Air Toxics LTD.

Laboratory Services Since 1989

Electronic Comprehensive Validation Package (eCVP)

AN ENVIRONMENTAL ANALYTICAL LABORATORY

COMPREHENSIVE VALIDATION PACKAGE

Modified TO-13A

INVENTORY SHEET

Work Order #: 0907419B

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Comments:

Completed by:

Kara McKiernan	Kara McKiernan / Document Control	7/29/09
(Signature)	(Print Name & Title)	(Date)

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WORK ORDER #: 0907419B

Work Order Summary

CLIENT:	Mr. Doug Herlocker Tetra Tech 3380 Americana Terrace, Suite 201 Boise, ID 83706	**BILL TO:**	Mr. Doug Herlocker Tetra Tech 3380 Americana Terrace, Suite 201 Boise, ID 83706
PHONE:	208-389-1030	**P.O. #**	103P0333.005
FAX:		**PROJECT #**	103P0333 BMI
DATE RECEIVED:	07/21/2009	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	07/28/2009		

FRACTION #	NAME	TEST
03A	BMI06-071709	Modified TO-13A
06A	BMI08-071709	Modified TO-13A
09A	BMI08-071709BS	Modified TO-13A
10A	Lab Blank	Modified TO-13A
11A	LCS	Modified TO-13A

CERTIFIED BY: Linda L. Freeman DATE: 07/28/09

Laboratory Director

Certfication 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

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LABORATORY NARRATIVE
Modified TO-13A
Tetra Tech
Workorder# 0907419B

Three PUF/XAD Cartridge samples were received on July 21, 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:

Requirement	*TO-13A*	*ATL Modifications*
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 7/01/2009 and 7/08/2009.

Sampling volume was supplied by the client. A sample volume of 150 m3 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 Holding Time (Days)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
BMI06-071709	0907419B-03A	7/17/2009	7/21/2009	7/22/2009	5	7/23/2009	1	Good
BMI08-071709	0907419B-06A	7/17/2009	7/21/2009	7/22/2009	5	7/23/2009	1	Good
BMI08-071709BS	0907419B-09A	7/17/2009	7/21/2009	7/22/2009	5	7/23/2009	1	Good
Lab Blank	0907419B-10A	NA	NA	7/22/2009	NA	7/23/2009	1	Good
LCS	0907419B-11A	NA	NA	7/22/2009	NA	7/23/2009	1	Good

Sample Results and Raw Data

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

Client Sample ID: BMI06-071709

Lab ID#: 0907419B-03A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
1,4-Dichlorobenzene	1.0	0.0067	1.3	0.0090
Benzoic Acid	30	0.20	61	0.41
Naphthalene	1.0	0.0067	38	0.26
2-Methylnaphthalene	1.0	0.0067	43	0.29
Hexachlorobenzene	1.0	0.0067	5.8	0.039
Phenanthrene	1.0	0.0067	1.3	0.0090
di-n-Butylphthalate	5.0	0.034	89	0.60
bis(2-Ethylhexyl)phthalate	5.0	0.034	14	0.098

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Client Sample ID: BMI06-071709

Lab ID#: 0907419B-03A

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

File Name:	**v072317**	**Date of Collection: 7/17/09 11:15:00 AM**
Dil. Factor:	**1.00**	**Date of Analysis: 7/23/09 07:04 PM**
		Date of Extraction: 7/22/09

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Phenol	5.0	0.034	Not Detected	Not Detected
bis(2-Chloroethyl) Ether	1.0	0.0067	Not Detected	Not Detected
2-Chlorophenol	5.0	0.034	Not Detected	Not Detected
1,3-Dichlorobenzene	1.0	0.0067	Not Detected	Not Detected
1,4-Dichlorobenzene	1.0	0.0067	1.3	0.0090
1,2-Dichlorobenzene	1.0	0.0067	Not Detected	Not Detected
2-Methylphenol (o-Cresol)	5.0	0.034	Not Detected	Not Detected
bis(2-Chloroisopropyl) Ether	1.0	0.0067	Not Detected	Not Detected
N-Nitroso-di-n-propylamine	1.0	0.0067	Not Detected	Not Detected
4-Methylphenol/3-Methylphenol	5.0	0.034	Not Detected	Not Detected
Hexachloroethane	1.0	0.0067	Not Detected	Not Detected
Nitrobenzene	1.0	0.0067	Not Detected	Not Detected
Isophorone	1.0	0.0067	Not Detected	Not Detected
2-Nitrophenol	5.0	0.034	Not Detected	Not Detected
2,4-Dimethylphenol	5.0	0.034	Not Detected	Not Detected
Benzoic Acid	30	0.20	61	0.41
bis(2-Chloroethoxy) Methane	1.0	0.0067	Not Detected	Not Detected
2,4-Dichlorophenol	5.0	0.034	Not Detected	Not Detected
1,2,4-Trichlorobenzene	1.0	0.0067	Not Detected	Not Detected
Naphthalene	1.0	0.0067	38	0.26
4-Chloroaniline	10	0.067	Not Detected	Not Detected
Hexachlorobutadiene	1.0	0.0067	Not Detected	Not Detected
4-Chloro-3-methylphenol	5.0	0.034	Not Detected	Not Detected
2-Methylnaphthalene	1.0	0.0067	43	0.29
Hexachlorocyclopentadiene	20	0.13	Not Detected	Not Detected
2,4,6-Trichlorophenol	5.0	0.034	Not Detected	Not Detected
2,4,5-Trichlorophenol	5.0	0.034	Not Detected	Not Detected
2-Chloronaphthalene	1.0	0.0067	Not Detected	Not Detected
2-Nitroaniline	10	0.067	Not Detected	Not Detected
Dimethylphthalate	5.0	0.034	Not Detected	Not Detected
Acenaphthylene	1.0	0.0067	Not Detected	Not Detected
2,6-Dinitrotoluene	5.0	0.034	Not Detected	Not Detected
3-Nitroaniline	10	0.067	Not Detected	Not Detected
Acenaphthene	1.0	0.0067	Not Detected	Not Detected
2,4-Dinitrophenol	20	0.13	Not Detected	Not Detected
4-Nitrophenol	20	0.13	Not Detected	Not Detected
2,4-Dinitrotoluene	5.0	0.034	Not Detected	Not Detected
Dibenzofuran	1.0	0.0067	Not Detected	Not Detected

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Client Sample ID: BMI06-071709

Lab ID#: 0907419B-03A

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

File Name:	**v072317**	**Date of Collection: 7/17/09 11:15:00 AM**
Dil. Factor:	**1.00**	**Date of Analysis: 7/23/09 07:04 PM**
		Date of Extraction: 7/22/09

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Diethylphthalate	5.0	0.034	Not Detected	Not Detected
Fluorene	1.0	0.0067	Not Detected	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	0.0067	Not Detected	Not Detected
4-Nitroaniline	10	0.067	Not Detected	Not Detected
4,6-Dinitro-2-methylphenol	10	0.067	Not Detected	Not Detected
N-Nitrosodiphenylamine	10	0.067	Not Detected	Not Detected
4-Bromophenyl-phenyl Ether	1.0	0.0067	Not Detected	Not Detected
Hexachlorobenzene	1.0	0.0067	5.8	0.039
Pentachlorophenol	20	0.13	Not Detected	Not Detected
Phenanthrene	1.0	0.0067	1.3	0.0090
Anthracene	1.0	0.0067	Not Detected	Not Detected
di-n-Butylphthalate	5.0	0.034	89	0.60
Fluoranthene	1.0	0.0067	Not Detected	Not Detected
Pyrene	1.0	0.0067	Not Detected	Not Detected
Butylbenzylphthalate	5.0	0.034	Not Detected	Not Detected
3,3'-Dichlorobenzidine	20	0.13	Not Detected	Not Detected
Chrysene	1.0	0.0067	Not Detected	Not Detected
Benzo(a)anthracene	1.0	0.0067	Not Detected	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.034	14	0.098
Di-n-Octylphthalate	5.0	0.034	Not Detected	Not Detected
Benzo(b)fluoranthene	1.0	0.0067	Not Detected	Not Detected
Benzo(k)fluoranthene	1.0	0.0067	Not Detected	Not Detected
Benzo(a)pyrene	1.0	0.0067	Not Detected	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	0.0067	Not Detected	Not Detected
Dibenz(a,h)anthracene	1.0	0.0067	Not Detected	Not Detected
Benzo(g,h,i)perylene	1.0	0.0067	Not Detected	Not Detected

Air Sample Volume(L): 148000
Container Type: PUF/XAD Cartridge

Surrogates	%Recovery	Method Limits
2-Fluorophenol	92	50-150
Phenol-d5	98	50-150
Nitrobenzene-d5	89	50-150
2,4,6-Tribromophenol	97	50-150
Fluorene-d10	91	60-120
Pyrene-d10	89	60-120
Fluoranthene-d10	149	50-150

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BMI06-071709

Lab ID#: 0907419B-03A

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

File Name:	**v072317**	**Date of Collection: 7/17/09 11:15:00 AM**
Dil. Factor:	**1.00**	**Date of Analysis: 7/23/09 07:04 PM**
		Date of Extraction: 7/22/09

Surrogates	**%Recovery**	**Method Limits**
Benzo(a)pyrene-d12	130	50-150

Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/23jul09a.b/v072317.d
Lab Smp Id: 0907419B-03A
Inj Date : 23-JUL-2009 19:04
Operator : rn Inst ID: msdv.i
Smp Info : ;0907419B-03A;
Misc Info : ,NOTICS
Comment : HP-5MS 30M X 0.25mm X 0.25u
Method : /chem/msdv.i/23jul09a.b/bnap0716.m
Meth Date : 24-Jul-2009 15:59 lzhang Quant Type: ISTD
Cal Date : 16-JUL-2009 16:28 Cal File: v071610.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TO13+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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
$ 1 2-Fluorophenol	112	2.825	2.815	(0.669)	342194	45.7461	45.75
$ 2 Phenol-d5	99	3.903	3.893	(0.924)	416568	48.9785	48.98
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	4.224	4.224	(1.000)	323297	40.0000	
9 1,4-Dichlorobenzene*	146	4.245	4.245	(1.005)	11043	1.33500	1.335
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.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
	16 Hexachloroethane	117	Compound Not Detected.					
$	17 Nitrobenzene-d5	82	4.991	4.991	(0.848)	372366	44.4194	44.42
	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	5.779	5.768	(0.982)	222118	61.1218	61.12
	25 2,4-Dichlorophenol*	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	5.882	5.882	(1.000)	809013	40.0000	
	28 Naphthalene	128	5.913	5.903	(1.005)	883904	37.9940	37.99
	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	6.794	6.794	(1.155)	573381	42.9662	42.97
	145 1-Methylnaphthalene	142	6.929	6.929	(1.178)	221420	15.9500	15.95
	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	8.100	(1.000)	396477	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	8.711	8.712	(1.075)	517515	45.7447	45.74
	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	9.064	9.064	(1.119)	81988	48.6260	48.62
	65 4-Bromophenyl phenyl ether	248	Compound Not Detected.					
	66 Hexachlorobenzene	284	9.509	9.509	(0.964)	21480	5.78000	5.780
	68 Pentachlorophenol*	266	Compound Not Detected.					
*	71 Phenanthrene-d10	188	9.862	9.862	(1.000)	664745	40.0000	
	72 Phenanthrene	178	9.882	9.883	(1.002)	25445	1.34148	1.341
	73 Anthracene	178	Compound Not Detected.					
	78 Di-n-butylphthalate	149	10.732	10.732	(1.088)	1760674	88.8173	88.82
	80 Fluoranthene*	202	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
$ 148 Pyrene-d10	212	11.551	11.561	(0.866)	631928	44.6743	44.67
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	13.333	13.333	(1.000)	606219	40.0000	
89 3 3'-Dichlorobenzidine	252	Compound Not Detected.					
91 Chrysene	228	Compound Not Detected.					
93 bis(2-ethylhexyl)Phthalate	149	13.686	13.686	(1.026)	175390	14.5516	14.55
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	15.738	15.748	(1.000)	444110	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	11.292	11.292	(1.145)	210298	14.8694	14.87
$ 101 Benzo(a)pyrene-d12	264	15.592	15.613	(0.991)	116887	13.0200	13.02

Report Date: 24-Jul-2009 16:00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v072317.d
Lab Smp Id: 0907419B-03A
Analysis Type: SV
Quant Type: ISTD
Operator: rn
Method File: /chem/msdv.i/23jul09a.b/bnap0716.m
Misc Info: ,NOTICS

Calibration Date: 23-JUL-2009
Calibration Time: 14:25

Level: LOW
Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 1,4-Dichlorobenze	328325	164162	656650	323297	-1.53
27 Naphthalene-d8	734702	367351	1469404	809013	10.11
47 Acenaphthene-d10	357960	178980	715920	396477	10.76
71 Phenanthrene-d10	669092	334546	1338184	664745	-0.65
90 Chrysene-d12	540686	270343	1081372	606219	12.12
99 Perylene-d12	423996	211998	847992	444110	4.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 1,4-Dichlorobenze	4.22	3.72	4.72	4.22	0.00
27 Naphthalene-d8	5.88	5.38	6.38	5.88	0.00
47 Acenaphthene-d10	8.10	7.60	8.60	8.10	0.00
71 Phenanthrene-d10	9.86	9.36	10.36	9.86	0.00
90 Chrysene-d12	13.33	12.83	13.83	13.33	0.00
99 Perylene-d12	15.75	15.25	16.25	15.74	-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.

Report Date: 24-Jul-2009 16:00

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 23jul09a
Sample Matrix: GAS
Fraction: SV
Lab Smp Id: 0907419B-03A
Level: LOW
Operator: rn
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: PAH100.spk
Quant Type: ISTD
Sublist File: TO13+fs.sub
Method File: /chem/msdv.i/23jul09a.b/bnap0716.m
Misc Info: ,NOTICS

SURROGATE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	50.00	45.75	91.49	50-150
$ 2 Phenol-d5	50.00	48.98	97.96	50-150
$ 17 Nitrobenzene-d5	50.00	44.42	88.84	50-150
$ 147 Fluorene-d10	50.00	45.74	91.49	60-120
$ 62 2,4,6-Tribromophen	50.00	48.62	97.25	50-150
$ 148 Pyrene-d10	50.00	44.67	89.35	60-120
$ 83 Fluoranthene-d10	10.00	14.87	148.69	50-150
$ 101 Benzo(a)pyrene-d12	10.00	13.02	130.20	50-150

Data File: /chem/msdv.i/23jul09a.b/v072317.d

Date : 23-JUL-2009 19:04

Client ID:

Sample Info: ;0907419B-03A;

Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: rn

Column diameter: 0.25

0015

Data File: /chem/msdv.i/23jul09a.b/v072317.d

Date : 23-JUL-2009 19:04

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-03A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

9 1,4-Dichlorobenzene*

Concentration: 1.335 ug

Data File: /chem/msdv.i/23jul09a.b/v072317.d

Date : 23-JUL-2009 19:04

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-03A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

24 Benzoic Acid

Concentration: 61.12 ug

Data File: /chem/msdv.i/23jul09a.b/v072317.d

Date : 23-JUL-2009 19:04

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-03A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

28 Naphthalene

Concentration: 37.99 ug

Data File: /chem/msdv.i/23jul09a.b/v072317.d

Date : 23-JUL-2009 19:04

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-03A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

33 2-Methylnaphthalene

Concentration: 42.97 ug

Data File: /chem/msdv.i/23jul09a.b/v072317.d

Date : 23-JUL-2009 19:04

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-03A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

145 1-Methylnaphthalene

Concentration: 15.95 ug

Data File: /chem/msdv.i/23jul09a.b/v072317.d

Date : 23-JUL-2009 19:04

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-03A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

66 Hexachlorobenzene

Concentration: 5.780 ug

Data File: /chem/msdv.i/23jul09a.b/v072317.d

Date : 23-JUL-2009 19:04

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-03A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

72 Phenanthrene

Concentration: 1.341 ug

Data File: /chem/msdv.i/23jul09a.b/v072317.d

Date : 23-JUL-2009 19:04

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-03A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

78 Di-n-butylphthalate

Concentration: 88.82 ug

Data File: /chem/msdv.i/23jul09a.b/v072317.d

Date : 23-JUL-2009 19:04

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-03A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

93 bis(2-ethylhexyl)Phthalate

Concentration: 14.55 ug

Air Toxics LTD.
Laboratory Services Since 1989

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

Client Sample ID: BMI08-071709

Lab ID#: 0907419B-06A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Phenol	5.0	0.049	9.0	0.087
1,4-Dichlorobenzene	1.0	0.0097	1.1	0.011
4-Methylphenol/3-Methylphenol	5.0	0.049	5.5	0.054
Benzoic Acid	30	0.29	46	0.45
Naphthalene	1.0	0.0097	42	0.40
2-Methylnaphthalene	1.0	0.0097	34	0.33
Hexachlorobenzene	1.0	0.0097	2.1	0.021
Phenanthrene	1.0	0.0097	1.2	0.012
di-n-Butylphthalate	5.0	0.049	100	1.0
bis(2-Ethylhexyl)phthalate	5.0	0.049	12	0.12

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BMI08-071709

Lab ID#: 0907419B-06A

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

File Name:	**v072318**	**Date of Collection: 7/17/09 12:55:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 7/23/09 07:31 PM**
		Date of Extraction: 7/22/09

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Phenol	5.0	0.049	9.0	0.087
bis(2-Chloroethyl) Ether	1.0	0.0097	Not Detected	Not Detected
2-Chlorophenol	5.0	0.049	Not Detected	Not Detected
1,3-Dichlorobenzene	1.0	0.0097	Not Detected	Not Detected
1,4-Dichlorobenzene	1.0	0.0097	1.1	0.011
1,2-Dichlorobenzene	1.0	0.0097	Not Detected	Not Detected
2-Methylphenol (o-Cresol)	5.0	0.049	Not Detected	Not Detected
bis(2-Chloroisopropyl) Ether	1.0	0.0097	Not Detected	Not Detected
N-Nitroso-di-n-propylamine	1.0	0.0097	Not Detected	Not Detected
4-Methylphenol/3-Methylphenol	5.0	0.049	5.5	0.054
Hexachloroethane	1.0	0.0097	Not Detected	Not Detected
Nitrobenzene	1.0	0.0097	Not Detected	Not Detected
Isophorone	1.0	0.0097	Not Detected	Not Detected
2-Nitrophenol	5.0	0.049	Not Detected	Not Detected
2,4-Dimethylphenol	5.0	0.049	Not Detected	Not Detected
Benzoic Acid	30	0.29	46	0.45
bis(2-Chloroethoxy) Methane	1.0	0.0097	Not Detected	Not Detected
2,4-Dichlorophenol	5.0	0.049	Not Detected	Not Detected
1,2,4-Trichlorobenzene	1.0	0.0097	Not Detected	Not Detected
Naphthalene	1.0	0.0097	42	0.40
4-Chloroaniline	10	0.097	Not Detected	Not Detected
Hexachlorobutadiene	1.0	0.0097	Not Detected	Not Detected
4-Chloro-3-methylphenol	5.0	0.049	Not Detected	Not Detected
2-Methylnaphthalene	1.0	0.0097	34	0.33
Hexachlorocyclopentadiene	20	0.19	Not Detected	Not Detected
2,4,6-Trichlorophenol	5.0	0.049	Not Detected	Not Detected
2,4,5-Trichlorophenol	5.0	0.049	Not Detected	Not Detected
2-Chloronaphthalene	1.0	0.0097	Not Detected	Not Detected
2-Nitroaniline	10	0.097	Not Detected	Not Detected
Dimethylphthalate	5.0	0.049	Not Detected	Not Detected
Acenaphthylene	1.0	0.0097	Not Detected	Not Detected
2,6-Dinitrotoluene	5.0	0.049	Not Detected	Not Detected
3-Nitroaniline	10	0.097	Not Detected	Not Detected
Acenaphthene	1.0	0.0097	Not Detected	Not Detected
2,4-Dinitrophenol	20	0.19	Not Detected	Not Detected
4-Nitrophenol	20	0.19	Not Detected	Not Detected
2,4-Dinitrotoluene	5.0	0.049	Not Detected	Not Detected
Dibenzofuran	1.0	0.0097	Not Detected	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BMI08-071709

Lab ID#: 0907419B-06A

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

File Name:	**v072318**	**Date of Collection: 7/17/09 12:55:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 7/23/09 07:31 PM**
		Date of Extraction: 7/22/09

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Diethylphthalate	5.0	0.049	Not Detected	Not Detected
Fluorene	1.0	0.0097	Not Detected	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	0.0097	Not Detected	Not Detected
4-Nitroaniline	10	0.097	Not Detected	Not Detected
4,6-Dinitro-2-methylphenol	10	0.097	Not Detected	Not Detected
N-Nitrosodiphenylamine	10	0.097	Not Detected	Not Detected
4-Bromophenyl-phenyl Ether	1.0	0.0097	Not Detected	Not Detected
Hexachlorobenzene	1.0	0.0097	2.1	0.021
Pentachlorophenol	20	0.19	Not Detected	Not Detected
Phenanthrene	1.0	0.0097	1.2	0.012
Anthracene	1.0	0.0097	Not Detected	Not Detected
di-n-Butylphthalate	5.0	0.049	100	1.0
Fluoranthene	1.0	0.0097	Not Detected	Not Detected
Pyrene	1.0	0.0097	Not Detected	Not Detected
Butylbenzylphthalate	5.0	0.049	Not Detected	Not Detected
3,3'-Dichlorobenzidine	20	0.19	Not Detected	Not Detected
Chrysene	1.0	0.0097	Not Detected	Not Detected
Benzo(a)anthracene	1.0	0.0097	Not Detected	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.049	12	0.12
Di-n-Octylphthalate	5.0	0.049	Not Detected	Not Detected
Benzo(b)fluoranthene	1.0	0.0097	Not Detected	Not Detected
Benzo(k)fluoranthene	1.0	0.0097	Not Detected	Not Detected
Benzo(a)pyrene	1.0	0.0097	Not Detected	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	0.0097	Not Detected	Not Detected
Dibenz(a,h)anthracene	1.0	0.0097	Not Detected	Not Detected
Benzo(g,h,i)perylene	1.0	0.0097	Not Detected	Not Detected

Air Sample Volume(L): 103000
Container Type: PUF/XAD Cartridge

Surrogates	%Recovery	Method Limits
2-Fluorophenol	84	50-150
Phenol-d5	90	50-150
Nitrobenzene-d5	86	50-150
2,4,6-Tribromophenol	96	50-150
Fluorene-d10	85	60-120
Pyrene-d10	89	60-120
Fluoranthene-d10	125	50-150

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BMI08-071709

Lab ID#: 0907419B-06A

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

File Name:	**v072318**	**Date of Collection: 7/17/09 12:55:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 7/23/09 07:31 PM**
		Date of Extraction: 7/22/09

Surrogates	**%Recovery**	**Method Limits**
Benzo(a)pyrene-d12	114	50-150

Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/23jul09a.b/v072318.d
Lab Smp Id: 0907419B-06A
Inj Date : 23-JUL-2009 19:31
Operator : rn Inst ID: msdv.i
Smp Info : ;0907419B-06A;
Misc Info : ,NOTICS
Comment : HP-5MS 30M X 0.25mm X 0.25u
Method : /chem/msdv.i/23jul09a.b/bnap0716.m
Meth Date : 24-Jul-2009 15:59 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: TO13+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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
$ 1 2-Fluorophenol	112	2.825	2.815	(0.669)	312441	41.9728	41.97
$ 2 Phenol-d5	99	3.903	3.893	(0.924)	380786	44.9903	44.99
3 Phenol*	94	3.924	3.913	(0.929)	89827	8.95320	8.953
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	4.224	4.224	(1.000)	321724	40.0000	
9 1,4-Dichlorobenzene*	146	4.245	4.245	(1.005)	9363	1.13744	1.137
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	4.898	4.888	(1.159)	38957	5.54799	5.548
15 N-Nitrosodipropylamine**	70	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
	16 Hexachloroethane	117	Compound Not Detected.					
$	17 Nitrobenzene-d5	82	4.991	4.991	(0.848)	365934	43.0298	43.03
	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	5.768	5.768	(0.981)	170465	46.2394	46.24
	25 2,4-Dichlorophenol*	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	5.882	5.882	(1.000)	820713	40.0000	
	28 Naphthalene	128	5.913	5.903	(1.005)	983313	41.6645	41.66
	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	6.794	6.794	(1.155)	461069	34.0575	34.06
	145 1-Methylnaphthalene	142	6.929	6.929	(1.178)	184726	13.1170	13.12
	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	8.090	8.100	(1.000)	395416	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	8.711	8.712	(1.077)	480556	42.5918	42.59
	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	9.064	9.064	(1.120)	80571	47.9138	47.91
	65 4-Bromophenyl phenyl ether	248	Compound Not Detected.					
	66 Hexachlorobenzene	284	9.509	9.509	(0.964)	8445	2.12780	2.128
	68 Pentachlorophenol*	266	Compound Not Detected.					
*	71 Phenanthrene-d10	188	9.862	9.862	(1.000)	709934	40.0000	
	72 Phenanthrene	178	9.882	9.883	(1.002)	24730	1.22079	1.221
	73 Anthracene	178	Compound Not Detected.					
	78 Di-n-butylphthalate	149	10.732	10.732	(1.088)	2200325	103.930	103.9
	80 Fluoranthene*	202	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
$ 148 Pyrene-d10	212	11.551	11.561	(0.866)	634969	44.6825	44.68
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	13.333	13.333	(1.000)	609025	40.0000	
89 3 3'-Dichlorobenzidine	252	Compound Not Detected.					
91 Chrysene	228	Compound Not Detected.					
93 bis(2-ethylhexyl)Phthalate	149	13.686	13.686	(1.026)	146625	12.1090	12.11
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	15.737	15.748	(1.000)	450580	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	11.292	11.292	(1.145)	189151	12.5229	12.52
$ 101 Benzo(a)pyrene-d12	264	15.592	15.613	(0.991)	104028	11.4213	11.42

Report Date: 24-Jul-2009 16:00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v072318.d
Lab Smp Id: 0907419B-06A
Analysis Type: SV
Quant Type: ISTD
Operator: rn
Method File: /chem/msdv.i/23jul09a.b/bnap0716.m
Misc Info: ,NOTICS

Calibration Date: 23-JUL-2009
Calibration Time: 14:25

Level: LOW
Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 1,4-Dichlorobenze	328325	164162	656650	321724	-2.01
27 Naphthalene-d8	734702	367351	1469404	820713	11.71
47 Acenaphthene-d10	357960	178980	715920	395416	10.46
71 Phenanthrene-d10	669092	334546	1338184	709934	6.10
90 Chrysene-d12	540686	270343	1081372	609025	12.64
99 Perylene-d12	423996	211998	847992	450580	6.27

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 1,4-Dichlorobenze	4.22	3.72	4.72	4.22	-0.01
27 Naphthalene-d8	5.88	5.38	6.38	5.88	0.00
47 Acenaphthene-d10	8.10	7.60	8.60	8.09	-0.13
71 Phenanthrene-d10	9.86	9.36	10.36	9.86	0.00
90 Chrysene-d12	13.33	12.83	13.83	13.33	0.00
99 Perylene-d12	15.75	15.25	16.25	15.74	-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.

Report Date: 24-Jul-2009 16:00

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 23jul09a
Sample Matrix: GAS
Fraction: SV
Lab Smp Id: 0907419B-06A
Level: LOW
Operator: rn
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: PAH100.spk
Quant Type: ISTD
Sublist File: TO13+fs.sub
Method File: /chem/msdv.i/23jul09a.b/bnap0716.m
Misc Info: ,NOTICS

SURROGATE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	50.00	41.97	83.95	50-150
$ 2 Phenol-d5	50.00	44.99	89.98	50-150
$ 17 Nitrobenzene-d5	50.00	43.03	86.06	50-150
$ 147 Fluorene-d10	50.00	42.59	85.18	60-120
$ 62 2,4,6-Tribromophen	50.00	47.91	95.83	50-150
$ 148 Pyrene-d10	50.00	44.68	89.36	60-120
$ 83 Fluoranthene-d10	10.00	12.52	125.23	50-150
$ 101 Benzo(a)pyrene-d12	10.00	11.42	114.21	50-150

0034

Data File: /chem/msdv.i/23jul09a.b/v072318.d
Date : 23-JUL-2009 19:31
Client ID:
Sample Info: ;0907419B-06A;
Volume Injected (uL): 1.0
Column phase: DB-5.625

Instrument: msdv.i
Operator: rn
Column diameter: 0.25

Data File: /chem/msdv.i/23jul09a.b/v072318.d

Date : 23-JUL-2009 19:31

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-06A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

3 Phenol*

Concentration: 8.953 ug

Data File: /chem/msdv.i/23jul09a.b/v072318.d

Date : 23-JUL-2009 19:31

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-06A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

9 1,4-Dichlorobenzene*

Concentration: 1.137 ug

Data File: /chem/msdv.i/23jul09a.b/v072318.d

Date : 23-JUL-2009 19:31

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-06A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

14 4-Methylphenol

Concentration: 5.548 ug

Data File: /chem/msdv.i/23jul09a.b/v072318.d

Date : 23-JUL-2009 19:31

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-06A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

24 Benzoic Acid

Concentration: 46.24 ug

Data File: /chem/msdv.i/23jul09a.b/v072318.d

Date : 23-JUL-2009 19:31

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-06A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

28 Naphthalene

Concentration: 41.66 ug

Data File: /chem/msdv.i/23jul09a.b/v072318.d

Date : 23-JUL-2009 19:31

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-06A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

33 2-Methylnaphthalene

Concentration: 34.06 ug

Data File: /chem/msdv.i/23jul09a.b/v072318.d

Date : 23-JUL-2009 19:31

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-06A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

145 1-Methylnaphthalene

Concentration: 13.12 ug

Data File: /chem/msdv.i/23jul09a.b/v072318.d

Date : 23-JUL-2009 19:31

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-06A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

66 Hexachlorobenzene

Concentration: 2.128 ug

Data File: /chem/msdv.i/23jul09a.b/v072318.d

Date : 23-JUL-2009 19:31

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-06A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

72 Phenanthrene

Concentration: 1.221 ug

Data File: /chem/msdv.i/23jul09a.b/v072318.d

Date : 23-JUL-2009 19:31

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-06A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

78 Di-n-butylphthalate

Concentration: 103.9 ug

Data File: /chem/msdv.i/23jul09a.b/v072318.d

Date : 23-JUL-2009 19:31

Client ID:

Instrument: msdv.i

Sample Info: ;0907419B-06A;

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

93 bis(2-ethylhexyl)Phthalate

Concentration: 12.11 ug

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

Client Sample ID: BMI08-071709BS

Lab ID#: 0907419B-09A

No Detections Were Found.

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BMI08-071709BS

Lab ID#: 0907419B-09A

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

File Name:	**v072319**	**Date of Collection: 7/17/09 1/1/1990**
Dil. Factor:	**1.00**	**Date of Analysis: 7/23/09 07:58 PM**
		Date of Extraction: 7/22/09

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Phenol	5.0	0.033	Not Detected	Not Detected
bis(2-Chloroethyl) Ether	1.0	0.0067	Not Detected	Not Detected
2-Chlorophenol	5.0	0.033	Not Detected	Not Detected
1,3-Dichlorobenzene	1.0	0.0067	Not Detected	Not Detected
1,4-Dichlorobenzene	1.0	0.0067	Not Detected	Not Detected
1,2-Dichlorobenzene	1.0	0.0067	Not Detected	Not Detected
2-Methylphenol (o-Cresol)	5.0	0.033	Not Detected	Not Detected
bis(2-Chloroisopropyl) Ether	1.0	0.0067	Not Detected	Not Detected
N-Nitroso-di-n-propylamine	1.0	0.0067	Not Detected	Not Detected
4-Methylphenol/3-Methylphenol	5.0	0.033	Not Detected	Not Detected
Hexachloroethane	1.0	0.0067	Not Detected	Not Detected
Nitrobenzene	1.0	0.0067	Not Detected	Not Detected
Isophorone	1.0	0.0067	Not Detected	Not Detected
2-Nitrophenol	5.0	0.033	Not Detected	Not Detected
2,4-Dimethylphenol	5.0	0.033	Not Detected	Not Detected
Benzoic Acid	30	0.20	Not Detected	Not Detected
bis(2-Chloroethoxy) Methane	1.0	0.0067	Not Detected	Not Detected
2,4-Dichlorophenol	5.0	0.033	Not Detected	Not Detected
1,2,4-Trichlorobenzene	1.0	0.0067	Not Detected	Not Detected
Naphthalene	1.0	0.0067	Not Detected	Not Detected
4-Chloroaniline	10	0.067	Not Detected	Not Detected
Hexachlorobutadiene	1.0	0.0067	Not Detected	Not Detected
4-Chloro-3-methylphenol	5.0	0.033	Not Detected	Not Detected
2-Methylnaphthalene	1.0	0.0067	Not Detected	Not Detected
Hexachlorocyclopentadiene	20	0.13	Not Detected	Not Detected
2,4,6-Trichlorophenol	5.0	0.033	Not Detected	Not Detected
2,4,5-Trichlorophenol	5.0	0.033	Not Detected	Not Detected
2-Chloronaphthalene	1.0	0.0067	Not Detected	Not Detected
2-Nitroaniline	10	0.067	Not Detected	Not Detected
Dimethylphthalate	5.0	0.033	Not Detected	Not Detected
Acenaphthylene	1.0	0.0067	Not Detected	Not Detected
2,6-Dinitrotoluene	5.0	0.033	Not Detected	Not Detected
3-Nitroaniline	10	0.067	Not Detected	Not Detected
Acenaphthene	1.0	0.0067	Not Detected	Not Detected
2,4-Dinitrophenol	20	0.13	Not Detected	Not Detected
4-Nitrophenol	20	0.13	Not Detected	Not Detected
2,4-Dinitrotoluene	5.0	0.033	Not Detected	Not Detected
Dibenzofuran	1.0	0.0067	Not Detected	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BMI08-071709BS

Lab ID#: 0907419B-09A

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

File Name:	**v072319**	**Date of Collection: 7/17/09 1/1/1990**
Dil. Factor:	**1.00**	**Date of Analysis: 7/23/09 07:58 PM**
		Date of Extraction: 7/22/09

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Diethylphthalate	5.0	0.033	Not Detected	Not Detected
Fluorene	1.0	0.0067	Not Detected	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	0.0067	Not Detected	Not Detected
4-Nitroaniline	10	0.067	Not Detected	Not Detected
4,6-Dinitro-2-methylphenol	10	0.067	Not Detected	Not Detected
N-Nitrosodiphenylamine	10	0.067	Not Detected	Not Detected
4-Bromophenyl-phenyl Ether	1.0	0.0067	Not Detected	Not Detected
Hexachlorobenzene	1.0	0.0067	Not Detected	Not Detected
Pentachlorophenol	20	0.13	Not Detected	Not Detected
Phenanthrene	1.0	0.0067	Not Detected	Not Detected
Anthracene	1.0	0.0067	Not Detected	Not Detected
di-n-Butylphthalate	5.0	0.033	Not Detected	Not Detected
Fluoranthene	1.0	0.0067	Not Detected	Not Detected
Pyrene	1.0	0.0067	Not Detected	Not Detected
Butylbenzylphthalate	5.0	0.033	Not Detected	Not Detected
3,3'-Dichlorobenzidine	20	0.13	Not Detected	Not Detected
Chrysene	1.0	0.0067	Not Detected	Not Detected
Benzo(a)anthracene	1.0	0.0067	Not Detected	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.033	Not Detected	Not Detected
Di-n-Octylphthalate	5.0	0.033	Not Detected	Not Detected
Benzo(b)fluoranthene	1.0	0.0067	Not Detected	Not Detected
Benzo(k)fluoranthene	1.0	0.0067	Not Detected	Not Detected
Benzo(a)pyrene	1.0	0.0067	Not Detected	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	0.0067	Not Detected	Not Detected
Dibenz(a,h)anthracene	1.0	0.0067	Not Detected	Not Detected
Benzo(g,h,i)perylene	1.0	0.0067	Not Detected	Not Detected

Air Sample Volume(L): 150000
Container Type: PUF/XAD Cartridge

Surrogates	%Recovery	Method Limits
2-Fluorophenol	84	50-150
Phenol-d5	92	50-150
Nitrobenzene-d5	81	50-150
2,4,6-Tribromophenol	88	50-150
Fluorene-d10	84	60-120
Pyrene-d10	86	60-120
Fluoranthene-d10	129	50-150

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BMI08-071709BS

Lab ID#: 0907419B-09A

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

File Name:	**v072319**	**Date of Collection: 7/17/09 1/1/1990**
Dil. Factor:	**1.00**	**Date of Analysis: 7/23/09 07:58 PM**
		Date of Extraction: 7/22/09

Surrogates	**%Recovery**	**Method Limits**
Benzo(a)pyrene-d12	138	50-150

Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/23jul09a.b/v072319.d
Lab Smp Id: 0907419B-09A
Inj Date : 23-JUL-2009 19:58
Operator : rn Inst ID: msdv.i
Smp Info : ;0907419B-09A;
Misc Info : ,NOTICS
Comment : HP-5MS 30M X 0.25mm X 0.25u
Method : /chem/msdv.i/23jul09a.b/bnap0716.m
Meth Date : 24-Jul-2009 15:59 lzhang Quant Type: ISTD
Cal Date : 16-JUL-2009 16:28 Cal File: v071610.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TO13+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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
$ 1 2-Fluorophenol	112	2.825	2.815	(0.669)	316270	42.1808	42.18
$ 2 Phenol-d5	99	3.913	3.893	(0.926)	392120	45.9953	46.00
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	4.224	4.224	(1.000)	324061	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.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
	16 Hexachloroethane	117	Compound Not Detected.					
$	17 Nitrobenzene-d5	82	4.991	4.991	(0.848)	348997	40.6554	40.66
	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	5.882	5.882	(1.000)	828440	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	8.089	8.100	(1.000)	400661	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	8.711	8.712	(1.077)	478552	41.8589	41.86
	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	9.064	9.064	(1.120)	75013	44.0246	44.02
	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	9.861	9.862	(1.000)	742466	40.0000	
	72 Phenanthrene	178	Compound Not Detected.					
	73 Anthracene	178	Compound Not Detected.					
	78 Di-n-butylphthalate	149	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
80 Fluoranthene*	202	Compound Not Detected.					
$ 148 Pyrene-d10	212	11.551	11.561	(0.866)	596150	42.7882	42.79
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	13.333	13.333	(1.000)	597105	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	15.737	15.748	(1.000)	480802	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	11.292	11.292	(1.145)	204557	12.9494	12.95
$ 101 Benzo(a)pyrene-d12	264	15.592	15.613	(0.991)	133846	13.7713	13.77

Report Date: 24-Jul-2009 16:00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v072319.d
Lab Smp Id: 0907419B-09A
Analysis Type: SV
Quant Type: ISTD
Operator: rn
Method File: /chem/msdv.i/23jul09a.b/bnap0716.m
Misc Info: ,NOTICS

Calibration Date: 23-JUL-2009
Calibration Time: 14:25

Level: LOW
Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 1,4-Dichlorobenze	328325	164162	656650	324061	-1.30
27 Naphthalene-d8	734702	367351	1469404	828440	12.76
47 Acenaphthene-d10	357960	178980	715920	400661	11.93
71 Phenanthrene-d10	669092	334546	1338184	742466	10.97
90 Chrysene-d12	540686	270343	1081372	597105	10.43
99 Perylene-d12	423996	211998	847992	480802	13.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 1,4-Dichlorobenze	4.22	3.72	4.72	4.22	-0.01
27 Naphthalene-d8	5.88	5.38	6.38	5.88	-0.01
47 Acenaphthene-d10	8.10	7.60	8.60	8.09	-0.13
71 Phenanthrene-d10	9.86	9.36	10.36	9.86	0.00
90 Chrysene-d12	13.33	12.83	13.83	13.33	0.00
99 Perylene-d12	15.75	15.25	16.25	15.74	-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.

Report Date: 24-Jul-2009 16:00

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 23jul09a
Sample Matrix: GAS
Fraction: SV
Lab Smp Id: 0907419B-09A
Level: LOW
Operator: rn
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: PAH100.spk
Quant Type: ISTD
Sublist File: TO13+fs.sub
Method File: /chem/msdv.i/23jul09a.b/bnap0716.m
Misc Info: ,NOTICS

SURROGATE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	50.00	42.18	84.36	50-150
$ 2 Phenol-d5	50.00	46.00	91.99	50-150
$ 17 Nitrobenzene-d5	50.00	40.66	81.31	50-150
$ 147 Fluorene-d10	50.00	41.86	83.72	60-120
$ 62 2,4,6-Tribromophen	50.00	44.02	88.05	50-150
$ 148 Pyrene-d10	50.00	42.79	85.58	60-120
$ 83 Fluoranthene-d10	10.00	12.95	129.49	50-150
$ 101 Benzo(a)pyrene-d12	10.00	13.77	137.71	50-150

Data File: /chem/msdv.i/23jul09a.b/v072319.d

Date : 23-JUL-2009 19:58

Client ID:

Sample Info: ;0907419B-09A;

Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: rn

Column diameter: 0.25

0055

QC Results and Raw Data

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0907419B-10A

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

File Name:	**v072315**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/23/09 06:09 PM**
		Date of Extraction: 7/22/09

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Phenol	5.0	0.033	Not Detected	Not Detected
bis(2-Chloroethyl) Ether	1.0	0.0067	Not Detected	Not Detected
2-Chlorophenol	5.0	0.033	Not Detected	Not Detected
1,3-Dichlorobenzene	1.0	0.0067	Not Detected	Not Detected
1,4-Dichlorobenzene	1.0	0.0067	Not Detected	Not Detected
1,2-Dichlorobenzene	1.0	0.0067	Not Detected	Not Detected
2-Methylphenol (o-Cresol)	5.0	0.033	Not Detected	Not Detected
bis(2-Chloroisopropyl) Ether	1.0	0.0067	Not Detected	Not Detected
N-Nitroso-di-n-propylamine	1.0	0.0067	Not Detected	Not Detected
4-Methylphenol/3-Methylphenol	5.0	0.033	Not Detected	Not Detected
Hexachloroethane	1.0	0.0067	Not Detected	Not Detected
Nitrobenzene	1.0	0.0067	Not Detected	Not Detected
Isophorone	1.0	0.0067	Not Detected	Not Detected
2-Nitrophenol	5.0	0.033	Not Detected	Not Detected
2,4-Dimethylphenol	5.0	0.033	Not Detected	Not Detected
Benzoic Acid	30	0.20	Not Detected	Not Detected
bis(2-Chloroethoxy) Methane	1.0	0.0067	Not Detected	Not Detected
2,4-Dichlorophenol	5.0	0.033	Not Detected	Not Detected
1,2,4-Trichlorobenzene	1.0	0.0067	Not Detected	Not Detected
Naphthalene	1.0	0.0067	Not Detected	Not Detected
4-Chloroaniline	10	0.067	Not Detected	Not Detected
Hexachlorobutadiene	1.0	0.0067	Not Detected	Not Detected
4-Chloro-3-methylphenol	5.0	0.033	Not Detected	Not Detected
2-Methylnaphthalene	1.0	0.0067	Not Detected	Not Detected
Hexachlorocyclopentadiene	20	0.13	Not Detected	Not Detected
2,4,6-Trichlorophenol	5.0	0.033	Not Detected	Not Detected
2,4,5-Trichlorophenol	5.0	0.033	Not Detected	Not Detected
2-Chloronaphthalene	1.0	0.0067	Not Detected	Not Detected
2-Nitroaniline	10	0.067	Not Detected	Not Detected
Dimethylphthalate	5.0	0.033	Not Detected	Not Detected
Acenaphthylene	1.0	0.0067	Not Detected	Not Detected
2,6-Dinitrotoluene	5.0	0.033	Not Detected	Not Detected
3-Nitroaniline	10	0.067	Not Detected	Not Detected
Acenaphthene	1.0	0.0067	Not Detected	Not Detected
2,4-Dinitrophenol	20	0.13	Not Detected	Not Detected
4-Nitrophenol	20	0.13	Not Detected	Not Detected
2,4-Dinitrotoluene	5.0	0.033	Not Detected	Not Detected
Dibenzofuran	1.0	0.0067	Not Detected	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0907419B-10A

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

File Name:	**v072315**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/23/09 06:09 PM**	
		Date of Extraction: 7/22/09	

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Diethylphthalate	5.0	0.033	Not Detected	Not Detected
Fluorene	1.0	0.0067	Not Detected	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	0.0067	Not Detected	Not Detected
4-Nitroaniline	10	0.067	Not Detected	Not Detected
4,6-Dinitro-2-methylphenol	10	0.067	Not Detected	Not Detected
N-Nitrosodiphenylamine	10	0.067	Not Detected	Not Detected
4-Bromophenyl-phenyl Ether	1.0	0.0067	Not Detected	Not Detected
Hexachlorobenzene	1.0	0.0067	Not Detected	Not Detected
Pentachlorophenol	20	0.13	Not Detected	Not Detected
Phenanthrene	1.0	0.0067	Not Detected	Not Detected
Anthracene	1.0	0.0067	Not Detected	Not Detected
di-n-Butylphthalate	5.0	0.033	Not Detected	Not Detected
Fluoranthene	1.0	0.0067	Not Detected	Not Detected
Pyrene	1.0	0.0067	Not Detected	Not Detected
Butylbenzylphthalate	5.0	0.033	Not Detected	Not Detected
3,3'-Dichlorobenzidine	20	0.13	Not Detected	Not Detected
Chrysene	1.0	0.0067	Not Detected	Not Detected
Benzo(a)anthracene	1.0	0.0067	Not Detected	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.033	Not Detected	Not Detected
Di-n-Octylphthalate	5.0	0.033	Not Detected	Not Detected
Benzo(b)fluoranthene	1.0	0.0067	Not Detected	Not Detected
Benzo(k)fluoranthene	1.0	0.0067	Not Detected	Not Detected
Benzo(a)pyrene	1.0	0.0067	Not Detected	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	0.0067	Not Detected	Not Detected
Dibenz(a,h)anthracene	1.0	0.0067	Not Detected	Not Detected
Benzo(g,h,i)perylene	1.0	0.0067	Not Detected	Not Detected

Air Sample Volume(L): 150000
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
2-Fluorophenol	83	50-150
Phenol-d5	90	50-150
Nitrobenzene-d5	78	50-150
2,4,6-Tribromophenol	85	50-150
Fluorene-d10	78	60-120
Pyrene-d10	82	60-120

Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/23jul09a.b/v072315.d
Lab Smp Id: 0907419B-Blank Client Smp ID: Lab Blank
Inj Date : 23-JUL-2009 18:09
Operator : rn Inst ID: msdv.i
Smp Info : ;0907419B-Blank;Lab Blank
Misc Info : ,NOTICS
Comment : HP-5MS 30M X 0.25mm X 0.25u
Method : /chem/msdv.i/23jul09a.b/bnap0716.m
Meth Date : 24-Jul-2009 15:59 lzhang Quant Type: ISTD
Cal Date : 16-JUL-2009 16:28 Cal File: v071610.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TO13.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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
$ 1 2-Fluorophenol	112	2.825	2.815	(0.669)	303146	41.6073	41.61
$ 2 Phenol-d5	99	3.903	3.893	(0.924)	374874	45.2523	45.25
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	4.224	4.224	(1.000)	314895	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.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
	16 Hexachloroethane	117	Compound Not Detected.					
$	17 Nitrobenzene-d5	82	4.991	4.991	(0.848)	330979	39.2931	39.29
	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	5.882	5.882	(1.000)	812910	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	8.090	8.100	(1.000)	400598	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	8.711	8.712	(1.077)	445925	39.0112	39.01
	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	9.064	9.064	(1.120)	72532	42.5752	42.58
	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	9.862	9.862	(1.000)	723167	40.0000	
	72 Phenanthrene	178	Compound Not Detected.					
	73 Anthracene	178	Compound Not Detected.					
	78 Di-n-butylphthalate	149	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
80 Fluoranthene*	202	Compound Not Detected.					
$ 148 Pyrene-d10	212	11.551	11.561	(0.867)	581136	41.0730	41.07
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	13.323	13.333	(1.000)	606374	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	15.738	15.748	(1.000)	476314	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.					

Report Date: 24-Jul-2009 16:00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v072315.d
Lab Smp Id: 0907419B-Blank
Analysis Type: SV
Quant Type: ISTD
Operator: rn
Method File: /chem/msdv.i/23jul09a.b/bnap0716.m
Misc Info: ,NOTICS

Calibration Date: 23-JUL-2009
Calibration Time: 14:25
Client Smp ID: Lab Blank
Level: LOW
Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 1,4-Dichlorobenze	328325	164162	656650	314895	-4.09
27 Naphthalene-d8	734702	367351	1469404	812910	10.64
47 Acenaphthene-d10	357960	178980	715920	400598	11.91
71 Phenanthrene-d10	669092	334546	1338184	723167	8.08
90 Chrysene-d12	540686	270343	1081372	606374	12.15
99 Perylene-d12	423996	211998	847992	476314	12.34

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 1,4-Dichlorobenze	4.22	3.72	4.72	4.22	0.00
27 Naphthalene-d8	5.88	5.38	6.38	5.88	0.00
47 Acenaphthene-d10	8.10	7.60	8.60	8.09	-0.13
71 Phenanthrene-d10	9.86	9.36	10.36	9.86	0.00
90 Chrysene-d12	13.33	12.83	13.83	13.32	-0.08
99 Perylene-d12	15.75	15.25	16.25	15.74	-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.

Report Date: 24-Jul-2009 16:00

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 23jul09a
Sample Matrix: GAS
Fraction: SV
Lab Smp Id: 0907419B-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: TO13.sub
Method File: /chem/msdv.i/23jul09a.b/bnap0716.m
Misc Info: ,NOTICS

SURROGATE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	50.00	41.61	83.21	50-150
$ 2 Phenol-d5	50.00	45.25	90.50	50-150
$ 17 Nitrobenzene-d5	50.00	39.29	78.59	50-150
$ 147 Fluorene-d10	50.00	39.01	78.02	60-120
$ 62 2,4,6-Tribromophen	50.00	42.58	85.15	50-150
$ 148 Pyrene-d10	50.00	41.07	82.15	60-120

0064

Data File: /chem/msdv.i/23jul09a.b/v072315.d
Date : 23-JUL-2009 18:09
Client ID: Lab Blank
Sample Info: ;0907419B-Blank;Lab Blank
Volume Injected (uL): 1.0
Column phase: DB-5.625

Instrument: msdv.i
Operator: rn
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.: 0907419B

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		2,4,6-Tribromophenol	#	Pyrene-d10	#	2-Fluorophenol	#	Nitrobenzene-d5	#	TOTAL OUT
01	BMI06-071709	97		89		92		89		0
02	BMI08-071709	96		89		84		86		0
03	BMI08-071709BS	88		86		84		81		0
04	Lab Blank	85		82		83		78		0
05	LCS	89		88		76		84		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.: 0907419B

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		Phenol-d5	#	Fluorene-d10	#	Fluoranthene-d10	#	Benzo(a)pyrene-d12	#	TOTAL OUT
01	BMI06-071709	98		91		149		130		0
02	BMI08-071709	90		85		125		114		0
03	BMI08-071709BS	92		84		129		138		0
04	Lab Blank	90		78						0
05	LCS	82		83						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: 0907419B

Lab File ID: v072307.d

Date Analyzed: 07/23/2009

Instrument ID: msdv.i

Time Analyzed: 02:25 PM

		Naphthalene-d8 Area	#	RT	#	Acenaphthene-d12 Area	#	RT	#	Phenanthrene-d10 Area	#	RT	#
	24-HOUR STD	734702		5.88		357960		8.1		669092		9.86	
	UPPER LIMIT	1469404		06.21		715920		08.43		1338184		10.19	
	LOWER LIMIT	367351		05.55		178980		07.77		334546		09.53	
	CLIENT SAMPLE NO												
01	BMI06-071709	809013		5.88		396477		8.1		664745		9.86	
02	BMI08-071709	820713		5.88		395416		8.09		709934		9.86	
03	BMI08-071709BS	828440		5.88		400661		8.09		742466		9.86	
04	Lab Blank	812910		5.88		400598		8.09		723167		9.86	
05	LCS	852127		5.88		416941		8.09		771328		9.86	
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: 0907419B

Lab File ID: v072307.d

Date Analyzed: 07/23/2009

Instrument ID: msdv.i

Time Analyzed: 02:25 PM

		Perylene-d12 Area	#	RT	#	Chrysene-d12 Area	#	RT	#	1,4-Dichlorobenzene-d4 Area	#	RT	#
	24-HOUR STD	423996		15.75		540686		13.33		328325		4.22	
	UPPER LIMIT	847992		16.08		1081372		13.66		656650		04.55	
	LOWER LIMIT	211998		15.42		270343		13.00		164162		03.89	
	CLIENT SAMPLE NO												
01	BMI06-071709	444110		15.74		606219		13.33		323297		4.22	
02	BMI08-071709	450580		15.74		609025		13.33		321724		4.22	
03	BMI08-071709BS	480802		15.74		597105		13.33		324061		4.22	
04	Lab Blank	476314		15.74		606374		13.32		314895		4.22	
05	LCS	474866		15.74		624072		13.33		369945		4.22	
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
	80.000 Level 7	100.000 Level 8	160.000 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

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					
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 Level 7	100.000 Level 8	160.000 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

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	80.000 Level 7	100.000 Level 8	160.000 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

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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					
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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++ <-

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	80.000 Level 7	100.000 Level 8	160.000 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	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	<-

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	80.000 Level 7	100.000 Level 8	160.000 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

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	80.000 Level 7	100.000 Level 8	160.000 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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++ <-

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	80.000 Level 7	100.000 Level 8	160.000 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

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	80.000 Level 7	100.000 Level 8	160.000 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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++ <-

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	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	

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	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

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```
|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: V0716116

2,4-Dinitrophenol - %RSD>20% but <30%
Acceptable TO13, not 8270c

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

7/17/09

Based on 1 ul injection in DCM

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2 / 100.000 Level 8	10.000 Level 3 / 160.000 Level 9	20.000 Level 4	40.000 Level 5	50.000 Level 6	RRF	% RSD	
unit in ug/ml or ng on column									
3 Phenol*	+++++	1.37634	1.46526	1.43979	1.22020	1.27444			
	1.13677	1.11882	0.94758				1.24740	14.252	CCC
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	RM 7/19/09
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	CCC
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	

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 Client Smp ID: Breakdown
Inj Date : 16-JUL-2009 14:19
Operator : rn Inst ID: msdv.i
Smp Info : ;1685-10C-50;
Misc Info :
Comment :
Method : /chem/msdv.i/16Jul2009.b/BREAK.m
Meth Date : 18-May-2009 13:40 rnoonan Quant Type: ESTD
Cal Date : 20-OCT-2004 08:05 Cal File: p102001a.d
Als 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)
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	

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

MSD-V Run Log

@Air Toxics Ltd.

Logbook#: 1837

Method: TO15A.

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 (0.609) 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 (19.16) 2

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

Instrument ID: MSD-V
DFTPP File ID: V071605
DFTPP Injection Date: 7/16/09
DFTPP Injection Time 1419

IS#:	Area Counts
1,4-Dichlorobenzene-d_4:	344510
Naphthalene-d_8:	803185
Acenaphthene-d_{10}:	3604531
Phenanthrene-d_{10}:	6860990
Chrysene-d_{12}:	5791675
Perylene-d_{12}:	4394467

Injection Volume: 1.0 µL

	use	File #	Sample / Client Name	Vial #	Dilution Factor	Date Analyzed	Time Analyzed	Initials	Comments
1	X	V071601	DCM Wash	1	1.0	7/16/09	~~1419~~	nm	Time Analyzed = 0919
2	X	02	1685-10C-50	2			1438		= 1000
3	X	03	1685-124-4 Sim CCV	3			~~1505~~ nm 7/17/09		= 1241
4	X	04	DCM Blank, SIM	4			1308		
5	✓	05	1685-10C-50	2			1419		Breakdown 0%
6	✓	06	DCM 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	DCM Blank	14			1941		
18									
19									
20									
21									
22								nm 7/17/09	

Calculation Check:

ng of compound = $\frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF}$ = $\frac{548823}{\cancel{344510}\ 344510}$ × $\frac{40.0}{1.24740}$ = 51.08

nm 7/17/09

File ID: V071612
Compound: phenol
Initials: nm

7/17/09

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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (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.

Report Date: 17-Jul-2009 10:02

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v071616.d
Lab Smp Id: 1685-155-50
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: LCS
Level: LOW
Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
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 LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
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.

Report Date: 17-Jul-2009 10:02

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 Hexachlorocyclopen	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)fluoranthe	50.00	55.51	111.03	70-130
96	Benzo(k)fluoranthe	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

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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: rn
Column diameter: 0.25

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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: 1ng.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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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
Lab File ID: v071607.d
Lab Smp Id: 1685-171-1
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: 15:05
Client Smp ID: Level 1
Level: LOW
Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
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 LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
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: rn

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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
Lab File ID: v071608.d
Lab Smp Id: 1685-171-5
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: 15:33
Client Smp ID: Level 2
Level: LOW
Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
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 LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
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.

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

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: rn

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS 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	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
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 LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
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.

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

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: rn

Column diameter: 0.25

0177

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS 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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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.

Report Date: 17-Jul-2009 09:49

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 LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
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 LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
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: rn
Column diameter: 0.25

Page 1

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS 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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
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 LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
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.

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

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

Instrument: msdv.i

Operator: rn

Column diameter: 0.25

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS 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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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.

Report Date: 17-Jul-2009 09:40

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v071612.d
Lab Smp Id: 1685-171-50
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: CCV
Level: LOW
Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
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 LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
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.d
Date : 16-JUL-2009 17:23
Client ID: CCV
Sample Info: ;1685-171-50;CCV
Volume Injected (uL): 1.0
Column phase: DB-5.625

Instrument: msdv.i
Operator: rn
Column diameter: 0.25

Page 1

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS 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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
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 LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
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.

0197

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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.

Report Date: 17-Jul-2009 09:45

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v071614.d
Lab Smp Id: 1685-171-100
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 8
Level: LOW
Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
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 LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
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.

0202

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (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 LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
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 LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
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.

0207

Data File: /chem/msdv.i/16jul09a.b/v071615.d
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: rn
Column diameter: 0.25

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdv.i Injection Date: 23-JUL-2009 14:25
Lab File ID: v072307.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/23jul09a.b/bnap0716.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 1 2-Fluorophenol	0.92550	0.86982	0.050	6.01645	30.00000	Averaged
$ 2 Phenol-d5	1.05230	0.99320	0.050	5.61639	30.00000	Averaged
3 Phenol*	1.24740	1.20017	0.050	3.78623	30.00000	Averaged
41 Aniline	1.58922	1.48090	0.050	6.81603	30.00000	Averaged
4 bis(2-Chloroethyl)ether	1.10301	0.99579	0.050	9.72110	30.00000	Averaged
5 2-Chlorophenol	0.92397	0.89681	0.050	2.93980	30.00000	Averaged
6 1,3-Dichlorobenzene	0.99701	0.90791	0.050	8.93629	30.00000	Averaged
9 1,4-Dichlorobenzene*	1.02344	0.91691	0.050	10.40934	30.00000	Averaged
10 Benzyl Alcohol	0.60530	0.61090	0.050	-0.92521	30.00000	Averaged
11 1,2-Dichlorobenzene	0.93885	0.86547	0.050	7.81565	30.00000	Averaged
12 2-Methylphenol	0.84827	0.82717	0.050	2.48759	30.00000	Averaged
13 bis(2-Chloroisopropyl)ether	1.67931	1.39516	0.050	16.92056	30.00000	Averaged
14 4-Methylphenol	0.87302	0.84304	0.050	3.43482	30.00000	Averaged
15 N-Nitrosodipropylamine**	0.69463	0.66747	0.050	3.90991	30.00000	Averaged
16 Hexachloroethane	0.41976	0.38600	0.050	8.04335	30.00000	Averaged
$ 17 Nitrobenzene-d5	0.41448	0.41735	0.050	-0.69338	30.00000	Averaged
18 Nitrobenzene	0.45093	0.44790	0.050	0.67366	30.00000	Averaged
19 Isophorone	0.82250	0.82176	0.050	0.08959	30.00000	Averaged
20 2-Nitrophenol*	0.17771	0.19650	0.050	-10.57201	30.00000	Averaged
21 2,4-Dimethylphenol	0.33866	0.34681	0.050	-2.40763	30.00000	Averaged
24 Benzoic Acid	0.17968	0.19642	0.050	-9.31869	30.00000	Averaged
23 bis(2-Chloroethoxy)methane	0.52032	0.51484	0.050	1.05398	30.00000	Averaged
25 2,4-Dichlorophenol*	0.25632	0.26785	0.050	-4.49833	30.00000	Averaged
26 1,2,4-Trichlorobenzene	0.32758	0.32059	0.050	2.13213	30.00000	Averaged
28 Naphthalene	1.15026	1.08095	0.050	6.02512	30.00000	Averaged
29 4-Chloroaniline	0.48836	0.49328	0.050	-1.00691	30.00000	Averaged
30 Hexachlorobutadiene*	0.16695	0.16585	0.050	0.65626	30.00000	Averaged
32 4-Chloro-3-Methylphenol*	0.30780	0.32591	0.050	-5.88333	30.00000	Averaged
33 2-Methylnaphthalene	0.65981	0.64999	0.050	1.48872	30.00000	Averaged
145 1-Methylnaphthalene	0.68637	0.67372	0.050	1.84439	30.00000	Averaged
35 Hexachlorocyclopentadiene**	0.36331	0.35605	0.050	1.99878	30.00000	Averaged
36 2,4,6-Trichlorophenol*	0.36744	0.38951	0.050	-6.00580	30.00000	Averaged
37 2,4,5-Trichlorophenol	0.39154	0.39045	0.050	0.28044	30.00000	Averaged
39 2-Chloronaphthalene	1.27263	1.22629	0.050	3.64095	30.00000	Averaged
40 2-Nitroaniline	0.50206	0.49173	0.050	2.05812	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdv.i Injection Date: 23-JUL-2009 14:25
Lab File ID: v072307.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/23jul09a.b/bnap0716.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
42 Dimethylphthalate	1.29779	1.28728	0.050	0.80994	30.00000	Averaged
44 2,6-Dinitrotoluene	0.32140	0.32533	0.050	-1.22362	30.00000	Averaged
45 Acenaphthylene	2.04269	2.00963	0.050	1.61839	30.00000	Averaged
46 3-Nitroaniline	0.41107	0.39147	0.050	4.76619	30.00000	Averaged
48 Acenaphthene*	1.25679	1.18922	0.050	5.37623	30.00000	Averaged
49 2,4-Dinitrophenol**	0.15312	0.15651	0.050	-2.21061	30.00000	Averaged
50 4-Nitrophenol**	0.22237	0.21310	0.050	4.16546	30.00000	Averaged
51 Dibenzofuran	1.72505	1.60481	0.050	6.97013	30.00000	Averaged
52 2,4-Dinitrotoluene	0.41922	0.41809	0.050	0.27050	30.00000	Averaged
56 Diethylphthalate	1.38575	1.39912	0.050	-0.96530	30.00000	Averaged
$ 147 Fluorene-d10	1.14136	1.09123	0.050	4.39255	30.00000	Averaged
58 4-Chlorophenyl phenyl ether	0.64141	0.59274	0.050	7.58770	30.00000	Averaged
57 Fluorene	1.35965	1.30911	0.050	3.71699	30.00000	Averaged
59 4-Nitroaniline	0.42773	0.42589	0.050	0.43030	30.00000	Averaged
60 4,6-Dinitro-2-methylphenol	0.10481	0.11455	0.050	-9.28691	30.00000	Averaged
61 N-nitrosodiphenylamine*	0.59718	0.56764	0.050	4.94729	30.00000	Averaged
$ 62 2,4,6-Tribromophenol	0.17011	0.18130	0.050	-6.57860	30.00000	Averaged
65 4-Bromophenyl phenyl ether	0.19069	0.18696	0.050	1.95599	30.00000	Averaged
66 Hexachlorobenzene	0.22362	0.21591	0.050	3.44777	30.00000	Averaged
68 Pentachlorophenol*	0.09603	0.10428	0.050	-8.58744	30.00000	Averaged
72 Phenanthrene	1.14136	1.05982	0.050	7.14456	30.00000	Averaged
73 Anthracene	1.09597	1.06270	0.050	3.03638	30.00000	Averaged
144 Carbazole	2.06021	1.97718	0.050	4.02989	30.00000	Averaged
78 Di-n-butylphthalate	1.19285	1.25690	0.050	-5.36901	30.00000	Averaged
$ 83 Fluoranthene-d10	0.85103	0.79801	0.050	6.23016	30.00000	Averaged
80 Fluoranthene*	1.03951	0.97974	0.050	5.74914	30.00000	Averaged
$ 148 Pyrene-d10	0.93334	0.92913	0.050	0.45077	30.00000	Averaged
81 Pyrene	1.34888	1.34175	0.050	0.52867	30.00000	Averaged
85 Butyl benzyl phthalate	0.57001	0.64165	0.050	-12.56840	30.00000	Averaged
89 3 3'-Dichlorobenzidine	0.38717	0.41532	0.050	-7.27066	30.00000	Averaged
88 Benzo(a)Anthracene	1.20050	1.22109	0.050	-1.71483	30.00000	Averaged
91 Chrysene	1.29377	1.17635	0.050	9.07618	30.00000	Averaged
93 bis(2-ethylhexyl)Phthalate	0.79529	0.87801	0.050	-10.40141	30.00000	Averaged
94 Di-n-octyl phthalate*	1.58576	1.83103	0.050	-15.46677	30.00000	Averaged
95 Benzo(b)fluoranthene	1.48815	1.46058	0.050	1.85256	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdv.i Injection Date: 23-JUL-2009 14:25
Lab File ID: v072307.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/23jul09a.b/bnap0716.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
96 Benzo(k)fluoranthene	1.63520	1.60135	0.050	2.06974	30.00000	Averaged
97 Benzo(e)pyrene	1.34870	1.32235	0.050	1.95385	30.00000	Averaged
$ 101 Benzo(a)pyrene-d12	0.80858	0.84510	0.050	-4.51614	30.00000	Averaged
98 Benzo(a)pyrene*	1.46424	1.42362	0.050	2.77368	30.00000	Averaged
103 Indeno(1,2,3-cd)pyrene	1.23327	1.36011	0.050	-10.28568	30.00000	Averaged
104 Dibenzo(a,h)anthracene	1.29180	1.32558	0.050	-2.61493	30.00000	Averaged
105 Benzo(g,h,i)perylene	1.46071	1.48005	0.050	-1.32382	30.00000	Averaged

Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/23jul09a.b/v072307.d
Lab Smp Id: 1685-171-50 Client Smp ID: ccv
Inj Date : 23-JUL-2009 14:25
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/23jul09a.b/bnap0716.m
Meth Date : 23-Jul-2009 14:52 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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$ 1 2-Fluorophenol	112	2.815	2.815	(0.666)	356979	50.0000	46.99
$ 2 Phenol-d5	99	3.893	3.893	(0.921)	407614	50.0000	47.19
3 Phenol*	94	3.913	3.913	(0.926)	492557	50.0000	48.11
41 Aniline	93	3.872	3.872	(0.917)	607769	50.0000	46.59
4 bis(2-Chloroethyl)ether	93	3.965	3.965	(0.939)	408678	50.0000	45.14
5 2-Chlorophenol	128	4.007	4.007	(0.948)	368055	50.0000	48.53
6 1,3-Dichlorobenzene	146	4.173	4.173	(0.988)	372613	50.0000	45.53
* 7 1,4-Dichlorobenzene-d4	150	4.224	4.224	(1.000)	328325	40.0000	
9 1,4-Dichlorobenzene*	146	4.245	4.245	(1.005)	376305	50.0000	44.80
10 Benzyl Alcohol	108	4.463	4.463	(1.056)	250718	50.0000	50.46
11 1,2-Dichlorobenzene	146	4.483	4.483	(1.061)	355196	50.0000	46.09
12 2-Methylphenol	108	4.680	4.680	(1.108)	339476	50.0000	48.76
13 bis(2-Chloroisopropyl)ether	45	4.680	4.680	(1.108)	572582	50.0000	41.54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	14 4-Methylphenol	108	4.888	4.888	(1.157)	345988	50.0000	48.28
	15 N-Nitrosodipropylamine**	70	4.867	4.867	(1.152)	273935	50.0000	48.04
	16 Hexachloroethane	117	4.877	4.877	(1.155)	158417	50.0000	45.98
$	17 Nitrobenzene-d5	82	4.991	4.991	(0.848)	383287	50.0000	50.35
	18 Nitrobenzene	77	5.012	5.012	(0.852)	411338	50.0000	49.66
	19 Isophorone	82	5.333	5.333	(0.907)	754690	50.0000	49.96
	20 2-Nitrophenol*	139	5.437	5.437	(0.924)	180463	50.0000	55.29
	21 2,4-Dimethylphenol	122	5.561	5.561	(0.945)	318507	50.0000	51.20
	24 Benzoic Acid	122	5.768	5.768	(0.981)	180388	50.0000	54.66
	23 bis(2-Chloroethoxy)methane	93	5.675	5.675	(0.965)	472817	50.0000	49.47
	25 2,4-Dichlorophenol*	162	5.758	5.758	(0.979)	245989	50.0000	52.25
	26 1,2,4-Trichlorobenzene	180	5.841	5.841	(0.993)	294425	50.0000	48.93
*	27 Naphthalene-d8	136	5.882	5.882	(1.000)	734702	40.0000	
	28 Naphthalene	128	5.903	5.903	(1.004)	992722	50.0000	46.99
	29 4-Chloroaniline	127	6.038	6.038	(1.026)	453019	50.0000	50.50
	30 Hexachlorobutadiene*	225	6.173	6.173	(1.049)	152316	50.0000	49.67
	32 4-Chloro-3-Methylphenol*	107	6.722	6.722	(1.143)	299305	50.0000	52.94
	33 2-Methylnaphthalene	142	6.794	6.794	(1.155)	596937	50.0000	49.26
	145 1-Methylnaphthalene	142	6.929	6.929	(1.178)	618725	50.0000	49.08
	35 Hexachlorocyclopentadiene**	237	7.095	7.095	(0.876)	159315	50.0000	49.00
	36 2,4,6-Trichlorophenol*	196	7.209	7.209	(0.890)	174286	50.0000	53.00
	37 2,4,5-Trichlorophenol	196	7.261	7.261	(0.896)	174705	50.0000	49.86
	39 2-Chloronaphthalene	162	7.385	7.385	(0.912)	548705	50.0000	48.18
	40 2-Nitroaniline	65	7.592	7.592	(0.937)	220024	50.0000	48.97
	42 Dimethylphthalate	163	7.893	7.893	(0.974)	575995	50.0000	49.60
	44 2,6-Dinitrotoluene	165	7.955	7.955	(0.982)	145571	50.0000	50.61
	45 Acenaphthylene	152	7.903	7.903	(0.976)	899211	50.0000	49.19
	46 3-Nitroaniline	138	8.100	8.100	(1.000)	175165	50.0000	47.62
*	47 Acenaphthene-d10	164	8.100	8.100	(1.000)	357960	40.0000	
	48 Acenaphthene*	154	8.131	8.131	(1.004)	532116	50.0000	47.31
	49 2,4-Dinitrophenol**	184	8.224	8.224	(1.015)	70030	50.0000	51.10
	50 4-Nitrophenol**	109	8.380	8.380	(1.035)	95353	50.0000	47.92
	51 Dibenzofuran	168	8.328	8.328	(1.028)	718071	50.0000	46.51
	52 2,4-Dinitrotoluene	165	8.411	8.411	(1.038)	187074	50.0000	49.86
	56 Diethylphthalate	149	8.763	8.763	(1.082)	626038	50.0000	50.48
$	147 Fluorene-d10	176	8.712	8.712	(1.075)	488270	50.0000	47.80
	58 4-Chlorophenyl phenyl ether	204	8.784	8.784	(1.084)	265221	50.0000	46.21
	57 Fluorene	166	8.743	8.743	(1.079)	585761	50.0000	48.14
	59 4-Nitroaniline	138	8.857	8.857	(1.093)	190565	50.0000	49.78
	60 4,6-Dinitro-2-methylphenol	198	8.898	8.898	(0.902)	95803	50.0000	54.64
	61 N-nitrosodiphenylamine*	169	8.940	8.940	(0.906)	474754	50.0000	47.53
$	62 2,4,6-Tribromophenol	330	9.064	9.064	(1.119)	81122	50.0000	53.29
	65 4-Bromophenyl phenyl ether	248	9.364	9.364	(0.950)	156364	50.0000	49.02
	66 Hexachlorobenzene	284	9.509	9.509	(0.964)	180580	50.0000	48.28
	68 Pentachlorophenol*	266	9.737	9.737	(0.987)	87213	50.0000	54.29
*	71 Phenanthrene-d10	188	9.862	9.862	(1.000)	669092	40.0000	
	72 Phenanthrene	178	9.883	9.883	(1.002)	886395	50.0000	46.43(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
73 Anthracene	178	9.934	9.934	(1.007)	888802	50.0000	48.48
144 Carbazole	167	10.162	10.162	(2.406)	811449	50.0000	47.98
78 Di-n-butylphthalate	149	10.732	10.732	(1.088)	1051223	50.0000	52.68
$ 83 Fluoranthene-d10	212	11.292	11.292	(1.145)	667431	50.0000	46.88
80 Fluoranthene*	202	11.313	11.313	(1.147)	819424	50.0000	47.12
$ 148 Pyrene-d10	212	11.561	11.561	(0.867)	627962	50.0000	49.77
81 Pyrene	202	11.582	11.582	(0.869)	906832	50.0000	49.74
85 Butyl benzyl phthalate	149	12.649	12.649	(0.949)	433664	50.0000	56.28
89 3 3'-Dichlorobenzidine	252	13.354	13.354	(1.002)	280698	50.0000	53.64
88 Benzo(a)Anthracene	228	13.313	13.313	(0.998)	825281	50.0000	50.86
* 90 Chrysene-d12	240	13.333	13.333	(1.000)	540686	40.0000	
91 Chrysene	228	13.375	13.375	(1.003)	795042	50.0000	45.46
93 bis(2-ethylhexyl)Phthalate	149	13.686	13.686	(1.026)	593409	50.0000	55.20
94 Di-n-octyl phthalate*	149	14.764	14.764	(0.946)	970436	50.0000	57.73
95 Benzo(b)fluoranthene	252	15.116	15.116	(0.968)	774100	50.0000	49.07
96 Benzo(k)fluoranthene	252	15.157	15.157	(0.971)	848708	50.0000	48.96(H)
97 Benzo(e)pyrene	252	15.562	15.562	(0.997)	700838	50.0000	49.02(H)
$ 101 Benzo(a)pyrene-d12	264	15.613	15.613	(1.000)	447897	50.0000	52.26
98 Benzo(a)pyrene*	252	15.644	15.644	(1.002)	754513	50.0000	48.61(H)
* 99 Perylene-d12	264	15.748	15.748	(1.000)	423996	40.0000	(H)
103 Indeno(1,2,3-cd)pyrene	276	17.479	17.479	(1.119)	720854	50.0000	55.14
104 Dibenzo(a,h)anthracene	278	17.541	17.541	(1.123)	702549	50.0000	51.31
105 Benzo(g,h,i)perylene	276	17.862	17.862	(1.144)	784419	50.0000	50.66

QC Flag Legend

H - Operator selected an alternate compound hit.

Report Date: 23-Jul-2009 14:52

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v072307.d
Lab Smp Id: 1685-171-50
Analysis Type: SV
Quant Type: ISTD
Operator: rn
Method File: /chem/msdv.i/23jul09a.b/bnap0716.m
Misc Info: ,NOTICS

Calibration Date: 23-JUL-2009
Calibration Time: 14:25
Client Smp ID: ccv
Level: LOW
Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 1,4-Dichlorobenze	328325	164162	656650	328325	0.00
27 Naphthalene-d8	734702	367351	1469404	734702	0.00
47 Acenaphthene-d10	357960	178980	715920	357960	0.00
71 Phenanthrene-d10	669092	334546	1338184	669092	0.00
90 Chrysene-d12	540686	270343	1081372	540686	0.00
99 Perylene-d12	423996	211998	847992	423996	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 1,4-Dichlorobenze	4.22	3.72	4.72	4.22	0.00
27 Naphthalene-d8	5.88	5.38	6.38	5.88	0.00
47 Acenaphthene-d10	8.10	7.60	8.60	8.10	0.00
71 Phenanthrene-d10	9.86	9.36	10.36	9.86	0.00
90 Chrysene-d12	13.33	12.83	13.83	13.33	0.00
99 Perylene-d12	15.75	15.25	16.25	15.75	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/23jul09a.b/v072307.d

Date : 23-JUL-2009 14:25

Client ID: ccv

Sample Info: ;1685-171-50;ccv

Volume Injected (uL): 1.0

Column phase: DB-5.625

Instrument: msdv.i

Operator: rn

Column diameter: 0.25

0215

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0907419B-11A

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

File Name:	**v072316**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/23/09 06:36 PM**
		Date of Extraction: 7/22/09

Compound	%Recovery
Phenol	81
bis(2-Chloroethyl) Ether	Not Spiked
2-Chlorophenol	78
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	76
Naphthalene	Not Spiked
4-Chloroaniline	Not Spiked
Hexachlorobutadiene	Not Spiked
4-Chloro-3-methylphenol	87
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	62
2,4-Dinitrotoluene	76
Dibenzofuran	Not Spiked

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0907419B-11A

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

File Name:	**v072316**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/23/09 06:36 PM**
		Date of Extraction: 7/22/09

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	76
Phenanthrene	Not Spiked
Anthracene	Not Spiked
di-n-Butylphthalate	Not Spiked
Fluoranthene	Not Spiked
Pyrene	84
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): 150000
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
2-Fluorophenol	76	50-150
Phenol-d5	82	50-150
Nitrobenzene-d5	84	50-150
2,4,6-Tribromophenol	89	50-150
Fluorene-d10	83	60-120
Pyrene-d10	88	60-120

Report Date: 24-Jul-2009 16:00

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 23jul09a
Sample Matrix: GAS
Fraction: SV
Lab Smp Id: 0907419B-LCS
Client Smp ID: LCS
Level: LOW
Operator: rn
Data Type: MS DATA
SampleType: LCS
SpikeList File: TO13100.spk
Quant Type: ISTD
Sublist File: lcsfull.sub
Method File: /chem/msdv.i/23jul09a.b/bnap0716.m
Misc Info: ,NOTICS

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
3 Phenol*	50.00	40.66	81.31	50-150
5 2-Chlorophenol	50.00	39.14	78.29	50-150
9 1,4-Dichlorobenzen	50.00	34.18	68.37	50-150
15 N-Nitrosodipropyla	50.00	39.86	79.73	50-150
26 1,2,4-Trichloroben	50.00	38.01	76.02	50-150
32 4-Chloro-3-Methylp	50.00	43.69	87.38	50-150
48 Acenaphthene*	50.00	37.25	74.50	50-150
50 4-Nitrophenol**	50.00	31.14	62.27	38-96
52 2,4-Dinitrotoluene	50.00	37.98	75.97	50-150
68 Pentachlorophenol*	50.00	38.19	76.37	39-106
81 Pyrene	50.00	41.80	83.61	60-120

SURROGATE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	50.00	38.19	76.39	50-150
$ 2 Phenol-d5	50.00	41.18	82.36	50-150
$ 17 Nitrobenzene-d5	50.00	42.05	84.10	50-150
$ 62 2,4,6-Tribromophen	50.00	44.46	88.92	50-150
$ 147 Fluorene-d10	50.00	41.57	83.15	60-120
$ 148 Pyrene-d10	50.00	43.79	87.58	60-120

Air Toxics Ltd.

Semivolatile by Modified 8270C/TO-13

Data file : /chem/msdv.i/23jul09a.b/v072316.d
Lab Smp Id: 0907419B-LCS Client Smp ID: LCS
Inj Date : 23-JUL-2009 18:36
Operator : rn Inst ID: msdv.i
Smp Info : ;0907419B-LCS;LCS
Misc Info : ,NOTICS
Comment : HP-5MS 30M X 0.25mm X 0.25u
Method : /chem/msdv.i/23jul09a.b/bnap0716.m
Meth Date : 24-Jul-2009 15:59 lzhang Quant Type: ISTD
Cal Date : 16-JUL-2009 16:28 Cal File: v071610.d
Als bottle: 11 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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
$ 1 2-Fluorophenol	112	2.825	2.815	(0.669)	326931	38.1946	38.19
$ 2 Phenol-d5	99	3.903	3.893	(0.924)	400770	41.1793	41.18
$ 17 Nitrobenzene-d5	82	4.991	4.991	(0.848)	371277	42.0486	42.05
$ 62 2,4,6-Tribromophenol	330	9.064	9.064	(1.120)	78829	44.4577	44.46
$ 147 Fluorene-d10	176	8.711	8.712	(1.077)	494593	41.5728	41.57
$ 148 Pyrene-d10	212	11.551	11.561	(0.866)	637650	43.7892	43.79
* 7 1,4-Dichlorobenzene-d4	150	4.224	4.224	(1.000)	369945	40.0000	
* 27 Naphthalene-d8	136	5.882	5.882	(1.000)	852127	40.0000	
* 47 Acenaphthene-d10	164	8.090	8.100	(1.000)	416941	40.0000	
* 71 Phenanthrene-d10	188	9.862	9.862	(1.000)	771328	40.0000	
* 90 Chrysene-d12	240	13.333	13.333	(1.000)	624072	40.0000	
* 99 Perylene-d12	264	15.738	15.748	(1.000)	474866	40.0000	
3 Phenol*	94	3.913	3.913	(0.926)	469036	40.6559	40.66

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
5 2-Chlorophenol	128	4.007	4.007	(0.948)	334495	39.1431	39.14
9 1,4-Dichlorobenzene*	146	4.245	4.245	(1.005)	323574	34.1848	34.18
15 N-Nitrosodipropylamine**	70	4.867	4.867	(1.152)	256102	39.8640	39.86
26 1,2,4-Trichlorobenzene	180	5.851	5.841	(0.995)	265247	38.0096	38.01
32 4-Chloro-3-Methylphenol*	107	6.722	6.722	(1.143)	286473	43.6892	43.69
48 Acenaphthene*	154	8.131	8.131	(1.005)	487961	37.2485	37.25
50 4-Nitrophenol**	109	8.380	8.380	(1.036)	72169	31.1364	31.14
52 2,4-Dinitrotoluene	165	8.411	8.411	(1.040)	165988	37.9854	37.98
68 Pentachlorophenol*	266	9.737	9.737	(0.987)	70712	38.1864	38.19
81 Pyrene	202	11.582	11.582	(0.869)	879772	41.8044	41.80

Report Date: 24-Jul-2009 16:00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v072316.d
Lab Smp Id: 0907419B-LCS
Analysis Type: SV
Quant Type: ISTD
Operator: rn
Method File: /chem/msdv.i/23jul09a.b/bnap0716.m
Misc Info: ,NOTICS

Calibration Date: 23-JUL-2009
Calibration Time: 14:25
Client Smp ID: LCS
Level: LOW
Sample Type: PUF/XAD

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 1,4-Dichlorobenze	328325	164162	656650	369945	12.68
27 Naphthalene-d8	734702	367351	1469404	852127	15.98
47 Acenaphthene-d10	357960	178980	715920	416941	16.48
71 Phenanthrene-d10	669092	334546	1338184	771328	15.28
90 Chrysene-d12	540686	270343	1081372	624072	15.42
99 Perylene-d12	423996	211998	847992	474866	12.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 1,4-Dichlorobenze	4.22	3.72	4.72	4.22	0.00
27 Naphthalene-d8	5.88	5.38	6.38	5.88	0.00
47 Acenaphthene-d10	8.10	7.60	8.60	8.09	-0.13
71 Phenanthrene-d10	9.86	9.36	10.36	9.86	0.00
90 Chrysene-d12	13.33	12.83	13.83	13.33	0.00
99 Perylene-d12	15.75	15.25	16.25	15.74	-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.

0222

Data File: /chem/msdv.i/23jul09a.b/v072316.d
Date : 23-JUL-2009 18:36
Client ID: LCS
Sample Info: ;0907419B-LCS;LCS
Volume Injected (uL): 1.0
Column phase: DB-5.625

Instrument: msdv.i
Operator: rn
Column diameter: 0.25

Data File: /chem/msdv.i/23jul09a.b/v072316.d

Date : 23-JUL-2009 18:36

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907419B-LCS;LCS

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

3 Phenol*

Concentration: 40.66 ug

Data File: /chem/msdv.i/23jul09a.b/v072316.d

Date : 23-JUL-2009 18:36

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907419B-LCS;LCS

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

5 2-Chlorophenol

Concentration: 39.14 ug

Data File: /chem/msdv.i/23jul09a.b/v072316.d

Date : 23-JUL-2009 18:36

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907419B-LCS;LCS

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

9 1,4-Dichlorobenzene*

Concentration: 34.18 ug

Data File: /chem/msdv.i/23jul09a.b/v072316.d

Date : 23-JUL-2009 18:36

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907419B-LCS;LCS

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

15 N-Nitrosodipropylamine**

Concentration: 39.86 ug

Data File: /chem/msdv.i/23jul09a.b/v072316.d

Date : 23-JUL-2009 18:36

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907419B-LCS;LCS

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 38.01 ug

Data File: /chem/msdv.i/23jul09a.b/v072316.d

Date : 23-JUL-2009 18:36

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907419B-LCS;LCS

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

32 4-Chloro-3-Methylphenol*

Concentration: 43.69 ug

Data File: /chem/msdv.i/23jul09a.b/v072316.d

Date : 23-JUL-2009 18:36

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907419B-LCS;LCS

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

48 Acenaphthene*

Concentration: 37.25 ug

Data File: /chem/msdv.i/23jul09a.b/v072316.d

Date : 23-JUL-2009 18:36

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907419B-LCS;LCS

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

50 4-Nitrophenol**

Concentration: 31.14 ug

Data File: /chem/msdv.i/23jul09a.b/v072316.d

Date : 23-JUL-2009 18:36

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907419B-LCS;LCS

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

52 2,4-Dinitrotoluene

Concentration: 37.98 ug

Data File: /chem/msdv.i/23jul09a.b/v072316.d

Date : 23-JUL-2009 18:36

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907419B-LCS;LCS

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

68 Pentachlorophenol*

Concentration: 38.19 ug

Data File: /chem/msdv.i/23jul09a.b/v072316.d

Date : 23-JUL-2009 18:36

Client ID: LCS

Instrument: msdv.i

Sample Info: ;0907419B-LCS;LCS

Volume Injected (uL): 1.0

Operator: rn

Column phase: DB-5.625

Column diameter: 0.25

81 Pyrene

Concentration: 41.80 ug

TO-13A ASE Extraction Logbook @Air Toxics Logbook#: 1809

Date Extracted: 7/22/09
Set-up By: KJ
Spiked By: MJS
Spike Date: 7/22/09

Spike Witness: MM
Date Witnessed: 7/22/09
☑ *Proj.Pr./COC checked* ☑ *Spike ID Verified*
☑ *Spike Amt. Verified* ☐ *Equipment checked*
☑ *Verified media certified*

Solvent: Dichloromethane
Solvent Lot #: 090321
Concentrated By: MJS
Date Concentrated: 7/23/09

	ATL Sample ID #	Client I.D. #	Car. #	PUF / XAD/Filter Lot #	Surr. ID/Conc. (µg/mL)*	Surr. Amt. (mL)	LCS ID/Conc. (µg/mL)	LCS Amt. (mL)	Fin. Vol. (mL)
1.	0907419B-03A	BM106-071709	3	F090619 P090626, X090608	1698-23-100	0.5mL	NA	NA	1.0
2	-06A	BM108-071709	3/2	P090629 X090608 P090702 F090619	↓	↓	↓	↓	↓
2	-09A	BM108-071709BS	3	↓					
	-blk	NA	3/2	X090713 P090710					
	-LCS	↓	3	↓		0.5mL	1698-24-100	0.5mL	
								MJS	
								7/22/09	

Pre-Spiked Surrogate	Surr. ID/Conc. (ug/mL)	Surr Amt (uL)	Spiked By	Spiked Date
Benzo(a)pyrene-d12 1	1698-14-100	100	MJS	7/1/09
2 Fluoranthene-d10	↓	↓	↓	7/8/09

Water Bath Temperature °C	Initial Temp °C	Final Temp °C
	65°C	69°C

Comments: 0907419B-03A had a small amount of XAD spill out. (MJS) 0907419B-09A PUF has a yellow color on middle PUF (MJS)

*TO-13A(mod) Surrogate Compounds: 2-Fluorophenol, Phenol-d_5, Nitrobenzene-d_5, 2,4,6-Tribromophenol, Fluorene-d_{10} and Pyrene-d_{10}
*PAH Surrogate Compounds: Fluorene-d_{10} and Pyrene-d_{10}

 Signed: [signature] Date: 7/23/09 Revised: 04/09

MSD-V Run Log

@Air Toxics Ltd.

Logbook#: 1837

Method: TO13A

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base peak, 100.00% relative abundance	100.00
51	30.00 - 60.00% of mass 198	53.32
68	Less than 2.00% of mass 69	0.39 (0.78)1
69	Less than 99.90% of mass 198	50.45
70	Less than 2.00% of mass 69	0.00 (0.00)1
127	40.00 – 60.00% of mass 198	59.15
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.94
275	10.00 - 30.00% of mass 198	20.75
365	Greater than 1.00% of mass 198	2.42
441	Present, but less than mass 443	8.52
442	40.00 - 100.00% of mass 198	59.65
443	17.00 - 23.00% of mass 442	11.44 (19.17)2

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

Instrument ID: MSD-V
DFTPP File ID: V072306
DFTPP Injection Date: 7/23/09
DFTPP Injection Time 1358

IS# :	Area Counts
1,4-Dichlorobenzene-d_4:	328325
Naphthalene-d_8:	734702
Acenaphthene-d_{10}:	357960
Phenanthrene-d_{10}:	669092
Chrysene-d_{12}:	540686
Perylene-d_{12}:	423996

Injection Volume: 1.0 µL

	use	File #	Sample / Client Name	Vial #	Dilution Factor	Date Analyzed	Time Analyzed	Initials	Comments
1	✓	V072306	1685-10C-50	2	1.0	7/23/09	1358	RM/li	
2	✓	07	1685-17I-50	3			1425		
3	✓	08	DCM Blank	4			1456		
4	~~nu~~	~~09~~	~~0907358B-Blank~~	~~5~~					RM 7/23/09
5	~~nu~~	~~10~~	~~LCS~~	~~6~~					RM 7/23/09
6	✓	V0723 09	0907322 0907322-LCS	5	1.0	7/23/09	1524	RM/li	
7	✓	10	0907358B-Blank	6			1551		
8	✓	11	-LCS	7			1619		
9	✓	12	-03A	8			1646		
10	✓	13	-03AA	8			1714		
11	✓	14	-06A	9			1741		
12	✓	15	0907419B-Blank	10			1809		
13	✓	16	-LCS	11			1836		
14	✓	17	-03A	12			1904		
15	✓	18	-06A	13			1931		
16	✓	19	-09A	14			1958		
17	✓	20	P090713 X090713	15			2026		cut.
18	✓	21	1698-21-100	16			2053		Field Spike cut
19	✓	22	RM 7/24/09 1698-27-100	17			2120		Field Spike cut.
20	✓	23	MJS LCS-1	18			2148		
21	X	24	LCS-2	19			2215		
22	✓	25	LCS-3	20			2242		

Calculation Check:

ng of compound = $\frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{492557}{328325} \times \frac{40.0}{1.24740} = 48.11$ ✓

File ID: V072307
Compound: phenol
Initials: RM

Signed: [signature]

Date: 7/24/09

... cont'd on pg 18

Air Toxics Ltd.

Data file : /chem/msdv.i/16Jul2009.b/v071605.d
Lab Smp Id: DFTPP 50ng Client Smp ID: DFTPP 50ng
Inj Date : 16-JUL-2009 14:19
Operator : rn Inst 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 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

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (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

Data File: /chem/msdv.i/16jul09a.b/v071605.d

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

Data File: /chem/msdv.i/16jul09a.b/v071605.d

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)

Data File: /chem/msdv.i/16jul09a.b/v071605.d

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

Data File: v071605.d
Spectrum: Avg. Scans 206-208 (5.23), Background Scan 203
Location of Maximum: 198.00
Number of points: 135

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	56	105.00	177	168.00	566	242.00	109
39.00	655	106.00	53	174.00	148	243.00	105
49.00	30	107.00	3252	175.00	333	244.00	1931
50.00	2479	108.00	516	176.00	54	245.00	215
51.00	11246	110.00	6502	177.00	73	246.00	276
52.00	567	111.00	873	179.00	615	255.00	9018
56.00	318	116.00	82	180.00	498	256.00	1320
57.00	753	117.00	1962	181.00	187	258.00	422
61.00	62	118.00	74	185.00	274	265.00	170
62.00	65	122.00	102	186.00	2599	273.00	251
63.00	402	123.00	223	187.00	731	274.00	755
65.00	187	124.00	66	189.00	117	275.00	4085
68.00	69	125.00	60	192.00	182	276.00	529
69.00	10043	127.00	11640	193.00	194	277.00	306
74.00	862	128.00	816	196.00	412	296.00	1057
75.00	1478	129.00	4095	198.00	19888	297.00	159
76.00	476	130.00	343	199.00	1306	303.00	122
77.00	11956	135.00	255	203.00	56	315.00	119
78.00	830	136.00	75	204.00	573	323.00	374
79.00	602	137.00	144	205.00	956	334.00	206
80.00	479	141.00	410	206.00	4245	352.00	60
81.00	720	142.00	79	207.00	592	354.00	60
82.00	103	143.00	59	208.00	73	365.00	474
83.00	155	147.00	171	211.00	136	372.00	209
85.00	77	148.00	497	216.00	50	402.00	50
86.00	298	149.00	50	217.00	1054	403.00	68
87.00	51	153.00	70	218.00	71	421.00	54
91.00	78	155.00	207	221.00	946	423.00	602
92.00	90	156.00	395	223.00	236	424.00	82
93.00	1047	160.00	60	224.00	2437	441.00	1795
98.00	723	161.00	181	225.00	601	442.00	12170
99.00	765	165.00	69	227.00	953	443.00	2332
101.00	427	166.00	55	228.00	109	444.00	178
104.00	187	167.00	775	229.00	180		

Air Toxics Ltd.

Data file : /chem/msdv.i/23Jul2009.b/v072306.d
Lab Smp Id: DFTPP 50ng Client Smp ID: DFTPP 50ng
Inj Date : 23-JUL-2009 13:58
Operator : rn Inst ID: msdv.i
Smp Info : ;1685-10C-50;
Misc Info :
Comment :
Method : /chem/msdv.i/23Jul2009.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

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug)	TARGET RANGE	RATIO
1 dftpp						CAS #:		
5.201	5.502	(0.000)	198	15720			100.00- 100.00	100.00
5.201	5.502	(0.000)	51	8382			30.00- 60.00	53.32
5.201	5.502	(0.000)	68	62			0.00- 2.00	0.78
5.201	5.502	(0.000)	69	7930			0.00- 99.90	50.45
5.201	5.502	(0.000)	70	0			0.00- 2.00	0.00
5.201	5.502	(0.000)	127	9299			40.00- 60.00	59.15
5.201	5.502	(0.000)	197	0			0.00- 1.00	0.00
5.201	5.502	(0.000)	199	1091			5.00- 9.00	6.94
5.201	5.502	(0.000)	275	3262			10.00- 30.00	20.75
5.201	5.502	(0.000)	365	381			1.00- 0.00	2.42
5.201	5.502	(0.000)	441	1340			0.01- 99.99	74.53
5.201	5.502	(0.000)	442	9377			40.00- 100.00	59.65
5.201	5.502	(0.000)	443	1798			17.00- 23.00	19.17

Data File: /chem/msdv.i/23Jul2009.b/v072306.d

Date : 23-JUL-2009 13:58

Client ID: DFTPP 50ng

Instrument: msdv.i

Sample Info: ;1685-10C-50;

Operator: rn

Column phase:

Column diameter: 0.25

Data File: /chem/msdv.i/23Jul2009.b/v072306.d

Date : 23-JUL-2009 13:58

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	53.32
68	Less than 2.00% of mass 69	0.39 (0.78)
69	Less than 99.90% of mass 198	50.45
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	59.15
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.94
275	10.00 - 30.00% of mass 198	20.75
365	Greater than 1.00% of mass 198	2.42
441	Present, but less than mass 443	8.52
442	40.00 - 100.00% of mass 198	59.65
443	17.00 - 23.00% of mass 442	11.44 (19.17)

Data File: /chem/msdv.i/23Jul2009.b/v072306.d

Date : 23-JUL-2009 13:58

Client ID: DFTPP 50ng

Instrument: msdv.i

Sample Info: ;1685-10C-50;

Operator: rn

Column phase:

Column diameter: 0.25

Data File: v072306.d
Spectrum: Avg. Scans 203-205 (5.20), Background Scan 200
Location of Maximum: 198.00
Number of points: 116

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	540	104.00	79	167.00	644	245.00	200
49.00	28	105.00	158	168.00	432	246.00	232
50.00	1851	107.00	2608	174.00	130	255.00	7295
51.00	8382	108.00	412	175.00	284	256.00	1142
52.00	430	110.00	4944	177.00	63	258.00	344
56.00	189	111.00	742	179.00	495	265.00	120
57.00	605	116.00	72	180.00	291	273.00	196
61.00	51	117.00	1583	181.00	174	274.00	590
62.00	52	118.00	71	185.00	217	275.00	3262
63.00	335	122.00	69	186.00	2064	276.00	417
65.00	145	123.00	199	187.00	553	277.00	236
68.00	62	124.00	59	189.00	53	296.00	861
69.00	7930	125.00	53	192.00	143	297.00	116
74.00	642	127.00	9299	193.00	180	303.00	50
75.00	1173	128.00	689	196.00	350	323.00	283
76.00	388	129.00	3280	198.00	15720	334.00	183
77.00	9309	130.00	237	199.00	1091	352.00	55
78.00	673	135.00	226	204.00	419	365.00	381
79.00	476	136.00	65	205.00	830	372.00	155
80.00	378	137.00	124	206.00	3429	403.00	65
81.00	586	141.00	306	207.00	473	423.00	463
82.00	85	142.00	67	211.00	109	424.00	64
83.00	80	147.00	156	217.00	867	441.00	1340
86.00	167	148.00	410	221.00	736	442.00	9377
91.00	66	153.00	55	223.00	167	443.00	1798
92.00	59	155.00	179	224.00	2091	444.00	108
93.00	800	156.00	280	225.00	441		
98.00	561	160.00	51	227.00	780		
99.00	572	161.00	137	229.00	136		
101.00	283	165.00	51	244.00	1468		

Shipping/ Receiving Documents

Air Toxics LTD.
Laboratory Services Since 1989

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 #: 0907419B
# of pages (Including Cover): 1

7/29/2009

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

Air Toxics LTD.

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 samples. D.O.T. Hot line (800) 467-4922.

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95360-4719 95630
(916) 985-1000 FAX (916) 985-1020

0246

Page 1 of 1

Project Manager: Douglas Herbeker
Collected by: (Print and Sign) Beki Dano
Company: Tetra Tech EMI Email: douglas.herbeker@tetratech.com
Address: 350 American Ter. 20 City: Boise State: ID Zip: 83706
Phone: 208 389 1030 Fax: 208 389 1183

Project Info:
P.O. #:
Project #: 1039833
Project Name: BMI

Turn Around Time:
☒ Normal
☐ Rush
specify

Circle Reporting Units:
ppbv ppmv
ug/m³ mg/m³

Lab I.D.	Field Sample I.D. (Location)	Tube # / Cartridge #	Date of Collection	Start Time	End Time	Duration	Final Volume m³	Analysis Requested
	BMI06-071709		7/17/09	1130	1115	22.40	171.05	TO9A
	BMI06-071709					22.41	142.32	TO9A
0849	BMI06-071709					22.26	148.30	TO13A
	BMI08-071709			1255	1255	20.32	182.20	TO9A
	BMI08-071709					20.32	154.34	TO9A
0848	BMI08-071709					20.32	102.73	TO13A
	BMI08-071709BS			—	—	—	—	TO9A
	BMI08-071709BS			—	—	—	—	TO9A
0847	BMI08-071709BS			—	—	—	—	TO13A

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	7/20/09 1500	[signature]	7/21/09 AM 0905
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Pump Calibration Information
Pre-test Flow Rate:
Post-test Flow Rate:
Average Flow Rate:
Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex		6°C	Good	Yes No None	0907419

Air Toxics LTD.
Laboratory Services Since 1989

SAMPLE RECEIPT SUMMARY

WORKORDER 0907419B

Client

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

Phone

208-389-1030

Fax

Date Promised: 08/04/09
Date Completed: 7/28/09
Date Received: 7/21/09
PO#: 103P0333.005
Project#: 103P0333 BMI

Sales Rep: JJM

Total $: $ 675.00
Logged By: MG

Fraction	Sample #	Analysis	Collected	Amount$
03A	BMI06-071709	Modified TO-13A	7/17/2009	$225.00
06A	BMI08-071709	Modified TO-13A	7/17/2009	$225.00
09A	BMI08-071709BS	Modified TO-13A	7/17/2009	$225.00
10A	Lab Blank	Modified TO-13A	NA	$0.00
11A	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

Data File: /chem/msdv.i/23jul09a.b/v072306a.d
Report Date: 24-Jul-2009 16:01

Air Toxics Ltd.

Performance Check for 8270C

Data file : /chem/msdv.i/23jul09a.b/v072306a.d
Lab Smp Id: DFTPP 50ng Client Smp ID: Breakdown
Inj Date : 23-JUL-2009 13:58
Operator : rn Inst ID: msdv.i
Smp Info : ;1685-10C-50;
Misc Info :
Comment :
Method : /chem/msdv.i/23jul09a.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
Vol 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				379088	14.9962	14.99619
2 Pentachlorophenol	4.341	4.341	0.000	195532	16.8010	16.80103
3 Benzidine	6.579	6.590	-0.011	299276	9.68251	9.682514
4 p,p'-DDE	8.579	7.470	1.109	11875		
5 p,p'-DDD	8.030	7.802	0.228	6831		
6 p,p'-DDT	7.937	7.947	-0.010	360380	14.9962	14.99619

0% Breakdown

W 7/24/09

Compound Listing

Modified TO-13A (rev. 2001)

CAS Number	Compound	Detection Limit ug	Type
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 ug	Type
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	

@Air Toxics Ltd.

DATA REVIEW CHECKLIST

Work Order #: 0907419B

A_1	A_2	R	T	M	Q	
☐	☐	☑	☐	☑	☐	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)
		NA ☐	☐	NA ☐	☐	Sample Discrepancy Report (SDR) is completed
☐	☐	NA ☐	☐	☐	☐	Corrective Action issued - #
☐	☐	☐	☐	☑	☐	Unusual circumstances have been documented in the notes section below

LUMEN *validation report present and initialed* ***CIRCLE (YES / NO)***

☐	☐	☑	☐	☑	☐	Lab Blank, CCV, LCS and DUP met QC criteria
☐	☐	☑	☐	☑	☐	Hold time is met for all samples
		☑	☐	NA ☐	☐	Appropriate data qualifier flags are applied
		☑	☐	NA ☐	☐	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
☐	☐	☑	☐		☐	Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))
☐	☐	☑	☐			Correct amount of sample analyzed (i.e. sample not over-diluted)
		☑	☐			Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)
		NA ☐	☐			TICs resemble reference spectra
		☐	☐			TICs between duplicate samples are consistent
☐	☐	☑	☐	☑	☐	Checked samples for trends (i.e. Influent vs. Effluent, Field Dups, Field/Trip Blank, etc.)
☐	☐	NA ☑	☐			Data for multiple analyses of sample(s) has been evaluated for comparability of results
		☑		☑		Special units for all samples in the final report are correctly calculated
		☑	☐	☑		Manually entered results checked (i.e. TPH/NMOC)
☐	☐	☑				Chain of Custody verified for any special comments (i.e. different compounds/RLs, action levels)
		☑				Chain of Custody scanned correctly
					☐	Verify sample id's vs. chain of custody
		☑				Date MDL(s) performed per instrument(s) 11/21/08
☐	☐	NA ☐				Samples pressurized w/ appropriate gas (N_2 or He) ☐ Other (i.e. Tedlar bag, cartridge, sorbent)
☐	☐	☐				Final pressure consistent with canister size (6L vs. 1L)
☐	☐	☐				Verify receipt pressures
☐	☐	☐				Verify canister ID #'s
		☑		☑		Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)
				☑		MDL date(s) present for all instruments utilized
		☑	☐	NA ☐	☐	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: ES pre-spiked.
Report in ug/m³.
QA: Blank

M/Q:

A_1/A_2 (Analytical Review/Date)	R/T (Reporting Review/Date)	M (Management Review/Date)	Q (QA Review/Date)
A_1:	R: 7/24/09	7/28/09	
A_2:	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