Port of Seattle
Lora Lake Apartments Site

Remedial Investigation/ Feasibility Study

Volume II

Appendix F
Lora Lake Apartments Parcel Remedial Investigation Data Report

Attachment F.3
Analytical Laboratory Data

FINAL

DIOXIN/FURAN ANALYTICAL METHODS AND REPORTING LIMIT DEFINITIONS

Frontier Analytical Laboratories analyzed soil, groundwater, and sediment samples collected as part of the Lora Lake Apartments Remedial Investigation and Feasibility Study (RI/FS) for dioxins/furans using U.S. Environmental Protection Agency (USEPA) Method 1613.

Currently, there are eight analytical methods that are routinely used for the determination of dioxins and furans. Of those, USEPA Methods 8290 and 1613 are fine-scale analytical methods comparable in the quality of analysis and results.[1] Both employ high resolution gas chromatography/high-resolution mass spectrometry processes that provide test results as low as parts per trillion (ppt) for solid samples and parts per quadrillion (ppq) for aqueous samples.

Analytical requirements for dioxins/furans are unique compared to other routinely monitored contaminants. Because dioxins/furans are toxic at much lower concentrations than other contaminants and dioxin/furan analysis requires speciation of many congeners, the analytical requirements are far more sophisticated and sensitive. For instance, most contaminants are commonly measured in parts per million (ppm) and parts per billion (ppb) whereas dioxins/furans are commonly measured in ppt and ppq. Stable isotopically labeled analogs of the target compounds are used to determine exact retention times and to correct targets for recovery, providing a more analytically precise value for the dioxins/furans than most other analyte groups.

USEPA Method 1613 defines three analytical limits for dioxin/furan analysis that are critical to the evaluation of the reported data and assessment of data quality. The Minimum Limit (ML) is the highest (least fine scale) limit, the Detection Limit (DL) is a mid-range limit, and the Method Detection Limit (MDL) is the lowest (finest scale) limit (refer to Figure 1). These limit definitions have significant importance in the calculation of dioxin/furan toxic equivalency quotients (TEQs), as discussed below.

The MDL is defined as “The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the value is above zero and is determined from analysis of a sample in a given matrix type containing the analyte.” (USEPA SW-846).[2] Therefore, there is a statistically valid 99 percent probability that any analyte observed greater than the MDL is, indeed, present in the sample. The USEPA has established the MDL as a reporting threshold. By laboratory and USEPA

[1] The primary differences in these methods are analyte recovery limits, internal standards, and sample holding times (described in detail in the Lora Lake Apartments RI/FS Work Plan). USEPA Method 1613 was selected to analyze the Lora Lake Apartments Site RI samples to take advantage of the method holding time of 1 year (in contrast to the USEPA Method 8290 holding time of 30 days). The longer holding time made it possible to follow the tiered dioxin/furan soil analysis approach described in the Lora Lake Apartments RI/FS Work Plan (Floyd|Snider 2010).

[2] The MDL is a statistically calculated value, and for operational purposes the USEPA states that when it is necessary to determine the MDL in a matrix, the MDL should be determined by multiplying the appropriate one-sided 99 percent t-statistic by the standard deviation obtained from a minimum of three analyses of matrix spike containing the analyte of interest at a concentration three to five times the estimated MDL, where the t-statistic is obtained from standard references or as described in Chapter 1 of SW-846 (USEPA 1992).

standards and industry convention, the analyte is considered “not present” even if a measured value less than this level is reported by the analytical process.

For USEPA Method 1613 the term Minimum Limit is used to represent the lowest point of calibration on the instrument or lowest standard. Minimum requirements for the MLs for dioxin/furan congeners are specified in the method. The ML is equivalent to a “reporting limit” (RL) as that term is used for other analytical methods (e.g., USEPA Method 6010 for metals or USEPA Method 8290 for semivolatile organic compounds). MLs and RLs are equivalent, and, in common practice are used interchangeably to refer to the lowest concentration of an analyte that the laboratory will routinely report or can reliably measure within specified control limits. Detected concentrations greater than or equal to the ML are quantified with a known and acceptable level of precision and accuracy.

MDLs and RLs are terms used to define analytical process limits used consistently across various analytical methods. USEPA Method 1613 dioxin/furan analysis also uses the term Detection Limit or DL. The DL is a “real response” that is based on the method-specific minimum signal-to-noise ratio for each congener, for each analysis run. The DL represents the sample- and matrix-specific level at which a congener can be detected. The DL level or concentration is greater than the MDL, but less than the ML. By definition, to designate a positive detection of an analyte, the analyte concentration must be measured at more than the method-specific minimum signal-to-noise ratio. A positive detection greater than the MDL and less than the ML is given a “J” qualifier to indicate that the analyte or congener was positively identified, but that the concentration was estimated because the precision and accuracy of the result is unknown at this low level. For USEPA Method 1613, the DL is effectively equivalent to the Estimated Detection Limit or EDL used for USEPA Method 8290. An EDL is often still calculated for USEPA Method 1613, per the Contract Laboratory Program requirements.

Given these definitions of analytical limits used for USEPA Method 1613, the common term “non-detect” or “non-detected” means that the analyte measurement was less than the MDL, where potential instrument responses are within the background noise associated with the equipment and analyses. When calculating dioxin/furan TEQ concentrations, non-detect congeners may be assigned a value of one-half of the DL, (WSDOE 2007) or may be assigned “zero.” Because dioxins/furans are toxic at very low concentrations, the approach of assigning one-half of the DL for non-detected congeners or setting non-detect compounds to zero for the calculation of dioxin/furan TEQ concentrations is important in evaluating environmental data. Risk-based cleanup levels are often at low levels that may be near or less than the DLs.

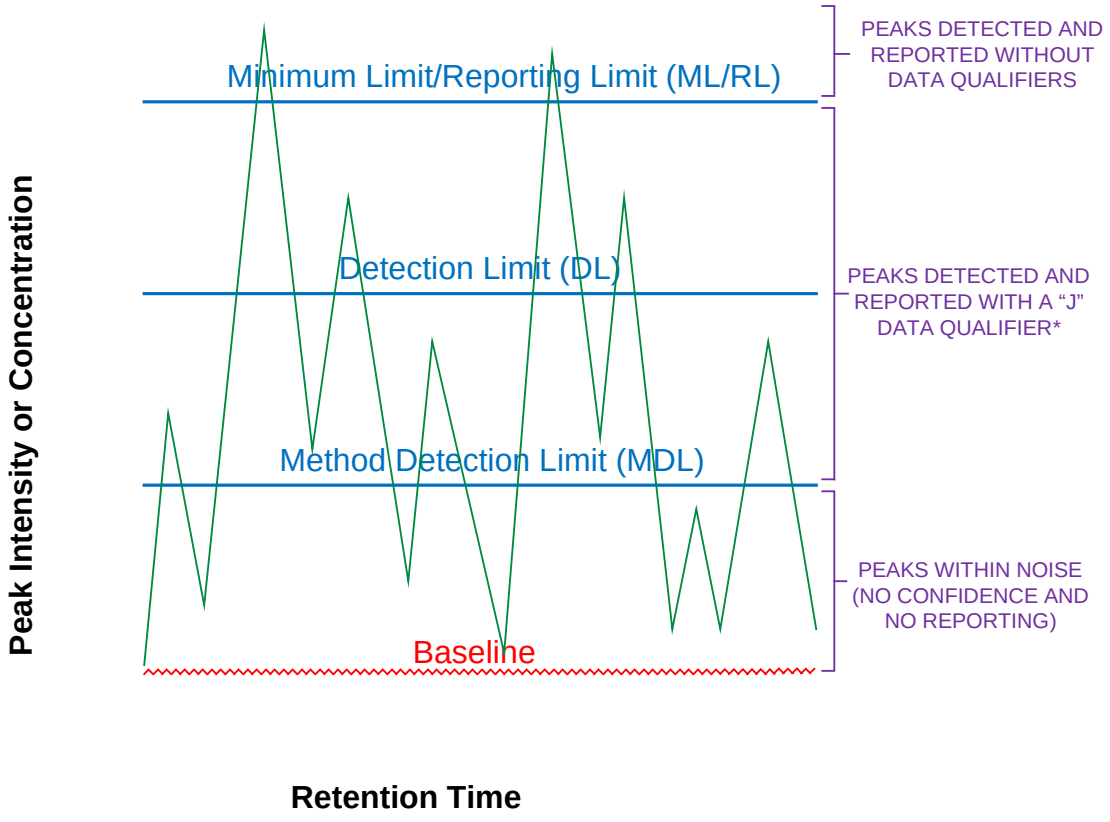
REFERENCES

Floyd|Snider. 2010. *Lora Lake Apartments Final Remedial Investigation/Feasibility Study Work Plan*. Prepared for Port of Seattle. 30 July.

U.S. Environmental Protection Agency (USEPA). 1992. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)*. Third Edition. Chapter 1. http://www.epa.gov/epawaste/hazard/testmethods/sw846/online/index.htm. Last accessed on November 29, 2011.

Washington State Department of Ecology (WSDOE). 2007. *Concise Explanatory Statement and Responsiveness Summary for the Amendment of Chapter 173-340 WAC, Model Toxics Control Act Cleanup Regulation*. Publication Number 07-09-108. October.

Figure



Note:

* "J" qualifier indicated that the analyte was analyzed for and positively identified, but the associated numerical value is an estimated quantity.

FLOYD | SNIDER strategy ▪ science ▪ engineering	**Remedial Investigation/ Feasibility Study Port of Seattle Lora Lake Apartments Site Burien, Washington**	Attachment F.3 Figure 1 USEPA Method 1613 Analytical Limits

Laboratory Data

Table of Contents: ARI Job RG54

Client: Floyd/Snider

Project: POS-LLA Lora Lake RI

BC

Signature

August-09-2010

Date

Table of Contents: ARI Job RG54

Client: Floyd/Snider

Project: POS-LLA Lora Lake RI

BL
Signature

August-09-2010
Date

Analytical Resources, Incorporated
Analytical Chemists and Consultants

September 1, 2010

Jessi Massingale
Floyd-Snider Inc.
601 Union Street, Suite 600
Seattle, WA 98101-2341

RE: Client Project: Lora Lake RI, POS-LLA
ARI Job No: RG54

Dear Ms. Massingale:

Please find enclosed the original Chain-of-Custody (COC) records, sample receipt documentation, and the final data package for samples from the project referenced above.

Sample receipt and detail of these analyses are discussed in the Case Narrative.

An electronic copy of this package will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Susan D. Dunnihoo
Director, Client Services
sue@arilabs.com
206-695-6207

Enclosures

cc: eFile RG54

SD/co

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Documentation

ARI Job ID: RG54

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: RG54	Turn-around Requested: Standard	Page: 1 of 1	
ARI Client Company: Floyd Snider	Phone: 206-292-2078	Date: 7/28/10	Ice Present?
Client Contact: M. McCullough / J. Massingale		No. of Coolers:	Cooler Temps:
Client Project Name: Lora Lake RI			
Client Project #: Pos-LLA	Samplers: MM, AM, KA		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: PAHs (8270)	PCP (8041)	NWTPH-Dx	NWTPH-Gx + BETX (8021)	As + Pb (6010)	Select VOCs* (8260C)	TOC (Plumb '81)	Dioxin 1613	ARCHIVE (Dioxin)	Notes/Comments
PSB14-0-.5-072810	7/28/10	13:35	S	9	✓	✓	✓	✓	✓	✓		✓		* See project file for VOC list
PSB14-1.5-2.0-072810		13:50		9	✓	✓	✓	✓	✓	✓		✓		
PSB14-2-4-072810		13:37		9	✓	✓	✓	✓	✓	✓		✓		
PSB14-4-7-072810		14:15		1									✓	
PSB14-7-9-072810		13:45		9	✓	✓	✓	✓	✓	✓	✓		✓	
PSB14-12-14-072810		14:16		9	✓	✓	✓	✓	✓	✓	✓		✓	
PSB14-TB		17:20	W	3				✓		✓				

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: Meg McCullough	Printed Name: Jennifer Millsap	Printed Name:	Printed Name:
	Company: F/S	Company: ARI	Company:	Company:
	Date & Time: 7/28/10 17:55	Date & Time: 7/28/10 1755	Date & Time:	Date & Time:

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: RG54	Turn-around Requested: Standard	Page: 1 of 1	
ARI Client Company: Floyd Snider	Phone: 206-292-2078	Date: 7/28/10	Ice Present?
Client Contact: M. McCullough / J. Massingale		No. of Coolers:	Cooler Temps:
Client Project Name: Lon Lake RI			
Client Project #: 205-LLA	Samplers: MM, AM, KA		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	PAHs (8270)	PCP (8041)	NWTPH-DX	As + Pb (6010)	*Select VOCs (8260)	TOC (PLUMB)	NW TPH-Gx + BETX (8021)	DIOXIN (1613)	Arsenic (Dioxin)	Notes/Comments
PSB17-0-0.5-072810	7/28/10	11:55	S	9	✓	✓	✓	✓	✓		✓	✓		* See project info for VOC list
PSB17-0.5-2-072810		12:25		9	✓	✓	✓	✓	✓		✓	✓		
PSB17-2-4-072810		12:33		9	✓	✓	✓	✓	✓		✓	✓		
PSB17-4-6-072810		12:15		9	✓	✓	✓	✓	✓	✓	✓	✓		
PSB17-10-13-072810		12:05	↓	9	✓	✓	✓	✓	✓		✓	✓		
PSB17-TB		17:30	W	3					✓		✓			

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: Megan McCullough	Printed Name: Jennifer Millsap	Printed Name:	Printed Name:
	Company: F/S	Company: ARI	Company:	Company:
	Date & Time: 7/28/10 17:55	Date & Time: 7/28/10 1755	Date & Time:	Date & Time:

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: Floyd Snider | Project Name: Lora Lake

COC No(s): _____ NA | Delivered by: Fed-Ex UPS Courier (Hand Delivered) Other: _____

Assigned ARI Job No: RG54 | 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) ~~7.5~~ JM 5.1 0.1 2.7 ___ ___

If cooler temperature is out of compliance fill out form 00070F | Temp Gun ID#: 90877952

Cooler Accepted by: W / JM | Date: 7/28/10 | Time: 1800

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) JM 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 | 7/23/10

Was Sample Split by ARI: (NA) YES | Date/Time: _____ | Equipment: _____ | Split by: _____

Samples Logged by: JM | Date: 7/30/10 | Time: 1100

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC
PSB14-0.0-0.5-072810	PSB14-0-.5-072810	PSB17-1.5-2.0-072810	PSB17-1.5-2-072810
PSB14-7.0-9.0-072810	PSB14 7-9 - 072810	PSB17-2.0-4.0-072810	PSB-2-4-072810
PSB14-12.0-14.0-072810	PSB14-12-14-072810	PSB17-4.0-6.0-072810	PSB17-4-6-072810
PSB17-0.0-0.5-072810	PSB17-0-0.5-072810		

Additional Notes, Discrepancies, & Resolutions:

No sample bottles were received for PSB17-TB

PSB14-TB = sm in 3 of 3

By: JM Date: 7/30/10

Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

Case Narrative, Data Qualifiers, Control Limits

ARI Job ID: RG54

Case Narrative

Client: Floyd Snider
Project: Lora Lake RI, POS-LLA
ARI Job No.: RG54

Sample receipt

Analytical Resources, Inc. (ARI) accepted eleven soil samples and a trip blank on July 28, 2010 under ARI job RG54. The cooler temperatures measured by IR thermometer following ARI SOP were 0.1, 2.7, and 5.7°C. For details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

Dioxin/Furan analyses were subcontracted to Frontier Analytical Laboratory in El Dorado Hills, CA. The dioxin data on CD as generated by Frontier is forwarded with this package.

Volatiles by SW8260C

The samples were analyzed within method recommended holding times.

Initial and continuing calibrations were within method requirements. Internal standard areas were within control limits with the exception of d4-1,4-Dichlorobenzene for sample **PSB14-7-9-07** which fell outside control limits low. This internal standard was not associated with any of the requested compounds. No corrective action was taken.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limit. The LCS and LCSD percent recoveries were within control limits.

PAHs by SW8270D

The samples were initially screened to determine if a response was present that would require modifications in the extraction process. No modifications were required. The samples and associated laboratory QC were initially extracted and analyzed within the method recommended holding times.

Sample **PSB14-0-.5-072810** was re-extracted within method recommended holding times for samples stored frozen. Both sets of data have been reported for review.

Initial and continuing calibrations were within method requirements. Internal standards were within limits.

The surrogate percent recovery of d14-p-Terphenyl fell outside the control limits low for sample **PSB14-0-.5-072810**. The sample was re-extracted at a lower sample volume to reduce matrix interference, and all surrogate percent recoveries were within control limits. No further corrective action was taken.

The surrogate percent recovery of d14-p-Terphenyl fell outside the control limits low for sample **PSB14-7-9-072810**. The sample was undetected for all requested compounds. No corrective action was taken.

The method blanks were clean at the reporting limit. The LCS percent recoveries were within control limits.

The batch matrix spike and matrix spike duplicate analyzed under ARI job RG51 had percent recoveries within advisory limits.

In response to comments from NELAP and DOD auditors, ARI will now report the 'total' benzofluoranthenes rather than the individual compounds. This total will include the response of the b, k and j isomers.

Pentachlorophenol by SW8041

The samples and associated laboratory QC were extracted and analyzed within the method recommended holding times.

Initial and continuing calibrations were within method requirements.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limit. The LCS percent recovery was within control limits.

The matrix spike and matrix spike duplicate percent recoveries were within advisory control limits.

Acid/Silica Cleaned NWTPH-Dx

The samples and associated laboratory QC were extracted and analyzed within the method recommended holding times.

Initial and continuing calibrations were within method requirements.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limits. The LCS and LCSD percent recoveries were within control limits.

The batch matrix spike and matrix spike duplicate analyzed under ARI job RG51 had percent recoveries within advisory limits.

BETX by SW8021B Mod and NWTPH-Gx

The samples and associated laboratory QC were analyzed within the method recommended holding times.

Initial and continuing calibrations were within method requirements. .

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limits. The LCS and LCSD percent recoveries were within control limits.

The matrix spike percent recovery of Ethylbenzene fell outside the advisory control limits with a wide RPD for sample **PSB14-12-14-072810**. No corrective action is required for matrix QC.

Total Arsenic and Lead by SW846 6010B

The samples and associated laboratory QC were digested and analyzed within the method recommended holding time.

The method blank was clean at the reporting limits. The LCS percent recoveries were within control limits.

The SRM results were within advisory ranges.

The batch matrix spike percent recoveries and replicate RPDs were within control limits. Copies of these summary forms have been included in this report.

General Chemistry (TOC/TS)

The samples and associated laboratory QC were prepared and analyzed within the method recommended holding time.

The method blanks were clean at the reporting limits. The LCS percent recovery was within control limits.

The SRM percent recovery was within limits.

The batch matrix spike percent recovery and replicate RSDs were within control limit. Copies of the summary form have been included in this report.

Data Reporting Qualifiers

Effective 7/10/2009

Inorganic Data

U Indicates that the target analyte was not detected at the reported concentration

* Duplicate RPD is not within established control limits

B Reported value is less than the CRDL but ≥ the Reporting Limit

N Matrix Spike recovery not within established control limits

NA Not Applicable, analyte not spiked

H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible

L Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U Indicates that the target analyte was not detected at the reported concentration

* Flagged value is not within established control limits

B Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.

J Estimated concentration when the value is less than ARI's established reporting limits

D The spiked compound was not detected due to sample extract dilution

E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

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).

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

Geotechnical Data

A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F Samples were frozen prior to particle size determination

SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots was below the level required for accurate weighting

7/3/2010

SURR SOLUTIONS

LABEL	SOLN ID	TEST	CONC. UG/ML	SOLVENT	EXP.
A	1732-2	ABN	100/150	MEOH	07/30/10
B	1747-2	SIM PNA	15/75	MEOH	10/07/10
C	1705-4	SIM ABN	25/37.5	MEOH	07/30/10
D	1742-1	LOW PCB	0.2	ACETONE	12/29/10
E	1661-2	HERB	62.5	MEOH	10/02/10
F	1683-3	PCP	12.5	ACETONE	12/09/10
G	1707-2	1,4DIOXANE	100	MEOH	03/19/11
H	1723-2	OP-PEST	25	MEOH	04/02/11
I	1747-1	LOW S. PNA	1.5	MEOH	10/07/10
J	1681-2	TBT-PORE	0.125	MECL2	12/01/10
K	1689-1	MED PCB	20	ACETONE	12/29/10
L	1681-1	TBT	2.5	MECL2	12/01/10
M	1682-1	EPH	1500	MECL2	09/17/10
N	1689-3	PCB	2	ACETONE	12/29/10
O	1740-1	TPH	450	MECL2	12/11/10
P	1742-2	HCID	2250	MECL2	05/13/11
Q	1620-2	EDB	1	MEOH	06/22/10
R	1615-1	RESIN ACID	250	ACETONE	06/17/10
S*	1568-5	PBDE	.25	MEOH	01/13/11
T	1674-2	ALKYL PNA	10	MEOH	07/30/10
U	1633-1	CONGENER	2.5	ACETONE	08/11/10
V					
*reverified solution					

LCS SOLUTIONS

7/3/2010

LABL	SOLN ID	TEST	CONC. UG/ML	SOLVENT	EXP.
1	1716-1	PCB 1660	20	ACETONE	03/30/11
2#		BCOC PEST	10	ACETONE	NA
3	1705-3	PEST	02/04/20	ACETONE	03/08/11
4	1744-3	LOW PEST	0.2/0.4/2	ACETONE	03/08/11
5	1677-1	EPH	1500	MECL2	11/12/10
6	1702-2	PCP	12.5/125	ACETONE	02/18/11
7	1738-2	ABN	100	ACETONE	01/31/11
8	1681-4	TBT	2.5	MECL2	12/01/10
9	1682-2	PORE TBT	.125/.25	MECL2	12/01/10
10	1698-2	ABN ACID	100/200	MECL2	07/14/10
11	1730-2	TPHD	15000	ACETONE	04/26/11
12	1741-2	ABN BASE	200	MEOH	07/24/10
13	1716-2	LOW PCB	2	ACETONE	03/30/11
14	1730-1	LOW ABN ACID	10/20	MEOH	07/14/10
15	1726-3	SIM PNA	15/75	MEOH	10/07/10
16	1707-1	DIOXANE	100	MEOH	11/05/10
17	1644-1	1248 PCB	10	ACETONE	09/10/10
18	1726-4	LOW SIM PNA	1.5	ACETONE	10/07/10
19	1746-3	AK103	7500	ACETONE	12/01/10
20	1682-4	PNA	100	ACETONE	12/04/10
21	1725-1	SKY/BHT	100	MEOH	03/18/11
22	1728-1	HERB	12.5/12500	MEOH	10/20/10
23	1706-1	LW ABN BASE	20	MEOH	03/08/11
24	1696-1	LOW ABN	10	ACETONE	01/13/11
25#		DIPHENYL	100	MEOH	NA
26	1723-3	OP-PEST	25	MEOH	11/20/10
27	1668-3	STEROLS	200	MEOH	10/30/10
28#		ADD. PEST	4	ACETONE	NA
29#		DECANES	100	MEOH	NA
30	1620-1	EDB/DBCP	0.2	MEOH	06/22/10

7/3/2010

LCS SOLUTIONS

31	1707-3	TERPINEOL	100	MEOH	03/19/11
32	1619-3	GUAIACOL	50-200	ACETONE	04/30/10
33	1639-3	RETENE	100	MEOH	09/03/10
34	1633-1	CONGENERS	2.5	ACETONE	08/11/10
35	1674-3	ALKYL PNA A	10	MEOH	10/28/10
36	1601-3	ALKYL PNA B	10	MEOH	05/13/10
50	1617-1	FULL RESIN	250	ACETONE	06/17/10
51	1696-3	DDTS	2.5	ACETONE	06/03/10
52	1613-5	1232 PCB	20	ACETONE	06/16/10
53	1703-3	DALAPON	50	MEOH	09/11/10
54	1701-2	PBDE	0.5	ACETONE	02/10/11
	#=PROJECT SPECIFIC SOLUTION				
	*=REVERIFIED SOLUTION				

Analytical Resources,Incorporated
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Spike Recovery Control Limits for Analysis of Solid Samples Volatile Organic Compounds (VOA) EPA SW-846 Methods 8260C 5 mL Purge Volume [7]

Effective:5/18/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

	Low Level [1]	Low Level ME Limits [3]	Medium Level [2]	Medium Level ME Limits [3]
LCS Spike Recovery [8]				
Dichlorodifluoromethane	53 - 148	37 - 164	25 - 128	**10** - 145
Chloromethane	64 - 125	54 - 135	55 - 121	44 - 132
Vinyl Chloride	63 - 137	51 - 149	66 - 123	57 - 133
Bromomethane	57 - 136	44 - 149	40 - 154	21 - 173
Chloroethane	64 - 131	53 - 142	72 - 128	63 - 137
Trichlorofluoromethane	69 - 132	59 - 143	69 - 135	58 - 146
Acrolein	54 - 137	40 - 151	39 - 135	23 - 151
1,1,2-Trichloro-1,2,2-trifluoroethane	74 - 130	65 - 139	65 - 139	53 - 151
Acetone	60 - 131	48 - 143	55 - 130	43 - 143
1,1-Dichloroethene	75 - 126	67 - 135	73 - 133	63 - 143
Bromoethane	76 - 126	68 - 134	74 - 133	64 - 143
Methyl Iodide	65 - 139	53 - 151	47 - 155	29 - 173
Methylene Chloride	70 - 123	61 - 132	**80 - 120**	75 - 122
Acrylonitrile	67 - 125	57 - 135	62 - 129	51 - 140
Methyl tert-Butyl Ether	70 - 120	62 - 128	69 - 128	59 - 138
Carbon Disulfide	71 - 129	61 - 139	64 - 135	52 - 147
trans-1,2-Dichloroethene	80 - **120**	74 - 126	78 - 125	70 - 133
Vinyl Acetate	60 - 136	47 - 149	66 - 132	55 - 143
1,1-Dichloroethane	**80 - 120**	75 - 124	77 - 124	69 132
2-Butanone	70 - **120**	62 - 127	65 - 126	55 - 136
2,2-Dichloropropane	74 - 123	66 - 131	75 - 127	66 - 136
cis-1,2-Dichloroethene	**80 - 120**	76 - 123	**80** - 125	74 - 132
Chloroform	80 - **120**	74 - 123	**80** - 124	73 - 131
Bromodichloromethane	77 - 121	70 - 128	78 - 130	69 - 139
1,1,1-Trichloroethane	77 - 121	70 - 128	76 - 130	67 - 139
1,1-Dichloropropene	**80 - 120**	77 - 123	77 - 131	68 - 140
Carbon Tetrachloride	77 - 122	70 - 130	74 - 129	65 - 138
1,2-Dichloroethane	76 - **120**	69 - 123	73 - 123	65 - 131
Benzene	**80** - 120	80 - 126	**80 - 120**	75 - 130
Trichloroethene	**80 - 120**	77 - 123	**80** - 125	75 - 132
1,2-Dichloropropane	**80 - 120**	76 - 120	**80** - 122	74 - 129
Bromochloromethane	80 - 120	73 - 127	**80** - 127	73 - 135
Dibromomethane	80 - **120**	74 - 121	**80** - 121	76 - 128
2-Chloroethylvinylether	**10** - 191	**10** - 222	61 - 128	50 - 139

Spike Recovery Control Limits for Analysis of Solid Samples Volatile Organic Compounds (VOA) EPA SW-846 Methods 8260C 5 mL Purge Volume [7]

Effective:5/18/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

	Low Level [1]	Low Level ME Limits [3]	Medium Level [2]	Medium Level ME Limits [3]
4-Methyl-2-Pentanone	67 - **120**	59 - 125	80 - 123	73 - 130
cis-1,3-Dichloropropene	74 - **120**	67 - 125	80 - 122	73 - 129
Toluene	**80** - **120**	79 - **120**	**80** - 122	**80** - 127
trans-1,3-Dichloropropene	65 - **120**	57 - 125	**80** - 123	79 - 129
2-Hexanone	65 - 130	54 - 141	58 - 129	46 - 141
1,1,2-Trichloroethane	**80** - **120**	75 - 122	**80** - 120	77 - 126
1,3-Dichloropropane	80 - **120**	74 - 122	**80** - 120	76 - 126
Tetrachloroethene	**80** - 121	79 - 127	**80** - 130	73 - 138
Dibromochloromethane	64 - **120**	55 - 128	77 - 120	70 - 127
Ethylene Dibromide	75 - **120**	68 - 124	**80** - **120**	**80** - 120
Chlorobenzene	**80** - **120**	82 - 120	**80** - 121	80 - 127
Ethylbenzene	**80** - 127	80 - 134	**80** - 126	**80** - 132
1,1,2,2-Tetrachloroethane	74 - 120	66 - 128	79 - **120**	73 - 123
m,p-Xylene	**80** - 125	**80** - 131	**80** - 130	**80** - 137
o-Xylene	78 - **120**	71 - 126	**80** - 124	**80** - 130
Styrene	**80** - 123	78 - 130	**80** - 132	77 - 140
Isopropylbenzene	**80** - 127	84 - 133	**80** - 130	**80** - 137
Bromoform	60 - **120**	50 - 128	68 - 129	58 - 139
1,1,1,2-Tetrachloroethane	69 - 121	60 - 130	**80** - 126	76 - 133
1,2,3-Trichloropropane	72 - 121	64 - 129	77 - **120**	71 - 121
trans-1,4-Dichloro-2-butene	65 - 126	55 - 136	66 - 127	56 - 137
n-Propylbenzene	**80** - 132	**80** - 139	**80** - 132	77 - 140
Bromobenzene	**80** - **120**	78 - 122	**80** - 121	80 - 127
1,3,5-Trimethylbenzene	**80** - 125	**80** - 131	78 - 137	68 - 147
2-Chlorotoluene	**80** - 125	77 - 132	**80** - 123	**80** - 129
4-Chlorotoluene	**80** - 127	77 - 134	**80** - 130	74 - 138
tert-Butylbenzene	87 - 122	**80** - 128	**80** - 133	78 - 141
1,2,4-Trimethylbenzene	**80** - 126	**80** - 132	**80** - 131	79 - 139
sec-Butylbenzene	**80** - 134	80 - 142	**80** - 136	76 - 146
4-Isopropyltoluene	**80** - 131	**80** - 138	**80** - 141	71 - 151
1,3-Dichlorobenzene	**80** - 120	**80** - 126	**80** 126	77 - 133
1,4-Dichlorobenzene	**80** - 120	79 - 126	**80** 121	77 - 127
n-Butylbenzene	**80** - 138	**80** - 146	**80** - 138	77 - 147
1,2-Dichlorobenzene	**80** - **120**	78 - 122	**80** - **120**	**80** - 121
1,2-Dibromo-3-chloropropane	59 - 120	49 - 130	67 - 121	58 - 130
1,2,4-Trichlorobenzene	78 - 130	69 - 139	**80** - 133	72 - 142

Spike Recovery Control Limits for Analysis of Solid Samples Volatile Organic Compounds (VOA) EPA SW-846 Methods 8260C 5 mL Purge Volume [7]

Effective:5/18/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

	Low Level [1]	Low Level ME Limits [3]	Medium Level [2]	Medium Level ME Limits [3]
Hexachloro-1,3-butadiene	76 - 129	67 - 138	62 - 148	48 - 162
Naphthalene	66 - **120**	58 - 126	74 - 133	64 - 143
1,2,3-Trichlorobenzene	73 - 123	65 - 131	80 - 126	72 - 134
MB/LCS Surrogate Recovery				
Dibromofluoromethane	**80 - 120**	(4)	**80 - 120**	(4)
d4-1,2-Dichloroethane	79 - 121	(4)	76 - **120**	(4)
d8-Toluene	**80 - 120**	(4)	**80 - 120**	(4)
4-Bromofluorobenzene	**80 - 120**	(4)	**80 - 120**	(4)
d4-1,2-Dichlorobenzene	**80 - 120**	(4)	**80 - 120**	(4)
Sample Surrogate Recovery				
Dibromofluoromethane	30 - 160[6]	(4)	30 - 160[6]	(4)
d4-1,2-Dichloroethane	75 - 152	(4)	69 - **120**	(4)
d8-Toluene	82 - 115	(4)	**80 - 120**	(4)
4-Bromofluorobenzene	64 - **120**	(4)	76 - 128	(4)
d4-1,2-Dichlorobenzene	**80 - 120**	(4)	**80 - 120**	(4)

(1) Control Limits calculated using all data generated 1/1/08 through 12/31/08.
(2) Control Limits calculated using all data generated 3/1/07 through 11/15/07.
(3) **ME** = A **marginal exceedance** defined in the NELAC Standard[5] as beyond the LCS-CL but still within the ME limits. ME limits are between 3 and 4 standard deviations around the mean. A maximum of four marginal exceedances are acceptable. Five or more marginal exceedances require corrective action.
(4) Marginal Exceedances not allowed for surrogate standards
(5) **2003 NELAC Standard (EPA/600/R-04/003), July 2003**, Chapter 5, pages 251-252.
(6) 30 – 160 are default, advisory control limits used when there is insufficient data to calculate historic control limits. **DO NOT** use these limits as the sole reason to reject the data from a batch of analyses
(7) Highlighted control limits (**bold font**) are adjusted from the calculated values as follows:
a) ARI does not use control limits < 10
b) Control limits for analyzes with no separate preparation procedure are adjusted to reflect the minimum uncertainty in the calibration of the instrument allowed by the referenced analytical method.
(8) Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.

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Spike Recovery Control Limits for Polycyclic Aromatic Hydrocarbons EPA Method SW-846-8270D [1,2]

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

Sample Matrix	Water		Soil	
Sample Volume / Final Volume	**500 mL to 0.5 mL**		**7.5 g / 0.5 mL**	
LCS Spike Recovery [6]	**Control Limits**	**ME Limits [3]**	**Control Limits**	**ME Limits [3]**
Napthalene	30 - **100**	21 - **100**	37 - **100**	31 - **100**
2-Methylnapthalene	33 - 108	21 - 121	43 - 101	33 - 111
1-Methylnapthalene	34 - **100**	26 - **100**	39 - **100**	32 - **100**
Acenaphthylene	45 - **100**	38 - **100**	44 - **100**	37 - **100**
Acenapthene	40 - **100**	32 - **100**	41 - **100**	35 - **100**
Dibenzofuran	45 - **100**	37 - **100**	44 - **100**	37 - **100**
Fluorene	45 - **100**	37 - 105	49 - **100**	43 - **100**
Phenanthrene	47 - 101	38 - 110	48 - **100**	42 - **100**
Anthracene	47 - **100**	38 - 108	50 - **100**	44 - **100**
Fluoranthene	48 - 110	38 - 120	54 - **100**	47 - 107
Pyrene	48 - 109	38 - 119	41 - 105	30 - 116
Benz(a)anthracene	44 - 105	34 - 115	49 - **100**	42 - 102
Chyrsene	50 - 103	41 - 112	50 - **100**	43 - 101
Benzofluoranthene(s) (Total)	30 - 160[7]	30 - 160[7]	30 - 160[7]	30 - 160[7]
Benzo(a)pyrene	44 - 107	34 - 118	50 - **100**	42 - 105
Indeno(1,2,3-cd)pyrene	30 - 106	17 - 119	33 - 101	22 - 112
Dibenzo(a,h)anthracene	42 - 103	32 - 113	37 - 104	26 - 115
Benzo(g,h,i)Perylene	42 - 102	32 - 112	33 - 107	21 - 119
MB / LCS Surrogate Recovery		-		
d14-p-Terphenyl	52 - 110	(5)	47 - 112	(5)
2-Fluorobiphenyl	36 - **100**	(5)	40 - **100**	(5)
Sample Surrogate Recovery				
d14-p-Terphenyl	23 - 120	(5)	35 - 112	(5)
2-Fluorobiphenyl	38 - **100**	(5)	34 - **100**	(5)

(1) Control limits calculated using all available spike recovery data from 7/1/07 through 2/27/09.
(2) Highlighted control limits (**bold font**) adjusted to demonstrate that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
(3) **ME** = A marginal exceedance defined in the NELAC Standard (4) as beyond the LCS-CL but still within the ME limits. ME limits are between 3 and 4 standard deviations around the mean. A maximum of one marginal exceedance is acceptable. Two or more marginal exceedances require corrective action.
(4) **2003 NELAC Standard (EPA/600/R-04/003), July 2003**, Chapter 5, pages 251-252.
(5) Marginal Exceedances are not allowed for surrogate standards.
(6) Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.
(7) Default limits pending generation of historic limits for total benzofluoranthrenes (7/29/10)

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Spike Recovery Control Limits for Chlorinated Phenols
EPA Method SW-846-8041[1,2]

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

	ARI's Calculated Control Limits	
Sample Matrix:	Water	Soil / Sediment
Sample Amount / Final Volume:	500 / 50 mL	10 g / 25 mL
LCS Spike Recovery [3]		
Pentachlorophenol	27 - 115	**10** - 162
Method Blank/LCS Surrogate Recovery		
2,4,6-Tribromophenol	40 - 130	50 - 115
Sample Surrogate Recovery		
2,4,6-Tribromophenol	11 - 156	**10** - 146

(1) ARI's Control limits calculated using all available spike recovery data from 1/1/08 through 12/1/08.
(2) Highlighted control limits (**bold font**) adjusted to demonstrate that ARI does not use control limits < 10.
(3) Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.

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Spike Recovery Control Limits Hydrocarbon Identification (NWTPH-HCID) and Diesel Range Petroleum Hydrocarbons (NWTPH-D & AK-102) [1]

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

Method:	NWTPH-HCID [2]	NWTPH-D		AK102 [2]
Sample Matrix:	Water& Soil	Water	Soil	Water & Soil
Preparation:	500 to 1 mL	500 to 1 mL	10g to 1 mL	500 to 1 mL or 10g to 1 mL
LCS Spike Recovery [3]				
Diesel	-- - --	56 - 103	55 - 104	75 - 125
Diesel with Acid & Silica Clean-up	-- - --	43 - 100	54 - 96	(4)
Diesel with Silica Clean-up	-- --	43 - 100	54 - 96	75 - 125
Method Blank/LCS Surrogate Recovery				
o-Terphenyl	-- - --	57 - 120	58 - 121	60 - 120
o-Terphenyl with Acid & Silica Clean-up	-- - --	51 - 120	63 - 115	(4)
o-Terphenyl Silica Clean-up		51 - 120	63 - 115	60 - 120
Sample Surrogate Recovery				
o-Terphenyl	50 - 150	35 - 131	53 - 118	50 - 150
o-Terphenyl with Acid & Silica Clean-up	-- - --	41 - 121	49 - 120	(4)
o-Terphenyl with Silica Clean-up		41 - 121	49 - 120	50 - 150

1. Control Limits calculated using all data generated 1/1/08 through 12/31/08
2. Method specified, non-prescriptive limits. The NWTPH-HCID Method does not include LCS or MS analyses.
3. Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.
4. Alaska State UST Methods do not allow acid cleanup of sample extracts.

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Spike Recovery Control Limits BTEX – EPA Method 8021 & Gasoline – Methods NWTPH-G and AK101[1,2]

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

Sample Matrix:	**Aqueous Samples**		**Soil / Sediment Samples**	
Analytical Method:	Method 8021B	NWTPH-G AK-101	Method 8021B	NWTPH-G AK-101
LCS Spike Recovery [3]				
Benzene	73 - **120**		72 - **120**	
Toluene	73 - **120**		72 - **120**	
Ethyl benzene	69 - **120**		71 - **120**	
m,p-Xylenes	72 - **120**		72 - **120**	
o-Xlyene	73 - **120**		72 - **120**	
MTBE	30 - 182		40 - 163	
Gasoline		75 - 124		74 - 124
Method Blank/LCS Surrogate Recovery				
Trifluorotoluene (TFT)	79 - **120**	**80 - 120**	80 - **120**	**80 - 120**
Bromobenzene	79 - **120**	**80 - 120**	77 - **120**	**80 - 120**
Sample Surrogate Recovery				
Trifluorotoluene (TFT)	**80 - 120**	**80** - 120	68 - 124	66 - 123
Bromobenzene	**80 - 120**	**80** - 120	62 - 134	62 - 130

(1) Control Limits calculated using all data generated 1/1/08 through 12/31/08.
(2) Highlighted control limits (bold font) are adjusted from the calculated values as follows:
a) Highlighted control limits (**bold font**) adjusted to demonstrate that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
b) Control limits for analytes with no separate preparation procedure are adjusted to reflect the minimum uncertainty in the calibration of the instrument allowed by the referenced analytical method.
(3) Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.

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Summary of Laboratory Control Limits Metals Analyses (All Methods & Sample Matrices)

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

Element	Matrix Spike Recovery	LCS Recovery	Replicate RPD
Aluminum	75 - 125	80 - 120	≤ 20%
Antimony	75 - 125	80 - 120	≤ 20%
Arsenic	75 - 125	80 - 120	≤ 20%
Barium	75 - 125	80 - 120	≤ 20%
Beryllium	75 - 125	80 - 120	≤ 20%
Boron	75 - 125	80 - 120	≤ 20%
Cadmium	75 - 125	80 - 120	≤ 20%
Calcium	75 - 125	80 - 120	≤ 20%
Chromium	75 - 125	80 - 120	≤ 20%
Cobalt	75 - 125	80 - 120	≤ 20%
Copper	75 - 125	80 - 120	≤ 20%
Iron	75 - 125	80 - 120	≤ 20%
Lead	75 - 125	80 - 120	≤ 20%
Magnesium	75 - 125	80 - 120	≤ 20%
Manganese	75 - 125	80 - 120	≤ 20%
Mercury	75 - 125	80 - 120	≤ 20%
Nickel	75 - 125	80 - 120	≤ 20%
Potassium	75 - 125	80 - 120	≤ 20%
Selenium	75 - 125	80 - 120	≤ 20%
Silica	75 - 125	80 - 120	≤ 20%
Silver	75 - 125	80 - 120	≤ 20%
Sodium	75 - 125	80 - 120	≤ 20%
Strontium	75 - 125	80 - 120	≤ 20%
Thallium	75 - 125	80 - 120	≤ 20%
Vanadium	75 - 125	80 - 120	≤ 20%
Zinc	75 - 125	80 - 120	≤ 20%

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Spike Recovery Control Limits for Conventional Wet Chemistry
Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

	ARI's Control Limits	
Sample Matrix:	Water	Soil / Sediment
Matrix Spike Recoveries	% Recovery	% Recovery
Ammonia	75 - 125	75 - 125
Bromide	75 125	75 - 125
Chloride	75 125	75 - 125
Cyanide	75 - 125	75 - 125
Ferrous Iron	75 - 125	75 - 125
Fluoride	75 - 125	75 - 125
Formaldehyde	75 - 125	75 - 125
Hexane Extractable Material	-- - --	78 - 114
Hexavalent Chromium	75 - 125	75 - 125
Nitrate/Nitrite	75 - 125	75 - 125
Oil and Grease	75 - 125	75 - 125
Phenol	75 - 125	75 - 125
Phosphorous	75 - 125	75 - 125
Sulfate	75 - 125	75 - 125
Sulfide	75 - 125	75 - 125
Total Kjeldahl Nitrogen	75 - 125	75 - 125
Total Organic Carbon	75 - 125	75 - 125
Duplicate RPDs		
Acidity	±20%	±20%
Alkalinity	±20%	±20%
BOD	±20%	±20%
Cation Exchange	±20%	±20%
COD	±20%	±20%
Conductivity	±20%	±20%
Salinity	±20%	±20%
Solids	±20%	±20%
Turbidity	±20%	±20%

Volatile Analysis
Report and Summary QC Forms

ARI Job ID: RG54

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: PSB14-0-.5-072810**
Page 1 of 1 **SAMPLE**

Lab Sample ID: RG54A
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/04/10 13:27

Sample Amount: 7.59 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 7.6%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	0.7	< 0.7	U
156-59-2	cis-1,2-Dichloroethene	0.7	< 0.7	U
107-06-2	1,2-Dichloroethane	0.7	< 0.7	U
79-01-6	Trichloroethene	0.7	< 0.7	U
127-18-4	Tetrachloroethene	0.7	< 0.7	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	134%
d8-Toluene	103%
Bromofluorobenzene	83.4%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: PSB14-1.5-2.0-072810**
Page 1 of 1 **SAMPLE**

Lab Sample ID: RG54B
LIMS ID: 10-18203
Matrix: Soil
Data Release Authorized: NW
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/04/10 13:51

Sample Amount: 8.45 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 8.5%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	0.6	< 0.6	U
156-59-2	cis-1,2-Dichloroethene	0.6	< 0.6	U
107-06-2	1,2-Dichloroethane	0.6	< 0.6	U
79-01-6	Trichloroethene	0.6	< 0.6	U
127-18-4	Tetrachloroethene	0.6	< 0.6	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	137%
d8-Toluene	104%
Bromofluorobenzene	97.9%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C
Page 1 of 1

Sample ID: PSB14-2-4-072810
SAMPLE

Lab Sample ID: RG54C
LIMS ID: 10-18204
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/04/10 14:47

Sample Amount: 8.66 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 9.0%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	0.6	< 0.6	U
156-59-2	cis-1,2-Dichloroethene	0.6	< 0.6	U
107-06-2	1,2-Dichloroethane	0.6	< 0.6	U
79-01-6	Trichloroethene	0.6	< 0.6	U
127-18-4	Tetrachloroethene	0.6	< 0.6	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	123%
d8-Toluene	104%
Bromofluorobenzene	88.3%
d4-1,2-Dichlorobenzene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: PSB14-7-9-072810**
Page 1 of 1 **SAMPLE**

Lab Sample ID: RG54E
LIMS ID: 10-18206
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/04/10 15:11

Sample Amount: 9.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 10.9%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	0.6	< 0.6	U
156-59-2	cis-1,2-Dichloroethene	0.6	< 0.6	U
107-06-2	1,2-Dichloroethane	0.6	< 0.6	U
79-01-6	Trichloroethene	0.6	< 0.6	U
127-18-4	Tetrachloroethene	0.6	< 0.6	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	120%
d8-Toluene	100%
Bromofluorobenzene	75.3%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: PSB14-12-14-072810**
Page 1 of 1 **SAMPLE**

Lab Sample ID: RG54F
LIMS ID: 10-18207
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/04/10 15:37

Sample Amount: 9.26 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 11.0%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	0.5	< 0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	< 0.5	U
107-06-2	1,2-Dichloroethane	0.5	< 0.5	U
79-01-6	Trichloroethene	0.5	< 0.5	U
127-18-4	Tetrachloroethene	0.5	< 0.5	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	125%
d8-Toluene	104%
Bromofluorobenzene	94.4%
d4-1,2-Dichlorobenzene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: PSB14-TB**
Page 1 of 1 **SAMPLE**

Lab Sample ID: RG54G
LIMS ID: 10-18208
Matrix: Water
Data Release Authorized: MW
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/04/10 16:04

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	116%
d8-Toluene	106%
Bromofluorobenzene	94.2%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: PSB17-0-0.5-072810**
Page 1 of 1 **SAMPLE**

Lab Sample ID: RG54H
LIMS ID: 10-18209
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/04/10 16:30

Sample Amount: 9.09 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 6.5%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	0.6	< 0.6	U
156-59-2	cis-1,2-Dichloroethene	0.6	< 0.6	U
107-06-2	1,2-Dichloroethane	0.6	< 0.6	U
79-01-6	Trichloroethene	0.6	< 0.6	U
127-18-4	Tetrachloroethene	0.6	< 0.6	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	127%
d8-Toluene	104%
Bromofluorobenzene	96.2%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: PSB17-1.5-2-072810**
Page 1 of 1 **SAMPLE**

Lab Sample ID: RG54I
LIMS ID: 10-18210
Matrix: Soil
Data Release Authorized: NW
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/04/10 16:57

Sample Amount: 7.98 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 5.3%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	0.6	< 0.6	U
156-59-2	cis-1,2-Dichloroethene	0.6	< 0.6	U
107-06-2	1,2-Dichloroethane	0.6	< 0.6	U
79-01-6	Trichloroethene	0.6	< 0.6	U
127-18-4	Tetrachloroethene	0.6	< 0.6	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	122%
d8-Toluene	104%
Bromofluorobenzene	95.3%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C Sample ID: PSB17-2-4-072810
  SAMPLE

Lab Sample ID: RG54J
LIMS ID: 10-18211
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/04/10 17:23

Sample Amount: 8.18 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 7.4%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	0.6	< 0.6	U
156-59-2	cis-1,2-Dichloroethene	0.6	< 0.6	U
107-06-2	1,2-Dichloroethane	0.6	< 0.6	U
79-01-6	Trichloroethene	0.6	< 0.6	U
127-18-4	Tetrachloroethene	0.6	< 0.6	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	126%
d8-Toluene	104%
Bromofluorobenzene	96.4%
d4-1,2-Dichlorobenzene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C Sample ID: PSB17-4-6-072810
  SAMPLE

Lab Sample ID: RG54K
LIMS ID: 10-18212
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/04/10 17:50

Sample Amount: 7.19 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 7.7%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	0.7	< 0.7	U
156-59-2	cis-1,2-Dichloroethene	0.7	< 0.7	U
107-06-2	1,2-Dichloroethane	0.7	< 0.7	U
79-01-6	Trichloroethene	0.7	< 0.7	U
127-18-4	Tetrachloroethene	0.7	< 0.7	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	120%
d8-Toluene	102%
Bromofluorobenzene	96.7%
d4-1,2-Dichlorobenzene	103%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: PSB17-10-13-072810**
Page 1 of 1 **SAMPLE**

Lab Sample ID: RG54L
LIMS ID: 10-18213
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/04/10 18:16

Sample Amount: 9.19 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 7.7%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	0.5	< 0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	< 0.5	U
107-06-2	1,2-Dichloroethane	0.5	< 0.5	U
79-01-6	Trichloroethene	0.5	< 0.5	U
127-18-4	Tetrachloroethene	0.5	< 0.5	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	131%
d8-Toluene	104%
Bromofluorobenzene	96.4%
d4-1,2-Dichlorobenzene	106%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-080410	Method Blank	Low	117%	105%	94.6%	103%	0
LCS-080410	Lab Control	Low	90.0%	104%	98.7%	99.1%	0
LCSD-080410	Lab Control Dup	Low	105%	103%	99.6%	101%	0
RG54A	PSB14-0-.5-072810	Low	134%	103%	83.4%	104%	0
RG54B	PSB14-1.5-2.0-072810	Low	137%	104%	97.9%	104%	0
RG54C	PSB14-2-4-072810	Low	123%	104%	88.3%	105%	0
RG54E	PSB14-7-9-072810	Low	120%	100%	75.3%	104%	0
RG54F	PSB14-12-14-072810	Low	125%	104%	94.4%	105%	0
RG54H	PSB17-0-0.5-072810	Low	127%	104%	96.2%	104%	0
RG54I	PSB17-1.5-2-072810	Low	122%	104%	95.3%	104%	0
RG54J	PSB17-2-4-072810	Low	126%	104%	96.4%	105%	0
RG54K	PSB17-4-6-072810	Low	120%	102%	96.7%	103%	0
RG54L	PSB17-10-13-072810	Low	131%	104%	96.4%	106%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260C	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	79-121	76-120	75-152	69-120
(TOL) = d8-Toluene	80-120	80-120	82-115	80-120
(BFB) = Bromofluorobenzene	80-120	80-120	64-120	76-128
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-120	80-120	80-120

Log Number Range: 10-18202 to 10-18213

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
RG54G	PSB14-TB	5	116%	106%	94.2%	102%	0

SW8260C	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	80-122	80-125
(TOL) = d8-Toluene	80-120	80-120
(BFB) = Bromofluorobenzene	80-120	80-120
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-120

Prep Method: SW5030B
Log Number Range: 10-18208 to 10-18208

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C Sample ID: LCS-080410
  LAB CONTROL SAMPLE

Lab Sample ID: LCS-080410
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN5/PAB
LCSD: FINN5/PAB
Date Analyzed LCS: 08/04/10 11:07
LCSD: 08/04/10 11:41

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
trans-1,2-Dichloroethene	52.7	50.0	105%	50.5	50.0	101%	4.3%
cis-1,2-Dichloroethene	52.0	50.0	104%	50.5	50.0	101%	2.9%
1,2-Dichloroethane	49.4	50.0	98.8%	47.5	50.0	95.0%	3.9%
Trichloroethene	49.7	50.0	99.4%	46.9	50.0	93.8%	5.8%
Tetrachloroethene	48.1	50.0	96.2%	44.4	50.0	88.8%	8.0%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	90.0%	105%
d8-Toluene	104%	103%
Bromofluorobenzene	98.7%	99.6%
d4-1,2-Dichlorobenzene	99.1%	101%

4A

VOLATILE METHOD BLANK SUMMARY

Method Blank ID.

MB0804

Lab Name: ANALYTICAL RESOURCES, INC

Client: FLOYD SNIDER

ARI Job No: RG54

Project: LORA LAKES RI

Lab File ID: MB0804

Lab Sample ID: MB0804

Date Analyzed: 08/04/10

Time Analyzed: 1208

Instrument ID: FINN5

Heated Purge: (Y/N) Y

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0804	LCS0804	LCS0804	1107
02	LCS0804	LCS0804	LCS0804A	1141
03	PSB14-0-.5-0	RG54A	RG54A	1327
04	PSB14-1.5-2.	RG54B	RG54B	1351
05	PSB14-2-4-07	RG54C	RG54C	1447
06	PSB14-7-9-07	RG54E	RG54E	1511
07	PSB14-12-14-	RG54F	RG54F	1537
08	PSB14-TB	RG54G	RG54G	1604
09	PSB17-0-0.5-	RG54H	RG54H	1630
10	PSB17-1.5-2-	RG54I	RG54I	1657
11	PSB17-2-4-07	RG54J	RG54J	1723
12	PSB17-4-6-07	RG54K	RG54K	1750
13	PSB17-10-13-	RG54L	RG54L	1816
14				
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COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C
Page 1 of 1

Sample ID: MB-080410
METHOD BLANK

Lab Sample ID: MB-080410
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/04/10 12:08

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	117%
d8-Toluene	105%
Bromofluorobenzene	94.6%
d4-1,2-Dichlorobenzene	103%

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ANALYTICAL RESOURCES, INC Contract: FLOYD SNIDER

Lab Code: ARI Case No.: LORA LAKES RI SDG No.: RG54

Lab File ID: BFB07231 BFB Injection Date: 07/23/10

Instrument ID: FINN5 BFB Injection Time: 1648

GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	24.7
75	30.0 - 66.0% of mass 95	49.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.2 (0.2)1
174	50.0 - 101.0% of mass 95	77.4
175	4.0 - 9.0% of mass 174	5.7 (7.4)1
176	93.0 - 101.0% of mass 174	76.4 (98.8)1
177	5.0 - 9.0% of mass 176	5.5 (7.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD200	IC0723	2000723	07/23/10	1718
02	VSTD150	IC0723	1500723	07/23/10	1749
03	VSTD100	IC0723	1000723	07/23/10	1816
04	VSTD050	IC0723	0500723	07/23/10	1842
05	VSTD010	IC0723	0100723	07/23/10	1909
06	VSTD005	IC0723	0050723	07/23/10	1935
07	VSTD002	IC0723	0020723	07/23/10	2002
08	VSTD001	IC0723	0010723	07/23/10	2028
09					
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ANALYTICAL RESOURCES, INC Contract: FLOYD SNIDER

Lab Code: ARI Case No.: LORA LAKES RI SDG No.: RG54

Lab File ID: BFB0804 BFB Injection Date: 08/04/10

Instrument ID: FINN5 BFB Injection Time: 0950

GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	25.2
75	30.0 - 66.0% of mass 95	50.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.2 (0.3)1
174	50.0 - 101.0% of mass 95	73.1
175	4.0 - 9.0% of mass 174	5.7 (7.9)1
176	93.0 - 101.0% of mass 174	71.4 (97.6)1
177	5.0 - 9.0% of mass 176	5.2 (7.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	CC0804	0500804	08/04/10	1024
02	LCS0804	LCS0804	LCS0804	08/04/10	1107
03	LCS0804	LCS0804	LCS0804A	08/04/10	1141
04	MB0804	MB0804	MB0804	08/04/10	1208
05	PSB14-0-.5-07281	RG54A	RG54A	08/04/10	1327
06	PSB14-1.5-2.0-07	RG54B	RG54B	08/04/10	1351
07	PSB14-2-4-072810	RG54C	RG54C	08/04/10	1447
08	PSB14-7-9-072810	RG54E	RG54E	08/04/10	1511
09	PSB14-12-14-0728	RG54F	RG54F	08/04/10	1537
10	PSB14-TB	RG54G	RG54G	08/04/10	1604
11	PSB17-0-0.5-0728	RG54H	RG54H	08/04/10	1630
12	PSB17-1.5-2-0728	RG54I	RG54I	08/04/10	1657
13	PSB17-2-4-072810	RG54J	RG54J	08/04/10	1723
14	PSB17-4-6-072810	RG54K	RG54K	08/04/10	1750
15	PSB17-10-13-0728	RG54L	RG54L	08/04/10	1816
16					
17					
18					
19					
20					
21					
22					

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: RG54 Project: LORA LAKES RI

Instrument ID: FINN5 Calibration Date: 07/23/10

LAB FILE ID: RF1: 0010723 RF2: 0020723 RF5: 0050723
RF10: 0100723 RF50: 0500723

COMPOUND	RF1	RF2	RF5	RF10	RF50
Chloromethane	2.155	1.962	1.917	2.009	1.652
Vinyl Chloride	1.519	1.452	1.513	1.597	1.363
Bromomethane	0.934	0.851	0.777	0.625	0.810
Chloroethane	1.071	1.093	0.988	0.871	0.876
Trichlorofluoromethane	1.476	1.559	1.505	1.410	1.426
Acrolein	0.205	0.197	0.177	0.164	0.157
112Trichloro122Trifluoroetha	1.274	1.182	1.204	1.123	1.014
Acetone	0.308	0.320	0.314	0.301	0.268
1,1-Dichloroethene	1.036	1.019	1.041	1.032	0.979
Bromoethane	0.707	0.744	0.729	0.753	0.727
Iodomethane	1.011	1.066	1.142	1.140	1.253
Methylene Chloride		1.396	1.190	1.128	0.935
Acrylonitrile	0.196	0.243	0.283	0.285	0.261
Carbon Disulfide	3.372	3.310	3.395	3.282	3.176
Trans-1,2-Dichloroethene	0.815	0.825	0.806	0.895	0.794
Vinyl Acetate	1.378	1.475	1.529	1.560	1.561
1,1-Dichloroethane	1.593	1.577	1.616	1.674	1.534
2-Butanone	0.326	0.330	0.344	0.353	0.328
2,2-Dichloropropane	0.887	0.897	0.933	0.951	0.913
Cis-1,2-Dichloroethene	0.703	0.702	0.718	0.759	0.692
Chloroform	1.249	1.296	1.316	1.320	1.203
Bromochloromethane	0.301	0.323	0.367	0.357	0.335
1,1,1-Trichloroethane	0.977	0.934	0.973	0.985	0.933
1,1-Dichloropropene	0.670	0.690	0.712	0.765	0.673
Carbon Tetrachloride	0.581	0.624	0.604	0.630	0.570
1,2-Dichloroethane	0.571	0.629	0.633	0.678	0.586
Benzene	1.759	1.768	1.800	1.965	1.656
Trichloroethene	0.436	0.500	0.510	0.540	0.468
1,2-Dichloropropane	0.524	0.521	0.548	0.582	0.501
Bromodichloromethane	0.521	0.592	0.582	0.604	0.542
Dibromomethane	0.253	0.259	0.260	0.288	0.249
2-Chloroethyl Vinyl Ether		0.142	0.173	0.190	0.185
4-Methyl-2-Pentanone	0.141	0.137	0.132	0.143	0.133
Cis 1,3-dichloropropene	0.503	0.566	0.600	0.660	0.638
Toluene	1.257	1.104	1.022	1.052	0.921
Trans 1,3-Dichloropropene	0.446	0.472	0.491	0.540	0.521
2-Hexanone	0.489	0.418	0.404	0.438	0.381

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: RG54 Project: LORA LAKES RI

Instrument ID: FINN5 Calibration Date: 07/23/10

LAB FILE ID: RF1: 0010723 RF2: 0020723 RF5: 0050723
RF10: 0100723 RF50: 0500723

COMPOUND	RF1	RF2	RF5	RF10	RF50
1,1,2-Trichloroethane	0.269	0.295	0.323	0.339	0.296
1,3-Dichloropropane	0.683	0.714	0.715	0.756	0.678
Tetrachloroethene	0.617	0.527	0.565	0.567	0.490
Chlorodibromomethane	0.427	0.440	0.465	0.502	0.453
1,2-Dibromoethane	0.301	0.328	0.338	0.349	0.322
Chlorobenzene	1.449	1.256	1.215	1.285	1.093
Ethyl Benzene	2.203	2.176	2.088	2.268	2.021
1,1,1,2-Tetrachloroethane	0.488	0.463	0.438	0.454	0.389
m,p-xylene	0.686	0.701	0.756	0.820	0.768
o-Xylene	0.597	0.672	0.700	0.773	0.750
Styrene	1.013	1.042	1.151	1.321	1.228
Bromoform	0.588	0.562	0.563	0.584	0.521
1,1,2,2-Tetrachloroethane	1.199	1.124	1.036	1.126	0.917
1,2,3-Trichloropropane		0.226	0.221	0.226	0.186
Trans-1,4-Dichloro 2-Butene		0.322	0.326	0.349	0.301
N-Propyl Benzene	4.356	4.362	4.593	5.132	4.292
Bromobenzene	0.977	0.937	0.972	1.058	0.917
Isopropyl Benzene	3.581	3.464	3.670	4.080	3.636
2-Chloro Toluene	3.123	2.806	3.073	3.372	2.810
4-Chloro Toluene	2.626	2.911	2.880	3.298	2.959
T-Butyl Benzene	2.255	2.386	2.573	2.864	2.638
1,3,5-Trimethyl Benzene	2.663	2.667	2.918	3.226	2.998
1,2,4-Trimethylbenzene	2.438	2.545	2.851	3.260	2.948
S-Butyl Benzene	3.651	3.689	3.984	4.454	4.031
4-Isopropyl Toluene	2.226	2.542	2.823	3.180	2.946
1,3-Dichlorobenzene	1.562	1.533	1.674	1.912	1.646
1,4-Dichlorobenzene	1.655	1.573	1.702	1.839	1.597
N-Butyl Benzene	2.810	2.765	3.045	3.430	3.102
1,2-Dichlorobenzene	1.537	1.602	1.638	1.750	1.517
1,2-Dibromo 3-Chloropropane	0.152	0.209	0.190	0.200	0.171
1,2,4-Trichlorobenzene	0.965	1.017	0.971	1.126	0.860
Hexachloro 1,3-Butadiene	0.585	0.688	0.689	0.751	0.589
Naphthalene	1.716	1.756	1.742	2.094	1.618
1,2,3-Trichlorobenzene	0.961	1.020	0.960	1.136	0.809
Dichlorodifluoromethane	0.618	0.692	0.660	0.633	0.675
Methyl tert-Butyl Ether	1.392	1.482	1.616	1.631	1.525

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: RG54 Project: LORA LAKES RI

Instrument ID: FINN5 Calibration Date: 07/23/10

LAB FILE ID: RF1: 0010723 RF2: 0020723 RF5: 0050723
RF10: 0100723 RF50: 0500723

COMPOUND	RF1	RF2	RF5	RF10	RF50
d4-1,2-Dichloroethane	0.718	0.705	0.687	0.646	0.643
d8-Toluene	1.123	1.149	1.122	1.106	1.114
4-Bromofluorobenzene	0.550	0.557	0.558	0.551	0.566
d4-1,2-Dichlorobenzene	0.929	0.920	0.920	0.926	0.925
Dibromofluoromethane	0.649	0.629	0.614	0.586	0.599

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: RG54 Project: LORA LAKES RI

Instrument ID: FINN5 Calibration Date: 07/23/10

LAB FILE ID: RF100: 1000723 RF150: 1500723 RF200: 2000723

COMPOUND	RF100	RF150	RF200
Chloromethane	1.566	1.388	1.306
Vinyl Chloride	1.358	1.171	1.061
Bromomethane	0.769	0.647	0.579
Chloroethane	0.778	0.629	
Trichlorofluoromethane	1.280	1.042	0.967
Acrolein	0.146	0.119	
112Trichloro122Trifluoroetha	0.976	0.818	0.758
Acetone	0.244	0.204	
1,1-Dichloroethene	0.934	0.797	0.739
Bromoethane	0.727	0.633	0.591
Iodomethane	1.256	1.066	1.025
Methylene Chloride	0.929	0.821	
Acrylonitrile	0.258	0.230	0.220
Carbon Disulfide	2.867	2.186	1.913
Trans-1,2-Dichloroethene	0.835	0.766	0.722
Vinyl Acetate	1.554	1.197	1.056
1,1-Dichloroethane	1.561	1.255	1.069
2-Butanone	0.323	0.268	0.247
2,2-Dichloropropane	0.956	0.876	0.855
Cis-1,2-Dichloroethene	0.742	0.687	0.690
Chloroform	1.234	1.073	0.959
Bromochloromethane	0.351	0.332	0.335
1,1,1-Trichloroethane	0.962	0.878	0.863
1,1-Dichloropropene	0.695	0.631	0.596
Carbon Tetrachloride	0.592	0.551	0.570
1,2-Dichloroethane	0.598	0.544	0.529
Benzene	1.455	1.088	
Trichloroethene	0.485	0.448	0.461
1,2-Dichloropropane	0.518	0.470	0.475
Bromodichloromethane	0.555	0.516	0.514
Dibromomethane	0.260	0.237	0.249
2-Chloroethyl Vinyl Ether	0.194	0.187	0.198
4-Methyl-2-Pentanone	0.132	0.122	0.117
Cis 1,3-dichloropropene	0.676	0.620	0.570
Toluene	0.946	0.783	0.707
Trans 1,3-Dichloropropene	0.559	0.524	0.508
2-Hexanone	0.322		

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: RG54 Project: LORA LAKES RI

Instrument ID: FINN5 Calibration Date: 07/23/10

LAB FILE ID: RF100: 1000723 RF150: 1500723 RF200: 2000723

COMPOUND	RF100	RF150	RF200
1,1,2-Trichloroethane	0.308	0.291	0.306
1,3-Dichloropropane	0.724	0.676	0.684
Tetrachloroethene	0.546	0.543	0.590
Chlorodibromomethane	0.493	0.479	0.528
1,2-Dibromoethane	0.328	0.309	0.324
Chlorobenzene	1.173	0.982	0.930
Ethyl Benzene	1.784	1.342	
1,1,1,2-Tetrachloroethane	0.428	0.439	0.492
m,p-xylene	0.804	0.647	0.616
o-Xylene	0.840	0.828	0.865
Styrene	1.342	1.127	1.094
Bromoform	0.539	0.500	0.474
1,1,2,2-Tetrachloroethane	0.890	0.780	0.707
1,2,3-Trichloropropane	0.183	0.160	0.146
Trans-1,4-Dichloro 2-Butene	0.299	0.258	0.237
N-Propyl Benzene	3.334		
Bromobenzene	0.956	0.872	0.817
Isopropyl Benzene	3.053	2.076	
2-Chloro Toluene	2.821	1.980	
4-Chloro Toluene	2.626	1.857	
T-Butyl Benzene	2.560	1.958	1.463
1,3,5-Trimethyl Benzene	2.733	1.921	
1,2,4-Trimethylbenzene	2.800	1.985	
S-Butyl Benzene	3.263		
4-Isopropyl Toluene	2.747	2.006	
1,3-Dichlorobenzene	1.804	1.479	1.214
1,4-Dichlorobenzene	1.775	1.484	1.208
N-Butyl Benzene	2.846	1.945	
1,2-Dichlorobenzene	1.586	1.401	1.156
1,2-Dibromo 3-Chloropropane	0.158	0.137	0.128
1,2,4-Trichlorobenzene	0.913	0.825	0.739
Hexachloro 1,3-Butadiene	0.597	0.554	0.542
Naphthalene	1.558	1.287	
1,2,3-Trichlorobenzene	0.822	0.736	0.646
Dichlorodifluoromethane	0.674	0.632	0.601
Methyl tert-Butyl Ether	1.542	1.313	1.151

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: RG54 Project: LORA LAKES RI

Instrument ID: FINN5 Calibration Date: 07/23/10

LAB FILE ID: RF100: 1000723 RF150: 1500723 RF200: 2000723

COMPOUND	RF100	RF150	RF200
d4-1,2-Dichloroethane	0.641	0.617	0.560
d8-Toluene	1.080	1.048	1.047
4-Bromofluorobenzene	0.592	0.613	0.695
d4-1,2-Dichlorobenzene	0.902	0.880	0.873
Dibromofluoromethane	0.586	0.572	0.533

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: RG54 Project: LORA LAKES RI

Instrument ID: FINN5 Calibration Date: 07/23/10

COMPOUND	CURVE TYPE	AVE RF	%RSD OR R^2
Chloromethane	AVRG	1.744	17.8
Vinyl Chloride	AVRG	1.379	13.3
Bromomethane	AVRG	0.749	16.3
Chloroethane	AVRG	0.901	18.3
Trichlorofluoromethane	AVRG	1.333	16.4
Acrolein	AVRG	0.166	17.8
112Trichloro122Trifluoroetha	AVRG	1.044	17.8
Acetone	AVRG	0.280	15.4
1,1-Dichloroethene	AVRG	0.947	12.4
Bromoethane	AVRG	0.701	8.2
Iodomethane	AVRG	1.120	8.5
Methylene Chloride	AVRG	1.066	19.9
Acrylonitrile	AVRG	0.247	12.5
Carbon Disulfide	AVRG	2.938	19.6
Trans-1,2-Dichloroethene	AVRG	0.807	6.3
Vinyl Acetate	AVRG	1.414	13.5
1,1-Dichloroethane	AVRG	1.485	14.1
2-Butanone	AVRG	0.315	11.8
2,2-Dichloropropane	AVRG	0.909	4.0
Cis-1,2-Dichloroethene	AVRG	0.711	3.7
Chloroform	AVRG	1.206	10.6
Bromochloromethane	AVRG	0.338	6.1
1,1,1-Trichloroethane	AVRG	0.938	4.9
1,1-Dichloropropene	AVRG	0.679	7.5
Carbon Tetrachloride	AVRG	0.590	4.7
1,2-Dichloroethane	AVRG	0.596	8.3
Benzene	AVRG	1.642	17.6
Trichloroethene	AVRG	0.481	7.2
1,2-Dichloropropane	AVRG	0.518	7.1
Bromodichloromethane	AVRG	0.553	6.5
Dibromomethane	AVRG	0.257	5.7
2-Chloroethyl Vinyl Ether	AVRG	0.181	10.5
4-Methyl-2-Pentanone	AVRG	0.132	6.7
Cis 1,3-dichloropropene	AVRG	0.604	9.4
Toluene	AVRG	0.974	18.0
Trans 1,3-Dichloropropene	AVRG	0.508	7.2
2-Hexanone	AVRG	0.409	13.6

<- Indicates value outside QC limits:
(%RSD < 20% or R^2 > 0.990)

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: RG54 Project: LORA LAKES RI

Instrument ID: FINN5 Calibration Date: 07/23/10

COMPOUND	CURVE TYPE	AVE RF	%RSD OR R^2
1,1,2-Trichloroethane	AVRG	0.303	7.0
1,3-Dichloropropane	AVRG	0.704	4.0
Tetrachloroethene	AVRG	0.556	7.0
Chlorodibromomethane	AVRG	0.473	7.2
1,2-Dibromoethane	AVRG	0.325	4.7
Chlorobenzene	AVRG	1.173	14.4
Ethyl Benzene	AVRG	1.983	16.3
1,1,1,2-Tetrachloroethane	AVRG	0.449	7.4
m,p-xylene	AVRG	0.725	10.2
o-Xylene	AVRG	0.753	12.3
Styrene	AVRG	1.165	10.5
Bromoform	AVRG	0.541	7.5
1,1,2,2-Tetrachloroethane	AVRG	0.972	18.2
1,2,3-Trichloropropane	AVRG	0.193	17.0
Trans-1,4-Dichloro 2-Butene	AVRG	0.299	13.1
N-Propyl Benzene	AVRG	4.345	13.4
Bromobenzene	AVRG	0.938	7.7
Isopropyl Benzene	AVRG	3.366	19.2
2-Chloro Toluene	AVRG	2.855	15.4
4-Chloro Toluene	AVRG	2.736	16.4
T-Butyl Benzene	AVRG	2.337	19.1
1,3,5-Trimethyl Benzene	AVRG	2.732	15.0
1,2,4-Trimethylbenzene	AVRG	2.690	15.2
S-Butyl Benzene	AVRG	3.845	10.6
4-Isopropyl Toluene	AVRG	2.638	15.6
1,3-Dichlorobenzene	AVRG	1.603	13.2
1,4-Dichlorobenzene	AVRG	1.604	12.2
N-Butyl Benzene	AVRG	2.849	16.1
1,2-Dichlorobenzene	AVRG	1.523	11.8
1,2-Dibromo 3-Chloropropane	AVRG	0.168	17.6
1,2,4-Trichlorobenzene	AVRG	0.927	13.0
Hexachloro 1,3-Butadiene	AVRG	0.624	12.0
Naphthalene	AVRG	1.682	14.5
1,2,3-Trichlorobenzene	AVRG	0.886	18.2
Dichlorodifluoromethane	AVRG	0.648	4.8
Methyl tert-Butyl Ether	AVRG	1.456	11.2

<- Indicates value outside QC limits:
(%RSD < 20% or R^2 > 0.990)

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: RG54 Project: LORA LAKES RI

Instrument ID: FINN5 Calibration Date: 07/23/10

COMPOUND	CURVE TYPE	AVE RF	%RSD OR R^2
d4-1,2-Dichloroethane	AVRG	0.652	7.8
d8-Toluene	AVRG	1.099	3.4
4-Bromofluorobenzene	AVRG	0.585	8.5
d4-1,2-Dichlorobenzene	AVRG	0.909	2.4
Dibromofluoromethane	AVRG	0.596	6.0

<- Indicates value outside QC limits:
(%RSD < 20% or R^2 > 0.990)

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: RG54 Project: LORA LAKES RI

Instrument ID: FINN5 Cont. Calib. Date: 08/04/10

Init. Calib. Date: 07/23/10 Cont. Calib. Time: 1024

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift	
Chloromethane	1.744	1.507	0.100	AVRG	-13.6	
Vinyl Chloride	1.379	1.432	0.010	AVRG	3.8	
Bromomethane	0.749	1.040	0.010	AVRG	38.8	<-
Chloroethane	0.901	0.975	0.010	AVRG	8.2	
Trichlorofluoromethane	1.333	1.203	0.010	AVRG	-9.8	
Acrolein	0.166	0.165	0.010	AVRG	-0.6	
112Trichloro122Trifluoroetha	1.044	1.110	0.010	AVRG	6.3	
Acetone	0.280	0.268	0.010	AVRG	-4.3	
1,1-Dichloroethene	0.947	0.962	0.010	AVRG	1.6	
Bromoethane	0.701	0.638	0.010	AVRG	-9.0	
Iodomethane	1.120	0.888	0.010	AVRG	-20.7	<-
Methylene Chloride	1.066	1.009	0.010	AVRG	-5.3	
Acrylonitrile	0.247	0.279	0.010	AVRG	13.0	
Carbon Disulfide	2.938	3.444	0.010	AVRG	17.2	
Trans-1,2-Dichloroethene	0.807	0.842	0.010	AVRG	4.3	
Vinyl Acetate	1.414	1.578	0.010	AVRG	11.6	
1,1-Dichloroethane	1.485	1.563	0.100	AVRG	5.2	
2-Butanone	0.315	0.329	0.010	AVRG	4.4	
2,2-Dichloropropane	0.908	0.830	0.010	AVRG	-8.6	
Cis-1,2-Dichloroethene	0.712	0.745	0.010	AVRG	4.6	
Chloroform	1.206	1.217	0.010	AVRG	0.9	
Bromochloromethane	0.338	0.313	0.010	AVRG	-7.4	
1,1,1-Trichloroethane	0.938	0.874	0.010	AVRG	-6.8	
1,1-Dichloropropene	0.679	0.692	0.010	AVRG	1.9	
Carbon Tetrachloride	0.590	0.561	0.010	AVRG	-4.9	
1,2-Dichloroethane	0.596	0.602	0.010	AVRG	1.0	
Benzene	1.642	1.724	0.010	AVRG	5.0	
Trichloroethene	0.481	0.479	0.010	AVRG	-0.4	
1,2-Dichloropropane	0.517	0.507	0.010	AVRG	-1.9	
Bromodichloromethane	0.553	0.551	0.010	AVRG	-0.4	
Dibromomethane	0.257	0.257	0.010	AVRG	0.0	
2-Chloroethyl Vinyl Ether	0.181	0.199	0.010	AVRG	9.9	
4-Methyl-2-Pentanone	0.132	0.128	0.010	AVRG	-3.0	
Cis 1,3-dichloropropene	0.604	0.636	0.010	AVRG	5.3	
Toluene	0.974	0.965	0.010	AVRG	-0.9	
Trans 1,3-Dichloropropene	0.508	0.516	0.010	AVRG	1.6	
2-Hexanone	0.409	0.388	0.010	AVRG	-5.1	

<- Exceeds QC limit of 20% D
* RF less than minimum RF

FORM VII VOA

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: RG54 Project: LORA LAKES RI

Instrument ID: FINN5 Cont. Calib. Date: 08/04/10

Init. Calib. Date: 07/23/10 Cont. Calib. Time: 1024

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift	
1,1,2-Trichloroethane	0.303	0.311	0.010	AVRG	2.6	
1,3-Dichloropropane	0.704	0.739	0.010	AVRG	5.0	
Tetrachloroethene	0.556	0.530	0.010	AVRG	-4.7	
Chlorodibromomethane	0.473	0.474	0.010	AVRG	0.2	
1,2-Dibromoethane	0.325	0.320	0.010	AVRG	-1.5	
Chlorobenzene	1.173	1.181	0.300	AVRG	0.7	
Ethyl Benzene	1.983	2.191	0.010	AVRG	10.5	
1,1,1,2-Tetrachloroethane	0.449	0.399	0.010	AVRG	-11.1	
m,p-xylene	0.725	0.864	0.010	AVRG	19.2	
o-Xylene	0.753	0.829	0.010	AVRG	10.1	
Styrene	1.165	1.378	0.010	AVRG	18.3	
Bromoform	0.541	0.499	0.100	AVRG	-7.8	
1,1,2,2-Tetrachloroethane	0.972	0.907	0.300	AVRG	-6.7	
1,2,3-Trichloropropane	0.192	0.181	0.010	AVRG	-5.7	
Trans-1,4-Dichloro 2-Butene	0.299	0.345	0.010	AVRG	15.4	
N-Propyl Benzene	4.345	4.589	0.010	AVRG	5.6	
Bromobenzene	0.938	0.924	0.010	AVRG	-1.5	
Isopropyl Benzene	3.366	3.758	0.010	AVRG	11.6	
2-Chloro Toluene	2.855	3.020	0.010	AVRG	5.8	
4-Chloro Toluene	2.737	3.165	0.010	AVRG	15.6	
T-Butyl Benzene	2.337	2.789	0.010	AVRG	19.3	
1,3,5-Trimethyl Benzene	2.732	3.230	0.010	AVRG	18.2	
1,2,4-Trimethylbenzene	2.690	3.211	0.010	AVRG	19.4	
S-Butyl Benzene	3.845	4.420	0.010	AVRG	15.0	
4-Isopropyl Toluene	2.638	3.296	0.010	AVRG	24.9	<-
1,3-Dichlorobenzene	1.603	1.842	0.010	AVRG	14.9	
1,4-Dichlorobenzene	1.604	1.780	0.010	AVRG	11.0	
N-Butyl Benzene	2.849	3.642	0.010	AVRG	27.8	<-
1,2-Dichlorobenzene	1.523	1.655	0.010	AVRG	8.7	
1,2-Dibromo 3-Chloropropane	0.168	0.149	0.010	AVRG	-11.3	
1,2,4-Trichlorobenzene	0.927	0.987	0.010	AVRG	6.5	
Hexachloro 1,3-Butadiene	0.624	0.655	0.010	AVRG	5.0	
Naphthalene	1.682	1.635	0.010	AVRG	-2.8	
1,2,3-Trichlorobenzene	0.886	0.878	0.010	AVRG	-0.9	
Dichlorodifluoromethane	0.648	0.638	0.010	AVRG	-1.5	
Methyl tert-Butyl Ether	1.456	1.314	0.010	AVRG	-9.8	

<- Exceeds QC limit of 20% D
* RF less than minimum RF

FORM VII VOA

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: RG54 Project: LORA LAKES RI

Instrument ID: FINN5 Cont. Calib. Date: 08/04/10

Init. Calib. Date: 07/23/10 Cont. Calib. Time: 1024

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
d4-1,2-Dichloroethane	0.652	0.601	0.010	AVRG	-7.8
d8-Toluene	1.099	1.130	0.010	AVRG	2.8
4-Bromofluorobenzene	0.585	0.586	0.010	AVRG	0.2
d4-1,2-Dichlorobenzene	0.909	0.895	0.010	AVRG	-1.5
Dibromofluoromethane	0.596	0.581	0.010	AVRG	-2.5

<- Exceeds QC limit of 20% D
* RF less than minimum RF

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: RG54 Project: LORA LAKES RI

Ical Midpoint ID: 0500723 Ical Date: 07/23/10

Instrument ID: FINN5 Project Run Date: 08/04/10

		IS1(PFB) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CLB) AREA #	RT #
	ICAL MIDPT	131115	6.62	191559	7.63	161199	10.78
	UPPER LIMIT	262230	7.12	383118	8.13	322398	11.28
	LOWER LIMIT	65558	6.12	95780	7.13	80600	10.28
	Sample ID						
01	LCS0804	136905	6.61	197026	7.63	159081	10.77
02	LCS0804	138668	6.63	207746	7.64	172992	10.79
03	MB0804	124649	6.62	186870	7.63	160706	10.78
04	PSB14-0-.5-0	124604	6.61	190632	7.63	148391	10.77
05	PSB14-1.5-2.	127471	6.63	200523	7.64	177766	10.79
06	PSB14-2-4-07	134260	6.62	202723	7.64	168315	10.78
07	PSB14-7-9-07	128932	6.63	191270	7.64	129652	10.79
08	PSB14-12-14-	134487	6.61	206649	7.63	182688	10.77
09	PSB14-TB	133581	6.62	203833	7.64	178411	10.78
10	PSB17-0-0.5-	140784	6.63	217805	7.65	189133	10.79
11	PSB17-1.5-2-	136382	6.61	207857	7.63	179355	10.77
12	PSB17-2-4-07	137301	6.61	211993	7.63	184003	10.77
13	PSB17-4-6-07	151986	6.63	224135	7.65	194637	10.79
14	PSB17-10-13-	147100	6.62	228084	7.63	198529	10.78
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (PFB) = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CLB) = d5-Chlorobenzene

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Ical midpoint
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Ical midpoint

* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: RG54 Project: LORA LAKES RI

Ical Midpoint ID: 0500723 Ical Date: 07/23/10

Instrument ID: FINN5 Project Run Date: 08/04/10

		IS4(DCB) AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	88279	13.47				
	UPPER LIMIT	176558	13.97				
	LOWER LIMIT	44140	12.97				
	Sample ID						
01	LCS0804	90190	13.46				
02	LCS0804	98470	13.47				
03	MB0804	78426	13.46				
04	PSB14-0-.5-0	55041	13.46				
05	PSB14-1.5-2.	90298	13.47				
06	PSB14-2-4-07	71184	13.47				
07	PSB14-7-9-07	40291*	13.47				
08	PSB14-12-14-	89531	13.46				
09	PSB14-TB	87420	13.47				
10	PSB17-0-0.5-	93367	13.48				
11	PSB17-1.5-2-	87784	13.46				
12	PSB17-2-4-07	91153	13.46				
13	PSB17-4-6-07	99445	13.48				
14	PSB17-10-13-	99405	13.47				
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (DCB) = d4-1,4-Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Ical midpoint
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Ical midpoint

* Values outside of QC limits.

Semivolatile PAH Analysis
Report and Summary QC Forms

ARI Job ID: RG54

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D GC/MS

Sample ID: PSB14-0-.5-072810
SAMPLE

Lab Sample ID: RG54A
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized:
Reported: 08/16/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/10/10
Date Analyzed: 08/12/10 17:41
Instrument/Analyst: NT6/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 26.6 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 7.6%

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	19	< 19 U
218-01-9	**Chrysene**	**19**	**10 J**
50-32-8	Benzo(a)pyrene	19	< 19 U
193-39-5	Indeno(1,2,3-cd)pyrene	19	< 19 U
53-70-3	Dibenz(a,h)anthracene	19	< 19 U
TOTBFA	Total Benzofluoranthenes	19	< 19 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery	
d14-p-Terphenyl	20.4%
2-Fluorobiphenyl	65.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D GC/MS

Sample ID: PSB14-0-.5-072810
REEXTRACT

Lab Sample ID: RG54A
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized:
Reported: 08/30/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/17/10
Date Analyzed: 08/19/10 17:03
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 6.90 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 7.6%

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	72	< 72 U
218-01-9	Chrysene	72	< 72 U
50-32-8	Benzo(a)pyrene	72	< 72 U
193-39-5	Indeno(1,2,3-cd)pyrene	72	< 72 U
53-70-3	Dibenz(a,h)anthracene	72	< 72 U
TOTBFA	Total Benzofluoranthenes	72	< 72 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery	
d14-p-Terphenyl	75.6%
2-Fluorobiphenyl	68.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D GC/MS

Sample ID: PSB14-1.5-2.0-072810
SAMPLE

Lab Sample ID: RG54B
LIMS ID: 10-18203
Matrix: Soil
Data Release Authorized:
Reported: 08/16/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/10/10
Date Analyzed: 08/12/10 18:14
Instrument/Analyst: NT6/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.7 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 8.5%

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	20	< 20 U
218-01-9	Chrysene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
TOTBFA	Total Benzofluoranthenes	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	38.8%
2-Fluorobiphenyl	60.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D GC/MS
Page 1 of 1

Sample ID: PSB14-2-4-072810
SAMPLE

Lab Sample ID: RG54C
LIMS ID: 10-18204
Matrix: Soil
Data Release Authorized:
Reported: 08/16/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/10/10
Date Analyzed: 08/12/10 18:46
Instrument/Analyst: NT6/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 26.1 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 9.0%

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	19	< 19 U
218-01-9	Chrysene	19	< 19 U
50-32-8	Benzo(a)pyrene	19	< 19 U
193-39-5	Indeno(1,2,3-cd)pyrene	19	< 19 U
53-70-3	Dibenz(a,h)anthracene	19	< 19 U
TOTBFA	Total Benzofluoranthenes	19	< 19 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	76.8%
2-Fluorobiphenyl	64.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D GC/MS

Sample ID: PSB14-7-9-072810
SAMPLE

Lab Sample ID: RG54E
LIMS ID: 10-18206
Matrix: Soil
Data Release Authorized:
Reported: 08/16/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/10/10
Date Analyzed: 08/12/10 19:19
Instrument/Analyst: NT6/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 26.1 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 10.9%

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	19	< 19 U
218-01-9	Chrysene	19	< 19 U
50-32-8	Benzo(a)pyrene	19	< 19 U
193-39-5	Indeno(1,2,3-cd)pyrene	19	< 19 U
53-70-3	Dibenz(a,h)anthracene	19	< 19 U
TOTBFA	Total Benzofluoranthenes	19	< 19 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery	
d14-p-Terphenyl	30.4%
2-Fluorobiphenyl	61.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D GC/MS

Sample ID: PSB14-12-14-072810
SAMPLE

Lab Sample ID: RG54F
LIMS ID: 10-18207
Matrix: Soil
Data Release Authorized:
Reported: 08/16/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/10/10
Date Analyzed: 08/12/10 19:51
Instrument/Analyst: NT6/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.9 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 11.0%

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	19	< 19 U
218-01-9	Chrysene	19	< 19 U
50-32-8	Benzo(a)pyrene	19	< 19 U
193-39-5	Indeno(1,2,3-cd)pyrene	19	< 19 U
53-70-3	Dibenz(a,h)anthracene	19	< 19 U
TOTBFA	Total Benzofluoranthenes	19	< 19 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

dl4-p-Terphenyl	78.0%
2-Fluorobiphenyl	60.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D GC/MS
Page 1 of 1

Sample ID: PSB17-0-0.5-072810
SAMPLE

Lab Sample ID: RG54H
LIMS ID: 10-18209
Matrix: Soil
Data Release Authorized:
Reported: 08/24/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/10/10
Date Analyzed: 08/13/10 14:09
Instrument/Analyst: NT6/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 6.5%

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	20	< 20 U
218-01-9	**Chrysene**	**20**	**40**
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
TOTBFA	Total Benzofluoranthenes	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	79.6%
2-Fluorobiphenyl	78.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D GC/MS

Sample ID: PSB17-1.5-2-072810
SAMPLE

Lab Sample ID: RG54I
LIMS ID: 10-18210
Matrix: Soil
Data Release Authorized:
Reported: 08/16/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/10/10
Date Analyzed: 08/12/10 20:56
Instrument/Analyst: NT6/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 26.1 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 5.3%

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	19	< 19 U
218-01-9	Chrysene	19	< 19 U
50-32-8	Benzo(a)pyrene	19	< 19 U
193-39-5	Indeno(1,2,3-cd)pyrene	19	< 19 U
53-70-3	Dibenz(a,h)anthracene	19	< 19 U
TOTBFA	Total Benzofluoranthenes	19	< 19 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery	
d14-p-Terphenyl	78.0%
2-Fluorobiphenyl	61.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D GC/MS

Sample ID: PSB17-2-4-072810
SAMPLE

Lab Sample ID: RG54J
LIMS ID: 10-18211
Matrix: Soil
Data Release Authorized:
Reported: 08/16/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/10/10
Date Analyzed: 08/12/10 21:29
Instrument/Analyst: NT6/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 7.4%

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	20	< 20 U
218-01-9	Chrysene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
TOTBFA	Total Benzofluoranthenes	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	71.6%
2-Fluorobiphenyl	56.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D GC/MS

Sample ID: PSB17-10-13-072810
SAMPLE

Lab Sample ID: RG54L
LIMS ID: 10-18213
Matrix: Soil
Data Release Authorized:
Reported: 08/16/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/10/10
Date Analyzed: 08/12/10 22:01
Instrument/Analyst: NT6/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 24.6 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 7.7%

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	20	< 20 U
218-01-9	Chrysene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
TOTBFA	Total Benzofluoranthenes	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	78.4%
2-Fluorobiphenyl	60.8%

ANALYTICAL RESOURCES INCORPORATED

SW8270 PNA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA

Client ID	TER	FBP	TOT OUT
MB-081010	74.4%	54.4%	0
LCS-081010	92.8%	64.8%	0
PSB14-0-.5-072810	20.4%*	65.6%	1
PSB14-0-.5-072810 RE	75.6%	68.4%	0
MB-081710	84.4%	67.2%	0
LCS-081710	81.2%	56.0%	0
PSB14-1.5-2.0-072810	38.8%	60.8%	0
PSB14-2-4-072810	76.8%	64.4%	0
PSB14-7-9-072810	30.4%*	61.6%	1
PSB14-12-14-072810	78.0%	60.8%	0
PSB17-0-0.5-072810	79.6%	78.0%	0
PSB17-1.5-2-072810	78.0%	61.6%	0
PSB17-2-4-072810	71.6%	56.4%	0
PSB17-10-13-072810	78.4%	60.8%	0

	LCS/MB LIMITS	QC LIMITS
(TER) = d14-p-Terphenyl	(47-112)	(35-112)
(FBP) = 2-Fluorobiphenyl	(40-100)	(34-100)

Prep Method: SW3550C
Log Number Range: 10-18202 to 10-18213

FORM-II SW8270 PNA

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D GC/MS

Sample ID: LCS-081010
LAB CONTROL

Lab Sample ID: LCS-081010
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized:
Reported: 08/16/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: NA
Date Received: 07/28/10

Date Extracted: 08/10/10
Date Analyzed: 08/12/10 12:47
Instrument/Analyst: NT6/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes

Sample Amount: 25.0 g-dry-wt
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00
Alumina Cleanup: No

Analyte	Lab Control	Spike Added	Recovery
Benzo(a)anthracene	390	500	78.0%
Chrysene	383	500	76.6%
Benzo(a)pyrene	337	500	67.4%
Indeno(1,2,3-cd)pyrene	352	500	70.4%
Dibenz(a,h)anthracene	356	500	71.2%
Total Benzofluoranthenes	752	1000	75.2%

Semivolatile Surrogate Recovery	
d14-p-Terphenyl	92.8%
2-Fluorobiphenyl	64.8%

Results reported in µg/kg

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D GC/MS
Page 1 of 1

Sample ID: LCS-081710
LAB CONTROL

Lab Sample ID: LCS-081710
LIMS ID: 10-18203
Matrix: Soil
Data Release Authorized:
Reported: 08/30/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: NA
Date Received: 07/28/10

Date Extracted: 08/17/10
Date Analyzed: 08/19/10 16:30
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes

Sample Amount: 25.0 g-dry-wt
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00
Alumina Cleanup: No

Analyte	Lab Control	Spike Added	Recovery
Benzo(a)anthracene	368	500	73.6%
Chrysene	361	500	72.2%
Benzo(a)pyrene	337	500	67.4%
Indeno(1,2,3-cd)pyrene	264	500	52.8%
Dibenz(a,h)anthracene	270	500	54.0%
Total Benzofluoranthenes	795	1000	79.5%

Semivolatile Surrogate Recovery	
d14-p-Terphenyl	81.2%
2-Fluorobiphenyl	56.0%

Results reported in µg/kg

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

RG51MBS1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: RG51 Project: LORA LAKES RI

Lab File ID: 08121002 Date Extracted: 08/10/10

Instrument ID: NT6 Date Analyzed: 08/12/10

Matrix: SOLID Time Analyzed: 1214

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	RG51LCSS1	RG51LCSS1	08121003	08/12/10
02	PSB12-0-0.5-0728	RG51A	08121005	08/12/10
03	PSB12-1.5-2.0-07	RG51B	08121006	08/12/10
04	PSB12-2-4-072810	RG51C	08121007	08/12/10
05	PSB12-8-10-07281	RG51E	08121008	08/12/10
06	PSB12-14-17-0728	RG51F	08121009	08/12/10
07	PSB12-14-17-072	RG51FMS	08121010	08/12/10
08	PSB12-14-17-072	RG51FMSD	08121011	08/12/10
09	PSB14-0-.5-07281	RG54A	08121012	08/12/10
10	PSB14-1.5-2.0-07	RG54B	08121013	08/12/10
11	PSB14-2-4-072810	RG54C	08121014	08/12/10
12	PSB14-7-9-072810	RG54E	08121015	08/12/10
13	PSB14-12-14-0728	RG54F	08121016	08/12/10
14	PSB17-1.5-2-0728	RG54I	08121018	08/12/10
15	PSB17-2-4-072810	RG54J	08121019	08/12/10
16	PSB17-10-13-0728	RG54L	08121020	08/12/10
17	PSB13-0-0.5-0729	RG60A	08121021	08/12/10
18	PSB13-1.5-2-0729	RG60B	08121022	08/12/10
19	PSB13-4-6-072910	RG60D	08131002	08/13/10
20	PSB13-11-13-0729	RG60E	08131003	08/13/10
21	PSB13-14.5-16.5-	RG60F	08131004	08/13/10
22	PSB17-0-0.5-0728	RG54H	08131006	08/13/10
23	PSB13-2-4-072910	RG60C	08131007	08/13/10
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FORM IV SV

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D GC/MS
Page 1 of 1

Sample ID: MB-081010
METHOD BLANK

Lab Sample ID: MB-081010
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized:
Reported: 08/16/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 08/10/10
Date Analyzed: 08/12/10 12:14
Instrument/Analyst: NT6/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.0 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	20	< 20 U
218-01-9	Chrysene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
TOTBFA	Total Benzofluoranthenes	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	74.4%
2-Fluorobiphenyl	54.4%

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

RG54MBS1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: RG54 Project: LORA LAKE RI

Lab File ID: 08191005 Date Extracted: 08/17/10

Instrument ID: NT4 Date Analyzed: 08/19/10

Matrix: SOLID Time Analyzed: 1556

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	RG54LCSS1	RG54LCSS1	08191006	08/19/10
02	PSB14-0-.5-07281	RG54ARE	08191007	08/19/10
03	PSB13-0-0.5-0729	RG60ARE	08191008	08/19/10
04	PSB13-1.5-2-0729	RG60BRE	08191009	08/19/10
05	PSB13-2-4-072910	RG60CRE	08191016	08/19/10
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FORM IV SV

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D GC/MS

Sample ID: MB-081710
METHOD BLANK

Lab Sample ID: MB-081710
LIMS ID: 10-18203
Matrix: Soil
Data Release Authorized:
Reported: 08/30/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 08/17/10
Date Analyzed: 08/19/10 15:56
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.0 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	20	< 20 U
218-01-9	Chrysene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
TOTBFA	Total Benzofluoranthenes	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	84.4%
2-Fluorobiphenyl	67.2%

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

Instrument ID: NT6 Project: LORA LAKES RI

DFTPP Injection Date: 07/23/10 DFTPP Injection Time: 1501

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	32.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	39.4
70	Less than 2.0% of mass 69	0.1 (0.3)1
127	10.0 - 80.0% of mass 198	50.5
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.4
275	10.0 - 60.0% of mass 198	26.8
365	Greater than 1.0% of mass 198	3.26
441	0.0 - 24.0% of mass 442	10.5 (15.1)2
442	50.0 - 200.0% of mass 198	69.5
443	15.0 - 24.0% of mass 442	14.4 (20.7)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	IC250723	IC250723	07231001	07/23/10	1501
02	IC010723	IC010723	07231002	07/23/10	1538
03	IC050723	IC050723	07231003	07/23/10	1616
04	IC100723	IC100723	07231004	07/23/10	1652
05	IC400723	IC400723	07231005	07/23/10	1729
06	IC600723	IC600723	07231006	07/23/10	1801
07	IC800723	IC800723	07231007	07/23/10	1838
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

Instrument ID: NT6 Project: LORA LAKES RI

DFTPP Injection Date: 08/12/10 DFTPP Injection Time: 1142

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	31.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	37.3
70	Less than 2.0% of mass 69	0.2 (0.6)1
127	10.0 - 80.0% of mass 198	47.8
197	Less than 2.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.3
275	10.0 - 60.0% of mass 198	27.4
365	Greater than 1.0% of mass 198	3.34
441	0.0 - 24.0% of mass 442	11.8 (15.2)2
442	50.0 - 200.0% of mass 198	77.6
443	15.0 - 24.0% of mass 442	15.3 (19.7)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC0812	CC0812	08121001	08/12/10	1142
02	RG51MBS1	RG51MBS1	08121002	08/12/10	1214
03	RG51LCSS1	RG51LCSS1	08121003	08/12/10	1247
04	PSB12-0-0.5-0728	RG51A	08121005	08/12/10	1352
05	PSB12-1.5-2.0-07	RG51B	08121006	08/12/10	1425
06	PSB12-2-4-072810	RG51C	08121007	08/12/10	1457
07	PSB12-8-10-07281	RG51E	08121008	08/12/10	1530
08	PSB12-14-17-0728	RG51F	08121009	08/12/10	1603
09	PSB12-14-17-072	RG51FMS	08121010	08/12/10	1636
10	PSB12-14-17-072	RG51FMSD	08121011	08/12/10	1708
11	PSB14-0-.5-07281	RG54A	08121012	08/12/10	1741
12	PSB14-1.5-2.0-07	RG54B	08121013	08/12/10	1814
13	PSB14-2-4-072810	RG54C	08121014	08/12/10	1846
14	PSB14-7-9-072810	RG54E	08121015	08/12/10	1919
15	PSB14-12-14-0728	RG54F	08121016	08/12/10	1951
16	PSB17-1.5-2-0728	RG54I	08121018	08/12/10	2056
17	PSB17-2-4-072810	RG54J	08121019	08/12/10	2129
18	PSB17-10-13-0728	RG54L	08121020	08/12/10	2201
19	PSB13-0-0.5-0729	RG60A	08121021	08/12/10	2233
20	PSB13-1.5-2-0729	RG60B	08121022	08/12/10	2306
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22					

FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

Instrument ID: NT6 Project: LORA LAKES RI

DFTPP Injection Date: 08/13/10 DFTPP Injection Time: 1124

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	31.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	37.6
70	Less than 2.0% of mass 69	0.3 (0.9)1
127	10.0 - 80.0% of mass 198	49.6
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.1
275	10.0 - 60.0% of mass 198	26.9
365	Greater than 1.0% of mass 198	2.89
441	0.0 - 24.0% of mass 442	11.2 (14.5)2
442	50.0 - 200.0% of mass 198	77.1
443	15.0 - 24.0% of mass 442	15.6 (20.2)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC0813	CC0813	08131001	08/13/10	1124
02	PSB13-4-6-072910	RG60D	08131002	08/13/10	1157
03	PSB13-11-13-0729	RG60E	08131003	08/13/10	1230
04	PSB13-14.5-16.5-	RG60F	08131004	08/13/10	1303
05	PSB17-0-0.5-0728	RG54H	08131006	08/13/10	1409
06	PSB13-2-4-072910	RG60C	08131007	08/13/10	1442
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FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOTD/SNIDER

Instrument ID: NT4 Project: LORA LAKE RI

DFTPP Injection Date: 07/19/10 DFTPP Injection Time: 1618

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	28.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	34.2
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	10.0 - 80.0% of mass 198	55.5
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.3
275	10.0 - 60.0% of mass 198	23.4
365	Greater than 1.0% of mass 198	2.50
441	0.0 - 24.0% of mass 442	13.5 (15.4)2
442	50.0 - 200.0% of mass 198	87.7
443	15.0 - 24.0% of mass 442	17.3 (19.8)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	IC250719	IC250719	07191001	07/19/10	1618
02	IC010719	IC010719	07191002	07/19/10	1656
03	IC050719	IC050719	07191003	07/19/10	1733
04	IC100719	IC100719	07191004	07/19/10	1807
05	IC400719	IC400719	07191005	07/19/10	1841
06	IC600719	IC600719	07191006	07/19/10	1914
07	IC800719	IC800719	07191007	07/19/10	1948
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FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOTD/SNIDER

Instrument ID: NT4 Project: LORA LAKE RI

DFTPP Injection Date: 08/19/10 DFTPP Injection Time: 1340

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	29.4
68	Less than 2.0% of mass 69	0.1 (0.3)1
69	Mass 69 relative abundance	35.8
70	Less than 2.0% of mass 69	0.5 (1.5)1
127	10.0 - 80.0% of mass 198	54.0
197	Less than 2.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 60.0% of mass 198	22.8
365	Greater than 1.0% of mass 198	2.32
441	0.0 - 24.0% of mass 442	2.8 (2.9)2
442	50.0 - 200.0% of mass 198	96.4
443	15.0 - 24.0% of mass 442	18.2 (18.8)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC0819	CC0819	08191001	08/19/10	1340
02	RG54MBS2	RG54MBS2	08191005	08/19/10	1556
03	RG54LCSS2	RG54LCSS2	08191006	08/19/10	1630
04	PSB14-0-.5-07281	RG54ARE	08191007	08/19/10	1703
05	PSB13-0-0.5-0729	RG60ARE	08191008	08/19/10	1737
06	PSB13-1.5-2-0729	RG60BRE	08191009	08/19/10	1811
07	PSB13-2-4-072910	RG60CRE	08191016	08/19/10	2215
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FORM V SV

6C

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: RG51 Project: LORA LAKES RI

Instrument ID: NT6 Calibration Date: 07/23/10

LAB FILE ID: RRF1 =07231002 RRF5 =07231003 RRF10 =07231004
RRF25 =07231001 RRF40 =07231005 RRF60 =07231006
RRF80 =07231007

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	___ RRF	%RSD /R^2
Naphthalene	1.344	1.200	1.234	1.150	1.086	0.978	0.921	1.130	13.0
2-Methylnaphthalene	0.728	0.638	0.666	0.617	0.598	0.559	0.536	0.620	10.5
Acenaphthylene	2.388	2.206	2.262	2.117	1.979	1.779	1.677	2.058	12.6
Acenaphthene	1.449	1.311	1.358	1.306	1.260	1.174	1.140	1.285	8.3
Dibenzofuran	1.971	1.742	1.824	1.716	1.655	1.552	1.492	1.707	9.5
Fluorene	1.725	1.509	1.552	1.465	1.398	1.296	1.238	1.455	11.3
Phenanthrene	1.456	1.294	1.343	1.256	1.196	1.102	1.049	1.242	11.3
Anthracene	1.476	1.349	1.393	1.324	1.242	1.132	1.067	1.283	11.3
Fluoranthene	1.469	1.440	1.474	1.407	1.319	1.196	1.117	1.346	10.5
Pyrene	1.491	1.147	1.199	1.298	1.134	1.109	1.052	1.204	12.3
Benzo(a)anthracene	1.391	1.067	1.108	1.258	1.104	1.098	1.067	1.156	10.6
Chrysene	1.340	1.001	1.042	1.160	1.031	1.015	0.986	1.082	11.7
Benzo(a)pyrene	1.398	1.287	1.363	1.282	1.246	1.150	1.101	1.261	8.5
Indeno(1,2,3-cd)pyrene	1.859	1.700	1.761	1.708	1.672	1.582	1.529	1.687	6.5
Dibenzo(a,h)anthracene	1.371	1.330	1.381	1.333	1.299	1.220	1.142	1.296	6.7
Benzo(g,h,i)perylene	1.721	1.540	1.579	1.535	1.502	1.415	1.360	1.522	7.7
1-methylnaphthalene	0.741	0.665	0.679	0.642	0.620	0.581	0.557	0.641	9.7
Total Benzofluoranthenes	1.545	1.350	1.369	1.319	1.237	1.131	1.063	1.288	12.5
Terphenyl-d14	0.848	0.620	0.666	0.760	0.675	0.682		0.708	11.6
2-Fluorobiphenyl	1.655	1.418	1.444	1.370	1.295	1.218		1.400	10.7

<- Outside QC limits: %RSD <20% or R^2 > 0.990

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: RG51 Project: LORA LAKES RI

Instrument ID: NT6 Cont. Calib. Date: 08/12/10

Init. Calib. Date: 07/23/10 Cont. Calib. Time: 1142

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Naphthalene	1.130	1.144	0.700	AVRG	1.2
2-Methylnaphthalene	0.620	0.638	0.400	AVRG	2.9
Acenaphthylene	2.058	2.069	0.900	AVRG	0.5
Acenaphthene	1.285	1.266	0.900	AVRG	-1.5
Dibenzofuran	1.707	1.712	0.800	AVRG	0.3
Fluorene	1.455	1.508	0.900	AVRG	3.6
Phenanthrene	1.242	1.275	0.700	AVRG	2.6
Anthracene	1.283	1.321	0.700	AVRG	3.0
Fluoranthene	1.346	1.462	0.600	AVRG	8.6
Pyrene	1.204	1.244	0.600	AVRG	3.3
Benzo(a)anthracene	1.156	1.243	0.800	AVRG	7.5
Chrysene	1.082	1.106	0.700	AVRG	2.2
Benzo(a)pyrene	1.261	1.301	0.700	AVRG	3.2
Indeno(1,2,3-cd)pyrene	1.687	1.630	0.500	AVRG	-3.4
Dibenzo(a,h)anthracene	1.296	1.283	0.400	AVRG	-1.0
Benzo(g,h,i)perylene	1.522	1.456	0.500	AVRG	-4.3
1-methylnaphthalene	0.641	0.662	0.010	AVRG	3.3
Total Benzofluoranthenes	1.288	1.322	0.010	AVRG	2.6
Terphenyl-d14	0.708	0.765	0.010	AVRG	8.0
2-Fluorobiphenyl	1.400	1.344	0.010	AVRG	-4.0

<- Exceeds QC limit of 20% D

* RF less than minimum RF

FORM VII SV-1

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: RG51 Project: LORA LAKES RI

Instrument ID: NT6 Cont. Calib. Date: 08/13/10

Init. Calib. Date: 07/23/10 Cont. Calib. Time: 1124

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Naphthalene	1.130	1.148	0.700	AVRG	1.6
2-Methylnaphthalene	0.620	0.630	0.400	AVRG	1.6
Acenaphthylene	2.058	2.075	0.900	AVRG	0.8
Acenaphthene	1.285	1.260	0.900	AVRG	-1.9
Dibenzofuran	1.707	1.727	0.800	AVRG	1.2
Fluorene	1.455	1.471	0.900	AVRG	1.1
Phenanthrene	1.242	1.268	0.700	AVRG	2.1
Anthracene	1.283	1.336	0.700	AVRG	4.1
Fluoranthene	1.346	1.474	0.600	AVRG	9.5
Pyrene	1.204	1.232	0.600	AVRG	2.3
Benzo(a)anthracene	1.156	1.243	0.800	AVRG	7.5
Chrysene	1.082	1.132	0.700	AVRG	4.6
Benzo(a)pyrene	1.261	1.264	0.700	AVRG	0.2
Indeno(1,2,3-cd)pyrene	1.687	1.659	0.500	AVRG	-1.6
Dibenzo(a,h)anthracene	1.296	1.311	0.400	AVRG	1.2
Benzo(g,h,i)perylene	1.522	1.479	0.500	AVRG	-2.8
1-methylnaphthalene	0.641	0.656	0.010	AVRG	2.3
Total Benzofluoranthenes	1.288	1.281	0.010	AVRG	-0.5
Terphenyl-d14	0.708	0.758	0.010	AVRG	7.1
2-Fluorobiphenyl	1.400	1.351	0.010	AVRG	-3.5

<- Exceeds QC limit of 20% D

* RF less than minimum RF

FORM VII SV-1

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: RG51 Project: LORA LAKES RI

Ical Midpoint ID: 07231001 Ical Date: 07/23/10

Instrument ID: NT6 Cont. Cal Date: 08/12/10

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	ICAL MIDPT	182786	7.59	584137	9.64	320442	12.50
	UPPER LIMIT	365572		1168274		640884	
	LOWER LIMIT	91393		292068		160221	
	CCAL	170078	7.25	563656	9.33	331873	12.20
	UPPER LIMIT		7.75		9.83		12.70
	LOWER LIMIT		6.75		8.83		11.70
01	RG51MBS1			654011	9.32	386336	12.19
02	RG51LCSS1			659808	9.32	376047	12.19
03	PSB12-0-0.5-			624298	9.32	363695	12.19
04	PSB12-1.5-2.			644085	9.32	378101	12.20
05	PSB12-2-4-07			675619	9.32	402393	12.20
06	PSB12-8-10-0			690383	9.33	400767	12.20
07	PSB12-14-17-			672234	9.32	389561	12.20
08	PSB12-14-17-			647337	9.32	368766	12.20
09	PSB12-14-17-			684526	9.32	391450	12.20
10	PSB14-0-.5-0			646802	9.32	372263	12.19
11	PSB14-1.5-2.			684688	9.32	394732	12.20
12	PSB14-2-4-07			697008	9.32	405526	12.19
13	PSB14-7-9-07			688034	9.33	406917	12.20
14	PSB14-12-14-			680198	9.32	399910	12.20
15	PSB17-1.5-2-			666015	9.33	391326	12.20
16	PSB17-2-4-07			675475	9.33	399146	12.20
17	PSB17-10-13-			673627	9.32	398471	12.20
18	PSB13-0-0.5-			635836	9.32	370489	12.20
19	PSB13-1.5-2-			672506	9.33	396543	12.20
20							
21							
22							
23							
24							
25							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-1

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: RG51 Project: LORA LAKES RI

Ical Midpoint ID: 07231001 Ical Date: 07/23/10

Instrument ID: NT6 Cont. Cal Date: 08/12/10

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	ICAL MIDPT	503793	14.86	532343	19.16	517269	21.31
	UPPER LIMIT	1007586		1064686		1034538	
	LOWER LIMIT	251896		266172		258634	
	CCAL	526027	14.57	597231	18.89	556523	21.04
	UPPER LIMIT		15.07		19.39		21.54
	LOWER LIMIT		14.07		18.39		20.54
01	RG51MBS1	624497	14.56	689136	18.88	618317	21.04
02	RG51LCSS1	616996	14.56	660878	18.89	624348	21.04
03	PSB12-0-0.5-	582400	14.57	758225	18.89	752564	21.06
04	PSB12-1.5-2.	606153	14.57	727151	18.89	726625	21.05
05	PSB12-2-4-07	645964	14.57	772569	18.89	779609	21.06
06	PSB12-8-10-0	655503	14.57	758101	18.89	745929	21.05
07	PSB12-14-17-	623192	14.57	771041	18.89	770890	21.05
08	PSB12-14-17-	609818	14.57	724259	18.89	744130	21.05
09	PSB12-14-17-	646825	14.57	805012	18.89	809972	21.05
10	PSB14-0-.5-0	604870	14.57	792141	18.89	779443	21.07
11	PSB14-1.5-2.	650726	14.57	791148	18.89	754770	21.05
12	PSB14-2-4-07	659514	14.57	805472	18.89	768749	21.05
13	PSB14-7-9-07	657807	14.57	815444	18.89	808589	21.06
14	PSB14-12-14-	646609	14.57	802236	18.89	765842	21.05
15	PSB17-1.5-2-	638836	14.57	777046	18.89	722521	21.05
16	PSB17-2-4-07	666150	14.57	834140	18.89	744511	21.05
17	PSB17-10-13-	658509	14.57	817846	18.89	755989	21.05
18	PSB13-0-0.5-	618800	14.57	763836	18.89	732220	21.05
19	PSB13-1.5-2-	662430	14.57	834468	18.89	779307	21.06
20							
21							
22							
23							
24							
25							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-2

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: RG51 Project: LORA LAKES RI

Ical Midpoint ID: 07231001 Ical Date: 07/23/10

Instrument ID: NT6 Cont. Cal Date: 08/12/10

		IS7 AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	719428	20.35				
	UPPER LIMIT	1438856					
	LOWER LIMIT	359714					
	CCAL	727831	20.13				
	UPPER LIMIT		20.63				
	LOWER LIMIT		19.63				
01	RG51MBS1						
02	RG51LCSS1						
03	PSB12-0-0.5-						
04	PSB12-1.5-2.						
05	PSB12-2-4-07						
06	PSB12-8-10-0						
07	PSB12-14-17-						
08	PSB12-14-17-						
09	PSB12-14-17-						
10	PSB14-0-.5-0						
11	PSB14-1.5-2.						
12	PSB14-2-4-07						
13	PSB14-7-9-07						
14	PSB14-12-14-						
15	PSB17-1.5-2-						
16	PSB17-2-4-07						
17	PSB17-10-13-						
18	PSB13-0-0.5-						
19	PSB13-1.5-2-						
20							
21							
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23							
24							
25							

IS7 = Di-n-octylphthalate-d4

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: RG51 Project: LORA LAKES RI

Ical Midpoint ID: 07231001 Ical Date: 07/23/10

Instrument ID: NT6 Cont. Cal Date: 08/13/10

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	ICAL MIDPT	182786		7.59		584137		9.64		320442		12.50	
	UPPER LIMIT	365572				1168274				640884			
	LOWER LIMIT	91393				292068				160221			
	CCAL	166565		7.19		550174		9.25		321882		12.09	
	UPPER LIMIT			7.69				9.75				12.59	
	LOWER LIMIT			6.69				8.75				11.59	
01	PSB13-4-6-07					646607		9.24		380788		12.09	
02	PSB13-11-13-					655374		9.24		389020		12.08	
03	PSB13-14.5-1					657063		9.24		382063		12.09	
04	PSB17-0-0.5-					626035		9.24		374024		12.09	
05	PSB13-2-4-07					667186		9.25		410669		12.09	
06													
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24													
25													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-1

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: RG51 Project: LORA LAKES RI

Ical Midpoint ID: 07231001 Ical Date: 07/23/10

Instrument ID: NT6 Cont. Cal Date: 08/13/10

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	ICAL MIDPT	503793	14.86	532343	19.16	517269	21.31
	UPPER LIMIT	1007586		1064686		1034538	
	LOWER LIMIT	251896		266172		258634	
	CCAL	505369	14.44	591540	18.72	590209	20.85
	UPPER LIMIT		14.94		19.22		21.35
	LOWER LIMIT		13.94		18.22		20.35
01	PSB13-4-6-07	616103	14.44	683741	18.71	676003	20.85
02	PSB13-11-13-	630919	14.43	730490	18.71	755660	20.85
03	PSB13-14.5-1	634253	14.43	767749	18.71	788938	20.86
04	PSB17-0-0.5-	619985	14.44	848355	18.73	705991	20.89
05	PSB13-2-4-07	703145	14.44	724927	18.76	307927	20.94
06							
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25							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-2

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No: RG51 Project: LORA LAKES RI

Ical Midpoint ID: 07231001 Ical Date: 07/23/10

Instrument ID: NT6 Cont. Cal Date: 08/13/10

		IS7 AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	719428	20.35				
	UPPER LIMIT	1438856					
	LOWER LIMIT	359714					
	CCAL	731396	19.94				
	UPPER LIMIT		20.44				
	LOWER LIMIT		19.44				
01	PSB13-4-6-07						
02	PSB13-11-13-						
03	PSB13-14.5-1						
04	PSB17-0-0.5-						
05	PSB13-2-4-07						
06							
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IS7 = Di-n-octylphthalate-d4

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-3

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOTD/SNIDER

ARI Job No: RG54 Project: LORA LAKE RI

Instrument ID: NT4 Calibration Date: 07/19/10

LAB FILE ID: RRF1 =07191002 RRF5 =07191003 RRF10 =07191004
RRF25 =07191001 RRF40 =07191005 RRF60 =07191006
RRF80 =07191007

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	___ RRF	%RSD /R^2
Naphthalene	1.181	1.019	1.014	0.962	0.896	0.777	0.792	0.949	14.9
2-Methylnaphthalene	0.746	0.663	0.663	0.650	0.638	0.574	0.580	0.645	9.0
Acenaphthylene	1.949	1.755	1.753	1.672	1.560	1.388	1.409	1.641	12.3
Acenaphthene	1.245	1.099	1.112	1.066	1.031	0.944	0.980	1.068	9.2
Dibenzofuran	1.646	1.492	1.498	1.424	1.360	1.260	1.288	1.424	9.5
Fluorene	1.445	1.300	1.316	1.260	1.179	1.051	1.074	1.232	11.4
Phenanthrene	1.270	1.078	1.084	1.038	0.986	0.893	0.904	1.036	12.4
Anthracene	1.269	1.107	1.124	1.074	1.022	0.908	0.916	1.060	11.9
Fluoranthene	1.233	1.101	1.145	1.101	1.070	0.936	0.928	1.073	10.2
Pyrene	1.549	1.324	1.302	1.293	1.196	1.087	1.126	1.268	12.1
Benzo(a)anthracene	1.400	1.207	1.241	1.176	1.116	1.016	1.050	1.172	11.0
Chrysene	1.384	1.200	1.214	1.158	1.079	0.977	1.021	1.148	12.0
Benzo(a)pyrene	1.234	1.104	1.132	1.125	1.085	1.008	1.041	1.104	6.6
Indeno(1,2,3-cd)pyrene	1.109	1.079	1.195	1.245	1.261	1.177	1.234	1.186	5.9
Dibenzo(a,h)anthracene	0.819	0.863	0.968	1.027	1.038	0.954	1.003	0.953	8.8
Benzo(g,h,i)perylene	0.944	0.900	1.054	1.046	1.078	1.014	1.058	1.013	6.6
1-methylnaphthalene	0.738	0.636	0.645	0.635	0.631	0.563	0.574	0.632	9.1
Total Benzofluoranthenes	1.382	1.227	1.244	1.199	1.142	1.024	1.044	1.180	10.5
Terphenyl-d14	0.936	0.818	0.742	0.802	0.727	0.686	0.710	0.774	11.1
2-Fluorobiphenyl	1.464	1.332	1.174	1.258	1.162	1.080	1.106	1.225	11.1

<- Outside QC limits: %RSD <20% or R^2 > 0.990

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOTD/SNIDER

ARI Job No: RG54 Project: LORA LAKE RI

Instrument ID: NT4 Cont. Calib. Date: 08/19/10

Init. Calib. Date: 07/19/10 Cont. Calib. Time: 1340

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Naphthalene	0.949	0.920	0.700	AVRG	-3.0
2-Methylnaphthalene	0.645	0.611	0.400	AVRG	-5.3
Acenaphthylene	1.641	1.645	0.900	AVRG	0.2
Acenaphthene	1.068	1.031	0.900	AVRG	-3.5
Dibenzofuran	1.424	1.383	0.800	AVRG	-2.9
Fluorene	1.232	1.160	0.900	AVRG	-5.8
Phenanthrene	1.036	0.934	0.700	AVRG	-9.8
Anthracene	1.060	0.973	0.700	AVRG	-8.2
Fluoranthene	1.073	1.006	0.600	AVRG	-6.2
Pyrene	1.268	1.231	0.600	AVRG	-2.9
Benzo(a)anthracene	1.172	1.120	0.800	AVRG	-4.4
Chrysene	1.148	1.095	0.700	AVRG	-4.6
Benzo(a)pyrene	1.104	1.035	0.700	AVRG	-6.2
Indeno(1,2,3-cd)pyrene	1.186	1.130	0.500	AVRG	-4.7
Dibenzo(a,h)anthracene	0.953	0.929	0.400	AVRG	-2.5
Benzo(g,h,i)perylene	1.013	0.935	0.500	AVRG	-7.7
1-methylnaphthalene	0.632	0.610	0.010	AVRG	-3.5
Total Benzofluoranthenes	1.180	1.076	0.010	AVRG	-8.8
Terphenyl-d14	0.774	0.728	0.010	AVRG	-5.9
2-Fluorobiphenyl	1.225	1.107	0.010	AVRG	-9.6

<- Exceeds QC limit of 20% D

* RF less than minimum RF

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOTD/SNIDER

ARI Job No: RG54 Project: LORA LAKE RI

Ical Midpoint ID: 07191001 Ical Date: 07/19/10

Instrument ID: NT4 Cont. Cal Date: 08/19/10

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	ICAL MIDPT	356478	8.70	1293412	10.74	785897	13.63
	UPPER LIMIT	712956		2586824		1571794	
	LOWER LIMIT	178239		646706		392948	
	CCAL	386792	7.68	1352410	9.72	840037	12.57
	UPPER LIMIT		8.18		10.22		13.07
	LOWER LIMIT		7.18		9.22		12.07
01	RG54MBS2			1015849	9.71	622493	12.56
02	RG54LCSS2			1100384	9.72	664342	12.56
03	PSB14-0-.5-0			1332651	9.72	801090	12.56
04	PSB13-0-0.5-			1244824	9.71	755544	12.56
05	PSB13-1.5-2-			1233306	9.71	731833	12.56
06	PSB13-2-4-07			1889642	9.72	1146096	12.56
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25							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-1

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOTD/SNIDER

ARI Job No: RG54 Project: LORA LAKE RI

Ical Midpoint ID: 07191001 Ical Date: 07/19/10

Instrument ID: NT4 Cont. Cal Date: 08/19/10

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	ICAL MIDPT	1313990		16.03		1155293		20.38		1146289		22.58	
	UPPER LIMIT	2627980				2310586				2292578			
	LOWER LIMIT	656995				577646				573144			
	CCAL	1383202		14.93		1161620		19.22		1257185		21.37	
	UPPER LIMIT			15.43				19.72				21.87	
	LOWER LIMIT			14.43				18.72				20.87	
01	RG54MBS2	1028403		14.92		991004		19.21		879245		21.36	
02	RG54LCSS2	1115640		14.92		1048244		19.22		935470		21.37	
03	PSB14-0-.5-0	1338340		14.92		1284700		19.22		959185		21.37	
04	PSB13-0-0.5-	1241479		14.92		1145912		19.21		970947		21.36	
05	PSB13-1.5-2-	1250218		14.92		1139194		19.21		923017		21.36	
06	PSB13-2-4-07	1980045		14.92		1705384		19.22		895198		21.37	
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-2

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOTD/SNIDER

ARI Job No: RG54 Project: LORA LAKE RI

Ical Midpoint ID: 07191001 Ical Date: 07/19/10

Instrument ID: NT4 Cont. Cal Date: 08/19/10

		IS7 AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	1825297	21.45				
	UPPER LIMIT	3650594					
	LOWER LIMIT	912648					
	CCAL	1834295	20.38				
	UPPER LIMIT		20.88				
	LOWER LIMIT		19.88				
01	RG54MBS2						
02	RG54LCSS2						
03	PSB14-0-.5-0						
04	PSB13-0-0.5-						
05	PSB13-1.5-2-						
06	PSB13-2-4-07						
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

IS7 = Di-n-octylphthalate-d4

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-3

PCP/Chlorophenols Analysis
Report and Summary QC Forms

ARI Job ID: RG54

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: PSB14-0-.5-072810
SAMPLE

Lab Sample ID: RG54A
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized:
Reported: 08/18/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/07/10
Date Analyzed: 08/13/10 18:24
Instrument/Analyst: ECD1/YZ

Sample Amount: 9.32 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: 7.6%

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	6.7	8.5

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	16.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: PSB14-1.5-2.0-072810
SAMPLE

Lab Sample ID: RG54B
LIMS ID: 10-18203
Matrix: Soil
Data Release Authorized:
Reported: 08/18/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/07/10
Date Analyzed: 08/13/10 19:24
Instrument/Analyst: ECD1/YZ

Sample Amount: 9.17 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: 8.5%

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	6.8	11

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	43.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: PSB14-2-4-072810
SAMPLE

Lab Sample ID: RG54C
LIMS ID: 10-18204
Matrix: Soil
Data Release Authorized:
Reported: 08/18/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/07/10
Date Analyzed: 08/13/10 19:44
Instrument/Analyst: ECD1/YZ

Sample Amount: 9.21 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: 9.0%

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	**6.8**	**9.0**

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	59.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: PSB14-7-9-072810
SAMPLE

Lab Sample ID: RG54E
LIMS ID: 10-18206
Matrix: Soil
Data Release Authorized:
Reported: 08/18/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/07/10
Date Analyzed: 08/13/10 20:04
Instrument/Analyst: ECD1/YZ

Sample Amount: 9.42 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: 10.9%

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	**6.6**	**9.4**

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	12.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: PSB14-12-14-072810
SAMPLE

Lab Sample ID: RG54F
LIMS ID: 10-18207
Matrix: Soil
Data Release Authorized:
Reported: 08/18/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/07/10
Date Analyzed: 08/13/10 20:24
Instrument/Analyst: ECD1/YZ

Sample Amount: 9.14 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: 11.0%

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	6.8	11

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	52.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: PSB17-0-0.5-072810
SAMPLE

Lab Sample ID: RG54H
LIMS ID: 10-18209
Matrix: Soil
Data Release Authorized:
Reported: 08/18/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/07/10
Date Analyzed: 08/13/10 20:44
Instrument/Analyst: ECD1/YZ

Sample Amount: 9.75 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: 6.5%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	6.4	< 6.4 U

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	12.7%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: PSB17-1.5-2-072810
SAMPLE

Lab Sample ID: RG54I
LIMS ID: 10-18210
Matrix: Soil
Data Release Authorized:
Reported: 08/18/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/07/10
Date Analyzed: 08/13/10 21:44
Instrument/Analyst: ECD1/YZ

Sample Amount: 9.70 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: 5.3%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	6.4	< 6.4 U

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	42.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: PSB17-2-4-072810
SAMPLE

Lab Sample ID: RG54J
LIMS ID: 10-18211
Matrix: Soil
Data Release Authorized:
Reported: 08/18/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/07/10
Date Analyzed: 08/13/10 22:04
Instrument/Analyst: ECD1/YZ

Sample Amount: 9.38 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: 7.4%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	6.7	< 6.7 U

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	51.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: PSB17-4-6-072810
SAMPLE

Lab Sample ID: RG54K
LIMS ID: 10-18212
Matrix: Soil
Data Release Authorized:
Reported: 08/18/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/07/10
Date Analyzed: 08/13/10 22:24
Instrument/Analyst: ECD1/YZ

Sample Amount: 9.35 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: 7.7%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	6.7	< 6.7 U

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	24.1%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: PSB17-10-13-072810
SAMPLE

Lab Sample ID: RG54L
LIMS ID: 10-18213
Matrix: Soil
Data Release Authorized:
Reported: 08/18/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/07/10
Date Analyzed: 08/13/10 22:44
Instrument/Analyst: ECD1/YZ

Sample Amount: 9.33 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: 7.7%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	6.7	< 6.7 U

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	36.8%

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA

Client ID	TBP	TOT OUT
MB-080710	50.0%	0
LCS-080710	54.8%	0
PSB14-0-.5-072810	16.8%	0
PSB14-0-.5-072810 MS	21.2%	0
PSB14-0-.5-072810 MSD	18.9%	0
PSB14-1.5-2.0-072810	43.6%	0
PSB14-2-4-072810	59.6%	0
PSB14-7-9-072810	12.4%	0
PSB14-12-14-072810	52.4%	0
PSB17-0-0.5-072810	12.7%	0
PSB17-1.5-2-072810	42.8%	0
PSB17-2-4-072810	51.2%	0
PSB17-4-6-072810	24.1%	0
PSB17-10-13-072810	36.8%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(50-115)	(10-146)

Prep Method: SW3550B
Log Number Range: 10-18202 to 10-18213

FORM-II SW8041

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: PSB14-0-.5-072810
MS/MSD

Lab Sample ID: RG54A
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized:
Reported: 08/18/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted MS/MSD: 08/07/10

Sample Amount MS: 9.63 g-dry-wt
MSD: 9.30 g-dry-wt

Date Analyzed MS: 08/13/10 18:44
MSD: 08/13/10 19:04

Final Extract Volume MS: 25 mL
MSD: 25 mL

Instrument/Analyst MS: ECD1/YZ
MSD: ECD1/YZ

Dilution Factor MS: 1.00
MSD: 1.00

Percent Moisture: 7.6%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Pentachlorophenol	8.52	42.8	64.9	52.8%	56.7	67.2	71.7%	27.9%

Results reported in µg/kg
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: PSB14-0-.5-072810
MATRIX SPIKE

Lab Sample ID: RG54A
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized:
Reported: 08/18/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/07/10
Date Analyzed: 08/13/10 18:44
Instrument/Analyst: ECD1/YZ

Sample Amount: 9.63 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: 7.6%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	6.5	---

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	21.2%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: PSB14-0-.5-072810
MATRIX SPIKE DUP

Lab Sample ID: RG54A
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized:
Reported: 08/18/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/07/10
Date Analyzed: 08/13/10 19:04
Instrument/Analyst: ECD1/YZ

Sample Amount: 9.30 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: 7.6%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	6.7	---

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	18.9%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: LCS-080710
LAB CONTROL

Lab Sample ID: LCS-080710
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized:
Reported: 08/18/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Extracted: 08/07/10
Date Analyzed: 08/13/10 18:04
Instrument/Analyst: ECD1/YZ

Sample Amount: 10.0 g
Final Extract Volume: 25 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
Pentachlorophenol	44.1	62.5	70.6%

Chlorophenols Surrogate Recovery

2,4,6-Tribromophenol	54.8%

Results reported in µg/kg

FORM III

4

CHLOROPHENOL METHOD BLANK SUMMARY

SAMPLE NO.

RG54MBS1

Lab Name: ANALYTICAL RESOURCES, INC
Client: FLOYD/SNIDER

ARI Job No.: RG54
Project: LORA LAKE

Lab Sample ID: RG54MBS1
Lab File ID: 0813A026

Matrix (soil/water) SOLID
Extraction:(SepF/Cont/Sonc) SW3550C

Sulfur Cleanup (Y/N) Y
Date Extracted: 08/07/10

Date Analyzed (1): 08/13/10
Date Analyzed (2): 08/13/10

Time Analyzed (1): 1744
Time Analyzed (2): 1744

Instrument ID (1): ECD1
Instrument ID (2): ECD1

GC Column (1): ZB5 ID: 0.53(mm)
GC Column (2): ZB35 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	RG54LCSS1	RG54LCSS1	08/13/10	08/13/10
02	PSB14-0-.5-0	RG54A	08/13/10	08/13/10
03	PSB14-0-.5-0	RG54AMS	08/13/10	08/13/10
04	PSB14-0-.5-0	RG54AMSD	08/13/10	08/13/10
05	PSB14-1.5-2.	RG54B	08/13/10	08/13/10
06	PSB14-2-4-07	RG54C	08/13/10	08/13/10
07	PSB14-7-9-07	RG54E	08/13/10	08/13/10
08	PSB14-12-14-	RG54F	08/13/10	08/13/10
09	PSB17-0-0.5-	RG54H	08/13/10	08/13/10
10	PSB17-1.5-2-	RG54I	08/13/10	08/13/10
11	PSB17-2-4-07	RG54J	08/13/10	08/13/10
12	PSB17-4-6-07	RG54K	08/13/10	08/13/10
13	PSB17-10-13-	RG54L	08/13/10	08/13/10
14	PSB13-0-0.5-	RG60A	08/13/10	08/13/10
15	PSB13-1.5-2-	RG60B	08/13/10	08/13/10
16	PSB13-2-4-07	RG60C	08/13/10	08/13/10
17	PSB13-4-6-07	RG60D	08/14/10	08/14/10
18	PSB13-11-13-	RG60E	08/14/10	08/14/10
19	PSB13-14.5-1	RG60F	08/14/10	08/14/10

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MB-080710
METHOD BLANK

Lab Sample ID: MB-080710
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized:
Reported: 08/18/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 08/07/10
Date Analyzed: 08/13/10 17:44
Instrument/Analyst: ECD1/YZ

Sample Amount: 10.0 g
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	6.2	< 6.2 U

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	50.0%

FORM I

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: RG54 Project: LORA LAKE

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 08/09/10

COMPOUND	RT OF STANDARDS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	MEAN RT	RT WINDOW FROM	TO
Pentachlorophenol	11.22	11.22	11.22	11.21	11.21	11.21	11.15	11.29
2,4,6-Trichloropheno	7.26	7.26	7.26	7.26	7.26	7.26	7.19	7.33
2,3,6-Trichloropheno	7.62	7.62	7.62	7.61	7.61	7.62	7.55	7.69
2,4,5-Trichloropheno	8.25	8.24	8.23	8.22	8.21	8.23	8.17	8.31
2,3,4-Trichloropheno	8.81	8.79	8.78	8.77	8.76	8.78	8.72	8.86
2,3,5,6-Tetrachlorop	9.01	9.01	9.00	9.00	8.99	9.00	8.94	9.08
2,3,4,5-Tetrachlorop	10.42	10.41	10.41	10.40	10.39	10.40	10.34	10.48
2,4-Dichlorophenol	6.90	6.89	6.89	6.89	6.88	6.89	6.82	6.96
2,4,6-Tribromophenol	10.01	10.00	10.00	9.99	9.98	10.00	9.93	10.07

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: RG54 Project: LORA LAKE

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 08/09/10

COMPOUND	RT OF STANDARDS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	MEAN RT	RT WINDOW FROM	TO
Pentachlorophenol	11.66	11.65	11.65	11.65	11.65	11.65	11.59	11.73
2,4,6-Trichloropheno	7.33	7.33	7.33	7.33	7.33	7.33	7.26	7.40
2,3,6-Trichloropheno	7.86	7.86	7.86	7.86	7.85	7.86	7.79	7.93
2,4,5-Trichloropheno	8.62	8.61	8.60	8.59	8.59	8.60	8.54	8.69
2,3,4-Trichloropheno	9.38	9.37	9.36	9.36	9.35	9.36	9.31	9.45
2,3,5,6-Tetrachlorop	9.28	9.27	9.27	9.26	9.26	9.27	9.21	9.35
2,3,4,5-Tetrachlorop	11.13	11.12	11.11	11.11	11.10	11.11	11.06	11.20
2,4-Dichlorophenol	7.17	7.16	7.16	7.16	7.15	7.16	7.10	7.24
2,4,6-Tribromophenol	10.65	10.64	10.64	10.63	10.63	10.64	10.58	10.72

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: RG54 Project: LORA LAKE

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 08/09/10

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol	24528	19824	17830	15337	13686	11965	0.9996	Q
2,4,6-Trichlorophenol	13540	10473	9560	8413	7539	6660	0.9997	Q
2,3,6-Trichlorophenol	12902	10500	9607	8801	8025	7161	0.9998	Q
2,4,5-Trichlorophenol	6404	5362	5688	4915	4290	3627	19.7	A
2,3,4-Trichlorophenol	8393	7068	7135	7922	5474	5053	19.4	A
2,3,5,6-Tetrachloroph	17905	15060	14996	14233	11882	10558	18.4	A
2,3,4,5-Tetrachloroph	16324	13459	12294	10216	8895	7628	0.9995	Q
2,4-Dichlorophenol	721	627	611	486	409	342	0.9993	Q
2,4,6-Tribromophenol	18561	14998	13969	12135	11200	9940	0.9997	Q
						AVE RSD	23.3	

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A006.d/0809A006.cdf
LVL 2: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A007.d/0809A007.cdf
LVL 3: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A008.d
LVL 4: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A005.d/0809A005.cdf
LVL 5: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A009.d
LVL 6: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A010.d

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: RG54 Project: LORA LAKE

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 08/09/10

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol	28790	24995	23903	21206	20507	18368	16.2	A
2,4,6-Trichlorophenol	14811	12542	14020	12241	11222	10070	14.0	A
2,3,6-Trichlorophenol	15358	13183	12610	12054	11138	10108	14.6	A
2,4,5-Trichlorophenol	9451	7724	7152	6203	5568	4896	0.9997	Q
2,3,4-Trichlorophenol	13138	11714	9430	8408	7532	6669	0.9995	Q
2,3,5,6-Tetrachloroph	22710	20100	18581	17733	16666	15298	14.2	A
2,3,4,5-Tetrachloroph	18414	16106	15136	13550	12798	11541	17.0	A
2,4-Dichlorophenol	859	720	733	619	536	458	0.9997	Q
2,4,6-Tribromophenol	22648	19438	18816	17793	17226	16083	12.2	A
						AVE RSD	17.9	

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A006.d/0809A006.cdf
LVL 2: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A007.d/0809A007.cdf
LVL 3: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A008.d
LVL 4: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A005.d
LVL 5: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A009.d
LVL 6: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A010.d

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: RG54 Project: LORA LAKE

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 08/09/10 08/09/10

Client Sample No.(PCP): Date Analyzed :08/13/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1724

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.21	11.15	11.29	24.7	25.0	-1.2
2,4,6-Trichlorophenol	7.26	7.19	7.33	25.4	25.0	1.6
2,3,6-Trichlorophenol	7.61	7.55	7.69	23.1	25.0	-7.6
2,4,5-Trichlorophenol	8.21	8.17	8.31	24.7	25.0	-1.2
2,3,4-Trichlorophenol	8.76	8.72	8.86	23.5	25.0	-6.0
2,3,5,6-Tetrachlorophenol	8.99	8.94	9.08	24.1	25.0	-3.6
2,3,4,5-Tetrachlorophenol	10.39	10.34	10.48	24.6	25.0	-1.6
2,4-Dichlorophenol	6.88	6.82	6.96	227	250	-9.2
2,4,6-Tribromophenol (surr	9.99	9.93	10.07	24.8	25.0	-0.8

AVERAGE %D = 3.6

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: RG54 Project: LORA LAKE

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 08/09/10 08/09/10

Client Sample No.(PCP): Date Analyzed :08/13/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1724

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.64	11.59	11.73	23.9	25.0	-4.4
2,4,6-Trichlorophenol	7.33	7.26	7.40	26.2	25.0	4.8
2,3,6-Trichlorophenol	7.86	7.79	7.93	24.2	25.0	-3.2
2,4,5-Trichlorophenol	8.59	8.54	8.69	25.8	25.0	3.2
2,3,4-Trichlorophenol	9.35	9.31	9.45	24.9	25.0	-0.4
2,3,5,6-Tetrachlorophenol	9.26	9.21	9.35	25.1	25.0	0.4
2,3,4,5-Tetrachlorophenol	11.10	11.06	11.20	23.5	25.0	-6.0
2,4-Dichlorophenol	7.15	7.10	7.24	252	250	0.8
2,4,6-Tribromophenol (surr	10.63	10.58	10.72	24.7	25.0	-1.2

AVERAGE %D = 2.7

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: RG54 Project: LORA LAKE

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 08/09/10 08/09/10

Client Sample No.(PCP): Date Analyzed :08/13/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :2124

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.21	11.15	11.29	22.7	25.0	-9.2
2,4,6-Trichlorophenol	7.26	7.19	7.33	25.0	25.0	0.0
2,3,6-Trichlorophenol	7.61	7.55	7.69	22.7	25.0	-9.2
2,4,5-Trichlorophenol	8.22	8.17	8.31	23.7	25.0	-5.2
2,3,4-Trichlorophenol	8.77	8.72	8.86	22.8	25.0	-8.8
2,3,5,6-Tetrachlorophenol	8.99	8.94	9.08	23.6	25.0	-5.6
2,3,4,5-Tetrachlorophenol	10.39	10.34	10.48	22.9	25.0	-8.4
2,4-Dichlorophenol	6.89	6.82	6.96	226	250	-9.6
2,4,6-Tribromophenol (surr	9.99	9.93	10.07	23.8	25.0	-4.8

AVERAGE %D = 6.8

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: RG54 Project: LORA LAKE

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 08/09/10 08/09/10

Client Sample No.(PCP): Date Analyzed :08/13/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :2124

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.65	11.59	11.73	22.3	25.0	-10.8
2,4,6-Trichlorophenol	7.33	7.26	7.40	26.5	25.0	6.0
2,3,6-Trichlorophenol	7.86	7.79	7.93	23.9	25.0	-4.4
2,4,5-Trichlorophenol	8.59	8.54	8.69	24.7	25.0	-1.2
2,3,4-Trichlorophenol	9.35	9.31	9.45	24.0	25.0	-4.0
2,3,5,6-Tetrachlorophenol	9.26	9.21	9.35	24.6	25.0	-1.6
2,3,4,5-Tetrachlorophenol	11.11	11.06	11.20	22.3	25.0	-10.8
2,4-Dichlorophenol	7.16	7.10	7.24	250	250	0.0
2,4,6-Tribromophenol (surr	10.63	10.58	10.72	23.8	25.0	-4.8

AVERAGE %D = 4.8

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: RG54 Project: LORA LAKE

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 08/09/10 08/09/10

Client Sample No.(PCP): Date Analyzed :08/14/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :0124

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.21	11.15	11.29	23.1	25.0	-7.6
2,4,6-Trichlorophenol	7.26	7.19	7.33	25.5	25.0	2.0
2,3,6-Trichlorophenol	7.62	7.55	7.69	23.0	25.0	-8.0
2,4,5-Trichlorophenol	8.22	8.17	8.31	24.3	25.0	-2.8
2,3,4-Trichlorophenol	8.77	8.72	8.86	23.7	25.0	-5.2
2,3,5,6-Tetrachlorophenol	9.00	8.94	9.08	23.7	25.0	-5.2
2,3,4,5-Tetrachlorophenol	10.39	10.34	10.48	23.6	25.0	-5.6
2,4-Dichlorophenol	6.89	6.82	6.96	231	250	-7.6
2,4,6-Tribromophenol (surr	9.99	9.93	10.07	24.4	25.0	-2.4

AVERAGE %D = 5.2

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: RG54 Project: LORA LAKE

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 08/09/10 08/09/10

Client Sample No.(PCP): Date Analyzed :08/14/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :0124

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.65	11.59	11.73	22.2	25.0	-11.2
2,4,6-Trichlorophenol	7.33	7.26	7.40	26.5	25.0	6.0
2,3,6-Trichlorophenol	7.86	7.79	7.93	24.4	25.0	-2.4
2,4,5-Trichlorophenol	8.59	8.54	8.69	25.6	25.0	2.4
2,3,4-Trichlorophenol	9.35	9.31	9.45	24.1	25.0	-3.6
2,3,5,6-Tetrachlorophenol	9.26	9.21	9.35	24.8	25.0	-0.8
2,3,4,5-Tetrachlorophenol	11.11	11.06	11.20	22.2	25.0	-11.2
2,4-Dichlorophenol	7.16	7.10	7.24	254	250	1.6
2,4,6-Tribromophenol (surr	10.63	10.58	10.72	24.1	25.0	-3.6

AVERAGE %D = 4.8

FORM VII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: RG54 Project: LORA LAKE

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 08/09/10 08/09/10

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.00

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCPD	08/09/10	1223	9.99
02		PCPA	08/09/10	1243	10.01
03		PCPB	08/09/10	1303	10.00
04		PCPC	08/09/10	1323	10.00
05		PCPE	08/09/10	1343	9.98
06		PCPF	08/09/10	1403	9.98
07		PCP CCAL	08/13/10	1724	9.99
08	RG54MBS1	RG54MBS1	08/13/10	1744	9.99
09	RG54LCSS1	RG54LCSS1	08/13/10	1804	9.99
10	PSB14-0-.5-0	RG54A	08/13/10	1824	9.98
11	PSB14-0-.5-0	RG54AMS	08/13/10	1844	9.99
12	PSB14-0-.5-0	RG54AMSD	08/13/10	1904	9.99
13	PSB14-1.5-2.	RG54B	08/13/10	1924	9.99
14	PSB14-2-4-07	RG54C	08/13/10	1944	9.99
15	PSB14-7-9-07	RG54E	08/13/10	2004	9.99
16	PSB14-12-14-	RG54F	08/13/10	2024	9.99
17	PSB17-0-0.5-	RG54H	08/13/10	2044	9.99
18		PCP CCAL	08/13/10	2124	9.99
19	PSB17-1.5-2-	RG54I	08/13/10	2144	9.99
20	PSB17-2-4-07	RG54J	08/13/10	2204	9.99
21	PSB17-4-6-07	RG54K	08/13/10	2224	9.99
22	PSB17-10-13-	RG54L	08/13/10	2244	9.99
23	PSB13-0-0.5-	RG60A	08/13/10	2304	9.99
24	PSB13-1.5-2-	RG60B	08/13/10	2324	9.99
25	PSB13-2-4-07	RG60C	08/13/10	2344	9.99
26	PSB13-4-6-07	RG60D	08/14/10	0004	9.99
27	PSB13-11-13-	RG60E	08/14/10	0024	9.99
28	PSB13-14.5-1	RG60F	08/14/10	0044	9.99
29		PCP CCAL	08/14/10	0124	9.99

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

ARI Job No.: RG54 Project: LORA LAKE

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 08/09/10 08/09/10

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.65

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCPD	08/09/10	1223	10.63
02		PCPA	08/09/10	1243	10.65
03		PCPB	08/09/10	1303	10.64
04		PCPC	08/09/10	1323	10.64
05		PCPE	08/09/10	1343	10.63
06		PCPF	08/09/10	1403	10.63
07		PCP CCAL	08/13/10	1724	10.63
08	RG54MBS1	RG54MBS1	08/13/10	1744	10.63
09	RG54LCSS1	RG54LCSS1	08/13/10	1804	10.63
10	PSB14-0-.5-0	RG54A	08/13/10	1824	10.63
11	PSB14-0-.5-0	RG54AMS	08/13/10	1844	10.63
12	PSB14-0-.5-0	RG54AMSD	08/13/10	1904	10.63
13	PSB14-1.5-2.	RG54B	08/13/10	1924	10.63
14	PSB14-2-4-07	RG54C	08/13/10	1944	10.63
15	PSB14-7-9-07	RG54E	08/13/10	2004	10.63
16	PSB14-12-14-	RG54F	08/13/10	2024	10.63
17	PSB17-0-0.5-	RG54H	08/13/10	2044	10.63
18		PCP CCAL	08/13/10	2124	10.63
19	PSB17-1.5-2-	RG54I	08/13/10	2144	10.63
20	PSB17-2-4-07	RG54J	08/13/10	2204	10.63
21	PSB17-4-6-07	RG54K	08/13/10	2224	10.63
22	PSB17-10-13-	RG54L	08/13/10	2244	10.63
23	PSB13-0-0.5-	RG60A	08/13/10	2304	10.63
24	PSB13-1.5-2-	RG60B	08/13/10	2324	10.63
25	PSB13-2-4-07	RG60C	08/13/10	2344	10.63
26	PSB13-4-6-07	RG60D	08/14/10	0004	10.63
27	PSB13-11-13-	RG60E	08/14/10	0024	10.63
28	PSB13-14.5-1	RG60F	08/14/10	0044	10.63
29		PCP CCAL		0124	

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

TPHD Analysis
Report and Summary QC Forms

ARI Job ID: RG54

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID-Silica and Acid Cleaned
Page 1 of 2
Matrix: Soil

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA

Data Release Authorized:
Reported: 08/05/10

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result
MB-080210	Method Blank	08/02/10	08/04/10	1.00	Diesel	5.0	< 5.0 U
10-18202	HC ID: ---		FID9	1.0	Motor Oil	10	< 10 U
					o-Terphenyl		103%
RG54A	PSB14-0-.5-072810	08/02/10	08/04/10	1.00	**Diesel**	**5.4**	**13**
10-18202	HC ID: **DRO/MOTOR OIL**		FID9	1.0	**Motor Oil**	**11**	**180**
					o-Terphenyl		108%
RG54B	PSB14-1.5-2.0-072810	08/02/10	08/04/10	1.00	Diesel	5.4	< 5.4 U
10-18203	HC ID: ---		FID9	1.0	Motor Oil	11	< 11 U
					o-Terphenyl		117%
RG54C	PSB14-2-4-072810	08/02/10	08/04/10	1.00	Diesel	5.4	< 5.4 U
10-18204	HC ID: ---		FID9	1.0	Motor Oil	11	< 11 U
					o-Terphenyl		116%
RG54E	PSB14-7-9-072810	08/02/10	08/04/10	1.00	**Diesel**	**5.6**	**9.0**
10-18206	HC ID: **DRO/MOTOR OIL**		FID9	1.0	**Motor Oil**	**11**	**120**
					o-Terphenyl		113%
RG54F	PSB14-12-14-072810	08/02/10	08/04/10	1.00	Diesel	5.4	< 5.4 U
10-18207	HC ID: ---		FID9	1.0	Motor Oil	11	< 11 U
					o-Terphenyl		104%
RG54H	PSB17-0-0.5-072810	08/02/10	08/04/10	1.00	**Diesel**	**5.3**	**22**
10-18209	HC ID: **DRO/MOTOR OIL**		FID9	1.0	**Motor Oil**	**11**	**260**
					o-Terphenyl		109%
RG54I	PSB17-1.5-2-072810	08/02/10	08/04/10	1.00	Diesel	5.2	< 5.2 U
10-18210	HC ID: ---		FID9	1.0	Motor Oil	10	< 10 U
					o-Terphenyl		115%
RG54J	PSB17-2-4-072810	08/02/10	08/04/10	1.00	Diesel	5.2	< 5.2 U
10-18211	HC ID: ---		FID9	1.0	Motor Oil	10	< 10 U
					o-Terphenyl		110%
RG54K	PSB17-4-6-072810	08/02/10	08/04/10	1.00	Diesel	5.3	< 5.3 U
10-18212	HC ID: **MOTOR OIL**		FID9	1.0	**Motor Oil**	**11**	**38**
					o-Terphenyl		108%
RG54L	PSB17-10-13-072810	08/02/10	08/04/10	1.00	Diesel	5.4	< 5.4 U
10-18213	HC ID: ---		FID9	1.0	Motor Oil	11	< 11 U
					o-Terphenyl		118%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID-Silica and Acid Cleaned
Page 2 of 2
Matrix: Soil

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA

Data Release Authorized:
Reported: 08/05/10

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result

Reported in mg/kg (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel quantitation on total peaks in the range from C12 to C24.
Motor Oil quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicate results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

CLEANED TPHD SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA

Client ID	OTER	TOT OUT
MB-080210	103%	0
LCS-080210	105%	0
LCSD-080210	110%	0
PSB14-0-.5-072810	108%	0
PSB14-1.5-2.0-0728	117%	0
PSB14-2-4-072810	116%	0
PSB14-7-9-072810	113%	0
PSB14-12-14-072810	104%	0
PSB17-0-0.5-072810	109%	0
PSB17-1.5-2-072810	115%	0
PSB17-2-4-072810	110%	0
PSB17-4-6-072810	108%	0
PSB17-10-13-072810	118%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(63-115)	(49-120)

Prep Method: SW3546
Log Number Range: 10-18202 to 10-18213

FORM-II TPHD

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned **Sample ID: LCS-080210**
Page 1 of 1 LCS/LCSD

Lab Sample ID: LCS-080210 QC Report No: RG54-Floyd/Snider
LIMS ID: 10-18202 Project: Lora Lake RI
Matrix: Soil POS-LLA
Data Release Authorized: MW Date Sampled: 07/28/10
Reported: 08/05/10 Date Received: 07/28/10

Date Extracted LCS/LCSD: 08/02/10 Sample Amount LCS: 10.0 g
LCSD: 10.0 g
Date Analyzed LCS: 08/04/10 00:09 Final Extract Volume LCS: 1.0 mL
LCSD: 08/04/10 00:30 LCSD: 1.0 mL
Instrument/Analyst LCS: FID/MS Dilution Factor LCS: 1.0
LCSD: FID/MS LCSD: 1.0

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	126	150	84.0%	131	150	87.3%	3.9%

TPHD Surrogate Recovery

	LCS	LCSD
o-Terphenyl	105%	110%

Results reported in mg/kg
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: RG54
Matrix: Soil Project: Lora Lake RI
Date Received: 07/28/10 POS-LLA

ARI ID	Client ID	Client Amt	Final Vol	Basis	Prep Date
10-18202-080210MB1	Method Blank	10.0 g	1.00 mL	-	08/02/10
10-18202-080210LCS1	Lab Control	10.0 g	1.00 mL	-	08/02/10
10-18202-080210LCSD1	Lab Control Dup	10.0 g	1.00 mL	-	08/02/10
10-18202-RG54A	PSB14-0-.5-072810	9.34 g	1.00 mL	D	08/02/10
10-18203-RG54B	PSB14-1.5-2.0-072819	9.29 g	1.00 mL	D	08/02/10
10-18204-RG54C	PSB14-2-4-072810	9.32 g	1.00 mL	D	08/02/10
10-18206-RG54E	PSB14-7-9-072810	8.95 g	1.00 mL	D	08/02/10
10-18207-RG54F	PSB14-12-14-072810	9.24 g	1.00 mL	D	08/02/10
10-18209-RG54H	PSB17-0-0.5-072810	9.37 g	1.00 mL	D	08/02/10
10-18210-RG54I	PSB17-1.5-2-072810	9.59 g	1.00 mL	D	08/02/10
10-18211-RG54J	PSB17-2-4-072810	9.53 g	1.00 mL	D	08/02/10
10-18212-RG54K	PSB17-4-6-072810	9.44 g	1.00 mL	D	08/02/10
10-18213-RG54L	PSB17-10-13-072810	9.29 g	1.00 mL	D	08/02/10

Basis: D=Dry Weight W=As Received

TPH METHOD BLANK SUMMARY

BLANK NO.

RG66MBS1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: RG51,RG54 Project No.: LORA LAKE APTS.

Date Extracted: 08/02/10 Matrix: SOLID

Date Analyzed : 08/04/10 Instrument ID : FID9

Time Analyzed : 0052

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	PSB12-14-17-	RG51F	08/03/10
02	PSB12-1.5-2.	RG51B	08/03/10
03	PSB12-0-0.5-	RG51A	08/03/10
04	PSB12-2-4-07	RG51C	08/03/10
05	PSB12-8-10-0	RG51D	08/03/10
06	PSB12-8-10-0	RG51E	08/03/10
07	PSB12-4-6-07	RG51G	08/03/10
08	PSB12-14-17-	RG51FMS	08/03/10
09	PSB12-14-17-	RG51FMSD	08/03/10
10	RG66LCSS1	RG66LCSS1	08/04/10
11	RG66LCSDS1	RG66LCSDS1	08/04/10
12	PSB14-0-.5-0	RG54A	08/04/10
13	PSB14-1.5-2.	RG54B	08/04/10
14	PSB14-2-4-07	RG54C	08/04/10
15	PSB14-7-9-07	RG54E	08/04/10
16	PSB14-12-14-	RG54F	08/04/10
17	PSB17-0-0.5-	RG54H	08/04/10
18	PSB17-1.5-2-	RG54I	08/04/10
19	PSB17-2-4-07	RG54J	08/04/10
20	PSB17-4-6-07	RG54K	08/04/10
21	PSB17-10-13-	RG54L	08/04/10
22			
23			
24			
25			
26			
27			
28			
29			
30			

6a

NW DIESEL INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

Instrument: FID9.I Project: LORA LAKE APTS.

Calibration Date: 28-JUL-2010 SDG No.: RG51,RG54

Diesel Range	RF1 50	RF2 100	RF3 250	RF4 500	RF5 1000	RF6 2500	Ave RF	%RSD
WA Diesel	25798	26021	26287	26699	26258	26926	26331	1.6
AK Diesel	28440	28641	29044	29481	28983	29726	29053	1.7
OR Diesel	28651	28856	29299	29708	29231	30010	29293	1.7
o-Terph	25541	25406	25759	26018	26067	25782	25762	1.0

<- Indicates %RSD outside limits
Surrogate areas are not included in Diesel RF calculation.

Quant Ranges : WA Diesel C12-C24 (3.091-6.020)
AK Diesel C10-C25 (2.455-6.212)
OR Diesel C10-C28 (2.455-6.723)

Calibration Files	Analysis Time
0728A012.D	28-JUL-2010 20:24
0728A013.D	28-JUL-2010 20:45
0728A014.D	28-JUL-2010 21:07
0728A015.D	28-JUL-2010 21:28
0728A016.D	28-JUL-2010 21:49
0728A017.D	28-JUL-2010 22:11

NW MOTOR OIL RANGE INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

Instrument: FID9.I Project: LORA LAKE APTS.

Calibration Date: 29-JUL-2010 SDG No.: RG51,RG54

Product Range	RF1 100	RF2 250	RF3 500	RF4 1000	RF5 2500	RF6 5000	Ave RF	%RSD
WA M.Oil C24-C38	14669	13064	12525	12576	12003	11886	12787	7.9
Triac Surr	20395	20154	19766	20069	19304	19306	19832	2.3

<- Indicates %RSD outside limits
Surrogate areas are not included in Motor Oil RF calculation.

Calibration Files	Analysis Time
0728A019.D	28-JUL-2010 22:53
0728A020.D	28-JUL-2010 23:15
0728A021.D	28-JUL-2010 23:36
0728A022.D	28-JUL-2010 23:57
0728A023.D	29-JUL-2010 00:18
0728A024.D	29-JUL-2010 00:40

7a

DIESEL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE APTS.

CCal Date: 03-AUG-2010 SDG No.: RG51,RG54

Analysis Time: 18:03 Lab ID: DIESEL#2

Instrument: FID9.I Lab File Name: 0803A017.D

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	6132149	232.9	250	-6.8
AK102 (C10-C25)	6816350	234.6	250	-6.2
Terphenyl	1064000	41.3	45	-8.2

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA Diesel C12-C24
AK Diesel C10-C25

7a

MOTOR OIL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE APTS.

CCal Date: 03-AUG-2010 SDG No.: RG51,RG54

Analysis Time: 18:25 Lab ID: MOIL#2

Instrument: FID9.I Lab File Name: 0803A018.D

M.oil Range	Area*	CalcAmnt	NomAmnt	% D	
WAMoil(C24-C38)	6588886	515.3	500	3.1	
AK103 (C25-C36)	5607210	1119.4	500	123.9	<-
n-Triacontane	881439	44.4	45	-1.2	

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA M.Oil C24-C38
AK M.Oil C25-C36

7a

DIESEL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE APTS.

CCal Date: 04-AUG-2010 SDG No.: RG51,RG54

Analysis Time: 01:13 Lab ID: DIESEL#3

Instrument: FID9.I Lab File Name: 0803A037.D

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	6231950	236.7	250	-5.3
AK102 (C10-C25)	6922487	238.3	250	-4.7
Terphenyl	1056576	41.0	45	-8.9

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA Diesel C12-C24
AK Diesel C10-C25

7a

MOTOR OIL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE APTS.

CCal Date: 04-AUG-2010 SDG No.: RG51,RG54

Analysis Time: 01:34 Lab ID: MOIL#3

Instrument: FID9.I Lab File Name: 0803A038.D

M.oil Range	Area*	CalcAmnt	NomAmnt	% D	
WAMoil(C24-C38)	6524419	510.2	500	2.0	
AK103 (C25-C36)	5611144	1120.2	500	124.0	<-
n-Triacontane	903945	45.6	45	1.3	

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA M.Oil C24-C38
AK M.Oil C25-C36

7a

DIESEL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE APTS.

CCal Date: 04-AUG-2010 SDG No.: RG51,RG54

Analysis Time: 05:49 Lab ID: DIESEL#4

Instrument: FID9.I Lab File Name: 0803A050.D

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	6276395	238.4	250	-4.7
AK102 (C10-C25)	6977114	240.2	250	-3.9
Terphenyl	1075829	41.8	45	-7.2

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA Diesel C12-C24
AK Diesel C10-C25

7a

MOTOR OIL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE APTS.

CCal Date: 04-AUG-2010 SDG No.: RG51,RG54

Analysis Time: 06:11 Lab ID: MOIL#4

Instrument: FID9.I Lab File Name: 0803A051.D

M.oil Range	Area*	CalcAmnt	NomAmnt	% D	
WAMoil(C24-C38)	6698090	523.8	500	4.8	
AK103 (C25-C36)	5786031	1155.1	500	131.0	<-
n-Triacontane	925341	46.7	45	3.7	

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA M.Oil C24-C38
AK M.Oil C25-C36

TPH ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: RG51,RG54 Project: LORA LAKE APTS.

Instrument ID: FID9 GC Column: RTX-1

Run Date: 07/29/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.77 TRIAC: 7.04

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01		RT	07/28/10	1941	4.77	7.08
02		IB	07/28/10	2002	4.77	7.08
03		DIESEL 50	07/28/10	2024	4.76	7.04
04		DIESEL 100	07/28/10	2045	4.76	7.04
05		DIESEL 250	07/28/10	2107	4.77	7.04
06		DIESEL 500	07/28/10	2128	4.78	7.04
07		DIESEL 1000	07/28/10	2149	4.80	7.03
08		DIESEL 2500	07/28/10	2211	4.83*	7.04
09		DIESEL ICV	07/28/10	2232	4.77	7.04
10		MOIL 100	07/28/10	2253	4.77	7.08
11		MOIL 250	07/28/10	2315	4.77	7.09
12		MOIL 500	07/28/10	2336	4.76	7.09*
13		MOIL 1000	07/28/10	2357	4.76	7.10*
14		MOIL 2500	07/29/10	0018	4.76	7.13*
15		MOIL 5000	07/29/10	0040	4.76	7.16*
16		MOIL ICV	07/29/10	0101	4.76	7.09*

QC LIMITS

TERPH = o-terph (+/- 0.05 MINUTES)
TRIAC = Triacon Surr (+/- 0.05 MINUTES)

* Values outside of QC limits.

FORM VIII TPH

TPH ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: RG51,RG54 Project: LORA LAKE APTS.

Instrument ID: FID9 GC Column: RTX-1

Run Date: 08/03/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.79 TRIAC: 7.12

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	RT	RT	08/03/10	1238	4.79	7.14
02	IB	IB	08/03/10	1342	4.79	7.14
03	DIESEL#2	DIESEL#2	08/03/10	1803	4.79	7.12
04	MOIL#2	MOIL#2	08/03/10	1825	4.81	7.13
05	ZZZZZ	ZZZZZ	08/03/10	1847	4.80	7.13
06	ZZZZZ	ZZZZZ	08/03/10	1908	4.78	7.12
07	PSB12-14-17-	RG51F	08/03/10	1930	4.79	7.13
08	ZZZZZ	ZZZZZ	08/03/10	1951	4.78	7.11
09	ZZZZZ	ZZZZZ	08/03/10	2013	4.78	7.12
10	ZZZZZ	ZZZZZ	08/03/10	2035	4.78	7.12
11	ZZZZZ	ZZZZZ	08/03/10	2056	4.78	7.12
12	PSB12-1.5-2.	RG51B	08/03/10	2117	4.79	7.13
13	PSB12-0-0.5-	RG51A	08/03/10	2139	4.79	7.15
14	PSB12-2-4-07	RG51C	08/03/10	2200	4.79	7.13
15	PSB12-8-10-0	RG51D	08/03/10	2222	4.79	7.13
16	PSB12-8-10-0	RG51E	08/03/10	2243	4.79	7.13
17	PSB12-4-6-07	RG51G	08/03/10	2305	4.79	7.13
18	PSB12-14-17-	RG51FMS	08/03/10	2326	4.80	7.13
19	PSB12-14-17-	RG51FMSD	08/03/10	2347	4.80	7.13
20	RG66LCSS1	RG66LCSS1	08/04/10	0009	4.80	7.12
21	RG66LCSDS1	RG66LCSDS1	08/04/10	0030	4.80	7.12
22	RG66MBS1	RG66MBS1	08/04/10	0052	4.79	7.12
23	DIESEL#3	DIESEL#3	08/04/10	0113	4.79	7.11
24	MOIL#3	MOIL#3	08/04/10	0134	4.78	7.13
25	ZZZZZ	ZZZZZ	08/04/10	0156	4.78	7.13
26	PSB14-0-.5-0	RG54A	08/04/10	0217	4.79	7.14
27	PSB14-1.5-2.	RG54B	08/04/10	0238	4.79	7.13
28	PSB14-2-4-07	RG54C	08/04/10	0259	4.79	7.13
29	PSB14-7-9-07	RG54E	08/04/10	0321	4.79	7.13
30	PSB14-12-14-	RG54F	08/04/10	0342	4.79	7.13
31	PSB17-0-0.5-	RG54H	08/04/10	0403	4.79	7.15
32	PSB17-1.5-2-	RG54I	08/04/10	0424	4.79	7.13

QC LIMITS

TERPH = o-terph (+/- 0.05 MINUTES)
TRIAC = Triacon Surr (+/- 0.05 MINUTES)

* Values outside of QC limits.

FORM VIII TPH

TPH ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: RG51,RG54 Project: LORA LAKE APTS.

Instrument ID: FID9 GC Column: RTX-1

Run Date: 08/03/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.79 TRIAC: 7.12

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	PSB17-2-4-07	RG54J	08/04/10	0446	4.79	7.13
02	PSB17-4-6-07	RG54K	08/04/10	0507	4.79	7.13
03	PSB17-10-13-	RG54L	08/04/10	0528	4.79	7.13
04	DIESEL#4	DIESEL#4	08/04/10	0549	4.79	7.11
05	MOIL#4	MOIL#4	08/04/10	0611	4.78	7.13
06	ZZZZZ	ZZZZZ	08/04/10	0632	4.78	7.13

QC LIMITS

TERPH = o-terph (+/- 0.05 MINUTES)
TRIAC = Triacon Surr (+/- 0.05 MINUTES)

* Values outside of QC limits.

FORM VIII TPH

TPHG/BETX Analysis
Report and Summary QC Forms

ARI Job ID: RG54

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG

Sample ID: PSB14-0-.5-072810
SAMPLE

Lab Sample ID: RG54A
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Analyzed: 08/03/10 14:35
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Sample Amount: 170 mg-dry-wt
Percent Moisture: 7.6%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	7.2	< 7.2 U
108-88-3	Toluene	7.2	< 7.2 U
100-41-4	Ethylbenzene	7.2	< 7.2 U
179601-23-1	m,p-Xylene	14	< 14 U
95-47-6	o-Xylene	7.2	< 7.2 U

			GAS ID
Gasoline Range Hydrocarbons	2.9	< 2.9 U	---

BETX Surrogate Recovery

Trifluorotoluene	100%
Bromobenzene	98.7%

Gasoline Surrogate Recovery

Trifluorotoluene	105%
Bromobenzene	102%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG

Sample ID: PSB14-1.5-2.0-072810
SAMPLE

Lab Sample ID: RG54B
LIMS ID: 10-18203
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Analyzed: 08/03/10 14:59
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Sample Amount: 160 mg-dry-wt
Percent Moisture: 8.5%

CAS Number	Analyte	RL	Result	GAS ID
71-43-2	Benzene	8.0	< 8.0 U	
108-88-3	Toluene	8.0	< 8.0 U	
100-41-4	Ethylbenzene	8.0	< 8.0 U	
179601-23-1	m,p-Xylene	16	< 16 U	
95-47-6	o-Xylene	8.0	< 8.0 U	
	Gasoline Range Hydrocarbons	3.2	< 3.2 U	---

BETX Surrogate Recovery

Trifluorotoluene	98.8%
Bromobenzene	99.0%

Gasoline Surrogate Recovery

Trifluorotoluene	103%
Bromobenzene	102%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: PSB14-2-4-072810
SAMPLE

Lab Sample ID: RG54C
LIMS ID: 10-18204
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Analyzed: 08/03/10 15:24
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Sample Amount: 150 mg-dry-wt
Percent Moisture: 9.0%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	8.4	< 8.4 U
108-88-3	Toluene	8.4	< 8.4 U
100-41-4	Ethylbenzene	8.4	< 8.4 U
179601-23-1	m,p-Xylene	17	< 17 U
95-47-6	o-Xylene	8.4	< 8.4 U

			GAS ID
	Gasoline Range Hydrocarbons	3.4	< 3.4 U ---

BETX Surrogate Recovery

Trifluorotoluene	101%
Bromobenzene	102%

Gasoline Surrogate Recovery

Trifluorotoluene	107%
Bromobenzene	106%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: PSB14-7-9-072810
SAMPLE

Lab Sample ID: RG54E
LIMS ID: 10-18206
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Analyzed: 08/03/10 15:48
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Sample Amount: 120 mg-dry-wt
Percent Moisture: 10.9%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	11	< 11 U
108-88-3	Toluene	11	< 11 U
100-41-4	Ethylbenzene	11	< 11 U
179601-23-1	m,p-Xylene	21	< 21 U
95-47-6	o-Xylene	11	< 11 U

			GAS ID
Gasoline Range Hydrocarbons	4.2	< 4.2 U	---

BETX Surrogate Recovery

Trifluorotoluene	106%
Bromobenzene	106%

Gasoline Surrogate Recovery

Trifluorotoluene	111%
Bromobenzene	109%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG

Sample ID: PSB14-12-14-072810
SAMPLE

Lab Sample ID: RG54F
LIMS ID: 10-18207
Matrix: Soil
Data Release Authorized: MW
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Analyzed: 08/03/10 16:13
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Sample Amount: 150 mg-dry-wt
Percent Moisture: 11.0%

CAS Number	Analyte	RL	Result	GAS ID
71-43-2	Benzene	8.5	< 8.5 U	
108-88-3	Toluene	8.5	< 8.5 U	
100-41-4	Ethylbenzene	8.5	< 8.5 U	
179601-23-1	m,p-Xylene	17	< 17 U	
95-47-6	o-Xylene	8.5	< 8.5 U	
	Gasoline Range Hydrocarbons	3.4	< 3.4 U	---

BETX Surrogate Recovery

Trifluorotoluene	107%
Bromobenzene	108%

Gasoline Surrogate Recovery

Trifluorotoluene	112%
Bromobenzene	111%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG

Sample ID: PSB14-TB
SAMPLE

Lab Sample ID: RG54G
LIMS ID: 10-18208
Matrix: Water
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Analyzed: 08/03/10 10:05
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	0.25	< 0.25 U
108-88-3	Toluene	0.25	< 0.25 U
100-41-4	Ethylbenzene	0.25	< 0.25 U
179601-23-1	m,p-Xylene	0.50	< 0.50 U
95-47-6	o-Xylene	0.25	< 0.25 U

			GAS ID
	Gasoline Range Hydrocarbons	0.10	< 0.10 U ---

BETX Surrogate Recovery

Trifluorotoluene	100%
Bromobenzene	98.9%

Gasoline Surrogate Recovery

Trifluorotoluene	105%
Bromobenzene	103%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: PSB17-0-0.5-072810
SAMPLE

Lab Sample ID: RG54H
LIMS ID: 10-18209
Matrix: Soil
Data Release Authorized: MW
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Analyzed: 08/03/10 18:40
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Sample Amount: 170 mg-dry-wt
Percent Moisture: 6.5%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	7.4	< 7.4 U
108-88-3	Toluene	7.4	< 7.4 U
100-41-4	Ethylbenzene	7.4	< 7.4 U
179601-23-1	m,p-Xylene	15	< 15 U
95-47-6	o-Xylene	7.4	< 7.4 U

			GAS ID
Gasoline Range Hydrocarbons	3.0	< 3.0 U	---

BETX Surrogate Recovery

Trifluorotoluene	99.2%
Bromobenzene	101%

Gasoline Surrogate Recovery

Trifluorotoluene	104%
Bromobenzene	104%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG

Sample ID: PSB17-1.5-2-072810
SAMPLE

Lab Sample ID: RG54I
LIMS ID: 10-18210
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Analyzed: 08/03/10 19:04
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Sample Amount: 150 mg-dry-wt
Percent Moisture: 5.3%

CAS Number	Analyte	RL	Result	GAS ID
71-43-2	Benzene	8.2	< 8.2 U	
108-88-3	Toluene	8.2	< 8.2 U	
100-41-4	Ethylbenzene	8.2	< 8.2 U	
179601-23-1	m,p-Xylene	16	< 16 U	
95-47-6	o-Xylene	8.2	< 8.2 U	
	Gasoline Range Hydrocarbons	3.3	< 3.3 U	---

BETX Surrogate Recovery

Trifluorotoluene	102%
Bromobenzene	103%

Gasoline Surrogate Recovery

Trifluorotoluene	106%
Bromobenzene	107%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG

Sample ID: PSB17-2-4-072810
SAMPLE

Lab Sample ID: RG54J
LIMS ID: 10-18211
Matrix: Soil
Data Release Authorized: MW
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Analyzed: 08/03/10 19:29
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Sample Amount: 150 mg-dry-wt
Percent Moisture: 7.4%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	8.6	< 8.6 U
108-88-3	Toluene	8.6	< 8.6 U
100-41-4	Ethylbenzene	8.6	< 8.6 U
179601-23-1	m,p-Xylene	17	< 17 U
95-47-6	o-Xylene	8.6	< 8.6 U

			GAS ID
	Gasoline Range Hydrocarbons	3.4	< 3.4 U ---

BETX Surrogate Recovery

Trifluorotoluene	102%
Bromobenzene	102%

Gasoline Surrogate Recovery

Trifluorotoluene	106%
Bromobenzene	105%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: PSB17-4-6-072810
SAMPLE

Lab Sample ID: RG54K
LIMS ID: 10-18212
Matrix: Soil
Data Release Authorized: MW
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Analyzed: 08/03/10 19:54
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Sample Amount: 140 mg-dry-wt
Percent Moisture: 7.7%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	8.9	< 8.9 U
108-88-3	Toluene	8.9	< 8.9 U
100-41-4	Ethylbenzene	8.9	< 8.9 U
179601-23-1	m,p-Xylene	18	< 18 U
95-47-6	o-Xylene	8.9	< 8.9 U

			GAS ID
Gasoline Range Hydrocarbons	3.6	< 3.6 U	---

BETX Surrogate Recovery

Trifluorotoluene	99.4%
Bromobenzene	103%

Gasoline Surrogate Recovery

Trifluorotoluene	104%
Bromobenzene	106%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG

Sample ID: PSB17-10-13-072810
SAMPLE

Lab Sample ID: RG54L
LIMS ID: 10-18213
Matrix: Soil
Data Release Authorized:
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Analyzed: 08/03/10 20:18
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Sample Amount: 160 mg-dry-wt
Percent Moisture: 7.7%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	7.8	< 7.8 U
108-88-3	Toluene	7.8	< 7.8 U
100-41-4	Ethylbenzene	7.8	< 7.8 U
179601-23-1	m,p-Xylene	16	< 16 U
95-47-6	o-Xylene	7.8	< 7.8 U

			GAS ID
	Gasoline Range Hydrocarbons	3.1	< 3.1 U ---

BETX Surrogate Recovery

Trifluorotoluene	101%
Bromobenzene	102%

Gasoline Surrogate Recovery

Trifluorotoluene	106%
Bromobenzene	105%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

TPHG SOIL SURROGATE RECOVERY SUMMARY

ARI Job: RG54
Matrix: Soil

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA

Client ID	BFB	TFT	BBZ	TOT OUT
MB-080310	NA	100%	99.1%	0
LCS-080310	NA	105%	103%	0
LCSD-080310	NA	102%	102%	0
PSB14-0-.5-072810	NA	105%	102%	0
PSB14-1.5-2.0-072810	NA	103%	102%	0
PSB14-2-4-072810	NA	107%	106%	0
PSB14-7-9-072810	NA	111%	109%	0
PSB14-12-14-072810	NA	112%	111%	0
PSB14-12-14-072810 MS	NA	104%	107%	0
PSB14-12-14-072810 MSD	NA	111%	107%	0
PSB17-0-0.5-072810	NA	104%	104%	0
PSB17-1.5-2-072810	NA	106%	107%	0
PSB17-2-4-072810	NA	106%	105%	0
PSB17-4-6-072810	NA	104%	106%	0
PSB17-10-13-072810	NA	106%	105%	0

	LCS/MB LIMITS	QC LIMITS
(BFB) = Bromofluorobenzene	(70-130)	(70-130)
(TFT) = Trifluorotoluene	(80-120)	(66-123)
(BBZ) = Bromobenzene	(80-120)	(62-130)

Log Number Range: 10-18202 to 10-18213

ANALYTICAL RESOURCES INCORPORATED

BETX SOIL SURROGATE RECOVERY SUMMARY

ARI Job: RG54
Matrix: Soil

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA

Client ID	TFT	BBZ	TOT OUT
MB-080310	94.8%	95.1%	0
LCS-080310	99.2%	97.8%	0
LCSD-080310	97.3%	99.2%	0
PSB14-0-.5-072810	100%	98.7%	0
PSB14-1.5-2.0-072810	98.8%	99.0%	0
PSB14-2-4-072810	101%	102%	0
PSB14-7-9-072810	106%	106%	0
PSB14-12-14-072810	107%	108%	0
PSB14-12-14-072810 MS	99.1%	105%	0
PSB14-12-14-072810 MSD	106%	106%	0
PSB17-0-0.5-072810	99.2%	101%	0
PSB17-1.5-2-072810	102%	103%	0
PSB17-2-4-072810	102%	102%	0
PSB17-4-6-072810	99.4%	103%	0
PSB17-10-13-072810	101%	102%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(68-124)
(BBZ) = Bromobenzene	(77-120)	(62-134)

Log Number Range: 10-18202 to 10-18213

FORM II BETX

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: RG54
Matrix: Water

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA

Client ID	TFT	BBZ	TOT OUT
PSB14-TB	105%	103%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 10-18208 to 10-18208

FORM II TPHG

ANALYTICAL RESOURCES INCORPORATED

BETX WATER SURROGATE RECOVERY SUMMARY

ARI Job: RG54
Matrix: Water

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA

Client ID	TFT	BBZ	TOT OUT
PSB14-TB	100%	98.9%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(79-120)	(80-120)
(BBZ) = Bromobenzene	(79-120)	(80-120)

Log Number Range: 10-18208 to 10-18208

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: PSB14-12-14-072810
MATRIX SPIKE

Lab Sample ID: RG54F
LIMS ID: 10-18207
Matrix: Soil
Data Release Authorized: MW
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Analyzed MS: 08/03/10 16:37
MSD: 08/03/10 17:02
Instrument/Analyst MS: PID3/MH
MSD: PID3/MH

Purge Volume: 5.0 mL

Sample Amount MS: 147 mg-dry-wt
MSD: 147 mg-dry-wt

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Gasoline Range Hydrocarbons	< 3.40 U	34.3	34.0	101%	36.1	34.0	106%	5.1%

Reported in mg/kg (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	MS	MSD
Trifluorotoluene	104%	111%
Bromobenzene	107%	107%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod

Sample ID: PSB14-12-14-072810
MATRIX SPIKE

Lab Sample ID: RG54F
LIMS ID: 10-18207
Matrix: Soil
Data Release Authorized: MW
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Date Analyzed MS: 08/03/10 16:37
MSD: 08/03/10 17:02
Instrument/Analyst MS: PID3/MH
MSD: PID3/MH

Purge Volume: 5.0 mL

Sample Amount MS: 147 mg-dry-wt
MSD: 147 mg-dry-wt

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Benzene	< 8.50 U	79.2	71.4	111%	81.9	71.4	115%	3.4%
Toluene	< 8.50 U	1080	976	111%	1120	976	115%	3.6%
Ethylbenzene	< 8.50 U	13.9	313	4.4%	347	313	111%	185%
m,p-Xylene	< 17.0 U	1190	1150	103%	1230	1150	107%	3.3%
o-Xylene	< 8.50 U	518	476	109%	534	476	112%	3.0%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

BETX Surrogate Recovery

	MS	MSD
Trifluorotoluene	99.1%	106%
Bromobenzene	105%	106%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG

Sample ID: LCS-080310
LAB CONTROL SAMPLE

Lab Sample ID: LCS-080310
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized: MW
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 08/03/10 08:21
LCSD: 08/03/10 08:46
Instrument/Analyst LCS: PID3/MH
LCSD: PID3/MH

Purge Volume: 5.0 mL

Sample Amount LCS: 100 mg-dry-wt
LCSD: 100 mg-dry-wt

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	50.2	50.0	100%	48.4	50.0	96.8%	3.7%

Reported in mg/kg (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	105%	102%
Bromobenzene	103%	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
Page 1 of 1

Sample ID: LCS-080310
LAB CONTROL SAMPLE

Lab Sample ID: LCS-080310
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized: hmw
Reported: 08/06/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 08/03/10 08:21
LCSD: 08/03/10 08:46
Instrument/Analyst LCS: PID3/MH
LCSD: PID3/MH

Purge Volume: 5.0 mL

Sample Amount LCS: 100 mg-dry-wt
LCSD: 100 mg-dry-wt

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Benzene	112	105	107%	108	105	103%	3.6%
Toluene	1540	1440	107%	1480	1440	103%	4.0%
Ethylbenzene	467	460	102%	453	460	98.5%	3.0%
m,p-Xylene	1680	1690	99.4%	1610	1690	95.3%	4.3%
o-Xylene	720	700	103%	707	700	101%	1.8%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

BETX Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	99.2%	97.3%
Bromobenzene	97.8%	99.2%

BETX/GAS METHOD BLANK SUMMARY

BLANK NO.

MB0803S1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: RG60-RG54 Project No.: LORA LAKE

Date Analyzed : 08/03/10 Matrix: SOIL

Time Analyzed : 0910 Instrument ID : PID3

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	LCS0803S1	LCS0803	08/03/10
02	LCSD0803S1	LCSD0803	08/03/10
03	PSB14-TB	RG54G	08/03/10
04	PSB13-TB	RG60G	08/03/10
05	PSB13-1.5-2-	RG60B	08/03/10
06	PSB13-2-4-07	RG60C	08/03/10
07	PSB13-4-6-07	RG60D	08/03/10
08	PSB13-11-13-	RG60E	08/03/10
19	PSB13-14.5-1	RG60F	08/03/10
10	PSB14-0-.5-0	RG54A	08/03/10
11	PSB14-1.5-2.	RG54B	08/03/10
12	PSB14-2-4-07	RG54C	08/03/10
13	PSB14-7-9-07	RG54E	08/03/10
14	PSB14-12-14-	RG54F	08/03/10
15	PSB14-12-14-	RG54FMS	08/03/10
16	PSB14-12-14-	RG54FMSD	08/03/10
17	PSB17-0-0.5-	RG54H	08/03/10
18	PSB17-1.5-2-	RG54I	08/03/10
19	PSB17-2-4-07	RG54J	08/03/10
20	PSB17-4-6-07	RG54K	08/03/10
21	PSB17-10-13-	RG54L	08/03/10
22			
23			

FORM IV BETX/GAS

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod **Sample ID: MB-080310**
TPHG by Method NWTPHG **METHOD BLANK**
Page 1 of 1

Lab Sample ID: MB-080310 QC Report No: RG54-Floyd/Snider
LIMS ID: 10-18202 Project: Lora Lake RI
Matrix: Soil Event: POS-LLA
Data Release Authorized: Date Sampled: NA
Reported: 08/06/10 Date Received: NA

Date Analyzed: 08/03/10 09:10 Purge Volume: 5.0 mL
Instrument/Analyst: PID3/MH Sample Amount: 100 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	12	< 12 U
108-88-3	Toluene	12	< 12 U
100-41-4	Ethylbenzene	12	< 12 U
179601-23-1	m,p-Xylene	25	< 25 U
95-47-6	o-Xylene	12	< 12 U

			GAS ID
Gasoline Range Hydrocarbons	5.0	< 5.0 U	---

BETX Surrogate Recovery

Trifluorotoluene	94.8%
Bromobenzene	95.1%

Gasoline Surrogate Recovery

Trifluorotoluene	100%
Bromobenzene	99.1%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

6a
GAS INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

Instrument/Det: PID3.I/RTX 502-2 FID Project: LORA LAKE

Calibration Date: 28-JUL-2010 SDG No.: RG60-RG54

Gas Range	RF1 0.1	RF2 0.25	RF3 1.0	RF4 2.5	RF5 5.0	RF6 20	Ave RF	%RSD
WA Gas	1009250	772696	761867	782843	800745	839442	827807	11.2
AK Gas	1342560	1066876	1050254	1042480	1063396	1225137	1131784	10.9
NW Gas	1102210	829838	811111	828987	844316	875713	882029	12.5
8015Gas	1959390	1600162	1564234	1551602	1571254	1738000	1664107	9.6
$TFT(Surr)	78.13636	73.54545	71.97015	70.35000	70.48120	69.03933		
	70.30000						71.97607	4.271
$BB(Surr)	48.72727	43.22727	42.49254	41.18000	42.06767	41.53933		
	42.23000						43.06630	5.994

<- Indicates %RSD outside limits
Surrogate areas are not included in RF calculation.

Quant Ranges : WA Gas Toluene - nC12
AK Gas nC6 - nC10
NW Gas Toluene - Naphthalene
8015 Gas 2-Methylpentane - 1,2,4-Trimethylbenzene

Calibration Files	Analysis Time
0728a012.d	28-JUL-2010 11:42
0728a004.d	28-JUL-2010 08:07
0728a005.d	28-JUL-2010 08:31
0728a006.d	28-JUL-2010 08:56
0728a007.d	28-JUL-2010 09:20
0728a008.d	28-JUL-2010 09:45

Surr Calibration Files	Analysis Time
0629a005.d	29-JUN-2010 07:59
0629a006.d	29-JUN-2010 08:24
0629a007.d	29-JUN-2010 08:48
0629a008.d	29-JUN-2010 09:12
0629a009.d	29-JUN-2010 09:37
0629a010.d	29-JUN-2010 10:01
0629a011.d	29-JUN-2010 10:26

7a

GAS CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE

CCal Date: 28-JUL-2010 SDG No.: RG60-RG54

Lab File Name: 0728a010.d Inst/Det: PID3.I/RTX 502-2 FID

Gas Range	Area*	CalcAmnt	NomAmnt	%D	
WAGas (Tol-C12)	2493506	3.01	2.50	20.5	<-
AKGas (C6-C10)	2858408	2.53	2.50	1.0	
NWGas (Tol-Nap)	2556570	2.90	2.50	15.9	
8015B (2MP-TMB)	3739886	2.25	2.50	-10.1	

* Surrogate areas are subtracted from Total Area
<- Indicates an RPD outside QC limits

7b
FID SURROGATE CONTINUING CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC.
Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010
Project: LORA LAKE

CCal Date: 28-JUL-2010
SDG No.: RG60-RG54

Lab File Name: 0728a010.d
Inst/Det: PID3.I/RTX 502-2 FID

Surrogate	Area	CalcAmnt	NomAmnt	RPD
Trifluorotol	85915	99.7	100.0	-0.3
Bromoflrbenz	33856	101.1	100.0	1.1

FORM VII-Surr

BETX CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: RG60-RG54 Project No.: LORA LAKE

Instrument/Det: PID3/RTX 502-2 PID Calibration Date: 08/03/10

Init. Calib. Date(s): 06/29/10 Calib. File: 0803A002.D

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Benzene	7.69	7.65	7.79	25.66	25.00	2.6
Toluene	10.27	10.24	10.38	25.44	25.00	1.8
Ethylbenzene	12.80	12.77	12.91	24.73	25.00	-1.1
M/P-Xylene	12.94	12.91	13.05	49.97	50.00	-0.1
O-Xylene	13.72	13.71	13.81	24.91	25.00	-0.4
MTBE	5.29	5.24	5.38	26.31	25.00	5.2
TFT(Surr)	8.41	8.37	8.51	97.81	100.0	-2.2
BB(Surr)	14.89	14.84	14.98	96.52	100.0	-3.5

FORM VII BETX

7a
GAS CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE

CCal Date: 03-AUG-2010 SDG No.: RG60-RG54

Lab File Name: 0803a003.d Inst/Det: PID3.I/RTX 502-2 FID

Gas Range	Area*	CalcAmnt	NomAmnt	%D
WAGas (Tol-C12)	2059882	2.49	2.50	-0.5
AKGas (C6-C10)	2758865	2.44	2.50	-2.5
NWGas (Tol-Nap)	2190146	2.48	2.50	-0.7
8015B (2MP-TMB)	4090267	2.46	2.50	-1.7

* Surrogate areas are subtracted from Total Area
<- Indicates an RPD outside QC limits

7b
FID SURROGATE CONTINUING CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE

CCal Date: 03-AUG-2010 SDG No.: RG60-RG54

Lab File Name: 0803a003.d Inst/Det: PID3.I/RTX 502-2 FID

Surrogate	Area	CalcAmnt	NomAmnt	RPD
Trifluorotol	93670	109.4	100.0	9.4
Bromoflrbenz	37366	106.5	100.0	6.5

BETX CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: RG60-RG54 Project No.: LORA LAKE

Instrument/Det: PID3/RTX 502-2 PID Calibration Date: 08/03/10

Init. Calib. Date(s): 06/29/10 Calib. File: 0803A014.D

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Benzene	7.72	7.65	7.79	27.15	25.00	8.6
Toluene	10.31	10.24	10.38	27.51	25.00	10.0
Ethylbenzene	12.84	12.77	12.91	26.67	25.00	6.7
M/P-Xylene	12.98	12.91	13.05	53.70	50.00	7.4
O-Xylene	13.76	13.71	13.81	27.51	25.00	10.0
MTBE	5.31	5.24	5.38	27.09	25.00	8.4
TFT(Surr)	8.44	8.37	8.51	102.5	100.0	2.5
BB(Surr)	14.91	14.84	14.98	104.3	100.0	4.3

FORM VII BETX

7a
GAS CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE

CCal Date: 03-AUG-2010 SDG No.: RG60-RG54

Lab File Name: 0803a015.d Inst/Det: PID3.I/RTX 502-2 FID

Gas Range	Area*	CalcAmnt	NomAmnt	%D
WAGas (Tol-C12)	2060837	2.49	2.50	-0.4
AKGas (C6-C10)	2737165	2.42	2.50	-3.3
NWGas (Tol-Nap)	2177926	2.47	2.50	-1.2
8015B (2MP-TMB)	4079909	2.45	2.50	-1.9

* Surrogate areas are subtracted from Total Area
<- Indicates an RPD outside QC limits

7b
FID SURROGATE CONTINUING CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE

CCal Date: 03-AUG-2010 SDG No.: RG60-RG54

Lab File Name: 0803a015.d Inst/Det: PID3.I/RTX 502-2 FID

Surrogate	Area	CalcAmnt	NomAmnt	RPD
Trifluorotol	94644	110.1	100.0	10.1
Bromoflrbenz	39566	108.5	100.0	8.5

BETX CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: RG60-RG54 Project No.: LORA LAKE

Instrument/Det: PID3/RTX 502-2 PID Calibration Date: 08/03/10

Init. Calib. Date(s): 06/29/10 Calib. File: 0803A026.D

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Benzene	7.72	7.65	7.79	26.78	25.00	7.1
Toluene	10.31	10.24	10.38	26.86	25.00	7.4
Ethylbenzene	12.84	12.77	12.91	26.12	25.00	4.5
M/P-Xylene	12.98	12.91	13.05	52.35	50.00	4.7
O-Xylene	13.76	13.71	13.81	26.58	25.00	6.3
MTBE	5.31	5.24	5.38	26.80	25.00	7.2
TFT(Surr)	8.44	8.37	8.51	103.2	100.0	3.2
BB(Surr)	14.91	14.84	14.98	103.1	100.0	3.1

FORM VII BETX

7a
GAS CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE

CCal Date: 03-AUG-2010 SDG No.: RG60-RG54

Lab File Name: 0803a027.d Inst/Det: PID3.I/RTX 502-2 FID

Gas Range	Area*	CalcAmnt	NomAmnt	%D
WAGas (Tol-C12)	2033253	2.46	2.50	-1.8
AKGas (C6-C10)	2663212	2.35	2.50	-5.9
NWGas (Tol-Nap)	2147059	2.43	2.50	-2.6
8015B (2MP-TMB)	3991386	2.40	2.50	-4.1

* Surrogate areas are subtracted from Total Area
<- Indicates an RPD outside QC limits

7b
FID SURROGATE CONTINUING CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE

CCal Date: 03-AUG-2010 SDG No.: RG60-RG54

Lab File Name: 0803a027.d Inst/Det: PID3.I/RTX 502-2 FID

Surrogate	Area	CalcAmnt	NomAmnt	RPD
Trifluorotol	93833	108.9	100.0	8.9
Bromoflrbenz	38029	108.1	100.0	8.1

BETX CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: RG60-RG54 Project No.: LORA LAKE

Instrument/Det: PID3/RTX 502-2 PID Calibration Date: 08/03/10

Init. Calib. Date(s): 06/29/10 Calib. File: 0803A034.D

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Benzene	7.71	7.65	7.79	27.62	25.00	10.5
Toluene	10.31	10.24	10.38	27.64	25.00	10.6
Ethylbenzene	12.84	12.77	12.91	26.68	25.00	6.7
M/P-Xylene	12.98	12.91	13.05	53.57	50.00	7.1
O-Xylene	13.76	13.71	13.81	27.72	25.00	10.9
MTBE	5.30	5.24	5.38	26.83	25.00	7.3
TFT(Surr)	8.44	8.37	8.51	100.5	100.0	0.5
BB(Surr)	14.91	14.84	14.98	106.8	100.0	6.8

FORM VII BETX

7a
GAS CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE

CCal Date: 03-AUG-2010 SDG No.: RG60-RG54

Lab File Name: 0803a035.d Inst/Det: PID3.I/RTX 502-2 FID

Gas Range	Area*	CalcAmnt	NomAmnt	%D
WAGas (Tol-C12)	1918976	2.32	2.50	-7.3
AKGas (C6-C10)	2475978	2.19	2.50	-12.5
NWGas (Tol-Nap)	2026436	2.30	2.50	-8.1
8015B (2MP-TMB)	3757672	2.26	2.50	-9.7

* Surrogate areas are subtracted from Total Area
<- Indicates an RPD outside QC limits

7b
FID SURROGATE CONTINUING CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE

CCal Date: 03-AUG-2010 SDG No.: RG60-RG54

Lab File Name: 0803a035.d Inst/Det: PID3.I/RTX 502-2 FID

Surrogate	Area	CalcAmnt	NomAmnt	RPD
Trifluorotol	92144	106.6	100.0	6.6
Bromoflrbenz	37796	110.6	100.0	10.6

BETX/GAS ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: RG60-RG54 Project: LORA LAKE

Instrument ID: PID3 GC Detector: RTX 502-2 PID

Run Date: 06/29/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

METHOD SURROGATE RT
S1 : 8.44 S2 : 14.91

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	S1 #	S2 RT	S2 #
01		RINSE	06/29/10	0548				
02		RT+BCAL 1	06/29/10	0613	8.42		14.90	
03		GCAL 1	06/29/10	0637	8.43		14.91	
04		RINSE	06/29/10	0735				
05		BETX .25	06/29/10	0759	8.42		14.89	
06		BETX .5	06/29/10	0824	8.43		14.90	
07		BETX 5	06/29/10	0848	8.43		14.91	
08		BETX 25	06/29/10	0912	8.44		14.91	
09		BETX 50	06/29/10	0937	8.44		14.91	
10		BETX 100	06/29/10	1001	8.44		14.91	
11		BETX 200	06/29/10	1026	8.44		14.91	
12		BETX ICV	06/29/10	1050	8.44		14.91	
13		GCAL 2	06/29/10	1145	8.37		14.87	
14		LCS0629	06/29/10	1210	8.42		14.89	
15		LCSD0629	06/29/10	1234	8.43		14.90	
16		MB0629	06/29/10	1259	8.43		14.91	
17	ZZZZZ	ZZZZZ	06/29/10	1344	8.38		14.88	
18	ZZZZZ	ZZZZZ	06/29/10	1408	8.42		14.90	
19	ZZZZZ	ZZZZZ	06/29/10	1433	8.43		14.90	
20	ZZZZZ	ZZZZZ	06/29/10	1458	8.43		14.91	
21	ZZZZZ	ZZZZZ	06/29/10	1522	8.43		14.91	
22	ZZZZZ	ZZZZZ	06/29/10	1547	8.44		14.91	
23	ZZZZZ	ZZZZZ	06/29/10	1611	8.44		14.91	
24		RINSE	06/29/10	1636				
25		BCAL 3	06/29/10	1700	8.44		14.91	
26		GCAL 2	06/29/10	1725	8.44		14.91	

QC LIMITS

S1 = TFT(Surr) (+/- 0.07 MINUTES)
S2 = BB(Surr) (+/- 0.07 MINUTES)

* Values outside of QC limits.

BETX INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: RG60-RG54 Project: LORA LAKE

Instrument/Det: PID3 /RTX 502-2 PID Calibration Date: 06/29/10

	CALIBRATION FACTORS						
COMPOUND	0.25	0.5	5	25	50	MEAN	%RSD
Benzene	1564	1462	1257	1240	1256		
Toluene	1608	1252	1288	1275	1275		
Ethylbenzene	1404	1420	1164	1185	1190		
M/P-Xylene	1614	1381	1314	1300	1302		
O-Xylene	1352	1232	1295	1269	1282		
MTBE	464	288	367	346	348		
TFT(Surr)	243	220	213	214	217		
BB(Surr)	496	451	434	440	456		

Calibration Files

/chem3/pid3.i/20100629-1.b/0629a005.d
/chem3/pid3.i/20100629-1.b/0629a006.d
/chem3/pid3.i/20100629-1.b/0629a007.d
/chem3/pid3.i/20100629-1.b/0629a008.d
/chem3/pid3.i/20100629-1.b/0629a009.d
/chem3/pid3.i/20100629-1.b/0629a010.d
/chem3/pid3.i/20100629-1.b/0629a011.d

BETX INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: RG60-RG54 Project: LORA LAKE

Instrument/Det: PID3 /RTX 502-2 PID Calibration Date: 06/29/10

COMPOUND	CALIBRATION FACTORS 100	200	MEAN	%RSD			
Benzene	1220	1254	1322	10.16			
Toluene	1247	1294	1320	9.72			
Ethylbenzene	1152	1183	1242	9.38			
M/P-Xylene	1247	1268	1346	9.29			
O-Xylene	1256	1307	1285	3.02			
MTBE	334	343	356	15.04			
TFT(Surr)	212	219	220	4.94			
BB(Surr)	450	463	456	4.41			

BETX/GAS ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: RG60-RG54 Project: LORA LAKE

Instrument ID: PID3 GC Detector: RTX 502-2 FID

Run Date: 07/28/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

	METHOD SURROGATE RT S1 : 8.44 S2 : 14.91					
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
01		ZZZZZ	07/28/10	0653		14.86
02		RT+BCAL 1	07/28/10	0718	8.41	14.89
03		ZZZZZ	07/28/10	0742	8.43	14.90
04		GAS .25	07/28/10	0807	8.43	14.91
05		GAS 1	07/28/10	0831	8.44	14.91
06		GAS 2.5	07/28/10	0856	8.44	14.91
07		GAS 5	07/28/10	0920	8.44	14.91
08		GAS 20	07/28/10	0945	8.44	14.91
09		ZZZZZ	07/28/10	1009		14.84
10		GAS ICV	07/28/10	1034	8.44	14.91
11		ZZZZZ	07/28/10	1117		14.93
12		GAS .1	07/28/10	1142	8.43	14.90

QC LIMITS

S1 = TFT(Surr) (+/- 0.07 MINUTES)

S2 = BB(Surr) (+/- 0.07 MINUTES)

* Values outside of QC limits.

BETX/GAS ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: RG60-RG54 Project: LORA LAKE

Instrument ID: PID3 GC Detector: RTX 502-2 PID

Run Date: 08/03/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

METHOD SURROGATE RT
S1 : 8.44 S2 : 14.91

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	S1 #	S2 RT	S2 #
01	ZZZZZ	ZZZZZ	08/03/10	0708				
02	RT+BCAL 1	RT+BCAL 1	08/03/10	0732	8.41		14.89	
03	GCAL 1	GCAL 1	08/03/10	0757	8.42		14.90	
04	LCS0803S1	LCS0803	08/03/10	0821	8.43		14.91	
05	LCSD0803S1	LCSD0803	08/03/10	0846	8.44		14.91	
06	MB0803S1	MB0803	08/03/10	0910	8.44		14.91	
07	PSB14-TB	RG54G	08/03/10	1005	8.37		14.87	
08	PSB13-TB	RG60G	08/03/10	1030	8.42		14.89	
09	ZZZZZ	ZZZZZ	08/03/10	1054	8.43		14.90	
10	PSB13-1.5-2-	RG60B	08/03/10	1119	8.44		14.91	
11	PSB13-2-4-07	RG60C	08/03/10	1143	8.44		14.91	
12	PSB13-4-6-07	RG60D	08/03/10	1208	8.44		14.91	
13	ZZZZZ	ZZZZZ	08/03/10	1232				
14	BCAL 2	BCAL 2	08/03/10	1256	8.44		14.91	
15	GCAL 2	GCAL 2	08/03/10	1320	8.44		14.91	
16	PSB13-11-13-	RG60E	08/03/10	1345	8.44		14.91	
17	PSB13-14.5-1	RG60F	08/03/10	1410	8.44		14.91	
18	PSB14-0-.5-0	RG54A	08/03/10	1435	8.44		14.91	
19	PSB14-1.5-2.	RG54B	08/03/10	1459	8.44		14.91	
20	PSB14-2-4-07	RG54C	08/03/10	1524	8.44		14.91	
21	PSB14-7-9-07	RG54E	08/03/10	1548	8.44		14.91	
22	PSB14-12-14-	RG54F	08/03/10	1613	8.44		14.91	
23	PSB14-12-14-	RG54FMS	08/03/10	1637	8.44		14.91	
24	PSB14-12-14-	RG54FMSD	08/03/10	1702	8.44		14.91	
25	ZZZZZ	ZZZZZ	08/03/10	1727				
26	BCAL3	BCAL3	08/03/10	1751	8.44		14.91	
27	GCAL 3	GCAL 3	08/03/10	1816	8.44		14.91	
28	PSB17-0-0.5-	RG54H	08/03/10	1840	8.44		14.91	
29	PSB17-1.5-2-	RG54I	08/03/10	1904	8.44		14.91	
30	PSB17-2-4-07	RG54J	08/03/10	1929	8.44		14.91	
31	PSB17-4-6-07	RG54K	08/03/10	1954	8.44		14.91	
32	PSB17-10-13-	RG54L	08/03/10	2018	8.44		14.91	

QC LIMITS

S1 = TFT(Surr) (+/- 0.07 MINUTES)
S2 = BB(Surr) (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII-2 BETX

BETX/GAS ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD/SNIDER

SDG No.: RG60-RG54 Project: LORA LAKE

Instrument ID: PID3 GC Detector: RTX 502-2 PID

Run Date: 08/03/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

METHOD SURROGATE RT
S1 : 8.44 S2 : 14.91

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	S1 #	S2 RT	S2 #
01	ZZZZZ	ZZZZZ	08/03/10	2043				
02	BCAL 4	BCAL 4	08/03/10	2108	8.44		14.91	
03	GCAL 4	GCAL 4	08/03/10	2132	8.44		14.91	

QC LIMITS

S1 = TFT(Surr) (+/- 0.07 MINUTES)

S2 = BB(Surr) (+/- 0.07 MINUTES)

* Values outside of QC limits.

Metals Analysis
Report and Summary QC Forms

ARI Job ID: RG54

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

SDG: RG51

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
PSB12-0-0.5-072810	RG51A	10-18183	
PSB12-0-0.5-072810D	RG51ADUP	10-18183	
PSB12-0-0.5-072810S	RG51ASPK	10-18183	
PSB12-1.5-2.0-0728	RG51B	10-18184	
PBS	RG51MB1	10-18184	
LCSS	RG51MB1SPK	10-18184	
LCSS	RG51REF1	10-18184	
PSB12-2-4-072810	RG51C	10-18185	
PSB12-8-10-072810	RG51D	10-18186	
PSB12-8-10-072810-	RG51E	10-18187	
PSB12-14-17-072810	RG51F	10-18188	
PSB12-4-6-072810	RG51G	10-18189	
PSB14-0-.5-072810	RG54A	10-18202	
PSB14-1.5-2.0-0728	RG54B	10-18203	
PSB14-2-4-072810	RG54C	10-18204	
PSB14-7-9-072810	RG54E	10-18206	
PSB14-12-14-072810	RG54F	10-18207	
PSB17-0-0.5-072810	RG54H	10-18209	
PSB17-1.5-2-072810	RG54I	10-18210	
PSB17-2-4-072810	RG54J	10-18211	
PSB17-4-6-072810	RG54K	10-18212	

Were ICP interelement corrections applied ?	Yes/No	YES
Were ICP background corrections applied ?	Yes/No	YES
If yes - were raw data generated before application of background corrections ?	Yes/No	NO

Comments: _____

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: _____ Name: Jay Kuhn

Date: 8/10/10 Title: Inorganic Manager

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

SDG: RG51

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
PSB17-10-13-072810	RG54L	10-18213	

Were ICP interelement corrections applied ?	Yes/No	YES
Were ICP background corrections applied ?	Yes/No	YES
If yes - were raw data generated before application of background corrections ?	Yes/No	NO

Comments: _____

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: _____ Name: Jay Kuhn

Date: 8/10/10 Title: Inorganic Manager

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: PSB12-0-0.5-072810
MATRIX SPIKE

Lab Sample ID: RG51A
LIMS ID: 10-18183
Matrix: Soil
Data Release Authorized:
Reported: 08/10/10

QC Report No: RG51-Floyd/Snider
Project: Lora Lakes RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	6010B	5 U	203	208	97.6%	
Lead	6010B	11	207	208	94.2%	

Reported in mg/kg-dry

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: PSB12-0-0.5-072810
DUPLICATE

Lab Sample ID: RG51A
LIMS ID: 10-18183
Matrix: Soil
Data Release Authorized:
Reported: 08/10/10

QC Report No: RG51-Floyd/Snider
Project: Lora Lakes RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	6010B	5 U	5 U	0.0%	+/- 5	L
Lead	6010B	11	12	8.7%	+/- 20%	

Reported in mg/kg-dry

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: LAB CONTROL**

Lab Sample ID: RG51LCS
LIMS ID: 10-18184
Matrix: Soil
Data Release Authorized:
Reported: 08/10/10

QC Report No: RG51-Floyd/Snider
Project: Lora Lakes RI
POS-LLA
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	6010B	209	200	104%	
Lead	6010B	203	200	102%	

Reported in mg/kg-dry

N-Control limit not met
NA-Not Applicable, Analyte Not Spiked
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: METHOD BLANK**

Lab Sample ID: RG51MB
LIMS ID: 10-18184
Matrix: Soil
Data Release Authorized:
Reported: 08/10/10

QC Report No: RG51-Floyd/Snider
Project: Lora Lakes RI
POS-LLA
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/03/10	6010B	08/06/10	7440-38-2	Arsenic	5	5	U
3050B	08/03/10	6010B	08/06/10	7439-92-1	Lead	2	2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: STD REFERENCE
ERA D053540

Lab Sample ID: RG51SRM
LIMS ID: 10-18184
Matrix: Soil
Data Release Authorized:
Reported: 08/10/10

QC Report No: RG51-Floyd/Snider
Project: Lora Lakes RI
POS-LLA
Date Sampled: NA
Date Received: NA

Analyte	Analysis Method	Analysis Date	mg/kg-dry	Certified Value	Advisory Range
Arsenic	6010B	08/06/10	137	132	106-157
Lead	6010B	08/06/10	129	130	106-154

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: PSB14-0-.5-072810
SAMPLE

Lab Sample ID: RG54A
LIMS ID: 10-18202
Matrix: Soil
Data Release Authorized:
Reported: 08/10/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Percent Total Solids: 92.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/03/10	6010B	08/06/10	7440-38-2	Arsenic	5	5	U
3050B	08/03/10	6010B	08/06/10	**7439-92-1**	**Lead**	2	**17**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: PSB14-1.5-2.0-072810
SAMPLE

Lab Sample ID: RG54B
LIMS ID: 10-18203
Matrix: Soil
Data Release Authorized:
Reported: 08/10/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Percent Total Solids: 91.7%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/03/10	6010B	08/06/10	7440-38-2	Arsenic	5	5	U
3050B	08/03/10	6010B	08/06/10	**7439-92-1**	**Lead**	2	**3**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: PSB14-2-4-072810
SAMPLE

Lab Sample ID: RG54C
LIMS ID: 10-18204
Matrix: Soil
Data Release Authorized:
Reported: 08/10/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Percent Total Solids: 90.0%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/03/10	6010B	08/06/10	7440-38-2	Arsenic	5	5	U
3050B	08/03/10	6010B	08/06/10	**7439-92-1**	**Lead**	2	**11**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: PSB14-7-9-072810
SAMPLE

Lab Sample ID: RG54E
LIMS ID: 10-18206
Matrix: Soil
Data Release Authorized:
Reported: 08/10/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Percent Total Solids: 88.8%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/03/10	6010B	08/06/10	7440-38-2	Arsenic	5	5	U
3050B	08/03/10	6010B	08/06/10	**7439-92-1**	**Lead**	2	**16**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: PSB14-12-14-072810
SAMPLE

Lab Sample ID: RG54F
LIMS ID: 10-18207
Matrix: Soil
Data Release Authorized:
Reported: 08/10/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Percent Total Solids: 85.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/03/10	6010B	08/06/10	7440-38-2	Arsenic	6	6	U
3050B	08/03/10	6010B	08/06/10	7439-92-1	Lead	2	2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: PSB17-0-0.5-072810
SAMPLE

Lab Sample ID: RG54H
LIMS ID: 10-18209
Matrix: Soil
Data Release Authorized:
Reported: 08/10/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Percent Total Solids: 93.7%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/03/10	6010B	08/06/10	7440-38-2	Arsenic	5	5	U
3050B	08/03/10	6010B	08/06/10	**7439-92-1**	**Lead**	2	**7**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: PSB17-1.5-2-072810
SAMPLE

Lab Sample ID: RG54I
LIMS ID: 10-18210
Matrix: Soil
Data Release Authorized:
Reported: 08/10/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Percent Total Solids: 94.0%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/03/10	6010B	08/06/10	7440-38-2	Arsenic	5	5	U
3050B	08/03/10	6010B	08/06/10	**7439-92-1**	**Lead**	2	**7**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: PSB17-2-4-072810
SAMPLE

Lab Sample ID: RG54J
LIMS ID: 10-18211
Matrix: Soil
Data Release Authorized:
Reported: 08/10/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Percent Total Solids: 93.0%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/03/10	6010B	08/06/10	7440-38-2	Arsenic	5	5	U
3050B	08/03/10	6010B	08/06/10	**7439-92-1**	**Lead**	2	**2**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: PSB17-4-6-072810
SAMPLE

Lab Sample ID: RG54K
LIMS ID: 10-18212
Matrix: Soil
Data Release Authorized:
Reported: 08/10/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Percent Total Solids: 91.5%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/03/10	6010B	08/06/10	7440-38-2	Arsenic	5	5	U
3050B	08/03/10	6010B	08/06/10	7439-92-1	Lead	2	2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: PSB17-10-13-072810
SAMPLE

Lab Sample ID: RG54L
LIMS ID: 10-18213
Matrix: Soil
Data Release Authorized:
Reported: 08/10/10

QC Report No: RG54-Floyd/Snider
Project: Lora Lake RI
POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Percent Total Solids: 92.1%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/03/10	6010B	08/06/10	7440-38-2	Arsenic	5	5	U
3050B	08/03/10	6010B	08/06/10	7439-92-1	Lead	2	2	U

U-Analyte undetected at given RL
RL-Reporting Limit

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

UNITS: ug/L

SDG: RG51

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Arsenic	AS	ICP	IP080672	2000.0	2028.54	101.4	2000.0	2067.67	103.4	2068.32	103.4	2095.14	104.8	2102.32	105.1	2132.58	106.6
Lead	PB	ICP	IP080672	2000.0	2018.87	100.9	2000.0	2057.24	102.9	2058.28	102.9	2087.41	104.4	2086.28	104.3	2118.92	105.9

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

UNITS: ug/L

SDG: RG51

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Arsenic	AS	ICP	IP080672	2000.0	2141.27	107.1	2167.23	108.4	2020.94	101.0	2040.79	102.0	2103.30	105.2	2099.50	105.0
Lead	PB	ICP	IP080672	2000.0	2117.28	105.9	2141.82	107.1	1992.75	99.6	2028.27	101.4	2045.38	102.3	2052.03	102.6

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

UNITS: ug/L

SDG: RG51

ANALYTE	EL	M	RUN	CCVTV	CCV12	%R	CCV13	%R	CCV14	%R	CCV15	%R	CCV16	%R	CCV17	%R
Arsenic	AS	ICP	IP080672	2000.0	2118.06	105.9										
Lead	PB	ICP	IP080672	2000.0	2047.62	102.4										

Control Limits: Mercury 80-120; Other Metals 90-110

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

UNITS: ug/L

SDG: RG51

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Arsenic	AS	ICP	IP080672	50.0	50.76	101.5										
Lead	PB	ICP	IP080672	20.0	19.58	97.9										

Control Limits: no control limits have been established by the EPA at this time.

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

UNITS: ug/L

SDG: RG51

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Arsenic	AS	ICP	IP080672	10.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Lead	PB	ICP	IP080672	3.0	20.0	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U

RG51: 9203

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

UNITS: ug/L

SDG: RG51

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Arsenic	AS	ICP	IP080672	10.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Lead	PB	ICP	IP080672	3.0	20.0	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U

RG51.0026

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

UNITS: ug/L

SDG: RG51

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB12	C	CCB13	C	CCB14	C	CCB15	C	CCB16	C	CCB17	C
Arsenic	AS	ICP	IP080672	10.0	50.0	50.0	U										
Lead	PB	ICP	IP080672	3.0	20.0	20.0	U										

RG51: 00216

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

SDG: RG51

ICS SOURCE: I.V.

RUNID: IP080672

INSTRUMENT ID: OPTIMA ICP 2

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Aluminum	200000	200000	202056.2	205902.2	**103.0**						
Antimony		1000	25.6	1048.4	**104.8**						
Arsenic		1000	8.8	1017.9	**101.8**						
Barium		1000	1.6	1023.1	**102.3**						
Beryllium		1000	0.0	1003.6	**100.4**						
Boron			-5.9	-9.7							
Cadmium		1000	2.1	1054.6	**105.5**						
Calcium	100000	100000	100660.2	102199.6	**102.2**						
Chromium		1000	1.6	1039.0	**103.9**						
Cobalt		1000	-0.6	969.9	**97.0**						
Copper		1000	-1.5	1040.9	**104.1**						
Iron	200000	200000	196856.6	199851.6	**99.9**						
Lead		1000	-9.4	959.2	**95.9**						
Magnesium	100000	100000	99472.7	100801.5	**100.8**						
Manganese		1000	1.0	973.4	**97.3**						
Molybdenum			4.4	3.9							
Nickel		1000	2.2	962.7	**96.3**						
Potassium			13.3	-49.0							
Selenium		1000	45.7	1066.1	**106.6**						
Silicon			-18.0	-20.2							
Silver		1000	-1.0	1025.5	**102.6**						
Sodium			8.3	21.4							
Strontium			3.6	3.7							
Thallium		1000	10.2	974.0	**97.4**						
Tin			-10.3	-9.7							
Titanium			1.1	1.6							
Vanadium		1000	2.6	987.8	**98.8**						
Zinc		1000	-9.8	951.3	**95.1**						

RG51-0021

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

SDG: RG51

UNITS: ug/L

ANALYTE	EL	METH	INSTRUMENT	WAVELENTH (nm)	GFA BACK-GROUND	CLP CRDL	RL	RL DATE	ICP LINEAR RANGE (ug/L)	ICP LR DATE
Arsenic	AS	ICP	OPTIMA ICP 2	197.20		10	50.0	4/1/2010	30000.0	6/25/2010
Lead	PB	ICP	OPTIMA ICP 2	220.35		3	20.0	4/1/2010	300000.0	6/25/2010

ICP Interelement Correction Factors

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

SDG: RG51

IEC DATE: 6/25/2010

INSTRUMENT ID: OPTIMA ICP 2

ANALYTE	WAVELENGTH	AL	AS	BA	BE	CA	CD	CO	CR	CU	FE
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	10.6345000	0.0000000	0.0000000
Arsenic	188.98	0.0000000	0.0000000	0.0000000	0.0000000	0.0302010	0.0000000	-0.9445380	1.0514100	0.0000000	0.0000000
Barium	233.53	0.0000000	0.0000000	0.0000000	0.0000000	0.0087705	0.0000000	-0.1163000	0.0000000	0.0000000	0.0917961
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	3.3930900	0.0000000	0.0000000	0.0000000	0.0000000	0.1261800	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.5291320	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0194491	0.0000000	-0.0579845	0.0000000	0.0000000	-0.0470434
Cobalt	228.62	0.0000000	0.0000000	0.1846310	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0124726
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.2841270	-0.0424887	0.0000000	-0.0717000
Iron	273.96	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	-0.1693720	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-1.9714800	1.2740100	0.0700135
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.1319490	0.0000000	-1.9410900	-0.9247460	0.0000000	0.5007690
Manganese	257.61	0.0067696	0.0000000	0.0000000	0.0000000	0.0023349	0.0000000	0.0000000	0.0000000	0.0000000	-0.0051882
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0173285	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0679605	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-3.5126200	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	-5.9937200	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	2.3133900	0.3288770	0.0000000	-0.1504990
Tin	189.93	0.0000000	0.0000000	0.0000000	0.0000000	-0.0462590	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0623399	0.0000000	0.0000000	0.1821360	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-4.1559900	0.0000000	0.1070520
Zinc	206.20	0.0279274	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.3041290	0.0000000	0.0000000

RG51-6S2-S1

ICP Interelement Correction Factors

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

SDG: RG51

IEC DATE: 6/25/2010

INSTRUMENT ID: OPTIMA ICP 2

ANALYTE	WAVELENGTH	MG	MN	MO	NI	PB	SB	TI	TL	V	ZN
Aluminum	308.22	0.0000000	0.0000000	10.5279000	0.0000000	0.0000000	0.0000000	2.3617300	0.0000000	18.6686000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	-0.3653530	0.0000000	0.0000000	-1.2842400	0.0000000	-3.1614700	0.0000000
Arsenic	188.98	0.0000000	0.0000000	1.5685300	0.0000000	0.0000000	0.0000000	-18.0910000	0.0000000	0.0000000	0.0000000
Barium	233.53	0.0000000	0.0000000	0.0000000	0.1042590	0.0000000	0.0000000	0.0000000	0.0000000	0.5343320	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0111651	0.0000000	0.5182900	0.0000000
Cadmium	228.80	0.0000000	0.0000000	0.0000000	-0.6501870	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.1304500	0.0000000	0.1655120	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.2567570	0.0000000
Cobalt	228.62	0.0000000	0.0000000	-0.1920370	0.1791340	0.0000000	0.0000000	1.6866300	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0228258	0.0000000	0.7071800	0.0000000	0.0000000	0.0000000	0.3708110	0.0000000	0.0000000	0.0000000
Iron	273.96	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	5.3092800	0.0000000
Lead	220.35	0.0000000	0.0000000	-0.3219480	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	-3.4563100	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	-0.2309750	0.0000000	0.0000000	0.0000000	-0.0245610	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.7107260	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.1962650	0.1355340	0.0000000	0.0000000	0.0000000	-0.0347846	0.0000000	-0.2306430	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	?75.8690000	0.0000000	0.0000000	?38.7330000
Thallium	190.80	0.0000000	-0.9583370	-3.2391700	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	1.5566700	0.0000000
Tin	189.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.6349390	-0.4579360	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	0.0000000	1.2012000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	-0.1525300	-0.7369790	0.0000000	0.0000000	0.0000000	0.5819800	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.2610670	0.0000000	-0.0597607	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

FORM XI

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

SDG: RG51

ANALYSIS METHOD: ICP

ARI PREP CODE: SWC

PREPDATE: 8/3/2010

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
PSB12-0-0.5-072810	RG51A	1.064	0.0	50.0
PSB12-0-0.5-072810D	RG51ADUP	1.069	0.0	50.0
PSB12-0-0.5-072810S	RG51ASPK	1.060	0.0	50.0
PSB12-1.5-2.0-0728	RG51B	1.054	0.0	50.0
PSB12-2-4-072810	RG51C	1.076	0.0	50.0
PSB12-8-10-072810	RG51D	1.089	0.0	50.0
PSB12-8-10-072810-	RG51E	1.005	0.0	50.0
PSB12-14-17-072810	RG51F	1.074	0.0	50.0
PSB12-4-6-072810	RG51G	1.033	0.0	50.0
PBS	RG51MB1	1.000	0.0	50.0
LCSS	RG51MB1SPK	1.000	0.0	50.0
LCSS	RG51REF1	1.009	0.0	50.0

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

SDG: RG51

ANALYSIS METHOD: ICP

ARI PREP CODE: SWC

PREPDATE: 8/3/2010

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
PSB14-0-.5-072810	RG54A	1.080	0.0	50.0
PSB14-1.5-2.0-0728	RG54B	1.030	0.0	50.0
PSB14-2-4-072810	RG54C	1.034	0.0	50.0
PSB14-7-9-072810	RG54E	1.088	0.0	50.0
PSB14-12-14-072810	RG54F	1.001	0.0	50.0
PSB17-0-0.5-072810	RG54H	1.045	0.0	50.0
PSB17-1.5-2-072810	RG54I	1.024	0.0	50.0
PSB17-2-4-072810	RG54J	1.044	0.0	50.0
PSB17-4-6-072810	RG54K	1.019	0.0	50.0
PSB17-10-13-072810	RG54L	1.055	0.0	50.0

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

SDG: RG51

INSTRUMENT ID: OPTIMA ICP 2

RUNID: IP080672 METHOD: ICP

START DATE: 8/6/2010

END DATE: 8/6/2010

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	09161				X																	X									
S2	S2	1.00	09202																														
S3	S3	1.00	09222				X																	X									
S4	S4	1.00	09245																														
S5	S5	1.00	09270																														
ICV	ICV	1.00	09295				X																	X									
ICB	ICB	1.00	09340				X																	X									
CRI	CRII	1.00	09380				X																	X									
ICSA	ICSAI	1.00	09421				X																	X									
ICSAB	ICSABI	1.00	09462				X																	X									
CCV	CCV1	1.00	09500				X																	X									
CCB	CCB1	1.00	09542				X																	X									
ZZZZZZ	RF71MB1	2.00	09581																														
ZZZZZZ	RG11MB1	2.00	10022																														
ZZZZZZ	RG11A	2.00	10063																														
ZZZZZZ	RF71ADUP	2.00	10102																														
ZZZZZZ	RF71A	2.00	10141																														
ZZZZZZ	RF71ASPK	2.00	10181																														
ZZZZZZ	RF71APOST	2.00	10215																														
ZZZZZZ	RF71MB1SPK	2.00	10254																														
ZZZZZZ	RG11MB1SPK	2.00	10295																														
ZZZZZZ	RG11MB1SPD	2.00	10340																														
CCV	CCV2	1.00	10381				X																	X									
CCB	CCB2	1.00	10422				X																	X									
S2	S2	1.00	10484																														
S5	S5	1.00	10503																														
CCV	CCV3	1.00	10534				X																	X									
CCB	CCB3	1.00	10575				X																	X									
ZZZZZZ	RG30MB1	1.00	11020																														
ZZZZZZ	RG30F	1.00	11060																														
ZZZZZZ	RG30G	1.00	11101																														
ZZZZZZ	RG30H	1.00	11142																														
ZZZZZZ	RG30ADUP	1.00	11183																														
ZZZZZZ	RG30A	1.00	11225																														
ZZZZZZ	RG30ASPK	1.00	11270																														

FORM XIV

RG51-092710

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI

SDG: RG51

INSTRUMENT ID: OPTIMA ICP 2

RUNID: IP080672 METHOD: ICP

START DATE: 8/6/2010

END DATE: 8/6/2010

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	RG30MB1SPK	1.00	11311																														
CCV	CCV4	1.00	11352				X																	X									
CCB	CCB4	1.00	11393				X																	X									
ZZZZZZ	RF71MB1	2.00	11433																														
ZZZZZZ	RG11MB1	2.00	11474																														
ZZZZZZ	RG11A	5.00	11514																														
ZZZZZZ	RF71ADUP	2.00	11554																														
ZZZZZZ	RF71A	2.00	11593																														
ZZZZZZ	RF71ASPK	2.00	12033																														
ZZZZZZ	ZZZZZZ	2.00	12071																														
ZZZZZZ	RF71MB1SPK	2.00	12111																														
ZZZZZZ	RG11MB1SPK	2.00	12152																														
ZZZZZZ	RG11MB1SPD	2.00	12193																														
CCV	CCV5	1.00	12234				X																	X									
CCB	CCB5	1.00	12275				X																	X									
ZZZZZZ	RG84D	10.00	12320																														
ZZZZZZ	RG84G	10.00	12360																														
ZZZZZZ	RG84H	2.00	12400																														
ZZZZZZ	RG84I	2.00	12434																														
ZZZZZZ	RG84J	2.00	12472																														
ZZZZZZ	RG84K	2.00	12510																														
ZZZZZZ	RG84ADUP	20.00	12545																														
ZZZZZZ	DIL	1.00	12590																														
ZZZZZZ	RG84A	20.00	13031																														
ZZZZZZ	RG84ASPK	20.00	13070																														
CCV	CCV6	1.00	13110				X																	X									
CCB	CCB6	1.00	13151				X																	X									
ZZZZZZ	RG83MB	5.00	13192																														
ZZZZZZ	RG83ADUP	5.00	13234																														
ZZZZZZ	RG83A	5.00	13275																														
ZZZZZZ	RG83ASPK	5.00	13320																														
PSB17-4-6-072810	RG54K	2.00	13362				X																	X									
PSB17-10-13-072810	RG54L	2.00	13400				X																	X									
CCV	CCV7	1.00	13440				X																	X									
CCB	CCB7	1.00	13481				X																	X									

FORM XIV

RG51.0025

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI | INSTRUMENT ID: OPTIMA ICP 2 | START DATE: 8/6/2010

SDG: RG51 | RUNID: IP080672 | METHOD: ICP | END DATE: 8/6/2010

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S3	S3	1.00	13521				X																	X									
CCV	CCV8	1.00	13575				X																	X									
CCB	CCB8	1.00	14020				X																	X									
ZZZZZZ	RG84D	10.00	14061																														
ZZZZZZ	RG84G	10.00	14101																														
ZZZZZZ	RG84H	2.00	14141																														
ZZZZZZ	RG84I	2.00	14180																														
ZZZZZZ	RG84J	2.00	14215																														
ZZZZZZ	RG84K	2.00	14253																														
ZZZZZZ	RG84A	20.00	14293																														
ZZZZZZ	RG84ASPK	20.00	14332																														
ZZZZZZ	RG84ADUP	20.00	14372																														
ZZZZZZ	DIL	1.00	14413																														
CCV	CCV9	1.00	14454				X																	X									
CCB	CCB9	1.00	14500				X																	X									
PBS	RG51MB1	2.00	14535				X																	X									
PSB12-1.5-2.0-0728	RG51B	2.00	14575				X																	X									
PSB12-2-4-072810	RG51C	2.00	15013				X																	X									
PSB12-8-10-072810	RG51D	2.00	15053				X																	X									
PSB12-0-0.5-072810D	RG51ADUP	2.00	15091				X																	X									
PSB12-0-0.5-072810	RG51A	2.00	15130				X																	X									
PSB12-0-0.5-072810S	RG51ASPK	2.00	15170				X																	X									
ZZZZZZ	ZZZZZZ	2.00	15205																														
LCSS	RG51REF1	2.00	15243				X																	X									
LCSS	RG51MB1SPK	2.00	15281				X																	X									
CCV	CCV10	1.00	15322				X																	X									
CCB	CCB10	1.00	15364				X																	X									
PSB12-14-17-072810	RG51F	2.00	15403				X																	X									
PSB12-4-6-072810	RG51G	2.00	15442				X																	X									
PSB14-0-.5-072810	RG54A	2.00	15480				X																	X									
PSB14-1.5-2.0-0728	RG54B	2.00	15520				X																	X									
PSB14-2-4-072810	RG54C	2.00	15554				X																	X									
PSB14-7-9-072810	RG54E	2.00	15592				X																	X									
PSB14-12-14-072810	RG54F	2.00	16030				X																	X									
PSB17-0-0.5-072810	RG54H	2.00	16065				X																	X									

FORM XIV

RG51_8021S

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd/Snider

PROJECT: Lora Lakes RI | INSTRUMENT ID: OPTIMA ICP 2 | START DATE: 8/6/2010

SDG: RG51 | RUNID: IP080672 | METHOD: ICP | END DATE: 8/6/2010

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
PSB17-1.5-2-072810	RG54I	2.00	16104				X																	X									
PSB17-2-4-072810	RG54J	2.00	16143				X																	X									
CCV	CCV11	1.00	16181				X																	X									
CCB	CCB11	1.00	16222				X																	X									
ZZZZZZ	RG42MB	2.00	16263																														
PSB12-8-10-072810-	RG51E	2.00	16302				X																	X									
ZZZZZZ	RG42A	2.00	16342																														
ZZZZZZ	RG42B	2.00	16383																														
ZZZZZZ	RG42C	2.00	16423																														
ZZZZZZ	RG42D	2.00	16463																														
ZZZZZZ	RG42E	2.00	16504																														
ZZZZZZ	RG47A	5.00	16543																														
ZZZZZZ	RG47MBSPK	2.00	16583																														
ZZZZZZ	RG42MBSPK	2.00	17024																														
CCV	CCV12	1.00	17065				X																	X									
CCB	CCB12	1.00	17111				X																	X									

RG51-052210

General Chemistry Analysis
Report and Summary QC Forms

ARI Job ID: RG54

SAMPLE RESULTS-CONVENTIONALS
RG54-Floyd/Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 08/05/10

Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Client ID: PSB14-7-9-072810
ARI ID: 10-18206 RG54E

Analyte	Date	Method	Units	RL	Sample
Total Solids	07/30/10 073010#1	EPA 160.3	Percent	0.01	88.70
Total Organic Carbon	08/03/10 080310#1	Plumb,1981	Percent	0.020	2.01

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RG54-Floyd/Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 08/05/10

Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Client ID: PSB14-12-14-072810
ARI ID: 10-18207 RG54F

Analyte	Date	Method	Units	RL	Sample
Total Solids	07/30/10 073010#1	EPA 160.3	Percent	0.01	89.10
Total Organic Carbon	08/03/10 080310#1	Plumb,1981	Percent	0.020	0.273

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RG54-Floyd/Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 08/05/10

Project: Lora Lake RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Client ID: PSB17-4-6-072810
ARI ID: 10-18212 RG54K

Analyte	Date	Method	Units	RL	Sample
Total Solids	07/30/10 073010#1	EPA 160.3	Percent	0.01	79.40
Total Organic Carbon	08/03/10 080310#1	Plumb,1981	Percent	0.020	0.147

RL Analytical reporting limit
U Undetected at reported detection limit

MS/MSD RESULTS-CONVENTIONALS
RG51-Floyd/Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 08/11/10

Project: Lora Lakes RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: RG51F Client ID: PSB12-14-17-072810						
Total Organic Carbon	08/09/10	Percent	0.280	1.06	0.851	91.7%

REPLICATE RESULTS-CONVENTIONALS
RG51-Floyd/Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 08/11/10

Project: Lora Lakes RI
Event: POS-LLA
Date Sampled: 07/28/10
Date Received: 07/28/10

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: RG51F Client ID: PSB12-14-17-072810					
Total Solids	07/30/10	Percent	92.50	91.80 91.60	0.5%
Total Organic Carbon	08/09/10	Percent	0.280	0.311 0.339	9.5%

METHOD BLANK RESULTS-CONVENTIONALS
RG54-Floyd/Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 08/05/10

Project: Lora Lake RI
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	07/30/10	Percent	< 0.01 U
Total Organic Carbon	08/03/10	Percent	< 0.020 U

STANDARD REFERENCE RESULTS-CONVENTIONALS
RG54-Floyd/Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 08/05/10

Project: Lora Lake RI
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon NIST #8704	08/03/10	Percent	3.42	3.35	102.1%

Total Solids

ARI Job ID: RG54

Volatiles Total Solids-voats
Data By: Pat Basilio
Created: 8/ 5/10

Worklist: 35
Analyst: PAB
Comments:

Oven ID:_____

Balance ID:_____

Samples In: Date:_____ Time:_____ Temp:_____ Analyst:_____

Samples Out: Date:_____ Time:_____ Temp:_____ Analyst:_____

	ARI ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids
1.	RG54A 10-18202				$ 92.40
2.	RG54B 10-18203				$ 91.50
3.	RG54C 10-18204				$ 91.00
4.	RG54E 10-18206				$ 89.10
5.	RG54F 10-18207				$ 89.00
6.	RG54H 10-18209				$ 93.50
7.	RG54I 10-18210				$ 94.70
8.	RG54J 10-18211				$ 92.60
9.	RG54K 10-18212				$ 92.30
10.	RG54L 10-18213				$ 92.30

* - VOA TS Copied From BETX TS
% - VOA TS Copied From Metals TS
$ - VOA TS Copied From Extraction TS

BETX/TPHG Total Solids-betxts
Data By: Monica Herbert
Created: 8/ 6/10

Worklist: 319
Analyst: MH
Comments:

Oven ID:_____

Balance ID:_____

Samples In: Date:_____ Time:_____ Temp:_____ Analyst:_____

Samples Out: Date:_____ Time:_____ Temp:_____ Analyst:_____

	ARI ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids
1.	RG54A 10-18202			*	92.4
2.	RG54B 10-18203			*	91.5
3.	RG54C 10-18204			*	91.0
4.	RG54E 10-18206			*	89.1
5.	RG54F 10-18207			*	89.0
6.	RG54H 10-18209			*	93.5
7.	RG54I 10-18210			*	94.7
8.	RG54J 10-18211			*	92.6
9.	RG54K 10-18212			*	92.3
10.	RG54L 10-18213			*	92.3

* - BETX TS Copied From VOA TS
% - BETX TS Copied From Metals TS
$ - BETX TS Copied From Extraction TS

Extractions Total Solids-extts
Data By: Tiffani N. Sledge
Created: 8/ 3/10

Worklist: 8710
Analyst: RVR
Comments:

Oven ID:_____

Balance ID:_____

Samples In: Date:_____ Time:_____ Temp:_____ Analyst:_____

Samples Out: Date:_____ Time:_____ Temp:_____ Analyst:_____

	ARI ID CLIENT ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids	pH
1.	RG54A 10-18202 PSB14-0-.5-072810	1.18	11.83	11.02	92.4	NR
2.	RG54B 10-18203 PSB14-1.5-2.0-072810	1.19	11.08	10.24	91.5	NR
3.	RG54C 10-18204 PSB14-2-4-072810	1.18	11.67	10.73	91.0	NR
4.	RG54E 10-18206 PSB14-7-9-072810	1.18	11.12	10.04	89.1	NR
5.	RG54F 10-18207 PSB14-12-14-072810	1.18	12.36	11.13	89.0	NR
6.	RG54H 10-18209 PSB17-0-0.5-072810	1.17	11.39	10.73	93.5	NR
7.	RG54I 10-18210 PSB17-1.5-2-072810	1.18	11.53	10.98	94.7	NR
8.	RG54J 10-18211 PSB17-2-4-072810	1.16	11.25	10.50	92.6	NR
9.	RG54K 10-18212 PSB17-4-6-072810	1.18	11.80	10.98	92.3	NR
10.	RG54L 10-18213 PSB17-10-13-072810	1.18	11.26	10.48	92.3	NR

Extractions Total Solids-extts
Data By: Tiffani N. Sledge
Created: 8/ 3/10

Worklist: 8710
Analyst: TNS
Comments:

Oven ID: Ø15

Balance ID: 38Ø4ØØ92

Samples In: Date: 8-3-1Ø Time: 12:25 Temp: 1ØØ° Analyst: TS

Samples Out: Date: 8/4/1Ø Time: 96:25 Temp: 1ØØ° Analyst: RR

	ARI ID / CLIENT ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids	pH
1.	RG54A 10-18202 PSB14-0-.5-072810	1.18g.	11.83g.	11.Ø2	NR	
2.	RG54B 10-18203 PSB14-1.5-2.0-072810	1.19g.	11.Ø8g.	1Ø.24	NR	
3.	RG54C 10-18204 PSB14-2-4-072810	1.18g.	11.67g.	1Ø.73	NR	
4.	RG54E 10-18206 PSB14-7-9-072810	1.18g.	11.12g.	1Ø.8Ø4	NR	
5.	RG54F 10-18207 PSB14-12-14-072810	1.18g.	12.36g.	11.13	NR	
6.	RG54H 10-18209 PSB17-0-0.5-072810	1.17g.	11.39g.	1Ø.73	NR	
7.	RG54I 10-18210 PSB17-1.5-2-072810	1.18g.	11.53g.	1Ø.98	NR	
8.	RG54J 10-18211 PSB17-2-4-072810	1.16g.	11.25g.	1Ø.5Ø	NR	
9.	RG54K 10-18212 PSB17-4-6-072810	1.18g.	11.8Øg.	1Ø.98	NR	
10.	RG54L 10-18213 PSB17-10-13-072810	1.18g.	11.26g.	1Ø.48	NR	

Solids Data Entry Report Checked by: DM Date: 8/4/10
Date: 08/04/10 Data Analyst: KM

Solids Determination performed on 08/03/10 by DM

JOB	SAMPLE	CLIENTID	TAREWEIGHT	SAMPDISH	DRYWEIGHT	SOLIDS
RG54	A	PSB14-0-.5-072810	0.960	10.771	10.015	92.29
RG54	B	PSB14-1.5-2.0-07281	0.979	10.382	9.604	91.73
RG54	C	PSB14-2-4-072810	0.934	10.902	9.906	90.01
RG54	E	PSB14-7-9-072810	0.968	10.608	9.528	88.80
RG54	F	PSB14-12-14-072810	1.006	10.407	9.022	85.27
RG54	H	PSB17-0-0.5-072810	1.003	10.600	9.992	93.66
RG54	I	PSB17-1.5-2-072810	1.008	10.795	10.210	94.02
RG54	J	PSB17-2-4-072810	0.966	10.749	10.068	93.04
RG54	K	PSB17-4-6-072810	1.009	10.178	9.401	91.53
RG54	L	PSB17-10-13-072810	0.986	10.713	9.946	92.11

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Total Solids Bench Sheet

Laboratory Section Metals

Oven Identification: 07 **Balance ID:** 068755

Samples in Oven: Date: 8-03-10 Time: 1840 Temp: 104°C Analyst: DM

Removed from Oven: Date: 8-04-10 Time: 1005 Temp: 101°C Analyst: MH

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]
RG54	A	0.960	10.771	10.615	—	✓
"	B	0.979	10.382	9.604	—	✓
"	C	0.934	10.902	9.906	—	✓
"	E	0.968	10.608	9.528	—	✓
"	F	1.006	10.457	9.022	—	✓
"	H	1.003	10.600	9.992	—	✓
"	I	1.008	10.795	10.210	—	✓
"	J	0.966	10.749	10.068	—	✓
"	K	1.009	10.178	9.401	—	✓
"	L	0.986	10.713	9.946	—	✓
			8-3-10 DM			

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.

Volatile Raw Data
Preparation Log

ARI Job ID: RG54

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Volatile Organics Extraction Bench Sheet

(8260B, 8260B-SIM, 8021, NWTPH-Gx, AK-101, TPH-G, VPH, TCLP-ZHE)

ARI Project No. RG54 | Client ID/Project | Extraction Date | MeOH Lot No. | Analyst

1st Extraction: 11/8/09

2nd Extraction:

	Lab ID	Vial No.	Preservative		Method 5035 Sample Weight					Comments
			$NaHSO_3$	CH_3OH	Vial Weight	Tare (from vial)	Sample Weight	Extract Volume	MeOH Spilt Volume	
	MB:									
	LCS:									
	LCSD:									
1	RG54A	5	–		43.69	35.48	8.21			
2	B	5	–		44.55	35.31	9.24			
3	C	4	–		40.87	31.349	9.521			
4	E	4	–		44.95	34.89	10.06			
5	F	5	–		45.63	35.24	10.37			
6	G	1					Smk			
7	H	4	–		41.03	31.306	9.724			
8	I	4	–		39.73	31.300	8.430			
9	J	5	–		40.27	31.436	8.834			
10	K	5	–		39.21	31.422	7.788			
11	L	4	–		41.80	31.836	9.964			
12										
13										
14										
15										
16										
17										
18										
19										
20										
	Balance ID:									

	Solution ID	Concentration	Amount Spiked	Analyst	Witness
Surrogate:					
Spike:					

RG54:00237

Volatile Raw Data
Initial Calibration Notes and Raw Data

ARI Job ID: RG54

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Analyst Notes / Corrective Action Log

ARI Project ID: FS ical Client ID: _____

ARI SOP: **404S**(Gas) **410S**(BTEX) **430S**(VPH) **700S**(8260C) **703S**(SIM) **706S**(524.2) **710S**(RSK-175)

Parameter(s): _____

Instrument: NT-3 NT-5 NT-7 NT-9 NT-10 PID-1 PID-2 PID-3 FID-6 FINN-5

Purge Volume (mL) 5 Curve Date: 7/23/10 Analysis Start Date: 7/23/10

pH ≤ 2.0	YES / NO / NA	Method Blank In Control?	YES / NO
BFB Tune Meets Criteria?	YES / NO / NA	LCS / LCSD Recovery In Control?	YES / NO
Internal Standard Meets Criteria?	YES / NO / NA	Surrogate Recovery In Control?	YES / NO
ICal acceptable?	YES / NO	CCal acceptable?	YES / NO
Q flag applied?	YES / NO / NA	Q flag applied?	YES / NO / NA
Manual Integrations for ICal?	YES / NO	Manual Integrations for Samples?	Yes /NO
Special Analysis Criteria Met?	YES / NO / NA		

Bubbles/Headspace: None SM (≤ 2mm •) PB (2-4mm) LG (> 4mm ●) Head Space

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

ICV - bromoethane 124.8%R
1,2,4 TCB 75%R
1,2,3 TCB 76.7%R

all analytes averaged

Additional Details on Reverse: Yes / No

Analyst: _____ **Date:** 7/29/10

Reviewer: _____ **Date:** 7/29/10

Analytical Resources Inc.: Organics Instrument Log

FINN5 Serial No.: 5500-000421A

Date: 7/23/10 Analysis: 8260C Analyst: KT

GC Program: F5 Column No: 821724 Column Type: MTX-502.2

Instrument Tune (.U or .CT.): DFTPP0723 EM Voltage: 1549

Calibration File: 2000723 Curve Date: 7/23/10

IS/SS	Ical/Ccal	LCS/ICV
WI644-4	WI646-2	WI647-1
	WI646-3	~~WI647-~~ 1 6/28/10

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/finn5.i/23JUL10.b

	Time	Filename	LabID	ClientID	WT											
1	0837	BFB0723.d	BFB0723	BFB0723	0.00											
2	1648	BFB07231.d	BFB0723	BFB0723	0.00											
3	1718	2000723.d	IC0723	VSTD200	5.00	6.62	159149	7.64	229095	10.79	171495	13.47	145587			
4	1749	1500723.d	IC0723	VSTD150	5.00	6.62	155784	7.64	228573	10.78	178614	13.47	122904			
5	1816	1000723.d	IC0723	VSTD100	5.00	6.62	135334	7.64	199732	10.78	160631	13.47	96340			
6	1842	0500723.d	IC0723	VSTD050	5.00	6.62	131115	7.63	191559	10.78	161199	13.47	88279			
7	1909	0100723.d	IC0723	VSTD010	5.00	6.62	118930	7.63	168271	10.78	140990	13.46	72150			
8	1935	0050723.d	IC0723	VSTD005	5.00	6.62	117041	7.63	170929	10.78	146260	13.46	75761			
9	2002	0020723.d	IC0723	VSTD002	5.00	6.62	115854	7.63	165926	10.78	143906	13.47	73251			
10	2028	0010723.d	IC0723	VSTD001	5.00	6.61	113813	7.63	168346	10.77	142296	13.46	71616			
11	2214	ICV0723.d	ICV0723	ICV0723	5.00	6.62	130699	7.64	194200	10.78	160989	13.47	90026			

7/28/10

Maintenance / Comments

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem1/finn5.i/23JUL10.b

ARI Job No.: BFB0 Method: bfb8260.m Instrument: finn5.i Date: 23-JUL-2010

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1648	BFB07231.d	BFB0723	BFB0723	1	NO MANUAL INTEGRATION
1718	2000723.d	IC0723	VSTD200	1	NO MANUAL INTEGRATION
1749	1500723.d	IC0723	VSTD150	1	NO MANUAL INTEGRATION
1816	1000723.d	IC0723	VSTD100	1	NO MANUAL INTEGRATION
1842	0500723.d	IC0723	VSTD050	1	NO MANUAL INTEGRATION
1909	0100723.d	IC0723	VSTD010	1	NO MANUAL INTEGRATION
1935	0050723.d	IC0723	VSTD005	1	2-Hexanone, Trans-1,4-Dichloro 2-Butene,
2002	0020723.d	IC0723	VSTD002	1	Acetone, 2-Hexanone, 1,2,3-Trichloropropane, Trans-1,4-Dichloro 2-Butene,
2028	0010723.d	IC0723	VSTD001	1	Acetone, 1,1,1-Trichloroethane, 2-Hexanone, 1,1,2,2-Tetrachloroethane, 1,2,3-Trichloropropane, Trans-1,4-Dichloro 2-Butene,
2214	ICV0723.d	ICV0723	ICV0723	1	NO MANUAL INTEGRATION

Data File: /chem1/finn5.i/23JUL10.b/BFB07231.d

Date : 23-JUL-2010 16:48

Client ID: BFB0723

Instrument: finn5.i

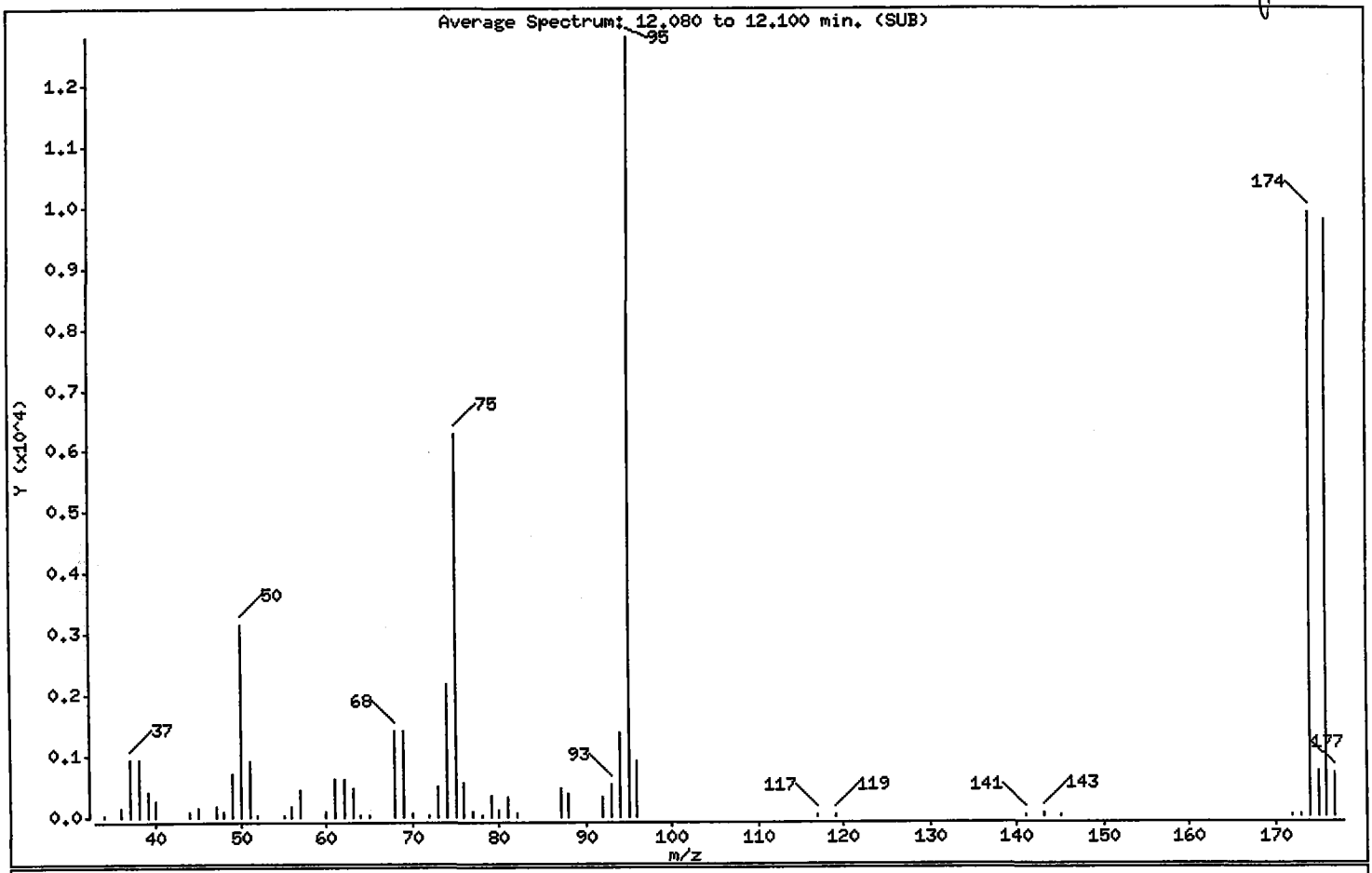
Sample Info: BFB0723,BFB0723,,1,23JUL10,,

Operator: PB

Column phase: RTX502.2

Column diameter: 0.18

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	24.73
75	30.00 - 66.00% of mass 95	49.06
96	5.00 - 9.00% of mass 95	7.07
173	Less than 2.00% of mass 174	0.16 (0.21)
174	50.00 - 101.00% of mass 95	77.38
175	4.00 - 9.00% of mass 174	5.70 (7.37)
176	93.00 - 101.00% of mass 174	76.42 (98.77)
177	5.00 - 9.00% of mass 176	5.51 (7.21)

Data File: /chem1/finn5.i/23JUL10.b/BFB07231.d

Date : 23-JUL-2010 16:48

Client ID: BFB0723

Instrument: finn5.i

Sample Info: BFB0723,BFB0723,,1,23JUL10,,

Operator: PB

Column phase: RTX502.2

Column diameter: 0.18

Data File: BFB07231.d
Spectrum: Average Spectrum: 12.080 to 12.100 min. (SUB)
Location of Maximum: 95.00
Number of points: 55

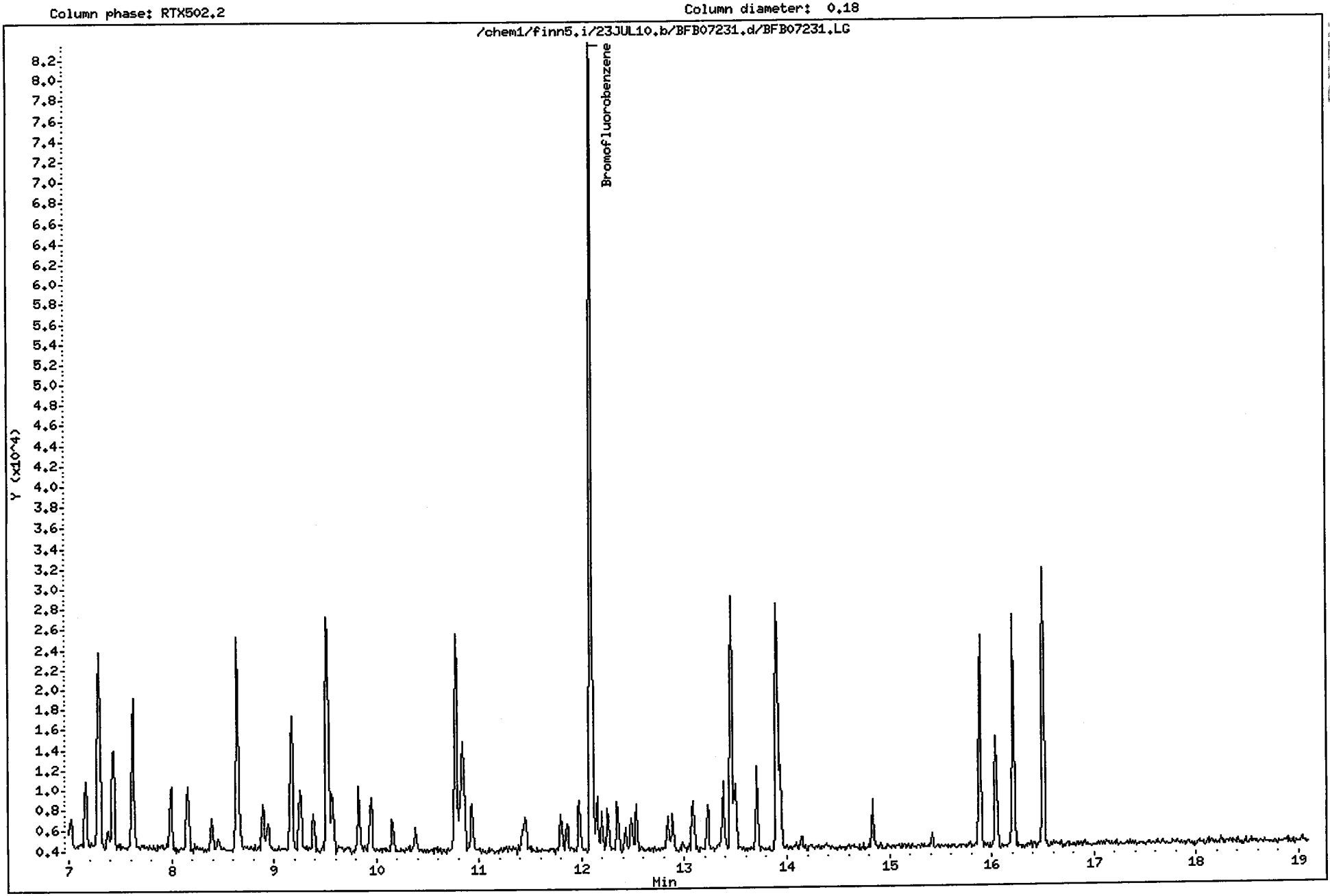
m/z	Y	m/z	Y	m/z	Y	m/z	Y
34.00	41	55.00	28	74.00	2174	95.00	12792
36.00	159	56.00	184	75.00	6276	96.00	905
37.00	938	57.00	440	76.00	565	117.00	17
38.00	936	60.00	91	77.00	77	119.00	25
39.00	400	61.00	624	78.00	18	141.00	28
40.00	260	62.00	625	79.00	363	143.00	45
44.00	96	63.00	460	80.00	109	145.00	24
45.00	144	64.00	38	81.00	331	172.00	26
47.00	178	65.00	22	82.00	62	173.00	21
48.00	81	68.00	1416	87.00	469	174.00	9898
49.00	708	69.00	1407	88.00	387	175.00	729
50.00	3164	70.00	64	92.00	317	176.00	9776
51.00	905	72.00	18	93.00	542	177.00	705
52.00	33	73.00	511	94.00	1387		

Data File: /chem1/finn5.i/23JUL10.b/BFB07231.d
Date : 23-JUL-2010 16:48
Client ID: BFB0723
Sample Info: BFB0723,BFB0723,,1,23JUL10,,

Instrument: finn5.i

Operator: PB
Column diameter: 0.18

Column phase: RTX502.2



Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 17:18
End Cal Date : 23-JUL-2010 20:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/23JUL10.b/s8260b.m
Cal Date : 26-Jul-2010 09:12 patrickb
Curve Type : Average

Calibration File Names:
Level 1: /chem1/finn5.i/23JUL10.b/0010723.d
Level 2: /chem1/finn5.i/23JUL10.b/0020723.d
Level 3: /chem1/finn5.i/23JUL10.b/0050723.d
Level 4: /chem1/finn5.i/23JUL10.b/0100723.d
Level 5: /chem1/finn5.i/23JUL10.b/0500723.d
Level 6: /chem1/finn5.i/23JUL10.b/1000723.d
Level 7: /chem1/finn5.i/23JUL10.b/1500723.d
Level 8: /chem1/finn5.i/23JUL10.b/2000723.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	RRF	% RSD	
	150.000 Level 7	200.000 Level 8							
1 Dichlorodifluoromethane	0.61856	0.69160	0.65985	0.63344	0.67493	0.67442			
	0.63254	0.60144					0.64835	4.860	
2 Chloromethane	2.15529	1.96152	1.91728	2.00912	1.65244	1.56576			
	1.38789	1.30591					1.74440	17.810	
3 Vinyl Chloride	1.51916	1.45247	1.51314	1.59745	1.36296	1.35754			
	1.17136	1.06143					1.37944	13.295	
4 Bromomethane	0.93443	0.85086	0.77665	0.62524	0.81039	0.76904			
	0.64701	0.57949					0.74914	16.282	
181 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
5 Chloroethane	1.07062	1.09297	0.98777	0.87106	0.87644	0.77822			
	0.62883	+++++					0.90084	18.341	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 17:18
End Cal Date : 23-JUL-2010 20:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/23JUL10.b/s8260b.m
Cal Date : 26-Jul-2010 09:12 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						
6 Trichlorofluoromethane	1.47611	1.55864	1.50469	1.41033	1.42641	1.27999		
	1.04222	0.96730					1.33321	16.450
7 Acrolein	0.20463	0.19693	0.17700	0.16354	0.15712	0.14591		
	0.11901	+++++					0.16631	17.814
8 112Trichloro122Trifluoroethan	1.27446	1.18209	1.20394	1.12348	1.01422	0.97608		
	0.81784	0.75797					1.04376	17.834
9 Acetone	0.30796	0.31971	0.31370	0.30116	0.26843	0.24372		
	0.20402	+++++					0.27982	15.417
10 1,1-Dichloroethene	1.03591	1.01895	1.04143	1.03174	0.97906	0.93375		
	0.79718	0.73915					0.94715	12.366
11 Bromoethane	0.70730	0.74361	0.72880	0.75267	0.72730	0.72722		
	0.63319	0.59114					0.70140	8.233
12 Iodomethane	1.01087	1.06621	1.14259	1.14012	1.25306	1.25553		
	1.06567	1.02480					1.11986	8.526
13 Methylene Chloride	+++++	1.39659	1.18975	1.12760	0.93514	0.92898		
	0.82084	+++++					1.06648	19.864
14 Acrylonitrile	0.19594	0.24276	0.28315	0.28492	0.26101	0.25835		
	0.23046	0.21983					0.24705	12.529

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 17:18
End Cal Date : 23-JUL-2010 20:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/23JUL10.b/s8260b.m
Cal Date : 26-Jul-2010 09:12 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							
16 Methyl tert-Butyl Ether	1.39176	1.48204	1.61653	1.63134	1.52463	1.54183			
	1.31326	1.15084					1.45653	11.218	
15 Carbon Disulfide	3.37220	3.30955	3.39522	3.28180	3.17583	2.86693			
	2.18562	1.91323					2.93755	19.647	
17 Trans-1,2-Dichloroethene	0.81493	0.82496	0.80638	0.89481	0.79365	0.83461			
	0.76581	0.72223					0.80717	6.268	
18 Vinyl Acetate	1.37858	1.47513	1.52895	1.55974	1.56063	1.55351			
	1.19699	1.05617					1.41371	13.515	
19 1,1-Dichloroethane	1.59340	1.57720	1.61593	1.67405	1.53370	1.56119			
	1.25502	1.06889					1.48492	14.111	
179 Hexane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
20 2-Butanone	0.32659	0.32955	0.34359	0.35332	0.32770	0.32306			
	0.26832	0.24668					0.31485	11.826	
21 2,2-Dichloropropane	0.88742	0.89660	0.93309	0.95140	0.91310	0.95603			
	0.87622	0.85519					0.90863	3.989	
22 Cis-1,2-Dichloroethene	0.70291	0.70218	0.71753	0.75872	0.69175	0.74171			
	0.68699	0.68958					0.71142	3.685	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 17:18
End Cal Date : 23-JUL-2010 20:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/23JUL10.b/s8260b.m
Cal Date : 26-Jul-2010 09:12 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							
24 Chloroform	1.24898	1.29560	1.31578	1.31952	1.20276	1.23393			
	1.07329	0.95949					1.20617	10.579	
26 Bromochloromethane	0.30137	0.32304	0.36688	0.35714	0.33542	0.35133			
	0.33200	0.33497					0.33777	6.124	
27 1,1,1-Trichloroethane	0.97660	0.93458	0.97291	0.98520	0.93283	0.96160			
	0.87853	0.86280					0.93813	4.889	
182 1-Butanol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
29 1,1-Dichloropropene	0.66975	0.69007	0.71193	0.76499	0.67325	0.69499			
	0.63130	0.59559					0.67899	7.511	
30 Carbon Tetrachloride	0.58124	0.62407	0.60370	0.63020	0.57050	0.59224			
	0.55109	0.57045					0.59044	4.670	
32 1,2-Dichloroethane	0.57115	0.62874	0.63301	0.67822	0.58611	0.59776			
	0.54427	0.52926					0.59607	8.280	
33 Benzene	1.75947	1.76841	1.80022	1.96537	1.65649	1.45472			
	1.08835	+++++					1.64186	17.603	
180 Isooctane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 17:18
End Cal Date : 23-JUL-2010 20:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/23JUL10.b/s8260b.m
Cal Date : 26-Jul-2010 09:12 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	
35 Trichloroethene	0.43601	0.49962	0.50986	0.54002	0.46846	0.48511	0.44820	0.46107	0.48104	7.173	
36 1,2-Dichloropropane	0.52451	0.52147	0.54818	0.58228	0.50133	0.51755	0.47045	0.47472	0.51756	7.121	
38 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
37 Bromodichloromethane	0.52125	0.59258	0.58170	0.60376	0.54255	0.55496	0.51592	0.51411	0.55335	6.471	
39 Dibromomethane	0.25305	0.25915	0.25993	0.28772	0.24894	0.26038	0.23699	0.24918	0.25692	5.717	
40 2-Chloroethyl Vinyl Ether	+++++	0.14178	0.17329	0.18981	0.18519	0.19380	0.18677	0.19813	0.18125	10.524	
41 4-Methyl-2-Pentanone	0.14149	0.13693	0.13232	0.14268	0.13289	0.13206	0.12187	0.11715	0.13218	6.720	
42 Cis 1,3-dichloropropene	0.50313	0.56652	0.59990	0.66027	0.63768	0.67623	0.61950	0.56997	0.60415	9.387	
28 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 17:18
End Cal Date : 23-JUL-2010 20:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/23JUL10.b/s8260b.m
Cal Date : 26-Jul-2010 09:12 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						
44 Toluene	1.25664	1.10456	1.02224	1.05184	0.92146	0.94617		
	0.78347	0.70675					0.97414	18.057
45 Trans 1,3-Dichloropropene	0.44640	0.47190	0.49114	0.54059	0.52142	0.55921		
	0.52387	0.50804					0.50782	7.254
46 2-Hexanone	0.48863	0.41802	0.40375	0.43814	0.38146	0.32234		
	+++++	+++++					0.40872	13.652
47 1,1,2-Trichloroethane	0.26879	0.29516	0.32288	0.33895	0.29564	0.30800		
	0.29114	0.30558					0.30327	6.989
48 1,3-Dichloropropane	0.68343	0.71401	0.71469	0.75583	0.67765	0.72373		
	0.67642	0.68404					0.70372	4.007
49 Tetrachloroethene	0.61667	0.52708	0.56488	0.56674	0.48964	0.54556		
	0.54309	0.59035					0.55550	6.995
50 Chlorodibromomethane	0.42693	0.43952	0.46540	0.50238	0.45273	0.49329		
	0.47878	0.52825					0.47341	7.173
51 1,2-Dibromoethane	0.30087	0.32786	0.33839	0.34926	0.32203	0.32796		
	0.30873	0.32362					0.32484	4.715
53 Chlorobenzene	1.44874	1.25551	1.21469	1.28463	1.09325	1.17322		
	0.98203	0.92990					1.17275	14.376

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 17:18
End Cal Date : 23-JUL-2010 20:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/23JUL10.b/s8260b.m
Cal Date : 26-Jul-2010 09:12 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						
55 1,1,1,2-Tetrachloroethane	0.48807	0.46350	0.43819	0.45358	0.38926	0.42774		
	0.43874	0.49165					0.44884	7.446
54 Ethyl Benzene	2.20280	2.17625	2.08813	2.26814	2.02082	1.78412		
	1.34210	+++++					1.98319	16.336
56 m,p-xylene	0.68572	0.70089	0.75629	0.82054	0.76759	0.80414		
	0.64714	0.61656					0.72486	10.182
57 o-Xylene	0.59735	0.67179	0.70053	0.77321	0.74982	0.84040		
	0.82834	0.86537					0.75335	12.283
58 Styrene	1.01338	1.04252	1.15090	1.32066	1.22803	1.34186		
	1.12721	1.09402					1.16482	10.471
59 Isopropyl Benzene	3.58090	3.46378	3.66983	4.08053	3.63628	3.05286		
	2.07611	+++++					3.36576	19.154
60 Bromoform	0.58786	0.56177	0.56335	0.58351	0.52086	0.53868		
	0.49959	0.47363					0.54116	7.521
61 1,1,2,2-Tetrachloroethane	1.19875	1.12388	1.03602	1.12613	0.91700	0.89056		
	0.77962	0.70704					0.97237	18.199
63 1,2,3-Trichloropropane	+++++	0.22594	0.22109	0.22654	0.18550	0.18274		
	0.16039	0.14626					0.19264	16.965

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 17:18
End Cal Date : 23-JUL-2010 20:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/23JUL10.b/s8260b.m
Cal Date : 26-Jul-2010 09:12 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
65 Trans-1,4-Dichloro 2-Butene	+++++	0.32184	0.32576	0.34893	0.30143	0.29907	0.25759	0.23740	0.29886	13.135
66 N-Propyl Benzene	4.35587	4.36240	4.59339	5.13243	4.29164	3.33374	+++++	+++++	4.34491	13.450
67 Bromobenzene	0.97674	0.93719	0.97174	1.05787	0.91718	0.95651	0.87178	0.81723	0.93828	7.723
68 1,3,5-Trimethyl Benzene	2.66281	2.66686	2.91760	3.22571	2.99783	2.73312	1.92105	+++++	2.73214	15.058
69 2-Chloro Toluene	3.12291	2.80576	3.07335	3.37221	2.80971	2.82080	1.97970	+++++	2.85492	15.393
70 4-Chloro Toluene	2.62581	2.91088	2.87998	3.29757	2.95871	2.62567	1.85746	+++++	2.73658	16.426
71 T-Butyl Benzene	2.25508	2.38597	2.57296	2.86417	2.63858	2.56035	1.95835	1.46344	2.33736	19.065
72 1,2,4-Trimethylbenzene	2.43800	2.54502	2.85134	3.25960	2.94781	2.80039	1.98513	+++++	2.68961	15.258
73 S-Butyl Benzene	3.65072	3.68903	3.98398	4.45398	4.03139	3.26306	+++++	+++++	3.84536	10.568

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 17:18
End Cal Date : 23-JUL-2010 20:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/23JUL10.b/s8260b.m
Cal Date : 26-Jul-2010 09:12 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							
74 4-Isopropyl Toluene	2.22576	2.54160	2.82348	3.17997	2.94657	2.74678			
	2.00557	+++++					2.63853	15.583	
75 1,3-Dichlorobenzene	1.56180	1.53308	1.67395	1.91240	1.64575	1.80399			
	1.47885	1.21428					1.60301	13.256	
64 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
77 1,4-Dichlorobenzene	1.65466	1.57267	1.70259	1.83867	1.59685	1.77492			
	1.48449	1.20781					1.60408	12.218	
178 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
78 N-Butyl Benzene	2.81013	2.76549	3.04510	3.43035	3.10253	2.84626			
	1.94473	+++++					2.84923	16.127	
80 1,2-Dichlorobenzene	1.53737	1.60237	1.63752	1.74962	1.51750	1.58654			
	1.40066	1.15636					1.52349	11.753	
81 1,2-Dibromo 3-Chloropropane	0.15220	0.20921	0.18954	0.20055	0.17137	0.15806			
	0.13717	0.12795					0.16826	17.597	
82 1,2,4-Trichlorobenzene	0.96487	1.01671	0.97082	1.12640	0.86020	0.91319			
	0.82523	0.73938					0.92710	12.980	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 17:18
End Cal Date : 23-JUL-2010 20:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/23JUL10.b/s8260b.m
Cal Date : 26-Jul-2010 09:12 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 Hexachloro 1,3-Butadiene	0.58506	0.68805	0.68940	0.75107	0.58913	0.59714	0.55357	0.54187	0.62441	12.059
84 Naphthalene	1.71610	1.75595	1.74219	2.09362	1.61770	1.55845	1.28695	+++++	1.68157	14.468
85 1,2,3-Trichlorobenzene	0.96068	1.02012	0.96026	1.13604	0.80895	0.82225	0.73656	0.64602	0.88636	18.168
$ 25 Dibromofluoromethane	0.64899	0.62877	0.61356	0.58619	0.59870	0.58643	0.57172	0.53307	0.59593	5.995
$ 31 d4-1,2-Dichloroethane	0.71761	0.70471	0.68731	0.64625	0.64321	0.64102	0.61687	0.55964	0.65208	7.847
$ 43 d8-Toluene	1.12329	1.14949	1.12157	1.10618	1.11356	1.07971	1.04839	1.04692	1.09864	3.363
$ 62 4-Bromofluorobenzene	0.54956	0.55666	0.55779	0.55088	0.56658	0.59164	0.61336	0.69489	0.58517	8.478
$ 79 d4-1,2-Dichlorobenzene	0.92905	0.92027	0.92025	0.92575	0.92529	0.90255	0.87965	0.87290	0.90947	2.425

Report Date : 29-Jul-2010 14:28

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/finn5.i/23JUL10.b/s8260b.m
Batch File: /chem1/finn5.i/23JUL10.b
Inst ID: finn5.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08
FILENAME:	2000723	1500723	1000723	0500723	0100723	0050723	0020723	0010723
INJ.DATE:	23-JUL-2010	23-JUL-2010	23-JUL-2010	23-JUL-2010	23-JUL-2010	23-JUL-2010	23-JUL-2010	23-JUL-2010
INJ.TIME:	17:18	17:49	18:16	18:42	19:09	19:35	20:02	20:28

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Dichlorodifluoromethan	3.015	3.015	3.005	3.005	3.005	3.005	3.005	2.995	3.015	2.750-3.280	3.006	0.006
2 Chloromethane	3.316	3.316	3.306	3.306	3.306	3.296	3.306	3.296	3.316	3.051-3.581	3.306	0.008
3 Vinyl Chloride	3.417	3.417	3.417	3.417	3.407	3.417	3.427	3.417	3.417	3.152-3.682	3.417	0.005
4 Bromomethane	3.909	3.909	3.909	3.909	3.899	3.899	3.909	3.899	3.909	3.644-4.174	3.906	0.005
181 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.500	4.235-4.765	+++++	+++++
5 Chloroethane	3.980	3.980	3.980	3.980	3.970	3.970	3.980	3.970	3.980	3.715-4.245	3.976	0.005
6 Trichlorofluoromethane	4.241	4.241	4.241	4.241	4.231	4.231	4.241	4.231	4.241	3.976-4.506	4.237	0.005
7 Acrolein	4.633	4.633	4.633	4.623	4.623	4.623	4.623	4.623	4.633	4.368-4.898	4.627	0.005
8 112Trichloro122Trifluo	4.643	4.643	4.643	4.633	4.633	4.633	4.643	4.633	4.643	4.378-4.908	4.638	0.005
9 Acetone	4.693	4.683	4.683	4.673	4.673	4.673	4.673	4.673	4.693	4.428-4.958	4.678	0.008
10 1,1-Dichloroethene	4.844	4.844	4.834	4.834	4.834	4.834	4.834	4.834	4.844	4.579-5.109	4.837	0.005
11 Bromoethane	5.055	5.055	5.055	5.055	5.055	5.045	5.055	5.055	5.055	4.790-5.320	5.054	0.004
12 Iodomethane	5.156	5.156	5.156	5.156	5.146	5.146	5.156	5.146	5.156	4.891-5.421	5.152	0.005
13 Methylene Chloride	5.276	5.276	5.276	5.266	5.266	5.266	5.266	5.266	5.276	5.011-5.541	5.270	0.005
14 Acrylonitrile	5.367	5.357	5.357	5.357	5.357	5.347	5.347	5.347	5.367	5.102-5.632	5.354	0.007
16 Methyl tert-Butyl Ethe	5.407	5.397	5.397	5.397	5.397	5.387	5.397	5.387	5.407	5.142-5.672	5.396	0.006
15 Carbon Disulfide	5.377	5.377	5.377	5.377	5.367	5.367	5.377	5.367	5.377	5.112-5.642	5.373	0.005

Reviewer 1 _____ Date: 7/29/10
Reviewer 2 _____ Date: _____

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/finn5.i/23JUL10.b/s8260b.m
Batch File: /chem1/finn5.i/23JUL10.b
Inst ID: finn5.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	17 Trans-1,2-Dichloroethe	5.558	5.558	5.558	5.558	5.548	5.548	5.558	5.548	5.558	5.293-5.822	5.554	0.005
	18 Vinyl Acetate	5.879	5.879	5.879	5.879	5.869	5.869	5.879	5.869	5.879	5.614-6.144	5.875	0.005
	19 1,1-Dichloroethane	5.940	5.940	5.940	5.940	5.929	5.929	5.929	5.929	5.940	5.675-6.204	5.935	0.005
	179 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.990	5.725-6.255	+++++	+++++
	20 2-Butanone	6.291	6.281	6.281	6.281	6.281	6.271	6.281	6.271	6.291	6.026-6.556	6.280	0.006
	21 2,2-Dichloropropane	6.462	6.462	6.462	6.452	6.452	6.452	6.452	6.442	6.462	6.197-6.727	6.455	0.007
	22 Cis-1,2-Dichloroethene	6.502	6.502	6.492	6.492	6.492	6.492	6.492	6.482	6.502	6.237-6.767	6.494	0.006
*	23 Pentafluorobenzene	6.623	6.623	6.623	6.623	6.623	6.623	6.623	6.613	6.623	6.358-6.888	6.622	0.004
	24 Chloroform	6.643	6.643	6.643	6.643	6.633	6.633	6.643	6.633	6.643	6.378-6.908	6.639	0.005
	26 Bromochloromethane	6.814	6.814	6.804	6.804	6.804	6.804	6.804	6.794	6.814	6.549-7.079	6.805	0.006
$	25 Dibromofluoromethane	6.844	6.844	6.844	6.844	6.834	6.834	6.834	6.834	6.844	6.579-7.109	6.839	0.005
	27 1,1,1-Trichloroethane	7.035	7.035	7.035	7.025	7.025	7.025	7.025	7.015	7.035	6.770-7.300	7.027	0.007
	182 1-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.030	7.765-8.295	+++++	+++++
	29 1,1-Dichloropropene	7.176	7.176	7.176	7.176	7.166	7.166	7.176	7.166	7.176	6.870-7.481	7.172	0.005
$	31 d4-1,2-Dichloroethane	7.306	7.306	7.306	7.306	7.296	7.296	7.306	7.296	7.306	7.041-7.571	7.303	0.005
	30 Carbon Tetrachloride	7.296	7.296	7.286	7.286	7.286	7.286	7.286	7.286	7.296	6.991-7.602	7.289	0.005
	32 1,2-Dichloroethane	7.397	7.397	7.397	7.387	7.387	7.387	7.387	7.387	7.397	7.091-7.702	7.391	0.005
	33 Benzene	7.447	7.447	7.447	7.437	7.437	7.437	7.437	7.427	7.447	7.141-7.752	7.439	0.007
	180 Isooctane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.687	6.422-6.952	+++++	+++++
*	34 1,4-Difluorobenzene	7.638	7.638	7.638	7.628	7.628	7.628	7.628	7.628	7.638	7.332-7.944	7.632	0.005
	35 Trichloroethene	8.010	8.010	8.010	8.000	8.000	8.000	8.010	8.000	8.010	7.704-8.315	8.005	0.005
	36 1,2-Dichloropropane	8.171	8.171	8.171	8.171	8.161	8.161	8.161	8.161	8.171	7.865-8.476	8.166	0.005

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/finn5.i/23JUL10.b/s8260b.m
Batch File: /chem1/finn5.i/23JUL10.b
Inst ID: finn5.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	38 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.887	8.622-9.152	+++++	+++++
	37 Bromodichloromethane	8.412	8.402	8.402	8.402	8.402	8.392	8.402	8.392	8.412	8.106-8.717	8.401	0.006
	39 Dibromomethane	8.472	8.472	8.472	8.472	8.472	8.462	8.472	8.462	8.472	8.167-8.778	8.470	0.005
	40 2-Chloroethyl Vinyl Et	8.623	8.623	8.623	8.613	8.613	8.613	8.613	8.613	8.623	8.317-8.928	8.617	0.005
	41 4-Methyl-2-Pentanone	8.663	8.653	8.653	8.653	8.653	8.643	8.653	8.643	8.663	8.357-8.969	8.652	0.006
	42 Cis 1,3-dichloropropen	8.914	8.914	8.904	8.904	8.904	8.904	8.904	8.894	8.914	8.609-9.220	8.906	0.006
	28 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.337	7.072-7.602	+++++	+++++
$	43 d8-Toluene	9.186	9.186	9.186	9.186	9.176	9.176	9.186	9.176	9.186	8.880-9.491	9.182	0.005
	44 Toluene	9.276	9.266	9.266	9.266	9.266	9.256	9.266	9.256	9.276	8.971-9.582	9.265	0.006
	45 Trans 1,3-Dichloroprop	9.407	9.397	9.397	9.397	9.397	9.387	9.397	9.387	9.407	9.101-9.712	9.395	0.006
	46 2-Hexanone	9.537	9.537	9.527	9.527	9.527	9.527	9.527	9.527	9.537	9.106-9.969	9.530	0.005
	47 1,1,2-Trichloroethane	9.588	9.578	9.578	9.578	9.578	9.578	9.578	9.568	9.588	9.282-9.893	9.578	0.005
	48 1,3-Dichloropropane	9.839	9.839	9.839	9.839	9.829	9.829	9.839	9.829	9.839	9.407-10.270	9.835	0.005
	49 Tetrachloroethene	9.960	9.960	9.960	9.960	9.949	9.949	9.960	9.949	9.960	9.528-10.391	9.956	0.005
	50 Chlorodibromomethane	10.171	10.171	10.161	10.161	10.161	10.161	10.161	10.161	10.171	9.739-10.602	10.163	0.005
	51 1,2-Dibromoethane	10.392	10.392	10.392	10.392	10.382	10.382	10.382	10.382	10.392	10.086-10.697	10.387	0.005
*	52 d5-Chlorobenzene	10.794	10.784	10.784	10.784	10.784	10.784	10.784	10.774	10.794	10.362-11.225	10.784	0.005
	53 Chlorobenzene	10.834	10.834	10.824	10.824	10.824	10.824	10.824	10.814	10.834	10.402-11.266	10.825	0.006
	55 1,1,1,2-Tetrachloroeth	10.864	10.854	10.854	10.854	10.844	10.844	10.854	10.844	10.864	10.432-11.296	10.851	0.007
	54 Ethyl Benzene	10.864	10.864	10.864	10.854	10.854	10.854	10.854	10.854	10.864	10.432-11.296	10.858	0.005
	56 m,p-xylene	10.944	10.944	10.944	10.934	10.934	10.934	10.934	10.934	10.944	10.512-11.376	10.938	0.005
	57 o-Xylene	11.437	11.437	11.427	11.427	11.427	11.427	11.427	11.417	11.437	11.005-11.869	11.428	0.006
	58 Styrene	11.467	11.467	11.457	11.457	11.457	11.457	11.457	11.447	11.467	11.035-11.899	11.458	0.006
	59 Isopropyl Benzene	11.819	11.809	11.809	11.809	11.809	11.799	11.809	11.799	11.819	11.280-12.357	11.807	0.006

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/finn5.i/23JUL10.b/s8260b.m
Batch File: /chem1/finn5.i/23JUL10.b
Inst ID: finn5.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
60	Bromoform	11.879	11.869	11.869	11.869	11.869	11.859	11.869	11.859	11.879	11.340-12.418	11.868	0.006
61	1,1,2,2-Tetrachloroeth	11.990	11.990	11.990	11.990	11.980	11.980	11.990	11.980	11.990	11.451-12.528	11.986	0.005
$ 62	4-Bromofluorobenzene	12.110	12.110	12.110	12.100	12.100	12.100	12.100	12.100	12.110	11.678-12.542	12.104	0.005
63	1,2,3-Trichloropropane	12.160	12.160	12.160	12.150	12.150	12.150	12.150	12.150	12.160	11.622-12.699	12.154	0.005
65	Trans-1,4-Dichloro 2-B	12.211	12.211	12.211	12.211	12.201	12.201	12.201	12.191	12.211	11.672-12.749	12.204	0.007
66	N-Propyl Benzene	12.271	12.271	12.261	12.261	12.261	12.261	12.261	12.251	12.271	11.732-12.810	12.262	0.006
67	Bromobenzene	12.361	12.351	12.351	12.351	12.351	12.341	12.351	12.341	12.361	11.823-12.900	12.350	0.006
68	1,3,5-Trimethyl Benzen	12.442	12.442	12.432	12.432	12.432	12.432	12.432	12.422	12.442	11.903-12.980	12.433	0.006
69	2-Chloro Toluene	12.502	12.502	12.492	12.492	12.492	12.492	12.492	12.482	12.502	11.963-13.041	12.493	0.006
70	4-Chloro Toluene	12.552	12.542	12.542	12.532	12.532	12.532	12.532	12.532	12.552	12.014-13.091	12.537	0.008
71	T-Butyl Benzene	12.854	12.854	12.844	12.844	12.844	12.844	12.844	12.834	12.854	12.315-13.392	12.845	0.006
72	1,2,4-Trimethylbenzene	12.904	12.894	12.894	12.894	12.894	12.884	12.894	12.884	12.904	12.365-13.443	12.893	0.006
73	S-Butyl Benzene	13.095	13.095	13.095	13.095	13.085	13.085	13.085	13.085	13.095	12.556-13.634	13.090	0.005
74	4-Isopropyl Toluene	13.246	13.246	13.236	13.236	13.236	13.236	13.236	13.226	13.246	12.707-13.784	13.237	0.006
75	1,3-Dichlorobenzene	13.397	13.387	13.387	13.387	13.387	13.377	13.387	13.377	13.397	12.858-13.935	13.385	0.006
64	Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.768	13.336-14.200	+++++	+++++
* 76	d4-1,4-Dichlorobenzene	13.467	13.467	13.467	13.467	13.457	13.457	13.467	13.457	13.467	12.928-14.006	13.463	0.005
77	1,4-Dichlorobenzene	13.507	13.507	13.507	13.497	13.497	13.497	13.497	13.497	13.507	12.968-14.046	13.501	0.005
178	1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.100	13.561-14.639	+++++	+++++
78	N-Butyl Benzene	13.728	13.718	13.718	13.718	13.708	13.708	13.718	13.708	13.728	13.190-14.267	13.716	0.007
$ 79	d4-1,2-Dichlorobenzene	13.919	13.909	13.909	13.909	13.909	13.909	13.909	13.899	13.919	13.380-14.458	13.909	0.005
80	1,2-Dichlorobenzene	13.949	13.949	13.949	13.939	13.939	13.939	13.939	13.929	13.949	13.411-14.488	13.942	0.007
81	1,2-Dibromo 3-Chloropr	14.854	14.854	14.844	14.844	14.844	14.844	14.844	14.834	14.854	14.315-15.393	14.845	0.006

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/finn5.i/23JUL10.b/s8260b.m
Batch File: /chem1/finn5.i/23JUL10.b
Inst ID: finn5.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
82 1,2,4-Trichlorobenzene	15.899	15.899	15.899	15.889	15.889	15.889	15.889	15.889	15.899	15.360-16.438	15.893	0.005
83 Hexachloro 1,3-Butadie	16.050	16.050	16.050	16.050	16.040	16.040	16.040	16.040	16.050	15.511-16.588	16.045	0.005
84 Naphthalene	16.231	16.221	16.221	16.221	16.221	16.211	16.221	16.211	16.231	15.692-16.769	16.219	0.006
85 1,2,3-Trichlorobenzene	16.512	16.512	16.512	16.512	16.502	16.502	16.502	16.492	16.512	15.973-17.051	16.506	0.007

RC51: 69259

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/23JUL10.b/0010723.d
Lab Smp Id: IC0723 Client Smp ID: VSTD001
Inj Date : 23-JUL-2010 20:28
Operator : PB Inst ID: finn5.i
Smp Info : IC0723,5,5,0
Misc Info : 10-
Comment :
Method : /chem1/finn5.i/23JUL10.b/s8260b.m
Meth Date : 29-Jul-2010 14:28 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 20:28 Cal File: 0010723.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

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	2.995	2.995	(0.453)	1408	1.00000	0.9540
2 Chloromethane	50	3.296	3.296	(0.498)	4906	1.00000	1.236
3 Vinyl Chloride	62	3.417	3.417	(0.517)	3458	1.00000	1.101
4 Bromomethane	94	3.899	3.899	(0.590)	2127	1.00000	1.247
5 Chloroethane	64	3.970	3.970	(0.600)	2437	1.00000	1.188
6 Trichlorofluoromethane	101	4.231	4.231	(0.640)	3360	1.00000	1.107
7 Acrolein	56	4.623	4.623	(0.699)	2329	5.00000	6.152
8 112Trichloro122Trifluoroethane	101	4.633	4.633	(0.701)	2901	1.00000	1.221
9 Acetone	43	4.673	4.673	(0.707)	3505	5.00000	5.503(M)
10 1,1-Dichloroethene	96	4.834	4.834	(0.731)	2358	1.00000	1.094
11 Bromoethane	108	5.055	5.055	(0.764)	1610	1.00000	1.008
12 Iodomethane	142	5.146	5.146	(0.778)	2301	1.00000	0.9027
13 Methylene Chloride	84	5.266	5.266	(0.796)	3788	1.00000	1.560
14 Acrylonitrile	53	5.347	5.347	(0.808)	446	1.00000	0.7931(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.387	5.387	(0.815)	3168	1.00000	0.9555(Q)
	15 Carbon Disulfide	76	5.367	5.367	(0.812)	7676	1.00000	1.148(Q)
	17 Trans-1,2-Dichloroethene	96	5.548	5.548	(0.839)	1855	1.00000	1.010
	18 Vinyl Acetate	43	5.869	5.869	(0.888)	3138	1.00000	0.9751
	19 1,1-Dichloroethane	63	5.929	5.929	(0.897)	3627	1.00000	1.073
	20 2-Butanone	43	6.271	6.271	(0.948)	3717	5.00000	5.186(T)
	21 2,2-Dichloropropane	77	6.442	6.442	(0.974)	2020	1.00000	0.9766
	22 Cis-1,2-Dichloroethene	96	6.482	6.482	(0.980)	1600	1.00000	0.9880
*	23 Pentafluorobenzene	168	6.613	6.613	(1.000)	113813	50.0000	
	24 Chloroform	83	6.633	6.633	(1.003)	2843	1.00000	1.035(Q)
	26 Bromochloromethane	128	6.794	6.794	(1.027)	686	1.00000	0.8922(Q)
$	25 Dibromofluoromethane	111	6.834	6.834	(1.033)	73863	50.0000	54.452(Q)
	27 1,1,1-Trichloroethane	97	7.015	7.015	(1.061)	2223	1.00000	1.041(M)
	29 1,1-Dichloropropene	75	7.166	7.166	(0.939)	2255	1.00000	0.9864
	30 Carbon Tetrachloride	117	7.286	7.286	(0.955)	1957	1.00000	0.9844
$	31 d4-1,2-Dichloroethane	65	7.296	7.296	(1.103)	81673	50.0000	55.025
	32 1,2-Dichloroethane	62	7.387	7.387	(0.968)	1923	1.00000	0.9582
	33 Benzene	78	7.427	7.427	(0.974)	5924	1.00000	1.072
*	34 1,4-Difluorobenzene	114	7.628	7.628	(1.000)	168346	50.0000	
	35 Trichloroethene	95	8.000	8.000	(1.049)	1468	1.00000	0.9064
	36 1,2-Dichloropropane	63	8.161	8.161	(1.070)	1766	1.00000	1.013
	37 Bromodichloromethane	83	8.392	8.392	(1.100)	1755	1.00000	0.9420
	39 Dibromomethane	93	8.462	8.462	(1.109)	852	1.00000	0.9849
	40 2-Chloroethyl Vinyl Ether	63	8.613	8.613	(1.129)	404	1.00000	0.6620(Q)
	41 4-Methyl-2-Pentanone	58	8.643	8.643	(1.133)	2382	5.00000	5.352(Q)
	42 Cis 1,3-dichloropropene	75	8.894	8.894	(1.166)	1694	1.00000	0.8328
$	43 d8-Toluene	98	9.176	9.176	(1.203)	189101	50.0000	51.122
	44 Toluene	92	9.256	9.256	(1.213)	4231	1.00000	1.290
	45 Trans 1,3-Dichloropropene	75	9.387	9.387	(1.231)	1503	1.00000	0.8790(Q)
	46 2-Hexanone	43	9.527	9.527	(0.884)	6953	5.00000	5.978(M)
	47 1,1,2-Trichloroethane	97	9.568	9.568	(1.254)	905	1.00000	0.8863
	48 1,3-Dichloropropane	76	9.829	9.829	(0.912)	1945	1.00000	0.9712
	49 Tetrachloroethene	166	9.949	9.949	(0.924)	1755	1.00000	1.110
	50 Chlorodibromomethane	129	10.161	10.161	(0.943)	1215	1.00000	0.9018
	51 1,2-Dibromoethane	107	10.382	10.382	(1.361)	1013	1.00000	0.9262(T)
*	52 d5-Chlorobenzene	117	10.774	10.774	(1.000)	142296	50.0000	
	53 Chlorobenzene	112	10.814	10.814	(1.004)	4123	1.00000	1.235
	54 Ethyl Benzene	91	10.854	10.854	(1.007)	6269	1.00000	1.111
	55 1,1,1,2-Tetrachloroethane	131	10.844	10.844	(1.007)	1389	1.00000	1.087
	56 m,p-xylene	106	10.934	10.934	(1.015)	3903	2.00000	1.892(Q)
	57 o-Xylene	106	11.417	11.417	(1.060)	1700	1.00000	0.7929(Q)
	58 Styrene	104	11.447	11.447	(1.062)	2884	1.00000	0.8700
	59 Isopropyl Benzene	105	11.799	11.799	(0.877)	5129	1.00000	1.064
	60 Bromoform	173	11.859	11.859	(0.881)	842	1.00000	1.086
	61 1,1,2,2-Tetrachloroethane	83	11.980	11.980	(0.890)	1717	1.00000	1.233(M)
$	62 4-Bromofluorobenzene	95	12.100	12.100	(1.123)	78200	50.0000	46.957
	63 1,2,3-Trichloropropane	110	12.150	12.150	(0.903)	282	1.00000	1.022(QM)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.191	12.191	(0.906)	407	1.00000	0.9508 (QM)
	66 N-Propyl Benzene	91	12.251	12.251	(0.910)	6239	1.00000	1.002
	67 Bromobenzene	156	12.341	12.341	(0.917)	1399	1.00000	1.041
	68 1,3,5-Trimethyl Benzene	105	12.422	12.422	(0.923)	3814	1.00000	0.9746
	69 2-Chloro Toluene	91	12.482	12.482	(0.928)	4473	1.00000	1.094
	70 4-Chloro Toluene	91	12.532	12.532	(0.931)	3761	1.00000	0.9595
	71 T-Butyl Benzene	119	12.834	12.834	(0.954)	3230	1.00000	0.9648
	72 1,2,4-Trimethylbenzene	105	12.884	12.884	(0.957)	3492	1.00000	0.9064
	73 S-Butyl Benzene	105	13.085	13.085	(0.972)	5229	1.00000	0.9494
	74 4-Isopropyl Toluene	119	13.226	13.226	(0.983)	3188	1.00000	0.8436
	75 1,3-Dichlorobenzene	146	13.377	13.377	(0.994)	2237	1.00000	0.9743
*	76 d4-1,4-Dichlorobenzene	152	13.457	13.457	(1.000)	71616	50.0000	
	77 1,4-Dichlorobenzene	146	13.497	13.497	(1.003)	2370	1.00000	1.032 (Q)
	78 N-Butyl Benzene	91	13.708	13.708	(1.019)	4025	1.00000	0.9863
$	79 d4-1,2-Dichlorobenzene	152	13.899	13.899	(1.033)	66535	50.0000	51.077
	80 1,2-Dichlorobenzene	146	13.929	13.929	(1.035)	2202	1.00000	1.009
	81 1,2-Dibromo 3-Chloropropane	75	14.834	14.834	(1.102)	218	1.00000	0.9046 (Q)
	82 1,2,4-Trichlorobenzene	180	15.889	15.889	(1.181)	1382	1.00000	1.041
	83 Hexachloro 1,3-Butadiene	225	16.040	16.040	(1.192)	838	1.00000	0.9370
	84 Naphthalene	128	16.211	16.211	(1.205)	2458	1.00000	1.020
	85 1,2,3-Trichlorobenzene	180	16.492	16.492	(1.226)	1376	1.00000	1.084

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 0010723.d
Lab Smp Id: IC0723
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/23JUL10.b/s8260b.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 18:42
Client Smp ID: VSTD001
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
23 Pentafluorobenzen	131115	65558	262230	113813	-13.20
34 1,4-Difluorobenze	191559	95780	383118	168346	-12.12
52 d5-Chlorobenzene	161199	80600	322398	142296	-11.73
76 d4-1,4-Dichlorobe	88279	44140	176558	71616	-18.88

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.62	6.12	7.12	6.61	-0.15
34 1,4-Difluorobenze	7.63	7.13	8.13	7.63	0.00
52 d5-Chlorobenzene	10.78	10.28	11.28	10.77	-0.09
76 d4-1,4-Dichlorobe	13.47	12.97	13.97	13.46	-0.07

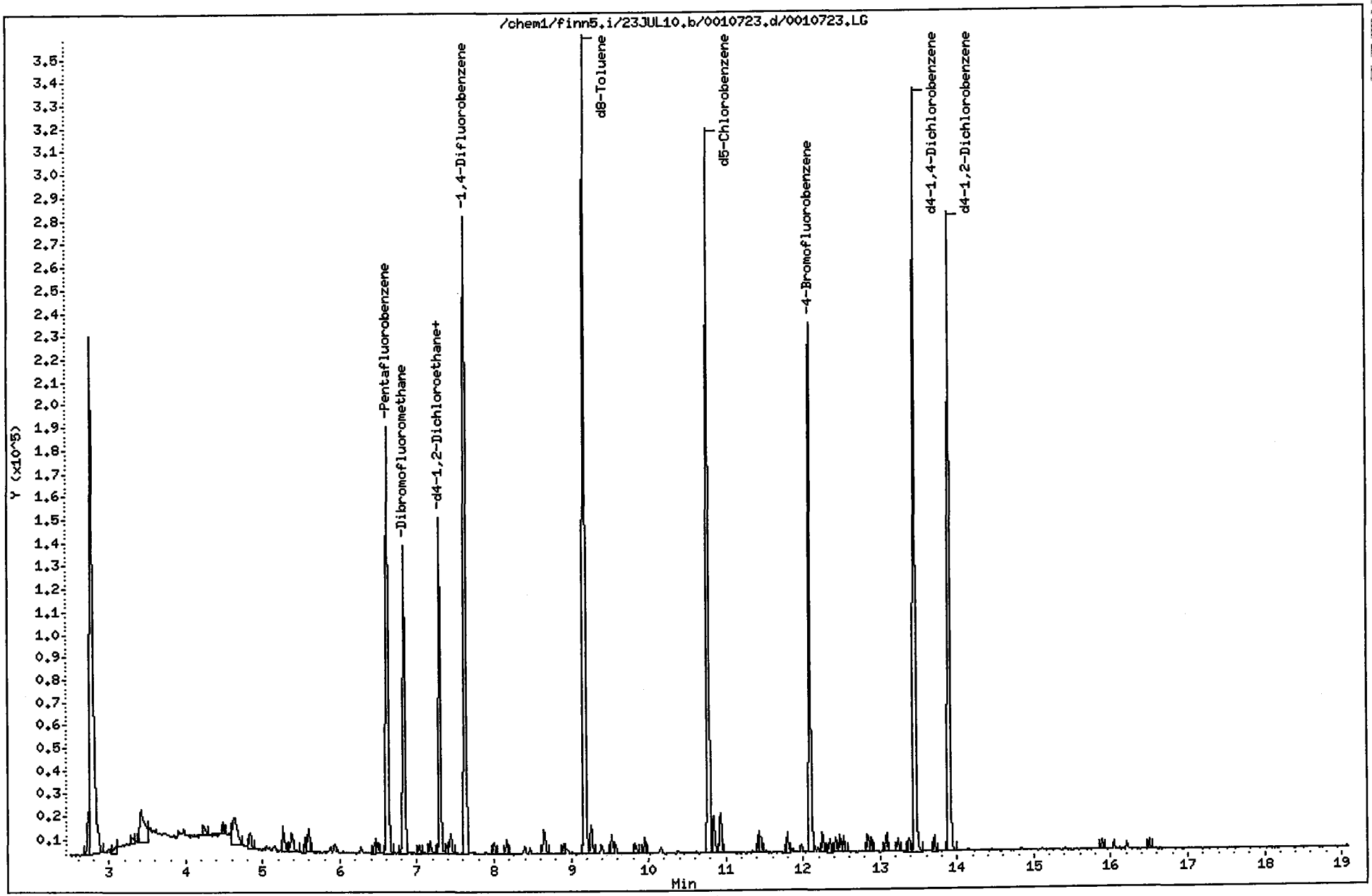
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/finn5.i/23JUL10.b/0010723.d
Date : 23-JUL-2010 20:28
Client ID: VSTD001
Sample Info: IC0723,5,5,0

Instrument: finn5.i

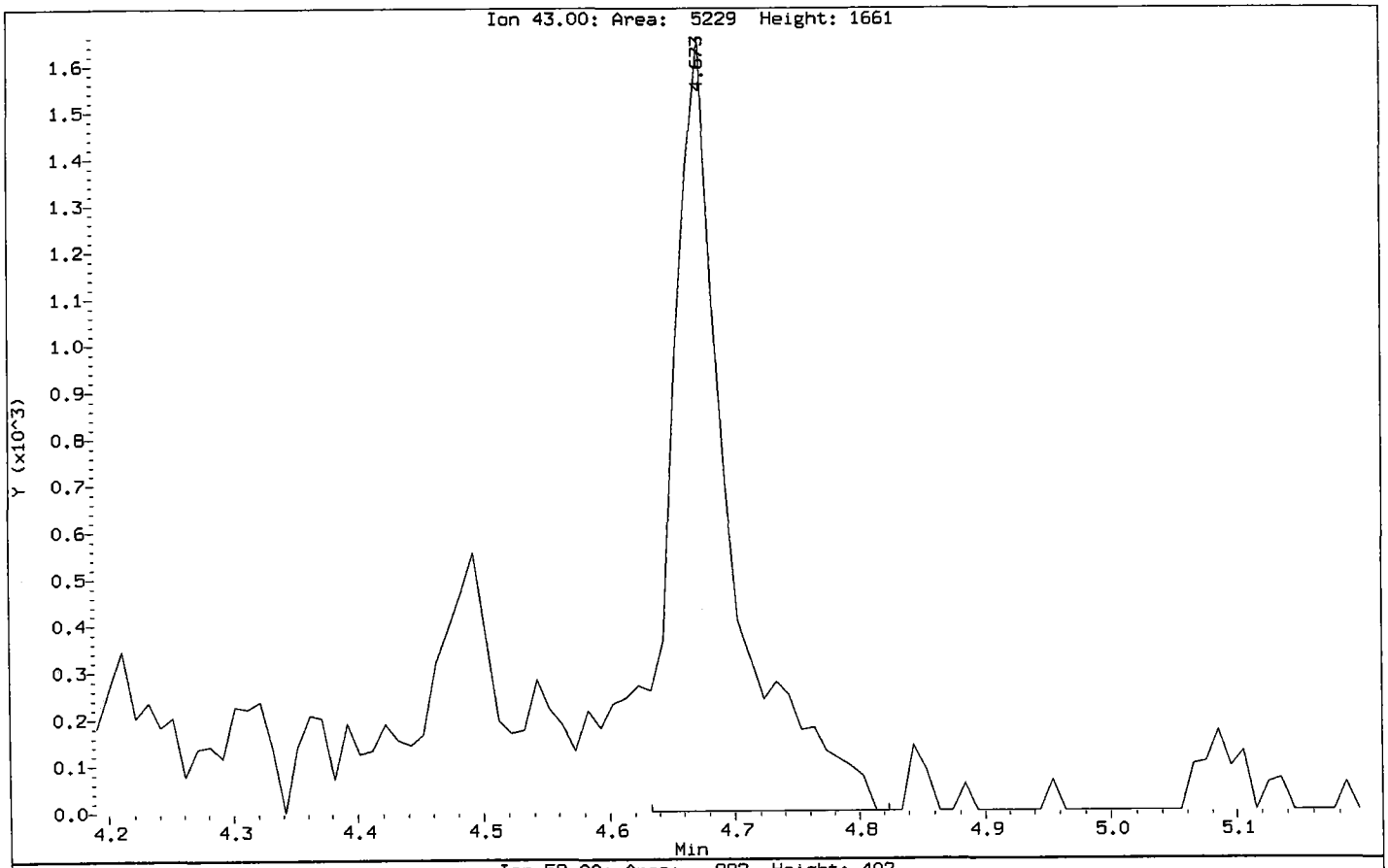
Operator: PB
Column diameter: 0.18

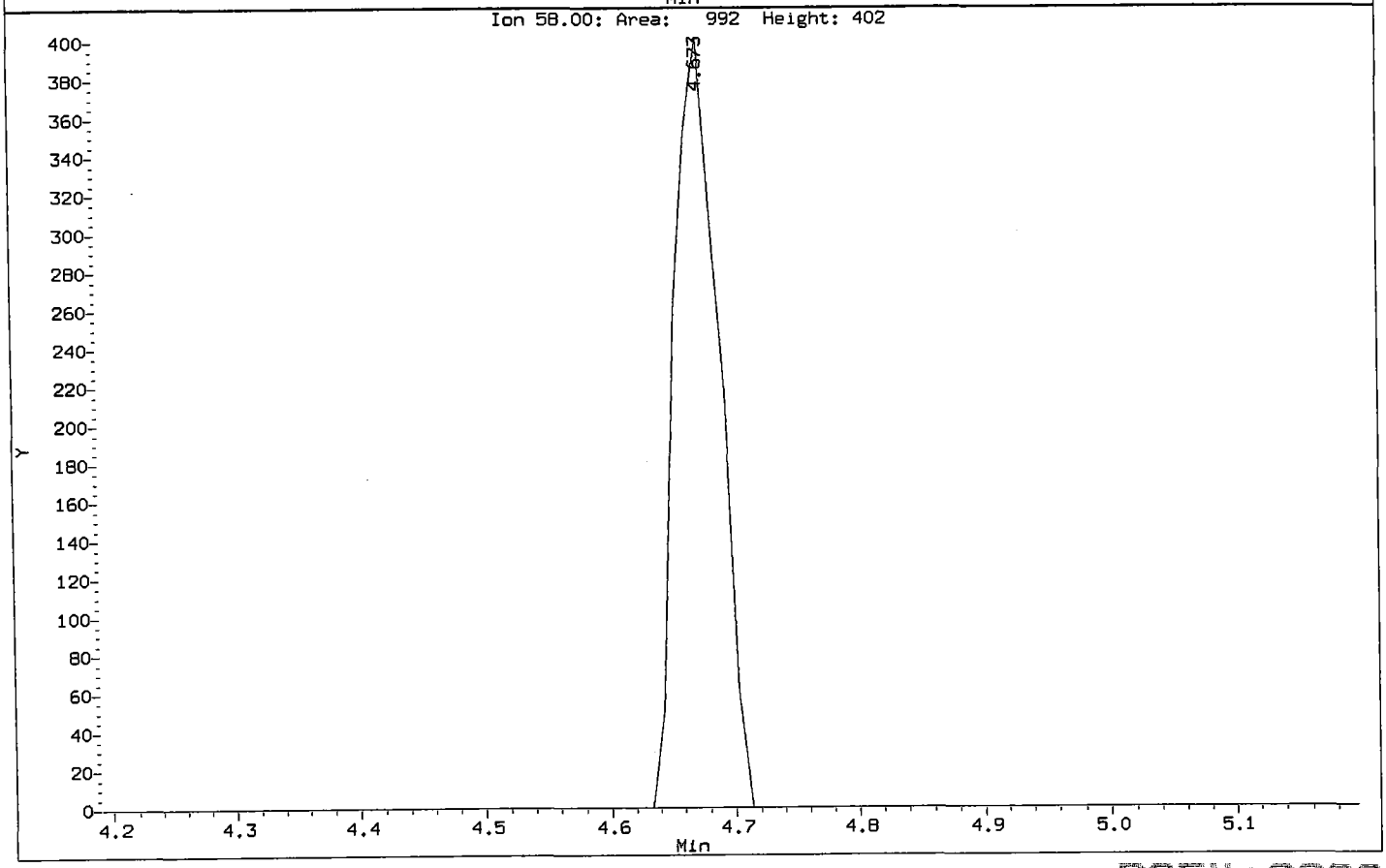
Column phase: Rtx502.2



Data File: /chem1/finn5.i/23JUL10.b/0010723.d/0010723.LG
Injection Date: 23-JUL-2010 20:28
Instrument: finn5.i
Client Sample ID: VSTD001

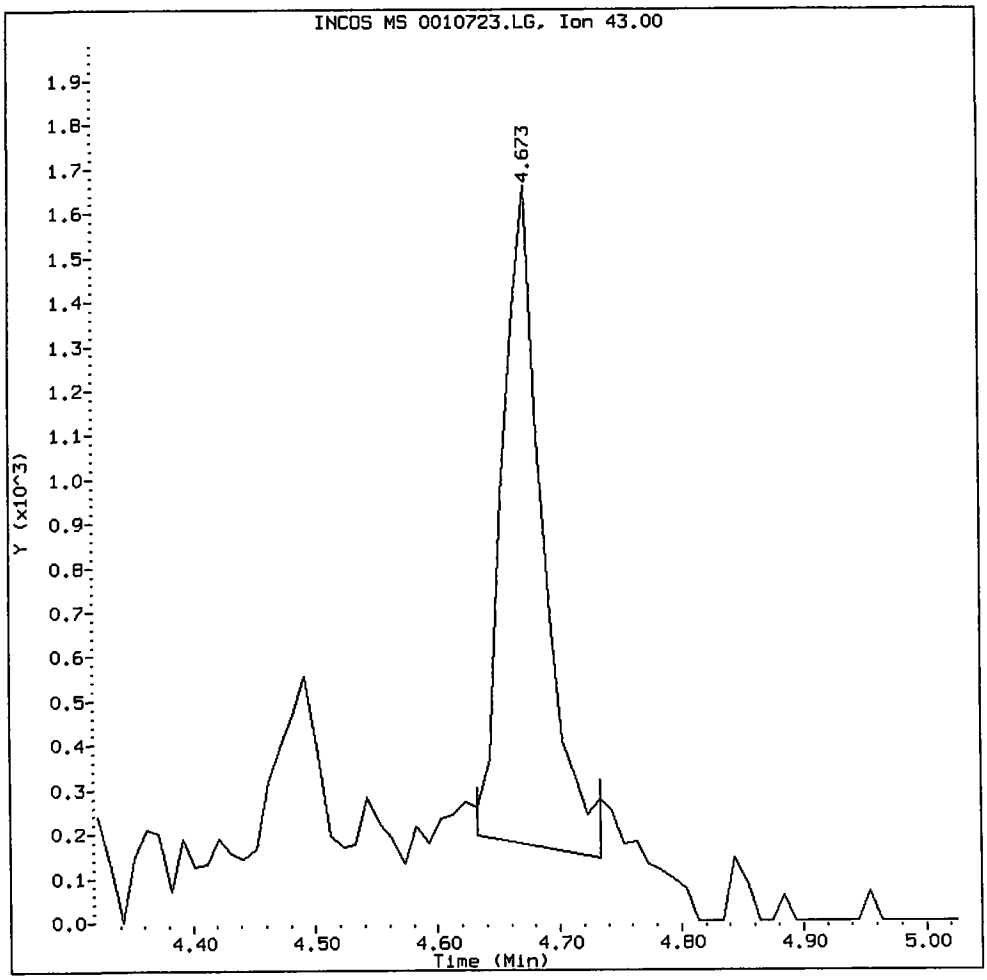
Compound: Acetone
CAS Number:





IC0723, /chem1/finn5.i/23JUL10.b/0010723.d

Acetone Amount: 5.50 Area: 3505



MANUAL INTEGRATION for Acetone

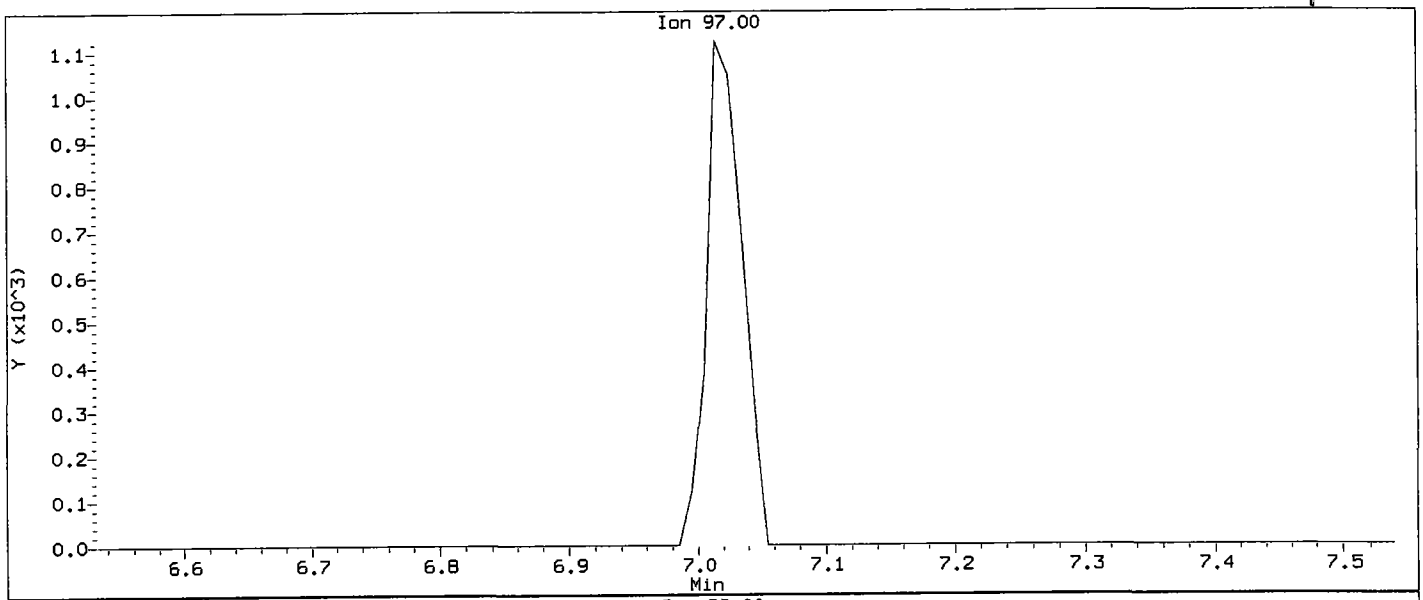
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

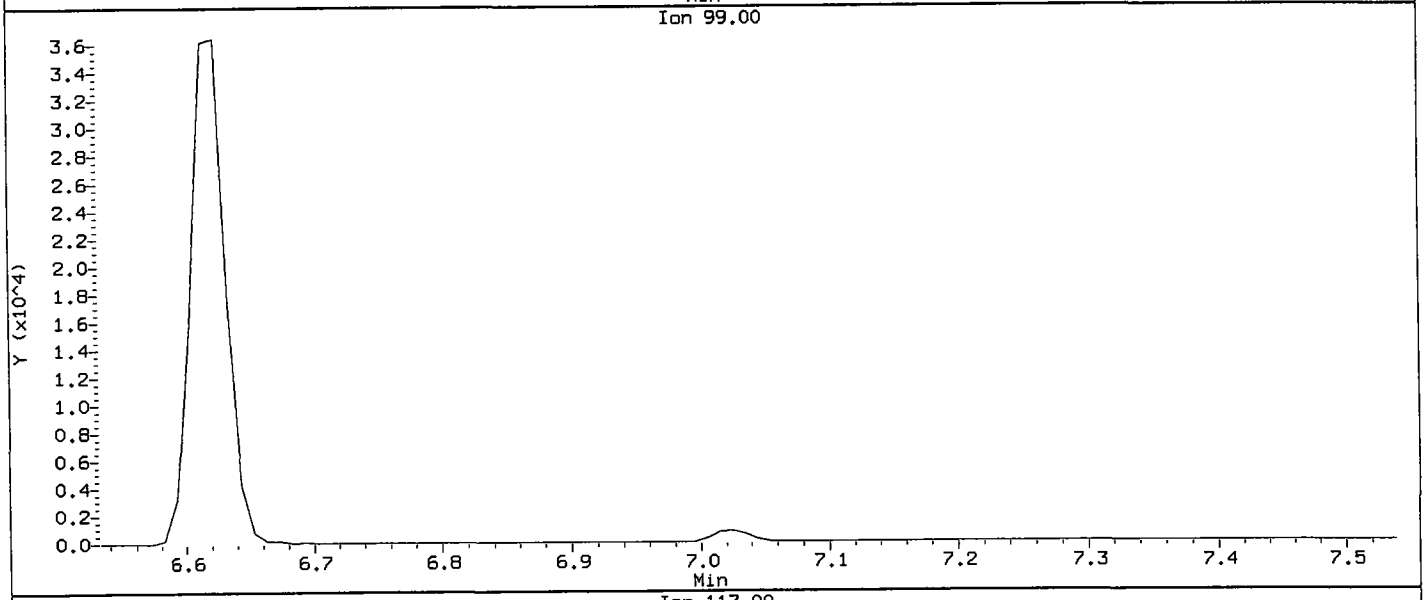
5. Other _____

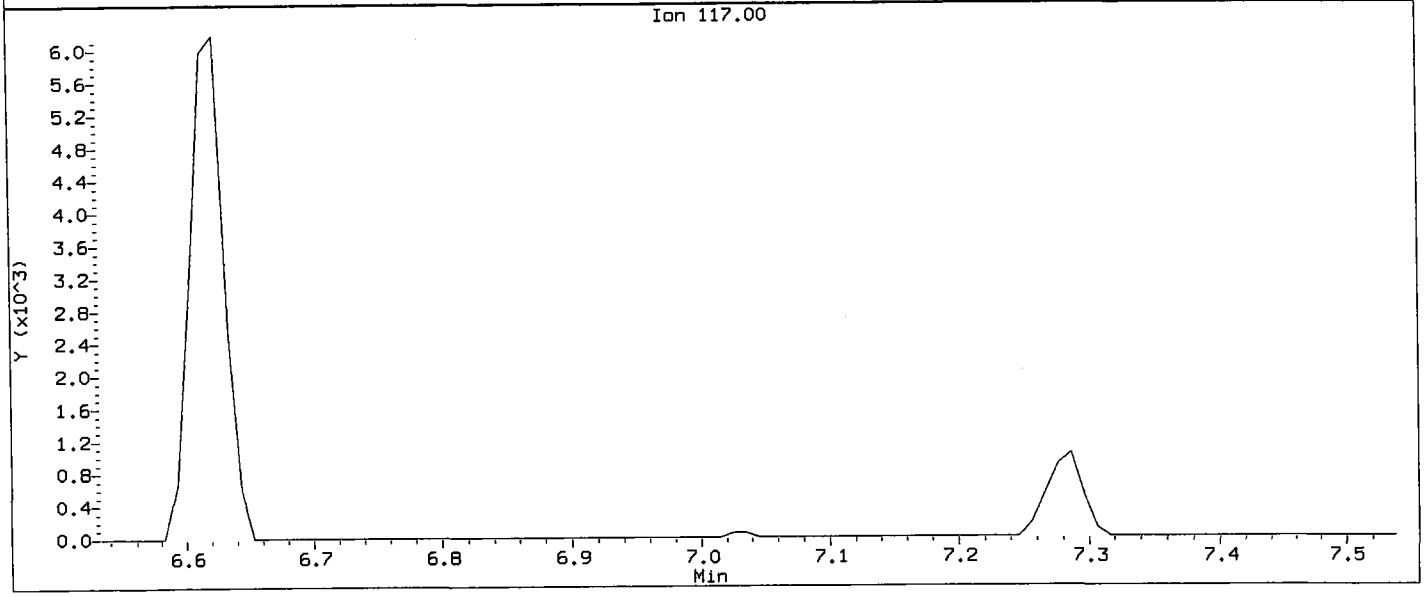
Analyst: _____ Date: 7/26/10

Data File: /chem1/finn5.i/23JUL10.b/0010723.d/0010723.LG
Injection Date: 23-JUL-2010 20:28
Instrument: finn5.i
Client Sample ID: VSTD001

Compound: 1,1,1-Trichloroethane
CAS Number:

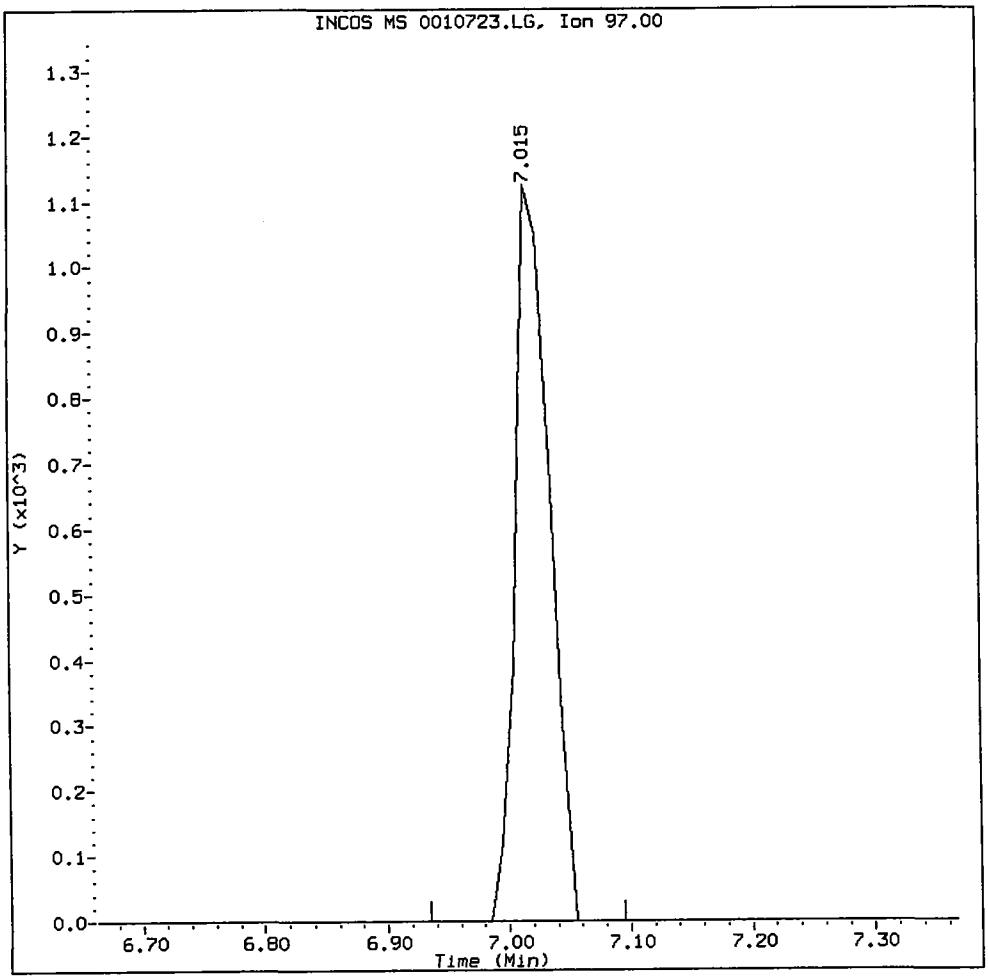






IC0723, /chem1/finn5.i/23JUL10.b/0010723.d

1,1,1-Trichloroethane Amount: 1.04 Area: 2223



MANUAL INTEGRATION for 1,1,1-Trichloroethane

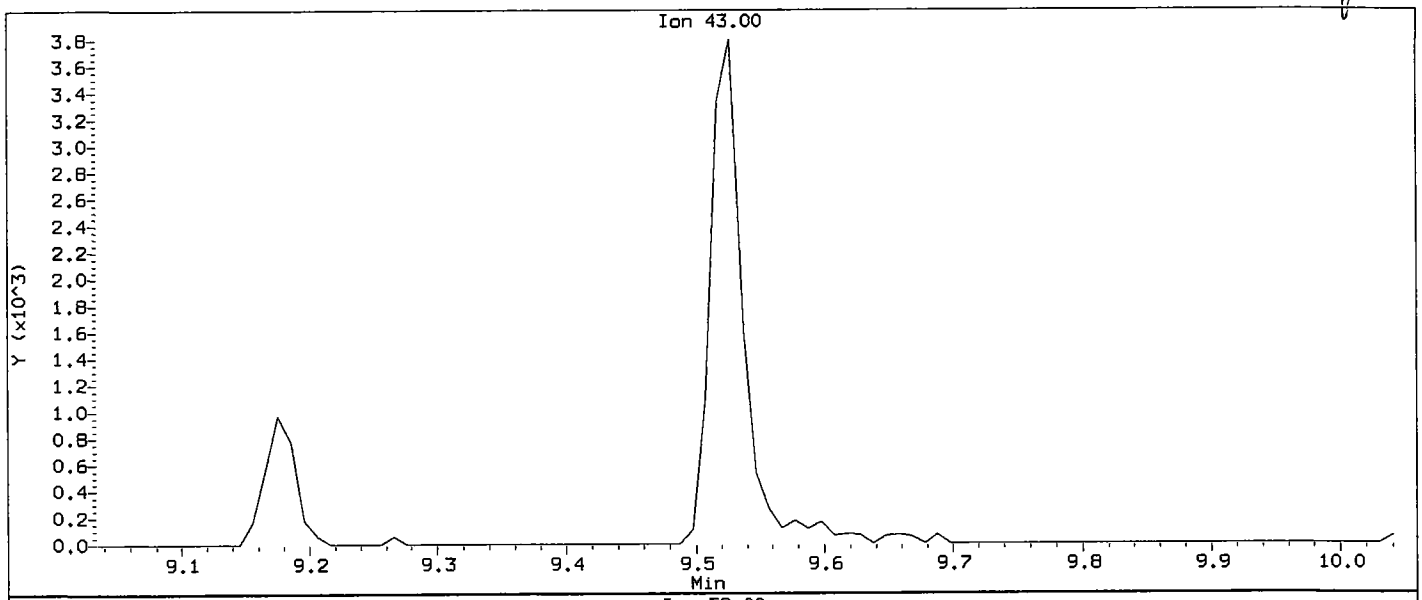
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

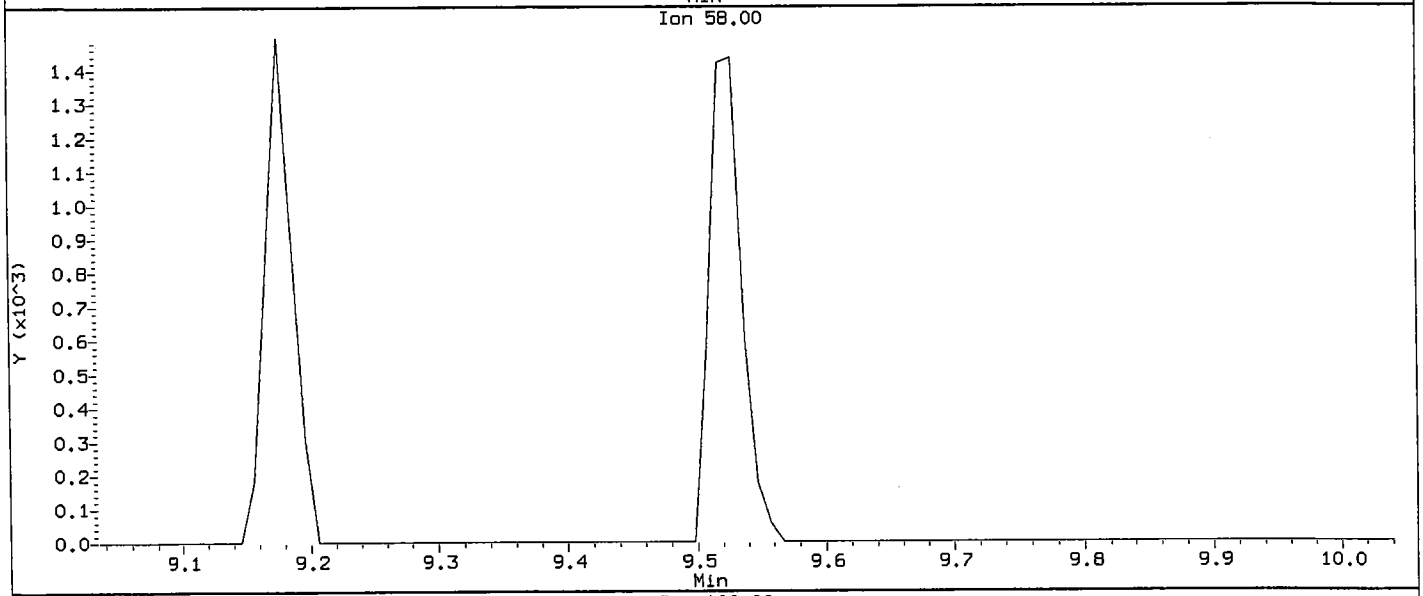
5. Other _____

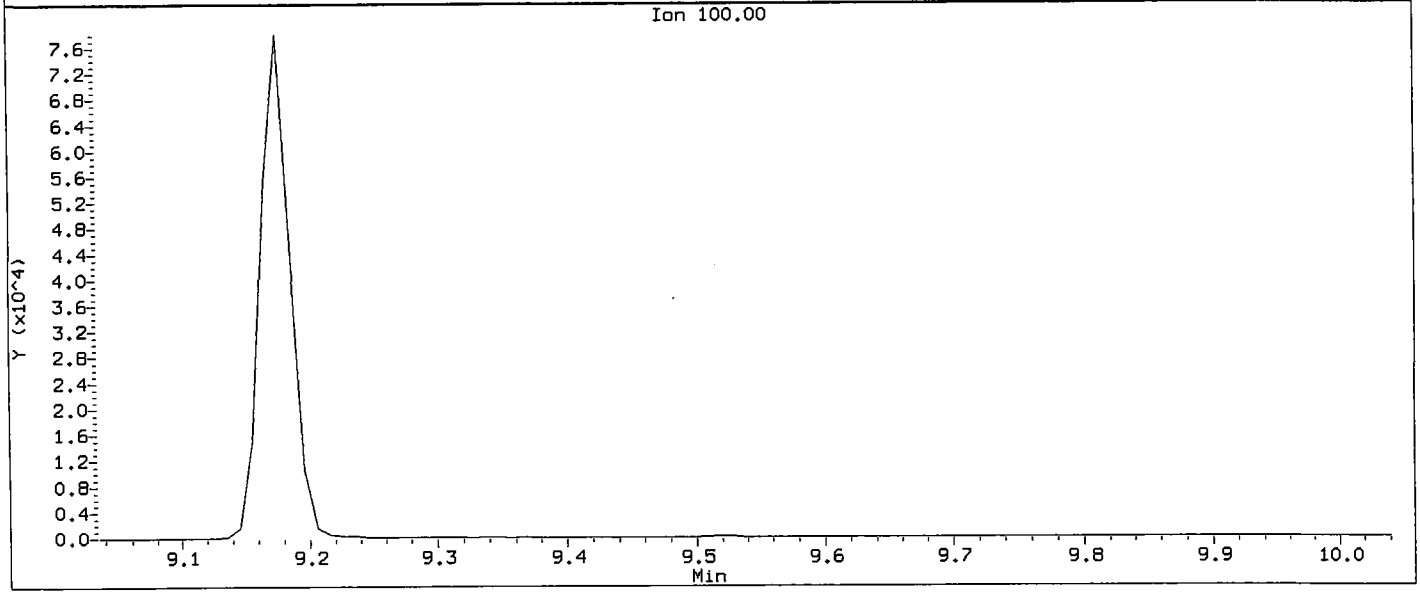
Analyst: _____ Date: 7/26/10

Data File: /chem1/finn5.i/23JUL10.b/0010723.d/0010723.LG
Injection Date: 23-JUL-2010 20:28
Instrument: finn5.i
Client Sample ID: VSTD001

Compound: 2-Hexanone
CAS Number:

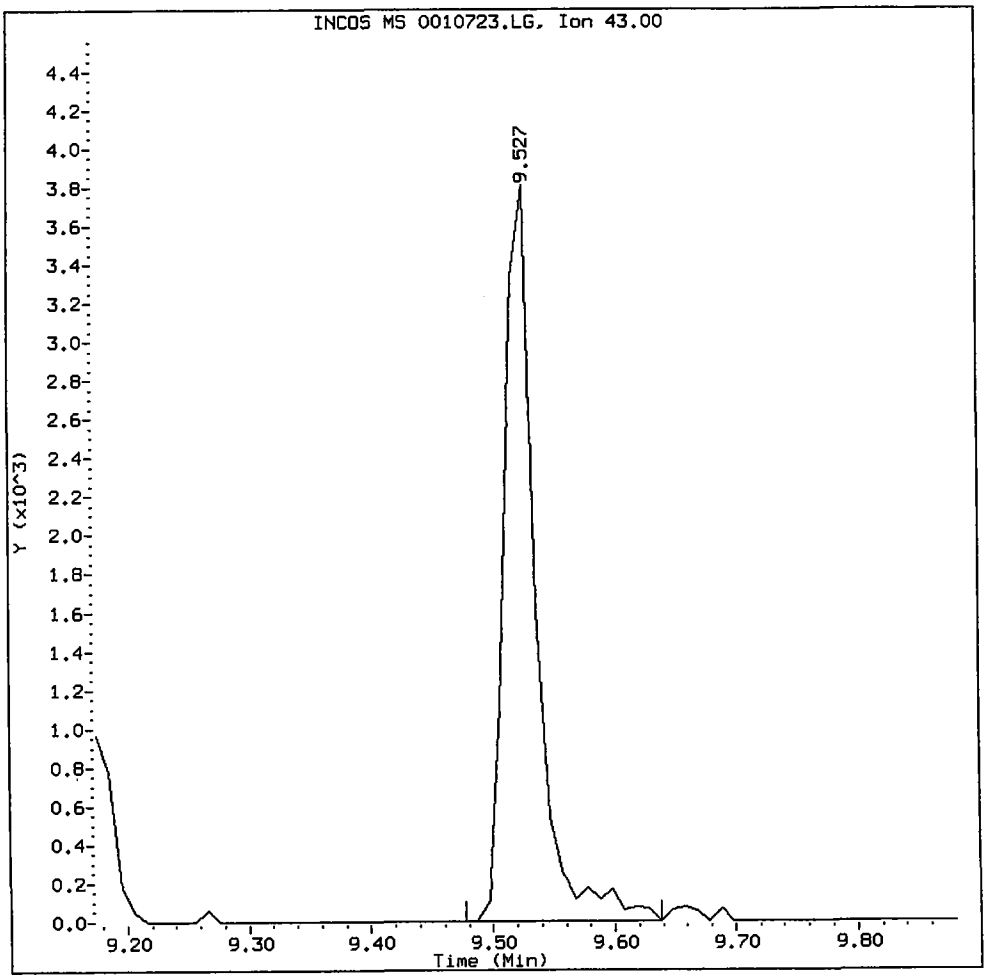






IC0723, /chem1/finn5.i/23JUL10.b/0010723.d

2-Hexanone Amount: 5.98 Area: 6953



MANUAL INTEGRATION for 2-Hexanone

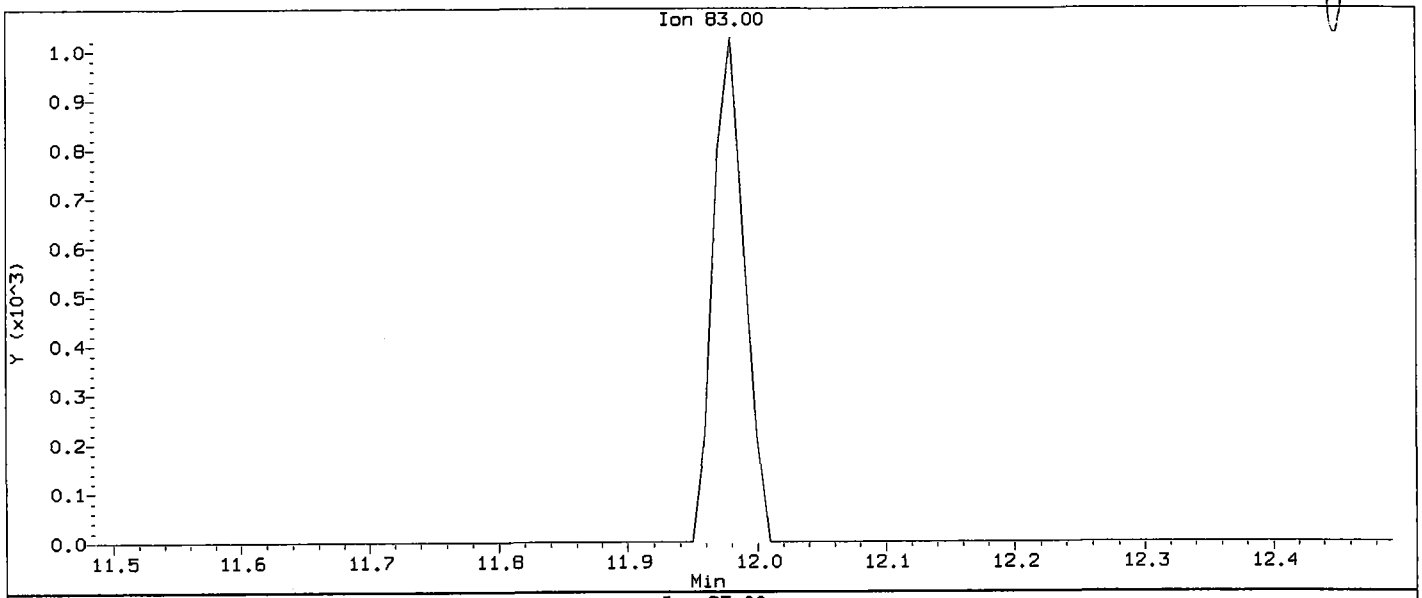
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

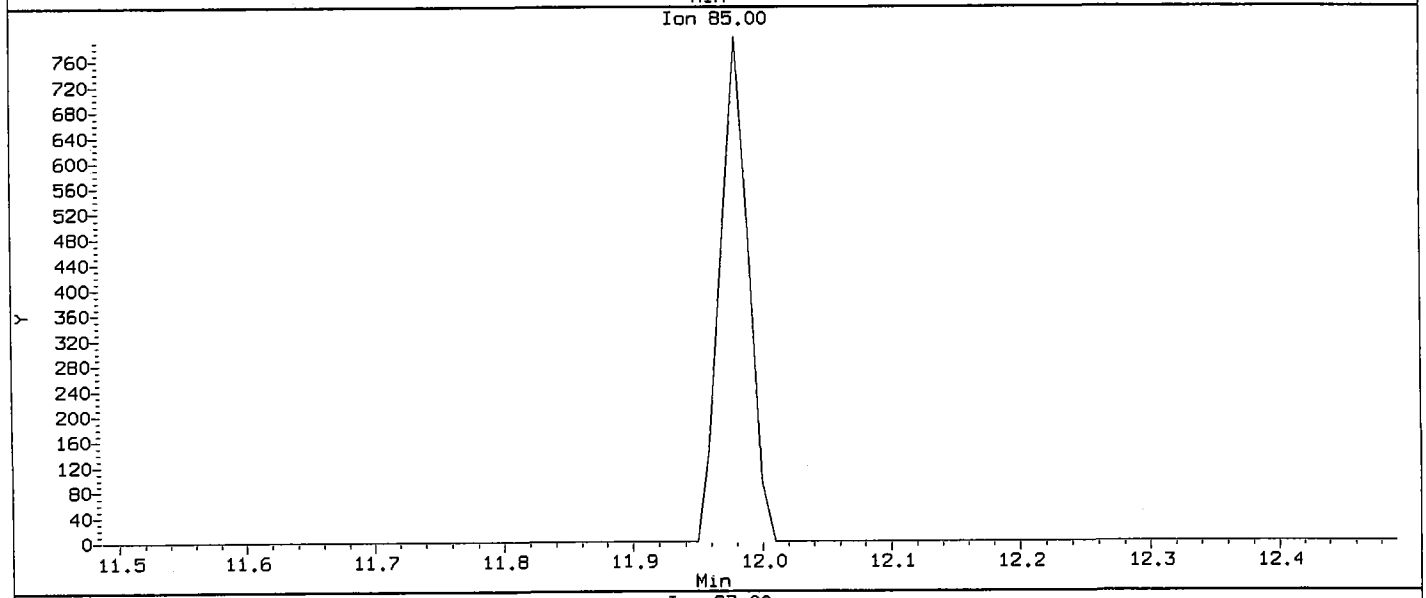
5. Other _____

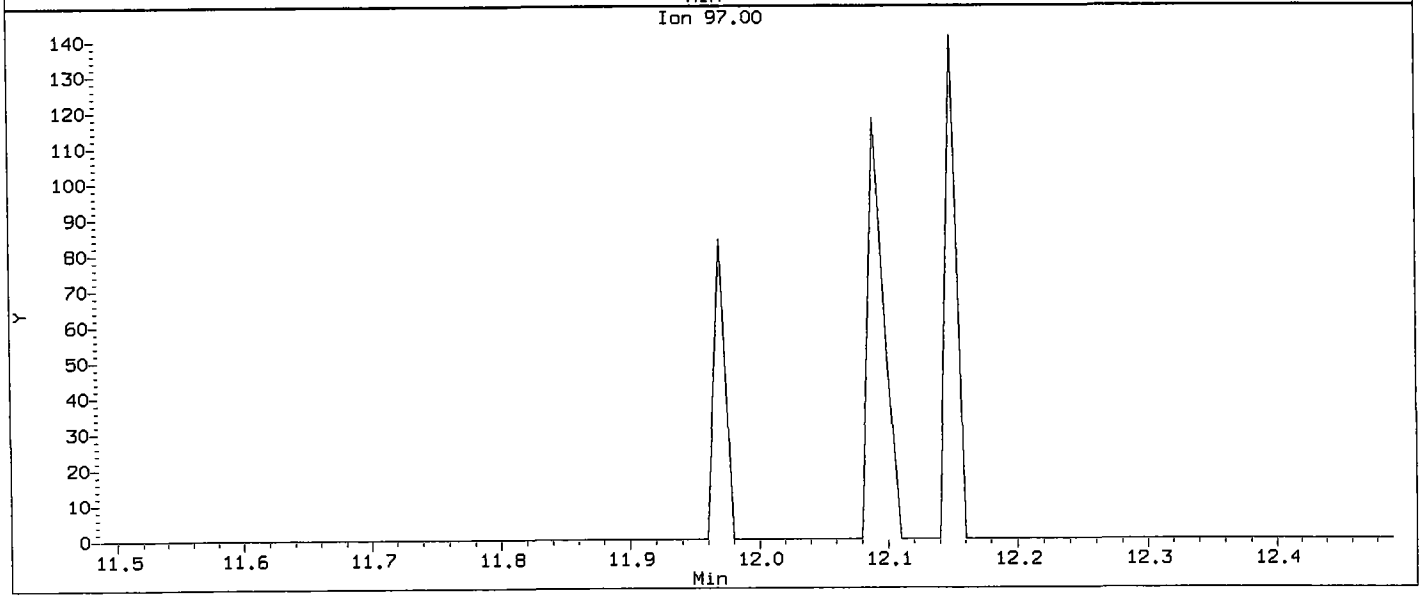
Analyst: _____ Date: 7/28/10

Data File: /chem1/finn5.i/23JUL10.b/0010723.d/0010723.LG
Injection Date: 23-JUL-2010 20:28
Instrument: finn5.i
Client Sample ID: VSTD001

Compound: 1,1,2,2-Tetrachloroethane
CAS Number:

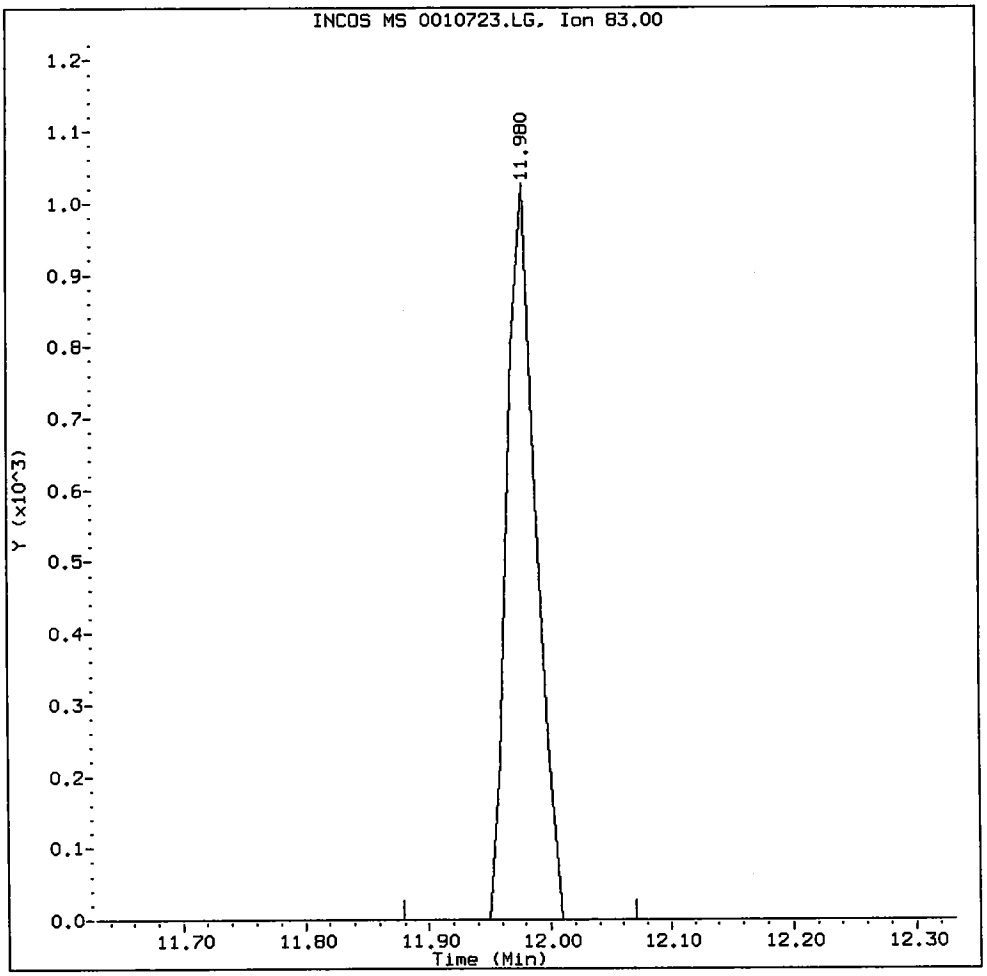






IC0723, /chem1/finn5.i/23JUL10.b/0010723.d

1,1,2,2-Tetrachloroethane Amount: 1.23 Area: 1717



MANUAL INTEGRATION for 1,1,2,2-Tetrachloroethane

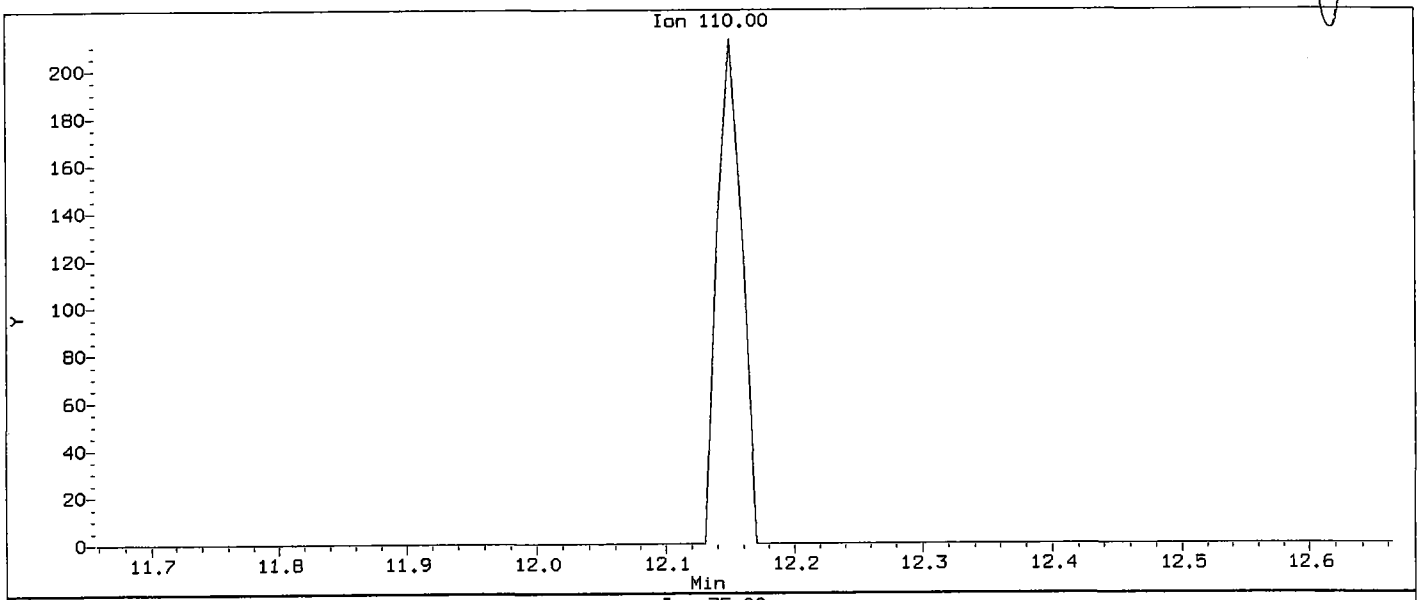
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

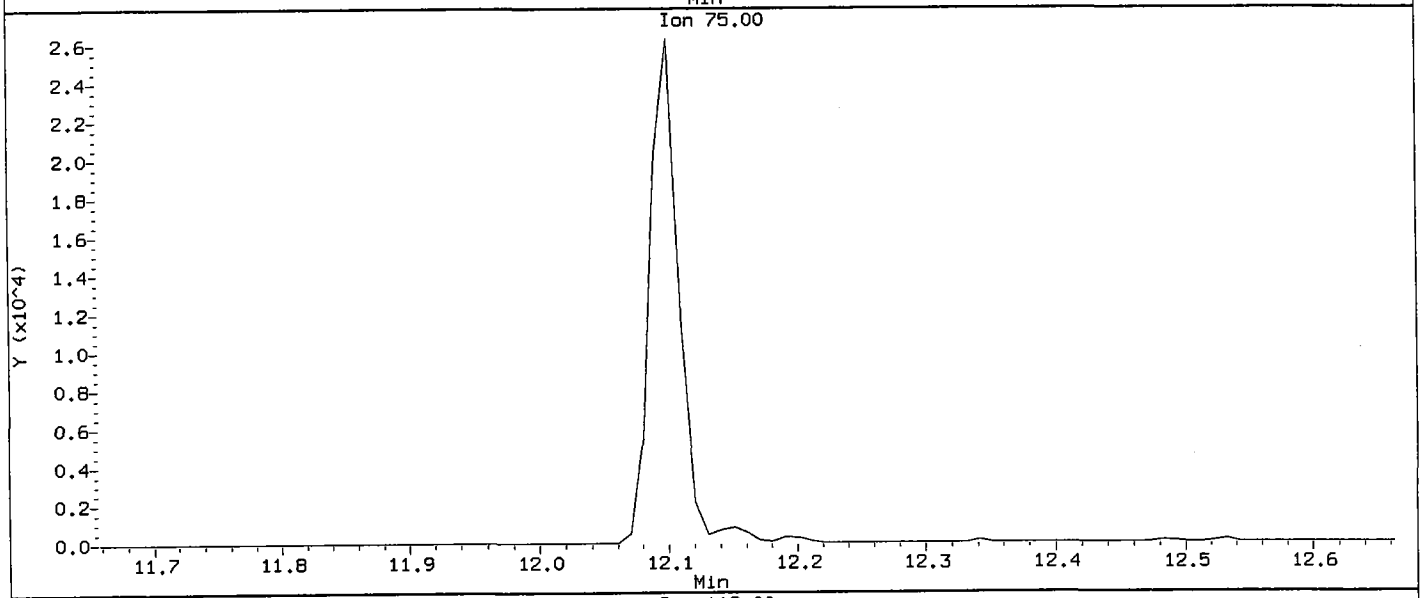
5. Other _____

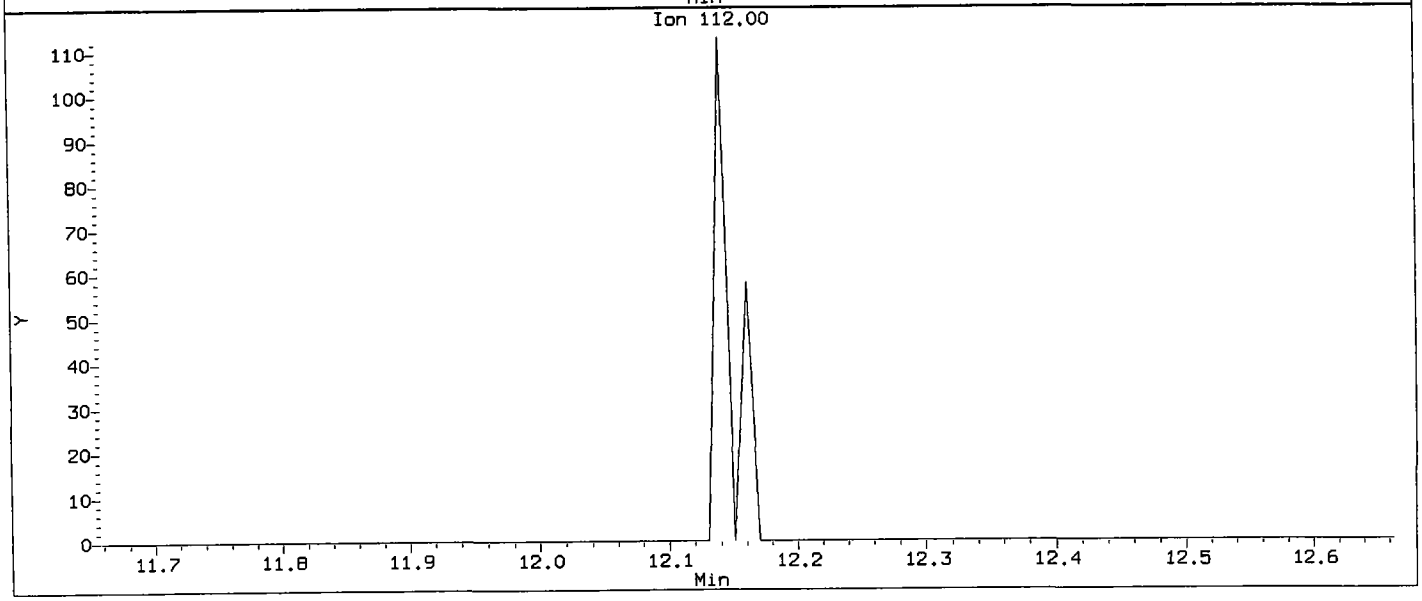
Analyst: _____ Date: 7/12/10

Data File: /chem1/finn5.i/23JUL10.b/0010723.d/0010723.LG
Injection Date: 23-JUL-2010 20:28
Instrument: finn5.i
Client Sample ID: VSTD001

Compound: 1,2,3-Trichloropropane
CAS Number:

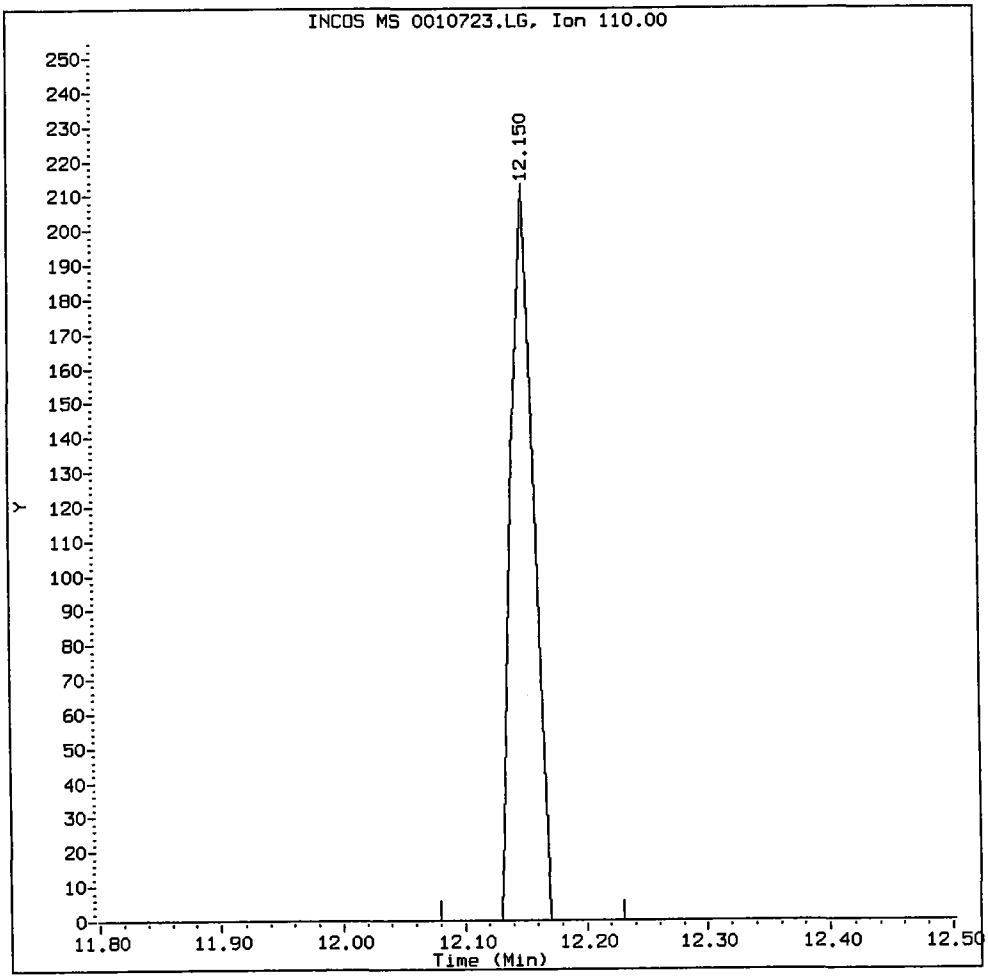






IC0723, /chem1/finn5.i/23JUL10.b/0010723.d

1,2,3-Trichloropropane Amount: 1.02 Area: 282



MANUAL INTEGRATION for 1,2,3-Trichloropropane

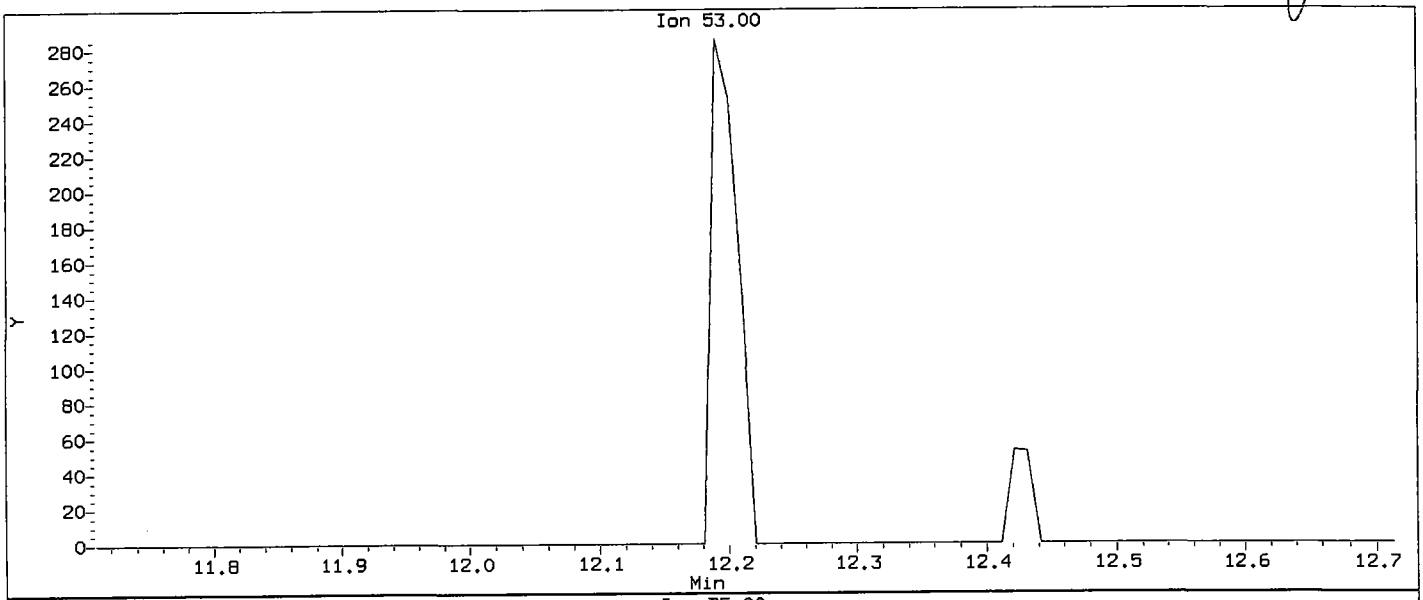
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

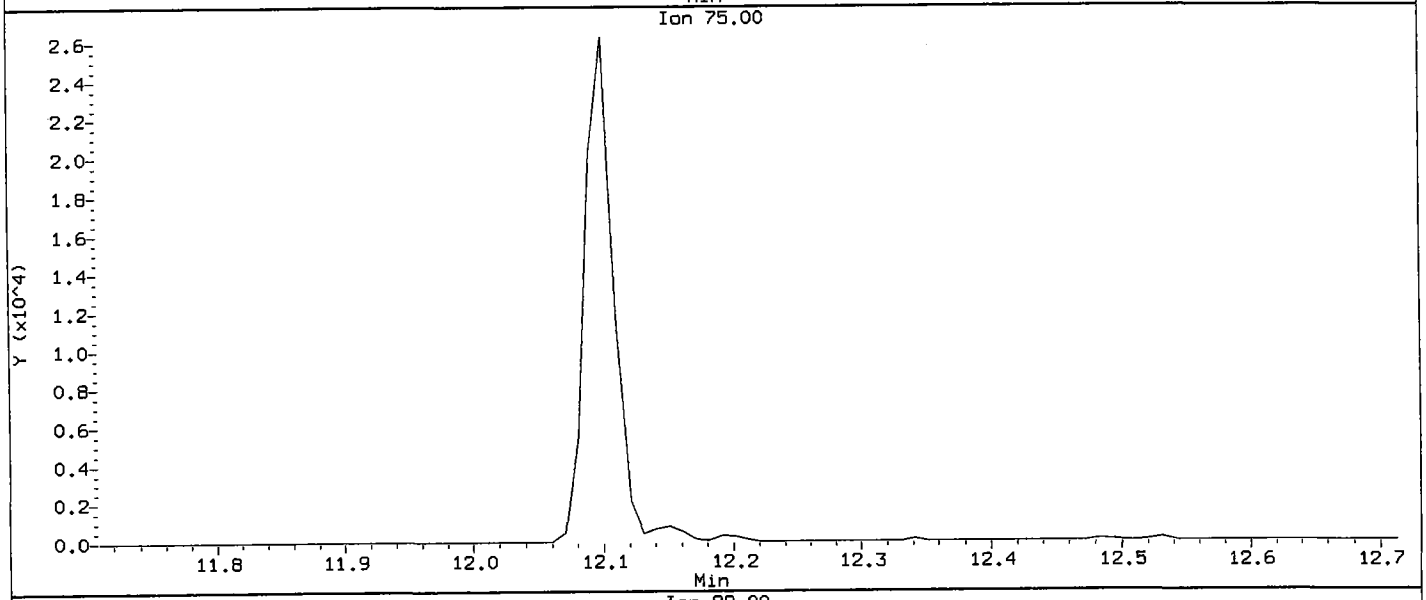
5. Other _____

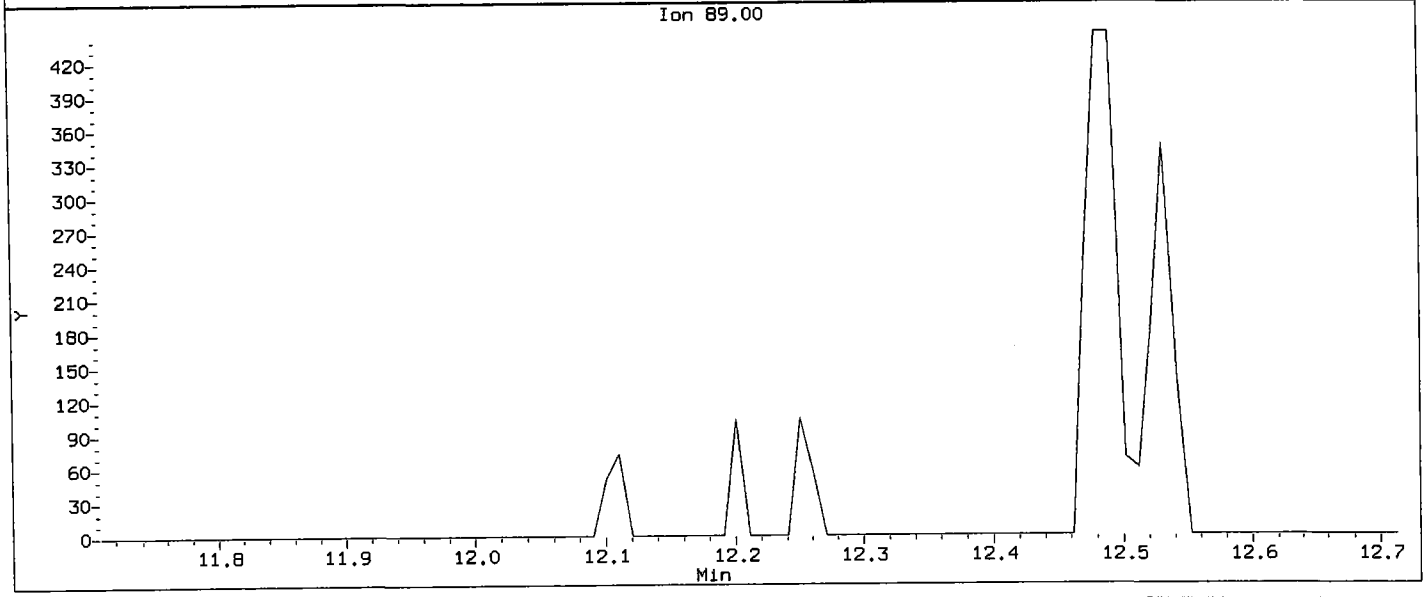
Analyst: _____ Date: 7/14/10

Data File: /chem1/finn5.i/23JUL10.b/0010723.d/0010723.LG
Injection Date: 23-JUL-2010 20:28
Instrument: finn5.i
Client Sample ID: VSTD001

Compound: Trans-1,4-Dichloro 2-Butene
CAS Number:

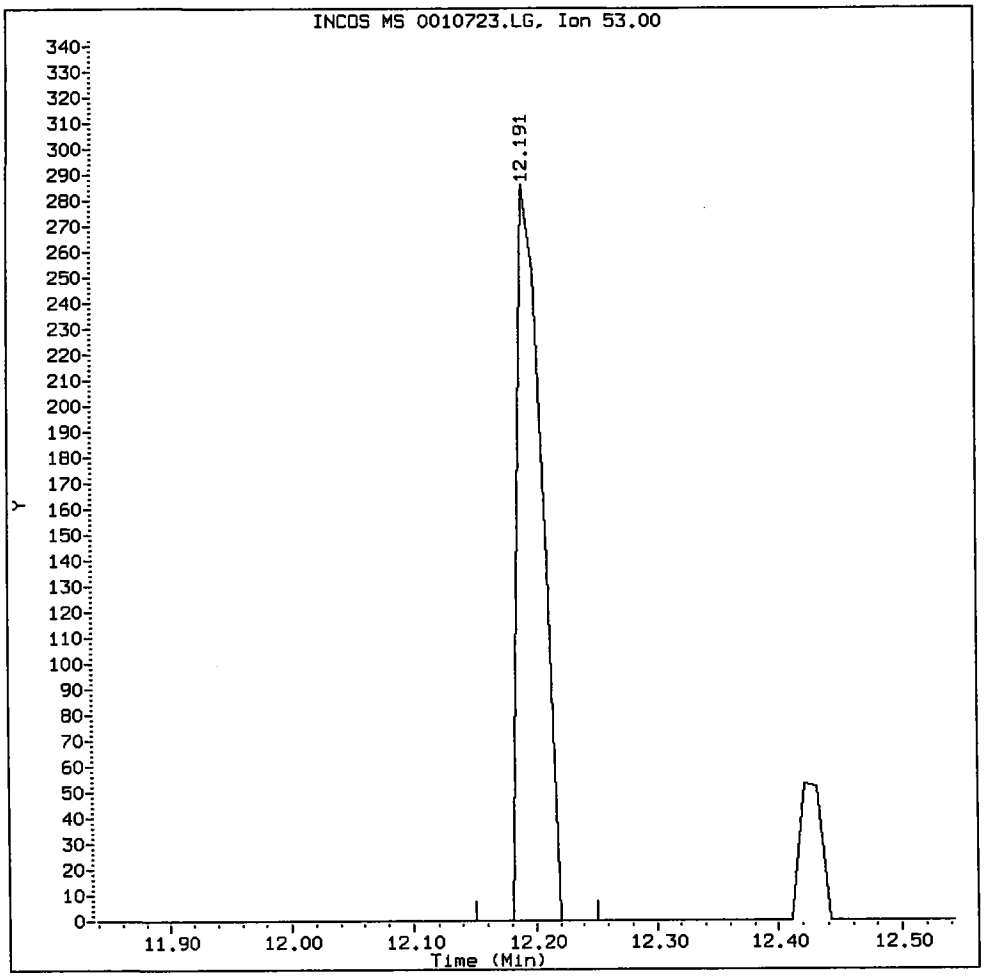






IC0723, /chem1/finn5.i/23JUL10.b/0010723.d

Trans-1,4-Dichloro 2-Butene Amount: 0.95 Area: 407



MANUAL INTEGRATION for Trans-1,4-Dichloro 2-Butene

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 7/26/10

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/23JUL10.b/0020723.d
Lab Smp Id: IC0723 Client Smp ID: VSTD002
Inj Date : 23-JUL-2010 20:02
Operator : PB Inst ID: finn5.i
Smp Info : IC0723,5,5,0
Misc Info : 10-
Comment :
Method : /chem1/finn5.i/23JUL10.b/s8260b.m
Meth Date : 29-Jul-2010 14:28 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 20:02 Cal File: 0020723.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

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	3.005	3.005	(0.454)	3205	2.00000	2.133
2 Chloromethane	50	3.306	3.306	(0.499)	9090	2.00000	2.249
3 Vinyl Chloride	62	3.427	3.427	(0.517)	6731	2.00000	2.106(Q)
4 Bromomethane	94	3.909	3.909	(0.590)	3943	2.00000	2.272
5 Chloroethane	64	3.980	3.980	(0.601)	5065	2.00000	2.426
6 Trichlorofluoromethane	101	4.241	4.241	(0.640)	7223	2.00000	2.338
7 Acrolein	56	4.623	4.623	(0.698)	4563	10.0000	11.841
8 112Trichloro122Trifluoroethane	101	4.643	4.643	(0.701)	5478	2.00000	2.265
9 Acetone	43	4.673	4.673	(0.706)	7408	10.0000	11.426(M)
10 1,1-Dichloroethene	96	4.834	4.834	(0.730)	4722	2.00000	2.152
11 Bromoethane	108	5.055	5.055	(0.763)	3446	2.00000	2.120
12 Iodomethane	142	5.156	5.156	(0.778)	4941	2.00000	1.904
13 Methylene Chloride	84	5.266	5.266	(0.795)	6472	2.00000	2.619
14 Acrylonitrile	53	5.347	5.347	(0.807)	1125	2.00000	1.965(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.397	5.397	(0.815)	6868	2.00000	2.035 (Q)
	15 Carbon Disulfide	76	5.377	5.377	(0.812)	15337	2.00000	2.253 (Q)
	17 Trans-1,2-Dichloroethene	96	5.558	5.558	(0.839)	3823	2.00000	2.044
	18 Vinyl Acetate	43	5.879	5.879	(0.888)	6836	2.00000	2.087
	19 1,1-Dichloroethane	63	5.929	5.929	(0.895)	7309	2.00000	2.124
	20 2-Butanone	43	6.281	6.281	(0.948)	7636	10.0000	10.467
	21 2,2-Dichloropropane	77	6.452	6.452	(0.974)	4155	2.00000	1.974
	22 Cis-1,2-Dichloroethene	96	6.492	6.492	(0.980)	3254	2.00000	1.974
*	23 Pentafluorobenzene	168	6.623	6.623	(1.000)	115854	50.0000	
	24 Chloroform	83	6.643	6.643	(1.003)	6004	2.00000	2.148 (Q)
	26 Bromochloromethane	128	6.804	6.804	(1.027)	1497	2.00000	1.913 (Q)
$	25 Dibromofluoromethane	111	6.834	6.834	(1.032)	72845	50.0000	52.755 (Q)
	27 1,1,1-Trichloroethane	97	7.025	7.025	(1.061)	4331	2.00000	1.992
	29 1,1-Dichloropropene	75	7.176	7.176	(0.941)	4580	2.00000	2.033
	30 Carbon Tetrachloride	117	7.286	7.286	(0.955)	4142	2.00000	2.114
$	31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.103)	81644	50.0000	54.036
	32 1,2-Dichloroethane	62	7.387	7.387	(0.968)	4173	2.00000	2.110
	33 Benzene	78	7.437	7.437	(0.975)	11737	2.00000	2.154
*	34 1,4-Difluorobenzene	114	7.628	7.628	(1.000)	165926	50.0000	
	35 Trichloroethene	95	8.010	8.010	(1.050)	3316	2.00000	2.077
	36 1,2-Dichloropropane	63	8.161	8.161	(1.070)	3461	2.00000	2.015
	37 Bromodichloromethane	83	8.402	8.402	(1.101)	3933	2.00000	2.142
	39 Dibromomethane	93	8.472	8.472	(1.111)	1720	2.00000	2.017
	40 2-Chloroethyl Vinyl Ether	63	8.613	8.613	(1.129)	941	2.00000	1.564 (Q)
	41 4-Methyl-2-Pentanone	58	8.653	8.653	(1.134)	4544	10.0000	10.360 (Q)
	42 Cis 1,3-dichloropropene	75	8.904	8.904	(1.167)	3760	2.00000	1.875
$	43 d8-Toluene	98	9.186	9.186	(1.204)	190730	50.0000	52.314
	44 Toluene	92	9.266	9.266	(1.215)	7331	2.00000	2.268
	45 Trans 1,3-Dichloropropene	75	9.397	9.397	(1.232)	3132	2.00000	1.858
	46 2-Hexanone	43	9.527	9.527	(0.884)	12031	10.0000	10.227 (M)
	47 1,1,2-Trichloroethane	97	9.578	9.578	(1.256)	1959	2.00000	1.946
	48 1,3-Dichloropropane	76	9.839	9.839	(0.912)	4110	2.00000	2.029
	49 Tetrachloroethene	166	9.960	9.960	(0.924)	3034	2.00000	1.898
	50 Chlorodibromomethane	129	10.161	10.161	(0.942)	2530	2.00000	1.857
	51 1,2-Dibromoethane	107	10.382	10.382	(1.361)	2176	2.00000	2.018 (T)
*	52 d5-Chlorobenzene	117	10.784	10.784	(1.000)	143906	50.0000	
	53 Chlorobenzene	112	10.824	10.824	(1.004)	7227	2.00000	2.141
	54 Ethyl Benzene	91	10.854	10.854	(1.007)	12527	2.00000	2.195
	55 1,1,1,2-Tetrachloroethane	131	10.854	10.854	(1.007)	2668	2.00000	2.065
	56 m,p-xylene	106	10.934	10.934	(1.014)	8069	4.00000	3.868 (Q)
	57 o-Xylene	106	11.427	11.427	(1.060)	3867	2.00000	1.783
	58 Styrene	104	11.457	11.457	(1.062)	6001	2.00000	1.790
	59 Isopropyl Benzene	105	11.809	11.809	(0.877)	10149	2.00000	2.058
	60 Bromoform	173	11.869	11.869	(0.881)	1646	2.00000	2.076
	61 1,1,2,2-Tetrachloroethane	83	11.990	11.990	(0.890)	3293	2.00000	2.312
$	62 4-Bromofluorobenzene	95	12.100	12.100	(1.122)	80106	50.0000	47.564
	63 1,2,3-Trichloropropane	110	12.150	12.150	(0.902)	662	2.00000	2.346 (QM)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.201	12.201	(0.906)	943	2.00000	2.154 (QM)
	66 N-Propyl Benzene	91	12.261	12.261	(0.910)	12782	2.00000	2.008
	67 Bromobenzene	156	12.351	12.351	(0.917)	2746	2.00000	1.998
	68 1,3,5-Trimethyl Benzene	105	12.432	12.432	(0.923)	7814	2.00000	1.952
	69 2-Chloro Toluene	91	12.492	12.492	(0.928)	8221	2.00000	1.966
	70 4-Chloro Toluene	91	12.532	12.532	(0.931)	8529	2.00000	2.127
	71 T-Butyl Benzene	119	12.844	12.844	(0.954)	6991	2.00000	2.042
	72 1,2,4-Trimethylbenzene	105	12.894	12.894	(0.957)	7457	2.00000	1.892
	73 S-Butyl Benzene	105	13.085	13.085	(0.972)	10809	2.00000	1.919
	74 4-Isopropyl Toluene	119	13.236	13.236	(0.983)	7447	2.00000	1.926
	75 1,3-Dichlorobenzene	146	13.387	13.387	(0.994)	4492	2.00000	1.913
*	76 d4-1,4-Dichlorobenzene	152	13.467	13.467	(1.000)	73251	50.0000	
	77 1,4-Dichlorobenzene	146	13.497	13.497	(1.002)	4608	2.00000	1.961
	78 N-Butyl Benzene	91	13.718	13.718	(1.019)	8103	2.00000	1.941
$	79 d4-1,2-Dichlorobenzene	152	13.909	13.909	(1.033)	67411	50.0000	50.594
	80 1,2-Dichlorobenzene	146	13.939	13.939	(1.035)	4695	2.00000	2.104
	81 1,2-Dibromo 3-Chloropropane	75	14.844	14.844	(1.102)	613	2.00000	2.487
	82 1,2,4-Trichlorobenzene	180	15.889	15.889	(1.180)	2979	2.00000	2.193
	83 Hexachloro 1,3-Butadiene	225	16.040	16.040	(1.191)	2016	2.00000	2.204
	84 Naphthalene	128	16.221	16.221	(1.204)	5145	2.00000	2.088
	85 1,2,3-Trichlorobenzene	180	16.502	16.502	(1.225)	2989	2.00000	2.302

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 0020723.d
Lab Smp Id: IC0723
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/23JUL10.b/s8260b.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 18:42
Client Smp ID: VSTD002
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
23 Pentafluorobenzen	131115	65558	262230	115854	-11.64
34 1,4-Difluorobenze	191559	95780	383118	165926	-13.38
52 d5-Chlorobenzene	161199	80600	322398	143906	-10.73
76 d4-1,4-Dichlorobe	88279	44140	176558	73251	-17.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.62	6.12	7.12	6.62	0.00
34 1,4-Difluorobenze	7.63	7.13	8.13	7.63	0.00
52 d5-Chlorobenzene	10.78	10.28	11.28	10.78	0.00
76 d4-1,4-Dichlorobe	13.47	12.97	13.97	13.47	0.00

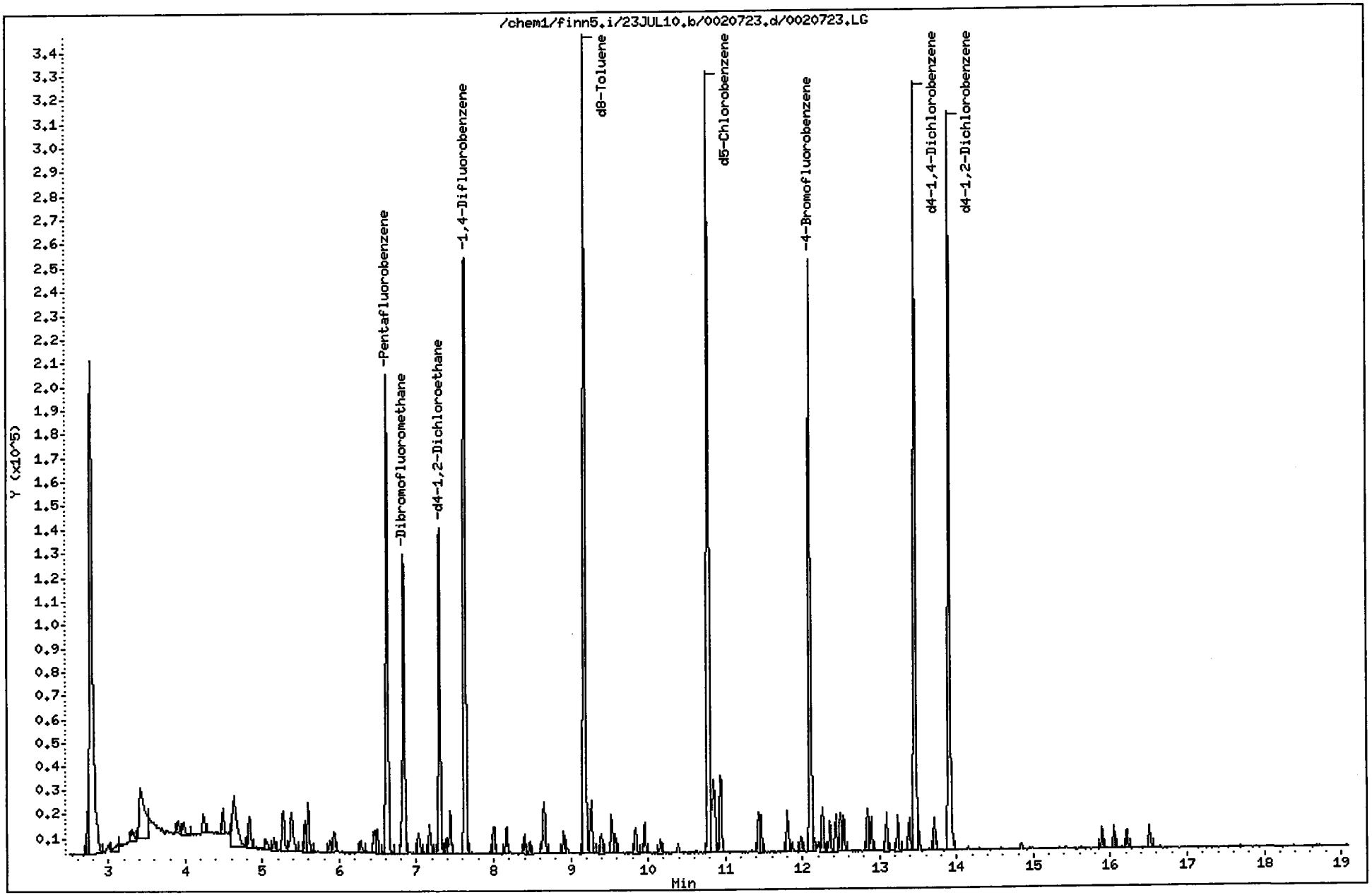
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/finn5.i/23JUL10.b/0020723.d
Date : 23-JUL-2010 20:02
Client ID: VSTD002
Sample Info: IC0723,5,5,0

Instrument: finn5.i

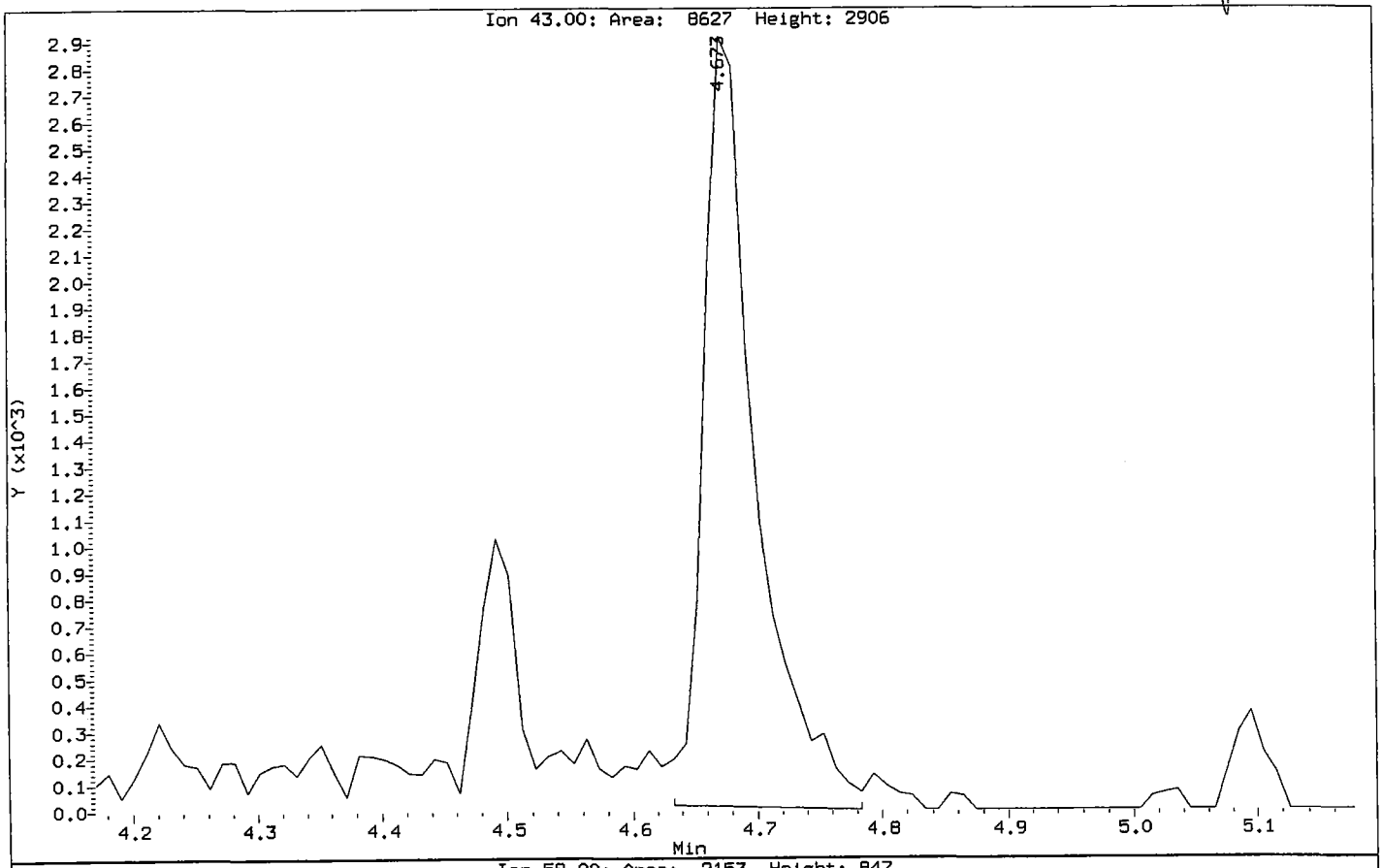
Operator: PB
Column diameter: 0.18

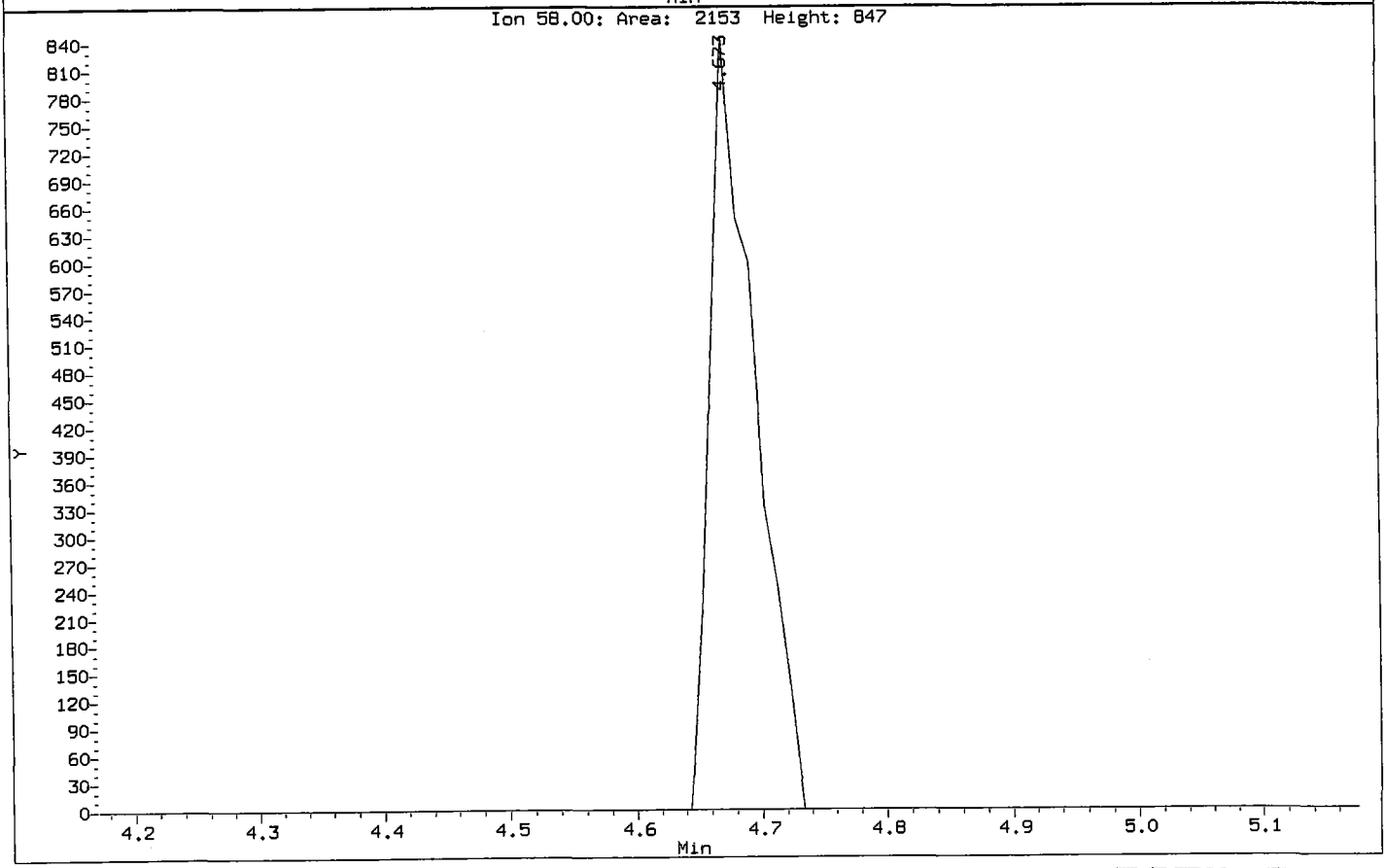
Column phase: Rtx502.2



Data File: /chem1/finn5.i/23JUL10.b/0020723.d/0020723.LG
Injection Date: 23-JUL-2010 20:02
Instrument: finn5.i
Client Sample ID: VSTD002

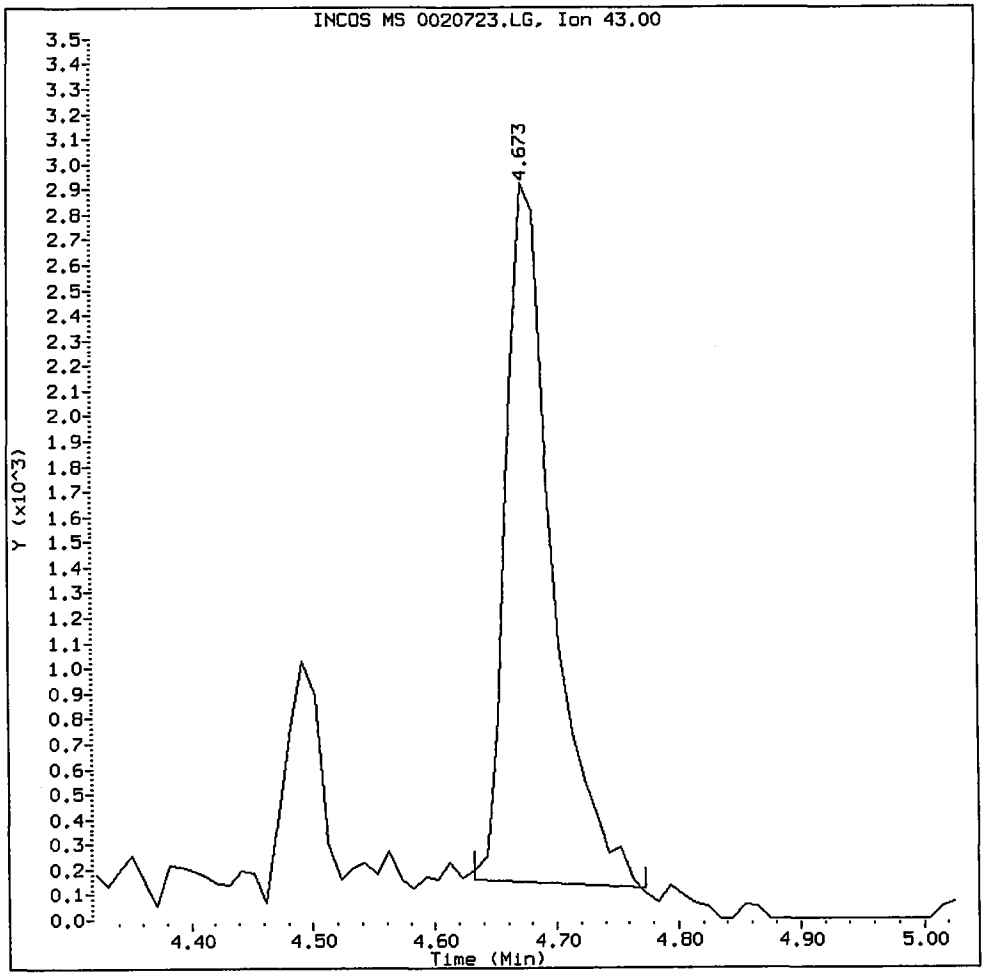
Compound: Acetone
CAS Number:





IC0723, /chem1/finn5.i/23JUL10.b/0020723.d

Acetone Amount: 11.43 Area: 7408



MANUAL INTEGRATION for Acetone

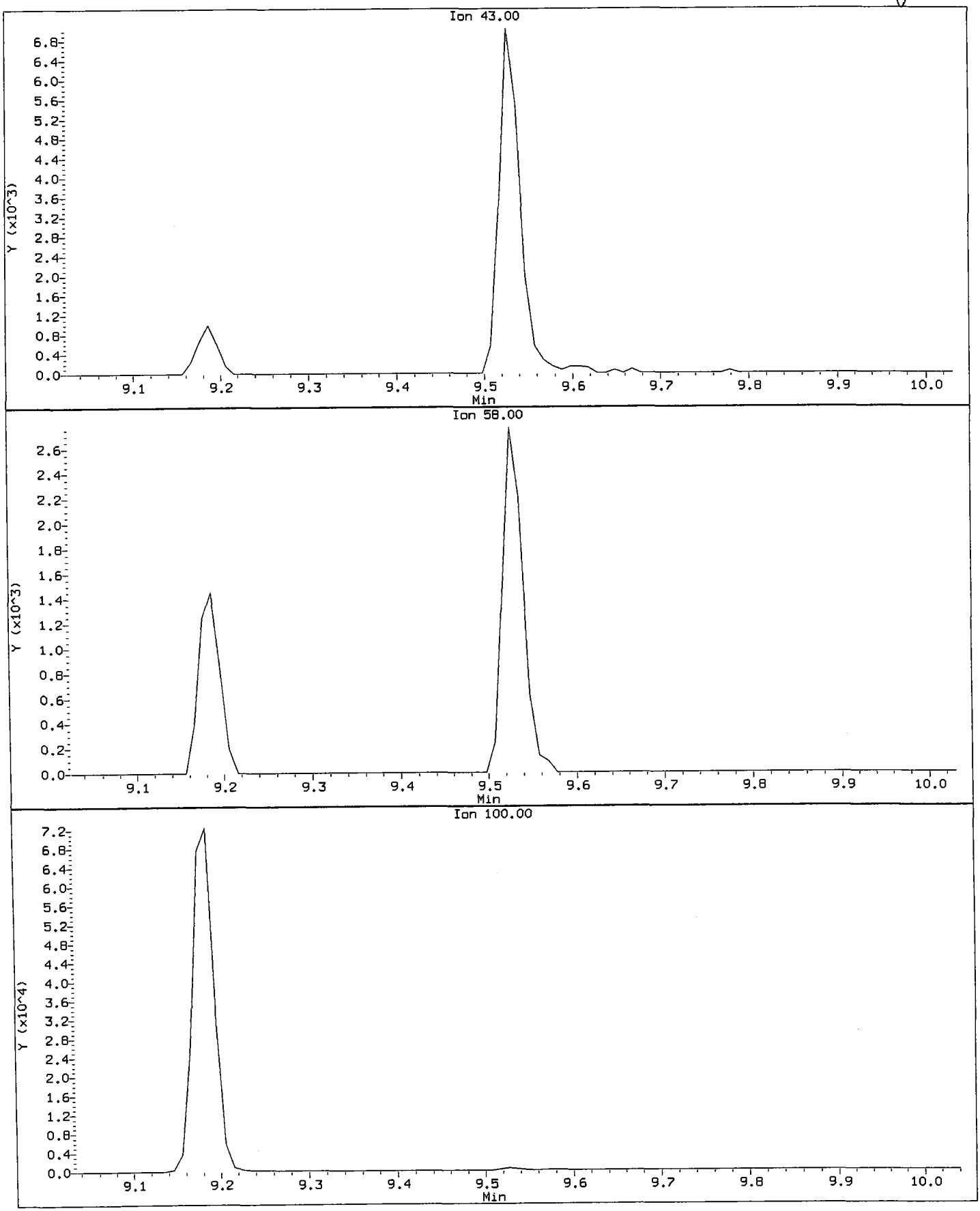
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 7/29/10

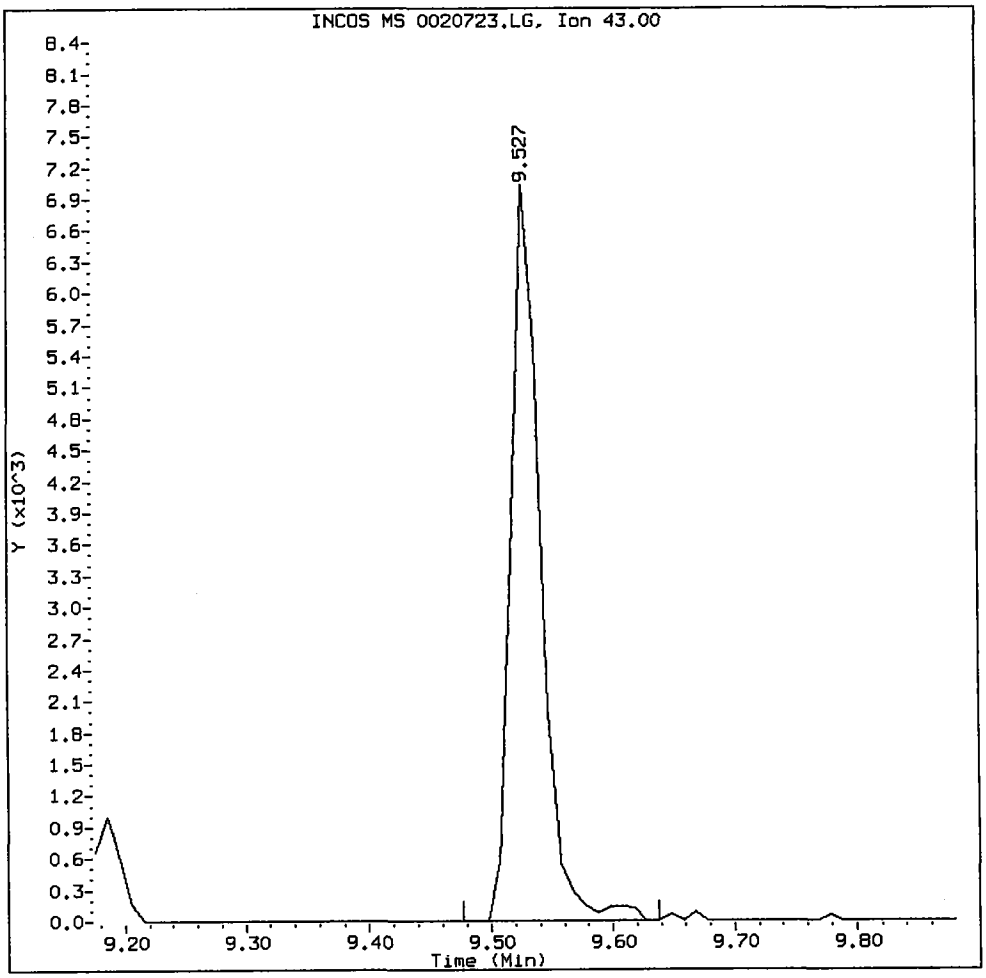
Data File: /chem1/finn5.i/23JUL10.b/0020723.d/0020723.LG
Injection Date: 23-JUL-2010 20:02
Instrument: finn5.i
Client Sample ID: VSTD002

Compound: 2-Hexanone
CAS Number:



IC0723, /chem1/finn5.i/23JUL10.b/0020723.d

2-Hexanone Amount: 10.23 Area: 12031



MANUAL INTEGRATION for 2-Hexanone

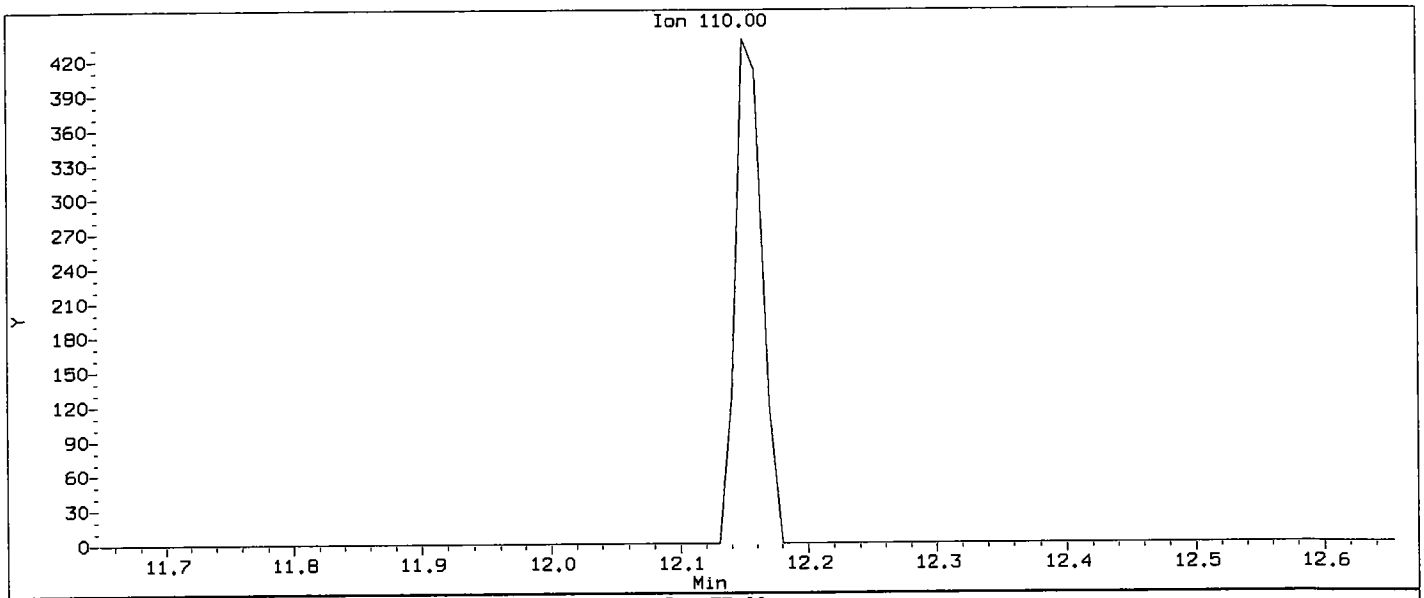
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

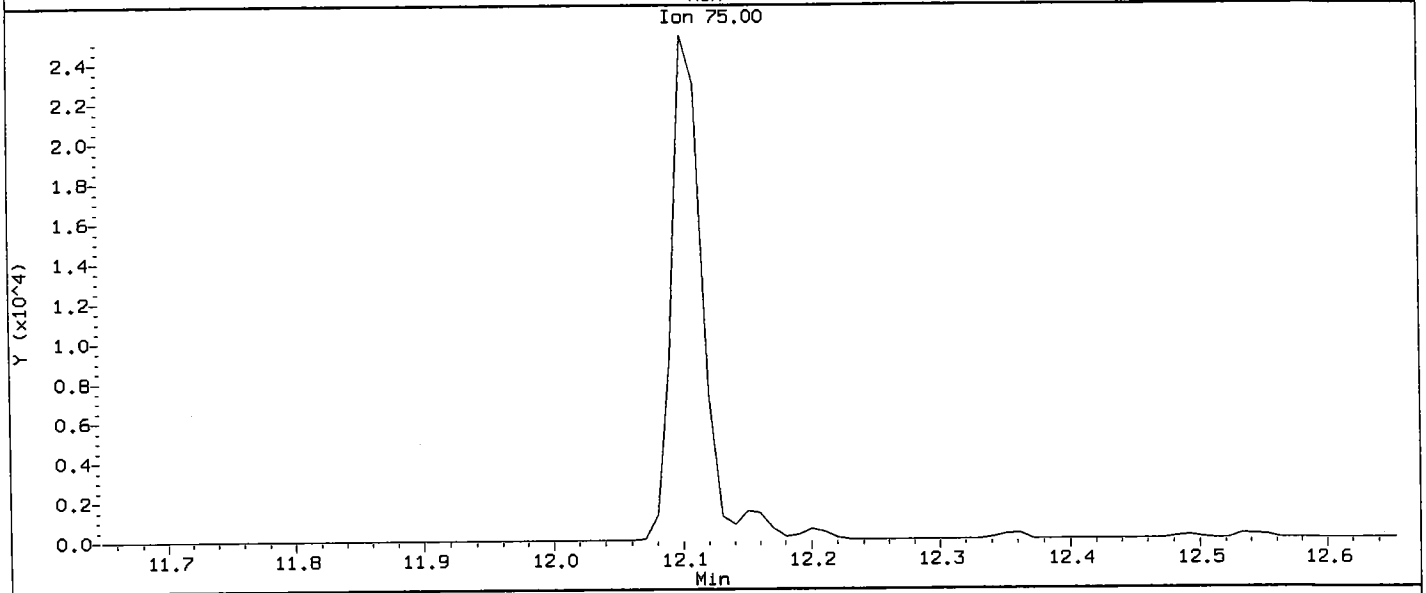
5. Other _____

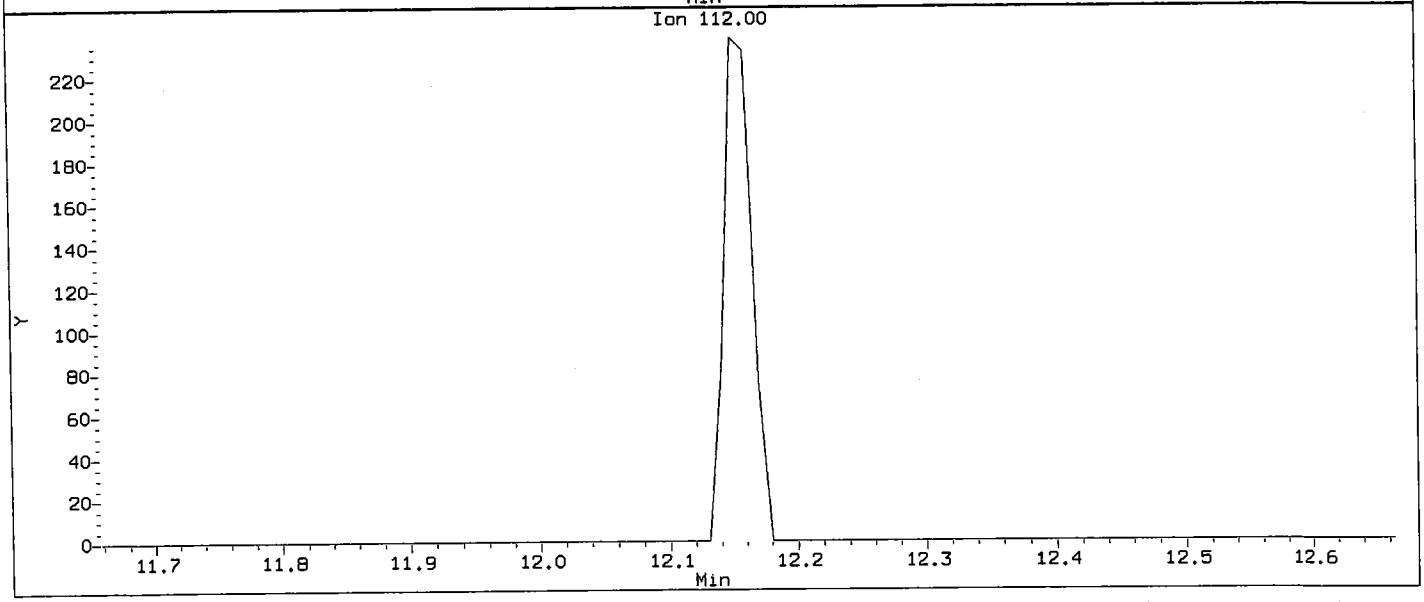
Analyst: _____ Date: 7/28/10

Data File: /chem1/finn5.i/23JUL10.b/0020723.d/0020723.LG
Injection Date: 23-JUL-2010 20:02
Instrument: finn5.i
Client Sample ID: VSTD002

Compound: 1,2,3-Trichloropropane
CAS Number:

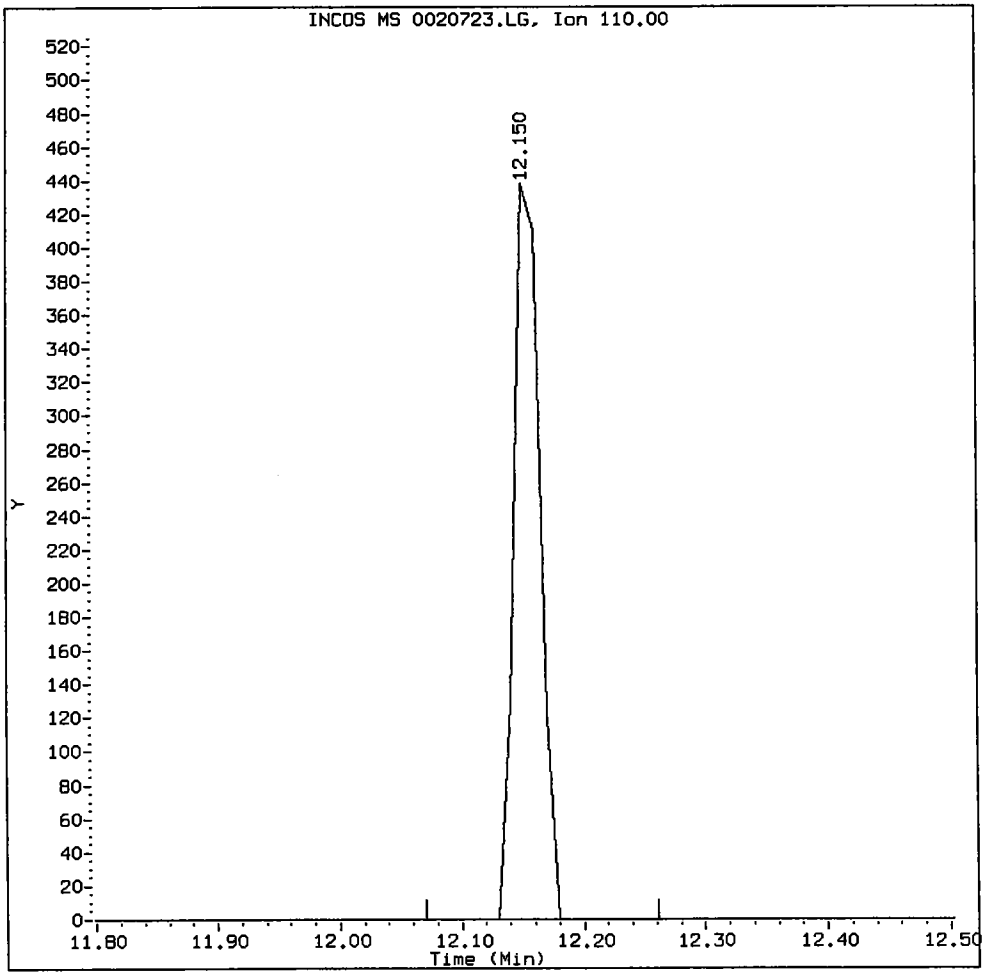






IC0723, /chem1/finn5.i/23JUL10.b/0020723.d

1,2,3-Trichloropropane Amount: 2.35 Area: 662



MANUAL INTEGRATION for 1,2,3-Trichloropropane

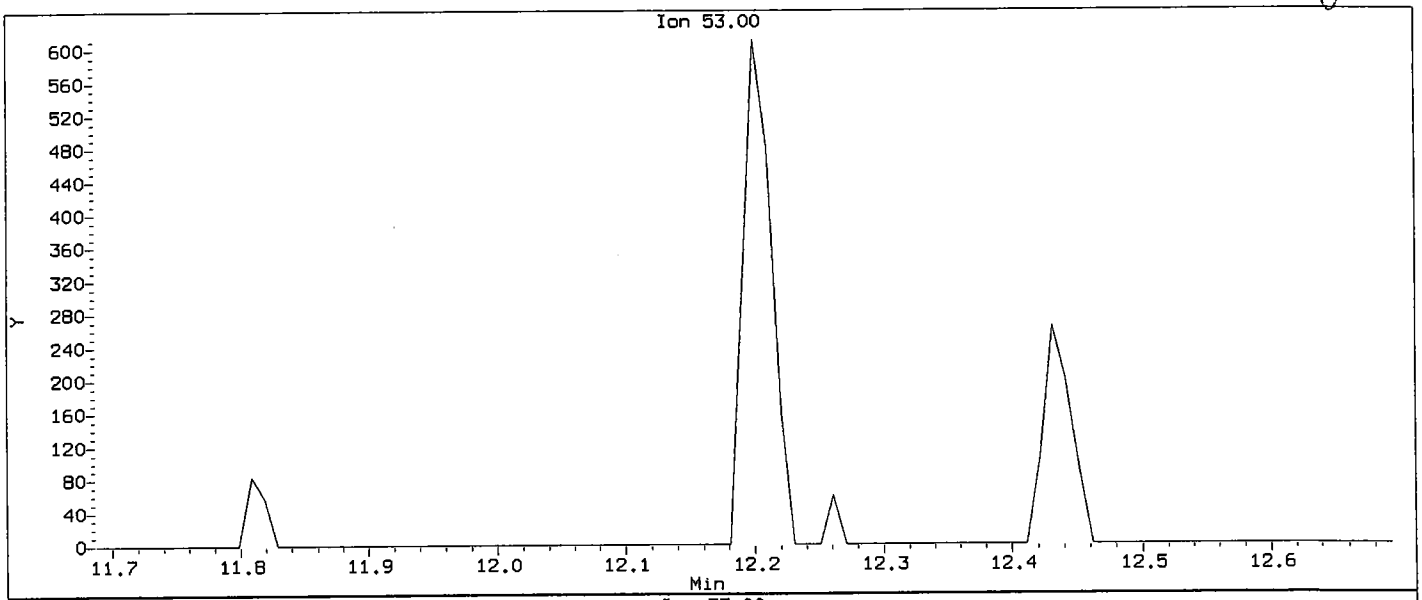
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

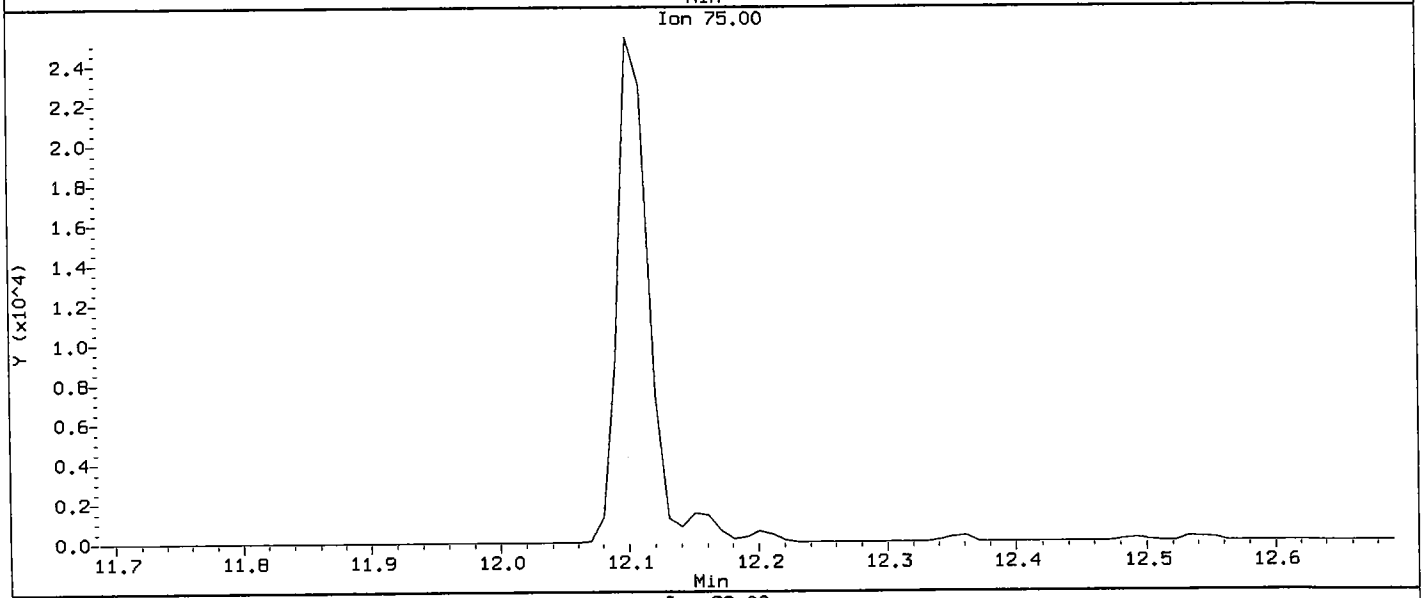
5. Other _____

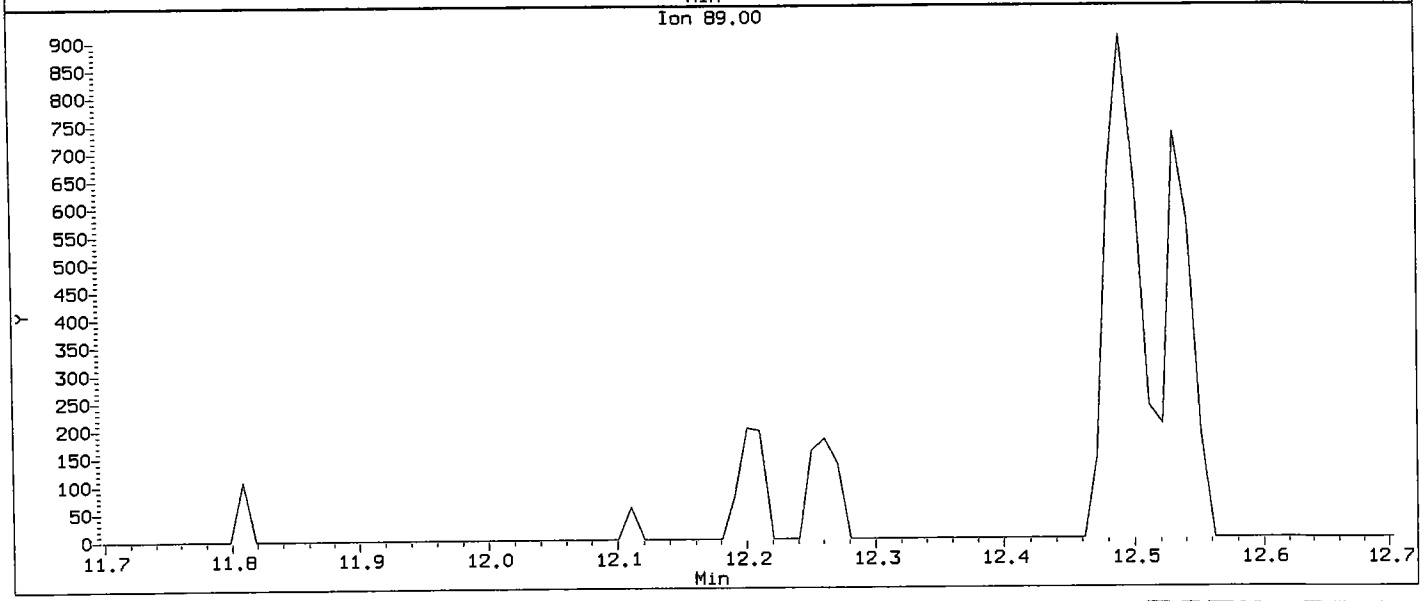
Analyst: _____ Date: 7/14/10

Data File: /chem1/finn5.i/23JUL10.b/0020723.d/0020723.LG
Injection Date: 23-JUL-2010 20:02
Instrument: finn5.i
Client Sample ID: VSTD002

Compound: Trans-1,4-Dichloro 2-Butene
CAS Number:

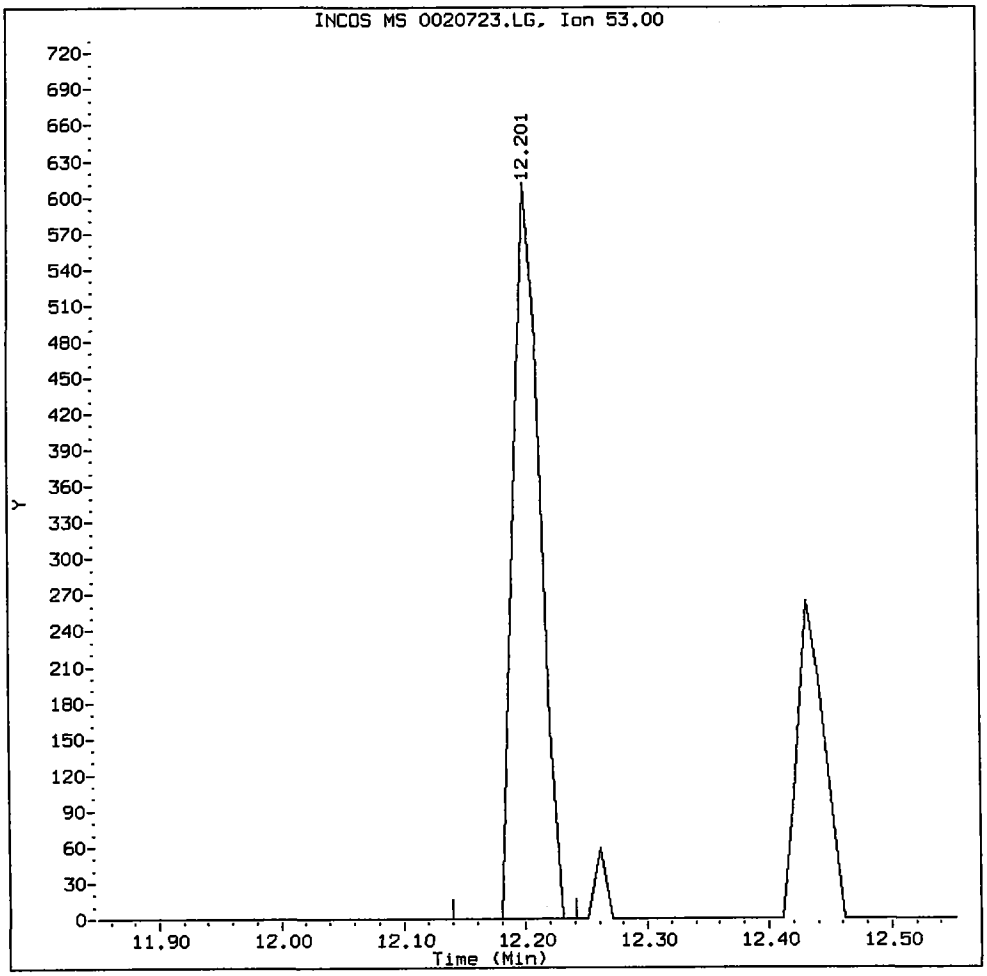






IC0723, /chem1/finn5.i/23JUL10.b/0020723.d

Trans-1,4-Dichloro 2-Butene Amount: 2.15 Area: 943



MANUAL INTEGRATION for Trans-1,4-Dichloro 2-Butene

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 7/12/10

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/23JUL10.b/0050723.d
Lab Smp Id: IC0723 Client Smp ID: VSTD005
Inj Date : 23-JUL-2010 19:35
Operator : PB Inst ID: finn5.i
Smp Info : IC0723,5,5,0
Misc Info : 10-
Comment :
Method : /chem1/finn5.i/23JUL10.b/s8260b.m
Meth Date : 29-Jul-2010 14:28 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 19:35 Cal File: 0050723.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

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	3.005	3.005	(0.454)	7723	5.00000	5.089
2 Chloromethane	50	3.296	3.296	(0.498)	22440	5.00000	5.496
3 Vinyl Chloride	62	3.417	3.417	(0.516)	17710	5.00000	5.485(Q)
4 Bromomethane	94	3.899	3.899	(0.589)	9090	5.00000	5.184
5 Chloroethane	64	3.970	3.970	(0.599)	11561	5.00000	5.482
6 Trichlorofluoromethane	101	4.231	4.231	(0.639)	17611	5.00000	5.643
7 Acrolein	56	4.623	4.623	(0.698)	10358	25.0000	26.607
8 112Trichloro122Trifluoroethane	101	4.633	4.633	(0.700)	14091	5.00000	5.767
9 Acetone	43	4.673	4.673	(0.706)	18358	25.0000	28.028
10 1,1-Dichloroethene	96	4.834	4.834	(0.730)	12189	5.00000	5.498
11 Bromoethane	108	5.045	5.045	(0.762)	8530	5.00000	5.195
12 Iodomethane	142	5.146	5.146	(0.777)	13373	5.00000	5.102
13 Methylene Chloride	84	5.266	5.266	(0.795)	13925	5.00000	5.578
14 Acrylonitrile	53	5.347	5.347	(0.807)	3314	5.00000	5.730(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.387	5.387	(0.813)	18920	5.00000	5.549(Q)
	15 Carbon Disulfide	76	5.367	5.367	(0.810)	39738	5.00000	5.779
	17 Trans-1,2-Dichloroethene	96	5.548	5.548	(0.838)	9438	5.00000	4.995
	18 Vinyl Acetate	43	5.869	5.869	(0.886)	17895	5.00000	5.408
	19 1,1-Dichloroethane	63	5.929	5.929	(0.895)	18913	5.00000	5.441
	20 2-Butanone	43	6.271	6.271	(0.947)	20107	25.0000	27.282
	21 2,2-Dichloropropane	77	6.452	6.452	(0.974)	10921	5.00000	5.134
	22 Cis-1,2-Dichloroethene	96	6.492	6.492	(0.980)	8398	5.00000	5.043(Q)
*	23 Pentafluorobenzene	168	6.623	6.623	(1.000)	117041	50.0000	
	24 Chloroform	83	6.633	6.633	(1.002)	15400	5.00000	5.454(Q)
	26 Bromochloromethane	128	6.804	6.804	(1.027)	4294	5.00000	5.431(Q)
$	25 Dibromofluoromethane	111	6.834	6.834	(1.032)	71812	50.0000	51.480(Q)
	27 1,1,1-Trichloroethane	97	7.025	7.025	(1.061)	11387	5.00000	5.185
	29 1,1-Dichloropropene	75	7.166	7.166	(0.939)	12169	5.00000	5.243
	30 Carbon Tetrachloride	117	7.286	7.286	(0.955)	10319	5.00000	5.112
$	31 d4-1,2-Dichloroethane	65	7.296	7.296	(1.102)	80444	50.0000	52.702
	32 1,2-Dichloroethane	62	7.387	7.387	(0.968)	10820	5.00000	5.310
	33 Benzene	78	7.437	7.437	(0.975)	30771	5.00000	5.482
*	34 1,4-Difluorobenzene	114	7.628	7.628	(1.000)	170929	50.0000	
	35 Trichloroethene	95	8.000	8.000	(1.049)	8715	5.00000	5.300
	36 1,2-Dichloropropane	63	8.161	8.161	(1.070)	9370	5.00000	5.296
	37 Bromodichloromethane	83	8.392	8.392	(1.100)	9943	5.00000	5.256
	39 Dibromomethane	93	8.462	8.462	(1.109)	4443	5.00000	5.059
	40 2-Chloroethyl Vinyl Ether	63	8.613	8.613	(1.129)	2962	5.00000	4.780(Q)
	41 4-Methyl-2-Pentanone	58	8.643	8.643	(1.133)	11309	25.0000	25.028(Q)
	42 Cis 1,3-dichloropropene	75	8.904	8.904	(1.167)	10254	5.00000	4.965
$	43 d8-Toluene	98	9.176	9.176	(1.203)	191709	50.0000	51.044
	44 Toluene	92	9.256	9.256	(1.213)	17473	5.00000	5.247
	45 Trans 1,3-Dichloropropene	75	9.387	9.387	(1.231)	8395	5.00000	4.836
	46 2-Hexanone	43	9.527	9.527	(0.884)	29526	25.0000	24.696(M)
	47 1,1,2-Trichloroethane	97	9.578	9.578	(1.256)	5519	5.00000	5.323
	48 1,3-Dichloropropane	76	9.829	9.829	(0.911)	10453	5.00000	5.078
	49 Tetrachloroethene	166	9.949	9.949	(0.923)	8262	5.00000	5.084
	50 Chlorodibromomethane	129	10.161	10.161	(0.942)	6807	5.00000	4.915
	51 1,2-Dibromoethane	107	10.382	10.382	(1.361)	5784	5.00000	5.208
*	52 d5-Chlorobenzene	117	10.784	10.784	(1.000)	146260	50.0000	
	53 Chlorobenzene	112	10.824	10.824	(1.004)	17766	5.00000	5.179
	54 Ethyl Benzene	91	10.854	10.854	(1.007)	30541	5.00000	5.264
	55 1,1,1,2-Tetrachloroethane	131	10.844	10.844	(1.006)	6409	5.00000	4.881
	56 m,p-xylene	106	10.934	10.934	(1.014)	22123	10.0000	10.434(Q)
	57 o-Xylene	106	11.427	11.427	(1.060)	10246	5.00000	4.649
	58 Styrene	104	11.457	11.457	(1.062)	16833	5.00000	4.940
	59 Isopropyl Benzene	105	11.799	11.799	(0.877)	27803	5.00000	5.452
	60 Bromoform	173	11.859	11.859	(0.881)	4268	5.00000	5.205
	61 1,1,2,2-Tetrachloroethane	83	11.980	11.980	(0.890)	7849	5.00000	5.327
$	62 4-Bromofluorobenzene	95	12.100	12.100	(1.122)	81582	50.0000	47.660
	63 1,2,3-Trichloropropane	110	12.150	12.150	(0.903)	1675	5.00000	5.738

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	12.201	12.201	(0.907)	2468	5.00000	5.450(QM)
66	N-Propyl Benzene	91	12.261	12.261	(0.911)	34800	5.00000	5.286
67	Bromobenzene	156	12.341	12.341	(0.917)	7362	5.00000	5.178
68	1,3,5-Trimethyl Benzene	105	12.432	12.432	(0.924)	22104	5.00000	5.339
69	2-Chloro Toluene	91	12.492	12.492	(0.928)	23284	5.00000	5.382
70	4-Chloro Toluene	91	12.532	12.532	(0.931)	21819	5.00000	5.262
71	T-Butyl Benzene	119	12.844	12.844	(0.954)	19493	5.00000	5.504
72	1,2,4-Trimethylbenzene	105	12.884	12.884	(0.957)	21602	5.00000	5.301
73	S-Butyl Benzene	105	13.085	13.085	(0.972)	30183	5.00000	5.180
74	4-Isopropyl Toluene	119	13.236	13.236	(0.984)	21391	5.00000	5.350
75	1,3-Dichlorobenzene	146	13.377	13.377	(0.994)	12682	5.00000	5.221
* 76	d4-1,4-Dichlorobenzene	152	13.457	13.457	(1.000)	75761	50.0000	
77	1,4-Dichlorobenzene	146	13.497	13.497	(1.003)	12899	5.00000	5.307
78	N-Butyl Benzene	91	13.708	13.708	(1.019)	23070	5.00000	5.344
$ 79	d4-1,2-Dichlorobenzene	152	13.909	13.909	(1.034)	69719	50.0000	50.593
80	1,2-Dichlorobenzene	146	13.939	13.939	(1.036)	12406	5.00000	5.374
81	1,2-Dibromo 3-Chloropropane	75	14.844	14.844	(1.103)	1436	5.00000	5.632
82	1,2,4-Trichlorobenzene	180	15.889	15.889	(1.181)	7355	5.00000	5.236
83	Hexachloro 1,3-Butadiene	225	16.040	16.040	(1.192)	5223	5.00000	5.520
84	Naphthalene	128	16.211	16.211	(1.205)	13199	5.00000	5.180
85	1,2,3-Trichlorobenzene	180	16.502	16.502	(1.226)	7275	5.00000	5.417

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 0050723.d
Lab Smp Id: IC0723
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/23JUL10.b/s8260b.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 18:42
Client Smp ID: VSTD005
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
23 Pentafluorobenzen	131115	65558	262230	117041	-10.73
34 1,4-Difluorobenze	191559	95780	383118	170929	-10.77
52 d5-Chlorobenzene	161199	80600	322398	146260	-9.27
76 d4-1,4-Dichlorobe	88279	44140	176558	75761	-14.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.62	6.12	7.12	6.62	0.00
34 1,4-Difluorobenze	7.63	7.13	8.13	7.63	0.00
52 d5-Chlorobenzene	10.78	10.28	11.28	10.78	0.00
76 d4-1,4-Dichlorobe	13.47	12.97	13.97	13.46	-0.07

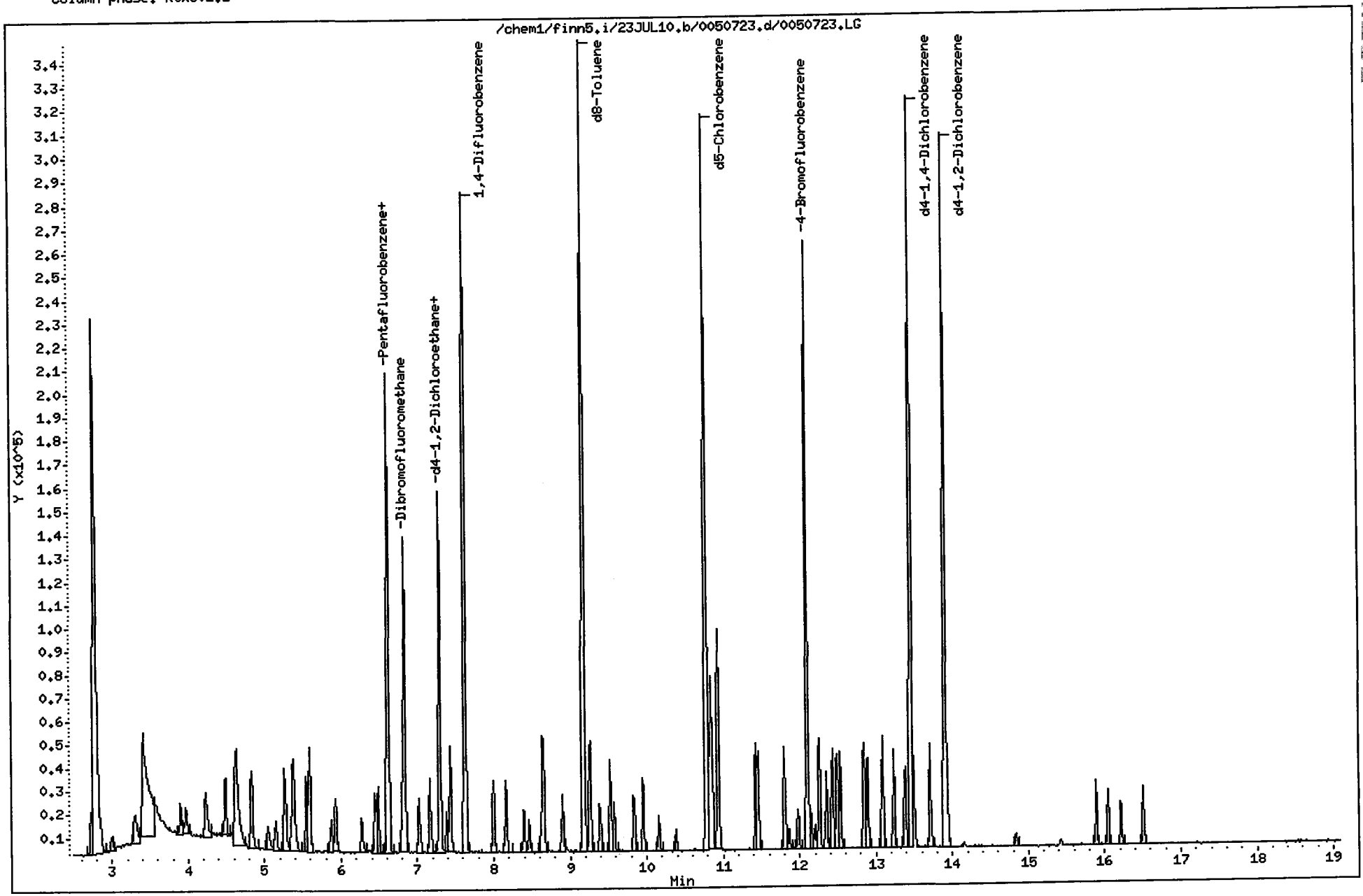
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/finn5.i/23JUL10.b/0050723.d
Date : 23-JUL-2010 19:35
Client ID: VSTD005
Sample Info: IC0723,5,5,0

Instrument: finn5.i

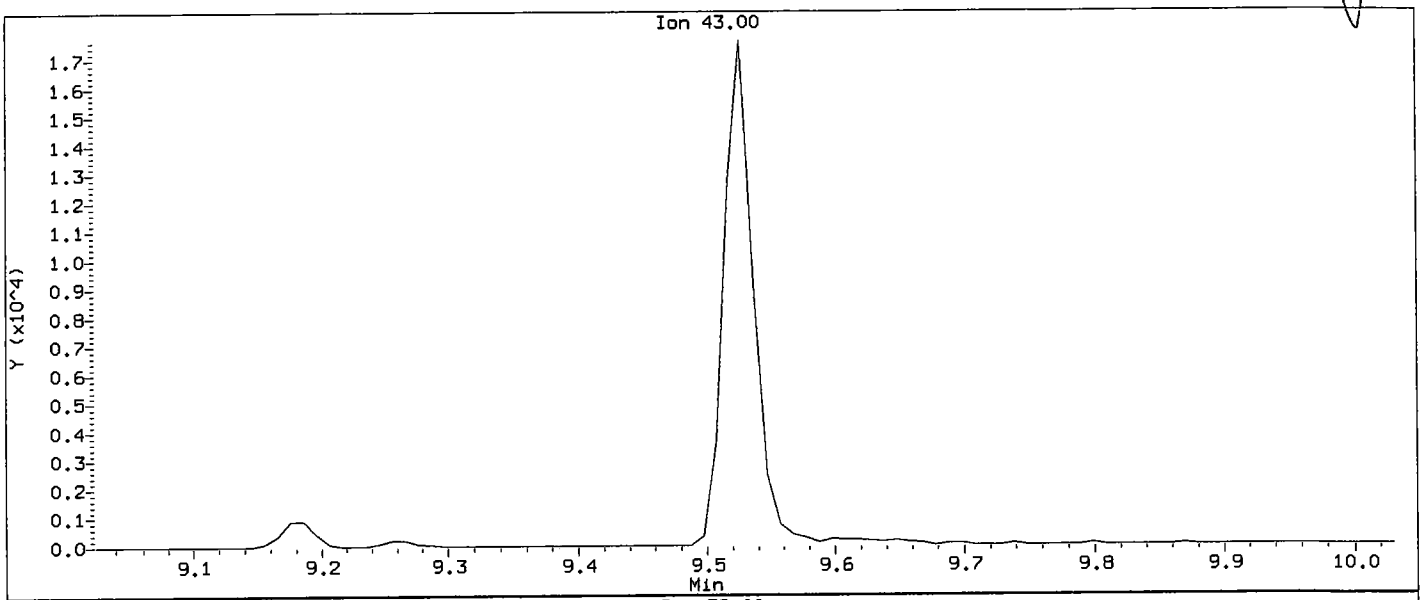
Operator: PB
Column diameter: 0.18

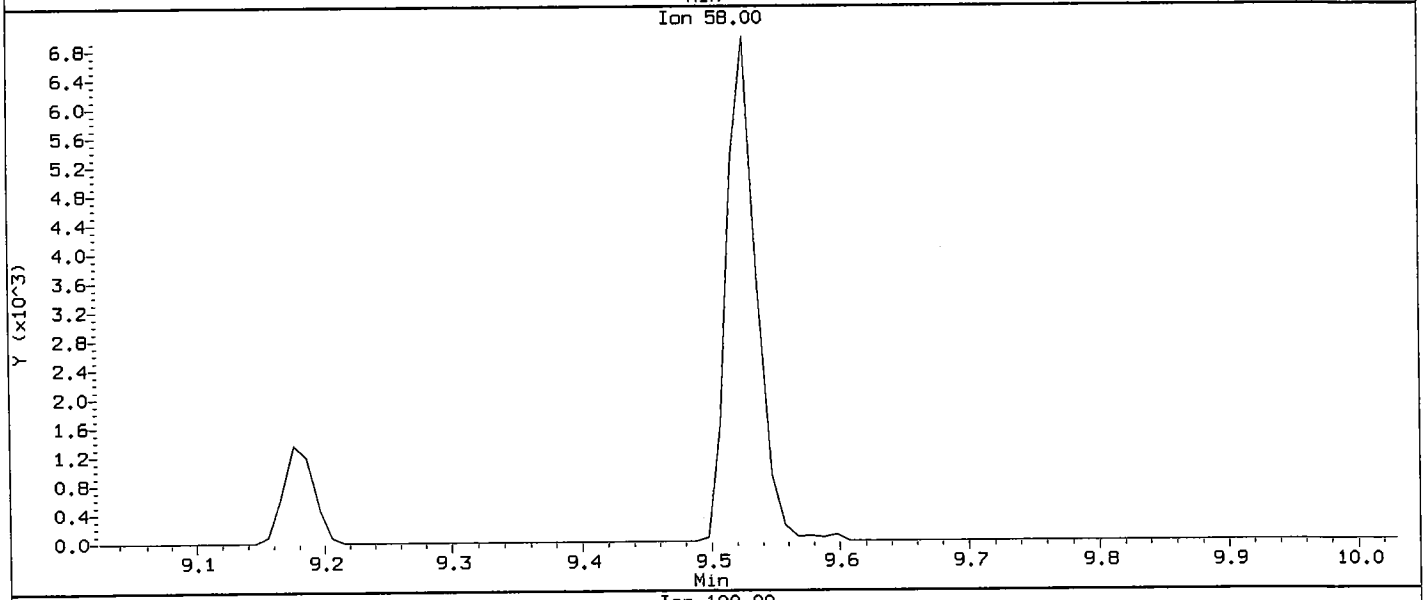
Column phase: Rtx502.2

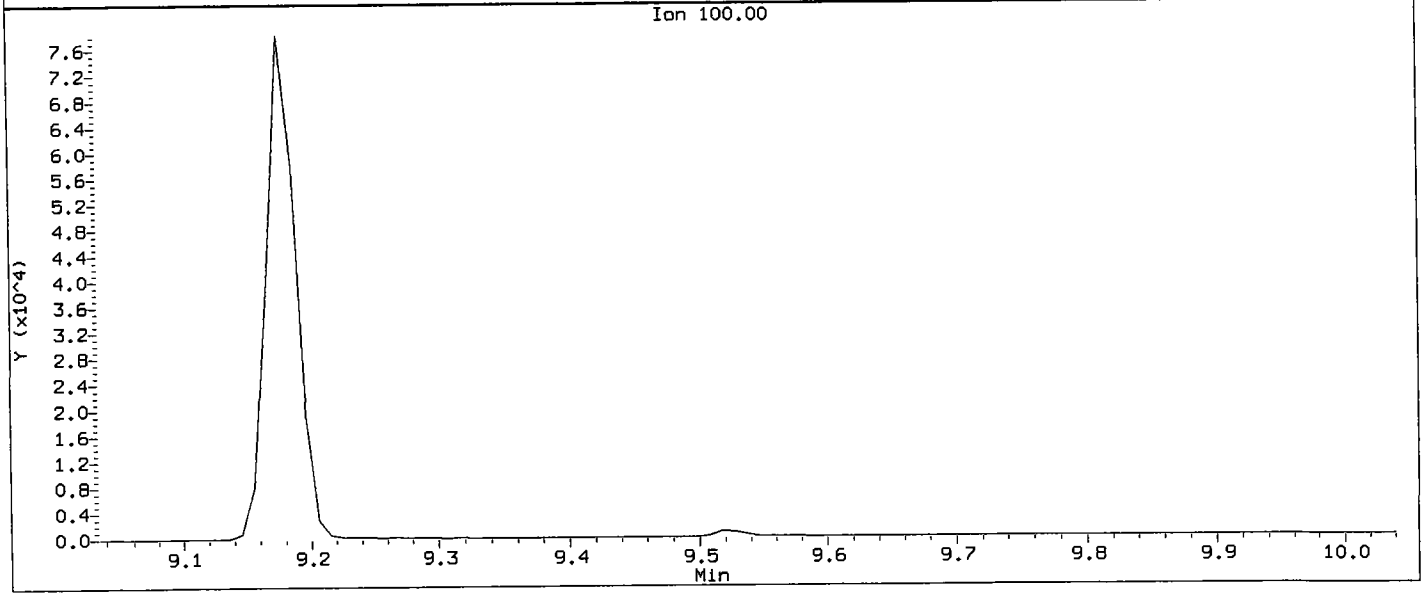


Data File: /chem1/finn5.i/23JUL10.b/0050723.d/0050723.LG
Injection Date: 23-JUL-2010 19:35
Instrument: finn5.i
Client Sample ID: VSTD005

Compound: 2-Hexanone
CAS Number:

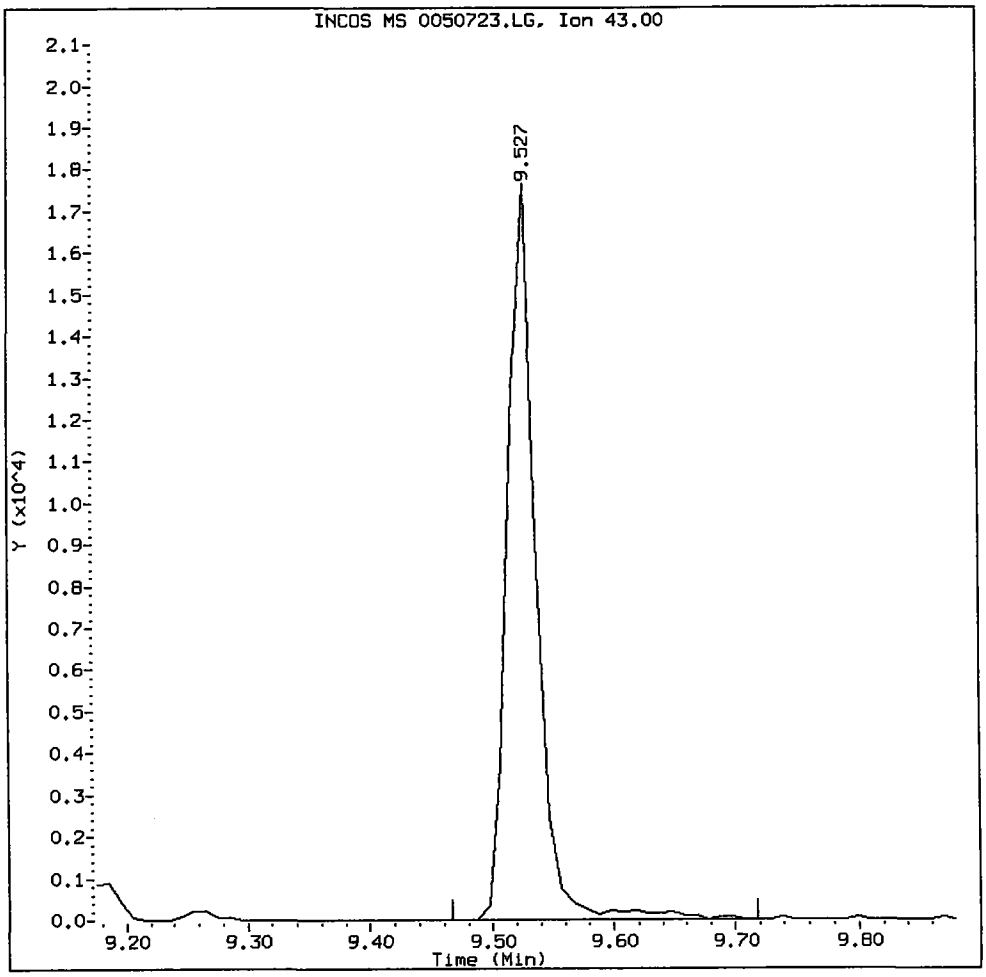






IC0723, /chem1/finn5.i/23JUL10.b/0050723.d

2-Hexanone Amount: 24.70 Area: 29526



MANUAL INTEGRATION for 2-Hexanone

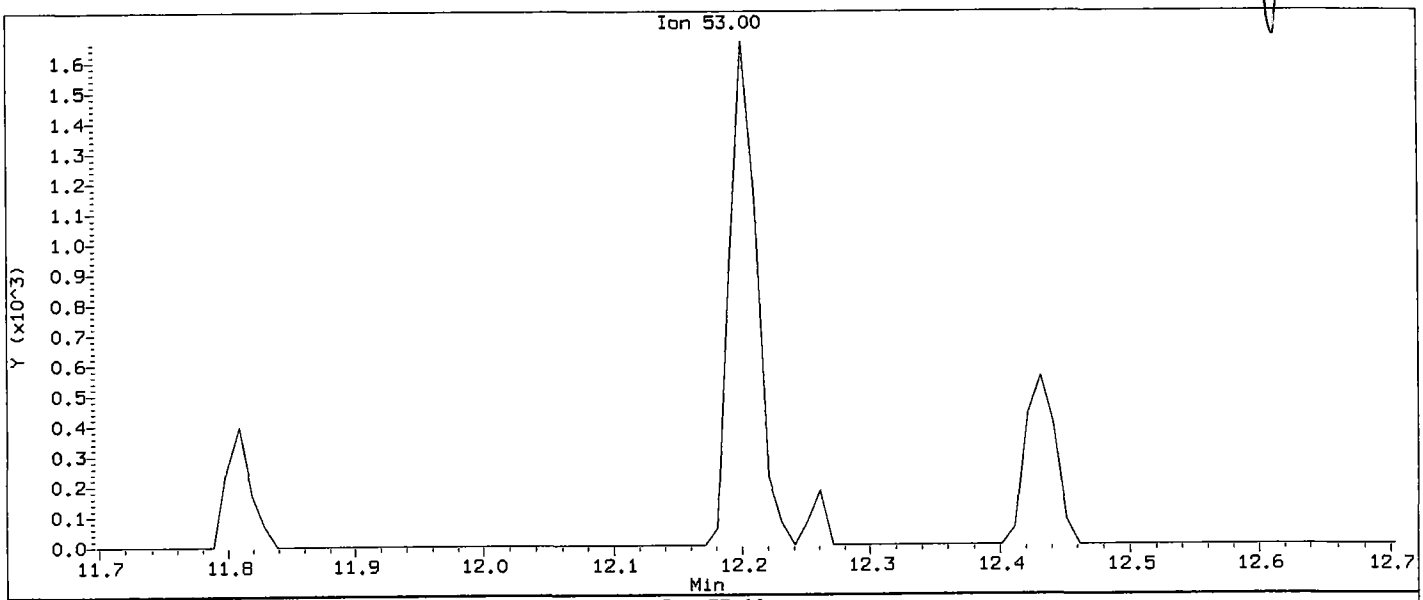
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

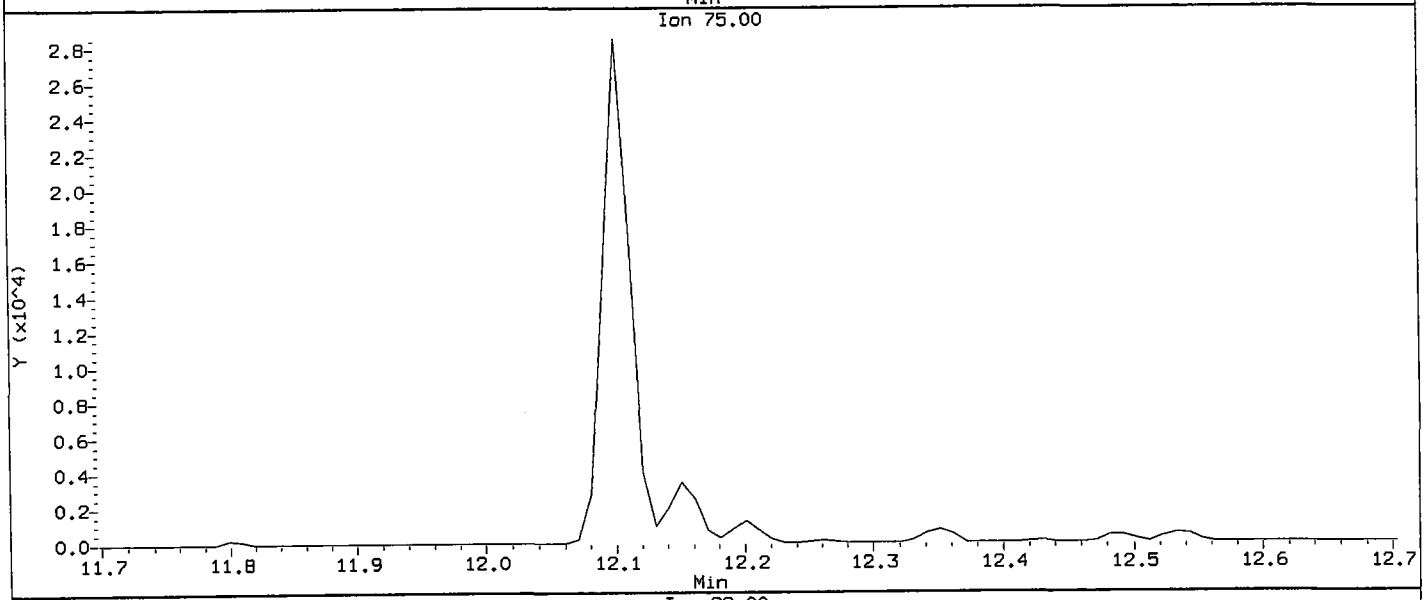
5. Other _____

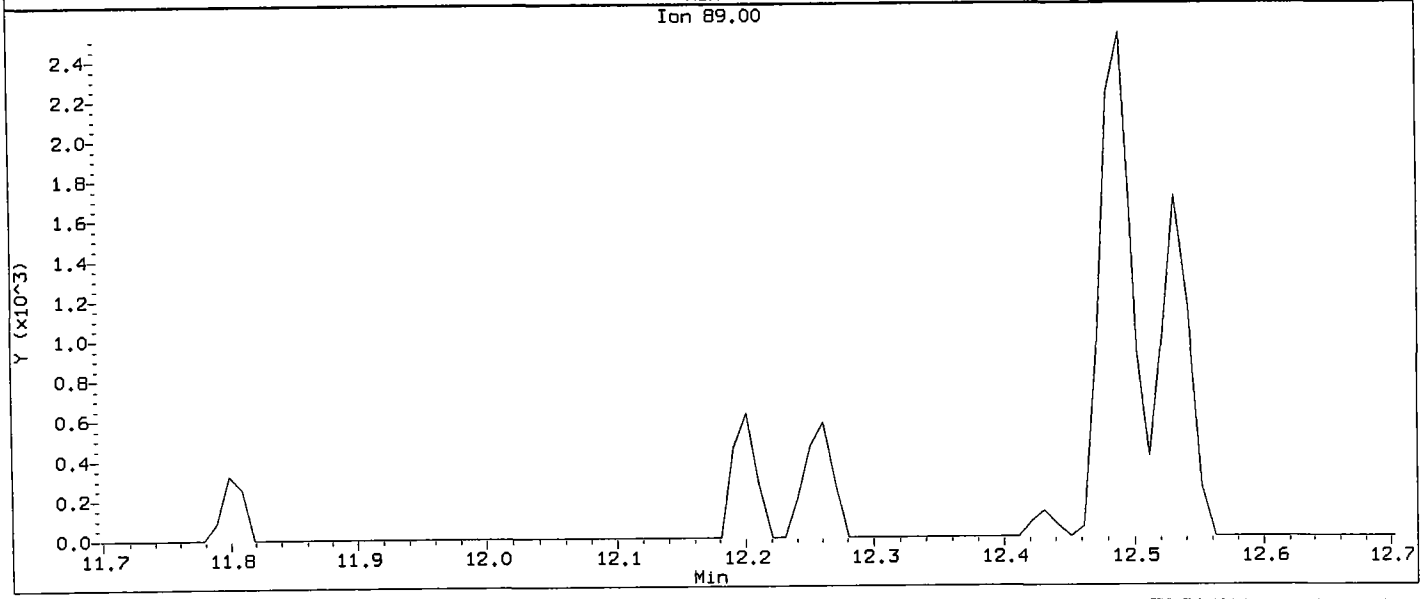
Analyst: _____ Date: 7/12/10

Data File: /chem1/finn5.i/23JUL10.b/0050723.d/0050723.LG
Injection Date: 23-JUL-2010 19:35
Instrument: finn5.i
Client Sample ID: VSTD005

Compound: Trans-1,4-Dichloro 2-Butene
CAS Number:

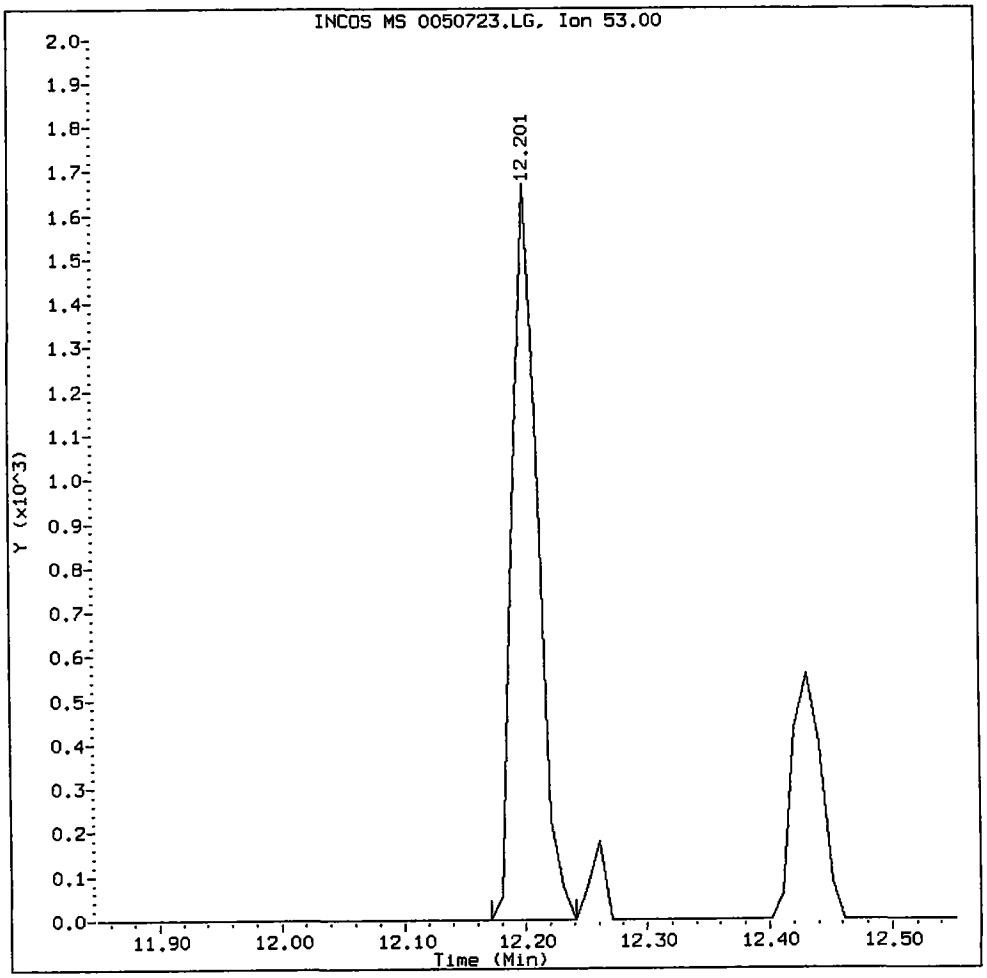






IC0723, /chem1/finn5.i/23JUL10.b/0050723.d

Trans-1,4-Dichloro 2-Butene Amount: 5.45 Area: 2468



MANUAL INTEGRATION for Trans-1,4-Dichloro 2-Butene

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: _____

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/23JUL10.b/0100723.d
Lab Smp Id: IC0723 Client Smp ID: VSTD010
Inj Date : 23-JUL-2010 19:09
Operator : PB Inst ID: finn5.i
Smp Info : IC0723,5,5,0
Misc Info : 10-
Comment :
Method : /chem1/finn5.i/23JUL10.b/s8260b.m
Meth Date : 29-Jul-2010 14:29 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 19:09 Cal File: 0100723.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

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	3.005	3.005	(0.454)	15067	10.0000	9.770
2 Chloromethane	50	3.306	3.306	(0.499)	47789	10.0000	11.518
3 Vinyl Chloride	62	3.407	3.407	(0.514)	37997	10.0000	11.580(Q)
4 Bromomethane	94	3.899	3.899	(0.589)	14872	10.0000	8.346
5 Chloroethane	64	3.970	3.970	(0.599)	20719	10.0000	9.669
6 Trichlorofluoromethane	101	4.231	4.231	(0.639)	33546	10.0000	10.578
7 Acrolein	56	4.623	4.623	(0.698)	19450	50.0000	49.169
8 112Trichloro122Trifluoroethane	101	4.633	4.633	(0.700)	26723	10.0000	10.764
9 Acetone	43	4.673	4.673	(0.706)	35817	50.0000	53.814
10 1,1-Dichloroethene	96	4.834	4.834	(0.730)	24541	10.0000	10.893
11 Bromoethane	108	5.055	5.055	(0.763)	17903	10.0000	10.731
12 Iodomethane	142	5.146	5.146	(0.777)	27119	10.0000	10.181
13 Methylene Chloride	84	5.266	5.266	(0.795)	26821	10.0000	10.573
14 Acrylonitrile	53	5.357	5.357	(0.809)	6777	10.0000	11.533(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.397	5.397	(0.815)	38803	10.0000	11.200(Q)
	15 Carbon Disulfide	76	5.367	5.367	(0.810)	78061	10.0000	11.172
	17 Trans-1,2-Dichloroethene	96	5.548	5.548	(0.838)	21284	10.0000	11.086
	18 Vinyl Acetate	43	5.869	5.869	(0.886)	37100	10.0000	11.033
	19 1,1-Dichloroethane	63	5.929	5.929	(0.895)	39819	10.0000	11.274
	20 2-Butanone	43	6.281	6.281	(0.948)	42020	50.0000	56.109
	21 2,2-Dichloropropane	77	6.452	6.452	(0.974)	22630	10.0000	10.471
	22 Cis-1,2-Dichloroethene	96	6.492	6.492	(0.980)	18047	10.0000	10.665
*	23 Pentafluorobenzene	168	6.623	6.623	(1.000)	118930	50.0000	
	24 Chloroform	83	6.633	6.633	(1.002)	31386	10.0000	10.940
	26 Bromochloromethane	128	6.804	6.804	(1.027)	8495	10.0000	10.574
$	25 Dibromofluoromethane	111	6.834	6.834	(1.032)	69715	50.0000	49.182(Q)
	27 1,1,1-Trichloroethane	97	7.025	7.025	(1.061)	23434	10.0000	10.502
	29 1,1-Dichloropropene	75	7.166	7.166	(0.939)	25745	10.0000	11.267
	30 Carbon Tetrachloride	117	7.286	7.286	(0.955)	21209	10.0000	10.673
$	31 d4-1,2-Dichloroethane	65	7.296	7.296	(1.102)	76858	50.0000	49.553
	32 1,2-Dichloroethane	62	7.387	7.387	(0.968)	22825	10.0000	11.378
	33 Benzene	78	7.437	7.437	(0.975)	66143	10.0000	11.970
*	34 1,4-Difluorobenzene	114	7.628	7.628	(1.000)	168271	50.0000	
	35 Trichloroethene	95	8.000	8.000	(1.049)	18174	10.0000	11.226
	36 1,2-Dichloropropane	63	8.161	8.161	(1.070)	19596	10.0000	11.250
	37 Bromodichloromethane	83	8.402	8.402	(1.101)	20319	10.0000	10.911
	39 Dibromomethane	93	8.472	8.472	(1.111)	9683	10.0000	11.199
	40 2-Chloroethyl Vinyl Ether	63	8.613	8.613	(1.129)	6388	10.0000	10.472(Q)
	41 4-Methyl-2-Pentanone	58	8.653	8.653	(1.134)	24009	50.0000	53.974
	42 Cis 1,3-dichloropropene	75	8.904	8.904	(1.167)	22221	10.0000	10.929
$	43 d8-Toluene	98	9.176	9.176	(1.203)	186138	50.0000	50.343
	44 Toluene	92	9.266	9.266	(1.215)	35399	10.0000	10.798
	45 Trans 1,3-Dichloropropene	75	9.397	9.397	(1.232)	18193	10.0000	10.645
	46 2-Hexanone	43	9.527	9.527	(0.884)	61774	50.0000	53.599
	47 1,1,2-Trichloroethane	97	9.578	9.578	(1.256)	11407	10.0000	11.176
	48 1,3-Dichloropropane	76	9.829	9.829	(0.911)	21313	10.0000	10.740
	49 Tetrachloroethene	166	9.949	9.949	(0.923)	15981	10.0000	10.202
	50 Chlorodibromomethane	129	10.161	10.161	(0.942)	14166	10.0000	10.612
	51 1,2-Dibromoethane	107	10.382	10.382	(1.361)	11754	10.0000	10.752
*	52 d5-Chlorobenzene	117	10.784	10.784	(1.000)	140990	50.0000	
	53 Chlorobenzene	112	10.824	10.824	(1.004)	36224	10.0000	10.954
	54 Ethyl Benzene	91	10.854	10.854	(1.007)	63957	10.0000	11.437
	55 1,1,1,2-Tetrachloroethane	131	10.844	10.844	(1.006)	12790	10.0000	10.106
	56 m,p-xylene	106	10.934	10.934	(1.014)	46275	20.0000	22.640(Q)
	57 o-Xylene	106	11.427	11.427	(1.060)	21803	10.0000	10.264
	58 Styrene	104	11.457	11.457	(1.062)	37240	10.0000	11.338
	59 Isopropyl Benzene	105	11.809	11.809	(0.878)	58882	10.0000	12.124
	60 Bromoform	173	11.869	11.869	(0.882)	8420	10.0000	10.783
	61 1,1,2,2-Tetrachloroethane	83	11.980	11.980	(0.890)	16250	10.0000	11.581
$	62 4-Bromofluorobenzene	95	12.100	12.100	(1.122)	77668	50.0000	47.070
	63 1,2,3-Trichloropropane	110	12.150	12.150	(0.903)	3269	10.0000	11.760

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
65 Trans-1,4-Dichloro 2-Butene	53	12.201	12.201	(0.907)	5035	10.0000	11.675
66 N-Propyl Benzene	91	12.261	12.261	(0.911)	74061	10.0000	11.812
67 Bromobenzene	156	12.351	12.351	(0.918)	15265	10.0000	11.274
68 1,3,5-Trimethyl Benzene	105	12.432	12.432	(0.924)	46547	10.0000	11.806
69 2-Chloro Toluene	91	12.492	12.492	(0.928)	48661	10.0000	11.812
70 4-Chloro Toluene	91	12.532	12.532	(0.931)	47584	10.0000	12.050
71 T-Butyl Benzene	119	12.844	12.844	(0.954)	41330	10.0000	12.254
72 1,2,4-Trimethylbenzene	105	12.894	12.894	(0.958)	47036	10.0000	12.119
73 S-Butyl Benzene	105	13.085	13.085	(0.972)	64271	10.0000	11.583
74 4-Isopropyl Toluene	119	13.236	13.236	(0.984)	45887	10.0000	12.052
75 1,3-Dichlorobenzene	146	13.387	13.387	(0.995)	27596	10.0000	11.930
* 76 d4-1,4-Dichlorobenzene	152	13.457	13.457	(1.000)	72150	50.0000	
77 1,4-Dichlorobenzene	146	13.497	13.497	(1.003)	26532	10.0000	11.462
78 N-Butyl Benzene	91	13.708	13.708	(1.019)	49500	10.0000	12.040
$ 79 d4-1,2-Dichlorobenzene	152	13.909	13.909	(1.034)	66793	50.0000	50.895
80 1,2-Dichlorobenzene	146	13.939	13.939	(1.036)	25247	10.0000	11.484
81 1,2-Dibromo 3-Chloropropane	75	14.844	14.844	(1.103)	2894	10.0000	11.920
82 1,2,4-Trichlorobenzene	180	15.889	15.889	(1.181)	16254	10.0000	12.150
83 Hexachloro 1,3-Butadiene	225	16.040	16.040	(1.192)	10838	10.0000	12.028
84 Naphthalene	128	16.221	16.221	(1.205)	30211	10.0000	12.450
85 1,2,3-Trichlorobenzene	180	16.502	16.502	(1.226)	16393	10.0000	12.817

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem1/finn5.i/23JUL10.b/0100723.d
Report Date: 29-Jul-2010 14:29

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 0100723.d
Lab Smp Id: IC0723
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/23JUL10.b/s8260b.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 18:42
Client Smp ID: VSTD010
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
23 Pentafluorobenzen	131115	65558	262230	118930	-9.29
34 1,4-Difluorobenze	191559	95780	383118	168271	-12.16
52 d5-Chlorobenzene	161199	80600	322398	140990	-12.54
76 d4-1,4-Dichlorobe	88279	44140	176558	72150	-18.27

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.62	6.12	7.12	6.62	0.00
34 1,4-Difluorobenze	7.63	7.13	8.13	7.63	0.00
52 d5-Chlorobenzene	10.78	10.28	11.28	10.78	0.00
76 d4-1,4-Dichlorobe	13.47	12.97	13.97	13.46	-0.07

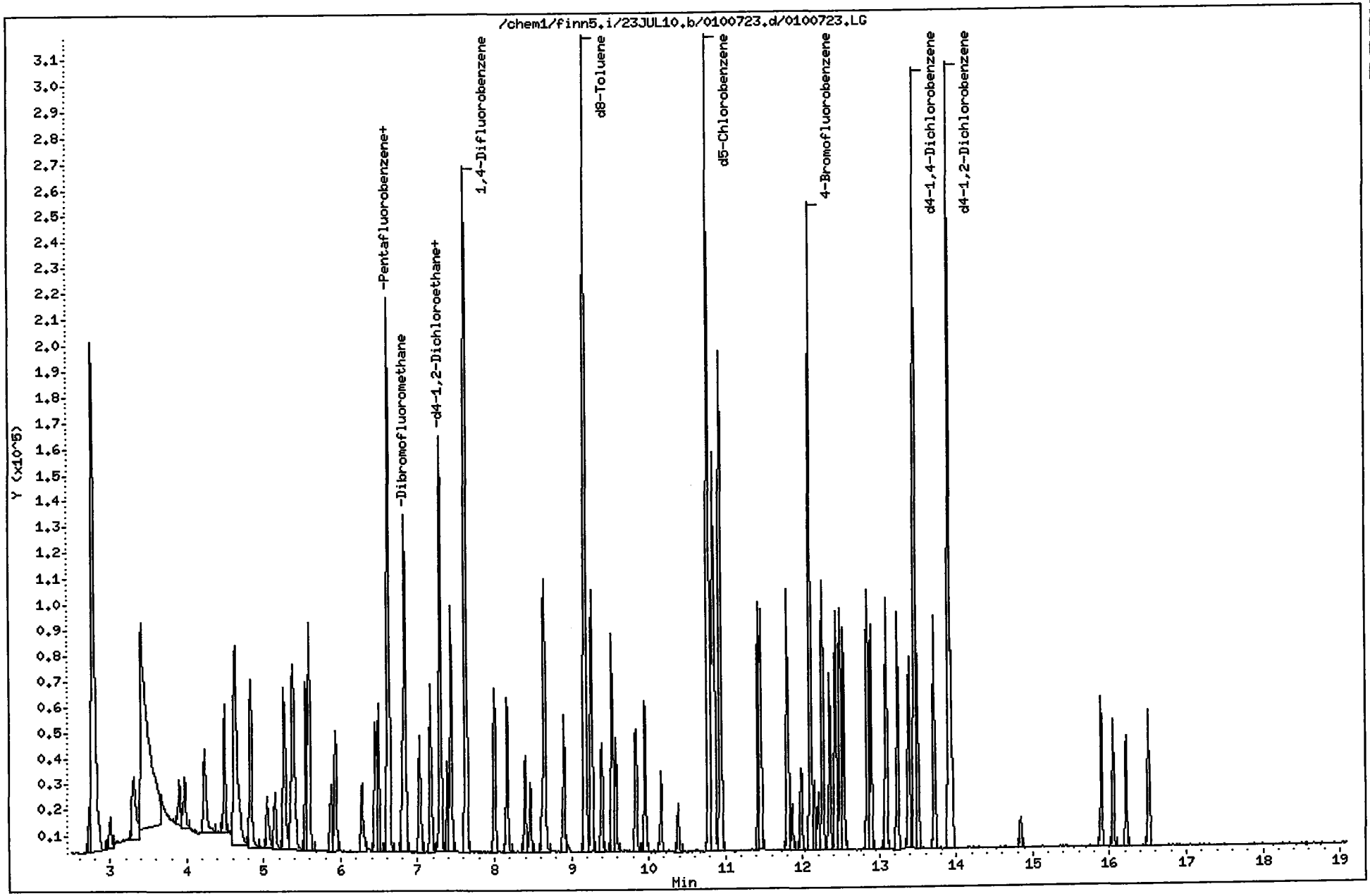
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/finn5.i/23JUL10.b/0100723.d
Date : 23-JUL-2010 19:09
Client ID: VSTD010
Sample Info: IC0723,5,5,0

Instrument: finn5.i

Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/23JUL10.b/0500723.d
Lab Smp Id: IC0723 Client Smp ID: VSTD050
Inj Date : 23-JUL-2010 18:42
Operator : PB Inst ID: finn5.i
Smp Info : IC0723,5,5,0
Misc Info : 10-
Comment :
Method : /chem1/finn5.i/23JUL10.b/s8260b.m
Meth Date : 29-Jul-2010 14:29 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 18:42 Cal File: 0500723.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

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	3.005	3.005	(0.454)	88494	50.0000	52.050
2 Chloromethane	50	3.306	3.306	(0.499)	216660	50.0000	47.364
3 Vinyl Chloride	62	3.417	3.417	(0.516)	178705	50.0000	49.403
4 Bromomethane	94	3.909	3.909	(0.590)	106254	50.0000	54.088
5 Chloroethane	64	3.980	3.980	(0.601)	114914	50.0000	48.645
6 Trichlorofluoromethane	101	4.241	4.241	(0.640)	187024	50.0000	53.495
7 Acrolein	56	4.623	4.623	(0.698)	103002	250.000	236.19
8 112Trichloro122Trifluoroethane	101	4.633	4.633	(0.700)	132979	50.0000	48.585
9 Acetone	43	4.673	4.673	(0.706)	175977	250.000	239.83
10 1,1-Dichloroethene	96	4.834	4.834	(0.730)	128370	50.0000	51.685
11 Bromoethane	108	5.055	5.055	(0.763)	95360	50.0000	51.846
12 Iodomethane	142	5.156	5.156	(0.778)	164295	50.0000	55.947
13 Methylene Chloride	84	5.266	5.266	(0.795)	122611	50.0000	43.842
14 Acrylonitrile	53	5.357	5.357	(0.809)	34222	50.0000	52.824

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.397	5.397	(0.815)	199902	50.0000	52.338
	15 Carbon Disulfide	76	5.377	5.377	(0.812)	416399	50.0000	54.056
	17 Trans-1,2-Dichloroethene	96	5.558	5.558	(0.839)	104060	50.0000	49.162
	18 Vinyl Acetate	43	5.879	5.879	(0.888)	204622	50.0000	55.196
	19 1,1-Dichloroethane	63	5.940	5.940	(0.897)	201091	50.0000	51.642
	20 2-Butanone	43	6.281	6.281	(0.948)	214832	250.000	260.20
	21 2,2-Dichloropropane	77	6.452	6.452	(0.974)	119721	50.0000	50.246
	22 Cis-1,2-Dichloroethene	96	6.492	6.492	(0.980)	90699	50.0000	48.618
*	23 Pentafluorobenzene	168	6.623	6.623	(1.000)	131115	50.0000	
	24 Chloroform	83	6.643	6.643	(1.003)	157700	50.0000	49.859
	26 Bromochloromethane	128	6.804	6.804	(1.027)	43978	50.0000	49.652
$	25 Dibromofluoromethane	111	6.844	6.844	(1.033)	78499	50.0000	50.233
	27 1,1,1-Trichloroethane	97	7.025	7.025	(1.061)	122308	50.0000	49.717
	29 1,1-Dichloropropene	75	7.176	7.176	(0.941)	128968	50.0000	49.578
	30 Carbon Tetrachloride	117	7.286	7.286	(0.955)	109284	50.0000	48.311
$	31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.103)	84334	50.0000	49.320
	32 1,2-Dichloroethane	62	7.387	7.387	(0.968)	112274	50.0000	49.165
	33 Benzene	78	7.437	7.437	(0.975)	317315	50.0000	50.445
*	34 1,4-Difluorobenzene	114	7.628	7.628	(1.000)	191559	50.0000	
	35 Trichloroethene	95	8.000	8.000	(1.049)	89737	50.0000	48.692
	36 1,2-Dichloropropane	63	8.171	8.171	(1.071)	96034	50.0000	48.432
	37 Bromodichloromethane	83	8.402	8.402	(1.101)	103931	50.0000	49.024
	39 Dibromomethane	93	8.472	8.472	(1.111)	47687	50.0000	48.448
	40 2-Chloroethyl Vinyl Ether	63	8.613	8.613	(1.129)	35475	50.0000	51.086
	41 4-Methyl-2-Pentanone	58	8.653	8.653	(1.134)	127285	250.000	251.36
	42 Cis 1,3-dichloropropene	75	8.904	8.904	(1.167)	122153	50.0000	52.775
$	43 d8-Toluene	98	9.186	9.186	(1.204)	213313	50.0000	50.679
	44 Toluene	92	9.266	9.266	(1.215)	176514	50.0000	47.296
	45 Trans 1,3-Dichloropropene	75	9.397	9.397	(1.232)	99882	50.0000	51.339
	46 2-Hexanone	43	9.527	9.527	(0.884)	307458	250.000	233.33
	47 1,1,2-Trichloroethane	97	9.578	9.578	(1.256)	56632	50.0000	48.742
	48 1,3-Dichloropropane	76	9.839	9.839	(0.912)	109236	50.0000	48.147
	49 Tetrachloroethene	166	9.960	9.960	(0.924)	78929	50.0000	44.072
	50 Chlorodibromomethane	129	10.161	10.161	(0.942)	72980	50.0000	47.816
	51 1,2-Dibromoethane	107	10.392	10.392	(1.362)	61687	50.0000	49.567
*	52 d5-Chlorobenzene	117	10.784	10.784	(1.000)	161199	50.0000	
	53 Chlorobenzene	112	10.824	10.824	(1.004)	176231	50.0000	46.611
	54 Ethyl Benzene	91	10.854	10.854	(1.007)	325754	50.0000	50.948
	55 1,1,1,2-Tetrachloroethane	131	10.854	10.854	(1.007)	62748	50.0000	43.363
	56 m,p-xylene	106	10.934	10.934	(1.014)	247468	100.000	105.89
	57 o-Xylene	106	11.427	11.427	(1.060)	120870	50.0000	49.766
	58 Styrene	104	11.457	11.457	(1.062)	197957	50.0000	52.713
	59 Isopropyl Benzene	105	11.809	11.809	(0.877)	321007	50.0000	54.019
	60 Bromoform	173	11.869	11.869	(0.881)	45981	50.0000	48.125
	61 1,1,2,2-Tetrachloroethane	83	11.990	11.990	(0.890)	80952	50.0000	47.153
$	62 4-Bromofluorobenzene	95	12.100	12.100	(1.122)	91332	50.0000	48.412
	63 1,2,3-Trichloropropane	110	12.150	12.150	(0.902)	16376	50.0000	48.148

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.211	12.211	(0.907)	26610	50.0000	50.430
	66 N-Propyl Benzene	91	12.261	12.261	(0.910)	378862	50.0000	49.387
	67 Bromobenzene	156	12.351	12.351	(0.917)	80968	50.0000	48.876
	68 1,3,5-Trimethyl Benzene	105	12.432	12.432	(0.923)	264645	50.0000	54.862
	69 2-Chloro Toluene	91	12.492	12.492	(0.928)	248038	50.0000	49.208
	70 4-Chloro Toluene	91	12.532	12.532	(0.931)	261192	50.0000	54.058
	71 T-Butyl Benzene	119	12.844	12.844	(0.954)	232931	50.0000	56.443
	72 1,2,4-Trimethylbenzene	105	12.894	12.894	(0.957)	260230	50.0000	54.800
	73 S-Butyl Benzene	105	13.095	13.095	(0.972)	355887	50.0000	52.419
	74 4-Isopropyl Toluene	119	13.236	13.236	(0.983)	260120	50.0000	55.837
	75 1,3-Dichlorobenzene	146	13.387	13.387	(0.994)	145285	50.0000	51.333
*	76 d4-1,4-Dichlorobenzene	152	13.467	13.467	(1.000)	88279	50.0000	
	77 1,4-Dichlorobenzene	146	13.497	13.497	(1.002)	140968	50.0000	49.774
	78 N-Butyl Benzene	91	13.718	13.718	(1.019)	273888	50.0000	54.445
$	79 d4-1,2-Dichlorobenzene	152	13.909	13.909	(1.033)	81684	50.0000	50.870
	80 1,2-Dichlorobenzene	146	13.939	13.939	(1.035)	133963	50.0000	49.803
	81 1,2-Dibromo 3-Chloropropane	75	14.844	14.844	(1.102)	15128	50.0000	50.924
	82 1,2,4-Trichlorobenzene	180	15.889	15.889	(1.180)	75938	50.0000	46.392
	83 Hexachloro 1,3-Butadiene	225	16.050	16.050	(1.192)	52008	50.0000	47.175
	84 Naphthalene	128	16.221	16.221	(1.204)	142809	50.0000	48.101
	85 1,2,3-Trichlorobenzene	180	16.512	16.512	(1.226)	71413	50.0000	45.633

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 0500723.d
Lab Smp Id: IC0723
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/23JUL10.b/s8260b.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 18:42
Client Smp ID: VSTD050
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
23 Pentafluorobenzen	131115	65558	262230	131115	0.00
34 1,4-Difluorobenze	191559	95780	383118	191559	0.00
52 d5-Chlorobenzene	161199	80600	322398	161199	0.00
76 d4-1,4-Dichlorobe	88279	44140	176558	88279	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.62	6.12	7.12	6.62	0.00
34 1,4-Difluorobenze	7.63	7.13	8.13	7.63	0.00
52 d5-Chlorobenzene	10.78	10.28	11.28	10.78	0.00
76 d4-1,4-Dichlorobe	13.47	12.97	13.97	13.47	0.00

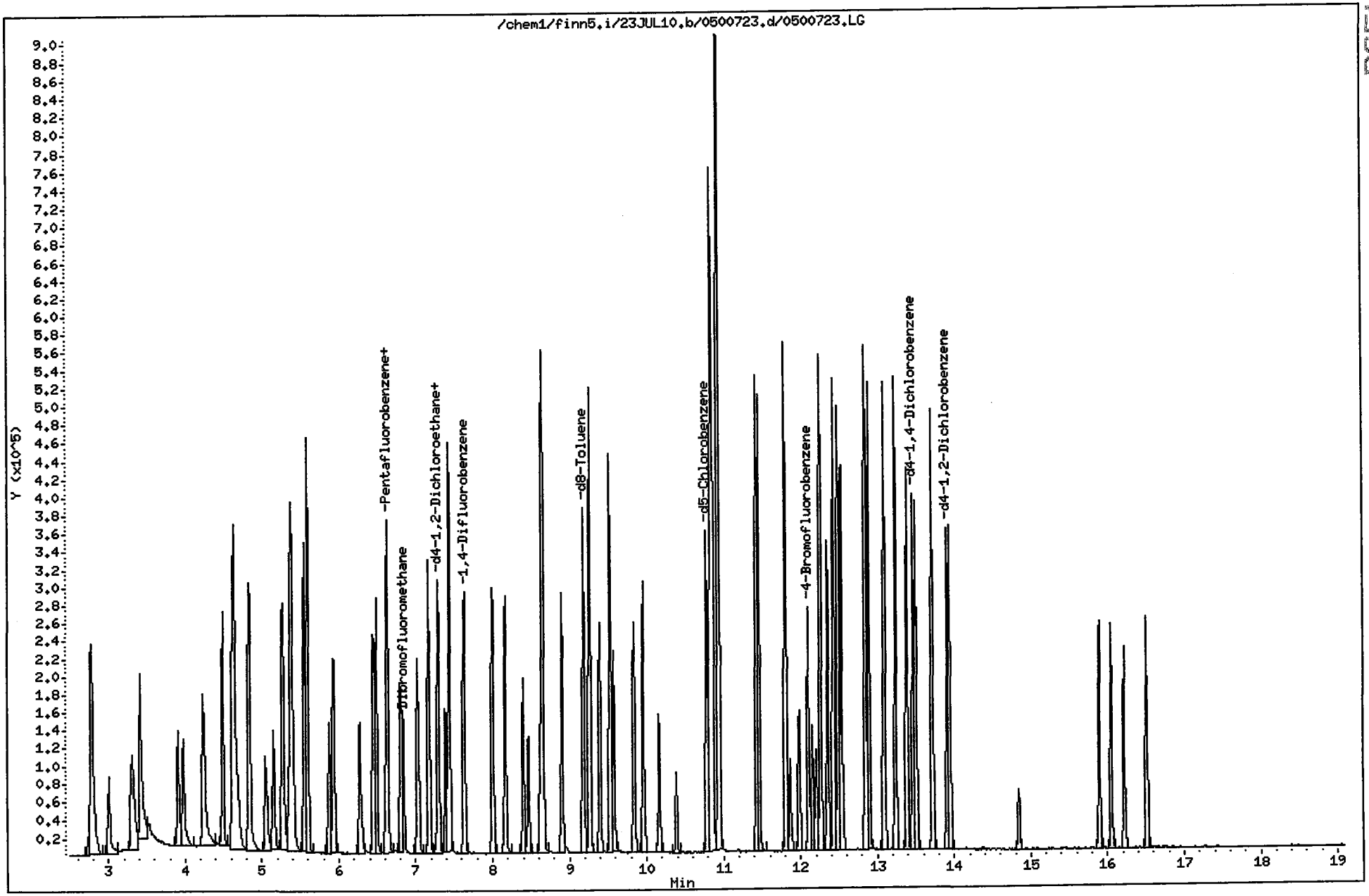
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/finn5.i/23JUL10.b/0500723.d
Date : 23-JUL-2010 18:42
Client ID: VSTD050
Sample Info: IC0723,5,5,0

Instrument: finn5.i

Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



RG5H : 66966

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/23JUL10.b/1000723.d
Lab Smp Id: IC0723 Client Smp ID: VSTD100
Inj Date : 23-JUL-2010 18:16
Operator : PB Inst ID: finn5.i
Smp Info : IC0723,5,5,0
Misc Info : 10-
Comment :
Method : /chem1/finn5.i/23JUL10.b/s8260b.m
Meth Date : 29-Jul-2010 14:29 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 18:16 Cal File: 1000723.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

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	3.005	3.005	(0.454)	182544	100.000	104.02
2 Chloromethane	50	3.306	3.306	(0.499)	423802	100.000	89.759
3 Vinyl Chloride	62	3.417	3.417	(0.516)	367442	100.000	98.412
4 Bromomethane	94	3.909	3.909	(0.590)	208154	100.000	102.66
5 Chloroethane	64	3.980	3.980	(0.601)	210640	100.000	86.388
6 Trichlorofluoromethane	101	4.241	4.241	(0.640)	346453	100.000	96.008
7 Acrolein	56	4.633	4.633	(0.700)	197468	500.000	438.68
8 112Trichloro122Trifluoroethane	101	4.643	4.643	(0.701)	264194	100.000	93.516
9 Acetone	43	4.683	4.683	(0.707)	329833	500.000	435.50
10 1,1-Dichloroethene	96	4.834	4.834	(0.730)	252737	100.000	98.586
11 Bromoethane	108	5.055	5.055	(0.763)	196835	100.000	103.68
12 Iodomethane	142	5.156	5.156	(0.778)	339831	100.000	112.12
13 Methylene Chloride	84	5.276	5.276	(0.797)	251445	100.000	87.107
14 Acrylonitrile	53	5.357	5.357	(0.809)	69928	100.000	104.57(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.397	5.397	(0.815)	417323	100.000	105.86(Q)
	15 Carbon Disulfide	76	5.377	5.377	(0.812)	775986	100.000	97.596
	17 Trans-1,2-Dichloroethene	96	5.558	5.558	(0.839)	225901	100.000	103.40
	18 Vinyl Acetate	43	5.879	5.879	(0.888)	420486	100.000	109.89
	19 1,1-Dichloroethane	63	5.940	5.940	(0.897)	422564	100.000	105.14
	20 2-Butanone	43	6.281	6.281	(0.948)	437209	500.000	513.04
	21 2,2-Dichloropropane	77	6.462	6.462	(0.976)	258768	100.000	105.22
	22 Cis-1,2-Dichloroethene	96	6.492	6.492	(0.980)	200756	100.000	104.26
*	23 Pentafluorobenzene	168	6.623	6.623	(1.000)	135334	50.0000	
	24 Chloroform	83	6.643	6.643	(1.003)	333986	100.000	102.30
	26 Bromochloromethane	128	6.804	6.804	(1.027)	95093	100.000	104.01
$	25 Dibromofluoromethane	111	6.844	6.844	(1.033)	79364	50.0000	49.203(Q)
	27 1,1,1-Trichloroethane	97	7.035	7.035	(1.062)	260275	100.000	102.50
	29 1,1-Dichloropropene	75	7.176	7.176	(0.939)	277625	100.000	102.36
	30 Carbon Tetrachloride	117	7.286	7.286	(0.954)	236579	100.000	100.30
$	31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.103)	86752	50.0000	49.152
	32 1,2-Dichloroethane	62	7.397	7.397	(0.968)	238783	100.000	100.28
	33 Benzene	78	7.447	7.447	(0.975)	581109	100.000	88.602
*	34 1,4-Difluorobenzene	114	7.638	7.638	(1.000)	199732	50.0000	
	35 Trichloroethene	95	8.010	8.010	(1.049)	193783	100.000	100.84
	36 1,2-Dichloropropane	63	8.171	8.171	(1.070)	206742	100.000	99.998
	37 Bromodichloromethane	83	8.402	8.402	(1.100)	221686	100.000	100.29
	39 Dibromomethane	93	8.472	8.472	(1.109)	104013	100.000	101.35
	40 2-Chloroethyl Vinyl Ether	63	8.623	8.623	(1.129)	77415	100.000	106.92(Q)
	41 4-Methyl-2-Pentanone	58	8.653	8.653	(1.133)	263763	500.000	499.56(Q)
	42 Cis 1,3-dichloropropene	75	8.904	8.904	(1.166)	270130	100.000	111.93
$	43 d8-Toluene	98	9.186	9.186	(1.203)	215653	50.0000	49.139
	44 Toluene	92	9.266	9.266	(1.213)	377962	100.000	97.129(Q)
	45 Trans 1,3-Dichloropropene	75	9.397	9.397	(1.230)	223383	100.000	110.12
	46 2-Hexanone	43	9.527	9.527	(0.884)	517771	500.000	394.32
	47 1,1,2-Trichloroethane	97	9.578	9.578	(1.254)	123034	100.000	101.56
	48 1,3-Dichloropropane	76	9.839	9.839	(0.912)	232506	100.000	102.84
	49 Tetrachloroethene	166	9.960	9.960	(0.924)	175269	100.000	98.211
	50 Chlorodibromomethane	129	10.161	10.161	(0.942)	158474	100.000	104.20
	51 1,2-Dibromoethane	107	10.392	10.392	(1.361)	131007	100.000	100.96
*	52 d5-Chlorobenzene	117	10.784	10.784	(1.000)	160631	50.0000	
	53 Chlorobenzene	112	10.824	10.824	(1.004)	376912	100.000	100.04
	54 Ethyl Benzene	91	10.864	10.864	(1.007)	573170	100.000	89.962
	55 1,1,1,2-Tetrachloroethane	131	10.854	10.854	(1.007)	137418	100.000	95.300
	56 m,p-xylene	106	10.944	10.944	(1.015)	516678	200.000	221.87(Q)
	57 o-Xylene	106	11.427	11.427	(1.060)	269989	100.000	111.56(Q)
	58 Styrene	104	11.457	11.457	(1.062)	431090	100.000	115.20
	59 Isopropyl Benzene	105	11.809	11.809	(0.877)	588226	100.000	90.704
	60 Bromoform	173	11.869	11.869	(0.881)	103792	100.000	99.542
	61 1,1,2,2-Tetrachloroethane	83	11.990	11.990	(0.890)	171593	100.000	91.586
$	62 4-Bromofluorobenzene	95	12.110	12.110	(1.123)	95036	50.0000	50.553
	63 1,2,3-Trichloropropane	110	12.160	12.160	(0.903)	35211	100.000	94.864

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.211	12.211	(0.907)	57625	100.000	100.07
	66 N-Propyl Benzene	91	12.261	12.261	(0.910)	642345	100.000	76.727
	67 Bromobenzene	156	12.351	12.351	(0.917)	184300	100.000	101.94
	68 1,3,5-Trimethyl Benzene	105	12.432	12.432	(0.923)	526617	100.000	100.04
	69 2-Chloro Toluene	91	12.492	12.492	(0.928)	543512	100.000	98.805
	70 4-Chloro Toluene	91	12.542	12.542	(0.931)	505915	100.000	95.947
	71 T-Butyl Benzene	119	12.844	12.844	(0.954)	493329	100.000	109.54
	72 1,2,4-Trimethylbenzene	105	12.894	12.894	(0.957)	539580	100.000	104.12
	73 S-Butyl Benzene	105	13.095	13.095	(0.972)	628727	100.000	84.857
	74 4-Isopropyl Toluene	119	13.236	13.236	(0.983)	529249	100.000	104.10
	75 1,3-Dichlorobenzene	146	13.387	13.387	(0.994)	347593	100.000	112.54
*	76 d4-1,4-Dichlorobenzene	152	13.467	13.467	(1.000)	96340	50.0000	
	77 1,4-Dichlorobenzene	146	13.507	13.507	(1.003)	341992	100.000	110.65
	78 N-Butyl Benzene	91	13.718	13.718	(1.019)	548418	100.000	99.896
$	79 d4-1,2-Dichlorobenzene	152	13.909	13.909	(1.033)	86952	50.0000	49.620
	80 1,2-Dichlorobenzene	146	13.949	13.949	(1.036)	305695	100.000	104.14
	81 1,2-Dibromo 3-Chloropropane	75	14.844	14.844	(1.102)	30455	100.000	93.940
	82 1,2,4-Trichlorobenzene	180	15.899	15.899	(1.181)	175953	100.000	98.499
	83 Hexachloro 1,3-Butadiene	225	16.050	16.050	(1.192)	115056	100.000	95.632
	84 Naphthalene	128	16.221	16.221	(1.204)	300283	100.000	92.679
	85 1,2,3-Trichlorobenzene	180	16.512	16.512	(1.226)	158431	100.000	92.767

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 1000723.d
Lab Smp Id: IC0723
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/23JUL10.b/s8260b.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 18:42
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
23 Pentafluorobenzen	131115	65558	262230	135334	3.22
34 1,4-Difluorobenze	191559	95780	383118	199732	4.27
52 d5-Chlorobenzene	161199	80600	322398	160631	-0.35
76 d4-1,4-Dichlorobe	88279	44140	176558	96340	9.13

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.62	6.12	7.12	6.62	0.00
34 1,4-Difluorobenze	7.63	7.13	8.13	7.64	0.13
52 d5-Chlorobenzene	10.78	10.28	11.28	10.78	0.00
76 d4-1,4-Dichlorobe	13.47	12.97	13.97	13.47	0.00

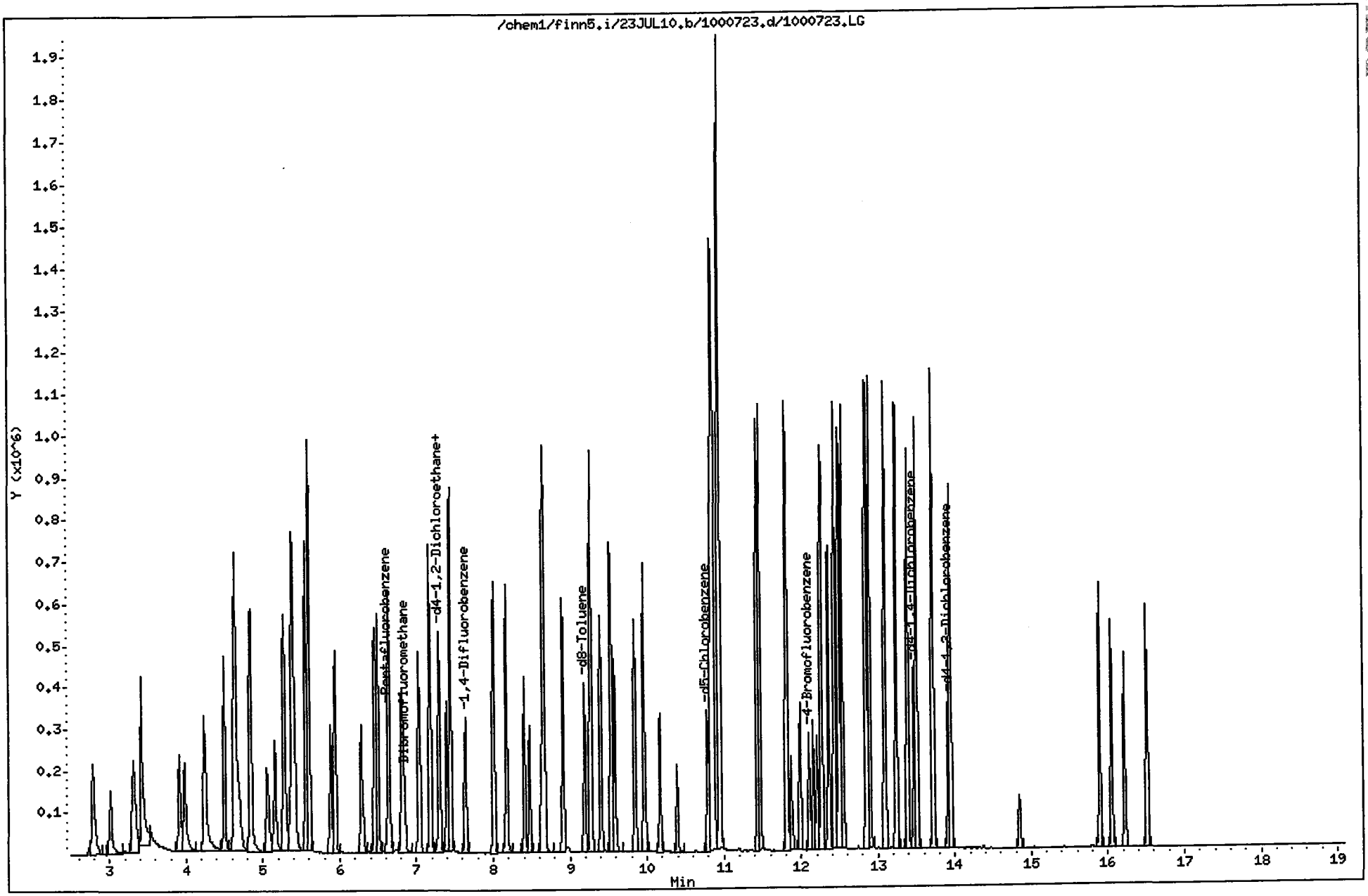
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/finn5.i/23JUL10.b/1000723.d
Date : 23-JUL-2010 18:16
Client ID: VSTD100
Sample Info: IC0723,5,5,0

Instrument: finn5.i

Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



RG51:00313

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/23JUL10.b/1500723.d
Lab Smp Id: IC0723 Client Smp ID: VSTD150
Inj Date : 23-JUL-2010 17:49
Operator : PB Inst ID: finn5.i
Smp Info : IC0723,5,5,0
Misc Info : 10-
Comment :
Method : /chem1/finn5.i/23JUL10.b/s8260b.m
Meth Date : 29-Jul-2010 14:29 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:49 Cal File: 1500723.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

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	3.015	3.015	(0.455)	295620	150.000	146.34
2 Chloromethane	50	3.316	3.316	(0.501)	648632	150.000	119.34
3 Vinyl Chloride	62	3.417	3.417	(0.516)	547438	150.000	127.37
4 Bromomethane	94	3.909	3.909	(0.590)	302383	150.000	129.55
5 Chloroethane	64	3.980	3.980	(0.601)	293885	150.000	104.71
6 Trichlorofluoromethane	101	4.241	4.241	(0.640)	487082	150.000	117.26
7 Acrolein	56	4.633	4.633	(0.700)	278099	750.000	536.71
8 112Trichloro122Trifluoroethane	101	4.643	4.643	(0.701)	382218	150.000	117.53
9 Acetone	43	4.683	4.683	(0.707)	476748	750.000	546.84
10 1,1-Dichloroethene	96	4.844	4.844	(0.731)	372564	150.000	126.25
11 Bromoethane	108	5.055	5.055	(0.763)	295924	150.000	135.41
12 Iodomethane	142	5.156	5.156	(0.778)	498041	150.000	142.74
13 Methylene Chloride	84	5.276	5.276	(0.797)	383620	150.000	115.45
14 Acrylonitrile	53	5.357	5.357	(0.809)	107704	150.000	139.92(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.397	5.397	(0.815)	613756	150.000	135.24(Q)
	15 Carbon Disulfide	76	5.377	5.377	(0.812)	1021453	150.000	111.60(Q)
	17 Trans-1,2-Dichloroethene	96	5.558	5.558	(0.839)	357903	150.000	142.31(Q)
	18 Vinyl Acetate	43	5.879	5.879	(0.888)	559418	150.000	127.00
	19 1,1-Dichloroethane	63	5.940	5.940	(0.897)	586536	150.000	126.78
	20 2-Butanone	43	6.281	6.281	(0.948)	627000	750.000	639.16
	21 2,2-Dichloropropane	77	6.462	6.462	(0.976)	409501	150.000	144.65
	22 Cis-1,2-Dichloroethene	96	6.502	6.502	(0.982)	321064	150.000	144.85(Q)
*	23 Pentafluorobenzene	168	6.623	6.623	(1.000)	155784	50.0000	
	24 Chloroform	83	6.643	6.643	(1.003)	501605	150.000	133.48
	26 Bromochloromethane	128	6.814	6.814	(1.029)	155161	150.000	147.44
$	25 Dibromofluoromethane	111	6.844	6.844	(1.033)	89065	50.0000	47.969(Q)
	27 1,1,1-Trichloroethane	97	7.035	7.035	(1.062)	410583	150.000	140.47
	29 1,1-Dichloropropene	75	7.176	7.176	(0.939)	432896	150.000	139.46
	30 Carbon Tetrachloride	117	7.296	7.296	(0.955)	377891	150.000	140.00
$	31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.103)	96098	50.0000	47.300
	32 1,2-Dichloroethane	62	7.397	7.397	(0.968)	373218	150.000	136.97
	33 Benzene	78	7.447	7.447	(0.975)	746304	150.000	99.432
*	34 1,4-Difluorobenzene	114	7.638	7.638	(1.000)	228573	50.0000	
	35 Trichloroethene	95	8.010	8.010	(1.049)	307337	150.000	139.76
	36 1,2-Dichloropropane	63	8.171	8.171	(1.070)	322596	150.000	136.35
	37 Bromodichloromethane	83	8.402	8.402	(1.100)	353775	150.000	139.85
	39 Dibromomethane	93	8.472	8.472	(1.109)	162509	150.000	138.36
	40 2-Chloroethyl Vinyl Ether	63	8.623	8.623	(1.129)	128070	150.000	154.56(Q)
	41 4-Methyl-2-Pentanone	58	8.653	8.653	(1.133)	417853	750.000	691.54(Q)
	42 Cis 1,3-dichloropropene	75	8.914	8.914	(1.167)	424803	150.000	153.81
$	43 d8-Toluene	98	9.186	9.186	(1.203)	239633	50.0000	47.713
	44 Toluene	92	9.266	9.266	(1.213)	537240	150.000	120.64(Q)
	45 Trans 1,3-Dichloropropene	75	9.397	9.397	(1.230)	359227	150.000	154.74
	46 2-Hexanone	43	9.537	9.537	(0.884)	658433	750.000	450.96(Q)
	47 1,1,2-Trichloroethane	97	9.578	9.578	(1.254)	199640	150.000	144.00
	48 1,3-Dichloropropane	76	9.839	9.839	(0.912)	362456	150.000	144.18
	49 Tetrachloroethene	166	9.960	9.960	(0.924)	291013	150.000	146.65
	50 Chlorodibromomethane	129	10.171	10.171	(0.943)	256549	150.000	151.70
	51 1,2-Dibromoethane	107	10.392	10.392	(1.361)	211704	150.000	142.56
*	52 d5-Chlorobenzene	117	10.784	10.784	(1.000)	178614	50.0000	
	53 Chlorobenzene	112	10.834	10.834	(1.005)	526215	150.000	125.61
	54 Ethyl Benzene	91	10.864	10.864	(1.007)	719154	150.000	101.51(Q)
	55 1,1,1,2-Tetrachloroethane	131	10.854	10.854	(1.007)	235095	150.000	146.62
	56 m,p-xylene	106	10.944	10.944	(1.015)	693534	300.000	267.84(Q)
	57 o-Xylene	106	11.437	11.437	(1.061)	443859	150.000	164.93(Q)
	58 Styrene	104	11.467	11.467	(1.063)	604009	150.000	145.16
	59 Isopropyl Benzene	105	11.809	11.809	(0.877)	765486	150.000	92.525
	60 Bromoform	173	11.869	11.869	(0.881)	184206	150.000	138.48
	61 1,1,2,2-Tetrachloroethane	83	11.990	11.990	(0.890)	287454	150.000	120.26
$	62 4-Bromofluorobenzene	95	12.110	12.110	(1.123)	109555	50.0000	52.409
	63 1,2,3-Trichloropropane	110	12.160	12.160	(0.903)	59137	150.000	124.89

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.211	12.211	(0.907)	94977	150.000	129.29
	66 N-Propyl Benzene	91	12.271	12.271	(0.911)	798434	150.000	74.759(Q)
	67 Bromobenzene	156	12.351	12.351	(0.917)	321436	150.000	139.37(Q)
	68 1,3,5-Trimethyl Benzene	105	12.442	12.442	(0.924)	708315	150.000	105.47(Q)
	69 2-Chloro Toluene	91	12.502	12.502	(0.928)	729939	150.000	104.02
	70 4-Chloro Toluene	91	12.542	12.542	(0.931)	684866	150.000	101.81
	71 T-Butyl Benzene	119	12.854	12.854	(0.954)	722068	150.000	125.68
	72 1,2,4-Trimethylbenzene	105	12.894	12.894	(0.957)	731940	150.000	110.71(Q)
	73 S-Butyl Benzene	105	13.095	13.095	(0.972)	812152	150.000	85.922
	74 4-Isopropyl Toluene	119	13.246	13.246	(0.984)	739478	150.000	114.02
	75 1,3-Dichlorobenzene	146	13.387	13.387	(0.994)	545268	150.000	138.38
*	76 d4-1,4-Dichlorobenzene	152	13.467	13.467	(1.000)	122904	50.0000	
	77 1,4-Dichlorobenzene	146	13.507	13.507	(1.003)	547350	150.000	138.82
	78 N-Butyl Benzene	91	13.718	13.718	(1.019)	717047	150.000	102.38(Q)
$	79 d4-1,2-Dichlorobenzene	152	13.909	13.909	(1.033)	108113	50.0000	48.361
	80 1,2-Dichlorobenzene	146	13.949	13.949	(1.036)	516441	150.000	137.91
	81 1,2-Dibromo 3-Chloropropane	75	14.854	14.854	(1.103)	50577	150.000	122.29
	82 1,2,4-Trichlorobenzene	180	15.899	15.899	(1.181)	304271	150.000	133.52
	83 Hexachloro 1,3-Butadiene	225	16.050	16.050	(1.192)	204107	150.000	132.98
	84 Naphthalene	128	16.221	16.221	(1.204)	474513	150.000	114.80
	85 1,2,3-Trichlorobenzene	180	16.512	16.512	(1.226)	271577	150.000	124.65

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 1500723.d
Lab Smp Id: IC0723
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/23JUL10.b/s8260b.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 18:42
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
23 Pentafluorobenzen	131115	65558	262230	155784	18.81
34 1,4-Difluorobenze	191559	95780	383118	228573	19.32
52 d5-Chlorobenzene	161199	80600	322398	178614	10.80
76 d4-1,4-Dichlorobe	88279	44140	176558	122904	39.22

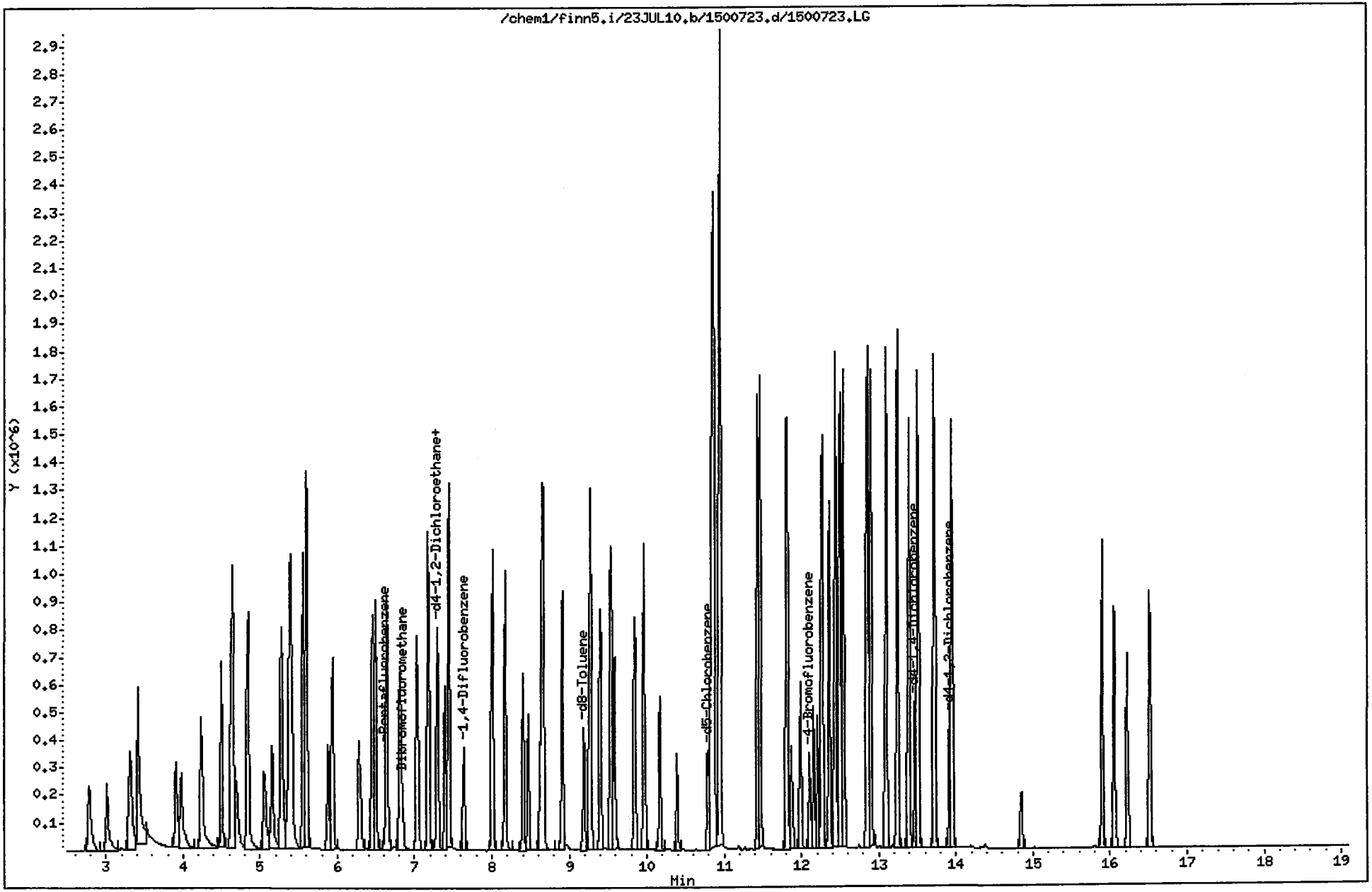
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.62	6.12	7.12	6.62	0.00
34 1,4-Difluorobenze	7.63	7.13	8.13	7.64	0.13
52 d5-Chlorobenzene	10.78	10.28	11.28	10.78	0.00
76 d4-1,4-Dichlorobe	13.47	12.97	13.97	13.47	0.00

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: /chem1/finn5.i/23JUL10.b/1500723.d
Date : 23-JUL-2010 17:49
Client ID: VSTD150
Sample Info: IC0723,5,5,0

Instrument: finn5.i
Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/23JUL10.b/2000723.d
Lab Smp Id: IC0723 Client Smp ID: VSTD200
Inj Date : 23-JUL-2010 17:18
Operator : PB Inst ID: finn5.i
Smp Info : IC0723,5,5,0
Misc Info : 10-
Comment :
Method : /chem1/finn5.i/23JUL10.b/s8260b.m
Meth Date : 29-Jul-2010 14:29 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

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	3.015	3.015	(0.455)	382873	200.000	185.53
2 Chloromethane	50	3.316	3.316	(0.501)	831334	200.000	149.72
3 Vinyl Chloride	62	3.417	3.417	(0.516)	675701	200.000	153.89
4 Bromomethane	94	3.909	3.909	(0.590)	368903	200.000	154.71
5 Chloroethane	64	3.980	3.980	(0.601)	364783	200.000	127.22
6 Trichlorofluoromethane	101	4.241	4.241	(0.640)	615782	200.000	145.11
7 Acrolein	56	4.633	4.633	(0.700)	343518	1000.00	648.94
8 112Trichloro122Trifluoroethane	101	4.643	4.643	(0.701)	482521	200.000	145.24
9 Acetone	43	4.693	4.693	(0.709)	560993	1000.00	629.87
10 1,1-Dichloroethene	96	4.844	4.844	(0.731)	470540	200.000	156.08(Q)
11 Bromoethane	108	5.055	5.055	(0.763)	376320	200.000	168.56
12 Iodomethane	142	5.156	5.156	(0.778)	652382	200.000	183.02
13 Methylene Chloride	84	5.276	5.276	(0.797)	495091	200.000	145.85(Q)
14 Acrylonitrile	53	5.367	5.367	(0.810)	139945	200.000	177.96(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.407	5.407	(0.816)	732622	200.000	158.02(Q)
	15 Carbon Disulfide	76	5.377	5.377	(0.812)	1217955	200.000	130.26(Q)
	17 Trans-1,2-Dichloroethene	96	5.558	5.558	(0.839)	459768	200.000	178.95(Q)
	18 Vinyl Acetate	43	5.879	5.879	(0.888)	672353	200.000	149.42
	19 1,1-Dichloroethane	63	5.940	5.940	(0.897)	680449	200.000	143.96
	20 2-Butanone	43	6.291	6.291	(0.950)	785164	1000.00	783.47
	21 2,2-Dichloropropane	77	6.462	6.462	(0.976)	544411	200.000	188.24
	22 Cis-1,2-Dichloroethene	96	6.502	6.502	(0.982)	438984	200.000	193.86
*	23 Pentafluorobenzene	168	6.623	6.623	(1.000)	159149	50.0000	
	24 Chloroform	83	6.643	6.643	(1.003)	610807	200.000	159.10
	26 Bromochloromethane	128	6.814	6.814	(1.029)	213240	200.000	198.34
$	25 Dibromofluoromethane	111	6.844	6.844	(1.033)	84837	50.0000	44.726(Q)
	27 1,1,1-Trichloroethane	97	7.035	7.035	(1.062)	549252	200.000	183.94
	29 1,1-Dichloropropene	75	7.176	7.176	(0.939)	545791	200.000	175.44
	30 Carbon Tetrachloride	117	7.296	7.296	(0.955)	522753	200.000	193.23
$	31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.103)	89066	50.0000	42.912
	32 1,2-Dichloroethane	62	7.397	7.397	(0.968)	485007	200.000	177.58
	33 Benzene	78	7.447	7.447	(0.975)	870526	200.000	115.72
*	34 1,4-Difluorobenzene	114	7.638	7.638	(1.000)	229095	50.0000	
	35 Trichloroethene	95	8.010	8.010	(1.049)	422519	200.000	191.70
	36 1,2-Dichloropropane	63	8.171	8.171	(1.070)	435024	200.000	183.44
	37 Bromodichloromethane	83	8.412	8.412	(1.101)	471123	200.000	185.82
	39 Dibromomethane	93	8.472	8.472	(1.109)	228343	200.000	193.98
	40 2-Chloroethyl Vinyl Ether	63	8.623	8.623	(1.129)	181565	200.000	218.62(Q)
	41 4-Methyl-2-Pentanone	58	8.663	8.663	(1.134)	536767	1000.00	886.32(Q)
	42 Cis 1,3-dichloropropene	75	8.914	8.914	(1.167)	522307	200.000	188.68
$	43 d8-Toluene	98	9.186	9.186	(1.203)	239843	50.0000	47.646
	44 Toluene	92	9.276	9.276	(1.214)	647650	200.000	145.10(Q)
	45 Trans 1,3-Dichloropropene	75	9.407	9.407	(1.232)	465557	200.000	200.09
	46 2-Hexanone	43	9.537	9.537	(0.884)	763183	1000.00	544.40(Q)
	47 1,1,2-Trichloroethane	97	9.588	9.588	(1.255)	280030	200.000	201.53
	48 1,3-Dichloropropane	76	9.839	9.839	(0.912)	469237	200.000	194.40
	49 Tetrachloroethene	166	9.960	9.960	(0.923)	404966	200.000	212.54
	50 Chlorodibromomethane	129	10.171	10.171	(0.942)	362369	200.000	223.17
	51 1,2-Dibromoethane	107	10.392	10.392	(1.361)	296560	200.000	199.25
*	52 d5-Chlorobenzene	117	10.794	10.794	(1.000)	171495	50.0000	
	53 Chlorobenzene	112	10.834	10.834	(1.004)	637891	200.000	158.58
	54 Ethyl Benzene	91	10.864	10.864	(1.007)	844494	200.000	124.15(Q)
	55 1,1,1,2-Tetrachloroethane	131	10.864	10.864	(1.007)	337259	200.000	219.07
	56 m,p-xylene	106	10.944	10.944	(1.014)	845893	400.000	340.24(Q)
	57 o-Xylene	106	11.437	11.437	(1.060)	593625	200.000	229.74(Q)
	58 Styrene	104	11.467	11.467	(1.062)	750474	200.000	187.84(Q)
	59 Isopropyl Benzene	105	11.819	11.819	(0.878)	880078	200.000	89.802(Q)
	60 Bromoform	173	11.879	11.879	(0.882)	275819	200.000	175.04
	61 1,1,2,2-Tetrachloroethane	83	11.990	11.990	(0.890)	411745	200.000	145.43
$	62 4-Bromofluorobenzene	95	12.110	12.110	(1.122)	119170	50.0000	59.375
	63 1,2,3-Trichloropropane	110	12.160	12.160	(0.903)	85172	200.000	151.85

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.211	12.211	(0.907)	138249	200.000	158.87
	66 N-Propyl Benzene	91	12.271	12.271	(0.911)	919942	200.000	72.715(Q)
	67 Bromobenzene	156	12.361	12.361	(0.918)	475914	200.000	174.20(Q)
	68 1,3,5-Trimethyl Benzene	105	12.442	12.442	(0.924)	843459	200.000	106.02(Q)
	69 2-Chloro Toluene	91	12.502	12.502	(0.928)	835546	200.000	100.51(Q)
	70 4-Chloro Toluene	91	12.552	12.552	(0.932)	905693	200.000	113.66(Q)
	71 T-Butyl Benzene	119	12.854	12.854	(0.954)	852231	200.000	125.22(Q)
	72 1,2,4-Trimethylbenzene	105	12.904	12.904	(0.958)	866210	200.000	110.61(Q)
	73 S-Butyl Benzene	105	13.095	13.095	(0.972)	959505	200.000	85.695(Q)
	74 4-Isopropyl Toluene	119	13.246	13.246	(0.984)	862152	200.000	112.22(Q)
	75 1,3-Dichlorobenzene	146	13.397	13.397	(0.995)	707131	200.000	151.50
*	76 d4-1,4-Dichlorobenzene	152	13.467	13.467	(1.000)	145587	50.0000	
	77 1,4-Dichlorobenzene	146	13.507	13.507	(1.003)	703363	200.000	150.59
	78 N-Butyl Benzene	91	13.728	13.728	(1.019)	866011	200.000	104.39(Q)
$	79 d4-1,2-Dichlorobenzene	152	13.919	13.919	(1.034)	127083	50.0000	47.990
	80 1,2-Dichlorobenzene	146	13.949	13.949	(1.036)	673403	200.000	151.80
	81 1,2-Dibromo 3-Chloropropane	75	14.854	14.854	(1.103)	74509	200.000	152.08
	82 1,2,4-Trichlorobenzene	180	15.899	15.899	(1.181)	430578	200.000	159.50
	83 Hexachloro 1,3-Butadiene	225	16.050	16.050	(1.192)	315558	200.000	173.56
	84 Naphthalene	128	16.231	16.231	(1.205)	551716	200.000	112.68
	85 1,2,3-Trichlorobenzene	180	16.512	16.512	(1.226)	376206	200.000	145.77

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 2000723.d
Lab Smp Id: IC0723
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/23JUL10.b/s8260b.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 18:42
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
23 Pentafluorobenzen	131115	65558	262230	159149	21.38
34 1,4-Difluorobenze	191559	95780	383118	229095	19.60
52 d5-Chlorobenzene	161199	80600	322398	171495	6.39
76 d4-1,4-Dichlorobe	88279	44140	176558	145587	64.92

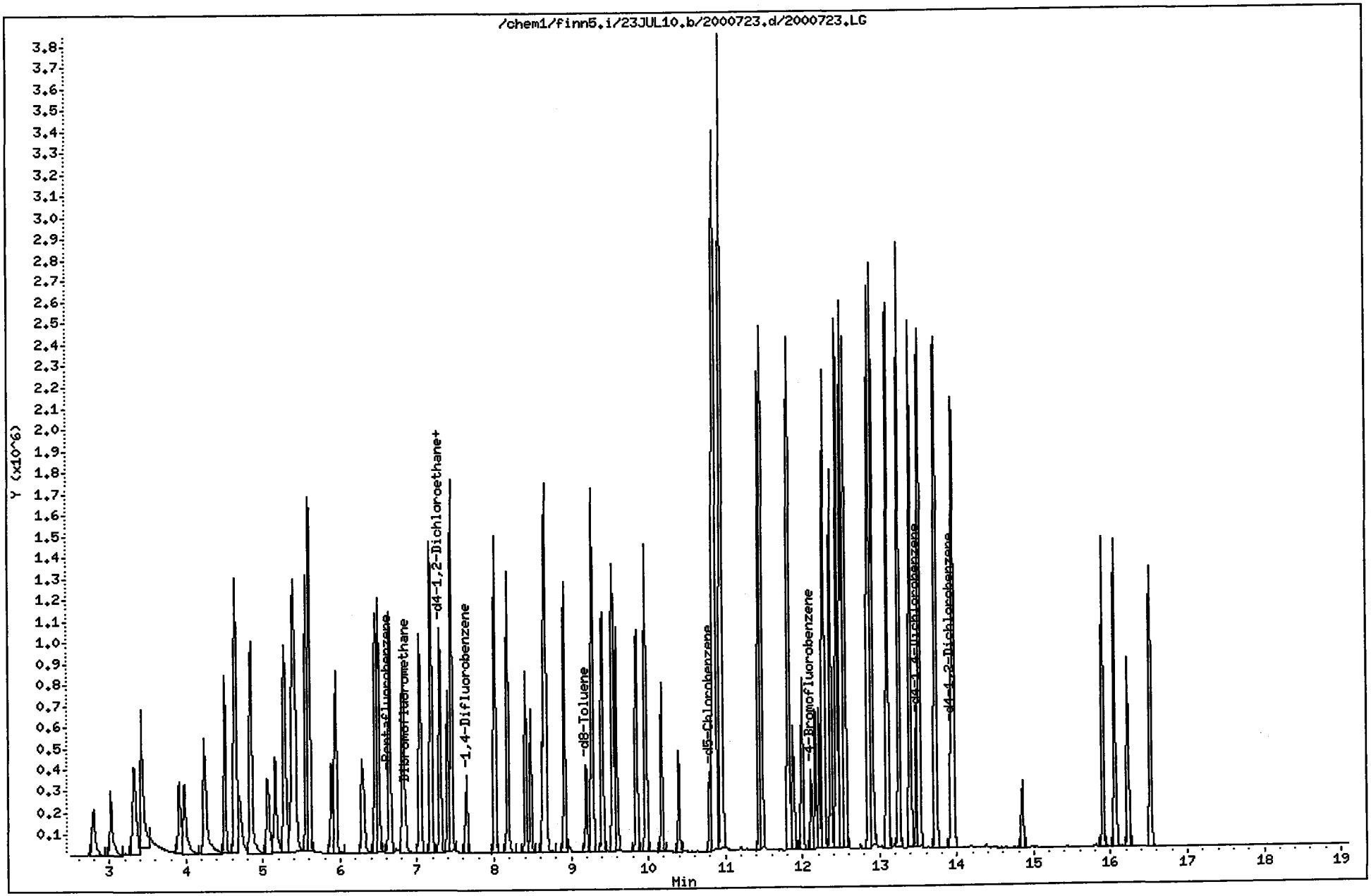
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.62	6.12	7.12	6.62	0.00
34 1,4-Difluorobenze	7.63	7.13	8.13	7.64	0.13
52 d5-Chlorobenzene	10.78	10.28	11.28	10.79	0.09
76 d4-1,4-Dichlorobe	13.47	12.97	13.97	13.47	0.00

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: /chem1/finn5.i/23JUL10.b/2000723.d
Date : 23-JUL-2010 17:18
Client ID: VSTD200
Sample Info: IC0723,5,5,0

Instrument: finn5.i
Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/23JUL10.b/ICV0723.d
Lab Smp Id: ICV0723 Client Smp ID: ICV0723
Inj Date : 23-JUL-2010 22:14
Operator : PB Inst ID: finn5.i
Smp Info : ICV0723,5,5,0
Misc Info : 10-
Comment :
Method : /chem1/finn5.i/23JUL10.b/s8260b.m
Meth Date : 29-Jul-2010 14:29 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

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	3.005	3.015	(0.454)	88303	52.1032	52.103
2 Chloromethane	50	3.306	3.316	(0.499)	217848	47.7755	47.775
3 Vinyl Chloride	62	3.417	3.417	(0.516)	192357	53.3461	53.346
4 Bromomethane	94	3.909	3.909	(0.590)	122206	62.4063	62.406
5 Chloroethane	64	3.980	3.980	(0.601)	123869	52.6030	52.603
6 Trichlorofluoromethane	101	4.241	4.241	(0.640)	196733	56.4516	56.452
7 Acrolein	56	4.623	4.633	(0.698)	109928	252.871	252.87
8 112Trichloro122Trifluoroethane	101	4.643	4.643	(0.701)	142159	52.1041	52.104
9 Acetone	43	4.683	4.693	(0.707)	183316	250.626	250.63
10 1,1-Dichloroethene	96	4.834	4.844	(0.730)	130784	52.8244	52.824
11 Bromoethane	108	5.055	5.055	(0.763)	98954	53.9712	53.971
12 Iodomethane	142	5.156	5.156	(0.778)	164327	56.1364	56.136
13 Methylene Chloride	84	5.276	5.276	(0.797)	130295	46.7382	46.738
14 Acrylonitrile	53	5.357	5.367	(0.809)	36679	56.7973	56.797(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.397	5.407	(0.815)	193967	50.9456	50.946(Q)
	15 Carbon Disulfide	76	5.377	5.377	(0.812)	446067	58.0915	58.092
	17 Trans-1,2-Dichloroethene	96	5.558	5.558	(0.839)	107789	51.0864	51.086
	18 Vinyl Acetate	43	5.879	5.879	(0.888)	205828	55.6982	55.698
	19 1,1-Dichloroethane	63	5.940	5.940	(0.897)	207542	53.4687	53.469
	20 2-Butanone	43	6.281	6.291	(0.948)	220070	267.396	267.40
	21 2,2-Dichloropropane	77	6.462	6.462	(0.976)	115299	48.5440	48.544
	22 Cis-1,2-Dichloroethene	96	6.492	6.502	(0.980)	96880	52.0962	52.096
*	23 Pentafluorobenzene	168	6.623	6.623	(1.000)	130699	50.0000	
	24 Chloroform	83	6.643	6.643	(1.003)	163311	51.7971	51.797
	26 Bromochloromethane	128	6.804	6.814	(1.027)	45855	51.9357	51.936
$	25 Dibromofluoromethane	111	6.844	6.844	(1.033)	79530	51.0546	51.055(Q)
	27 1,1,1-Trichloroethane	97	7.035	7.035	(1.062)	121554	49.5682	49.568
	29 1,1-Dichloropropene	75	7.176	7.176	(0.939)	128897	48.8768	48.877
	30 Carbon Tetrachloride	117	7.296	7.296	(0.955)	112147	48.9029	48.903
$	31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.103)	85607	50.2236	50.224
	32 1,2-Dichloroethane	62	7.397	7.397	(0.968)	113558	49.0506	49.051
	33 Benzene	78	7.437	7.447	(0.974)	327392	51.3396	51.340
*	34 1,4-Difluorobenzene	114	7.638	7.638	(1.000)	194200	50.0000	
	35 Trichloroethene	95	8.010	8.010	(1.049)	89432	47.8663	47.866
	36 1,2-Dichloropropane	63	8.171	8.171	(1.070)	96896	48.2020	48.202
	37 Bromodichloromethane	83	8.402	8.412	(1.100)	105966	49.3042	49.304
	39 Dibromomethane	93	8.472	8.472	(1.109)	50061	50.1678	50.168
	40 2-Chloroethyl Vinyl Ether	63	8.623	8.623	(1.129)	36400	51.7056	51.706(Q)
	41 4-Methyl-2-Pentanone	58	8.653	8.663	(1.133)	124957	243.406	243.40
	42 Cis 1,3-dichloropropene	75	8.904	8.914	(1.166)	119381	50.8758	50.876
$	43 d8-Toluene	98	9.186	9.186	(1.203)	213419	50.0149	50.015
	44 Toluene	92	9.266	9.276	(1.213)	178106	47.0736	47.074
	45 Trans 1,3-Dichloropropene	75	9.397	9.407	(1.230)	97312	49.3376	49.338
	46 2-Hexanone	43	9.527	9.537	(0.884)	302971	230.222	230.22
	47 1,1,2-Trichloroethane	97	9.578	9.588	(1.254)	58163	49.3789	49.379
	48 1,3-Dichloropropane	76	9.839	9.839	(0.912)	111278	49.1112	49.111
	49 Tetrachloroethene	166	9.960	9.960	(0.924)	77284	43.2093	43.209
	50 Chlorodibromomethane	129	10.161	10.171	(0.942)	74343	48.7727	48.773
	51 1,2-Dibromoethane	107	10.392	10.392	(1.361)	60617	48.0450	48.045
*	52 d5-Chlorobenzene	117	10.784	10.794	(1.000)	160989	50.0000	
	53 Chlorobenzene	112	10.824	10.834	(1.004)	173699	46.0010	46.001
	54 Ethyl Benzene	91	10.864	10.864	(1.007)	323591	50.6763	50.676
	55 1,1,1,2-Tetrachloroethane	131	10.854	10.864	(1.007)	63372	43.8510	43.851
	56 m,p-xylene	106	10.944	10.944	(1.015)	245109	105.022	105.02
	57 o-Xylene	106	11.427	11.437	(1.060)	120691	49.7567	49.757
	58 Styrene	104	11.457	11.467	(1.062)	197449	52.6464	52.646
	59 Isopropyl Benzene	105	11.809	11.819	(0.877)	319484	52.7192	52.719
	60 Bromoform	173	11.869	11.879	(0.881)	46057	47.2689	47.269
	61 1,1,2,2-Tetrachloroethane	83	11.990	11.990	(0.890)	81604	46.6101	46.610
$	62 4-Bromofluorobenzene	95	12.110	12.110	(1.123)	92917	49.3160	49.316
	63 1,2,3-Trichloropropane	110	12.160	12.160	(0.903)	16385	47.2399	47.240

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.211	12.211	(0.907)	26774	49.7563	49.756
	66 N-Propyl Benzene	91	12.261	12.271	(0.910)	379504	48.5107	48.511
	67 Bromobenzene	156	12.351	12.361	(0.917)	77896	46.1089	46.109
	68 1,3,5-Trimethyl Benzene	105	12.432	12.442	(0.923)	260307	52.9158	52.916
	69 2-Chloro Toluene	91	12.492	12.502	(0.928)	265535	51.6571	51.657
	70 4-Chloro Toluene	91	12.542	12.552	(0.931)	238191	48.3413	48.341
	71 T-Butyl Benzene	119	12.844	12.854	(0.954)	232736	55.3018	55.302
	72 1,2,4-Trimethylbenzene	105	12.894	12.904	(0.957)	256248	52.9143	52.914
	73 S-Butyl Benzene	105	13.095	13.095	(0.972)	356050	51.4252	51.425
	74 4-Isopropyl Toluene	119	13.236	13.246	(0.983)	257043	54.1060	54.106
	75 1,3-Dichlorobenzene	146	13.387	13.397	(0.994)	136992	47.4636	47.464
*	76 d4-1,4-Dichlorobenzene	152	13.467	13.467	(1.000)	90026	50.0000	
	77 1,4-Dichlorobenzene	146	13.507	13.507	(1.003)	134851	46.6906	46.691
	78 N-Butyl Benzene	91	13.718	13.728	(1.019)	266189	51.8878	51.888
$	79 d4-1,2-Dichlorobenzene	152	13.909	13.919	(1.033)	82049	50.1059	50.106
	80 1,2-Dichlorobenzene	146	13.949	13.949	(1.036)	130036	47.4052	47.405
	81 1,2-Dibromo 3-Chloropropane	75	14.844	14.854	(1.102)	14043	46.3542	46.354
	82 1,2,4-Trichlorobenzene	180	15.899	15.899	(1.181)	62702	37.5627	37.563(R)
	83 Hexachloro 1,3-Butadiene	225	16.050	16.050	(1.192)	47253	42.0301	42.030
	84 Naphthalene	128	16.221	16.231	(1.204)	125569	41.4735	41.473
	85 1,2,3-Trichlorobenzene	180	16.512	16.512	(1.226)	61205	38.3513	38.351

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: ICV0723.d
Lab Smp Id: ICV0723
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/23JUL10.b/s8260b.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 18:42
Client Smp ID: ICV0723
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
23 Pentafluorobenzen	131115	65558	262230	130699	-0.32
34 1,4-Difluorobenze	191559	95780	383118	194200	1.38
52 d5-Chlorobenzene	161199	80600	322398	160989	-0.13
76 d4-1,4-Dichlorobe	88279	44140	176558	90026	1.98

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.62	6.12	7.12	6.62	0.00
34 1,4-Difluorobenze	7.63	7.13	8.13	7.64	0.13
52 d5-Chlorobenzene	10.78	10.28	11.28	10.78	0.00
76 d4-1,4-Dichlorobe	13.47	12.97	13.97	13.47	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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Client SDG: 23JUL10
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: ICV0723 Client Smp ID: ICV0723
Level: LOW Operator: PB
Data Type: MS DATA SampleType: LCS
SpikeList File: all.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: /chem1/finn5.i/23JUL10.b/s8260b.m
Misc Info: 10-

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	52.103	104.21	53-148
2	Chloromethane	50.000	47.775	95.55	64-125
3	Vinyl Chloride	50.000	53.346	106.69	63-137
4	Bromomethane	50.000	62.406	124.81	57-136
5	Chloroethane	50.000	52.603	105.21	64-131
6	Trichlorofluoromet	50.000	56.452	112.90	69-132
7	Acrolein	250.00	252.87	101.15	54-137
8	112Trichloro122Tri	50.000	52.104	104.21	74-130
9	Acetone	250.00	250.63	100.25	60-131
10	1,1-Dichloroethene	50.000	52.824	105.65	75-126
11	Bromoethane	50.000	53.971	107.94	76-126
12	Iodomethane	50.000	56.136	112.27	65-139
13	Methylene Chloride	50.000	46.738	93.48	70-123
15	Carbon Disulfide	50.000	58.092	116.18	71-129
14	Acrylonitrile	50.000	56.797	113.59	67-125
16	Methyl tert-Butyl	50.000	50.946	101.89	70-120
17	Trans-1,2-Dichloro	50.000	51.086	102.17	80-120
18	Vinyl Acetate	50.000	55.698	111.40	60-136
19	1,1-Dichloroethane	50.000	53.469	106.94	80-120
20	2-Butanone	250.00	267.40	106.96	70-120
21	2,2-Dichloropropan	50.000	48.544	97.09	74-123
22	Cis-1,2-Dichloroet	50.000	52.096	104.19	80-120
24	Chloroform	50.000	51.797	103.59	80-120
26	Bromochloromethane	50.000	51.936	103.87	80-120
27	1,1,1-Trichloroeth	50.000	49.568	99.14	77-121
29	1,1-Dichloropropen	50.000	48.877	97.75	80-120
30	Carbon Tetrachlori	50.000	48.903	97.81	77-122
32	1,2-Dichloroethane	50.000	49.051	98.10	76-120
33	Benzene	50.000	51.340	102.68	80-120
35	Trichloroethene	50.000	47.866	95.73	80-120
36	1,2-Dichloropropan	50.000	48.202	96.40	80-120
37	Bromodichlorometha	50.000	49.304	98.61	77-121
39	Dibromomethane	50.000	50.168	100.34	80-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
40 2-Chloroethyl Viny	50.000	51.706	103.41	10-191
41 4-Methyl-2-Pentano	250.00	243.40	97.36	67-120
42 Cis 1,3-dichloropr	50.000	50.876	101.75	74-120
44 Toluene	50.000	47.074	94.15	80-120
45 Trans 1,3-Dichloro	50.000	49.338	98.68	65-120
46 2-Hexanone	250.00	230.22	92.09	65-130
47 1,1,2-Trichloroeth	50.000	49.379	98.76	80-120
48 1,3-Dichloropropan	50.000	49.111	98.22	80-120
49 Tetrachloroethene	50.000	43.209	86.42	80-121
50 Chlorodibromometha	50.000	48.773	97.55	64-120
51 1,2-Dibromoethane	50.000	48.045	96.09	75-120
53 Chlorobenzene	50.000	46.001	92.00	80-120
55 1,1,1,2-Tetrachlor	50.000	43.851	87.70	69-121
54 Ethyl Benzene	50.000	50.676	101.35	80-127
56 m,p-xylene	100.00	105.02	105.02	80-125
57 o-Xylene	50.000	49.757	99.51	78-120
58 Styrene	50.000	52.646	105.29	80-123
59 Isopropyl Benzene	50.000	52.719	105.44	80-127
60 Bromoform	50.000	47.269	94.54	60-120
61 1,1,2,2-Tetrachlor	50.000	46.610	93.22	74-120
63 1,2,3-Trichloropro	50.000	47.240	94.48	72-121
65 Trans-1,4-Dichloro	50.000	49.756	99.51	65-126
66 N-Propyl Benzene	50.000	48.511	97.02	80-132
67 Bromobenzene	50.000	46.109	92.22	80-120
68 1,3,5-Trimethyl Be	50.000	52.916	105.83	80-125
69 2-Chloro Toluene	50.000	51.657	103.31	80-125
70 4-Chloro Toluene	50.000	48.341	96.68	80-127
71 T-Butyl Benzene	50.000	55.302	110.60	87-122
72 1,2,4-Trimethylben	50.000	52.914	105.83	80-126
73 S-Butyl Benzene	50.000	51.425	102.85	80-134
74 4-Isopropyl Toluen	50.000	54.106	108.21	80-131
75 1,3-Dichlorobenzen	50.000	47.464	94.93	80-120
77 1,4-Dichlorobenzen	50.000	46.691	93.38	80-120
78 N-Butyl Benzene	50.000	51.888	103.78	80-138
80 1,2-Dichlorobenzen	50.000	47.405	94.81	80-120
81 1,2-Dibromo 3-Chlo	50.000	46.354	92.71	59-120
82 1,2,4-Trichloroben	50.000	37.563	75.13*	78-130
83 Hexachloro 1,3-But	50.000	42.030	84.06	76-129
84 Naphthalene	50.000	41.473	82.95	66-120
85 1,2,3-Trichloroben	50.000	38.351	76.70	73-123

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	51.055	102.11	30-160

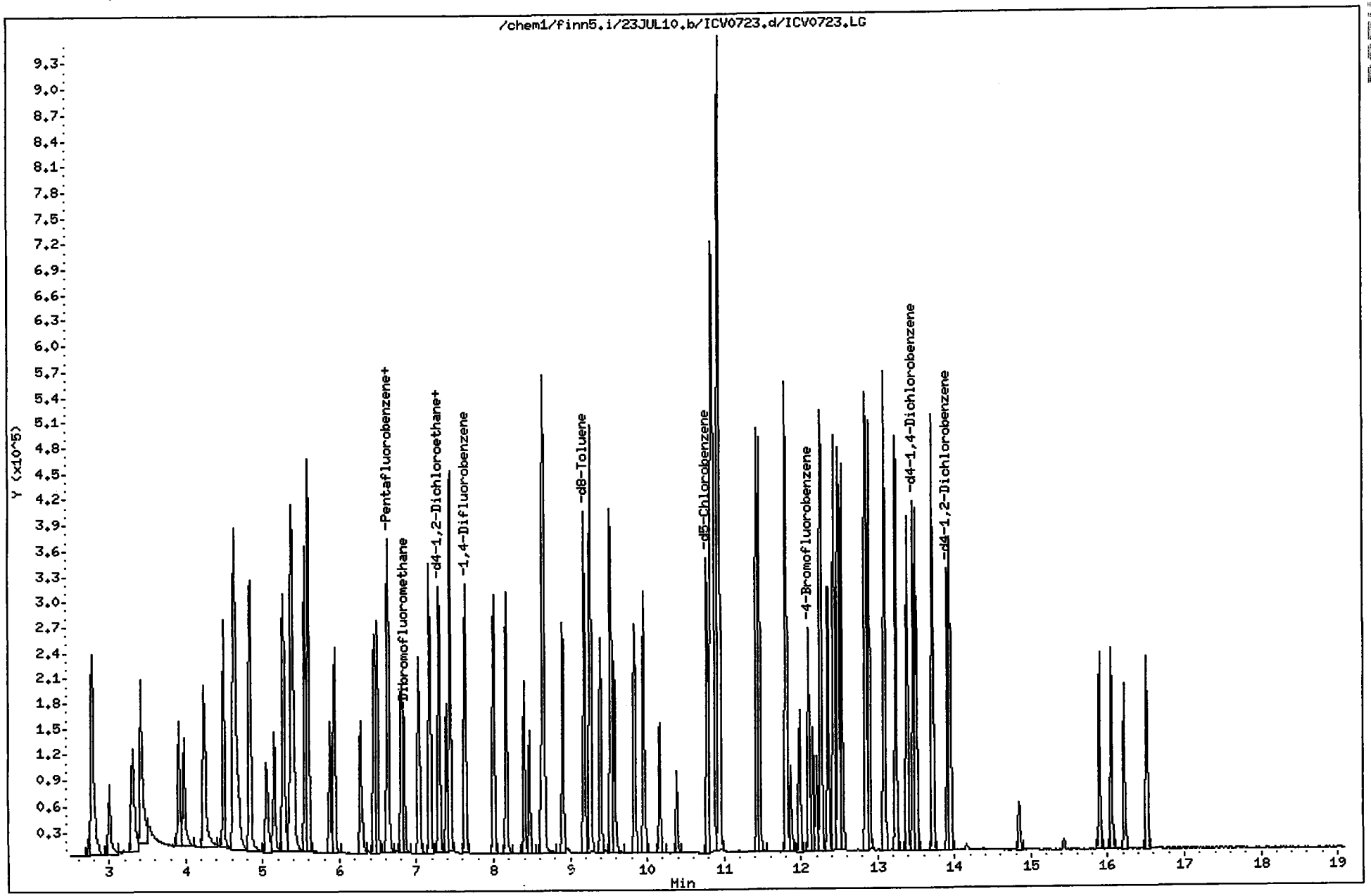
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 31 d4-1,2-Dichloroeth	50.000	50.224	100.45	75-152
$ 43 d8-Toluene	50.000	50.015	100.03	82-115
$ 62 4-Bromofluorobenze	50.000	49.316	98.63	64-120
$ 79 d4-1,2-Dichloroben	50.000	50.106	100.21	80-120

Data File: /chem1/finn5.i/23JUL10.b/ICV0723.d
Date : 23-JUL-2010 22:14
Client ID: ICV0723
Sample Info: ICV0723,5,5,0

Instrument: finn5.i

Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



RGSI-00021

Volatile Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: RG54

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Analyst Notes / Corrective Action Log

ARI Project ID: RG54 Client ID: Floyd Snider

ARI SOP:**404S**(Gas) **410S**(BTEX) **430S**(VPH) **700S**(8260C) **703S**(SIM) **706S**(524.2) **710S**(RSK-175)

Parameter(s): _____

Instrument: NT-3 NT-5 NT-7 NT-9 NT-10 PID-1 PID-2 PID-3 FID-6 FINN-5

Purge Volume (mL) 5 Curve Date: 7/22/10 Analysis Start Date: 8/4/10

pH ≤ 2.0	YES / NO / NA	Method Blank In Control?	YES / NO
BFB Tune Meets Criteria?	YES / NO / NA (Sample G)	LCS / LCSD Recovery In Control?	YES / NO
Internal Standard Meets Criteria?	YES / NO / NA	Surrogate Recovery In Control?	YES / NO
ICal acceptable?	YES / NO	CCal acceptable?	YES / NO
Q flag applied?	YES / NO / NA	Q flag applied?	YES / NO / NA
Manual Integrations for ICal?	YES / NO	Manual Integrations for Samples?	Yes / NO
Special Analysis Criteria Met?	YES / NO / NA		

Bubbles/Headspace: None SM (≤ 2mm •) PB (2-4mm) LG (> 4mm ●) Head Space

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Additional Details on Reverse: Yes / No

Analyst: _____ **Date:** 8/6/10

Reviewer: _____ **Date:** _____

Analytical Resources Inc.: Organics Instrument Log

FINN5 Serial No.: 5500-000421A

Date: 8/4/10 Analysis: 8260C Analyst: JH

GC Program: FS Column No: 821729 Column Type: MTX-624

Instrument Tune (.U or .CT.): BFB0804 EM Voltage: 1648

Calibration File: 0500804 Curve Date: 7/22/10

IS/SS	Ical/Ccal	LCS/ICV
w1648-1	w1646-2	w1646-2

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/finn5.i/04AUG10.b

	Time	Filename	LabID	ClientID	WT									
1	0950	BFB0804.d	BFB0804	BFB0804	0.00									
2	1024	0500804.d	CC0804	VSTD050	5.00	6.63	128572	7.64	187769	10.79	150933	13.48	87344	
3	1107	LCS0804.d	LCS0804	LCS0804	5.00	6.61	136905	7.63	197026	10.77	159081	13.46	90190	
4	1141	LCS0804A.d	LCS0804	LCS0804	5.00	6.63	138668	7.64	207746	10.79	172992	13.47	98470	
5	1208	MB0804.d	MB0804	MB0804	5.00	6.62	124649	7.63	186870	10.78	160706	13.46	78426	
6	1327	RG54A.d	RG54A	PSB14-0-.5-072810	5.00	6.61	124604	7.63	190632	10.77	148391	13.46	55041	
7	1351	RG54B.d	RG54B	PSB14-1.5-2.0-07281	5.00	6.63	127471	7.64	200523	10.79	177766	13.47	90298	
8	1447	RG54C.d	RG54C	PSB14-2-4-072810	5.00	6.62	134260	7.64	202723	10.78	168315	13.47	71184	
9	1511	RG54E.d	RG54E	PSB14-7-9-072810	5.00	6.63	128932	7.64	191270	10.79	129652	13.47	40291	
10	1537	RG54F.d	RG54F	PSB14-12-14-072810	5.00	6.61	134487	7.63	206649	10.77	182688	13.46	89531	
11	1604	RG54G.d	RG54G	PSB14-TB	1	6.62	133581	7.64	203833	10.78	178411	13.47	87420	
12	1630	RG54H.d	RG54H	PSB17-0-0.5-072810	5.00	6.63	140784	7.65	217805	10.79	189133	13.48	93367	
13	1657	RG54I.d	RG54I	PSB17-1.5-2-072810	5.00	6.61	136382	7.63	207857	10.77	179355	13.46	87784	
14	1723	RG54J.d	RG54J	PSB17-2-4-072810	5.00	6.61	137301	7.63	211993	10.77	184003	13.46	91153	
15	1750	RG54K.d	RG54K	PSB17-4-6-072810	5.00	6.63	151986	7.65	224135	10.79	194637	13.48	99445	
16	1816	RG54L.d	RG54L	PSB17-10-13-072810	5.00	6.62	147100	7.63	228084	10.78	198529	13.47	99405	
17	1843	RG60A.d	RG60A	PSB13-0-0.5-072910	5.00	6.63	126291	7.65	186357	10.79	146593	13.48	52760	
18	1909	RG60B.d	RG60B	PSB13-1.5-2-072910	5.00	6.63	171148	7.65	253323	10.79	212637	13.48	101533	
19	1936	RG60C.d	RG60C	PSB13-2-4-072910	5.00	6.63	152970	7.64	230211	10.79	196779	13.47	87983	
20	2002	RG60D.d	RG60D	PSB13-4-6-072910	5.00	6.63	162030	7.64	246819	10.79	207441	13.47	102315	
21	2029	RG60E.d	RG60E	PSB13-11-13-072910	5.00	6.63	148872	7.65	226474	10.79	192703	13.48	95934	
22	2055	RG60F.d	RG60F	PSB13-14.5-16.5-072	5.00	6.61	150285	7.63	227925	10.77	199596	13.46	100629	
23	2121	RG60G.d	RG60G	PSB13-TB	1	6.63	146440	7.65	219414	10.79	185559	13.48	89236	

Maint

Mainter

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem1/finn5.i/04AUG10.b

ARI Job No.: BFB0 Method: bfb8260.m Instrument: finn5.i Date: 04-AUG-2010

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0950	BFB0804.d	BFB0804	BFB0804	1	NO MANUAL INTEGRATION
1024	0500804.d	CC0804	VSTD050	1	NO MANUAL INTEGRATION
1107	LCS0804.d	LCS0804	LCS0804	1	NO MANUAL INTEGRATION
1141	LCS0804A.d	LCS0804	LCS0804	1	NO MANUAL INTEGRATION
1208	MB0804.d	MB0804	MB0804	1	NO MANUAL INTEGRATION
1327	RG54A.d	RG54A	PSB14-0-.5	1	NO MANUAL INTEGRATION
1351	RG54B.d	RG54B	PSB14-1.5-	1	NO MANUAL INTEGRATION
1447	RG54C.d	RG54C	PSB14-2-4-	1	NO MANUAL INTEGRATION
1511	RG54E.d	RG54E	PSB14-7-9-	1	NO MANUAL INTEGRATION
1537	RG54F.d	RG54F	PSB14-12-1	1	NO MANUAL INTEGRATION
1604	RG54G.d	RG54G	PSB14-TB	1	NO MANUAL INTEGRATION
1630	RG54H.d	RG54H	PSB17-0-0.	1	NO MANUAL INTEGRATION
1657	RG54I.d	RG54I	PSB17-1.5-	1	NO MANUAL INTEGRATION
1723	RG54J.d	RG54J	PSB17-2-4-	1	NO MANUAL INTEGRATION
1750	RG54K.d	RG54K	PSB17-4-6-	1	NO MANUAL INTEGRATION
1816	RG54L.d	RG54L	PSB17-10-1	1	NO MANUAL INTEGRATION
1843	RG60A.d	RG60A	PSB13-0-0.	1	NO MANUAL INTEGRATION
1909	RG60B.d	RG60B	PSB13-1.5-	1	NO MANUAL INTEGRATION
1936	RG60C.d	RG60C	PSB13-2-4-	1	NO MANUAL INTEGRATION
2002	RG60D.d	RG60D	PSB13-4-6-	1	NO MANUAL INTEGRATION
2029	RG60E.d	RG60E	PSB13-11-1	1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem1/finn5.i/04AUG10.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2121	RG60G.d	RG60G	PSB13-TB	1	NO MANUAL INTEGRATION

Q-FLAG SUMMARY FOR DATABATCH - /chem1/finn5.i/04AUG10.b

Instrument: finn5.i Date: 04-AUG-2010 Method: s8260b.m

INITIAL CAL: 23-JUL-2010

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 04-AUG-2010

Compound	%D
Bromomethane	38.9
Iodomethane	-20.7
4-Isopropyl Toluene	24.9
N-Butyl Benzene	27.8

Data File: /chem1/finn5.i/04AUG10.b/BFB0804.d

Date : 04-AUG-2010 09:50

Client ID: BFB0804

Instrument: finn5.i

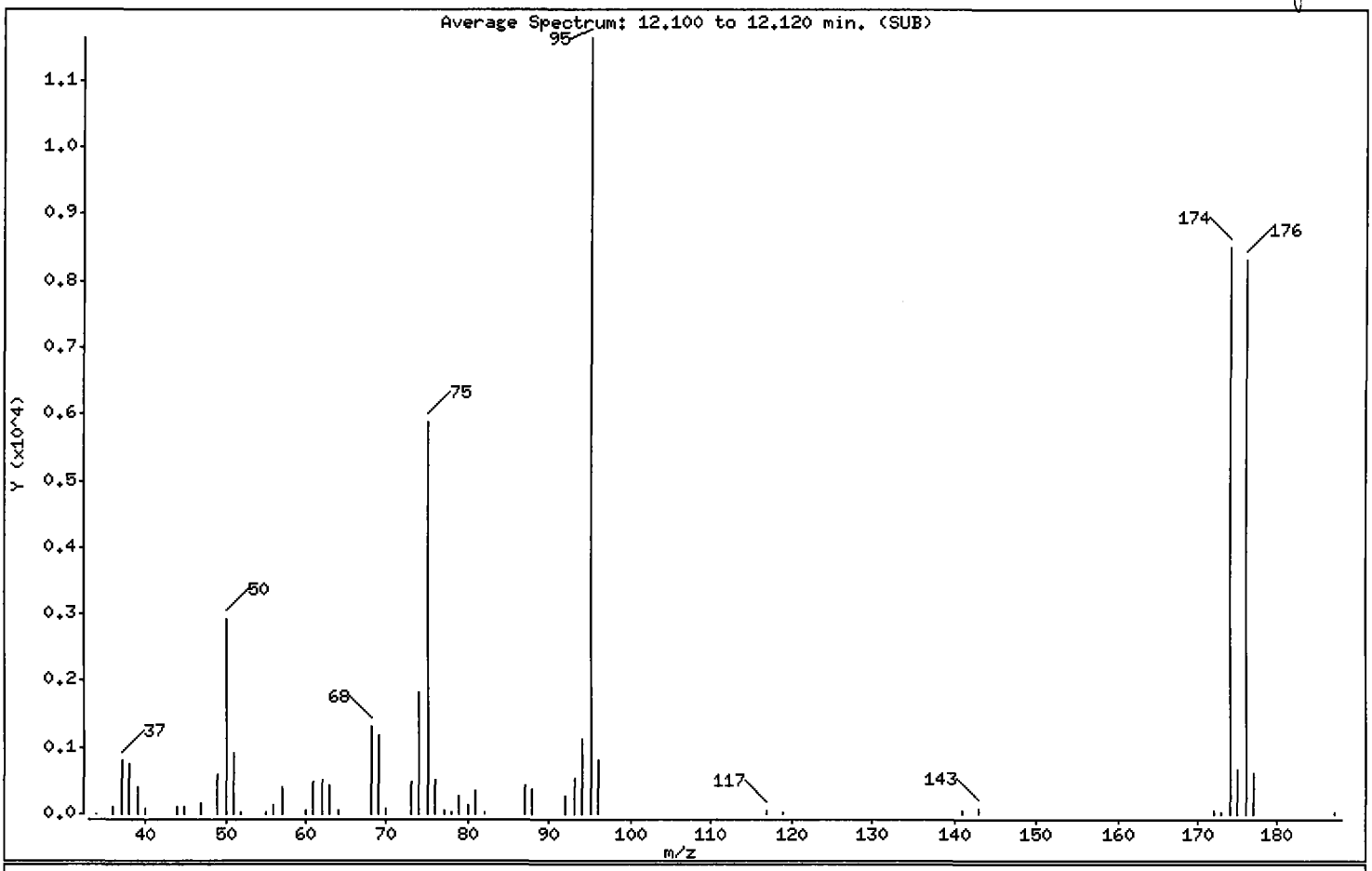
Sample Info: BFB0804,BFB0804,,1,04AUG10,,

Operator: PB

Column phase: RTX502.2

Column diameter: 0.18

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	25.18
75	30.00 - 66.00% of mass 95	50.49
96	5.00 - 9.00% of mass 95	6.83
173	Less than 2.00% of mass 174	0.22 (0.31)
174	50.00 - 101.00% of mass 95	73.09
175	4.00 - 9.00% of mass 174	5.75 (7.86)
176	93.00 - 101.00% of mass 174	71.37 (97.65)
177	5.00 - 9.00% of mass 176	5.22 (7.32)

Data File: /chem1/finn5.i/04AUG10.b/BFB0804.d

Date : 04-AUG-2010 09:50

Client ID: BFB0804

Instrument: finn5.i

Sample Info: BFB0804,BFB0804,,1,04AUG10,,

Operator: PB

Column phase: RTX502.2

Column diameter: 0.18

Data File: BFB0804.d
Spectrum: Average Spectrum: 12.100 to 12.120 min. (SUB)
Location of Maximum: 95.00
Number of points: 52

m/z	Y	m/z	Y	m/z	Y	m/z	Y
34.00	9	56.00	145	77.00	47	119.00	23
36.00	115	57.00	410	78.00	29	141.00	47
37.00	816	60.00	47	79.00	268	143.00	77
38.00	752	61.00	472	80.00	128	172.00	52
39.00	409	62.00	513	81.00	340	173.00	26
40.00	70	63.00	417	82.00	36	174.00	8509
44.00	101	64.00	66	87.00	438	175.00	669
45.00	114	68.00	1325	88.00	382	176.00	8309
47.00	148	69.00	1192	92.00	265	177.00	608
49.00	597	70.00	89	93.00	542	187.00	23
50.00	2931	73.00	483	94.00	1139		
51.00	924	74.00	1837	95.00	11642		
52.00	20	75.00	5878	96.00	795		
55.00	20	76.00	516	117.00	52		

Data File: /chem1/finn5.i/04AUG10.b/BFB0804.d

Date : 04-AUG-2010 09:50

Client ID: BFB0804

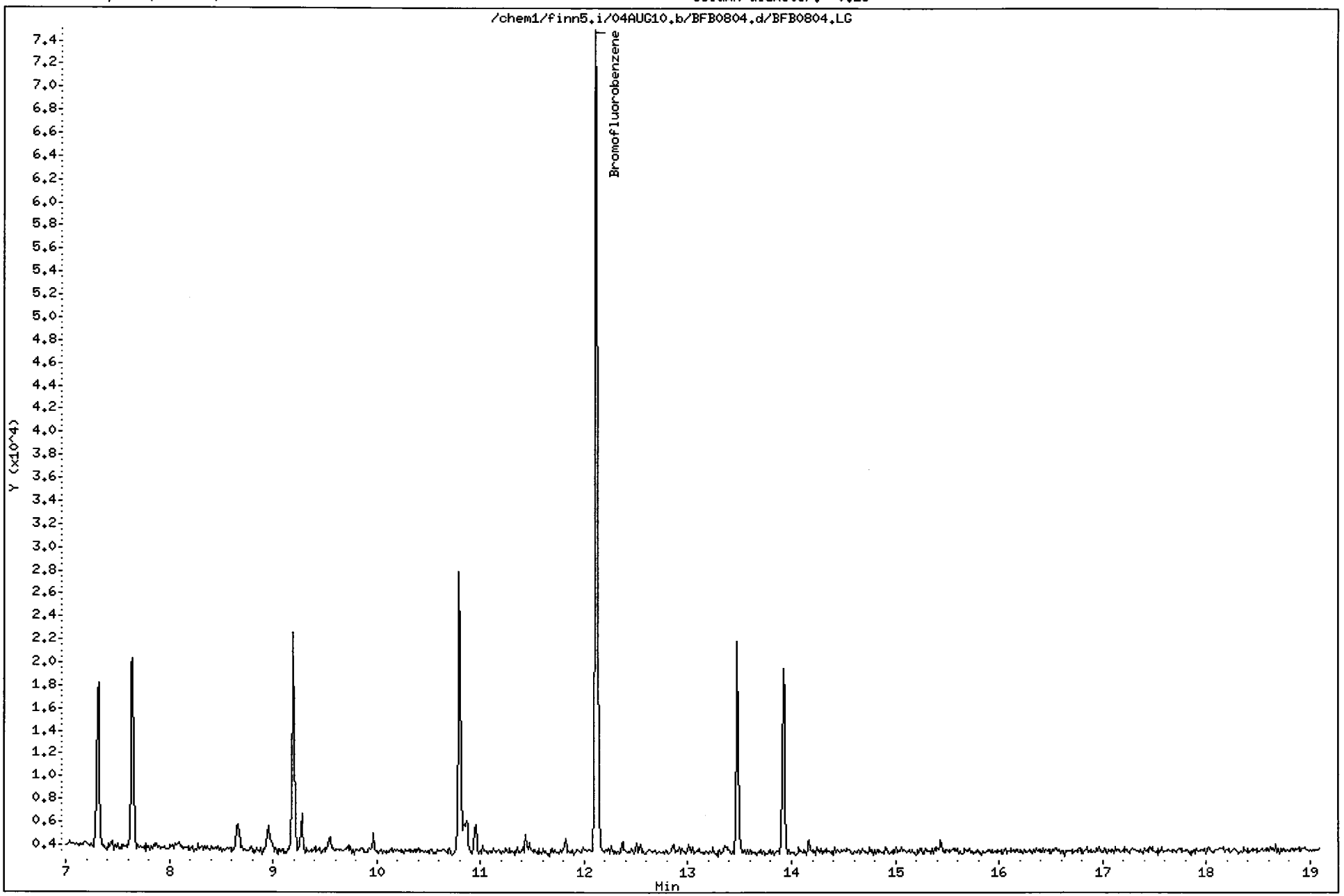
Sample Info: BFB0804,BFB0804,,1,04AUG10,,

Column phase: RTX502.2

Instrument: finn5.i

Operator: PB

Column diameter: 0.18



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/04AUG10.b/0500804.d
Lab Smp Id: CC0804 Client Smp ID: VSTD050
Inj Date : 04-AUG-2010 10:24
Operator : PB Inst ID: finn5.i
Smp Info : CC0804,5,5,0
Misc Info : 10-
Comment :
Method : /chem1/finn5.i/04AUG10.b/s8260b.m
Meth Date : 04-Aug-2010 11:22 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

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	3.015	3.015	(0.455)	82091	50.0000	49.240
2 Chloromethane	50	3.316	3.316	(0.500)	193707	50.0000	43.184
3 Vinyl Chloride	62	3.427	3.427	(0.517)	184083	50.0000	51.896
4 Bromomethane	94	3.909	3.909	(0.589)	133773	50.0000	69.443
5 Chloroethane	64	3.990	3.990	(0.602)	125419	50.0000	54.142
6 Trichlorofluoromethane	101	4.241	4.241	(0.639)	154667	50.0000	45.115
7 Acrolein	56	4.633	4.633	(0.698)	106377	250.000	248.75
8 112Trichloro122Trifluoroethane	101	4.643	4.643	(0.700)	142736	50.0000	53.181
9 Acetone	43	4.683	4.683	(0.706)	172562	250.000	239.83
10 1,1-Dichloroethene	96	4.844	4.844	(0.730)	123632	50.0000	50.762
11 Bromoethane	108	5.065	5.065	(0.764)	82083	50.0000	45.510
12 Iodomethane	142	5.166	5.166	(0.779)	114187	50.0000	39.653
13 Methylene Chloride	84	5.276	5.276	(0.795)	129753	50.0000	47.314
14 Acrylonitrile	53	5.357	5.357	(0.808)	35871	50.0000	56.465(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.397	5.397	(0.814)	168900	50.0000	45.096(Q)
	15 Carbon Disulfide	76	5.377	5.377	(0.811)	442813	50.0000	58.622
	17 Trans-1,2-Dichloroethene	96	5.558	5.558	(0.838)	108316	50.0000	52.185
	18 Vinyl Acetate	43	5.879	5.879	(0.886)	202916	50.0000	55.818
	19 1,1-Dichloroethane	63	5.940	5.940	(0.895)	200953	50.0000	52.628
	20 2-Butanone	43	6.281	6.281	(0.947)	211587	250.000	261.34
	21 2,2-Dichloropropane	77	6.462	6.462	(0.974)	106788	50.0000	45.704
	22 Cis-1,2-Dichloroethene	96	6.502	6.502	(0.980)	95798	50.0000	52.366
*	23 Pentafluorobenzene	168	6.633	6.633	(1.000)	128572	50.0000	
	24 Chloroform	83	6.643	6.643	(1.002)	156437	50.0000	50.438
	26 Bromochloromethane	128	6.814	6.814	(1.027)	40293	50.0000	46.392
$	25 Dibromofluoromethane	111	6.844	6.844	(1.032)	74683	50.0000	48.737(Q)
	27 1,1,1-Trichloroethane	97	7.035	7.035	(1.061)	112405	50.0000	46.596
	29 1,1-Dichloropropene	75	7.176	7.176	(0.939)	129939	50.0000	50.960
	30 Carbon Tetrachloride	117	7.296	7.296	(0.955)	105344	50.0000	47.510
$	31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.101)	77329	50.0000	46.118
	32 1,2-Dichloroethane	62	7.397	7.397	(0.968)	113079	50.0000	50.516
	33 Benzene	78	7.447	7.447	(0.975)	323687	50.0000	52.497
*	34 1,4-Difluorobenzene	114	7.638	7.638	(1.000)	187769	50.0000	
	35 Trichloroethene	95	8.010	8.010	(1.049)	89912	50.0000	49.772
	36 1,2-Dichloropropane	63	8.171	8.171	(1.070)	95175	50.0000	48.967
	37 Bromodichloromethane	83	8.412	8.412	(1.101)	103457	50.0000	49.786
	39 Dibromomethane	93	8.482	8.482	(1.111)	48335	50.0000	50.098
	40 2-Chloroethyl Vinyl Ether	63	8.623	8.623	(1.129)	37314	50.0000	54.820
	41 4-Methyl-2-Pentanone	58	8.663	8.663	(1.134)	119924	250.000	241.60
	42 Cis 1,3-dichloropropene	75	8.914	8.914	(1.167)	119433	50.0000	52.641
$	43 d8-Toluene	98	9.186	9.186	(1.203)	212230	50.0000	51.439
	44 Toluene	92	9.276	9.276	(1.214)	181237	50.0000	49.541
	45 Trans 1,3-Dichloropropene	75	9.407	9.407	(1.232)	96841	50.0000	50.780
	46 2-Hexanone	43	9.537	9.537	(0.884)	292448	250.000	237.03
	47 1,1,2-Trichloroethane	97	9.588	9.588	(1.255)	58328	50.0000	51.215
	48 1,3-Dichloropropane	76	9.849	9.849	(0.912)	111514	50.0000	52.494
	49 Tetrachloroethene	166	9.960	9.960	(0.923)	79949	50.0000	47.678
	50 Chlorodibromomethane	129	10.171	10.171	(0.942)	71566	50.0000	50.079
	51 1,2-Dibromoethane	107	10.392	10.392	(1.361)	60193	50.0000	49.343
*	52 d5-Chlorobenzene	117	10.794	10.794	(1.000)	150933	50.0000	
	53 Chlorobenzene	112	10.834	10.834	(1.004)	178295	50.0000	50.364
	54 Ethyl Benzene	91	10.864	10.864	(1.007)	330658	50.0000	55.233
	55 1,1,1,2-Tetrachloroethane	131	10.864	10.864	(1.007)	60264	50.0000	44.479
	56 m,p-xylene	106	10.944	10.944	(1.014)	260742	100.000	119.16
	57 o-Xylene	106	11.437	11.437	(1.060)	125086	50.0000	55.005
	58 Styrene	104	11.467	11.467	(1.062)	208022	50.0000	59.161
	59 Isopropyl Benzene	105	11.819	11.819	(0.877)	328264	50.0000	55.831
	60 Bromoform	173	11.879	11.879	(0.881)	43578	50.0000	46.098
	61 1,1,2,2-Tetrachloroethane	83	12.000	12.000	(0.890)	79260	50.0000	46.661
$	62 4-Bromofluorobenzene	95	12.110	12.110	(1.122)	88402	50.0000	50.046
	63 1,2,3-Trichloropropane	110	12.160	12.160	(0.902)	15839	50.0000	47.068

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.211	12.211	(0.906)	30116	50.0000	57.686
	66 N-Propyl Benzene	91	12.271	12.271	(0.910)	400826	50.0000	52.809
	67 Bromobenzene	156	12.361	12.361	(0.917)	80691	50.0000	49.230
	68 1,3,5-Trimethyl Benzene	105	12.442	12.442	(0.923)	282145	50.0000	59.116
	69 2-Chloro Toluene	91	12.502	12.502	(0.928)	263744	50.0000	52.884
	70 4-Chloro Toluene	91	12.542	12.542	(0.931)	276478	50.0000	57.834
	71 T-Butyl Benzene	119	12.854	12.854	(0.954)	243575	50.0000	59.654
	72 1,2,4-Trimethylbenzene	105	12.904	12.904	(0.957)	280454	50.0000	59.691
	73 S-Butyl Benzene	105	13.095	13.095	(0.972)	386075	50.0000	57.474
	74 4-Isopropyl Toluene	119	13.246	13.246	(0.983)	287893	50.0000	62.460
	75 1,3-Dichlorobenzene	146	13.397	13.397	(0.994)	160872	50.0000	57.448
*	76 d4-1,4-Dichlorobenzene	152	13.477	13.477	(1.000)	87344	50.0000	
	77 1,4-Dichlorobenzene	146	13.507	13.507	(1.002)	155523	50.0000	55.502
	78 N-Butyl Benzene	91	13.718	13.718	(1.018)	318089	50.0000	63.908
$	79 d4-1,2-Dichlorobenzene	152	13.919	13.919	(1.033)	78196	50.0000	49.219
	80 1,2-Dichlorobenzene	146	13.949	13.949	(1.035)	144556	50.0000	54.316
	81 1,2-Dibromo 3-Chloropropane	75	14.854	14.854	(1.102)	13019	50.0000	44.295
	82 1,2,4-Trichlorobenzene	180	15.899	15.899	(1.180)	86208	50.0000	53.230
	83 Hexachloro 1,3-Butadiene	225	16.050	16.050	(1.191)	57253	50.0000	52.488
	84 Naphthalene	128	16.231	16.231	(1.204)	142833	50.0000	48.624
	85 1,2,3-Trichlorobenzene	180	16.522	16.522	(1.226)	76649	50.0000	49.503

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 0500804.d
Lab Smp Id: CC0804
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-

Calibration Date: 04-AUG-2010
Calibration Time: 10:24
Client Smp ID: VSTD050
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
23 Pentafluorobenzen	131115	65558	262230	128572	-1.94
34 1,4-Difluorobenze	191559	95780	383118	187769	-1.98
52 d5-Chlorobenzene	161199	80600	322398	150933	-6.37
76 d4-1,4-Dichlorobe	88279	44140	176558	87344	-1.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.62	6.12	7.12	6.63	0.15
34 1,4-Difluorobenze	7.63	7.13	8.13	7.64	0.13
52 d5-Chlorobenzene	10.78	10.28	11.28	10.79	0.09
76 d4-1,4-Dichlorobe	13.47	12.97	13.97	13.48	0.07

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.

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: finn5.i
Lab File ID: 0500804.d
Analysis Type: SOIL
Lab Sample ID: CC0804
Method: /chem1/finn5.i/04AUG10.b/s8260b.m

Injection Date: 04-AUG-2010 10:24
Init. Cal. Date(s): 23-JUL-2010 23-JUL-2010
Init. Cal. Times: 17:18 20:28
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 Dichlorodifluoromethane	0.64835	0.63849	0.010	-1.52095	20.00000	Averaged	
2 Chloromethane	1.74440	1.50661	0.100	-13.63191	20.00000	Averaged	
3 Vinyl Chloride	1.37944	1.43175	0.010	3.79205	20.00000	Averaged	
4 Bromomethane	0.74914	1.04046	0.010	38.88696	20.00000	Averaged	<- n/q
5 Chloroethane	0.90084	0.97548	0.010	8.28469	20.00000	Averaged	
6 Trichlorofluoromethane	1.33321	1.20296	0.010	-9.76946	20.00000	Averaged	
7 Acrolein	0.16631	0.16548	0.010	-0.49947	20.00000	Averaged	
8 112Trichloro122Trifluoroeth	1.04376	1.11017	0.010	6.36246	20.00000	Averaged	
9 Acetone	0.27982	0.26843	0.010	-4.06903	20.00000	Averaged	
10 1,1-Dichloroethene	0.94715	0.96158	0.010	1.52371	20.00000	Averaged	
11 Bromoethane	0.70140	0.63843	0.010	-8.97886	20.00000	Averaged	
12 Iodomethane	1.11986	0.88812	0.010	-20.69330	20.00000	Averaged	<- n/q
13 Methylene Chloride	1.06648	1.00919	0.010	-5.37229	20.00000	Averaged	
14 Acrylonitrile	0.24705	0.27900	0.010	12.93066	20.00000	Averaged	
16 Methyl tert-Butyl Ether	1.45653	1.31366	0.010	-9.80876	20.00000	Averaged	
15 Carbon Disulfide	2.93755	3.44408	0.010	17.24333	20.00000	Averaged	
17 Trans-1,2-Dichloroethene	0.80717	0.84245	0.010	4.37092	20.00000	Averaged	
18 Vinyl Acetate	1.41371	1.57823	0.010	11.63693	20.00000	Averaged	
19 1,1-Dichloroethane	1.48492	1.56297	0.100	5.25567	20.00000	Averaged	
20 2-Butanone	0.31485	0.32913	0.010	4.53684	20.00000	Averaged	
21 2,2-Dichloropropane	0.90863	0.83057	0.010	-8.59113	20.00000	Averaged	
22 Cis-1,2-Dichloroethene	0.71142	0.74509	0.010	4.73295	20.00000	Averaged	
24 Chloroform	1.20617	1.21673	0.010	0.87553	20.00000	Averaged	
26 Bromochloromethane	0.33777	0.31339	0.010	-7.21639	20.00000	Averaged	
$ 25 Dibromofluoromethane	0.59593	0.58087	0.010	-2.52650	20.00000	Averaged	
27 1,1,1-Trichloroethane	0.93813	0.87426	0.010	-6.80814	20.00000	Averaged	
29 1,1-Dichloropropene	0.67899	0.69202	0.010	1.91916	20.00000	Averaged	
30 Carbon Tetrachloride	0.59044	0.56103	0.010	-4.98057	20.00000	Averaged	
$ 31 d4-1,2-Dichloroethane	0.65208	0.60145	0.010	-7.76451	20.00000	Averaged	
32 1,2-Dichloroethane	0.59607	0.60222	0.010	1.03301	20.00000	Averaged	
33 Benzene	1.64186	1.72385	0.010	4.99363	20.00000	Averaged	
35 Trichloroethene	0.48104	0.47885	0.010	-0.45691	20.00000	Averaged	
36 1,2-Dichloropropane	0.51756	0.50687	0.010	-2.06543	20.00000	Averaged	
37 Bromodichloromethane	0.55335	0.55098	0.010	-0.42873	20.00000	Averaged	
39 Dibromomethane	0.25692	0.25742	0.010	0.19547	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: finn5.i Injection Date: 04-AUG-2010 10:24
Lab File ID: 0500804.d Init. Cal. Date(s): 23-JUL-2010 23-JUL-2010
Analysis Type: SOIL Init. Cal. Times: 17:18 20:28
Lab Sample ID: CC0804 Quant Type: ISTD
Method: /chem1/finn5.i/04AUG10.b/s8260b.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
40 2-Chloroethyl Vinyl Ether	0.18125	0.19873	0.001	9.64043	20.00000	Averaged	
41 4-Methyl-2-Pentanone	0.13218	0.12774	0.010	-3.35884	20.00000	Averaged	
42 Cis 1,3-dichloropropene	0.60415	0.63606	0.010	5.28205	20.00000	Averaged	
$ 43 d8-Toluene	1.09864	1.13027	0.010	2.87886	20.00000	Averaged	
44 Toluene	0.97414	0.96521	0.010	-0.91704	20.00000	Averaged	
45 Trans 1,3-Dichloropropene	0.50782	0.51574	0.010	1.56043	20.00000	Averaged	
46 2-Hexanone	0.40872	0.38752	0.010	-5.18755	20.00000	Averaged	
47 1,1,2-Trichloroethane	0.30327	0.31064	0.010	2.42980	20.00000	Averaged	
48 1,3-Dichloropropane	0.70372	0.73883	0.010	4.98899	20.00000	Averaged	
49 Tetrachloroethene	0.55550	0.52970	0.010	-4.64423	20.00000	Averaged	
50 Chlorodibromomethane	0.47341	0.47416	0.010	0.15842	20.00000	Averaged	
51 1,2-Dibromoethane	0.32484	0.32057	0.010	-1.31325	20.00000	Averaged	
53 Chlorobenzene	1.17275	1.18128	0.300	0.72798	20.00000	Averaged	
54 Ethyl Benzene	1.98319	2.19076	0.010	10.46623	20.00000	Averaged	
55 1,1,1,2-Tetrachloroethane	0.44884	0.39928	0.010	-11.04218	20.00000	Averaged	
56 m,p-xylene	0.72486	0.86377	0.010	19.16346	20.00000	Averaged	
57 o-Xylene	0.75335	0.82876	0.010	10.00927	20.00000	Averaged	
58 Styrene	1.16482	1.37824	0.010	18.32186	20.00000	Averaged	
59 Isopropyl Benzene	3.36576	3.75827	0.010	11.66213	20.00000	Averaged	
60 Bromoform	0.54116	0.49892	0.100	-7.80411	20.00000	Averaged	
61 1,1,2,2-Tetrachloroethane	0.97237	0.90745	0.300	-6.67702	20.00000	Averaged	
$ 62 4-Bromofluorobenzene	0.58517	0.58571	0.010	0.09214	20.00000	Averaged	
63 1,2,3-Trichloropropane	0.19264	0.18134	0.010	-5.86467	20.00000	Averaged	
65 Trans-1,4-Dichloro 2-Butene	0.29886	0.34480	0.010	15.37121	20.00000	Averaged	
66 N-Propyl Benzene	4.34491	4.58903	0.010	5.61846	20.00000	Averaged	
67 Bromobenzene	0.93828	0.92383	0.010	-1.53984	20.00000	Averaged	
68 1,3,5-Trimethyl Benzene	2.73214	3.23026	0.010	18.23187	20.00000	Averaged	
69 2-Chloro Toluene	2.85492	3.01959	0.010	5.76806	20.00000	Averaged	
70 4-Chloro Toluene	2.73658	3.16538	0.010	15.66897	20.00000	Averaged	
71 T-Butyl Benzene	2.33736	2.78867	0.010	19.30838	20.00000	Averaged	
72 1,2,4-Trimethylbenzene	2.68961	3.21090	0.010	19.38155	20.00000	Averaged	
73 S-Butyl Benzene	3.84536	4.42014	0.010	14.94749	20.00000	Averaged	
74 4-Isopropyl Toluene	2.63853	3.29606	0.010	24.92033	20.00000	Averaged	<- ok
75 1,3-Dichlorobenzene	1.60301	1.84182	0.010	14.89715	20.00000	Averaged	
77 1,4-Dichlorobenzene	1.60408	1.78058	0.010	11.00302	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: finn5.i Injection Date: 04-AUG-2010 10:24
Lab File ID: 0500804.d Init. Cal. Date(s): 23-JUL-2010 23-JUL-2010
Analysis Type: SOIL Init. Cal. Times: 17:18 20:28
Lab Sample ID: CC0804 Quant Type: ISTD
Method: /chem1/finn5.i/04AUG10.b/s8260b.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
78 N-Butyl Benzene	2.84923	3.64177	0.010	27.81616	20.00000	Averaged	<-
$ 79 d4-1,2-Dichlorobenzene	0.90947	0.89526	0.010	-1.56159	20.00000	Averaged	
80 1,2-Dichlorobenzene	1.52349	1.65502	0.010	8.63309	20.00000	Averaged	
81 1,2-Dibromo 3-Chloropropane	0.16826	0.14906	0.010	-11.41062	20.00000	Averaged	
82 1,2,4-Trichlorobenzene	0.92710	0.98699	0.010	6.46032	20.00000	Averaged	
83 Hexachloro 1,3-Butadiene	0.62441	0.65548	0.010	4.97636	20.00000	Averaged	
84 Naphthalene	1.68157	1.63529	0.010	-2.75186	20.00000	Averaged	
85 1,2,3-Trichlorobenzene	0.88636	0.87755	0.010	-0.99379	20.00000	Averaged	

Data File: /chem1/finn5.i/04AUG10.b/0500804.d

Date : 04-AUG-2010 10:24

Client ID: VSTD050

Sample Info: CC0804,5,5,0

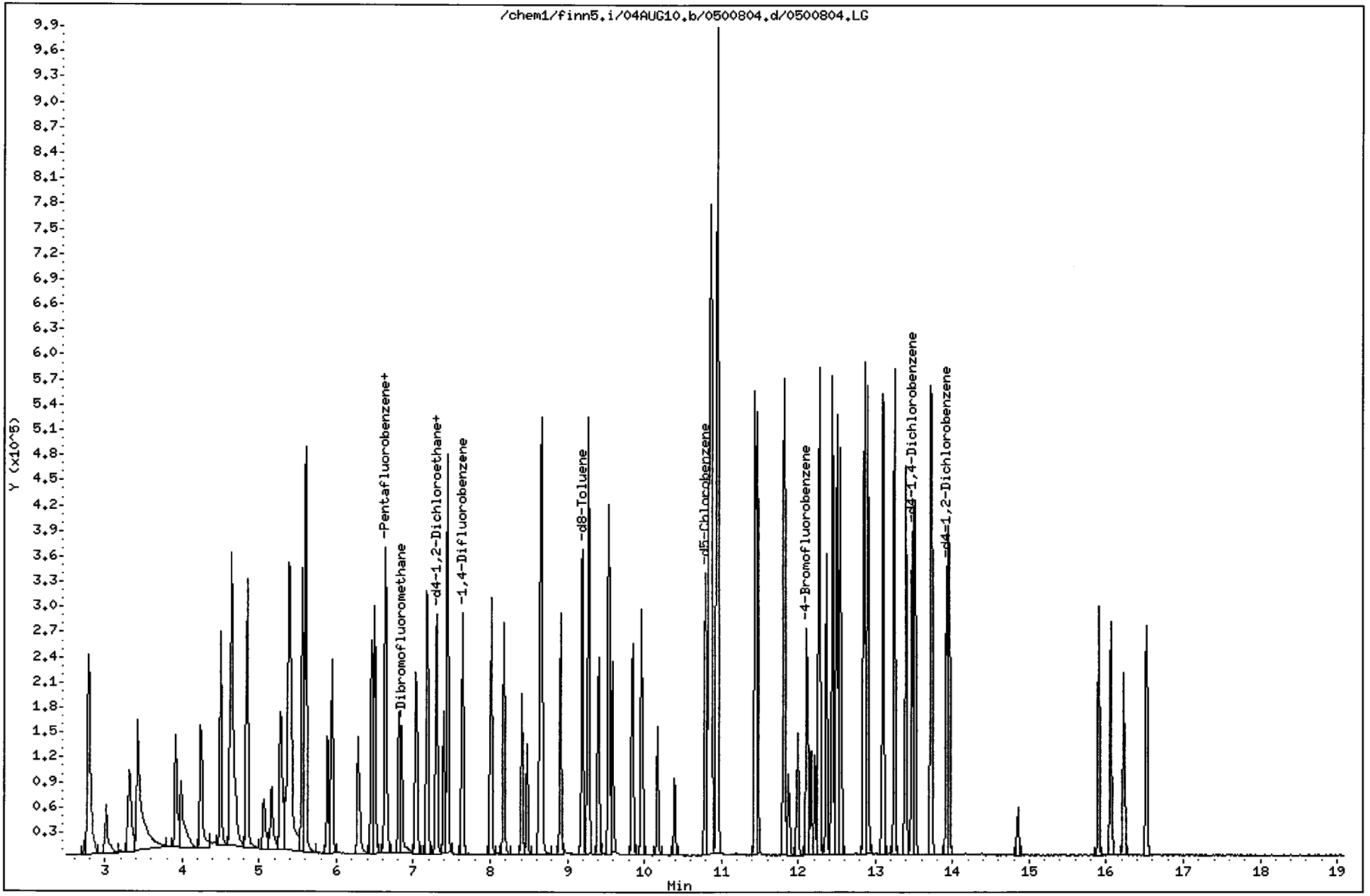
Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB

Column diameter: 0.18

RGSL: 00319



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/04AUG10.b/LCS0804.d
Lab Smp Id: LCS0804 Client Smp ID: LCS0804
Inj Date : 04-AUG-2010 11:07
Operator : PB Inst ID: finn5.i
Smp Info : LCS0804,5,5,0
Misc Info : 10-18202
Comment :
Method : /chem1/finn5.i/04AUG10.b/s8260b.m
Meth Date : 05-Aug-2010 16:25 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

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	2.995	3.015	(0.453)	86280	48.6018	48.602
2 Chloromethane	50	3.296	3.316	(0.498)	202594	42.4161	42.416
3 Vinyl Chloride	62	3.417	3.427	(0.517)	184421	48.8268	48.827
4 Bromomethane	94	3.899	3.909	(0.590)	134304	65.4753	65.475
5 Chloroethane	64	3.970	3.990	(0.600)	124577	50.5055	50.506
6 Trichlorofluoromethane	101	4.231	4.241	(0.640)	188839	51.7301	51.730
7 Acrolein	56	4.613	4.633	(0.698)	111075	243.927	243.93
8 112Trichloro122Trifluoroethane	101	4.633	4.643	(0.701)	148373	51.9165	51.916
9 Acetone	43	4.673	4.683	(0.707)	184988	241.448	241.45
10 1,1-Dichloroethene	96	4.834	4.844	(0.731)	135974	52.4311	52.431
11 Bromoethane	108	5.045	5.065	(0.763)	103153	53.7111	53.711
12 Iodomethane	142	5.146	5.166	(0.778)	188380	61.4361	61.436
13 Methylene Chloride	84	5.266	5.276	(0.796)	131861	45.1558	45.156
14 Acrylonitrile	53	5.347	5.357	(0.808)	37851	55.9552	55.955(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.387	5.397	(0.815)	178295	44.7065	44.706 (Q)
	15 Carbon Disulfide	76	5.367	5.377	(0.812)	456326	56.7337	56.734
	17 Trans-1,2-Dichloroethene	96	5.548	5.558	(0.839)	116488	52.7066	52.706
	18 Vinyl Acetate	43	5.869	5.879	(0.888)	208762	53.9313	53.931
	19 1,1-Dichloroethane	63	5.929	5.940	(0.897)	209825	51.6065	51.606
	20 2-Butanone	43	6.271	6.281	(0.948)	218722	253.711	253.71
	21 2,2-Dichloropropane	77	6.452	6.462	(0.976)	112531	45.2309	45.231
	22 Cis-1,2-Dichloroethene	96	6.482	6.502	(0.980)	101372	52.0407	52.041
*	23 Pentafluorobenzene	168	6.613	6.633	(1.000)	136905	50.0000	
	24 Chloroform	83	6.633	6.643	(1.003)	164327	49.7567	49.757
	26 Bromochloromethane	128	6.794	6.814	(1.027)	47181	51.0152	51.015
$	25 Dibromofluoromethane	111	6.834	6.844	(1.033)	77291	47.3681	47.368 (Q)
	27 1,1,1-Trichloroethane	97	7.025	7.035	(1.062)	119466	46.5084	46.508
	29 1,1-Dichloropropene	75	7.166	7.176	(0.939)	136292	50.9397	50.940
	30 Carbon Tetrachloride	117	7.286	7.296	(0.955)	109310	46.9821	46.982
$	31 d4-1,2-Dichloroethane	65	7.296	7.306	(1.103)	80376	45.0172	45.017
	32 1,2-Dichloroethane	62	7.387	7.397	(0.968)	116054	49.4097	49.410
	33 Benzene	78	7.437	7.447	(0.975)	340102	52.5677	52.568
*	34 1,4-Difluorobenzene	114	7.628	7.638	(1.000)	197026	50.0000	
	35 Trichloroethene	95	8.000	8.010	(1.049)	94230	49.7109	49.711
	36 1,2-Dichloropropane	63	8.161	8.171	(1.070)	99611	48.8419	48.842
	37 Bromodichloromethane	83	8.392	8.412	(1.100)	107456	49.2803	49.280
	39 Dibromomethane	93	8.462	8.482	(1.109)	50444	49.8265	49.826
	40 2-Chloroethyl Vinyl Ether	63	8.613	8.623	(1.129)	38651	54.1156	54.116
	41 4-Methyl-2-Pentanone	58	8.643	8.663	(1.133)	124728	239.475	239.48
	42 Cis 1,3-dichloropropene	75	8.894	8.914	(1.166)	125709	52.8042	52.804
$	43 d8-Toluene	98	9.176	9.186	(1.203)	224003	51.7423	51.742
	44 Toluene	92	9.256	9.276	(1.213)	189293	49.3127	49.313
	45 Trans 1,3-Dichloropropene	75	9.387	9.407	(1.231)	99387	49.6668	49.667
	46 2-Hexanone	43	9.527	9.537	(0.884)	295080	226.915	226.91
	47 1,1,2-Trichloroethane	97	9.568	9.588	(1.254)	60719	50.8095	50.810
	48 1,3-Dichloropropane	76	9.829	9.849	(0.912)	115684	51.6681	51.668
	49 Tetrachloroethene	166	9.949	9.960	(0.924)	85090	48.1442	48.144
	50 Chlorodibromomethane	129	10.161	10.171	(0.943)	73641	48.8916	48.892
	51 1,2-Dibromoethane	107	10.382	10.392	(1.361)	61270	47.8660	47.866
*	52 d5-Chlorobenzene	117	10.774	10.794	(1.000)	159081	50.0000	
	53 Chlorobenzene	112	10.824	10.834	(1.005)	186431	49.9650	49.965
	54 Ethyl Benzene	91	10.854	10.864	(1.007)	344895	54.6605	54.660
	55 1,1,1,2-Tetrachloroethane	131	10.844	10.864	(1.007)	62679	43.8917	43.892
	56 m,p-xylene	106	10.934	10.944	(1.015)	269388	116.809	116.81
	57 o-Xylene	106	11.427	11.437	(1.061)	129969	54.2243	54.224
	58 Styrene	104	11.447	11.467	(1.062)	214141	57.7819	57.782
	59 Isopropyl Benzene	105	11.799	11.819	(0.877)	344636	56.7662	56.766
	60 Bromoform	173	11.859	11.879	(0.881)	44984	46.0837	46.084
	61 1,1,2,2-Tetrachloroethane	83	11.980	12.000	(0.890)	81141	46.2614	46.261
$	62 4-Bromofluorobenzene	95	12.100	12.110	(1.123)	91902	49.3623	49.362
	63 1,2,3-Trichloropropane	110	12.150	12.160	(0.903)	16345	47.0389	47.039

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.201	12.211	(0.907)	29468	54.6632	54.663
	66 N-Propyl Benzene	91	12.261	12.271	(0.911)	423723	54.0646	54.064
	67 Bromobenzene	156	12.341	12.361	(0.917)	85826	50.7105	50.710
	68 1,3,5-Trimethyl Benzene	105	12.432	12.442	(0.924)	291300	59.1084	59.108
	69 2-Chloro Toluene	91	12.492	12.502	(0.928)	287375	55.8042	55.804
	70 4-Chloro Toluene	91	12.532	12.542	(0.931)	282129	57.1545	57.154
	71 T-Butyl Benzene	119	12.844	12.854	(0.954)	253777	60.1918	60.192
	72 1,2,4-Trimethylbenzene	105	12.884	12.904	(0.957)	292965	60.3862	60.386
	73 S-Butyl Benzene	105	13.085	13.095	(0.972)	395081	56.9588	56.959
	74 4-Isopropyl Toluene	119	13.236	13.246	(0.984)	305072	64.0990	64.099
	75 1,3-Dichlorobenzene	146	13.377	13.397	(0.994)	169989	58.7889	58.789
*	76 d4-1,4-Dichlorobenzene	152	13.457	13.477	(1.000)	90190	50.0000	
	77 1,4-Dichlorobenzene	146	13.497	13.507	(1.003)	167708	57.9614	57.961
	78 N-Butyl Benzene	91	13.708	13.718	(1.019)	344540	67.0385	67.038
$	79 d4-1,2-Dichlorobenzene	152	13.909	13.919	(1.034)	81295	49.5552	49.555
	80 1,2-Dichlorobenzene	146	13.939	13.949	(1.036)	150614	54.8071	54.807
	81 1,2-Dibromo 3-Chloropropane	75	14.844	14.854	(1.103)	13961	45.9998	46.000
	82 1,2,4-Trichlorobenzene	180	15.889	15.899	(1.181)	96796	57.8819	57.882
	83 Hexachloro 1,3-Butadiene	225	16.040	16.050	(1.192)	61405	54.5185	54.518
	84 Naphthalene	128	16.211	16.231	(1.205)	156723	51.6690	51.669
	85 1,2,3-Trichlorobenzene	180	16.502	16.522	(1.226)	83899	52.4758	52.476

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: LCS0804.d
Lab Smp Id: LCS0804
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18202

Calibration Date: 04-AUG-2010
Calibration Time: 10:24
Client Smp ID: LCS0804
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
23 Pentafluorobenzen	131115	65558	262230	136905	4.42
34 1,4-Difluorobenze	191559	95780	383118	197026	2.85
52 d5-Chlorobenzene	161199	80600	322398	159081	-1.31
76 d4-1,4-Dichlorobe	88279	44140	176558	90190	2.16

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.63	6.13	7.13	6.61	-0.30
34 1,4-Difluorobenze	7.64	7.14	8.14	7.63	-0.13
52 d5-Chlorobenzene	10.79	10.29	11.29	10.77	-0.19
76 d4-1,4-Dichlorobe	13.48	12.98	13.98	13.46	-0.15

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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Client SDG: 04AUG10
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: LCS0804 Client Smp ID: LCS0804
Level: LOW Operator: PB
Data Type: MS DATA SampleType: LCS
SpikeList File: all.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18202

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	48.602	97.20	53-148
2	Chloromethane	50.000	42.416	84.83	64-125
3	Vinyl Chloride	50.000	48.827	97.65	63-137
4	Bromomethane	50.000	65.475	130.95	57-136
5	Chloroethane	50.000	50.506	101.01	64-131
6	Trichlorofluoromet	50.000	51.730	103.46	69-132
7	Acrolein	250.00	243.93	97.57	54-137
8	112Trichloro122Tri	50.000	51.916	103.83	74-130
9	Acetone	250.00	241.45	96.58	60-131
10	1,1-Dichloroethene	50.000	52.431	104.86	75-126
11	Bromoethane	50.000	53.711	107.42	76-126
12	Iodomethane	50.000	61.436	122.87	65-139
13	Methylene Chloride	50.000	45.156	90.31	70-123
15	Carbon Disulfide	50.000	56.734	113.47	71-129
14	Acrylonitrile	50.000	55.955	111.91	67-125
16	Methyl tert-Butyl	50.000	44.706	89.41	70-120
17	Trans-1,2-Dichloro	50.000	52.706	105.41	80-120
18	Vinyl Acetate	50.000	53.931	107.86	60-136
19	1,1-Dichloroethane	50.000	51.606	103.21	80-120
20	2-Butanone	250.00	253.71	101.48	70-120
21	2,2-Dichloropropan	50.000	45.231	90.46	74-123
22	Cis-1,2-Dichloroet	50.000	52.041	104.08	80-120
24	Chloroform	50.000	49.757	99.51	80-120
26	Bromochloromethane	50.000	51.015	102.03	80-120
27	1,1,1-Trichloroeth	50.000	46.508	93.02	77-121
29	1,1-Dichloropropen	50.000	50.940	101.88	80-120
30	Carbon Tetrachlori	50.000	46.982	93.96	77-122
32	1,2-Dichloroethane	50.000	49.410	98.82	76-120
33	Benzene	50.000	52.568	105.14	80-120
35	Trichloroethene	50.000	49.711	99.42	80-120
36	1,2-Dichloropropan	50.000	48.842	97.68	80-120
37	Bromodichlorometha	50.000	49.280	98.56	77-121
39	Dibromomethane	50.000	49.826	99.65	80-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
40 2-Chloroethyl Viny	50.000	54.116	108.23	10-191
41 4-Methyl-2-Pentano	250.00	239.48	95.79	67-120
42 Cis 1,3-dichloropr	50.000	52.804	105.61	74-120
44 Toluene	50.000	49.313	98.63	80-120
45 Trans 1,3-Dichloro	50.000	49.667	99.33	65-120
46 2-Hexanone	250.00	226.91	90.77	65-130
47 1,1,2-Trichloroeth	50.000	50.810	101.62	80-120
48 1,3-Dichloropropan	50.000	51.668	103.34	80-120
49 Tetrachloroethene	50.000	48.144	96.29	80-121
50 Chlorodibromometha	50.000	48.892	97.78	64-120
51 1,2-Dibromoethane	50.000	47.866	95.73	75-120
53 Chlorobenzene	50.000	49.965	99.93	80-120
55 1,1,1,2-Tetrachlor	50.000	43.892	87.78	69-121
54 Ethyl Benzene	50.000	54.660	109.32	80-127
56 m,p-xylene	100.00	116.81	116.81	80-125
57 o-Xylene	50.000	54.224	108.45	78-120
58 Styrene	50.000	57.782	115.56	80-123
59 Isopropyl Benzene	50.000	56.766	113.53	80-127
60 Bromoform	50.000	46.084	92.17	60-120
61 1,1,2,2-Tetrachlor	50.000	46.261	92.52	74-120
63 1,2,3-Trichloropro	50.000	47.039	94.08	72-121
65 Trans-1,4-Dichloro	50.000	54.663	109.33	65-126
66 N-Propyl Benzene	50.000	54.064	108.13	80-132
67 Bromobenzene	50.000	50.710	101.42	80-120
68 1,3,5-Trimethyl Be	50.000	59.108	118.22	80-125
69 2-Chloro Toluene	50.000	55.804	111.61	80-125
70 4-Chloro Toluene	50.000	57.154	114.31	80-127
71 T-Butyl Benzene	50.000	60.192	120.38	87-122
72 1,2,4-Trimethylben	50.000	60.386	120.77	80-126
73 S-Butyl Benzene	50.000	56.959	113.92	80-134
74 4-Isopropyl Toluen	50.000	64.099	128.20	80-131
75 1,3-Dichlorobenzen	50.000	58.789	117.58	80-120
77 1,4-Dichlorobenzen	50.000	57.961	115.92	80-120
78 N-Butyl Benzene	50.000	67.038	134.08	80-138
80 1,2-Dichlorobenzen	50.000	54.807	109.61	80-120
81 1,2-Dibromo 3-Chlo	50.000	46.000	92.00	59-120
82 1,2,4-Trichloroben	50.000	57.882	115.76	78-130
83 Hexachloro 1,3-But	50.000	54.518	109.04	76-129
84 Naphthalene	50.000	51.669	103.34	66-120
85 1,2,3-Trichloroben	50.000	52.476	104.95	73-123

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	47.368	94.74	30-160

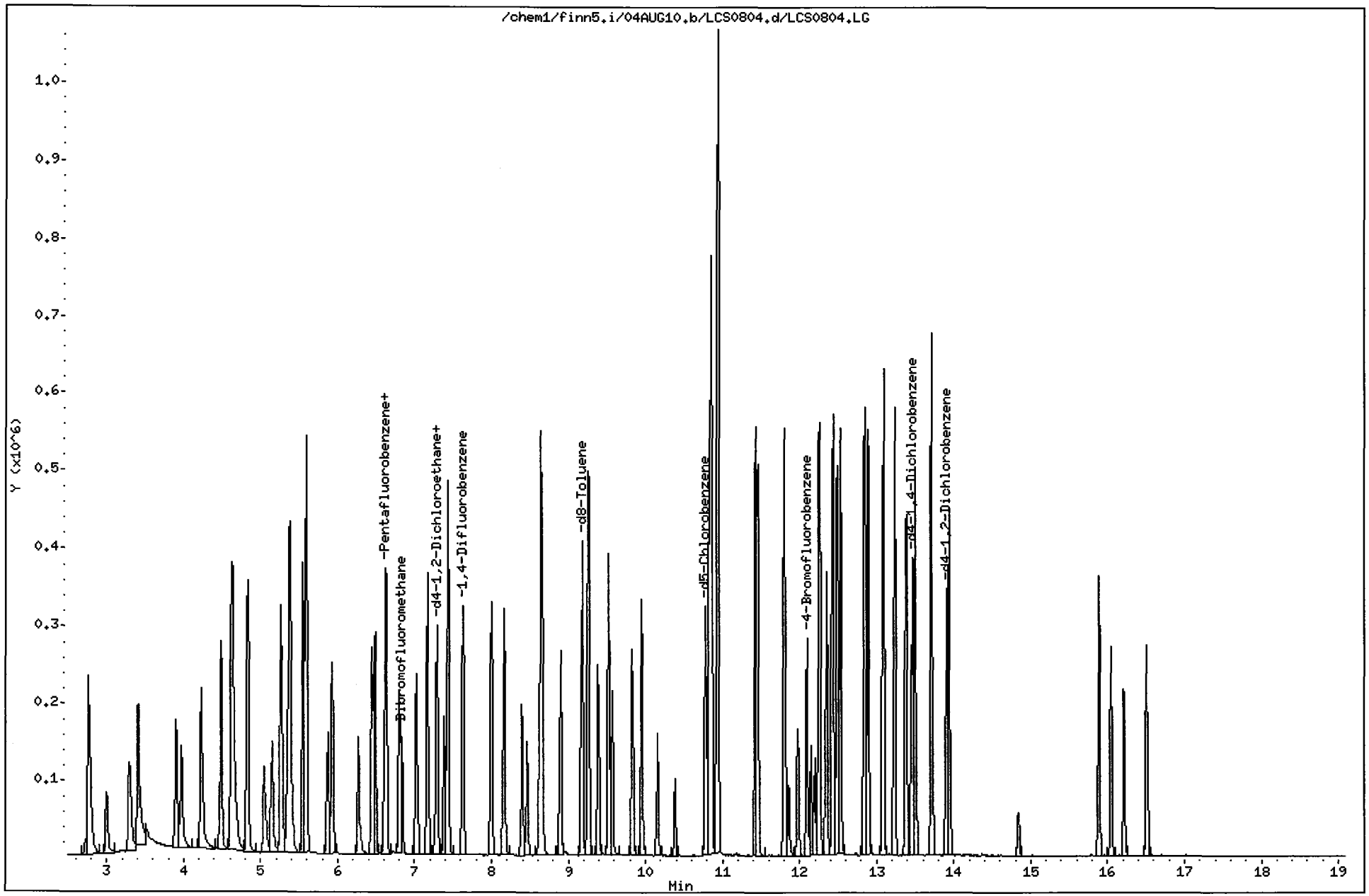
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 31 d4-1,2-Dichloroeth	50.000	45.017	90.03	75-152
$ 43 d8-Toluene	50.000	51.742	103.48	82-115
$ 62 4-Bromofluorobenze	50.000	49.362	98.72	64-120
$ 79 d4-1,2-Dichloroben	50.000	49.555	99.11	80-120

Data File: /chem1/finn5.i/04AUG10.b/LCS0804.d
Date : 04-AUG-2010 11:07
Client ID: LCS0804
Sample Info: LCS0804,5,5,0

Instrument: finn5.i

Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



RGS1-99356

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/04AUG10.b/LCS0804A.d
Lab Smp Id: LCS0804 Client Smp ID: LCS0804
Inj Date : 04-AUG-2010 11:41
Operator : PB Inst ID: finn5.i
Smp Info : LCS0804,5,5,0
Misc Info : 10-18202
Comment :
Method : /chem1/finn5.i/04AUG10.b/s8260b.m
Meth Date : 05-Aug-2010 16:25 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

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	3.015	3.015	(0.455)	86224	47.9527	47.953
2 Chloromethane	50	3.316	3.316	(0.500)	202812	41.9219	41.922
3 Vinyl Chloride	62	3.427	3.427	(0.517)	188654	49.3125	49.312
4 Bromomethane	94	3.909	3.909	(0.589)	142458	68.5675	68.568(R)
5 Chloroethane	64	3.980	3.990	(0.600)	125045	50.0507	50.051
6 Trichlorofluoromethane	101	4.241	4.241	(0.639)	131260	35.4999	35.500
7 Acrolein	56	4.633	4.633	(0.698)	114390	248.013	248.01
8 112Trichloro122Trifluoroethane	101	4.643	4.643	(0.700)	146380	50.5680	50.568
9 Acetone	43	4.683	4.683	(0.706)	187681	241.848	241.85
10 1,1-Dichloroethene	96	4.844	4.844	(0.730)	124895	47.5468	47.547
11 Bromoethane	108	5.065	5.065	(0.764)	80818	41.5464	41.546
12 Iodomethane	142	5.166	5.166	(0.779)	110841	35.6888	35.689
13 Methylene Chloride	84	5.276	5.276	(0.795)	132954	44.9512	44.951
14 Acrylonitrile	53	5.357	5.357	(0.808)	34735	50.6960	50.696(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.397	5.397	(0.814)	181726	44.9875	44.988 (Q)
	15 Carbon Disulfide	76	5.377	5.377	(0.811)	445426	54.6744	54.674
	17 Trans-1,2-Dichloroethene	96	5.558	5.558	(0.838)	113071	50.5101	50.510
	18 Vinyl Acetate	43	5.879	5.879	(0.886)	217496	55.4733	55.473
	19 1,1-Dichloroethane	63	5.940	5.940	(0.895)	205185	49.8237	49.824
	20 2-Butanone	43	6.281	6.281	(0.947)	238993	273.700	273.70
	21 2,2-Dichloropropane	77	6.462	6.462	(0.974)	109097	43.2931	43.293
	22 Cis-1,2-Dichloroethene	96	6.502	6.502	(0.980)	99665	50.5139	50.514
*	23 Pentafluorobenzene	168	6.633	6.633	(1.000)	138668	50.0000	
	24 Chloroform	83	6.643	6.643	(1.002)	160597	48.0091	48.009
	26 Bromochloromethane	128	6.814	6.814	(1.027)	40306	43.0274	43.027
$	25 Dibromofluoromethane	111	6.844	6.844	(1.032)	85322	51.6251	51.625 (Q)
	27 1,1,1-Trichloroethane	97	7.035	7.035	(1.061)	116146	44.6411	44.641
	29 1,1-Dichloropropene	75	7.176	7.176	(0.939)	135688	48.0970	48.097
	30 Carbon Tetrachloride	117	7.296	7.296	(0.955)	107260	43.7221	43.722
$	31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.101)	94922	52.4882	52.488
	32 1,2-Dichloroethane	62	7.397	7.397	(0.968)	117557	47.4670	47.467
	33 Benzene	78	7.447	7.447	(0.975)	337634	49.4933	49.493
*	34 1,4-Difluorobenzene	114	7.638	7.638	(1.000)	207746	50.0000	
	35 Trichloroethene	95	8.010	8.010	(1.049)	93732	46.8966	46.896
	36 1,2-Dichloropropane	63	8.171	8.171	(1.070)	98677	45.8873	45.887
	37 Bromodichloromethane	83	8.412	8.412	(1.101)	105733	45.9880	45.988
	39 Dibromomethane	93	8.472	8.482	(1.109)	51783	48.5098	48.510
	40 2-Chloroethyl Vinyl Ether	63	8.623	8.623	(1.129)	39954	53.0534	53.053 (Q)
	41 4-Methyl-2-Pentanone	58	8.663	8.663	(1.134)	137886	251.077	251.08
	42 Cis 1,3-dichloropropene	75	8.914	8.914	(1.167)	126090	50.2312	50.231
$	43 d8-Toluene	98	9.186	9.186	(1.203)	235036	51.4893	51.489
	44 Toluene	92	9.276	9.276	(1.214)	190227	46.9989	46.999
	45 Trans 1,3-Dichloropropene	75	9.407	9.407	(1.232)	100140	47.4608	47.461
	46 2-Hexanone	43	9.537	9.537	(0.884)	333937	236.146	236.14
	47 1,1,2-Trichloroethane	97	9.588	9.588	(1.255)	62165	49.3352	49.335
	48 1,3-Dichloropropane	76	9.849	9.849	(0.912)	118889	48.8296	48.830
	49 Tetrachloroethene	166	9.960	9.960	(0.923)	85392	44.4299	44.430
	50 Chlorodibromomethane	129	10.171	10.171	(0.942)	77418	47.2660	47.266
	51 1,2-Dibromoethane	107	10.392	10.392	(1.361)	66494	49.2666	49.266
*	52 d5-Chlorobenzene	117	10.794	10.794	(1.000)	172992	50.0000	
	53 Chlorobenzene	112	10.834	10.834	(1.004)	188552	46.4698	46.470
	54 Ethyl Benzene	91	10.864	10.864	(1.007)	349446	50.9283	50.928
	55 1,1,1,2-Tetrachloroethane	131	10.854	10.864	(1.006)	63294	40.7582	40.758
	56 m,p-xylene	106	10.944	10.944	(1.014)	272835	108.791	108.79
	57 o-Xylene	106	11.437	11.437	(1.060)	131737	50.5422	50.542
	58 Styrene	104	11.467	11.467	(1.062)	216713	53.7736	53.774
	59 Isopropyl Benzene	105	11.819	11.819	(0.878)	344794	52.0168	52.017
	60 Bromoform	173	11.879	11.879	(0.882)	47948	44.9899	44.990
	61 1,1,2,2-Tetrachloroethane	83	11.990	12.000	(0.890)	88112	46.0116	46.012
$	62 4-Bromofluorobenzene	95	12.110	12.110	(1.122)	100851	49.8131	49.813
	63 1,2,3-Trichloropropane	110	12.160	12.160	(0.903)	17540	46.2335	46.233

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.211	12.211	(0.907)	32549	55.3014	55.301
	66 N-Propyl Benzene	91	12.271	12.271	(0.911)	420604	49.1539	49.154
	67 Bromobenzene	156	12.361	12.361	(0.918)	85490	46.2646	46.265
	68 1,3,5-Trimethyl Benzene	105	12.442	12.442	(0.924)	290341	53.9600	53.960
	69 2-Chloro Toluene	91	12.502	12.502	(0.928)	278715	49.5716	49.572
	70 4-Chloro Toluene	91	12.542	12.542	(0.931)	283596	52.6208	52.621
	71 T-Butyl Benzene	119	12.854	12.854	(0.954)	252880	54.9356	54.936
	72 1,2,4-Trimethylbenzene	105	12.904	12.904	(0.958)	290961	54.9302	54.930
	73 S-Butyl Benzene	105	13.095	13.095	(0.972)	395889	52.2760	52.276
	74 4-Isopropyl Toluene	119	13.246	13.246	(0.984)	298064	57.3605	57.360
	75 1,3-Dichlorobenzene	146	13.397	13.397	(0.995)	167229	52.9713	52.971
*	76 d4-1,4-Dichlorobenzene	152	13.467	13.477	(1.000)	98470	50.0000	
	77 1,4-Dichlorobenzene	146	13.507	13.507	(1.003)	164164	51.9658	51.966
	78 N-Butyl Benzene	91	13.718	13.718	(1.019)	336258	59.9255	59.925
$	79 d4-1,2-Dichlorobenzene	152	13.919	13.919	(1.034)	90123	50.3170	50.317
	80 1,2-Dichlorobenzene	146	13.949	13.949	(1.036)	151785	50.5889	50.589
	81 1,2-Dibromo 3-Chloropropane	75	14.854	14.854	(1.103)	14946	45.1044	45.104
	82 1,2,4-Trichlorobenzene	180	15.899	15.899	(1.181)	95899	52.5235	52.523
	83 Hexachloro 1,3-Butadiene	225	16.050	16.050	(1.192)	60069	48.8478	48.848
	84 Naphthalene	128	16.221	16.231	(1.204)	165056	49.8406	49.841
	85 1,2,3-Trichlorobenzene	180	16.512	16.522	(1.226)	85975	49.2526	49.253

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: LCS0804A.d
Lab Smp Id: LCS0804
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18202

Calibration Date: 04-AUG-2010
Calibration Time: 10:24
Client Smp ID: LCS0804
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
23 Pentafluorobenzen	131115	65558	262230	138668	5.76
34 1,4-Difluorobenze	191559	95780	383118	207746	8.45
52 d5-Chlorobenzene	161199	80600	322398	172992	7.32
76 d4-1,4-Dichlorobe	88279	44140	176558	98470	11.54

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.63	6.13	7.13	6.63	0.00
34 1,4-Difluorobenze	7.64	7.14	8.14	7.64	0.00
52 d5-Chlorobenzene	10.79	10.29	11.29	10.79	0.00
76 d4-1,4-Dichlorobe	13.48	12.98	13.98	13.47	-0.07

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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Client SDG: 04AUG10
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: LCS0804 Client Smp ID: LCS0804
Level: LOW Operator: PB
Data Type: MS DATA SampleType: LCSD
SpikeList File: all.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18202

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	47.953	95.91	53-148
2	Chloromethane	50.000	41.922	83.84	64-125
3	Vinyl Chloride	50.000	49.312	98.62	63-137
4	Bromomethane	50.000	68.568	137.14*	57-136
5	Chloroethane	50.000	50.051	100.10	64-131
6	Trichlorofluoromet	50.000	35.500	71.00	69-132
7	Acrolein	250.00	248.01	99.21	54-137
8	112Trichloro122Tri	50.000	50.568	101.14	74-130
9	Acetone	250.00	241.85	96.74	60-131
10	1,1-Dichloroethene	50.000	47.547	95.09	75-126
11	Bromoethane	50.000	41.546	83.09	76-126
12	Iodomethane	50.000	35.689	71.38	65-139
13	Methylene Chloride	50.000	44.951	89.90	70-123
15	Carbon Disulfide	50.000	54.674	109.35	71-129
14	Acrylonitrile	50.000	50.696	101.39	67-125
16	Methyl tert-Butyl	50.000	44.988	89.98	70-120
17	Trans-1,2-Dichloro	50.000	50.510	101.02	80-120
18	Vinyl Acetate	50.000	55.473	110.95	60-136
19	1,1-Dichloroethane	50.000	49.824	99.65	80-120
20	2-Butanone	250.00	273.70	109.48	70-120
21	2,2-Dichloropropan	50.000	43.293	86.59	74-123
22	Cis-1,2-Dichloroet	50.000	50.514	101.03	80-120
24	Chloroform	50.000	48.009	96.02	80-120
26	Bromochloromethane	50.000	43.027	86.05	80-120
27	1,1,1-Trichloroeth	50.000	44.641	89.28	77-121
29	1,1-Dichloropropen	50.000	48.097	96.19	80-120
30	Carbon Tetrachlori	50.000	43.722	87.44	77-122
32	1,2-Dichloroethane	50.000	47.467	94.93	76-120
33	Benzene	50.000	49.493	98.99	80-120
35	Trichloroethene	50.000	46.896	93.79	80-120
36	1,2-Dichloropropan	50.000	45.887	91.77	80-120
37	Bromodichlorometha	50.000	45.988	91.98	77-121
39	Dibromomethane	50.000	48.510	97.02	80-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
40 2-Chloroethyl Viny	50.000	53.053	106.11	10-191
41 4-Methyl-2-Pentano	250.00	251.08	100.43	67-120
42 Cis 1,3-dichloropr	50.000	50.231	100.46	74-120
44 Toluene	50.000	46.999	94.00	80-120
45 Trans 1,3-Dichloro	50.000	47.461	94.92	65-120
46 2-Hexanone	250.00	236.14	94.46	65-130
47 1,1,2-Trichloroeth	50.000	49.335	98.67	80-120
48 1,3-Dichloropropan	50.000	48.830	97.66	80-120
49 Tetrachloroethene	50.000	44.430	88.86	80-121
50 Chlorodibromometha	50.000	47.266	94.53	64-120
51 1,2-Dibromoethane	50.000	49.266	98.53	75-120
53 Chlorobenzene	50.000	46.470	92.94	80-120
55 1,1,1,2-Tetrachlor	50.000	40.758	81.52	69-121
54 Ethyl Benzene	50.000	50.928	101.86	80-127
56 m,p-xylene	100.00	108.79	108.79	80-125
57 o-Xylene	50.000	50.542	101.08	78-120
58 Styrene	50.000	53.774	107.55	80-123
59 Isopropyl Benzene	50.000	52.017	104.03	80-127
60 Bromoform	50.000	44.990	89.98	60-120
61 1,1,2,2-Tetrachlor	50.000	46.012	92.02	74-120
63 1,2,3-Trichloropro	50.000	46.233	92.47	72-121
65 Trans-1,4-Dichloro	50.000	55.301	110.60	65-126
66 N-Propyl Benzene	50.000	49.154	98.31	80-132
67 Bromobenzene	50.000	46.265	92.53	80-120
68 1,3,5-Trimethyl Be	50.000	53.960	107.92	80-125
69 2-Chloro Toluene	50.000	49.572	99.14	80-125
70 4-Chloro Toluene	50.000	52.621	105.24	80-127
71 T-Butyl Benzene	50.000	54.936	109.87	87-122
72 1,2,4-Trimethylben	50.000	54.930	109.86	80-126
73 S-Butyl Benzene	50.000	52.276	104.55	80-134
74 4-Isopropyl Toluen	50.000	57.360	114.72	80-131
75 1,3-Dichlorobenzen	50.000	52.971	105.94	80-120
77 1,4-Dichlorobenzen	50.000	51.966	103.93	80-120
78 N-Butyl Benzene	50.000	59.925	119.85	80-138
80 1,2-Dichlorobenzen	50.000	50.589	101.18	80-120
81 1,2-Dibromo 3-Chlo	50.000	45.104	90.21	59-120
82 1,2,4-Trichloroben	50.000	52.523	105.05	78-130
83 Hexachloro 1,3-But	50.000	48.848	97.70	76-129
84 Naphthalene	50.000	49.841	99.68	66-120
85 1,2,3-Trichloroben	50.000	49.253	98.51	73-123

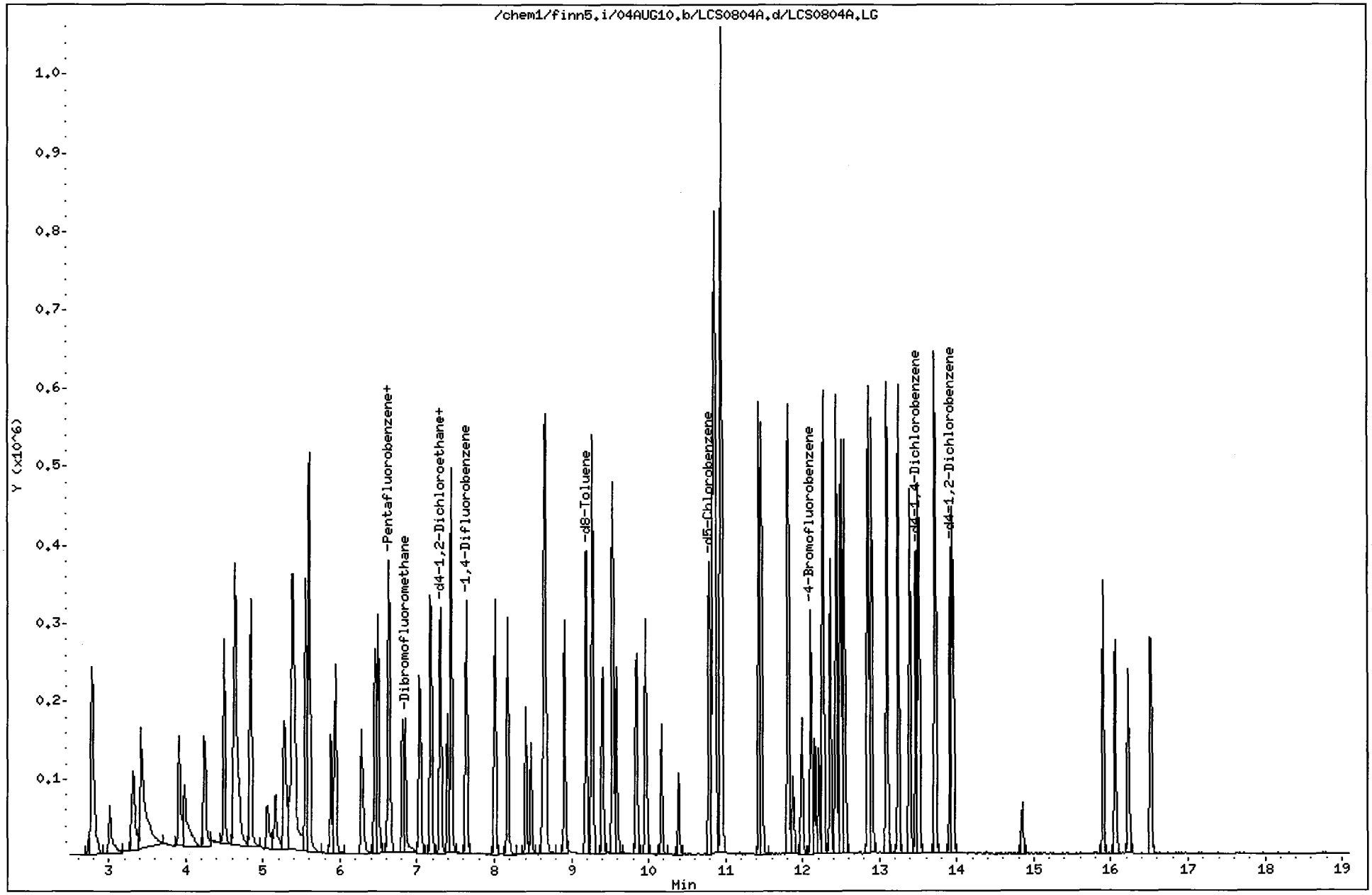
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	51.625	103.25	30-160

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 31 d4-1,2-Dichloroeth	50.000	52.488	104.98	75-152
$ 43 d8-Toluene	50.000	51.489	102.98	82-115
$ 62 4-Bromofluorobenze	50.000	49.813	99.63	64-120
$ 79 d4-1,2-Dichloroben	50.000	50.317	100.63	80-120

Data File: /chem1/finn5.i/04AUG10.b/LCS0804A.d
Date : 04-AUG-2010 11:41
Client ID: LCS0804
Sample Info: LCS0804,5,5,0

Instrument: finn5.i
Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



RGSIM 6636

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/04AUG10.b/MB0804.d
Lab Smp Id: MB0804 Client Smp ID: MB0804
Inj Date : 04-AUG-2010 12:08
Operator : PB Inst ID: finn5.i
Smp Info : MB0804,5,5,0
Misc Info : 10-18202
Comment :
Method : /chem1/finn5.i/04AUG10.b/s8260b.m
Meth Date : 05-Aug-2010 16:25 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

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	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 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.673	4.683	(0.706)	3399	4.87260	4.873
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.					
	15 Carbon Disulfide	76	Compound Not Detected.					
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	18 Vinyl Acetate	43	Compound Not Detected.					
	19 1,1-Dichloroethane	63	Compound Not Detected.					
	20 2-Butanone	43	6.281	6.281	(0.948)	2679	3.41311	3.413
	21 2,2-Dichloropropane	77	Compound Not Detected.					
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
*	23 Pentafluorobenzene	168	6.623	6.633	(1.000)	124649	50.0000	
	24 Chloroform	83	Compound Not Detected.					
	26 Bromochloromethane	128	Compound Not Detected.					
$	25 Dibromofluoromethane	111	6.834	6.844	(1.032)	83755	56.3765	56.376(Q)
	27 1,1,1-Trichloroethane	97	Compound Not Detected.					
	29 1,1-Dichloropropene	75	Compound Not Detected.					
	30 Carbon Tetrachloride	117	Compound Not Detected.					
$	31 d4-1,2-Dichloroethane	65	7.296	7.306	(1.102)	95041	58.4646	58.465
	32 1,2-Dichloroethane	62	Compound Not Detected.					
	33 Benzene	78	Compound Not Detected.					
*	34 1,4-Difluorobenzene	114	7.628	7.638	(1.000)	186870	50.0000	
	35 Trichloroethene	95	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	39 Dibromomethane	93	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 4-Methyl-2-Pentanone	58	8.653	8.663	(1.134)	1642	3.32394	3.324
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43 d8-Toluene	98	9.176	9.186	(1.203)	215838	52.5659	52.566
	44 Toluene	92	Compound Not Detected.					
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	46 2-Hexanone	43	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 1,3-Dichloropropane	76	Compound Not Detected.					
	49 Tetrachloroethene	166	Compound Not Detected.					
	50 Chlorodibromomethane	129	Compound Not Detected.					
	51 1,2-Dibromoethane	107	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	10.784	10.794	(1.000)	160706	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 Isopropyl Benzene	105	Compound Not Detected.					
	60 Bromoform	173	Compound Not Detected.					
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	12.100	12.110	(1.122)	88992	47.3160	47.316
	63 1,2,3-Trichloropropane	110	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
66	N-Propyl Benzene	91	Compound Not Detected.					
67	Bromobenzene	156	Compound Not Detected.					
68	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
69	2-Chloro Toluene	91	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	13.457	13.477	(1.000)	78426	50.0000	
77	1,4-Dichlorobenzene	146	Compound Not Detected.					
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	13.909	13.919	(1.034)	73346	51.4162	51.416 (Q)
80	1,2-Dichlorobenzene	146	13.939	13.949	(1.036)	1227	0.51347	0.5135
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	Naphthalene	128	16.211	16.231	(1.205)	5571	2.11217	2.112
85	1,2,3-Trichlorobenzene	180	16.502	16.522	(1.226)	2909	2.09240	2.092

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: MB0804.d
Lab Smp Id: MB0804
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18202

Calibration Date: 04-AUG-2010
Calibration Time: 10:24
Client Smp ID: MB0804
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
23 Pentafluorobenzen	131115	65558	262230	124649	-4.93
34 1,4-Difluorobenze	191559	95780	383118	186870	-2.45
52 d5-Chlorobenzene	161199	80600	322398	160706	-0.31
76 d4-1,4-Dichlorobe	88279	44140	176558	78426	-11.16

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.63	6.13	7.13	6.62	-0.15
34 1,4-Difluorobenze	7.64	7.14	8.14	7.63	-0.13
52 d5-Chlorobenzene	10.79	10.29	11.29	10.78	-0.09
76 d4-1,4-Dichlorobe	13.48	12.98	13.98	13.46	-0.15

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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Client SDG: 04AUG10
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: MB0804 Client Smp ID: MB0804
Level: LOW Operator: PB
Data Type: MS DATA SampleType: BLANK
SpikeList File: all.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18202

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	56.376	112.75	30-160
$ 31 d4-1,2-Dichloroeth	50.000	58.465	116.93	75-152
$ 43 d8-Toluene	50.000	52.566	105.13	82-115
$ 62 4-Bromofluorobenze	50.000	47.316	94.63	64-120
$ 79 d4-1,2-Dichloroben	50.000	51.416	102.83	80-120

Data File: /chem1/finn5.i/04AUG10.b/MB0804.d

Date : 04-AUG-2010 12:08

Client ID: MB0804

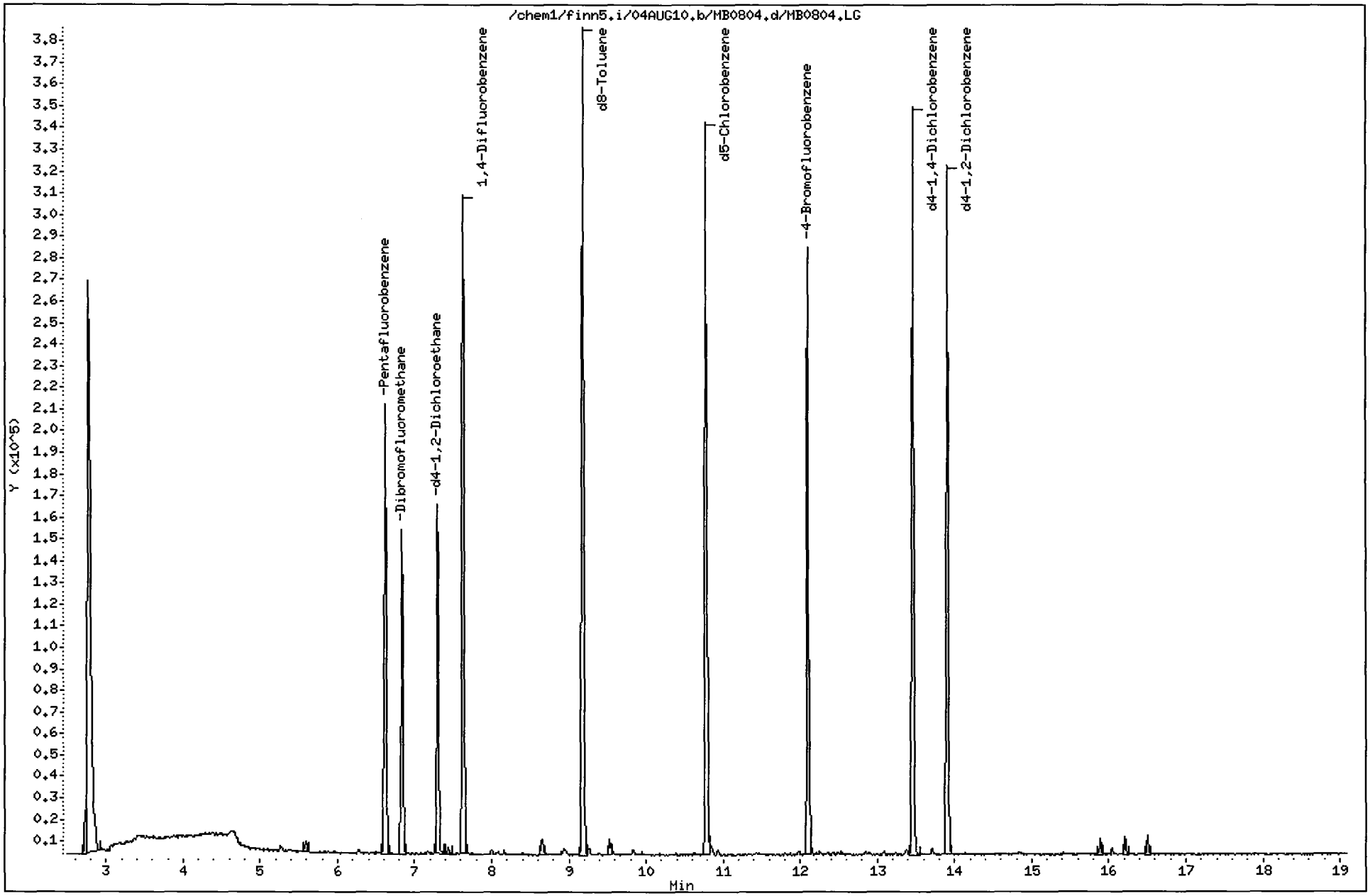
Sample Info: MB0804,5,5,0

Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB

Column diameter: 0.18



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/04AUG10.b/RG54A.d
Lab Smp Id: RG54A Client Smp ID: PSB14-0-.5-072810
Inj Date : 04-AUG-2010 13:27
Operator : PB Inst ID: finn5.i
Smp Info : RG54A,5,8.21,0
Misc Info : 10-18202
Comment :
Method : /chem1/finn5.i/04AUG10.b/s8260b.m
Meth Date : 05-Aug-2010 16:25 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	8.21000	Sample Amount
M	0.00000	Moisture (%)

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 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.663	4.683	(0.705)	110372	158.280	96.394
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	5.266	5.276	(0.796)	7790	2.93104	1.785
14 Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)	
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.						
	15 Carbon Disulfide	76	Compound Not Detected.						
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.						
	18 Vinyl Acetate	43	Compound Not Detected.						
	19 1,1-Dichloroethane	63	Compound Not Detected.						
	20 2-Butanone	43	6.271	6.281	(0.948)	6854	8.73530	5.320	
	21 2,2-Dichloropropane	77	Compound Not Detected.						
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.						
*	23 Pentafluorobenzene	168	6.613	6.633	(1.000)	124604	50.0000		
	24 Chloroform	83	Compound Not Detected.						
	26 Bromochloromethane	128	Compound Not Detected.						
$	25 Dibromofluoromethane	111	6.834	6.844	(1.033)	89565	60.3091	36.729	(Q)
	27 1,1,1-Trichloroethane	97	Compound Not Detected.						
	29 1,1-Dichloropropene	75	Compound Not Detected.						
	30 Carbon Tetrachloride	117	Compound Not Detected.						
$	31 d4-1,2-Dichloroethane	65	7.296	7.306	(1.103)	108792	66.9478	40.772	
	32 1,2-Dichloroethane	62	Compound Not Detected.						
	33 Benzene	78	7.427	7.447	(0.974)	4678	0.74730	0.4551	
*	34 1,4-Difluorobenzene	114	7.628	7.638	(1.000)	190632	50.0000		
	35 Trichloroethene	95	Compound Not Detected.						
	36 1,2-Dichloropropane	63	Compound Not Detected.						
	37 Bromodichloromethane	83	Compound Not Detected.						
	39 Dibromomethane	93	Compound Not Detected.						
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.						
	41 4-Methyl-2-Pentanone	58	Compound Not Detected.						
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.						
$	43 d8-Toluene	98	9.176	9.186	(1.203)	215460	51.4383	31.326	
	44 Toluene	92	Compound Not Detected.						
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.						
	46 2-Hexanone	43	Compound Not Detected.						
	47 1,1,2-Trichloroethane	97	Compound Not Detected.						
	48 1,3-Dichloropropane	76	Compound Not Detected.						
	49 Tetrachloroethene	166	Compound Not Detected.						
	50 Chlorodibromomethane	129	Compound Not Detected.						
	51 1,2-Dibromoethane	107	Compound Not Detected.						
*	52 d5-Chlorobenzene	117	10.774	10.794	(1.000)	148391	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 Isopropyl Benzene	105	Compound Not Detected.						
	60 Bromoform	173	Compound Not Detected.						
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
$	62 4-Bromofluorobenzene	95	12.100	12.110	(1.123)	72434	41.7084	25.401	
	63 1,2,3-Trichloropropane	110	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
66	N-Propyl Benzene	91	Compound Not Detected.					
67	Bromobenzene	156	Compound Not Detected.					
68	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
69	2-Chloro Toluene	91	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	13.457	13.477	(1.000)	55041	50.0000	
77	1,4-Dichlorobenzene	146	Compound Not Detected.					
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	13.899	13.919	(1.033)	52248	52.1875	31.783(Q)
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: RG54A.d
Lab Smp Id: RG54A
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18202

Calibration Date: 04-AUG-2010
Calibration Time: 10:24
Client Smp ID: PSB14-0-.5-072810
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
23 Pentafluorobenzen	131115	65558	262230	124604	-4.97
34 1,4-Difluorobenze	191559	95780	383118	190632	-0.48
52 d5-Chlorobenzene	161199	80600	322398	148391	-7.95
76 d4-1,4-Dichlorobe	88279	44140	176558	55041	-37.65

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.63	6.13	7.13	6.61	-0.30
34 1,4-Difluorobenze	7.64	7.14	8.14	7.63	-0.13
52 d5-Chlorobenzene	10.79	10.29	11.29	10.77	-0.19
76 d4-1,4-Dichlorobe	13.48	12.98	13.98	13.46	-0.15

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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Client SDG: RG54
Sample Matrix: SOLID
Fraction: VOA
Lab Smp Id: RG54A
Client Smp ID: PSB14-0-.5-072810
Level: LOW
Operator: PB
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: all.spk
Quant Type: ISTD
Sublist File: voa.sub
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18202

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	60.309	120.62	30-160
$ 31 d4-1,2-Dichloroeth	50.000	66.948	133.90	75-152
$ 43 d8-Toluene	50.000	51.438	102.88	82-115
$ 62 4-Bromofluorobenze	50.000	41.708	83.42	64-120
$ 79 d4-1,2-Dichloroben	50.000	52.188	104.38	80-120

Data File: /chem1/finn5.i/04AUG10.b/RG54A.d

Date : 04-AUG-2010 13:27

Client ID: PSB14-0-.5-072810

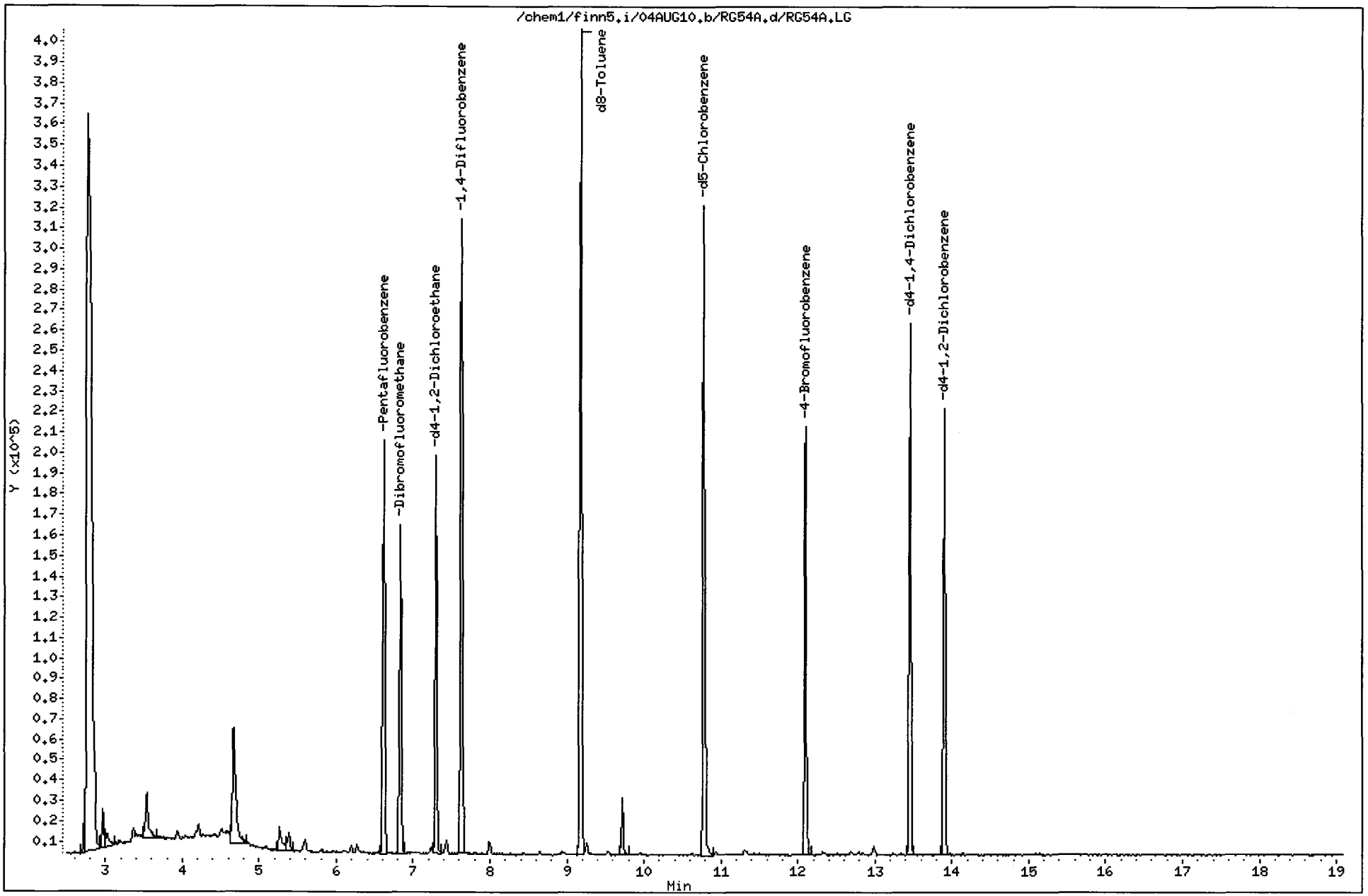
Sample Info: RG54A,5,8.21,0

Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB

Column diameter: 0.18



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/04AUG10.b/RG54B.d
Lab Smp Id: RG54B Client Smp ID: PSB14-1.5-2.0-07281
Inj Date : 04-AUG-2010 13:51
Operator : PB Inst ID: finn5.i
Smp Info : RG54B,5,9.24,0
Misc Info : 10-18203
Comment :
Method : /chem1/finn5.i/04AUG10.b/s8260b.m
Meth Date : 05-Aug-2010 16:25 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	9.24000	Sample Amount
M	0.00000	Moisture (%)

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 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.683	4.683	(0.706)	65006	91.1257	49.310
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	5.276	5.276	(0.795)	7776	2.85997	1.548
14 Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.					
	15 Carbon Disulfide	76	Compound Not Detected.					
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	18 Vinyl Acetate	43	Compound Not Detected.					
	19 1,1-Dichloroethane	63	Compound Not Detected.					
	20 2-Butanone	43	6.291	6.281	(0.948)	3166	3.94426	2.134
	21 2,2-Dichloropropane	77	Compound Not Detected.					
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
*	23 Pentafluorobenzene	168	6.633	6.633	(1.000)	127471	50.0000	
	24 Chloroform	83	Compound Not Detected.					
	26 Bromochloromethane	128	Compound Not Detected.					
$	25 Dibromofluoromethane	111	6.844	6.844	(1.032)	92467	60.8628	32.934(Q)
	27 1,1,1-Trichloroethane	97	Compound Not Detected.					
	29 1,1-Dichloropropene	75	Compound Not Detected.					
	30 Carbon Tetrachloride	117	Compound Not Detected.					
$	31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.101)	114173	68.6789	37.164
	32 1,2-Dichloroethane	62	Compound Not Detected.					
	33 Benzene	78	Compound Not Detected.					
*	34 1,4-Difluorobenzene	114	7.638	7.638	(1.000)	200523	50.0000	
	35 Trichloroethene	95	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	39 Dibromomethane	93	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43 d8-Toluene	98	9.186	9.186	(1.203)	229238	52.0281	28.154
	44 Toluene	92	Compound Not Detected.					
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	46 2-Hexanone	43	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 1,3-Dichloropropane	76	Compound Not Detected.					
	49 Tetrachloroethene	166	Compound Not Detected.					
	50 Chlorodibromomethane	129	Compound Not Detected.					
	51 1,2-Dibromoethane	107	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	10.794	10.794	(1.000)	177766	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 Isopropyl Benzene	105	Compound Not Detected.					
	60 Bromoform	173	Compound Not Detected.					
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	12.110	12.110	(1.122)	101824	48.9430	26.484
	63 1,2,3-Trichloropropane	110	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
66	N-Propyl Benzene	91	Compound Not Detected.					
67	Bromobenzene	156	Compound Not Detected.					
68	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
69	2-Chloro Toluene	91	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	13.467	13.477	(1.000)	90298	50.0000	
77	1,4-Dichlorobenzene	146	Compound Not Detected.					
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	13.919	13.919	(1.034)	85543	52.0823	28.183(Q)
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: RG54B.d
Lab Smp Id: RG54B
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18203

Calibration Date: 04-AUG-2010
Calibration Time: 10:24
Client Smp ID: PSB14-1.5-2.0-07281
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
23 Pentafluorobenzen	131115	65558	262230	127471	-2.78
34 1,4-Difluorobenze	191559	95780	383118	200523	4.68
52 d5-Chlorobenzene	161199	80600	322398	177766	10.28
76 d4-1,4-Dichlorobe	88279	44140	176558	90298	2.29

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.63	6.13	7.13	6.63	0.00
34 1,4-Difluorobenze	7.64	7.14	8.14	7.64	0.00
52 d5-Chlorobenzene	10.79	10.29	11.29	10.79	0.00
76 d4-1,4-Dichlorobe	13.48	12.98	13.98	13.47	-0.07

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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Client SDG: RG54
Sample Matrix: SOLID
Fraction: VOA
Lab Smp Id: RG54B
Client Smp ID: PSB14-1.5-2.0-07281
Level: LOW
Operator: PB
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: all.spk
Quant Type: ISTD
Sublist File: voa.sub
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18203

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	60.863	121.73	30-160
$ 31 d4-1,2-Dichloroeth	50.000	68.679	137.36	75-152
$ 43 d8-Toluene	50.000	52.028	104.06	82-115
$ 62 4-Bromofluorobenze	50.000	48.943	97.89	64-120
$ 79 d4-1,2-Dichloroben	50.000	52.082	104.16	80-120

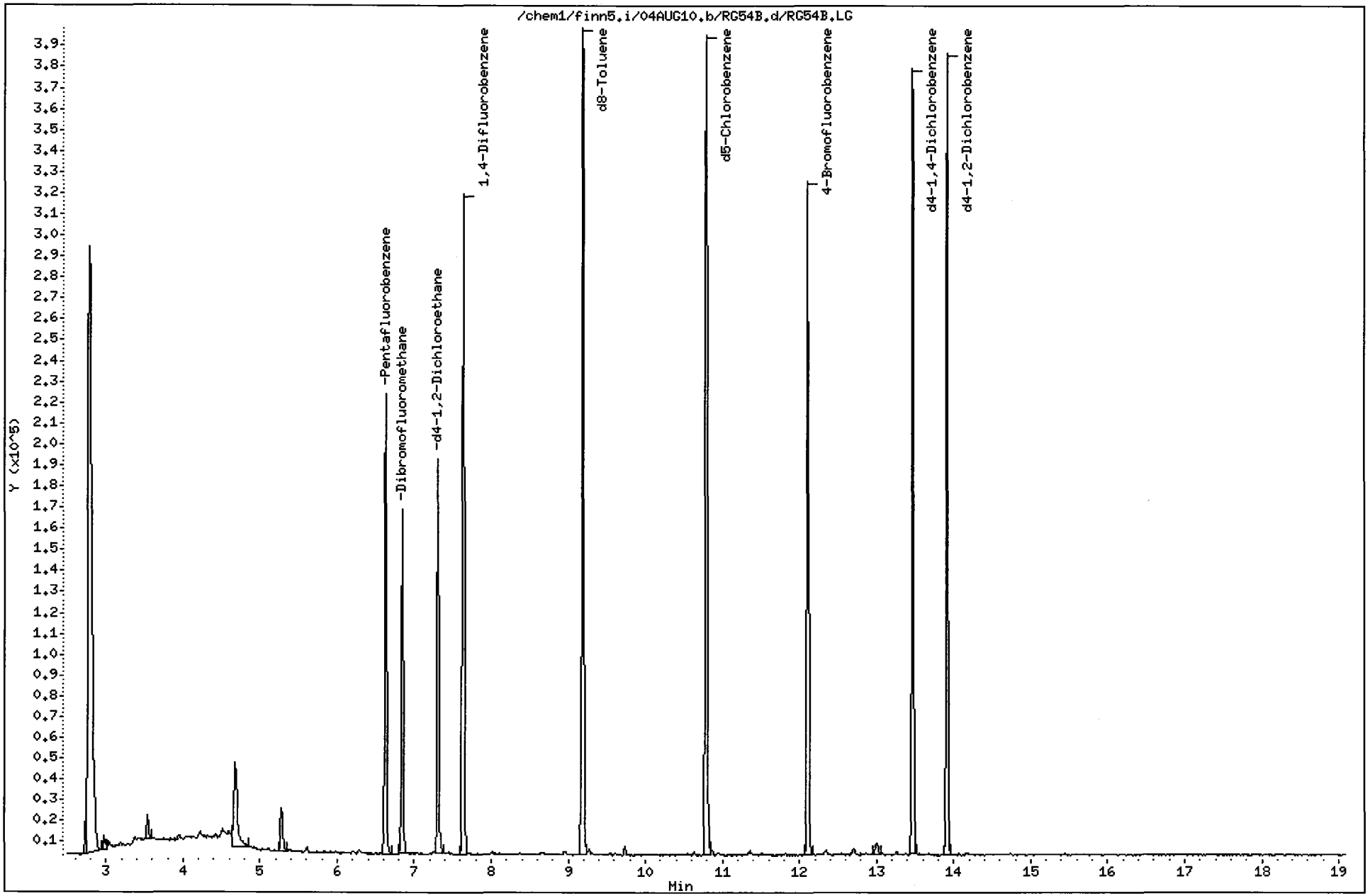
Data File: /chem1/finn5.i/04AUG10.b/RG54B.d
Date : 04-AUG-2010 13:51
Client ID: PSB14-1.5-2.0-07281
Sample Info: RG54B,5,9.24,0

Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB
Column diameter: 0.18

RG54B:09332



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/04AUG10.b/RG54C.d
Lab Smp Id: RG54C Client Smp ID: PSB14-2-4-072810
Inj Date : 04-AUG-2010 14:47
Operator : PB Inst ID: finn5.i
Smp Info : RG54C,5,9.521,0
Misc Info : 10-18204
Comment :
Method : /chem1/finn5.i/04AUG10.b/s8260b.m
Meth Date : 05-Aug-2010 16:25 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	9.52100	Sample Amount
M	0.00000	Moisture (%)

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	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 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.673	4.683	(0.706)	137357	182.811	96.004
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)	
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.						
	15 Carbon Disulfide	76	Compound Not Detected.						
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.						
	18 Vinyl Acetate	43	Compound Not Detected.						
	19 1,1-Dichloroethane	63	Compound Not Detected.						
	20 2-Butanone	43	6.281	6.281	(0.948)	5949	7.03661	3.695	
	21 2,2-Dichloropropane	77	Compound Not Detected.						
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.						
*	23 Pentafluorobenzene	168	6.623	6.633	(1.000)	134260	50.0000		
	24 Chloroform	83	Compound Not Detected.						
	26 Bromochloromethane	128	Compound Not Detected.						
$	25 Dibromofluoromethane	111	6.844	6.844	(1.033)	92766	57.9721	30.444	(Q)
	27 1,1,1-Trichloroethane	97	Compound Not Detected.						
	29 1,1-Dichloropropene	75	Compound Not Detected.						
	30 Carbon Tetrachloride	117	Compound Not Detected.						
$	31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.103)	107576	61.4384	32.265	
	32 1,2-Dichloroethane	62	Compound Not Detected.						
	33 Benzene	78	7.447	7.447	(0.975)	3714	0.55792	0.2930	
*	34 1,4-Difluorobenzene	114	7.638	7.638	(1.000)	202723	50.0000		
	35 Trichloroethene	95	Compound Not Detected.						
	36 1,2-Dichloropropane	63	Compound Not Detected.						
	37 Bromodichloromethane	83	Compound Not Detected.						
	39 Dibromomethane	93	Compound Not Detected.						
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.						
	41 4-Methyl-2-Pentanone	58	Compound Not Detected.						
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.						
$	43 d8-Toluene	98	9.186	9.186	(1.203)	231178	51.8990	27.255	
	44 Toluene	92	9.266	9.276	(1.213)	1780	0.45068	0.2367	
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.						
	46 2-Hexanone	43	Compound Not Detected.						
	47 1,1,2-Trichloroethane	97	Compound Not Detected.						
	48 1,3-Dichloropropane	76	Compound Not Detected.						
	49 Tetrachloroethene	166	Compound Not Detected.						
	50 Chlorodibromomethane	129	Compound Not Detected.						
	51 1,2-Dibromoethane	107	Compound Not Detected.						
*	52 d5-Chlorobenzene	117	10.784	10.794	(1.000)	168315	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 Isopropyl Benzene	105	Compound Not Detected.						
	60 Bromoform	173	Compound Not Detected.						
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
$	62 4-Bromofluorobenzene	95	12.110	12.110	(1.123)	87005	44.1683	23.195	
	63 1,2,3-Trichloropropane	110	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
66	N-Propyl Benzene	91	Compound Not Detected.					
67	Bromobenzene	156	Compound Not Detected.					
68	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
69	2-Chloro Toluene	91	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	13.467	13.477	(1.000)	71184	50.0000	
77	1,4-Dichlorobenzene	146	Compound Not Detected.					
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	13.909	13.919	(1.033)	67820	52.3792	27.507
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: RG54C.d
Lab Smp Id: RG54C
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18204

Calibration Date: 04-AUG-2010
Calibration Time: 10:24
Client Smp ID: PSB14-2-4-072810
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
23 Pentafluorobenzen	131115	65558	262230	134260	2.40
34 1,4-Difluorobenze	191559	95780	383118	202723	5.83
52 d5-Chlorobenzene	161199	80600	322398	168315	4.41
76 d4-1,4-Dichlorobe	88279	44140	176558	71184	-19.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.63	6.13	7.13	6.62	-0.15
34 1,4-Difluorobenze	7.64	7.14	8.14	7.64	0.00
52 d5-Chlorobenzene	10.79	10.29	11.29	10.78	-0.09
76 d4-1,4-Dichlorobe	13.48	12.98	13.98	13.47	-0.07

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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: SOLID
Lab Smp Id: RG54C
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18204

Client SDG: RG54
Fraction: VOA
Client Smp ID: PSB14-2-4-072810
Operator: PB
SampleType: SAMPLE
Quant Type: ISTD

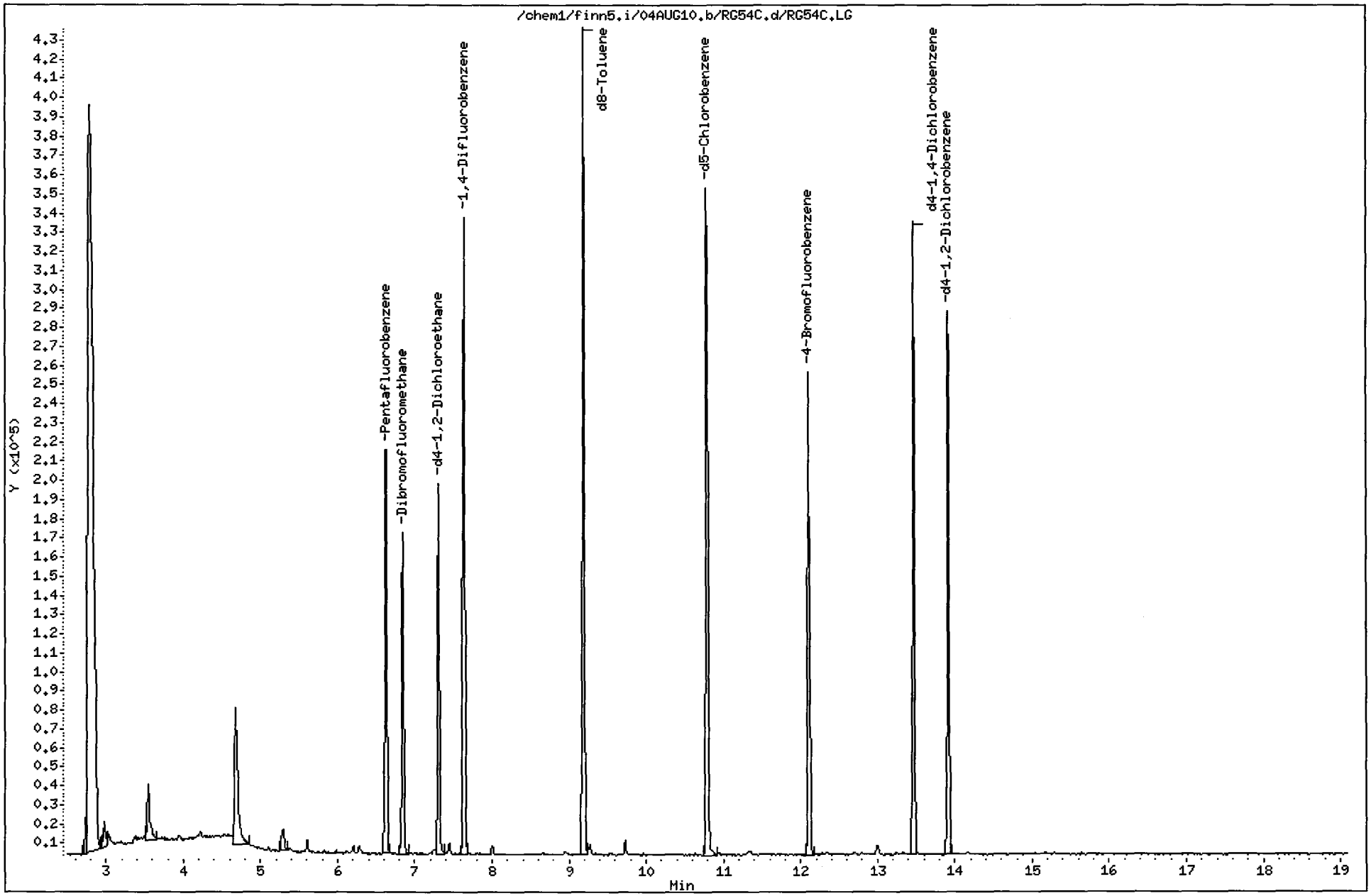
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	57.972	115.94	30-160
$ 31 d4-1,2-Dichloroeth	50.000	61.438	122.88	75-152
$ 43 d8-Toluene	50.000	51.899	103.80	82-115
$ 62 4-Bromofluorobenze	50.000	44.168	88.34	64-120
$ 79 d4-1,2-Dichloroben	50.000	52.379	104.76	80-120

Data File: /chem1/finn5.i/04AUG10.b/RG54C.d
Date : 04-AUG-2010 14:47
Client ID: PSB14-2-4-072810
Sample Info: RG54C,5,9.521,0

Instrument: finn5.i

Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



RG54C 68368

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/04AUG10.b/RG54E.d
Lab Smp Id: RG54E Client Smp ID: PSB14-7-9-072810
Inj Date : 04-AUG-2010 15:11
Operator : PB Inst ID: finn5.i
Smp Info : RG54E,5,10.06,0
Misc Info : 10-18206
Comment :
Method : /chem1/finn5.i/04AUG10.b/s8260b.m
Meth Date : 05-Aug-2010 16:25 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	10.06000	Sample Amount
M	0.00000	Moisture (%)

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 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.683	4.683	(0.706)	146626	203.212	101.00
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	5.276	5.276	(0.795)	14136	5.14023	2.555
14 Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.					
	15 Carbon Disulfide	76	Compound Not Detected.					
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	18 Vinyl Acetate	43	Compound Not Detected.					
	19 1,1-Dichloroethane	63	Compound Not Detected.					
	20 2-Butanone	43	6.281	6.281	(0.947)	7328	9.02590	4.486
	21 2,2-Dichloropropane	77	Compound Not Detected.					
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
*	23 Pentafluorobenzene	168	6.633	6.633	(1.000)	128932	50.0000	
	24 Chloroform	83	Compound Not Detected.					
	26 Bromochloromethane	128	Compound Not Detected.					
$	25 Dibromofluoromethane	111	6.844	6.844	(1.032)	89793	58.4330	29.042(Q)
	27 1,1,1-Trichloroethane	97	Compound Not Detected.					
	29 1,1-Dichloropropene	75	Compound Not Detected.					
	30 Carbon Tetrachloride	117	Compound Not Detected.					
$	31 d4-1,2-Dichloroethane	65	7.316	7.306	(1.103)	100642	59.8535	29.748
	32 1,2-Dichloroethane	62	Compound Not Detected.					
	33 Benzene	78	7.447	7.447	(0.975)	10015	1.59455	0.7925
*	34 1,4-Difluorobenzene	114	7.638	7.638	(1.000)	191270	50.0000	
	35 Trichloroethene	95	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	39 Dibromomethane	93	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43 d8-Toluene	98	9.196	9.186	(1.204)	210364	50.0541	24.878
	44 Toluene	92	9.276	9.276	(1.214)	4131	1.10855	0.5510
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	46 2-Hexanone	43	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 1,3-Dichloropropane	76	Compound Not Detected.					
	49 Tetrachloroethene	166	Compound Not Detected.					
	50 Chlorodibromomethane	129	Compound Not Detected.					
	51 1,2-Dibromoethane	107	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	10.794	10.794	(1.000)	129652	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 Isopropyl Benzene	105	Compound Not Detected.					
	60 Bromoform	173	Compound Not Detected.					
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	12.110	12.110	(1.122)	57105	37.6343	18.705
	63 1,2,3-Trichloropropane	110	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
66	N-Propyl Benzene	91	Compound Not Detected.					
67	Bromobenzene	156	Compound Not Detected.					
68	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
69	2-Chloro Toluene	91	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	13.467	13.477	(1.000)	40291	50.0000	
77	1,4-Dichlorobenzene	146	Compound Not Detected.					
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	13.919	13.919	(1.034)	38262	52.2087	25.949(Q)
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: RG54E.d
Lab Smp Id: RG54E
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18206

Calibration Date: 04-AUG-2010
Calibration Time: 10:24
Client Smp ID: PSB14-7-9-072810
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
23 Pentafluorobenzen	131115	65558	262230	128932	-1.66
34 1,4-Difluorobenze	191559	95780	383118	191270	-0.15
52 d5-Chlorobenzene	161199	80600	322398	129652	-19.57
76 d4-1,4-Dichlorobe	88279	44140	176558	40291	-54.36

<-

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.63	6.13	7.13	6.63	0.00
34 1,4-Difluorobenze	7.64	7.14	8.14	7.64	0.00
52 d5-Chlorobenzene	10.79	10.29	11.29	10.79	0.00
76 d4-1,4-Dichlorobe	13.48	12.98	13.98	13.47	-0.07

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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Client SDG: RG54
Sample Matrix: SOLID
Fraction: VOA
Lab Smp Id: RG54E
Client Smp ID: PSB14-7-9-072810
Level: LOW
Operator: PB
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: all.spk
Quant Type: ISTD
Sublist File: voa.sub
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18206

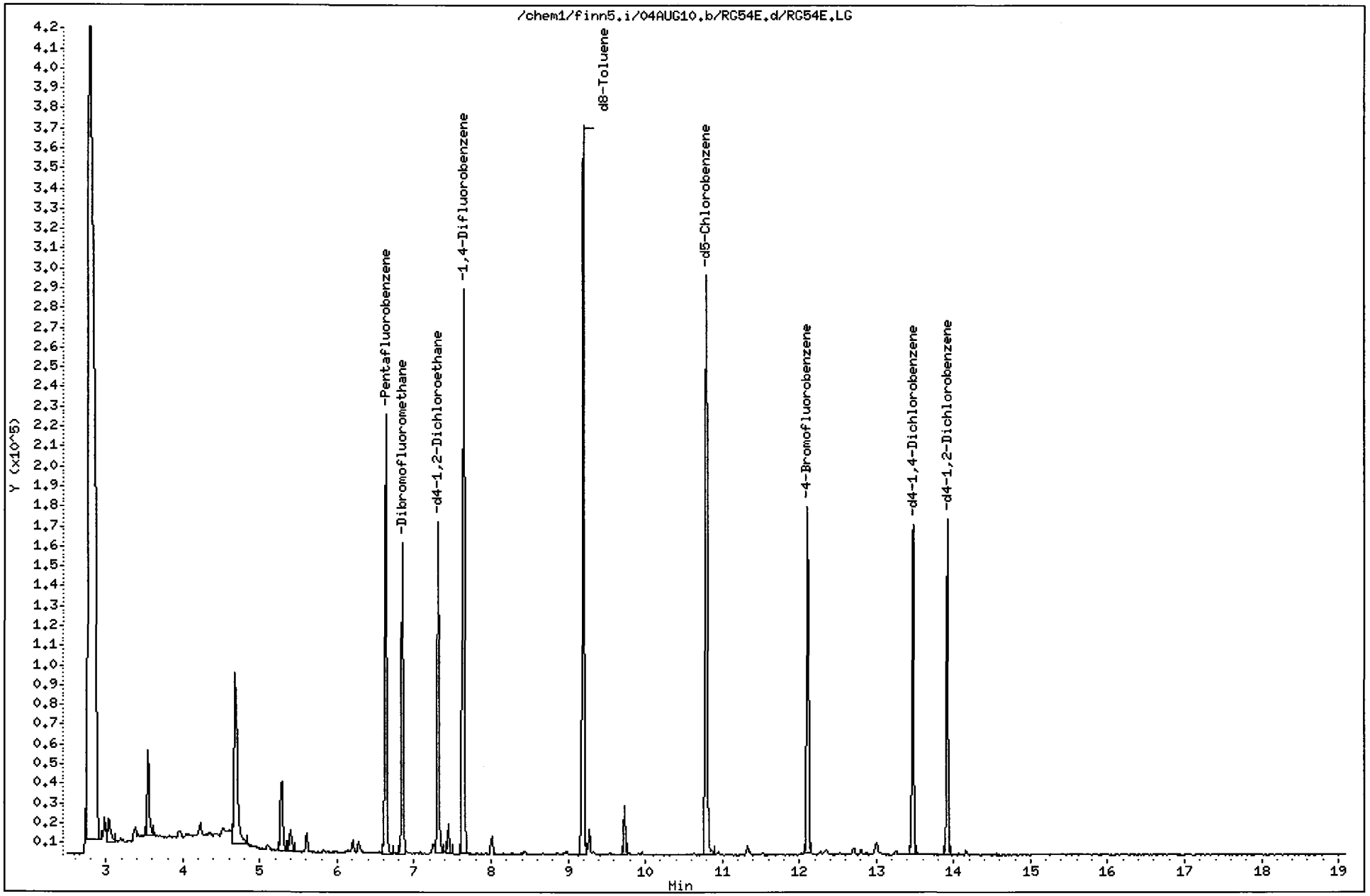
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	58.433	116.87	30-160
$ 31 d4-1,2-Dichloroeth	50.000	59.854	119.71	75-152
$ 43 d8-Toluene	50.000	50.054	100.11	82-115
$ 62 4-Bromofluorobenze	50.000	37.634	75.27	64-120
$ 79 d4-1,2-Dichloroben	50.000	52.209	104.42	80-120

Data File: /chem1/finn5.i/04AUG10.b/RG54E.d
Date : 04-AUG-2010 15:11
Client ID: PSB14-7-9-072810
Sample Info: RG54E,5,10.06,0

Instrument: finn5.i

Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



RG54E

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/04AUG10.b/RG54F.d
Lab Smp Id: RG54F Client Smp ID: PSB14-12-14-072810
Inj Date : 04-AUG-2010 15:37
Operator : PB Inst ID: finn5.i
Smp Info : RG54F,5,10.37,0
Misc Info : 10-18207
Comment :
Method : /chem1/finn5.i/04AUG10.b/s8260b.m
Meth Date : 05-Aug-2010 16:25 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	10.37000	Sample Amount
M	0.00000	Moisture (%)

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	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 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.663	4.683	(0.705)	76060	101.059	48.726
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	5.266	5.276	(0.796)	6256	2.18089	1.052
14 Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.					
	15 Carbon Disulfide	76	Compound Not Detected.					
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	18 Vinyl Acetate	43	Compound Not Detected.					
	19 1,1-Dichloroethane	63	Compound Not Detected.					
	20 2-Butanone	43	6.271	6.281	(0.948)	4302	5.07991	2.449
	21 2,2-Dichloropropane	77	Compound Not Detected.					
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
*	23 Pentafluorobenzene	168	6.613	6.633	(1.000)	134487	50.0000	
	24 Chloroform	83	Compound Not Detected.					
	26 Bromochloromethane	128	Compound Not Detected.					
$	25 Dibromofluoromethane	111	6.834	6.844	(1.033)	93305	58.2105	28.067(Q)
	27 1,1,1-Trichloroethane	97	Compound Not Detected.					
	29 1,1-Dichloropropene	75	Compound Not Detected.					
	30 Carbon Tetrachloride	117	Compound Not Detected.					
$	31 d4-1,2-Dichloroethane	65	7.296	7.306	(1.103)	110007	62.7207	30.241
	32 1,2-Dichloroethane	62	Compound Not Detected.					
	33 Benzene	78	Compound Not Detected.					
*	34 1,4-Difluorobenzene	114	7.628	7.638	(1.000)	206649	50.0000	
	35 Trichloroethene	95	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	39 Dibromomethane	93	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43 d8-Toluene	98	9.176	9.186	(1.203)	234953	51.7444	24.949
	44 Toluene	92	Compound Not Detected.					
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	46 2-Hexanone	43	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 1,3-Dichloropropane	76	Compound Not Detected.					
	49 Tetrachloroethene	166	Compound Not Detected.					
	50 Chlorodibromomethane	129	Compound Not Detected.					
	51 1,2-Dibromoethane	107	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	10.774	10.794	(1.000)	182688	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 Isopropyl Benzene	105	Compound Not Detected.					
	60 Bromoform	173	Compound Not Detected.					
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	12.100	12.110	(1.123)	100956	47.2184	22.767
	63 1,2,3-Trichloropropane	110	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
66	N-Propyl Benzene	91	Compound Not Detected.					
67	Bromobenzene	156	Compound Not Detected.					
68	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
69	2-Chloro Toluene	91	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	13.457	13.477	(1.000)	89531	50.0000	
77	1,4-Dichlorobenzene	146	Compound Not Detected.					
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	13.899	13.919	(1.033)	85225	52.3332	25.233(Q)
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: RG54F.d
Lab Smp Id: RG54F
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18207

Calibration Date: 04-AUG-2010
Calibration Time: 10:24
Client Smp ID: PSB14-12-14-072810
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
23 Pentafluorobenzen	131115	65558	262230	134487	2.57
34 1,4-Difluorobenze	191559	95780	383118	206649	7.88
52 d5-Chlorobenzene	161199	80600	322398	182688	13.33
76 d4-1,4-Dichlorobe	88279	44140	176558	89531	1.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.63	6.13	7.13	6.61	-0.30
34 1,4-Difluorobenze	7.64	7.14	8.14	7.63	-0.13
52 d5-Chlorobenzene	10.79	10.29	11.29	10.77	-0.19
76 d4-1,4-Dichlorobe	13.48	12.98	13.98	13.46	-0.15

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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: SOLID
Lab Smp Id: RG54F
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18207

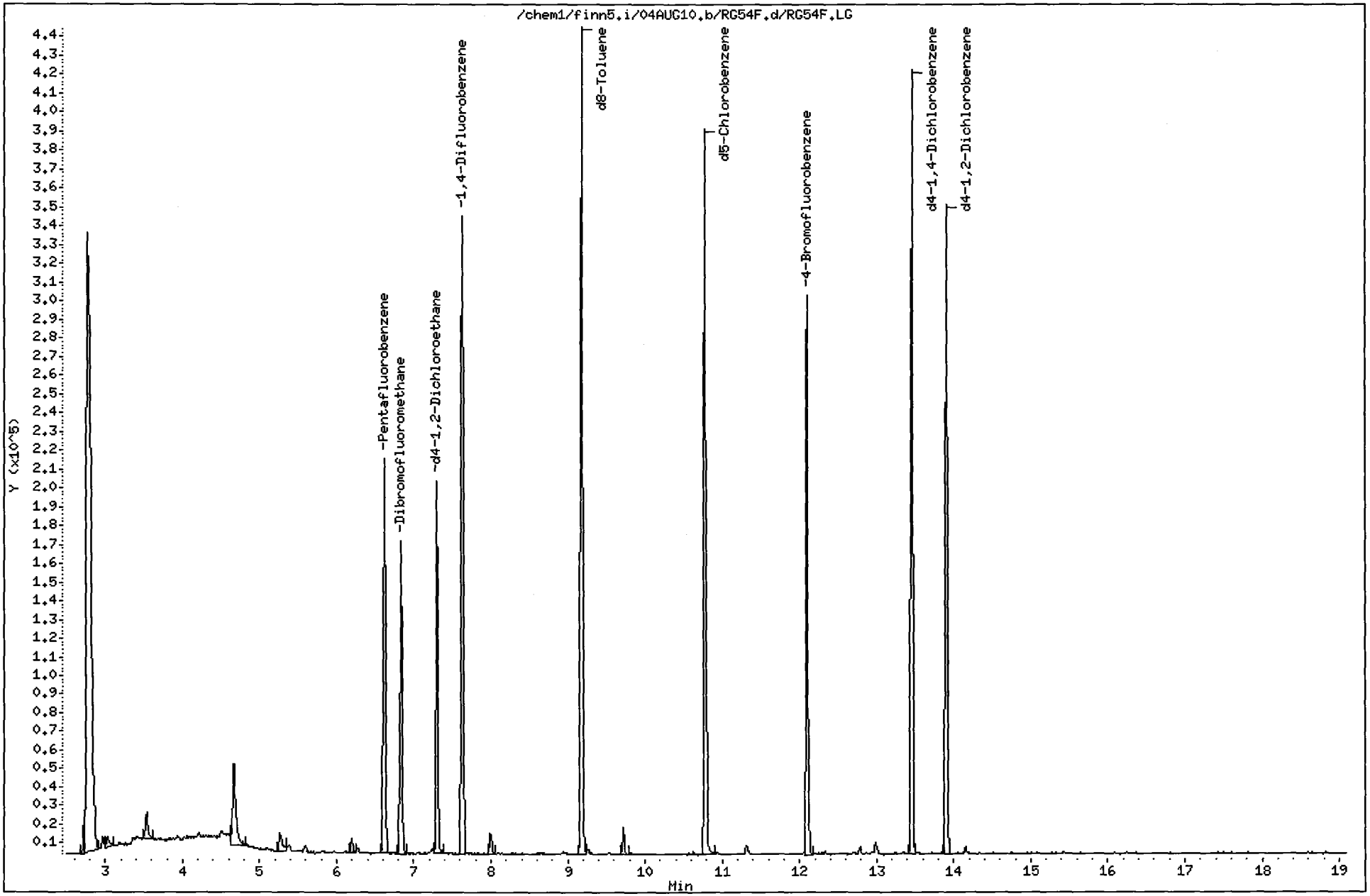
Client SDG: RG54
Fraction: VOA
Client Smp ID: PSB14-12-14-072810
Operator: PB
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	58.210	116.42	30-160
$ 31 d4-1,2-Dichloroeth	50.000	62.721	125.44	75-152
$ 43 d8-Toluene	50.000	51.744	103.49	82-115
$ 62 4-Bromofluorobenze	50.000	47.218	94.44	64-120
$ 79 d4-1,2-Dichloroben	50.000	52.333	104.67	80-120

Data File: /chem1/finn5.i/04AUG10.b/RG54F.d
Date : 04-AUG-2010 15:37
Client ID: PSB14-12-14-072810
Sample Info: RG54F,5,10.37,0

Instrument: finn5.i
Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



RG54F.D

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/04AUG10.b/RG54G.d
Lab Smp Id: RG54G Client Smp ID: PSB14-TB
Inj Date : 04-AUG-2010 16:04
Operator : PB Inst ID: finn5.i
Smp Info : RG54G,5,5,0
Misc Info : 10-18208
Comment :
Method : /chem1/finn5.i/04AUG10.b/s8260b.m
Meth Date : 05-Aug-2010 16:25 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	PurgeVolume (mL)
Sa	0.00000	SampleAmount (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/L)
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	3.306	3.316	(0.499)	2727	0.58515	0.5851
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 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.683	4.683	(0.707)	5068	6.77939	6.779
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	5.276	5.276	(0.797)	13836	4.85604	4.856
14 Acrylonitrile	53	Compound Not Detected.					
16 Methyl tert-Butyl Ether	73	Compound Not Detected.					

		QUANT SIG					CONCENTRATIONS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/Kg)	FINAL (ug/L)
	15 Carbon Disulfide	76	Compound Not Detected.					
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	18 Vinyl Acetate	43	Compound Not Detected.					
	19 1,1-Dichloroethane	63	Compound Not Detected.					
	20 2-Butanone	43	Compound Not Detected.					
	21 2,2-Dichloropropane	77	Compound Not Detected.					
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
*	23 Pentafluorobenzene	168	6.623	6.633	(1.000)	133581	50.0000	
	24 Chloroform	83	Compound Not Detected.					
	26 Bromochloromethane	128	Compound Not Detected.					
$	25 Dibromofluoromethane	111	6.844	6.844	(1.033)	91150	57.2517	57.252(Q)
	27 1,1,1-Trichloroethane	97	Compound Not Detected.					
	29 1,1-Dichloropropene	75	Compound Not Detected.					
	30 Carbon Tetrachloride	117	Compound Not Detected.					
$	31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.103)	101220	58.1022	58.102
	32 1,2-Dichloroethane	62	Compound Not Detected.					
	33 Benzene	78	Compound Not Detected.					
*	34 1,4-Difluorobenzene	114	7.638	7.638	(1.000)	203833	50.0000	
	35 Trichloroethene	95	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	39 Dibromomethane	93	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43 d8-Toluene	98	9.186	9.186	(1.203)	236190	52.7354	52.735
	44 Toluene	92	Compound Not Detected.					
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	46 2-Hexanone	43	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 1,3-Dichloropropane	76	Compound Not Detected.					
	49 Tetrachloroethene	166	Compound Not Detected.					
	50 Chlorodibromomethane	129	Compound Not Detected.					
	51 1,2-Dibromoethane	107	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	10.784	10.794	(1.000)	178411	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 Isopropyl Benzene	105	Compound Not Detected.					
	60 Bromoform	173	Compound Not Detected.					
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	12.110	12.110	(1.123)	98321	47.0884	47.088
	63 1,2,3-Trichloropropane	110	Compound Not Detected.					
	65 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/L)
66	N-Propyl Benzene	91	Compound Not Detected.					
67	Bromobenzene	156	Compound Not Detected.					
68	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
69	2-Chloro Toluene	91	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	13.467	13.477	(1.000)	87420	50.0000	
77	1,4-Dichlorobenzene	146	Compound Not Detected.					
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	13.909	13.919	(1.033)	81506	51.2581	51.258
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: RG54G.d
Lab Smp Id: RG54G
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18208

Calibration Date: 04-AUG-2010
Calibration Time: 10:24
Client Smp ID: PSB14-TB
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
23 Pentafluorobenzen	131115	65558	262230	133581	1.88
34 1,4-Difluorobenze	191559	95780	383118	203833	6.41
52 d5-Chlorobenzene	161199	80600	322398	178411	10.68
76 d4-1,4-Dichlorobe	88279	44140	176558	87420	-0.97

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.63	6.13	7.13	6.62	-0.15
34 1,4-Difluorobenze	7.64	7.14	8.14	7.64	0.00
52 d5-Chlorobenzene	10.79	10.29	11.29	10.78	-0.09
76 d4-1,4-Dichlorobe	13.48	12.98	13.98	13.47	-0.07

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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: LIQUID
Lab Smp Id: RG54G
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18208

Client SDG: RG54
Fraction: VOA
Client Smp ID: PSB14-TB
Operator: PB
SampleType: SAMPLE
Quant Type: ISTD

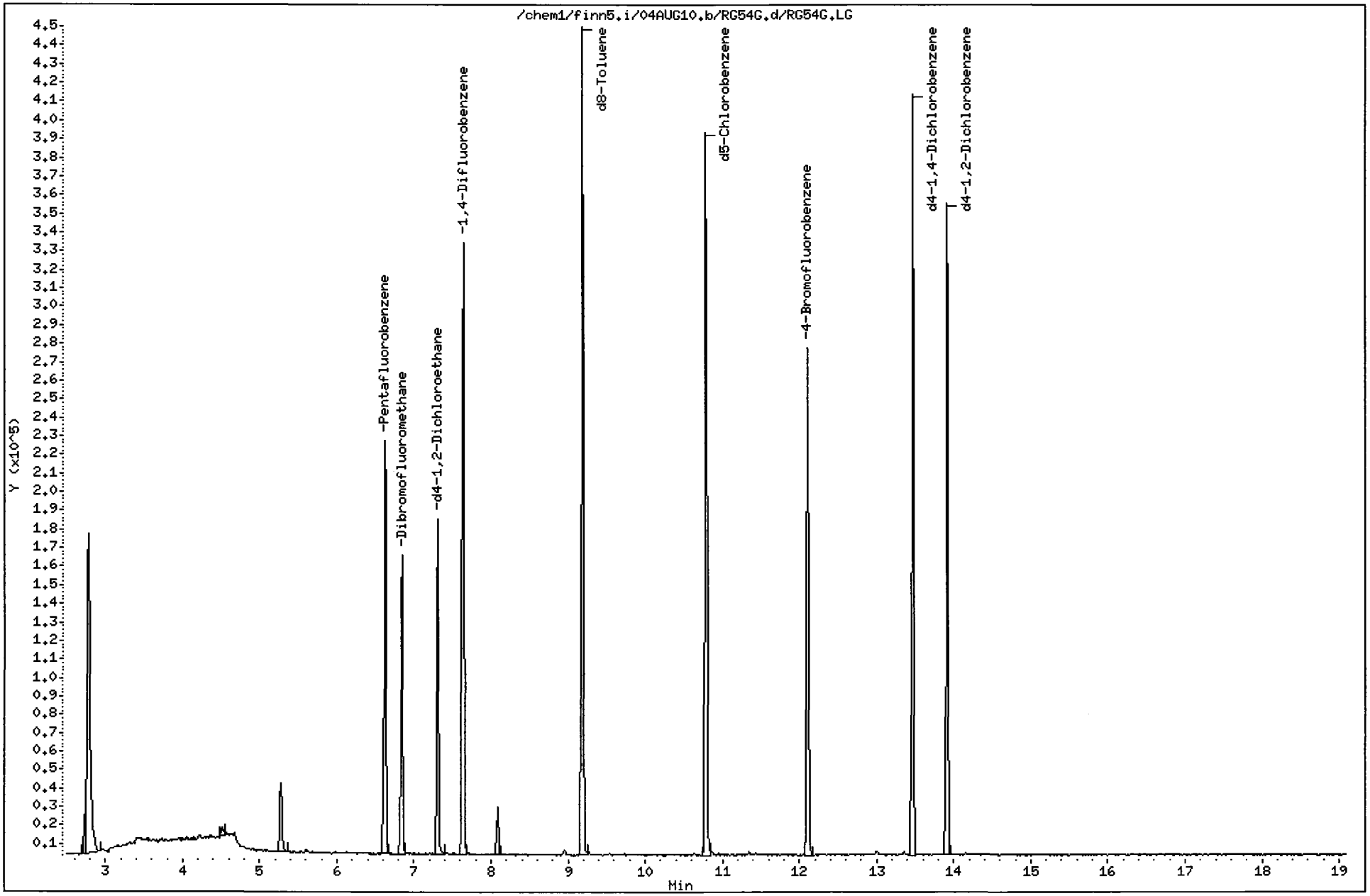
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	57.252	114.50	30-160
$ 31 d4-1,2-Dichloroeth	50.000	58.102	116.20	75-152
$ 43 d8-Toluene	50.000	52.735	105.47	82-115
$ 62 4-Bromofluorobenze	50.000	47.088	94.18	71-120
$ 79 d4-1,2-Dichloroben	50.000	51.258	102.52	80-121

Data File: /chem1/finn5.i/04AUG10.b/RG54G.d
Date : 04-AUG-2010 16:04
Client ID: PSB14-TB
Sample Info: RG54G,5,5,0

Instrument: finn5.i

Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



RG54G 08/10/10

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/04AUG10.b/RG54H.d
Lab Smp Id: RG54H Client Smp ID: PSB17-0-0.5-072810
Inj Date : 04-AUG-2010 16:30
Operator : PB Inst ID: finn5.i
Smp Info : RG54H,5,9.724,0
Misc Info : 10-18209
Comment :
Method : /chem1/finn5.i/04AUG10.b/s8260b.m
Meth Date : 05-Aug-2010 16:25 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	9.72400	Sample Amount
M	0.00000	Moisture (%)

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 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.683	4.683	(0.706)	46059	58.4601	30.060
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.					
	15 Carbon Disulfide	76	Compound Not Detected.					
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	18 Vinyl Acetate	43	Compound Not Detected.					
	19 1,1-Dichloroethane	63	Compound Not Detected.					
	20 2-Butanone	43	6.291	6.281	(0.948)	2831	3.19339	1.642
	21 2,2-Dichloropropane	77	Compound Not Detected.					
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
*	23 Pentafluorobenzene	168	6.633	6.633	(1.000)	140784	50.0000	
	24 Chloroform	83	Compound Not Detected.					
	26 Bromochloromethane	128	Compound Not Detected.					
$	25 Dibromofluoromethane	111	6.854	6.844	(1.033)	97588	58.1594	29.905(Q)
	27 1,1,1-Trichloroethane	97	Compound Not Detected.					
	29 1,1-Dichloropropene	75	Compound Not Detected.					
	30 Carbon Tetrachloride	117	Compound Not Detected.					
$	31 d4-1,2-Dichloroethane	65	7.316	7.306	(1.103)	116755	63.5907	32.698
	32 1,2-Dichloroethane	62	Compound Not Detected.					
	33 Benzene	78	Compound Not Detected.					
*	34 1,4-Difluorobenzene	114	7.648	7.638	(1.000)	217805	50.0000	
	35 Trichloroethene	95	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	39 Dibromomethane	93	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43 d8-Toluene	98	9.196	9.186	(1.202)	247928	51.8052	26.638
	44 Toluene	92	Compound Not Detected.					
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	46 2-Hexanone	43	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 1,3-Dichloropropane	76	Compound Not Detected.					
	49 Tetrachloroethene	166	Compound Not Detected.					
	50 Chlorodibromomethane	129	Compound Not Detected.					
	51 1,2-Dibromoethane	107	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	10.794	10.794	(1.000)	189133	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 Isopropyl Benzene	105	Compound Not Detected.					
	60 Bromoform	173	Compound Not Detected.					
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	12.110	12.110	(1.122)	106464	48.0977	24.731
	63 1,2,3-Trichloropropane	110	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
66	N-Propyl Benzene	91	Compound Not Detected.					
67	Bromobenzene	156	Compound Not Detected.					
68	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
69	2-Chloro Toluene	91	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	13.477	13.477	(1.000)	93367	50.0000	
77	1,4-Dichlorobenzene	146	Compound Not Detected.					
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	13.919	13.919	(1.033)	88138	51.8983	26.686(Q)
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: RG54H.d
Lab Smp Id: RG54H
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18209

Calibration Date: 04-AUG-2010
Calibration Time: 10:24
Client Smp ID: PSB17-0-0.5-072810
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
23 Pentafluorobenzen	131115	65558	262230	140784	7.37
34 1,4-Difluorobenze	191559	95780	383118	217805	13.70
52 d5-Chlorobenzene	161199	80600	322398	189133	17.33
76 d4-1,4-Dichlorobe	88279	44140	176558	93367	5.76

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.63	6.13	7.13	6.63	0.00
34 1,4-Difluorobenze	7.64	7.14	8.14	7.65	0.13
52 d5-Chlorobenzene	10.79	10.29	11.29	10.79	0.00
76 d4-1,4-Dichlorobe	13.48	12.98	13.98	13.48	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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: SOLID
Lab Smp Id: RG54H
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18209

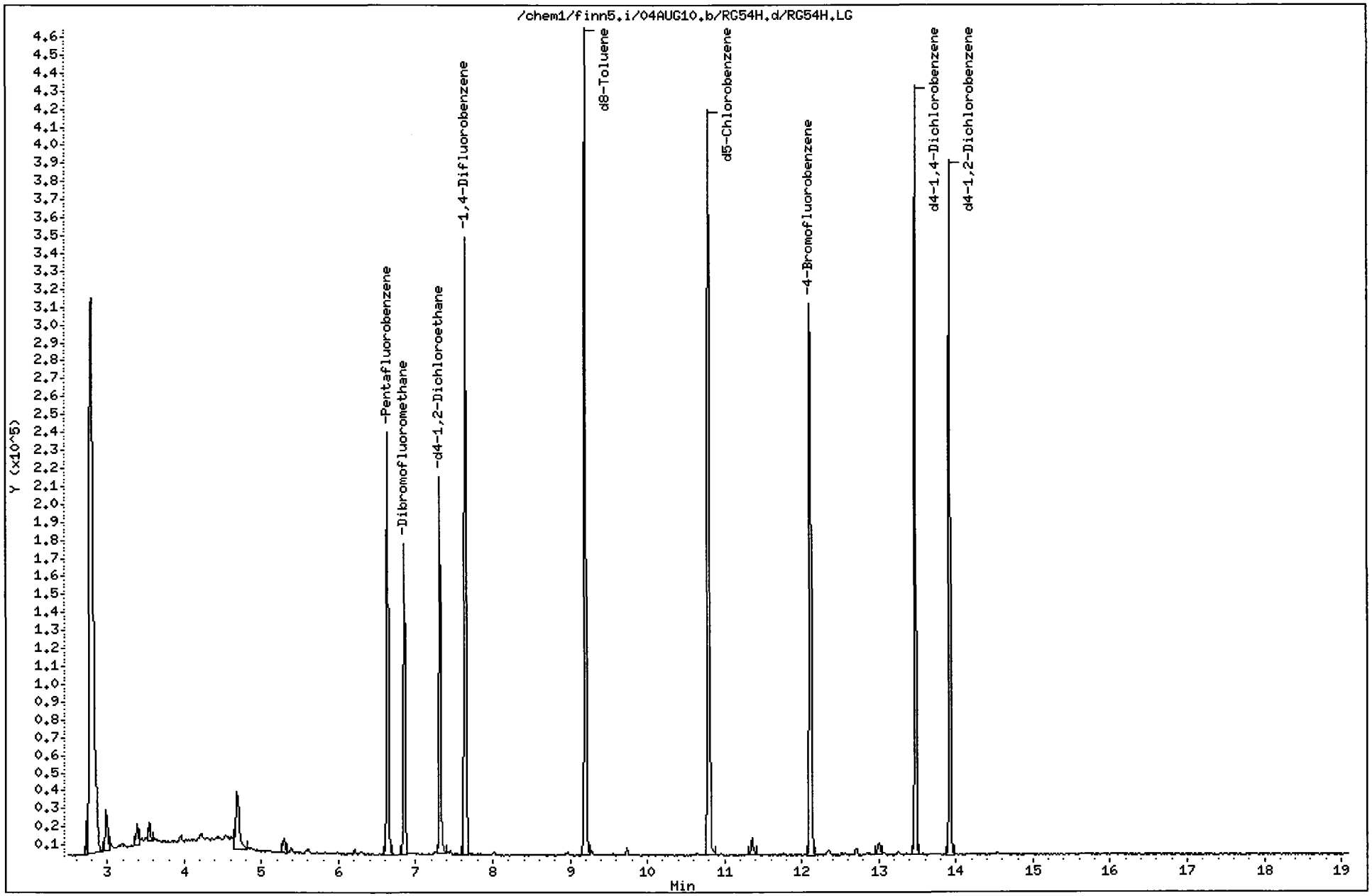
Client SDG: RG54
Fraction: VOA
Client Smp ID: PSB17-0-0.5-072810
Operator: PB
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	58.159	116.32	30-160
$ 31 d4-1,2-Dichloroeth	50.000	63.591	127.18	75-152
$ 43 d8-Toluene	50.000	51.805	103.61	82-115
$ 62 4-Bromofluorobenze	50.000	48.098	96.20	64-120
$ 79 d4-1,2-Dichloroben	50.000	51.898	103.80	80-120

Data File: /chem1/finn5.i/04AUG10.b/RG54H.d
Date : 04-AUG-2010 16:30
Client ID: PSB17-0-0.5-072810
Sample Info: RG54H,5,9.724,0

Instrument: finn5.i
Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



RG54H.SQ12

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/04AUG10.b/RG54I.d
Lab Smp Id: RG54I Client Smp ID: PSB17-1.5-2-072810
Inj Date : 04-AUG-2010 16:57
Operator : PB Inst ID: finn5.i
Smp Info : RG54I,5,8.430,0
Misc Info : 10-18210
Comment :
Method : /chem1/finn5.i/04AUG10.b/s8260b.m
Meth Date : 05-Aug-2010 16:25 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	8.43000	Sample Amount
M	0.00000	Moisture (%)

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 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.663	4.683	(0.705)	76440	100.153	59.402
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	5.256	5.276	(0.795)	2162	0.74322	0.4408
14 Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.					
	15 Carbon Disulfide	76	Compound Not Detected.					
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	18 Vinyl Acetate	43	Compound Not Detected.					
	19 1,1-Dichloroethane	63	Compound Not Detected.					
	20 2-Butanone	43	6.271	6.281	(0.948)	3014	3.50956	2.082
	21 2,2-Dichloropropane	77	Compound Not Detected.					
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
*	23 Pentafluorobenzene	168	6.613	6.633	(1.000)	136382	50.0000	
	24 Chloroform	83	Compound Not Detected.					
	26 Bromochloromethane	128	Compound Not Detected.					
$	25 Dibromofluoromethane	111	6.834	6.844	(1.033)	94338	58.0372	34.423(Q)
	27 1,1,1-Trichloroethane	97	Compound Not Detected.					
	29 1,1-Dichloropropene	75	Compound Not Detected.					
	30 Carbon Tetrachloride	117	Compound Not Detected.					
$	31 d4-1,2-Dichloroethane	65	7.296	7.306	(1.103)	108775	61.1566	36.273
	32 1,2-Dichloroethane	62	Compound Not Detected.					
	33 Benzene	78	Compound Not Detected.					
*	34 1,4-Difluorobenzene	114	7.628	7.638	(1.000)	207857	50.0000	
	35 Trichloroethene	95	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	39 Dibromomethane	93	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43 d8-Toluene	98	9.176	9.186	(1.203)	237428	51.9856	30.834
	44 Toluene	92	Compound Not Detected.					
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	46 2-Hexanone	43	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 1,3-Dichloropropane	76	Compound Not Detected.					
	49 Tetrachloroethene	166	Compound Not Detected.					
	50 Chlorodibromomethane	129	Compound Not Detected.					
	51 1,2-Dibromoethane	107	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	10.774	10.794	(1.000)	179355	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 Isopropyl Benzene	105	Compound Not Detected.					
	60 Bromoform	173	Compound Not Detected.					
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	12.100	12.110	(1.123)	99994	47.6376	28.255
	63 1,2,3-Trichloropropane	110	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
66	N-Propyl Benzene	91	Compound Not Detected.					
67	Bromobenzene	156	Compound Not Detected.					
68	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
69	2-Chloro Toluene	91	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	13.457	13.477	(1.000)	87784	50.0000	
77	1,4-Dichlorobenzene	146	Compound Not Detected.					
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	13.899	13.919	(1.033)	82784	51.8459	30.751(Q)
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: RG54I.d
Lab Smp Id: RG54I
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18210

Calibration Date: 04-AUG-2010
Calibration Time: 10:24
Client Smp ID: PSB17-1.5-2-072810
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
23 Pentafluorobenzen	131115	65558	262230	136382	4.02
34 1,4-Difluorobenze	191559	95780	383118	207857	8.51
52 d5-Chlorobenzene	161199	80600	322398	179355	11.26
76 d4-1,4-Dichlorobe	88279	44140	176558	87784	-0.56

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.63	6.13	7.13	6.61	-0.30
34 1,4-Difluorobenze	7.64	7.14	8.14	7.63	-0.13
52 d5-Chlorobenzene	10.79	10.29	11.29	10.77	-0.19
76 d4-1,4-Dichlorobe	13.48	12.98	13.98	13.46	-0.15

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.

Analytical Resources, Inc.

RECOVERY REPORT

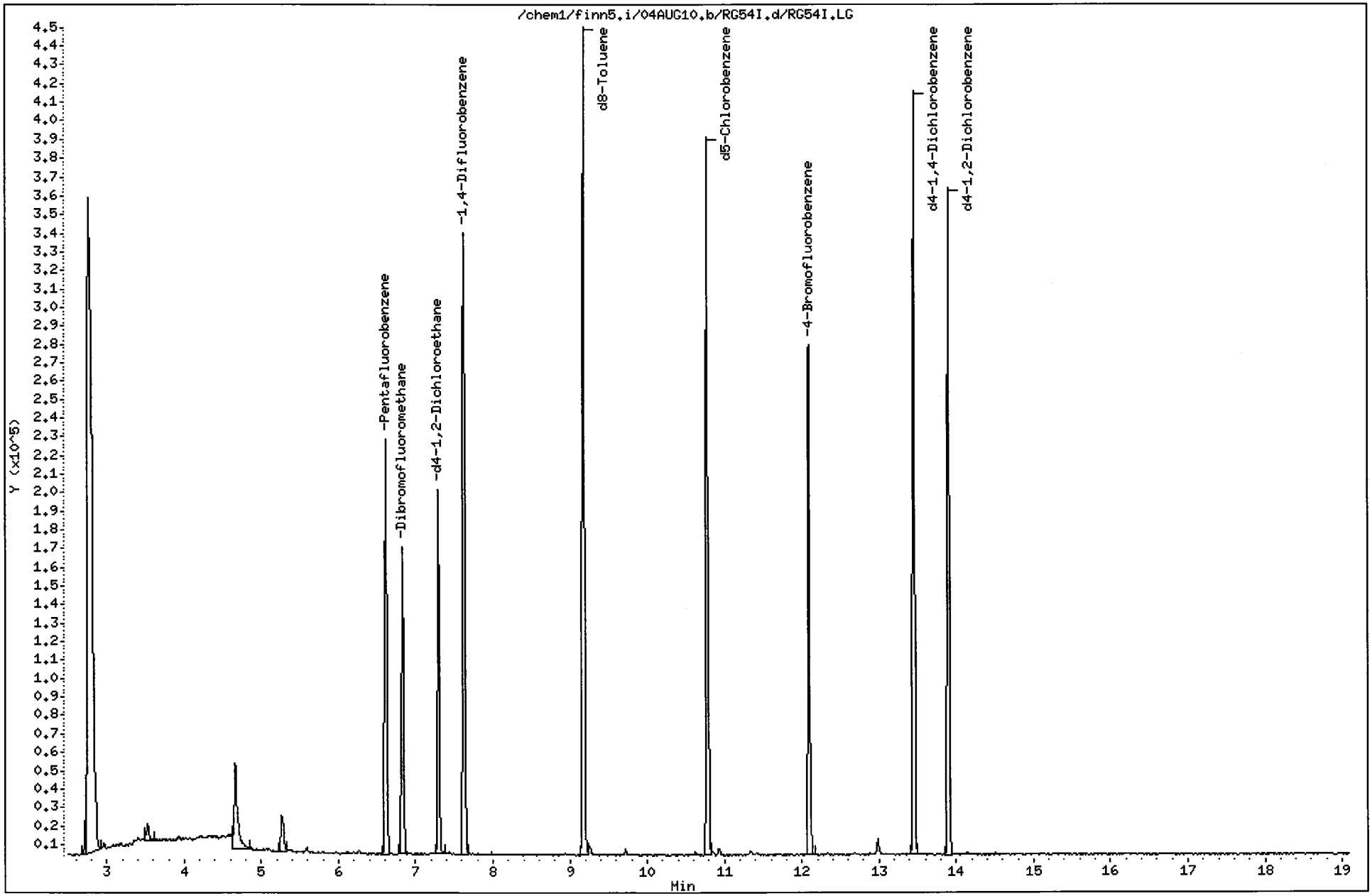
Client Name: Floyd/Snider
Client SDG: RG54
Sample Matrix: SOLID
Fraction: VOA
Lab Smp Id: RG54I
Client Smp ID: PSB17-1.5-2-072810
Level: LOW
Operator: PB
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: all.spk
Quant Type: ISTD
Sublist File: voa.sub
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18210

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	58.037	116.07	30-160
$ 31 d4-1,2-Dichloroeth	50.000	61.156	122.31	75-152
$ 43 d8-Toluene	50.000	51.986	103.97	82-115
$ 62 4-Bromofluorobenze	50.000	47.638	95.28	64-120
$ 79 d4-1,2-Dichloroben	50.000	51.846	103.69	80-120

Data File: /chem1/finn5.i/04AUG10.b/RG54I.d
Date : 04-AUG-2010 16:57
Client ID: PSB17-1.5-2-072810
Sample Info: RG54I,5,8.430,0

Instrument: finn5.i
Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



RG54I:6414.D

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/04AUG10.b/RG54J.d
Lab Smp Id: RG54J Client Smp ID: PSB17-2-4-072810
Inj Date : 04-AUG-2010 17:23
Operator : PB Inst ID: finn5.i
Smp Info : RG54J,5,8.834,0
Misc Info : 10-18211
Comment :
Method : /chem1/finn5.i/04AUG10.b/s8260b.m
Meth Date : 05-Aug-2010 16:25 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	8.83400	Sample Amount
M	0.00000	Moisture (%)

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	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 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.663	4.683	(0.705)	46799	60.9062	34.473
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	5.266	5.276	(0.796)	2018	0.68907	0.3900
14 Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.					
	15 Carbon Disulfide	76	5.367	5.377	(0.812)	4945	0.61302	0.3470
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	18 Vinyl Acetate	43	Compound Not Detected.					
	19 1,1-Dichloroethane	63	Compound Not Detected.					
	20 2-Butanone	43	6.271	6.281	(0.948)	2573	2.97599	1.684
	21 2,2-Dichloropropane	77	Compound Not Detected.					
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
*	23 Pentafluorobenzene	168	6.613	6.633	(1.000)	137301	50.0000	
	24 Chloroform	83	Compound Not Detected.					
	26 Bromochloromethane	128	Compound Not Detected.					
$	25 Dibromofluoromethane	111	6.834	6.844	(1.033)	95172	58.1583	32.917(Q)
	27 1,1,1-Trichloroethane	97	Compound Not Detected.					
	29 1,1-Dichloropropene	75	Compound Not Detected.					
	30 Carbon Tetrachloride	117	Compound Not Detected.					
$	31 d4-1,2-Dichloroethane	65	7.296	7.306	(1.103)	112366	62.7527	35.518
	32 1,2-Dichloroethane	62	Compound Not Detected.					
	33 Benzene	78	Compound Not Detected.					
*	34 1,4-Difluorobenzene	114	7.628	7.638	(1.000)	211993	50.0000	
	35 Trichloroethene	95	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	39 Dibromomethane	93	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43 d8-Toluene	98	9.176	9.186	(1.203)	241164	51.7734	29.303
	44 Toluene	92	Compound Not Detected.					
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	46 2-Hexanone	43	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 1,3-Dichloropropane	76	Compound Not Detected.					
	49 Tetrachloroethene	166	Compound Not Detected.					
	50 Chlorodibromomethane	129	Compound Not Detected.					
	51 1,2-Dibromoethane	107	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	10.774	10.794	(1.000)	184003	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 Isopropyl Benzene	105	Compound Not Detected.					
	60 Bromoform	173	Compound Not Detected.					
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	12.100	12.110	(1.123)	103835	48.2179	27.291
	63 1,2,3-Trichloropropane	110	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
66	N-Propyl Benzene	91	Compound Not Detected.					
67	Bromobenzene	156	Compound Not Detected.					
68	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
69	2-Chloro Toluene	91	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	13.457	13.477	(1.000)	91153	50.0000	
77	1,4-Dichlorobenzene	146	Compound Not Detected.					
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	13.899	13.919	(1.033)	86749	52.3211	29.613
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: RG54J.d
Lab Smp Id: RG54J
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18211

Calibration Date: 04-AUG-2010
Calibration Time: 10:24
Client Smp ID: PSB17-2-4-072810
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
23 Pentafluorobenzen	131115	65558	262230	137301	4.72
34 1,4-Difluorobenze	191559	95780	383118	211993	10.67
52 d5-Chlorobenzene	161199	80600	322398	184003	14.15
76 d4-1,4-Dichlorobe	88279	44140	176558	91153	3.26

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.63	6.13	7.13	6.61	-0.30
34 1,4-Difluorobenze	7.64	7.14	8.14	7.63	-0.13
52 d5-Chlorobenzene	10.79	10.29	11.29	10.77	-0.19
76 d4-1,4-Dichlorobe	13.48	12.98	13.98	13.46	-0.15

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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Sample Matrix: SOLID
Lab Smp Id: RG54J
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18211

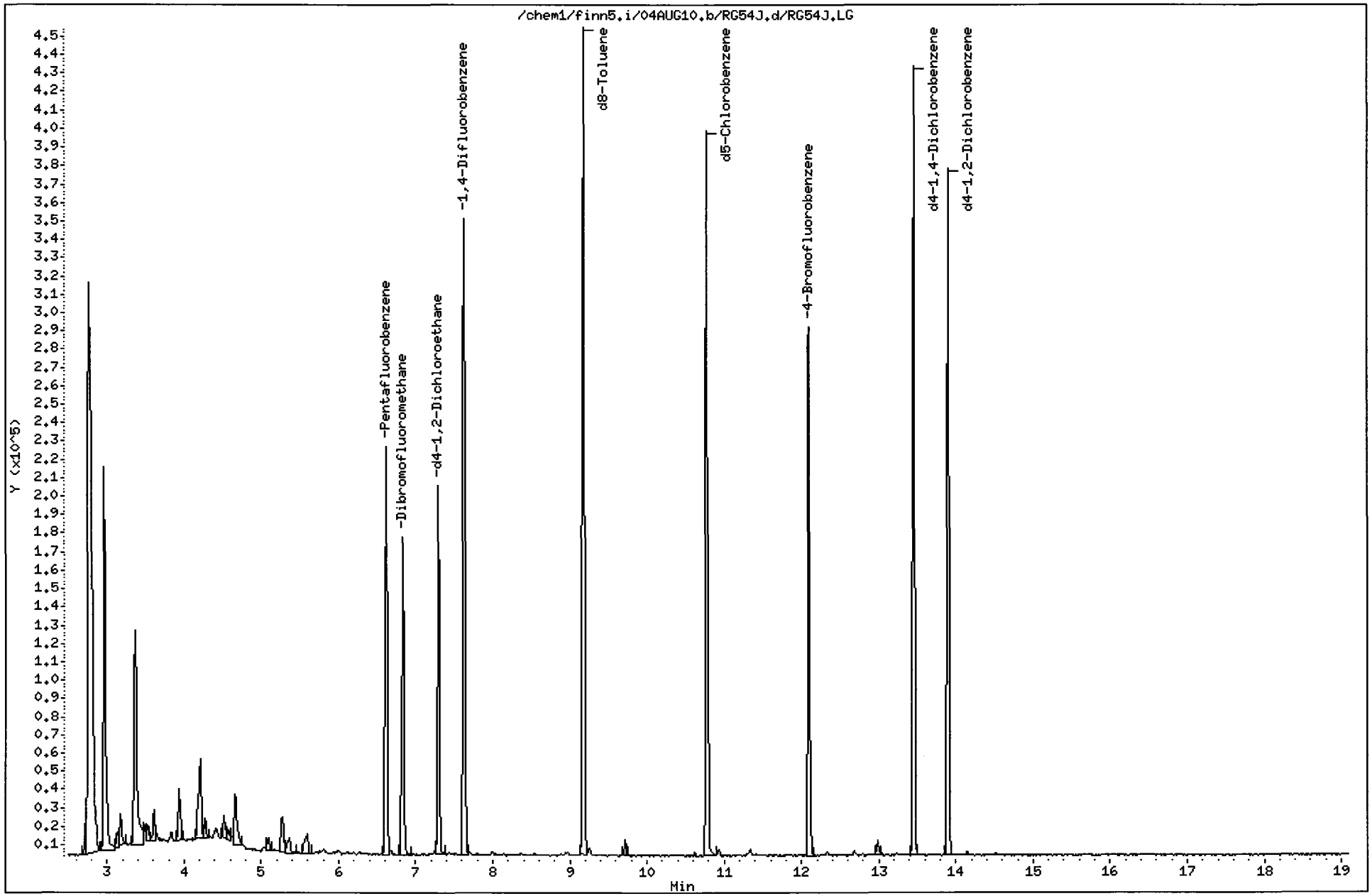
Client SDG: RG54
Fraction: VOA
Client Smp ID: PSB17-2-4-072810
Operator: PB
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	58.158	116.32	30-160
$ 31 d4-1,2-Dichloroeth	50.000	62.753	125.51	75-152
$ 43 d8-Toluene	50.000	51.773	103.55	82-115
$ 62 4-Bromofluorobenze	50.000	48.218	96.44	64-120
$ 79 d4-1,2-Dichloroben	50.000	52.321	104.64	80-120

Data File: /chem1/finn5.i/04AUG10.b/RG54J.d
Date : 04-AUG-2010 17:23
Client ID: PSB17-2-4-072810
Sample Info: RG54J,5,8.834,0

Instrument: finn5.i
Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



RG54J-68L121

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/04AUG10.b/RG54K.d
Lab Smp Id: RG54K Client Smp ID: PSB17-4-6-072810
Inj Date : 04-AUG-2010 17:50
Operator : PB Inst ID: finn5.i
Smp Info : RG54K,5,7.788,0
Misc Info : 10-18212
Comment :
Method : /chem1/finn5.i/04AUG10.b/s8260b.m
Meth Date : 05-Aug-2010 16:25 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	7.78800	Sample Amount
M	0.00000	Moisture (%)

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 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.683	4.683	(0.706)	19419	22.8308	14.658
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.					
	15 Carbon Disulfide	76	Compound Not Detected.					
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	18 Vinyl Acetate	43	Compound Not Detected.					
	19 1,1-Dichloroethane	63	Compound Not Detected.					
	20 2-Butanone	43	Compound Not Detected.					
	21 2,2-Dichloropropane	77	Compound Not Detected.					
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
*	23 Pentafluorobenzene	168	6.633	6.633	(1.000)	151986	50.0000	
	24 Chloroform	83	Compound Not Detected.					
	26 Bromochloromethane	128	Compound Not Detected.					
$	25 Dibromofluoromethane	111	6.854	6.844	(1.033)	100843	55.6697	35.741(Q)
	27 1,1,1-Trichloroethane	97	Compound Not Detected.					
	29 1,1-Dichloropropene	75	Compound Not Detected.					
	30 Carbon Tetrachloride	117	Compound Not Detected.					
$	31 d4-1,2-Dichloroethane	65	7.316	7.306	(1.103)	118490	59.7791	38.379
	32 1,2-Dichloroethane	62	Compound Not Detected.					
	33 Benzene	78	Compound Not Detected.					
*	34 1,4-Difluorobenzene	114	7.648	7.638	(1.000)	224135	50.0000	
	35 Trichloroethene	95	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	39 Dibromomethane	93	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43 d8-Toluene	98	9.196	9.186	(1.202)	250367	50.8373	32.638
	44 Toluene	92	Compound Not Detected.					
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	46 2-Hexanone	43	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 1,3-Dichloropropane	76	Compound Not Detected.					
	49 Tetrachloroethene	166	Compound Not Detected.					
	50 Chlorodibromomethane	129	Compound Not Detected.					
	51 1,2-Dibromoethane	107	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	10.794	10.794	(1.000)	194637	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 Isopropyl Benzene	105	Compound Not Detected.					
	60 Bromoform	173	Compound Not Detected.					
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	12.120	12.110	(1.123)	110181	48.3694	31.054
	63 1,2,3-Trichloropropane	110	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
66	N-Propyl Benzene	91	Compound Not Detected.					
67	Bromobenzene	156	Compound Not Detected.					
68	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
69	2-Chloro Toluene	91	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	13.477	13.477	(1.000)	99445	50.0000	
77	1,4-Dichlorobenzene	146	Compound Not Detected.					
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	13.919	13.919	(1.033)	93387	51.6282	33.146
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: RG54K.d
Lab Smp Id: RG54K
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18212

Calibration Date: 04-AUG-2010
Calibration Time: 10:24
Client Smp ID: PSB17-4-6-072810
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
23 Pentafluorobenzen	131115	65558	262230	151986	15.92
34 1,4-Difluorobenze	191559	95780	383118	224135	17.01
52 d5-Chlorobenzene	161199	80600	322398	194637	20.74
76 d4-1,4-Dichlorobe	88279	44140	176558	99445	12.65

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.63	6.13	7.13	6.63	0.00
34 1,4-Difluorobenze	7.64	7.14	8.14	7.65	0.13
52 d5-Chlorobenzene	10.79	10.29	11.29	10.79	0.00
76 d4-1,4-Dichlorobe	13.48	12.98	13.98	13.48	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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Client SDG: RG54
Sample Matrix: SOLID
Fraction: VOA
Lab Smp Id: RG54K
Client Smp ID: PSB17-4-6-072810
Level: LOW
Operator: PB
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: all.spk
Quant Type: ISTD
Sublist File: voa.sub
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18212

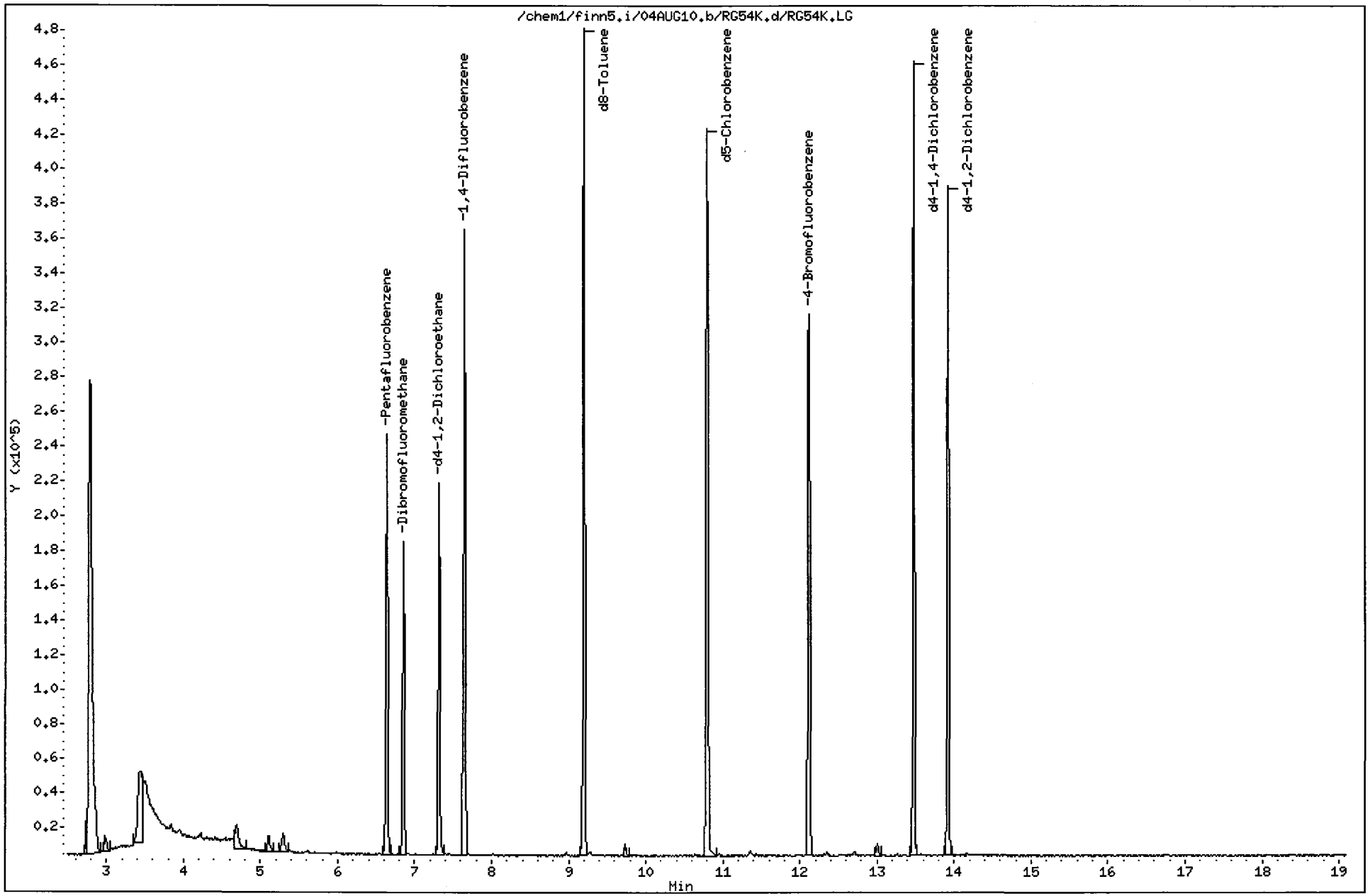
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	55.670	111.34	30-160
$ 31 d4-1,2-Dichloroeth	50.000	59.779	119.56	75-152
$ 43 d8-Toluene	50.000	50.837	101.67	82-115
$ 62 4-Bromofluorobenze	50.000	48.369	96.74	64-120
$ 79 d4-1,2-Dichloroben	50.000	51.628	103.26	80-120

Data File: /chem1/finn5.i/04AUG10.b/RG54K.d
Date : 04-AUG-2010 17:50
Client ID: PSB17-4-6-072810
Sample Info: RG54K,5,7.788,0

Instrument: finn5.i

Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



RG54K-06130

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/04AUG10.b/RG54L.d
Lab Smp Id: RG54L Client Smp ID: PSB17-10-13-072810
Inj Date : 04-AUG-2010 18:16
Operator : PB Inst ID: finn5.i
Smp Info : RG54L,5,9.964,0
Misc Info : 10-18213
Comment :
Method : /chem1/finn5.i/04AUG10.b/s8260b.m
Meth Date : 05-Aug-2010 16:25 patrickb Quant Type: ISTD
Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	9.96400	Sample Amount
M	0.00000	Moisture (%)

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 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.673	4.683	(0.706)	5663	6.87911	3.452
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.					
	15 Carbon Disulfide	76	Compound Not Detected.					
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	18 Vinyl Acetate	43	Compound Not Detected.					
	19 1,1-Dichloroethane	63	Compound Not Detected.					
	20 2-Butanone	43	Compound Not Detected.					
	21 2,2-Dichloropropane	77	Compound Not Detected.					
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
*	23 Pentafluorobenzene	168	6.623	6.633	(1.000)	147100	50.0000	
	24 Chloroform	83	Compound Not Detected.					
	26 Bromochloromethane	128	Compound Not Detected.					
$	25 Dibromofluoromethane	111	6.844	6.844	(1.033)	104205	59.4364	29.826(Q)
	27 1,1,1-Trichloroethane	97	Compound Not Detected.					
	29 1,1-Dichloropropene	75	Compound Not Detected.					
	30 Carbon Tetrachloride	117	Compound Not Detected.					
$	31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.103)	125238	65.2822	32.759
	32 1,2-Dichloroethane	62	Compound Not Detected.					
	33 Benzene	78	Compound Not Detected.					
*	34 1,4-Difluorobenzene	114	7.628	7.638	(1.000)	228084	50.0000	
	35 Trichloroethene	95	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	39 Dibromomethane	93	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43 d8-Toluene	98	9.186	9.186	(1.204)	261705	52.2195	26.204
	44 Toluene	92	Compound Not Detected.					
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	46 2-Hexanone	43	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 1,3-Dichloropropane	76	Compound Not Detected.					
	49 Tetrachloroethene	166	Compound Not Detected.					
	50 Chlorodibromomethane	129	Compound Not Detected.					
	51 1,2-Dibromoethane	107	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	10.784	10.794	(1.000)	198529	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 Isopropyl Benzene	105	Compound Not Detected.					
	60 Bromoform	173	Compound Not Detected.					
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	12.100	12.110	(1.122)	112044	48.2229	24.198
	63 1,2,3-Trichloropropane	110	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
66	N-Propyl Benzene	91	Compound Not Detected.					
67	Bromobenzene	156	Compound Not Detected.					
68	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
69	2-Chloro Toluene	91	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	13.467	13.477	(1.000)	99405	50.0000	
77	1,4-Dichlorobenzene	146	Compound Not Detected.					
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	13.909	13.919	(1.033)	95412	52.7689	26.480(Q)
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: RG54L.d
Lab Smp Id: RG54L
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18213

Calibration Date: 04-AUG-2010
Calibration Time: 10:24
Client Smp ID: PSB17-10-13-072810
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
23 Pentafluorobenzen	131115	65558	262230	147100	12.19
34 1,4-Difluorobenze	191559	95780	383118	228084	19.07
52 d5-Chlorobenzene	161199	80600	322398	198529	23.16
76 d4-1,4-Dichlorobe	88279	44140	176558	99405	12.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.63	6.13	7.13	6.62	-0.15
34 1,4-Difluorobenze	7.64	7.14	8.14	7.63	-0.13
52 d5-Chlorobenzene	10.79	10.29	11.29	10.78	-0.09
76 d4-1,4-Dichlorobe	13.48	12.98	13.98	13.47	-0.07

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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider
Client SDG: RG54
Sample Matrix: SOLID
Fraction: VOA
Lab Smp Id: RG54L
Client Smp ID: PSB17-10-13-072810
Level: LOW
Operator: PB
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: all.spk
Quant Type: ISTD
Sublist File: voa.sub
Method File: /chem1/finn5.i/04AUG10.b/s8260b.m
Misc Info: 10-18213

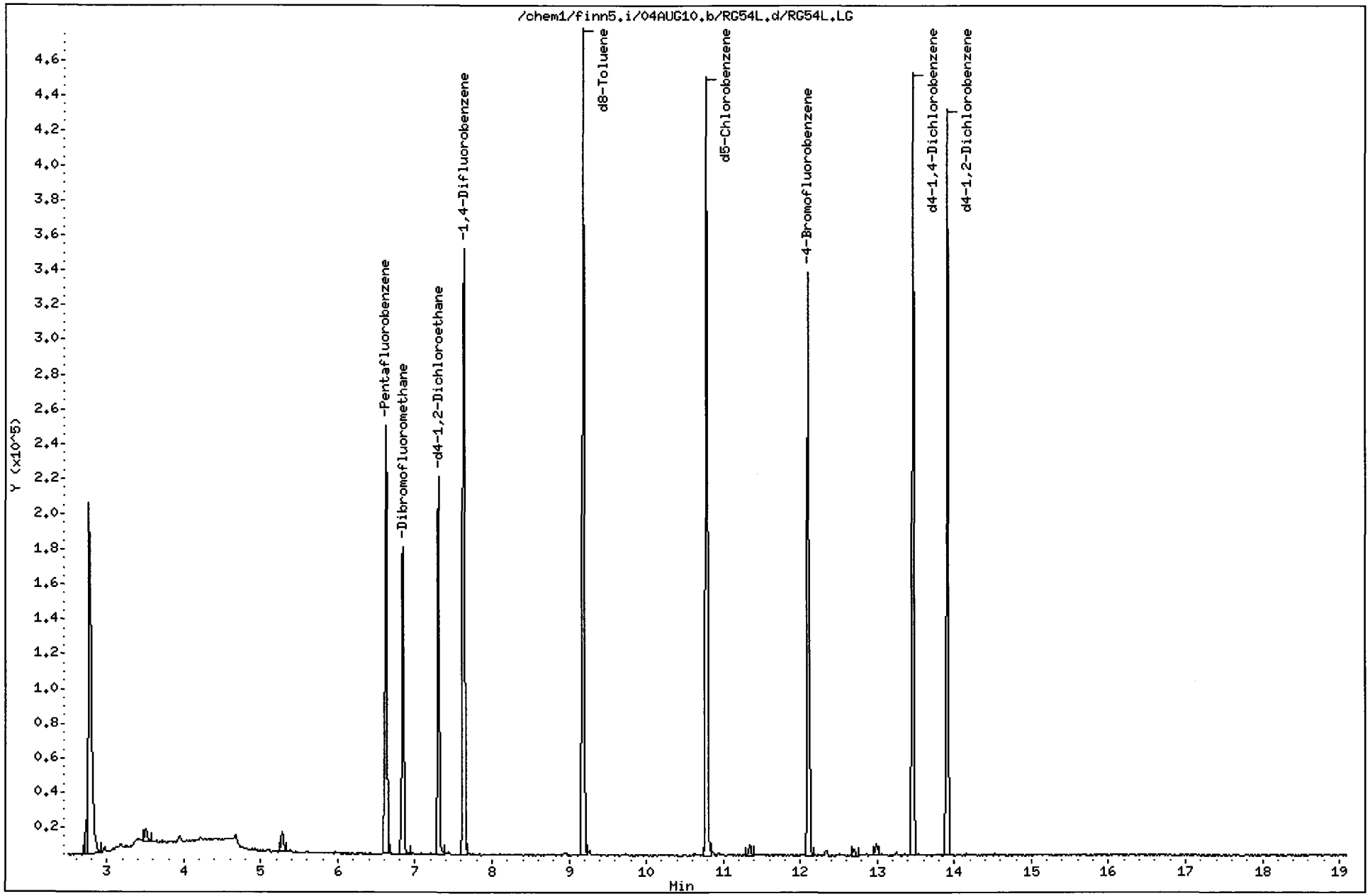
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	59.436	118.87	30-160
$ 31 d4-1,2-Dichloroeth	50.000	65.282	130.56	75-152
$ 43 d8-Toluene	50.000	52.219	104.44	82-115
$ 62 4-Bromofluorobenze	50.000	48.223	96.45	64-120
$ 79 d4-1,2-Dichloroben	50.000	52.769	105.54	80-120

Data File: /chem1/finn5.i/04AUG10.b/RG54L.d
Date : 04-AUG-2010 18:16
Client ID: PSB17-10-13-072810
Sample Info: RG54L,5,9.964,0

Instrument: finn5.i

Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



Semivolatile PAH Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: RG54

Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

(8270) PNA Soil/ Sediment
Sonication (3550B) (SOP # 3304S)

P500A (2¢ ppb)
~~In-House (67ppb)~~

Preparation Test PNA # 1

ARI Job No(s) RG51, RG54, RG6¢

Batch set up by: ~~SH~~

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted (dry wt)	Sonic Horn ID	KD	TurboVap (1) 2 3	(Opt) SilicaGel Clean (1:1) (Y) / N	TurboVap (1) 2 3	Final Effective Volume	Volume to Lab	Comments
	RG51 MBS	Date 08/10/10	~~7.50g~~ 25.00g	12					0.5mL	0.5mL	1¢g Actual
	SBS	↓	↓	11					↓	↓	↓
	~~SBS Dup.~~		↓						↓	↓	
2	RG51 A	checked	28.46	10							
2	B		27.03	9							
2	C		27.02	8							
1	E		27.02	7							
2	F		27.36	6							
2	Fms		27.12	5							
2	Fmsd		27.08	4							
8	RG54 A		28.84	3							See Notes
8	B		28.12	2							
8	C		28.64	1							
8	E		29.33	12							See Notes
8	F		29.15	11							
8	H		27.00	10							See Notes
8	I		27.60	9							
8	J		27.25	8							
8	L		28.68	7							
6	RG6¢ A		27.29	6							See Notes
6	B		27.20	5							
6	C		28.16	4							
6	D		28.63	3							
6	E		28.20	2							
6	F	↓	28.02	1							
Analyst/Date		AE 08/10/10 →			RP 8/11/10	MW 8/11/10 →					MW 8/11/10

Fill 0.4

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
BAN Surrogate	A	125µL	[illegible]	[illegible]	[illegible] 08/10/10
8270 PNA Spike	20	125µL	[illegible]	[illegible]	[illegible] 08/10/10

Extraction Time: 11:35 — 25¢mL

Balance ID: [illegible]

SPECIAL INSTRUCTIONS: 1. Weigh into ~~100mL~~ 250mL flask. 2. Extract 2X with 1:1 DCM/Acetone. Plus 1 X DCM only. 3. Collect into ~~150mL beaker~~ with 5-10g sodium sulfate in the bottom + small funnel with pre-rinsed neutral glasswool. NO SODIUM SULFATE. 4. KD (small drying column) to 8mL at 85-90°. 5. Exchange (2 X with 10mL) to Hexane at 100°. 6. TurboVap. 7. Silica Clean-up-Root Beer Color? (All or none) Y / N. 8. TurboVap (if Silica Clean). 9. Vial in DCM.

A. Need Total Solids Y / (N) B. ~~Archive Freeze~~ Y / N

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: RG54 Client ID: Floyd/Snider

Parameter: 8270 PNA P500A Client Project: Lora Lake RI

Note problems, concerns, corrective actions	Analyst/Date
Screens: Soil/Sediment/Solid/Other:	
☒ No Anomalies (standard soil/sediment) A,B,C,E,H,I,J,K,L	8-3-10 TS
☐ Wet sediment/sludge= F	
☐ Standing Water Decanted=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay (Difficult to homogenize/Mixed with Kitchen Aid)=	
☒ Rocks/Organics= A,B,C,E,F,H,I,J,K,L	8-3-10 TS
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates=	
☐ Emulsions=	
☐ Other (Details)=	
☒ Other Notes/Comments= A,B,E,H – extracts centrifuged to separate excess particulates prior to filtering for SPE	WW 8/11/10

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

(8270) PNA ~~Soil~~/ Sediment
Sonication (3550C) (SOP # 3304S)

Preparation Test PNA # 1

ARI Job No(s) RG54 (RX), RG6ф (RX)

~~In-House (67ppb)~~ P5ODA (24ppb)

Batch set up by: JY

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted (dry wt)	Sonic Horn ID + Check	KD Hex X X 2	TurboVap 1 2 3	~~(Opt)~~ (REQ) SilicaGel Clean (1:1) Y N	TurboVap 1 2 3	Final Effective Volume	Volume to Lab	Comments
	RG54(RX) MBS	Date 8-17-10	~~7.50g~~ 25.49g	1	↓	↓	↓	↓	0.5mL	0.5mL	1pg Actual
	↓ SBS	↓	↓	2	↓	↓	↓	↓	↓	↓	↓
	~~SBS Dup.~~		↓						↓	↓	
8	RG54(RX) A2	verified	7.47	3	↓	↓	↓	↓	↓	↓	See notes
5	RG6ф(RX) A2	↓	7.09	4	↓	↓	↓	↓	↓	↓	↓
6	↓ B2	↓	7.19	5	↓	↓	↓	↓	↓	↓	↓
6	↓ C2	↓	7.49	6	↓	↓	↓	↓	↓	↓	↓
Analyst/Date	AC 8-17-10				TS 8-18-10	SP 8/18/10	SP 8/18/10	⟶			

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
BAN Surrogate	**A**	**125μL**	1/22/11	WC	AC
8270 PNA Spike	**20**	**125μL**	12/04/10	WC	AC
Extraction Time: 15:20			**Balance ID:** 21754520		

SPECIAL INSTRUCTIONS: 1. Weigh into 100mL beakers. 2. Extract 2X with 1:1 DCM/Acetone. Plus 1 X DCM only. 3. Collect into 150mL beaker with 5-10g sodium sulfate in the bottom + small funnel with pre-rinsed neutral glasswool. <u>NO SODIUM SULFATE.</u> 4. KD (small drying column) to 8mL at 85-90°. 5. Exchange (2 X with 10mL) to Hexane at 100°. 6. TurboVap. 7. Silica Clean-up-Root Beer Color? (All ~~or none~~) Y N. 8. TurboVap (if Silica Clean). 9. Vial in DCM.

A. Need Total Solids Y (N) B. ~~Archive~~/Freeze (Y) N

3007F

Revision 014
08/11/2010

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: RG54 (RX) / RG6Ø (RX) Client ID: Floyd/Snider

Parameter: 827Ø PNA PSDDA Client Project: Lora Lake RI

Note problems, concerns, corrective actions	Analyst/Date
Screens: Soil/Sediment/Solid/Other:	
☐ No Anomalies (standard soil/sediment)	
☐ Wet sediment/sludge=	
☐ Standing Water Decanted=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay (Difficult to homogenize/Mixed with Kitchen Aid)=	
☐ Rocks/Organics=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates=	
☐ Emulsions=	
☐ Other (Details)=	
☒ Other Notes/Comments= Re-extracted Samples 7g to a Ø.5mL final Volume as per laboratory director.	SH 8/17/1Ø
RG54 A_2, RG60 A_2, RG60 B_2 + RG60 C_2 - centrifuged extracts prior to turbovap to remove particulates.	SP 8/18/1Ø

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Serial # 00547

REQUEST FOR RE-EXTRACTION / RE-ANALYSIS
(Organic Analyses)

Todays Date: 8/16/10
Client Name: Floyd / Snyder
ARI Project Number: ~~RG54~~ & RG60
Client Project: ~~Lora Lake~~ R7
Analysis: ~~8270 PAH (PSDDA)~~
Turn Around Time: ~~8/10/10~~
Project Manager: SML
Date Sampled: ~~7/28/10~~
Sample Matrix Soil

Criteria Flagged

Unacceptable Blank:	☐	Unacceptable Surrogate:	☒
Unacceptable Duplicate:	☐	Instrument Problem:	☐
Unacceptable Spike:	☐	Other:	☐
Overwrite LIMS:	☐	Enter as Re-extract:	☐
Re-Extract In Holding:	☐	Sample Frozen?:	☐
Re-Extract Out of Holding:	☐	Holding Time Remaining:	☐

Details of Problem / Recommended Corrective Action

SS Recovery low.
Please see "BB" for corrective action

Samples Affected

~~RG54A~~ ; RG60A, B & C.

Corrective Action Taken

Analyst: _____ **Supervisor:** _____
Date: _____ **Date:** _____

PM Approval: _____
Date: _____

Form 0030F

Revision 006
3/4/10

Semivolatile PAH Raw Data
Initial Calibration

ARI Job ID: RG54

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: curve Client ID: ✓

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): 8270

Instrument: NT-2 NT-4 (NT-6) NT-8 NT11

Curve Date: 7/23/10 Analysis Start Date: 7/23/10

DFTPP Tune Meets Criteria?	(YES) / NO	Internal Standard Meets Criteria?	(YES) / NO
DDT Breakdown <20%?	(YES) / NO / NA	Method Blank In Control?	YES / NO / (NA)
Peak Tailing Factor ≤2?	(YES) / NO / NA	LCS / LCSD Recovery In Control?	(YES) / NO
ICal acceptable?	(YES) / NO	CCal acceptable?	YES / NO / (NA)
Q flag applied?	YES / (NO)	Q flag applied?	YES / (NO)
Surrogate Recovery in Control?	(YES) / NO	Special Analysis Criteria Met?	YES / NO / (NA)
Manual Integrations for ICal?	(YES) / NO	Manual Integrations for Samples?	Yes / NO / (NA)

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Two compounds @ linear curve fit.

Additional Details on Reverse: Yes / No

Analyst: [signature] **Date:** 07/26/10

Reviewer: [signature] **Date:** 7/26/10

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 15:01
End Cal Date : 23-JUL-2010 18:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt6.i/20100723.b/SW846072310.m
Cal Date : 26-Jul-2010 11:29 jianqing
Curve Type : Average

Calibration File Names:
Level 1: /chem1/nt6.i/20100723.b/07231002.D
Level 2: /chem1/nt6.i/20100723.b/07231003.D
Level 3: /chem1/nt6.i/20100723.b/07231004.D
Level 4: /chem1/nt6.i/20100723.b/07231001.D
Level 5: /chem1/nt6.i/20100723.b/07231005.D
Level 6: /chem1/nt6.i/20100723.b/07231006.D
Level 7: /chem1/nt6.i/20100723.b/07231007.D

B 07/26/10

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	___ RRF	% RSD
186 Carbaryl	0.52977	0.47325	0.61814	0.60108	0.60183	0.56738	0.56361	0.56501	8.893
179 n-Decane	1.30295	1.13144	1.17576	1.12634	1.10387	1.04830	1.01836	1.12957	8.229
180 n-Octadecane	0.46718	0.42555	0.43641	0.39738	0.36784	0.33613	0.32003	0.39293	13.806
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	___ RRF	% RSD
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 p-Benzoquinone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
168 Pentachlorobenzene	0.60186	0.53250	0.55894	0.54825	0.55050	0.53139	0.53253	0.55085	4.523
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	___ RRF	% RSD
135 2,3,5,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 2,3,4,5-tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
133 Butylatedhydroxytoluene	1.30909	1.21610	1.18712	1.11886	1.06955	1.02859	0.95110	1.12577	10.800
132 3,6-Dimethylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 alpha-Terpineol	0.25182	0.24104	0.24573	0.23829	0.24115	0.23457	0.22750	0.24001	3.244
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 Acetophenone	1.84319	1.73378	1.77490	1.74051	1.72755	1.65306	1.61433	1.72676	4.371
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 1,4-Dioxane	0.59514	0.55269	0.57759	0.57316	0.57745	0.55960	0.56023	0.57084	2.532
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 2,3,4,6-Tetrachlorophenol	0.36744	0.39880	0.41626	0.43155	0.44579	0.45431	0.44511	0.42275	7.341

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	___ RRF	% RSD
178 2-Benzyl-4-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
118 Triphenyl Phosphate	0.22270	0.18490	0.19777	0.23461	0.21824	0.23636	0.23491	0.21850	9.200
117 Butyl Diphenyl Phosphate	0.23132	0.20255	0.20803	0.23443	0.21391	0.22397	0.21525	0.21849	5.428
116 Dibutyl Phenyl Phosphate	0.68627	0.76192	0.76950	0.75246	0.74004	0.71386	0.67452	0.72837	5.142
115 Tributyl Phosphate	1.12856	1.13872	1.13497	1.07164	1.03189	0.98475	0.91681	1.05819	8.054
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 Diphenyl Oxide	1.53546	1.31951	1.36647	1.28948	1.22753	1.16194	1.12652	1.28956	10.689
112 Biphenyl	+++++	1.59664	1.63155	1.49389	1.39001	1.27465	1.19789	1.43077	12.189

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD
111 Azobenzene (1,2-DP-Hydrazine)	1.57438	1.43424	1.49821	1.42379	1.37937	1.27319	1.32256	1.41510	7.224
110 Tetrachloroguaiacol	+++++	0.14646	0.16171	0.16055	0.15529	0.15347	0.14766	0.15419	4.112
109 3,4,5-Trichloroguaiacol	+++++	0.14975	0.16112	0.15998	0.15730	0.15863	0.15358	0.15673	2.744
181 3,4,6-Trichloroguaiacol	+++++	0.46068	0.51059	0.53282	0.55514	0.56584	0.55567	0.53012	7.434
108 4,5,6-Trichloroguaiacol	+++++	0.22564	0.25405	0.25473	0.25582	0.25861	0.25789	0.25112	5.020
184 3,4-Dichloroguaiacol	+++++	0.41063	0.45682	0.46408	0.48450	0.49162	0.48416	0.46530	6.433
107 4,5-Dichloroguaiacol	+++++	0.29660	0.32878	0.32291	0.31726	0.31810	0.30860	0.31537	3.604
182 4,6-Dichloroguaiacol	+++++	0.51548	0.57045	0.56609	0.57861	0.58642	0.56693	0.56399	4.433
185 4-Chloroguaiacol	+++++	0.53454	0.56196	0.59394	0.59906	0.60299	0.58799	0.58008	4.588

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	___ RRF	% RSD
106 Guaiacol	1.31655	1.24004	1.23299	1.18332	1.18795	1.16704	1.12217	1.20715	5.183
105 1-methylnaphthalene	0.74149	0.66501	0.67894	0.64252	0.61983	0.58074	0.55698	0.64079	9.715
151 1,2,4,5-Tetrachlorobenzene	0.80474	0.73406	0.71934	0.70252	0.69462	0.68639	0.65422	0.71370	6.648
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
167 2,2',4,4',5-Pentabromobipheny	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Phenol	1.89881 / 1.53020	1.92806	1.75475	1.69716	1.59437	1.52833	1.70453	9.695
4 Bis(2-Chloroethyl)ether	1.50887 / 1.19962	1.36105	1.31022	1.31066	1.26776	1.18856	1.30667	8.313
6 2-Chlorophenol	1.65200 / 1.32343	1.61864	1.51267	1.47180	1.38752	1.35040	1.47378	8.739
7 1,3-Dichlorobenzene	1.94687 / 1.52440	1.78065	1.78276	1.72433	1.67465	1.58381	1.71678	8.165
9 1,4-Dichlorobenzene	1.86926 / 1.51292	1.70537	1.74943	1.70915	1.66135	1.56577	1.68189	7.011
11 Benzyl alcohol	0.77509 / 0.79833	0.79840	0.85212	0.82991	0.81569	0.77911	0.80695	3.424
12 1,2-Dichlorobenzene	1.81140 / 1.40328	1.64005	1.63637	1.54853	1.50623	1.40215	1.56400	9.333
13 2-Methylphenol	1.38158 / 1.12503	1.39693	1.30099	1.28263	1.22315	1.18744	1.27111	7.847

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD
14 2,2'-oxybis(1-Chloropropane)	1.56111	1.45840	1.45760	1.39900	1.35796	1.27681	1.24232	1.39331	7.980
15 4-Methylphenol	1.33792	1.43605	1.32248	1.26810	1.21133	1.13770	1.07044	1.25486	9.980
16 N-Nitroso-di-n-propylamine	0.96975	0.90964	0.92513	0.89191	0.88013	0.81864	0.79055	0.88368	6.974
17 Hexachloroethane	0.69156	0.62895	0.62970	0.61801	0.59719	0.55598	0.53161	0.60757	8.670
19 Nitrobenzene	0.49447	0.44806	0.45461	0.43234	0.41483	0.38265	0.38832	0.43075	9.139
20 Isophorone	0.74620	0.69226	0.71744	0.69327	0.67659	0.64123	0.63503	0.68600	5.768
21 2-Nitrophenol	0.24226	0.25813	0.25659	0.26172	0.25436	0.25160	0.24453	0.25274	2.824
22 2,4-Dimethylphenol	0.45174	0.45432	0.43299	0.42026	0.39913	0.38380	0.36884	0.41587	7.975
23 Bis(2-Chloroethoxy)methane	0.52038	0.47785	0.50468	0.47961	0.46835	0.44098	0.43564	0.47536	6.495

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD	
	80.000 Level 7								
24 Benzoic acid	+++++	0.25353	0.27552	0.32032	0.32546	0.33540			
	0.33426						0.30742	11.190	
25 2,4-Dichlorophenol	0.37024	0.39379	0.37568	0.36588	0.35534	0.35112			
	0.33685						0.36413	5.069	
26 1,2,4-Trichlorobenzene	0.45200	0.40330	0.41475	0.40421	0.39011	0.36396			
	0.35612						0.39778	8.106	
28 Naphthalene	1.34365	1.20046	1.23378	1.14951	1.08605	0.97778			
	0.92143						1.13038	13.040	
29 4-Chloroaniline	0.50552	0.47709	0.49634	0.45962	0.44170	0.40294			
	0.38655						0.45282	10.003	
30 Hexachlorobutadiene	0.25638	0.22668	0.23442	0.23404	0.22968	0.22252			
	0.22014						0.23198	5.186	
31 4-Chloro-3-methylphenol	0.36042	0.36903	0.36214	0.35815	0.34753	0.33596			
	0.32412						0.35105	4.578	
32 2-Methylnaphthalene	0.72760	0.63815	0.66651	0.61721	0.59789	0.55861			
	0.53653						0.62036	10.468	
33 Hexachlorocyclopentadiene	0.20062	0.29421	0.36461	0.40146	0.41997	0.41627			
	0.41693						0.35915	23.148	<-

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7							
34 2,4,6-Trichlorophenol	0.43015	0.47052	0.46116	0.47882	0.45477	0.45554		
	0.45431						0.45790	3.343
35 2,4,5-Trichlorophenol	0.47628	0.47205	0.46476	0.48592	0.46888	0.47285		
	0.46652						0.47246	1.505
37 2-Chloronaphthalene	1.54535	1.40750	1.43034	1.34606	1.26852	1.17397		
	1.13390						1.32938	11.042
38 2-Nitroaniline	0.31929	0.32596	0.34177	0.33767	0.33711	0.32812		
	0.32675						0.33095	2.425
39 Dimethylphthalate	1.63732	1.49856	1.57686	1.53153	1.48535	1.40593		
	1.37278						1.50119	6.141
40 Acenaphthylene	2.38812	2.20629	2.26228	2.11737	1.97889	1.77863		
	1.67677						2.05833	12.636
41 2,6-Dinitrotoluene	0.32513	0.34390	0.36822	0.36347	0.36531	0.36325		
	0.36762						0.35670	4.543
43 3-Nitroaniline	0.32531	0.33792	0.35741	0.33779	0.31058	0.26898		
	0.24663						0.31209	12.886
44 Acenaphthene	1.44933	1.31145	1.35758	1.30569	1.26041	1.17354		
	1.13988						1.28541	8.251

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Cal Date : 26-Jul-2010 11:29 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD	
	80.000 Level 7								
45 2,4-Dinitrophenol	+++++	0.15972	0.20982	0.26548	0.28518	0.29643			
	0.29677						0.25223	22.113	<-
46 Dibenzofuran	1.97073	1.74217	1.82392	1.71558	1.65479	1.55243			
	1.49208						1.70738	9.485	
47 4-Nitrophenol	0.14465	0.19170	0.19502	0.19549	0.19673	0.18950			
	0.18556						0.18552	9.937	
48 2,4-Dinitrotoluene	0.41495	0.43227	0.46723	0.47394	0.48074	0.47156			
	0.47542						0.45944	5.510	
49 Fluorene	1.72499	1.50935	1.55160	1.46516	1.39788	1.29602			
	1.23768						1.45467	11.263	
50 Diethylphthalate	1.65609	1.44115	1.46874	1.35703	1.30203	1.29409			
	1.24820						1.39533	10.031	
51 4-Chlorophenyl-phenylether	0.77786	0.71006	0.72927	0.72419	0.71697	0.69184			
	0.68535						0.71936	4.228	
52 4-Nitroaniline	0.31952	0.34487	0.36113	0.34628	0.35407	0.35027			
	0.35598						0.34745	3.896	
53 4,6-Dinitro-2-methylphenol	+++++	0.17800	0.18906	0.20650	0.20336	0.20685			
	0.20459						0.19806	5.985	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 15:01
End Cal Date : 23-JUL-2010 18:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt6.i/20100723.b/SW846072310.m
Cal Date : 26-Jul-2010 11:29 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD
54 N-Nitrosodiphenylamine	0.76057	0.71351	0.72399	0.68723	0.66721	0.63370	0.60826	0.68493	7.745
56 4-Bromophenyl-phenylether	0.30519	0.28523	0.29802	0.29933	0.29604	0.28568	0.28366	0.29331	2.865
57 Hexachlorobenzene	0.32868	0.30770	0.31766	0.31238	0.30543	0.29668	0.29438	0.30899	3.861
58 Pentachlorophenol	0.11687	0.16065	0.17900	0.20167	0.20189	0.20915	0.20910	0.18262	18.647
60 Phenanthrene	1.45576	1.29440	1.34343	1.25583	1.19585	1.10163	1.04929	1.24231	11.283
61 Anthracene	1.47639	1.34925	1.39267	1.32351	1.24238	1.13218	1.06711	1.28336	11.313
62 Carbazole	1.36692	1.28291	1.30155	1.20074	1.12860	1.04899	1.00778	1.19107	11.334
63 Di-n-butylphthalate	1.55627	1.55895	1.61948	1.54279	1.42773	1.30015	1.21295	1.45976	10.426
64 Fluoranthene	1.46938	1.43951	1.47419	1.40730	1.31885	1.19659	1.11705	1.34612	10.490

Analytical Resources, Inc.

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Integrator : HP RTE
Method file : /chem1/nt6.i/20100723.b/SW846072310.m
Cal Date : 26-Jul-2010 11:29 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD
65 Pyrene	1.49138	1.14703	1.19893	1.29849	1.13413	1.10935	1.05243	1.20453	12.295
67 Butylbenzylphthalate	0.59487	0.51715	0.56810	0.65458	0.58263	0.58548	0.57376	0.58237	6.979
68 Benzo(a)anthracene	1.39098	1.06661	1.10750	1.25843	1.10391	1.09815	1.06749	1.15615	10.590
70 3,3'-Dichlorobenzidine	0.44402	0.35360	0.36752	0.40197	0.35390	0.35362	0.35158	0.37517	9.396
71 Chrysene	1.33967	1.00093	1.04247	1.16040	1.03078	1.01541	0.98576	1.08220	11.749
72 bis(2-Ethylhexyl)phthalate	0.62188	0.63105	0.67615	0.66016	0.63926	0.61152	0.59845	0.63407	4.277
73 Di-n-octylphthalate	1.27928	1.13221	1.13885	1.09382	1.03609	0.97292	0.93556	1.08410	10.667
74 Benzo(b)fluoranthene	1.49258	1.30818	1.42583	1.36294	1.34299	1.22771	1.21188	1.33887	7.544
75 Benzo(k)fluoranthene	1.69142	1.56076	1.49557	1.43389	1.27991	1.16420	1.04777	1.38193	16.524

Analytical Resources, Inc.

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt6.i/20100723.b/SW846072310.m
Cal Date : 26-Jul-2010 11:29 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	___ RRF	% RSD
76 Benzo(a)pyrene	1.39809	1.28696	1.36282	1.28220	1.24651	1.15033	1.10139	1.26119	8.455
78 Indeno(1,2,3-cd)pyrene	1.85894	1.70038	1.76063	1.70804	1.67153	1.58151	1.52926	1.68718	6.486
79 Dibenzo(a,h)anthracene	1.37073	1.33009	1.38098	1.33329	1.29862	1.21997	1.14185	1.29650	6.673
80 Benzo(g,h,i)perylene	1.72129	1.54055	1.57913	1.53478	1.50241	1.41521	1.36024	1.52194	7.655
90 N-Nitrosodimethylamine	0.88469	0.84172	0.89111	0.87943	0.86425	0.83117	0.84254	0.86213	2.766
91 Aniline	2.06700	2.01319	2.07738	1.99420	1.93682	1.81178	1.76492	1.95218	6.251
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
93 Benzidine	0.45260	0.44131	0.41100	0.39901	0.33246	0.33127	0.32392	0.38451	14.241
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Analytical Resources, Inc.

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt6.i/20100723.b/SW846072310.m
Cal Date : 26-Jul-2010 11:29 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	___ RRF	% RSD
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
98 Retene	0.44717	0.37047	0.39056	0.44711	0.41452	0.43343	0.41808	0.41733	6.887
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
103 Pyridine	1.33649	1.51578	1.62048	1.61940	1.61272	1.55018	1.53311	1.54116	6.500
187 Total Benzofluoranthenes	1.54483	1.34994	1.36948	1.31896	1.23716	1.13146	1.06285	1.28781	12.488
$ 1 2-Fluorophenol	1.32504	1.31481	1.36463	1.36344	1.32946	1.27501	+++++	1.32873	2.516

Analytical Resources, Inc.

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Integrator : HP RTE
Method file : /chem1/nt6.i/20100723.b/SW846072310.m
Cal Date : 26-Jul-2010 11:29 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	___ RRF	% RSD
$ 137 d8-1,4-Dioxane	0.56856	0.53848	0.55643	0.58008	0.57549	0.56934	0.56922	0.56537	2.462
$ 2 Phenol-d5	1.69382	1.55249	1.59277	1.52515	1.45467	1.38972	+++++	1.53477	6.928
$ 5 2-Chlorophenol-d4	1.47973	1.30309	1.34183	1.27103	1.21380	1.16836	+++++	1.29631	8.421
$ 10 1,2-Dichlorobenzene-d4	0.96853	0.89668	0.93034	0.89435	0.87040	0.83604	+++++	0.89939	5.125
$ 18 Nitrobenzene-d5	0.42483	0.37416	0.39663	0.39082	0.38152	0.36335	+++++	0.38855	5.494
$ 36 2-Fluorobiphenyl	1.65520	1.41789	1.44387	1.37047	1.29517	1.21808	+++++	1.40011	10.705
$ 55 2,4,6-Tribromophenol	0.16694	0.16130	0.18415	0.19150	0.19308	0.19643	+++++	0.18223	8.067
$ 66 Terphenyl-d14	0.84857	0.61959	0.66571	0.76006	0.67516	0.68193	+++++	0.70850	11.610
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

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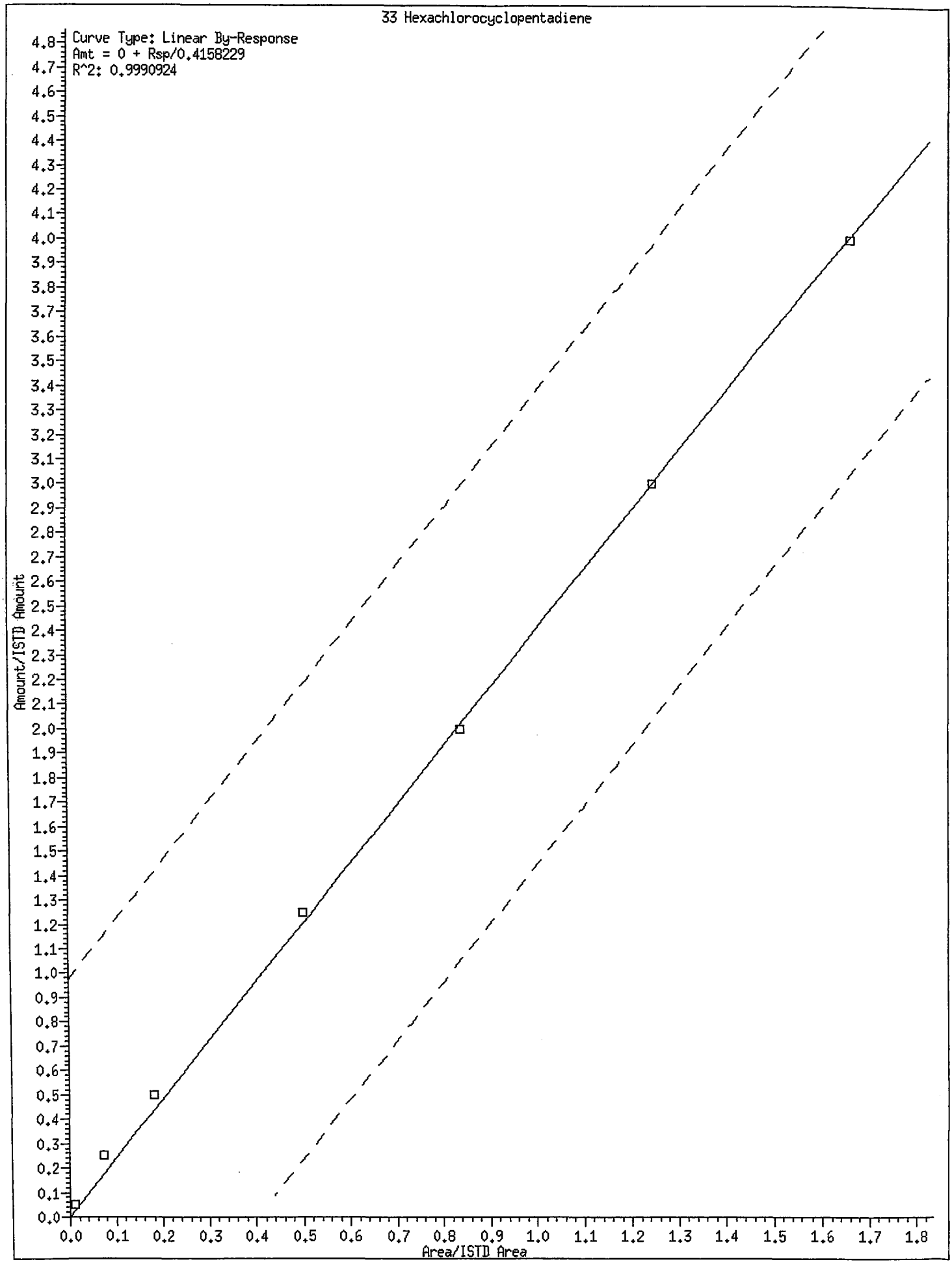
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt6.i/20100723.b/SW846072310.m
Cal Date : 26-Jul-2010 11:29 jianqing

07/26/10

Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	80 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
31 4-Chloro-3-methylphenol	0.36042	0.36903	0.36214	0.35815	0.34753	0.33596	0.32412	AVRG		0.35105		4.57798
32 2-Methylnaphthalene	0.72760	0.63815	0.66651	0.61721	0.59789	0.55861	0.53653	AVRG		0.62036		10.46774
33 Hexachlorocyclopentadiene	3366	24140	58996	160807	275445	425348	562487	LINR	0.000e+00	0.41582		0.99909
34 2,4,6-Trichlorophenol	0.43015	0.47052	0.46116	0.47882	0.45477	0.45554	0.45431	AVRG		0.45790		3.34343
35 2,4,5-Trichlorophenol	0.47628	0.47205	0.46476	0.48592	0.46888	0.47285	0.46652	AVRG		0.47246		1.50508
37 2-Chloronaphthalene	1.54535	1.40750	1.43034	1.34606	1.26852	1.17397	1.13390	AVRG		1.32938		11.04215
38 2-Nitroaniline	0.31929	0.32596	0.34177	0.33767	0.33711	0.32812	0.32675	AVRG		0.33095		2.42548


33 Hexachlorocyclopentadiene
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.4158229
R^2: 0.9990924
Amount/ISTD Amount
Area/ISTD Area

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 15:01
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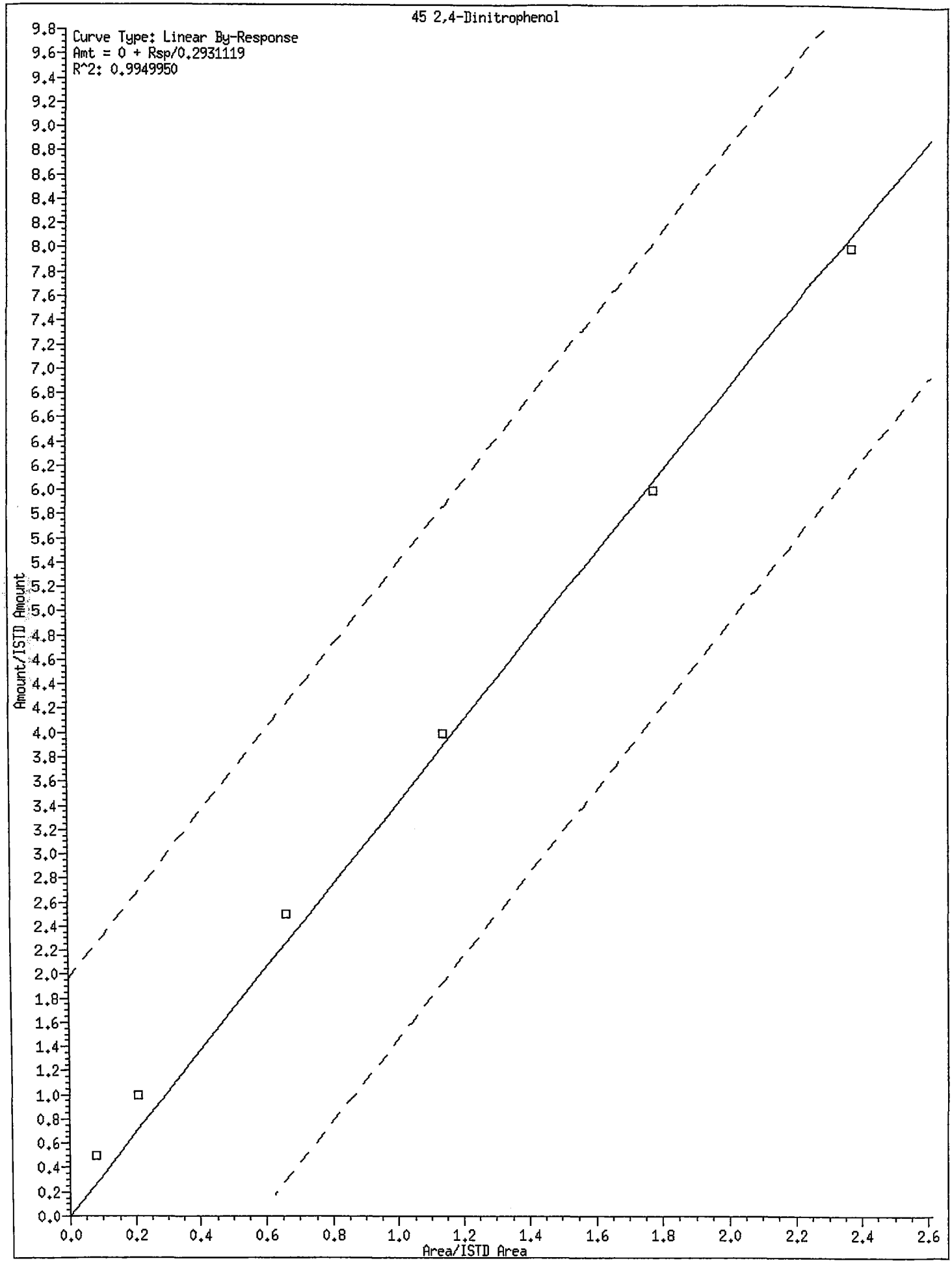
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt6.i/20100723.b/SW846072310.m
Cal Date : 26-Jul-2010 11:29 jianqing

DZ 07/26/10

Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	80 Level 7										
39 Dimethylphthalate	1.63732	1.49856	1.57686	1.53153	1.48535	1.40593					
	1.37278						AVRG		1.50119		6.14147
40 Acenaphthylene	2.38812	2.20629	2.26228	2.11737	1.97889	1.77863					
	1.67677						AVRG		2.05833		12.63575
41 2,6-Dinitrotoluene	0.32513	0.34390	0.36822	0.36347	0.36531	0.36325					
	0.36762						AVRG		0.35670		4.54287
43 3-Nitroaniline	0.32531	0.33792	0.35741	0.33779	0.31058	0.26898					
	0.24663						AVRG		0.31209		12.88590
44 Acenaphthene	1.44933	1.31145	1.35758	1.30569	1.26041	1.17354					
	1.13988						AVRG		1.28541		8.25094
45 2,4-Dinitrophenol	+++++	26211	67900	212676	374074	605790					
	800753						LINR	0.000e+00	0.29311		0.99500
46 Dibenzofuran	1.97073	1.74217	1.82392	1.71558	1.65479	1.55243					
	1.49208						AVRG		1.70738		9.48459


45 2,4-Dinitrophenol
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.2931119
R^2: 0.9949950
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

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 15:01
End Cal Date : 23-JUL-2010 18:38
Quant Method : ISTD
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Method file : /chem1/nt6.i/20100723.b/SW846072310.m
Cal Date : 26-Jul-2010 11:29 jianqing

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt6.i/20100723.b/SW846072310.m
Batch File: /chem1/nt6.i/20100723.b
Inst ID: nt6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	07231001	07231002	07231003	07231004	07231005	07231006	07231007
ANJ.DATE:	23-JUL-2010	23-JUL-2010	23-JUL-2010	23-JUL-2010	23-JUL-2010	23-JUL-2010	23-JUL-2010
ANJ.TIME:	15:01	15:38	16:16	16:52	17:29	18:01	18:38

AR 07/26/10

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	5.605	5.602	5.601	5.605	5.605	5.610	+++++	5.605	2.605-8.605	5.605	0.003
186 Carbaryl	15.689	15.686	15.680	15.684	15.689	15.694	15.702	15.689	12.689-18.689	15.689	0.007
179 n-Decane	7.448	7.440	7.444	7.443	7.448	7.453	7.450	7.448	4.448-10.448	7.447	0.005
180 n-Octadecane	14.829	14.826	14.825	14.824	14.829	14.829	14.832	14.829	11.829-17.829	14.828	0.003
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.531	15.531-21.531	+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.634	13.634-19.634	+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.609	14.609-20.609	+++++	+++++
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.863	13.863-19.863	+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.605	17.605-23.605	+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.015	14.015-20.015	+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.609	14.609-20.609	+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.562	14.562-20.562	+++++	+++++
177 p-Benzoquinone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.781	3.781-9.781	+++++	+++++
168 Pentachlorobenzene	12.853	12.850	12.849	12.853	12.858	12.863	12.866	12.853	9.853-15.853	12.856	0.007
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.212	44.212-50.212	+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.746	44.746-50.746	+++++	+++++
147 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.216	45.216-51.216	+++++	+++++

Reviewer 1 _____ Date: _____
Reviewer 2 _____ Date: 7/26/10

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt6.i/20100723.b/SW846072310.m
Batch File: /chem1/nt6.i/20100723.b
Inst ID: nt6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
148 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.281	44.281-50.281	+++++	+++++
149 TCMX	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.387	40.387-46.387	+++++	+++++
150 DCBP	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.989	47.989-53.989	+++++	+++++
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	67.733	64.733-70.733	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.067	62.067-68.067	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.917	46.917-52.917	+++++	+++++
135 2,3,5,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.269	36.269-42.269	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.317	36.317-42.317	+++++	+++++
$ 137 d8-1,4-Dioxane	2.107	2.109	2.103	2.107	2.112	2.122	2.125	2.107	0.000-5.107	2.112	0.008
* 134 Di-n-octylphthalate-d4	20.346	20.344	20.343	20.347	20.347	20.346	20.354	20.346	17.346-23.346	20.347	0.004
133 Butylatedhydroxytoluen	12.698	12.695	12.694	12.698	12.698	12.703	12.706	12.698	9.698-15.698	12.699	0.004
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.450	62.450-68.450	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	64.400	61.400-67.400	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	62.100	59.100-65.100	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.912	51.912-57.912	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.212	51.212-57.212	+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	57.650	54.650-60.650	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.750	53.750-59.750	+++++	+++++
144 alpha-Terpineol	9.718	9.715	9.714	9.718	9.723	9.728	9.731	9.718	6.718-12.718	9.721	0.007
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.166	49.166-55.166	+++++	+++++

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt6.i/20100723.b/SW846072310.m
Batch File: /chem1/nt6.i/20100723.b
Inst ID: nt6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.617	47.617-53.617	+++++	+++++
123 Acetophenone	8.302	8.300	8.299	8.303	8.308	8.313	8.316	8.302	5.302-11.302	8.306	0.007
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.467	40.467-46.467	+++++	+++++
143 1,4-Dioxane	2.149	2.152	2.146	2.150	2.155	2.165	2.168	2.149	0.000-5.149	2.155	0.008
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.500	51.500-57.500	+++++	+++++
120 2,3,4,6-Tetrachlorophe	13.104	13.107	13.100	13.104	13.110	13.109	13.112	13.104	10.104-16.104	13.107	0.004
178 2-Benzyl-4-Chloropheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.128	13.128-19.128	+++++	+++++
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.069	44.069-50.069	+++++	+++++
118 Triphenyl Phosphate	18.723	18.720	18.714	18.718	18.723	18.722	18.731	18.723	15.723-21.723	18.721	0.005
117 Butyl Diphenyl Phospha	17.126	17.123	17.122	17.126	17.126	17.131	17.134	17.126	14.126-20.126	17.127	0.004
116 Dibutyl Phenyl Phospha	15.449	15.446	15.445	15.449	15.454	15.454	15.457	15.449	12.449-18.449	15.450	0.004
115 Tributyl Phosphate	13.734	13.726	13.731	13.729	13.745	13.755	13.763	13.734	10.734-16.734	13.741	0.014
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.950	45.950-51.950	+++++	+++++
113 Diphenyl Oxide	11.779	11.777	11.776	11.774	11.780	11.779	11.782	11.779	8.779-14.779	11.778	0.003
112 Biphenyl	11.582	11.579	11.578	11.577	11.582	11.587	11.590	11.582	8.582-14.582	11.582	0.005
111 Azobenzene (1,2-DP-Hyd	13.654	13.646	13.650	13.649	13.654	13.659	13.667	13.654	10.654-16.654	13.654	0.007
110 Tetrachloroguaiacol	14.824	14.821	14.820	14.824	14.829	14.834	14.842	14.824	11.824-17.824	14.828	0.008
109 3,4,5-Trichloroguaiaco	13.205	13.203	13.202	13.206	13.211	13.210	13.219	13.205	10.205-16.205	13.208	0.006
181 3,4,6-Trichloroguaiaco	13.323	13.320	13.314	13.318	13.323	13.328	13.331	13.323	10.323-16.323	13.322	0.006
108 4,5,6-Trichloroguaiaco	14.242	14.239	14.238	14.237	14.242	14.247	14.250	14.242	11.242-17.242	14.242	0.005
184 3,4-Dichloroguaiacol	11.667	11.670	11.669	11.667	11.673	11.672	11.675	11.667	8.667-14.667	11.671	0.003
107 4,5-Dichloroguaiacol	12.463	12.460	12.459	12.458	12.469	12.468	12.476	12.463	9.463-15.463	12.465	0.007
182 4,6-Dichloroguaiacol	12.463	12.460	12.459	12.458	12.469	12.468	12.476	12.463	9.463-15.463	12.465	0.007
185 4-Chloroguaiacol	10.594	10.586	10.590	10.594	10.594	10.593	10.596	10.594	7.594-13.594	10.592	0.003

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	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
106	Guaiacol	8.575	8.572	8.571	8.575	8.580	8.585	8.588	8.575	5.575-11.575	8.578	0.007
105	1-methylnaphthalene	10.968	10.965	10.964	10.968	10.968	10.973	10.975	10.968	7.968-13.968	10.969	0.004
151	1,2,4,5-Tetrachloroben	11.138	11.136	11.135	11.133	11.139	11.138	11.141	11.138	8.138-14.138	11.137	0.003
152	Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.943	27.943-33.943	+++++	+++++
153	Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.442	20.442-26.442	+++++	+++++
154	Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.968	18.968-24.968	+++++	+++++
155	Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.466	20.466-26.466	+++++	+++++
156	Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.866	19.866-25.866	+++++	+++++
157	Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.413	20.413-26.413	+++++	+++++
158	Ethion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.952	21.952-27.952	+++++	+++++
159	4-Nonylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.721	18.721-24.721	+++++	+++++
160	Tetraethyl Tin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.159	15.159-21.159	+++++	+++++
161	1,2,3-Trichloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	36.246	33.246-39.246	+++++	+++++
162	1,2,3,4-Tetrachloronap	+++++	+++++	+++++	+++++	+++++	+++++	+++++	37.506	34.506-40.506	+++++	+++++
163	1,2,3,5,8-Pentachloron	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.893	35.893-41.893	+++++	+++++
164	1,2,3,4,6,7-Hexachloro	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.681	36.681-42.681	+++++	+++++
165	1,2,3,4,5,6,7-Heptachl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	41.123	38.123-44.123	+++++	+++++
166	Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.253	39.253-45.253	+++++	+++++
167	2,2',4,4',5-Pentabromo	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.033	39.033-45.033	+++++	+++++
$ 2	Phenol-d5	7.207	7.205	7.204	7.202	7.213	7.218	0.000	7.207	4.207-10.207	6.178	2.724
3	Phenol	7.229	7.221	7.220	7.224	7.229	7.239	7.237	7.229	4.229-10.229	7.228	0.008
4	Bis(2-Chloroethyl)ethe	7.282	7.274	7.273	7.277	7.282	7.287	7.290	7.282	4.282-10.282	7.281	0.006
$ 5	2-Chlorophenol-d4	7.293	7.296	7.295	7.293	7.298	7.303	+++++	7.293	4.293-10.293	7.296	0.004

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	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
6	2-Chlorophenol	7.320	7.317	7.316	7.320	7.320	7.325	7.327	7.320	4.320-10.320	7.321	0.004
7	1,3-Dichlorobenzene	7.523	7.525	7.524	7.523	7.528	7.533	7.530	7.523	4.523-10.523	7.527	0.004
* 8	1,4-Dichlorobenzene-d4	7.592	7.589	7.588	7.592	7.592	7.597	7.595	7.592	4.592-10.592	7.592	0.003
9	1,4-Dichlorobenzene	7.619	7.616	7.615	7.614	7.619	7.624	7.621	7.619	4.619-10.619	7.618	0.004
$ 10	1,2-Dichlorobenzene-d4	7.891	7.888	7.887	7.891	7.891	7.896	0.000	7.891	4.891-10.891	6.764	2.983
11	Benzyl alcohol	7.896	7.894	7.893	7.897	7.902	7.907	7.910	7.896	4.896-10.896	7.900	0.007
12	1,2-Dichlorobenzene	7.912	7.910	7.909	7.913	7.913	7.918	7.915	7.912	4.912-10.912	7.913	0.003
13	2-Methylphenol	8.158	8.150	8.155	8.153	8.158	8.163	8.166	8.158	5.158-11.158	8.158	0.006
14	2,2'-oxybis(1-Chloropr	8.158	8.155	8.160	8.158	8.158	8.163	8.161	8.158	5.158-11.158	8.159	0.002
15	4-Methylphenol	8.393	8.385	8.389	8.388	8.399	8.404	8.406	8.393	5.393-11.393	8.395	0.008
16	N-Nitroso-di-n-propyla	8.377	8.369	8.368	8.367	8.383	8.388	8.390	8.377	5.377-11.377	8.377	0.010
17	Hexachloroethane	8.398	8.396	8.400	8.399	8.399	8.404	8.406	8.398	5.398-11.398	8.400	0.004
$ 18	Nitrobenzene-d5	8.537	8.529	8.528	8.532	8.538	8.542	+++++	8.537	5.537-11.537	8.535	0.005
19	Nitrobenzene	8.564	8.556	8.560	8.559	8.570	8.574	8.572	8.564	5.564-11.564	8.565	0.007
20	Isophorone	8.949	8.941	8.945	8.944	8.954	8.959	8.967	8.949	5.949-11.949	8.951	0.010
21	2-Nitrophenol	9.082	9.079	9.079	9.082	9.082	9.087	9.090	9.082	6.082-12.082	9.083	0.004
22	2,4-Dimethylphenol	9.226	9.218	9.217	9.221	9.227	9.231	9.234	9.226	6.226-12.226	9.225	0.006
23	Bis(2-Chloroethoxy)met	9.360	9.357	9.356	9.360	9.365	9.370	9.373	9.360	6.360-12.360	9.363	0.007
24	Benzoic acid	9.477	9.347	9.383	9.419	9.520	9.568	9.603	9.477	6.477-12.477	9.474	0.096
25	2,4-Dichlorophenol	9.477	9.475	9.474	9.472	9.478	9.482	9.485	9.477	6.477-12.477	9.478	0.005
26	1,2,4-Trichlorobenzene	9.590	9.587	9.591	9.590	9.595	9.595	9.597	9.590	6.590-12.590	9.592	0.004
* 27	Naphthalene-d8	9.643	9.640	9.639	9.643	9.649	9.648	9.651	9.643	6.643-12.643	9.645	0.004
28	Naphthalene	9.675	9.672	9.671	9.670	9.675	9.680	9.683	9.675	6.675-12.675	9.675	0.005
29	4-Chloroaniline	9.835	9.838	9.837	9.835	9.841	9.840	9.843	9.835	6.835-12.835	9.839	0.003

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	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	30 Hexachlorobutadiene	10.006	10.003	10.003	10.001	10.006	10.006	10.009	10.006	7.006-13.006	10.005	0.003
	31 4-Chloro-3-methylpheno	10.674	10.671	10.670	10.669	10.674	10.679	10.682	10.674	7.674-13.674	10.674	0.005
	32 2-Methylnaphthalene	10.797	10.794	10.798	10.797	10.797	10.802	10.805	10.797	7.797-13.797	10.798	0.004
	33 Hexachlorocyclopentadi	11.181	11.179	11.183	11.181	11.181	11.181	11.184	11.181	8.181-14.181	11.181	0.002
	34 2,4,6-Trichlorophenol	11.325	11.323	11.322	11.320	11.326	11.330	11.333	11.325	8.325-14.325	11.326	0.005
	35 2,4,5-Trichlorophenol	11.384	11.387	11.380	11.379	11.384	11.389	11.392	11.384	8.384-14.384	11.385	0.005
$	36 2-Fluorobiphenyl	11.454	11.446	11.450	11.448	11.454	11.453	0.000	11.454	8.454-14.454	9.815	4.328
	37 2-Chloronaphthalene	11.571	11.568	11.567	11.571	11.577	11.576	11.579	11.571	8.571-14.571	11.573	0.004
	38 2-Nitroaniline	11.822	11.819	11.818	11.817	11.828	11.832	11.835	11.822	8.822-14.822	11.825	0.007
	39 Dimethylphthalate	12.207	12.199	12.198	12.202	12.207	12.217	12.220	12.207	9.207-15.207	12.207	0.009
	40 Acenaphthylene	12.244	12.241	12.246	12.244	12.250	12.249	12.252	12.244	9.244-15.244	12.247	0.004
	41 2,6-Dinitrotoluene	12.292	12.289	12.288	12.287	12.298	12.303	12.305	12.292	9.292-15.292	12.295	0.007
*	42 Acenaphthene-d10	12.500	12.498	12.497	12.495	12.501	12.500	12.503	12.500	9.500-15.500	12.499	0.003
	43 3-Nitroaniline	12.500	12.498	12.497	12.495	12.506	12.516	12.519	12.500	9.500-15.500	12.504	0.010
	44 Acenaphthene	12.548	12.546	12.545	12.549	12.554	12.559	12.562	12.548	9.548-15.548	12.552	0.007
	45 2,4-Dinitrophenol	12.666	12.663	12.662	12.661	12.672	12.682	12.690	12.666	9.666-15.666	12.671	0.011
	46 Dibenzofuran	12.810	12.808	12.807	12.810	12.816	12.821	12.823	12.810	9.810-15.810	12.814	0.007
	47 4-Nitrophenol	12.842	12.845	12.839	12.837	12.842	12.853	12.861	12.842	9.842-15.842	12.846	0.008
	48 2,4-Dinitrotoluene	12.917	12.909	12.908	12.912	12.917	12.927	12.930	12.917	9.917-15.917	12.917	0.009
	49 Fluorene	13.366	13.363	13.362	13.366	13.371	13.376	13.379	13.366	10.366-16.366	13.369	0.007
	50 Diethylphthalate	13.360	13.347	13.351	13.355	13.366	13.371	13.368	13.360	10.360-16.360	13.360	0.009
	51 4-Chlorophenyl-phenyle	13.403	13.400	13.399	13.403	13.409	13.408	13.411	13.403	10.403-16.403	13.405	0.004
	52 4-Nitroaniline	13.494	13.486	13.485	13.489	13.505	13.515	13.523	13.494	10.494-16.494	13.499	0.015
	53 4,6-Dinitro-2-methylph	13.563	13.555	13.554	13.558	13.574	13.584	13.593	13.563	10.563-16.563	13.569	0.015

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	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	54 N-Nitrosodiphenylamine	13.611	13.609	13.608	13.612	13.617	13.622	13.630	13.611	10.611-16.611	13.615	0.008
$	55 2,4,6-Tribromophenol	13.793	13.785	13.784	13.788	13.793	13.798	+++++	13.793	10.793-16.793	13.790	0.005
	56 4-Bromophenyl-phenylet	14.183	14.175	14.179	14.178	14.183	14.183	14.185	14.183	11.183-17.183	14.181	0.004
	57 Hexachlorobenzene	14.386	14.389	14.382	14.386	14.391	14.391	14.399	14.386	11.386-17.386	14.389	0.005
	58 Pentachlorophenol	14.696	14.693	14.692	14.691	14.696	14.701	14.704	14.696	11.696-17.696	14.696	0.005
*	59 Phenanthrene-d10	14.861	14.859	14.858	14.861	14.867	14.866	14.869	14.861	11.861-17.861	14.863	0.004
	60 Phenanthrene	14.899	14.896	14.895	14.893	14.904	14.909	14.912	14.899	11.899-17.899	14.901	0.007
	61 Anthracene	14.973	14.965	14.964	14.968	14.974	14.978	14.987	14.973	11.973-17.973	14.973	0.008
	62 Carbazole	15.267	15.264	15.263	15.267	15.273	15.272	15.280	15.267	12.267-18.267	15.270	0.006
	63 Di-n-butylphthalate	16.004	16.002	16.001	16.004	16.004	16.009	16.012	16.004	13.004-19.004	16.005	0.004
	64 Fluoranthene	16.827	16.824	16.823	16.822	16.827	16.832	16.835	16.827	13.827-19.827	16.827	0.005
	65 Pyrene	17.179	17.171	17.176	17.174	17.179	17.184	17.187	17.179	14.179-20.179	17.179	0.006
$	66 Terphenyl-d14	17.510	17.508	17.512	17.511	17.516	17.515	0.000	17.510	14.510-20.510	15.010	6.619
	67 Butylbenzylphthalate	18.413	18.410	18.404	18.408	18.413	18.413	18.421	18.413	15.413-21.413	18.412	0.005
	68 Benzo(a)anthracene	19.134	19.131	19.130	19.134	19.140	19.144	19.147	19.134	16.134-22.134	19.137	0.007
*	69 Chrysene-d12	19.161	19.153	19.157	19.156	19.166	19.166	19.169	19.161	16.161-22.161	19.161	0.006
	70 3,3'-Dichlorobenzidine	19.166	19.158	19.162	19.161	19.166	19.166	19.174	19.166	16.166-22.166	19.165	0.005
	71 Chrysene	19.198	19.190	19.194	19.198	19.204	19.209	19.217	19.198	16.198-22.198	19.201	0.009
	72 bis(2-Ethylhexyl)phtha	19.417	19.414	19.413	19.417	19.417	19.417	19.420	19.417	16.417-22.417	19.417	0.002
	73 Di-n-octylphthalate	20.357	20.354	20.354	20.357	20.357	20.362	20.360	20.357	17.357-23.357	20.357	0.003
	74 Benzo(b)fluoranthene	20.784	20.776	20.781	20.779	20.790	20.795	20.803	20.784	17.784-23.784	20.787	0.010
	75 Benzo(k)fluoranthene	20.816	20.808	20.813	20.811	20.822	20.832	20.840	20.816	17.816-23.816	20.821	0.012
	76 Benzo(a)pyrene	21.228	21.220	21.224	21.223	21.233	21.238	21.246	21.228	18.228-24.228	21.230	0.010
*	77 Perylene-d12	21.308	21.305	21.304	21.303	21.308	21.308	21.316	21.308	18.308-24.308	21.307	0.004

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	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
78	Indeno(1,2,3-cd)pyrene	22.697	22.689	22.688	22.686	22.707	22.712	22.720	22.697	19.697-25.697	22.700	0.014
79	Dibenzo(a,h)anthracene	22.723	22.710	22.714	22.718	22.729	22.739	22.747	22.723	19.723-25.723	22.726	0.013
80	Benzo(g,h,i)perylene	23.054	23.036	23.040	23.044	23.065	23.075	23.089	23.054	20.054-26.054	23.058	0.020
$ 85	p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	51.633	48.633-54.633	+++++	+++++
$ 86	Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	63.533	60.533-66.533	+++++	+++++
$ 87	Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	60.273	57.273-63.273	+++++	+++++
$ 88	Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	78.600	75.600-81.600	+++++	+++++
$ 89	Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.841	47.841-53.841	+++++	+++++
90	N-Nitrosodimethylamine	2.721	2.718	2.717	2.716	2.732	2.742	2.750	2.721	0.000-5.721	2.728	0.014
91	Aniline	7.154	7.151	7.150	7.149	7.154	7.159	7.157	7.154	4.154-10.154	7.154	0.004
92	1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.160	53.160-59.160	+++++	+++++
93	Benzidine	17.099	17.102	17.095	17.099	17.099	17.104	17.107	17.099	14.099-20.099	17.101	0.004
$ 95	D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.075	49.075-55.075	+++++	+++++
96	p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.250	46.250-52.250	+++++	+++++
97	Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	61.202	58.202-64.202	+++++	+++++
98	Retene	17.751	17.753	17.747	17.751	17.751	17.756	17.759	17.751	14.751-20.751	17.752	0.004
99	Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.125	28.125-34.125	+++++	+++++
100	3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.717	15.717-21.717	+++++	+++++
101	Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.964	19.964-25.964	+++++	+++++
102	beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	79.550	76.550-82.550	+++++	+++++
103	Pyridine	2.689	2.713	2.696	2.694	2.694	2.705	2.702	2.689	0.000-5.689	2.699	0.008
187	Total Benzofluoranthen	20.816	20.808	20.813	20.811	20.822	20.832	20.840	20.816	17.816-23.816	20.821	0.012

Analytical Resources Inc.: Organics Instrument Log

NT-6 Serial No.:GC=US00036167, MS=US81221575

Date: 7/23/10 Analysis: 8270 Analyst: [illegible]

GC Program: ABN1.m Column No: 172127 Column Type: ZB-5MS

Instrument Tune (.U or .CT.): 100629 EM Voltage: 1688

Calibration File: 0723l001 Curve Date: 7/23/10

IS/SS	Ical/Ccal	LCS/ICV
1752-1	~~1747-3~~, 1733-1	~~1751-3~~, 1713-1
	~~1736-1~~, 1736-1.	~~1721-2~~, 1720-1
	~~1601~~9 1753-1	~~1601~~9 1717-1
	~~1754-1~~ (carbaryl)	~~1754-1~~

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/nt6.i/20100723.b

	Time	Filename	LabID	ClientId	DF											
1	1501	07231001.D	IC250723	IC250723	1	7.59	182786	9.64	584137	12.50	320442	14.86	503793	19.16	532343	21.31	517269	20.35	719428
2	1538	07231002.D	IC010723	IC010723	1	7.59	195617	9.64	619162	12.50	335561	14.86	502252	19.15	533625	21.31	501426	20.34	671548
3	1616	07231003.D	IC050723	IC050723	1	7.59	188843	9.64	605649	12.50	328204	14.86	492773	19.16	623042	21.30	509773	20.34	685489
4	1652	07231004.D	IC100723	IC100723	1	7.59	185943	9.64	593293	12.50	323613	14.86	496900	19.16	608888	21.30	502175	20.35	694500
5	1729	07231005.D	IC400723	IC400723	1	7.59	179813	9.65	584978	12.50	327933	14.87	525448	19.17	593530	21.31	534102	20.35	734023
6	1801	07231006.D	IC600723	IC600723	1	7.60	184946	9.65	607475	12.50	340603	14.87	548107	19.17	578965	21.31	572566	20.35	744081
7	1838	07231007.D	IC800723	IC800723	1	7.59	184081	9.65	604045	12.50	337280	14.87	549184	19.17	574045	21.32	593718	20.35	737424
8	2017	07231008.D	ICV0723	ICV0723	1	7.59	176582	9.65	582262	12.50	323945	14.86	516976	19.16	544051	21.30	522945	20.35	731609
9	2053	07231009.D	RE80MBW1	RE80MBW1	1	7.59	191409	9.64	626705	12.49	340804	14.86	511015	19.16	542517	20.35	680199	21.30	530348
10	2129	07231010.D	RE80LCSW1	RE80LCSW1	1	7.59	186065	9.64	600768	12.50	336459	14.86	542160	19.16	543756	20.34	743452	21.31	536707
11	2206	07231011.D	RE80LCSDW1	RE80LCSDW1	1	7.59	193224	9.64	618733	12.50	346038	14.86	562142	19.16	552203	20.35	754902	21.31	547020
12	2242	07231012.D	RE80A	EB-01-0710	1	7.59	202174	9.64	668869	12.50	358572	14.86	537356	19.16	568871	20.34	711184	21.30	552466

[signature] 07/26/10

Maintenance / Comments

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem1/nt6.i/20100723.b

ARI Job No.: IC25 Method: SW846072310.m Instrument: nt6.i Date: 23-JUL-2010

DB 07/26/10

ime	Filename	LabID	ClientId	DF	Manually Integrated Compounds
501	07231001.D	IC250723	IC250723	1	4-Nitrophenol,
538	07231002.D	IC010723	IC010723	1	Benzoic acid, 4-Chloro-3-methylphenol, 4-Nitrophenol, Pyridine, Total Benzofluoranthenes, 1,2-Dichlorobenzene-d4,
616	07231003.D	IC050723	IC050723	1	4-Nitrophenol, Total Benzofluoranthenes,
652	07231004.D	IC100723	IC100723	1	4-Nitrophenol, Total Benzofluoranthenes,
729	07231005.D	IC400723	IC400723	1	NO MANUAL INTEGRATION
801	07231006.D	IC600723	IC600723	1	Benzoic acid, 4-Nitrophenol,
838	07231007.D	IC800723	IC800723	1	Benzoic acid, 4-Nitrophenol,

Data File: /chem1/nt6.i/20100723.b/tune.b/07231001.D

Date : 23-JUL-2010 15:01

Client ID: DFTPP0723

Instrument: nt6.i

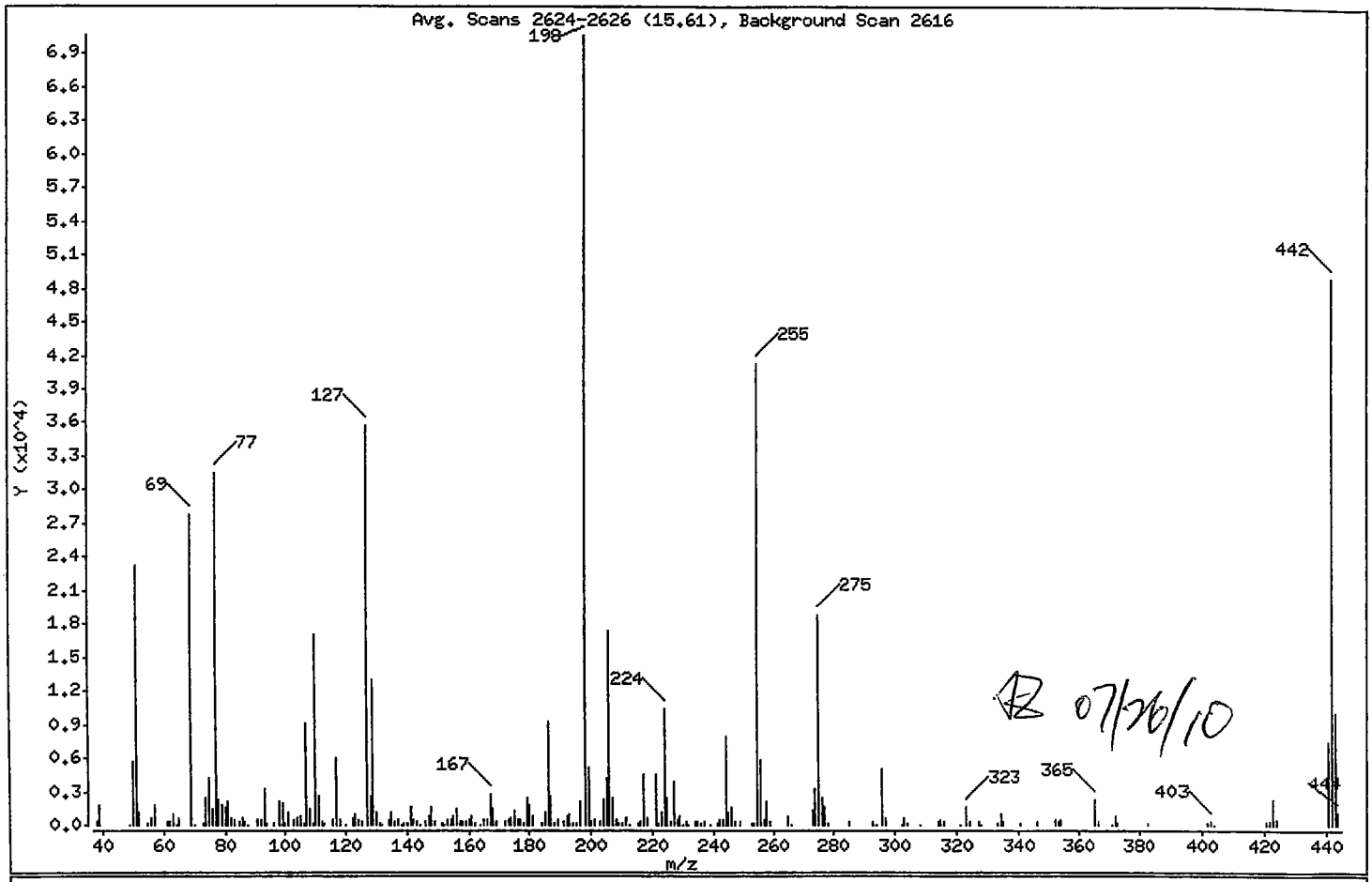
Sample Info: DFTPP0723

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	32.79
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	39.43
70	Less than 2.00% of mass 69	0.11 (0.27)
127	10.00 - 80.00% of mass 198	50.48
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.37
275	10.00 - 60.00% of mass 198	26.75
365	Greater than 1.00% of mass 198	3.26
441	0.01 - 24.00% of mass 442	10.46 (15.05)
442	50.00 - 200.00% of mass 198	69.53
443	15.00 - 24.00% of mass 442	14.36 (20.66)

Data File: /chem1/nt6.i/20100723.b/tune.b/07231001.D

Date : 23-JUL-2010 15:01

Client ID: DFTPP0723

Instrument: nt6.i

Sample Info: DFTPP0723

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: 07231001.D
Spectrum: Avg. Scans 2624-2626 (15.61), Background Scan 2616
Location of Maximum: 198.00
Number of points: 220

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	387	123.00	922	188.00	228	258.00	2047
39.00	1825	124.00	480	189.00	470	259.00	339
49.00	65	125.00	365	191.00	272	265.00	871
50.00	5640	127.00	35688	192.00	768	266.00	70
51.00	23184	128.00	2664	193.00	910	273.00	1286
52.00	1188	129.00	13060	194.00	205	274.00	3278
55.00	117	130.00	1185	195.00	108	275.00	18912
56.00	724	131.00	199	196.00	2168	276.00	2417
57.00	1783	132.00	53	198.00	70696	277.00	1549
61.00	268	134.00	417	199.00	5207	278.00	225
62.00	303	135.00	1057	200.00	352	285.00	281
63.00	1001	136.00	403	201.00	473	293.00	310
64.00	57	137.00	530	203.00	399	294.00	55
65.00	603	138.00	53	204.00	2330	296.00	5042
69.00	27872	139.00	133	205.00	4267	297.00	617
70.00	76	140.00	157	206.00	17352	302.00	51
73.00	239	141.00	1557	207.00	2460	303.00	684
74.00	2447	142.00	527	208.00	547	304.00	121
75.00	4272	143.00	334	209.00	224	308.00	56
76.00	1504	144.00	51	210.00	220	314.00	246
77.00	31608	146.00	256	211.00	719	315.00	557
78.00	2353	147.00	794	212.00	72	316.00	334
79.00	1859	148.00	1619	215.00	138	321.00	61
80.00	1551	149.00	391	216.00	402	323.00	1624
81.00	2087	151.00	243	217.00	4593	324.00	284
82.00	569	152.00	55	218.00	656	327.00	303
83.00	501	153.00	556	221.00	4555	328.00	54
85.00	371	154.00	413	222.00	212	333.00	133
86.00	612	155.00	876	223.00	1131	334.00	1046
87.00	283	156.00	1402	224.00	10419	335.00	247
88.00	58	157.00	248	225.00	2454	341.00	195
91.00	565	158.00	315	226.00	302	346.00	381
92.00	460	159.00	248	227.00	3948	352.00	507
93.00	3213	160.00	524	228.00	566	353.00	296
94.00	196	161.00	761	229.00	863	354.00	512

Data File: /chem1/nt6.i/20100723.b/tune.b/07231001.D

Date : 23-JUL-2010 15:01

Client ID: DFTPP0723 Instrument: nt6.i

Sample Info: DFTPP0723

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.25

Data File: 07231001.D
Spectrum: Avg. Scans 2624-2626 (15.61), Background Scan 2616
Location of Maximum: 198.00
Number of points: 220

m/z	Y	m/z	Y	m/z	Y	m/z	Y
96.00	222	162.00	236	230.00	56	365.00	2305
98.00	2141	164.00	52	231.00	395	366.00	343
99.00	1893	165.00	557	232.00	58	371.00	53
100.00	125	166.00	524	234.00	262	372.00	781
101.00	1206	167.00	2749	235.00	263	373.00	223
103.00	429	168.00	1464	236.00	143	383.00	219
104.00	718	169.00	273	237.00	373	402.00	207
105.00	891	172.00	270	239.00	65	403.00	390
106.00	85	173.00	422	241.00	228	404.00	51
107.00	9053	174.00	680	242.00	541	421.00	350
108.00	1452	175.00	1231	243.00	516	422.00	291
109.00	101	176.00	512	244.00	7897	423.00	2348
110.00	17112	177.00	488	245.00	1132	424.00	560
111.00	2583	178.00	162	246.00	1556	441.00	7398
112.00	346	179.00	2424	247.00	296	442.00	49152
113.00	127	180.00	1708	249.00	252	443.00	10155
116.00	407	181.00	748	253.00	143	444.00	1103
117.00	6032	184.00	213	254.00	104		
118.00	485	185.00	1151	255.00	41248		
120.00	62	186.00	9244	256.00	5893		
122.00	623	187.00	2603	257.00	528		

Data File: /chem1/nt6.i/20100723.b/tune.b/07231001.D

Date : 23-JUL-2010 15:01

Client ID: DFTPP0723

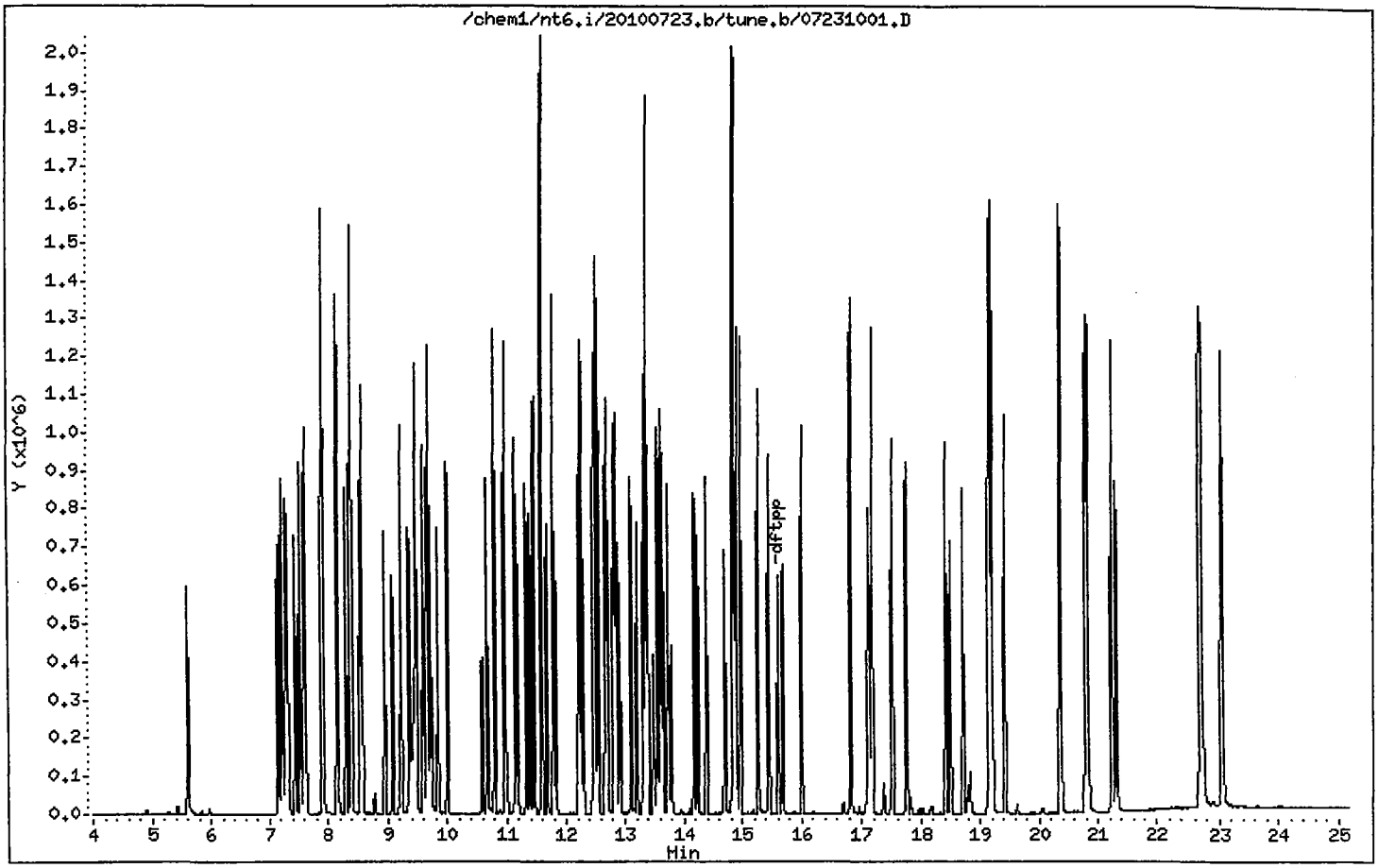
Instrument: nt6.i

Sample Info: DFTPP0723

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem1/nt6.i/20100723.b/ddt.b/07231001.D ARI ID: IC250723
Method: /chem1/nt6.i/20100723.b/ddt.b/sw846ddt.m Misc: 10-
Analysis Date: 23-JUL-2010 15:01 Instrument: nt6.i

COMPOUND	RT	AREA
Pentachlorophenol	14.696	127003
Benzidine	17.099	261375
4,4'-DDE	----	----
4,4'-DDD	18.023	5204
4,4'-DDT	18.493	237032

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(0 + 5204) * 100}{(0 + 5204 + 237032)}$$

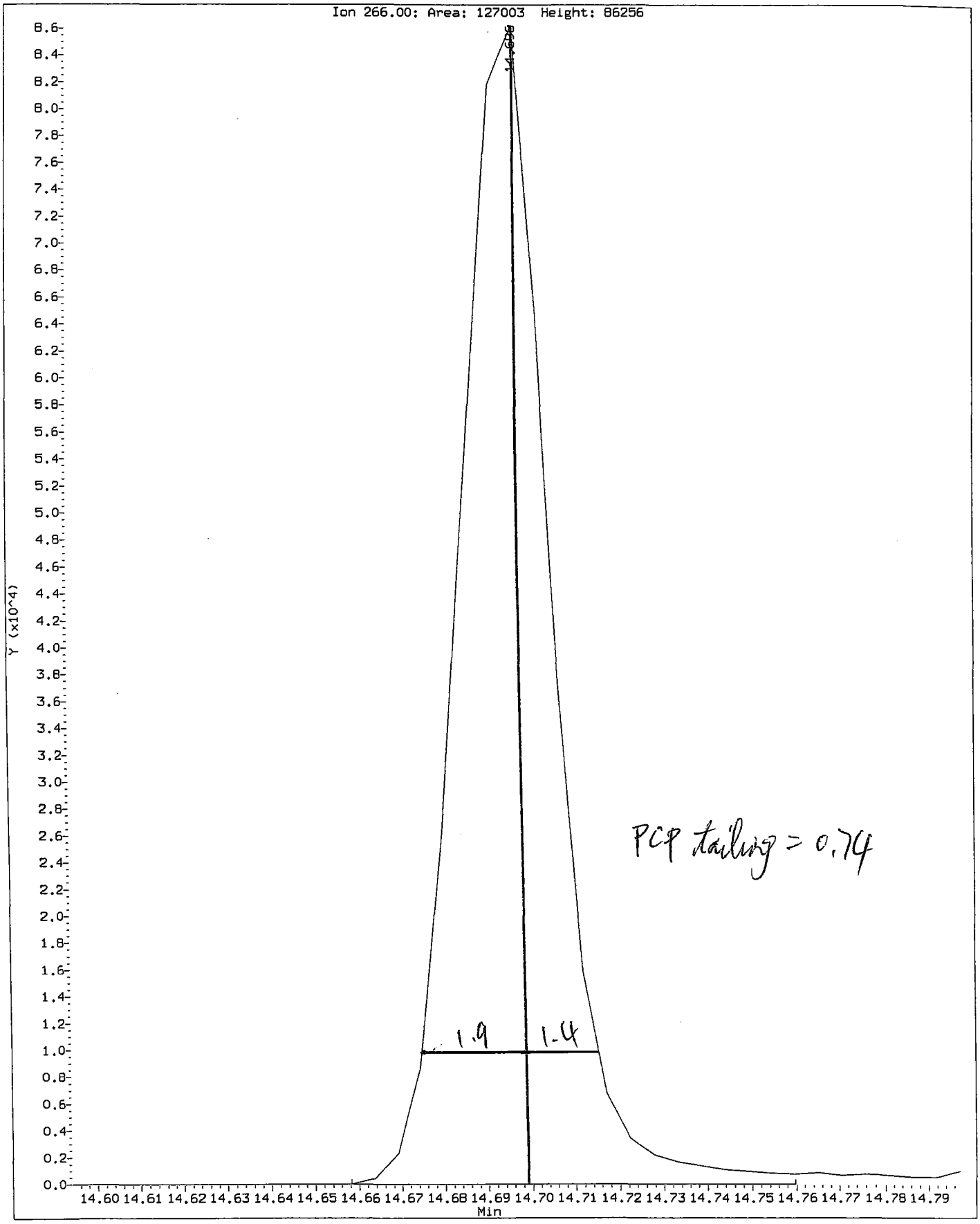
DDT Percent Breakdown = 2.1 %

06

AZ 07/26/10

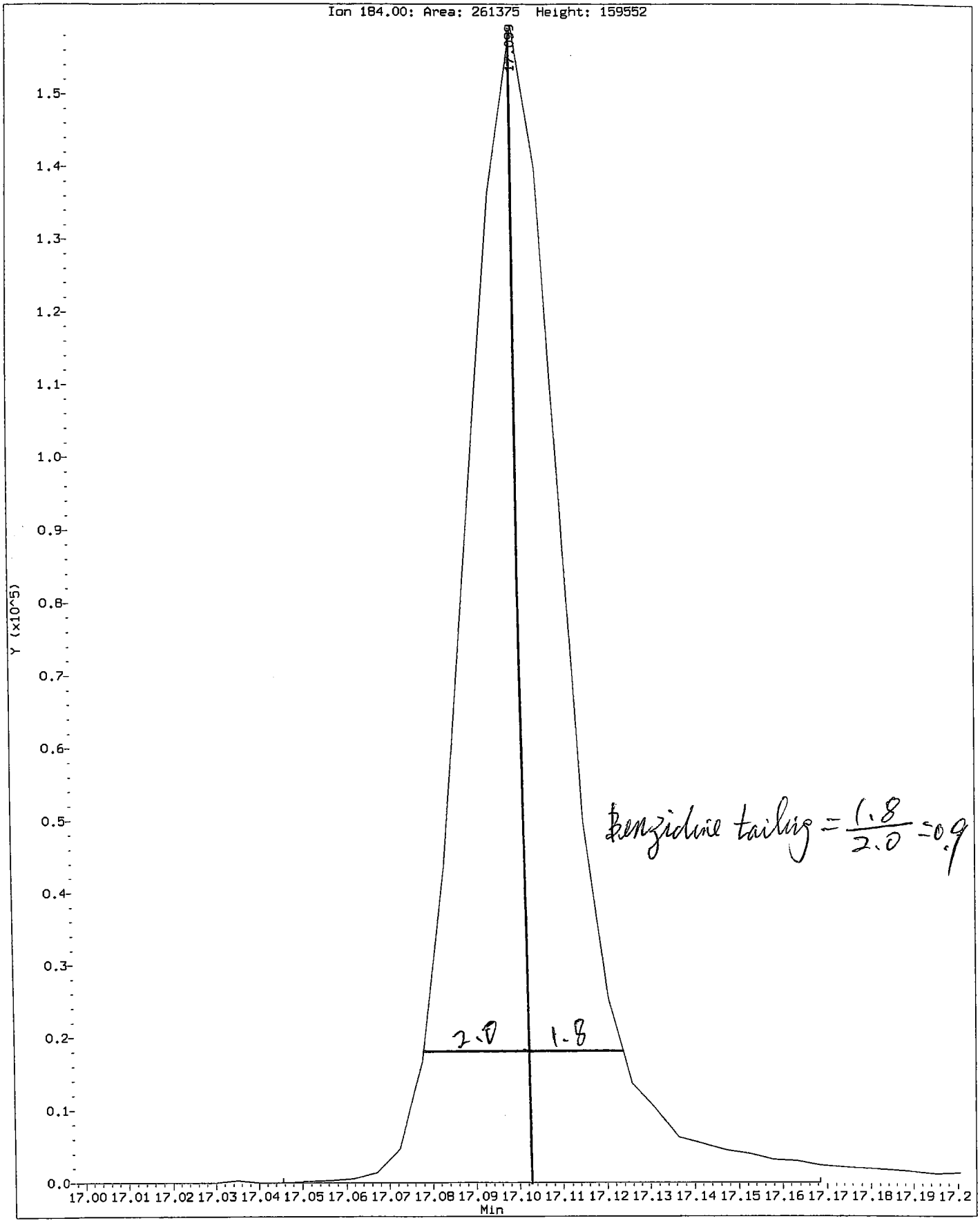
Data File: /chem1/nt6.i/20100723.b/ddt.b/07231001.D
Injection Date: 23-JUL-2010 15:01
Instrument: nt6.i
Client Sample ID: IC250723

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem1/nt6.i/20100723.b/ddt.b/07231001.D
Injection Date: 23-JUL-2010 15:01
Instrument: nt6.i
Client Sample ID: IC250723

Compound: Benzidine
CAS Number:



Benzidine tailing = $\frac{1.8}{2.0} = 0.9$

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231002.D
Lab Smp Id: IC010723 Client Smp ID: IC010723
Inj Date : 23-JUL-2010 15:38
Operator : JZ Inst ID: nt6.i
Smp Info : IC010723,
Misc Info : 10-
Comment : 1ul Injection
Method : /chem1/nt6.i/20100723.b/SW846072310.m
Meth Date : 26-Jul-2010 11:33 jianqing Quant Type: ISTD
Cal Date : 23-JUL-2010 15:38 Cal File: 07231002.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

07/26/10

AMOUNTS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	5.602	5.610	(0.738)	12960	1.00000	1.000
$	2 Phenol-d5	99	7.205	7.218	(0.949)	16567	1.00000	1.000
	3 Phenol	94	7.221	7.237	(0.951)	18572	1.00000	1.000
$	5 2-Chlorophenol-d4	132	7.296	7.303	(0.961)	14473	1.00000	1.000
	4 Bis(2-Chloroethyl)ether	93	7.274	7.290	(0.958)	14758	1.00000	1.000
	6 2-Chlorophenol	128	7.317	7.327	(0.964)	16158	1.00000	1.000
	7 1,3-Dichlorobenzene	146	7.525	7.530	(0.992)	19042	1.00000	1.000
*	8 1,4-Dichlorobenzene-d4	152	7.589	7.595	(1.000)	195617	20.0000	
	9 1,4-Dichlorobenzene	146	7.616	7.621	(1.004)	18283	1.00000	1.000
$	10 1,2-Dichlorobenzene-d4	152	7.888	7.896	(1.039)	9473	1.00000	1.000 (M)
	12 1,2-Dichlorobenzene	146	7.910	7.915	(1.042)	17717	1.00000	1.000
	11 Benzyl alcohol	108	7.894	7.910	(1.040)	7581	1.00000	1.000
	14 2,2'-oxybis(1-Chloropropane)	45	8.155	8.161	(1.075)	15269	1.00000	1.000
	13 2-Methylphenol	108	8.150	8.166	(1.074)	13513	1.00000	1.000
	17 Hexachloroethane	117	8.396	8.406	(1.106)	6764	1.00000	1.000
	16 N-Nitroso-di-n-propylamine	70	8.369	8.390	(1.103)	9485	1.00000	1.000
	15 4-Methylphenol	108	8.385	8.406	(1.105)	13086	1.00000	1.000
$	18 Nitrobenzene-d5	82	8.529	8.542	(0.885)	13152	1.00000	1.000
	19 Nitrobenzene	77	8.556	8.572	(0.888)	15308	1.00000	1.000
	20 Isophorone	82	8.941	8.967	(0.927)	23101	1.00000	1.000
	21 2-Nitrophenol	139	9.079	9.090	(0.942)	7500	1.00000	1.000
	22 2,4-Dimethylphenol	107	9.218	9.234	(0.956)	13985	1.00000	1.000
	23 Bis(2-Chloroethoxy)methane	93	9.357	9.373	(0.971)	16110	1.00000	1.000
	25 2,4-Dichlorophenol	162	9.475	9.485	(0.983)	11462	1.00000	1.000
	26 1,2,4-Trichlorobenzene	180	9.587	9.597	(0.994)	13993	1.00000	1.000
*	27 Naphthalene-d8	136	9.640	9.651	(1.000)	619162	20.0000	
	28 Naphthalene	128	9.672	9.683	(1.003)	41597	1.00000	1.000

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	29 4-Chloroaniline	127	9.838	9.843	(1.020)	15650	1.00000	1.000
	30 Hexachlorobutadiene	225	10.003	10.009	(1.038)	7937	1.00000	1.000
	31 4-Chloro-3-methylphenol	107	10.671	10.682	(1.107)	11158	1.00000	1.000(M)
	32 2-Methylnaphthalene	141	10.794	10.805	(1.120)	22525	1.00000	1.000
	33 Hexachlorocyclopentadiene	237	11.179	11.184	(0.894)	3366	1.00000	1.000
	34 2,4,6-Trichlorophenol	196	11.323	11.333	(0.906)	7217	1.00000	1.000
	35 2,4,5-Trichlorophenol	196	11.387	11.392	(0.911)	7991	1.00000	1.000
$	36 2-Fluorobiphenyl	172	11.446	11.453	(0.916)	27771	1.00000	1.000
	37 2-Chloronaphthalene	162	11.568	11.579	(0.926)	25928	1.00000	1.000
	38 2-Nitroaniline	65	11.819	11.835	(0.946)	5357	1.00000	1.000
	39 Dimethylphthalate	163	12.199	12.220	(0.976)	27471	1.00000	1.000
	40 Acenaphthylene	152	12.241	12.252	(0.979)	40068	1.00000	1.000
	41 2,6-Dinitrotoluene	165	12.289	12.305	(0.983)	5455	1.00000	1.000
*	42 Acenaphthene-d10	164	12.498	12.503	(1.000)	335561	20.0000	
	43 3-Nitroaniline	138	12.498	12.519	(1.000)	5458	1.00000	1.000
	44 Acenaphthene	153	12.546	12.562	(1.004)	24317	1.00000	1.000
	46 Dibenzofuran	168	12.808	12.823	(1.025)	33065	1.00000	1.000
	47 4-Nitrophenol	109	12.845	12.861	(1.028)	2427	1.00000	1.000(M)
	48 2,4-Dinitrotoluene	165	12.909	12.930	(1.033)	6962	1.00000	1.000
	50 Diethylphthalate	149	13.347	13.368	(1.068)	27786	1.00000	1.000
	49 Fluorene	166	13.363	13.379	(1.069)	28942	1.00000	1.000
	51 4-Chlorophenyl-phenylether	204	13.400	13.411	(1.072)	13051	1.00000	1.000
	52 4-Nitroaniline	138	13.486	13.523	(1.079)	5361	1.00000	1.000
	54 N-Nitrosodiphenylamine	169	13.609	13.630	(0.916)	19100	1.00000	1.000
$	55 2,4,6-Tribromophenol	330	13.785	13.798	(1.103)	2801	1.00000	1.000
	56 4-Bromophenyl-phenylether	248	14.175	14.185	(0.954)	7664	1.00000	1.000
	57 Hexachlorobenzene	284	14.389	14.399	(0.968)	8254	1.00000	1.000
	58 Pentachlorophenol	266	14.693	14.704	(0.989)	2935	1.00000	1.000
*	59 Phenanthrene-d10	188	14.859	14.869	(1.000)	502252	20.0000	
	60 Phenanthrene	178	14.896	14.912	(1.002)	36558	1.00000	1.000
	61 Anthracene	178	14.965	14.987	(1.007)	37076	1.00000	1.000
	62 Carbazole	167	15.264	15.280	(1.027)	34327	1.00000	1.000
	63 Di-n-butylphthalate	149	16.002	16.012	(1.077)	39082	1.00000	1.000
	64 Fluoranthene	202	16.824	16.835	(1.132)	36900	1.00000	1.000
	65 Pyrene	202	17.171	17.187	(0.897)	39792	1.00000	1.000
$	66 Terphenyl-d14	244	17.508	17.515	(0.914)	22641	1.00000	1.000
	67 Butylbenzylphthalate	149	18.410	18.421	(0.961)	15872	1.00000	1.000
	68 Benzo(a)anthracene	228	19.131	19.147	(0.999)	37113	1.00000	1.000
*	69 Chrysene-d12	240	19.153	19.169	(1.000)	533625	20.0000	
	70 3,3'-Dichlorobenzidine	252	19.158	19.174	(1.000)	11847	1.00000	1.000
	71 Chrysene	228	19.190	19.217	(1.002)	35744	1.00000	1.000
	72 bis(2-Ethylhexyl)phthalate	149	19.414	19.420	(0.954)	20881	1.00000	1.000
*	134 Di-n-octylphthalate-d4	153	20.344	20.354	(1.000)	671548	20.0000	
	73 Di-n-octylphthalate	149	20.354	20.360	(1.001)	42955	1.00000	1.000
	74 Benzo(b)fluoranthene	252	20.776	20.803	(0.975)	37421	1.00000	1.000
	75 Benzo(k)fluoranthene	252	20.808	20.840	(0.977)	42406	1.00000	1.000
	187 Total Benzofluoranthenes	252	20.808	20.840	(0.977)	77462	2.00000	2.000(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
76	Benzo(a)pyrene	252	21.220	21.246	(0.996)	35052	1.00000	1.000
* 77	Perylene-d12	264	21.305	21.316	(1.000)	501426	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	22.689	22.720	(1.065)	46606	1.00000	1.000
79	Dibenzo(a,h)anthracene	278	22.710	22.747	(1.066)	34366	1.00000	1.000
80	Benzo(g,h,i)perylene	276	23.036	23.089	(1.081)	43155	1.00000	1.000
90	N-Nitrosodimethylamine	74	2.718	2.750	(0.358)	8653	1.00000	1.000
103	Pyridine	79	2.713	2.702	(0.357)	13072	1.00000	1.000 (M)
91	Aniline	93	7.151	7.157	(0.942)	20217	1.00000	1.000
105	1-methylnaphthalene	141	10.965	10.975	(1.137)	22955	1.00000	1.000
93	Benzidine	184	17.102	17.107	(0.893)	12076	1.00000	1.000
111	Azobenzene (1,2-DP-Hydrazine)	77	13.646	13.667	(1.092)	26415	1.00000	1.000
143	1,4-Dioxane	88	2.152	2.168	(0.284)	5821	1.00000	1.000
$ 137	d8-1,4-Dioxane	96	2.109	2.125	(0.278)	5561	1.00000	1.000
144	alpha-Terpineol	59	9.715	9.731	(1.008)	7796	1.00000	1.000
98	Retene	219	17.753	17.759	(0.927)	11931	1.00000	1.000
133	Butylatedhydroxytoluene	205	12.695	12.706	(1.016)	21964	1.00000	1.000
115	Tributyl Phosphate	99	13.726	13.763	(0.924)	28341	1.00000	1.000
116	Dibutyl Phenyl Phosphate	175	15.446	15.457	(1.040)	17234	1.00000	1.000
117	Butyl Diphenyl Phosphate	94	17.123	17.134	(0.894)	6172	1.00000	1.000
118	Triphenyl Phosphate	326	18.720	18.731	(0.977)	5942	1.00000	1.000
123	Acetophenone	105	8.300	8.316	(1.094)	18028	1.00000	1.000
179	n-Decane	57	7.440	7.450	(0.980)	12744	1.00000	1.000
180	n-Octadecane	57	14.826	14.832	(0.998)	11732	1.00000	1.000
168	Pentachlorobenzene	250	12.850	12.866	(1.028)	10098	1.00000	1.000
113	Diphenyl Oxide	170	11.777	11.782	(0.942)	25762	1.00000	1.000
112	Biphenyl	154	11.579	11.590	(0.926)	31556	1.00000	
120	2,3,4,6-Tetrachlorophenol	232	13.107	13.112	(1.049)	6165	1.00000	1.000
151	1,2,4,5-Tetrachlorobenzene	216	11.136	11.141	(0.891)	13502	1.00000	1.000
110	Tetrachloroguaiacol	247	14.821	14.842	(0.997)	3748	2.00000	
109	3,4,5-Trichloroguaiacol	213	13.203	13.219	(0.889)	2088	1.00000	
181	3,4,6-Trichloroguaiacol	211	13.320	13.331	(1.755)	2419	1.00000	
108	4,5,6-Trichloroguaiacol	213	14.239	14.250	(1.139)	1998	1.00000	
184	3,4-Dichloroguaiacol	192	11.670	11.675	(1.538)	2055	1.00000	
107	4,5-Dichloroguaiacol	192	12.460	12.476	(0.997)	5561	2.00000	
182	4,6-Dichloroguaiacol	192	12.460	12.476	(1.642)	5561	2.00000	
185	4-Chloroguaiacol	115	10.586	10.596	(1.395)	1238	0.50000	
186	Carbaryl	144	15.686	15.702	(1.056)	13304	1.00000	1.000
106	Guaiacol	124	8.572	8.588	(1.129)	12877	1.00000	1.000

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 07231002.D
Lab Smp Id: IC010723
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt6.i/20100723.b/SW846072310.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 15:01
Client Smp ID: IC010723
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	182786	91393	365572	195617	7.02
27 Naphthalene-d8	584137	292068	1168274	619162	6.00
42 Acenaphthene-d10	320442	160221	640884	335561	4.72
59 Phenanthrene-d10	503793	251896	1007586	502252	-0.31
69 Chrysene-d12	532343	266172	1064686	533625	0.24
134 Di-n-octylphthala	719428	359714	1438856	671548	-6.66
77 Perylene-d12	517269	258634	1034538	501426	-3.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.59	-0.03
27 Naphthalene-d8	9.64	9.14	10.14	9.64	-0.03
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	-0.02
59 Phenanthrene-d10	14.86	14.36	15.36	14.86	-0.02
69 Chrysene-d12	19.16	18.66	19.66	19.15	-0.04
134 Di-n-octylphthala	20.35	19.85	20.85	20.34	-0.01
77 Perylene-d12	21.31	20.81	21.81	21.31	-0.01

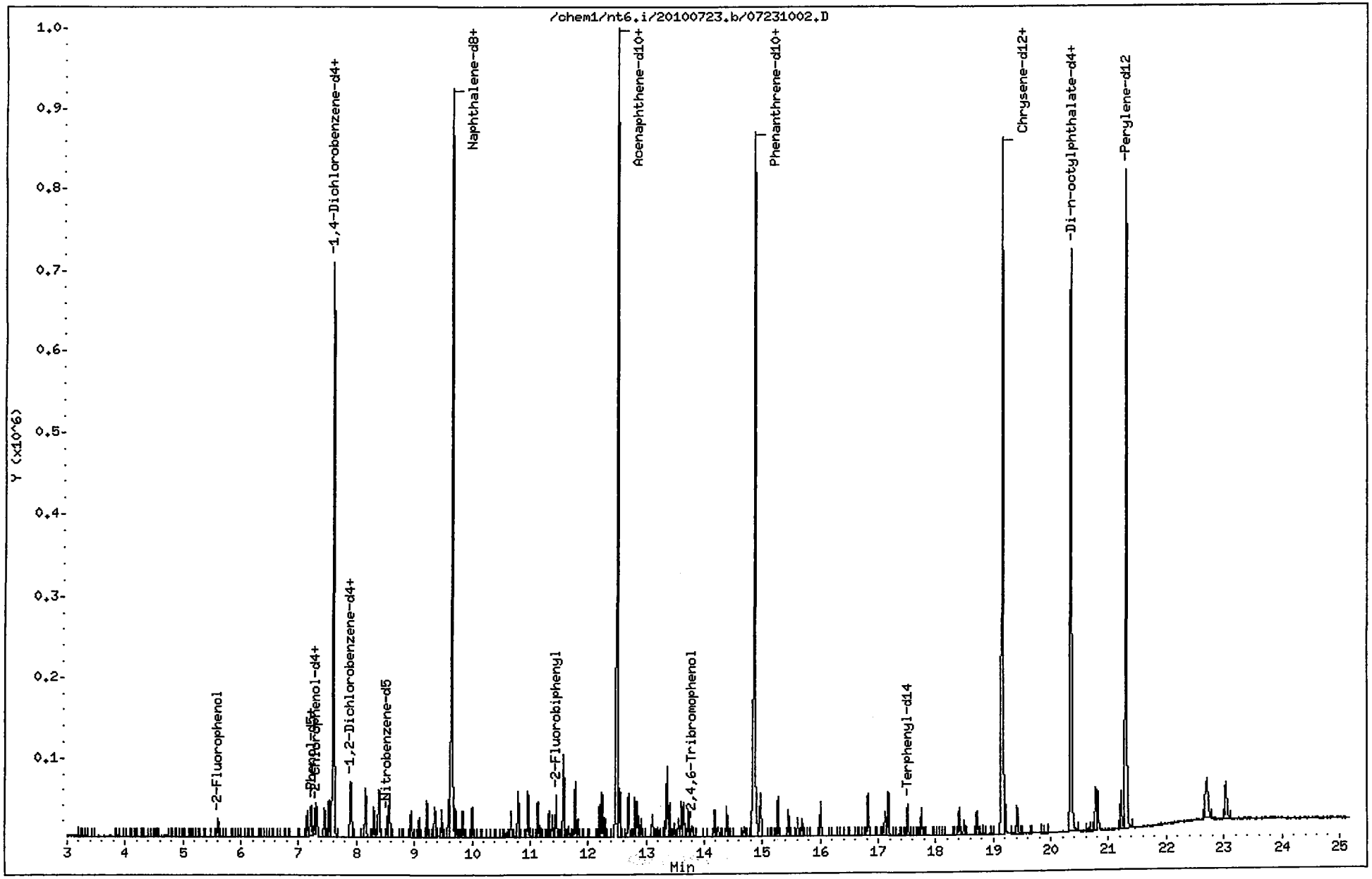
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt6.i/20100723.b/07231002.D
Date : 23-JUL-2010 15:38
Client ID: IC010723
Sample Info: IC010723,

Instrument: nt6.i

Operator: JZ
Column diameter: 0.32

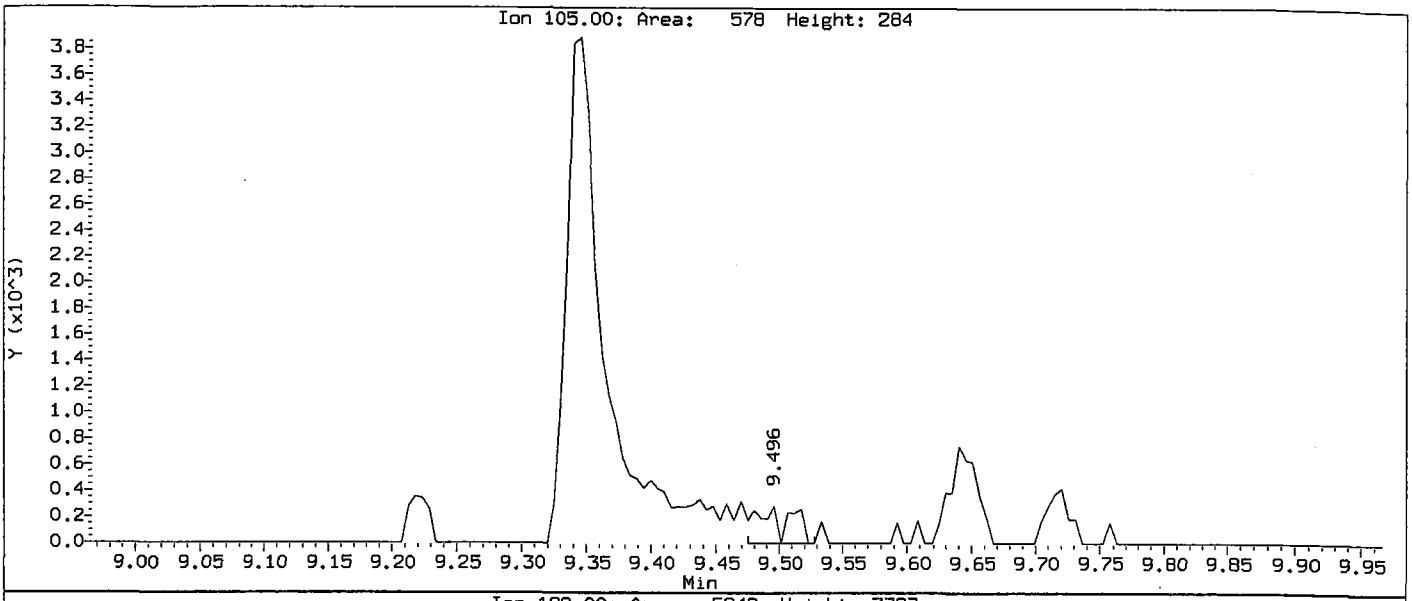
Column phase: ZB-5msi

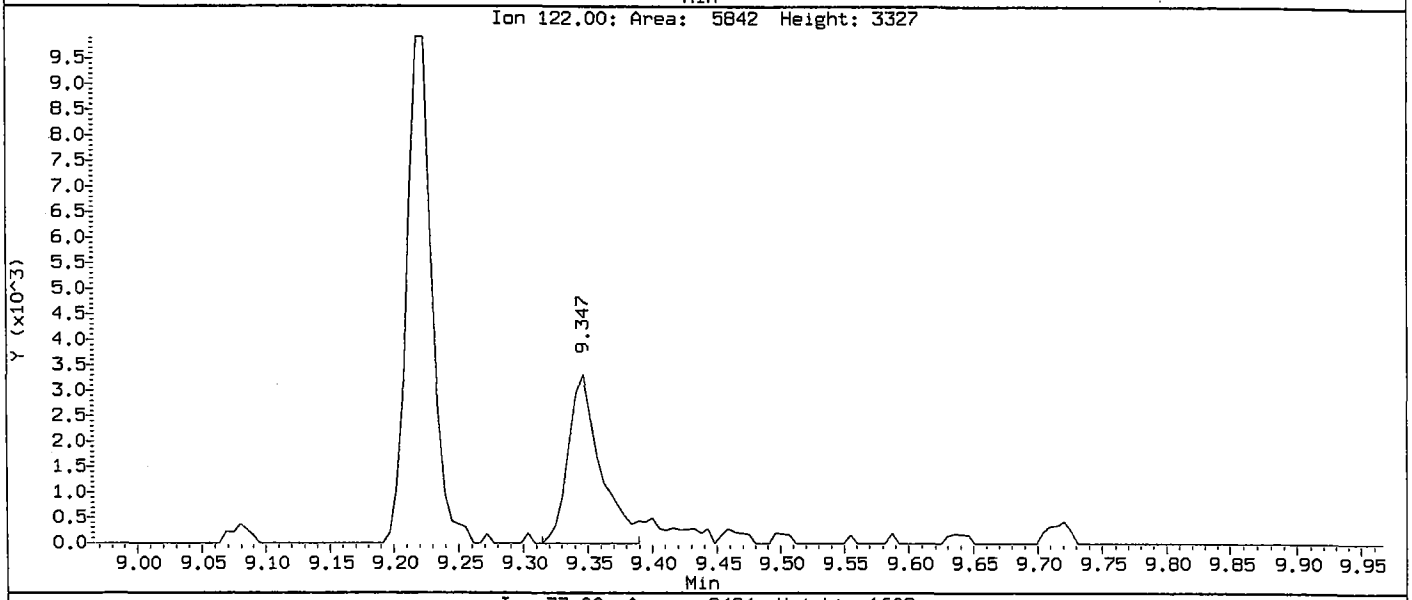


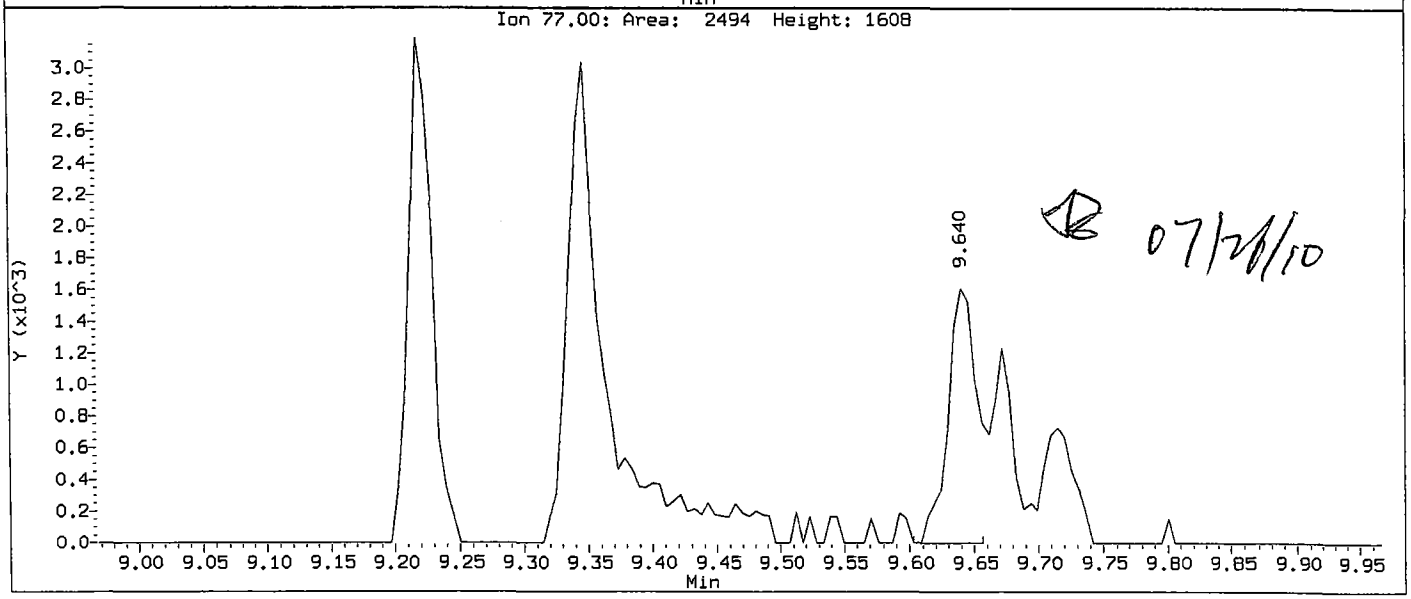
RG51:99168

Data File: /chem1/nt6.i/20100723.b/07231002.D
Injection Date: 23-JUL-2010 15:38
Instrument: nt6.i
Client Sample ID: IC010723

Compound: Benzoic acid
CAS Number: 65-85-0



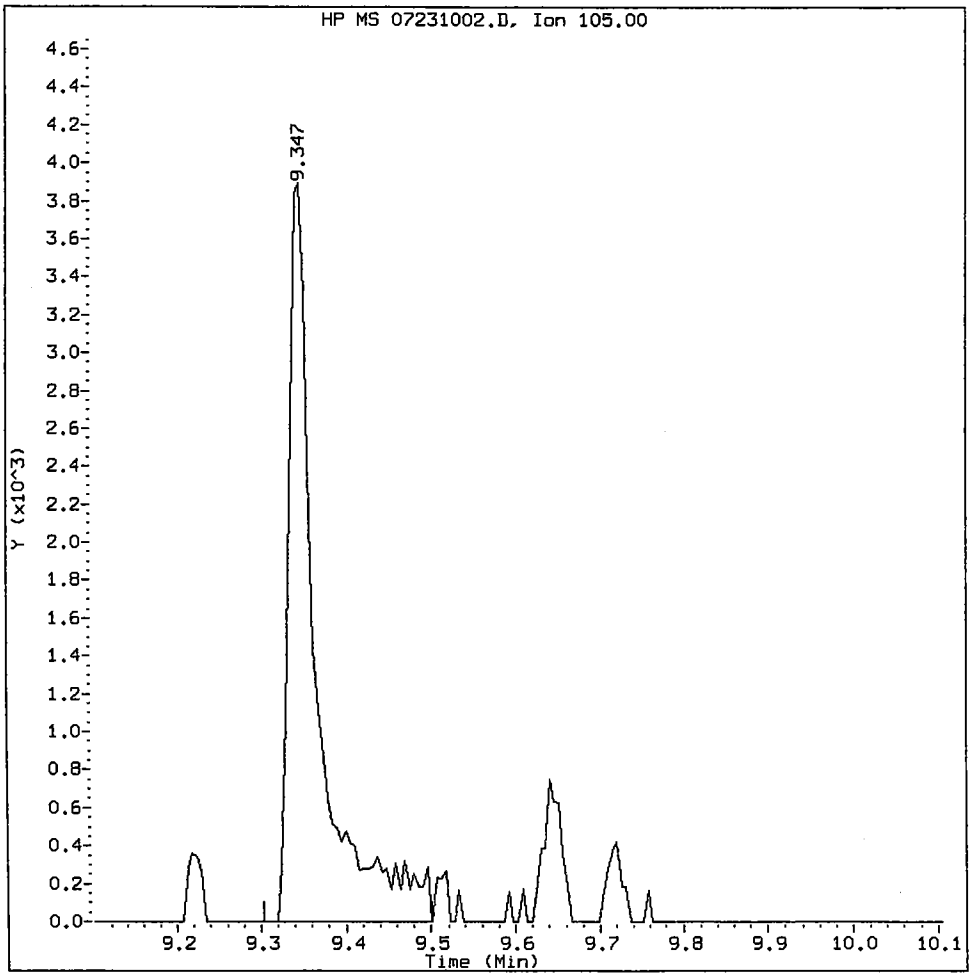




07/27/10

IC010723, /chem1/nt6.i/20100723.b/07231002.D

Benzoic acid Amount: 0.00 Area: 8860



MANUAL INTEGRATION for Benzoic acid

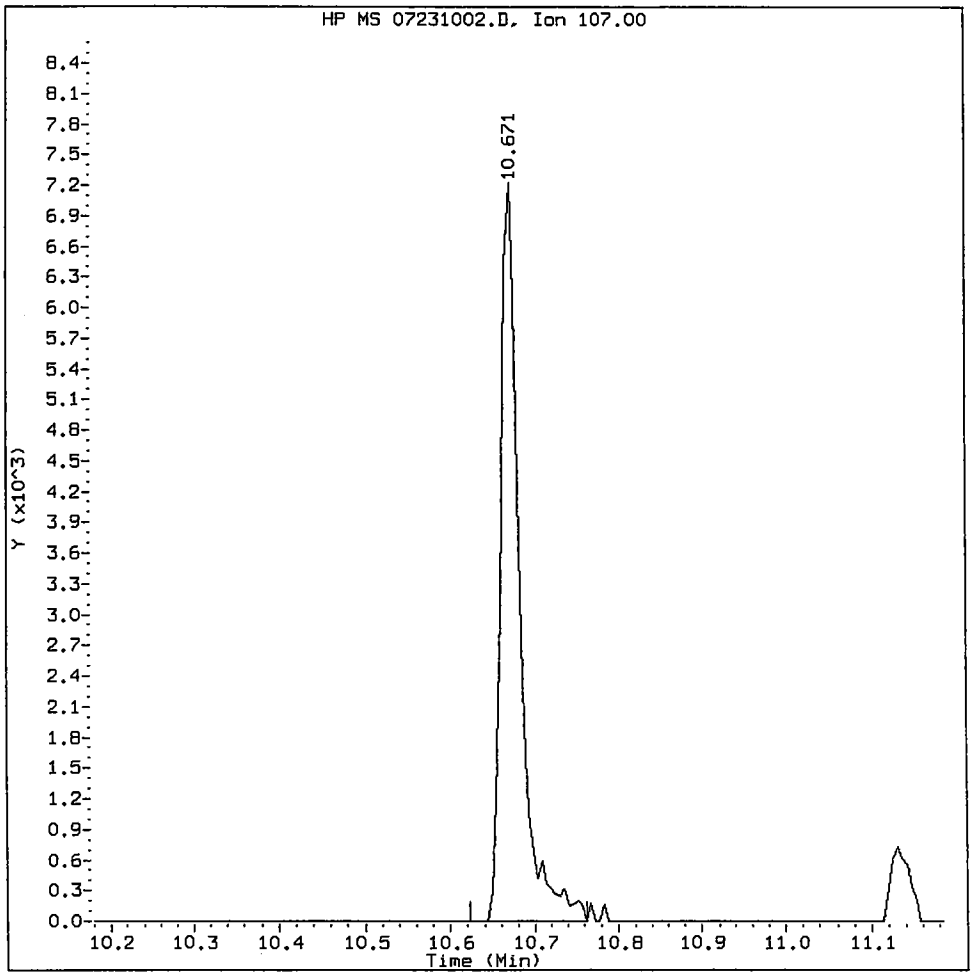
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: AZ Date 07/16/10

IC010723, /chem1/nt6.i/20100723.b/07231002.D

4-Chloro-3-methylphenol Amount: 1.00 Area: 11158



MANUAL INTEGRATION for 4-Chloro-3-methylphenol

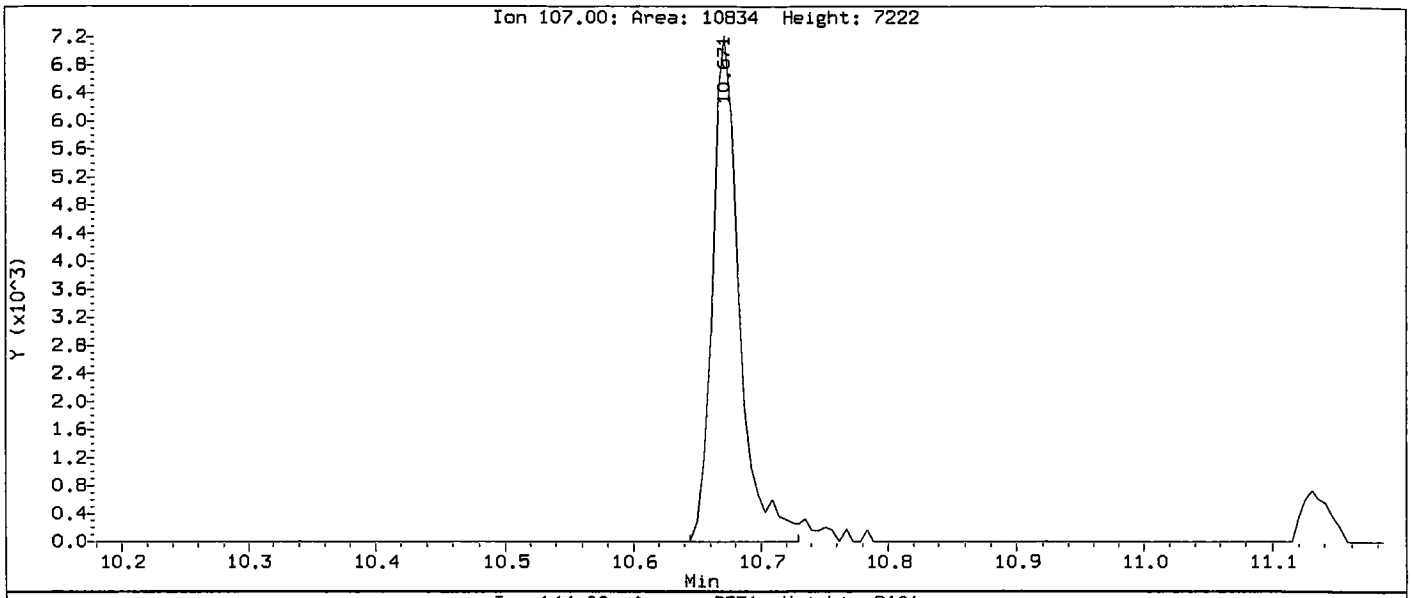
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

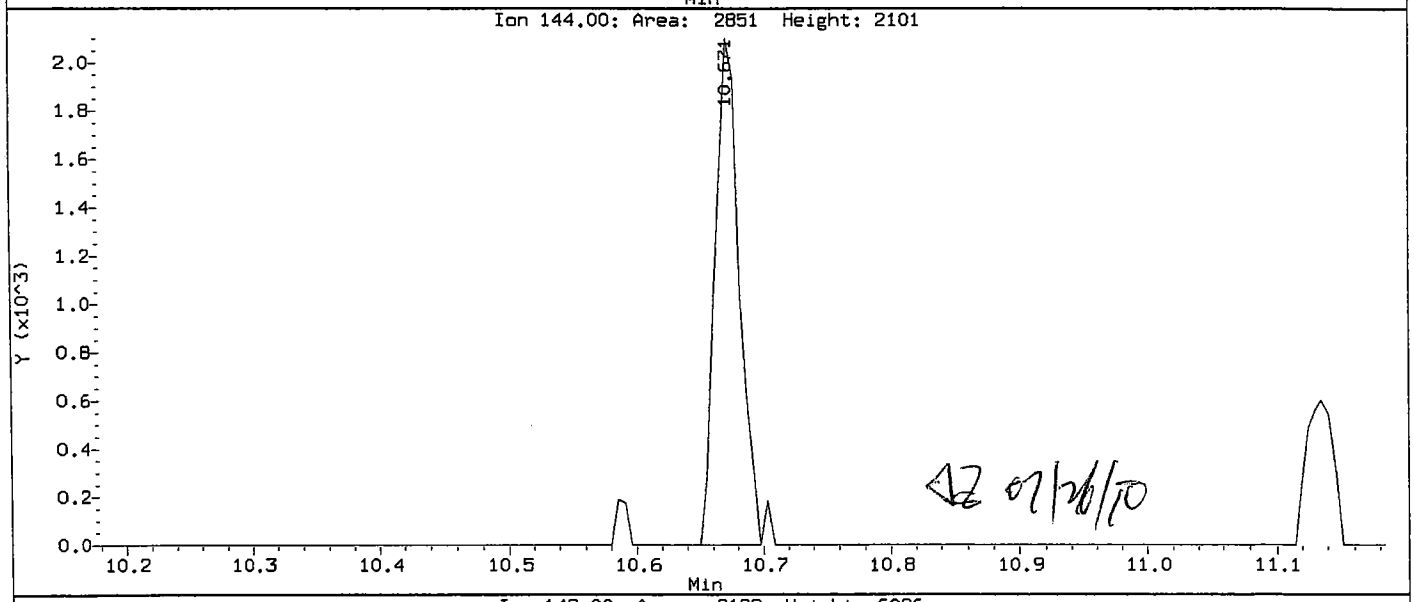
5. Other _____

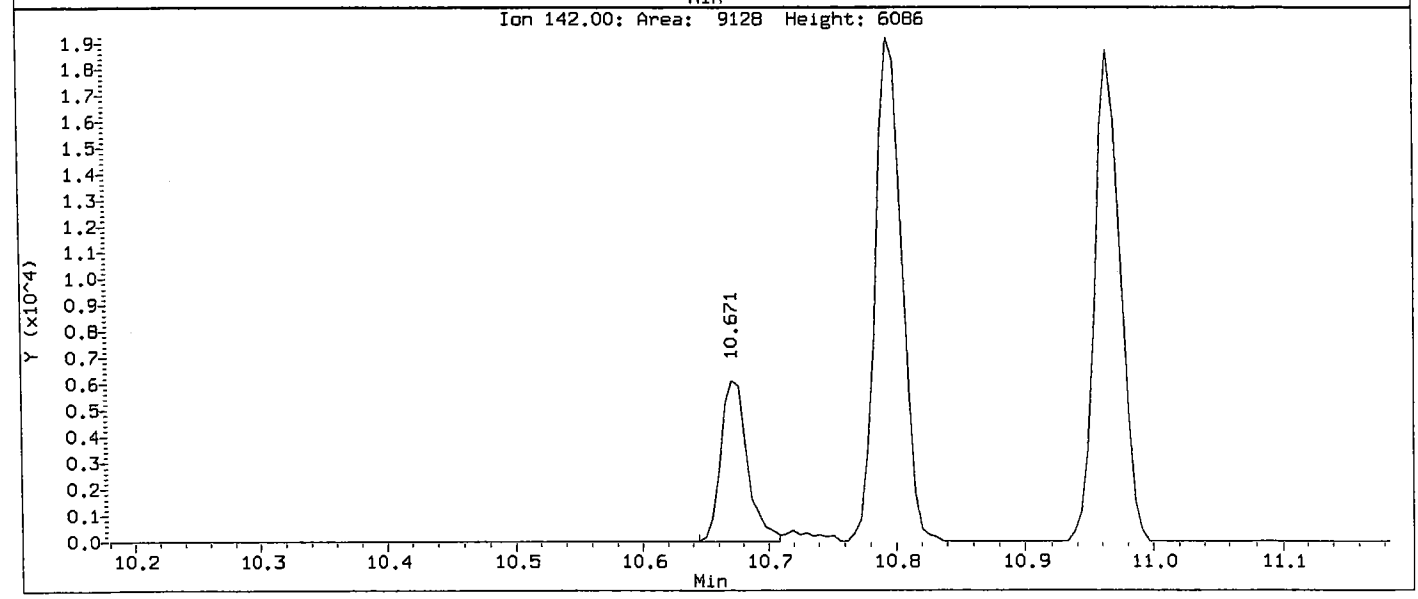
Analyst: _____ Date: 7/14/10

Data File: /chem1/nt6.i/20100723A.b/07231002.D
Injection Date: 23-JUL-2010 15:38
Instrument: nt6.i
Client Sample ID: IC010723

Compound: 4-Chloro-3-methylphenol
CAS Number: 59-50-7

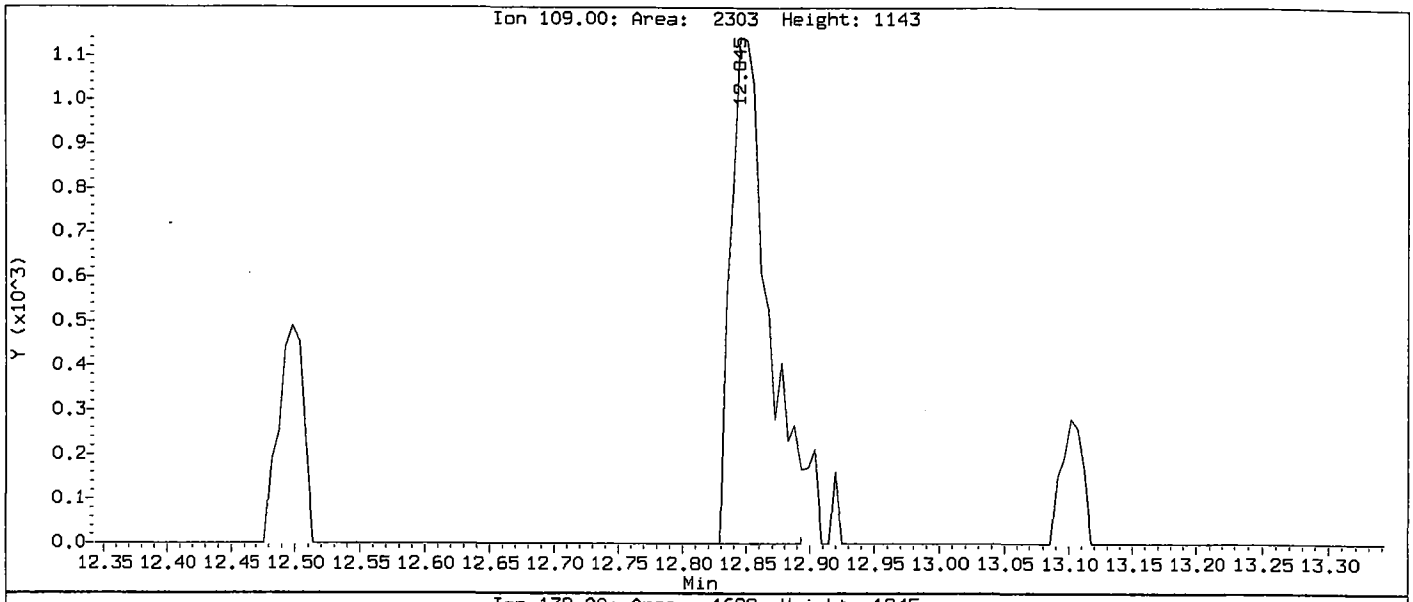


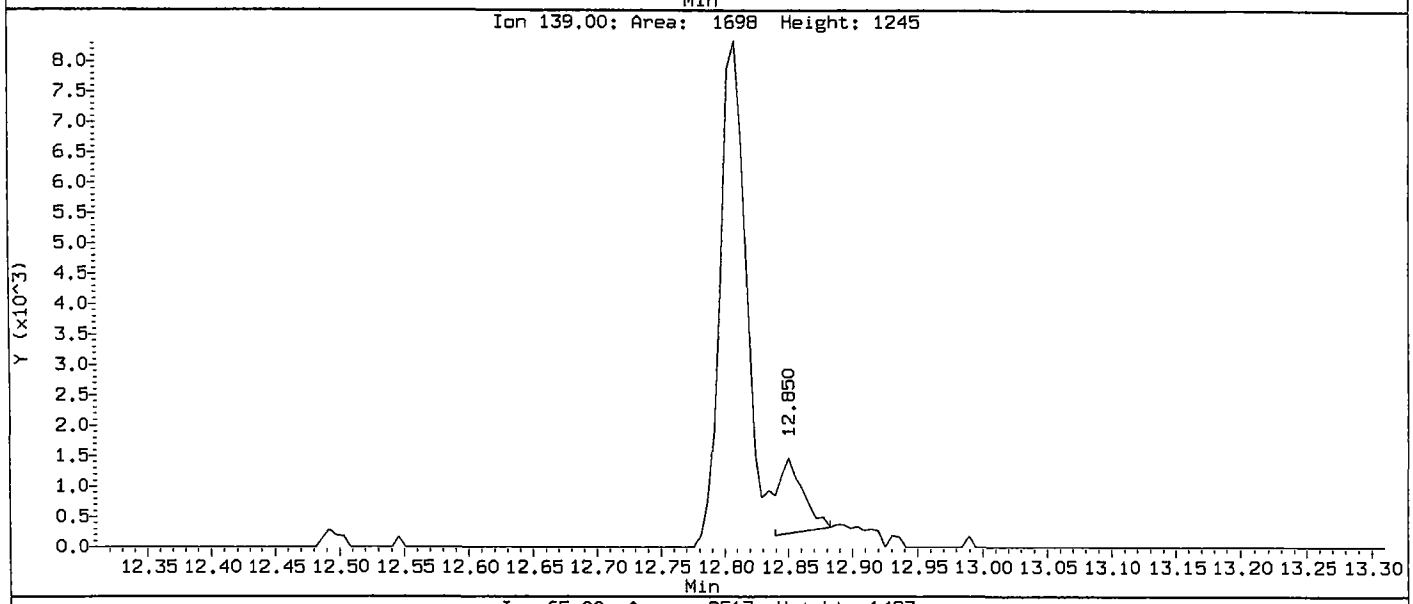


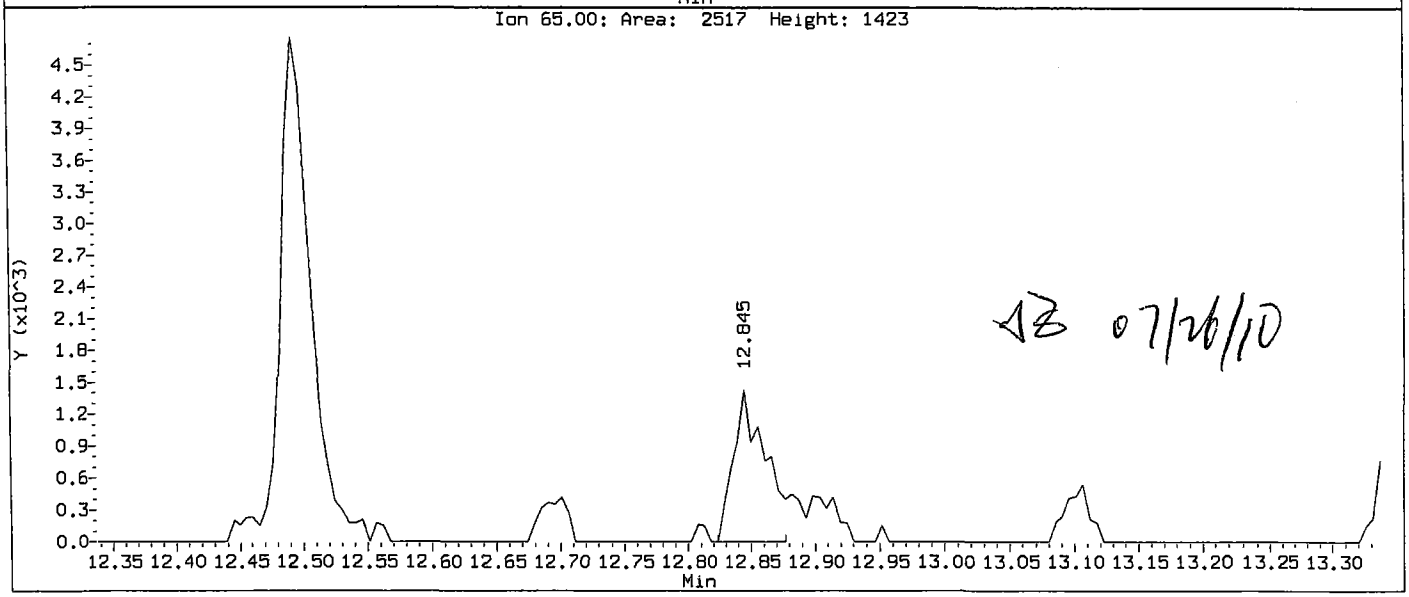


Data File: /chem1/nt6.i/20100723.b/07231002.D
Injection Date: 23-JUL-2010 15:38
Instrument: nt6.i
Client Sample ID: ICO10723

Compound: 4-Nitrophenol
CAS Number: 100-02-7





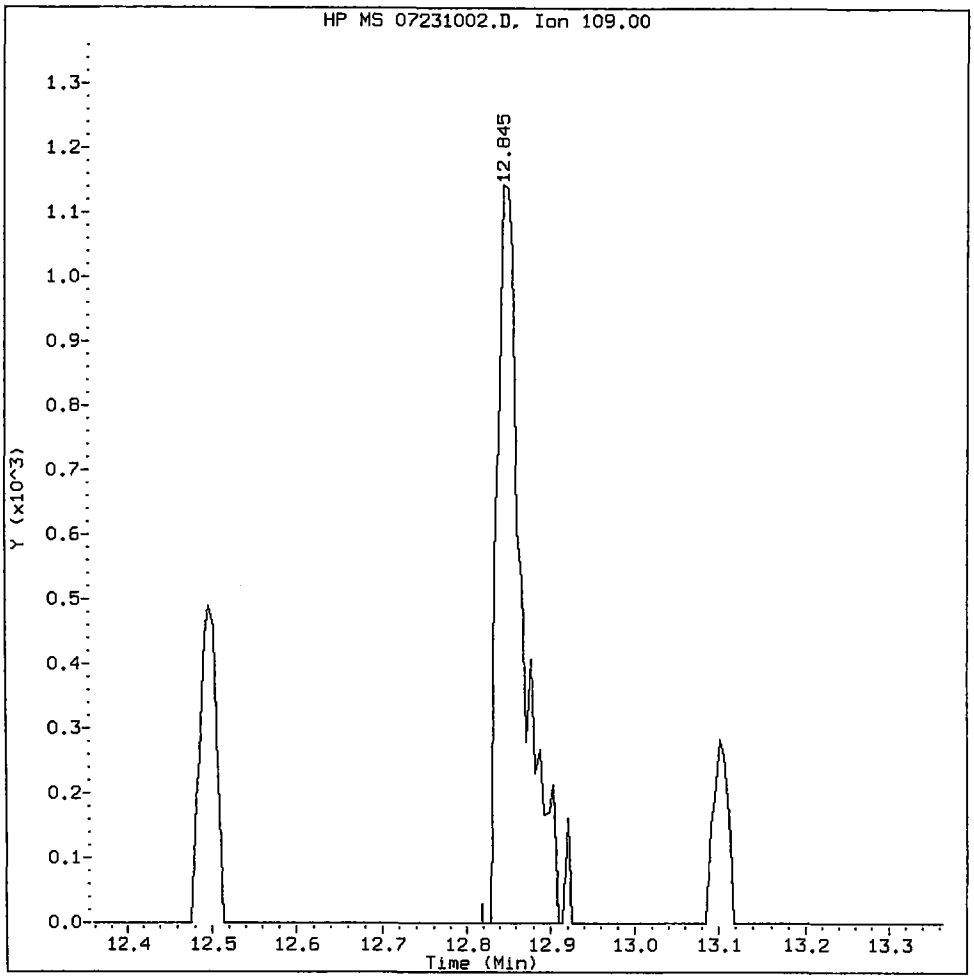


AB 07/26/10

RG54 : 00493

IC010723, /chem1/nt6.i/20100723.b/07231002.D

4-Nitrophenol Amount: 1.00 Area: 2427



MANUAL INTEGRATION for 4-Nitrophenol

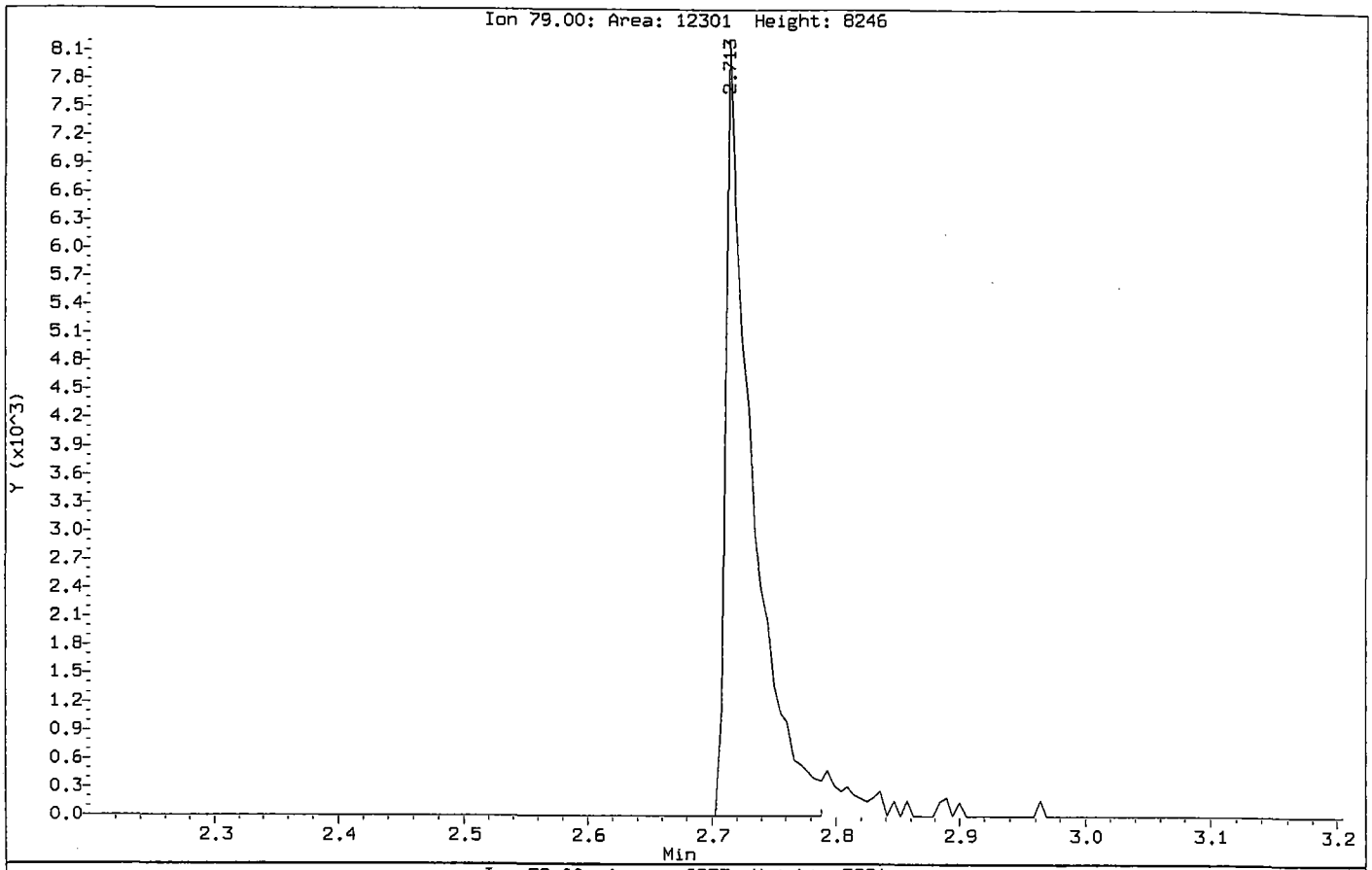
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

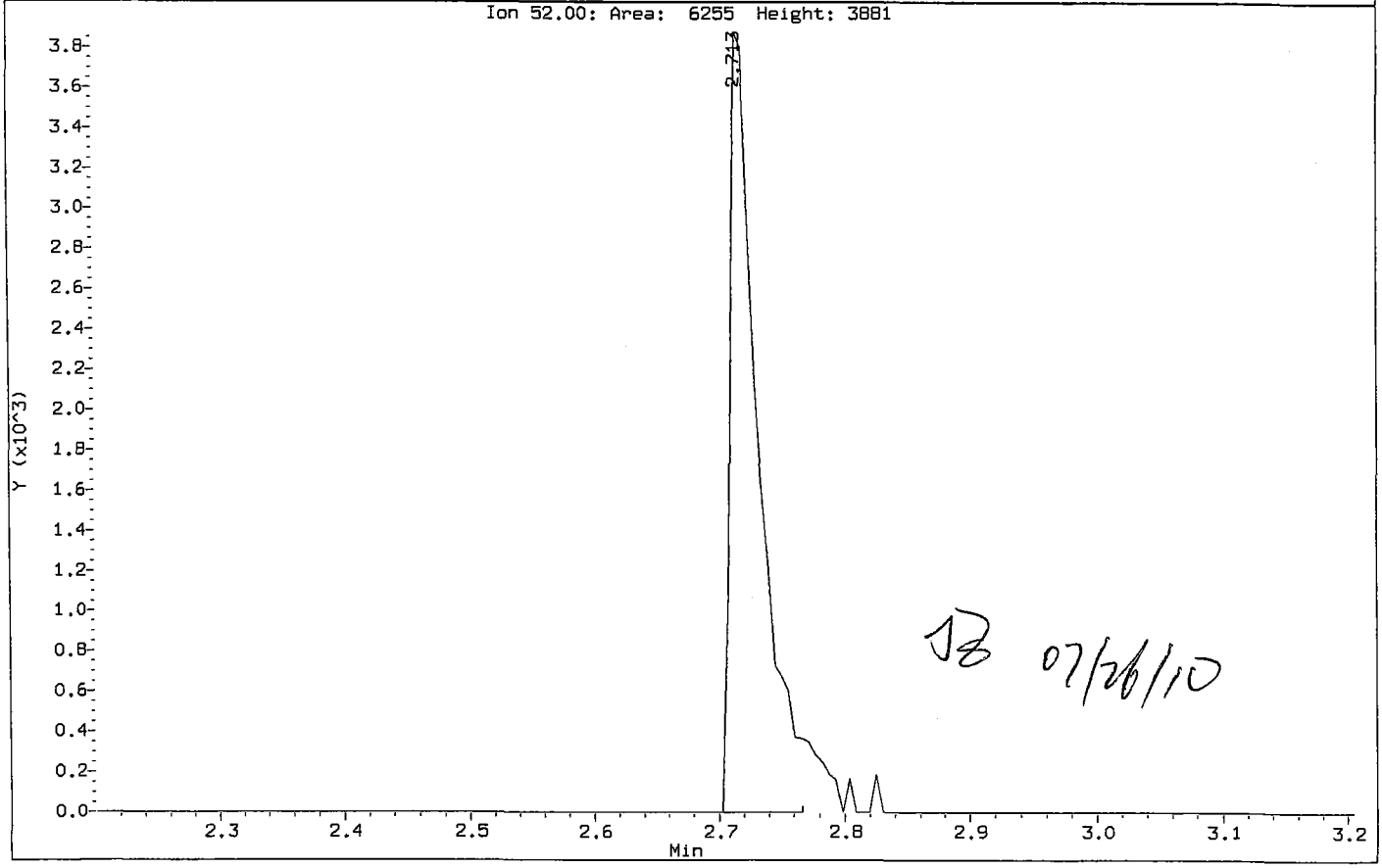
5. Other _____

Analyst: _____ Date: 07/26/10

Data File: /chem1/nt6.i/20100723.b/07231002.D
Injection Date: 23-JUL-2010 15:38
Instrument: nt6.i
Client Sample ID: IC010723

Compound: Pyridine
CAS Number:

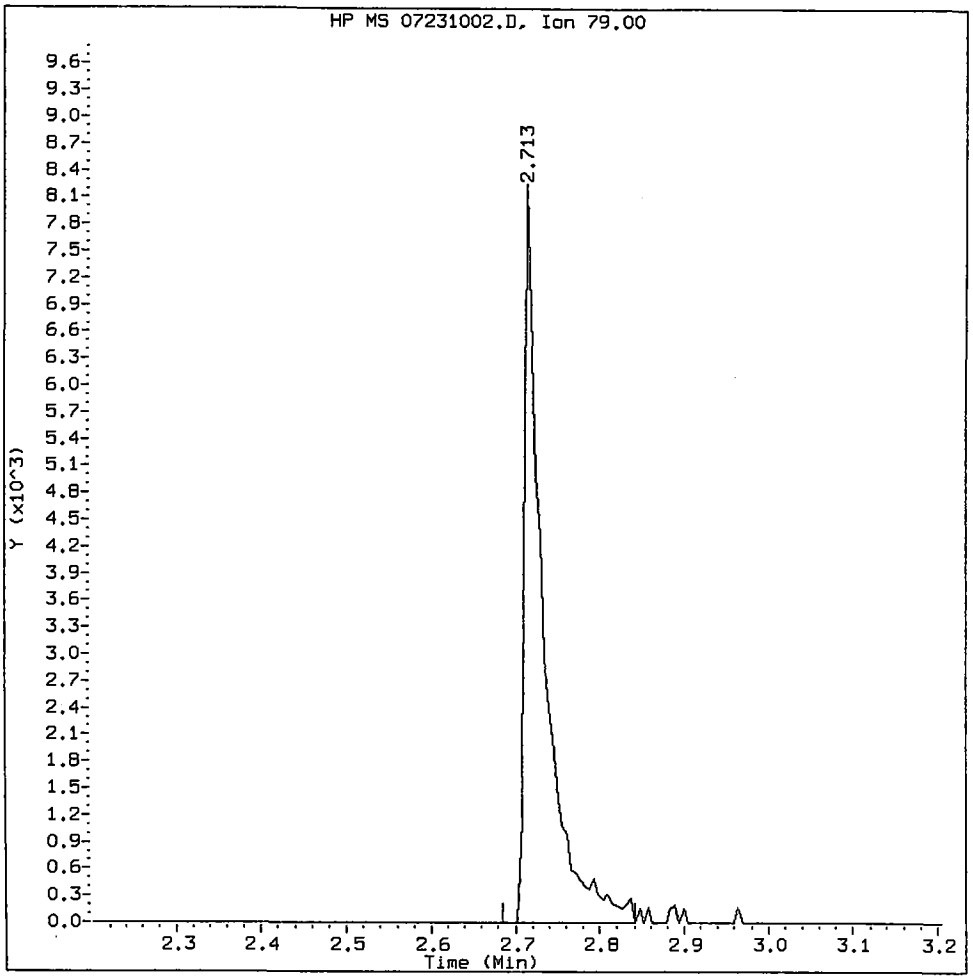




JB 07/26/10

IC010723, /chem1/nt6.i/20100723.b/07231002.D

Pyridine Amount: 1.00 Area: 13072



MANUAL INTEGRATION for Pyridine

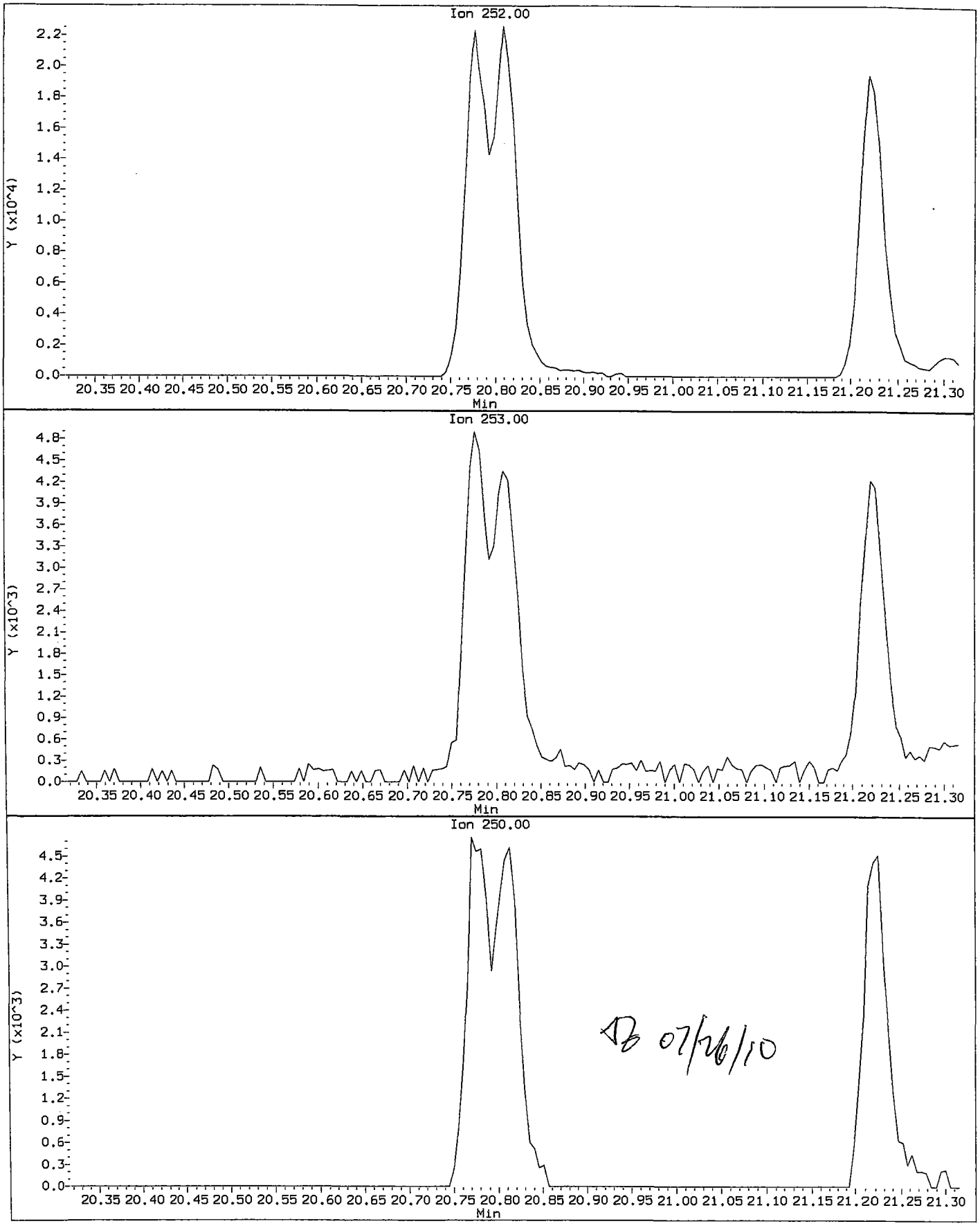
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 07/26/10

Data File: /chem1/nt6.i/20100723.b/07231002.D
Injection Date: 23-JUL-2010 15:38
Instrument: nt6.i
Client Sample ID: IC010723

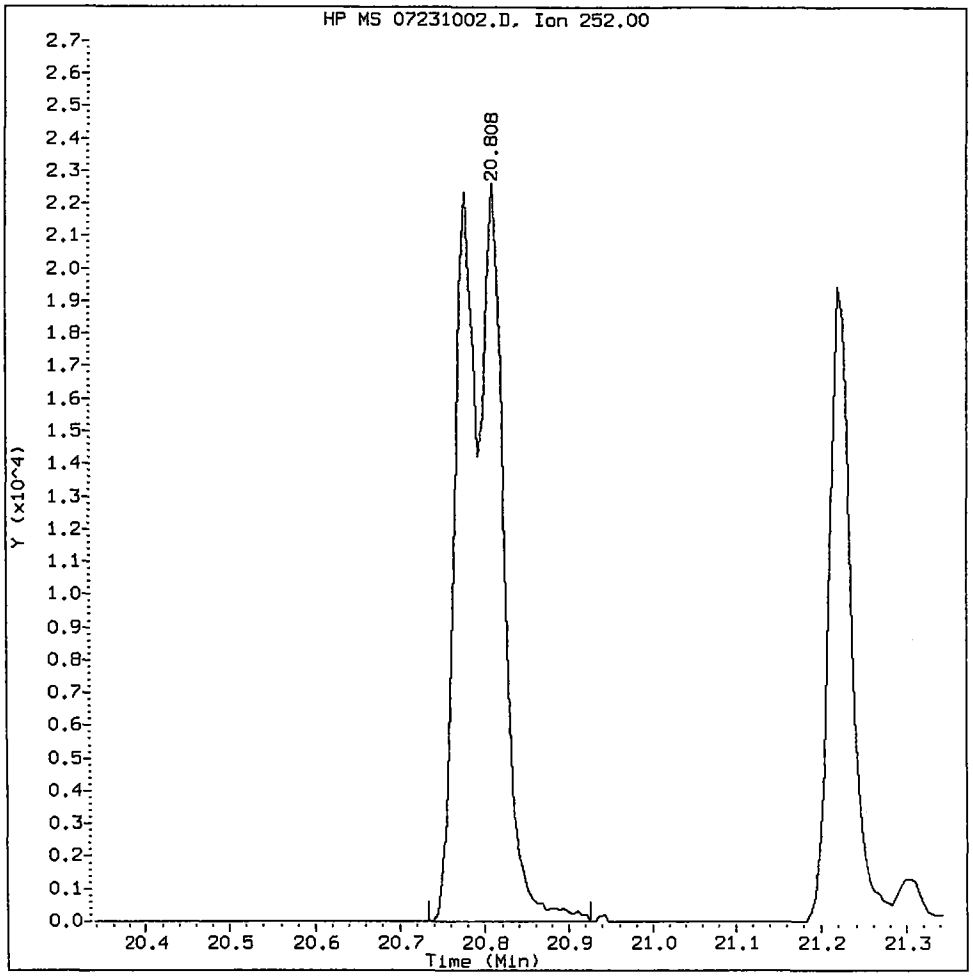
Compound: Total Benzofluoranthenes
CAS Number:



DB 07/26/10

IC010723, /chem1/nt6.i/20100723.b/07231002.D

Total Benzofluoranthenes Amount: 2.00 Area: 77462



MANUAL INTEGRATION for Total Benzofluoranthenes

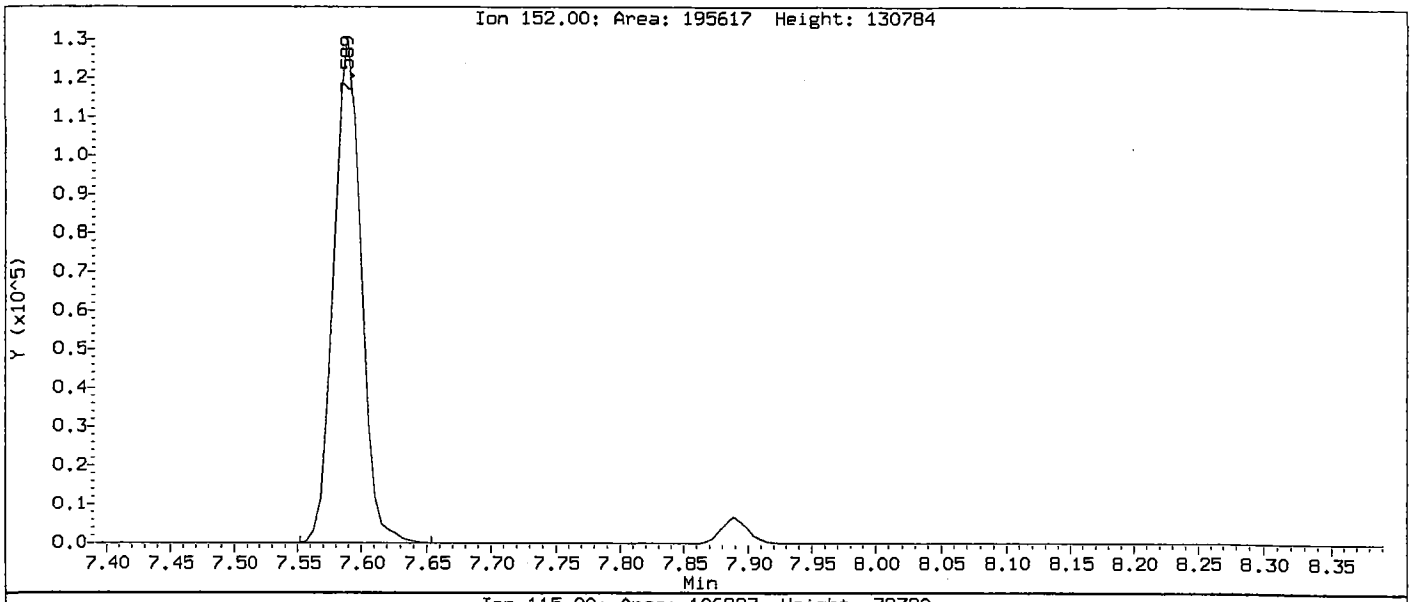
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

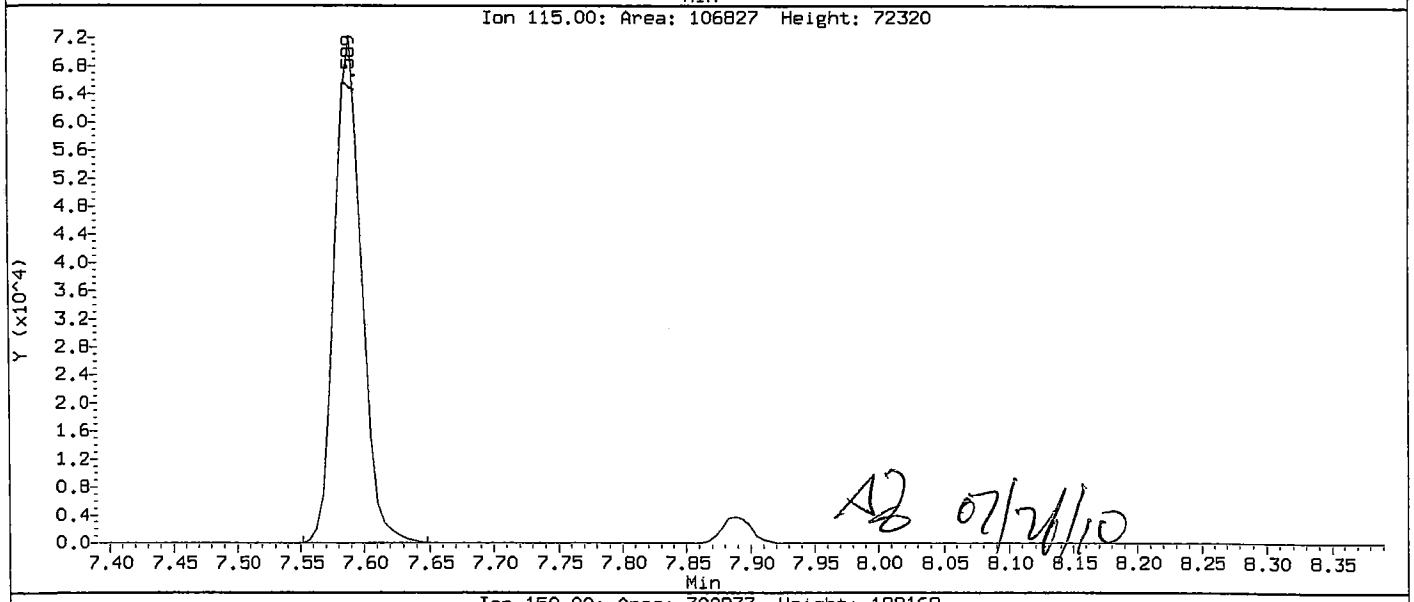
5. Other _____

Analyst: _____ Date: 07/26/10

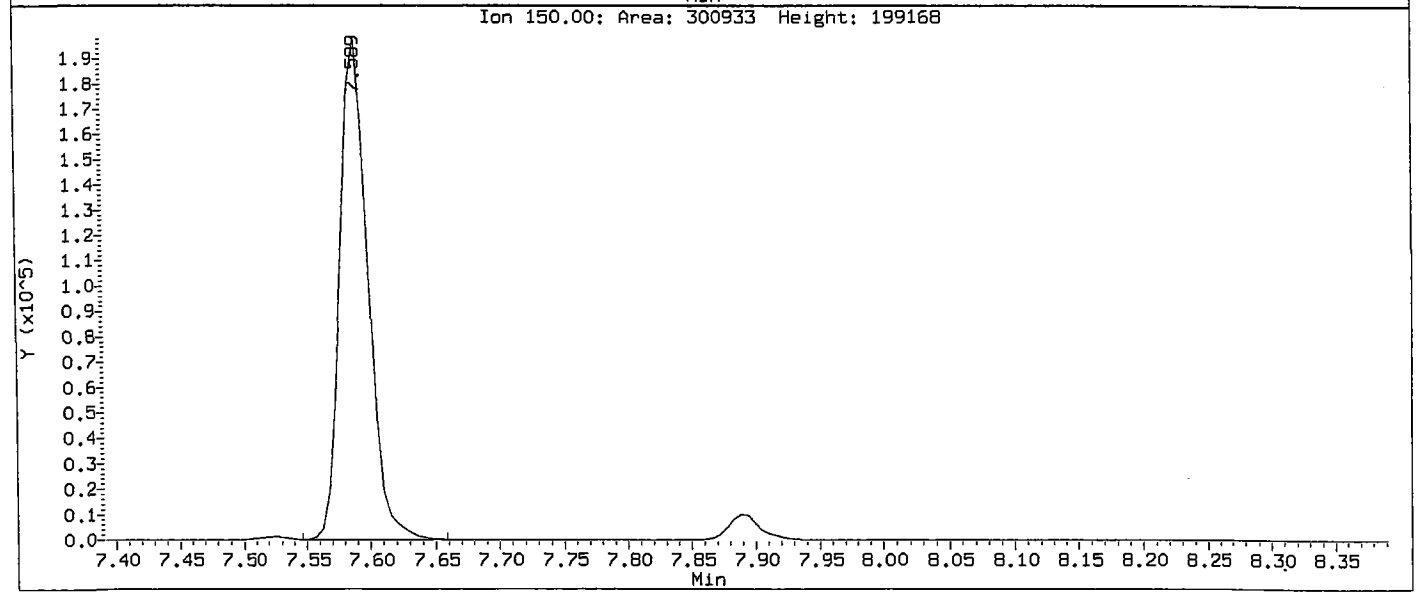
Data File: /chem1/nt6.i/20100723.b/07231002.D
Injection Date: 23-JUL-2010 15:38
Instrument: nt6.i
Client Sample ID: IC010723

Compound: 1,2-Dichlorobenzene-d4
CAS Number: 2199-69-1



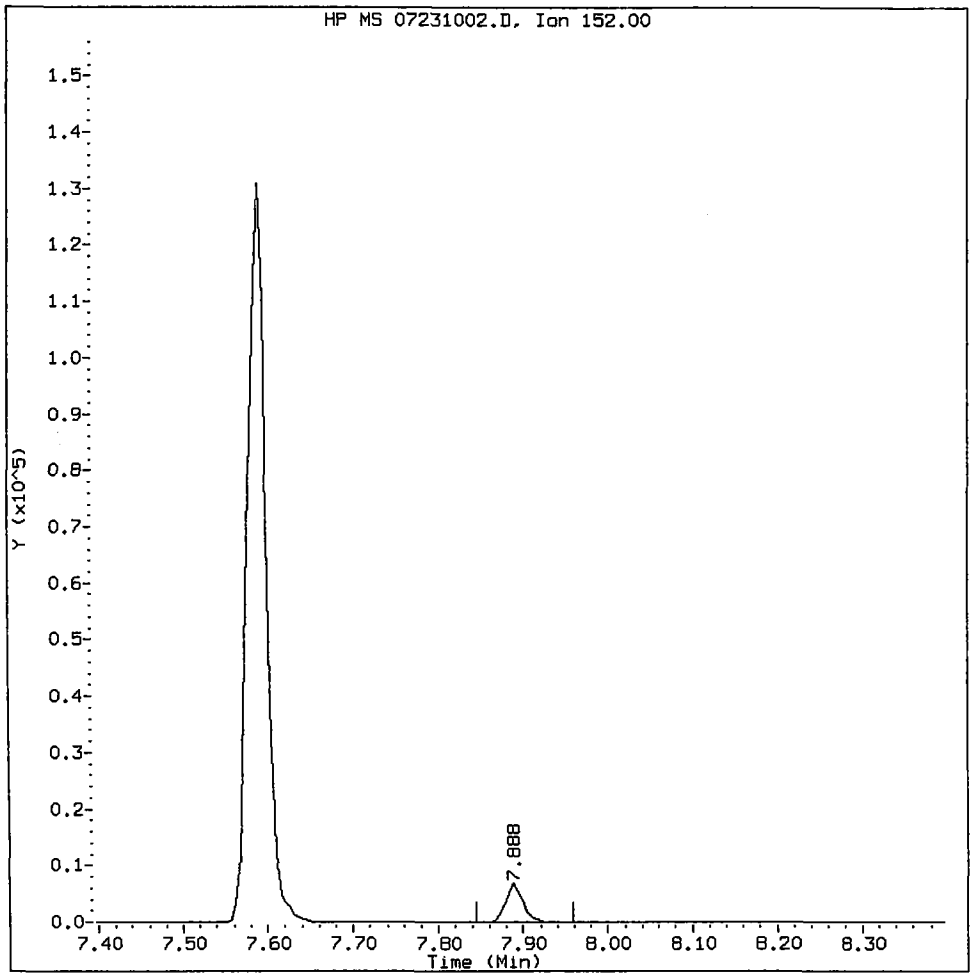


AB 07/27/10



IC010723, /chem1/nt6.i/20100723.b/07231002.D

1,2-Dichlorobenzene-d4 Amount: 1.00 Area: 9473



MANUAL INTEGRATION for 1,2-Dichlorobenzene-d4

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Other RT confirmation

Analyst: [signature] Date: 07/26/10

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231003.D
Lab Smp Id: IC050723 Client Smp ID: IC050723
Inj Date : 23-JUL-2010 16:16
Operator : JZ Inst ID: nt6.i
Smp Info : IC050723,
Misc Info : 10-
Comment : 1ul Injection
Method : /chem1/nt6.i/20100723.b/SW846072310.m
Meth Date : 26-Jul-2010 11:33 jianqing Quant Type: ISTD
Cal Date : 23-JUL-2010 16:16 Cal File: 07231003.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

AB 07/26/10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	5.601	5.610	(0.738)	62073	5.00000	4.981
$ 2	Phenol-d5	99	7.204	7.218	(0.949)	73294	5.00000	4.782
3	Phenol	94	7.220	7.237	(0.951)	91025	5.00000	5.038
$ 5	2-Chlorophenol-d4	132	7.295	7.303	(0.961)	61520	5.00000	4.683
4	Bis(2-Chloroethyl)ether	93	7.273	7.290	(0.958)	64256	5.00000	4.742
6	2-Chlorophenol	128	7.316	7.327	(0.964)	76417	5.00000	4.949
7	1,3-Dichlorobenzene	146	7.524	7.530	(0.992)	84066	5.00000	4.777
* 8	1,4-Dichlorobenzene-d4	152	7.588	7.595	(1.000)	188843	20.0000	
9	1,4-Dichlorobenzene	146	7.615	7.621	(1.004)	80512	5.00000	4.771
$ 10	1,2-Dichlorobenzene-d4	152	7.887	7.896	(1.039)	42333	5.00000	4.807
12	1,2-Dichlorobenzene	146	7.909	7.915	(1.042)	77428	5.00000	4.752
11	Benzyl alcohol	108	7.893	7.910	(1.040)	37693	5.00000	5.074
14	2,2'-oxybis(1-Chloropropane)	45	8.160	8.161	(1.075)	68852	5.00000	4.830
13	2-Methylphenol	108	8.155	8.166	(1.075)	65950	5.00000	5.028
17	Hexachloroethane	117	8.400	8.406	(1.107)	29693	5.00000	4.763
16	N-Nitroso-di-n-propylamine	70	8.368	8.390	(1.103)	42945	5.00000	4.840
15	4-Methylphenol	108	8.389	8.406	(1.106)	67797	5.00000	5.177
$ 18	Nitrobenzene-d5	82	8.528	8.542	(0.885)	56653	5.00000	4.683
19	Nitrobenzene	77	8.560	8.572	(0.888)	67842	5.00000	4.754
20	Isophorone	82	8.945	8.967	(0.928)	104816	5.00000	4.812
21	2-Nitrophenol	139	9.079	9.090	(0.942)	39084	5.00000	5.159
22	2,4-Dimethylphenol	107	9.217	9.234	(0.956)	68790	5.00000	5.014
23	Bis(2-Chloroethoxy)methane	93	9.356	9.373	(0.971)	72352	5.00000	4.787
24	Benzoic acid	105	9.383	9.603	(0.973)	76776	10.0000	10.00
25	2,4-Dichlorophenol	162	9.474	9.485	(0.983)	59625	5.00000	5.154
26	1,2,4-Trichlorobenzene	180	9.591	9.597	(0.995)	61064	5.00000	4.715
* 27	Naphthalene-d8	136	9.639	9.651	(1.000)	605649	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	9.671	9.683	(1.003)	181764	5.00000	4.719
	29 4-Chloroaniline	127	9.837	9.843	(1.020)	72237	5.00000	4.855
	30 Hexachlorobutadiene	225	10.003	10.009	(1.038)	34322	5.00000	4.693
	31 4-Chloro-3-methylphenol	107	10.670	10.682	(1.107)	55875	5.00000	5.059
	32 2-Methylnaphthalene	141	10.798	10.805	(1.120)	96623	5.00000	4.673
	33 Hexachlorocyclopentadiene	237	11.183	11.184	(0.895)	24140	5.00000	5.946
	34 2,4,6-Trichlorophenol	196	11.322	11.333	(0.906)	38607	5.00000	5.224
	35 2,4,5-Trichlorophenol	196	11.380	11.392	(0.911)	38732	5.00000	4.978
$	36 2-Fluorobiphenyl	172	11.450	11.453	(0.916)	116339	5.00000	4.614
	37 2-Chloronaphthalene	162	11.567	11.579	(0.926)	115487	5.00000	4.767
	38 2-Nitroaniline	65	11.818	11.835	(0.946)	26745	5.00000	5.052
	39 Dimethylphthalate	163	12.198	12.220	(0.976)	122958	5.00000	4.779
	40 Acenaphthylene	152	12.246	12.252	(0.980)	181028	5.00000	4.802
	41 2,6-Dinitrotoluene	165	12.288	12.305	(0.983)	28217	5.00000	5.140
*	42 Acenaphthene-d10	164	12.497	12.503	(1.000)	328204	20.0000	
	43 3-Nitroaniline	138	12.497	12.519	(1.000)	27727	5.00000	5.095
	44 Acenaphthene	153	12.545	12.562	(1.004)	107606	5.00000	4.750
	45 2,4-Dinitrophenol	184	12.662	12.690	(1.013)	26211	10.0000	10.00
	46 Dibenzofuran	168	12.807	12.823	(1.025)	142947	5.00000	4.692
	47 4-Nitrophenol	109	12.839	12.861	(1.027)	15729	5.00000	5.699 (M)
	48 2,4-Dinitrotoluene	165	12.908	12.930	(1.033)	35468	5.00000	5.102
	50 Diethylphthalate	149	13.351	13.368	(1.068)	118248	5.00000	4.653
	49 Fluorene	166	13.362	13.379	(1.069)	123844	5.00000	4.667
	51 4-Chlorophenyl-phenylether	204	13.399	13.411	(1.072)	58261	5.00000	4.772
	52 4-Nitroaniline	138	13.485	13.523	(1.079)	28297	5.00000	5.191
	53 4,6-Dinitro-2-methylphenol	198	13.554	13.593	(0.912)	43858	10.0000	10.00
	54 N-Nitrosodiphenylamine	169	13.608	13.630	(0.916)	87899	5.00000	4.840
$	55 2,4,6-Tribromophenol	330	13.784	13.798	(1.103)	13235	5.00000	4.914
	56 4-Bromophenyl-phenylether	248	14.179	14.185	(0.954)	35138	5.00000	4.831
	57 Hexachlorobenzene	284	14.382	14.399	(0.968)	37907	5.00000	4.835
	58 Pentachlorophenol	266	14.692	14.704	(0.989)	19791	5.00000	5.789
*	59 Phenanthrene-d10	188	14.858	14.869	(1.000)	492773	20.0000	
	60 Phenanthrene	178	14.895	14.912	(1.003)	159461	5.00000	4.707
	61 Anthracene	178	14.964	14.987	(1.007)	166219	5.00000	4.775
	62 Carbazole	167	15.263	15.280	(1.027)	158046	5.00000	4.841
	63 Di-n-butylphthalate	149	16.001	16.012	(1.077)	192052	5.00000	5.004
	64 Fluoranthene	202	16.823	16.835	(1.132)	177338	5.00000	4.949
	65 Pyrene	202	17.176	17.187	(0.897)	178662	5.00000	4.347
$	66 Terphenyl-d14	244	17.512	17.515	(0.914)	96507	5.00000	4.220
	67 Butylbenzylphthalate	149	18.404	18.421	(0.961)	80552	5.00000	4.651
	68 Benzo(a)anthracene	228	19.130	19.147	(0.999)	166136	5.00000	4.340
*	69 Chrysene-d12	240	19.157	19.169	(1.000)	623042	20.0000	
	70 3,3'-Dichlorobenzidine	252	19.162	19.174	(1.000)	55077	5.00000	4.433
	71 Chrysene	228	19.194	19.217	(1.002)	155906	5.00000	4.276
	72 bis(2-Ethylhexyl)phthalate	149	19.413	19.420	(0.954)	108145	5.00000	5.037
*	134 Di-n-octylphthalate-d4	153	20.343	20.354	(1.000)	685489	20.0000	
	73 Di-n-octylphthalate	149	20.354	20.360	(1.001)	194029	5.00000	4.695

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	20.781	20.803	(0.975)	166719	5.00000	4.671
75	Benzo(k)fluoranthene	252	20.813	20.840	(0.977)	198908	5.00000	4.799
187	Total Benzofluoranthenes	252	20.813	20.840	(0.977)	344081	10.0000	9.327 (M)
76	Benzo(a)pyrene	252	21.224	21.246	(0.996)	164015	5.00000	4.793
* 77	Perylene-d12	264	21.304	21.316	(1.000)	509773	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	22.688	22.720	(1.065)	216702	5.00000	4.777
79	Dibenzo(a,h)anthracene	278	22.714	22.747	(1.066)	169511	5.00000	4.925
80	Benzo(g,h,i)perylene	276	23.040	23.089	(1.081)	196333	5.00000	4.723
90	N-Nitrosodimethylamine	74	2.717	2.750	(0.358)	39738	5.00000	4.876
103	Pyridine	79	2.696	2.702	(0.355)	71561	5.00000	5.314
91	Aniline	93	7.150	7.157	(0.942)	95044	5.00000	4.934
105	1-methylnaphthalene	141	10.964	10.975	(1.137)	100691	5.00000	4.728
93	Benzidine	184	17.095	17.107	(0.892)	68739	5.00000	4.937
111	Azobenzene (1,2-DP-Hydrazine)	77	13.650	13.667	(1.092)	117681	5.00000	4.767
143	1,4-Dioxane	88	2.146	2.168	(0.283)	26093	5.00000	4.815
$ 137	d8-1,4-Dioxane	96	2.103	2.125	(0.277)	25422	5.00000	4.864
144	alpha-Terpineol	59	9.714	9.731	(1.008)	36496	5.00000	4.891
98	Retene	219	17.747	17.759	(0.926)	57705	5.00000	4.531
133	Butylatedhydroxytoluene	205	12.694	12.706	(1.016)	99782	5.00000	4.816
115	Tributyl Phosphate	99	13.731	13.763	(0.924)	140283	5.00000	5.022
116	Dibutyl Phenyl Phosphate	175	15.445	15.457	(1.040)	93863	5.00000	5.261
117	Butyl Diphenyl Phosphate	94	17.122	17.134	(0.894)	31549	5.00000	4.668
118	Triphenyl Phosphate	326	18.714	18.731	(0.977)	28800	5.00000	4.536
123	Acetophenone	105	8.299	8.316	(1.094)	81853	5.00000	4.847
179	n-Decane	57	7.444	7.450	(0.981)	53416	5.00000	4.648
180	n-Octadecane	57	14.825	14.832	(0.998)	52425	5.00000	4.767
168	Pentachlorobenzene	250	12.849	12.866	(1.028)	43692	5.00000	4.694
113	Diphenyl Oxide	170	11.776	11.782	(0.942)	108267	5.00000	4.622
112	Biphenyl	154	11.578	11.590	(0.926)	131006	5.00000	5.000
120	2,3,4,6-Tetrachlorophenol	232	13.100	13.112	(1.048)	32722	5.00000	5.205
151	1,2,4,5-Tetrachlorobenzene	216	11.135	11.141	(0.891)	60230	5.00000	4.770
110	Tetrachloroguaiacol	247	14.820	14.842	(0.997)	36086	10.0000	10.00
109	3,4,5-Trichloroguaiacol	213	13.202	13.219	(0.889)	18448	5.00000	5.000
181	3,4,6-Trichloroguaiacol	211	13.314	13.331	(1.755)	21749	5.00000	5.000
108	4,5,6-Trichloroguaiacol	213	14.238	14.250	(1.139)	18514	5.00000	5.000
184	3,4-Dichloroguaiacol	192	11.669	11.675	(1.538)	19386	5.00000	5.000
107	4,5-Dichloroguaiacol	192	12.459	12.476	(0.997)	48672	10.0000	10.00
182	4,6-Dichloroguaiacol	192	12.459	12.476	(1.642)	48672	10.0000	10.00
185	4-Chloroguaiacol	115	10.590	10.596	(1.396)	12618	2.50000	2.500
186	Carbaryl	144	15.680	15.702	(1.055)	58301	5.00000	4.718
106	Guaiacol	124	8.571	8.588	(1.129)	58543	5.00000	4.850

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 07231003.D
Lab Smp Id: IC050723
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt6.i/20100723.b/SW846072310.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 15:01
Client Smp ID: IC050723
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	182786	91393	365572	188843	3.31
27 Naphthalene-d8	584137	292068	1168274	605649	3.68
42 Acenaphthene-d10	320442	160221	640884	328204	2.42
59 Phenanthrene-d10	503793	251896	1007586	492773	-2.19
69 Chrysene-d12	532343	266172	1064686	623042	17.04
134 Di-n-octylphthala	719428	359714	1438856	685489	-4.72
77 Perylene-d12	517269	258634	1034538	509773	-1.45

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.59	-0.05
27 Naphthalene-d8	9.64	9.14	10.14	9.64	-0.04
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	-0.03
59 Phenanthrene-d10	14.86	14.36	15.36	14.86	-0.02
69 Chrysene-d12	19.16	18.66	19.66	19.16	-0.02
134 Di-n-octylphthala	20.35	19.85	20.85	20.34	-0.02
77 Perylene-d12	21.31	20.81	21.81	21.30	-0.02

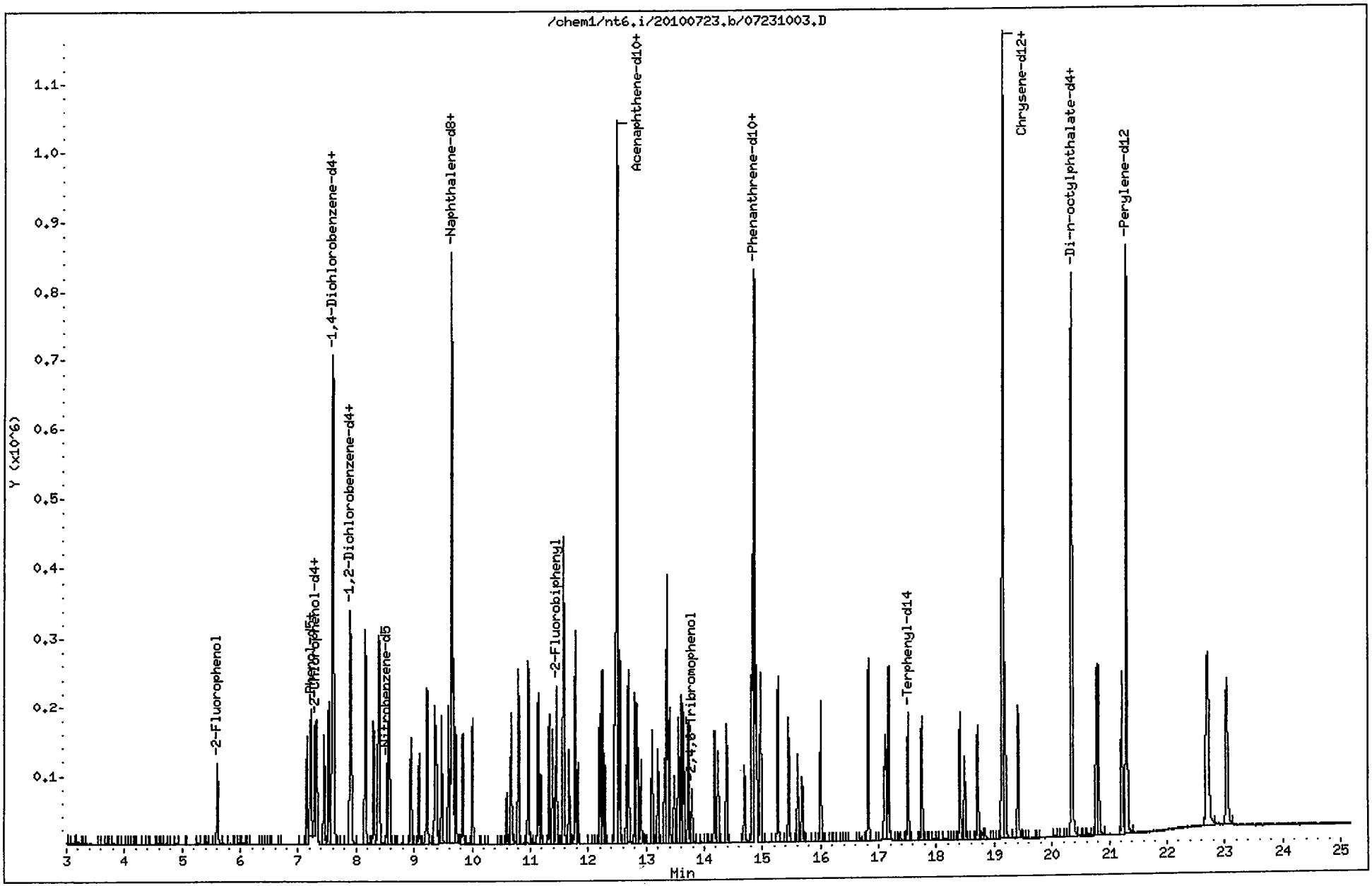
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt6.i/20100723.b/07231003.D
Date : 23-JUL-2010 16:16
Client ID: IC050723
Sample Info: IC050723,

Instrument: nt6.i

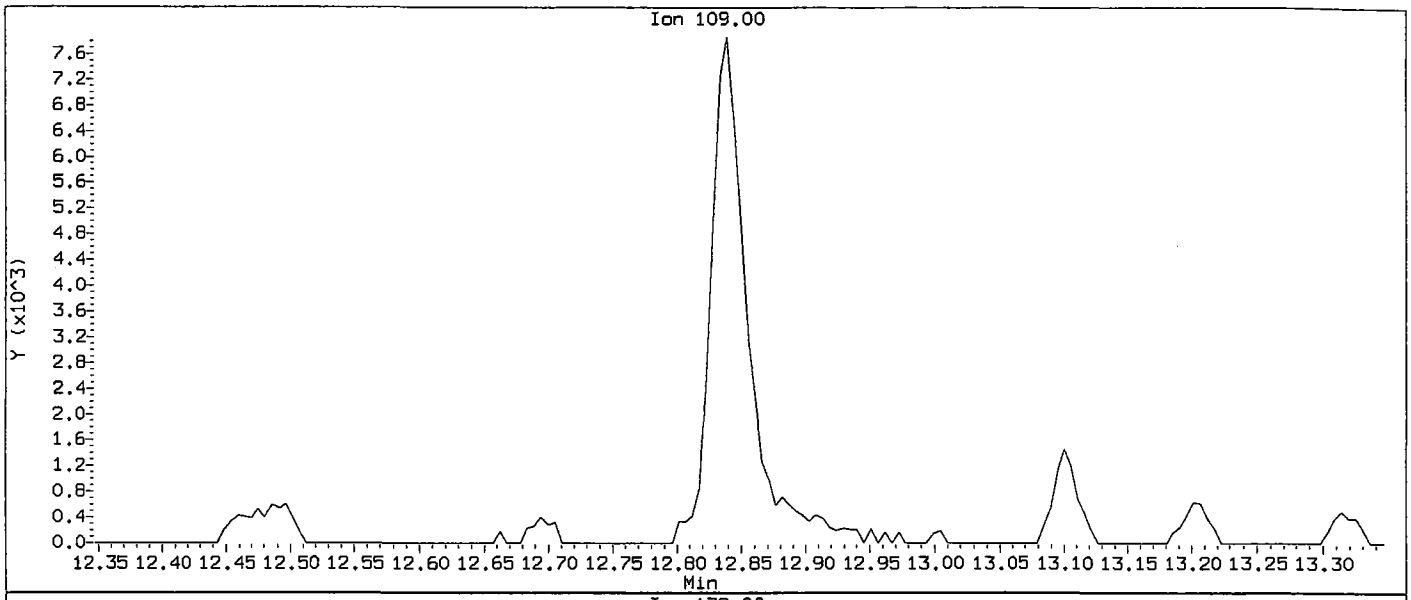
Operator: JZ
Column diameter: 0.32

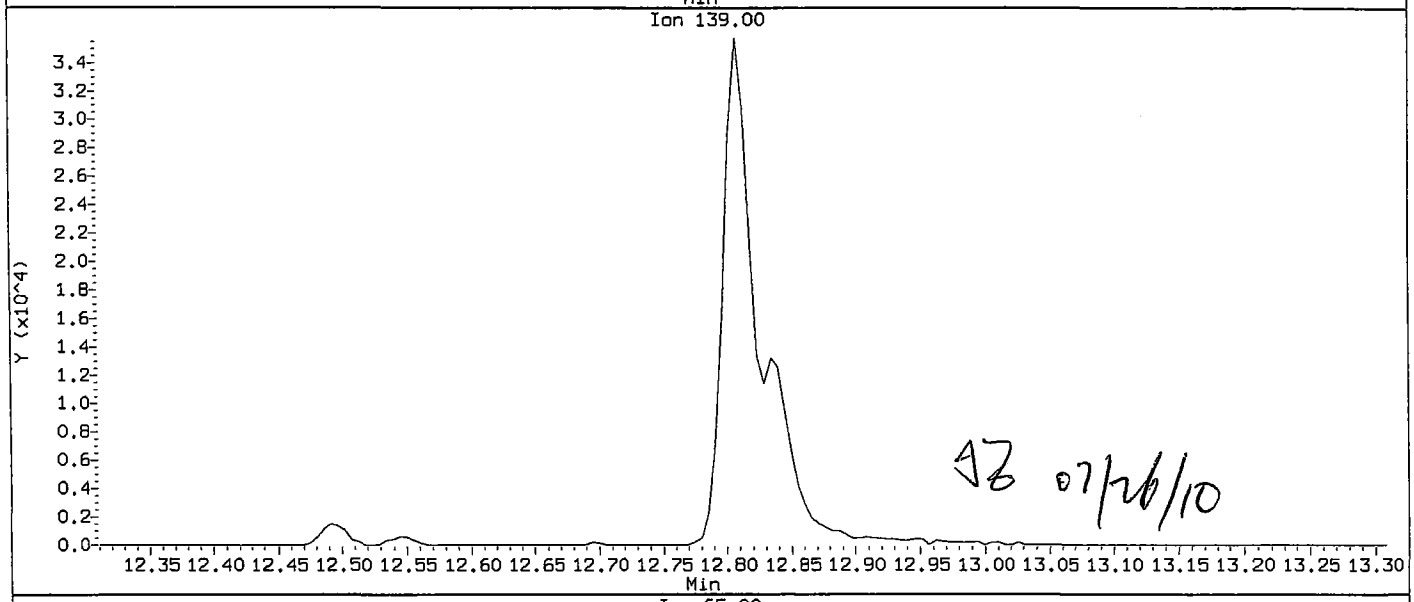
Column phase: ZB-5msi



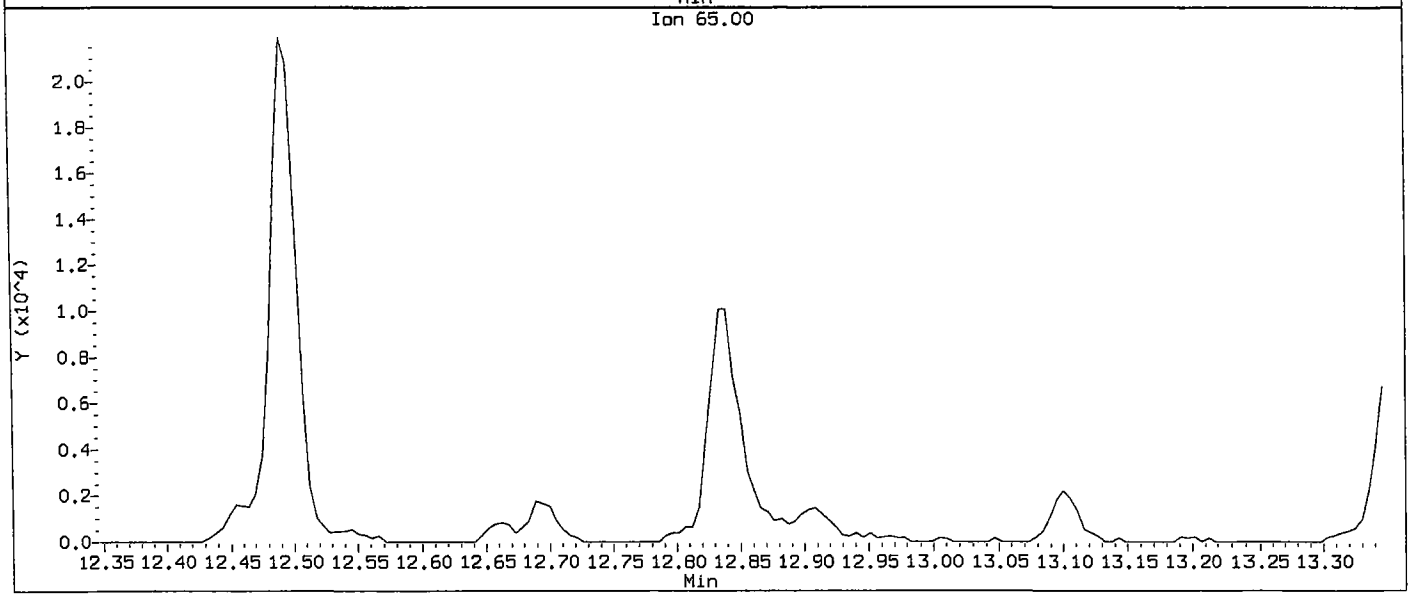
Data File: /chem1/nt6.i/20100723.b/07231003.D
Injection Date: 23-JUL-2010 16:16
Instrument: nt6.i
Client Sample ID: IC050723

Compound: 4-Nitrophenol
CAS Number: 100-02-7



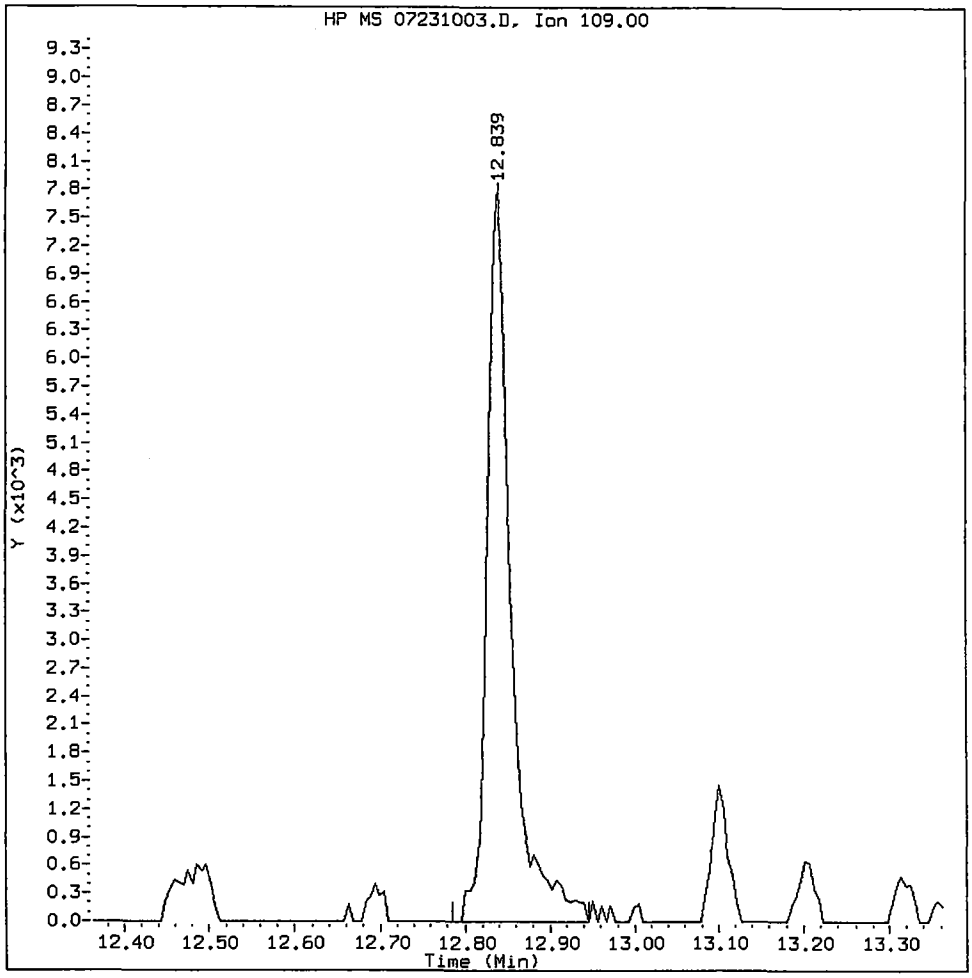


JZ 07/26/10



IC050723, /chem1/nt6.i/20100723.b/07231003.D

4-Nitrophenol Amount: 5.70 Area: 15729



MANUAL INTEGRATION for 4-Nitrophenol

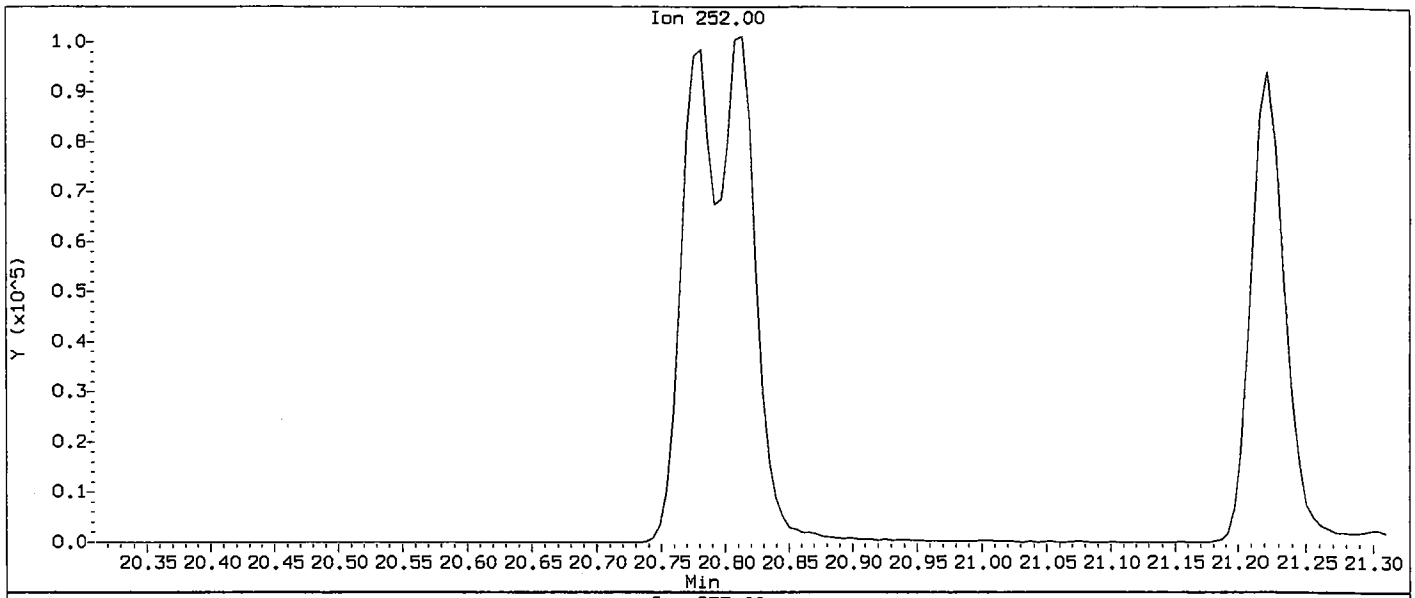
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

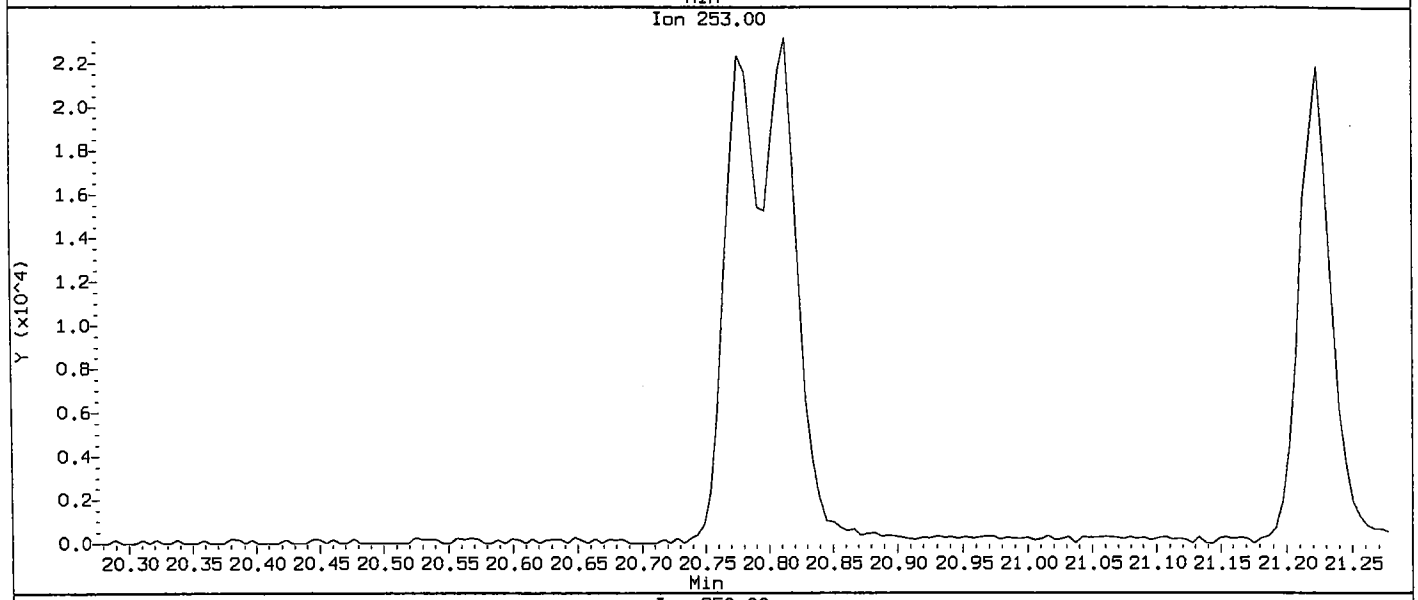
5. Other _____

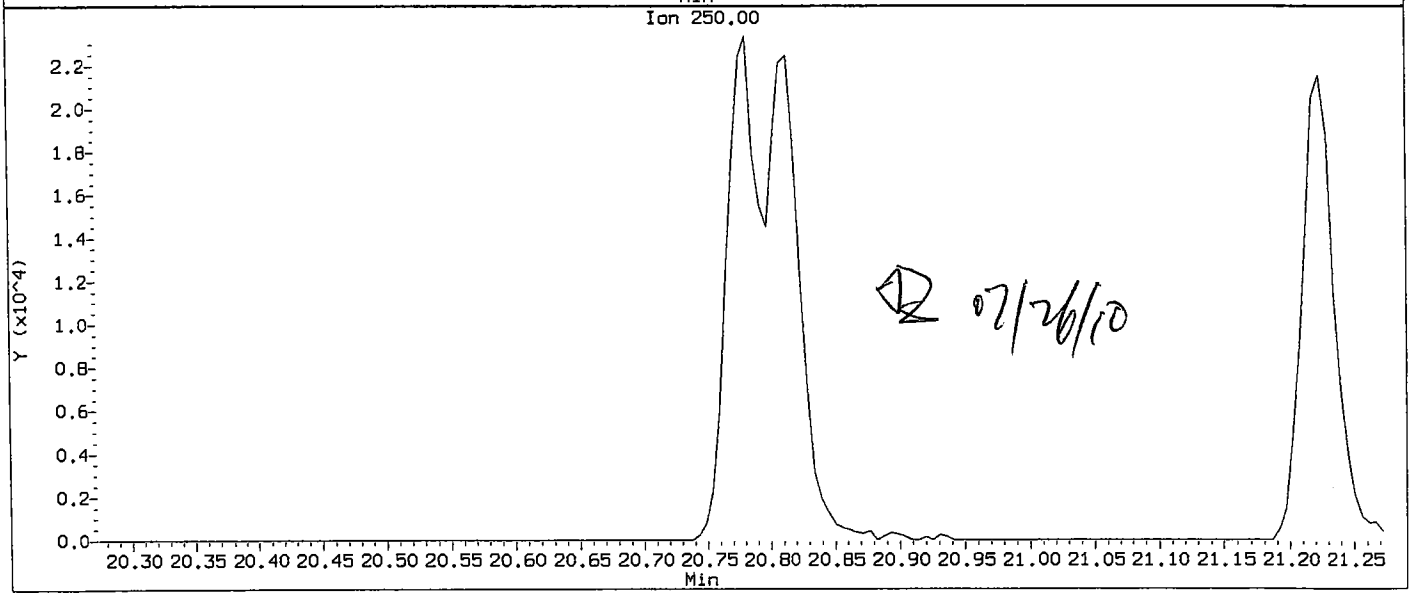
Analyst: _____ Date: 07/26/10

Data File: /chem1/nt6.i/20100723.b/07231003.D
Injection Date: 23-JUL-2010 16:16
Instrument: nt6.i
Client Sample ID: IC050723

Compound: Total Benzofluoranthenes
CAS Number:



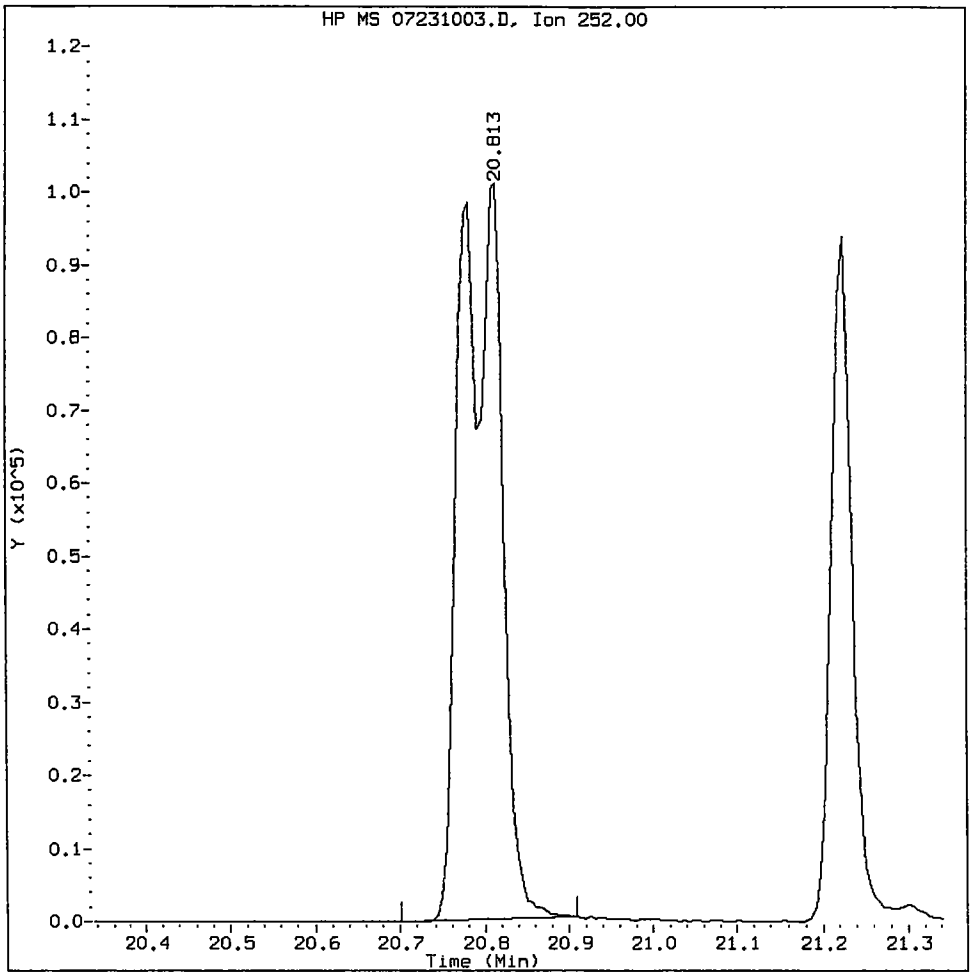




07/26/10

IC050723, /chem1/nt6.i/20100723.b/07231003.D

Total Benzofluoranthenes Amount: 9.33 Area: 344081



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: AZ Date: 07/26/10

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231004.D
Lab Smp Id: IC100723 Client Smp ID: IC100723
Inj Date : 23-JUL-2010 16:52
Operator : JZ Inst ID: nt6.i
Smp Info : IC100723,
Misc Info : 10-
Comment : 1ul Injection
Method : /chem1/nt6.i/20100723.b/SW846072310.m
Meth Date : 26-Jul-2010 11:33 jianqing Quant Type: ISTD
Cal Date : 23-JUL-2010 16:52 Cal File: 07231004.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

JZ 07/26/10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	1 2-Fluorophenol	112	5.605	5.610	(0.738)	126872	10.0000	10.22
$	2 Phenol-d5	99	7.202	7.218	(0.949)	148082	10.0000	9.874
	3 Phenol	94	7.224	7.237	(0.951)	163142	10.0000	9.431
$	5 2-Chlorophenol-d4	132	7.293	7.303	(0.961)	124752	10.0000	9.760
	4 Bis(2-Chloroethyl)ether	93	7.277	7.290	(0.958)	121813	10.0000	9.403
	6 2-Chlorophenol	128	7.320	7.327	(0.964)	140635	10.0000	9.487
	7 1,3-Dichlorobenzene	146	7.523	7.530	(0.991)	165746	10.0000	9.706
*	8 1,4-Dichlorobenzene-d4	152	7.592	7.595	(1.000)	185943	20.0000	
	9 1,4-Dichlorobenzene	146	7.614	7.621	(1.003)	162647	10.0000	9.858
$	10 1,2-Dichlorobenzene-d4	152	7.891	7.896	(1.039)	86495	10.0000	9.984
	12 1,2-Dichlorobenzene	146	7.913	7.915	(1.042)	152136	10.0000	9.649
	11 Benzyl alcohol	108	7.897	7.910	(1.040)	79223	10.0000	10.54
	14 2,2'-oxybis(1-Chloropropane)	45	8.158	8.161	(1.075)	135515	10.0000	9.767
	13 2-Methylphenol	108	8.153	8.166	(1.074)	120955	10.0000	9.567
	17 Hexachloroethane	117	8.399	8.406	(1.106)	58544	10.0000	9.687
	16 N-Nitroso-di-n-propylamine	70	8.367	8.390	(1.102)	86011	10.0000	9.896
	15 4-Methylphenol	108	8.388	8.406	(1.105)	122953	10.0000	9.685
$	18 Nitrobenzene-d5	82	8.532	8.542	(0.885)	117660	10.0000	9.952
	19 Nitrobenzene	77	8.559	8.572	(0.888)	134857	10.0000	9.761
	20 Isophorone	82	8.944	8.967	(0.927)	212825	10.0000	9.983
	21 2-Nitrophenol	139	9.082	9.090	(0.942)	76116	10.0000	10.17
	22 2,4-Dimethylphenol	107	9.221	9.234	(0.956)	128445	10.0000	9.701
	23 Bis(2-Chloroethoxy)methane	93	9.360	9.373	(0.971)	149711	10.0000	10.07
	24 Benzoic acid	105	9.419	9.603	(0.977)	163463	20.0000	20.83
	25 2,4-Dichlorophenol	162	9.472	9.485	(0.982)	111444	10.0000	9.889
	26 1,2,4-Trichlorobenzene	180	9.590	9.597	(0.994)	123035	10.0000	9.797
*	27 Naphthalene-d8	136	9.643	9.651	(1.000)	593293	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	9.670	9.683	(1.003)	365998	10.0000	9.797
	29 4-Chloroaniline	127	9.835	9.843	(1.020)	147238	10.0000	10.07
	30 Hexachlorobutadiene	225	10.001	10.009	(1.037)	69541	10.0000	9.802
	31 4-Chloro-3-methylphenol	107	10.669	10.682	(1.106)	107429	10.0000	9.953
	32 2-Methylnaphthalene	141	10.797	10.805	(1.120)	197718	10.0000	9.839
	33 Hexachlorocyclopentadiene	237	11.181	11.184	(0.895)	58996	10.0000	12.73
	34 2,4,6-Trichlorophenol	196	11.320	11.333	(0.906)	74618	10.0000	10.16
	35 2,4,5-Trichlorophenol	196	11.379	11.392	(0.911)	75201	10.0000	9.867
$	36 2-Fluorobiphenyl	172	11.448	11.453	(0.916)	233627	10.0000	9.590
	37 2-Chloronaphthalene	162	11.571	11.579	(0.926)	231438	10.0000	9.790
	38 2-Nitroaniline	65	11.817	11.835	(0.946)	55300	10.0000	10.39
	39 Dimethylphthalate	163	12.202	12.220	(0.976)	255146	10.0000	10.04
	40 Acenaphthylene	152	12.244	12.252	(0.980)	366052	10.0000	9.898
	41 2,6-Dinitrotoluene	165	12.287	12.305	(0.983)	59580	10.0000	10.65
*	42 Acenaphthene-d10	164	12.495	12.503	(1.000)	323613	20.0000	
	43 3-Nitroaniline	138	12.495	12.519	(1.000)	57832	10.0000	10.51
	44 Acenaphthene	153	12.549	12.562	(1.004)	219666	10.0000	9.889
	45 2,4-Dinitrophenol	184	12.661	12.690	(1.013)	67900	20.0000	22.71
	46 Dibenzofuran	168	12.810	12.823	(1.025)	295122	10.0000	9.882
	47 4-Nitrophenol	109	12.837	12.861	(1.027)	31555	10.0000	11.01 (M)
	48 2,4-Dinitrotoluene	165	12.912	12.930	(1.033)	75601	10.0000	10.66
	50 Diethylphthalate	149	13.355	13.368	(1.069)	237651	10.0000	9.650
	49 Fluorene	166	13.366	13.379	(1.070)	251059	10.0000	9.726
	51 4-Chlorophenyl-phenylether	204	13.403	13.411	(1.073)	118001	10.0000	9.868
	52 4-Nitroaniline	138	13.489	13.523	(1.079)	58433	10.0000	10.56
	53 4,6-Dinitro-2-methylphenol	198	13.558	13.593	(0.912)	93942	20.0000	20.60
	54 N-Nitrosodiphenylamine	169	13.612	13.630	(0.916)	179875	10.0000	9.881
$	55 2,4,6-Tribromophenol	330	13.788	13.798	(1.103)	29796	10.0000	10.78
	56 4-Bromophenyl-phenylether	248	14.178	14.185	(0.954)	74043	10.0000	10.06
	57 Hexachlorobenzene	284	14.386	14.399	(0.968)	78922	10.0000	9.989
	58 Pentachlorophenol	266	14.691	14.704	(0.988)	44473	10.0000	11.76
*	59 Phenanthrene-d10	188	14.861	14.869	(1.000)	496900	20.0000	
	60 Phenanthrene	178	14.893	14.912	(1.002)	333776	10.0000	9.845
	61 Anthracene	178	14.968	14.987	(1.007)	346010	10.0000	9.904
	62 Carbazole	167	15.267	15.280	(1.027)	323370	10.0000	9.882
	63 Di-n-butylphthalate	149	16.004	16.012	(1.077)	402360	10.0000	10.26
	64 Fluoranthene	202	16.822	16.835	(1.132)	366262	10.0000	10.09
	65 Pyrene	202	17.174	17.187	(0.897)	365007	10.0000	9.373
$	66 Terphenyl-d14	244	17.511	17.515	(0.914)	202672	10.0000	9.359
	67 Butylbenzylphthalate	149	18.408	18.421	(0.961)	172956	10.0000	10.14
	68 Benzo(a)anthracene	228	19.134	19.147	(0.999)	337172	10.0000	9.320
*	69 Chrysene-d12	240	19.156	19.169	(1.000)	608888	20.0000	
	70 3,3'-Dichlorobenzidine	252	19.161	19.174	(1.000)	111890	10.0000	9.463
	71 Chrysene	228	19.198	19.217	(1.002)	317375	10.0000	9.244
	72 bis(2-Ethylhexyl)phthalate	149	19.417	19.420	(0.954)	234792	10.0000	10.52
*	134 Di-n-octylphthalate-d4	153	20.347	20.354	(1.000)	694500	20.0000	
	73 Di-n-octylphthalate	149	20.357	20.360	(1.001)	395465	10.0000	9.623

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	20.779	20.803	(0.975)	358007	10.0000	10.12
75	Benzo(k)fluoranthene	252	20.811	20.840	(0.977)	375520	10.0000	9.450
187	Total Benzofluoranthenes	252	20.811	20.840	(0.977)	687719	20.0000	19.27(M)
76	Benzo(a)pyrene	252	21.223	21.246	(0.996)	342186	10.0000	10.10
* 77	Perylene-d12	264	21.303	21.316	(1.000)	502175	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	22.686	22.720	(1.065)	442073	10.0000	9.928
79	Dibenzo(a,h)anthracene	278	22.718	22.747	(1.066)	346747	10.0000	10.15
80	Benzo(g,h,i)perylene	276	23.044	23.089	(1.082)	396501	10.0000	9.786
90	N-Nitrosodimethylamine	74	2.716	2.750	(0.358)	82848	10.0000	10.21
103	Pyridine	79	2.694	2.702	(0.355)	150658	10.0000	10.87
91	Aniline	93	7.149	7.157	(0.942)	193137	10.0000	10.12
105	1-methylnaphthalene	141	10.968	10.975	(1.137)	201404	10.0000	9.767
93	Benzidine	184	17.099	17.107	(0.893)	125128	10.0000	9.449
111	Azobenzene (1,2-DP-Hydrazine)	77	13.649	13.667	(1.092)	242420	10.0000	9.973
143	1,4-Dioxane	88	2.150	2.168	(0.283)	53699	10.0000	10.04
$ 137	d8-1,4-Dioxane	96	2.107	2.125	(0.278)	51732	10.0000	10.03
144	alpha-Terpineol	59	9.718	9.731	(1.008)	72894	10.0000	9.981
98	Retene	219	17.751	17.759	(0.927)	118903	10.0000	9.698
133	Butylatedhydroxytoluene	205	12.698	12.706	(1.016)	192083	10.0000	9.593
115	Tributyl Phosphate	99	13.729	13.763	(0.924)	281983	10.0000	10.01
116	Dibutyl Phenyl Phosphate	175	15.449	15.457	(1.040)	191183	10.0000	10.41
117	Butyl Diphenyl Phosphate	94	17.126	17.134	(0.894)	63332	10.0000	9.722
118	Triphenyl Phosphate	326	18.718	18.731	(0.977)	60209	10.0000	9.801
123	Acetophenone	105	8.303	8.316	(1.094)	165015	10.0000	9.949
179	n-Decane	57	7.443	7.450	(0.980)	109312	10.0000	9.770
180	n-Octadecane	57	14.824	14.832	(0.997)	108426	10.0000	9.850
168	Pentachlorobenzene	250	12.853	12.866	(1.029)	90440	10.0000	9.903
113	Diphenyl Oxide	170	11.774	11.782	(0.942)	221103	10.0000	9.711
112	Biphenyl	154	11.577	11.590	(0.926)	263995	10.0000	10.11
120	2,3,4,6-Tetrachlorophenol	232	13.104	13.112	(1.049)	67353	10.0000	10.56
151	1,2,4,5-Tetrachlorobenzene	216	11.133	11.141	(0.891)	116394	10.0000	9.557
110	Tetrachloroguaiacol	247	14.824	14.842	(0.997)	80353	20.0000	20.99
109	3,4,5-Trichloroguaiacol	213	13.206	13.219	(0.889)	40031	10.0000	10.37
181	3,4,6-Trichloroguaiacol	211	13.318	13.331	(1.754)	47470	10.0000	10.51
108	4,5,6-Trichloroguaiacol	213	14.237	14.250	(1.139)	41107	10.0000	10.59
184	3,4-Dichloroguaiacol	192	11.667	11.675	(1.537)	42471	10.0000	10.53
107	4,5-Dichloroguaiacol	192	12.458	12.476	(0.997)	106396	20.0000	21.03
182	4,6-Dichloroguaiacol	192	12.458	12.476	(1.641)	106071	20.0000	21.01
185	4-Chloroguaiacol	115	10.594	10.596	(1.395)	26123	5.00000	5.125
186	Carbaryl	144	15.684	15.702	(1.055)	153576	10.0000	11.44
106	Guaiacol	124	8.575	8.588	(1.129)	114633	10.0000	9.761

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 07231004.D
Lab Smp Id: IC100723
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt6.i/20100723.b/SW846072310.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 15:01
Client Smp ID: IC100723
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	182786	91393	365572	185943	1.73
27 Naphthalene-d8	584137	292068	1168274	593293	1.57
42 Acenaphthene-d10	320442	160221	640884	323613	0.99
59 Phenanthrene-d10	503793	251896	1007586	496900	-1.37
69 Chrysene-d12	532343	266172	1064686	608888	14.38
134 Di-n-octylphthala	719428	359714	1438856	694500	-3.46
77 Perylene-d12	517269	258634	1034538	502175	-2.92

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.59	0.00
27 Naphthalene-d8	9.64	9.14	10.14	9.64	0.00
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	-0.04
59 Phenanthrene-d10	14.86	14.36	15.36	14.86	0.00
69 Chrysene-d12	19.16	18.66	19.66	19.16	-0.03
134 Di-n-octylphthala	20.35	19.85	20.85	20.35	0.00
77 Perylene-d12	21.31	20.81	21.81	21.30	-0.02

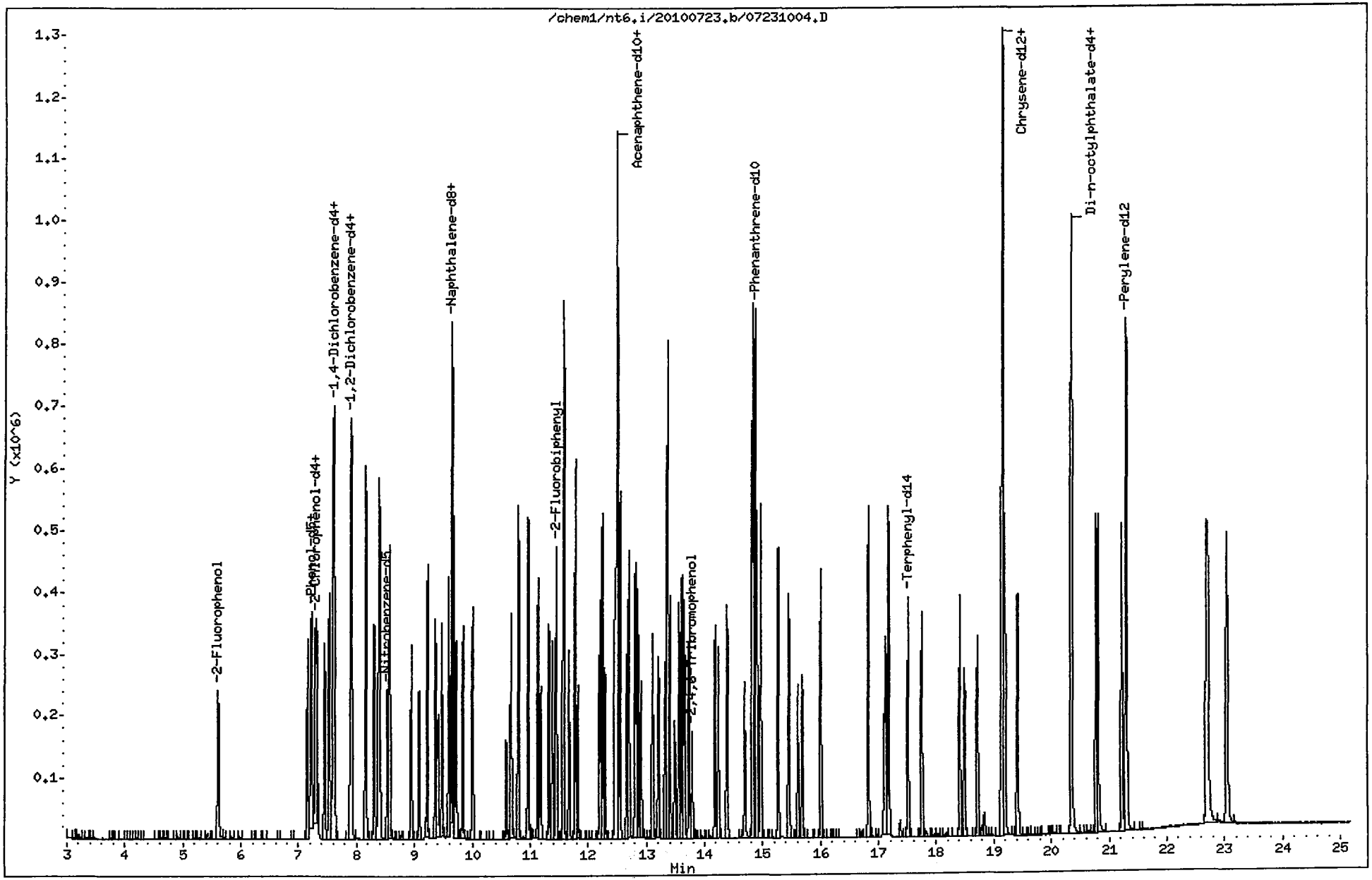
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt6.i/20100723.b/07231004.D
Date : 23-JUL-2010 16:52
Client ID: IC100723
Sample Info: IC100723,

Instrument: nt6.i

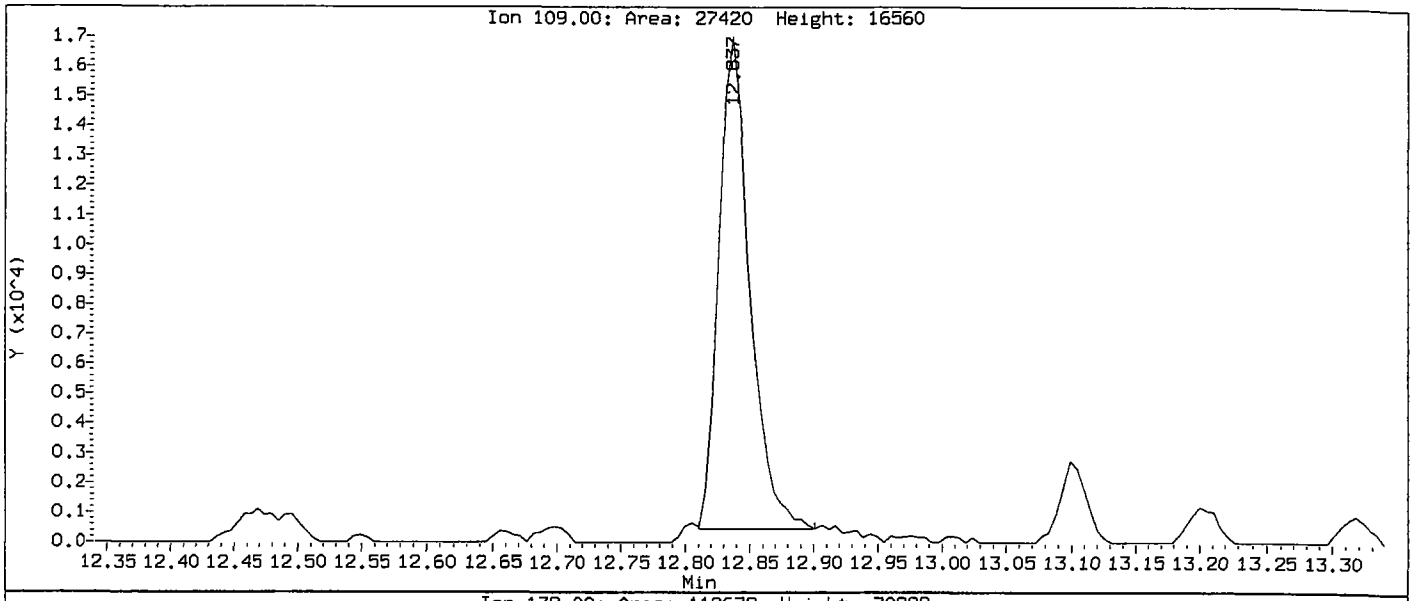
Operator: JZ
Column diameter: 0.32

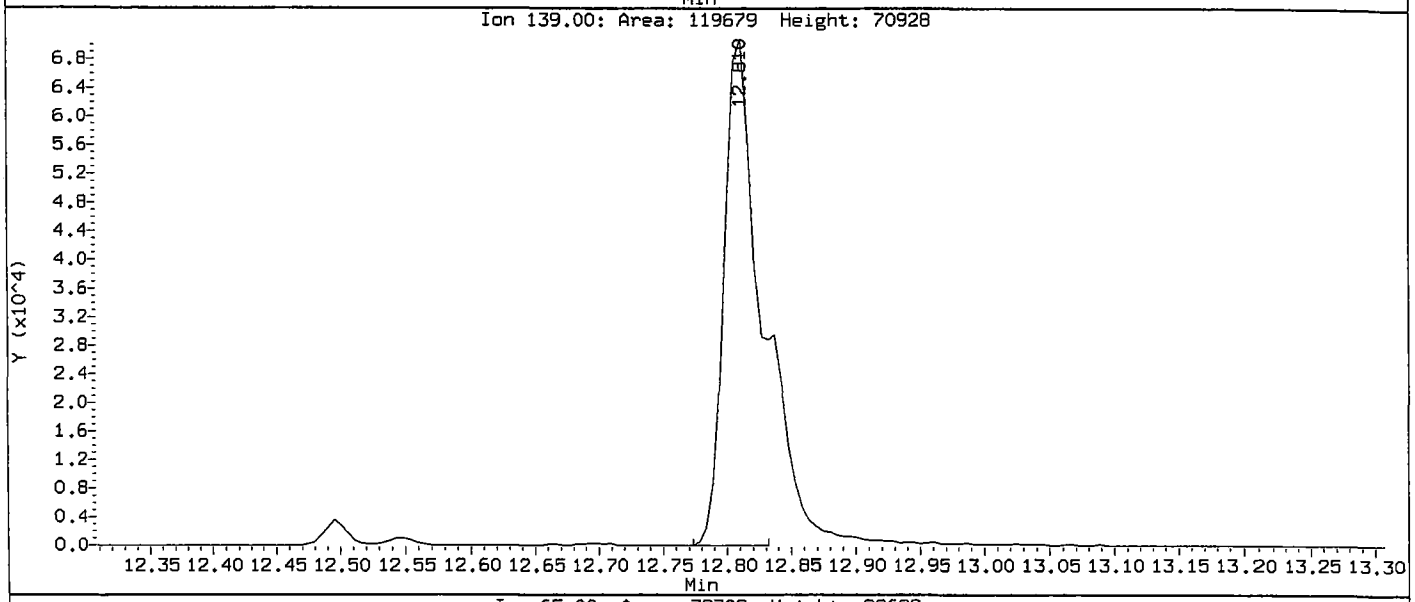
Column phase: ZB-5msi

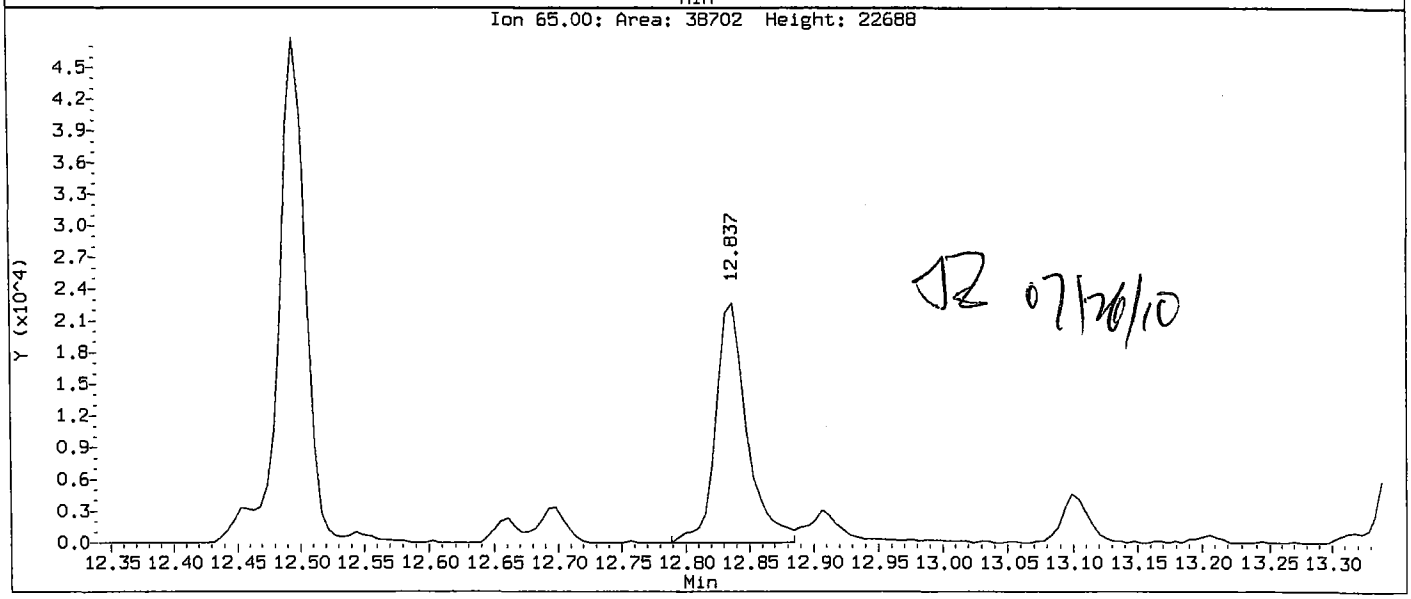


Data File: /chem1/nt6.i/20100723.b/07231004.D
Injection Date: 23-JUL-2010 16:52
Instrument: nt6.i
Client Sample ID: IC100723

Compound: 4-Nitrophenol
CAS Number: 100-02-7



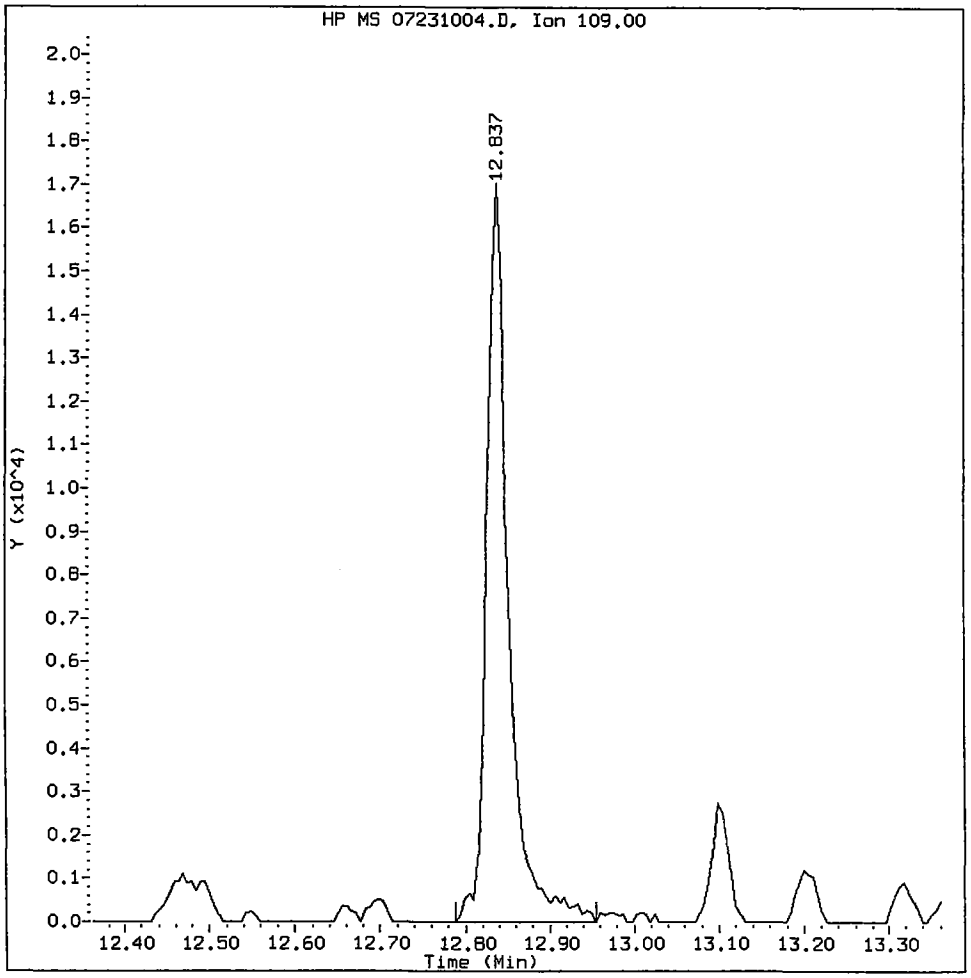




JR 07/26/10

IC100723, /chem1/nt6.i/20100723.b/07231004.D

4-Nitrophenol Amount: 11.01 Area: 31555



MANUAL INTEGRATION for 4-Nitrophenol

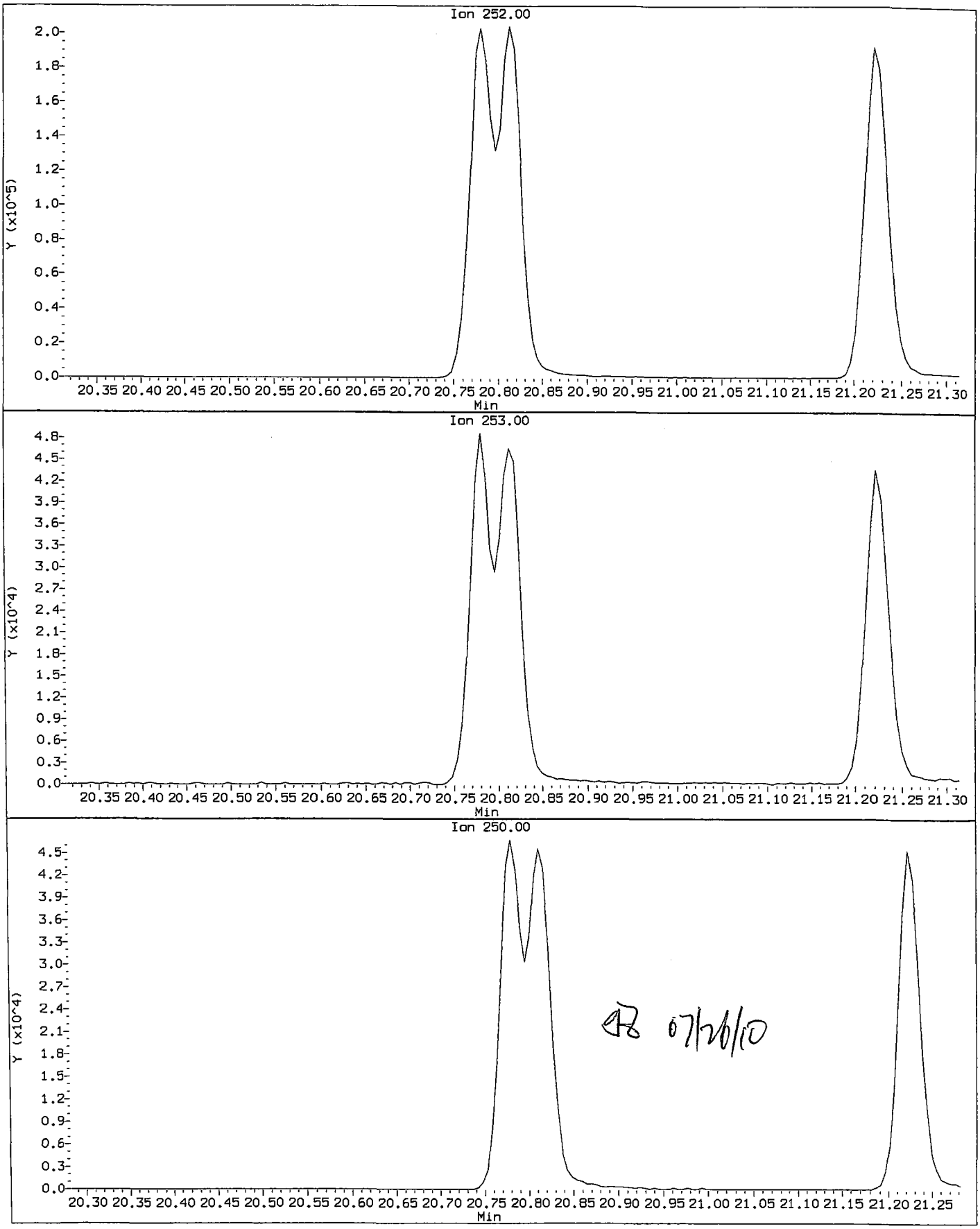
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: AZ Date: 07/26/10

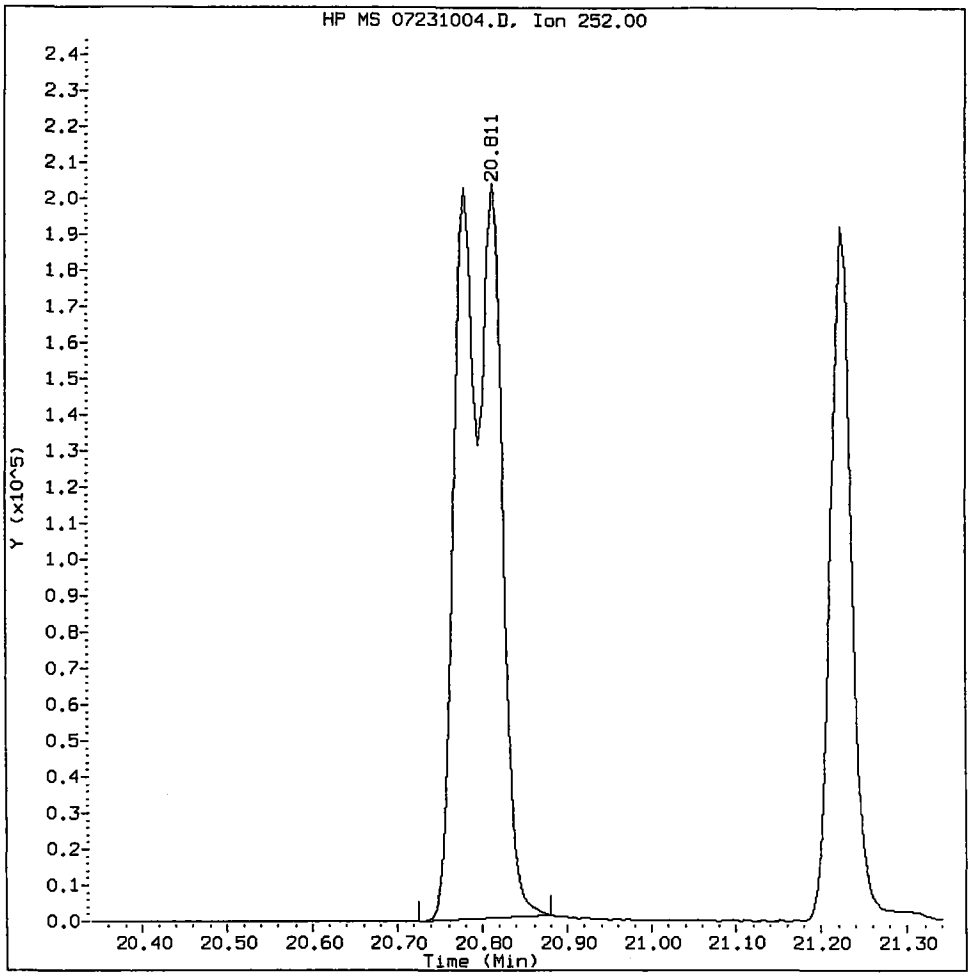
Data File: /chem1/nt6.i/20100723.b/07231004.D
Injection Date: 23-JUL-2010 16:52
Instrument: nt6.i
Client Sample ID: IC100723

Compound: Total Benzofluoranthenes
CAS Number:



IC100723, /chem1/nt6.i/20100723.b/07231004.D

Total Benzofluoranthenes Amount: 19.27 Area: 687719



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 07/16/10

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231001.D
Lab Smp Id: IC250723 Client Smp ID: IC250723
Inj Date : 23-JUL-2010 15:01
Operator : JZ Inst ID: nt6.i
Smp Info : IC250723
Misc Info : 10-
Comment : 1ul Injection
Method : /chem1/nt6.i/20100723.b/SW846072310.m
Meth Date : 26-Jul-2010 11:33 jianqing Quant Type: ISTD
Cal Date : 23-JUL-2010 15:01 Cal File: 07231001.D
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

R 07/26/10

AMOUNTS

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	5.605	5.610	(0.738)	311522	25.0000	25.40
$	2	Phenol-d5	99	7.207	7.218	(0.949)	348471	25.0000	23.96
	3	Phenol	94	7.229	7.237	(0.952)	387771	25.0000	23.32
$	5	2-Chlorophenol-d4	132	7.293	7.303	(0.961)	290409	25.0000	23.56
	4	Bis(2-Chloroethyl)ether	93	7.282	7.290	(0.959)	299463	25.0000	23.87
	6	2-Chlorophenol	128	7.320	7.327	(0.964)	336281	25.0000	23.53
	7	1,3-Dichlorobenzene	146	7.523	7.530	(0.991)	393980	25.0000	23.83
*	8	1,4-Dichlorobenzene-d4	152	7.592	7.595	(1.000)	182786	20.0000	
	9	1,4-Dichlorobenzene	146	7.619	7.621	(1.004)	390510	25.0000	24.30
$	10	1,2-Dichlorobenzene-d4	152	7.891	7.896	(1.039)	204344	25.0000	24.24
	12	1,2-Dichlorobenzene	146	7.912	7.915	(1.042)	353813	25.0000	23.33
	11	Benzyl alcohol	108	7.896	7.910	(1.040)	189620	25.0000	25.49
	14	2,2'-oxybis(1-Chloropropane)	45	8.158	8.161	(1.075)	319647	25.0000	23.81
	13	2-Methylphenol	108	8.158	8.166	(1.075)	293058	25.0000	23.92
	17	Hexachloroethane	117	8.398	8.406	(1.106)	141205	25.0000	24.06
	16	N-Nitroso-di-n-propylamine	70	8.377	8.390	(1.103)	203786	25.0000	24.13
	15	4-Methylphenol	108	8.393	8.406	(1.106)	289738	25.0000	23.64
$	18	Nitrobenzene-d5	82	8.537	8.542	(0.885)	285365	25.0000	24.63
	19	Nitrobenzene	77	8.564	8.572	(0.888)	315680	25.0000	23.63
	20	Isophorone	82	8.949	8.967	(0.928)	506209	25.0000	24.33
	21	2-Nitrophenol	139	9.082	9.090	(0.942)	191103	25.0000	25.69
	22	2,4-Dimethylphenol	107	9.226	9.234	(0.957)	306864	25.0000	23.89
	23	Bis(2-Chloroethoxy)methane	93	9.360	9.373	(0.971)	350199	25.0000	24.19
	24	Benzoic acid	105	9.477	9.603	(0.983)	467782	50.0000	56.57
	25	2,4-Dichlorophenol	162	9.477	9.485	(0.983)	267155	25.0000	24.30
	26	1,2,4-Trichlorobenzene	180	9.590	9.597	(0.994)	295139	25.0000	24.14
*	27	Naphthalene-d8	136	9.643	9.651	(1.000)	584137	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	9.675	9.683	(1.003)	839339	25.0000	23.33
	29 4-Chloroaniline	127	9.835	9.843	(1.020)	335598	25.0000	23.71
	30 Hexachlorobutadiene	225	10.006	10.009	(1.038)	170886	25.0000	24.60
	31 4-Chloro-3-methylphenol	107	10.674	10.682	(1.107)	261511	25.0000	24.70
	32 2-Methylnaphthalene	141	10.797	10.805	(1.120)	450667	25.0000	23.30
	33 Hexachlorocyclopentadiene	237	11.181	11.184	(0.894)	160807	25.0000	31.84
	34 2,4,6-Trichlorophenol	196	11.325	11.333	(0.906)	191794	25.0000	26.01
	35 2,4,5-Trichlorophenol	196	11.384	11.392	(0.911)	194635	25.0000	25.59
$	36 2-Fluorobiphenyl	172	11.454	11.453	(0.916)	548947	25.0000	23.28
	37 2-Chloronaphthalene	162	11.571	11.579	(0.926)	539169	25.0000	23.49
	38 2-Nitroaniline	65	11.822	11.835	(0.946)	135253	25.0000	25.49
	39 Dimethylphthalate	163	12.207	12.220	(0.976)	613460	25.0000	24.53
	40 Acenaphthylene	152	12.244	12.252	(0.979)	848116	25.0000	23.59
	41 2,6-Dinitrotoluene	165	12.292	12.305	(0.983)	145587	25.0000	25.95
*	42 Acenaphthene-d10	164	12.500	12.503	(1.000)	320442	20.0000	
	43 3-Nitroaniline	138	12.500	12.519	(1.000)	135304	25.0000	24.87
	44 Acenaphthene	153	12.548	12.562	(1.004)	522996	25.0000	24.07
	45 2,4-Dinitrophenol	184	12.666	12.690	(1.013)	212676	50.0000	62.71
	46 Dibenzofuran	168	12.810	12.823	(1.025)	687180	25.0000	23.66
	47 4-Nitrophenol	109	12.842	12.861	(1.027)	78303	25.0000	26.89 (M)
	48 2,4-Dinitrotoluene	165	12.917	12.930	(1.033)	189836	25.0000	26.50
	50 Diethylphthalate	149	13.360	13.368	(1.069)	543562	25.0000	22.91
	49 Fluorene	166	13.366	13.379	(1.069)	586873	25.0000	23.44
	51 4-Chlorophenyl-phenylether	204	13.403	13.411	(1.072)	290075	25.0000	24.62
	52 4-Nitroaniline	138	13.494	13.523	(1.079)	138704	25.0000	25.24
	53 4,6-Dinitro-2-methylphenol	198	13.563	13.593	(0.913)	260085	50.0000	54.00
	54 N-Nitrosodiphenylamine	169	13.611	13.630	(0.916)	432780	25.0000	23.82
$	55 2,4,6-Tribromophenol	330	13.793	13.798	(1.103)	76705	25.0000	27.21
	56 4-Bromophenyl-phenylether	248	14.183	14.185	(0.954)	188502	25.0000	25.20
	57 Hexachlorobenzene	284	14.386	14.399	(0.968)	196721	25.0000	24.67
	58 Pentachlorophenol	266	14.696	14.704	(0.989)	127003	25.0000	30.64
*	59 Phenanthrene-d10	188	14.861	14.869	(1.000)	503793	20.0000	
	60 Phenanthrene	178	14.899	14.912	(1.002)	790845	25.0000	23.48
	61 Anthracene	178	14.973	14.987	(1.008)	833467	25.0000	23.88
	62 Carbazole	167	15.267	15.280	(1.027)	756153	25.0000	23.31
	63 Di-n-butylphthalate	149	16.004	16.012	(1.077)	971559	25.0000	24.58
	64 Fluoranthene	202	16.827	16.835	(1.132)	886233	25.0000	24.30
	65 Pyrene	202	17.179	17.187	(0.897)	864054	25.0000	25.28
$	66 Terphenyl-d14	244	17.510	17.515	(0.914)	505765	25.0000	26.26
	67 Butylbenzylphthalate	149	18.413	18.421	(0.961)	435577	25.0000	28.04
	68 Benzo(a)anthracene	228	19.134	19.147	(0.999)	837394	25.0000	26.09
*	69 Chrysene-d12	240	19.161	19.169	(1.000)	532343	20.0000	
	70 3,3'-Dichlorobenzidine	252	19.166	19.174	(1.000)	267484	25.0000	25.65
	71 Chrysene	228	19.198	19.217	(1.002)	772165	25.0000	25.54
	72 bis(2-Ethylhexyl)phthalate	149	19.417	19.420	(0.954)	593672	25.0000	25.50
*	134 Di-n-octylphthalate-d4	153	20.346	20.354	(1.000)	719428	20.0000	
	73 Di-n-octylphthalate	149	20.357	20.360	(1.001)	983658	25.0000	23.55

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	20.784	20.803	(0.975)	881261	25.0000	24.38
75	Benzo(k)fluoranthene	252	20.816	20.840	(0.977)	927133	25.0000	23.20
187	Total Benzofluoranthenes	252	20.816	20.840	(0.977)	1705649	50.0000	47.25
76	Benzo(a)pyrene	252	21.228	21.246	(0.996)	829054	25.0000	24.06
* 77	Perylene-d12	264	21.308	21.316	(1.000)	517269	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	22.697	22.720	(1.065)	1104393	25.0000	24.30
79	Dibenzo(a,h)anthracene	278	22.723	22.747	(1.066)	862084	25.0000	24.62
80	Benzo(g,h,i)perylene	276	23.054	23.089	(1.082)	992366	25.0000	24.07
90	N-Nitrosodimethylamine	74	2.721	2.750	(0.358)	200935	25.0000	25.15
103	Pyridine	79	2.689	2.702	(0.354)	370004	25.0000	26.58
91	Aniline	93	7.154	7.157	(0.942)	455640	25.0000	24.46
105	1-methylnaphthalene	141	10.968	10.975	(1.137)	469146	25.0000	23.55
93	Benzidine	184	17.099	17.107	(0.892)	265510	25.0000	23.42
111	Azobenzene (1,2-DP-Hydrazine)	77	13.654	13.667	(1.092)	570301	25.0000	24.01
143	1,4-Dioxane	88	2.149	2.168	(0.283)	130956	25.0000	24.94
$ 137	d8-1,4-Dioxane	96	2.107	2.125	(0.277)	132537	25.0000	25.86
144	alpha-Terpineol	59	9.718	9.731	(1.008)	173991	25.0000	24.39
98	Retene	219	17.751	17.759	(0.926)	297518	25.0000	27.01
133	Butylatedhydroxytoluene	205	12.698	12.706	(1.016)	448163	25.0000	23.16
115	Tributyl Phosphate	99	13.734	13.763	(0.924)	674856	25.0000	23.95
116	Dibutyl Phenyl Phosphate	175	15.449	15.457	(1.040)	473853	25.0000	25.33
117	Butyl Diphenyl Phosphate	94	17.126	17.134	(0.894)	155996	25.0000	26.75
118	Triphenyl Phosphate	326	18.723	18.731	(0.977)	156116	25.0000	27.93
123	Acetophenone	105	8.302	8.316	(1.094)	397677	25.0000	24.54
179	n-Decane	57	7.448	7.450	(0.981)	257349	25.0000	23.78
180	n-Octadecane	57	14.829	14.832	(0.998)	250246	25.0000	23.02
168	Pentachlorobenzene	250	12.853	12.866	(1.028)	219604	25.0000	24.46
113	Diphenyl Oxide	170	11.779	11.782	(0.942)	516503	25.0000	23.40
112	Biphenyl	154	11.582	11.590	(0.926)	598381	25.0000	23.73
120	2,3,4,6-Tetrachlorophenol	232	13.104	13.112	(1.048)	172859	25.0000	26.74
151	1,2,4,5-Tetrachlorobenzene	216	11.138	11.141	(0.891)	281398	25.0000	23.73
110	Tetrachloroguaiacol	247	14.824	14.842	(0.997)	202210	50.0000	51.38
109	3,4,5-Trichloroguaiacol	213	13.205	13.219	(0.889)	100748	25.0000	25.48
181	3,4,6-Trichloroguaiacol	211	13.323	13.331	(1.755)	121741	25.0000	26.57
108	4,5,6-Trichloroguaiacol	213	14.242	14.250	(1.139)	102033	25.0000	26.01
184	3,4-Dichloroguaiacol	192	11.667	11.675	(1.537)	106034	25.0000	26.14
107	4,5-Dichloroguaiacol	192	12.463	12.476	(0.997)	258682	50.0000	51.08
182	4,6-Dichloroguaiacol	192	12.463	12.476	(1.642)	258682	50.0000	51.40
185	4-Chloroguaiacol	115	10.594	10.596	(1.395)	67852	12.5000	13.18
186	Carbaryl	144	15.689	15.702	(1.056)	378522	25.0000	27.05
106	Guaiacol	124	8.575	8.588	(1.129)	270369	25.0000	23.80

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 07231001.D
Lab Smp Id: IC250723
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt6.i/20100723.b/SW846072310.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 15:01
Client Smp ID: IC250723
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	182786	91393	365572	182786	0.00
27 Naphthalene-d8	584137	292068	1168274	584137	0.00
42 Acenaphthene-d10	320442	160221	640884	320442	0.00
59 Phenanthrene-d10	503793	251896	1007586	503793	0.00
69 Chrysene-d12	532343	266172	1064686	532343	0.00
134 Di-n-octylphthala	719428	359714	1438856	719428	0.00
77 Perylene-d12	517269	258634	1034538	517269	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.59	0.00
27 Naphthalene-d8	9.64	9.14	10.14	9.64	0.00
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	0.00
59 Phenanthrene-d10	14.86	14.36	15.36	14.86	0.00
69 Chrysene-d12	19.16	18.66	19.66	19.16	0.00
134 Di-n-octylphthala	20.35	19.85	20.85	20.35	0.00
77 Perylene-d12	21.31	20.81	21.81	21.31	0.00

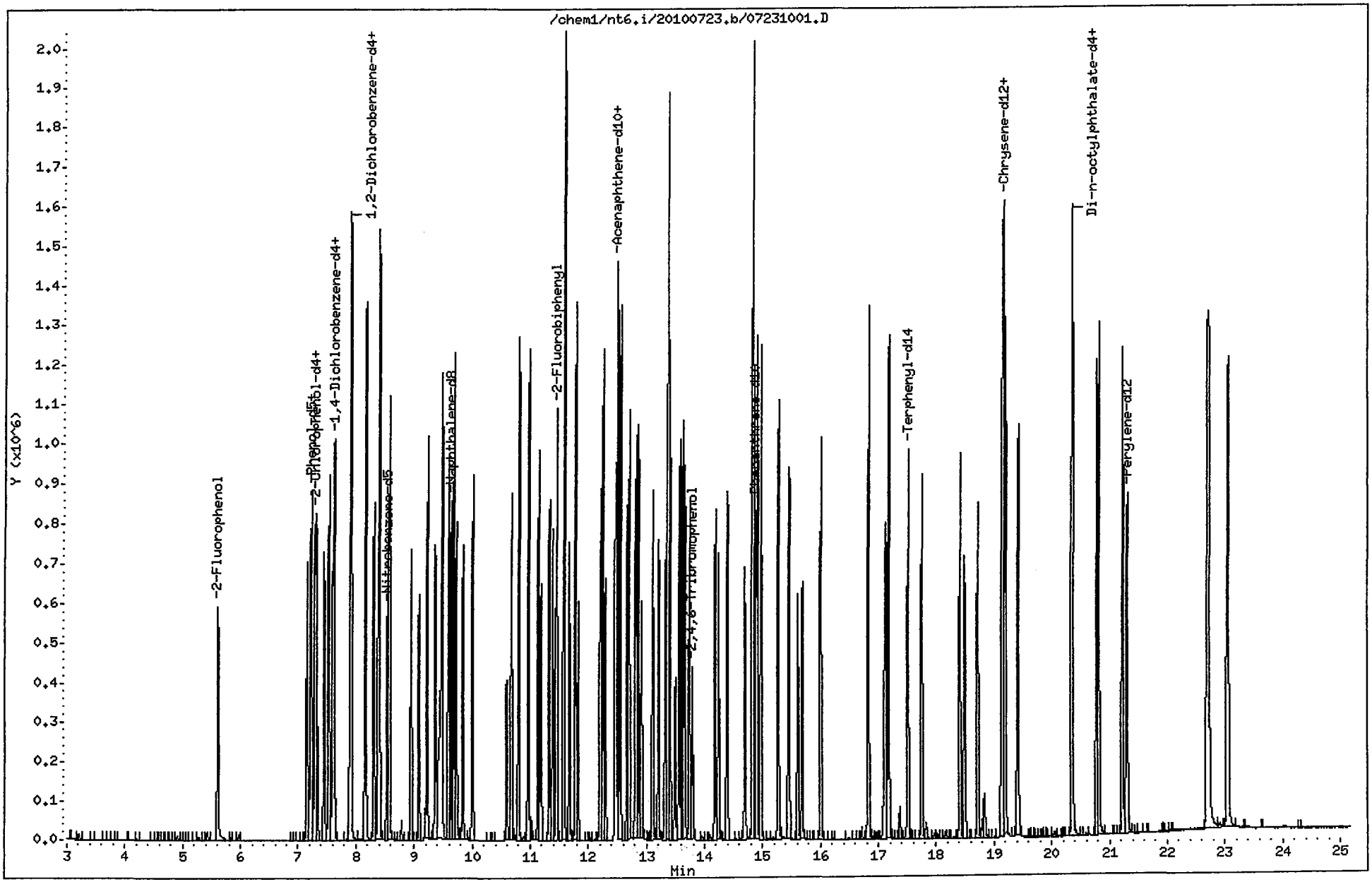
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt6.i/20100723.b/07231001.D
Date : 23-JUL-2010 15:01
Client ID: IC250723
Sample Info: IC250723

Instrument: nt6.i

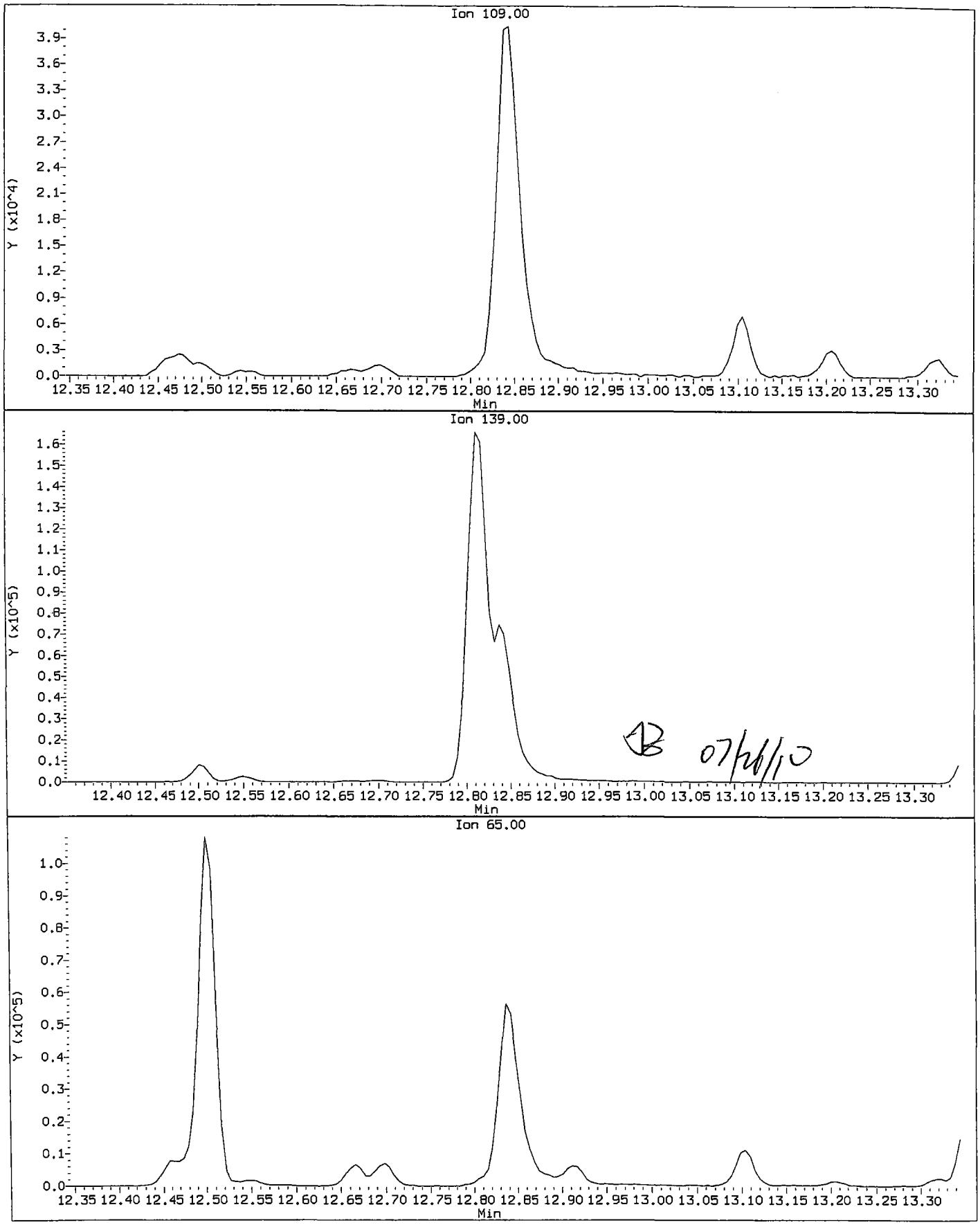
Operator: JZ
Column diameter: 0.32

Column phase: ZB-5msi



Data File: /chem1/nt6.i/20100723.b/07231001.D
Injection Date: 23-JUL-2010 15:01
Instrument: nt6.i
Client Sample ID: IC250723

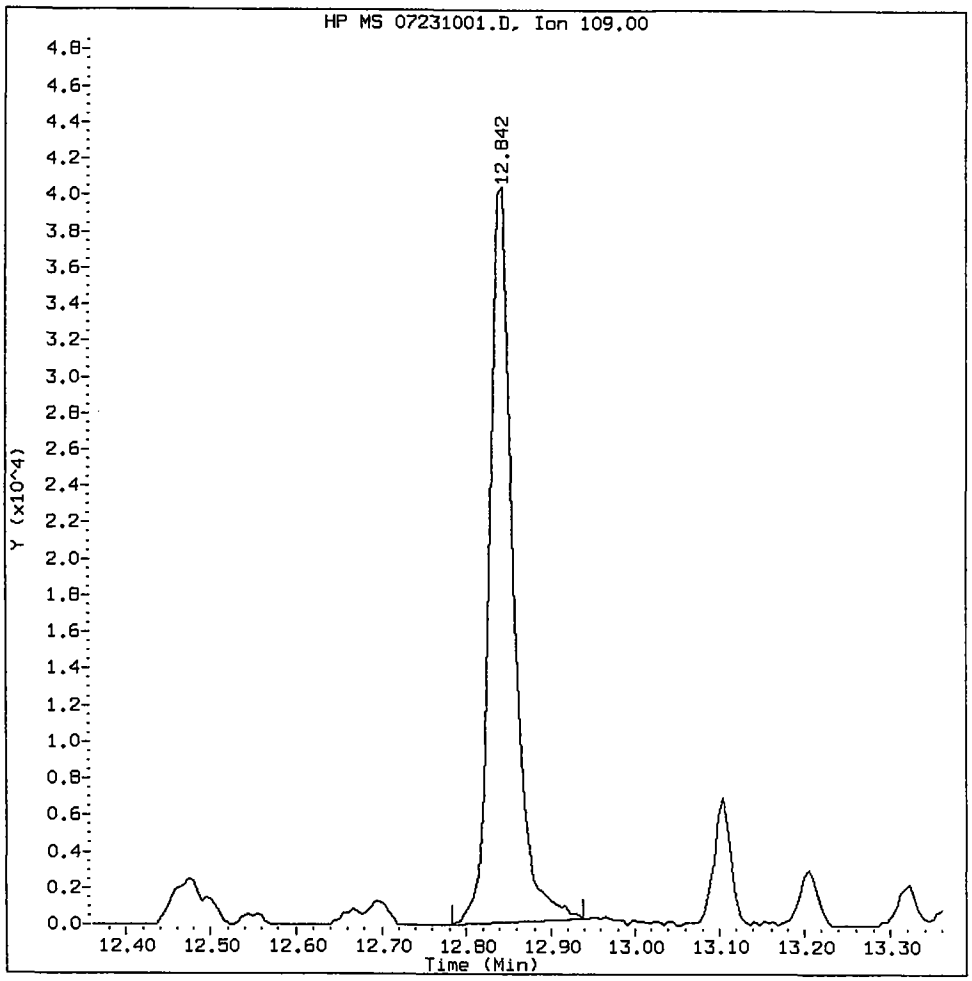
Compound: 4-Nitrophenol
CAS Number: 100-02-7



B 07/27/10

IC250723, /chem1/nt6.i/20100723.b/07231001.D

4-Nitrophenol Amount: 26.89 Area: 78303



MANUAL INTEGRATION for 4-Nitrophenol

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 07/16/10

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231005.D
Lab Smp Id: IC400723 Client Smp ID: IC400723
Inj Date : 23-JUL-2010 17:29
Operator : JZ Inst ID: nt6.i
Smp Info : IC400723,
Misc Info : 10-
Comment : 1ul Injection
Method : /chem1/nt6.i/20100723.b/SW846072310.m
Meth Date : 26-Jul-2010 11:33 jianqing Quant Type: ISTD
Cal Date : 23-JUL-2010 17:29 Cal File: 07231005.D
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

AB 07/26/10

AMOUNTS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	5.605	5.610	(0.738)	478107	40.0000	39.70
$	2 Phenol-d5	99	7.213	7.218	(0.950)	523138	40.0000	37.21
	3 Phenol	94	7.229	7.237	(0.952)	573376	40.0000	35.94
$	5 2-Chlorophenol-d4	132	7.298	7.303	(0.961)	436515	40.0000	36.73
	4 Bis(2-Chloroethyl)ether	93	7.282	7.290	(0.959)	455918	40.0000	37.52
	6 2-Chlorophenol	128	7.320	7.327	(0.964)	498989	40.0000	36.31
	7 1,3-Dichlorobenzene	146	7.528	7.530	(0.992)	602247	40.0000	37.59
*	8 1,4-Dichlorobenzene-d4	152	7.592	7.595	(1.000)	179813	20.0000	
	9 1,4-Dichlorobenzene	146	7.619	7.621	(1.004)	597463	40.0000	38.22
$	10 1,2-Dichlorobenzene-d4	152	7.891	7.896	(1.039)	313019	40.0000	38.17
	12 1,2-Dichlorobenzene	146	7.913	7.915	(1.042)	541681	40.0000	37.00
	11 Benzyl alcohol	108	7.902	7.910	(1.041)	293342	40.0000	40.07
	14 2,2'-oxybis(1-Chloropropane)	45	8.158	8.161	(1.075)	488359	40.0000	37.54
	13 2-Methylphenol	108	8.158	8.166	(1.075)	439877	40.0000	37.15
	17 Hexachloroethane	117	8.399	8.406	(1.106)	214765	40.0000	37.73
	16 N-Nitroso-di-n-propylamine	70	8.383	8.390	(1.104)	316516	40.0000	38.46
	15 4-Methylphenol	108	8.399	8.406	(1.106)	435625	40.0000	36.84
$	18 Nitrobenzene-d5	82	8.538	8.542	(0.885)	446362	40.0000	38.77
	19 Nitrobenzene	77	8.570	8.572	(0.888)	485333	40.0000	36.97
	20 Isophorone	82	8.954	8.967	(0.928)	791586	40.0000	38.38
	21 2-Nitrophenol	139	9.082	9.090	(0.941)	297585	40.0000	39.96
	22 2,4-Dimethylphenol	107	9.227	9.234	(0.956)	466959	40.0000	36.98
	23 Bis(2-Chloroethoxy)methane	93	9.365	9.373	(0.971)	547954	40.0000	38.22
	24 Benzoic acid	105	9.520	9.603	(0.987)	761553	80.0000	88.65
	25 2,4-Dichlorophenol	162	9.478	9.485	(0.982)	415729	40.0000	38.19
	26 1,2,4-Trichlorobenzene	180	9.595	9.597	(0.994)	456415	40.0000	37.79
*	27 Naphthalene-d8	136	9.649	9.651	(1.000)	584978	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	9.675	9.683	(1.003)	1270631	40.0000	36.12
	29 4-Chloroaniline	127	9.841	9.843	(1.020)	516764	40.0000	37.11
	30 Hexachlorobutadiene	225	10.006	10.009	(1.037)	268712	40.0000	38.89
	31 4-Chloro-3-methylphenol	107	10.674	10.682	(1.106)	406596	40.0000	38.67
	32 2-Methylnaphthalene	141	10.797	10.805	(1.119)	699508	40.0000	36.82
	33 Hexachlorocyclopentadiene	237	11.181	11.184	(0.894)	275445	40.0000	49.97
	34 2,4,6-Trichlorophenol	196	11.326	11.333	(0.906)	298271	40.0000	39.62
	35 2,4,5-Trichlorophenol	196	11.384	11.392	(0.911)	307523	40.0000	39.60
$	36 2-Fluorobiphenyl	172	11.454	11.453	(0.916)	849457	40.0000	36.06
	37 2-Chloronaphthalene	162	11.577	11.579	(0.926)	831977	40.0000	36.25
	38 2-Nitroaniline	65	11.828	11.835	(0.946)	221096	40.0000	40.57
	39 Dimethylphthalate	163	12.207	12.220	(0.976)	974193	40.0000	38.43
	40 Acenaphthylene	152	12.250	12.252	(0.980)	1297887	40.0000	36.13
	41 2,6-Dinitrotoluene	165	12.298	12.305	(0.984)	239593	40.0000	41.37
*	42 Acenaphthene-d10	164	12.501	12.503	(1.000)	327933	20.0000	
	43 3-Nitroaniline	138	12.506	12.519	(1.000)	203699	40.0000	37.22
	44 Acenaphthene	153	12.554	12.562	(1.004)	826657	40.0000	37.71
	45 2,4-Dinitrophenol	184	12.672	12.690	(1.014)	374074	80.0000	99.17
	46 Dibenzofuran	168	12.816	12.823	(1.025)	1085318	40.0000	37.16
	47 4-Nitrophenol	109	12.842	12.861	(1.027)	129026	40.0000	42.60
	48 2,4-Dinitrotoluene	165	12.917	12.930	(1.033)	315304	40.0000	42.37
	50 Diethylphthalate	149	13.366	13.368	(1.069)	853959	40.0000	36.04
	49 Fluorene	166	13.371	13.379	(1.070)	916824	40.0000	36.55
	51 4-Chlorophenyl-phenylether	204	13.409	13.411	(1.073)	470235	40.0000	39.20
	52 4-Nitroaniline	138	13.505	13.523	(1.080)	232223	40.0000	41.03
	53 4,6-Dinitro-2-methylphenol	198	13.574	13.593	(0.913)	427429	80.0000	83.76
	54 N-Nitrosodiphenylamine	169	13.617	13.630	(0.916)	701173	40.0000	37.56
$	55 2,4,6-Tribromophenol	330	13.793	13.798	(1.103)	126637	40.0000	43.05
	56 4-Bromophenyl-phenylether	248	14.183	14.185	(0.954)	311111	40.0000	39.90
	57 Hexachlorobenzene	284	14.391	14.399	(0.968)	320970	40.0000	38.86
	58 Pentachlorophenol	266	14.696	14.704	(0.988)	212167	40.0000	46.95
*	59 Phenanthrene-d10	188	14.867	14.869	(1.000)	525448	20.0000	
	60 Phenanthrene	178	14.904	14.912	(1.002)	1256713	40.0000	36.54
	61 Anthracene	178	14.974	14.987	(1.007)	1305609	40.0000	36.63
	62 Carbazole	167	15.273	15.280	(1.027)	1186045	40.0000	35.94
	63 Di-n-butylphthalate	149	16.004	16.012	(1.077)	1500393	40.0000	37.06
	64 Fluoranthene	202	16.827	16.835	(1.132)	1385977	40.0000	37.10
	65 Pyrene	202	17.179	17.187	(0.896)	1346276	40.0000	36.18
$	66 Terphenyl-d14	244	17.516	17.515	(0.914)	801457	40.0000	37.83
	67 Butylbenzylphthalate	149	18.413	18.421	(0.961)	691617	40.0000	39.94
	68 Benzo(a)anthracene	228	19.140	19.147	(0.999)	1310404	40.0000	37.25
*	69 Chrysene-d12	240	19.166	19.169	(1.000)	593530	20.0000	
	70 3,3'-Dichlorobenzidine	252	19.166	19.174	(1.000)	420101	40.0000	36.85
	71 Chrysene	228	19.204	19.217	(1.002)	1223597	40.0000	36.98
	72 bis(2-Ethylhexyl)phthalate	149	19.417	19.420	(0.954)	938469	40.0000	39.60
*	134 Di-n-octylphthalate-d4	153	20.347	20.354	(1.000)	734023	20.0000	
	73 Di-n-octylphthalate	149	20.357	20.360	(1.001)	1521034	40.0000	36.48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	20.790	20.803	(0.976)	1434589	40.0000	38.74
75	Benzo(k)fluoranthene	252	20.822	20.840	(0.977)	1367201	40.0000	34.31
187	Total Benzofluoranthenes	252	20.822	20.840	(0.977)	2643068	80.0000	72.56
76	Benzo(a)pyrene	252	21.233	21.246	(0.996)	1331524	40.0000	37.91
* 77	Perylene-d12	264	21.308	21.316	(1.000)	534102	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	22.707	22.720	(1.066)	1785536	40.0000	38.43
79	Dibenzo(a,h)anthracene	278	22.729	22.747	(1.067)	1387194	40.0000	38.69
80	Benzo(g,h,i)perylene	276	23.065	23.089	(1.082)	1604879	40.0000	38.14
90	N-Nitrosodimethylamine	74	2.732	2.750	(0.360)	310807	40.0000	39.63
103	Pyridine	79	2.694	2.702	(0.355)	579976	40.0000	41.86
91	Aniline	93	7.154	7.157	(0.942)	696532	40.0000	38.40
105	1-methylnaphthalene	141	10.968	10.975	(1.137)	725171	40.0000	37.03
93	Benzidine	184	17.099	17.107	(0.892)	394646	40.0000	32.65
111	Azobenzene (1,2-DP-Hydrazine)	77	13.654	13.667	(1.092)	904684	40.0000	37.74
143	1,4-Dioxane	88	2.155	2.168	(0.284)	207666	40.0000	40.16
$ 137	d8-1,4-Dioxane	96	2.112	2.125	(0.278)	206960	40.0000	40.83
144	alpha-Terpineol	59	9.723	9.731	(1.008)	282130	40.0000	39.60
98	Retene	219	17.751	17.759	(0.926)	492059	40.0000	40.05
133	Butylatedhydroxytoluene	205	12.698	12.706	(1.016)	701480	40.0000	36.25
115	Tributyl Phosphate	99	13.745	13.763	(0.925)	1084412	40.0000	37.48
116	Dibutyl Phenyl Phosphate	175	15.454	15.457	(1.040)	777710	40.0000	39.89
117	Butyl Diphenyl Phosphate	94	17.126	17.134	(0.894)	253920	40.0000	39.24
118	Triphenyl Phosphate	326	18.723	18.731	(0.977)	259068	40.0000	41.25
123	Acetophenone	105	8.308	8.316	(1.094)	621273	40.0000	39.17
179	n-Decane	57	7.448	7.450	(0.981)	396980	40.0000	37.80
180	n-Octadecane	57	14.829	14.832	(0.997)	386562	40.0000	35.13
168	Pentachlorobenzene	250	12.858	12.866	(1.029)	361056	40.0000	39.43
113	Diphenyl Oxide	170	11.780	11.782	(0.942)	805094	40.0000	36.43
112	Biphenyl	154	11.582	11.590	(0.926)	911660	40.0000	36.39
120	2,3,4,6-Tetrachlorophenol	232	13.110	13.112	(1.049)	292380	40.0000	43.28
151	1,2,4,5-Tetrachlorobenzene	216	11.139	11.141	(0.891)	455577	40.0000	38.01
110	Tetrachloroguaiacol	247	14.829	14.842	(0.997)	326377	80.0000	79.63
109	3,4,5-Trichloroguaiacol	213	13.211	13.219	(0.889)	165311	40.0000	40.07
181	3,4,6-Trichloroguaiacol	211	13.323	13.331	(1.755)	199643	40.0000	43.13
108	4,5,6-Trichloroguaiacol	213	14.242	14.250	(1.139)	167783	40.0000	41.33
184	3,4-Dichloroguaiacol	192	11.673	11.675	(1.537)	174240	40.0000	42.69
107	4,5-Dichloroguaiacol	192	12.469	12.476	(0.997)	416165	80.0000	80.22
182	4,6-Dichloroguaiacol	192	12.469	12.476	(1.642)	416165	80.0000	83.01
185	4-Chloroguaiacol	115	10.594	10.596	(1.395)	107719	20.0000	20.93
186	Carbaryl	144	15.689	15.702	(1.055)	632465	40.0000	42.62
106	Guaiacol	124	8.580	8.588	(1.130)	427217	40.0000	38.56

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 07231005.D
Lab Smp Id: IC400723
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt6.i/20100723.b/SW846072310.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 15:01
Client Smp ID: IC400723
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	182786	91393	365572	179813	-1.63
27 Naphthalene-d8	584137	292068	1168274	584978	0.14
42 Acenaphthene-d10	320442	160221	640884	327933	2.34
59 Phenanthrene-d10	503793	251896	1007586	525448	4.30
69 Chrysene-d12	532343	266172	1064686	593530	11.49
134 Di-n-octylphthala	719428	359714	1438856	734023	2.03
77 Perylene-d12	517269	258634	1034538	534102	3.25

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.59	0.00
27 Naphthalene-d8	9.64	9.14	10.14	9.65	0.06
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	0.00
59 Phenanthrene-d10	14.86	14.36	15.36	14.87	0.04
69 Chrysene-d12	19.16	18.66	19.66	19.17	0.03
134 Di-n-octylphthala	20.35	19.85	20.85	20.35	0.00
77 Perylene-d12	21.31	20.81	21.81	21.31	0.00

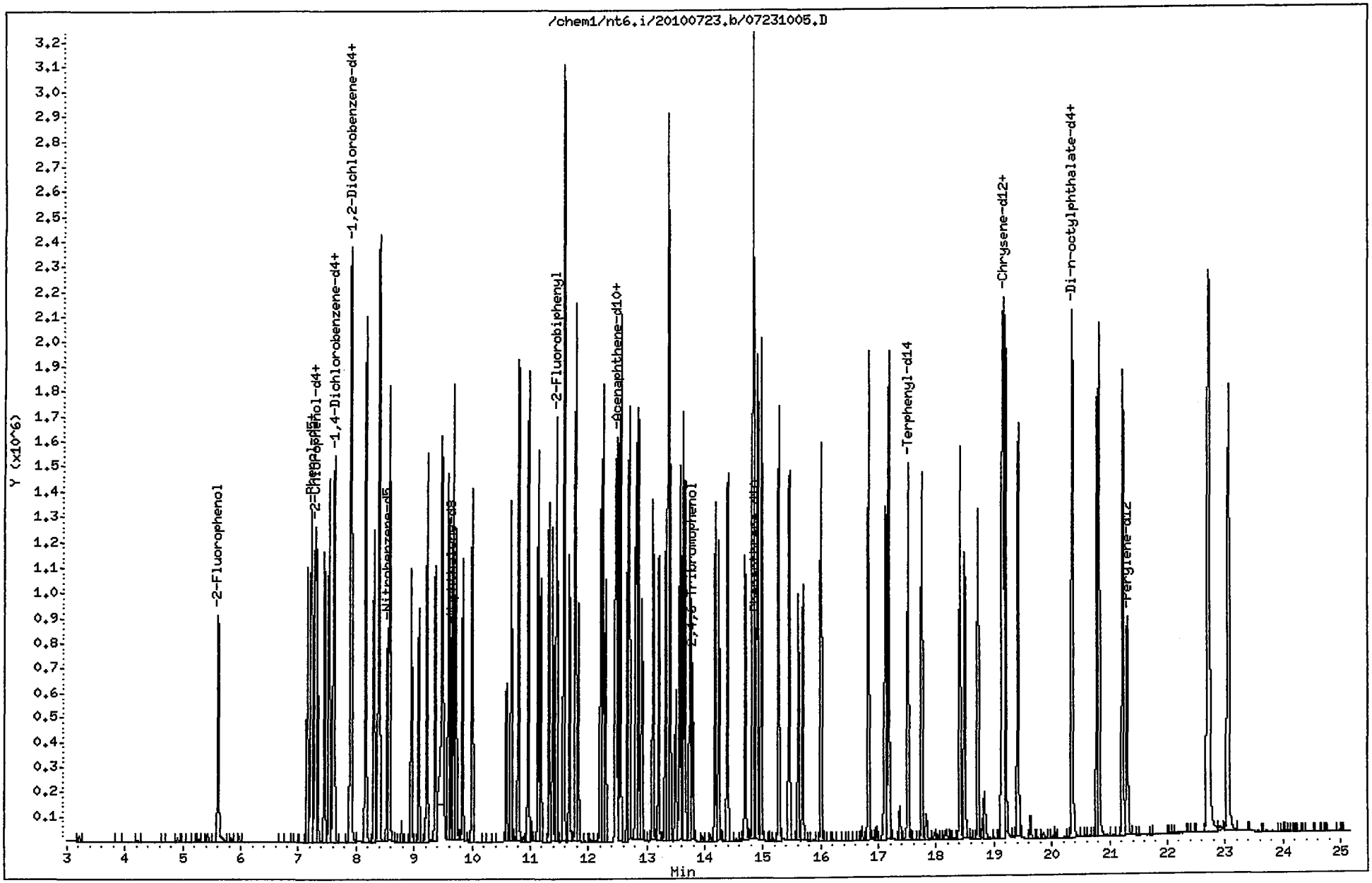
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt6.i/20100723.b/07231005.D
Date : 23-JUL-2010 17:29
Client ID: IC400723
Sample Info: IC400723,

Instrument: nt6.i

Operator: JZ
Column diameter: 0.32

Column phase: ZB-5msi



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231006.D
Lab Smp Id: IC600723 Client Smp ID: IC600723
Inj Date : 23-JUL-2010 18:01
Operator : JZ Inst ID: nt6.i
Smp Info : IC600723,
Misc Info : 10-
Comment : 1ul Injection
Method : /chem1/nt6.i/20100723.b/SW846072310.m
Meth Date : 26-Jul-2010 11:33 jianqing Quant Type: ISTD
Cal Date : 23-JUL-2010 18:01 Cal File: 07231006.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

07/26/10

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	5.610	5.610	(0.738)	707424	60.0000	57.57
$	2	Phenol-d5	99	7.218	7.218	(0.950)	771071	60.0000	54.33
	3	Phenol	94	7.239	7.237	(0.953)	847974	60.0000	52.90
$	5	2-Chlorophenol-d4	132	7.303	7.303	(0.961)	648248	60.0000	54.08
	4	Bis(2-Chloroethyl)ether	93	7.287	7.290	(0.959)	659456	60.0000	53.84
	6	2-Chlorophenol	128	7.325	7.327	(0.964)	749255	60.0000	54.06
	7	1,3-Dichlorobenzene	146	7.533	7.530	(0.992)	878759	60.0000	54.34
*	8	1,4-Dichlorobenzene-d4	152	7.597	7.595	(1.000)	184946	20.0000	
	9	1,4-Dichlorobenzene	146	7.624	7.621	(1.004)	868746	60.0000	54.94
$	10	1,2-Dichlorobenzene-d4	152	7.896	7.896	(1.039)	463869	60.0000	55.77
	12	1,2-Dichlorobenzene	146	7.918	7.915	(1.042)	777966	60.0000	52.89
	11	Benzyl alcohol	108	7.907	7.910	(1.041)	432282	60.0000	57.83
	14	2,2'-oxybis(1-Chloropropane)	45	8.163	8.161	(1.075)	708425	60.0000	54.01
	13	2-Methylphenol	108	8.163	8.166	(1.075)	658836	60.0000	55.00
	17	Hexachloroethane	117	8.404	8.406	(1.106)	308477	60.0000	53.78
	16	N-Nitroso-di-n-propylamine	70	8.388	8.390	(1.104)	454211	60.0000	54.62
	15	4-Methylphenol	108	8.404	8.406	(1.106)	631240	60.0000	53.10
$	18	Nitrobenzene-d5	82	8.542	8.542	(0.885)	662173	60.0000	56.11
	19	Nitrobenzene	77	8.574	8.572	(0.889)	697353	60.0000	52.44
	20	Isophorone	82	8.959	8.967	(0.929)	1168591	60.0000	55.40
	21	2-Nitrophenol	139	9.087	9.090	(0.942)	458514	60.0000	59.41
	22	2,4-Dimethylphenol	107	9.231	9.234	(0.957)	699441	60.0000	54.35
	23	Bis(2-Chloroethoxy)methane	93	9.370	9.373	(0.971)	803647	60.0000	54.90
	24	Benzoic acid	105	9.568	9.603	(0.992)	1222479	120.000	133.3(M)
	25	2,4-Dichlorophenol	162	9.482	9.485	(0.983)	639889	60.0000	57.14
	26	1,2,4-Trichlorobenzene	180	9.595	9.597	(0.994)	663284	60.0000	53.96
*	27	Naphthalene-d8	136	9.648	9.651	(1.000)	607475	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	9.680	9.683	(1.003)	1781924	60.0000	50.35
	29 4-Chloroaniline	127	9.840	9.843	(1.020)	734328	60.0000	52.12
	30 Hexachlorobutadiene	225	10.006	10.009	(1.037)	405523	60.0000	57.07
	31 4-Chloro-3-methylphenol	107	10.679	10.682	(1.107)	612255	60.0000	56.70
	32 2-Methylnaphthalene	141	10.802	10.805	(1.120)	1018025	60.0000	52.84
	33 Hexachlorocyclopentadiene	237	11.181	11.184	(0.894)	425348	60.0000	71.46
	34 2,4,6-Trichlorophenol	196	11.330	11.333	(0.906)	465479	60.0000	59.61
	35 2,4,5-Trichlorophenol	196	11.389	11.392	(0.911)	483158	60.0000	59.92
$	36 2-Fluorobiphenyl	172	11.453	11.453	(0.916)	1244640	60.0000	52.20
	37 2-Chloronaphthalene	162	11.576	11.579	(0.926)	1199578	60.0000	51.72
	38 2-Nitroaniline	65	11.832	11.835	(0.947)	335276	60.0000	59.36
	39 Dimethylphthalate	163	12.217	12.220	(0.977)	1436593	60.0000	55.40
	40 Acenaphthylene	152	12.249	12.252	(0.980)	1817418	60.0000	50.29
	41 2,6-Dinitrotoluene	165	12.303	12.305	(0.984)	371177	60.0000	61.42
*	42 Acenaphthene-d10	164	12.500	12.503	(1.000)	340603	20.0000	
	43 3-Nitroaniline	138	12.516	12.519	(1.001)	274842	60.0000	49.96
	44 Acenaphthene	153	12.559	12.562	(1.005)	1199130	60.0000	53.76
	45 2,4-Dinitrophenol	184	12.682	12.690	(1.015)	605790	120.000	146.2
	46 Dibenzofuran	168	12.821	12.823	(1.026)	1586285	60.0000	53.43
	47 4-Nitrophenol	109	12.853	12.861	(1.028)	193631	60.0000	61.29 (M)
	48 2,4-Dinitrotoluene	165	12.927	12.930	(1.034)	481845	60.0000	61.94
	50 Diethylphthalate	149	13.371	13.368	(1.070)	1322312	60.0000	54.69
	49 Fluorene	166	13.376	13.379	(1.070)	1324287	60.0000	52.16
	51 4-Chlorophenyl-phenylether	204	13.408	13.411	(1.073)	706929	60.0000	57.25
	52 4-Nitroaniline	138	13.515	13.523	(1.081)	357914	60.0000	60.74
	53 4,6-Dinitro-2-methylphenol	198	13.584	13.593	(0.914)	680240	120.000	126.2
	54 N-Nitrosodiphenylamine	169	13.622	13.630	(0.916)	1042005	60.0000	54.50
$	55 2,4,6-Tribromophenol	330	13.798	13.798	(1.104)	200710	60.0000	64.67
	56 4-Bromophenyl-phenylether	248	14.183	14.185	(0.954)	469752	60.0000	58.12
	57 Hexachlorobenzene	284	14.391	14.399	(0.968)	487833	60.0000	57.16
	58 Pentachlorophenol	266	14.701	14.704	(0.989)	343904	60.0000	70.42
*	59 Phenanthrene-d10	188	14.866	14.869	(1.000)	548107	20.0000	
	60 Phenanthrene	178	14.909	14.912	(1.003)	1811434	60.0000	51.86
	61 Anthracene	178	14.978	14.987	(1.008)	1861671	60.0000	51.49
	62 Carbazole	167	15.272	15.280	(1.027)	1724877	60.0000	51.52
	63 Di-n-butylphthalate	149	16.009	16.012	(1.077)	2137856	60.0000	51.97
	64 Fluoranthene	202	16.832	16.835	(1.132)	1967573	60.0000	51.86
	65 Pyrene	202	17.184	17.187	(0.897)	1926828	60.0000	54.12
$	66 Terphenyl-d14	244	17.515	17.515	(0.914)	1184437	60.0000	57.75
	67 Butylbenzylphthalate	149	18.413	18.421	(0.961)	1016920	60.0000	60.17
	68 Benzo(a)anthracene	228	19.144	19.147	(0.999)	1907368	60.0000	56.27
*	69 Chrysene-d12	240	19.166	19.169	(1.000)	578965	20.0000	
	70 3,3'-Dichlorobenzidine	252	19.166	19.174	(1.000)	614208	60.0000	55.97
	71 Chrysene	228	19.209	19.217	(1.002)	1763657	60.0000	55.47
	72 bis(2-Ethylhexyl)phthalate	149	19.417	19.420	(0.954)	1365056	60.0000	57.33
*	134 Di-n-octylphthalate-d4	153	20.346	20.354	(1.000)	744081	20.0000	
	73 Di-n-octylphthalate	149	20.362	20.360	(1.001)	2171789	60.0000	52.64

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	20.795	20.803	(0.976)	2108839	60.0000	54.16
75	Benzo(k)fluoranthene	252	20.832	20.840	(0.978)	1999749	60.0000	48.59
187	Total Benzofluoranthenes	252	20.832	20.840	(0.978)	3887015	120.000	102.4
76	Benzo(a)pyrene	252	21.238	21.246	(0.997)	1975913	60.0000	53.59
* 77	Perylene-d12	264	21.308	21.316	(1.000)	572566	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	22.712	22.720	(1.066)	2716552	60.0000	55.38
79	Dibenzo(a,h)anthracene	278	22.739	22.747	(1.067)	2095539	60.0000	55.36
80	Benzo(g,h,i)perylene	276	23.075	23.089	(1.083)	2430911	60.0000	54.82
90	N-Nitrosodimethylamine	74	2.742	2.750	(0.361)	461166	60.0000	57.63
103	Pyridine	79	2.705	2.702	(0.356)	860099	60.0000	60.30
91	Aniline	93	7.159	7.157	(0.942)	1005247	60.0000	54.81
105	1-methylnaphthalene	141	10.973	10.975	(1.137)	1058350	60.0000	53.22
93	Benzidine	184	17.104	17.107	(0.892)	575385	60.0000	50.37
111	Azobenzene (1,2-DP-Hydrazine)	77	13.659	13.667	(1.093)	1300956	60.0000	53.40
143	1,4-Dioxane	88	2.165	2.168	(0.285)	310488	60.0000	58.64
$ 137	d8-1,4-Dioxane	96	2.122	2.125	(0.279)	315891	60.0000	60.49
144	alpha-Terpineol	59	9.728	9.731	(1.008)	427485	60.0000	58.13
98	Retene	219	17.756	17.759	(0.926)	752823	60.0000	62.33
133	Butylatedhydroxytoluene	205	12.703	12.706	(1.016)	1051020	60.0000	53.44
115	Tributyl Phosphate	99	13.755	13.763	(0.925)	1619252	60.0000	54.62
116	Dibutyl Phenyl Phosphate	175	15.454	15.457	(1.040)	1173813	60.0000	58.09
117	Butyl Diphenyl Phosphate	94	17.131	17.134	(0.894)	389020	60.0000	61.35
118	Triphenyl Phosphate	326	18.722	18.731	(0.977)	410539	60.0000	65.73
123	Acetophenone	105	8.313	8.316	(1.094)	917180	60.0000	56.82
179	n-Decane	57	7.453	7.450	(0.981)	581639	60.0000	54.78
180	n-Octadecane	57	14.829	14.832	(0.997)	552713	60.0000	49.79
168	Pentachlorobenzene	250	12.863	12.866	(1.029)	542976	60.0000	57.56
113	Diphenyl Oxide	170	11.779	11.782	(0.942)	1187278	60.0000	52.95
112	Biphenyl	154	11.587	11.590	(0.927)	1302449	60.0000	51.77
120	2,3,4,6-Tetrachlorophenol	232	13.109	13.112	(1.049)	464221	60.0000	65.05
151	1,2,4,5-Tetrachlorobenzene	216	11.138	11.141	(0.891)	701362	60.0000	56.91
110	Tetrachloroguaiacol	247	14.834	14.842	(0.998)	504715	120.000	118.4
109	3,4,5-Trichloroguaiacol	213	13.210	13.219	(0.889)	260835	60.0000	60.48
181	3,4,6-Trichloroguaiacol	211	13.328	13.331	(1.754)	313950	60.0000	64.67
108	4,5,6-Trichloroguaiacol	213	14.247	14.250	(1.140)	264245	60.0000	62.12
184	3,4-Dichloroguaiacol	192	11.672	11.675	(1.536)	272767	60.0000	63.91
107	4,5-Dichloroguaiacol	192	12.468	12.476	(0.997)	650083	120.000	120.5
182	4,6-Dichloroguaiacol	192	12.468	12.476	(1.641)	650734	120.000	124.9
185	4-Chloroguaiacol	115	10.593	10.596	(1.394)	167281	30.0000	31.27
186	Carbaryl	144	15.694	15.702	(1.056)	932958	60.0000	60.23
106	Guaiacol	124	8.585	8.588	(1.130)	647516	60.0000	57.33

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 07231006.D
Lab Smp Id: IC600723
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt6.i/20100723.b/SW846072310.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 15:01
Client Smp ID: IC600723
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	182786	91393	365572	184946	1.18
27 Naphthalene-d8	584137	292068	1168274	607475	4.00
42 Acenaphthene-d10	320442	160221	640884	340603	6.29
59 Phenanthrene-d10	503793	251896	1007586	548107	8.80
69 Chrysene-d12	532343	266172	1064686	578965	8.76
134 Di-n-octylphthala	719428	359714	1438856	744081	3.43
77 Perylene-d12	517269	258634	1034538	572566	10.69

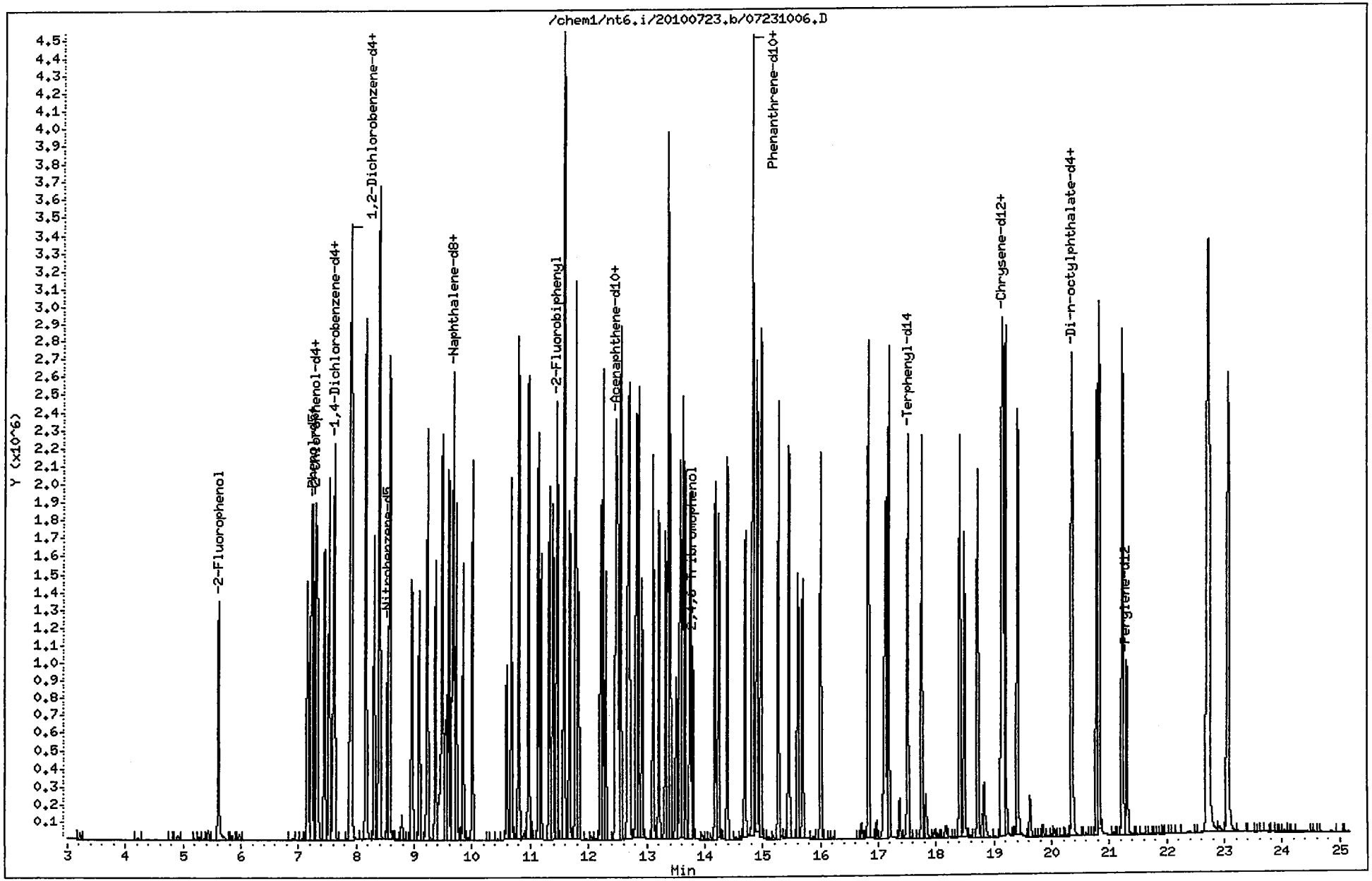
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.60	0.07
27 Naphthalene-d8	9.64	9.14	10.14	9.65	0.05
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	0.00
59 Phenanthrene-d10	14.86	14.36	15.36	14.87	0.03
69 Chrysene-d12	19.16	18.66	19.66	19.17	0.03
134 Di-n-octylphthala	20.35	19.85	20.85	20.35	0.00
77 Perylene-d12	21.31	20.81	21.81	21.31	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: /chem1/nt6.i/20100723.b/07231006.D
Date : 23-JUL-2010 18:01
Client ID: IC600723
Sample Info: IC600723,

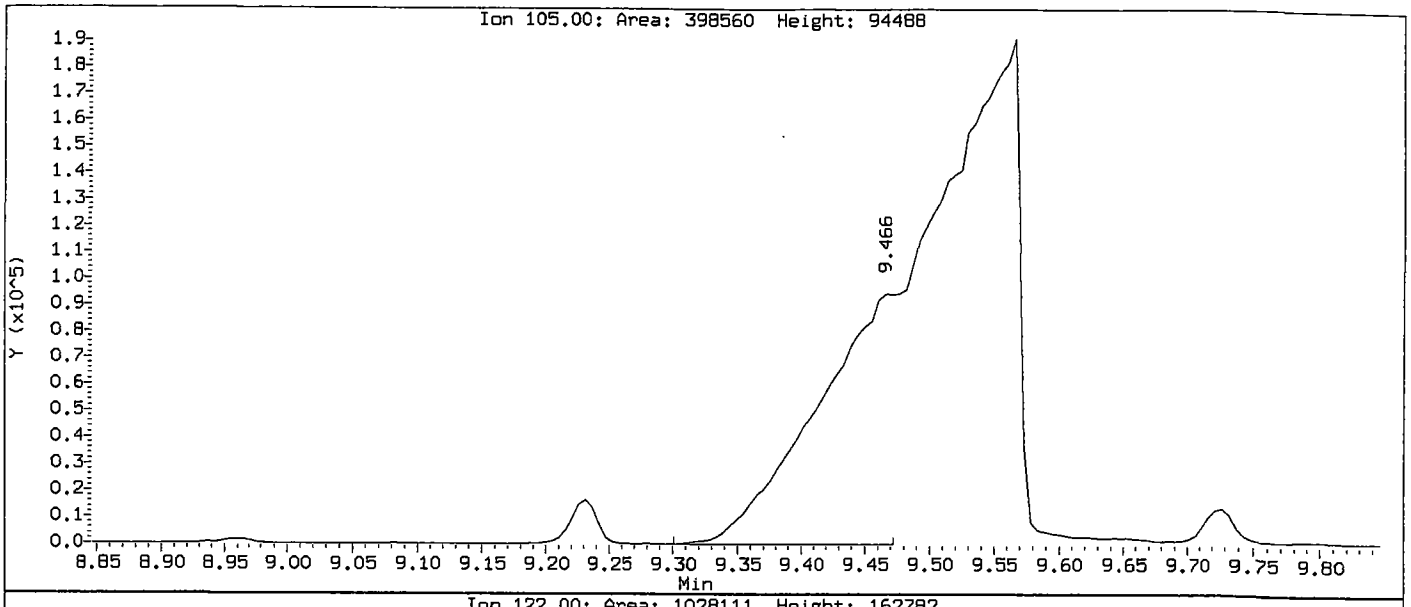
Instrument: nt6.i
Operator: JZ
Column diameter: 0.32

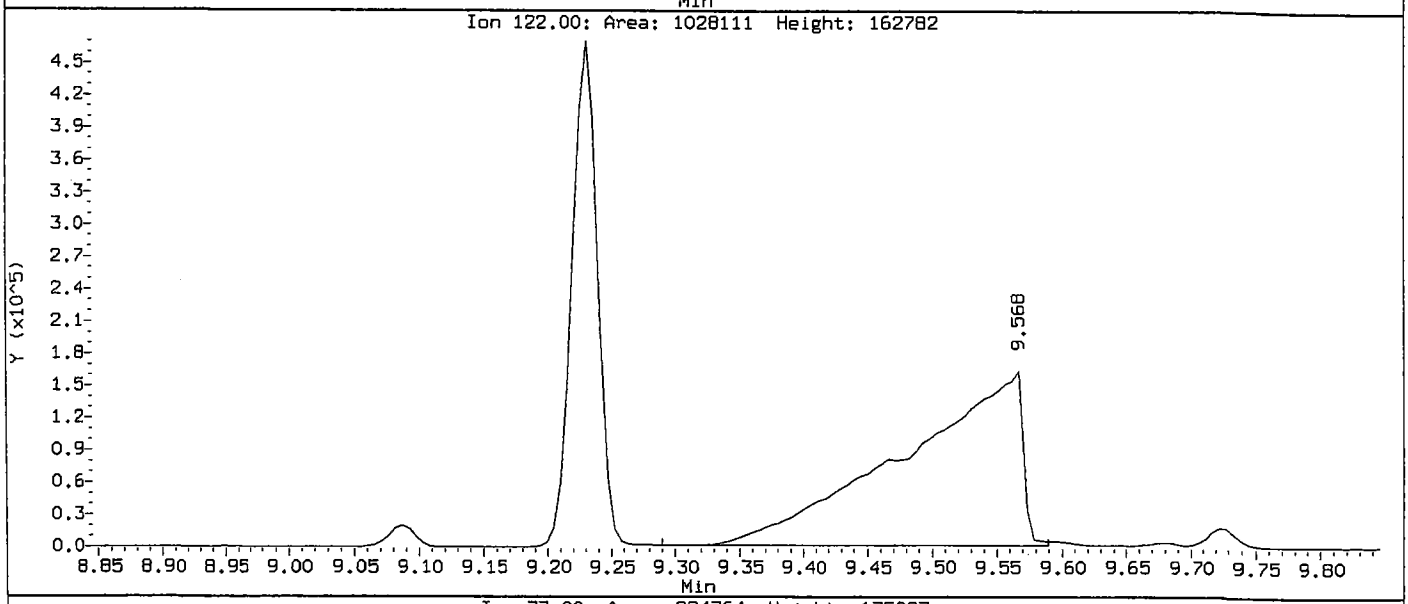
Column phase: ZB-5msi

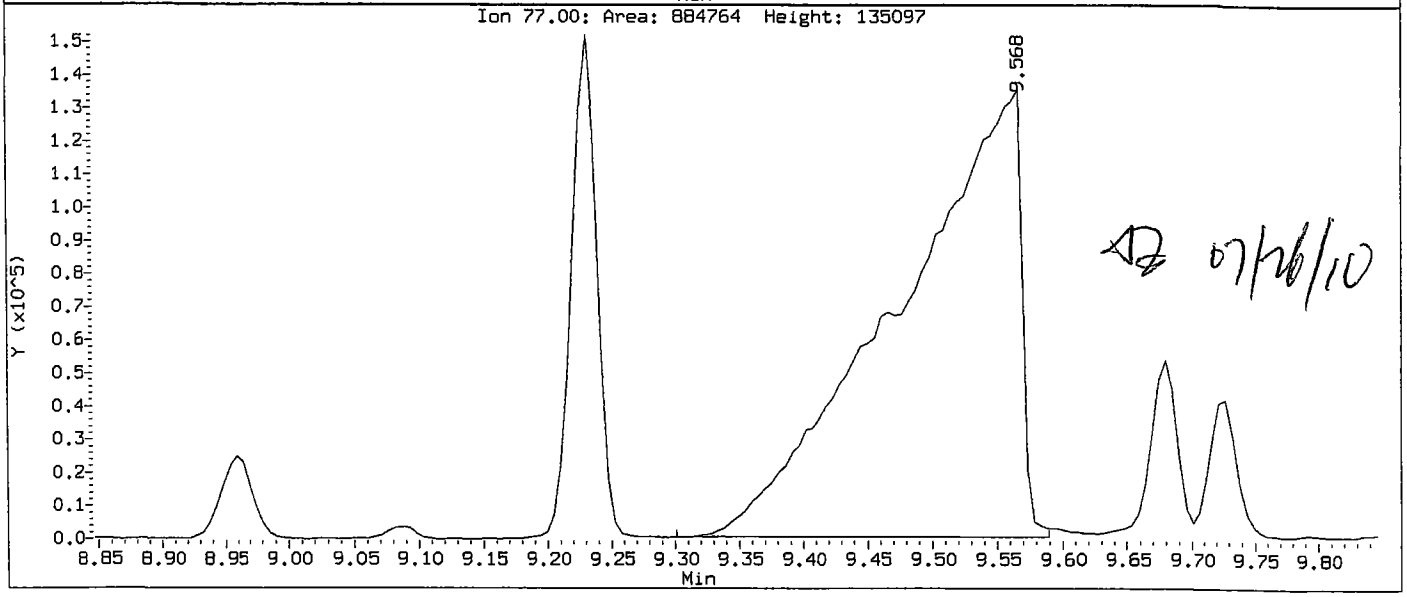


Data File: /chem1/nt6.i/20100723.b/07231006.D
Injection Date: 23-JUL-2010 18:01
Instrument: nt6.i
Client Sample ID: IC600723

Compound: Benzoic acid
CAS Number: 65-85-0



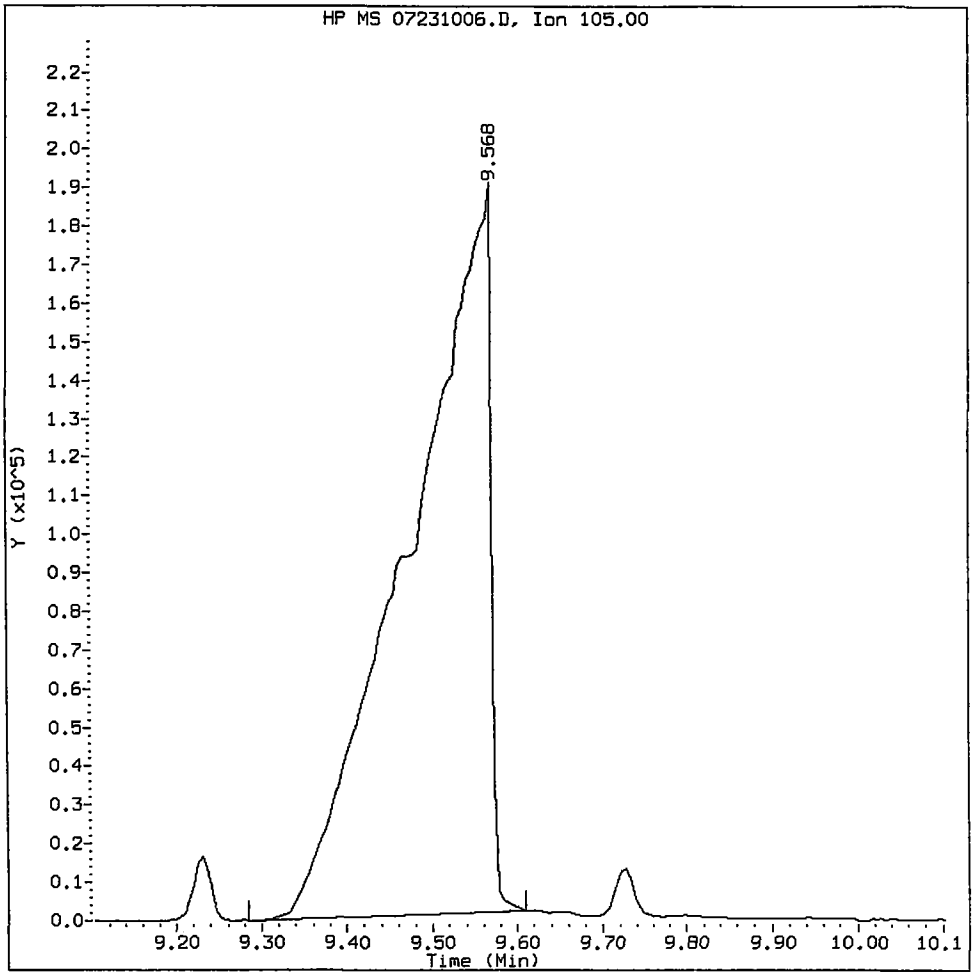




AD 07/26/10

IC600723, /chem1/nt6.i/20100723.b/07231006.D

Benzoic acid Amount: 133.25 Area: 1222479



MANUAL INTEGRATION for Benzoic acid

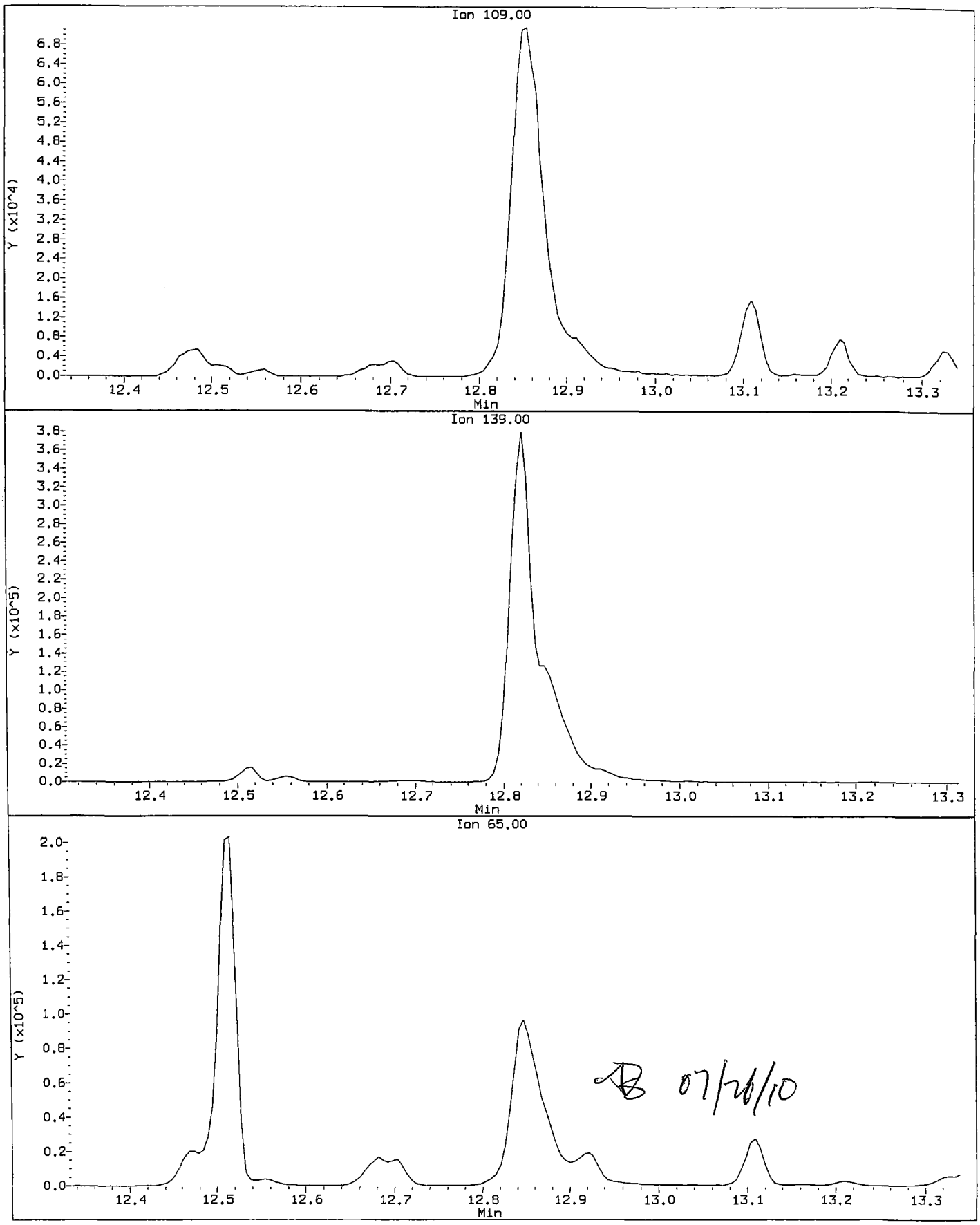
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 07/26/10

Data File: /chem1/nt6.i/20100723.b/07231006.D
Injection Date: 23-JUL-2010 18:01
Instrument: nt6.i
Client Sample ID: IC600723

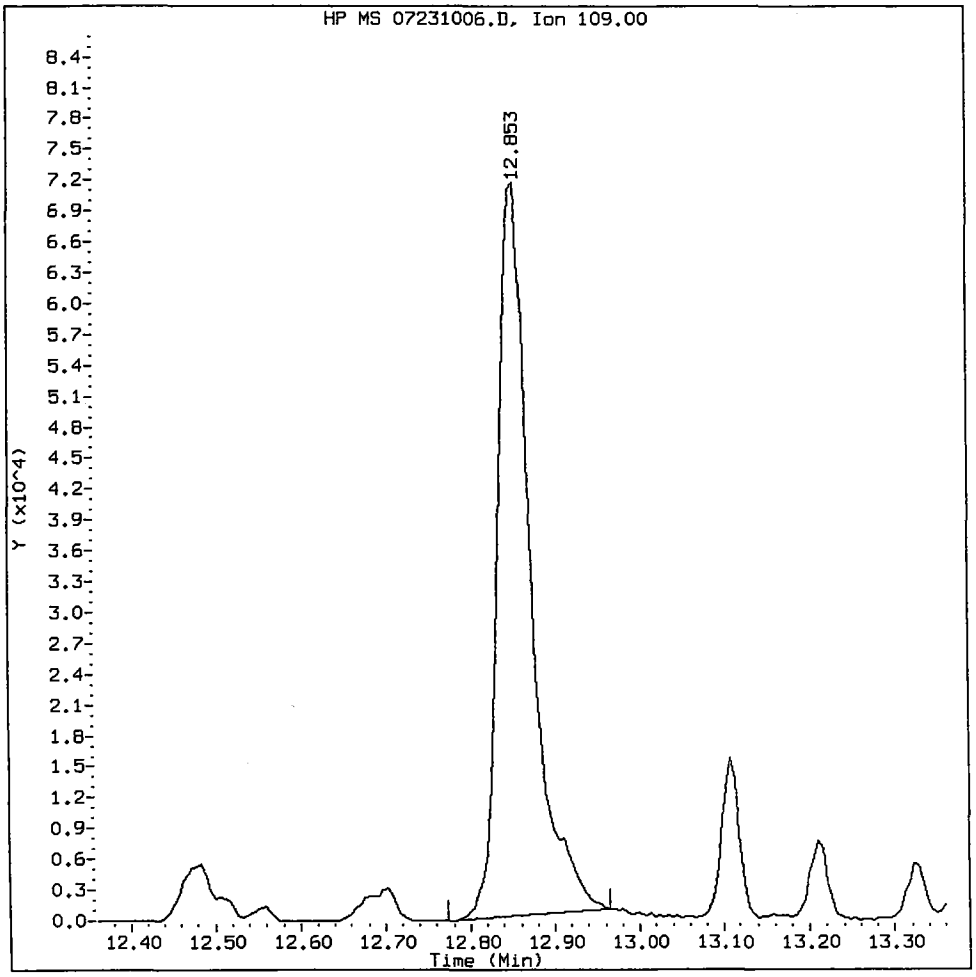
Compound: 4-Nitrophenol
CAS Number: 100-02-7



07/28/10

IC600723, /chem1/nt6.i/20100723.b/07231006.D

4-Nitrophenol Amount: 61.29 Area: 193631



MANUAL INTEGRATION for 4-Nitrophenol

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 07/26/10

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231007.D
Lab Smp Id: IC800723 Client Smp ID: IC800723
Inj Date : 23-JUL-2010 18:38
Operator : JZ Inst ID: nt6.i
Smp Info : IC800723,
Misc Info : 10-
Comment : 1ul Injection
Method : /chem1/nt6.i/20100723.b/SW846072310.m
Meth Date : 26-Jul-2010 11:33 jianqing Quant Type: ISTD
Cal Date : 23-JUL-2010 18:38 Cal File: 07231007.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

07/26/10

AMOUNTS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	Compound Not Detected.					
$ 2	Phenol-d5	99	Compound Not Detected.					
3	Phenol	94	7.237	7.237	(0.953)	1126724	80.0000	71.82
$ 5	2-Chlorophenol-d4	132	Compound Not Detected.					
4	Bis(2-Chloroethyl)ether	93	7.290	7.290	(0.960)	883307	80.0000	73.45
6	2-Chlorophenol	128	7.327	7.327	(0.965)	974470	80.0000	71.84
7	1,3-Dichlorobenzene	146	7.530	7.530	(0.992)	1122451	80.0000	71.04
* 8	1,4-Dichlorobenzene-d4	152	7.595	7.595	(1.000)	184081	20.0000	
9	1,4-Dichlorobenzene	146	7.621	7.621	(1.004)	1114001	80.0000	71.96
$ 10	1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	7.915	7.915	(1.042)	1033272	80.0000	71.78
11	Benzyl alcohol	108	7.910	7.910	(1.041)	587828	80.0000	79.15
14	2,2'-oxybis(1-Chloropropane)	45	8.161	8.161	(1.075)	914751	80.0000	71.33
13	2-Methylphenol	108	8.166	8.166	(1.075)	828388	80.0000	70.81
17	Hexachloroethane	117	8.406	8.406	(1.107)	391434	80.0000	70.00
16	N-Nitroso-di-n-propylamine	70	8.390	8.390	(1.105)	582100	80.0000	71.57
15	4-Methylphenol	108	8.406	8.406	(1.107)	788189	80.0000	68.24
$ 18	Nitrobenzene-d5	82	Compound Not Detected.					
19	Nitrobenzene	77	8.572	8.572	(0.888)	938257	80.0000	72.12
20	Isophorone	82	8.967	8.967	(0.929)	1534357	80.0000	74.06
21	2-Nitrophenol	139	9.090	9.090	(0.942)	590820	80.0000	77.40
22	2,4-Dimethylphenol	107	9.234	9.234	(0.957)	891173	80.0000	70.95
23	Bis(2-Chloroethoxy)methane	93	9.373	9.373	(0.971)	1052582	80.0000	73.32
24	Benzoic acid	105	9.603	9.603	(0.995)	1615248	160.000	174.0 (M)
25	2,4-Dichlorophenol	162	9.485	9.485	(0.983)	813900	80.0000	74.01
26	1,2,4-Trichlorobenzene	180	9.597	9.597	(0.994)	860458	80.0000	71.62
* 27	Naphthalene-d8	136	9.651	9.651	(1.000)	604045	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	9.683	9.683	(1.003)	2226345	80.0000	65.21
	29 4-Chloroaniline	127	9.843	9.843	(1.020)	933966	80.0000	68.29
	30 Hexachlorobutadiene	225	10.009	10.009	(1.037)	531907	80.0000	75.92
	31 4-Chloro-3-methylphenol	107	10.682	10.682	(1.107)	783143	80.0000	73.86
	32 2-Methylnaphthalene	141	10.805	10.805	(1.120)	1296353	80.0000	69.19
	33 Hexachlorocyclopentadiene	237	11.184	11.184	(0.894)	562487	80.0000	92.87
	34 2,4,6-Trichlorophenol	196	11.333	11.333	(0.906)	612923	80.0000	79.37
	35 2,4,5-Trichlorophenol	196	11.392	11.392	(0.911)	629388	80.0000	78.99
$	36 2-Fluorobiphenyl	172	Compound Not Detected.					
	37 2-Chloronaphthalene	162	11.579	11.579	(0.926)	1529762	80.0000	68.24
	38 2-Nitroaniline	65	11.835	11.835	(0.947)	440827	80.0000	78.99
	39 Dimethylphthalate	163	12.220	12.220	(0.977)	1852039	80.0000	73.16
	40 Acenaphthylene	152	12.252	12.252	(0.980)	2262161	80.0000	65.17
	41 2,6-Dinitrotoluene	165	12.305	12.305	(0.984)	495961	80.0000	82.45
*	42 Acenaphthene-d10	164	12.503	12.503	(1.000)	337280	20.0000	
	43 3-Nitroaniline	138	12.519	12.519	(1.001)	332728	80.0000	63.22
	44 Acenaphthene	153	12.562	12.562	(1.005)	1537831	80.0000	70.94
	45 2,4-Dinitrophenol	184	12.690	12.690	(1.015)	800753	160.000	188.3
	46 Dibenzofuran	168	12.823	12.823	(1.026)	2012989	80.0000	69.91
	47 4-Nitrophenol	109	12.861	12.861	(1.029)	250336	80.0000	80.02 (M)
	48 2,4-Dinitrotoluene	165	12.930	12.930	(1.034)	641395	80.0000	82.78
	50 Diethylphthalate	149	13.368	13.368	(1.069)	1683972	80.0000	71.56
	49 Fluorene	166	13.379	13.379	(1.070)	1669783	80.0000	68.07
	51 4-Chlorophenyl-phenylether	204	13.411	13.411	(1.073)	924625	80.0000	76.22
	52 4-Nitroaniline	138	13.523	13.523	(1.082)	480261	80.0000	81.96
	53 4,6-Dinitro-2-methylphenol	198	13.593	13.593	(0.914)	898863	160.000	165.3
	54 N-Nitrosodiphenylamine	169	13.630	13.630	(0.917)	1336197	80.0000	71.05
$	55 2,4,6-Tribromophenol	330	Compound Not Detected.					
	56 4-Bromophenyl-phenylether	248	14.185	14.185	(0.954)	623118	80.0000	77.37
	57 Hexachlorobenzene	284	14.399	14.399	(0.968)	646668	80.0000	76.22
	58 Pentachlorophenol	266	14.704	14.704	(0.989)	459345	80.0000	91.60
*	59 Phenanthrene-d10	188	14.869	14.869	(1.000)	549184	20.0000	
	60 Phenanthrene	178	14.912	14.912	(1.003)	2305020	80.0000	67.57
	61 Anthracene	178	14.987	14.987	(1.008)	2344156	80.0000	66.52
	62 Carbazole	167	15.280	15.280	(1.028)	2213821	80.0000	67.69
	63 Di-n-butylphthalate	149	16.012	16.012	(1.077)	2664538	80.0000	66.47
	64 Fluoranthene	202	16.835	16.835	(1.132)	2453870	80.0000	66.39
	65 Pyrene	202	17.187	17.187	(0.897)	2416567	80.0000	69.90
$	66 Terphenyl-d14	244	Compound Not Detected.					
	67 Butylbenzylphthalate	149	18.421	18.421	(0.961)	1317448	80.0000	78.82
	68 Benzo(a)anthracene	228	19.147	19.147	(0.999)	2451149	80.0000	73.87
*	69 Chrysene-d12	240	19.169	19.169	(1.000)	574045	20.0000	
	70 3,3'-Dichlorobenzidine	252	19.174	19.174	(1.000)	807285	80.0000	74.97
	71 Chrysene	228	19.217	19.217	(1.002)	2263478	80.0000	72.87
	72 bis(2-Ethylhexyl)phthalate	149	19.420	19.420	(0.954)	1765240	80.0000	75.51
*	134 Di-n-octylphthalate-d4	153	20.354	20.354	(1.000)	737424	20.0000	
	73 Di-n-octylphthalate	149	20.360	20.360	(1.000)	2759606	80.0000	69.04

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	20.803	20.803	(0.976)	2878066	80.0000	72.41
75	Benzo(k)fluoranthene	252	20.840	20.840	(0.978)	2488308	80.0000	60.66
187	Total Benzofluoranthenes	252	20.840	20.840	(0.978)	5048243	160.000	132.0
76	Benzo(a)pyrene	252	21.246	21.246	(0.997)	2615653	80.0000	69.86
* 77	Perylene-d12	264	21.316	21.316	(1.000)	593718	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	22.720	22.720	(1.066)	3631800	80.0000	72.51
79	Dibenzo(a,h)anthracene	278	22.747	22.747	(1.067)	2711737	80.0000	70.46
80	Benzo(g,h,i)perylene	276	23.089	23.089	(1.083)	3230387	80.0000	71.50
90	N-Nitrosodimethylamine	74	2.750	2.750	(0.362)	620385	80.0000	78.18
103	Pyridine	79	2.702	2.702	(0.356)	1128868	80.0000	79.58
91	Aniline	93	7.157	7.157	(0.942)	1299555	80.0000	72.33
105	1-methylnaphthalene	141	10.975	10.975	(1.137)	1345774	80.0000	69.54
93	Benzidine	184	17.107	17.107	(0.892)	743780	80.0000	67.39
111	Azobenzene (1,2-DP-Hydrazine)	77	13.667	13.667	(1.093)	1784288	80.0000	74.77
143	1,4-Dioxane	88	2.168	2.168	(0.285)	412510	80.0000	78.51
$ 137	d8-1,4-Dioxane	96	2.125	2.125	(0.280)	419134	80.0000	80.55
144	alpha-Terpineol	59	9.731	9.731	(1.008)	549670	80.0000	75.83
98	Retene	219	17.759	17.759	(0.926)	959990	80.0000	80.14
133	Butylatedhydroxytoluene	205	12.706	12.706	(1.016)	1283146	80.0000	67.59
115	Tributyl Phosphate	99	13.763	13.763	(0.926)	2014000	80.0000	69.31
116	Dibutyl Phenyl Phosphate	175	15.457	15.457	(1.040)	1481750	80.0000	74.09
117	Butyl Diphenyl Phosphate	94	17.134	17.134	(0.894)	494257	80.0000	78.81
118	Triphenyl Phosphate	326	18.731	18.731	(0.977)	539388	80.0000	86.01
123	Acetophenone	105	8.316	8.316	(1.095)	1188668	80.0000	74.79
179	n-Decane	57	7.450	7.450	(0.981)	749840	80.0000	72.12
180	n-Octadecane	57	14.832	14.832	(0.997)	703022	80.0000	65.16
168	Pentachlorobenzene	250	12.866	12.866	(1.029)	718448	80.0000	77.34
113	Diphenyl Oxide	170	11.782	11.782	(0.942)	1519811	80.0000	69.89
112	Biphenyl	154	11.590	11.590	(0.927)	1616091	80.0000	66.98
120	2,3,4,6-Tetrachlorophenol	232	13.112	13.112	(1.049)	600513	80.0000	84.23
151	1,2,4,5-Tetrachlorobenzene	216	11.141	11.141	(0.891)	882626	80.0000	73.33
110	Tetrachloroguaiacol	247	14.842	14.842	(0.998)	648752	160.000	153.2
109	3,4,5-Trichloroguaiacol	213	13.219	13.219	(0.889)	337376	80.0000	78.39
181	3,4,6-Trichloroguaiacol	211	13.331	13.331	(1.755)	409150	80.0000	83.85
108	4,5,6-Trichloroguaiacol	213	14.250	14.250	(1.140)	347921	80.0000	82.16
184	3,4-Dichloroguaiacol	192	11.675	11.675	(1.537)	356500	80.0000	83.24
107	4,5-Dichloroguaiacol	192	12.476	12.476	(0.998)	832681	160.000	156.6
182	4,6-Dichloroguaiacol	192	12.476	12.476	(1.643)	834886	160.000	160.8
185	4-Chloroguaiacol	115	10.596	10.596	(1.395)	216477	40.0000	40.55
186	Carbaryl	144	15.702	15.702	(1.056)	1238106	80.0000	79.80
106	Guaiacol	124	8.588	8.588	(1.131)	826280	80.0000	74.37

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 07231007.D
Lab Smp Id: IC800723
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt6.i/20100723.b/SW846072310.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 15:01
Client Smp ID: IC800723
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	182786	91393	365572	184081	0.71
27 Naphthalene-d8	584137	292068	1168274	604045	3.41
42 Acenaphthene-d10	320442	160221	640884	337280	5.25
59 Phenanthrene-d10	503793	251896	1007586	549184	9.01
69 Chrysene-d12	532343	266172	1064686	574045	7.83
134 Di-n-octylphthala	719428	359714	1438856	737424	2.50
77 Perylene-d12	517269	258634	1034538	593718	14.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.59	0.03
27 Naphthalene-d8	9.64	9.14	10.14	9.65	0.08
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	0.02
59 Phenanthrene-d10	14.86	14.36	15.36	14.87	0.05
69 Chrysene-d12	19.16	18.66	19.66	19.17	0.04
134 Di-n-octylphthala	20.35	19.85	20.85	20.35	0.04
77 Perylene-d12	21.31	20.81	21.81	21.32	0.04

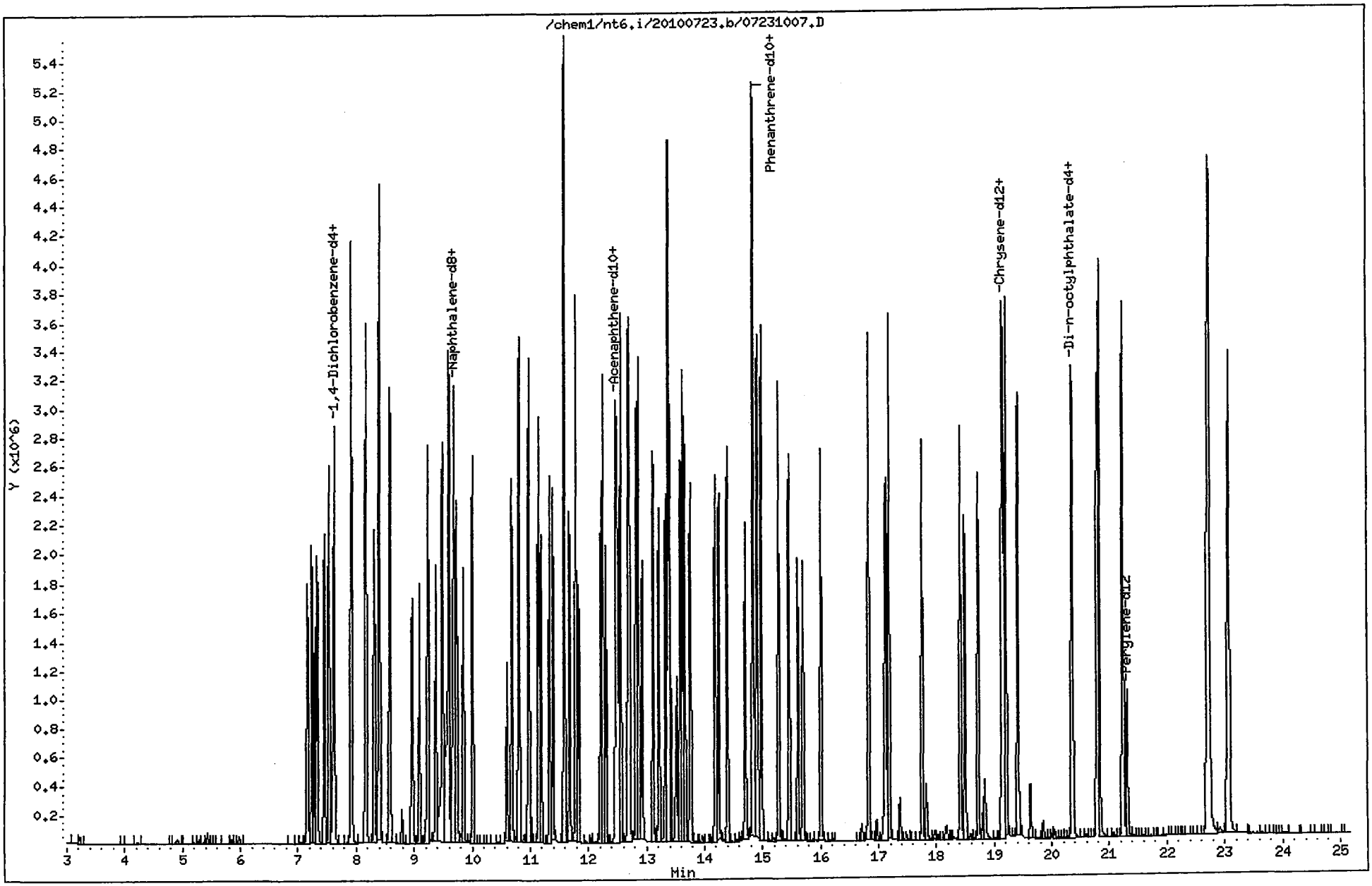
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt6.i/20100723.b/07231007.D
Date : 23-JUL-2010 18:38
Client ID: IC800723
Sample Info: IC800723,

Instrument: nt6.i

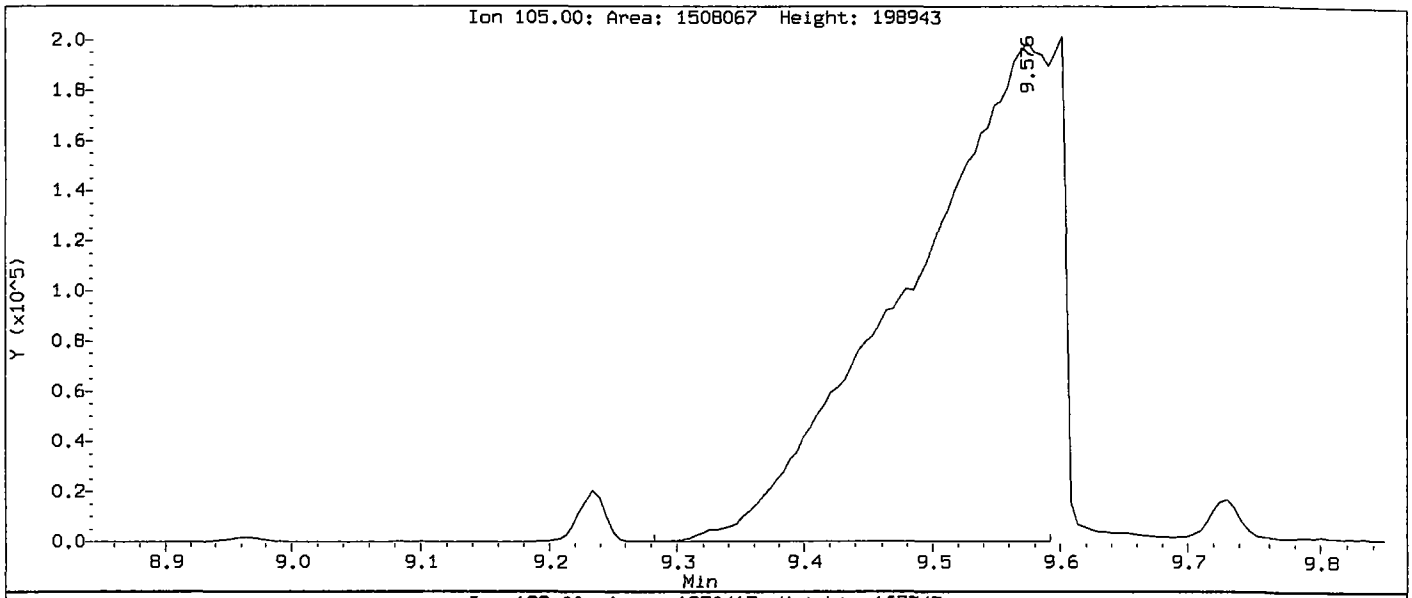
Operator: JZ
Column diameter: 0.32

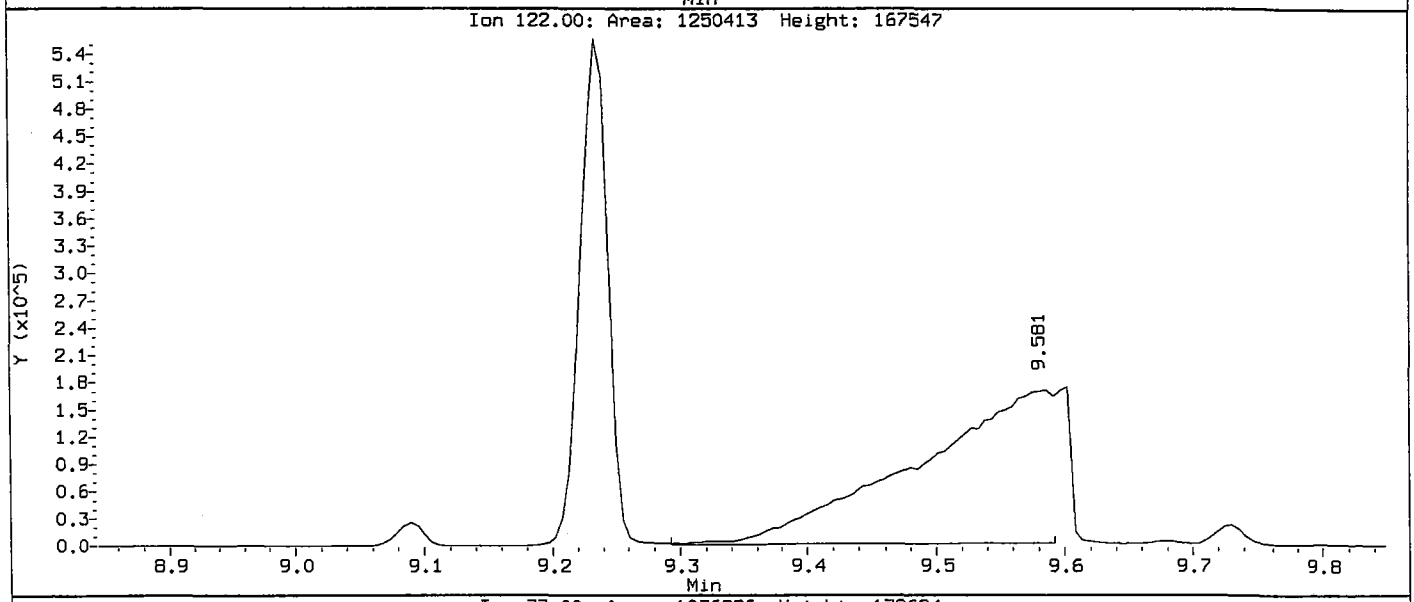
Column phase: ZB-5msi

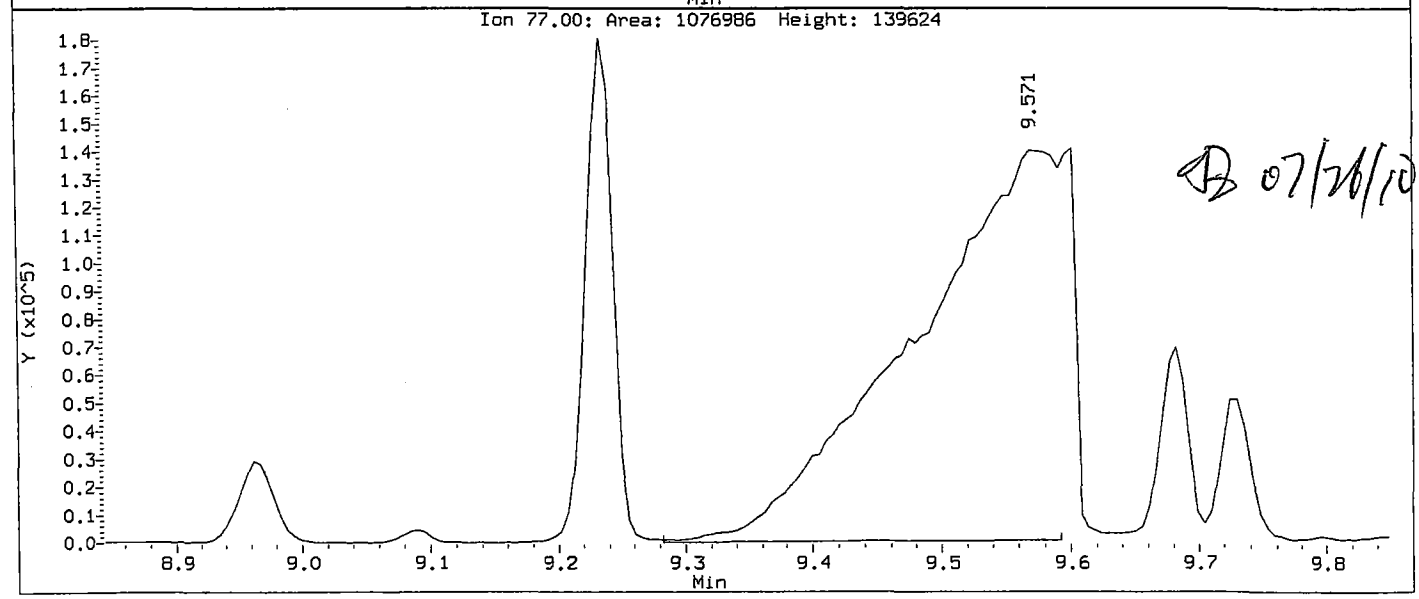


Data File: /chem1/nt6.i/20100723.b/07231007.D
Injection Date: 23-JUL-2010 18:38
Instrument: nt6.i
Client Sample ID: IC800723

Compound: Benzoic acid
CAS Number: 65-85-0



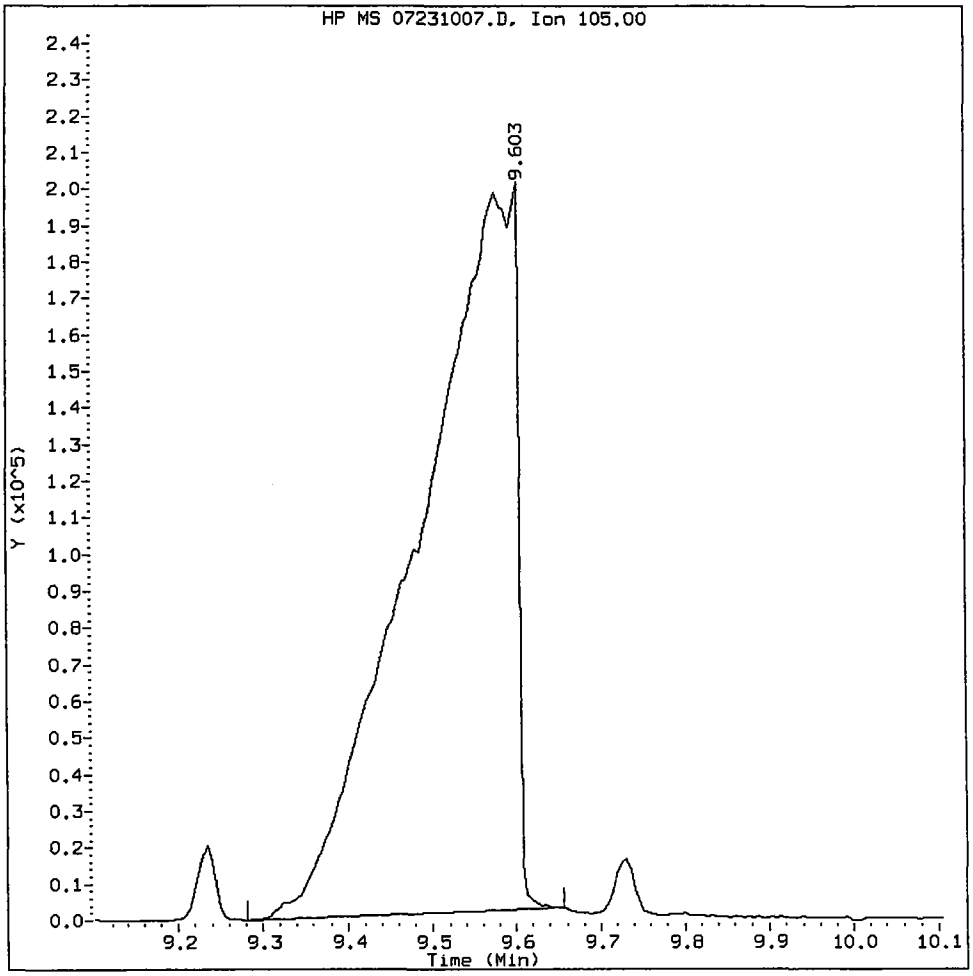




D 07/26/10

IC800723, /chem1/nt6.i/20100723.b/07231007.D

Benzoic acid Amount: 173.97 Area: 1615248



MANUAL INTEGRATION for Benzoic acid

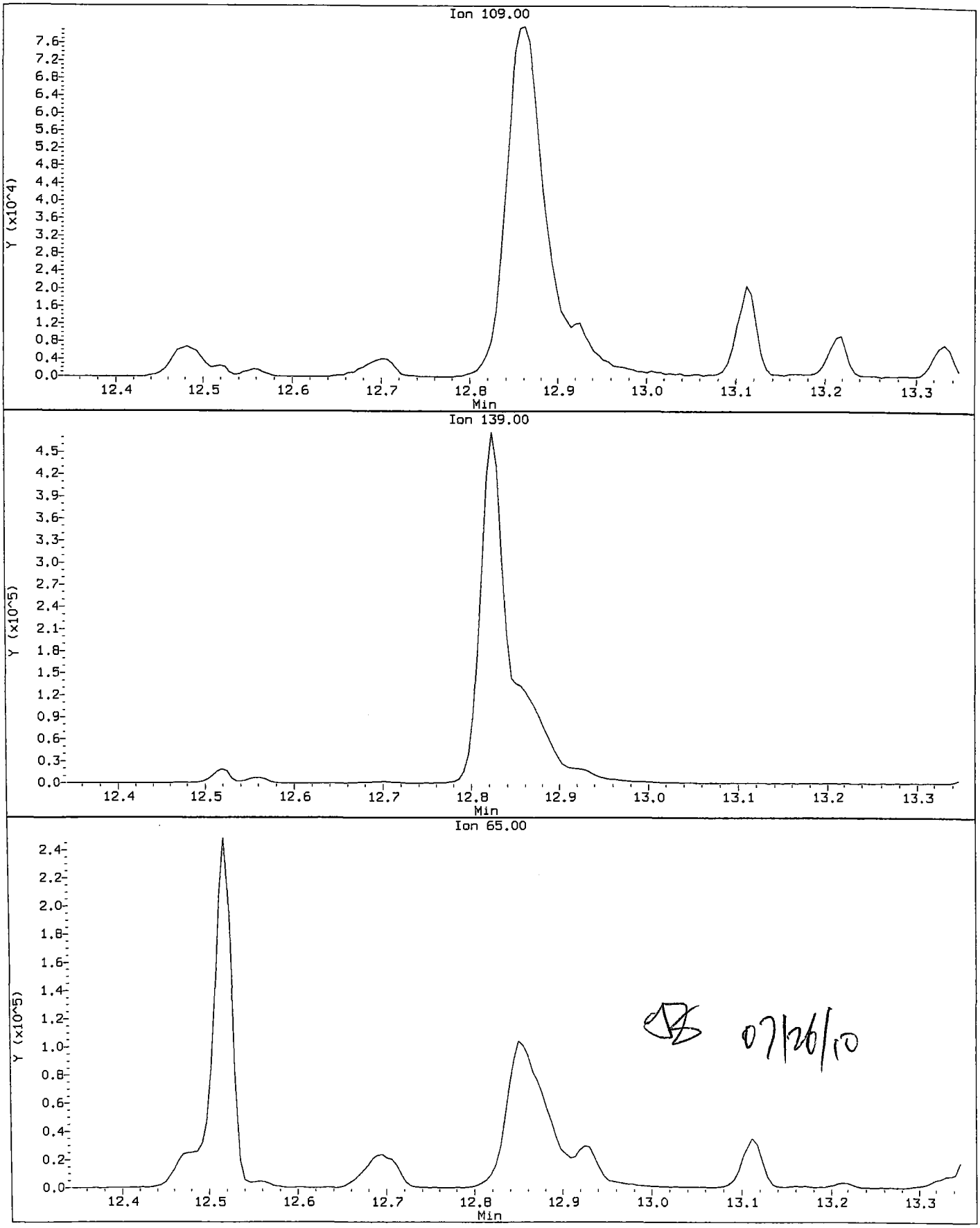
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 07/26/10

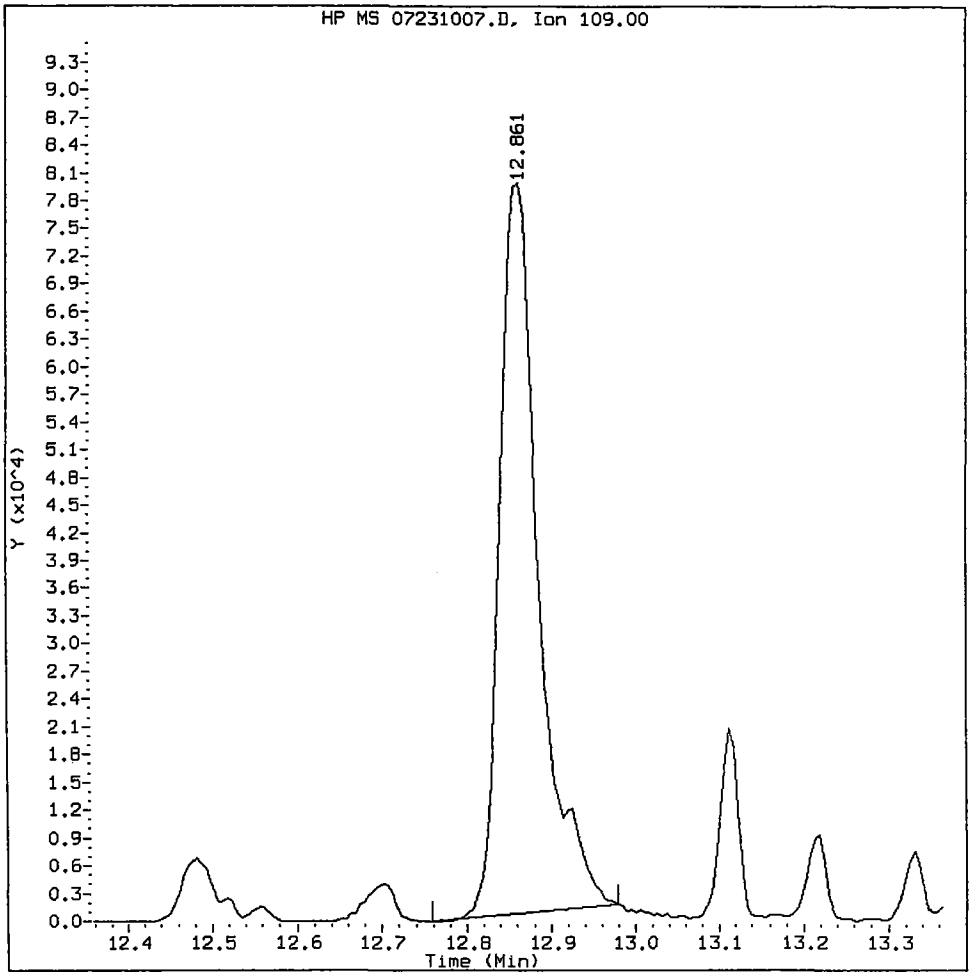
Data File: /chem1/nt6.i/20100723.b/07231007.D
Injection Date: 23-JUL-2010 18:38
Instrument: nt6.i
Client Sample ID: IC800723

Compound: 4-Nitrophenol
CAS Number: 100-02-7



IC800723, /chem1/nt6.i/20100723.b/07231007.D

4-Nitrophenol Amount: 80.02 Area: 250336



MANUAL INTEGRATION for 4-Nitrophenol

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: AZ Date: 07/26/10

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231008.D
Lab Smp Id: ICV0723 Client Smp ID: ICV0723
Inj Date : 23-JUL-2010 20:17
Operator : JZ Inst ID: nt6.i
Smp Info : ICV0723,
Misc Info : 10-
Comment : 1ul Injection
Method : /chem1/nt6.i/20100723.b/SW846072310.m
Meth Date : 26-Jul-2010 11:35 jianqing Quant Type: ISTD
Cal Date : 23-JUL-2010 18:38 Cal File: 07231007.D
Als bottle: 8 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

JZ 07/26/10

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$	1	2-Fluorophenol	112	5.602	5.610	(0.738)	302142	25.7548	25.75(R)
$	2	Phenol-d5	99	7.204	7.218	(0.949)	335463	24.7563	24.76(R)
	3	Phenol	94	7.226	7.237	(0.952)	339785	22.5779	22.58
$	5	2-Chlorophenol-d4	132	7.295	7.303	(0.961)	281753	24.6175	24.62(R)
	4	Bis(2-Chloroethyl)ether	93	7.279	7.290	(0.959)	304187	26.3668	26.37
	6	2-Chlorophenol	128	7.316	7.327	(0.964)	291054	22.3679	22.37
	7	1,3-Dichlorobenzene	146	7.525	7.530	(0.992)	378563	24.9751	24.98
*	8	1,4-Dichlorobenzene-d4	152	7.589	7.595	(1.000)	176582	20.0000	
	9	1,4-Dichlorobenzene	146	7.616	7.621	(1.004)	373980	25.1845	25.18
$	10	1,2-Dichlorobenzene-d4	152	7.888	7.896	(1.039)	197842	24.9146	24.91(R)
	12	1,2-Dichlorobenzene	146	7.909	7.915	(1.042)	346390	25.0849	25.08
	11	Benzyl alcohol	108	7.899	7.910	(1.041)	205971	28.9097	28.91
	14	2,2'-oxybis(1-Chloropropane)	45	8.155	8.161	(1.075)	320212	26.0298	26.03
	13	2-Methylphenol	108	8.155	8.166	(1.075)	260466	23.2089	23.21
	17	Hexachloroethane	117	8.401	8.406	(1.107)	138110	25.7462	25.75
	16	N-Nitroso-di-n-propylamine	70	8.374	8.390	(1.103)	210206	26.9423	26.94
	15	4-Methylphenol	108	8.390	8.406	(1.106)	259863	23.4548	23.45
$	18	Nitrobenzene-d5	82	8.534	8.542	(0.885)	274740	24.2876	24.29(R)
	19	Nitrobenzene	77	8.561	8.572	(0.888)	317981	25.3562	25.36
	20	Isophorone	82	8.945	8.967	(0.927)	556067	27.8428	27.84
	21	2-Nitrophenol	139	9.079	9.090	(0.941)	165718	22.5221	22.52
	22	2,4-Dimethylphenol	107	9.223	9.234	(0.956)	266385	22.0023	22.00
	23	Bis(2-Chloroethoxy)methane	93	9.362	9.373	(0.971)	346047	25.0051	25.01
	24	Benzoic acid	105	9.458	9.603	(0.981)	411600	45.9898	45.99
	25	2,4-Dichlorophenol	162	9.474	9.485	(0.982)	229314	21.6315	21.63
	26	1,2,4-Trichlorobenzene	180	9.592	9.597	(0.994)	290055	25.0468	25.05
*	27	Naphthalene-d8	136	9.645	9.651	(1.000)	582262	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
	28 Naphthalene	128	9.672	9.683	(1.003)	855843	26.0064	26.01
	29 4-Chloroaniline	127	9.837	9.843	(1.020)	369626	28.0380	28.04
	30 Hexachlorobutadiene	225	10.003	10.009	(1.037)	170071	25.1822	25.18
	31 4-Chloro-3-methylphenol	107	10.671	10.682	(1.106)	226211	22.1338	22.13
	32 2-Methylnaphthalene	141	10.799	10.805	(1.120)	485070	26.8581	26.86
	33 Hexachlorocyclopentadiene	237	11.178	11.184	(0.894)	155013	23.0155	23.02
	34 2,4,6-Trichlorophenol	196	11.322	11.333	(0.906)	163848	22.0919	22.09
	35 2,4,5-Trichlorophenol	196	11.381	11.392	(0.911)	172363	22.5234	22.52
$	36 2-Fluorobiphenyl	172	11.450	11.453	(0.916)	546411	24.0943	24.09(R)
	37 2-Chloronaphthalene	162	11.573	11.579	(0.926)	532254	24.7189	24.72
	38 2-Nitroaniline	65	11.824	11.835	(0.946)	149026	27.8009	27.80
	39 Dimethylphthalate	163	12.204	12.220	(0.976)	629083	25.8720	25.87
	40 Acenaphthylene	152	12.246	12.252	(0.980)	848021	25.4360	25.44
	41 2,6-Dinitrotoluene	165	12.294	12.305	(0.984)	145173	25.1272	25.13
*	42 Acenaphthene-d10	164	12.497	12.503	(1.000)	323945	20.0000	
	43 3-Nitroaniline	138	12.503	12.519	(1.000)	149842	29.6424	29.64
	44 Acenaphthene	153	12.551	12.562	(1.004)	536105	25.7493	25.75
	45 2,4-Dinitrophenol	184	12.668	12.690	(1.014)	201042	42.3460	42.35
	46 Dibenzofuran	168	12.812	12.823	(1.025)	752607	27.2141	27.21
	47 4-Nitrophenol	109	12.839	12.861	(1.027)	71518	23.8006	23.80
	48 2,4-Dinitrotoluene	165	12.914	12.930	(1.033)	194901	26.1903	26.19
	50 Diethylphthalate	149	13.357	13.368	(1.069)	572287	25.3218	25.32
	49 Fluorene	166	13.368	13.379	(1.070)	602733	25.5811	25.58
	51 4-Chlorophenyl-phenylether	204	13.405	13.411	(1.073)	292139	25.0726	25.07
	52 4-Nitroaniline	138	13.496	13.523	(1.080)	152959	27.1798	27.18
	53 4,6-Dinitro-2-methylphenol	198	13.566	13.593	(0.913)	223359	43.6280	43.63
	54 N-Nitrosodiphenylamine	169	13.614	13.630	(0.916)	427806	24.1637	24.16
$	55 2,4,6-Tribromophenol	330	13.790	13.798	(1.103)	75610	25.6162	25.62(R)
	56 4-Bromophenyl-phenylether	248	14.180	14.185	(0.954)	191744	25.2907	25.29
	57 Hexachlorobenzene	284	14.388	14.399	(0.968)	200104	25.0540	25.05
	58 Pentachlorophenol	266	14.692	14.704	(0.988)	106284	22.5154	22.52
*	59 Phenanthrene-d10	188	14.863	14.869	(1.000)	516976	20.0000	
	60 Phenanthrene	178	14.901	14.912	(1.002)	817896	25.4699	25.47
	61 Anthracene	178	14.970	14.987	(1.007)	843835	25.4372	25.44
	62 Carbazole	167	15.269	15.280	(1.027)	757904	24.6171	24.62
	63 Di-n-butylphthalate	149	16.006	16.012	(1.077)	984901	26.1018	26.10
	64 Fluoranthene	202	16.829	16.835	(1.132)	924404	26.5666	26.57
	65 Pyrene	202	17.176	17.187	(0.896)	895541	27.3311	27.33
$	66 Terphenyl-d14	244	17.513	17.515	(0.914)	502221	26.0581	26.06(R)
	67 Butylbenzylphthalate	149	18.410	18.421	(0.961)	445853	28.1439	28.14
	68 Benzo(a)anthracene	228	19.136	19.147	(0.999)	853493	27.1378	27.14
*	69 Chrysene-d12	240	19.163	19.169	(1.000)	544051	20.0000	
	70 3,3'-Dichlorobenzidine	252	19.163	19.174	(1.000)	296160	29.0191	29.02
	71 Chrysene	228	19.200	19.217	(1.002)	787876	26.7633	26.76
	72 bis(2-Ethylhexyl)phthalate	149	19.414	19.420	(0.954)	606626	26.1539	26.15
*	134 Di-n-octylphthalate-d4	153	20.349	20.354	(1.000)	731609	20.0000	
	73 Di-n-octylphthalate	149	20.359	20.360	(1.001)	983437	24.7985	24.80

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
	74 Benzo(b)fluoranthene	252	20.787	20.803	(0.976)	939291	26.8309	26.83
	75 Benzo(k)fluoranthene	252	20.819	20.840	(0.977)	899448	24.8923	24.89
	187 Total Benzofluoranthenes	252	20.819	20.840	(0.977)	1738917	51.6417	51.64
	76 Benzo(a)pyrene	252	21.225	21.246	(0.996)	801751	24.3128	24.31
*	77 Perylene-d12	264	21.305	21.316	(1.000)	522945	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	22.699	22.720	(1.065)	1164841	26.4045	26.40
	79 Dibenzo(a,h)anthracene	278	22.725	22.747	(1.067)	891426	26.2958	26.30
	80 Benzo(g,h,i)perylene	276	23.057	23.089	(1.082)	1016920	25.5542	25.55
	90 N-Nitrosodimethylamine	74	2.718	2.750	(0.358)	203152	26.6890	26.69
	103 Pyridine	79	2.686	2.702	(0.354)	386661	28.4162	28.42
	91 Aniline	93	7.151	7.157	(0.942)	509239	29.5450	29.55
	105 1-methylnaphthalene	141	10.964	10.975	(1.137)	465323	24.9433	24.94
	93 Benzidine	184	17.101	17.107	(0.892)	330482	31.5959	31.60
	111 Azobenzene (1,2-DP-Hydrazine)	77	13.651	13.667	(1.092)	566528	24.7167	24.72
	143 1,4-Dioxane	88	2.146	2.168	(0.283)	134807	26.7477	26.75
$	137 d8-1,4-Dioxane	96	2.104	2.125	(0.277)	124707	24.9828	24.98 (R)
	144 alpha-Terpineol	59	9.720	9.731	(1.008)	173894	24.8865	24.89
	98 Retene	219	17.753	17.759	(0.926)	302825	26.6747	26.67
	133 Butylatedhydroxytoluene	205	12.700	12.706	(1.016)	453731	24.8832	24.88
	115 Tributyl Phosphate	99	13.736	13.763	(0.924)	694262	25.3816	25.38
	116 Dibutyl Phenyl Phosphate	175	15.451	15.457	(1.040)	487084	25.8710	25.87
	117 Butyl Diphenyl Phosphate	94	17.128	17.134	(0.894)	158542	26.6745	26.67
	118 Triphenyl Phosphate	326	18.720	18.731	(0.977)	159074	26.7635	26.76
	123 Acetophenone	105	8.299	8.316	(1.094)	420299	27.5683	27.57
	179 n-Decane	57	7.445	7.450	(0.981)	271295	27.2026	27.20
	180 n-Octadecane	57	14.826	14.832	(0.997)	288829	28.4370	28.44
	168 Pentachlorobenzene	250	12.855	12.866	(1.029)	231893	25.9903	25.99
	113 Diphenyl Oxide	170	11.776	11.782	(0.942)	374237	17.9170	17.92
	112 Biphenyl	154	11.579	11.590	(0.926)	642598	27.7286	27.73
	120 2,3,4,6-Tetrachlorophenol	232	13.106	13.112	(1.049)	176844	25.8264	25.83
	151 1,2,4,5-Tetrachlorobenzene	216	11.135	11.141	(0.891)	282106	24.4037	24.40
	110 Tetrachloroguaiacol	247	14.826	14.842	(0.997)	201384	50.5278	50.53
	109 3,4,5-Trichloroguaiacol	213	13.208	13.219	(0.889)	99787	24.6313	24.63
	181 3,4,6-Trichloroguaiacol	211	13.320	13.331	(1.755)	118646	25.3490	25.35
	108 4,5,6-Trichloroguaiacol	213	14.238	14.250	(1.139)	102183	25.1219	25.12
	184 3,4-Dichloroguaiacol	192	11.669	11.675	(1.538)	104314	25.3919	25.39
	107 4,5-Dichloroguaiacol	192	12.465	12.476	(0.997)	254884	49.8970	49.90
	182 4,6-Dichloroguaiacol	192	12.465	12.476	(1.643)	254884	51.1860	51.19
	185 4-Chloroguaiacol	115	10.591	10.596	(1.396)	65963	12.8795	12.88
	186 Carbaryl	144	15.686	15.702	(1.055)	383589	26.2646	26.26
	106 Guaiacol	124	8.577	8.588	(1.130)	271343	25.4590	25.46

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 07231008.D
Lab Smp Id: ICV0723
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt6.i/20100723.b/SW846072310.m
Misc Info: 10-

Calibration Date: 23-JUL-2010
Calibration Time: 15:01
Client Smp ID: ICV0723
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	182786	91393	365572	176582	-3.39
27 Naphthalene-d8	584137	292068	1168274	582262	-0.32
42 Acenaphthene-d10	320442	160221	640884	323945	1.09
59 Phenanthrene-d10	503793	251896	1007586	516976	2.62
69 Chrysene-d12	532343	266172	1064686	544051	2.20
134 Di-n-octylphthala	719428	359714	1438856	731609	1.69
77 Perylene-d12	517269	258634	1034538	522945	1.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.59	-0.04
27 Naphthalene-d8	9.64	9.14	10.14	9.65	0.02
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	-0.02
59 Phenanthrene-d10	14.86	14.36	15.36	14.86	0.01
69 Chrysene-d12	19.16	18.66	19.66	19.16	0.01
134 Di-n-octylphthala	20.35	19.85	20.85	20.35	0.01
77 Perylene-d12	21.31	20.81	21.81	21.30	-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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: NONE
Lab Smp Id: ICV0723
Level:
Data Type: MS DATA
SpikeList File: ICVS.spk
Sublist File: ICAL.sub
Method File: /chem1/nt6.i/20100723.b/SW846072310.m
Misc Info: 10-

Client SDG: 20100723
Fraction: SV
Client Smp ID: ICV0723
Operator: JZ
SampleType: LCS
Quant Type: ISTD

SPIKE	COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
3	Phenol	25.00	22.58	90.31	
4	Bis(2-Chloroethyl)	25.00	26.37	105.47	
6	2-Chlorophenol	25.00	22.37	89.47	
7	1,3-Dichlorobenzen	25.00	24.98	99.90	
9	1,4-Dichlorobenzen	25.00	25.18	100.74	
11	Benzyl alcohol	25.00	28.91	115.64	
12	1,2-Dichlorobenzen	25.00	25.08	100.34	
13	2-Methylphenol	25.00	23.21	92.84	
14	2,2'-oxybis(1-Chlo	25.00	26.03	104.12	
15	4-Methylphenol	25.00	23.45	93.82	
16	N-Nitroso-di-n-pro	25.00	26.94	107.77	
17	Hexachloroethane	25.00	25.75	102.98	
19	Nitrobenzene	25.00	25.36	101.42	
20	Isophorone	25.00	27.84	111.37	
21	2-Nitrophenol	25.00	22.52	90.09	
22	2,4-Dimethylphenol	25.00	22.00	88.01	
23	Bis(2-Chloroethoxy	25.00	25.01	100.02	
24	Benzoic acid	50.00	45.99	91.98	
25	2,4-Dichlorophenol	25.00	21.63	86.53	
26	1,2,4-Trichloroben	25.00	25.05	100.19	
28	Naphthalene	25.00	26.01	104.03	
29	4-Chloroaniline	25.00	28.04	112.15	
30	Hexachlorobutadien	25.00	25.18	100.73	
31	4-Chloro-3-methylp	25.00	22.13	88.54	
32	2-Methylnaphthalen	25.00	26.86	107.43	
33	Hexachlorocyclopen	25.00	23.02	92.06	
34	2,4,6-Trichlorophe	25.00	22.09	88.37	
35	2,4,5-Trichlorophe	25.00	22.52	90.09	
37	2-Chloronaphthalen	25.00	24.72	98.88	
38	2-Nitroaniline	25.00	27.80	111.20	
39	Dimethylphthalate	25.00	25.87	103.49	
40	Acenaphthylene	25.00	25.44	101.74	
41	2,6-Dinitrotoluene	25.00	25.13	100.51	

SPIKE	COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
43	3-Nitroaniline	25.00	29.64	118.57	
44	Acenaphthene	25.00	25.75	103.00	
45	2,4-Dinitrophenol	50.00	42.35	84.69	
46	Dibenzofuran	25.00	27.21	108.86	
47	4-Nitrophenol	25.00	23.80	95.20	
48	2,4-Dinitrotoluene	25.00	26.19	104.76	
49	Fluorene	25.00	25.58	102.32	
50	Diethylphthalate	25.00	25.32	101.29	
51	4-Chlorophenyl-phe	25.00	25.07	100.29	
52	4-Nitroaniline	25.00	27.18	108.72	
53	4,6-Dinitro-2-meth	50.00	43.63	87.26	
54	N-Nitrosodiphenyla	25.00	24.16	96.65	
56	4-Bromophenyl-phen	25.00	25.29	101.16	
57	Hexachlorobenzene	25.00	25.05	100.22	
58	Pentachlorophenol	25.00	22.52	90.06	
60	Phenanthrene	25.00	25.47	101.88	
61	Anthracene	25.00	25.44	101.75	
62	Carbazole	25.00	24.62	98.47	
63	Di-n-butylphthalat	25.00	26.10	104.41	
64	Fluoranthene	25.00	26.57	106.27	
65	Pyrene	25.00	27.33	109.32	
67	Butylbenzylphthala	25.00	28.14	112.58	
68	Benzo(a)anthracene	25.00	27.14	108.55	
70	3,3'-Dichlorobenzi	25.00	29.02	116.08	
71	Chrysene	25.00	26.76	107.05	
72	bis(2-Ethylhexyl)p	25.00	26.15	104.62	
73	Di-n-octylphthalat	25.00	24.80	99.19	
74	Benzo(b)fluoranthe	25.00	26.83	107.32	
75	Benzo(k)fluoranthe	25.00	24.89	99.57	
76	Benzo(a)pyrene	25.00	24.31	97.25	
78	Indeno(1,2,3-cd)py	25.00	26.40	105.62	
79	Dibenzo(a,h)anthra	25.00	26.30	105.18	
80	Benzo(g,h,i)peryle	25.00	25.55	102.22	
90	N-Nitrosodimethyla	25.00	26.69	106.76	
91	Aniline	25.00	29.55	118.18	
93	Benzidine	25.00	31.60	126.38	
103	Pyridine	25.00	28.42	113.66	
105	1-methylnaphthalen	25.00	24.94	99.77	
120	2,3,4,6-Tetrachlor	25.00	25.83	103.31	
151	1,2,4,5-Tetrachlor	25.00	24.40	97.61	
143	1,4-Dioxane	25.00	26.75	106.99	
110	Tetrachloroguaiaco	50.00	50.53	101.06	
109	3,4,5-Trichlorogua	25.00	24.63	98.53	
181	3,4,6-Trichlorogua	25.00	25.35	101.40	
108	4,5,6-Trichlorogua	25.00	25.12	100.49	
184	3,4-Dichloroguaiac	25.00	25.39	101.57	
107	4,5-Dichloroguaiac	50.00	49.90	99.79	

SPIKE COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
182 4,6-Dichloroguaiac	50.00	51.19	102.37	
185 4-Chloroguaiacol	12.50	12.88	103.04	
106 Guaiacol	25.00	25.46	101.84	

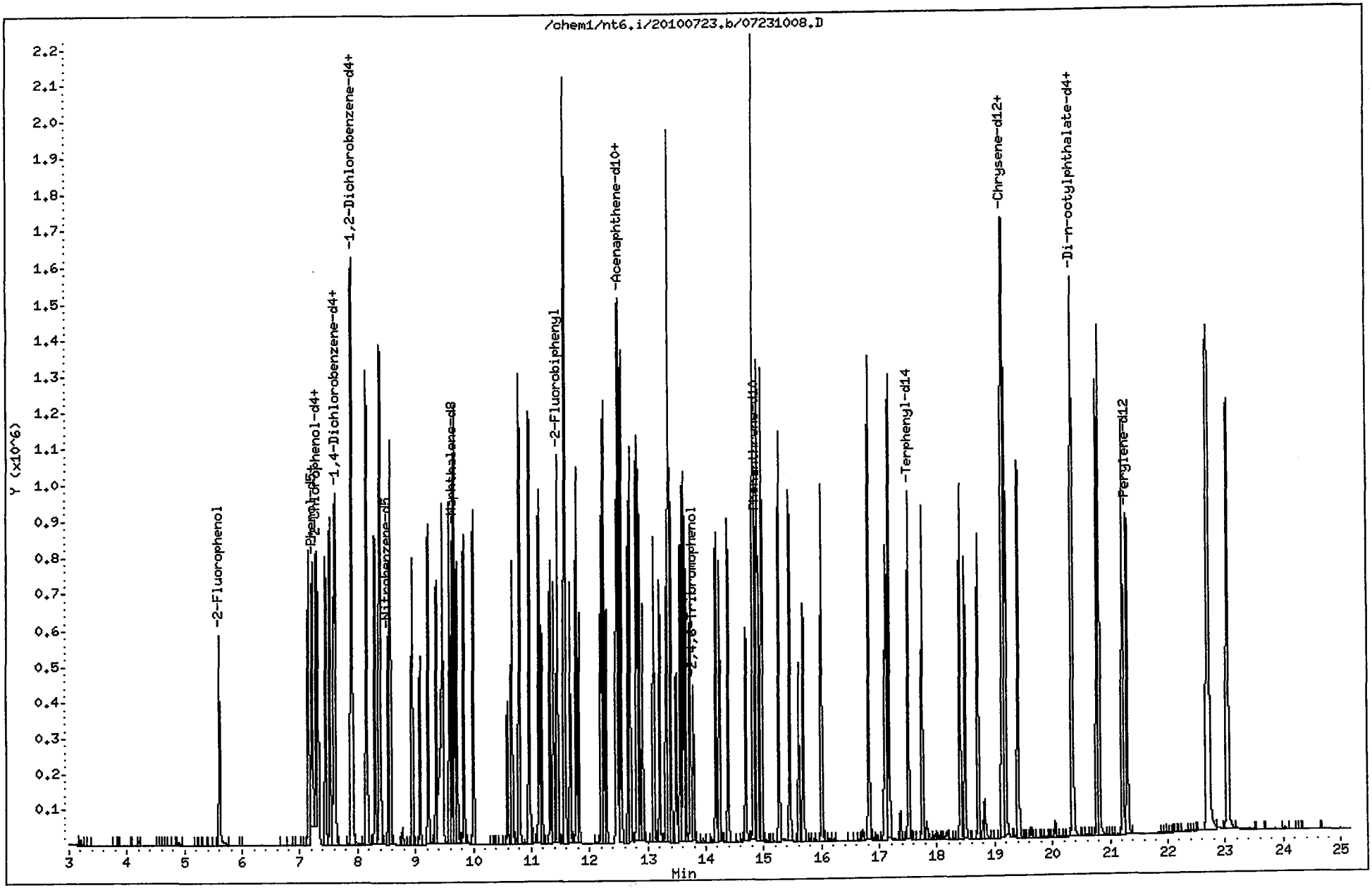
SURROGATE COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	25.00	25.75	103.02	
$ 2 Phenol-d5	25.00	24.76	99.03	
$ 5 2-Chlorophenol-d4	25.00	24.62	98.47	
$ 10 1,2-Dichlorobenzen	25.00	24.91	99.66	
$ 18 Nitrobenzene-d5	25.00	24.29	97.15	
$ 36 2-Fluorobiphenyl	25.00	24.09	96.38	
$ 55 2,4,6-Tribromophen	25.00	25.62	102.46	
$ 66 Terphenyl-d14	25.00	26.06	104.23	
$ 137 d8-1,4-Dioxane	25.00	24.98	99.93	

Data File: /chem1/nt6.i/20100723.b/07231008.D
Date : 23-JUL-2010 20:17
Client ID: ICV0723
Sample Info: ICV0723,

Instrument: nt6.i

Operator: JZ
Column diameter: 0.32

Column phase: ZB-5msi



Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: GWRL Client ID: /

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): 8270

Instrument: NT-2 (NT-4) NT-6 NT-8 NT11

Curve Date: 7/19/10 Analysis Start Date: 7/19/10

DFTPP Tune Meets Criteria?	(YES) / NO	Internal Standard Meets Criteria?	(YES) / NO
DDT Breakdown <20%?	(YES) / NO / NA	Method Blank In Control?	YES / NO / (NA)
Peak Tailing Factor ≤2?	(YES) / NO / NA	LCS / LCSD Recovery In Control?	(YES) / NO
ICal acceptable?	(YES) / NO	CCal acceptable?	(YES) / NO
Q flag applied?	YES / (NO)	Q flag applied?	YES / (NO)
Surrogate Recovery in Control?	(YES) / NO	Special Analysis Criteria Met?	YES / NO / (NA)
Manual Integrations for ICal?	(YES) / NO	Manual Integrations for Samples?	Yes /(NO) / (NA)

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Additional Details on Reverse: Yes / No

Analyst: [signature] **Date:** 07/21/10

Reviewer: [signature] **Date:** 7/22/10

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2010 16:18
End Cal Date : 19-JUL-2010 19:48
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100719.b/SW846100719.m
Cal Date : 20-Jul-2010 18:52 jianqing
Curve Type : Average

Calibration File Names:
Level 1: /chem3/nt4.i/20100719.b/07191002.d
Level 2: /chem3/nt4.i/20100719.b/07191003.d
Level 3: /chem3/nt4.i/20100719.b/07191004.d
Level 4: /chem3/nt4.i/20100719.b/07191001.d
Level 5: /chem3/nt4.i/20100719.b/07191005.d
Level 6: /chem3/nt4.i/20100719.b/07191006.d
Level 7: /chem3/nt4.i/20100719.b/07191007.d

JB 07/20/10

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD
186 Carbaryl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 n-Decane	0.92180	0.82264	0.83087	0.80562	0.77461	0.72218	0.72634	0.80058	8.602
180 n-Octadecane	0.30254	0.30439	0.30088	0.27733	0.26049	0.23560	0.24283	0.27487	10.602
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7							
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
177 p-Benzoquinone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
168 Pentachlorobenzene	0.48861	0.40393	0.42050	0.40899	0.40317	0.38693		
	0.40461						0.41668	7.974
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Cal Date : 20-Jul-2010 18:52 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	___ RRF	% RSD
135 2,3,5,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 2,3,4,5-tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
133 Butylatedhydroxytoluene	1.19720	1.04095	0.99330	0.97685	0.89378	0.77988	0.78639	0.95262	15.499
132 3,6-Dimethylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	___ RRF	% RSD
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 alpha-Terpineol	0.20333	0.18267	0.17306	0.16830	0.15310	0.14414	0.14638	0.16728	12.784
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 Acetophenone	0.47112	0.43077	0.44900	0.41885	0.42391	0.38242	0.39668	0.42468	7.057
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 1,4-Dioxane	0.42414	0.38659	0.38470	0.38545	0.38216	0.36299	0.37185	0.38541	4.967
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 2,3,4,6-Tetrachlorophenol	0.25519	0.28418	0.30668	0.32679	0.31590	0.31226	0.32321	0.30346	8.378

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Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7							
178 2-Benzyl-4-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
118 Triphenyl Phosphate	0.21448	0.19694	0.20258	0.20992	0.19726	0.19550		
	0.20200						0.20267	3.524
117 Butyl Diphenyl Phosphate	0.20655	0.19943	0.20154	0.21935	0.20468	0.19710		
	0.20303						0.20453	3.550
116 Dibutyl Phenyl Phosphate	0.63142	0.63922	0.64164	0.65657	0.62011	0.59024		
	0.58599						0.62360	4.271
115 Tributyl Phosphate	0.82256	0.81058	0.82385	0.77329	0.73758	0.67365		
	0.67146						0.75899	8.759
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
113 Diphenyl Oxide	1.27946	1.14210	1.08994	1.06974	1.02840	0.95213		
	0.97094						1.07610	10.365
112 Biphenyl	1.45512	1.34252	1.29488	1.25164	1.18585	1.05874		
	1.07159						1.23719	11.621

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Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7							
111 Azobenzene (1,2-DP-Hydrazine)	1.14006	1.05422	1.06029	0.98330	0.93779	0.85870		
	0.88505						0.98849	10.333
110 Tetrachloroguaiacol	0.11596	0.11133	0.11890	0.12191	0.11926	0.11335		
	0.11589						0.11666	3.126
109 3,4,5-Trichloroguaiacol	0.11049	0.11016	0.12312	0.12448	0.12647	0.12285		
	0.12207						0.11995	5.607
181 3,4,6-Trichloroguaiacol	0.12878	0.13256	0.14742	0.14807	0.14839	0.14105		
	0.14100						0.14104	5.542
108 4,5,6-Trichloroguaiacol	0.11309	0.11565	0.12736	0.12953	0.13025	0.12878		
	0.13208						0.12525	6.072
184 3,4-Dichloroguaiacol	0.18718	0.19558	0.20120	0.21429	0.21460	0.21416		
	0.22213						0.20702	6.072
107 4,5-Dichloroguaiacol	0.24994	0.26319	0.28360	0.28782	0.31885	0.31206		
	0.32256						0.29115	9.653
182 4,6-Dichloroguaiacol	0.26639	0.25087	0.25423	0.27031	0.24545	0.25236		
	0.25904						0.25695	3.442
185 4-Chloroguaiacol	0.52855	0.55087	0.58184	0.65330	0.62945	0.63641		
	0.65684						0.60532	8.508

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Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD
106 Guaiacol	1.15403	1.10226	1.04007	1.07495	1.03019	1.00527	1.05597	1.06610	4.672
105 1-methylnaphthalene	0.73856	0.63642	0.64470	0.63475	0.63080	0.56290	0.57420	0.63176	9.061
151 1,2,4,5-Tetrachlorobenzene	0.60742	0.54668	0.51019	0.52365	0.49918	0.49132	0.50330	0.52596	7.664
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Integrator : HP RTE
Method file : /chem3/nt4.i/20100719.b/SW846100719.m
Cal Date : 20-Jul-2010 18:52 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7							
167 2,2',4,4',5-Pentabromobipheny	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
3 Phenol	1.52327	1.49036	1.44408	1.42057	1.27348	1.24736		
	1.25719						1.37947	8.499
4 Bis(2-Chloroethyl)ether	1.15389	1.05315	1.02928	1.02414	1.00496	0.95372		
	0.98212						1.02875	6.230
6 2-Chlorophenol	1.37703	1.36240	1.36527	1.36485	1.23335	1.24332		
	1.24328						1.31278	5.206
7 1,3-Dichlorobenzene	1.70982	1.50199	1.50118	1.48198	1.44634	1.37413		
	1.42568						1.49159	7.143
9 1,4-Dichlorobenzene	1.69819	1.51370	1.53118	1.50592	1.47489	1.38965		
	1.43221						1.50653	6.502
11 Benzyl alcohol	+++++	0.91223	0.79662	0.78505	0.73616	0.72469		
	0.73582						0.78176	8.991
12 1,2-Dichlorobenzene	1.58084	1.43971	1.41297	1.38858	1.37137	1.28892		
	1.33936						1.40311	6.593
13 2-Methylphenol	1.00242	1.11049	1.11324	1.09858	1.00909	1.01582		
	1.02716						1.05383	4.830

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7							
14 2,2'-oxybis(1-Chloropropane)	1.13408	1.01956	0.99179	0.96247	0.92361	0.85484		
	0.88281						0.96702	9.707
15 4-Methylphenol	1.07650	1.16260	1.11867	1.13237	1.04810	1.05052		
	1.06807						1.09383	4.048
16 N-Nitroso-di-n-propylamine	0.78726	0.74703	0.72321	0.71449	0.70269	0.67015		
	0.70434						0.72131	5.160
17 Hexachloroethane	0.59135	0.55760	0.55641	0.56043	0.55416	0.53089		
	0.55511						0.55799	3.172
19 Nitrobenzene	0.34489	0.32224	0.32158	0.30263	0.30059	0.27111		
	0.28230						0.30648	8.251
20 Isophorone	0.57278	0.51716	0.52559	0.50326	0.49812	0.45867		
	0.48724						0.50898	6.978
21 2-Nitrophenol	0.16195	0.18553	0.20346	0.20681	0.19423	0.19296		
	0.19540						0.19148	7.720
22 2,4-Dimethylphenol	0.34079	0.36339	0.36901	0.35409	0.32771	0.31174		
	0.31961						0.34090	6.502
23 Bis(2-Chloroethoxy)methane	0.40457	0.35984	0.36446	0.35658	0.34648	0.31829		
	0.33302						0.35475	7.699

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	80.000 Level 7								
24 Benzoic acid	+++++	0.15013	0.22239	0.26771	0.26141	0.27115			
	0.28027						0.24218	20.377	<-
25 2,4-Dichlorophenol	0.25352	0.30103	0.32365	0.32634	0.30124	0.29644			
	0.29424						0.29949	8.019	
26 1,2,4-Trichlorobenzene	0.36782	0.33592	0.33834	0.33196	0.32979	0.31123			
	0.31968						0.33353	5.349	
28 Naphthalene	1.18074	1.01940	1.01451	0.96244	0.89659	0.77689			
	0.79230						0.94898	14.906	
29 4-Chloroaniline	0.39252	0.40069	0.40268	0.39409	0.37339	0.34529			
	0.34011						0.37840	6.924	
30 Hexachlorobutadiene	0.21745	0.18519	0.19378	0.18639	0.18753	0.17448			
	0.17979						0.18923	7.318	
31 4-Chloro-3-methylphenol	0.20393	0.27117	0.29842	0.30937	0.28574	0.27836			
	0.27550						0.27464	12.366	
32 2-Methylnaphthalene	0.74630	0.66270	0.66341	0.64960	0.63860	0.57380			
	0.58003						0.64492	9.012	
33 Hexachlorocyclopentadiene	0.19670	0.24178	0.28639	0.31893	0.32950	0.33112			
	0.34400						0.29263	18.716	

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Cal Date : 20-Jul-2010 18:52 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	___ RRF	% RSD
34 2,4,6-Trichlorophenol	0.30819	0.35802	0.37214	0.38430	0.36043	0.36626	0.37085	0.36003	6.787
35 2,4,5-Trichlorophenol	0.24826	0.35083	0.38002	0.41048	0.38587	0.39121	0.39911	0.36654	15.105
37 2-Chloronaphthalene	1.24508	1.12343	1.11327	1.10426	1.06169	0.96578	1.00077	1.08775	8.398
38 2-Nitroaniline	0.14117	0.18570	0.22375	0.23754	0.22985	0.22602	0.22604	0.21001	16.476
39 Dimethylphthalate	1.45154	1.30059	1.32041	1.28013	1.23687	1.16414	1.19011	1.27768	7.480
40 Acenaphthylene	1.94865	1.75474	1.75306	1.67242	1.55992	1.38771	1.40886	1.64077	12.334
41 2,6-Dinitrotoluene	0.24350	0.27750	0.29856	0.30488	0.30145	0.28576	0.30088	0.28751	7.563
43 3-Nitroaniline	0.26688	0.27225	0.29172	0.27509	0.24490	0.21809	0.20565	0.25351	12.551
44 Acenaphthene	1.24498	1.09893	1.11201	1.06610	1.03099	0.94431	0.98045	1.06825	9.248

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2010 16:18
End Cal Date : 19-JUL-2010 19:48
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100719.b/SW846100719.m
Cal Date : 20-Jul-2010 18:52 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD	
	80.000 Level 7								
45 2,4-Dinitrophenol	+++++	0.03672	0.10442	0.16137	0.17851	0.19947			
	0.20969						0.14836	44.553	<-
46 Dibenzofuran	1.64581	1.49192	1.49840	1.42404	1.35991	1.25954			
	1.28807						1.42396	9.465	
47 4-Nitrophenol	0.14176	0.14832	0.18103	0.19488	0.19349	0.19799			
	0.19695						0.17920	13.431	
48 2,4-Dinitrotoluene	0.28796	0.35208	0.40205	0.40448	0.40680	0.39051			
	0.40980						0.37910	11.820	
49 Fluorene	1.44497	1.29959	1.31553	1.25982	1.17937	1.05063			
	1.07434						1.23204	11.392	
50 Diethylphthalate	1.57307	1.36806	1.41182	1.31777	1.26768	1.13760			
	1.17582						1.32169	11.204	
51 4-Chlorophenyl-phenylether	0.69474	0.61629	0.61711	0.60255	0.58436	0.52633			
	0.54152						0.59756	9.315	
52 4-Nitroaniline	0.28107	0.27988	0.27202	0.26389	0.27732	0.26889			
	0.27942						0.27464	2.371	
53 4,6-Dinitro-2-methylphenol	+++++	0.08845	0.12548	0.14855	0.14840	0.15739			
	0.15973						0.13800	19.657	

Analytical Resources, Inc.

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Method file : /chem3/nt4.i/20100719.b/SW846100719.m
Cal Date : 20-Jul-2010 18:52 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7							
54 N-Nitrosodiphenylamine	0.59897	0.56644	0.58454	0.56521	0.56824	0.52773		
	0.53790						0.56415	4.382
56 4-Bromophenyl-phenylether	0.21096	0.20155	0.21106	0.20521	0.20601	0.19314		
	0.20319						0.20445	3.008
57 Hexachlorobenzene	0.24169	0.20966	0.21365	0.20517	0.20414	0.19121		
	0.20035						0.20941	7.598
58 Pentachlorophenol	+++++	0.12236	0.13905	0.15024	0.14329	0.14966		
	0.15151						0.14268	7.744
60 Phenanthrene	1.26953	1.07829	1.08369	1.03854	0.98609	0.89265		
	0.90371						1.03607	12.407
61 Anthracene	1.26876	1.10675	1.12399	1.07407	1.02212	0.90794		
	0.91554						1.05988	11.902
62 Carbazole	1.14479	1.01093	0.98838	0.94710	0.92667	0.85605		
	0.86786						0.96311	10.213
63 Di-n-butylphthalate	1.39044	1.32866	1.35805	1.29164	1.18853	1.02048		
	1.01833						1.22802	12.705
64 Fluoranthene	1.23295	1.10063	1.14509	1.10131	1.07018	0.93571		
	0.92842						1.07347	10.212

Analytical Resources, Inc.

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Integrator : HP RTE
Method file : /chem3/nt4.i/20100719.b/SW846100719.m
Cal Date : 20-Jul-2010 18:52 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7							
65 Pyrene	1.54895	1.32386	1.30232	1.29301	1.19639	1.08660		
	1.12621						1.26819	12.130
67 Butylbenzylphthalate	0.63232	0.62704	0.69192	0.67226	0.65120	0.60529		
	0.62513						0.64359	4.672
68 Benzo(a)anthracene	1.39978	1.20719	1.24065	1.17611	1.11630	1.01634		
	1.05028						1.17238	11.012
70 3,3'-Dichlorobenzidine	0.36883	0.40238	0.42289	0.39897	0.37590	0.34353		
	0.34172						0.37917	8.081
71 Chrysene	1.38365	1.19972	1.21395	1.15816	1.07914	0.97665		
	1.02095						1.14746	11.954
72 bis(2-Ethylhexyl)phthalate	0.53161	0.56815	0.61721	0.58487	0.58969	0.54278		
	0.54044						0.56782	5.521
73 Di-n-octylphthalate	1.26596	1.05129	1.06355	0.99565	0.93391	0.82830		
	0.82184						0.99436	15.514
74 Benzo(b)fluoranthene	1.40393	1.29239	1.31290	1.21076	1.20926	1.06436		
	1.22076						1.24491	8.538
75 Benzo(k)fluoranthene	1.53572	1.29180	1.33244	1.33678	1.21455	1.11293		
	1.00320						1.26106	13.651

Analytical Resources, Inc.

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Integrator : HP RTE
Method file : /chem3/nt4.i/20100719.b/SW846100719.m
Cal Date : 20-Jul-2010 18:52 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD
187 Total Benzofluoranthenes	1.38210	1.22664	1.24385	1.19904	1.14180	1.02417	1.04387	1.18021	10.477
76 Benzo(a)pyrene	1.23441	1.10443	1.13165	1.12539	1.08511	1.00857	1.04071	1.10432	6.582
78 Indeno(1,2,3-cd)pyrene	1.10926	1.07903	1.19493	1.24464	1.26134	1.17723	1.23424	1.18581	5.856
79 Dibenzo(a,h)anthracene	0.81878	0.86277	0.96765	1.02741	1.03845	0.95450	1.00345	0.95329	8.751
80 Benzo(g,h,i)perylene	0.94422	0.90041	1.05378	1.04646	1.07844	1.01381	1.05822	1.01362	6.558
90 N-Nitrosodimethylamine	0.64783	0.59968	0.56719	0.58049	0.56446	0.53912	0.57962	0.58263	5.869
91 Aniline	1.66497	1.54617	1.49097	1.44064	1.35252	1.27767	1.30611	1.43987	9.674
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
93 Benzidine	0.42376	0.43565	0.41475	0.34689	0.33093	0.31136	0.30159	0.36642	15.475

Analytical Resources, Inc.

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Method file : /chem3/nt4.i/20100719.b/SW846100719.m
Cal Date : 20-Jul-2010 18:52 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
98 Retene	0.45889	0.42060	0.41951	0.43772	0.41600	0.40302	0.41927	0.42500	4.249
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
103 Pyridine	0.90268	0.95399	1.04225	1.06515	1.04732	0.97877	1.04329	1.00478	6.029
$ 1 2-Fluorophenol	1.16448	1.12400	1.01131	1.14250	1.05748	1.03186	1.05437	1.08371	5.470

Analytical Resources, Inc.

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Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100719.b/SW846100719.m
Cal Date : 20-Jul-2010 18:52 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	___ RRF	% RSD
$ 137 d8-1,4-Dioxane	0.43005	0.40873	0.39728	0.39731	0.39810	0.37989	0.39506	0.40092	3.838
$ 2 Phenol-d5	1.09019	1.11643	1.02349	1.12745	1.05098	1.00985	1.04391	1.06604	4.295
$ 5 2-Chlorophenol-d4	1.21573	1.17992	1.08812	1.18777	1.11736	1.08778	1.13033	1.14386	4.448
$ 10 1,2-Dichlorobenzene-d4	0.97264	0.91430	0.80244	0.85219	0.81452	0.79829	0.81850	0.85327	7.758
$ 18 Nitrobenzene-d5	0.32597	0.33013	0.31174	0.31824	0.30824	0.28032	0.29218	0.30955	5.796
$ 36 2-Fluorobiphenyl	1.46388	1.33164	1.17402	1.25846	1.16251	1.07975	1.10556	1.22512	11.123
$ 55 2,4,6-Tribromophenol	0.11310	0.14211	0.14091	0.15595	0.14884	0.14537	0.15489	0.14302	10.084
$ 66 Terphenyl-d14	0.93602	0.81779	0.74164	0.80245	0.72726	0.68592	0.70996	0.77444	11.066
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

RSS1569

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2010 16:18
End Cal Date : 19-JUL-2010 19:48
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100719.b/SW846100719.m
Cal Date : 20-Jul-2010 18:52 jianqing

AB 07/20/10

Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	80 Level 7										
23 Bis(2-Chloroethoxy)methane	0.40457	0.35984	0.36446	0.35658	0.34648	0.31829					
	0.33302						AVRG		0.35475		7.69914
24 Benzoic acid	+++++	76277	295968	865635	1401298	2377813					
	2519498						LINR	0.000e+00	0.27416		0.99624
25 2,4-Dichlorophenol	0.25352	0.30103	0.32365	0.32634	0.30124	0.29644					
	0.29424						AVRG		0.29949		8.01880
26 1,2,4-Trichlorobenzene	0.36782	0.33592	0.33834	0.33196	0.32979	0.31123					
	0.31968						AVRG		0.33353		5.34949
28 Naphthalene	1.18074	1.01940	1.01451	0.96244	0.89659	0.77689					
	0.79230						AVRG		0.94898		14.90588
29 4-Chloroaniline	0.39252	0.40069	0.40268	0.39409	0.37339	0.34529					
	0.34011						AVRG		0.37840		6.92405
30 Hexachlorobutadiene	0.21745	0.18519	0.19378	0.18639	0.18753	0.17448					
	0.17979						AVRG		0.18923		7.31839

RGS1 6595

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

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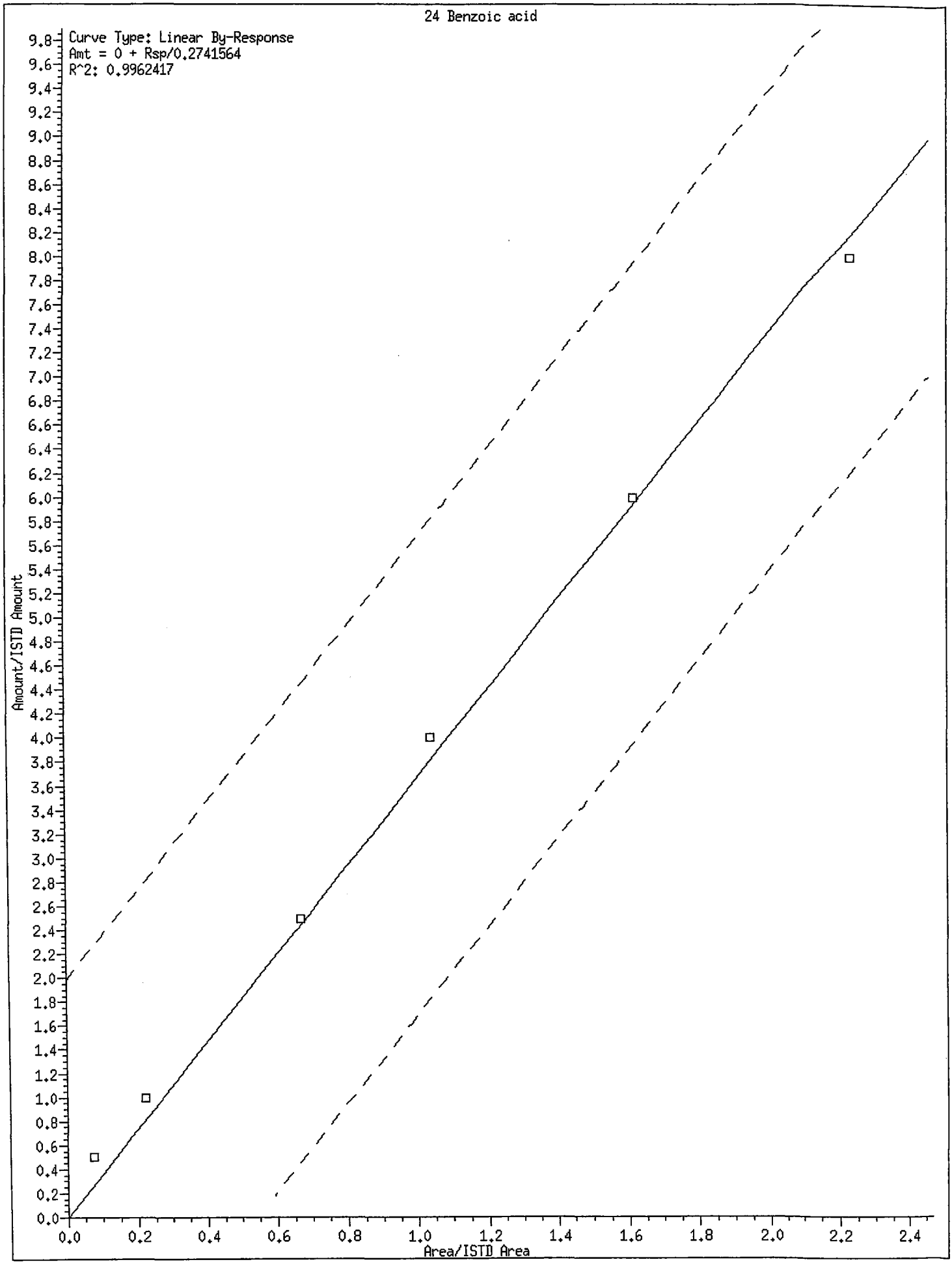
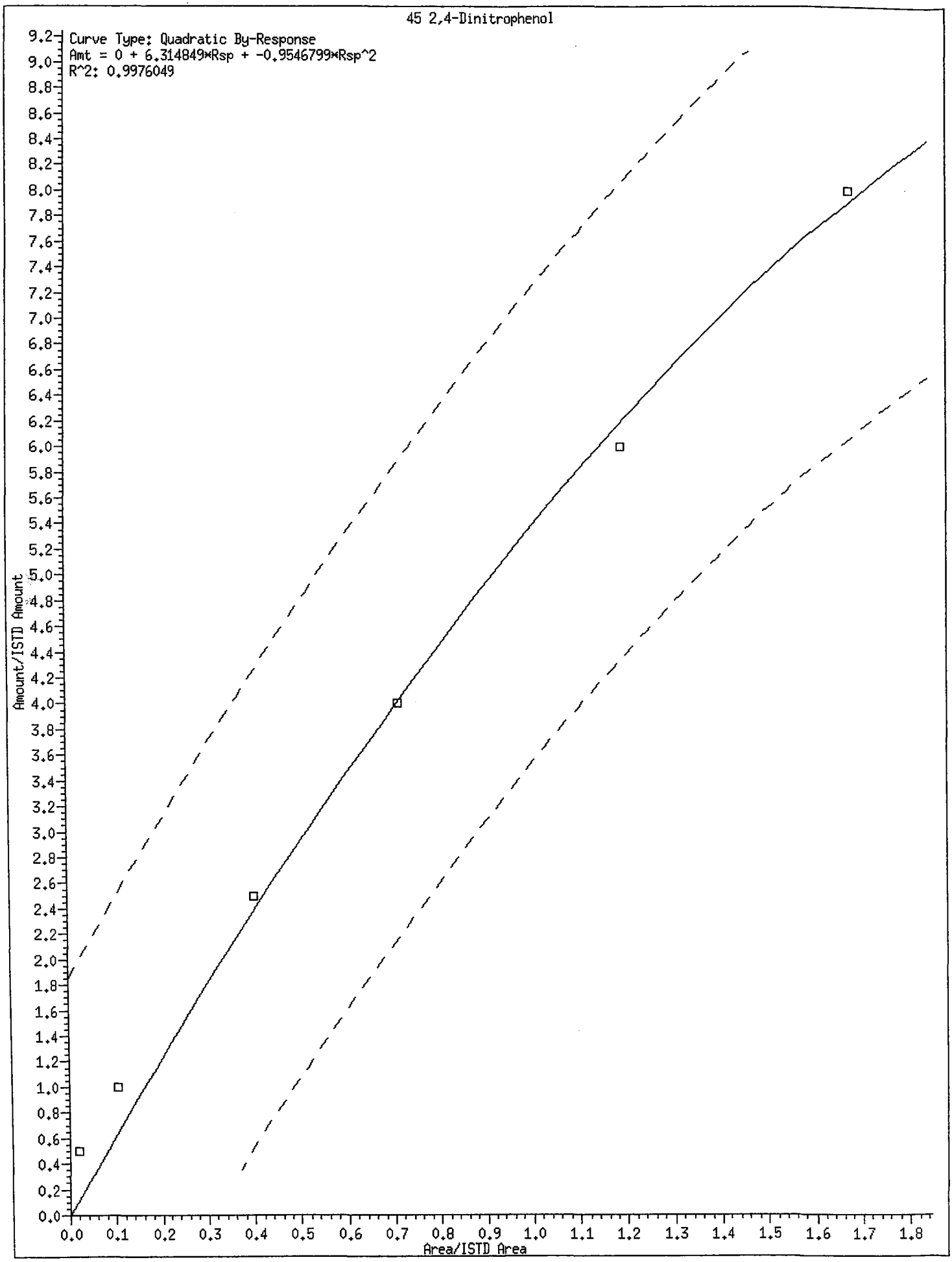
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100719.b/SW846100719.m
Cal Date : 20-Jul-2010 18:52 jianqing

07/20/10

Compound	1 Level 1 / 80 Level 7	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
39 Dimethylphthalate	1.45154	1.30059	1.32041	1.28013	1.23687	1.16414					
	1.19011						AVRG		1.27768		7.48035
40 Acenaphthylene	1.94865	1.75474	1.75306	1.67242	1.55992	1.38771					
	1.40886						AVRG		1.64077		12.33449
41 2,6-Dinitrotoluene	0.24350	0.27750	0.29856	0.30488	0.30145	0.28576					
	0.30088						AVRG		0.28751		7.56349
43 3-Nitroaniline	0.26688	0.27225	0.29172	0.27509	0.24490	0.21809					
	0.20565						AVRG		0.25351		12.55145
44 Acenaphthene	1.24498	1.09893	1.11201	1.06610	1.03099	0.94431					
	0.98045						AVRG		1.06825		9.24750
45 2,4-Dinitrophenol	+++++	10990	84130	317048	599293	1050607					
	1116227						QUAD	0.000e+00	6.31485	-0.95468	0.99760
46 Dibenzofuran	1.64581	1.49192	1.49840	1.42404	1.35991	1.25954					
	1.28807						AVRG		1.42396		9.46465


24 Benzoic acid
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.2741564
R^2: 0.9962417
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


45 2,4-Dinitrophenol
Curve Type: Quadratic By-Response
Amt = 0 + 6.314849*Rsp + -0.9546799*Rsp^2
R^2: 0.9976049
Amount/ISTD Amount
Area/ISTD Area

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2010 16:18
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Quant Method : ISTD
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Cal Date : 20-Jul-2010 18:52 jianqing

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/nt4.i/20100719.b/SW846100719.m
Batch File: /chem3/nt4.i/20100719.b
Inst ID: nt4.i

07/20/10

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	07191001	07191002	07191003	07191004	07191005	07191006	07191007
ANJ.DATE:	19-JUL-2010	19-JUL-2010	19-JUL-2010	19-JUL-2010	19-JUL-2010	19-JUL-2010	19-JUL-2010
ANJ.TIME:	16:18	16:56	17:33	18:07	18:41	19:14	19:48

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 2-Fluorophenol	6.736	6.727	6.724	6.731	6.738	6.742	6.737	6.736	3.736-9.736	6.734	0.006
186 Carbaryl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.584	13.584-19.584	+++++	+++++
179 n-Decane	8.498	8.495	8.498	8.500	8.500	8.504	8.505	8.498	5.498-11.498	8.500	0.003
180 n-Octadecane	15.876	15.874	15.876	15.878	15.879	15.882	15.883	15.876	12.876-18.876	15.878	0.003
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.531	15.531-21.531	+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.634	13.634-19.634	+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.609	14.609-20.609	+++++	+++++
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.863	13.863-19.863	+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.605	17.605-23.605	+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.015	14.015-20.015	+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.609	14.609-20.609	+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.562	14.562-20.562	+++++	+++++
177 p-Benzoquinone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.654	6.654-12.654	+++++	+++++
168 Pentachlorobenzene	13.985	13.976	13.979	13.981	13.987	13.991	13.992	13.985	10.985-16.985	13.984	0.006
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.212	44.212-50.212	+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.746	44.746-50.746	+++++	+++++
147 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.216	45.216-51.216	+++++	+++++

Reviewer 1 _____ Date: _____
Reviewer 2 _____ Date: 7/22/10

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/nt4.i/20100719.b/SW846100719.m
Batch File: /chem3/nt4.i/20100719.b
Inst ID: nt4.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
148 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.281	44.281-50.281	+++++	+++++
149 TCMX	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.387	40.387-46.387	+++++	+++++
150 DCBP	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.989	47.989-53.989	+++++	+++++
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	67.733	64.733-70.733	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.067	62.067-68.067	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.917	46.917-52.917	+++++	+++++
135 2,3,5,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.269	36.269-42.269	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.317	36.317-42.317	+++++	+++++
$ 137 d8-1,4-Dioxane	3.440	3.420	3.417	3.448	3.448	3.452	3.424	3.440	0.440-6.440	3.436	0.015
* 134 Di-n-octylphthalate-d4	21.451	21.449	21.451	21.447	21.453	21.457	21.458	21.451	18.451-24.451	21.452	0.004
133 Butylatedhydroxytoluen	13.768	13.765	13.767	13.763	13.770	13.773	13.774	13.768	10.768-16.768	13.769	0.004
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.450	62.450-68.450	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	64.400	61.400-67.400	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	62.100	59.100-65.100	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.912	51.912-57.912	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.212	51.212-57.212	+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	57.650	54.650-60.650	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.750	53.750-59.750	+++++	+++++
144 alpha-Terpineol	10.783	10.775	10.777	10.773	10.786	10.789	10.790	10.783	7.783-13.783	10.782	0.007
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.166	49.166-55.166	+++++	+++++

Analytical Resources, Inc.
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Method File: /chem3/nt4.i/20100719.b/SW846100719.m
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Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.617	47.617-53.617	+++++	+++++
123 Acetophenone	9.379	9.371	9.373	9.375	9.382	9.391	9.392	9.379	6.379-12.379	9.380	0.008
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.467	40.467-46.467	+++++	+++++
143 1,4-Dioxane	3.511	3.485	3.487	3.512	3.513	3.522	3.494	3.511	0.511-6.511	3.504	0.015
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.500	51.500-57.500	+++++	+++++
120 2,3,4,6-Tetrachlorophe	14.214	14.211	14.214	14.210	14.216	14.220	14.221	14.214	11.214-17.214	14.215	0.004
178 2-Benzyl-4-Chloropheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.282	9.282-15.282	+++++	+++++
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.069	44.069-50.069	+++++	+++++
118 Triphenyl Phosphate	19.859	19.857	19.853	19.855	19.861	19.865	19.866	19.859	16.859-22.859	19.860	0.005
117 Butyl Diphenyl Phospha	18.238	18.235	18.232	18.234	18.240	18.244	18.245	18.238	15.238-21.238	18.238	0.005
116 Dibutyl Phenyl Phospha	16.529	16.526	16.528	16.524	16.531	16.534	16.535	16.529	13.529-19.529	16.530	0.004
115 Tributyl Phosphate	14.778	14.769	14.766	14.768	14.792	14.801	14.802	14.778	11.778-17.778	14.782	0.016
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.950	45.950-51.950	+++++	+++++
113 Diphenyl Oxide	12.863	12.860	12.863	12.864	12.865	12.869	12.870	12.863	9.863-15.863	12.865	0.003
112 Biphenyl	12.675	12.672	12.675	12.671	12.677	12.681	12.682	12.675	9.675-15.675	12.676	0.004
111 Azobenzene (1,2-DP-Hyd	14.766	14.758	14.760	14.762	14.774	14.778	14.779	14.766	11.766-17.766	14.768	0.009
110 Tetrachloroguaiacol	15.959	15.950	15.947	15.948	15.961	15.970	15.971	15.959	12.959-18.959	15.958	0.010
109 3,4,5-Trichloroguaiaco	14.308	14.305	14.302	14.304	14.310	14.314	14.315	14.308	11.308-17.308	14.308	0.005
181 3,4,6-Trichloroguaiaco	14.431	14.429	14.425	14.427	14.434	14.437	14.444	14.431	11.431-17.431	14.432	0.006
108 4,5,6-Trichloroguaiaco	15.342	15.339	15.342	15.338	15.344	15.353	15.349	15.342	12.342-18.342	15.344	0.006
184 3,4-Dichloroguaiacol	12.757	12.754	12.751	12.753	12.759	12.763	12.764	12.757	9.757-15.757	12.757	0.005
107 4,5-Dichloroguaiacol	13.539	13.530	13.527	13.528	13.541	13.544	13.545	13.539	10.539-16.538	13.536	0.008
182 4,6-Dichloroguaiacol	13.568	13.559	13.562	13.563	13.570	13.579	13.580	13.568	10.568-16.568	13.569	0.008
185 4-Chloroguaiacol	11.653	11.650	11.653	11.648	11.655	11.658	11.660	11.653	8.653-14.653	11.654	0.004

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	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
106	Guaiacol	9.638	9.629	9.632	9.633	9.640	9.644	9.645	9.638	6.638-12.638	9.637	0.006
105	1-methylnaphthalene	12.076	12.073	12.070	12.071	12.078	12.081	12.082	12.076	9.076-15.076	12.076	0.005
151	1,2,4,5-Tetrachloroben	12.240	12.237	12.234	12.236	12.242	12.246	12.247	12.240	9.240-15.240	12.240	0.005
152	Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.943	27.943-33.943	+++++	+++++
153	Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.442	20.442-26.442	+++++	+++++
154	Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.968	18.968-24.968	+++++	+++++
155	Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.466	20.466-26.466	+++++	+++++
156	Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.866	19.866-25.866	+++++	+++++
157	Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.413	20.413-26.413	+++++	+++++
158	Ethion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.952	21.952-27.952	+++++	+++++
159	4-Nonylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.721	18.721-24.721	+++++	+++++
160	Tetraethyl Tin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.159	15.159-21.159	+++++	+++++
161	1,2,3-Trichloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	36.246	33.246-39.246	+++++	+++++
162	1,2,3,4-Tetrachloronap	+++++	+++++	+++++	+++++	+++++	+++++	+++++	37.506	34.506-40.506	+++++	+++++
163	1,2,3,5,8-Pentachloron	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.893	35.893-41.893	+++++	+++++
164	1,2,3,4,6,7-Hexachloro	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.681	36.681-42.681	+++++	+++++
165	1,2,3,4,5,6,7-Heptachl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	41.123	38.123-44.123	+++++	+++++
166	Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.253	39.253-45.253	+++++	+++++
167	2,2',4,4',5-Pentabromo	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.033	39.033-45.033	+++++	+++++
$ 2	Phenol-d5	8.216	8.208	8.210	8.212	8.224	8.228	8.229	8.216	5.216-11.216	8.218	0.009
3	Phenol	8.234	8.225	8.228	8.229	8.242	8.251	8.252	8.234	5.234-11.234	8.237	0.011
4	Bis(2-Chloroethyl)ethe	8.346	8.337	8.339	8.341	8.348	8.351	8.352	8.346	5.346-11.346	8.345	0.006
$ 5	2-Chlorophenol-d4	8.387	8.384	8.386	8.388	8.395	8.398	8.393	8.387	5.387-11.387	8.390	0.005

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	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
6	2-Chlorophenol	8.416	8.407	8.410	8.412	8.418	8.422	8.423	8.416	5.416-11.416	8.415	0.006
7	1,3-Dichlorobenzene	8.633	8.631	8.633	8.635	8.636	8.639	8.640	8.633	5.633-11.633	8.635	0.003
* 8	1,4-Dichlorobenzene-d4	8.698	8.689	8.692	8.694	8.694	8.698	8.699	8.698	5.698-11.698	8.695	0.004
9	1,4-Dichlorobenzene	8.721	8.713	8.715	8.717	8.724	8.721	8.722	8.721	5.721-11.721	8.719	0.004
$ 10	1,2-Dichlorobenzene-d4	8.998	8.995	8.991	8.993	9.000	8.997	8.998	8.998	5.998-11.998	8.996	0.003
11	Benzyl alcohol	8.956	8.948	8.944	8.952	8.959	8.968	8.969	8.956	5.956-11.956	8.957	0.009
12	1,2-Dichlorobenzene	9.015	9.012	9.015	9.017	9.017	9.021	9.022	9.015	6.015-12.015	9.017	0.003
13	2-Methylphenol	9.174	9.159	9.162	9.164	9.176	9.179	9.181	9.174	6.174-12.174	9.171	0.009
14	2,2'-oxybis(1-Chloropr	9.209	9.206	9.203	9.205	9.211	9.215	9.216	9.209	6.209-12.209	9.209	0.005
15	4-Methylphenol	9.397	9.388	9.391	9.393	9.405	9.414	9.415	9.397	6.397-12.397	9.401	0.011
16	N-Nitroso-di-n-propyla	9.426	9.418	9.414	9.422	9.434	9.444	9.445	9.426	6.426-12.426	9.429	0.012
17	Hexachloroethane	9.509	9.506	9.508	9.504	9.511	9.508	9.509	9.509	6.509-12.509	9.508	0.002
$ 18	Nitrobenzene-d5	9.620	9.612	9.614	9.616	9.622	9.626	9.627	9.620	6.620-12.620	9.620	0.006
19	Nitrobenzene	9.650	9.641	9.644	9.645	9.652	9.661	9.662	9.650	6.650-12.650	9.651	0.008
20	Isophorone	10.026	10.017	10.014	10.015	10.028	10.037	10.038	10.026	7.026-13.026	10.025	0.010
21	2-Nitrophenol	10.167	10.164	10.160	10.162	10.169	10.172	10.173	10.167	7.167-13.167	10.167	0.005
22	2,4-Dimethylphenol	10.243	10.234	10.237	10.239	10.245	10.254	10.256	10.243	7.243-13.243	10.244	0.008
23	Bis(2-Chloroethoxy)met	10.396	10.393	10.390	10.391	10.398	10.407	10.408	10.396	7.396-13.396	10.398	0.007
24	Benzoic acid	10.466	10.317	10.354	10.397	10.509	10.560	10.567	10.466	7.466-13.466	10.453	0.099
25	2,4-Dichlorophenol	10.543	10.534	10.531	10.538	10.545	10.548	10.549	10.543	7.543-13.543	10.541	0.007
26	1,2,4-Trichlorobenzene	10.684	10.675	10.677	10.679	10.680	10.683	10.684	10.684	7.684-13.684	10.680	0.004
* 27	Naphthalene-d8	10.742	10.739	10.742	10.744	10.744	10.748	10.749	10.742	7.742-13.742	10.744	0.003
28	Naphthalene	10.778	10.769	10.771	10.773	10.780	10.783	10.784	10.778	7.778-13.778	10.777	0.006
29	4-Chloroaniline	10.901	10.898	10.895	10.896	10.903	10.907	10.908	10.901	7.901-13.901	10.901	0.005

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	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	30 Hexachlorobutadiene	11.083	11.080	11.083	11.084	11.085	11.083	11.084	11.083	8.083-14.083	11.083	0.002
	31 4-Chloro-3-methylpheno	11.694	11.691	11.688	11.690	11.696	11.700	11.701	11.694	8.694-14.694	11.694	0.005
	32 2-Methylnaphthalene	11.900	11.897	11.893	11.895	11.902	11.905	11.906	11.900	8.900-14.900	11.900	0.005
	33 Hexachlorocyclopentadi	12.281	12.273	12.275	12.277	12.278	12.281	12.282	12.281	9.281-15.281	12.278	0.004
	34 2,4,6-Trichlorophenol	12.405	12.402	12.404	12.400	12.407	12.410	12.411	12.405	9.405-15.405	12.406	0.004
	35 2,4,5-Trichlorophenol	12.463	12.461	12.457	12.459	12.466	12.469	12.470	12.463	9.463-15.463	12.464	0.005
$	36 2-Fluorobiphenyl	12.540	12.531	12.534	12.535	12.536	12.540	12.541	12.540	9.540-15.540	12.537	0.004
	37 2-Chloronaphthalene	12.687	12.684	12.686	12.682	12.689	12.698	12.699	12.687	9.687-15.687	12.689	0.007
	38 2-Nitroaniline	12.910	12.901	12.904	12.906	12.912	12.921	12.923	12.910	9.910-15.910	12.911	0.008
	39 Dimethylphthalate	13.268	13.260	13.262	13.264	13.276	13.286	13.287	13.268	10.268-16.268	13.272	0.011
	40 Acenaphthylene	13.374	13.371	13.374	13.370	13.376	13.380	13.381	13.374	10.374-16.374	13.375	0.004
	41 2,6-Dinitrotoluene	13.374	13.365	13.362	13.364	13.376	13.380	13.387	13.374	10.374-16.374	13.372	0.009
*	42 Acenaphthene-d10	13.627	13.624	13.626	13.628	13.629	13.632	13.633	13.627	10.627-16.627	13.628	0.003
	43 3-Nitroaniline	13.591	13.583	13.579	13.587	13.599	13.609	13.610	13.591	10.591-16.591	13.594	0.012
	44 Acenaphthene	13.679	13.677	13.673	13.675	13.682	13.691	13.686	13.679	10.679-16.679	13.680	0.006
	45 2,4-Dinitrophenol	13.756	13.741	13.744	13.751	13.764	13.779	13.780	13.756	10.756-16.756	13.759	0.016
	46 Dibenzofuran	13.944	13.935	13.938	13.939	13.946	13.949	13.951	13.944	10.944-16.944	13.943	0.006
	47 4-Nitrophenol	13.867	13.859	13.855	13.857	13.870	13.879	13.880	13.867	10.867-16.867	13.867	0.010
	48 2,4-Dinitrotoluene	14.008	14.000	13.996	13.998	14.011	14.020	14.021	14.008	11.008-17.008	14.008	0.010
	49 Fluorene	14.508	14.499	14.502	14.497	14.510	14.513	14.514	14.508	11.508-17.508	14.506	0.007
	50 Diethylphthalate	14.431	14.417	14.419	14.421	14.434	14.437	14.438	14.431	11.431-17.431	14.428	0.009
	51 4-Chlorophenyl-phenyle	14.514	14.505	14.508	14.509	14.516	14.519	14.514	14.514	11.514-17.514	14.512	0.005
	52 4-Nitroaniline	14.596	14.581	14.584	14.586	14.610	14.625	14.626	14.596	11.596-17.596	14.601	0.019
	53 4,6-Dinitro-2-methylph	14.672	14.664	14.660	14.662	14.680	14.695	14.697	14.672	11.672-17.672	14.676	0.015

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	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
54	N-Nitrosodiphenylamine	14.713	14.711	14.707	14.709	14.721	14.731	14.732	14.713	11.713-17.713	14.718	0.010
$ 55	2,4,6-Tribromophenol	14.931	14.922	14.925	14.920	14.933	14.936	14.937	14.931	11.931-17.931	14.929	0.007
56	4-Bromophenyl-phenylet	15.301	15.298	15.301	15.296	15.303	15.306	15.308	15.301	12.301-18.301	15.302	0.004
57	Hexachlorobenzene	15.542	15.533	15.536	15.537	15.544	15.547	15.548	15.542	12.542-18.542	15.541	0.006
58	Pentachlorophenol	15.830	15.827	15.823	15.825	15.832	15.841	15.842	15.830	12.830-18.830	15.831	0.007
* 59	Phenanthrene-d10	16.029	16.021	16.023	16.025	16.031	16.035	16.036	16.029	13.029-19.029	16.029	0.006
60	Phenanthrene	16.064	16.056	16.058	16.060	16.073	16.076	16.077	16.064	13.064-19.064	16.066	0.009
61	Anthracene	16.141	16.132	16.135	16.136	16.143	16.152	16.153	16.141	13.141-19.141	16.142	0.008
62	Carbazole	16.411	16.408	16.405	16.407	16.413	16.423	16.424	16.411	13.411-19.411	16.413	0.007
63	Di-n-butylphthalate	17.093	17.084	17.086	17.088	17.095	17.092	17.093	17.093	14.092-20.093	17.090	0.004
64	Fluoranthene	18.021	18.012	18.015	18.016	18.023	18.026	18.027	18.021	15.021-21.021	18.020	0.006
65	Pyrene	18.385	18.376	18.379	18.380	18.387	18.396	18.397	18.385	15.385-21.385	18.386	0.008
$ 66	Terphenyl-d14	18.667	18.664	18.667	18.662	18.669	18.672	18.674	18.667	15.667-21.667	18.668	0.004
67	Butylbenzylphthalate	19.536	19.528	19.530	19.532	19.538	19.542	19.543	19.536	16.536-22.536	19.536	0.006
68	Benzo(a)anthracene	20.353	20.344	20.347	20.348	20.361	20.364	20.365	20.353	17.353-23.353	20.355	0.009
* 69	Chrysene-d12	20.382	20.374	20.376	20.378	20.384	20.388	20.389	20.382	17.382-23.382	20.381	0.006
70	3,3'-Dichlorobenzidine	20.341	20.338	20.335	20.337	20.343	20.347	20.348	20.341	17.341-23.341	20.341	0.005
71	Chrysene	20.423	20.415	20.411	20.413	20.425	20.435	20.436	20.423	17.423-23.423	20.423	0.010
72	bis(2-Ethylhexyl)phtha	20.517	20.515	20.511	20.513	20.514	20.517	20.518	20.517	17.517-23.517	20.515	0.003
73	Di-n-octylphthalate	21.463	21.454	21.457	21.459	21.465	21.469	21.470	21.463	18.463-24.463	21.462	0.006
74	Benzo(b)fluoranthene	22.021	22.012	22.015	22.017	22.029	22.038	22.040	22.021	19.021-25.021	22.025	0.011
75	Benzo(k)fluoranthene	22.056	22.048	22.044	22.046	22.064	22.074	22.075	22.056	19.056-25.056	22.058	0.013
187	Total Benzofluoranthen	22.056	22.012	22.044	22.046	22.064	22.074	22.075	22.056	19.056-25.056	22.053	0.022
76	Benzo(a)pyrene	22.491	22.482	22.485	22.481	22.499	22.508	22.510	22.491	19.491-25.491	22.494	0.012

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/nt4.i/20100719.b/SW846100719.m
Batch File: /chem3/nt4.i/20100719.b
Inst ID: nt4.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
*	77 Perylene-d12	22.579	22.571	22.573	22.575	22.575	22.579	22.580	22.579	19.579-25.579	22.576	0.004
	78 Indeno(1,2,3-cd)pyrene	24.424	24.403	24.406	24.413	24.438	24.453	24.454	24.424	21.424-27.424	24.427	0.021
	79 Dibenzo(a,h)anthracene	24.447	24.421	24.429	24.431	24.455	24.471	24.477	24.447	21.447-27.447	24.447	0.022
	80 Benzo(g,h,i)perylene	24.958	24.926	24.929	24.936	24.972	24.987	24.989	24.958	21.958-27.958	24.957	0.027
$	85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	51.633	48.633-54.633	+++++	+++++
$	86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	63.533	60.533-66.533	+++++	+++++
$	87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	60.273	57.273-63.273	+++++	+++++
$	88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	78.600	75.600-81.600	+++++	+++++
$	89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.841	47.841-53.841	+++++	+++++
	90 N-Nitrosodimethylamine	4.280	4.260	4.257	4.276	4.288	4.298	4.281	4.280	1.280-7.280	4.277	0.015
	91 Aniline	8.246	8.237	8.240	8.241	8.248	8.251	8.252	8.246	5.246-11.246	8.245	0.006
	92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.160	53.160-59.160	+++++	+++++
	93 Benzidine	18.250	18.247	18.244	18.245	18.252	18.255	18.251	18.250	15.250-21.250	18.249	0.004
$	95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.075	49.075-55.075	+++++	+++++
	96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.250	46.250-52.250	+++++	+++++
	97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	61.202	58.202-64.202	+++++	+++++
	98 Retene	18.925	18.923	18.925	18.921	18.927	18.931	18.932	18.925	15.925-21.925	18.926	0.004
	99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.125	28.125-34.125	+++++	+++++
	100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.475	21.475-27.475	+++++	+++++
	101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.481	21.481-27.481	+++++	+++++
	102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	79.550	76.550-82.550	+++++	+++++
	103 Pyridine	4.251	4.272	4.245	4.258	4.253	4.257	4.240	4.251	1.251-7.251	4.254	0.010

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem3/nt4.i/20100719.b

ARI Job No.: IC25 Method: SW846100719.m Instrument: nt4.i Date: 19-JUL-2010

KZ 07/21/10

ime	Filename	LabID	ClientId	DF	Manually Integrated Compounds
518	07191001.d	IC250719	IC250719	1	NO MANUAL INTEGRATION
656	07191002.d	IC010719	IC010719	1	Benzoic acid, 3-Nitroaniline, 4-Nitrophenol, 4-Nitroaniline, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, Benzidine, Pyridine, Total Benzofluoranthenes, 1,2-Dichlorobenzene-d4,
733	07191003.d	IC050719	IC050719	1	NO MANUAL INTEGRATION
807	07191004.d	IC100719	IC100719	1	NO MANUAL INTEGRATION
841	07191005.d	IC400719	IC400719	1	NO MANUAL INTEGRATION
914	07191006.d	IC600719	IC600719	1	Benzoic acid,
948	07191007.d	IC800719	IC800719	1	Benzoic acid, 4-Nitrophenol,
021	07191008.d	ICV0719	ICV0719	1	NO MANUAL INTEGRATION

Analytical Resources Inc.: Organics Instrument Log

NT-4 Serial No.: GC = US00010849; MS = US72821113

Date: 7/16/10 (19 ✓) Analysis: 8270 Analyst: ✓

GC Program: ✓ Column No: 172294 Column Type: ZB-5MS

Instrument Tune (.U or .CT.): 100716 EM Voltage: 1343

Calibration File: 071900 Curve Date: ~~07/16/10~~ 7/19/10 ✓

IS/SS	Ical/Ccal	LCS/ICV
1627-1	17473, 1733-1	1751-3, 1713-1
	~~1735-1~~, 1736-1	~~1721-2~~, 1730-1
	~~1619~~, 1740-2	~~1619~~, 1740-2

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt4.i/20100719.b

	Time	Filename	LabID	ClientId	DF											
1	1618	07191001.d	IC250719	IC250719	1	8.70	356478	10.74	1293412	13.63	785897	16.03	1313990	20.38	1155293	22.58	1146289	21.45	1825297
2	1656	07191002.d	IC010719	IC010719	1	8.69	290756	10.74	1025728	13.62	609037	16.02	1031072	20.37	888098	22.57	896867	21.45	1405493
3	1733	07191003.d	IC050719	IC050719	1	8.69	280196	10.74	1016171	13.63	598563	16.02	1007780	20.38	879562	22.57	872109	21.45	1375669
4	1807	07191004.d	IC100719	IC100719	1	8.69	386803	10.74	1330824	13.63	805701	16.02	1335679	20.38	1209826	22.57	1193862	21.45	1905755
5	1841	07191005.d	IC400719	IC400719	1	8.69	381018	10.74	1340154	13.63	839318	16.03	1371590	20.38	1264495	22.58	1213809	21.45	1902533
6	1914	07191006.d	IC600719	IC600719	1	8.70	397320	10.75	1461536	13.63	877821	16.03	1448224	20.39	1294779	22.58	1277873	21.46	1930038
7	1948	07191007.d	IC800719	IC800719	1	8.70	300879	10.75	1123708	13.63	665405	16.04	1124245	20.39	968321	22.58	976271	21.46	1492891
8	2021	07191008.d	ICV0719	ICV0719	1	8.69	289791	10.74	1041288	13.62	632100	16.03	1057026	20.38	945392	22.57	894258	21.45	1458222

✓ 07/21/10

Maintenance / Comments

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

Data File: /chem3/nt4.i/20100719.b/tune.b/07191001.d

Date : 19-JUL-2010 16:18

Client ID: DFTPP0719

Instrument: nt4.i

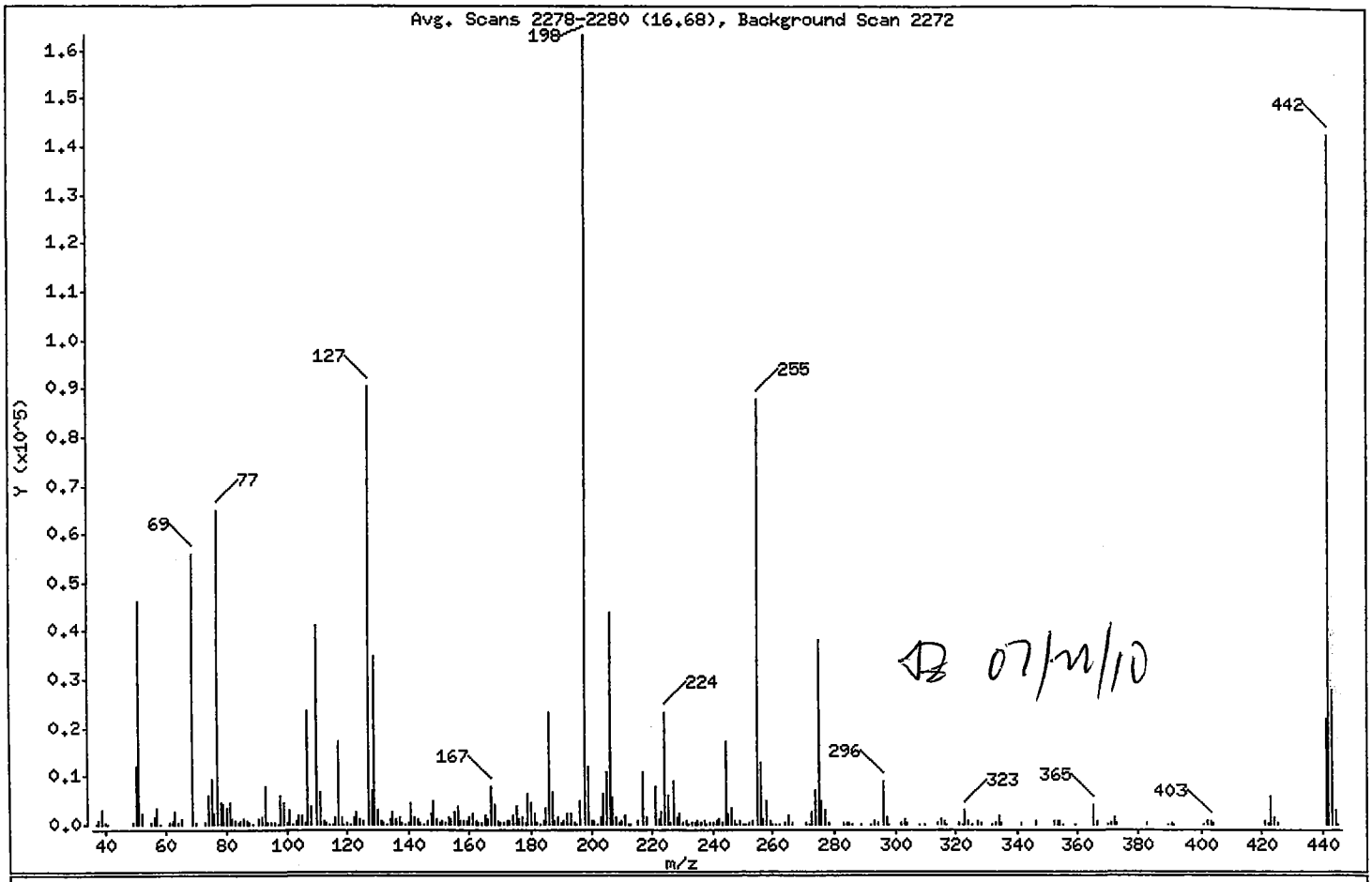
Sample Info: DFTPP0719

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25

1 dftpp



DB 07/21/10

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	28.30
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	34.18
70	Less than 2.00% of mass 69	0.18 (0.54)
127	10.00 - 80.00% of mass 198	55.45
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.26
275	10.00 - 60.00% of mass 198	23.41
365	Greater than 1.00% of mass 198	2.50
441	0.01 - 24.00% of mass 442	13.47 (15.37)
442	50.00 - 200.00% of mass 198	87.66
443	15.00 - 24.00% of mass 442	17.32 (19.76)

Data File: /chem3/nt4.i/20100719.b/tune.b/07191001.d

Date : 19-JUL-2010 16:18

Client ID: DFTPP0719

Instrument: nt4.i

Sample Info: DFTPP0719

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: 07191001.d

Spectrum: Avg. Scans 2278-2280 (16.68), Background Scan 2272

Location of Maximum: 198.00

Number of points: 274

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	119	124.00	1068	194.00	516	274.00	6952
38.00	626	125.00	928	195.00	74	275.00	38240
39.00	3155	127.00	90568	196.00	4842	276.00	4902
40.00	240	128.00	7240	198.00	163328	277.00	3117
41.00	133	129.00	34976	199.00	11863	278.00	490
49.00	341	130.00	3136	200.00	903	283.00	378
50.00	12091	131.00	637	201.00	766	284.00	198
51.00	46216	132.00	342	202.00	187	285.00	490
52.00	2279	133.00	153	203.00	1329	286.00	65
55.00	297	134.00	1129	204.00	6388	289.00	110
56.00	1438	135.00	2602	205.00	10845	292.00	155
57.00	3212	136.00	1014	206.00	44056	293.00	700
58.00	135	137.00	1442	207.00	5697	294.00	220
61.00	549	138.00	343	208.00	1620	296.00	9048
62.00	790	139.00	162	209.00	354	297.00	1458
63.00	2458	140.00	293	210.00	768	298.00	53
64.00	336	141.00	4488	211.00	2062	302.00	218
65.00	1093	142.00	1318	212.00	166	303.00	1189
69.00	55832	143.00	949	213.00	136	304.00	343
70.00	301	144.00	361	215.00	571	308.00	99
73.00	194	145.00	149	217.00	11029	310.00	86
74.00	5838	146.00	933	218.00	1504	314.00	446
75.00	9200	147.00	2243	221.00	7732	315.00	1132
76.00	2411	148.00	4838	222.00	1169	316.00	637
77.00	64832	149.00	1154	223.00	2692	317.00	83
78.00	4584	150.00	297	224.00	23456	321.00	312
79.00	4287	151.00	712	225.00	6043	322.00	133
80.00	3333	152.00	458	226.00	467	323.00	3131
81.00	4634	153.00	1366	227.00	9060	324.00	671
82.00	1207	154.00	1075	228.00	1570	325.00	51
83.00	927	155.00	2457	229.00	2131	327.00	645
84.00	269	156.00	3710	230.00	278	328.00	320
85.00	789	157.00	774	231.00	800	332.00	166
86.00	948	158.00	741	232.00	137	333.00	387
87.00	602	159.00	635	233.00	218	334.00	2050

Data File: /chem3/nt4.i/20100719.b/tune.b/07191001.d

Date : 19-JUL-2010 16:18

Client ID: DFTPP0719

Instrument: nt4.i

Sample Info: DFTPP0719

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: 07191001.d

Spectrum: Avg. Scans 2278-2280 (16.68), Background Scan 2272

Location of Maximum: 198.00

Number of points: 274

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	274	160.00	1414	234.00	561	335.00	456
89.00	140	161.00	2227	235.00	806	341.00	328
91.00	1126	162.00	641	236.00	506	346.00	618
92.00	1437	163.00	254	237.00	841	352.00	919
93.00	7814	164.00	284	238.00	65	353.00	651
94.00	392	165.00	1814	239.00	363	354.00	938
95.00	194	166.00	1157	240.00	376	355.00	90
96.00	431	167.00	7700	241.00	578	359.00	57
97.00	63	168.00	4026	242.00	1185	365.00	4085
98.00	5863	169.00	685	243.00	462	366.00	751
99.00	4521	170.00	323	244.00	17144	370.00	62
100.00	429	171.00	443	245.00	2104	371.00	244
101.00	2891	172.00	734	246.00	3475	372.00	1497
102.00	148	173.00	921	247.00	804	373.00	472
103.00	837	174.00	1805	248.00	141	383.00	429
104.00	1882	175.00	3722	249.00	685	390.00	161
105.00	1824	176.00	1027	250.00	67	391.00	235
106.00	256	177.00	1400	251.00	147	392.00	78
107.00	23808	178.00	437	252.00	188	401.00	53
108.00	3656	179.00	6417	253.00	579	402.00	748
110.00	41184	180.00	4403	255.00	87864	403.00	833
111.00	6615	181.00	2289	256.00	12866	404.00	311
112.00	697	182.00	438	257.00	1093	421.00	791
113.00	280	183.00	173	258.00	4775	422.00	405
114.00	62	184.00	574	259.00	669	423.00	5987
115.00	172	185.00	3393	260.00	130	424.00	1326
116.00	1343	186.00	23320	261.00	146	425.00	201
117.00	17168	187.00	6795	262.00	58	441.00	22008
118.00	1429	188.00	689	264.00	215	442.00	143168
119.00	139	189.00	1412	265.00	1846	443.00	28288
120.00	356	190.00	292	266.00	390	444.00	2849
121.00	75	191.00	714	271.00	396	445.00	152
122.00	1440	192.00	2176	272.00	150		
123.00	2633	193.00	2306	273.00	2780		

Data File: /chem3/nt4.i/20100719.b/tune.b/07191001.d

Date : 19-JUL-2010 16:18

Client ID: DFTPP0719

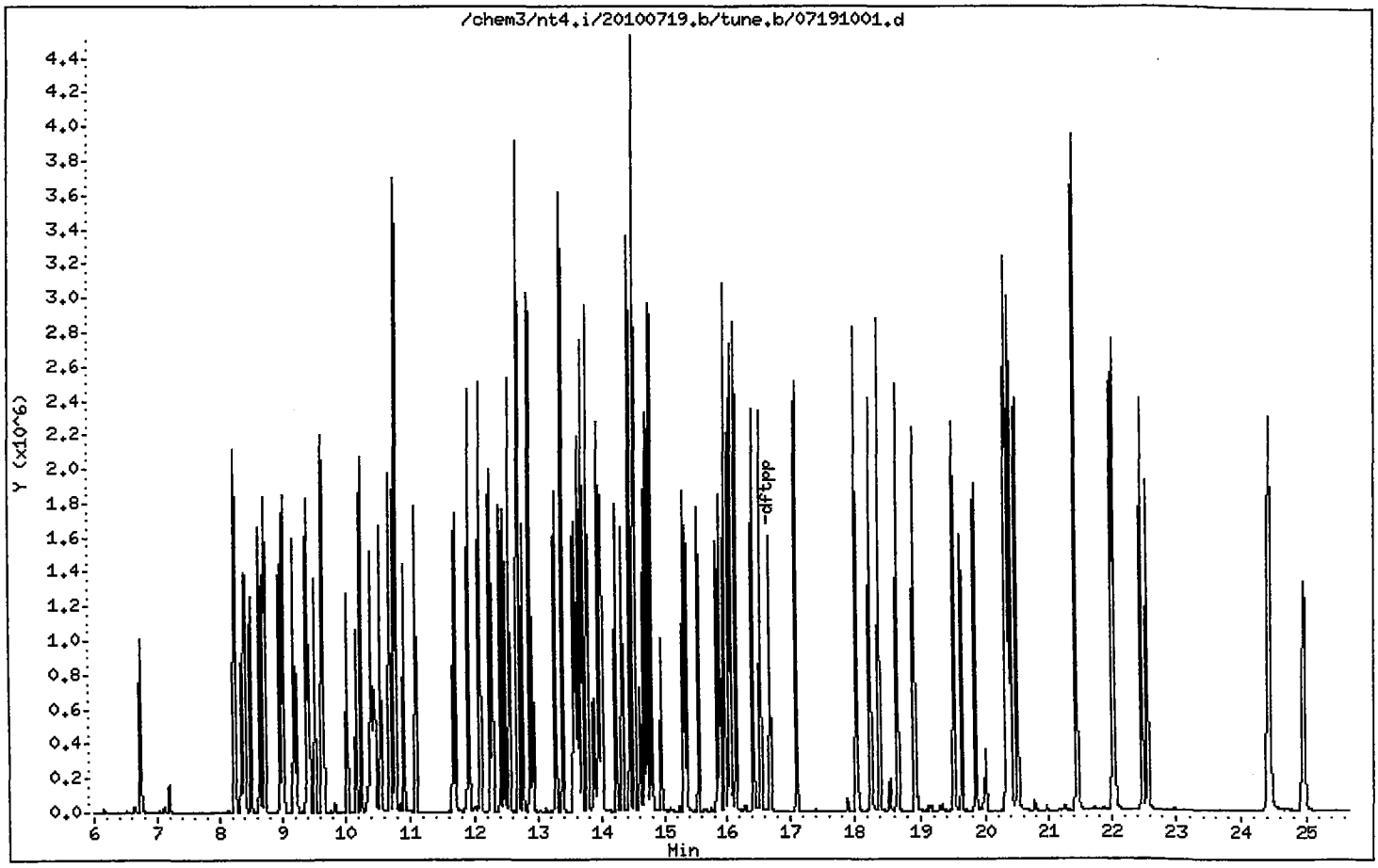
Instrument: nt4.i

Sample Info: DFTPP0719

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem3/nt4.i/20100719.b/ddt.b/07191001.d ARI ID: IC250719
Method: /chem3/nt4.i/20100719.b/ddt.b/sw846ddt.m Misc: 10-
Analysis Date: 19-JUL-2010 16:18 Instrument: nt4.i

COMPOUND	RT	AREA
Pentachlorophenol	15.830	246760
Benzidine	13.756	317048
4,4'-DDE	----	----
4,4'-DDD	19.172	9246
4,4'-DDT	19.654	449440

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

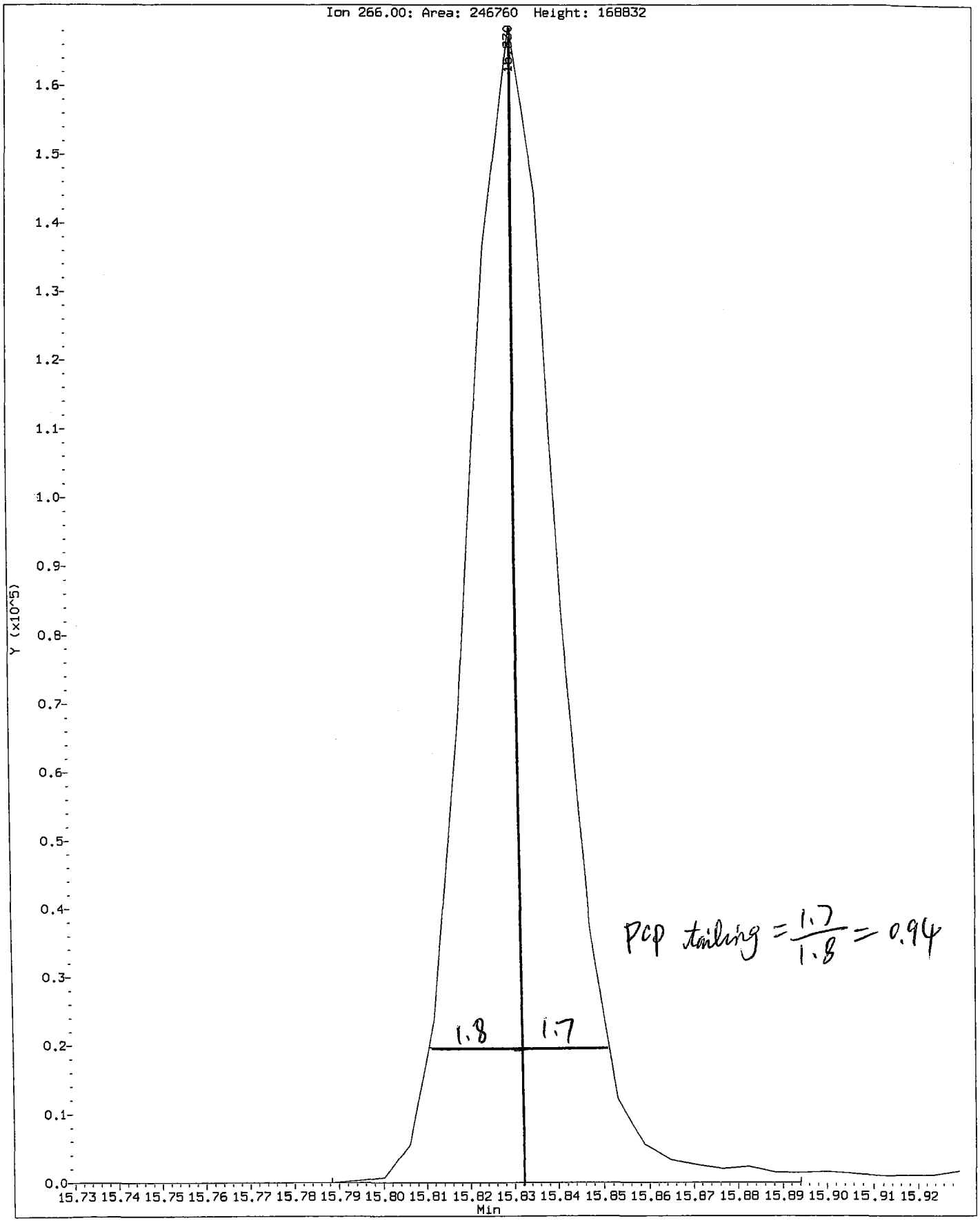
$$\text{DDT Percent Breakdown} = \frac{(0 + 9246) * 100}{(0 + 9246 + 449440)}$$

DDT Percent Breakdown = 2.0 %

DL 07/21/10

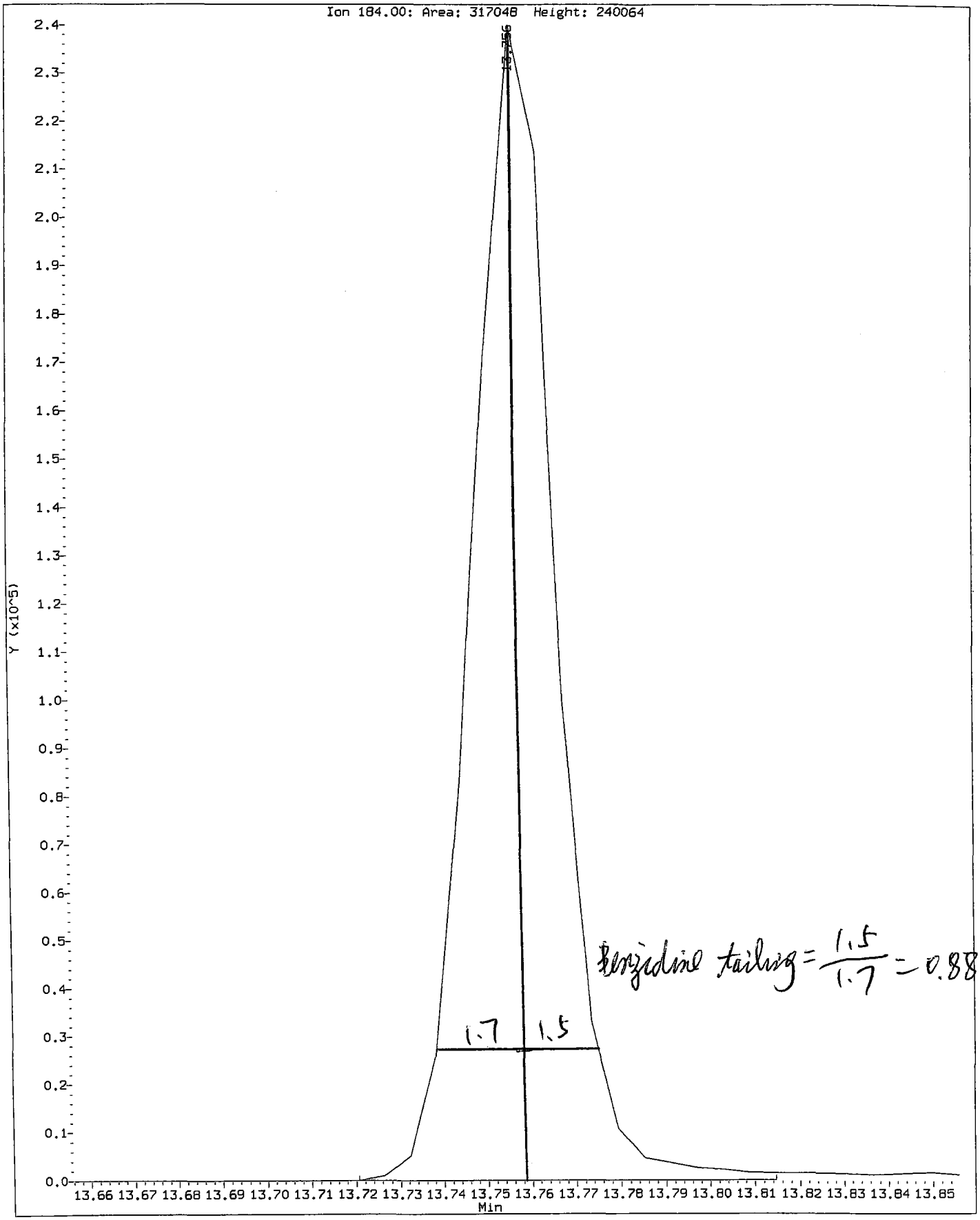
Data File: /chem3/nt4.i/20100719.b/ddt.b/07191001.d
Injection Date: 19-JUL-2010 16:18
Instrument: nt4.i
Client Sample ID: IC250719

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt4.i/20100719.b/ddt.b/07191001.d
Injection Date: 19-JUL-2010 16:18
Instrument: nt4.i
Client Sample ID: IC250719

Compound: Benzidine
CAS Number:



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100719.b/07191002.d
Lab Smp Id: IC010719 Client Smp ID: IC010719
Inj Date : 19-JUL-2010 16:56
Operator : JZ Inst ID: nt4.i
Smp Info : IC010719
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100719.b/SW846100719.m
Meth Date : 21-Jul-2010 18:37 jianqing Quant Type: ISTD
Cal Date : 19-JUL-2010 16:56 Cal File: 07191002.d
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

JZ 07/21/10

AMOUNTS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.727	6.737	(0.774)	16929	1.00000	1.000
$	2 Phenol-d5	99	8.208	8.229	(0.945)	15849	1.00000	1.000
	3 Phenol	94	8.225	8.252	(0.947)	22145	1.00000	1.000
$	5 2-Chlorophenol-d4	132	8.384	8.393	(0.965)	17674	1.00000	1.000
	4 Bis(2-Chloroethyl)ether	93	8.337	8.352	(0.959)	16775	1.00000	1.000
	6 2-Chlorophenol	128	8.407	8.423	(0.968)	20019	1.00000	1.000
	7 1,3-Dichlorobenzene	146	8.631	8.640	(0.993)	24857	1.00000	1.000
*	8 1,4-Dichlorobenzene-d4	152	8.689	8.699	(1.000)	290756	20.0000	
	9 1,4-Dichlorobenzene	146	8.713	8.722	(1.003)	24688	1.00000	1.000
$	10 1,2-Dichlorobenzene-d4	152	8.995	8.998	(1.035)	14140	1.00000	1.000 (M)
	12 1,2-Dichlorobenzene	146	9.012	9.022	(1.037)	22982	1.00000	1.000
	14 2,2'-oxybis(1-Chloropropane)	45	9.206	9.216	(1.059)	16487	1.00000	1.000
	13 2-Methylphenol	108	9.159	9.181	(1.054)	14573	1.00000	1.000
	17 Hexachloroethane	117	9.506	9.509	(1.094)	8597	1.00000	1.000
	16 N-Nitroso-di-n-propylamine	70	9.418	9.445	(1.084)	11445	1.00000	1.000
	15 4-Methylphenol	108	9.388	9.415	(1.080)	15650	1.00000	1.000
$	18 Nitrobenzene-d5	82	9.612	9.627	(0.895)	16718	1.00000	1.000
	19 Nitrobenzene	77	9.641	9.662	(0.898)	17688	1.00000	1.000
	20 Isophorone	82	10.017	10.038	(0.933)	29376	1.00000	1.000
	21 2-Nitrophenol	139	10.164	10.173	(0.946)	8306	1.00000	1.000
	22 2,4-Dimethylphenol	107	10.234	10.256	(0.953)	17478	1.00000	1.000
	23 Bis(2-Chloroethoxy)methane	93	10.393	10.408	(0.968)	20749	1.00000	1.000
	25 2,4-Dichlorophenol	162	10.534	10.549	(0.981)	13002	1.00000	1.000
	26 1,2,4-Trichlorobenzene	180	10.675	10.684	(0.994)	18864	1.00000	1.000
*	27 Naphthalene-d8	136	10.739	10.749	(1.000)	1025728	20.0000	
	28 Naphthalene	128	10.769	10.784	(1.003)	60556	1.00000	1.000
	29 4-Chloroaniline	127	10.898	10.908	(1.015)	20131	1.00000	1.000

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	30 Hexachlorobutadiene	225	11.080	11.084	(1.032)	11152	1.00000	1.000
	31 4-Chloro-3-methylphenol	107	11.691	11.701	(1.089)	10459	1.00000	1.000
	32 2-Methylnaphthalene	142	11.897	11.906	(1.108)	38275	1.00000	1.000
	34 2,4,6-Trichlorophenol	196	12.402	12.411	(0.910)	9385	1.00000	1.000
	35 2,4,5-Trichlorophenol	196	12.461	12.470	(0.915)	7560	1.00000	1.000
$	36 2-Fluorobiphenyl	172	12.531	12.541	(0.920)	44578	1.00000	1.000
	37 2-Chloronaphthalene	162	12.684	12.699	(0.931)	37915	1.00000	1.000
	38 2-Nitroaniline	65	12.901	12.923	(0.947)	4299	1.00000	1.000
	39 Dimethylphthalate	163	13.260	13.287	(0.973)	44202	1.00000	1.000
	40 Acenaphthylene	152	13.371	13.381	(0.981)	59340	1.00000	1.000
	41 2,6-Dinitrotoluene	165	13.365	13.387	(0.981)	7415	1.00000	1.000
*	42 Acenaphthene-d10	164	13.624	13.633	(1.000)	609037	20.0000	
	43 3-Nitroaniline	138	13.583	13.610	(0.997)	8127	1.00000	1.000 (M)
	44 Acenaphthene	153	13.677	13.686	(1.004)	37912	1.00000	1.000
	46 Dibenzofuran	168	13.935	13.951	(1.023)	50118	1.00000	1.000
	48 2,4-Dinitrotoluene	165	14.000	14.021	(1.028)	8769	1.00000	1.000
	50 Diethylphthalate	149	14.417	14.438	(1.058)	47903	1.00000	1.000
	49 Fluorene	166	14.499	14.514	(1.064)	44002	1.00000	1.000
	51 4-Chlorophenyl-phenylether	204	14.505	14.514	(1.065)	21156	1.00000	1.000
	52 4-Nitroaniline	138	14.581	14.626	(1.070)	8559	1.00000	1.000 (M)
	54 N-Nitrosodiphenylamine	169	14.711	14.732	(0.918)	30879	1.00000	1.000
$	55 2,4,6-Tribromophenol	330	14.922	14.937	(1.095)	3444	1.00000	1.000
	56 4-Bromophenyl-phenylether	248	15.298	15.308	(0.955)	10876	1.00000	1.000
	57 Hexachlorobenzene	284	15.533	15.548	(0.970)	12460	1.00000	1.000
*	59 Phenanthrene-d10	188	16.021	16.036	(1.000)	1031072	20.0000	
	60 Phenanthrene	178	16.056	16.077	(1.002)	65449	1.00000	1.000
	61 Anthracene	178	16.132	16.153	(1.007)	65409	1.00000	1.000
	62 Carbazole	167	16.408	16.424	(1.024)	59018	1.00000	1.000
	63 Di-n-butylphthalate	149	17.084	17.093	(1.066)	71682	1.00000	1.000
	64 Fluoranthene	202	18.012	18.027	(1.124)	63563	1.00000	1.000
	65 Pyrene	202	18.376	18.397	(0.902)	68781	1.00000	1.000
$	66 Terphenyl-d14	244	18.664	18.674	(0.916)	41564	1.00000	1.000
	67 Butylbenzylphthalate	149	19.528	19.543	(0.958)	28078	1.00000	1.000
	68 Benzo(a)anthracene	228	20.344	20.365	(0.999)	62157	1.00000	1.000
*	69 Chrysene-d12	240	20.374	20.389	(1.000)	888098	20.0000	
	70 3,3'-Dichlorobenzidine	252	20.338	20.348	(0.998)	16378	1.00000	1.000
	71 Chrysene	228	20.415	20.436	(1.002)	61441	1.00000	1.000
	72 bis(2-Ethylhexyl)phthalate	149	20.515	20.518	(0.956)	37359	1.00000	1.000
*	134 Di-n-octylphthalate-d4	153	21.449	21.458	(1.000)	1405493	20.0000	
	73 Di-n-octylphthalate	149	21.454	21.470	(1.000)	88965	1.00000	1.000
	74 Benzo(b)fluoranthene	252	22.012	22.040	(0.975)	62957	1.00000	1.000
	75 Benzo(k)fluoranthene	252	22.048	22.075	(0.977)	68867	1.00000	1.000
	187 Total Benzofluoranthenes	252	22.012	22.075	(0.975)	123956	2.00000	2.000 (M)
	76 Benzo(a)pyrene	252	22.482	22.510	(0.996)	55355	1.00000	1.000
*	77 Perylene-d12	264	22.571	22.580	(1.000)	896867	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	24.403	24.454	(1.081)	49743	1.00000	1.000
	79 Dibenzo(a,h)anthracene	278	24.421	24.477	(1.082)	36717	1.00000	1.000 (M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
80	Benzo(g,h,i)perylene	276	24.926	24.989	(1.104)	42342	1.00000	1.000(M)
90	N-Nitrosodimethylamine	74	4.260	4.281	(0.490)	9418	1.00000	1.000
103	Pyridine	79	4.272	4.240	(0.492)	13123	1.00000	1.000(M)
91	Aniline	93	8.237	8.252	(0.948)	24205	1.00000	1.000
105	1-methylnaphthalene	142	12.073	12.082	(1.124)	37878	1.00000	1.000
93	Benzidine	184	18.247	18.251	(0.896)	18817	1.00000	1.000(M)
111	Azobenzene (1,2-DP-Hydrazine)	77	14.758	14.779	(1.083)	34717	1.00000	1.000
143	1,4-Dioxane	88	3.485	3.494	(0.401)	6166	1.00000	
$ 137	d8-1,4-Dioxane	96	3.420	3.424	(0.394)	6252	1.00000	
151	1,2,4,5-Tetrachlorobenzene	216	12.237	12.247	(0.898)	18497	1.00000	1.000
120	2,3,4,6-Tetrachlorophenol	232	14.211	14.221	(1.043)	7771	1.00000	1.000
144	alpha-Terpineol	59	10.775	10.790	(1.003)	10428	1.00000	1.000
98	Retene	219	18.923	18.932	(0.929)	20377	1.00000	1.000
133	Butylatedhydroxytoluene	205	13.765	13.774	(1.010)	36457	1.00000	1.000
115	Tributyl Phosphate	99	14.769	14.802	(0.922)	42406	1.00000	1.000
116	Dibutyl Phenyl Phosphate	175	16.526	16.535	(1.032)	32552	1.00000	1.000
117	Butyl Diphenyl Phosphate	94	18.235	18.245	(0.895)	9172	1.00000	1.000
118	Triphenyl Phosphate	326	19.857	19.866	(0.975)	9524	1.00000	1.000
123	Acetophenone	105	9.371	9.392	(0.873)	24162	1.00000	1.000
179	n-Decane	57	8.495	8.505	(0.978)	13401	1.00000	1.000
180	n-Octadecane	57	15.874	15.883	(0.991)	15597	1.00000	1.000
168	Pentachlorobenzene	250	13.976	13.992	(1.026)	14879	1.00000	1.000
113	Diphenyl Oxide	170	12.860	12.870	(0.944)	38962	1.00000	1.000
112	Biphenyl	154	12.672	12.682	(0.930)	44311	1.00000	1.000
110	Tetrachloroguaiacol	247	15.950	15.971	(0.996)	11956	2.00000	2.000
109	3,4,5-Trichloroguaiacol	213	14.305	14.315	(0.893)	5696	1.00000	1.000
181	3,4,6-Trichloroguaiacol	211	14.429	14.444	(0.901)	6639	1.00000	1.000
108	4,5,6-Trichloroguaiacol	213	15.339	15.349	(0.957)	5830	1.00000	1.000
184	3,4-Dichloroguaiacol	192	12.754	12.764	(0.936)	5700	1.00000	1.000
107	4,5-Dichloroguaiacol	192	13.530	13.545	(0.993)	7611	1.00000	1.000
182	4,6-Dichloroguaiacol	192	13.559	13.580	(0.995)	8112	1.00000	1.000
185	4-Chloroguaiacol	115	11.650	11.660	(1.341)	3842	0.50000	0.5000
106	Guaiacol	124	9.629	9.645	(1.108)	16777	1.00000	1.000

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 07191002.d
Lab Smp Id: IC010719
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100719.b/SW846100719.m
Misc Info: 10-

Calibration Date: 19-JUL-2010
Calibration Time: 16:18
Client Smp ID: IC010719
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	356478	178239	712956	290756	-18.44
27 Naphthalene-d8	1293412	646706	2586824	1025728	-20.70
42 Acenaphthene-d10	785897	392948	1571794	609037	-22.50
59 Phenanthrene-d10	1313990	656995	2627980	1031072	-21.53
69 Chrysene-d12	1155293	577646	2310586	888098	-23.13
134 Di-n-octylphthala	1825297	912648	3650594	1405493	-23.00
77 Perylene-d12	1146289	573144	2292578	896867	-21.76

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.70	8.20	9.20	8.69	-0.10
27 Naphthalene-d8	10.74	10.24	11.24	10.74	-0.03
42 Acenaphthene-d10	13.63	13.13	14.13	13.62	-0.02
59 Phenanthrene-d10	16.03	15.53	16.53	16.02	-0.05
69 Chrysene-d12	20.38	19.88	20.88	20.37	-0.04
134 Di-n-octylphthala	21.45	20.95	21.95	21.45	-0.01
77 Perylene-d12	22.58	22.08	23.08	22.57	-0.04

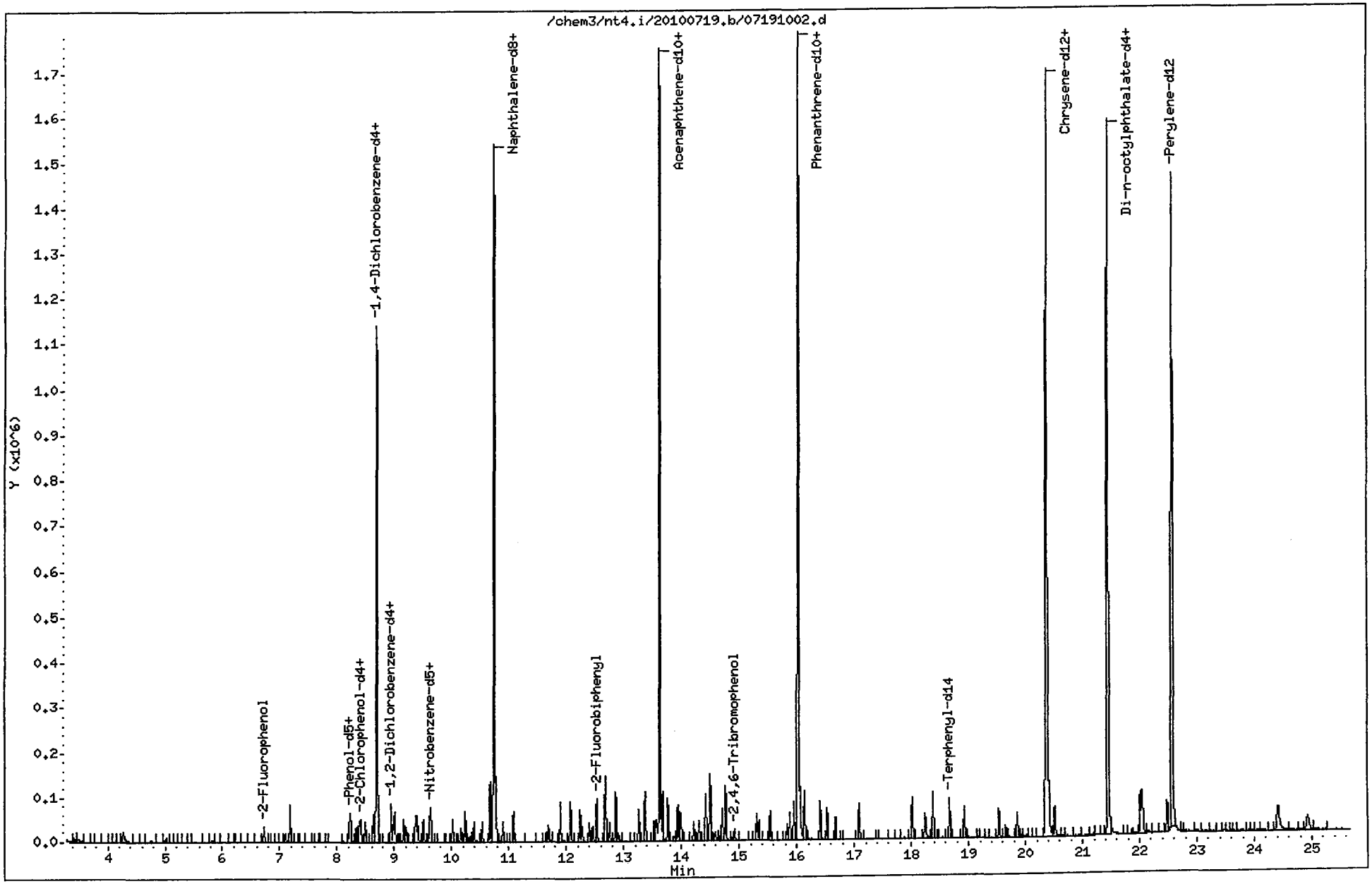
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20100719.b/07191002.d
Date : 19-JUL-2010 16:56
Client ID: IC010719
Sample Info: IC010719

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32

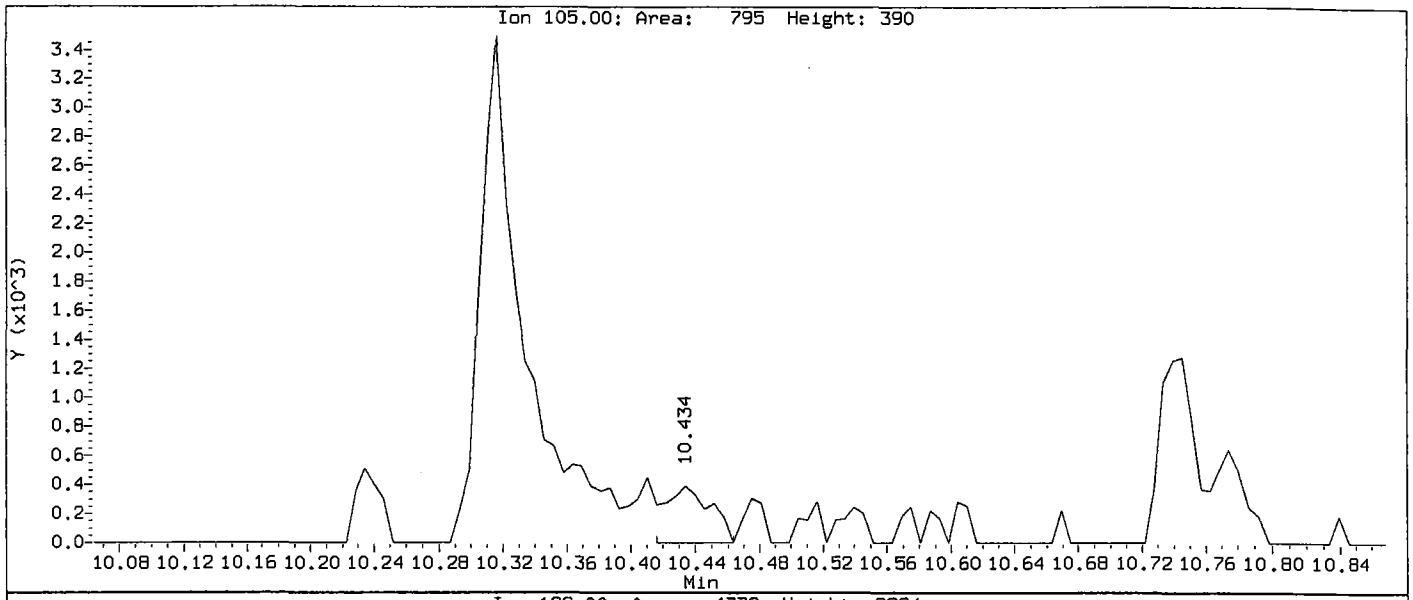
Column phase: ZB-5msi

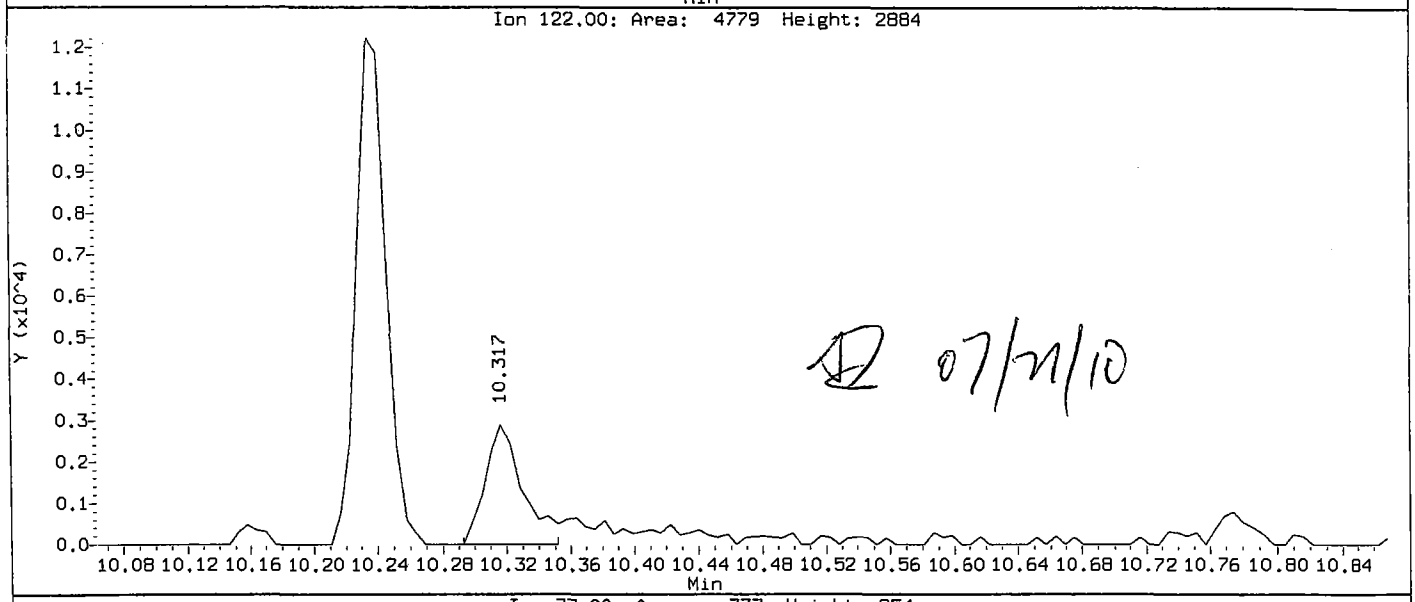


RGS1 00601

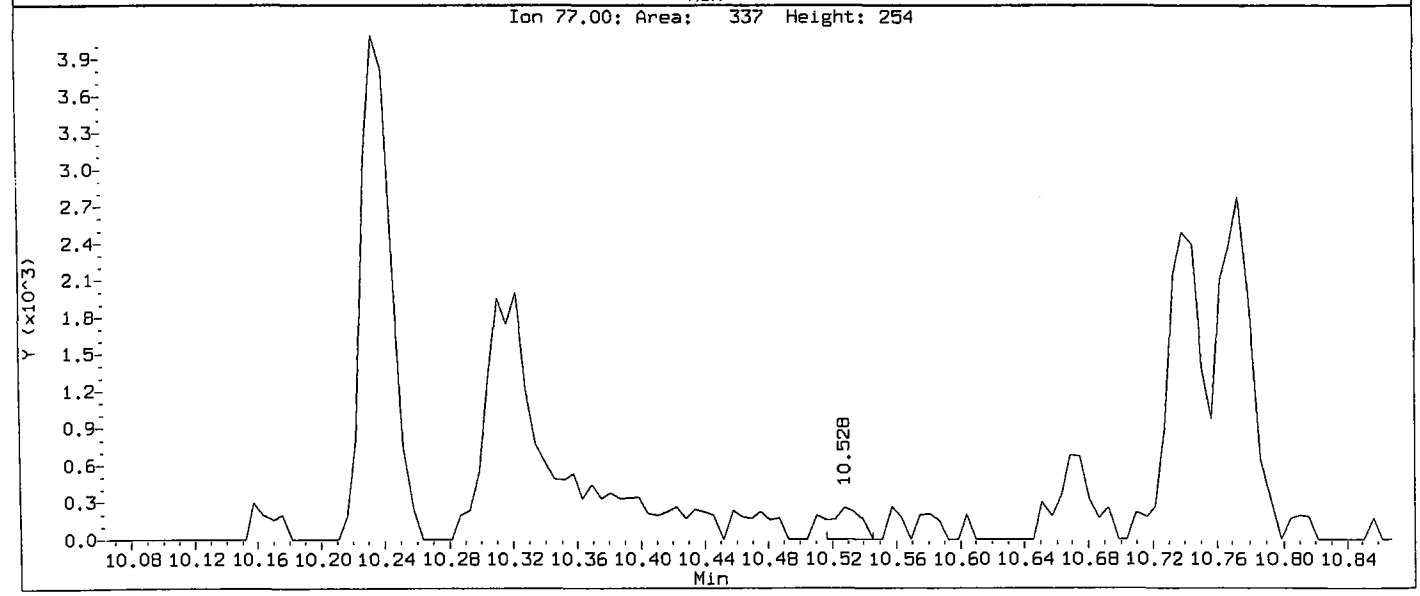
Data File: /chem3/nt4.i/20100719.b/07191002.d
Injection Date: 19-JUL-2010 16:56
Instrument: nt4.i
Client Sample ID: IC010719

Compound: Benzoic acid
CAS Number: 65-85-0



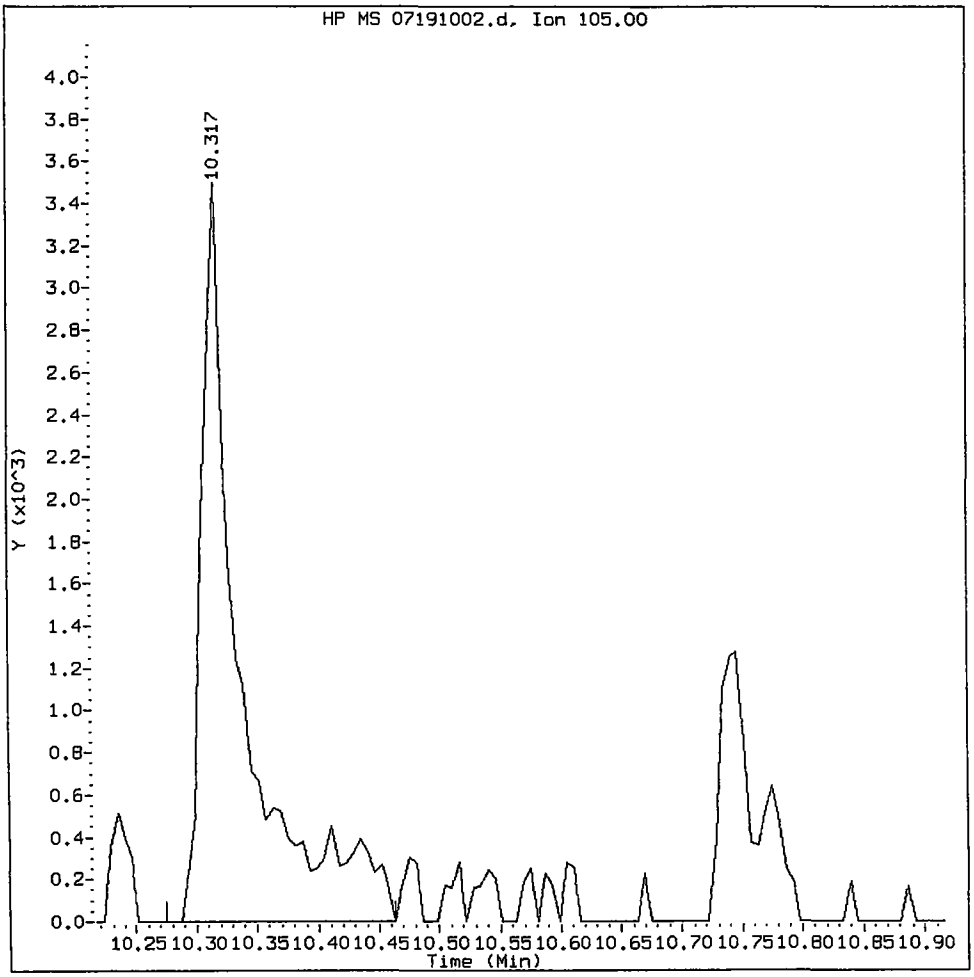


07/21/10



IC010719, /chem3/nt4.i/20100719.b/07191002.d

Benzoic acid Amount: 0.00 Area: 8004



MANUAL INTEGRATION for Benzoic acid

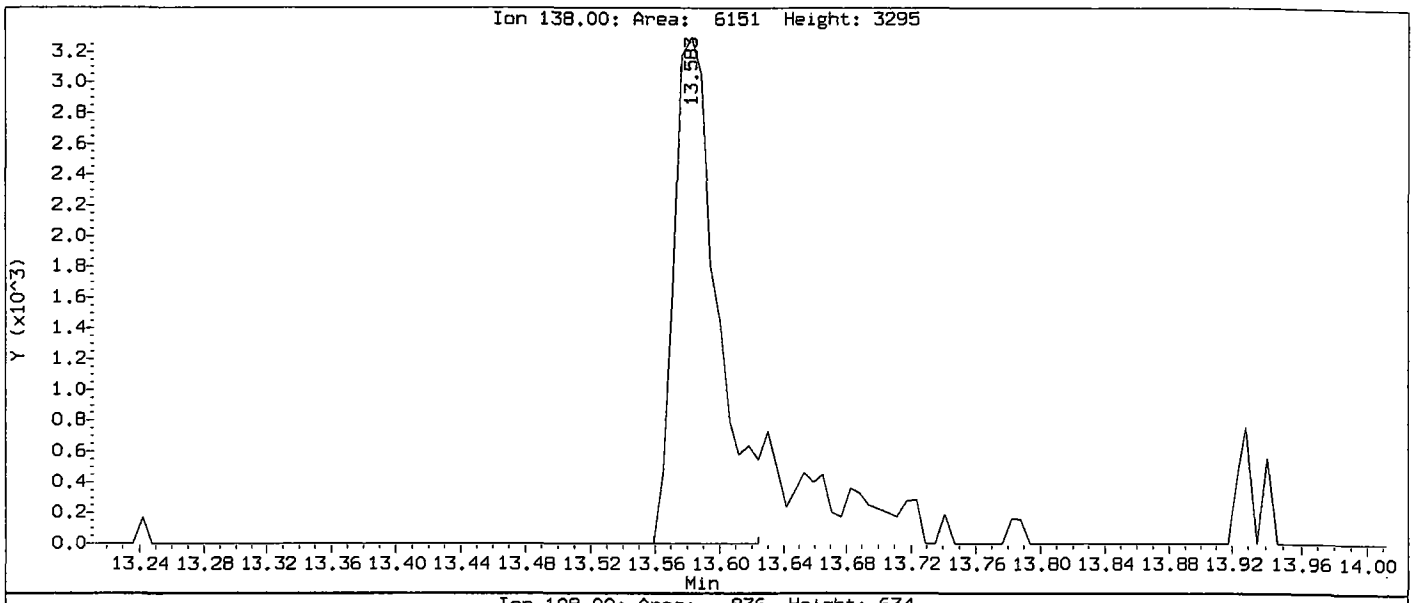
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

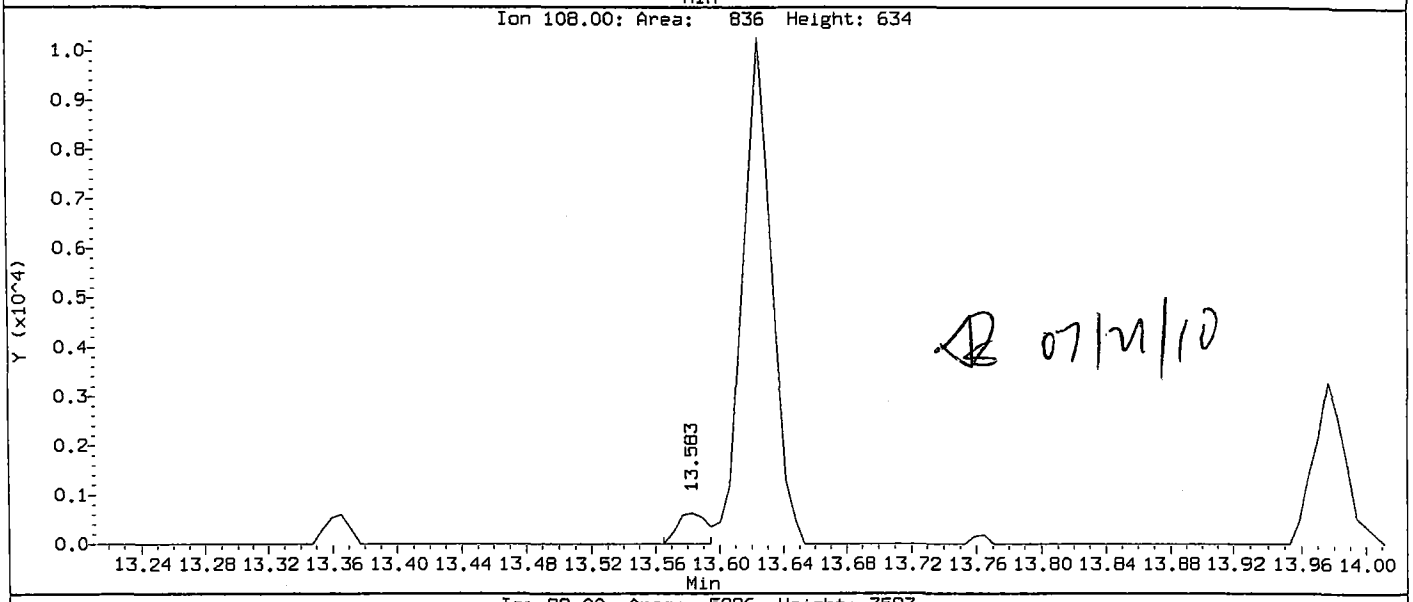
5. Other _____

Analyst: _____ Date: 07/21/10

Data File: /chem3/nt4.i/20100719B.b/07191002.d
Injection Date: 19-JUL-2010 16:56
Instrument: nt4.i
Client Sample ID: IC010719

Compound: 3-Nitroaniline
CAS Number: 99-09-2





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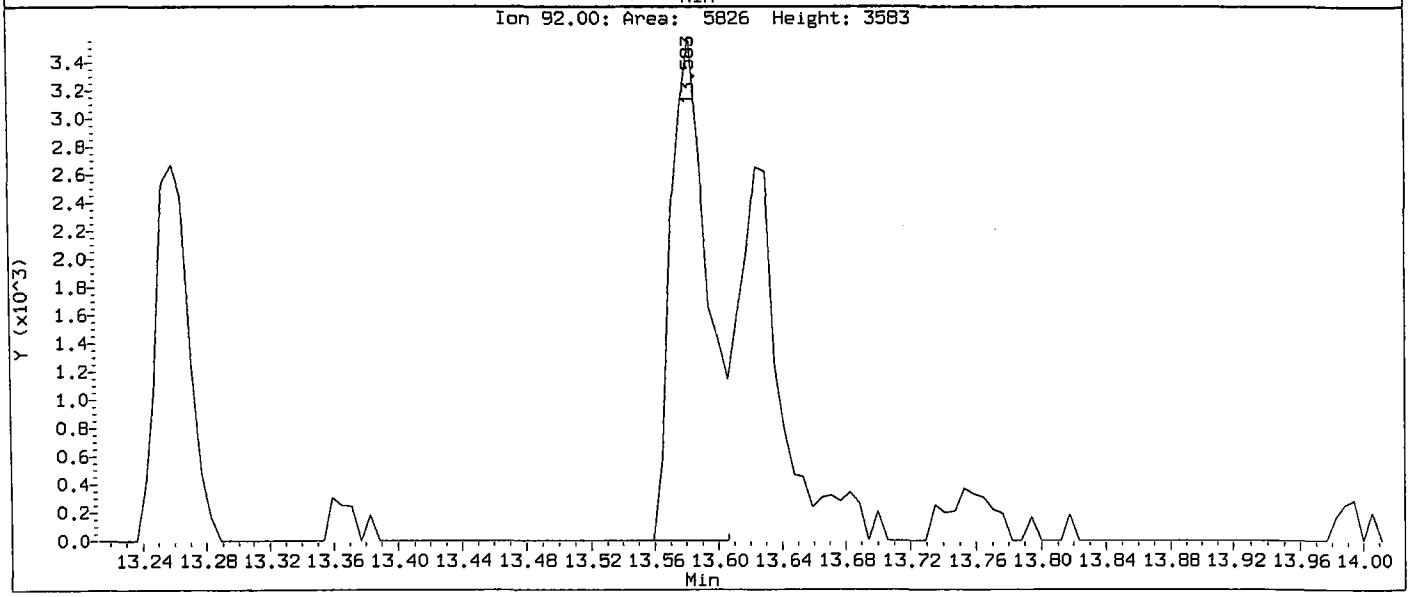

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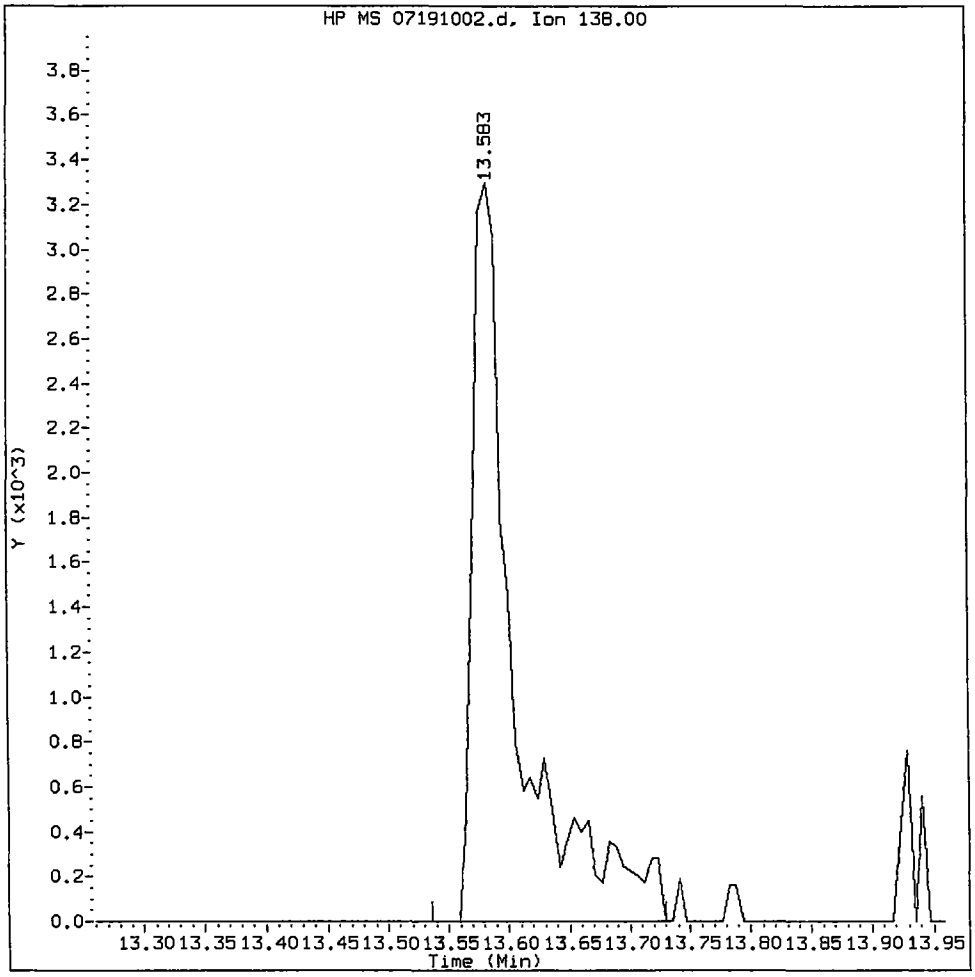
3-Nitroaniline Amount: 1.00 Area: 8127



MANUAL INTEGRATION for 3-Nitroaniline

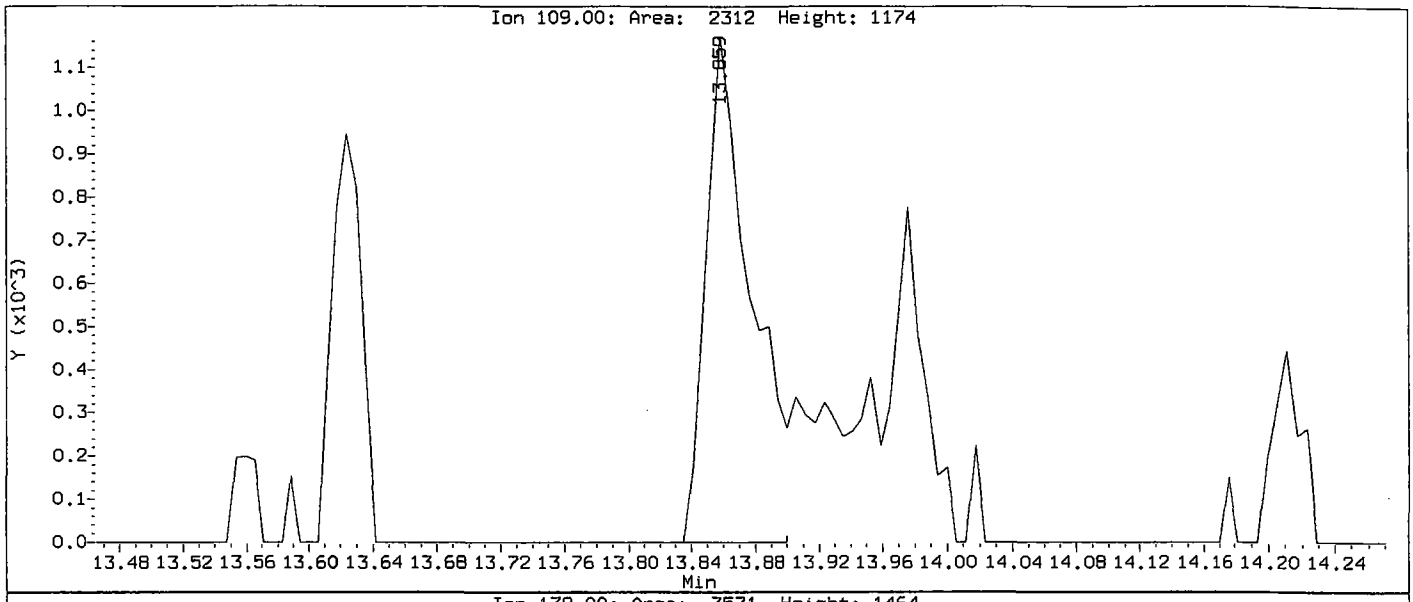
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

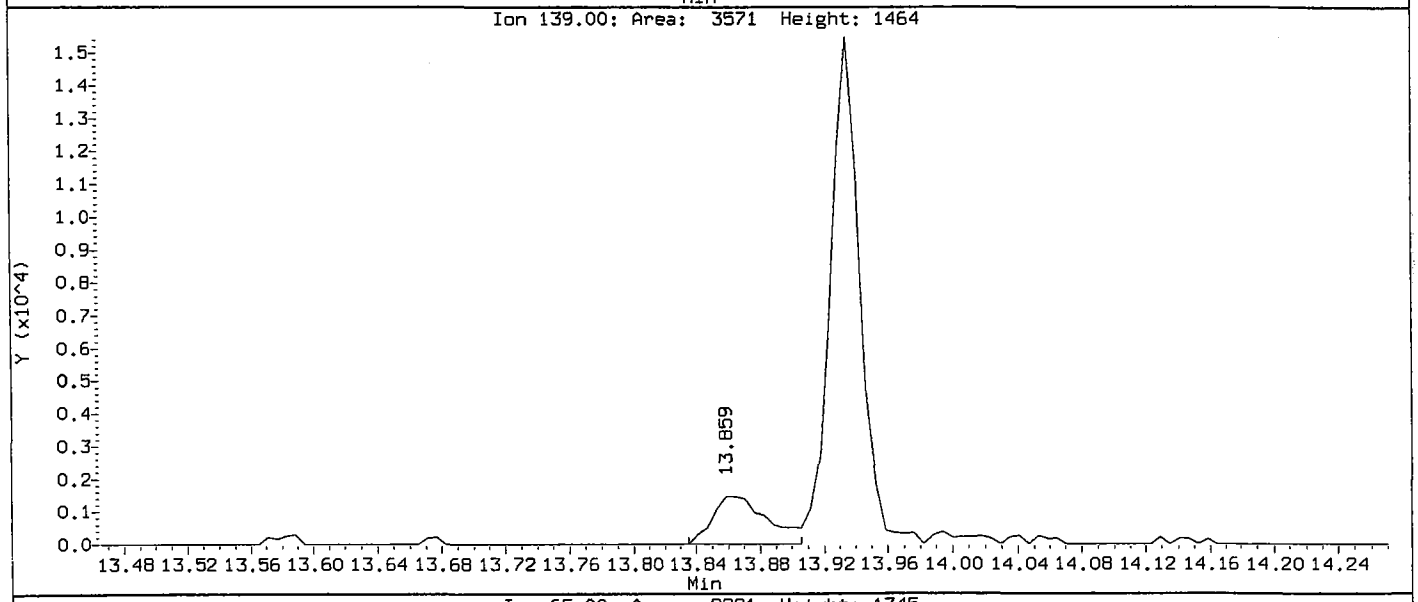
5. Other _____

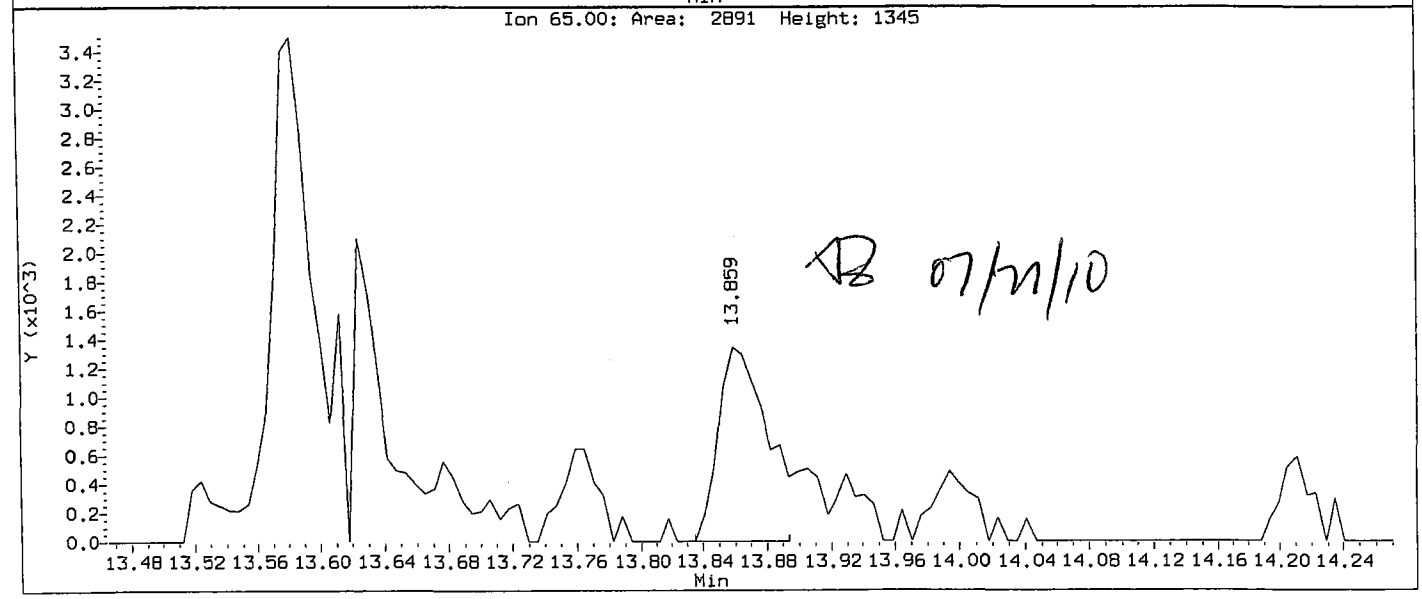
Analyst: _____ Date: 07/21/10

Data File: /chem3/nt4.i/20100719.b/07191002.d
Injection Date: 19-JUL-2010 16:56
Instrument: nt4.i
Client Sample ID: IC010719

Compound: 4-Nitrophenol
CAS Number: 100-02-7







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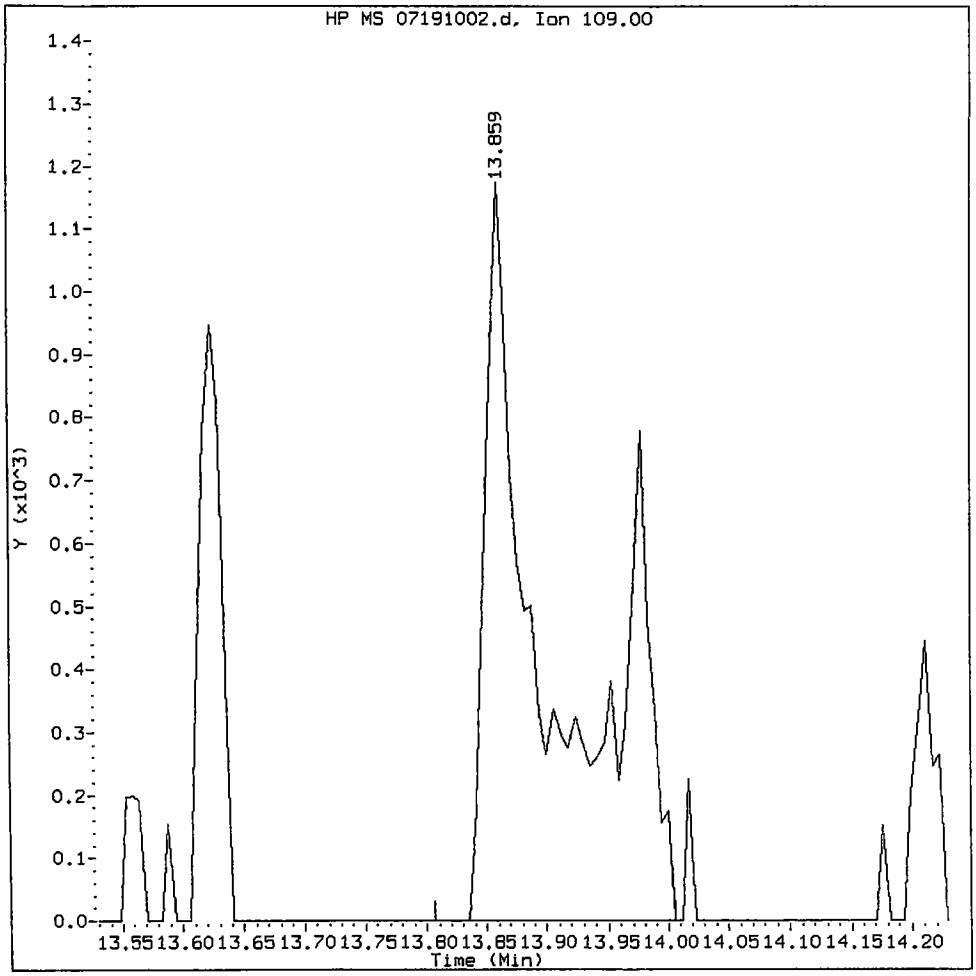
IC010719, /chem3/nt4.i/20100719.b/07191002.d

4-Nitrophenol Amount: 0.00 Area: 4317



MANUAL INTEGRATION for 4-Nitrophenol

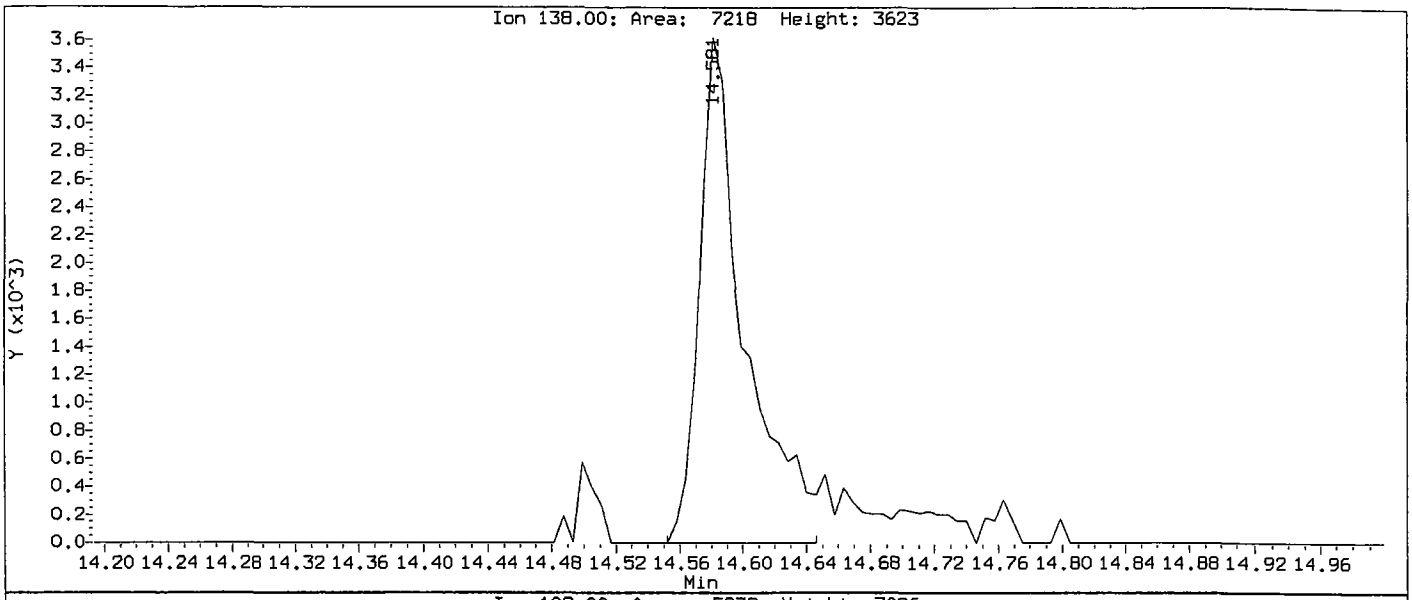
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

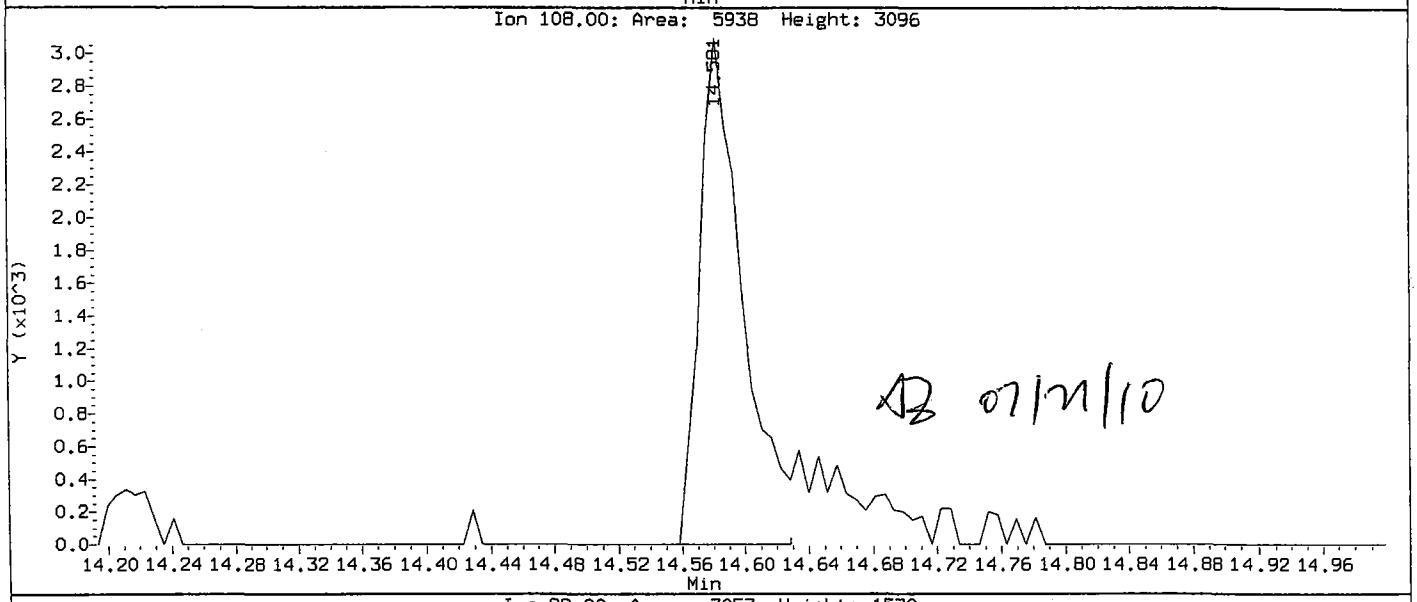
5. Other _____

Analyst: _____ Date: 07/21/10

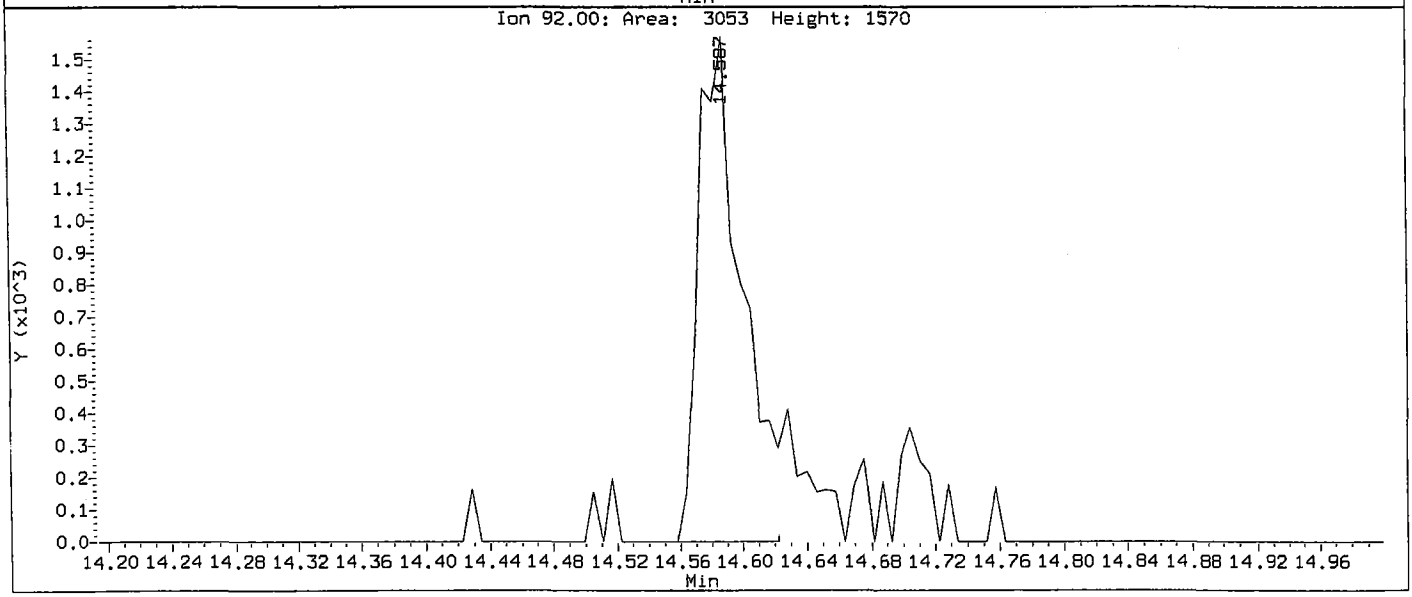
Data File: /chem3/nt4.i/20100719.b/07191002.d
Injection Date: 19-JUL-2010 16:56
Instrument: nt4.i
Client Sample ID: IC010719

Compound: 4-Nitroaniline
CAS Number: 100-01-6



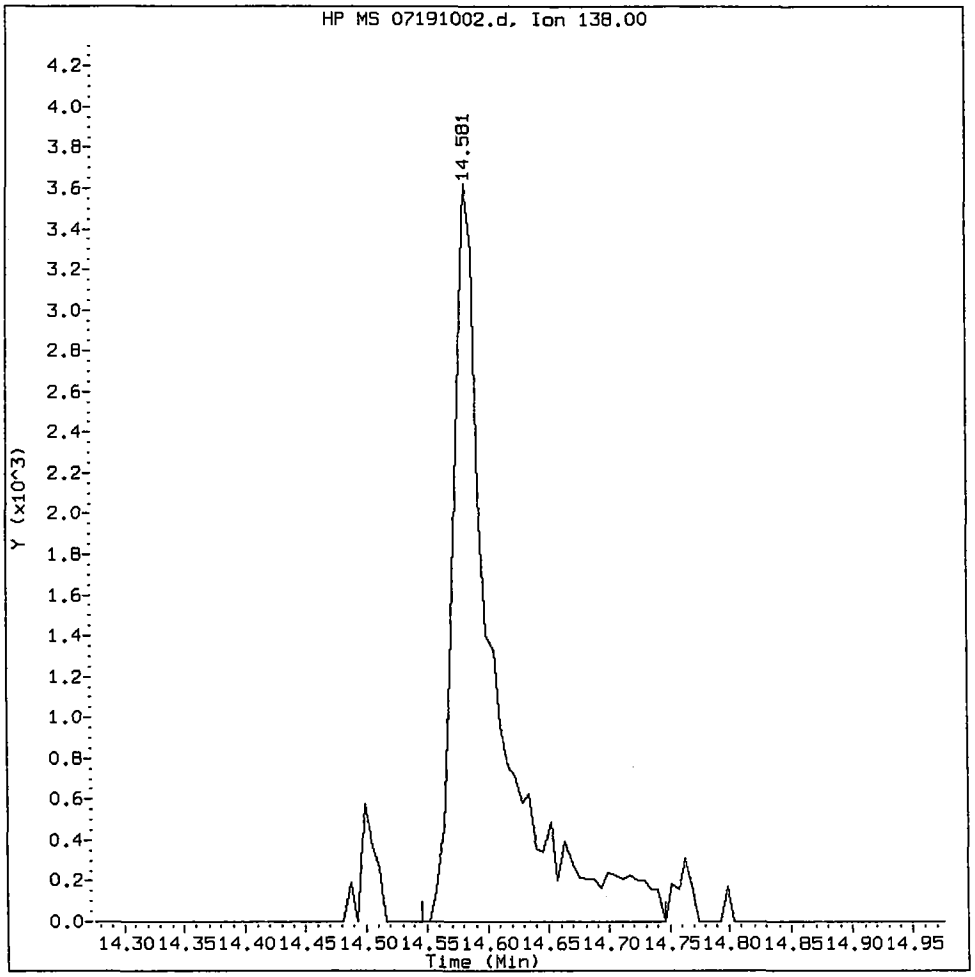


AB 07/21/10



IC010719, /chem3/nt4.i/20100719.b/07191002.d

4-Nitroaniline Amount: 1.00 Area: 8559



MANUAL INTEGRATION for 4-Nitroaniline

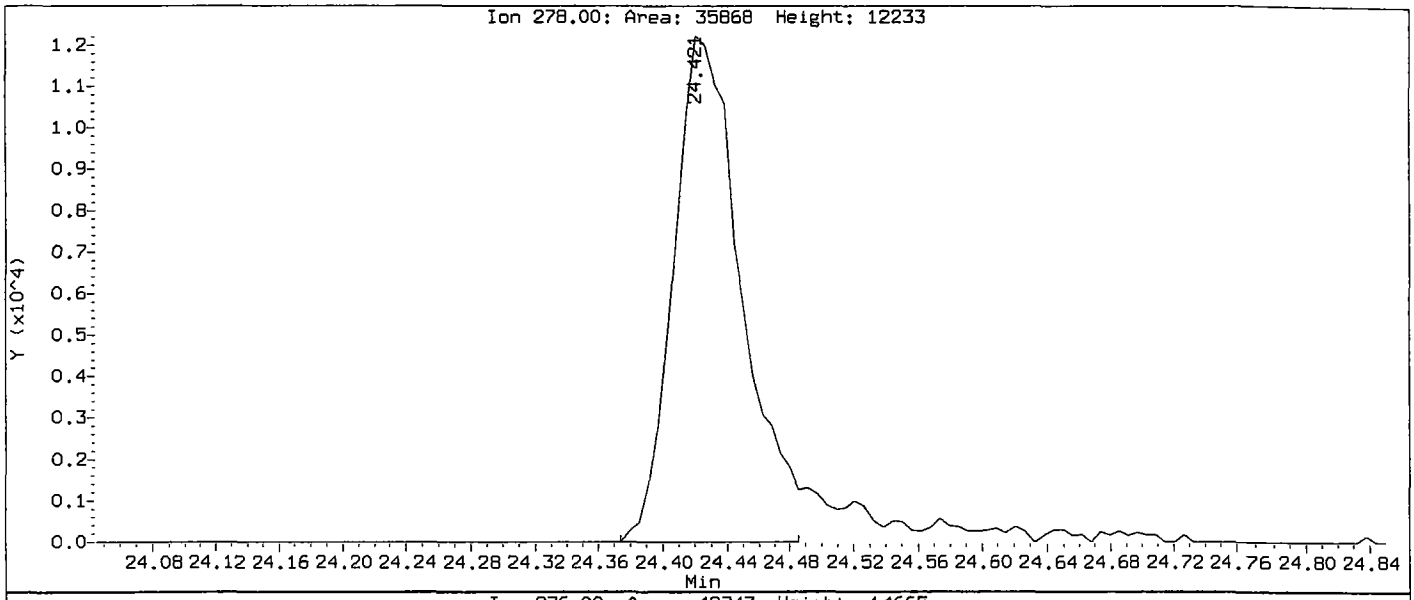
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

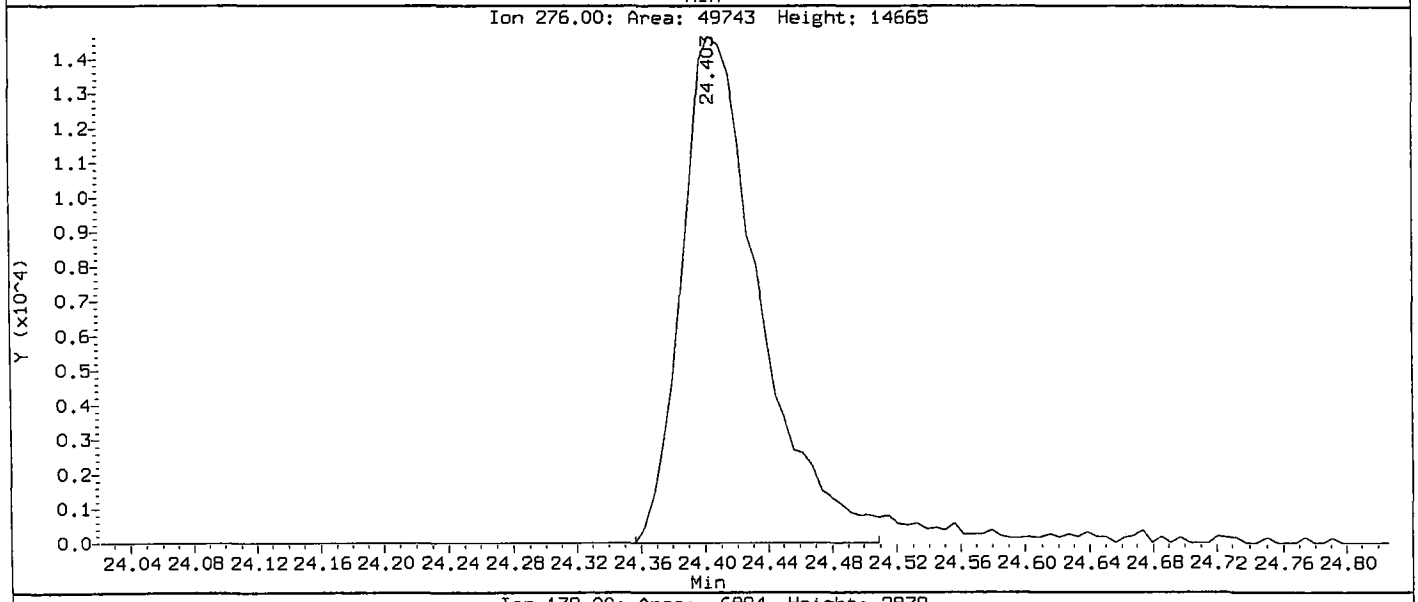
5. Other _____

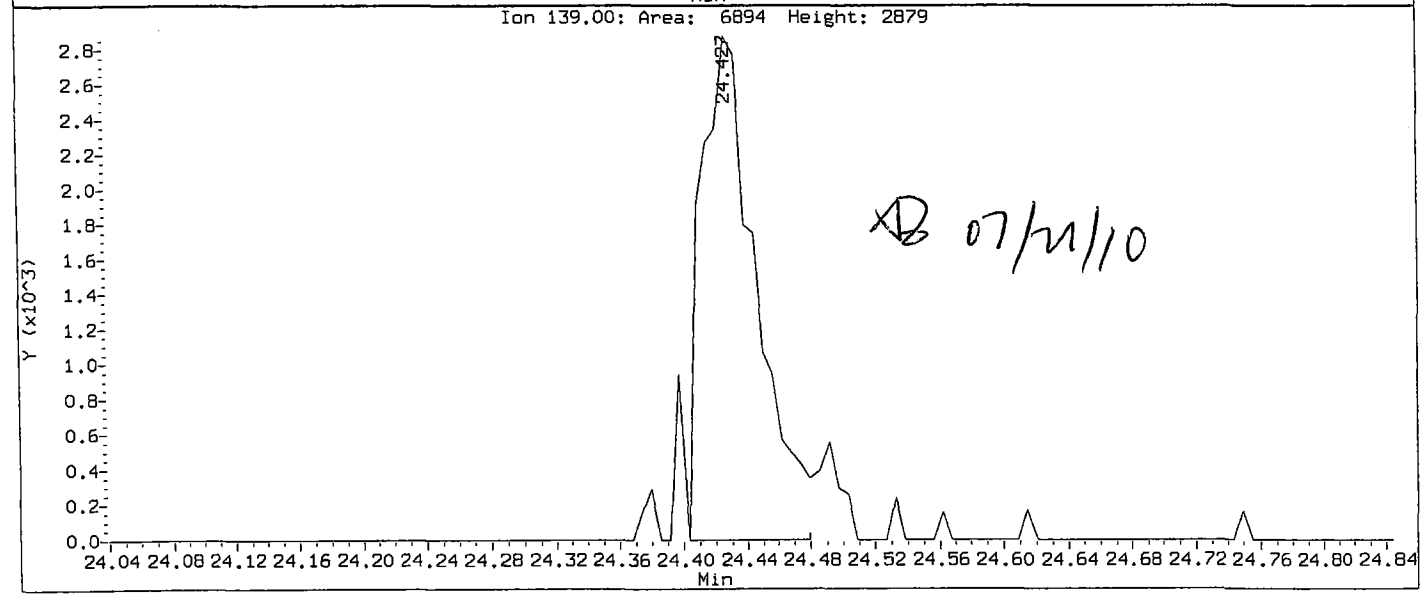
Analyst: _____ Date: 07/21/10

Data File: /chem3/nt4.i/20100719.b/07191002.d
Injection Date: 19-JUL-2010 16:56
Instrument: nt4.i
Client Sample ID: IC010719

Compound: Dibenzo(a,h)anthracene
CAS Number: 53-70-3



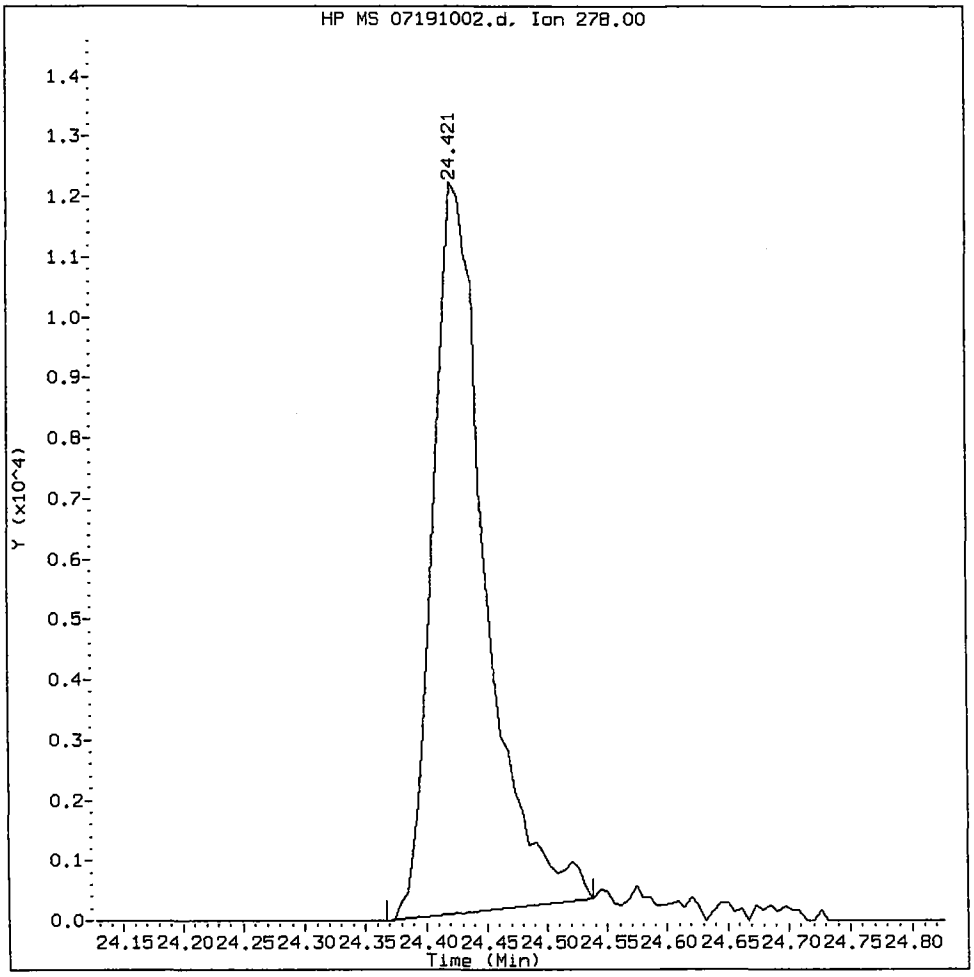




XD 07/21/10

IC010719, /chem3/nt4.i/20100719.b/07191002.d

Dibenzo(a,h)anthracene Amount: 1.00 Area: 36717



MANUAL INTEGRATION for Dibenzo(a,h)anthracene

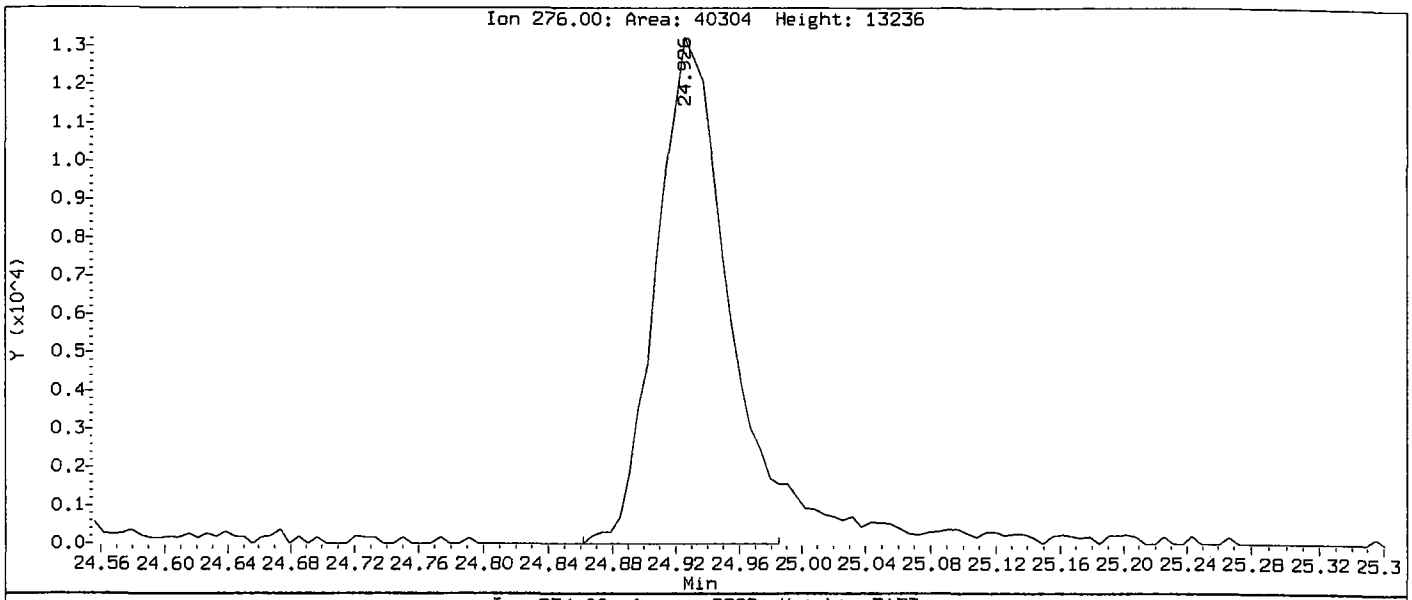
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

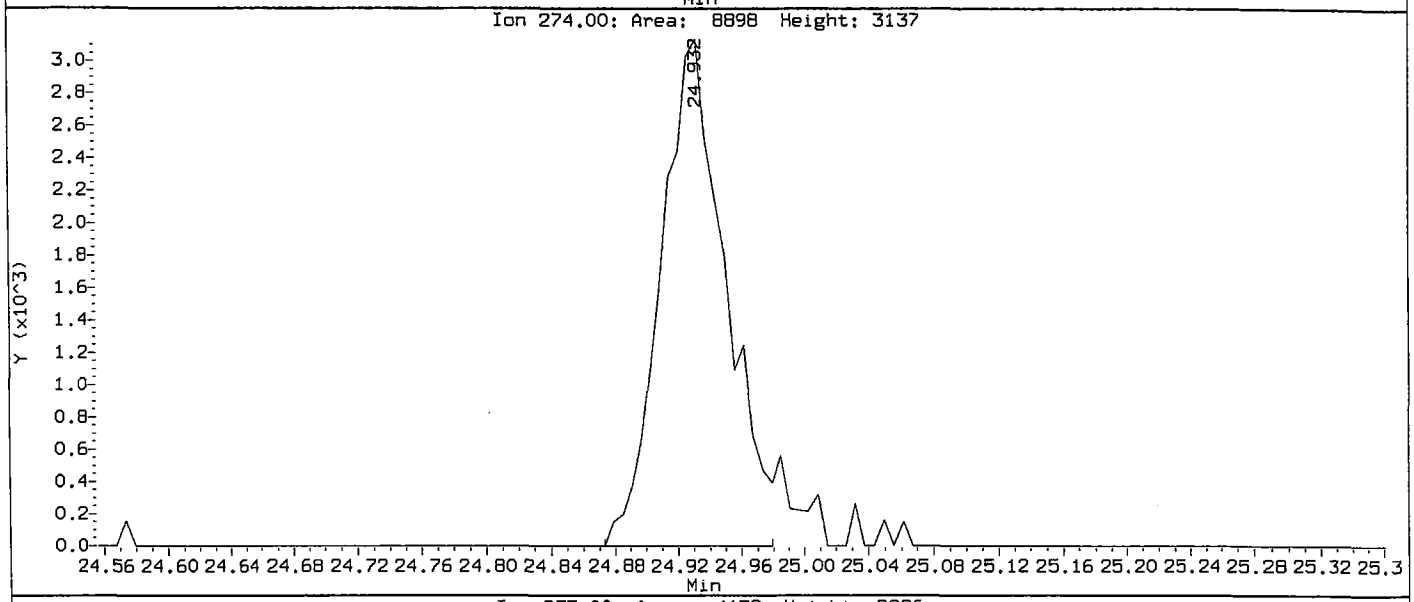
5. Other _____

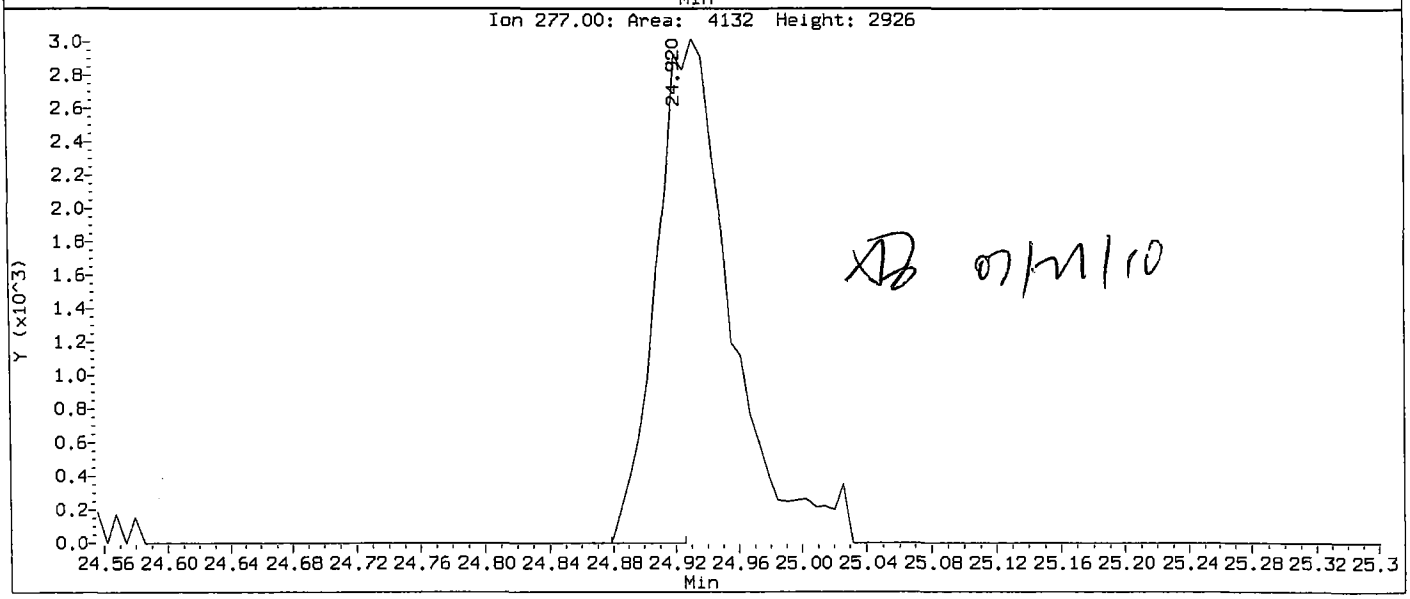
Analyst: AZ Date: 07/21/10

Data File: /chem3/nt4.i/20100719.b/07191002.d
Injection Date: 19-JUL-2010 16:56
Instrument: nt4.i
Client Sample ID: IC010719

Compound: Benzo(g,h,i)perylene
CAS Number: 191-24-2



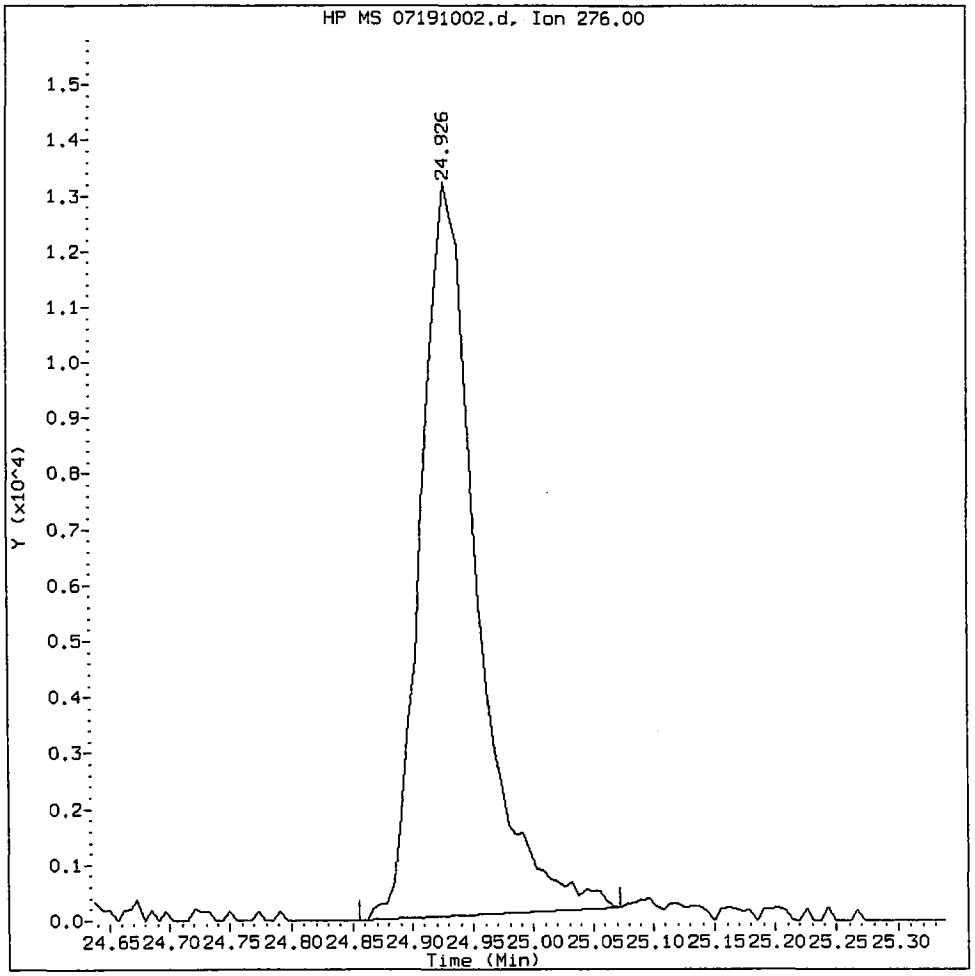




XB 07/21/10

IC010719, /chem3/nt4.i/20100719.b/07191002.d

Benzo(g,h,i)perylene Amount: 1.00 Area: 42342



MANUAL INTEGRATION for Benzo(g,h,i)perylene

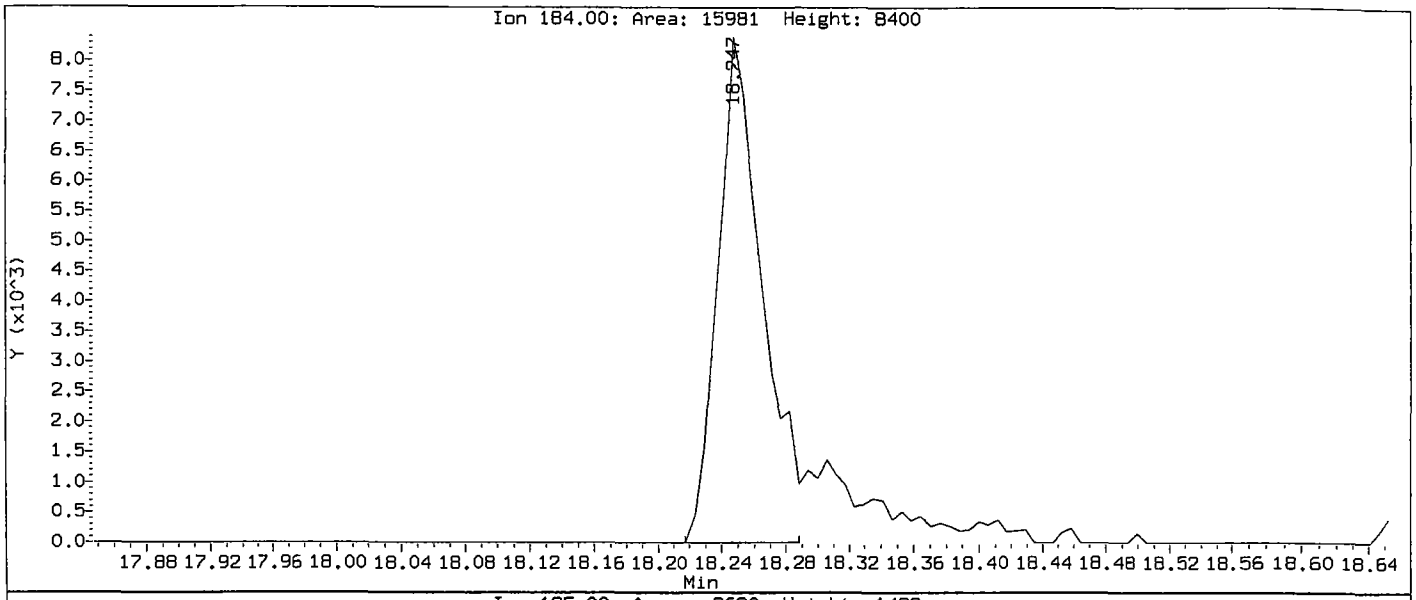
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

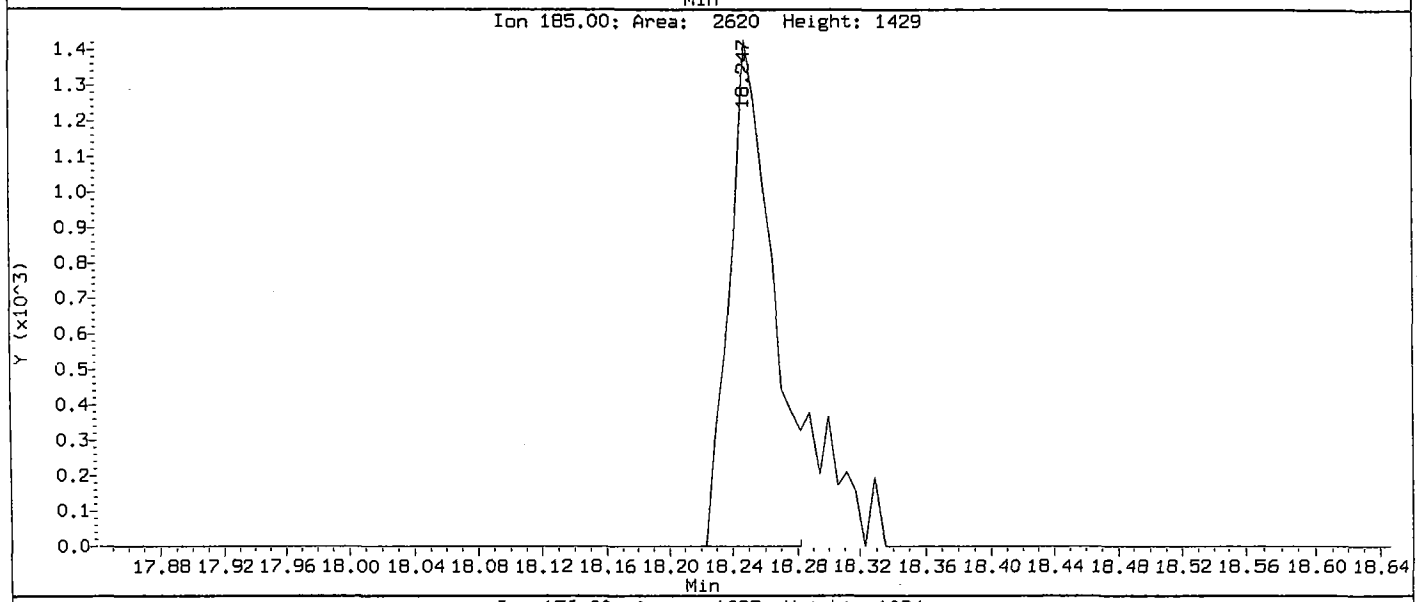
5. Other _____

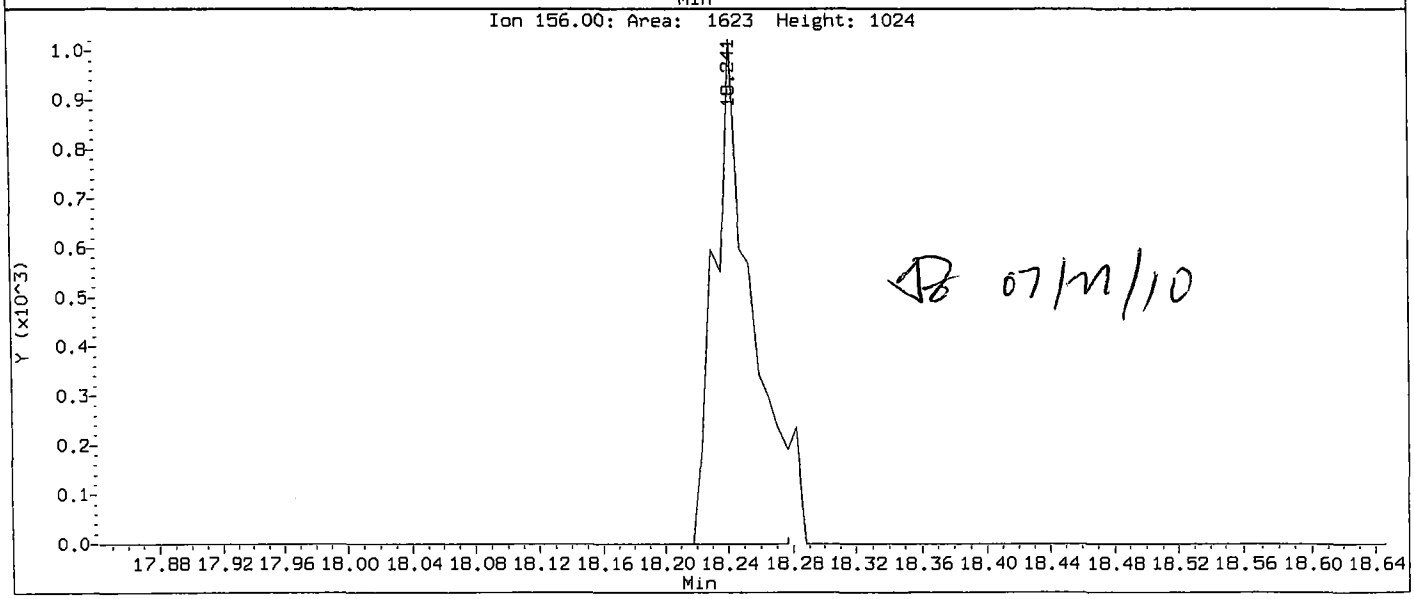
Analyst: _____ Date: 07/21/10

Data File: /chem3/nt4.i/20100719.b/07191002.d
Injection Date: 19-JUL-2010 16:56
Instrument: nt4.i
Client Sample ID: IC010719

Compound: Benzidine
CAS Number:



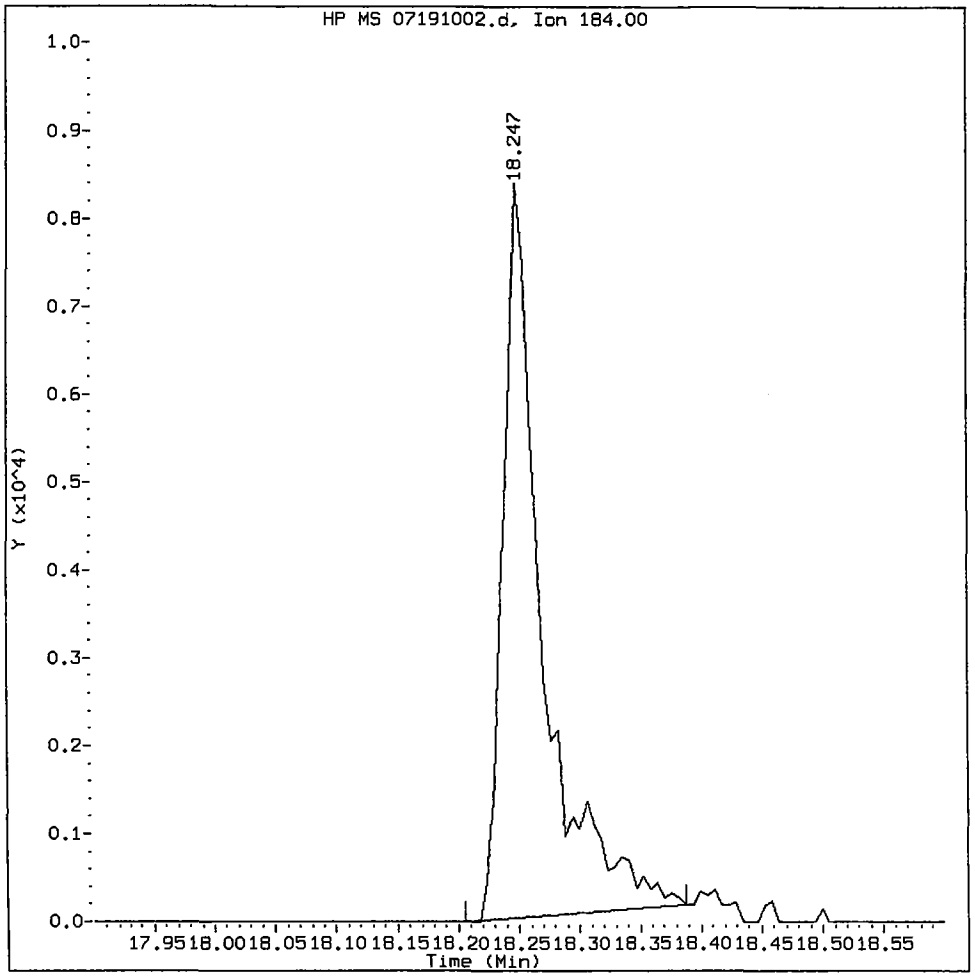




B 07/21/10

IC010719, /chem3/nt4.i/20100719.b/07191002.d

Benzidine Amount: 1.00 Area: 18817



MANUAL INTEGRATION for Benzidine

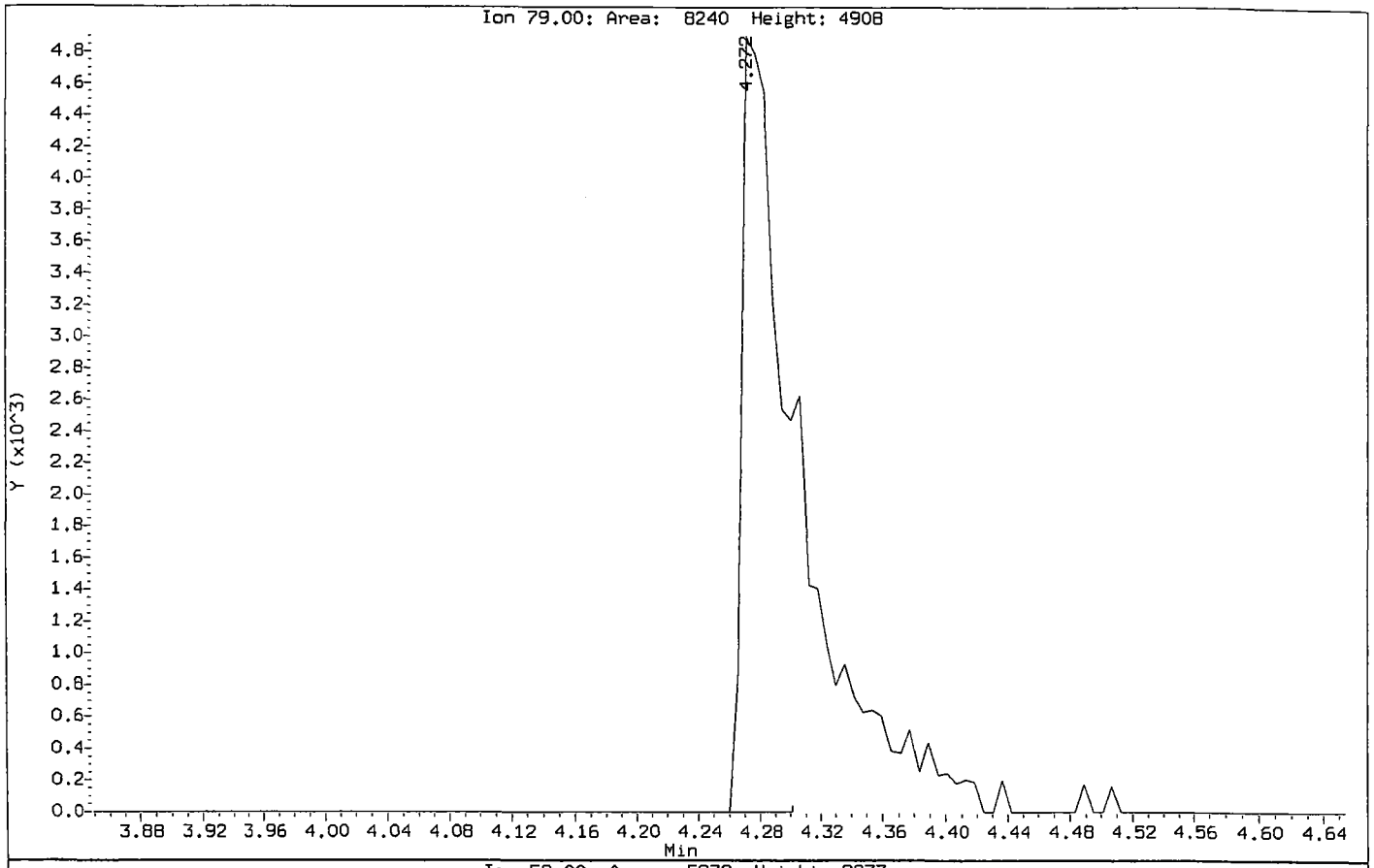
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

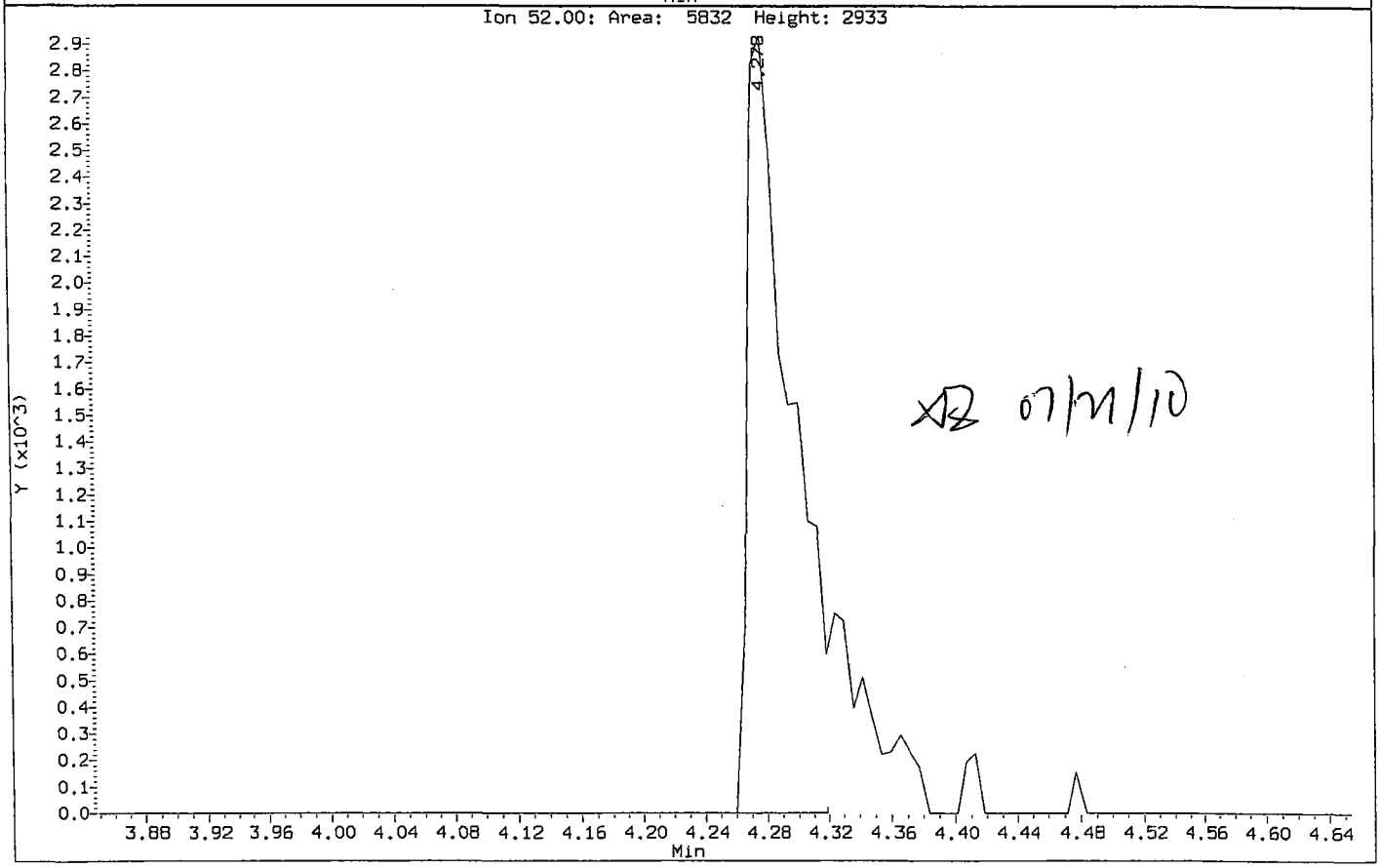
5. Other _____

Analyst: XD Date: 07/21/10

Data File: /chem3/nt4.i/20100719.b/07191002.d
Injection Date: 19-JUL-2010 16:56
Instrument: nt4.i
Client Sample ID: IC010719

Compound: Pyridine
CAS Number:

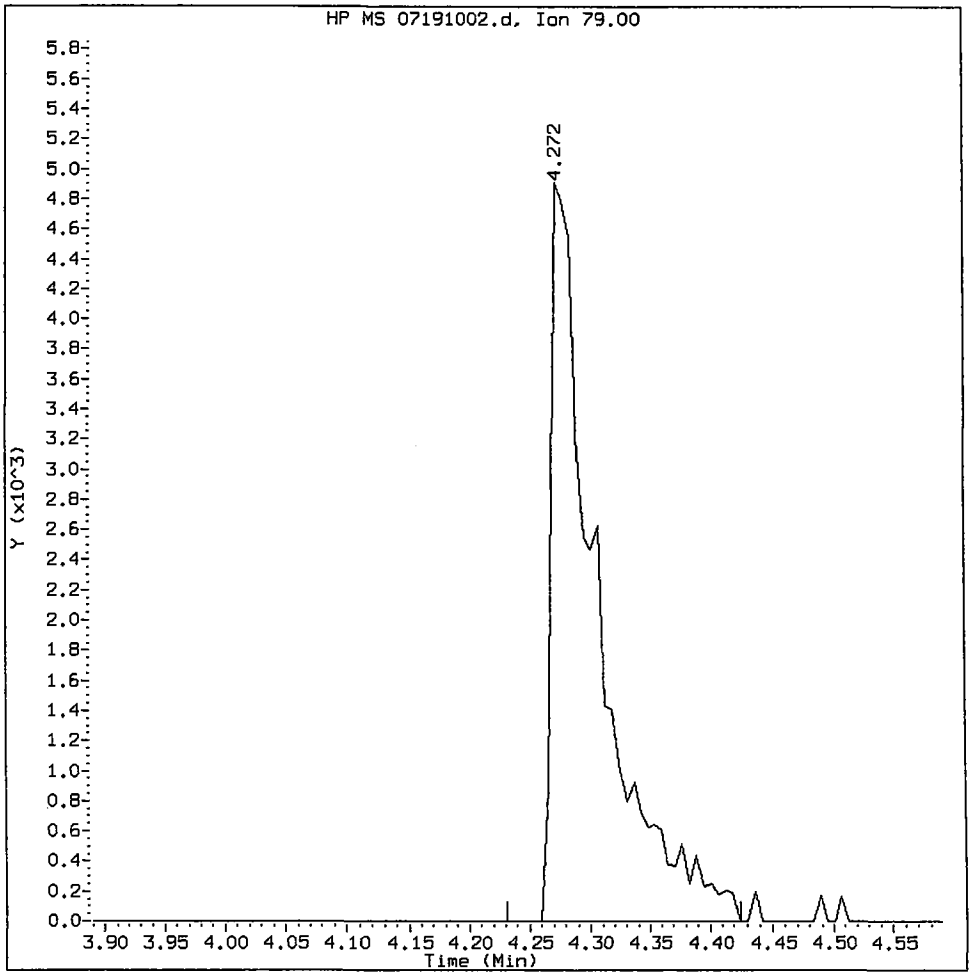




XB 07/21/10

IC010719, /chem3/nt4.i/20100719.b/07191002.d

Pyridine Amount: 1.00 Area: 13123



MANUAL INTEGRATION for Pyridine

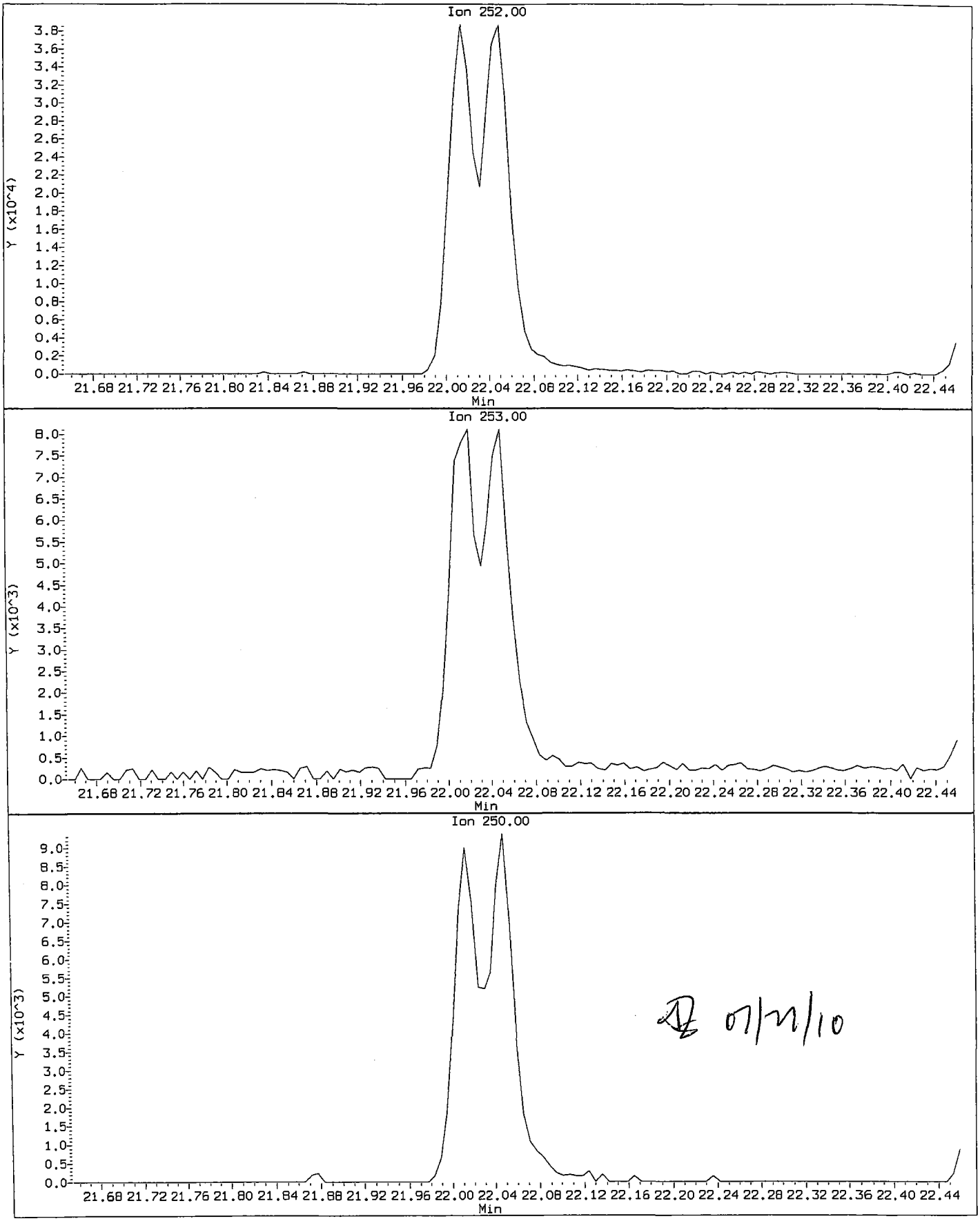
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 07/21/10

Data File: /chem3/nt4.i/20100719.b/07191002.d
Injection Date: 19-JUL-2010 16:56
Instrument: nt4.i
Client Sample ID: IC010719

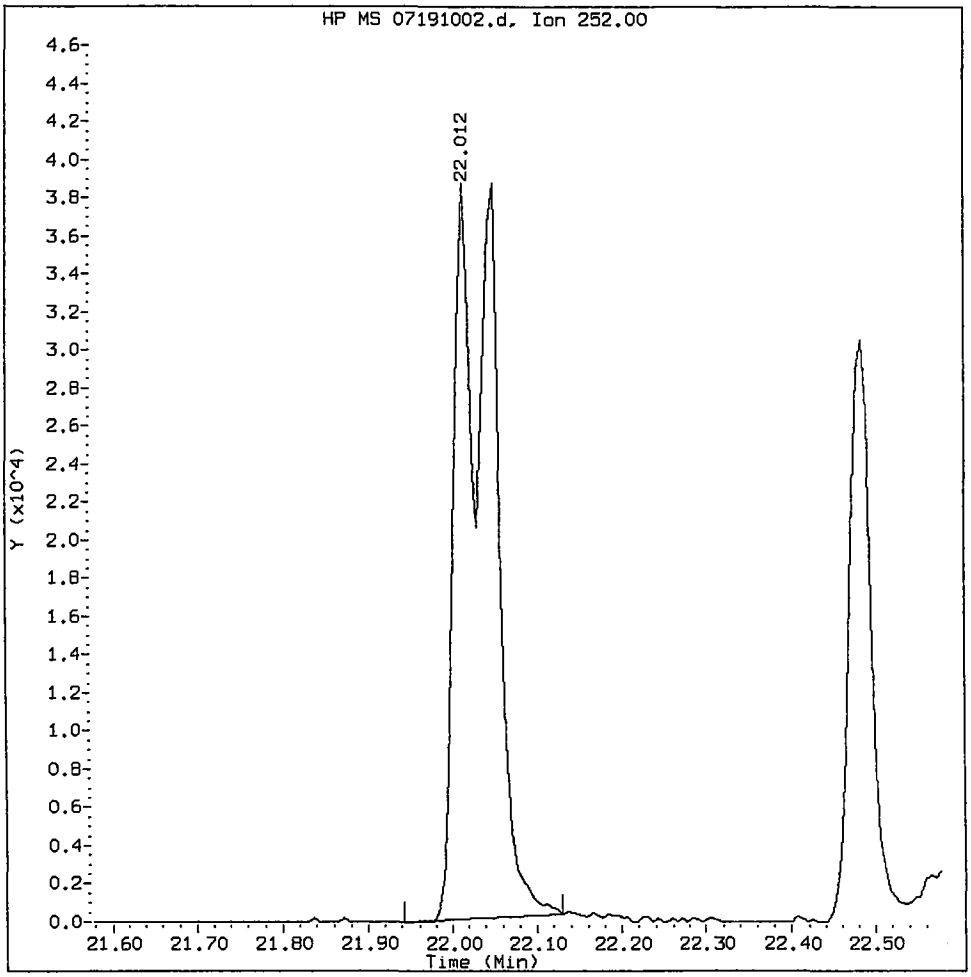
Compound: Total Benzofluoranthenes
CAS Number:



07/21/10

IC010719, /chem3/nt4.i/20100719.b/07191002.d

Total Benzofluoranthenes Amount: 2.00 Area: 123956



MANUAL INTEGRATION for Total Benzofluoranthenes

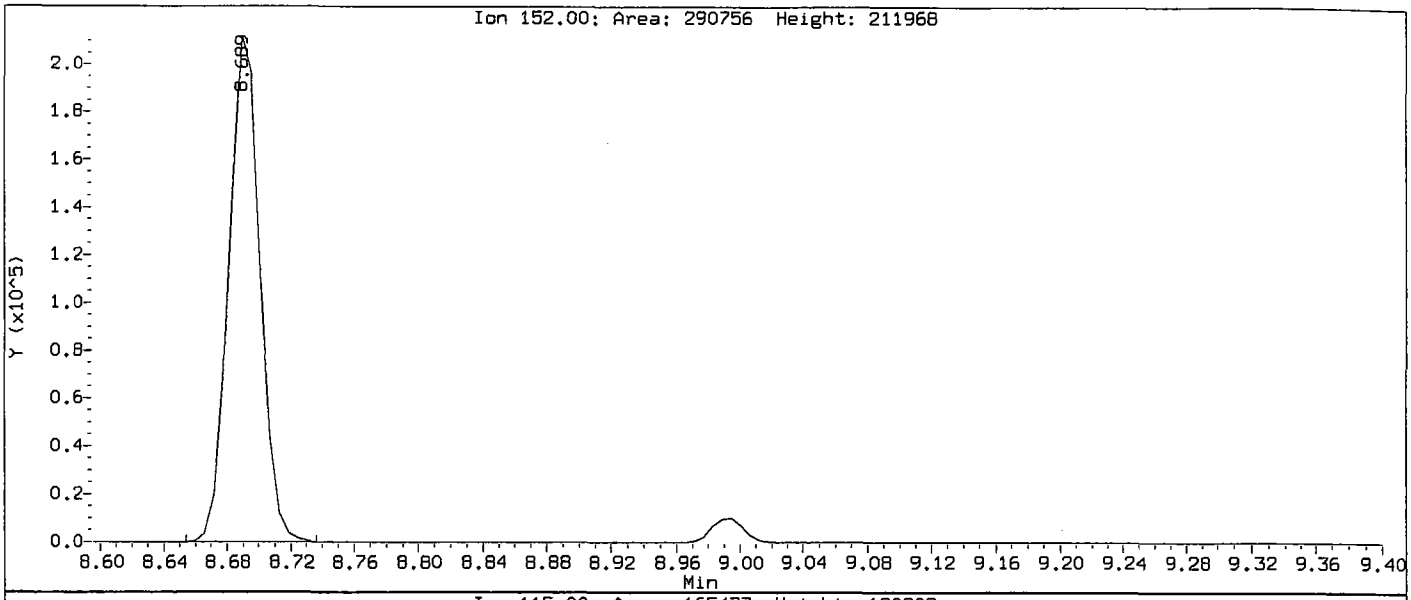
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

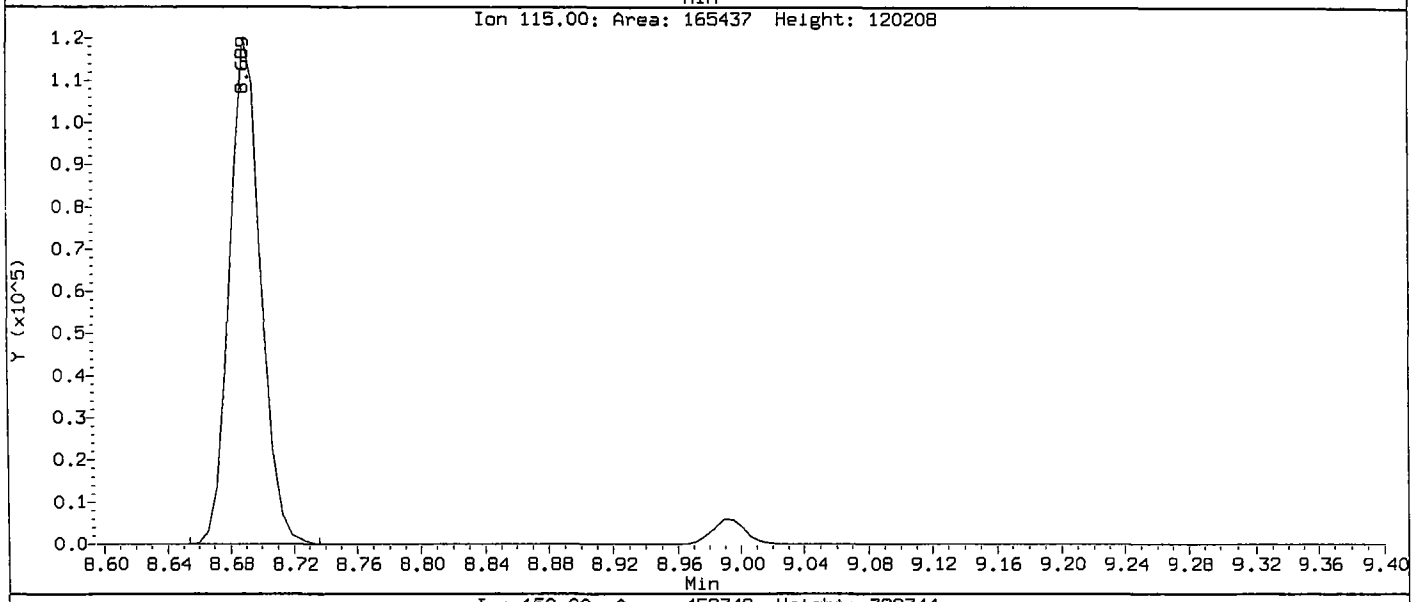
5. Other _____

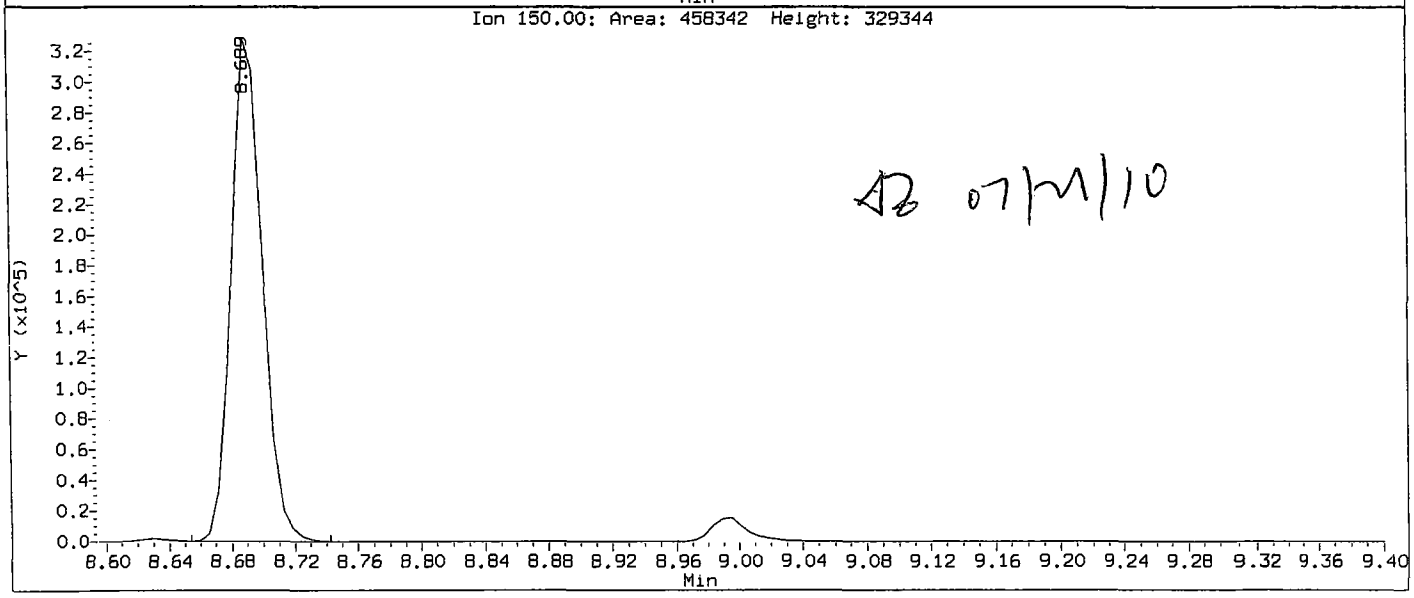
Analyst: AZ Date: 07/21/10

Data File: /chem3/nt4.i/20100719.b/07191002.d
Injection Date: 19-JUL-2010 16:56
Instrument: nt4.i
Client Sample ID: IC010719

Compound: 1,2-Dichlorobenzene-d4
CAS Number: 2199-69-1



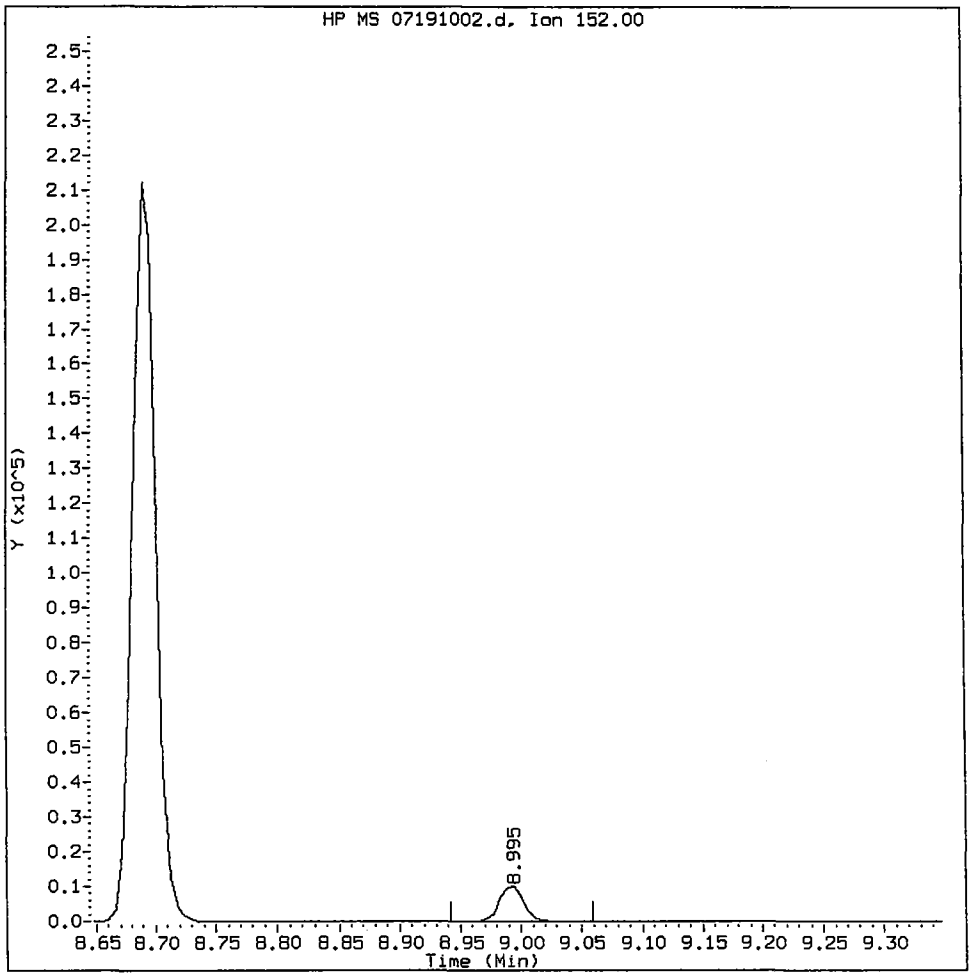




AB 07/21/10

IC010719, /chem3/nt4.i/20100719.b/07191002.d

1,2-Dichlorobenzene-d4 Amount: 1.00 Area: 14140



MANUAL INTEGRATION for 1,2-Dichlorobenzene-d4

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Other RT corrected

Analyst: [signature] Date: 07/21/10

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100719.b/07191003.d
Lab Smp Id: IC050719 Client Smp ID: IC050719
Inj Date : 19-JUL-2010 17:33
Operator : JZ Inst ID: nt4.i
Smp Info : IC050719
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100719.b/SW846100719.m
Meth Date : 21-Jul-2010 18:37 jianqing Quant Type: ISTD
Cal Date : 19-JUL-2010 17:33 Cal File: 07191003.d
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

JQ 07/21/10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.724	6.737	(0.774)	78735	5.00000	4.912
$	2 Phenol-d5	99	8.210	8.229	(0.945)	78205	5.00000	5.059
	3 Phenol	94	8.228	8.252	(0.947)	104398	5.00000	4.945
$	5 2-Chlorophenol-d4	132	8.386	8.393	(0.965)	82652	5.00000	4.925
	4 Bis(2-Chloroethyl)ether	93	8.339	8.352	(0.959)	73772	5.00000	4.772
	6 2-Chlorophenol	128	8.410	8.423	(0.968)	95435	5.00000	4.973
	7 1,3-Dichlorobenzene	146	8.633	8.640	(0.993)	105213	5.00000	4.676
*	8 1,4-Dichlorobenzene-d4	152	8.692	8.699	(1.000)	280196	20.0000	
	9 1,4-Dichlorobenzene	146	8.715	8.722	(1.003)	106033	5.00000	4.713
$	10 1,2-Dichlorobenzene-d4	152	8.991	8.998	(1.034)	64046	5.00000	4.845
	12 1,2-Dichlorobenzene	146	9.015	9.022	(1.037)	100850	5.00000	4.766
	11 Benzyl alcohol	108	8.944	8.969	(1.029)	63901	5.00000	5.000
	14 2,2'-oxybis(1-Chloropropane)	45	9.203	9.216	(1.059)	71419	5.00000	4.734
	13 2-Methylphenol	108	9.162	9.181	(1.054)	77789	5.00000	5.256
	17 Hexachloroethane	117	9.508	9.509	(1.094)	39059	5.00000	4.853
	16 N-Nitroso-di-n-propylamine	70	9.414	9.445	(1.083)	52329	5.00000	4.869
	15 4-Methylphenol	108	9.391	9.415	(1.080)	81439	5.00000	5.192
$	18 Nitrobenzene-d5	82	9.614	9.627	(0.895)	83867	5.00000	5.032
	19 Nitrobenzene	77	9.644	9.662	(0.898)	81864	5.00000	4.830
	20 Isophorone	82	10.014	10.038	(0.932)	131381	5.00000	4.745
	21 2-Nitrophenol	139	10.160	10.173	(0.946)	47132	5.00000	5.339
	22 2,4-Dimethylphenol	107	10.237	10.256	(0.953)	92317	5.00000	5.160
	23 Bis(2-Chloroethoxy)methane	93	10.390	10.408	(0.967)	91416	5.00000	4.707
	24 Benzoic acid	105	10.354	10.567	(0.964)	76277	10.0000	10.00
	25 2,4-Dichlorophenol	162	10.531	10.549	(0.980)	76474	5.00000	5.428
	26 1,2,4-Trichlorobenzene	180	10.677	10.684	(0.994)	85339	5.00000	4.773
*	27 Naphthalene-d8	136	10.742	10.749	(1.000)	1016171	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
28	Naphthalene	128	10.771	10.784	(1.003)	258970	5.00000	4.633
29	4-Chloroaniline	127	10.895	10.908	(1.014)	101792	5.00000	5.051
30	Hexachlorobutadiene	225	11.083	11.084	(1.032)	47045	5.00000	4.599
31	4-Chloro-3-methylphenol	107	11.688	11.701	(1.088)	68890	5.00000	5.708
32	2-Methylnaphthalene	142	11.893	11.906	(1.107)	168353	5.00000	4.703
33	Hexachlorocyclopentadiene	237	12.275	12.282	(0.901)	36180	5.00000	5.000
34	2,4,6-Trichlorophenol	196	12.404	12.411	(0.910)	53574	5.00000	5.374
35	2,4,5-Trichlorophenol	196	12.457	12.470	(0.914)	52498	5.00000	5.856
$ 36	2-Fluorobiphenyl	172	12.534	12.541	(0.920)	199267	5.00000	4.763
37	2-Chloronaphthalene	162	12.686	12.699	(0.931)	168111	5.00000	4.743
38	2-Nitroaniline	65	12.904	12.923	(0.947)	27788	5.00000	5.681
39	Dimethylphthalate	163	13.262	13.287	(0.973)	194622	5.00000	4.726
40	Acenaphthylene	152	13.374	13.381	(0.981)	262580	5.00000	4.738
41	2,6-Dinitrotoluene	165	13.362	13.387	(0.981)	41526	5.00000	5.326
* 42	Acenaphthene-d10	164	13.626	13.633	(1.000)	598563	20.0000	
43	3-Nitroaniline	138	13.579	13.610	(0.997)	40739	5.00000	5.050
44	Acenaphthene	153	13.673	13.686	(1.003)	164445	5.00000	4.688
45	2,4-Dinitrophenol	184	13.744	13.780	(1.009)	10990	10.0000	10.00
46	Dibenzofuran	168	13.938	13.951	(1.023)	223252	5.00000	4.755
47	4-Nitrophenol	109	13.855	13.880	(1.017)	22195	5.00000	5.000
48	2,4-Dinitrotoluene	165	13.996	14.021	(1.027)	52686	5.00000	5.501
50	Diethylphthalate	149	14.419	14.438	(1.058)	204717	5.00000	4.651
49	Fluorene	166	14.502	14.514	(1.064)	194472	5.00000	4.735
51	4-Chlorophenyl-phenylether	204	14.508	14.514	(1.065)	92222	5.00000	4.701
52	4-Nitroaniline	138	14.584	14.626	(1.070)	41882	5.00000	4.989
53	4,6-Dinitro-2-methylphenol	198	14.660	14.697	(0.915)	44569	10.0000	10.00
54	N-Nitrosodiphenylamine	169	14.707	14.732	(0.918)	142712	5.00000	4.860
$ 55	2,4,6-Tribromophenol	330	14.925	14.937	(1.095)	21266	5.00000	5.568
56	4-Bromophenyl-phenylether	248	15.301	15.308	(0.955)	50780	5.00000	4.886
57	Hexachlorobenzene	284	15.536	15.548	(0.970)	52822	5.00000	4.645
58	Pentachlorophenol	266	15.823	15.842	(0.988)	30827	5.00000	5.000
* 59	Phenanthrene-d10	188	16.023	16.036	(1.000)	1007780	20.0000	
60	Phenanthrene	178	16.058	16.077	(1.002)	271669	5.00000	4.593
61	Anthracene	178	16.135	16.153	(1.007)	278839	5.00000	4.659
62	Carbazole	167	16.405	16.424	(1.024)	254700	5.00000	4.690
63	Di-n-butylphthalate	149	17.086	17.093	(1.066)	334748	5.00000	4.886
64	Fluoranthene	202	18.015	18.027	(1.124)	277298	5.00000	4.716
65	Pyrene	202	18.379	18.397	(0.902)	291105	5.00000	4.608
$ 66	Terphenyl-d14	244	18.667	18.674	(0.916)	179825	5.00000	4.663
67	Butylbenzylphthalate	149	19.530	19.543	(0.958)	137881	5.00000	4.979
68	Benzo(a)anthracene	228	20.347	20.365	(0.999)	265449	5.00000	4.631
* 69	Chrysene-d12	240	20.376	20.389	(1.000)	879562	20.0000	
70	3,3'-Dichlorobenzidine	252	20.335	20.348	(0.998)	88480	5.00000	5.218
71	Chrysene	228	20.411	20.436	(1.002)	263806	5.00000	4.644
72	bis(2-Ethylhexyl)phthalate	149	20.511	20.518	(0.956)	195395	5.00000	5.166
* 134	Di-n-octylphthalate-d4	153	21.451	21.458	(1.000)	1375669	20.0000	
73	Di-n-octylphthalate	149	21.457	21.470	(1.000)	361557	5.00000	4.537

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	22.015	22.040	(0.975)	281777	5.00000	4.793
75	Benzo(k)fluoranthene	252	22.044	22.075	(0.977)	281647	5.00000	4.569
187	Total Benzofluoranthenes	252	22.044	22.075	(0.977)	534883	10.0000	9.404
76	Benzo(a)pyrene	252	22.485	22.510	(0.996)	240795	5.00000	4.722
* 77	Perylene-d12	264	22.573	22.580	(1.000)	872109	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	24.406	24.454	(1.081)	235258	5.00000	4.931
79	Dibenzo(a,h)anthracene	278	24.429	24.477	(1.082)	188107	5.00000	5.131
80	Benzo(g,h,i)perylene	276	24.929	24.989	(1.104)	196313	5.00000	4.881
90	N-Nitrosodimethylamine	74	4.257	4.281	(0.490)	42007	5.00000	4.807
103	Pyridine	79	4.245	4.240	(0.488)	66826	5.00000	5.138
91	Aniline	93	8.240	8.252	(0.948)	108308	5.00000	4.815
105	1-methylnaphthalene	142	12.070	12.082	(1.124)	161677	5.00000	4.629
93	Benzidine	184	18.244	18.251	(0.895)	95796	5.00000	5.069
111	Azobenzene (1,2-DP-Hydrazine)	77	14.760	14.779	(1.083)	157755	5.00000	4.804
143	1,4-Dioxane	88	3.487	3.494	(0.401)	27080	5.00000	
$ 137	d8-1,4-Dioxane	96	3.417	3.424	(0.393)	28631	5.00000	
151	1,2,4,5-Tetrachlorobenzene	216	12.234	12.247	(0.898)	81805	5.00000	4.737
120	2,3,4,6-Tetrachlorophenol	232	14.214	14.221	(1.043)	42525	5.00000	5.269
144	alpha-Terpineol	59	10.777	10.790	(1.003)	46405	5.00000	4.732
98	Retene	219	18.925	18.932	(0.929)	92486	5.00000	4.782
133	Butylatedhydroxytoluene	205	13.767	13.774	(1.010)	155768	5.00000	4.651
115	Tributyl Phosphate	99	14.766	14.802	(0.922)	204221	5.00000	4.963
116	Dibutyl Phenyl Phosphate	175	16.528	16.535	(1.032)	161048	5.00000	5.031
117	Butyl Diphenyl Phosphate	94	18.232	18.245	(0.895)	43853	5.00000	4.912
118	Triphenyl Phosphate	326	19.853	19.866	(0.974)	43306	5.00000	4.787
123	Acetophenone	105	9.373	9.392	(0.873)	109435	5.00000	4.776
179	n-Decane	57	8.498	8.505	(0.978)	57625	5.00000	4.716
180	n-Octadecane	57	15.876	15.883	(0.991)	76689	5.00000	5.015
168	Pentachlorobenzene	250	13.979	13.992	(1.026)	60444	5.00000	4.526
113	Diphenyl Oxide	170	12.863	12.870	(0.944)	170904	5.00000	4.716
112	Biphenyl	154	12.675	12.682	(0.930)	200895	5.00000	4.799
110	Tetrachloroguaiacol	247	15.947	15.971	(0.995)	56098	10.0000	9.796
109	3,4,5-Trichloroguaiacol	213	14.302	14.315	(0.893)	27754	5.00000	4.993
181	3,4,6-Trichloroguaiacol	211	14.425	14.444	(0.900)	33397	5.00000	5.072
108	4,5,6-Trichloroguaiacol	213	15.342	15.349	(0.957)	29137	5.00000	5.056
184	3,4-Dichloroguaiacol	192	12.751	12.764	(0.936)	29266	5.00000	5.110
107	4,5-Dichloroguaiacol	192	13.527	13.545	(0.993)	39384	5.00000	5.129
182	4,6-Dichloroguaiacol	192	13.562	13.580	(0.995)	37541	5.00000	4.850
185	4-Chloroguaiacol	115	11.653	11.660	(1.341)	19294	2.50000	2.552
106	Guaiacol	124	9.632	9.645	(1.108)	77212	5.00000	4.885

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 07191003.d
Lab Smp Id: IC050719
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100719.b/SW846100719.m
Misc Info: 10-

Calibration Date: 19-JUL-2010
Calibration Time: 16:18
Client Smp ID: IC050719
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	356478	178239	712956	280196	-21.40
27 Naphthalene-d8	1293412	646706	2586824	1016171	-21.43
42 Acenaphthene-d10	785897	392948	1571794	598563	-23.84
59 Phenanthrene-d10	1313990	656995	2627980	1007780	-23.30
69 Chrysene-d12	1155293	577646	2310586	879562	-23.87
134 Di-n-octylphthala	1825297	912648	3650594	1375669	-24.63
77 Perylene-d12	1146289	573144	2292578	872109	-23.92

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.70	8.20	9.20	8.69	-0.07
27 Naphthalene-d8	10.74	10.24	11.24	10.74	0.00
42 Acenaphthene-d10	13.63	13.13	14.13	13.63	0.00
59 Phenanthrene-d10	16.03	15.53	16.53	16.02	-0.04
69 Chrysene-d12	20.38	19.88	20.88	20.38	-0.03
134 Di-n-octylphthala	21.45	20.95	21.95	21.45	0.00
77 Perylene-d12	22.58	22.08	23.08	22.57	-0.03

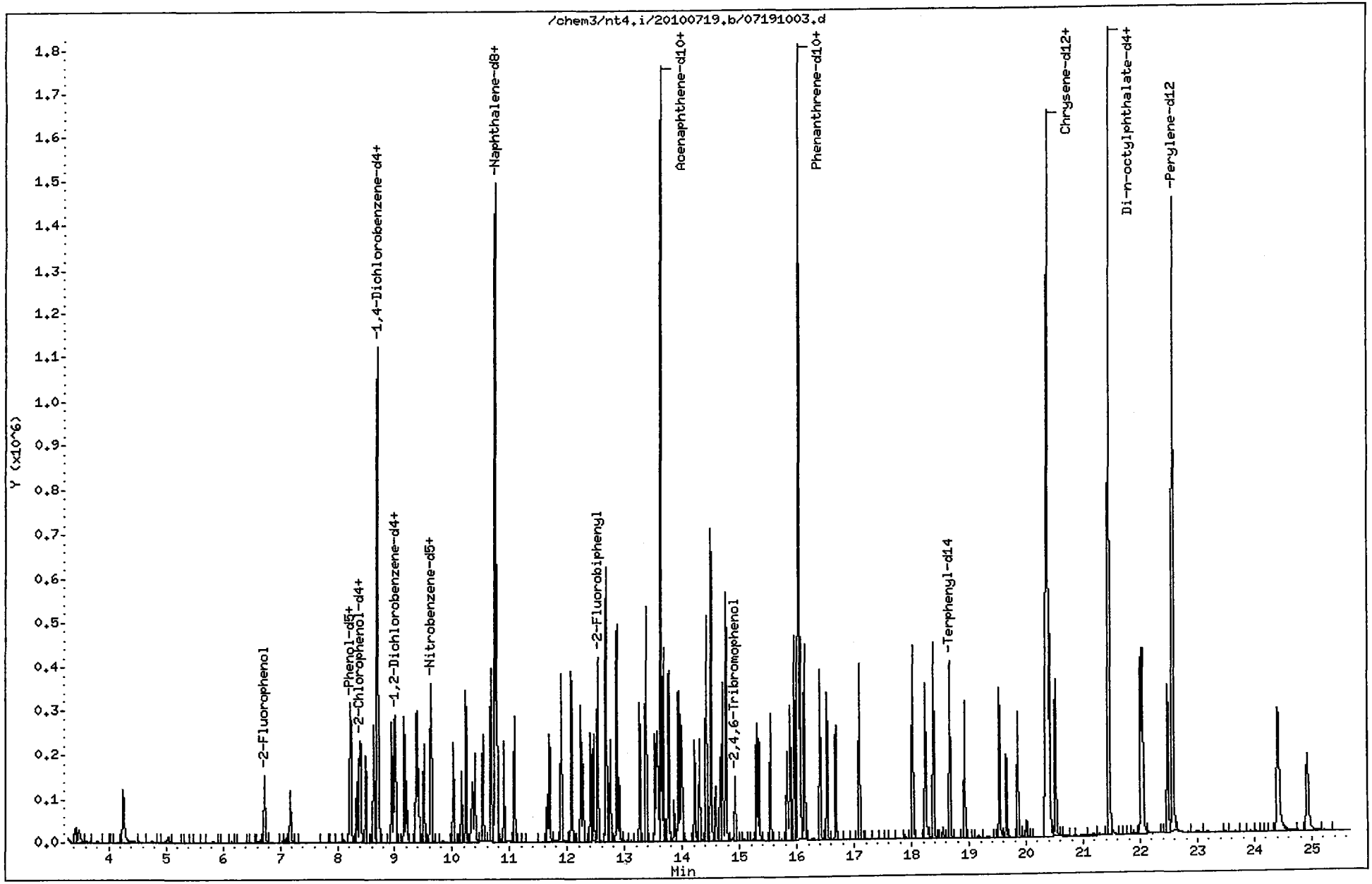
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20100719.b/07191003.d
Date : 19-JUL-2010 17:33
Client ID: IC050719
Sample Info: IC050719

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32

Column phase: ZB-5msi



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100719.b/07191004.d
Lab Smp Id: IC100719 Client Smp ID: IC100719
Inj Date : 19-JUL-2010 18:07
Operator : JZ Inst ID: nt4.i
Smp Info : IC100719
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100719.b/SW846100719.m
Meth Date : 21-Jul-2010 18:37 jianqing Quant Type: ISTD
Cal Date : 19-JUL-2010 18:07 Cal File: 07191004.d
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

AB 07/21/10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.731	6.737	(0.774)	195589	10.0000	9.194
$	2 Phenol-d5	99	8.212	8.229	(0.945)	197945	10.0000	9.506
	3 Phenol	94	8.229	8.252	(0.947)	279288	10.0000	9.719
$	5 2-Chlorophenol-d4	132	8.388	8.393	(0.965)	210444	10.0000	9.370
	4 Bis(2-Chloroethyl)ether	93	8.341	8.352	(0.959)	199065	10.0000	9.541
	6 2-Chlorophenol	128	8.412	8.423	(0.968)	264045	10.0000	9.978
	7 1,3-Dichlorobenzene	146	8.635	8.640	(0.993)	290331	10.0000	9.556
*	8 1,4-Dichlorobenzene-d4	152	8.694	8.699	(1.000)	386803	20.0000	
	9 1,4-Dichlorobenzene	146	8.717	8.722	(1.003)	296132	10.0000	9.685
$	10 1,2-Dichlorobenzene-d4	152	8.993	8.998	(1.034)	155193	10.0000	8.951
	12 1,2-Dichlorobenzene	146	9.017	9.022	(1.037)	273270	10.0000	9.561
	11 Benzyl alcohol	108	8.952	8.969	(1.030)	154068	10.0000	9.323
	14 2,2'-oxybis(1-Chloropropane)	45	9.205	9.216	(1.059)	191814	10.0000	9.459
	13 2-Methylphenol	108	9.164	9.181	(1.054)	215302	10.0000	10.35
	17 Hexachloroethane	117	9.504	9.509	(1.093)	107610	10.0000	9.788
	16 N-Nitroso-di-n-propylamine	70	9.422	9.445	(1.084)	139869	10.0000	9.611
	15 4-Methylphenol	108	9.393	9.415	(1.080)	216352	10.0000	9.995
$	18 Nitrobenzene-d5	82	9.616	9.627	(0.895)	207435	10.0000	9.663
	19 Nitrobenzene	77	9.645	9.662	(0.898)	213986	10.0000	9.758
	20 Isophorone	82	10.015	10.038	(0.932)	349735	10.0000	9.760
	21 2-Nitrophenol	139	10.162	10.173	(0.946)	135384	10.0000	11.08
	22 2,4-Dimethylphenol	107	10.239	10.256	(0.953)	245541	10.0000	10.32
	23 Bis(2-Chloroethoxy)methane	93	10.391	10.408	(0.967)	242519	10.0000	9.686
	24 Benzoic acid	105	10.397	10.567	(0.968)	295968	20.0000	23.88
	25 2,4-Dichlorophenol	162	10.538	10.549	(0.981)	215361	10.0000	11.06
	26 1,2,4-Trichlorobenzene	180	10.679	10.684	(0.994)	225136	10.0000	9.740
*	27 Naphthalene-d8	136	10.744	10.749	(1.000)	1330824	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	10.773	10.784	(1.003)	675065	10.0000	9.468
	29 4-Chloroaniline	127	10.896	10.908	(1.014)	267945	10.0000	10.10
	30 Hexachlorobutadiene	225	11.084	11.084	(1.032)	128941	10.0000	9.747
	31 4-Chloro-3-methylphenol	107	11.690	11.701	(1.088)	198573	10.0000	11.57
	32 2-Methylnaphthalene	142	11.895	11.906	(1.107)	441444	10.0000	9.604
	33 Hexachlorocyclopentadiene	237	12.277	12.282	(0.901)	115371	10.0000	10.84
	34 2,4,6-Trichlorophenol	196	12.400	12.411	(0.910)	149916	10.0000	10.75
	35 2,4,5-Trichlorophenol	196	12.459	12.470	(0.914)	153093	10.0000	11.64
$	36 2-Fluorobiphenyl	172	12.535	12.541	(0.920)	472954	10.0000	8.873
	37 2-Chloronaphthalene	162	12.682	12.699	(0.931)	448480	10.0000	9.592
	38 2-Nitroaniline	65	12.906	12.923	(0.947)	90139	10.0000	12.19
	39 Dimethylphthalate	163	13.264	13.287	(0.973)	531928	10.0000	9.727
	40 Acenaphthylene	152	13.370	13.381	(0.981)	706222	10.0000	9.638
	41 2,6-Dinitrotoluene	165	13.364	13.387	(0.981)	120276	10.0000	10.93
*	42 Acenaphthene-d10	164	13.628	13.633	(1.000)	805701	20.0000	
	43 3-Nitroaniline	138	13.587	13.610	(0.997)	117521	10.0000	10.53
	44 Acenaphthene	153	13.675	13.686	(1.003)	447973	10.0000	9.653
	45 2,4-Dinitrophenol	184	13.751	13.780	(1.009)	84130	20.0000	29.59
	46 Dibenzofuran	168	13.939	13.951	(1.023)	603633	10.0000	9.696
	47 4-Nitrophenol	109	13.857	13.880	(1.017)	72927	10.0000	10.99
	48 2,4-Dinitrotoluene	165	13.998	14.021	(1.027)	161965	10.0000	11.57
	50 Diethylphthalate	149	14.421	14.438	(1.058)	568753	10.0000	9.730
	49 Fluorene	166	14.497	14.514	(1.064)	529962	10.0000	9.720
	51 4-Chlorophenyl-phenylether	204	14.509	14.514	(1.065)	248604	10.0000	9.602
	52 4-Nitroaniline	138	14.586	14.626	(1.070)	109583	10.0000	9.797
	53 4,6-Dinitro-2-methylphenol	198	14.662	14.697	(0.915)	167601	20.0000	23.46
	54 N-Nitrosodiphenylamine	169	14.709	14.732	(0.918)	390380	10.0000	10.02
$	55 2,4,6-Tribromophenol	330	14.920	14.937	(1.095)	56765	10.0000	10.67
	56 4-Bromophenyl-phenylether	248	15.296	15.308	(0.955)	140953	10.0000	10.15
	57 Hexachlorobenzene	284	15.537	15.548	(0.970)	142687	10.0000	9.639
	58 Pentachlorophenol	266	15.825	15.842	(0.988)	92866	10.0000	10.64
*	59 Phenanthrene-d10	188	16.025	16.036	(1.000)	1335679	20.0000	
	60 Phenanthrene	178	16.060	16.077	(1.002)	723729	10.0000	9.474
	61 Anthracene	178	16.136	16.153	(1.007)	750646	10.0000	9.636
	62 Carbazole	167	16.407	16.424	(1.024)	660077	10.0000	9.431
	63 Di-n-butylphthalate	149	17.088	17.093	(1.066)	906961	10.0000	9.993
	64 Fluoranthene	202	18.016	18.027	(1.124)	764738	10.0000	9.875
	65 Pyrene	202	18.380	18.397	(0.902)	787792	10.0000	9.358
$	66 Terphenyl-d14	244	18.662	18.674	(0.916)	448627	10.0000	8.916
	67 Butylbenzylphthalate	149	19.532	19.543	(0.958)	418550	10.0000	10.64
	68 Benzo(a)anthracene	228	20.348	20.365	(0.999)	750485	10.0000	9.673
*	69 Chrysene-d12	240	20.378	20.389	(1.000)	1209826	20.0000	
	70 3,3'-Dichlorobenzidine	252	20.337	20.348	(0.998)	255812	10.0000	10.62
	71 Chrysene	228	20.413	20.436	(1.002)	734332	10.0000	9.591
	72 bis(2-Ethylhexyl)phthalate	149	20.513	20.518	(0.956)	588126	10.0000	10.78
*	134 Di-n-octylphthalate-d4	153	21.447	21.458	(1.000)	1905755	20.0000	
	73 Di-n-octylphthalate	149	21.459	21.470	(1.001)	1013433	10.0000	9.438

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	22.017	22.040	(0.975)	783710	10.0000	9.824
75	Benzo(k)fluoranthene	252	22.046	22.075	(0.977)	795376	10.0000	9.609
187	Total Benzofluoranthenes	252	22.046	22.075	(0.977)	1484981	20.0000	19.37
76	Benzo(a)pyrene	252	22.481	22.510	(0.996)	675517	10.0000	9.782
* 77	Perylene-d12	264	22.575	22.580	(1.000)	1193862	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	24.413	24.454	(1.081)	713289	10.0000	10.60
79	Dibenzo(a,h)anthracene	278	24.431	24.477	(1.082)	577618	10.0000	10.96
80	Benzo(g,h,i)perylene	276	24.936	24.989	(1.105)	629032	10.0000	10.91
90	N-Nitrosodimethylamine	74	4.276	4.281	(0.492)	109696	10.0000	9.377
103	Pyridine	79	4.258	4.240	(0.490)	201572	10.0000	10.79
91	Aniline	93	8.241	8.252	(0.948)	288356	10.0000	9.513
105	1-methylnaphthalene	142	12.071	12.082	(1.124)	428993	10.0000	9.576
93	Benzidine	184	18.245	18.251	(0.895)	250888	10.0000	9.765
111	Azobenzene (1,2-DP-Hydrazine)	77	14.762	14.779	(1.083)	427139	10.0000	9.774
143	1,4-Dioxane	88	3.512	3.494	(0.404)	74401	10.0000	
$ 137	d8-1,4-Dioxane	96	3.448	3.424	(0.397)	76835	10.0000	
151	1,2,4,5-Tetrachlorobenzene	216	12.236	12.247	(0.898)	205530	10.0000	9.197
120	2,3,4,6-Tetrachlorophenol	232	14.210	14.221	(1.043)	123547	10.0000	10.87
144	alpha-Terpineol	59	10.773	10.790	(1.003)	115158	10.0000	9.287
98	Retene	219	18.921	18.932	(0.928)	253770	10.0000	9.689
133	Butylatedhydroxytoluene	205	13.763	13.774	(1.010)	400152	10.0000	9.222
115	Tributyl Phosphate	99	14.768	14.802	(0.922)	550197	10.0000	10.06
116	Dibutyl Phenyl Phosphate	175	16.524	16.535	(1.031)	428511	10.0000	10.07
117	Butyl Diphenyl Phosphate	94	18.234	18.245	(0.895)	121912	10.0000	9.952
118	Triphenyl Phosphate	326	19.855	19.866	(0.974)	122543	10.0000	9.898
123	Acetophenone	105	9.375	9.392	(0.873)	298771	10.0000	9.971
179	n-Decane	57	8.500	8.505	(0.978)	160692	10.0000	9.679
180	n-Octadecane	57	15.878	15.883	(0.991)	200941	10.0000	9.943
168	Pentachlorobenzene	250	13.981	13.992	(1.026)	169400	10.0000	9.608
113	Diphenyl Oxide	170	12.864	12.870	(0.944)	439084	10.0000	9.312
112	Biphenyl	154	12.671	12.682	(0.930)	521643	10.0000	9.492
110	Tetrachloroguaiacol	247	15.948	15.971	(0.995)	158817	20.0000	20.61
109	3,4,5-Trichloroguaiacol	213	14.304	14.315	(0.893)	82226	10.0000	10.74
181	3,4,6-Trichloroguaiacol	211	14.427	14.444	(0.900)	98454	10.0000	10.82
108	4,5,6-Trichloroguaiacol	213	15.338	15.349	(0.957)	85057	10.0000	10.73
184	3,4-Dichloroguaiacol	192	12.753	12.764	(0.936)	81053	10.0000	10.34
107	4,5-Dichloroguaiacol	192	13.528	13.545	(0.993)	114248	10.0000	10.68
182	4,6-Dichloroguaiacol	192	13.563	13.580	(0.995)	102418	10.0000	9.886
185	4-Chloroguaiacol	115	11.648	11.660	(1.340)	56264	5.00000	5.254
106	Guaiacol	124	9.633	9.645	(1.108)	201151	10.0000	9.466

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 07191004.d
Lab Smp Id: IC100719
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100719.b/SW846100719.m
Misc Info: 10-

Calibration Date: 19-JUL-2010
Calibration Time: 16:18
Client Smp ID: IC100719
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	356478	178239	712956	386803	8.51
27 Naphthalene-d8	1293412	646706	2586824	1330824	2.89
42 Acenaphthene-d10	785897	392948	1571794	805701	2.52
59 Phenanthrene-d10	1313990	656995	2627980	1335679	1.65
69 Chrysene-d12	1155293	577646	2310586	1209826	4.72
134 Di-n-octylphthala	1825297	912648	3650594	1905755	4.41
77 Perylene-d12	1146289	573144	2292578	1193862	4.15

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.70	8.20	9.20	8.69	-0.05
27 Naphthalene-d8	10.74	10.24	11.24	10.74	0.01
42 Acenaphthene-d10	13.63	13.13	14.13	13.63	0.01
59 Phenanthrene-d10	16.03	15.53	16.53	16.02	-0.03
69 Chrysene-d12	20.38	19.88	20.88	20.38	-0.02
134 Di-n-octylphthala	21.45	20.95	21.95	21.45	-0.02
77 Perylene-d12	22.58	22.08	23.08	22.57	-0.02

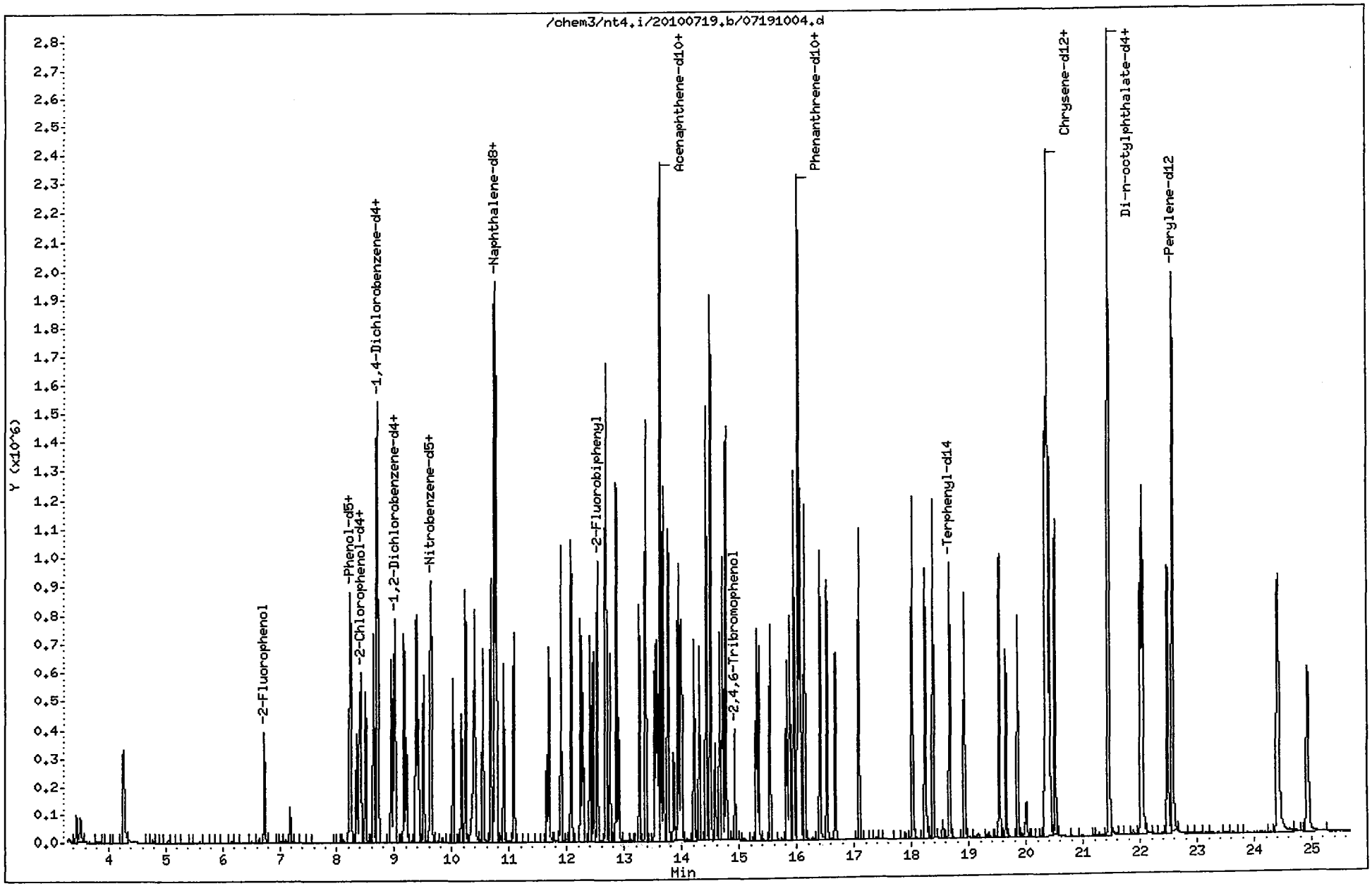
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20100719.b/07191004.d
Date : 19-JUL-2010 18:07
Client ID: IC100719
Sample Info: IC100719

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32

Column phase: ZB-5msi



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100719.b/07191001.d
Lab Smp Id: IC250719 Client Smp ID: IC250719
Inj Date : 19-JUL-2010 16:18
Operator : JZ Inst ID: nt4.i
Smp Info : IC250719
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100719.b/SW846100719.m
Meth Date : 21-Jul-2010 18:37 jianqing Quant Type: ISTD
Cal Date : 19-JUL-2010 16:18 Cal File: 07191001.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

07/21/10

AMOUNTS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	6.736	6.737	(0.774)	509094	25.0000	25.72
$ 2	Phenol-d5	99	8.216	8.229	(0.945)	502390	25.0000	25.87
3	Phenol	94	8.234	8.252	(0.947)	633003	25.0000	24.17
$ 5	2-Chlorophenol-d4	132	8.387	8.393	(0.964)	529269	25.0000	25.43
4	Bis(2-Chloroethyl)ether	93	8.346	8.352	(0.959)	456355	25.0000	24.04
6	2-Chlorophenol	128	8.416	8.423	(0.968)	608173	25.0000	24.95
7	1,3-Dichlorobenzene	146	8.633	8.640	(0.993)	660365	25.0000	23.92
* 8	1,4-Dichlorobenzene-d4	152	8.698	8.699	(1.000)	356478	20.0000	
9	1,4-Dichlorobenzene	146	8.721	8.722	(1.003)	671032	25.0000	24.10
$ 10	1,2-Dichlorobenzene-d4	152	8.998	8.998	(1.034)	379735	25.0000	24.06
12	1,2-Dichlorobenzene	146	9.015	9.022	(1.036)	618747	25.0000	23.85
11	Benzyl alcohol	108	8.956	8.969	(1.030)	349815	25.0000	23.61
14	2,2'-oxybis(1-Chloropropane)	45	9.209	9.216	(1.059)	428872	25.0000	23.43
13	2-Methylphenol	108	9.174	9.181	(1.055)	489525	25.0000	25.40
17	Hexachloroethane	117	9.509	9.509	(1.093)	249727	25.0000	24.73
16	N-Nitroso-di-n-propylamine	70	9.426	9.445	(1.084)	318375	25.0000	24.04
15	4-Methylphenol	108	9.397	9.415	(1.080)	504582	25.0000	25.22
$ 18	Nitrobenzene-d5	82	9.620	9.627	(0.896)	514519	25.0000	24.74
19	Nitrobenzene	77	9.650	9.662	(0.898)	489280	25.0000	23.44
20	Isophorone	82	10.026	10.038	(0.933)	813652	25.0000	23.75
21	2-Nitrophenol	139	10.167	10.173	(0.946)	334369	25.0000	27.29
22	2,4-Dimethylphenol	107	10.243	10.256	(0.954)	572473	25.0000	24.81
23	Bis(2-Chloroethoxy)methane	93	10.396	10.408	(0.968)	576503	25.0000	24.00
24	Benzoic acid	105	10.466	10.567	(0.974)	865635	50.0000	62.72
25	2,4-Dichlorophenol	162	10.543	10.549	(0.981)	527621	25.0000	27.09
26	1,2,4-Trichlorobenzene	180	10.684	10.684	(0.995)	536705	25.0000	24.16
* 27	Naphthalene-d8	136	10.742	10.749	(1.000)	1293412	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	10.778	10.784	(1.003)	1556045	25.0000	23.04
	29 4-Chloroaniline	127	10.901	10.908	(1.015)	637156	25.0000	24.79
	30 Hexachlorobutadiene	225	11.083	11.084	(1.032)	301348	25.0000	23.81
	31 4-Chloro-3-methylphenol	107	11.694	11.701	(1.089)	500175	25.0000	28.57
	32 2-Methylnaphthalene	142	11.900	11.906	(1.108)	1050247	25.0000	23.86
	33 Hexachlorocyclopentadiene	237	12.281	12.282	(0.901)	313309	25.0000	28.24
	34 2,4,6-Trichlorophenol	196	12.405	12.411	(0.910)	377521	25.0000	27.01
	35 2,4,5-Trichlorophenol	196	12.463	12.470	(0.915)	403239	25.0000	29.54
$	36 2-Fluorobiphenyl	172	12.540	12.541	(0.920)	1236271	25.0000	24.07
	37 2-Chloronaphthalene	162	12.687	12.699	(0.931)	1084794	25.0000	24.08
	38 2-Nitroaniline	65	12.910	12.923	(0.947)	233355	25.0000	30.14
	39 Dimethylphthalate	163	13.268	13.287	(0.974)	1257560	25.0000	23.92
	40 Acenaphthylene	152	13.374	13.381	(0.981)	1642937	25.0000	23.46
	41 2,6-Dinitrotoluene	165	13.374	13.387	(0.981)	299507	25.0000	27.11
*	42 Acenaphthene-d10	164	13.627	13.633	(1.000)	785897	20.0000	
	43 3-Nitroaniline	138	13.591	13.610	(0.997)	270236	25.0000	24.87
	44 Acenaphthene	153	13.679	13.686	(1.004)	1047303	25.0000	23.58
	45 2,4-Dinitrophenol	184	13.756	13.780	(1.009)	317048	50.0000	80.02
	46 Dibenzofuran	168	13.944	13.951	(1.023)	1398933	25.0000	23.50
	47 4-Nitrophenol	109	13.867	13.880	(1.018)	191448	25.0000	27.88
	48 2,4-Dinitrotoluene	165	14.008	14.021	(1.028)	397346	25.0000	27.96
	50 Diethylphthalate	149	14.431	14.438	(1.059)	1294538	25.0000	23.24
	49 Fluorene	166	14.508	14.514	(1.065)	1237613	25.0000	23.68
	51 4-Chlorophenyl-phenylether	204	14.514	14.514	(1.065)	591928	25.0000	23.81
	52 4-Nitroaniline	138	14.596	14.626	(1.071)	259237	25.0000	24.06
	53 4,6-Dinitro-2-methylphenol	198	14.672	14.697	(0.915)	487973	50.0000	61.47
	54 N-Nitrosodiphenylamine	169	14.713	14.732	(0.918)	928356	25.0000	24.41
$	55 2,4,6-Tribromophenol	330	14.931	14.937	(1.096)	153201	25.0000	28.25
	56 4-Bromophenyl-phenylether	248	15.301	15.308	(0.955)	337061	25.0000	24.76
	57 Hexachlorobenzene	284	15.542	15.548	(0.970)	336992	25.0000	23.58
	58 Pentachlorophenol	266	15.830	15.842	(0.988)	246760	25.0000	27.37
*	59 Phenanthrene-d10	188	16.029	16.036	(1.000)	1313990	20.0000	
	60 Phenanthrene	178	16.064	16.077	(1.002)	1705790	25.0000	23.23
	61 Anthracene	178	16.141	16.153	(1.007)	1764147	25.0000	23.48
	62 Carbazole	167	16.411	16.424	(1.024)	1555593	25.0000	23.15
	63 Di-n-butylphthalate	149	17.093	17.093	(1.066)	2121495	25.0000	24.06
	64 Fluoranthene	202	18.021	18.027	(1.124)	1808894	25.0000	24.05
	65 Pyrene	202	18.385	18.397	(0.902)	1867259	25.0000	23.65
$	66 Terphenyl-d14	244	18.667	18.674	(0.916)	1158832	25.0000	24.33
	67 Butylbenzylphthalate	149	19.536	19.543	(0.958)	970822	25.0000	25.62
	68 Benzo(a)anthracene	228	20.353	20.365	(0.999)	1698446	25.0000	23.41
*	69 Chrysene-d12	240	20.382	20.389	(1.000)	1155293	20.0000	
	70 3,3'-Dichlorobenzidine	252	20.341	20.348	(0.998)	576157	25.0000	25.04
	71 Chrysene	228	20.423	20.436	(1.002)	1672513	25.0000	23.37
	72 bis(2-Ethylhexyl)phthalate	149	20.517	20.518	(0.956)	1334441	25.0000	25.41
*	134 Di-n-octylphthalate-d4	153	21.451	21.458	(1.000)	1825297	20.0000	
	73 Di-n-octylphthalate	149	21.463	21.470	(1.001)	2271687	25.0000	22.75

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	22.021	22.040	(0.975)	1734852	25.0000	23.19
75	Benzo(k)fluoranthene	252	22.056	22.075	(0.977)	1915421	25.0000	24.32
187	Total Benzofluoranthenes	252	22.056	22.075	(0.977)	3436118	50.0000	47.47
76	Benzo(a)pyrene	252	22.491	22.510	(0.996)	1612522	25.0000	24.49
* 77	Perylene-d12	264	22.579	22.580	(1.000)	1146289	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	24.424	24.454	(1.082)	1783402	25.0000	26.89
79	Dibenzo(a,h)anthracene	278	24.447	24.477	(1.083)	1472138	25.0000	27.94
80	Benzo(g,h,i)perylene	276	24.958	24.989	(1.105)	1499429	25.0000	26.53
90	N-Nitrosodimethylamine	74	4.280	4.281	(0.492)	258666	25.0000	24.24
103	Pyridine	79	4.251	4.240	(0.489)	474630	25.0000	26.87
91	Aniline	93	8.246	8.252	(0.948)	641945	25.0000	23.45
105	1-methylnaphthalene	142	12.076	12.082	(1.124)	1026237	25.0000	23.91
93	Benzidine	184	18.250	18.251	(0.895)	500943	25.0000	21.40
111	Azobenzene (1,2-DP-Hydrazine)	77	14.766	14.779	(1.084)	965964	25.0000	23.20
143	1,4-Dioxane	88	3.511	3.494	(0.404)	171754	25.0000	
$ 137	d8-1,4-Dioxane	96	3.440	3.424	(0.396)	177040	25.0000	
151	1,2,4,5-Tetrachlorobenzene	216	12.240	12.247	(0.898)	514416	25.0000	23.93
120	2,3,4,6-Tetrachlorophenol	232	14.214	14.221	(1.043)	321030	25.0000	27.86
144	alpha-Terpineol	59	10.783	10.790	(1.004)	272097	25.0000	23.14
98	Retene	219	18.925	18.932	(0.929)	632122	25.0000	25.20
133	Butylatedhydroxytoluene	205	13.768	13.774	(1.010)	959628	25.0000	23.21
115	Tributyl Phosphate	99	14.778	14.802	(0.922)	1270123	25.0000	23.94
116	Dibutyl Phenyl Phosphate	175	16.529	16.535	(1.031)	1078412	25.0000	25.56
117	Butyl Diphenyl Phosphate	94	18.238	18.245	(0.895)	316769	25.0000	26.53
118	Triphenyl Phosphate	326	19.859	19.866	(0.974)	303151	25.0000	25.48
123	Acetophenone	105	9.379	9.392	(0.873)	677189	25.0000	23.67
179	n-Decane	57	8.498	8.505	(0.977)	358983	25.0000	23.83
180	n-Octadecane	57	15.876	15.883	(0.990)	455513	25.0000	23.40
168	Pentachlorobenzene	250	13.985	13.992	(1.026)	401776	25.0000	23.75
113	Diphenyl Oxide	170	12.863	12.870	(0.944)	1050883	25.0000	23.35
112	Biphenyl	154	12.675	12.682	(0.930)	1229577	25.0000	23.42
110	Tetrachloroguaiacol	247	15.959	15.971	(0.996)	400470	50.0000	52.09
109	3,4,5-Trichloroguaiacol	213	14.308	14.315	(0.893)	204465	25.0000	26.58
181	3,4,6-Trichloroguaiacol	211	14.431	14.444	(0.900)	243206	25.0000	26.59
108	4,5,6-Trichloroguaiacol	213	15.342	15.349	(0.957)	212755	25.0000	26.67
184	3,4-Dichloroguaiacol	192	12.757	12.764	(0.936)	210509	25.0000	26.84
107	4,5-Dichloroguaiacol	192	13.539	13.545	(0.994)	282749	25.0000	26.54
182	4,6-Dichloroguaiacol	192	13.568	13.580	(0.996)	265540	25.0000	25.95
185	4-Chloroguaiacol	115	11.653	11.660	(1.340)	145555	12.5000	14.11
106	Guaiacol	124	9.638	9.645	(1.108)	478994	25.0000	24.59

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 07191001.d
Lab Smp Id: IC250719
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100719.b/SW846100719.m
Misc Info: 10-

Calibration Date: 19-JUL-2010
Calibration Time: 16:18
Client Smp ID: IC250719
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	356478	178239	712956	356478	0.00
27 Naphthalene-d8	1293412	646706	2586824	1293412	0.00
42 Acenaphthene-d10	785897	392948	1571794	785897	0.00
59 Phenanthrene-d10	1313990	656995	2627980	1313990	0.00
69 Chrysene-d12	1155293	577646	2310586	1155293	0.00
134 Di-n-octylphthala	1825297	912648	3650594	1825297	0.00
77 Perylene-d12	1146289	573144	2292578	1146289	0.00

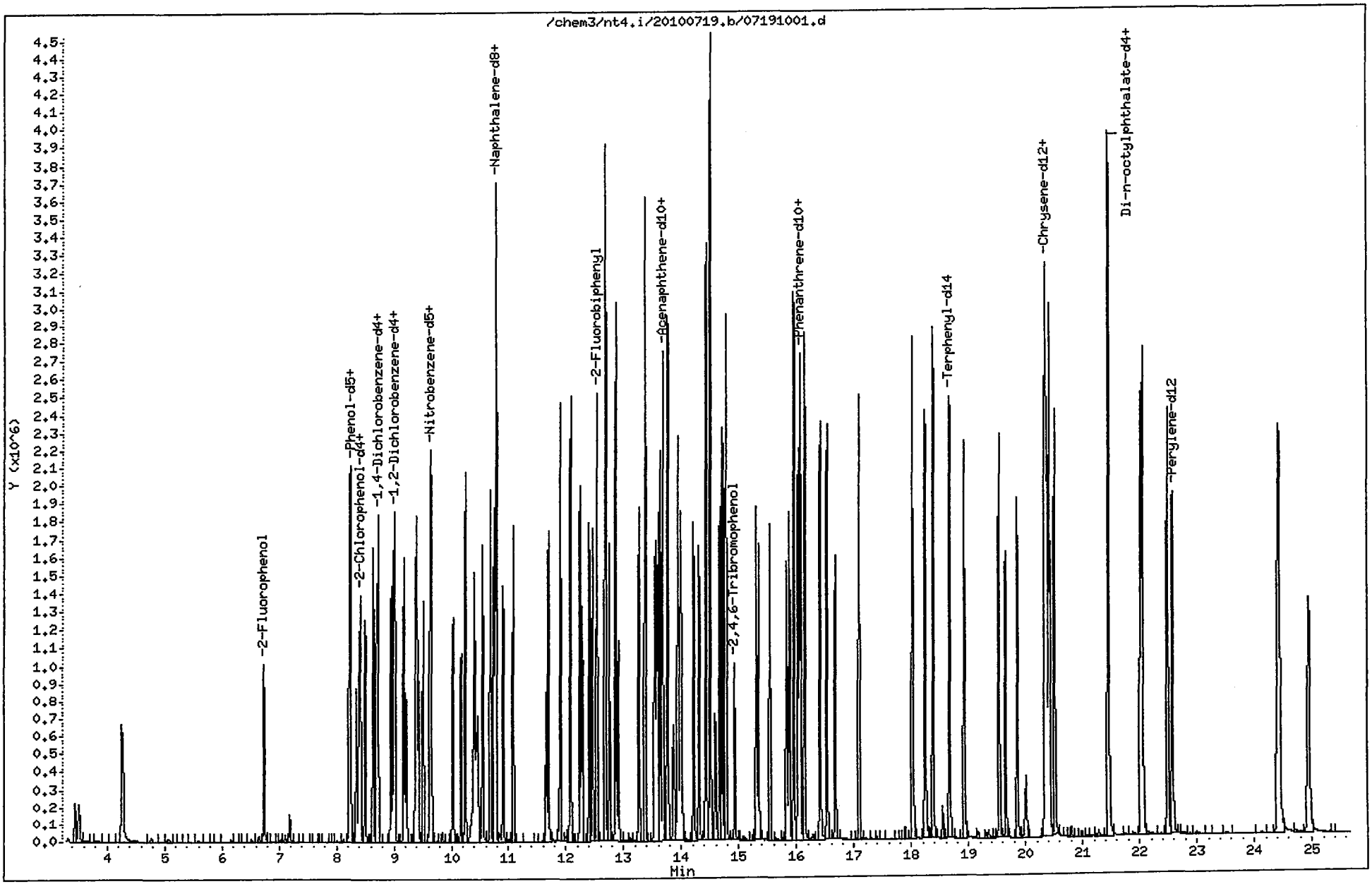
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.70	8.20	9.20	8.70	0.00
27 Naphthalene-d8	10.74	10.24	11.24	10.74	0.00
42 Acenaphthene-d10	13.63	13.13	14.13	13.63	0.00
59 Phenanthrene-d10	16.03	15.53	16.53	16.03	0.00
69 Chrysene-d12	20.38	19.88	20.88	20.38	0.00
134 Di-n-octylphthala	21.45	20.95	21.95	21.45	0.00
77 Perylene-d12	22.58	22.08	23.08	22.58	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: /chem3/nt4.i/20100719.b/07191001.d
Date : 19-JUL-2010 16:18
Client ID: IC250719
Sample Info: IC250719

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32

Column phase: ZB-5msi



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100719.b/07191005.d
Lab Smp Id: IC400719 Client Smp ID: IC400719
Inj Date : 19-JUL-2010 18:41
Operator : JZ Inst ID: nt4.i
Smp Info : IC400719
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100719.b/SW846100719.m
Meth Date : 21-Jul-2010 18:37 jianqing Quant Type: ISTD
Cal Date : 19-JUL-2010 18:41 Cal File: 07191005.d
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

07/21/10

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	1	2-Fluorophenol	112	6.738	6.737	(0.775)	805836	40.0000	38.46
$	2	Phenol-d5	99	8.224	8.229	(0.946)	800887	40.0000	38.86
	3	Phenol	94	8.242	8.252	(0.948)	970435	40.0000	35.61
$	5	2-Chlorophenol-d4	132	8.395	8.393	(0.966)	851467	40.0000	38.60
	4	Bis(2-Chloroethyl)ether	93	8.348	8.352	(0.960)	765819	40.0000	38.17
	6	2-Chlorophenol	128	8.418	8.423	(0.968)	939854	40.0000	36.80
	7	1,3-Dichlorobenzene	146	8.636	8.640	(0.993)	1102160	40.0000	37.86
*	8	1,4-Dichlorobenzene-d4	152	8.694	8.699	(1.000)	381018	20.0000	
	9	1,4-Dichlorobenzene	146	8.724	8.722	(1.003)	1123923	40.0000	38.19
$	10	1,2-Dichlorobenzene-d4	152	9.000	8.998	(1.035)	620692	40.0000	37.40
	12	1,2-Dichlorobenzene	146	9.017	9.022	(1.037)	1045036	40.0000	38.13
	11	Benzyl alcohol	108	8.959	8.969	(1.030)	560984	40.0000	36.47
	14	2,2'-oxybis(1-Chloropropane)	45	9.211	9.216	(1.059)	703825	40.0000	36.71
	13	2-Methylphenol	108	9.176	9.181	(1.055)	768962	40.0000	37.84
	17	Hexachloroethane	117	9.511	9.509	(1.094)	422293	40.0000	39.30
	16	N-Nitroso-di-n-propylamine	70	9.434	9.445	(1.085)	535476	40.0000	38.25
	15	4-Methylphenol	108	9.405	9.415	(1.082)	798691	40.0000	37.85
$	18	Nitrobenzene-d5	82	9.622	9.627	(0.896)	826176	40.0000	38.67
	19	Nitrobenzene	77	9.652	9.662	(0.898)	805687	40.0000	37.76
	20	Isophorone	82	10.028	10.038	(0.933)	1335102	40.0000	38.07
	21	2-Nitrophenol	139	10.169	10.173	(0.946)	520600	40.0000	40.81
	22	2,4-Dimethylphenol	107	10.245	10.256	(0.954)	878355	40.0000	37.35
	23	Bis(2-Chloroethoxy)methane	93	10.398	10.408	(0.968)	928673	40.0000	37.83
	24	Benzoic acid	105	10.509	10.567	(0.978)	1401298	80.0000	92.78
	25	2,4-Dichlorophenol	162	10.545	10.549	(0.981)	807406	40.0000	40.01
	26	1,2,4-Trichlorobenzene	180	10.680	10.684	(0.994)	883928	40.0000	38.71
*	27	Naphthalene-d8	136	10.744	10.749	(1.000)	1340154	20.0000	

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	28	Naphthalene	128	10.780	10.784	(1.003)	2403128	40.0000	35.34
	29	4-Chloroaniline	127	10.903	10.908	(1.015)	1000805	40.0000	38.04
	30	Hexachlorobutadiene	225	11.085	11.084	(1.032)	502639	40.0000	38.65
	31	4-Chloro-3-methylphenol	107	11.696	11.701	(1.089)	765878	40.0000	41.76
	32	2-Methylnaphthalene	142	11.902	11.906	(1.108)	1711633	40.0000	38.00
	33	Hexachlorocyclopentadiene	237	12.278	12.282	(0.901)	553109	40.0000	44.81
	34	2,4,6-Trichlorophenol	196	12.407	12.411	(0.910)	605024	40.0000	40.43
	35	2,4,5-Trichlorophenol	196	12.466	12.470	(0.915)	647741	40.0000	43.47
$	36	2-Fluorobiphenyl	172	12.536	12.541	(0.920)	1951425	40.0000	36.38
	37	2-Chloronaphthalene	162	12.689	12.699	(0.931)	1782192	40.0000	37.60
	38	2-Nitroaniline	65	12.912	12.923	(0.947)	385828	40.0000	45.16
	39	Dimethylphthalate	163	13.276	13.287	(0.974)	2076257	40.0000	37.54
	40	Acenaphthylene	152	13.376	13.381	(0.981)	2618537	40.0000	35.91
	41	2,6-Dinitrotoluene	165	13.376	13.387	(0.981)	506024	40.0000	42.28
*	42	Acenaphthene-d10	164	13.629	13.633	(1.000)	839318	20.0000	
	43	3-Nitroaniline	138	13.599	13.610	(0.998)	411097	40.0000	36.26
	44	Acenaphthene	153	13.682	13.686	(1.004)	1730659	40.0000	37.13
	45	2,4-Dinitrophenol	184	13.764	13.780	(1.010)	599293	80.0000	118.8
	46	Dibenzofuran	168	13.946	13.951	(1.023)	2282796	40.0000	36.65
	47	4-Nitrophenol	109	13.870	13.880	(1.018)	324791	40.0000	43.13
	48	2,4-Dinitrotoluene	165	14.011	14.021	(1.028)	682861	40.0000	43.90
	50	Diethylphthalate	149	14.434	14.438	(1.059)	2127981	40.0000	36.54
	49	Fluorene	166	14.510	14.514	(1.065)	1979735	40.0000	36.29
	51	4-Chlorophenyl-phenylether	204	14.516	14.514	(1.065)	980934	40.0000	37.52
	52	4-Nitroaniline	138	14.610	14.626	(1.072)	465525	40.0000	40.36
	53	4,6-Dinitro-2-methylphenol	198	14.680	14.697	(0.916)	814156	80.0000	92.95
	54	N-Nitrosodiphenylamine	169	14.721	14.732	(0.918)	1558783	40.0000	39.41
$	55	2,4,6-Tribromophenol	330	14.933	14.937	(1.096)	249842	40.0000	42.47
	56	4-Bromophenyl-phenylether	248	15.303	15.308	(0.955)	565124	40.0000	39.82
	57	Hexachlorobenzene	284	15.544	15.548	(0.970)	559987	40.0000	38.00
	58	Pentachlorophenol	266	15.832	15.842	(0.988)	393069	40.0000	41.31
*	59	Phenanthrene-d10	188	16.031	16.036	(1.000)	1371590	20.0000	
	60	Phenanthrene	178	16.073	16.077	(1.003)	2705033	40.0000	36.15
	61	Anthracene	178	16.143	16.153	(1.007)	2803865	40.0000	36.53
	62	Carbazole	167	16.413	16.424	(1.024)	2542023	40.0000	36.93
	63	Di-n-butylphthalate	149	17.095	17.093	(1.066)	3260353	40.0000	36.25
	64	Fluoranthene	202	18.023	18.027	(1.124)	2935696	40.0000	37.88
	65	Pyrene	202	18.387	18.397	(0.902)	3025660	40.0000	35.90
$	66	Terphenyl-d14	244	18.669	18.674	(0.916)	1839228	40.0000	36.14
	67	Butylbenzylphthalate	149	19.538	19.543	(0.958)	1646877	40.0000	39.77
	68	Benzo(a)anthracene	228	20.361	20.365	(0.999)	2823099	40.0000	36.36
*	69	Chrysene-d12	240	20.384	20.389	(1.000)	1264495	20.0000	
	70	3,3'-Dichlorobenzidine	252	20.343	20.348	(0.998)	950636	40.0000	38.18
	71	Chrysene	228	20.425	20.436	(1.002)	2729145	40.0000	35.77
	72	bis(2-Ethylhexyl)phthalate	149	20.514	20.518	(0.956)	2243796	40.0000	40.79
*	134	Di-n-octylphthalate-d4	153	21.453	21.458	(1.000)	1902533	20.0000	
	73	Di-n-octylphthalate	149	21.465	21.470	(1.001)	3553588	40.0000	35.17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	22.029	22.040	(0.976)	2935610	40.0000	37.62
75	Benzo(k)fluoranthene	252	22.064	22.075	(0.977)	2948453	40.0000	36.19
187	Total Benzofluoranthenes	252	22.064	22.075	(0.977)	5543714	80.0000	73.74
76	Benzo(a)pyrene	252	22.499	22.510	(0.997)	2634243	40.0000	38.20
* 77	Perylene-d12	264	22.575	22.580	(1.000)	1213809	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	24.438	24.454	(1.082)	3062042	40.0000	42.84
79	Dibenzo(a,h)anthracene	278	24.455	24.477	(1.083)	2520948	40.0000	44.05
80	Benzo(g,h,i)perylene	276	24.972	24.989	(1.106)	2618046	40.0000	42.94
90	N-Nitrosodimethylamine	74	4.288	4.281	(0.493)	430140	40.0000	38.14
103	Pyridine	79	4.253	4.240	(0.489)	798092	40.0000	41.80
91	Aniline	93	8.248	8.252	(0.949)	1030671	40.0000	36.09
105	1-methylnaphthalene	142	12.078	12.082	(1.124)	1690741	40.0000	38.40
93	Benzidine	184	18.252	18.251	(0.895)	836928	40.0000	33.91
111	Azobenzene (1,2-DP-Hydrazine)	77	14.774	14.779	(1.084)	1574216	40.0000	36.24
143	1,4-Dioxane	88	3.513	3.494	(0.404)	291223	40.0000	
$ 137	d8-1,4-Dioxane	96	3.448	3.424	(0.397)	303363	40.0000	
151	1,2,4,5-Tetrachlorobenzene	216	12.242	12.247	(0.898)	837944	40.0000	37.15
120	2,3,4,6-Tetrachlorophenol	232	14.216	14.221	(1.043)	530279	40.0000	42.44
144	alpha-Terpineol	59	10.786	10.790	(1.004)	410363	40.0000	34.78
98	Retene	219	18.927	18.932	(0.929)	1052055	40.0000	38.65
133	Butylatedhydroxytoluene	205	13.770	13.774	(1.010)	1500329	40.0000	35.04
115	Tributyl Phosphate	99	14.792	14.802	(0.923)	2023303	40.0000	37.18
116	Dibutyl Phenyl Phosphate	175	16.531	16.535	(1.031)	1701062	40.0000	38.89
117	Butyl Diphenyl Phosphate	94	18.240	18.245	(0.895)	517626	40.0000	39.68
118	Triphenyl Phosphate	326	19.861	19.866	(0.974)	498877	40.0000	38.63
123	Acetophenone	105	9.382	9.392	(0.873)	1136208	40.0000	38.65
179	n-Decane	57	8.500	8.505	(0.978)	590284	40.0000	37.28
180	n-Octadecane	57	15.879	15.883	(0.990)	714571	40.0000	36.04
168	Pentachlorobenzene	250	13.987	13.992	(1.026)	676775	40.0000	37.94
113	Diphenyl Oxide	170	12.865	12.870	(0.944)	1726304	40.0000	36.67
112	Biphenyl	154	12.677	12.682	(0.930)	1990603	40.0000	36.32
110	Tetrachloroguaiacol	247	15.961	15.971	(0.996)	654310	80.0000	81.22
109	3,4,5-Trichloroguaiacol	213	14.310	14.315	(0.893)	346917	40.0000	42.53
181	3,4,6-Trichloroguaiacol	211	14.434	14.444	(0.900)	407062	40.0000	42.08
108	4,5,6-Trichloroguaiacol	213	15.344	15.349	(0.957)	357303	40.0000	42.30
184	3,4-Dichloroguaiacol	192	12.759	12.764	(0.936)	360234	40.0000	42.38
107	4,5-Dichloroguaiacol	192	13.541	13.545	(0.994)	535237	40.0000	45.44
182	4,6-Dichloroguaiacol	192	13.570	13.580	(0.996)	412019	40.0000	38.14
185	4-Chloroguaiacol	115	11.655	11.660	(1.341)	239833	20.0000	21.38
106	Guaiacol	124	9.640	9.645	(1.109)	785043	40.0000	38.14

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 07191005.d
Lab Smp Id: IC400719
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100719.b/SW846100719.m
Misc Info: 10-

Calibration Date: 19-JUL-2010
Calibration Time: 16:18
Client Smp ID: IC400719
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	356478	178239	712956	381018	6.88
27 Naphthalene-d8	1293412	646706	2586824	1340154	3.61
42 Acenaphthene-d10	785897	392948	1571794	839318	6.80
59 Phenanthrene-d10	1313990	656995	2627980	1371590	4.38
69 Chrysene-d12	1155293	577646	2310586	1264495	9.45
134 Di-n-octylphthala	1825297	912648	3650594	1902533	4.23
77 Perylene-d12	1146289	573144	2292578	1213809	5.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.70	8.20	9.20	8.69	-0.04
27 Naphthalene-d8	10.74	10.24	11.24	10.74	0.02
42 Acenaphthene-d10	13.63	13.13	14.13	13.63	0.02
59 Phenanthrene-d10	16.03	15.53	16.53	16.03	0.01
69 Chrysene-d12	20.38	19.88	20.88	20.38	0.01
134 Di-n-octylphthala	21.45	20.95	21.95	21.45	0.01
77 Perylene-d12	22.58	22.08	23.08	22.58	-0.02

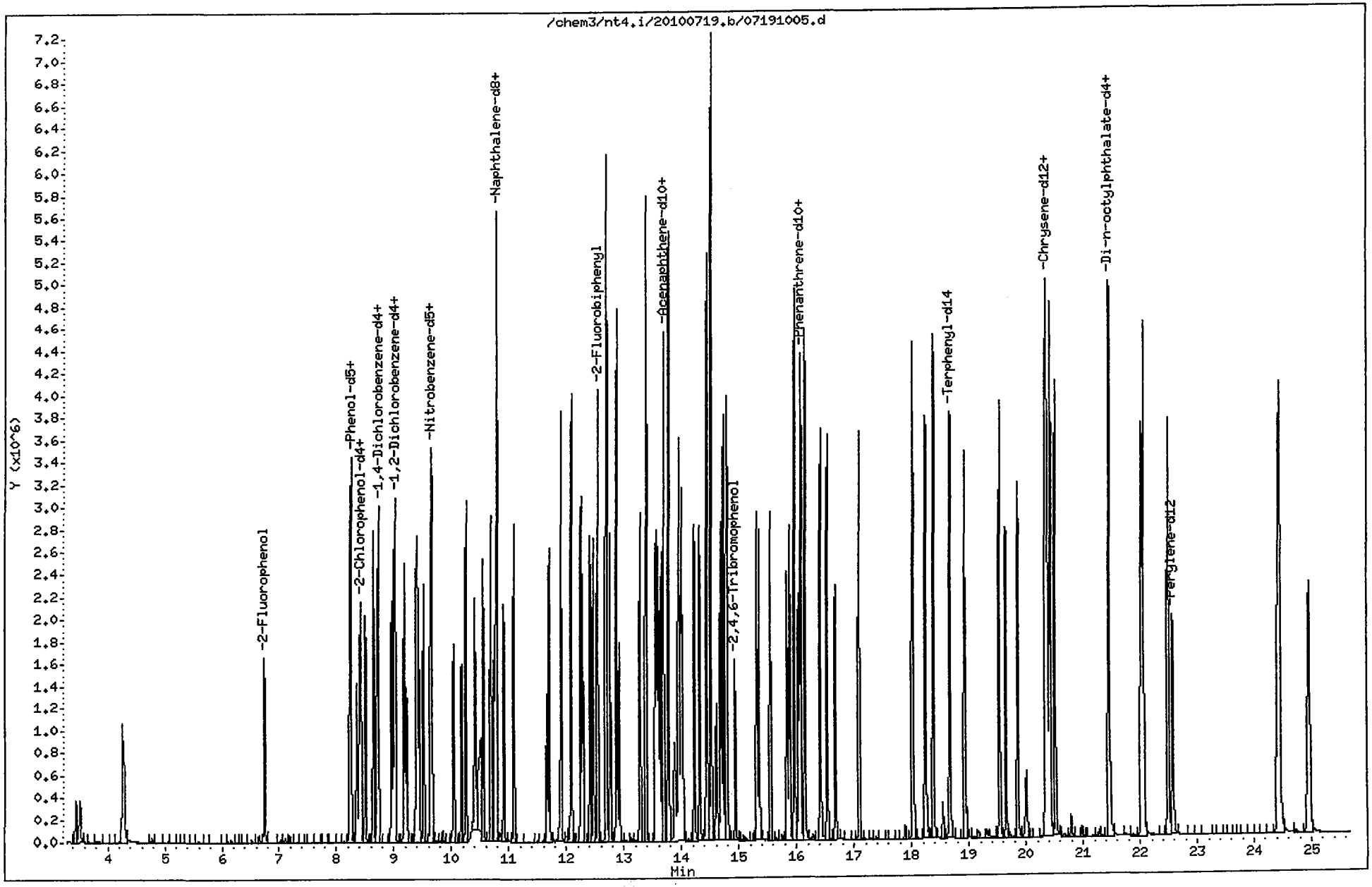
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20100719.b/07191005.d
Date : 19-JUL-2010 18:41
Client ID: IC400719
Sample Info: IC400719

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32

Column phase: ZB-5msi



RG51:00519

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100719.b/07191006.d
Lab Smp Id: IC600719 Client Smp ID: IC600719
Inj Date : 19-JUL-2010 19:14
Operator : JZ Inst ID: nt4.i
Smp Info : IC600719
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100719.b/SW846100719.m
Meth Date : 21-Jul-2010 18:37 jianqing Quant Type: ISTD
Cal Date : 19-JUL-2010 19:14 Cal File: 07191006.d
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

JZ 07/21/10

AMOUNTS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.742	6.737	(0.775)	1229938	60.0000	56.87
$	2 Phenol-d5	99	8.228	8.229	(0.946)	1203698	60.0000	56.64
	3 Phenol	94	8.251	8.252	(0.949)	1486801	60.0000	53.46
$	5 2-Chlorophenol-d4	132	8.398	8.393	(0.966)	1296594	60.0000	56.95
	4 Bis(2-Chloroethyl)ether	93	8.351	8.352	(0.960)	1136800	60.0000	55.21
	6 2-Chlorophenol	128	8.422	8.423	(0.968)	1481989	60.0000	56.33
	7 1,3-Dichlorobenzene	146	8.639	8.640	(0.993)	1637912	60.0000	54.87
*	8 1,4-Dichlorobenzene-d4	152	8.698	8.699	(1.000)	397320	20.0000	
	9 1,4-Dichlorobenzene	146	8.721	8.722	(1.003)	1656413	60.0000	54.89
$	10 1,2-Dichlorobenzene-d4	152	8.997	8.998	(1.034)	951535	60.0000	55.76
	12 1,2-Dichlorobenzene	146	9.021	9.022	(1.037)	1536342	60.0000	54.70
	11 Benzyl alcohol	108	8.968	8.969	(1.031)	863804	60.0000	54.97
	14 2,2'-oxybis(1-Chloropropane)	45	9.215	9.216	(1.059)	1018933	60.0000	52.28
	13 2-Methylphenol	108	9.179	9.181	(1.055)	1210815	60.0000	57.59
	17 Hexachloroethane	117	9.508	9.509	(1.093)	632803	60.0000	57.04
	16 N-Nitroso-di-n-propylamine	70	9.444	9.445	(1.086)	798791	60.0000	55.53
	15 4-Methylphenol	108	9.414	9.415	(1.082)	1252181	60.0000	57.40
$	18 Nitrobenzene-d5	82	9.626	9.627	(0.896)	1229087	60.0000	53.83
	19 Nitrobenzene	77	9.661	9.662	(0.899)	1188709	60.0000	52.39
	20 Isophorone	82	10.037	10.038	(0.934)	2011089	60.0000	53.69
	21 2-Nitrophenol	139	10.172	10.173	(0.946)	846073	60.0000	60.67
	22 2,4-Dimethylphenol	107	10.254	10.256	(0.954)	1366838	60.0000	54.30
	23 Bis(2-Chloroethoxy)methane	93	10.407	10.408	(0.968)	1395558	60.0000	53.29
	24 Benzoic acid	105	10.560	10.567	(0.982)	2377813	120.000	138.7(M)
	25 2,4-Dichlorophenol	162	10.548	10.549	(0.981)	1299788	60.0000	59.22
	26 1,2,4-Trichlorobenzene	180	10.683	10.684	(0.994)	1364625	60.0000	55.60
*	27 Naphthalene-d8	136	10.748	10.749	(1.000)	1461536	20.0000	

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	28 Naphthalene	128	10.783	10.784	(1.003)	3406376	60.0000	47.80
	29 4-Chloroaniline	127	10.907	10.908	(1.015)	1513974	60.0000	53.84
	30 Hexachlorobutadiene	225	11.083	11.084	(1.031)	765030	60.0000	54.87
	31 4-Chloro-3-methylphenol	107	11.700	11.701	(1.089)	1220499	60.0000	60.84
	32 2-Methylnaphthalene	142	11.905	11.906	(1.108)	2515888	60.0000	52.50
	33 Hexachlorocyclopentadiene	237	12.281	12.282	(0.901)	871995	60.0000	65.89
	34 2,4,6-Trichlorophenol	196	12.410	12.411	(0.910)	964534	60.0000	61.35
	35 2,4,5-Trichlorophenol	196	12.469	12.470	(0.915)	1030226	60.0000	65.00
$	36 2-Fluorobiphenyl	172	12.540	12.541	(0.920)	2843491	60.0000	52.03
	37 2-Chloronaphthalene	162	12.698	12.699	(0.931)	2543337	60.0000	52.57
	38 2-Nitroaniline	65	12.921	12.923	(0.948)	595218	60.0000	65.41
	39 Dimethylphthalate	163	13.286	13.287	(0.975)	3065731	60.0000	54.05
	40 Acenaphthylene	152	13.380	13.381	(0.981)	3654484	60.0000	49.58
	41 2,6-Dinitrotoluene	165	13.380	13.387	(0.981)	752544	60.0000	60.10
*	42 Acenaphthene-d10	164	13.632	13.633	(1.000)	877821	20.0000	
	43 3-Nitroaniline	138	13.609	13.610	(0.998)	574337	60.0000	50.04
	44 Acenaphthene	153	13.691	13.686	(1.004)	2486799	60.0000	52.32
	45 2,4-Dinitrophenol	184	13.779	13.780	(1.011)	1050607	120.000	175.9
	46 Dibenzofuran	168	13.949	13.951	(1.023)	3316951	60.0000	52.24
	47 4-Nitrophenol	109	13.879	13.880	(1.018)	521388	60.0000	64.86
	48 2,4-Dinitrotoluene	165	14.020	14.021	(1.028)	1028405	60.0000	62.65
	50 Diethylphthalate	149	14.437	14.438	(1.059)	2995821	60.0000	50.71
	49 Fluorene	166	14.513	14.514	(1.065)	2766792	60.0000	50.10
	51 4-Chlorophenyl-phenylether	204	14.519	14.514	(1.065)	1386076	60.0000	52.04
	52 4-Nitroaniline	138	14.625	14.626	(1.073)	708100	60.0000	58.91
	53 4,6-Dinitro-2-methylphenol	198	14.695	14.697	(0.916)	1367613	120.000	141.3
	54 N-Nitrosodiphenylamine	169	14.731	14.732	(0.919)	2292809	60.0000	55.69
$	55 2,4,6-Tribromophenol	330	14.936	14.937	(1.096)	382818	60.0000	61.84
	56 4-Bromophenyl-phenylether	248	15.306	15.308	(0.955)	839139	60.0000	56.62
	57 Hexachlorobenzene	284	15.547	15.548	(0.970)	830754	60.0000	54.39
	58 Pentachlorophenol	266	15.841	15.842	(0.988)	650217	60.0000	63.72
*	59 Phenanthrene-d10	188	16.035	16.036	(1.000)	1448224	20.0000	
	60 Phenanthrene	178	16.076	16.077	(1.003)	3878293	60.0000	50.62
	61 Anthracene	178	16.152	16.153	(1.007)	3944693	60.0000	50.26
	62 Carbazole	167	16.423	16.424	(1.024)	3719250	60.0000	52.47
	63 Di-n-butylphthalate	149	17.092	17.093	(1.066)	4433661	60.0000	48.48
	64 Fluoranthene	202	18.026	18.027	(1.124)	4065333	60.0000	51.15
	65 Pyrene	202	18.396	18.397	(0.902)	4220721	60.0000	50.47
$	66 Terphenyl-d14	244	18.672	18.674	(0.916)	2664333	60.0000	52.41
	67 Butylbenzylphthalate	149	19.542	19.543	(0.958)	2351154	60.0000	56.16
	68 Benzo(a)anthracene	228	20.364	20.365	(0.999)	3947800	60.0000	51.13
*	69 Chrysene-d12	240	20.388	20.389	(1.000)	1294779	20.0000	
	70 3,3'-Dichlorobenzidine	252	20.347	20.348	(0.998)	1334380	60.0000	53.48
	71 Chrysene	228	20.435	20.436	(1.002)	3793653	60.0000	50.15
	72 bis(2-Ethylhexyl)phthalate	149	20.517	20.518	(0.956)	3142762	60.0000	56.90
*	134 Di-n-octylphthalate-d4	153	21.457	21.458	(1.000)	1930038	20.0000	
	73 Di-n-octylphthalate	149	21.469	21.470	(1.001)	4795925	60.0000	48.58

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	22.038	22.040	(0.976)	4080347	60.0000	51.13
75	Benzo(k)fluoranthene	252	22.074	22.075	(0.978)	4266538	60.0000	51.21
187	Total Benzofluoranthenes	252	22.074	22.075	(0.978)	7852544	120.000	102.2
76	Benzo(a)pyrene	252	22.508	22.510	(0.997)	3866473	60.0000	54.28
* 77	Perylene-d12	264	22.579	22.580	(1.000)	1277873	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	24.453	24.454	(1.083)	4513038	60.0000	59.97
79	Dibenzo(a,h)anthracene	278	24.471	24.477	(1.084)	3659183	60.0000	60.61
80	Benzo(g,h,i)perylene	276	24.987	24.989	(1.107)	3886563	60.0000	60.45
90	N-Nitrosodimethylamine	74	4.298	4.281	(0.494)	642614	60.0000	55.47
103	Pyridine	79	4.257	4.240	(0.489)	1166653	60.0000	58.82
91	Aniline	93	8.251	8.252	(0.949)	1522936	60.0000	52.43
105	1-methylnaphthalene	142	12.081	12.082	(1.124)	2468087	60.0000	52.66
93	Benzidine	184	18.255	18.251	(0.895)	1209446	60.0000	49.52
111	Azobenzene (1,2-DP-Hydrazine)	77	14.778	14.779	(1.084)	2261358	60.0000	51.23
143	1,4-Dioxane	88	3.522	3.494	(0.405)	432668	60.0000	
$ 137	d8-1,4-Dioxane	96	3.452	3.424	(0.397)	452808	60.0000	
151	1,2,4,5-Tetrachlorobenzene	216	12.246	12.247	(0.898)	1293861	60.0000	55.65
120	2,3,4,6-Tetrachlorophenol	232	14.220	14.221	(1.043)	822319	60.0000	62.42
144	alpha-Terpineol	59	10.789	10.790	(1.004)	632002	60.0000	50.64
98	Retene	219	18.931	18.932	(0.929)	1565454	60.0000	56.77
133	Butylatedhydroxytoluene	205	13.773	13.774	(1.010)	2053796	60.0000	47.73
115	Tributyl Phosphate	99	14.801	14.802	(0.923)	2926776	60.0000	52.25
116	Dibutyl Phenyl Phosphate	175	16.534	16.535	(1.031)	2564420	60.0000	56.23
117	Butyl Diphenyl Phosphate	94	18.244	18.245	(0.895)	765596	60.0000	57.75
118	Triphenyl Phosphate	326	19.865	19.866	(0.974)	759375	60.0000	57.84
123	Acetophenone	105	9.391	9.392	(0.874)	1676761	60.0000	53.44
179	n-Decane	57	8.504	8.505	(0.978)	860809	60.0000	53.30
180	n-Octadecane	57	15.882	15.883	(0.990)	1023596	60.0000	50.45
168	Pentachlorobenzene	250	13.991	13.992	(1.026)	1018953	60.0000	55.45
113	Diphenyl Oxide	170	12.869	12.870	(0.944)	2507406	60.0000	52.24
112	Biphenyl	154	12.681	12.682	(0.930)	2788162	60.0000	50.23
110	Tetrachloroguaiacol	247	15.970	15.971	(0.996)	984961	120.000	116.5
109	3,4,5-Trichloroguaiacol	213	14.314	14.315	(0.893)	533736	60.0000	61.63
181	3,4,6-Trichloroguaiacol	211	14.437	14.444	(0.900)	612812	60.0000	60.00
108	4,5,6-Trichloroguaiacol	213	15.353	15.349	(0.958)	559497	60.0000	62.26
184	3,4-Dichloroguaiacol	192	12.763	12.764	(0.936)	563971	60.0000	62.83
107	4,5-Dichloroguaiacol	192	13.544	13.545	(0.994)	821802	60.0000	65.49
182	4,6-Dichloroguaiacol	192	13.579	13.580	(0.996)	664585	60.0000	59.01
185	4-Chloroguaiacol	115	11.658	11.660	(1.340)	379286	30.0000	31.99
106	Guaiacol	124	9.644	9.645	(1.109)	1198240	60.0000	56.49

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 07191006.d
Lab Smp Id: IC600719
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100719.b/SW846100719.m
Misc Info: 10-

Calibration Date: 19-JUL-2010
Calibration Time: 16:18
Client Smp ID: IC600719
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	356478	178239	712956	397320	11.46
27 Naphthalene-d8	1293412	646706	2586824	1461536	13.00
42 Acenaphthene-d10	785897	392948	1571794	877821	11.70
59 Phenanthrene-d10	1313990	656995	2627980	1448224	10.22
69 Chrysene-d12	1155293	577646	2310586	1294779	12.07
134 Di-n-octylphthala	1825297	912648	3650594	1930038	5.74
77 Perylene-d12	1146289	573144	2292578	1277873	11.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.70	8.20	9.20	8.70	0.00
27 Naphthalene-d8	10.74	10.24	11.24	10.75	0.05
42 Acenaphthene-d10	13.63	13.13	14.13	13.63	0.04
59 Phenanthrene-d10	16.03	15.53	16.53	16.03	0.04
69 Chrysene-d12	20.38	19.88	20.88	20.39	0.03
134 Di-n-octylphthala	21.45	20.95	21.95	21.46	0.03
77 Perylene-d12	22.58	22.08	23.08	22.58	0.00

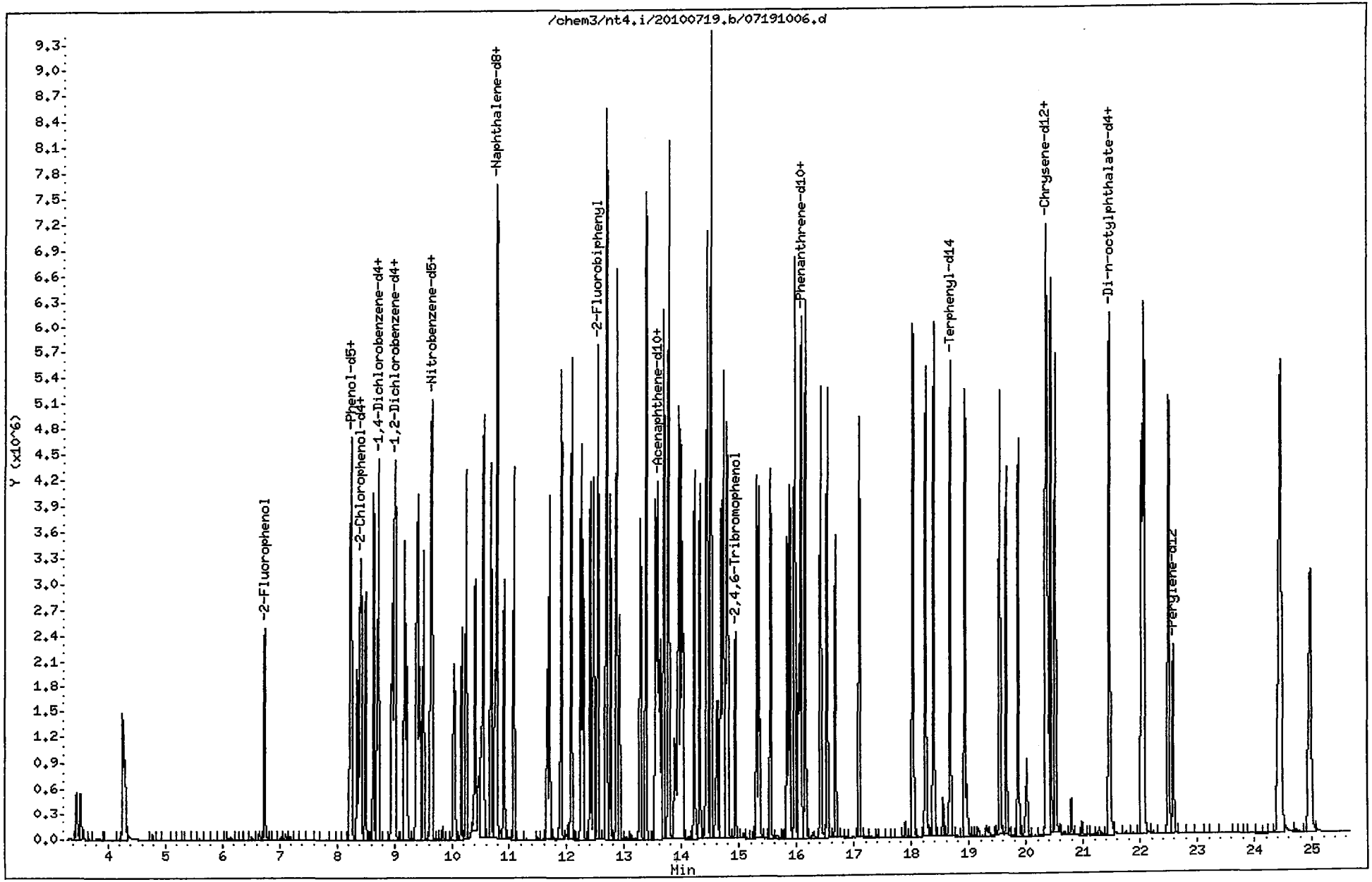
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20100719.b/07191006.d
Date : 19-JUL-2010 19:14
Client ID: IC600719
Sample Info: IC600719

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32

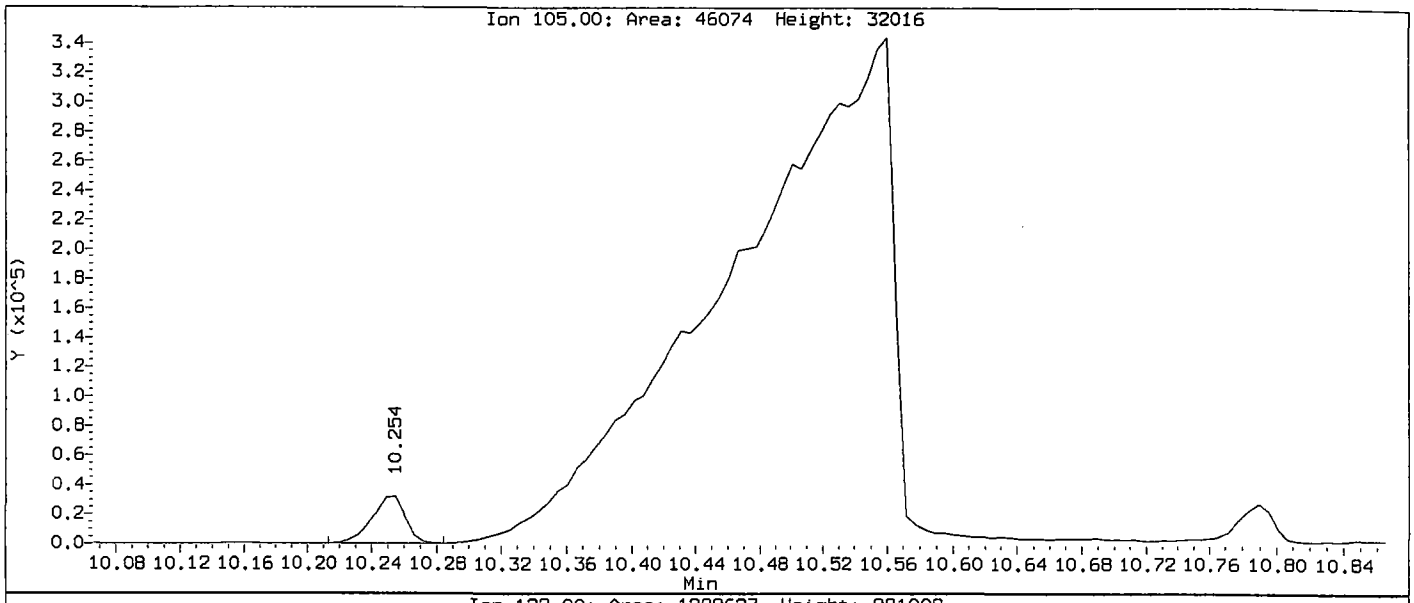
Column phase: ZB-5msi

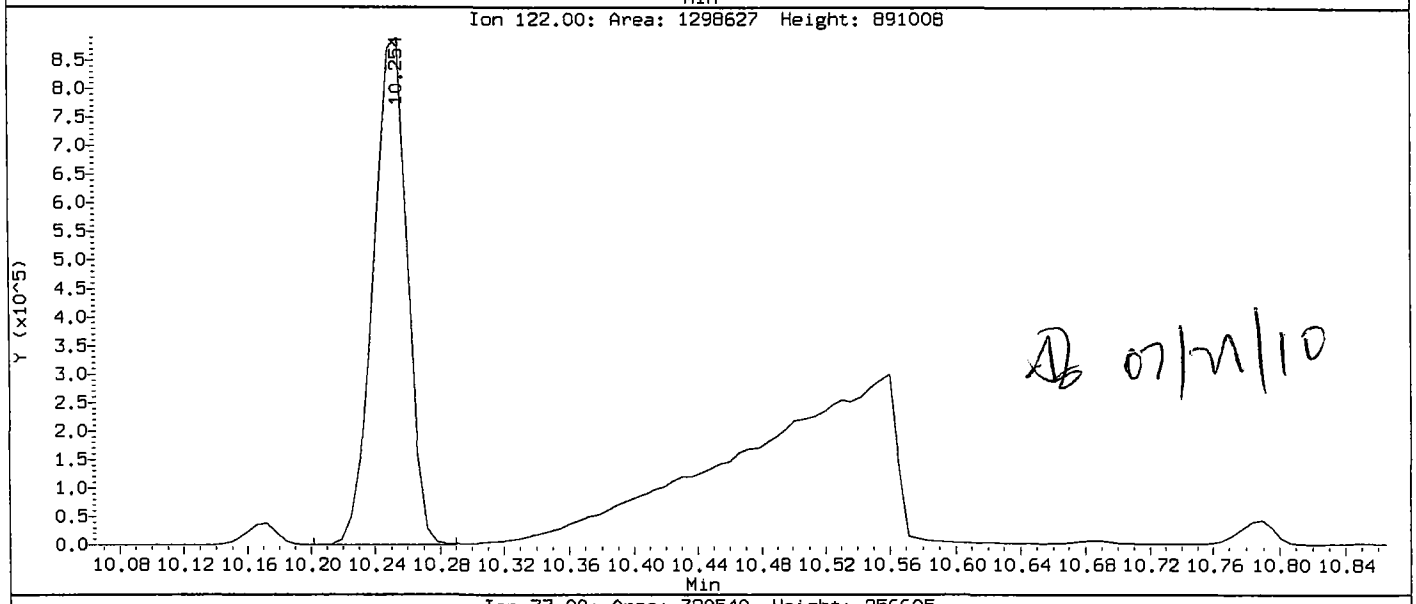


RG5H00616

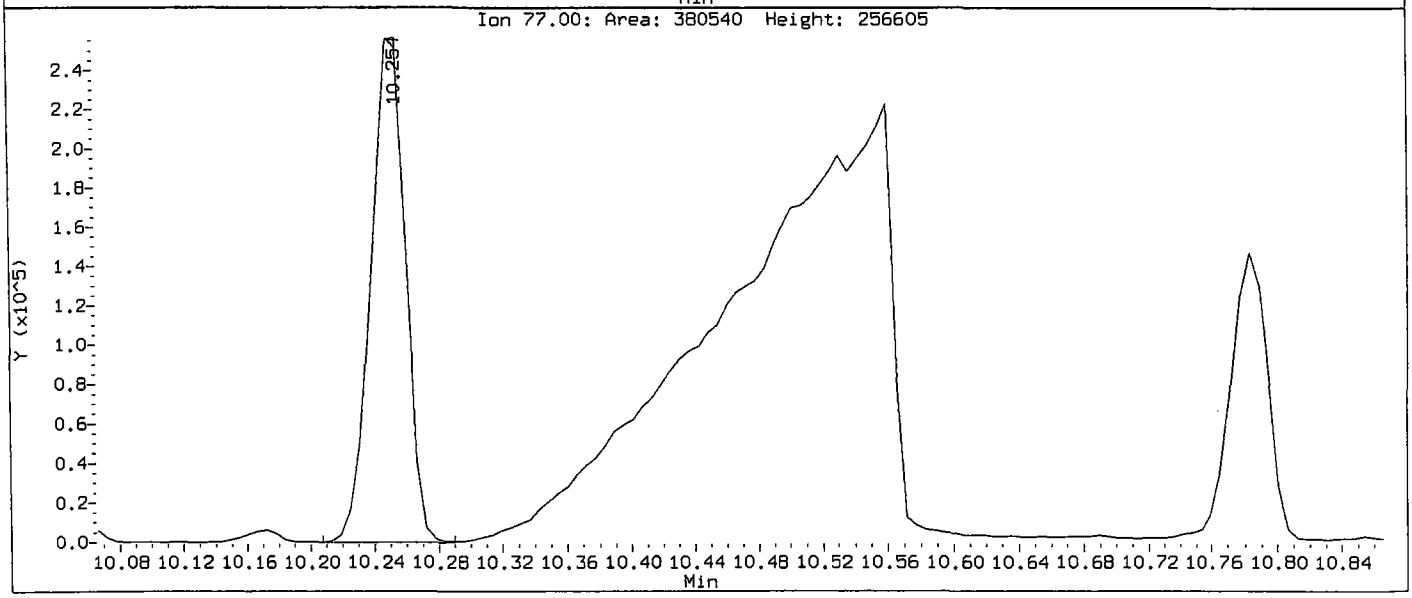
Data File: /chem3/nt4.i/20100719.b/07191006.d
Injection Date: 19-JUL-2010 19:14
Instrument: nt4.i
Client Sample ID: IC600719

Compound: Benzoic acid
CAS Number: 65-85-0



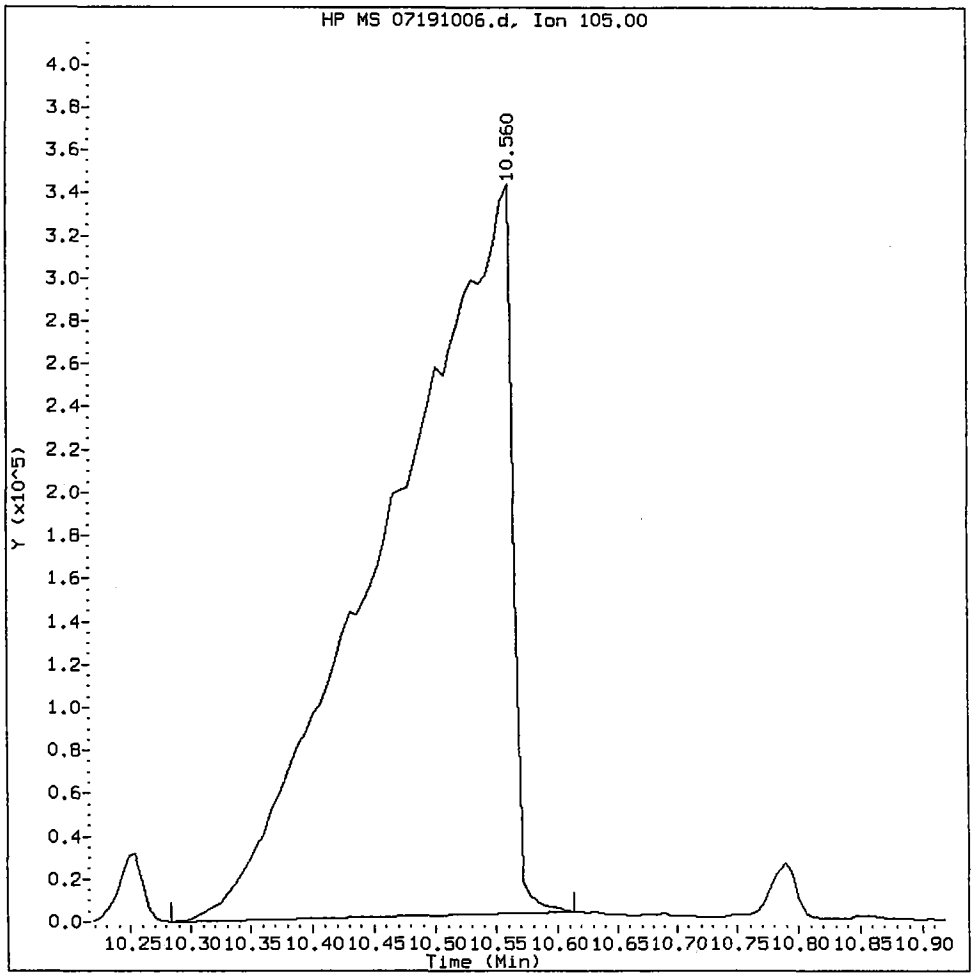


D 07/21/10



IC600719, /chem3/nt4.i/20100719.b/07191006.d

Benzoic acid Amount: 138.72 Area: 2377813



MANUAL INTEGRATION for Benzoic acid

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Other RT correction

Analyst: AZ Date: 07/21/10

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100719.b/07191007.d
Lab Smp Id: IC800719 Client Smp ID: IC800719
Inj Date : 19-JUL-2010 19:48
Operator : JZ Inst ID: nt4.i
Smp Info : IC800719
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100719.b/SW846100719.m
Meth Date : 21-Jul-2010 18:37 jianqing Quant Type: ISTD
Cal Date : 19-JUL-2010 19:48 Cal File: 07191007.d
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

07/21/10

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	6.737	6.737	(0.774)	1268957	80.0000	77.83
$	2	Phenol-d5	99	8.229	8.229	(0.946)	1256362	80.0000	78.34
	3	Phenol	94	8.252	8.252	(0.949)	1513050	80.0000	72.91
$	5	2-Chlorophenol-d4	132	8.393	8.393	(0.965)	1360372	80.0000	79.05
	4	Bis(2-Chloroethyl)ether	93	8.352	8.352	(0.960)	1181994	80.0000	76.37
	6	2-Chlorophenol	128	8.423	8.423	(0.968)	1496302	80.0000	75.76
	7	1,3-Dichlorobenzene	146	8.640	8.640	(0.993)	1715827	80.0000	76.46
*	8	1,4-Dichlorobenzene-d4	152	8.699	8.699	(1.000)	300879	20.0000	
	9	1,4-Dichlorobenzene	146	8.722	8.722	(1.003)	1723689	80.0000	76.05
$	10	1,2-Dichlorobenzene-d4	152	8.998	8.998	(1.034)	985077	80.0000	76.74
	12	1,2-Dichlorobenzene	146	9.022	9.022	(1.037)	1611941	80.0000	76.37
	11	Benzyl alcohol	108	8.969	8.969	(1.031)	885576	80.0000	75.30
	14	2,2'-oxybis(1-Chloropropane)	45	9.216	9.216	(1.059)	1062470	80.0000	73.03
	13	2-Methylphenol	108	9.181	9.181	(1.055)	1236207	80.0000	77.98
	17	Hexachloroethane	117	9.509	9.509	(1.093)	668079	80.0000	79.59
	16	N-Nitroso-di-n-propylamine	70	9.445	9.445	(1.086)	847679	80.0000	78.12
	15	4-Methylphenol	108	9.415	9.415	(1.082)	1285439	80.0000	78.12
$	18	Nitrobenzene-d5	82	9.627	9.627	(0.896)	1313315	80.0000	75.51
	19	Nitrobenzene	77	9.662	9.662	(0.899)	1268880	80.0000	73.69
	20	Isophorone	82	10.038	10.038	(0.934)	2190082	80.0000	76.58
	21	2-Nitrophenol	139	10.173	10.173	(0.946)	878305	80.0000	81.64
	22	2,4-Dimethylphenol	107	10.256	10.256	(0.954)	1436576	80.0000	75.00
	23	Bis(2-Chloroethoxy)methane	93	10.408	10.408	(0.968)	1496886	80.0000	75.10
	24	Benzoic acid	105	10.567	10.567	(0.983)	2519498	160.000	185.2(M)
	25	2,4-Dichlorophenol	162	10.549	10.549	(0.981)	1322567	80.0000	78.60
	26	1,2,4-Trichlorobenzene	180	10.684	10.684	(0.994)	1436894	80.0000	76.68
*	27	Naphthalene-d8	136	10.749	10.749	(1.000)	1123708	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
28	Naphthalene	128	10.784	10.784	(1.003)	3561240	80.0000	66.79
29	4-Chloroaniline	127	10.908	10.908	(1.015)	1528754	80.0000	71.91
30	Hexachlorobutadiene	225	11.084	11.084	(1.031)	808142	80.0000	76.01
31	4-Chloro-3-methylphenol	107	11.701	11.701	(1.089)	1238322	80.0000	80.25
32	2-Methylnaphthalene	142	11.906	11.906	(1.108)	2607146	80.0000	71.95
33	Hexachlorocyclopentadiene	237	12.282	12.282	(0.901)	915584	80.0000	89.17
34	2,4,6-Trichlorophenol	196	12.411	12.411	(0.910)	987062	80.0000	82.41
35	2,4,5-Trichlorophenol	196	12.470	12.470	(0.915)	1062277	80.0000	87.11
$ 36	2-Fluorobiphenyl	172	12.541	12.541	(0.920)	2942574	80.0000	72.19
37	2-Chloronaphthalene	162	12.699	12.699	(0.931)	2663679	80.0000	73.60
38	2-Nitroaniline	65	12.923	12.923	(0.948)	601628	80.0000	86.11
39	Dimethylphthalate	163	13.287	13.287	(0.975)	3167616	80.0000	74.52
40	Acenaphthylene	152	13.381	13.381	(0.981)	3749859	80.0000	68.69
41	2,6-Dinitrotoluene	165	13.387	13.387	(0.982)	800837	80.0000	83.72
* 42	Acenaphthene-d10	164	13.633	13.633	(1.000)	665405	20.0000	
43	3-Nitroaniline	138	13.610	13.610	(0.998)	547360	80.0000	64.90
44	Acenaphthene	153	13.686	13.686	(1.004)	2609597	80.0000	73.42
45	2,4-Dinitrophenol	184	13.780	13.780	(1.011)	1116227	160.000	226.1
46	Dibenzofuran	168	13.951	13.951	(1.023)	3428345	80.0000	72.37
47	4-Nitrophenol	109	13.880	13.880	(1.018)	524194	80.0000	84.96 (M)
48	2,4-Dinitrotoluene	165	14.021	14.021	(1.028)	1090733	80.0000	86.48
50	Diethylphthalate	149	14.438	14.438	(1.059)	3129575	80.0000	71.17
49	Fluorene	166	14.514	14.514	(1.065)	2859491	80.0000	69.76
51	4-Chlorophenyl-phenylether	204	14.514	14.514	(1.065)	1441324	80.0000	72.50
52	4-Nitroaniline	138	14.626	14.626	(1.073)	743720	80.0000	81.39
53	4,6-Dinitro-2-methylphenol	198	14.697	14.697	(0.916)	1436565	160.000	185.2
54	N-Nitrosodiphenylamine	169	14.732	14.732	(0.919)	2418926	80.0000	76.28
$ 55	2,4,6-Tribromophenol	330	14.937	14.937	(1.096)	412250	80.0000	86.64
56	4-Bromophenyl-phenylether	248	15.308	15.308	(0.955)	913731	80.0000	79.51
57	Hexachlorobenzene	284	15.548	15.548	(0.970)	900972	80.0000	76.54
58	Pentachlorophenol	266	15.842	15.842	(0.988)	681354	80.0000	84.95
* 59	Phenanthrene-d10	188	16.036	16.036	(1.000)	1124245	20.0000	
60	Phenanthrene	178	16.077	16.077	(1.003)	4063948	80.0000	69.78
61	Anthracene	178	16.153	16.153	(1.007)	4117176	80.0000	69.11
62	Carbazole	167	16.424	16.424	(1.024)	3902737	80.0000	72.09
63	Di-n-butylphthalate	149	17.093	17.093	(1.066)	4579430	80.0000	66.34
64	Fluoranthene	202	18.027	18.027	(1.124)	4175102	80.0000	69.19
65	Pyrene	202	18.397	18.397	(0.902)	4362118	80.0000	71.04
$ 66	Terphenyl-d14	244	18.674	18.674	(0.916)	2749894	80.0000	73.34
67	Butylbenzylphthalate	149	19.543	19.543	(0.958)	2421300	80.0000	77.70
68	Benzo(a)anthracene	228	20.365	20.365	(0.999)	4068026	80.0000	71.67
* 69	Chrysene-d12	240	20.389	20.389	(1.000)	968321	20.0000	
70	3,3'-Dichlorobenzidine	252	20.348	20.348	(0.998)	1323573	80.0000	72.10
71	Chrysene	228	20.436	20.436	(1.002)	3954441	80.0000	71.18
72	bis(2-Ethylhexyl)phthalate	149	20.518	20.518	(0.956)	3227271	80.0000	76.14
* 134	Di-n-octylphthalate-d4	153	21.458	21.458	(1.000)	1492891	20.0000	
73	Di-n-octylphthalate	149	21.470	21.470	(1.001)	4907690	80.0000	66.12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	22.040	22.040	(0.976)	4767186	80.0000	78.45
75	Benzo(k)fluoranthene	252	22.075	22.075	(0.978)	3917576	80.0000	63.64(H)
187	Total Benzofluoranthenes	252	22.075	22.075	(0.978)	8152817	160.000	141.5
76	Benzo(a)pyrene	252	22.510	22.510	(0.997)	4064073	80.0000	75.39
* 77	Perylene-d12	264	22.580	22.580	(1.000)	976271	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	24.454	24.454	(1.083)	4819802	80.0000	83.27
79	Dibenzo(a,h)anthracene	278	24.477	24.477	(1.084)	3918538	80.0000	84.21
80	Benzo(g,h,i)perylene	276	24.989	24.989	(1.107)	4132422	80.0000	83.52
90	N-Nitrosodimethylamine	74	4.281	4.281	(0.492)	697583	80.0000	79.59
103	Pyridine	79	4.240	4.240	(0.487)	1255622	80.0000	83.07
91	Aniline	93	8.252	8.252	(0.949)	1571926	80.0000	72.57
105	1-methylnaphthalene	142	12.082	12.082	(1.124)	2580932	80.0000	72.71
93	Benzidine	184	18.251	18.251	(0.895)	1168136	80.0000	63.96
111	Azobenzene (1,2-DP-Hydrazine)	77	14.779	14.779	(1.084)	2355672	80.0000	71.63
143	1,4-Dioxane	88	3.494	3.494	(0.402)	447525	80.0000	
$ 137	d8-1,4-Dioxane	96	3.424	3.424	(0.394)	475461	80.0000	
151	1,2,4,5-Tetrachlorobenzene	216	12.247	12.247	(0.898)	1339605	80.0000	76.55
120	2,3,4,6-Tetrachlorophenol	232	14.221	14.221	(1.043)	860255	80.0000	85.21
144	alpha-Terpineol	59	10.790	10.790	(1.004)	657935	80.0000	70.00
98	Retene	219	18.932	18.932	(0.929)	1623969	80.0000	78.92
133	Butylatedhydroxytoluene	205	13.774	13.774	(1.010)	2093075	80.0000	66.04
115	Tributyl Phosphate	99	14.802	14.802	(0.923)	3019559	80.0000	70.77
116	Dibutyl Phenyl Phosphate	175	16.535	16.535	(1.031)	2635204	80.0000	75.18
117	Butyl Diphenyl Phosphate	94	18.245	18.245	(0.895)	786388	80.0000	79.41
118	Triphenyl Phosphate	326	19.866	19.866	(0.974)	782394	80.0000	79.73
123	Acetophenone	105	9.392	9.392	(0.874)	1783025	80.0000	74.73
179	n-Decane	57	8.505	8.505	(0.978)	874156	80.0000	72.58
180	n-Octadecane	57	15.883	15.883	(0.990)	1091994	80.0000	70.68
168	Pentachlorobenzene	250	13.992	13.992	(1.026)	1076925	80.0000	77.68
113	Diphenyl Oxide	170	12.870	12.870	(0.944)	2584282	80.0000	72.18
112	Biphenyl	154	12.682	12.682	(0.930)	2852174	80.0000	69.29
110	Tetrachloroguaiacol	247	15.971	15.971	(0.996)	1042306	160.000	158.9
109	3,4,5-Trichloroguaiacol	213	14.315	14.315	(0.893)	548942	80.0000	81.41
181	3,4,6-Trichloroguaiacol	211	14.444	14.444	(0.901)	634089	80.0000	79.98
108	4,5,6-Trichloroguaiacol	213	15.349	15.349	(0.957)	593948	80.0000	84.36
184	3,4-Dichloroguaiacol	192	12.764	12.764	(0.936)	591226	80.0000	85.84
107	4,5-Dichloroguaiacol	192	13.545	13.545	(0.994)	858522	80.0000	88.63
182	4,6-Dichloroguaiacol	192	13.580	13.580	(0.996)	689458	80.0000	80.65
185	4-Chloroguaiacol	115	11.660	11.660	(1.340)	395259	40.0000	43.40
106	Guaiacol	124	9.645	9.645	(1.109)	1270875	80.0000	79.24

QC Flag Legend

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

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 07191007.d
Lab Smp Id: IC800719
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100719.b/SW846100719.m
Misc Info: 10-

Calibration Date: 19-JUL-2010
Calibration Time: 16:18
Client Smp ID: IC800719
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	356478	178239	712956	300879	-15.60
27 Naphthalene-d8	1293412	646706	2586824	1123708	-13.12
42 Acenaphthene-d10	785897	392948	1571794	665405	-15.33
59 Phenanthrene-d10	1313990	656995	2627980	1124245	-14.44
69 Chrysene-d12	1155293	577646	2310586	968321	-16.18
134 Di-n-octylphthala	1825297	912648	3650594	1492891	-18.21
77 Perylene-d12	1146289	573144	2292578	976271	-14.83

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.70	8.20	9.20	8.70	0.01
27 Naphthalene-d8	10.74	10.24	11.24	10.75	0.06
42 Acenaphthene-d10	13.63	13.13	14.13	13.63	0.05
59 Phenanthrene-d10	16.03	15.53	16.53	16.04	0.04
69 Chrysene-d12	20.38	19.88	20.88	20.39	0.03
134 Di-n-octylphthala	21.45	20.95	21.95	21.46	0.03
77 Perylene-d12	22.58	22.08	23.08	22.58	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.