



Electronic Comprehensive Validation Package (eCVP)



AN ENVIRONMENTAL ANALYTICAL LABORATORY

## COMPREHENSIVE VALIDATION PACKAGE

Modified TO-13A

### INVENTORY SHEET

Work Order #: 0907252B

Page Nos.	
From	To
1. Work Order Cover Page & Laboratory Narrative	
a. <u>Lumen Validation Report</u>	
2. Sample Results and Raw Data (Organized by Sample)	
a. ATL Sample Results Form	
b. Target Compound Raw Data	
-Internal Standard Area and Retention Time Summary	
-Surrogate Recovery Summary (If Applicable)	
-Chromatogram(s) and Ion Profiles (If Applicable)	
3. QC Results and Raw Data	
a. Method Blank (Results+ Raw Data)	
b. Surrogate Recover Summary Form (If Applicable)	
c. Internal Standard Summary Form (If Applicable)	
d. Duplicate Results Summary Sheet	
e. Matrix Spike/Matrix Spike Duplicate (Results + Raw Data)	
f. Initial Calibration Data (Summary Sheet + Raw Data)	
g. MDL Study (If Applicable)	
h. Continuing Calibration Verification Data (Summary Sheet	
i. Second Source LCS(Summary + Raw Data)	
i. Extraction Logs	
k. Instrument Run Logs/Software Verification	
l. GC/MS Tune (Results + Raw Data)	
4. Shipping/Receiving Documents	
a. Login Receipt Summary Sheet	
b. Chain-of-Custody Records	
c. Sample Log-In Sheet	
d. Misc Shipping/Receiving Records (list of individual records)	
<u>Sample Receipt Discrepancy Report</u>	
5. Other Records (describe or list)	
a. <u>Manual Spectral Defense</u>	
b. <u>Manual Integrations</u>	
c. <u>Manual Calculations</u>	
d. <u>Canister Dilution Factors</u>	
e. <u>Laboratory Corrective Action Request</u>	
f. <u>CAS Number Reference</u>	
g. <u>Variance Table</u>	
h. <u>Canister Certification</u>	
i. <u>Data Review Check Sheet</u>	

Comments:

Completed by:

**Kara McKiernan**

(Signature)

Kara McKiernan / Document Control

( Print Name & Title)

7/23/09

(Date)


**WORK ORDER #: 0907252B**

Work Order Summary

<b>CLIENT:</b>	Mr. Doug Herlocker Tetra Tech 3380 Americana Terrace, Suite 201 Boise, ID 83706	<b>BILL TO:</b>	Mr. Doug Herlocker Tetra Tech 3380 Americana Terrace, Suite 201 Boise, ID 83706
<b>PHONE:</b>	208-389-1030	<b>P.O. #</b>	103P0333.005
<b>FAX:</b>		<b>PROJECT #</b>	103P0333.006 BMI OFFSITE
<b>DATE RECEIVED:</b>	07/14/2009	<b>CONTACT:</b>	Kelly Buettner
<b>DATE COMPLETED:</b>	07/23/2009		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
03A	OFF04-070909	Modified TO-13A
06A	OFF03-070909	Modified TO-13A
07A	Lab Blank	Modified TO-13A
08A	LCS	Modified TO-13A

CERTIFIED BY:



Laboratory Director

DATE: 07/23/09

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004  
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,

Accreditation number: E87680, Effective date: 07/01/08, Expiration date: 06/30/09

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630  
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

**LABORATORY NARRATIVE**  
**Modified TO-13A**  
**Tetra Tech**  
**Workorder# 0907252B**

Two PUF/XAD Cartridge samples were received on July 14, 2009. The laboratory performed the analysis for polycyclic aromatic hydrocarbons in air by modified EPA Method TO-13A. The PUF/XAD samples were extracted using Pressurized Fluid Extraction (PFE) by EPA Method 3545A. The sample extract was then concentrated to 1.0 mL and analyzed by GC/MS in the full scan mode.

Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-13A</i>	<i>ATL Modifications</i>
Extraction Solvent	10% ether in hexane for PUF; DCM for XAD sorbent. Final extract in hexane.	DCM for PUF/XAD cartridge and XAD sorbent. Final extract in DCM.
Glassware Cleaning	Muffle furnace is utilized.	Solvent cleaning procedure is used.
Extraction technique	Soxhlet extraction	Soxhlet extraction or pressurized fluid extraction (PFE).
Calibration range	0.10 to 2.5 ug/mL	1.0 ug/mL to 160 ug/mL
Solvent Process Blank	Required each analytical batch.	Not performed; each solvent lot is certified prior to use.
Method Blank	<Method Detection Limit	<Reporting Limit

**Receiving Notes**

There were no receiving discrepancies.

**Analytical Notes**

The sample cartridges were pre-spiked with Fluoranthene-d10 and Benzo(a)Pyrene-d12 on 7/01/09.

Sampling volume was supplied by the client. A sample volume of 80 m<sup>3</sup> was assumed for all QC samples.

**Definition of Data Qualifying Flags**

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

E - Exceeds instrument calibration range.

Q - Exceeds quality control limits.

S - Saturated peak.

J - Estimated value.

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

U - Compound analyzed for but not detected above the reporting limit.

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Table 1**

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample	Sample Extract		Sample Condition
					Holding Time (Days)	Date Analyzed	Holding Time (Days)	
OFF04-070909	0907252B-03A	7/ 9/2009	7/14/2009	7/15/2009	6	7/21/2009	6	Good
OFF03-070909	0907252B-06A	7/ 9/2009	7/14/2009	7/15/2009	6	7/21/2009	6	Good
Lab Blank	0907252B-07A	NA	NA	7/15/2009	NA	7/21/2009	6	Good
LCS	0907252B-08A	NA	NA	7/15/2009	NA	7/21/2009	6	Good

## **Sample Results and Raw Data**

---

---

**Summary of Detected Compounds**  
**MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN**

**Client Sample ID: OFF04-070909**

**Lab ID#: 0907252B-03A**

<b>Compound</b>	<b>Rpt. Limit (ug)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug)</b>	<b>Amount (ug/m3)</b>
Naphthalene	1.0	0.024	20	0.48
2-Methylnaphthalene	1.0	0.024	16	0.38
Phenanthrene	1.0	0.024	1.0	0.024
di-n-Butylphthalate	5.0	0.12	34	0.82



Client Sample ID: OFF04-070909

Lab ID#: 0907252B-03A

**MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN**

<b>File Name:</b>	<b>v072128</b>	<b>Date of Collection: 7/9/09 5:10:00 PM</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 7/21/09 09:54 PM</b>
		<b>Date of Extraction: 7/15/09</b>

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Phenol	5.0	0.12	Not Detected	Not Detected
bis(2-Chloroethyl) Ether	1.0	0.024	Not Detected	Not Detected
2-Chlorophenol	5.0	0.12	Not Detected	Not Detected
1,3-Dichlorobenzene	1.0	0.024	Not Detected	Not Detected
1,4-Dichlorobenzene	1.0	0.024	Not Detected	Not Detected
1,2-Dichlorobenzene	1.0	0.024	Not Detected	Not Detected
2-Methylphenol (o-Cresol)	5.0	0.12	Not Detected	Not Detected
bis(2-Chloroisopropyl) Ether	1.0	0.024	Not Detected	Not Detected
N-Nitroso-di-n-propylamine	1.0	0.024	Not Detected	Not Detected
4-Methylphenol/3-Methylphenol	5.0	0.12	Not Detected	Not Detected
Hexachloroethane	1.0	0.024	Not Detected	Not Detected
Nitrobenzene	1.0	0.024	Not Detected	Not Detected
Isophorone	1.0	0.024	Not Detected	Not Detected
2-Nitrophenol	5.0	0.12	Not Detected	Not Detected
2,4-Dimethylphenol	5.0	0.12	Not Detected	Not Detected
Benzoic Acid	30	0.71	Not Detected	Not Detected
bis(2-Chloroethoxy) Methane	1.0	0.024	Not Detected	Not Detected
2,4-Dichlorophenol	5.0	0.12	Not Detected	Not Detected
1,2,4-Trichlorobenzene	1.0	0.024	Not Detected	Not Detected
Naphthalene	1.0	0.024	20	0.48
4-Chloroaniline	10	0.24	Not Detected	Not Detected
Hexachlorobutadiene	1.0	0.024	Not Detected	Not Detected
4-Chloro-3-methylphenol	5.0	0.12	Not Detected	Not Detected
2-Methylnaphthalene	1.0	0.024	16	0.38
Hexachlorocyclopentadiene	20	0.47	Not Detected	Not Detected
2,4,6-Trichlorophenol	5.0	0.12	Not Detected	Not Detected
2,4,5-Trichlorophenol	5.0	0.12	Not Detected	Not Detected
2-Chloronaphthalene	1.0	0.024	Not Detected	Not Detected
2-Nitroaniline	10	0.24	Not Detected	Not Detected
Dimethylphthalate	5.0	0.12	Not Detected	Not Detected
Acenaphthylene	1.0	0.024	Not Detected	Not Detected
2,6-Dinitrotoluene	5.0	0.12	Not Detected	Not Detected
3-Nitroaniline	10	0.24	Not Detected	Not Detected
Acenaphthene	1.0	0.024	Not Detected	Not Detected
2,4-Dinitrophenol	20	0.47	Not Detected	Not Detected
4-Nitrophenol	20	0.47	Not Detected	Not Detected
2,4-Dinitrotoluene	5.0	0.12	Not Detected	Not Detected
Dibenzofuran	1.0	0.024	Not Detected	Not Detected

Client Sample ID: OFF04-070909

Lab ID#: 0907252B-03A

**MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN**

<b>File Name:</b>	<b>v072128</b>	<b>Date of Collection: 7/9/09 5:10:00 PM</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 7/21/09 09:54 PM</b>
		<b>Date of Extraction: 7/15/09</b>

<b>Compound</b>	<b>Rpt. Limit (ug)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug)</b>	<b>Amount (ug/m3)</b>
Diethylphthalate	5.0	0.12	Not Detected	Not Detected
Fluorene	1.0	0.024	Not Detected	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	0.024	Not Detected	Not Detected
4-Nitroaniline	10	0.24	Not Detected	Not Detected
4,6-Dinitro-2-methylphenol	10	0.24	Not Detected	Not Detected
N-Nitrosodiphenylamine	10	0.24	Not Detected	Not Detected
4-Bromophenyl-phenyl Ether	1.0	0.024	Not Detected	Not Detected
Hexachlorobenzene	1.0	0.024	Not Detected	Not Detected
Pentachlorophenol	20	0.47	Not Detected	Not Detected
Phenanthrene	1.0	0.024	1.0	0.024
Anthracene	1.0	0.024	Not Detected	Not Detected
di-n-Butylphthalate	5.0	0.12	34	0.82
Fluoranthene	1.0	0.024	Not Detected	Not Detected
Pyrene	1.0	0.024	Not Detected	Not Detected
Butylbenzylphthalate	5.0	0.12	Not Detected	Not Detected
3,3'-Dichlorobenzidine	20	0.47	Not Detected	Not Detected
Chrysene	1.0	0.024	Not Detected	Not Detected
Benzo(a)anthracene	1.0	0.024	Not Detected	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.12	Not Detected	Not Detected
Di-n-Octylphthalate	5.0	0.12	Not Detected	Not Detected
Benzo(b)fluoranthene	1.0	0.024	Not Detected	Not Detected
Benzo(k)fluoranthene	1.0	0.024	Not Detected	Not Detected
Benzo(a)pyrene	1.0	0.024	Not Detected	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	0.024	Not Detected	Not Detected
Dibenz(a,h)anthracene	1.0	0.024	Not Detected	Not Detected
Benzo(g,h,i)perylene	1.0	0.024	Not Detected	Not Detected

**Air Sample Volume(L): 42100**

**Container Type: PUF/XAD Cartridge**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
2-Fluorophenol	94	50-150
Phenol-d5	99	50-150
Nitrobenzene-d5	89	50-150
2,4,6-Tribromophenol	99	50-150
Fluorene-d10	89	60-120
Pyrene-d10	88	60-120
Fluoranthene-d10	145	50-150

Client Sample ID: OFF04-070909

Lab ID#: 0907252B-03A

**MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN**

<b>File Name:</b>	<b>v072128</b>	<b>Date of Collection:</b> 7/9/09 5:10:00 PM
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b> 7/21/09 09:54 PM
		<b>Date of Extraction:</b> 7/15/09

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
Benzo(a)pyrene-d12	140	50-150

Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/21jul09a.b/v072128.d  
Lab Smp Id: 0907252B-03A  
Inj Date : 21-JUL-2009 21:54  
Operator : rn  
Inst ID: msdv.i  
Smp Info : ;0907252B-03A;  
Misc Info : ,NOTICS  
Comment : HP-5MS 30M X 0.25mm X 0.25u  
Method : /chem/msdv.i/21jul09a.b/bnap0716.m  
Meth Date : 22-Jul-2009 09:03 lzhang  
Quant Type: ISTD  
Cal Date : 16-JUL-2009 16:28  
Cal File: v071610.d  
Als bottle: 15  
Dil Factor: 1.00000  
Integrator: HP RTE  
Compound Sublist: T013+fs.sub  
Target Version: 3.50  
Processing Host: eeyore

Concentration Formula: Amt \* DF \* (Vt/S\*Vi)/CF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
S	1.00000	Sample Portion
Vi	1.00000	Volume injected (uL)
CF	1000.00000	Conversion ng->ug

Cpnd VariableLocal Compound Variable

		CONCENTRATIONS					
		QUANT	SIG				
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug)
=====	=====	==	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112	2.825	2.825	(0.667)	347792	46.8005	46.80
\$ 2 Phenol-d5	99	3.903	3.913	(0.922)	419425	49.6390	49.64
3 Phenol*	94	Compound Not Detected.					
4 bis(2-Chloroethyl)ether	93	Compound Not Detected.					
5 2-Chlorophenol	128	Compound Not Detected.					
6 1,3-Dichlorobenzene	146	Compound Not Detected.					
* 7 1,4-Dichlorobenzene-d4	150	4.235	4.234	(1.000)	321183	40.0000	
9 1,4-Dichlorobenzene*	146	Compound Not Detected.					
11 1,2-Dichlorobenzene	146	Compound Not Detected.					
12 2-Methylphenol	108	Compound Not Detected.					
13 bis(2-Chloroisopropyl)ether	45	Compound Not Detected.					
14 4-Methylphenol	108	Compound Not Detected.					
15 N-Nitrosodipropylamine**	70	Compound Not Detected.					

Report Date: 22-Jul-2009 09:14

							CONCENTRATIONS			
		QUANT	SIG				ON-COLUMN	FINAL		
Compounds		MASS	RT	EXP	RT	REL	RT	RESPONSE	( ng )	( ug )
=====		=====	==	=====		=====		=====	=====	=====
	16	Hexachloroethane	117					Compound Not Detected.		
\$	17	Nitrobenzene-d5	82	5.001	5.001	(0.849)		390856	44.5962	44.60
	18	Nitrobenzene	77					Compound Not Detected.		
	19	Isophorone	82					Compound Not Detected.		
	20	2-Nitrophenol*	139					Compound Not Detected.		
	21	2,4-Dimethylphenol	122					Compound Not Detected.		
	23	bis(2-Chloroethoxy)methane	93					Compound Not Detected.		
	24	Benzoic Acid	122					Compound Not Detected.		
	25	2,4-Dichlorophenol*	162					Compound Not Detected.		
	26	1,2,4-Trichlorobenzene	180					Compound Not Detected.		
*	27	Naphthalene-d8	136	5.893	5.893	(1.000)		845818	40.0000	
	28	Naphthalene	128	5.913	5.924	(1.004)		496392	20.4086	20.41
	29	4-Chloroaniline	127					Compound Not Detected.		
	30	Hexachlorobutadiene*	225					Compound Not Detected.		
	32	4-Chloro-3-Methylphenol*	107					Compound Not Detected.		
	33	2-Methylnaphthalene	142	6.805	6.804	(1.155)		224751	16.1088	16.11
145	1	Methylnaphthalene	142	6.939	6.939	(1.178)		88817	6.11953	6.120
	35	Hexachlorocyclopentadiene**	237					Compound Not Detected.		
	36	2,4,6-Trichlorophenol*	196					Compound Not Detected.		
	37	2,4,5-Trichlorophenol	196					Compound Not Detected.		
	39	2-Chloronaphthalene	162					Compound Not Detected.		
	40	2-Nitroaniline	65					Compound Not Detected.		
	42	Dimethylphthalate	163					Compound Not Detected.		
	45	Acenaphthylene	152					Compound Not Detected.		
	44	2,6-Dinitrotoluene	165					Compound Not Detected.		
	46	3-Nitroaniline	138					Compound Not Detected.		
*	47	Acenaphthene-d10	164	8.100	8.110	(1.000)		409368	40.0000	
	48	Acenaphthene*	154					Compound Not Detected.		
	49	2,4-Dinitrophenol**	184					Compound Not Detected.		
	50	4-Nitrophenol**	109					Compound Not Detected.		
	51	Dibenzofuran	168					Compound Not Detected.		
	52	2,4-Dinitrotoluene	165					Compound Not Detected.		
\$	147	Fluorene-d10	176	8.722	8.722	(1.077)		522578	44.7377	44.74
	56	Diethylphthalate	149					Compound Not Detected.		
	57	Fluorene	166					Compound Not Detected.		
	58	4-Chlorophenyl phenyl ether	204					Compound Not Detected.		
	59	4-Nitroaniline	138					Compound Not Detected.		
	60	4,6-Dinitro-2-methylphenol	198					Compound Not Detected.		
	61	N-nitrosodiphenylamine*	169					Compound Not Detected.		
\$	62	2,4,6-Tribromophenol	330	9.074	9.084	(1.120)		85927	49.3573	49.36
	65	4-Bromophenyl phenyl ether	248					Compound Not Detected.		
	66	Hexachlorobenzene	284					Compound Not Detected.		
	68	Pentachlorophenol*	266					Compound Not Detected.		
*	71	Phenanthrene-d10	188	9.872	9.872	(1.000)		709963	40.0000	
	72	Phenanthrene	178	9.893	9.893	(1.002)		20657	1.01969	1.020
	73	Anthracene	178					Compound Not Detected.		
	78	Di-n-butylphthalate	149	10.743	10.742	(1.088)		730711	34.5131	34.51
	80	Fluoranthene*	202					Compound Not Detected.		

Compounds	QUANT	SIG	CONCENTRATIONS					
			ON-COLUMN			FINAL		
	MASS		RT	EXP RT	REL RT	RESPONSE	( ng)	( ug)
=====	=====		==	=====	=====	=====	=====	=====
\$ 148 Pyrene-d10	212		11.561	11.571	(0.866)	662029	43.9580	43.96
81 Pyrene	202		Compound Not Detected.					
85 Butyl benzyl phthalate	149		Compound Not Detected.					
88 Benzo(a)Anthracene	228		Compound Not Detected.					
* 90 Chrysene-d12	240		13.344	13.354	(1.000)	645444	40.0000	
89 3 3'-Dichlorobenzidine	252		Compound Not Detected.					
91 Chrysene	228		Compound Not Detected.					
93 bis(2-ethylhexyl)Phthalate	149		Compound Not Detected.					
94 Di-n-octyl phthalate*	149		Compound Not Detected.					
95 Benzo(b)fluoranthene	252		Compound Not Detected.					
96 Benzo(k)fluoranthene	252		Compound Not Detected.					
98 Benzo(a)pyrene*	252		Compound Not Detected.					
* 99 Perylene-d12	264		15.758	15.758	(1.000)	453572	40.0000	
103 Indeno(1,2,3-cd)pyrene	276		Compound Not Detected.					
104 Dibenzo(a,h)anthracene	278		Compound Not Detected.					
105 Benzo(g,h,i)perylene	276		Compound Not Detected.					
\$ 83 Fluoranthene-d10	212		11.302	11.302	(1.145)	218685	14.4776	14.48
\$ 101 Benzo(a)pyrene-d12	264		15.613	15.623	(0.991)	128674	14.0340	14.03

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: msdv.i

Calibration Date: 21-JUL-2009

Lab File ID: v072128.d

Calibration Time: 16:00

Lab Smp Id: 0907252B-03A

Analysis Type: SV

Level: LOW

Quant Type: ISTD

Sample Type: PUF/XAD

Operator: rn

Method File: /chem/msdv.i/21jul09a.b/bnap0716.m

Misc Info: ,NOTICS

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	279073	139536	558146	321183	15.09
27 Naphthalene-d8	666869	333434	1333738	845818	26.83
47 Acenaphthene-d10	316636	158318	633272	409368	29.29
71 Phenanthrene-d10	583267	291634	1166534	709963	21.72
90 Chrysene-d12	493051	246526	986102	645444	30.91
99 Perylene-d12	360565	180282	721130	453572	25.79

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	4.23	3.73	4.73	4.23	0.00
27 Naphthalene-d8	5.89	5.39	6.39	5.89	0.00
47 Acenaphthene-d10	8.11	7.61	8.61	8.10	-0.13
71 Phenanthrene-d10	9.87	9.37	10.37	9.87	0.00
90 Chrysene-d12	13.35	12.85	13.85	13.34	-0.08
99 Perylene-d12	15.76	15.26	16.26	15.76	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.

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 21jul09a  
Sample Matrix: GAS Fraction: SV  
Lab Smp Id: 0907252B-03A  
Level: LOW Operator: rn  
Data Type: MS DATA SampleType: SAMPLE  
SpikeList File: PAH100.spk Quant Type: ISTD  
Sublist File: T013+fs.sub  
Method File: /chem/msdv.i/21jul09a.b/bnap0716.m  
Misc Info: ,NOTICS

SURROGATE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
\$ 1 2-Fluorophenol	50.00	46.80	93.60	50-150
\$ 2 Phenol-d5	50.00	49.64	99.28	50-150
\$ 17 Nitrobenzene-d5	50.00	44.60	89.19	50-150
\$ 147 Fluorene-d10	50.00	44.74	89.48	60-120
\$ 62 2,4,6-Tribromophen	50.00	49.36	98.71	50-150
\$ 148 Pyrene-d10	50.00	43.96	87.92	60-120
\$ 83 Fluoranthene-d10	10.00	14.48	144.78	50-150
\$ 101 Benzo(a)pyrene-d12	10.00	14.03	140.34	50-150



Data File: /chem/msdv.i/21jul09a.b/v072128.d

Date : 21-JUL-2009 21:54

Client ID:

Sample Info: j0907262B-03A;

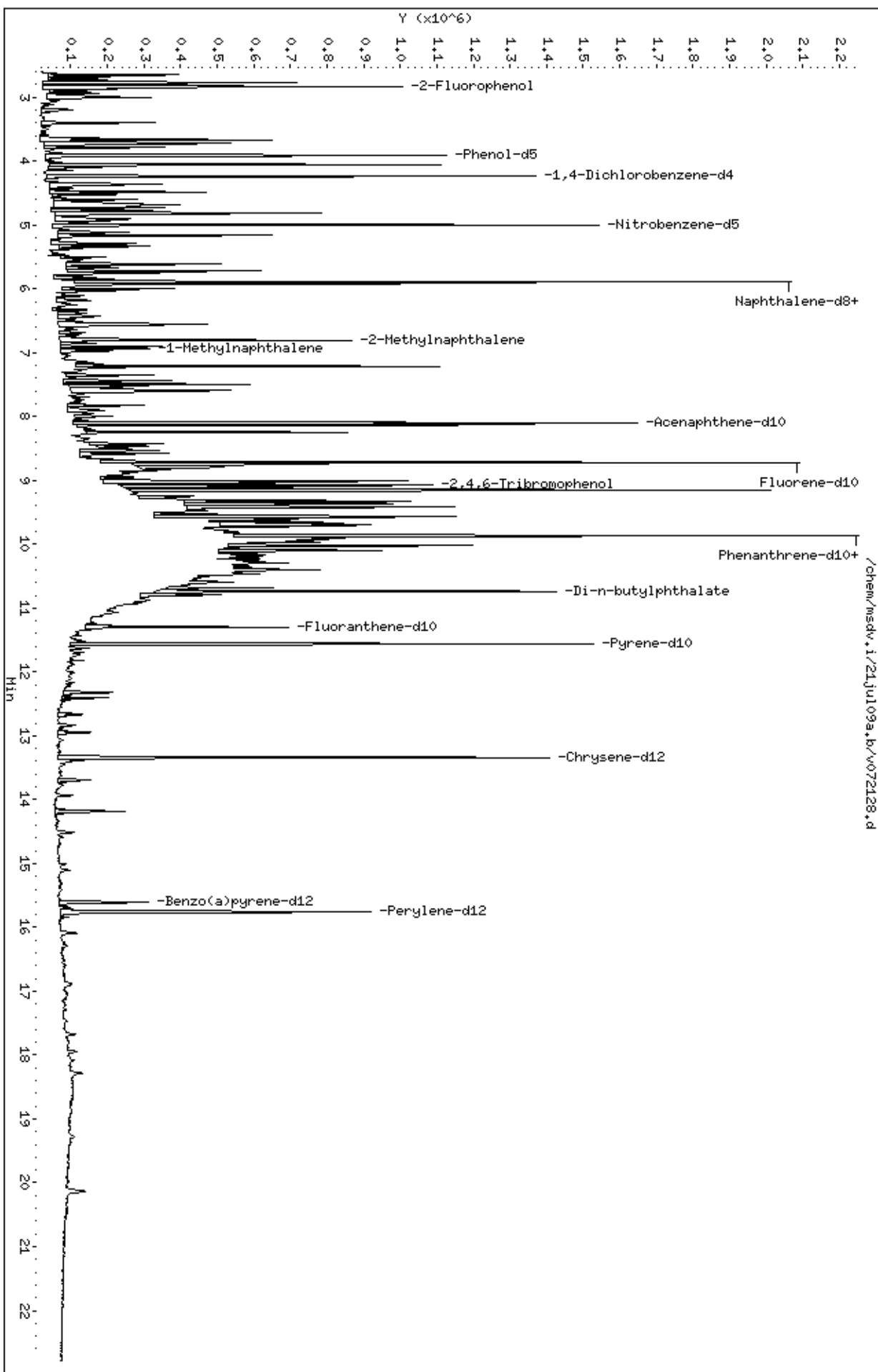
Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: m

Column diameter: 0.25



Date : 21-JUL-2009 21:54

Client ID:

Instrument: msdv.i

Sample Info: ;0907252B-03A;

Volume Injected (uL): 1.0

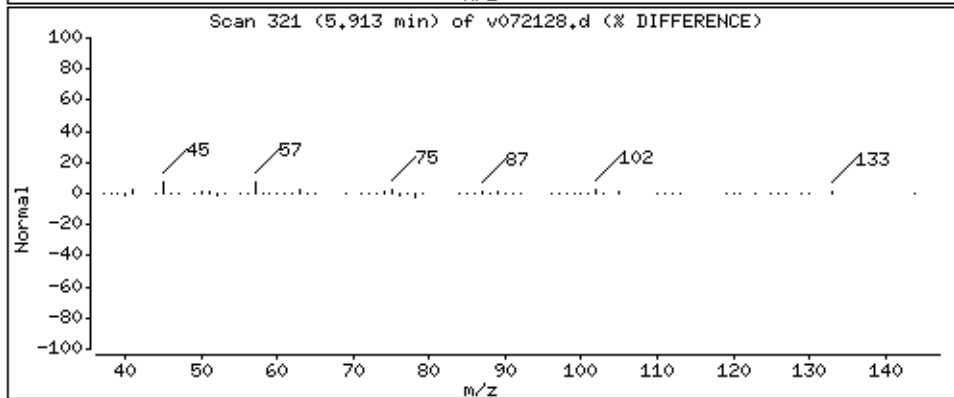
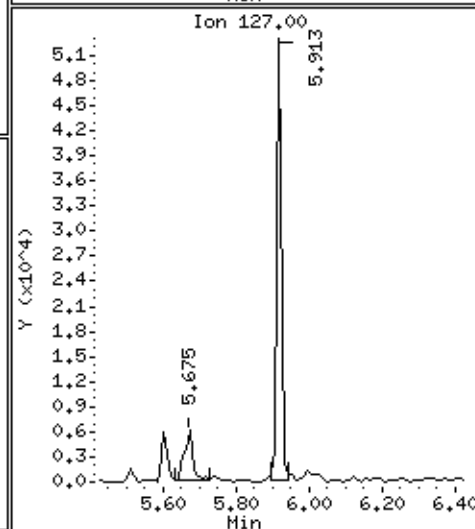
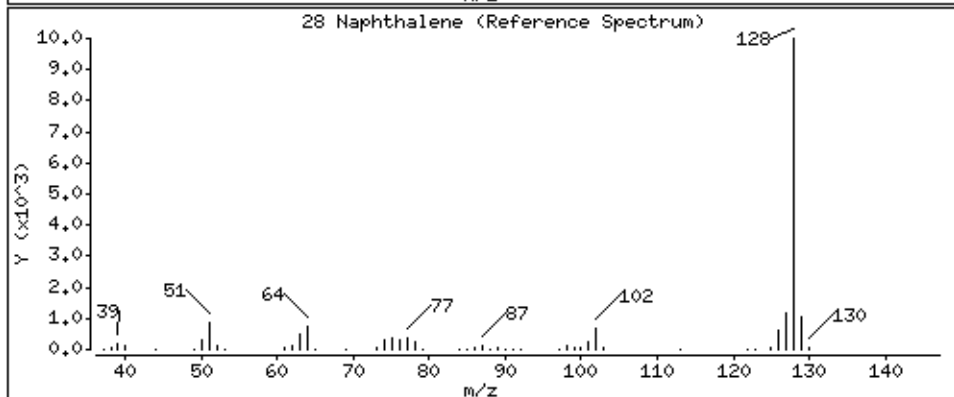
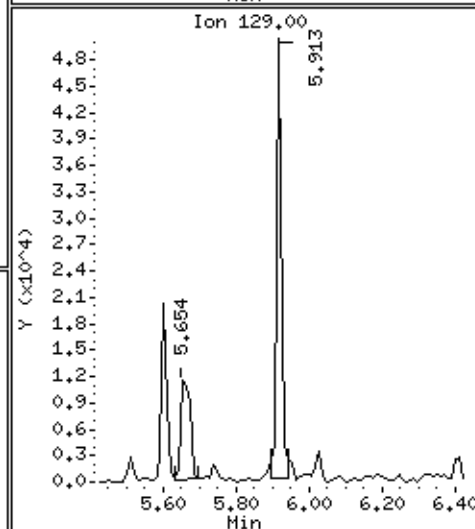
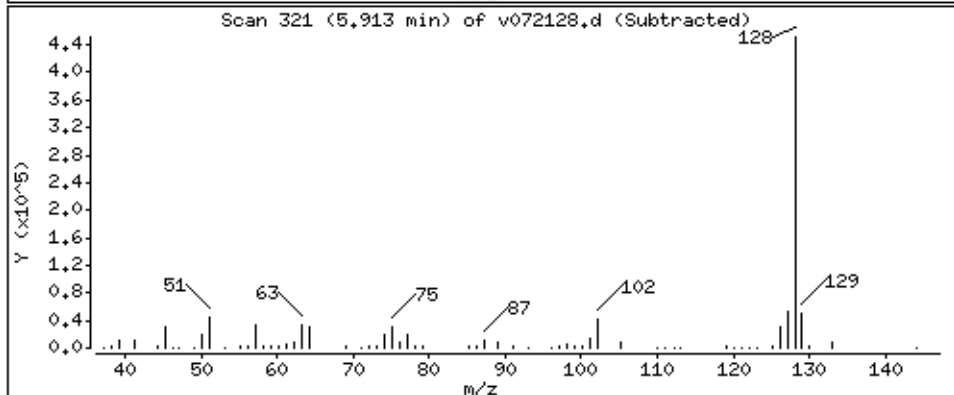
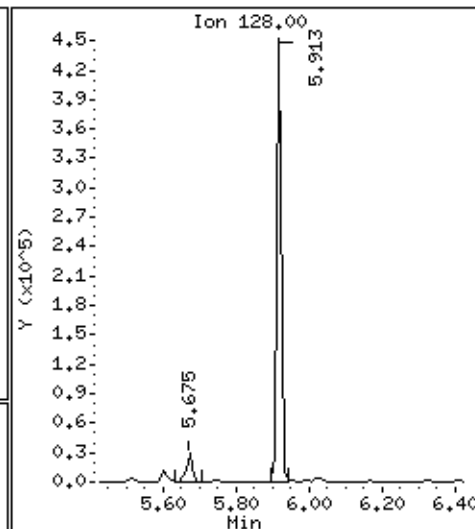
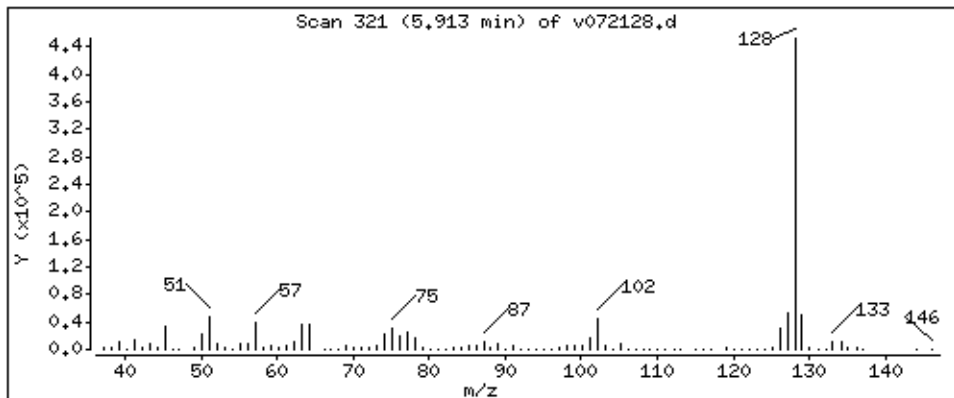
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

28 Naphthalene

Concentration: 20.41 ug



Date : 21-JUL-2009 21:54

Client ID:

Instrument: msdv.i

Sample Info: ;0907252B-03A;

Volume Injected (uL): 1.0

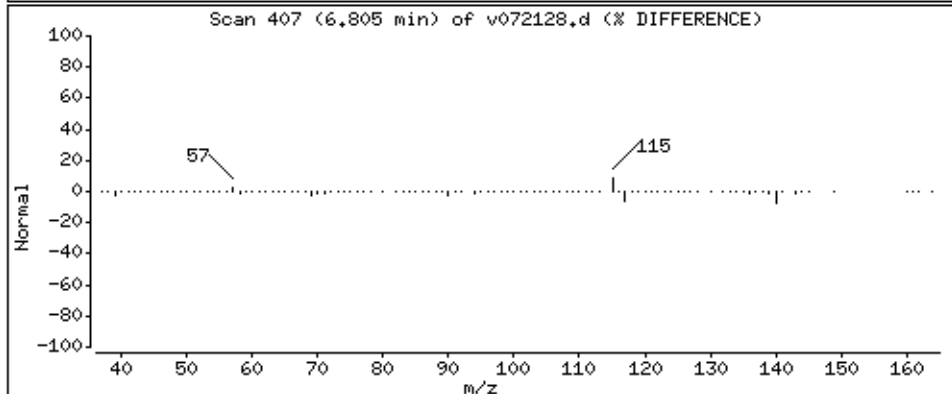
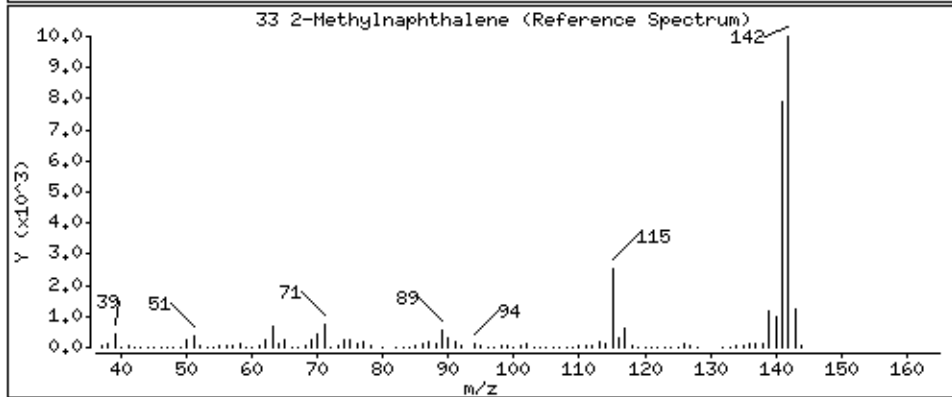
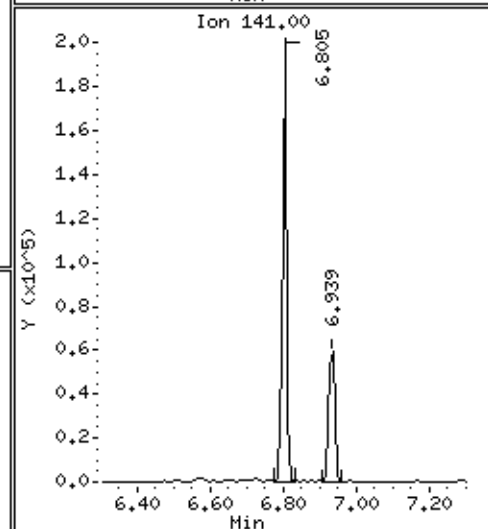
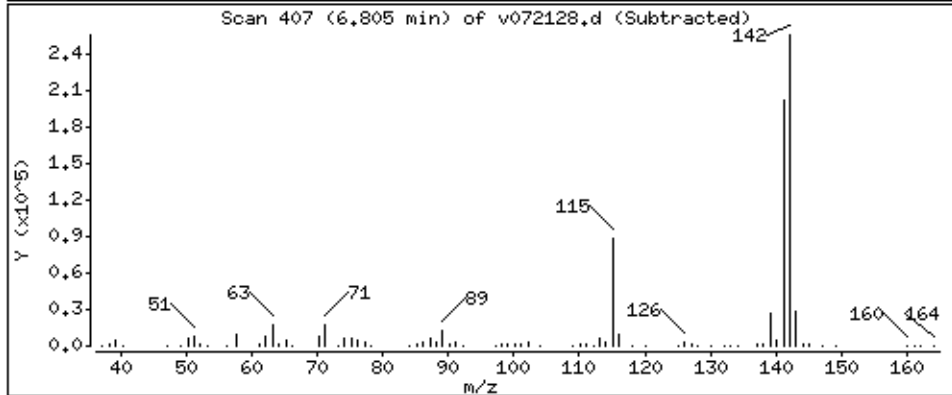
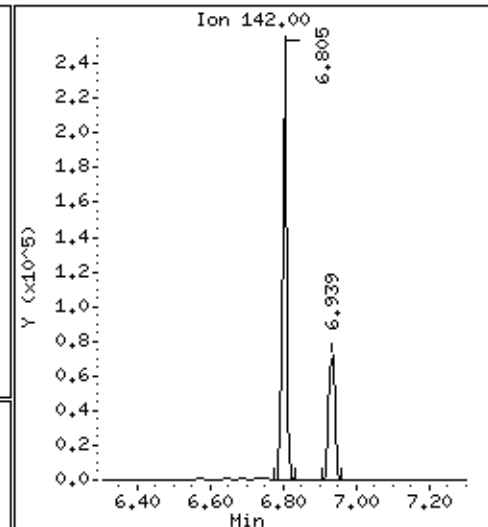
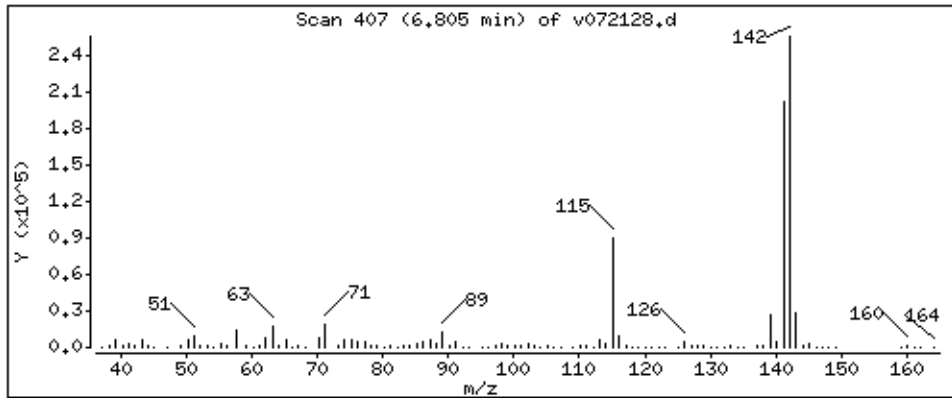
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

33 2-Methylnaphthalene

Concentration: 16.11 ug



Date : 21-JUL-2009 21:54

Client ID:

Instrument: msdv.i

Sample Info: ;0907252B-03A;

Volume Injected (uL): 1.0

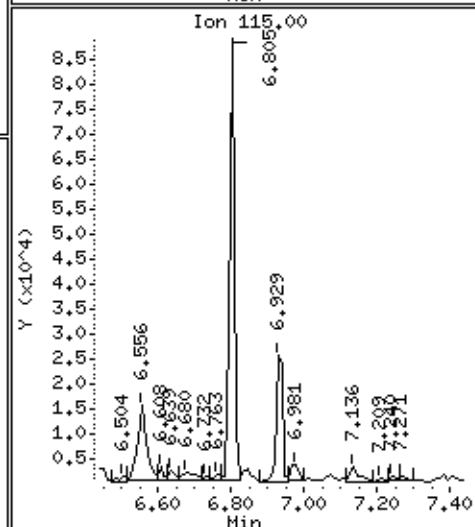
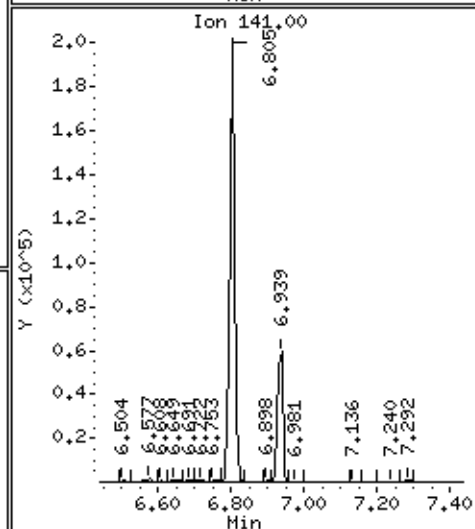
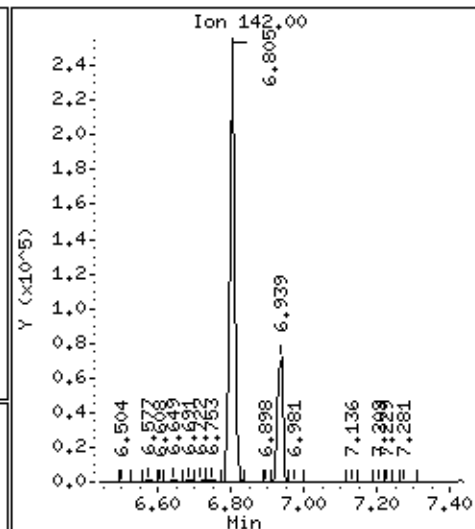
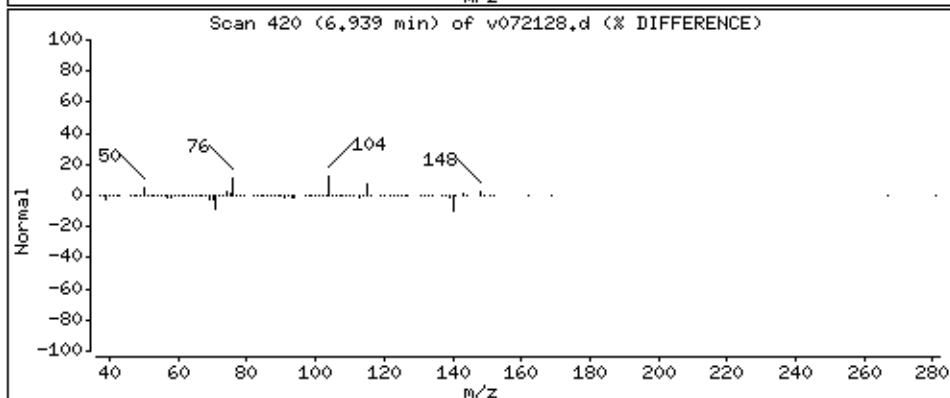
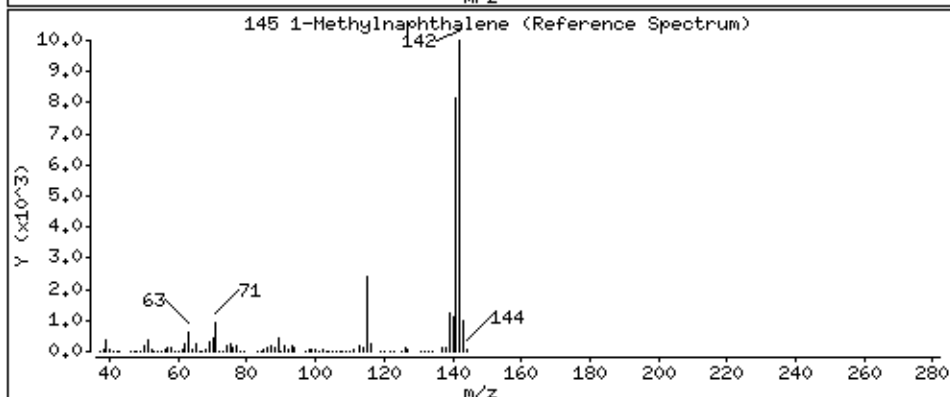
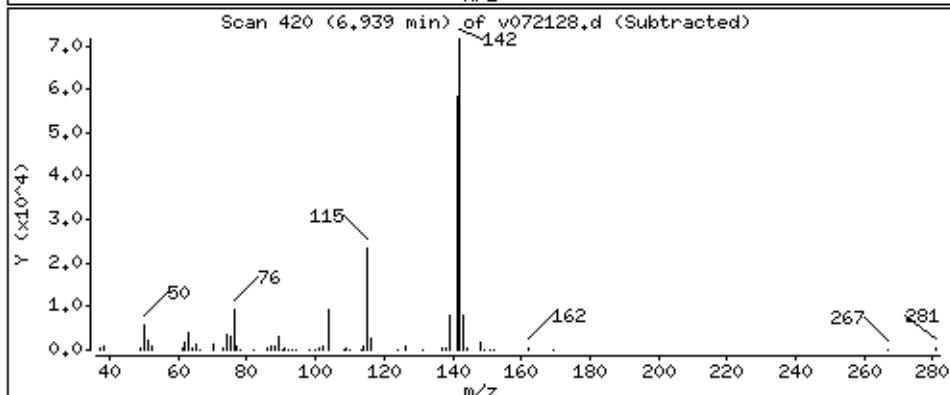
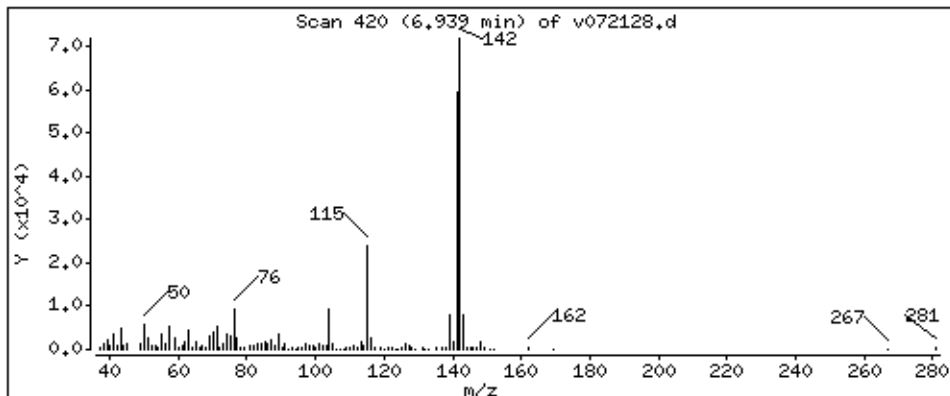
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

145 1-Methylnaphthalene

Concentration: 6.120 ug



Date : 21-JUL-2009 21:54

Client ID:

Instrument: msdv.i

Sample Info: ;0907252B-03A;

Volume Injected (uL): 1.0

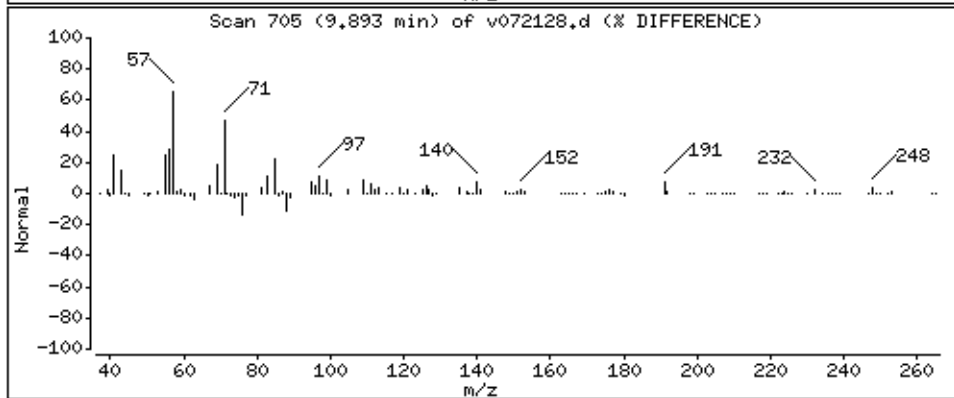
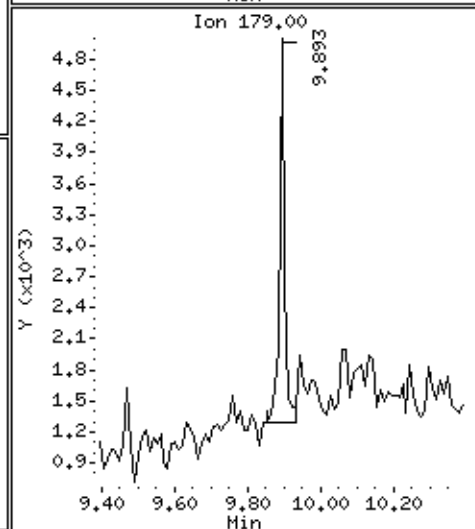
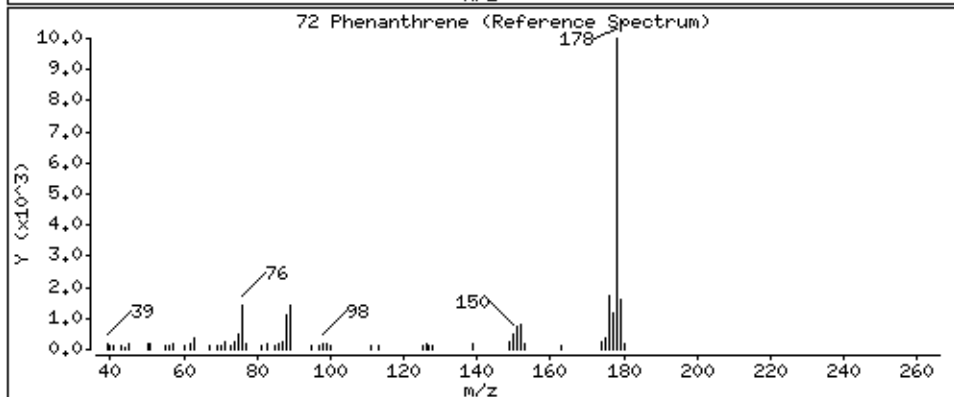
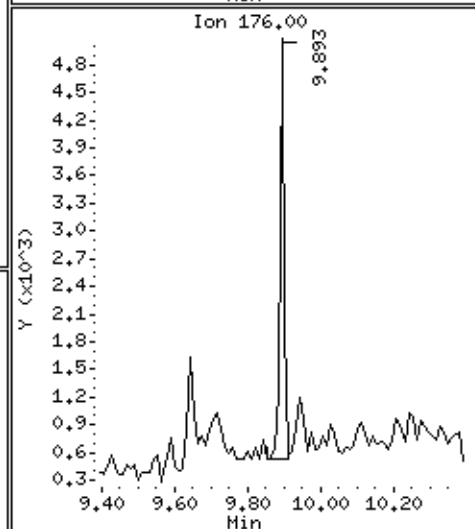
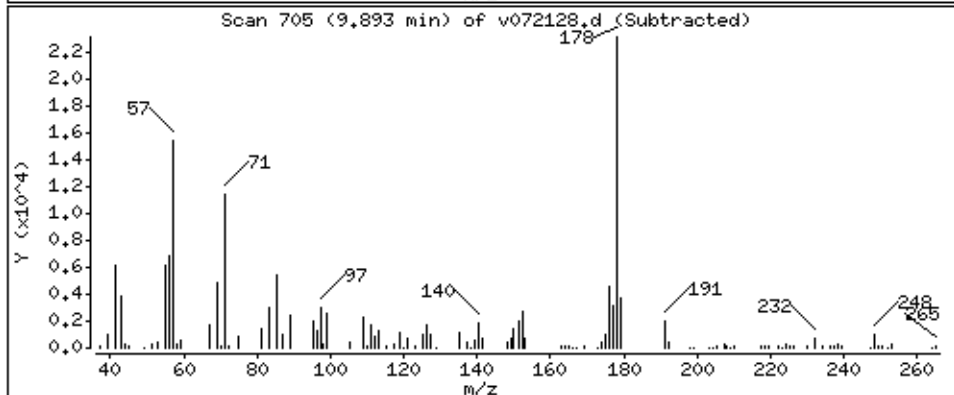
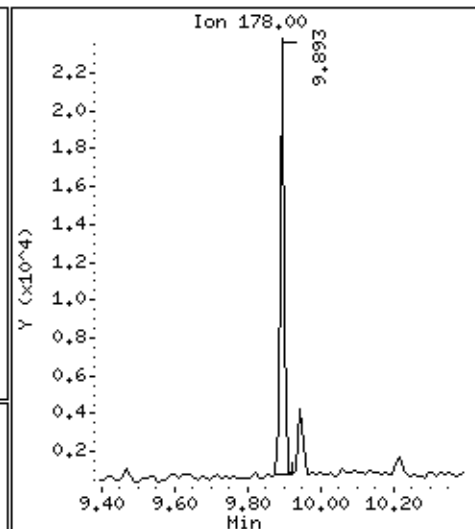
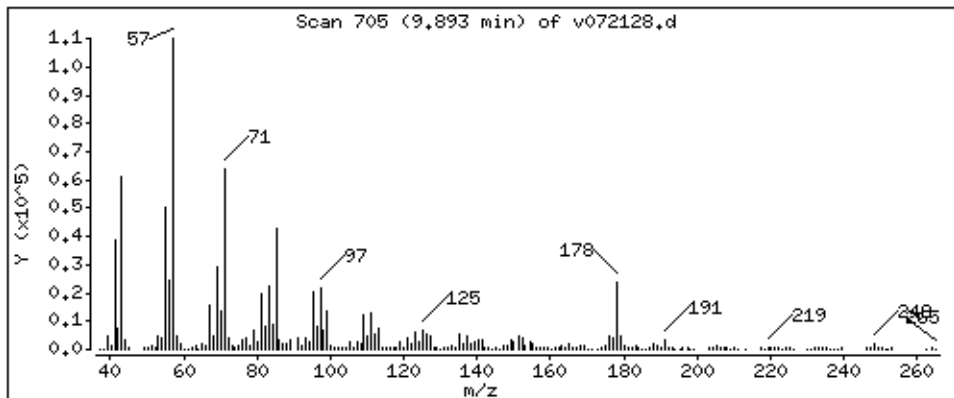
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

72 Phenanthrene

Concentration: 1.020 ug



Date : 21-JUL-2009 21:54

Client ID:

Instrument: msdv.i

Sample Info: ;0907252B-03A;

Volume Injected (uL): 1.0

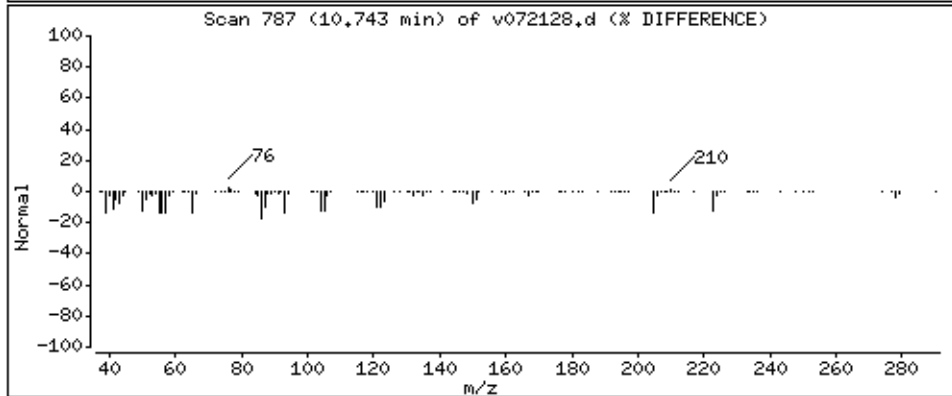
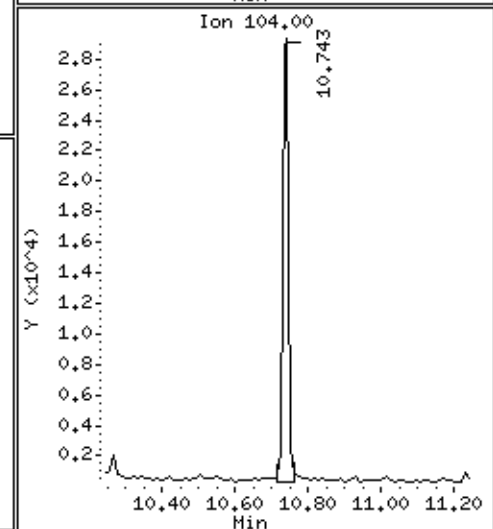
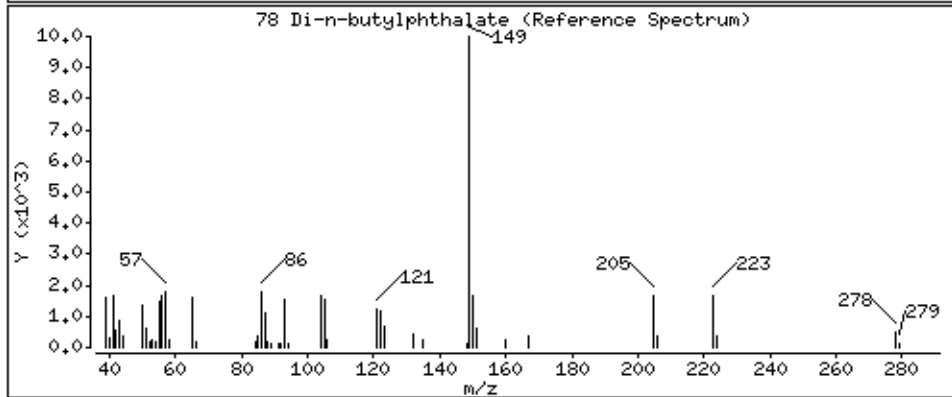
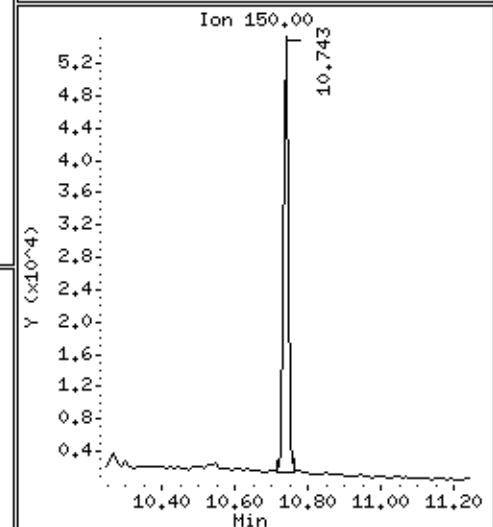
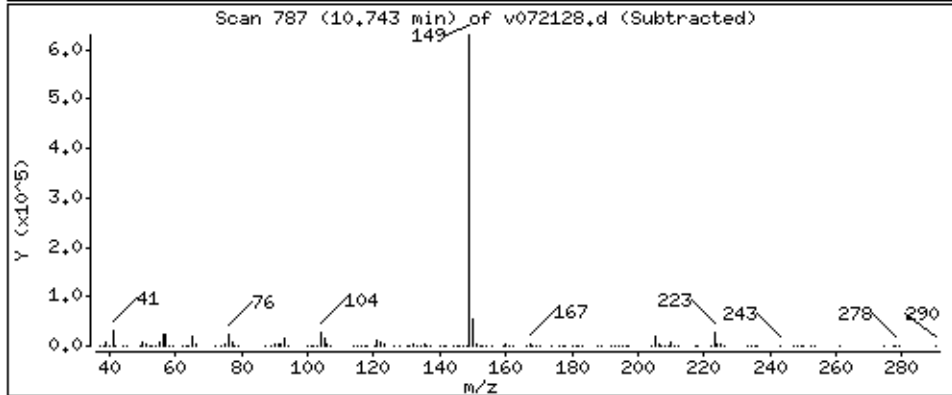
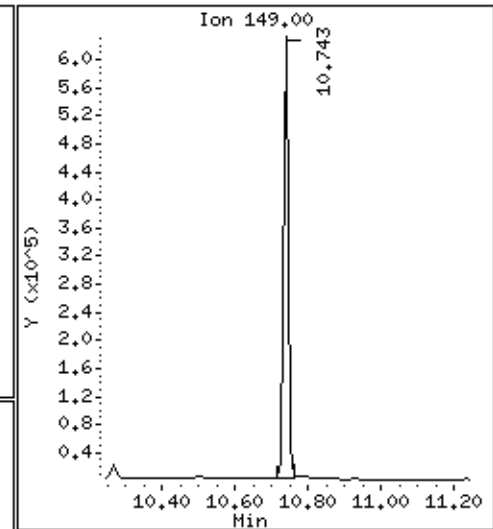
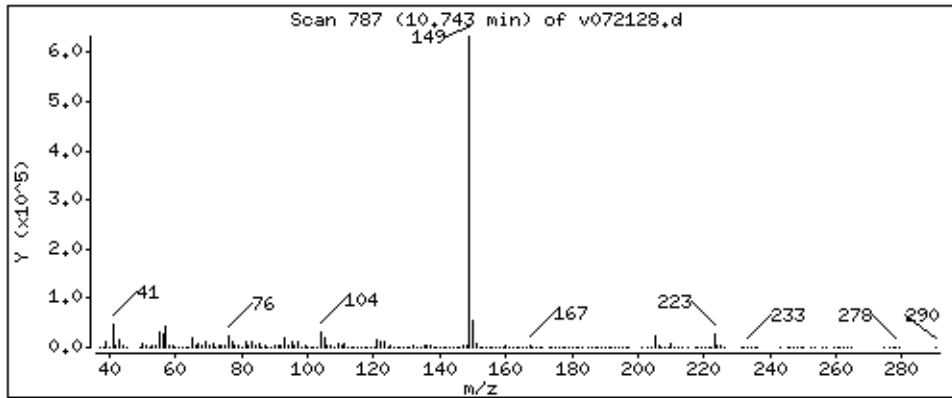
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

78 Di-n-butylphthalate

Concentration: 34.51 ug



---

---

**Summary of Detected Compounds**  
**MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN**

**Client Sample ID: OFF03-070909**

**Lab ID#: 0907252B-06A**

<b>Compound</b>	<b>Rpt. Limit (ug)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug)</b>	<b>Amount (ug/m3)</b>
di-n-Butylphthalate	5.0	0.063	67	0.84
bis(2-Ethylhexyl)phthalate	5.0	0.063	5.7	0.072

Client Sample ID: OFF03-070909

Lab ID#: 0907252B-06A

**MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN**

<b>File Name:</b>	<b>v072129</b>	<b>Date of Collection:</b> 7/9/09 5:20:00 PM
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b> 7/21/09 10:21 PM
		<b>Date of Extraction:</b> 7/15/09

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Phenol	5.0	0.063	Not Detected	Not Detected
bis(2-Chloroethyl) Ether	1.0	0.013	Not Detected	Not Detected
2-Chlorophenol	5.0	0.063	Not Detected	Not Detected
1,3-Dichlorobenzene	1.0	0.013	Not Detected	Not Detected
1,4-Dichlorobenzene	1.0	0.013	Not Detected	Not Detected
1,2-Dichlorobenzene	1.0	0.013	Not Detected	Not Detected
2-Methylphenol (o-Cresol)	5.0	0.063	Not Detected	Not Detected
bis(2-Chloroisopropyl) Ether	1.0	0.013	Not Detected	Not Detected
N-Nitroso-di-n-propylamine	1.0	0.013	Not Detected	Not Detected
4-Methylphenol/3-Methylphenol	5.0	0.063	Not Detected	Not Detected
Hexachloroethane	1.0	0.013	Not Detected	Not Detected
Nitrobenzene	1.0	0.013	Not Detected	Not Detected
Isophorone	1.0	0.013	Not Detected	Not Detected
2-Nitrophenol	5.0	0.063	Not Detected	Not Detected
2,4-Dimethylphenol	5.0	0.063	Not Detected	Not Detected
Benzoic Acid	30	0.38	Not Detected	Not Detected
bis(2-Chloroethoxy) Methane	1.0	0.013	Not Detected	Not Detected
2,4-Dichlorophenol	5.0	0.063	Not Detected	Not Detected
1,2,4-Trichlorobenzene	1.0	0.013	Not Detected	Not Detected
Naphthalene	1.0	0.013	Not Detected	Not Detected
4-Chloroaniline	10	0.13	Not Detected	Not Detected
Hexachlorobutadiene	1.0	0.013	Not Detected	Not Detected
4-Chloro-3-methylphenol	5.0	0.063	Not Detected	Not Detected
2-Methylnaphthalene	1.0	0.013	Not Detected	Not Detected
Hexachlorocyclopentadiene	20	0.25	Not Detected	Not Detected
2,4,6-Trichlorophenol	5.0	0.063	Not Detected	Not Detected
2,4,5-Trichlorophenol	5.0	0.063	Not Detected	Not Detected
2-Chloronaphthalene	1.0	0.013	Not Detected	Not Detected
2-Nitroaniline	10	0.13	Not Detected	Not Detected
Dimethylphthalate	5.0	0.063	Not Detected	Not Detected
Acenaphthylene	1.0	0.013	Not Detected	Not Detected
2,6-Dinitrotoluene	5.0	0.063	Not Detected	Not Detected
3-Nitroaniline	10	0.13	Not Detected	Not Detected
Acenaphthene	1.0	0.013	Not Detected	Not Detected
2,4-Dinitrophenol	20	0.25	Not Detected	Not Detected
4-Nitrophenol	20	0.25	Not Detected	Not Detected
2,4-Dinitrotoluene	5.0	0.063	Not Detected	Not Detected
Dibenzofuran	1.0	0.013	Not Detected	Not Detected



Client Sample ID: OFF03-070909

Lab ID#: 0907252B-06A

**MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN**

File Name:	v072129	Date of Collection: 7/9/09 5:20:00 PM
Dil. Factor:	1.00	Date of Analysis: 7/21/09 10:21 PM
		Date of Extraction: 7/15/09

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Diethylphthalate	5.0	0.063	Not Detected	Not Detected
Fluorene	1.0	0.013	Not Detected	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	0.013	Not Detected	Not Detected
4-Nitroaniline	10	0.13	Not Detected	Not Detected
4,6-Dinitro-2-methylphenol	10	0.13	Not Detected	Not Detected
N-Nitrosodiphenylamine	10	0.13	Not Detected	Not Detected
4-Bromophenyl-phenyl Ether	1.0	0.013	Not Detected	Not Detected
Hexachlorobenzene	1.0	0.013	Not Detected	Not Detected
Pentachlorophenol	20	0.25	Not Detected	Not Detected
Phenanthrene	1.0	0.013	Not Detected	Not Detected
Anthracene	1.0	0.013	Not Detected	Not Detected
di-n-Butylphthalate	5.0	0.063	67	0.84
Fluoranthene	1.0	0.013	Not Detected	Not Detected
Pyrene	1.0	0.013	Not Detected	Not Detected
Butylbenzylphthalate	5.0	0.063	Not Detected	Not Detected
3,3'-Dichlorobenzidine	20	0.25	Not Detected	Not Detected
Chrysene	1.0	0.013	Not Detected	Not Detected
Benzo(a)anthracene	1.0	0.013	Not Detected	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.063	5.7	0.072
Di-n-Octylphthalate	5.0	0.063	Not Detected	Not Detected
Benzo(b)fluoranthene	1.0	0.013	Not Detected	Not Detected
Benzo(k)fluoranthene	1.0	0.013	Not Detected	Not Detected
Benzo(a)pyrene	1.0	0.013	Not Detected	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	0.013	Not Detected	Not Detected
Dibenz(a,h)anthracene	1.0	0.013	Not Detected	Not Detected
Benzo(g,h,i)perylene	1.0	0.013	Not Detected	Not Detected

Air Sample Volume(L): 79300

Container Type: PUF/XAD Cartridge

Surrogates	%Recovery	Method Limits
2-Fluorophenol	95	50-150
Phenol-d5	102	50-150
Nitrobenzene-d5	91	50-150
2,4,6-Tribromophenol	98	50-150
Fluorene-d10	86	60-120
Pyrene-d10	91	60-120
Fluoranthene-d10	139	50-150

Client Sample ID: OFF03-070909

Lab ID#: 0907252B-06A

**MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN**

File Name:	v072129	Date of Collection: 7/9/09 5:20:00 PM
Dil. Factor:	1.00	Date of Analysis: 7/21/09 10:21 PM
		Date of Extraction: 7/15/09

Surrogates	%Recovery	Method Limits
Benzo(a)pyrene-d12	144	50-150

Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/21jul09a.b/v072129.d

Lab Smp Id: 0907252B-06A

Inj Date : 21-JUL-2009 22:21

Operator : rn

Inst ID: msdv.i

Smp Info : ;0907252B-06A;

Misc Info : ,NOTICS

Comment : HP-5MS 30M X 0.25mm X 0.25u

Method : /chem/msdv.i/21jul09a.b/bnap0716.m

Meth Date : 22-Jul-2009 09:03 lzhang

Quant Type: ISTD

Cal Date : 16-JUL-2009 16:28

Cal File: v071610.d

Als bottle: 16

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: T013+fs.sub

Target Version: 3.50

Processing Host: eeyore

Concentration Formula: Amt \* DF \* (Vt/S\*Vi)/CF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
S	1.00000	Sample Portion
Vi	1.00000	Volume injected (uL)
CF	1000.00000	Conversion ng->ug

Cpnd Variable

Local Compound Variable

		CONCENTRATIONS					
		QUANT	SIG				
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug)
=====	=====	==	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112	2.825	2.825	(0.667)	359759	47.5367	47.54
\$ 2 Phenol-d5	99	3.913	3.913	(0.924)	439466	51.0718	51.07
3 Phenol*	94	Compound Not Detected.					
4 bis(2-Chloroethyl)ether	93	Compound Not Detected.					
5 2-Chlorophenol	128	Compound Not Detected.					
6 1,3-Dichlorobenzene	146	Compound Not Detected.					
* 7 1,4-Dichlorobenzene-d4	150	4.235	4.234	(1.000)	327089	40.0000	
9 1,4-Dichlorobenzene*	146	Compound Not Detected.					
11 1,2-Dichlorobenzene	146	Compound Not Detected.					
12 2-Methylphenol	108	Compound Not Detected.					
13 bis(2-Chloroisopropyl)ether	45	Compound Not Detected.					
14 4-Methylphenol	108	Compound Not Detected.					
15 N-Nitrosodipropylamine**	70	Compound Not Detected.					

							CONCENTRATIONS			
		QUANT	SIG					ON-COLUMN	FINAL	
Compounds		MASS	RT	EXP	RT	REL	RT	RESPONSE	( ng )	( ug )
=====		=====	==	=====		=====		=====	=====	=====
	16	Hexachloroethane	117		Compound	Not	Detected.			
\$	17	Nitrobenzene-d5	82	5.001	5.001	(0.849)		410054	45.5286	45.53
	18	Nitrobenzene	77		Compound	Not	Detected.			
	19	Isophorone	82		Compound	Not	Detected.			
	20	2-Nitrophenol*	139		Compound	Not	Detected.			
	21	2,4-Dimethylphenol	122		Compound	Not	Detected.			
	23	bis(2-Chloroethoxy)methane	93		Compound	Not	Detected.			
	24	Benzoic Acid	122		Compound	Not	Detected.			
	25	2,4-Dichlorophenol*	162		Compound	Not	Detected.			
	26	1,2,4-Trichlorobenzene	180		Compound	Not	Detected.			
*	27	Naphthalene-d8	136	5.893	5.893	(1.000)		869190	40.0000	
	28	Naphthalene	128		Compound	Not	Detected.			
	29	4-Chloroaniline	127		Compound	Not	Detected.			
	30	Hexachlorobutadiene*	225		Compound	Not	Detected.			
	32	4-Chloro-3-Methylphenol*	107		Compound	Not	Detected.			
	33	2-Methylnaphthalene	142		Compound	Not	Detected.			
145	1	Methylnaphthalene	142		Compound	Not	Detected.			
	35	Hexachlorocyclopentadiene**	237		Compound	Not	Detected.			
	36	2,4,6-Trichlorophenol*	196		Compound	Not	Detected.			
	37	2,4,5-Trichlorophenol	196		Compound	Not	Detected.			
	39	2-Chloronaphthalene	162		Compound	Not	Detected.			
	40	2-Nitroaniline	65		Compound	Not	Detected.			
	42	Dimethylphthalate	163		Compound	Not	Detected.			
	45	Acenaphthylene	152		Compound	Not	Detected.			
	44	2,6-Dinitrotoluene	165		Compound	Not	Detected.			
	46	3-Nitroaniline	138		Compound	Not	Detected.			
*	47	Acenaphthene-d10	164	8.100	8.110	(1.000)		422074	40.0000	
	48	Acenaphthene*	154		Compound	Not	Detected.			
	49	2,4-Dinitrophenol**	184		Compound	Not	Detected.			
	50	4-Nitrophenol**	109		Compound	Not	Detected.			
	51	Dibenzofuran	168		Compound	Not	Detected.			
	52	2,4-Dinitrotoluene	165		Compound	Not	Detected.			
\$	147	Fluorene-d10	176	8.722	8.722	(1.077)		518095	43.0187	43.02
	56	Diethylphthalate	149		Compound	Not	Detected.			
	57	Fluorene	166		Compound	Not	Detected.			
	58	4-Chlorophenyl phenyl ether	204		Compound	Not	Detected.			
	59	4-Nitroaniline	138		Compound	Not	Detected.			
	60	4,6-Dinitro-2-methylphenol	198		Compound	Not	Detected.			
	61	N-nitrosodiphenylamine*	169		Compound	Not	Detected.			
\$	62	2,4,6-Tribromophenol	330	9.074	9.084	(1.120)		87983	49.0169	49.02
	65	4-Bromophenyl phenyl ether	248		Compound	Not	Detected.			
	66	Hexachlorobenzene	284		Compound	Not	Detected.			
	68	Pentachlorophenol*	266		Compound	Not	Detected.			
*	71	Phenanthrene-d10	188	9.872	9.872	(1.000)		762554	40.0000	
	72	Phenanthrene	178		Compound	Not	Detected.			
	73	Anthracene	178		Compound	Not	Detected.			
	78	Di-n-butylphthalate	149	10.743	10.742	(1.088)		1524395	67.0349	67.03
	80	Fluoranthene*	202		Compound	Not	Detected.			

Compounds	QUANT	SIG						CONCENTRATIONS	
			ON-COLUMN	FINAL				( ng )	( ug )
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 148 Pyrene-d10	212		11.561	11.571	(0.866)	682037	45.3048		45.30
81 Pyrene	202		Compound Not Detected.						
85 Butyl benzyl phthalate	149		Compound Not Detected.						
88 Benzo(a)Anthracene	228		Compound Not Detected.						
* 90 Chrysene-d12	240		13.344	13.354	(1.000)	645184	40.0000		
89 3 3'-Dichlorobenzidine	252		Compound Not Detected.						
91 Chrysene	228		Compound Not Detected.						
93 bis(2-ethylhexyl)Phthalate	149		13.696	13.696	(1.026)	73663	5.74251		5.742
94 Di-n-octyl phthalate*	149		Compound Not Detected.						
95 Benzo(b)fluoranthene	252		Compound Not Detected.						
96 Benzo(k)fluoranthene	252		Compound Not Detected.						
98 Benzo(a)pyrene*	252		Compound Not Detected.						
* 99 Perylene-d12	264		15.758	15.758	(1.000)	461003	40.0000		
103 Indeno(1,2,3-cd)pyrene	276		Compound Not Detected.						
104 Dibenzo(a,h)anthracene	278		Compound Not Detected.						
105 Benzo(g,h,i)perylene	276		Compound Not Detected.						
\$ 83 Fluoranthene-d10	212		11.302	11.302	(1.145)	225036	13.8706		13.87
\$ 101 Benzo(a)pyrene-d12	264		15.613	15.623	(0.991)	134337	14.4155		14.42

Report Date: 22-Jul-2009 09:15

## Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARYInstrument ID: msdv.i  
Lab File ID: v072129.d  
Lab Smp Id: 0907252B-06ACalibration Date: 21-JUL-2009  
Calibration Time: 16:00

Analysis Type: SV

Level: LOW

Quant Type: ISTD

Sample Type: PUF/XAD

Operator: rn

Method File: /chem/msdv.i/21jul09a.b/bnap0716.m

Misc Info: ,NOTICS

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	279073	139536	558146	327089	17.21
27 Naphthalene-d8	666869	333434	1333738	869190	30.34
47 Acenaphthene-d10	316636	158318	633272	422074	33.30
71 Phenanthrene-d10	583267	291634	1166534	762554	30.74
90 Chrysene-d12	493051	246526	986102	645184	30.86
99 Perylene-d12	360565	180282	721130	461003	27.86

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	4.23	3.73	4.73	4.23	0.00
27 Naphthalene-d8	5.89	5.39	6.39	5.89	0.00
47 Acenaphthene-d10	8.11	7.61	8.61	8.10	-0.13
71 Phenanthrene-d10	9.87	9.37	10.37	9.87	0.00
90 Chrysene-d12	13.35	12.85	13.85	13.34	-0.08
99 Perylene-d12	15.76	15.26	16.26	15.76	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.

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 21jul09a  
Sample Matrix: GAS Fraction: SV  
Lab Smp Id: 0907252B-06A  
Level: LOW Operator: rn  
Data Type: MS DATA SampleType: SAMPLE  
SpikeList File: PAH100.spk Quant Type: ISTD  
Sublist File: T013+fs.sub  
Method File: /chem/msdv.i/21jul09a.b/bnap0716.m  
Misc Info: ,NOTICS

SURROGATE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
\$ 1 2-Fluorophenol	50.00	47.54	95.07	50-150
\$ 2 Phenol-d5	50.00	51.07	102.14	50-150
\$ 17 Nitrobenzene-d5	50.00	45.53	91.06	50-150
\$ 147 Fluorene-d10	50.00	43.02	86.04	60-120
\$ 62 2,4,6-Tribromophen	50.00	49.02	98.03	50-150
\$ 148 Pyrene-d10	50.00	45.30	90.61	60-120
\$ 83 Fluoranthene-d10	10.00	13.87	138.71	50-150
\$ 101 Benzo(a)pyrene-d12	10.00	14.42	144.15	50-150

Data File: /chem/msdv.i/21jul09a.b/v072129.d

Date : 21-JUL-2009 22:21

Client ID:

Sample Info: j0907252B-06A;

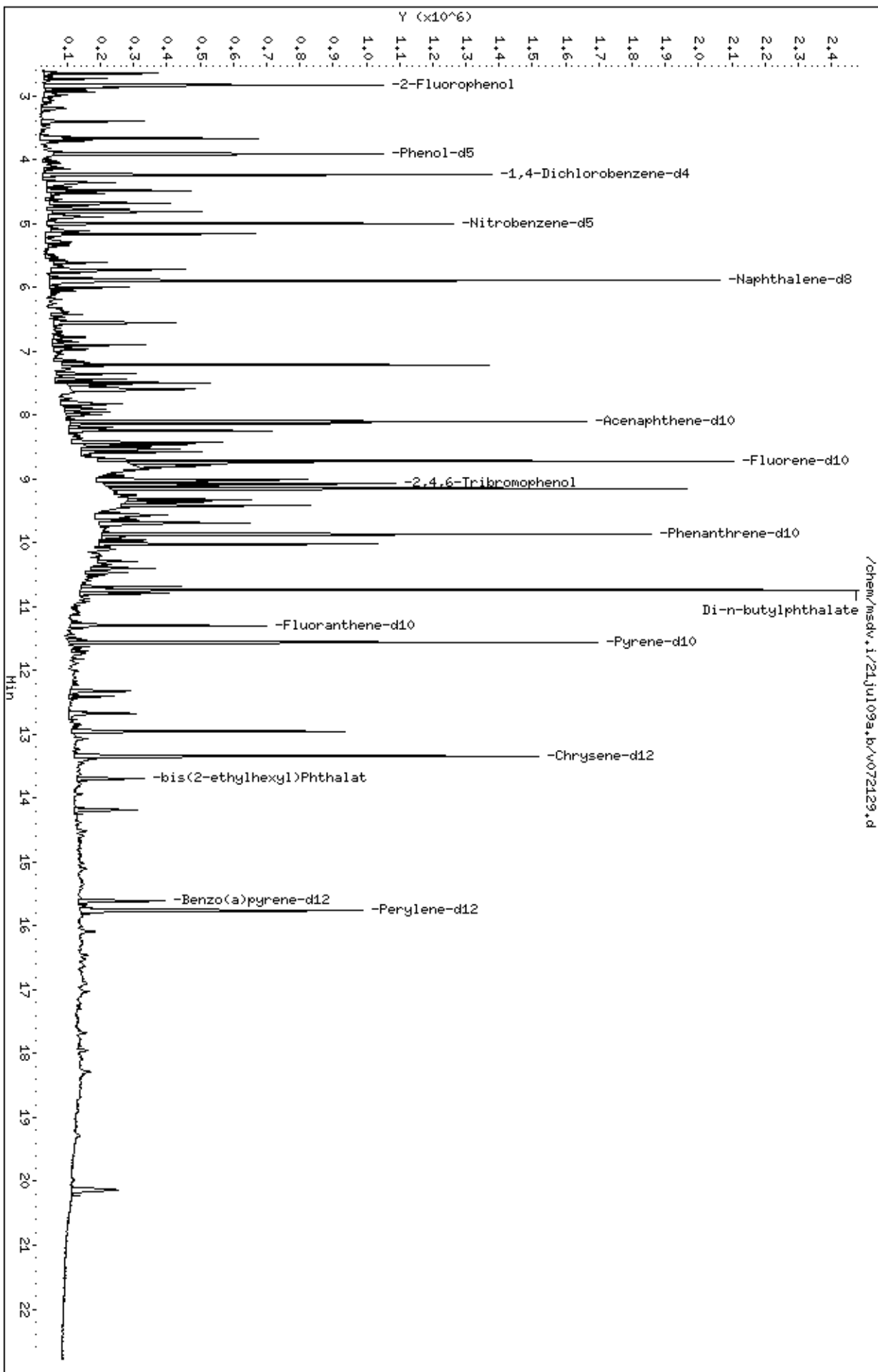
Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: m

Column diameter: 0.25





Date : 21-JUL-2009 22:21

Client ID:

Instrument: msdv.i

Sample Info: ;0907252B-06A;

Volume Injected (uL): 1.0

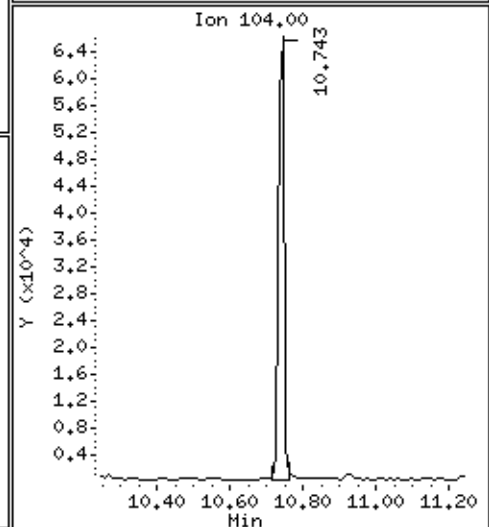
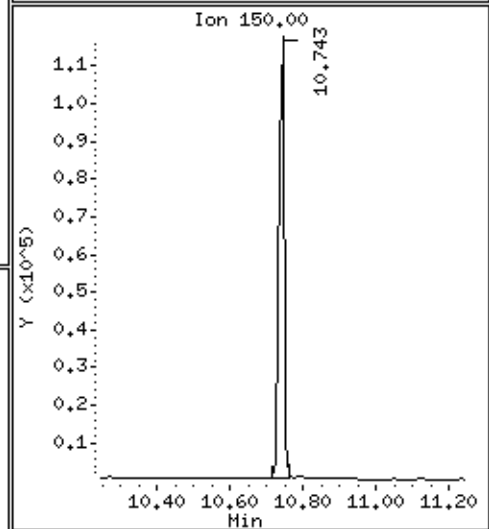
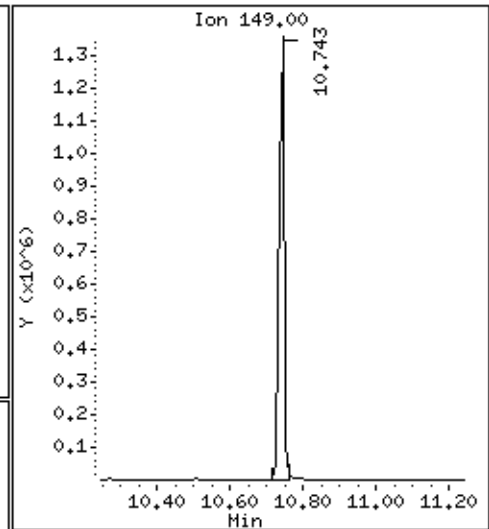
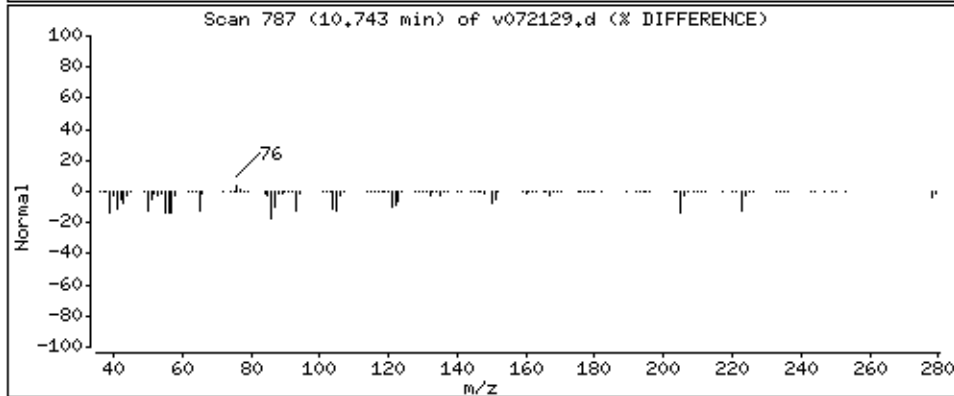
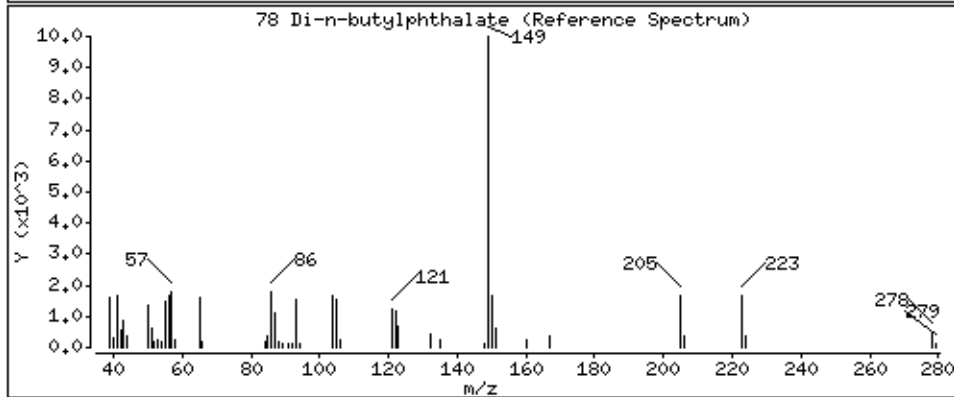
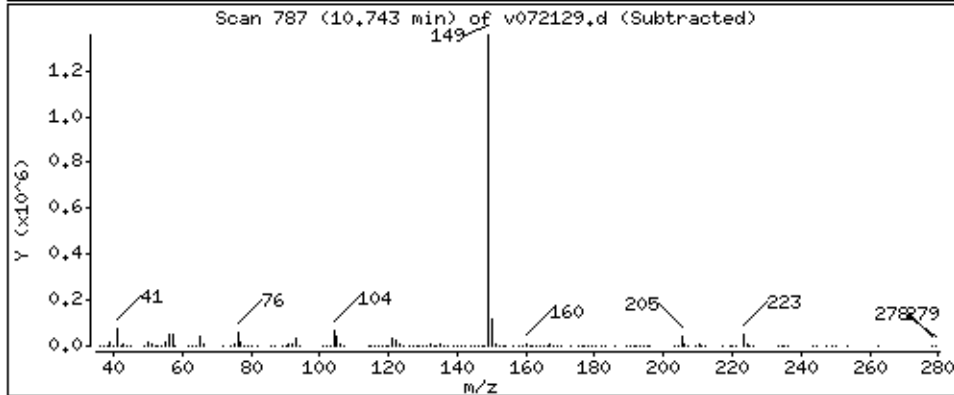
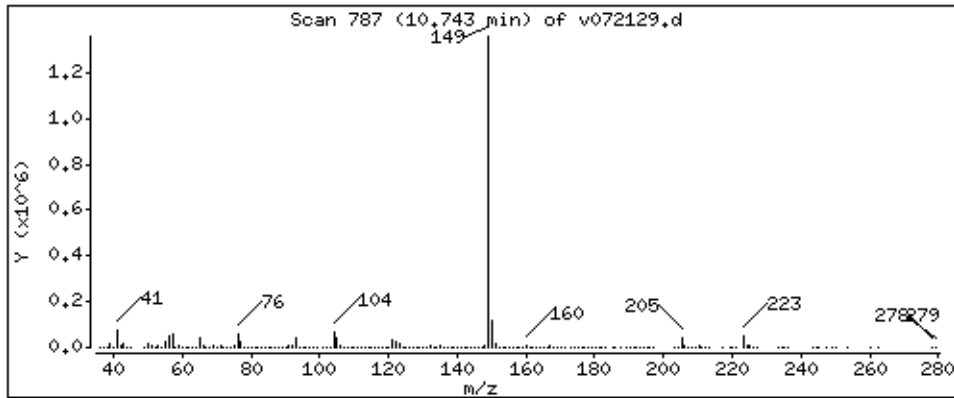
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

78 Di-n-butylphthalate

Concentration: 67.03 ug



Date : 21-JUL-2009 22:21

Client ID:

Instrument: msdv.i

Sample Info: ;0907252B-06A;

Volume Injected (uL): 1.0

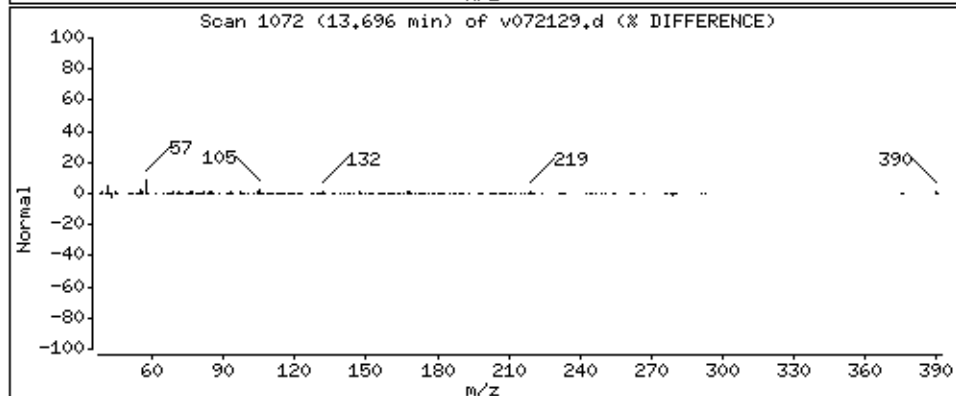
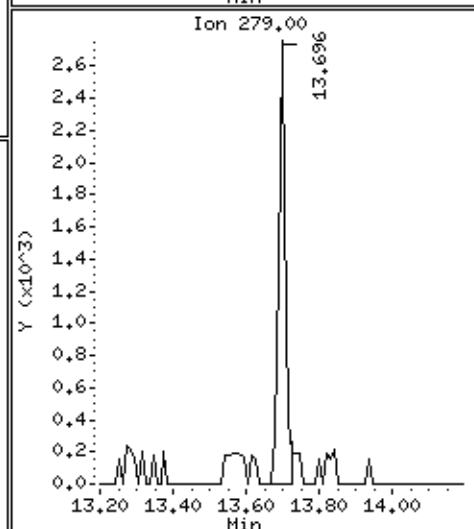
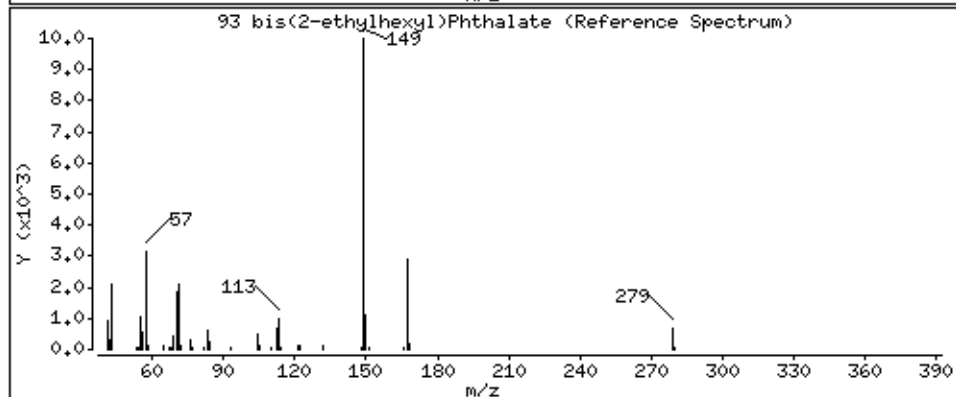
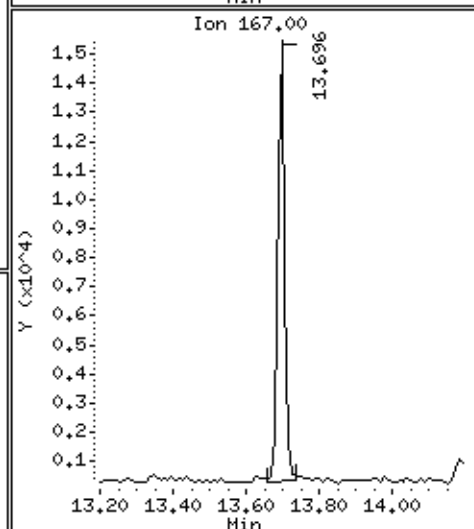
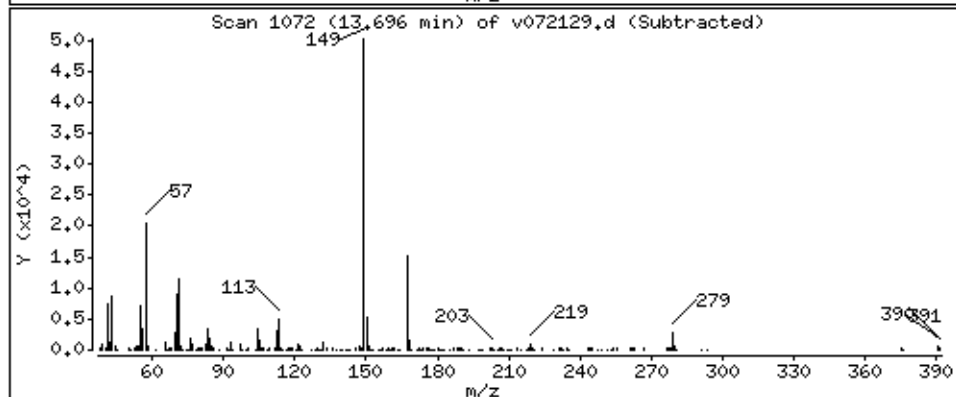
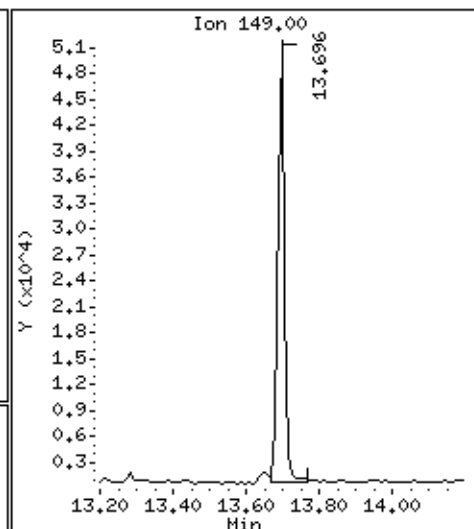
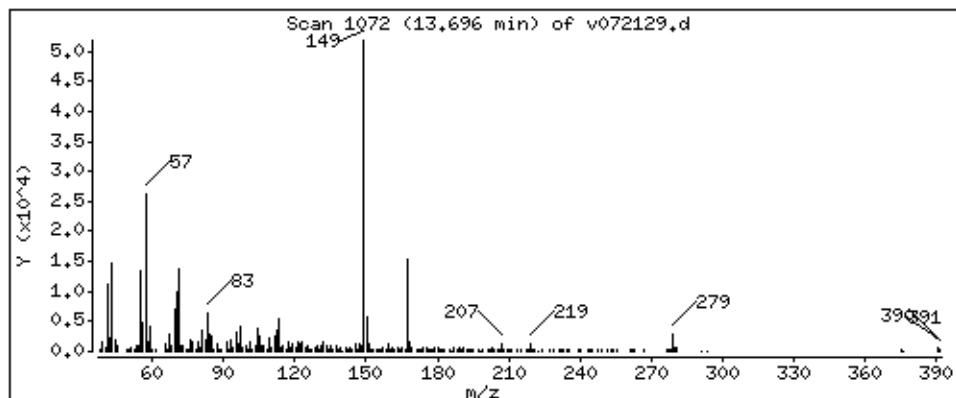
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

93 bis(2-ethylhexyl)Phthalate

Concentration: 5.742 ug



## **QC Results and Raw Data**

Client Sample ID: Lab Blank

Lab ID#: 0907252B-07A

**MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN**

<b>File Name:</b>	<b>v072126</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 7/21/09 08:59 PM</b>
		<b>Date of Extraction: 7/15/09</b>

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Phenol	5.0	0.062	Not Detected	Not Detected
bis(2-Chloroethyl) Ether	1.0	0.012	Not Detected	Not Detected
2-Chlorophenol	5.0	0.062	Not Detected	Not Detected
1,3-Dichlorobenzene	1.0	0.012	Not Detected	Not Detected
1,4-Dichlorobenzene	1.0	0.012	Not Detected	Not Detected
1,2-Dichlorobenzene	1.0	0.012	Not Detected	Not Detected
2-Methylphenol (o-Cresol)	5.0	0.062	Not Detected	Not Detected
bis(2-Chloroisopropyl) Ether	1.0	0.012	Not Detected	Not Detected
N-Nitroso-di-n-propylamine	1.0	0.012	Not Detected	Not Detected
4-Methylphenol/3-Methylphenol	5.0	0.062	Not Detected	Not Detected
Hexachloroethane	1.0	0.012	Not Detected	Not Detected
Nitrobenzene	1.0	0.012	Not Detected	Not Detected
Isophorone	1.0	0.012	Not Detected	Not Detected
2-Nitrophenol	5.0	0.062	Not Detected	Not Detected
2,4-Dimethylphenol	5.0	0.062	Not Detected	Not Detected
Benzoic Acid	30	0.38	Not Detected	Not Detected
bis(2-Chloroethoxy) Methane	1.0	0.012	Not Detected	Not Detected
2,4-Dichlorophenol	5.0	0.062	Not Detected	Not Detected
1,2,4-Trichlorobenzene	1.0	0.012	Not Detected	Not Detected
Naphthalene	1.0	0.012	Not Detected	Not Detected
4-Chloroaniline	10	0.12	Not Detected	Not Detected
Hexachlorobutadiene	1.0	0.012	Not Detected	Not Detected
4-Chloro-3-methylphenol	5.0	0.062	Not Detected	Not Detected
2-Methylnaphthalene	1.0	0.012	Not Detected	Not Detected
Hexachlorocyclopentadiene	20	0.25	Not Detected	Not Detected
2,4,6-Trichlorophenol	5.0	0.062	Not Detected	Not Detected
2,4,5-Trichlorophenol	5.0	0.062	Not Detected	Not Detected
2-Chloronaphthalene	1.0	0.012	Not Detected	Not Detected
2-Nitroaniline	10	0.12	Not Detected	Not Detected
Dimethylphthalate	5.0	0.062	Not Detected	Not Detected
Acenaphthylene	1.0	0.012	Not Detected	Not Detected
2,6-Dinitrotoluene	5.0	0.062	Not Detected	Not Detected
3-Nitroaniline	10	0.12	Not Detected	Not Detected
Acenaphthene	1.0	0.012	Not Detected	Not Detected
2,4-Dinitrophenol	20	0.25	Not Detected	Not Detected
4-Nitrophenol	20	0.25	Not Detected	Not Detected
2,4-Dinitrotoluene	5.0	0.062	Not Detected	Not Detected
Dibenzofuran	1.0	0.012	Not Detected	Not Detected

Client Sample ID: Lab Blank

Lab ID#: 0907252B-07A

**MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN**

<b>File Name:</b>	<b>v072126</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 7/21/09 08:59 PM</b>
		<b>Date of Extraction: 7/15/09</b>

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Diethylphthalate	5.0	0.062	Not Detected	Not Detected
Fluorene	1.0	0.012	Not Detected	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	0.012	Not Detected	Not Detected
4-Nitroaniline	10	0.12	Not Detected	Not Detected
4,6-Dinitro-2-methylphenol	10	0.12	Not Detected	Not Detected
N-Nitrosodiphenylamine	10	0.12	Not Detected	Not Detected
4-Bromophenyl-phenyl Ether	1.0	0.012	Not Detected	Not Detected
Hexachlorobenzene	1.0	0.012	Not Detected	Not Detected
Pentachlorophenol	20	0.25	Not Detected	Not Detected
Phenanthrene	1.0	0.012	Not Detected	Not Detected
Anthracene	1.0	0.012	Not Detected	Not Detected
di-n-Butylphthalate	5.0	0.062	Not Detected	Not Detected
Fluoranthene	1.0	0.012	Not Detected	Not Detected
Pyrene	1.0	0.012	Not Detected	Not Detected
Butylbenzylphthalate	5.0	0.062	Not Detected	Not Detected
3,3'-Dichlorobenzidine	20	0.25	Not Detected	Not Detected
Chrysene	1.0	0.012	Not Detected	Not Detected
Benzo(a)anthracene	1.0	0.012	Not Detected	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.062	Not Detected	Not Detected
Di-n-Octylphthalate	5.0	0.062	Not Detected	Not Detected
Benzo(b)fluoranthene	1.0	0.012	Not Detected	Not Detected
Benzo(k)fluoranthene	1.0	0.012	Not Detected	Not Detected
Benzo(a)pyrene	1.0	0.012	Not Detected	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	0.012	Not Detected	Not Detected
Dibenz(a,h)anthracene	1.0	0.012	Not Detected	Not Detected
Benzo(g,h,i)perylene	1.0	0.012	Not Detected	Not Detected

**Air Sample Volume(L): 80000**

**Container Type: NA - Not Applicable**

Surrogates	%Recovery	Method Limits
2-Fluorophenol	91	50-150
Phenol-d5	96	50-150
Nitrobenzene-d5	81	50-150
2,4,6-Tribromophenol	86	50-150
Fluorene-d10	80	60-120
Pyrene-d10	82	60-120

Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/21jul09a.b/v072126.d

Lab Smp Id: 0907252B/253B-Blank

Client Smp ID: Lab Blank

Inj Date : 21-JUL-2009 20:59

Operator : rn

Inst ID: msdv.i

Smp Info : ;0907252B/253B-Blank;Lab Blank

Misc Info : ,NOTICS

Comment : HP-5MS 30M X 0.25mm X 0.25u

Method : /chem/msdv.i/21jul09a.b/bnap0716.m

Meth Date : 22-Jul-2009 09:03 lzhang

Quant Type: ISTD

Cal Date : 16-JUL-2009 16:28

Cal File: v071610.d

Als bottle: 13

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: T013.sub

Target Version: 3.50

Processing Host: eeyore

Concentration Formula: Amt \* DF \* (Vt/S\*Vi)/CF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
S	1.00000	Sample Portion
Vi	1.00000	Volume injected (uL)
CF	1000.00000	Conversion ng->ug

Cpnd Variable

Local Compound Variable

		CONCENTRATIONS					
		QUANT	SIG				
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL ( ug)
=====	=====	==	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112	2.825	2.825	(0.667)	336289	45.4016	45.40
\$ 2 Phenol-d5	99	3.913	3.913	(0.924)	406057	48.2151	48.22
3 Phenol*	94	Compound Not Detected.					
4 bis(2-Chloroethyl)ether	93	Compound Not Detected.					
5 2-Chlorophenol	128	Compound Not Detected.					
6 1,3-Dichlorobenzene	146	Compound Not Detected.					
* 7 1,4-Dichlorobenzene-d4	150	4.235	4.234	(1.000)	320129	40.0000	
9 1,4-Dichlorobenzene*	146	Compound Not Detected.					
11 1,2-Dichlorobenzene	146	Compound Not Detected.					
12 2-Methylphenol	108	Compound Not Detected.					
13 bis(2-Chloroisopropyl)ether	45	Compound Not Detected.					
14 4-Methylphenol	108	Compound Not Detected.					
15 N-Nitrosodipropylamine**	70	Compound Not Detected.					

Data File: /chem/msdv.i/21jul09a.b/v072126.d Page 2

Data File: /chem/msdv.i/21jul09a.b/v072126.d Page 2

Compounds	QUANT	SIG	CONCENTRATIONS					
			ON-COLUMN	FINAL				
	MASS		RT	EXP RT	REL RT	RESPONSE	( ng)	( ug)
=====	=====		==	=====	=====	=====	=====	=====
80 Fluoranthene*	202		Compound Not Detected.					
\$ 148 Pyrene-d10	212		11.561	11.571	(0.866)	622750	41.1547	41.15
81 Pyrene	202		Compound Not Detected.					
85 Butyl benzyl phthalate	149		Compound Not Detected.					
88 Benzo(a)Anthracene	228		Compound Not Detected.					
* 90 Chrysene-d12	240		13.344	13.354	(1.000)	648506	40.0000	
89 3 3'-Dichlorobenzidine	252		Compound Not Detected.					
91 Chrysene	228		Compound Not Detected.					
93 bis(2-ethylhexyl)Phthalate	149		Compound Not Detected.					
94 Di-n-octyl phthalate*	149		Compound Not Detected.					
95 Benzo(b)fluoranthene	252		Compound Not Detected.					
96 Benzo(k)fluoranthene	252		Compound Not Detected.					
98 Benzo(a)pyrene*	252		Compound Not Detected.					
* 99 Perylene-d12	264		15.758	15.758	(1.000)	476132	40.0000	
103 Indeno(1,2,3-cd)pyrene	276		Compound Not Detected.					
104 Dibenzo(a,h)anthracene	278		Compound Not Detected.					
105 Benzo(g,h,i)perylene	276		Compound Not Detected.					



Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: msdv.i

Calibration Date: 21-JUL-2009

Lab File ID: v072126.d

Calibration Time: 16:00

Lab Smp Id: 0907252B/253B-Blank

Client Smp ID: Lab Blank

Analysis Type: SV

Level: LOW

Quant Type: ISTD

Sample Type: PUF/XAD

Operator: rn

Method File: /chem/msdv.i/21jul09a.b/bnap0716.m

Misc Info: ,NOTICS

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	279073	139536	558146	320129	14.71
27 Naphthalene-d8	666869	333434	1333738	853180	27.94
47 Acenaphthene-d10	316636	158318	633272	420199	32.71
71 Phenanthrene-d10	583267	291634	1166534	779958	33.72
90 Chrysene-d12	493051	246526	986102	648506	31.53
99 Perylene-d12	360565	180282	721130	476132	32.05

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	4.23	3.73	4.73	4.23	0.00
27 Naphthalene-d8	5.89	5.39	6.39	5.89	0.00
47 Acenaphthene-d10	8.11	7.61	8.61	8.10	-0.13
71 Phenanthrene-d10	9.87	9.37	10.37	9.87	0.00
90 Chrysene-d12	13.35	12.85	13.85	13.34	-0.08
99 Perylene-d12	15.76	15.26	16.26	15.76	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.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:	Client SDG: 21jul09a
Sample Matrix: GAS	Fraction: SV
Lab Smp Id: 0907252B/253B-Blank	Client Smp ID: Lab Blank
Level: LOW	Operator: rn
Data Type: MS DATA	SampleType: SAMPLE
SpikeList File: PAH100.spk	Quant Type: ISTD
Sublist File: T013.sub	
Method File: /chem/msdv.i/21jul09a.b/bnap0716.m	
Misc Info: ,NOTICS	

SURROGATE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
\$ 1 2-Fluorophenol	50.00	45.40	90.80	50-150
\$ 2 Phenol-d5	50.00	48.22	96.43	50-150
\$ 17 Nitrobenzene-d5	50.00	40.69	81.38	50-150
\$ 147 Fluorene-d10	50.00	39.92	79.85	60-120
\$ 62 2,4,6-Tribromophen	50.00	43.08	86.15	50-150
\$ 148 Pyrene-d10	50.00	41.15	82.31	60-120

Data File: /chem/msdv.i/21jul09a.b/v072126.d

Date : 21-JUL-2009 20:59

Client ID: Lab Blank

Sample Info: j0907262B/253B-Blank;Lab Blank

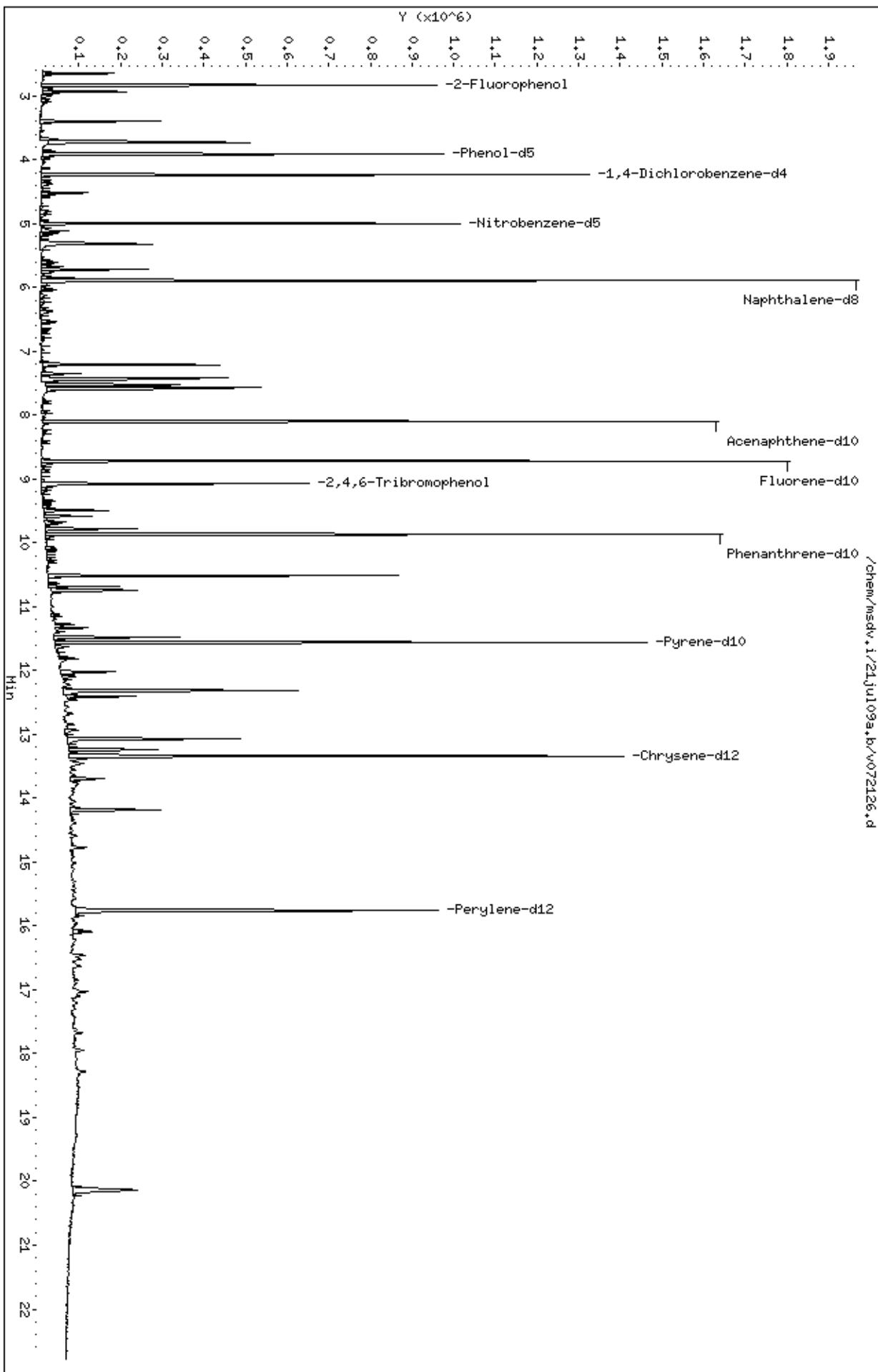
Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: m

Column diameter: 0.25



# LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED.

SDG No.: 0907252B

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY							
		2,4,6-Tribromophenol	#	Pyrene-d10	#	2-Fluorophenol	#	Nitrobenzene-d5	TOTAL OUT
01	OFF04-070909	99		88		94		89	0
02	OFF03-070909	98		91		95		91	0
03	Lab Blank	86		82		91		81	0
04	LCS	90		85		81		83	0
05									0
06									0
07									0
08									0
09									0
10									0
11									0
12									0
13									0
14									0
15									0
16									0
17									0
18									0
19									0
20									0
21									0
22									0
23									0
24									0

Surrogate Recovery Limits

2,4,6-Tribromophenol 50 - 150

Pyrene-d10 60 - 120

2-Fluorophenol 50 - 150

Nitrobenzene-d5 50 - 150

\* Designates values outside of QC limits

# LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED.

SDG No.: 0907252B

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY							
		Phenol-d5	#	Fluorene-d10	#	Fluoranthene-d10	#	Benzo(a)pyrene-d12	TOTAL OUT
01	OFF04-070909	99		89		145		140	0
02	OFF03-070909	102		86		139		144	0
03	Lab Blank	96		80					0
04	LCS	88		82					0
05									0
06									0
07									0
08									0
09									0
10									0
11									0
12									0
13									0
14									0
15									0
16									0
17									0
18									0
19									0
20									0
21									0
22									0
23									0
24									0

Surrogate Recovery Limits

Phenol-d5 50 - 150

Fluorene-d10 60 - 120

Fluoranthene-d10 50 - 150

Benzo(a)pyrene-d12 50 - 150

\* Designates values outside of QC limits

# LEVEL-IV VALIDATABLE

Modified EPA Method TO-13A GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD

SDG No: 0907252B

Lab File ID: v072116.d

Date Analyzed: 07/21/2009

Instrument ID: msdv.i

Time Analyzed: 04:00 PM

	Naphthalene-d8		RT		Acenaphthene-d12		RT		Phenanthrene-d10		RT	
	Area	#		#	Area	#		#	Area	#		#
24-HOUR STD	666869		5.89		316636		8.11		583267		9.87	
UPPER LIMIT	1333738		06.22		633272		08.44		1166534		10.20	
LOWER LIMIT	333434		05.56		158318		07.78		291634		09.54	
CLIENT SAMPLE NO												
01 OFF04-070909	845818		5.89		409368		8.1		709963		9.87	
02 OFF03-070909	869190		5.89		422074		8.1		762554		9.87	
03 Lab Blank	853180		5.89		420199		8.1		779958		9.87	
04 LCS	854144		5.89		422302		8.1		777085		9.87	
05												
06												
07												
08												
09												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												

'Area Upper Limit=+200% of internal standard area'

'Area Lower Limit=-50% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

\* Designates values outside of QC limits

# LEVEL-IV VALIDATABLE

Modified EPA Method TO-13A GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD

SDG No: 0907252B

Lab File ID: v072116.d

Date Analyzed: 07/21/2009

Instrument ID: msdv.i

Time Analyzed: 04:00 PM

	Perylene-d12	#	RT	#	Chrysene-d12	#	RT	#	1,4-Dichlorobenzene-d4	#	RT	#
	Area				Area				Area			
24-HOUR STD	360565		15.76		493051		13.35		279073		4.23	
UPPER LIMIT	721130		16.09		986102		13.68		558146		04.56	
LOWER LIMIT	180282		15.43		246526		13.02		139536		03.90	
CLIENT SAMPLE NO												
01 OFF04-070909	453572		15.76		645444		13.34		321183		4.23	
02 OFF03-070909	461003		15.76		645184		13.34		327089		4.23	
03 Lab Blank	476132		15.76		648506		13.34		320129		4.23	
04 LCS	471935		15.76		639429		13.34		355444		4.23	
05												
06												
07												
08												
09												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												

'Area Upper Limit=+200% of internal standard area'

'Area Lower Limit=-50% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

\* Designates values outside of QC limits

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 16-JUL-2009 15:05  
End Cal Date : 16-JUL-2009 18:46  
Quant Method : ISTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/msdv.i/16jul09a.b/bnap0716.m  
Cal Date : 17-Jul-2009 09:48 rnoonan  
Curve Type : Average

Calibration File Names:

Level 1: /chem/msdv.i/16jul09a.b/v071607.d  
Level 2: /chem/msdv.i/16jul09a.b/v071608.d  
Level 3: /chem/msdv.i/16jul09a.b/v071609.d  
Level 4: /chem/msdv.i/16jul09a.b/v071610.d  
Level 5: /chem/msdv.i/16jul09a.b/v071611.d  
Level 6: /chem/msdv.i/16jul09a.b/v071612.d  
Level 7: /chem/msdv.i/16jul09a.b/v071613.d  
Level 8: /chem/msdv.i/16jul09a.b/v071614.d  
Level 9: /chem/msdv.i/16jul09a.b/v071615.d

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	20.000 Level 4	40.000 Level 5	50.000 Level 6	RRF	% RSD
3 Phenol*	+++++	1.37634	1.46526	1.43979	1.22020	1.27444		
	1.13677	1.11882	0.94758				1.24740	14.252
4 bis(2-Chloroethyl)ether	1.26591	1.28153	1.28772	1.21806	1.02294	1.10911		
	0.97425	0.93814	0.82948				1.10301	15.399
5 2-Chlorophenol	+++++	1.00748	1.07099	1.05170	0.90224	0.96419		
	0.85753	0.82766	0.70998				0.92397	13.348
6 1,3-Dichlorobenzene	1.26784	1.13835	1.17144	1.10337	0.92519	0.97979		
	0.85760	0.83036	0.69912				0.99701	18.646
9 1,4-Dichlorobenzene*	1.32598	1.17765	1.20183	1.14865	0.91976	1.00523		
	0.87036	0.84741	0.71411				1.02344	19.664
10 Benzyl Alcohol	0.56896	0.62538	0.68788	0.69748	0.61103	0.65871		
	0.56541	0.56643	0.46642				0.60530	12.015
11 1,2-Dichlorobenzene	1.23807	1.09078	1.11933	1.06003	0.85704	0.91546		
	0.79494	0.76235	0.61167				0.93885	21.502



Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 16-JUL-2009 15:05  
End Cal Date : 16-JUL-2009 18:46  
Quant Method : ISTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/msdv.i/16jul09a.b/bnap0716.m  
Cal Date : 17-Jul-2009 09:48 rnoonan  
Curve Type : Average

Compound	1.000	5.000	10.000	20.000	40.000	50.000	—	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	
	-----	-----	-----	-----	-----	-----		
	80.000	100.000	160.000					
	Level 7	Level 8	Level 9					
=====	=====	=====	=====	=====	=====	=====	=====	=====
12 2-Methylphenol	+++++	0.95897	1.02999	0.97519	0.84212	0.87382		
	0.75784	0.72623	0.62202				0.84827	16.452
-----	-----	-----	-----	-----	-----	-----	-----	-----
13 bis(2-Chloroisopropyl)ether	2.24464	2.02325	2.06151	1.94329	1.57619	1.62028		
	1.36477	1.27938	1.00046				1.67931	24.799
-----	-----	-----	-----	-----	-----	-----	-----	-----
14 4-Methylphenol	+++++	0.98654	1.07922	1.04187	0.86749	0.89698		
	0.76060	0.74351	0.60798				0.87302	18.580
-----	-----	-----	-----	-----	-----	-----	-----	-----
15 N-Nitrosodipropylamine**	0.79891	0.76313	0.81099	0.81467	0.69836	0.70585		
	0.61685	0.58270	0.46022				0.69463	17.423
-----	-----	-----	-----	-----	-----	-----	-----	-----
16 Hexachloroethane	0.54614	0.50105	0.49941	0.48496	0.39276	0.41192		
	0.35040	0.32922	0.26201				0.41976	22.578
-----	-----	-----	-----	-----	-----	-----	-----	-----
18 Nitrobenzene	0.44237	0.43282	0.48468	0.46188	0.41908	0.46980		
	0.45529	0.44709	0.44540				0.45093	4.362
-----	-----	-----	-----	-----	-----	-----	-----	-----
19 Isophorone	0.77690	0.77259	0.86227	0.86842	0.77622	0.84938		
	0.83520	0.84788	0.81365				0.82250	4.710
-----	-----	-----	-----	-----	-----	-----	-----	-----
20 2-Nitrophenol*	+++++	0.13852	0.16155	0.18126	0.16720	0.19403		
	0.19077	0.19768	0.19070				0.17771	11.502
-----	-----	-----	-----	-----	-----	-----	-----	-----
21 2,4-Dimethylphenol	+++++	0.32197	0.36196	0.36437	0.30862	0.35446		
	0.34483	0.34103	0.31204				0.33866	6.495
-----	-----	-----	-----	-----	-----	-----	-----	-----
22 N-nitrosodimethylamine	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
-----	-----	-----	-----	-----	-----	-----	-----	-----

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 16-JUL-2009 15:05  
End Cal Date : 16-JUL-2009 18:46  
Quant Method : ISTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/msdv.i/16jul09a.b/bnap0716.m  
Cal Date : 17-Jul-2009 09:48 rnoonan  
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	20.000 Level 4	40.000 Level 5	50.000 Level 6	RRF	% RSD
	80.000	100.000	160.000					
	Level 7	Level 8	Level 9					
23 bis(2-Chloroethoxy)methane	0.53121	0.52671	0.55867	0.55330	0.47431	0.54046		
	0.50637	0.51128	0.48061				0.52032	5.723
24 Benzoic Acid	+++++	+++++	+++++	0.13517	0.15094	0.17301		
	0.19801	0.20734	0.21358				0.17968	17.778
25 2,4-Dichlorophenol*	+++++	0.24963	0.26235	0.27519	0.24183	0.26961		
	0.25813	0.26158	0.23225				0.25632	5.584
26 1,2,4-Trichlorobenzene	0.37778	0.34872	0.36318	0.34522	0.29899	0.33146		
	0.30897	0.29959	0.27428				0.32758	10.436
28 Naphthalene	1.37803	1.23240	1.25876	1.22007	1.03865	1.14909		
	1.04998	1.04733	0.97798				1.15026	11.421
29 4-Chloroaniline	+++++	+++++	0.52003	0.52104	0.46414	0.51283		
	0.47313	0.47069	0.45669				0.48836	5.794
30 Hexachlorobutadiene*	0.18702	0.17665	0.17920	0.17737	0.14752	0.17407		
	0.15971	0.15732	0.14369				0.16695	9.157
150 Benzothiazole	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
32 4-Chloro-3-Methylphenol*	+++++	0.27949	0.29506	0.31927	0.28913	0.33230		
	0.31284	0.32351	0.31078				0.30780	5.921
33 2-Methylnaphthalene	0.74581	0.69766	0.71414	0.71375	0.60652	0.66719		
	0.61529	0.62447	0.55348				0.65981	9.603

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 16-JUL-2009 15:05  
End Cal Date : 16-JUL-2009 18:46  
Quant Method : ISTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/msdv.i/16jul09a.b/bnap0716.m  
Cal Date : 17-Jul-2009 09:48 rnoonan  
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	20.000 Level 4	40.000 Level 5	50.000 Level 6	RRF	% RSD
	80.000	100.000	160.000					
	Level 7	Level 8	Level 9					
145 1-Methylnaphthalene	0.79901	0.73041	0.76406	0.73535	0.62678	0.68083		
	0.63084	0.62512	0.58497				0.68637	10.776
35 Hexachlorocyclopentadiene**	+++++	+++++	+++++	0.34136	0.31225	0.39317		
	0.37836	0.39213	0.36261				0.36331	8.737
36 2,4,6-Trichlorophenol*	+++++	0.31985	0.36156	0.38456	0.34540	0.40225		
	0.38544	0.39118	0.34929				0.36744	7.633
37 2,4,5-Trichlorophenol	+++++	0.35007	0.41058	0.44759	0.38811	0.40388		
	0.38878	0.38297	0.36039				0.39154	7.746
39 2-Chloronaphthalene	1.39617	1.32513	1.39738	1.38778	1.15945	1.33295		
	1.20356	1.17470	1.07654				1.27263	9.466
40 2-Nitroaniline	+++++	0.37567	0.46659	0.52380	0.48935	0.57283		
	0.52693	0.55028	0.51104				0.50206	12.115
41 Aniline	1.80445	1.68759	1.81779	1.76632	1.50599	1.61095		
	1.45382	1.42364	1.23240				1.58922	12.586
42 Dimethylphthalate	+++++	1.38741	1.44840	1.46192	1.22463	1.36992		
	1.26304	1.18689	1.04014				1.29779	11.208
43 Bicyclo[2.2.1]hepta-2,5-diene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
44 2,6-Dinitrotoluene	+++++	0.28034	0.32833	0.34375	0.30357	0.34513		
	0.33735	0.33974	0.29301				0.32140	7.899

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 16-JUL-2009 15:05  
End Cal Date : 16-JUL-2009 18:46  
Quant Method : ISTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/msdv.i/16jul09a.b/bnap0716.m  
Cal Date : 17-Jul-2009 09:48 rnoonan  
Curve Type : Average

Compound	1.000	5.000	10.000	20.000	40.000	50.000	—	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	
	80.000	100.000	160.000					
	Level 7	Level 8	Level 9					
45 Acenaphthylene	2.08001	2.17701	2.32091	2.25077	1.93117	2.21336		
	1.96851	1.89037	1.55213				2.04269	11.624
46 3-Nitroaniline	+++++	+++++	0.39771	0.40574	0.38413	0.44651		
	0.40649	0.44587	0.39101				0.41107	6.141
149 Pentachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++ <-
48 Acenaphthene*	1.48099	1.34539	1.38646	1.33518	1.15658	1.30255		
	1.15580	1.12861	1.01951				1.25679	11.807
49 2,4-Dinitrophenol**	+++++	+++++	+++++	0.08967	0.11060	0.14875		
	0.18315	0.18835	0.19822				0.15312	29.249
50 4-Nitrophenol**	+++++	+++++	+++++	0.18489	0.19297	0.22980		
	0.23921	0.24338	0.24395				0.22237	11.924
51 Dibenzofuran	1.92299	1.81177	1.89988	1.86129	1.58702	1.80410		
	1.60228	1.57066	1.46542				1.72505	9.774
52 2,4-Dinitrotoluene	+++++	0.33353	0.41018	0.44352	0.40454	0.45270		
	0.43801	0.44814	0.42317				0.41922	9.263
53 1-Chloro-3,4-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++ <-
54 2-Methyl-benzenamine	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++ <-

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 16-JUL-2009 15:05  
End Cal Date : 16-JUL-2009 18:46  
Quant Method : ISTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/msdv.i/16jul09a.b/bnap0716.m  
Cal Date : 17-Jul-2009 09:48 rnoonan  
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	20.000 Level 4	40.000 Level 5	50.000 Level 6	RRF	% RSD	
	80.000	100.000	160.000						
	Level 7	Level 8	Level 9						
55 N,N-Dimethyl-benzenamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
56 Diethylphthalate	+++++	1.41557	1.53247	1.52830	1.30240	1.47426			
	1.35132	1.32193	1.15972				1.38575	9.204	
57 Fluorene	1.55951	1.43671	1.49657	1.50787	1.28306	1.39382			
	1.25796	1.23978	1.06156				1.35965	11.837	
58 4-Chlorophenyl phenyl ether	0.78993	0.70203	0.69615	0.67942	0.57908	0.65724			
	0.60339	0.58070	0.48472				0.64141	13.944	
151 2-Methylthiobenzothiazole	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
59 4-Nitroaniline	+++++	+++++	0.39656	0.43023	0.39936	0.45303			
	0.44511	0.43378	0.43604				0.42773	5.078	
155 2-Aminobenothiazole	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
60 4,6-Dinitro-2-methylphenol	+++++	+++++	0.06764	0.09169	0.09425	0.11453			
	0.11212	0.12650	0.12696				0.10481	20.516	
61 N-nitrosodiphenylamine*	+++++	+++++	0.69809	0.66490	0.57702	0.64772			
	0.54239	0.56327	0.48691				0.59718	12.613	
152 2-Hydroxybenzothiazole	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 16-JUL-2009 15:05  
End Cal Date : 16-JUL-2009 18:46  
Quant Method : ISTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/msdv.i/16jul09a.b/bnap0716.m  
Cal Date : 17-Jul-2009 09:48 rnoonan  
Curve Type : Average

Compound	1.000	5.000	10.000	20.000	40.000	50.000	—	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	
	-----	-----	-----	-----	-----	-----		
	80.000	100.000	160.000					
	Level 7	Level 8	Level 9					
=====	=====	=====	=====	=====	=====	=====	=====	=====
63 2,4-Dimethylbenzenamine	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++ <-
-----	-----	-----	-----	-----	-----	-----	-----	-----
64 N,N,4-Trimethylbenzenamine	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++ <-
-----	-----	-----	-----	-----	-----	-----	-----	-----
65 4-Bromophenyl phenyl ether	0.19710	0.19782	0.21012	0.21170	0.17380	0.19502		
	0.17875	0.18449	0.16737				0.19069	8.165
-----	-----	-----	-----	-----	-----	-----	-----	-----
66 Hexachlorobenzene	0.25733	0.24118	0.24300	0.23405	0.20287	0.22432		
	0.20629	0.21351	0.19002				0.22362	9.864
-----	-----	-----	-----	-----	-----	-----	-----	-----
67 Cumene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++ <-
-----	-----	-----	-----	-----	-----	-----	-----	-----
144 Carbazole	2.18908	2.26174	2.43759	2.36638	2.12828	2.11635		
	1.77819	1.75785	1.50641				2.06021	15.145
-----	-----	-----	-----	-----	-----	-----	-----	-----
68 Pentachlorophenol*	+++++	+++++	+++++	0.07846	0.08329	0.10365		
	0.09863	0.10616	0.10597				0.09603	12.644
-----	-----	-----	-----	-----	-----	-----	-----	-----
69 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++ <-
-----	-----	-----	-----	-----	-----	-----	-----	-----
70 Diethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++ <-
-----	-----	-----	-----	-----	-----	-----	-----	-----
72 Phenanthrene	1.36287	1.27622	1.27634	1.23152	1.05403	1.14657		
	0.98065	1.01476	0.92932				1.14136	13.434
-----	-----	-----	-----	-----	-----	-----	-----	-----

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 16-JUL-2009 15:05  
End Cal Date : 16-JUL-2009 18:46  
Quant Method : ISTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/msdv.i/16jul09a.b/bnap0716.m  
Cal Date : 17-Jul-2009 09:48 rnoonan  
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	20.000 Level 4	40.000 Level 5	50.000 Level 6	RRF	% RSD	
	80.000	100.000	160.000						
	Level 7	Level 8	Level 9						
73 Anthracene	1.16294	1.11600	1.24548	1.21369	1.05104	1.12228			
	1.00302	1.03870	0.91061				1.09597	9.683	
74 Dicyclopentadiene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
76 3-Methylphenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
78 Di-n-butylphthalate	+++++	1.04265	1.22222	1.27864	1.14105	1.31032			
	1.18189	1.23544	1.13060				1.19285	7.300	
153 2-Mercaptobenzothiazole	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
154 2-Morpholinothiobenzothiazole	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
79 Lindane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
80 Fluoranthene*	1.09888	1.10865	1.16797	1.14059	0.97802	1.07113			
	0.93766	0.96237	0.89030				1.03951	9.523	
81 Pyrene	1.45427	1.49211	1.51935	1.44919	1.22119	1.35334			
	1.26869	1.25696	1.12484				1.34888	10.224	
84 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 16-JUL-2009 15:05  
End Cal Date : 16-JUL-2009 18:46  
Quant Method : ISTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/msdv.i/16jul09a.b/bnap0716.m  
Cal Date : 17-Jul-2009 09:48 rnoonan  
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	20.000 Level 4	40.000 Level 5	50.000 Level 6	RRF	% RSD	
	80.000	100.000	160.000						
	Level 7	Level 8	Level 9						
85 Butyl benzyl phthalate	+++++	0.39113	0.49349	0.56015	0.52457	0.64737			
	0.64874	0.66595	0.62868				0.57001	16.885	
86 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
87 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
88 Benzo(a)Anthracene	1.11341	1.12369	1.25472	1.26208	1.12045	1.27242			
	1.25067	1.24025	1.16683				1.20050	5.667	
89 3 3'-Dichlorobenzidine	+++++	+++++	+++++	0.38497	0.34402	0.41308			
	0.40343	0.41118	0.36634				0.38717	7.133	
91 Chrysene	1.90703	1.42604	1.36310	1.30455	1.08670	1.21925			
	1.15023	1.14181	1.04521				1.29377	20.311	
92 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
93 bis(2-ethylhexyl)Phthalate	+++++	0.54213	0.70049	0.79403	0.72599	0.89035			
	0.90194	0.93175	0.87562				0.79529	16.693	
94 Di-n-octyl phthalate*	+++++	0.88250	1.19005	1.49198	1.49507	1.79925			
	1.93242	1.98180	1.91302				1.58576	24.974	
95 Benzo(b)fluoranthene	1.16156	1.42766	1.52845	1.54266	1.31749	1.65855			
	1.49664	1.63738	1.62295				1.48815	10.980	



## INITIAL CALIBRATION DATA

```

Start Cal Date   : 16-JUL-2009 15:05
End Cal Date     : 16-JUL-2009 18:46
Quant Method     : ISTD
Origin           : Disabled
Target Version   : 3.50
Integrator       : HP RTE
Method file      : /chem/msdv.i/16jul09a.b/bnap0716.m
Cal Date         : 17-Jul-2009 09:48 rnoonan
Curve Type       : Average

```

Compound	1.000	5.000	10.000	20.000	40.000	50.000	—	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			
	-----	-----	-----	-----	-----	-----			
	80.000	100.000	160.000						
	Level 7	Level 8	Level 9						
-----									
96 Benzo(k)fluoranthene	1.54556	1.69706	1.76671	1.80090	1.61107	1.66576			
	1.74038	1.56651	1.32281				1.63520	8.954	
-----									
97 Benzo(e)pyrene	1.21816	1.30862	1.42145	1.45168	1.25925	1.43014			
	1.37640	1.36542	1.30718				1.34870	5.975	
-----									
98 Benzo(a)pyrene*	1.22726	1.48484	1.58696	1.57547	1.35565	1.55684			
	1.49611	1.47861	1.41638				1.46424	7.931	
-----									
103 Indeno(1,2,3-cd)pyrene	0.80099	1.07557	1.19257	1.29690	1.16300	1.42951			
	1.37886	1.37197	1.39001				1.23327	16.366	
-----									
104 Dibenzo(a,h)anthracene	0.96758	1.26229	1.32585	1.40270	1.25287	1.38780			
	1.42597	1.31616	1.28495				1.29180	10.558	
-----									
105 Benzo(g,h,i)perylene	1.23140	1.42367	1.49675	1.53279	1.37495	1.58340			
	1.52698	1.51002	1.46646				1.46071	7.250	
-----									
106 3,3'-Dimethoxybenzidine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
-----									
139 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
-----									
140 Perylene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
-----									
143 Coronene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
-----									

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 16-JUL-2009 15:05  
End Cal Date : 16-JUL-2009 18:46  
Quant Method : ISTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/msdv.i/16jul09a.b/bnap0716.m  
Cal Date : 17-Jul-2009 09:48 rnoonan  
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	20.000 Level 4	40.000 Level 5	50.000 Level 6	RRF	% RSD	
	80.000 Level 7	100.000 Level 8	160.000 Level 9						
141 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
\$ 1 2-Fluorophenol	+++++	1.03010	1.04839	1.05329	0.88900	0.95778			
	0.85664	0.84202	0.72678				0.92550	12.650	
\$ 2 Phenol-d5	+++++	1.22384	1.25585	1.20071	1.00610	1.07134			
	0.93765	0.92395	0.79894				1.05230	15.623	
\$ 8 13C-Phenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
\$ 17 Nitrobenzene-d5	0.37778	0.39736	0.43224	0.43465	0.38486	0.43734			
	0.42332	0.43011	0.41264				0.41448	5.454	
\$ 31 d4-1,4-dibromobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
\$ 146 2-Methylnaphthalene-d10	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
\$ 34 1-Methylnaphthalene-d10	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
\$ 38 2-Fluorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
\$ 62 2,4,6-Tribromophenol	+++++	0.13757	0.16174	0.17534	0.15837	0.18516			
	0.18048	0.18460	0.17761				0.17011	9.671	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 16-JUL-2009 15:05  
End Cal Date : 16-JUL-2009 18:46  
Quant Method : ISTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/msdv.i/16jul09a.b/bnap0716.m  
Cal Date : 17-Jul-2009 09:48 rnoonan  
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	20.000 Level 4	40.000 Level 5	50.000 Level 6	RRF	% RSD	
	80.000 Level 7	100.000 Level 8	160.000 Level 9						
\$ 75 13c-Pentachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
\$ 77 d10-Anthracene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
\$ 82 Terphenyl-d14	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
\$ 83 Fluoranthene-d10	0.80278	0.79851	0.88096	0.88220	0.92498	0.81677			
	+++++	+++++	+++++				0.85103	6.127	
\$ 100 Benzo(e)pyrene-d12	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
\$ 101 Benzo(a)pyrene-d12	0.58459	0.73438	0.83560	0.88774	0.93762	0.87154			
	+++++	+++++	+++++				0.80858	15.962	
\$ 102 d12-Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
\$ 142 1,3,5-Trichlorobenzene-d3	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-
\$ 147 Fluorene-d10	1.20114	1.18564	1.23008	1.24570	1.06418	1.21135			
	1.08873	1.07284	0.97261				1.14136	8.259	
\$ 148 Pyrene-d10	0.94948	0.97475	1.05081	1.00195	0.85378	0.95213			
	0.89476	0.89566	0.82676				0.93334	7.711	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 16-JUL-2009 15:05  
End Cal Date : 16-JUL-2009 18:46  
Quant Method : ISTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/msdv.i/16jul09a.b/bnap0716.m  
Cal Date : 17-Jul-2009 09:48 rnoonan  
Curve Type : Average

Average %RSD Results.	
=====	
Calculated Average %RSD =	11.8363571
Maximun Average %RSD	= 15
* Passed Average %RSD Test.	

## Calibration History

Method : /chem/msdv.i/16jul09a.b/bnap0716.m  
Start Cal Date: 16-JUL-2009 15:05  
End Cal Date : 16-JUL-2009 18:46

### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
16-JUL-2009 15:05	1ng	/chem/msdv.i/16jul09a.b/v071607.d
Cal Level: 2 , Cal Amount: 5.00000		
16-JUL-2009 15:33	5ng	/chem/msdv.i/16jul09a.b/v071608.d
Cal Level: 3 , Cal Amount: 10.00000		
16-JUL-2009 16:01	10ng	/chem/msdv.i/16jul09a.b/v071609.d
Cal Level: 4 , Cal Amount: 20.00000		
16-JUL-2009 16:28	20ng	/chem/msdv.i/16jul09a.b/v071610.d
Cal Level: 5 , Cal Amount: 40.00000		
16-JUL-2009 16:56	50ng	/chem/msdv.i/16jul09a.b/v071611.d
Cal Level: 6 , Cal Amount: 50.00000		
16-JUL-2009 17:23	50ccv	/chem/msdv.i/16jul09a.b/v071612.d
Cal Level: 7 , Cal Amount: 80.00000		
16-JUL-2009 17:51	160ng	/chem/msdv.i/16jul09a.b/v071613.d
Cal Level: 8 , Cal Amount: 100.00000		
16-JUL-2009 18:19	160ng	/chem/msdv.i/16jul09a.b/v071614.d

```
+-----+-----+-----+
+-----+-----+-----+
| Cal Level: 9 , Cal Amount: 160.00000 |
+=====+
|16-JUL-2009 18:46 |160ng |/chem/msdv.i/16jul09a.b/v071615.d |
+-----+-----+-----+
```

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 6

```
+-----+-----+-----+
| Ccal Level: 6 , Ccal Amount: 50.00 |
+=====+
|16-JUL-2009 17:23 |50ccv |/chem/msdv.i/16jul09a.b/v071612.d |
+-----+-----+-----+
```

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 16-JUL-2009 15:05  
End Cal Date : 16-JUL-2009 18:46  
Quant Method : ISTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /chem/msdv.i/16jul09a.b/bnap0716.m  
Cal Date : 17-Jul-2009 09:48 rnoonan  
Curve Type : Average

Second source: V071616

2,4-Dinitrophenol - %RSD > 20%  
but < 30%.

Acceptable TO13, not 8270e

Calibration File Names:

- Level 1: /chem/msdv.i/16jul09a.b/v071607.d
- Level 2: /chem/msdv.i/16jul09a.b/v071608.d
- Level 3: /chem/msdv.i/16jul09a.b/v071609.d
- Level 4: /chem/msdv.i/16jul09a.b/v071610.d
- Level 5: /chem/msdv.i/16jul09a.b/v071611.d
- Level 6: /chem/msdv.i/16jul09a.b/v071612.d
- Level 7: /chem/msdv.i/16jul09a.b/v071613.d
- Level 8: /chem/msdv.i/16jul09a.b/v071614.d
- Level 9: /chem/msdv.i/16jul09a.b/v071615.d

Based on 1 µL injection in DCM

6/17/09

Compound	1.000	5.000	10.000	20.000	40.000	50.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
unit in µg/mL or ng on column	80.000	100.000	160.000					
	Level 7	Level 8	Level 9					
3 Phenol*	++++	1.37634	1.46526	1.43979	1.22020	1.27444		
	1.13677	1.11882	0.94758				1.24740	14.252
4 bis(2-Chloroethyl)ether	1.26591	1.28153	1.28772	1.21806	1.02294	1.10911		
	0.97425	0.93814	0.82948				1.10301	15.399
5 2-Chlorophenol	++++	1.00748	1.07099	1.05170	0.90224	0.96419		
	0.85753	0.82766	0.70998				0.92397	13.348
6 1,3-Dichlorobenzene	1.26784	1.13835	1.17144	1.10337	0.92519	0.97979		
	0.85760	0.83036	0.69912				0.99701	18.646
9 1,4-Dichlorobenzene*	1.32598	1.17765	1.20183	1.14865	0.91976	1.00523		
	0.87036	0.84741	0.71411				1.02344	19.664
10 Benzyl Alcohol	0.56896	0.62538	0.68788	0.69748	0.61103	0.65871		
	0.56541	0.56643	0.46642				0.60530	12.015
11 1,2-Dichlorobenzene	1.23807	1.09078	1.11933	1.06003	0.85704	0.91546		
	0.79494	0.76235	0.61167				0.93885	21.502

ccc

11/19/09

ccc

### **Initial Calibration Narrative**

A nine point initial calibration was analyzed on MSD-V on 7/16/09. 2,4-Dinitrophenol an SPCC compound for 8270c was found to have %RSD >20% but <30%. The %RSD is acceptable for TO-13A analysis.



RM 7/17/09

Air Toxics Ltd.

Performance Check for 8270C

Data file : /chem/msdv.i/16Jul2009.b/v071605a.d  
Lab Smp Id: DFTPP 50ng  
Inj Date : 16-JUL-2009 14:19  
Operator : rn  
Smp Info : ;1685-10C-50;  
Misc Info :  
Comment :  
Method : /chem/msdv.i/16Jul2009.b/BREAK.m  
Meth Date : 18-May-2009 13:40 rnoonan  
Cal Date : 20-OCT-2004 08:05  
Als bottle: 2  
Dil Factor: 1.00000  
Integrator: Falcon  
Target Version: 3.50  
Processing Host: eeyore

Client Smp ID: Breakdown  
Inst ID: msdv.i  
Quant Type: ESTD  
Cal File: p102001a.d  
QC Sample: DFTPP  
Compound Sublist: all.sub

Concentration Formula: Amt \* DF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

		CONCENTRATIONS			
		ON-COLUMN		FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	( area) ( ug)
=====					
M 1 Total DDT				439696	18.2967
2 Pentachlorophenol	4.372	4.631	-0.259	210170	18.0589
3 Benzidine	6.610	6.890	-0.280	353613	11.4405
4 p,p'-DDE	Compound Not Detected.				
5 p,p'-DDD	Compound Not Detected.				
6 p,p'-DDT	7.978	7.978	0.000	439696	18.2967

Breakdown =  $\frac{0 + 0}{439696} \times 100 = 0\%$

## MSD-V Run Log

@Air Toxics Ltd.

Logbook#: 1837

Method: TD13A

m/z ION ABUNDANCE CRITERIA

% RELATIVE ABUNDANCE

198	Base peak, 100.00% relative abundance	100.00
51	30.00 - 60.00% of mass 198	56.53
68	Less than 2.00% of mass 69	0.35 (0.69) 1
69	Less than 99.90% of mass 198	50.48
70	Less than 2.00% of mass 69	0.00 (0.00) 1
127	40.00 - 60.00% of mass 198	58.51
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.56
275	10.00 - 30.00% of mass 198	20.53
365	Greater than 1.00% of mass 198	2.38
441	Present, but less than mass 443	9.02
442	40.00 - 100.00% of mass 198	61.17
443	17.00 - 23.00% of mass 442	11.72 (9.16) 2

1 - value in parenthesis is % mass 69    2 - value in parenthesis is % mass 442

Instrument ID: MSD-VDFTPP File ID: V071605DFTPP Injection Date: 7/16/09DFTPP Injection Time: 1419

IS#	Area Counts
1,4-Dichlorobenzene-d <sub>4</sub> :	344510
Naphthalene-d <sub>8</sub> :	803185
Acenaphthene-d <sub>10</sub> :	364531
Phenanthrene-d <sub>10</sub> :	686990
Chrysene-d <sub>12</sub> :	579675
Perylene-d <sub>12</sub> :	439467

Injection Volume: 1.0 µL

U S E	File #	Sample / Client Name	Vial #	Dilution Factor	Date Analyzed	Time Analyzed	Initials	Comments
1	X	V071601	DEM Wash	1	1.0	7/16/09	1419	Time Analyzed = 8919
2	X	02	1685-10C-50	2		1438		= 1000
3	X	03	1685-124-4 <sup>Sim</sup> CCV	3		4505		= 1241
4	X	04	DEM Blank Sim	4		1308		
5	✓	05	1685-10C-50	2		1419		Breakdown 0%
6	✓	06	DEM Blank	3		1438		
7	✓	07	1685-171-1	4		1505		Level 1
8	✓	08	-5	5		1533		Level 2
9	✓	09	-10	6		1601		Level 3
10	✓	10	-20	7		1628		Level 4
11	✓	11	-40	8		1656		Level 5
12	✓	12	-50	9		1723		Level 6, CCV
13	✓	13	-80	10		1751		Level 7
14	✓	14	-100	11		1819		Level 8
15	✓	15	✓ -160	12		1846		Level 9
16	✓	16	1685-155-50 LCS	13		1914		LCS
17	✓	17	DEM Blank	14	✓	1941	✓	
18								
19								
20								
21								
22								

## Calculation Check:

$$\text{ng of compound} = \frac{\text{Area}_{\text{sample}}}{\text{Area}_{\text{std}}} \times \frac{\text{Conc.}_{\text{std}}}{\text{RRF}} = \frac{548823}{344510} \times \frac{40.0}{1.24740} = 51.08$$

File ID: V071612Compound: phenolInitials: nmDonna7/17/09

Rev.07/09

Page 7

Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/16jul09a.b/v071616.d

Lab Smp Id: 1685-155-50

Client Smp ID: LCS

Inj Date : 16-JUL-2009 19:14

Operator : rn

Inst ID: msdv.i

Smp Info : ;1685-155-50;LCS

Misc Info : ,NOTICS

Comment :

Method : /chem/msdv.i/16jul09a.b/bnap0716.m

Meth Date : 17-Jul-2009 10:00 lzhang

Quant Type: ISTD

Cal Date : 16-JUL-2009 16:28

Cal File: v071610.d

Als bottle: 13

QC Sample: LCS

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: second.sub

Target Version: 3.50

Processing Host: eeyore

Concentration Formula: Amt \* DF \* (Vt/S\*Vi)/CF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
S	1.00000	Sample Portion
Vi	1.00000	Volume injected (uL)
CF	1000.00000	Conversion ng->ug

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG		CONCENTRATIONS				
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
						( ng)	( ug)
=====	=====	==	=====	=====	=====	=====	=====
3 Phenol*	94	3.934	3.934	(0.927)	586696	50.2332	50.23
41 Aniline	93	3.892	3.893	(0.917)	744025	50.0019	50.00
4 bis(2-Chloroethyl)ether	93	3.996	3.986	(0.941)	499463	48.3621	48.36
5 2-Chlorophenol	128	4.038	4.038	(0.951)	433699	50.1318	50.13
6 1,3-Dichlorobenzene	146	4.203	4.204	(0.990)	473899	50.7656	50.76
* 7 1,4-Dichlorobenzene-d4	150	4.245	4.245	(1.000)	374522	40.0000	
9 1,4-Dichlorobenzene*	146	4.266	4.266	(1.005)	472382	49.2961	49.30
10 Benzyl Alcohol	108	4.494	4.494	(1.059)	312314	55.1064	55.11
11 1,2-Dichlorobenzene	146	4.514	4.514	(1.063)	446689	50.8149	50.81
12 2-Methylphenol	108	4.701	4.701	(1.107)	401811	50.5905	50.59
13 bis(2-Chloroisopropyl)ether	45	4.711	4.711	(1.110)	719598	45.7659	45.76
14 4-Methylphenol	108	4.898	4.908	(1.154)	400009	48.9357	48.94
15 N-Nitrosodipropylamine**	70	4.887	4.888	(1.151)	333216	51.2334	51.23

Compounds	QUANT SIG		CONCENTRATIONS				
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
						( ng)	( ug)
=====	=====	==	=====	=====	=====	=====	=====
16 Hexachloroethane	117	4.908	4.908	(1.156)	200736	51.0744	51.07
18 Nitrobenzene	77	5.043	5.043	(0.853)	536436	53.6966	53.70
19 Isophorone	82	5.354	5.354	(0.905)	993080	54.4991	54.50
20 2-Nitrophenol*	139	5.457	5.457	(0.923)	211157	53.6322	53.63
21 2,4-Dimethylphenol	122	5.582	5.582	(0.944)	361786	48.2201	48.22
24 Benzoic Acid	122	5.799	5.789	(0.981)	226891	56.9990	57.00
23 bis(2-Chloroethoxy)methane	93	5.696	5.696	(0.963)	566885	49.1772	49.18
25 2,4-Dichlorophenol*	162	5.779	5.779	(0.977)	290740	51.1990	51.20
26 1,2,4-Trichlorobenzene	180	5.872	5.872	(0.993)	359428	49.5268	49.53
* 27 Naphthalene-d8	136	5.913	5.913	(1.000)	886172	40.0000	
28 Naphthalene	128	5.934	5.934	(1.004)	1211999	47.5608	47.56
29 4-Chloroaniline	127	6.069	6.069	(1.026)	559869	51.7469	51.75
30 Hexachlorobutadiene*	225	6.203	6.204	(1.049)	187861	50.7919	50.79
32 4-Chloro-3-Methylphenol*	107	6.742	6.743	(1.140)	357518	52.4294	52.43
33 2-Methylnaphthalene	142	6.815	6.815	(1.152)	764817	52.3213	52.32
145 1-Methylnaphthalene	142	6.950	6.950	(1.175)	729451	47.9708	47.97
35 Hexachlorocyclopentadiene**	237	7.126	7.126	(0.877)	194316	52.1060	52.11
36 2,4,6-Trichlorophenol*	196	7.229	7.240	(0.890)	202960	53.8124	53.81
37 2,4,5-Trichlorophenol	196	7.281	7.281	(0.897)	205054	51.0209	51.02
39 2-Chloronaphthalene	162	7.416	7.416	(0.913)	697833	53.4207	53.42
40 2-Nitroaniline	65	7.613	7.613	(0.937)	292753	56.8073	56.81
42 Dimethylphthalate	163	7.913	7.914	(0.974)	688822	51.7084	51.71
44 2,6-Dinitrotoluene	165	7.976	7.976	(0.982)	177998	53.9544	53.95
45 Acenaphthylene	152	7.924	7.924	(0.976)	1083367	51.6693	51.67
46 3-Nitroaniline	138	8.131	8.131	(1.001)	231281	54.8136	54.81
* 47 Acenaphthene-d10	164	8.121	8.121	(1.000)	410582	40.0000	
48 Acenaphthene*	154	8.162	8.162	(1.005)	635929	49.2955	49.30
49 2,4-Dinitrophenol**	184	8.245	8.256	(1.015)	81844	52.0719	52.07
50 4-Nitrophenol**	109	8.400	8.411	(1.034)	118737	52.0210	52.02
51 Dibenzofuran	168	8.359	8.359	(1.029)	917710	51.8281	51.83
52 2,4-Dinitrotoluene	165	8.442	8.442	(1.040)	248959	57.8552	57.86
56 Diethylphthalate	149	8.784	8.784	(1.082)	756360	53.1746	53.17
58 4-Chlorophenyl phenyl ether	204	8.805	8.805	(1.084)	326228	49.5505	49.55
57 Fluorene	166	8.773	8.774	(1.080)	708014	50.7313	50.73
59 4-Nitroaniline	138	8.877	8.877	(1.093)	241976	55.1139	55.11
60 4,6-Dinitro-2-methylphenol	198	8.929	8.929	(0.904)	112837	54.4211	54.42
61 N-nitrosodiphenylamine*	169	8.970	8.971	(0.908)	507474	42.9572	42.96
65 4-Bromophenyl phenyl ether	248	9.385	9.385	(0.950)	181903	48.2226	48.22
66 Hexachlorobenzene	284	9.530	9.530	(0.964)	229085	51.7864	51.79
68 Pentachlorophenol*	266	9.768	9.769	(0.988)	100940	53.1359	53.14
* 71 Phenanthrene-d10	188	9.882	9.883	(1.000)	791278	40.0000	
72 Phenanthrene	178	9.913	9.914	(1.003)	1060102	46.9520	46.95(H)
73 Anthracene	178	9.965	9.965	(1.008)	1064430	49.0962	49.10
144 Carbazole	167	10.193	10.193	(2.401)	1028791	53.3333	53.33
78 Di-n-butylphthalate	149	10.753	10.753	(1.088)	1255803	53.2190	53.22
80 Fluoranthene*	202	11.344	11.344	(1.148)	1058075	51.4541	51.45
81 Pyrene	202	11.603	11.613	(0.868)	1089359	49.2398	49.24

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							( ng)	( ug)
=====	=====	==	=====	=====	=====		=====	=====
85 Butyl benzyl phthalate	149	12.680	12.691	(0.948)	536153		57.3490	57.35
89 3 3'-Dichlorobenzidine	252	13.395	13.396	(1.002)	340747		53.6597	53.66
88 Benzo(a)Anthracene	228	13.344	13.344	(0.998)	1007630		51.1750	51.17
* 90 Chrysene-d12	240	13.375	13.375	(1.000)	656056		40.0000	
91 Chrysene	228	13.416	13.416	(1.003)	987393		46.5320	46.53
93 bis(2-ethylhexyl)Phthalate	149	13.727	13.727	(1.026)	725925		55.6527	55.65
94 Di-n-octyl phthalate*	149	14.805	14.805	(0.938)	1156258		58.9380	58.94
95 Benzo(b)fluoranthene	252	15.167	15.168	(0.961)	1022046		55.5140	55.51
96 Benzo(k)fluoranthene	252	15.209	15.209	(0.963)	1008203		49.8376	49.84
97 Benzo(e)pyrene	252	15.613	15.613	(0.989)	913162		54.7282	54.73
98 Benzo(a)pyrene*	252	15.696	15.696	(0.994)	887001		48.9657	48.96(H)
* 99 Perylene-d12	264	15.789	15.789	(1.000)	494859		40.0000	
103 Indeno(1,2,3-cd)pyrene	276	17.541	17.530	(1.111)	858907		56.2948	56.29
104 Dibenzo(a,h)anthracene	278	17.592	17.593	(1.114)	796218		49.8214	49.82
105 Benzo(g,h,i)perylene	276	17.914	17.914	(1.135)	960713		53.1627	53.16

QC Flag Legend

H - Operator selected an alternate compound hit.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: msdv.i

Calibration Date: 16-JUL-2009

Lab File ID: v071616.d

Calibration Time: 17:23

Lab Smp Id: 1685-155-50

Client Smp ID: LCS

Analysis Type: SV

Level: LOW

Quant Type: ISTD

Sample Type: PUF/XAD

Operator: rn

Method File: /chem/msdv.i/16jul09a.b/bnap0716.m

Misc Info: ,NOTICS

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	344510	172255	689020	374522	8.71
27 Naphthalene-d8	803185	401592	1606370	886172	10.33
47 Acenaphthene-d10	364531	182266	729062	410582	12.63
71 Phenanthrene-d10	686990	343495	1373980	791278	15.18
90 Chrysene-d12	579675	289838	1159350	656056	13.18
99 Perylene-d12	439467	219734	878934	494859	12.60

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	4.25	3.75	4.75	4.24	-0.01
27 Naphthalene-d8	5.91	5.41	6.41	5.91	0.00
47 Acenaphthene-d10	8.12	7.62	8.62	8.12	0.00
71 Phenanthrene-d10	9.88	9.38	10.38	9.88	0.00
90 Chrysene-d12	13.37	12.87	13.87	13.37	0.00
99 Perylene-d12	15.79	15.29	16.29	15.79	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.

Air Toxics Ltd.

RECOVERY REPORT

Client Name:	Client SDG: 16jul09a
Sample Matrix: GAS	Fraction: SV
Lab Smp Id: 1685-155-50	Client Smp ID: LCS
Level: LOW	Operator: rn
Data Type: MS DATA	SampleType: LCS
SpikeList File: 8270sec.spk	Quant Type: ISTD
Sublist File: second.sub	
Method File: /chem/msdv.i/16jul09a.b/bnap0716.m	
Misc Info: ,NOTICS	

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
3 Phenol*	50.00	50.23	100.47	70-130
4 bis(2-Chloroethyl)	50.00	48.36	96.72	70-130
5 2-Chlorophenol	50.00	50.13	100.26	70-130
6 1,3-Dichlorobenzen	50.00	50.76	101.53	70-130
9 1,4-Dichlorobenzen	50.00	49.30	98.59	70-130
10 Benzyl Alcohol	50.00	55.11	110.21	70-130
11 1,2-Dichlorobenzen	50.00	50.81	101.63	70-130
12 2-Methylphenol	50.00	50.59	101.18	70-130
13 bis(2-Chloroisopro	50.00	45.76	91.53	70-130
14 4-Methylphenol	50.00	48.94	97.87	70-130
15 N-Nitrosodipropyla	50.00	51.23	102.47	70-130
16 Hexachloroethane	50.00	51.07	102.15	70-130
18 Nitrobenzene	50.00	53.70	107.39	70-130
19 Isophorone	50.00	54.50	109.00	70-130
20 2-Nitrophenol*	50.00	53.63	107.26	70-130
21 2,4-Dimethylphenol	50.00	48.22	96.44	70-130
23 bis(2-Chloroethoxy	50.00	49.18	98.35	70-130
24 Benzoic Acid	50.00	57.00	114.00	70-130
25 2,4-Dichlorophenol	50.00	51.20	102.40	70-130
26 1,2,4-Trichloroben	50.00	49.53	99.05	70-130
28 Naphthalene	50.00	47.56	95.12	70-130
29 4-Chloroaniline	50.00	51.75	103.49	70-130
30 Hexachlorobutadien	50.00	50.79	101.58	70-130
32 4-Chloro-3-Methylp	50.00	52.43	104.86	70-130
33 2-Methylnaphthalen	50.00	52.32	104.64	70-130
145 1-Methylnaphthalen	50.00	47.97	95.94	70-130
35 Hexachlorocyclopene	50.00	52.11	104.21	70-130
36 2,4,6-Trichlorophe	50.00	53.81	107.62	70-130
37 2,4,5-Trichlorophe	50.00	51.02	102.04	70-130
39 2-Chloronaphthalen	50.00	53.42	106.84	70-130
40 2-Nitroaniline	50.00	56.81	113.61	70-130
46 3-Nitroaniline	50.00	54.81	109.63	70-130
42 Dimethylphthalate	50.00	51.71	103.42	70-130

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
44 2,6-Dinitrotoluene	50.00	53.95	107.91	70-130
45 Acenaphthylene	50.00	51.67	103.34	70-130
48 Acenaphthene*	50.00	49.30	98.59	70-130
49 2,4-Dinitrophenol*	50.00	52.07	104.14	70-130
50 4-Nitrophenol**	50.00	52.02	104.04	70-130
52 2,4-Dinitrotoluene	50.00	57.86	115.71	70-130
51 Dibenzofuran	50.00	51.83	103.66	70-130
56 Diethylphthalate	50.00	53.17	106.35	70-130
57 Fluorene	50.00	50.73	101.46	70-130
58 4-Chlorophenyl phe	50.00	49.55	99.10	70-130
59 4-Nitroaniline	50.00	55.11	110.23	70-130
60 4,6-Dinitro-2-meth	50.00	54.42	108.84	70-130
61 N-nitrosodiphenyla	50.00	42.96	85.91	70-130
65 4-Bromophenyl phen	50.00	48.22	96.45	70-130
66 Hexachlorobenzene	50.00	51.79	103.57	70-130
144 Carbazole	50.00	53.33	106.67	70-130
68 Pentachlorophenol*	50.00	53.14	106.27	70-130
72 Phenanthrene	50.00	46.95	93.90	70-130
73 Anthracene	50.00	49.10	98.19	70-130
78 Di-n-butylphthalat	50.00	53.22	106.44	70-130
80 Fluoranthene*	50.00	51.45	102.91	70-130
81 Pyrene	50.00	49.24	98.48	70-130
85 Butyl benzyl phtha	50.00	57.35	114.70	70-130
89 3 3'-Dichlorobenzi	50.00	53.66	107.32	70-130
88 Benzo(a)Anthracene	50.00	51.17	102.35	70-130
91 Chrysene	50.00	46.53	93.06	70-130
93 bis(2-ethylhexyl)P	50.00	55.65	111.31	70-130
94 Di-n-octyl phthala	50.00	58.94	117.88	70-130
95 Benzo(b)fluoranth	50.00	55.51	111.03	70-130
96 Benzo(k)fluoranth	50.00	49.84	99.68	70-130
97 Benzo(e)pyrene	50.00	54.73	109.46	70-130
98 Benzo(a)pyrene*	50.00	48.96	97.93	70-130
103 Indeno(1,2,3-cd)py	50.00	56.29	112.59	70-130
104 Dibenzo(a,h)anthra	50.00	49.82	99.64	70-130
105 Benzo(g,h,i)peryle	50.00	53.16	106.33	70-130



Data File: /chem/msdv.i/16jul09a.b/v071616.d

Date : 16-JUL-2009 19:14

Client ID: LCS

Sample Info: #1685-155-50;LCS

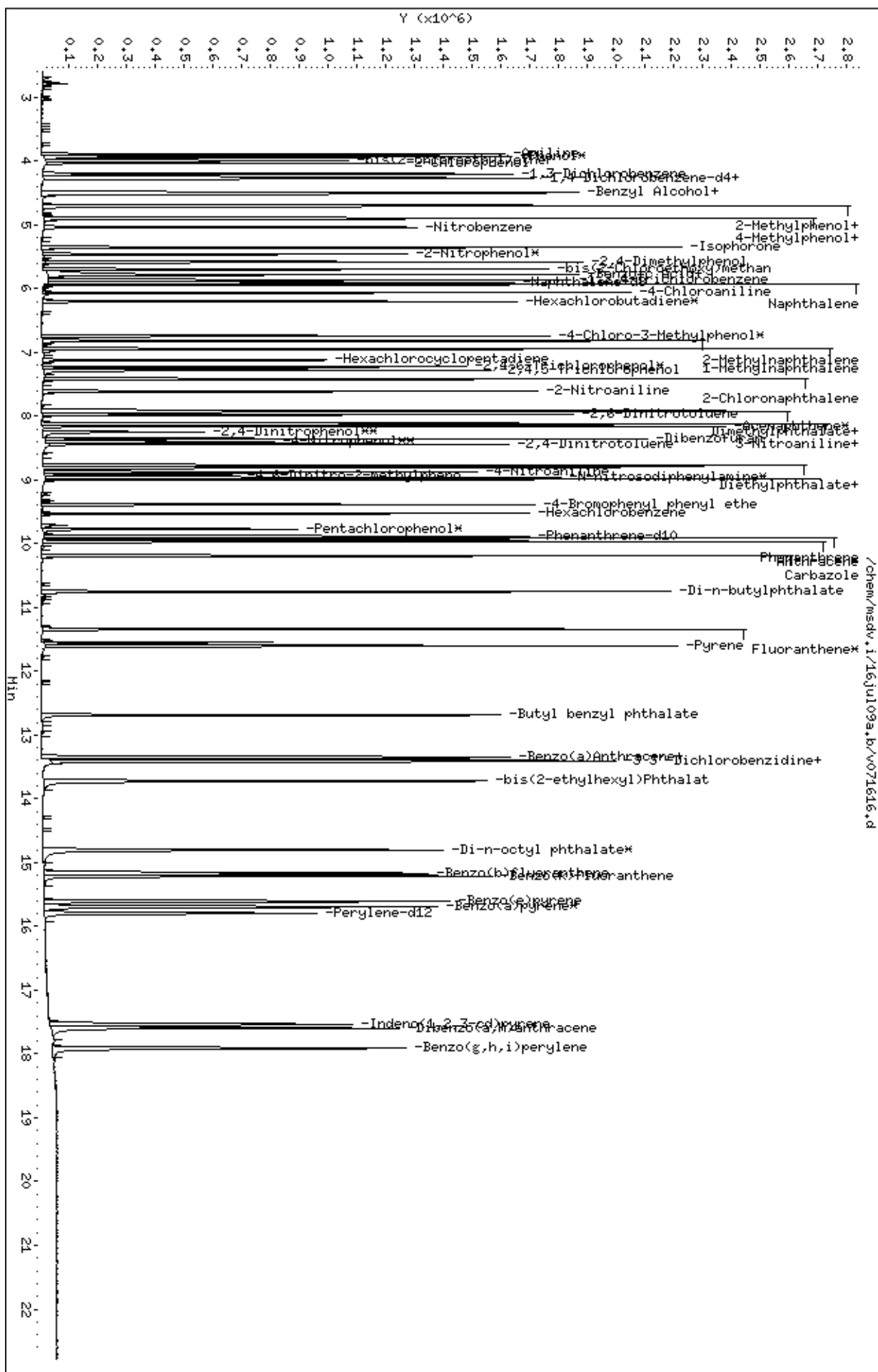
Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: m

Column diameter: 0.25



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

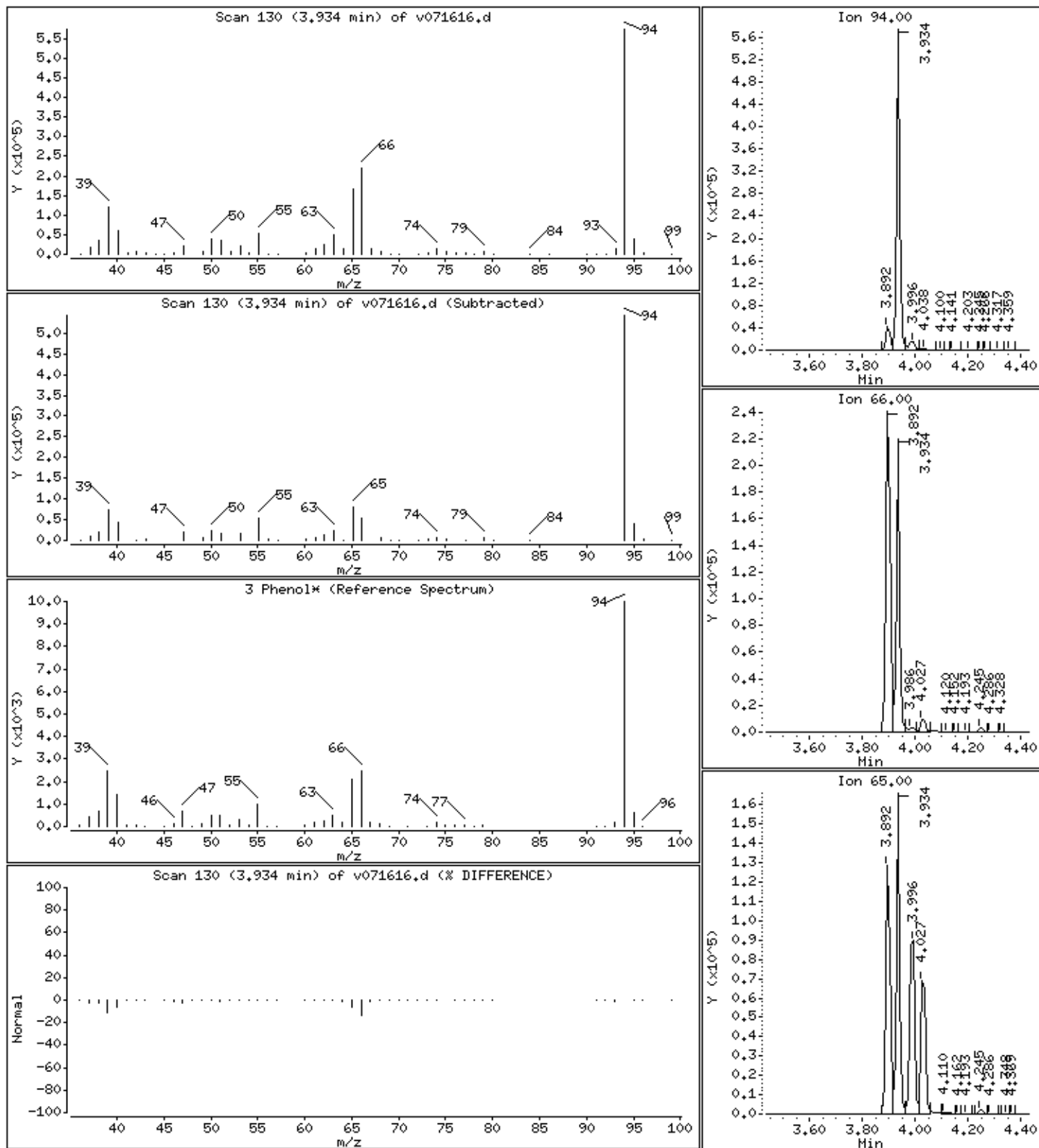
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

3 Phenol\*

Concentration: 50.23 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

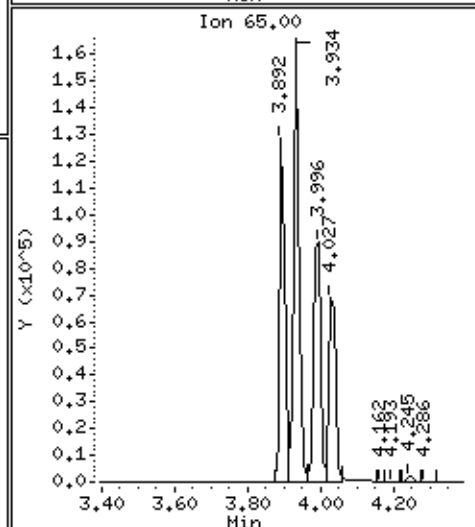
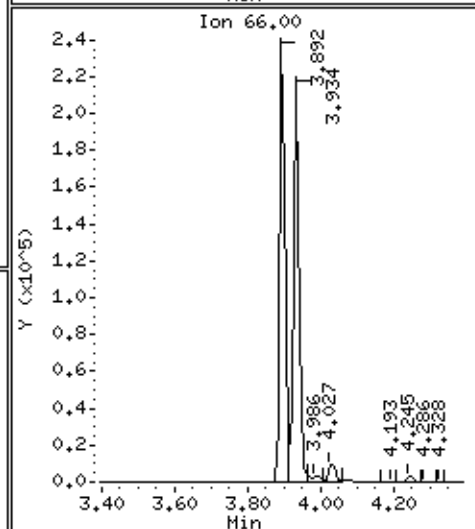
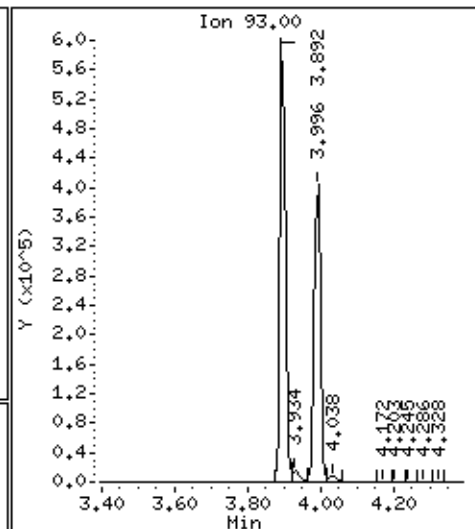
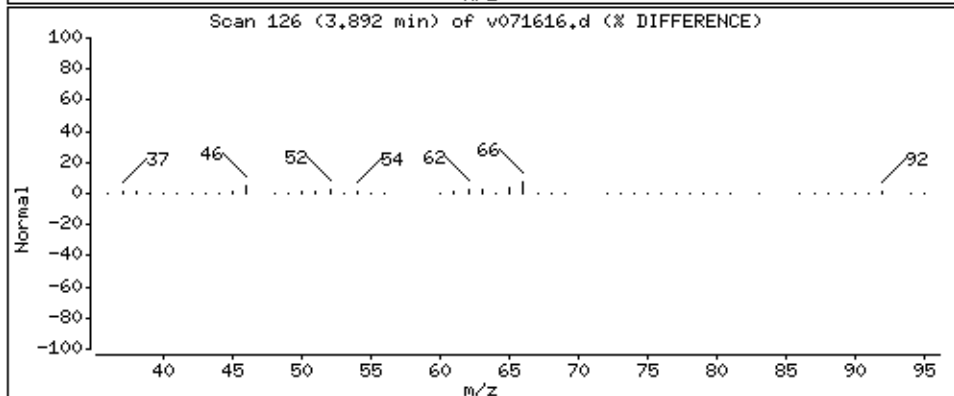
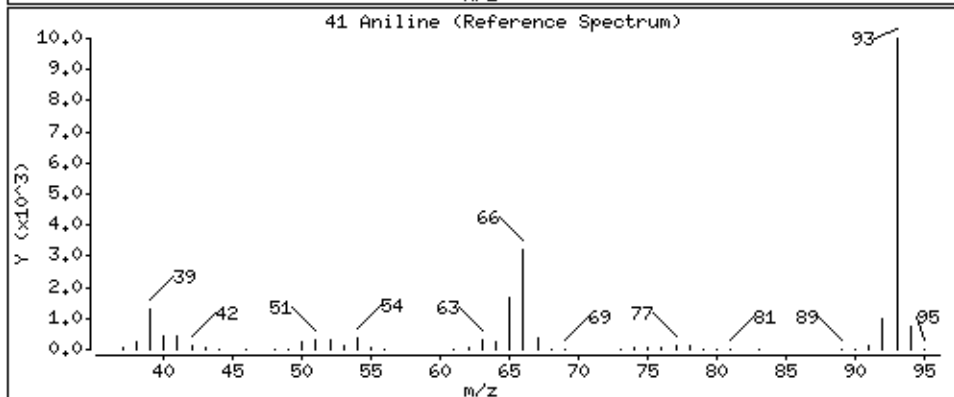
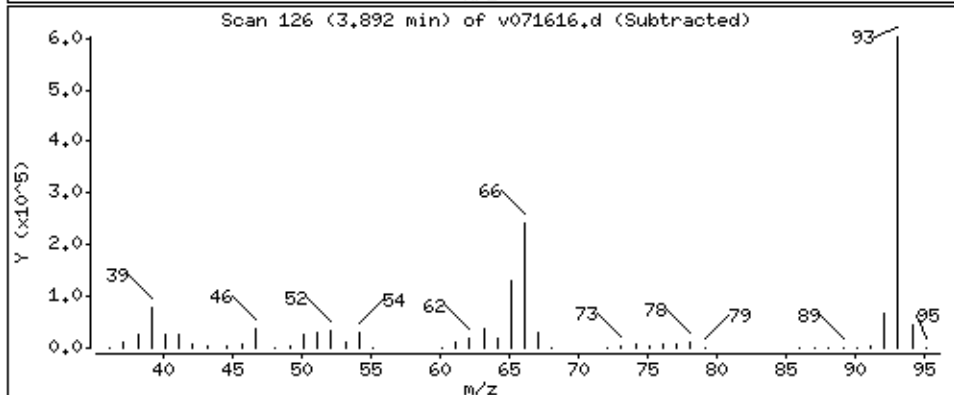
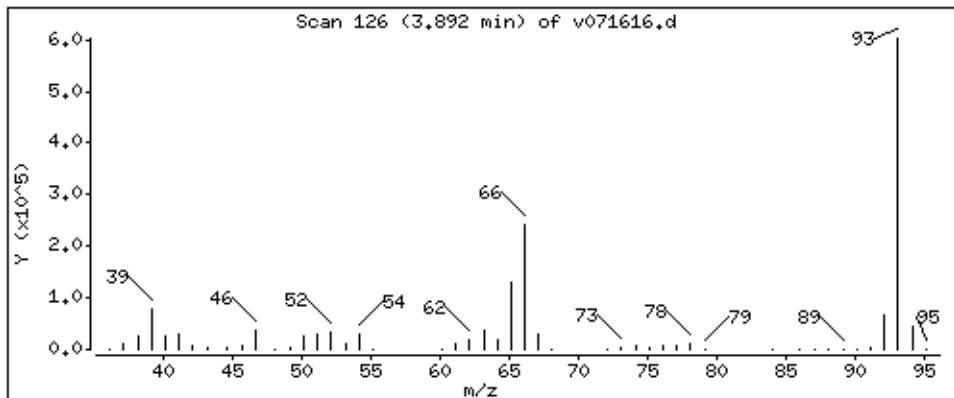
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

41 Aniline

Concentration: 50.00 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

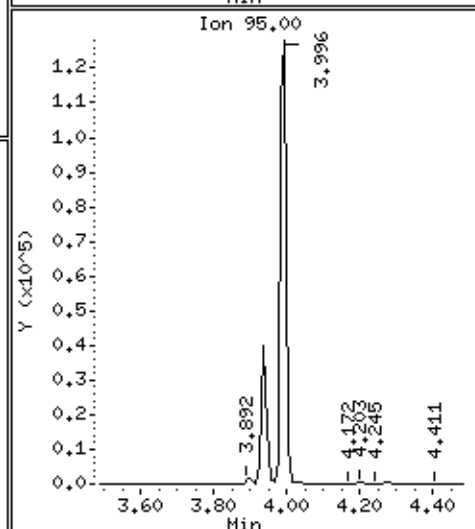
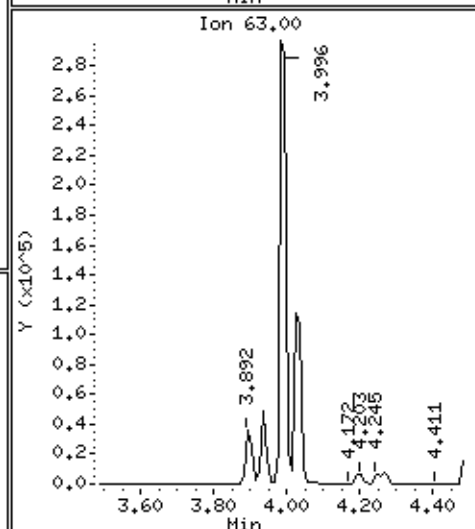
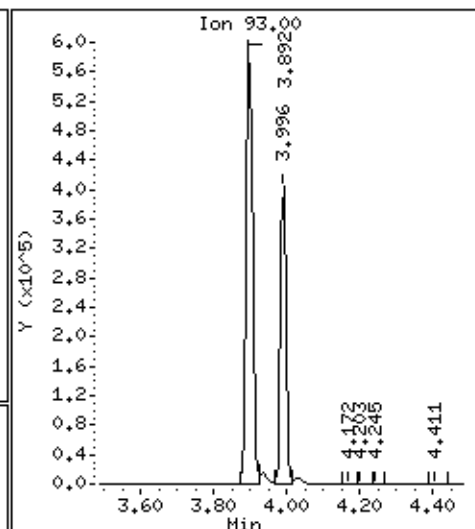
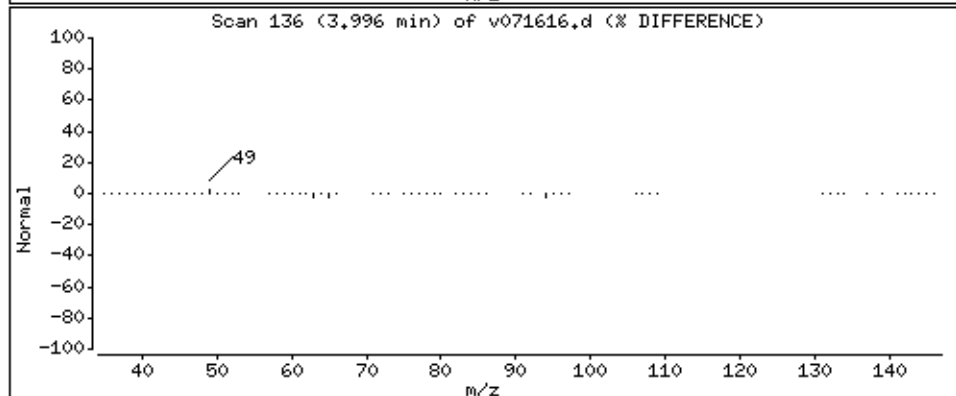
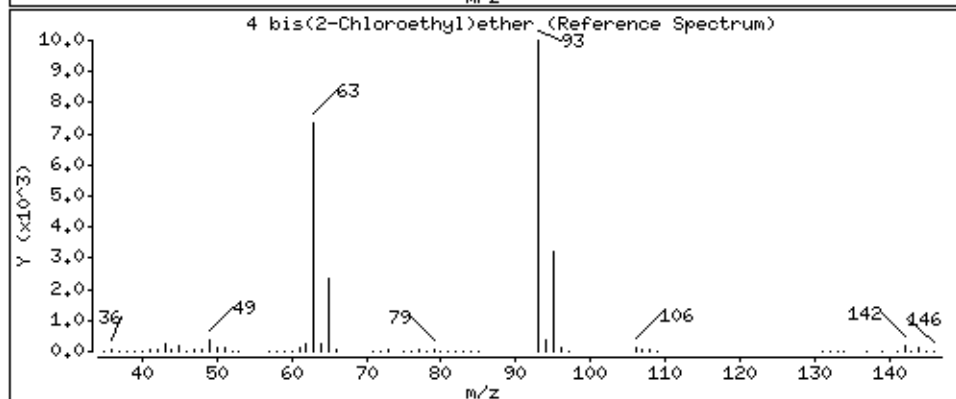
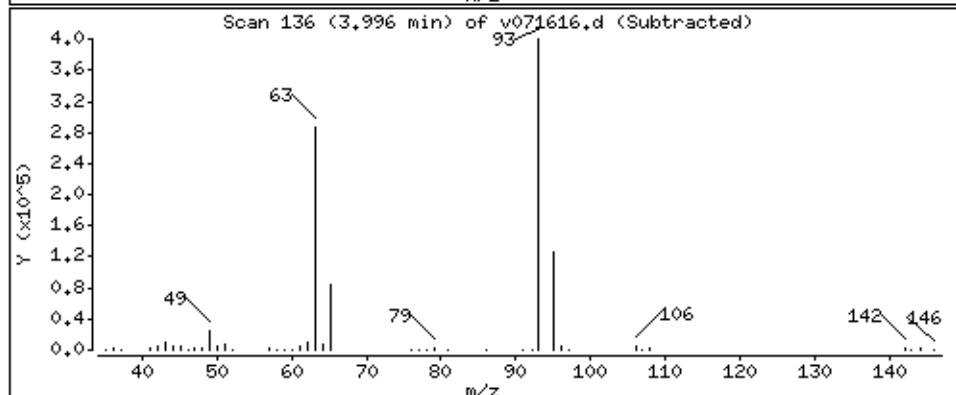
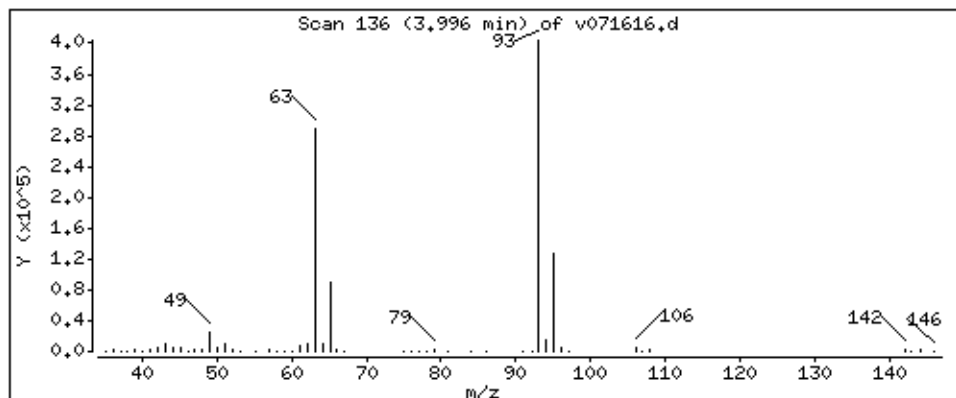
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

4 bis(2-Chloroethyl)ether

Concentration: 48.36 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

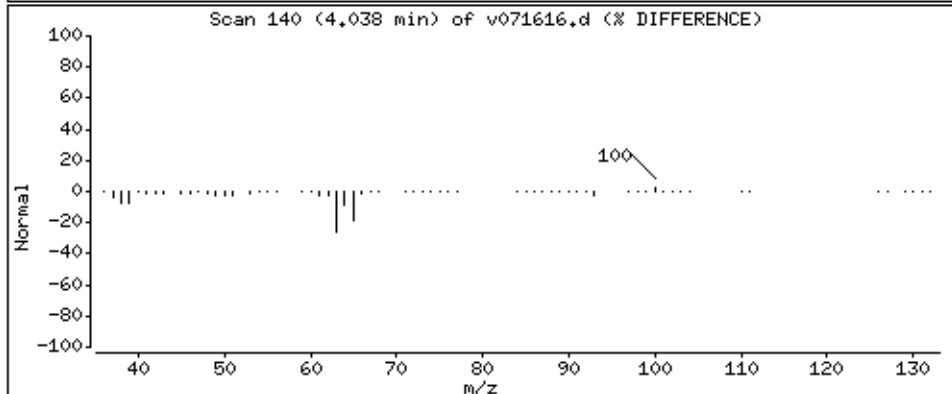
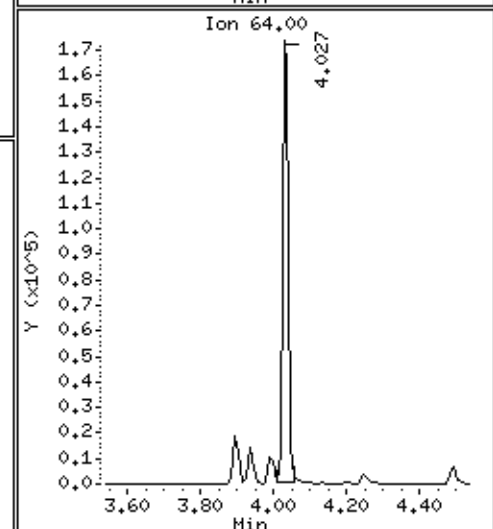
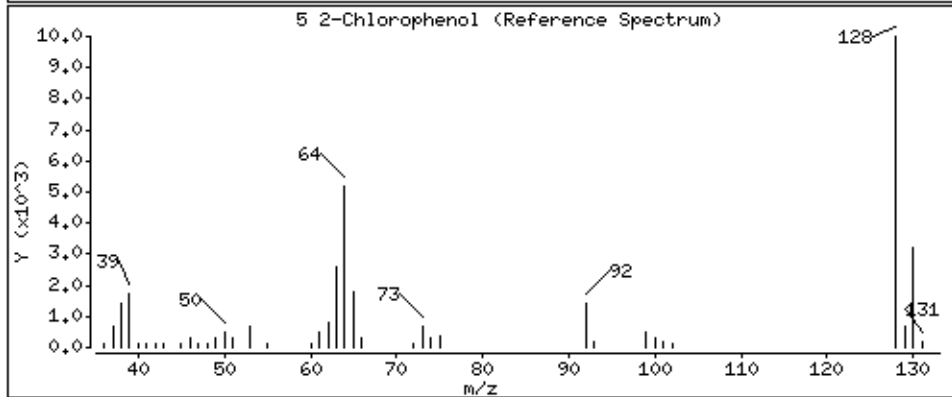
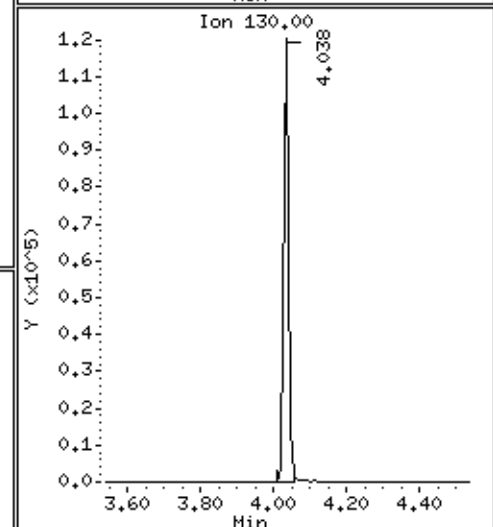
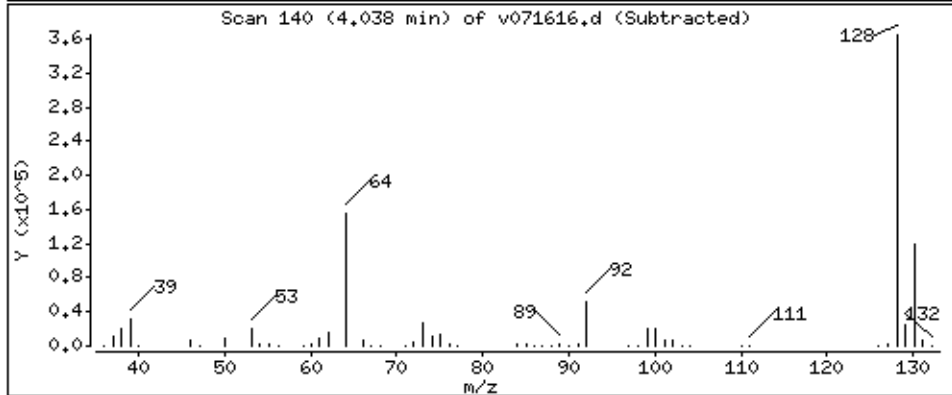
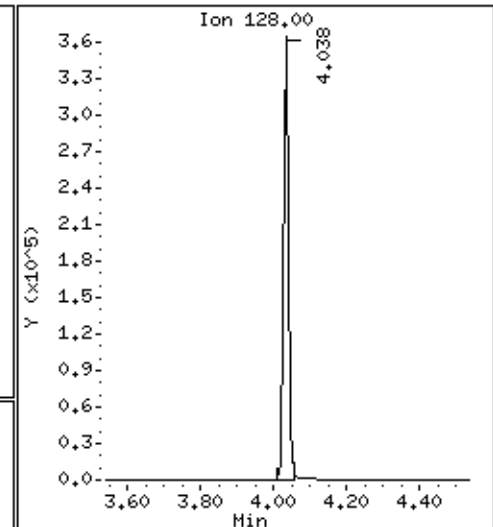
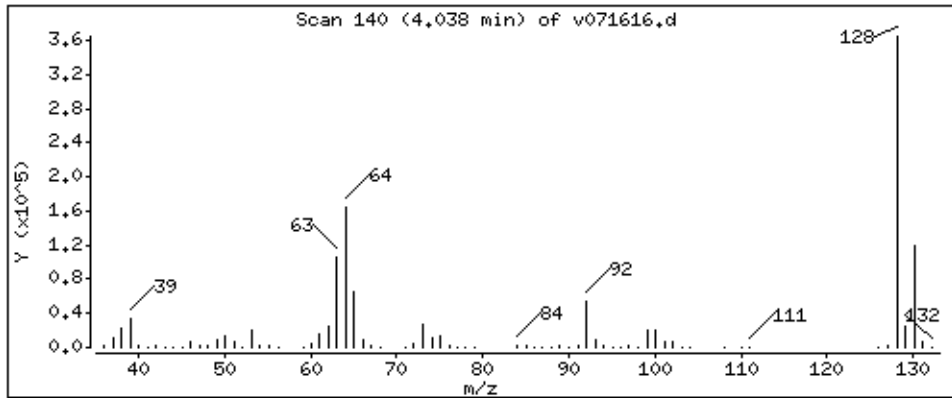
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

5 2-Chlorophenol

Concentration: 50.13 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

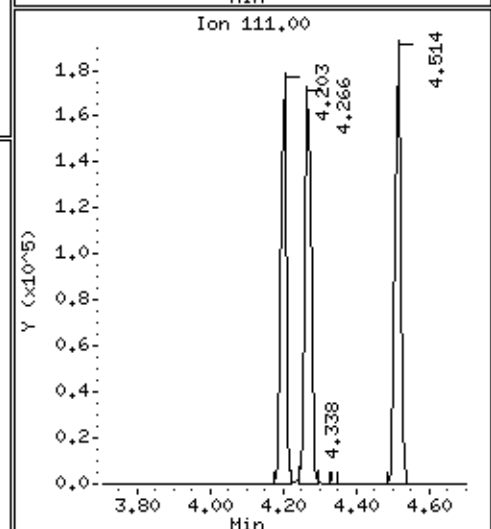
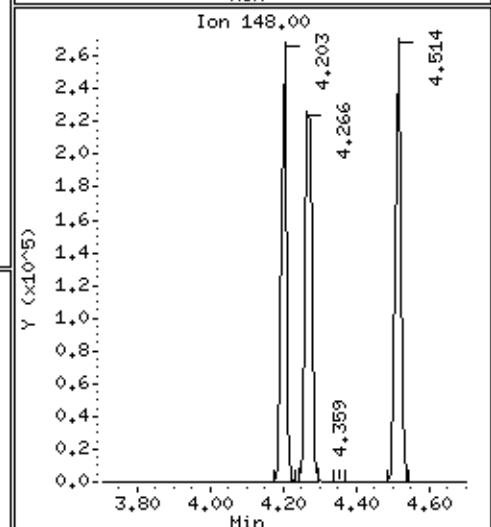
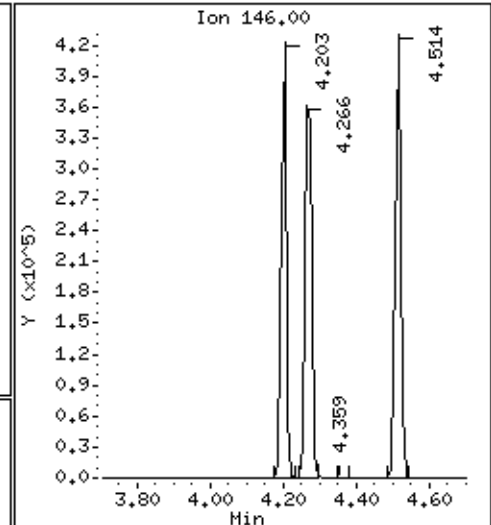
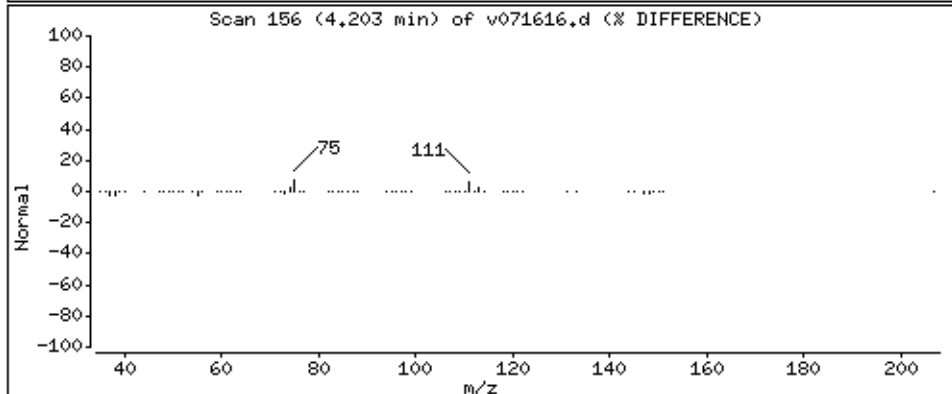
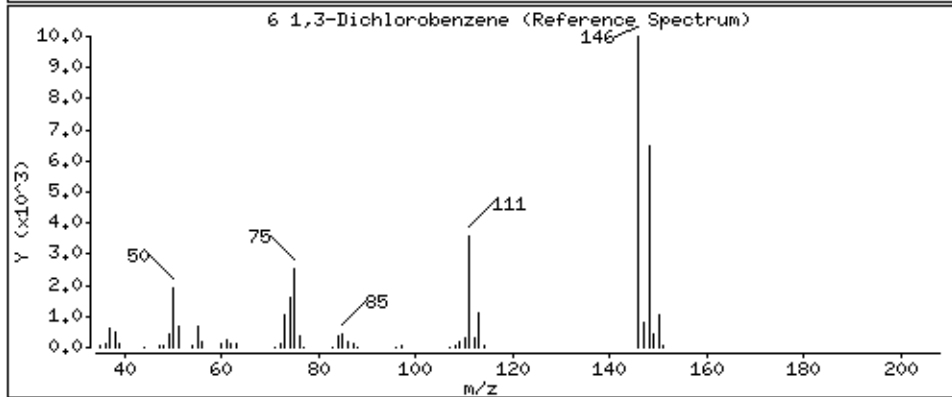
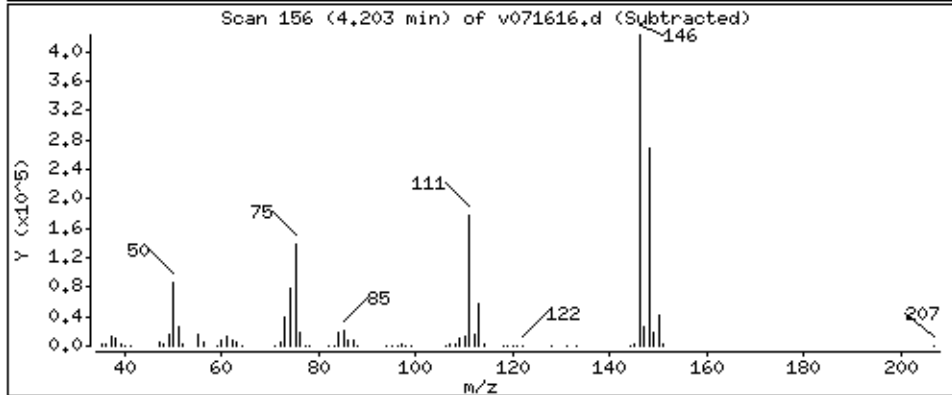
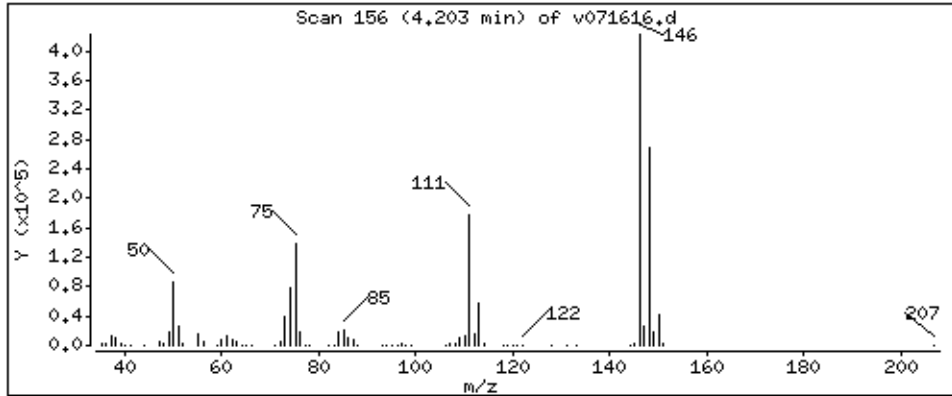
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

6 1,3-Dichlorobenzene

Concentration: 50.76 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

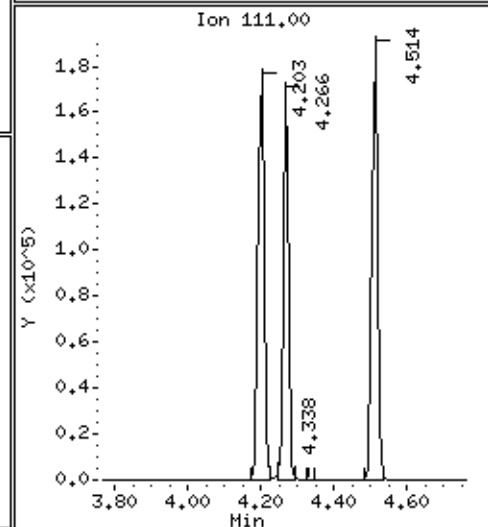
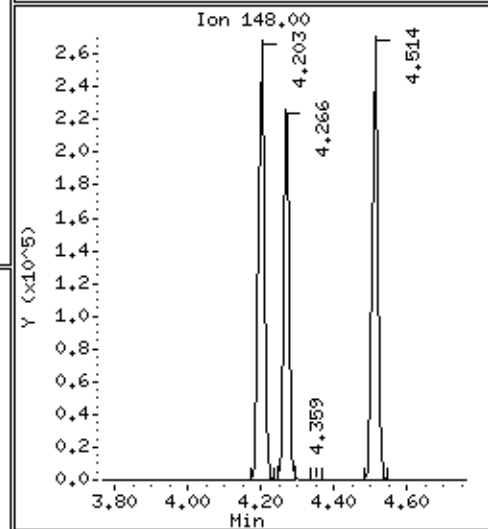
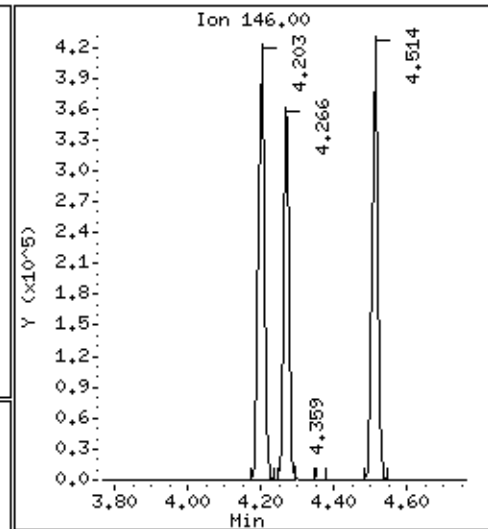
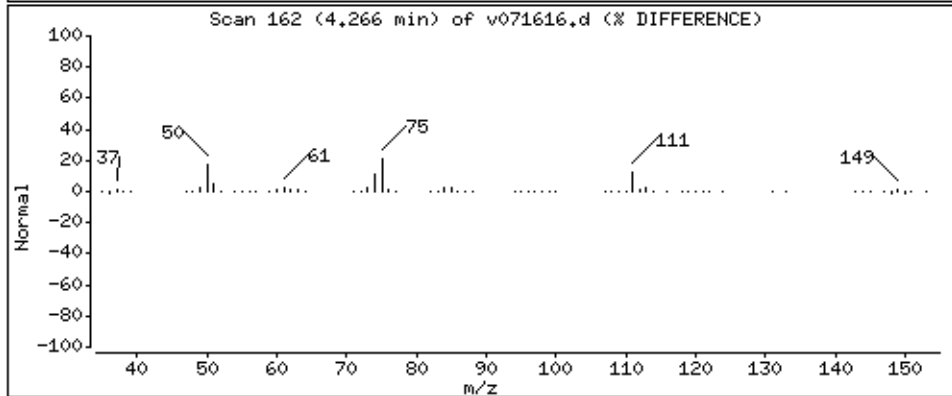
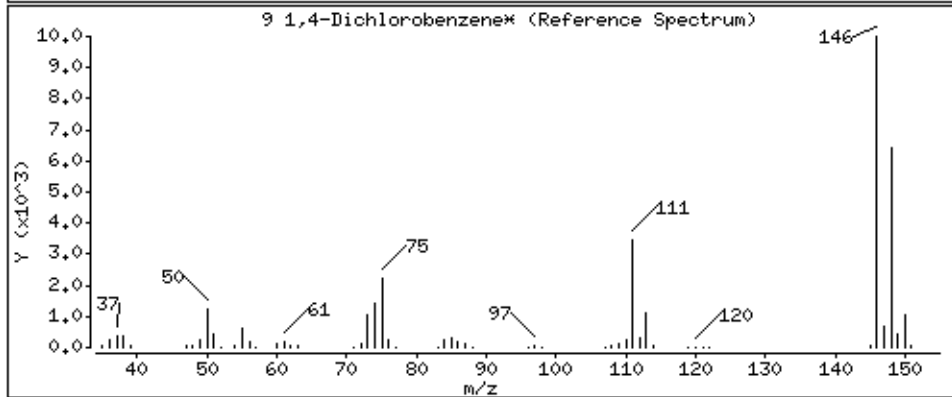
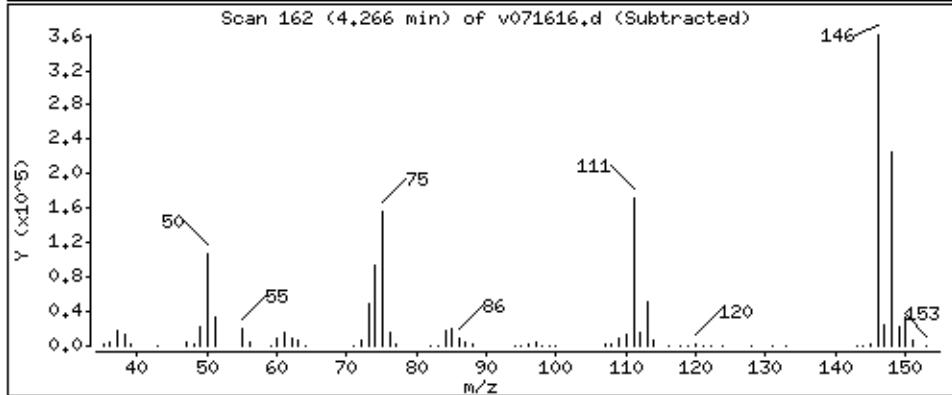
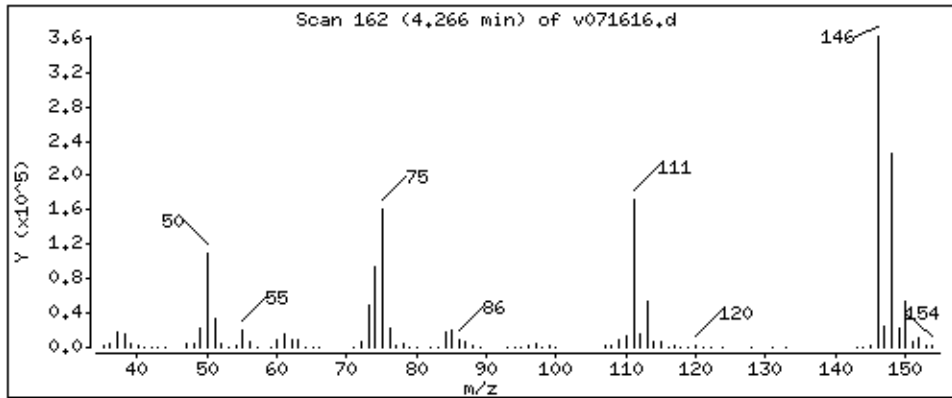
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

9 1,4-Dichlorobenzene\*

Concentration: 49.30 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

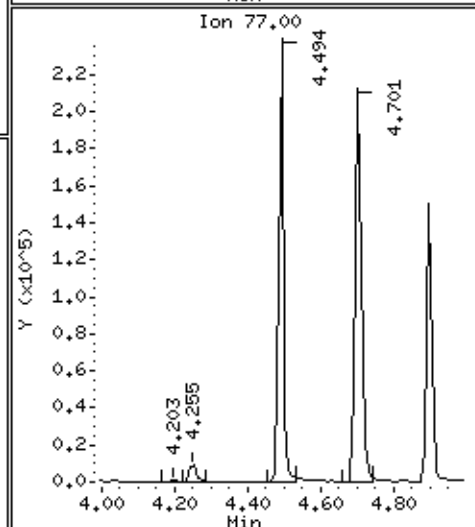
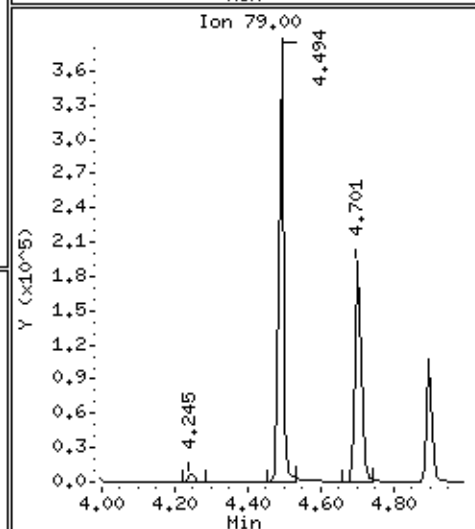
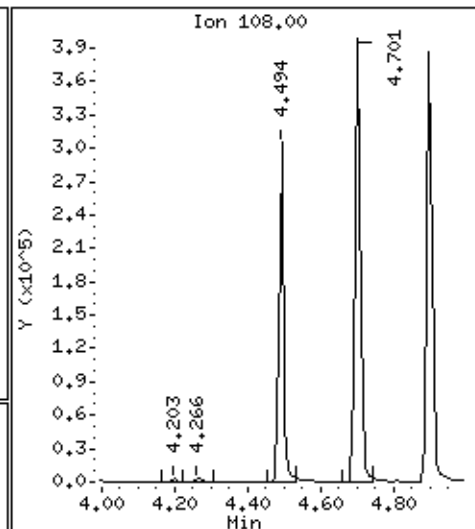
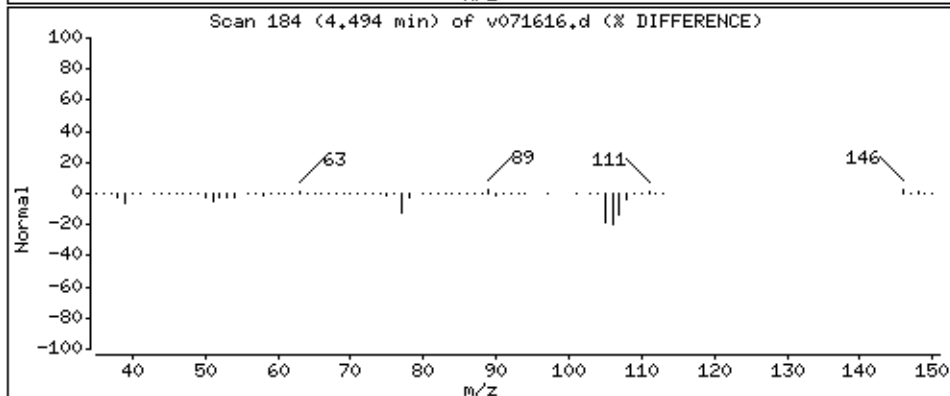
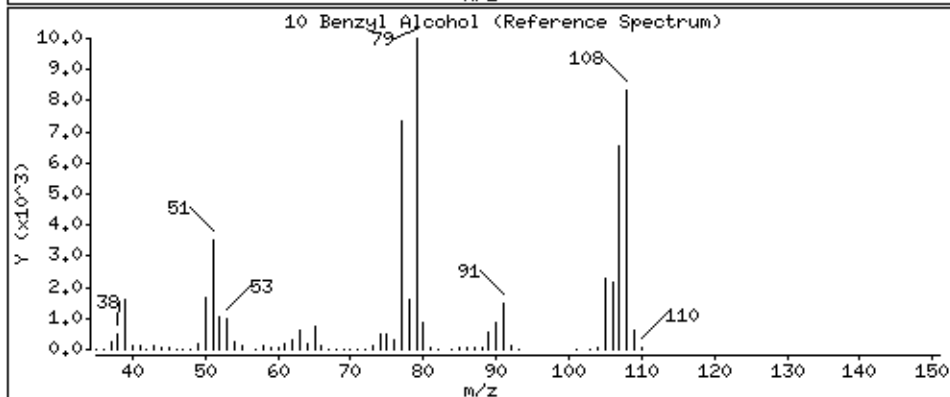
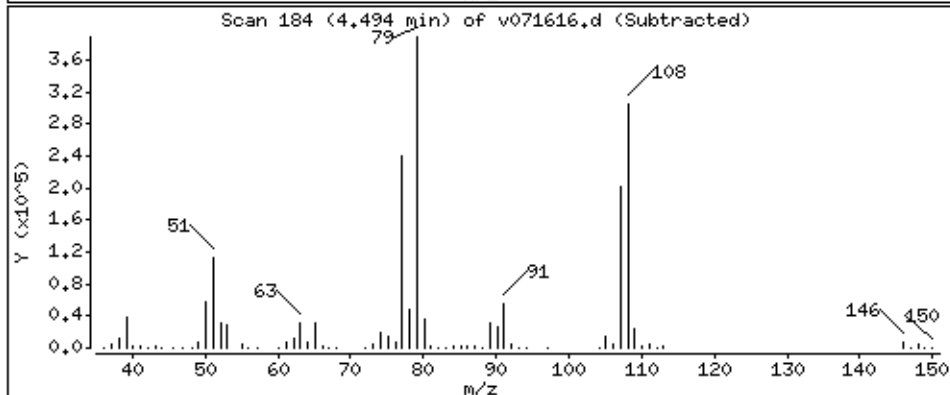
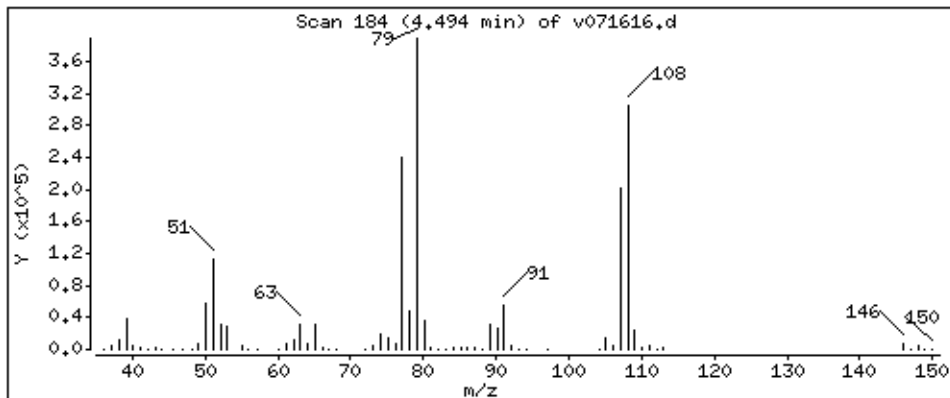
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

10 Benzyl Alcohol

Concentration: 55.11 ug





Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

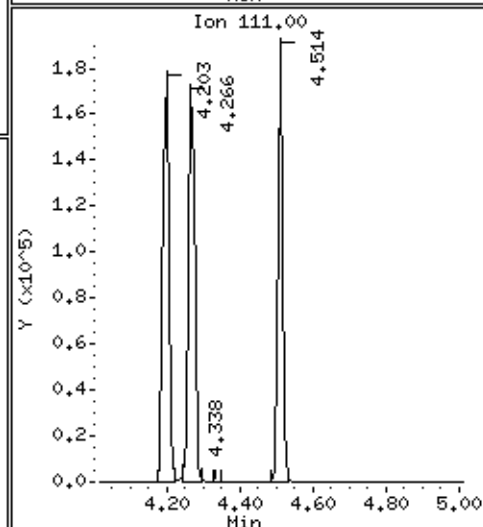
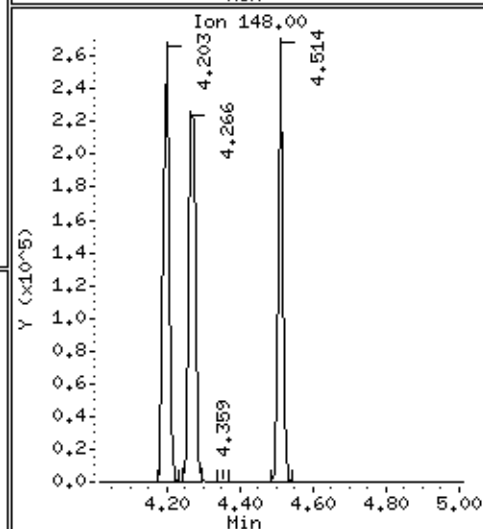
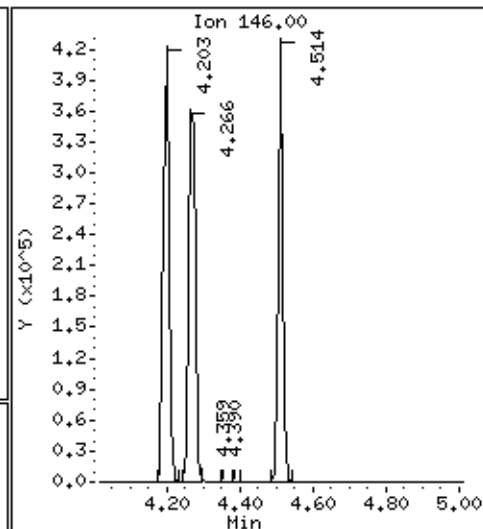
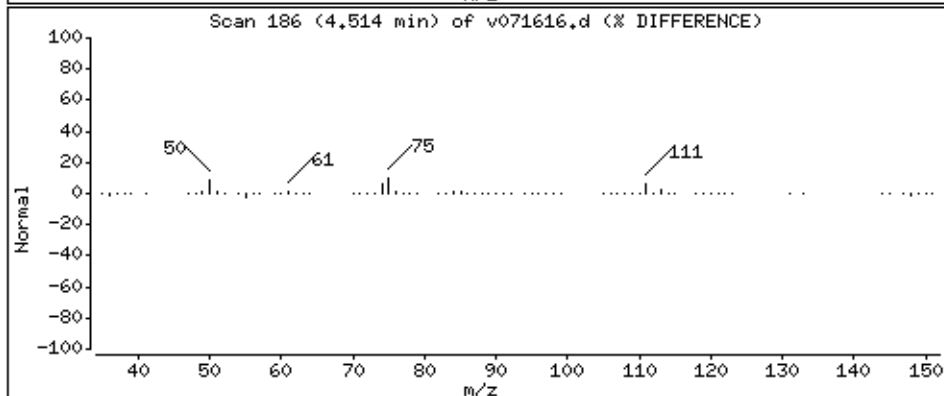
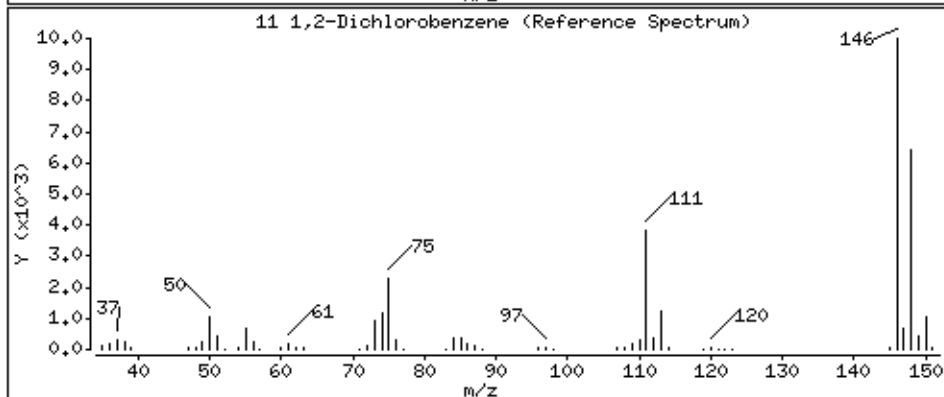
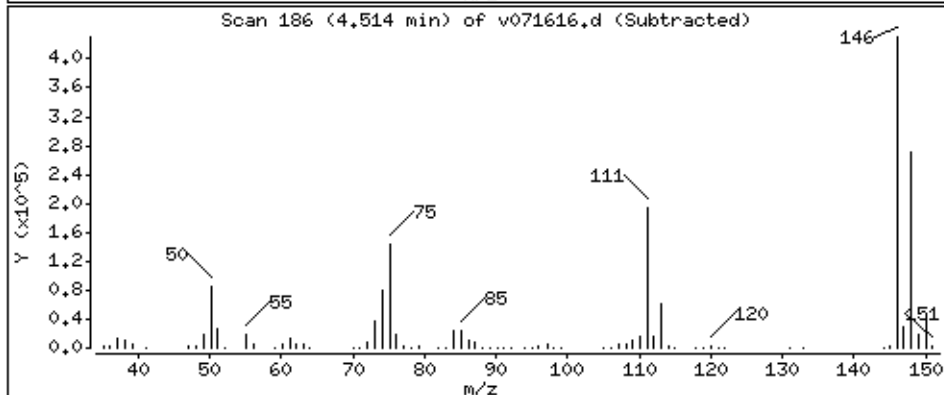
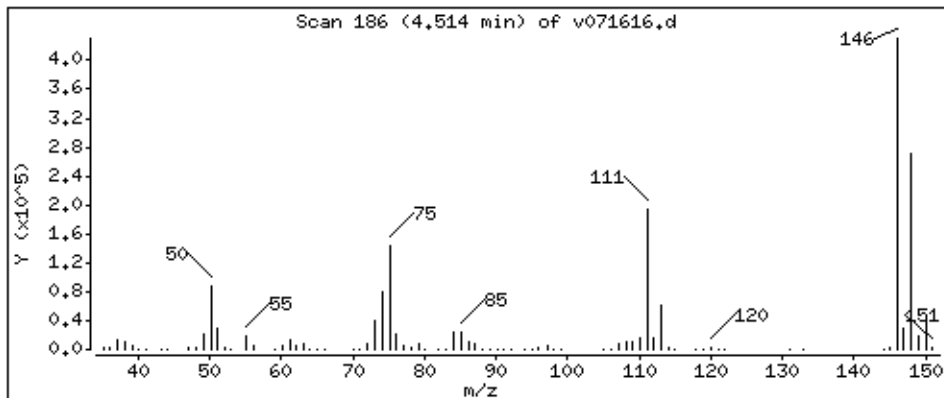
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

11 1,2-Dichlorobenzene

Concentration: 50.81 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

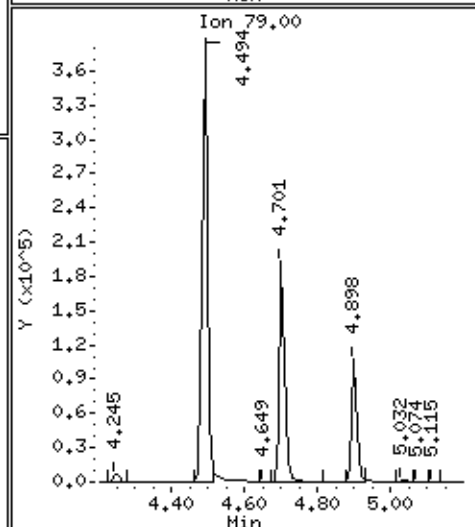
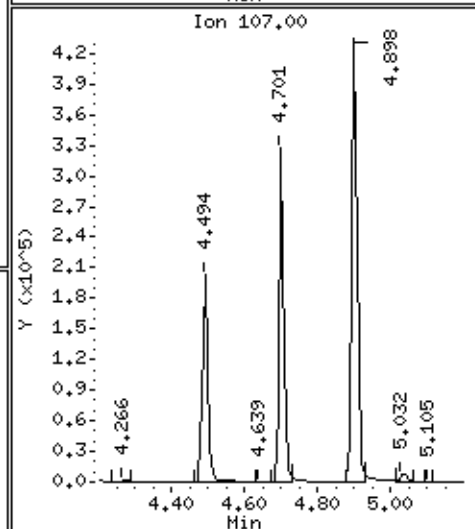
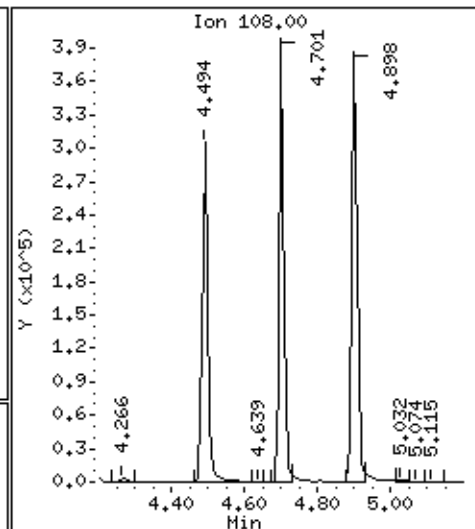
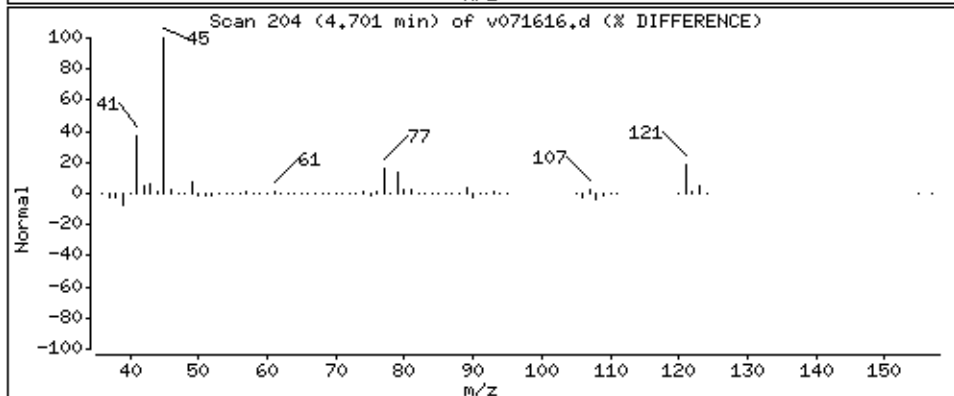
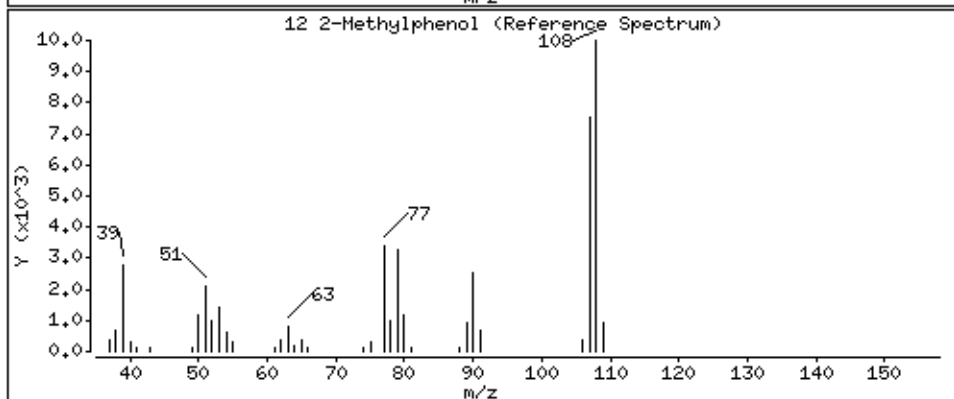
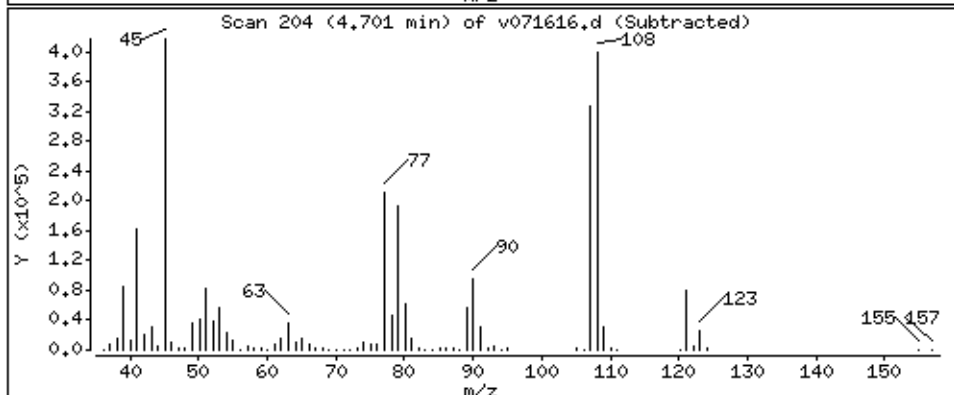
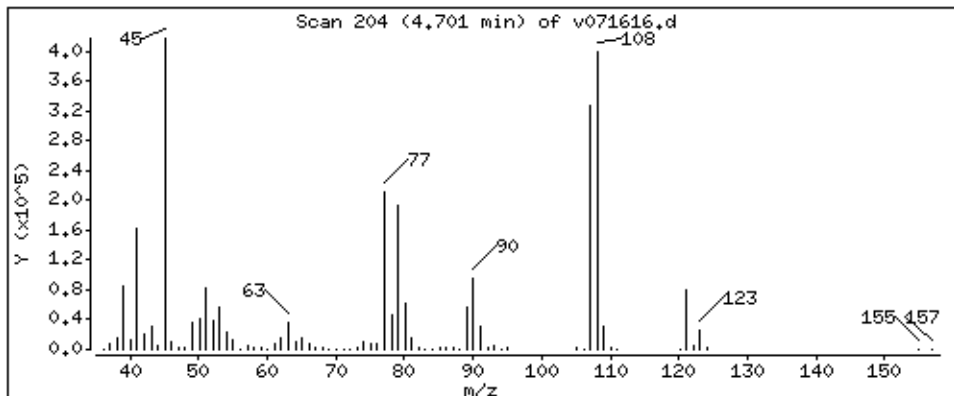
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

12 2-Methylphenol

Concentration: 50.59 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

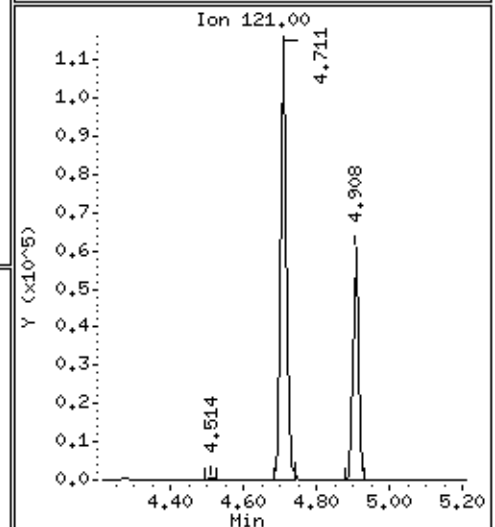
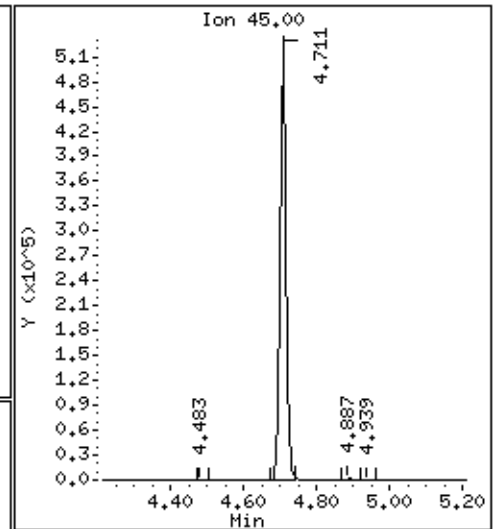
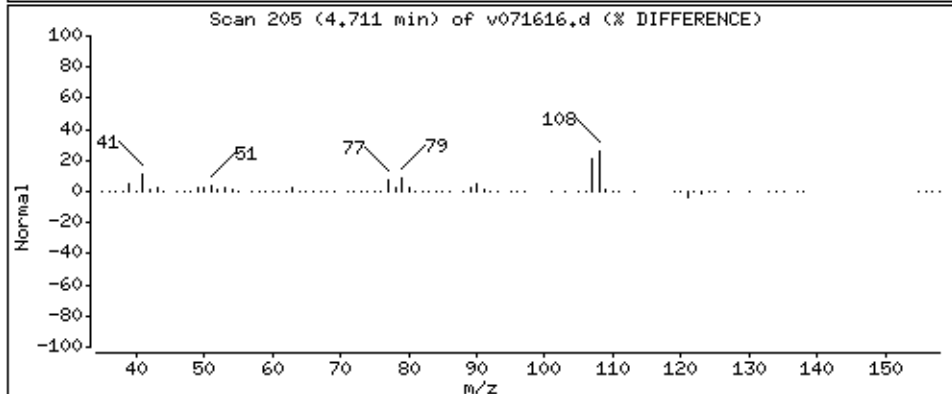
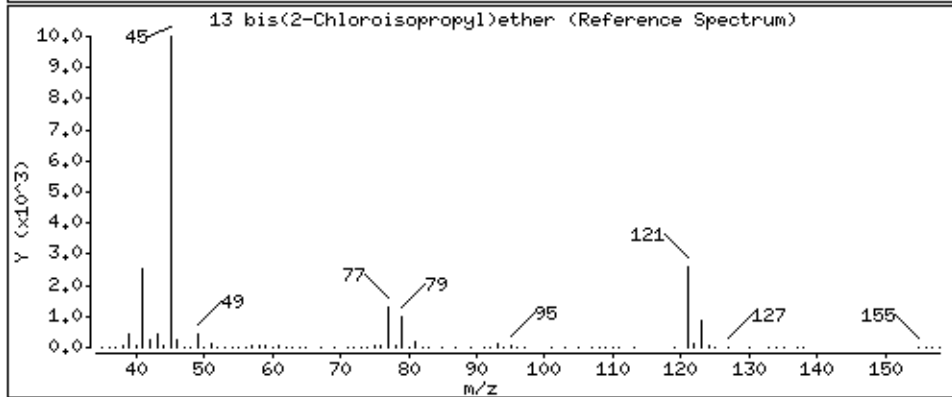
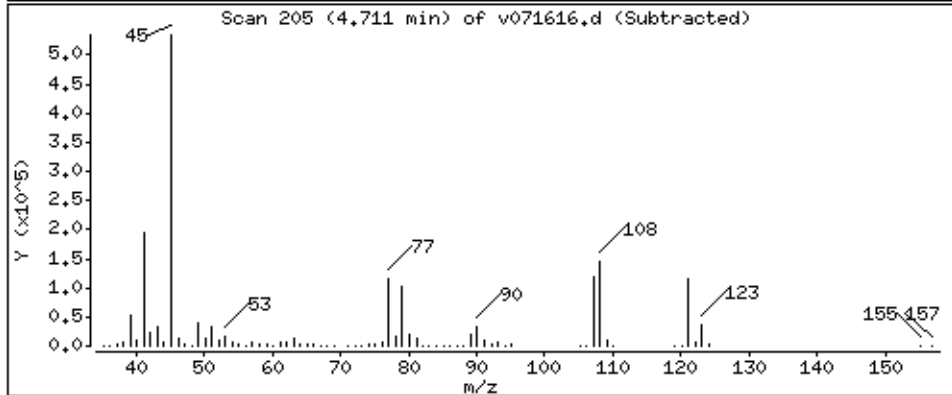
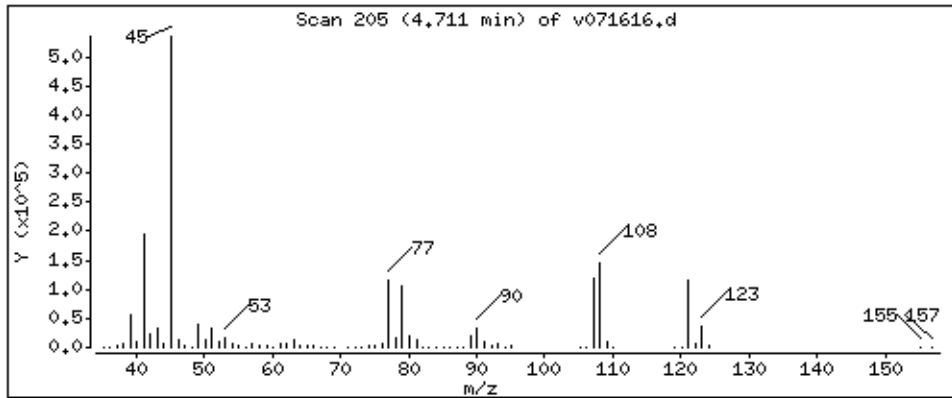
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

13 bis(2-Chloroisopropyl)ether

Concentration: 45.76 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

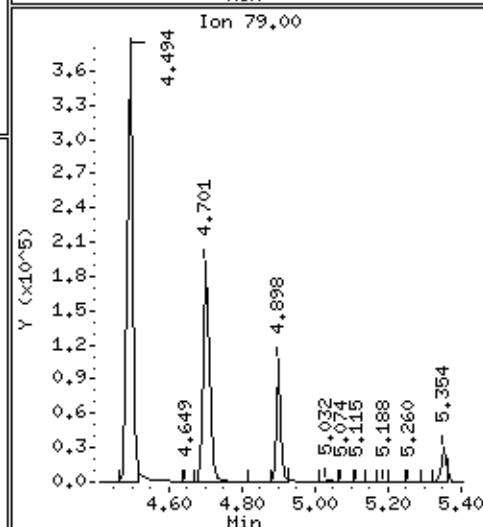
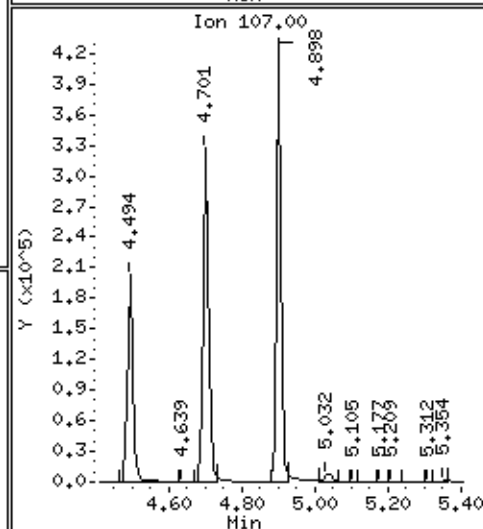
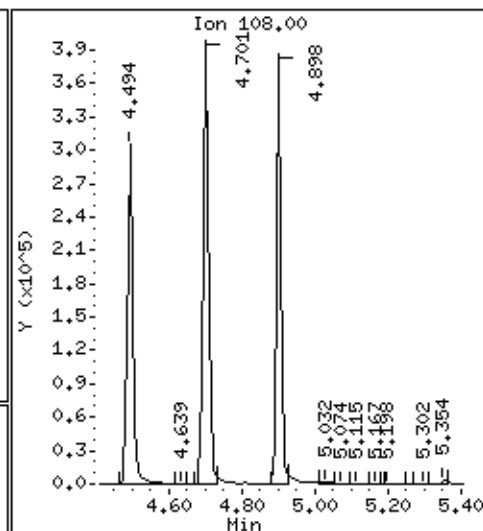
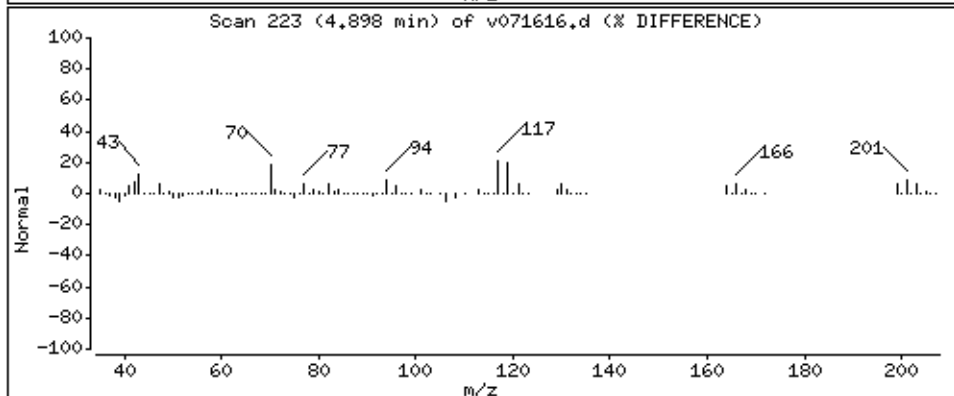
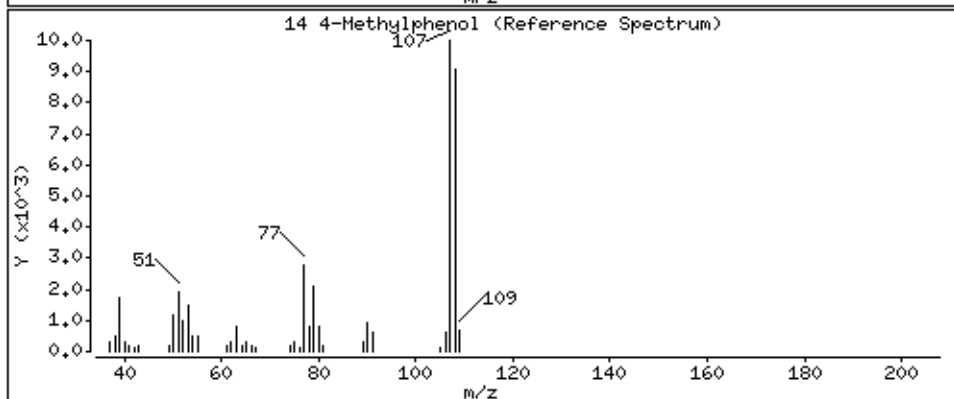
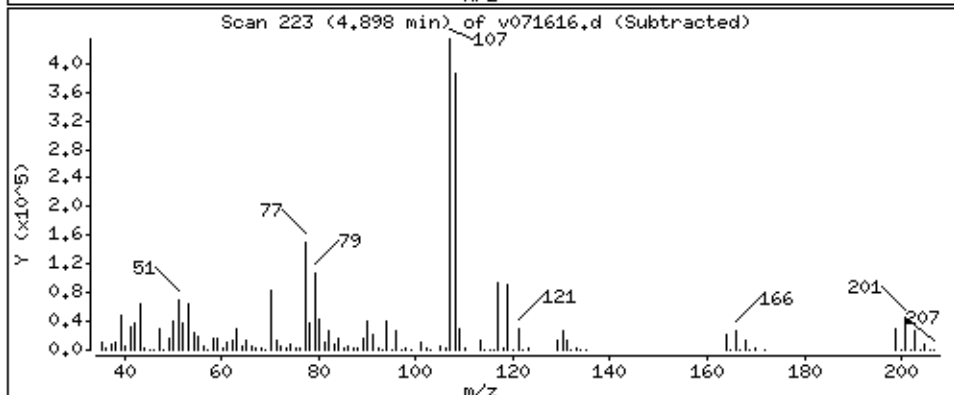
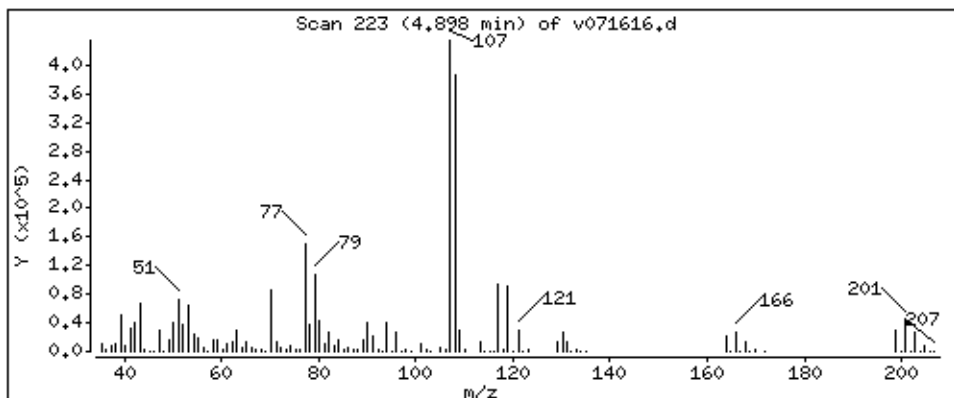
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

14 4-Methylphenol

Concentration: 48.94 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

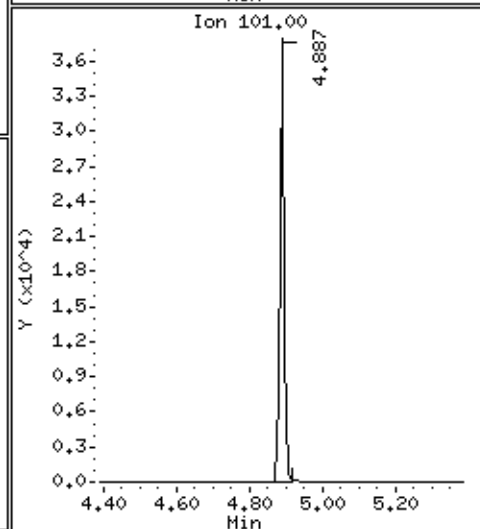
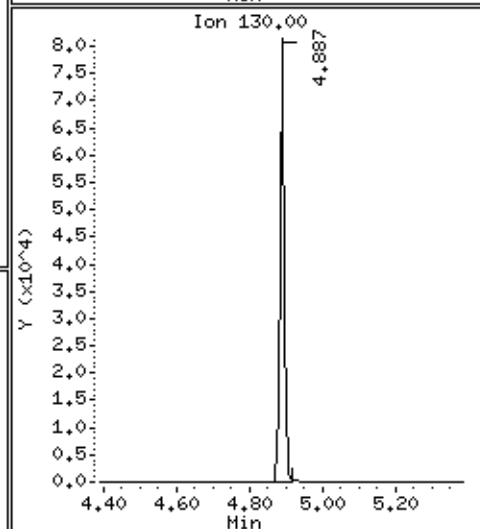
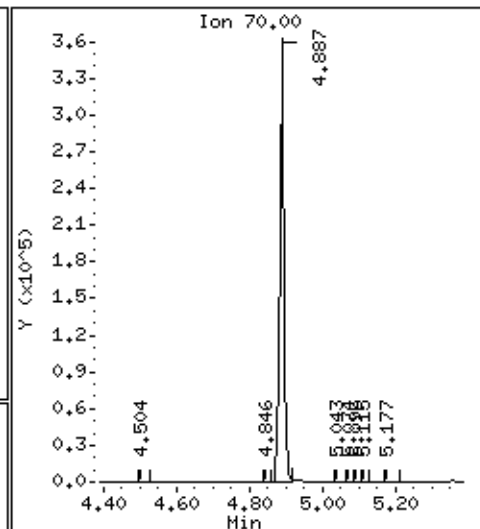
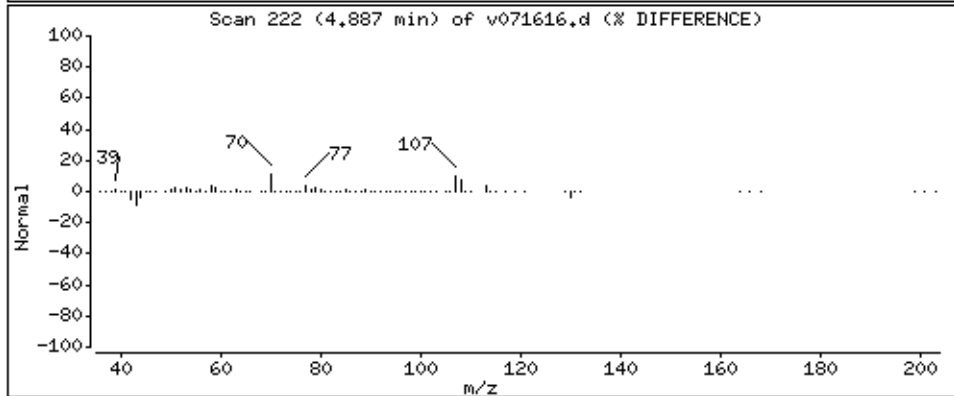
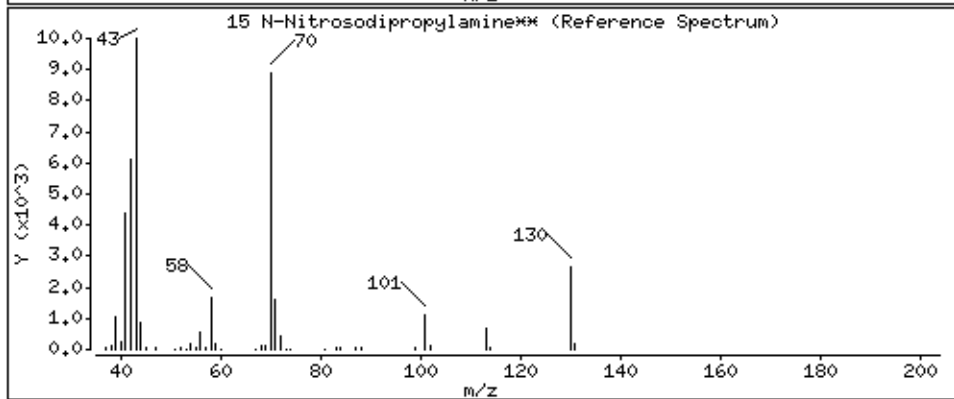
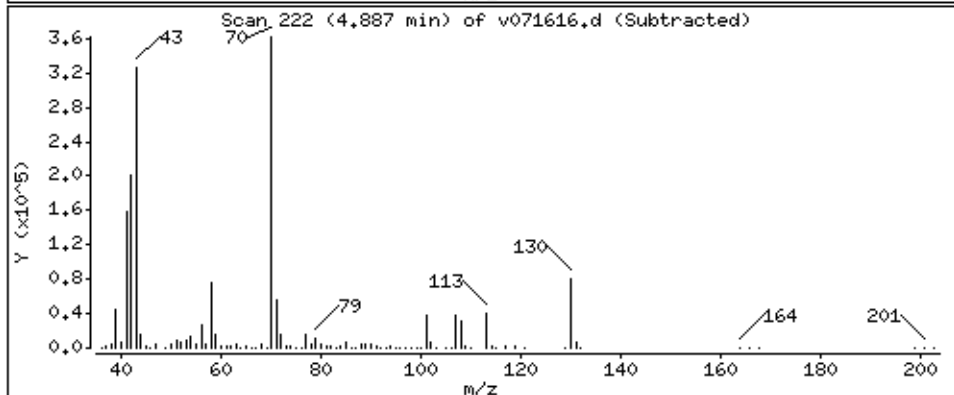
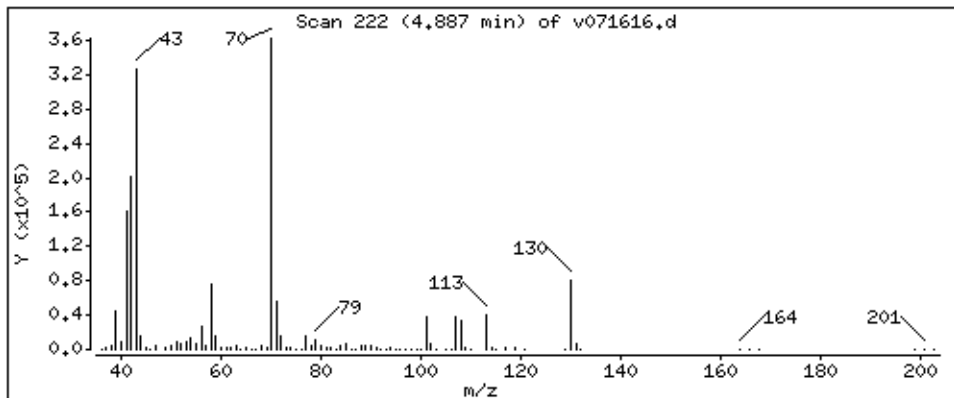
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

15 N-Nitrosodipropylamine\*\*

Concentration: 51.23 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

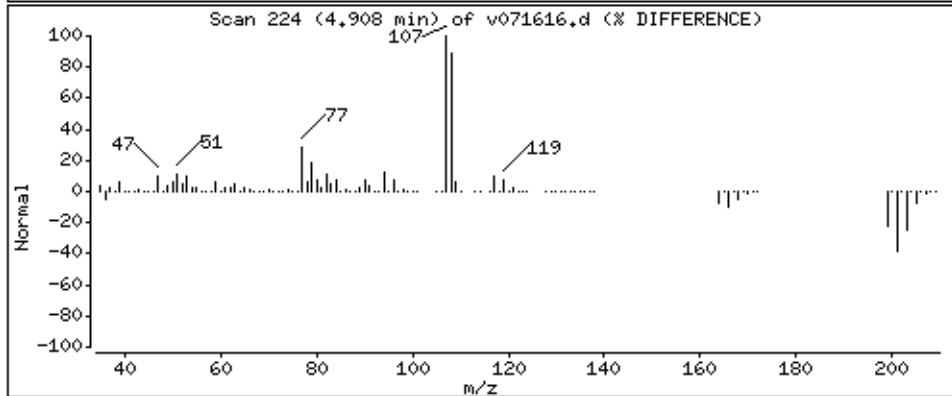
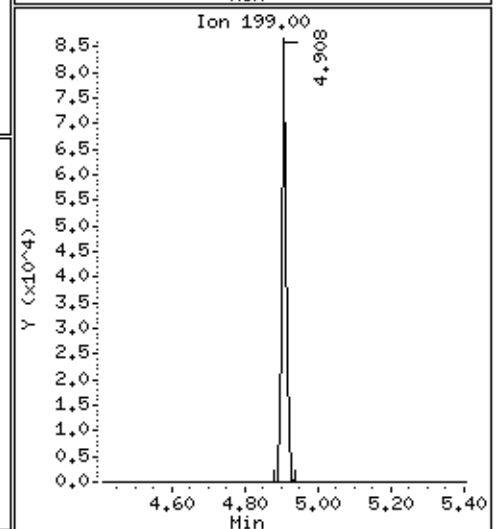
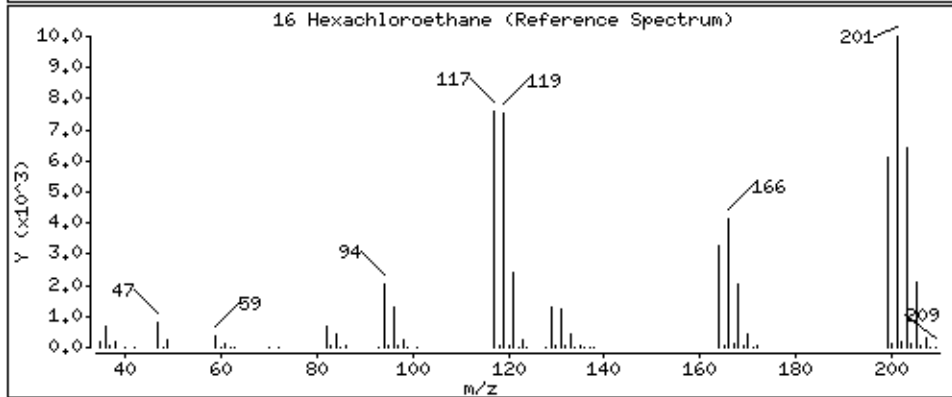
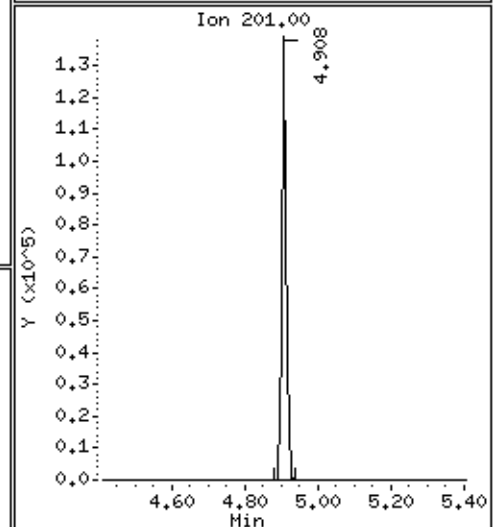
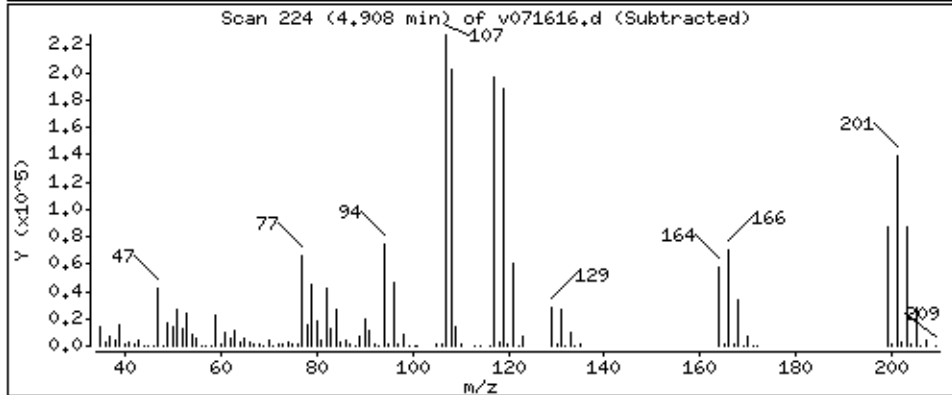
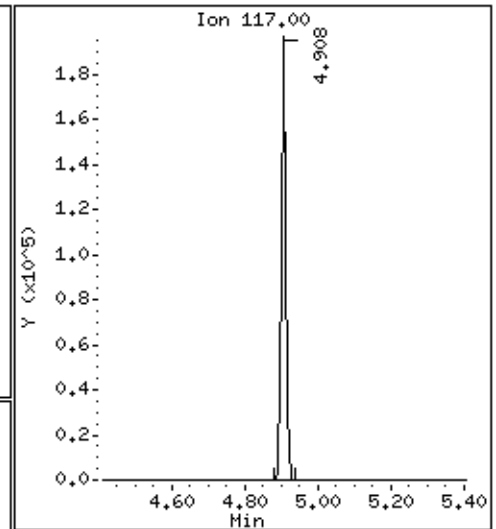
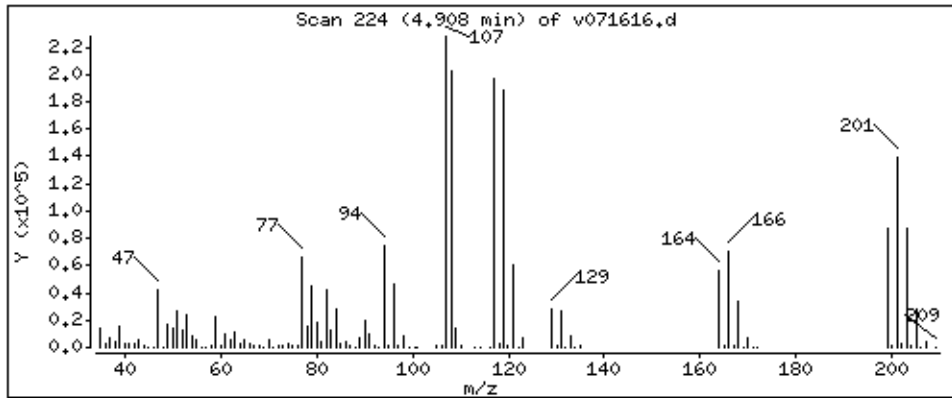
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

16 Hexachloroethane

Concentration: 51.07 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

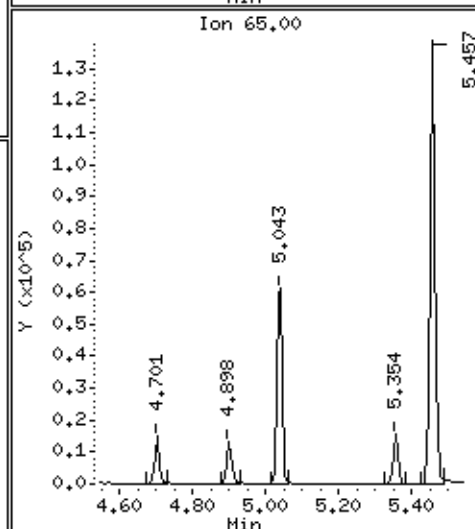
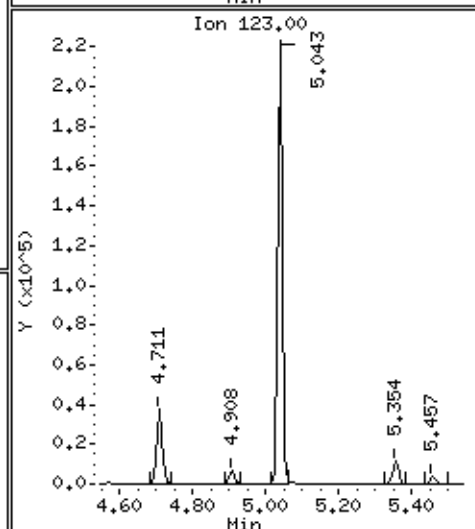
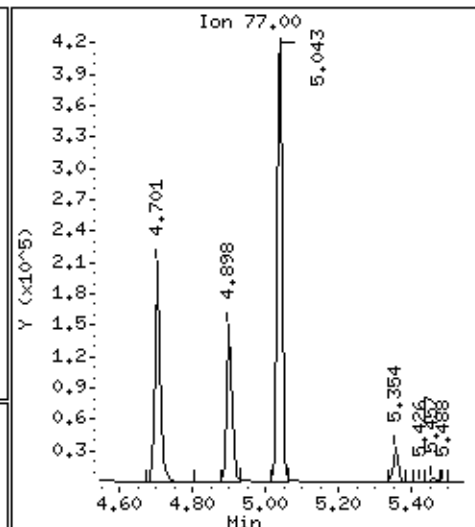
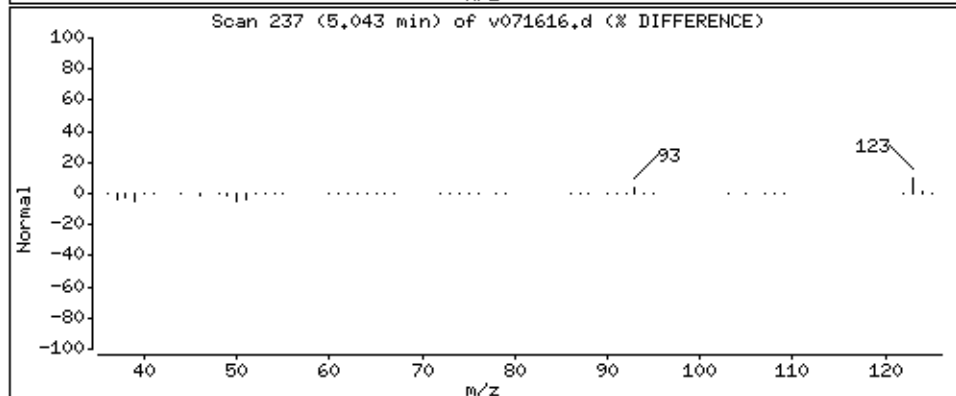
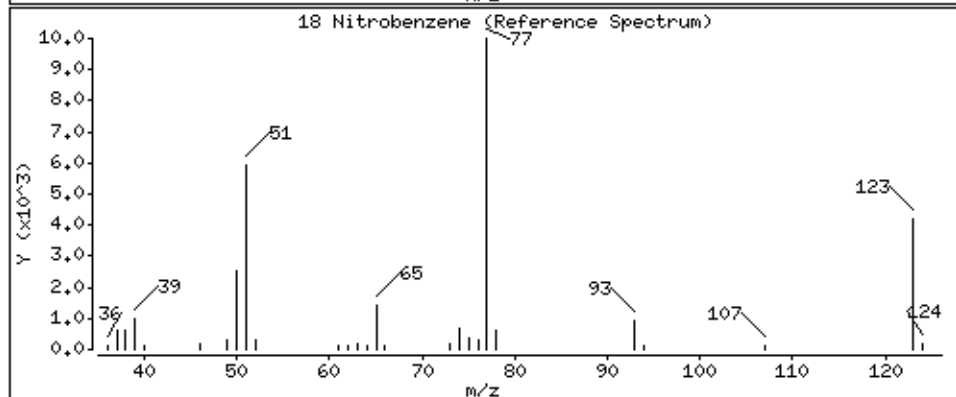
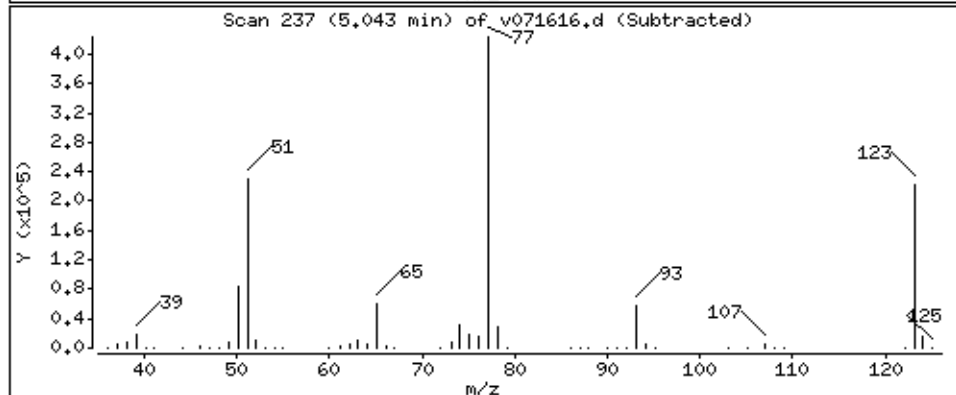
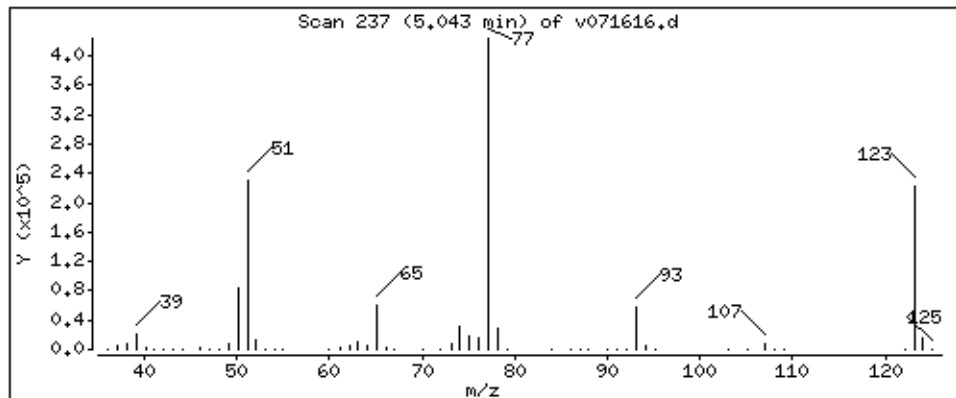
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

18 Nitrobenzene

Concentration: 53.70 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

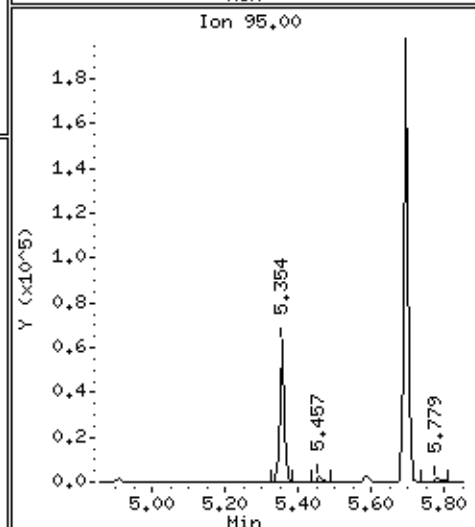
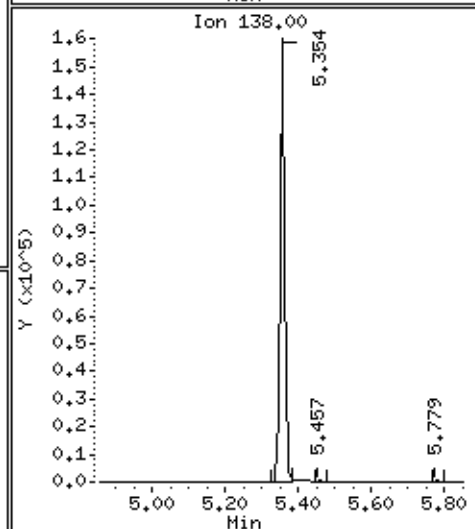
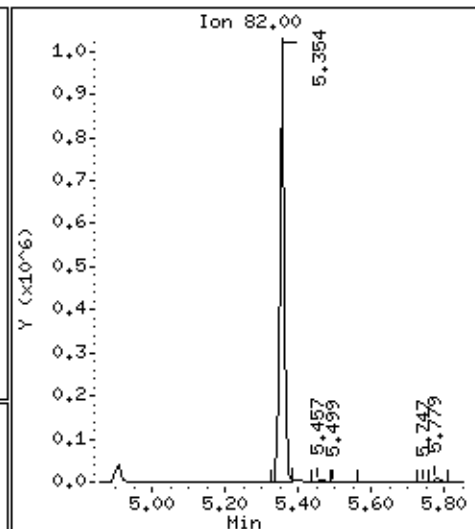
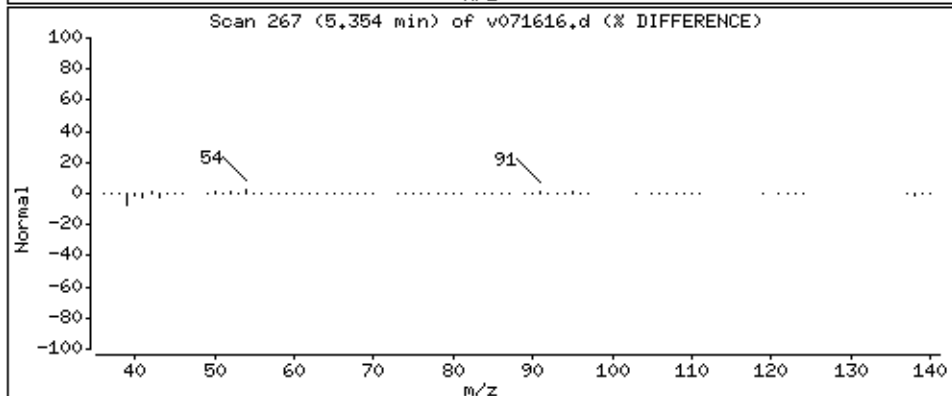
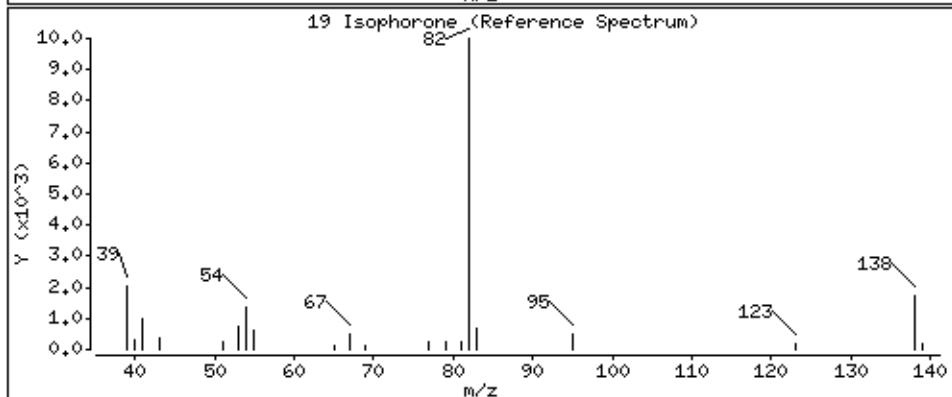
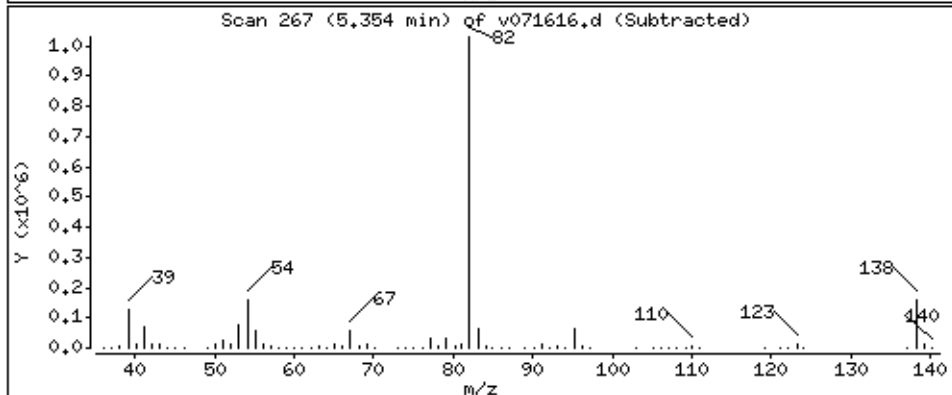
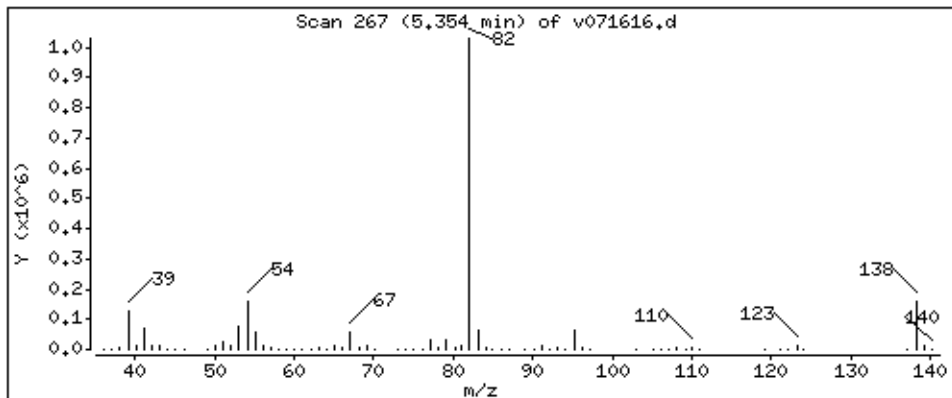
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

19 Isophorone

Concentration: 54.50 ug





Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

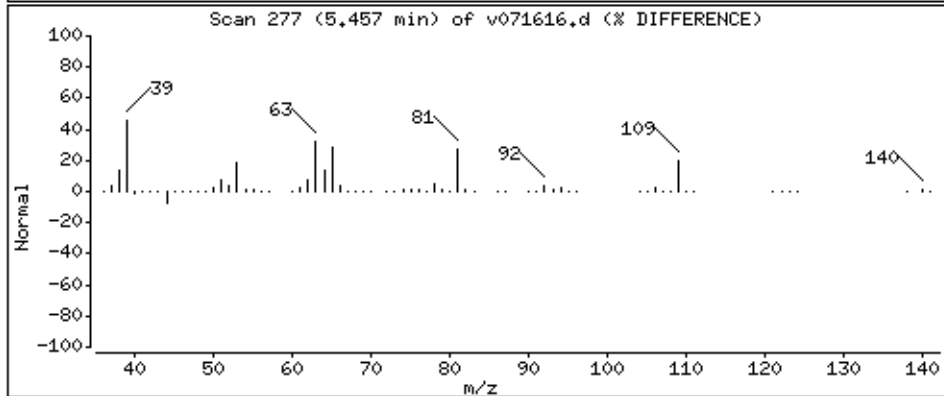
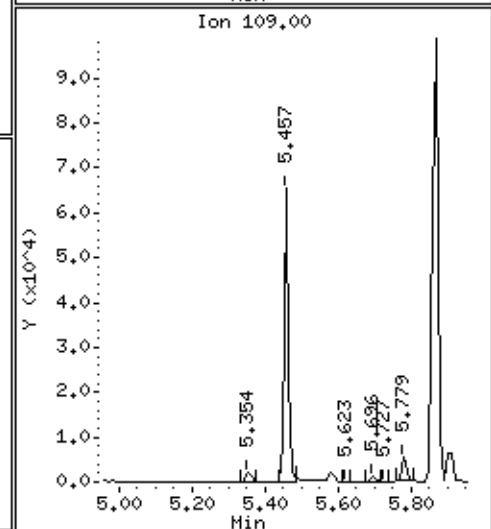
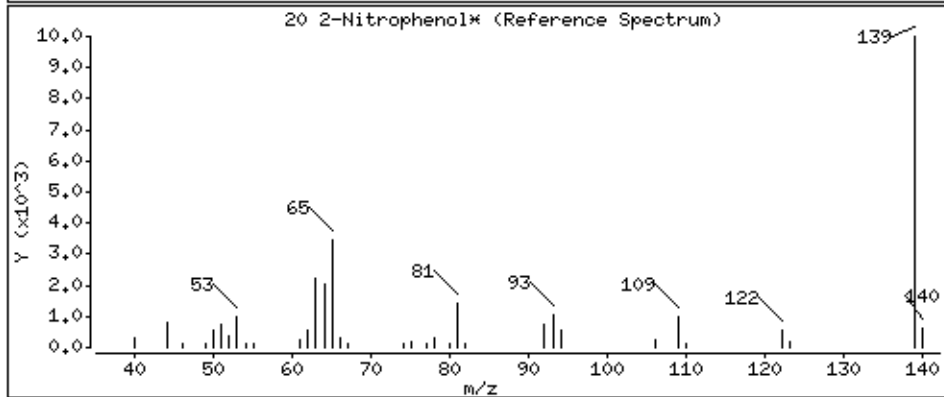
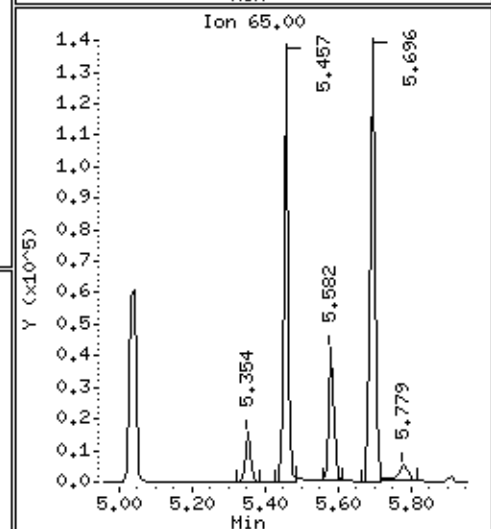
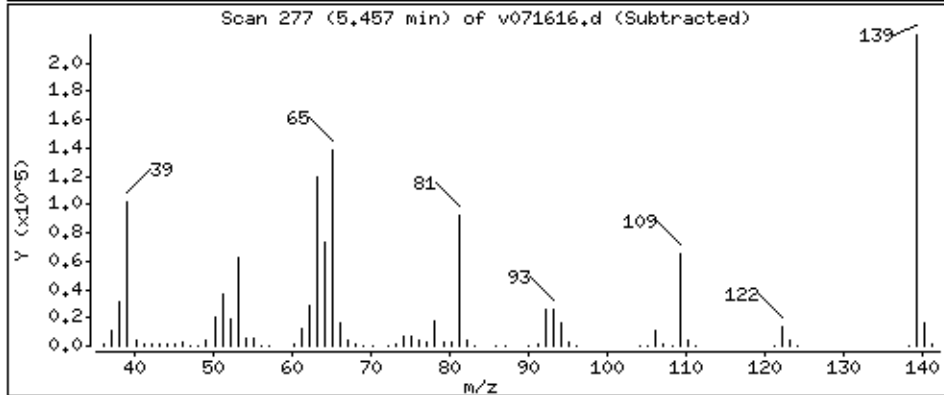
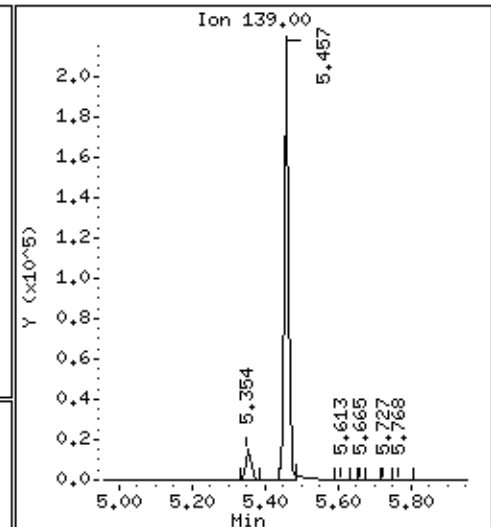
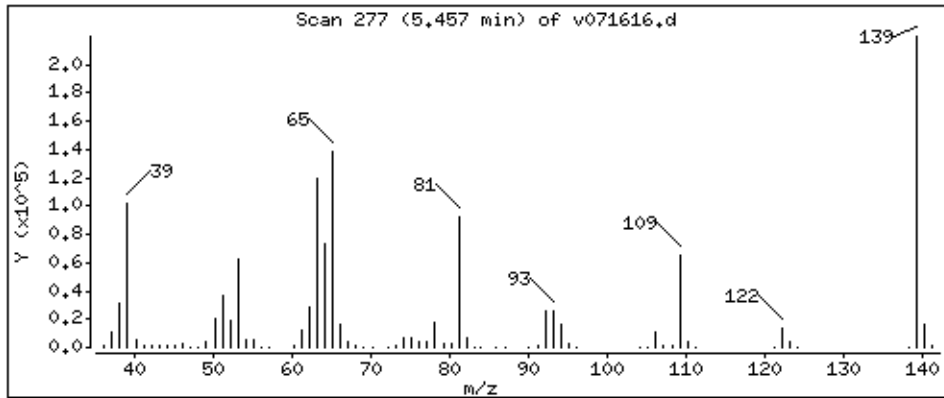
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

20 2-Nitrophenol\*

Concentration: 53.63 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

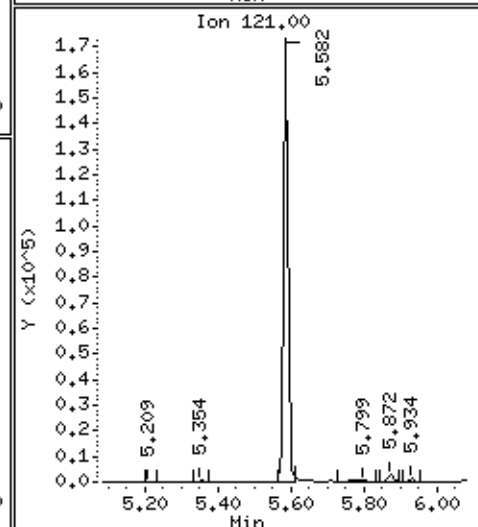
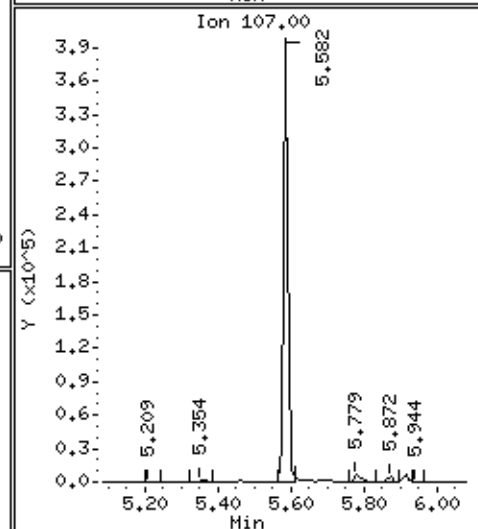
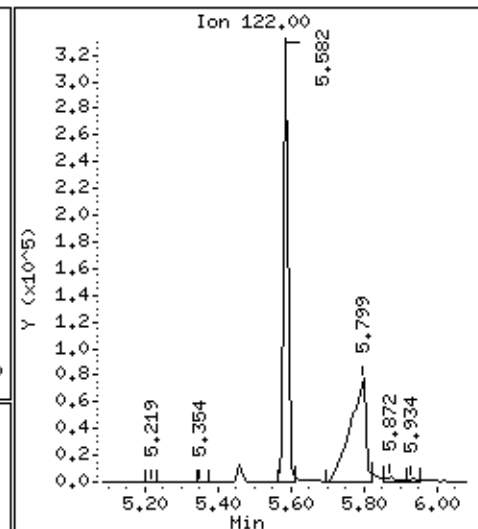
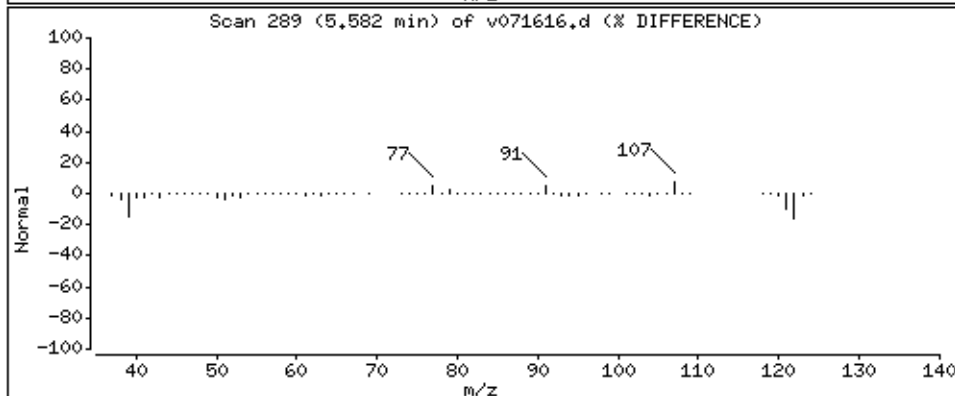
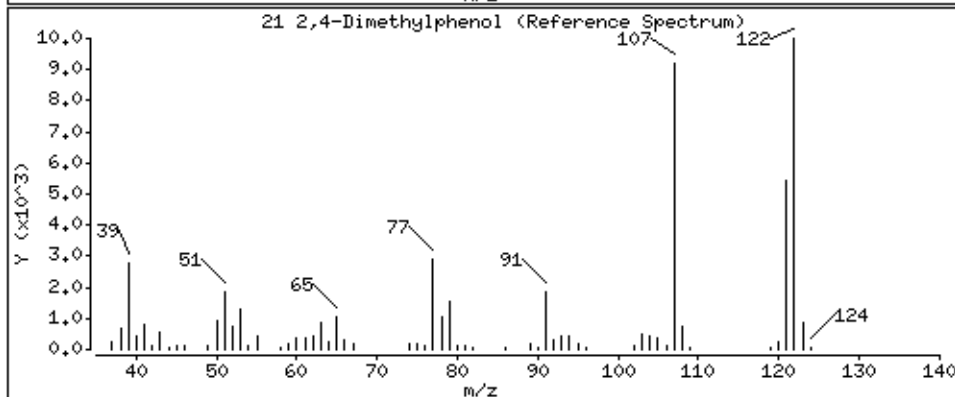
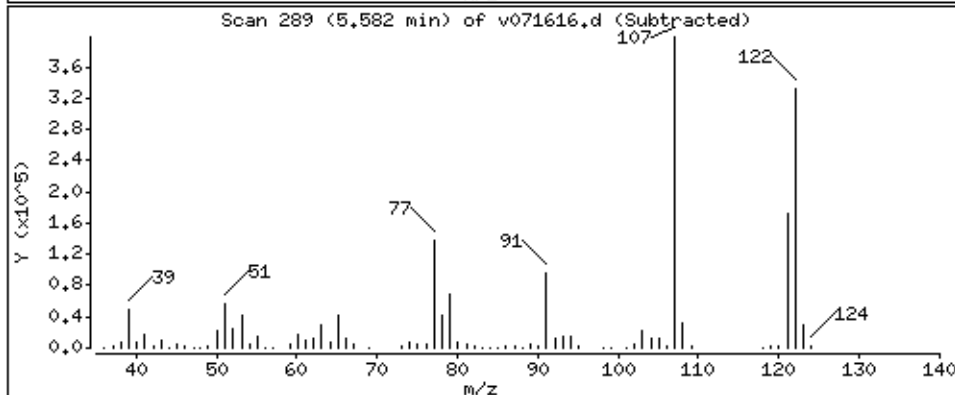
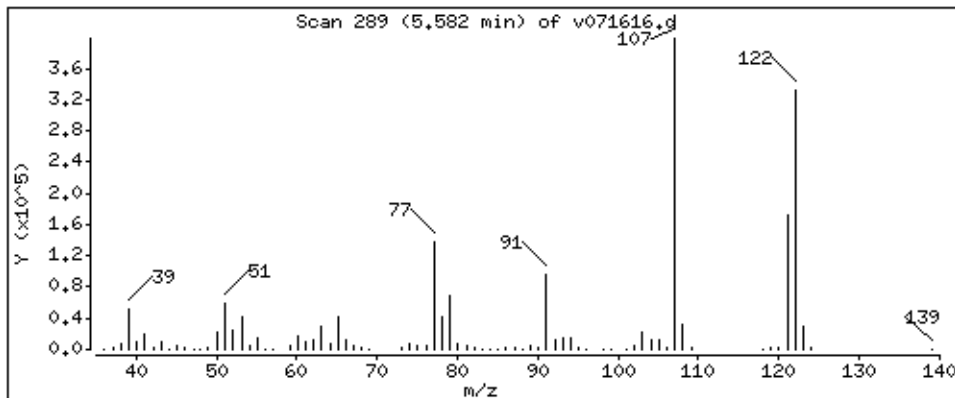
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

21 2,4-Dimethylphenol

Concentration: 48.22 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

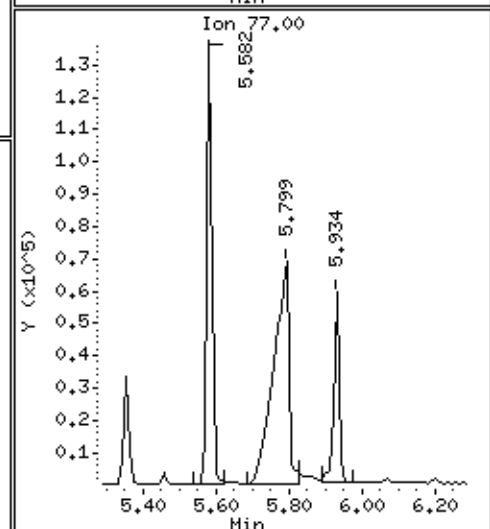
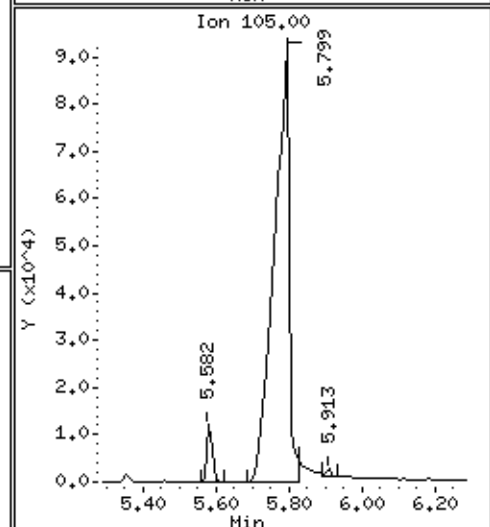
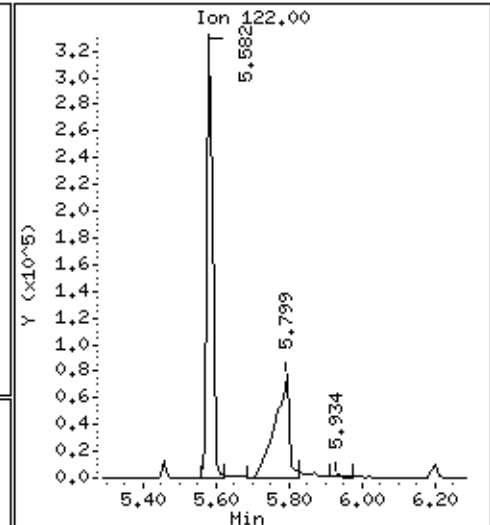
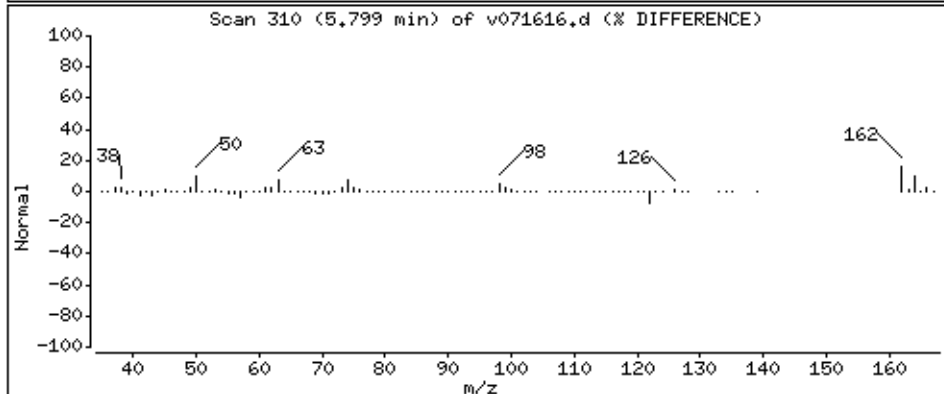
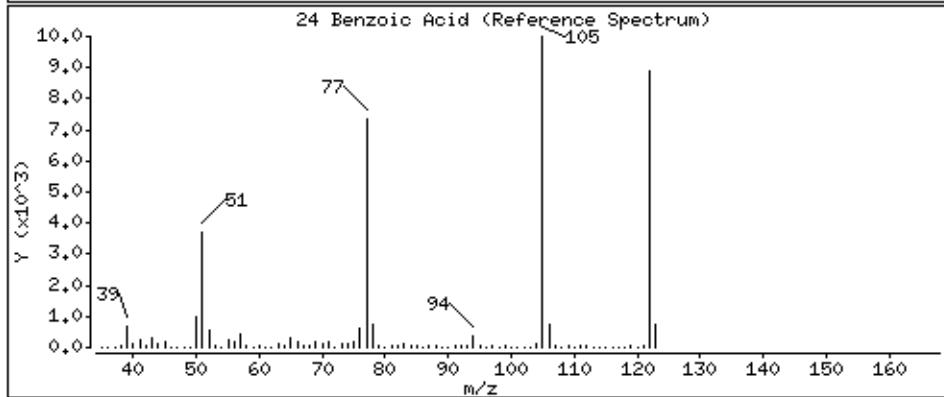
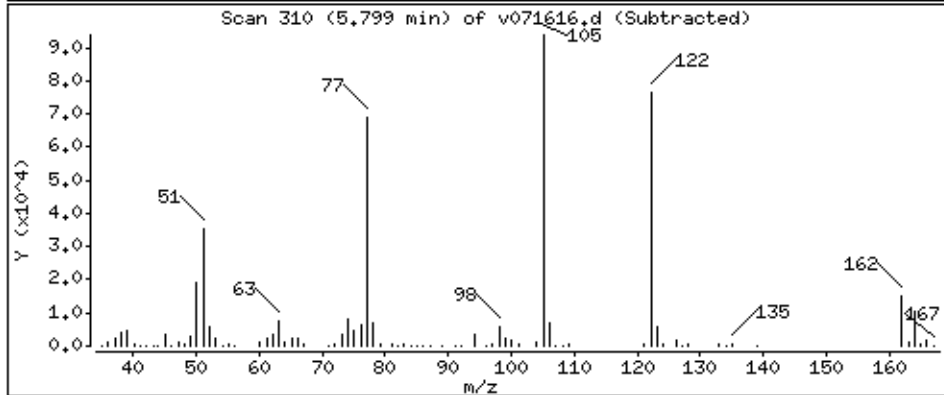
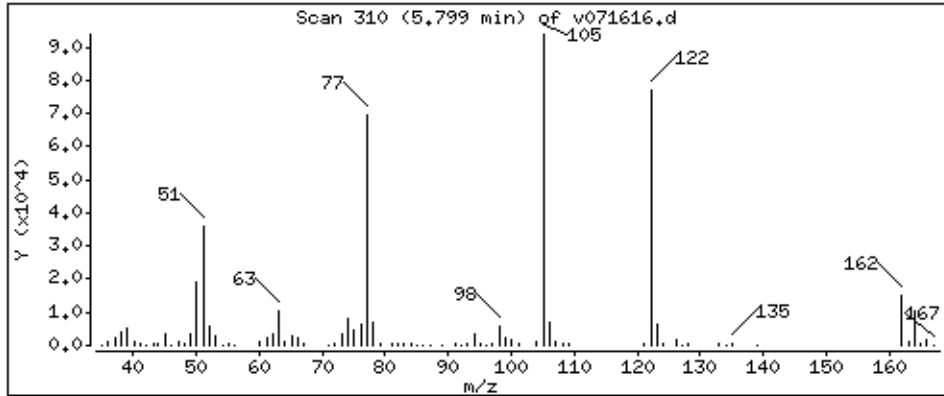
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

24 Benzoic Acid

Concentration: 57.00 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

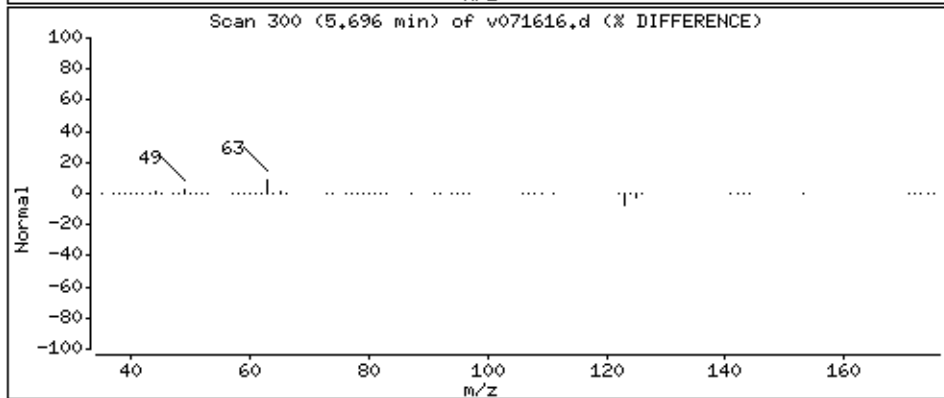
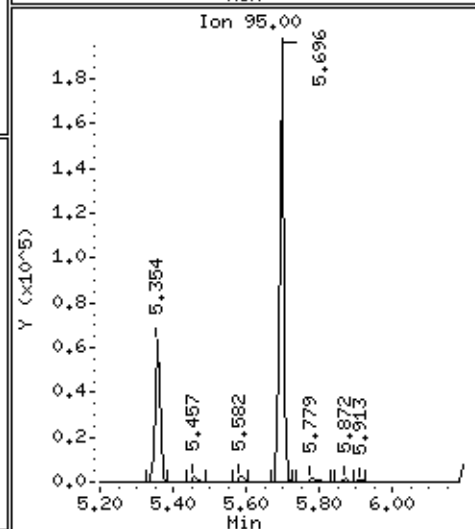
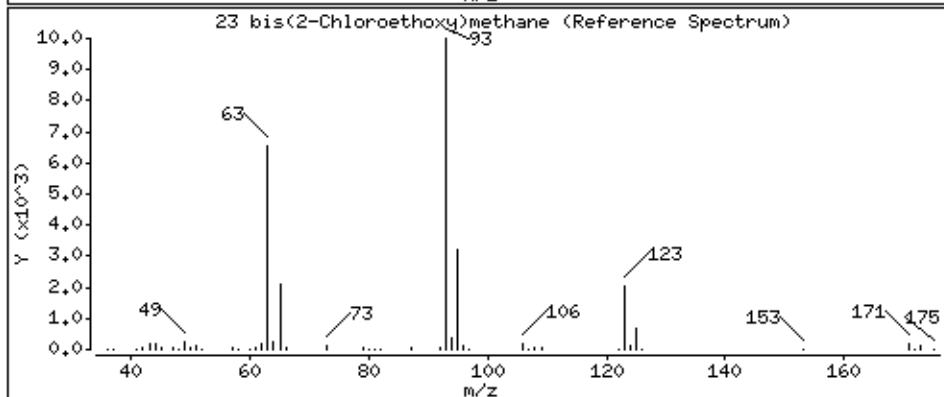
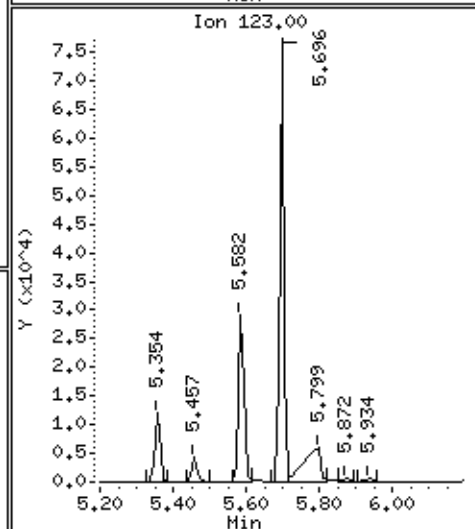
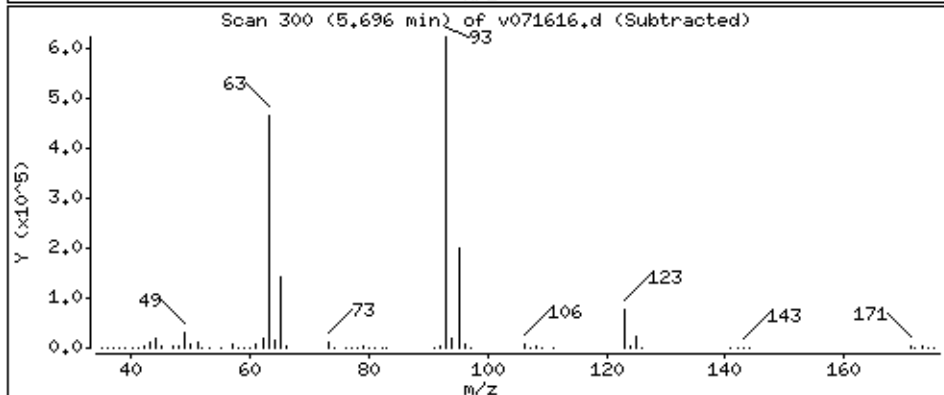
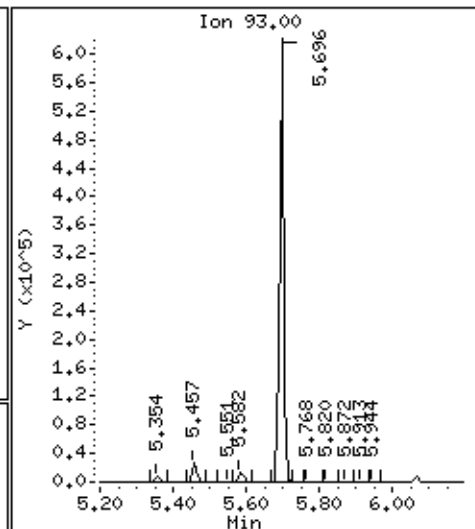
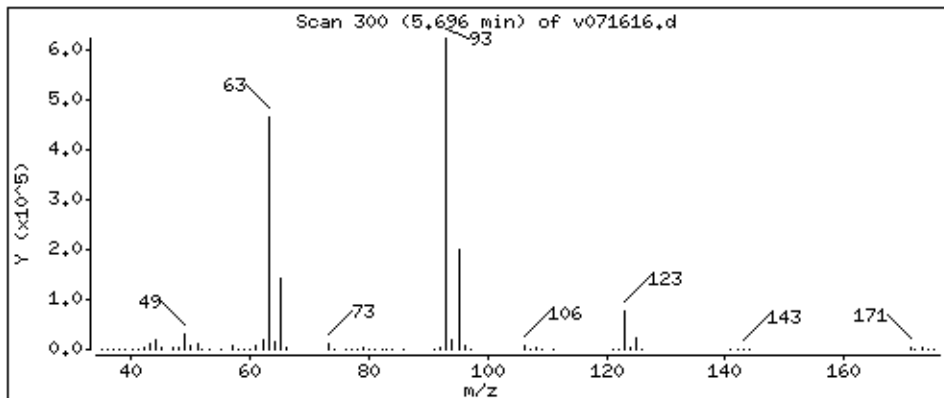
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

23 bis(2-Chloroethoxy)methane

Concentration: 49.18 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

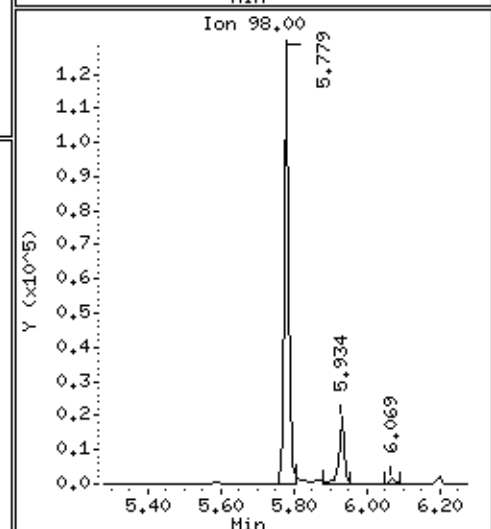
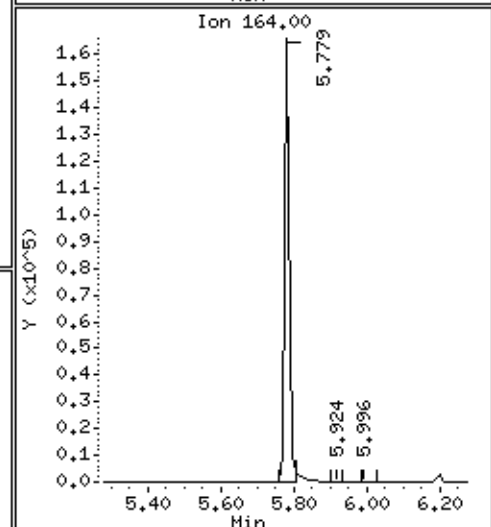
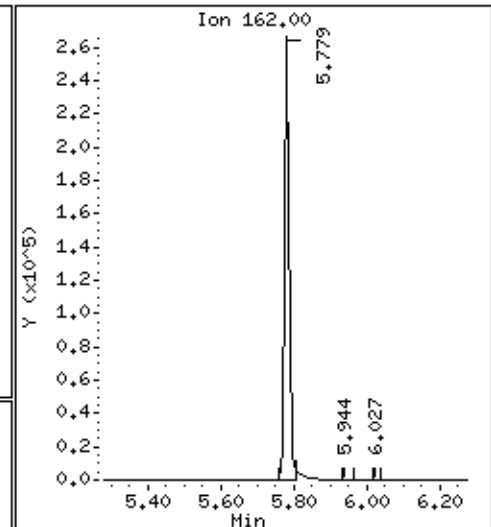
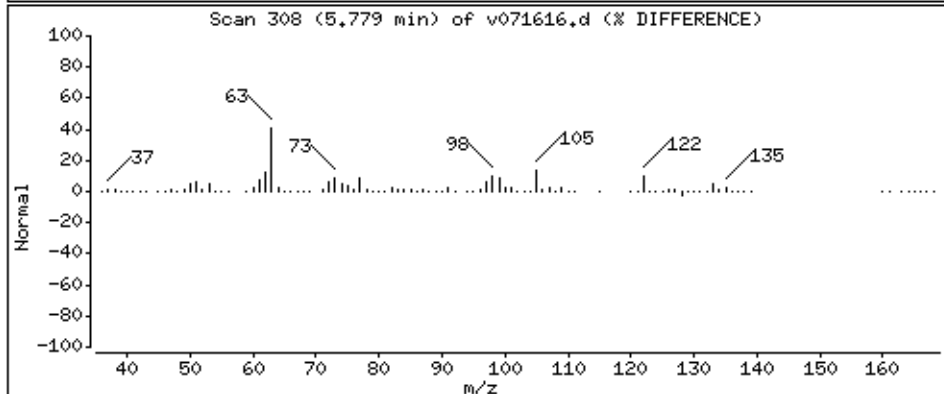
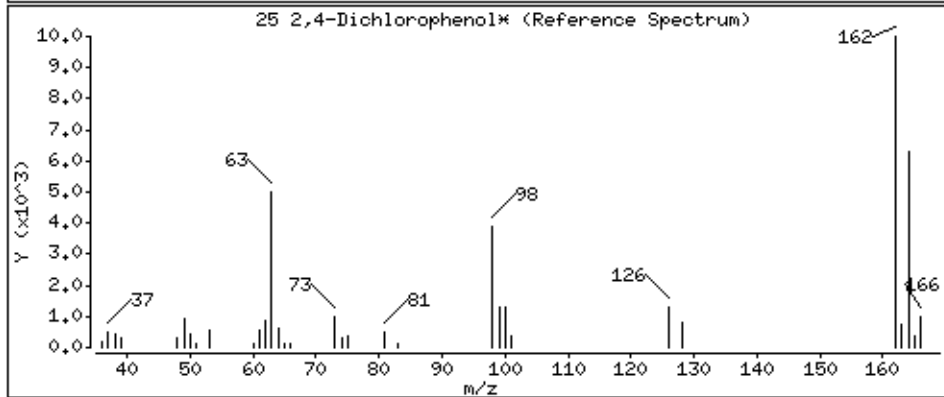
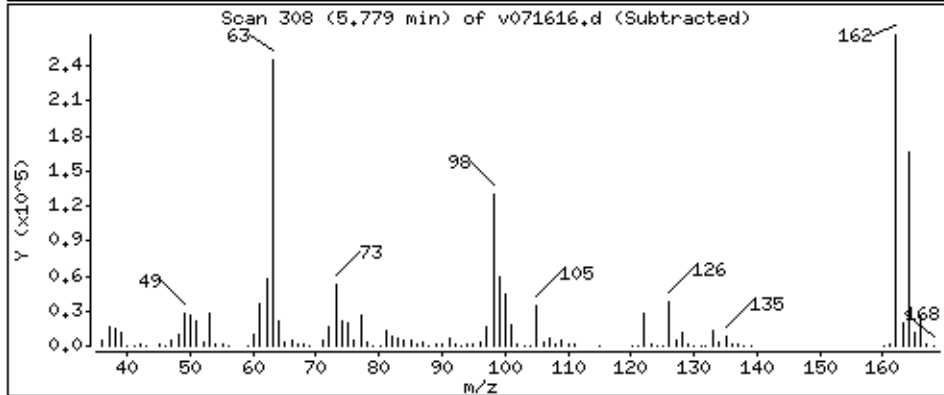
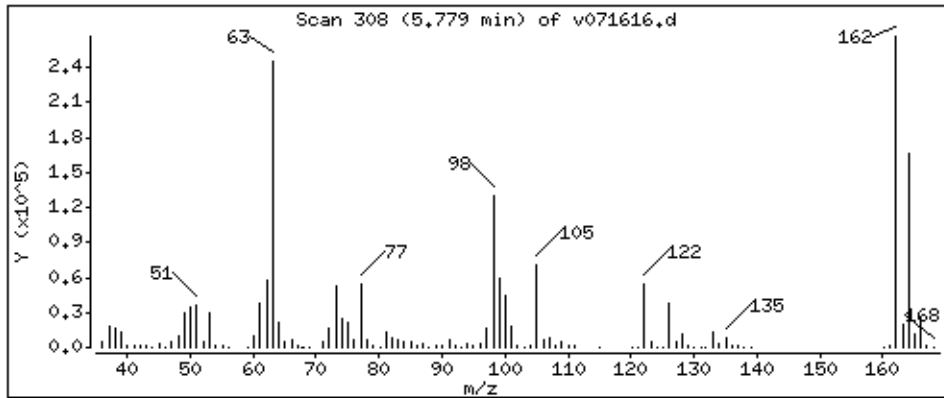
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

25 2,4-Dichlorophenol\*

Concentration: 51.20 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

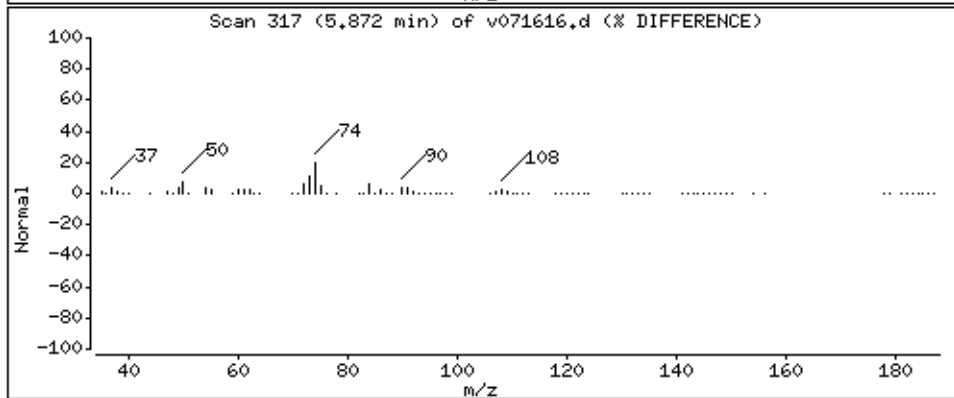
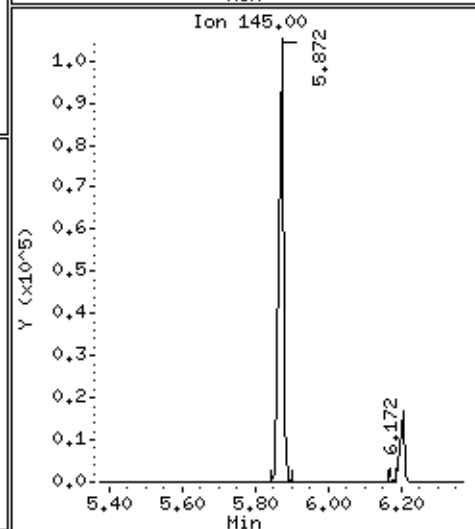
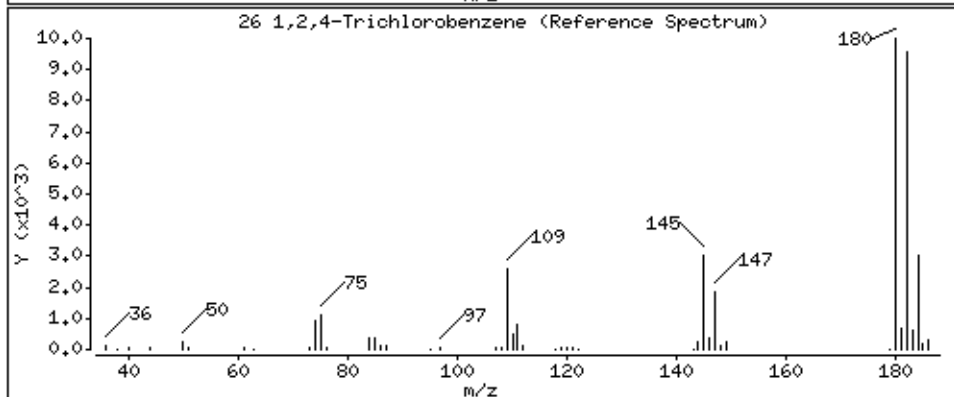
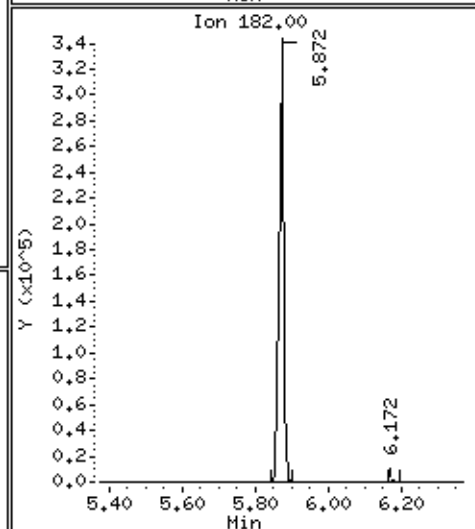
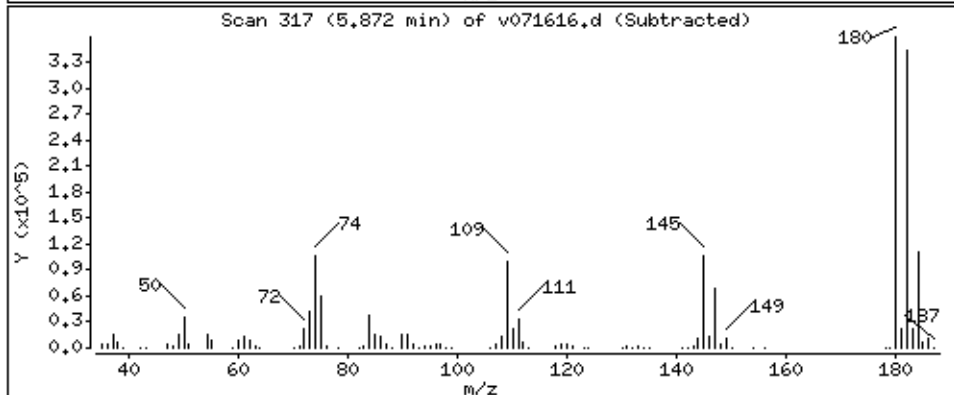
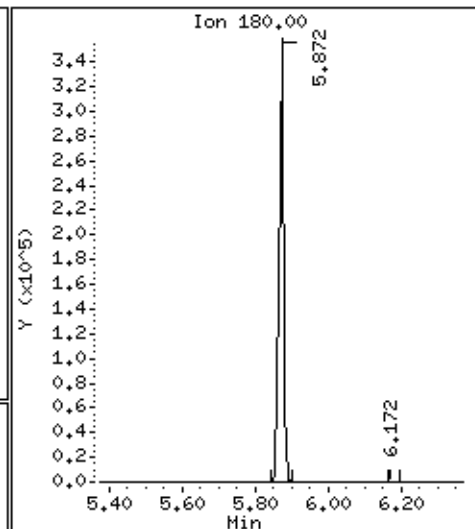
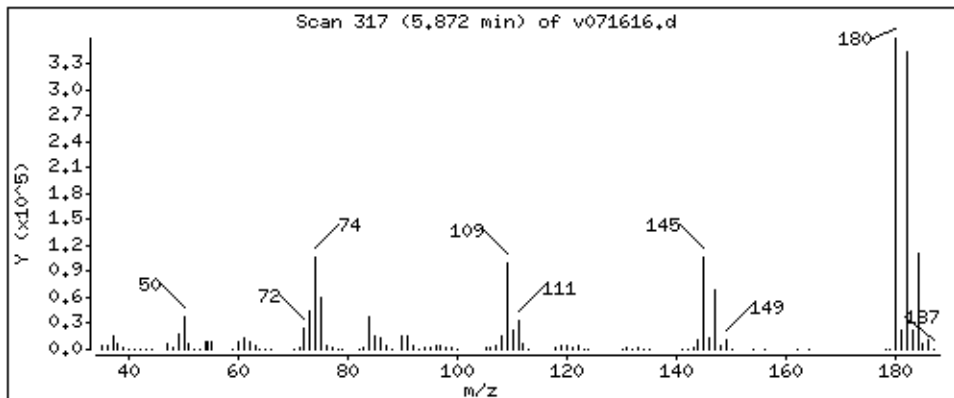
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 49.53 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

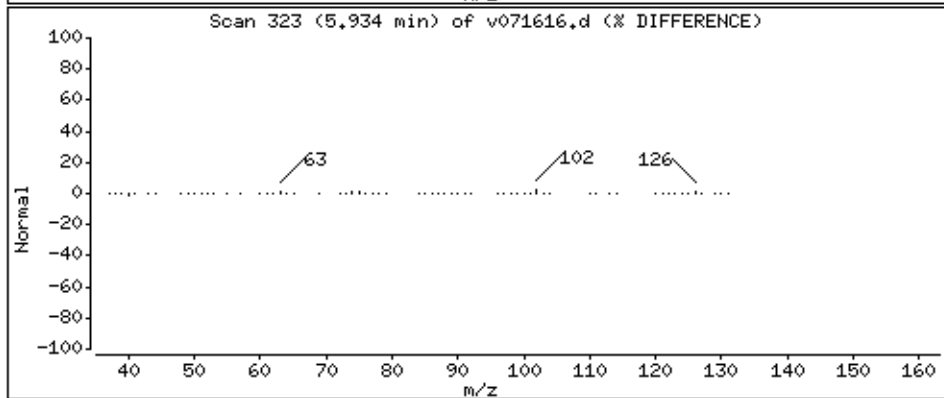
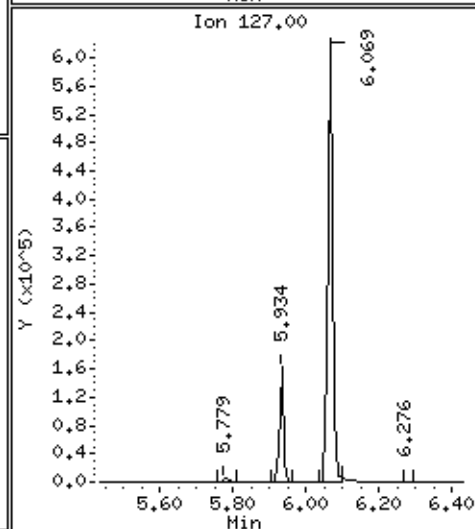
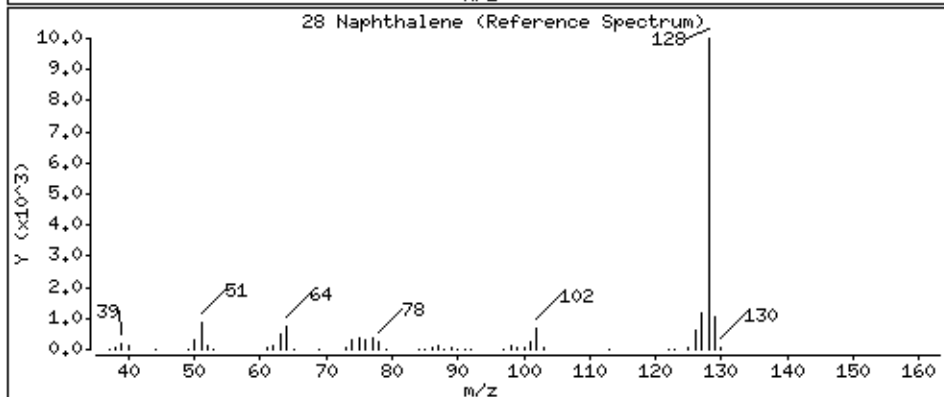
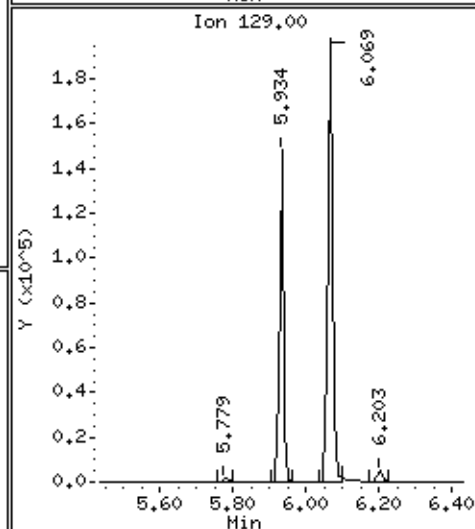
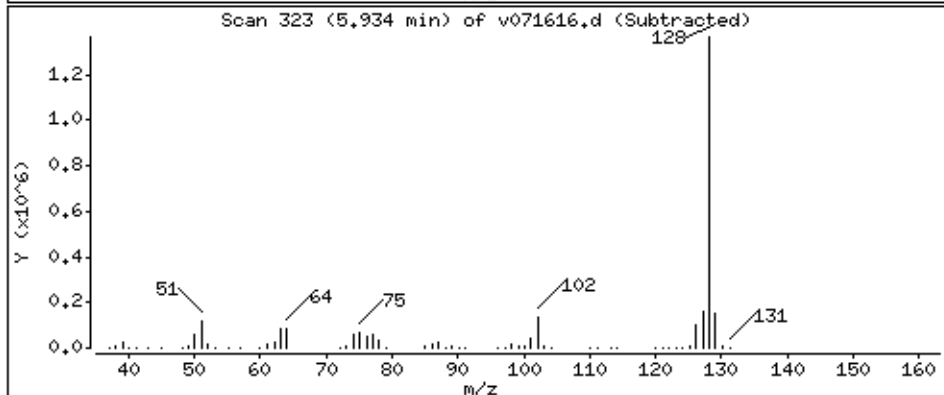
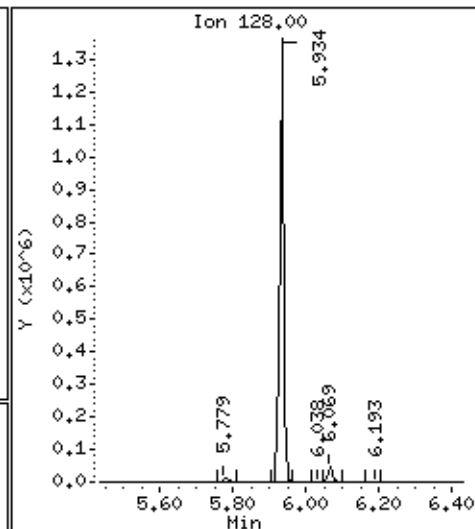
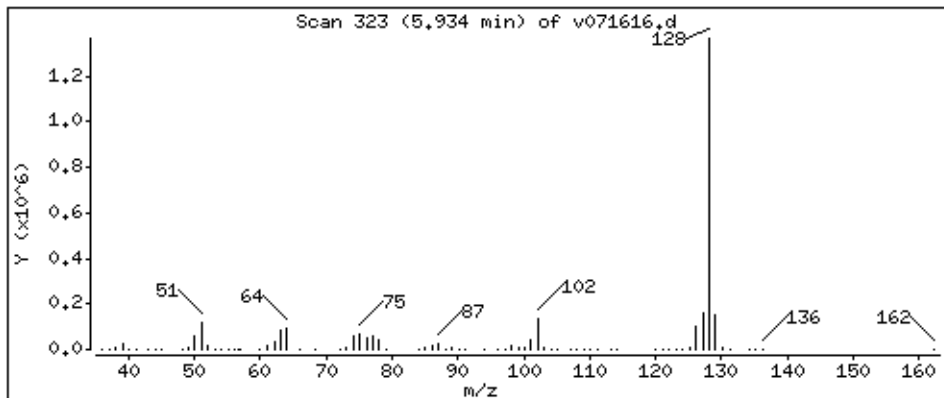
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

28 Naphthalene

Concentration: 47.56 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

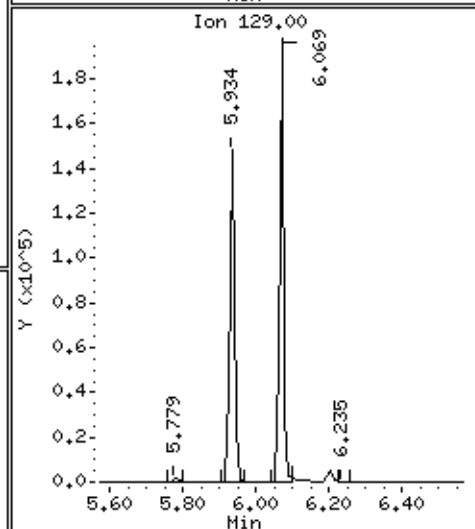
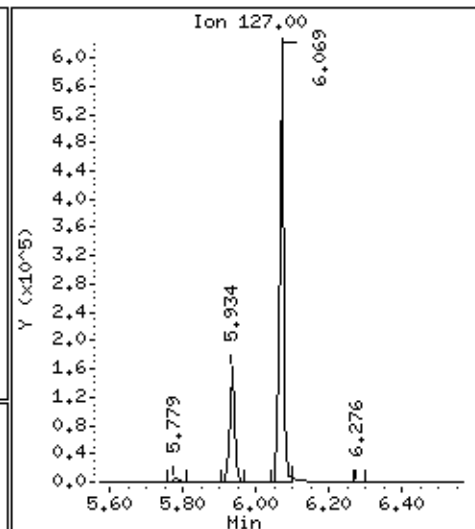
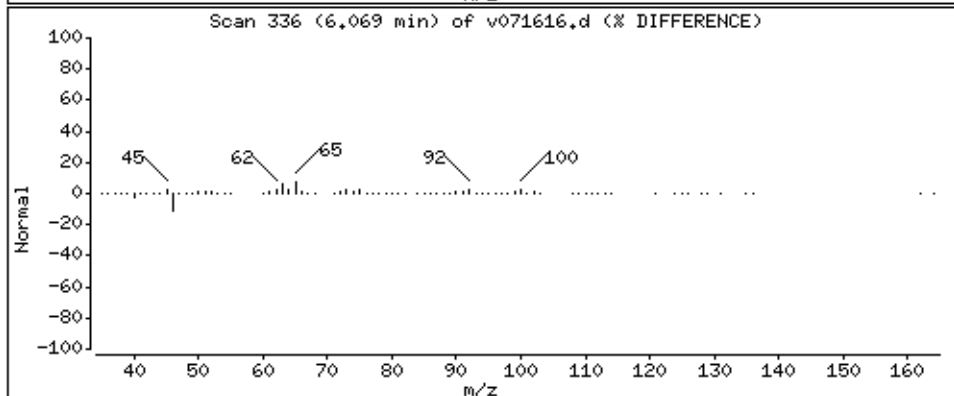
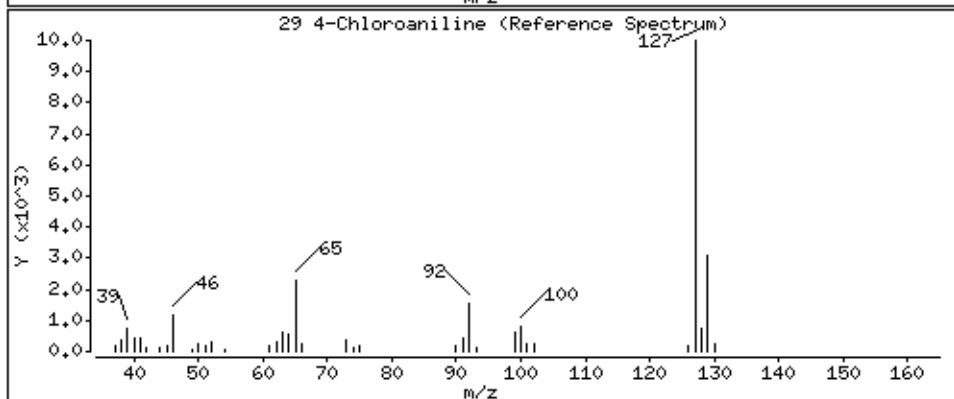
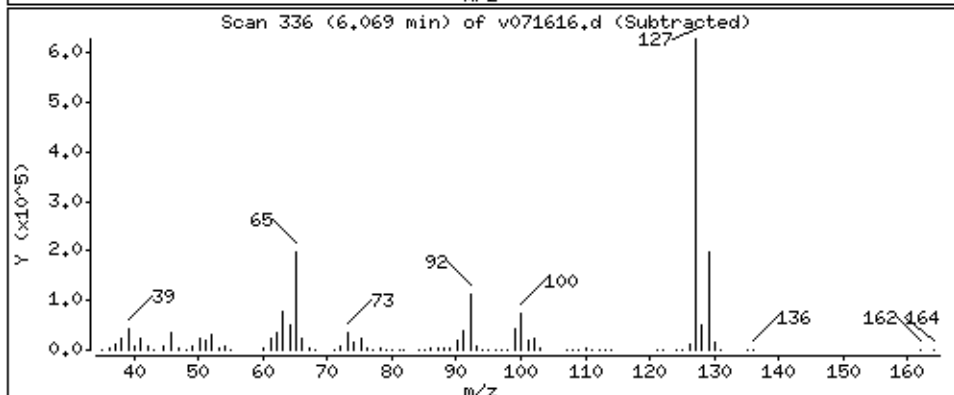
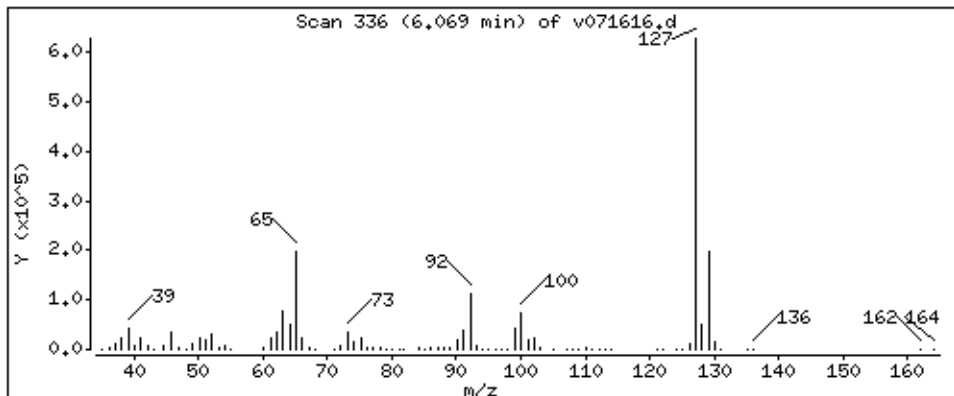
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

29 4-Chloroaniline

Concentration: 51.75 ug





Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

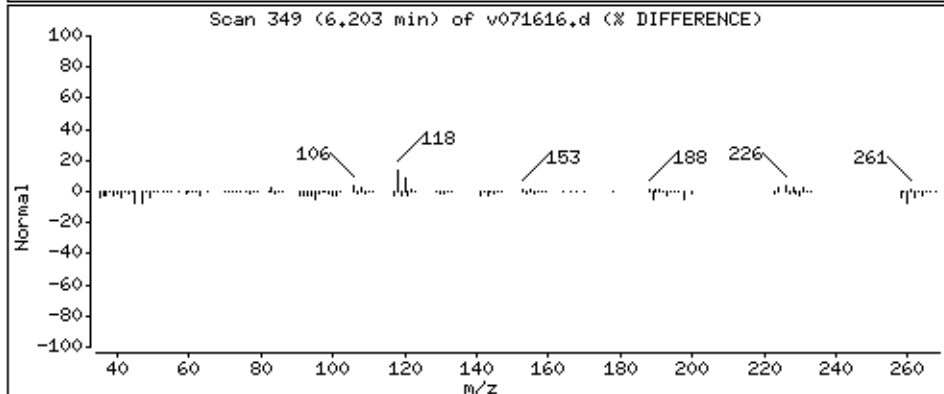
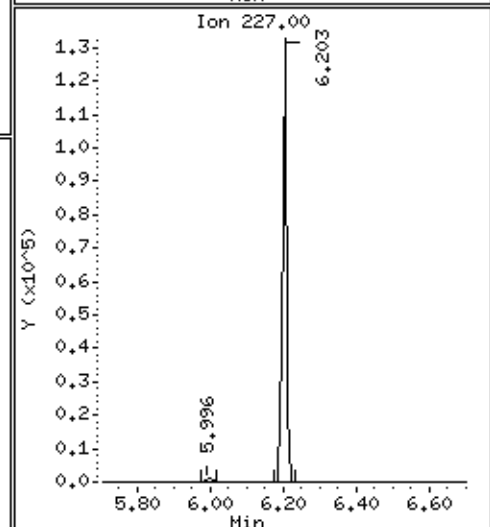
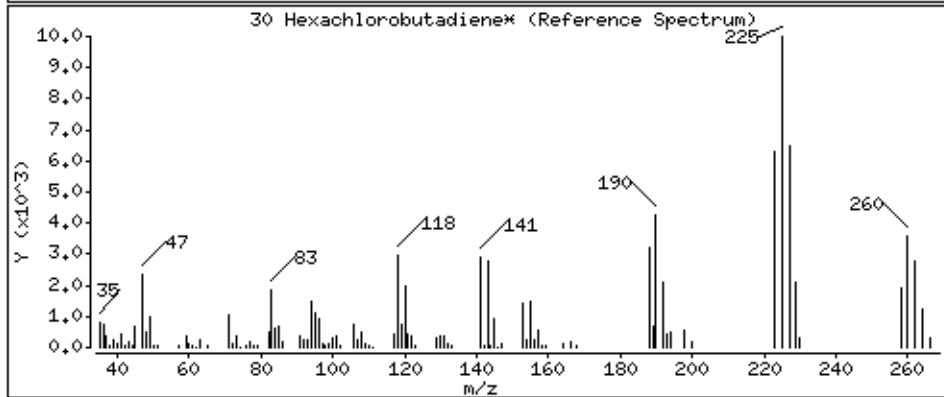
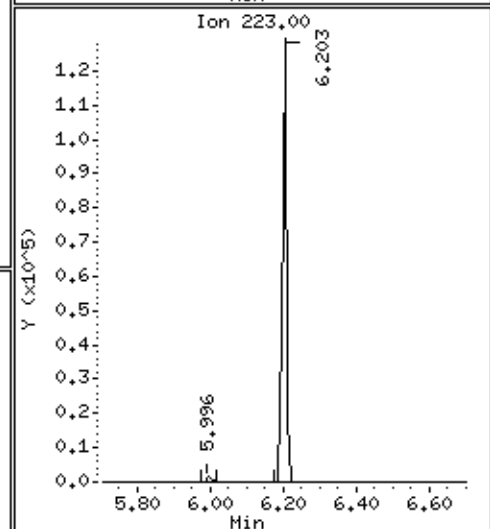
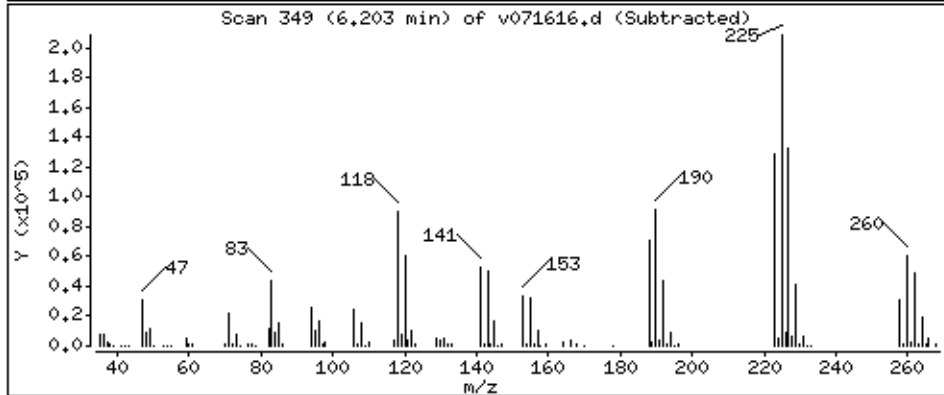
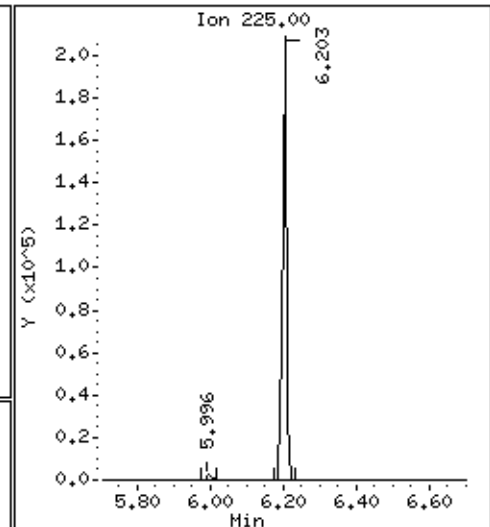
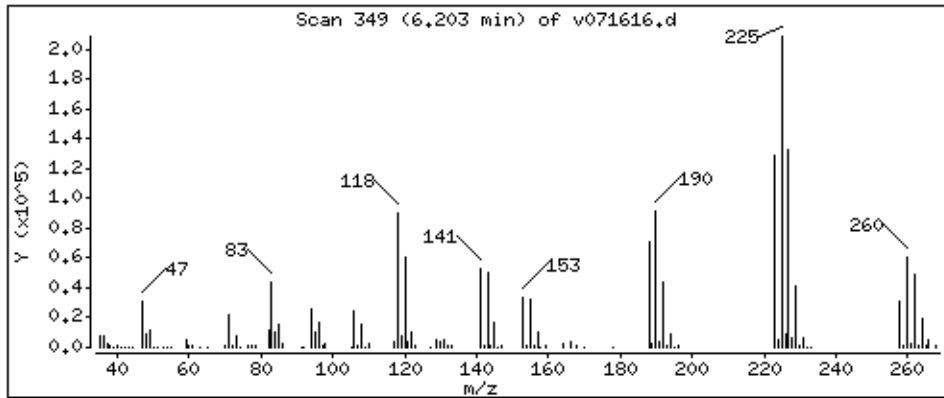
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

30 Hexachlorobutadiene\*

Concentration: 50.79 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

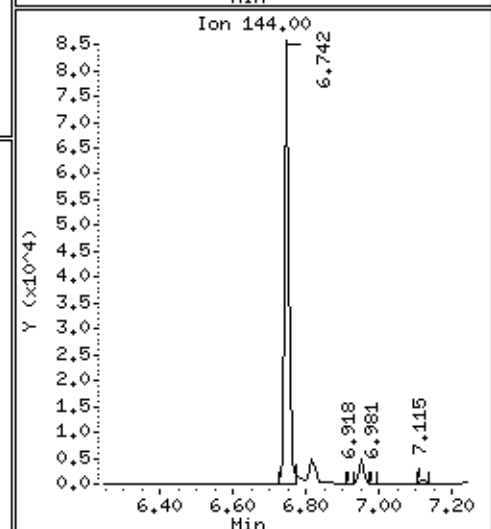
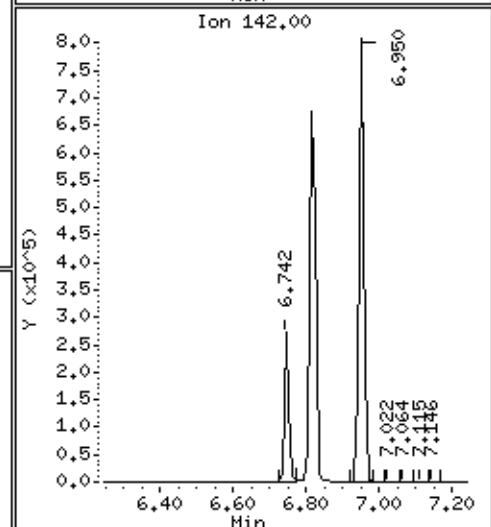
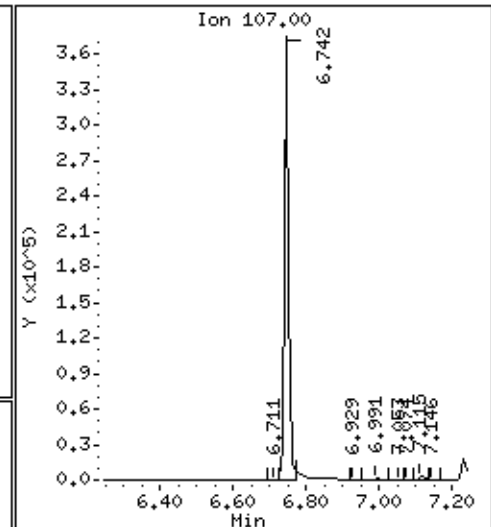
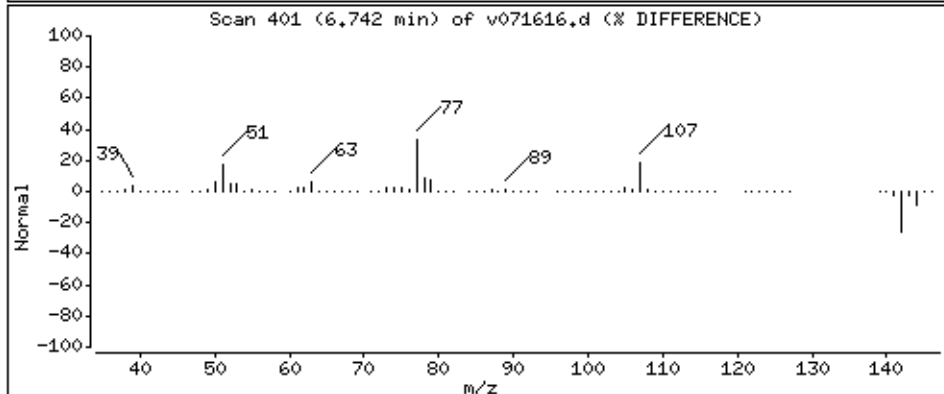
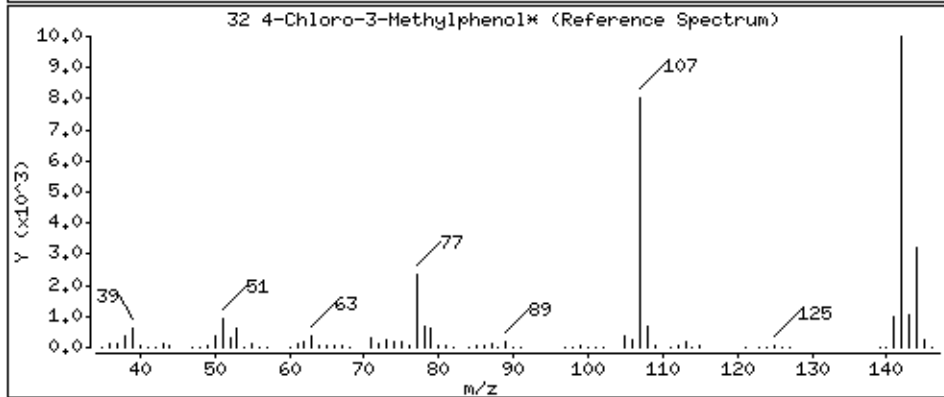
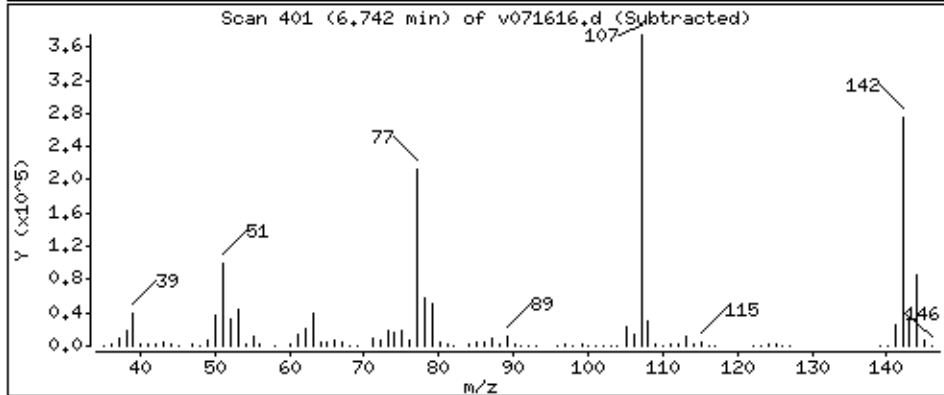
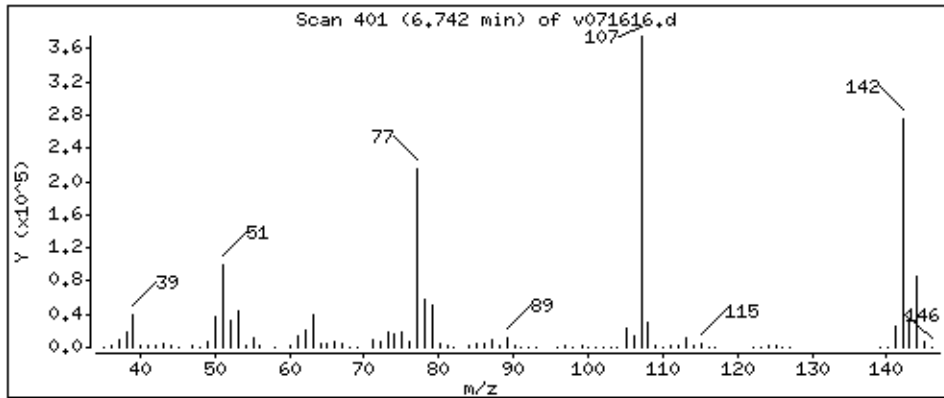
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

32 4-Chloro-3-Methylphenol\*

Concentration: 52.43 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

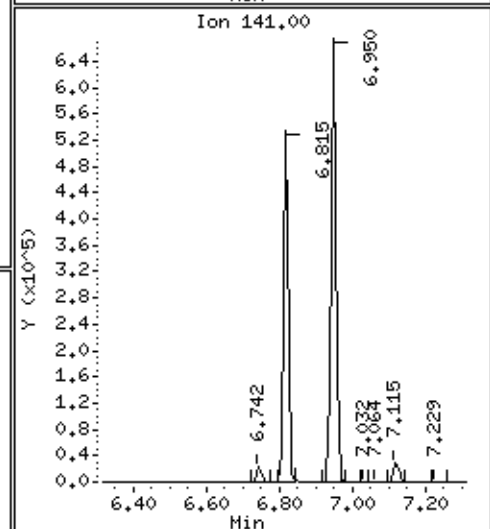
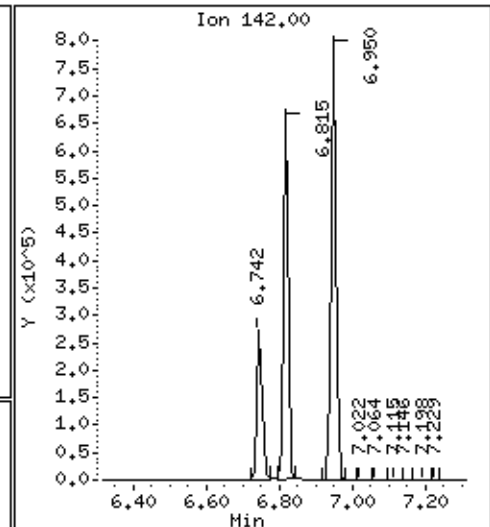
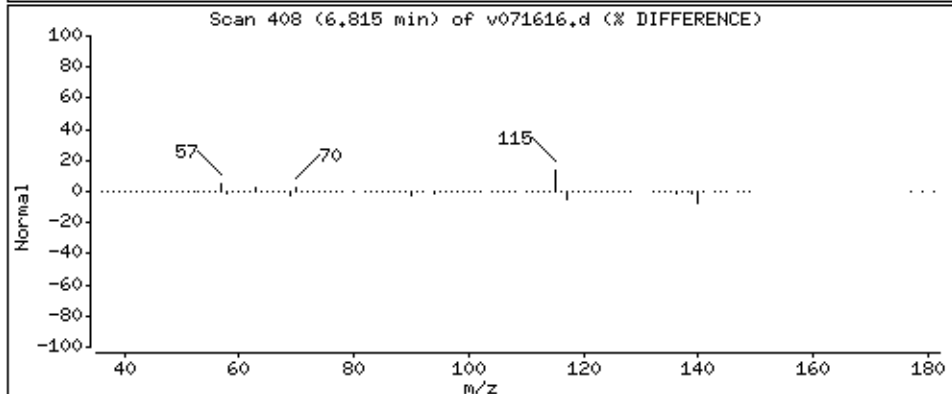
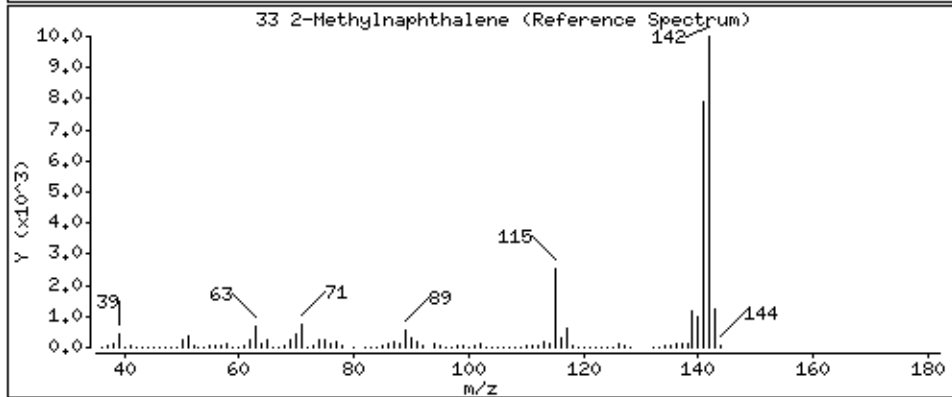
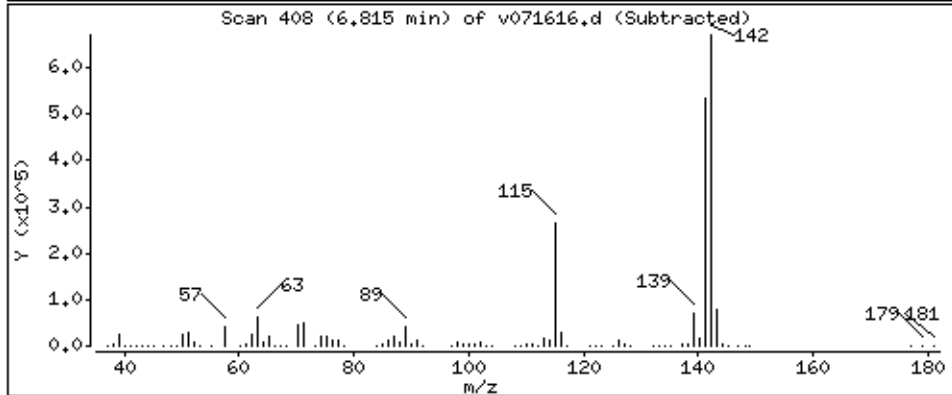
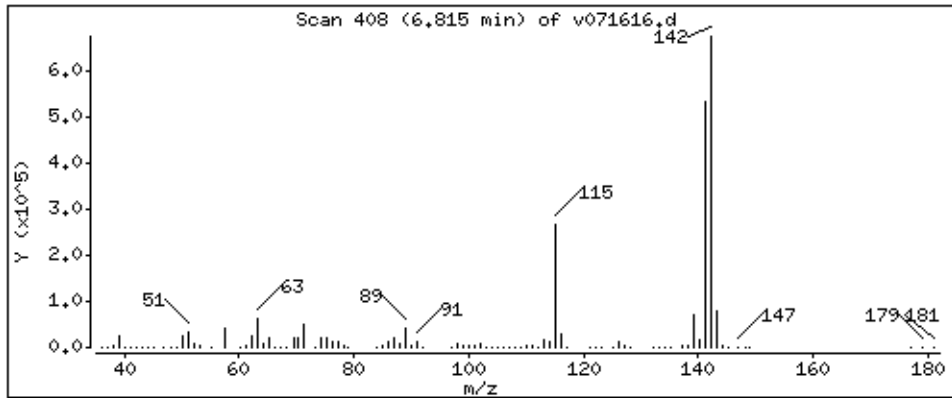
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

33 2-Methylnaphthalene

Concentration: 52.32 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

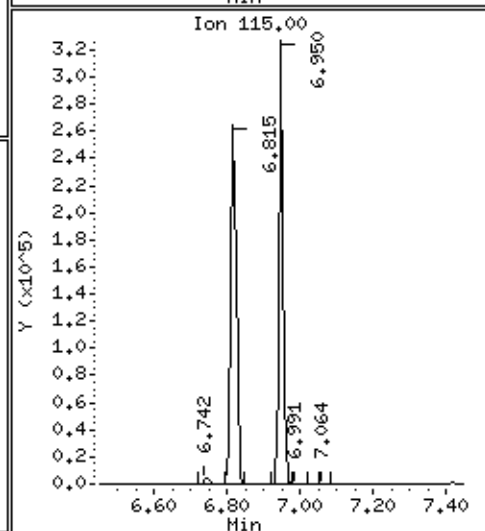
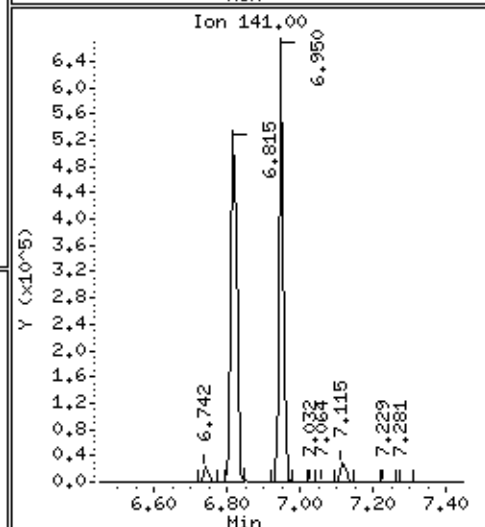
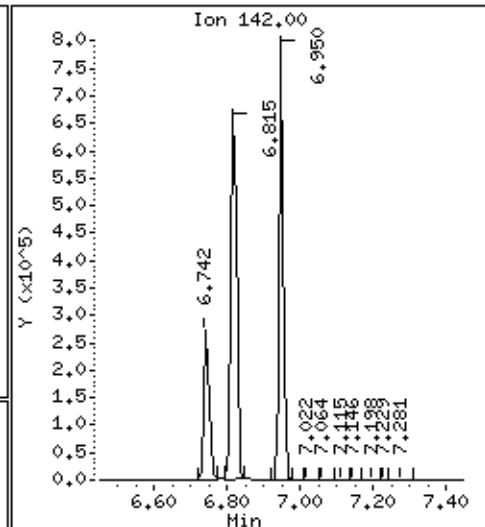
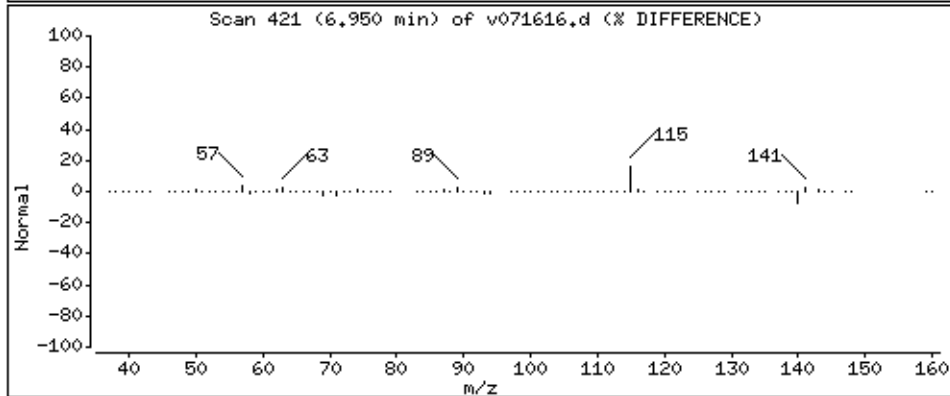
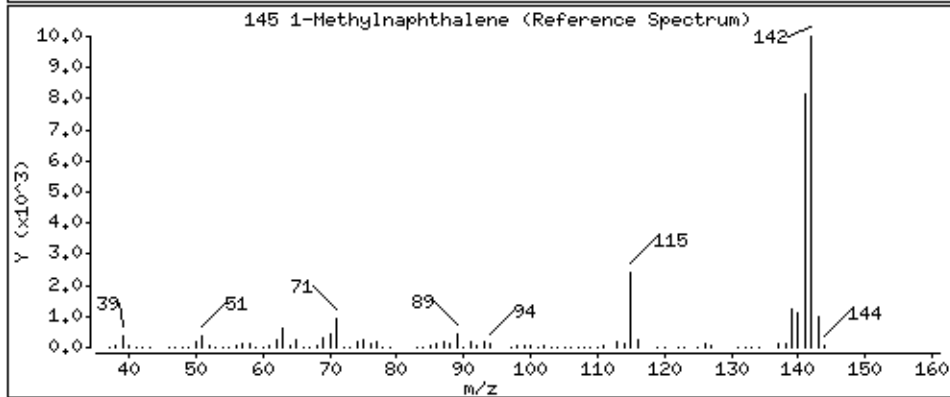
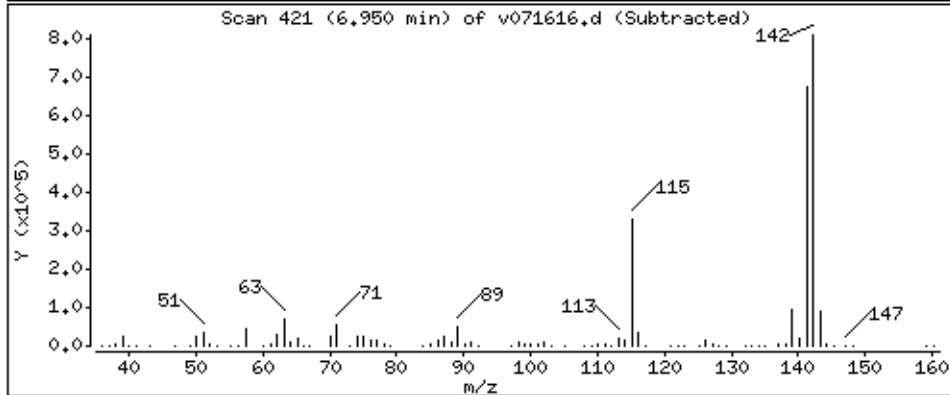
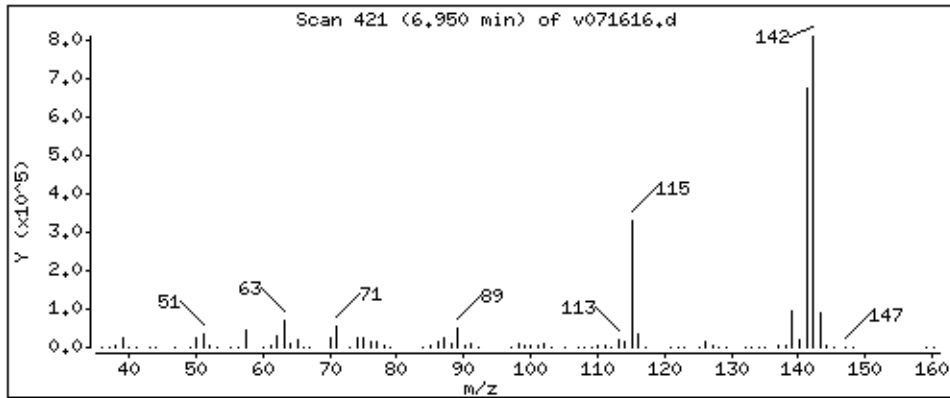
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

145 1-Methylnaphthalene

Concentration: 47.97 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

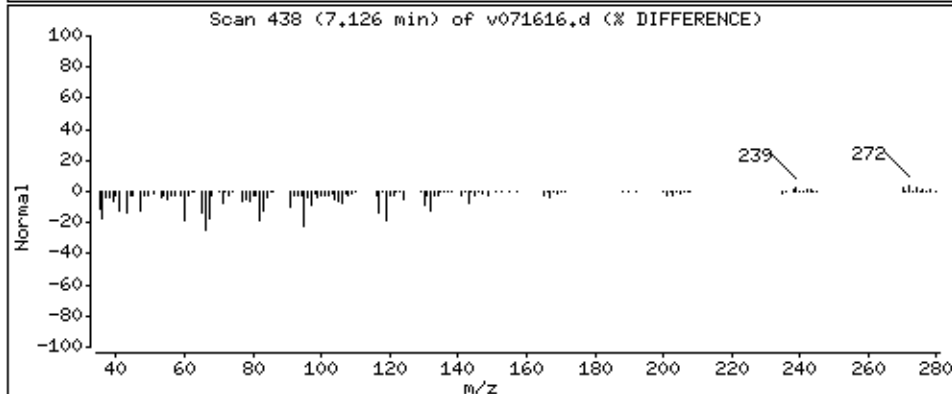
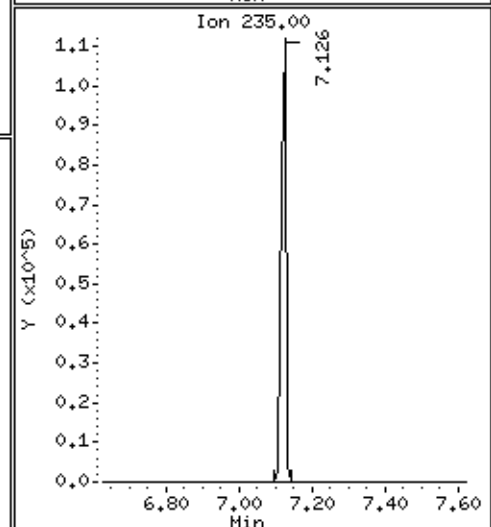
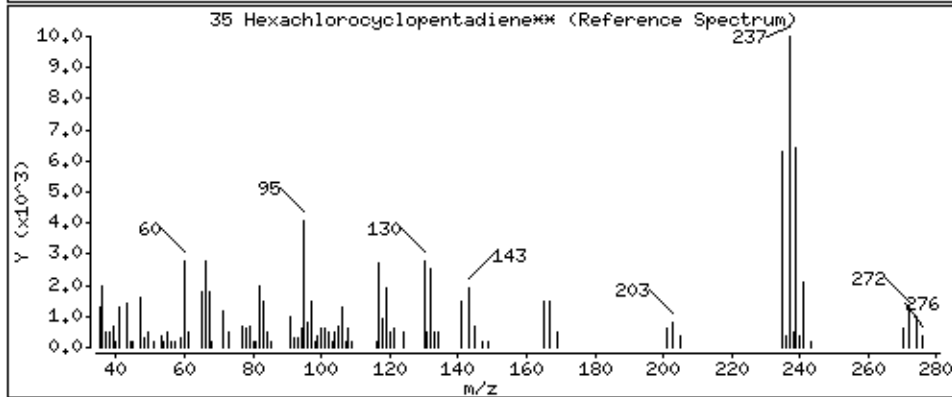
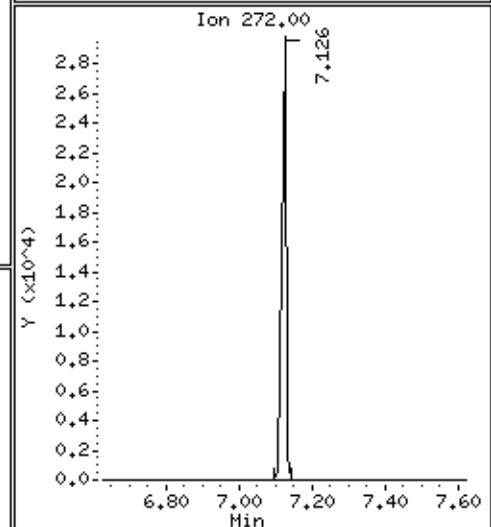
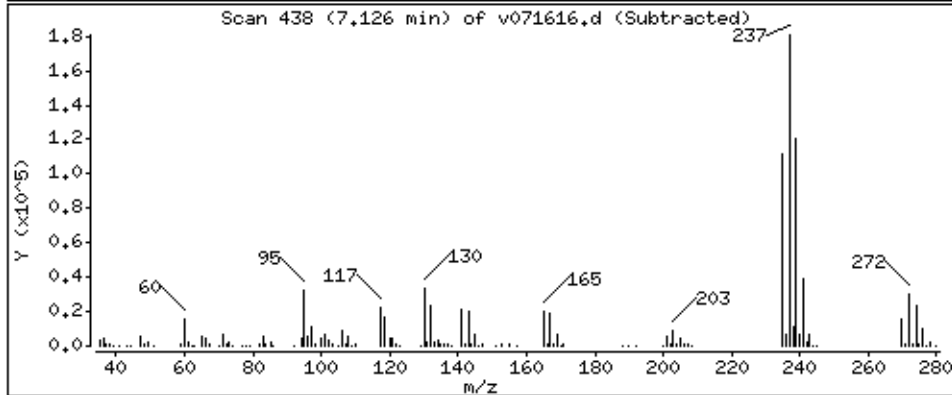
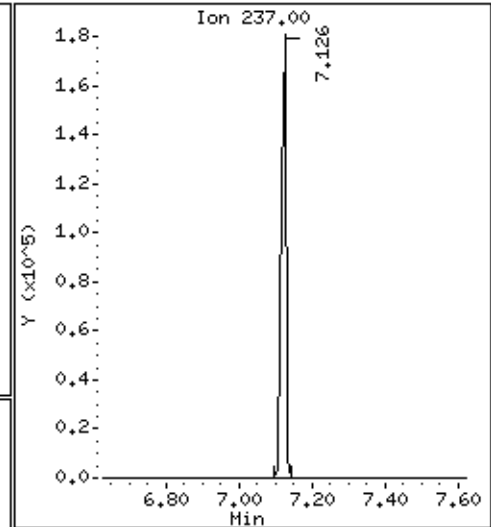
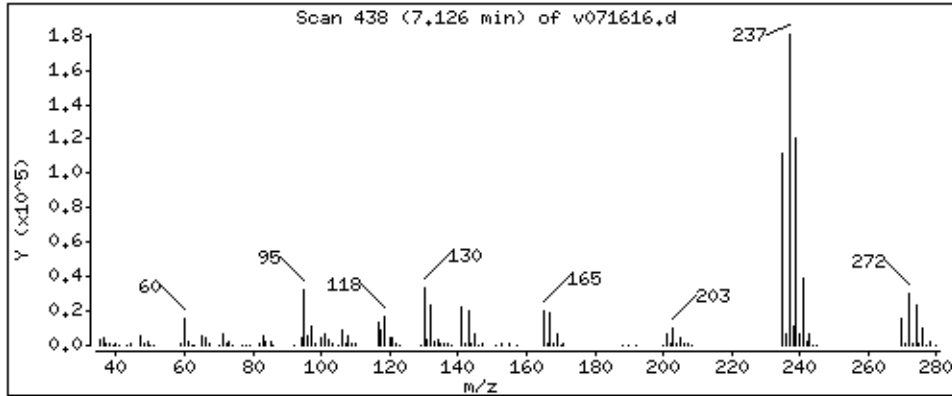
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

35 Hexachlorocyclopentadiene\*\*

Concentration: 52.11 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

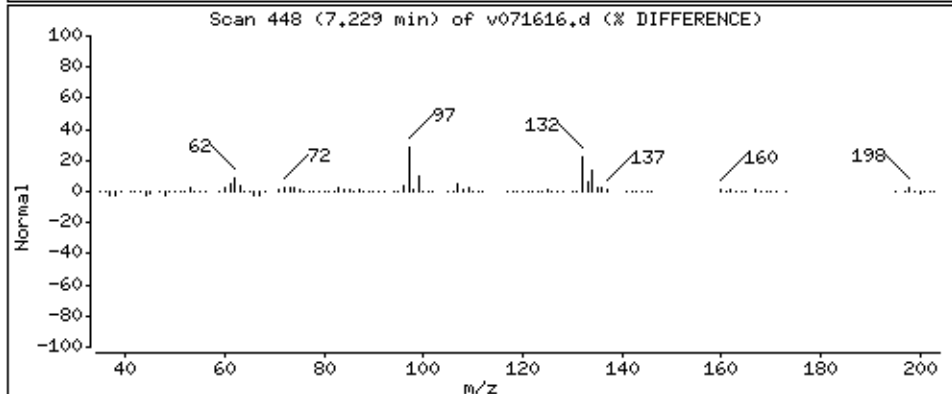
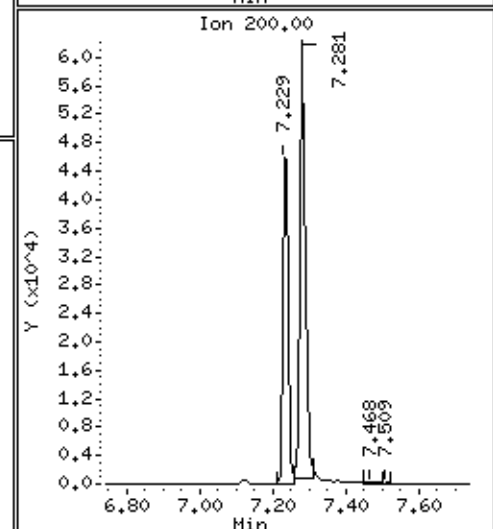
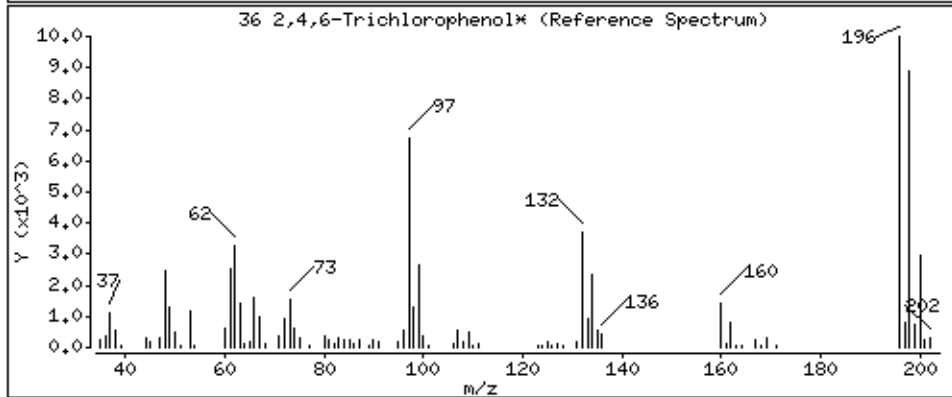
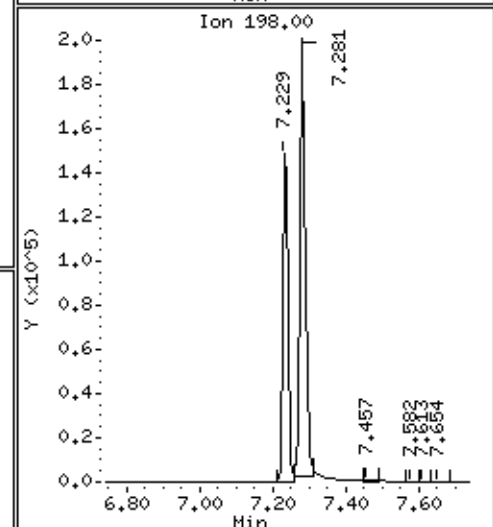
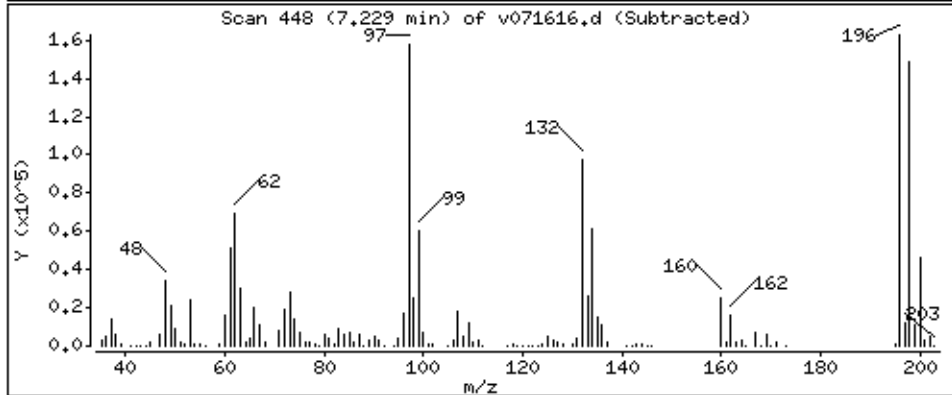
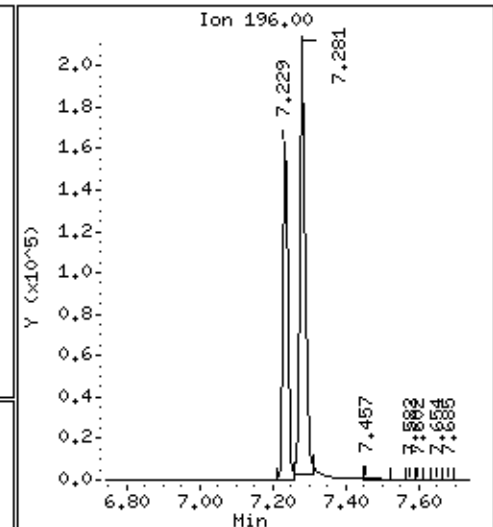
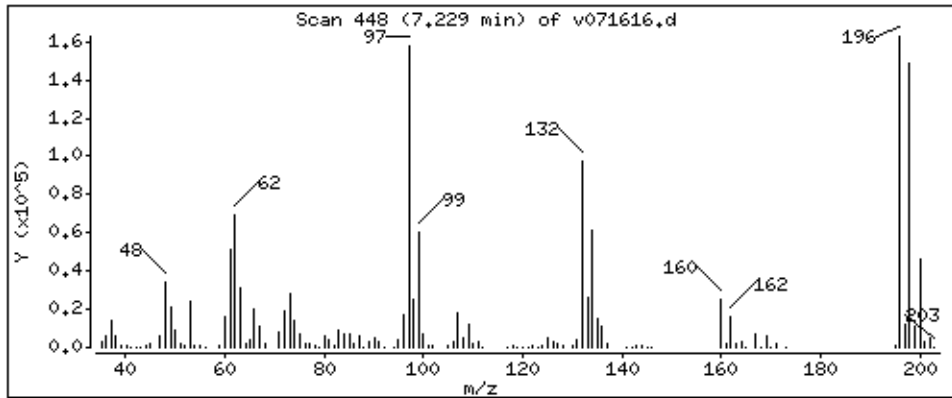
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

36 2,4,6-Trichlorophenol\*

Concentration: 53.81 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

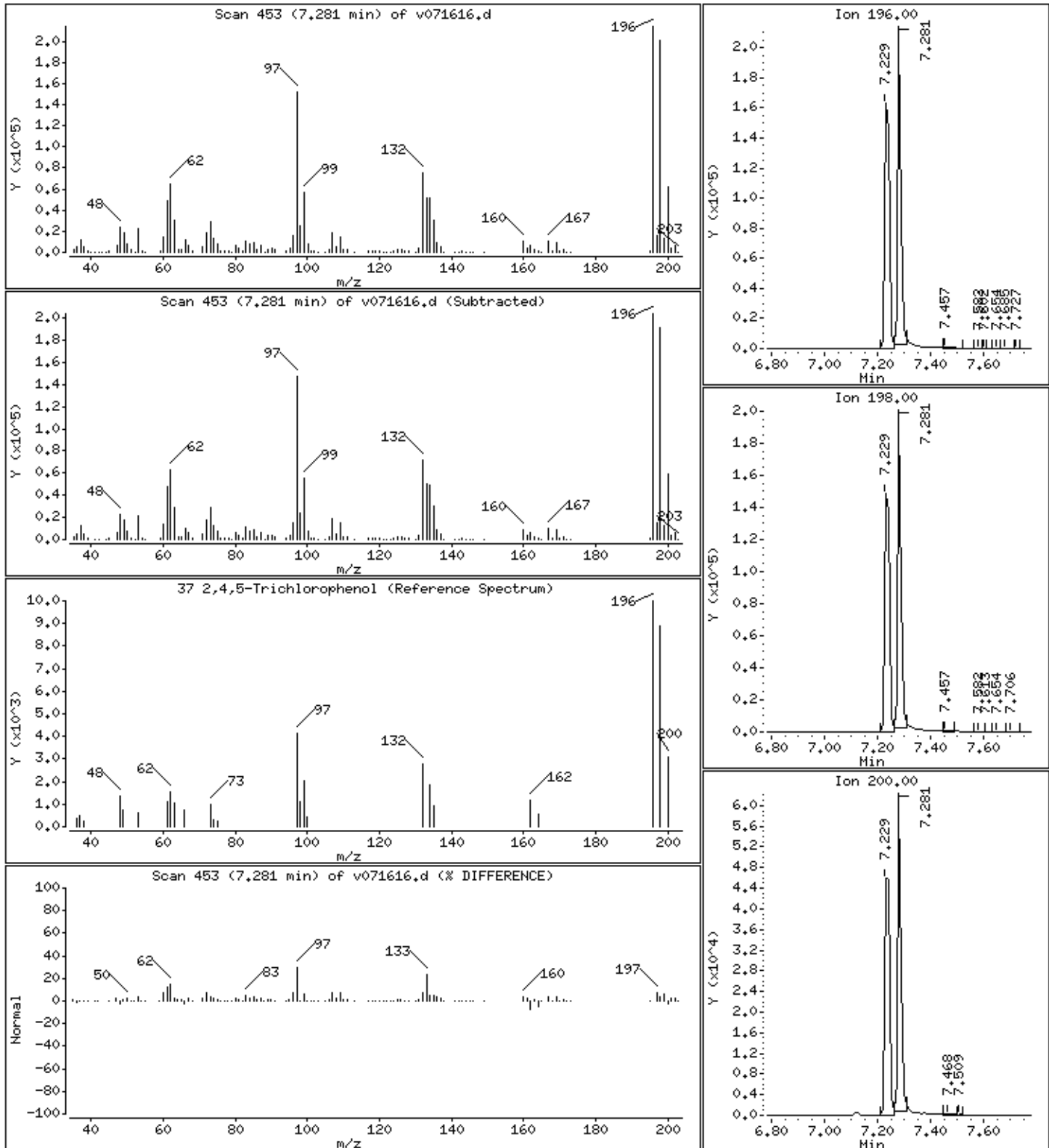
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

37 2,4,5-Trichlorophenol

Concentration: 51.02 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

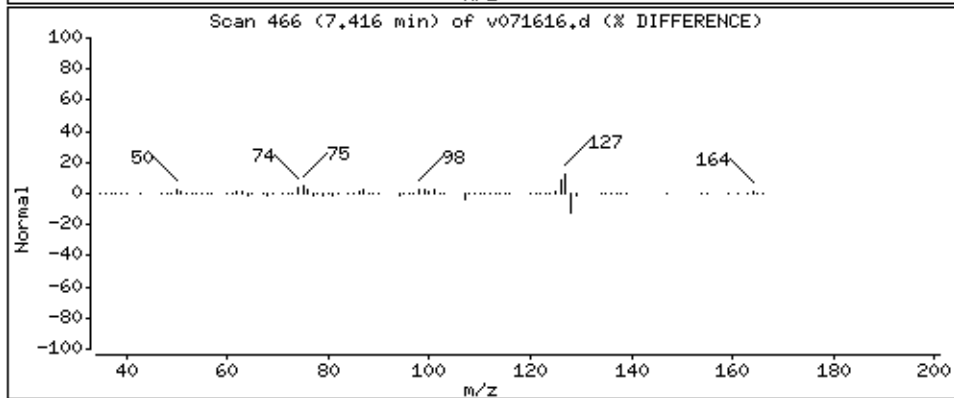
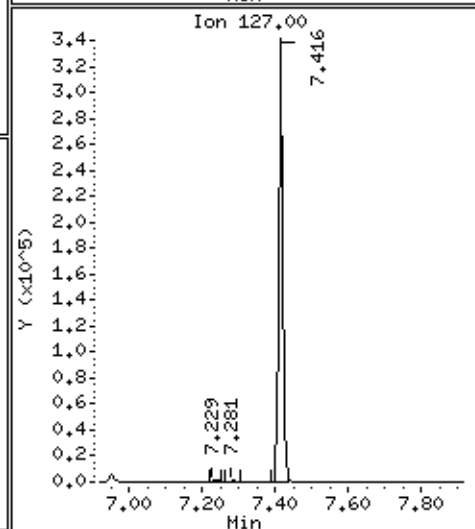
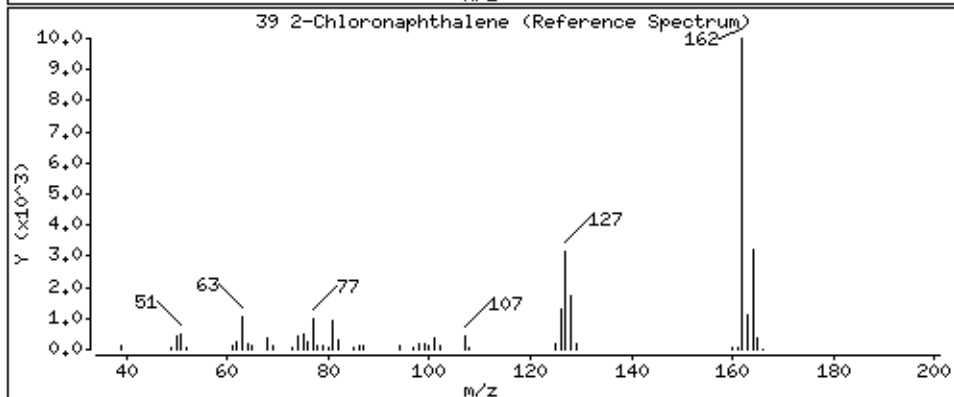
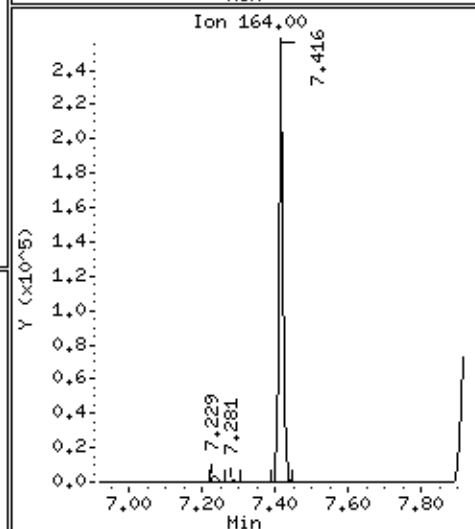
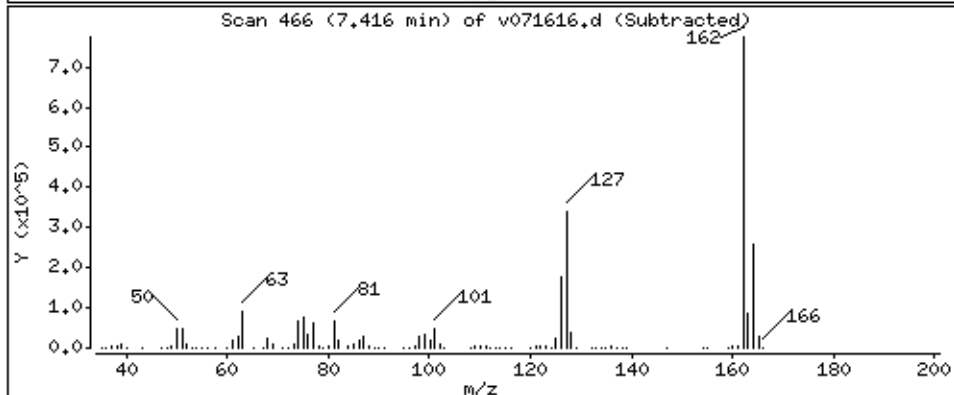
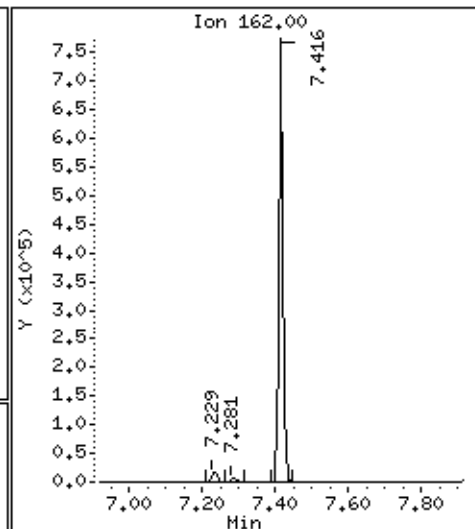
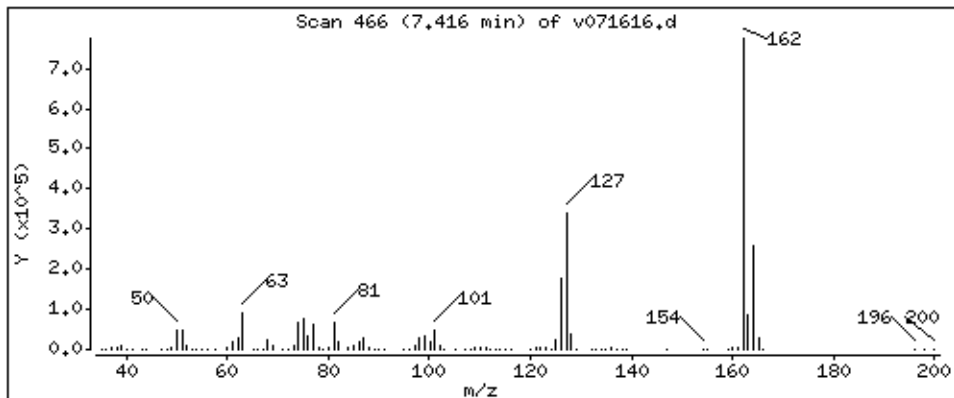
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

39 2-Chloronaphthalene

Concentration: 53.42 ug





Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

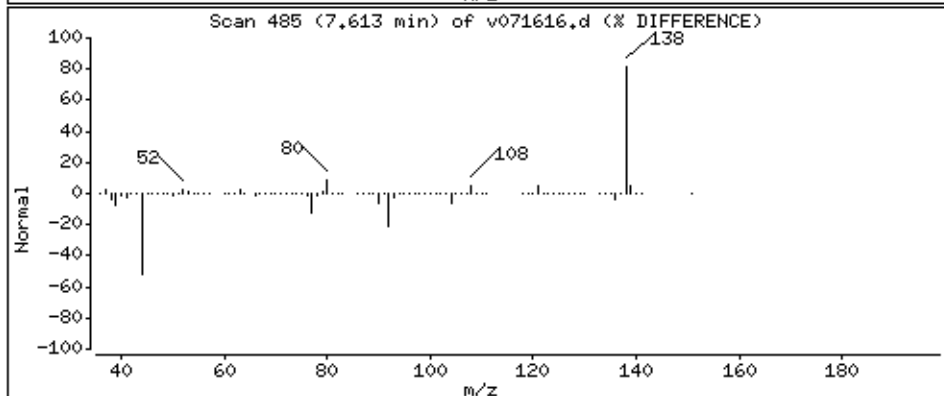
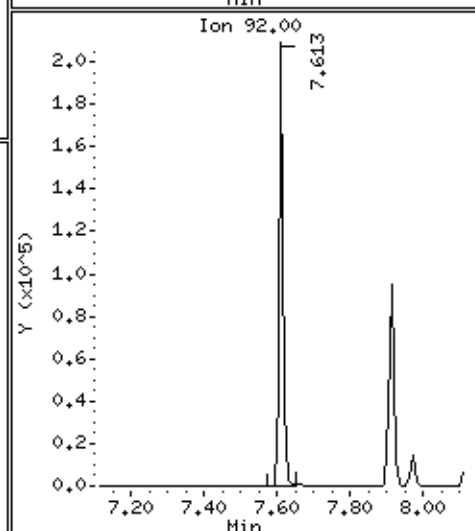
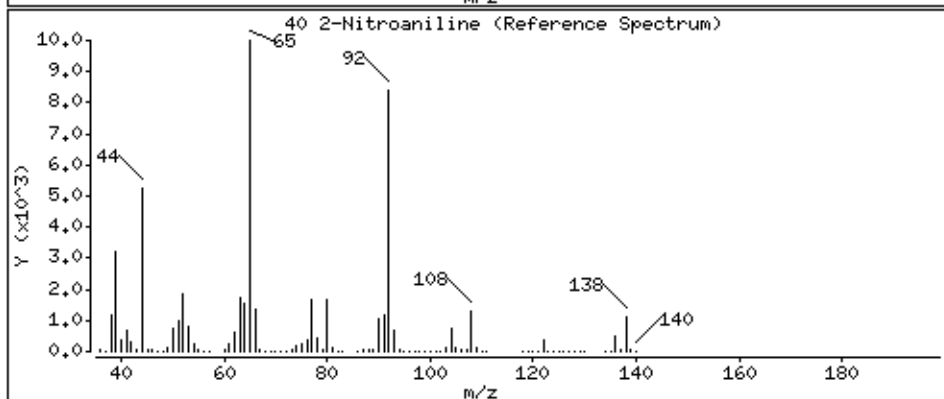
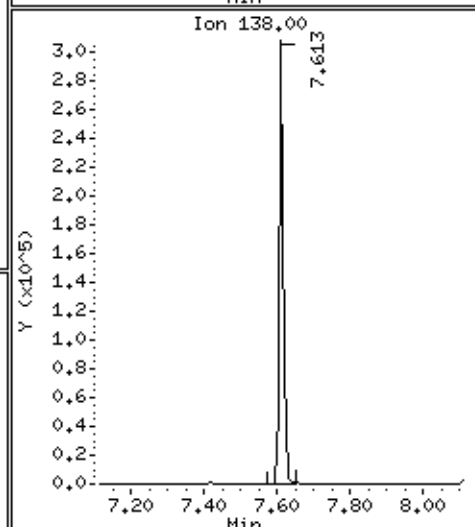
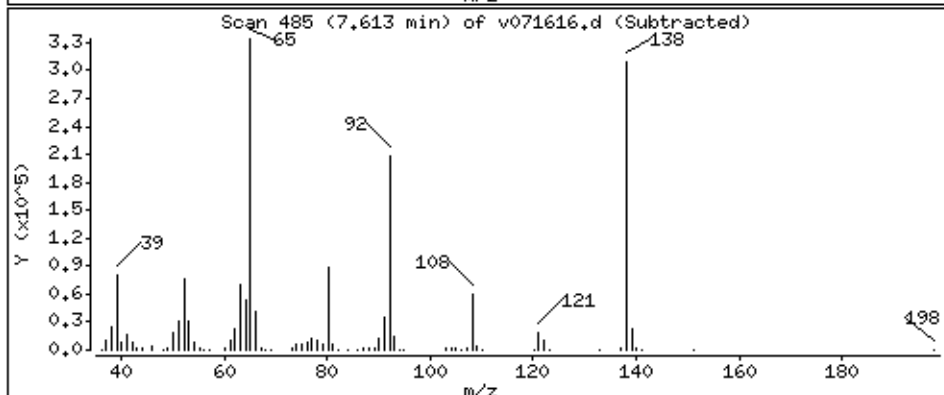
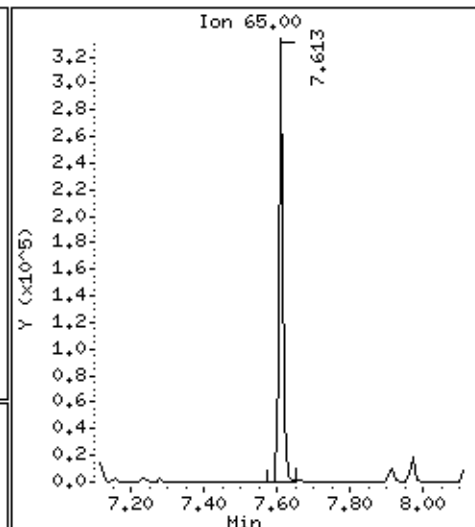
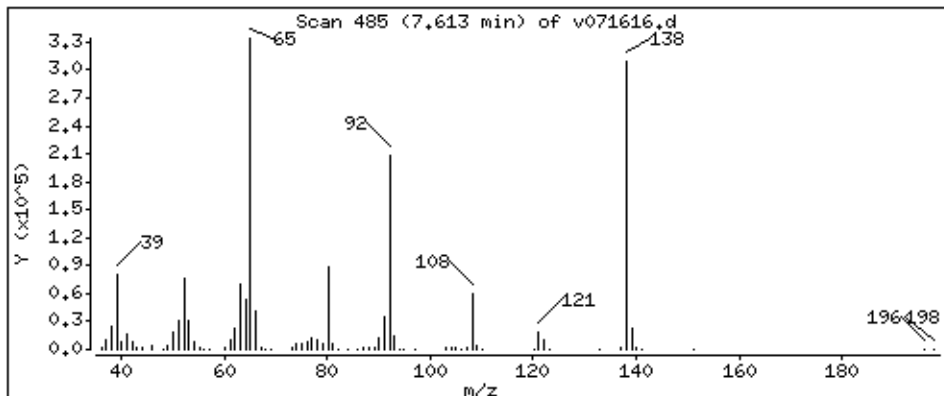
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

40 2-Nitroaniline

Concentration: 56.81 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

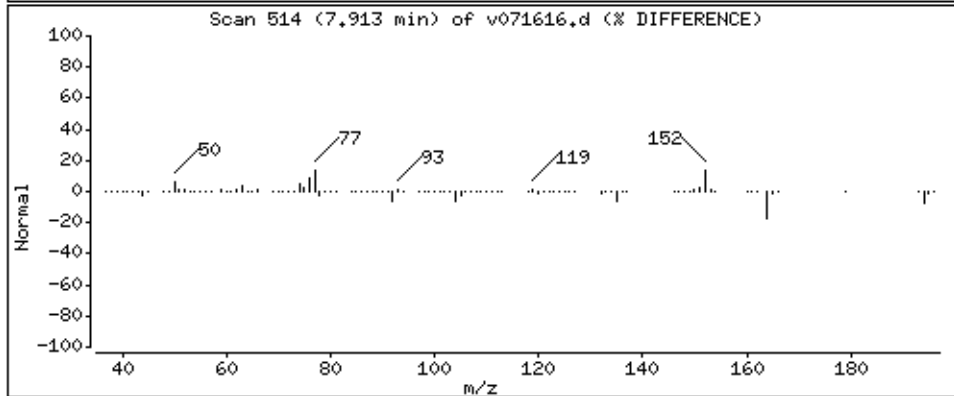
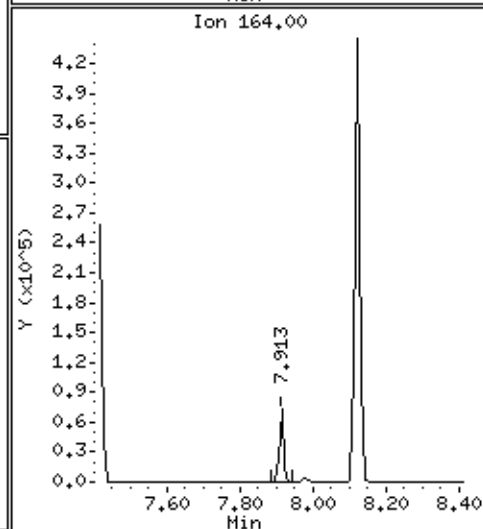
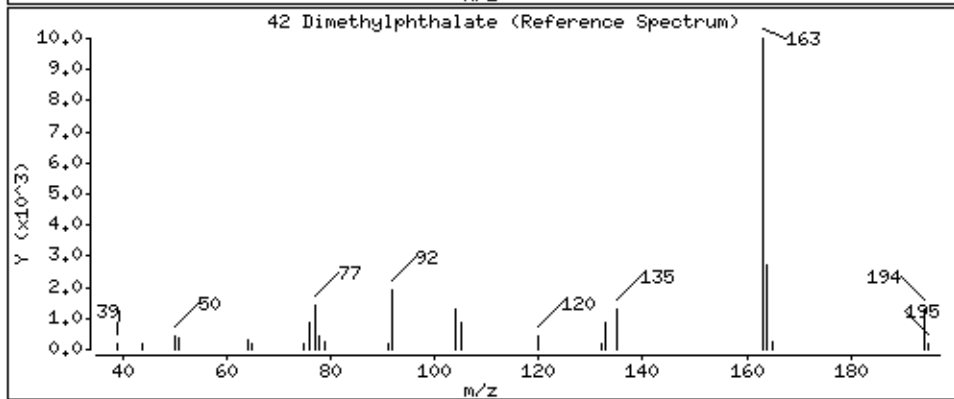
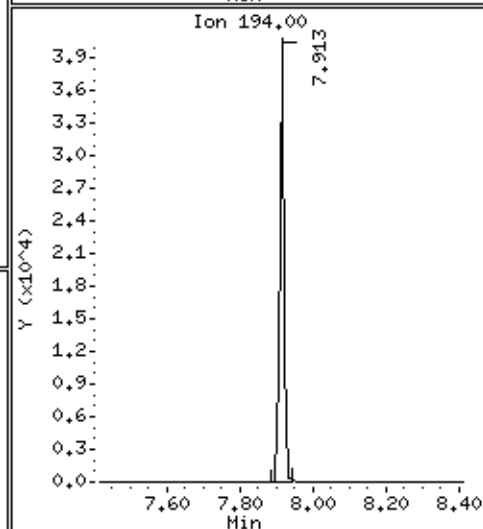
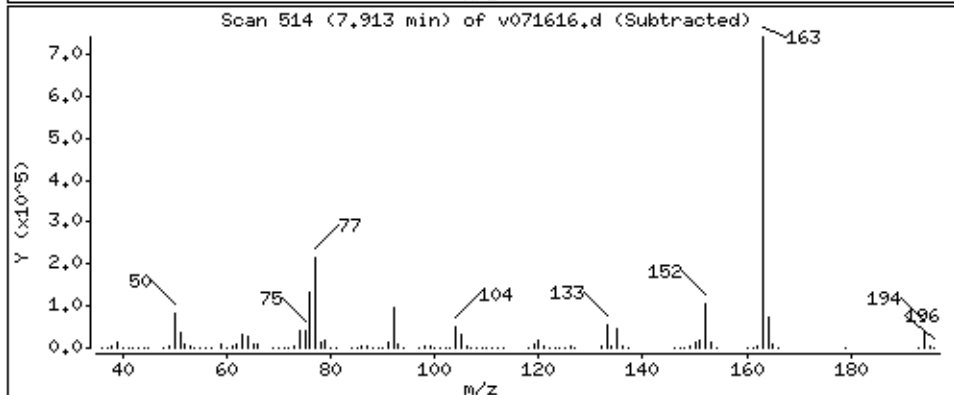
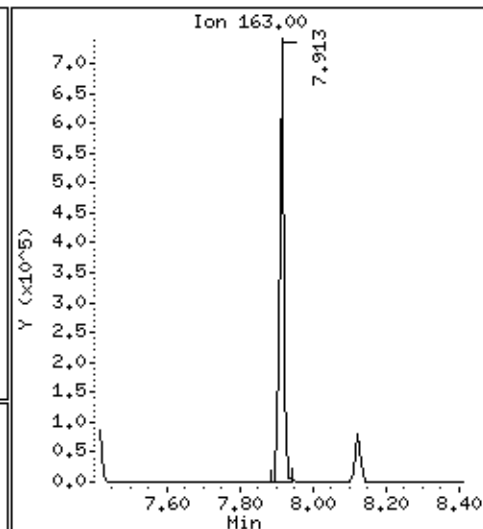
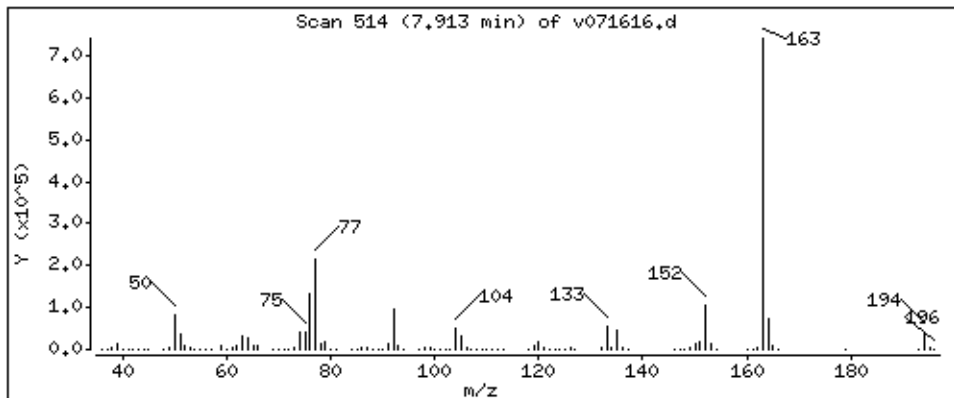
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

42 Dimethylphthalate

Concentration: 51.71 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

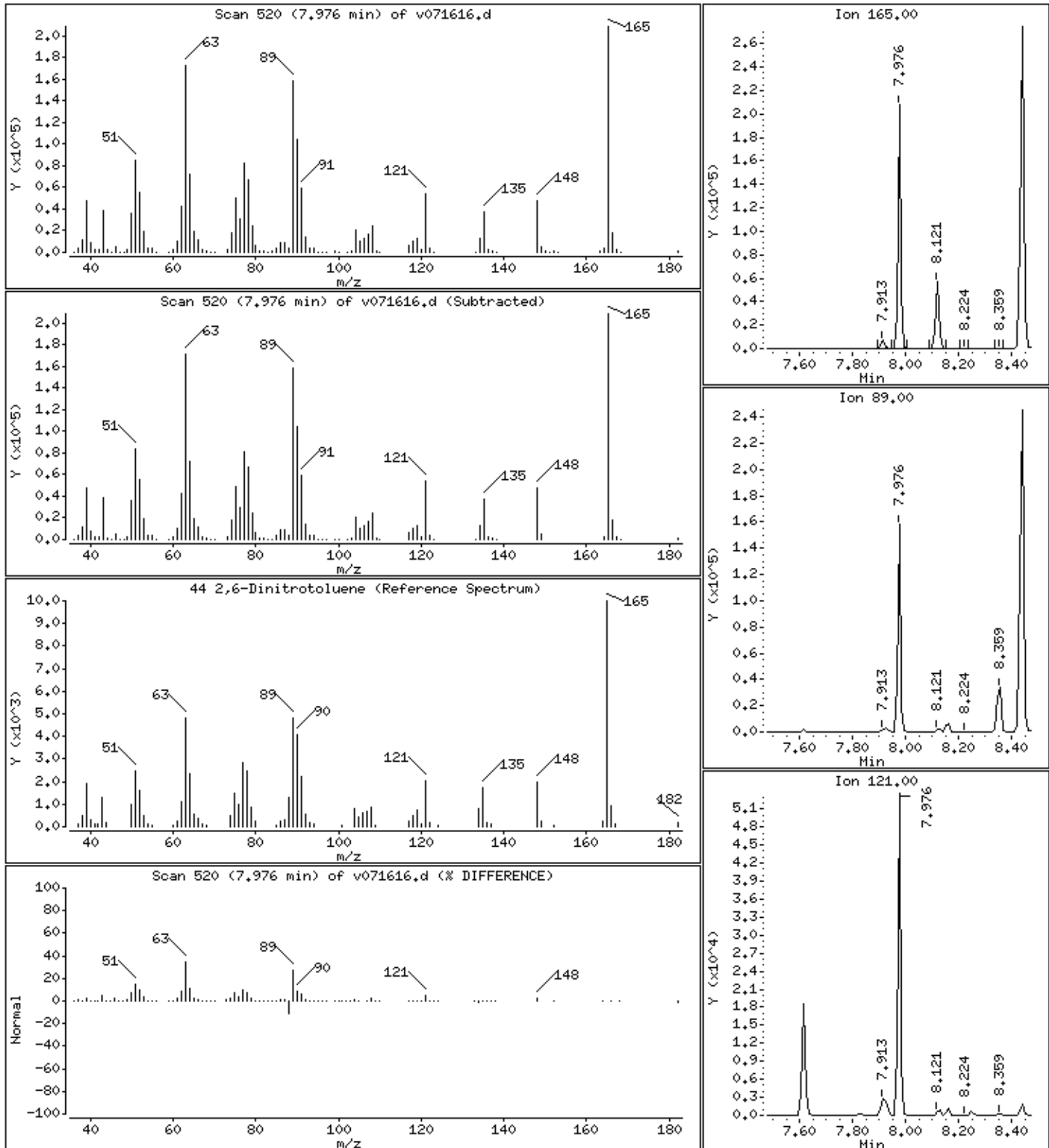
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

44 2,6-Dinitrotoluene

Concentration: 53.95 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

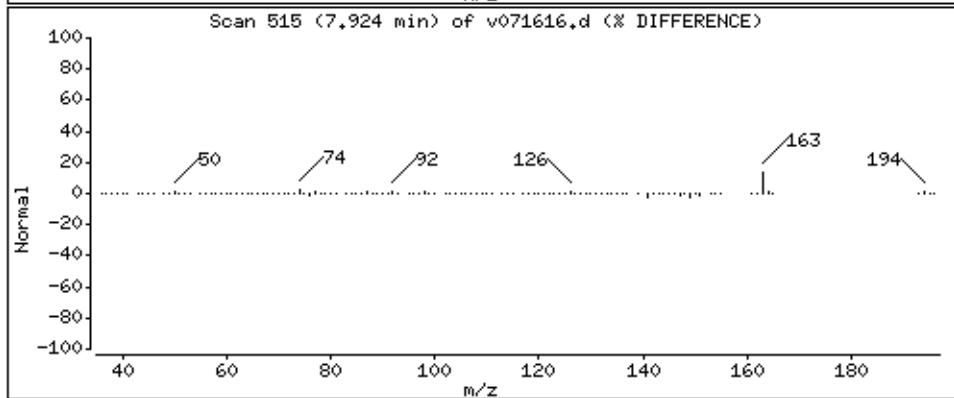
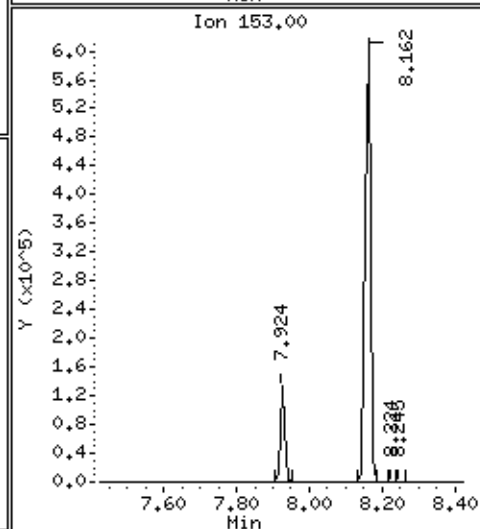
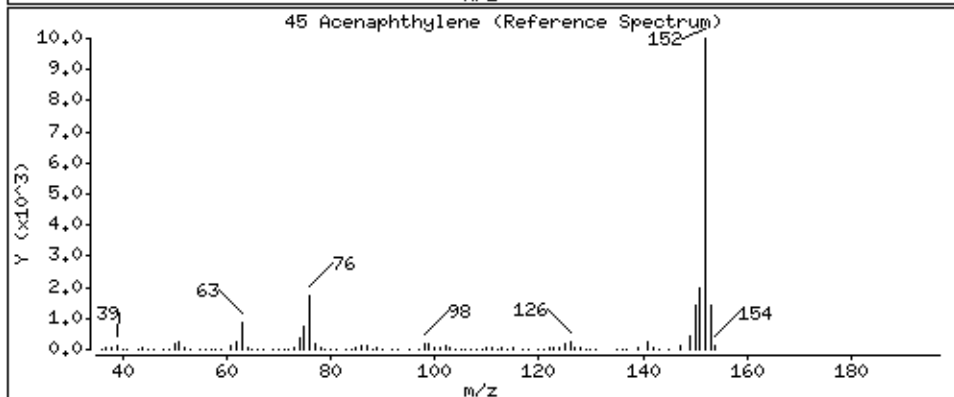
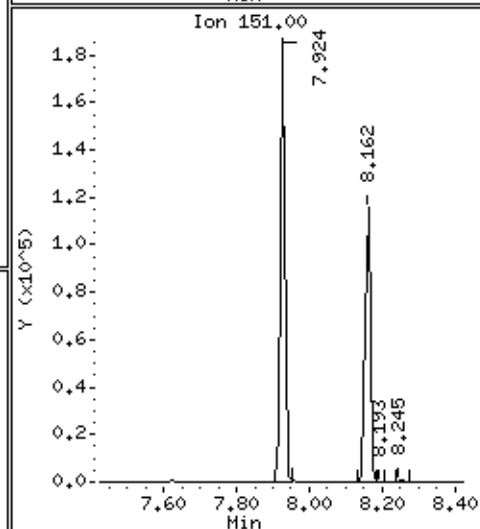
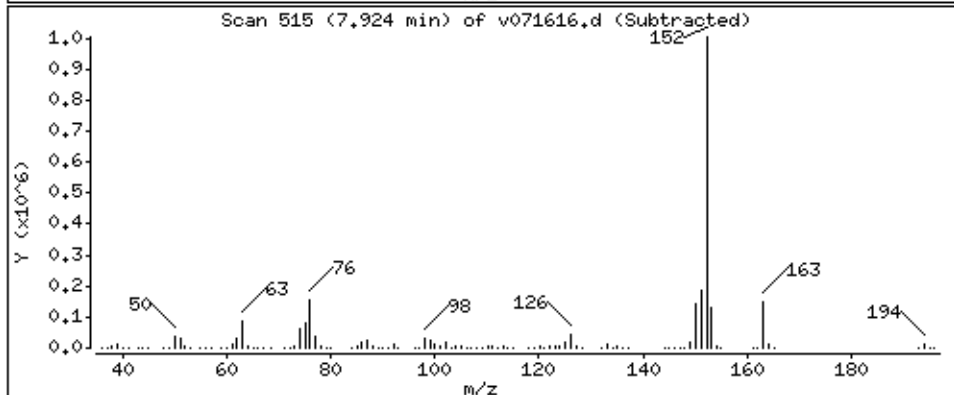
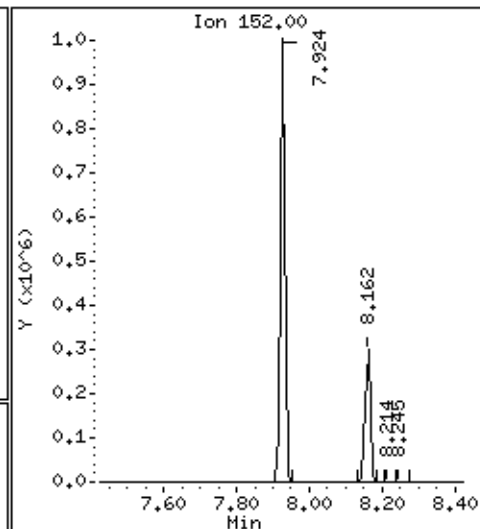
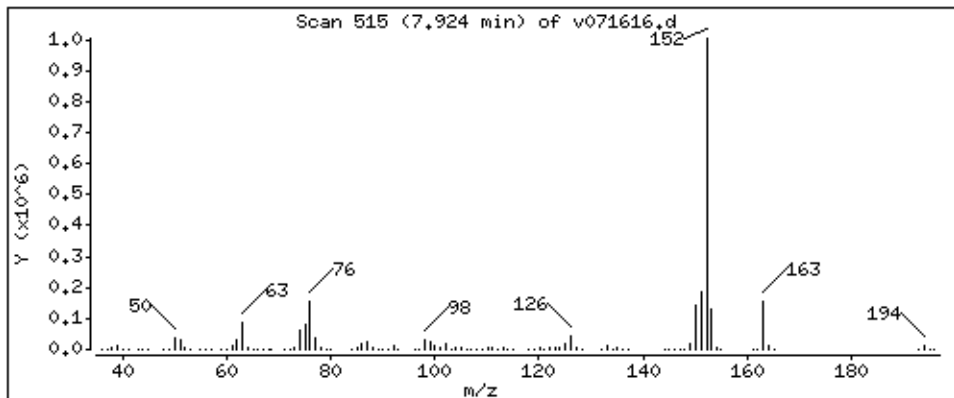
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

45 Acenaphthylene

Concentration: 51.67 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

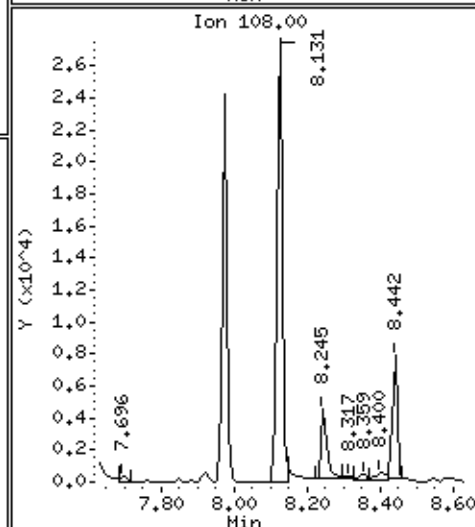
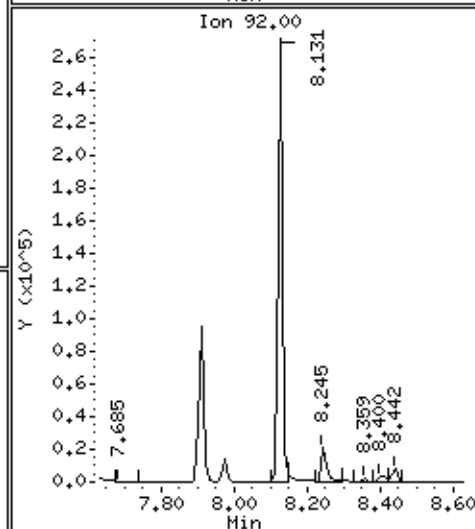
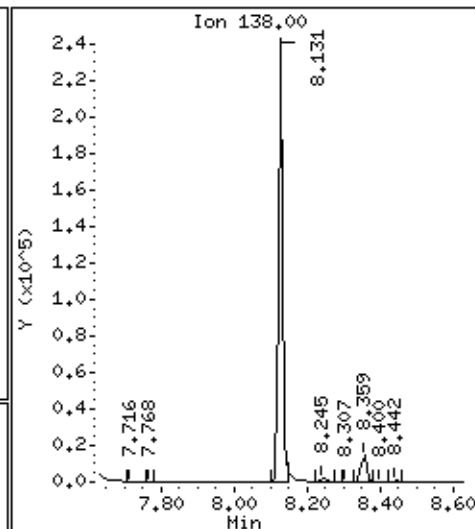
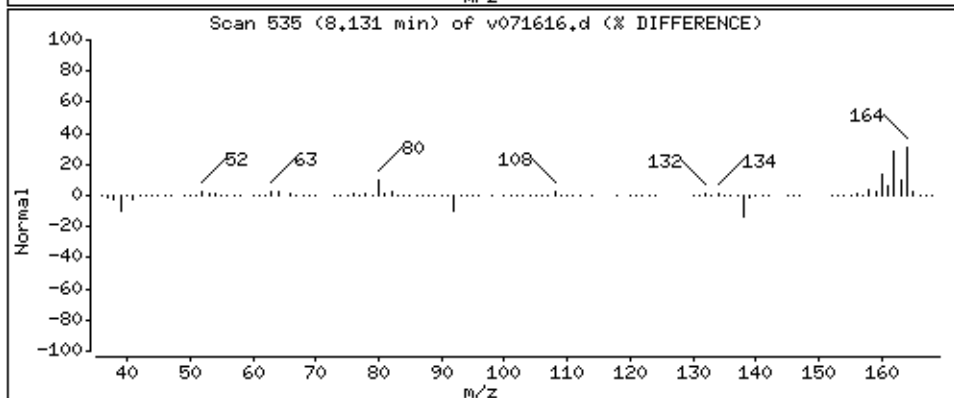
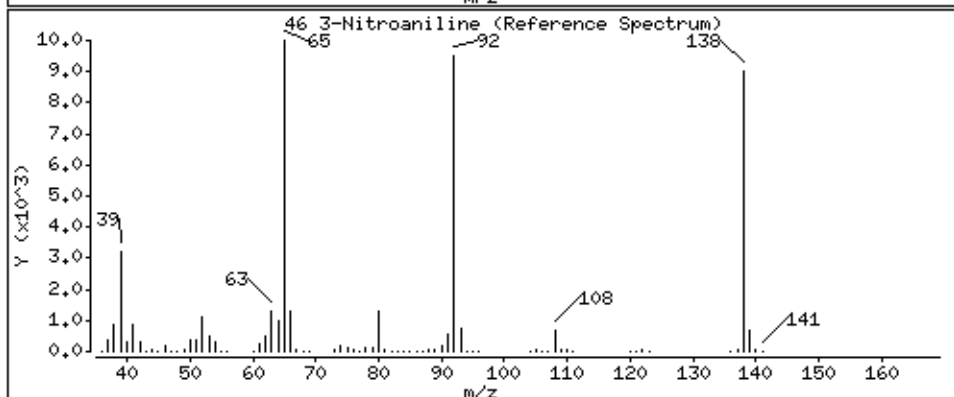
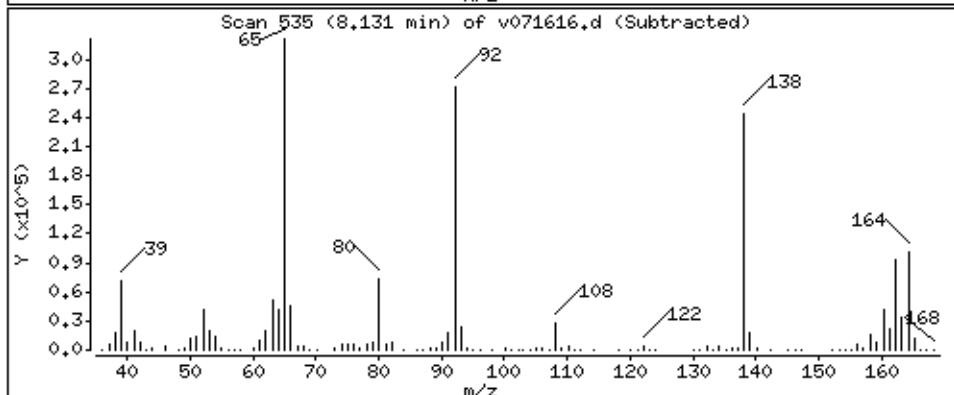
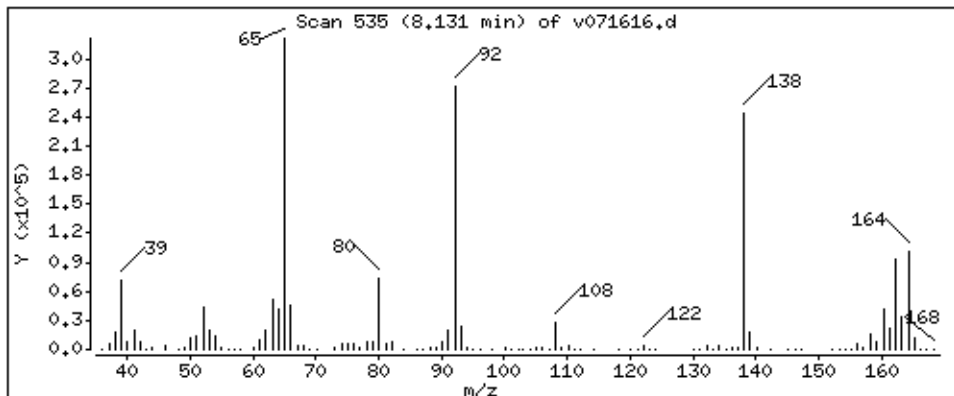
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

46 3-Nitroaniline

Concentration: 54.81 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

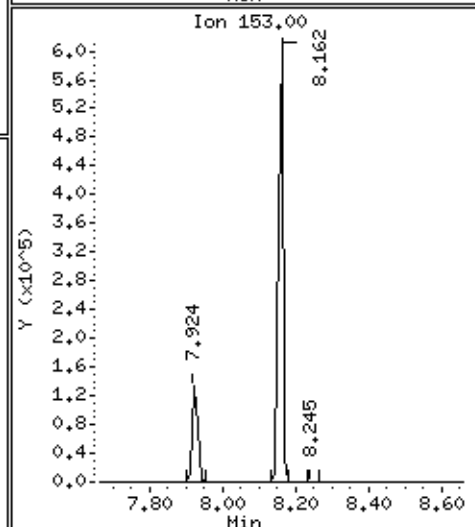
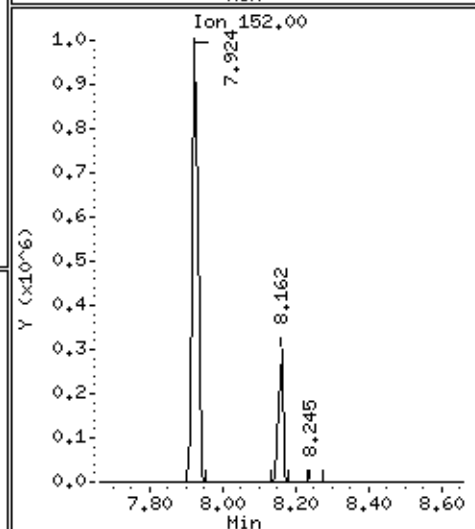
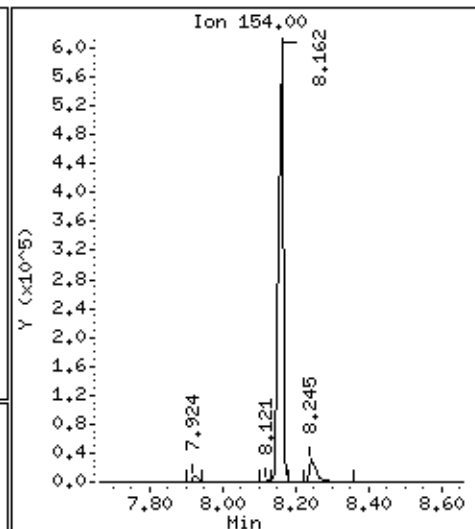
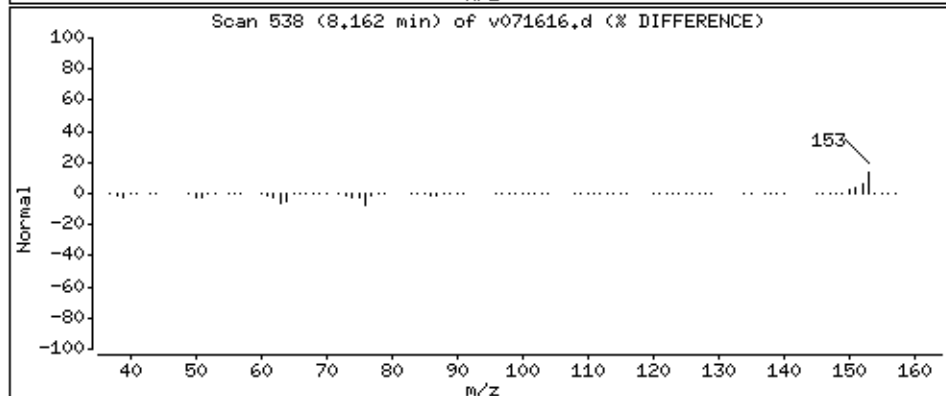
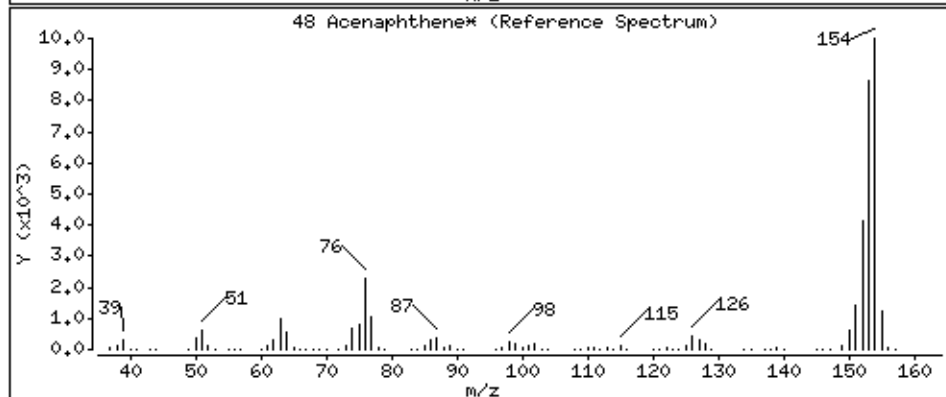
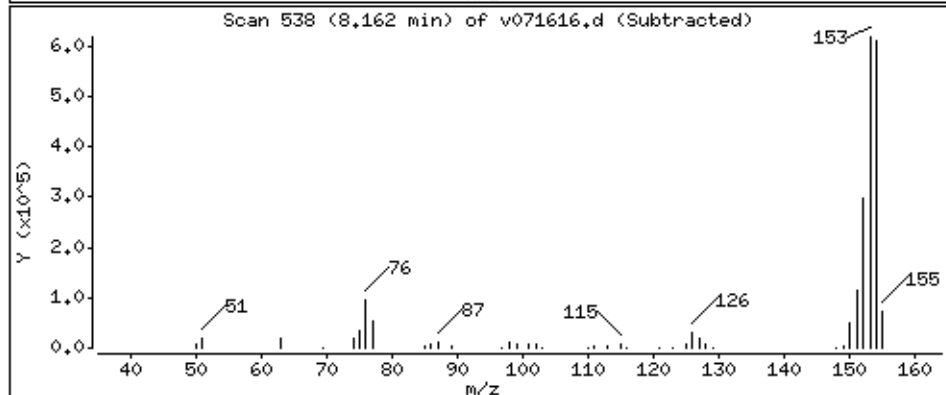
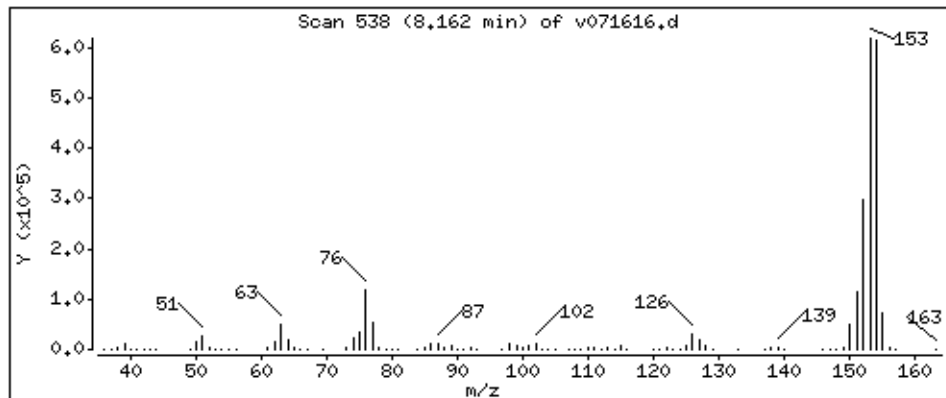
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

48 Acenaphthene\*

Concentration: 49.30 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

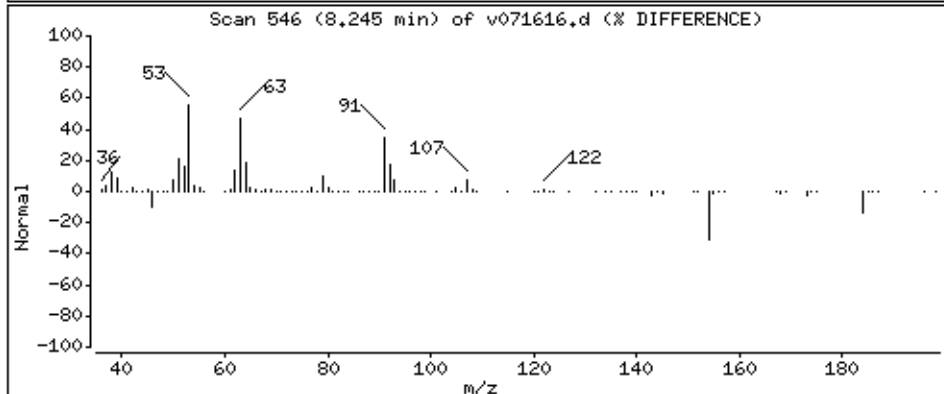
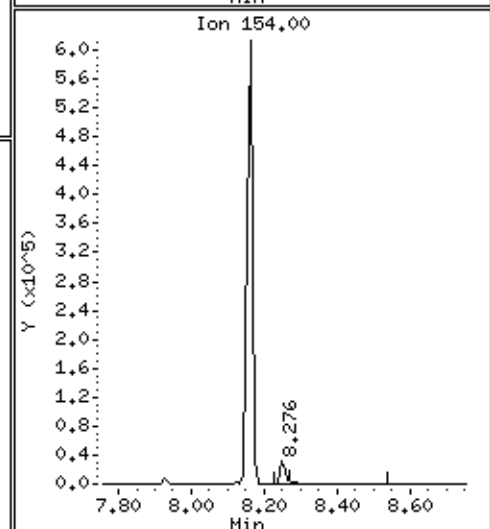
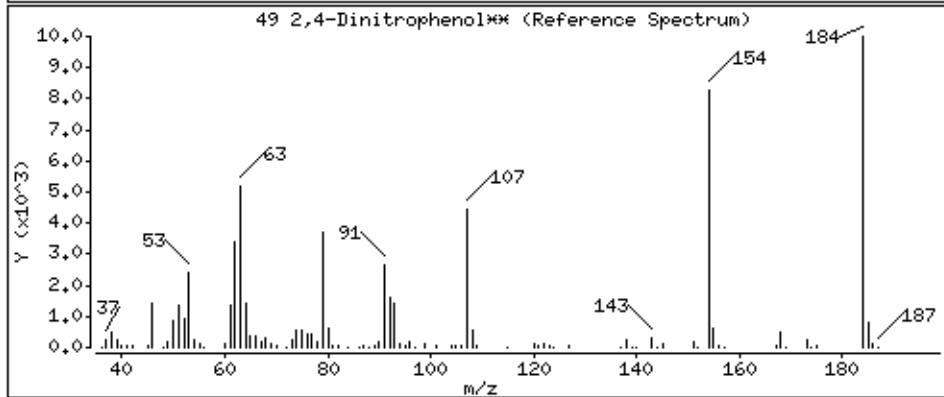
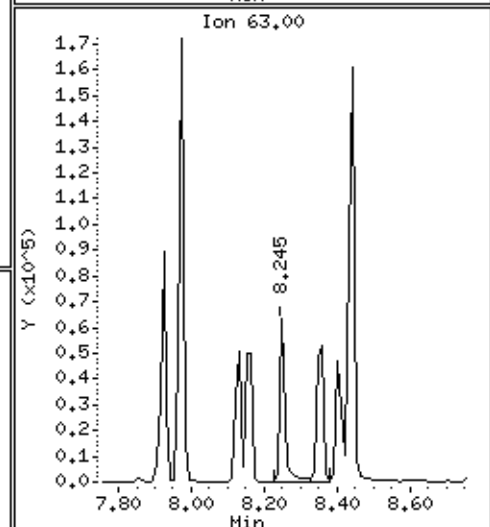
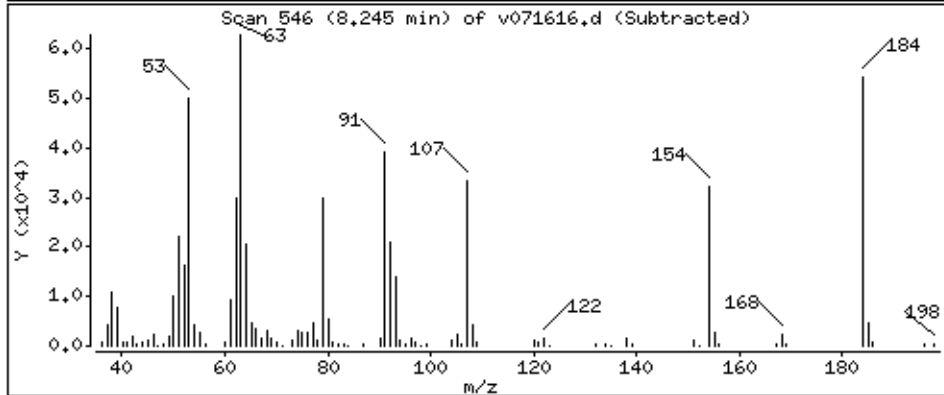
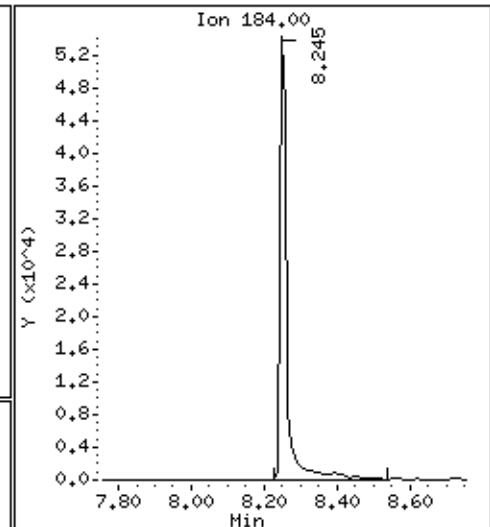
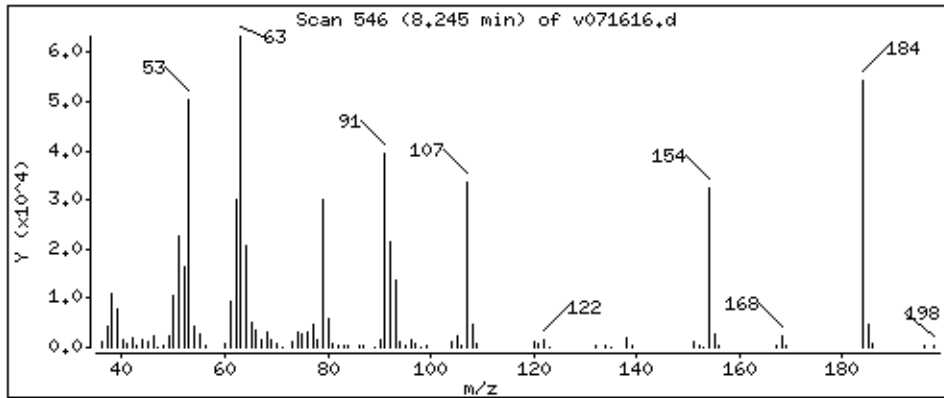
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

49 2,4-Dinitrophenol\*\*

Concentration: 52.07 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

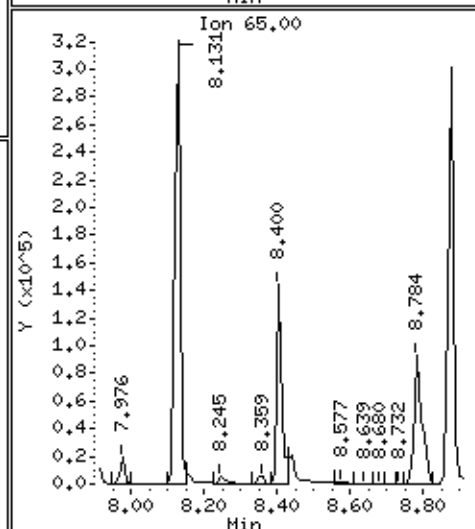
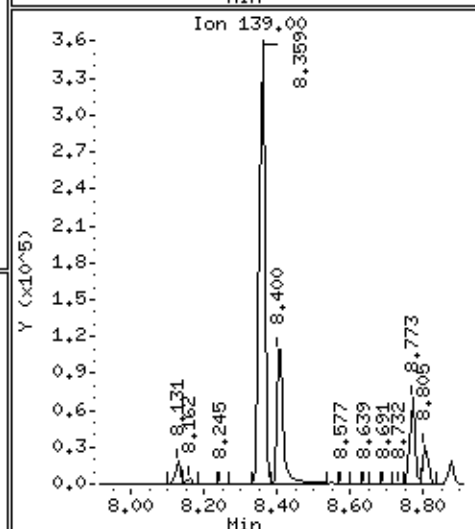
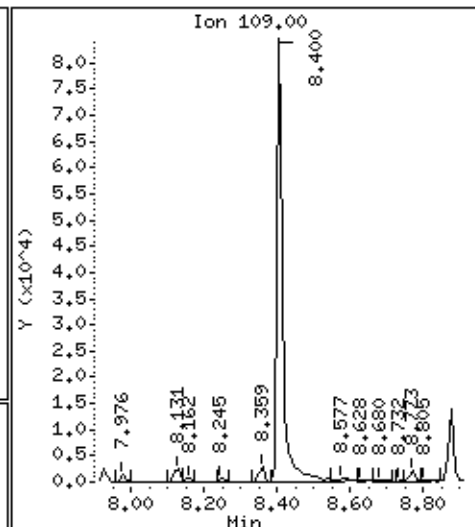
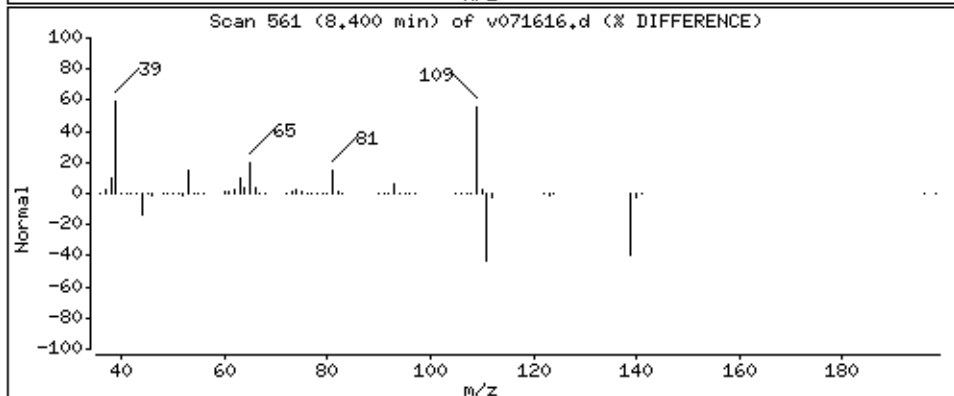
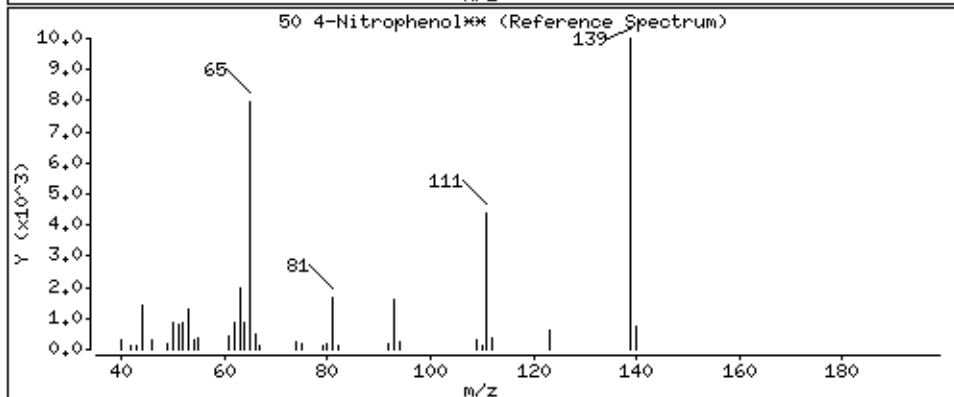
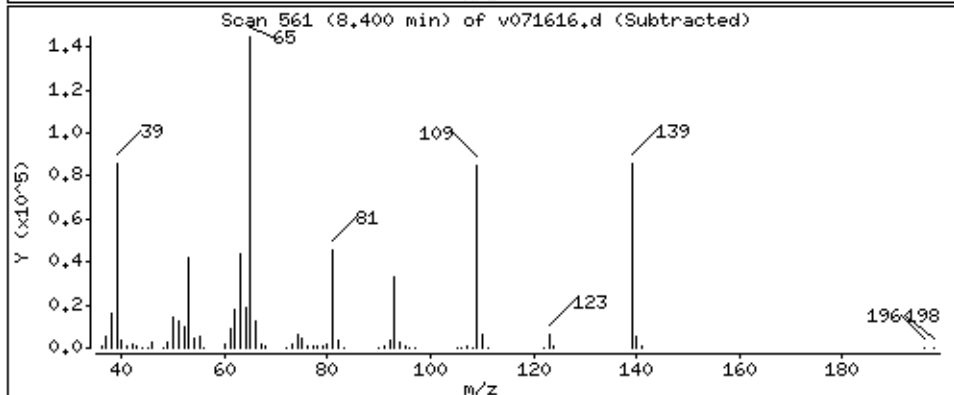
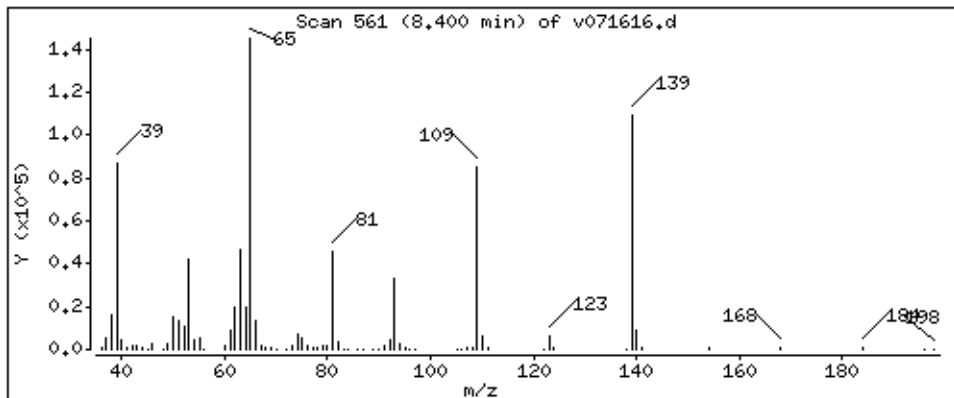
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

50 4-Nitrophenol\*\*

Concentration: 52.02 ug





Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

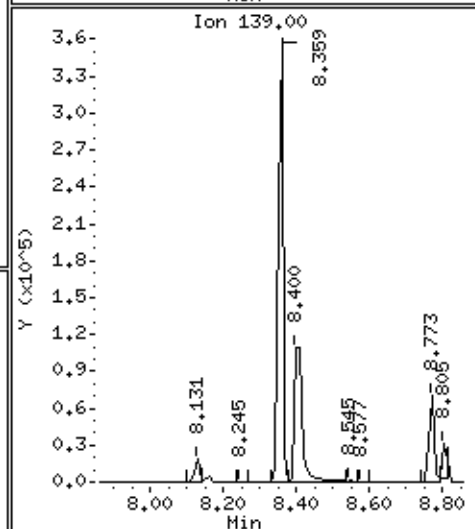
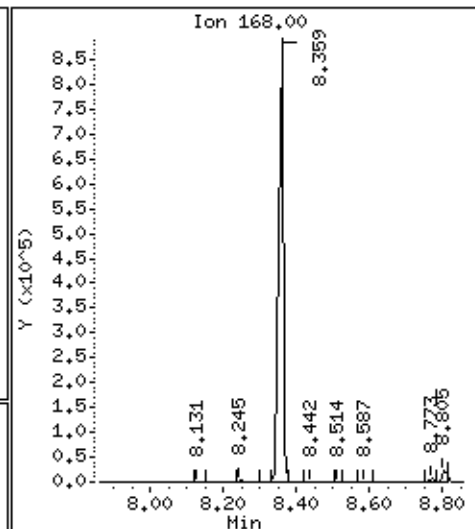
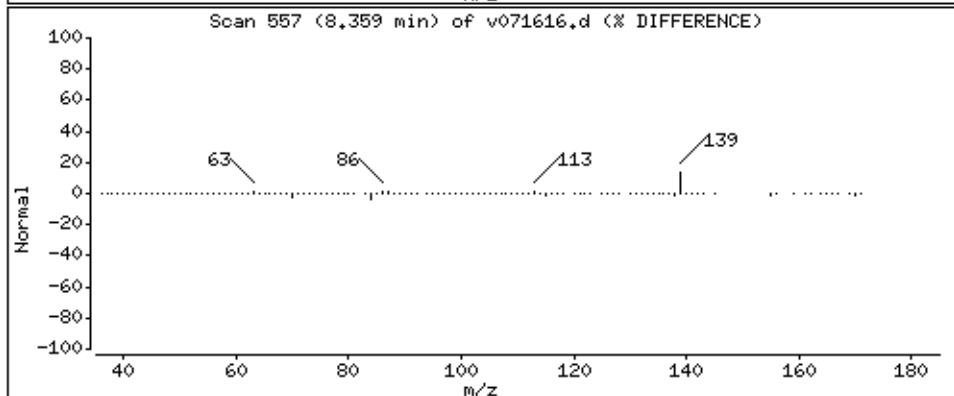
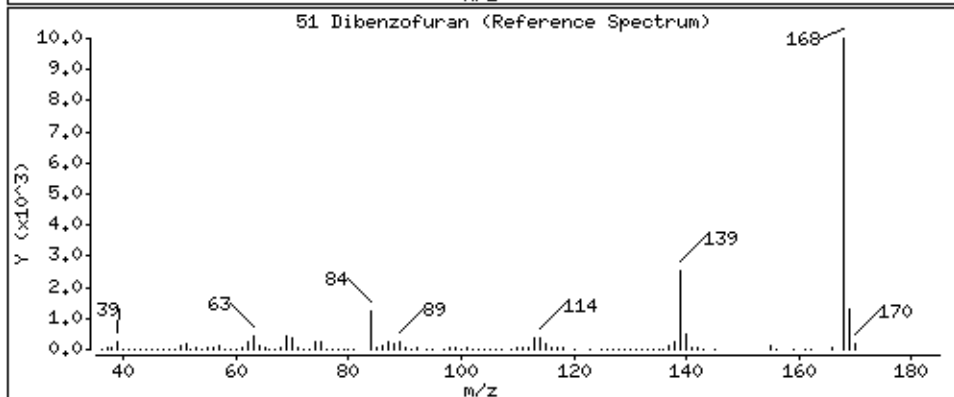
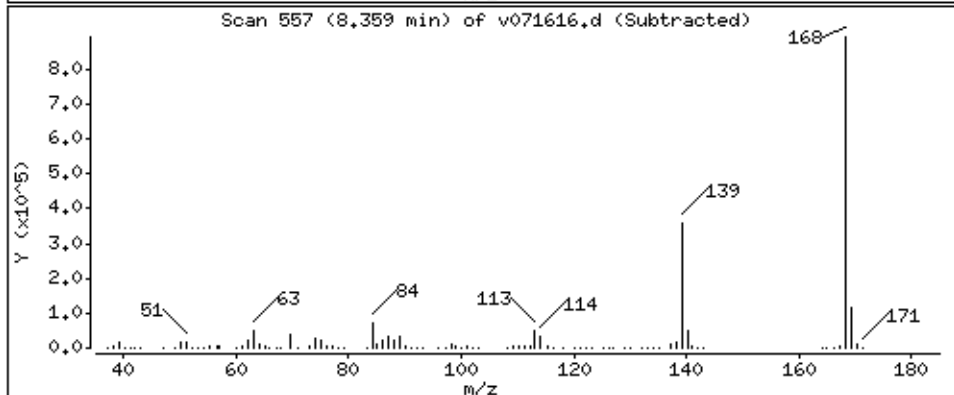
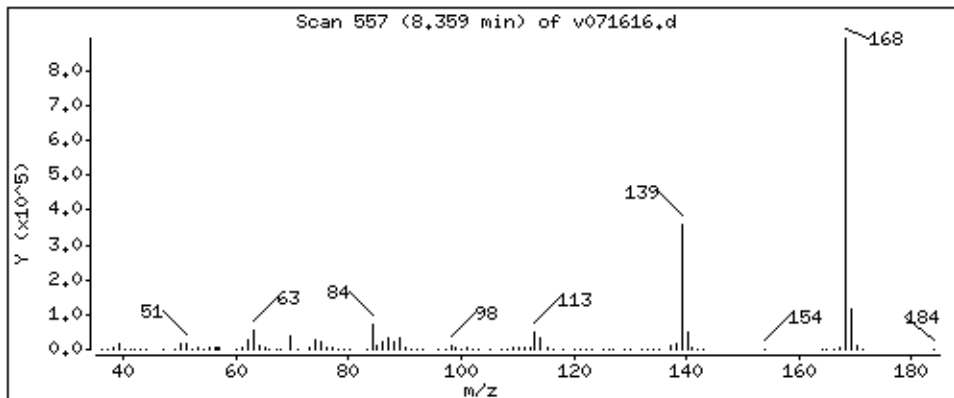
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

51 Dibenzofuran

Concentration: 51.83 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

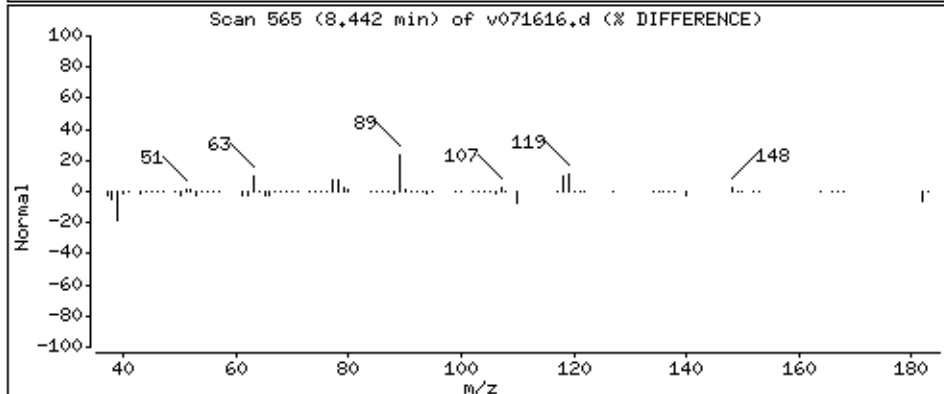
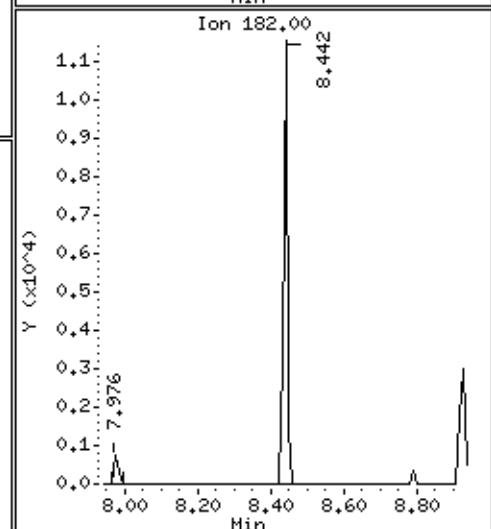
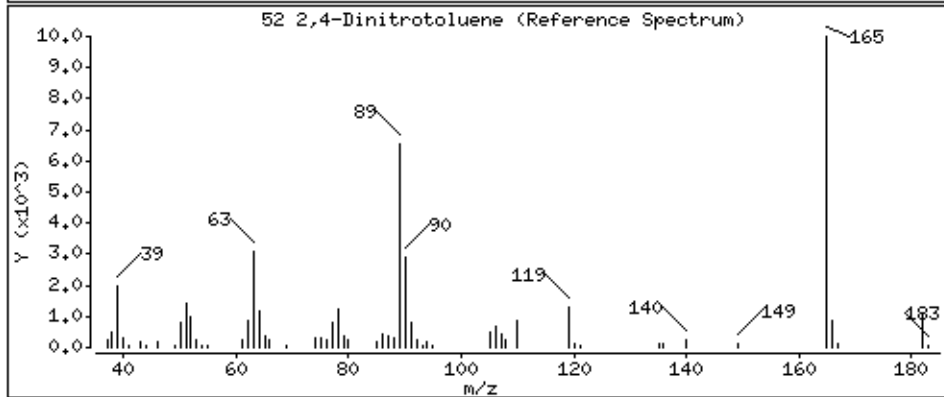
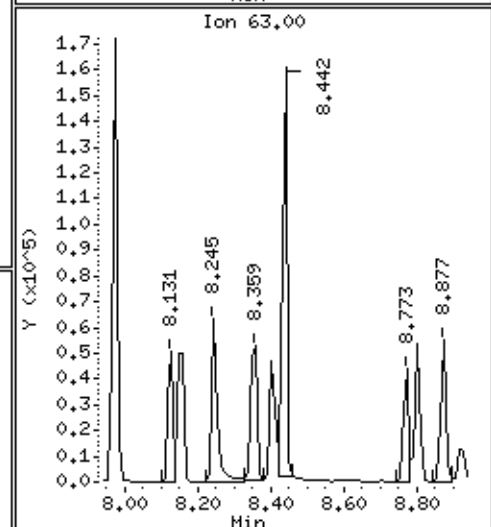
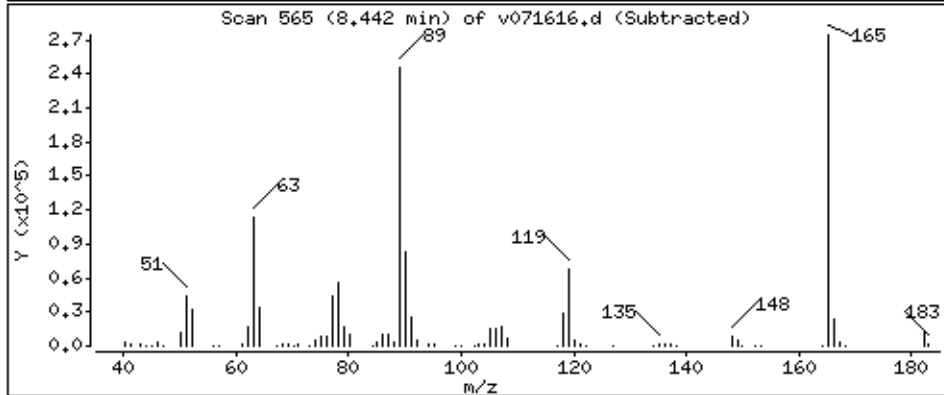
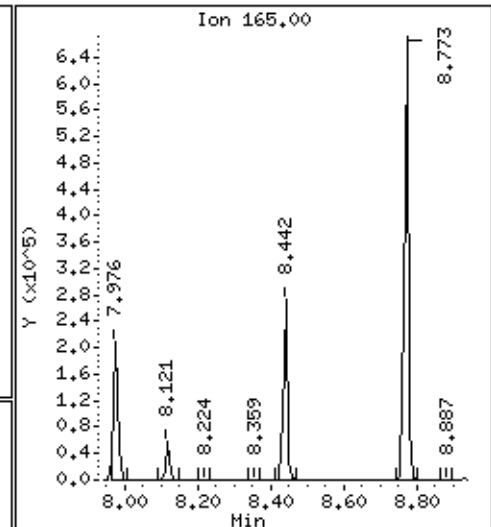
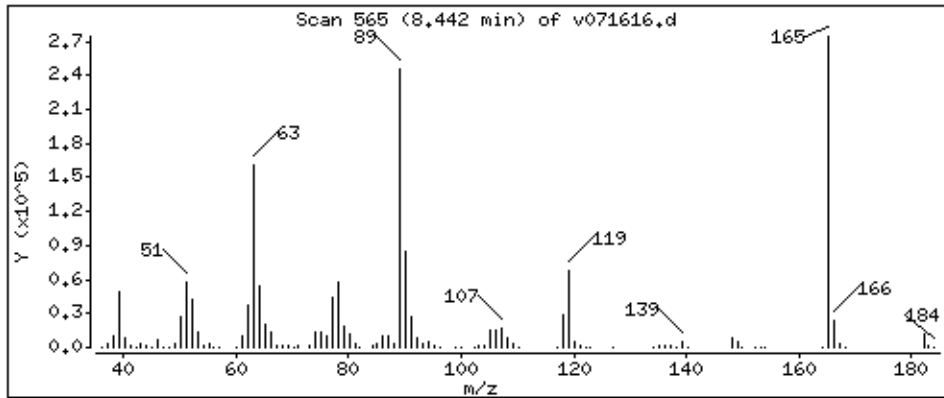
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

52 2,4-Dinitrotoluene

Concentration: 57.86 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

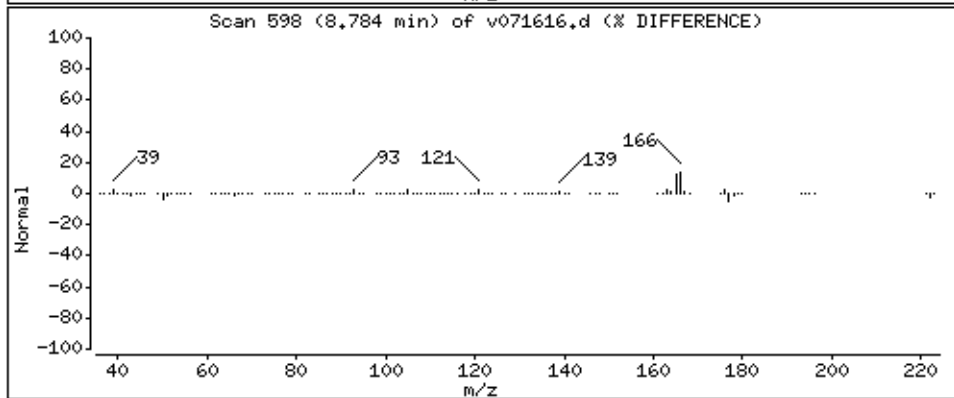
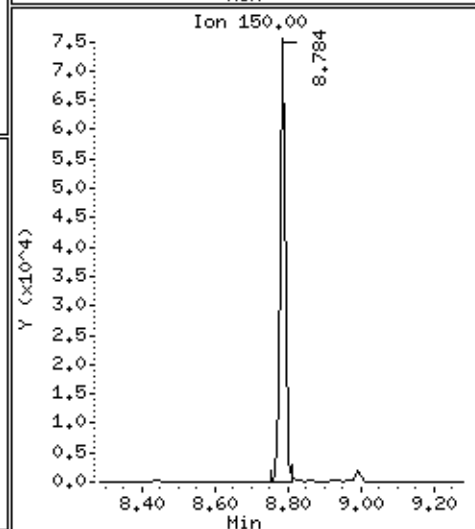
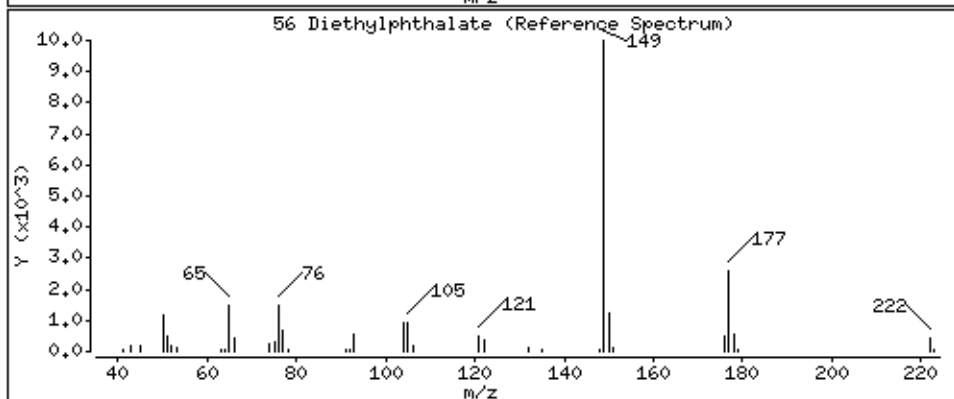
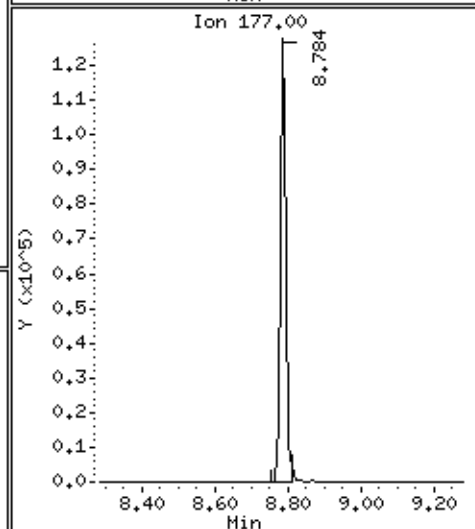
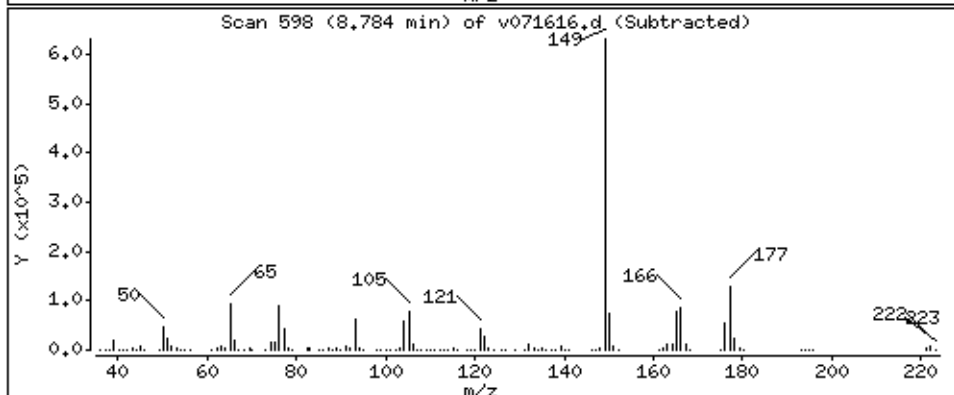
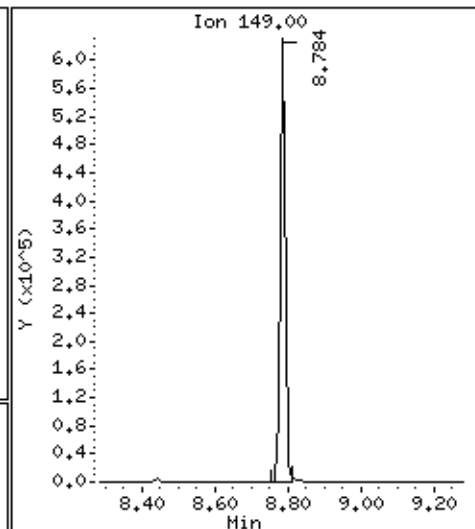
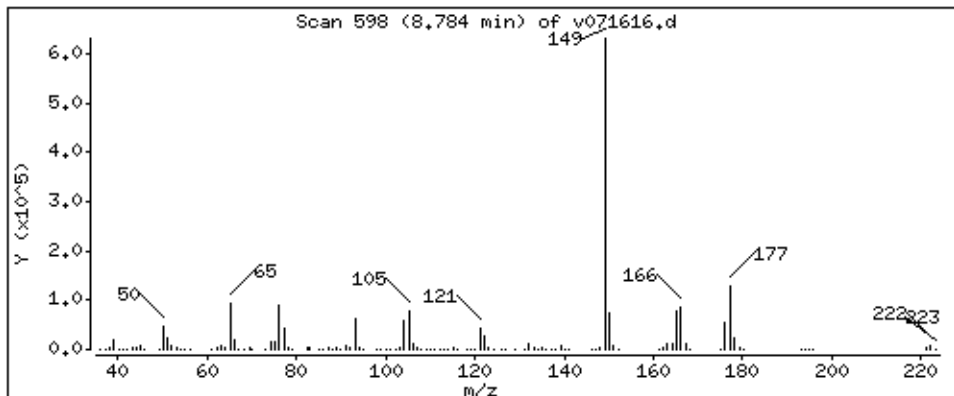
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

56 Diethylphthalate

Concentration: 53.17 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

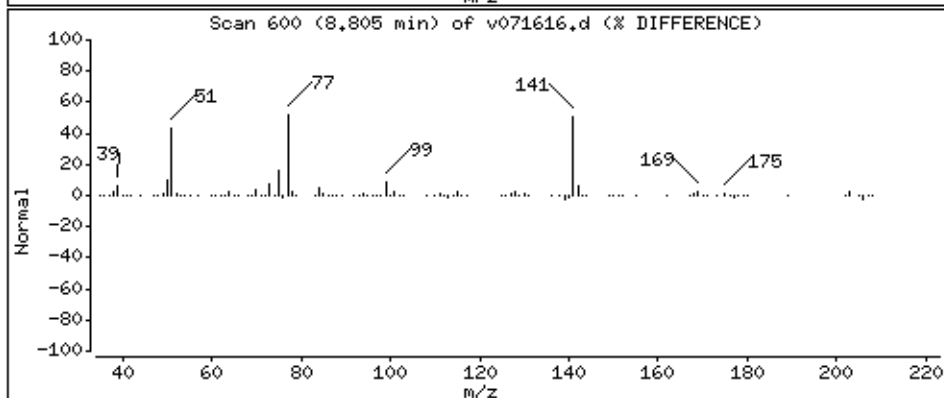
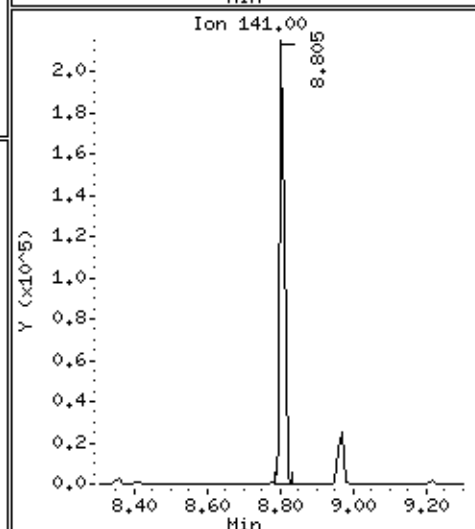
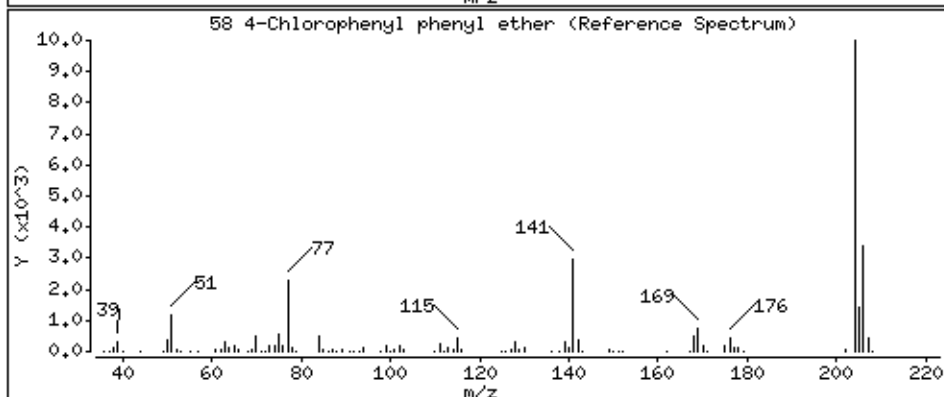
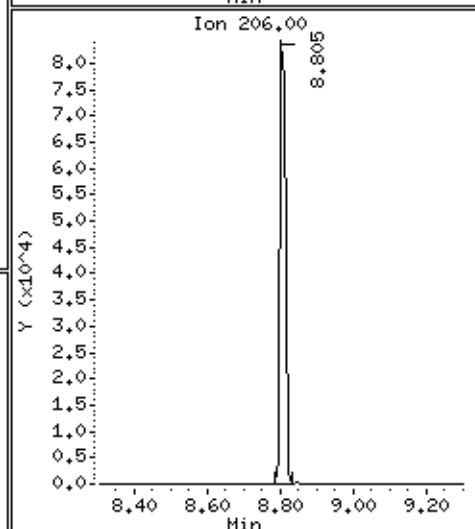
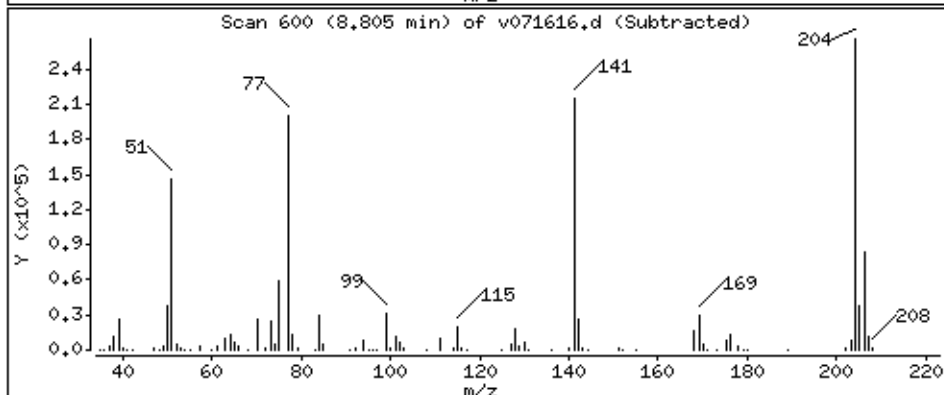
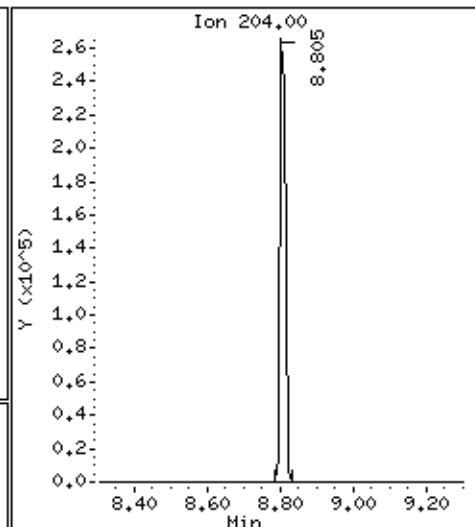
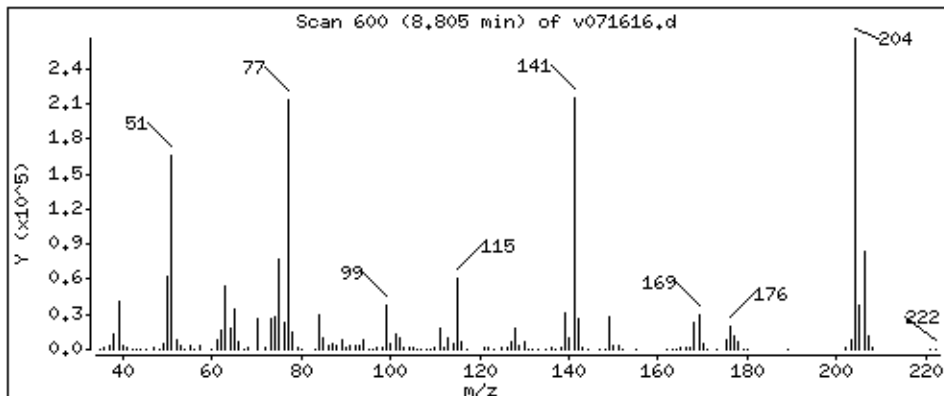
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

58 4-Chlorophenyl phenyl ether

Concentration: 49.55 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

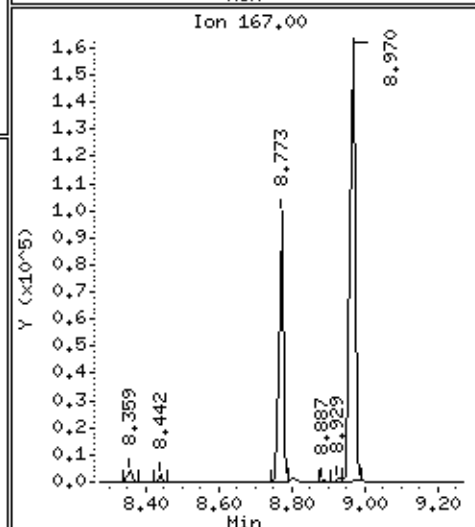
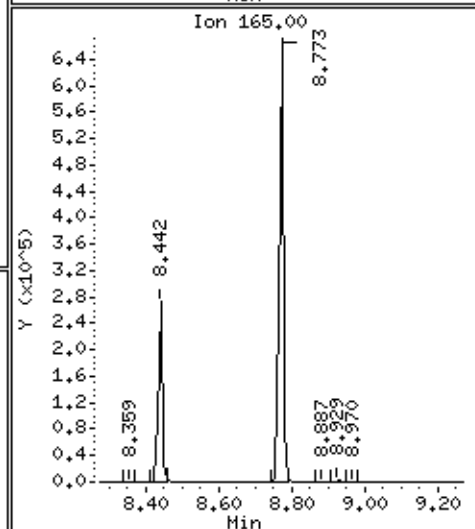
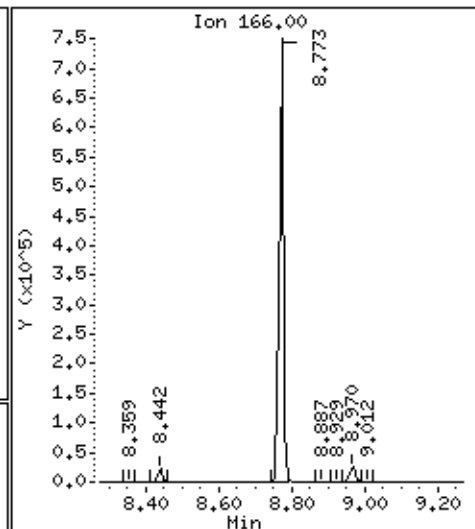
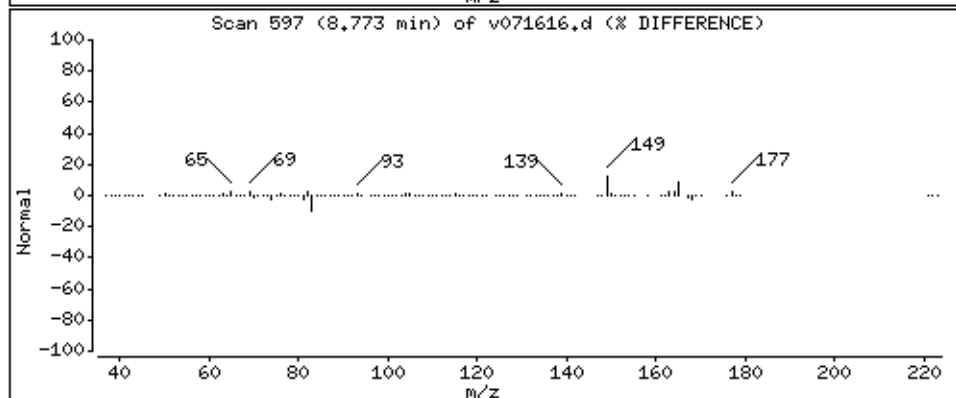
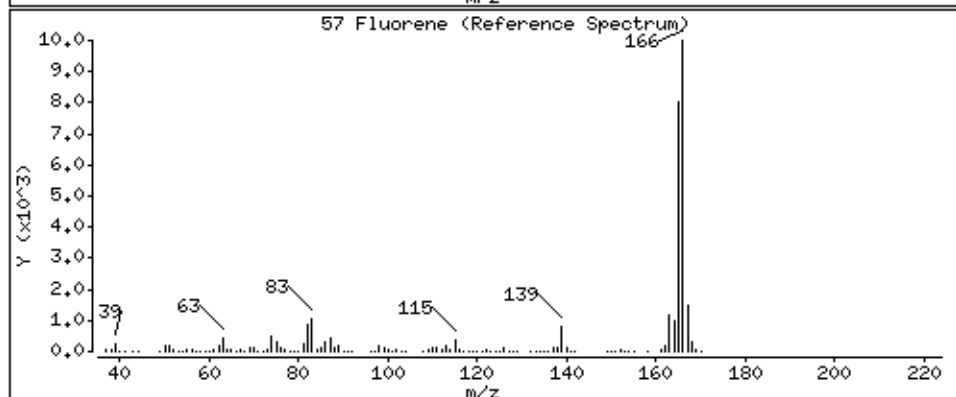
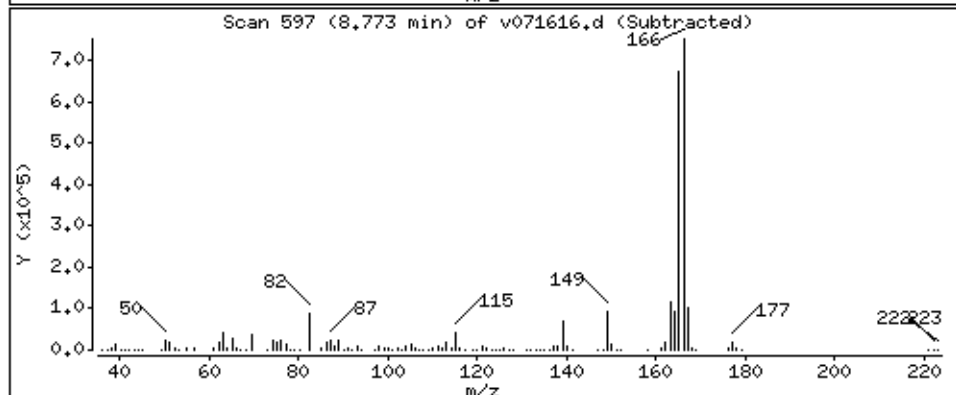
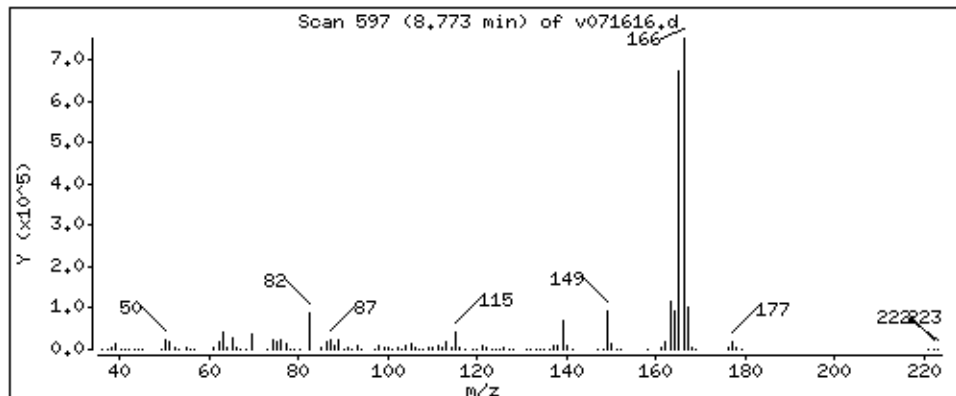
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

57 Fluorene

Concentration: 50.73 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

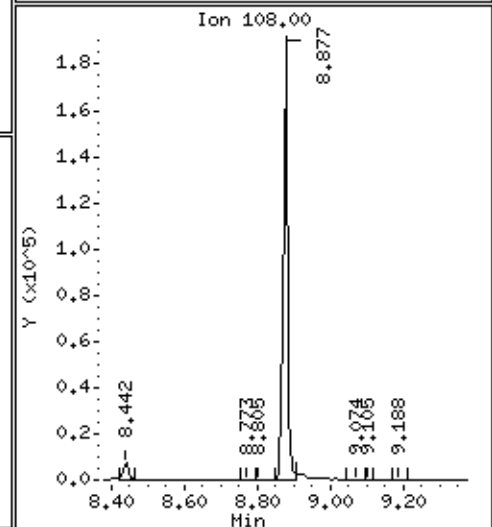
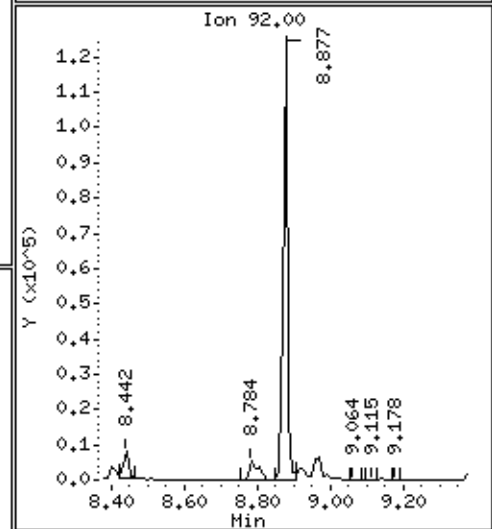
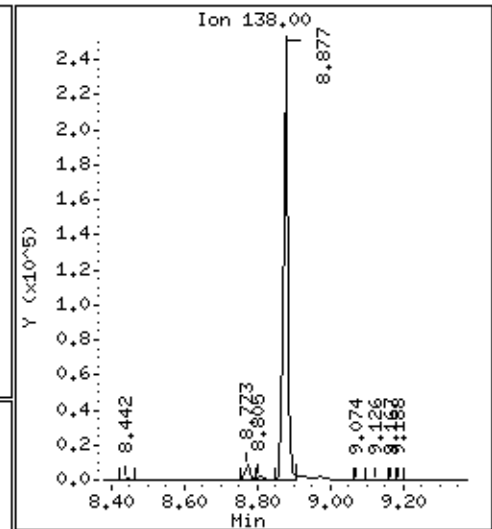
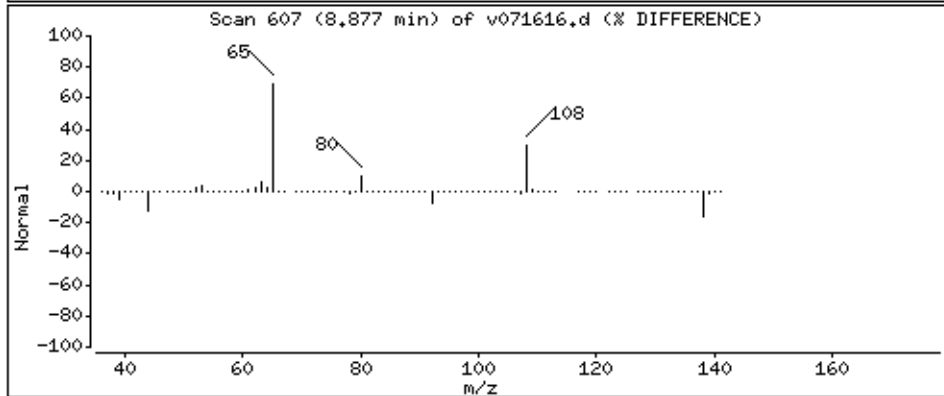
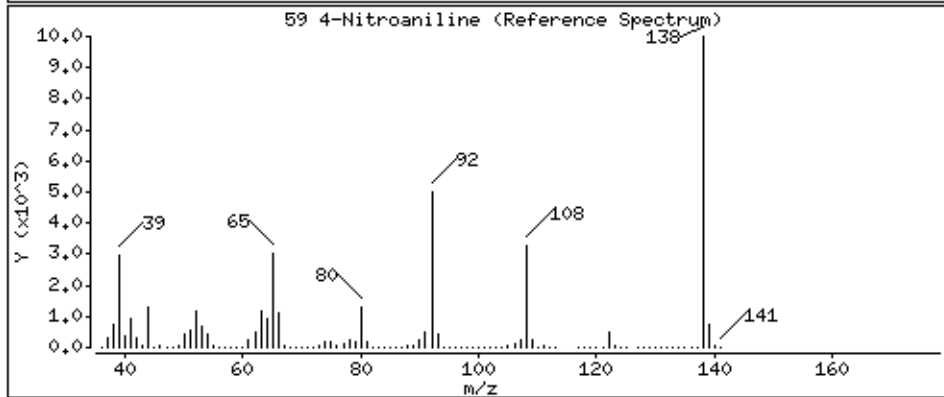
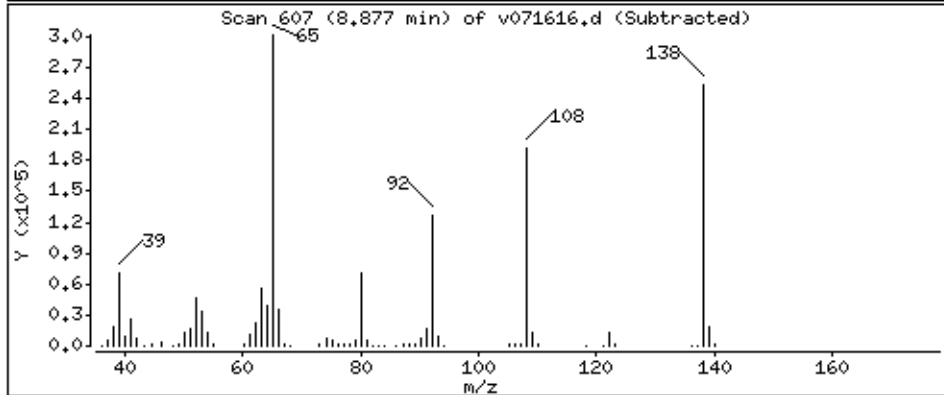
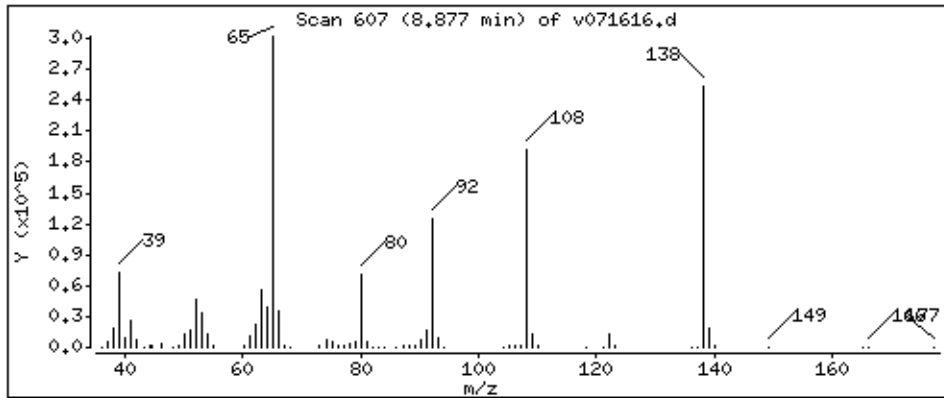
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

59 4-Nitroaniline

Concentration: 55.11 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

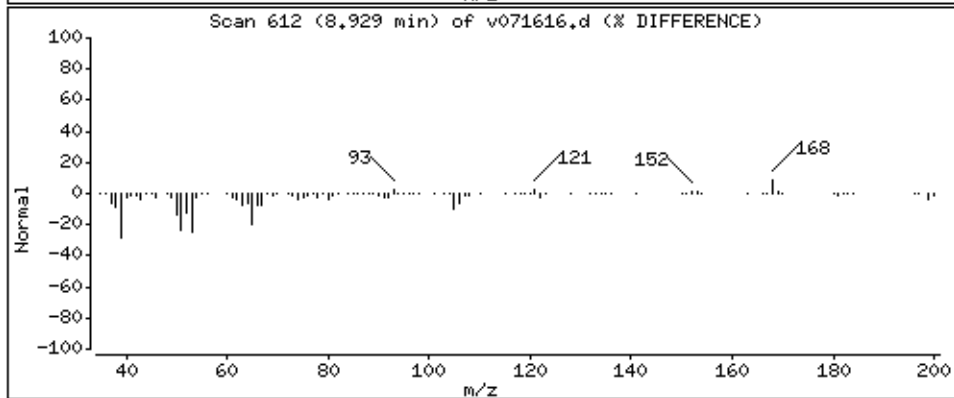
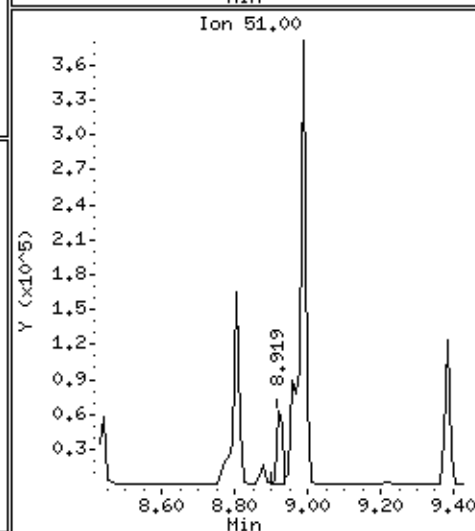
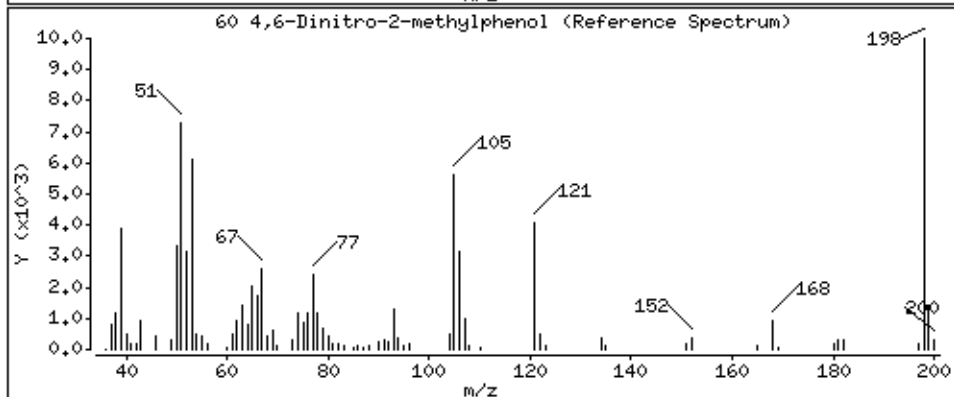
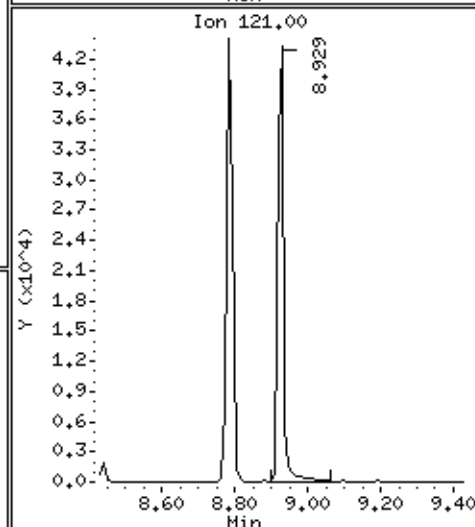
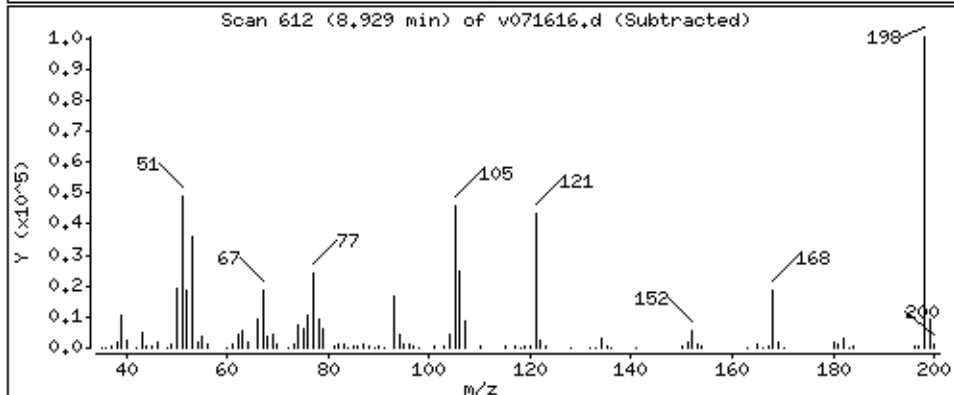
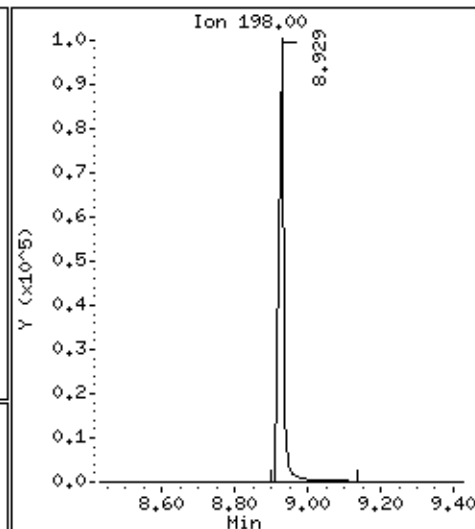
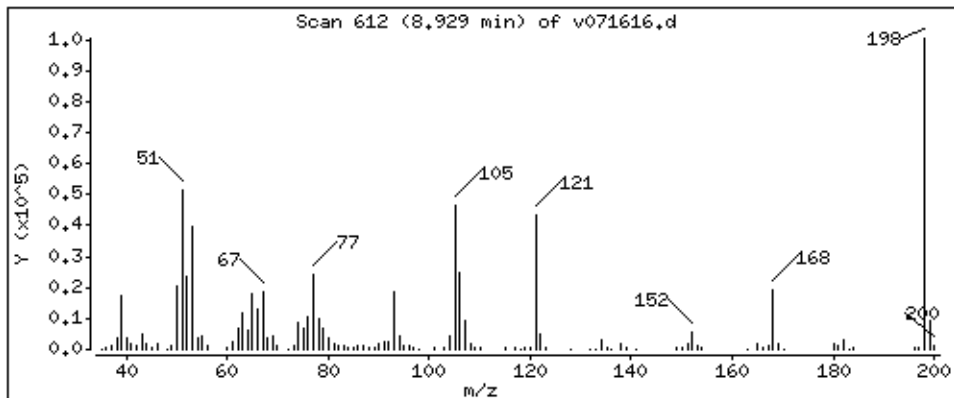
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

60 4,6-Dinitro-2-methylphenol

Concentration: 54.42 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

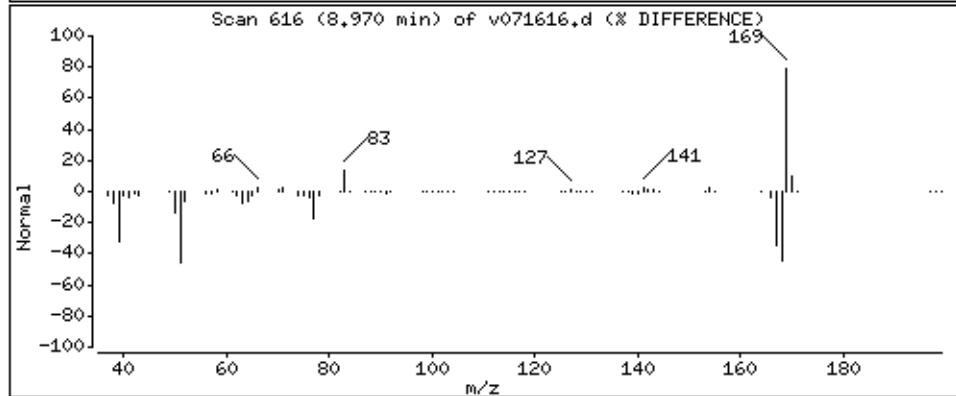
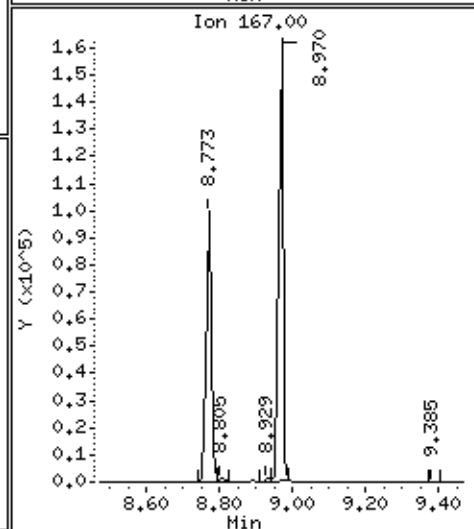
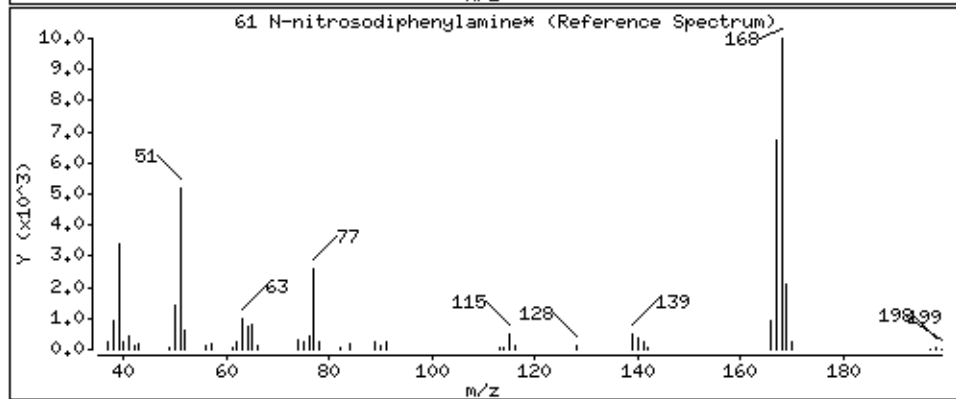
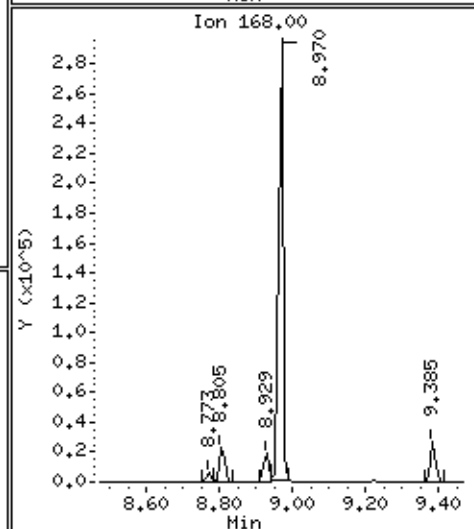
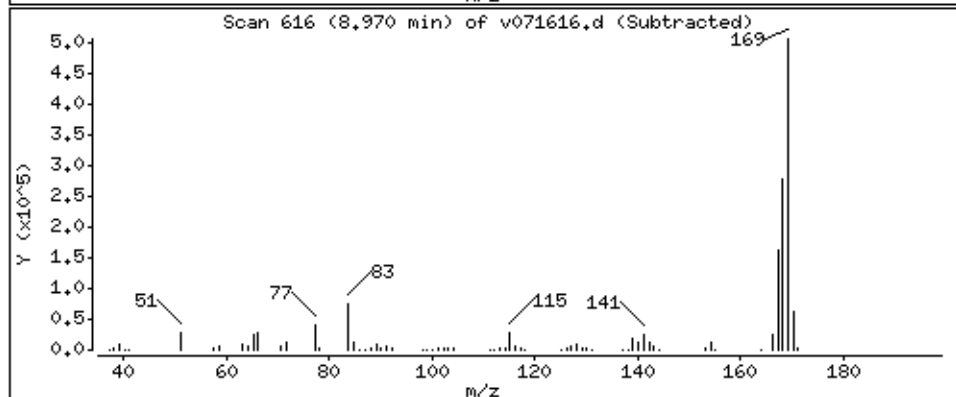
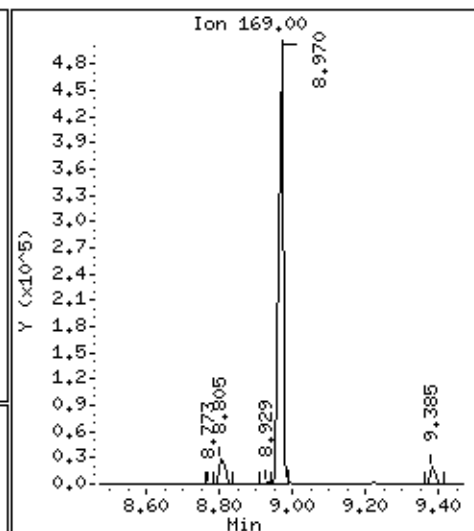
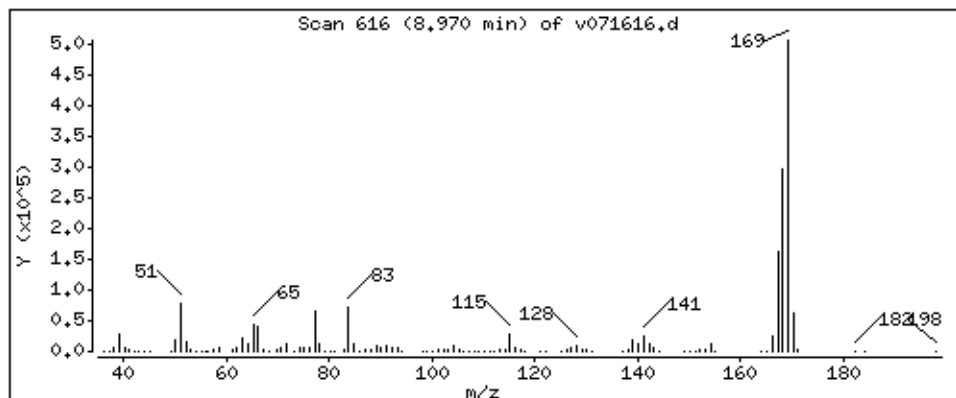
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

61 N-nitrosodiphenylamine\*

Concentration: 42.96 ug





Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

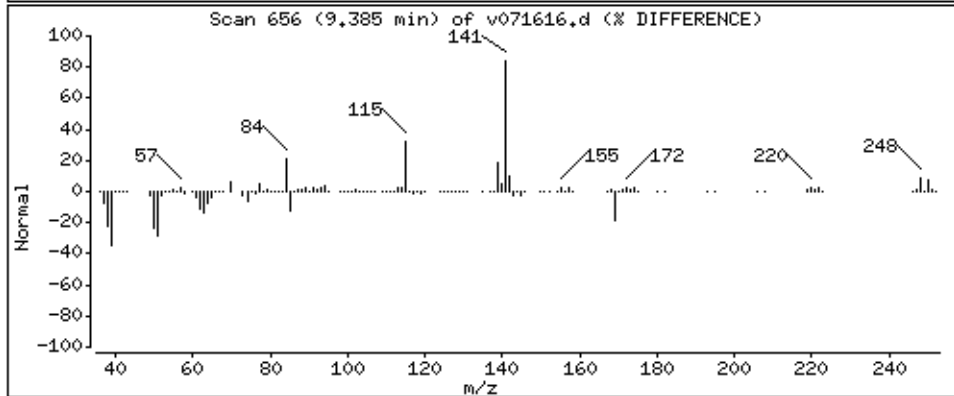
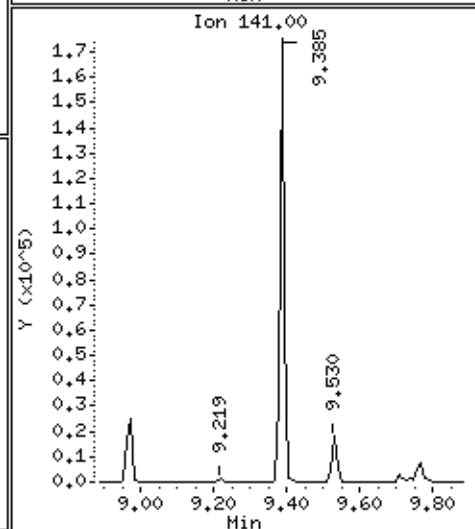
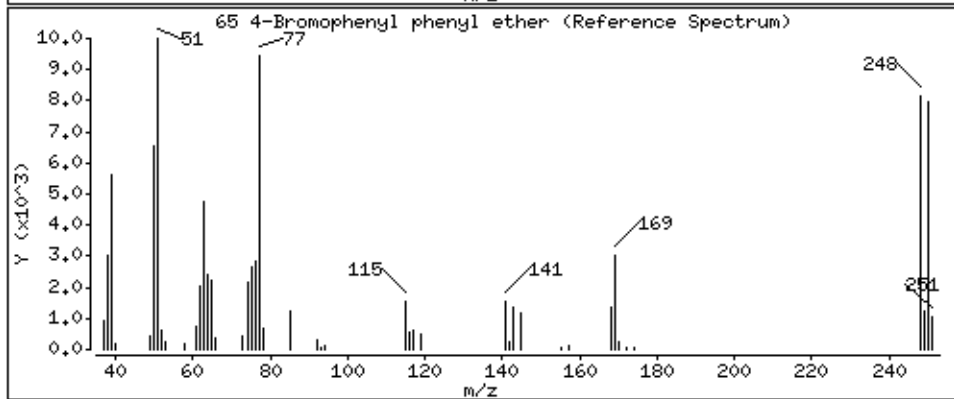
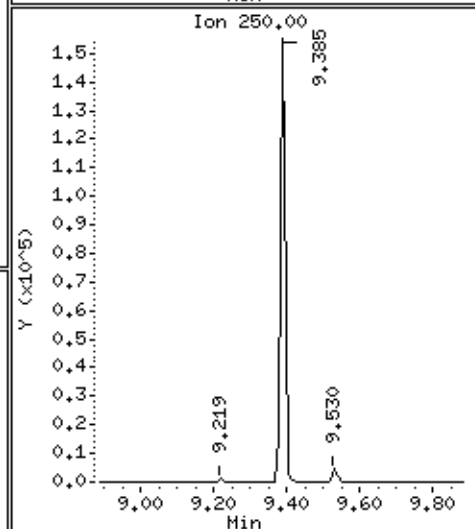
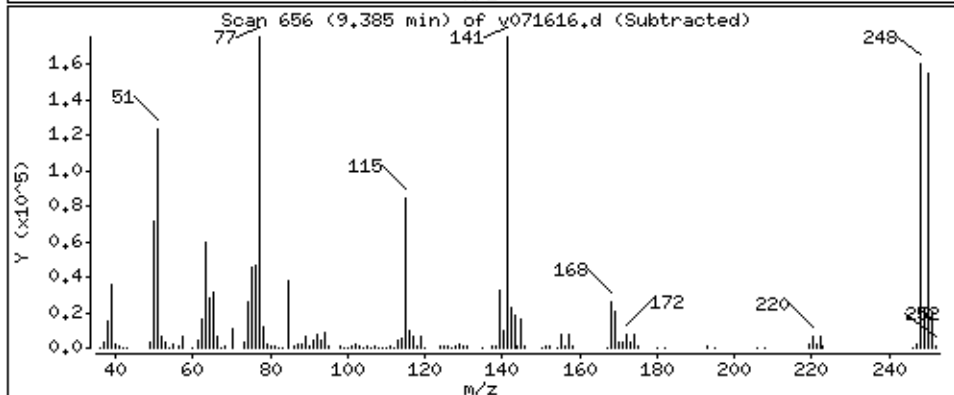
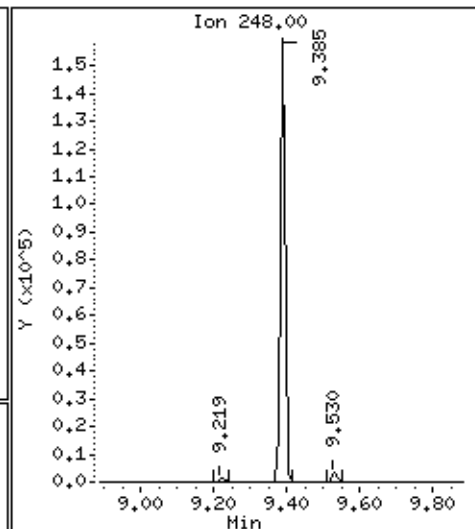
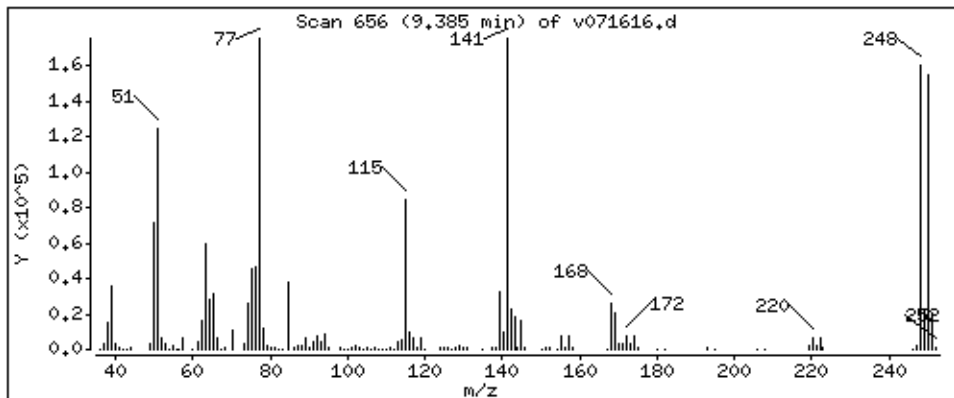
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

65 4-Bromophenyl phenyl ether

Concentration: 48.22 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

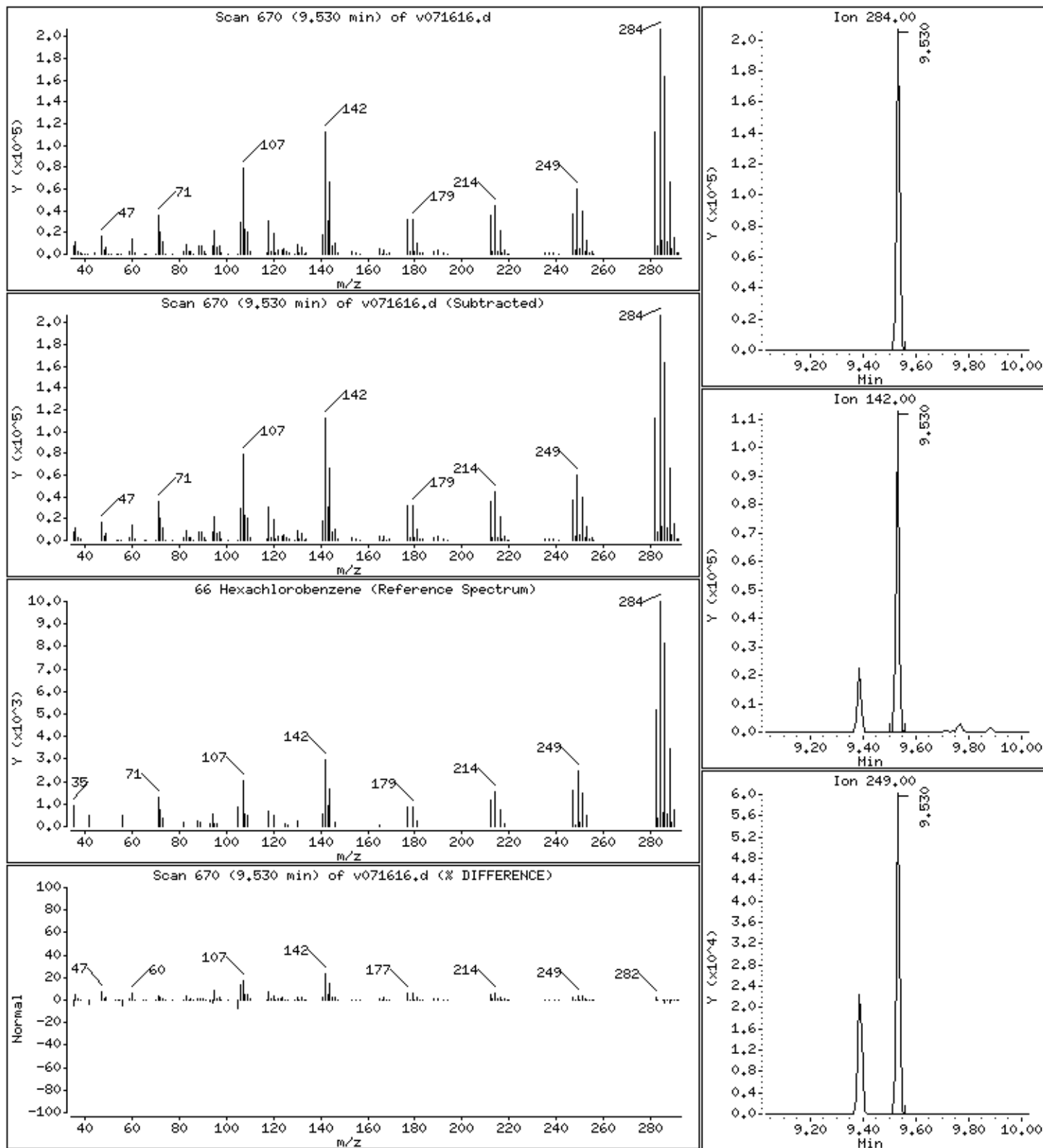
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

66 Hexachlorobenzene

Concentration: 51.79 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

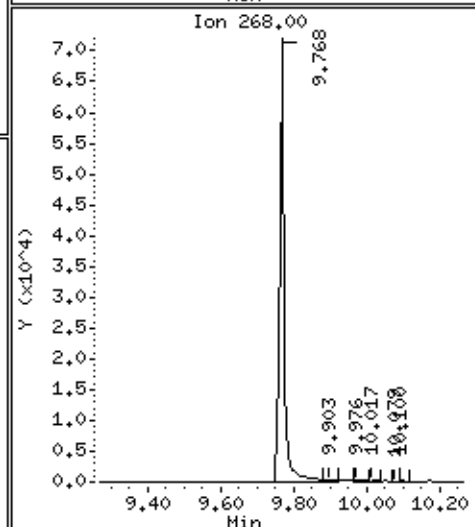
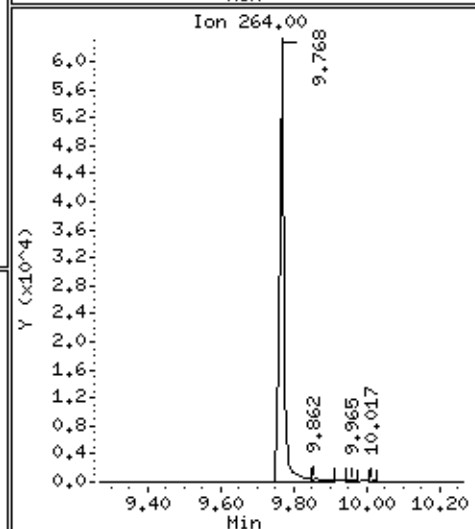
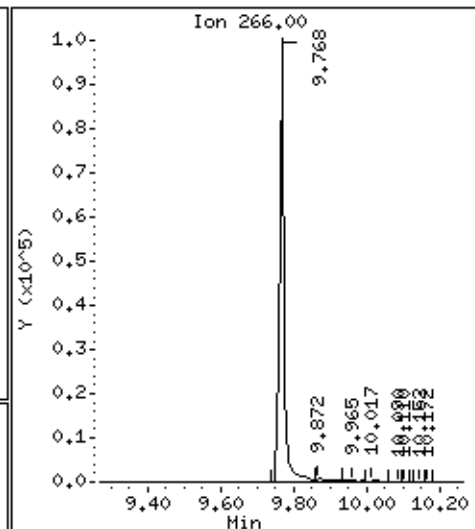
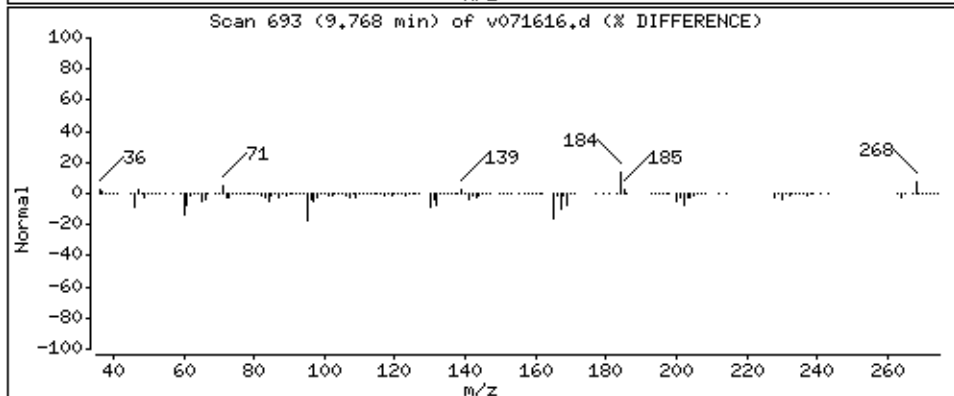
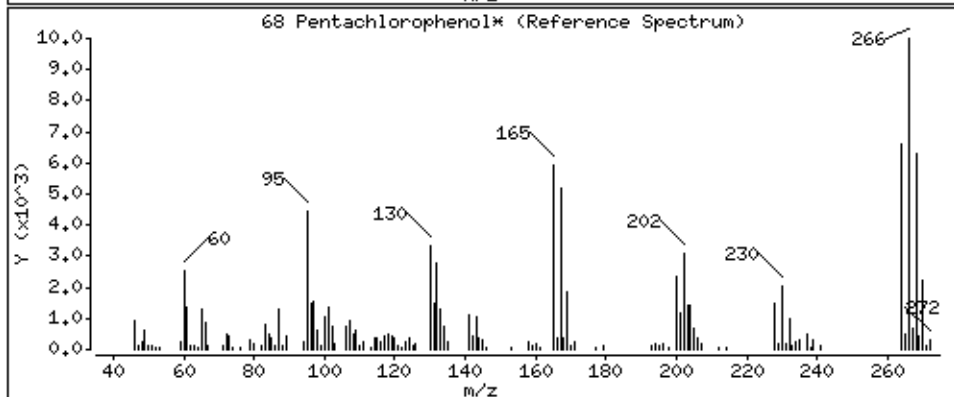
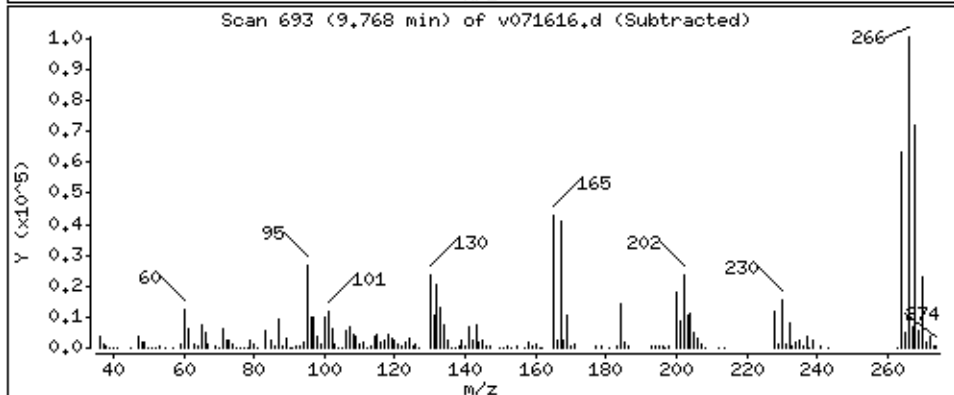
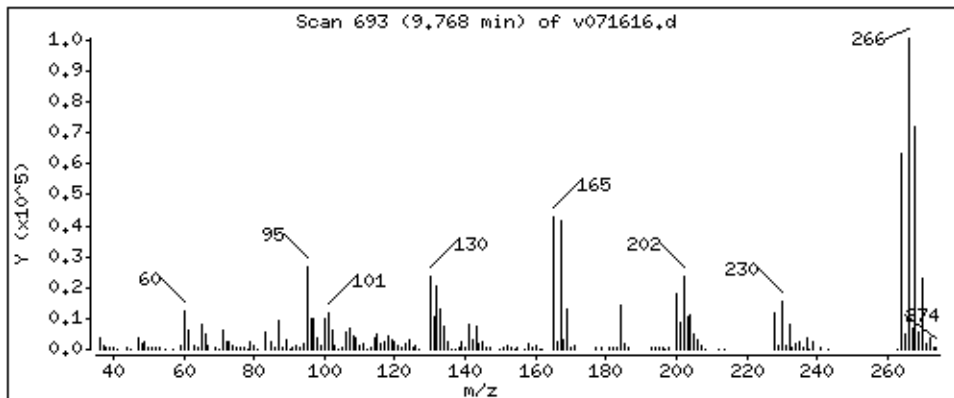
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

68 Pentachlorophenol\*

Concentration: 53.14 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

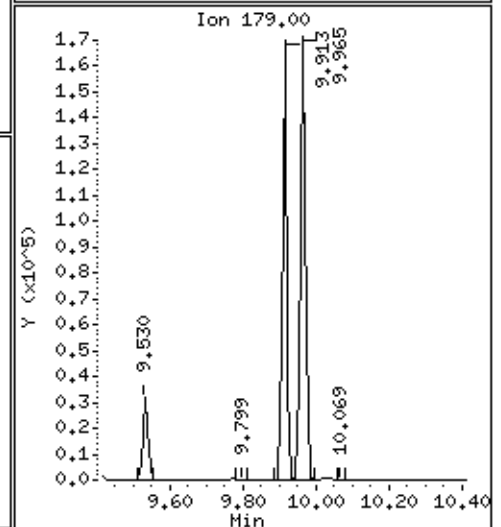
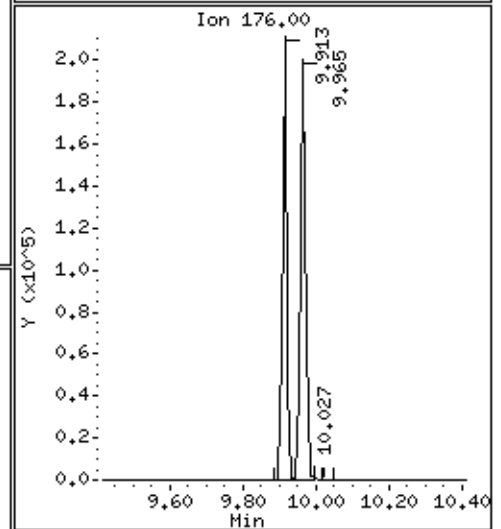
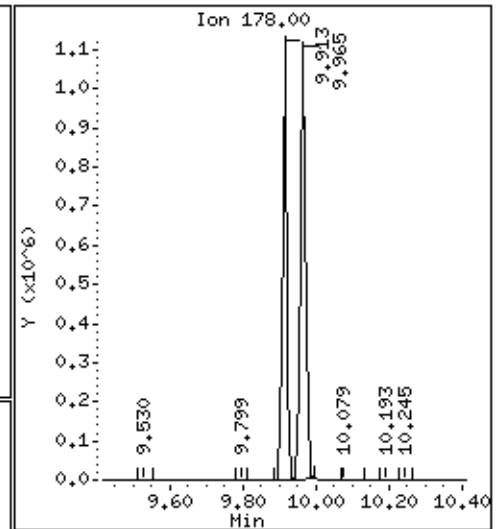
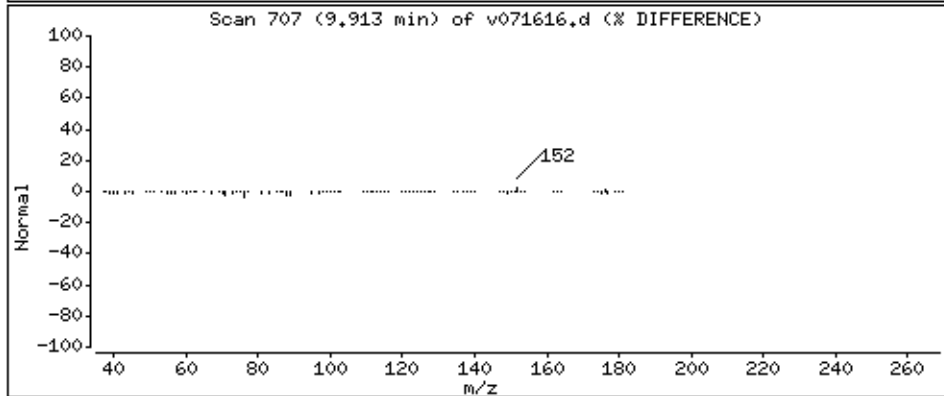
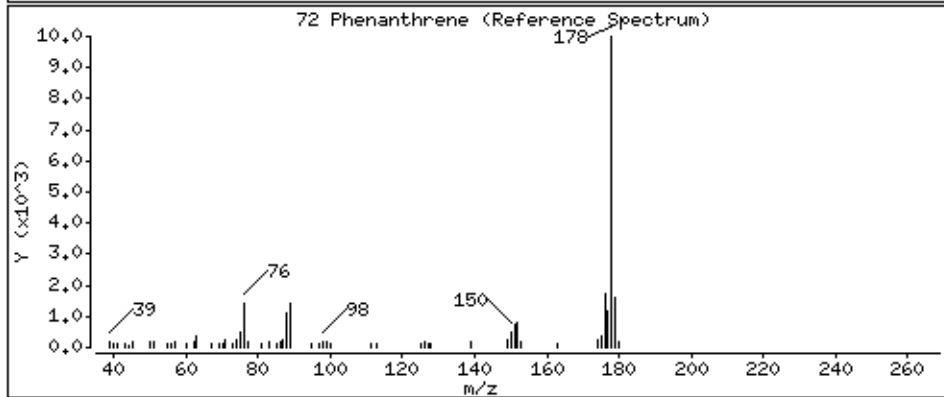
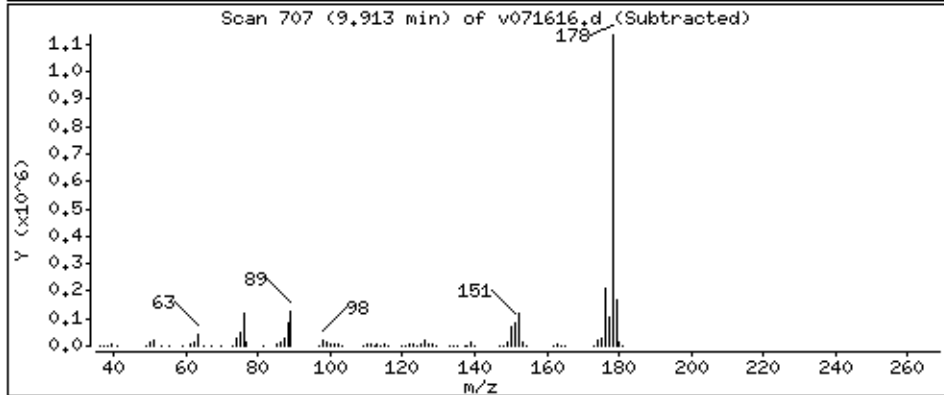
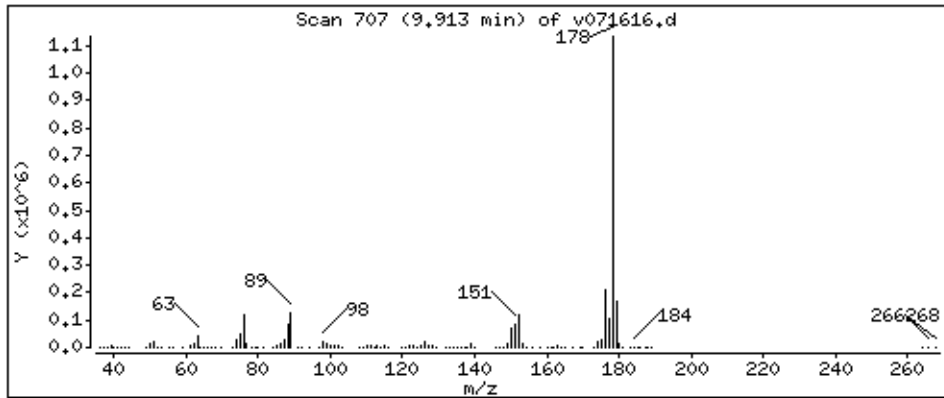
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

72 Phenanthrene

Concentration: 46.95 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

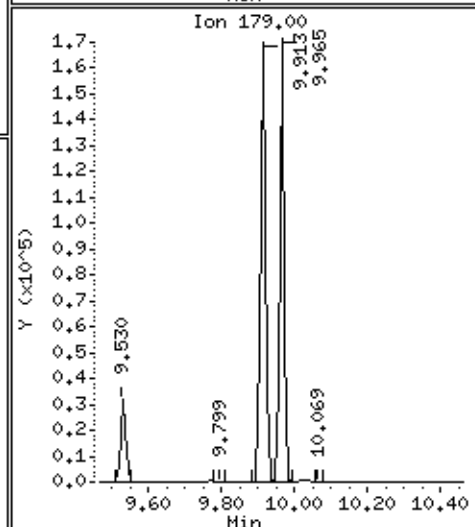
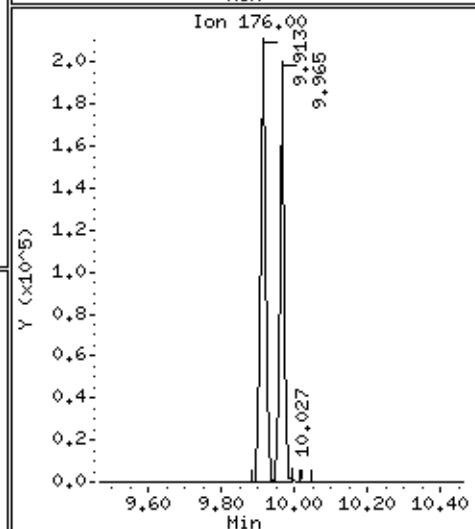
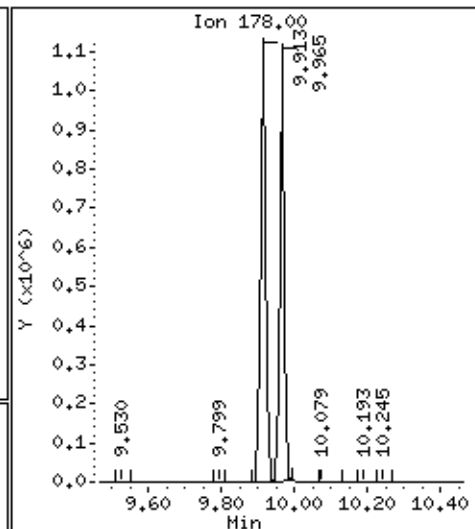
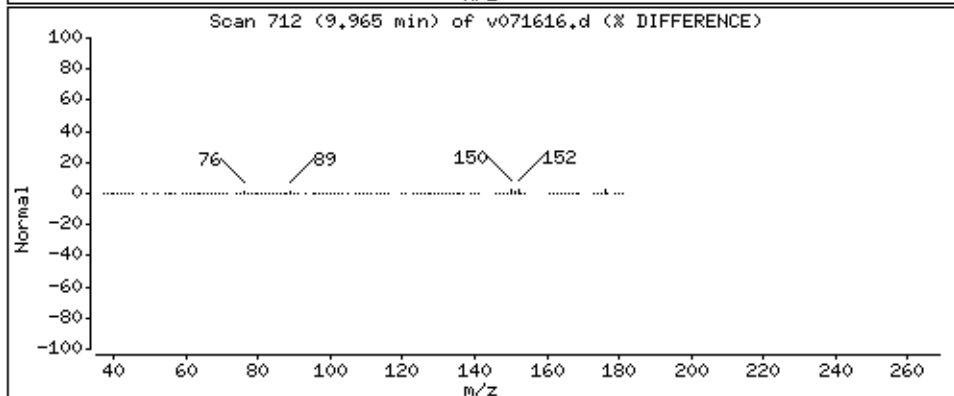
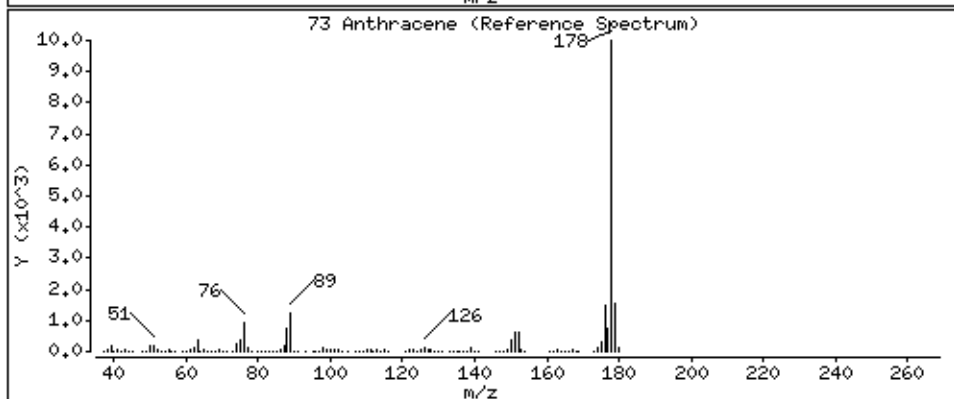
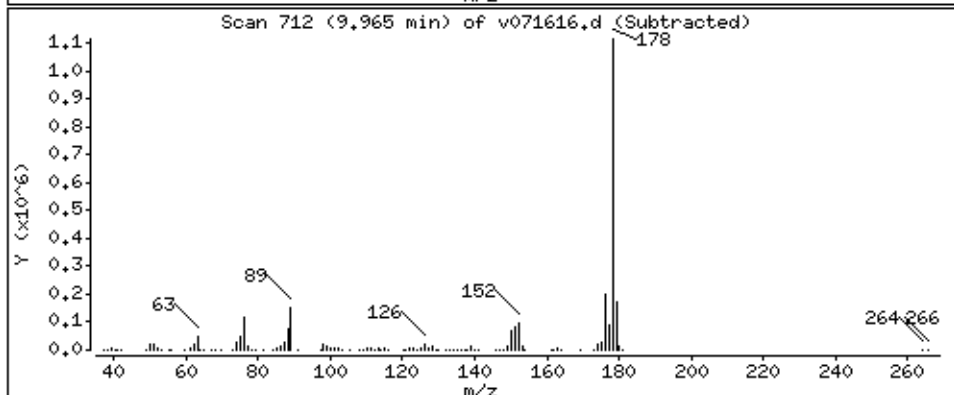
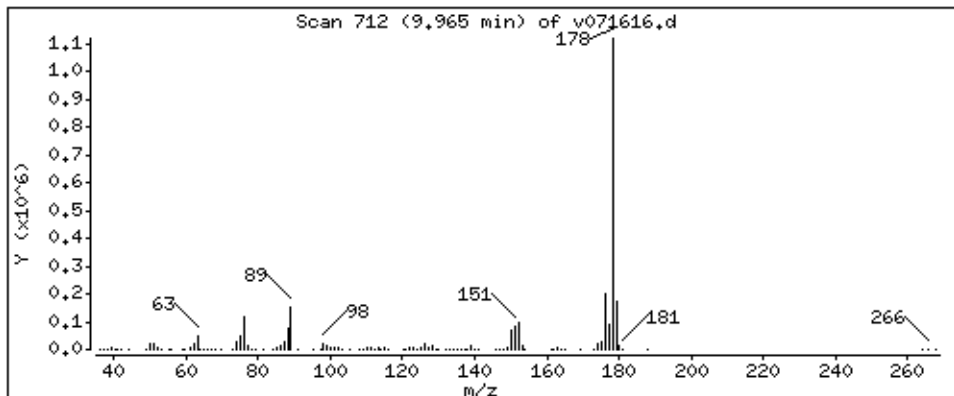
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

73 Anthracene

Concentration: 49.10 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

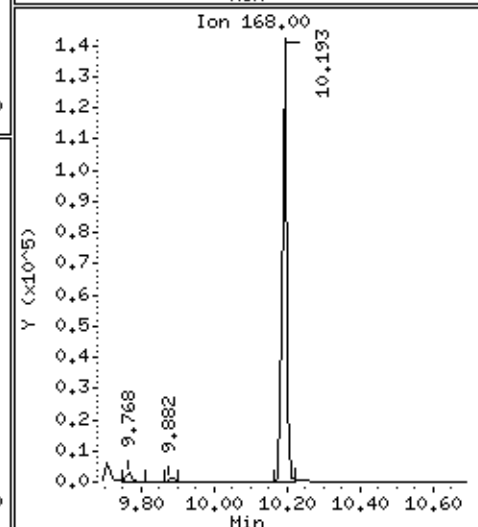
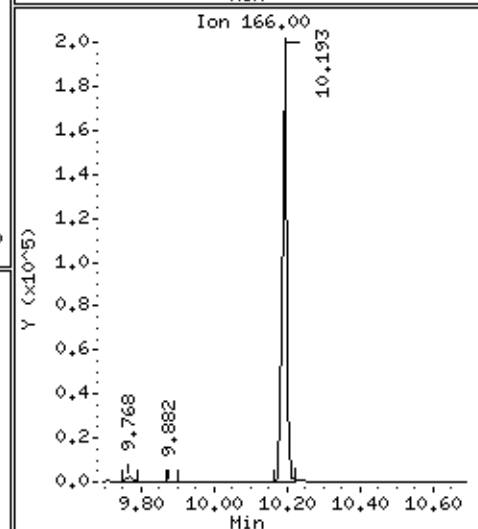
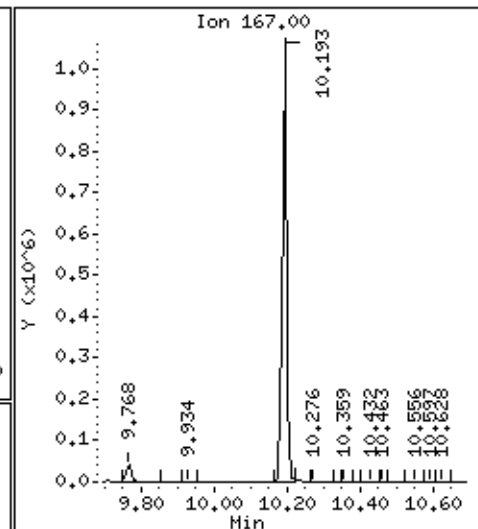
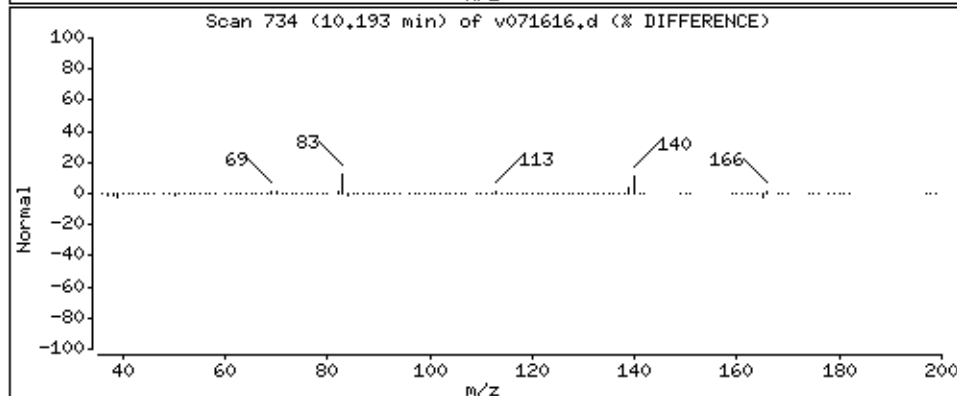
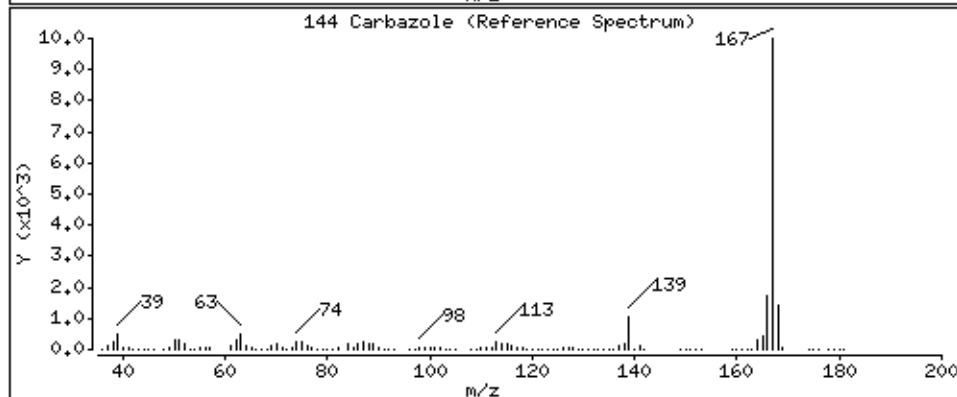
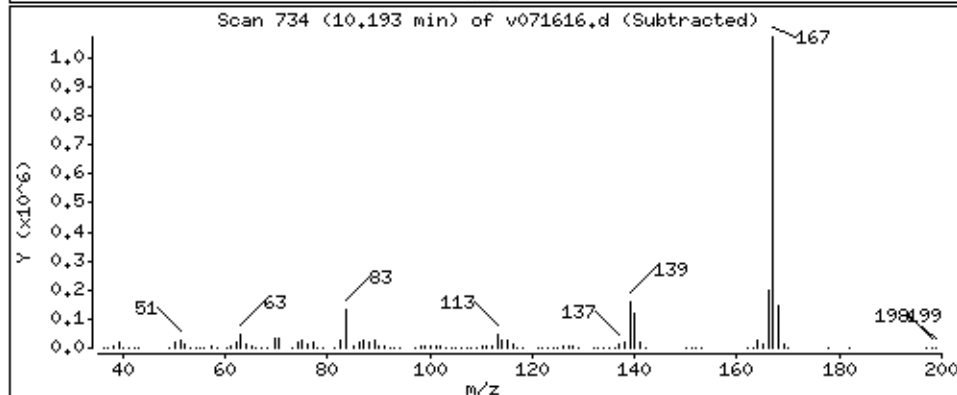
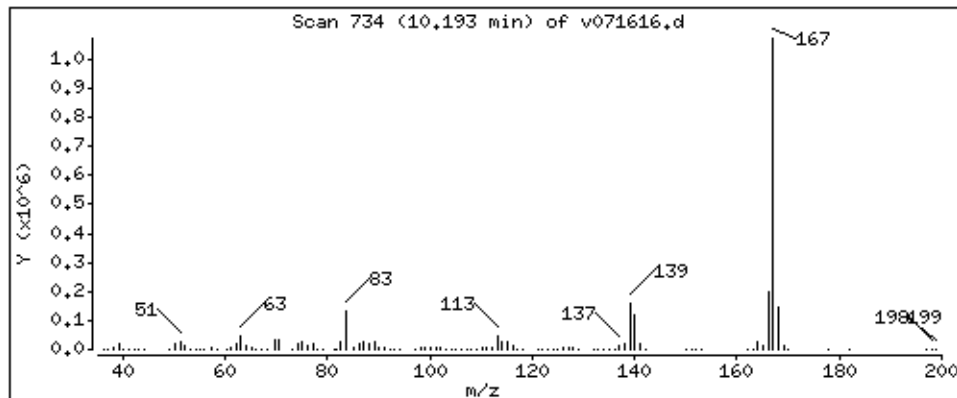
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

144 Carbazole

Concentration: 53.33 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

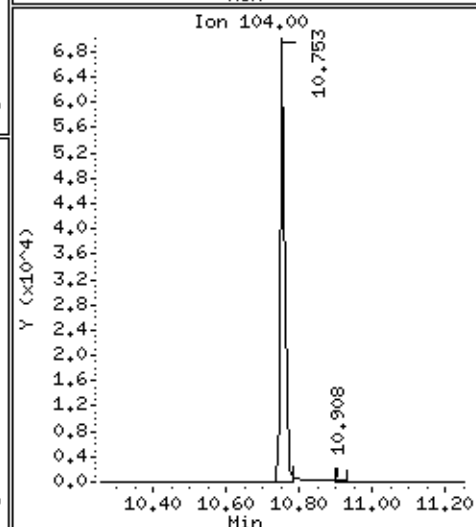
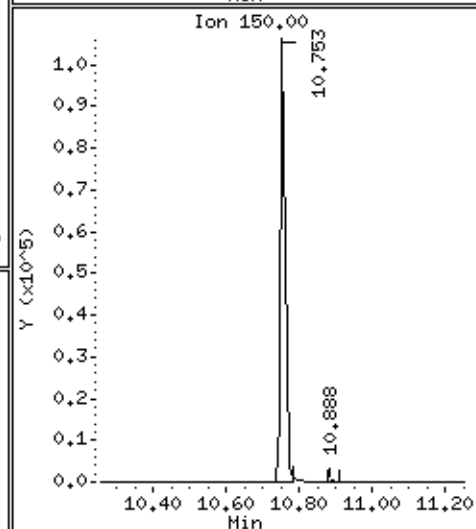
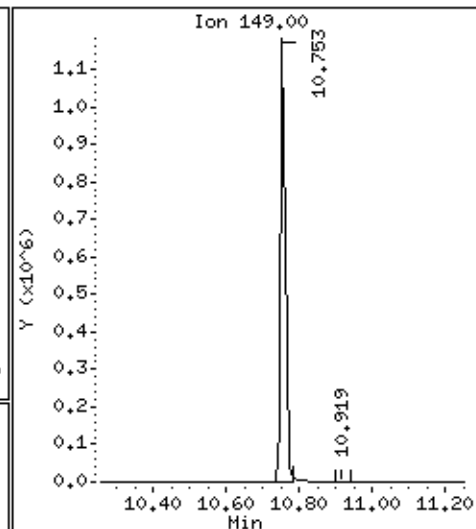
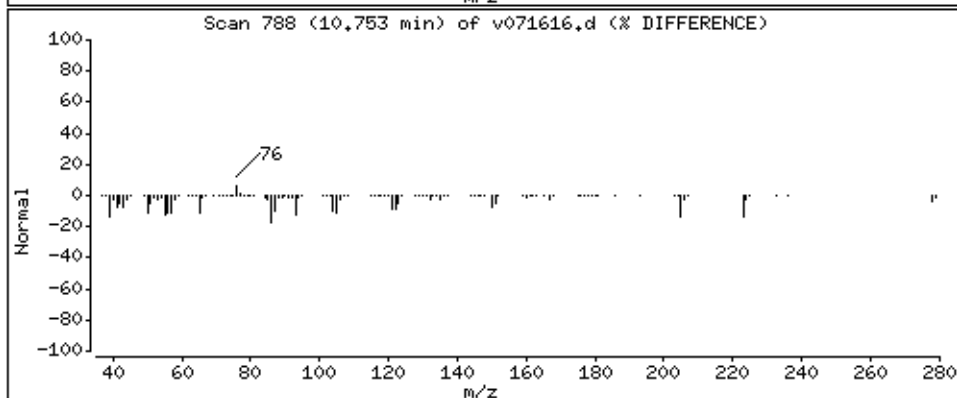
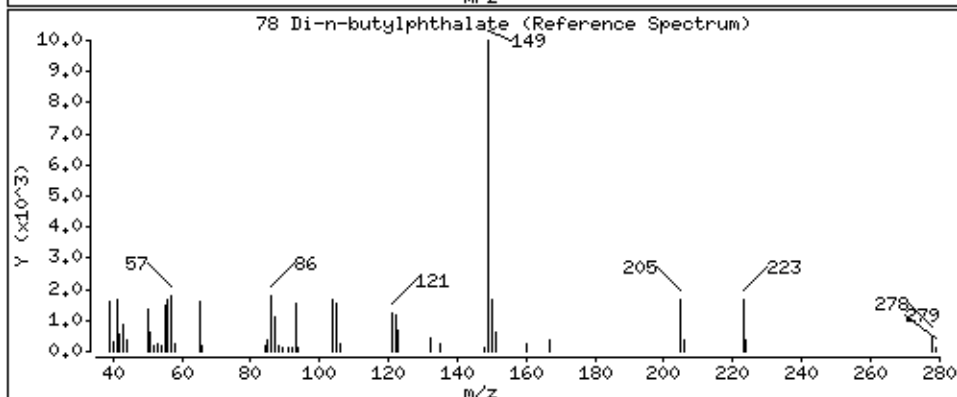
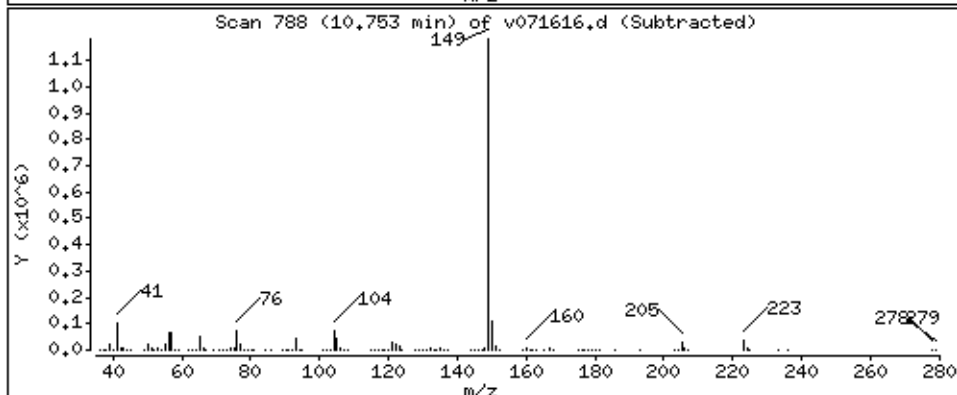
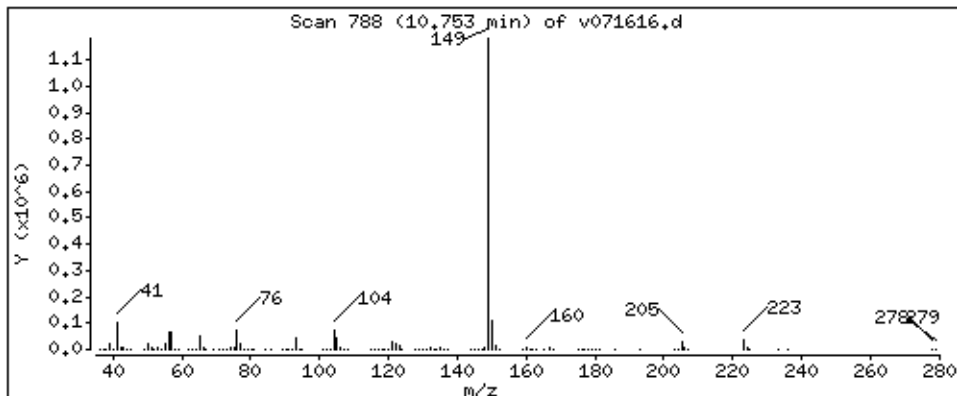
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

78 Di-n-butylphthalate

Concentration: 53.22 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

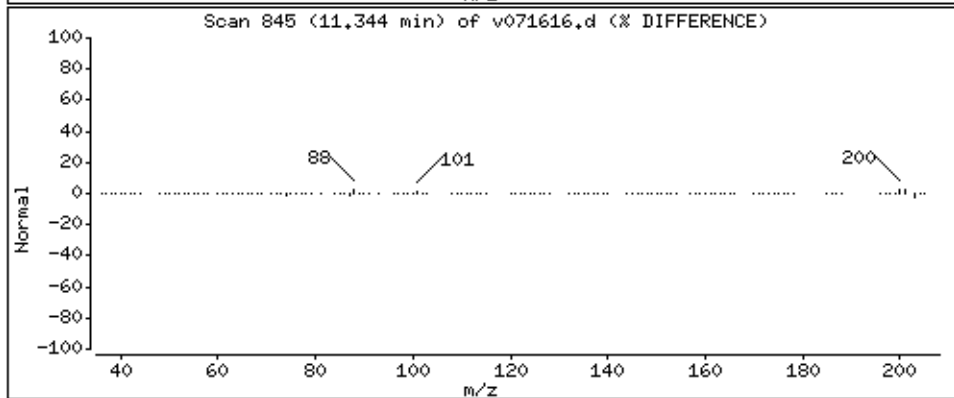
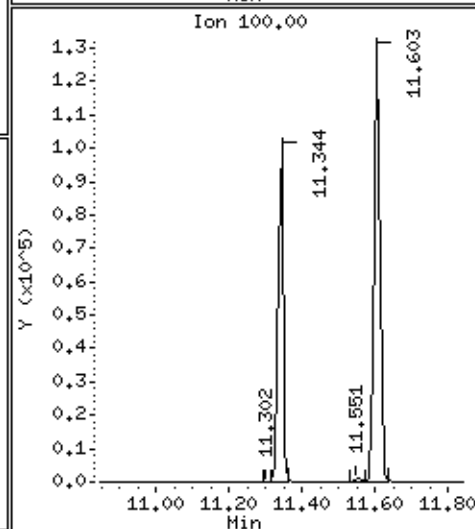
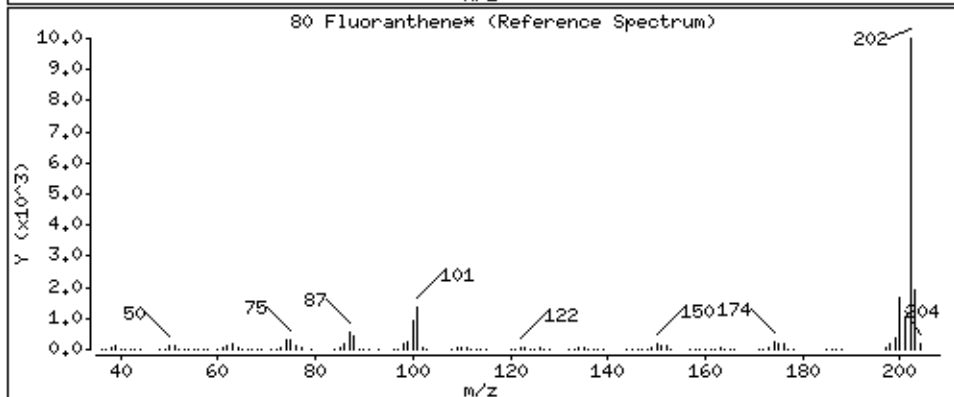
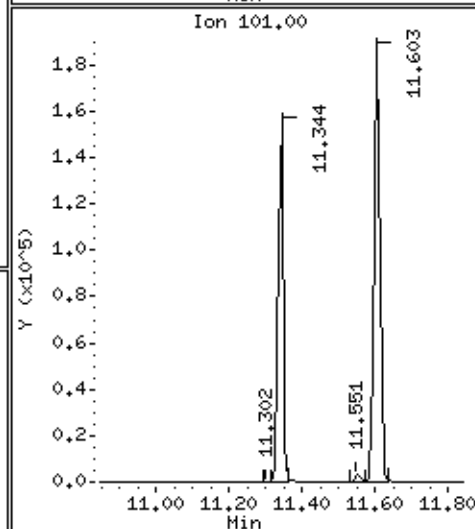
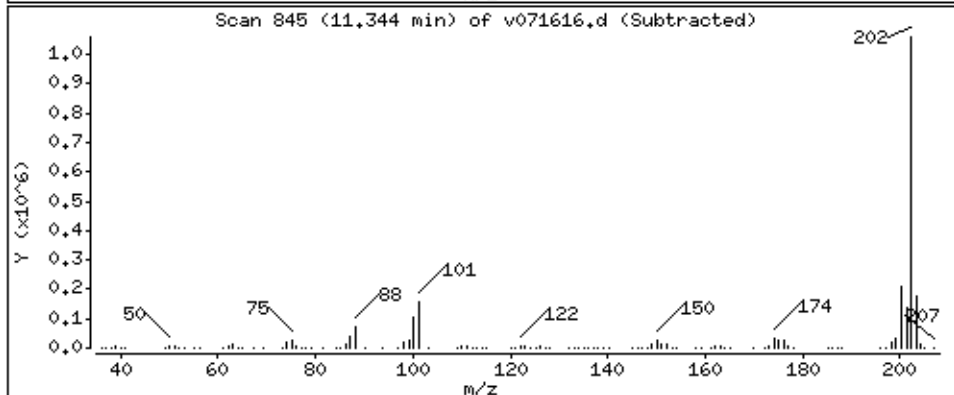
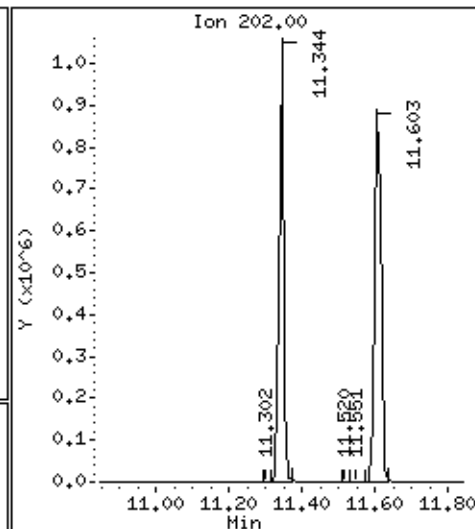
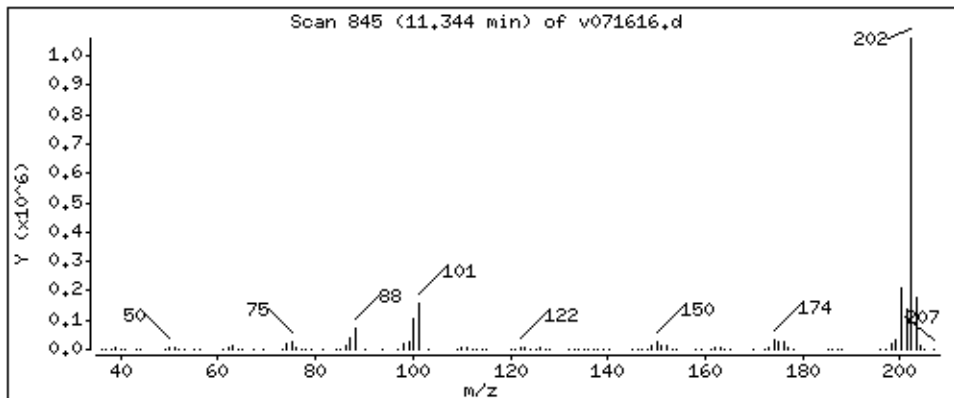
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

80 Fluoranthene\*

Concentration: 51.45 ug





Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

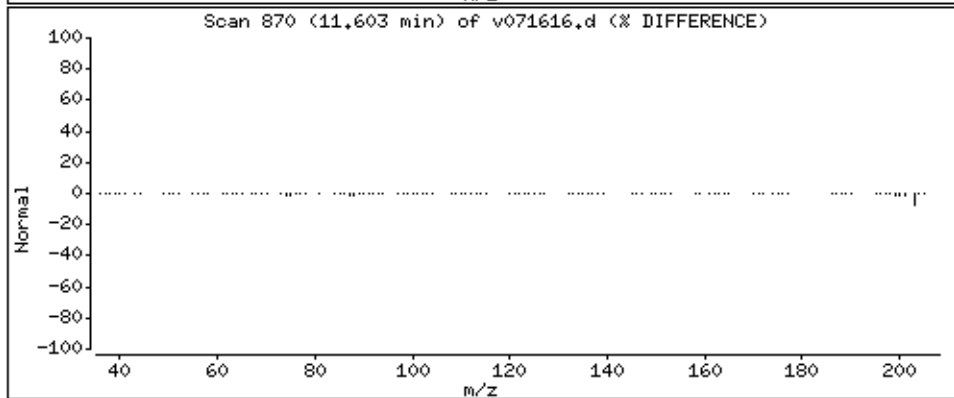
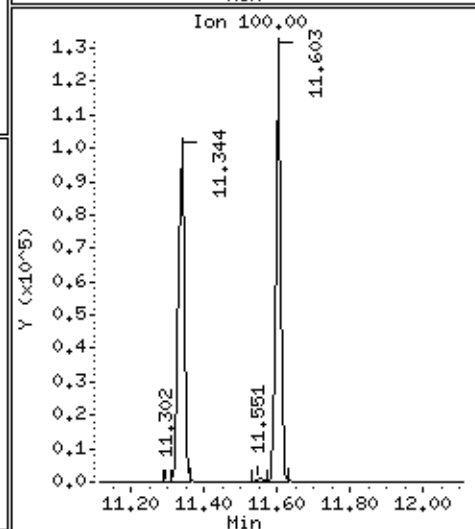
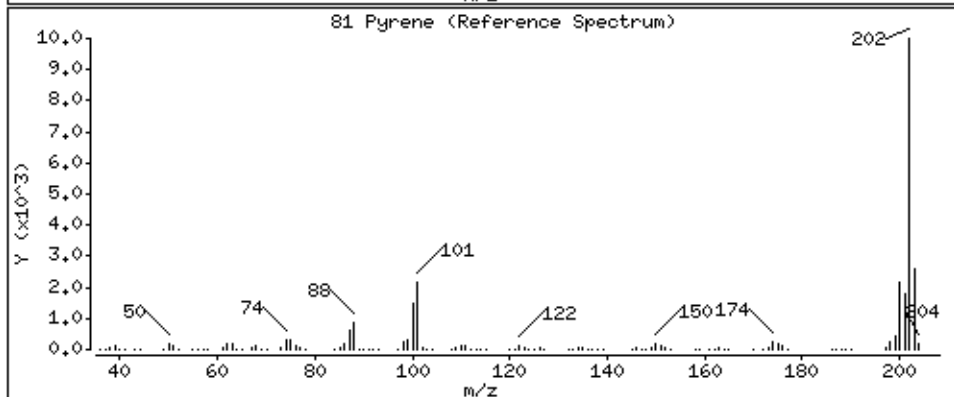
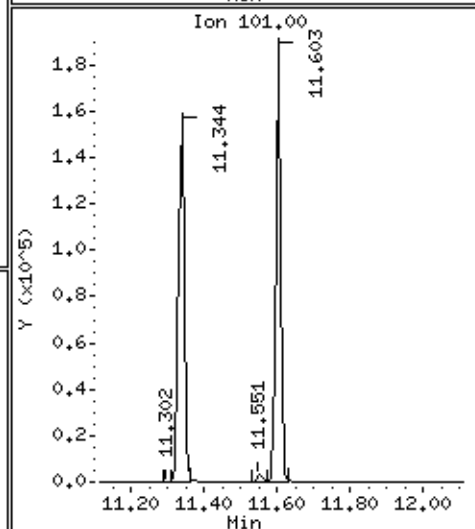
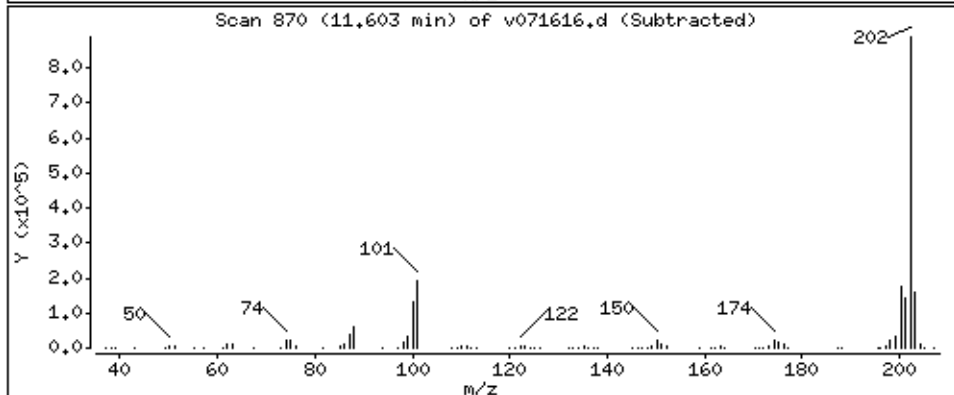
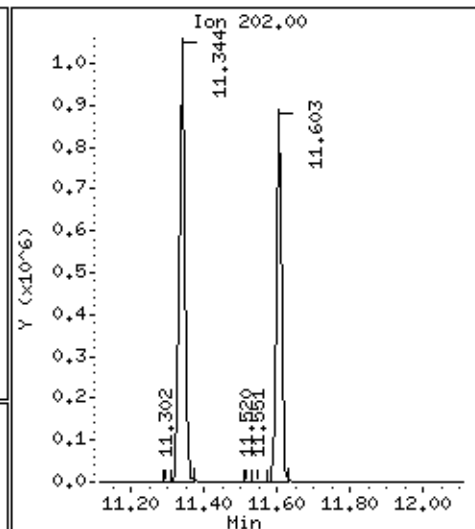
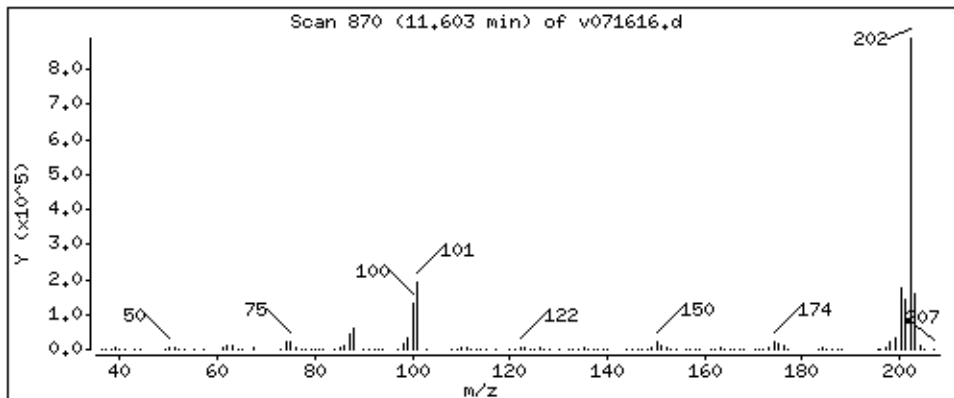
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

81 Pyrene

Concentration: 49.24 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

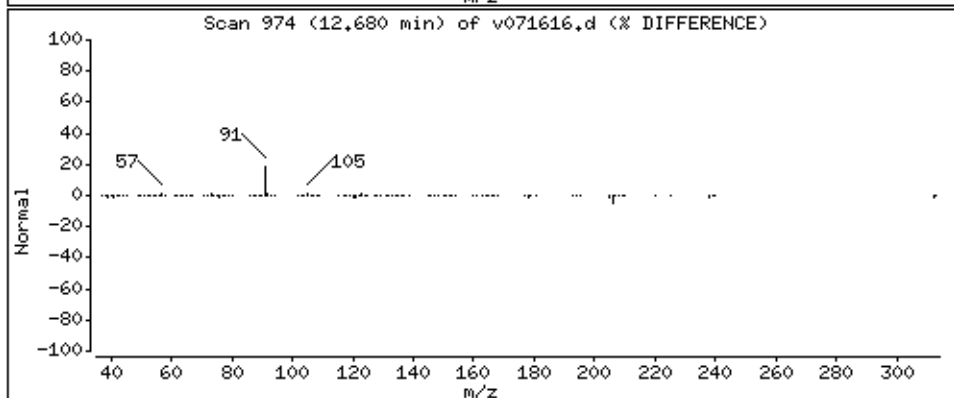
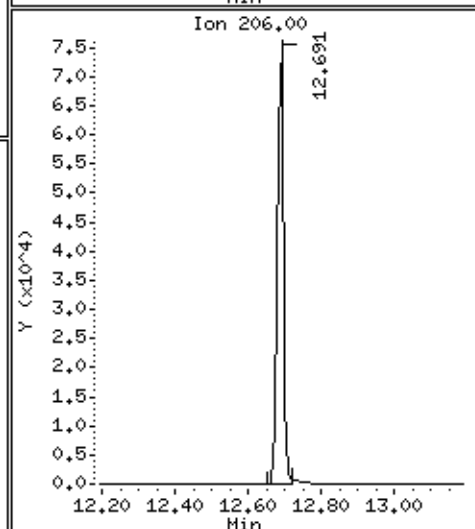
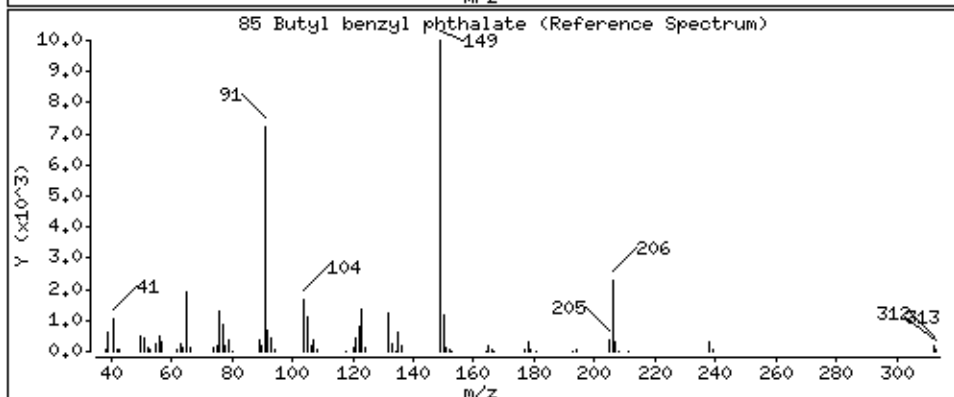
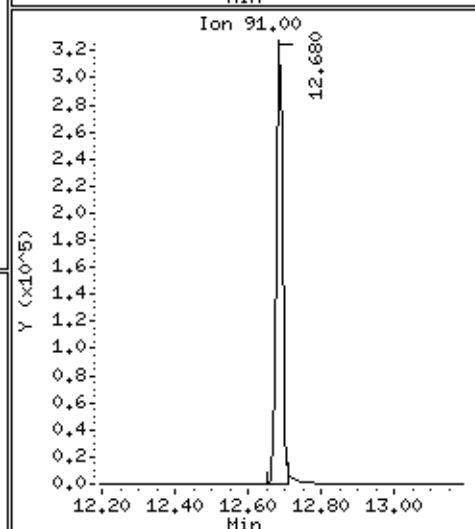
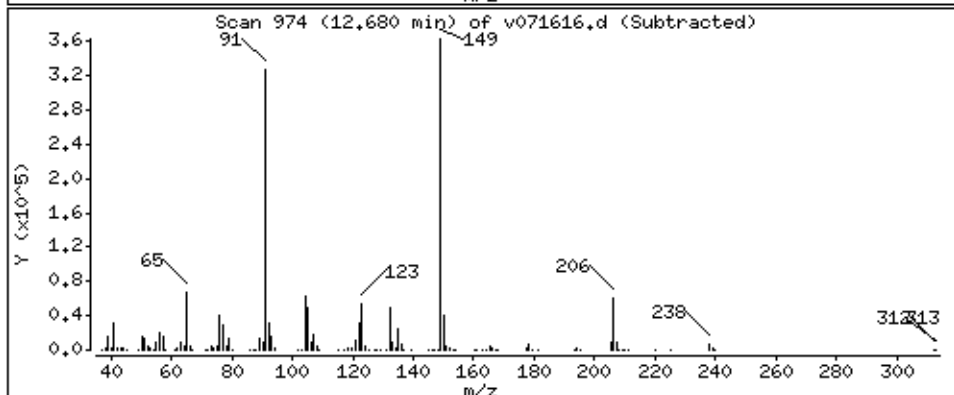
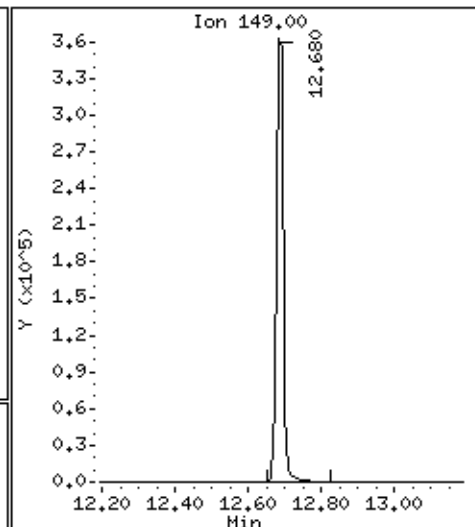
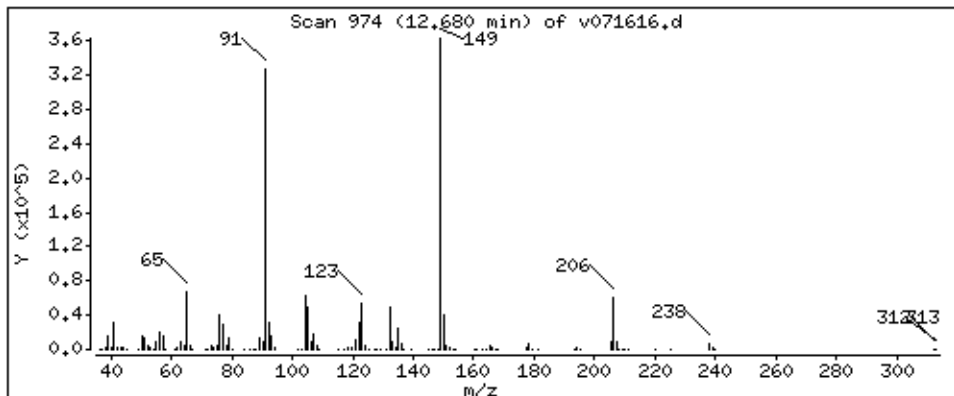
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

85 Butyl benzyl phthalate

Concentration: 57.35 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

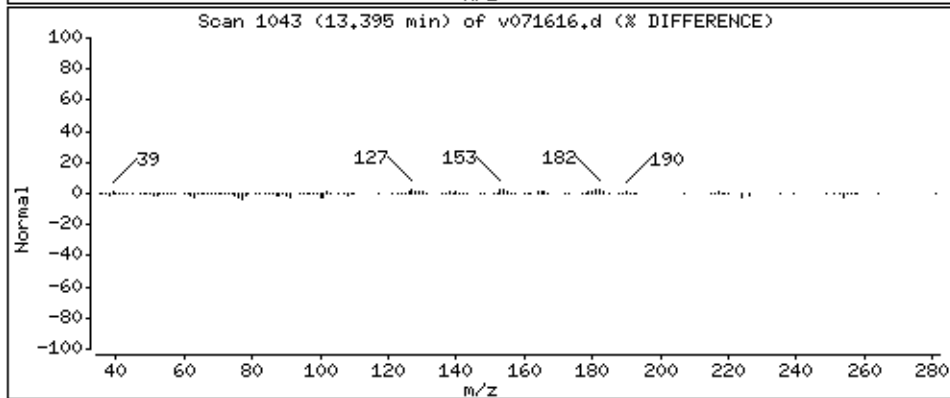
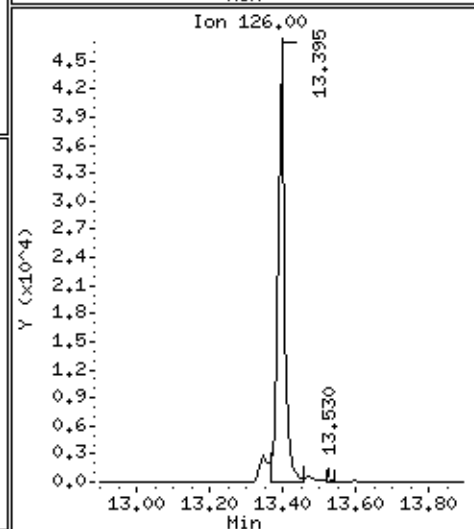
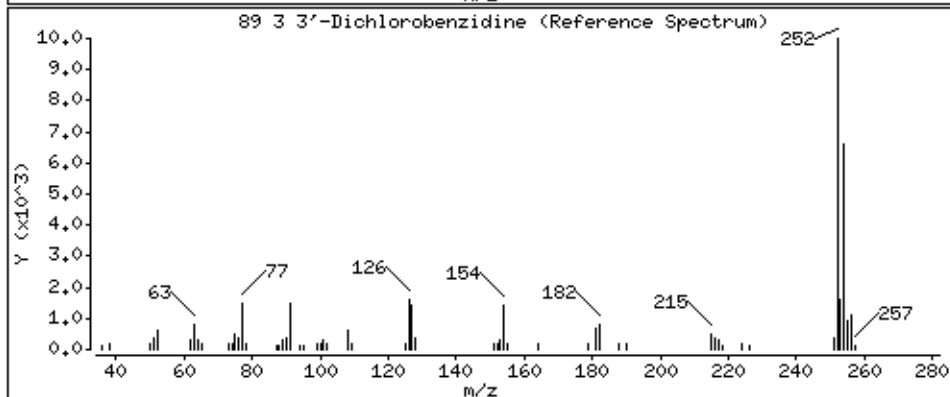
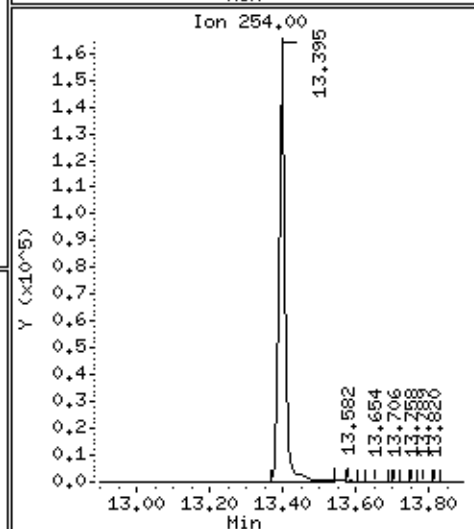
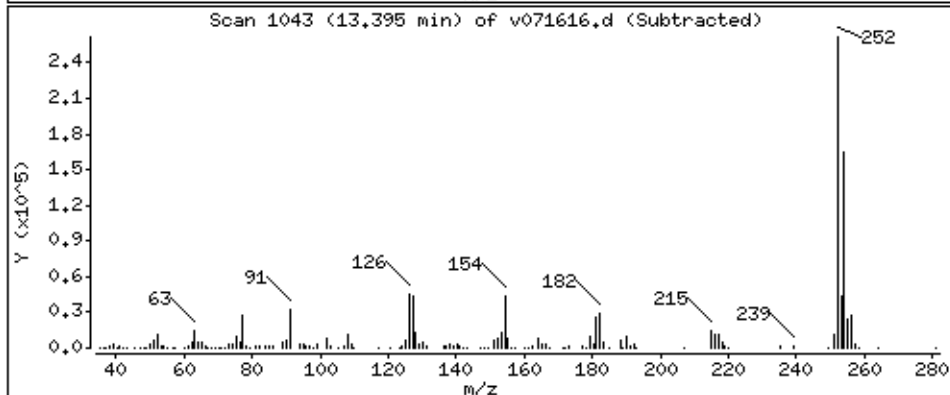
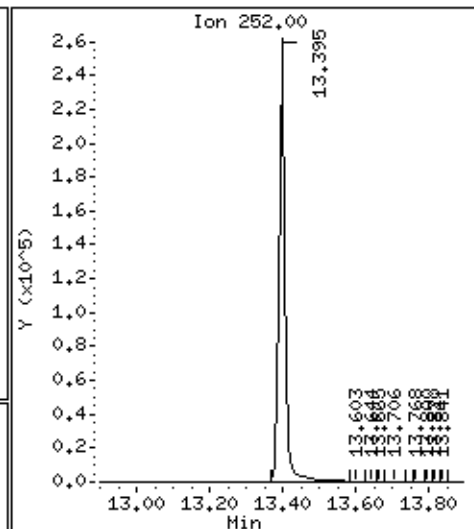
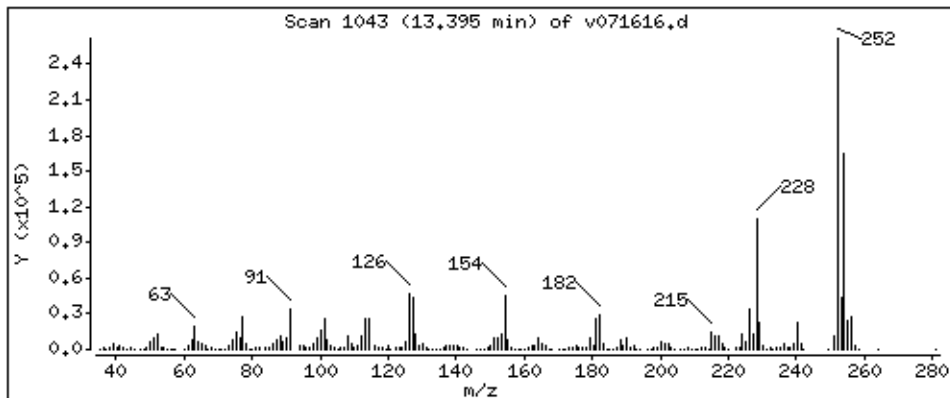
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

89 3 3'-Dichlorobenzidine

Concentration: 53.66 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

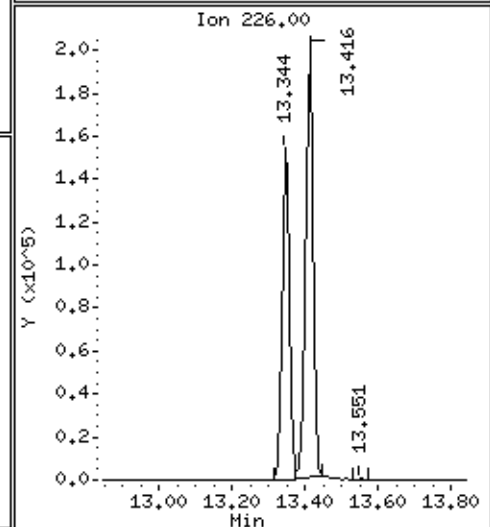
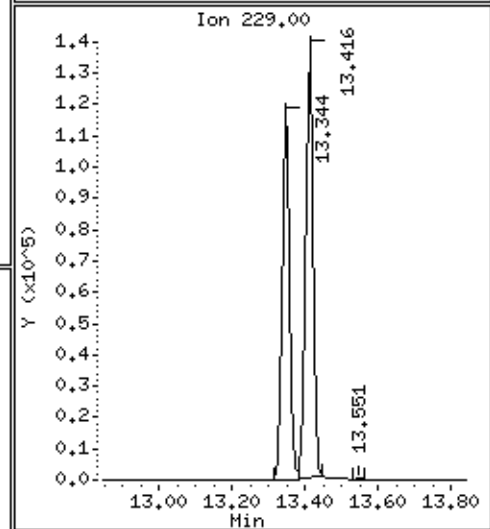
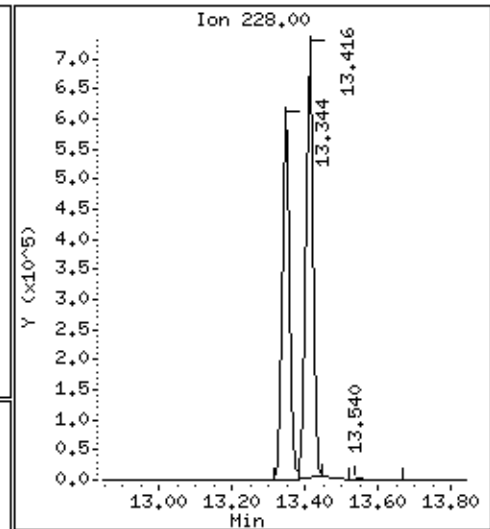
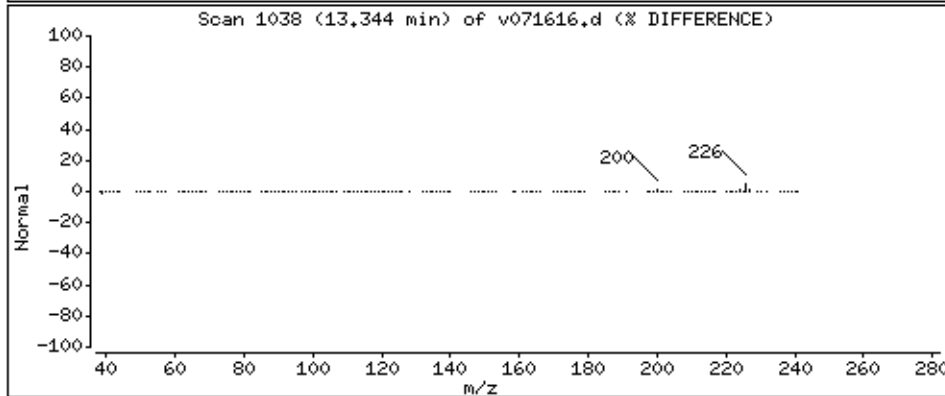
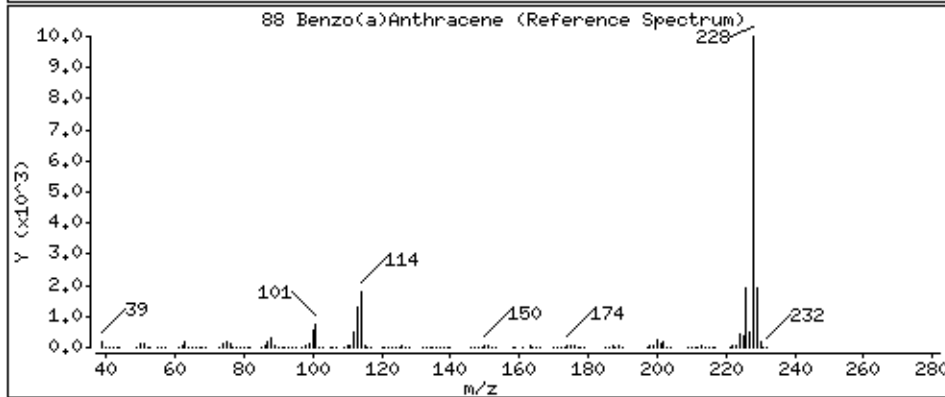
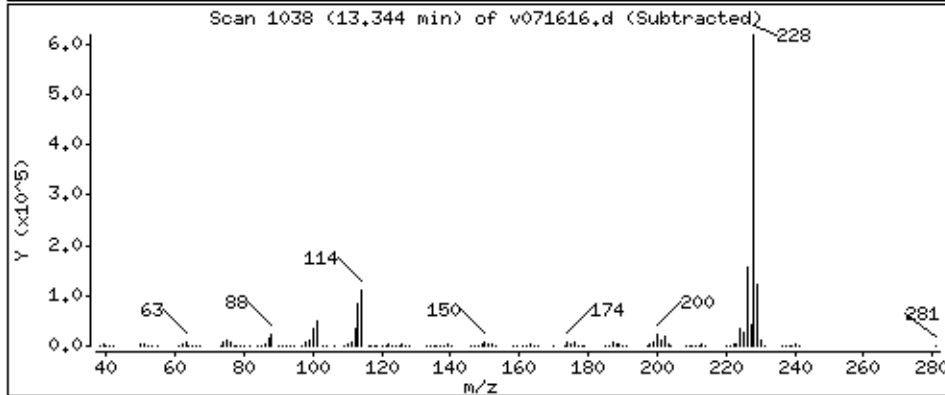
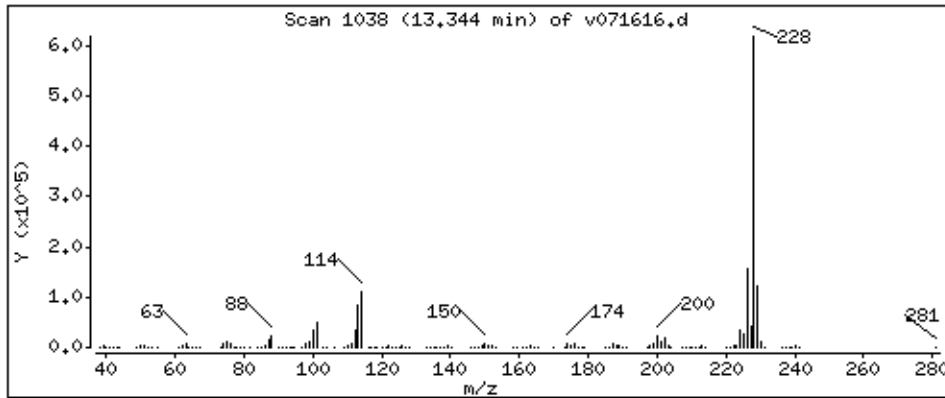
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

88 Benzo(a)Anthracene

Concentration: 51.17 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

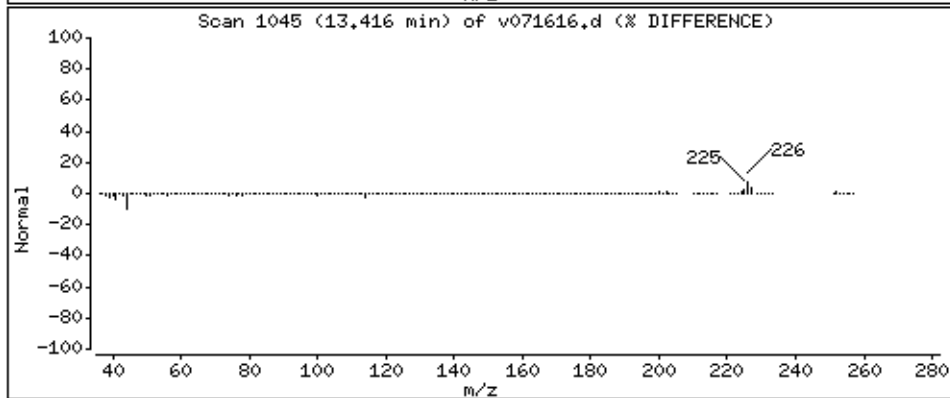
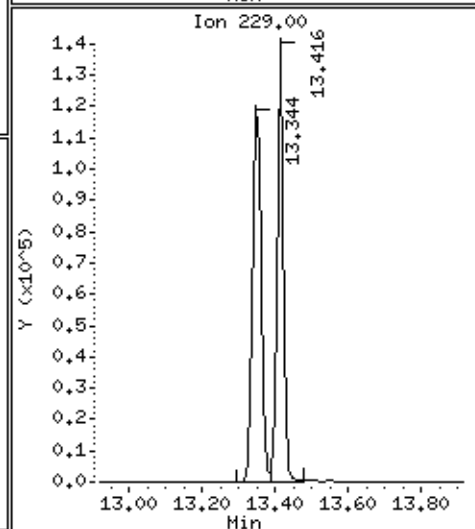
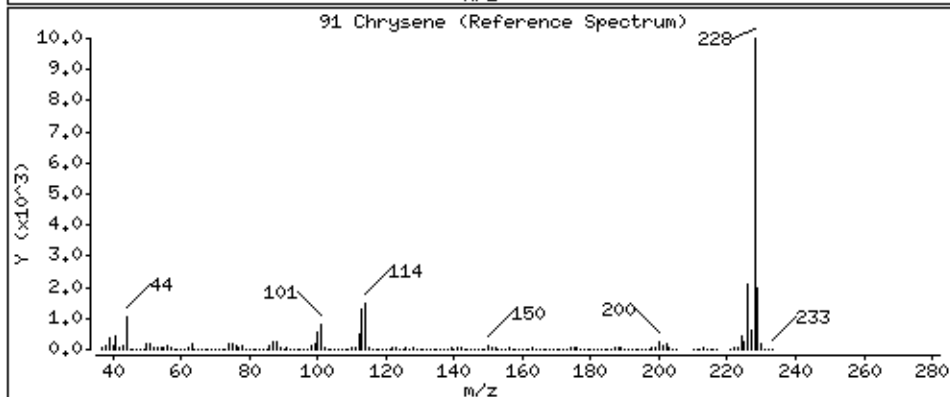
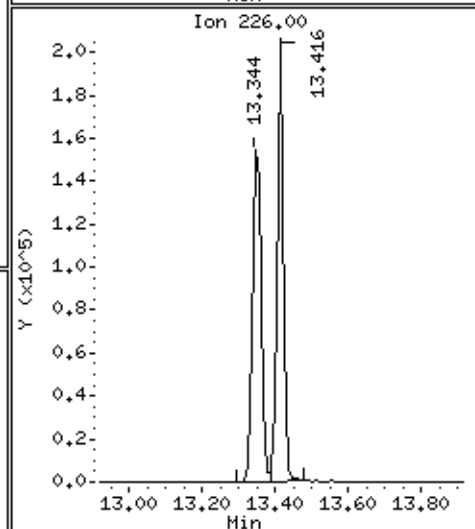
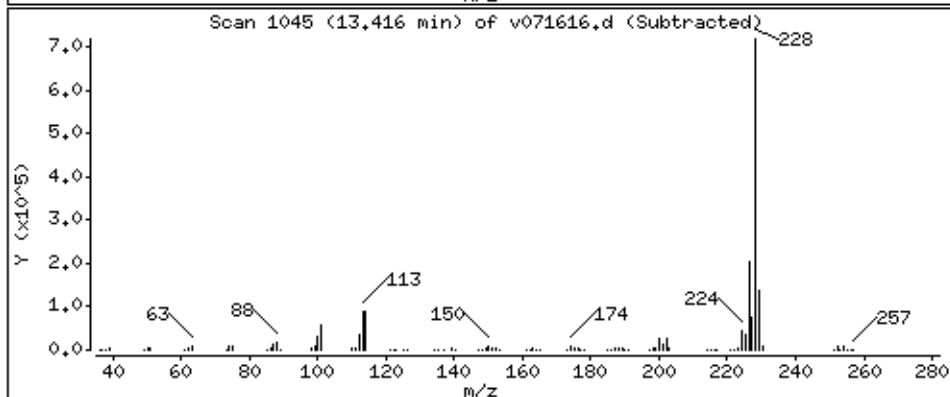
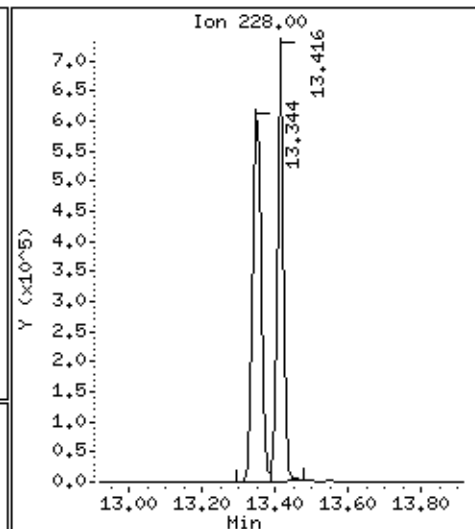
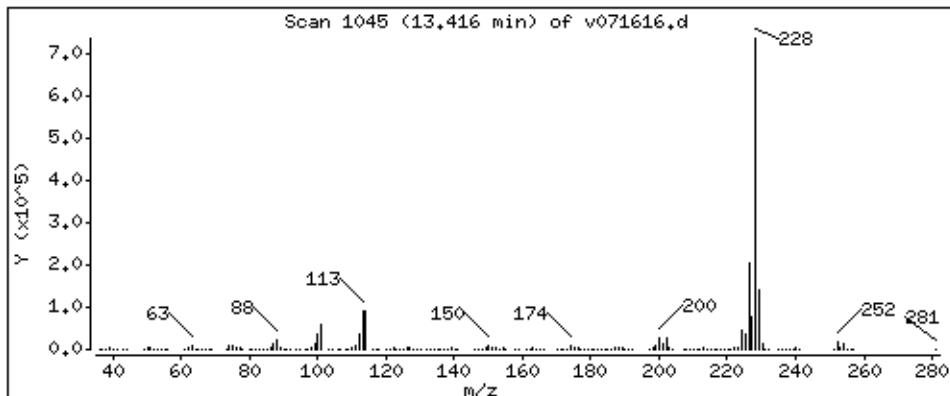
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

91 Chrysene

Concentration: 46.53 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

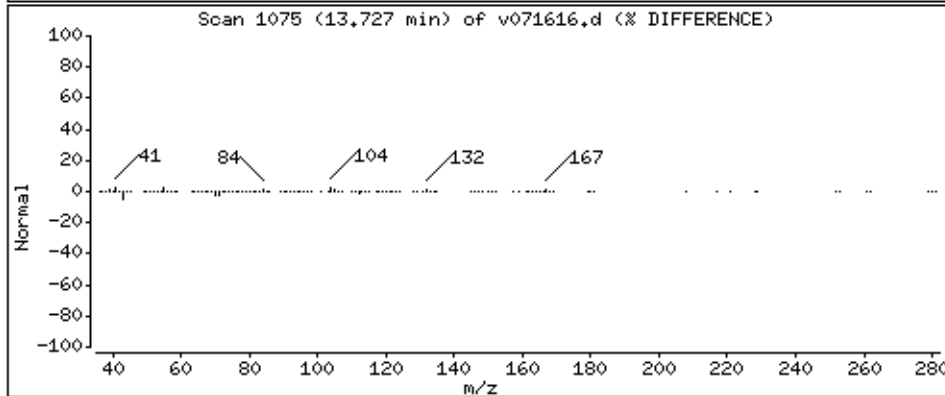
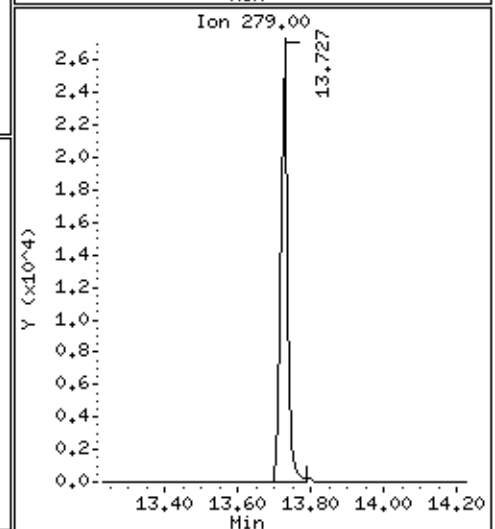
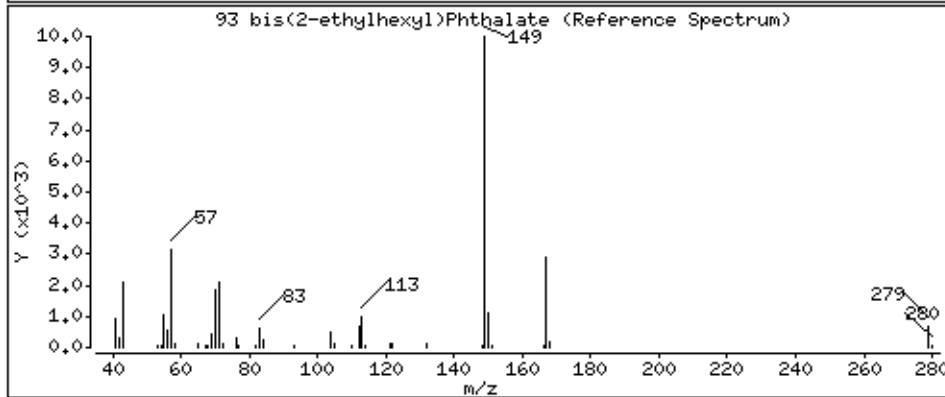
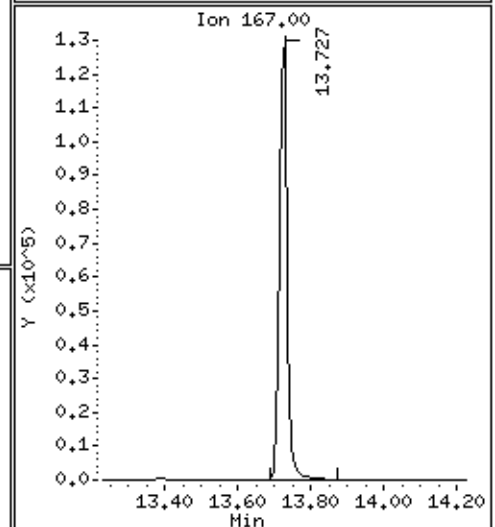
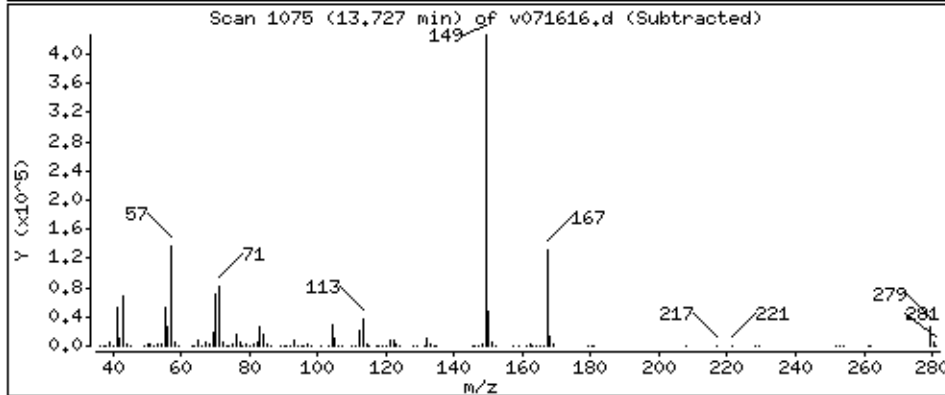
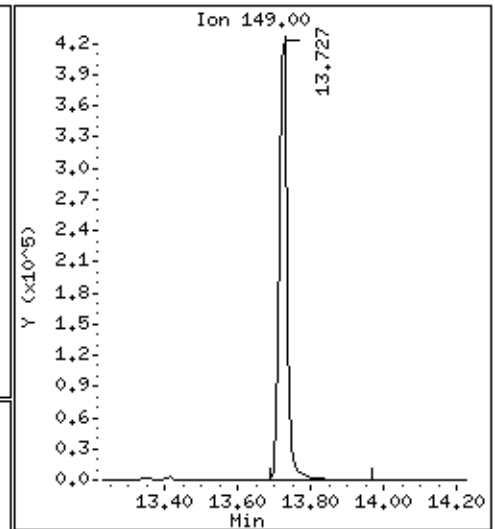
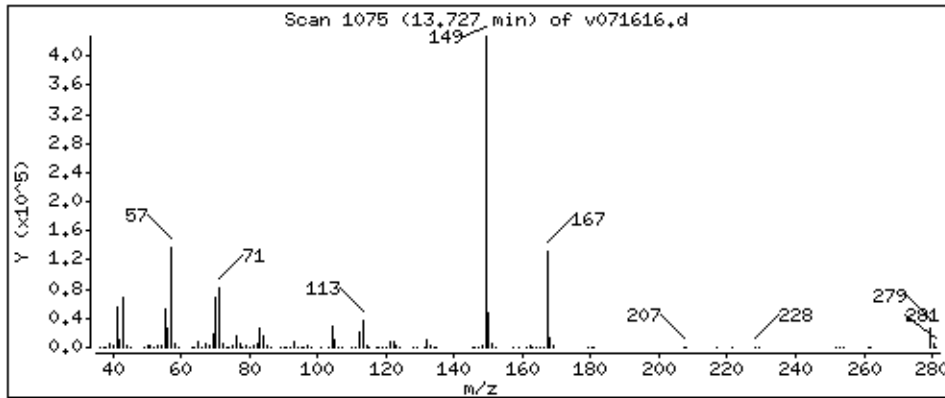
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

93 bis(2-ethylhexyl)Phthalate

Concentration: 55.65 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

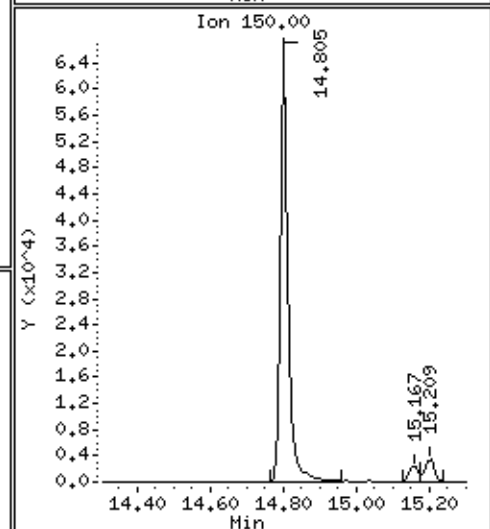
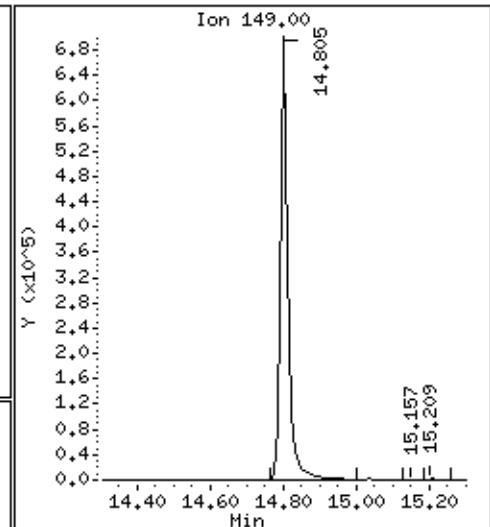
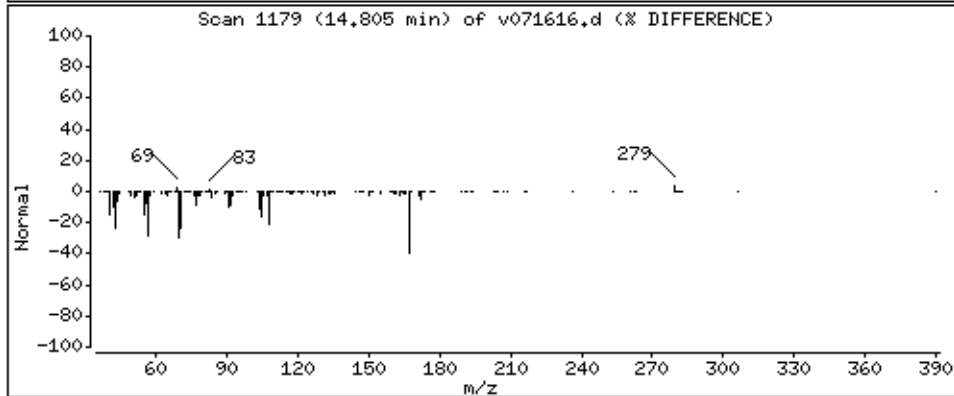
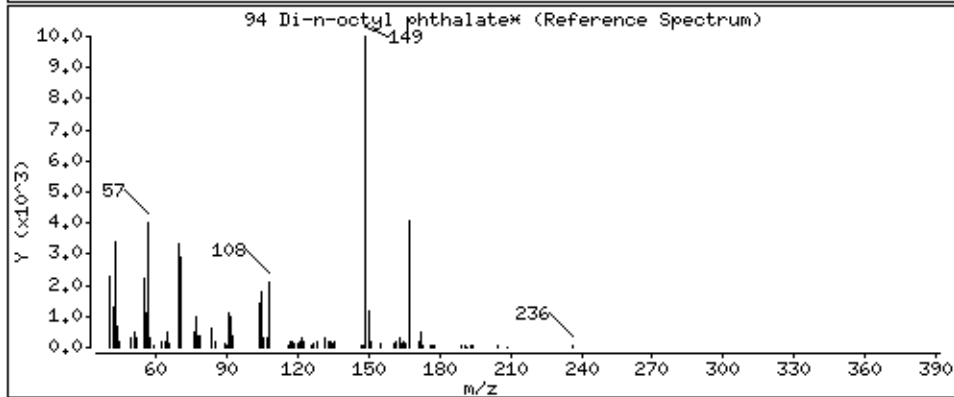
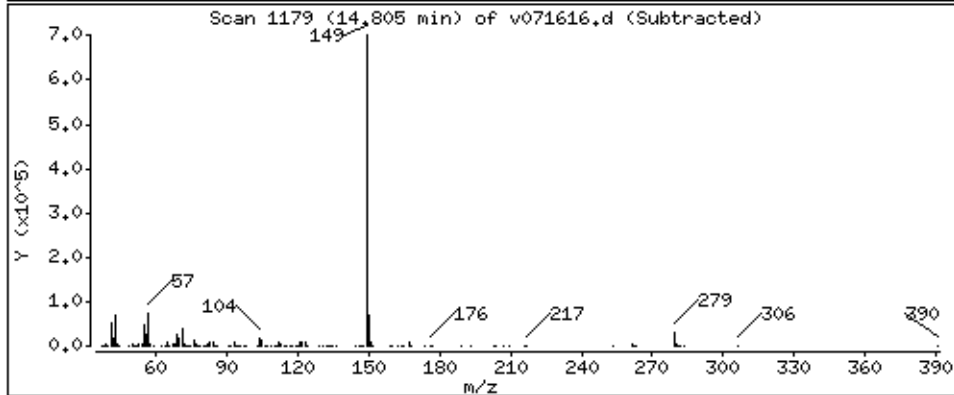
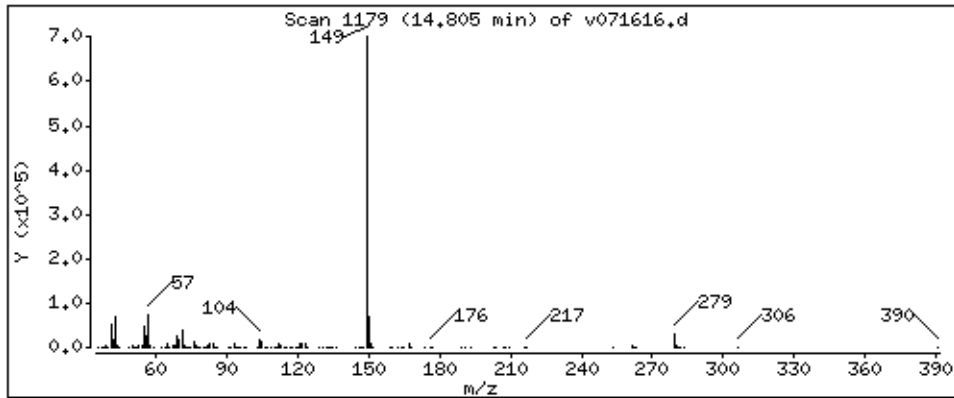
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

94 Di-n-octyl phthalate\*

Concentration: 58.94 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

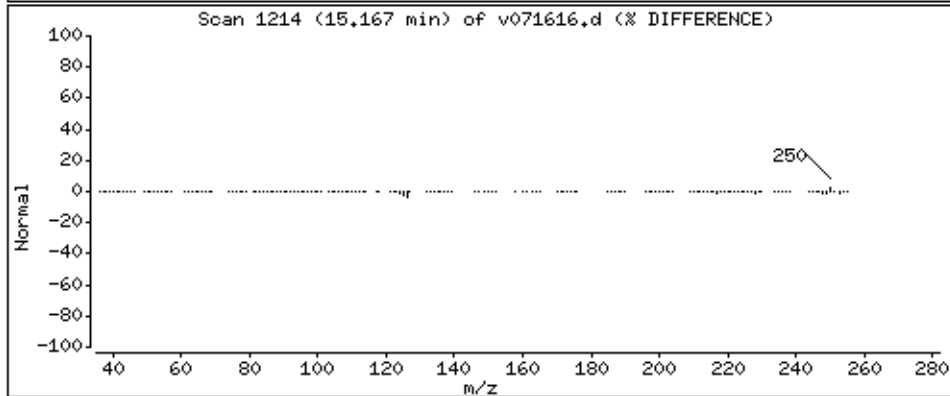
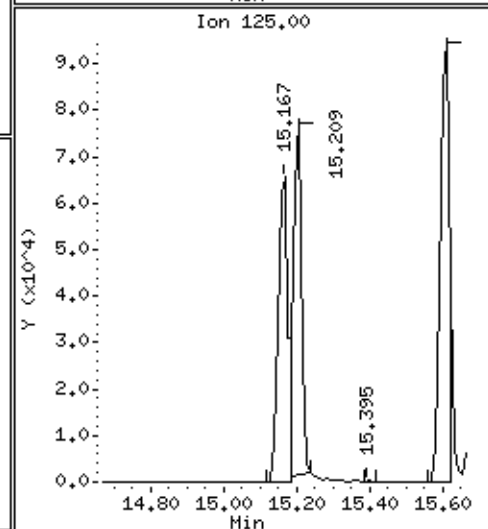
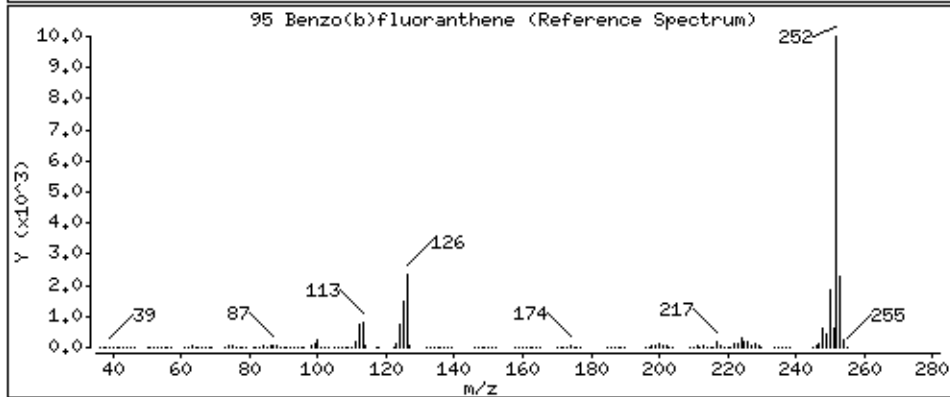
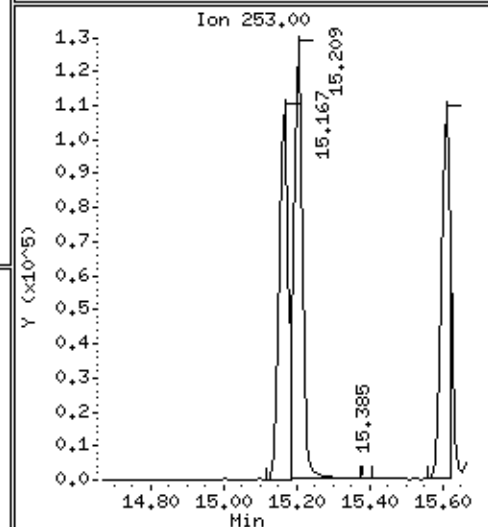
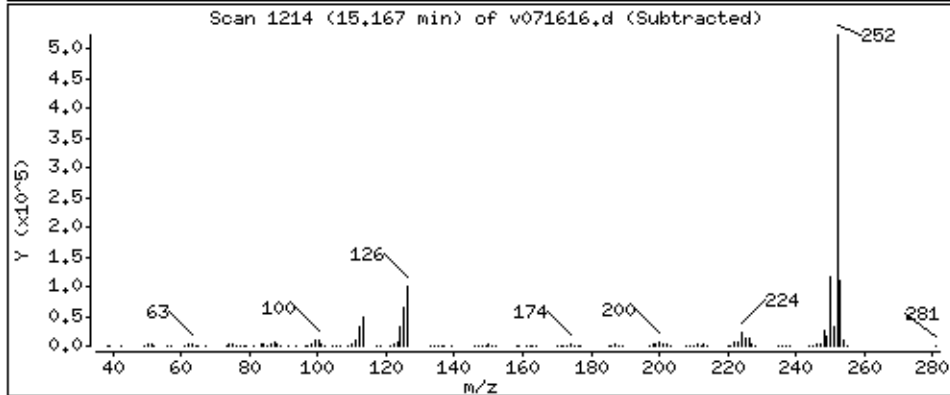
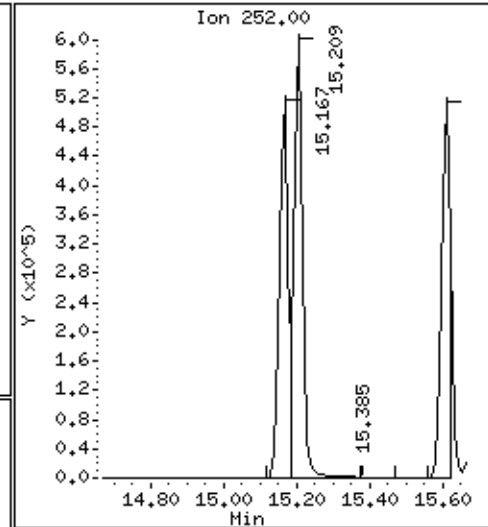
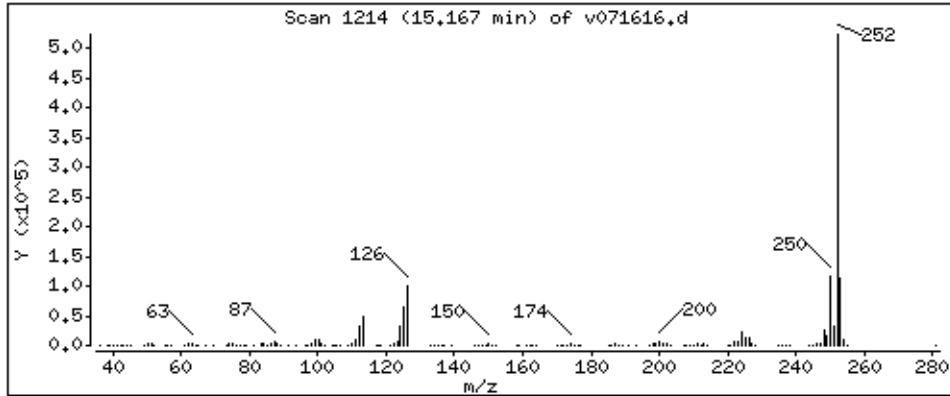
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

95 Benzo(b)fluoranthene

Concentration: 55.51 ug





Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

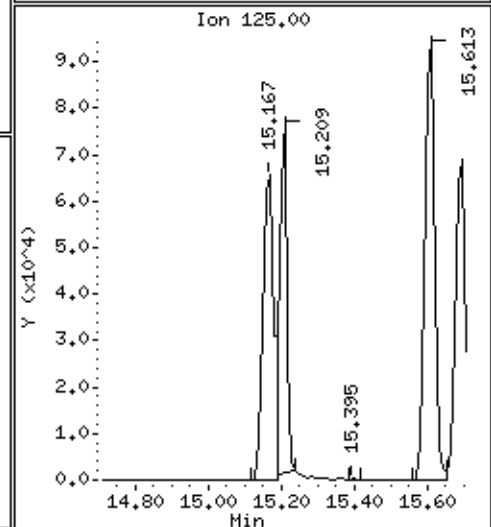
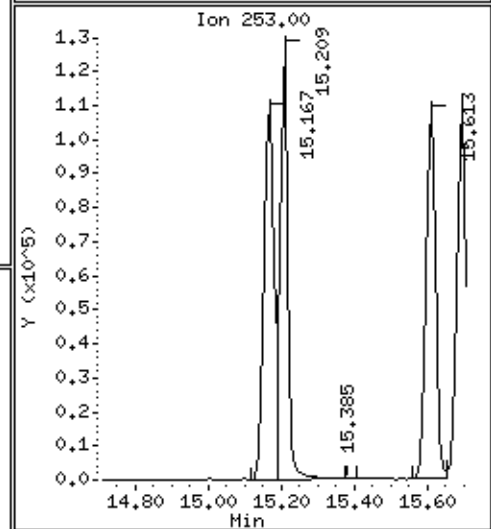
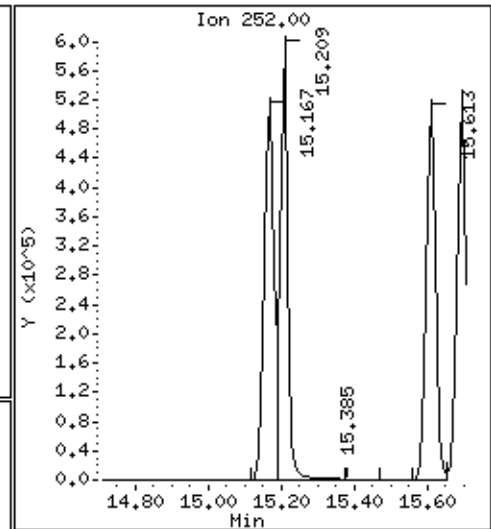
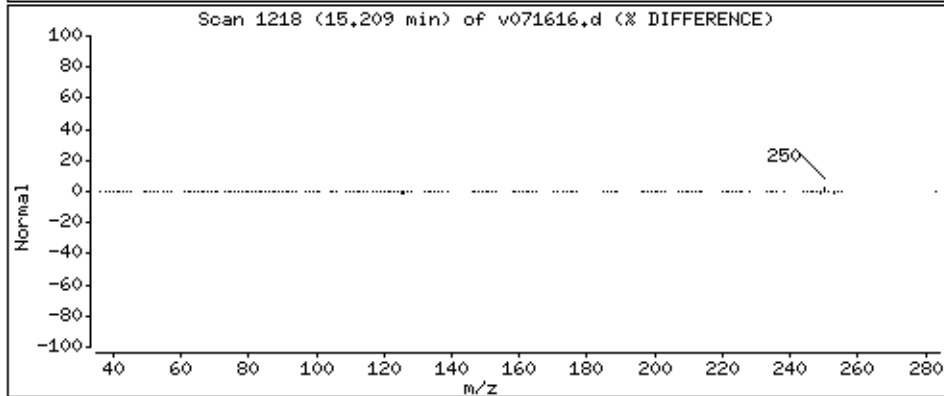
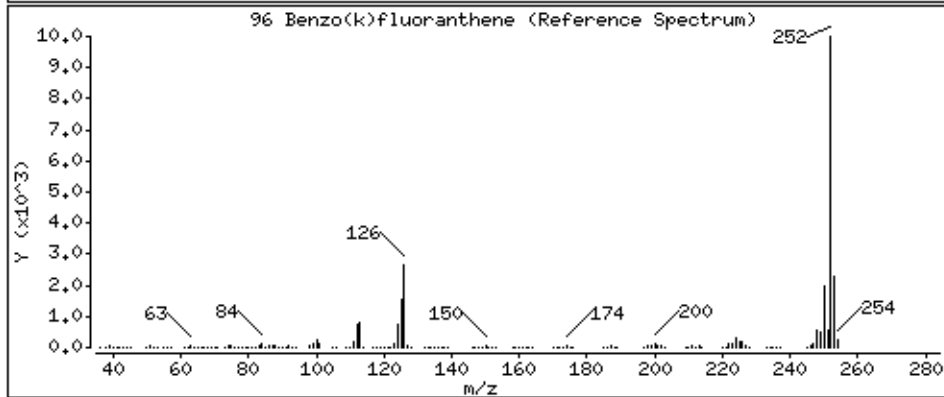
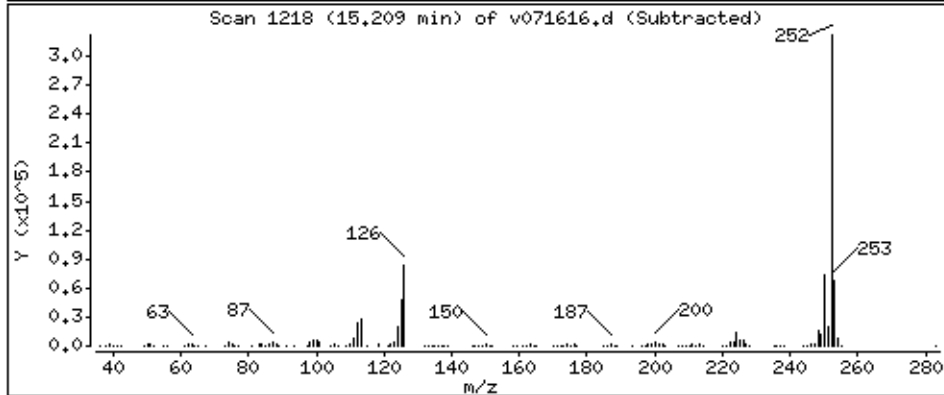
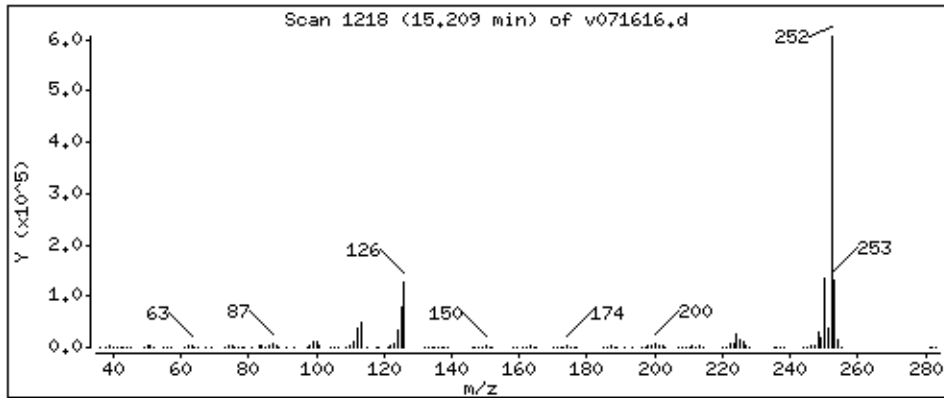
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

96 Benzo(k)fluoranthene

Concentration: 49.84 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

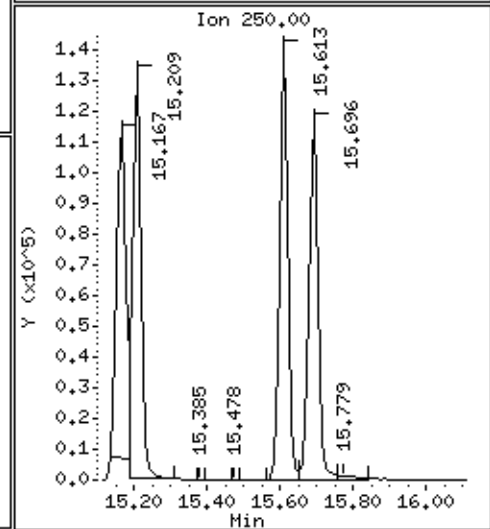
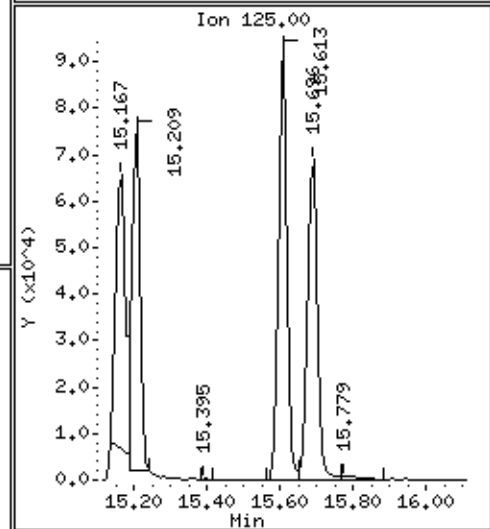
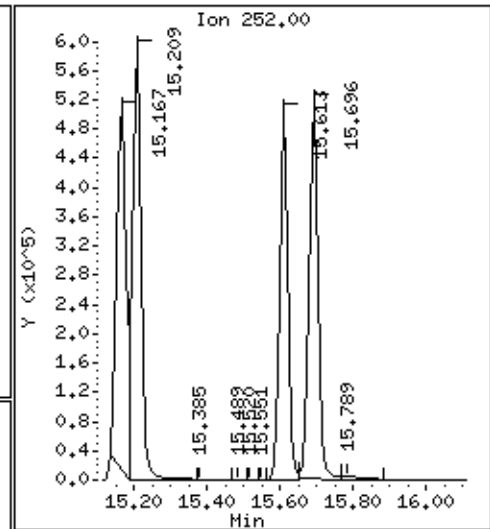
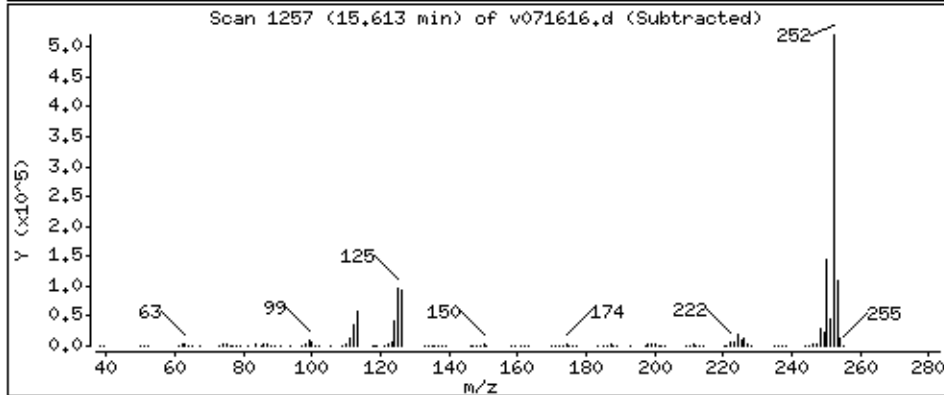
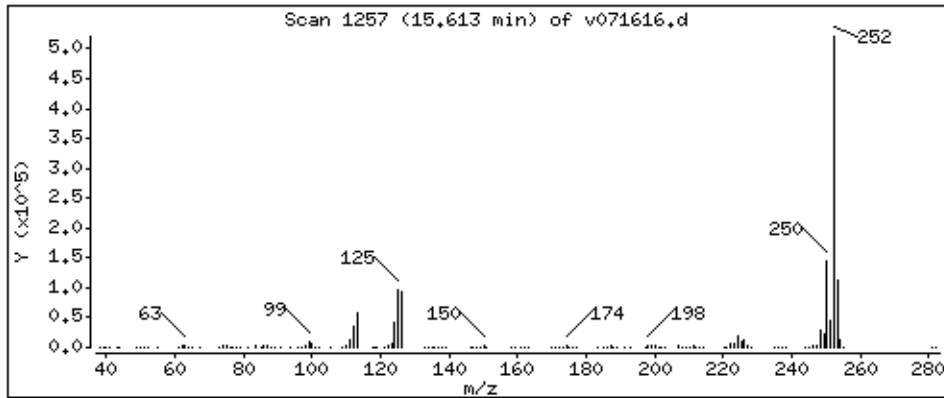
Operator: rn

Column phase: DB-5,625

Column diameter: 0.25

97 Benzo(e)pyrene

Concentration: 54.73 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

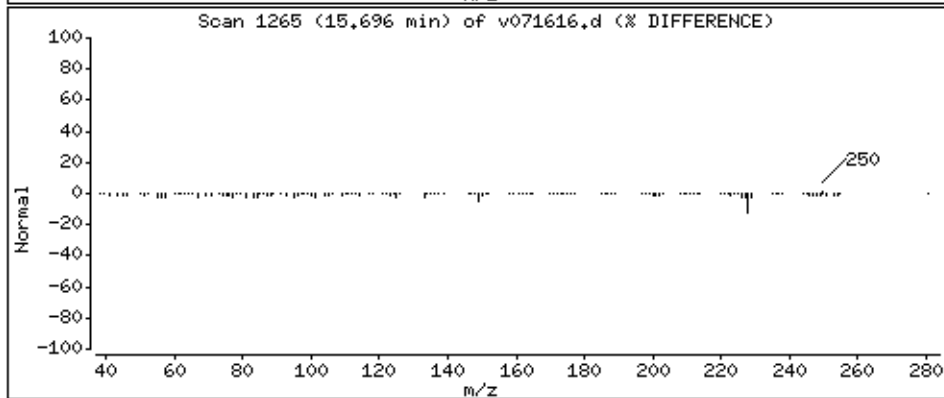
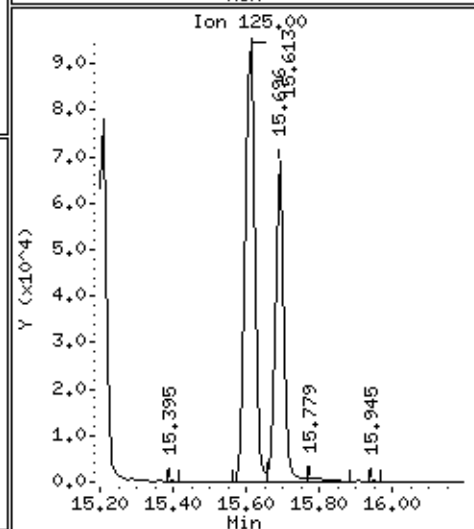
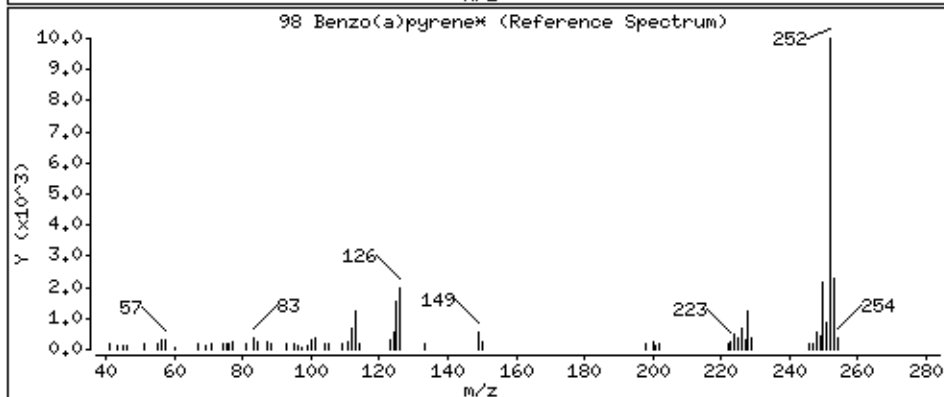
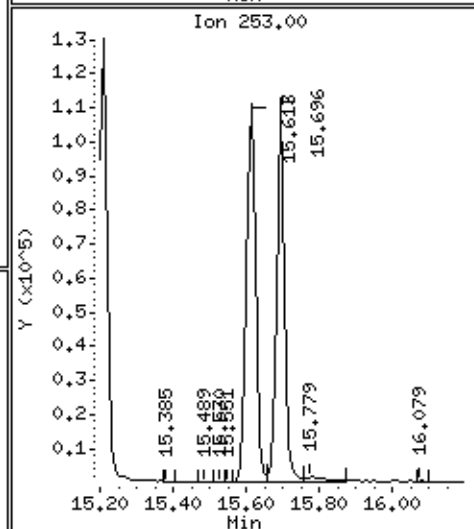
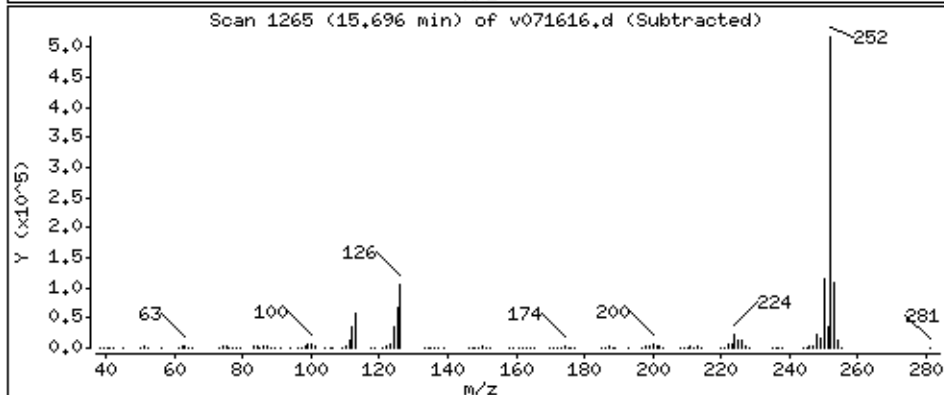
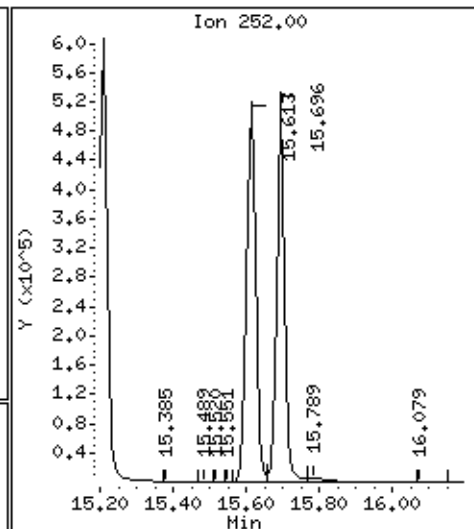
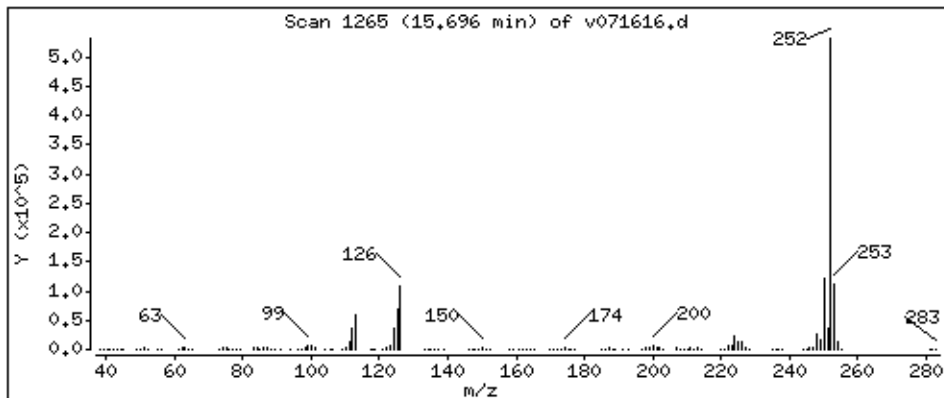
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

98 Benzo(a)pyrene\*

Concentration: 48.96 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

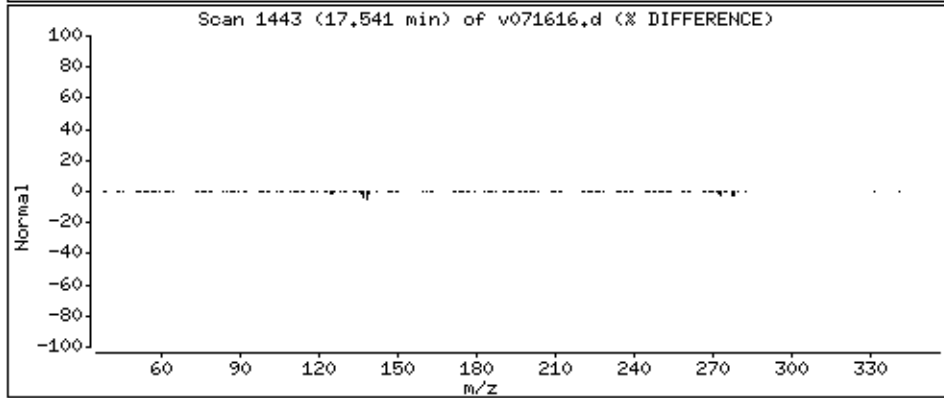
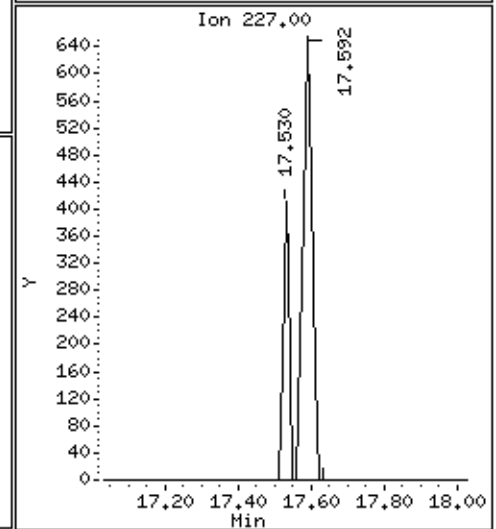
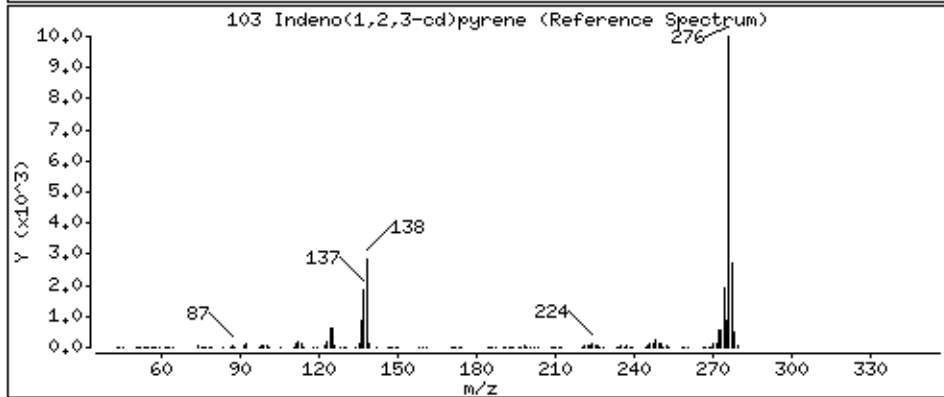
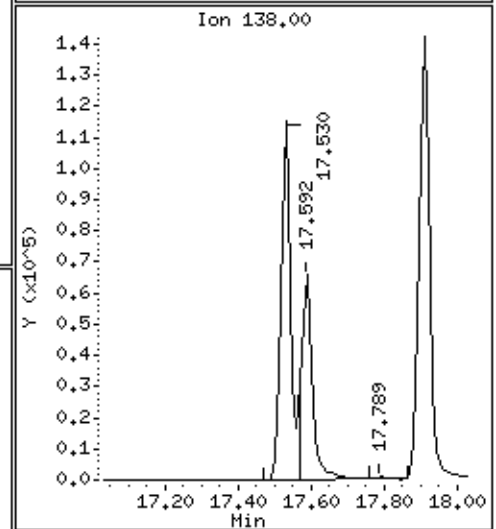
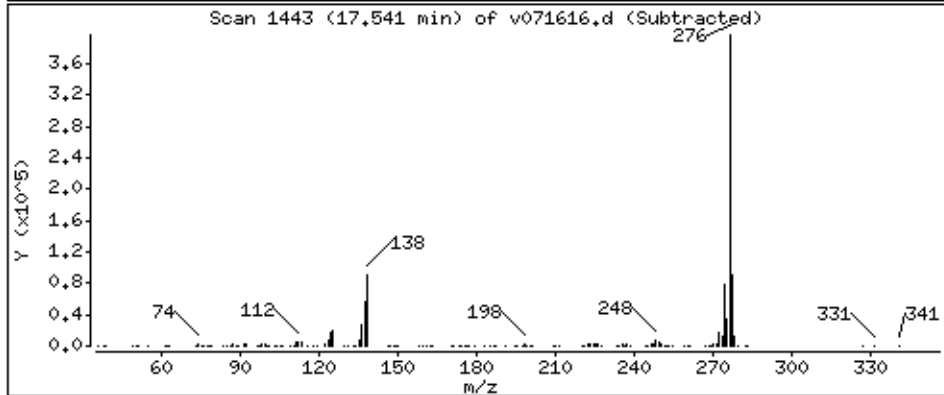
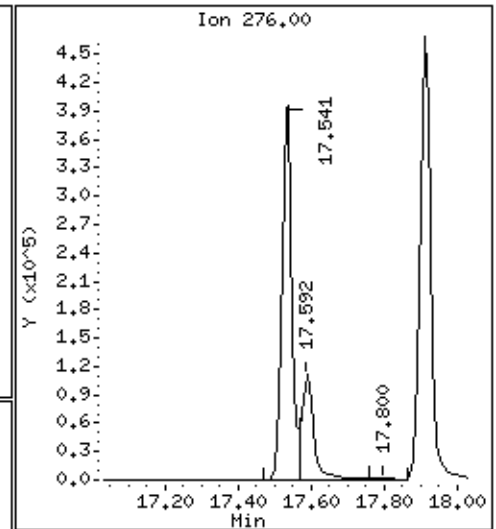
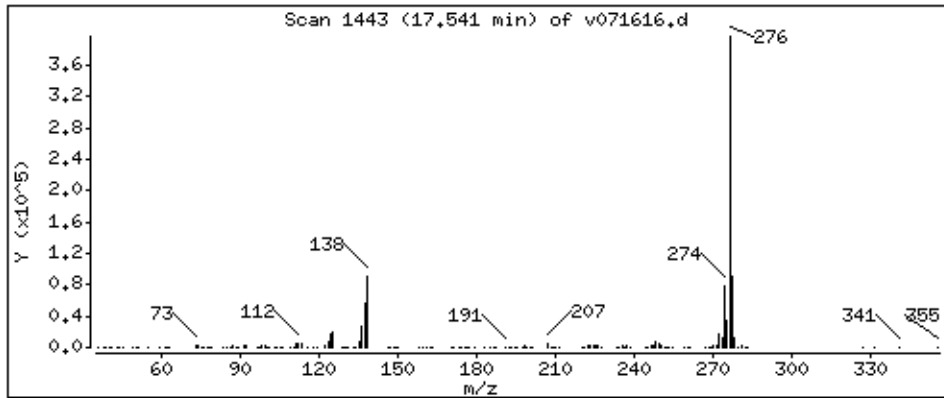
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

103 Indeno(1,2,3-cd)pyrene

Concentration: 56.29 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

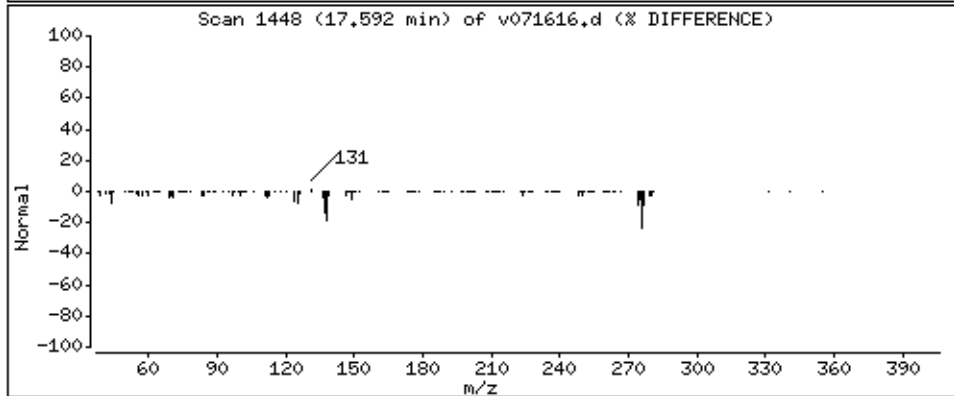
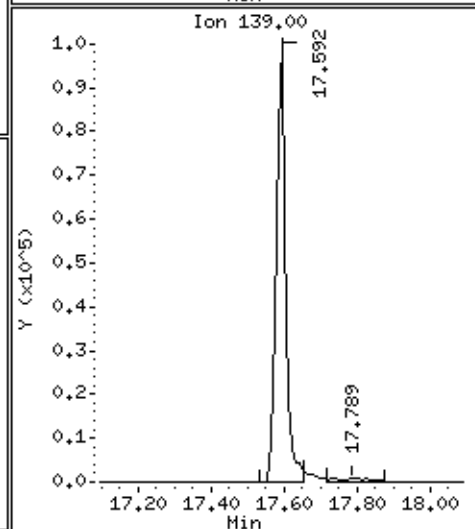
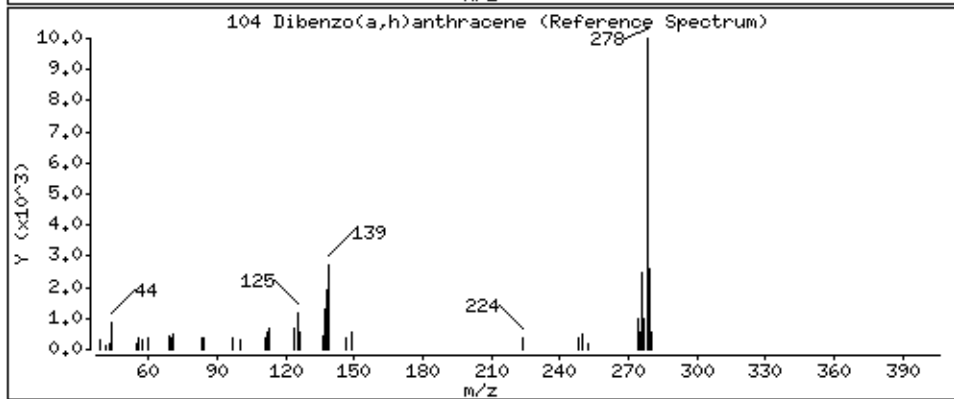
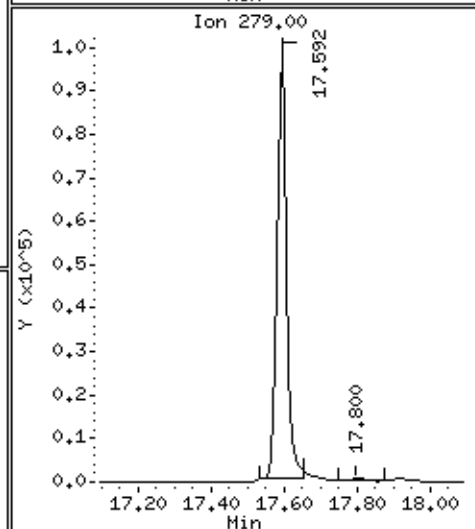
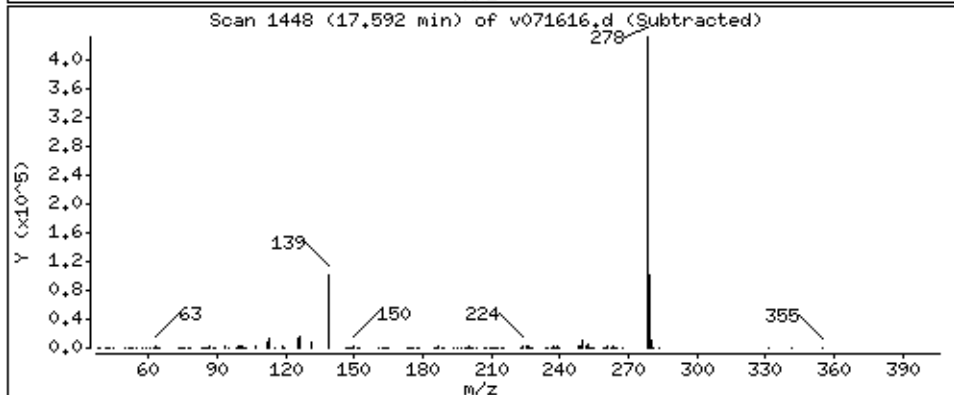
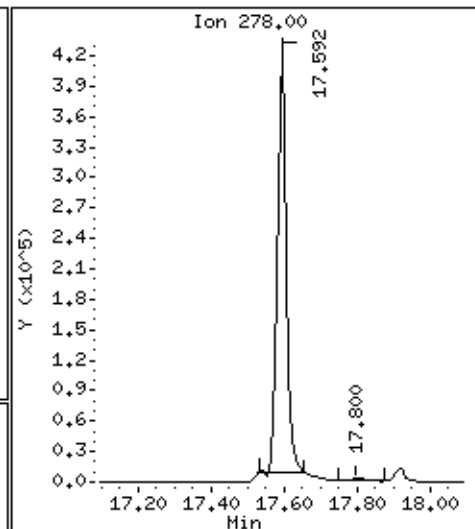
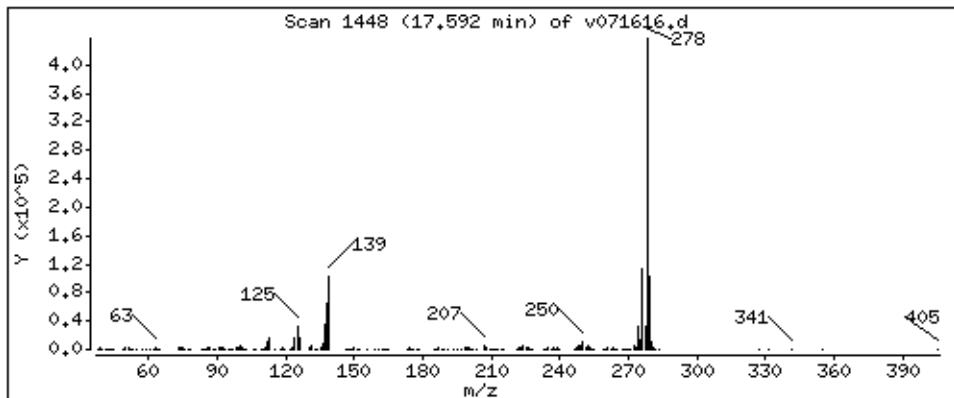
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

104 Dibenzo(a,h)anthracene

Concentration: 49.82 ug



Date : 16-JUL-2009 19:14

Client ID: LCS

Instrument: msdv.i

Sample Info: 1685-155-50;LCS

Volume Injected (uL): 1.0

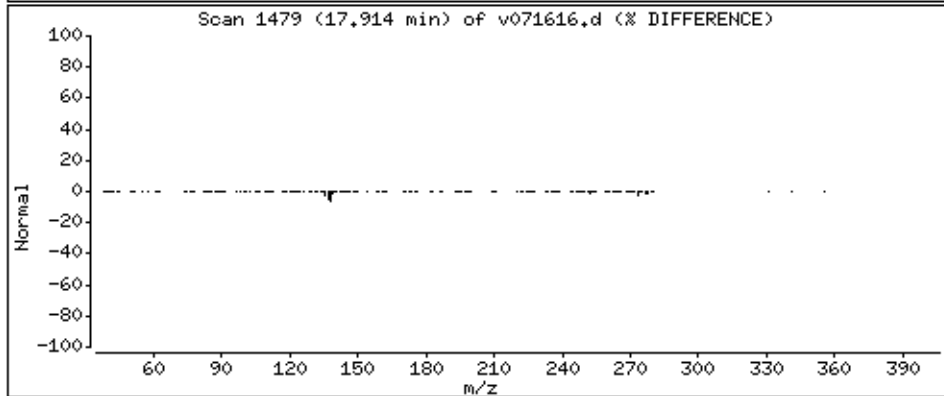
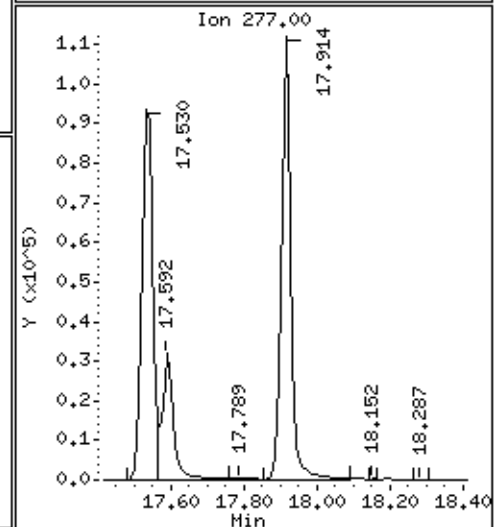
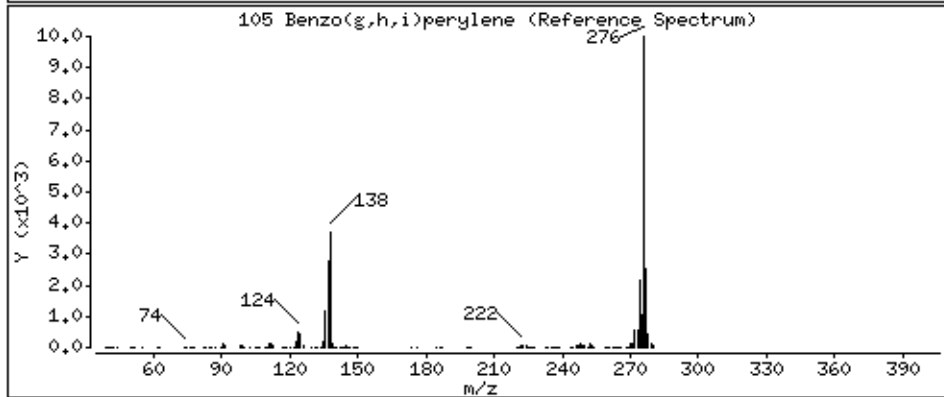
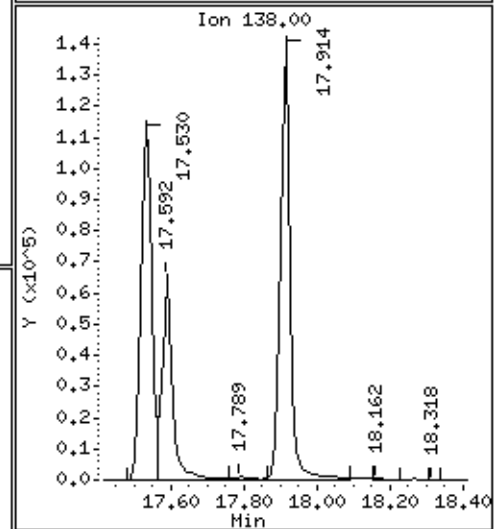
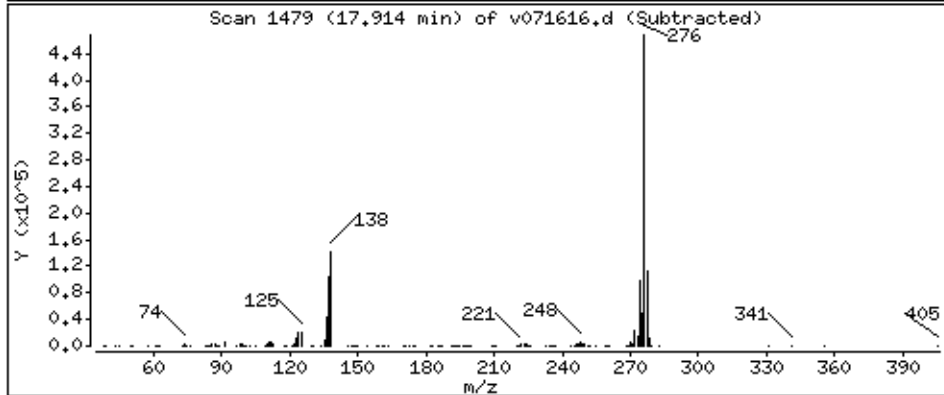
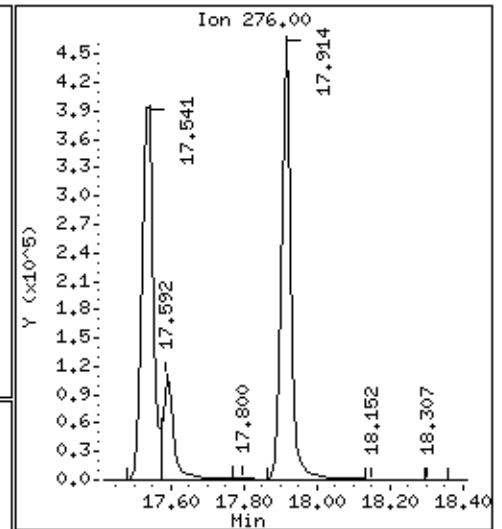
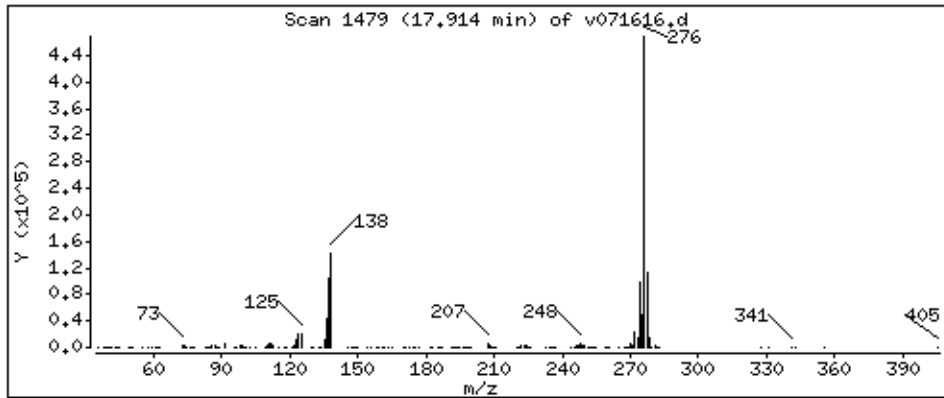
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

105 Benzo(g,h,i)perylene

Concentration: 53.16 ug



Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/16jul09a.b/v071607.d

Lab Smp Id: 1685-171-1

Client Smp ID: Level 1

Inj Date : 16-JUL-2009 15:05

Operator : rn

Inst ID: msdv.i

Smp Info : ;1685-171-1;Level 1

Misc Info : ,NOTICS

Comment :

Method : /chem/msdv.i/16jul09a.b/bnap0716.m

Meth Date : 17-Jul-2009 09:11 rnoonan

Quant Type: ISTD

Cal Date : 16-JUL-2009 15:05

Cal File: v071607.d

Als bottle: 4

Calibration Sample, Level: 1

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: lng.sub

Target Version: 3.50

Processing Host: eeyore

Concentration Formula: Amt \* DF \* (Vt/S\*Vi)/CF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
S	1.00000	Sample Portion
Vi	1.00000	Volume injected (uL)
CF	1000.00000	Conversion ng->ug

Cpnd Variable

Local Compound Variable

Compounds	QUANT	SIG						AMOUNTS	
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
								( ng )	( ng )
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 17 Nitrobenzene-d5	82		5.012	5.022	(0.849)		7862	1.00000	1.000
\$ 83 Fluoranthene-d10	212		11.323	11.323	(1.146)		14475	1.00000	1.000
\$ 101 Benzo(a)pyrene-d12	264		15.644	15.665	(0.991)		6362	1.00000	1.000
\$ 147 Fluorene-d10	176		8.732	8.742	(1.075)		11979	1.00000	1.000
\$ 148 Pyrene-d10	212		11.582	11.592	(0.867)		14451	1.00000	1.000
* 7 1,4-Dichlorobenzene-d4	150		4.245	4.255	(1.000)		310322	40.0000	
* 27 Naphthalene-d8	136		5.903	5.913	(1.000)		832434	40.0000	
* 47 Acenaphthene-d10	164		8.121	8.121	(1.000)		398921	40.0000	
* 71 Phenanthrene-d10	188		9.882	9.893	(1.000)		721242	40.0000	
* 90 Chrysene-d12	240		13.364	13.375	(1.000)		608799	40.0000	
* 99 Perylene-d12	264		15.789	15.800	(1.000)		435311	40.0000	
4 bis(2-Chloroethyl)ether	93		3.986	3.996	(0.939)		9821	1.00000	1.000
41 Aniline	93		3.893	3.903	(0.917)		13999	1.00000	1.000

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						( ng)	( ng)
=====	=====	==	=====	=====	=====	=====	=====
6 1,3-Dichlorobenzene	146	4.204	4.203	(0.990)	9836	1.00000	1.000
9 1,4-Dichlorobenzene*	146	4.266	4.276	(1.005)	10287	1.00000	1.000
10 Benzyl Alcohol	108	4.494	4.494	(1.059)	4414	1.00000	1.000
11 1,2-Dichlorobenzene	146	4.514	4.514	(1.063)	9605	1.00000	1.000
13 bis(2-Chloroisopropyl)ether	45	4.701	4.711	(1.107)	17414	1.00000	1.000
15 N-Nitrosodipropylamine**	70	4.887	4.887	(1.151)	6198	1.00000	1.000
16 Hexachloroethane	117	4.908	4.908	(1.156)	4237	1.00000	1.000
18 Nitrobenzene	77	5.033	5.043	(0.853)	9206	1.00000	1.000
19 Isophorone	82	5.354	5.354	(0.907)	16168	1.00000	1.000
23 bis(2-Chloroethoxy)methane	93	5.696	5.696	(0.965)	11055	1.00000	1.000
26 1,2,4-Trichlorobenzene	180	5.872	5.872	(0.995)	7862	1.00000	1.000
28 Naphthalene	128	5.934	5.934	(1.005)	28678	1.00000	1.000
30 Hexachlorobutadiene*	225	6.204	6.203	(1.051)	3892	1.00000	1.000
33 2-Methylnaphthalene	142	6.815	6.815	(1.154)	15521	1.00000	1.000
145 1-Methylnaphthalene	142	6.950	6.950	(1.177)	16628	1.00000	1.000
39 2-Chloronaphthalene	162	7.416	7.416	(0.913)	13924	1.00000	1.000
45 Acenaphthylene	152	7.924	7.934	(0.976)	20744	1.00000	1.000
48 Acenaphthene*	154	8.152	8.162	(1.004)	14770	1.00000	1.000
51 Dibenzofuran	168	8.349	8.359	(1.028)	19178	1.00000	1.000
57 Fluorene	166	8.774	8.774	(1.080)	15553	1.00000	1.000
58 4-Chlorophenyl phenyl ether	204	8.805	8.815	(1.084)	7878	1.00000	1.000
65 4-Bromophenyl phenyl ether	248	9.385	9.385	(0.950)	3554	1.00000	1.000
66 Hexachlorobenzene	284	9.530	9.530	(0.964)	4640	1.00000	1.000
144 Carbazole	167	10.193	10.193	(2.401)	16983	1.00000	1.000
72 Phenanthrene	178	9.914	9.913	(1.003)	24574	1.00000	1.000
73 Anthracene	178	9.965	9.965	(1.008)	20969	1.00000	1.000
80 Fluoranthene*	202	11.344	11.344	(1.148)	19814	1.00000	1.000
81 Pyrene	202	11.603	11.613	(0.868)	22134	1.00000	1.000
88 Benzo(a)Anthracene	228	13.344	13.354	(0.998)	16946	1.00000	1.000
91 Chrysene	228	13.406	13.416	(1.003)	29025	1.00000	1.000
95 Benzo(b)fluoranthene	252	15.157	15.168	(0.960)	12641	1.00000	1.000
96 Benzo(k)fluoranthene	252	15.199	15.209	(0.963)	16820	1.00000	1.000
97 Benzo(e)pyrene	252	15.603	15.613	(0.988)	13257	1.00000	1.000
98 Benzo(a)pyrene*	252	15.686	15.696	(0.993)	13356	1.00000	1.000
103 Indeno(1,2,3-cd)pyrene	276	17.520	17.541	(1.110)	8717	1.00000	1.000
104 Dibenzo(a,h)anthracene	278	17.582	17.592	(1.114)	10530	1.00000	1.000
105 Benzo(g,h,i)perylene	276	17.903	17.914	(1.134)	13401	1.00000	1.000



Report Date: 17-Jul-2009 09:11

## Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: msdv.i

Calibration Date: 16-JUL-2009

Lab File ID: v071607.d

Calibration Time: 15:05

Lab Smp Id: 1685-171-1

Client Smp ID: Level 1

Analysis Type: SV

Level: LOW

Quant Type: ISTD

Sample Type: PUF/XAD

Operator: rn

Method File: /chem/msdv.i/16jul09a.b/bnap0716.m

Misc Info: ,NOTICS

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	310322	155161	620644	310322	0.00
27 Naphthalene-d8	832434	416217	1664868	832434	0.00
47 Acenaphthene-d10	398921	199460	797842	398921	0.00
71 Phenanthrene-d10	721242	360621	1442484	721242	0.00
90 Chrysene-d12	608799	304400	1217598	608799	0.00
99 Perylene-d12	435311	217656	870622	435311	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	4.24	3.74	4.74	4.24	0.00
27 Naphthalene-d8	5.90	5.40	6.40	5.90	0.00
47 Acenaphthene-d10	8.12	7.62	8.62	8.12	0.00
71 Phenanthrene-d10	9.88	9.38	10.38	9.88	0.00
90 Chrysene-d12	13.36	12.86	13.86	13.36	0.00
99 Perylene-d12	15.79	15.29	16.29	15.79	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: /chem/msdv.i/16jul09a.b/v071607.d

Date : 16-JUL-2009 15:05

Client ID: Level 1

Sample Info: #1685-171-1;Level 1

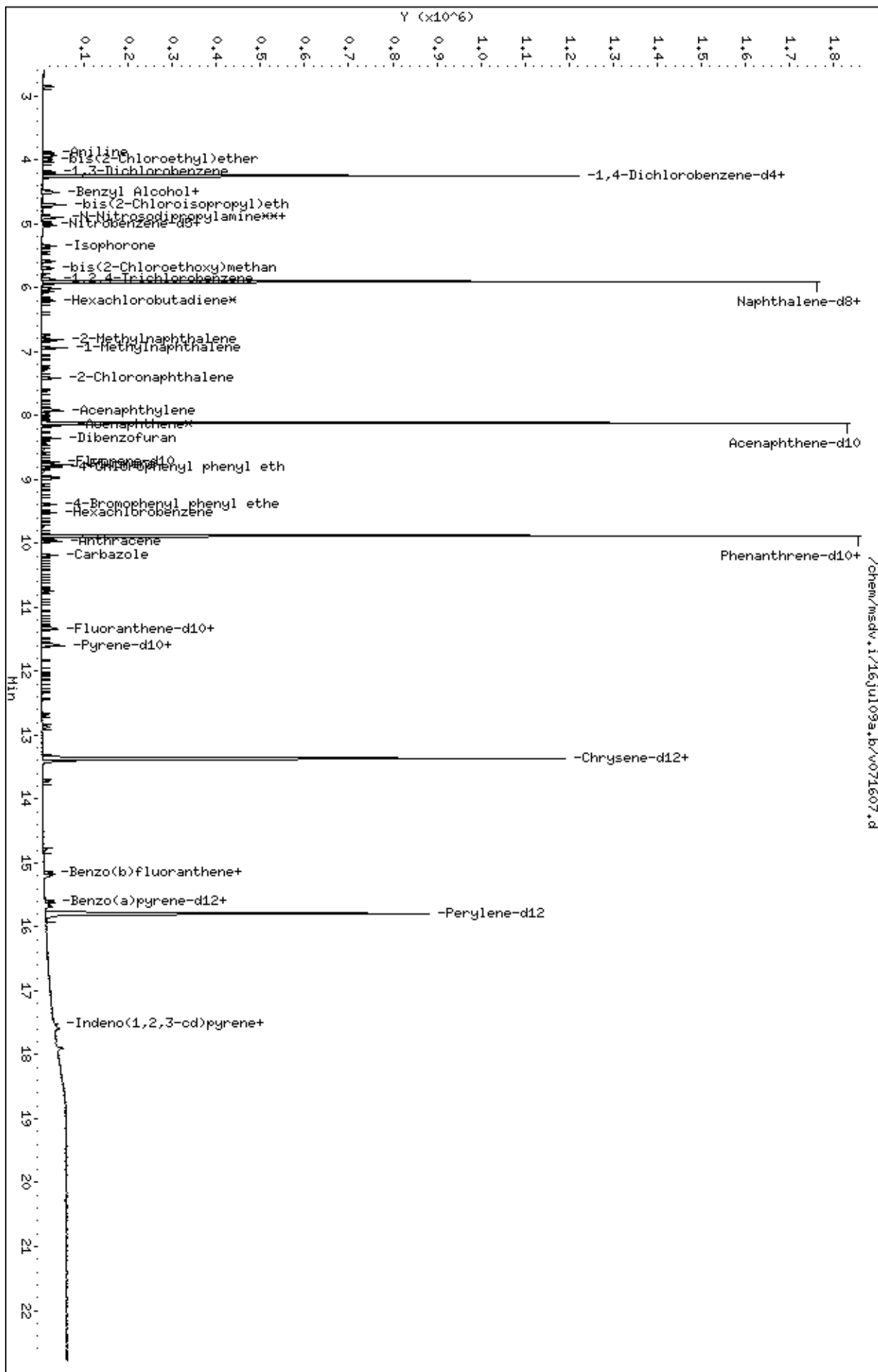
Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: m

Column diameter: 0.25



Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/16jul09a.b/v071608.d

Lab Smp Id: 1685-171-5

Client Smp ID: Level 2

Inj Date : 16-JUL-2009 15:33

Operator : rn

Inst ID: msdv.i

Smp Info : ;1685-171-5;Level 2

Misc Info : ,NOTICS

Comment :

Method : /chem/msdv.i/16jul09a.b/bnap0716.m

Meth Date : 17-Jul-2009 09:11 rnoonan

Quant Type: ISTD

Cal Date : 16-JUL-2009 15:33

Cal File: v071608.d

Als bottle: 5

Calibration Sample, Level: 2

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 5ng.sub

Target Version: 3.50

Processing Host: eeyore

Concentration Formula: Amt \* DF \* (Vt/S\*Vi)/CF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
S	1.00000	Sample Portion
Vi	1.00000	Volume injected (uL)
CF	1000.00000	Conversion ng->ug

Cpnd Variable

Local Compound Variable

						AMOUNTS	
		QUANT	SIG			CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	( ng)	( ng)
=====	=====	==	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112	2.846	2.846	(0.670)	43305	5.00000	5.000
\$ 2 Phenol-d5	99	3.924	3.934	(0.924)	51450	5.00000	5.000
\$ 17 Nitrobenzene-d5	82	5.012	5.022	(0.849)	43656	5.00000	5.126
\$ 62 2,4,6-Tribromophenol	330	9.095	9.095	(1.120)	7172	5.00000	5.000
\$ 101 Benzo(a)pyrene-d12	264	15.644	15.665	(0.991)	40858	5.00000	5.568
\$ 83 Fluoranthene-d10	212	11.323	11.323	(1.146)	73796	5.00000	4.987
\$ 147 Fluorene-d10	176	8.732	8.742	(1.075)	61811	5.00000	4.968
\$ 148 Pyrene-d10	212	11.582	11.592	(0.867)	76031	5.00000	5.066
* 7 1,4-Dichlorobenzene-d4	150	4.245	4.255	(1.000)	336318	40.0000	
* 27 Naphthalene-d8	136	5.903	5.913	(1.000)	878927	40.0000	
* 47 Acenaphthene-d10	164	8.121	8.121	(1.000)	417064	40.0000	
* 71 Phenanthrene-d10	188	9.883	9.893	(1.000)	739333	40.0000	
* 90 Chrysene-d12	240	13.364	13.375	(1.000)	624003	40.0000	

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	( ng )	( ng )	( ng )	( ng )	( ng )	( ng )	( ng )
=====	=====	=====	=====	=====	=====	=====	=====
* 99 Perylene-d12	264	15.789	15.800	(1.000)	445091	40.0000	
3 Phenol*	94	3.934	3.944	(0.927)	57861	5.00000	5.000
41 Aniline	93	3.893	3.903	(0.917)	70946	5.00000	4.833
4 bis(2-Chloroethyl)ether	93	3.986	3.996	(0.939)	53875	5.00000	5.031
5 2-Chlorophenol	128	4.038	4.038	(0.951)	42354	5.00000	5.000
6 1,3-Dichlorobenzene	146	4.204	4.203	(0.990)	47856	5.00000	4.731
9 1,4-Dichlorobenzene*	146	4.266	4.276	(1.005)	49508	5.00000	4.704
11 1,2-Dichlorobenzene	146	4.514	4.514	(1.063)	45856	5.00000	4.684
12 2-Methylphenol	108	4.701	4.711	(1.107)	40315	5.00000	5.000
13 bis(2-Chloroisopropyl)ether	45	4.701	4.711	(1.107)	85057	5.00000	4.741
14 4-Methylphenol	108	4.908	4.908	(1.156)	41474	5.00000	5.000
15 N-Nitrosodipropylamine**	70	4.888	4.887	(1.151)	32082	5.00000	4.885
16 Hexachloroethane	117	4.908	4.908	(1.156)	21064	5.00000	4.785
18 Nitrobenzene	77	5.033	5.043	(0.853)	47552	5.00000	4.945
19 Isophorone	82	5.354	5.354	(0.907)	84881	5.00000	4.986
20 2-Nitrophenol*	139	5.457	5.457	(0.924)	15219	5.00000	5.000
21 2,4-Dimethylphenol	122	5.582	5.592	(0.946)	35374	5.00000	5.000
23 bis(2-Chloroethoxy)methane	93	5.696	5.696	(0.965)	57867	5.00000	4.979
25 2,4-Dichlorophenol*	162	5.779	5.789	(0.979)	27426	5.00000	5.000
26 1,2,4-Trichlorobenzene	180	5.872	5.872	(0.995)	38312	5.00000	4.800
28 Naphthalene	128	5.934	5.934	(1.005)	135399	5.00000	4.721
30 Hexachlorobutadiene*	225	6.204	6.203	(1.051)	19408	5.00000	4.857
32 4-Chloro-3-Methylphenol*	107	6.753	6.753	(1.144)	30706	5.00000	5.000
33 2-Methylnaphthalene	142	6.815	6.815	(1.154)	76649	5.00000	4.833
145 1-Methylnaphthalene	142	6.950	6.950	(1.177)	80247	5.00000	4.776
36 2,4,6-Trichlorophenol*	196	7.240	7.240	(0.892)	16675	5.00000	5.000
37 2,4,5-Trichlorophenol	196	7.292	7.292	(0.898)	18250	5.00000	5.000
39 2-Chloronaphthalene	162	7.416	7.416	(0.913)	69083	5.00000	4.869
40 2-Nitroaniline	65	7.613	7.613	(0.937)	19585	5.00000	5.000
46 3-Nitroaniline	138	8.121	8.131	(1.000)	17459	5.00000	
42 Dimethylphthalate	163	7.914	7.913	(0.974)	72330	5.00000	5.000
44 2,6-Dinitrotoluene	165	7.976	7.976	(0.982)	14615	5.00000	5.000
45 Acenaphthylene	152	7.924	7.934	(0.976)	113494	5.00000	5.114
48 Acenaphthene*	154	8.152	8.162	(1.004)	70139	5.00000	4.760
50 4-Nitrophenol**	109	8.411	8.411	(1.036)	5254	5.00000	
52 2,4-Dinitrotoluene	165	8.442	8.442	(1.040)	17388	5.00000	5.000
51 Dibenzofuran	168	8.349	8.359	(1.028)	94453	5.00000	4.851
56 Diethylphthalate	149	8.784	8.784	(1.082)	73798	5.00000	5.000
57 Fluorene	166	8.774	8.774	(1.080)	74900	5.00000	4.795
58 4-Chlorophenyl phenyl ether	204	8.805	8.815	(1.084)	36599	5.00000	4.705
65 4-Bromophenyl phenyl ether	248	9.385	9.385	(0.950)	18282	5.00000	5.009
66 Hexachlorobenzene	284	9.530	9.530	(0.964)	22289	5.00000	4.838
144 Carbazole	167	10.193	10.193	(2.401)	95083	5.00000	5.082
72 Phenanthrene	178	9.914	9.913	(1.003)	117944	5.00000	4.836
73 Anthracene	178	9.965	9.965	(1.008)	103137	5.00000	4.897
78 Di-n-butylphthalate	149	10.753	10.753	(1.088)	96358	5.00000	5.000
80 Fluoranthene*	202	11.344	11.344	(1.148)	102458	5.00000	5.022

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	( ng)	( ng)	( ng)	( ng)	( ng)	( ng)	( ng)
=====	=====	==	=====	=====	=====	=====	=====
81 Pyrene	202	11.603	11.613	(0.868)	116385	5.00000	5.064
85 Butyl benzyl phthalate	149	12.681	12.691	(0.949)	30508	5.00000	5.000
88 Benzo(a)Anthracene	228	13.344	13.354	(0.998)	87648	5.00000	5.023
91 Chrysene	228	13.406	13.416	(1.003)	111232	5.00000	4.278
93 bis(2-ethylhexyl)Phthalate	149	13.727	13.727	(1.027)	42286	5.00000	5.000
94 Di-n-octyl phthalate*	149	14.805	14.805	(0.938)	49099	5.00000	5.000
95 Benzo(b)fluoranthene	252	15.157	15.168	(0.960)	79430	5.00000	5.514
96 Benzo(k)fluoranthene	252	15.199	15.209	(0.963)	94418	5.00000	5.234
97 Benzo(e)pyrene	252	15.603	15.613	(0.988)	72807	5.00000	5.179
98 Benzo(a)pyrene*	252	15.686	15.696	(0.993)	82611	5.00000	5.475
103 Indeno(1,2,3-cd)pyrene	276	17.520	17.541	(1.110)	59841	5.00000	5.732
104 Dibenzo(a,h)anthracene	278	17.582	17.592	(1.114)	70229	5.00000	5.661
105 Benzo(g,h,i)perylene	276	17.904	17.914	(1.134)	79208	5.00000	5.362
10 Benzyl Alcohol	108	4.494	4.494	(1.059)	26291	5.00000	5.236

Report Date: 17-Jul-2009 09:11

## Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: msdv.i

Calibration Date: 16-JUL-2009

Lab File ID: v071608.d

Calibration Time: 15:33

Lab Smp Id: 1685-171-5

Client Smp ID: Level 2

Analysis Type: SV

Level: LOW

Quant Type: ISTD

Sample Type: PUF/XAD

Operator: rn

Method File: /chem/msdv.i/16jul09a.b/bnap0716.m

Misc Info: ,NOTICS

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	336318	168159	672636	336318	0.00
27 Naphthalene-d8	878927	439464	1757854	878927	0.00
47 Acenaphthene-d10	417064	208532	834128	417064	0.00
71 Phenanthrene-d10	739333	369666	1478666	739333	0.00
90 Chrysene-d12	624003	312002	1248006	624003	0.00
99 Perylene-d12	445091	222546	890182	445091	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	4.25	3.75	4.75	4.25	0.00
27 Naphthalene-d8	5.90	5.40	6.40	5.90	0.00
47 Acenaphthene-d10	8.12	7.62	8.62	8.12	0.00
71 Phenanthrene-d10	9.88	9.38	10.38	9.88	0.00
90 Chrysene-d12	13.36	12.86	13.86	13.36	0.00
99 Perylene-d12	15.79	15.29	16.29	15.79	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.

Date : 16-JUL-2009 15:33

Client ID: Level 2

Sample Info: #1685-171-5;Level 2

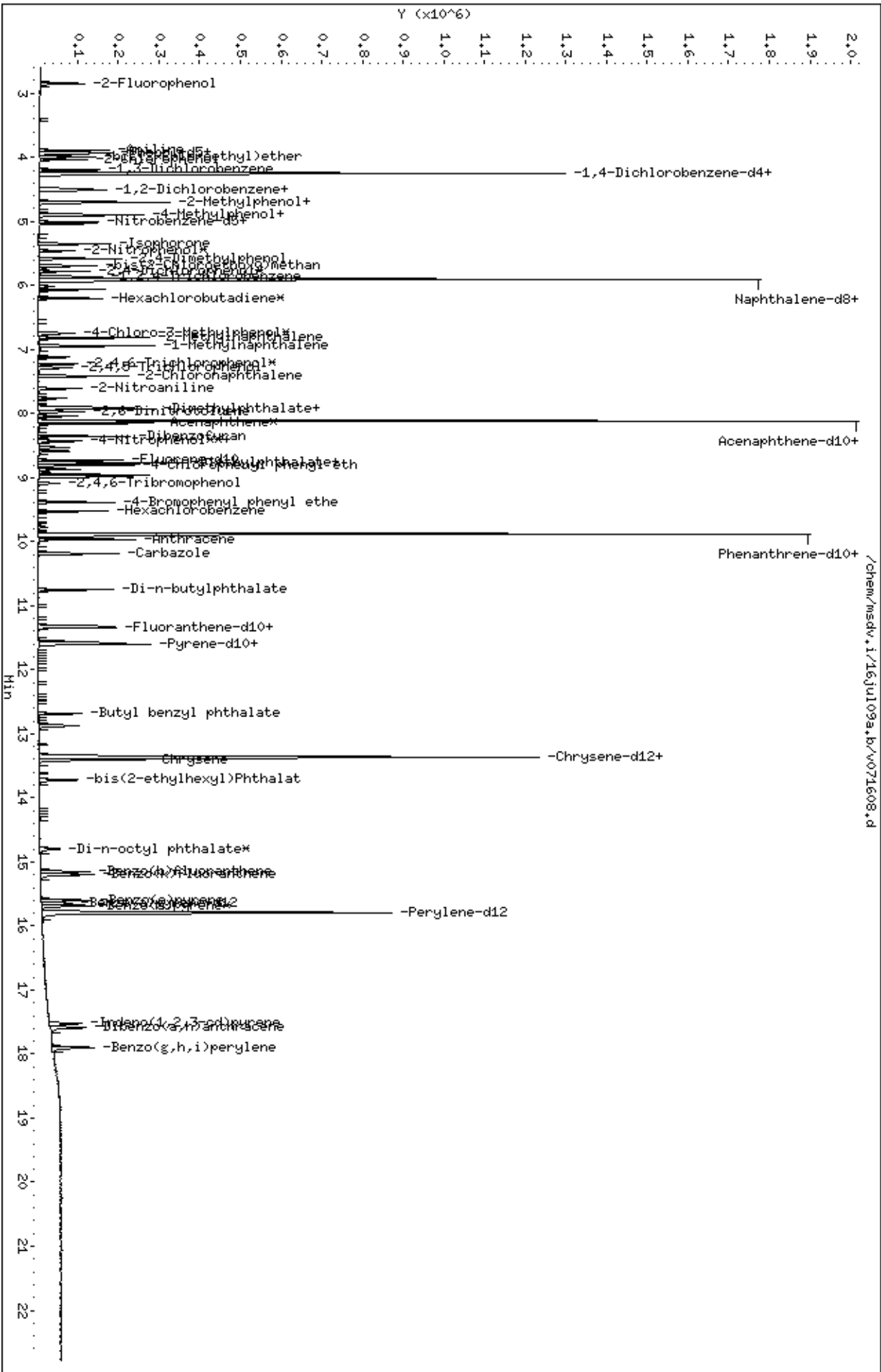
Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: m

Column diameter: 0.25



Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/16jul09a.b/v071609.d

Lab Smp Id: 1685-171-10

Client Smp ID: Level 3

Inj Date : 16-JUL-2009 16:01

Operator : rn

Inst ID: msdv.i

Smp Info : ;1685-171-10;Level 3

Misc Info : ,NOTICS

Comment :

Method : /chem/msdv.i/16jul09a.b/bnap0716.m

Meth Date : 17-Jul-2009 09:11 rnoonan

Quant Type: ISTD

Cal Date : 16-JUL-2009 16:01

Cal File: v071609.d

Als bottle: 6

Calibration Sample, Level: 3

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10ng.sub

Target Version: 3.50

Processing Host: eeyore

Concentration Formula: Amt \* DF \* (Vt/S\*Vi)/CF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
S	1.00000	Sample Portion
Vi	1.00000	Volume injected (uL)
CF	1000.00000	Conversion ng->ug

Cpnd Variable

Local Compound Variable

		AMOUNTS					
		QUANT	SIG				
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112	2.846	2.846	(0.670)	88524	10.0000	10.09
\$ 2 Phenol-d5	99	3.924	3.934	(0.924)	106041	10.0000	10.13
\$ 17 Nitrobenzene-d5	82	5.012	5.022	(0.849)	93913	10.0000	10.74
\$ 62 2,4,6-Tribromophenol	330	9.095	9.095	(1.120)	16587	10.0000	10.81
\$ 101 Benzo(a)pyrene-d12	264	15.644	15.665	(0.991)	96892	10.0000	11.63
\$ 83 Fluoranthene-d10	212	11.323	11.323	(1.146)	164022	10.0000	10.65
\$ 147 Fluorene-d10	176	8.732	8.742	(1.075)	126152	10.0000	10.20
\$ 148 Pyrene-d10	212	11.582	11.592	(0.867)	165470	10.0000	10.60
* 7 1,4-Dichlorobenzene-d4	150	4.245	4.255	(1.000)	337751	40.0000	
* 27 Naphthalene-d8	136	5.903	5.913	(1.000)	869080	40.0000	
* 47 Acenaphthene-d10	164	8.121	8.121	(1.000)	410224	40.0000	
* 71 Phenanthrene-d10	188	9.883	9.893	(1.000)	744746	40.0000	
* 90 Chrysene-d12	240	13.364	13.375	(1.000)	629877	40.0000	



						AMOUNTS	
		QUANT	SIG			CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	( ng )	( ng )
=====	=====	==	=====	=====	=====	=====	=====
* 99 Perylene-d12	264	15.789	15.800	(1.000)	463820	40.0000	
3 Phenol*	94	3.934	3.944	(0.927)	123723	10.0000	10.31
41 Aniline	93	3.893	3.903	(0.917)	153490	10.0000	10.27
4 bis(2-Chloroethyl)ether	93	3.986	3.996	(0.939)	108732	10.0000	10.07
5 2-Chlorophenol	128	4.038	4.038	(0.951)	90432	10.0000	10.30
6 1,3-Dichlorobenzene	146	4.204	4.203	(0.990)	98914	10.0000	9.823
9 1,4-Dichlorobenzene*	146	4.266	4.276	(1.005)	101480	10.0000	9.730
11 1,2-Dichlorobenzene	146	4.514	4.514	(1.063)	94514	10.0000	9.738
12 2-Methylphenol	108	4.701	4.711	(1.107)	86970	10.0000	10.36
13 bis(2-Chloroisopropyl)ether	45	4.701	4.711	(1.107)	174069	10.0000	9.771
14 4-Methylphenol	108	4.908	4.908	(1.156)	91127	10.0000	10.45
15 N-Nitrosodipropylamine**	70	4.888	4.887	(1.151)	68478	10.0000	10.25
16 Hexachloroethane	117	4.908	4.908	(1.156)	42169	10.0000	9.687
18 Nitrobenzene	77	5.033	5.043	(0.853)	105306	10.0000	10.69
19 Isophorone	82	5.354	5.354	(0.907)	187345	10.0000	10.72
20 2-Nitrophenol*	139	5.457	5.457	(0.924)	35099	10.0000	10.77
21 2,4-Dimethylphenol	122	5.582	5.592	(0.946)	78644	10.0000	10.58
23 bis(2-Chloroethoxy)methane	93	5.696	5.696	(0.965)	121382	10.0000	10.37
25 2,4-Dichlorophenol*	162	5.779	5.789	(0.979)	57001	10.0000	10.25
26 1,2,4-Trichlorobenzene	180	5.872	5.872	(0.995)	78908	10.0000	9.999
28 Naphthalene	128	5.934	5.934	(1.005)	273491	10.0000	9.760
29 4-Chloroaniline	127	6.069	6.069	(1.028)	112986	10.0000	10.00
30 Hexachlorobutadiene*	225	6.204	6.203	(1.051)	38934	10.0000	9.903
32 4-Chloro-3-Methylphenol*	107	6.742	6.753	(1.142)	64108	10.0000	10.27
33 2-Methylnaphthalene	142	6.815	6.815	(1.154)	155162	10.0000	9.930
145 1-Methylnaphthalene	142	6.950	6.950	(1.177)	166008	10.0000	9.994
36 2,4,6-Trichlorophenol*	196	7.230	7.240	(0.890)	37080	10.0000	10.61
37 2,4,5-Trichlorophenol	196	7.281	7.292	(0.897)	42107	10.0000	10.80
39 2-Chloronaphthalene	162	7.416	7.416	(0.913)	143310	10.0000	10.18
40 2-Nitroaniline	65	7.613	7.613	(0.937)	47852	10.0000	11.08
46 3-Nitroaniline	138	8.121	8.131	(1.000)	40788	10.0000	10.00
42 Dimethylphthalate	163	7.914	7.913	(0.974)	148542	10.0000	10.22
44 2,6-Dinitrotoluene	165	7.976	7.976	(0.982)	33672	10.0000	10.79
45 Acenaphthylene	152	7.924	7.934	(0.976)	238023	10.0000	10.58
48 Acenaphthene*	154	8.152	8.162	(1.004)	142190	10.0000	9.873
52 2,4-Dinitrotoluene	165	8.442	8.442	(1.040)	42066	10.0000	11.03
51 Dibenzofuran	168	8.349	8.359	(1.028)	194844	10.0000	10.12
56 Diethylphthalate	149	8.784	8.784	(1.082)	157164	10.0000	10.40
57 Fluorene	166	8.774	8.774	(1.080)	153482	10.0000	9.993
58 4-Chlorophenyl phenyl ether	204	8.805	8.815	(1.084)	71394	10.0000	9.544
59 4-Nitroaniline	138	8.867	8.877	(1.092)	40670	10.0000	10.00
60 4,6-Dinitro-2-methylphenol	198	8.919	8.929	(0.902)	12593	10.0000	10.00
61 N-nitrosodiphenylamine*	169	8.960	8.970	(0.907)	129975	10.0000	10.00
65 4-Bromophenyl phenyl ether	248	9.385	9.385	(0.950)	39121	10.0000	10.42
66 Hexachlorobenzene	284	9.530	9.530	(0.964)	45244	10.0000	9.831
144 Carbazole	167	10.193	10.193	(2.401)	205825	10.0000	10.62
72 Phenanthrene	178	9.914	9.913	(1.003)	237638	10.0000	9.779(H)

Compounds	QUANT	SIG						AMOUNTS	
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
								( ng)	( ng)
=====	=====	==	=====	=====	=====	=====	=====		
73 Anthracene	178		9.965	9.965	(1.008)	231892	10.0000	10.60	
78 Di-n-butylphthalate	149		10.753	10.753	(1.088)	227561	10.0000	10.79	
80 Fluoranthene*	202		11.344	11.344	(1.148)	217461	10.0000	10.38	
81 Pyrene	202		11.603	11.613	(0.868)	239251	10.0000	10.21	
85 Butyl benzyl phthalate	149		12.681	12.691	(0.949)	77710	10.0000	11.16	
88 Benzo(a)Anthracene	228		13.344	13.354	(0.998)	197580	10.0000	10.78	
91 Chrysene	228		13.406	13.416	(1.003)	214646	10.0000	8.708	
93 bis(2-ethylhexyl)Phthalate	149		13.727	13.727	(1.027)	110306	10.0000	11.27	
94 Di-n-octyl phthalate*	149		14.805	14.805	(0.938)	137992	10.0000	11.48	
95 Benzo(b)fluoranthene	252		15.157	15.168	(0.960)	177231	10.0000	11.14	
96 Benzo(k)fluoranthene	252		15.199	15.209	(0.963)	204859	10.0000	10.58	
97 Benzo(e)pyrene	252		15.603	15.613	(0.988)	164824	10.0000	10.80	
98 Benzo(a)pyrene*	252		15.686	15.696	(0.993)	184016	10.0000	11.07	
103 Indeno(1,2,3-cd)pyrene	276		17.520	17.541	(1.110)	138285	10.0000	11.66	
104 Dibenzo(a,h)anthracene	278		17.582	17.592	(1.114)	153739	10.0000	11.19	
105 Benzo(g,h,i)perylene	276		17.903	17.914	(1.134)	173556	10.0000	10.82	
10 Benzyl Alcohol	108		4.494	4.494	(1.059)	58083	10.0000	10.96	

QC Flag Legend

H - Operator selected an alternate compound hit.

Report Date: 17-Jul-2009 09:11

## Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: msdv.i  
Lab File ID: v071609.d  
Lab Smp Id: 1685-171-10  
Analysis Type: SV  
Quant Type: ISTD  
Operator: rn  
Method File: /chem/msdv.i/16jul09a.b/bnap0716.m  
Misc Info: ,NOTICS

Calibration Date: 16-JUL-2009  
Calibration Time: 16:01  
Client Smp ID: Level 3  
Level: LOW  
Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	337751	168876	675502	337751	0.00
27 Naphthalene-d8	869080	434540	1738160	869080	0.00
47 Acenaphthene-d10	410224	205112	820448	410224	0.00
71 Phenanthrene-d10	744746	372373	1489492	744746	0.00
90 Chrysene-d12	629877	314938	1259754	629877	0.00
99 Perylene-d12	463820	231910	927640	463820	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	4.25	3.75	4.75	4.25	0.00
27 Naphthalene-d8	5.90	5.40	6.40	5.90	0.00
47 Acenaphthene-d10	8.12	7.62	8.62	8.12	0.00
71 Phenanthrene-d10	9.88	9.38	10.38	9.88	0.00
90 Chrysene-d12	13.36	12.86	13.86	13.36	0.00
99 Perylene-d12	15.79	15.29	16.29	15.79	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.

Date : 16-JUL-2009 16:01

Client ID: Level 3

Sample Info: #1685-171-10; Level 3

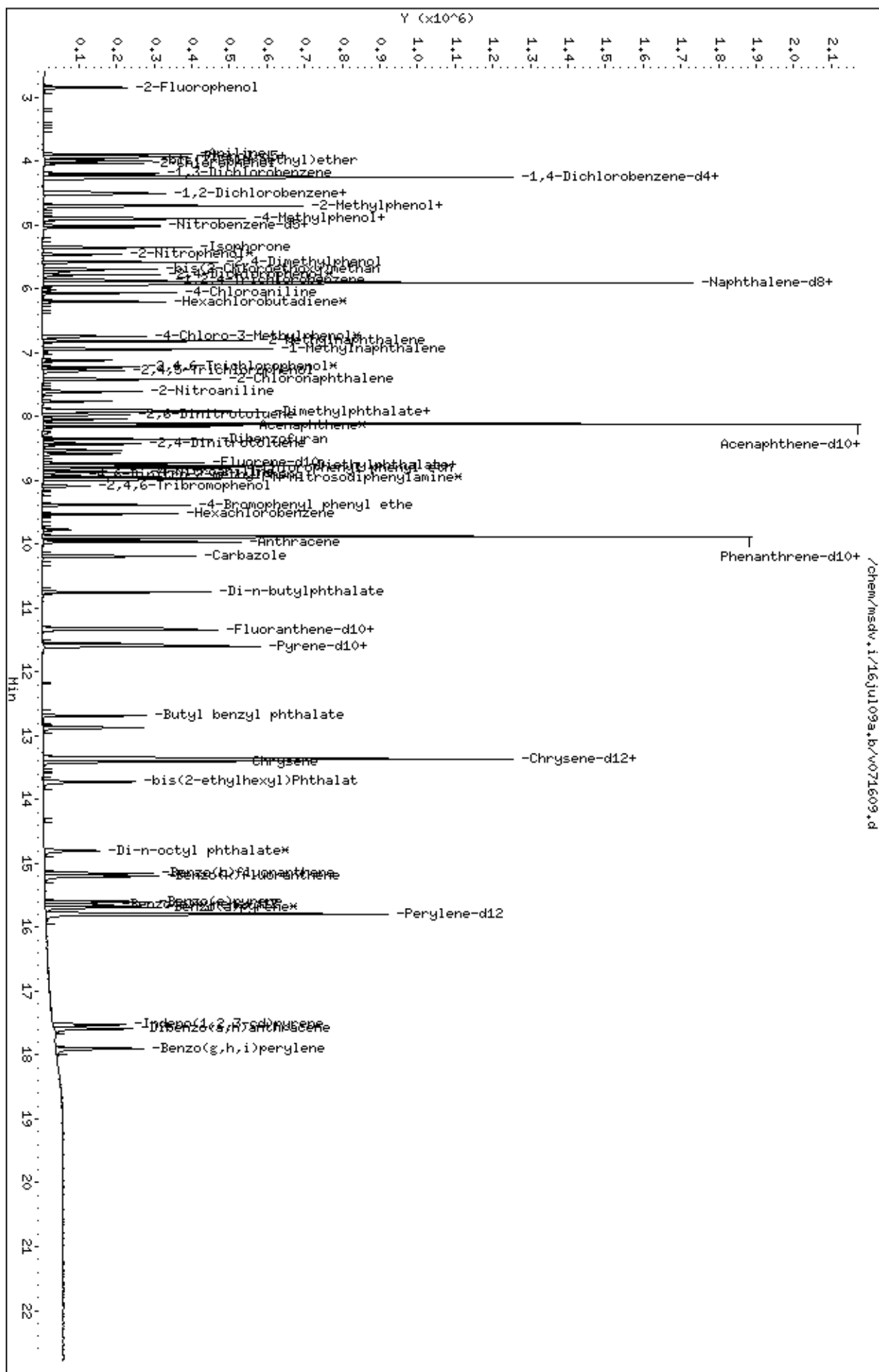
Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: m

Column diameter: 0.25



Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/16jul09a.b/v071610.d

Lab Smp Id: 1685-171-20

Client Smp ID: Level 4

Inj Date : 16-JUL-2009 16:28

Operator : rn

Inst ID: msdv.i

Smp Info : ;1685-171-20;Level 4

Misc Info : ,NOTICS

Comment :

Method : /chem/msdv.i/16jul09a.b/bnap0716.m

Meth Date : 17-Jul-2009 09:46 rnoonan

Quant Type: ISTD

Cal Date : 16-JUL-2009 16:28

Cal File: v071610.d

Als bottle: 7

Calibration Sample, Level: 4

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 20ng.sub

Target Version: 3.50

Processing Host: eeyore

Concentration Formula: Amt \* DF \* (Vt/S\*Vi)/CF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
S	1.00000	Sample Portion
Vi	1.00000	Volume injected (uL)
CF	1000.00000	Conversion ng->ug

Cpnd Variable

Local Compound Variable

		AMOUNTS					
		QUANT	SIG				
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112	2.846	2.846	(0.670)	169478	20.0000	22.76
\$ 2 Phenol-d5	99	3.924	3.924	(0.924)	193198	20.0000	22.82
\$ 17 Nitrobenzene-d5	82	5.012	5.012	(0.849)	177291	20.0000	20.97
\$ 62 2,4,6-Tribromophenol	330	9.095	9.095	(1.120)	33158	20.0000	20.62
\$ 101 Benzo(a)pyrene-d12	264	15.644	15.655	(0.991)	196779	20.0000	21.96
\$ 83 Fluoranthene-d10	212	11.323	11.323	(1.146)	309600	20.0000	20.73
\$ 147 Fluorene-d10	176	8.732	8.743	(1.075)	235575	20.0000	21.83
\$ 148 Pyrene-d10	212	11.582	11.582	(0.866)	299118	20.0000	21.47
* 7 1,4-Dichlorobenzene-d4	150	4.245	4.245	(1.000)	321806	40.0000	
* 27 Naphthalene-d8	136	5.903	5.913	(1.000)	815784	40.0000	
* 47 Acenaphthene-d10	164	8.121	8.121	(1.000)	378220	40.0000	
* 71 Phenanthrene-d10	188	9.883	9.883	(1.000)	701878	40.0000	
* 90 Chrysene-d12	240	13.375	13.375	(1.000)	597070	40.0000	

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	( ng )	( ng )	( ng )	( ng )	( ng )	( ng )	( ng )
=====	=====	=====	=====	=====	=====	=====	=====
* 99 Perylene-d12	264	15.789	15.789	(1.000)	443325	40.0000	
3 Phenol*	94	3.934	3.934	(0.927)	231666	20.0000	23.08
41 Aniline	93	3.893	3.893	(0.917)	284206	20.0000	22.23
4 bis(2-Chloroethyl)ether	93	3.986	3.986	(0.939)	195990	20.0000	22.09
5 2-Chlorophenol	128	4.027	4.038	(0.949)	169221	20.0000	22.76
6 1,3-Dichlorobenzene	146	4.204	4.204	(0.990)	177536	20.0000	22.13
9 1,4-Dichlorobenzene*	146	4.266	4.266	(1.005)	184821	20.0000	22.45
11 1,2-Dichlorobenzene	146	4.514	4.514	(1.063)	170562	20.0000	22.58
12 2-Methylphenol	108	4.701	4.701	(1.107)	156911	20.0000	22.99
13 bis(2-Chloroisopropyl)ether	45	4.701	4.711	(1.107)	312681	20.0000	23.14
14 4-Methylphenol	108	4.908	4.908	(1.156)	167640	20.0000	23.87
15 N-Nitrosodipropylamine**	70	4.888	4.888	(1.151)	131083	20.0000	23.46
16 Hexachloroethane	117	4.908	4.908	(1.156)	78031	20.0000	23.11
18 Nitrobenzene	77	5.033	5.043	(0.853)	188397	20.0000	20.48
19 Isophorone	82	5.354	5.354	(0.907)	354222	20.0000	21.12
20 2-Nitrophenol*	139	5.458	5.457	(0.924)	73933	20.0000	20.40
21 2,4-Dimethylphenol	122	5.582	5.582	(0.946)	148622	20.0000	21.52
23 bis(2-Chloroethoxy)methane	93	5.696	5.696	(0.965)	225688	20.0000	21.27
24 Benzoic Acid	122	5.758	5.789	(0.975)	55136	20.0000	15.05
25 2,4-Dichlorophenol*	162	5.779	5.779	(0.979)	112249	20.0000	21.47
26 1,2,4-Trichlorobenzene	180	5.872	5.872	(0.995)	140814	20.0000	21.08
28 Naphthalene	128	5.934	5.934	(1.005)	497658	20.0000	21.21
29 4-Chloroaniline	127	6.069	6.069	(1.028)	212528	20.0000	21.34
30 Hexachlorobutadiene*	225	6.204	6.204	(1.051)	72347	20.0000	21.25
32 4-Chloro-3-Methylphenol*	107	6.743	6.743	(1.142)	130227	20.0000	20.74
33 2-Methylnaphthalene	142	6.815	6.815	(1.154)	291133	20.0000	21.63
145 1-Methylnaphthalene	142	6.950	6.950	(1.177)	299945	20.0000	21.43
35 Hexachlorocyclopentadiene**	237	7.126	7.126	(0.877)	64554	20.0000	18.79
36 2,4,6-Trichlorophenol*	196	7.230	7.240	(0.890)	72724	20.0000	20.93
37 2,4,5-Trichlorophenol	196	7.281	7.281	(0.897)	84643	20.0000	22.86
39 2-Chloronaphthalene	162	7.416	7.416	(0.913)	262443	20.0000	21.81
40 2-Nitroaniline	65	7.613	7.613	(0.937)	99055	20.0000	20.86
46 3-Nitroaniline	138	8.121	8.131	(1.000)	76729	20.0000	19.74
42 Dimethylphthalate	163	7.914	7.914	(0.974)	276464	20.0000	22.53
44 2,6-Dinitrotoluene	165	7.976	7.976	(0.982)	65007	20.0000	21.39
45 Acenaphthylene	152	7.924	7.924	(0.976)	425643	20.0000	22.04
48 Acenaphthene*	154	8.162	8.162	(1.005)	252496	20.0000	21.25
49 2,4-Dinitrophenol**	184	8.245	8.256	(1.015)	16957	20.0000	11.71
50 4-Nitrophenol**	109	8.401	8.411	(1.034)	34964	20.0000	16.63
52 2,4-Dinitrotoluene	165	8.442	8.442	(1.040)	83874	20.0000	21.16
51 Dibenzofuran	168	8.349	8.359	(1.028)	351989	20.0000	21.58
56 Diethylphthalate	149	8.784	8.784	(1.082)	289016	20.0000	22.06
57 Fluorene	166	8.774	8.774	(1.080)	285154	20.0000	22.18
58 4-Chlorophenyl phenyl ether	204	8.805	8.805	(1.084)	128486	20.0000	21.18
59 4-Nitroaniline	138	8.867	8.877	(1.092)	81361	20.0000	20.12
60 4,6-Dinitro-2-methylphenol	198	8.919	8.929	(0.902)	32178	20.0000	17.50
61 N-nitrosodiphenylamine*	169	8.960	8.971	(0.907)	233338	20.0000	22.27

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	( ng )	( ng )	( ng )	( ng )	( ng )	( ng )	( ng )
=====	=====	=====	=====	=====	=====	=====	=====
65 4-Bromophenyl phenyl ether	248	9.385	9.385	(0.950)	74293	20.0000	22.20
66 Hexachlorobenzene	284	9.530	9.530	(0.964)	82138	20.0000	20.93
144 Carbazole	167	10.193	10.193	(2.401)	380757	20.0000	22.97
68 Pentachlorophenol*	266	9.769	9.769	(0.988)	27536	20.0000	16.34
72 Phenanthrene	178	9.914	9.914	(1.003)	432188	20.0000	21.58(H)
73 Anthracene	178	9.965	9.965	(1.008)	425932	20.0000	22.15
78 Di-n-butylphthalate	149	10.753	10.753	(1.088)	448725	20.0000	21.44
80 Fluoranthene*	202	11.344	11.344	(1.148)	400277	20.0000	21.94
81 Pyrene	202	11.603	11.613	(0.868)	432633	20.0000	21.49
85 Butyl benzyl phthalate	149	12.681	12.691	(0.948)	167223	20.0000	19.65
89 3 3'-Dichlorobenzidine	252	13.396	13.396	(1.002)	114927	20.0000	19.89
88 Benzo(a)Anthracene	228	13.344	13.344	(0.998)	376776	20.0000	21.02
91 Chrysene	228	13.406	13.416	(1.002)	389453	20.0000	20.17
93 bis(2-ethylhexyl)Phthalate	149	13.717	13.727	(1.026)	237045	20.0000	19.97
94 Di-n-octyl phthalate*	149	14.805	14.805	(0.938)	330717	20.0000	18.82
95 Benzo(b)fluoranthene	252	15.157	15.168	(0.960)	341950	20.0000	20.73
96 Benzo(k)fluoranthene	252	15.199	15.209	(0.963)	399193	20.0000	22.03
97 Benzo(e)pyrene	252	15.603	15.613	(0.988)	321782	20.0000	21.53
98 Benzo(a)pyrene*	252	15.686	15.696	(0.993)	349222	20.0000	21.52
103 Indeno(1,2,3-cd)pyrene	276	17.530	17.530	(1.110)	287474	20.0000	21.03
104 Dibenzo(a,h)anthracene	278	17.582	17.593	(1.114)	310925	20.0000	21.72
105 Benzo(g,h,i)perylene	276	17.904	17.914	(1.134)	339761	20.0000	20.99
10 Benzyl Alcohol	108	4.494	4.494	(1.059)	112227	20.0000	23.04

QC Flag Legend

H - Operator selected an alternate compound hit.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: msdv.i  
Lab File ID: v071610.d  
Lab Smp Id: 1685-171-20  
Analysis Type: SV  
Quant Type: ISTD  
Operator: rn  
Method File: /chem/msdv.i/16jul09a.b/bnap0716.m  
Misc Info: ,NOTICS

Calibration Date: 16-JUL-2009  
Calibration Time: 17:23  
Client Smp ID: Level 4  
Level: LOW  
Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	344510	172255	689020	321806	-6.59
27 Naphthalene-d8	803185	401592	1606370	815784	1.57
47 Acenaphthene-d10	364531	182266	729062	378220	3.76
71 Phenanthrene-d10	686990	343495	1373980	701878	2.17
90 Chrysene-d12	579675	289838	1159350	597070	3.00
99 Perylene-d12	439467	219734	878934	443325	0.88

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	4.25	3.75	4.75	4.25	0.00
27 Naphthalene-d8	5.91	5.41	6.41	5.90	-0.18
47 Acenaphthene-d10	8.12	7.62	8.62	8.12	0.00
71 Phenanthrene-d10	9.88	9.38	10.38	9.88	0.00
90 Chrysene-d12	13.37	12.87	13.87	13.37	0.00
99 Perylene-d12	15.79	15.29	16.29	15.79	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: /chem/msdv.i/16jul09a.b/v071610.d

Date : 16-JUL-2009 16:28

Client ID: Level 4

Sample Info: #1685-171-20; Level 4

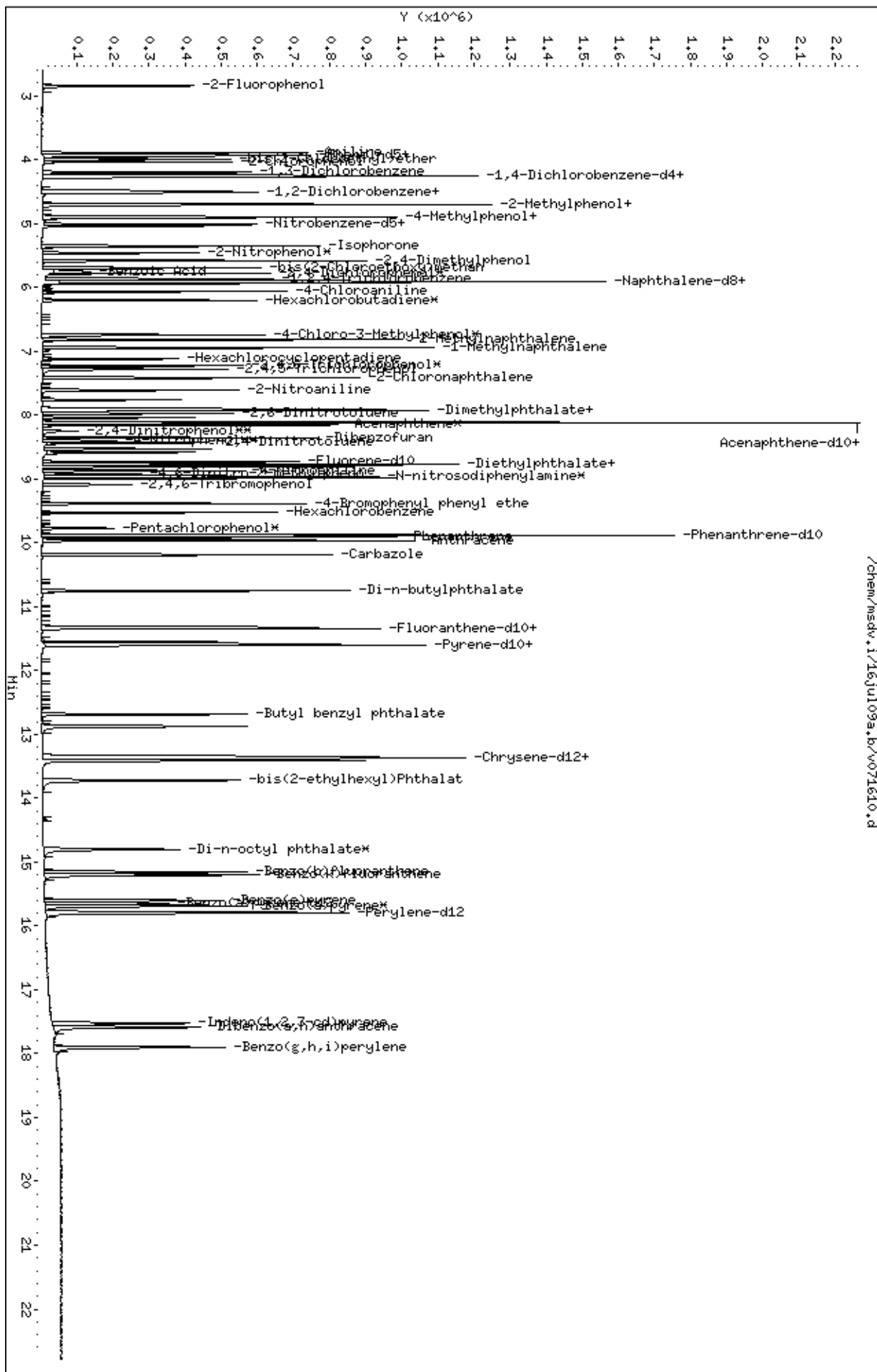
Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: m

Column diameter: 0.25



Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/16jul09a.b/v071611.d

Lab Smp Id: 1685-171-40

Client Smp ID: Level 5

Inj Date : 16-JUL-2009 16:56

Operator : rn

Inst ID: msdv.i

Smp Info : ;1685-171-40;Level 5

Misc Info : ,NOTICS

Comment :

Method : /chem/msdv.i/16jul09a.b/bnap0716.m

Meth Date : 17-Jul-2009 09:35 rnoonan

Quant Type: ISTD

Cal Date : 16-JUL-2009 16:56

Cal File: v071611.d

Als bottle: 8

Calibration Sample, Level: 5

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 50ng.sub

Target Version: 3.50

Processing Host: eeyore

Concentration Formula: Amt \* DF \* (Vt/S\*Vi)/CF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
S	1.00000	Sample Portion
Vi	1.00000	Volume injected (uL)
CF	1000.00000	Conversion ng->ug

Cpnd Variable

Local Compound Variable

		AMOUNTS					
		QUANT	SIG				
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112	2.846	2.846	(0.670)	282143	40.0000	38.42
\$ 2 Phenol-d5	99	3.924	3.924	(0.924)	319305	40.0000	38.24
\$ 17 Nitrobenzene-d5	82	5.012	5.012	(0.849)	301512	40.0000	37.14
\$ 62 2,4,6-Tribromophenol	330	9.095	9.095	(1.120)	58831	40.0000	37.24
\$ 83 Fluoranthene-d10	212	11.323	11.323	(1.146)	641776	40.0000	43.48
\$ 101 Benzo(a)pyrene-d12	264	15.655	15.655	(0.991)	418261	40.0000	46.38
\$ 147 Fluorene-d10	176	8.742	8.743	(1.077)	395323	40.0000	37.29
\$ 148 Pyrene-d10	212	11.582	11.582	(0.866)	513884	40.0000	36.59
* 7 1,4-Dichlorobenzene-d4	150	4.245	4.245	(1.000)	317370	40.0000	
* 27 Naphthalene-d8	136	5.903	5.913	(1.000)	783436	40.0000	
* 47 Acenaphthene-d10	164	8.121	8.121	(1.000)	371483	40.0000	
* 71 Phenanthrene-d10	188	9.882	9.883	(1.000)	693829	40.0000	
* 90 Chrysene-d12	240	13.375	13.375	(1.000)	601894	40.0000	

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	( ng )	( ng )	( ng )	( ng )	( ng )	( ng )	( ng )
=====	=====	=====	=====	=====	=====	=====	=====
* 99 Perylene-d12	264	15.789	15.789	(1.000)	446087	40.0000	
3 Phenol*	94	3.934	3.934	(0.927)	387254	40.0000	39.13
41 Aniline	93	3.893	3.893	(0.917)	477956	40.0000	37.90
4 bis(2-Chloroethyl)ether	93	3.986	3.986	(0.939)	324649	40.0000	37.10
5 2-Chlorophenol	128	4.038	4.038	(0.951)	286343	40.0000	39.06
6 1,3-Dichlorobenzene	146	4.203	4.204	(0.990)	293627	40.0000	37.12
9 1,4-Dichlorobenzene*	146	4.266	4.266	(1.005)	291904	40.0000	35.95
10 Benzyl Alcohol	108	4.494	4.494	(1.059)	193924	40.0000	40.38
11 1,2-Dichlorobenzene	146	4.514	4.514	(1.063)	271998	40.0000	36.51
12 2-Methylphenol	108	4.701	4.701	(1.107)	267263	40.0000	39.71
13 bis(2-Chloroisopropyl)ether	45	4.711	4.711	(1.110)	500234	40.0000	37.54
14 4-Methylphenol	108	4.908	4.908	(1.156)	275316	40.0000	39.75
15 N-Nitrosodipropylamine**	70	4.887	4.888	(1.151)	221639	40.0000	40.21
16 Hexachloroethane	117	4.908	4.908	(1.156)	124651	40.0000	37.43
18 Nitrobenzene	77	5.033	5.043	(0.853)	328325	40.0000	37.17
19 Isophorone	82	5.354	5.354	(0.907)	608119	40.0000	37.75
20 2-Nitrophenol*	139	5.457	5.457	(0.924)	130990	40.0000	37.63
21 2,4-Dimethylphenol	122	5.582	5.582	(0.946)	241785	40.0000	36.45
23 bis(2-Chloroethoxy)methane	93	5.696	5.696	(0.965)	371590	40.0000	36.46
24 Benzoic Acid	122	5.768	5.789	(0.977)	118254	40.0000	33.60
25 2,4-Dichlorophenol*	162	5.779	5.779	(0.979)	189462	40.0000	37.74
26 1,2,4-Trichlorobenzene	180	5.872	5.872	(0.995)	234238	40.0000	36.51
28 Naphthalene	128	5.934	5.934	(1.005)	813716	40.0000	36.12
29 4-Chloroaniline	127	6.069	6.069	(1.028)	363623	40.0000	38.02
30 Hexachlorobutadiene*	225	6.204	6.204	(1.051)	115573	40.0000	35.34
32 4-Chloro-3-Methylphenol*	107	6.742	6.743	(1.142)	226516	40.0000	37.57
33 2-Methylnaphthalene	142	6.815	6.815	(1.154)	475173	40.0000	36.77
145 1-Methylnaphthalene	142	6.950	6.950	(1.177)	491042	40.0000	36.53
35 Hexachlorocyclopentadiene**	237	7.126	7.126	(0.877)	115994	40.0000	34.38
36 2,4,6-Trichlorophenol*	196	7.229	7.240	(0.890)	128311	40.0000	37.60
37 2,4,5-Trichlorophenol	196	7.281	7.281	(0.897)	144175	40.0000	39.65
39 2-Chloronaphthalene	162	7.416	7.416	(0.913)	430715	40.0000	36.44
40 2-Nitroaniline	65	7.613	7.613	(0.937)	181785	40.0000	38.99
46 3-Nitroaniline	138	8.131	8.131	(1.001)	142696	40.0000	37.38
42 Dimethylphthalate	163	7.913	7.914	(0.974)	454930	40.0000	37.74
44 2,6-Dinitrotoluene	165	7.976	7.976	(0.982)	112770	40.0000	37.78
45 Acenaphthylene	152	7.924	7.924	(0.976)	717398	40.0000	37.82
48 Acenaphthene*	154	8.162	8.162	(1.005)	429651	40.0000	36.81
49 2,4-Dinitrophenol**	184	8.245	8.256	(1.015)	41087	40.0000	30.47
50 4-Nitrophenol**	109	8.400	8.411	(1.034)	71685	40.0000	34.71
52 2,4-Dinitrotoluene	165	8.442	8.442	(1.040)	150279	40.0000	38.60
51 Dibenzofuran	168	8.359	8.359	(1.029)	589550	40.0000	36.80
56 Diethylphthalate	149	8.784	8.784	(1.082)	483820	40.0000	37.59
57 Fluorene	166	8.774	8.774	(1.080)	476634	40.0000	37.75
58 4-Chlorophenyl phenyl ether	204	8.805	8.805	(1.084)	215118	40.0000	36.11
59 4-Nitroaniline	138	8.877	8.877	(1.093)	148355	40.0000	37.35
60 4,6-Dinitro-2-methylphenol	198	8.919	8.929	(0.902)	65393	40.0000	35.97

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
							( ng)	( ng)
=====	=====	==	=====	=====	=====		=====	=====
61 N-nitrosodiphenylamine*	169	8.970	8.971	(0.908)	400354		40.0000	38.65
65 4-Bromophenyl phenyl ether	248	9.385	9.385	(0.950)	120585		40.0000	36.46
66 Hexachlorobenzene	284	9.530	9.530	(0.964)	140758		40.0000	36.29
144 Carbazole	167	10.193	10.193	(2.401)	675452		40.0000	41.32
68 Pentachlorophenol*	266	9.768	9.769	(0.988)	57792		40.0000	34.70
72 Phenanthrene	178	9.914	9.914	(1.003)	731318		40.0000	36.94(H)
73 Anthracene	178	9.965	9.965	(1.008)	729241		40.0000	38.36
78 Di-n-butylphthalate	149	10.753	10.753	(1.088)	791692		40.0000	38.26
80 Fluoranthene*	202	11.344	11.344	(1.148)	678576		40.0000	37.63
81 Pyrene	202	11.603	11.613	(0.868)	735026		40.0000	36.21
85 Butyl benzyl phthalate	149	12.680	12.691	(0.948)	315737		40.0000	36.81
89 3 3'-Dichlorobenzidine	252	13.395	13.396	(1.002)	207063		40.0000	35.54
88 Benzo(a)Anthracene	228	13.344	13.344	(0.998)	674390		40.0000	37.33
91 Chrysene	228	13.416	13.416	(1.003)	654079		40.0000	33.60
93 bis(2-ethylhexyl)Phthalate	149	13.727	13.727	(1.026)	436969		40.0000	36.51
94 Di-n-octyl phthalate*	149	14.805	14.805	(0.938)	666932		40.0000	37.71
95 Benzo(b)fluoranthene	252	15.168	15.168	(0.961)	587713		40.0000	35.41
96 Benzo(k)fluoranthene	252	15.209	15.209	(0.963)	718678		40.0000	39.41
97 Benzo(e)pyrene	252	15.613	15.613	(0.989)	561736		40.0000	37.35
98 Benzo(a)pyrene*	252	15.696	15.696	(0.994)	604739		40.0000	37.03
103 Indeno(1,2,3-cd)pyrene	276	17.530	17.530	(1.110)	518800		40.0000	37.72
104 Dibenzo(a,h)anthracene	278	17.593	17.593	(1.114)	558888		40.0000	38.79
105 Benzo(g,h,i)perylene	276	17.914	17.914	(1.135)	613347		40.0000	37.65

QC Flag Legend

H - Operator selected an alternate compound hit.

Report Date: 17-Jul-2009 09:38

## Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: msdv.i  
Lab File ID: v071611.d  
Lab Smp Id: 1685-171-40  
Analysis Type: SV  
Quant Type: ISTD  
Operator: rn  
Method File: /chem/msdv.i/16jul09a.b/bnap0716.m  
Misc Info: ,NOTICS

Calibration Date: 16-JUL-2009  
Calibration Time: 17:23  
Client Smp ID: Level 5  
Level: LOW  
Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	344510	172255	689020	317370	-7.88
27 Naphthalene-d8	803185	401592	1606370	783436	-2.46
47 Acenaphthene-d10	364531	182266	729062	371483	1.91
71 Phenanthrene-d10	686990	343495	1373980	693829	1.00
90 Chrysene-d12	579675	289838	1159350	601894	3.83
99 Perylene-d12	439467	219734	878934	446087	1.51

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	4.25	3.75	4.75	4.24	0.00
27 Naphthalene-d8	5.91	5.41	6.41	5.90	-0.18
47 Acenaphthene-d10	8.12	7.62	8.62	8.12	0.00
71 Phenanthrene-d10	9.88	9.38	10.38	9.88	0.00
90 Chrysene-d12	13.37	12.87	13.87	13.37	0.00
99 Perylene-d12	15.79	15.29	16.29	15.79	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.

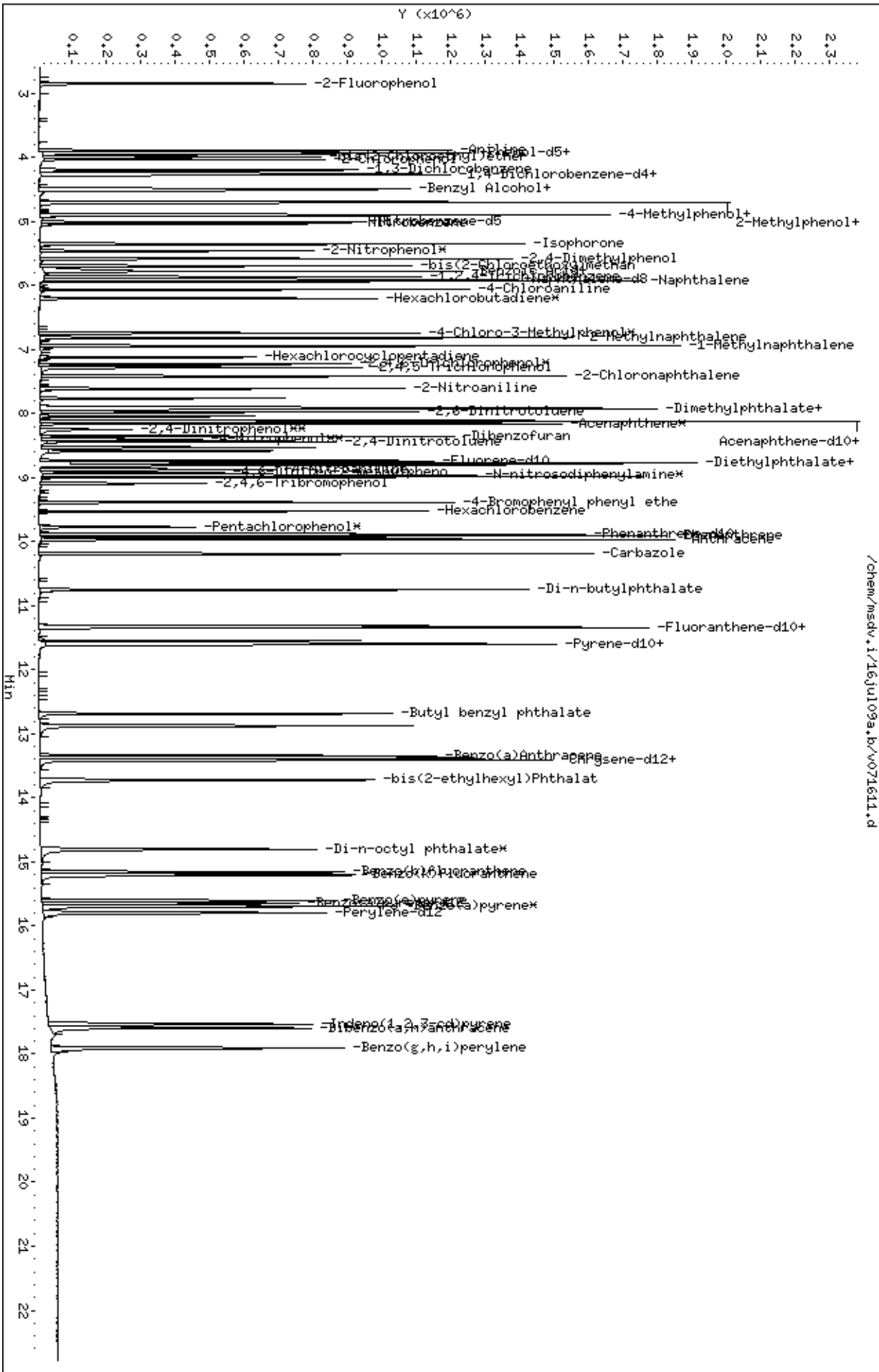
Date : 16-JUL-2009 16:56

Client ID: Level 5

Sample Info: #1685-171-40; Level 5

Volume Injected (uL): 1.0

Column phase: DB-5.625



Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/16jul09a.b/v071612.d

Lab Smp Id: 1685-171-50

Client Smp ID: CCV

Inj Date : 16-JUL-2009 17:23

Operator : rn

Inst ID: msdv.i

Smp Info : ;1685-171-50;CCV

Misc Info : ,NOTICS

Comment :

Method : /chem/msdv.i/16jul09a.b/bnap0716.m

Meth Date : 17-Jul-2009 09:35 rnoonan

Quant Type: ISTD

Cal Date : 16-JUL-2009 17:23

Cal File: v071612.d

Als bottle: 9

Calibration Sample, Level: 6

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 50ccv.sub

Target Version: 3.50

Processing Host: eeyore

Concentration Formula: Amt \* DF \* (Vt/S\*Vi)/CF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
S	1.00000	Sample Portion
Vi	1.00000	Volume injected (uL)
CF	1000.00000	Conversion ng->ug

Cpnd Variable

Local Compound Variable

		AMOUNTS					
		QUANT	SIG				
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112	2.846	2.846	(0.670)	412454	50.0000	51.74
\$ 2 Phenol-d5	99	3.924	3.924	(0.924)	461358	50.0000	50.90
3 Phenol*	94	3.934	3.934	(0.927)	548823	50.0000	51.08
41 Aniline	93	3.893	3.893	(0.917)	693737	50.0000	50.68
4 bis(2-Chloroethyl)ether	93	3.986	3.986	(0.939)	477623	50.0000	50.28
5 2-Chlorophenol	128	4.038	4.038	(0.951)	415215	50.0000	52.18
6 1,3-Dichlorobenzene	146	4.204	4.204	(0.990)	421934	50.0000	49.14
* 7 1,4-Dichlorobenzene-d4	150	4.245	4.245	(1.000)	344510	40.0000	
9 1,4-Dichlorobenzene*	146	4.266	4.266	(1.005)	432890	50.0000	49.11
10 Benzyl Alcohol	108	4.494	4.494	(1.059)	283666	50.0000	54.41
11 1,2-Dichlorobenzene	146	4.514	4.514	(1.063)	394231	50.0000	48.75
12 2-Methylphenol	108	4.701	4.701	(1.107)	376299	50.0000	51.50
13 bis(2-Chloroisopropyl)ether	45	4.711	4.711	(1.110)	697754	50.0000	48.24

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						( ng)	( ng)
=====	=====	==	=====	=====	=====	=====	=====
14 4-Methylphenol	108	4.908	4.908	(1.156)	386274	50.0000	51.37
15 N-Nitrosodipropylamine**	70	4.888	4.888	(1.151)	303965	50.0000	50.81
16 Hexachloroethane	117	4.908	4.908	(1.156)	177389	50.0000	49.07
\$ 17 Nitrobenzene-d5	82	5.012	5.012	(0.848)	439084	50.0000	52.76
18 Nitrobenzene	77	5.043	5.043	(0.853)	471674	50.0000	52.09
19 Isophorone	82	5.354	5.354	(0.905)	852761	50.0000	51.63
20 2-Nitrophenol*	139	5.457	5.457	(0.923)	194807	50.0000	54.59
21 2,4-Dimethylphenol	122	5.582	5.582	(0.944)	355872	50.0000	52.33
24 Benzoic Acid	122	5.789	5.789	(0.979)	173697	50.0000	48.14
23 bis(2-Chloroethoxy)methane	93	5.696	5.696	(0.963)	542613	50.0000	51.94
25 2,4-Dichlorophenol*	162	5.779	5.779	(0.977)	270682	50.0000	52.59
26 1,2,4-Trichlorobenzene	180	5.872	5.872	(0.993)	332784	50.0000	50.59
* 27 Naphthalene-d8	136	5.913	5.913	(1.000)	803185	40.0000	
28 Naphthalene	128	5.934	5.934	(1.004)	1153669	50.0000	49.95
29 4-Chloroaniline	127	6.069	6.069	(1.026)	514876	50.0000	52.50
30 Hexachlorobutadiene*	225	6.204	6.204	(1.049)	174758	50.0000	52.13
32 4-Chloro-3-Methylphenol*	107	6.743	6.743	(1.140)	333620	50.0000	53.98
33 2-Methylnaphthalene	142	6.815	6.815	(1.152)	669843	50.0000	50.56
145 1-Methylnaphthalene	142	6.950	6.950	(1.175)	683544	50.0000	49.60
35 Hexachlorocyclopentadiene**	237	7.126	7.126	(0.877)	179153	50.0000	54.11
36 2,4,6-Trichlorophenol*	196	7.240	7.240	(0.892)	183293	50.0000	54.74
37 2,4,5-Trichlorophenol	196	7.281	7.281	(0.897)	184035	50.0000	51.58
39 2-Chloronaphthalene	162	7.416	7.416	(0.913)	607375	50.0000	52.37
40 2-Nitroaniline	65	7.613	7.613	(0.937)	261018	50.0000	57.05
42 Dimethylphthalate	163	7.914	7.914	(0.974)	624224	50.0000	52.78
44 2,6-Dinitrotoluene	165	7.976	7.976	(0.982)	157264	50.0000	53.69
45 Acenaphthylene	152	7.924	7.924	(0.976)	1008546	50.0000	54.18
46 3-Nitroaniline	138	8.131	8.131	(1.001)	203458	50.0000	54.31
* 47 Acenaphthene-d10	164	8.121	8.121	(1.000)	364531	40.0000	
48 Acenaphthene*	154	8.162	8.162	(1.005)	593524	50.0000	51.82
49 2,4-Dinitrophenol**	184	8.256	8.256	(1.017)	67782	50.0000	50.32
50 4-Nitrophenol**	109	8.411	8.411	(1.036)	104710	50.0000	51.67
51 Dibenzofuran	168	8.359	8.359	(1.029)	822061	50.0000	52.29
52 2,4-Dinitrotoluene	165	8.442	8.442	(1.040)	206278	50.0000	53.99
56 Diethylphthalate	149	8.784	8.784	(1.082)	671769	50.0000	53.19
\$ 147 Fluorene-d10	176	8.743	8.743	(1.077)	551967	50.0000	53.06
58 4-Chlorophenyl phenyl ether	204	8.805	8.805	(1.084)	299482	50.0000	51.23
57 Fluorene	166	8.774	8.774	(1.080)	635111	50.0000	51.26
59 4-Nitroaniline	138	8.877	8.877	(1.093)	206429	50.0000	52.96
60 4,6-Dinitro-2-methylphenol	198	8.929	8.929	(0.904)	98354	50.0000	54.64
61 N-nitrosodiphenylamine*	169	8.971	8.971	(0.908)	556218	50.0000	54.23
\$ 62 2,4,6-Tribromophenol	330	9.095	9.095	(1.120)	84371	50.0000	54.42
65 4-Bromophenyl phenyl ether	248	9.385	9.385	(0.950)	167471	50.0000	51.14
66 Hexachlorobenzene	284	9.530	9.530	(0.964)	192636	50.0000	50.16
68 Pentachlorophenol*	266	9.769	9.769	(0.988)	89007	50.0000	53.97
* 71 Phenanthrene-d10	188	9.883	9.883	(1.000)	686990	40.0000	
72 Phenanthrene	178	9.914	9.914	(1.003)	984599	50.0000	50.23(H)



Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	( ng )	( ng )	( ng )	( ng )	( ng )	( ng )	( ng )
=====	=====	=====	=====	=====	=====	=====	=====
73 Anthracene	178	9.965	9.965	(1.008)	963748	50.0000	51.20
144 Carbazole	167	10.193	10.193	(2.401)	911379	50.0000	51.36
78 Di-n-butylphthalate	149	10.753	10.753	(1.088)	1125221	50.0000	54.92
\$ 83 Fluoranthene-d10	212	11.323	11.323	(1.146)	701394	50.0000	47.99
80 Fluoranthene*	202	11.344	11.344	(1.148)	919819	50.0000	51.52
\$ 148 Pyrene-d10	212	11.582	11.582	(0.866)	689904	50.0000	51.01
81 Pyrene	202	11.613	11.613	(0.868)	980619	50.0000	50.16
85 Butyl benzyl phthalate	149	12.691	12.691	(0.949)	469082	50.0000	56.79
89 3 3'-Dichlorobenzidine	252	13.396	13.396	(1.002)	299318	50.0000	53.35
88 Benzo(a)Anthracene	228	13.344	13.344	(0.998)	921984	50.0000	53.00
* 90 Chrysene-d12	240	13.375	13.375	(1.000)	579675	40.0000	
91 Chrysene	228	13.416	13.416	(1.003)	883464	50.0000	47.12
93 bis(2-ethylhexyl)Phthalate	149	13.727	13.727	(1.026)	645145	50.0000	55.98
94 Di-n-octyl phthalate*	149	14.805	14.805	(0.946)	988391	50.0000	56.73
95 Benzo(b)fluoranthene	252	15.168	15.168	(0.969)	911100	50.0000	55.72
96 Benzo(k)fluoranthene	252	15.209	15.209	(0.972)	915059	50.0000	50.93(H)
97 Benzo(e)pyrene	252	15.613	15.613	(0.997)	785623	50.0000	53.02(H)
\$ 101 Benzo(a)pyrene-d12	264	15.655	15.655	(1.000)	478769	50.0000	53.89
98 Benzo(a)pyrene*	252	15.696	15.696	(1.003)	855224	50.0000	53.16(H)
* 99 Perylene-d12	264	15.789	15.789	(1.000)	439467	40.0000	(H)
103 Indeno(1,2,3-cd)pyrene	276	17.530	17.530	(1.120)	785276	50.0000	57.96
104 Dibenzo(a,h)anthracene	278	17.593	17.593	(1.124)	762366	50.0000	53.72
105 Benzo(g,h,i)perylene	276	17.914	17.914	(1.144)	869814	50.0000	54.20

QC Flag Legend

H - Operator selected an alternate compound hit.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: msdv.i

Calibration Date: 16-JUL-2009

Lab File ID: v071612.d

Calibration Time: 17:23

Lab Smp Id: 1685-171-50

Client Smp ID: CCV

Analysis Type: SV

Level: LOW

Quant Type: ISTD

Sample Type: PUF/XAD

Operator: rn

Method File: /chem/msdv.i/16jul09a.b/bnap0716.m

Misc Info: ,NOTICS

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	344510	172255	689020	344510	0.00
27 Naphthalene-d8	803185	401592	1606370	803185	0.00
47 Acenaphthene-d10	364531	182266	729062	364531	0.00
71 Phenanthrene-d10	686990	343495	1373980	686990	0.00
90 Chrysene-d12	579675	289838	1159350	579675	0.00
99 Perylene-d12	439467	219734	878934	439467	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	4.25	3.75	4.75	4.25	0.00
27 Naphthalene-d8	5.91	5.41	6.41	5.91	0.00
47 Acenaphthene-d10	8.12	7.62	8.62	8.12	0.00
71 Phenanthrene-d10	9.88	9.38	10.38	9.88	0.00
90 Chrysene-d12	13.37	12.87	13.87	13.37	0.00
99 Perylene-d12	15.79	15.29	16.29	15.79	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: /chem/msdv.i/16jul09a.b/v071612.o

Date : 16-JUL-2009 17:23

Client ID: CCV

Sample Info: #1685-171-50;CCW

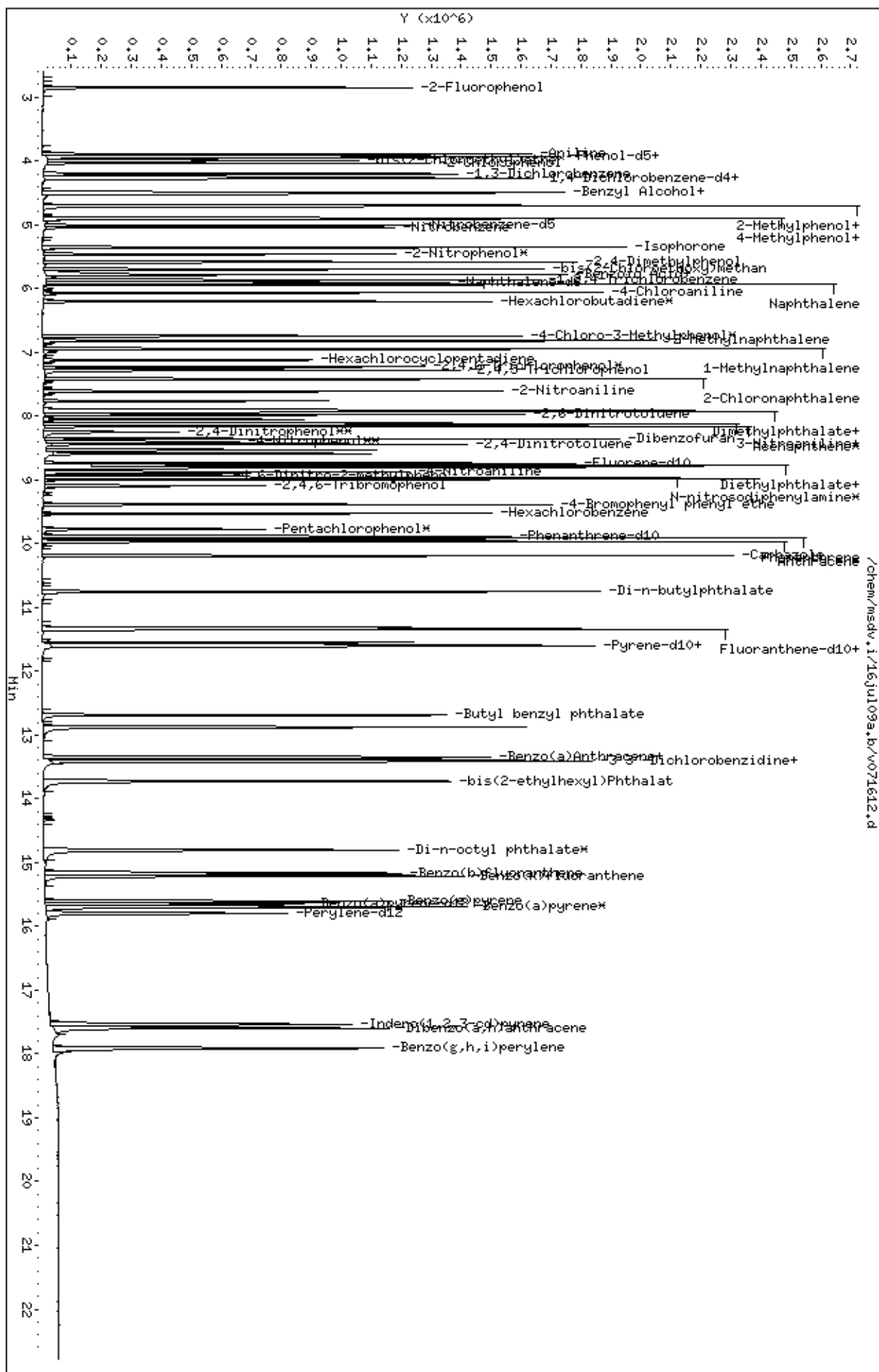
Volume Injected (ul): 1.0

Column phase: DB-5, 625

Instrument: msdv.i

Operator: m

Column diameter: 0.25



Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/16jul09a.b/v071613.d

Lab Smp Id: 1685-171-80

Client Smp ID: Level 7

Inj Date : 16-JUL-2009 17:51

Operator : rn

Inst ID: msdv.i

Smp Info : ;1685-171-80;Level 7

Misc Info : ,NOTICS

Comment :

Method : /chem/msdv.i/16jul09a.b/bnap0716.m

Meth Date : 17-Jul-2009 09:38 rnoonan

Quant Type: ISTD

Cal Date : 16-JUL-2009 17:51

Cal File: v071613.d

Als bottle: 10

Calibration Sample, Level: 7

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 160ng.sub

Target Version: 3.50

Processing Host: eeyore

Concentration Formula: Amt \* DF \* (Vt/S\*Vi)/CF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
S	1.00000	Sample Portion
Vi	1.00000	Volume injected (uL)
CF	1000.00000	Conversion ng->ug

Cpnd Variable

Local Compound Variable

		AMOUNTS					
		QUANT	SIG				
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112	2.835	2.846	(0.666)	681107	80.0000	74.05
\$ 2 Phenol-d5	99	3.924	3.924	(0.922)	745520	80.0000	71.28
\$ 17 Nitrobenzene-d5	82	5.022	5.012	(0.849)	726669	80.0000	81.70
\$ 62 2,4,6-Tribromophenol	330	9.095	9.095	(1.120)	142634	80.0000	84.88
\$ 147 Fluorene-d10	176	8.742	8.743	(1.077)	860445	80.0000	76.31
\$ 148 Pyrene-d10	212	11.592	11.582	(0.867)	1081556	80.0000	76.69
* 7 1,4-Dichlorobenzene-d4	150	4.255	4.245	(1.000)	397545	40.0000	
* 27 Naphthalene-d8	136	5.913	5.913	(1.000)	858307	40.0000	
* 47 Acenaphthene-d10	164	8.121	8.121	(1.000)	395160	40.0000	
* 71 Phenanthrene-d10	188	9.893	9.883	(1.000)	774099	40.0000	
* 90 Chrysene-d12	240	13.375	13.375	(1.000)	604386	40.0000	
* 99 Perylene-d12	264	15.800	15.789	(1.000)	461376	40.0000	
3 Phenol*	94	3.944	3.934	(0.927)	903834	80.0000	72.90

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						( ng)	( ng)
=====	=====	==	=====	=====	=====	=====	=====
41 Aniline	93	3.903	3.893	(0.917)	1155919	80.0000	73.18
4 bis(2-Chloroethyl)ether	93	3.996	3.986	(0.939)	774618	80.0000	70.66
5 2-Chlorophenol	128	4.038	4.038	(0.949)	681817	80.0000	74.25
6 1,3-Dichlorobenzene	146	4.203	4.204	(0.988)	681867	80.0000	68.81
9 1,4-Dichlorobenzene*	146	4.276	4.266	(1.005)	692016	80.0000	68.03
10 Benzyl Alcohol	108	4.494	4.494	(1.056)	449550	80.0000	74.73
11 1,2-Dichlorobenzene	146	4.514	4.514	(1.061)	632047	80.0000	67.74
12 2-Methylphenol	108	4.701	4.701	(1.105)	602552	80.0000	71.47
13 bis(2-Chloroisopropyl)ether	45	4.711	4.711	(1.107)	1085114	80.0000	65.02
14 4-Methylphenol	108	4.908	4.908	(1.153)	604749	80.0000	69.70
15 N-Nitrosodipropylamine**	70	4.898	4.888	(1.151)	490452	80.0000	71.04
16 Hexachloroethane	117	4.908	4.908	(1.153)	278596	80.0000	66.78
18 Nitrobenzene	77	5.043	5.043	(0.853)	781562	80.0000	80.77
19 Isophorone	82	5.354	5.354	(0.905)	1433712	80.0000	81.23
20 2-Nitrophenol*	139	5.457	5.457	(0.923)	327482	80.0000	85.88
21 2,4-Dimethylphenol	122	5.592	5.582	(0.946)	591941	80.0000	81.46
23 bis(2-Chloroethoxy)methane	93	5.696	5.696	(0.963)	869238	80.0000	77.85
24 Benzoic Acid	122	5.820	5.789	(0.984)	339911	80.0000	88.16
25 2,4-Dichlorophenol*	162	5.789	5.779	(0.979)	443104	80.0000	80.56
26 1,2,4-Trichlorobenzene	180	5.872	5.872	(0.993)	530385	80.0000	75.46
28 Naphthalene	128	5.934	5.934	(1.004)	1802410	80.0000	73.02
29 4-Chloroaniline	127	6.069	6.069	(1.026)	812188	80.0000	77.50
30 Hexachlorobutadiene*	225	6.203	6.204	(1.049)	274162	80.0000	76.53
32 4-Chloro-3-Methylphenol*	107	6.742	6.743	(1.140)	537028	80.0000	81.31
33 2-Methylnaphthalene	142	6.825	6.815	(1.154)	1056218	80.0000	74.60
145 1-Methylnaphthalene	142	6.950	6.950	(1.175)	1082905	80.0000	73.53
35 Hexachlorocyclopentadiene**	237	7.126	7.126	(0.877)	299026	80.0000	83.31
36 2,4,6-Trichlorophenol*	196	7.240	7.240	(0.892)	304619	80.0000	83.92
37 2,4,5-Trichlorophenol	196	7.281	7.281	(0.897)	307259	80.0000	79.44
39 2-Chloronaphthalene	162	7.416	7.416	(0.913)	951200	80.0000	75.66
40 2-Nitroaniline	65	7.613	7.613	(0.937)	416440	80.0000	83.96
46 3-Nitroaniline	138	8.131	8.131	(1.001)	321261	80.0000	79.11
42 Dimethylphthalate	163	7.924	7.914	(0.976)	998207	80.0000	77.86
44 2,6-Dinitrotoluene	165	7.986	7.976	(0.983)	266612	80.0000	83.97
45 Acenaphthylene	152	7.934	7.924	(0.977)	1555755	80.0000	77.09
48 Acenaphthene*	154	8.162	8.162	(1.005)	913453	80.0000	73.57
49 2,4-Dinitrophenol**	184	8.255	8.256	(1.017)	144745	80.0000	97.68
50 4-Nitrophenol**	109	8.411	8.411	(1.036)	189049	80.0000	86.06
52 2,4-Dinitrotoluene	165	8.442	8.442	(1.040)	346171	80.0000	83.58
51 Dibenzofuran	168	8.359	8.359	(1.029)	1266315	80.0000	74.31
56 Diethylphthalate	149	8.794	8.784	(1.083)	1067979	80.0000	78.01
57 Fluorene	166	8.774	8.774	(1.080)	994189	80.0000	74.02
58 4-Chlorophenyl phenyl ether	204	8.815	8.805	(1.085)	476868	80.0000	75.26
59 4-Nitroaniline	138	8.887	8.877	(1.094)	351779	80.0000	83.25
60 4,6-Dinitro-2-methylphenol	198	8.929	8.929	(0.903)	173591	80.0000	85.58
61 N-nitrosodiphenylamine*	169	8.970	8.971	(0.907)	839726	80.0000	72.66
65 4-Bromophenyl phenyl ether	248	9.395	9.385	(0.950)	276747	80.0000	74.99(H)

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
							( ng)	( ng)
=====	=====	==	=====	=====	=====		=====	=====
66 Hexachlorobenzene	284	9.540	9.530	(0.964)	319374		80.0000	73.80
144 Carbazole	167	10.193	10.193	(2.395)	1413820		80.0000	69.05
68 Pentachlorophenol*	266	9.768	9.769	(0.987)	152706		80.0000	82.17
72 Phenanthrene	178	9.913	9.914	(1.002)	1518234		80.0000	68.74(H)
73 Anthracene	178	9.965	9.965	(1.007)	1552873		80.0000	73.21
78 Di-n-butylphthalate	149	10.753	10.753	(1.087)	1829801		80.0000	79.26
80 Fluoranthene*	202	11.344	11.344	(1.147)	1451682		80.0000	72.16
81 Pyrene	202	11.613	11.613	(0.868)	1533555		80.0000	75.24
85 Butyl benzyl phthalate	149	12.691	12.691	(0.949)	784174		80.0000	91.05
89 3 3'-Dichlorobenzidine	252	13.406	13.396	(1.002)	487660		80.0000	83.36
88 Benzo(a)Anthracene	228	13.354	13.344	(0.998)	1511772		80.0000	83.34
91 Chrysene	228	13.416	13.416	(1.003)	1390370		80.0000	71.12
93 bis(2-ethylhexyl)Phthalate	149	13.727	13.727	(1.026)	1090234		80.0000	90.73
94 Di-n-octyl phthalate*	149	14.805	14.805	(0.937)	1783149		80.0000	97.49
95 Benzo(b)fluoranthene	252	15.167	15.168	(0.960)	1381028		80.0000	80.46
96 Benzo(k)fluoranthene	252	15.219	15.209	(0.963)	1605937		80.0000	85.14
97 Benzo(e)pyrene	252	15.623	15.613	(0.989)	1270079		80.0000	81.64
98 Benzo(a)pyrene*	252	15.706	15.696	(0.994)	1380539		80.0000	81.74
103 Indeno(1,2,3-cd)pyrene	276	17.541	17.530	(1.110)	1272345		80.0000	89.44
104 Dibenzo(a,h)anthracene	278	17.603	17.593	(1.114)	1315821		80.0000	88.31
105 Benzo(g,h,i)perylene	276	17.934	17.914	(1.135)	1409023		80.0000	83.63

QC Flag Legend

H - Operator selected an alternate compound hit.

Report Date: 17-Jul-2009 09:43

## Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: msdv.i  
 Lab File ID: v071613.d  
 Lab Smp Id: 1685-171-80  
 Analysis Type: SV  
 Quant Type: ISTD  
 Operator: rn  
 Method File: /chem/msdv.i/16jul09a.b/bnap0716.m  
 Misc Info: ,NOTICS

Calibration Date: 16-JUL-2009  
 Calibration Time: 17:23  
 Client Smp ID: Level 7  
 Level: LOW  
 Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	344510	172255	689020	397545	15.39
27 Naphthalene-d8	803185	401592	1606370	858307	6.86
47 Acenaphthene-d10	364531	182266	729062	395160	8.40
71 Phenanthrene-d10	686990	343495	1373980	774099	12.68
90 Chrysene-d12	579675	289838	1159350	604386	4.26
99 Perylene-d12	439467	219734	878934	461376	4.99

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	4.25	3.75	4.75	4.26	0.24
27 Naphthalene-d8	5.91	5.41	6.41	5.91	0.00
47 Acenaphthene-d10	8.12	7.62	8.62	8.12	0.00
71 Phenanthrene-d10	9.88	9.38	10.38	9.89	0.10
90 Chrysene-d12	13.37	12.87	13.87	13.37	0.00
99 Perylene-d12	15.79	15.29	16.29	15.80	0.06

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Date : 16-JUL-2009 17:51

Client ID: Level 7

Sample Info: #1685-171-80; Level 7

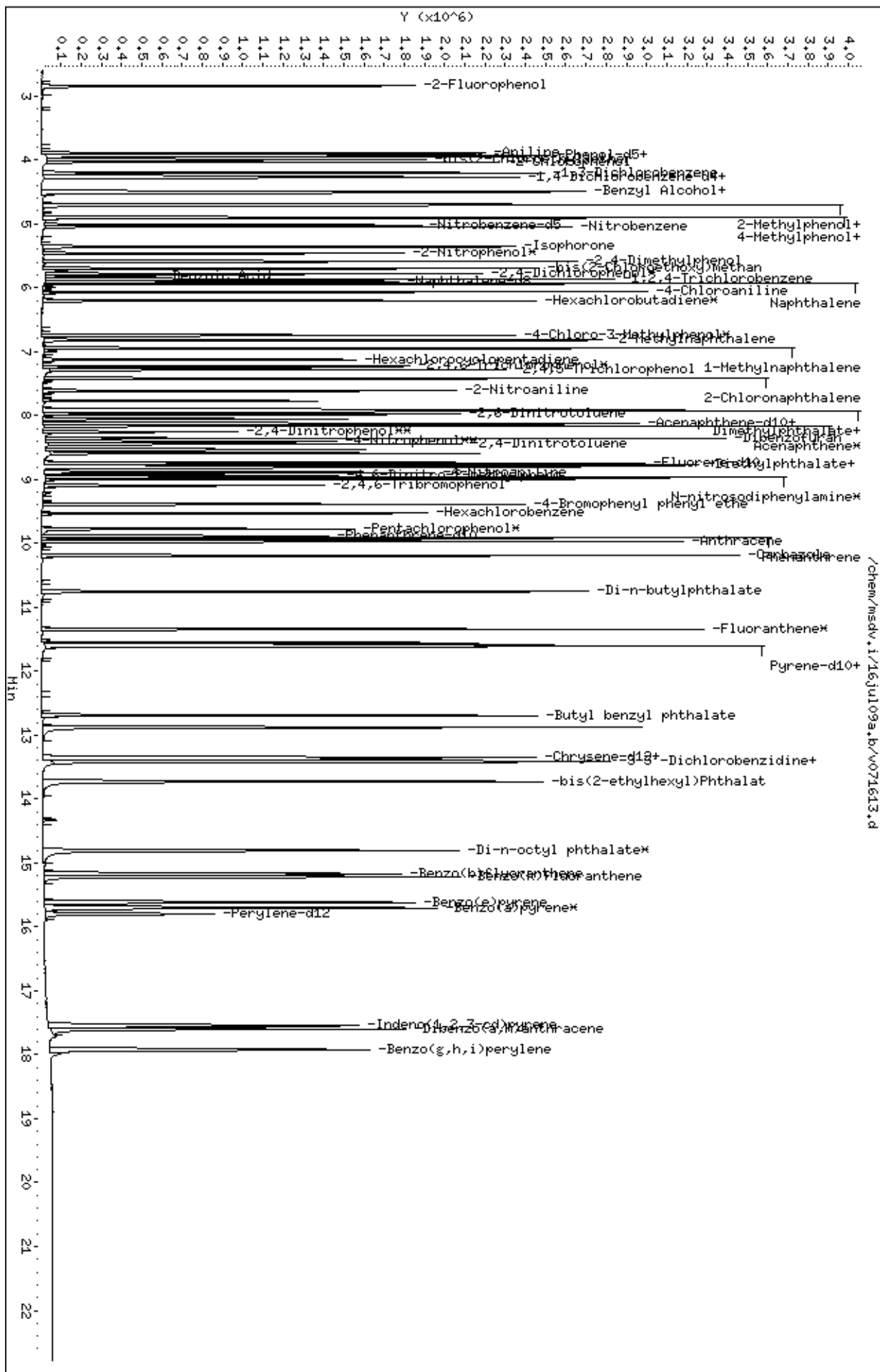
Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: mn

Column diameter: 0.25





Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/16jul09a.b/v071614.d

Lab Smp Id: 1685-171-100

Client Smp ID: Level 8

Inj Date : 16-JUL-2009 18:19

Operator : rn

Inst ID: msdv.i

Smp Info : ;1685-171-100;Level 8

Misc Info : ,NOTICS

Comment :

Method : /chem/msdv.i/16jul09a.b/bnap0716.m

Meth Date : 17-Jul-2009 09:41 rnoonan

Quant Type: ISTD

Cal Date : 16-JUL-2009 18:19

Cal File: v071614.d

Als bottle: 11

Calibration Sample, Level: 8

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 160ng.sub

Target Version: 3.50

Processing Host: eeyore

Concentration Formula: Amt \* DF \* (Vt/S\*Vi)/CF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
S	1.00000	Sample Portion
Vi	1.00000	Volume injected (uL)
CF	1000.00000	Conversion ng->ug

Cpnd Variable

Local Compound Variable

						AMOUNTS	
		QUANT	SIG			CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	( ng)	( ng)
=====	=====	==	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112	2.836	2.846	(0.666)	847723	100.000	90.98
\$ 2 Phenol-d5	99	3.924	3.924	(0.922)	930208	100.000	87.80
\$ 17 Nitrobenzene-d5	82	5.022	5.012	(0.849)	911625	100.000	103.8
\$ 62 2,4,6-Tribromophenol	330	9.095	9.095	(1.120)	182916	100.000	108.5
\$ 147 Fluorene-d10	176	8.742	8.743	(1.077)	1063054	100.000	94.00
\$ 148 Pyrene-d10	212	11.592	11.582	(0.867)	1336344	100.000	95.96
* 7 1,4-Dichlorobenzene-d4	150	4.255	4.245	(1.000)	402708	40.0000	
* 27 Naphthalene-d8	136	5.913	5.913	(1.000)	847803	40.0000	
* 47 Acenaphthene-d10	164	8.121	8.121	(1.000)	396352	40.0000	
* 71 Phenanthrene-d10	188	9.893	9.883	(1.000)	749459	40.0000	
* 90 Chrysene-d12	240	13.375	13.375	(1.000)	596809	40.0000	
* 99 Perylene-d12	264	15.800	15.789	(1.000)	462273	40.0000	
3 Phenol*	94	3.944	3.934	(0.927)	1126390	100.000	89.69

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						( ng)	( ng)
=====	=====	==	=====	=====	=====	=====	=====
41 Aniline	93	3.903	3.893	(0.917)	1433276	100.000	89.58
4 bis(2-Chloroethyl)ether	93	3.996	3.986	(0.939)	944488	100.000	85.05
5 2-Chlorophenol	128	4.038	4.038	(0.949)	833262	100.000	89.58
6 1,3-Dichlorobenzene	146	4.203	4.204	(0.988)	835985	100.000	83.28
9 1,4-Dichlorobenzene*	146	4.276	4.266	(1.005)	853146	100.000	82.80
10 Benzyl Alcohol	108	4.494	4.494	(1.056)	570266	100.000	93.58
11 1,2-Dichlorobenzene	146	4.514	4.514	(1.061)	767509	100.000	81.20
12 2-Methylphenol	108	4.701	4.701	(1.105)	731145	100.000	85.61
13 bis(2-Chloroisopropyl)ether	45	4.711	4.711	(1.107)	1288040	100.000	76.18
14 4-Methylphenol	108	4.908	4.908	(1.153)	748543	100.000	85.16
15 N-Nitrosodipropylamine**	70	4.898	4.888	(1.151)	586642	100.000	83.88
16 Hexachloroethane	117	4.908	4.908	(1.153)	331449	100.000	78.43
18 Nitrobenzene	77	5.043	5.043	(0.853)	947603	100.000	99.15
19 Isophorone	82	5.364	5.354	(0.907)	1797092	100.000	103.1
20 2-Nitrophenol*	139	5.457	5.457	(0.923)	418990	100.000	111.2
21 2,4-Dimethylphenol	122	5.592	5.582	(0.946)	722815	100.000	100.7
23 bis(2-Chloroethoxy)methane	93	5.696	5.696	(0.963)	1083656	100.000	98.26
24 Benzoic Acid	122	5.830	5.789	(0.986)	439460	100.000	115.4
25 2,4-Dichlorophenol*	162	5.789	5.779	(0.979)	554414	100.000	102.0
26 1,2,4-Trichlorobenzene	180	5.872	5.872	(0.993)	634981	100.000	91.46
28 Naphthalene	128	5.934	5.934	(1.004)	2219826	100.000	91.05
29 4-Chloroaniline	127	6.069	6.069	(1.026)	997633	100.000	96.38
30 Hexachlorobutadiene*	225	6.204	6.204	(1.049)	333447	100.000	94.23
32 4-Chloro-3-Methylphenol*	107	6.742	6.743	(1.140)	685683	100.000	105.1
33 2-Methylnaphthalene	142	6.825	6.815	(1.154)	1323565	100.000	94.64
145 1-Methylnaphthalene	142	6.950	6.950	(1.175)	1324955	100.000	91.08
35 Hexachlorocyclopentadiene**	237	7.126	7.126	(0.877)	388551	100.000	107.9
36 2,4,6-Trichlorophenol*	196	7.240	7.240	(0.892)	387611	100.000	106.5
37 2,4,5-Trichlorophenol	196	7.281	7.281	(0.897)	379477	100.000	97.81
39 2-Chloronaphthalene	162	7.416	7.416	(0.913)	1163990	100.000	92.30
40 2-Nitroaniline	65	7.613	7.613	(0.937)	545266	100.000	109.6
46 3-Nitroaniline	138	8.141	8.131	(1.003)	441805	100.000	108.5
42 Dimethylphthalate	163	7.924	7.914	(0.976)	1176067	100.000	91.45
44 2,6-Dinitrotoluene	165	7.986	7.976	(0.983)	336642	100.000	105.7
45 Acenaphthylene	152	7.934	7.924	(0.977)	1873132	100.000	92.54
48 Acenaphthene*	154	8.162	8.162	(1.005)	1118319	100.000	89.80
49 2,4-Dinitrophenol**	184	8.255	8.256	(1.017)	186635	100.000	123.7
50 4-Nitrophenol**	109	8.411	8.411	(1.036)	241163	100.000	109.4
52 2,4-Dinitrotoluene	165	8.452	8.442	(1.041)	444052	100.000	106.9
51 Dibenzofuran	168	8.359	8.359	(1.029)	1556335	100.000	91.05
56 Diethylphthalate	149	8.794	8.784	(1.083)	1309871	100.000	95.39
57 Fluorene	166	8.784	8.774	(1.082)	1228474	100.000	91.18
58 4-Chlorophenyl phenyl ether	204	8.815	8.805	(1.085)	575403	100.000	90.54
59 4-Nitroaniline	138	8.888	8.877	(1.094)	429828	100.000	101.4
60 4,6-Dinitro-2-methylphenol	198	8.939	8.929	(0.904)	237014	100.000	120.7
61 N-nitrosodiphenylamine*	169	8.970	8.971	(0.907)	1055361	100.000	94.32
65 4-Bromophenyl phenyl ether	248	9.395	9.385	(0.950)	345672	100.000	96.75

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
							( ng)	( ng)
=====	=====	==	=====	=====	=====		=====	=====
66 Hexachlorobenzene	284	9.540	9.530	(0.964)	400042		100.000	95.48
144 Carbazole	167	10.193	10.193	(2.395)	1769754		100.000	85.32
68 Pentachlorophenol*	266	9.768	9.769	(0.987)	198911		100.000	110.6
72 Phenanthrene	178	9.913	9.914	(1.002)	1901301		100.000	88.91(H)
73 Anthracene	178	9.976	9.965	(1.008)	1946163		100.000	94.77
78 Di-n-butylphthalate	149	10.763	10.753	(1.088)	2314782		100.000	103.6
80 Fluoranthene*	202	11.344	11.344	(1.147)	1803133		100.000	92.58
81 Pyrene	202	11.613	11.613	(0.868)	1875416		100.000	93.18
85 Butyl benzyl phthalate	149	12.691	12.691	(0.949)	993606		100.000	116.8
89 3 3'-Dichlorobenzidine	252	13.406	13.396	(1.002)	613490		100.000	106.2
88 Benzo(a)Anthracene	228	13.354	13.344	(0.998)	1850482		100.000	103.3
91 Chrysene	228	13.427	13.416	(1.004)	1703610		100.000	88.25
93 bis(2-ethylhexyl)Phthalate	149	13.727	13.727	(1.026)	1390197		100.000	117.2
94 Di-n-octyl phthalate*	149	14.805	14.805	(0.937)	2290333		100.000	125.0
95 Benzo(b)fluoranthene	252	15.178	15.168	(0.961)	1892291		100.000	110.0
96 Benzo(k)fluoranthene	252	15.219	15.209	(0.963)	1810385		100.000	95.80
97 Benzo(e)pyrene	252	15.624	15.613	(0.989)	1577992		100.000	101.2
98 Benzo(a)pyrene*	252	15.706	15.696	(0.994)	1708808		100.000	101.0
103 Indeno(1,2,3-cd)pyrene	276	17.551	17.530	(1.111)	1585558		100.000	111.2
104 Dibenzo(a,h)anthracene	278	17.613	17.593	(1.115)	1521063		100.000	101.9
105 Benzo(g,h,i)perylene	276	17.934	17.914	(1.135)	1745100		100.000	103.4

QC Flag Legend

H - Operator selected an alternate compound hit.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: msdv.i

Calibration Date: 16-JUL-2009

Lab File ID: v071614.d

Calibration Time: 17:23

Lab Smp Id: 1685-171-100

Client Smp ID: Level 8

Analysis Type: SV

Level: LOW

Quant Type: ISTD

Sample Type: PUF/XAD

Operator: rn

Method File: /chem/msdv.i/16jul09a.b/bnap0716.m

Misc Info: ,NOTICS

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	344510	172255	689020	402708	16.89
27 Naphthalene-d8	803185	401592	1606370	847803	5.56
47 Acenaphthene-d10	364531	182266	729062	396352	8.73
71 Phenanthrene-d10	686990	343495	1373980	749459	9.09
90 Chrysene-d12	579675	289838	1159350	596809	2.96
99 Perylene-d12	439467	219734	878934	462273	5.19

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	4.25	3.75	4.75	4.26	0.24
27 Naphthalene-d8	5.91	5.41	6.41	5.91	0.00
47 Acenaphthene-d10	8.12	7.62	8.62	8.12	0.00
71 Phenanthrene-d10	9.88	9.38	10.38	9.89	0.10
90 Chrysene-d12	13.37	12.87	13.87	13.37	0.00
99 Perylene-d12	15.79	15.29	16.29	15.80	0.06

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

Date : 16-JUL-2009 18:19

Client ID: Level 8

Sample Info: #1685-171-100;Level 8

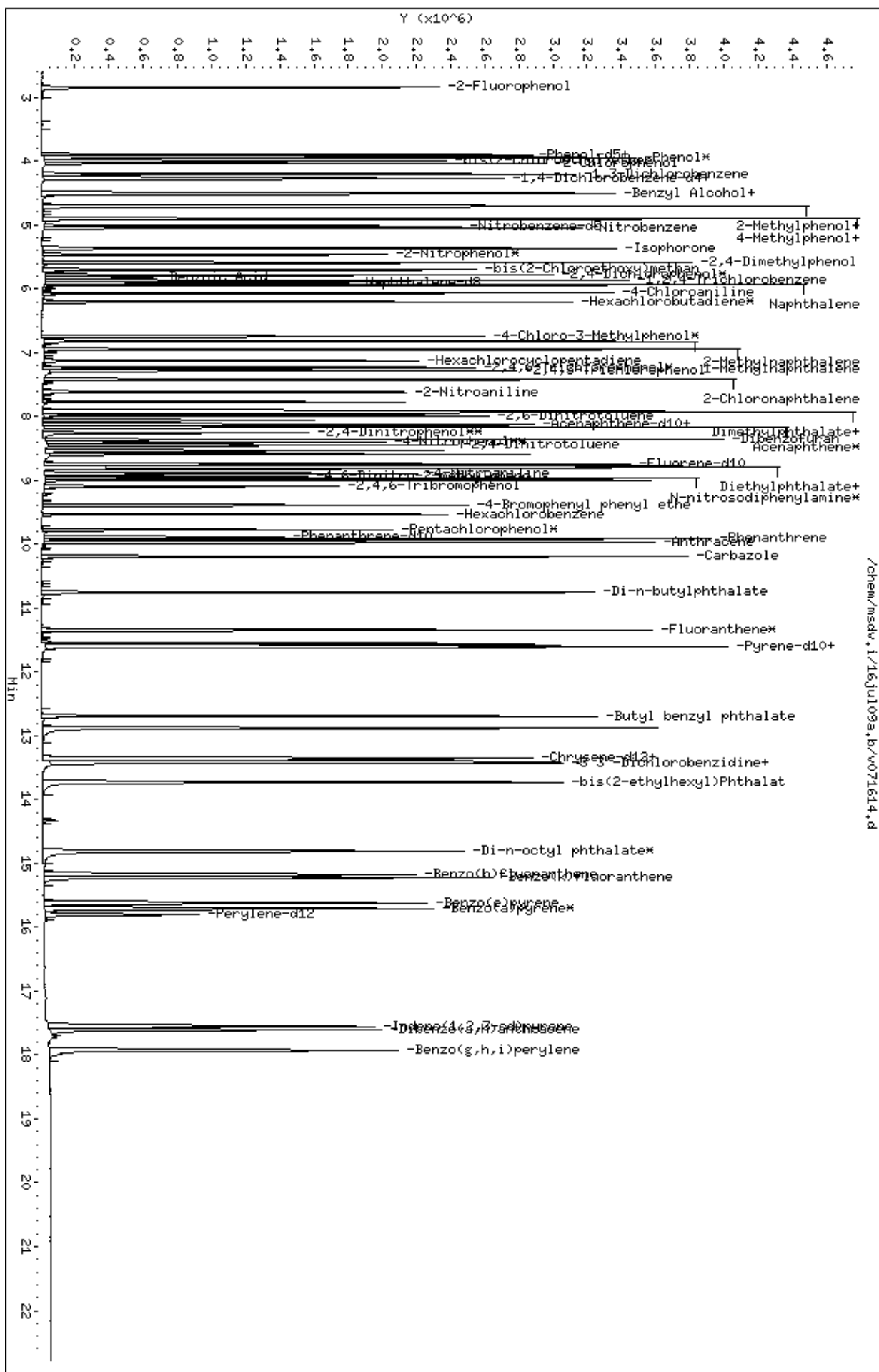
Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: m

Column diameter: 0.25



Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/16jul09a.b/v071615.d

Lab Smp Id: 1685-171-160

Client Smp ID: Level 9

Inj Date : 16-JUL-2009 18:46

Operator : rn

Inst ID: msdv.i

Smp Info : ;1685-171-160;Level 9

Misc Info : ,NOTICS

Comment :

Method : /chem/msdv.i/16jul09a.b/bnap0716.m

Meth Date : 17-Jul-2009 09:44 rnoonan

Quant Type: ISTD

Cal Date : 16-JUL-2009 18:46

Cal File: v071615.d

Als bottle: 12

Calibration Sample, Level: 9

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 160ng.sub

Target Version: 3.50

Processing Host: eeyore

Concentration Formula: Amt \* DF \* (Vt/S\*Vi)/CF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
S	1.00000	Sample Portion
Vi	1.00000	Volume injected (uL)
CF	1000.00000	Conversion ng->ug

Cpnd Variable

Local Compound Variable

						AMOUNTS	
		QUANT	SIG			CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	( ng)	( ng)
=====	=====	==	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112	2.846	2.846	(0.669)	1242551	160.000	125.6
\$ 2 Phenol-d5	99	3.934	3.924	(0.924)	1365917	160.000	121.5
\$ 17 Nitrobenzene-d5	82	5.022	5.012	(0.849)	1368156	160.000	159.3
\$ 62 2,4,6-Tribromophenol	330	9.105	9.095	(1.121)	280377	160.000	167.0(A)
\$ 147 Fluorene-d10	176	8.753	8.743	(1.078)	1535377	160.000	136.3
\$ 148 Pyrene-d10	212	11.592	11.582	(0.866)	1941276	160.000	141.7
* 7 1,4-Dichlorobenzene-d4	150	4.255	4.245	(1.000)	427418	40.0000	
* 27 Naphthalene-d8	136	5.913	5.913	(1.000)	828900	40.0000	
* 47 Acenaphthene-d10	164	8.121	8.121	(1.000)	394653	40.0000	
* 71 Phenanthrene-d10	188	9.893	9.883	(1.000)	738514	40.0000	
* 90 Chrysene-d12	240	13.385	13.375	(1.000)	587012	40.0000	
* 99 Perylene-d12	264	15.800	15.789	(1.000)	456609	40.0000	
3 Phenol*	94	3.955	3.934	(0.929)	1620047	160.000	121.5

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						( ng)	( ng)
=====	=====	==	=====	=====	=====	=====	=====
41 Aniline	93	3.903	3.893	(0.917)	2107007	160.000	124.1
4 bis(2-Chloroethyl)ether	93	3.996	3.986	(0.939)	1418135	160.000	120.3
5 2-Chlorophenol	128	4.038	4.038	(0.949)	1213828	160.000	122.9
6 1,3-Dichlorobenzene	146	4.203	4.204	(0.988)	1195269	160.000	112.2
9 1,4-Dichlorobenzene*	146	4.276	4.266	(1.005)	1220890	160.000	111.6
10 Benzyl Alcohol	108	4.504	4.494	(1.058)	797429	160.000	123.3
11 1,2-Dichlorobenzene	146	4.514	4.514	(1.061)	1045757	160.000	104.2
12 2-Methylphenol	108	4.711	4.701	(1.107)	1063442	160.000	117.3
13 bis(2-Chloroisopropyl)ether	45	4.711	4.711	(1.107)	1710466	160.000	95.32
14 4-Methylphenol	108	4.919	4.908	(1.156)	1039439	160.000	111.4
15 N-Nitrosodipropylamine**	70	4.898	4.888	(1.151)	786831	160.000	106.0
16 Hexachloroethane	117	4.908	4.908	(1.153)	447952	160.000	99.87
18 Nitrobenzene	77	5.053	5.043	(0.855)	1476766	160.000	158.0
19 Isophorone	82	5.375	5.354	(0.909)	2697751	160.000	158.3
20 2-Nitrophenol*	139	5.468	5.457	(0.925)	632278	160.000	171.7(A)
21 2,4-Dimethylphenol	122	5.592	5.582	(0.946)	1034609	160.000	147.4
23 bis(2-Chloroethoxy)methane	93	5.706	5.696	(0.965)	1593496	160.000	147.8
24 Benzoic Acid	122	5.862	5.789	(0.991)	708157	160.000	190.2(A)
25 2,4-Dichlorophenol*	162	5.789	5.779	(0.979)	770047	160.000	145.0
26 1,2,4-Trichlorobenzene	180	5.872	5.872	(0.993)	909391	160.000	134.0
28 Naphthalene	128	5.944	5.934	(1.005)	3242606	160.000	136.0
29 4-Chloroaniline	127	6.079	6.069	(1.028)	1514189	160.000	149.6
30 Hexachlorobutadiene*	225	6.204	6.204	(1.049)	476405	160.000	137.7
32 4-Chloro-3-Methylphenol*	107	6.753	6.743	(1.142)	1030428	160.000	161.6(A)
33 2-Methylnaphthalene	142	6.825	6.815	(1.154)	1835132	160.000	134.2
145 1-Methylnaphthalene	142	6.960	6.950	(1.177)	1939513	160.000	136.4
35 Hexachlorocyclopentadiene**	237	7.126	7.126	(0.877)	572427	160.000	159.7
36 2,4,6-Trichlorophenol*	196	7.240	7.240	(0.892)	551386	160.000	152.1
37 2,4,5-Trichlorophenol	196	7.281	7.281	(0.897)	568909	160.000	147.3
39 2-Chloronaphthalene	162	7.426	7.416	(0.914)	1699445	160.000	135.3
40 2-Nitroaniline	65	7.623	7.613	(0.939)	806733	160.000	162.9(A)
46 3-Nitroaniline	138	8.141	8.131	(1.003)	617251	160.000	152.2
42 Dimethylphthalate	163	7.924	7.914	(0.976)	1641973	160.000	128.2
44 2,6-Dinitrotoluene	165	7.986	7.976	(0.983)	462545	160.000	145.9
45 Acenaphthylene	152	7.934	7.924	(0.977)	2450212	160.000	121.6
48 Acenaphthene*	154	8.173	8.162	(1.006)	1609411	160.000	129.8
49 2,4-Dinitrophenol**	184	8.266	8.256	(1.018)	312907	160.000	208.1(A)
50 4-Nitrophenol**	109	8.421	8.411	(1.037)	385103	160.000	175.5(A)
52 2,4-Dinitrotoluene	165	8.463	8.442	(1.042)	668019	160.000	161.5(A)
51 Dibenzofuran	168	8.369	8.359	(1.031)	2313336	160.000	135.9
56 Diethylphthalate	149	8.794	8.784	(1.083)	1830750	160.000	133.9
57 Fluorene	166	8.784	8.774	(1.082)	1675788	160.000	124.9
58 4-Chlorophenyl phenyl ether	204	8.815	8.805	(1.085)	765182	160.000	120.9
59 4-Nitroaniline	138	8.898	8.877	(1.096)	688340	160.000	163.1(A)
60 4,6-Dinitro-2-methylphenol	198	8.950	8.929	(0.905)	375039	160.000	193.8(A)
61 N-nitrosodiphenylamine*	169	8.981	8.971	(0.908)	1438357	160.000	130.4
65 4-Bromophenyl phenyl ether	248	9.395	9.385	(0.950)	494430	160.000	140.4

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						( ng)	( ng)
=====	=====	==	=====	=====	=====	=====	=====
66 Hexachlorobenzene	284	9.540	9.530	(0.964)	561330	160.000	136.0
144 Carbazole	167	10.204	10.193	(2.398)	2575475	160.000	117.0
68 Pentachlorophenol*	266	9.779	9.769	(0.988)	313055	160.000	176.6(A)
72 Phenanthrene	178	9.924	9.914	(1.003)	2745251	160.000	130.3(H)
73 Anthracene	178	9.976	9.965	(1.008)	2689989	160.000	132.9
78 Di-n-butylphthalate	149	10.763	10.753	(1.088)	3339845	160.000	151.6
80 Fluoranthene*	202	11.354	11.344	(1.148)	2629984	160.000	137.0
81 Pyrene	202	11.623	11.613	(0.868)	2641173	160.000	133.4
85 Butyl benzyl phthalate	149	12.691	12.691	(0.948)	1476170	160.000	176.5(A)
89 3 3'-Dichlorobenzidine	252	13.406	13.396	(1.002)	860180	160.000	151.4
88 Benzo(a)Anthracene	228	13.364	13.344	(0.998)	2739772	160.000	155.5
91 Chrysene	228	13.427	13.416	(1.003)	2454201	160.000	129.3
93 bis(2-ethylhexyl)Phthalate	149	13.727	13.727	(1.026)	2056005	160.000	176.2(A)
94 Di-n-octyl phthalate*	149	14.815	14.805	(0.938)	3494003	160.000	193.0(A)
95 Benzo(b)fluoranthene	252	15.188	15.168	(0.961)	2964213	160.000	174.5(A)
96 Benzo(k)fluoranthene	252	15.230	15.209	(0.964)	2416024	160.000	129.4
97 Benzo(e)pyrene	252	15.634	15.613	(0.990)	2387474	160.000	155.1
98 Benzo(a)pyrene*	252	15.717	15.696	(0.995)	2586935	160.000	154.8
103 Indeno(1,2,3-cd)pyrene	276	17.561	17.530	(1.111)	2538772	160.000	180.3(A)
104 Dibenzo(a,h)anthracene	278	17.624	17.593	(1.115)	2346883	160.000	159.2
105 Benzo(g,h,i)perylene	276	17.955	17.914	(1.136)	2678404	160.000	160.6(A)

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- H - Operator selected an alternate compound hit.



Report Date: 17-Jul-2009 09:47

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: msdv.i  
 Lab File ID: v071615.d  
 Lab Smp Id: 1685-171-160  
 Analysis Type: SV  
 Quant Type: ISTD  
 Operator: rn  
 Method File: /chem/msdv.i/16jul09a.b/bnap0716.m  
 Misc Info: ,NOTICS

Calibration Date: 16-JUL-2009  
 Calibration Time: 17:23  
 Client Smp ID: Level 9  
 Level: LOW  
 Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	344510	172255	689020	427418	24.07
27 Naphthalene-d8	803185	401592	1606370	828900	3.20
47 Acenaphthene-d10	364531	182266	729062	394653	8.26
71 Phenanthrene-d10	686990	343495	1373980	738514	7.50
90 Chrysene-d12	579675	289838	1159350	587012	1.27
99 Perylene-d12	439467	219734	878934	456609	3.90

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	4.25	3.75	4.75	4.26	0.24
27 Naphthalene-d8	5.91	5.41	6.41	5.91	0.00
47 Acenaphthene-d10	8.12	7.62	8.62	8.12	0.00
71 Phenanthrene-d10	9.88	9.38	10.38	9.89	0.10
90 Chrysene-d12	13.37	12.87	13.87	13.39	0.08
99 Perylene-d12	15.79	15.29	16.29	15.80	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.

Date : 16-JUL-2009 18:46

Client ID: Level 9

Sample Info: #1685-171-160;Level 9

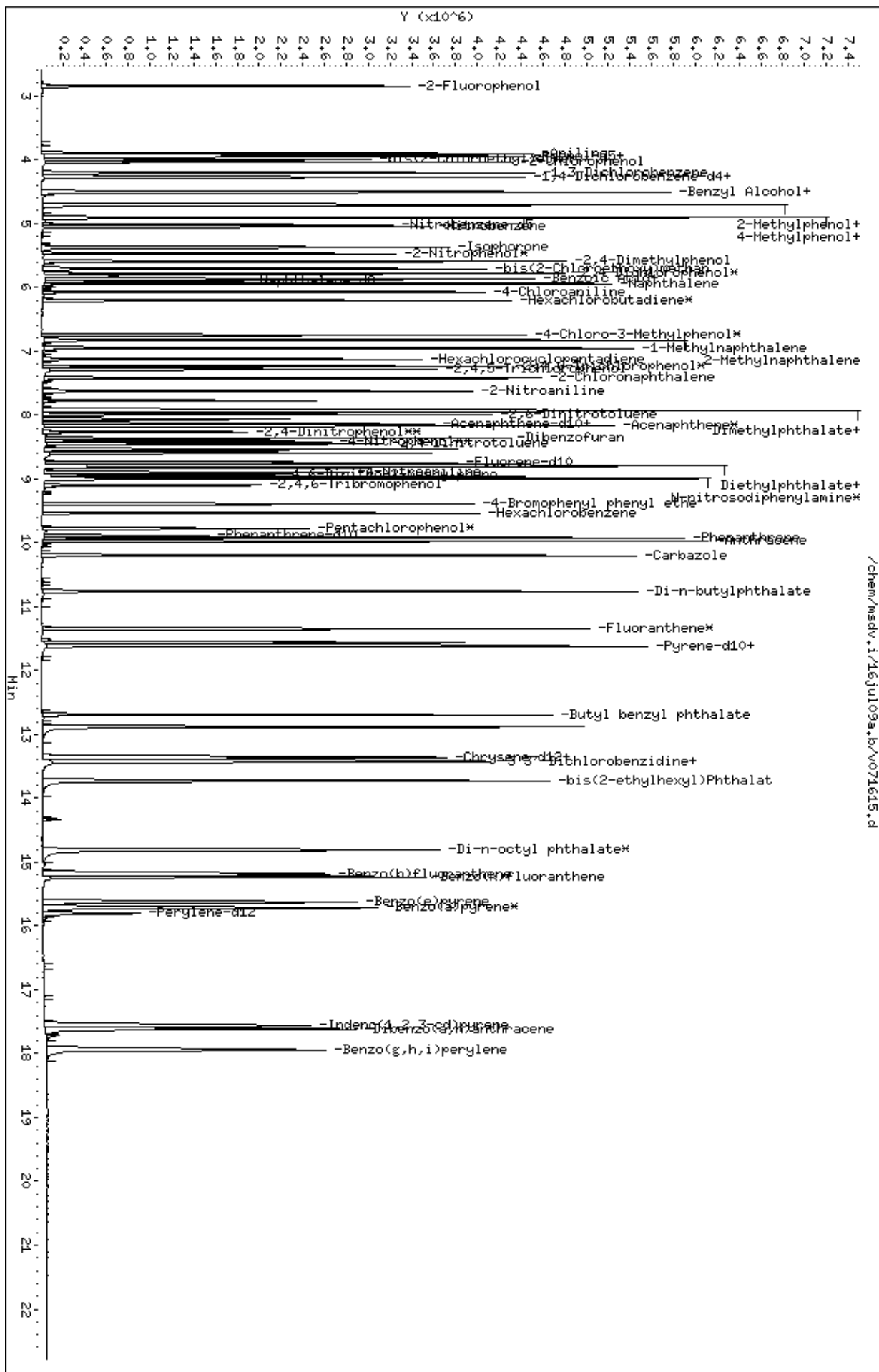
Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: m

Column diameter: 0.25



Report Date: 21-Jul-2009 16:37

## Air Toxics Ltd.

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdv.i Injection Date: 21-JUL-2009 16:00  
 Lab File ID: v072116.d Init. Cal. Date(s): 16-JUL-2009 16-JUL-2009  
 Analysis Type: PUF/XAD Init. Cal. Times: 15:05 18:46  
 Lab Sample ID: 1685-171-50 Quant Type: ISTD  
 Method: /chem/msdv.i/21jul09a.b/bnap0716.m

	_____		MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
=====	=====	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	0.92550	0.90871	0.050	1.81411	30.00000	Averaged
\$ 2 Phenol-d5	1.05230	1.03999	0.050	1.16915	30.00000	Averaged
3 Phenol*	1.24740	1.27309	0.050	-2.05929	30.00000	Averaged
41 Aniline	1.58922	1.56706	0.050	1.39446	30.00000	Averaged
4 bis(2-Chloroethyl)ether	1.10301	1.05619	0.050	4.24500	30.00000	Averaged
5 2-Chlorophenol	0.92397	0.93622	0.050	-1.32614	30.00000	Averaged
6 1,3-Dichlorobenzene	0.99701	0.93206	0.050	6.51401	30.00000	Averaged
9 1,4-Dichlorobenzene*	1.02344	0.95283	0.050	6.89903	30.00000	Averaged
10 Benzyl Alcohol	0.60530	0.63979	0.050	-5.69811	30.00000	Averaged
11 1,2-Dichlorobenzene	0.93885	0.88385	0.050	5.85879	30.00000	Averaged
12 2-Methylphenol	0.84827	0.87112	0.050	-2.69292	30.00000	Averaged
13 bis(2-Chloroisopropyl)ether	1.67931	1.52664	0.050	9.09125	30.00000	Averaged
14 4-Methylphenol	0.87302	0.90523	0.050	-3.68843	30.00000	Averaged
15 N-Nitrosodipropylamine**	0.69463	0.71025	0.050	-2.24814	30.00000	Averaged
16 Hexachloroethane	0.41976	0.40989	0.050	2.35253	30.00000	Averaged
\$ 17 Nitrobenzene-d5	0.41448	0.41255	0.050	0.46527	30.00000	Averaged
18 Nitrobenzene	0.45093	0.45498	0.050	-0.89799	30.00000	Averaged
19 Isophorone	0.82250	0.82777	0.050	-0.64017	30.00000	Averaged
20 2-Nitrophenol*	0.17771	0.18442	0.050	-3.77550	30.00000	Averaged
21 2,4-Dimethylphenol	0.33866	0.33909	0.050	-0.12670	30.00000	Averaged
24 Benzoic Acid	0.17968	0.17139	0.050	4.61296	30.00000	Averaged
23 bis(2-Chloroethoxy)methane	0.52032	0.50487	0.050	2.96946	30.00000	Averaged
25 2,4-Dichlorophenol*	0.25632	0.26186	0.050	-2.16033	30.00000	Averaged
26 1,2,4-Trichlorobenzene	0.32758	0.31484	0.050	3.88943	30.00000	Averaged
28 Naphthalene	1.15026	1.08685	0.050	5.51270	30.00000	Averaged
29 4-Chloroaniline	0.48836	0.48662	0.050	0.35788	30.00000	Averaged
30 Hexachlorobutadiene*	0.16695	0.15731	0.050	5.77609	30.00000	Averaged
32 4-Chloro-3-Methylphenol*	0.30780	0.32093	0.050	-4.26627	30.00000	Averaged
33 2-Methylnaphthalene	0.65981	0.62572	0.050	5.16691	30.00000	Averaged
145 1-Methylnaphthalene	0.68637	0.65857	0.050	4.05146	30.00000	Averaged
35 Hexachlorocyclopentadiene**	0.36331	0.35794	0.050	1.48013	30.00000	Averaged
36 2,4,6-Trichlorophenol*	0.36744	0.36734	0.050	0.02789	30.00000	Averaged
37 2,4,5-Trichlorophenol	0.39154	0.41271	0.050	-5.40544	30.00000	Averaged
39 2-Chloronaphthalene	1.27263	1.24868	0.050	1.88173	30.00000	Averaged
40 2-Nitroaniline	0.50206	0.52010	0.050	-3.59286	30.00000	Averaged
_____	_____	_____	_____	_____	_____	_____

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdv.i

Injection Date: 21-JUL-2009 16:00

Lab File ID: v072116.d

Init. Cal. Date(s): 16-JUL-2009 16-JUL-2009

Analysis Type: PUF/XAD

Init. Cal. Times: 15:05 18:46

Lab Sample ID: 1685-171-50

Quant Type: ISTD

Method: /chem/msdv.i/21jul09a.b/bnap0716.m

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
=====	=====	=====	=====	=====	=====	=====
42 Dimethylphthalate	1.29779	1.30192	0.050	-0.31816	30.00000	Averaged
44 2,6-Dinitrotoluene	0.32140	0.32262	0.050	-0.37790	30.00000	Averaged
45 Acenaphthylene	2.04269	2.02201	0.050	1.01249	30.00000	Averaged
46 3-Nitroaniline	0.41107	0.40408	0.050	1.70064	30.00000	Averaged
48 Acenaphthene*	1.25679	1.17488	0.050	6.51687	30.00000	Averaged
49 2,4-Dinitrophenol**	0.15312	0.14217	0.050	7.15075	30.00000	Averaged
50 4-Nitrophenol**	0.22237	0.22214	0.050	0.10025	30.00000	Averaged
51 Dibenzofuran	1.72505	1.61709	0.050	6.25784	30.00000	Averaged
52 2,4-Dinitrotoluene	0.41922	0.42770	0.050	-2.02112	30.00000	Averaged
56 Diethylphthalate	1.38575	1.41992	0.050	-2.46578	30.00000	Averaged
\$ 147 Fluorene-d10	1.14136	1.08837	0.050	4.64327	30.00000	Averaged
58 4-Chlorophenyl phenyl ether	0.64141	0.59394	0.050	7.40102	30.00000	Averaged
57 Fluorene	1.35965	1.30529	0.050	3.99776	30.00000	Averaged
59 4-Nitroaniline	0.42773	0.43496	0.050	-1.68933	30.00000	Averaged
60 4,6-Dinitro-2-methylphenol	0.10481	0.10984	0.050	-4.79283	30.00000	Averaged
61 N-nitrosodiphenylamine*	0.59718	0.58524	0.050	1.99961	30.00000	Averaged
\$ 62 2,4,6-Tribromophenol	0.17011	0.17310	0.050	-1.75737	30.00000	Averaged
65 4-Bromophenyl phenyl ether	0.19069	0.18481	0.050	3.08172	30.00000	Averaged
66 Hexachlorobenzene	0.22362	0.21524	0.050	3.74577	30.00000	Averaged
68 Pentachlorophenol*	0.09603	0.09484	0.050	1.23651	30.00000	Averaged
72 Phenanthrene	1.14136	1.09552	0.050	4.01644	30.00000	Averaged
73 Anthracene	1.09597	1.10239	0.050	-0.58531	30.00000	Averaged
144 Carbazole	2.06021	2.05472	0.050	0.26644	30.00000	Averaged
78 Di-n-butylphthalate	1.19285	1.24780	0.050	-4.60658	30.00000	Averaged
\$ 83 Fluoranthene-d10	0.85103	0.81776	0.050	3.90985	30.00000	Averaged
80 Fluoranthene*	1.03951	1.01299	0.050	2.55141	30.00000	Averaged
\$ 148 Pyrene-d10	0.93334	0.90149	0.050	3.41252	30.00000	Averaged
81 Pyrene	1.34888	1.30234	0.050	3.45002	30.00000	Averaged
85 Butyl benzyl phthalate	0.57001	0.60881	0.050	-6.80709	30.00000	Averaged
89 3 3'-Dichlorobenzidine	0.38717	0.39280	0.050	-1.45419	30.00000	Averaged
88 Benzo(a)Anthracene	1.20050	1.21372	0.050	-1.10123	30.00000	Averaged
91 Chrysene	1.29377	1.16662	0.050	9.82752	30.00000	Averaged
93 bis(2-ethylhexyl)Phthalate	0.79529	0.84800	0.050	-6.62824	30.00000	Averaged
94 Di-n-octyl phthalate*	1.58576	1.79447	0.050	-13.16150	30.00000	Averaged
95 Benzo(b)fluoranthene	1.48815	1.62223	0.050	-9.00991	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdv.i

Injection Date: 21-JUL-2009 16:00

Lab File ID: v072116.d

Init. Cal. Date(s): 16-JUL-2009 16-JUL-2009

Analysis Type: PUF/XAD

Init. Cal. Times: 15:05 18:46

Lab Sample ID: 1685-171-50

Quant Type: ISTD

Method: /chem/msdv.i/21jul09a.b/bnap0716.m

			MIN			MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE	
96 Benzo(k)fluoranthene	1.63520	1.67108	0.050	-2.19463	30.00000	Averaged	
97 Benzo(e)pyrene	1.34870	1.40963	0.050	-4.51768	30.00000	Averaged	
\$ 101 Benzo(a)pyrene-d12	0.80858	0.90119	0.050	-11.45287	30.00000	Averaged	
98 Benzo(a)pyrene*	1.46424	1.52984	0.050	-4.48066	30.00000	Averaged	
103 Indeno(1,2,3-cd)pyrene	1.23327	1.37062	0.050	-11.13732	30.00000	Averaged	
104 Dibenzo(a,h)anthracene	1.29180	1.28814	0.050	0.28289	30.00000	Averaged	
105 Benzo(g,h,i)perylene	1.46071	1.53359	0.050	-4.98907	30.00000	Averaged	

Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/21jul09a.b/v072116.d

Lab Smp Id: 1685-171-50

Client Smp ID: CCV

Inj Date : 21-JUL-2009 16:00

Operator : rn

Inst ID: msdv.i

Smp Info : ;1685-171-50;CCV

Misc Info : ,NOTICS

Comment : HP-5MS 30M X 0.25mm X 0.25u

Method : /chem/msdv.i/21jul09a.b/bnap0716.m

Meth Date : 21-Jul-2009 16:37 rnoonan

Quant Type: ISTD

Cal Date : 16-JUL-2009 16:28

Cal File: v071610.d

Als bottle: 3

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 50ccv.sub

Target Version: 3.50

Processing Host: eeyore

Concentration Formula: Amt \* DF \* (Vt/S\*Vi)/CF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
S	1.00000	Sample Portion
Vi	1.00000	Volume injected (uL)
CF	1000.00000	Conversion ng->ug

Cpnd Variable

Local Compound Variable

		AMOUNTS					
		QUANT	SIG				
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	=====	==	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112	2.825	2.825	(0.667)	316996	50.0000	49.09
\$ 2 Phenol-d5	99	3.913	3.913	(0.924)	362793	50.0000	49.42
3 Phenol*	94	3.924	3.924	(0.927)	444105	50.0000	51.03
41 Aniline	93	3.882	3.882	(0.917)	546654	50.0000	49.30
4 bis(2-Chloroethyl)ether	93	3.975	3.975	(0.939)	368443	50.0000	47.88
5 2-Chlorophenol	128	4.017	4.017	(0.949)	326593	50.0000	50.66
6 1,3-Dichlorobenzene	146	4.183	4.183	(0.988)	325142	50.0000	46.74
* 7 1,4-Dichlorobenzene-d4	150	4.234	4.234	(1.000)	279073	40.0000	
9 1,4-Dichlorobenzene*	146	4.255	4.255	(1.005)	332388	50.0000	46.55
10 Benzyl Alcohol	108	4.473	4.473	(1.056)	223186	50.0000	52.85
11 1,2-Dichlorobenzene	146	4.494	4.494	(1.061)	308322	50.0000	47.07
12 2-Methylphenol	108	4.690	4.690	(1.108)	303881	50.0000	51.35
13 bis(2-Chloroisopropyl)ether	45	4.690	4.690	(1.108)	532554	50.0000	45.45

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						( ng )	( ng )
=====	=====	==	=====	=====	=====	=====	=====
14 4-Methylphenol	108	4.887	4.887	(1.154)	315780	50.0000	51.84
15 N-Nitrosodipropylamine**	70	4.877	4.877	(1.152)	247764	50.0000	51.12
16 Hexachloroethane	117	4.887	4.887	(1.154)	142986	50.0000	48.82
\$ 17 Nitrobenzene-d5	82	5.001	5.001	(0.849)	343896	50.0000	49.77
18 Nitrobenzene	77	5.022	5.022	(0.852)	379268	50.0000	50.45
19 Isophorone	82	5.343	5.343	(0.907)	690015	50.0000	50.32
20 2-Nitrophenol*	139	5.447	5.447	(0.924)	153733	50.0000	51.89
21 2,4-Dimethylphenol	122	5.571	5.571	(0.945)	282661	50.0000	50.06
24 Benzoic Acid	122	5.779	5.779	(0.981)	142867	50.0000	47.69
23 bis(2-Chloroethoxy)methane	93	5.685	5.685	(0.965)	420855	50.0000	48.52
25 2,4-Dichlorophenol*	162	5.768	5.768	(0.979)	218282	50.0000	51.08
26 1,2,4-Trichlorobenzene	180	5.851	5.851	(0.993)	262443	50.0000	48.06
* 27 Naphthalene-d8	136	5.893	5.893	(1.000)	666869	40.0000	
28 Naphthalene	128	5.924	5.924	(1.005)	905980	50.0000	47.24
29 4-Chloroaniline	127	6.058	6.058	(1.028)	405637	50.0000	49.82
30 Hexachlorobutadiene*	225	6.193	6.193	(1.051)	131128	50.0000	47.11
32 4-Chloro-3-Methylphenol*	107	6.732	6.732	(1.142)	267522	50.0000	52.13
33 2-Methylnaphthalene	142	6.804	6.804	(1.155)	521593	50.0000	47.42
145 1-Methylnaphthalene	142	6.939	6.939	(1.178)	548972	50.0000	47.97
35 Hexachlorocyclopentadiene**	237	7.105	7.105	(0.876)	141669	50.0000	49.26
36 2,4,6-Trichlorophenol*	196	7.219	7.219	(0.890)	145391	50.0000	49.99
37 2,4,5-Trichlorophenol	196	7.271	7.271	(0.896)	163348	50.0000	52.70
39 2-Chloronaphthalene	162	7.406	7.406	(0.913)	494222	50.0000	49.06
40 2-Nitroaniline	65	7.602	7.602	(0.937)	205853	50.0000	51.80
42 Dimethylphthalate	163	7.903	7.903	(0.974)	515295	50.0000	50.16
44 2,6-Dinitrotoluene	165	7.965	7.965	(0.982)	127690	50.0000	50.19
45 Acenaphthylene	152	7.913	7.913	(0.976)	800302	50.0000	49.49
46 3-Nitroaniline	138	8.110	8.110	(1.000)	159931	50.0000	49.15
* 47 Acenaphthene-d10	164	8.110	8.110	(1.000)	316636	40.0000	
48 Acenaphthene*	154	8.141	8.141	(1.004)	465013	50.0000	46.74
49 2,4-Dinitrophenol**	184	8.235	8.235	(1.015)	56272	50.0000	46.42
50 4-Nitrophenol**	109	8.390	8.390	(1.034)	87923	50.0000	49.95
51 Dibenzofuran	168	8.338	8.338	(1.028)	640038	50.0000	46.87
52 2,4-Dinitrotoluene	165	8.431	8.431	(1.040)	169280	50.0000	51.01
56 Diethylphthalate	149	8.773	8.773	(1.082)	561996	50.0000	51.23
\$ 147 Fluorene-d10	176	8.722	8.722	(1.075)	430770	50.0000	47.68
58 4-Chlorophenyl phenyl ether	204	8.794	8.794	(1.084)	235077	50.0000	46.30
57 Fluorene	166	8.763	8.763	(1.080)	516628	50.0000	48.00
59 4-Nitroaniline	138	8.867	8.867	(1.093)	172154	50.0000	50.84
60 4,6-Dinitro-2-methylphenol	198	8.908	8.908	(0.902)	80080	50.0000	52.40
61 N-nitrosodiphenylamine*	169	8.950	8.950	(0.907)	426691	50.0000	49.00
\$ 62 2,4,6-Tribromophenol	330	9.084	9.084	(1.120)	68511	50.0000	50.88
65 4-Bromophenyl phenyl ether	248	9.375	9.375	(0.950)	134742	50.0000	48.46
66 Hexachlorobenzene	284	9.520	9.520	(0.964)	156931	50.0000	48.13
68 Pentachlorophenol*	266	9.748	9.748	(0.987)	69148	50.0000	49.38
* 71 Phenanthrene-d10	188	9.872	9.872	(1.000)	583267	40.0000	
72 Phenanthrene	178	9.893	9.893	(1.002)	798727	50.0000	47.99(H)

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL	
							( ng)	( ng)
=====	=====	==	=====	=====	=====	=====	=====	=====
73 Anthracene	178	9.955	9.955	(1.008)	803734	50.0000	50.29	
144 Carbazole	167	10.172	10.172	(2.402)	716771	50.0000	49.87	
78 Di-n-butylphthalate	149	10.742	10.742	(1.088)	909751	50.0000	52.30	
\$ 83 Fluoranthene-d10	212	11.302	11.302	(1.145)	596216	50.0000	48.04	
80 Fluoranthene*	202	11.323	11.323	(1.147)	738551	50.0000	48.72	
\$ 148 Pyrene-d10	212	11.571	11.571	(0.867)	555601	50.0000	48.29	
81 Pyrene	202	11.592	11.592	(0.868)	802653	50.0000	48.27	
85 Butyl benzyl phthalate	149	12.660	12.660	(0.948)	375218	50.0000	53.40	
89 3 3'-Dichlorobenzidine	252	13.375	13.375	(1.002)	242089	50.0000	50.73	
88 Benzo(a)Anthracene	228	13.323	13.323	(0.998)	748033	50.0000	50.55	
* 90 Chrysene-d12	240	13.354	13.354	(1.000)	493051	40.0000		
91 Chrysene	228	13.385	13.385	(1.002)	719007	50.0000	45.09	
93 bis(2-ethylhexyl)Phthalate	149	13.696	13.696	(1.026)	522635	50.0000	53.31	
94 Di-n-octyl phthalate*	149	14.774	14.774	(0.946)	808780	50.0000	56.58	
95 Benzo(b)fluoranthene	252	15.136	15.136	(0.969)	731149	50.0000	54.50	
96 Benzo(k)fluoranthene	252	15.178	15.178	(0.971)	753167	50.0000	51.10(H)	
97 Benzo(e)pyrene	252	15.582	15.582	(0.997)	635329	50.0000	52.26(H)	
\$ 101 Benzo(a)pyrene-d12	264	15.623	15.623	(1.000)	406170	50.0000	55.73	
98 Benzo(a)pyrene*	252	15.665	15.665	(1.003)	689510	50.0000	52.24(H)	
* 99 Perylene-d12	264	15.758	15.758	(1.000)	360565	40.0000		(H)
103 Indeno(1,2,3-cd)pyrene	276	17.499	17.499	(1.120)	617746	50.0000	55.57	
104 Dibenzo(a,h)anthracene	278	17.561	17.561	(1.124)	580574	50.0000	49.86	
105 Benzo(g,h,i)perylene	276	17.883	17.883	(1.145)	691198	50.0000	52.49	

QC Flag Legend

H - Operator selected an alternate compound hit.



Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: msdv.i

Calibration Date: 21-JUL-2009

Lab File ID: v072116.d

Calibration Time: 16:00

Lab Smp Id: 1685-171-50

Client Smp ID: CCV

Analysis Type: SV

Level: LOW

Quant Type: ISTD

Sample Type: PUF/XAD

Operator: rn

Method File: /chem/msdv.i/21jul09a.b/bnap0716.m

Misc Info: ,NOTICS

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	279073	139536	558146	279073	0.00
27 Naphthalene-d8	666869	333434	1333738	666869	0.00
47 Acenaphthene-d10	316636	158318	633272	316636	0.00
71 Phenanthrene-d10	583267	291634	1166534	583267	0.00
90 Chrysene-d12	493051	246526	986102	493051	0.00
99 Perylene-d12	360565	180282	721130	360565	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	4.23	3.73	4.73	4.23	0.00
27 Naphthalene-d8	5.89	5.39	6.39	5.89	0.00
47 Acenaphthene-d10	8.11	7.61	8.61	8.11	0.00
71 Phenanthrene-d10	9.87	9.37	10.37	9.87	0.00
90 Chrysene-d12	13.35	12.85	13.85	13.35	0.00
99 Perylene-d12	15.76	15.26	16.26	15.76	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.

Date : 21-JUL-2009 16:00

Client ID: CCV

Sample Info: #1685-171-50;CCV

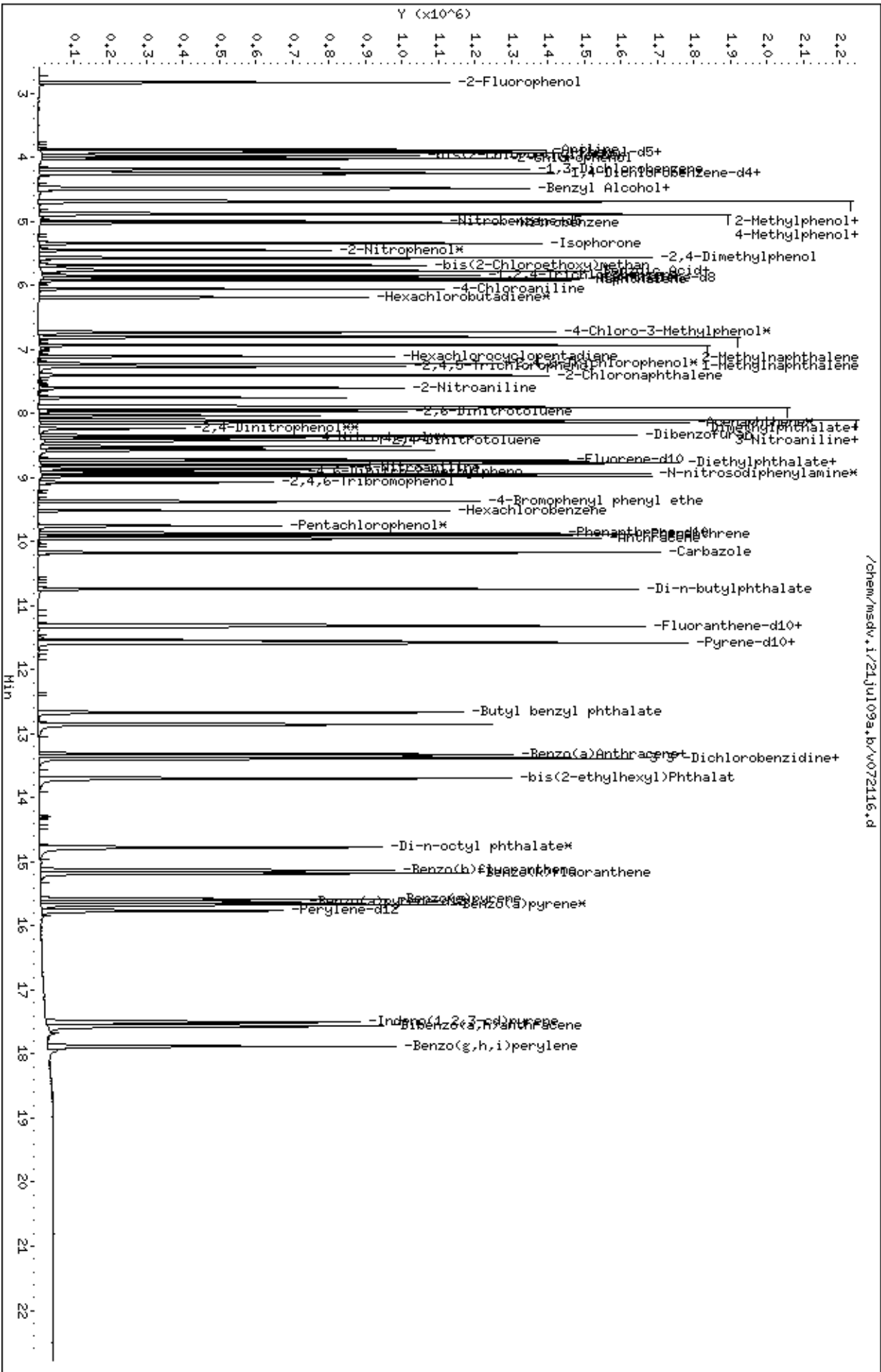
Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: m

Column diameter: 0.25



Client Sample ID: LCS

Lab ID#: 0907252B-08A

**MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN**

<b>File Name:</b>	<b>v072127</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 7/21/09 09:26 PM</b>
		<b>Date of Extraction: 7/15/09</b>

Compound	%Recovery
Phenol	87
bis(2-Chloroethyl) Ether	Not Spiked
2-Chlorophenol	84
1,3-Dichlorobenzene	Not Spiked
1,4-Dichlorobenzene	68
1,2-Dichlorobenzene	Not Spiked
2-Methylphenol (o-Cresol)	Not Spiked
bis(2-Chloroisopropyl) Ether	Not Spiked
N-Nitroso-di-n-propylamine	80
4-Methylphenol/3-Methylphenol	Not Spiked
Hexachloroethane	Not Spiked
Nitrobenzene	Not Spiked
Isophorone	Not Spiked
2-Nitrophenol	Not Spiked
2,4-Dimethylphenol	Not Spiked
Benzoic Acid	Not Spiked
bis(2-Chloroethoxy) Methane	Not Spiked
2,4-Dichlorophenol	Not Spiked
1,2,4-Trichlorobenzene	74
Naphthalene	Not Spiked
4-Chloroaniline	Not Spiked
Hexachlorobutadiene	Not Spiked
4-Chloro-3-methylphenol	92
2-Methylnaphthalene	Not Spiked
Hexachlorocyclopentadiene	Not Spiked
2,4,6-Trichlorophenol	Not Spiked
2,4,5-Trichlorophenol	Not Spiked
2-Chloronaphthalene	Not Spiked
2-Nitroaniline	Not Spiked
Dimethylphthalate	Not Spiked
Acenaphthylene	Not Spiked
2,6-Dinitrotoluene	Not Spiked
3-Nitroaniline	Not Spiked
Acenaphthene	74
2,4-Dinitrophenol	Not Spiked
4-Nitrophenol	72
2,4-Dinitrotoluene	78
Dibenzofuran	Not Spiked

Client Sample ID: LCS

Lab ID#: 0907252B-08A

**MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN**

<b>File Name:</b>	<b>v072127</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 7/21/09 09:26 PM</b>
		<b>Date of Extraction: 7/15/09</b>

Compound	%Recovery
Diethylphthalate	Not Spiked
Fluorene	Not Spiked
4-Chlorophenyl-phenyl Ether	Not Spiked
4-Nitroaniline	Not Spiked
4,6-Dinitro-2-methylphenol	Not Spiked
N-Nitrosodiphenylamine	Not Spiked
4-Bromophenyl-phenyl Ether	Not Spiked
Hexachlorobenzene	Not Spiked
Pentachlorophenol	78
Phenanthrene	Not Spiked
Anthracene	Not Spiked
di-n-Butylphthalate	Not Spiked
Fluoranthene	Not Spiked
Pyrene	81
Butylbenzylphthalate	Not Spiked
3,3'-Dichlorobenzidine	Not Spiked
Chrysene	Not Spiked
Benzo(a)anthracene	Not Spiked
bis(2-Ethylhexyl)phthalate	Not Spiked
Di-n-Octylphthalate	Not Spiked
Benzo(b)fluoranthene	Not Spiked
Benzo(k)fluoranthene	Not Spiked
Benzo(a)pyrene	Not Spiked
Indeno(1,2,3-c,d)pyrene	Not Spiked
Dibenz(a,h)anthracene	Not Spiked
Benzo(g,h,i)perylene	Not Spiked

**Air Sample Volume(L): 80000**

**Container Type: NA - Not Applicable**

Surrogates	%Recovery	Method Limits
2-Fluorophenol	81	50-150
Phenol-d5	88	50-150
Nitrobenzene-d5	83	50-150
2,4,6-Tribromophenol	90	50-150
Fluorene-d10	82	60-120
Pyrene-d10	85	60-120

Air Toxics Ltd.

RECOVERY REPORT

Client Name:	Client SDG: 21jul09a
Sample Matrix: GAS	Fraction: SV
Lab Smp Id: 0907252B/253B-LCS	Client Smp ID: LCS
Level: LOW	Operator: rn
Data Type: MS DATA	SampleType: LCS
SpikeList File: T013100.spk	Quant Type: ISTD
Sublist File: lcsfull.sub	
Method File: /chem/msdv.i/21jul09a.b/bnap0716.m	
Misc Info: ,NOTICS	

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
3 Phenol*	50.00	43.31	86.63	50-150
5 2-Chlorophenol	50.00	41.76	83.51	50-150
9 1,4-Dichlorobenzen	50.00	34.10	68.21	50-150
15 N-Nitrosodipropyla	50.00	40.26	80.51	50-150
26 1,2,4-Trichloroben	50.00	37.12	74.24	50-150
32 4-Chloro-3-Methylp	50.00	45.99	91.98	50-150
48 Acenaphthene*	50.00	37.18	74.37	50-150
50 4-Nitrophenol**	50.00	36.10	72.20	38-96
52 2,4-Dinitrotoluene	50.00	38.96	77.93	50-150
68 Pentachlorophenol*	50.00	39.28	78.57	39-106
81 Pyrene	50.00	40.56	81.11	60-120

SURROGATE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
\$ 1 2-Fluorophenol	50.00	40.34	80.69	50-150
\$ 2 Phenol-d5	50.00	44.21	88.43	50-150
\$ 17 Nitrobenzene-d5	50.00	41.38	82.77	50-150
\$ 62 2,4,6-Tribromophen	50.00	45.06	90.11	50-150
\$ 147 Fluorene-d10	50.00	40.97	81.94	60-120
\$ 148 Pyrene-d10	50.00	42.70	85.40	60-120

Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/21jul09a.b/v072127.d

Lab Smp Id: 0907252B/253B-LCS

Client Smp ID: LCS

Inj Date : 21-JUL-2009 21:26

Operator : rn

Inst ID: msdv.i

Smp Info : ;0907252B/253B-LCS;LCS

Misc Info : ,NOTICS

Comment : HP-5MS 30M X 0.25mm X 0.25u

Method : /chem/msdv.i/21jul09a.b/bnap0716.m

Meth Date : 22-Jul-2009 09:03 lzhang

Quant Type: ISTD

Cal Date : 16-JUL-2009 16:28

Cal File: v071610.d

Als bottle: 14

QC Sample: LCS

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: lcsfull.sub

Target Version: 3.50

Processing Host: eeyore

Concentration Formula: Amt \* DF \* (Vt/S\*Vi)/CF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
S	1.00000	Sample Portion
Vi	1.00000	Volume injected (uL)
CF	1000.00000	Conversion ng->ug

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG							CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	( ng)	FINAL	( ug)
=====	=====	==	=====	=====	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112	2.825	2.825	(0.667)	331787	40.3433		40.34	
\$ 2 Phenol-d5	99	3.913	3.913	(0.924)	413435	44.2138		44.21	
\$ 17 Nitrobenzene-d5	82	5.001	5.001	(0.849)	366278	41.3846		41.38	
\$ 62 2,4,6-Tribromophenol	330	9.074	9.084	(1.120)	80916	45.0554		45.06	
\$ 147 Fluorene-d10	176	8.722	8.722	(1.077)	493675	40.9689		40.97	
\$ 148 Pyrene-d10	212	11.572	11.571	(0.867)	637111	42.7014		42.70	
* 7 1,4-Dichlorobenzene-d4	150	4.234	4.234	(1.000)	355444	40.0000			
* 27 Naphthalene-d8	136	5.893	5.893	(1.000)	854144	40.0000			
* 47 Acenaphthene-d10	164	8.100	8.110	(1.000)	422302	40.0000			
* 71 Phenanthrene-d10	188	9.872	9.872	(1.000)	777085	40.0000			
* 90 Chrysene-d12	240	13.344	13.354	(1.000)	639429	40.0000			
* 99 Perylene-d12	264	15.758	15.758	(1.000)	471935	40.0000			
3 Phenol*	94	3.924	3.924	(0.927)	480098	43.3125		43.31	

Compounds	QUANT SIG							CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE			ON-COLUMN	FINAL
								( ng)	( ug)
=====	=====	==	=====	=====	=====			=====	=====
5 2-Chlorophenol	128	4.017	4.017	(0.949)	342843			41.7567	41.76
9 1,4-Dichlorobenzene*	146	4.255	4.255	(1.005)	310152			34.1036	34.10
15 N-Nitrosodipropylamine**	70	4.867	4.877	(1.149)	248477			40.2551	40.26
26 1,2,4-Trichlorobenzene	180	5.851	5.851	(0.993)	259635			37.1176	37.12
32 4-Chloro-3-Methylphenol*	107	6.732	6.732	(1.142)	302265			45.9888	45.99
48 Acenaphthene*	154	8.141	8.141	(1.005)	493389			37.1847	37.18
50 4-Nitrophenol**	109	8.390	8.390	(1.036)	84744			36.0979	36.10
52 2,4-Dinitrotoluene	165	8.421	8.431	(1.040)	172455			38.9644	38.96
68 Pentachlorophenol*	266	9.748	9.748	(0.987)	73286			39.2835	39.28
81 Pyrene	202	11.592	11.592	(0.869)	874487			40.5553	40.56

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: msdv.i

Calibration Date: 21-JUL-2009

Lab File ID: v072127.d

Calibration Time: 16:00

Lab Smp Id: 0907252B/253B-LCS

Client Smp ID: LCS

Analysis Type: SV

Level: LOW

Quant Type: ISTD

Sample Type: PUF/XAD

Operator: rn

Method File: /chem/msdv.i/21jul09a.b/bnap0716.m

Misc Info: ,NOTICS

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	279073	139536	558146	355444	27.37
27 Naphthalene-d8	666869	333434	1333738	854144	28.08
47 Acenaphthene-d10	316636	158318	633272	422302	33.37
71 Phenanthrene-d10	583267	291634	1166534	777085	33.23
90 Chrysene-d12	493051	246526	986102	639429	29.69
99 Perylene-d12	360565	180282	721130	471935	30.89

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
=====	=====	=====	=====	=====	=====
7 1,4-Dichlorobenze	4.23	3.73	4.73	4.23	0.00
27 Naphthalene-d8	5.89	5.39	6.39	5.89	0.00
47 Acenaphthene-d10	8.11	7.61	8.61	8.10	-0.13
71 Phenanthrene-d10	9.87	9.37	10.37	9.87	0.00
90 Chrysene-d12	13.35	12.85	13.85	13.34	-0.08
99 Perylene-d12	15.76	15.26	16.26	15.76	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: /chem/msdv.i/21jul09a.b/v072127.d

Date : 21-JUL-2009 21:26

Client ID: LCS

Sample Info: J0907262B/253B-LCS;LCS

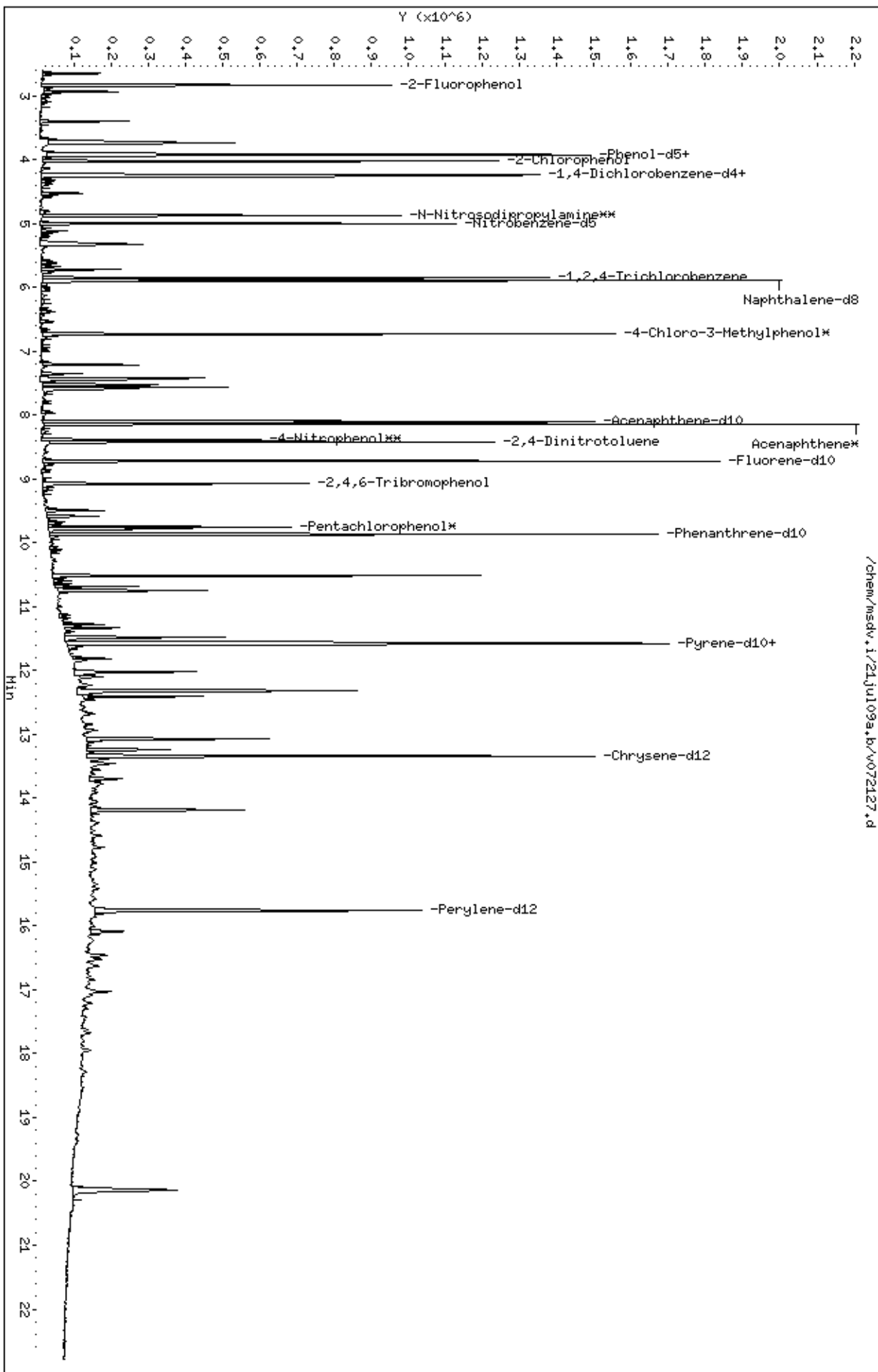
Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: m

Column diameter: 0.25



Date : 21-JUL-2009 21:26

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907252B/253B-LCS;LCS

Volume Injected (uL): 1.0

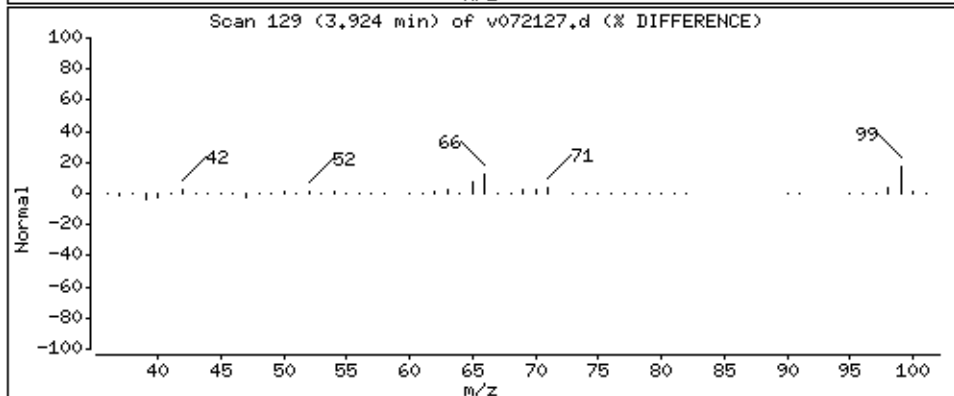
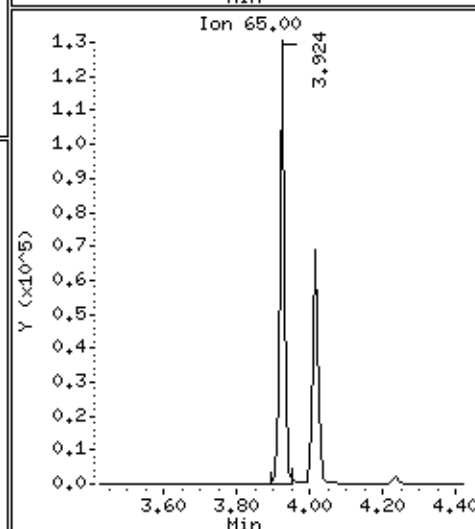
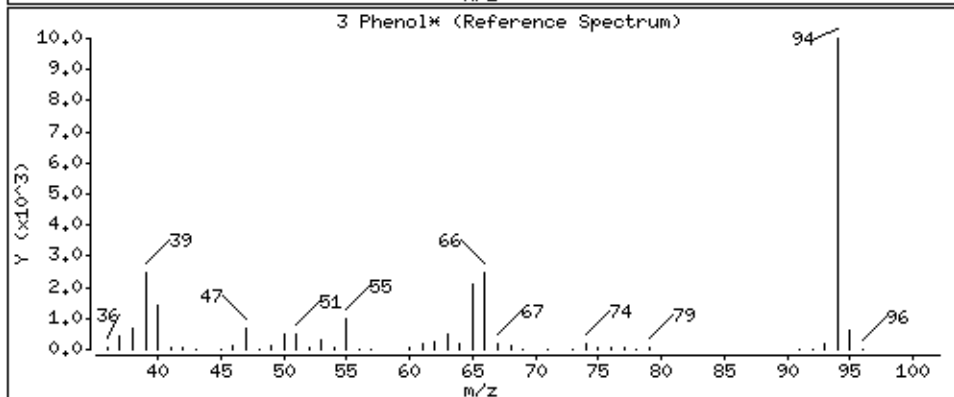
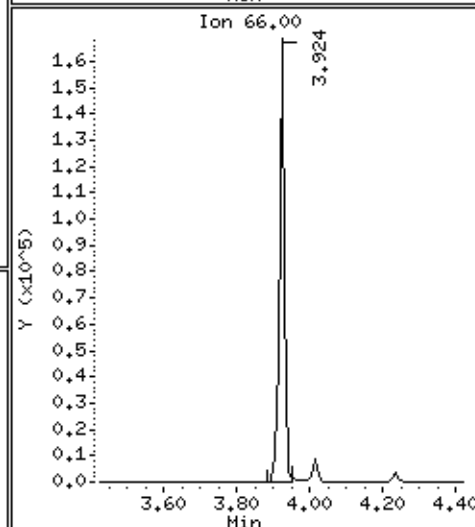
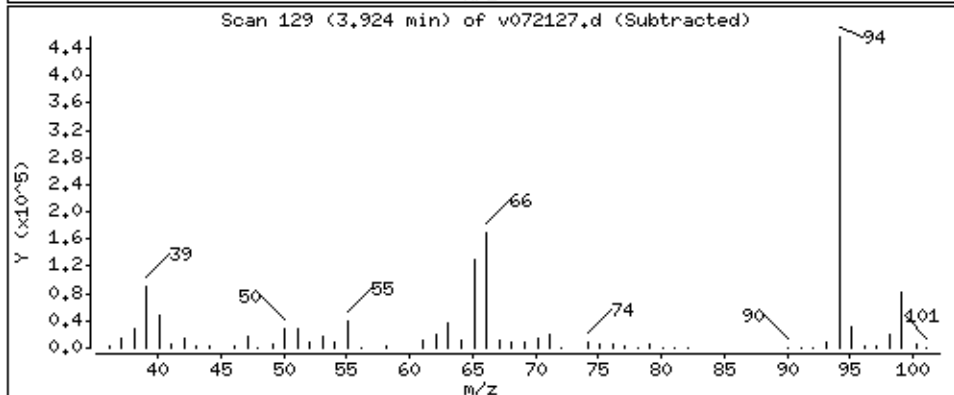
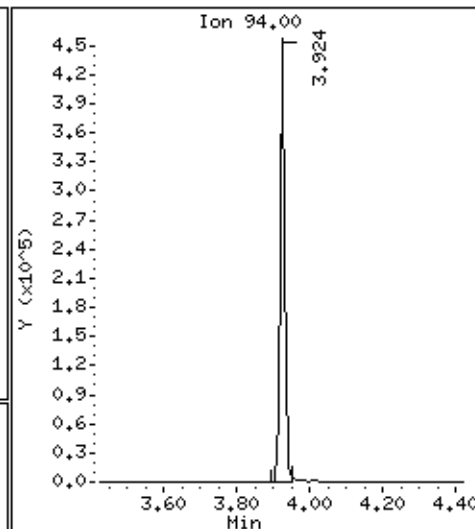
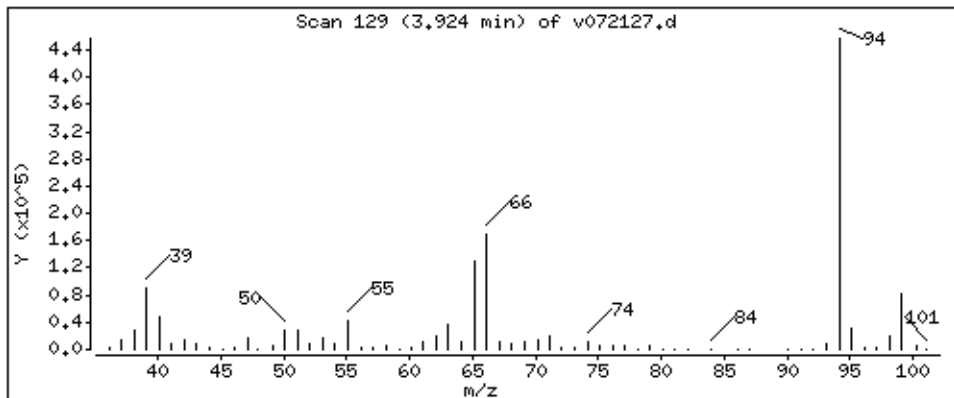
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

3 Phenol\*

Concentration: 43.31 ug



Date : 21-JUL-2009 21:26

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907252B/253B-LCS;LCS

Volume Injected (uL): 1.0

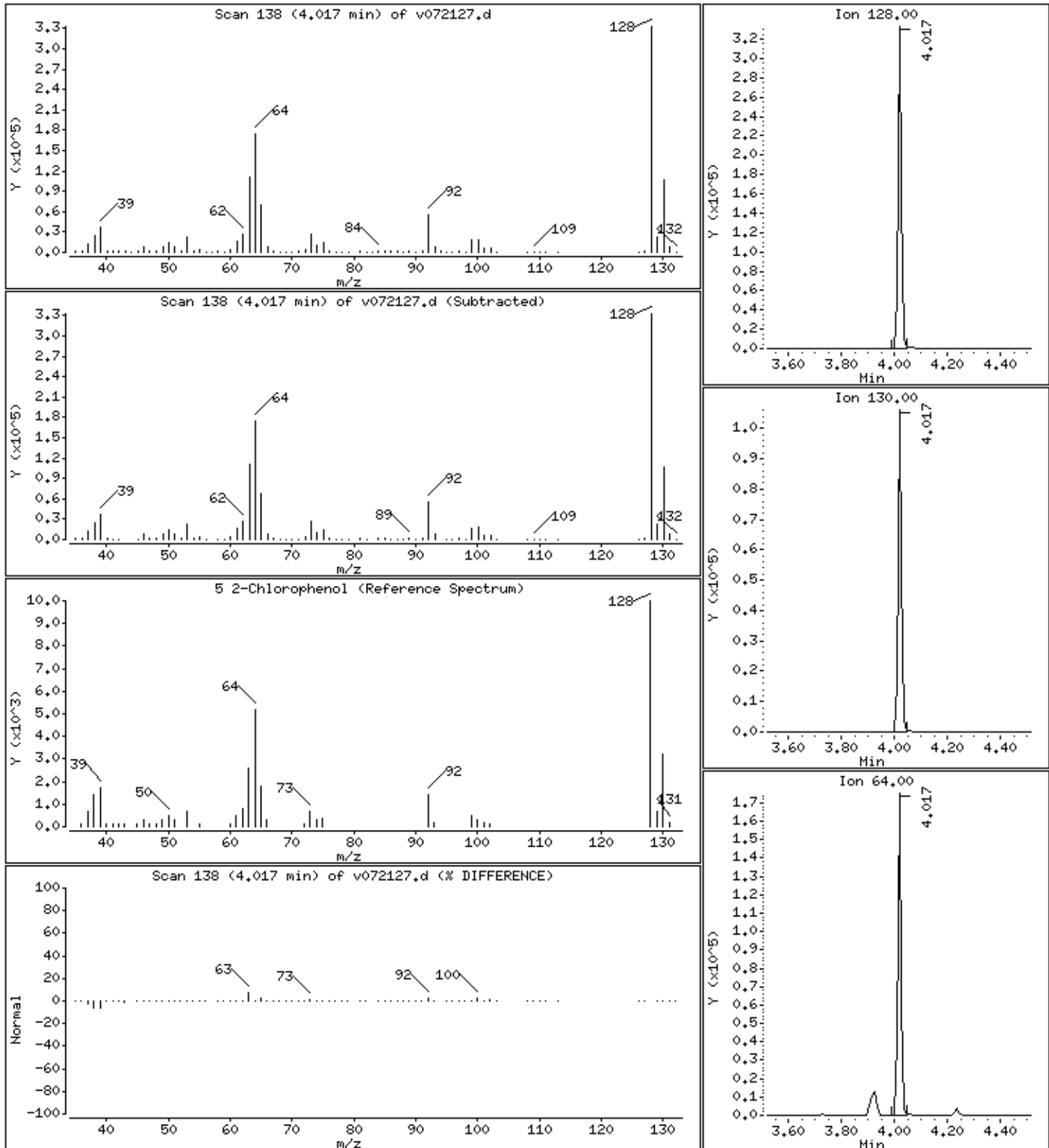
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

5 2-Chlorophenol

Concentration: 41.76 ug



Date : 21-JUL-2009 21:26

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907252B/253B-LCS;LCS

Volume Injected (uL): 1.0

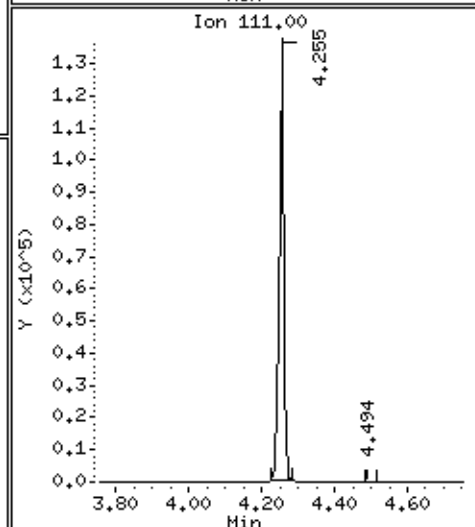
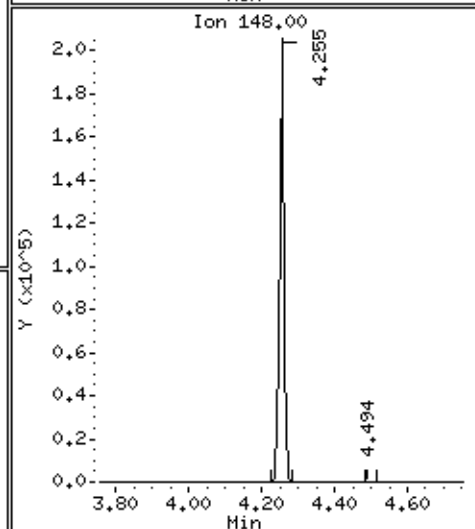
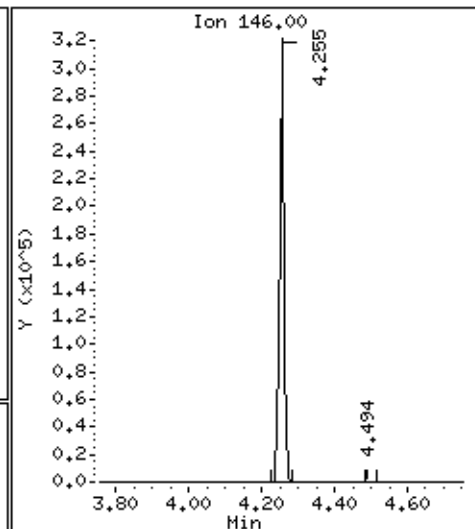
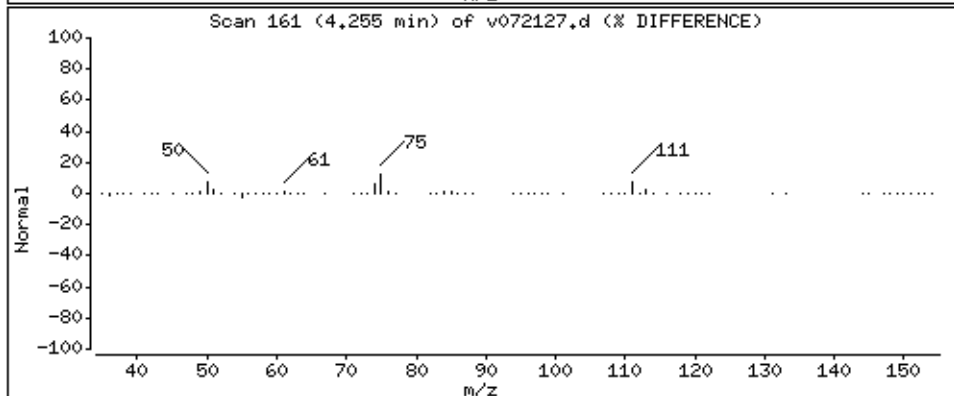
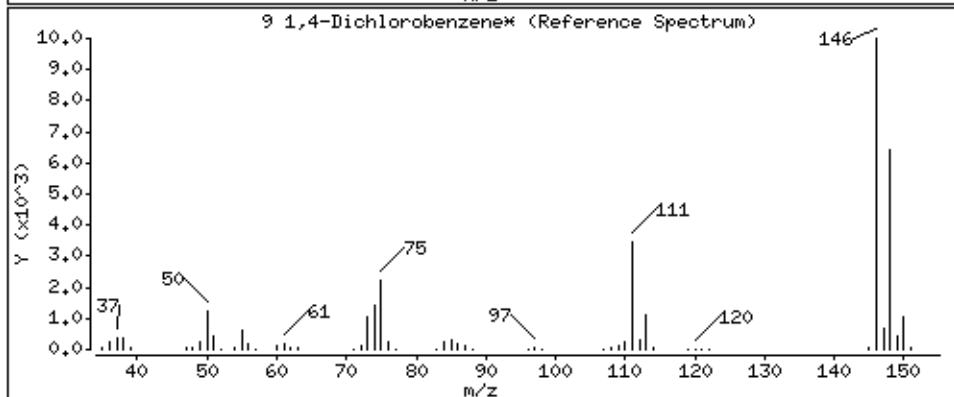
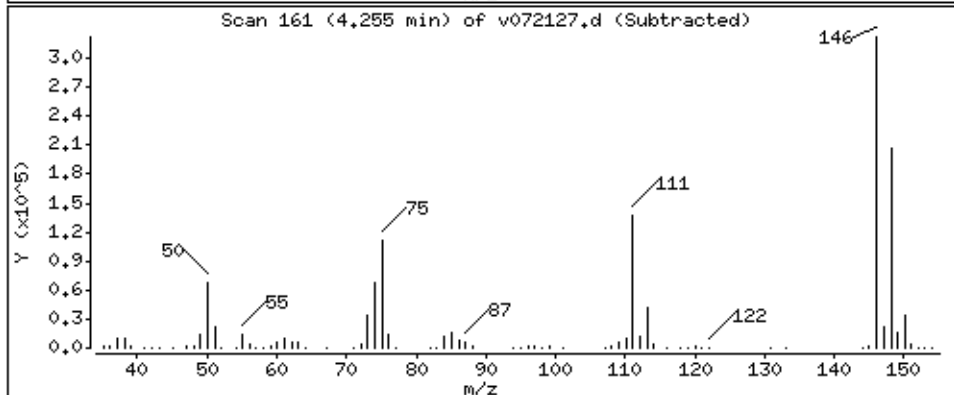
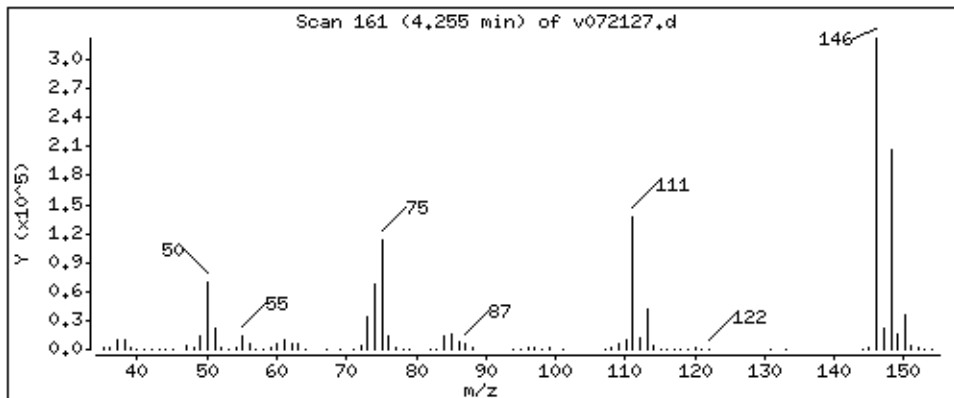
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

9 1,4-Dichlorobenzene\*

Concentration: 34.10 ug



Date : 21-JUL-2009 21:26

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907252B/253B-LCS;LCS

Volume Injected (uL): 1.0

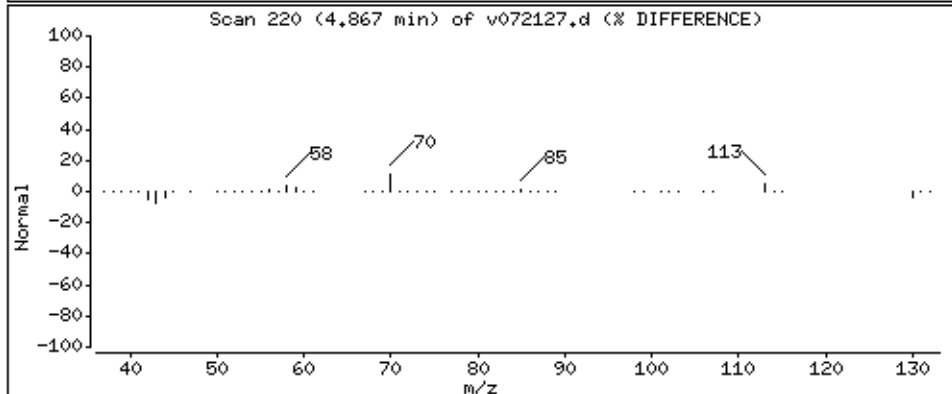
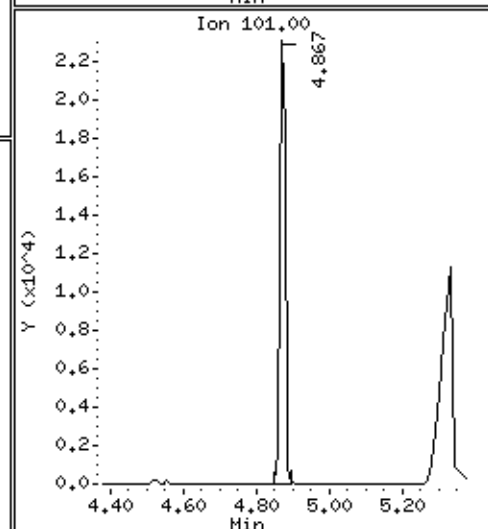
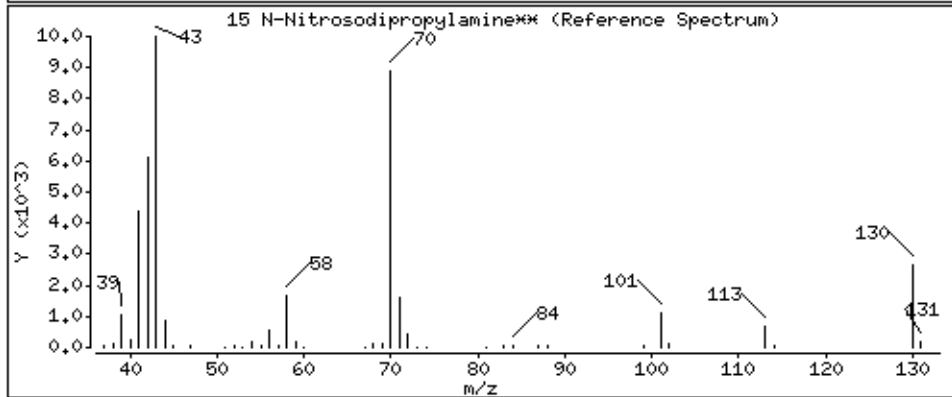
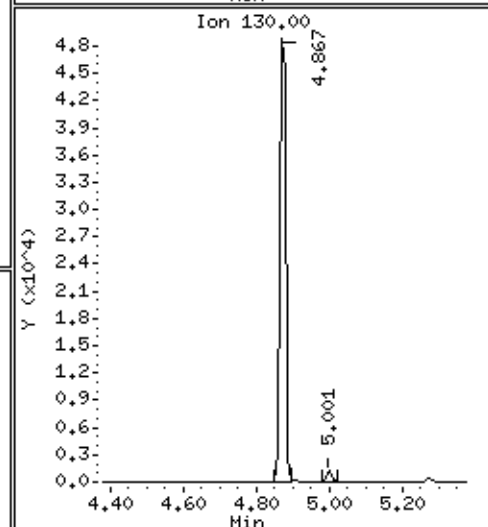
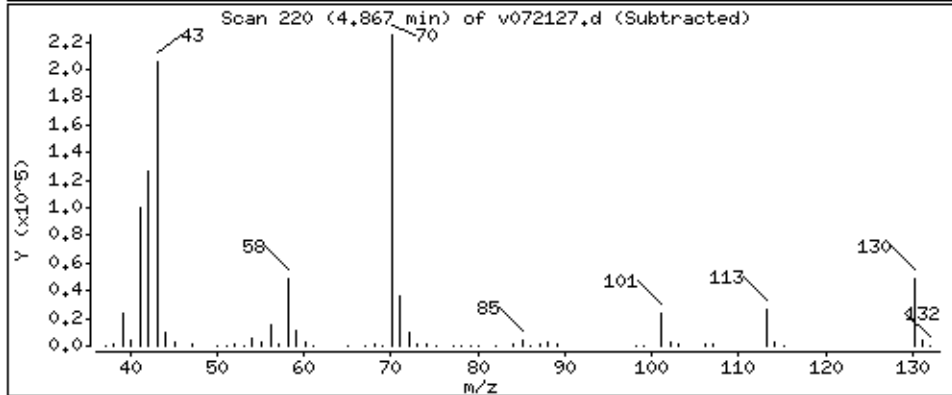
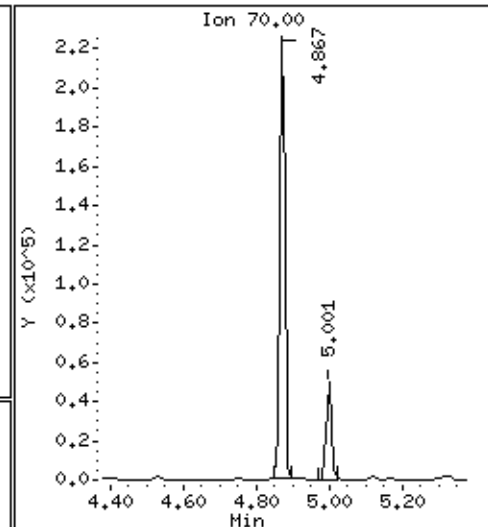
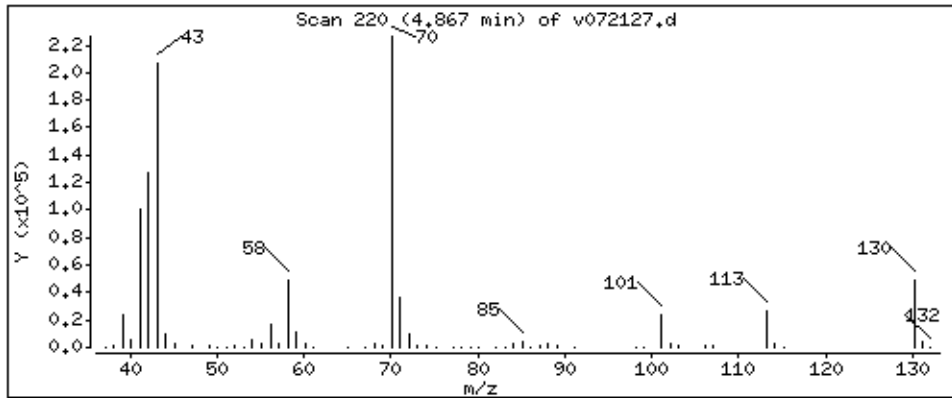
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

15 N-Nitrosodipropylamine\*\*

Concentration: 40.26 ug



Date : 21-JUL-2009 21:26

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907252B/253B-LCS;LCS

Volume Injected (uL): 1.0

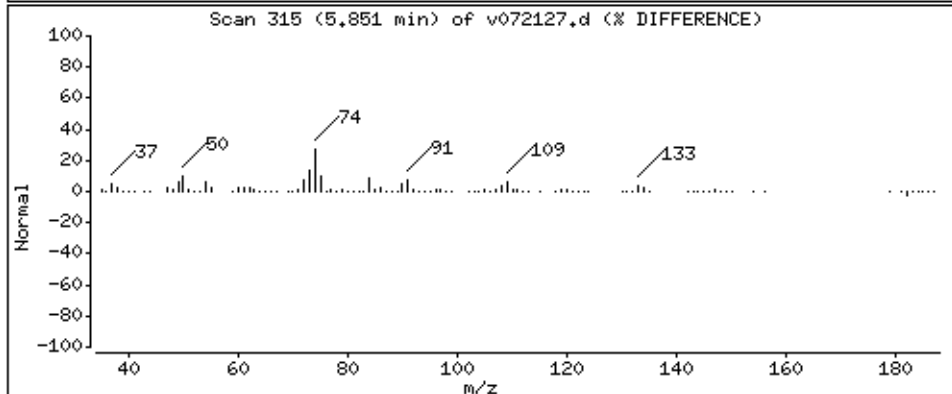
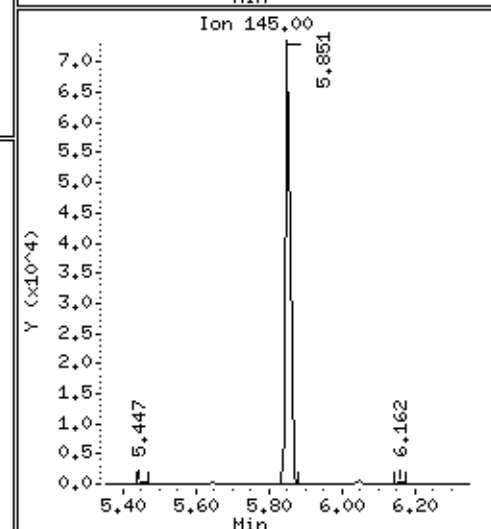
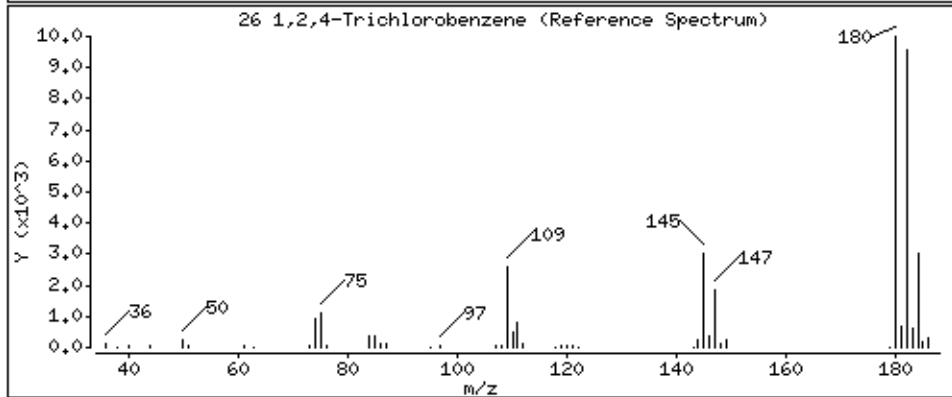
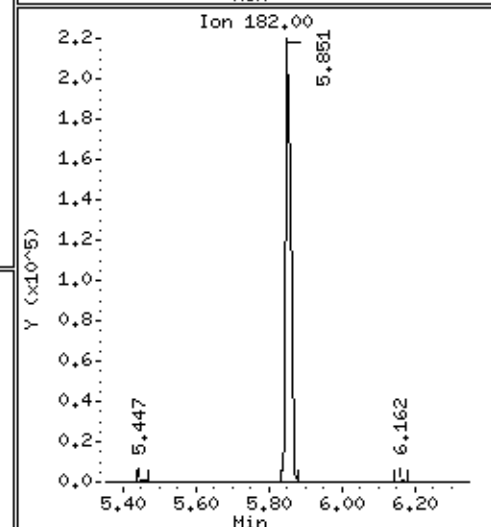
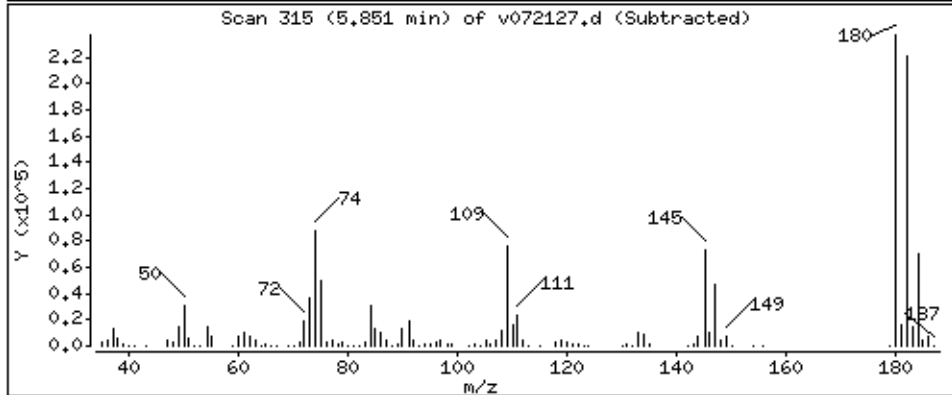
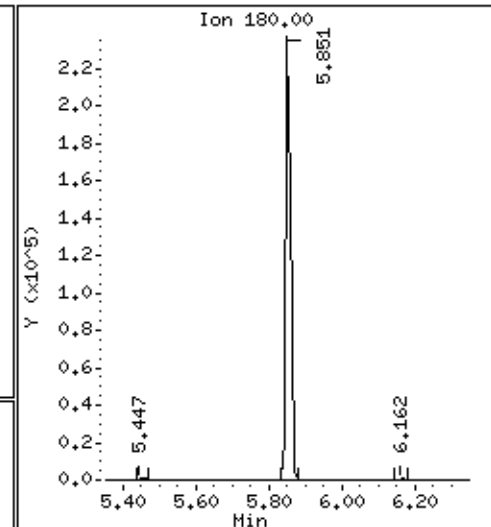
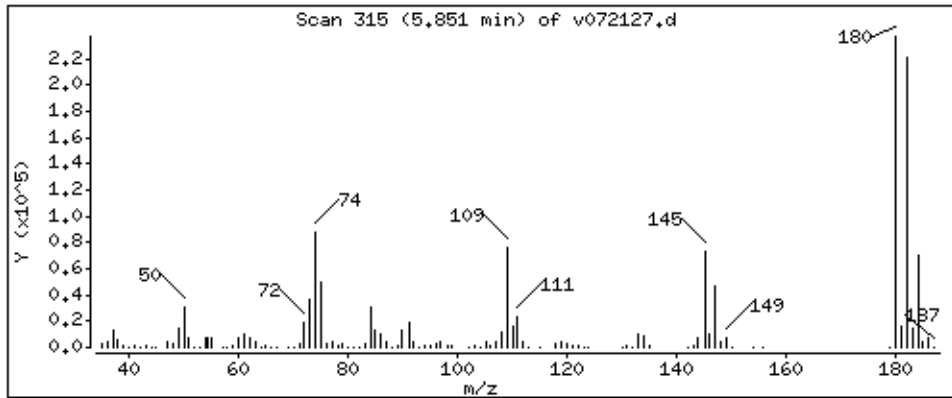
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 37.12 ug



Date : 21-JUL-2009 21:26

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907252B/253B-LCS;LCS

Volume Injected (uL): 1.0

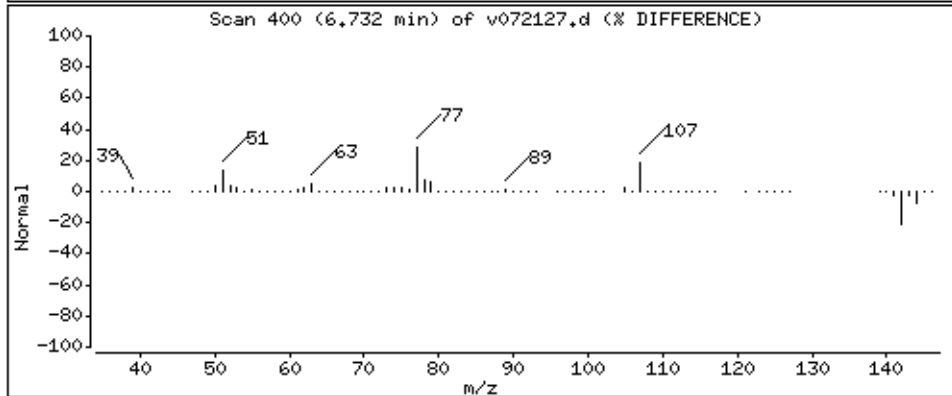
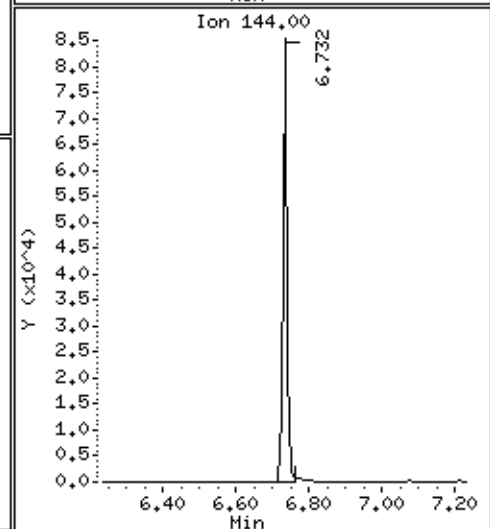
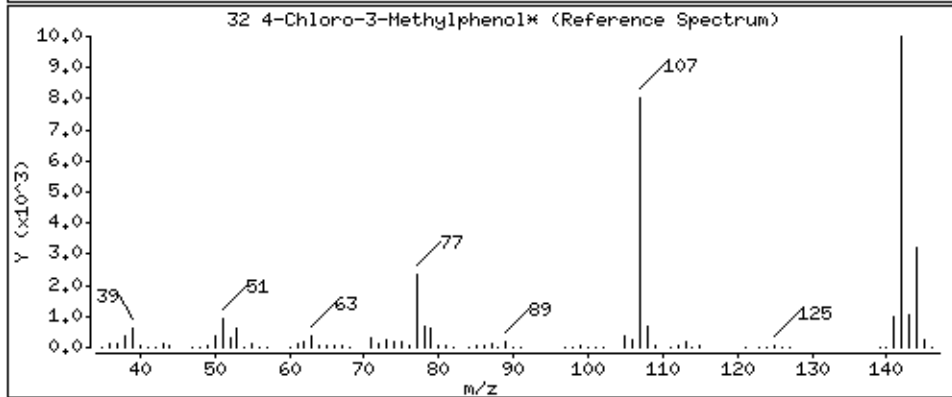
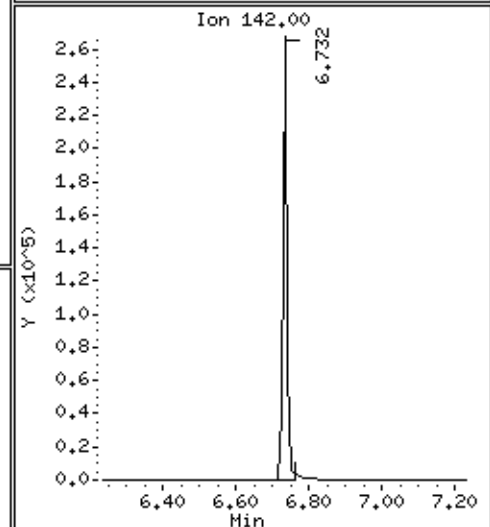
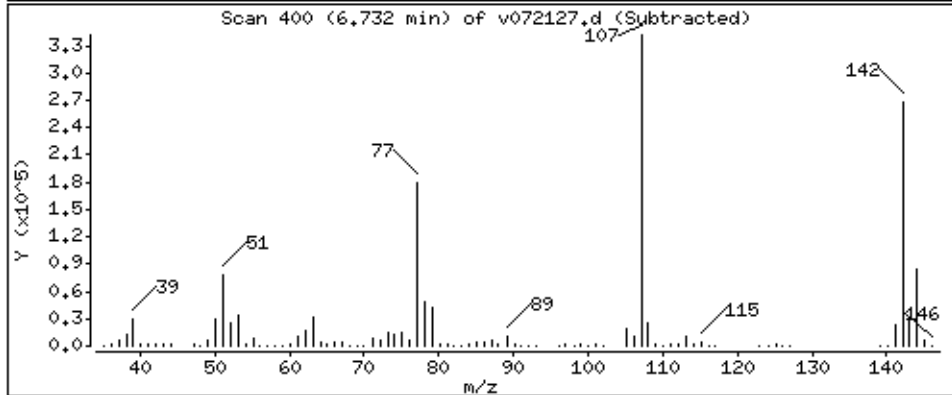
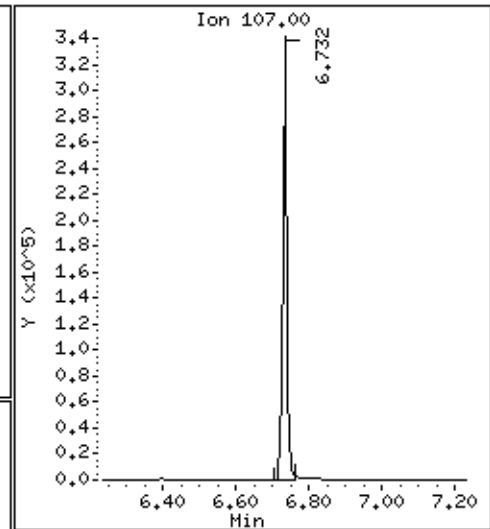
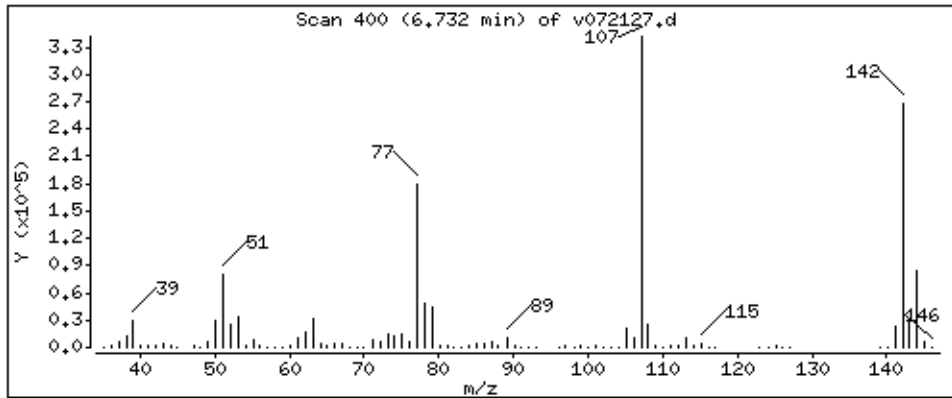
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

32 4-Chloro-3-Methylphenol\*

Concentration: 45.99 ug



Date : 21-JUL-2009 21:26

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907252B/253B-LCS;LCS

Volume Injected (uL): 1.0

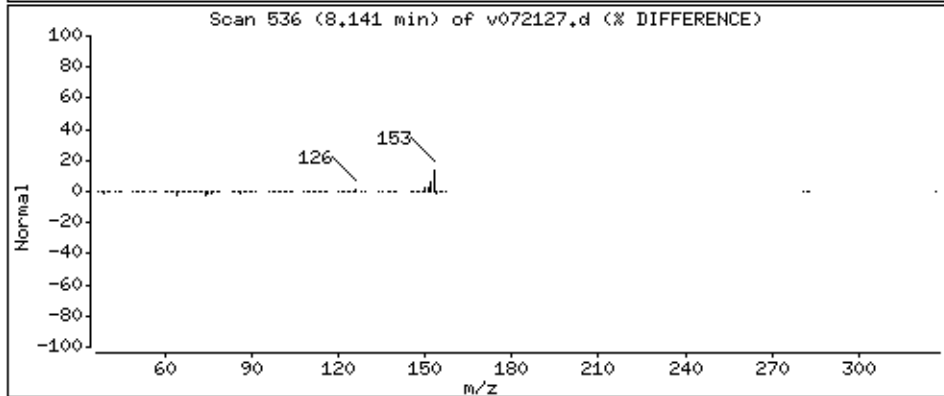
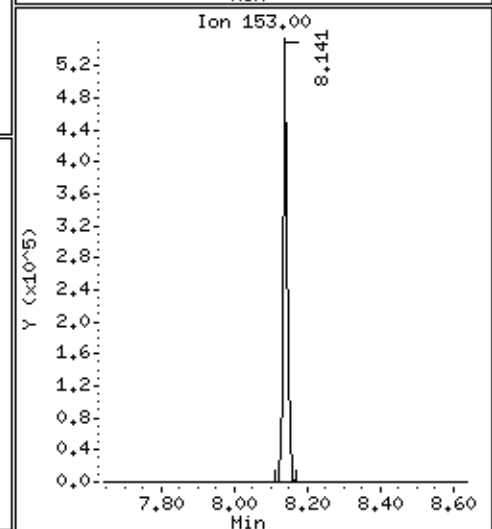
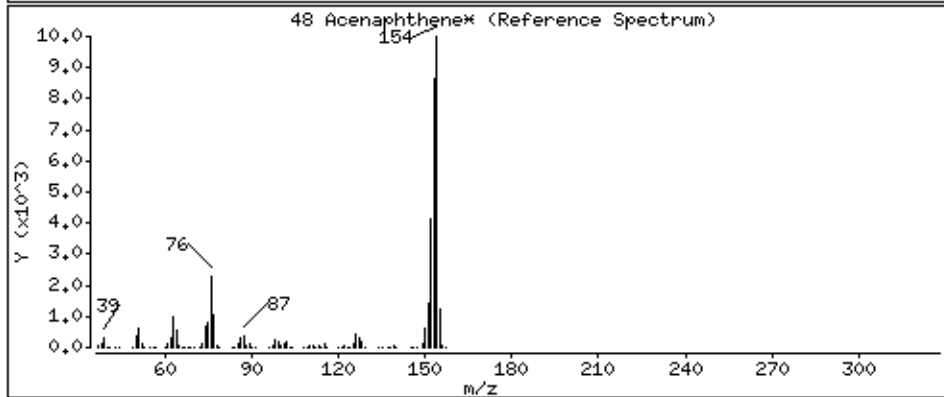
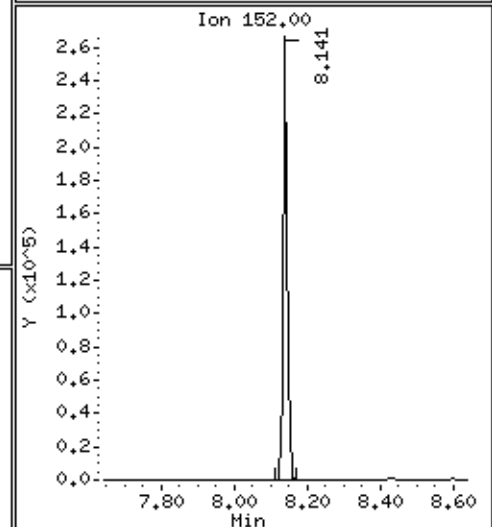
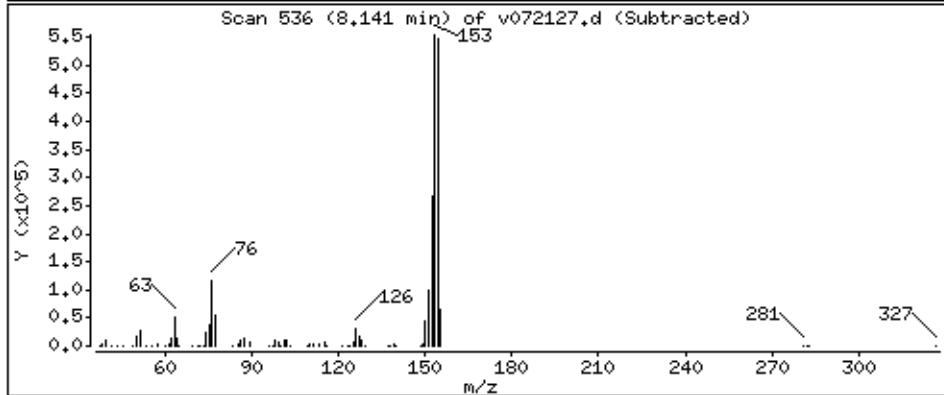
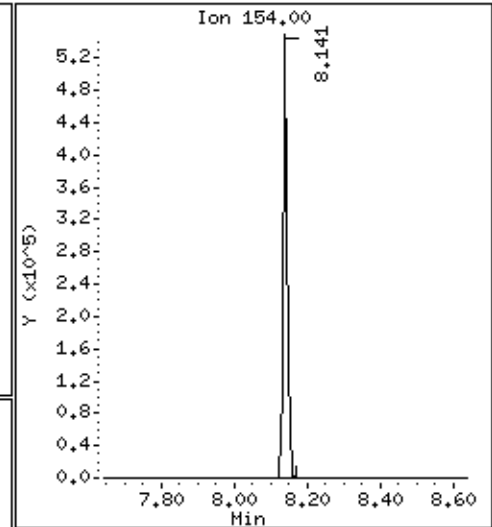
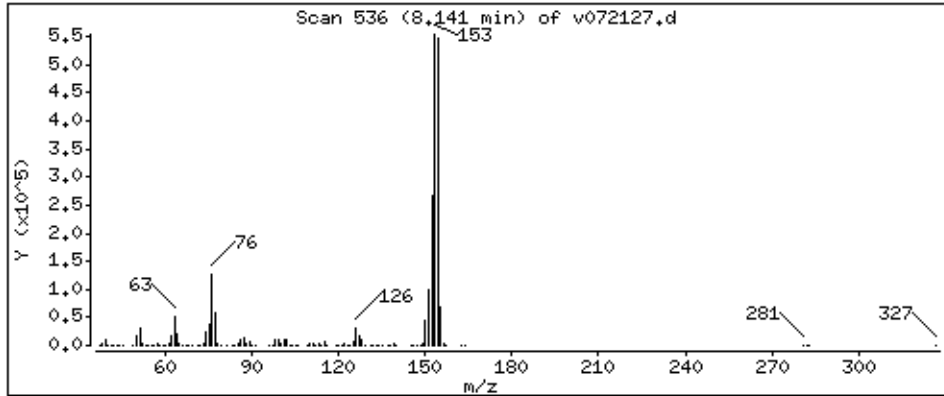
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

48 Acenaphthene\*

Concentration: 37.18 ug





Date : 21-JUL-2009 21:26

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907252B/253B-LCS;LCS

Volume Injected (uL): 1.0

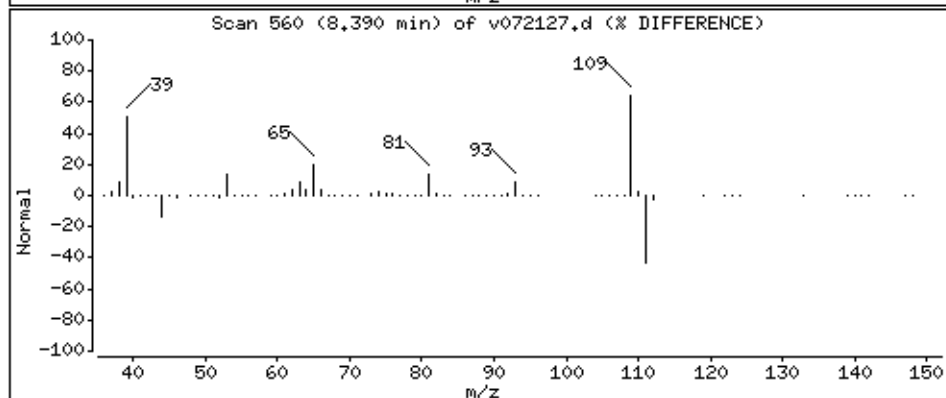
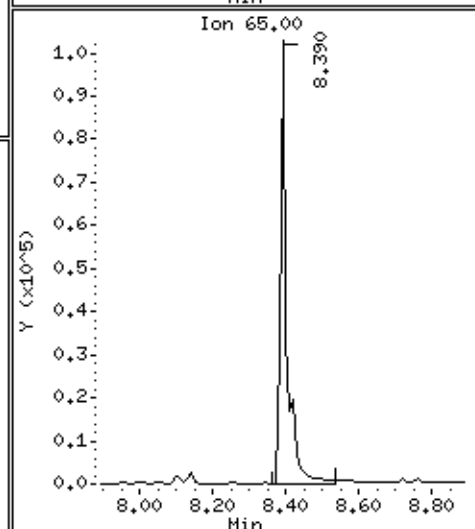
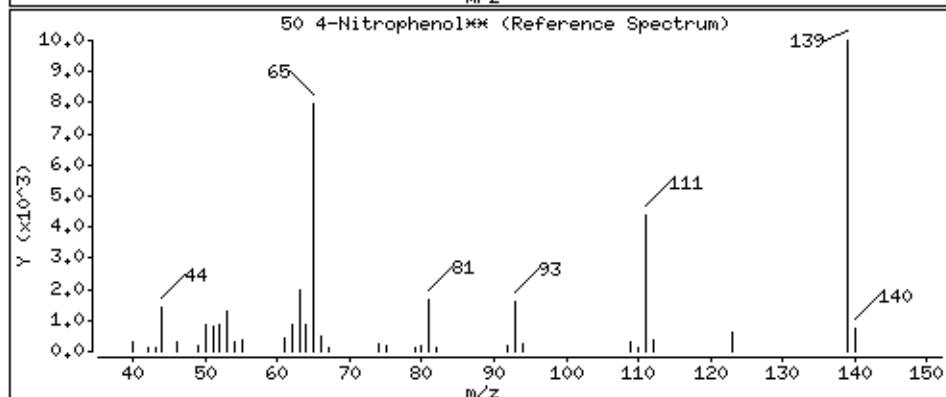
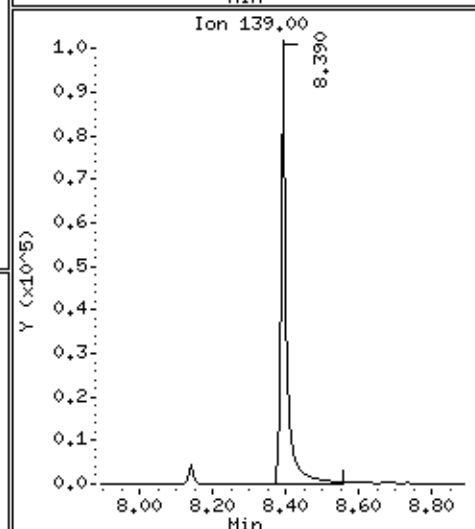
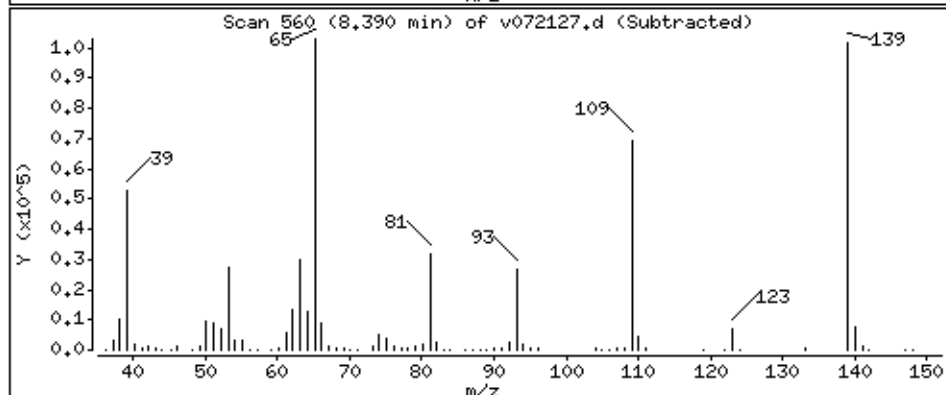
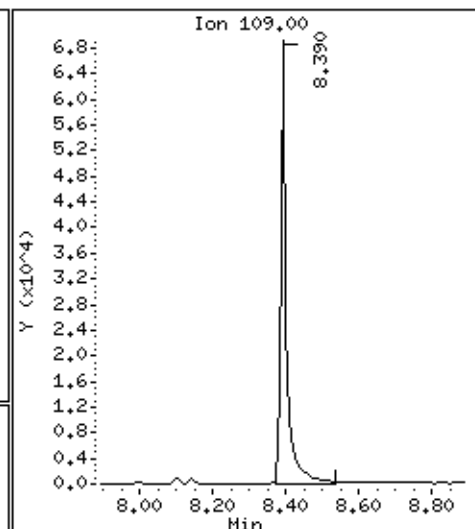
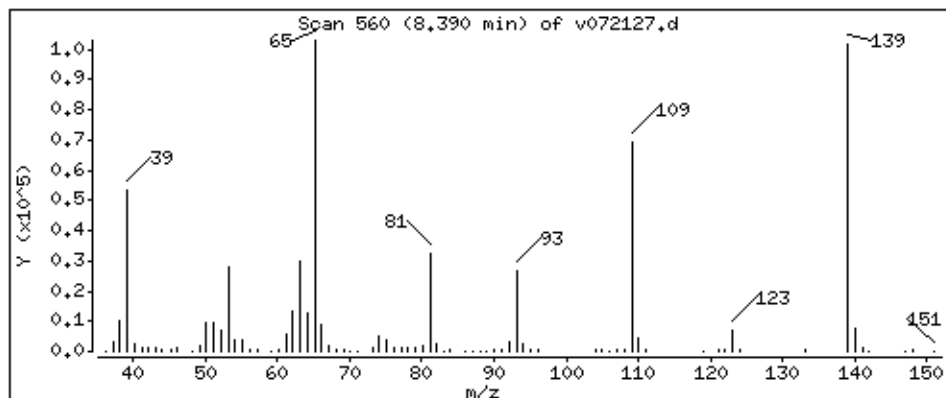
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

50 4-Nitrophenol\*\*

Concentration: 36.10 ug



Date : 21-JUL-2009 21:26

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907252B/253B-LCS;LCS

Volume Injected (uL): 1.0

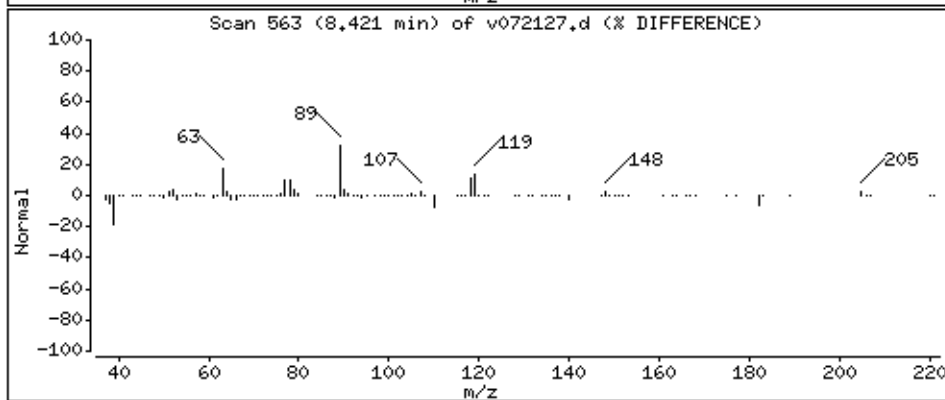
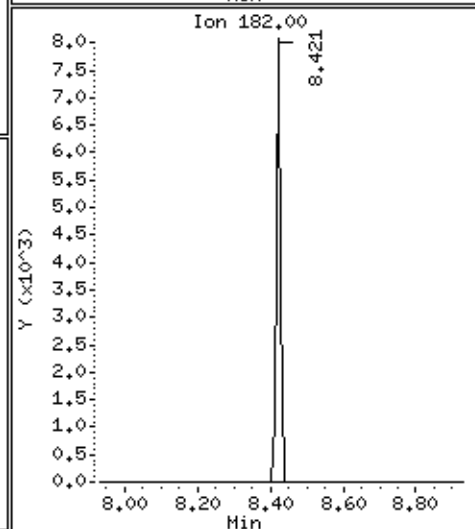
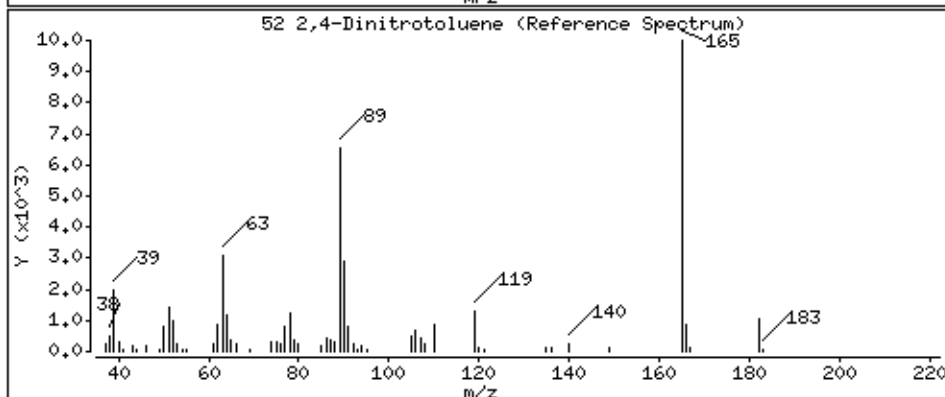
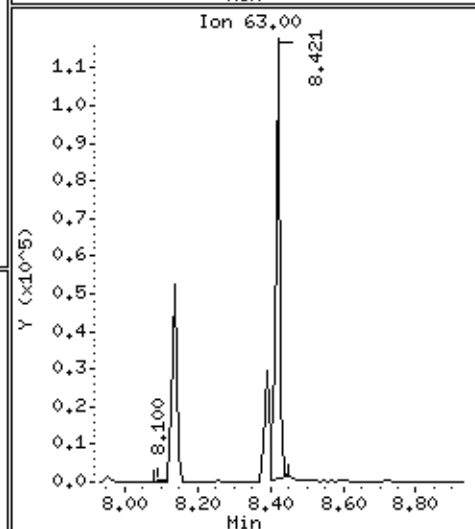
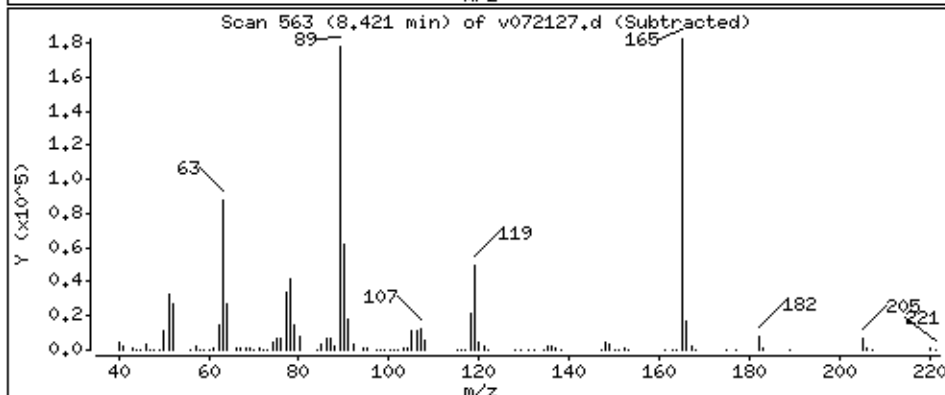
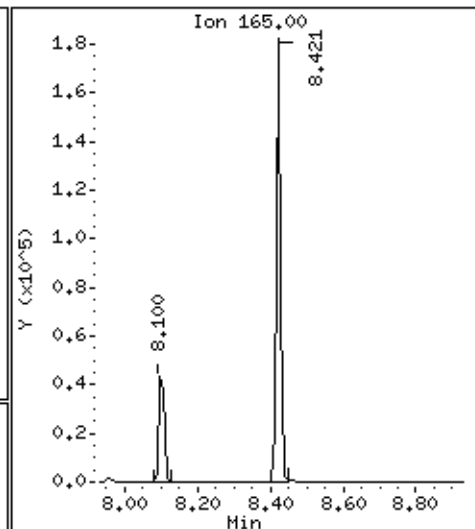
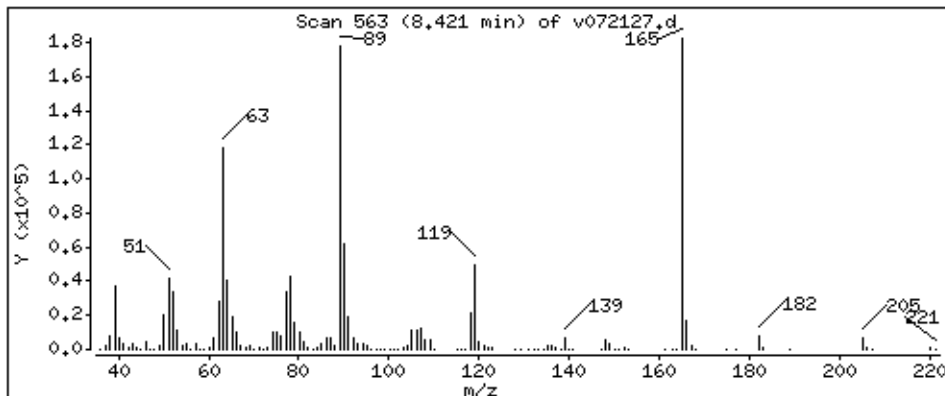
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

52 2,4-Dinitrotoluene

Concentration: 38.96 ug



Date : 21-JUL-2009 21:26

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907252B/253B-LCS;LCS

Volume Injected (uL): 1.0

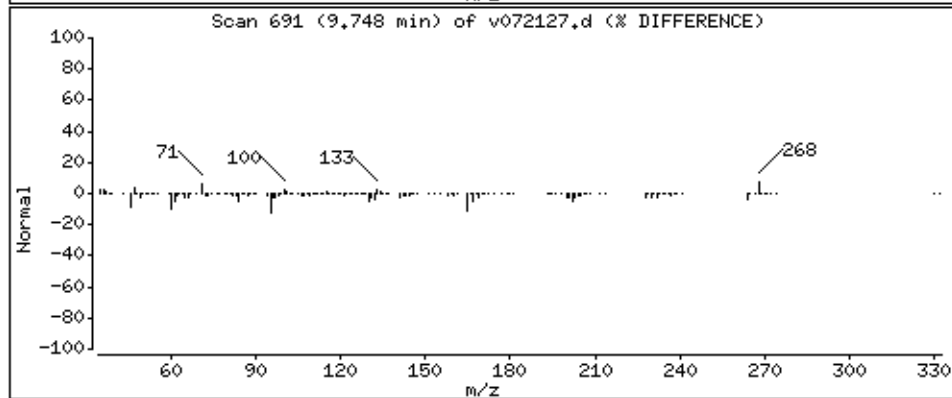
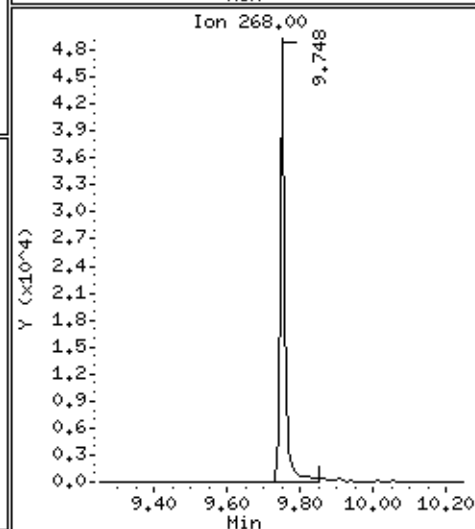
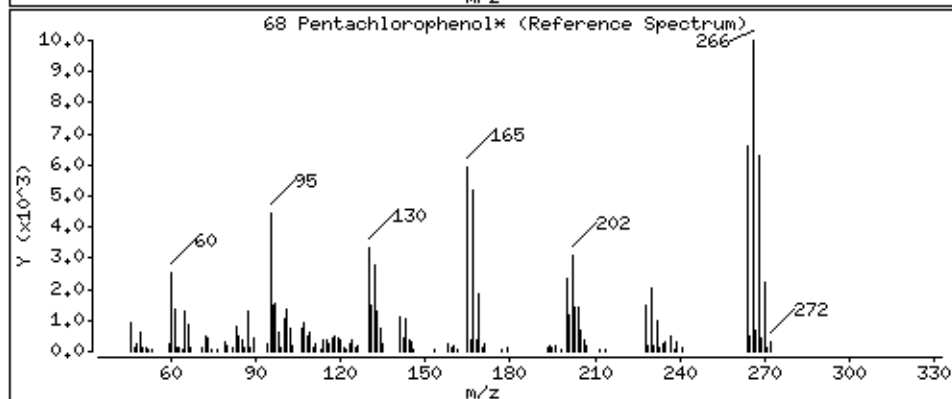
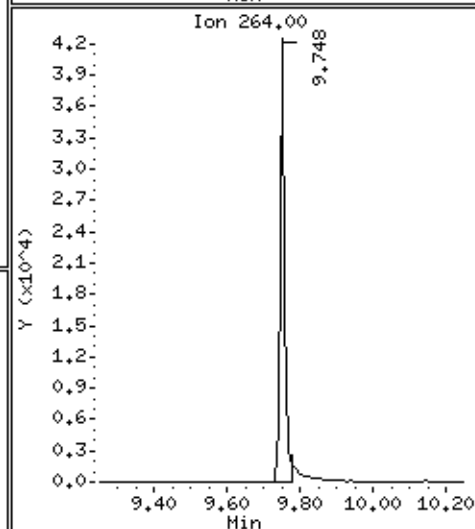
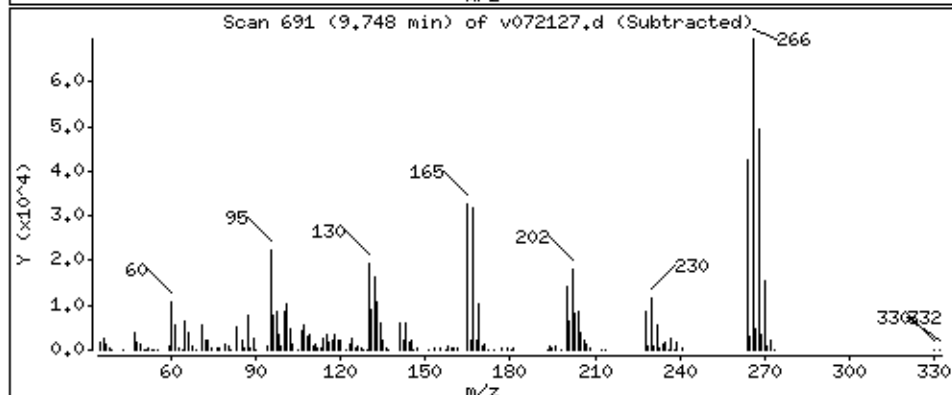
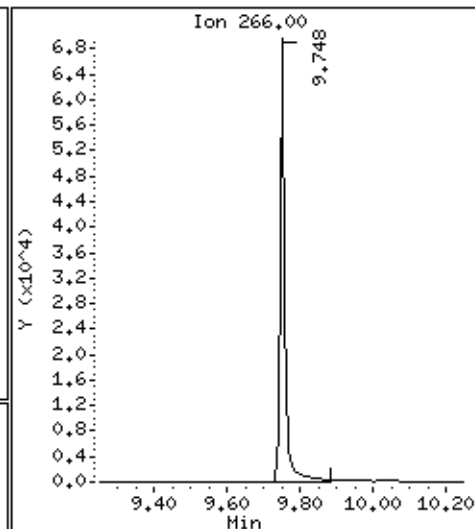
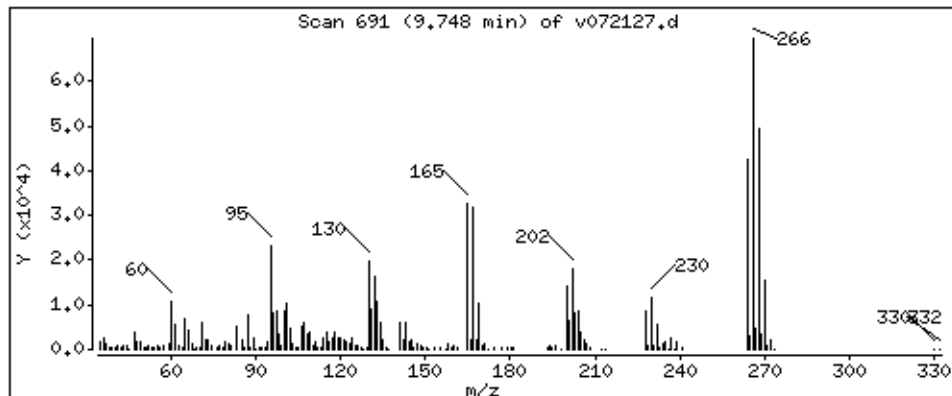
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

68 Pentachlorophenol\*

Concentration: 39.28 ug



Date : 21-JUL-2009 21:26

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907252B/253B-LCS;LCS

Volume Injected (uL): 1.0

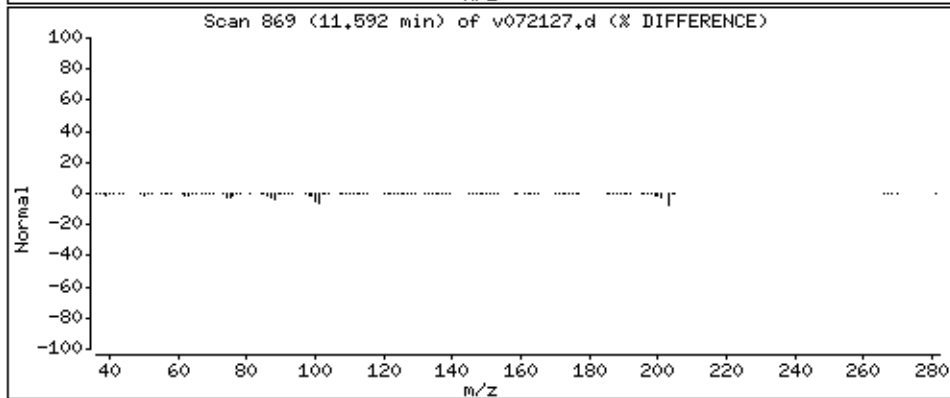
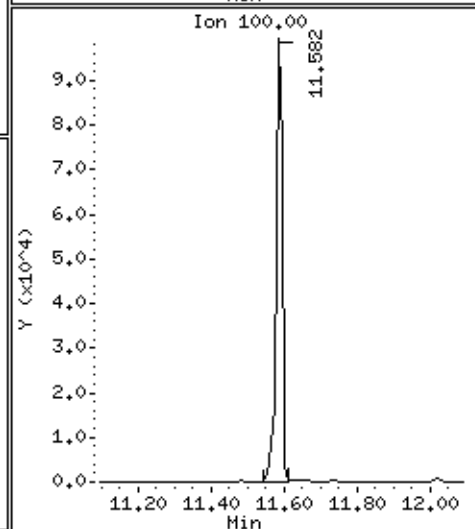
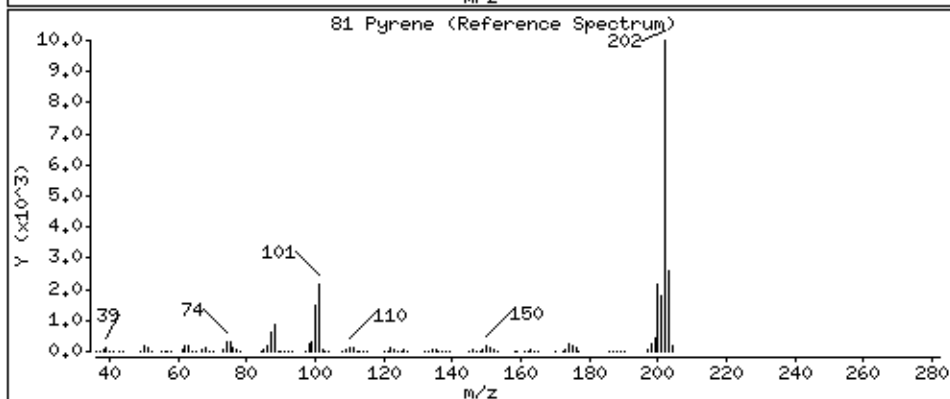
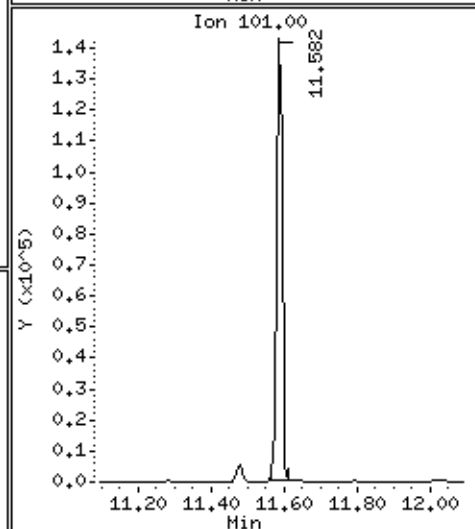
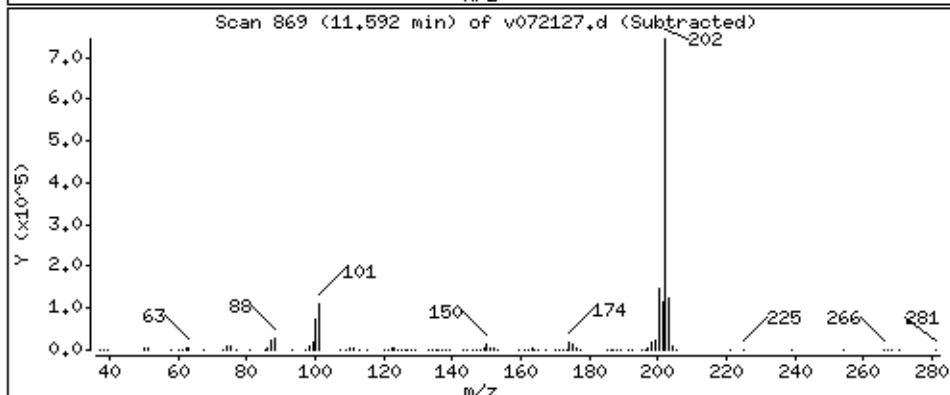
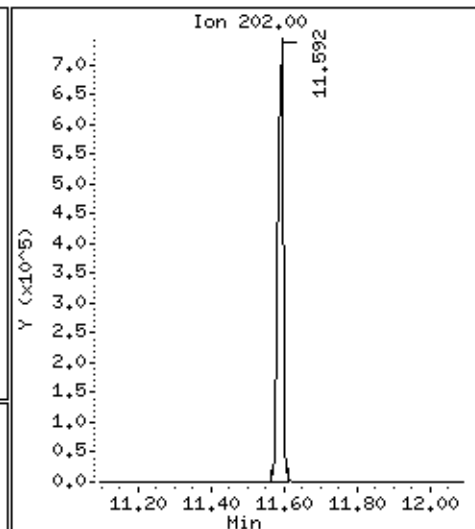
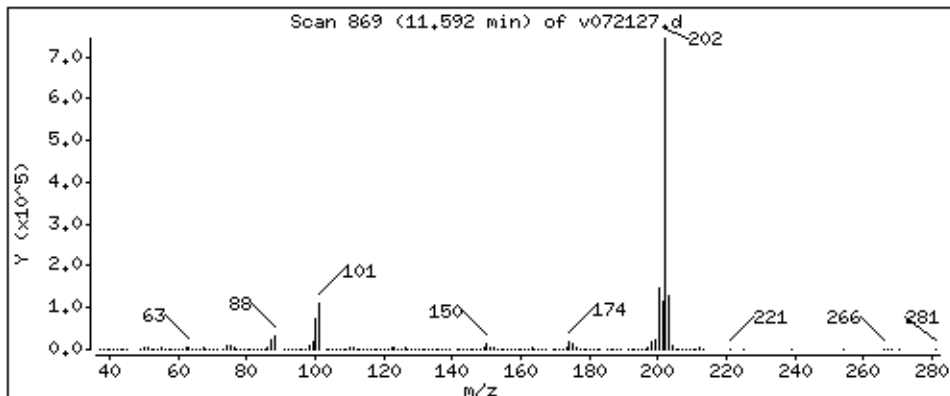
Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

81 Pyrene

Concentration: 40.56 ug



Solvent: Dichloromethane  
Solvent Lot #: 090321  
Concentrated By: MJS  
Date Concentrated: 7/17/08

Water Bath Temperature °C	Initial Temp °C	Final Temp °C
	56°	67°

Revised: 04/09

Method: TO13A TO13AS 1m  
m/z ION ABUNDANCE CRITERIA

% RELATIVE ABUNDANCE

198	Base peak, 100.00% relative abundance	100.00
51	30.00 - 60.00% of mass 198	53.71
68	Less than 2.00% of mass 69	0.00 (0.00 ) 1
69	Less than 99.90% of mass 198	51.02
70	Less than 2.00% of mass 69	0.00 (0.00 ) 1
127	40.00 - 60.00% of mass 198	57.77
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.63
275	10.00 - 30.00% of mass 198	19.88
365	Greater than 1.00% of mass 198	2.34
441	Present, but less than mass 443	8.85
442	40.00 - 100.00% of mass 198	61.69
443	17.00 - 23.00% of mass 442	11.59 (18.79 ) 2

1 - value in parenthesis is % mass 69 2 - value in parenthesis is % mass 442

Instrument ID: MSD-V  
DFTPP File ID: V072115  
DFTPP Injection Date: 7/21/09  
DFTPP Injection Time: 1541

1685-123A-1m10		Sim: 1685-123-100
IS#	Area Counts	Area
1,4-Dichlorobenzene-d <sub>4</sub>	279073	NA
Naphthalene-d <sub>8</sub>	666869	41134
Acenaphthene-d <sub>10</sub>	316636	18338
Phenanthrene-d <sub>10</sub>	583267	33005
Chrysene-d <sub>12</sub>	493051	25794
Perylene-d <sub>12</sub>	360565	17623

Injection Volume: 1.0 µL

U S E	File #	Sample / Client Name	Vial #	Dilution Factor	Date Analyzed	Time Analyzed	Initials	Comments
1	✓ V072114	DCM Wash	1	1.0	7/21/09	1524	nmj/s	
2	✓ 15	1685-100-50	2			1541		
3	✓ 16	1685-171-50	3			1600		ECV
4	✓ 17	1685-180-4	4			1639		SimCCV
5	✓ 18	DCM Blank: Sim	5			1707		
6	✓ 19	0907240B - Blank	6			1750		
7	✓ 20	- LCS	7			1817		
8	✓ 21	- OIA	8			1845		
9	✓ 22	- O2A	9			1912		
10	✓ 23	- O3A	10			1939		
11	✓ 24	↓ - O4A	11			2007		
12	✓ 25	DCM Blank	12			2032		
13	✓ 26	0907252B - Blank	13			2059		
14	✓ 27	↓ - LCS	14			2126		
15	✓ 28	0907252B - O3A	15			2154		
16	✓ 29	↓ - O6A	16			2221		
17	✓ 30	0907253B - O3A	17			2248		
18	✓ 31	↓ - O6A	18			2315		
19	✓ 32	0907392 - Blank	19		↓	2342		
20	✓ 33	↓ - LCS	20		7/22/09	0009		
21	✓ 34	0907322 - OIA	21			0036		
22	✓ ↓ 35	0907392 - OIA	22	↓	↓	0103	↓	

Calculation Check:

$$\text{ng of compound} = \frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}} = \frac{444105}{279073} \times \frac{40.0}{1.24740} = 51.03 \checkmark$$

File ID: V072116

Compound: phenol

Initials: nmj

Signed: [Signature]

Date: 7/22/09

... cont'd pg. 13

Method: TOGA / SIM

m/z ION ABUNDANCE CRITERIA

% RELATIVE ABUNDANCE

198	Base peak, 100.00% relative abundance	
51	30.00 - 60.00% of mass 198	
68	Less than 2.00% of mass 69	( ) 1
69	Less than 99.90% of mass 198	
70	Less than 2.00% of mass 69	( ) 1
127	40.00 - 60.00% of mass 198	
197	Less than 1.00% of mass 198	
199	5.00 - 9.00% of mass 198	
275	10.00 - 30.00% of mass 198	
365	Greater than 1.00% of mass 198	
441	Present, but less than mass 443	
442	40.00 - 100.00% of mass 198	( ) 1
443	17.00 - 23.00% of mass 442	( ) 2

Instrument ID: MSD-V

DFTPP File ID:

DFTPP Injection Date:

DFTPP Injection Time:

IS#	Area Counts
1,4-Dichlorobenzene-d <sub>4</sub>	
Naphthalene-d <sub>8</sub>	
Acenaphthene-d <sub>10</sub>	
Phenanthrene-d <sub>10</sub>	
Chrysene-d <sub>12</sub>	
Perylene-d <sub>12</sub>	

Injection Volume: 1.0 µL

1 - value in parenthesis is % mass 69 2 - value in parenthesis is % mass 442

See Header info pg.12

#	File #	Sample / Client Name	Vial #	Dilution Factor	Date Analyzed	Time Analyzed	Initials	Comments
1	✓ V072136	0907392-01AA	22	1.0	7/22/09	0130	RMW	
2	✓ 37	-02A	23	↓	↓	0157	↓	
3	✓ 38	-03A	24	↓	↓	0224	↓	
4	✓ 39	-04A	25	↓	↓	0251	↓	
5	✓ 40	Dcm Blank	26	↓	↓	0318	↓	
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								

## Calculation Check:

$$\text{ng of compound} = \frac{\text{Area}_{\text{sample}}}{\text{Area}_{\text{is}}} \times \frac{\text{Conc.}_{\text{is}}}{\text{RRF}} = \frac{444105}{279073} \times \frac{40.0}{1.24740} = 51.03$$

File ID: V072116  
Compound: phenol  
Initials: RMW

Date

7/22/09

Air Toxics Ltd.

Data file : /chem/msdv.i/16Jul2009.b/v071605.d  
Lab Smp Id: DFTPP 50ngClient Smp ID: DFTPP 50ng  
Inj Date : 16-JUL-2009 14:19  
Operator : rnInst ID: msdv.i  
Smp Info : ;1685-10C-50;  
Misc Info :  
Comment :  
Method : /chem/msdv.i/16Jul2009.b/dftpp.m  
Meth Date : 04-May-2009 14:11 rnoonanQuant Type: ISTD  
Cal Date :Cal File:  
Als bottle: 2QC Sample: DFTPP  
Dil Factor: 1.00000  
Integrator: HP RTECompound Sublist: all.sub  
Target Version: 3.50Sample Matrix: AIR  
Processing Host: eeyore

Concentration Formula: Amt \* DF \* Uf \* Vf \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor

Cpnd VariableLocal Compound Variable

CONCENTRATIONS								
		ON-COL		FINAL				
RT	EXP RT	(REL RT)	MASS	RESPONSE	( ug/L)	( ug)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====
1 dftpp				CAS #:				
5.232	5.502	(0.000)	198	19894			100.00- 100.00	100.00
5.232	5.502	(0.000)	51	11246			30.00- 60.00	56.53
5.232	5.502	(0.000)	68	69			0.00- 2.00	0.69
5.232	5.502	(0.000)	69	10043			0.00- 99.90	50.48
5.232	5.502	(0.000)	70	0			0.00- 2.00	0.00
5.232	5.502	(0.000)	127	11640			40.00- 60.00	58.51
5.232	5.502	(0.000)	197	0			0.00- 1.00	0.00
5.232	5.502	(0.000)	199	1306			5.00- 9.00	6.56
5.232	5.502	(0.000)	275	4085			10.00- 30.00	20.53
5.232	5.502	(0.000)	365	474			1.00- 0.00	2.38
5.232	5.502	(0.000)	441	1795			0.01- 99.99	76.97
5.232	5.502	(0.000)	442	12170			40.00- 100.00	61.17
5.232	5.502	(0.000)	443	2332			17.00- 23.00	19.16



Date : 16-JUL-2009 14:19

Client ID: DFTPP 50ng

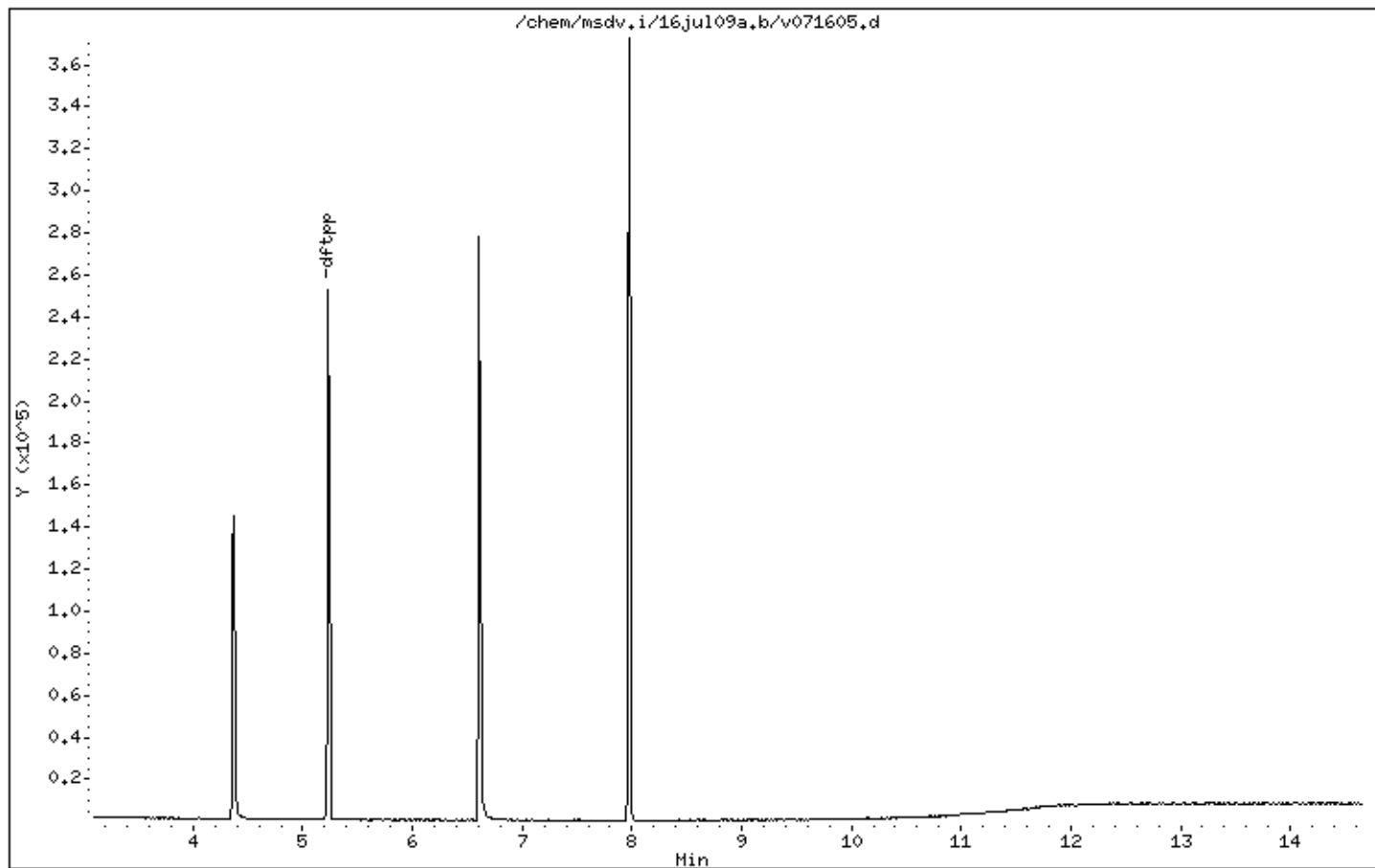
Instrument: msdv.i

Sample Info: ;1685-10C-50;

Operator: rn

Column phase:

Column diameter: 0.25



Date : 16-JUL-2009 14:19

Client ID: DFTPP 50ng

Instrument: msdv.i

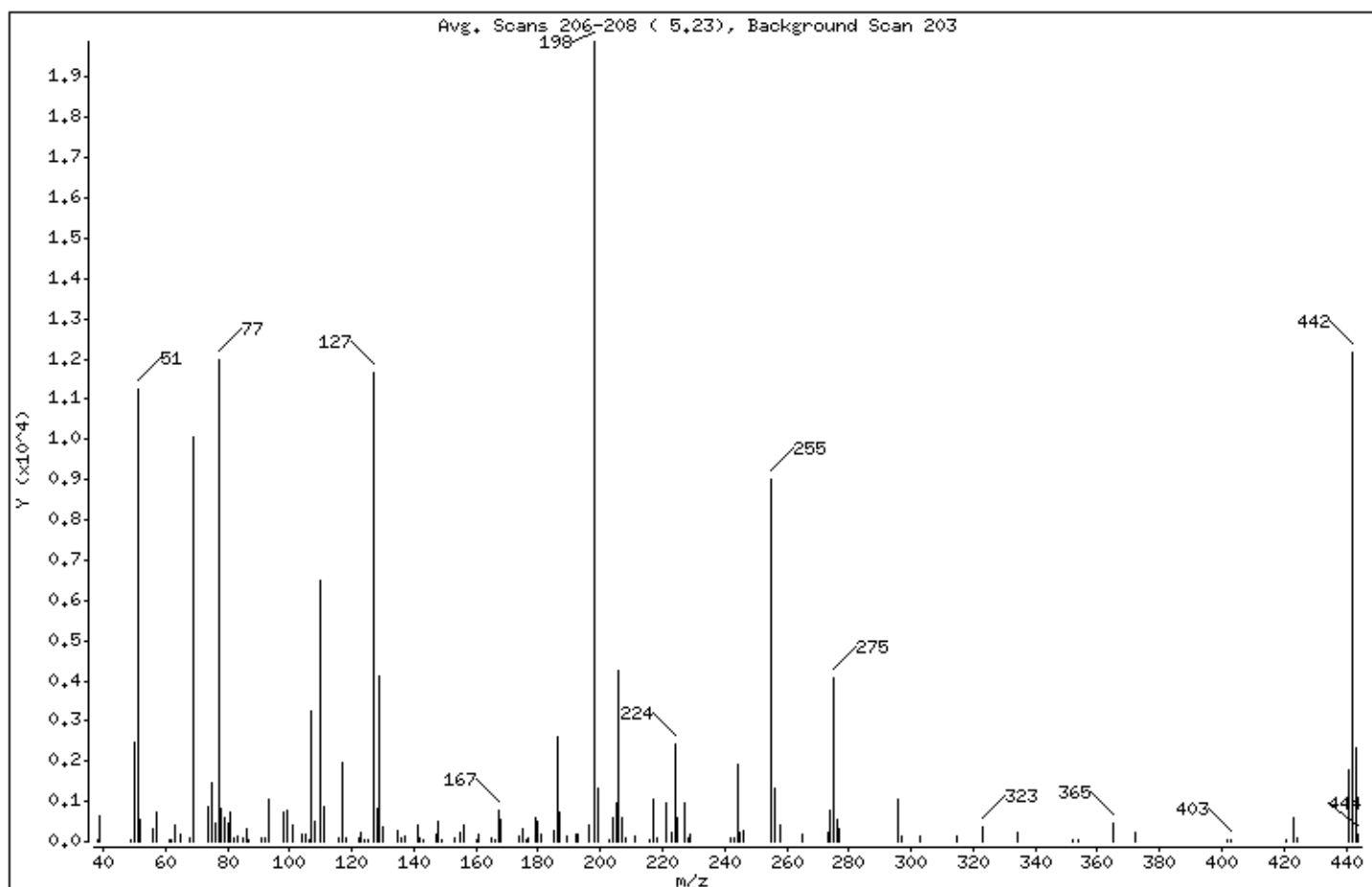
Sample Info: 1685-10C-50;

Operator: rn

Column phase:

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	56.53
68	Less than 2.00% of mass 69	0.35 ( 0.69)
69	Less than 99.90% of mass 198	50.48
70	Less than 2.00% of mass 69	0.00 ( 0.00)
127	40.00 - 60.00% of mass 198	58.51
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.56
275	10.00 - 30.00% of mass 198	20.53
365	Greater than 1.00% of mass 198	2.38
441	Present, but less than mass 443	9.02
442	40.00 - 100.00% of mass 198	61.17
443	17.00 - 23.00% of mass 442	11.72 ( 19.16)



Air Toxics Ltd.

Data file : /chem/msdv.i/21Jul2009.b/v072115.d

Lab Smp Id: DFTPP 50ng

Client Smp ID: DFTPP 50ng

Inj Date : 21-JUL-2009 15:41

Operator : rn

Inst ID: msdv.i

Smp Info : ;1685-10C-50;

Misc Info :

Comment :

Method : /chem/msdv.i/21Jul2009.b/dftpp.m

Meth Date : 04-May-2009 14:11 rnoonan

Quant Type: ISTD

Cal Date :

Cal File:

Als bottle: 2

QC Sample: DFTPP

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: all.sub

Target Version: 3.50

Sample Matrix: AIR

Processing Host: eeyore

Concentration Formula: Amt \* DF \* Uf \* Vf \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor

Cpnd Variable

Local Compound Variable

CONCENTRATIONS									
		ON-COL		FINAL					
RT	EXP RT	(REL RT)	MASS	RESPONSE	( ug/L)	( ug)	TARGET	RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 dftpp						CAS #:			
5.211	5.502	(0.000)	198	13776			100.00-	100.00	100.00
5.211	5.502	(0.000)	51	7399			30.00-	60.00	53.71
5.211	5.502	(0.000)	68	0			0.00-	2.00	0.00
5.211	5.502	(0.000)	69	7028			0.00-	99.90	51.02
5.211	5.502	(0.000)	70	0			0.00-	2.00	0.00
5.211	5.502	(0.000)	127	7958			40.00-	60.00	57.77
5.211	5.502	(0.000)	197	0			0.00-	1.00	0.00
5.211	5.502	(0.000)	199	913			5.00-	9.00	6.63
5.211	5.502	(0.000)	275	2739			10.00-	30.00	19.88
5.211	5.502	(0.000)	365	323			1.00-	0.00	2.34
5.211	5.502	(0.000)	441	1219			0.01-	99.99	76.33
5.211	5.502	(0.000)	442	8498			40.00-	100.00	61.69
5.211	5.502	(0.000)	443	1597			17.00-	23.00	18.79

Date : 21-JUL-2009 15:41

Client ID: DFTPP 50ng

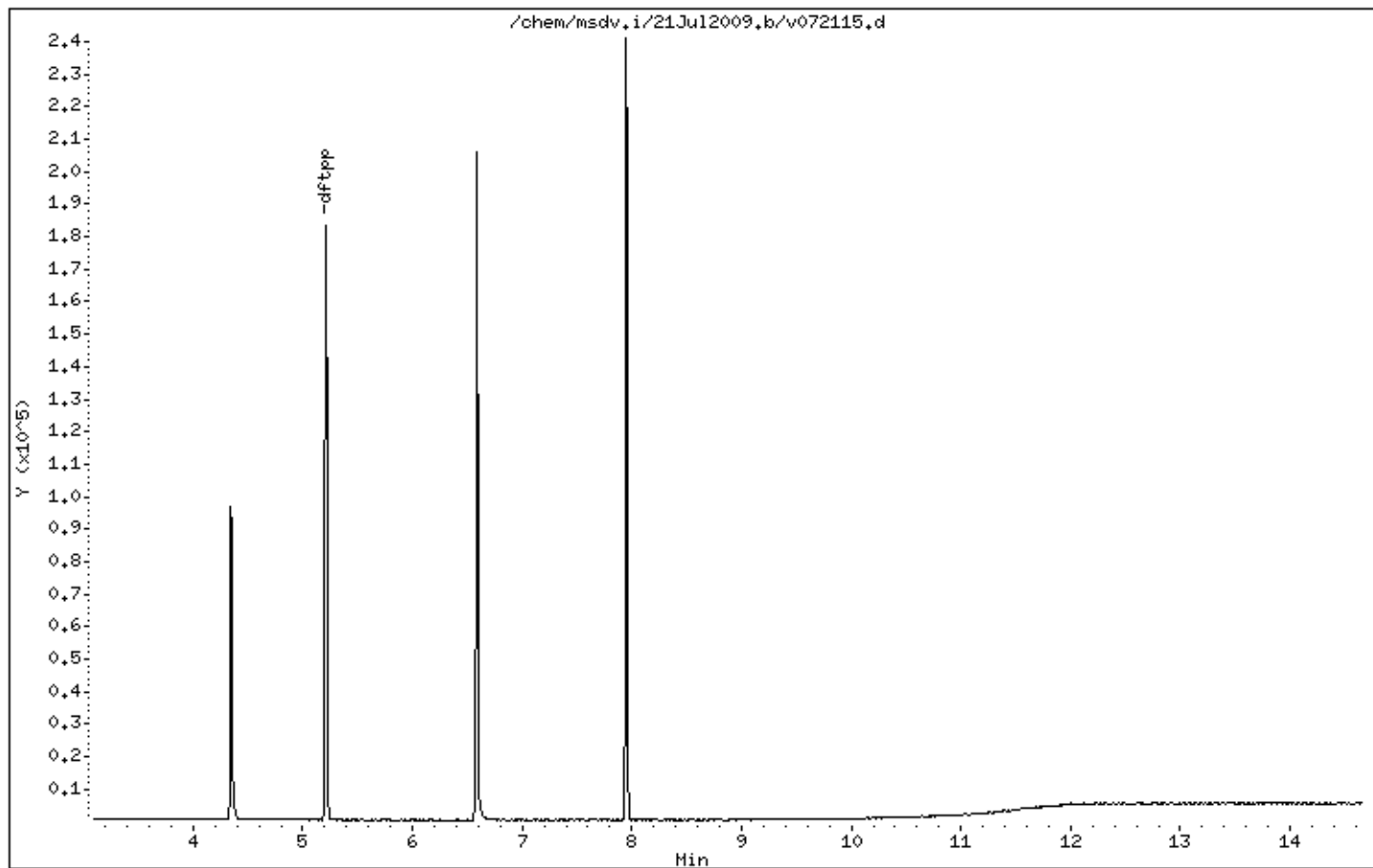
Instrument: msdv.i

Sample Info: ;1685-10C-50;

Operator: rn

Column phase:

Column diameter: 0.25



Date : 21-JUL-2009 15:41

Client ID: DFTPP 50ng

Instrument: msdv.i

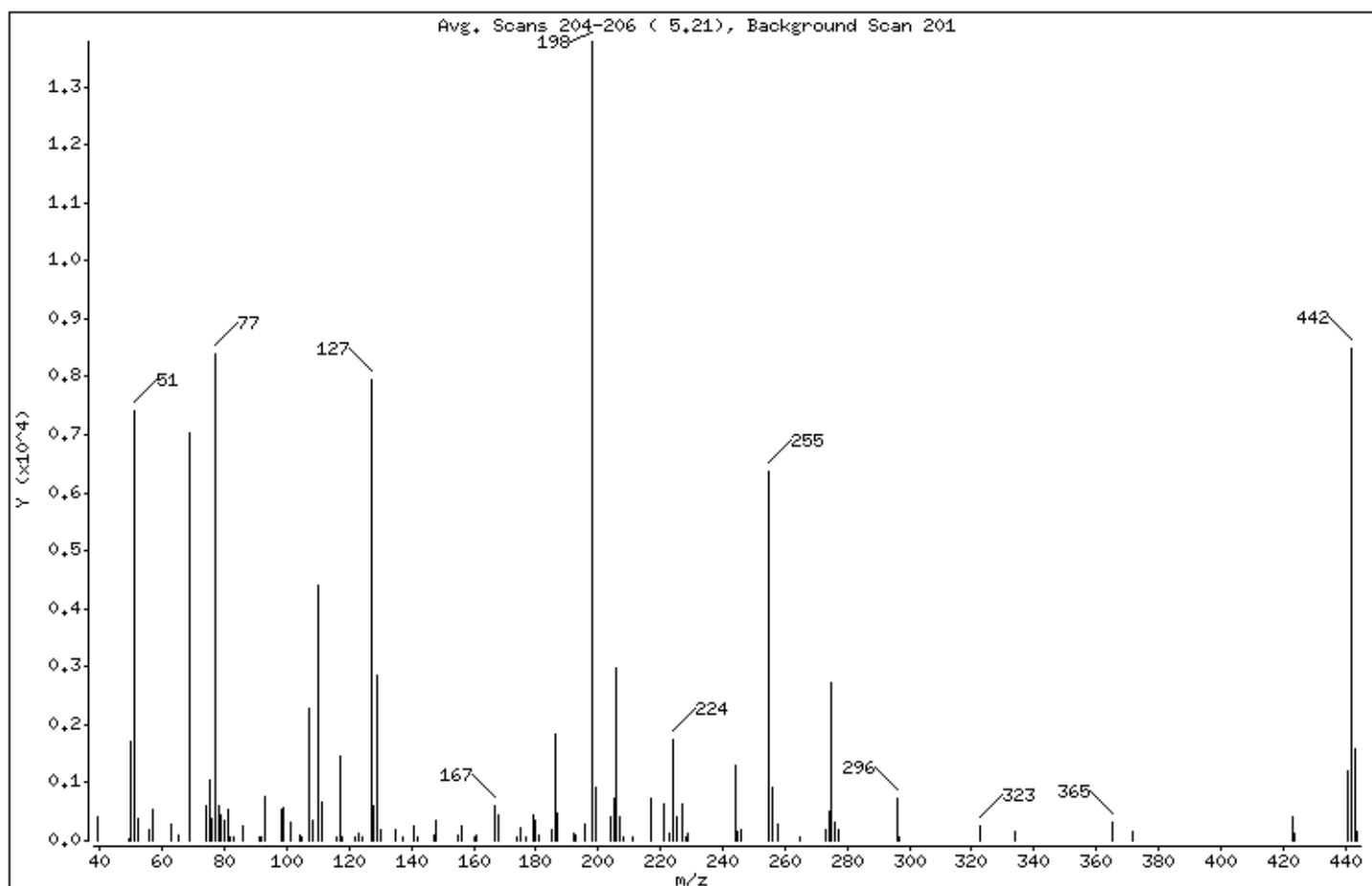
Sample Info: ;1685-10C-50;

Operator: rn

Column phase:

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	53.71
68	Less than 2.00% of mass 69	0.00 ( 0.00)
69	Less than 99.90% of mass 198	51.02
70	Less than 2.00% of mass 69	0.00 ( 0.00)
127	40.00 - 60.00% of mass 198	57.77
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.63
275	10.00 - 30.00% of mass 198	19.88
365	Greater than 1.00% of mass 198	2.34
441	Present, but less than mass 443	8.85
442	40.00 - 100.00% of mass 198	61.69
443	17.00 - 23.00% of mass 442	11.59 ( 18.79)

Date : 21-JUL-2009 15:41

Client ID: DFTPP 50ng

Instrument: msdv.i

Sample Info: ;1685-10C-50;

Operator: rn

Column phase:

Column diameter: 0.25

Data File: v072115.d

Spectrum: Avg. Scans 204-206 ( 5,21), Background Scan 201

Location of Maximum: 198.00

Number of points: 107

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39,00	422	104,00	94	168,00	445	228,00	55
49,00	26	105,00	75	174,00	65	229,00	132
50,00	1721	107,00	2282	175,00	210	244,00	1309
51,00	7399	108,00	353	177,00	55	245,00	146
52,00	380	110,00	4394	179,00	449	246,00	202
56,00	180	111,00	655	180,00	340	255,00	6354
57,00	534	116,00	53	181,00	94	256,00	927
63,00	292	117,00	1471	185,00	202	258,00	283
65,00	94	118,00	63	186,00	1851	265,00	62
69,00	7028	122,00	58	187,00	490	273,00	184
74,00	589	123,00	120	192,00	135	274,00	516
75,00	1033	124,00	54	193,00	82	275,00	2739
76,00	373	127,00	7958	196,00	281	276,00	316
77,00	8398	128,00	592	198,00	13776	277,00	192
78,00	614	129,00	2852	199,00	913	296,00	742
79,00	432	130,00	202	204,00	397	297,00	57
80,00	348	135,00	183	205,00	731	323,00	268
81,00	536	137,00	78	206,00	2988	334,00	147
82,00	68	141,00	243	207,00	424	365,00	323
83,00	73	142,00	58	208,00	50	372,00	155
86,00	248	147,00	81	211,00	59	423,00	413
91,00	60	148,00	341	217,00	719	424,00	112
92,00	64	155,00	104	221,00	624	441,00	1219
93,00	752	156,00	268	223,00	134	442,00	8498
98,00	533	160,00	51	224,00	1731	443,00	1597
99,00	556	161,00	83	225,00	407	444,00	153
101,00	307	167,00	592	227,00	628		

## **Shipping/ Receiving Documents**



**180 Blue Ravine Road, Suite B  
Folsom, CA 95630**

**Phone (916) 985-1000 FAX (916) 985-1020  
Hours 8:00 A.M. to 6:00 P.M. Pacific**

COMPANY: Tetra Tech  
ATTENTION: Mr. Doug Herlocker  
FAX #: \_\_\_\_\_  
FROM: Sample Receiving  
Workorder #: 0907252B  
# of pages (Including Cover): 1

7/23/2009

Thank you for selecting Air Toxics Ltd. We have received your samples and have found no discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Kelly Buettner at 916-985-1020**. ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

# **SORBENT SAMPLE COLLECTION**



## **CHAIN-OF-CUSTODY RECORD**

### **Sample Transportation Notice**

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, state, federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of sample. D.O.T. Hotline (800) 467-4922.

180 BLUE PAVINE ROAD, SUITE B  
FOLSOM, CA 95680-4565  
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

Project Manager Doreen Heberker

Collected by: (Print and Sign) Becki Davis Becki Davis

Company TECHNICAL ENVIRONMENTAL Email becki.davis@technicalenv.com

Address 2880 American Turnpike City CHICO State CA Zip 95926

Phone 916 389 1020 Fax 916 389 1183

### **Project Info:**

P.O. #                     

Project # 103R3333 . 006

Project Name BMI OFFSITE

### **Turn Around Time:**

☒ Normal

☐ Rush

### **Circle Reporting Units:**

ppbv

ppmv

ug/m<sup>3</sup>

mg/m<sup>3</sup>

accuracy

Lab ID	Field Sample I.D. (Location)	Tube # / Cartridge #	Date of Collection	Start Time	End Time	Duration	Final Volume m <sup>3</sup>	Analysis Requested
	07F04-070909		07/09/09	745	1710	9.22	84.89	704A
	07F04-070909			↓	↓	9.21	74.76	704A
08A	07F04-070909			↓	↓	8.13	42.12	703A
	07F03-070909			808	1720	9.33	23.50	704A
	07F03-070909			↓	↓	9.32	67.45	704A
06A	07F03-070909			↓	↓	9.33	79.24	703A
<div style="border: 1px solid black; width: 100%; height: 100%; transform: rotate(180deg);"></div>								
Relinquished by: (signature) <u>Becki Davis</u> Date/Time <u>7/10/09 1800</u>		Received by: (signature) <u>A. Davis</u> Date/Time <u>7/10/09 0855</u>		<b>Pump Calibration Information</b> Pre-test Flow Rate: <u>                    </u> Post-test Flow Rate: <u>                    </u> Average Flow Rate: <u>                    </u>				
Relinquished by: (signature) <u>                    </u> Date/Time <u>                    </u>		Received by: (signature) <u>                    </u> Date/Time <u>                    </u>		<b>Notes:</b> <u>                    </u> <u>                    </u> <u>                    </u>				
Lab Use	Shipper Name	Air Bill #	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #		
Only	<u>Field</u>		<u>6.7</u>	<u>Good</u>	<u>Yes</u> <u>No</u> <u>None</u>	<u>0907252</u>		

## SAMPLE RECEIPT SUMMARY

### WORKORDER 0907252B

**Client**

Mr. Doug Herlocker  
Tetra Tech  
3380 Americana Terrace, Suite 201  
Boise, ID 83706

**Phone**

208-389-1030

**Fax**

**Date Promised:** 07/28/09

**Date Completed:** 7/23/09

**Date Received:** 7/14/09

**PO#:** 103P0333.005

**Project#:** 103P0333.006 BMI OFFSITE

**Sales Rep:** JJM

**Total \$:** \$ 450.00

**Logged By:** MG

<u>Fraction</u>	<u>Sample #</u>	<u>Analysis</u>	<u>Collected</u>	<u>Amount\$</u>
03A	OFF04-070909	Modified TO-13A	7/9/2009	\$225.00
06A	OFF03-070909	Modified TO-13A	7/9/2009	\$225.00
07A	Lab Blank	Modified TO-13A	NA	\$0.00
08A	LCS	Modified TO-13A	NA	\$0.00

**Note:** Samples received after 3 P.M. PST are considered to be received on the following work day.  
Atlas Project Name/Profile#: Las Vegas Phase III/12356

**BILL TO:** Mr. Doug Herlocker  
Tetra Tech  
3380 Americana Terrace, Suite 201  
Boise, ID 83706

Analysis Code: TO-13A

**TERMS:** NET 45

Reporting Method: Modified TO-13A (rev. 2001)

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630  
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

## **Other Records**

Air Toxics Ltd.

Performance Check for 8270C

Data file : /chem/msdv.i/21Jul2009.b/v072115a.d  
Lab Smp Id: DFTPP 50ng Client Smp ID: Breakdown  
Inj Date : 21-JUL-2009 15:41  
Operator : rn Inst ID: msdv.i  
Smp Info : ;1685-10C-50;  
Misc Info :  
Comment :  
Method : /chem/msdv.i/21Jul2009.b/BREAK.m  
Meth Date : 21-Jul-2009 15:56 rnoonan Quant Type: ESTD  
Cal Date : 20-OCT-2004 08:05 Cal File: p102001a.d  
Vials bottle: 2 QC Sample: DFTPP  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: all.sub  
Target Version: 3.50  
Processing Host: eeyore

Concentration Formula: Amt \* DF \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN ( area)	FINAL ( ug)
1 Total DDT				312532	13.0051	
2 Pentachlorophenol	4.341	4.341	0.000	136759	11.7510	
3 Benzidine	6.590	6.590	0.000	239227	7.73975	
4 p,p'-DDE				Compound Not Detected.		
5 p,p'-DDD				Compound Not Detected.		
6 p,p'-DDT	7.947	7.947	0.000	312532	13.0051	

0% Breakdown

# Compound Listing

Modified TO-13A (rev. 2001)

CAS Number	Compound	Detection Limit	Type
		ug	
108-95-2	Phenol	5.0	
111-44-4	bis(2-Chloroethyl) Ether	1.0	
95-48-7	2-Methylphenol (o-Cresol)	5.0	
108-60-1	bis(2-Chloroisopropyl) Ether	1.0	
621-64-7	N-Nitroso-di-n-propylamine	1.0	
106-44-5	4-Methylphenol/3-Methylphenol	5.0	
67-72-1	Hexachloroethane	1.0	
98-95-3	Nitrobenzene	1.0	
78-59-1	Isophorone	1.0	
88-75-5	2-Nitrophenol	5.0	
105-67-9	2,4-Dimethylphenol	5.0	
65-85-0	Benzoic Acid	30	
111-91-1	bis(2-Chloroethoxy) Methane	1.0	
120-83-2	2,4-Dichlorophenol	5.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	
91-20-3	Naphthalene	1.0	
106-47-8	4-Chloroaniline	10	
87-68-3	Hexachlorobutadiene	1.0	
59-50-7	4-Chloro-3-methylphenol	5.0	
91-57-6	2-Methylnaphthalene	1.0	
77-47-4	Hexachlorocyclopentadiene	20	
88-06-2	2,4,6-Trichlorophenol	5.0	
95-95-4	2,4,5-Trichlorophenol	5.0	
91-58-7	2-Chloronaphthalene	1.0	
88-74-4	2-Nitroaniline	10	
131-11-3	Dimethylphthalate	5.0	
208-96-8	Acenaphthylene	1.0	
606-20-2	2,6-Dinitrotoluene	5.0	
99-09-2	3-Nitroaniline	10	
83-32-9	Acenaphthene	1.0	
51-28-5	2,4-Dinitrophenol	20	
100-02-7	4-Nitrophenol	20	
121-14-2	2,4-Dinitrotoluene	5.0	
132-64-9	Dibenzofuran	1.0	
84-66-2	Diethylphthalate	5.0	
86-73-7	Fluorene	1.0	
7005-72-3	4-Chlorophenyl-phenyl Ether	1.0	
100-01-6	4-Nitroaniline	10	
534-52-1	4,6-Dinitro-2-methylphenol	10	
86-30-6	N-Nitrosodiphenylamine	10	
101-55-3	4-Bromophenyl-phenyl Ether	1.0	
118-74-1	Hexachlorobenzene	1.0	
87-86-5	Pentachlorophenol	20	
85-01-8	Phenanthrene	1.0	
120-12-7	Anthracene	1.0	
84-74-2	di-n-Butylphthalate	5.0	

# Compound Listing

Modified TO-13A (rev. 2001)

CAS Number	Compound	Detection Limit	Type
		ug	
206-44-0	Fluoranthene	1.0	
129-00-0	Pyrene	1.0	
85-68-7	Butylbenzylphthalate	5.0	
91-94-1	3,3'-Dichlorobenzidine	20	
218-01-9	Chrysene	1.0	
56-55-3	Benzo(a)anthracene	1.0	
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	
117-84-0	Di-n-Octylphthalate	5.0	
205-99-2	Benzo(b)fluoranthene	1.0	
207-08-9	Benzo(k)fluoranthene	1.0	
50-32-8	Benzo(a)pyrene	1.0	
193-39-5	Indeno(1,2,3-c,d)pyrene	1.0	
53-70-3	Dibenz(a,h)anthracene	1.0	
191-24-2	Benzo(g,h,i)perylene	1.0	
367-12-4	2-Fluorophenol		
4165-62-2	Phenol-d5		
4165-60-0	Nitrobenzene-d5		
118-79-6	2,4,6-Tribromophenol		
81103-79-9	Fluorene-d10		
1718-52-1	Pyrene-d10		
95-57-8	2-Chlorophenol	5.0	
541-73-1	1,3-Dichlorobenzene	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	

# DATA REVIEW CHECKLIST

Work Order #:

0907252B

A <sub>1</sub>	A <sub>2</sub>	R	T	M	Q
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Analysis/Reporting vs. Project Profile/SOP requirements checked (i.e. 100% Dups, J-Flag to MDL, etc)  
 The final report has the correct reporting list, special units, and header info.  
 Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct)  
 Sample Discrepancy Report (SDR) is completed

Corrective Action issued - #

Unusual circumstances have been documented in the notes section below

LUMEN validation report present and initialed

CIRCLE (YES / NO)

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Lab Blank, CCV, LCS and DUP met QC criteria  
 Hold time is met for all samples  
 Appropriate data qualifier flags are applied  
 Manual integrations for samples and QC are properly documented  
 Samples analyzed within the project or method specific clock  
 Retention times have been verified  
 Appropriate ICAL(s) included  
 At least one result per sample is verified against the target quant sheets/raw data

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------	--------------------------

Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Correct amount of sample analyzed (i.e. sample not over-diluted)

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

TICs resemble reference spectra

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

TICs between duplicate samples are consistent

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Checked samples for trends (i.e. Influent vs. Effluent, Field Dups, Field/Trip Blank, etc.)

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Data for multiple analyses of sample(s) has been evaluated for comparability of results

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Special units for all samples in the final report are correctly calculated

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Manually entered results checked (i.e. TPH/NMOC)

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Chain of Custody verified for any special comments (i.e. different compounds/RLs, action levels)

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Chain of Custody scanned correctly

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Verify sample id's vs. chain of custody

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Date MDL(s) performed per instrument(s)

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Samples pressurized w/ appropriate gas (N<sub>2</sub> or He)

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Final pressure consistent with canister size (6L vs. 1L)

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Verify receipt pressures

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Verify canister ID #'s

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

MDL date(s) present for all instruments utilized

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Client LUMEN report reviewed for accuracy and completeness

Notes: (to include: noting samples with QA/QC problems, Blanks with positive hits, narratives, etc.)

A/R: Report on ug/m<sup>3</sup>.

pre-spike FS.

M/Q:

A<sub>1</sub>/A<sub>2</sub>  
(Analytical Review/Date)

R/T  
(Reporting Review/Date)

M  
(Management Review/Date)

Q  
(QA Review/Date)

A<sub>1</sub>:

R:

T:

A<sub>2</sub>:

T:

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply.

Rev. 02/20/09

Note (2): Management reviewer and reporting reviewer must be separate individuals.



**Not Applicable**