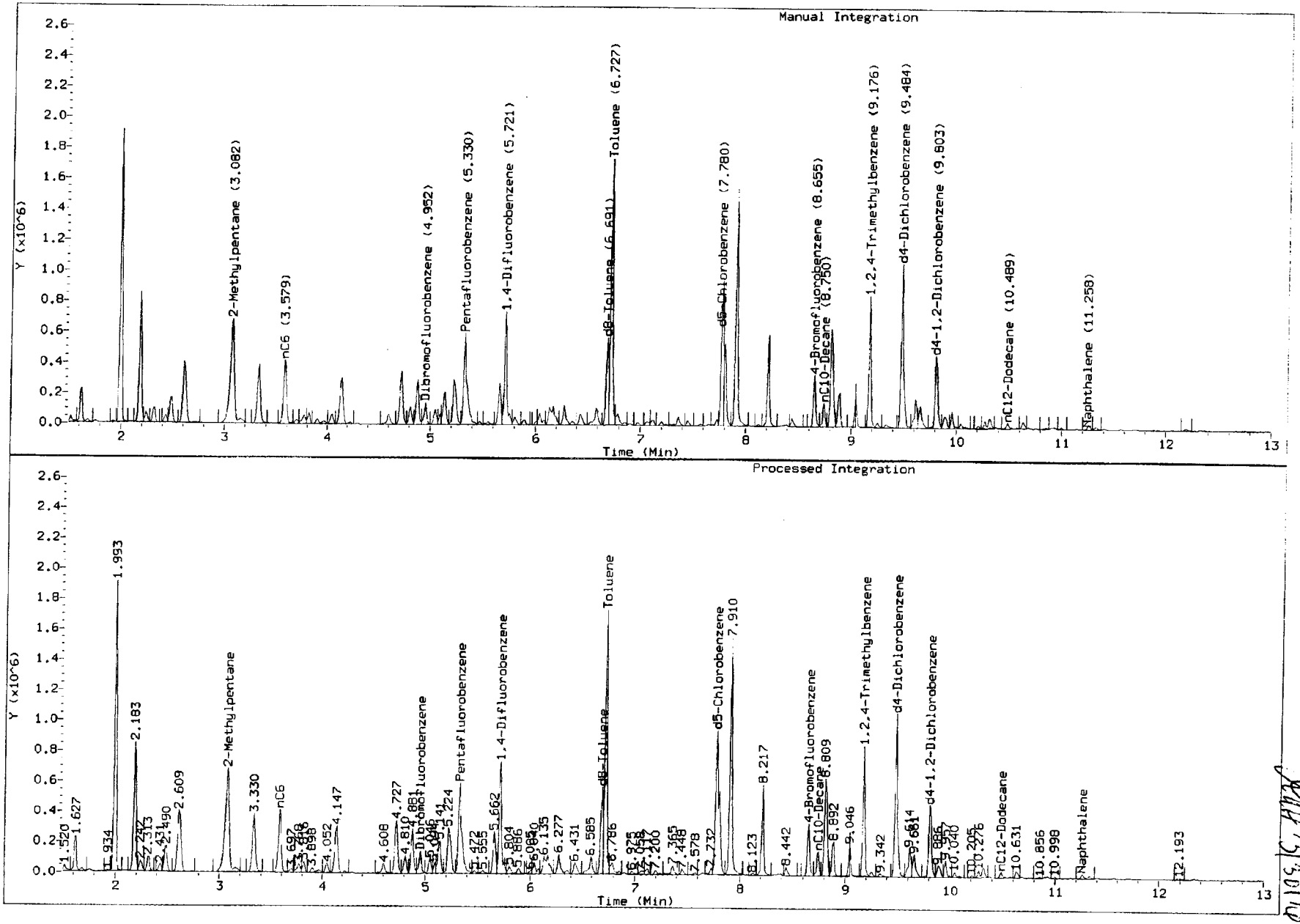
Operator: PC
Column diameter: 0.18



TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291623.D Injection: 29-MAR-2016 22:11

Lab ID:G0250329



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291623.D
Lab Smp Id: G0250329
Inj Date : 29-MAR-2016 22:11
Operator : PC Inst ID: nt2.i
Smp Info : G0250329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.951	4.947	(0.929)	75545	4.78409	4.784
31 Benzene	78	5.247	5.243	(0.917)	138156	1.96530	1.965
* 32 Pentafluorobenzene	168	5.330	5.326	(1.000)	330180	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.353	5.350	(1.004)	95599	5.11861	5.119
* 37 1,4-Difluorobenzene	114	5.720	5.717	(1.000)	523950	10.0000	
$ 43 d8-Toluene	98	6.691	6.687	(1.170)	321950	5.18997	5.190
44 Toluene	92	6.726	6.722	(1.176)	647699	13.9401	13.940
* 53 d5-Chlorobenzene	117	7.779	7.775	(1.000)	490395	10.0000	
55 Ethyl Benzene	106	7.803	7.811	(1.003)	99790	3.42746	3.427
57 m,p-xylene	106	7.909	7.906	(1.017)	394058	11.1044	11.104
58 o-Xylene	106	8.217	8.212	(1.056)	146476	4.37624	4.376
$ 62 4-Bromofluorobenzene	174	8.655	8.651	(1.113)	95586	4.78162	4.782
* 76 d4-1,4-Dichlorobenzene	152	9.483	9.479	(1.000)	259889	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.814	9.811	(1.035)	124653	5.01631	5.016

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291623.D
Lab Smp Id: G0250329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	330180	-5.76
37 1,4-Difluorobenze	562526	281263	1125052	523950	-6.86
53 d5-Chlorobenzene	502371	251186	1004742	490395	-2.38
76 d4-1,4-Dichlorobe	277950	138975	555900	259889	-6.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.08
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.07
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.05
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G0250329
Level: LOW
Data Type: MS DATA
SpikeList File: allspike.spk
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Client SDG: 20151001
Fraction: VOA

Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

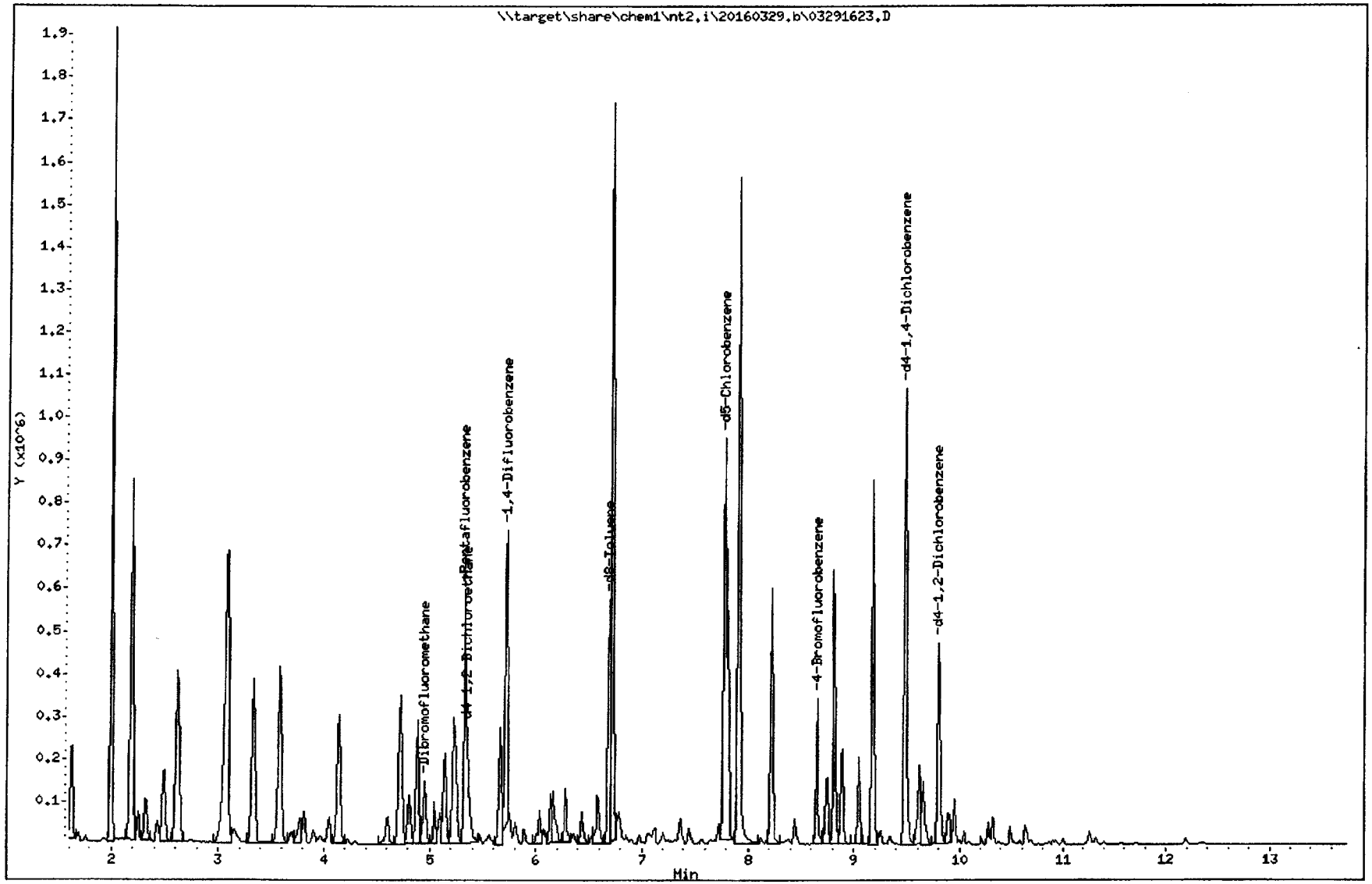
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.784	95.68	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.119	102.37	80-149
$ 43 d8-Toluene	5.000	5.190	103.80	77-120
$ 62 4-Bromofluorobenze	5.000	4.782	95.63	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.016	100.33	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291623.D
Date : 29-MAR-2016 22:11
Client ID:
Sample Info: G0250329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291623.D

Lab ID: G0250329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 22:11

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

RLH 3/30/16

Data file: 20160329g.b/03291624.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 22:32

ARI ID: G0100329
Client ID: GSTD0.1
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	3850119	0.080
8015C 2MP-TMB	(2.98 to 9.28)	83224207	7140486	0.086
AK101 nC6-nC10	(3.49 to 8.62)	58706304	4966251	0.085
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	3925968	0.080 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	6419449	0.088

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

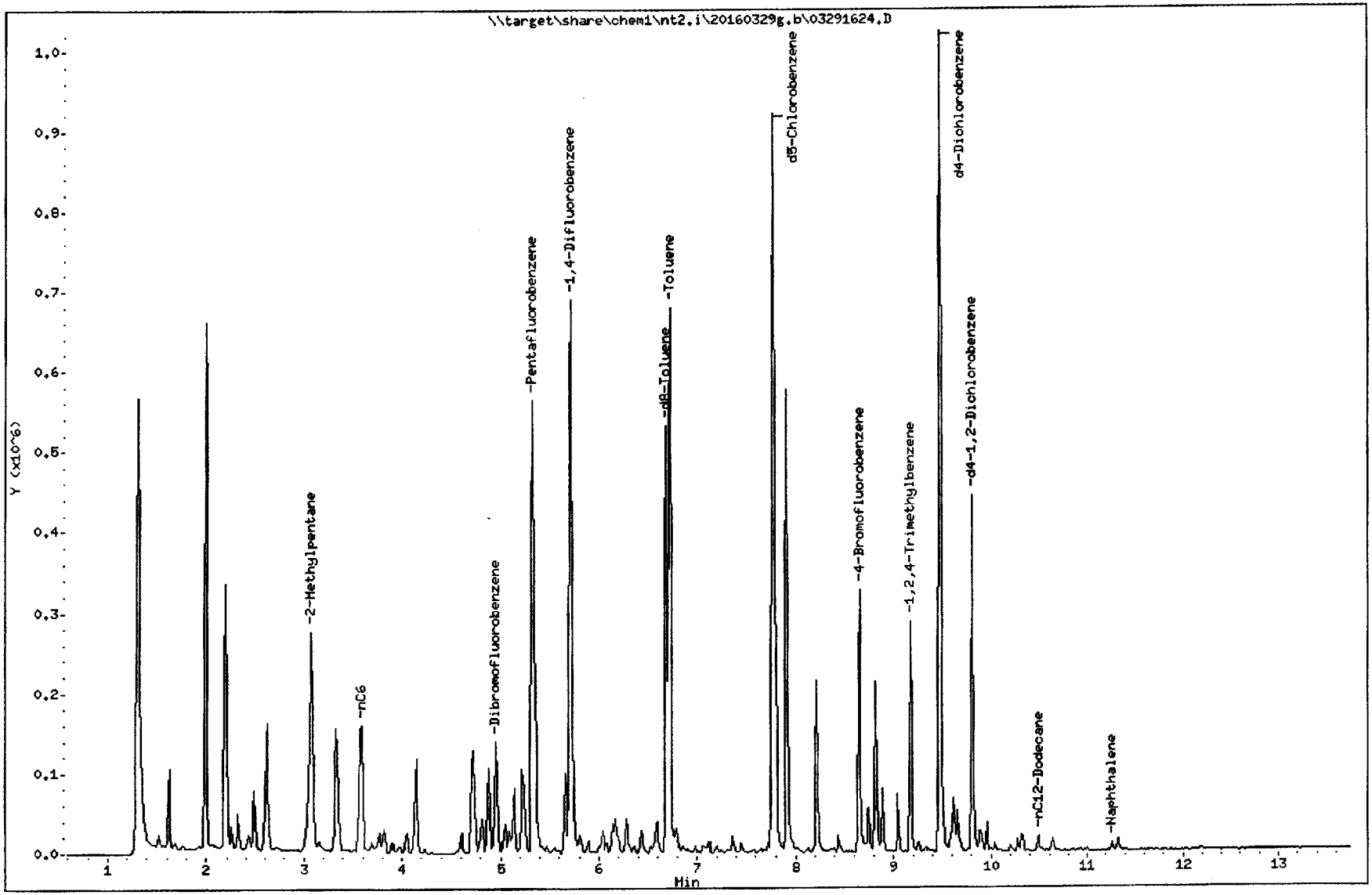
6.690	729346	d8-Toluene
8.655	616898	4-Bromofluorobenzene
9.483	1562613	d4-Dichlorobenzene
7.779	1619441	d5-Chlorobenzene
9.803	713446	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291624.D
Date : 29-MAR-2016 22:32
Client ID: GSTD0.1
Sample Info: G0100329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

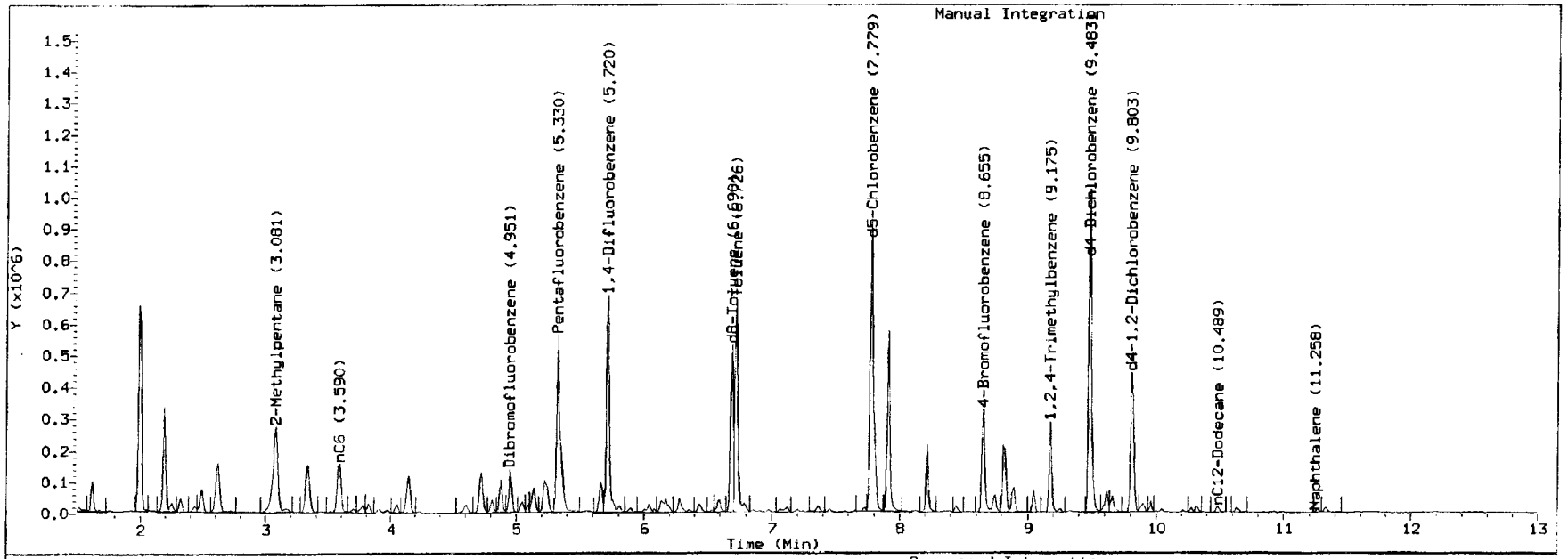
Column phase: RTXVMS

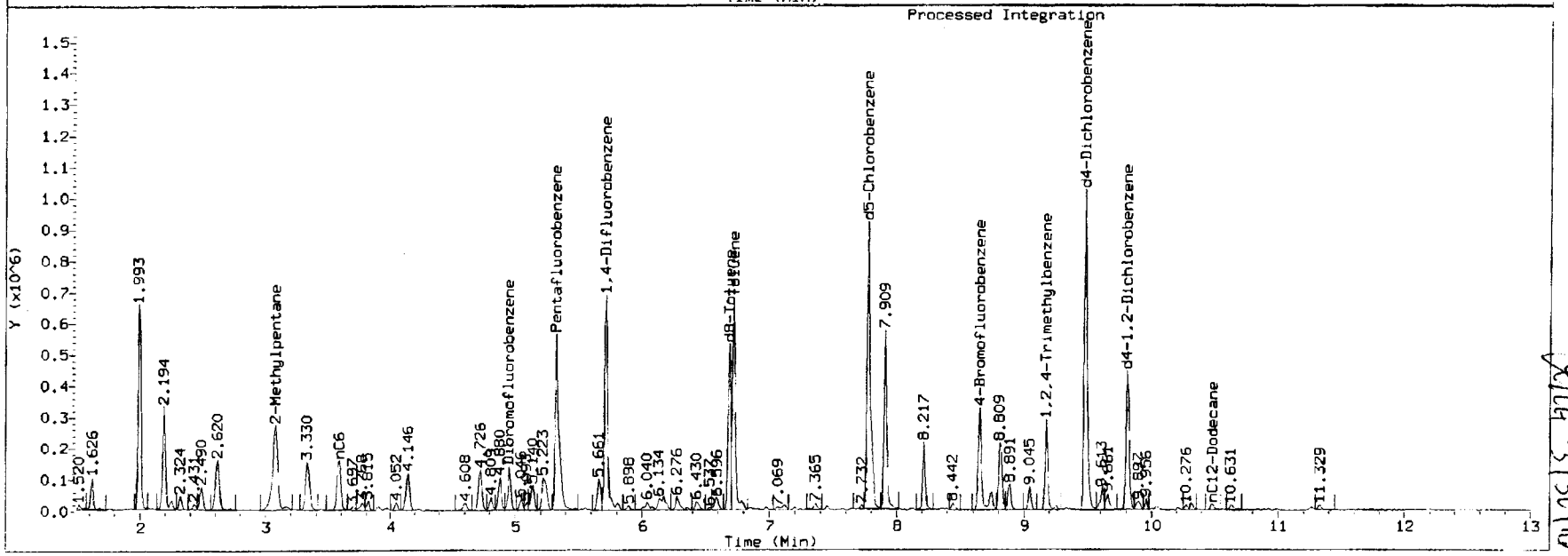


TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291624.D Injection: 29-MAR-2016 22:32

Lab ID:G0100329





Page 623 of 883

ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291624.D
Lab Smp Id: G0100329
Inj Date : 29-MAR-2016 22:32
Operator : PC Inst ID: nt2.i
Smp Info : G0100329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	27 Dibromofluoromethane	111	4.951	4.947	(0.929)	71888	4.95202	4.952
	31 Benzene	78	5.246	5.243	(0.917)	51759	0.80004	0.8000
*	32 Pentafluorobenzene	168	5.329	5.326	(1.000)	303542	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.353	5.350	(1.004)	91341	5.31982	5.320
*	37 1,4-Difluorobenzene	114	5.720	5.717	(1.000)	482197	10.0000	
$	43 d8-Toluene	98	6.690	6.687	(1.170)	292483	5.12321	5.123
	44 Toluene	92	6.725	6.722	(1.176)	249861	5.84328	5.843
*	53 d5-Chlorobenzene	117	7.779	7.775	(1.000)	459677	10.0000	
	55 Ethyl Benzene	106	7.802	7.811	(1.003)	36717	1.34538	1.345
	57 m,p-xylene	106	7.909	7.906	(1.017)	145124	4.36280	4.363
	58 o-Xylene	106	8.216	8.212	(1.056)	52554	1.67507	1.675
$	62 4-Bromofluorobenzene	174	8.654	8.651	(1.113)	87080	4.64721	4.647
*	76 d4-1,4-Dichlorobenzene	152	9.483	9.479	(1.000)	241501	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.814	9.811	(1.035)	117450	5.08632	5.086

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291624.D
Lab Smp Id: G0100329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	303542	-13.37
37 1,4-Difluorobenze	562526	281263	1125052	482197	-14.28
53 d5-Chlorobenzene	502371	251186	1004742	459677	-8.50
76 d4-1,4-Dichlorobe	277950	138975	555900	241501	-13.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.07
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.06
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.05
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G0100329
Level: LOW Operator: PC
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

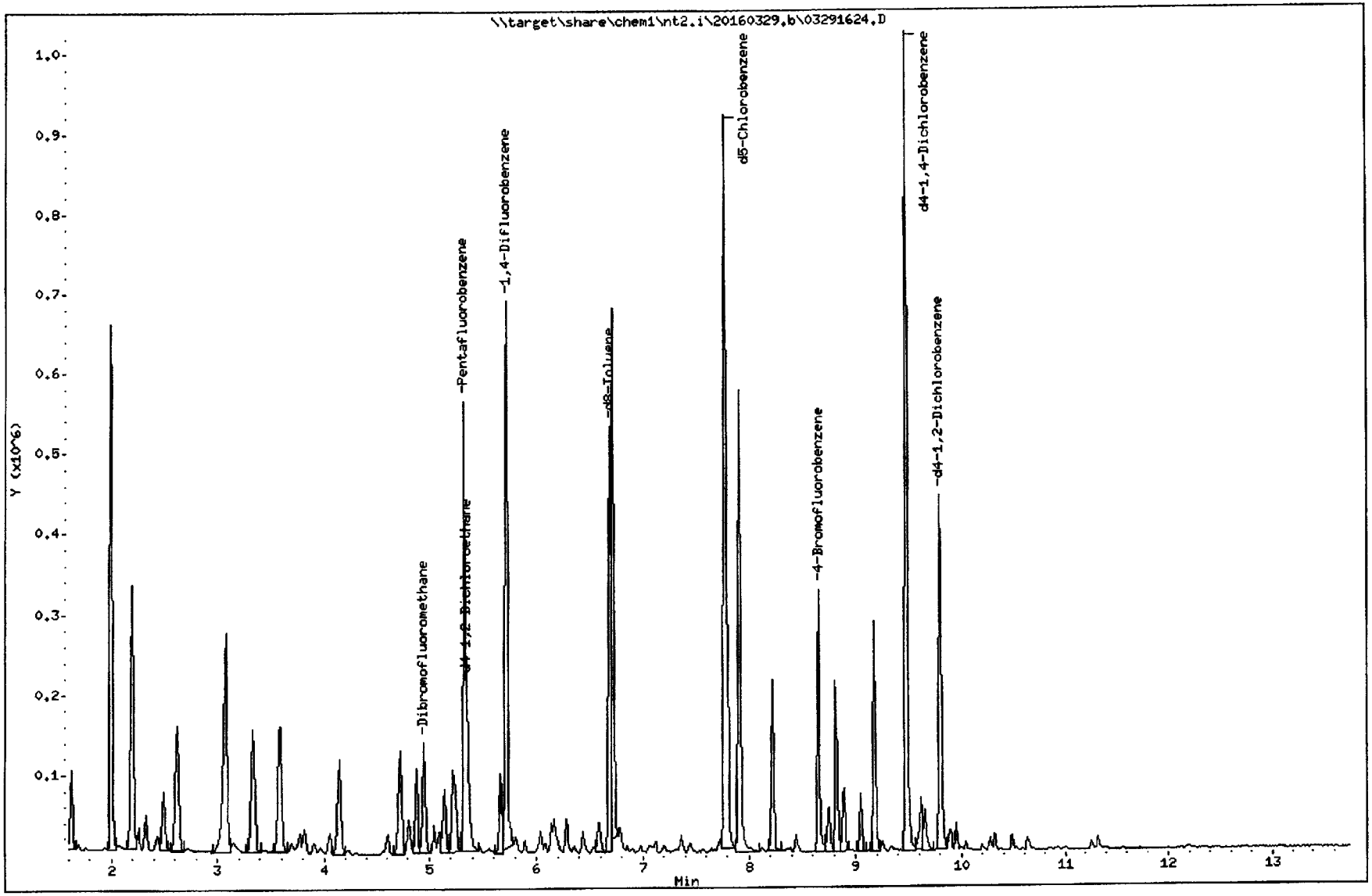
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.952	99.04	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.320	106.40	80-149
$ 43 d8-Toluene	5.000	5.123	102.46	77-120
$ 62 4-Bromofluorobenze	5.000	4.647	92.94	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.086	101.73	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291624.D
Date : 29-MAR-2016 22:32
Client ID:
Sample Info: G0100329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291624.D

Lab ID: G0100329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 22:32

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

Analytical Resources Inc.
GC/MS Gas Quantitation Report

3/30/16

Data file: 20160329g.b/03291625.D
Method: \20160329g.b\GAS032916.m
Instrument: nt2.i
Gas Ical Date: 29-MAR-2016
Injection Date: 29-MAR-2016 22:54

ARI ID: GSCV0329
Client ID: GSCV
Matrix: WATER
Dilution Factor: 1.000
Operator: PC

GASOLINE HYDROCARBONS

Range		RF	Total Area*	Amount (ug/mL)
WAGas Tol-C12	(6.62 to 10.56)	48008849	125458223	2.613 M
8015C 2MP-TMB	(2.98 to 9.28)	83224207	208594002	2.506 M
AK101 nC6-nC10	(3.49 to 8.62)	58706304	144105640	2.455 M
NWTPHG Tol-Nap	(6.62 to 11.38)	49203331	129715156	2.636 M
mod8015 nC6-nC12	(3.49 to 10.56)	73249380	203576469	2.779 M

True value = 2.5

M Indicates manual integration within range

* Surrogate areas are subtracted from Total Area

NW Gas Range Subtracted Peaks

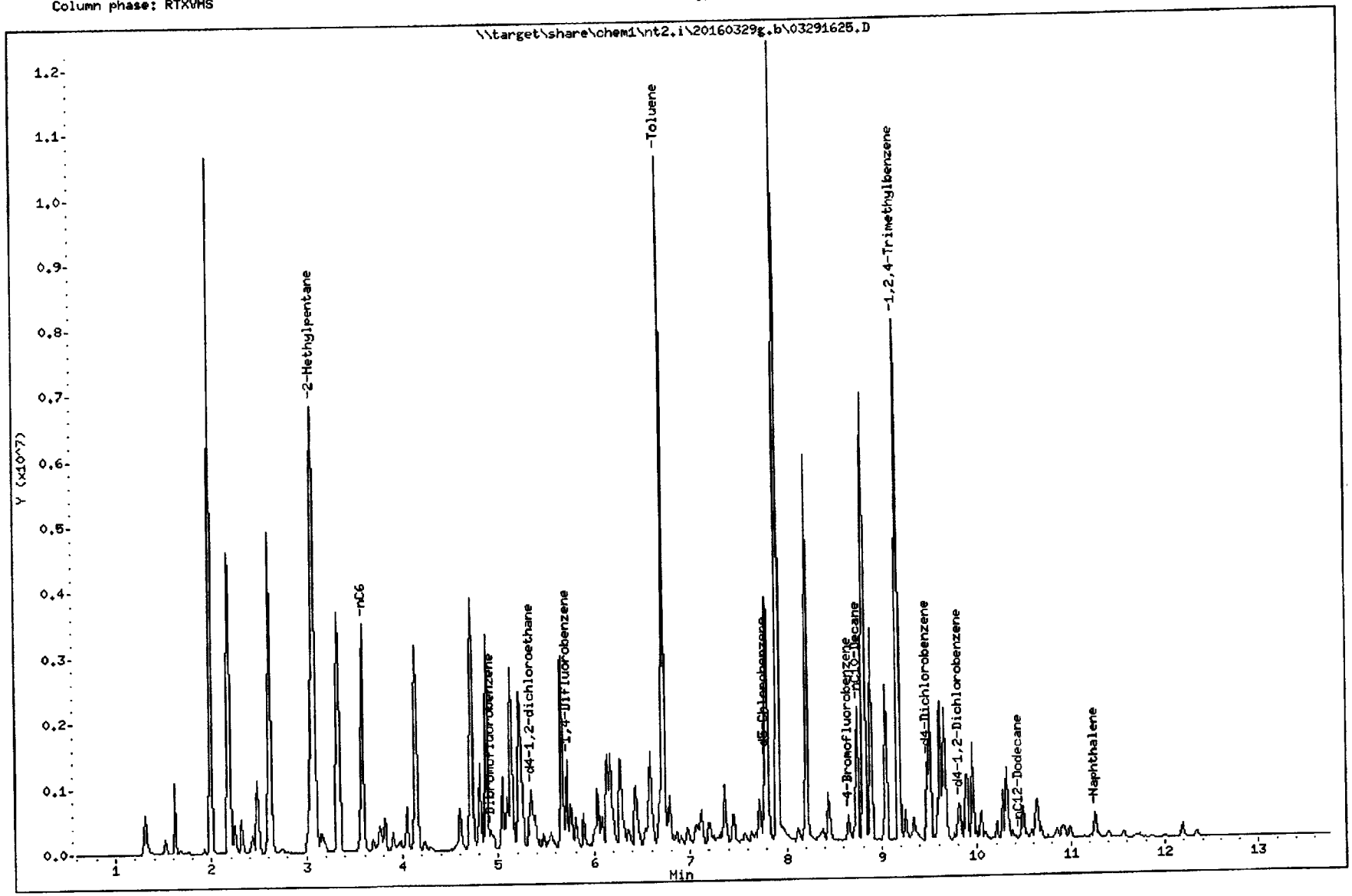
8.651	730123	4-Bromofluorobenzene
9.480	1842491	d4-Dichlorobenzene
7.776	2205885	d5-Chlorobenzene
9.811	1533863	d4-1,2-Dichlorobenzene

Data File: \\target\share\chem1\nt2.i\20160329g.b\03291625.D
Date : 29-MAR-2016 22:54
Client ID: GSCV
Sample Info: GSCV0329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

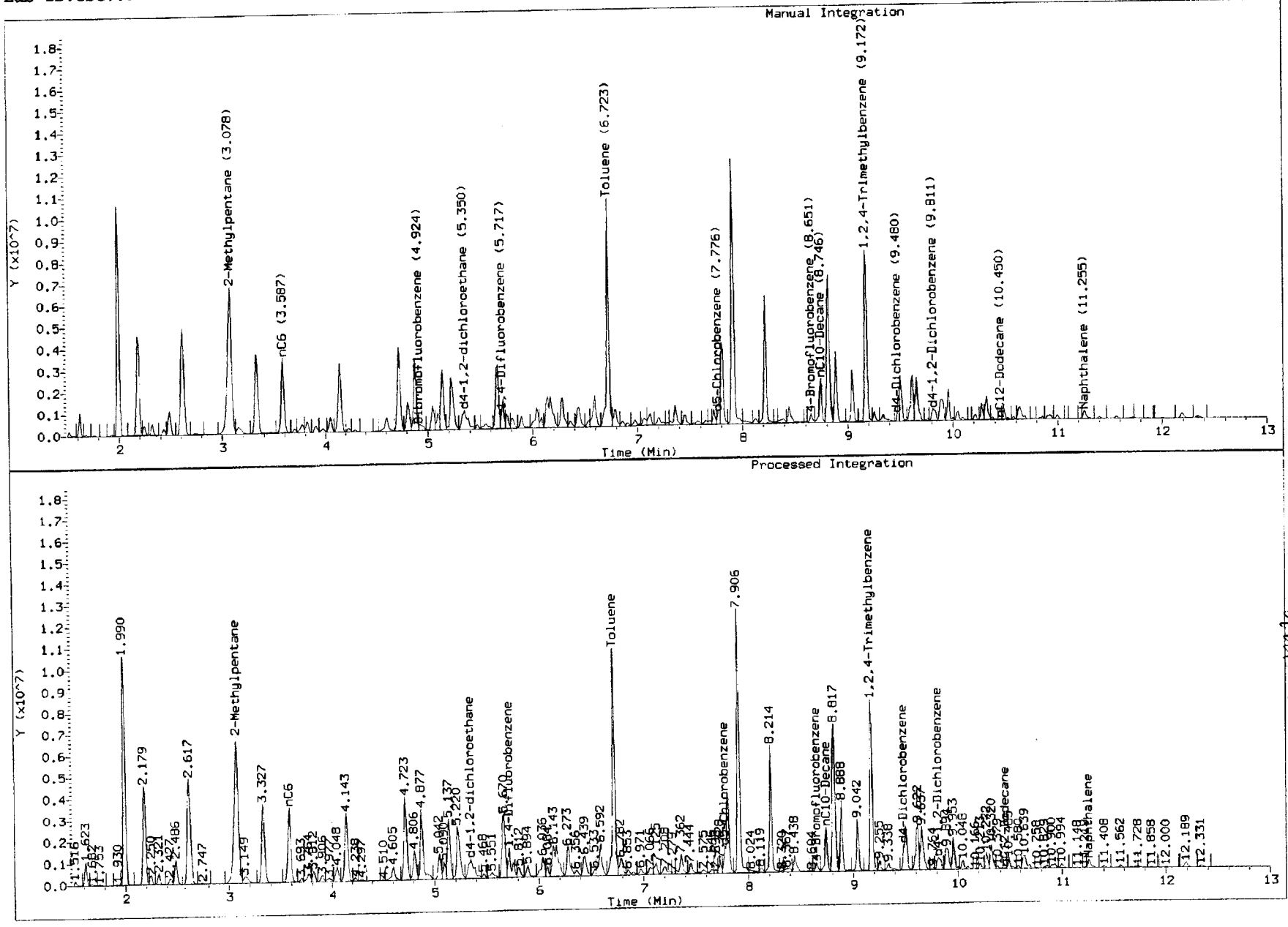
Column phase: RTXVMS



TPHG Manual Integrations Report

Datafile: NT2, 20160329g.b/03291625.D Injection: 29-MAR-2016 22:54

Lab ID:GSCV0329



ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160329.b\03291625.D
Lab Smp Id: GSCV0329
Inj Date : 29-MAR-2016 22:54
Operator : PC Inst ID: nt2.i
Smp Info : GSCV0329,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Meth Date : 30-Mar-2016 08:58 lanih Quant Type: ISTD
Cal Date : 29-MAR-2016 20:03 Cal File: 03291617.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 27 Dibromofluoromethane	111	4.947	4.947	(0.929)	76997	4.62830	4.628
31 Benzene	78	5.243	5.243	(0.917)	657783	8.82957	8.830
* 32 Pentafluorobenzene	168	5.326	5.326	(1.000)	347854	10.0000	
$ 33 d4-1,2-Dichloroethane	65	5.350	5.350	(1.004)	110861	5.63419	5.634
* 37 1,4-Difluorobenzene	114	5.716	5.717	(1.000)	555254	10.0000	
$ 43 d8-Toluene	98	6.687	6.687	(1.170)	350286	5.32840	5.328
44 Toluene	92	6.722	6.722	(1.176)	3750272	76.1648	76.165
* 53 d5-Chlorobenzene	117	7.775	7.775	(1.000)	518670	10.0000	
55 Ethyl Benzene	106	7.811	7.811	(1.005)	873090	28.3530	28.353
57 m,p-xylene	106	7.905	7.906	(1.017)	3174736	84.5854	84.585
58 o-Xylene	106	8.213	8.212	(1.056)	1410867	39.8544	39.854
$ 62 4-Bromofluorobenzene	174	8.651	8.651	(1.113)	106739	5.04846	5.048
* 76 d4-1,4-Dichlorobenzene	152	9.479	9.479	(1.000)	276192	10.0000	
$ 79 d4-1,2-Dichlorobenzene	152	9.810	9.811	(1.035)	133866	5.06908	5.069

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 03291625.D
Lab Smp Id: GSCV0329
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

Calibration Date: 29-MAR-2016
Calibration Time: 18:37

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	350375	175188	700750	347854	-0.72
37 1,4-Difluorobenze	562526	281263	1125052	555254	-1.29
53 d5-Chlorobenzene	502371	251186	1004742	518670	3.24
76 d4-1,4-Dichlorobe	277950	138975	555900	276192	-0.63

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.01
37 1,4-Difluorobenze	5.72	5.22	6.22	5.72	0.00
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.00
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: GSCV0329
Level: LOW Operator: PC
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160329.b\8260032916.m
Misc Info: 16-

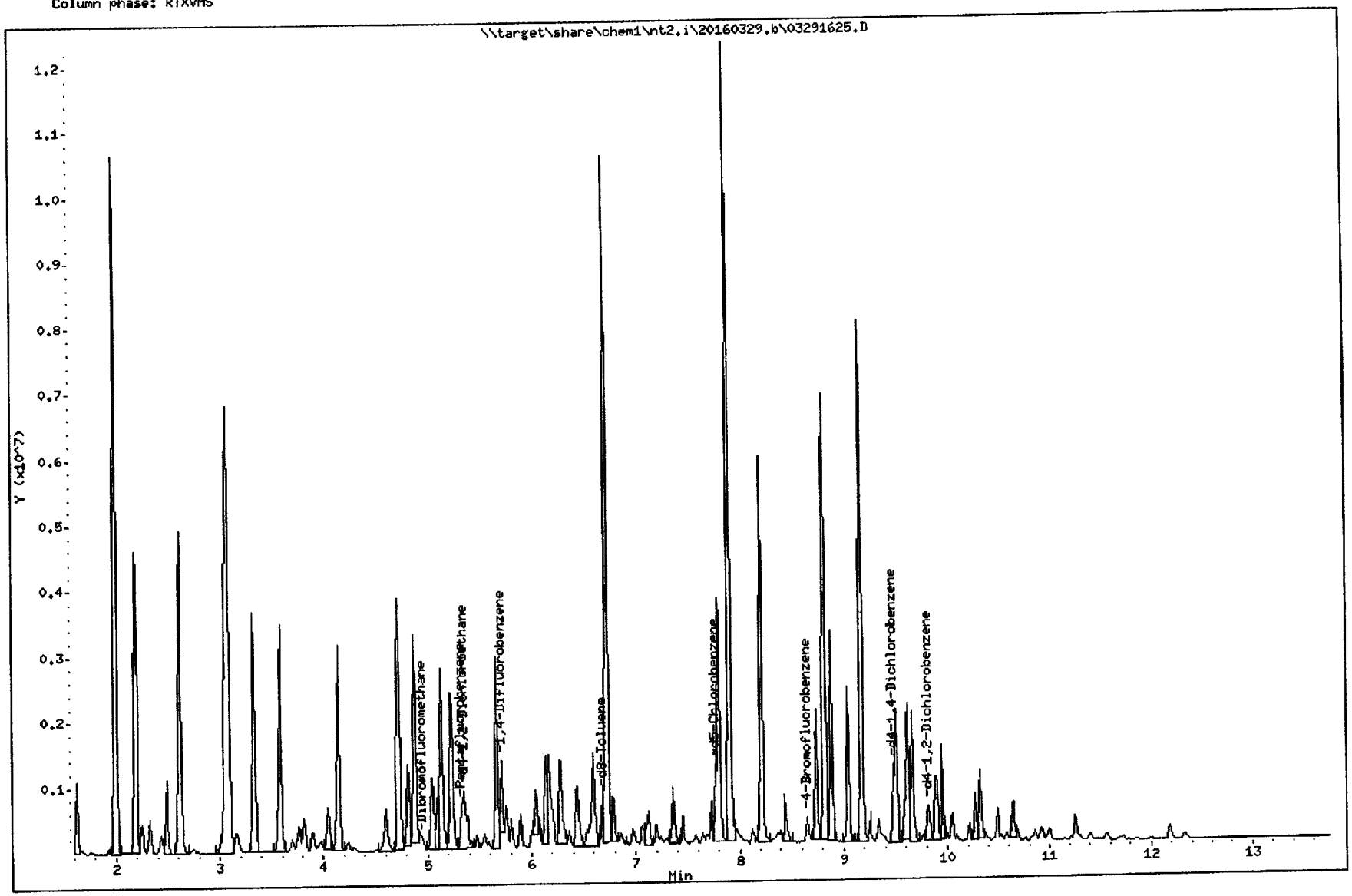
SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	4.628	92.57	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.634	112.68	80-149
$ 43 d8-Toluene	5.000	5.328	106.57	77-120
$ 62 4-Bromofluorobenze	5.000	5.048	100.97	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.069	101.38	80-120

Data File: \\target\share\chem1\nt2.i\20160329.b\03291625.D
Date : 29-MAR-2016 22:54
Client ID:
Sample Info: GSCV0329,10,10,0,

Instrument: nt2.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



REVIEW SUMMARY FOR FILE - 03291625.D

Lab ID: GSCV0329
nt2.i, 20160329.b\8260032916.m, 29-MAR-2016 22:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260032916.m,Sublist: mdl.sub = 0.2500

Exception: o-Xylene 0.1000

INITIAL CALIBRATION CHECK

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Instrument ID:	NT2	Calibration:	ZF00027
Lab File ID:	07061603G.D	Calibration Date:	06/15/16 11:34
Sequence:	SEG0023	Injection Date:	07/06/16
Lab Sample ID:	SEG0023-ICV1	Injection Time:	08:06

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Gasoline Range Organics (Tol-Nap)	A	1000.0	1130	49203.3300000	55843.9100000		13.5	20
Toluene-d8	A	5.0000	4.97		1.1782600			
4-Bromofluorobenzene	A	5.0000	5.06		0.3724832			

* Values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160706.b\07061603.D

Date : 06-JUL-2016 08:06

Client ID: GICV/LCS

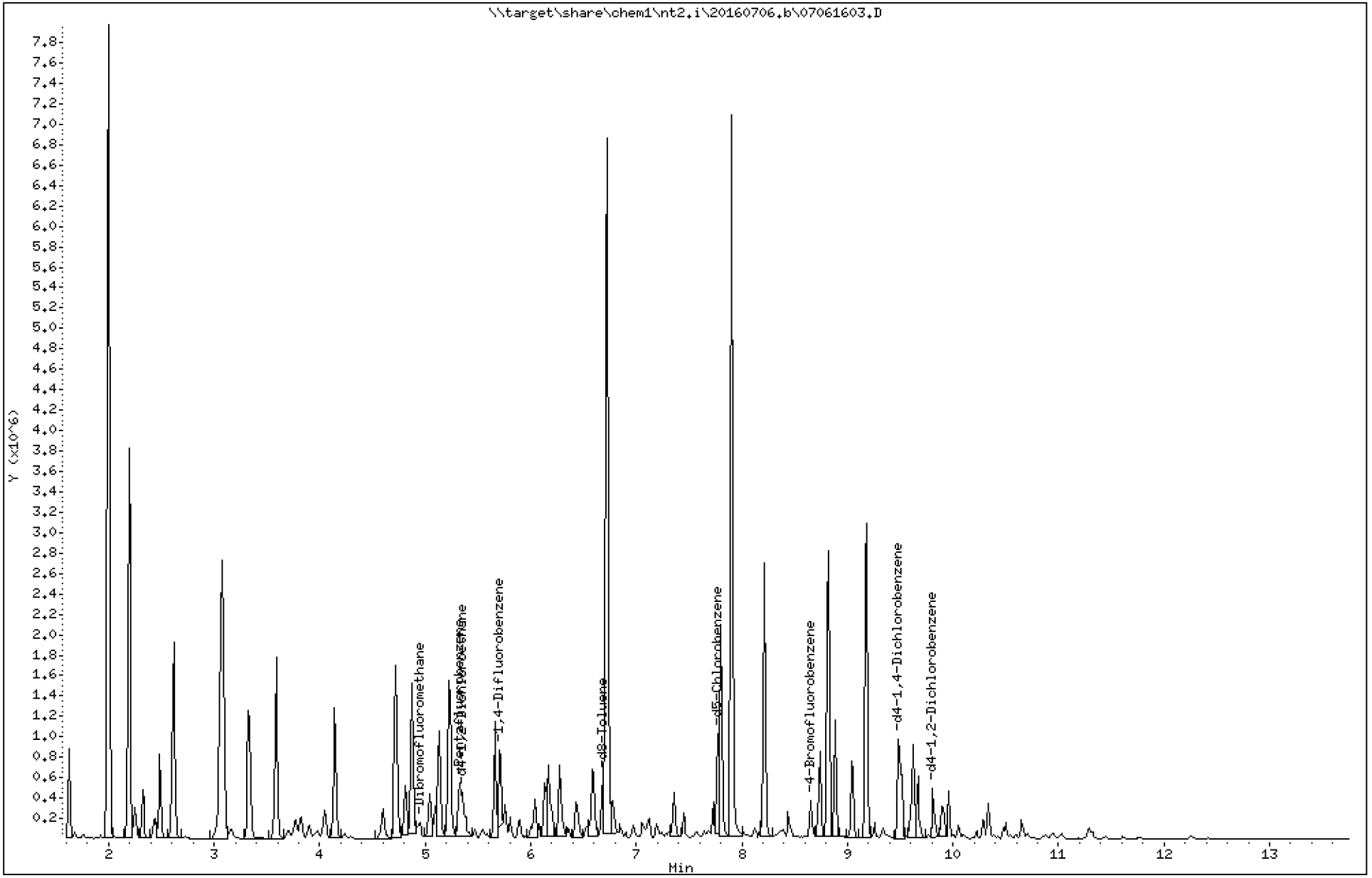
Instrument: nt2.i

Sample Info: GICV/LCS,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt2.i\20160706.b\07061603.D

Date : 06-JUL-2016 08:06

Client ID: GICV/LCS

Instrument: nt2.i

Sample Info: GICV/LCS,10,10,0,

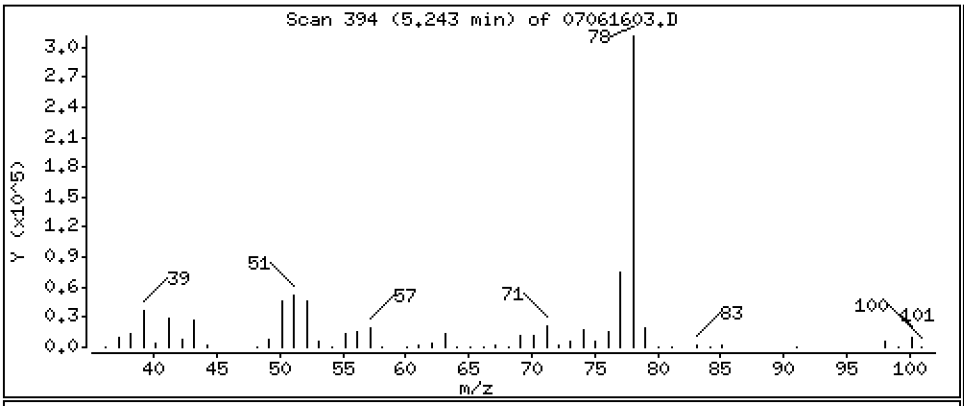
Operator: LH

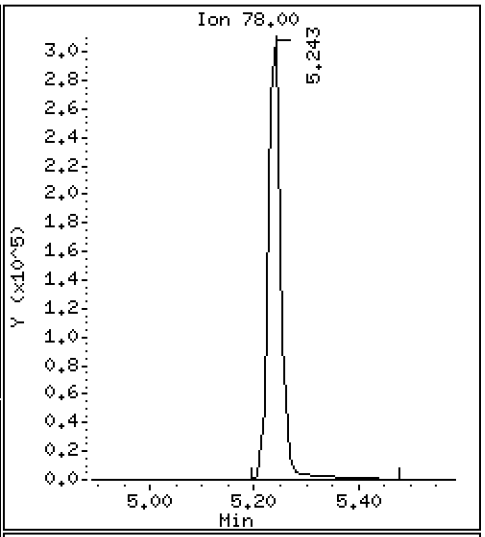
Column phase: RTXVMS

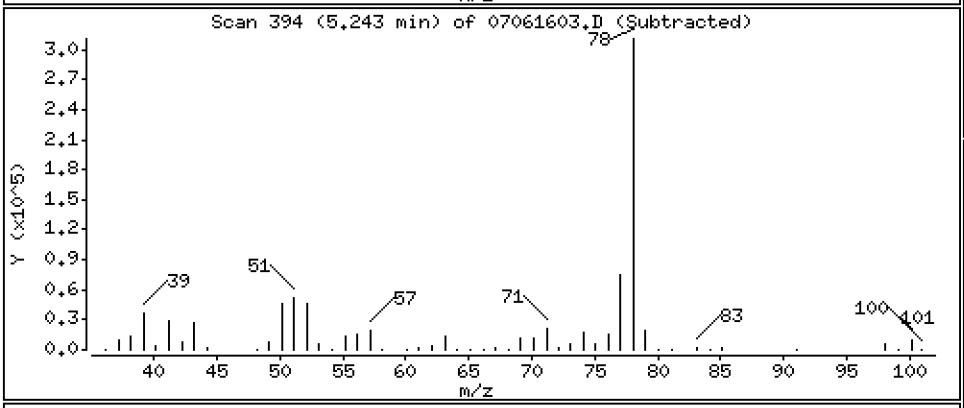
Column diameter: 0.18

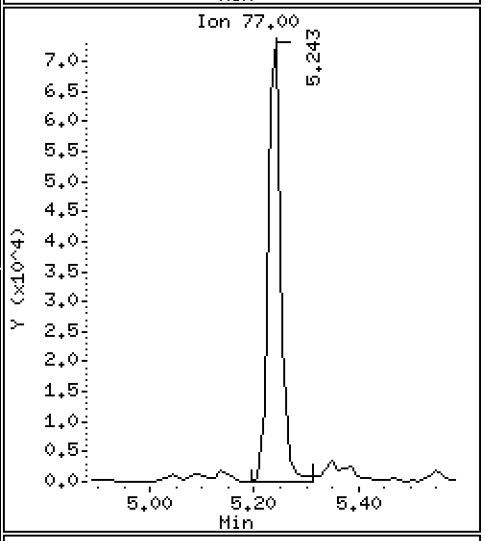
31 Benzene

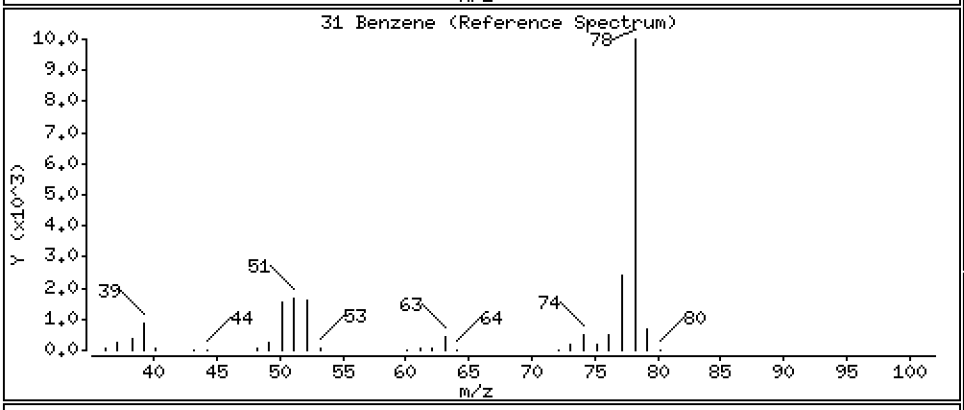
Concentration: 7.090 ug/L

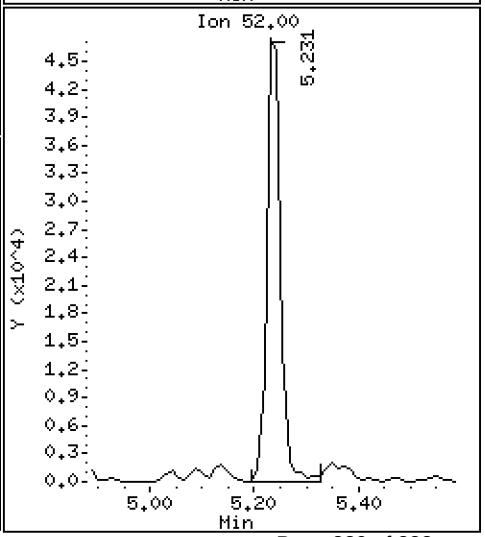


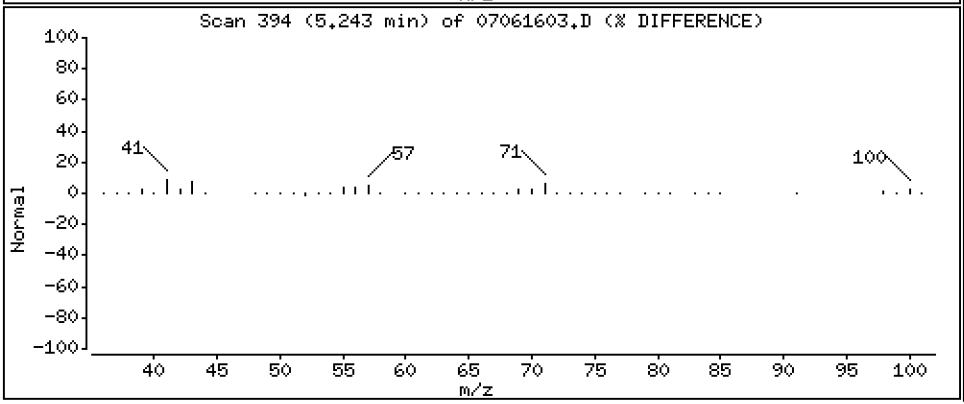












Data File: \\target\share\chem1\nt2.i\20160706.b\07061603.D

Date : 06-JUL-2016 08:06

Client ID: GICV/LCS

Instrument: nt2.i

Sample Info: GICV/LCS,10,10,0,

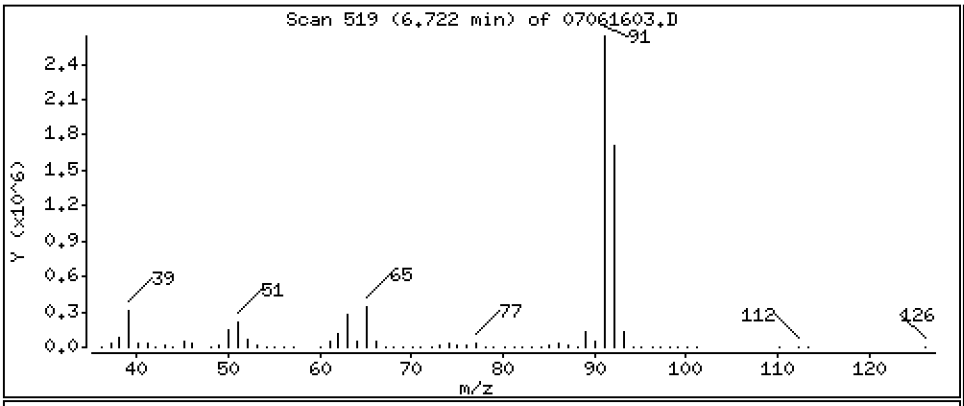
Operator: LH

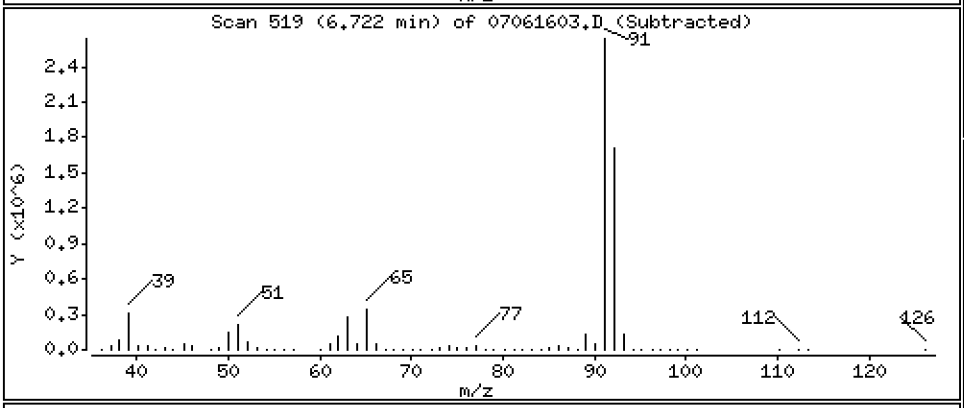
Column phase: RTXVMS

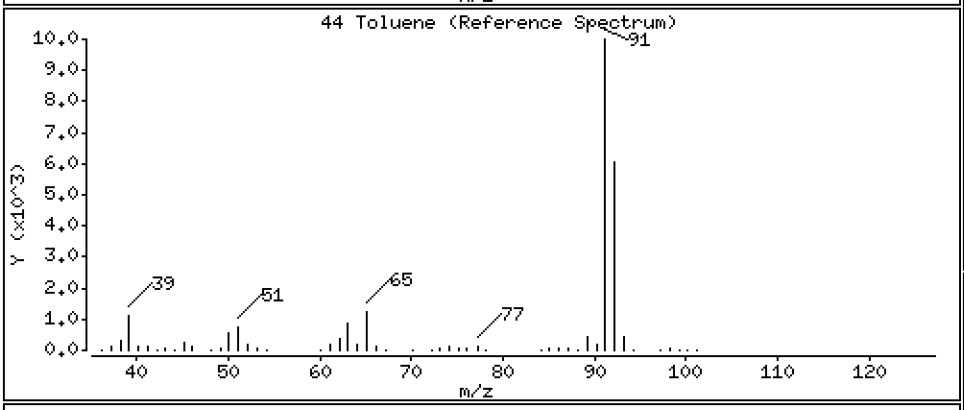
Column diameter: 0.18

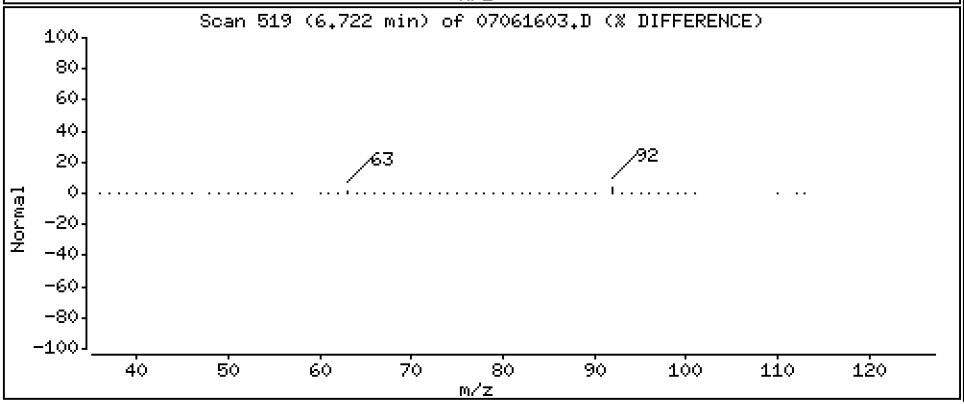
44 Toluene

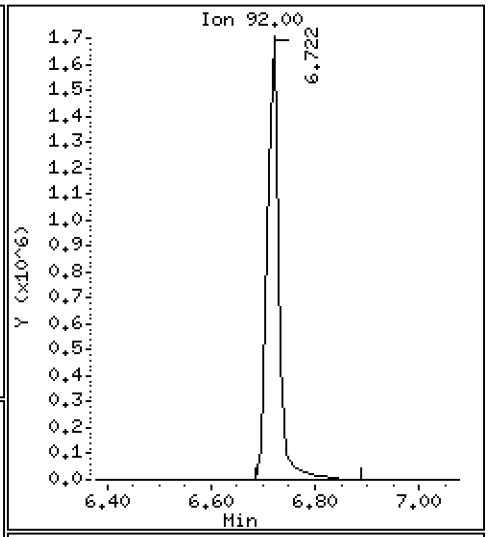
Concentration: 54.226 ug/L

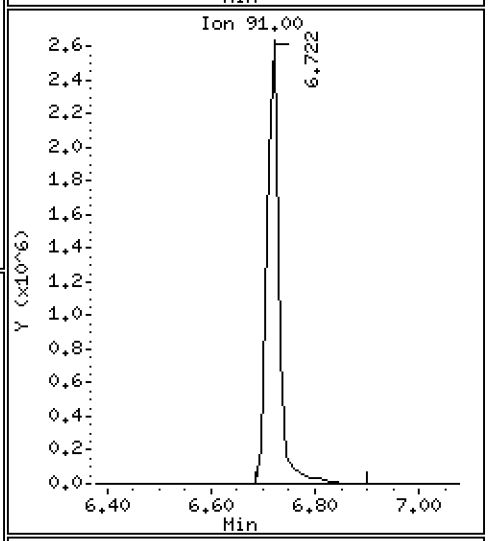


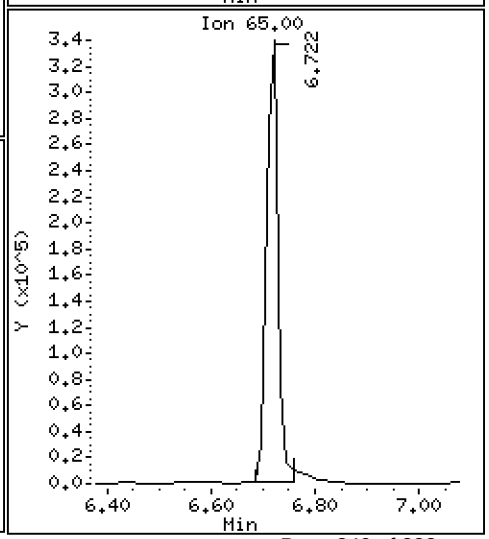












Data File: \\target\share\chem1\nt2.i\20160706.b\07061603.D

Date : 06-JUL-2016 08:06

Client ID: GICV/LCS

Instrument: nt2.i

Sample Info: GICV/LCS,10,10,0,

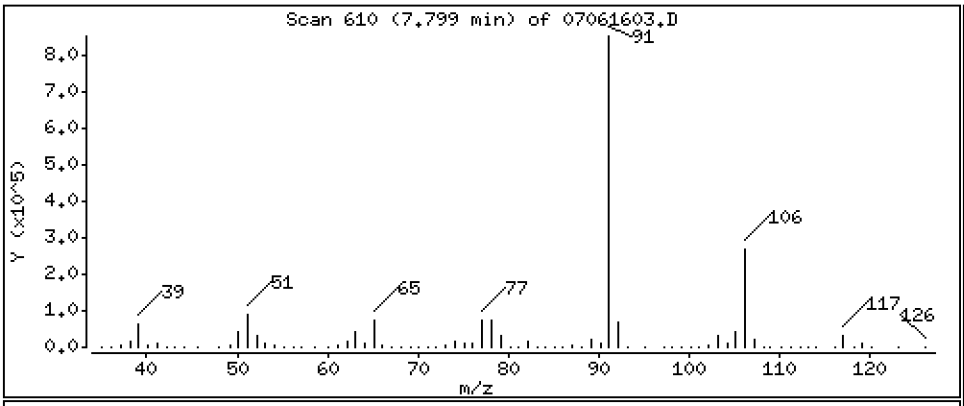
Operator: LH

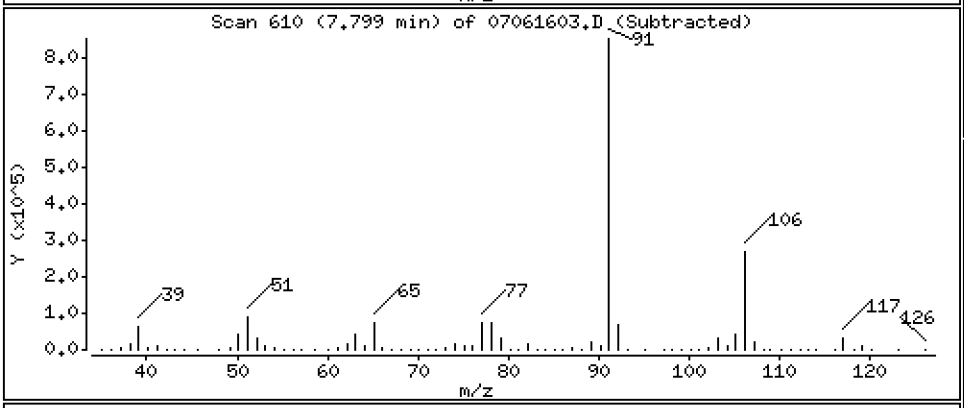
Column phase: RTXVMS

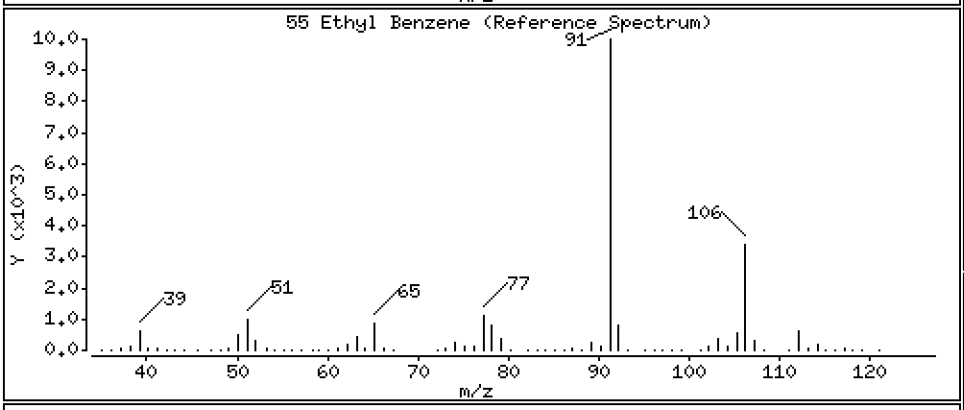
Column diameter: 0.18

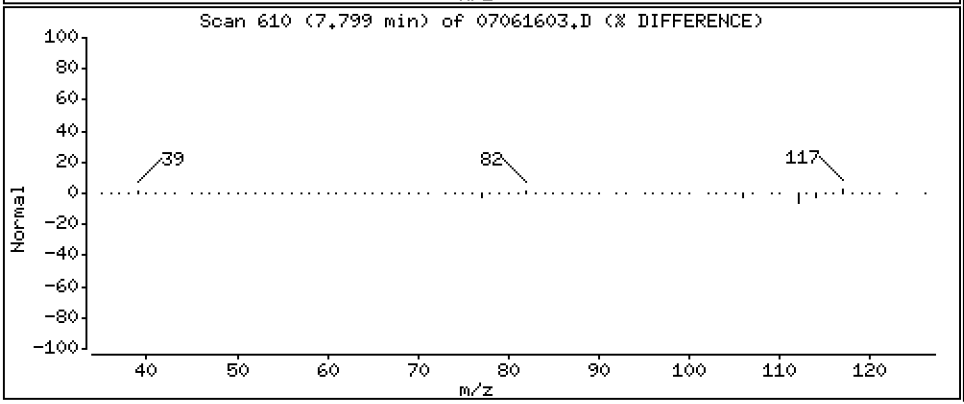
55 Ethyl Benzene

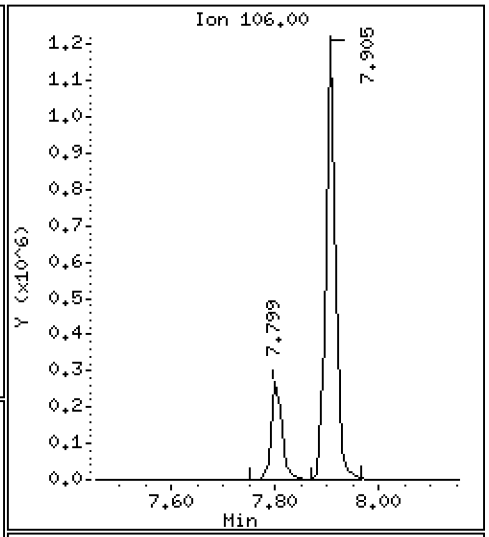
Concentration: 14.131 ug/L

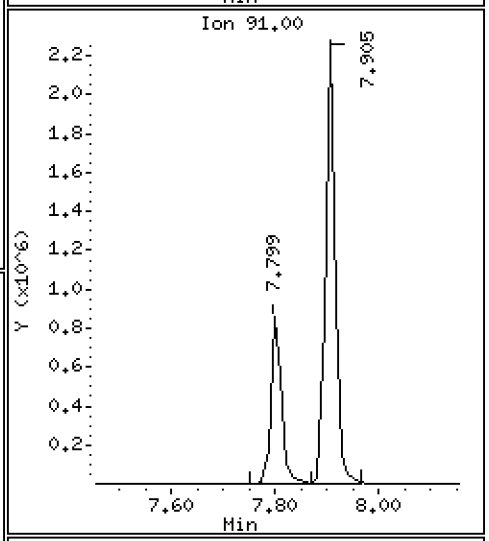


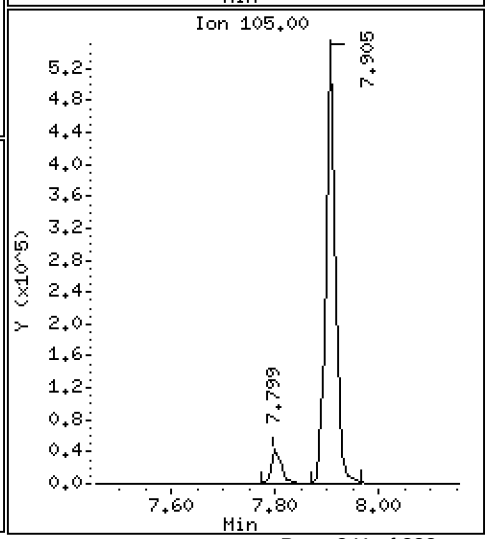












Data File: \\target\share\chem1\nt2.i\20160706.b\07061603.D

Date : 06-JUL-2016 08:06

Client ID: GICV/LCS

Instrument: nt2.i

Sample Info: GICV/LCS,10,10,0,

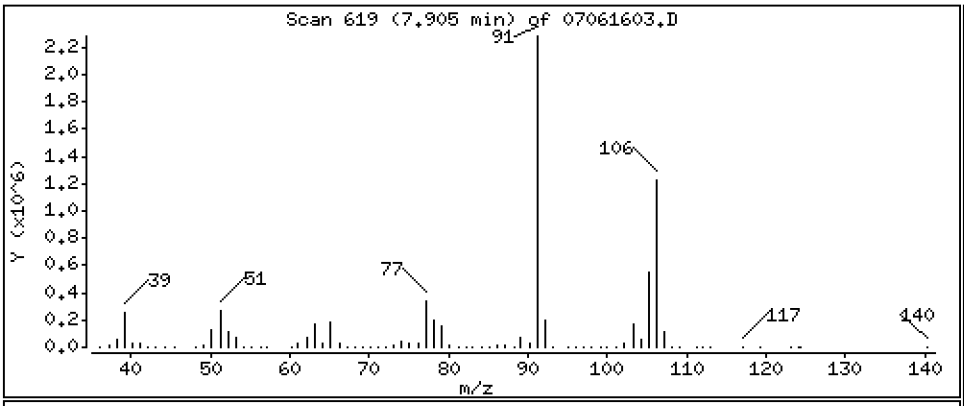
Operator: LH

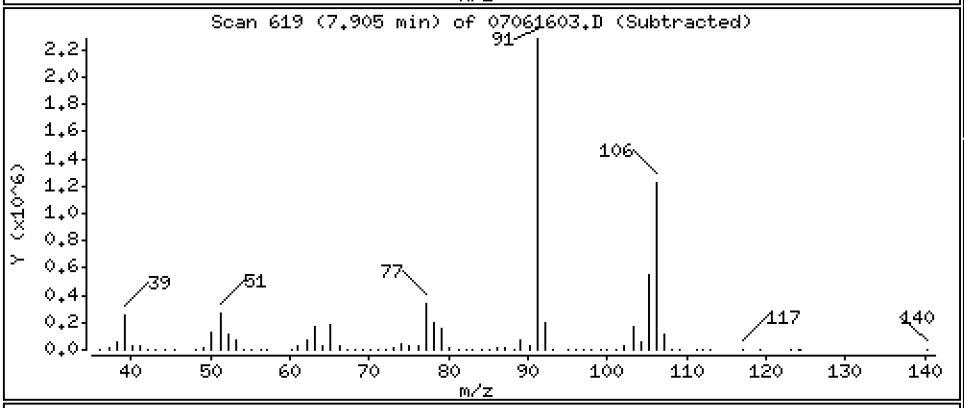
Column phase: RTXVMS

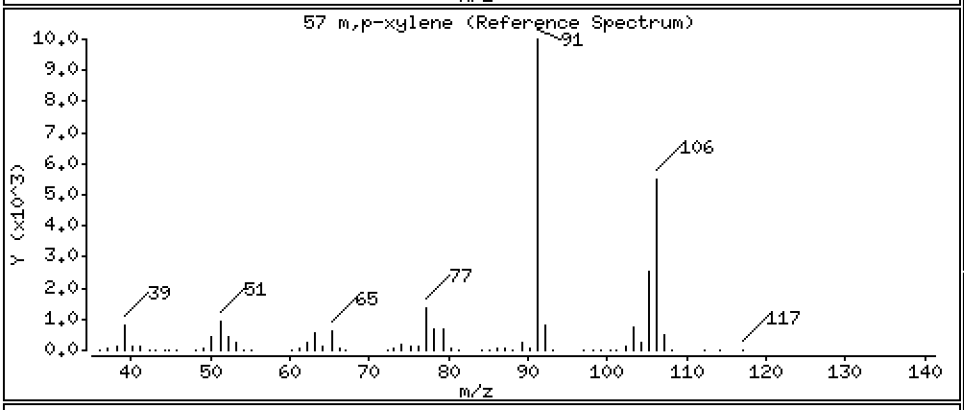
Column diameter: 0.18

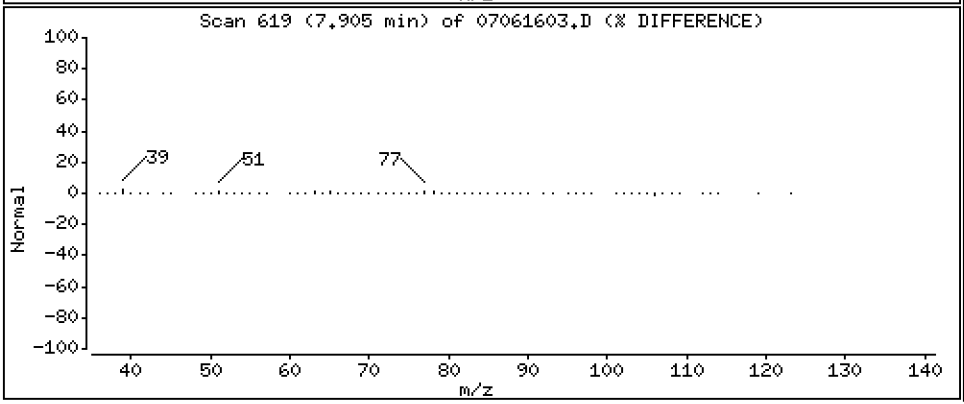
57 m,p-xylene

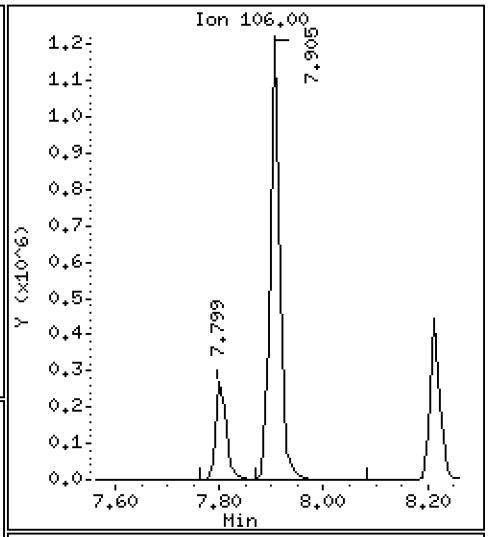
Concentration: 47.162 ug/L

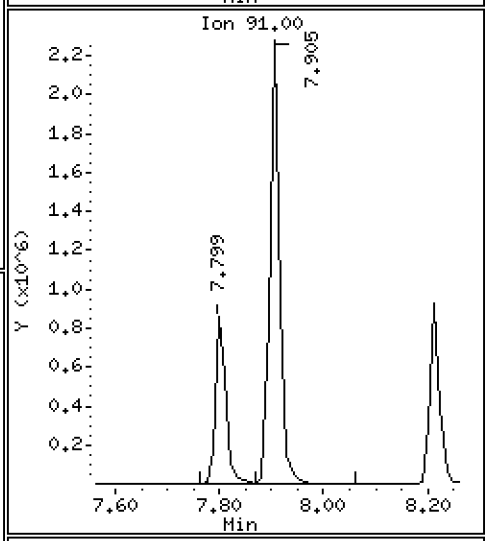


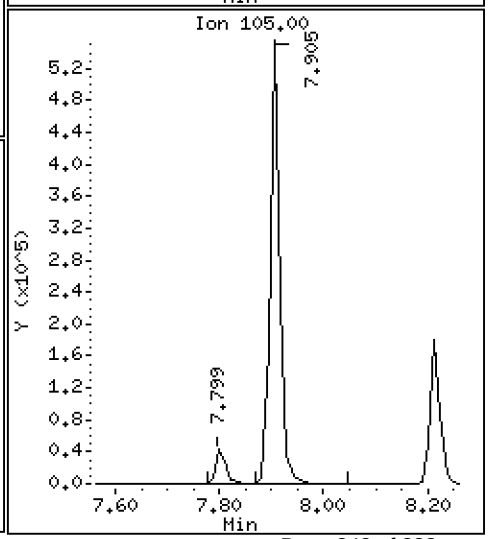












Data File: \\target\share\chem1\nt2.i\20160706.b\07061603.D

Date : 06-JUL-2016 08:06

Client ID: GICV/LCS

Instrument: nt2.i

Sample Info: GICV/LCS,10,10,0,

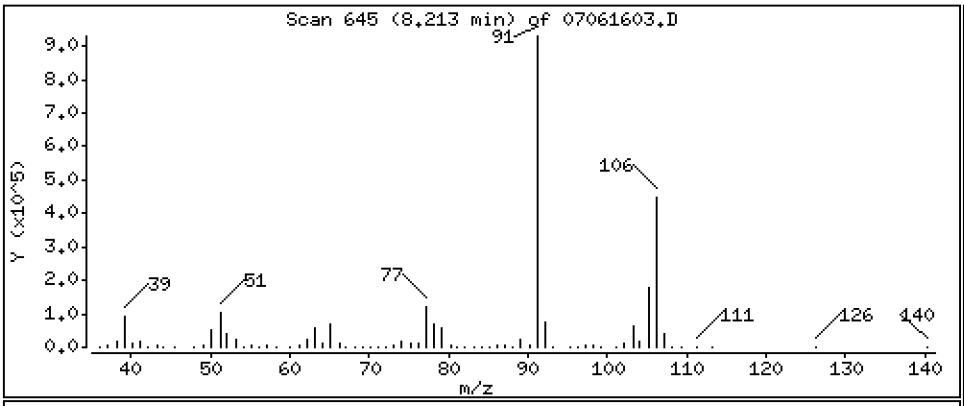
Operator: LH

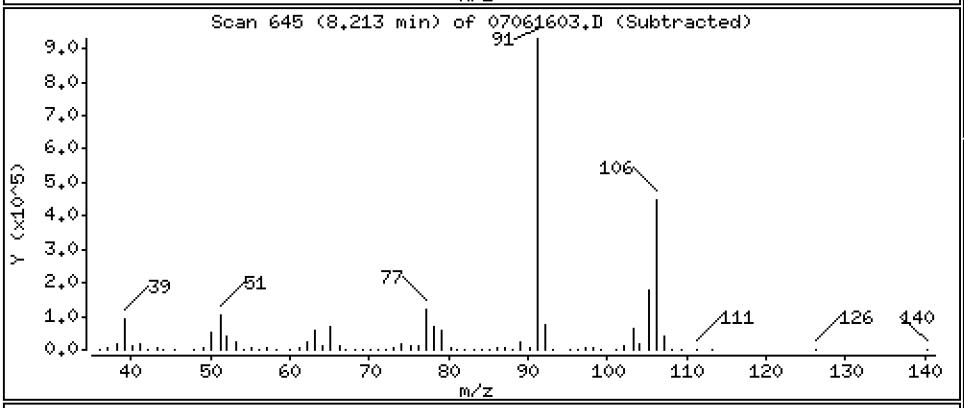
Column phase: RTXVMS

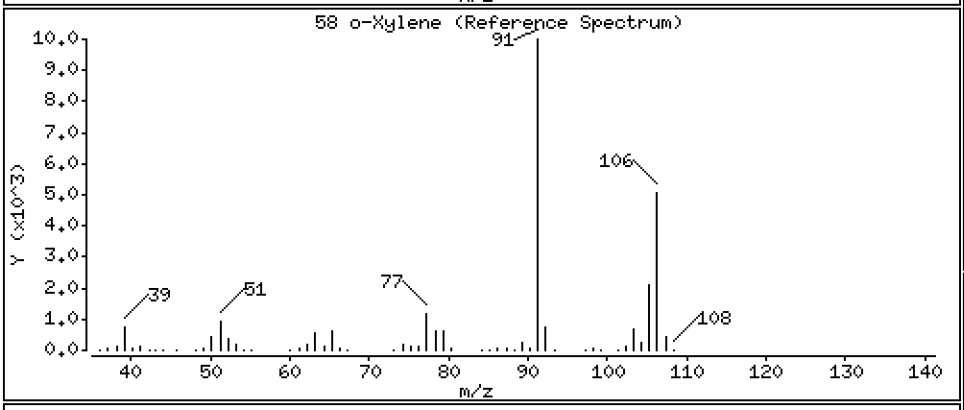
Column diameter: 0.18

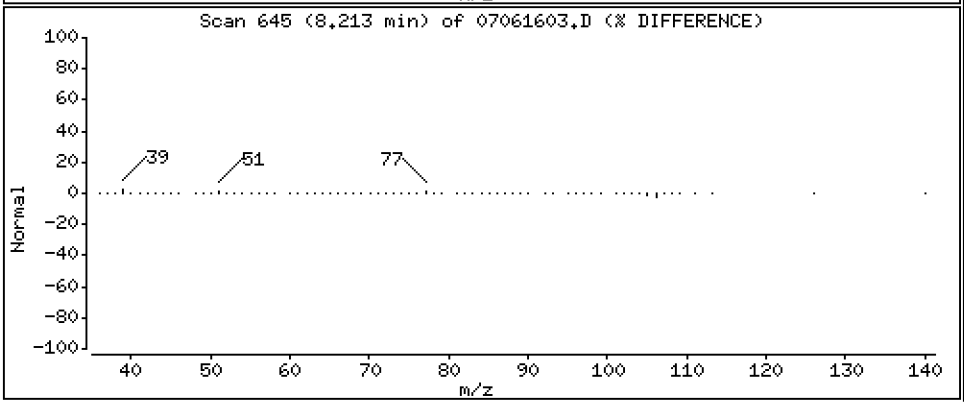
58 o-Xylene

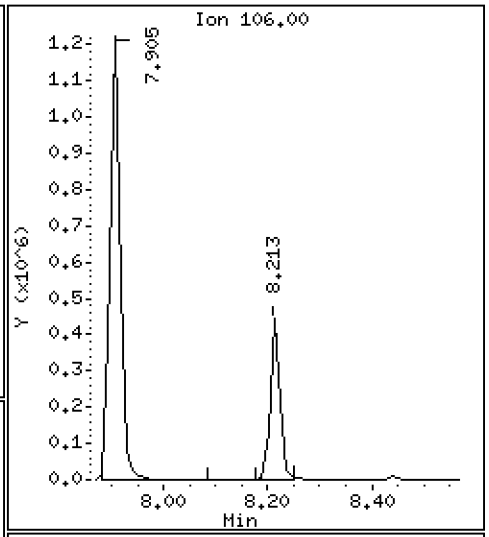
Concentration: 18.549 ug/L

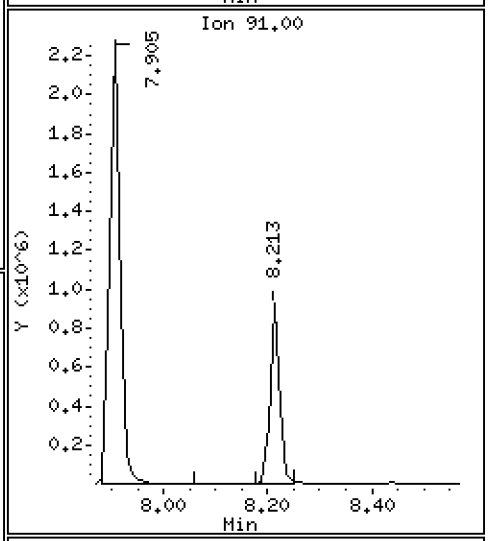


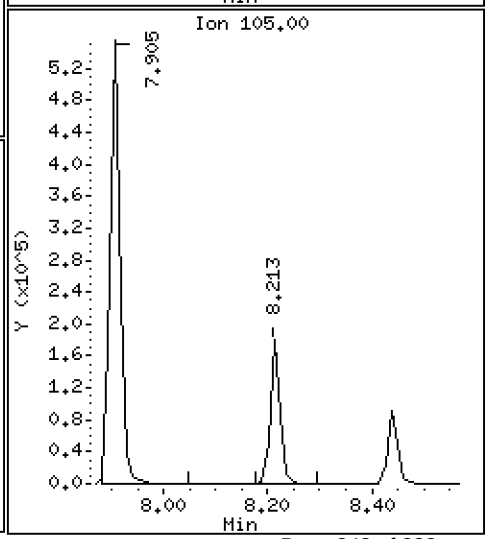












ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160706.b\07061603.D
Lab Smp Id: SEG0023-ICV1 Client Smp ID: GICV/LCS
Inj Date : 06-JUL-2016 08:06
Operator : LH Inst ID: nt2.i
Smp Info : GICV/LCS,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Meth Date : 07-Jul-2016 13:15 lanih Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.947	4.949	(0.929)	69241	5.11365	5.114
	31 Benzene	78	5.243	5.233	(0.917)	551599	7.09032	7.090
*	32 Pentafluorobenzene	168	5.325	5.328	(1.000)	298317	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.349	5.352	(1.004)	82837	5.61635	5.616
*	37 1,4-Difluorobenzene	114	5.716	5.707	(1.000)	518585	10.0000	
$	43 d8-Toluene	98	6.686	6.689	(1.170)	305514	4.97376	4.974
	44 Toluene	92	6.722	6.724	(1.176)	2667225	54.2255	54.226
*	53 d5-Chlorobenzene	117	7.775	7.777	(1.000)	457626	10.0000	
	55 Ethyl Benzene	106	7.798	7.801	(1.003)	400667	14.1309	14.131
	57 m,p-xylene	106	7.905	7.908	(1.017)	1616835	47.1619	47.162
	58 o-Xylene	106	8.213	8.215	(1.056)	589659	18.5491	18.549
$	62 4-Bromofluorobenzene	174	8.650	8.653	(1.113)	85229	5.06186	5.062
*	76 d4-1,4-Dichlorobenzene	152	9.491	9.481	(1.000)	233080	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.810	9.813	(1.034)	112356	5.19064	5.191

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 07061603.D
Lab Smp Id: SEG0023-ICV1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 06-JUL-2016
Calibration Time: 08:26
Client Smp ID: GICV/LCS
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	298317	20.35
37 1,4-Difluorobenze	400954	200477	801908	518585	29.34
53 d5-Chlorobenzene	354752	177376	709504	457626	29.00
76 d4-1,4-Dichlorobe	191489	95745	382978	233080	21.72

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.05
37 1,4-Difluorobenze	5.71	5.21	6.21	5.72	0.16
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.03
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.49	0.10

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: SEG0023-ICV1 Client Smp ID: GICV/LCS
Level: LOW Operator: LH
Data Type: MS DATA SampleType: LCS
SpikeList File: btexspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
31 Benzene	7.327	7.090	96.77	80-120
44 Toluene	53.083	54.226	102.15	80-120
55 Ethyl Benzene	13.623	14.131	103.73	78-122
57 m,p-xylene	43.355	47.162	108.78	78-126
58 o-Xylene	16.867	18.549	109.97	76-127

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	5.114	102.27	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.616	112.33	80-128
$ 43 d8-Toluene	5.000	4.974	99.48	80-120
$ 62 4-Bromofluorobenze	5.000	5.062	101.24	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.191	103.81	80-120

REVIEW SUMMARY FOR FILE - 07061603.D

Lab ID: SEG0023-ICV1
nt2.i, 20160706.b\8260061516LOW.m,   06-JUL-2016 08:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

CONTINUING CALIBRATION CHECK
NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Instrument ID:	NT2	Calibration:	ZF00027
Lab File ID:	07061616G.D	Calibration Date:	06/15/16 11:34
Sequence:	SEG0023	Injection Date:	07/06/16
Lab Sample ID:	SEG0023-CCV1	Injection Time:	13:05

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Gasoline Range Organics (Tol-Nap)	A	1000.0	1060	49203.3300000	52087.5900000		5.9	20
Toluene-d8	A	5.0000	4.89		1.1576590			
4-Bromofluorobenzene	A	5.0000	4.97		0.3659171			

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160706.b\07061616.D

Date : 06-JUL-2016 13:05

Client ID: GCCV

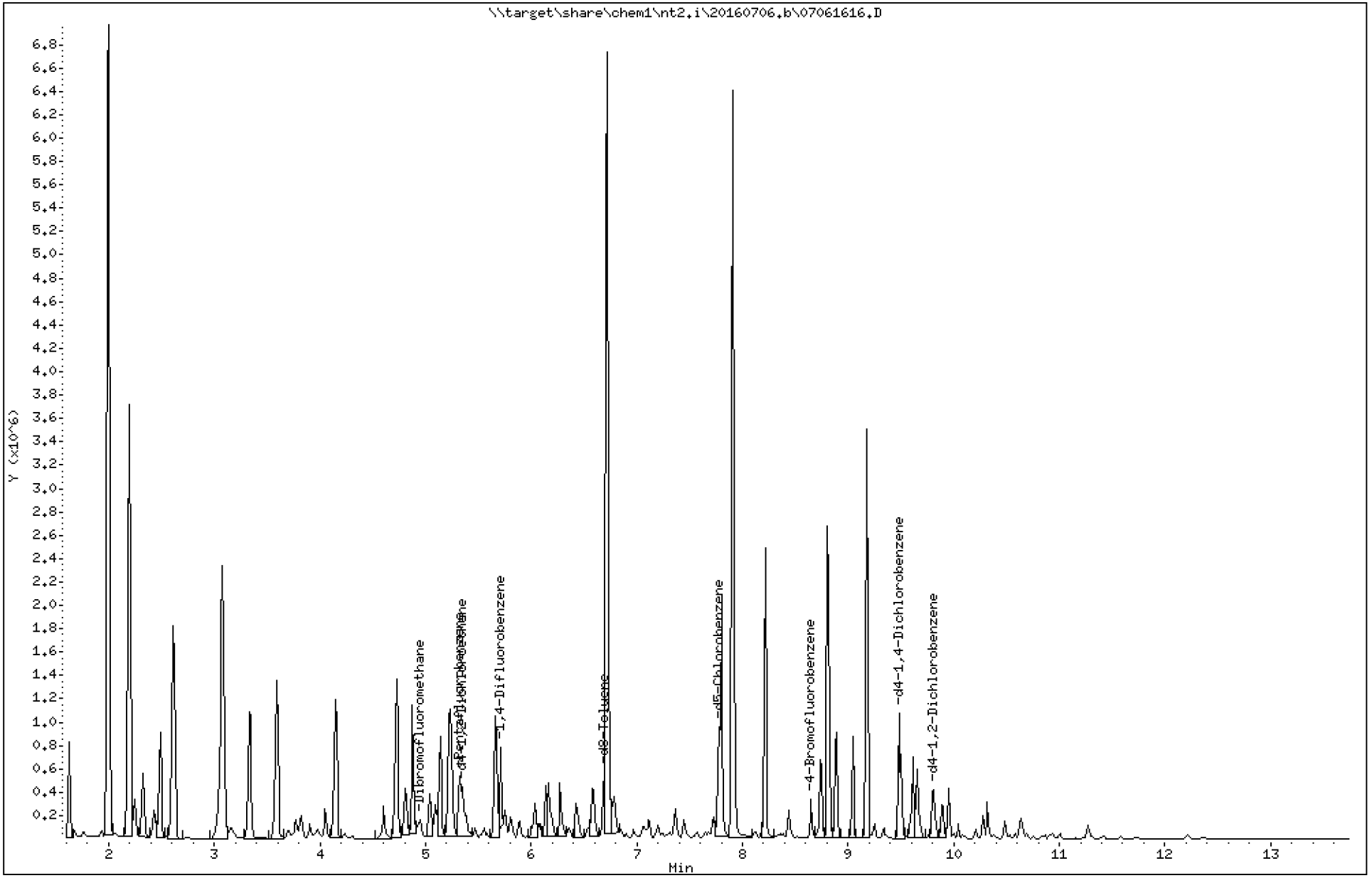
Instrument: nt2.i

Sample Info: GCCV,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt2.i\20160706.b\07061616.D

Date : 06-JUL-2016 13:05

Client ID: GCCV

Instrument: nt2.i

Sample Info: GCCV,10,10,0,

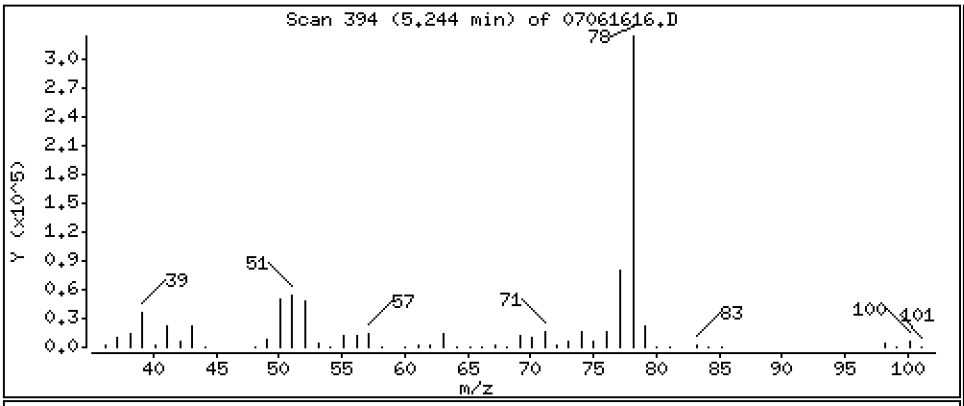
Operator: LH

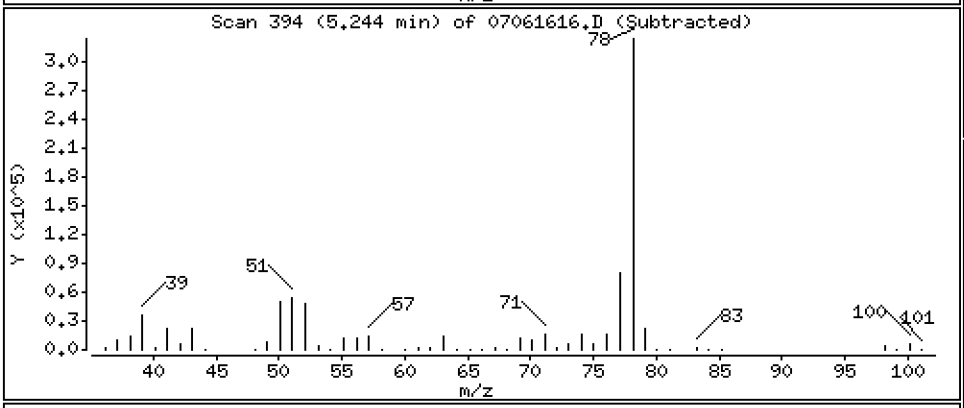
Column phase: RTXVMS

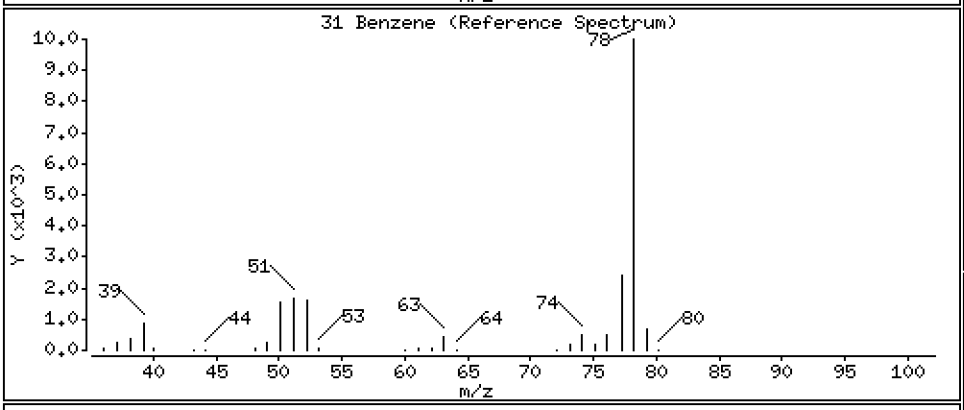
Column diameter: 0.18

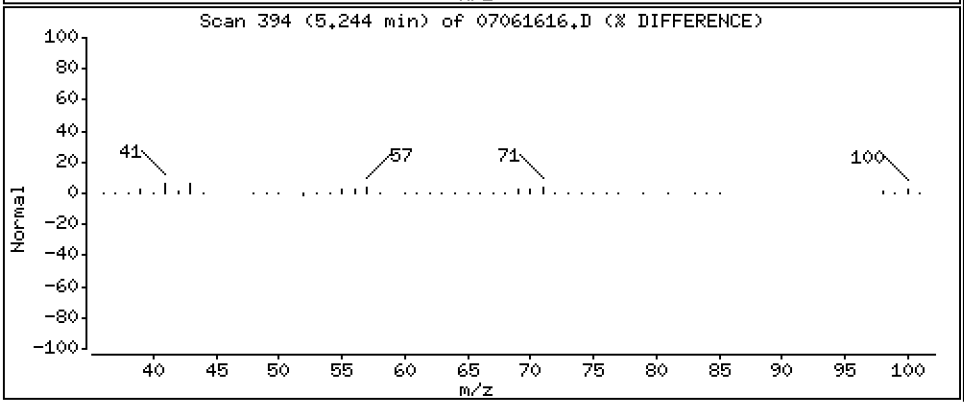
31 Benzene

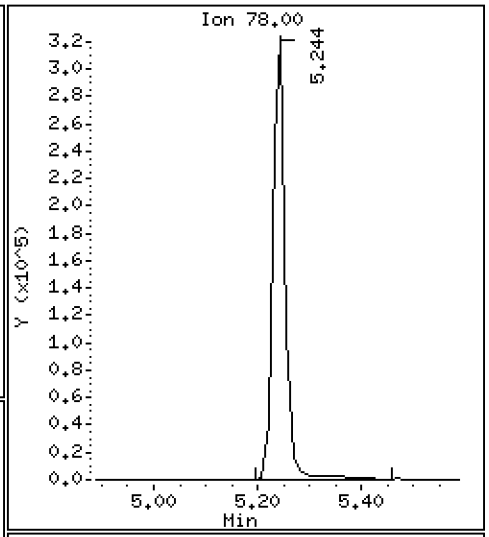
Concentration: 7.095 ug/L

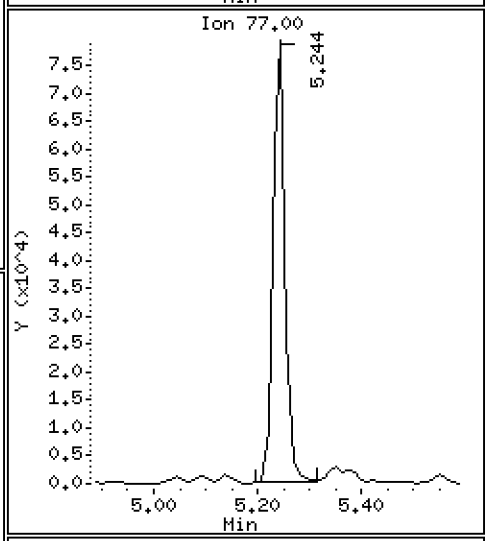


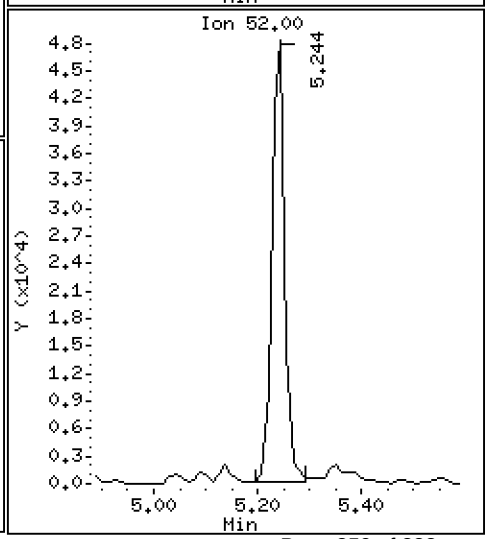












Data File: \\target\share\chem1\nt2.i\20160706.b\07061616.D

Date : 06-JUL-2016 13:05

Client ID: GCCV

Instrument: nt2.i

Sample Info: GCCV,10,10,0,

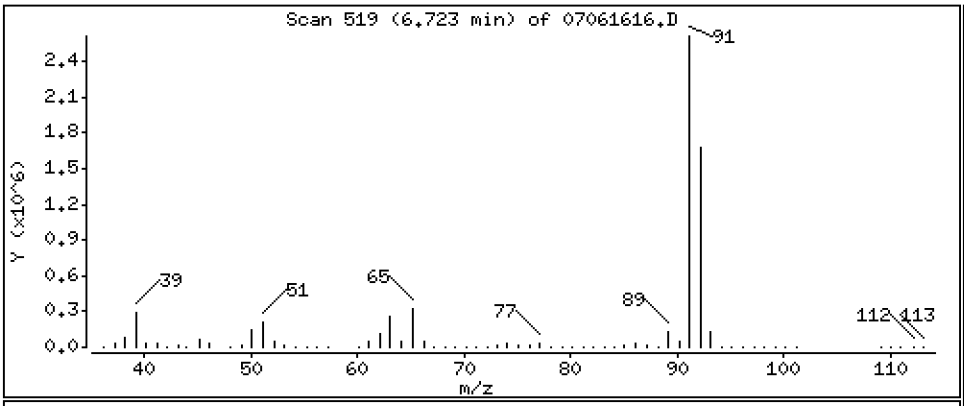
Operator: LH

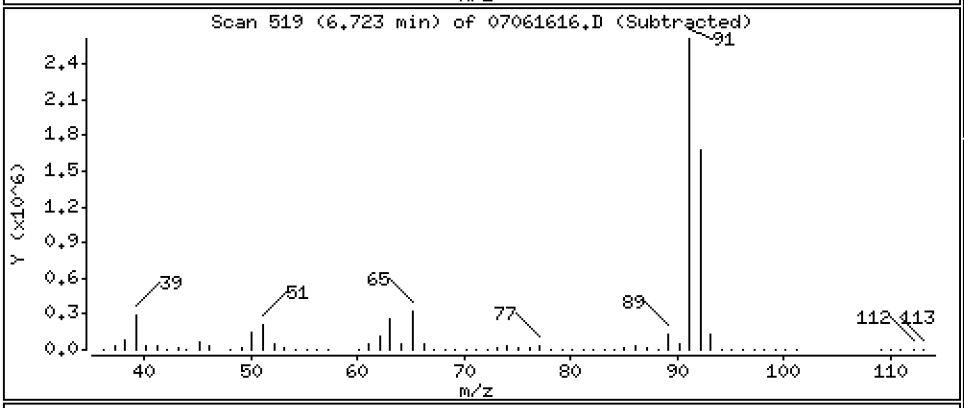
Column phase: RTXVMS

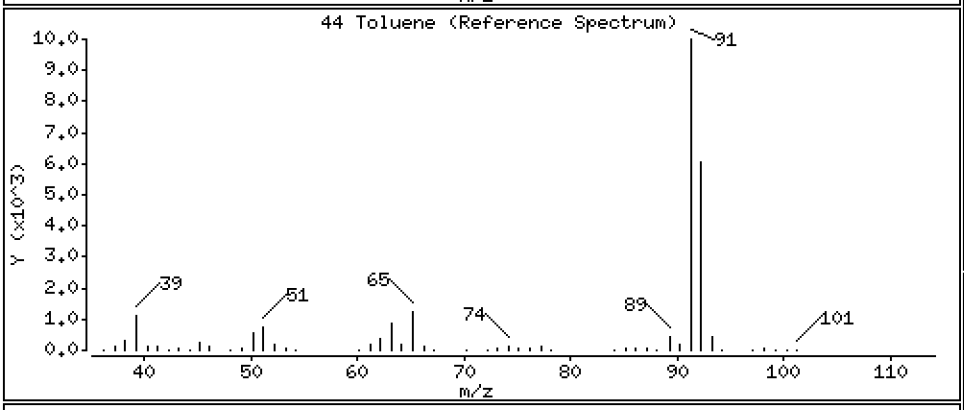
Column diameter: 0.18

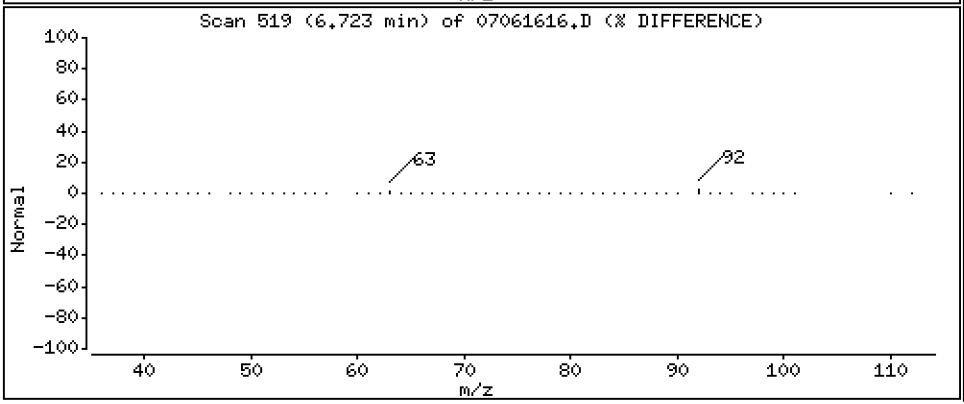
44 Toluene

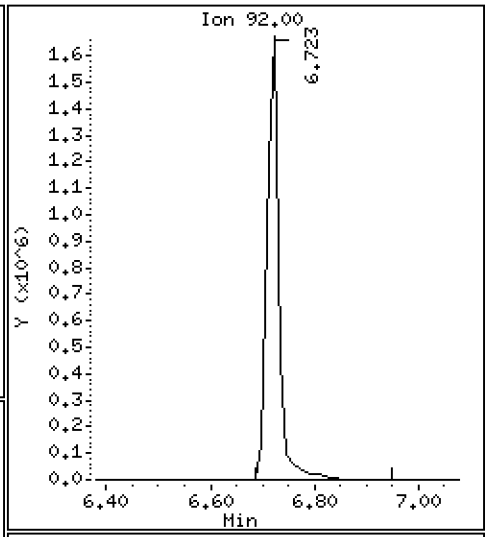
Concentration: 54.439 ug/L

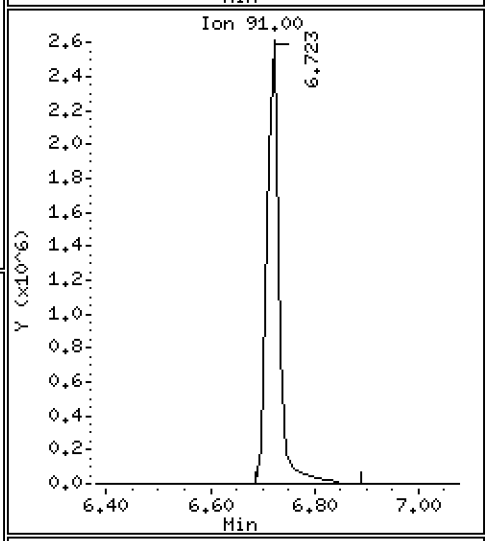


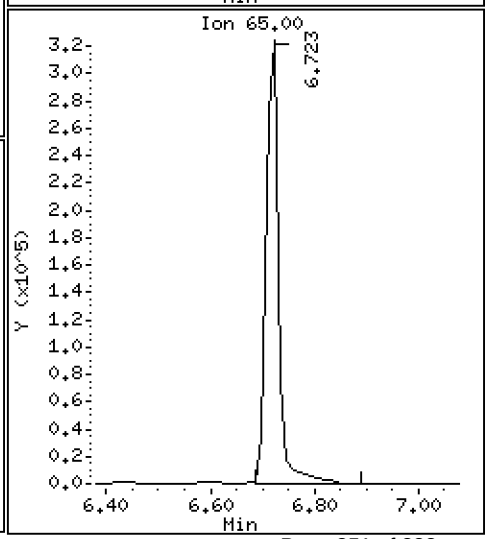












Data File: \\target\share\chem1\nt2.i\20160706.b\07061616.D

Date : 06-JUL-2016 13:05

Client ID: GCCV

Instrument: nt2.i

Sample Info: GCCV,10,10,0,

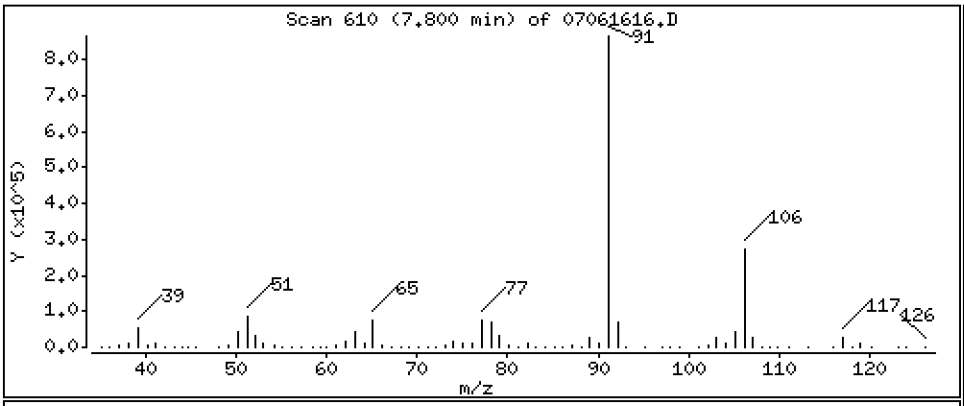
Operator: LH

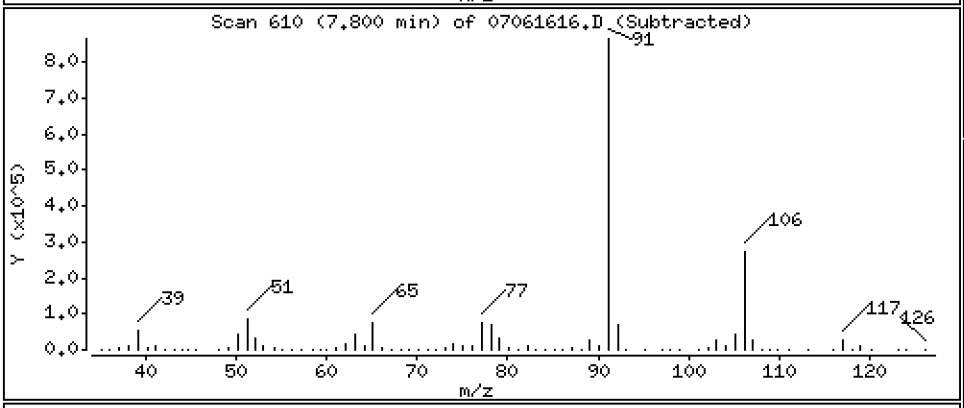
Column phase: RTXVMS

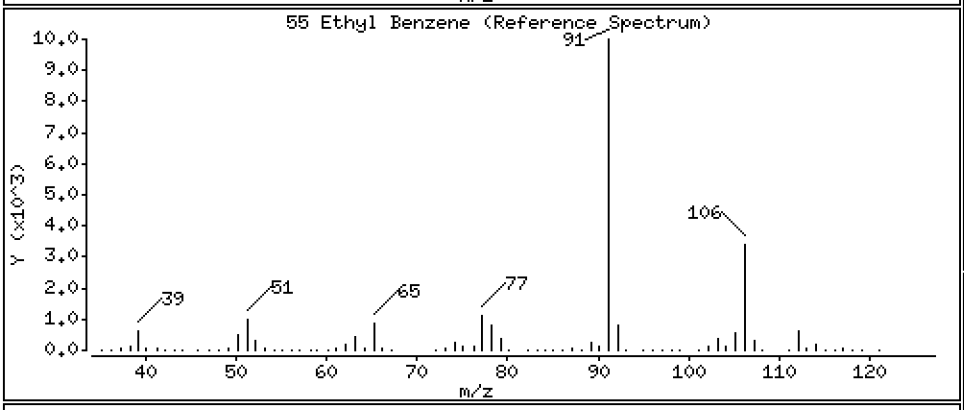
Column diameter: 0.18

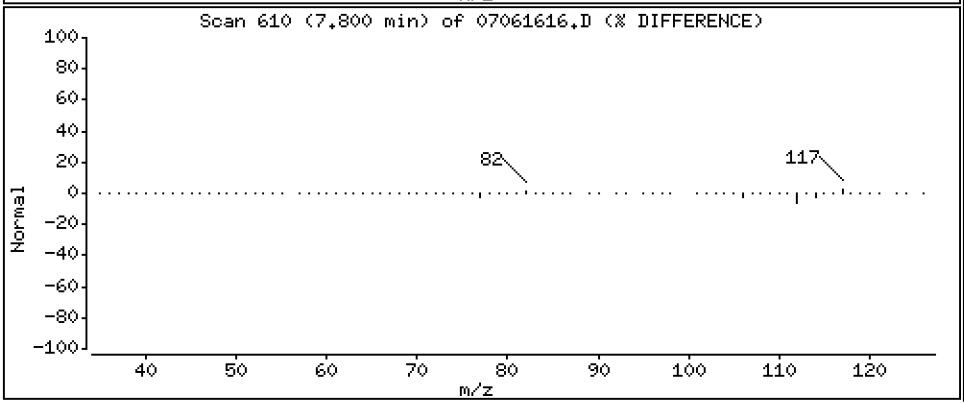
55 Ethyl Benzene

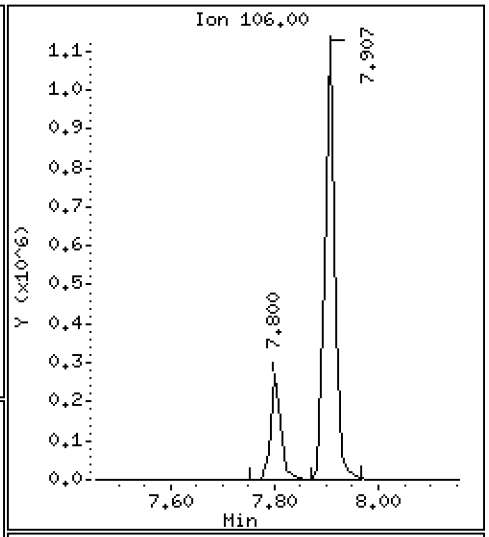
Concentration: 13.423 ug/L

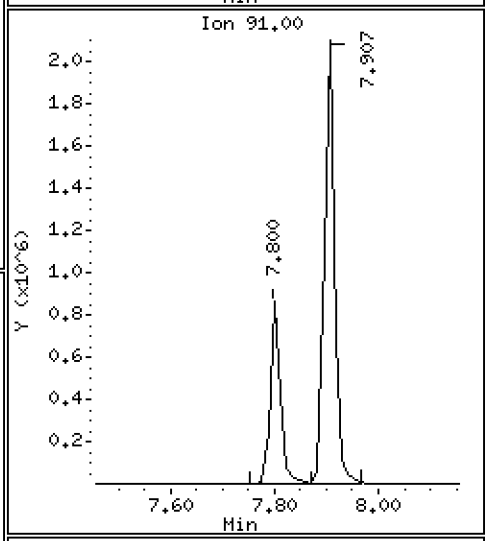


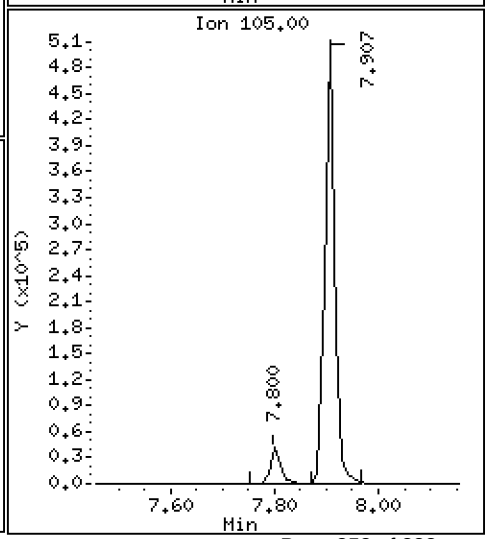












Data File: \\target\share\chem1\nt2.i\20160706.b\07061616.D

Date : 06-JUL-2016 13:05

Client ID: GCCV

Instrument: nt2.i

Sample Info: GCCV,10,10,0,

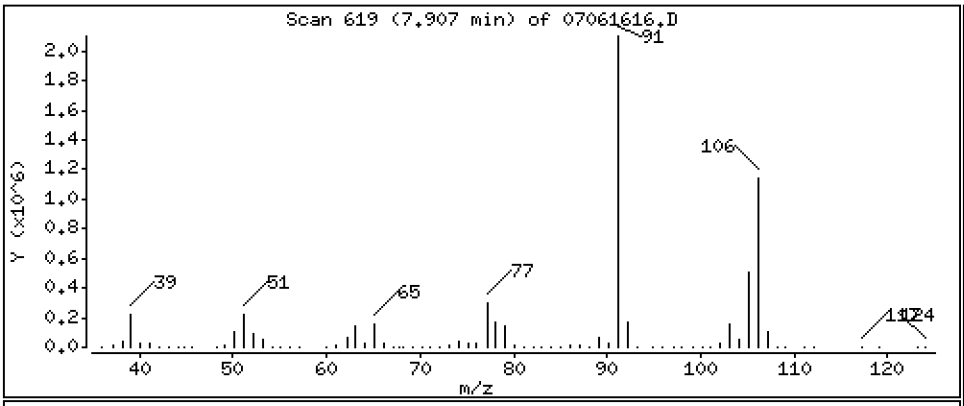
Operator: LH

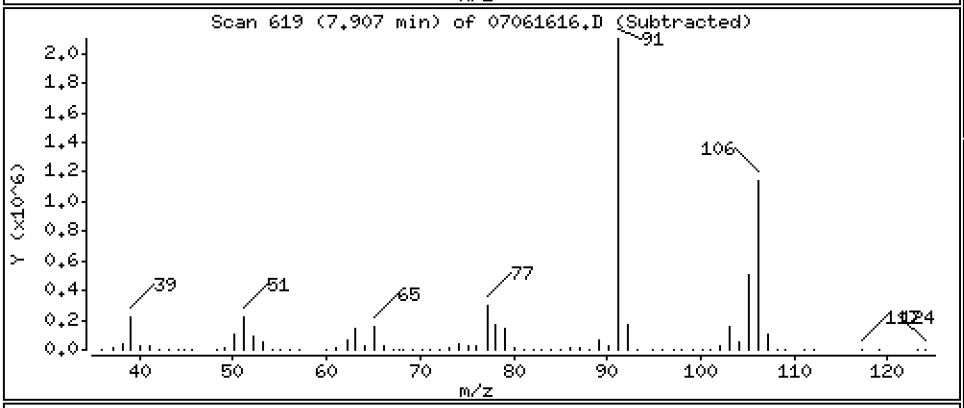
Column phase: RTXVMS

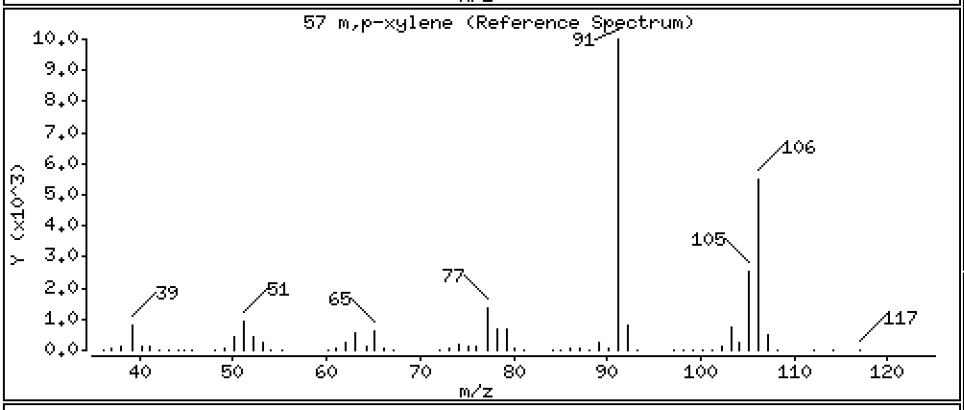
Column diameter: 0.18

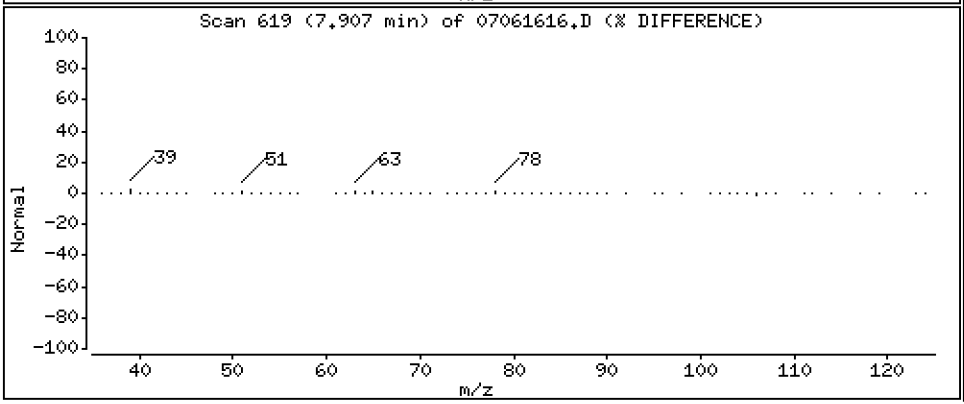
57 m,p-xylene

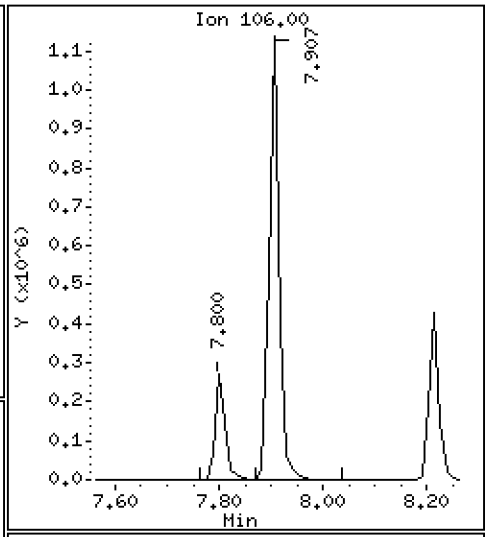
Concentration: 45.373 ug/L

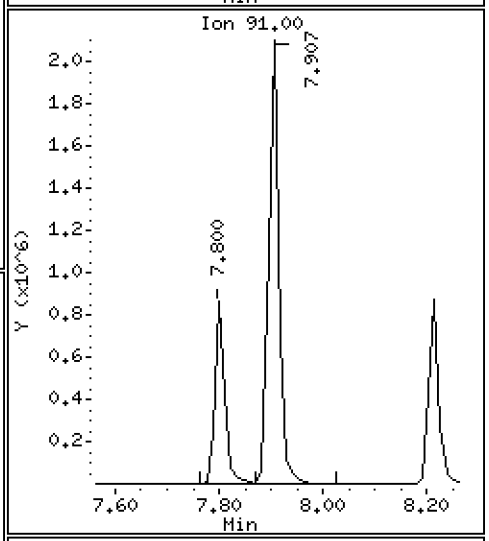


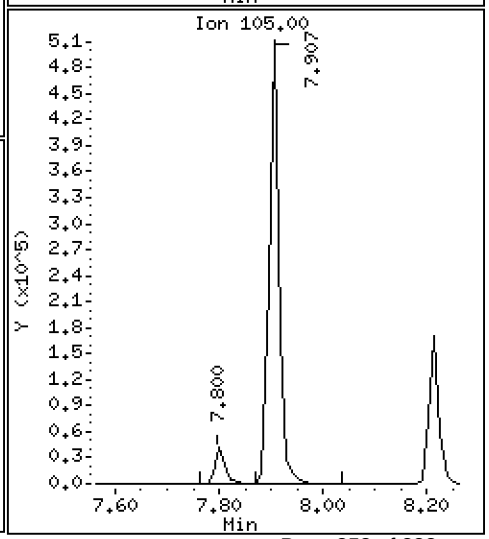












Data File: \\target\share\chem1\nt2.i\20160706.b\07061616.D

Date : 06-JUL-2016 13:05

Client ID: GCCV

Instrument: nt2.i

Sample Info: GCCV,10,10,0,

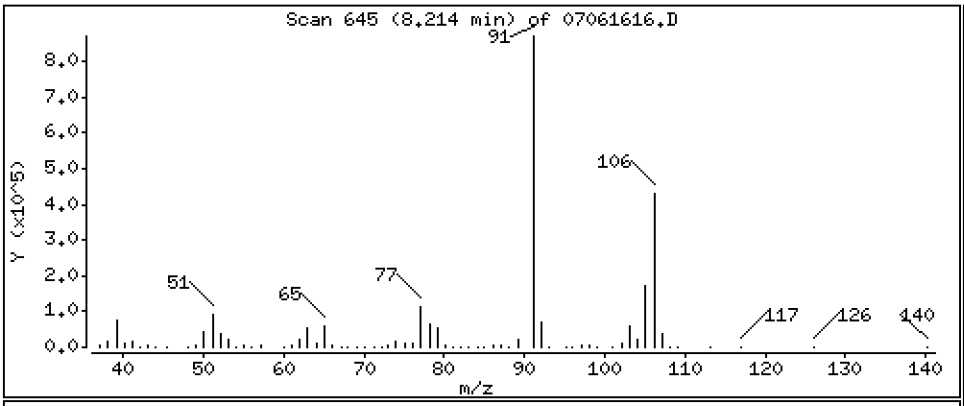
Operator: LH

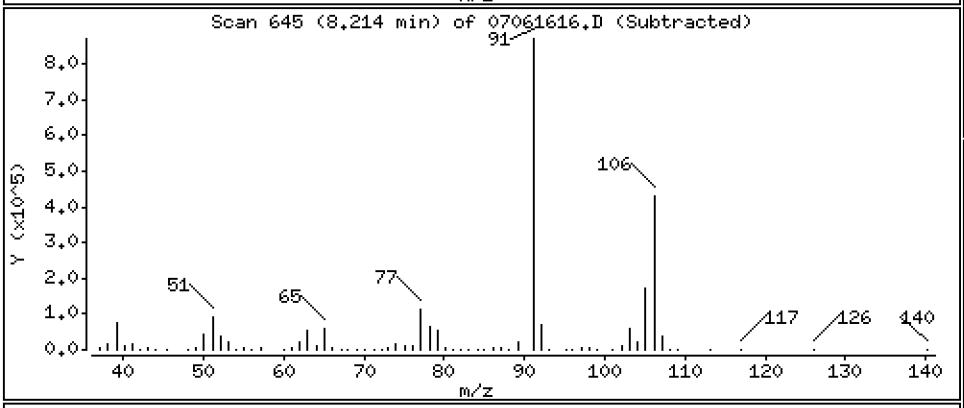
Column phase: RTXVMS

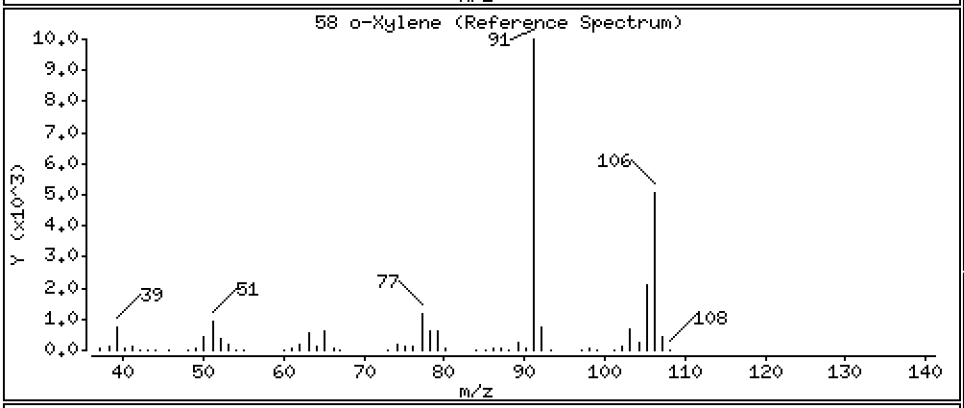
Column diameter: 0.18

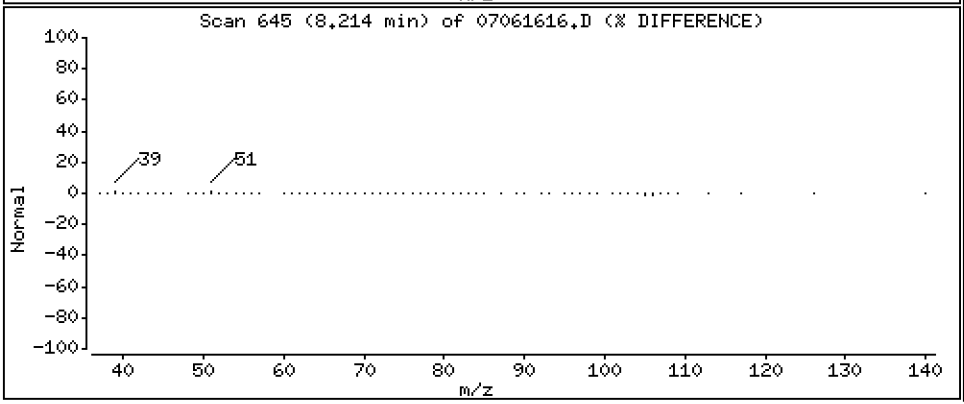
58 o-Xylene

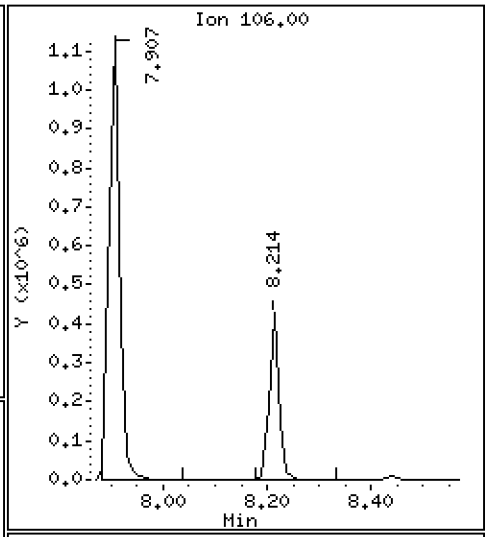
Concentration: 18.023 ug/L

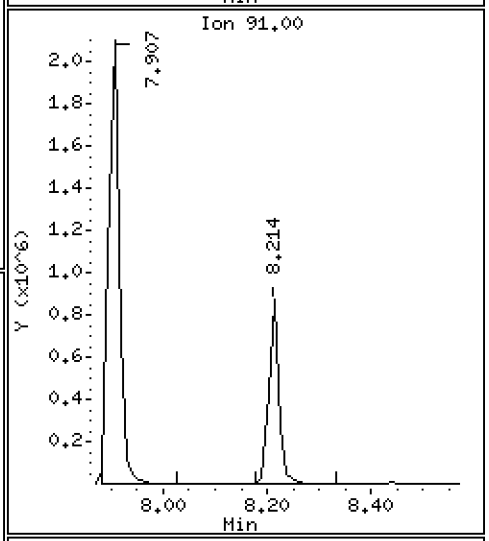


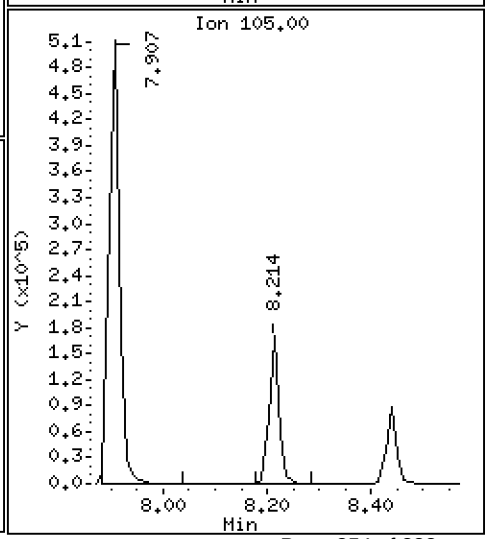












ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160706.b\07061616.D
Lab Smp Id: SEG0023-CCV1 Client Smp ID: GCCV
Inj Date : 06-JUL-2016 13:05
Operator : LH Inst ID: nt2.i
Smp Info : GCCV,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Meth Date : 07-Jul-2016 13:15 lanih Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 16 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.948	4.949	(0.929)	70130	5.44607	5.446
	31 Benzene	78	5.244	5.233	(0.917)	547765	7.09488	7.095
*	32 Pentafluorobenzene	168	5.326	5.328	(1.000)	283705	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.350	5.352	(1.004)	87422	6.23249	6.232
*	37 1,4-Difluorobenzene	114	5.717	5.707	(1.000)	514649	10.0000	
$	43 d8-Toluene	98	6.687	6.689	(1.170)	297894	4.88679	4.887
	44 Toluene	92	6.723	6.724	(1.176)	2657418	54.4394	54.439
*	53 d5-Chlorobenzene	117	7.776	7.777	(1.000)	455278	10.0000	
	55 Ethyl Benzene	106	7.800	7.801	(1.003)	378650	13.4233	13.423
	57 m,p-xylene	106	7.906	7.908	(1.017)	1547540	45.3734	45.373
	58 o-Xylene	106	8.214	8.215	(1.056)	570009	18.0234	18.023
$	62 4-Bromofluorobenzene	174	8.652	8.653	(1.113)	83297	4.97263	4.973
*	76 d4-1,4-Dichlorobenzene	152	9.480	9.481	(1.000)	226555	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.811	9.813	(1.035)	108436	5.15382	5.154

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 07061616.D
Lab Smp Id: SEG0023-CCV1
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 06-JUL-2016
Calibration Time: 08:26
Client Smp ID: GCCV
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	283705	14.45
37 1,4-Difluorobenze	400954	200477	801908	514649	28.36
53 d5-Chlorobenzene	354752	177376	709504	455278	28.34
76 d4-1,4-Dichlorobe	191489	95745	382978	226555	18.31

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.03
37 1,4-Difluorobenze	5.71	5.21	6.21	5.72	0.18
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	-0.02
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: SEG0023-CCV1 Client Smp ID: GCCV
Level: LOW Operator: LH
Data Type: MS DATA SampleType: LCS
SpikeList File: btexspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
31 Benzene	7.327	7.095	96.83	80-120
44 Toluene	53.083	54.439	102.56	80-120
55 Ethyl Benzene	13.623	13.423	98.53	78-122
57 m,p-xylene	43.355	45.373	104.66	78-126
58 o-Xylene	16.867	18.023	106.86	76-127

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	5.446	108.92	80-120
$ 33 d4-1,2-Dichloroeth	5.000	6.232	124.65	80-128
$ 43 d8-Toluene	5.000	4.887	97.74	80-120
$ 62 4-Bromofluorobenze	5.000	4.973	99.45	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.154	103.08	80-120

REVIEW SUMMARY FOR FILE - 07061616.D

Lab ID: SEG0023-CCV1
nt2.i, 20160706.b\8260061516LOW.m,   06-JUL-2016 13:05

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

CONTINUING CALIBRATION CHECK
NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Instrument ID:	NT2	Calibration:	ZF00027
Lab File ID:	07061631G.D	Calibration Date:	06/15/16 11:34
Sequence:	SEG0023	Injection Date:	07/06/16
Lab Sample ID:	SEG0023-CCV2	Injection Time:	18:15

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Gasoline Range Organics (Tol-Nap)	A	1000.0	995	49203.3300000	48981.0600000		-0.5	20
Toluene-d8	A	5.0000	5.02		1.1891220			
4-Bromofluorobenzene	A	5.0000	4.96		0.3650807			

* Values outside of QC limits

Data File: \\target\share\chem1\nt2.i\20160706.b\07061631.D

Date : 06-JUL-2016 18:15

Client ID: GCCV

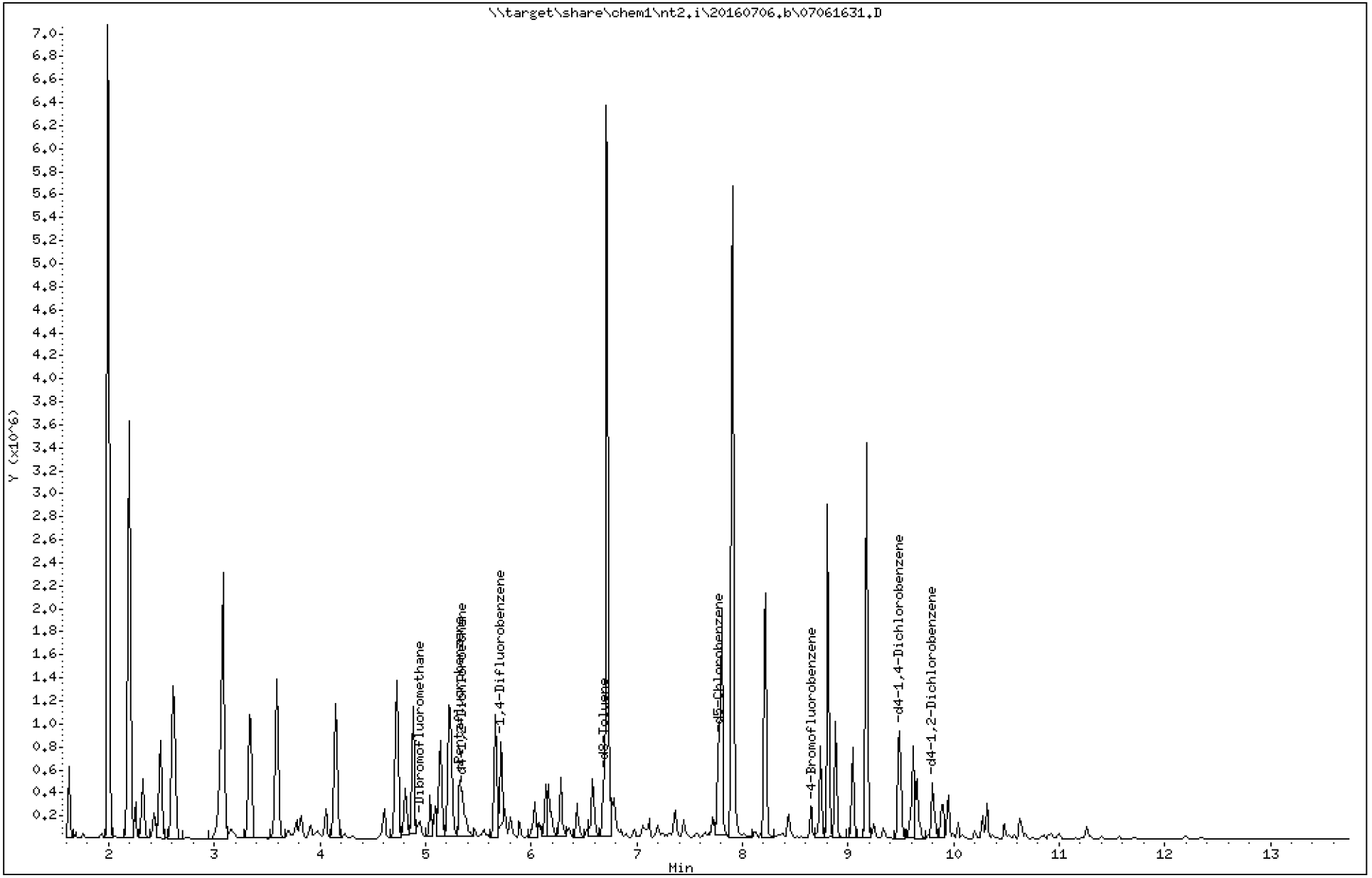
Instrument: nt2.i

Sample Info: GCCV,10,10,0,

Operator: LH

Column phase: RTXVMS

Column diameter: 0.18



Data File: \\target\share\chem1\nt2.i\20160706.b\07061631.D

Date : 06-JUL-2016 18:15

Client ID: GCCV

Instrument: nt2.i

Sample Info: GCCV,10,10,0,

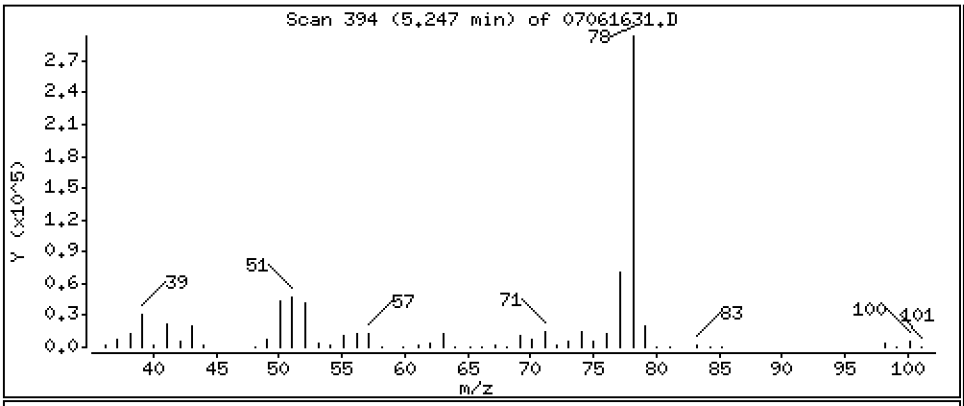
Operator: LH

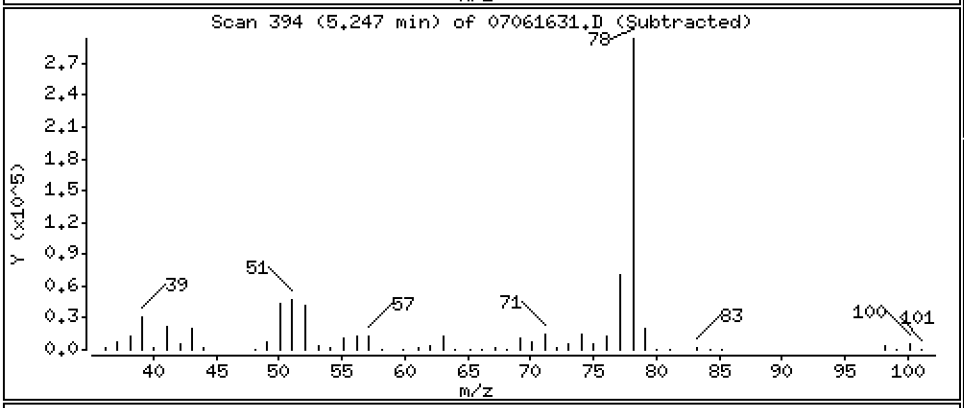
Column phase: RTXVMS

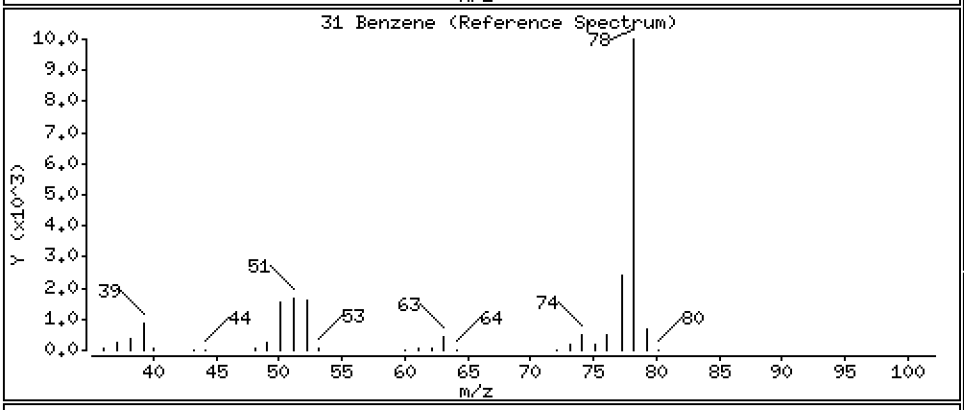
Column diameter: 0.18

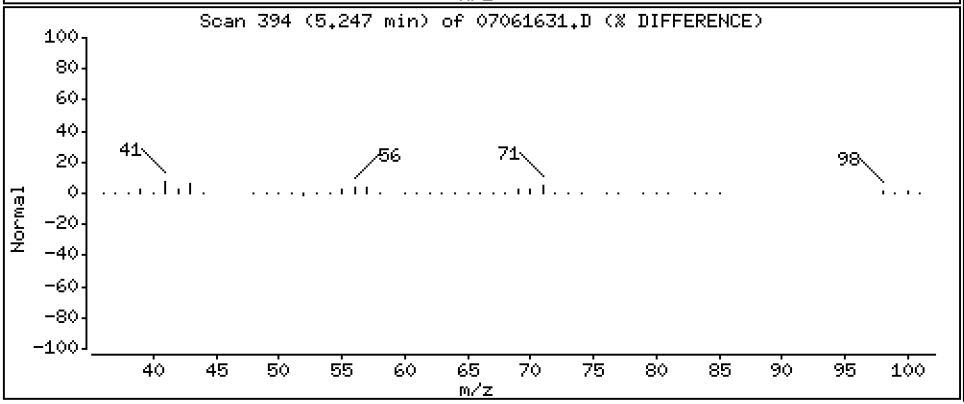
31 Benzene

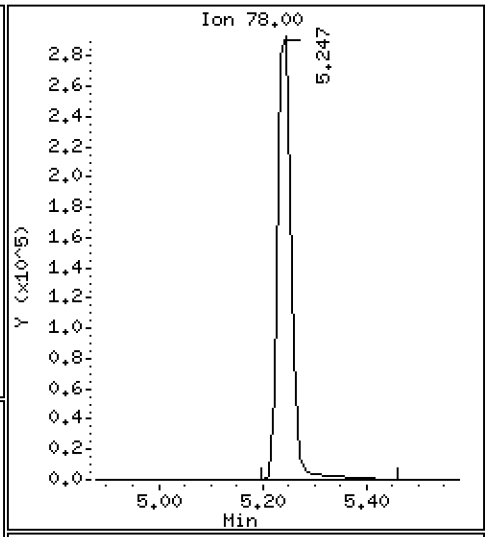
Concentration: 7.224 ug/L

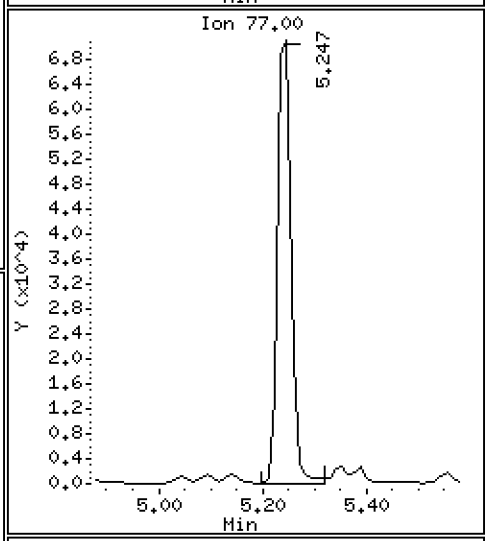


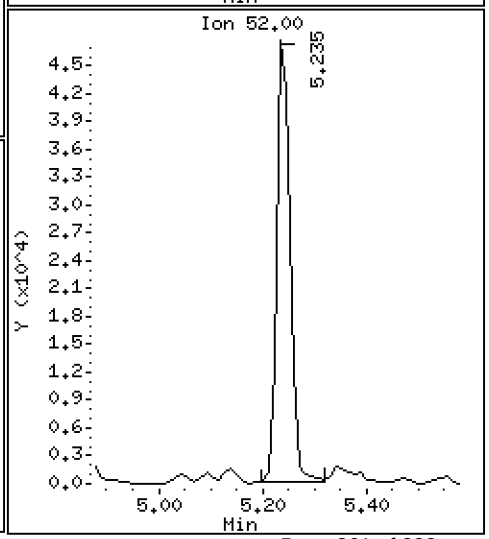












Data File: \\target\share\chem1\nt2.i\20160706.b\07061631.D

Date : 06-JUL-2016 18:15

Client ID: GCCV

Instrument: nt2.i

Sample Info: GCCV,10,10,0,

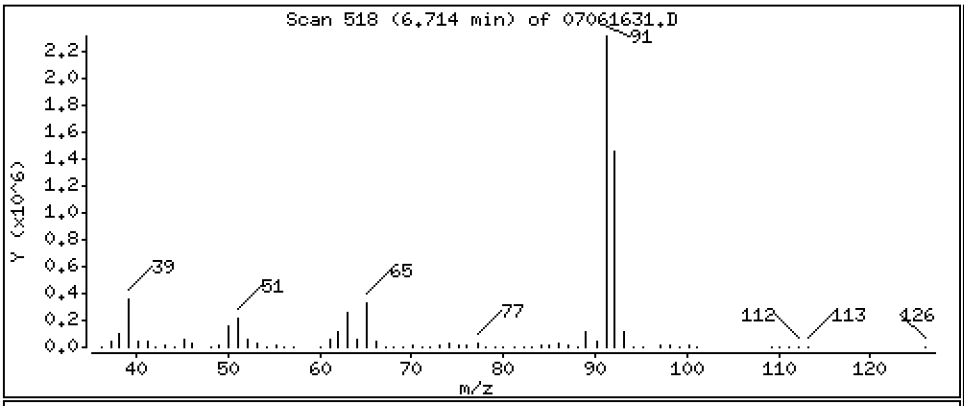
Operator: LH

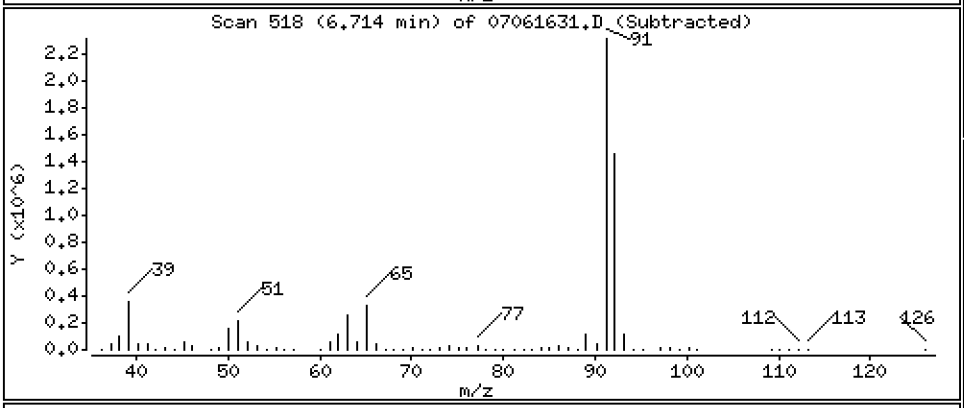
Column phase: RTXVMS

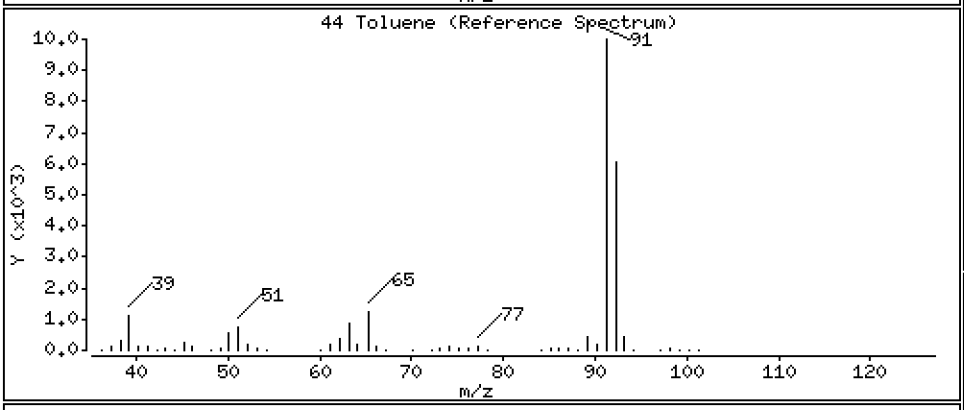
Column diameter: 0.18

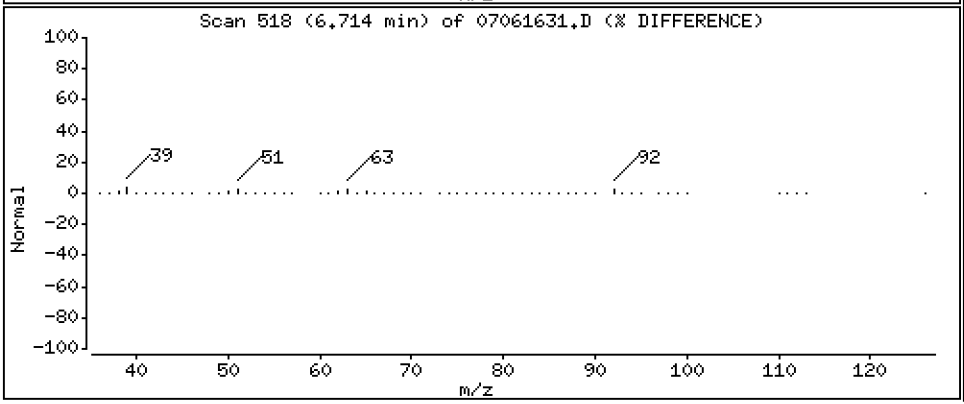
44 Toluene

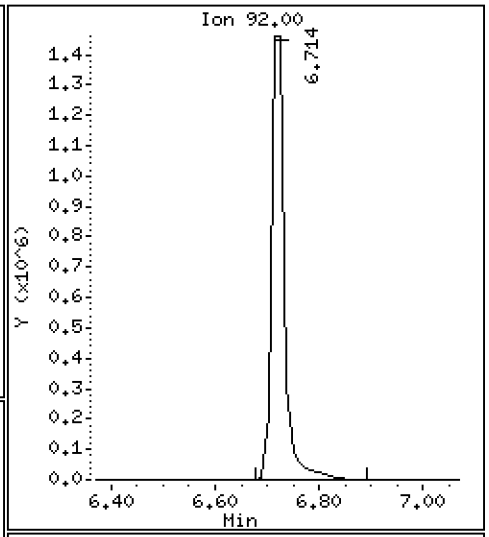
Concentration: 55.701 ug/L

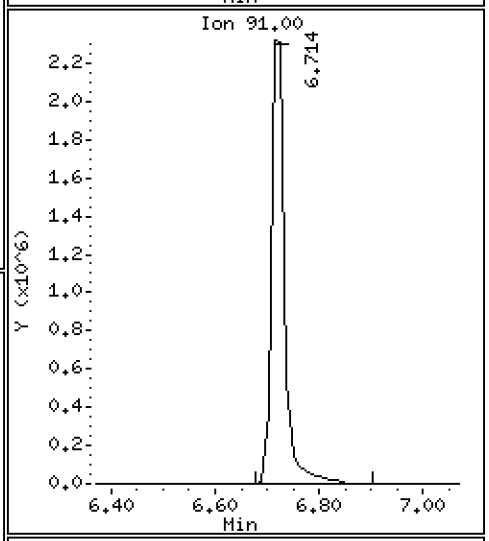


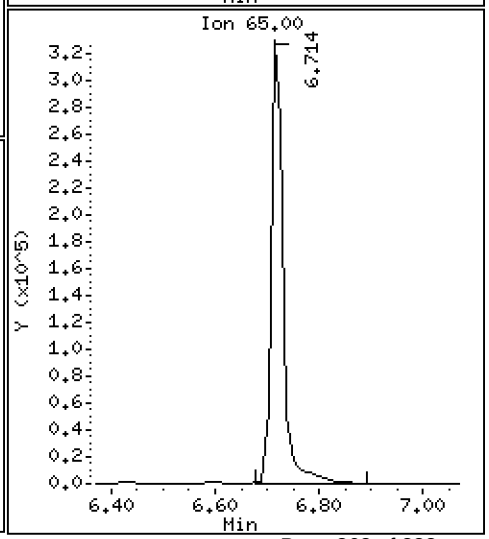












Data File: \\target\share\chem1\nt2.i\20160706.b\07061631.D

Date : 06-JUL-2016 18:15

Client ID: GCCV

Instrument: nt2.i

Sample Info: GCCV,10,10,0,

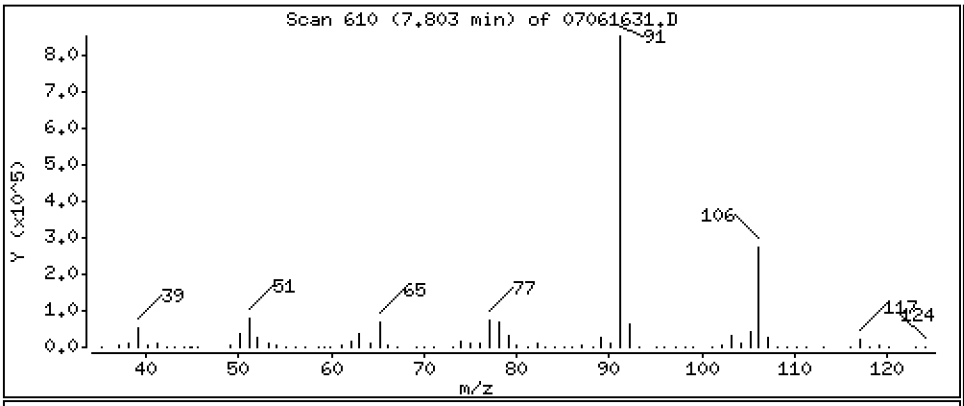
Operator: LH

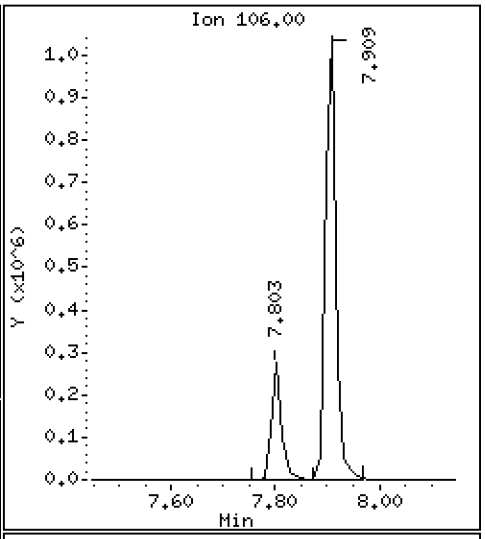
Column phase: RTXVMS

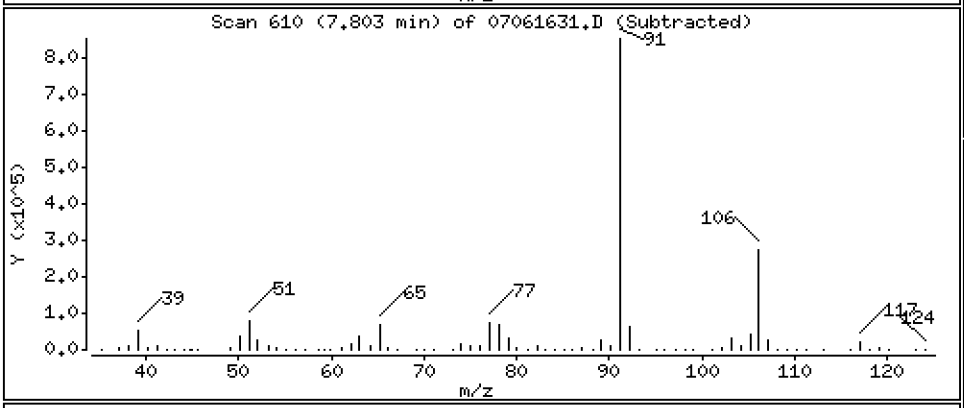
Column diameter: 0.18

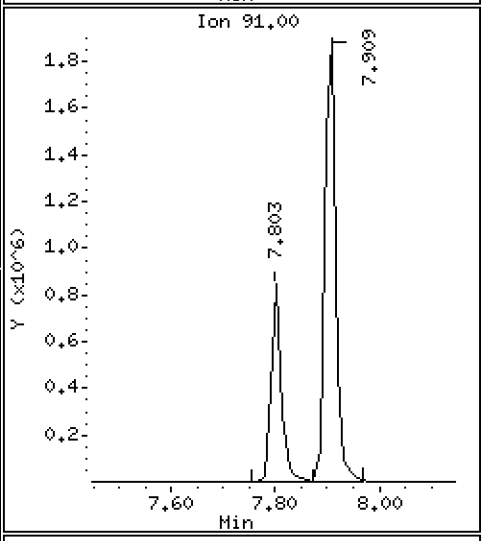
55 Ethyl Benzene

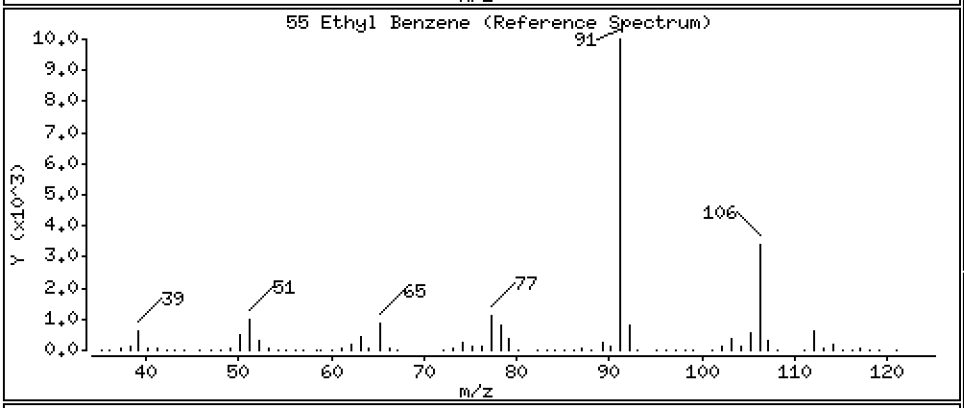
Concentration: 13.745 ug/L

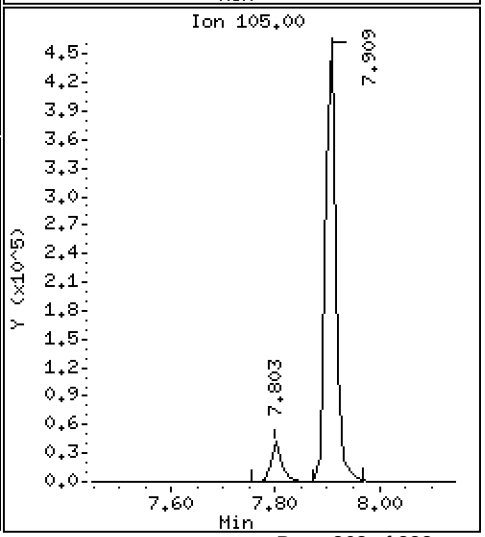


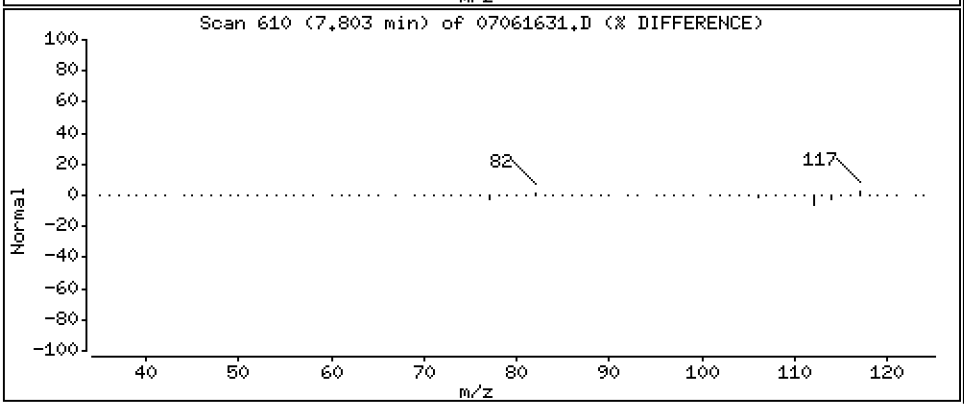












Data File: \\target\share\chem1\nt2.i\20160706.b\07061631.D

Date : 06-JUL-2016 18:15

Client ID: GCCV

Instrument: nt2.i

Sample Info: GCCV,10,10,0,

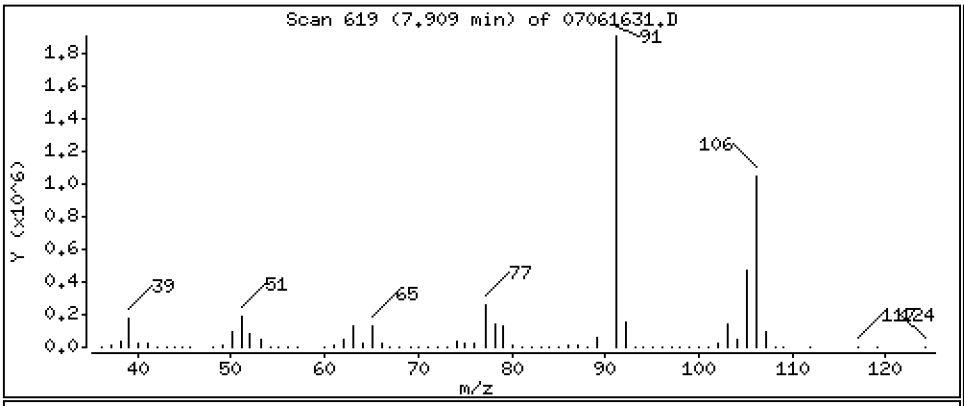
Operator: LH

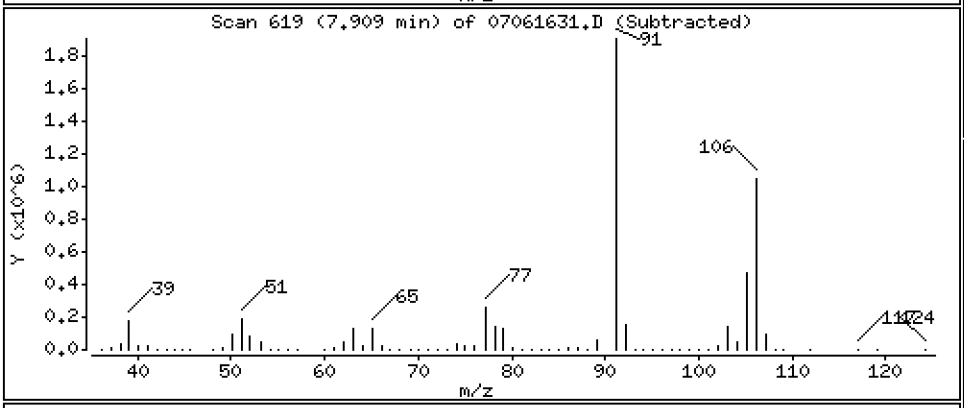
Column phase: RTXVMS

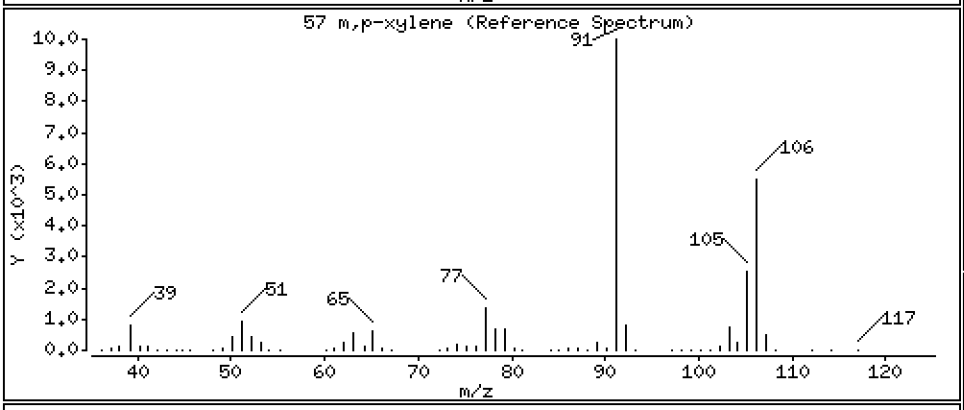
Column diameter: 0.18

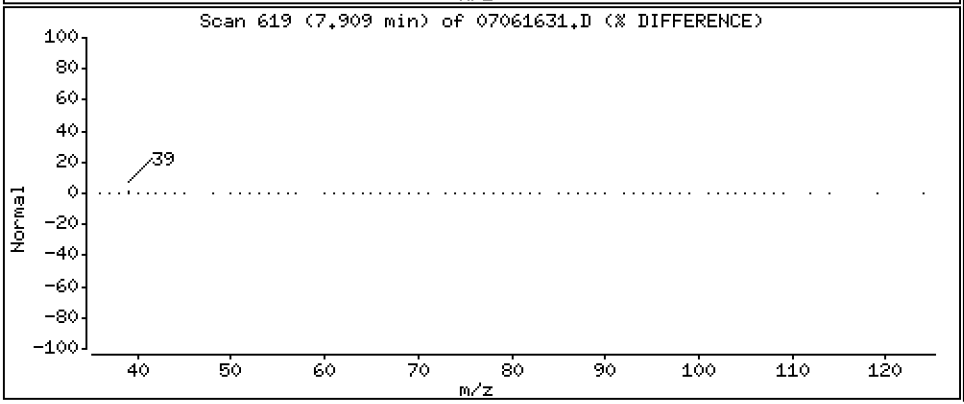
57 m,p-xylene

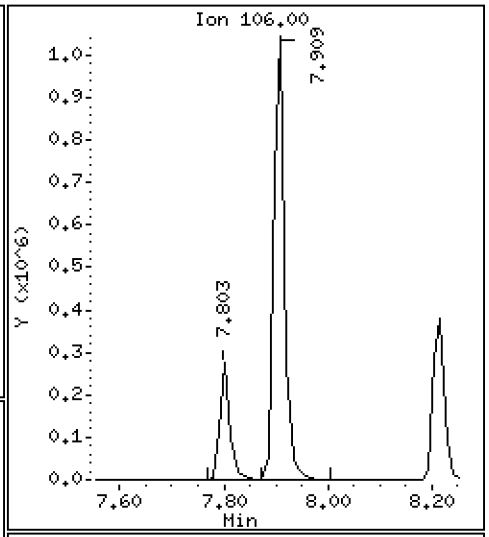
Concentration: 46.482 ug/L

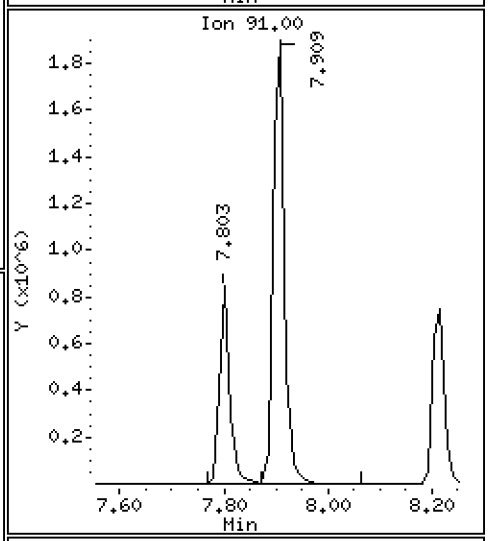


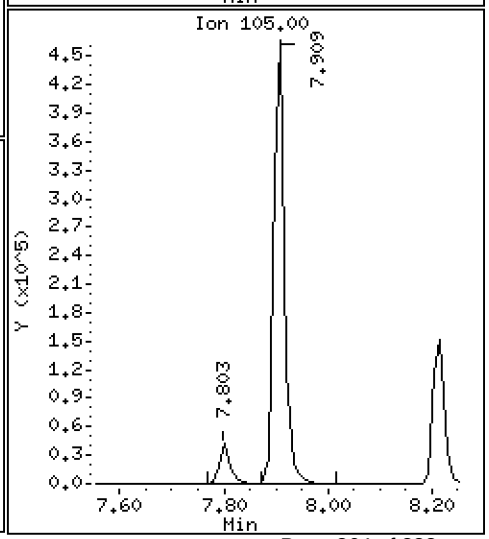












Data File: \\target\share\chem1\nt2.i\20160706.b\07061631.D

Date : 06-JUL-2016 18:15

Client ID: GCCV

Instrument: nt2.i

Sample Info: GCCV,10,10,0,

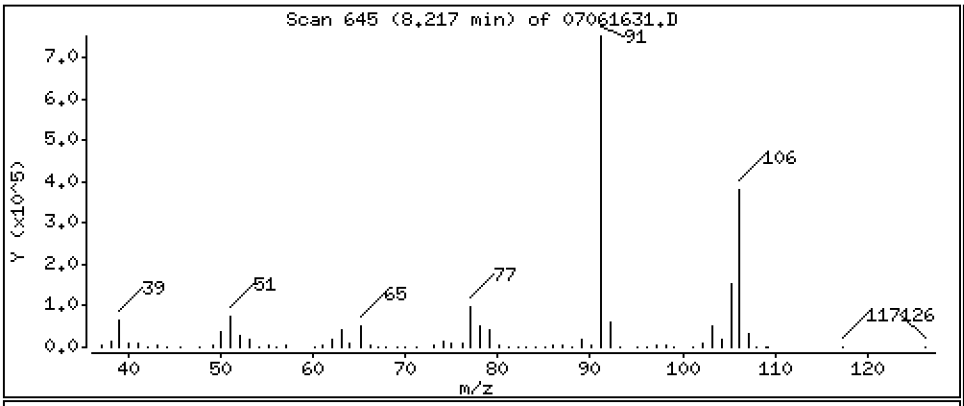
Operator: LH

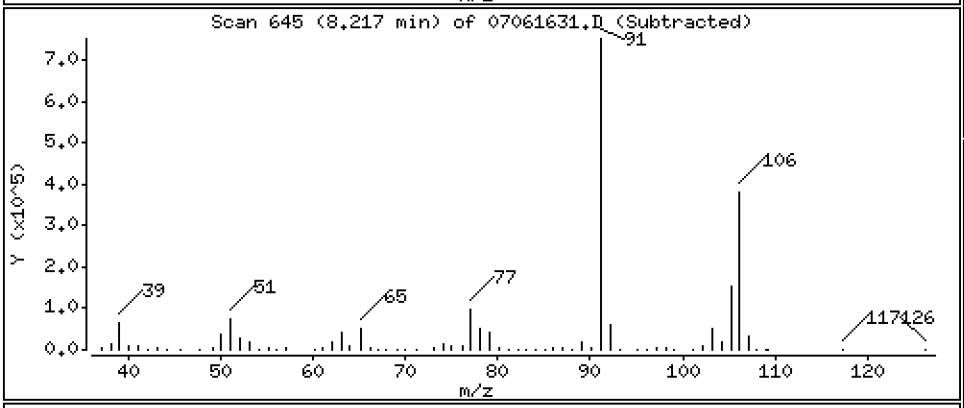
Column phase: RTXVMS

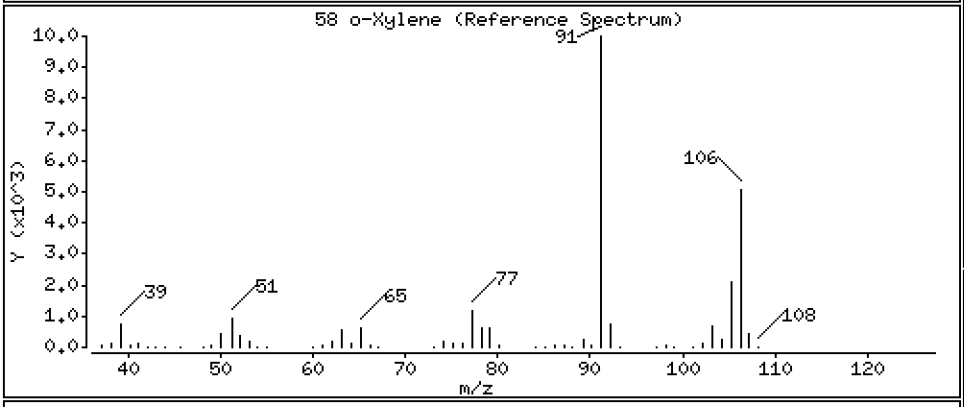
Column diameter: 0.18

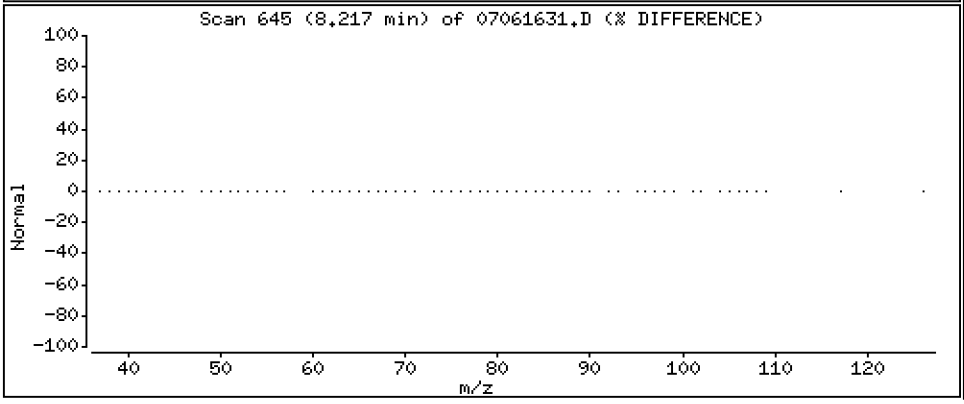
58 o-Xylene

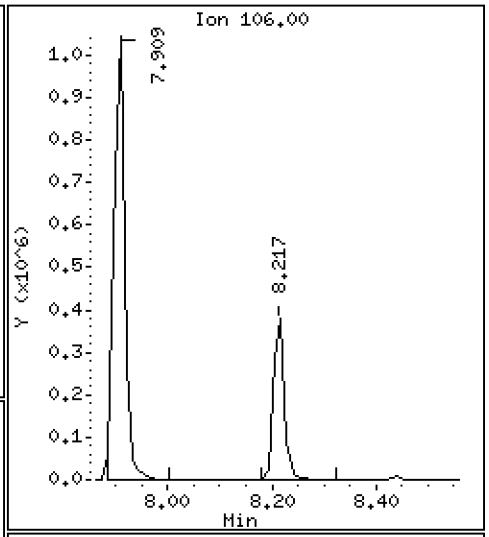
Concentration: 18.483 ug/L

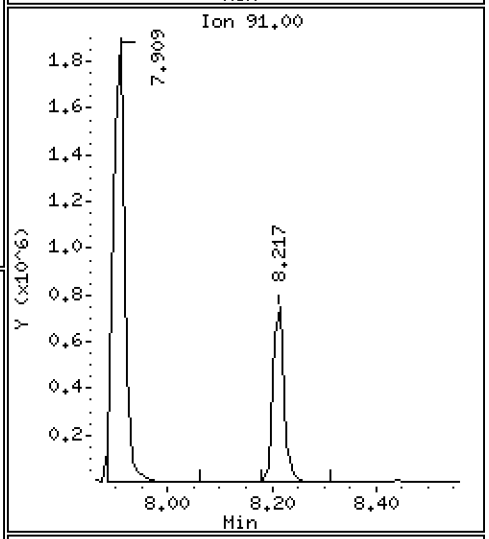


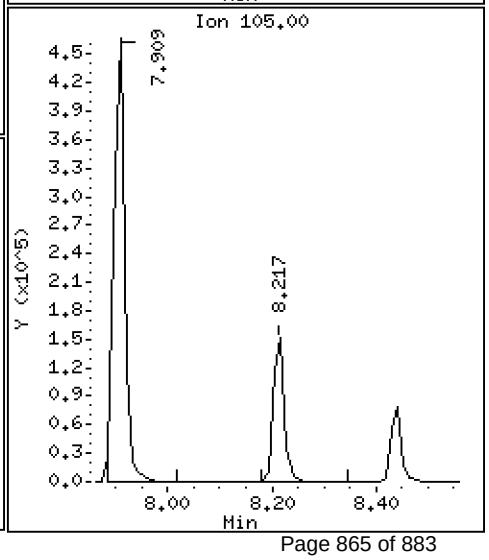












ARI Labs, Inc.

8260C 10 ml purge

Data file : \\target\share\chem1\nt2.i\20160706.b\07061631.D
Lab Smp Id: SEG0023-CCV2 Client Smp ID: GCCV
Inj Date : 06-JUL-2016 18:15
Operator : LH Inst ID: nt2.i
Smp Info : GCCV,10,10,0,
Misc Info : 16-
Comment :
Method : \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Meth Date : 07-Jul-2016 13:15 lanih Quant Type: ISTD
Cal Date : 15-JUN-2016 11:17 Cal File: 06151611.D
Als bottle: 31 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: betx.sub
Target Version: 4.14
Processing Host: ORGDATA13

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Pv	10.000	Purge Volume (mL)
Sa	10.000	Sample Amount (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	27 Dibromofluoromethane	111	4.950	4.949	(0.929)	65053	5.10041	5.100
	31 Benzene	78	5.246	5.233	(0.919)	543374	7.22367	7.224
*	32 Pentafluorobenzene	168	5.329	5.328	(1.000)	281001	10.0000	
$	33 d4-1,2-Dichloroethane	65	5.353	5.352	(1.004)	81432	5.86132	5.861
*	37 1,4-Difluorobenzene	114	5.708	5.707	(1.000)	501422	10.0000	
$	43 d8-Toluene	98	6.690	6.689	(1.172)	298126	5.01961	5.020
	44 Toluene	92	6.714	6.724	(1.176)	2649140	55.7014	55.701
*	53 d5-Chlorobenzene	117	7.778	7.777	(1.000)	444362	10.0000	
	55 Ethyl Benzene	106	7.802	7.801	(1.003)	378442	13.7455	13.745
	57 m,p-xylene	106	7.909	7.908	(1.017)	1547339	46.4820	46.482
	58 o-Xylene	106	8.216	8.215	(1.056)	570524	18.4829	18.483
$	62 4-Bromofluorobenzene	174	8.654	8.653	(1.113)	81114	4.96127	4.961
*	76 d4-1,4-Dichlorobenzene	152	9.482	9.481	(1.000)	230960	10.0000	
$	79 d4-1,2-Dichlorobenzene	152	9.802	9.813	(1.034)	109686	5.11380	5.114

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 07061631.D
Lab Smp Id: SEG0023-CCV2
Analysis Type: VOA
Quant Type: ISTD
Operator: LH
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

Calibration Date: 06-JUL-2016
Calibration Time: 08:26
Client Smp ID: GCCV
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	247878	123939	495756	281001	13.36
37 1,4-Difluorobenze	400954	200477	801908	501422	25.06
53 d5-Chlorobenzene	354752	177376	709504	444362	25.26
76 d4-1,4-Dichlorobe	191489	95745	382978	230960	20.61

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
32 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.02
37 1,4-Difluorobenze	5.71	5.21	6.21	5.71	0.02
53 d5-Chlorobenzene	7.78	7.28	8.28	7.78	0.01
76 d4-1,4-Dichlorobe	9.48	8.98	9.98	9.48	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

ARI Labs, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20151001
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: SEG0023-CCV2 Client Smp ID: GCCV
Level: LOW Operator: LH
Data Type: MS DATA SampleType: LCS
SpikeList File: btexspike.spk Quant Type: ISTD
Sublist File: betx.sub
Method File: \\target\share\chem1\nt2.i\20160706.b\8260061516LOW.m
Misc Info: 16-

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
31 Benzene	7.327	7.224	98.59	80-120
44 Toluene	53.083	55.701	104.93	80-120
55 Ethyl Benzene	13.623	13.745	100.90	78-122
57 m,p-xylene	43.355	46.482	107.21	78-126
58 o-Xylene	16.867	18.483	109.58	76-127

SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$ 27 Dibromofluorometha	5.000	5.100	102.01	80-120
$ 33 d4-1,2-Dichloroeth	5.000	5.861	117.23	80-128
$ 43 d8-Toluene	5.000	5.020	100.39	80-120
$ 62 4-Bromofluorobenze	5.000	4.961	99.23	80-120
$ 79 d4-1,2-Dichloroben	5.000	5.114	102.28	80-120

REVIEW SUMMARY FOR FILE - 07061631.D

Lab ID: SEG0023-CCV2
nt2.i, 20160706.b\8260061516LOW.m,   06-JUL-2016 18:15

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

On Column LOD for nt2.i,8260061516LOW.m,Sublist: voa.sub = 0.0100

Exception: d4-1,2-Dichloroethane (Surr) 0.0500
Exception: d8-Toluene (Surr) 0.0500
Exception: 4-Bromofluorobenzene (Surr) 0.0500
Exception: d4-1,2-Dichlorobenzene (Surr) 0.1000
Exception: Dibromofluoromethane (Surr) 0.1000

Analytical Resources, Incorporated

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEG0023	Instrument:	NT2
		Calibration:	ZF00027

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SEG0023-ICV1	07061603G.D	Water	07/06/16 08:06
Initial Cal Check	SEG0023-ICV1	07061603.D	Water	07/06/16 08:06
LCS	BEG0016-BS1	07061603lcs.D	Water	07/06/16 08:06
LCS	BEG0016-BS1	07061603LCSG.D	Water	07/06/16 08:06
LCS	BEG0020-BS1	07061603lcss.D	Solid	07/06/16 08:06
LCS	BEG0020-BS1	07061603LCSSG.D	Solid	07/06/16 08:06
LCS Dup	BEG0016-BSD1	07061605.D	Water	07/06/16 08:47
LCS Dup	BEG0016-BSD1	07061605G.D	Water	07/06/16 08:47
LCS Dup	BEG0020-BSD1	07061605lcsds.D	Solid	07/06/16 08:47
LCS Dup	BEG0020-BSD1	07061605LCSDSG.D	Solid	07/06/16 08:47
Blank	BEG0016-BLK1	07061606G.D	Water	07/06/16 09:07
Blank	BEG0016-BLK1	07061606.D	Water	07/06/16 09:07
Blank	BEG0020-BLK1	07061606mbs.D	Solid	07/06/16 09:07
Blank	BEG0020-BLK1	07061606mbsG.D	Solid	07/06/16 09:07
Calibration Check	SEG0023-CCV1	07061616G.D	Water	07/06/16 13:05
Calibration Check	SEG0023-CCV1	07061616.D	Water	07/06/16 13:05
CHRL-TB-160705	16G0006-04	07061621G.D	Water	07/06/16 14:48
CHRL-TB-160705	16G0006-04	07061621.D	Water	07/06/16 14:48
CHRL-O-03A-160705	16G0006-01	07061622.D	Solid	07/06/16 15:09
CHRL-O-03A-160705	16G0006-01	07061622G.D	Solid	07/06/16 15:09
CHRL-O-04A-160705	16G0006-02	07061623.D	Solid	07/06/16 15:30
CHRL-O-04A-160705	16G0006-02	07061623G.D	Solid	07/06/16 15:30
CHRL-P-03A-160705	16G0006-03	07061624G.D	Solid	07/06/16 15:50
CHRL-P-03A-160705	16G0006-03	07061624.D	Solid	07/06/16 15:50
Calibration Check	SEG0023-CCV2	07061631G.D	Water	07/06/16 18:15
Calibration Check	SEG0023-CCV2	07061631.D	Water	07/06/16 18:15

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SEG0023

Instrument: NT2
Calibnration ID: ZF00027

Printed: 7/7/2016 1:44:25PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SEG0023-TUN1	QC		1		E001314			
SEG0023-ICV1	QC		2		E001854	E001147		
BEG0016-BS1	QC		3			E001147		
BEG0020-BS1	QC		4			E001147		
BEG0016-BSD1	QC		5			E001147		
BEG0020-BSD1	QC		6			E001147		
BEG0016-BLK1	QC		7			E001147		
BEG0020-BLK1	QC		8			E001147		
16F0100-02	8260C VOA	A	9			E001147	G & K Services	
SEG0023-CCV1	QC		10		E001854	E001147		
16G0006-04	8260C Gas (NWTPH)	B	11			E001147	Anchor QEA, LLC	
16G0006-01	8260C Gas (NWTPH)	A	12			E001147	Anchor QEA, LLC	
16G0006-02	8260C Gas (NWTPH)	A	13			E001147	Anchor QEA, LLC	
16G0006-03	8260C Gas (NWTPH)	B	14			E001147	Anchor QEA, LLC	
16F0100-02RE1	8260C VOA	A	15			E001147	G & K Services	Added 7/7/2016 by LH
SEG0023-CCV2	QC		16		E001854	E001147		

Samples Loaded By Date

Data Processed By Date

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160706elementg.b

ARI Job No.: RTBF Method: GAS032916.m Instrument: nt2.i Date: 06-JUL-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0731	07061602G.D	RTBFB0706	10	1	Naphthalene,
0806	07061603G.D	SEG0023-ICV1		1	d5-Chlorobenzene,
0806	07061603LCSG.D	BEG0016-BS1		1	d5-Chlorobenzene,
0806	07061603LCSSG.D	BEG0020-BS1		1	d5-Chlorobenzene,
0847	07061605G.D	BEG0016-BSD1		1	Toluene, d4-Dichlorobenzene, d5-Chlorobenzene,
0847	07061605LCSDSG.D	BEG0020-BSD1		1	Toluene, d4-Dichlorobenzene, d5-Chlorobenzene,
0907	07061606G.D	BEG0016-BLK1		1	NO MANUAL INTEGRATION
0907	07061606mbsG.D	BEG0020-BLK1		1	NO MANUAL INTEGRATION
1305	07061616G.D	SEG0023-CCV1	GCCV	1	d4-Dichlorobenzene, d5-Chlorobenzene,
1448	07061621G.D	16G0006-04		1	NO MANUAL INTEGRATION
1509	07061622G.D	16G0006-01		1	NO MANUAL INTEGRATION
1530	07061623G.D	16G0006-02		1	NO MANUAL INTEGRATION
1550	07061624G.D	16G0006-03		1	NO MANUAL INTEGRATION
1815	07061631G.D	SEG0023-CCV2		1	d4-Dichlorobenzene,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160706.b

ARI Job No.: RINS Method: 8260061516LOW.m Instrument: nt2.i Date: 06-JUL-2016

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0659	07061601.D	RINSE		1	NO MANUAL INTEGRATION
0731	07061602.D	RTBFB0706	10	1	NO MANUAL INTEGRATION
0806	07061603.D	GICV/LCS	GICV/LCS	1	NO MANUAL INTEGRATION
0826	07061604.D	ICV/LCS	ICV/LCS	1	NO MANUAL INTEGRATION
0826	07061604lcs.D	ICV/LCS	ICV/LCS	1	NO MANUAL INTEGRATION
0847	07061605.D	GLCSD	GLCSD	1	NO MANUAL INTEGRATION
0907	07061606.D	MB	MB	1	NO MANUAL INTEGRATION
0928	07061607.D	BCT5A	92-9S	1	NO MANUAL INTEGRATION
0948	07061608.D	BCT5B	92-10S	1	NO MANUAL INTEGRATION
1009	07061609.D	BCT5C	50-1	1	NO MANUAL INTEGRATION
1030	07061610.D	BCT5D	51-2	1	NO MANUAL INTEGRATION
1050	07061611.D	BCT5E	02-1	1	NO MANUAL INTEGRATION
1111	07061612.D	BCT5F	92-8S	1	NO MANUAL INTEGRATION
1131	07061613.D	LCS	LCS	1	2-Butanone,
1152	07061614.D	LOW	LOW	1	Vinyl Acetate, 2-Butanore, 2-Hexanone, 1,2-Dibromo 3-Chloropropane,
1245	07061615.D	16F0100-02		1	NO MANUAL INTEGRATION
1301	07061616.D	GCCV	GCCV	1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160706.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1326	07061617.D	BCY1A	Batch 16-2	1	2-Pentanone,
1347	07061618.D	BCY1B	Batch 16-2	1	Toluene, 2-Pentanone,
1407	07061619.D	BCY1C	Batch 16-2	1	Toluene, 2-Pentanone,
1428	07061620.D	BCY1D	Batch 16-2	1	2-Pentanone,
1448	07061621.D	16G0006-04		1	NO MANUAL INTEGRATION
1509	07061622.D	16G0006-01		1	NO MANUAL INTEGRATION
1530	07061623.D	16G0006-02		1	NO MANUAL INTEGRATION
1550	07061624.D	16G0006-03		1	NO MANUAL INTEGRATION
1610	07061625.D	BCY5A	Batch 16-0	1	NO MANUAL INTEGRATION
1630	07061626.D	BCY1A	Batch 16-2	1	NO MANUAL INTEGRATION
1651	07061627.D	BCY1B	Batch 16-2	1	NO MANUAL INTEGRATION
1711	07061628.D	BCY1C	Batch 16-2	1	NO MANUAL INTEGRATION
1731	07061629.D	BCY1D	Batch 16-2	1	NO MANUAL INTEGRATION
1755	07061630.D	16F0100-02		1	Toluene,
1815	07061631.D	GCCV	GCCV	1	NO MANUAL INTEGRATION
1835	07061632.D	CCV	CCV	1	NO MANUAL INTEGRATION

BEG0020
BEG0016
SEG0023

Analytical Resources Inc.: Organics Instrument Log

NT-2 Serial No.: 82321977

Date: 7/6/16 Analysis: 8260C tgas Analyst: QAM

GC Program: VOAW Column No: 1295415 Column Type: RTX VMS

Instrument Tune (.U or .CT.): bfb.u EM Voltage: 2241

Calibration File: 07061602.d Curve Date: 6/15/16, 3/29/16 Injection Vol.: 10mL

ZF00027

IS/SS	Ical/Ccal	LCS/ICV
E1116	E912	E912
E1117	E2579	E2579

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem1\nt2.i\20160706.b

	Time	Filename	LabID	ClientID	Vial#	pH	DF							
1	0659	07061601.D	RINSE				1	5.32	288174	5.71	490208	7.78	428345	9.50	199423
2	0731	07061602.D	RTBFB0706	10			1								
3	0806	07061603.D	GICV/LCS	GICV/LCS			1	5.33	298317	5.72	518585	7.78	457626	9.49	233080
4	0826	07061604.D	ICV/LCS	ICV/LCS			1	5.33	283636	5.71	491681	7.78	446431	9.48	234320
5	0847	07061605.D	GLCSD	GLCSD			1	5.33	279683	5.72	486724	7.78	425830	9.48	221732
6	0907	07061606.D	MB	MB			1	5.33	265350	5.72	463868	7.78	419693	9.48	210020
7	0928	07061607.D	BCT5A	92-9S	2	≤2	1	5.33	278799	5.72	491671	7.78	435117	9.48	212096
8	0948	07061608.D	BCT5B	92-10S	3		1	5.33	251477	5.72	444445	7.78	390205	9.48	198239
9	1009	07061609.D	BCT5C	50-1	2		1	5.33	247559	5.71	433383	7.78	374994	9.48	187366
10	1030	07061610.D	BCT5D	51-2	2		1	5.33	238662	5.72	424187	7.78	388515	9.48	191829
11	1050	07061611.D	BCT5E	02-1	1		1	5.33	224541	5.72	396980	7.78	355521	9.48	168777
12	1111	07061612.D	BCT5F	92-8S	2	7	1	5.33	269351	5.72	446216	7.78	415519	9.48	205891
13	1131	07061613.D	LCS	LCS			1	5.33	246064	5.72	439469	7.78	406837	9.48	215172
14	1152	07061614.D	LOW	LOW			1	5.33	252359	5.72	431419	7.78	389753	9.48	191778
15	1245	07061615.D	16F0100-02	5X	A	≤2	1	5.33	242522	5.71	429744	7.78	399223	9.48	211240
16	1305	07061616.D	GCCV	GCCV			1	5.33	283705	5.72	514649	7.78	455278	9.48	226555
17	1326	07061617.D	BCY1A	100X Batch 16-26T	1	7	1	5.33	278309	5.72	466212	7.78	455446	9.48	221982
18	1347	07061618.D	BCY1B	Batch 16-26T	1		1	5.33	287329	5.72	502513	7.78	462818	9.48	228626
19	1407	07061619.D	BCY1C	Batch 16-26T	1		1	5.33	268139	5.72	439188	7.78	427294	9.48	207930
20	1428	07061620.D	BCY1D	Batch 16-26T	1		1	5.33	286275	5.72	460547	7.78	448351	9.48	221426
21	1448	07061621.D	16G0006-04		B	≤2	1	5.33	251756	5.72	439922	7.78	379362	9.48	183671
22	1509	07061622.D	16G0006-01			soil	1	5.32	278484	5.71	497596	7.78	452678	9.48	241436
23	1530	07061623.D	16G0006-02				1	5.32	298870	5.71	518514	7.78	456828	9.48	238021
24	1550	07061624.D	16G0006-03				1	5.31	315620	5.71	556411	7.78	500300	9.48	266019
25	1610	07061625.D	BCY5A	200X Batch 16-071-R	1	≤2	1	5.33	293199	5.72	525755	7.78	466927	9.48	228708
26	1630	07061626.D	BCY1A	2000X Batch 16-26T	2	7	1	5.33	282556	5.72	501720	7.78	452516	9.48	218442
27	1651	07061627.D	BCY1B	Batch 16-26T	2		1	5.33	262361	5.72	462520	7.78	426178	9.48	206661
28	1711	07061628.D	BCY1C	Batch 16-26T	2		1	5.33	269066	5.72	478321	7.78	440638	9.48	213264
29	1731	07061629.D	BCY1D	Batch 16-26T	2		1	5.33	257872	5.72	449265	7.78	413399	9.48	197876
30	1755	07061630.D	16F0100-02	50X	C		1	5.33	256234	5.72	435957	7.78	395863	9.48	201838
31	1815	07061631.D	GCCV	GCCV			1	5.33	281001	5.71	501422	7.78	444362	9.48	230960
32	1835	07061632.D	CCV	CCV			1	5.33	275055	5.72	488746	7.78	441584	9.48	227314

→ 2000X

QAM 7/7/16

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEC0063	Instrument:	NT2
		Calibration:	ZD00012

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Secondary Cal Check	SEC0063-SCV1	03291618.D	Water	03/29/16 20:24
Cal Standard	SEC0063-CALE	20160329g.b-002	Water	03/29/16 20:45
Cal Standard	SEC0063-CALD	20160329g.b-003	Water	03/29/16 21:07
Cal Standard	SEC0063-CALC	20160329g.b-004	Water	03/29/16 21:28
Cal Standard	SEC0063-CALB	20160329g.b-005	Water	03/29/16 21:50
Cal Standard	SEC0063-CALA	20160329g.b-006	Water	03/29/16 22:11
Cal Standard	SEC0063-CAL9	20160329g.b-007	Water	03/29/16 22:32
Secondary Cal Check	SEC0063-SCV2	20160329g.b-008	Water	03/29/16 22:54

SURROGATE RECOVERY SUMMARY

NWTPHg

Laboratory: Analytical Resources, Inc.
SDG/WO: 16G0006
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0023
Instrument: NT2
Calibration: ZF00027
Calibration Date: 03/29/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
BEG0016-BS1 (Water)	Lab File ID: 07061603lcs.D		Analyzed: 07/06/16 08:06	
Toluene-d8	5.0000	99.5	80 - 120	
4-Bromofluorobenzene	5.0000	101	80 - 120	
BEG0020-BS1 (Solid)	Lab File ID: 07061603lcss.D		Analyzed: 07/06/16 08:06	
Toluene-d8	5.0000	99.5	80 - 120	
4-Bromofluorobenzene	5.0000	101	78 - 123	
SEG0023-ICV1 (Water)	Lab File ID: 07061603.D		Analyzed: 07/06/16 08:06	
Toluene-d8	5.0000	99.5	0 - 200	
4-Bromofluorobenzene	5.0000	101	0 - 200	
BEG0016-BSD1 (Water)	Lab File ID: 07061605.D		Analyzed: 07/06/16 08:47	
Toluene-d8	5.0000	96.7	80 - 120	
4-Bromofluorobenzene	5.0000	101	80 - 120	
BEG0020-BSD1 (Solid)	Lab File ID: 07061605lcsds.D		Analyzed: 07/06/16 08:47	
Toluene-d8	5.0000	96.7	80 - 120	
4-Bromofluorobenzene	5.0000	101	78 - 123	
BEG0016-BLK1 (Water)	Lab File ID: 07061606.D		Analyzed: 07/06/16 09:07	
Toluene-d8	5.0000	97.0	80 - 120	
4-Bromofluorobenzene	5.0000	94.8	80 - 120	
BEG0020-BLK1 (Solid)	Lab File ID: 07061606mbs.D		Analyzed: 07/06/16 09:07	
Toluene-d8	5.0000	97.0	80 - 120	
4-Bromofluorobenzene	5.0000	94.8	78 - 123	
16G0006-04 (Water)	Lab File ID: 07061621.D		Analyzed: 07/06/16 14:48	
Toluene-d8	5.0000	95.5	80 - 120	
4-Bromofluorobenzene	5.0000	93.6	80 - 120	
16G0006-01 (Solid)	Lab File ID: 07061622.D		Analyzed: 07/06/16 15:09	
Toluene-d8	5.0000	95.9	80 - 120	
4-Bromofluorobenzene	5.0000	104	78 - 123	
16G0006-02 (Solid)	Lab File ID: 07061623.D		Analyzed: 07/06/16 15:30	
Toluene-d8	5.0000	97.5	80 - 120	
4-Bromofluorobenzene	5.0000	103	78 - 123	

SURROGATE RECOVERY SUMMARY

NWTPHg

Laboratory:	Analytical Resources, Inc.	SDG/WO:	16G0006
Client:	Anchor QEA, LLC	Project:	CHRL SSWA
Sequence:	SEG0023	Instrument:	NT2
Calibration:	ZF00027	Calibration Date:	03/29/2016

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
16G0006-03 (Solid)	Lab File ID: 07061624.D		Analyzed: 07/06/16 15:50	
Toluene-d8	5.0000	95.1	80 - 120	
4-Bromofluorobenzene	5.0000	104	78 - 123	

INTERNAL STANDARD AREA AND RT SUMMARY

NWTPHg

Laboratory: Analytical Resources, Inc.
SDG: 16G0006
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0023
Instrument: NT2
Calibration: ZF00027

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (BEG0016-BS1)		(Water)		Lab File ID: 07061603lcs.D				Analyzed: 07/06/16 08:06	
Pentafluorobenzene	298317	5.325				50 - 200		+/-0.50	
Chlorobenzene-d5	457626	7.775				50 - 200		+/-0.50	
1,4-Difluorobenzene	518585	5.716				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	233080	9.491				50 - 200		+/-0.50	
LCS (BEG0020-BS1)		(Solid)		Lab File ID: 07061603lcss.D				Analyzed: 07/06/16 08:06	
Pentafluorobenzene	298317	5.325				50 - 200		+/-0.50	
Chlorobenzene-d5	457626	7.775				50 - 200		+/-0.50	
1,4-Difluorobenzene	518585	5.716				50 - 200		+/-0.50	
1,4-Dichlorobenzene-d4	233080	9.491				50 - 200		+/-0.50	
LCS Dup (BEG0016-BSD1)		(Water)		Lab File ID: 07061605.D				Analyzed: 07/06/16 08:47	
Pentafluorobenzene	279683	5.326	298317	5.325	94	50 - 200	0.0010	+/-0.50	
Chlorobenzene-d5	425830	7.775	457626	7.775	93	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	486724	5.716	518585	5.716	94	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	221732	9.479	233080	9.491	95	50 - 200	-0.0120	+/-0.50	
LCS Dup (BEG0020-BSD1)		(Solid)		Lab File ID: 07061605lcsds.D				Analyzed: 07/06/16 08:47	
Pentafluorobenzene	279683	5.326	298317	5.325	94	50 - 200	0.0010	+/-0.50	
Chlorobenzene-d5	425830	7.775	457626	7.775	93	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	486724	5.716	518585	5.716	94	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	221732	9.479	233080	9.491	95	50 - 200	-0.0120	+/-0.50	
Blank (BEG0016-BLK1)		(Water)		Lab File ID: 07061606.D				Analyzed: 07/06/16 09:07	
Pentafluorobenzene	265350	5.326	298317	5.325	89	50 - 200	0.0010	+/-0.50	
Chlorobenzene-d5	419693	7.775	457626	7.775	92	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	463868	5.716	518585	5.716	89	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	210020	9.479	233080	9.491	90	50 - 200	-0.0120	+/-0.50	
Blank (BEG0020-BLK1)		(Solid)		Lab File ID: 07061606mbs.D				Analyzed: 07/06/16 09:07	
Pentafluorobenzene	265350	5.326	298317	5.325	89	50 - 200	0.0010	+/-0.50	
Chlorobenzene-d5	419693	7.775	457626	7.775	92	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	463868	5.716	518585	5.716	89	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	210020	9.479	233080	9.491	90	50 - 200	-0.0120	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

NWTPHg

Laboratory: Analytical Resources, Inc.
SDG: 16G0006
Client: Anchor QEA, LLC
Project: CHRL SSWA
Sequence: SEG0023
Instrument: NT2
Calibration: ZF00027

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
CHRL-TB-160705 (16G0006-04)		(Water)		Lab File ID: 07061621.D				Analyzed: 07/06/16 14:48	
Pentafluorobenzene	251756	5.326	283705	5.326	89	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	379362	7.776	455278	7.776	83	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	439922	5.717	514649	5.717	85	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	183671	9.48	226555	9.48	81	50 - 200	0.0000	+/-0.50	
CHRL-O-03A-160705 (16G0006-01)		(Solid)		Lab File ID: 07061622.D				Analyzed: 07/06/16 15:09	
Pentafluorobenzene	278484	5.317	283705	5.326	98	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	452678	7.778	455278	7.776	99	50 - 200	0.0020	+/-0.50	
1,4-Difluorobenzene	497596	5.708	514649	5.717	97	50 - 200	-0.0090	+/-0.50	
1,4-Dichlorobenzene-d4	241436	9.482	226555	9.48	107	50 - 200	0.0020	+/-0.50	
CHRL-O-04A-160705 (16G0006-02)		(Solid)		Lab File ID: 07061623.D				Analyzed: 07/06/16 15:30	
Pentafluorobenzene	298870	5.317	283705	5.326	105	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	456828	7.778	455278	7.776	100	50 - 200	0.0020	+/-0.50	
1,4-Difluorobenzene	518514	5.707	514649	5.717	101	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	238021	9.482	226555	9.48	105	50 - 200	0.0020	+/-0.50	
CHRL-P-03A-160705 (16G0006-03)		(Solid)		Lab File ID: 07061624.D				Analyzed: 07/06/16 15:50	
Pentafluorobenzene	315620	5.314	283705	5.326	111	50 - 200	-0.0120	+/-0.50	
Chlorobenzene-d5	500300	7.775	455278	7.776	110	50 - 200	-0.0010	+/-0.50	
1,4-Difluorobenzene	556411	5.705	514649	5.717	108	50 - 200	-0.0120	+/-0.50	
1,4-Dichlorobenzene-d4	266019	9.479	226555	9.48	117	50 - 200	-0.0010	+/-0.50	

Analytical Resources, Incorporated

HOLDING TIME SUMMARY

Analysis: NWTPHg

Laboratory: Analytical Resources, Inc. SDG: 16G0006

Client: Anchor QEA, LLC Project: CHRL SSWA

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
CHRL-O-03A-160705 16G0006-01	07/05/16 17:10	07/06/16 07:15	07/06/16 14:20	1	14	07/06/16 15:09	1	14	
CHRL-O-04A-160705 16G0006-02	07/05/16 17:00	07/06/16 07:15	07/06/16 14:20	1	14	07/06/16 15:30	1	14	
CHRL-P-03A-160705 16G0006-03	07/05/16 16:45	07/06/16 07:15	07/06/16 14:20	1	14	07/06/16 15:50	1	14	
CHRL-TB-160705 16G0006-04	07/05/16 00:00	07/06/16 07:15	07/06/16 12:23	2	14	07/06/16 14:48	2	14	

* Indicates hold time exceedance.

Analytical Resources, Incorporated

METHOD DETECTION AND REPORTING LIMITS

NWTPHg

Laboratory: Analytical Resources, Inc. SDG: 16G0006

Client: Anchor QEA, LLC Project: CHRL SSWA

Matrix: Solid Instrument: NT2

Analyte	MDL	RL	Units
Gasoline Range Organics (Tol-Nap)	2500	5000	ug/kg

Analytical Resources, Incorporated

METHOD DETECTION AND REPORTING LIMITS

NWTPHg

Laboratory: Analytical Resources, Inc. SDG: 16G0006

Client: Anchor QEA, LLC Project: CHRL SSWA

Matrix: Water Instrument: NT2

Analyte	MDL	RL	Units
Gasoline Range Organics (Tol-Nap)	9.06	100	ug/L

APPENDIX C
DATA VALIDATION REPORTS

ANCHOR QEA

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Seattle, Washington 98101
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www.anchorqea.com

DATA VALIDATION REVIEW REPORT – EPA STAGE 2A

Project:	Cedar Hills Regional Landfill – South Solid Waste Area
Project Number:	150067-01.01
Date:	September 23, 2016

This report summarizes the review of analytical results for 30 soil samples, 2 duplicates, and 2 trip blanks collected June 29 and July 5, 2016. The samples were collected by Anchor QEA, LLC, and submitted to Analytical Resources Inc. (ARI) in Tukwila, Washington. The samples were analyzed for the following parameters:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) method 8260C
- Gasoline range organics (GRO) by Northwest Total Petroleum Hydrocarbons – Gasoline Range Extended (NWTPH-Gx)
- Total solids (TS) by Standard Method 2540B

ARI sample data group (SDG) numbers 16F0096 and 16G0006 were reviewed in this report. IDs of samples reviewed in this report are presented in Table 1.

Table 1
Samples Reviewed

Sample ID	Lab ID	Matrix	Analyses
CHRL-M-02-160629	16F0096-01	Soil	VOCs, GRO, TS
CHRL-M-03-160629	16F0096-02	Soil	VOCs, GRO, TS
CHRL-M-53-160629	16F0096-03	Soil	VOCs, GRO, TS
CHRL-M-04-160629	16F0096-04	Soil	VOCs, GRO, TS
CHRL-M-05-160629	16F0096-05	Soil	VOCs, GRO, TS
CHRL-O-01-160629	16F0096-06	Soil	VOCs, GRO, TS
CHRL-O-02-160629	16F0096-07	Soil	VOCs, GRO, TS
CHRL-O-03-160629	16F0096-08	Soil	VOCs, GRO, TS
CHRL-O-04-160629	16F0096-09	Soil	VOCs, GRO, TS
CHRL-O-05-160629	16F0096-10	Soil	VOCs, GRO, TS
CHRL-N-01-160629	16F0096-11	Soil	VOCs, GRO, TS
CHRL-N-02-160629	16F0096-12	Soil	VOCs, GRO, TS
CHRL-N-03-160629	16F0096-13	Soil	VOCs, GRO, TS

Sample ID	Lab ID	Matrix	Analyses
CHRL-N-04-160629	16F0096-14	Soil	VOCs, GRO, TS
CHRL-N-05-160629	16F0096-15	Soil	VOCs, GRO, TS
CHRL-Q-01-160629	16F0096-16	Soil	VOCs, GRO, TS
CHRL-Q-02-160629	16F0096-17	Soil	VOCs, GRO, TS
CHRL-Q-03-160629	16F0096-18	Soil	VOCs, GRO, TS
CHRL-Q-04-160629	16F0096-19	Soil	VOCs, GRO, TS
CHRL-Q-05-160629	16F0096-20	Soil	VOCs, GRO, TS
CHRL-P-01-160629	16F0096-21	Soil	VOCs, GRO, TS
CHRL-P-02-160629	16F0096-22	Soil	VOCs, GRO, TS
CHRL-P-52-160629	16F0096-23	Soil	VOCs, GRO, TS
CHRL-P-03-160629	16F0096-24	Soil	VOCs, GRO, TS
CHRL-P-04-160629	16F0096-25	Soil	VOCs, GRO, TS
CHRL-P-05-160629	16F0096-26	Soil	VOCs, GRO, TS
CHRL-R-02-160629	16F0096-27	Soil	VOCs, GRO, TS
CHRL-R-03-160629	16F0096-28	Soil	VOCs, GRO, TS
CHRL-R-04-160629	16F0096-29	Soil	VOCs, GRO, TS
CHRL-O-03A-160705	16G0006-01	Soil	VOCs, GRO, TS
CHRL-O-04A-160705	16G0006-02	Soil	VOCs, GRO, TS
CHRL-P-03A-160705	16G0006-03	Soil	VOCs, GRO, TS
CHRL-TB-160629	16F0096-30	Water	VOCs
CHRL-TB-160705	16G0006-04	Water	VOCs

Data Validation and Qualifications

Laboratory results were reviewed using the following guidelines:

- *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA 2016)
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (USEPA 2016)

Laboratory and method QC criteria were also used as stated in USEPA 1986 (SW-846, Third Edition), *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*, update 1, August 1993; update II, January 1995; update IIA, February 1994; update IIB, August 1995; update III, June 1997; update IIIA, May 1999; update IIIB, June 2008; update IVA and IVB, January 2008. Unless noted in this report, laboratory results for the samples listed above were within criteria.

Field Documentation

Field documentation was checked for completeness and accuracy. The chain-of-custody forms were signed by ARI at the time of sample receipt; the samples were received within the recommended temperature range and in good condition.

Holding Times and Sample Preservation and Analytical Methods

Samples were appropriately preserved and analyzed within holding times.

Laboratory Method Blanks

Laboratory method blanks were analyzed at the required frequencies. All method blanks were free of target analytes.

Field Quality Control

Field Duplicates

Two field duplicate samples were collected in association with these samples sets. Detected results are summarized in Table 2.

Table 2
Field Duplicate Summary

Analyte	CHRL-M-03-160629	CHRL-M-53-160629	RPD
Total solids	89.22%	89.88%	1%
1,2-Dichloroethene, cis-	4.81 µg/kg	3.88 µg/kg	21%
Benzene	1.19U µg/kg	0.38J µg/kg	200%
Ethylbenzene	1.58 µg/kg	1.68 µg/kg	6%
m,p-Xylene	3.67 µg/kg	3.73 µg/kg	2%
o-Xylene	1.49 µg/kg	1.59 µg/kg	6%
Toluene	2.2 µg/kg	2.29 µg/kg	4%
Trichloroethene (TCE)	2.51 µg/kg	2.04 µg/kg	21%

Analyte	CHRL-P-02-160629	CHRL-P-52-160629	RPD
Total solids	92.91%	92.75%	0%
1,2-Dichloroethene, cis-	83.2 µg/kg	173 µg/kg	70%
Benzene	0.6J µg/kg	1.3 µg/kg	74%
Bromomethane	0.26J µg/kg	1.03U µg/kg	200%
Ethylbenzene	5.53 µg/kg	8.69 µg/kg	44%
m,p-Xylene	22.1 µg/kg	33.9 µg/kg	42%

Analyte	CHRL-P-02-160629	CHRL-P-52-160629	RPD
o-Xylene	9.31 µg/kg	14.4 µg/kg	43%
Toluene	137 µg/kg	150 µg/kg	9%
Trichloroethene (TCE)	28.8 µg/kg	52.1 µg/kg	58%
Vinyl chloride	0.98U µg/kg	9.24 µg/kg	200%

Notes:

µg/L = micrograms/liter

Results at or near the MRL may have exaggerated relative percent difference (RPD) values. Non-detect results were treated as zero for the purpose of calculating RPD values. No data were qualified based on field duplicate results.

Surrogate Recoveries

All surrogate recoveries were within the laboratory control limits.

Laboratory Control Sample and Laboratory Control Sample Duplicate

Laboratory control samples (LCS) and laboratory control sample duplicates (LCSD) were analyzed at the required frequencies. All LCS/LCSD analyses resulted in recoveries and/or RPD values within project-required control limits.

Matrix Spike and Matrix Spike Duplicate

Matrix spike (MS) and matrix spike duplicate (MSD) samples were not analyzed in association with these sample sets due to insufficient sample mass provided. Accuracy and precision were instead demonstrated in the LCS/LCSD samples.

Laboratory Duplicates

Laboratory duplicates were not analyzed in association with these sample sets.

Method Reporting Limits

Though TPH-Gx and some VOC reporting limits were above SAP requirements, reporting limits were acceptable as reported, Values were reported as undiluted, or when reported as diluted, the reporting limit accurately reflects the dilution factor.

Overall Assessment

As was determined by this evaluation, the laboratory followed the specified analytical methods and all requested sample analyses were completed. In the case where samples were reanalyzed due to results above calibration range, the most technically acceptable results have been reported. Accuracy was acceptable as demonstrated by the surrogate and LCS/LCSD recovery values. Precision was also acceptable as demonstrated by the LCS/LCSD RPD values. All data were acceptable as reported.

REFERENCES

Anchor QEA, 2016. Sampling and Analysis Plan Cedar Hills Regional Landfill South Solid Waste Area Contaminated Soil Investigation. February.

USEPA, 2016. USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation (OSRTI). EPA 540-R-2016-002. September.

USEPA, 2016. USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. USEPA 540-R-2016-002. September.

APPENDIX D
GCL AND CDN PRODUCT DATA SHEETS

PRODUCT DATA SHEET

GSE BentoLiner NWL Geosynthetic Clay Liner

GSE BentoLiner "NWL" is a needle-punched reinforced composite geosynthetic clay liner (GCL) comprised of a uniform layer of granular sodium bentonite encapsulated between a nonwoven and a scrim-nonwoven geotextile for dimensional stability. The product is intended for moderate to steep slopes and moderate to high load applications where increased internal shear strength is required.

[*]

AT THE CORE:

This composite clay liner is composed of a uniform layer of granular sodium bentonite between a nonwoven and scrim-nonwoven textile for dimensional stability.

Product Specifications

Tested Property	Test Method	Frequency	Value
Geotextile Property			
Cap Nonwoven, Mass/Unit Area	ASTM D 5261	1/200,000 ft²	6.0 oz/yd² MARV(1)
Carrier Scrim Nonwoven, Mass/Unit Area	ASTM D 5261	1/200,000 ft²	6.0 oz/yd² MARV
Bentonite Property			
Swell Index	ASTM D 5890	1/100,000 lb	24 ml/2 g min
Moisture Content	ASTM D 4643	1/100,000 lb	12% max
Fluid Loss	ASTM D 5891	1/100,000 lb	18 ml max
Finished GCL Property			
Bentonite, Mass/Unit Area(2)	ASTM D 5993	1/40,000 ft²	0.75 lb/ft² MARV
Tensile Strength(3)	ASTM D 6768	1/40,000 ft²	45 lb/in MARV
Peel Strength	ASTM D 6496 ASTM D 4632(4)	1/40,000 ft²	3.5 lb/in MARV 21 lb MARV
Hydraulic Conductivity(5)	ASTM D 5887	1/Week	5 x 10^{-9} cm/sec max
Index Flux(5)	ASTM D 5887	1/Week	1 x 10^{-8} m³/m²/sec max
Internal Shear Strength(6)	ASTM D 6243	Periodically	500 psf Typical
TYPICAL ROLL DIMENSIONS			
Width x Length(7)	Typical	Every Roll	15.5 ft x 150 ft
Area per Roll	Typical	Every Roll	2,325 ft²
Packaged Weight	Typical	Every Roll	2,600 lb

NOTES:

- (1)Minimum Average Roll Value.
- (2)At 0% moisture content.
- (3)Tested in machine direction.
- (4)Modified ASTM D 4632 to use a 4 in wide grip. The maximum peak of five specimens averaged in machine direction.
- (5)Deaired, deionized water @ 5 psi maximum effective confining stress and 2 psi head pressure.
- (6)Typical peak value for specimen hydrated for 24 hours and sheared under a 200 psf normal stress.
- (7)Roll widths and lengths have a tolerance of ±1%.

GSE is a leading manufacturer and marketer of geosynthetic lining products and services. We've built a reputation of reliability through our dedication to providing consistency of product, price and protection to our global customers.

Our commitment to innovation, our focus on quality and our industry expertise allow us the flexibility to collaborate with our clients to develop a custom, purpose-fit solution.

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For more information on this product and others, please visit us at GSEworld.com, call 800.435.2008 or contact your local sales office.

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PRODUCT DATA SHEET

GSE TenFlow 350 mil Geocomposite (Double-Sided)

GSE TenFlow geocomposite consists of a 350 mil thick GSE TenFlow geonet heat-laminated on both sides with a GSE nonwoven needle-punched geotextile. TenFlow 350 is a T-shaped tri-axial geonet comprised of HDPE strands forming a three dimensional structure to provide planar water flow. The geotextile is available in mass per unit area range of 6 oz/yd² to 16 oz/yd². TenFlow 350 geocomposite provides high transmissivity in a soil environment.

AT THE CORE:
A 350 mil thick TenFlow geonet heat-laminated on both sides with a nonwoven needlepunched geotextile.

Product Specifications

Tested Property	Test Method	Frequency	Minimum Average Roll Value[1]	
Geocomposite[6]			6 oz/yd²	8 oz/yd²
Transmissivity[2], gal/min/ft, (m²/sec) at gradient=0.1	ASTM D 4716	1/540,000 ft²	31.4 (6.5×10^{-3})	31.4 (6.5×10^{-3})
Transmissivity[2], gal/min/ft, (m²/sec) at gradient=0.33	ASTM D 4716	1/540,000 ft²	16.9 (3.5×10^{-3})	16.9 (3.5×10^{-3})
Ply Adhesion, lb/in	ASTM D 7005	1/50,000 ft²	0.5	0.5
Geonet Core[1,3] – GSE TenFlow				
Geonet Core Thickness, mi	ASTM D 5199	1/50,000 ft²	350	350
Density, g/cm³	ASTM D 1505	1/50,000 ft²	0.94	0.94
Carbon Black Content, %	ASTM D 4218	1/50,000 ft²	2.0	2.0
Creep Reduction Factor[4]	GRI-GC8	per formulation	1.05	1.05
Geotextile[1,3]				
Mass per Unit Area, oz/yd²	ASTM D 5261	1/90,000 ft²	6	8
Grab Tensile Strength, lb	ASTM D 4632	1/90,000 ft²	160	220
Grab Elongation	ASTM D 4632	1/90,000 ft²	50%	50%
CBR Puncture Strength, lb	ASTM D 6241	1/540,000 ft²	435	575
Trapezoidal Tear Strength, lb	ASTM D 4533	1/90,000 ft²	65	90
AOS, US sieve[1], (mm)	ASTM D 4751	1/540,000 ft²	70 (0.212)	80 (0.180)
Permittivity, sec^{-1}	ASTM D 4491	1/540,000 ft²	1.5	1.3
Water Flow Rate, gpm/ft²	ASTM D 4491	1/540,000 ft²	110	95
UV Resistance, % retained	ASTM D 4355 (after 500 hours)	per formulation	70	70
NOMINAL ROLL DIMENSIONS[5]				
Roll Width, ft			12.5	12.5
Roll Length, ft			200	200
Roll Area, ft²			2500	2500

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DOT/ROAD SERVICES DIVISION
MATERIALS LABORATORY

NOTES:
- [1] All geotextile properties are minimum average roll values except AOS which is maximum average roll value and UV resistance is typical value. Geonet core thickness is minimum average value.
- [2] Normal load of 1,000 psf, boundary condition: plate/sand/geocomposite/geomembrane/plate, water at 70°F for 1 hour.
- [3] Component properties prior to lamination.
- [4] 10,000 hour creep test under 2,000 psf at 70°F temperature.
- [5] Roll widths and lengths have a tolerance of ±1%
- [6] The TenFlow geonet has a circular aperture side and a cuspated side. The side with the circular apertures should be placed against the soil while the cuspated side should be placed against the geomembrane.

GSE is a leading manufacturer and marketer of geosynthetic lining products and services. We've built a reputation of reliability through our dedication to providing consistency of product, price and protection to our global customers.

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APPENDIX E
FIELD DIRECTIVES

FIELD DIRECTIVE
(WORK CHANGE DIRECTIVE)

FIELD DIRECTIVE NUMBER:	**FD-01**
CONTRACT NUMBER:	C01129C17
DATE:	6/22/17 (revised 6/27/17)

Project:	CHRL Area 8 Development and Area 7 Stages 3 and 4 Closure
Owner:	King County DNRP Solid Waste Division
Contractor:	Scarsella Bros., Inc.
Engineer:	HDR/BHC
Construction Manager:	Anchor QEA

The following additions, deletions, or revisions to the Work have been ordered and authorized:

DESCRIPTION OF ALTERATION:

Install approximately 68 LF of 12-inch piping (CPE or HDPE) between an existing catch basin and existing surface ditch as shown in attached Drawing AC-3. Seal penetration into existing CB structure using non-shrink grout in accordance with project specifications. Protect inlet side of piping at drainage ditch using rip-rap protection per Detail 2, BC-56. and trash rack per Detail 3, BC-56.

Payment for all labor, equipment, and materials shall be at the lump sum price listed below. Payment for all work will be made under Bid Item A-03, Minor Changes.

REASON FOR CHANGE:

Surface flow from the existing drainage swale shown in attached Drawing AC-3 is captured through the inlet grating at the existing catch basin. The catch basin is within the stockpile limits and will be covered. In order to pick up surface water flow from the existing swale, a new storm line needs to be installed at the location shown. RFI 04 was submitted by the contractor for clarification on how to address drainage at this location. The designer indicated that the flow from the swale could be backed up to allow flow to enter the existing catch basin located to the east (see attached for location); however, the existing subsurface pipe shown connecting the two catch basins does not exist.

METHOD OF PAYMENT:

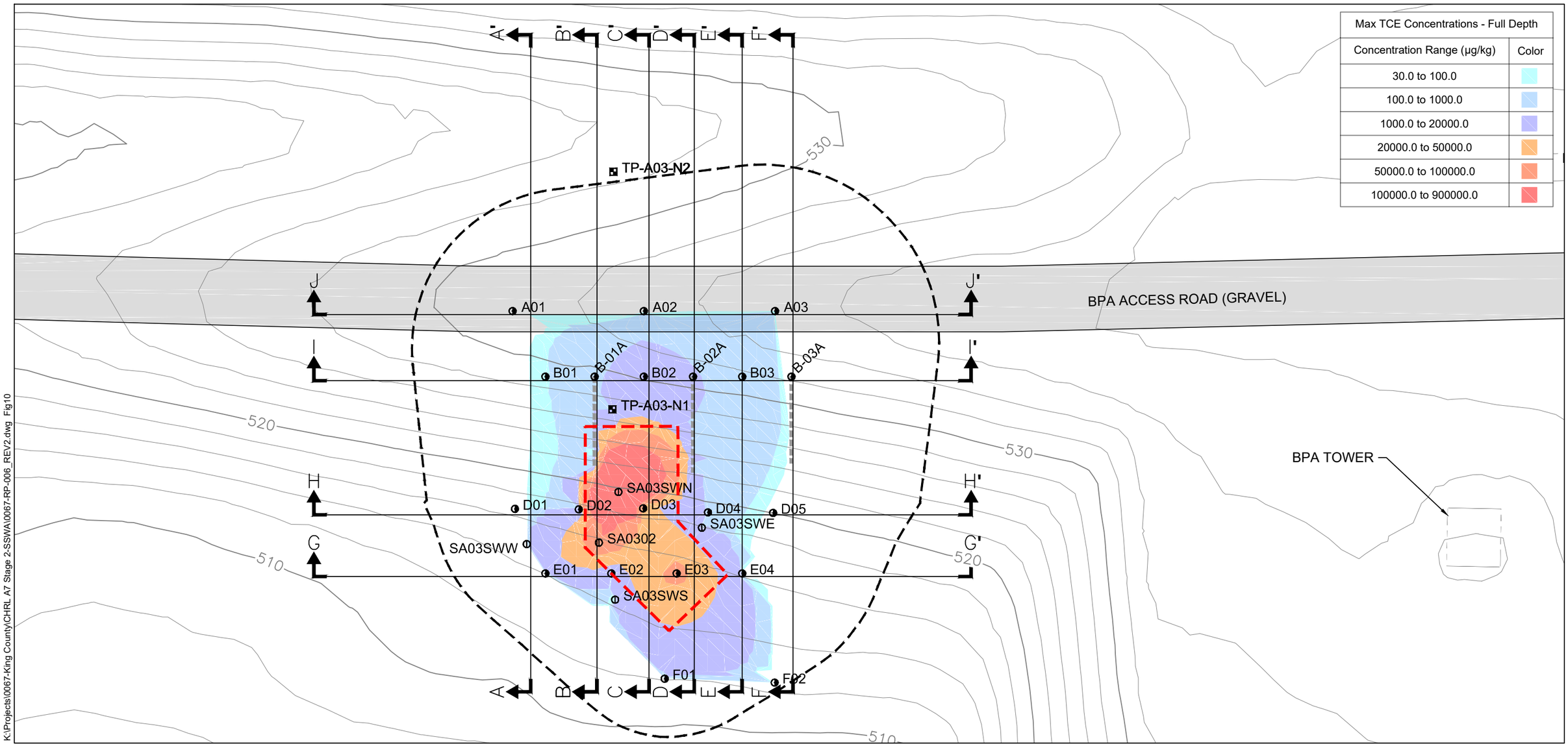
Contract Unit Price:	$
Lump Sum:	$ 4,500
Cost of Work (Time and Materials)	$

REMARKS:

RECOMMENDED BY: _____ **DATE:** 6/27/17
Construction Manager

ACCEPTED BY: _____ **DATE:** _____
Contractor

APPROVED BY: _____ **DATE:** _____
Owner



K:\Projects\0067-King County\CHRL A7 Stage 2-SSWA\0067-RP-006_REV2.dwg Fig10

Jun 13, 2016 9:29am rgoode

SOURCE: Drawing prepared from electronic topographic survey provided by Lin and Associates, Inc., dated December 8, 2015.
HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

NOTES: Soil concentrations shown indicate laboratory analytical results from SSWA confirmation sampling conducted by Anchor QEA between 8-6-2015 and 3-10-2016.

LEGEND:

- E01 — 2016 Boring Location and ID
- SA0300 — 2015 Surface Sample Location and ID
- TP-A03-N1 — 2015 Test Pit Location and ID
- Boring drilled at 41° from horizontal
- 5 — Existing Contours (2 ft Intervals)
- A — Cross Section Location and Designation
- Proposed Hazardous contaminated soil excavation limits
- Proposed Non-hazardous contaminated soil excavation limits

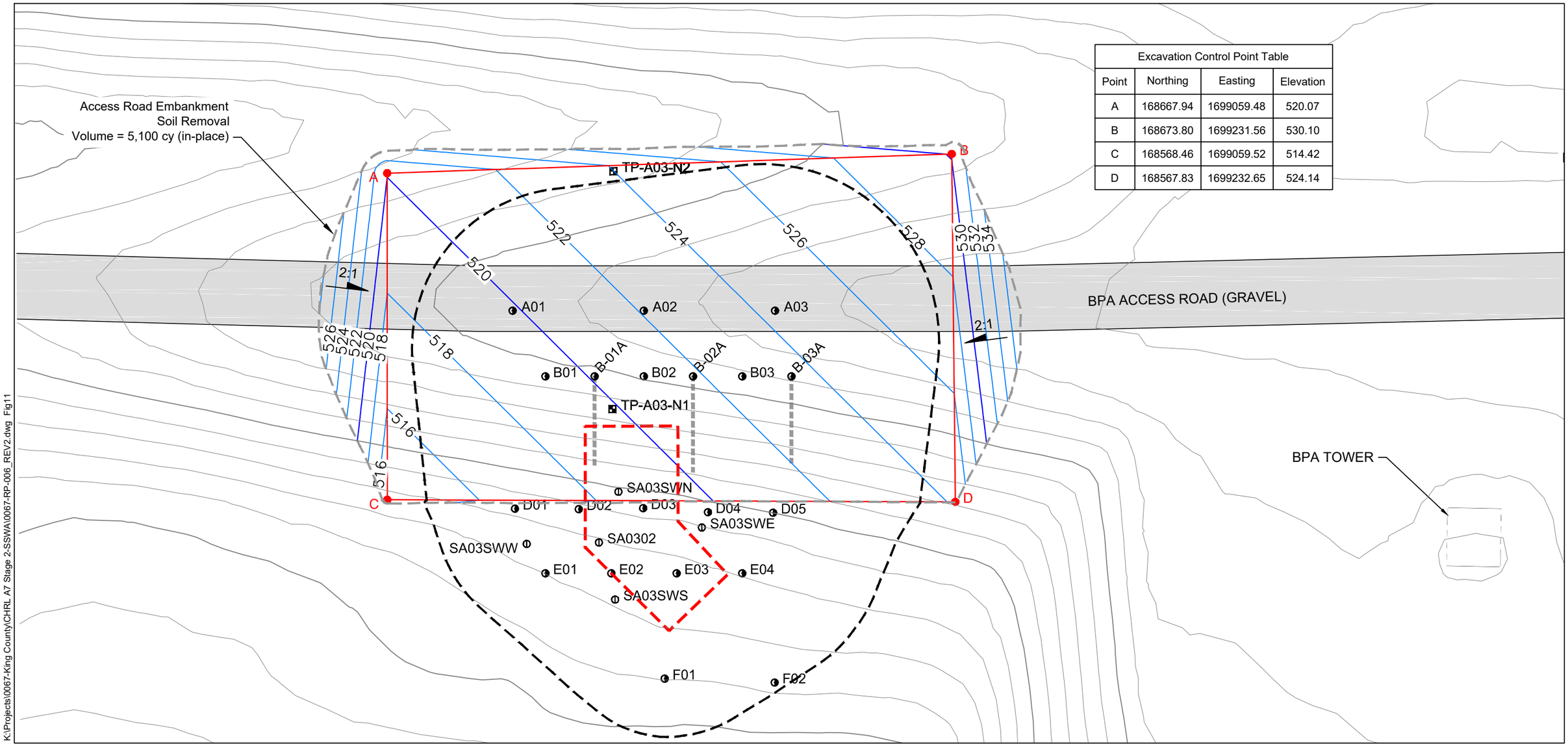
0 30
Scale in Feet

DRAFT

ANCHOR QEA

Figure 10
Natural Neighbor Interpolated TCE Concentrations All Depths
Contaminated Soil Investigation Report
CHRL SSWA Contaminated Soil Investigation/KCSWD

Excavation Control Point Table			
Point	Northing	Easting	Elevation
A	168667.94	1699059.48	520.07
B	168673.80	1699231.56	530.10
C	168568.46	1699059.52	514.42
D	168567.83	1699232.65	524.14



K:\Projects\0067-King County\CHRL A7 Stage 2-SSWA\0067-RP-006_REV2.dwg Fig11

Jun 13, 2016 9:29am rgoode

SOURCE: Drawing prepared from electronic topographic survey provided by Lin and Associates, Inc., dated December 8, 2015.
HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

NOTES: Soil concentrations shown indicate laboratory analytical results from SSWA confirmation sampling conducted by Anchor QEA between 8-6-2015 and 3-10-2016.

LEGEND:

- **E01** — 2016 Boring Location and ID
- SA0300 — 2015 Surface Sample Location and ID
- TP-A03-N1 — 2015 Test Pit Location and ID
- Boring drilled at 41° from horizontal
- Existing Contours (2 ft Intervals)
- Proposed Contours (2 ft Intervals)
- Proposed Hazardous contaminated soil excavation limits
- Proposed Non-hazardous contaminated soil excavation limits
- A — Excavation control point

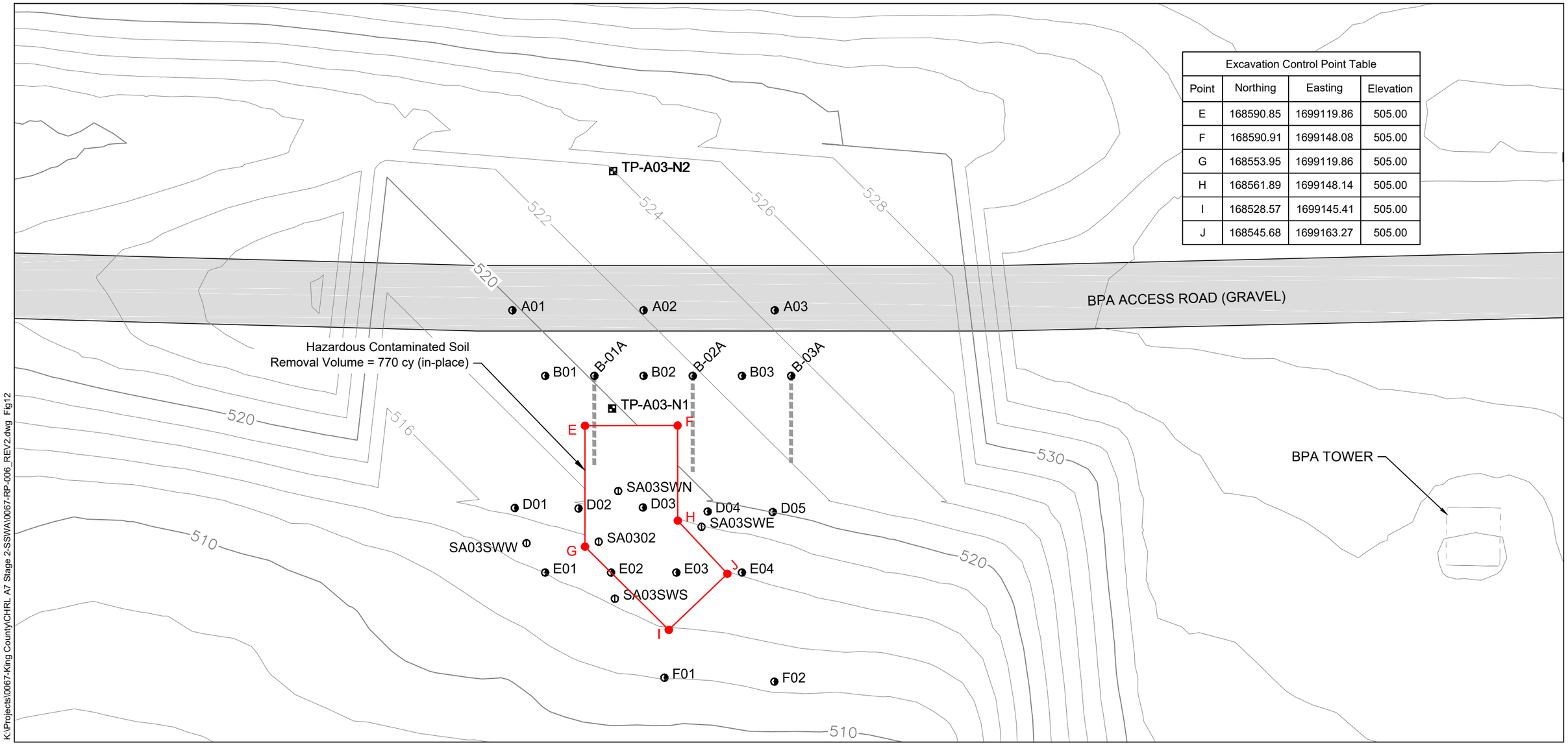
0 30
Scale in Feet

DRAFT

ANCHOR QEA

Figure 11
BPA Access Road Embankment Removal Plan
Contaminated Soil Investigation Report
CHRL SSWA Contaminated Soil Investigation/KCSWD

Excavation Control Point Table			
Point	Northing	Easting	Elevation
E	168590.85	1699119.86	505.00
F	168590.91	1699148.08	505.00
G	168553.95	1699119.86	505.00
H	168561.89	1699148.14	505.00
I	168528.57	1699145.41	505.00
J	168545.68	1699163.27	505.00



SOURCE: Drawing prepared from electronic topographic survey provided by Lin and Associates, Inc., dated December 8, 2015.
HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

NOTES: Soil concentrations shown indicate laboratory analytical results from SSWA confirmation sampling conducted by Anchor QEA between 8-6-2015 and 3-10-2016.

LEGEND:

- **E01** — 2016 Boring Location and ID
- SA0300 — 2015 Surface Sample Location and ID
- TP-A03-N1 — 2015 Test Pit Location and ID
- Boring drilled at 41° from horizontal
- 5 — Existing Contours (2 ft Intervals)
- 5 — Proposed Contours (2 ft Intervals)
- Proposed Hazardous contaminated soil excavation limits
- A — Excavation control point

0 30
Scale in Feet

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Jun 13, 2016 9:29am rgoode

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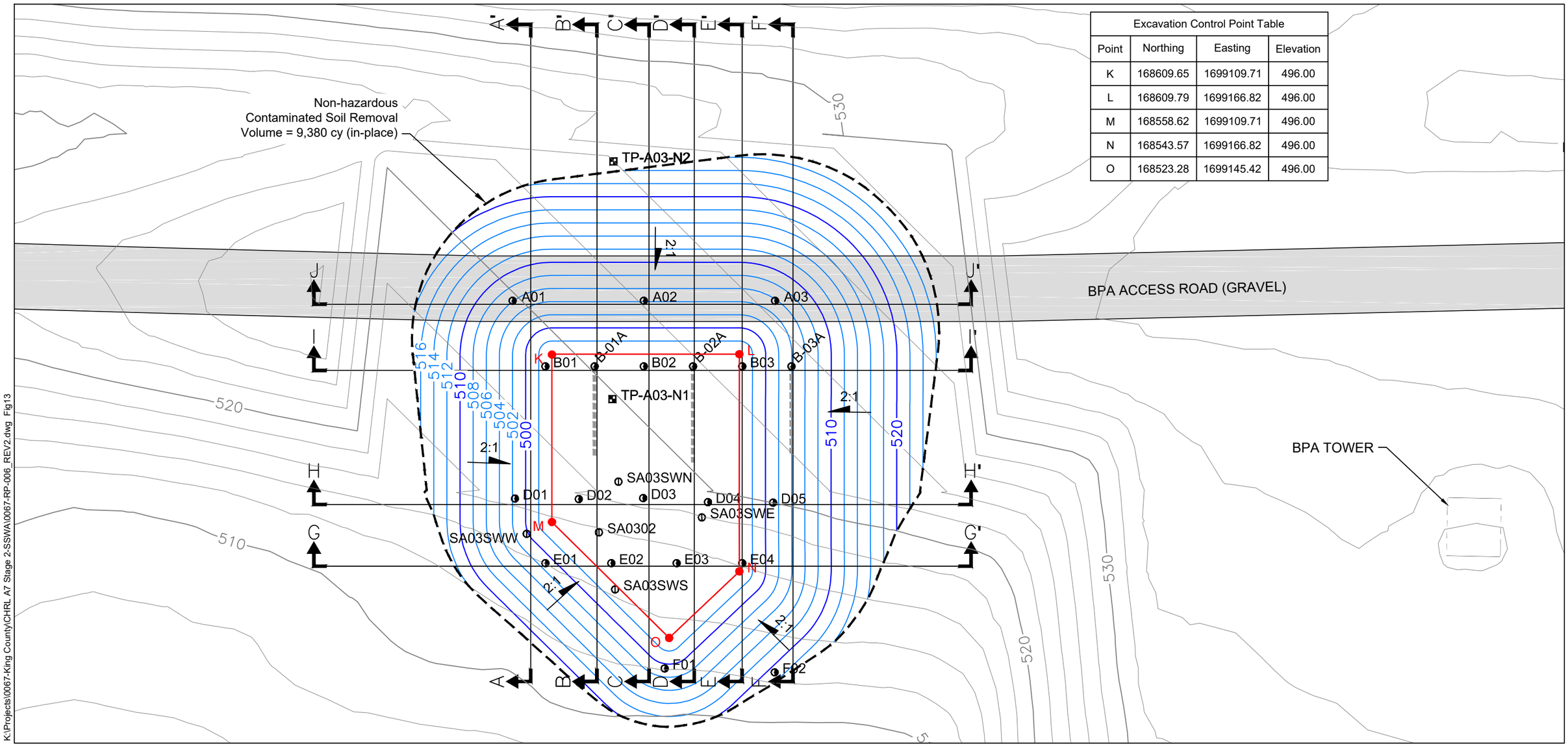
ANCHOR QEA

Figure 12
Hazardous Contaminated Soil Removal Plan
Contaminated Soil Investigation Report
CHRL SSWA Contaminated Soil Investigation/KCSWD

Excavation Control Point Table			
Point	Northing	Easting	Elevation
K	168609.65	1699109.71	496.00
L	168609.79	1699166.82	496.00
M	168558.62	1699109.71	496.00
N	168543.57	1699166.82	496.00
O	168523.28	1699145.42	496.00



SOURCE: Drawing prepared from electronic topographic survey provided by Lin and Associates, Inc., dated December 8, 2015.
HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

NOTES: Soil concentrations shown indicate laboratory analytical results from SSWA confirmation sampling conducted by Anchor QEA between 8-6-2015 and 3-10-2016.

LEGEND:

- E01 — 2016 Boring Location and ID
- SA0300 — 2015 Surface Sample Location and ID
- TP-A03-N1 — 2015 Test Pit Location and ID
- Boring drilled at 41° from horizontal
- Existing Contours (2 ft Intervals)
- Proposed Contours (2 ft Intervals)
- A — Cross Section Location and Designation
- Proposed Non-hazardous contaminated soil excavation bottom
- Proposed Non-hazardous contaminated soil excavation limits
- A — Excavation control point

0 30
Scale in Feet

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Jun 13, 2016 9:30am rgoode

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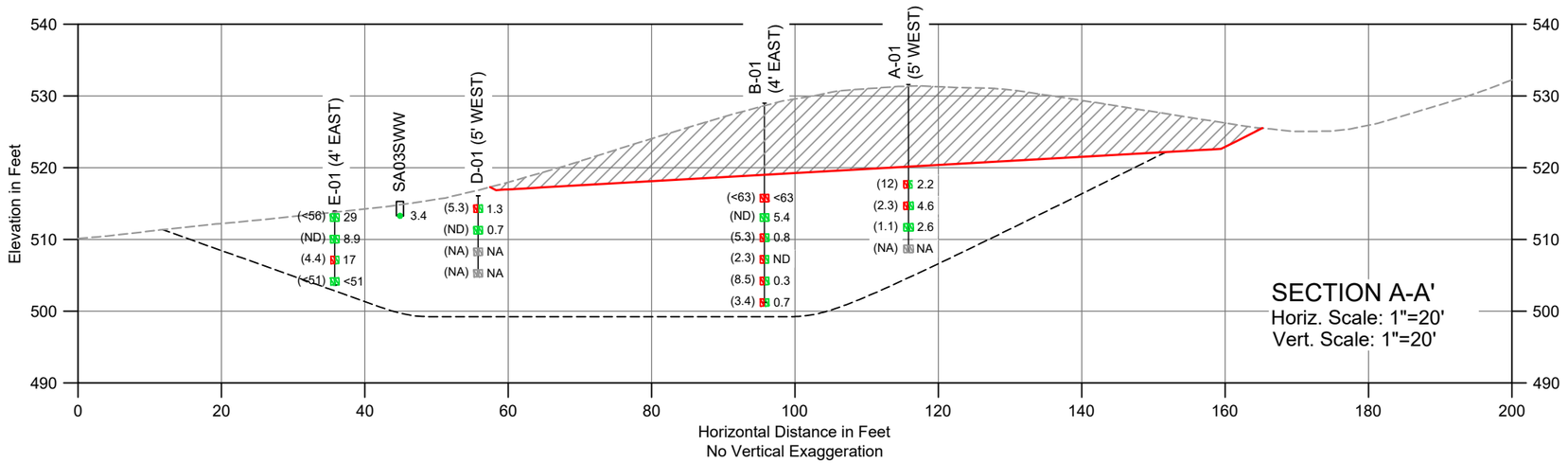
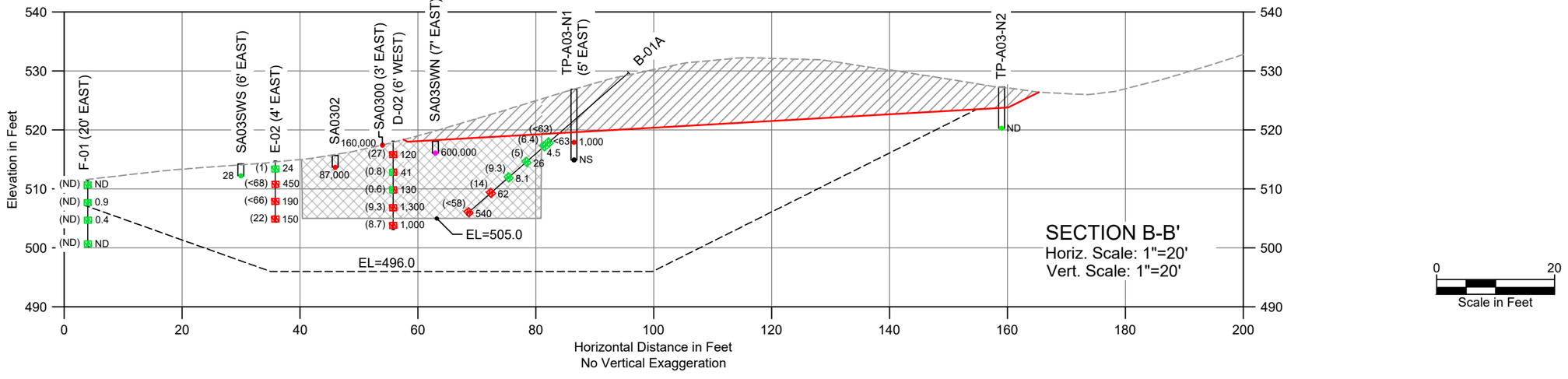
ANCHOR QEA

Figure 13
Non-Hazardous Contaminated Soil Removal Plan
Contaminated Soil Investigation Report
CHRL SSWA Contaminated Soil Investigation/KCSWD





SOURCE: Drawing prepared from preliminary topographic survey provided by Lin and Associates, Inc., dated December 8, 2015.
HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

NOTES: Soil concentrations shown indicate laboratory analytical results from SSWA confirmation sampling conducted by Anchor QEA between 8-6-2015 and 3-10-2016.

LEGEND:

- Excavation limits of soil meeting dangerous waste criteria (Hazardous)
- Clean embankment fill
- Existing ground surface
- Clean embankment soil removal limit
- Non-hazardous contaminated soil removal limit
- (8.7) 190 VC / TCE — Boring sample showing TCE and vinyl chloridE (VC) concentration in µg/kg, exceeding screening level
- (0.8) 8.1 VC / TCE — Boring sample showing TCE and vinyl chloride (VC) concentration in µg/kg, less than screening level
- 1,000 — Surface or Test Pit sample showing TCE concentration in µg/kg, exceeding screening level
- 3.4 — Surface or Test Pit Sample showing TCE concentration in µg/kg, less than screening level
- 31,000 — Sample exceeding TCLP dangerous waste criteria, showing TCE soil concentration in µg/kg
- 2016 soil boring
- 2015 test pit
- ND Non-detect
- NS Not sampled
- NA Not analyzed
- <51 Non detect showing elevated method detection limit

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Jun 13, 2016 9:39am rgoode

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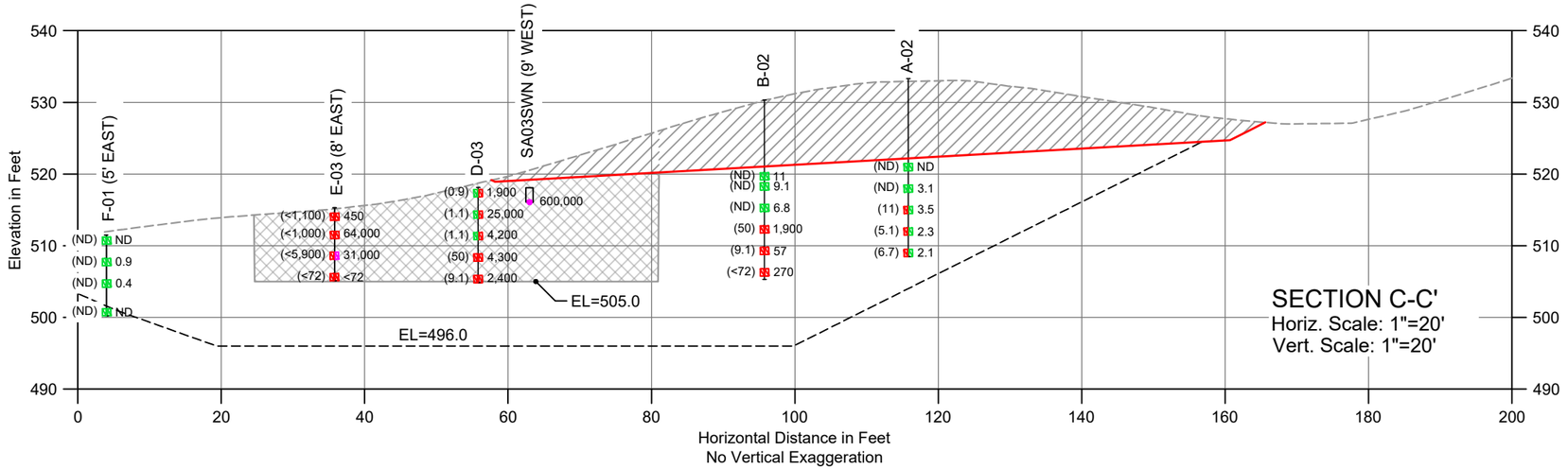
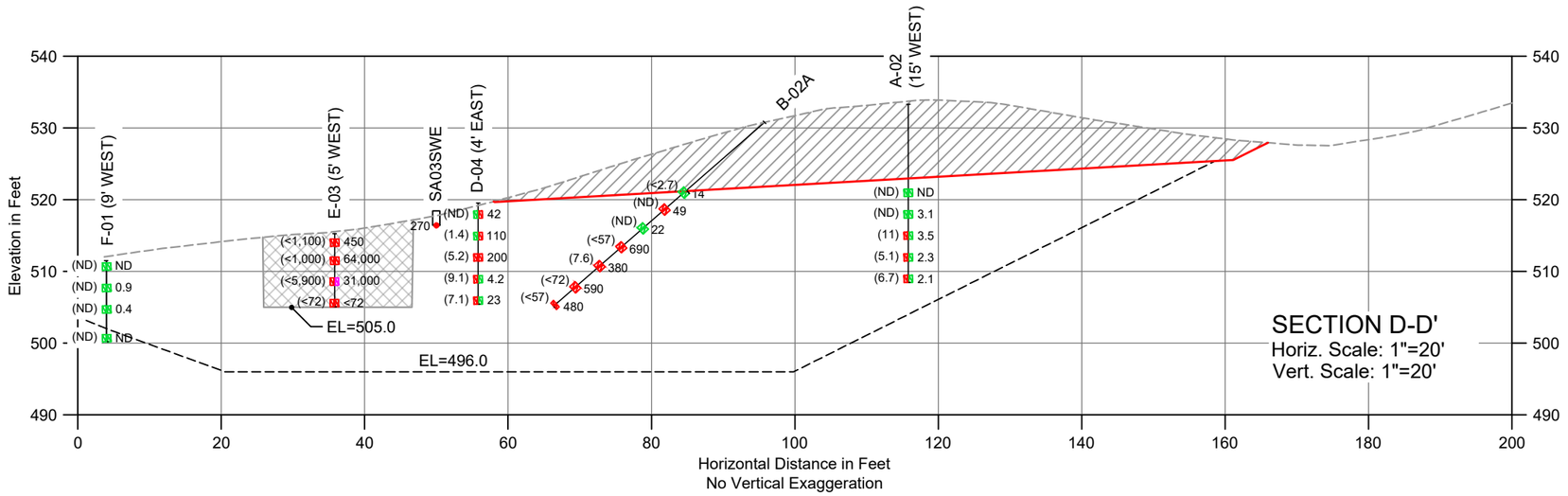
ANCHOR QEA

Figure 14
Sections A and B
Contaminated Soil Investigation Report
CHRL SSWA Contaminated Soil Investigation/KCSWD





SOURCE: Drawing prepared from preliminary topographic survey provided by Lin and Associates, Inc., dated December 8, 2015.
HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

NOTES: Soil concentrations shown indicate laboratory analytical results from SSWA confirmation sampling conducted by Anchor QEA between 8-6-2015 and 3-10-2016.

LEGEND:

- Excavation limits of soil meeting dangerous waste criteria (Hazardous)
- Clean embankment fill
- Existing ground surface
- Clean embankment soil removal limit
- Non-hazardous contaminated soil removal limit
- (8.7) 190 VC / TCE — Boring sample showing TCE and vinyl chloridE (VC) concentration in µg/kg, exceeding screening level
- (0.8) 8.1 VC / TCE — Boring sample showing TCE and vinyl chloride (VC) concentration in µg/kg, less than screening level
- 1,000 — Surface or Test Pit sample showing TCE concentration in µg/kg, exceeding screening level
- 3.4 — Surface or Test Pit sample showing TCE concentration in µg/kg, less than screening level
- 31,000 — Sample exceeding TCLP dangerous waste criteria, showing TCE soil concentration in µg/kg
- 2016 soil boring
- 2015 test pit

ND Non-detect
NS Not sampled
NA Not analyzed
<51 Non detect showing elevated method detection limit

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Jun 13, 2016 9:39am rgoode

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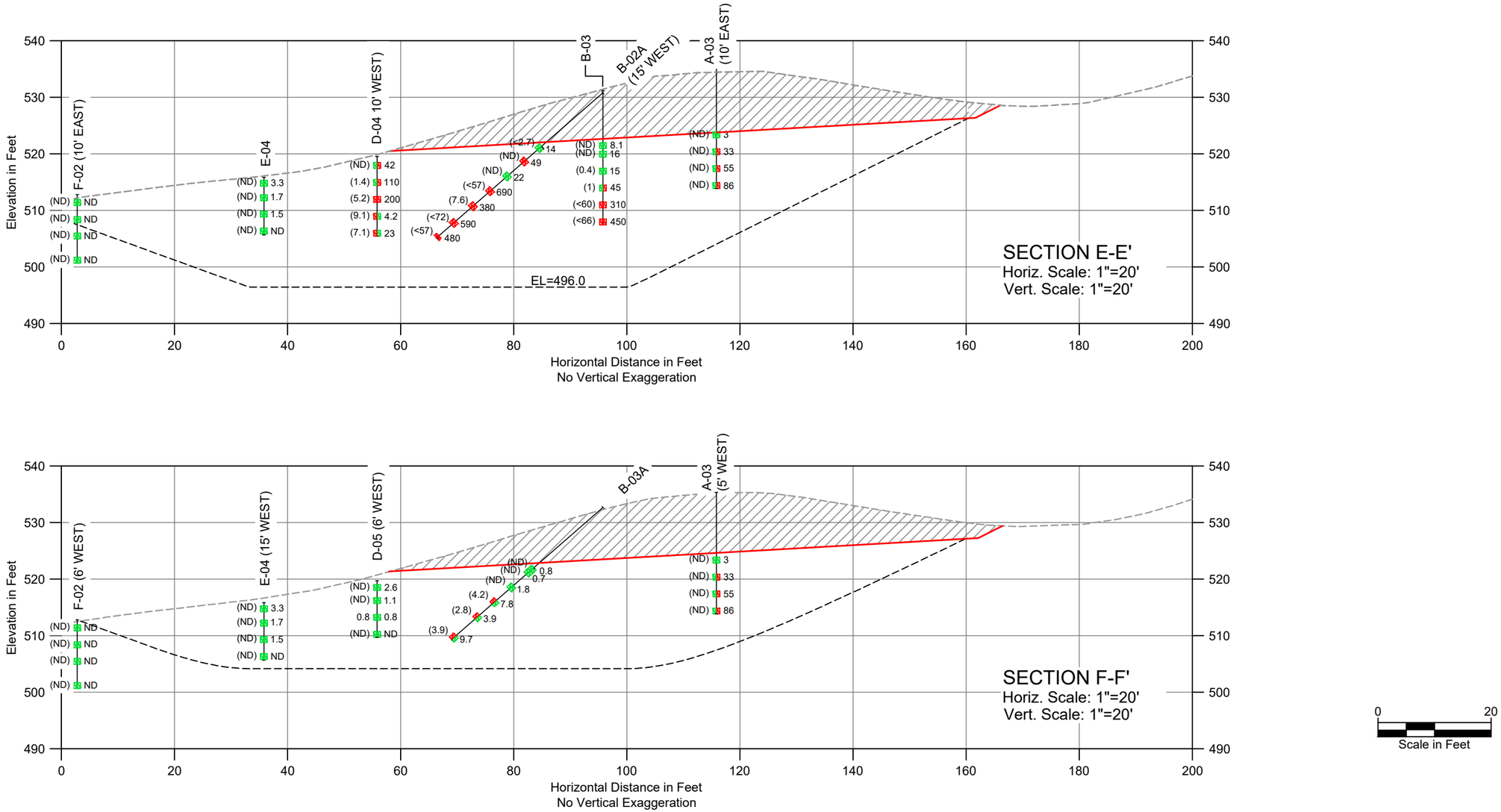
ANCHOR QEA

Figure 15
Sections C and D
Contaminated Soil Investigation Report
CHRL SSWA Contaminated Soil Investigation/KCSWD



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Jun 13, 2016 9:39am rgoode

SOURCE: Drawing prepared from preliminary topographic survey provided by Lin and Associates, Inc., dated December 8, 2015.
HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

NOTES: Soil concentrations shown indicate laboratory analytical results from SSWA confirmation sampling conducted by Anchor QEA between 8-6-2015 and 3-10-2016.

LEGEND:

- Clean embankment fill
- Existing ground surface
- Clean embankment soil removal limit
- Non-hazardous contaminated soil removal limit

(8.7) 190 VC TCE — Boring sample showing TCE and vinyl chloridE (VC) concentration in µg/kg, exceeding screening level

(0.8) 8.1 VC TCE — Boring sample showing TCE and vinyl chloride (VC) concentration in µg/kg, less than screening level

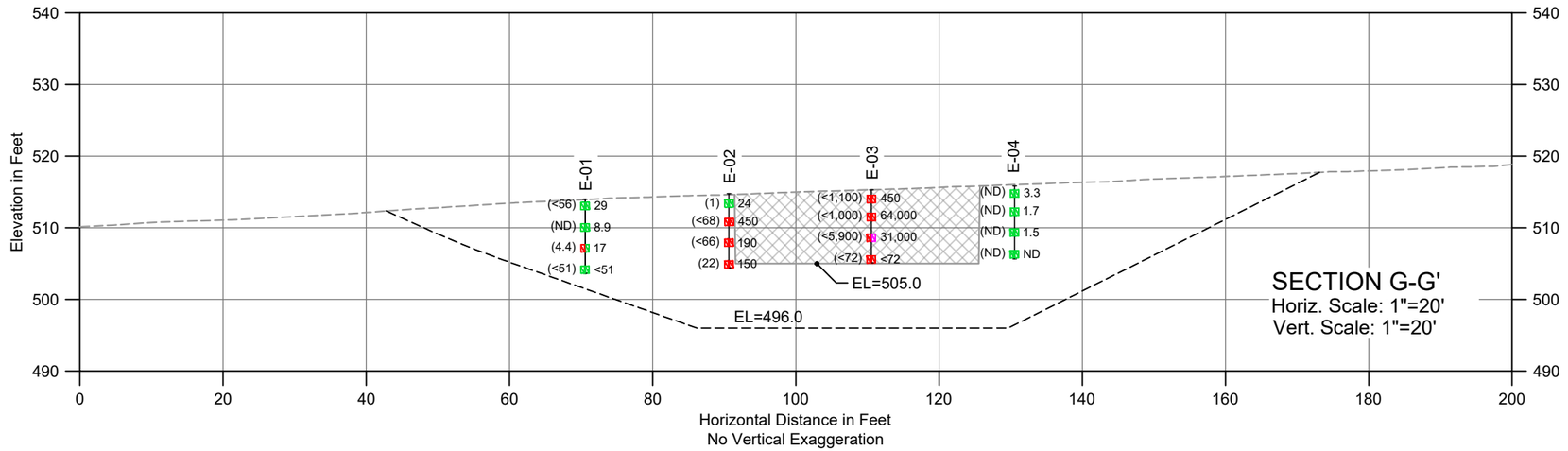
- 2016 soil boring
- 2015 test pit

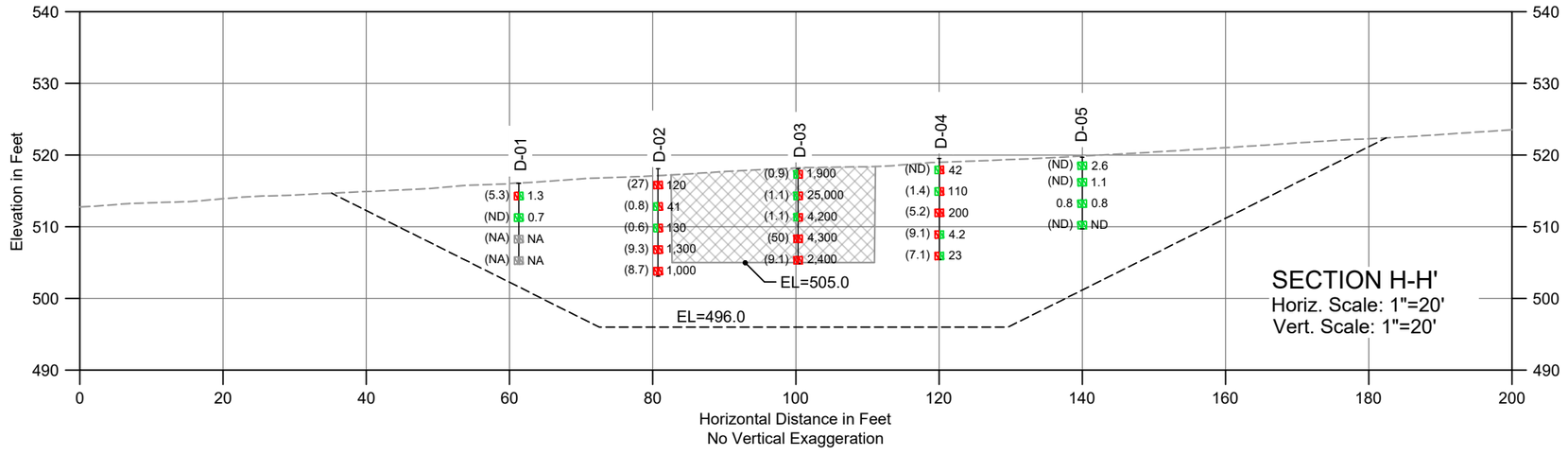
ND Non-detect
NS Not sampled
NA Not analyzed
<51 Non detect showing elevated method detection limit

DRAFT

ANCHOR QEA

Figure 16
Sections E and F
Contaminated Soil Investigation Report
CHRL SSWA Contaminated Soil Investigation/KCSWD





K:\Projects\0067-King County\CHRL A7 Stage 2-SSWA\0067-RP-006_REV2.dwg Fig17

Jun 13, 2016 9:31am rgoode

SOURCE: Drawing prepared from preliminary topographic survey provided by Lin and Associates, Inc., dated December 8, 2015.
HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

NOTES: Soil concentrations shown indicate laboratory analytical results from SSWA confirmation sampling conducted by Anchor QEA between 8-6-2015 and 3-10-2016.

LEGEND:

- Excavation limits of soil meeting dangerous waste criteria (Hazardous)
- Non-hazardous contaminated soil removal limit
- Existing ground surface

- (8.7) 190 / VC / TCE — Boring sample showing TCE and vinyl chloridE (VC) concentration in µg/kg, exceeding screening level
- (0.8) 8.1 / VC / TCE — Boring sample showing TCE and vinyl chloride (VC) concentration in µg/kg, less than screening level
- 31,000 — Sample exceeding TCLP dangerous waste criteria, showing TCE soil concentration in µg/kg

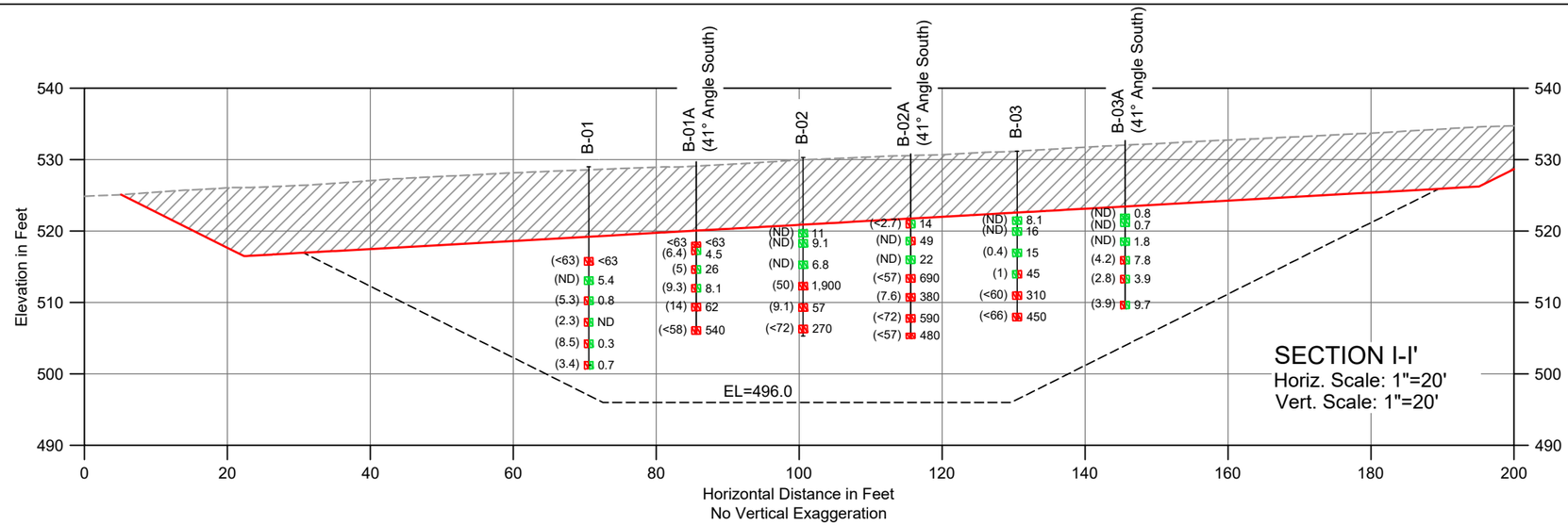
- 2016 soil boring
- 2015 test pit

ND	Non-detect
NS	Not sampled
NA	Not analyzed
<51	Non detect showing elevated method detection limit

DRAFT

ANCHOR QEA

Figure 17
Sections G and H
Contaminated Soil Investigation Report
CHRL SSWA Contaminated Soil Investigation/KCSWD



K:\Projects\0067-King County\CHRL A7 Stage 2-SSWA\0067-RP-006_REV2.dwg Fig18

Jun 13, 2016 9:31am rgoode

SOURCE: Drawing prepared from preliminary topographic survey provided by Lin and Associates, Inc., dated December 8, 2015.
HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

NOTES: Soil concentrations shown indicate laboratory analytical results from SSWA confirmation sampling conducted by Anchor QEA between 8-6-2015 and 3-10-2016.

LEGEND:

- Clean embankment fill
- Existing ground surface
- Clean embankment soil removal limit
- Non-hazardous contaminated soil removal limit

(8.7) 190 (VC / TCE) — Boring sample showing TCE and vinyl chloridE (VC) concentration in µg/kg, exceeding screening level

(0.8) 8.1 (VC / TCE) — Boring sample showing TCE and vinyl chloride (VC) concentration in µg/kg, less than screening level

- 2016 soil boring
- 2015 test pit

ND	Non-detect
NS	Not sampled
NA	Not analyzed
<51	Non detect showing elevated method detection limit

DRAFT

ANCHOR QEA

Figure 18
Sections I and J
Contaminated Soil Investigation Report
CHRL SSWA Contaminated Soil Investigation/KCSWD

FIELD DIRECTIVE
(WORK CHANGE DIRECTIVE)

FIELD DIRECTIVE NUMBER:	**FD-02**
CONTRACT NUMBER:	C01027C16
DATE:	7/5/16

Project:	CHRL SW Stormwater and CSW Ponds and LFG Pipeline
Owner:	King County DNRP Solid Waste Division
Contractor:	Goodfellow Brothers Inc.
Engineer:	AECOM/HDR
Construction Manager:	Anchor QEA

The following additions, deletions, or revisions to the Work have been ordered and authorized:

DESCRIPTION OF ALTERATION:

Additional removal of non-hazardous contaminated soils within the center of the excavation limits is required based on the draft soil sampling analytical results. Soils surrounding the P3, O3, and O4 sample locations as shown on the attached figure require removal. The construction manager will monitor excavation of these soils and determine the additional removal depth in the field. Excavated soils shall be hauled and disposed of at the Area 7 active face. The construction manager will collect additional bottom confirmation samples upon completion of the overexca vation. The excavation shall not be backfilled until approval is given by the construction manager.

Costs for the additional overexcavtion and backfill will be paid at the contract unit price for Bid Item A-17. Measurement will be by survey of in-place volume.

REASON FOR CHANGE:

To remove remaining contaminated soils in exceedance of MTCA Method B – Protective of Groundwater cleanup levels.

METHOD OF PAYMENT:

Contract Unit Price:	$16 per cubic yard
Lump Sum:	$
Cost of Work (Time and Materials)	$

REMARKS:

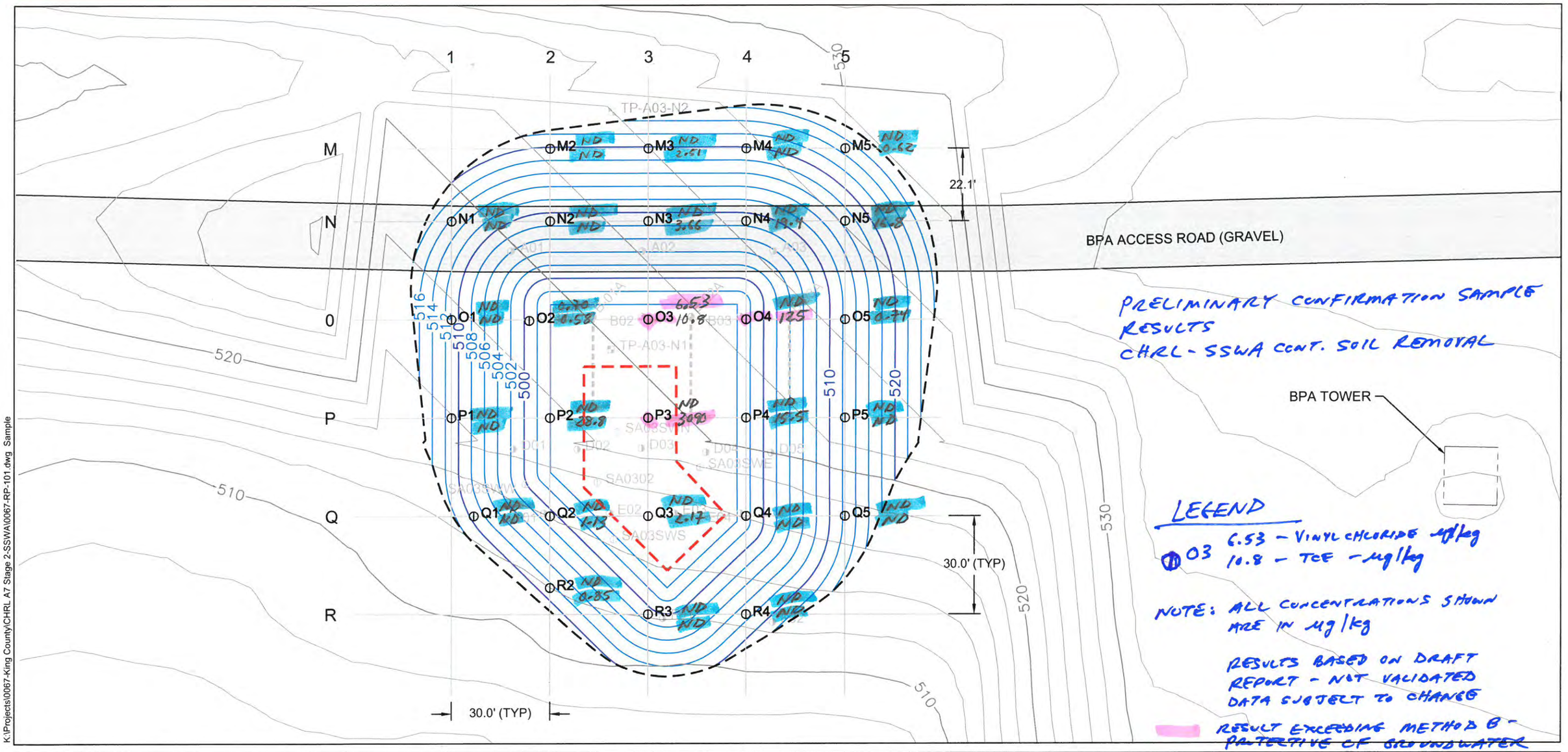
Estimated additional removal volume is approximately 300 cubic yards (in-place). Estimated additional cost at the contract unit price is $4,800.

It is understood that this Work Change Directive will / will not change the Contract Price or Times but is evidence that the parties expect a Change Order to be subsequently issued reflecting any changes.

RECOMMENDED BY: Rick Goode — Construction Manager **DATE:** 7/5/16

ACCEPTED BY: _____ — Contractor **DATE:** _____

APPROVED BY: _____ — Owner **DATE:** _____



K:\Projects\0067-King County\CHRL A7 Stage 2-SSWA\0067-RP-101.dwg Sample

Jun 29, 2016 9:30am rgoode

SOURCE: Drawing prepared from electronic topographic survey provided by Lin and Associates, Inc., dated December 8, 2015.
HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

NOTES: Soil concentrations shown indicate laboratory analytical results from SSWA confirmation sampling conducted by Anchor QEA between 8-6-2015 and 3-10-2016.

LEGEND:

- E01 — 2016 Boring location and ID
- SA03SWS — 2015 Surface sample location and ID
- TP-A03-N1 — 2015 Test pit location and ID
- Boring drilled at 41° from horizontal
- 5 — Existing contours (2 foot Intervals)
- 5 — Proposed Contours (2 ft Intervals)
- N3 — Proposed soil confirmation sample location and ID
- Proposed hazardous contaminated soil excavation limits
- Proposed non-hazardous contaminated soil excavation limits

0 30
Scale in Feet

ANCHOR QEA

Figure 1
Confirmation Sample Location Plan
Sampling and Analysis Plan
CHRL SSWA Contaminated Soil Removal

King County
Department of Natural Resources and Parks

Form 02-CN-033

FIELD DIRECTIVE
(WORK CHANGE DIRECTIVE)

FIELD DIRECTIVE NUMBER:	**FD-10**
CONTRACT NUMBER:	C01027C16
DATE:	10/6/16

Project:	CHRL SW Stormwater and CSW Ponds and LFG Pipeline
Owner:	King County DNRP Solid Waste Division
Contractor:	Goodfellow Brothers Inc.
Engineer:	AECOM/HDR
Construction Manager:	Anchor QEA

The following additions, deletions, or revisions to the Work have been ordered and authorized:

DESCRIPTION OF ALTERATION:

Provide a low-permeability cover system overt the former contaminated soil removal area located along the northeast corner of the pond as shown in attached Figures 1 and 2. GCL material shall be GSE BentoLiner NWL. CDN material shall be GSE double sided SF2 350 and installed over the full length of the GCL. The current specified GSE SF2 225 CDN shall be replaced with the SF2 350 CDN. GCL and CDN materials will be provided by the owner at its current location along the east end of the Area 7 Berm Road. The contractor is responsible for moving the material to the installation location.

Costs associated with subgrade preparation, material installation, and backfill placement shall be paid at the lump sum cost below.

REASON FOR CHANGE:

To provide a cover system to prevent surface water from migrating vertically down through soil remaining at depth in exceeding Washington State Model Toxics Control Act (MTCA) Method B Protective of Groundwater cleanup levels.

METHOD OF PAYMENT:

Contract Unit Price:	$
Lump Sum:	$57,796.52
Cost of Work (Time and Materials)	$

REMARKS:

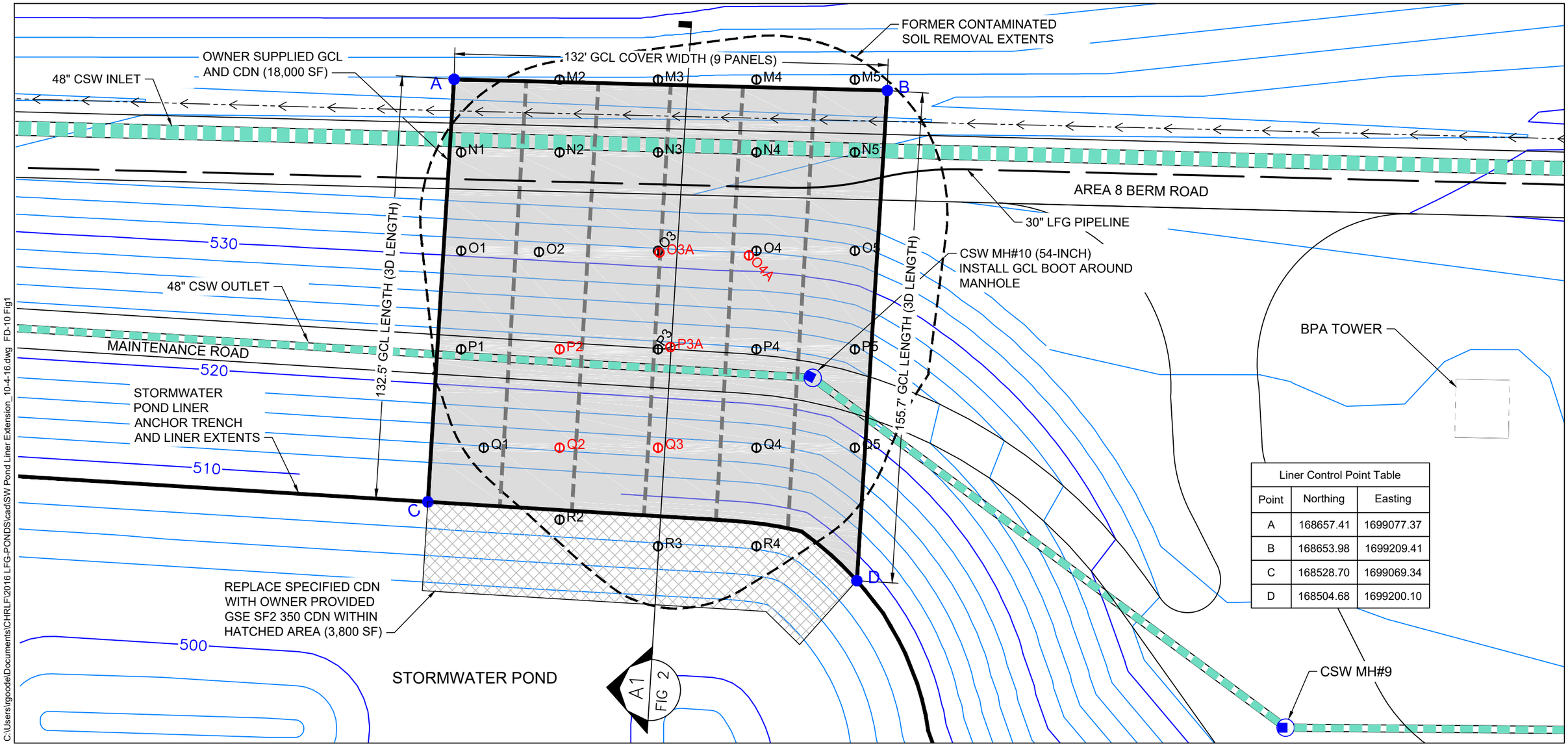
Estimated GCL quantity is 18,000 square feet (overlap not included). Estimated CDN quantity is 21,800 square feet (overlap not included).

It is understood that this Work Change Directive will / will not change the Contract Price or Times but is evidence that the parties expect a Change Order to be subsequently issued reflecting any changes.

RECOMMENDED BY: Rick Goode, Construction Manager — **DATE:** 10/6/16

ACCEPTED BY: _____, Contractor — **DATE:** 10-6-16

APPROVED BY: _____, Owner — **DATE:** 10/6/16



Liner Control Point Table		
Point	Northing	Easting
A	168657.41	1699077.37
B	168653.98	1699209.41
C	168528.70	1699069.34
D	168504.68	1699200.10

C:\Users\rgoode\Documents\CHRLF\2016 LFG-PONDS\cad\SW Pond Liner Extension_10-4-16.dwg FD-10 Fig1

Oct 04, 2016 7:32am rgoode

HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

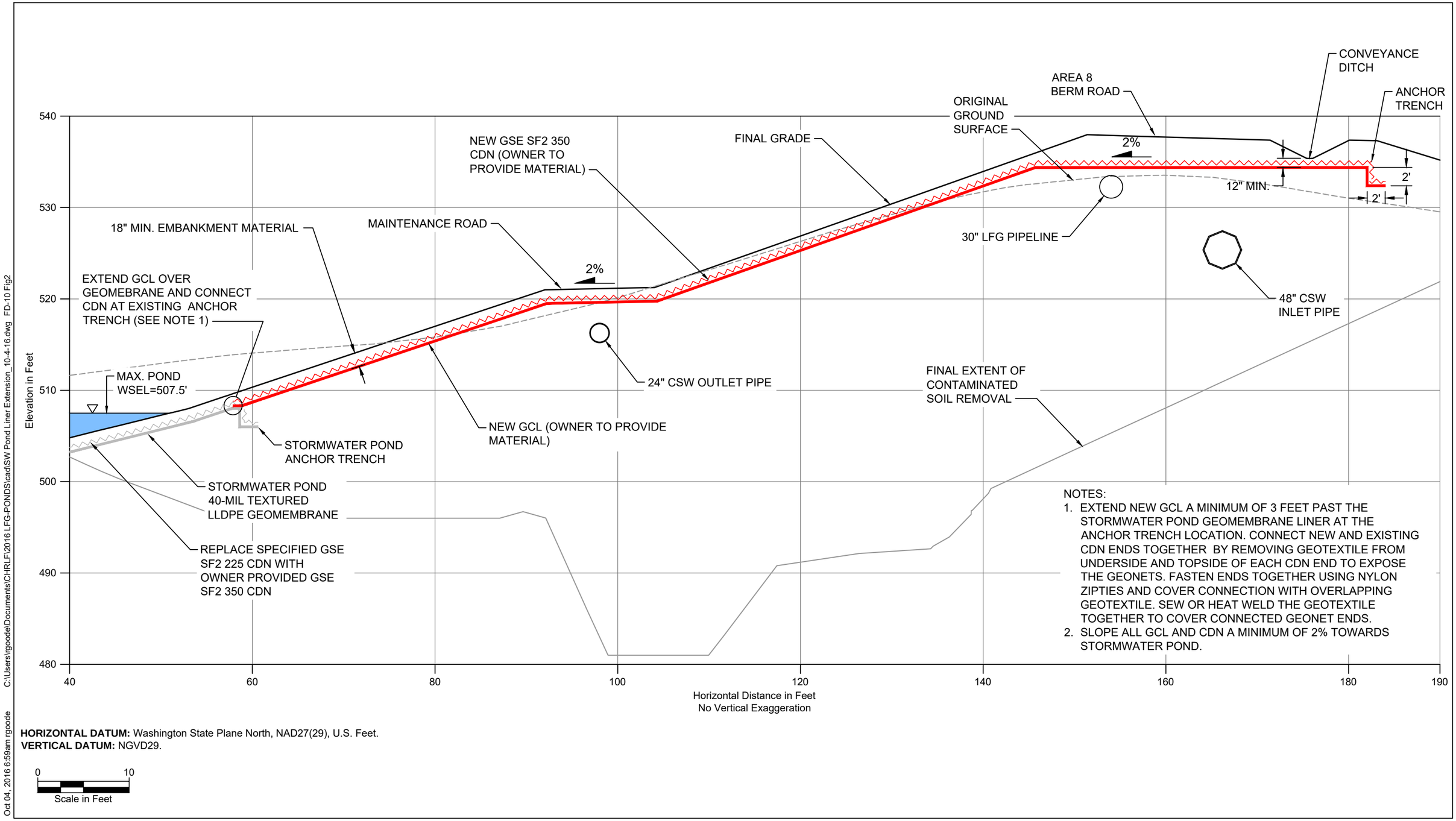
LEGEND:

- 5 — Final Contours (2 ft Intervals)
- Former contaminated soil excavation limits
- Drainage ditch
- Φ P1 — Soil confirmation sample location and ID below MTCA Method B Protective of Groundwater cleanup level
- Φ O3A — Soil confirmation sample location and ID exceeding MTCA Method B Protective of Groundwater cleanup level
- A — Liner control point and ID

0 30
Scale in Feet

ANCHOR QEA

Figure 1
Contaminated Soil Removal Area Liner Extension Plan
Field Directive 10 - Geomembrane Liner Extension
CHRL SW Stormwater and CSW Ponds and LFG Pipeline



C:\Users\rgoode\Documents\CHRLF\2016 LFG-PONDS\cad\SW Pond Liner Extension_10-4-16.dwg FD-10 Fig2
Oct 04, 2016 6:59am rgoode

HORIZONTAL DATUM: Washington State Plane North, NAD27(29), U.S. Feet.
VERTICAL DATUM: NGVD29.

ANCHOR QEA

Figure 2
Section A1
Field Directive 10 - Geomembrane Liner Extension
CHRL SW Stormwater and CSW Ponds and LFG Pipeline

Field Directive FD-10 -Contaminated Soil Area Cover System
Cedar Hills Regional Landfill
SW Stormwater and CSW Ponds and LFG Pipeline
Contract C01027C16
Independent Cost Estimate

PROPOSED WORK DESCRIPTION: Provide a low-permeability cover system overt the former contaminated soil removal area located along the northeast corner of the pond as shown in attached Figures 1 and 2. GCL material shall be GSE BentoLiner NWL. CDN material shall be GSE double sided SF2 350 and installed over the full length of the GCL. The current specified GSE SF2 225 CDN shall be replaced with the SF2 350 CDN. GCL and CDN materials will be provided by the owner at its current location along the east end of the Area 7 Berm Road. The contractor is responsible for moving the material to the installation location.

LABOR	Reg Hrs	OT Hrs	Reg Rate	OT Rate	Total
Operator Group 1A - 50-90 Tons			$ 69.21	$ 92.39	$ -
Operator Group 1 - 30-50 Tons	16	4	$ 68.50	$ 91.35	$ 1,461.40
Operator Group 1 - 30-50 Tons			$ 68.50	$ 91.35	$ -
Operator Group 1 - 30-50 Tons			$ 68.50	$ 91.35	$ -
Operator Group 1 - 30-50 Tons			$ 68.50	$ 91.35	$ -
Operator Group 1 - 30-50 Tons			$ 68.50	$ 91.35	$ -
Operator Group 2 - Loader/Scraper	16	4	$ 67.88	$ 90.43	$ 1,447.80
Operator Group 2 - Loader/Scraper	16	4	$ 67.88	$ 90.43	$ 1,447.80
Operator Group 3 - Dozer	16	4	$ 67.35	$ 89.64	$ 1,436.16
Operator Group 4 - Roller	8	2	$ 64.35	$ 85.21	$ 685.22
Foreman	16	4	$ 69.35	$ 92.40	$ 1,479.20
Superintendent	8	4	$ 72.44	$ 96.92	$ 967.20
Flagger Supervisor			$ 47.43	$ 63.61	$ -
Flagger			$ 44.33	$ 59.07	$ -
General Laborer	16	4	$ 52.37	$ 70.82	$ 1,121.20
Pipe Layer			$ 53.35	$ 72.25	$ -
Lead Pipe layer			$ 58.63	$ 79.97	$ -

EQUIP	Reg Hrs	Reg Rate	Total
CAT D6 LGP		$ 137.07	$ -
CAT D6T XW	20	$ 129.28	$ 2,585.60
CAT D8T		$ 216.17	$ -
Hitachi ZAXIS 650LC-3	20	$ 293.73	$ 5,874.60
JD 872D Blade (Grader)		$ 103.97	$ -
CAT 950 Loader	20	$ 87.79	$ 1,755.80
CAT 740 (2015)		$ 151.28	$ -
CAT 740 (2015)		$ 151.28	$ -
CAT 740 (2015)		$ 151.28	$ -
CAT 627H Scraper		$ 320.29	$ -
CAT 627H Scraper	20	$ 320.29	$ 6,405.80
Water Truck 4600 Gal		$ 60.35	$ -
Dynapac Roller	10	$ 90.00	$ 900.00

MATERIALS	Qty	Unit	Unit Cost	Total
	0	each	$ -	$ -

SUBCONTRACTORS	Qty	Unit	Unit Cost	Total
Cover System Installation (no materials)	23000	SF	$ 0.90	$ 20,700.00

Subtotal Labor/Equip/Mtls	$ 27,567.78
Overhead and Profit (18%)	$ 4,962.20
Subtototal Subcontractors	$ 20,700.00
Markup on Subcontractors (7%)	$ 1,449.00
TOTAL ESTIMATED COST	**$ 54,678.98**

GOODFELLOW BROS., INC. GENERAL CONTRACTOR

10/5/16

Mr. Rick Goode
Anchor QEA
720 Olive Way, Suite 1900
Seattle, WA 98101

RE: SW Contaminated Cover System.

Dear Sir

The revised proposal for the additional work pertaining to FD – 10 cover system is as follows.

Labor	$15,942.80
Equipment	$ 8,721.10
18 %	$ 4,439.50
Subcontractor	$26,816.00
7 %	$ 1,877.12
TOTAL	$57,796.52

Sincerely

Dennis Diteman
Project Manager
Goodfellow Bros. Inc.

GOODFELLOW BROS., INC.
ESTABLISHED 1921

P.O. Box 1419
Maple Valley, WA 98038
425-432-2202

Goodfellow Bros., Inc. - Force Account Pricing Sheet

Customer Name:	King County	**GBI Project Number:**	202685	**Date:**	~~9/12/2016~~
Project Name:	Cedar Hills Regional Landfill	**Cost Code:**		**BI No.:**	10-5-2016

DESCRIPTION OF WORK: Grading Activities

FD-10 to provide a cover system to prevent surface water from migrating vertically down through soil remaining at depth in exceeding Washington state model toxics Control act (MTCA) Method B protecive of ground water cleanup levels.

Directed by: **Date Received**

LABOR:	Employee Class	Regular Hours	Overtime Hours	Regular Rate	Overtime Rate	Total
Jimmy Nolte	520	40.00	-	$72.08	$96.64	$ 2,883.20
Jamie Anderson	524	40.00	-	$67.88	$90.43	$ 2,715.20
Joel Sadowsky	532	40.00	-	$67.88	$90.43	$ 2,715.20
Mickey Dillon	509	40.00	-	$54.97	$75.06	$ 2,198.80
James Robert	524	40.00	-	$67.88	$90.43	$ 2,715.20
Grade Checker	532	40.00	-	$67.88	$90.43	$ 2,715.20
		-	-			
		-	-			
					SUBTOTAL	$ 15,942.80
					Mark-up On Labor 18.0%	$ 2,869.70

EQUIPMENT:	Equipment Code	Equipment Hours	Stand-by Time	Operating Rate	Stand-by Rate	Total
2013 Ford F 150 Pick Up	P1213	40.00	$ -	$ 15.21	$ -	$ 608.40
D6T Dozer	C505	40.00	$ -	$ 114.29	$ -	$ 4,571.60
Hitachi ZX350LC Excavator	BH331	20.00	$ -	$ 142.23	$ -	$ 2,844.60
HAMM3411 Single Roller	XC0510	10.00	$ -	$ 69.65	$ -	$ 696.50
		-	$ -		$ -	
		-	$ -		$ -	
		-	$ -		$ -	
		-	$ -		$ -	

Outside Rental Equip.(Rates based on minimum daily or weekly charge):

						$ -
						$ -
						$ -
					SUBTOTAL	$ 8,721.10
					Mark-up On Equipment 18.0%	$ 1,569.80

MATERIALS USED: Tax Rate = 9.50%	Quantity	Units	Unit Cost	Extended Cost	Sale Tax	Total
	-		$ -	$ -	$ -	$ -
	-		$ -	$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
					SUBTOTAL	$ -
					TAX	$ -
					Mark-up On Materials 18.0%	$ -

SUBCONTRACTORS:	Quantity	Units	Unit Cost		Total
Northwest linings	1.00	ls	$ 26,816.00		$ 26,816.00
					$ -
					$ -
				SUBTOTAL	$ 26,816.00
				Mark-up On Subcontractors 7.0%	$ 1,877.12

Comments:		
	SUBTOTAL	$ 51,479.90
	TAX	$ -
	Overall Markup	$ 6,316.62
	TOTAL	$ 57,796.52

Owner Representative's Signature:	Date	GBI Project Manager's Signature:	Date

Dennis Diteman

From: Ryan Hendrickson <ryanh@northwestlinings.com>
Sent: Wednesday, October 05, 2016 11:25 AM
To: Todd Flanagan
Cc: Dennis Diteman; kirkl@northwestlinings.com; 'Brian Fry'
Subject: RE: CHRL Ponds and Pipeline - Draft Field Directive 10 Liner Extension
Attachments: P16-406FD10-01-CHRL Ponds and Pipeline - Draft Field Directive 10 Liner ....doc

Gentlemen,

Attached is the revised quote from NWL for FD10.

CO breakdown
GCL install only
Labor $12,891-includes equipment, per diems, housing, insurance
MU 18% on that item – $2,325

Geocomp install only
Labor $9,830-includes equipment, per diems, housing, insurance
MU 18% on that item – $1,770

Regards,

RYAN HENDRICKSON | ESTIMATOR

d. 253 867 5752 | c. 206 409 4940 | f. 253 872 0245

From: Ryan Hendrickson [mailto:ryanh@northwestlinings.com]
Sent: Friday, September 16, 2016 9:37 AM
To: 'Todd Flanagan'
Cc: 'Dennis Diteman'; 'kirkl@northwestlinings.com'; 'Brian Fry'
Subject: RE: CHRL Ponds and Pipeline - Draft Field Directive 10 Liner Extension

Gentlemen,

Please see the attached proposal for the above referenced project. Please let me know if you have any questions.

Regards,

RYAN HENDRICKSON | ESTIMATOR

d. 253 867 5752 | c. 206 409 4940 | f. 253 872 0245

From: Brian Fry [mailto:brianf@northwestlinings.com]
Sent: Monday, September 12, 2016 9:16 AM
To: 'Todd Flanagan'
Cc: 'Dennis Diteman'; kirkl@northwestlinings.com; 'Ryan Hendrickson'; 'Scott Mitchell'
Subject: CHRL Ponds and Pipeline - Draft Field Directive 10 Liner Extension

NORTHWEST LININGS &
GEOTEXTILE PRODUCTS, Inc.
"Helping to Protect the Environment"
21000 77th Avenue South
Kent, WA 98032
(253) 872-0244 • (800) 729-6954
FAX: (253) 872-0245
www.northwestlinings.com

Quote Ref. #: P16-406FD10-01

REVISED 10/5/16

Date: September 16, 2016

Attention: Estimating Department
Subject: CHRL Field Directive 10
Reference: 40-mil LLDPE and Geocomposite

Gentlemen,

NORTHWEST LININGS & GEOTEXTILE PRODUCTS, INC. can supply & install the following geosynthetic materials for the above referenced project as follows:

Approximately 20,440 SF of owner supplied GCL installed and approximately 24,140 SF of owner supplied 350-mil geocomposite installed only
250 sand bags as temporary ballast
One (1) pipe penetration at 54"ø or less
Zero LF of liner to concrete attachment
Industry standard QA/QC
Labor and specialty welding equipment to install the above materials

$ 26,816.00

- **CDN shall be installed from the top of the slope to the toe of the slope (not including butt seams). Tie-in per note 1 on Figure 2 shall not be utilized on this project.**
- **All CDN (24,140 SF) shall be supplied by the owner.**
- **All GCL (20,440 SF) shall be supplied by the owner.**

Northwest Linings **acknowledges** the receipt of the following Addenda: 0.

Equipment & Operator (please refer to page three for more information):
Customer (General Contractor / Owner) would be responsible for providing a piece of heavy equipment for NW Linings (loader or forklift capable of lifting 8,000 lb and accessing the area to be lined) and operator for 0 days to stage and deploy material with the Northwest Linings crew. For unloading see project site support sheet attached.

Prices are F.O.B. jobsite and do **not** include sales taxes, local taxes, fees, or bonding (unless otherwise noted). Refer to the "BONDING, TAXES, AND INSURANCE" section of this bid. **Bonding cost: 2%**

Number of mobilizations included in this bid: 0 additional mobilization(s): $ 150

This quote is valid for 14 days from the date of this bid and is based on:

☒ Public Wages; Classification: General Laborer, Non-Union Open Shop

Sincerely,

Kirk Lilleskare *Ryan Hendrickson*

Kirk Lilleskare
Vice President Construction
Northwest Linings & Geotextile Products, Inc.

Ryan Hendrickson
Estimator / Project Manager

Accepted by: _____
Name: _____
Company: _____
Date: _____

GOODFELLOW BROS., INC. GENERAL CONTRACTOR

9/19/16

Mr. Rick Goode
Anchor QEA
720 Olive Way, Suite 1900
Seattle, WA 98101

RE: SW Contaminated Cover System.

Dear Sir

The proposal for the additional work pertaining to FD-10 cover system is as follows.

Labor	$15,942.80
Equipment	$ 8,721.10
Subcontractor	$ 37,000.00
Mark up 18%	$ 11,099.50
Total	**$72,763.40**

Sincerely

Dennis Diteman
Project Manager
Goodfellow Bros. Inc.

GOODFELLOW BROS., INC.
ESTABLISHED 1921

P.O. Box 1419
Maple Valley, WA 98038
425-432-2202

Goodfellow Bros., Inc. - Force Account Pricing Sheet

Customer Name:	King County	GBI Project Number:	202685	Date:	9/12/2016
Project Name:	Cedar Hills Regional Landfill	Cost Code:		BI No.:	

DESCRIPTION OF WORK: Grading Activities

FD-10 to provide a cover system to prevent surface water from migrating vertically down through soil remaining at depth in exceeding Washington state model toxics Control act (MTCA) Method B protecive of ground water cleanup levels.

Directed by: Date Received

LABOR:	Employee Class	Regular Hours	Overtime Hours	Regular Rate	Overtime Rate	Total
Jimmy Nolte	520	40.00	-	$72.08	$96.64	$ 2,883.20
Jamie Anderson	524	40.00	-	$67.88	$90.43	$ 2,715.20
Joel Sadowsky	532	40.00	-	$67.88	$90.43	$ 2,715.20
Mickey Dillon	509	40.00	-	$54.97	$75.06	$ 2,198.80
James Robert	524	40.00	-	$67.88	$90.43	$ 2,715.20
Grade Checker	532	40.00	-	$67.88	$90.43	$ 2,715.20
		-	-			
		-	-			
					SUBTOTAL	$ 15,942.80
					Mark-up On Labor 18.0%	$ 2,869.70

EQUIPMENT:	Equipment Code	Equipment Hours	Stand-by Time	Operating Rate	Stand-by Rate	Total
2013 Ford F 150 Pick Up	P1213	40.00	$ -	$ 15.21	$ -	$ 608.40
D6T Dozer	C505	40.00	$ -	$ 114.29	$ -	$ 4,571.60
Hitachi ZX350LC Excavator	BH331	20.00	$ -	$ 142.23	$ -	$ 2,844.60
HAMM3411 Single Roller	XC0510	10.00	$ -	$ 69.65	$ -	$ 696.50
		-	$ -		$ -	
		-	$ -		$ -	
		-	$ -		$ -	
		-	$ -		$ -	
Outside Rental Equip.(Rates based on minimum daily or weekly charge):						
						$ -
						$ -
						$ -
					SUBTOTAL	$ 8,721.10
					Mark-up On Equipment 18.0%	$ 1,569.80

MATERIALS USED: Tax Rate = 9.50%	Quantity	Units	Unit Cost	Extended Cost	Sale Tax	Total
	-		$ -	$ -	$ -	$ -
	-		$ -	$ -	$ -	$ -
				$ -	$ -	$ -
				$ -	$ -	$ -
					SUBTOTAL	$ -
					TAX	$ -
					Mark-up On Materials 18.0%	$ -

SUBCONTRACTORS:	Quantity	Units	Unit Cost		Total
Northwest linings	1.00	ls	$ 37,000.00		$ 37,000.00
					$ -
					$ -
				SUBTOTAL	$ 37,000.00
				Mark-up On Subcontractors 18.0%	$ 6,660.00

Comments:		
	SUBTOTAL	$ 61,663.90
	TAX	$ -
	Overall Markup	$ 11,099.50
	TOTAL	$ 72,763.40

Owner Representative's Signature:	Date	GBI Project Manager's Signature:	Date